GEOLOGICAL AND GEOCHEMICAL REPORT

on the

HOLY CROSS PROPERTY
HC and ZUR Mineral Claims

Omineca Mining Division
British Columbia

NTS 93F15
53° 47' North Latitude
124° 56' West Longitude

by

P.E. Fox., Ph.D., P.Eng.

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Work paid for by
PHELPS DODGE CORPORATION OF CANADA, LIMITED

November 20, 1996

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SUMMARY

The Holy Cross Property consists of 132 units in seven claims, located approximately 145 kilometres west of Prince George in central British Columbia. The claims are readily accessed by a network of forest service and secondary logging roads from the village of Fraser Lake, 33 kilometres to the north. This report describes a short exploration program conducted during July and August 1996.

The claims are underlain by andesite flows of the middle Jurassic Hazelton, overlain by upper Cretaceous Kasalka Group rhyolite, rhyodacite and tuff. The rhyolite occurs in a series of three northwesterly trending domes that outcrop between Bentzi Lake and the peak of Holy Cross Mountain. Minor sedimentary rocks of the Cretaceous Skeena Group and Eocene Endako Group basalts locally cap the older units.

Gold mineralization on the Holy Cross prospect was discovered in 1987 by Noranda Exploration who explored the property until 1989. They defined several areas of silicificied, quartz veined rhyolite with gold concentrations up to 1.0 g/t gold over 8.5 metres. The HC 1 and 6 claims were staked by Cogema Resources in 1994 and explored by Phelps Dodge Corporation of Canada during 1995, followed by staking of the Zur 1 to 5 claims in October 1995. Sampling confirmed the presence of anomalous concentrations of gold and silver.

The 1996 exploration program focused on detailing an east-trending gold soil anomaly detected by Noranda Exploration in 1988. Work consisted of prospecting, geological mapping, grid installation, soil and rock sampling. Soil samples returned up to 323 ppb gold and 851 ppb silver, with generally low concentrations of arsenic and base metals. Anomalous gold geochemistry delineated two distinct zones within the grid area, comfirming and in-filling Noranda's anomaly. Samples of altered rhyolite returned up to 1.46 gpt gold and 18.7gpt silver. Rock samples contained up to 624.7 ppm arsenic, however, arsenic is more often associated with elevated silver concentrations than with gold.

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INTRODUCTION

A program of prospecting, geological mapping, rock and soil sampling was conducted on the Holy Cross property between July 6 and August 25, 1996. This report details the work program and discusses the results obtained.

LOCATION, ACCESS and PHYSIOGRAPHY

The Holy Cross Property is located approximately 33 kilometres south of the village of Fraser Lake in central British Columbia. The claims are situated in the vicinity of Hallett Lake, between Bentzi Lake and the summit of Holy Cross Mountain (Figure 1). Access from Fraser Lake is via the Holy Cross Forest Service Road which bisects the HC 6 claim at about the 40 kilometre mark. Three subsidiary logging roads leave the main Forest Service Road at kilometres 36, 37 and 40, providing access to most portions of the claim block.

The claims encompass a series of knolls on the east side of Holy Cross Mountain. Topography is gentle to moderate with elevations ranging from approximately 1,158 metres at Targe Creek in the southeast corner of HC 6 to 1,411 metres on a hilltop in the northwest portion of HC 1. Forest cover consists primarily of spruce and pine on the western third of the claims, the eastern area has been clear-cut.

CLAIM INFORMATION

The Holy Cross Property consists of seven four-post claims, totalling 132 units, recorded in the Omineca Mining Division and shown on NTS map sheet 93F/15W (Figure 2). The HC 6 claim was staked over pre-existing tenures, reducing the effective claim area to approximately 8 units. The HC 1 claim is entirely contained within Zur 1 and 2 and HC 6 is largely overstaked by Zur 5. Claim details are set out in Table 1. Expiry dates indicated are contingent upon the work contained herein being accepted for assessment credits.

Two Notices to Group, recorded on October 9, 1996, establish the HC 96-1 claim group (HC1, Zur 1, 2 and 5 claims) and the HC 96-2 claim group (HC 6, Zur 3, 4 and 5 claims).

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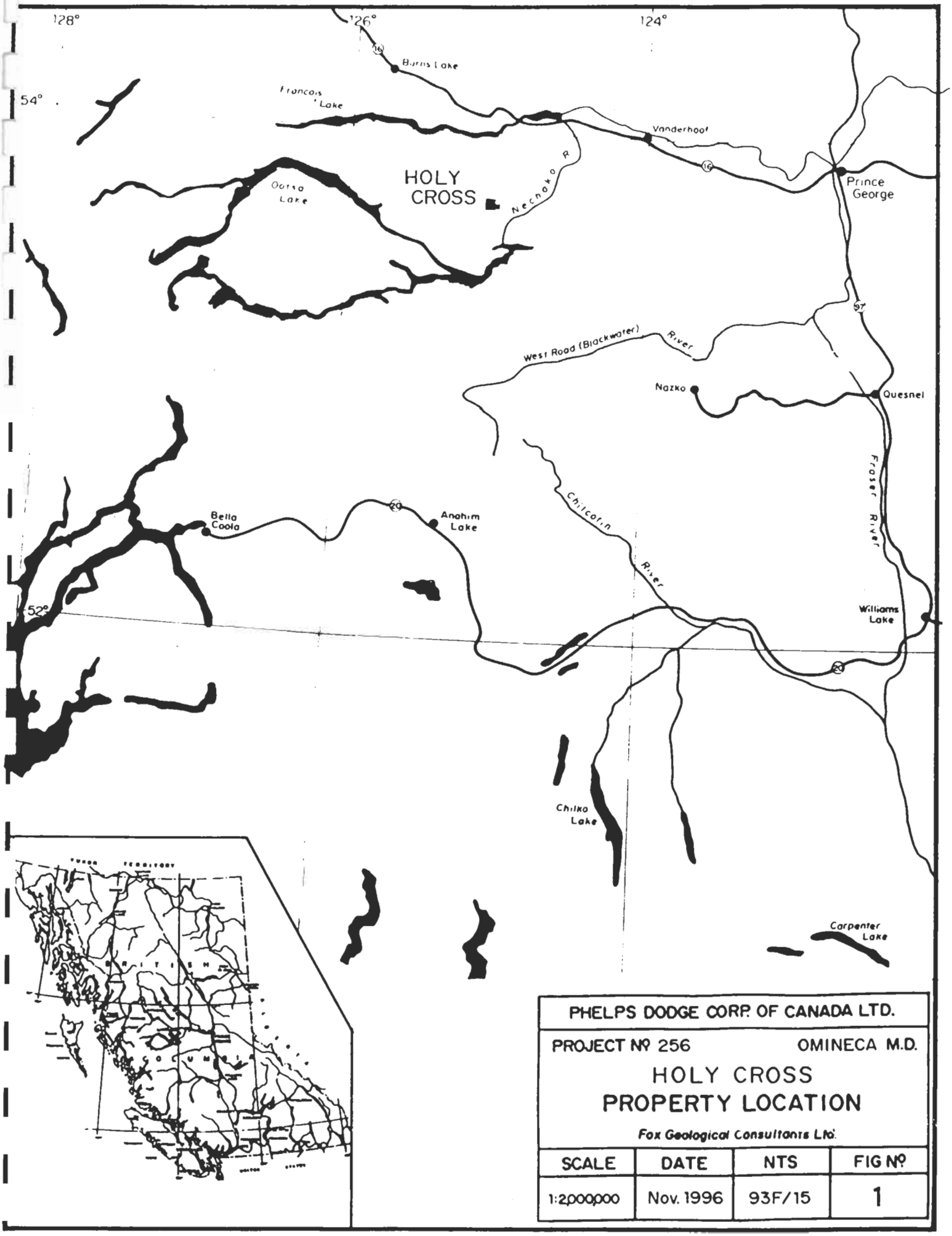


PHELPS DODGE CORP. OF CANADA LTD.			
PROJECT Nº 256		OMINECA M.D.	
HOLY CROSS PROPERTY LOCATION			
Fox Geological Consultants Ltd.			
SCALE	DATE	NTS	FIG Nº
1:2,000,000	Nov. 1996	93F/15	1

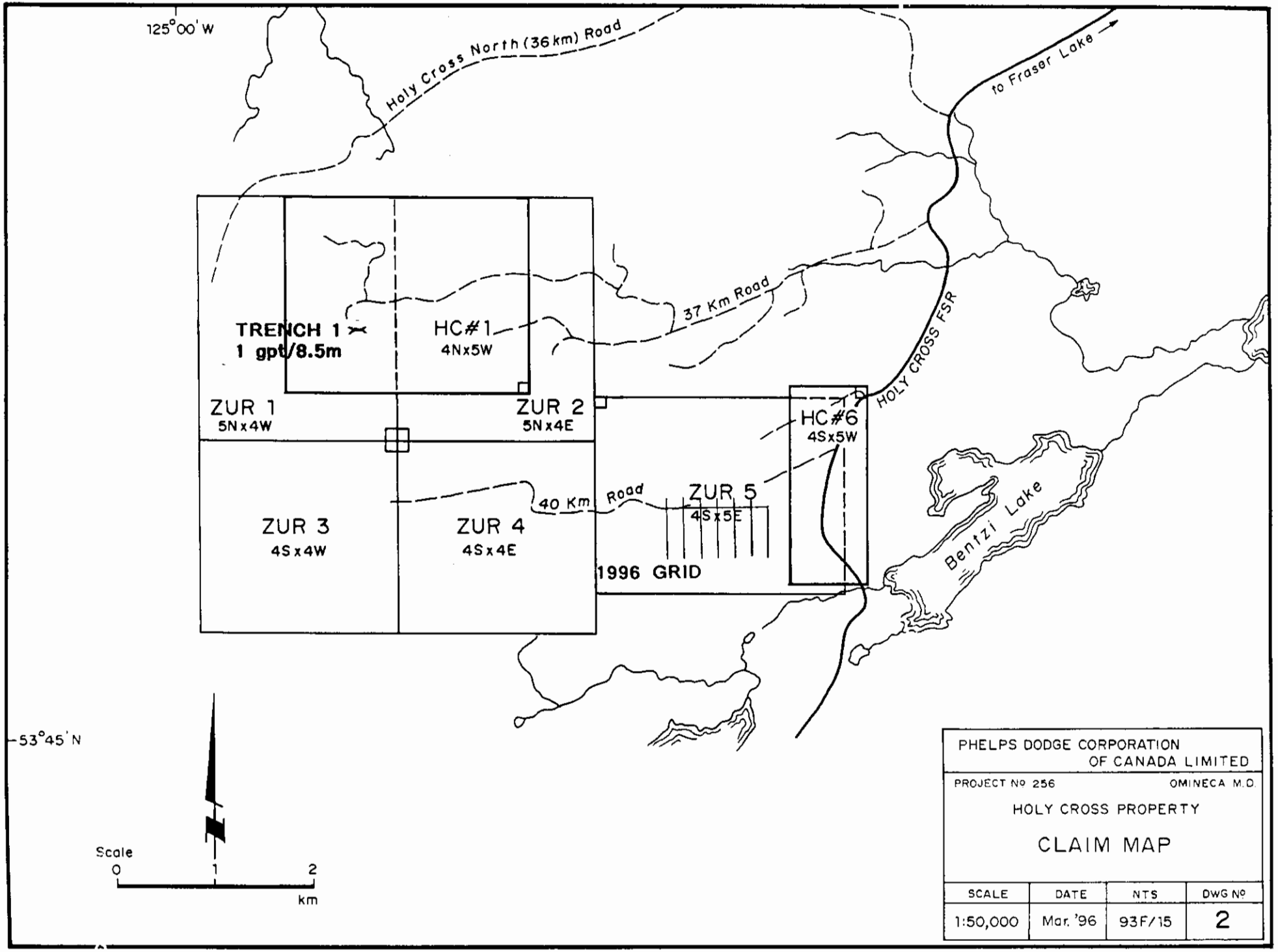

125°00' W
Holy Cross North (36 km) Road
to Fraser Lake
37 Km Road
HOLY CROSS FSR
TRENCH 1
1 gpt/8.5m
HC#1
4NxSW
ZUR 1
5NxW
ZUR 2
5NxE
HC#6
4SxSW
ZUR 3
4SxW
ZUR 4
4SxE
40 Km Road
ZUR 5
4SxSE
1996 GRID
Bentzi Lake
53°45' N
Scale
0
1
2
km
PHELPS DODGE CORPORATION OF CANADA LIMITED
PROJECT No 256
OMINECA M.D.
HOLY CROSS PROPERTY
CLAIM MAP
SCALE
DATE
NTS
DWG No
1:50,000
Mar. '96
93F/15
2

Table I: CLAIM DATA			
Claim Name	Record No.	No. of Units	Expiry Date
HC 1	331896	20	October 14, 1998
HC 6	331897	20	October 14, 1998
Zur 1	341371	20	October 18, 1998
Zur 2	341372	20	October 19, 1998
Zur 3	341373	16	October 19, 1997
Zur 4	341374	16	October 19, 1997
Zur 5	341375	20	October 20, 1997

HISTORY

The Holy Cross prospect was discovered in 1987 by Noranda Exploration Company during a reconnaissance exploration program. The original claims were staked after rock samples collected from a rhyolite dome returned anomalous concentrations of gold. Noranda explored the property during 1988-89 with geological mapping, extensive soil sampling, trenching and geophysical surveys (IP, magnetometer). They identified several areas of pervasively silicificied, quartz veined rhyolite with anomalous gold concentrations. Trench 1, excavated on silicified rhyolite breccia, returned 1.0 g/t gold over 8.5 metres.

