DIAMOND DRILLING REPORT

on the

LAIDMAN PROPERTY
(CR 31-38, LD 1-11 and Laid 1-6 Claims)

Omineca Mining Division
British Columbia

NTS 93F/3
53° 10' North Latitude
125° 13' West Longitude

by

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

FOX GEOLOGICAL SERVICES INC.
1409 - 409 Granville Street
Vancouver, BC V6C 1T8

Work Paid for by
PHELPS DODGE CORPORATION OF CANADA, LIMITED

January 23, 1998

TABLE OF CONTENTS

List of Tables

List of Figures

Appendices

SUMMARY

A diamond drill program was conducted on the Laidman gold prospect during August, 1998. The property is situated in the plateau region of central British Columbia, 155 kilometres southwest of Vanderhoof. The prospect lies in the Nechako Arch, part of the Intermontane accretionary belt of British Columbia, close to the easterly trending Top Lake Lineament. The western part of the property is underlain by Hazelton Group volcanic and sedimentary rocks of Jurassic age and the remainder by granitic rocks of the Cretaceous age Laidman Lake batholith. Extensive argillic alteration and quartz stockwork zones were discovered in 1996 along several logging roads and clear-cut blocks leading to the discovery of a zone of quartz veinlets bearing up to 19.6 gpt gold from bedrock and rubble crop exposures (Discovery zone). Further work in 1996 identified the 110 zone, a partially exposed quartz breccia zone which has returned up to 5640 ppb gold in soils and 1,440 ppb gold in rocks. A less well-defined zone of float and quartz rubble bearing up to 8 gpt gold is located 200 metres west of the Laid 1 corner post.

The 1997 diamond drill program consisted of five holes, totaling 1004.5 metres, drilled between August 10 and 26. Drill hole 97-1 was drilled to test mineralization in the original Discovery zone, holes 97-2 through 97-5 tested the 110 zone. Drilling in both zones intersected granite and diorite with lesser monzodiorite and several dacitic to rhyolitic dykes. These rocks are argillic and chlorite altered with local sericitization and silicification. Pyrite is common, occurring as disseminations, clots, fracture fillings and veinlets. Rare traces of chalcopyrite and arsenopyrite were also observed. Gold content was generally low, with only narrow intervals exceeding 100 ppb (up to 192 ppb). The best results were from DDH 97-5 where a heavily silicified interval between two dacite dykes averaged 643 ppb gold over 4.1-metres and DDH 97-4, which returned 18-metres of 116.7 ppb gold.

Suite 1409 - 409 Granville Street. Vancouver, B.C. V6C 1T8
Telephone (604) 669-2954 Fax (604) 681-3920

INTRODUCTION

This report describes a diamond drill program conducted on the Laidman gold prospect between August 10 and 26, 1997. Five holes were drilled for a total of 1004.5 metres. Method and results of this program are discussed herein.

LOCATION, ACCESS AND PHYSIOGRAPHY

The Laidman property is situated on the south slopes of the Fawnie Range within the Nechako Plateau of British Columbia. Topography is gentle to moderate with elevations ranging from 1,000 to 1,500 metres. The property is located on NTS map sheet 93 F/3 (Figure 1), 155 road kilometres southwest of Vanderhoof.

Access to the claims from Vanderhoof is via the Kluskus-Ootsa Forest Service Road for approximately 140 kilometres and then southwest along the Kluskus-Malaput Forest Service road for 15 kilometres. Several short spur roads provide local access to the property. Forest cover is typical of the region, consisting of spruce and pine. Approximately half of the property has been logged by clear cut methods.

