87-386-15443
0987

DRILLING REPORT

ON

CUNNINGHAM CREEK CLAIMS

(MINERAL LEASE M32, JIM 251(9) & BLACKMARTIN CLAIMS 1128(8) 1129(8)
(SIDEWINDER 1-3 4955-7(7))
CARIBOO MINING DIVISION
N.T.S. MAP 93A/14W
LAT. ~~50~~ 52° 55'N LONG. 121° 21'W

FOR

IMPERIAL METALS CORPORATION
1300 - 409 GRANVILLE STREET
VANCOUVER, B.C. V6C 1T2

BY

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IMPERIAL METALS CORPORATION
AUGUST, 1984

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,443

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0. SUMMARY

Imperial Metals Corporation owns mineral lease M32 and 8 additional mineral claims and reverted crown grants covering the Cariboo Hudson Mine. The mine produced approximately 12,000 tons grading 0.44 ounces of gold in the late 1930's. The property was extensively trenched in the early 1940's and then inactive until the late 1970's. The property had 5 holes drilled in 1977 by Resoursex and that company was then taken over in 1978 by Imperial. Imperial drilled 5 holes in 1979. The property lay inactive until 1983.

In the early summer of 1983 Imperial conducted an extensive geochemical survey over the principal target areas. One target, the Shasta vein, was drilled in October 1983. The drilling totalled 510m in 12 holes from 7 different locations. The core was logged and sampled for assaying. The drill results indicate approximately 36,000 tons grading 0.39 oz/ton Au and 0.61 oz/ton Ag.

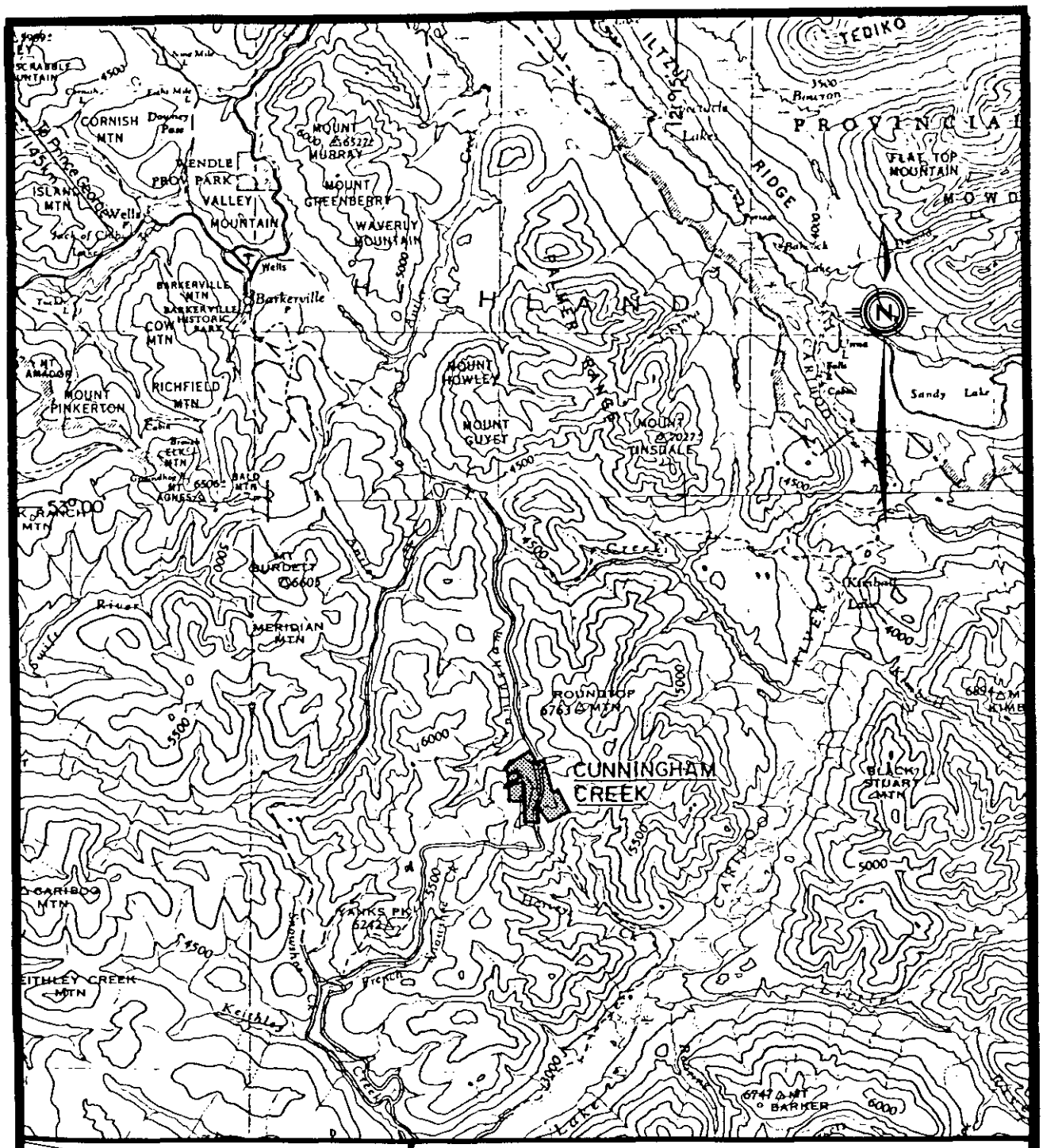
Following the recommendations of the author's 1983 Drilling Report, the old mine was rehabilitated to give access to those workings that undercut the Shasta vein and other areas. Fill-in soil geochemistry was completed in some areas and the grid was extended well to the northwest. Induced polarization survey was conducted principally over the areas with known sulphide potential, and an extensive backhoe trenching programme was conducted. An additional 16 holes were drilled into the Shasta vein, 5 into the projected strike of the 605 vein and 3 into the area of the I.P. anomaly. Drilling totalled 1133m of NQ core that was logged and split for assaying.

1. LOCATION & ACCESS

The Cunningham Creek property is located approximately 20 miles south of Wells - Barkerville in the Cariboo Mining Division of British Columbia. The approximate centre of the claims is Latitude 52° 55' N and Longitude 121° 21'W.

The property may be reached by four wheel drive road by following the Cunningham Creek Pass "3100" logging road east from Barkerville for 15km then turning south on the Barkerville - Likely road. This road traverses the property from north to south. Barkerville is 85km east of Quesnel on Highway #97.

A location map accompanies this report (figure 1).



IMPERIAL METALS CORPORATION

CUNNINGHAM CREEK

FIGURE 1 N.T.S. 93A,H

LOCATION MAP

Cariboo Mining Division, British Columbia

Km 5 0 5 10 15 Km

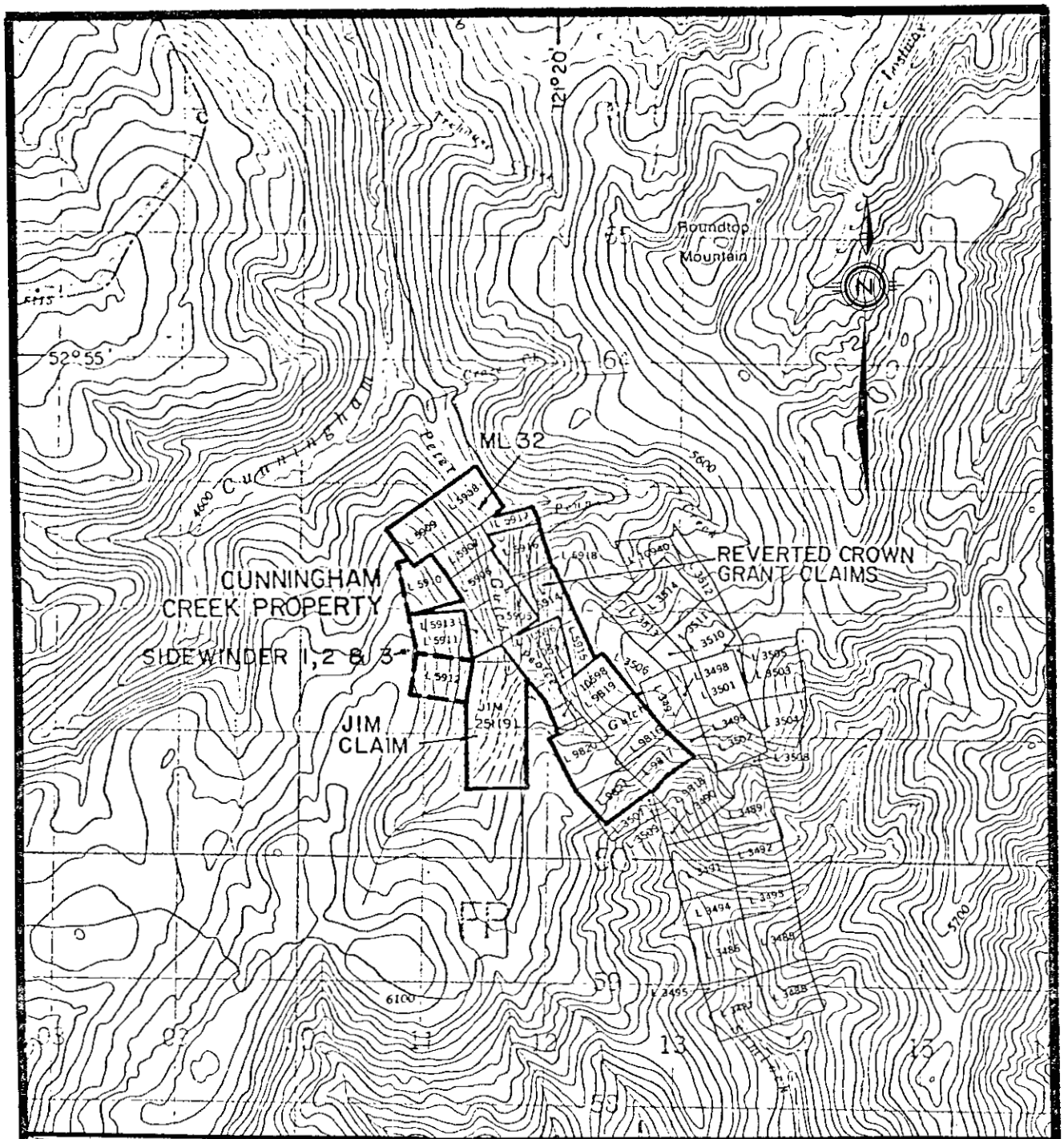
SCALE: 1:250 000	GEOLOGIST: S. P. QUIN, B. Sc.
DATE: NOVEMBER 1983	DRAWN BY:

2. PROPERTY

The Cunningham Creek property consists of Mineral Lease M32, five reverted Crown Grants and one modified grid claim of 3 units. The total area held is approximately 325 hectares.

Name	Lot #	Record #	Expiry Date
Mineral Lease	-	M32	January 6, 1985
Jim	-	251	September 7, 1987
Black Martin #2	5914	1129	August 14, 1987
Black Martin #1	5915	1129	August 14, 1987
Black Martin #3	5616	1128	August 14, 1987
Black Martin Fr.	5918	1128	August 14, 1987
Sidewinder #1 - #3	5710 - 12	4955-7	July 11, 1987

A property map is given in figure 2.


121°20'
52°55'
Roundtop Mountain
N
ML 32
CUNNINGHAM CREEK PROPERTY
SIDEWINDER 1, 2 & 3
JIM CLAIM
REVERTED CROWN GRANT CLAIMS
Cunningham Creek
4600
5600
5700
6100
L 5909
L 5908
L 5907
L 5910
L 5913
L 5911
L 5912
L 5914
L 5915
L 5916
L 5917
L 5918
L 5938
L 3512
L 3514
L 3510
L 3505
L 3503
L 3498
L 3501
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L 3471
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L 3469
L 3468
L 3467
L 3466
L

3. HISTORY

The Cunningham Creek property is located at the southern end of the Cariboo Gold Belt, one of the major gold producing areas in North America. Gold was first discovered in Wells in the 1860's and placer production peaked before the turn of the century. The placer activity sparked extensive exploration for lode occurrances but it was not until 1933, when the Cariboo Gold Quartz Mine went into production, that lode gold was recovered on any significant scale. The Island Mountain Mine opened in 1934 and the combined production of the two mines totalled over 2.5 million tons at a grade of 14.6g/tonne. On the Cunningham Creek property itself, the original discovery of auriferous gold veins was made in the early 1920's. Adits were driven into the Hudson Vein in 1923 and 1924 but it was not until 1937 that serious development commenced. Subsequently a total of 2,440m of drifting was completed on 6 levels. Stoping only took place on two levels and to surface covering a dip length of approximately 75m. Total production totalled 11,737 metric tons (12,938 tons) of ore, from which 160,922g (5,186 oz) of gold were extracted.

Following the shut down of the mine, extensive surface stripping and diamond drilling took place in 1940 - 1947. The mine and mill were dismantled and sold in 1947 (B.C. Dept. Mines Bulletin #34).

More recently the Mosquito Creek Gold Mine opened in Wells on the same structure as the Island Mountain Mine.

The original crown grants reverted to the government in 1971 and were immediately acquired as a mineral lease. In the period 1973 - 1983 extensive soil geochemical surveys were conducted and limited diamond drilling programmes conducted in 1978, 1979 and 1983 totalling 461m, 226m, and 518m respectively. Most of this work was concentrated on the Shasta vein.

4. GEOLOGICAL SETTING

It is proposed by Struik (1983) that the Cariboo area consists of a series of accreted terranes, one of these being the Barkerville terrane that consists principally of the Palaeozoic Snowshoe Formation, and hosts the Cariboo Gold Belt. The Snowshoe consists of a thick sequence of highly deformed and metamorphosed sedimentary volcanic and carbonate rocks that Struik (1981) proposes represent sandstones, shales and limestones deposited on a shallow to moderately deep ocean shelf. Subsequent uplift, folding, metamorphism and faulting has resulted in a complex package of quartzite, grits, siltites, phyllites, limestones and dolomites. Heavy overprinting by hydrothermal alteration, combined with lensing out of strata, makes corrolation very difficult. No distinctive marker beds have been identified as yet, with dolomotized limestones holding most promise since they are distinctive and relatively resistant to erosion.

5. MINERAL OCCURRANCES

There are four principal types of mineralization on the property. Quartz veins are the most prominant and have been the principal exploration target to date. Individual veins tend to be fairly small and erratic, however they are viable exploration target in themselves. This is best illustrated by the Cariboo Gold Quartz Mine, where quartz veins were the principal source of the 1.54 million tonnes of ore averaging 13.3g/tonne. There are several veins on the property. All the production came from the Hudson vein, totalling approximately 11,000 tonnes. In the mine workings there is also the Shasta vein an the 605 vein. There are several other veins on the property that have returned reasonable assays over significant widths.

Quartz veins often act as feeders to the second major type of mineralization, replacement type (Aldrick 1983). This forms the principal ore type at Mosquito Creek and Island Mountain. The type of ore occurs as lenses of massive pyrite in or close to the contact with a particular limestone band. This type of ore was first discovered on the property in the 1984 trenching programme and was the target of the Induced Polarization programme. The other two types of mineralization consists of massive lenses of galena and pyrrhotite with significant silver values. Finally there are lenses of quartz - scheelite investigated by the B.C. Dept. of Mines in 1942 (Bulletin #10, 1943 p. 93-96).

6. RECENT EXPLORATION

Extensive soil geochemistry surveys were conducted in the early 1970's using indicator elements to locate gold occurrances, without much success. Drilling based on these results and EM16 and magnetometer surveys failed to detect significant mineralization. However, one hole drilled in 1978 into the Shasta vein, immediately below the showing, intersected 13 feet averaging 0.89oz/ton Au. More drilling in 1979 further extended this occurrance down dip (J. McGoran, Drilling Report 1979). In 1983 Imperial conducted an extensive, detailed soil geochemistry survey (S.P. Quin, Geochemical Report, January 1984). This work was followed by a limited drilling programme in October 1983 with 12 holes totalling 1673 feet drilled into the Shasta Vein (S.P. Quin, Drilling Report February 1984). A follow up drilling programme was recommended for 1984, with additional geochemistry, an induced polarization survey and backhoe trenching for other targets.

7. 1984 EXPLORATION

7. (a) Mine Rehabilitation

A J.D. 550 cat with a backhoe was used to strip the remains of the caved timbers away from both 200 foot level portals. Jackpot Mining of Vancouver was contracted to rehabilitate these portals to allow access to the underground workings for geological purposes. Work was commenced on June 21, 1984 and both portals were complete, with doors and locks, on July 5, 1984. Most of the time and effort was put into the south portal because of caving just inside the collar of the adit. The north portal presented very few problems and was completed very quickly.

Once timbered, the workings were inspected by Alex MacPherson, a ticketed shift boss, for mine safety and the workings were found to be in relatively good condition with very little caving away from the portal areas. The air circulation was good on the main 200' level and on the 250 and 300 foot levels.

7. (b) Soil Geochemistry

The grid, called the South grid in the previous geochemical report (S.P.Quin January 1984) was extended to grid west and grid north. Certain portions of the grid were sampled on a 10m sample interval and all samples analysed for 30 metals by induced coupled plasma methods as described in Appendix E. In addition all samples were also re-analysed for gold by the more sensitive atomic absorption method also described in Appendix E. The gold geochemistry results have been plotted on figure 3, with previous survey results also plotted for continuity. The assay certificates are given in Appendix D. In all, a total of 711 soil samples were collected from the B soil horizon at depths of 10 - 30 cm below the surface.

The results in the area grid north of the base line between lines 2+00E and 4+00E extended previously known trends. In the area of

7. (b) Soil Geochemistry Cont'd

lines 11+00W and 12+00W a good anomaly was found coincident with the induced polarization surveys best anomaly. Several other anomalous areas were also indicated.

7. (c) Trenching

An extensive backhoe trenching programme was conducted between June 24 and August 3, 1984 on the property, mostly involving reopening trenches dug by cat in the early 1940's, some of which had been reopened in the early 1970's. The trenching programme was aimed at several targets and it is subdivided below:

Shasta Vein	- Rehabilitation	370m
Hudson Vein/605 Vein	- Rehabilitation	320m
	- New Trenches	160m
Moneta Showing	- Rehabilitation	300m
Sulphide Showing	- Rehabilitation	90m
	- New trenches	25m
Other	- Rehabiliation	130m
	TOTAL	1,395m

The locations of these trenches are illustrated in figure 4. Geological maps of these trenches are given in figures 5 - 8 inclusive.

7. (d) Geophysics

Between the 12 and 24 of July, Geoterrex ran a gradient array induced polarization survey over the extended south grid area.

7. (d) Geophysics Cont'd

Approximately 12 km were covered on lines of 500 to 700m in length, 100m apart and a 50m electrode spacing. Most of the area between lines 4+00E and 18+00W was covered on this basis, though lines 1+00W, 3+00W and 7+00W were omitted from the survey. In addition a Dipole-Dipole array survey was conducted over lines 11+00W and 12+00W, the area of the best I.P. response, with a 25m dipole separation. A more detailed survey was also conducted on line 11+00W with a 10m dipole separation, between 0+50N and 1+90N.

The results of this survey are not reported here, but will be filed as a separate assessment report, authored by J. Hawkins, Geophysicist for Geoterrex.

7. (e) Diamond Drilling

The 1984 diamond drilling programme was designed to continue testing the Shasta Vein, previously drilled in 1978, 1979 and 1983. The intention was to continue extending the known strike length to the southeast and northwest, keeping above the 200' level workings.

A contract was let to J.T. Thomas Diamond Drilling of Smithers, B.C. to drill the Cunningham Creek property. Mobilization commenced on July 20, 1984 from Houston and Smithers and the first drill hole was collared on July 21, 1984.

Diamond drilling was completed on August 2, 1984 with a total of 3718 feet (1133m) of coring in 24 holes from 13 different locations testing 3 different structures. The first 16 holes were drilled into the Shasta vein, the next five holes into the projected strike of the 605 vein and the last 3 holes into the I.P. anomaly. Drill holes are located in figure 4 and in more detail for the first 21 holes, on figure 9.

7. (e) Diamond Drilling Cont'd

All core was logged by the author and the results are enclosed in Appendix A. Sections of core with visible mineralization or significant quartz veining were split along the core axis into two equal halves, one half sampled at the intervals noted on the logs, and sent for assay. All drill core was assayed by Acme Analytical of Vancouver, B.C. by methods described in Appendix E and the assay certificates enclosed as Appendix B.

The core is stored on the property.

8. DISCUSSION OF RESULTS

The soil geochemistry extensions to the south grid have continued to outline and extend known mineral occurrances previously indicated. As previously suspected gold is the element that best outlines known showings, though the most anomalous areas tend to have lead, zinc and rarely silver or arsenic associated. However there are many cases when this is not the case and when any of these "associated elements" can be found to be anomalous with no associated gold values. There are significant and fairly continuous gold anomalies associated with the I.P. anomaly and running along or close to the base line between approximately 2+00E and 4+00E.

The trenching programme enabled a much more detailed understanding of the nature and controlling influences on the veins and mineralization than have previously been possible. The trenches have been left open for further inspection in 1985.

Diamond drilling of the Shasta Vein confirmed the presence of Reconnaissance Drilled Reserves (Appendix E, Quin 1984) but failed to significantly increase the tonnage or grade of the block. In fact, the net effect was to slightly reduce the indicated grade and tonnage, but this tonnage is much more certain. Underground and surface samples have weighted averages of 0.145oz/ton Au across 3.9 feet average and 0.210oz/ton Au across 7.45 feet average respectively. The average of all Shasta Vein intersections is 0.261oz/t Au, 0.26oz/t Ag across 4.5 feet average. Total tonnage is estimated at 30,000 short tons.

Drilling of the 605 Vein included 5 holes, only one of which intersected significant mineralized vein. Hence the weighted average of all vein intersections of 0.23oz/t Au and 0.27oz/t Ag across 3.4 feet may be misleading, since the veins intersected in holes and 84-19 to 21 may not be the same structure as that in 84-18. The latter has a weighted average intersection grade of 0.860oz/t Au, 0.49oz/t Ag

8. DISCUSSION OF RESULTS Cont'd

across 3 feet. Some tonnage can be loosely inferred, at approximately 11,000 tons.

The final drill target - the I.P anomaly on strike with the massive sulphide and replacement type mineralization - proved a difficult target to drill. The main problem was the targets proximity to the creek, requiring drilling from the down dip side to avoid extremely long holes. This should not have been a serious problem since the stratigraphy was near vertical dipping. However, the drill hole proved that the dips flattened out considerably down the hole. The shallowest angle hole did hit significant mineralization, averaging 0.318oz/ton Au over 10'6" (3.2m). Hole 84-23 drilled under the target and hole 24 - drilled vertically down the conductor - intersected only minor mineralization. Considering the average size of these replacement bodies (3m x 3m in cross section) these results are not unexpected.

A summary of drill intersections ore reserve calculations and weighted average calculations are all attached as Appendix F.

9. CONCLUSIONS AND RECOMMENDATIONS

The 1984 exploration programme was successful in that it confirmed the existence of the reconnaissance drilled tonnage in the Shasta Vein, but failed to significantly increase the tonnage drilled out. Exploration of two other targets, the 605 Vein and the massive sulphide/replacement mineralization achieved its objective in outlining anomalous areas with geochemistry and geophysics. Subsequent diamond drilling of these resulted in at least one significantly mineralized intersection in each target.

Above the 200 foot mine level the Shasta Vein can be considered drilled out and the only potential extensions exist below this level. Further exploration has to be concentrated in these areas, particularly in extending the wide, good grade shoots down dip. Both the 605 and massive sulphide targets warrant considerably more diamond drilling on at least 50 foot centres. Even more detailed drilling may be required for the replacement type mineralization, based on Mosquito Creek Gold Mines drilling experiences. As previously mentioned, there are also several other veins on the property as yet uninvestigated and these also warrant further exploration. To facilitate exploration of the Shasta and other veins undercut by the workings, the mine should be rehabiliated enabling underground diamond drilling and bulk sampling. The minimum work should involve rehabilitating the 200' level, and then the 600' level from surface to investigate the '605' Vein between the 200 foot and 600 foot level.

10. ITEMIZED COST STATEMENT FOR 1984

EQUIPMENT & SUPPLIES		$ 1,962.48
BOARD & LODGING	June 15 - August 7	20,585.15
TRUCK	2 months @ $1,000 per month	2,000.00
GEOCHEMISTRY - 694 soil samples for ICP @ $10.60 each	=	7,356.40
- 241 core samples assay for Cu, Pb, Ag, As, Au @ $22.75	=	5,482.75
- 68 rock samples assay for Cu, Pb, Zn, Ag, As, Au @ $22.75	=	1,547.00
18 rock samples assay for Au @ $9.25	=	166.50
- Sample bags	=	185.11
- Shipping	=	256.70
- Payroll 19 man days @ $135/d	=	2,565.00
GEOCHEMISTRY TOTAL		$ 17,559.46
MINE REHABILITATION - Contract	=	11,982.22
- Lumber for portals	=	1,544.25
- Company payroll 15 man days @ $135/d	=	2,430.00
- Bulldozer for access	=	825.00
MINING TOTAL		$ 16,781.47
BULLDOZING - Road Access	=	500.00
- Environmental clean up	=	1,100.00
BULLDOZING TOTAL		$ 1,600.00
TRENCHING - Backhoe	=	10,927.60
- Company payroll 25.5 man days @ $135/d	=	3,442.50
TRENCHING TOTAL		$ 14,370.10

10. ITEMIZED COST STATEMENT FOR 1984 Cont'd

DIAMOND DRILLING	- Mob/Demob	=	9,200.00
	- 3672 feet NQ @ $18/ft	=	66,096.00
	- Man & machine hours	=	7,249.00
	- Materials consumed	=	2,626.00
	- Dip tests of holes	=	900.00
	- Cat building set ups	=	7,200.00
	- Core splitting 6 man days @ $135/d	=	810.00
	DRILLING TOTAL		$ 94,081.00
OTHER PAYROLL	- Geologist, 59 days @ $200/day	=	11,800.00
	- Assistants for Mob/demob 18 man days @ $135/d	=	2,430.00
	OTHER PAYROLL TOTAL		$ 14,230.00
DRAFTING	- 100 hours @ $15 per hour	=	1,500.00
REPORT		=	1,500.00
	TOTAL		$186,135.66

11. STATEMENT OF QUALIFICATIONS :

I, Stephen Paul Quin, of 115 - 7297 Moffatt Road, Richmond, B.C. do hereby certify that :

1. I am a Mining Geologist in the employ of Imperial Metals Corportion with the head office at 1300 - 409 Granville St., Vancouver, B.C.

2. I am a graduate of the Royal School of Mines, London, Great Britain with a Batchelor of Science (Honors) Degree in Mining Geology.

3. I have been involved in exploration geology in British Columbia for the past five years and have been continuously employed by Imperial Metals Corporation and its predecessor companies for the past three and a half years.

4. This report is compiled from the given references and the author's personal experience of the property.

S.P. Quin, B.Sc. A.R.S.M.

Dated this 9TH day of December 1984

APPENDIX A

DRILL LOGS

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	Southern Grid	CORRECT DIP	-60°	PAGE	1 OF 2
HOLE NO.	84-1	LAT.	4+08E, 1+67S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	21/7/84	DEP.		SURVEY AT	No Test	DATE	22/7/84
COMPLETED	21/7/84	ELEV.	+1722m	% RECOVERY	90% +	CORE STORED	Camp
OBJECTIVE	Drill Shasta Vein	CORE SIZE	N.Q.	LENGTH	171'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1 ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS
0	5'		No recovery.					
5'	51'6"	Mst	Mudstone with some interbanded minor sandstone and siltstone layers.					
			11'-23' core recovery 95% + and rock has greenish (maripcsite?) colour.					
			23'-24' core heavily sheared - possible fault?					
			24-44'6" core fairly heavily fractured, iron stained and possible gouge zones @ 30', 34', 44'. Very poor recovery 37'-41' (major fault?)					
			44'6"-45'6" core quartz veined, heavily iron stained and sheared.					
			45'6"-51'6" fairly massive dirty sandstone relatively unweathered, 10-20% silicified Possible fault @ 51'					
51'6"	52'6"	G	Coarse, fairly heavily weathered gritty sst.					
52'6"	65'		Interbanded mudstone and dirty sandstone fairly heavily sheared (?) in mudstone and latter					

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	Southern Grid	CORRECT DIP	-60°	PAGE	2 OF 2
HOLE NO.	84-1	LAT.	4+08E, 1+67S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	21/7/84	DEP.		SURVEY AT	No Test	DATE	22/7/84
COMPLETED	21/7/84	ELEV.	+1722m	% RECOVERY	90% +	CORE STORED	Camp
OBJECTIVE	Drill Shasta Vein	CORE SIZE	N.Q.	LENGTH	171'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
								Cu	Pb	Zn	Ag	As	Au
			also heavily weathered. Locally minor quartz veins 62', 63' and 65'.										
65'	169	Silst	Massive blue-green siltstone, very poorly foliated with locally interbanded sandstones (possible way up because siltstone - down into sandstone?)										
				A2	69	71	2'	26	23	36	.1	16	5
			71-75' possible shear/fault zone with 50-90% quartz veins.	A1	71	75	4'	14	17	36	.2	55	470
				A3	95	78	3'	42	8	59	.3	62	5
			97'6"-98'6" quartz vein, massive, white with 15-20% calcite NVM	A4	97'6"	98'6"	1'	6	19	33	.2	7	5
			115-150' approx. 30-40% mudstone										
			139-140' heavily weathered & ironstained fractured zone.										
			150-171 mostly massive siltstone and sandstone with very minor mudstone decreasing down.										
				A6	150'6"	153'6"	3'	22	42	40	.4	26	5
			153'6"-154'6" quartz veined mudstone.	A5	153'6"	155'6"	2'	28	15	13	.1	6	5
			154'6"-±55'6" massive white quartz vein with 1-2% 1-2mm euhedral pyrite grains	A7	155'6"	158'	2'6"	10	47	40	.4	17	5
			161-163'6" heavily iron stained and weathered zone with minor (2") quartz veining @ 163/										
169	171'	Sst	Sheared & iron stained moderately foliated dirty sandstone										

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-60°	PAGE	1 OF 4
HOLE NO.	84-2	LAT.	3+25E, 1+40S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	23/7/84	DEP.		SURVEY AT	187' = 63°	DATE	23/7/84
COMPLETED	23/7/84	ELEV.	+1729m	% RECOVERY	90% +	CORE STORED	Camp
OBJECTIVE	Drill Shasta	CORE SIZE	N.Q.	LENGTH	187'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
								Cu	Pb	Zn	Ag	As	Au
0	8'	S	Casing: 25% recovery of fragmented core mostly massive dirty sandstone with 5 - 10% 1mm blue-white quartz grains. Some quartz vein fragments.										
8'	10'	S	Interbedded mudstone and siltstone. Bedding at about 30° to C.A., foliation is parallel. Core is fairly strongly weathered, especially along talcy mudstone bands.	A10	22'	25'6"	3'6"	25	34	28	.2	12	5
			6" quartz veining 50% @ 22', 35'6"										
			6" quartz vein @ 24'										
31'4"	40'	G	Gritty sandstone massive and coarse grained with 2-3" mudstone at bottom contact.										
40'	88'	Si/s	Very pale grey siltstone with 10-15% 1mm blue-white and white quartz grains. Locally heavily weathered and iron stained along fractures.										
			45-47 major fault? 6-8" of gouge.										
			60-63 heavily silicified and quartz pheno-crysts appear larger (1-2mm).										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-60°	PAGE	2 OF 4
HOLE NO.	84-2	LAT.	3+25E, 1+40S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	23/7/84	DEP.		SURVEY AT	187' = 63°	DATE	23/7/84
COMPLETED	23/7/84	ELEV.	+1729m	% RECOVERY	90% +	CORE STORED	Camp
OBJECTIVE	Drill Shasta	CORE SIZE	N.Q.	LENGTH	187'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
								Cu	Pb	Zn	Ag	As	Au
			69-70'6" 25-30% sericitic mudstone intercal-	A13	69	70'6"	1'6"	11	13	61	.1	11	5
			ations with 1% dissem pyrite clusters										
			and blebs along bedding (40° to CA).										
				A14	105	107	2'	35	81	31	.8	45	5
88'	117'	M/Si	Mid grey-green mudstone with minor siltstone	A11	107	109	2'	32	4	36	.2	20	5
			bands (may be localized silicification)	A12	109	114	5'	121	1	87	.2	35	35
			86-97' minor silicification & carbonate veins										
			(10-20%)										
			97-105' 10% core recovery-major fault zone.										
			105-114' core heavily silicified and quartz										
			veined (25-40%) often with assoc.										
			creamy white carbonate rims and veins										
			108-109 quartz vein with 2-5% sericitic										
			fragments and less than 1% pryite often										
			assoc. with sericite inclusions.										
117'	131'	S/si	Massive pale grey sandstone or siltstone with	A15	120	123	3'	25	198	276	.2	26	5
			10% plus, 1mm blueish-white quartz										
			grains very similar to 40-88'. Contains										
			minor sericitic partings and rare bands										
			of bleby, fine grained pyrite.										
			125-126'6" heavily fractured and sheared core.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-60°	PAGE	3 OF 4
HOLE NO.	84-2	LAT.	3+25E, 1+40S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	23/7/84	DEP.		SURVEY AT	187' = 63°	DATE	23/7/84
COMPLETED	23/7/84	ELEV.	+1729m	% RECOVERY	90% +	CORE STORED	Camp
OBJECTIVE	Drill Shasta	CORE SIZE	N.Q.	LENGTH	187'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
								Cu	Pb	Zn	Ag	As	Au
131'	166	Si/M	Interlayered siltstone and mudstone, latter	A16	131	134	3'	28	10	44	.1	51	5
			dominating. Locally silicified and quartz	A17	134	137	3'	21	19	32	.1	56	5
			veined. 1-2% dissem fine pyrite.	A18	137	140	3'	20	19	31	.2	1219	0.046
			139'6" quartz vein with 5% bleby pyrite.	A19	140	144	4'	29	37	36	.9	74	350
			140-144' core heavily sheared and broken										
			recovery poor (50%).										
		M	151-154' mariposite rich mudstone, also darker										
			chloritic? bands?										
			154-158 core heavily silicified-siltstone?										
				A21	155	158	3'	6	521	451	.8	24	5
		Qv	158-160 quartz vein, massive, white, and vuggy	A20	158	160	2'	2	101	116	24.2	218	18,6
			with quartz crystals in cavities 2-3%	A22	160	163	3'	18	11	28	.1	31	120
			blebs of fine grained pyrite. Often blebs										
			in cubic form - replacing coarser pyrite?										
			160-166 heavily silicified (25-50%)										
			164 possibly minor fault zone.										
166	172		Massive coarse grained sandstone, pale grey	A25	170	172	2'	21	8	44	.11	66	10
			with minor sericitic partings and mudstone										
			bands.										
172'	177	Qv	Massive white quartz vein, fairly fractured	A23	172	175	3'	300	929	28	22.1	3799	3510
			and locally weathered 175' - 4' bands of	A24	175	177	2'	40	12	13	.3	722	1830
			massive sandstone as above.										

* in oz/t

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-60°	PAGE	4 OF 4
HOLE NO.	84-2	LAT.	3+25E, 1+40S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	23/7/84	DEP.		SURVEY AT	187' = 63°	DATE	23/7/84
COMPLETED	23/7/84	ELEV.	+1729m	% RECOVERY	90% +	CORE STORED	Camp
OBJECTIVE	Drill Shasta	CORE SIZE	N.Q.	LENGTH	187'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
								Cu	Pb	Zn	Ag	As	Au
			Contains 5-10% fine grained pyrite in 1cm - 5cm										
			blebs and bands. Also contains minor galena										
			(less than 1%), rare aopy and possible cpy.										
			Brown anheritic carbonate approx. 5% of vein.										
177'	184'	D/M	Possibly dolomitic or arherite mudstone	A26	177	179	2'	12	6	26	.1	66	10
			(sericite) sericite alt'n intense, locally	A27	179	182'6"	3'6"	16	1	62	.1	47	5
			heavily silicified and small quartz -										
			ankerite vein common near main vein above.										
			Contains 1-2% disseminated 1-2mm blebs of										
			fine grain pyrite.										
184'	187'	S	Fairly massive grey siltstone with minor										
			sericitic partings.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-45°	PAGE	1 OF 3
HOLE NO.	84-3	LAT.	3+25E, 1+40S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	22/7/84	DEP.		SURVEY AT	150' = 48°	DATE	23/7/84
COMPLETED	23/7/84	ELEV.	+1729m	% RECOVERY	80% +	CORE STORED	Camp
OBJECTIVE	Drill Shasta Vein	CORE SIZE	NQ	LENGTH	150'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1 ft. = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS
0	6'		Casing					
0	10'	S	Massive weathered fairly coarse grained sandstone.					
10'	17'	M/s	Finely interbanded sandstone and mudstone heavily weathered especially along mudstone bands and heavy iron stained.					
17'	27'	Si	Massive, silicified light grey siltstone with minor siltstone bands. Locally iron stained and weathered along foliation and fractures. Bedding @ 50% to C.A.					
			47' fault/fracture zone 6" heavily fractured.					
47'	51'	S	Fairly coarse grained, almost gritty sandstone with 1mm blueish grey quartz grains.					
51'	76'	Si/m	Interbanded massive siltstone and dirty mudstone locally talcose.					
			56'6" core heavily fractured.					
			68 - 71' dark grey siltstone with possibly mariposite mudstone.					