During October 1994, Cogema Resources conducted reconnaissance rock and soil sampling, followed by staking of the HC 1 and 6 claims. Phelps Dodge Corporation of Canada explored the HC 1 and 6 during 1995 with prospecting and geological mapping. The Zur 1 to 5 claims were staked in October 1995.

REGIONAL GEOLOGY

The Holy Cross property is located in the Interior Plateau region of British Columbia, within the Intermontane Belt, which consists late Palaeozoic to late Tertiary sedimentary and volcanic belonging to the Stikinia, Cache Creek and Quesnellia Terranes (Figure 3). The claims lie in the Nechako Basin, within the central portion of the Stikine Terrane, which locally consists of three volcanic-stratigraphic groups ranging in age from upper Cretaceous to Miocene. The oldest of these, Eocene and possibly Oligocene Ootsa Lake Group rocks, consists of rhyolitic to dacitic flows, tuff and breccia with minor amounts of

andesite, basalt, conglomerate and tuffaceous shale. Pliocene to Pleistocene Chilcotin Group vesicular andesite and basalt flows, breccia and cinder cones conformably overlie the Ootsa Lake Group. An arcuate belt of Paleocene Nanika and Quanchus quartz monzonite and granite intrudes Ootsa Lake and older rocks. An Eocene extensional tectonic event, which resulted in basin and range type topography, is associated with epithermal, volcanic-hosted gold mineralization.

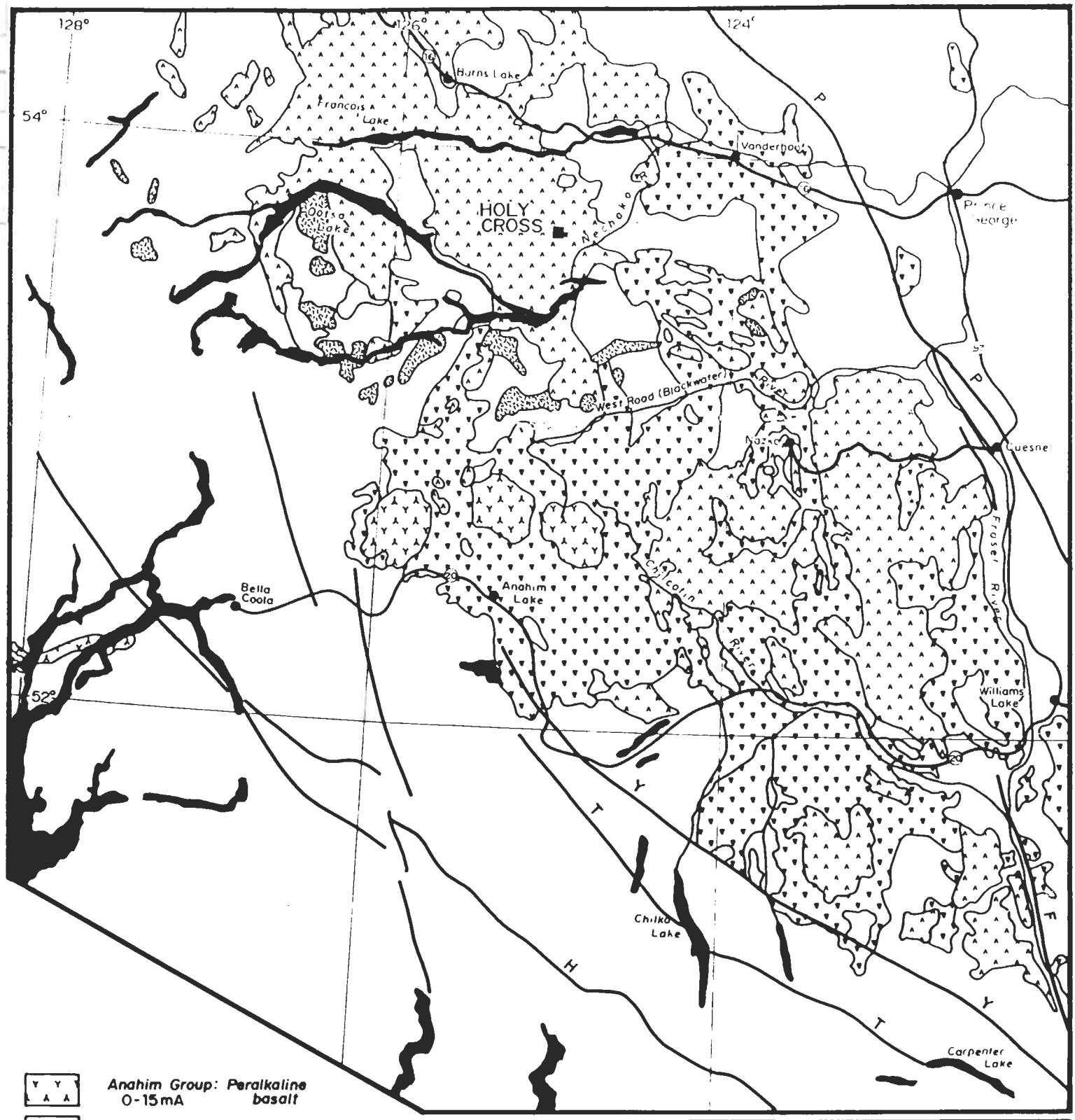
Pre-Tertiary rocks include lower Cretaceous Skeena Group, an assemblage of easterly derived back-arc clastics, middle Jurassic Hazelton Group alkaline to calc-alkaline volcanic and volcaniclastic rocks and Jurassic to Cretaceous granitic rocks in the Coast Plutonic Complex.

Mapping in the Holy Cross Mountain area by B.C. Geological Survey geologist R. Lane in 1994 shows the immediate area of the property to be underlain by Hazelton Group andesite and reworked crystal tuff, overlain by Skeena Group sedimentary rocks and Kasalka Group andesite flows. Ootsa Lake Group rhyolite, rhyolite breccia and andesite unconformably overlie the older rocks and flat-lying Endako Group andesite and basalt locally overlie all rocks in the area. Immediately north of the property, biotite quartz monzonite has intruded and metamorphosed Hazelton Group rocks. Diorite and gabbro plugs are locally associated with Endako Group rocks.

PROPERTY GEOLOGY

The HC property is underlain by volcanic and minor sedimentary rocks. The oldest rocks on the property are andesitic flows belong to the middle Jurassic Hazelton Group (Figure 4, unit 1). These are aphanitic to feldspar porphyritic and purple to grey or dark green in colour. Specular hematite has been observed in andesite outcropping on the east side of the property, as blebs, irregular stringers and local breccia matrices. Light green to grey, locally foliated tuff occurs as thin interbeds within the andesite sequence.

Overlying the Jurassic andesites are lower to upper Cretaceous Kasalka Group felsic volcanic rocks consisting of rhyolite and rhyodacite (unit 2), and crystal, ash and lapilli tuff (unit 3). Rhyolite occurs in a series of three northwesterly trending domes that outcrop between Bentzi Lake and the peak of Holy Cross Mountain. The HC 1 claim overlies the two western domes, the easternmost dome straddles the Zur 4/Zur 5 claim boundary. Rhyolite is pink to maroon in colour, locally porphyritic and/or flow banded and commonly



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PROJECT Nº 256 OMINECA M.D.

HOLY CROSS REGIONAL GEOLOGY

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SCALE	DATE	NTS	FIG Nº
1:2,000,000	Nov. 1996	93F/15	3

displays a slaty cleavage. Banded rhyolite (unit 2a) and rhyolite breccia (unit 2b) are spatially related. Lapilli tuff is locally interbedded with rhyolitic and andesitic flows. Lapilli are composed of rhyolite and feldspar porphyry, are variably clay-altered and set in a dark purple matrix.

Only minor sedimentary rocks have been encountered to date on the Holy Cross property. Polylithic conglomerate (unit 4) and argillite (unit 4a) are believed to belong to the Cretaceous Skeena Group. The youngest rocks on the property are Endako Group basalt, andesite and lapilli tuff, which locally cap the older volcanic units. These rocks are common cliff formers. The blocky, locally amygdaloidal olivine basalt and vesicular andesite are dark grey while the associated lapilli tuffs tend to be light grey coloured.

ALTERATION and MINERALIZATION

Argillic alteration is widespread within the Ootsa Lake volcanic rocks, locally overprinted by silicification which is reported in zones ranging up to 10 metres wide. Silicification is generally accompanied by quartz veins and local banded quartz-chalcedony or quartz-jasper veins. Quartz-healed breccias, fracture controlled drusy quartz and specular hematite are also common. Pyrite is disseminated, in amounts up to 5%, in banded rhyolite flow units and breccia on the ridge areas on HC 1 claim. Gold and silver mineralization is associated with banded, vuggy quartz veinlets and in silicified volcanic rocks. At Trench 1, excavated on the HC 1 claim, 1.0 gpt gold has been reported over an 8.5 metre section containing banded, pyritic quartz-jasper veins up to 10 centimetres wide. The mineralization in Trench 1 occurs at the intersection of two lineaments that trend approximately 035° and 120°.

Alteration observed on the Zur 5 claim is very similar to that associated with the rhyolite dome on HC 1. Silicification is widespread in the exposed felsic volcanics, accompanied by local quartz breccia zones. Quartz and/or chalcedony veins are common. Quartz stockworks were noted in two areas, hosted in rhyolite on line 136+00E and in argillite at the north end of line 134+00E. Quartz/chalcedony veins are often banded and vuggy. Argillic alteration was observed in the vicinity of the quartz stockworks, minor sericitization and chloritization have also been noted.

Specular hematite is locally disseminated within silicified rhyodacite. A 20 centimeter wide vein of massive hematite-magnetite, with possible pyrite and minor quartz, outcrops at 139+00E and 80+75N. Two exposures of silicified, brecciated volcanic fragments set in a matrix of massive specular hematite are situated nearby at 80+30N, 139+20E. Sulphide mineralization observed on the Zur 5 claim consisted predominantly of pyrite with local arsenopyrite, but was often too fine grained for identification. Pyrrhotite was observed in one location. Up to 2% pyrite is disseminated within argillized and silicified rocks, occasionally concentrated in chalcedonic flow bands in rhyolite, and in quartz veins.

1996 WORK PROGRAM

The 1996 exploration program, conducted between July 6 and August 25, focused on detailing an east-trending gold soil anomaly detected by Noranda Exploration in 1988. To this end, nine northerly oriented grid lines (134+00E to 150+00E) were instituted over the area, with 200-metre line spacing, connected by a 1600 metre long tie line. A total of 6.6 kilometres of new grid was established, from which 101 soil samples were collected at 50 metre intervals. Two additional soil samples were collected off grid, at 1988 soil sample sites to verify Noranda's data. Samples were obtained from the "B" horizon, where possible, stored in paper sample bags, tagged with a unique number and submitted to Acme Analytical Laboratories Ltd. in Vancouver, B.C. for analysis. Each sample was screened and an 80 mesh fraction analyzed for 34 elements by ICP techniques and for gold by geochemical atomic absorption analysis. Field notes detail location, topography, type and colour of material. Grid, soil sample locations and sample numbers are shown on Figure 5 and results for gold comprise Figure 6. Analytical method is more fully described in Appendix I.

The Zur 5 claim area was prospected and geologically mapped. Geology is compiled at a scale of 1:5,000 and is shown in Figure 4. A total of 53 rock samples was collected, tagged with unique numbers and submitted to Acme Analytical Laboratories Ltd. in Vancouver, B.C. for analysis. Each sample was crushed and analyzed for 34 elements by ICP techniques and for gold by geochemical atomic absorption analysis. Sample descriptions and key results are compiled in Appendix II and analytical certificates are comprise Appendix III.

RESULTS

The eastern half of the Zur 5 claim area is covered with a thick, monotonous blanket of till and no outcrop was seen on the grid area east of line 142+00E. Mapping indicates that much of the western and central claim area is underlain by rhyolite flows, with local flow banding in the west and a few exposures of brecciated rhyolite to the east, presumably along the edge of the dome. A large area of rhyolite underlying the western portion of the grid is surrounded on the north, east and southeast by a 100 to 200 metre wide belt of outcropping pyroclastic rocks which may extend onto the HC6 claim a kilometre to the northeast. Minor exposures of sedimentary rocks outcrop near the north end of line 134+00.