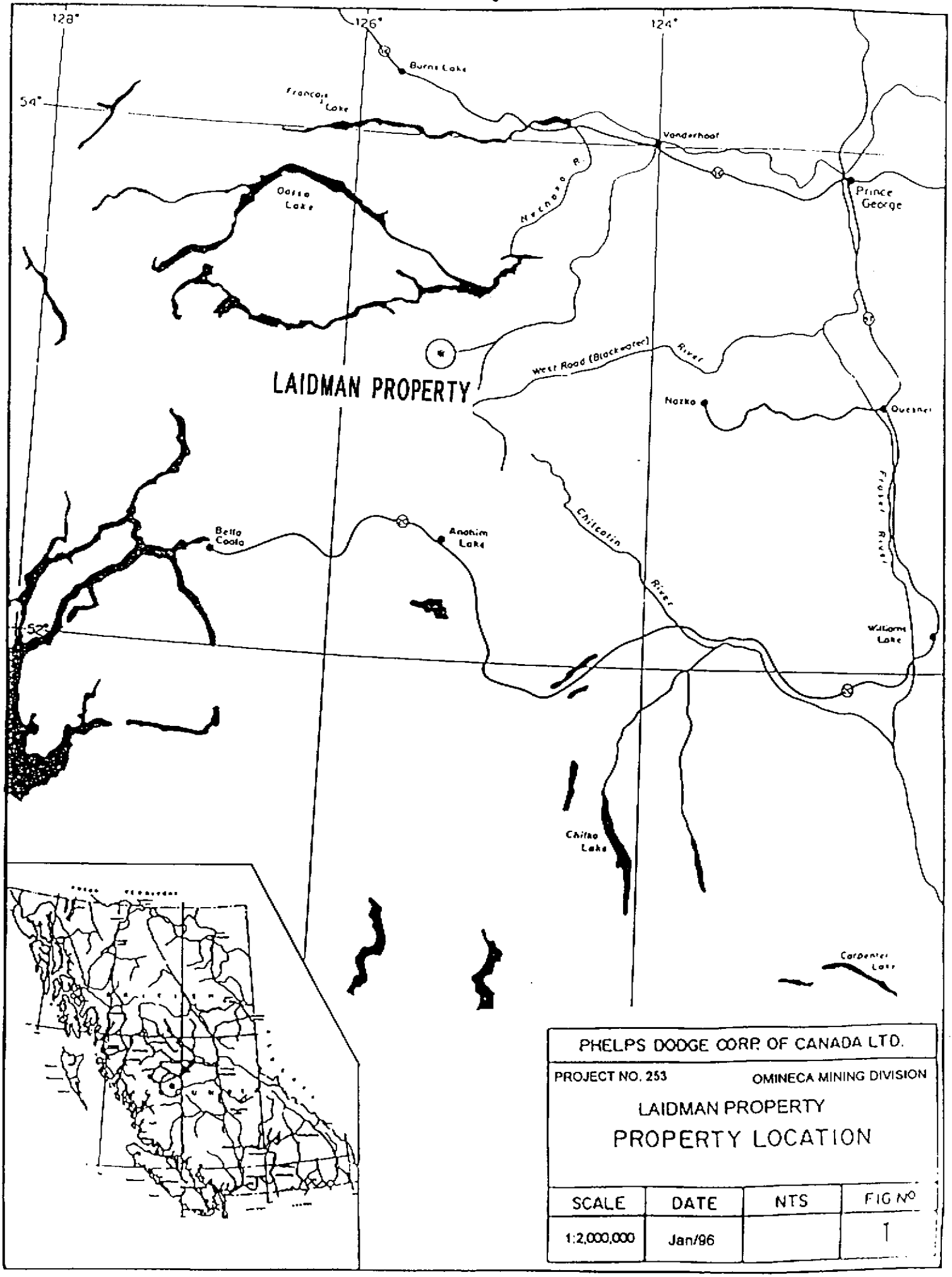
PROPERTY STATUS

The Laidman property consists of 14 two-post claims and 13 four-post claims, located in the Omineca Mining Division and shown on B.C. Ministry of Employment and Investment claim maps 93F/3E and 93F/3W (Figure 2). The claim block contains a total of 231 units, however, the effective claim area is somewhat less as the LD 3, 6 and 7 claims, staked during 1996 to cover possible gaps in the property, largely overstake pre-existing claims. Pertinent claim data is tabulated in Table 1 below. Expiry dates shown assume that the current work is accepted for assessment purposes.