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-45°	PAGE 2	OF 3
HOLE NO.	84-3	LAT.	3+25E, 1+40S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	22/7/84	DEP.		SURVEY AT	150' = 48°	DATE	22/7/84
COMPLETED	23/7/84	ELEV.	+1729m	% RECOVERY	80% +	CORE STORED	Camp
OBJECTIVE	Drill Shasta Vein	CORE SIZE	NQ	LENGTH	150'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb Cu	Pb	Zn	Ag	As	Au
			75-76' fault zone with 3" gouge zone.										
76'	114'	Si/m	Massive fine grained sandstone to siltstone with numerous minor mudstone partings and bands (sericitic) with assoc. 1-2% dissem pyrite blebs and bands.	A28	88	93	5'	42	16	99	.2	30	45
			85'6"-86'6" broken quartz vein.										
			112-114' core fairly heavily quartz veined (30-40%) and quartz contains large blebs of pryite.	A29	112	114	2'	13	10	44	.3	158	150
114	131	Si/s	Massive siltstone, locally sand grain size and	A30	114	117'6"	3'6"	20	43	70	.1	47	5
			minor sericitic partings. Has 1-2% dissem.	A31	117'6"	120'	2'6"	21	39	86	.2	29	5
			euhedral pyrite less than 1mm in size.	A32	128'	131'	3'	18	23	29	.2	17	25
			129-129'8" quartz vein with rare dissem. pyrite.										
131'	136'	M	Fine grained fairly dark grey mudstone with 5% dissem. pyrite blebs elongated along foliation.	A33	131	132'6"	1'6"	20	29	62	.1	30	5
				A34	132'6"	133'6"	1'	14	2414	4	27.1	6879	16100
				A35	133'6"	136'	2'6"	73	30	69	.3	85	25
			132'6"-±33'6" massive white quartz vein with 5% blebs of fine grained pyrite.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-45°	PAGE	3 OF 3
HOLE NO.	84-3	LAT.	3+25E, 1+40S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	22/7/84	DEP.		SURVEY AT	150' = 48°	DATE	22/7/84
COMPLETED	23/7/84	ELEV.	+1729m	% RECOVERY	80% +	CORE STORED	Camp
OBJECTIVE	Drill Shasta Vein	CORE SIZE	NQ	LENGTH	150'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
								Cu	Pb	Zn	Ag	As	Au
136'	139'	G	Very coarse grained pale grey sandstone with 30-40% blueish phenocrysts and rare very fine grained pyrite crystals.	A36	136	139	3'	10	33	38	.1	31	40
139	148'	M	Dark-medium grey mudstone with minor more siltstone bands. Numerous small quartz carbonate veins less than 1cm often with rare assoc. fine grained pyrite.										
148'	150	Si	Siltstone, pale grey massive, with minor sericitic partings. 149-149'6" quartz vein	A37	148	150	2'	1	22	14	.1	20	5

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-60°	PAGE	1 OF 3
HOLE NO.	84-4	LAT.	3+02E, 1+42S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	23/7/84	DEP.		SURVEY AT	157' - 72°	DATE	25/7/84
COMPLETED	24/7/84	ELEV.	+1729m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	157'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1 ft. = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm. Au in ppb					
								Cu	Pb	Zn	Ag	As	Au
0	9'		Casing. No core.										
9	32	S	Coarse, poorly sorted, dirty sandstone mostly heavily weathered and iron stained to 30'. 30-32' fairly pale grey sandstone with 10-15% 1mm quartz gragments.										
			20-27' core broken and possible fault @ 23'.										
32'	102'	M	Mudstone, sericitic with alternating bands of	A38	74'	77'	3'	19	43	68	.1	24	5
			mudstone and coarser poorly sorted sericitic	A39	87'	90'	3'	38	23	60	.1	28	5
			sandstone. Locally heavily silicified. 1-2% disseminated pyrite especially associated with sericitic mudstone bands.										
			Heavily silicification 55' - 56', 65' - 68'6", 73' - 74', 75'6" - 76'.										
102'	122'	S	Dirty sericitic sandstone with 20-30% 1mm blue-grey quartz grains in fine sandy-matin with sericitic partings.										
			2-3% pyrite blebs, fine grained disseminated throughout but with local bands of less than 1mm thick pyrite often along minor sericitic										
			partings. Also 1-2' bands of mudstone with	A43	119	122'	3'	22	4	38	.1	65	100

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-60°	PAGE	2 OF 3
HOLE NO.	84-4	LAT.	3+02E, 1+42S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	23/7/84	DEP.		SURVEY AT	157' = 72°	DATE	25/7/84
COMPLETED	24/7/84	ELEV.	+1729m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	157'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
			dolomitic rhombs 114-116', 117'6"-119'	A43	119	122	3'	22	4	38	.1	65	100
122'	128'	Qv	Massive white quartz vein with 5-10% very fine	A40	122	124	2'	15	110	1	2.0	2241	79200c
			grained pyrite in large (3-4cm) blebs 1%	A41	124	126	2'	4	3	1	0.2	286	14900c
			arsenopyrite and less than 1% galena.	A42	126	128	2'	10	25	12	1.7	655	12600c
			126'6" 3" mudstone parting										
			128' heavily sheared and deformed for 6"										
128'	149	S	Medium to coarse grained sandstone with 5-10%	A44	128	130'6"	2'6"	16	6	29	.2	79	15
			mudstone partings (sericitic) in 1-5cm bands.	A45	130'6"	134'	3'6"	29	65	42	.7	135	225
			Locally heavily silicified and quartz veined.										
			Less than 1% pyrite especially along mudstone bands. 137' - mariposite rich mudstone? 147' = 6" very coarse grains of quartz 0.5 - 1cm and mud partings deformed around them. Possibly in graded bed indicating right way up.										
149'	157'	M	Talcose limey mudstone possibly with 10-15% bolomite rhombs. Brownish colour. Quartz - carbonate veined and 2cm vein cross cuts foliation @ 152 - 154' clearly shows carbonate predates quartz. Locally heavily										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-60°	PAGE 3	OF 3
HOLE NO.	84-4	LAT.	3+02E, 1+42S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	23/7/84	DEP.		SURVEY AT	157' = 72°	DATE	25/7/84
COMPLETED	24/7/84	ELEV.	+1729m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	157'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS
			silicified - remains of cherty bands in post dpositional?					

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	45°	PAGE 1	OF 3
HOLE NO.	84-5	LAT.	3+02E, 1+42S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	24/7/84	DEP.		SURVEY AT		DATE	25/7/84
COMPLETED	24/7/84	ELEV.	+1729m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	132'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
0	10'		Casing. No core.										
10'	30'	G/s	Coarse gritty sandstone, rather dirty with 30-40% 1mm + blue-grey quartz grains. Core heavily weathered. Interbanded with finer dirty sandstone 10-13' coarse grit 19' minor filicified zone (4") 26-29' fault 4" mud/gauge and less than 10% core recovery.										
30'	72'	M	Sericitic mudstone with minor interbanded siltstone and sandstone. Localized silicification of core - possibly meta-siltstone? Minor bands (3-4") with 1% or less pyrite blebs elongated along foliation.										
			39-43' 20-30% quartz anherite veins in mudstone - still has dissem. pyrite.	A51	39	43	4'	23	21	40	.1	4	5
72	80'6"	S	Rather clean sandstone/siltstone with minor sericitic partings. 2-3% pyrite in 1-2mm blebs disseminated throughout. Some more chliritic bands and show evidence of soft sediment deformation. Minor (1mm) silic. bands throughout appears to be getting coarser towards the base, and 77' onwards	A52	72	77	5'	41	21	60	.1	23	5
				A53	77	80'6"	3'6"	19	1	48	.1	26	15

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	45°	PAGE 2	OF 3
HOLE NO.	84-5	LAT.	3+02E, 1+42S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	24/7/84	DEP.		SURVEY AT		DATE	25/7/84
COMPLETED	24/7/84	ELEV.	+1729m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	132'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb Cu	Pb	Zn	Ag	As	Au
			fairly gritty sandstone with minor (1cm) mudstone bands.										
80'6"	105'	M	Mudstone to siltstone, locally heavily silicified and quartz - carbonate veined 1-2% pyrite disseminated, but often associated with quartz stringers.										
			81' quartz-anherite vein 4" wide.	A54	81	83	2'	20	5	42	.1	122	60
			82-83' quartz anherite veined.										
			88'-89' core fractured and poor recovery.										
			95-105' increasing frequency of 5-10cm sandstone and siltstone bands - coarsening downwards?										
				A59	99'	100'6"	1'6"	38	1	56	.1	39	5
			100'6" quartz vein 5" wide with 10% ankerite and 50-60% pyrite.	A55	100'6"	102'	1'6"	430	909	59	31.4	1803	1870
				A56	102'	104'	2'	31	2	60	.1	129	105
				A57	104	105'	1'	48	17	45	.3	235	290
			104-105' 2-3% pyrite in 1-4mm blebs elongated along bedding. Percentage and size increase to 105' and at 105' have 60% quartz veined zone, 30% pyrite in 2-3cm above.	A58	105'	107'	2'	40	10	81	.1	53	30

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	45°	PAGE 3	OF 3
HOLE NO.	84-5	LAT.	3+02E, 1+42S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	24/7/84	DEP.		SURVEY AT		DATE	25/7/84
COMPLETED	24/7/84	ELEV.	+1729m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	132'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
105'	113'	T	Brown very fine grained talc-sericite schist with pyrite blebs strongly elongated along schistosity. Locally up to 1-2%. Minor, dark grey limestone bands 108', 108'6" with large (1cm) quartz grains.										
113'	120'	L	Massive dark grey heavily bleached - calcite veined limestone.										
120'	124'	T	Talc schist with 30-40% limestone bands, dark grey and calcite veining. Locally well pyritized ie. 123'-123'6"	A60	122'6"	124'	1'6"	15	1	35	.1	6	25
124'	132'	L	Fairly massive dark grey and white banded limestone with 5% chloritic (less than 0.5m) partings often with 5% pyrite.	A61	124'	125'6"	1'6"	27	1	21	.1	11	15

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-70°	PAGE	1 OF 3
HOLE NO.	84-6	LAT.	2+85E, 1+45S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	24/7/84	DEP.		SURVEY AT	163' = 71°	DATE	25/7/84
COMPLETED	25/7/84	ELEV.	+1727m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	163'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1ft. = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb Cu	Pb	Zn	As	Ag	Au
0	10'		Casing.										
10'	18'	M	Mudstone - heavily weathered and very soft.										
18'	22'	S	Coarse, almost gritty sandstone, heavily weathered and iron stained.										
			20' quartz vein 2-3" wide.										
22'	33'	Si	Massive very pale grey siltstone with minor sericitic partings.										
			29' quartz vein 2-3" wide.										
23'	35'	M	Sericitic mudstone with minor silty bands. Less than 1% disseminated pyrite in blebs elongated along foliation. Minor quartz veining.										
35'	45'	Si	Sericitic siltstone, locally silicified and quartz veined, moderately well foliated.										
			1-2% dissem. pyrite assoc. with silification	A47	34'	37'3"	3'3"	47	12	54	.1	21	5
			37'3"-38'8" massive white quartz vein. NVM	A46	37'3"	38'8"	17"	11	16	21	.1	14	5
			39'-40' possibly graded bed siltstone to coarse sandstone.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-70°	PAGE 2	OF 3
HOLE NO.	84-6	LAT.	2+85E, 1+45S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	24/7/84	DEP.		SURVEY AT	163' = 71°	DATE	25/7/84
COMPLETED	25/7/84	ELEV.	+1727m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	163'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
								Cu	Pb	Zn	As	Ag	Au
45'	47'		Core appears to be brecciated with large fragments of rock. Heavily silicified though not recent.										
47'	54'	S	Fine dirty sandstone with 10-15% brownish 1mm grain - arkosic? Locally silicified.										
54'	61'6"	M-G	Possibly graded sequence from sericitic mudstone to coarse grained poorly sorted grit with matrix supported 2-10mm quartz grains. Minor sericitic partings lower contact sharp @ 50° to core axes.										
61'6"		M-S	Mudstone, grading down into siltstone by 67'6" and fine sandstone by 68'. Mudstone partings have associated pyrite blebs up to 2mm, less than 1%.	A48	65'8"	68'	2'4"	29	12	74	.1	36	5
			65' possible fault zone 4" highly sheared. 65'9"-66'3" quartz - carbonate vein.										
			Repeat of sequence 69' - 82'										
			82' - 85'										
			85' - 89' coarse gritty sandstone last 1'										
			89' - 83' (As 83-89)										
			93' - 97'										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-70°	PAGE	3 OF 3
HOLE NO.	84-6	LAT.	2+85E, 1+45S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	24/7/84	DEP.		SURVEY AT	163' = 71°	DATE	25/7/84
COMPLETED	25/7/84	ELEV.	+1727m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	163'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
								Cu	Pb	Zn	Ag	As	Au
			97' possible minor fault zone.										
			97-102'6" Graded sequence										
			102'6"-106'6" Graded seq. siltstone to gritty sandstone										
			106'6"-116'6" Graded sequence mudst. to very coarse, gritty sst.										
			116'6"-120' Graded fine sst. to coarse gritty sst.										
			120'-131' Graded siltstone with few 1mm quartz grains to coarse gritty sst with up to 5mm grains										
			131'-136' Graded										
			136'-140' Graded										
			148'-154' Core silicified 20-25%										
			Grading continues to 163' of interbanded mudstone, siltstone and sandstone with occassional gritty bands in thicker sequences. All rock has sericitic partings throughout and mudstone often has minor blebs of pyrite along bedding.	A49	148	151	3'	37	5	51	.1	17	5
				A50	151	154	3'	30	2	76	.1	26	5

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-50°	PAGE 1	OF 4
HOLE NO.	84-7	LAT.	2+85E, 1+45S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	25/7/84	DEP.		SURVEY AT	123' = 53°	DATE	25/7/84
COMPLETED	25/7/84	ELEV.	+1727m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	133'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1ft = 30.5cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
								Cu	Pb	Zn	Ag	As	Au
0	12'		Casing.										
12'	16'		5% core recovery - fragments of coarse sandstone and quartz.										
16'	24'	M	Mostly mudstone - heavily weathered with minor interbanded dirty sandstone and some silicification.										
24'	32'	S/si	Fine grained sandstone and massive siltstone	A62	24'	29'	5'	24	8	40	.1	17	5
			Locally heavily silicified rarely with pyrite and galena associated (ie. 30'4")	A63	29'	32'	3'	17	79	79	.1	16	15
32'	46'6"		Start of graded sequences?										
			32-34 fine grained foliation of mudstone often heavily weathered along foliation										
			34-36 Siltstone grading to fine sandstone										
			36-37 Fairly coarse sandstone										
			37-46'6" graded sequence with minor mudstone grading in 3-4" to siltstone 45-46'6" gritty sst.										
			39-41' quartz ankerite veined section (50%) with massive blebs of fine grained pyrite (10% + of core, 30% of vein) hose fairly coarse arkosic sst.	A64	39	41	2'	579	45	138	.6	413	850

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-50°	PAGE	2 OF 4
HOLE NO.	84-7	LAT.	2+85E, 1+45S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	25/7/84	DEP.		SURVEY AT	123' = 53°	DATE	25/7/84
COMPLETED	25/7/84	ELEV.	+1727m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	133'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
								Cu	Pb	Zn	Ag	As	Au
46'6"	67'6"	M-Si	Finely interbanded mudstone and dirty sandstone. Grades into massive mudstone by 54'										
			51-53 heavily silicified (30-40%) with associated pyrite at contact with mudstone (3-5% of rock).	A65	51	53	2'	312	24	34	.1	45	25
			55-60' core heavily sheared strongly weathered and appears similar to 51-53' but fractured and continues less fractured but still weathered to 62'6"										
62'6"	98'	M-S	Graded sequence of minor soft mudstone grading into siltstone and sandstone.										
			62'6" - 71 one complete sequence.										
			Scale of grading varies considerably from 1' to over 10'. Occassionally have pyrite assoc. with localized silicification, usually at contact with mudstone.										
			86-98' fairly massive coarse grained sandstone sequence fineing down from siltstone	A68	90'	92'8"	2'8"	21	6	42	.1	54	5

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-50°	PAGE	3 OF 4
HOLE NO.	84-7	LAT.	2+85E, 1+45S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	25/7/84	DEP.		SURVEY AT	123' = 53°	DATE	25/7/84
COMPLETED	25/7/84	ELEV.	+1727m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	133'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
								Cu	Pb	Zn	Ag	As	Au
		Qv	92'8"-93'5" quartz vein with 5-10% pyrite	A66	92'8"	94'	1'4"	29	806	10	10.5	13871	1090
			and arsenopyrite	A67	94'	95'6"	1'6"	204	21	23	1.3	10878	6710
			93'5"-95'6" sandstone fairly well pyritized	A69	95'6"	97'6"	2'	18	1	50	.1	429	5
			2-3% pyrite blebs										
		Qv	95'6"-96' quartz vein with 30-40% massive										
			pyrite.										
			96-98' coarse sandstone less than 1% pyrite in										
			2.5mm blebs.										
98	102'	M	Mid grey mudstone with 2-3mm brown phenocrysts										
			elongated along foliation locally frac-										
			tured and iron stained.										
102'	117'	Mt/si	Interbanded talcose mudstone and siltstone	A70	104'	108'	4'	22	2	36	.1	34	180
			with less than 1% pyrite in blebs associ-										
			ated with mudstone. Locally silicified	A71	113'	117'	4'	27	1	100	.1	56	40
			and appears to be heavily deformed.										
			Becomes more talcose and brownish										
			colour to 117'										
			117' probably fracture zone, heavily weathered										
			and broken.										

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-50°	PAGE 4	OF 4
HOLE NO.	84-7	LAT.	2+85E, 1+45S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	25/7/84	DEP.		SURVEY AT	123' = 53°	DATE	25/7/84
COMPLETED	25/7/84	ELEV.	+1727m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	133'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb Cu	Pb	Zn	Ag	As	Au
117'	121	M/L	Talcose mudstone brown colour and interbanded dark grey limestone weathered and iron stained 1-2% pyrite in 1mm bands along foliation.	A72	117	121	4'	21	4	41	.1	20	5
121	127	L	Dark grey limestone with 5-10% chlorite partings for first 12". Rest fairly dark grey with 25-30% white calcite bands and patches. Less than 1% disseminated pyrite.										
127	131'6"	Mt	Talcose brown mudstone with 3-4% pyrite in blebs and fairly euhrdral 1-3mm crystals along foliation.	A74	127	131'6"	4'6"	23	1	29	.1	7	5
131'6"	133	L	Dark grey limestone with 10-20% white calcite bands and patches and minor talc partings.										
				46L									[illegible]
				A61									[illegible]

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-70°	PAGE 1	OF 2
HOLE NO.	84-8	LAT.	2+62E, 1+35S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	25/7/84	DEP.		SURVEY AT	187' = 73°	DATE	26/7/84
COMPLETED	25/7/84	ELEV.	+1724m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	187'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
								Cu	Pb	Zn	Ag	As	Au
0	8'		Casing. No core.										
8'	12'	S	Heavily weathered sandstone, very poor recovery and 5% sericitic partings.										
12'	16'	Si	Massive pale cream siltstone.										
16'	20'	M/Si	Fairly dark grey siltstone with 30% plus sericitic mudstone bands. Locally silicified. Heavily deformed.										
28'	182'	M-S	Graded sequence of sericitic mudstones grading through siltstone, fine sandstone to coarse gritty sandstone. Latter has quartz grains up to 3-4mm and tends to be massive and very pale grey.										
			31'-32' quartz veined 50%	A75	31'	32'	1'	16	2	31	.1	22	5
			40'-41' quartz veined 50%	A76	46'	50'	4'	111	187	119	.2	34	5
			50'-56' quartz veined section with veins comprising upto 50% of rock and up to 18" wide. 1-2% pyrite remains but vein heavily weathered and only haematite left.	A77	50'	53'	3'	59	9	72	.1	24	5
				A78	53'	56'	3'	3	6	8	.1	188	5
				A79	56'	58'	2'	49	19	45	.3	35	5
			63'-70'6" fairly coarse grained sandstone section with 40-50% silicification and carbonate veining.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-70°	PAGE	2 OF 2
HOLE NO.	84-8	LAT.	2+63E 1+35S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	25/7/84	DEP.		SURVEY AT	187' = 73°	DATE	26/7/84
COMPLETED	25/7/84	ELEV.	+1724m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	187'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb					
								Cu	Pb	Zn	Ag	As	Au
			97' quartz vein, sheared 4" wide with 5% pyrite, fairly strongly weathered and haematized.	A80	96'	98'	2'	50	65	27	.2	9	5
			107'6" 0.4m band of pyrite lying along foliation in dirty sandstone with sericitic partings. Sandstone itself pyritized with 1-2% 0.5mm blebs for less than 1' either side.	A81	106'	108'6"	2'6"	55	22	33	.1	2	5
			113' mariposite alteration of mudstone? silicified/veined zone often less than 1% pryite associated 118'-121' 10-20% quartz veined fine sandstone.	A82	118'	121'	3'	28	17	60	.2	5	5
			137'-138' 15-20% quartz veined fine sandstone	A83	136'6"	138'	1'6"	21	34	27	.1	4	5
			150'-152' 25-30% quartz veined fairly coarse	A84	150'	152'	2'	14	15	24	.4	2	5
			172'6" possible minor shear										
			173'-177' quartz veined 5-10% with 2-5cm quartz veins.	A85	173'	177'	4'	33	23	65	.1	21	5
182'	187'	Mt-Si	Fairly fine grained siltstone with 5-10% brown sericite-talc partings. Fairly heavily silicified between muddy partings.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY Cunningham Creek	LOCATION South Grid	CORRECT DIP -40°	PAGE 1 OF 3
HOLE NO. 84-9	LAT. 2+62E 1+35S	TRUE BRG 225°	LOGGED BY S.P. Quin
COMMENCED 26/7/84	DEP.	SURVEY AT 126' = 52°	DATE 26/7/84
COMPLETED 26/7/84	ELEV. +1724m	% RECOVERY	CORE STORED Camp
OBJECTIVE Shasta Vein	CORE SIZE N.Q.	LENGTH 126'	UNUSUAL FEAT.

FROM	TO	SYMBOL	DESCRIPTION * 1ft = 30.5cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in ppm, Au in ppb Cu	Pb	Zn	Ag	As	Au
0	10'		Casing. No core.										
10	22'	Si	Massive dark grey siltstone with minor 1-3mm mudstone bands 10-12' core recovery poor and core weathered.										
			13'-17' core heavily quartz veined (30-40%) and appears to once have been heavily pyritized but now haematite.	A86	13'	17'	4	38	13	73	.1	27	5
22'	26'	M	Dark grey to brown weathered mudstone	A87	24'	26'	2'	44	26	57	.4	43	5
			25'-25'6" fragments of quartz vein, core recovery poor.										
26'	94'	S	Dirty coarse grained sandstone with coarsening downwards - part of graded sequence from 22-26'?										
			26'6"-26'10" quartz - ankerite vein										
			27'4"-27'8" quartz vein with ankerite.										
			28'-28'6" quartz vein with 5-10% coarse grained pyrite.	A88	26'	28'6"	2'6"	11	9	15	.1	61	150
				A89	28'6"	31'	2'6"	64	15	29	.2	557	195
				A90	31'	33'6"	2'6"	62	158	61	.2	57	35
			30'-30'6" quartz veined section										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°	PAGE	2 OF 3
HOLE NO.	84-9	LAT.	2+62E, 1+35E	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	26/7/84	DEP.		SURVEY AT	126' = 52°	DATE	26/7/86
COMPLETED	26/7/84	ELEV.	+1724m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	NQ	LENGTH	126'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
			33'6"-34'6" quartz veined section, minor	A91	33'6"	34'6"	1	11	7	16	.2	268	350
			carbonate and 5% coarse pyrite mostly in top 4"	A92	34'6"	36'	1'6"	34	3	44	.1	63	115
			NB. Above 4 quartz veins in fine-medium sandstone, massive. Minor brown partings - talc?										
			43'-45' core 25% silicified										
			45'-46' core heavily sheared - fault zone?										
			46'2" quartz vein 2-3" heavily weathered haematite after pyrite.	A93	46'	48'	21	57	12	108	.4	55	5
			Localized silicification @ 50', 54', 55', 57'6", 64'6", 66'6"-67'										
			NB. 66' clear dark grey										
			79'-80' core broken and fractured.										
			91'-91'4" quartz ankerite vein.										
			92'-94' core increasingly chloritized.										
			94' quartz vein, 1 1/2" with less than 1% pyrite.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°	PAGE	3 OF 3
HOLE NO.	84-9	LAT.	2+62E 1+35S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	26/7/84	DEP.		SURVEY AT	126' = 52°	DATE	26/7/86
COMPLETED	26/7/84	ELEV.	+1724m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	NQ	LENGTH	126'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
94'	96'	Cs	Chlorite schist, very dark green, locally heavily pyritized, average 3-5% coarse grained and euhedral	A94	94'	96'	2'	33	8	38	.1	708	395
96'	97'6"	S	Fairly dark grey, medium grained sandstone	A95	96'	97'6"	1'6"	26	14	72	.2	49	5
97'6"	115'	Cs	Chloritic mudstone with 1-2% disseminated pyrite.	A96	97'6"	98'6"	1'	60	19	75	.2	19	5
98'6"	115'	M/S	Interbanded find pale green mudstone and fine-medium massive pale grey sandstone with sericitic partings. Mudstone has 25-30% brown carbonate (dolomite?) crystals 1-5mm elongated along foliation locally pyritized less than 1%										
115'	117'	C/L	Highly choritic limestone, well foliated. 116'-117' strongly weathered and iron stained.										
117'	126'	L	Limestone - dark grey, locally bleached and numerous calcite veins along foliation (25-30%). Minor very fine grained pyrite.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°	PAGE	1 OF 2
HOLE NO.	84-10	LAT.	2+39E 1+32S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	26/7/84	DEP.		SURVEY AT	145' = -45°	DATE	27/7/84
COMPLETED	27/7/84	ELEV.	+1720m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill Shasta Vein	CORE SIZE	N.Q.	LENGTH	145'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1ft. = 30.5cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
0	12'		Casing. No core.										
12'	122'	M-S	Graded sequence of mudstone to coarse sandstones.										
			12'-16' core heavily weathered and recovery poor to moderate, minor 2-3" quartz vein @ 15'										
			25'-37' mudstone through siltstone to coarse very pale grey massive gritty sandstone										
			37'-42' mudstone coarse sandstone	A100	36	38	2'	22	3	80	.2	61	5
			38'-39' quartz carbonate veined 25% and 2-3% pyrite.	A101	38	39	1'	281	720	154	.9	35	345
			42'-48' sericitic mudstone to medium grained grey sandstone.	A102	39	41	2'	23	11	34	.1	15	70
			43'-46' 10-15% quartz-carbonate veining.										
			48'-52' mudstone interbanded with siltstone on 2-3cm scale to coarse gritty sandstone with 2-3mm quartz grains for last 4".										
			52'-63' graded sequence, may be more than one? 55' minor fault with 2-3 gouge.										
			63'-67' graded sequence.										
			67'-74'1" graded sequence with weathered zone 71'-72'										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°	PAGE	2 OF 2
HOLE NO.	84-10	LAT.	2+39E 1+32E	TRUE BRG	225°	LOGGED BY	S.O. Quin
COMMENCED	26/7/84	DEP.		SURVEY AT	145' = 45°	DATE	27/7/84
COMPLETED	27/7/84	ELEV.	+1720m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill Shasta Vein	CORE SIZE	N.Q.	LENGTH	145'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
			74'6"-82' grades sequence										
			82'-87' graded sequence										
			Grading continues to 122' on similar scale										
			96'-98' local alteration and iron staining of mudstone										
			104'-105' 45-50% quartz veining in sericitic siltstone with less than 1% associated pyrite.										
				A97	110'	112'	2'	21	4	55	.1	29	5
			112'-112'6" quartz-carbonate vein NVM	A98	112'	112'6"	6"	7	2	23	.1	5	5
				A99	112'6"	114'6"	2'	16	3	80	.2	61	5
			112'6"-122' core gets pale green colour possibly mariposite?										
122'	145'	L	Limestone locally intensely folded or slumped mixture of dark grey and dark green chloritic bands on 1-6" scale with 10-15% white calcite veins. Less than 1% pyrite often associated with chlorite beds.										

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-65°	PAGE	1 OF 3
HOLE NO.	84-11	LAT.	2+39E 1+32E	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	27/7/84	DEP.		SURVEY AT	174' = -68°	DATE	27/7/84
COMPLETED	27/7/84	ELEV.	+1720m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill Shasta Vein	CORE SIZE	N.Q.	LENGTH	174'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1ft. = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
0	10'		Casing.										
10'	17	M	Heavily weathered mudstone with minor sandstone/siltstone intercalation and minor quartz veining, heavily weathered										
17'	174	M-S	Interbedded siltstone, fine sandstone and coarse gritty sandstone with minor sericitic mudstone barrels. Probably graded sequences.										
			Core locally fractured, weathered and iron stained @ 18', 22'6", 29' and appears to be concentrated in mudstones at top of graded sequence.	A103	27	30'6"	3'6"	35	26	67	.3	13	5
			18-22'6"										
			22'6"-28'										
			28'-34'										
			34'-39'										
			39'-48? etc.										
			Core locally silicified and pyritized 29'6"-30'6" 2-3% pyrite in mudstone.										
			Similar @ 35'-36' and 48'-49', 72'-73' but latter quite heavily weathered.	A104	47	49	2	9	8	17	.4	13	5
				A105	72	94	2	35	94	488	.2	78	15

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-65°	PAGE	2 OF 3
HOLE NO.	84-11	LAT.	2+39E 1+32S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	27/7/84	DEP.		SURVEY AT	174' = -68°	DATE	27/7/84
COMPLETED	27/7/84	ELEV.	+1720m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill Shasta Vein	CORE SIZE	N.Q.	LENGTH	174'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
			79'-70'6" quartz ankerite vein. NVM in coarse pale grey sandstone.										
			88'-89' core sheared, quartz veined.										
			97'-98' quartz veined coarse grey sandstone with 2-3% pyrite.	A106	97	99	2'	19	1609	18	1.5	14	10
			99'-103' core broken and recovery less than 50% but no weathering.										
			112'-118' core heavily silicified? sericitic mudstone with massive white quartz-ankerite vein 113'6"-115'. Section has 1-2% fine grained pyrite associated with silicification at contact with sericite.	A107	112'	113'6"	1'6"	43	12	40	.2	11	5
				A108	113'6"	115'	1'6"	3	5	21	.2	3	5
				A609	115'	-118'	3'	19	16	40	.4	19	5
				A110	118'	120'	2'	101	36	69	.3	18	5
			118' possible fault zone. Core fractured and poor recovery.										
			126'6"-127'6" minor quartz veining 40-50% and 1-2% coarse 0.5 - 1cm pyrite crystals and 1-2% very fine grained pyrite.	A111	126'6"	127'6"	1'	8	1	11	.2	78	450
			130'-133' pyrite 2-3% disseminated in sericitic sst.	A112	130	133	3'	70	7	75	.2	19	5

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-65°	PAGE	3 OF 3
HOLE NO.	84-11	LAT.	2+39E 1_32S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	27/7/84	DEP.		SURVEY AT	174' = -68°	DATE	27/7/84
COMPLETED	27/7/84	ELEV.	±1720m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill Shasta Vein	CORE SIZE	N.Q.	LENGTH	174'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
			136'-140' possible fault core broken and 4" of gouge up to 140'										
			147'-149' silicification 20-30% concentrated mostly in first 12"										
			170'-174' core becomes pale green in colour rather than grey-possibly increasing chloritic or mariposite? Is a mudstone with 1-2% disseminated pyrite. At 173' minor 3" quartz ankerite vein with localized pyrite.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°	PAGE 1	OF 2
HOLE NO.	84-12	LAT.	2+22E, 1+32S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	27/7/84	DEP.		SURVEY AT	123' = 43°	DATE	28/7/84
COMPLETED	27/7/84	ELEV.	+1717m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill Shasta Vein	CORE SIZE	N.Q.	LENGTH	128'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
0	5'	S	Core recovery 10-15% heavily weathered and broken. Probably fine, slightly sericitic sandstone.										
5'	12'	Si/s	Core reocvery 10-15%, less weathered than above but recovery poor. Siltstone to dirty sandstone.										
12'	77'	M-S	Graded sequences of minor dirty mudstone often heavily weathered, through siltstone sandstone and occassionally gritty sandstone.										
			Locally minor quartz vein @ 20'-21', 26'-27'										
			Mudstone bands in sequences often iron stained and weathered ie. 29', 34',										
			37', 47'-48'6", 53'-54' latter also has minor quartz veining.	A114	47	51	4'	41	31	79	.3	93	5
				A115	51	54	3'	23	9	52	.1	61	5
77'	84'	L/M ?	Fault zone 77'-62'. Mudstone 77-79' strongly weathered and iron stained 1-2% relict pyrite. 80' gouge zone 2-3". 80-82' warmy dolomitized mudstone with 5-6% fine grained pyrite. Possibly dolomitisation of limey mudstone?	A116	77	80	3'	75	2	53	.3	20	15
				A117	80	82	2'	234	3	57	.3	23	105
				A118	82'	83'6"	1'6"	43	6	70	.4	31	5

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°	PAGE 2	OF 2
HOLE NO.	84-12	LAT.	2+22E 1+32S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	27/7/84	DEP.		SURVEY AT	123' = 43°	DATE	28/7/84
COMPLETED	27/7/84	ELEV.	+1717m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill Shasta Vein	CORE SIZE	N.Q.	LENGTH	128'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
			82-84' relatively mattered mudstone with 10-15% 0.2-0.4mm brown? dolomite? crystals										
84'	128'	L	Dark grey limestone, locally shaley and chloritic, with 10-15% white calcite bands along bedding. Locally pyritized with less than 1% coarse pyrite grains disseminated throughout.										
			Locally weathered and iron stained ie. @ 105'-106', 113'6"-119'6"										

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-65°	PAGE	1 OF 3
HOLE NO.	84-13	LAT.	2+22E 1+32S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	27/7/84	DEP.		SURVEY AT	123' = -67°	DATE	28/7/84
COMPLETED	28/7/84	ELEV.	+1717m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill Shasta	CORE SIZE	N.Q.	LENGTH	145	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1ft = 30.5cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
0	2'		Casing. No core.										
2'	8'		25% core recovery, heavily weathered and broken. 5-10% of core in quartz vein.										
8'	14'6"	M	Graded bedding mudstone through siltstone to sandstone, occassionally quite coarse.										
			11-12'6" silicified and minor quartz veining with less than 1% pyrite.										
			17-18' weathered fracture zone, also at 25', 30' and 38.										
			Quartz vein @ 40'6", less than 3" wide.										
			42'-42'6" brown? dolomite? crystals in mudstone.										
			46'-63' Brown? dolomite crystals in fairly dark grey mudstone, comprise 10-15% of rock and only in mudstone bands. Siltstone bands lack crystals. Also have 2-3% disseminated pyrite associated.	A119	50	54	4'	49	5	55	.1	33	5
				A120	54	58	4'	27	52	30	.4	20	5
			75-77' heavily weathered & iron stained mudstone.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-65°
HOLE NO.	84-13	LAT.	2+22E 1+32S	TRUE BRG	225°
COMMENCED	27/7/84	DEP.		SURVEY AT	123' = 67°
COMPLETED	28/7/84	ELEV.	+1717m	% RECOVERY	
OBJECTIVE	Drill Shasta	CORE SIZE	N.Q.	LENGTH	145

LOGGED BY S.P. Quin

DATE 28/7/84

CORE STORED Camp

UNUSUAL FEAT.

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
			78-82' strongly quartz veined mudstone with										
			30-40% quartz vein. Major vein 80'8"-	A121	78'8"	80'8"	2'	25	3	51	.1	99	10
			81'8" with 2-4% pyrite and 3-4% haematite	A122	80'8"	81'8"	1'	1	422	3	6.7	312	20950
			relict after pyrite? Also less than 1%	A123	81'8"	84'	2'4"	31	229	33	.4	25	5
			galena in vein, unweathered. 81'8"-82'										
			possible gouge zone.										
			100-110' grey-green mudstone, locally silici-										
			fied and 10-15% 1mm brown carbonate?										
			Dolomite crystals lying along bedding.										
110'	114'6"	L	Dark grey limestone possibly heavily dolomi-										
			tized - has rodular appearance and										
			has little quartz or calcite veining.										
114'6"	117'	M/L	Very fine grained mudstone, pale grey green	A124	114'6"	117'	1'6"	12	6	13	.1	2	5
			and has 1-2% disseminated pyrite										
			crystals up to 2mm, 116=117' weathered										
			and iron stained. All may be come										
			as below but bleached?										
117'	145'	L	Dark grey fine grained limey shale grading	A125	117'	121'	4'	12	4	33	.1	2	5
			down into chlorite limestone percentage										
			of white calcite bands increases from										
			1-2% to 20-25% over first 10 feet. Has										
			1-2% disseminated pyrite throughout.										

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-65°	PAGE	3 OF 3
HOLE NO.	84-13	LAT.	2+22E 1+32S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	27/7/84	DEP.		SURVEY AT	123' = -67°	DATE	28/7/84
COMPLETED	28/7/84	ELEV.	+1717m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill Shasta	CORE SIZE	N.Q.	LENGTH	145	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
			131'-133' limestone weathered and iron stained										
			140'-142' core strongly sheared										
			142'-145' massive limestone										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°
HOLE NO.	84-14	LAT.	4+40E 1+74S	TRUE BRG	225°
COMMENCED	28/7/84	DEP.		SURVEY AT	125' = -42°
COMPLETED	28/7/84	ELEV.	+1707m	% RECOVERY	75%
OBJECTIVE	Drill Shasta	CORE SIZE	N.Q.	LENGTH	125'

PAGE 1 OF 2
LOGGED BY S.P. Quin
DATE 29/7/86
CORE STORED Camp
UNUSUAL FEAT.

FROM	TO	SYMBOL	DESCRIPTION * 1 ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Au, Ag in oz/ton Cu	Pb	Zn	Ag	As	Au
0	12'		Casing. No core.										
12'		M/S	Pale grey and light green graded sequences of mudstone through siltstone to sandstone										
			Mudstones well bedded, locally weathered and fractured and often talcose.										
			32'-34' fractured and quartz veined, probable fault.										
				A126	38'	40	2	.01	.01	.01	.02	.01	.001
			38'-40' heavily quartz (and ankerite) veined at least 30-40% and 2-3% haematite relict after pryite?										
			47'-2-3" gouge zone - fault.										
			48'6"-50'6" as 38-40.										
			Coarse gritty sst bases @ 51'6", 55'										
			70'-72' 25% core recovery - possible fault zone.										
			88'-88'6" quartz vein.										
			92'-107 core blocky, weathered and iron stained with 4" quartz veins @ 94', 102'8", 105', Host mostly coarse grained	A127	92	97	5'	.01	.01	.01	.01	.01	.001
				A128	97	103	6'	.01	.01	.01	.04	.01	.001
				A129	103	107	4'	.01	.01	.01	.02	.01	.001

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°
HOLE NO.	84-14	LAT.	4+40E 1+74S	TRUE BRG	225°
COMMENCED	28/7/84	DEP.		SURVEY AT	125' = -42°
COMPLETED	28/7/84	ELEV.	+1707m	% RECOVERY	75%
OBJECTIVE	Drill Shasta	CORE SIZE	N.Q.	LENGTH	125'

PAGE 2 OF 2
LOGGED BY S.P. Quin
DATE 29/7/84
CORE STORED Camp
UNUSUAL FEAT.