Soil sampling over the 1996 grid delineated two notable areas of anomalous gold geochemistry. On lines 136+00E and 138+00E, three samples returned 69 to 323 ppb gold in an area underlain by rhyolite. The second anomaly is defined by six samples collected along lines 144+00E and 146+00E, which returned 20 to 154 ppb gold from an area covered with overburden. Several stations on line 146+00, in the vicinity of this anomaly, could not be sampled due to swampy ground. Anomalous gold concentrations on the 1996 grid did not correlate well with other elements. Silver has the best correlation to gold and most samples with anomalous gold contain elevated silver concentrations, however, the reverse does not hold true. Arsenic and mercury occur in fairly low concentrations over the grid and correlate poorly with gold. Base metal concentrations are generally low.

Table 2: SUMMARY of 1996 SOIL GEOCHEMICAL RESULTS

Element	Au (ppb)	Ag (ppb)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)
Range	1-323	30-851	1-103	5-86	3-82	36-1142	1-7
Elevated	15	130	6	15	15	130	3
Anomalous	60	250	30	50	45	500	6

Two samples (60468, 61754) of altered pyritic rhyolite outcropping in the western grid returned gold concentrations of 416 and 1,460 ppb. Both samples were collected from areas with anomalous concentrations of gold in soil. Four samples of altered rhyolite and dacite talus, collected over the westernmost soil anomaly, contained elevated gold concentrations ranging from 160 to 316 ppb. Silver concentrations in bedrock and talus from this area were also quite high, up to 18,731 ppb. Arsenic was elevated (up to 624.7 ppm) in several samples, but accompanying gold content in the same samples was generally at background levels. At a second area of interest, near the northeast corner of Zur 5, a sample (61673) of silicified lapilli tuff returned 521 ppb gold. Most rocks collected from this area contained elevated silver concentrations ranging up to 1842 ppb. Several of the float samples collected throughout the claim area contained elevated silver and arsenic but no gold.

CONCLUSIONS

Geochemical sampling during 1996 served to confirm and fill-in Noranda's somewhat spotty 1988 gold soil anomaly, especially in the eastern grid area. Mapping and rock sampling in the easternmost of the three rhyolite domes indicates the presence of significant alteration and gold mineralization up to 1.46 gpt. This is the least explored of the three domes and merits further work.

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DISBURSEMENTS

Expenditures for the 1996 work program on the Holy Cross property are $17,600.00 as tabulated below:

Accommodation and Board			1,292.00
Assays	53 Rock Samples @ $19.55		1,036.15
	103 Soil Samples @ $15.45		1,591.35
Communication			223.00
Labour	C. Payne	11 days @ $295.00	3,245.00
	D. Gagnon	6 days @ 225.00	1,350.00
	A. Butler	1 days @ 225.00	225.00
	B. Terry	5 days @ 225.00	1,125.00
	J. Boutwell	3 days @ 225.00	675.00
	L. Payne	8 days @ 225.00	1,800.50
Report			3,500.00
Reproductions, Maps, Drafting			283.00
Shipping			92.00
Supplies and Services			612.00
Truck	11 days @ $50.00		550.00
Total			**$ 17,600.00**

Prepared by:

FOX GEOLOGICAL SERVICES INC.

P.E. Fox, Ph.D., P. Eng.
November 20, 1996

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CERTIFICATE

I, Peter Edward Fox, certify to the following:

1. I am a consulting geologist residing at #902 - 2077 Nelson Street, Vancouver, B.C.

2. I am a Professional Engineer registered in the Association of Professional Engineers and Geoscientists of British Columbia.

3. My academic qualifications are:

   B.Sc. and M.Sc., Queens University, Kingston, Ontario
   Ph.D., Carleton University, Ottawa, Ontario

4. I have been engaged in geological work since graduation in 1966.

Peter E. Fox, Ph.D., P. Eng.
Vancouver, B.C.
November 20, 1996

APPENDIX I

ANALYTICAL METHOD

Soil Samples

ICP A 15 gram sample is digested with 90 millilitres 3-1-2 HCL-HNo_3 at 95° C for one hour and is diluted to 100 millilitres with water. This each is partial for Mn, Fe, Sr, Ca, P, La, Cr, Mg, Ba, Ti, B, W and limited for Na, K. Ga and Al. The solution is analysed directly by ICP. Mo, Cu, Pb, Zn, Ag, As, Au, Cd, Sb, Bi, Tl, Hg, Se, Te and Ga are extracted with MIBK-Aliquat 336 and analysed by ICP. Elevated detection limits for samples contain Cu, Pb, Zn, As>1500 ppm, Fe>20%.

Au^+ Extracted by aqua-regia/MIBK with GF/AA finished.

Rock Samples

A 30 gram sample is treated as above.

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APPENDIX II

Field Notes and Selected Analytical Results

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ROCK SAMPLE DESCRIPTIONS AND GEOCHEMISTRY

SAMPLE	TYPE	DESCRIPTION	Au ppb	Ag ppb	As ppm
53891	GRAB	Maroon, silicified rhyolite with 20% quartz and plagioclase phenocrysts, chalcedony veining throughout, disseminated ilmenite, some vuggy quartz-chalcedony veining.	1	52	10.1
53892	GRAB	Siliceous, volcanic breccia with chalcedony veining and disseminated hematite, rock is vuggy, vugs are infilled with quartz and iron oxides.	1	120	1.1
53893	GRAB	Silicified breccia with patchy chlorite blebs, patchy chalcedony veinlets, minor ilmenite.	1	30	0.5
53894	GRAB	Silicified, brecciated conglomerate with disseminated sulphides, rock is vuggy.	2	1200	406.6
53895	GRAB	Silicified, monolithic breccia with iron oxides, rhyolite fragments, minor quartz veining, trace disseminated cubic pyrite and grey-green, weak to strong sericite alteration.	9	505	21.6
60459	GRAB	Angular, black-grey, silicified rhyolite (?), iron stained, vuggy. Host rock is a dark coloured rhyolite(?)	1	846	20.3
60460	GRAB	Dark coloured quartz phyric rhyolite, iron stained, vuggy, trace pyrite.	1	120	21.5
60461	GRAB	Massive hematite-magnetite, pyrite(?), 20cm wide vein, minor quartz.	35	7569	31.5
60462	GRAB	Intensely silicified rhyolite breccia with a grey quartz matrix, disseminated fine grained pyrite to 1.5%.	10	584	84.5
60463	GRAB	Brecciated feldspar phyric rhyolite (?), iron stained, vugs silica rich, no visible sulphides.	18	1031	23
60464	GRAB	Purplish chloritic tuff, minor silicification and vugs, pyrite as aggregates and fine disseminations.	1	382	2.6
60465	GRAB	Siliceous rhyolite with bluish sulphide rich chalcedony bands.	7	110	102.9
60466	GRAB	Quartz phyric rhyolite breccia, pyrite and arsenopyrite in bluish quartz chalcedony bands, tan coloured rhyolite clasts.	12	235	541.1
60467	GRAB	2cm wide band bluish quartz chalcedony in rhyolite, pyrite.	6	35	74.3
60468	GRAB	Siliceous rhyolite with bluish bands of quartz chalcedony, pyrite in quartz chalcedony bands.	1460	1137	33.4
61653	GRAB	Angular, grey-green, intensely silicified banded chlorite crystal tuff, feldspars are clay altered. Darker grey-green bands are up to 1cm thick, locally sulphide pods are up to 2cm long.	31	632	993.6
61654	GRAB	Angular, dark grey, intensely siliceous fine grained rock, 10-15% disseminated fine grained sulphide.	30	2074	1958.5
61655	GRAB	Feldspar phyric rhyodacite, trace to 1% disseminated hematite.	4	264	17.8
61656	GRAB	Grey-black chalcedonic quartz breccia, abundant limonite and iron stain, vuggy, quartz crystal lined fractures.	3	2094	38.3
61657	GRAB	Subangular, red to green, chalcedony-quartz breccia, weak banding in quartz-chalcedony, trace disseminated fine grained sulphide.	7	312	65.5
61658	GRAB	Intensely silicified volcanic fragments set in a with hematite matrix.	3	831	5.2
61659	GRAB	Massive hematite matrix breccia.	22	9314	80.7

ROCK SAMPLE DESCRIPTIONS AND GEOCHEMISTRY

SAMPLE	TYPE	DESCRIPTION	Au ppb	Ag ppb	As ppm
61660	GRAB	Angular to subangular, greenish dacite fragments in matrix supported breccia, matrix is hematite.	8	416	1.8
61661	GRAB	Intensely silicified volcanic (dacite?), iron stained on fractures.	1	52	3.9
61662	GRAB	Mottled, grey-green-white, intensely silicified volcanic with 1-2mm hematite veinlets throughout.	1	30	0.5
61663	GRAB	Polylithic conglomerate, dark grey, fine grained matrix with white to pink angular to rounded clasts, rock is silicified, trace disseminated very fine grained sulphides.	2	4394	356
61664	GRAB	Argillically altered flow banded rhyolite, bands replaced with banded chalcedony, less than 1% disseminated pyrite throughout.	14	409	99.2
61665	GRAB	Completely silicified volcanic (?), trace disseminated arsenopyrite, iron stained on fracture surfaces.	5	460	27.6
61666	GRAB	Mottled pink, green-grey, intensely silicified rock, trace disseminated very fine grained sulphide, limonitic stain on fracture surfaces.	3	34	14
61667	GRAB	Propylitic altered andesite and massive banded hematite.	1	30	3.7
61668	GRAB	Intensely silicified, brecciated dark grey massive argillite, less than 1% disseminated pyrrhotite and arsenopyrite.	5	2698	111.2
61669	GRAB	Light red-grey banded, massive, sugary textured quartz in rhyolite breccia host.	2	388	6
61670	GRAB	Intensely silicified lapilli tuff, 1-2% disseminated pyrite.	38	1842	624.7
61671	GRAB	Maroon, argillically altered lapilli tuff, intensely silicified, 1% disseminated fine grained pyrite.	64	1276	38.9
61672	GRAB	Argillically altered lapilli tuff breccia, angular sugary quartz fragments in silica matrix.	12	178	9.4
61673	GRAB	Silicified lapilli tuff, weak chlorite alteration, 2% disseminated fine grained pyrite.	521	671	7.4
61674	GRAB	Mottled, grey-black quartz-chalcedony breccia, locally vuggy, weak iron stain on fractures.	4	144	19.6
61675	GRAB	Vuggy silicified, weak argillically altered rhyolite with weak to moderate developed quartz stockwork.	45	1332	10.8
61676	GRAB	Reddish banded quartz, vuggy, in rhyodacite host.	308	18731	14.8
61677	GRAB	Argillically altered rhyodacite with less than 1cm to 1cm wide grey banded chalcedony-quartz, trace to 0.5% very fine grained sulphide.	23	1010	22.7
61678	GRAB	Argillically altered feldspar phyric rhyolite, grey chalcedony veining throughout, trace disseminated sulphides.	36	549	5
61679	GRAB	Silica flooded rhyolite breccia, trace disseminated very fine grained sulphide.	32	1733	3.5
61680	GRAB	Hematite stained banded quartz, dark grey layers of chalcedony.	47	1249	154.2
61681	GRAB	Angular rhyolite fragments to 1cm set in a quartz-chalcedony matrix.	3	30	4.5
61682	GRAB	1cm wide banded quartz vein in rhyodacite, trace disseminated pyrite.	2	118	1
61683	GRAB	Maroon feldspar phyric rhyodacite with quartz-hematite veining up to 1cm wide.	4	45	2.9

ROCK SAMPLE DESCRIPTIONS AND GEOCHEMISTRY

SAMPLE	TYPE	DESCRIPTION	Au ppb	Ag ppb	As ppm
61748	GRAB	Polylithic conglomerate, trace disseminated pyrite.	3	30	2.3
61749	GRAB	Dacite breccia, fragment supported with silica matrix.	85	263	147
61751	GRAB	Silicified dacite, trace disseminated pyrite, quartz in vugs, minor veinlets of chalcedony (?)	160	2340	25.8
61752	GRAB	Argillically altered and silicified rock, with minor vugs infilled with quartz-ilmenite.	18	878	435.3
61753	GRAB	Chalcedony veins and veinlets in vuggy rhyolite host, vugs lined with quartz crystals.	274	232	22
61754	GRAB	White-green, argillically altered, silicified rhyolite, vuggy quartz veining, salmon coloured hematite altered (?), major ilmenite and pyrite clasts.	416	1262	99.7
61755	GRAB	Argillically altered rhyolite with quartz veins, trace disseminated pyrite.	316	1625	47.5
61763	GRAB	Silicified vuggy crystal tuff breccia, irregular chalcedony patches throughout, vugs infilled with chlorite and drusy quartz, trace to 1% disseminated fine grained pyrite.	7	353	116.6