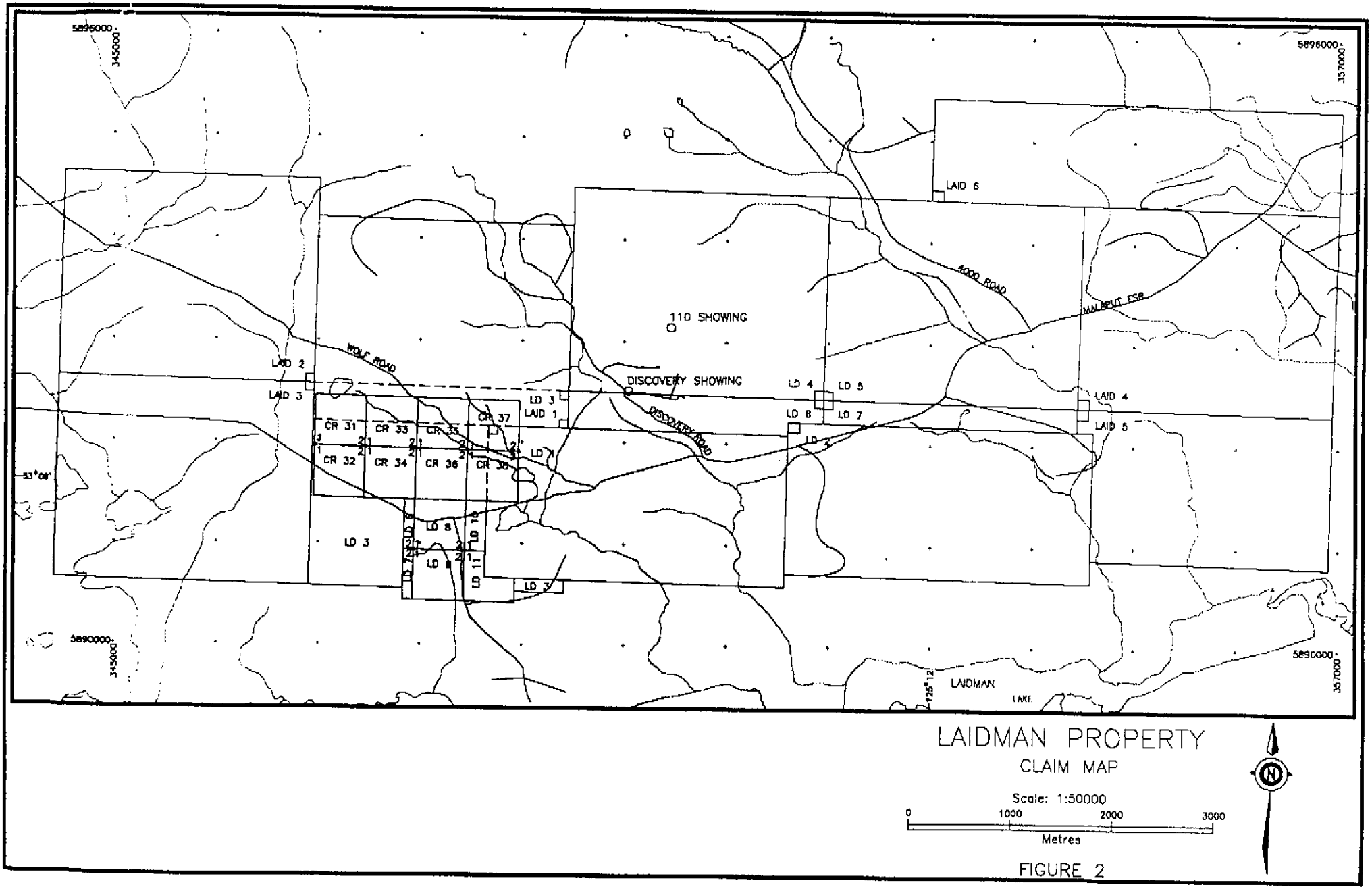
Suite 1409 - 409 Granville Street, Vancouver, B.C. V6C 1T8
Telephone (604) 669-2954 Fax (604) 681-3920