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Au, Ag in oz/ton Cu	Pb	Zn	Ag	As	Au
			Gritty sandstone but dirty - iron staining along muddy partings.										
			110' minor fracture zone, core sheared										
			110'-110'6" mudstone - pyritized 2-3% but weathered.										
			121'8" quartz vein, 4" pyrite haematized.										
			122' fracture zone, core heavily weathered	A130	122	123	3'	.01	.01	.01	.01	.01	.001
			122'-125' mudstone, weathered and iron stained with 1-2% pyrite.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-65°	PAGE	1 OF 2
HOLE NO.	84-15	LAT.	4+40E 1+74S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	28/7/84	DEP.		SURVEY AT	171' = 71°	DATE	29/7/84
COMPLETED	29/7/84	ELEV.	+1707m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	171'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1 ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au in oz/t Cu	Pb	Zn	Ag	As	Au
0	4'		Casing. No core.										
4	10'	S/m	Very little recovery (15-20%) of fine sericitic sandstone to mudstone.										
10'	171'	M/S	Interbedded graded sequences of mudstone to sandstone. Locally silicified @ 23-24', 41-42'6", 67-68'.										
			Shear/fractures @ 16'8, 18', 22', 29', 34', 44'6"-45'6", 68-70', 74-76'.										
			Quartz vein 102'6"-103'6" in fairly fine grained green mudstone.										
			Quartz veined 108-109' approx. 60% of the mudstone.	A131	108	111	3'	.01	.01	.01	.01	.01	.001
				A132	111	113'6"	2'6"	.01	.01	.01	.02	.01	.001
			109-110 coarse blue grey sandstone, massive with minor mudstone bands.										
			110-111' fractured & weathered mudstone.										
			111-113'6" dark grey possibly dolomotized limestone with 3-4% pyrite in bands up to 2mm thick along bedding.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-65°	PAGE 2	OF 2
HOLE NO.	84-15	LAT.	4+40E 1+74S	TRUE BRG	225°	LOGGED BY	S.P. Quin
COMMENCED	28/7/84	DEP.		SURVEY AT	171' - 71°	DATE	29/7/84
COMPLETED	29/7/84	ELEV.	+1707m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	171'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au in %/t					
								Cu	Pb	Zn	Ag	As	Au
			113'6"-116'6" very coarse grained gritty	A133	113'6"	115'		.01	.01	.01	.01	.01	.006
			sandstone. Grains up to 0.5cm.	A134	126'9"	129'	2'3"	.01	.01	.01	.01	.01	.001
			141'-162' core fairly strongly weathered and	A135	141'	147'	5'	.01	.01	.01	.01	.01	.001
			locally fractured. Fairly frequent local-	A136	147'	150'	3'	.01	.01	.01	.02	.01	.001
			ized silicification 143'-145', 148-149'	A137	150'	152'	2'	.01	.01	.01	.01	.01	.001
			Quartz vein 152'3"-153, 154-155'6"	A139	154'	155'6"	1'6"	.01	.01	.01	.02	.01	.001
			160' possible quartz filled fault, very little	A140	155'6"	160'	4'6"	.01	.01	.01	.01	.01	.001
			recovery.										
			162'-171' localized silicification @ 163', 171										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-50°	PAGE	1 OF 2
HOLE NO.	84-16	LAT.	4+40E 1+74S	TRUE BRG	210°	LOGGED BY	S.P. Quin
COMMENCED	29/7/84	DEP.		SURVEY AT	175' = 56°	DATE	30/7/84
COMPLETED	29/7/84	ELEV.	+1707m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	175'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1 ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au in oz/t Cu	Pb	Zn	Ag	As	Au
0	19'		Casing. No core.										
19'	175'	M-S	Graded sequences of mudstone to coarse sandstone.										
			29-36' weathered mudstone with 1-2% pyrite	A141	29'	37'	8'	.01	.01	.01	.01	.01	.001
			36'-37' Possible gouge zone, very poor	A142	37'	40'6"	3'6"	.01	.01	.01	.02	.01	.001
				A143	40'6"	41'4"	10"	.01	.01	.01	.02	.01	.001
			40'6"-41'4" quartz vein, haematite stained	A144	41'4"	4'3'	1'8"	.01	.01	.01	.01	.01	.001
			46'-46'6" quartz vein, haematite stained.										
			75-79' core sheared and weathered along mudstone bands.										
			84'-84'4" gouge zone, localized shearing of core.										
			95'-96' shearing of core - fault zone.										
			98'-99' quartz veining of core 25% NVM in two 2" veins.										
			106'6"-111' intense by silicified coarse grained sandstone. NVM.										
			115' fracture zone, heavily weathered and sheared.	A145	119'	120'4"	1'4"	.01	.01	.01	.05	.01	.001

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-50°
HOLE NO.	84-16	LAT.	4+40E 1+74S	TRUE BRG	210°
COMMENCED	29/7/84	DEP.		SURVEY AT	175' = 56°
COMPLETED	29/7/84	ELEV.	+1707m	% RECOVERY	
OBJECTIVE	Shasta Vein	CORE SIZE	N.Q.	LENGTH	175'

PAGE 2 OF 2

LOGGED BY S.P. Quin

DATE 30/7/84

CORE STORED Camp

UNUSUAL FEAT.

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au in oz/t					
								Cu	Pb	Zn	Ag	As	Au
			120'4"-121' quartz vein, iron stained along fractures and 10-15% anherite. NVM.	A146	120'4"	121'	8"	.01	.01	.01	.01	.02	.003
				A147	121'	122'6"	1'6"	.01	.01	.01	.03	.01	.001
			136'-136'6" coarse grained gritty sandstone base to graded sequence with 10-15% 2-3mm dark grey quartz grains.										
			137'6" iron stained fracture zone?										
			144' minor quartz veined fracture.										
			158-159' sheared zone with minor gouge and quartz veining.										
			159'-168' locally silicified and 1-2% dissem. pyrite in 2 graded sequences decided @ 164'										
			166'-175' graded sequence mudstone to coarse gritty sandstone with 1-2% fine grained disseminated pyrite.	A148	168'	172'	4'	.01	.01	.01	.02	.01	.001
				A149	172'	175'	3'	.01	.01	.01	.01	.01	.001

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-65°	PAGE	1 OF 4
HOLE NO.	84-17	LAT.	3+94E 0+15S	TRUE BRG	245°	LOGGED BY	S.P. Quin
COMMENCED	29/7/84	DEP.		SURVEY AT		DATE	30/7/84
COMPLETED	30/7/84	ELEV.	+1746m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	"605" Vein	CORE SIZE	N.Q.	LENGTH	160'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1 ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au in oz/t					
								Cu	Pb	Zn	Ag	As	Au
0'	10'		Casing. No core.										
10'	12'		Very poor recovery of sericitic sst.										
12'	13'		50% core recovery of quartz ankerite vein NVM.										
13'	16'		Core heavily sheared - fault zone.										
16'	23'	M-S	Fairly good recovery (70%+) of interbedded coarse sandstone fining to siltstone and mudstone.										
23'	27'	S	Poor recovery (25%) of sheared fine sericitic sandstone and quartz vein.										
27'	160'	M-S	Graded beds.										
			27'6"-32' graded sequence fine mudstone to massive coarse sst.										
			32'-37' graded sequence with quartz veins										
			@ 35'6"-36'6"	B1	35'6"	36'6"	1'	.01	.01	.01	.01	.01	.001
		Qv	39'-40' quartz vein pyrite rare but at contact with host mudstone.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-65°	PAGE	2 OF 4
HOLE NO.	84-17	LAT.	3+94E 0+15S	TRUE BRG	245°	LOGGED BY	S.P. Quin
COMMENCED	29/7/84	DEP.		SURVEY AT		DATE	30/7/84
COMPLETED	30/7/84	ELEV.	+1746m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	"605" Vein	CORE SIZE	N.Q.	LENGTH	160'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au oz/t					
								Cu	Pb	Zn	Ag	As	Au
			40'-41' heavily sheared sericitic mudstone with minor quartz veining & pyrite (less than 1%).	B2	41'	42'	1'	.01	.01	.01	.01	.01	.001
				B3	42'	44'6"	2'6"	.01	.01	.01	.01	.01	.001
		Qv	42'-45'6" quartz vein. Massive clean and white with minor pyrite at contact with mudstone.	B4	44'6"	46'6"	2'	.01	.02	.01	.01	.01	.001
			46'6"-48' silicified sandstone very pale grey and massive pale grey quartz comprises less than 50% of rock.	B5	46'6"	48'	1'8"	.01	.01	.01	.01	.01	.001
			48'-53' massive coarse grained pale grey sandstone.										
			53'-56' silicified sericitic sandstone similar to 46'6"-48'	B6	53'	55'	2'	.01	.01	.01	.01	.01	.001
				B7	55'	56'	1'	.01	.01	.01	.01	.01	.001
			56' start of mudstone sequence ending in pale-medium grey coarse sandstone @ 59'										
		Qv	56'-57' quartz vein massive white, less than 5% carbonate. NVM. silicified greater than 40% 57'-58' in mudstone.	B8	56'	57'	1'	.01	.01	.01	.01	.01	.001
				B9	57'	58'	1'	.01	.01	.01	.01	.01	.001
			63'-64' shear zone, core heavily fractured and broken.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-65°	PAGE	3 OF 4
HOLE NO.	84-17	LAT.	3+94E 0+15S	TRUE BRG	245°	LOGGED BY	S.P. Quin
COMMENCED	29/7/84	DEP.		SURVEY AT		DATE	30/7/84
COMPLETED	30/7/84	ELEV.	+1746m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	"605" Vein	CORE SIZE	N.Q.	LENGTH	160'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au oz/t					
								Cu	Pb	Zn	Ag	As	Au
			69'-74' core 30-40% silicified - host rock fine sericitic sandstone 4" quartz vein @ 72'6"										
			74'-83' core sheared and blocky, heavily weathered and pale grey colour, minor silicification, originally a mudstone.										
			84'-106' fine-medium sandstone to siltstone, locally mudstone. Occassional dark grey muddy bands, rest quite pale grey.										
			97'6"-99' 75% silicified/veined with quartz and 10-15% ankerite minor bands @ 99'6", 102', 103'-104'.	B10	97'6"	99'	1'6"	.01	.03	.05	.01	.01	.001
			106'-107' dark grey mudstone 20-25% brown 1-2mm crystals elongated along bedding.	B11	107'	110'	3'	.01	.01	.01	.01	.01	.001
				B12	110'	112'	2'	.01	.01	.01	.01	.01	.001
			107'-114' mudstone, dark grey 2-3% dissem pyrite and minor quartz veins.	B13	112'	114'	2'	.01	.01	.01	.01	.01	.001
			110'-112' quartz veined 60% with ankerite.										
			114'6"-119' same as 106'-107'										
			119'-153' highly deformed-stretched? interbanded siltstone and mudstone. Siltstone often boudinaged into pieces elongated along foliation, colour of mudstone varies, mostly pale grey green-										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-65°
HOLE NO.	87-17	LAT.	3+94E 0+15S	TRUE BRG	245°
COMMENCED	29/7/84	DEP.		SURVEY AT	
COMPLETED	30/7/84	ELEV.	+1746m	% RECOVERY	
OBJECTIVE	"605" Vein	CORE SIZE	N.Q.	LENGTH	160'

PAGE 4 OF 4
LOGGED BY S.P. Quin
DATE 30/7/84
CORE STORED Camp
UNUSUAL FEAT.

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au oz/t					
								Cu	Pb	Zn	Ag	As	Au
			locally very dark grey ie. 135'-140, 144'-147'										
			153'-157' massive pale grey sandstone to silt-stone with little muddy partings.										
			157'-160' as 119'-153'										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°	PAGE	1 OF 4
HOLE NO.	84-18	LAT.	3+94E	TRUE BRG	245°	LOGGED BY	S.P. Quin
COMMENCED	30/7/84	DEP.		SURVEY AT	140' = 38°	DATE	1/8/84
COMPLETED	30/7/84	ELEV.	+1746m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	"605" Vein	CORE SIZE	N.Q.	LENGTH	140'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1 ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in % Ag, Au in oz/t Cu	Pb	Zn	Ag	As	Au
0'	12'		Casing. No core.										
12'	16'	Qz/M	Very poor recovery (less than 20%), mostly quartz vein material and mudstone - dirty and iron stained.										
16'	25'	S/M	Strongly sheared mixture of mudstone and sandstone. Possible fault gouge @ 18'-21' feet, 22'-23'										
25'	28'	M	Fine grained sericitic mudstone, sheared @ 27'-28'										
28'	29'	Qz	Quartz vein massive with 2-3% dark brown anherite.	B14	28'	29'	1'	.01	.02	.01	.01	.01	.001
29'	42'	M-G	Interbanded graded sequences of fine possibly dolomitic mudstone with 2-3mm brown crystals alongated along foliation grading very quickly to sandstone and coarse gritty sandstone @ 34'-36' and 39'-41' with grain, up to 1cm elongated along foliation.										
42'	44'	M	Strongly sheared and heavily quartz veined sericitic mudstone with 1-2% disseminated pyrite associated with quartz	B15	42'	44'	2'	.01	.01	.01	.01	.01	.001

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°	PAGE	2 OF 4
HOLE NO.	84-18	LAT.	3+94E 0+15S	TRUE BRG	245°	LOGGED BY	S.P. Quin
COMMENCED	30/7/84	DEP.		SURVEY AT	140' = 38°	DATE	1/8/84
COMPLETED	30/7/84	ELEV.	+1746m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	"605" Vein	CORE SIZE	N.Q.	LENGTH	140'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
44'	46'4"	Qz	Massive white quartz vein with 5-10% pyrite concentrated mostly on two massive bands in first 6" of vein. Also 1-2% disseminated throughout vein.	B16	44'	46'4"	2'4"	.02	.09	.02	.36	.07	1.605
46'4"	47'	S	Massive green siltstone with minor quartz vein NVM	B17	46'4"	47'	8"	.01	.01	.01	.01	.01	.001
47'	52'	M	Strongly sheared and mariposite altered mudstone with 10-15% quartz anherite veining minor disseminated pyrite associated with veins.	A18	47'	50'	3'	.01	.01	.07	.01	.01	.007
52'	56'	M	Locally silicified mariposite sericite mudstone with stringers of quartz very similar to 47'-52' but not sheared and deformed as much.										
56'	59'	M-G	Graded from fine mudstone through sandstone to very coarse grit with quartz grains upto 0.5mm.										
59'	61'	M/Qz	Heavily quartz-anherite veined (50%) mudstone NVM.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°	PAGE	3 OF 4
HOLE NO.	84-18	LAT.	3+94E 0+15S	TRUE BRG	140' = 38°	LOGGED BY	S.P. Quin
COMMENCED	30/7/84	DEP.		SURVEY AT		DATE	1/8/84
COMPLETED	30/7/84	ELEV.	+1746m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	"605" Vein	CORE SIZE	N.Q.	LENGTH	140'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Au, Ag in oz/t					
								Cu	Pb	Zn	Ag	As	Au
61'	78'	M-G	Small scale graded bedding alternating from mudstone to gritty sandstone every 4-12". NVM.										
			72'6"-75' sheared and 30% + quartz veined with less than 1% disseminated fairly coarse pyrite.	B19	72'6"	75'	2'6"	.01	.01	.01	.01	.01	.002
			77'-78' quartz veined 20-30%										
78'	92'	M-G	Larger scale graded bedding on 3-6' scale to one sequence ie. 81'-84'6"	B20	83'6"	84'6"	1'	.01	.01	.01	.01	.01	.001
			84'6"-88'6" heavily quartz veined section:	B21	84'6"	86'6"	2'	.01	3.17	3.69	1.04	.01	.706
			84'6"-86'6" massive quartz vein with 5-10% pyrite, 3-4% galena, possibly minor arsenopyrite. 86'6"-88'6" has 40-50% quartz vein and 1-2% disseminated pyrite.	B22	86'6"	88'6"	2'	.01	.01	.01	.01	.01	.001
92'	103'	M	Dark grey mudstone, locally strongly deformed and possibly boudinageing of minor siltstone bands, locally quartz ankerite veined with minor pyrite @ 88'-90' 90'6"-92'	B23	18'	100'6"	2'6"	.01	.02	.02	.01	.01	.001
				B24	100'6"	102'	1'6"	.01	.01	.01	.01	.01	.001

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°
HOLE NO.	84-18	LAT.	3+94E 0+15S	TRUE BRG	140' = 38°
COMMENCED	30/7/84	DEP.		SURVEY AT	
COMPLETED	30/7/84	ELEV.	+1746m	% RECOVERY	
OBJECTIVE	"605" Vein	CORE SIZE	N.Q.	LENGTH	140'

PAGE 4 OF 4

LOGGED BY S.P. Quin

DATE 1/8/85

CORE STORED Camp

UNUSUAL FEAT.

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS
103'	140'	M-G	Interbedded graded sequences of quite dark grey mudstone, through siltstone to quite coarse grits. Local silicification @ 136'-139' with 6" quartz vein @ 138'6"-139'. Possible boudinage zone 121'-123'					

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-60°	PAGE	1 OF 3
HOLE NO.	84-19	LAT.	3+44E 0+12S	TRUE BRG	250°	LOGGED BY	S.P. Quin
COMMENCED	30/7/84	DEP.		SURVEY AT	218' = 70°	DATE	August 1, 1984
COMPLETED	31/7/84	ELEV.	+1745m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill 605 Vein	CORE SIZE	N.Q.	LENGTH	218'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1 ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au in oz/t Cu	Pb	Zn	Ag	As	Au
0	4'		Casing. No core.										
4'	7'		Very poor recovery (20-25%) of white quartz vein material and sandstone.										
7'	41'	S	Mostly fine to medium light grey sandstone with minor mudstone intercalations and locally quite coarse grained. 40'6"-41' silicified 40-50% and light green mica-mariposite?										
41'	41'6"	Qv	Quartz vein with 5-10% brownish cream carbonate - ankerite? Also 1-2% galena concentrated @ contact with mudstone below.	B25	40'6"	41'6"	1'	.01	.09	.01	.04	.01	.002
41'6"	42'6"	M	Mudstone - dark grey with 5-10% small quartz veins along foliation and 1-2% pyrite associated with veins chloritic?	B26	41'6"	42'6"	1'	.01	.01	.01	.02	.01	.007
42'6"	47'	M	Grey green mudstone strongly sheared of mariposite alteration. Abundant quartz-calcite veining approx. 1% fine grained pyrite.	B27	42'6"	47'	4'6"	.01	.01	.01	.01	.01	.001
47'	49'	M	Mudstone similar to above but less shearing	B28	47'	49'	2'	.01	.01	.01	.01	.01	.001

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-60°	PAGE 2	OF 3
HOLE NO.	84-19	LAT.	3+44E 0+12S	TRUE BRG	250°	LOGGED BY	S.P. Quin
COMMENCED	30/7/84	DEP.		SURVEY AT	218' = 70°	DATE	August 1, 1984
COMPLETED	31/7/84	ELEV.	+1746m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill 605 Vein	CORE SIZE	N.Q.	LENGTH	218'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au in oz/t Cu	Pb	Zn	Ag	As	Au
49'	50'	S	Fine-medium grained light grey sandstone with 2" quartz vein @ 50'										
50'	57'	M	Mudstone, light green at start and becomes more sheared, silicified and dark grey-green @ 55' and lightens up to 57'										
			53'-53'6" 25-30% quartz vein and over 5% pyrite associated with veins.	B29	53'	55'6"	2'6"	.01	0.57	.08	1.26	.01	.009
57'	59'	S	Massive coarse, almost gritty sandstone NVM.	B30	57'	59'	2'	.01	.01	.01	.02	.01	.001
59'	63'	M	Light green mudstone, silicified with quartz veins 30-40% and 2-3% pyrite associated with veins. Also mariposite.	B31	59'	63'	4'	.01	.01	.01	.02	.01	.001
63'	78'	S	Medium to coarse grained pale grey sandstone with very minor mudstone bands. Sericitic partings along foliation.	B32	70'	71'	1'	.01	.01	.01	.02	.01	.001
		Qv	71'-72'6" quartz vein massive, minor carbonate and less than 1% pyrite.	B33	71'	72'6"	1'6"	.01	.01	.01	.03	.01	.001
78'	87'	M	Dark grey mudstone strongly deformed and sheared with numerous quartz-carbonate veins and 1-2% associated pyrite.	B34	80'	82'	2'	.01	.01	.01	.01	.01	.001
				B35	85'	87'	2'	.01	.01	.01	.01	.01	.001

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-60°
HOLE NO.	84-19	LAT.	3+44E 0+12S	TRUE BRG	250°
COMMENCED	30/7/84	DEP.		SURVEY AT	218' = 70°
COMPLETED	31/7/84	ELEV.	+1745m	% RECOVERY	
OBJECTIVE	Drill 605 Vein	CORE SIZE	N.Q.	LENGTH	218'

PAGE 3 OF 3
LOGGED BY S.P. Quin
DATE August 1, 1984
CORE STORED Camp
UNUSUAL FEAT.

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Au, Ag in oz/t Cu	Pb	Zn	Ag	As	Au
87'	131'	M	Mudstone green-grey colour with 30-40% quartz carbonate veining sericitic-talcose mudstone. No visible mineralization.	B36	123'	131'	8'	.01	.01	.01	.01	.01	.012
131'	218'	M-G	Graded sequences of brownish green mudstone grading down to gritty pale grey sandstone. Mudstones silicified and dolomotized and have 1-2% dissem. pyrite ie. 144'6"-147', 149'-152'.	B37	144'6"	147'	2'6"	.01	.01	.01	.01	.01	.001
				B38	149'	152'	3'	.01	.01	.01	.01	.01	.001
			169'-173' probable sheare zone, sheared fairly dark grey mudstone with minor quartz veining.										
			Local silicification @ 181'-182', 186'-187', 196'-197.										
			Last 10' of core (208'-218') quite blocky and possible fault zone. Very broken core 217'-218'.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°	PAGE	1 OF 2
HOLE NO.	84-20	LAT.	3+44E 0+12S	TRUE BRG	250°	LOGGED BY	S.P. Quin
COMMENCED	31/7/84	DEP.		SURVEY AT	161' = -50° 30'	DATE	1/8/84
COMPLETED	31/7/84	ELEV.	+1745m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill 605 Vein	CORE SIZE	N.Q.	LENGTH	161'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1 ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %; Ag, Au in oz/t					
								Cu	Pb	Zn	Ag	As	Au
0'	1'	S	Casing - core recovered HQ size. Massive pale grey slightly sericitic sandstone.										
1'	161'	M-S	Graded bedding of mudstone - locally brownish colour and fine sandstone.										
			Locally massive siltstone to fine sandstone @ 16'-20' very similar to that in hole #84-19 @ 15'-19'										
			Local silicification @ 28'-29', 30'-32', 33'-33'6", 41'6"-42'6"	B38	46'	51'	5'	.01	.01	.01	.02	.01	.001
			46'-51 mudstone with 2-3% pyrite in bands up to 0.5mm.										
		Qv	66'-67' massive white quartz vein with sulphides: less than 1% galena and 4-5% red-brown sulphide possibly weathered pyrite? Still has sulphide appearance.	B40	66'	67'	7'	.01	.14	.58	.03	.01	.007
			71'-76' mudstone with 1-2% fine grained pyrite in fine bands along foliation.	B41	71'	76'	5'	.01	.01	.01	.01	.01	.001
		Qv	86'-87' quartz vein with less than 1% galena in mudstone.										
			90'6"-91'6" quartz carbonate vein NVM										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-40°	PAGE	2 OF 2
HOLE NO.	84-20	LAT.	3+44E 0+12S	TRUE BRG	250°	LOGGED BY	S.P. Quin
COMMENCED	31/7/84	DEP.		SURVEY AT	161' = 50°30'	DATE	1/8/84
COMPLETED	31/7/84	ELEV.	+1745m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill 605 Vein	CORE SIZE	N.Q.	LENGTH	161'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %; Ag, Au in oz/t Cu	Pb	Zn	Ag	As	Au
			Possible minor shear zone 94'-96' core blocky and minor quartz veining.										
				B42	100'	101'	1'	.01	.09	.32	.02	.01	.001
			101'-102'6" quartz veined mudstone with 50% quartz vein and vein has 1-2% each of pyrite and galena.	B43	101'	102'6"	1'6"	.01	1.02	.77	.23	.01	.186
			118'-118'6" quartz vein in brown sericite mudstone with 2-3% pyrite.	B44	118'	118'6"	6"	3.07	.01	.12	.37	.01	.029
				B45	118'6"	121'6"	123'	2'	.01	.01	.01	.01	.001
				B46	121'6"	123'	1'6"	.01	.01	.01	.01	.01	.01
			118'6"-123' mudstone locally silicified with quartz ankerite veins and minor pyrite.										
			146'-150' quartz veined mudstone with 95% quartz ankerite veins ending in possible fault zone with 1-2% dissem. pyrite.	B47	146'	150'	4'	.01	.01	.01	.02	.01	.001
			150'-154' mudstone with 2-3% dissem. pyrite assoc. with minor silicified zones.	B48	150'	154'	4'	.01	.01	.01	.01	.01	.01

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-45°	PAGE	1 OF 4
HOLE NO.	84-21	LAT.	3+70E 0+70S	TRUE BRG	250°	LOGGED BY	S.P. Quin
COMMENCED	31/7/84	DEP.		SURVEY AT		DATE	21
COMPLETED	1/8/84	ELEV.	+1745m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill 605	CORE SIZE	N.Q.	LENGTH	161'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1 ft. = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %; Ag, Au in oz/t Cu	Pb	Zn	Ag	As	Au
0'	6'		Casing. No core.										
6'	8'	M	Quartz veined sericitic mudstone. Poor recovery (10-15%). Beins have haematite replacing pyrite.										
8'	10'	Qv	Quartz vein - originally 3-5% pyrite now replaced by haematite. Strongly weathered.										
10'	11'	F	Probable fault zone - very poor recovery of highly sheared mudstone?										
11'	20'	M-S	Small scale graded beds with mudstone grading into fine sandstone over 4-6" core recovery poor (60-70%) locally mudstones strongly weathered. Mudstones also pyritic 1-2% disseminated 13'6"-14' heavily broken and weathered remains of quartz vein.	B49	16'	19'	3'	0.01	.01	.01	.02	.01	.001
			17-17'6" quartz vein with 2-3% pyrite.	B50	24'	26'	2'	.01	.01	.01	.03	.01	.001
20'		M-S	Larger scale graded bedding of medium grey mudstone grading through fine siltstone to coarse, almost gritty sandstone.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-45°
HOLE NO.	84-21	LAT.	3+70E 0+70S	TRUE BRG	250°
COMMENCED	31/7/84	DEP.		SURVEY AT	
COMPLETED	1/8/84	ELEV.	+1745m	% RECOVERY	
OBJECTIVE	Drill 605	CORE SIZE	N.Q.	LENGTH	161'

PAGE 2 OF 4
LOGGED BY S.P. Quin
DATE 21
CORE STORED Camp
UNUSUAL FEAT.

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %; Ag, Au in oz/t Cu	Pb	Zn	Ag	As	Au
			27'4"-21'6" heavily quartz veined mudstone and siltstone (60-70% vein) locally heavily pyritised.	B51	27'4"	31'6"	4'2"	.01	.01	.01	.06	.01	.001
				B52	31'6"	35'	3'6"	.01	.01	.01	.02	.01	.001
			32'6" quartz-ankerite vein in siltstone with 3-4% pyrite along contact.										
			35'-36' quartz vein massive with 5% carbonate (ankerite?) and less than 1% pyrite.	B53	35'	36'	2'	.01	.01	.01	.03	.01	.001
			36'-38' quartz veined mudstone with 1-2% disseminated pyrite. Core recovery only 75%.	B54	36'	38'	2'	.01	.01	.01	.01	.01	.001
			39'-63' dominated by fine to coarse sandstones 90% + little mudstone.										
			46' quartz vein 3"										
			55'6" quartz vein 3" strongly weathered.										
			57'-57'6" minor mudstone band with 10% pyrite in quartz veins.	B55	57'	59'6"	2'6"	.01	.01	.01	.01	.01	.008
			59'-50'6" minor quartz ankerite veining.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-45°	PAGE	3 OF 4
HOLE NO.	84-21	LAT.	3+70E 0+70S	TRUE BRG	250°	LOGGED BY	S.P. Quin
COMMENCED	31/7/84	DEP.		SURVEY AT		DATE	21
COMPLETED	1/8/84	ELEV.	+1745m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill 605	CORE SIZE	N.Q.	LENGTH	161'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au in oz/t					
								Cu	Pb	Zn	Ag	As	Au
			63'-80' green talc-sericite schist well foliated, locally siltstone. 5-10% brown dolomite crystals.										
			69'2"-69'8" quartz vein, minor ankerite, NVM.										
			73'-73'4" ankerite quartz vein, 25-30% pyrite.	B56	73'	74'2"	1'2"	.03	.01	.01	.01	.01	.001
			73'8"-74'2" quartz vein with 5-10% ankerite and 2-3% pyrite concentrated at upper end.										
80'	83'6"	M	Dark grass green-brown silt to mudstone with 15-20% quartz veins and 3-4% pyrite in large blebs assoc. with veins.	B57	80'	83'6"	3'6"	.01	.05	.01	.02	.01	.004
83'6"		M-S	Graded grey sequences from mudstone to sandstone. Locally quartz veined @ 85'6"-										
			87'6"	B58	85'6"	90'6"	5'	.01	.01	.01	.01	.01	.001
			90'-90'6"	B59	90'6"	95'	4'6"	.01	.01	.01	.01	.01	.001
			92'-93'6"										
			94'-95' In above vein 20-25% ankerite and NVM										
			95'-117' mostly fine-medium sandstone.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	South Grid	CORRECT DIP	-45°	PAGE 4	OF 4
HOLE NO.	84-21	LAT.	3+70E 0+70S	TRUE BRG	250°	LOGGED BY	S.P. Quin
COMMENCED	31/7/84	DEP.		SURVEY AT		DATE	21
COMPLETED	1/8/84	ELEV.	+1745m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill 605	CORE SIZE	N.Q.	LENGTH	161'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %; Au, Ag in oz/t					
								Cu	Pb	Zn	Ag	As	Au
			117'-119' talc-sericite mudstone.										
			119'-126'6" sandstones.										
			128'6"-128'6" fairly dark grey fine banded mudstone - siltstone.										
			128'6"-136' then banded sandstone.										
			130'-134'6" core sheared silicified and quartz veined (50%) in coarse gritty sandstone, 1-2% pyrite in sandstone.	B60	130'	134'6"	4'6"	.01	.01	.01	.01	.01	.006
			134'6"-141' mudstone grading to siltstone fairly dark grey. Minor quartz veining. Minor pyrite 1-2%.	B61	134'6"	138'	3'6"	.01	.01	.01	.01	.01	.001
			141'-161' mostly fine-gritting light grey sandstones, graded, with minor mudstone.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	Central Grid	CORRECT DIP	-50°	PAGE	1 OF 3
HOLE NO.	84-22	LAT.	11+00W 0+96N	TRUE BRG	065	LOGGED BY	S.P. Quin
COMMENCED	2/8/84	DEP.		SURVEY AT		DATE	3/8/84
COMPLETED	2/8/84	ELEV.	+1505m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill IP Anomaly	CORE SIZE	N.Q.	LENGTH	151'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1 ft. = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au in oz/t Cu	Pb	Zn	Ag	As	Au
0	40'		Casing. No core.										
40'	45'	M	Mudstone - fairly dark grey sericitic mudstone strongly weathered. Locally talcose.										
45'	63'	Cs	Fairly dark grey to dark green chlorite schist, locally quartz veined and has minor sandstone bands @ 46'-47' and 60'-61'. 1-2% disseminated pyrite in very dark chloritic sections.										
			Quartz carbonte vein 48'6"-49'										
				C1	55'	56'6"	1'6"	.01	.01	.01	.02	.01	.001
			Quartz vein 56'6-60' with minor carbonate and NVM except less than 1% pyrite at contact with mudstone.	C2	56'6"	60'	3'6"	.01	.01	.01	.02	.01	.008
				C3	60'	61'6"	1'6"	.01	.01	.01	.04	.01	.001
63'	76'	S	Medium to pale grey sandstone, locally silicified @ 65'6"-66' 25% quartz vein chlorite sections 70'-72' - minor mudstone bands and has 1-2% pyrite associated.										
76'	106'6"	Cs	Dark green chlorite schist with 1-2% pyrite throughout. Locally have 1-4" pale grey sectionsof more sericitic mudstone and minor siltstone/sandstone bands.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	Central Grid	CORRECT DIP	-50°	PAGE	2 OF 3
HOLE NO.	84-22	LAT.	11+00W 0+96N	TRUE BRG	065	LOGGED BY	S.P. Quin
COMMENCED	2/8/84	DEP.		SURVEY AT		DATE	3/8/84
COMPLETED	2/8/84	ELEV.	+1505m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill IP Anomaly	CORE SIZE	N.Q.	LENGTH	151'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au in oz/t					
								Cu	Pb	Zn	Ag	As	Au
			84'-85' quartz vein minor calcite and 2-3% pyrite throughout.	C4	82'6"	84'	1'6"	.01	.01	.01	.01	.01	.001
				C5	84'	85'	1'	.01	.01	.01	.03	.01	.001
				C6	85'	86'	1'	.01	.01	.01	.03	.01	.001
			87'-88'2" quartz calcite vein with 1-2% pyrite mostly @ contact with mudstone 50% each calcite and quartz.										
			90'-90'6" calcite - quartz vein with about 75% calcite.										
			90'6"-95' chlorite schist banded with 30-40% siltstone stringers appear to be bandinaged along foliation into lenses bands up to 1cm.										
			97'-101' quartz veining about 50% of rock.										
			102'-105' lighter grey mudstone with 30-40% dark chloritic bands.										
			105' quartz calcite vein approx. 2cm wide with galena along contact with mudstone.										
106'6"		L	Wormy limestone with minor chloritic mudstone band @ 111'-112' with 4-5% pyrite- coarse and euhedral.	C7	110'6"	111'6"	1'	.01	.01	.01	.01	.01	.011
				C8	111'6"	113'	1'6"	.01	1.25	1.24	2.14	0.51	1.910

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	Central Grid	CORRECT DIP	-50°	PAGE	3 OF 3
HOLE NO.	84-22	LAT.	11+00W 0+96N	TRUE BRG	065	LOGGED BY	S.P. Quin
COMMENCED	2/8/84	DEP.		SURVEY AT		DATE	3/8/84
COMPLETED	2/8/84	ELEV.	+1505m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill IP Anomaly	CORE SIZE	N.Q.	LENGTH	151'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %, Ag, Au in oz/t					
								Cu	Pb	Zn	Ag	As	Au
			112'6"-113' quartz vein 60% pyrite, 5% galena	C9	113'	116'6"	3'6"	.01	.01	.01	.01	.01	.003
		Qv	116'6"-122' heavily quartz veined section	C10	116'6"	117'6"	1'	.01	5.96	.01	4.71	.03	.107
			though recovery poor 117'6"-120' possible	C11	117'6"	120'	2'6"	.01	2.04	.01	1.53	.01	.023
			fault zone. Vein material heavily mineral-	C12	120'	122'	2'	.01	6.55	1.71	7.45	.04	.148
			ized with pyrite (up to 30% locally) and	C13	122'	123'	1'	.01	.08	.01	.08	.01	.004
			galena up to 10% locally.										
				C14	140'6"	141'6"	1'	.01	.01	.01	.03	.01	.001
			141'6"-145' quartz carbonte veined section	C15	141'6"	145'	3'6"	.01	.01	.01	.01	.01	.002
			(70-80%) vein). Calcite comprises	C16	145'	146'	1'	.01	.01	.01	.01	.01	.001
			30-40% of vein. Minor pyrite 1-2% of vein										
			N.B. Limestone is locally pyritized less than										
			1% with coarse (1-2mm) euhedral pyrite.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	Central Grid	CORRECT DIP	-70°	PAGE 1	OF 3
HOLE NO.	84-23	LAT.	11+00W 0+96N	TRUE BRG	065°	LOGGED BY	S.P. Quin
COMMENCED	2/8/84	DEP.		SURVEY AT		DATE	August 3, 1984
COMPLETED	2/8/84	ELEV.	+1505m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill IP Anomaly	CORE SIZE	N.Q.	LENGTH	161'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1 ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS
0	18'		Casing. No core.					
18'	19'6"	S	Fairly pale grey massive sandstone.					
19'6"	21'	M	Dark grey mudstone to siltstone, fairly massive, chloritic with 1-2% pyrite.					
21'	22'	S	Fine sandstone, dark grey, massive.					
22'	24'	M	Dark grey-green chloritic mudstone with ribboned siltstone bands, appear to be bandinaged along foliation.					
24'	25'	A	Massive, fine to medium grained fairly dark grey sandstone.					
25'	61'	Cs	Dark green chloritic mudstone with minor dark grey more sericitic siltstone bands. Disseminated pyrite 1-2%. Locally has 1-2cm siltstone bands heavily deformed and 1-2% pyrite associated. 39-56' dark grey chloritic schist heavily sheared and recovery poor. Almost like fault gouge 49'-52'					

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	Central Grid	CORRECT DIP	-70°	PAGE 2	OF 3
HOLE NO.	84-23	LAT.	11+00W 0+96N	TRUE BRG	065°	LOGGED BY	S.P. Quin
COMMENCED	2/8/84	DEP.		SURVEY AT		DATE	August 3, 1984
COMPLETED	2/8/84	ELEV.	+1505m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill IP Anomaly	CORE SIZE	N.Q.	LENGTH	161'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS Cu	Pb	Zn	Ag	As	Au
61'	73'	S	Medium to pale grey fine to medium grained sandstone with minor sericitic partings. Appear to be drilling almost parallel to foliation.										
73'	79'6"	M	Dark to medium grey mudstone locally heavily chloritic, with 1-3cm, siltstone bands to 75'. Angle of beds to core changes from 15-20° to 40° in 2' suggesting folding.										
79'6"	99'	M-S	Possibly graded sequence from mudstone/ siltstone to fine - mud sandstone?										
			82'-87' core heavily fractured and poor recovery - probable fault zone.										
				C17	95'	96'	1'	.01	.01	.01	.02	.01	.001
			96'-98'8" quartz vein with minor carbonate.	C18	96'	98'8"	2'8"	.01	.01	.01	.01	.01	.001
				C19	98'8"	100'	1'4"	.01	.01	.01	.03	.01	.001
				C20	100'	104'	4'	.01	.01	.01	.04	.01	.001
99'	117'	M	Chloritic mudstone with bands and lenses of siltstone/fine sandstone very similar to 88'-96' in 84'-22' gets more massive and dark grey colour towards bottom. Has 2-3% coarse euhedral pyrite.	C21	104'	107'	3'	.01	.01	.01	.01	.01	.001

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	Central Grid	CORRECT DIP	-70°	PAGE	3 OF 3
HOLE NO.	84-23	LAT.	11+00W 0+96N	TRUE BRG	065°	LOGGED BY	S.P. Quin
COMMENCED	2/8/84	DEP.		SURVEY AT		DATE	August 3, 1984
COMPLETED	2/8/84	ELEV.	+1505m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill IP Anomaly	CORE SIZE	N.Q.	LENGTH	161'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %; Ag, Au in oz/t					
								Cu	Pb	Zn	Ag	As	Au
117'	161'		Medium to pale grey mudstone grading to sericitic mudstone @ 120' gradually sericite content decreases, becomes more massive and siltstone grain size.										
			147'-161' massive very pale siltstone, no visible grains. No sericite and NVM.										

DRILL RECORD — IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	Central Grid	CORRECT DIP	-90°	PAGE	1 OF 2
HOLE NO.	84-24	LAT.	11+00W 1+20N	TRUE BRG	-	LOGGED BY	S.P. Quin
COMMENCED	2/8/84	DEP.		SURVEY AT	-	DATE	3/8/84
COMPLETED	2/8/84	ELEV.	+1495m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill IP Anomaly	CORE SIZE	N.Q.	LENGTH	50'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION * 1ft = 30.5 cm	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %; Au, Ag in oz/t Cu	Pb	Zn	Ag	As	Au
0'	5'		Casing. No core.										
8'	14'	M	Heavily quartz, veined sericitic mudstone with heavy iron staining vein in narrow less than 2cm but vertically dipping and dripping right down vein. 2-3% galena associated with vein.	C22	8'	11'	3'	.01	.83	1.05	.27	.01	.001
				C23	11'	14'	3'	.02	1.26	2.13	.39	.01	.001
14'	36'	L	Massive dolomitic limestone, bedding on foliation @ 20-30° to core axis. Locally chloritic and sericitic. Has less than 1% very fine disseminated pyrite.										
			21'-29' quartz-calcite vein approximately parallel to core very little associated pyrite (less than 1%).	C24	29'	30'6"	1'6"	.01	.29	.36	.11	.01	.009
			30'6"-36' quartz veined dolomitic limestone with 3-4% associated pyrite in large blebs.	C25	30'6"	34'6"	4'	.01	.07	.03	.11	.02	.018
				C27	34'6"	35'6"	1'	.04	7.33	4.86	1.89	.01	.003
				C28	35'8"	37'2"	1'4"	.01	.02	.01	.07	.01	.001
			35'-35'8" strongly mineralized with 5-10% pyrite and 3-5% galena.	C29	37'2"	38'6"	1'6"	.02	.07	.05	.09	.01	.016
				C30	38'6"	42'	3'6"	.01	.01	.01	.04	.01	.001
			37'-38'6" quartz veined, chloritic and 2-3% pyrite.										

DRILL RECORD

IMPERIAL METALS CORPORATION

PROPERTY	Cunningham Creek	LOCATION	Central Grid	CORRECT DIP	-90°	PAGE 2	OF 2
HOLE NO.	84-24	LAT.	11+00W 1+20N	TRUE BRG	-	LOGGED BY	S.P. Quin
COMMENCED	2/8/84	DEP.		SURVEY AT	-	DATE	3/8/84
COMPLETED	2/8/84	ELEV.	+1495m	% RECOVERY		CORE STORED	Camp
OBJECTIVE	Drill IP Anomaly	CORE SIZE	N.Q.	LENGTH	50'	UNUSUAL FEAT.	