SAMPLE	EAST	NORTH	TYPE	MATERIAL	COLOUR	REMARKS	Au
61756	12600	9800	SOIL	TILL	BROWN	ROCKY SOIL. RESAMPLE 290PPB AU.	1
61750	13000	10025	SOIL	TILL	BLACK	SANDY BLACK-BROWN SOIL. RESAMPLE 290PPB AU.	1
61610	13400	7500	SOIL	TILL	GREY	ROCKY SOIL.	1
61609	13400	7550	SOIL	TILL	BROWN	ROCKY SOIL.	1
61608	13400	7600	SOIL	TILL	GREY	B/C HORIZON. FINE SILTY SOIL; ROCKY.	1
61607	13400	7650	SOIL	TILL	GREY	B/C HORIZON. FINE SILTY SOIL; ROCKY.	2
61606	13400	7700	SOIL	TILL	GREY	SAMPLE TAKEN 5M N OF STATION. ROCKY SAMPLE.	9
61605	13400	7750	SOIL	TILL	GREY	B/C HORIZON. ROCKY SOIL.	1
61604	13400	7800	SOIL	TILL	BROWN	BROWN/ORANGE. ROCKY.	1
61603	13400	7850	SOIL	TILL	GREY	B/C HORIZON. ROCKY SOIL. CLEAR CUT.	1
61602	13400	7900	SOIL	TILL	GREY	ROCKY SOIL.	1
61601	13400	7950	SOIL	TILL	GREY	FINE SILTY MATERIAL.	138
61600	13400	8000	SOIL	TILL	GREY	B/C HORIZON. ROCKY SOIL. RHYOLITE FRAGMENTS CLEAR CUT.	1
61625	13400	8050	SOIL	TILL	BROWN	ROCKY SOIL.	1
61626	13400	8100	SOIL	TILL	GREY	ROCKY SOIL. OUTCROP TO NORTH. CONGLOMERATE.	3
61611	13600	7500	SOIL	TILL	GREY	GREY-BROWN. POOR SAMPLE. VERY ROCKY.	1
61612	13600	7525	SOIL	TILL	GREY	GREY-BROWN. ROCKY.	1
61613	13600	7575	SOIL	TILL	GREY	B/C HORIZON. GREY-BROWN. ROCKY SOIL.	102
61614	13600	7625	SOIL	TILL	GREY	B/C HORIZON.	4
61615	13600	7675	SOIL	TILL	GREY	GREY-BROWN. MOSTLY ROCKY SOIL. POOR SAMPLE.	1
61616	13600	7725	SOIL	TILL	GREY	ROCKY SOIL. OUTCROP UPSLOPE.	1
61617	13600	7775	SOIL	TILL	BROWN	FLOW BANDED RHYOLITE/QTZ VEINING TO 3CM WIDE.	2
61618	13600	7825	SOIL	TILL	GREY	ROCKY SOIL. OUTCROP. ALTERED RHYOLITE.	4
61619	13600	7875	SOIL	TILL	GREY	ROCKY SOIL.	1
61620	13600	7925	SOIL	TILL	GREY	B/C HORIZON. GREY-BROWN. ROCKY SOIL.	1
61621	13600	7975	SOIL	TILL	BROWN	B/C HORIZON.	1
61622	13600	8000	SOIL	TILL	GREY	GREY-BROWN. ROCKY SOIL.	1
61624	13600	8025	SOIL	TILL	GREY	B/C HORIZON. GREY-BROWN. ROCKY SOIL.	1
61623	13600	8075	SOIL	TILL	GREY	B/C HORIZON. GREY-BROWN. ROCKY SOIL.	1
61711	13800	7500	SOIL	TILL	ORANGE	CHARCOAL IN "A" SOIL HORIZON.	2
61710	13800	7550	SOIL	TILL	BROWN	ROCKY - MAFICS.	1
61709	13800	7600	SOIL	TILL	BROWN	NO SAMPLE AT 76+50.	2
61708	13800	7700	SOIL	TILL	BROWN	BASE OF SLOPE.	69
61707	13800	7750	SOIL	TILL	BROWN	RHYOLITE BRECCIA IN SOIL HOLE.	323
61706	13800	7800	SOIL	TILL	BROWN	STEEP. ROCKY.	5
61705	13800	7850	SOIL	TILL	BROWN		7
61704	13800	7900	SOIL	TILL	BROWN	ROCKY.	5
61703	13800	7950	SOIL	TILL	GREY	POORLY DEVELOPED. RHYOLITE SUBCROP.	2
61702	13800	8000	SOIL	TILL	BROWN	B/C HORIZON. ROCKY SOIL.	2
61701	13800	8050	SOIL	TILL	GREY	B/C HORIZON. ROCKY SOIL.	1
61700	13800	8100	SOIL	TILL	GREY	B/C HORIZON. RHYOLITE SUBCROP (?)	1

SAMPLE	EAST	NORTH	TYPE	MATERIAL	COLOUR	REMARKS	Au
61712	14000	7525	SOIL	TILL	BROWN	BROWN-GREY. RHYOLITE SUBCROP.	1
61713	14000	7575	SOIL	TILL	GREY	B/C HORIZON. ROCKY SOIL. SMALL RIDGE TOP - MORAINE (?)	1
61714	14000	7625	SOIL	TILL	BROWN	BROWN-ORANGE.	1
61715	14000	7675	SOIL	TILL	GREY	B/C HORIZON. ROCKY SOIL.	1
61716	14000	7725	SOIL	TILL	GREY	POORLY DEVELOPED CHARCOAL IN "A" SOIL HORIZON.	1
61717	14000	7825	SOIL	TILL	GREY	B/C HORIZON. NO SAMPLE AT 77+75.	7
61718	14000	7875	SOIL	TILL	BROWN	B/C HORIZON. BROWN-GREY. SAMPLE TAKEN 8M N OF STN.	1
61719	14000	7925	SOIL	TILL	GREY	B/C HORIZON. ROCKY.	18
61720	14000	7975	SOIL	TILL	BROWN	BROWN-GREY. ROCKY.	1
61721	14000	8000	SOIL	TILL	BROWN	B/C HORIZON. BROWN-GREY. SAMPLE TAKEN 8M N OF STN.	75
61722	14000	8075	SOIL	TILL	GREY	B/C HORIZON. ROCKY. VOLCANIC RHYOLITE (?) SUBCROP TO S.	2
61735	14200	7500	SOIL	TILL	BROWN	BASE OF SLOPE. BOG TO NORTH.	4
61734	14200	7550	SOIL	TILL	BROWN	5M ABOVE BOTTOM OF GULLEY.	3
61733	14200	7600	SOIL	TILL	BROWN	BENCH IN HILLSIDE. FOLIATED RHYOLITE (?) SUBCROP TO WEST.	2
61732	14200	7650	SOIL	TILL	GREY	B/C HORIZON. ROCKY.	1
61731	14200	7700	SOIL	TILL	BROWN	B/C HORIZON. ROCKY (RHYOLITE). BENCH IN HILLSIDE.	2
61730	14200	7750	SOIL	TILL	BROWN	BROWN-GREY. ROCKY AND SANDY.	3
61729	14200	7800	SOIL	TILL	BROWN	ROCKY SOIL. RHYOLITE SUBCROP.	2
61728	14200	7850	SOIL	TILL	GREY	B/C HORIZON. RHYOLITE SUBCROP.	5
61727	14200	7900	SOIL	TILL	GREY	B/C HORIZON.	13
61726	14200	7950	SOIL	TILL	BROWN	B/C HORIZON. SANDY.	2
61725	14200	8000	SOIL	TILL	BROWN	SAMPLE TAKEN 3M EAST OF STATION DUE TO SWAMP.	6
61724	14200	8050	SOIL	TILL	BROWN	ROCKY SOIL.	21
61723	14200	8100	SOIL	TILL	BROWN	ROCKY.	1
61736	14400	7525	SOIL	TILL	BROWN	BROWN-GREY. ROCKY.	9
61737	14400	7575	SOIL	TILL	BROWN	HILLOCK BESIDE SWAMP.	2
61738	14400	7625	SOIL	TILL	BROWN	ROCKY.	1
61739	14400	7725	SOIL	TILL	BROWN	NO SAMPLE TAKEN AT 76+75 DUE TO BOG.	4
61740	14400	7775	SOIL	TILL	BROWN	B/C HORIZON. BROWN-GREY.	4
61741	14400	7825	SOIL	TILL	BROWN		144
61742	14400	7875	SOIL	TILL	BROWN	ROCKY. POORLY DEVELOPED SOIL.	20
61743	14400	7925	SOIL	TILL	BROWN		43
61745	14400	8000	SOIL	TILL	GREY	B/C HORIZON. 10M FROM BOTTOM OF SLOPE.	4
61746	14400	8025	SOIL	TILL	BROWN	B/C HORIZON.	1
61747	14400	8075	SOIL	TILL	BROWN	B/C HORIZON. ROCKY.	10
61744	14400	9775	SOIL	TILL	BROWN	BROWN-ORANGE. BOTTOM OF GULLEY (?). 5M S OF STN.	9
61634	14600	7500	SOIL	TILL	BROWN	BROWN-GREY. ROCKY TILL.	1
61633	14600	7550	SOIL	TILL	BROWN	BROWN-ORANGE. ROCKY BUT GOOD B HORIZON.	1
61632	14600	7600	SOIL	TILL	BROWN	ROCKY SOIL.	67
61631	14600	7650	SOIL	TILL	GREY	ROCKY SOIL. N/S FROM 78+00 TO 77+00.	1
61630	14600	7850	SOIL	TILL	BROWN	SAMPLE TAKEN 5M W OF STATION. N/S AT 79+00.	68

SAMPLE	EAST	NORTH	TYPE	MATERIAL	COLOUR	REMARKS	Au
61629	14600	7950	SOIL	TILL	GREY	ROCKY SOIL. BESIDE LAKE/SWAMP.	49
61628	14600	8000	SOIL	TILL	GREY	B/C HORIZON. VERY ROCKY SOIL.	154
61627	14600	8050	SOIL	TILL	BROWN	ROCKY SOIL. N/S AT 81+00 DUE TO SWAMP.	13
61635	14800	7525	SOIL	TILL	BROWN		1
61636	14800	7575	SOIL	TILL	BROWN	ROCKY SOIL.	1
61637	14800	7625	SOIL	TILL	BROWN	BROWN-GREY. ROCKY SOIL.	2
61638	14800	7675	SOIL	TILL	BROWN	BROWN-GREY. ROCKY SOIL.	1
61639	14800	7725	SOIL	TILL	BROWN	GOOD B HORIZON.	4
61640	14800	7775	SOIL	TILL	GREY	ROCKY SOIL.	1
61641	14800	7825	SOIL	TILL	GREY	ROCKY SOIL.	1
61642	14800	7875	SOIL	TILL	BROWN	GOOD B HORIZON.	3
61643	14800	7925	SOIL	TILL	BROWN	GOOD B HORIZON.	1
61645	15000	7500	SOIL	TILL	BROWN	GOOD B HORIZON.	1
61644	15000	7550	SOIL	TILL	BROWN	GOOD B HORIZON.	1
61646	15000	7600	SOIL	TILL	BROWN	GOOD B HORIZON. SAMPLE TAKEN 10M W OF STATION.	1
61647	15000	7650	SOIL	TILL	BROWN	SILTY SOIL.	1
61648	15000	7800	SOIL	TILL	BROWN	B/C. BROWN-GREY. ROCKY. N/S AT 77+00 TO 77+50 DUE TO SWAMP.	1
61649	15000	7850	SOIL	TILL	BROWN		1
61650	15000	7900	SOIL	TILL	BROWN	GOOD B HORIZON.	1
61651	15000	7950	SOIL	TILL	GREY	ROCKY SOIL.	1
61652	15000	8000	SOIL	TILL	BROWN	SILTY SOIL. SAMPLE TAKEN 10M S OF STN. N/S AT 80+50 AND 81+00 DUE TO SWAMP.	1

APPENDIX III

Geochemical Analyses

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GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 256 File # 96-4002 Page 1