Table I: CLAIM DATA			
Name	Tenure No.	Units	Expiry
CR 31	326633	1	June 3, 2001
CR 32	326634	1	June 3, 2001
CR 33	326635	1	June 3, 2001
CR 34	326636	1	June 3, 2001
CR 35	326637	1	June 3, 2001
CR 36	326638	1	June 3, 2001
CR 37	326639	1	June 3, 2001
CR 38	326640	1	June 3, 2001
LD-1	331898	18	October 18, 2000
LD-2	331899	18	October 20, 2000
LD 3	348120	20	June 30, 1999
LD-4	331900	20	October 19, 2000
LD-5	331901	20	October 19, 2000
LD-6	331914	1	October 20, 2000
LD-6	348114	5	June 30, 1999
LD-7	331915	1	October 20, 2000
LD-7	348115	5	June 30, 1999
LD-8	331916	1	October 20, 2000
LD-9	331917	1	October 20, 2000
LD-10	331918	1	October 20, 2000
LD-11	331919	1	October 20, 2000
Laid 1	326059	20	June 3, 1999
Laid 2	348118	20	June 30, 1999
Laid 3	348119	20	June 30, 1999
Laid 4	348116	20	June 30, 1999
Laid 5	348117	15	June 30, 1999
Laid 6	348121	16	June 28, 1999

Suite 1409 - 409 Granville Street, Vancouver, B.C. V6C 1T8
Telephone (604) 669-2954 Fax (604) 681-3920



PHELPS DODGE CORP. OF CANADA LTD.			
PROJECT NO. 253	OMINECA MINING DIVISION		
LAIDMAN PROPERTY PROPERTY LOCATION			
SCALE	DATE	NTS	FIG Nº
1:2,000,000	Jan/96		1



LAIDMAN PROPERTY

CLAIM MAP

Scale: 1:50000

0 1000 2000 3000

Metres

FIGURE 2

PERMITS

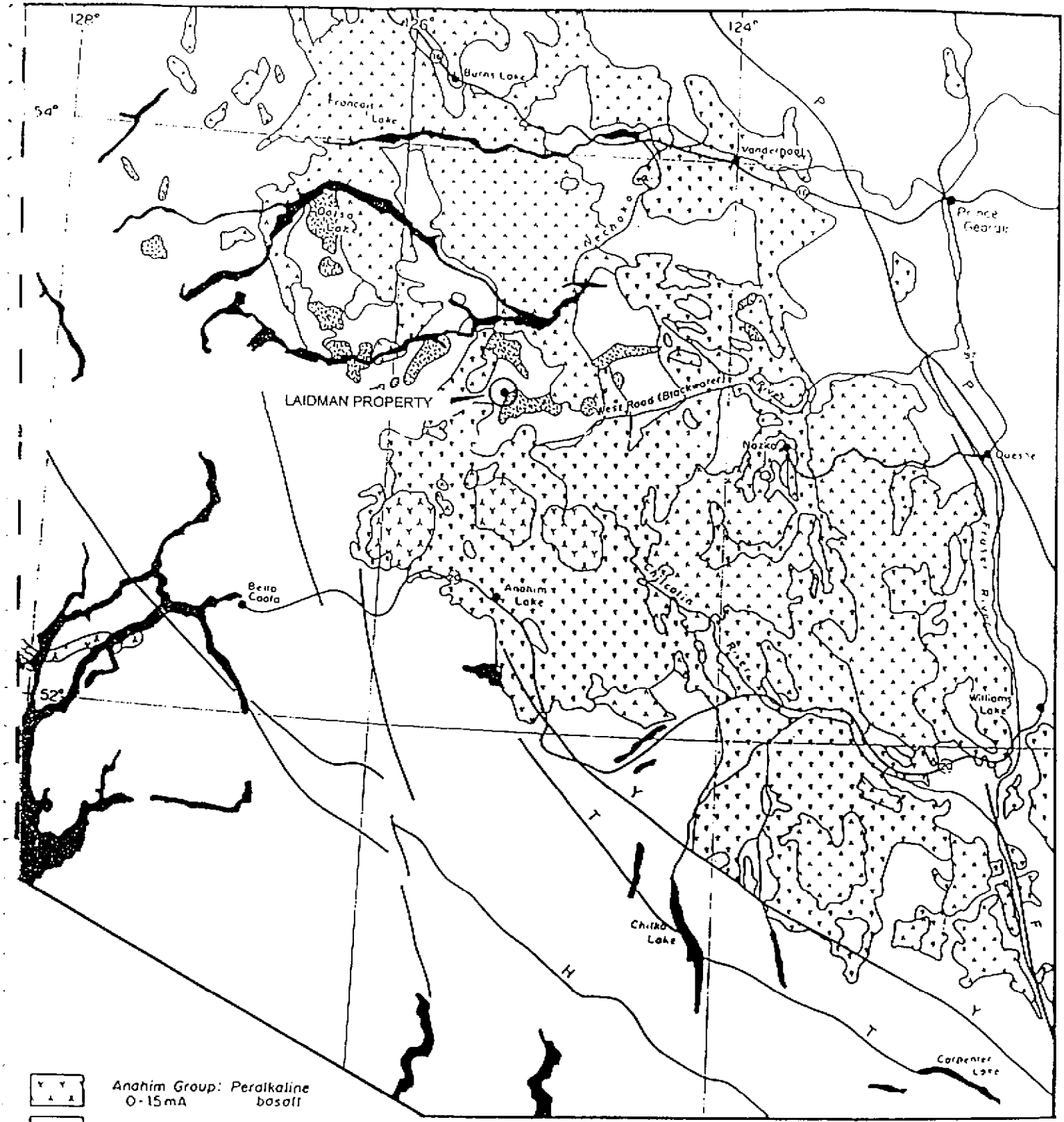
All work conducted on the Laidman Property during 1997 was performed under B.C. Ministry of Energy, Mines and Petroleum Resources Annual Work Approval Number PRG-1997-1000843-8579.