FROM	TO	SYMBOL	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ANALYSIS in %; Au, Ag in oz/t					
								Cu	Pb	Zn	Ag	As	Au
36'	50'	Mc	Chloritic mudstone with interbanded dark green chloritic bands and dark grey sericitc siltstone. Chlorite contact increases with depth. Chloritic bands have 1-3% euhedral pyrite.	C31	45'	47'	2'	.01	.01	.01	.02	.01	.001
			43'-45'6" fairly massive dark grey siltstone.										
			48' quartz calcite vein 5cm NVM.										

APPENDIX B

ASSAY CERTIFICATES - CORE

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

DATE RECEIVED: 3AUG84

DATE REPORT MAILED: Aug.4/84....

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-3 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.

ASSAYER: ..... DEAN TOYE. CERTIFIED B.C. ASSAYER

IMPERIAL METALS PROJECT # 4203 FILE # 84-1911 PAGE 1

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU* PPB
A-1	14	17	36	.2	55	470
A-2	26	23	36	.1	16	5
A-3	42	8	59	.3	62	5
A-4	6	19	33	.2	7	5
A-5	28	15	13	.1	6	5
A-6	22	42	40	.4	26	5
A-7	10	47	40	.4	17	5
A-10	25	34	28	.2	12	5
A-11	32	4	36	.2	20	5
A-12	121	1	87	.2	35	35
A-13	11	13	61	.1	11	5
A-14	35	81	31	.8	45	5
A-15	25	198	276	.2	26	5
A-16	28	10	44	.1	51	5
A-17	21	19	32	.1	56	5
A-18	20	19	31	.2	1219	2160
A-19	29	37	36	.9	74	350
A-20	2	101	116	24.2	218	18600
A-21	6	521	451	.8	24	5
A-22	18	11	28	.1	31	120
A-23	300	929	28	22.1	3799	3510
A-24	40	12	13	.3	722	1830
A-25	21	8	44	.1	29	5
A-26	12	6	26	.1	66	10
A-27	16	1	62	.1	47	5
A-28	42	16	99	.2	30	45
A-29	13	10	44	.3	158	150
A-30	20	43	70	.1	47	5
A-31	21	39	86	.2	29	5
A-32	18	23	29	.2	17	25
A-33	20	29	62	.1	30	5
A-34	14	2414	4	27.1	6879	16100
A-35	73	30	69	.3	85	25
A-36	10	33	38	.1	31	40
A-37	1	22	14	.1	20	5
A-38	19	43	68	.1	24	5
A-39	38	23	60	.1	28	5
STD S-1/AU 0.5	123	116	183	32.7	117	490

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU* PPB
A-40	15	110	1	2.0	2241	7920
A-41	4	3	1	.2	286	1490
A-42	10	25	12	1.7	655	12600
A-43	22	4	38	.1	65	100
A-44	16	6	29	.2	79	15
A-45	29	65	42	.7	135	225
A-46	11	16	21	.1	14	5
A-47	47	12	54	.1	21	5
A-48	29	12	74	.1	36	5
A-49	37	5	51	.1	17	5
A-50	30	2	76	.1	26	5
A-51	23	21	40	.1	9	5
A-52	41	21	60	.1	23	5
A-53	19	1	48	.1	26	15
A-54	20	5	42	.1	122	60
A-55	430	909	59	31.4	1803	18700
A-56	31	2	60	.1	129	105
A-57	48	17	45	.3	235	290
A-58	40	10	81	.1	53	30
A-59	38	1	56	.1	39	5
A-60	15	1	35	.1	6	25
A-61	27	1	21	.1	11	15
A-62	24	8	40	.1	17	5
A-63	17	79	79	.1	16	15
A-64	579	45	138	.6	413	850
A-65	312	24	34	.1	45	25
A-66	29	806	10	10.5	13871	10900
A-67	204	21	23	1.3	10878	6710
A-68	21	6	42	.1	54	5
A-69	18	1	50	.1	429	5
A-70	22	2	36	.1	34	180
A-71	27	1	100	.1	56	40
A-72	21	4	41	.1	20	5
A-73	8	10	16	.1	2	5
A-74	23	1	29	.1	7	5
A-75	16	2	31	.1	22	5
A-76	111	187	119	.2	34	5
STD S-1/AU 0.5	123	116	184	32.3	118	500

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU* PPB
A-77	59	9	72	.1	24	15
A-78	4	6	8	.1	188	5
A-79	49	19	45	.3	35	5
A-80	50	65	27	.2	9	5
A-81	55	22	33	.1	2	5
A-82	28	17	60	.2	5	5
A-83	21	34	27	.1	4	5
A-84	14	15	24	.4	2	5
A-85	33	23	65	.1	21	5
A-86	38	13	73	.1	27	5
A-87	44	26	57	.4	43	5
A-88	11	9	15	.1	61	150
A-89	64	15	29	.2	557	195
A-90	62	158	61	.2	57	35
A-91	11	7	16	.2	268	350
A-92	34	3	44	.1	63	115
A-93	57	12	108	.4	55	5
A-94	33	8	38	.1	708	395
A-95	26	14	72	.2	49	5
A-96	60	19	75	.2	19	5
A-97	21	4	55	.1	29	5
A-98	7	2	23	.1	5	5
A-99	16	2	64	.1	42	15
A-100	22	3	80	.2	61	5
A-101	281	720	154	.9	35	345
A-102	23	11	34	.1	15	70
A-103	35	26	67	.3	13	5
A-104	9	8	17	.4	13	5
A-105	35	94	488	.2	78	15
A-106	19	1609	18	1.5	14	10
A-107	43	12	40	.2	11	5
A-108	3	5	21	.2	3	5
A-109	19	16	40	.4	19	5
A-110	101	36	69	.3	18	5
A-111	8	1	11	.2	78	450
A-112	70	7	75	.2	19	5
A-114	41	31	79	.3	93	5
STD S-1/AU 0.5	123	118	184	33.0	116	490

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU* PPB
A-115	23	9	52	.1	61	5
A-116	75	2	53	.3	20	15
A-117	234	3	37	.3	23	105
A-118	43	6	20	.4	31	5
A-119	49	5	55	.1	33	5
A-120	27	52	30	.4	20	5
A-121	25	3	51	.1	99	10
A-122	1	422	3	6.7	312	20950
A-123	31	229	33	.4	25	5
A-124	12	6	13	.1	2	5
A-125	12	4	33	.1	2	5
STD S-1/AU 0.5	123	116	183	32.3	113	505

ACME ANALYTICAL LABORATORIES LTD.
852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6
PHONE 253-3158 TELEX 04-53124

DATE RECEIVED: AUG 3 1984

DATE REPORT MAILED: Aug 9/84.

ASSAY CERTIFICATE

1.00 GRAM SAMPLE IS DIGESTED WITH 50ML OF 3-1-3 OF HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR. AND IS DILUTED TO 100ML WITH WATER. DETECTION FOR BASE METAL IS .01%.
- SAMPLE TYPE: CORES AU* 10 GRAM REGULAR ASSAY

ASSAYER: P2-Rock DEAN TOYE. CERTIFIED B.C. ASSAYER

IMPERIAL METALS PROJECT # 4203 FILE # 84-1939 PAGE 1

SAMPLE#	CU %	PB %	ZN %	AG OZ/T	AS %	AU OZ/T
A126	.01	.01	.01	.02	.01	.001
A127	.01	.01	.01	.01	.01	.001
A128	.01	.01	.01	.04	.01	.001
A129	.01	.01	.01	.02	.01	.001
A130	.01	.01	.01	.01	.01	.001
A131	.01	.01	.01	.01	.01	.001
A132	.01	.01	.01	.02	.01	.001
A133	.01	.01	.01	.01	.01	.006
A134	.01	.01	.01	.01	.01	.001
A135	.01	.01	.01	.01	.01	.001
A136	.01	.01	.01	.02	.01	.001
A137	.01	.01	.01	.01	.01	.001
A138	.01	.01	.01	.01	.01	.001
A139	.01	.01	.01	.02	.01	.001
A140	.01	.01	.01	.01	.01	.001
A141	.01	.01	.01	.01	.01	.001
A142	.01	.01	.01	.02	.01	.001
A143	.01	.01	.01	.02	.01	.001
A144	.01	.01	.01	.01	.01	.001
A145	.01	.01	.01	.05	.01	.001
A146	.01	.01	.01	.01	.02	.003
A147	.01	.01	.01	.03	.01	.001
A148	.01	.01	.01	.02	.01	.001
A149	.01	.01	.01	.01	.01	.001
STD C-8	1.07	1.08	1.97	5.50	.07	-

ACME ANALYTICAL LABORATORIES LTD.
852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6
PHONE 253-3158 TELEX 04-53124

DATE RECEIVED: AUG 4 1984

DATE REPORT MAILED: Aug.8/84

ASSAY CERTIFICATE

1.00 GRAM SAMPLE IS DIGESTED WITH 50ML OF 3-1-3 OF HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR.
AND IS DILUTED TO 100ML WITH WATER. DETECTION FOR BASE METAL IS .01%.
- SAMPLE TYPE: ROCK CHIPS AU# 10 GRAM REGULAR ASSAY

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

IMPERIAL METALS PROJECT # 4203 FILE # 84-1947 PAGE 1

SAMPLE#	CU %	PB %	ZN %	AG OZ/T	AS %	AU OZ/T
B-1	.01	.01	.01	.01	.01	.001
B-2	.01	.01	.01	.01	.01	.001
B-3	.01	.01	.01	.01	.01	.001
B-4	.01	.02	.01	.01	.01	.001
B-5	.01	.01	.01	.01	.01	.001
B-6	.01	.01	.01	.01	.01	.001
B-7	.01	.01	.01	.01	.01	.001
B-8	.01	.01	.01	.01	.01	.001
B-9	.01	.01	.01	.01	.01	.001
B-10	.01	.03	.05	.01	.01	.001
B-11	.01	.01	.01	.01	.01	.001
B-12	.01	.01	.01	.01	.01	.001
B-13	.01	.01	.01	.01	.01	.001
B-14	.01	.01	.02	.01	.01	.001
B-15	.01	.01	.01	.01	.01	.001
B-16	.01	.09	.01	.36	.07	1.605
B-17	.01	.01	.01	.01	.01	.001
B-18	.01	.01	.07	.01	.01	.007
B-19	.01	.01	.01	.01	.01	.002
B-20	.01	.01	.01	.01	.01	.001
B-21	.01	3.17	3.69	1.04	.01	.706
B-22	.01	.01	.01	.01	.01	.001
B-23	.01	.02	.02	.01	.01	.001
B-24	.01	.01	.01	.01	.01	.001
B-25	.01	.09	.01	.04	.01	.002
B-26	.01	.01	.01	.02	.01	.007
B-27	.01	.01	.01	.01	.01	.001
B-28	.01	.01	.01	.01	.01	.001
B-29	.01	.57	.08	1.26	.01	.009
B-30	.01	.01	.01	.02	.01	.001
B-31	.01	.01	.01	.02	.01	.001
B-32	.01	.01	.01	.02	.01	.001
B-33	.01	.01	.01	.03	.01	.001
B-34	.01	.01	.01	.01	.01	.001
B-35	.01	.01	.01	.01	.01	.001
B-36	.01	.01	.01	.01	.01	.012
B-37	.01	.01	.01	.01	.01	.001
STD C-8	1.07	1.08	2.02	5.50	.07	-

SAMPLE#	CU %	PB %	ZN %	AG OZ/T	AS %	AU OZ/T
B-38	.01	.01	.01	.01	.01	.001
B-39	.01	.01	.01	.02	.01	.001
B-40	.01	.14	.58	.03	.01	.007
B-41	.01	.01	.01	.01	.01	.001
B-42	.01	.09	.32	.02	.01	.001
B-43	.01	1.02	.77	.23	.01	.186
B-44	3.07	.01	.12	.37	.01	.029
B-45	.02	.01	.01	.01	.01	.001
B-46	.01	.01	.01	.01	.01	.001
B-47	.01	.01	.01	.02	.01	.001
B-48	.01	.01	.01	.01	.01	.001
B-49	.01	.01	.01	.02	.01	.001
B-50	.01	.01	.01	.03	.01	.001
B-51	.01	.01	.01	.06	.01	.001
B-52	.01	.01	.01	.02	.01	.001
B-53	.01	.01	.01	.03	.01	.001
B-54	.01	.01	.01	.01	.01	.001
B-55	.01	.01	.01	.01	.01	.008
B-56	.03	.01	.01	.01	.01	.001
B-57	.01	.05	.01	.02	.01	.004
B-58	.01	.01	.01	.01	.01	.001
B-59	.01	.01	.01	.01	.01	.001
B-60	.01	.01	.01	.01	.01	.006
B-61	.01	.01	.01	.01	.01	.001
C-1	.01	.01	.01	.02	.01	.001
C-2	.01	.01	.01	.02	.01	.008
C-3	.01	.01	.01	.04	.01	.001
C-4	.01	.01	.01	.01	.01	.001
C-5	.01	.01	.01	.03	.01	.001
C-6	.01	.01	.01	.03	.01	.001
C-7	.01	.01	.01	.01	.01	.011
C-8	.01	1.25	1.24	2.14	.51	1.910
C-9	.01	.01	.01	.01	.01	.003
C-10	.01	5.96	.01	4.71	.03	.107
C-11	.01	2.04	.01	1.53	.01	.023
C-12	.01	6.55	1.71	7.45	.04	.148
C-13	.01	.08	.01	.08	.01	.004
STD C-8	1.07	1.08	2.02	5.50	.07	-

SAMPLE#	CU %	PB %	ZN %	AG OZ/T	AS %	AU OZ/T
C-14	.01	.01	.01	.03	.01	.001
C-15	.01	.01	.01	.01	.01	.002
C-16	.01	.01	.01	.01	.01	.001
C-17	.01	.01	.01	.02	.01	.001
C-18	.01	.01	.01	.01	.01	.001
C-19	.01	.01	.01	.03	.01	.001
C-20	.01	.01	.01	.04	.01	.001
C-21	.01	.01	.01	.01	.01	.001
C-22	.01	.83	1.05	.27	.01	.001
C-23	.02	1.26	2.13	.39	.01	.001
C-24	.01	.29	.36	.11	.01	.009
C-25	.01	.07	.03	.11	.02	.018
C-27	.04	7.33	4.86	1.89	.01	.003
C-28	.01	.02	.01	.07	.01	.001
C-29	.02	.07	.05	.09	.01	.016
C-30	.01	.01	.01	.04	.01	.001
C-31	.01	.01	.01	.02	.01	.001
STD C-8	1.07	1.08	1.97	5.50	.07	-

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

DATE RECEIVED AUG 9 1984

DATE REPORTS MAILED Aug 14/84

ASSAY CERTIFICATE

SAMPLE TYPE : PULP
AU BY FIRE ASSAY

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

IMPERIAL METALS PROJECT# 4203 FILE# 84-1911 R PAGE# 1

SAMPLE	AU OZ/T	
A-18	.046	
A-20	.506	
A-20	4.010	Av. 2.26 g/t
A-20	1.530	
A-20	2.980	
A-23	.146	
A-24	.057	
A-34	.407	
A-40	.282	
A-41	.063	
A-42	.456	
A-55	.459	
A-66	.360	
A-67	.238	
A-122	.276	
A-122	1.060	
A-122	.145	
A-122	.956	

Assayed 4 times.

APPENDIX C

ASSAY CERTIFICATES - ROCK

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 TELEX 04-53124

ASSAY ICP ANALYSIS

1.00 GRAM OF SAMPLE IS DIGESTED WITH 50ML OF 3-1-3 OF HCL-HNO3-H2O AT 95 DEG. OF WATER BATH FOR ONE HOUR AND IS DILUTED TO 100ML 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. DETECTION LIMIT FOR MOST METALS IS .01% SAMPLE TYPE: ROCK CHIPS AU* 10 GRAM REGULAR ASSAY

DATE RECEIVED: JULY 6 1984 DATE REPORT MAILED: July 13/84 ASSAYER.. DEAN TOYE. CERTIFIED B.C. ASSAYER

IMPERIAL METALS PROJECT # 4203 FILE # 84-1438B

SAMPLE#	MO %	CU %	PB %	ZN %	AG OZ/T	NI %	CO %	FE %	AS %	CD %	SB %	BI %	CA %	MG %	W %	AU OZ/T
MS#1	.003	.14	.01	.02	.09	.01	.01	40.97	.01	.001	.003	.001	2.18	.75	.010	.020
MS#2	.002	.05	.01	.01	.04	.01	.01	19.26	.01	.001	.001	.002	10.82	2.68	.172	.001
MS#3	.002	.11	11.83	.01	9.74	.01	.03	31.75	.01	.001	.021	.014	.95	.16	.006	.001
MS#4	.001	.06	12.66	.01	11.42	.01	.03	24.37	.01	.001	.028	.011	.38	.08	.001	.001
MS#5	.001	.05	.26	.01	.17	.01	.01	20.60	.01	.001	.002	.001	11.55	2.51	.001	.001
MS#6	.001	.05	.26	.01	.22	.01	.01	21.73	.01	.001	.001	.001	12.14	1.46	.001	.001
MS#7	.001	.01	.06	.01	.05	.01	.01	5.68	.01	.001	.001	.001	9.81	1.58	.001	.001
MS#8	.001	.05	.04	.01	.04	.01	.01	18.89	.01	.001	.001	.001	13.27	1.47	.001	.019
MS#9	.001	.24	7.16	.01	2.72	.01	.04	24.90	.01	.001	.005	.001	1.51	.47	.001	.020
MS#10	.001	.14	13.11	.01	14.07	.01	.01	18.02	.01	.001	.042	.003	.74	.19	.001	.001
MS#12	.002	.05	.10	.02	.17	.01	.01	18.87	.01	.001	.003	.004	10.77	2.48	.028	.101
MS#13	.001	.02	.05	.02	.05	.01	.01	6.71	.01	.001	.001	.001	6.33	1.20	.001	.001
MS#14	.001	.01	.02	.01	.03	.01	.01	7.36	.01	.001	.001	.001	8.28	1.09	.001	.001
MS#15	.001	.04	12.50	.01	11.47	.01	.01	16.31	.01	.001	.031	.005	.50	.15	.001	.001
MS#16	.002	.12	13.15	5.11	7.93	.02	.01	22.63	.01	.014	.021	.001	.19	.08	.006	.006
SHAS 'S'	.001	.01	1.64	.01	2.88	.03	.01	15.25	.19	.001	.001	.012	1.79	.65	.001	.315
STD C-8	.166	1.07	1.08	2.00	5.50	.18	.01	7.50	.07	.008	.296	.002	.88	.71	.052	-

ACME ANALYTICAL LABORATORIES LTD.
852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6
PHONE 253-3158 TELEX 04-53124

DATE RECEIVED: JULY 12 1984

DATE REPORT MAILED: July 17/84.

ASSAY ICP ANALYSIS

1.00 GRAM OF SAMPLE IS DIGESTED WITH 50ML OF 3-1-3 OF HCL-HNO3-H2O AT 95 DEG. OF WATER BATH FOR ONE HOUR AND IS DILUTED TO 100ML 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. DETECTION LIMIT FOR MOST METALS IS .01% SAMPLE TYPE: ROCK CHIPS AU* 10 GRAM REGULAR ASSAY

ASSAYER: DEAN TOYE. CERTIFIED B.C. ASSAYER

IMPERIAL METALS PROJECT # 4203 FILE # 84-1540B

SAMPLE#	CU %	PB %	ZN %	AG OZ/T	AS %	CD %	AU OZ/T
MS-17	.01	.07	.01	.16	.03	.001	.240
MS-18	.01	.01	.01	.04	.01	.001	.114
MS-19	.01	.01	.01	.02	.01	.001	.007
MS-20	.01	.02	.02	.14	.01	.001	.985
MS-21	.03	1.32	.01	.93	.01	.001	.006
MS-22	.01	2.09	.01	1.11	.01	.001	.003
MS-23	.12	20.73	.01	10.79	.01	.001	.008
STD C-8	1.07	1.08	2.00	5.50	.07	.008	-

ACME ANALYTICAL LABORATORIES LTD.
352 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6
PHONE 253-3158 TELEX 04-53124

DATE RECEIVED: JULY 16 1984

DATE REPORT MAILED: July.12/84

ASSAY ICP ANALYSIS

1.00 GRAM OF SAMPLE IS DIGESTED WITH 50ML OF 3-1-3 OF HCL-HNO3-H2O AT 95 DEG. OF WATER BATH FOR ONE HOUR AND IS DILUTED TO 100ML 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. DETECTION LIMIT FOR MOST METALS IS .01% SAMPLE TYPE: ROCK CHIPS AU* 10 GRAM REGULAR ASSAY

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

IMPERIAL METALS PROJECT # 4203 FILE # 84-1587 PAGE 1

SAMPLE#	CU %	PB %	ZN %	AS %	AG OZ/T	AU OZ/T	
S 1	.01	.01	.01	.01	.01	.008	12' 3oz
S 2	.01	.01	.01	.07	.04	.133	6'
S 3	.01	.01	.02	.49	.05	.227	3'
S 4	.01	.01	.01	.11	.03	.057	3'
S 5	.01	.01	.01	.02	.02	.004	100 3.2%
S 6	.01	.01	.01	.02	.03	.134	130 4.26'
S 7	.01	.01	.01	.20	.02	.073	70 2.30'
S 8	.01	.02	.01	.32	.12	.816	160 5.24'
S 9	.01	.01	.01	.05	.01	.001	30 .96
S 10	.01	.01	.01	.01	.03	.001	3'
S 11	.01	.01	.01	.01	.01	.001	6'
CH 1	.01	2.42	2.43	.03	.87	.693	
CH 2	.01	2.65	3.67	.06	1.41	.895	
Q 1	.05	.38	.02	.02	.45	.086	
Q 2	.08	.55	.04	.01	1.30	.004	
STD C-8	1.07	1.08	2.00	.07	5.50	-	

IMPERIAL METALS PROJECT # 4203 FILE # 84-1939 PAGE 2

SAMPLE#	CU %	PB %	ZN %	AG OZ/T	AS %	AU OZ/T		
S15	.01	.01	.01	.09	3.86	.592	106	3.4'
S16	.01	.01	.01	.02	.02	.063	120	3.14'
S17	.01	.02	.01	.05	.02	.158	120	3.14'
S18	.01	.01	.01	.04	.16	.245	140	4.59'
S19	.01	.01	.01	.05	.02	.063	110	3.6'
S20	.01	.20	.01	.61	.40	.276	90	2.6'
S21	.01	.01	.01	.04	.04	.024	50	1.6'
S22	.01	.01	.01	.04	.03	.001	40	1.3'
S23	.01	.06	.06	.06	.01	.001	190	5.6'
S24	.01	.01	.01	.05	2.14	.038	18	0.6'
MS31	.02	.01	.01	.05	.01	.004		
MS32	.04	.01	.01	.04	.01	.001		
MS33	.11	.01	.01	.04	.01	.008		
MS34	.24	15.90	.01	9.68	.01	.014		
MS35	.03	.02	.01	.04	.01	.042		
MS36	.03	.11	.01	.10	.01	.034		
STD C-8	1.07	1.08	1.98	5.50	.07	-		

ACME ANALYTICAL LABORATORIES LTD.
852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6
PHONE 253-3158 TELEX 04-53124

DATE RECEIVED: AUG 9 1984

DATE REPORT MAILED: Aug 13/84

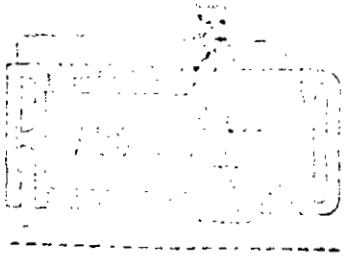
ASSAY CERTIFICATE

1.00 GRAM SAMPLE IS DIGESTED WITH 50ML OF 3-1-3 OF HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR. AND IS DILUTED TO 100ML WITH WATER. DETECTION FOR BASE METAL IS .01%.
- SAMPLE TYPE: ROCK CHIPS AU# 10 GRAM REGULAR ASSAY

ASSAYER: A. Dean Toye. DEAN TOYE. CERTIFIED B.C. ASSAYER

IMPERIAL METALS FILE # 84-2006

SAMPLE#	CU %	PB %	ZN %	AG OZ/T	AS %	AU OZ/T
605-1	.01	.01	.01	.01	.01	.001
605-2	.01	.01	.01	.01	.01	.001
605-3	.01	.17	.13	.05	.01	.001
605-4	.01	.01	.02	.01	.01	.001
605-5	.01	.01	.03	.01	.01	.001
605-6	.01	.01	.01	.01	.01	.001
605-7	.01	.01	.01	.01	.01	.001
S-50	.01	.05	.01	.03	.01	.136
S-51	.01	.15	.01	.06	.03	.192
S-52	.01	.33	.01	.17	.04	.225
S-53	.01	.16	.01	.12	.16	.603
Q#3	.01	.01	.01	.01	.01	.006
Q#4	.01	.01	.01	.01	.01	.004
STD C-8	1.07	1.08	2.02	5.50	.07	-



APPENDIX D

ASSAY CERTIFICATES - SOIL

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

DATE RECEIVED JULY 4 1984

DATE REPORTS MAILED July 12/84

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE TYPE : SOIL - DRIED AT 60 DEG C. , -80 MESH.
AU*, PD, PT - 10 GM FIRE ASSAY CONCENTRATION, HNO3 LEACHED,
AQUA REGIA DIGESTION, GRAPHITE FURNACE AA ANALYSIS.

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

IMPERIAL METALS PROJECT# 4203 FILE# 84-1380 PAGE# 1

SAMPLE	AU** PPB
475E 10S	4
475E 20S	3
475E 30S	5
475E 40S	33
475E 50S	10
475E 60S	70
475E 70S	22
475E 80S	8
475E 90S	16
475E 100S	7
475E 110S	15
475E 120S	60
475E 130S	21
475E 140S	2
475E 150S	3
475E 160S	15
475E 170S	195
475E 180S	60
475E 190S	7
475E 200S	6
475E BL	5
525E 150S	9
525E 160S	18
525E 170S	13
525E 180S	4
525E 190S	41
525E 200S	16
525E 210S	8
525E 220S	45
525E 230S	27
525E 240S	16
525E 250S	4
525E 260S	75
525E 270S	7
525E 280S	2
525E 290S	1
525E 300S	5

SAMPLE	AU** PPB
525E 310S	1
525E 320S	2
525E 330S	24
525E 340S	6
525E 350S	2
525E 360S	1
525E 370S	1
525E 380S	7
525E 390S	23
525E 400S	56
575E 150N	1
575E 160N	52
575E 170N	1
575E 180N	9
575E 190N	17
575E 200N	11
575E 210N	6
575E 220N	8
575E 230N	19
575E 240N	70
575E 250N	44
575E 260N	61
575E 270N	10
575E 280N	9
575E 290N	5
575E 300N	8
575E 310N	22
575E 320N	25
575E 330N	6
575E 350N	13
575E 360N	4
575E 370N	1
575E 380N	6
575E 390NA	3
575E 390NB	7
575E 400N	10
650E 10N	1
650E 20N	70

SAMPLE	AU** PPB
650E 30N	4
650E 40N	2
650E 50N	2
650E 60N	2
650E 70N	3
650E 80N	4
650E 90N	1
650E 100N	12
650E BL	10
4+75E 2+10S	8
4+75E 2+20S	75
4+75E 2+30S	4
4+75E 2+40S	17
4+75E 2+50S	6
4+75E 2+60S	65
4+75E 2+70S	55
4+75E 2+80S	8
4+75E 2+90S	46
4+75E 3+00S	5
4+75E 3+10S	2
4+75E 3+20S	1
4+75E 3+30S	1
4+75E 3+40S	10
4+75E 3+50S	2
4+75E 3+60S	2
4+75E 3+70S	2
4+75E 3+80S	3
4+75E 3+90S	3
4+75E 4+00S	65
6+25E 0+00BL	5
6+25E 0+10N	1
6+25E 0+20N	95
6+25E 0+30N	32
6+25E 0+40N	60
6+25E 0+50N	25
6+25E 0+60N	65
6+25E 0+70N	70

SAMPLE	AU** PPB
6+25E 0+80N	1
6+25E 0+90N	2
6+25E 1+00N	2
6+25E 0+10S	5
6+25E 0+20S	90
6+25E 0+30S	65
6+25E 0+40S	16
6+25E 0+50S	14
6+75E 0+00BL	9
6+75E 0+10N	20
6+75E 0+20N	11
6+75E 0+30N	5
6+75E 0+40N	2
6+75E 0+50N	1
6+75E 0+60N	1
6+75E 0+70N	16
6+75E 0+80N	1
6+75E 0+90N	2
6+75E 1+00N	5
6+75E 0+10S	4
6+75E 0+20S	3
6+75E 0+30S	48
6+75E 0+40S	75
6+75E 0+50S	42

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 3-1-3 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: SOIL AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: JULY 6 1984 DATE REPORT MAILED: July 13/84 ASSAYER. D. Toye. DEAN TOYE. CERTIFIED B.C. ASSAYER

IMPERIAL METALS PROJECT # 4203 FILE # 84-1438A 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	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
19W 500N	3	27	46	48	.4	12	9	609	5.62	16	2	ND	3	5	1	2	2	44	.05	.14	19	12	.15	62	.01	4	.86	.01	.03	2	35
19W 490N	3	23	47	43	.9	13	9	570	5.43	13	2	ND	3	5	1	2	2	42	.04	.19	20	16	.18	54	.01	4	.97	.01	.03	2	5
19W 480N	2	17	35	37	.7	10	6	188	2.76	9	2	ND	3	5	1	2	2	29	.02	.09	19	13	.16	35	.01	4	.86	.01	.02	2	30
19W 470N	2	17	32	35	.7	10	6	189	3.58	8	2	ND	2	5	1	2	2	34	.02	.11	17	12	.20	29	.01	5	.93	.01	.02	2	30
19W 460N	2	14	25	24	.4	8	6	226	2.61	7	2	ND	3	6	1	2	2	32	.04	.16	18	7	.12	35	.01	5	.62	.01	.04	2	5
19W 450N	3	32	69	67	.4	15	11	1042	6.67	14	2	ND	3	8	1	2	2	32	.08	.18	13	13	.23	47	.01	6	1.16	.01	.02	2	5
19W 440N	3	26	43	47	.7	12	8	455	5.98	11	2	ND	2	4	1	2	2	38	.01	.10	17	12	.18	40	.01	5	1.02	.01	.02	2	5
19W 430N	2	24	30	43	.2	11	8	593	4.90	13	2	ND	3	4	1	2	2	41	.02	.09	20	9	.11	32	.01	5	.72	.01	.02	2	5
19W 420N	3	32	41	57	.3	12	9	507	6.50	14	2	ND	3	5	1	2	2	49	.01	.09	20	12	.16	32	.01	6	.95	.01	.03	4	5
19W 410N	3	26	34	60	1.2	17	8	714	7.73	13	2	ND	3	5	1	2	2	44	.01	.11	20	14	.14	36	.02	8	.95	.01	.02	2	5
19W 400N	3	38	48	60	.4	18	14	1581	8.78	11	2	ND	3	6	1	2	2	45	.02	.14	20	27	.36	44	.02	5	1.75	.01	.02	2	5
19W 390N	3	38	32	62	.3	13	14	1428	5.19	7	2	ND	4	12	1	2	2	57	.18	.12	17	16	.74	52	.01	5	1.74	.01	.02	2	5
19W 380N	4	47	30	73	.1	21	16	3178	8.05	11	2	ND	5	5	1	2	2	28	.02	.25	25	23	.47	46	.01	7	1.58	.01	.02	2	5
19W 370N	3	17	42	65	.4	13	9	3481	5.06	17	2	ND	3	7	1	2	2	38	.05	.18	17	13	.10	91	.03	6	.77	.01	.04	2	5
19W 360N	2	43	17	71	.2	17	13	793	8.67	14	2	ND	2	7	1	2	2	49	.03	.12	16	19	.25	38	.02	7	1.36	.01	.02	2	5
19W 350N	2	20	14	34	.1	11	6	264	4.13	7	2	ND	3	6	1	2	2	49	.02	.09	21	13	.12	37	.02	5	.79	.01	.02	2	5
19W 340N	2	37	35	89	.1	19	23	1751	7.90	12	2	ND	4	9	1	2	2	47	.07	.16	16	23	.27	86	.02	7	1.49	.01	.04	2	5
19W 330N	3	33	43	89	.2	25	19	2701	5.08	8	2	ND	3	30	1	2	2	35	.68	.13	13	22	.39	169	.01	7	1.82	.01	.05	2	5
19W 320N	3	34	23	94	.5	20	18	3599	5.10	8	2	ND	2	50	1	2	2	33	1.38	.16	7	19	.32	193	.01	6	1.45	.01	.05	2	5
19W 310N	2	36	21	74	.4	21	17	617	6.27	9	2	ND	3	13	1	2	2	51	.19	.14	14	27	.37	102	.01	5	1.65	.01	.04	2	5
19W 300N	2	42	15	46	.6	16	13	242	4.56	20	2	ND	3	7	1	2	2	29	.04	.10	12	8	.14	29	.01	5	.63	.01	.03	2	5
19W 290N	2	28	14	37	.2	8	6	713	4.70	15	2	ND	2	4	1	2	2	41	.02	.15	18	7	.10	59	.01	5	.72	.01	.02	2	5
19W 280N	2	51	12	39	.1	7	8	552	4.25	20	2	ND	5	6	1	2	2	65	.08	.11	30	4	.13	69	.01	6	.79	.01	.02	2	5
19W 270N	2	45	26	64	.2	12	14	608	7.77	21	2	ND	4	12	1	2	2	80	.16	.11	12	18	.32	105	.01	7	2.24	.01	.02	2	5
19W 260N	2	43	21	68	.2	9	20	1335	8.09	19	2	ND	3	24	1	2	2	107	.35	.12	12	12	.29	190	.01	7	2.08	.01	.02	2	5
19W 250N	2	47	11	55	.3	10	10	527	6.24	10	2	ND	4	5	1	2	2	83	.04	.10	20	12	.28	52	.01	5	1.90	.01	.02	2	5
19W 240N	2	67	13	67	.4	9	10	592	7.98	25	2	ND	3	5	1	2	2	73	.04	.17	12	9	.25	38	.01	7	1.58	.01	.02	2	5
19W 230N	1	62	28	74	.2	14	15	1149	12.40	18	4	ND	3	4	1	2	2	67	.02	.32	12	14	.28	40	.01	8	1.69	.01	.02	2	5
19W 220N	3	47	17	55	.5	20	11	862	7.89	13	2	ND	2	5	1	2	2	104	.03	.28	14	22	.26	35	.02	7	1.39	.01	.02	2	5
19W 210N	2	33	9	77	.2	105	21	578	8.18	6	2	ND	2	4	1	2	2	85	.01	.13	11	158	.76	26	.02	9	2.39	.01	.01	2	5
19W 200N	2	70	14	73	.3	13	20	1518	8.58	7	2	ND	3	5	1	2	2	100	.03	.18	10	19	.43	42	.02	10	2.27	.01	.03	2	5
19W 190N	2	43	46	94	.4	9	12	1589	5.11	5	2	ND	3	8	1	2	2	82	.08	.14	15	14	.51	75	.01	7	1.81	.01	.02	2	5
19W 180N	2	24	13	54	.4	20	15	900	3.94	2	2	ND	2	8	1	2	2	70	.04	.13	20	21	.66	108	.01	6	1.71	.01	.02	2	5
19W 170N	2	24	14	58	.2	20	18	1407	5.56	2	2	ND	2	6	1	2	2	89	.04	.10	17	19	.67	95	.03	9	2.05	.01	.02	2	5
19W 160N	1	84	22	93	.4	14	16	1263	10.22	5	2	ND	3	5	1	2	2	79	.02	.15	12	16	.43	69	.02	10	1.97	.01	.02	2	5
19W 150N	2	47	14	75	.1	38	21	1592	6.56	2	2	ND	4	11	1	2	2	87	.13	.13	21	46	1.14	115	.02	7	2.52	.01	.03	2	5
STD A-1/AU 0.5	2	29	39	186	.3	36	13	1029	2.80	9	2	ND	3	37	1	2	2	56	.62	.11	7	64	.63	255	.10	8	2.00	.02	.19	2	480

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	AU* PPB
19W 130N	4	45	51	39	.2	22	9	1091	5.77	47	2	ND	3	4	1	2	2	50	.02	.12	17	11	.11	33	.01	2	.67	.01	.02	2	5
19W 120N	4	24	13	65	.3	83	16	328	5.14	6	2	ND	3	6	1	2	2	77	.05	.08	15	118	.75	32	.02	2	2.07	.01	.02	2	5
19W 110N	3	33	15	66	.2	23	15	1071	7.35	2	2	ND	4	6	1	2	2	105	.07	.13	12	21	.65	59	.02	2	2.36	.01	.03	2	5
19W 100N	3	46	12	59	.2	23	19	1267	5.10	3	2	ND	3	5	1	2	2	88	.03	.11	17	13	.57	77	.01	2	1.84	.01	.02	2	5
19W 90N	3	58	12	98	.3	21	15	923	9.59	3	2	ND	3	5	1	2	2	85	.03	.19	15	22	.36	28	.02	2	1.81	.01	.02	2	5
19W 80N	2	20	10	38	.4	14	5	388	2.71	8	2	ND	4	5	1	2	2	26	.05	.09	23	8	.08	31	.01	3	.66	.01	.03	2	5
19W 70N	4	34	7	78	.4	135	19	554	7.69	37	2	ND	2	5	1	2	2	129	.03	.15	2	290	.70	32	.01	2	2.16	.01	.01	2	5
19W 60N	3	64	9	80	.4	98	32	1858	9.33	67	2	ND	2	6	1	2	2	105	.04	.21	6	196	.53	53	.01	2	1.96	.01	.03	2	5
19W 50N	3	18	10	31	.2	28	9	357	4.32	6	2	ND	2	4	1	2	2	36	.01	.11	11	42	.13	37	.01	2	.70	.01	.02	2	5
19W 40N	3	28	8	61	.4	32	11	299	7.09	2	3	ND	2	3	1	2	2	63	.01	.13	3	48	.33	26	.01	2	1.49	.01	.02	2	25
19W 30N	3	21	12	35	.3	8	5	280	4.46	4	2	ND	2	4	1	2	2	66	.03	.10	11	9	.13	25	.01	2	1.12	.01	.02	2	5
19W 20N	2	14	15	33	.1	11	4	182	2.24	5	2	ND	5	5	1	2	2	22	.02	.07	27	7	.10	35	.01	3	.76	.01	.03	2	5
19W 10N	2	19	15	42	.3	14	4	166	3.29	4	2	ND	4	4	1	2	2	25	.02	.09	34	10	.15	21	.01	2	1.12	.01	.03	2	5
19W 0N	2	15	14	30	.1	7	4	273	2.72	9	2	ND	3	4	1	2	2	32	.02	.08	18	7	.07	31	.01	4	.96	.01	.03	2	5
19W 10S	2	13	24	49	.2	12	5	369	3.03	7	2	ND	3	10	1	2	2	34	.10	.06	21	15	.09	40	.01	3	1.15	.01	.03	2	5
19W 20S	3	42	30	75	.8	128	33	6390	6.00	59	2	ND	2	61	1	2	2	73	.77	.14	6	223	.90	87	.02	2	2.57	.01	.04	2	5
19W 30S	2	48	16	59	.2	96	19	728	7.39	74	2	ND	2	11	1	2	2	80	.11	.11	10	129	.39	34	.02	2	1.61	.01	.03	2	5
19W 50S	2	22	21	55	.2	19	6	684	3.60	5	2	ND	3	6	1	2	2	32	.05	.08	17	25	.27	43	.02	3	1.29	.01	.04	2	5
19W 70S	1	6	10	14	.1	4	1	204	.59	2	2	ND	3	6	1	2	2	15	.04	.04	27	8	.05	28	.01	3	.91	.01	.03	2	5
19W 80S	1	8	14	23	.1	6	3	322	1.92	7	2	ND	4	4	1	2	2	12	.01	.08	21	4	.02	19	.01	3	.52	.01	.04	2	5
19W 90S	2	12	11	67	.1	13	5	125	3.91	4	2	ND	8	5	1	2	2	10	.03	.10	19	11	.23	30	.01	3	1.29	.01	.02	2	5
19W 100S	3	24	8	39	.5	66	11	285	4.35	31	2	ND	2	5	1	2	2	84	.05	.12	11	137	.41	15	.01	3	1.16	.01	.12	2	5
16W 500N	2	44	109	75	1.8	20	12	334	5.63	17	2	ND	4	4	1	2	2	24	.02	.09	10	16	.21	29	.01	3	1.03	.01	.02	9	80
16W 490N	2	26	68	53	.6	15	8	262	4.77	13	2	ND	3	5	1	2	2	24	.03	.08	13	14	.17	36	.01	4	1.06	.01	.02	6	5
16W 480N	2	13	41	31	.6	8	4	214	3.45	10	2	ND	2	4	1	2	2	23	.01	.14	15	11	.12	31	.01	4	.83	.01	.03	4	5
16W 470N	2	26	74	45	1.1	12	8	380	3.97	12	2	ND	3	4	1	2	2	22	.02	.09	15	10	.15	36	.01	4	.84	.01	.03	10	20
16W 460N	2	29	54	43	.8	10	8	560	3.23	9	2	ND	2	4	1	2	2	27	.01	.06	16	12	.11	43	.01	4	.67	.01	.03	10	25
16W 450N	2	34	107	74	1.1	14	9	446	4.93	17	2	ND	2	4	1	2	2	33	.01	.09	12	15	.13	36	.01	3	.93	.01	.03	14	60
16W 440N	2	24	92	58	.7	11	9	579	4.58	13	2	ND	2	5	1	2	2	27	.01	.14	15	10	.13	53	.01	4	.84	.01	.03	12	25
16W 430N	1	53	110	111	.7	20	15	1726	7.70	13	2	ND	4	4	1	2	2	24	.02	.13	11	13	.18	43	.01	4	1.32	.01	.03	12	30
16W 420N	2	26	69	53	.6	11	8	683	4.55	12	2	ND	2	4	1	2	2	24	.01	.11	12	9	.12	35	.01	4	.78	.01	.03	7	5
16W 410N	2	21	48	46	.5	10	8	1113	3.84	11	2	ND	2	5	1	2	2	26	.05	.17	14	8	.12	40	.01	4	.62	.01	.03	3	5
16W 400N	2	24	39	51	.3	12	9	994	4.02	11	2	ND	2	6	1	2	2	23	.07	.12	16	6	.08	31	.01	5	.47	.01	.03	4	5
16W 390N	1	19	29	30	.8	9	5	295	2.70	6	2	ND	2	4	1	2	2	18	.01	.07	18	5	.08	32	.01	4	.55	.01	.02	48	5
16W 380N	2	36	71	67	.3	15	10	569	5.95	10	2	ND	3	5	1	2	2	35	.03	.10	16	14	.17	39	.01	5	.96	.01	.03	6	5
16W 370N	2	19	35	54	.4	11	8	388	3.86	11	2	ND	2	9	1	2	2	24	.20	.09	13	10	.10	55	.01	5	.77	.01	.04	2	5
16W 360N	2	18	34	40	.2	10	7	478	3.18	10	2	ND	2	5	1	2	2	22	.03	.08	15	11	.09	40	.01	4	.60	.01	.03	8	15
STD A-1/AU 0.5	2	30	40	184	.3	37	13	1019	2.77	9	2	ND	3	37	1	2	2	55	.61	.10	7	63	.62	252	.09	8	1.98	.02	.19	2	495