1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: C. Payne

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U 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	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
53891	1.8	3.8	10.3	16.9	52	4	1	86	.74	10.1	<5	2	16	.09	1.1	.1	1	.06	.034	20	19	.01	164	<.01	<2	.28	.01	.29	3	<.2	29	<.3	<.2	<.5	<1
53892	1.1	9.6	5.2	56.3	120	1	2	342	1.72	1.1	<5	1	7	.12	.4	.1	5	.05	.027	16	6	.08	114	<.01	2	.58	.01	.36	2	<.2	34	<.3	<.2	1.5	1
53893	2.0	27.7	2.7	39.7	<30	5	2	674	1.30	<.5	<5	<1	4	.03	.4	.1	1	.06	.018	13	19	.14	61	<.01	<2	.58	.01	.25	5	<.2	16	<.3	.2	1.4	<1
53894	196.1	31.9	275.0	456.2	1200	7	3	84	1.37	406.6	<5	<1	16	2.16	5.3	<.1	2	.03	.002	2	20	.01	121	<.01	<2	.12	.01	.12	9	<.2	1125	<.3	.4	<.5	2
53895	5.3	8.2	9.4	13.9	505	2	1	60	2.55	21.6	<5	1	11	.05	3.2	.2	6	.02	.035	8	32	.01	1026	<.01	<2	.29	<.01	.27	2	<.2	21	<.3	.3	1.0	9
60459	15.4	30.7	577.7	64.1	846	4	2	138	2.41	20.3	<5	<1	15	.28	1.8	.2	9	.04	.033	4	48	.02	1267	<.01	<2	.17	<.01	.07	9	<.2	300	.5	.4	1.1	<1
60460	8.3	8.2	26.1	8.6	120	7	1	64	.92	21.5	<5	<1	17	.11	.8	<.1	3	.05	.007	1	84	.01	2017	<.01	<2	.06	.01	.04	7	<.2	75	<.3	.3	<.5	<1
60461	4.2	19.3	4.2	92.9	7569	4	8	1097	16.50	31.5	<5	1	9	.55	<.2	4.1	79	.04	.014	7	28	.29	851	.01	6	1.32	<.01	.23	49	<.2	55	<.3	6.8	5.0	35
60462	22.6	98.0	88.5	20.6	584	4	1	122	1.73	84.5	8	4	17	.10	2.9	1.6	5	.01	.025	11	16	.02	132	<.01	<2	.35	.01	.23	4	<.2	19	<.3	.3	1.2	10
60463	1.2	15.8	29.7	12.7	1031	2	1	89	1.49	23.0	<5	<1	17	.04	3.5	.3	5	.03	.006	6	21	.01	521	<.01	<2	.26	.01	.20	6	<.2	222	.3	.2	.6	18
60464	2.0	81.4	9.6	27.8	382	4	2	409	2.37	2.6	<5	4	7	.10	2.3	.3	5	.06	.022	11	15	.10	195	.02	<2	.58	<.01	.32	5	<.2	15	<.3	<.2	1.6	1
60465	2.7	7.3	27.0	3.0	110	2	1	51	1.46	102.9	<5	2	18	.03	1.7	<.1	1	.02	.006	26	17	.01	272	<.01	<2	.24	<.01	.38	5	.2	61	<.3	<.2	.5	7
60466	4.1	10.4	64.7	4.3	235	4	1	47	1.93	541.1	5	1	16	.15	1.3	<.1	1	.05	.003	14	16	.01	67	<.01	<2	.20	<.01	.30	5	.2	119	<.3	.2	<.5	12
60467	10.6	17.5	35.3	5.5	35	4	1	53	1.38	74.3	14	2	10	.21	2.0	.1	1	.02	.002	9	19	.01	78	<.01	<2	.18	<.01	.19	8	<.2	54	<.3	.2	<.5	6
60468	16.3	626.5	18.6	12.2	1137	5	1	74	1.10	33.4	<5	4	10	.10	6.1	.4	2	.01	.012	8	21	.01	39	<.01	<2	.25	.01	.23	6	<.2	20	<.3	.5	.8	1460
61653	9.8	15.2	30.0	20.7	632	3	2	159	2.36	993.6	<5	1	26	.03	6.3	.5	3	.05	.024	8	7	.04	111	<.01	<2	.54	<.01	.26	3	1.6	63	1.0	1.0	3.0	31
61654	13.6	19.5	31.9	2.4	2074	5	2	43	2.73	1958.5	<5	<1	60	<.01	14.8	1.0	4	.08	.004	1	15	.01	34	<.01	<2	.22	<.01	.31	4	3.5	76	2.0	2.0	5.0	30
61655	1.6	62.1	6.5	27.6	264	3	1	305	2.78	17.8	<5	4	5	.17	6.7	.2	5	.03	.014	17	20	.03	276	.01	<2	.36	<.01	.21	13	<.2	<10	<.3	<.2	.8	4
61656	29.7	45.4	170.6	76.4	2094	12	9	264	2.53	38.3	<5	<1	11	.43	2.8	.2	21	.03	.022	1	46	.03	430	<.01	<2	.15	<.01	.07	9	<.2	62	<.3	<.2	1.0	3
61657	10.2	5.6	35.8	12.4	312	2	1	79	.86	65.5	5	3	37	.05	1.3	.1	1	.03	.013	20	23	.01	624	<.01	<2	.29	<.01	.28	5	<.2	18	<.3	.2	.5	7
61658	1.9	31.1	14.8	44.6	831	4	4	277	2.42	5.2	<5	<1	23	.04	.3	1.3	5	.05	.024	52	46	.07	1573	<.01	<2	.68	<.01	.27	4	<.2	21	<.3	.5	2.5	3
61659	5.1	55.7	12.4	194.1	9314	3	9	1242	15.94	80.7	<5	<1	17	.18	.9	2.8	73	.06	.041	96	38	.31	1540	.01	2	1.84	<.01	.29	37	<.2	18	<.3	4.3	10.2	22
61660	3.7	13.7	4.9	64.4	416	4	7	806	10.87	1.8	6	1	10	.05	.7	.4	46	.04	.013	3	29	.12	757	.03	<2	.75	<.01	.18	30	<.2	13	<.3	.6	2.1	8
RE 61660	3.2	13.0	3.4	63.7	340	4	6	796	10.82	1.6	<5	<1	10	.04	.6	.3	46	.04	.013	4	28	.12	762	.03	<2	.73	<.01	.19	30	<.2	27	.3	<.2	2.0	6
61661	.4	19.7	2.4	35.9	52	2	3	458	1.34	3.9	<5	1	10	.02	.2	.1	3	.05	.022	21	7	.04	164	<.01	<2	.64	<.01	.28	3	<.2	10	<.3	.2	1.2	1
61662	2.0	37.7	4.4	92.1	<30	4	4	917	2.39	<.5	<5	<1	11	.10	<.2	.2	5	.06	.026	14	12	.07	112	<.01	<2	.77	<.01	.25	5	<.2	<10	<.3	<.2	1.6	1
61663	489.2	111.3	268.1	346.4	4394	8	4	112	1.24	356.0	<5	1	24	1.81	8.4	.5	3	.05	.003	2	17	.01	173	<.01	<2	.15	<.01	.12	8	1.0	690	1.0	1.0	3.0	2
61664	27.7	138.2	20.6	41.4	409	3	1	307	1.93	99.2	<5	3	6	.04	2.4	1.2	5	.02	.022	17	11	.05	132	<.01	<2	.55	.01	.36	3	<.2	11	<.3	<.2	1.6	14
61665	2.2	17.2	16.2	87.7	460	4	4	934	3.29	27.6	<5	<1	34	.09	1.5	.3	11	.01	.013	15	25	.05	652	<.01	<2	.56	<.01	.24	5	<.2	54	<.3	.2	2.2	5
61666	2.2	9.1	6.3	7.8	34	4	1	61	.89	14.0	<5	<1	8	.01	3.5	.1	4	.02	.002	4	30	.01	580	<.01	<2	.23	<.01	.21	5	<.2	12	<.3	<.2	<.5	3
61667	17.2	1.7	1.3	176.7	<30	16	25	5437	18.12	3.7	<5	1	13	.38	<.2	.4	118	.15	.056	24	35	.99	900	.03	<2	3.47	<.01	.20	19	<.2	18	2.9	1.7	7.2	1
61668	325.9	15.2	63.8	667.7	2698	7	1	119	.98	111.2	<5	<1	12	1.27	3.9	<.1	2	.04	.003	1	48	.01	341	<.01	<2	.05	<.01	.03	8	<.2	528	<.3	.5	1.1	5
61669	7.3	15.9	34.8	12.6	388	3	1	86	.54	6.0	5	2	27	.02	2.8	.1	5	.04	.005	11	24	.05	283	<.01	3	.30	.01	.21	5	<.2	22	<.3	<.2	.5	2
STANDARD D2/AG-500/AU-R	24.5	124.9	101.4	282.6	1988	51	16	1130	4.54	76.0	20	18	50	2.44	7.4	23.4	78	.89	.110	19	61	1.30	285	.17	27	2.78	.07	.68	13	2.7	532	.3	2.5	7.6	481

ICP - 30 GRAM SAMPLE IS DIGESTED WITH 180 ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 100 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL. SOLUTION ANALYSED DIRECTLY BY ICP. MO CU PB ZN AG AS AU CD SB BI TL HG SE TE AND GA ARE EXTRACTED WITH MIBK-ALIQUAT 336 AND ANALYSED BY ICP. ELEVATED DETECTION LIMITS FOR SAMPLES CONTAIN CU,PB,ZN,AS>1500 PPM,Fe>20%.
- SAMPLE TYPE: ROCK AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 27 1996 **DATE REPORT MAILED:** Sept 5/96 **SIGNED BY..** D. Toye ..D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U 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	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
61670	19.2	32.0	23.4	31.6	1842	9	11	32	2.62	624.7	<5	<1	41	.24	7.8	.5	7	.04	.007	9	10	.01	47	<.01	<2	.21	.01	.21	3	3.2	37	<.3	<.2	.6	38
61671	40.6	3.2	48.8	3.9	1276	3	3	35	.91	38.9	<5	1	31	.02	9.3	<.1	2	.04	.010	11	5	.02	184	<.01	<2	.26	.01	.26	2	.3	264	<.3	<.2	<.5	64
61672	1.1	2.8	3.8	10.2	178	2	1	69	.79	9.4	<5	1	17	.02	1.2	.1	5	.05	.017	12	20	.02	548	<.01	<2	.25	<.01	.22	2	<.2	50	<.3	<.2	<.5	12
61673	1.7	2.9	7.6	15.9	671	5	6	202	2.97	7.4	<5	1	11	.04	1.4	.1	22	.14	.042	8	11	.03	65	<.01	<2	.55	<.01	.29	3	<.2	42	<.3	<.2	.7	521
61674	8.3	4.1	20.0	19.4	144	4	1	58	.45	19.6	<5	<1	20	.12	.4	<.1	1	.04	.007	1	68	.01	2103	<.01	<2	.06	<.01	.05	6	<.2	30	<.3	<.2	<.5	4
61675	11.1	4.3	17.0	29.4	1332	4	1	41	.63	10.8	<5	3	26	.13	2.1	.1	3	.06	.011	11	45	.01	1481	<.01	3	.22	<.01	.28	4	<.2	22	<.3	<.2	.5	45
61676	17.5	4.0	16.0	9.2	18731	4	1	47	1.41	14.8	<5	2	29	.12	3.0	.1	7	.03	.014	10	21	.01	458	<.01	3	.21	<.01	.29	5	<.2	77	.4	<.2	.5	308
61677	18.4	8.9	31.2	3.5	1010	4	<1	32	1.15	22.7	<5	4	12	.14	3.9	.2	1	.03	.005	20	19	.01	383	<.01	<2	.21	<.01	.29	3	<.2	33	<.3	.2	.5	23
61678	2.0	3.1	34.1	66.5	549	3	1	116	.87	5.0	<5	4	28	.20	.3	.1	2	.14	.054	34	17	.02	302	<.01	<2	.37	<.01	.31	3	<.2	24	<.3	<.2	.6	36
61679	88.4	3.6	113.6	10.8	1733	5	1	49	.40	3.5	<5	5	11	.05	3.3	.4	6	.05	.021	24	22	.01	325	<.01	<2	.28	<.01	.29	4	<.2	18	<.3	<.2	.6	32
61680	13.8	8.4	50.3	6.3	1249	4	<1	35	1.84	154.2	<5	3	15	.10	4.3	.1	1	.03	.011	12	11	.01	171	<.01	<2	.19	.01	.45	4	.4	252	<.3	<.2	<.5	47
61681	2.0	20.4	3.0	148.4	<30	26	11	1067	2.32	4.5	<5	2	93	.90	<.2	.1	73	.77	.165	17	73	.41	592	.09	<2	.73	.12	.30	<2	<.2	48	<.3	.2	2.2	3
61682	2.1	40.0	8.0	22.0	118	5	1	321	1.34	1.0	<5	3	6	.23	2.3	.2	4	.05	.022	20	19	.04	117	.01	<2	.30	<.01	.23	6	<.2	<10	<.3	<.2	.8	2
61683	5.1	38.8	13.9	39.5	45	5	2	120	6.81	2.9	<5	5	21	.23	11.1	.3	17	.08	.043	12	29	.02	638	.03	<2	.32	<.01	.27	57	<.2	<10	<.3	.2	.7	4
RE 61683	5.6	39.5	15.1	39.7	<30	5	2	122	6.95	2.9	<5	5	21	.26	12.5	.3	17	.08	.044	12	29	.02	659	.03	<2	.33	<.01	.26	59	<.2	<10	<.3	.3	.6	4
61748	.9	4.1	7.3	37.5	<30	4	2	652	1.18	2.3	<5	3	7	.04	.2	.2	7	.08	.038	22	9	.05	47	<.01	<2	.40	.05	.19	2	<.2	<10	<.3	<.2	1.3	3
61749	25.5	51.0	5.8	38.2	263	4	1	89	2.22	147.0	<5	2	7	.38	41.9	.2	4	.01	.022	15	27	<.01	731	<.01	<2	.25	<.01	.17	74	<.2	97	<.3	.2	.7	85
61751	56.6	8.8	577.7	403.0	2340	4	1	46	1.24	25.8	<5	1	17	24.94	6.7	.5	3	.05	.014	12	29	.01	707	<.01	<2	.17	.01	.29	4	<.2	1900	1.6	<.2	<.5	160
61752	22.6	9.8	62.2	19.2	878	4	1	59	1.97	435.3	<5	7	42	.23	35.5	.2	3	.06	.025	24	23	.01	587	<.01	<2	.30	.01	.39	3	.2	264	.4	.4	1.0	18
61753	11.3	2.7	100.0	13.2	232	4	1	89	.61	22.0	<5	4	11	.24	.8	.2	5	.04	.012	18	18	.01	379	<.01	<2	.26	<.01	.34	4	<.2	34	<.3	<.2	.7	274
61754	10.8	20.4	28.8	9.8	1262	4	1	60	2.45	99.7	<5	4	15	.12	9.5	.2	16	.02	.027	10	31	.01	733	<.01	<2	.28	.01	.39	5	<.2	74	.4	.3	.5	416
61755	68.6	4.4	20.2	2.6	1625	3	<1	41	1.11	47.5	5	5	11	.06	1.9	.1	6	.03	.012	9	19	.01	330	<.01	<2	.18	<.01	.38	3	<.2	24	<.3	.3	.6	316
STANDARD	25.2	129.8	102.6	284.1	2135	32	16	1142	4.68	79.0	22	18	80	2.34	7.8	22.7	80	.90	.111	19	65	1.31	287	.17	48	2.80	.12	.73	13	2.7	509	.6	2.4	7.9	466