HISTORY

Most of the CR and LD claims were staked by Cogema Resources in 1994, when Phelps Dodge Corporation of Canada staked the Laid 1 claim. There is no recorded history of work prior to this time, however, claim posts dating from the 1970's have been found within the property boundaries. During 1994, Cogema and Phelps Dodge conducted geological mapping, prospecting, rock and reconnaissance style till/soil sampling on their respective claims. Cogema prospectors discovered mineralized rocks of the Laidman batholith on a logging road on the LD 4 claim and a zone of skarn mineralization on the western CR claims. Phelps Dodge acquired the Cogema claim block in 1995 and performed extensive mapping, prospecting, rock sampling and trenching over two seasons, identifying the Discovery and "110" mineralized zones.

REGIONAL GEOLOGY

The Laidman gold prospect lies in the Intermontane Belt of British Columbia, a collage of accretionary plates of the Stikinia, Cache Creek and Quesnellia Terranes. These terranes are composed of late Paleozoic to Mesozoic marine volcanic and sedimentary rocks and Mesozoic to late Tertiary marine and non-marine sedimentary and volcanic rocks. The Yalakom and Fraser Fault systems bound the plateau to the southwest and northeast (Figure 3). The claims lie in the Nechako Arch, which consists of several volcanic-stratigraphic groups ranging in age from Jurassic to Miocene. Pre-Tertiary rocks of the Nechako Arch include lower Cretaceous Skeena Group, an assemblage of easterly-derived clastic rocks, the middle Jurassic Hazelton Group, which is composed of arc-type calc-alkaline volcanic and volcaniclastic rocks, and granitic plutons of Cretaceous age. The plutons include the Laidman Lake body, which hosts the Laidman gold prospect, and the Capoose batholith to the north, which is associated with the Capoose Lake silver-gold prospect (28 million tonnes grading 36 gpt silver and 0.9 gpt gold). Tertiary and younger rocks comprise the Ootsa Lake Group, which consists of rhyolitic to dacitic tuff, flows and breccias, and Miocene Chilcotin group vesicular basalt flows.