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	AU* PPB
16W 350N	2	20	33	46	.5	12	8	714	3.55	11	2	ND	2	5	1	2	2	21	.05	.13	10	15	.12	45	.01	6	.62	.01	.03	5	5
16W 340N	2	32	36	48	.5	14	9	423	4.04	14	2	ND	3	3	1	2	2	18	.02	.15	11	7	.12	28	.01	7	.59	.01	.03	4	5
16W 330N	2	23	47	59	1.0	11	7	502	4.49	12	2	ND	3	6	1	2	2	22	.07	.11	10	9	.12	82	.01	5	.68	.01	.03	4	5
16W 320N	2	23	45	34	.7	9	7	659	3.29	8	2	ND	2	4	1	2	2	18	.04	.12	9	6	.09	27	.01	4	.62	.01	.02	5	5
16W 310N	1	17	33	35	.4	8	5	266	3.11	11	2	ND	3	5	1	2	2	21	.04	.13	12	5	.11	49	.01	4	.67	.01	.03	4	5
16W 300N	2	24	44	36	.6	10	6	541	3.98	10	2	ND	2	4	1	2	2	24	.02	.09	10	7	.09	34	.01	5	.67	.01	.02	3	5
16W 0N	2	49	92	108	.4	27	22	1474	5.21	14	9	ND	4	39	1	2	2	13	.48	.12	9	17	.15	28	.01	7	.82	.01	.04	2	5
16W 10S	2	45	15	71	.1	14	10	366	5.72	22	2	ND	3	8	1	2	2	23	.08	.08	11	11	.10	26	.01	7	.67	.01	.04	2	5
16W 20S	2	66	14	62	.4	9	18	790	8.23	31	2	ND	2	9	1	2	2	59	.13	.13	5	8	.22	49	.01	8	1.17	.01	.04	2	5
16W 30S	2	59	12	67	.4	9	14	539	7.50	23	2	ND	2	8	1	2	2	46	.10	.12	5	5	.11	37	.01	5	1.01	.01	.02	2	5
16W 50S	1	13	9	28	.1	8	2	141	1.82	3	2	ND	4	5	1	2	2	16	.04	.07	23	6	.06	17	.01	2	.67	.01	.03	2	5
16W 60S	1	13	10	26	.1	7	3	131	1.75	4	2	ND	3	3	1	2	2	19	.01	.08	21	4	.05	23	.01	3	.72	.01	.03	2	5
16W 70S	1	5	7	17	.1	3	1	395	.89	4	2	ND	4	5	1	2	2	14	.06	.09	19	3	.06	25	.01	3	.71	.01	.04	2	5
16W 80S	1	10	12	19	.2	5	2	180	1.82	4	2	ND	4	4	1	2	2	21	.02	.08	24	4	.04	23	.01	4	.70	.01	.02	2	5
16W 90S	1	12	12	28	.1	6	2	204	2.75	8	2	ND	3	4	1	2	2	36	.02	.07	24	9	.12	24	.01	5	.99	.01	.03	2	5
16W 100S	2	14	19	30	.3	11	3	240	4.64	10	2	ND	3	4	1	2	2	38	.01	.10	20	12	.14	25	.01	5	1.22	.01	.03	2	5
13W 5+00N	2	22	20	42	.5	20	7	284	3.82	22	2	ND	3	3	1	2	2	20	.01	.10	15	14	.14	38	.01	6	.77	.01	.03	2	25
13W 4+90N	2	17	16	39	.3	19	6	306	3.96	17	2	ND	3	5	1	2	2	22	.02	.13	11	14	.18	24	.01	7	.88	.01	.02	2	5
13W 4+80N	2	22	19	40	.7	16	6	217	4.14	22	2	ND	3	3	1	2	2	20	.01	.10	10	16	.21	22	.01	5	.97	.01	.02	2	5
13W 4+70N	2	31	21	64	.5	30	13	855	3.91	29	2	ND	4	3	1	2	2	15	.01	.10	10	18	.21	42	.01	6	1.19	.01	.02	2	20
13W 4+60N	2	31	36	51	.3	21	10	520	4.05	19	2	ND	4	2	1	2	2	18	.01	.08	11	12	.18	27	.01	7	.88	.01	.02	2	100
13W 4+50N	2	31	31	68	.3	28	16	1669	4.42	32	2	ND	4	7	1	2	2	19	.08	.09	11	16	.22	60	.01	7	.88	.01	.03	5	5
13W 4+40N	1	12	9	27	.1	11	4	192	1.62	17	4	ND	3	4	1	2	2	15	.04	.05	14	4	.04	34	.01	4	.27	.01	.02	2	5
13W 4+30N	2	16	20	24	.4	11	4	204	3.37	19	2	ND	2	3	1	2	2	19	.02	.10	10	9	.08	28	.01	6	.62	.01	.03	2	5
13W 4+20N	2	36	38	68	.8	24	14	1102	5.86	34	2	ND	2	2	1	2	2	21	.01	.10	9	17	.19	41	.01	8	.97	.01	.02	3	5
13W 4+10N	1	20	15	41	.3	17	7	345	2.89	20	2	ND	2	4	1	2	2	27	.01	.08	15	8	.07	30	.01	6	.45	.01	.03	8	5
13W 4+00N	2	23	21	60	.7	21	9	543	4.65	46	6	ND	2	4	1	2	2	19	.06	.10	7	15	.15	62	.01	5	1.01	.01	.04	3	5
13W 3+90N	2	42	44	161	.5	44	18	606	4.40	35	2	ND	5	19	1	2	2	18	.28	.07	10	18	.33	93	.01	5	1.23	.01	.05	2	10
13W 3+80N	2	27	22	51	.1	22	11	507	3.27	25	2	ND	3	7	1	2	2	18	.08	.09	10	10	.20	86	.01	5	.70	.01	.04	2	5
13W 3+70N	2	19	21	41	.4	14	8	558	3.89	21	2	ND	2	8	1	2	2	20	.11	.09	9	10	.15	61	.01	5	.61	.01	.04	16	5
13W 3+60N	1	16	22	41	.1	15	7	584	2.57	14	2	ND	2	6	1	2	2	20	.04	.10	10	8	.14	37	.01	4	.51	.01	.02	2	60
13W 3+50N	1	26	32	54	.2	22	11	650	3.68	17	2	ND	2	8	1	2	2	21	.09	.10	11	12	.24	37	.01	3	.38	.01	.02	7	65
13W 3+40N	2	9	13	28	.1	8	5	254	2.05	14	4	ND	2	7	1	2	2	22	.06	.07	12	9	.12	37	.01	4	.57	.01	.04	3	5
13W 3+30N	2	24	24	77	.3	19	11	1253	3.13	13	5	ND	2	47	1	2	2	15	.72	.14	5	12	.22	76	.01	4	.82	.01	.03	2	5
13W 3+20N	1	45	45	79	.6	50	18	953	4.46	35	2	ND	6	15	1	2	2	17	.24	.10	14	14	.33	59	.01	6	1.18	.01	.04	4	25
13W 3+10N	1	20	23	39	.2	18	7	173	4.29	29	2	ND	2	4	1	2	2	18	.02	.09	8	12	.18	41	.01	4	.79	.01	.03	2	40
13W 3+00N	1	10	18	28	.2	9	6	401	2.10	15	2	ND	2	5	1	2	2	15	.04	.08	10	10	.16	44	.01	4	.67	.01	.02	2	5
STD A-1/AU 0.5	2	30	39	135	.3	36	13	1019	2.80	9	2	ND	3	37	1	2	2	56	.62	.11	7	64	.63	255	.09	8	1.97	.02	.19	2	470

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	AU* PPB
13W 2+90N	3	13	20	62	.1	16	7	577	5.86	10	2	ND	3	6	1	2	2	18	.06	.10	18	8	.10	38	.01	5	.56	.01	.03	4	5
10W 5+00N	2	17	8	35	.1	23	7	269	4.22	8	2	ND	3	4	1	2	2	27	.03	.09	22	13	.22	24	.01	3	.97	.01	.03	2	5
10W 4+90N	2	15	7	32	.1	16	6	155	3.77	11	2	ND	3	4	1	2	2	26	.02	.10	24	13	.12	20	.01	3	.94	.01	.03	2	30
10W 4+80N	1	11	7	21	.1	10	4	94	2.34	14	2	ND	3	3	1	2	2	21	.01	.07	24	5	.06	24	.01	4	.67	.01	.02	4	15
10W 4+70N	1	9	7	18	.1	12	3	54	2.41	12	2	ND	3	3	1	2	2	20	.01	.06	22	7	.07	19	.01	4	.74	.01	.02	4	45
10W 4+60N	2	22	42	51	.2	24	8	328	4.04	23	2	ND	3	6	1	2	2	21	.05	.09	22	10	.09	29	.01	4	.81	.01	.03	6	30
10W 4+50N	2	15	10	31	.1	16	7	249	2.46	13	2	ND	3	13	1	2	2	26	.18	.04	23	8	.06	37	.01	3	.52	.01	.03	4	10
10W 4+40N	2	20	11	46	.1	23	8	206	3.88	37	2	ND	4	5	1	2	2	28	.04	.05	25	10	.07	29	.01	5	.68	.01	.03	6	5
10W 4+30N	2	22	14	52	.1	27	10	275	3.73	19	2	ND	4	4	1	2	2	28	.02	.05	27	15	.15	36	.02	5	.72	.01	.03	6	5
10W 4+20N	2	23	15	52	.1	26	10	308	4.43	27	2	ND	4	4	1	2	2	31	.02	.06	29	12	.10	37	.02	5	.74	.01	.03	5	10
10W 4+10N	2	12	15	39	.1	16	5	155	3.36	14	2	ND	4	5	1	2	2	32	.05	.04	25	14	.11	43	.01	4	.97	.01	.03	5	5
10W 4+00N	2	18	15	44	.2	21	9	828	3.73	21	2	ND	3	6	1	2	2	25	.05	.07	23	14	.11	37	.01	6	.78	.01	.04	6	5
10W 3+90N	2	21	14	51	.1	26	9	299	3.49	21	2	ND	6	5	1	2	2	32	.03	.04	33	13	.07	31	.01	5	.61	.01	.03	5	25
10W 3+80N	2	20	23	45	.1	22	8	182	3.63	17	2	ND	4	5	1	2	2	34	.03	.04	25	12	.08	36	.02	5	.68	.01	.03	6	10
10W 3+60N	2	34	58	122	.1	37	21	1101	10.95	24	2	ND	6	28	1	2	2	51	.39	.05	22	20	.24	62	.01	3	1.34	.01	.04	3	5
10W 3+50N	2	28	40	75	.1	35	17	603	4.50	38	2	ND	5	25	1	2	2	20	.37	.06	18	18	.30	57	.01	5	1.34	.01	.05	3	10
10W 3+40N	2	33	41	82	.2	42	17	929	4.16	18	2	ND	5	28	1	2	2	17	.49	.08	16	13	.29	31	.01	5	.95	.01	.03	4	20
10W 3+30N	2	23	29	67	.1	23	9	423	4.75	30	2	ND	3	17	1	2	2	30	.29	.06	20	13	.10	67	.01	5	.74	.01	.03	4	25
10W 3+20N	2	22	20	50	.1	21	8	171	4.02	37	2	ND	4	13	1	2	2	26	.20	.05	23	9	.09	52	.01	5	.58	.01	.03	5	5
10W 3+10N	2	23	26	59	.6	22	8	184	3.69	41	2	ND	5	30	1	2	2	19	.52	.05	17	11	.21	45	.01	6	.92	.01	.04	3	10
10W 3+00N	2	18	377	238	.6	19	7	175	3.37	27	2	ND	4	11	2	2	2	19	.11	.05	18	10	.14	35	.01	5	.78	.01	.02	7	20
10W 2+90N	2	22	42	87	.2	26	14	701	3.59	12	2	ND	5	22	1	2	2	18	.36	.09	18	14	.34	29	.01	5	.97	.01	.03	3	20
10W 2+80N	2	33	29	65	.2	29	10	241	4.71	51	2	ND	4	5	1	2	2	18	.04	.07	19	12	.20	54	.01	8	.94	.01	.03	7	15
10W 2+70N	2	20	17	46	.2	19	8	259	3.71	24	2	ND	3	7	1	2	2	29	.09	.05	22	11	.09	46	.01	6	.65	.01	.03	3	55
10W 2+60N	2	26	40	74	.3	26	17	1513	4.14	19	2	ND	3	15	1	2	2	21	.18	.10	17	15	.18	53	.01	6	1.26	.01	.04	2	85
10W 2+50N	1	31	27	56	.2	20	10	241	4.42	12	2	ND	5	11	1	2	2	23	.08	.07	22	16	.22	33	.01	7	1.50	.01	.03	5	5
10W 2+40N	1	38	47	88	.4	29	17	1567	4.29	17	3	ND	4	34	1	2	2	22	.58	.13	16	13	.27	62	.01	8	1.30	.01	.04	2	30
10W 2+30N	1	28	22	62	.1	19	10	345	4.42	19	2	ND	4	8	1	2	2	26	.06	.08	20	13	.22	49	.01	6	1.13	.01	.03	2	5
10W 2+20N	1	27	17	58	.1	16	8	321	3.38	11	2	ND	3	18	1	2	2	27	.25	.09	18	11	.22	55	.01	6	.91	.01	.03	2	5
10W 2+10N	1	28	29	62	.1	19	11	532	4.23	15	2	ND	4	5	1	2	2	31	.01	.10	21	15	.25	65	.01	6	1.26	.01	.03	2	5
10W 2+00N	1	22	13	40	.1	14	7	187	3.20	14	2	ND	3	5	1	2	2	30	.02	.07	22	12	.21	40	.01	6	1.04	.01	.03	2	5
10W 1+90N	1	20	19	51	.2	16	9	599	3.91	19	2	ND	2	6	1	2	2	29	.04	.10	19	13	.19	40	.01	6	.83	.01	.04	3	105
10W 1+80N	1	28	24	67	.3	20	14	767	4.29	15	2	ND	4	13	1	2	2	32	.19	.12	19	14	.21	53	.01	7	1.23	.01	.04	2	5
10W 1+70N	1	67	50	85	.1	38	24	1038	5.62	22	2	ND	6	10	1	2	2	23	.10	.08	27	14	.23	68	.01	11	1.23	.01	.04	2	40
10W 1+60N	1	52	47	89	.2	34	21	1185	5.39	26	2	ND	6	14	1	2	2	23	.20	.08	24	14	.34	63	.01	10	1.20	.01	.04	2	10
10W 1+50N	1	72	106	117	.2	37	27	1843	6.55	21	2	ND	6	15	1	2	2	23	.19	.10	24	14	.33	71	.01	9	1.15	.01	.04	2	20
10W 1+40N	1	57	89	105	.2	34	23	1525	5.69	22	2	ND	5	13	1	2	2	24	.17	.09	24	15	.32	75	.01	8	1.29	.01	.04	2	30
STD A-1/AU 0.5	1	30	38	136	.3	37	17	1029	2.90	10	2	ND	3	27	1	2	2	56	.62	.10	8	64	.63	255	.09	8	2.00	.02	.19	2	510

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	AU* PPB
13W 2+00N	1	30	60	72	1.2	17	10	796	4.59	14	2	ND	2	5	1	2	2	24	.05	.14	12	21	.24	62	.01	2	1.00	.01	.03	3	5
13W 1+90N	1	28	36	61	.7	17	11	623	5.56	11	2	ND	2	5	1	2	2	26	.06	.12	14	26	.23	41	.01	2	.96	.01	.02	2	5
13W 1+80N	1	30	27	51	.6	15	12	1028	4.39	14	2	ND	2	5	1	2	2	29	.08	.17	15	23	.20	36	.01	2	.75	.01	.03	2	5
13W 1+70N	1	22	13	48	.2	15	9	794	4.03	7	2	ND	2	4	1	2	2	31	.05	.10	14	28	.23	53	.01	2	.79	.01	.04	2	5
13W 1+60N	2	15	16	35	.2	12	5	389	3.40	6	2	ND	2	4	1	2	2	23	.03	.09	13	14	.12	32	.01	2	.45	.01	.02	2	5
13W 1+50N	2	27	23	63	.2	15	13	2029	5.32	15	2	ND	2	6	1	2	2	23	.10	.12	17	16	.16	81	.01	2	.68	.01	.03	2	5
13W 1+40N	2	33	26	59	.1	13	8	472	5.25	14	2	ND	2	7	1	2	2	23	.08	.10	15	11	.09	93	.01	2	.40	.01	.02	2	5
13W 1+30N	2	23	22	57	.1	17	10	961	7.15	12	2	ND	2	7	1	2	2	32	.07	.09	20	23	.22	90	.02	2	.83	.01	.03	2	5
13W 1+20N	2	34	30	78	.1	18	15	1844	8.82	20	2	ND	2	9	1	2	2	27	.07	.14	22	19	.20	98	.01	2	.82	.01	.03	2	5
13W 1+10N	2	28	48	68	.1	20	17	2470	9.18	18	2	ND	3	22	1	2	2	12	.38	.11	31	8	.12	89	.01	2	.65	.01	.03	2	5
13W 1+00N	2	28	21	63	.1	17	13	893	4.71	13	2	ND	2	8	1	2	3	48	.11	.09	17	26	.34	69	.02	2	1.07	.01	.02	2	5
13W 0+90N	2	23	17	39	.1	16	11	1831	3.33	5	2	ND	2	4	1	2	2	47	.02	.07	16	25	.20	62	.01	2	.79	.01	.02	2	5
13W 0+80N	2	32	24	70	.1	21	12	667	4.22	10	2	ND	2	3	1	2	2	29	.03	.11	15	21	.29	29	.01	2	.84	.01	.04	2	5
13W 0+70N	1	20	12	47	.1	43	15	847	4.88	4	2	ND	2	4	1	2	2	59	.03	.17	15	74	.42	56	.01	2	1.19	.01	.02	2	5
13W 0+60N	1	25	16	57	.1	29	14	1306	5.40	3	2	ND	2	4	1	2	2	73	.02	.15	16	68	.57	46	.01	2	1.52	.01	.03	2	5
13W 0+50N	1	22	22	49	.2	19	12	579	4.79	9	2	ND	2	5	1	2	3	71	.05	.09	15	39	.53	28	.08	2	1.36	.01	.03	2	5
13W 0+40N	1	16	13	46	.2	11	6	807	4.26	8	2	ND	2	4	1	2	2	35	.03	.11	18	16	.16	36	.01	2	.89	.01	.03	2	5
13W 0+30N	1	20	18	47	.2	16	7	389	5.15	7	2	ND	2	3	1	2	2	28	.01	.14	19	20	.20	23	.01	2	1.09	.01	.03	2	5
13W 0+20N	1	26	22	62	.1	18	8	362	5.89	13	2	ND	3	4	1	2	2	25	.03	.21	20	21	.26	19	.01	2	1.22	.01	.03	2	5
13W 0+10N	1	17	14	33	.2	12	4	221	2.93	7	2	ND	2	3	1	2	2	26	.04	.09	15	10	.10	22	.01	2	.73	.01	.02	2	15
13W 0+00N	1	31	26	67	.1	21	11	457	6.33	14	2	ND	2	4	1	2	2	28	.02	.09	18	21	.26	22	.01	2	1.23	.01	.03	2	5
13W 0+10S	1	37	20	75	.4	24	12	312	6.09	13	2	ND	3	5	1	2	2	24	.06	.13	16	20	.30	29	.01	2	1.33	.01	.03	2	5
13W 0+20S	1	26	13	63	.1	20	11	789	4.46	13	2	ND	2	4	1	2	2	29	.04	.08	15	24	.28	36	.01	2	1.21	.01	.03	2	5
13W 0+30S	1	73	16	75	.3	35	20	370	6.07	15	2	ND	3	4	1	2	2	36	.02	.07	16	31	.44	33	.01	2	1.63	.01	.02	2	5
13W 0+40S	1	87	19	73	.1	26	25	541	7.00	24	2	ND	3	3	1	2	2	43	.06	.13	13	11	.32	23	.01	2	1.40	.01	.03	2	5
13W 0+50S	1	20	16	37	.3	11	6	163	5.66	14	2	ND	4	3	1	2	2	35	.02	.07	15	16	.16	30	.01	2	1.06	.01	.03	2	5
13W 0+60S	1	14	18	37	.2	14	5	357	2.72	6	2	ND	3	4	1	2	2	24	.05	.08	17	12	.14	45	.01	2	.79	.01	.03	2	5
13W	1	6	5	9	.2	4	1	40	.57	2	2	ND	3	3	1	2	2	12	.01	.03	24	5	.02	16	.01	2	.42	.01	.02	2	5
13W 0+80S	1	51	10	72	.1	13	15	2090	8.46	17	2	ND	2	4	1	2	2	29	.04	.16	8	5	.10	39	.01	2	.60	.01	.03	2	5
13W 0+90S	1	92	26	84	.6	22	34	4385	9.35	27	2	ND	2	7	1	2	2	38	.11	.21	4	9	.23	93	.01	2	1.19	.01	.04	2	10
13W 1+00S	2	105	216	64	.7	28	22	894	11.55	38	2	ND	2	5	1	2	2	16	.04	.18	11	4	.08	20	.01	2	.28	.01	.03	2	5
STD A-1/AU 0.5	1	29	39	188	.3	36	13	1039	2.80	10	2	ND	2	37	1	2	2	57	.63	.11	7	65	.64	258	.10	8	2.07	.02	.20	2	485

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 3-1-3 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: SOIL AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE. Dried at 60°C, -80 mesh fraction

DATE RECEIVED: JULY 22 1984 DATE REPORT MAILED: July 27/84 ASSAYER. D. Toye. DEAN TOYE. CERTIFIED B.C. ASSAYER

IMPERIAL METALS PROJECT # 4203 FILE # 84-1705 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	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB
18W 550N	1	26	34	50	.8	14	8	587	5.21	12	2	ND	3	4	1	2	2	33	.02	.13	12	17	.27	40	.01	2	1.37	.01	.03	4	15
18W 540N	1	11	22	24	.4	9	4	646	2.85	8	2	ND	2	3	1	2	2	23	.02	.16	12	10	.20	36	.01	2	.64	.01	.02	2	15
18W 530N	1	16	29	33	.5	13	5	746	3.83	10	2	ND	2	3	1	2	2	27	.03	.37	10	13	.19	36	.01	2	.75	.01	.03	2	5
18W 520N	1	21	31	36	1.1	9	6	616	3.73	9	2	ND	2	3	1	2	2	28	.02	.23	9	10	.16	34	.01	2	.68	.01	.03	2	10
18W 510N	1	46	68	67	.4	18	11	595	8.29	16	2	ND	3	4	1	2	2	34	.04	.21	11	18	.31	34	.01	9	1.39	.01	.02	3	5
18W 500N	1	36	44	54	.9	17	9	553	7.29	20	2	ND	2	5	1	4	2	58	.03	.20	17	17	.20	36	.02	2	1.18	.01	.04	3	5
18W 490N	1	46	32	58	.9	14	9	520	5.42	8	2	ND	2	4	1	2	2	67	.03	.16	6	16	.36	42	.01	2	1.38	.01	.03	2	10
18W 480N	1	26	51	49	.7	12	6	300	5.73	13	2	ND	2	4	1	2	2	33	.02	.12	10	13	.09	34	.02	2	.81	.01	.02	2	5
18W 470N	1	58	71	91	.6	39	14	644	6.90	22	2	ND	4	6	1	2	2	34	.07	.20	12	50	.58	57	.01	7	1.72	.01	.05	2	15
18W 460N	1	30	40	50	1.0	18	8	387	5.96	16	2	ND	2	3	1	2	2	38	.02	.14	14	18	.16	38	.01	3	.74	.01	.03	2	5
18W 450N	1	23	32	40	.4	14	7	553	4.34	14	2	ND	2	3	1	2	2	46	.02	.14	16	22	.21	46	.01	2	.91	.01	.02	2	5
18W 440N	1	25	31	43	.4	14	6	499	4.66	13	2	ND	2	7	1	2	2	24	.09	.19	13	11	.12	44	.01	8	.66	.01	.04	2	40
18W 430N	1	43	41	56	.8	16	9	931	8.57	15	2	ND	2	4	1	2	2	40	.02	.14	12	15	.21	45	.01	2	1.04	.01	.03	2	5
18W 420N	1	30	48	52	.7	17	8	789	9.02	17	2	ND	2	4	1	2	2	25	.02	.16	13	13	.13	26	.01	2	.99	.01	.02	2	5
18W 410N	1	32	25	48	.2	12	9	3471	4.58	14	2	ND	2	4	1	2	3	35	.02	.12	13	11	.16	82	.01	4	.83	.01	.02	2	5
18W 400N	1	32	57	67	.6	14	7	606	6.71	14	2	ND	2	5	1	2	3	44	.04	.14	11	15	.20	37	.01	2	.90	.02	.02	2	5
6W 400N	1	46	24	64	.1	52	23	1331	5.88	10	2	ND	2	16	1	2	2	21	.21	.18	18	26	.25	43	.01	2	1.28	.01	.05	2	5
6W 390N	2	43	27	57	.3	40	26	2760	4.24	3	2	ND	2	25	1	2	2	17	.32	.25	19	18	.25	52	.01	3	1.38	.01	.06	2	5
6W 380N	2	19	11	36	.1	20	6	426	3.56	6	2	ND	3	6	1	2	2	22	.02	.10	25	13	.10	34	.01	3	.80	.01	.04	2	5
6W 370N	1	16	14	26	.2	13	4	257	2.58	5	2	ND	2	5	1	2	2	21	.01	.11	19	9	.05	31	.01	2	.64	.01	.03	2	5
6W 360N	1	11	8	20	.5	8	4	330	1.79	13	2	ND	2	5	1	2	2	14	.02	.09	16	5	.03	25	.01	4	.44	.01	.03	21	5
6W 350N	1	20	9	63	.2	23	7	617	2.85	7	2	ND	2	10	1	2	2	19	.01	.09	21	6	.03	49	.01	2	.35	.01	.03	3	5
6W 340N	1	37	6	93	.1	36	12	638	6.78	15	2	ND	3	9	1	2	2	25	.03	.14	19	5	.06	36	.01	4	.38	.01	.03	5	5
6W 330N	3	40	22	64	.5	26	8	652	5.61	48	2	ND	2	7	1	2	2	31	.01	.12	18	10	.06	28	.01	6	.74	.01	.02	777	650
6W 320N	1	16	2	32	.1	18	6	96	2.57	13	2	ND	2	3	1	2	2	25	.01	.05	21	7	.03	18	.01	2	.37	.01	.02	10	25
6W 310N	1	26	6	49	.3	23	8	402	5.45	10	2	ND	2	4	1	2	2	24	.03	.14	13	9	.07	25	.01	2	.62	.01	.04	2	15
6W 300N	1	23	8	44	.2	28	6	208	3.91	5	2	ND	3	6	1	2	2	20	.01	.08	20	9	.05	26	.01	2	.65	.01	.02	2	5
6W 290N	1	39	19	60	.3	42	12	762	5.78	94	2	ND	3	5	1	2	2	22	.02	.12	23	9	.07	29	.01	2	.52	.01	.02	2	450
6W 280N	2	24	5	41	.3	27	7	197	2.83	17	2	ND	3	2	1	2	2	18	.01	.06	21	5	.03	22	.01	2	.29	.01	.02	2	5
6W 270N	1	15	4	20	.1	16	4	67	1.67	7	2	ND	4	2	1	2	2	16	.01	.04	26	4	.02	10	.01	2	.36	.01	.01	2	5
6W 260N	1	14	8	27	.4	13	4	109	3.24	13	2	ND	5	3	1	2	2	20	.01	.07	25	11	.10	19	.01	2	.66	.01	.02	4	5
6W 250N	2	14	6	25	.1	12	5	112	1.74	6	2	ND	3	3	1	2	2	24	.02	.07	22	8	.04	23	.01	2	.49	.01	.02	2	15
6W 240N	2	28	13	51	.2	25	7	162	5.30	17	2	ND	3	3	1	2	2	25	.01	.12	20	19	.13	23	.01	3	.85	.01	.02	2	5
6W 230N	1	41	6	59	.1	36	9	166	4.63	21	2	ND	5	2	1	2	2	14	.01	.09	24	3	.04	15	.01	2	.27	.01	.02	2	5
6W 220N	2	23	30	54	.2	23	7	239	5.36	21	2	ND	4	3	1	2	3	24	.01	.11	21	18	.13	25	.01	4	.89	.01	.02	65	25
6W 210N	1	61	27	82	.6	29	17	542	6.75	30	2	ND	5	4	1	2	2	29	.04	.12	13	20	.35	30	.01	2	1.46	.01	.04	3	70
6W 200N	1	29	32	67	.7	23	6	285	5.75	20	2	ND	4	4	1	2	2	28	.01	.11	20	21	.27	30	.01	2	1.30	.01	.04	16	5
STD S-1/AU-0.5	97	124	118	184	34.4	152	31	463	3.17	126	105	36	181	127	88	80	99	60	.56	.12	135	83	.58	122	.07	176	1.50	.24	.22	66	500

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	AU* PPB
6W 190N	3	12	12	39	.4	17	4	308	3.28	15	2	ND	3	5	1	2	2	24	.02	.12	29	14	.15	35	.01	3	.95	.01	.04	2	5
6W 180N	2	17	12	51	.2	24	6	531	5.72	24	2	ND	5	7	1	2	2	26	.14	.19	25	27	.24	42	.01	4	1.21	.01	.05	2	5
6W 170N	2	24	16	47	.4	22	5	337	5.31	26	2	ND	6	5	1	2	2	26	.04	.07	33	14	.09	42	.01	2	.93	.01	.04	2	5
6W 160N	1	38	25	69	.5	24	13	629	5.29	25	2	ND	2	12	1	2	2	29	.18	.09	23	19	.16	65	.01	3	1.10	.01	.05	2	5
6W 150N	2	25	33	71	.1	29	8	294	5.69	21	2	ND	3	7	1	2	2	27	.07	.07	27	17	.10	53	.02	2	.89	.01	.04	2	5
6W 140N	1	46	31	188	.7	32	14	1247	4.86	36	10	ND	2	60	2	2	2	14	1.17	.14	12	17	.22	42	.01	2	1.21	.01	.05	4	5
6W 130N	1	57	43	207	1.0	52	21	1998	5.72	37	2	ND	2	52	2	2	2	18	.97	.18	14	26	.44	71	.02	2	1.58	.01	.07	2	5
6W 120N	1	55	107	112	.6	68	27	832	4.73	66	2	ND	6	28	1	2	2	11	.38	.11	24	13	.45	42	.01	2	.82	.01	.06	2	180
6W 110N	1	54	54	254	.3	38	19	2202	4.67	33	2	ND	2	29	1	2	2	16	.37	.14	17	21	.23	63	.01	3	1.34	.01	.06	2	10
6W 100N	1	36	31	192	.3	33	12	1180	3.13	26	5	ND	2	47	1	2	2	9	.74	.13	9	11	.14	41	.01	5	.67	.01	.04	2	5
6W 90N	1	42	52	196	.4	32	16	2597	4.18	26	2	ND	2	57	1	2	2	15	.79	.16	13	17	.20	66	.01	4	1.24	.01	.06	2	5
6W 80N	1	37	53	153	.7	32	16	3056	4.41	22	2	ND	2	71	1	2	2	18	1.09	.19	15	20	.30	83	.02	7	1.48	.01	.07	3	5
6W 70N	1	24	32	85	.3	21	7	291	4.57	19	2	ND	2	20	1	2	2	29	.23	.12	21	21	.24	42	.01	2	1.31	.01	.05	2	5
6W 60N	1	21	33	105	.2	25	9	402	4.76	16	2	ND	2	16	1	2	2	31	.14	.17	20	23	.28	54	.02	2	1.48	.01	.05	2	5
6W 50N	1	31	33	97	.7	31	14	1999	5.24	25	2	ND	2	55	1	2	2	28	.84	.14	15	22	.30	94	.02	4	1.55	.01	.07	2	5
6W 40N	1	50	57	92	.2	51	18	720	5.31	62	2	ND	13	18	1	2	2	15	.17	.08	30	16	.43	90	.01	2	1.09	.01	.10	2	25
6W 30N	1	46	110	95	.4	53	18	665	4.97	57	2	ND	15	20	1	2	2	13	.21	.08	31	18	.43	123	.01	2	1.08	.01	.10	3	35
6W 20N	1	58	29	100	.2	46	18	850	5.83	38	2	ND	8	10	1	2	2	25	.10	.08	30	25	.66	111	.01	5	1.66	.01	.07	3	20
6W 10N	2	24	25	60	.2	23	7	298	3.76	36	2	ND	3	19	1	2	2	17	.21	.08	20	13	.20	93	.01	2	.93	.01	.06	2	5
6W 00N	2	36	25	84	.1	31	11	494	4.75	35	2	ND	4	17	1	2	2	25	.21	.08	21	20	.35	82	.01	2	1.21	.01	.07	6	5
6W 10S	2	49	17	76	.4	37	10	1476	3.00	22	4	ND	2	76	1	2	2	12	1.53	.11	10	13	.35	79	.01	6	.88	.01	.05	2	5
6W 20S	2	44	266	196	.7	51	18	730	5.19	56	2	ND	9	18	1	2	2	17	.22	.10	40	20	.49	61	.01	2	1.08	.01	.06	8	200
6W 30S	2	38	24	88	.1	36	13	827	4.33	11	2	ND	5	29	1	2	2	21	.37	.10	28	23	.48	67	.02	2	1.28	.01	.05	2	5
6W 40S	2	42	25	84	.2	41	14	753	4.54	23	2	ND	9	23	1	2	2	20	.21	.10	30	21	.47	71	.02	2	1.13	.01	.07	2	15
6W 50S	1	65	52	97	.1	44	19	1409	6.15	25	2	ND	12	30	1	2	2	21	.35	.12	35	20	.47	94	.01	2	1.18	.01	.09	2	55
6W 60S	1	66	48	95	.2	41	18	1506	5.74	23	2	ND	5	51	1	2	2	19	.81	.13	24	21	.44	88	.01	2	1.10	.01	.08	2	10
6W 70S	1	22	272	217	.7	11	5	468	3.24	10	2	ND	2	105	1	2	2	20	1.82	.11	10	12	.21	48	.01	6	.97	.01	.05	2	5
6W 80S	1	58	483	354	.9	22	14	2207	4.85	17	2	ND	2	75	4	2	2	20	1.16	.18	19	19	.36	65	.01	2	1.43	.01	.06	2	5
6W 90S	1	20	16	38	.3	9	3	136	3.65	10	2	ND	2	6	1	2	2	33	.03	.06	21	17	.12	66	.02	2	1.08	.01	.03	2	5
6W 100S	2	31	28	71	.6	15	9	1361	5.90	16	2	ND	2	6	1	2	2	30	.03	.12	21	24	.24	61	.02	2	1.43	.01	.04	2	5
6W 110S	2	29	11	51	.1	16	7	627	4.43	12	2	ND	2	6	1	2	2	23	.06	.08	21	17	.26	49	.01	3	1.01	.01	.04	2	15
6W 120S	1	76	61	98	.2	26	12	1396	7.67	141	2	ND	3	6	1	2	2	24	.04	.11	24	19	.28	67	.01	4	1.54	.01	.04	2	90
6W 130S	1	37	39	87	.5	11	9	683	7.68	29	2	ND	2	18	1	2	2	40	.20	.14	14	18	.27	106	.02	2	1.48	.01	.05	2	5
6W 140S	1	133	18	88	.5	24	27	1152	9.81	20	2	ND	2	54	1	2	2	38	.82	.14	14	20	.52	78	.01	2	1.98	.01	.04	2	25
6W 150S	1	44	24	77	.1	17	10	552	5.93	13	2	ND	3	17	1	2	2	33	.14	.08	18	22	.27	87	.02	2	1.40	.01	.04	2	5
6W 160S	1	72	39	78	.1	18	11	1010	5.94	19	2	ND	3	11	1	2	2	30	.12	.09	27	20	.38	92	.01	2	1.65	.01	.04	2	5
6W 170S	1	104	7	101	.1	21	20	837	8.66	9	2	ND	3	5	1	2	5	79	.03	.11	11	20	1.22	57	.01	2	2.71	.01	.03	2	5
STD G-1/AU-0.5	99	124	116	185	35.3	153	82	480	3.16	131	112	37	185	128	88	83	97	57	.56	.12	139	63	.58	123	.07	174	1.50	.24	.23	68	520