Standard is STANDARD D2/HG-500/AU-R. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 256 File # 96-1027 Page 1

1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: C. Payne

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U 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	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
61600	1.0	7.9	5.0	62.4	66	9	5	497	1.92	2.2	<5	1	39	.18	1.0	<.1	50	.29	.055	10	21	.19	329	.08	<2	1.32	.02	.10	<2	<.2	28	<.3	<.2	4.1	<1
61601	.8	10.6	4.7	55.0	133	11	6	349	2.28	2.1	<5	1	31	.07	.2	<.1	66	.24	.054	10	24	.21	327	.09	<2	1.40	.02	.07	<2	<.2	14	<.3	<.2	3.9	138
61602	.7	10.9	5.4	39.9	62	8	5	328	1.89	1.3	<5	2	45	.05	.2	.1	46	.34	.028	12	13	.33	124	.09	<2	1.31	.04	.07	<2	<.2	<10	<.3	<.2	3.4	1
61603	.5	9.3	4.0	35.9	<30	6	4	354	1.71	1.3	<5	2	30	.04	.2	.1	44	.24	.026	10	12	.23	88	.10	<2	1.09	.03	.07	<2	<.2	<10	<.3	<.2	2.7	1
61604	1.3	11.5	4.3	63.0	37	9	5	403	3.05	1.7	<5	1	37	.09	<.2	.1	117	.37	.083	5	16	.30	85	.17	<2	1.55	.03	.09	<2	<.2	12	<.3	<.2	5.5	<1
61605	1.1	8.1	9.4	48.8	62	4	4	753	1.57	.5	<5	1	36	.13	<.2	.1	48	.30	.064	7	9	.11	143	.09	<2	.75	.02	.06	<2	<.2	19	<.3	<.2	3.4	<1
61606	1.6	12.4	25.5	75.8	35	6	6	635	2.47	4.9	<5	2	43	.14	1.0	.1	76	.38	.053	36	33	.17	714	.05	2	1.29	.03	.16	2	<.2	35	<.3	<.2	3.6	9
61607	.7	20.3	3.4	72.1	<30	11	9	610	3.49	3.0	<5	1	52	.09	.2	.1	134	.49	.123	8	16	.44	119	.11	<2	1.84	.05	.07	<2	<.2	<10	<.3	<.2	4.8	2
61608	.8	9.9	5.1	67.9	<30	9	6	600	2.28	1.6	<5	1	39	.12	.2	.1	65	.31	.186	9	16	.20	163	.09	2	1.61	.02	.07	<2	<.2	22	<.3	<.2	4.8	1
61609	.9	9.2	4.9	67.1	48	7	5	497	2.74	1.4	<5	1	30	.08	.2	.1	116	.31	.081	6	14	.18	68	.12	<2	1.19	.04	.06	<2	<.2	15	<.3	<.2	4.9	1
61610	1.5	12.1	5.5	44.0	84	7	5	329	2.25	1.4	<5	1	39	.08	<.2	.1	66	.42	.070	7	15	.25	78	.10	<2	1.41	.03	.09	<2	<.2	36	<.3	<.2	5.2	<1
61611	1.6	30.3	5.2	75.7	114	9	10	1033	2.96	1.8	<5	1	75	.29	<.2	.1	110	.81	.068	9	15	.47	92	.09	2	1.70	.07	.06	<2	<.2	63	<.3	<.2	5.0	1
61612	.9	13.0	4.2	57.3	30	9	6	774	2.79	1.8	<5	1	47	.14	.2	.1	97	.44	.139	8	26	.25	271	.10	<2	1.45	.04	.07	<2	<.2	12	<.3	<.2	4.3	<1
61613	1.0	6.0	7.1	57.7	119	5	4	787	1.95	2.4	<5	2	21	.08	.9	.1	50	.18	.079	21	18	.12	284	.02	31	1.26	.03	.12	<2	<.2	10	<.3	<.2	3.7	102
61614	1.1	8.9	7.5	42.5	44	5	4	558	2.02	2.1	<5	1	35	.14	.7	.1	62	.31	.084	11	21	.12	378	.07	<2	.77	.02	.10	<2	<.2	19	<.3	<.2	3.7	4
61615	4.8	57.0	10.8	57.8	102	11	10	2764	1.98	2.1	5	<1	203	1.28	<.2	.3	54	2.28	.174	13	6	.33	267	.04	5	.85	.07	.16	<2	<.2	41	<.3	<.2	2.5	<1
61616	2.0	21.5	16.5	172.4	191	7	6	2303	2.54	3.3	<5	<1	59	1.44	.8	.2	71	.61	.189	23	41	.17	1257	.05	3	1.03	.03	.19	<2	<.2	20	<.3	<.2	3.2	<1
61617	1.6	86.0	17.5	336.6	196	11	10	3241	3.31	1.9	<5	1	70	2.71	1.0	.3	72	.66	.370	29	43	.29	1130	.09	<2	2.42	.01	.24	<2	<.2	37	<.3	<.2	6.5	2
RE 61617	1.5	83.5	18.0	343.2	194	11	10	3207	3.27	1.9	<5	1	68	2.65	1.0	.3	72	.66	.369	29	41	.29	1083	.10	<2	2.45	.01	.21	<2	<.2	47	<.3	<.2	6.6	1
61618	2.0	13.5	27.2	220.2	50	8	7	895	2.90	4.6	<5	2	23	.42	2.1	.1	76	.22	.115	10	24	.18	534	.02	2	2.40	.01	.12	2	.2	15	<.3	<.2	6.7	4
61619	1.8	6.2	13.2	238.0	147	5	6	963	2.10	2.8	<5	1	25	.55	.3	.1	63	.23	.139	12	19	.13	288	.04	<2	1.45	.02	.13	<2	<.2	27	<.3	<.2	4.9	1
61620	1.0	15.6	3.8	146.0	81	15	8	649	3.37	.6	<5	2	43	.19	<.2	.1	131	.46	.313	8	18	.33	174	.17	<2	2.15	.03	.10	<2	<.2	11	<.3	<.2	6.7	1
61621	4.3	16.2	10.6	243.0	343	9	8	2174	2.27	5.4	<5	1	61	.95	.3	.1	63	.44	.221	15	21	.16	327	.05	<2	1.67	.02	.11	<2	<.2	26	<.3	<.2	4.5	<1
61622	5.0	8.0	7.9	225.9	148	6	5	1121	1.76	.8	<5	<1	71	1.28	<.2	.1	49	.60	.147	9	22	.13	365	.09	<2	.89	.02	.13	<2	<.2	37	<.3	<.2	4.1	<1
61623	3.3	11.8	21.4	49.5	51	5	4	361	2.05	4.0	<5	2	31	.06	2.1	.2	52	.38	.102	19	13	.19	175	.07	<2	.85	.03	.10	2	<.2	12	<.3	<.2	2.3	1
61624	3.8	10.7	12.8	173.5	319	9	5	474	1.86	3.9	<5	2	32	.73	.3	.1	42	.28	.088	10	20	.18	269	.09	<2	1.34	.02	.11	<2	<.2	<10	<.3	<.2	5.0	1
61625	1.4	10.7	7.9	118.8	300	7	7	1142	2.29	1.8	<5	<1	33	.33	.3	.1	55	.29	.244	11	22	.16	318	.06	<2	1.29	.02	.10	<2	<.2	48	<.3	<.2	4.0	<1
61626	1.8	30.7	9.7	137.8	158	11	7	491	2.58	5.6	<5	2	43	.26	.5	.1	70	.30	.051	16	18	.33	183	.10	2	1.42	.03	.10	<2	<.2	22	<.3	<.2	3.5	3
61627	.8	12.6	5.9	48.8	<30	8	5	358	3.04	5.0	<5	2	39	.04	.5	.1	112	.37	.064	12	23	.25	122	.12	<2	.99	.05	.09	<2	<.2	<10	<.3	<.2	3.1	13
61628	1.0	5.2	9.7	46.9	163	5	3	446	1.80	1.5	<5	2	29	.07	.3	.1	52	.23	.073	13	15	.11	248	.07	<2	.84	.02	.12	<2	<.2	<10	<.3	<.2	3.0	154
61629	1.4	7.7	6.2	42.3	101	7	5	295	2.46	1.4	<5	2	21	.05	.2	.1	88	.17	.020	9	19	.18	94	.07	2	1.10	.02	.11	<2	<.2	<10	<.3	<.2	3.7	49
61630	6.5	32.8	13.5	66.5	479	16	10	739	4.17	102.5	<5	2	101	.20	4.9	.2	86	.88	.035	15	25	.37	162	.10	<2	1.88	.03	.09	<2	.2	47	<.3	<.2	5.1	68
61631	1.5	10.1	7.5	116.7	129	9	9	1082	2.79	2.0	<5	1	23	.21	.2	.1	75	.24	.144	8	19	.28	193	.09	<2	1.74	.02	.09	<2	<.2	17	<.3	<.2	5.9	1
61632	1.3	13.1	7.6	166.5	140	14	11	852	3.61	3.3	<5	1	38	.19	<.2	.1	100	.34	.299	8	36	.33	346	.08	<2	2.65	.01	.10	<2	<.2	30	<.3	<.2	7.7	67
STANDARD	25.1	128.6	101.7	291.4	1972	33	17	1141	4.63	78.8	25	19	50	2.34	7.5	22.1	81	.89	.113	20	65	1.29	286	.15	27	2.81	.07	.69	14	3.0	543	.5	2.5	7.3	52

Standard is STANDARD D2/HG-500/AU-S.

ICP - 15 GRAM SAMPLE IS DIGESTED WITH 90 ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 100 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL. SOLUTION ANALYSED DIRECTLY BY ICP. MO CU PB ZN AG AS AU CD SB BI TL HG SE TE AND GA ARE EXTRACTED WITH MIBK-ALIQUAT 336 AND ANALYSED BY ICP. ELEVATED DETECTION LIMITS FOR SAMPLES CONTAIN CU,PB,ZN,AS>1500 PPM,Fe>20%.