Anahim Group: Peralkaline basalt — 0-15 mA

Chilcotin Group: Backarc alkaline/tholeiite basalt — 2-10 mA

Nanika, Quanchus Intrusives: Quartz monzonite, granite — 60 mA

Ootsa Group: Calc-alkaline felsic volcanics — 35-70 mA

Pre-Tertiary rocks and Coast Intrusions

Fault — H - Harrison; T - Tchorkazan; Y - Yalakom; F - Fraser; P - Pinchi

PHELPS DODGE CORP. OF CANADA LTD.

PROJECT NO. 253 — OMINECA MINING DIVISION

LAIDMAN PROPERTY

REGIONAL GEOLOGY

Fox Geological Consultants Ltd

SCALE	DATE	NTS	FIG Nº
1:200,000	SEPT/85		3

PROPERTY GEOLOGY

The Laidman prospect is underlain largely by the multiphase Laidman Lake batholith of late Cretaceous age which has intruded southwest-dipping sediments and volcaniclastic rocks of the Hazelton Group. The claims lie along the Top Lake lineament which has formed a series of south-facing scarps believed to represent down faulted blocks within the Laidman batholith. Intrusive rocks consist of aplite, granite, quartz monzonite, monzodiorite and diorite. Detailed mapping in the 110 Zone (Figure 5) indicates that the bulk of the batholith consists of two phases of granite and a single phase of quartz monzonite. Granites may contain quartz phenocrysts or eutectic growth textures which are also present in quartz monzonite. The granite is cut by two generations of aplite dykes, a massive and a porphyritic phase bearing quartz phenocrysts. These rocks are, in turn, intruded by medium grained diorite with local fine-grained border phases, then by monzodiorite. The fine grained monzodiorite contains local breccia zones with clasts of all earlier phases.

Extensive argillic alteration and quartz vein stockworks have developed in east-northeast trending zones, several of which are exposed just north of the drill area. Rocks within these zones are foliated, brecciated and contain knots of quartz, chalcedony and clay-altered feldspar. Quartz veins are white to translucent, massive to vuggy and contain disseminated aggregates of sulphide minerals.

MINERALIZATION

Mineralized rocks of the Laidman batholith are poorly exposed in small road cuts, rubble crop and float blocks over an area as much as 300 metres wide (Figure 4). Both the Discovery and 110 zones consist of fine-grained, greyish green, foliated, sheared and brecciated quartz monzonite and granite containing east-striking quartz and chalcedony veins and quartz breccia. Where exposed, the veins form parallel sets of 2 centimeter veinlets consisting of fine-grained quartz and sulphides. Sulphide mineralization consists of fine-grained disseminated pyrite, arsenopyrite, galena, sphalerite and bismuthinite. Rusty weathering granitic rocks, bearing disseminated arsenopyrite and chalcedony veins, lie at the northeast corner of the Laid 1 claim and rusty weathering hornfels in the central part of the claim also contain easterly-trending quartz and chalcedony veinlets in a small body or off-shoot of the Laidman batholith. A third zone of float and bedrock rubble sampled last year lies just west of the legal claim post for the Laid 1 claim.

1996 WORK PROGRAM

The 1997 work program was conducted between August 10 and 26, 1997. Five holes of NQ sized core were drilled from five drill sites by L.D.S. Diamond Drilling Ltd. of Kamloops, B.C. Drill holes were each drilled to just over 200 metres depth, for a cumulative total of 1004.5 metres. Drill hole 97-1 was drilled to test mineralization in the original Discovery zone, holes 97-2 through 97-5 tested the 110 zone.

Drill core was logged on site, split and sampled, usually in 2-metre intervals. Samples were identified with unique numbers and sent to Acme Analytical Laboratories Ltd. of Vancouver, B.C. where they were evaluated by Ultratrace ICP and geochemical gold analysis. Samples from holes 97-1, 97-2, 97-3 and fourteen intervals in hole 97-5 were analyzed individually while samples from holes 97-4 and most of 97-5 were composited by the lab into 6-metre samples for analysis. Drill core was bundled and stored on the property. Drill hole locations and other pertinent data are tabulated below. Drill sites are plotted on Figure 4.