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	AU* PPB
6W 180S	1	28	21	69	.2	20	9	370	6.68	12	2	ND	5	31	1	2	2	31	.51	.11	21	19	.28	84	.01	2	1.52	.01	.05	2	5
6W 190S	1	30	22	74	.1	24	7	584	4.09	10	2	ND	6	44	1	2	2	14	.88	.19	26	13	.34	72	.01	2	.95	.01	.05	2	5
6W 200S	1	35	37	79	.1	26	13	1439	6.62	24	2	ND	7	16	1	2	2	15	.17	.14	37	12	.22	73	.01	3	1.02	.01	.05	2	5
3W 300N	2	29	17	45	.2	25	6	735	3.17	23	2	ND	2	14	1	2	2	21	.11	.11	25	7	.06	81	.01	5	.49	.01	.06	2	55
3W 290N	5	41	42	81	.3	39	14	1383	4.71	22	2	ND	2	14	1	2	2	19	.21	.14	23	15	.24	77	.01	3	.85	.01	.08	2	5
3W 280N	3	43	41	71	.3	44	25	3584	4.92	13	2	ND	2	30	1	2	2	19	.47	.26	12	16	.29	60	.01	5	1.55	.01	.08	2	5
3W 270N	2	39	32	73	.6	35	16	2827	3.80	25	2	ND	2	27	1	2	2	20	.35	.22	18	16	.24	66	.01	3	1.44	.01	.07	2	30
3W 260N	1	35	105	81	.4	32	14	2182	3.63	27	3	ND	2	39	1	2	2	22	.54	.19	15	16	.31	70	.01	2	1.32	.01	.08	2	5
3W 250N	1	29	63	83	.3	27	16	1381	4.26	28	2	ND	2	20	1	2	2	27	.26	.15	17	13	.20	80	.01	2	.90	.01	.08	3	105
3W 240N	2	36	2213	620	.5	29	23	3064	7.08	57	2	ND	2	21	2	2	2	21	.31	.22	16	12	.19	49	.01	7	.98	.01	.06	67	140
3W 230N	2	33	1206	403	.2	28	21	2074	6.19	50	2	ND	2	15	1	2	2	23	.14	.18	22	13	.12	54	.01	4	.81	.01	.05	44	30
3W 220N	2	45	355	217	.1	28	19	1512	6.88	43	2	ND	2	11	1	2	2	23	.11	.19	21	10	.09	57	.01	2	.64	.01	.07	19	20
3W 210N	2	47	72	147	.1	51	14	821	8.93	16	2	ND	3	5	1	2	2	20	.02	.12	25	8	.09	31	.01	2	.53	.01	.04	4	15
3W 200N	2	31	141	176	.1	38	13	986	5.63	17	2	ND	2	20	1	2	2	19	.31	.12	20	9	.11	57	.01	5	.62	.01	.04	9	5
3W 190N	2	43	64	252	.1	62	25	669	5.81	24	2	ND	5	12	1	2	2	16	.16	.14	26	23	.42	33	.01	2	1.34	.01	.06	2	5
3W 180N	2	39	245	293	.1	34	24	2051	6.19	21	2	ND	2	27	1	2	2	20	.43	.20	17	13	.19	68	.01	4	1.00	.01	.08	2	5
3W 170N	1	48	364	276	.5	42	27	3048	5.98	33	3	ND	2	34	2	2	2	19	.60	.24	19	14	.21	65	.01	3	1.19	.01	.09	45	15
3W 160N	1	49	559	292	.5	43	24	3703	5.77	38	9	ND	2	35	2	2	2	16	.65	.26	18	13	.21	64	.01	2	1.23	.01	.07	9	30
3W 150N	1	42	459	248	.1	38	20	2356	5.95	37	2	ND	2	18	1	2	2	20	.24	.21	19	13	.16	61	.01	2	1.09	.01	.07	4	25
3W 140N	1	40	348	220	.1	38	23	3275	5.69	36	2	ND	2	31	1	2	2	24	.47	.19	16	16	.22	75	.01	5	1.22	.01	.06	2	5
3W 130N	2	23	77	93	.1	30	10	472	3.99	17	2	ND	3	16	1	2	2	26	.24	.08	26	10	.10	53	.01	3	.81	.01	.05	2	5
3W 120N	1	28	38	94	.1	38	11	678	5.58	20	2	ND	4	12	1	2	2	25	.15	.11	24	15	.15	82	.01	4	.86	.01	.06	2	5
3W 110N	2	31	39	88	.1	34	12	873	5.14	18	2	ND	4	14	1	2	2	31	.19	.11	37	22	.23	74	.02	6	1.20	.01	.06	2	5
3W 100N	2	31	47	99	.1	33	12	873	4.92	18	2	ND	3	12	1	2	2	25	.16	.13	23	25	.35	74	.01	3	1.36	.01	.07	2	15
3W 90N	2	26	35	70	.2	28	9	501	4.50	21	2	ND	4	6	1	2	2	28	.03	.10	24	22	.23	54	.01	2	1.20	.01	.06	2	195
3W 80N	2	26	39	94	.1	28	13	1837	4.82	26	2	ND	2	16	1	2	2	26	.24	.16	20	20	.24	88	.01	2	1.13	.01	.07	3	20
3W 70N	3	21	29	59	.1	22	6	447	4.08	20	2	ND	3	7	1	2	2	23	.05	.12	25	19	.22	70	.01	6	1.08	.01	.06	2	15
3W 60N	3	20	50	66	.6	21	8	1292	4.80	28	2	ND	2	6	1	2	2	22	.04	.14	26	15	.12	65	.01	2	.78	.01	.05	4	5
3W 50N	3	26	31	61	.2	23	9	1125	4.94	26	2	ND	3	6	1	2	3	25	.04	.15	24	17	.13	61	.01	2	.95	.01	.06	4	10
3W 40N	3	28	32	72	.1	27	14	1337	5.29	40	2	ND	2	13	1	2	2	20	.19	.15	24	14	.18	54	.01	4	1.03	.01	.07	6	30
3W 30N	3	21	22	53	.1	22	6	386	4.26	34	2	ND	4	7	1	2	2	20	.07	.11	31	13	.14	59	.01	2	.76	.01	.05	7	35
3W 20N	3	21	23	61	.2	24	11	1174	4.08	34	2	ND	2	14	1	2	2	20	.27	.14	21	13	.17	69	.01	2	.78	.01	.06	4	15
3W 10N	3	29	43	88	.3	32	15	1724	4.48	31	2	ND	2	14	1	2	4	22	.23	.19	21	19	.27	81	.01	2	1.28	.01	.07	7	15
3W 00N	3	27	45	95	.6	29	15	1774	4.86	40	2	ND	2	10	1	2	2	23	.13	.15	23	20	.26	69	.01	2	1.19	.01	.09	7	5
3W 10S	3	21	26	54	.1	17	5	293	4.11	28	2	ND	4	6	1	2	2	21	.08	.12	26	18	.20	52	.01	2	.90	.01	.06	6	5
3W 20S	3	42	64	92	.1	49	18	1098	5.35	44	2	ND	7	13	1	2	4	13	.17	.09	32	14	.36	50	.01	2	.97	.01	.06	3	40
3W 30S	2	31	44	132	.6	37	14	2432	4.49	35	5	ND	2	34	1	2	3	18	.40	.20	17	22	.35	91	.01	3	1.42	.01	.09	4	10
STD A-1/AU 0.5	96	125	119	186	36.5	150	82	503	3.17	137	95	40	173	129	89	84	95	57	.56	.13	130	64	.58	124	.08	178	1.50	.25	.25	67	450

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	AU* PPB
3W 40S	1	31	32	95	.1	40	15	875	4.33	37	2	ND	4	16	1	2	2	17	.22	.12	23	21	.39	74	.01	6	1.17	.01	.07	2	20
3W 50S	2	35	47	110	.2	43	19	1460	5.34	33	2	ND	3	12	1	2	2	20	.11	.12	27	25	.41	76	.01	2	1.39	.01	.08	2	10
3W 60S	1	24	35	91	.3	31	14	1186	4.24	25	2	ND	2	18	1	2	2	22	.19	.19	21	24	.36	75	.01	2	1.53	.01	.08	2	5
3W 70S	1	20	33	90	.2	29	8	429	4.21	28	2	ND	3	19	1	2	2	21	.15	.17	20	22	.36	70	.01	6	1.29	.01	.08	2	10
3W 80S	1	28	34	101	.7	35	14	1554	3.80	27	2	ND	2	38	1	2	2	16	.48	.26	14	19	.32	77	.01	3	1.32	.01	.09	2	15
3W 90S	1	22	39	90	.4	31	14	1084	4.01	23	2	ND	2	10	1	2	2	17	.08	.20	21	22	.38	79	.01	7	1.45	.01	.09	2	15
3W 100S	1	53	42	91	.3	44	15	760	5.15	27	2	ND	5	8	1	2	2	22	.06	.12	27	27	.42	59	.01	2	1.53	.01	.06	2	25
3W 110S	1	15	18	43	.1	15	5	261	4.15	14	2	ND	3	5	1	2	2	27	.02	.09	25	22	.24	47	.01	5	1.11	.01	.05	2	5
3W 120S	1	30	21	58	.1	26	10	658	4.91	22	2	ND	3	5	1	2	2	21	.03	.12	25	22	.30	34	.01	6	1.12	.01	.04	2	15
3W 130S	1	16	19	36	.1	15	6	1355	3.08	8	2	ND	2	5	1	2	2	21	.03	.11	20	17	.20	49	.01	2	.88	.01	.04	2	5
3W 140S	2	22	31	53	.1	18	8	961	4.[illegible]	18	2	ND	2	5	1	2	2	29	.03	.13	21	22	.24	42	.02	9	1.06	.01	.05	2	5
3W 150S	1	57	29	103	.1	42	17	1089	4.85	20	2	ND	7	8	1	2	3	24	.04	.10	35	24	.53	85	.01	2	1.54	.01	.10	2	30
3W 160S	1	35	40	167	.1	27	13	1690	4.97	18	2	ND	2	14	1	2	2	25	.13	.15	24	20	.30	59	.02	5	1.25	.01	.04	2	225
3W 170S	2	28	27	190	.1	19	11	3457	4.46	16	2	ND	2	9	2	2	2	18	.05	.18	20	15	.18	62	.01	6	1.19	.01	.04	5	15
3W 180S	2	39	48	88	.1	24	12	1651	5.88	17	2	ND	2	8	1	2	2	27	.10	.16	28	19	.24	69	.01	8	1.14	.01	.04	6	10
3W 190S	2	41	180	67	.2	21	13	2136	4.99	12	2	ND	2	8	1	2	2	22	.06	.15	29	17	.21	54	.01	5	1.31	.01	.03	2	20
3W 200S	2	30	31	60	.1	16	8	1492	6.63	23	2	ND	2	5	1	2	2	31	.03	.19	25	14	.13	49	.01	12	.90	.01	.04	3	15
19W 550N	1	39	66	71	.1	20	11	981	6.80	18	2	ND	4	7	1	2	2	25	.06	.25	25	15	.29	46	.01	2	1.02	.01	.04	2	5
19W 540N	1	21	49	62	.5	11	7	872	3.78	10	2	ND	2	6	1	2	2	28	.09	.23	21	12	.18	49	.01	4	.72	.01	.03	2	5
19W 530N	1	16	29	34	.2	8	4	246	3.12	11	2	ND	2	5	1	2	2	29	.02	.10	24	10	.16	44	.01	5	.76	.01	.03	2	5
19W 520N	1	32	53	59	.3	16	8	520	4.96	16	2	ND	4	5	1	2	2	29	.03	.19	22	15	.27	52	.01	10	.97	.01	.03	7	5
19W 510N	1	24	38	36	.2	14	6	276	3.59	11	2	ND	4	5	1	2	2	26	.03	.11	23	14	.19	35	.01	6	.92	.01	.03	4	340
19W 500N	1	30	49	50	.2	17	8	438	4.72	16	2	ND	3	4	1	2	2	29	.02	.15	18	14	.24	49	.01	2	.96	.01	.04	2	10
17W 550N	1	21	29	46	.6	10	7	455	3.83	11	2	ND	3	4	1	2	2	29	.03	.13	18	12	.23	39	.01	4	.93	.01	.04	3	5
17W 540N	1	14	35	22	.1	4	4	468	2.46	10	2	ND	2	4	1	2	2	21	.02	.13	21	12	.14	43	.01	3	.74	.01	.05	3	140
17W 530N	1	20	42	39	.6	11	7	914	3.70	15	2	ND	3	5	1	2	2	25	.01	.22	25	12	.15	62	.01	4	.79	.01	.06	4	15
17W 520N	1	22	49	55	.2	14	8	812	4.05	18	2	ND	2	7	1	2	2	24	.08	.18	19	13	.17	63	.01	8	.79	.01	.05	9	15
17W 510N	1	31	68	55	1.1	15	7	422	4.63	17	2	ND	3	4	1	2	2	22	.01	.14	16	11	.18	38	.01	5	.87	.01	.05	5	40
17W 500N	1	36	71	62	.5	16	8	593	4.77	16	2	ND	3	5	1	2	2	24	.02	.16	15	16	.21	54	.01	6	1.16	.01	.05	8	20
17W 490N	1	28	52	45	.6	13	7	793	3.93	14	2	ND	3	4	1	2	2	23	.02	.16	18	10	.16	46	.01	2	.82	.01	.05	6	20
17W 480N	1	32	62	55	.5	13	8	497	6.51	20	2	ND	3	4	1	2	2	28	.01	.16	19	12	.18	39	.01	6	1.00	.01	.05	6	15
17W 470N	2	29	30	46	.2	8	8	987	4.73	15	2	ND	2	6	1	2	3	72	.04	.20	19	10	.45	38	.02	2	1.37	.01	.04	2	15
17W 460N	2	35	59	52	.6	13	7	697	5.65	15	2	ND	2	5	1	2	2	43	.02	.15	19	13	.21	38	.01	7	1.21	.01	.04	4	65
17W 450N	2	31	36	51	.6	11	7	455	4.95	11	2	ND	2	5	1	2	3	54	.03	.17	19	9	.32	39	.01	2	1.22	.01	.04	2	5
17W 440N	2	32	29	38	.5	9	6	542	4.96	13	2	ND	2	5	1	2	2	47	.04	.24	17	9	.17	38	.01	4	.81	.01	.04	3	5
17W 430N	2	24	83	63	.1	14	7	865	6.13	18	2	ND	3	8	1	2	2	25	.05	.20	25	10	.12	51	.02	4	.81	.01	.03	2	5
17W 420N	2	24	44	39	.1	14	7	627	4.80	14	2	ND	2	4	1	2	2	21	.02	.10	21	10	.07	23	.01	7	.59	.01	.03	2	5
STD S-1/AU-0.5	94	125	117	186	35.8	154	63	495	3.16	134	116	39	179	128	92	86	100	57	.56	.13	134	64	.58	124	.08	175	1.50	.24	.23	70	520

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	AU* PPB
17W 410N	2	34	30	44	.6	17	6	360	6.32	16	2	ND	2	5	1	6	2	35	.04	.21	16	12	.14	35	.01	4	.83	.01	.03	2	5
17W 400N	2	32	59	78	.5	20	6	747	7.61	21	2	ND	3	6	1	5	2	16	.09	.15	14	15	.13	42	.01	6	1.12	.01	.03	2	5
16W 550N	1	46	47	94	.9	51	16	774	4.61	54	2	ND	4	28	1	4	2	14	.44	.12	16	22	.39	85	.01	7	1.63	.01	.05	3	30
16W 540N	1	35	49	93	.4	32	12	662	4.08	40	2	ND	2	32	1	2	2	14	.50	.15	12	18	.36	75	.01	7	1.19	.01	.04	4	20
16W 530N	1	45	42	203	.6	35	9	509	4.19	69	2	ND	3	42	2	3	2	24	.71	.20	10	23	.63	99	.01	5	1.26	.01	.04	2	25
16W 520N	5	36	99	345	.5	21	25	461	9.57	106	2	ND	4	29	1	2	2	23	.47	.16	11	21	.46	65	.01	2	1.37	.01	.03	12	150
16W 500N	3	31	83	69	1.7	16	10	1282	6.83	18	2	ND	2	5	1	2	2	18	.06	.13	14	13	.14	37	.01	3	1.21	.01	.02	7	30
STD G-1/AU-0.5	95	126	120	187	37.9	156	83	520	3.16	133	98	40	203	130	94	91	109	58	.56	.14	147	65	.58	125	.08	199	1.51	.27	.24	74	500

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 3-1-3 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: SOIL AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: JULY 26 1984 DATE REPORT MAILED: July 30/84 ASSAYER: D. Toye .DEAN TOYE. CERTIFIED B.C. ASSAYER

IMPERIAL METALS PROJECT # 4203 FILE # 84-1803

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	AU* PPB
14W 5+50N	1	25	14	50	.3	28	8	851	3.94	24	2	ND	2	12	1	4	2	18	.13	.13	12	20	.24	58	.01	6	.91	.01	.04	2	5
14W 5+40N	1	33	18	74	.3	42	12	573	4.08	22	2	ND	5	15	1	2	2	12	.17	.07	14	15	.36	44	.01	6	.88	.01	.04	2	5
14W 5+30N	1	32	28	72	.1	39	12	590	4.10	17	2	ND	5	16	1	3	2	13	.21	.08	17	13	.33	37	.01	6	.83	.01	.03	2	90
14W 5+20N	1	28	28	63	.2	28	11	686	4.42	19	2	ND	3	7	1	2	2	17	.04	.09	15	17	.27	37	.01	6	1.00	.01	.04	2	30
14W 5+10N	1	16	9	29	.4	14	4	151	2.19	31	2	ND	2	6	1	6	2	15	.04	.08	15	7	.06	28	.01	4	.42	.01	.03	3	5
14W 5+00N	1	28	25	58	.2	27	5	481	4.32	36	2	ND	2	7	1	4	2	20	.04	.12	13	15	.22	51	.01	6	.82	.01	.04	2	5
14W 4+90N	1	28	34	73	.3	23	9	419	3.64	82	6	ND	3	14	1	3	2	17	.07	.12	9	14	.18	75	.01	6	.85	.01	.03	2	15
14W 4+80N	1	27	31	78	.2	29	9	740	3.93	57	2	ND	2	14	1	3	2	23	.11	.13	11	20	.14	79	.01	6	.76	.01	.04	2	5
14W 4+70N	1	25	36	49	.7	20	7	488	3.83	37	2	ND	2	7	1	2	2	23	.06	.14	13	17	.19	37	.01	6	.72	.01	.04	2	5
14W 4+60N	1	15	32	40	1.0	16	7	1256	2.30	29	2	ND	2	15	1	4	2	20	.20	.13	13	11	.14	52	.01	4	.43	.01	.07	2	45
14W 4+50N	1	13	20	40	.2	17	5	1033	2.72	16	9	ND	2	7	1	2	2	16	.08	.12	13	11	.17	47	.01	5	.64	.01	.04	2	5
14W 4+40N	1	17	17	34	.2	15	4	290	3.45	19	2	ND	3	4	1	2	2	18	.03	.15	16	13	.16	44	.01	5	.71	.01	.03	2	5
14W 4+30N	1	26	22	54	.2	21	7	380	4.51	22	2	ND	3	5	1	2	2	18	.04	.10	15	19	.22	37	.01	7	1.02	.01	.04	2	5
14W 4+20N	1	23	25	82	.2	25	7	1401	3.30	81	4	ND	2	45	1	2	2	15	.84	.13	7	18	.30	62	.01	5	.92	.01	.04	2	5
14W 4+10N	1	37	30	98	.2	34	12	792	4.38	38	2	ND	3	22	1	2	4	16	.37	.10	13	16	.40	50	.01	6	.93	.01	.04	5	25
14W 4+00N	1	26	42	172	.4	38	10	579	4.51	75	5	ND	3	29	1	2	2	17	.49	.15	11	25	.49	58	.01	7	1.30	.01	.04	5	5
13W 5+50N	2	30	22	71	.1	30	7	216	4.55	17	2	ND	7	6	1	2	2	17	.06	.05	22	17	.33	31	.01	7	.96	.01	.04	2	5
13W 5+40N	1	36	22	60	.3	30	7	222	5.30	14	2	ND	4	5	1	2	2	16	.05	.09	16	16	.20	23	.01	7	.77	.01	.02	6	5
13W 5+30N	1	42	23	99	.1	49	13	276	4.66	18	2	ND	6	4	1	2	2	12	.01	.06	25	16	.29	38	.01	7	1.01	.01	.03	3	5
13W 5+20N	1	25	12	46	.1	21	6	189	3.26	15	2	ND	5	4	1	3	2	21	.01	.07	25	9	.10	41	.01	5	.61	.01	.02	3	5
13W 5+10N	1	27	18	50	.3	24	5	391	4.26	17	2	ND	4	4	1	2	2	17	.03	.12	16	16	.18	40	.01	6	1.09	.01	.03	2	5
13W 5+00N	1	24	16	40	.2	21	4	343	3.80	25	2	ND	2	3	1	2	2	20	.02	.19	16	14	.15	33	.01	6	.70	.01	.03	4	5
12W 5+00N	1	30	20	55	.3	21	4	310	5.47	17	2	ND	3	6	1	2	2	27	.07	.09	14	21	.22	26	.01	7	.96	.01	.03	9	5
12W 4+90N	1	27	36	83	.5	24	8	777	4.99	33	2	ND	3	20	1	2	2	22	.29	.14	11	14	.17	67	.01	7	1.08	.01	.04	6	5
12W 4+80N	1	21	11	42	.1	17	4	286	3.62	46	2	ND	2	7	1	3	2	21	.05	.08	15	14	.14	33	.01	6	.80	.01	.02	5	15
12W 4+70N	2	22	8	36	.1	13	7	326	2.44	12	2	ND	3	6	1	2	2	28	.02	.04	20	11	.13	30	.01	4	.62	.01	.02	2	5
12W 4+60N	2	33	31	68	.1	23	11	638	4.53	14	2	ND	2	10	1	2	4	24	.17	.08	13	18	.34	34	.01	7	1.08	.01	.03	4	65
12W 4+50N	2	33	30	73	.1	28	12	968	4.04	9	2	ND	2	9	1	2	3	22	.09	.09	13	19	.39	57	.01	6	1.05	.01	.04	3	5
12W 4+40N	2	27	17	61	.1	24	8	632	3.75	13	2	ND	2	7	1	2	2	20	.07	.08	15	17	.29	37	.01	6	.81	.01	.02	6	5
12W 4+30N	2	38	29	64	.2	24	8	370	6.02	10	3	ND	4	5	1	2	5	26	.05	.12	15	22	.41	36	.01	8	1.26	.01	.04	5	5
12W 4+20N	3	24	26	44	.5	15	3	291	4.20	9	2	ND	5	5	1	2	6	22	.05	.15	16	18	.27	40	.01	6	.91	.01	.03	3	5
12W 4+10N	3	42	20	57	.7	12	8	2835	4.11	9	2	ND	2	4	1	2	2	28	.02	.15	14	10	.11	70	.01	6	.75	.01	.03	3	5
12W 4+00N	3	16	15	39	.2	14	3	778	3.05	7	2	ND	2	5	1	2	2	22	.06	.13	17	11	.14	33	.01	5	.59	.01	.02	3	5
12W 3+90N	3	30	29	55	.5	19	8	922	6.50	14	2	ND	3	4	1	2	2	29	.02	.14	16	21	.27	42	.01	8	.91	.01	.03	2	5
12W 3+80N	2	31	21	52	.5	23	7	454	4.84	20	2	ND	3	5	1	2	2	25	.07	.20	13	15	.28	26	.01	7	.80	.01	.04	4	5
12W 3+70N	2	21	11	40	.5	17	5	485	3.00	15	2	ND	2	6	1	2	2	25	.10	.12	16	13	.15	32	.01	5	.57	.01	.02	2	5
12W 3+60N	1	15	11	29	.4	11	4	140	3.28	13	2	ND	2	4	1	2	2	20	.03	.17	14	13	.20	45	.01	5	.71	.01	.02	3	5
12W 3+50N	2	21	16	35	.2	16	5	162	4.04	21	2	ND	3	5	1	2	2	30	.04	.08	19	13	.17	46	.01	6	.81	.01	.03	7	5
STD S-1/AU 0.5	95	124	118	185	74.3	154	82	479	3.15	124	100	38	189	128	98	93	99	57	.56	.17	136	64	.58	123	.08	172	1.50	.24	.22	140	495

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	AU* PPB
12W 3+40N	2	25	31	49	.4	20	6	306	5.24	30	2	ND	5	3	1	2	3	20	.02	.10	18	14	.20	28	.01	7	.79	.01	.02	2	115
12W 3+30N	2	40	14	63	.2	25	9	565	5.56	24	2	ND	3	3	1	2	2	22	.01	.16	12	13	.40	53	.01	10	1.07	.01	.02	2	25
12W 3+20N	2	23	18	45	.1	17	7	459	3.77	27	2	ND	2	4	1	2	4	20	.02	.14	13	11	.23	39	.01	7	.66	.01	.02	2	15
12W 3+10N	3	23	22	49	.1	21	7	383	4.14	33	2	ND	3	4	1	2	4	20	.03	.09	14	12	.19	44	.01	12	.61	.01	.02	2	20
12W 3+00N	2	33	31	65	.1	29	10	372	5.24	29	2	ND	5	7	1	2	2	20	.06	.10	19	19	.24	44	.01	9	1.47	.01	.02	2	15
12W 2+90N	1	31	28	81	.4	30	7	541	3.95	26	5	ND	2	35	1	2	2	16	.61	.16	9	17	.33	55	.01	4	1.03	.01	.02	3	35
12W 2+80N	1	31	33	78	.2	30	13	1046	4.39	34	2	ND	2	29	4	2	2	19	.46	.13	8	14	.35	69	.01	12	1.00	.01	.02	2	20
12W 2+70N	1	31	24	86	.3	18	11	1257	3.83	20	2	ND	2	72	1	2	3	14	1.08	.24	4	12	.28	105	.01	11	.93	.01	.02	2	40
12W 2+60N	1	18	25	35	.4	12	6	308	2.99	27	2	ND	2	6	1	2	2	16	.06	.14	8	8	.12	49	.01	4	.50	.01	.02	2	405
12W 2+50N	1	20	43	41	.2	14	4	311	3.66	21	2	ND	2	3	1	2	2	17	.02	.16	6	11	.20	38	.01	7	.65	.01	.02	2	15
11W 5+00N	2	14	12	26	.5	13	3	127	2.22	22	2	ND	6	6	1	2	2	25	.07	.04	21	9	.05	32	.01	9	.45	.01	.02	3	15
11W 4+90N	1	19	17	41	.2	19	4	196	4.12	29	2	ND	4	6	1	2	2	23	.04	.05	16	13	.13	40	.02	12	.62	.01	.03	2	10
11W 4+80N	1	39	22	91	.2	52	17	2291	4.09	34	8	ND	2	28	1	2	2	11	.36	.10	9	13	.20	67	.01	8	.67	.01	.03	2	20
11W 4+70N	1	21	18	45	.4	21	6	315	3.45	32	2	ND	4	9	1	2	2	18	.13	.07	10	10	.16	40	.01	3	.79	.01	.04	2	5
11W 4+60N	1	16	20	41	.2	17	4	260	3.68	22	2	ND	4	3	1	2	2	18	.01	.08	14	11	.11	30	.01	9	.69	.01	.02	2	5
11W 4+50N	1	16	11	55	.1	16	4	679	2.65	20	2	ND	2	7	1	2	2	20	.09	.07	15	8	.06	50	.01	6	.45	.01	.02	2	15
11W 4+40N	1	21	28	78	.2	25	9	867	4.25	22	2	ND	2	15	1	2	2	22	.14	.10	9	18	.28	64	.01	2	1.08	.01	.04	2	85
11W 4+30N	1	34	38	79	.1	38	12	815	4.04	22	2	ND	5	14	1	2	2	17	.20	.07	12	17	.41	47	.01	5	.90	.01	.04	2	25
11W 4+20N	1	21	31	61	.2	20	5	274	4.25	25	2	ND	3	6	1	2	2	22	.06	.07	11	15	.21	37	.01	3	.92	.01	.04	2	5
11W 4+10N	1	16	20	40	.1	15	4	217	3.13	51	2	ND	5	3	1	2	2	19	.03	.09	17	8	.10	42	.01	3	.53	.01	.02	2	20
11W 4+00N	1	13	15	23	.5	12	2	100	2.32	47	2	ND	5	3	1	2	2	15	.01	.07	13	7	.07	39	.01	13	.59	.01	.02	2	35
11W 3+90N	2	21	20	41	.5	15	5	679	3.32	43	2	ND	2	3	1	2	2	23	.02	.13	13	5	.08	47	.01	4	.53	.01	.02	7	5
11W 3+80N	2	18	23	37	.2	18	3	156	3.12	54	2	ND	4	3	1	2	2	17	.01	.10	12	6	.11	31	.01	4	.56	.01	.02	2	5
11W 3+70N	2	14	19	30	.2	15	3	238	2.67	35	2	ND	3	3	1	2	2	18	.04	.12	12	7	.09	50	.01	4	.51	.01	.03	2	90
11W 3+60N	3	24	29	65	.1	30	10	1746	4.43	48	2	ND	2	3	1	2	3	19	.02	.15	9	11	.11	59	.01	16	.52	.01	.03	2	5
11W 3+50N	2	13	10	24	.2	10	3	309	2.07	31	2	ND	2	2	1	2	2	13	.03	.10	10	5	.06	28	.01	2	.44	.01	.03	2	15
11W 3+40N	3	24	19	59	.1	24	7	270	4.71	58	2	ND	3	3	1	2	4	14	.05	.14	9	13	.18	40	.01	6	.71	.01	.02	2	5
11W 3+30N	3	28	22	55	.7	27	7	428	4.86	55	2	ND	3	5	1	2	3	16	.04	.12	12	13	.19	61	.01	2	.89	.01	.03	5	15
11W 3+20N	2	25	12	48	.1	15	7	819	4.23	16	2	ND	5	4	1	2	2	28	.03	.11	14	13	.34	46	.01	2	1.06	.01	.03	2	5
11W 3+10N	2	31	42	82	.1	29	11	1587	4.18	41	2	ND	2	22	1	2	2	18	.37	.12	9	13	.37	51	.01	2	.81	.01	.04	2	10
11W 3+00N	2	26	14	46	.3	19	7	720	5.25	20	2	ND	4	4	1	2	2	23	.02	.15	13	11	.25	46	.01	6	.84	.01	.03	2	5
11W 2+90N	1	23	12	40	.3	13	5	288	3.59	27	2	ND	3	3	1	2	2	23	.02	.12	10	10	.22	35	.01	9	.79	.01	.04	2	5
11W 2+80N	1	20	20	44	.2	15	6	423	3.81	21	2	ND	2	5	1	2	2	27	.02	.11	11	11	.17	50	.01	4	.66	.01	.03	2	15
11W 2+70N	1	16	19	43	.2	12	5	699	2.78	29	2	ND	2	6	1	2	2	18	.10	.11	10	8	.11	38	.01	2	.43	.01	.02	2	5
SDT 6-1/AU 0.5	93	126	117	187	35.3	155	92	513	3.16	136	99	41	181	130	99	93	99	58	.56	.13	133	64	.56	125	.09	174	1.50	.23	.23	67	490

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	AU* PPB
11W 2+60N	2	19	20	39	.3	18	6	333	3.65	24	2	ND	3	5	1	3	2	22	.03	.09	16	9	.11	32	.01	7	.63	.01	.03	2	5
11W 2+50N	2	22	23	44	.3	20	7	510	3.97	25	2	ND	2	7	1	2	2	23	.01	.10	19	12	.15	42	.01	5	.67	.01	.02	2	10
11W 2+40N	2	17	19	44	.2	18	5	410	3.54	21	2	ND	2	6	1	2	2	27	.05	.09	17	12	.15	54	.01	6	.69	.01	.03	2	20
11W 2+30N	2	31	42	79	.1	25	17	2245	4.79	23	2	ND	2	12	1	2	2	19	.13	.14	13	12	.19	59	.01	4	.91	.01	.04	2	5
11W 2+20N	1	41	195	185	.7	42	15	1281	4.80	22	2	ND	2	28	1	2	2	18	.74	.12	13	18	.45	46	.01	11	1.18	.01	.04	8	30
11W 2+10N	1	27	142	124	.2	44	24	2135	7.90	30	2	ND	3	12	1	2	2	22	.17	.13	27	17	.41	72	.01	2	1.19	.01	.04	5	45
11W 2+00N	1	32	91	111	.1	31	15	2032	5.05	21	2	ND	2	19	1	2	2	22	.30	.14	16	17	.24	85	.01	8	1.16	.01	.05	5	5
2+00E 1+00N	2	15	18	45	.2	16	6	317	3.77	10	2	ND	2	8	1	2	2	23	.07	.09	17	18	.21	48	.01	9	1.13	.01	.05	2	5
2+00E 0+90N	1	17	26	61	.1	21	11	941	3.83	20	2	ND	2	12	1	2	2	24	.15	.15	12	21	.37	72	.01	3	1.41	.01	.05	2	5
2+00E 0+80N	1	19	33	68	.1	22	14	920	4.10	16	2	ND	2	15	1	2	2	26	.22	.15	14	20	.39	66	.01	6	1.47	.01	.06	2	5
2+00E 0+70N	1	27	73	87	.3	31	9	1051	3.00	10	5	ND	2	42	1	3	2	16	.92	.37	10	19	.42	63	.01	4	1.55	.01	.05	2	10
2+00E 0+60N	1	24	255	121	.3	37	9	319	4.04	19	2	ND	4	18	1	3	2	16	.29	.16	16	24	.51	39	.01	3	1.47	.01	.04	2	15
2+00E 0+50N	1	29	136	77	.4	30	11	720	3.96	25	2	ND	2	14	1	2	2	20	.22	.23	16	21	.38	53	.01	5	1.62	.01	.06	2	5
2+00E 0+40N	1	51	190	107	.7	42	16	1567	4.50	22	3	ND	2	20	1	3	2	25	.32	.29	17	27	.47	61	.01	5	2.02	.01	.07	2	5
2+00E 0+30N	1	46	1037	240	.9	41	23	1578	5.44	27	2	ND	2	16	1	2	2	27	.18	.25	13	24	.37	52	.01	4	2.26	.01	.06	2	130
2+00E 0+20N	1	22	991	312	.6	19	4	259	3.92	91	2	ND	3	9	1	3	2	27	.11	.11	22	13	.11	42	.01	9	.39	.01	.04	19	180
2+00E 0+10N	1	25	1710	139	.5	21	5	805	3.27	33	2	ND	2	10	1	2	2	20	.12	.15	17	14	.21	26	.01	7	1.12	.01	.04	5	125
2+00E 0+00	1	13	66	45	.1	13	7	716	2.89	9	2	ND	2	11	1	2	2	19	.14	.11	17	12	.22	42	.01	2	.96	.01	.04	2	5
2+25E 1+00N	1	21	29	72	.1	26	9	1942	3.56	10	2	ND	2	25	1	2	2	23	.37	.28	12	22	.44	76	.01	4	1.84	.01	.06	2	5
2+25E 0+90N	1	19	29	56	.1	22	8	1132	3.12	12	3	ND	2	28	1	2	2	18	.52	.24	9	18	.41	74	.01	2	1.29	.01	.04	2	5
2+25E 0+80N	2	42	70	83	.5	38	11	1203	4.05	13	2	ND	2	27	1	2	2	22	.50	.29	15	24	.41	50	.02	11	2.02	.01	.05	2	5
2+25E 0+70N	2	49	176	125	.5	51	15	1934	3.93	12	12	ND	2	27	1	2	2	21	.51	.25	17	29	.47	36	.02	7	2.33	.01	.05	2	5
2+25E 0+60N	3	17	130	49	.1	18	10	628	2.72	6	2	ND	2	9	1	2	2	19	.14	.11	17	15	.22	39	.01	7	1.12	.01	.03	2	5
2+25E 0+50N	3	11	22	27	.1	9	2	133	2.82	9	2	ND	2	5	1	2	3	21	.03	.06	22	8	.10	24	.01	8	.61	.01	.03	2	5
2+25E 0+40N	3	18	23	31	.2	12	3	164	3.01	9	2	ND	4	5	1	2	2	19	.02	.06	26	12	.14	26	.01	7	.66	.01	.03	2	10
2+25E 0+30N	3	25	42	44	.1	20	6	390	3.31	10	2	ND	3	5	1	2	2	19	.03	.07	23	10	.13	31	.01	5	.66	.01	.04	2	20
2+25E 0+20N	2	5	27	15	.5	6	1	42	.96	3	2	ND	2	4	1	2	2	11	.03	.06	20	8	.08	31	.01	5	.54	.01	.02	2	25
2+25E 0+10N	5	84	11852	630	54.4	19	5	264	5.77	1183	2	76	4	11	4	11	23	14	.05	.14	12	8	.10	22	.01	13	.55	.01	.04	694	92650
2+25E 0+00BL	2	22	198	84	.6	25	9	683	3.89	34	2	ND	2	7	1	2	2	18	.07	.12	14	17	.20	31	.01	5	.89	.01	.04	9	205
2+25E 0+10S	2	14	191	42	.1	19	10	1788	2.19	15	2	ND	2	7	1	2	2	19	.09	.12	12	9	.12	54	.01	2	.89	.01	.04	2	20
2+25E 0+20S	1	15	36	45	.1	12	11	978	2.25	10	2	ND	2	15	1	3	2	21	.29	.10	13	8	.14	52	.01	3	.91	.01	.04	2	10
2+25E 0+30S	1	30	42	112	.1	35	15	5016	4.01	9	10	ND	2	25	1	2	2	23	.40	.27	7	18	.22	106	.01	5	1.56	.01	.05	2	15
2+25E 0+40S	1	13	33	51	.1	20	6	436	4.50	7	2	ND	2	6	1	3	2	23	.05	.09	14	16	.24	37	.01	2	1.05	.01	.04	2	5
2+25E 0+50S	1	33	27	76	.1	32	10	440	5.82	24	2	ND	2	10	1	3	2	24	.17	.16	11	21	.22	57	.01	3	1.17	.01	.04	4	20
2+50E 1+00N	2	25	18	51	.1	28	7	327	3.92	11	2	ND	2	5	1	2	2	24	.02	.07	20	16	.20	41	.01	7	1.12	.01	.04	2	310
2+50E 0+90N	2	24	12	37	.1	20	5	256	3.30	16	2	ND	2	4	1	2	2	19	.02	.07	17	10	.11	31	.01	7	.66	.01	.03	2	5
2+50E 0+80N	2	25	16	50	.1	25	11	696	2.81	7	6	ND	2	5	1	2	2	14	.09	.11	12	5	.09	28	.01	3	.41	.01	.04	2	5
STD B-1/AU 0.5	96	129	117	187	32.7	151	81	511	3.16	120	98	36	178	127	84	82	99	59	.56	.12	132	63	.58	122	.07	179	1.50	.14	.21	49	505