- SAMPLE TYPE: SOIL AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 27 1996 DATE REPORT MAILED: Sept 6/96 SIGNED BY. C. Toye .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U 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	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
61633	.8	11.3	5.3	107.7	120	12	8	431	2.81	2.8	<5	1	31	.08	.3	.1	76	.25	.284	7	19	.28	177	.06	3	2.39	.01	.07	<2	<.2	30	<.3	<.2	7.6	1
61634	1.2	13.6	9.0	139.5	75	16	10	800	3.25	2.0	<5	2	37	.12	.3	.1	90	.29	.201	8	32	.33	282	.08	2	2.84	.02	.08	<2	<.2	46	<.3	<.2	8.6	<1
61635	1.1	15.6	6.5	128.6	57	14	11	1165	3.55	2.9	<5	1	47	.21	.3	.2	107	.36	.159	10	32	.33	282	.08	<2	2.33	.02	.07	<2	<.2	33	<.3	<.2	7.8	<1
61636	1.5	12.9	6.4	124.7	105	13	10	1569	3.30	2.5	<5	1	36	.17	.2	.1	103	.32	.188	8	22	.28	186	.09	<2	2.14	.02	.07	<2	<.2	29	<.3	<.2	7.0	<1
61637	1.1	19.6	6.6	42.1	114	9	9	1029	2.96	5.7	<5	1	56	.10	.4	.1	80	.77	.033	14	21	.43	171	.07	<2	1.90	.05	.07	<2	<.2	16	<.3	<.2	5.6	2
61638	.6	14.0	5.6	38.4	175	8	5	429	2.55	2.9	<5	1	56	.09	.4	.1	57	.72	.026	13	21	.30	121	.10	2	1.48	.04	.06	<2	<.2	14	<.3	<.2	4.2	1
61639	3.2	15.4	12.6	181.9	126	16	14	927	3.90	3.2	<5	2	34	.16	.3	.1	102	.30	.300	8	32	.35	330	.05	5	3.22	.04	.11	<2	<.2	30	<.3	<.2	9.6	4
61640	2.3	16.2	7.7	165.6	111	15	13	1234	3.45	5.8	<5	2	36	.18	.7	.1	93	.27	.243	10	32	.37	319	.05	<2	2.64	.02	.11	<2	<.2	21	<.3	<.2	7.6	1
61641	2.4	11.6	10.6	95.8	91	10	9	1040	2.74	2.1	<5	1	39	.17	.3	.2	78	.30	.045	8	23	.26	175	.09	3	1.64	.02	.07	<2	<.2	21	<.3	<.2	6.6	<1
RE 61641	2.3	10.3	7.7	90.2	98	9	8	980	2.55	2.3	<5	1	37	.16	.4	.1	72	.28	.041	7	20	.24	166	.08	<2	1.54	.02	.07	<2	<.2	25	<.3	<.2	6.6	1
61642	1.0	18.2	7.0	169.3	136	16	12	829	3.45	5.1	<5	2	50	.15	.3	.1	87	.34	.206	14	25	.39	219	.07	<2	2.67	.03	.11	<2	<.2	28	<.3	<.2	7.6	3
61643	1.4	10.5	6.7	71.8	152	10	9	1235	2.58	1.4	<5	1	43	.13	.2	.1	64	.32	.112	7	22	.21	197	.07	<2	1.71	.02	.09	<2	<.2	17	<.3	<.2	6.1	<1
61644	1.0	12.3	5.6	80.6	32	12	11	780	3.72	1.4	<5	2	72	.08	<.2	.1	100	.60	.184	10	30	.41	276	.11	<2	2.50	.03	.15	<2	<.2	24	<.3	<.2	7.1	1
61645	1.3	14.5	7.4	199.9	89	17	14	1635	4.26	1.7	<5	2	63	.18	<.2	.2	114	.46	.222	8	35	.39	392	.10	<2	3.76	.02	.12	<2	<.2	16	<.3	<.2	10.1	<1
61646	1.4	14.6	8.5	177.8	105	17	12	1047	4.33	3.5	<5	2	39	.14	<.2	.1	131	.30	.324	10	39	.31	265	.12	<2	2.87	.02	.08	<2	<.2	23	<.3	<.2	8.2	<1
61647	1.1	11.9	5.6	116.8	44	14	9	955	3.22	1.8	<5	2	39	.13	<.2	.1	92	.27	.133	10	28	.28	243	.10	<2	2.17	.02	.11	<2	<.2	15	<.3	<.2	6.5	<1
61648	.9	8.9	5.6	93.1	41	7	6	829	2.39	.5	<5	2	31	.08	<.2	.1	61	.22	.122	8	16	.20	171	.10	2	1.44	.02	.08	<2	<.2	19	<.3	<.2	4.9	1
61649	1 2	12.4	6.8	128.1	64	15	11	1194	4.07	1.2	<5	2	30	.10	<.2	.1	119	.21	.208	10	33	.26	187	.16	<2	2.54	.03	.10	<2	<.2	17	<.3	<.2	8.1	1
61650	.6	14.8	6.4	77.8	<30	14	12	490	4.45	1.9	<5	3	64	.06	<.2	.1	140	.40	.107	13	30	.41	167	.19	<2	2.38	.02	.09	<2	<.2	24	<.3	<.2	8.0	<1
61651	1.1	10.1	8.8	117.0	51	10	6	656	2.39	.9	<5	2	35	.15	.2	.1	57	.28	.208	10	18	.24	176	.10	2	1.92	.02	.13	<2	<.2	29	<.3	<.2	7.0	<1
61652	.8	13.8	6.9	94.9	62	15	13	763	4.44	1.8	<5	3	54	.09	<.2	.1	130	.38	.176	11	31	.38	180	.13	<2	2.73	.02	.11	<2	<.2	18	<.3	<.2	8.3	<1
61700	2.8	14.2	7.2	67.0	103	8	5	352	2.13	2.9	<5	1	29	.10	.3	.1	50	.24	.060	12	16	.22	231	.08	<2	1.23	.02	.09	<2	<.2	19	<.3	<.2	4.3	<1
61701	4.7	20.4	15.5	78.6	183	9	7	649	3.24	14.2	<5	1	36	.10	.6	.1	119	.40	.073	11	25	.28	335	.12	<2	1.18	.04	.12	<2	<.2	25	<.3	<.2	4.5	<1
61702	1.4	17.5	5.6	56.1	119	10	5	340	2.94	5.5	<5	2	44	.09	.5	.1	91	.36	.043	10	21	.32	160	.16	<2	1.49	.04	.09	<2	<.2	15	<.3	<.2	4.5	2
61703	2.1	10.4	15.2	388.2	157	8	6	1490	2.18	2.4	<5	1	42	1.77	.5	.1	53	.40	.089	21	22	.16	463	.05	4	.94	.02	.13	<2	<.2	18	<.3	<.2	3.9	2
61704	2.1	7.7	16.8	190.0	123	5	3	1157	1.53	2.8	<5	<1	50	1.28	.6	<.1	33	.47	.085	25	18	.08	414	.02	<2	.80	.02	.14	<2	<.2	20	<.3	<.2	2.7	5
61705	2.1	8.2	18.5	106.1	130	7	5	787	1.90	6.8	<5	2	42	.56	1.3	.1	48	.36	.062	25	24	.11	510	.05	<2	.86	.02	.17	2	<.2	17	<.3	<.2	3.1	7
61706	5.6	49.1	24.0	1142.1	375	12	18	9484	2.20	3.5	<5	<1	154	9.06	1.1	.2	35	1.45	.344	27	104	.17	3982	.02	<2	1.44	.01	.19	<2	<.2	64	<.3	<.2	4.2	5
61707	5.2	21.8	17.2	261.9	574	12	9	2165	3.30	23.9	<5	1	78	1.38	1.2	.1	104	.62	.165	17	35	.24	788	.07	<2	1.43	.03	.13	<2	<.2	28	<.3	<.2	5.1	323
61708	5.3	30.8	20.3	386.1	624	11	9	1825	3.34	16.5	<5	1	69	2.13	1.3	.1	110	.55	.110	18	27	.18	368	.07	<2	1.18	.02	.12	<2	<.2	26	<.3	<.2	4.9	69
61709	.6	11.9	4.2	54.0	105	9	5	339	2.40	2.2	<5	2	56	.10	.3	.1	76	.58	.069	11	19	.31	98	.11	<2	1.33	.06	.05	<2	<.2	24	<.3	<.2	4.4	2
61710	.7	18.2	5.7	127.0	108	12	7	322	3.20	2.7	<5	1	46	.12	.3	.1	113	.40	.106	8	22	.37	131	.12	<2	2.06	.04	.06	<2	<.2	24	<.3	<.2	6.2	1
61711	1.0	13.8	4.4	63.8	<30	12	6	347	3.14	2.2	<5	2	28	.06	.2	.1	106	.29	.180	8	22	.21	105	.15	<2	1.99	.03	.04	<2	<.2	27	<.3	<.2	6.6	2
61712	.8	7.6	8.8	69.9	<30	10	4	504	2.15	2.2	<5	2	28	.14	.4	<.1	69	.26	.095	15	23	.13	363	.07	<2	1.09	.02	.09	<2	<.2	18	<.3	<.2	4.3	<1
STANDARD	24.6	129.9	101.9	286.8	2005	32	16	1162	4.56	76.8	19	19	52	2.38	7.8	22.8	80	.88	.109	19	64	1.29	282	.16	25	2.79	.06	.68	13	2.8	549	.5	2.2	7.7	48

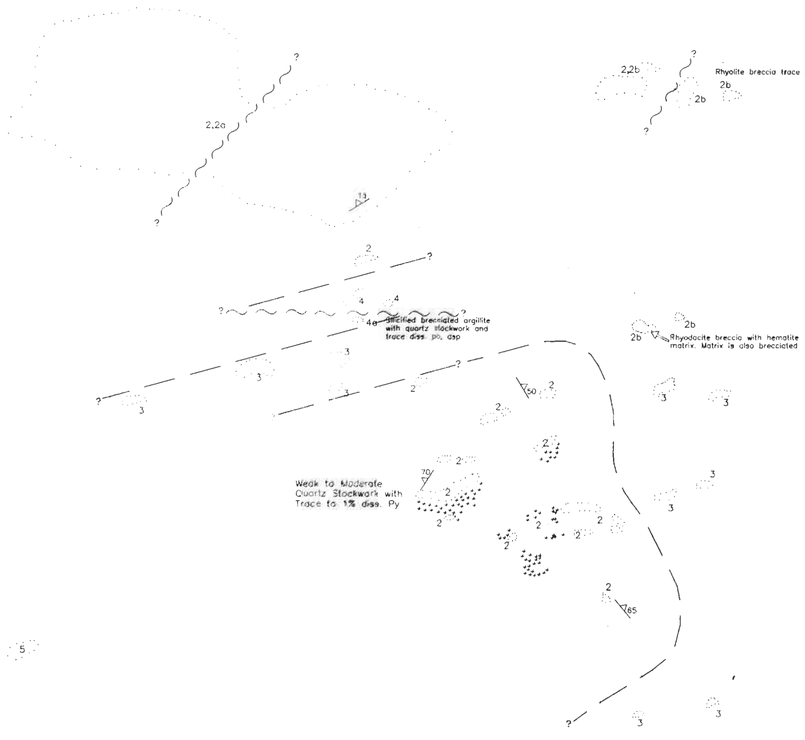
Standard is STANDARD D2/HG-500/AU-S. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