Table 2: DRILL HOLE DATA

HOLE NUMBER	LOCATION		SURVEY DATA		TOTAL LENGTH (metres)
	Grid East	Grid North	Azimuth	Dip	
97-1	102+00	99+75	360	-55	203.3
97-2	110+00	108+10	356	-55	200.3
97-3	100+50	110+00	003	-50	200.3
97-4	112+10	107+25	350	-55	200.3
97-5	111+00	107+70	360	-55	200.3

RESULTS

Drill hole 97-1 (Figure 6a), which tested the Discovery zone, intersected granite and diorite, both containing traces of disseminated and fracture controlled pyrite throughout. The rocks display weak to moderate argillic alteration with local chloritization and sericitization. Gold content was low, generally less than 20 ppb, ranging up to 174 ppb over 2 metres.

Drill hole 97-2 (Figure 6b) was collared in polylithic monzodiorite breccia with granite and minor diorite, rhyolite and dacite fragments. This unit is pyritic and chloritized. Below 85.7 metres, altered granite alternates with minor intervals of feldspar porphyry dacite. Gold concentrations are slightly elevated above background in this hole, ranging up to 192 ppb over 2 metres from a narrow rhyolite dyke with disseminated pyrite and arsenopyrite.

Hole 97-3 (Figure 6b) intersected predominantly sericitic granite with up to 5% disseminated and poddy pyrite. Below 116 metres, the granite contains dacitic inclusions and dacite dykes with granitic fragments. Pyrite content is less than 1% and gold is generally very low, increasing a bit toward the end of the hole to average 97 ppb over 6.3 metres.

Drill hole 97-4 (Figure 6c) intersected diorite to monzodiorite with a 15-metre section of granite and 35 metres of granite breccia. The diorite is chlorite and sericitic, with disseminated and veinlet pyrite. From 106 to 164.8 metres, the diorite is heavily cut by calcite-pyrite +/- chalcopyrite veins (5-10 veins per metre) and is locally brecciated. This hole returned sporadically elevated gold up to 127 ppb. An 18-metre intersection of altered diorite averaged 116.7 ppb gold (from 108 to 126 metres depth).

Hole 97-5 (Figure 6d) cut mildly sericitic granite and minor diorite. A heavily silicified interval between two dacite dykes averaged 643 ppb gold over 4.1-metres (from 137.9 to 142 metres). All other intervals returned less than 100 ppb gold.

CONCLUSIONS

The 1997 drill program intersected generally low gold tenors in all drill holes with a best intersection of 643 ppb gold over 4.1 metres in DDH 97-5.

DISBURSEMENTS

Expenditures for the 1997 work program on the Laidman property totals $55,370.00, as tabulated below.

L.D.S. Diamond Drilling	1004 metres @ $55.00/metre	55,220.00
	Mobilization and Demobilization	2,000.00
	2 hours Caterpillar @ $75/hour	150.00
Total		**$ 57,370.00**

Prepared by:

P.E. Fox, Ph.D., P. Eng.
January 23, 1998

REPORT DISTRIBUTION:

B.C. Mining Recorder	2
Phelps Dodge, Toronto Land File	1
Phelps Dodge, Vancouver	1
Cogema Resources, Saskatchewan	1

Suite 1409 - 409 Granville Street, Vancouver, B.C. V6C 1T8
Telephone (604) 669-2954 Fax (604) 681-3920

BIBLIOGRAPHY

Diakow, L.J. and Webster, I.C.L. (1994)
"Geology of the Fawnie Creek Map Area"; in Geological Fieldwork 1993, Paper 1994-1, British Columbia Geological Survey Branch, 1993.

Diakow, L.J., Webster, I., Levson, V., Giles, T. (1994)
"Bedrock and Surficial Geology of the Fawnie Creek Map Area"; Geological Survey Branch Open File 1994-2.

Fox, P. E., (1995)
"Project Report on the Laidman Gold Prospect"; Internal report for Phelps Dodge Corporation of Canada, Limited dated February 22, 1995.