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	AU* PPB
2+50E 0+70N	1	27	19	52	.2	20	9	562	4.29	12	5	ND	2	4	1	3	2	20	.03	.08	17	19	.23	33	.01	16	.95	.01	.04	2	15
2+50E 0+60N	1	21	22	42	.1	19	5	975	3.16	7	2	ND	2	3	1	3	2	22	.02	.10	16	16	.17	49	.01	11	.67	.01	.02	2	10
2+50E 0+50N	2	12	9	20	.2	11	2	143	2.33	6	2	ND	2	3	1	4	2	20	.02	.08	18	8	.07	26	.01	6	.49	.01	.02	2	5
2+50E 0+40N	1	10	14	16	.1	5	2	84	1.55	5	2	ND	2	4	1	4	2	11	.01	.05	24	4	.02	19	.01	6	.25	.01	.02	2	5
2+50E 0+30N	1	13	14	41	.5	58	9	351	4.21	42	2	ND	2	4	1	2	2	35	.02	.10	12	89	.27	26	.01	12	.89	.01	.02	2	25
2+50E 0+20N	1	14	33	27	.2	12	2	80	1.70	10	2	ND	3	3	1	2	2	11	.01	.05	28	4	.04	20	.01	2	.22	.01	.02	4	45
2+50E 0+10N	1	30	192	162	2.6	33	12	1620	3.72	18	4	ND	2	23	1	2	5	17	.26	.27	14	16	.21	48	.01	9	1.96	.01	.05	2	5
2+50E 0+00BL	2	14	170	58	.2	13	5	847	2.32	23	2	ND	2	5	1	2	4	19	.03	.09	20	7	.05	25	.01	5	.55	.01	.04	2	80
2+75E 1+00N	2	12	8	19	.1	8	1	56	1.29	2	2	ND	2	4	1	2	4	13	.02	.09	13	7	.04	39	.01	3	.50	.01	.02	2	5
2+75E 0+90N	2	9	13	14	.1	6	3	46	1.69	10	2	ND	2	3	1	2	2	19	.01	.07	16	5	.04	22	.01	7	.54	.01	.02	2	5
2+75E 0+80N	2	10	12	26	.1	11	3	132	2.09	9	2	ND	3	4	1	2	2	20	.01	.06	20	11	.06	25	.01	2	.60	.01	.02	2	5
2+75E 0+70N	1	46	24	47	.2	33	8	331	5.07	9	2	ND	2	3	1	2	2	16	.02	.12	15	15	.15	41	.01	4	.82	.01	.02	2	5
2+75E 0+60N	1	21	35	66	.4	22	11	1237	4.58	17	2	ND	2	5	1	3	2	25	.02	.10	17	20	.21	54	.01	13	1.20	.01	.04	2	30
2+75E 0+50N	1	9	13	17	.1	9	2	109	1.58	9	2	ND	2	5	1	3	2	17	.02	.06	18	6	.05	30	.01	2	.52	.01	.02	2	10
2+75E 0+40N	1	13	11	29	.3	13	3	405	2.33	8	2	ND	2	3	1	4	2	19	.01	.08	23	7	.07	32	.01	2	.50	.01	.02	2	5
2+75E 0+30N	1	9	9	13	.2	7	1	220	1.51	5	2	ND	2	3	1	5	2	12	.01	.07	22	8	.04	22	.01	4	.44	.01	.02	2	25
2+75E 0+20N	1	6	10	16	.2	6	2	582	1.12	7	2	ND	2	4	1	5	2	17	.03	.06	22	5	.05	28	.01	5	.52	.01	.02	2	5
2+75E 0+10N	1	12	27	26	.3	12	2	288	2.14	14	2	ND	3	5	1	5	2	12	.06	.11	23	8	.12	32	.01	6	.81	.01	.04	2	10
2+75E 0+00BL	1	15	224	46	.6	14	6	632	2.69	16	2	ND	2	5	1	3	2	18	.03	.09	19	9	.14	33	.01	4	.82	.01	.04	2	25
2+75E 0+10S	1	21	79	48	.4	19	6	342	3.19	23	2	ND	2	5	1	2	2	21	.03	.08	22	11	.13	47	.01	7	.65	.01	.04	2	15
2+75E 0+20S	1	38	680	470	.4	35	18	2747	4.02	26	2	ND	2	22	4	3	2	19	.30	.26	12	17	.25	47	.01	4	1.41	.01	.05	2	110
2+75E 0+30S	1	38	119	124	.2	32	27	1551	5.46	32	2	ND	2	22	1	3	2	15	.32	.25	11	11	.15	55	.01	4	1.25	.01	.06	2	105
2+75E 0+40S	1	33	29	88	.7	29	14	2106	3.65	14	2	ND	2	16	1	2	2	18	.35	.27	13	15	.24	64	.01	2	1.29	.01	.04	2	5
2+75E 0+50S	1	19	24	77	.2	23	13	4584	3.68	12	2	ND	2	13	1	2	3	22	.20	.24	9	14	.23	32	.01	6	1.16	.01	.06	2	5
3+00E 1+00N	1	29	22	55	.1	20	17	1570	4.44	9	2	ND	2	8	1	3	3	26	.04	.20	14	23	.38	65	.01	4	1.75	.01	.04	2	5
3+00E 0+90N	2	12	9	38	.1	16	5	480	3.03	3	2	ND	2	5	1	2	2	27	.04	.09	16	15	.19	47	.01	3	.79	.01	.05	2	5
3+00E 0+80N	2	27	14	98	.1	36	17	3584	4.94	11	8	ND	2	15	1	2	3	22	.21	.21	13	19	.23	89	.01	5	1.66	.01	.05	2	5
3+00E 0+70N	2	30	5	81	.1	50	12	223	4.66	24	2	ND	3	2	1	2	2	8	.01	.13	12	2	.06	24	.01	5	.30	.01	.03	2	5
3+00E 0+60N	2	21	15	27	.1	18	9	485	3.93	4	2	ND	2	6	1	2	2	19	.04	.14	12	7	.08	24	.01	12	.59	.01	.04	2	5
3+00E 0+50N	2	15	17	39	.1	15	11	1928	3.43	6	2	ND	2	6	1	2	2	21	.07	.13	15	12	.16	58	.01	2	.80	.01	.04	2	5
3+00E 0+40N	1	20	25	39	.1	19	6	442	4.20	19	2	ND	2	4	1	2	2	28	.02	.12	14	27	.28	31	.01	2	.99	.01	.03	2	15
3+00E 0+30N	1	14	12	19	.2	13	4	94	2.79	7	2	ND	2	4	1	5	2	16	.02	.08	14	5	.04	28	.01	2	.46	.01	.02	2	5
3+00E 0+20N	1	18	17	26	.1	20	6	1801	2.54	8	2	ND	2	3	1	4	2	14	.01	.11	15	7	.04	60	.01	3	.45	.01	.03	2	15
3+00E 0+10N	1	19	39	31	.2	11	5	901	2.77	19	2	ND	2	4	1	5	2	19	.02	.09	27	9	.06	42	.01	5	.58	.01	.04	2	50
3+00E 0+00BL	1	16	24	32	.2	17	5	657	2.80	19	2	ND	2	5	1	5	2	18	.02	.09	19	7	.09	39	.01	2	.74	.01	.04	2	5
3+25E 1+00N	1	23	10	37	.2	14	4	191	4.13	9	2	ND	2	5	1	6	2	28	.03	.10	18	15	.23	64	.01	2	1.03	.01	.03	2	5
3+25E 0+90N	1	14	9	42	.2	16	7	221	3.00	10	2	ND	2	6	1	5	2	23	.04	.10	16	15	.21	54	.01	4	1.17	.01	.04	2	5
STD S-1/AU 0.5	99	125	117	195	25.5	155	82	487	3.16	129	108	39	172	109	38	87	98	57	.56	.12	109	64	.58	124	.08	178	1.50	.24	.22	66	495

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	AU* PPB
3+25E 0+80N	1	19	21	83	.4	23	16	1920	4.37	15	2	ND	2	21	1	2	2	23	.27	.24	9	19	.26	80	.01	4	1.72	.01	.05	2	5
3+25E 0+70N	2	12	8	22	.2	15	5	950	1.36	2	3	ND	2	5	1	2	2	8	.09	.08	8	3	.03	79	.01	5	.23	.01	.03	2	5
3+25E 0+60N	2	19	11	40	.2	22	10	833	3.52	4	3	ND	2	9	1	2	2	21	.11	.11	11	11	.15	49	.01	7	.84	.01	.04	2	5
3+25E 0+50N	3	29	14	86	.2	42	17	2000	3.20	4	2	ND	2	7	1	2	3	16	.09	.14	11	5	.07	74	.01	6	.51	.01	.05	2	5
3+25E 0+40N	3	17	14	43	.1	21	15	1184	2.55	4	2	ND	2	6	1	2	3	15	.08	.13	11	4	.06	64	.01	3	.41	.01	.05	2	10
3+25E 0+30N	3	18	10	72	.1	49	13	1481	6.24	27	2	ND	2	4	1	2	7	37	.02	.21	12	79	.51	54	.01	5	1.31	.01	.04	2	5
3+25E 0+20N	3	13	35	65	.3	17	12	3521	3.98	23	5	ND	2	10	-1	2	3	23	.14	.19	11	10	.12	77	.01	5	.81	.01	.05	10	5
3+25E 0+10N	2	14	13	33	.1	20	3	301	2.27	30	2	ND	2	3	1	2	2	13	.02	.10	13	3	.03	22	.01	2	.37	.01	.03	16	60
3+25E 0+00	2	16	181	68	.2	20	10	1667	3.04	21	2	ND	2	7	1	2	2	19	.09	.14	15	5	.07	67	.01	3	.59	.01	.05	2	65
3+50E 1+00N	1	7	12	20	.2	7	1	152	2.14	8	2	ND	2	3	1	2	2	22	.01	.11	13	8	.13	22	.01	6	.78	.01	.03	2	5
3+50E 0+90N	1	14	8	26	.2	10	4	238	3.17	8	2	ND	2	3	1	2	3	24	.01	.11	12	11	.24	27	.01	3	1.22	.01	.03	2	10
3+50E 0+80N	1	7	11	22	.2	7	4	457	1.93	5	2	ND	2	3	1	2	2	22	.01	.08	14	10	.13	24	.01	5	.78	.01	.04	2	5
3+50E 0+70N	1	15	9	39	.4	16	6	577	2.84	7	5	ND	2	4	1	2	2	22	.02	.12	10	14	.24	32	.01	4	1.14	.01	.04	2	5
3+50E 0+60N	1	9	20	49	.2	26	7	897	3.95	30	2	ND	2	3	1	2	2	20	.03	.12	13	5	.07	41	.01	4	.49	.01	.04	2	10
3+50E 0+50N	1	14	407	138	.4	22	12	2773	3.14	17	4	ND	2	9	2	2	2	26	.12	.17	8	13	.12	86	.01	2	.76	.01	.06	2	5
3+50E 0+40N	1	22	14	58	.7	20	4	520	3.05	8	3	ND	2	11	1	2	2	17	.14	.25	8	17	.19	62	.01	4	1.57	.01	.05	2	5
3+50E 0+30N	1	19	11	42	.3	17	5	257	2.11	7	2	ND	2	5	1	2	2	11	.05	.11	11	2	.04	51	.01	2	.39	.01	.04	2	5
3+50E 0+20N	1	14	15	54	.1	22	7	440	2.86	17	2	ND	2	8	1	2	2	18	.05	.12	12	7	.06	103	.01	3	.69	.01	.04	2	5
3+50E 0+10N	1	15	23	33	.1	13	4	397	2.98	22	2	ND	2	3	1	2	2	18	.01	.10	14	13	.17	42	.01	5	.98	.01	.04	2	5
3+50E 0+00BL	1	14	25	32	.1	17	4	661	2.91	10	2	NB	2	3	1	2	2	15	.01	.08	11	4	.03	27	.01	5	.39	.01	.03	2	165
3+75E 1+00N	1	18	15	48	.2	23	6	319	4.39	17	2	ND	2	3	1	2	2	35	.01	.15	13	19	.25	27	.01	2	1.15	.01	.03	2	15
3+75E 0+90N	1	4	3	10	.2	2	2	49	.64	2	2	ND	2	3	1	2	2	8	.01	.07	10	4	.04	26	.01	3	.43	.01	.03	2	5
3+75E 0+80N	1	14	10	21	.1	8	3	705	2.11	5	2	ND	2	3	1	2	2	18	.01	.11	12	11	.15	46	.01	2	.90	.01	.03	2	5
3+75E 0+70N	1	9	12	22	.2	11	2	242	1.73	5	2	ND	2	3	1	2	2	18	.03	.11	11	8	.12	29	.01	4	.72	.01	.04	2	5
3+75E 0+60N	1	12	5	26	.1	10	3	338	2.29	6	2	ND	2	3	1	2	2	21	.01	.12	10	13	.16	32	.01	6	.99	.01	.03	2	5
3+75E 0+50N	1	12	4	23	.2	9	3	421	2.01	8	2	ND	2	4	1	2	2	16	.02	.14	8	8	.11	40	.01	5	.87	.01	.05	2	5
3+75E 0+40N	1	2	7	9	.1	3	1	39	.39	2	2	ND	2	3	1	2	2	7	.01	.05	14	3	.02	26	.01	3	.25	.01	.02	2	5
3+75E 0+30N	2	13	14	31	.1	14	4	227	3.18	13	2	NB	2	3	1	2	3	21	.01	.13	14	12	.11	29	.01	3	.75	.01	.02	2	5
3+75E 0+20N	1	9	15	23	.1	8	3	1013	1.89	6	2	ND	2	4	1	2	2	15	.02	.08	15	5	.03	42	.01	6	.48	.01	.04	2	5
3+75E 0+10N	1	12	17	30	.3	10	3	199	2.40	14	2	ND	3	4	1	2	2	19	.02	.10	18	12	.11	42	.01	2	.91	.01	.05	2	5
3+75E 0+00BL	1	12	30	20	.3	10	3	183	1.88	16	2	ND	4	4	1	2	2	13	.04	.09	14	5	.04	31	.01	4	.52	.01	.03	2	10
4+00E 1+00N	1	15	9	37	.2	21	6	181	3.18	7	2	ND	2	4	1	2	2	20	.03	.11	13	10	.14	42	.01	2	.88	.01	.04	2	5
4+00E 0+90N	1	20	5	33	.2	20	4	449	3.52	8	2	ND	2	3	1	2	2	20	.02	.10	13	14	.22	40	.01	2	1.00	.01	.04	2	5
4+00E 0+80N	1	5	2	16	.1	7	3	121	1.00	4	2	ND	2	3	1	2	2	14	.01	.06	13	5	.02	39	.01	2	.49	.01	.02	2	5
4+00E 0+70N	1	15	7	37	.2	16	6	672	3.82	13	5	ND	2	3	1	2	2	24	.03	.14	8	15	.24	36	.01	2	1.02	.01	.04	2	5
4+00E 0+60N	1	18	11	28	.2	19	5	855	2.86	7	2	NB	2	4	1	2	2	19	.06	.12	9	8	.09	52	.01	4	.70	.01	.04	2	5
4+00E 0+50N	1	17	11	33	.4	16	6	428	3.08	6	3	ND	2	4	1	2	2	21	.03	.13	6	13	.18	39	.01	4	.28	.01	.04	2	5
STD G-1/AU 0.5	93	125	118	185	35.6	154	81	488	2.16	127	105	38	182	129	86	37	98	57	.56	.12	139	63	.58	124	.08	178	1.50	.24	.22	70	500

IMPERIAL METALS PROJECT # 4203 FILE # 84-1803

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	AU* PPB
4+00E 0+40N	1	13	5	39	.1	20	4	508	2.81	9	2	ND	2	4	1	2	2	26	.02	.09	17	13	.10	43	.01	5	.75	.01	.02	2	5
4+00E 0+30N	1	14	7	44	.1	23	5	501	2.92	5	2	ND	2	7	1	2	2	23	.02	.08	16	9	.05	39	.01	2	.50	.01	.02	2	5
4+00E 0+20N	1	20	21	55	.1	30	7	508	3.94	19	2	ND	2	5	1	2	2	20	.02	.10	14	15	.13	34	.01	6	.85	.01	.04	4	5
4+00E 0+10N	1	12	7	26	.1	12	2	122	1.86	9	2	ND	2	6	1	2	2	12	.02	.06	22	8	.04	25	.01	2	.47	.01	.02	2	5
4+00E 0+00BL	1	18	10	55	.1	25	7	582	3.09	14	2	ND	2	7	1	2	2	23	.08	.09	17	10	.07	51	.01	2	.62	.01	.04	2	5

APPENDIX E

SAMPLE PREPARATION & METHOD OF ANALYSIS

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
Telephone : 253 - 3158

GEOCHEMICAL LABORATORY METHODOLOGY - 1984

Sample Preparation

1. Soil samples are dried at 60°C and sieved to -80 mesh.
2. Rock samples are pulverized to -100 mesh.

Geochemical Analysis (AA and ICP)

0.5 gram samples are digested in hot dilute aqua regia in a boiling water bath and diluted to 10 ml with demineralized water. Extracted metals are determined by :

A. Atomic Absorption (AA)

Ag*, Bi*, Cd*, Co, Cu, Fe, Ga, In, Mn, Mo, Ni, Pb, Sb*, Tl, V, Zn
(* denotes with background correction.)

B. Inductively Coupled Argon Plasma (ICP)

Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cu, Cr, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

Geochemical Analysis for Au*

10.0 gram samples that have been ignited overnite at 600°C are digested with hot dilute aqua regia, and the clear solution obtained is extracted with Methyl Isobutyl Ketone.

Au is determined in the MIBK extract by Atomic Absorption using background correction (Detection Limit = 5 ppb direct AA and 1 ppb graphite AA.)

Geochemical Analysis for Au**, Pd, Pt, Rh

10.0 - 30.0 gram samples are subjected to Fire Assay preconcentration techniques to produce silver beads.

The silver beads are dissolved and Au, Pd, Pt and Rh are determined in the solution by graphite furnace Atomic Absorption.

Geochemical Analysis for As

0.5 gram samples are digested with hot dilute aqua regia and diluted to 10 ml. As is determined in the solution by Graphite Furnace Atomic Absorption (AA) or by Inductively Coupled Argon Plasma (ICP).

Geochemical Analysis for Barium

0.1 gram samples are digested with hot NaOH and EDTA solution, and diluted to 10 ml.

Ba is determined in the solution by Atomic Absorption or ICP.

Geochemical Analysis for Tungsten

1.0 gram samples are fused with KCl, KNO_3 and Na_2CO_3 flux in a test tube, and the fusions are leached with 20 ml water. W in the solution determined by ICP with a detection of 1 ppm.

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Geochemical Analysis for Uranium

0.5 gram samples are digested with hot aqua regia and diluted to 10 ml.

Aliquots of the acid extract are solvent extracted using a salting agent and aliquots of the solvent extract are fused with NaF, K_2CO_3 and Na_2CO_3 flux in a platinum dish.

The fluorescence of the pellet is determined on the Jarrel Ash Fluorometer.

Geochemical Analysis for Fluorine

0.25 gram samples are fused with sodium hydroxide and leached with 10 ml water. The solution is neutralized, buffered, adjusted to pH 7.8 and diluted to 100 ml.

Fluorine is determined by Specific Ion Electrode using an Orion Model 404 meter.

Geochemical Analysis for Tin

1.0 gram samples are fused with ammonium iodide in a test tube. The sublimed iodine is leached with dilute hydrochloric acid.

The solution is extracted with MIBK and tin is determined in the extract by Atomic Absorption.

Geochemical Analysis for Chromium

0.1 gram samples are fused with Na_2O_2. The melt is leached with HCl and analysed by AA or ICP.

Geochemical Analysis for Hg

0.5 gram samples is digested with aqua regia and diluted with 20% HCl.

Hg in the solution is determined by cold vapour AA using a F & J Scientific Hg assembly. An aliquot of the extract is added to a stannous chloride / hydrochloric acid solution. The reduced Hg is swept out of the solution and passed into the Hg cell where it is measured by AA.

Geochemical Analysis for Ga & Ge

0.5 gram samples are digested with hot aqua regia with HF in pressure bombs.

Ga and Ge in the solution are determined by graphite furnace AA.

Geochemical Analysis for Tl (Thallium)

0.5 gram samples are digested with 1:1 HNO_3. Tl is determined in the extract by graphite AA.

Geochemical Analysis for Te (Tellurium)

0.5 gram samples are digested with hot aqua regia. The Te extracted in MIBK is analysed by AA graphite furnace.

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Large increases in demands from our clients in the mineral exploration industry for our analytical services in 1981 have prompted us to expand these services again in 1984. The acquisition of more space, equipment, personnel and technology will result in the expediting of sample results.

Our prices continue to be highly competitive despite inflationary pressures and our turnaround time is unmatched. Expansion in our laboratory since 1980 includes :

SPACE

Total laboratory, sample preparation and sample storage has been expanded to 12,000 square feet.

EQUIPMENT

1. Our ICP system has been expanded, and a second unit has been purchased which will allow us to determine up to 45 elements simultaneously.
2. AA spectrophotometers have been increased to 8.
3. Sample preparation, weighing and dissolution facilities have been increased.
4. A LECO Induction Furnace has been installed for determining Carbon and Sulfur simultaneously in geological and metallurgical samples.
5. An UA3 Laser Fluorometer from Scintrex is now used for determination of U in water to .01 ppb.

TECHNOLOGY

1. Fire assay laboratory for Ag, Au, Pt, Pd has been installed.
2. ICP multi element packages for water, geochem and assay programs have been developed.
3. Lower detection limits for some elements have been achieved by graphite furnace AA.

TECHNICAL ACHIEVEMENTS

1. Background corrected Atomic Absorption analysis of Ag and Au since 1971.
2. Best proven precision, accuracy and price for MoS_2 assays in North America.
3. Pioneered geochemical analysis by ICP at or to better detection limits than AA, including Ag, As, U, Th and W.

PROVEN PERFORMANCE

Our logistical and technical performance for our clients has been demonstrated on the Gambier, Capoose Lake, Trout Lake, Black Dome, Red Mountain, Carolin, Cirque, Minago River, Quesnel River, Terra Swede and other major projects.

APPENDIX F

ORE RESERVE & WEIGHTED AVERAGE CALCULATIONS

TONNAGE AND GRADE SUMMARY

	Width	Short Tons	Gold (oz/t)	Silver (oz/t)
Section 83-5 to 84-7 incl.	4.3'	31,500	0.374	0.50
Extending section 83-5 to 84-7 20m below 200' level	4.3'	11,500	0.374	0.50
Hudson Vein Pillars	6.0'	1,500	0.794	1.14
Massive Sulphides	6.0'	4,500	0.497	1.32
605 Vein	3.0'	2,000	0.5	0.5
		50,650	0.395	0.59
OR				
605 Vein	3.0'	11,500	0.230	0.27
		60,150	0.364	0.53

HOLE #	GRID LOC.	ANGLE/LENGTH		INTERVAL(F)	GOLD ASSAY(G)	FXG	SILVER ASSAY	FXS
84 - 16	4+40E 1+74E	-50°/210'	120'4"-121'	(8") 3'*	(0.003) 0.001	0.003	(.01)	0.01
84 - 15	4+40E 1+74E	-65°/171'	152'-155'6"	3'6"	.001	.004	.01	0.04
84 - 14	4+40E 1+74E	-40°/125'	102-105	3'	.001	.003	.01	.03
83 - 5	4+08E 1+82S	-40°135'	115-117'	(2') 3'*	0.001	0.003	0.001	0.03
83 - 6	4+08E 1+82S	-60°/156'	80'6"-84"	3'6"	2.662	9.317	8.63	30.20
84 - 1	4+08E 1+67E	-60°/171'	153'6"-155'6"	(2') 3'	.001	.002	.01	.02
79 - 3	3+94E 1+75S	-40°/76'	58'-62'	4'	0.065	0.260	0.35	1.40
79 - 4	3+67E 1+60S	-65°114'	75'-83'	?	?	?	?	?
83 - 2	3+84E 1+64S	-40°/120'	83'-88'	5'	0.001	0.005	0.01	0.05
83 - 3	3+84E 1+64S	-60°/141'	88'-91'	3'	0.002	0.006	0.01	0.03
83 - 4	3+84E 1+64S	-75°/190'	175'6"-?	?	?	?	?	?
78 - 4	3+67E 1+60S	-45°/116'	77'-90'	13'	0.89	11.570	N/A	?
79 - 1	3+67E 1+60S	-65°/163'	111'6-119'	7'6"	0.335	2.513	0.14	1.05
79 - 2	3+84E 1+64S	-75°/223'	131'-136'	5'	0.062	0.310	0.03	0.15
83 - 1	3+65E 1+69S	-45°/105'	35'-40'6"	5'6"	0.035	0.193	0.01	0.05

HOLE #	GRID LOC.	ANGLE/LENGTH		INTERVAL(F)	GOLD ASSAY(G)	FXG	SILVER ASSAY	FXS
83 - 8	3+43E 1+60S	-40°/121'	79'-83'	4'	0.001	0.004	0.01	0.04
83 - 7	3+43E 1+60S	-60°/135'	91'-96'	5'	0.001	0.005	0.01	0.05
83 - 9	3+43E 1+60S	-75°/167'	166'-?	?	?	?	?	?
83 - 10	3+20E 1+60S	-45°/135'	111'-113'	(2') 3'*	0.001	0.003	0.02	0.06
84 - 2	3+25E 1+40S	-60°/187'	158-160'	(2') 3'	(2.260) 1.500	4.510	0.71	1.42
84 - 3	3+25E 1+40S	-45°/150'	132'6"-133'6"	(1') 3'	(0.407) 0.136	0.407	(0.79) 0.26	0.79
79 - 5	2+96E	-42°/160'	18'-23'	5'	0.592	2.960	0.16	0.80
84 - 4	3+02E 1+42S	-60°/157'	122-128	6'	0.270	1.620	0.04	0.24
84 - 5		-45°/132'	100'6"-104'	3'6"	0.199	0.697	0.39	1.38
83 - 11	2+82E 1+60S	-45°/116'	27'6"-31' 31'-33'	3'6" 2'	0.134 0.044	0.469 0.088	0.91 3.44	3.18 6.88
84 - 6	2+85E 1+45S	-70°/163'	NIL	3'	NIL	-	NIL	-
84 - 7	2+85E	-50°/133'	92'8"-95'6"	(2'10")3'	(0.295) 0.279	0.837	(0.16) 0.15	0.46
a) TOTAL	27 Holes (24 Count)	3,972'	106'		36.083		48.37	
b) TOTAL	21 Holes		96.5'		36.073		48.29	

* Assumes minimum width of 3'

GRADE & TONNAGE

a) Holes 84-16 to 84-7 inclusive. Average width = 4.54 ft. (1.38m)
4.2 ft. (1.28m) true width

Strike length drilled = 155m N.B. Strike of 155m = 32m on slope + 123m on flat
Strike length inferred = 25m N.B. Strike of 25m = 12.5m on slope, 12.5m on flat
TOTAL = 180m

TONNAGE (i) On Flat = 135.5 x 1.28m x 55m x 2.7 tonnes/m^3
= 25,755 tonnes

(ii) On Slope = 1/2 (45.5m x 1.28m x 55m x 2.7 tonnes/m^3)
4,324 tonnes

Total tonnage drill indicated = 30,079 tonnes
= **33,157 short tons**

GRADE Gold average grade = $\frac{36.083}{106'}$ = **0.340 oz/t Au**

Silver average grade = $\frac{48.37}{106'}$ = **0.46 oz/t Ag**

b) Holes 83-5 to 84-7 inclusive.

Strike length drilled = 123m Average width = 4.59 feet (1.4m)
25m = 4.29 feet (1.3m) true
TOTAL 148m

TONNAGE = 148m x 1.3m x 55m x 2.7 tonnes/m^3
= 28,571 tonnes
= **31,494 short tons**

GRADE Gold average grade = $\frac{36.073}{96.5'}$ = **0.374 oz/t Au**

Silver average grade = $\frac{48.29}{96.5'}$ = 0.50 **oz/t Ag**

EXTENSIONS BELOW DRIFT

1. N.B. If extend highgrade shoot 20m below drift at equivalent width and grade add additional 3,680 metric tons @ 0.5 oz/t Au.

TOTAL = 13,800 metric tons = 15,000 short tons.

2. If extend whole vein 83-5 to 84-7 inclusive down dip @ equivalent width and grade for 20m = 10,400 metric tonnes

TOTAL = 42,00 metric tons = 43,000 short tons @ 0.37 oz/t Au, 0.50 oz/t Ag.

SURFACE SAMPLES: SHASTA VEIN

SAMPLE #	GOLD ASSAY G (oz/t)	WIDTH (W)	G X W	SILVER ASSAY S (oz/t)	S X W
S50	0.136	9.8'	1.33	0.01	0.12
S51	0.192	9.8'	1.88	0.04	0.24
S52	0.225	8.2'	1.84	0.05	0.15
S53	0.603	2'	1.21	0.03	0.09
TOTALS		29.8	6.26		1.04
WEIGHTED AVERAGES		7.45'	0.21 oz/t Au		0.03 oz/t Ag

UNDERGROUND SAMPLES: SHASTA VEIN

	SAMPLE #	GOLD ASSAY G (oz/t)	WIDTH W	G X W	SILVER ASSAY S (oz/t)	S X W
	S1	0.008	12'	0.096	0.01	0.12
	S2	0.133	6'	0.798	0.04	0.24
	S3	0.277	3'	0.681	0.05	0.15
	S4	0.057	3'	0.171	0.03	0.09
	S5	0.004	3.3'	0.013	0.02	0.07
	S6	0.131	4.3'	0.576	0.03	0.13
	S7	0.073	2.3'	0.168	0.02	0.05
	S8	0.816	5.2'	4.243	0.12	0.62
	S9	0.001	2.3'	0.002	0.01	0.02
	S10	0.001	3'	0.003	0.03	0.09
	S11	0.001	6'	0.006	0.01	0.06
	S15	0.592	3.5'	2.072	0.09	0.32
	S16	0.063	3.9'	0.246	0.02	0.08
	S17	0.158	3.9'	0.616	0.05	0.20
	S18	0.245	4.6'	1.127	0.04	0.18
	S19	0.063	3.6'	0.227	0.05	0.19
	S20	0.276	2.6'	0.718	0.61	1.59
	S21	0.024	1.6'	0.038	0.04	0.06
	S22	0.001	1.3'	0.001	0.04	0.05
	S23	0.001	5.6'	0.006	0.06	0.34
	S24	0.038	0.6'	0.023	0.05	0.03
TOTALS	21		81.6'	11.839		4.68
WEIGHTED AVERAGES			3.9'	0.145 oz/t Au		0.06 oz/t Ag

PILLARS C- H VEIN AVERAGE VEIN WIDTH = 6 feet (1.8m)

200' level	Above	17.5	feet	x 12.5	feet	= 20m^2	= 98.8 tonnes
	Below	55	feet	x 5	feet	= 25m^2	= 120 tonnes
250' level	Above	100	feet	x 8	feet	= 74m^2	= 360 tonnes
250' level to 300' level		25	feet	x 42	feet	= 98m^2	= 476 tonnes

1050 tonnes

OR 1160 short tons

605 VEIN

Average of 2 principal intersections = 0.86 oz/t Au
0.49 oz/t Ag across 3 feet

605 VEIN								
HOLE #	GRID LOCATION	ANGLE/LENGTH	VEINED SECTION	INTERVAL (F)	GOLD ASSAY G (oz/t)	FxG	SILVER ASSAY S (oz/t)	FxS
84-17	3+94E 0+15S	-65°/160'	42 - 46'6"	4'6	0.001	0.004	0.001	0.04
84-18	3+94E 0+15S	-40°/140'	44 - 46'4" 84'6"-86'6"	(2'4") 3' (2') 3'	(1.605) 1.25 (0.706) 0.471	3.750 1.412	(0.36) 0.28 (1.04) 0.69	0.84 2.08
84-19	3+44E 0+12S	-60°/218''	53 - 55'6" 71 - 72'6"	(2'6") 3' (1'6") 3'	(0.009) 0.008 0.001	0.022 0.003	(1.26) 1.05 (0.03) 0.02	3.15 0.03
84-20	3+44E 0+12S	-40°/161'	101 - 102'6"	(1'6") 3'	(0.186) 0.093	0.028	(0.23) 0.12	0.34
84-21	3+70E 0+07S	-45°/161'	130 - 134'6"	4'6")	.006	0.027	.01	0.04
TOTAL	5 Holes (7 intersection)	840'		24'		5.496		6.52

Strike Length Drilled = 50m
Strike Length Inferred = 25m

TOTAL = 75m

Average Width of Intersections = 3.4 feet (1.04m)
Depth Extent Inferred = 55m

Average Grade of all Intersections = **0.23 oz/t Au, 0.27 oz/t Ag**

Total Drill Indicated Tonnage, Main Structure = **11,583 tons**

WEIGHTED AVERAGES MASSIVE SULPHIDES

		Au	Ag	Zn	Pb
111'6" - 116'6"	5'	0.348 oz/t	0.65	0.379	0.379
111'6" - 117'6"	6'	0.497 oz/t	1.32	0.32	1.31
111'6" - 112	10'6"	0.318	2.54	0.51	2.48

Historical Average 2,000 to 7,000 tons
2 - 3m thick
6 metres wide
30 to 100's mm long

Hence grades and tonnages that might be inferred from this one intersection are 4 - 5,000 tons of 0.5 oz/ton Au and 1.3 oz/ton Ag with minor lead and zinc.

1+00 S | 0+50 S | 0+00 | 0+50 N | 1+00 N | 1+50 N | 2+00 N | 2+50 N | 3+00 N | 3+50 N | 4+00 N | 4+50 N | 5+00 N | 5+50 N | 6+00 N

21+00 W
20+50 W
20+00 W
19+50 W
19+00 W
18+50 W
18+00 W
17+50 W
17+00 W
16+50 W
16+00 W
15+50 W
15+00 W
14+50 W
14+00 W
13+50 W
13+00 W
12+50 W
12+00 W
11+50 W
11+00 W
10+50 W
10+00 W
9+50 W
9+00 W

TRUE NORTH
40°
GRID NORTH

LEGEND

- Access Road/Reclaimed Trench
- Creek
- Claim Boundary (Approximate)
- Soil Sample Line
- Geochemistry (Pb,Zn / Au)
  - Au (ppb)
  - Pb (ppm), > 50 ppm
  - Zn (ppm), > 90 ppm
- 1983 Centre Grid (Approximate)

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IMPERIAL METALS CORPORATION

CUNNINGHAM CREEK

FIGURE 3a — N.T.S. 93A/14W

MAIN GRID (NORTHWEST AREA) (1)

SOIL GEOCHEMISTRY: Au

Metres 25 0 25 50 75 Metres

SCALE: 1:1000 | GEOLOGIST: S.P. QUIN, B.Sc.

DATE: JUNE 1986 | DRAWN BY: S. HAWORTH

4+00 S 3+50 S 3+00 S 2+50 S 2+00 S 1+50 S 1+00 S 0+50 S 0+00 0+50 N 1+00 N 1+50 N 2+00 N 2+50 N 3+00 N 3+50 N 4+00 N

9+00 W
8+50 W
8+00 W
7+50 W
7+00 W
6+50 W
6+00 W
5+50 W
5+00 W
4+50 W
4+00 W
3+50 W
3+00 W
2+50 W
2+00 W
1+50 W
1+00 W
0+50 W
0+00

TRUE NORTH

40°

GRID NORTH

7,101 483,354 272,217 48,95 52,97 25,84 24,88 266,196

29,100 110,95 57,92 33,97 33,105 32,85 53,153 52,196 31,192 54,254 107,112 43,207 31,168

31,60 180,67 48,88 27,190 40,167 29,103

47,110 32,95 44,132 64,92

77,93 348,220 459,248 559,292 364,276 245,293 64,252 141,176 72,147 355,217 1206, 403 2213, 620 63,83 105,81

MILL

LEGEND

- Access Road/Reclaimed Trench
- Creek
- Claim Boundary (Approximate)
- Building
- Railway Track
- Open Trench
- Soil Sample Line
- Pb,Zn / Au — Geochemistry: Au (ppb), Pb (ppm), > 50 ppm, Zn (ppm), > 90 ppm
- 1983 Centre Grid (Approximate)

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FIGURE 3b N.T.S. 93A/14W

MAIN GRID (CENTRAL AREA) (2)

SOIL GEOCHEMISTRY: Au

Metres 25 0 25 50 75 Metres

SCALE: 1:1000	GEOLOGIST: S. P. QUIN, B.Sc.
DATE: JUNE 1986	DRAWN BY: S. HAWORTH

L.9820
L.10598
L.9819
MILL
PEARCE
L.9816
DAM
TRENCH
CREEK
WASTE DUMP
QUARTZ DUMP
TIMBERED PORTAL
200'
TRENCH
OLD WORKINGS
L.9821
L.9817
TIMBERED PORTAL
200'
WASTE DUMP
WINCH LANDING
L.3507
L.3509
L.9818
CAVED PORTAL
600'

TRUE NORTH
40°
GRID NORTH

LEGEND

- Access Road/Reclaimed Trench
- Creek
- Claim Boundary (Approximate)
- Building
- Portal
- Old Hand Trench
- Open Trench
- Drill Site Clearing
- Soil Sample Line
- Pb/Zn / Au — Geochemistry:
  - Au (ppb)
  - Pb (ppm), > 50 ppm
  - Zn (ppm), > 90 ppm
  - N/A = Data not available

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CUNNINGHAM CREEK

FIGURE 3c — N.T.S. 93A/14W

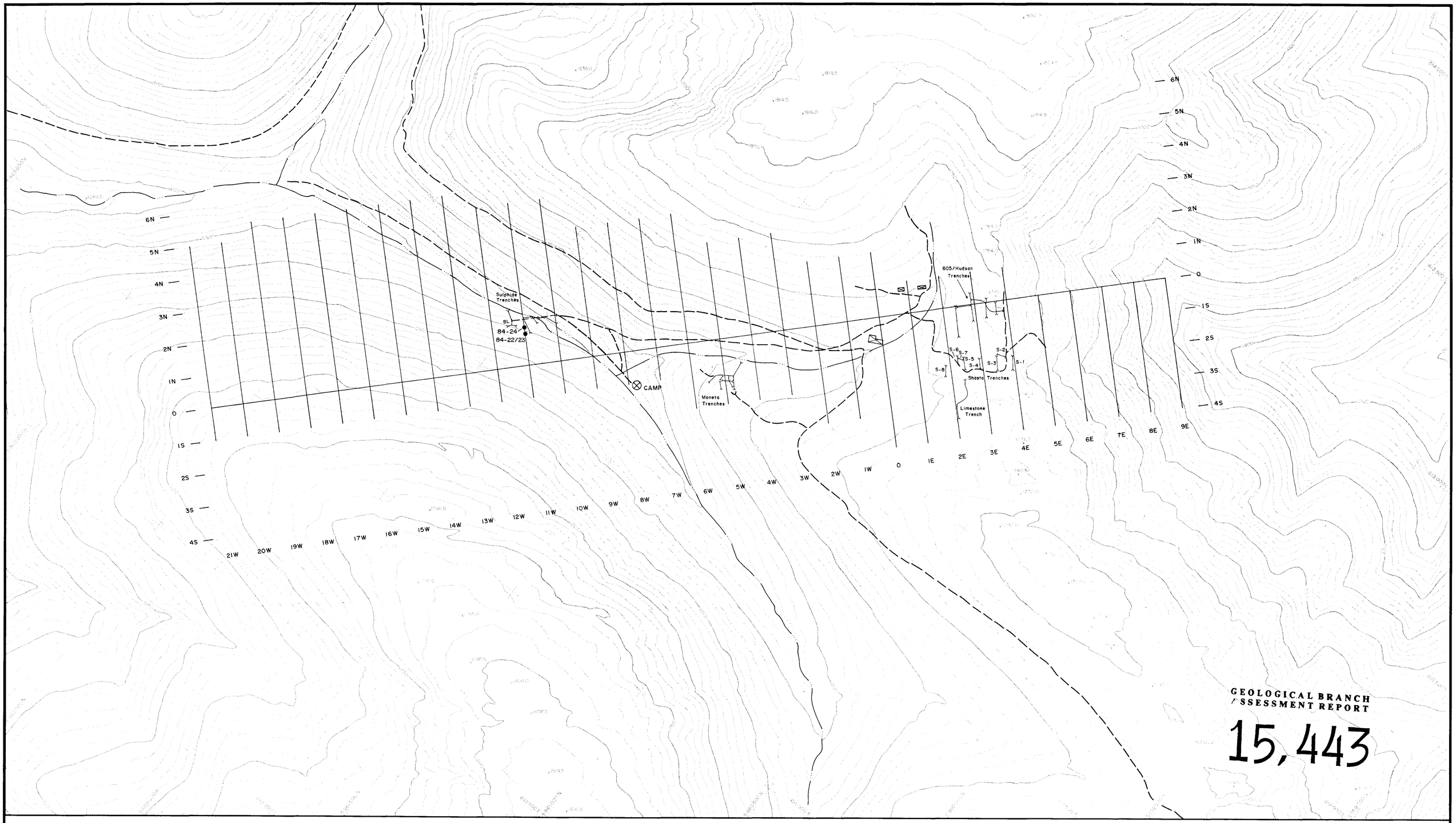
MAIN GRID (SOUTHEAST AREA) (3)

SOIL GEOCHEMISTRY: Au

Metres 25 0 25 50 75 Metres

SCALE: 1:1000 — GEOLOGIST: S. P. QUIN, B.Sc.