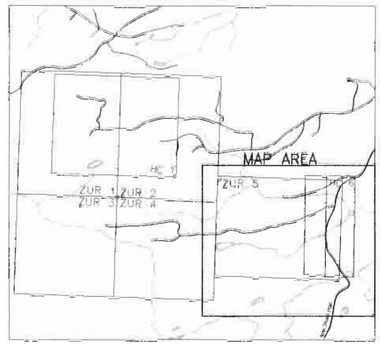
SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
61713	1.6	7.3	16.8	51.3	56	5	4	362	1.95	85.8	<5	1	43	.12	1.8	.1	49	.32	.058	19	30	.12	775	.03	2	.83	.01	.14	<2	<.2	52	<.3	<.2	3.6	1
61714	1.0	12.7	5.9	64.0	<30	10	7	541	3.10	3.1	<5	1	28	.09	.2	.1	105	.31	.202	10	22	.22	117	.11	<2	1.77	.03	.06	<2	<.2	34	<.3	<.2	6.7	1
61715	1.2	9.4	10.9	38.8	105	6	4	424	2.04	2.2	<5	2	30	.10	.4	<.1	65	.27	.030	12	15	.19	183	.07	<2	.93	.02	.07	<2	<.2	28	<.3	<.2	3.6	1
61716	2.0	18.2	19.8	59.7	299	8	5	948	2.12	8.7	<5	<1	59	.17	.8	<.1	47	.47	.045	49	20	.26	265	.03	<2	1.58	.02	.17	<2	<.2	66	<.3	<.2	4.4	1
61717	1.3	5.2	20.5	92.9	96	4	3	570	1.52	3.7	<5	<1	38	.18	.6	<.1	34	.27	.079	28	19	.10	357	.02	<2	.76	.01	.13	<2	<.2	<10	<.3	<.2	2.8	7
61718	3.8	8.3	11.0	236.3	200	5	4	1182	2.23	3.0	<5	1	31	.46	.5	.1	71	.25	.110	13	21	.13	307	.05	3	.88	.01	.12	<2	<.2	29	<.3	<.2	4.3	1
61719	6.1	15.9	82.2	139.0	851	7	6	914	2.44	7.8	<5	1	37	.61	148.8	<.1	70	.33	.057	18	24	.22	293	.07	<2	.91	.02	.12	<2	<.2	23	<.3	<.2	3.8	18
61720	1.0	10.2	7.9	174.1	136	8	5	560	2.40	1.1	<5	1	38	.35	1.2	<.1	57	.36	.147	13	30	.25	493	.08	<2	1.45	.02	.14	<2	<.2	20	<.3	<.2	4.8	1
61721	1.3	13.6	10.9	82.9	151	7	6	560	3.23	3.1	<5	2	32	.11	.6	.1	116	.34	.078	11	19	.24	198	.09	<2	1.28	.04	.12	<2	<.2	<10	<.3	<.2	4.7	75
RE 61721	1.3	13.5	11.8	86.6	119	8	7	588	3.28	3.1	<5	2	34	.11	.4	.1	118	.36	.083	11	17	.26	217	.09	<2	1.34	.04	.12	<2	<.2	19	<.3	<.2	4.8	7
61722	2.4	17.3	18.3	265.0	215	10	9	2723	2.87	4.1	<5	1	69	.97	.3	.1	75	.66	.223	15	48	.27	1322	.07	2	1.50	.03	.16	<2	<.2	13	<.3	<.2	5.4	2
61723	3.2	16.4	16.1	85.0	234	8	6	654	2.76	10.4	<5	1	33	.22	.6	.2	65	.33	.163	14	30	.26	528	.08	<2	1.30	.02	.14	<2	<.2	21	<.3	<.2	4.8	1
61724	2.8	10.7	11.4	131.5	275	7	6	1132	2.78	4.3	<5	1	31	.36	.4	.1	100	.28	.110	11	25	.18	367	.08	2	1.03	.02	.10	<2	<.2	14	<.3	<.2	4.7	21
61725	1.5	11.2	8.5	158.3	196	7	8	790	2.47	1.6	<5	1	38	.36	7.2	<.1	80	.37	.075	10	17	.24	199	.07	7	1.16	.03	.12	<2	<.2	31	<.3	<.2	4.9	6
61726	1.6	10.1	9.6	53.7	<30	7	6	397	2.53	5.6	<5	2	28	.05	.4	.1	78	.29	.055	13	17	.25	113	.07	4	1.10	.02	.08	<2	<.2	26	<.3	<.2	4.2	2
61727	.7	8.6	6.8	40.2	64	6	4	278	2.10	1.0	<5	1	28	.05	.5	<.1	59	.22	.029	12	17	.18	86	.08	2	.86	.02	.08	<2	<.2	15	<.3	<.2	4.0	13
61728	1.2	5.6	77.1	47.1	104	<1	2	461	1.50	9.0	<5	1	29	.21	3022.9	.1	47	.22	.019	15	18	.06	298	.05	2	.42	.01	.15	<2	<.2	57	<.3	.4	2.6	5
61729	1.2	4.9	34.0	114.0	75	3	3	638	1.38	4.8	<5	2	61	.22	7.2	<.1	32	.42	.085	23	25	.08	747	.02	2	.78	.01	.16	<2	<.2	16	<.3	<.2	2.5	2
61730	.6	6.1	17.0	66.3	46	4	3	616	1.87	1.1	<5	2	34	.16	2.4	<.1	51	.28	.092	19	27	.10	713	.04	3	1.00	.02	.13	<2	<.2	21	<.3	<.2	3.3	3
61731	1.3	6.9	12.3	84.4	147	4	4	1579	1.52	.6	<5	<1	64	.29	.5	<.1	48	.59	.053	17	29	.09	782	.03	2	.66	.02	.17	<2	<.2	37	<.3	<.2	2.6	2
61732	.9	7.2	15.0	77.3	53	5	4	261	2.03	3.2	<5	1	28	.12	4.3	<.1	56	.23	.118	18	21	.13	282	.03	<2	1.12	.02	.12	<2	<.2	13	<.3	<.2	4.1	1
61733	1.2	17.0	7.6	242.8	121	16	12	969	3.68	2.3	<5	1	49	.42	2.1	.1	101	.49	.299	9	46	.46	354	.07	<2	2.85	.02	.11	<2	<.2	24	<.3	<.2	9.0	2
61734	1.0	14.2	13.8	192.4	128	11	9	1234	3.42	7.4	<5	<1	65	.26	1.5	<.1	96	.47	.177	11	28	.28	183	.10	<2	1.79	.03	.10	<2	<.2	22	<.3	<.2	6.6	3
61735	1.0	14.0	5.7	252.6	119	9	8	599	2.83	3.3	<5	1	61	.22	2.2	.1	81	.41	.177	9	24	.26	165	.09	<2	1.54	.03	.09	<2	<.2	29	<.3	<.2	5.0	4
61736	4.0	13.0	7.6	140.5	200	11	12	636	3.23	12.8	<5	1	33	.25	1.4	.1	103	.32	.248	8	23	.29	144	.09	2	1.76	.03	.08	<2	<.2	20	<.3	<.2	7.8	9
61737	1.5	17.1	8.0	240.7	91	11	11	541	3.59	4.4	<5	1	67	.27	.5	.1	103	.71	.152	9	26	.35	135	.07	3	1.82	.03	.21	<2	<.2	11	<.3	<.2	7.0	2
61738	3.2	20.2	10.5	328.3	139	10	12	1678	3.12	14.3	<5	1	52	.58	1.9	.1	77	.46	.212	8	30	.32	309	.05	<2	1.83	.02	.15	<2	<.2	40	<.3	<.2	7.2	1
61739	2.0	14.4	7.7	163.6	265	15	13	882	3.81	5.3	<5	1	32	.28	.4	.1	105	.25	.308	8	30	.38	174	.06	<2	2.96	.01	.13	<2	<.2	35	<.3	<.2	9.3	4
61740	.9	6.3	13.3	60.1	48	5	4	265	2.09	3.0	<5	1	33	.08	.2	<.1	63	.29	.123	14	14	.15	166	.04	3	1.35	.02	.16	<2	<.2	20	<.3	<.2	4.9	4
61741	1.0	9.3	9.0	139.5	164	8	5	762	2.47	1.6	<5	2	45	.25	.2	.1	69	.31	.240	12	25	.18	285	.07	<2	1.50	.02	.11	<2	<.2	19	<.3	<.2	5.3	144
61742	1.0	7.6	12.6	56.3	163	4	3	515	1.74	2.1	<5	1	31	.16	.3	<.1	48	.24	.073	16	18	.10	282	.04	4	.85	.01	.12	<2	<.2	15	<.3	<.2	3.5	20
61743	1.0	8.8	8.9	87.4	104	7	5	380	2.25	1.9	<5	1	44	.09	<.2	<.1	56	.27	.244	12	15	.16	246	.06	2	1.51	.02	.10	<2	<.2	15	<.3	<.2	5.1	43
61744	1.1	10.7	8.6	59.2	158	9	6	255	2.77	3.1	<5	2	38	.07	.3	.1	79	.30	.223	12	19	.19	212	.05	<2	1.87	.02	.08	<2	<.2	26	<.3	<.2	5.8	9
61745	1.0	10.2	6.6	58.6	49	9	5	356	2.68	1.9	<5	2	28	.08	.2	.1	85	.25	.054	11	19	.22	125	.09	<2	1.18	.03	.10	<2	<.2	16	<.3	<.2	4.4	4
STANDARD	24.4	129.9	102.6	277.5	1869	31	15	1123	4.63	70.6	18	18	52	2.31	7.5	21.9	79	.87	.107	19	65	1.26	281	.16	26	2.73	.06	.73	13	2.5	494	.4	1.9	7.7	53

Standard is STANDARD D2/HG-500/AU-S. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U 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	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
61746	.9	7.9	8.9	61.7	97	6	4	436	2.23	1.1	<5	2	33	.09	.4	.1	67	.31	.113	12	14	.16	145	.07	<2	1.06	.02	.09	<2	<.2	12	<.3	<.2	3.4	1
61747	1.2	5.8	13.6	117.3	121	3	4	920	1.79	.7	<5	1	20	.18	.3	.1	50	.20	.102	16	12	.08	173	.04	<2	.92	.01	.11	<2	<.2	<10	<.3	<.2	3.2	10
61750	1.5	12.1	7.5	132.7	63	13	13	778	4.40	3.3	<5	3	38	.11	.3	.1	132	.37	.304	10	38	.29	250	.10	2	2.20	.02	.10	<2	<.2	16	<.3	<.2	6.3	<1
61756	.8	8.7	6.5	129.4	<30	8	7	778	2.31	1.2	<5	1	31	.10	.2	.1	68	.27	.151	11	14	.19	188	.05	<2	1.79	.02	.06	<2	<.2	<10	<.3	<.2	4.6	<1
RE 61756	.7	8.6	6.4	130.0	38	8	7	798	2.37	1.2	<5	2	31	.09	.3	.1	68	.27	.157	11	15	.20	194	.04	<2	1.81	.02	.08	<2	<.2	10	<.3	<.2	4.6	6

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.





LEGEND

MIOCENE

ENDAKO GROUP

5 — Basalt and andesite

CRETACEOUS

SKEENA GROUP

4 — Palylithic Conglomerate
4a: Argillite

KASALKA GROUP

3 — Lapilliistone, crystal tuff, tuff

2 — Pink to maroon rhyolite and rhyodacite locally porphyritic 2a: flow banded rhyolite
2b: rhyolite breccia

MIDDLE JURASSIC

HAZELTON GROUP

1 — Maroon to grey fine grained parphyritic andesite

SYMBOLS

Outcrop

Geological Contact

Fault (inferred)

50 — Flow banding (inclined)

Float

Creek

Pond

Contour interval 100 feet

Roads/Trails

0 100 200 300 400
SCALE IN METRES

To Accompany 1996 Assessment Report on the Holy Cross Gold Prospect, November 22, 1996.

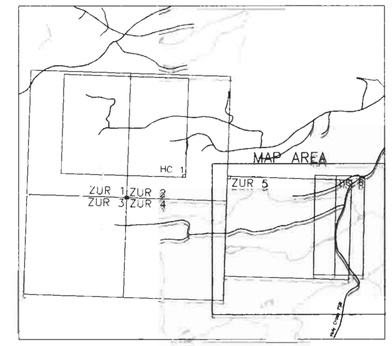
PHELPS DODGE CORP. OF CANADA LIMITED

PROJECT NO.: 256 (HOLY CROSS PROPERTY) — OMINECA MINING DIVISION

GEOLOGY

SCALE	DATE	BY	NTS NO.	FIGURE
1:5000	NOV/96	CWP	93 F/15	4

FOX GEOLOGICAL SERVICES INC.



LEGEND

MIOCENE

ENDAKO GROUP

5 — Basalt and andesite

CRETACEOUS

SKEENA GROUP

4 — Polylithic Conglomerate
4a: Argillite

KASALKA GROUP

3 — Lapillistone, crystal tuff, tuff

2 — Pink to maroon rhyolite and rhyodacite locally porphyritic 2a: flow banded rhyolite
2b: rhyolite breccia

MIDDLE JURASSIC

HAZELTON GROUP

1 — Maroon to grey fine grained porphyritic andesite

SYMBOLS

60468(146)137(33.4) — Arsenic (ppm)
Silver (ppb)
Gold (ppb)
Rock Sample Number

Talus
Float
Outcrop
Subcrop

Geological Contact

Fault (inferred)

Creek

Pond

Contour Interval 100 feet

Roads/Trails

0 100 200 300 400
SCALE IN METRES

To Accompany 1996 Assessment Report on the Holy Cross Gold Prospect, November 22, 1996.

PHELPS DODGE CORP. OF CANADA LIMITED

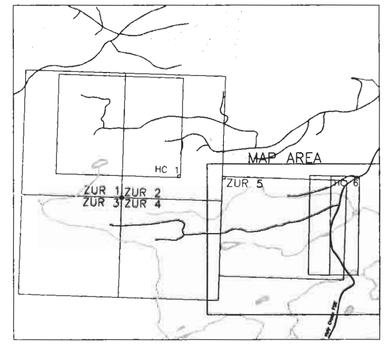
PROJECT NO.: 256 (HOLY CROSS PROPERTY) — OMINECA MINING DIVISION

ROCK GEOCHEMICAL RESULTS

GOLD(ppb), SILVER(ppb), ARSENIC(ppm)

SCALE	DATE	BY	NTS NO.	FIGURE
1:5000	NOV/96	CWP	93 F/15	5

FOX GEOLOGICAL SERVICES INC.



LEGEND

L 150E Grid Line Number

81N

61652 TL 80N Tieline

61651 Soil Sample Site and Sample Number

61650

SYMBOLS

Creek

Pond

Contour interval 100 feet

Roads/Trails

0 100 200 300 400
SCALE IN METRES

To Accompany 1998 Assessment Report on the Holy Cross Gold Prospect, November 22, 1998.

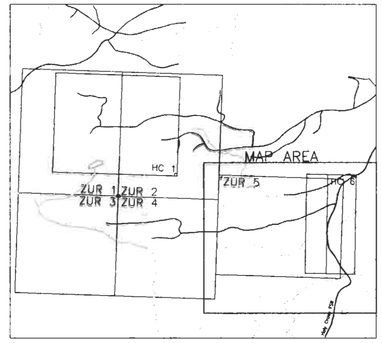
PHELPS DODGE CORP. OF CANADA LIMITED

PROJECT NO.: 256 (HOLY CROSS PROPERTY) OMINECA MINING DIVISION

SOIL SAMPLE NUMBERS

SCALE	DATE	BY	NTS NO.	FIGURE
1:5000	NOV/96	CWP	93 F/15	6

FOX GEOLOGICAL SERVICES INC.



LEGEND

MIOCENE

ENDAKO GROUP

5 — Basalt and andesite

CRETACEOUS

SKEENA GROUP

4 — Polylithic Conglomerate
4a: Argillite

KASALKA GROUP

3 — Lapillistone, crystal tuff, tuff

2 — Pink to maroon rhyolite and rhyodacite locally porphyritic 2a: flow banded rhyolite
2b: rhyolite breccia

MIDDLE JURASSIC

HAZELTON GROUP

1 — Maroon to grey fine grained porphyritic andesite

SYMBOLS

- Grid line
- Baseline
- Gold value ppb
- Soil sample site
- Gold value contours in ppb (60, 30, 15)
- Geological Contact
- Fault (inferred)
- Creek
- Pond
- Contour interval 100 feet
- Roads/Trails

0 100 200 300 400
SCALE IN METRES

To Accompany 1996 Assessment Report on the Holy Cross Gold Prospect, November 22, 1996.

PHELPS DODGE CORP. OF CANADA LIMITED

PROJECT NO.: 256 (HOLY CROSS PROPERTY) OMINECA MINING DIVISION

SOIL GEOCHEMICAL RESULTS
GOLD ppb

SCALE	DATE	BY	NTS NO.	FIGURE
1:5000	NOV/96	CWP	93 F/15	7

FOX GEOLOGICAL SERVICES INC.