DATE: JULY 1986 — DRAWN BY: S. HAWORTH



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GRID NORTH

TRUE NORTH

40°

LEGEND

- Road
- Creek
- Building
- Trench
- Diamond Drill Hole
- Geochemical Sample Grid

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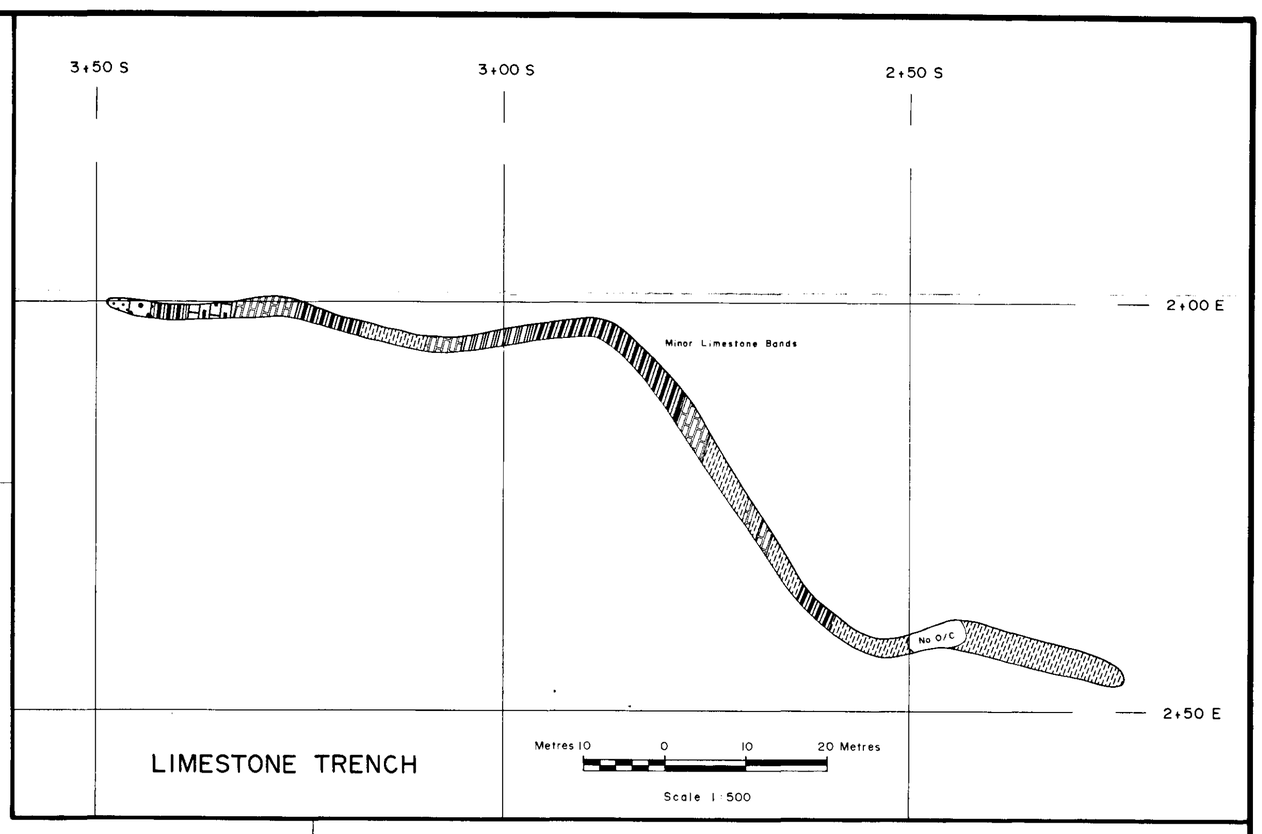
CUNNINGHAM CREEK

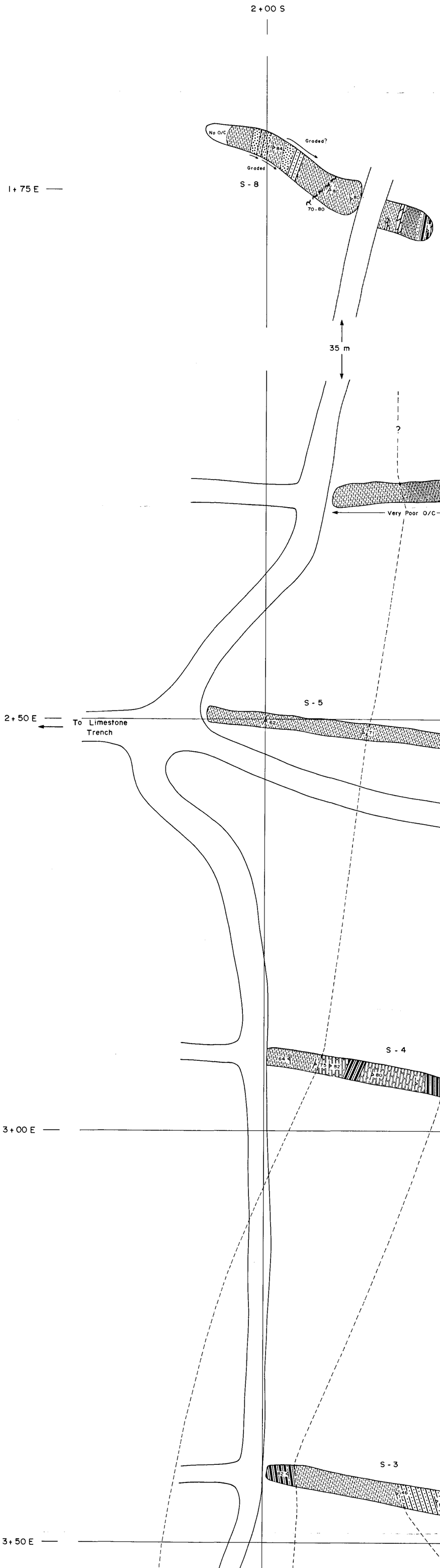
FIGURE 4 N.T.S. 93A/14W

LOCATION OF TRENCHES ④ & DRILL HOLES 84-22 TO 84-24

Metres 100 0 100 200 300 400 Metres

SCALE: 1:5000	GEOLOGIST: S. P. QUIN, B.Sc.
DATE: JULY 1986	DRAWN BY: S. HAWORTH





LEGEND

- Road
- Geochemical Sample Grid
- Fault (Strike / Dip)
- Foliation (Strike / Dip)
- Bedding (Strike / Dip)
- Bedding, Vertical (Strike)
- Geological Contact, Mapped
- Geological Contact, Interpreted
- Geological Contact, Transitional

Geology:

- Limestone, Massive
- Thin-banded Limestone and Schist
- Talc-Sericite Limey Shale & Limestone Bands
- Chloritic Limey Shale & Limestone Bands
- Sandstone
- Fine Sandstone with Sericite
- Interbanded Sericite Schist & Sandstone
- Sericite Schist
- Chlorite Schist
- Quartz Vein
- Quartz-Veined Limestone

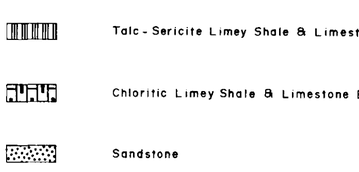


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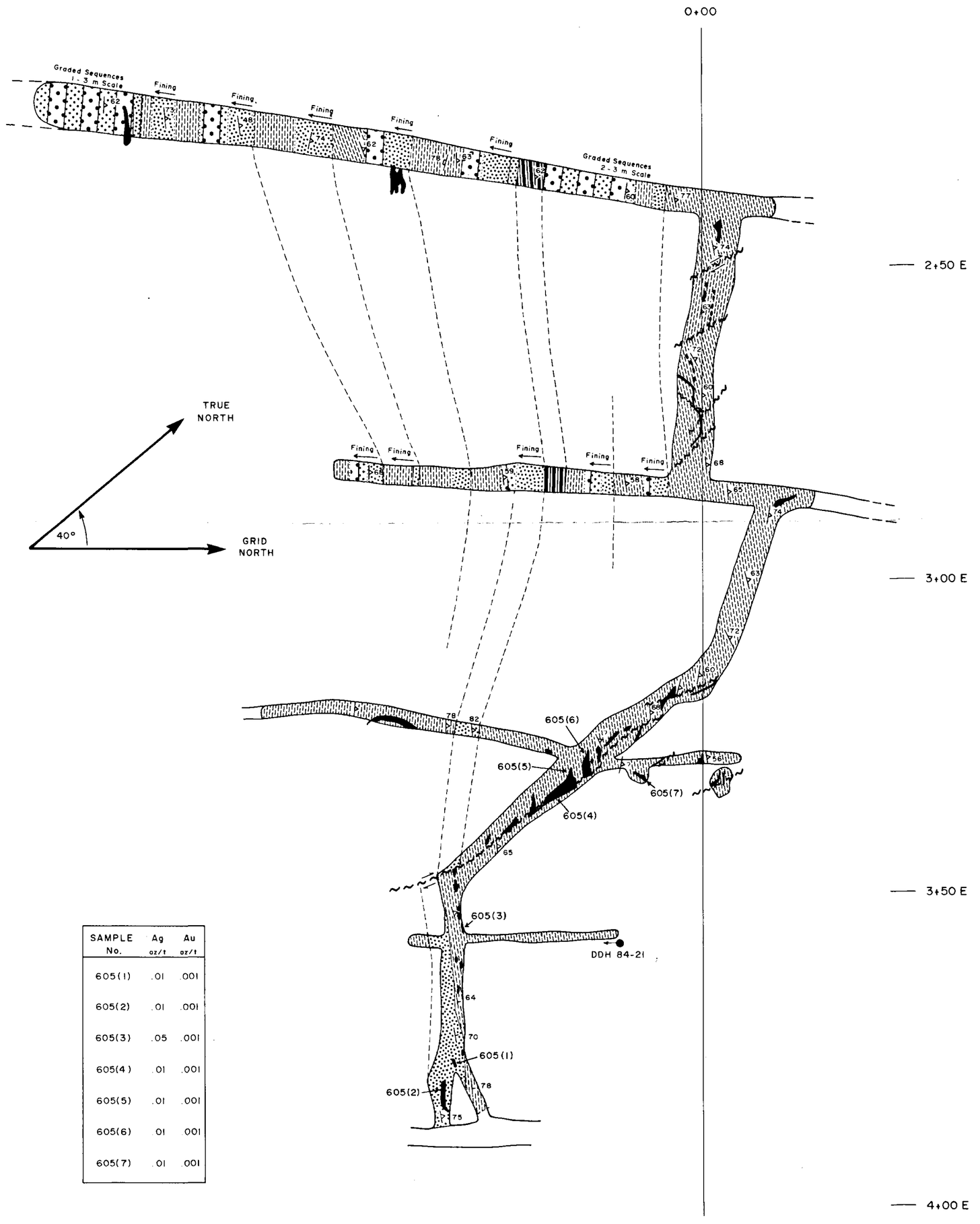
FIGURE 5 N.T.S. 93A/14W

GEOLOGY: (5)

SHASTA VEIN TRENCHES

Metres 5 0 5 10 15 20 Metres

SCALE: 1:250	GEOLOGIST: S. P. QUIN, B.Sc.
DATE: JULY 1986	DRAWN BY: S. HAWORTH



SAMPLE No.	Ag oz/t	Au oz/t
605(1)	.01	.001
605(2)	.01	.001
605(3)	.05	.001
605(4)	.01	.001
605(5)	.01	.001
605(6)	.01	.001
605(7)	.01	.001

LEGEND

- 605(3) — Rock Sample, 1984
- Geochemical Sample Grid
- Diamond Drill Hole
- Fault
- Strike / Dip — Vein
- Strike / Dip — Foliation
- Strike / Dip — Bedding
- Geological Contact, Mapped
- Geological Contact, Interpreted
- Geological Contact, Transitional

Geology:

- Sandstone
- Mixed Sandstone & Sericite Schist
- Sericite Schist
- Chlorite Schist
- Quartz Vein

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FIGURE 6 — N.T.S. 93A/14W

GEOLOGY:

(b)

HUDSON, 605 TRENCHES

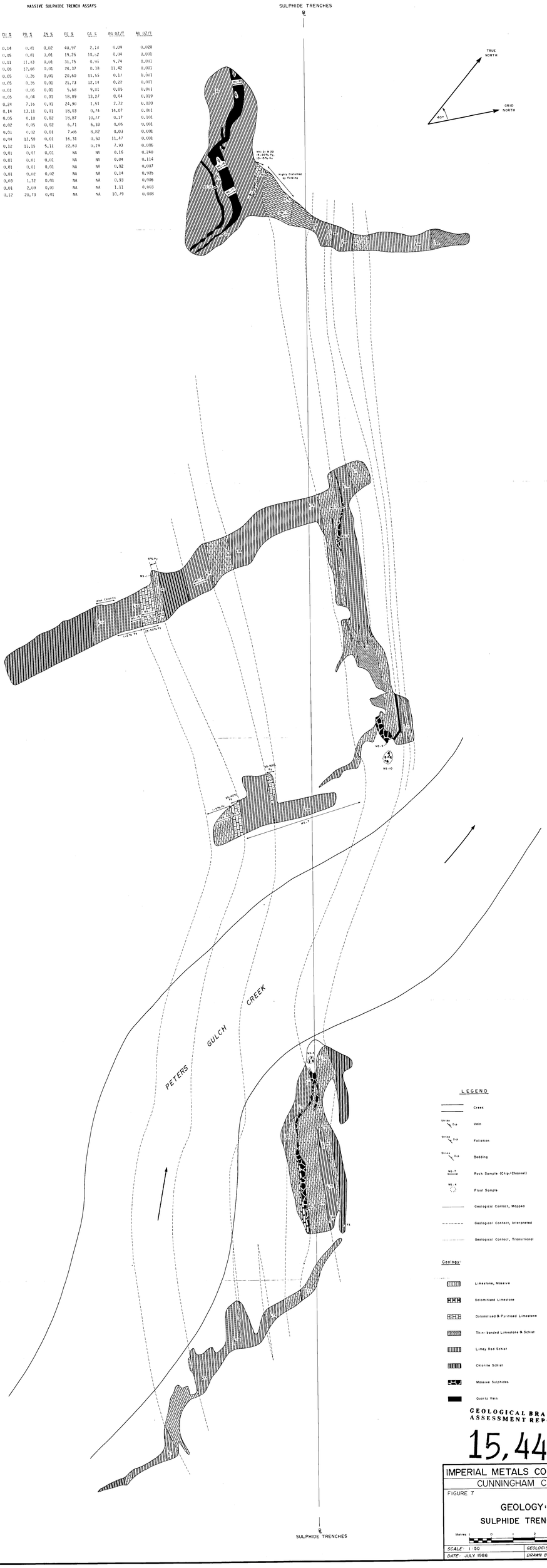
Metres 10 0 10 20 30 Metres

SCALE: 1 : 500 — GEOLOGIST: S. P. QUIN, B. Sc.

DATE: AUGUST 1986 — DRAWN BY: S. HAWORTH

MASSIVE SULPHIDE TRENCH ASSAYS

SAMPLE #	CU %	PB %	ZN %	FE %	CA %	AG OZ/T	AU OZ/T
MS #1	0.14	0.01	0.02	40.97	2.18	0.09	0.020
MS #2	0.05	0.01	0.01	19.26	10.62	0.04	0.001
MS #3	0.11	11.83	0.01	31.75	0.95	9.74	0.001
MS #4	0.06	12.66	0.01	24.37	0.38	11.42	0.001
MS #5	0.05	0.26	0.01	20.60	11.55	0.17	0.001
MS #6	0.05	0.26	0.01	21.73	12.14	0.22	0.001
MS #7	0.01	0.06	0.01	5.68	9.81	0.05	0.001
MS #8	0.05	0.04	0.01	18.89	13.27	0.04	0.019
MS #9	0.24	7.16	0.01	24.90	1.51	2.72	0.020
MS #10	0.14	13.11	0.01	18.03	0.74	14.07	0.001
MS #12	0.05	0.10	0.02	18.87	10.77	0.17	0.101
MS #13	0.02	0.05	0.02	6.71	6.33	0.05	0.001
MS #14	0.01	0.02	0.01	7.86	8.82	0.03	0.001
MS #15	0.04	13.50	0.01	16.31	0.50	11.47	0.001
MS #16	0.12	13.15	5.11	22.63	0.19	7.93	0.006
MS #17	0.01	0.07	0.01	NA	NA	0.16	0.240
MS #18	0.01	0.01	0.01	NA	NA	0.04	0.114
MS #19	0.01	0.01	0.01	NA	NA	0.02	0.007
MS #20	0.01	0.02	0.02	NA	NA	0.14	0.985
MS #21	0.03	1.32	0.01	NA	NA	0.93	0.006
MS #22	0.01	2.09	0.01	NA	NA	1.11	0.003
MS #23	0.12	20.73	0.01	NA	NA	10.79	0.008



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CUNNINGHAM CREEK

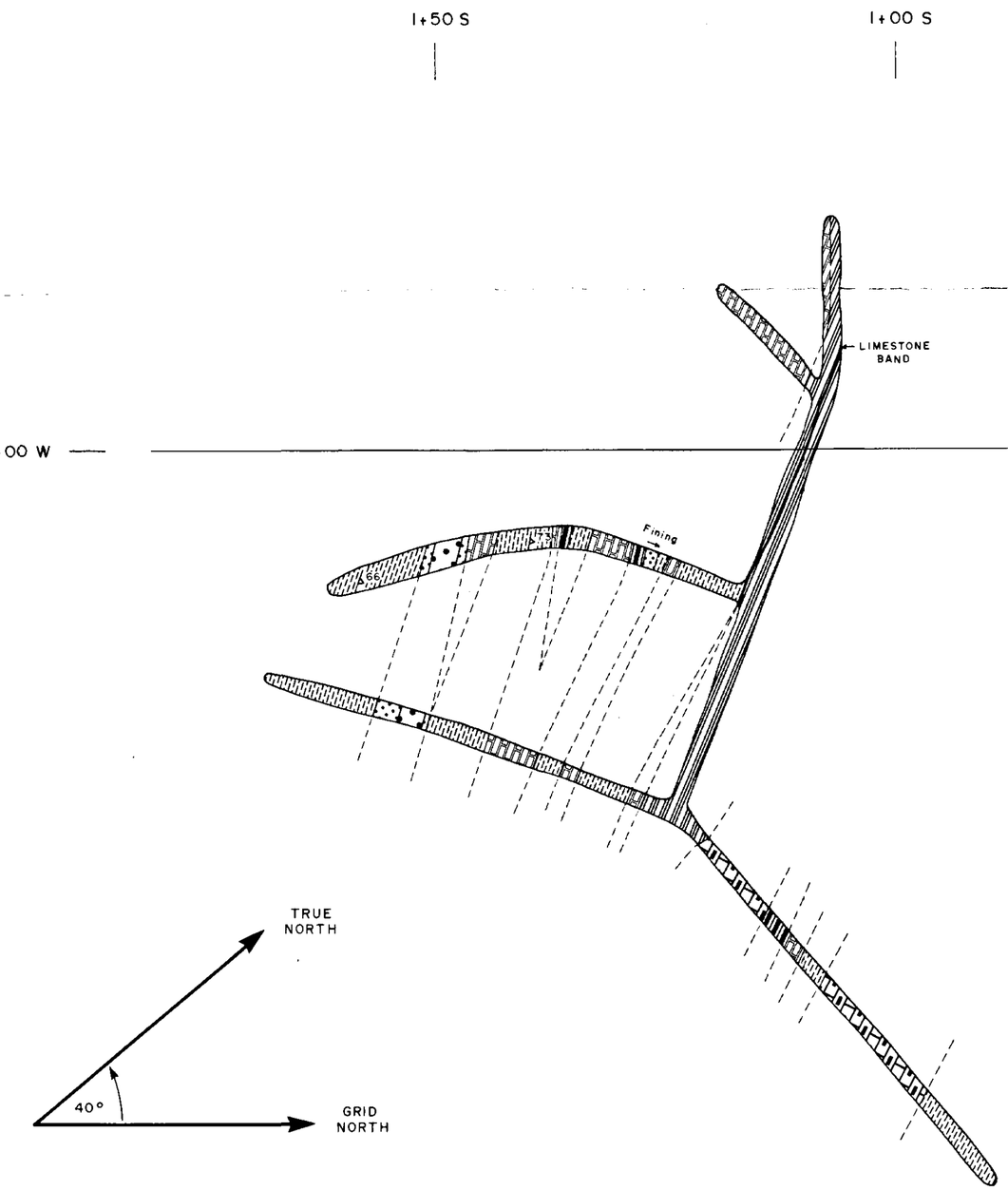
FIGURE 7 N.T.S. 93A/14W

GEOLOGY: (7)

SULPHIDE TRENCHES

Metres 1 0 1 2 3 4 Metres

SCALE: 1:50	GEOLOGIST: S. P. QUIN, B.Sc.
DATE: JULY 1986	DRAWN BY: S. HAWORTH



LEGEND

- Geochemical Sample Grid
- Strike / Dip — Foliation
- Geological Contact, Mapped
- Geological Contact, Interpreted

Geology:

- Limestone, Massive
- Talc-Sericite Limey Shale & Limestone Bands
- Chloritic Limey Shale & Limestone Bands
- Chlorite Schist
- Sericite Schist
- Interbanded Sericite Schist & Sandstone
- Sandstone

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FIGURE 8 — N.T.S. 93A/14W

GEOLOGY:

MONETA SHOWING TRENCHES

Metres 10 0 10 20 30 Metres

SCALE: 1 : 500	*GEOLOGIST:* S.P. QUIN, B. Sc.
DATE: AUGUST 1986	*DRAWN BY:* S. HAWORTH

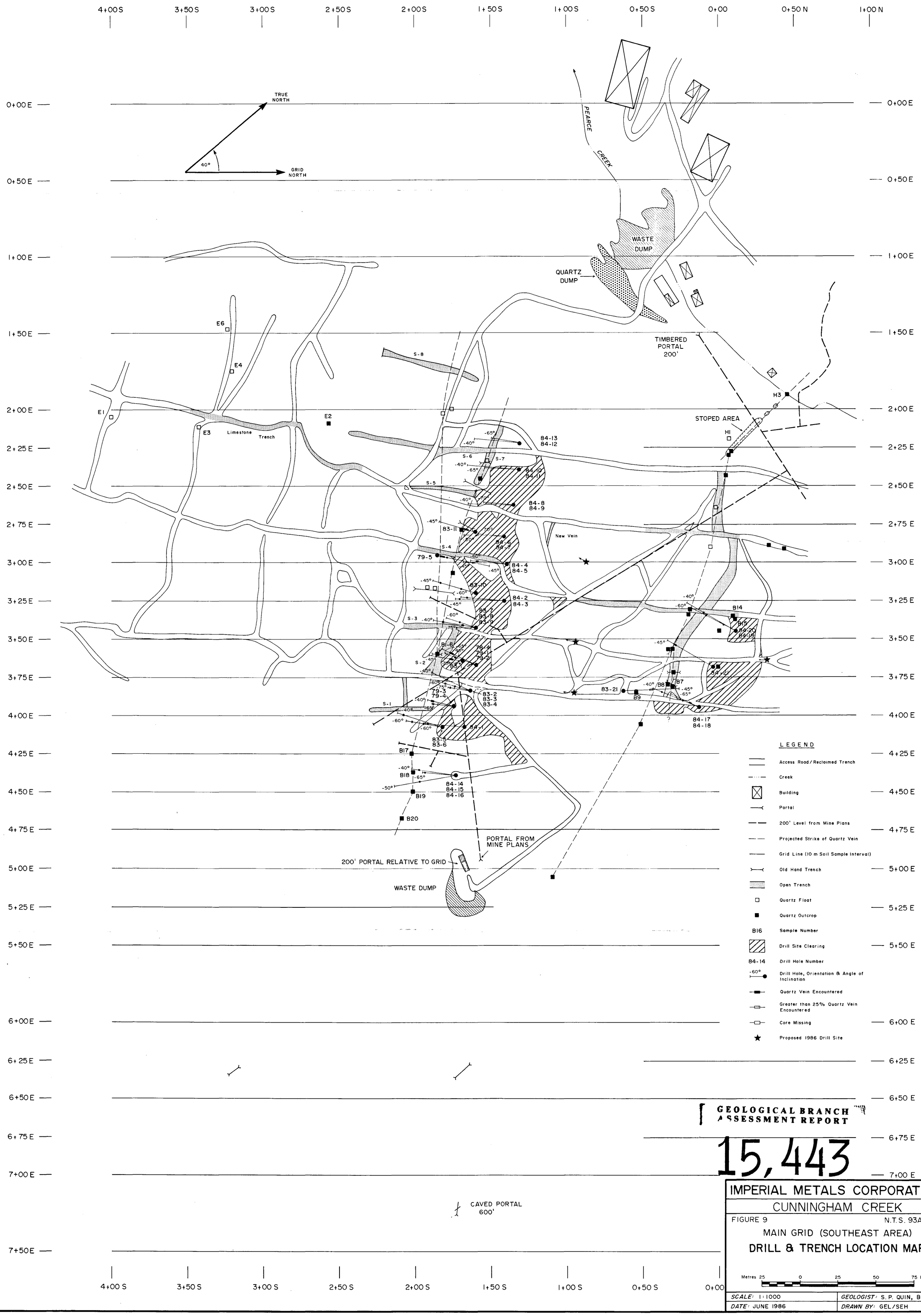

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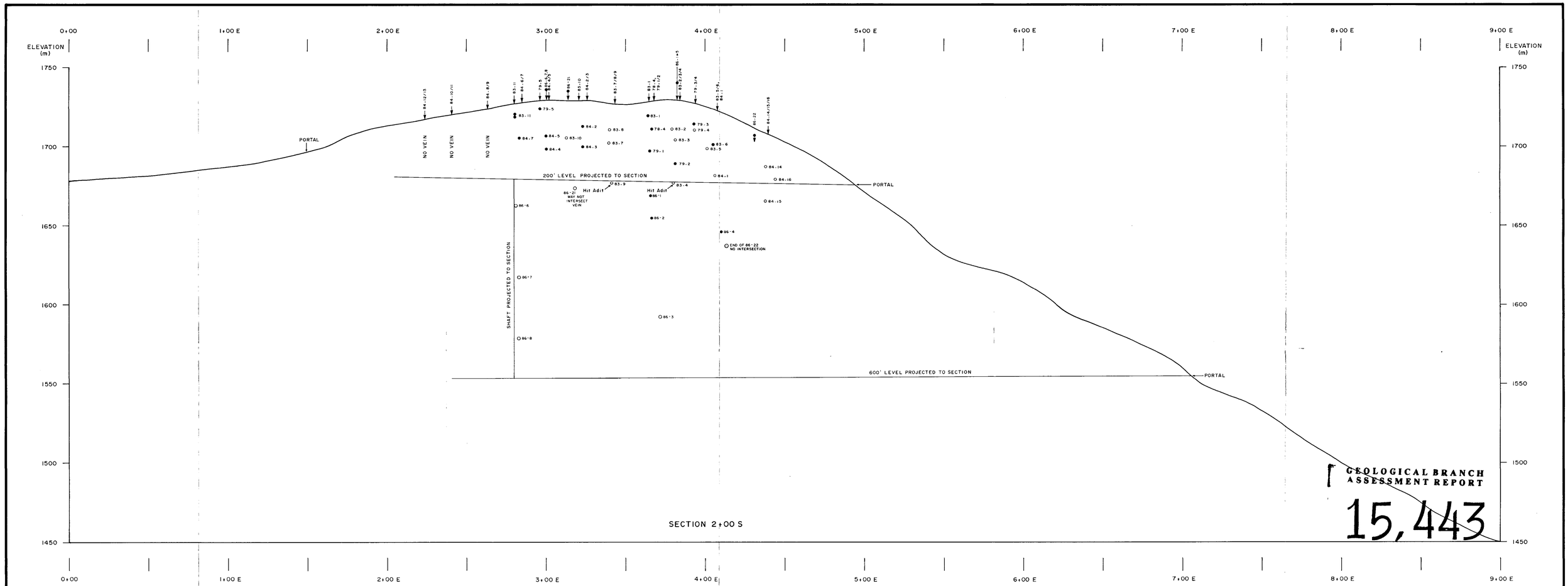
FIGURE 9 N.T.S. 93A/14W

MAIN GRID (SOUTHEAST AREA)

DRILL & TRENCH LOCATION MAP (9)

Metres 25 0 25 50 75 Metres

SCALE: 1:1000	GEOLOGIST: S. P. QUIN, B.Sc.
DATE: JUNE 1986	DRAWN BY: GEL/SEH



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LEGEND

- Projected Intersection, Shasta Vein - Auriferous
- Projected Intersection, Shasta Vein - Barren
- Elevation of Collar, Projected onto 2+00S Plane (Applies to 86 Holes Only)

IMPERIAL METALS CORPORATION

CUNNINGHAM CREEK

FIGURE 10 N.T.S. 93A/14W

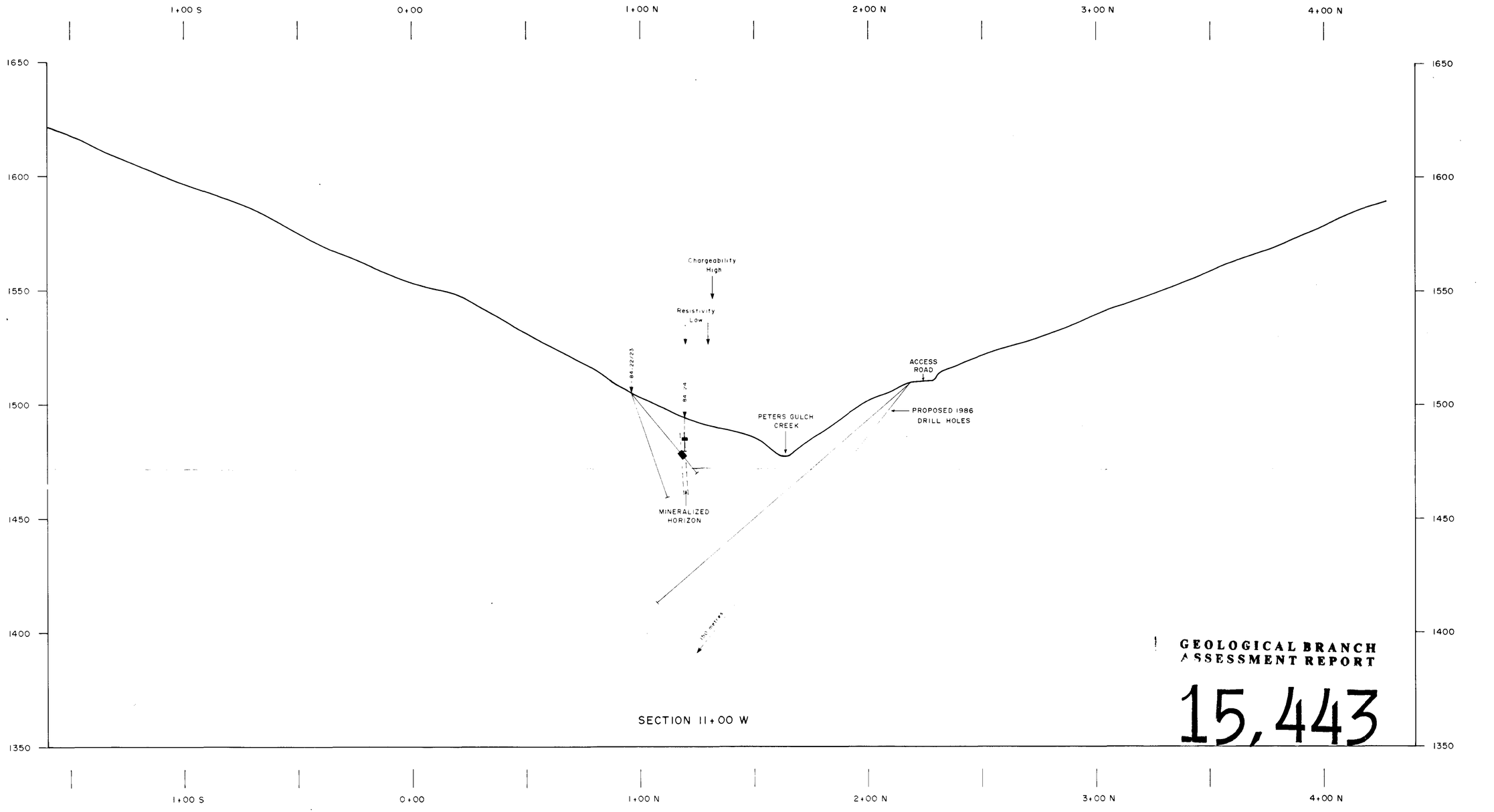
SECTION 2+00 S
LONGITUDINAL SECTION:
SHASTA VEIN

(10)

Metres 20 0 20 40 60 80 Metres

SCALE: 1:1000 | GEOLOGIST: S. P. QUIN, B.Sc.

DATE: AUG., 1986 REVISED: MAY, 1987 | DRAWN BY: S. HAWORTH



SECTION 11+00 W

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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LEGEND

Drill Hole

Ore Intersection

IMPERIAL METALS CORPORATION

CUNNINGHAM CREEK

FIGURE 11 — N.T.S. 93A/14W

CROSS-SECTION:
SULPHIDE SHOWING

Metres 20 0 20 40 60 80 Metres

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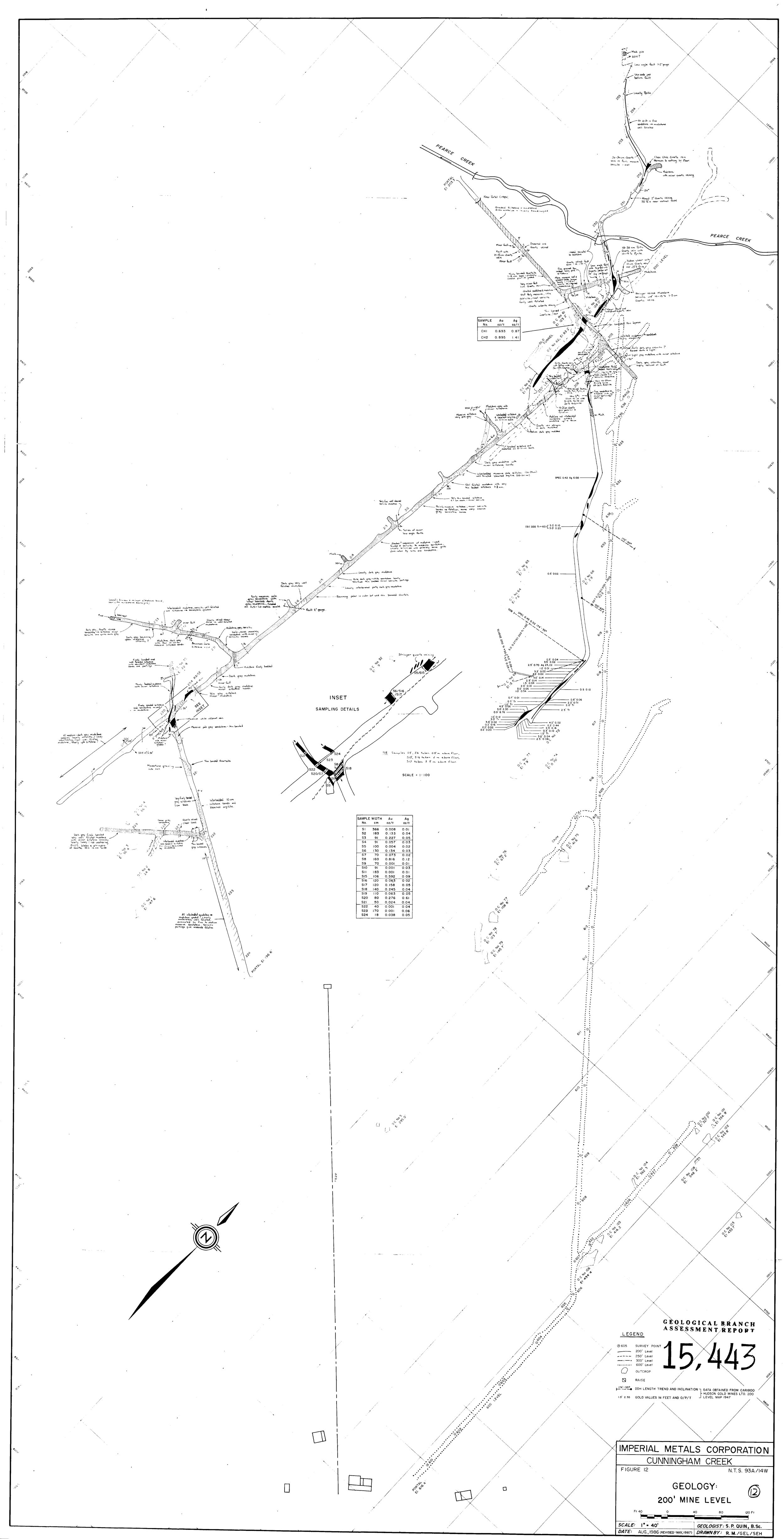
PEARCE CREEK
PEARCE CREEK
200' LEVEL
INSET
SAMPLING DETAILS
SCALE 1:100
SAMPLE Au Ag
No. oz/t oz/t
CH1 0.693 0.87
CH2 0.895 1.41
SAMPLE WIDTH Au Ag
No. cm oz/t oz/t
S1 366 0.008 0.01
S2 183 0.133 0.04
S3 91 0.227 0.05
S4 91 0.057 0.03
S5 100 0.004 0.02
S6 130 0.134 0.03
S7 70 0.073 0.02
S8 160 0.816 0.12
S9 70 0.001 0.01
S10 91 0.001 0.03
S11 183 0.001 0.01
S15 106 0.592 0.09
S16 120 0.063 0.02
S17 120 0.158 0.05
S18 140 0.245 0.04
S19 110 0.063 0.05
S20 80 0.276 0.61
S21 50 0.024 0.04
S22 40 0.001 0.04
S23 170 0.001 0.06
S524 18 0.038 0.05
LEGEND
SURVEY POINT
200' Level
250' Level
300' Level
600' Level
OUTCROP
RAISE
DDH LENGTH TREND AND INCLINATION
GOLD VALUES IN FEET AND O/P/T
DATA OBTAINED FROM CARIBOO HUDSON GOLD MINES LTD. 200' LEVEL MAP 1947
GEOLOGICAL BRANCH
ASSESSMENT REPORT
15,443
IMPERIAL METALS CORPORATION
CUNNINGHAM CREEK
FIGURE 12
N.T.S. 93A/14W
GEOLOGY:
200' MINE LEVEL
12
SCALE: 1" = 40'
DATE: AUG., 1986 (REVISED - MAY, 1987)
GEOLOGIST: S.P. QUIN, B.Sc.
DRAWN BY: R.M./GEL/SEH