Fox, P. E., (1995)
"Geochemical Assessment Report on the Laid 1 Claim"; Assessment Report by Fox Geological for Phelps Dodge Corporation of Canada, Limited dated January 20, 1995.

Fox, P. E., (1996)
"Geological Report on the Laid 1 Claim"; Assessment Report by Fox Geological for Phelps Dodge Corporation of Canada, Limited dated January 3, 1996.

Fox, P. E., (1996)
"Project Report on the Laidman Gold Prospect"; Internal report for Phelps Dodge Corporation of Canada, Limited dated December 25, 1996.

Payne, C. W., (1996)
"Geological and Soil Geochemical Report"; Assessment Report by Fox Geological for Phelps Dodge Corporation of Canada, Limited dated January 16, 1996.

Schimann, K. (1995)
"Geological and Geochemical Survey, Laidman Property (Nechako Project) 1994"; Assessment Report by Cogema Resources Inc., January 1995.

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.
January 23, 1998

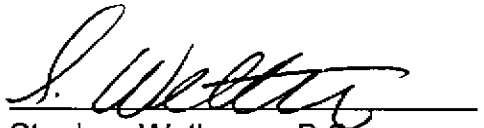
CERTIFICATE

I, Stephen Wetherup, of the City of Winnipeg, Manitoba, do hereby certify that:

1. I am temporarily a consulting geologist working out of 1409-409 Granville Street, Vancouver, B.C., 669-5736, while completing a Master's Thesis at the University of Alberta in the Department of Geology.

2. I graduated (with Distinction) from the University of Manitoba in 1995 with a Bachelor of Science degree in geology.

3. I have worked summers with the Geological Survey of Canada since 1994.



Stephen Wetherup, B.Sc.
Winnipeg, Manitoba.
September 23, 1997

APPENDIX I

Diamond Drill Logs

Suite 1409 - 409 Granville Street, Vancouver, B.C. V6C 1T8
Telephone (604) 669-2954 Fax (604) 681-3920

PHELPS DODGE CORPORATION OF CANADA, LIMITED

PROPERTY: Laidman
PROJECT No: 253
Location: L102E, 99+75N
Azimuth: 360
Dip: -55
Start Date: August 11, 1997
Complete Date: August 13, 1997

Length(m): 203.3
Core Size: NQ

Dip Tests: -53

DRILL HOLE NO: 97-1
Elevation:
Claim No:
Section:

Date Logged: August 13, 1997
Logged by: Greg Kulla and Sean Boyd

Purpose: Test discovery showing

From (metres)	To (metres)	Description	Sample No	Colour	To (metres)	Length (metres)	Comments	Chl	Py	Clay	Au (ppb)
0	3.7	Casing									
3.7	38.2	Granite:	518001	pink	5.0	1.7		2 tr		1	1
		Pink to pale green, medium grained, sub- to anhedral equigranular quartz and feldspar. Trace to	518002	pink	7.0	2.0		2 tr		1	1
		1% chlorite probably replacing biotite (<1mm) is commonly enclosed in plagioclase. Rare hematite	518003	pink	9.0	2.0	8.5-8.8 rubble	2 tr		1	2
		usually with chlorite. Rare fine grained disseminated pyrite. Fracture surfaces are roughly 40 and 90	518004	pink	11.0	2.0	green hairline fractures	2 tr		1	2
		degrees to c/a. Surfaces are coated with pale green to brown chalky clay and are locally chloritic.	518005	pink	13.0	2.0	green hairline fractures	2 tr		1	5
		Pyrite is more common on chloritic fractures. Hairline to 1cm wide veinlets are quartz rich with	518006	pink	15.0	2.0		2 tr		1	8
		dark green selvages. (Prominent from 9.0-13.0m). 23.0-31.0 is pale green, sericite on fractures	518007	pink	17.0	2.0		2 tr		1	1
		possibly replacing chlorite. Hairline fractures are offset and locally wall rock grain size is reduced.	518008	pink	19.0	2.0		2 tr		1	4
		Entire unit is weakly argillically altered. Fracture surfaces show moderate argillic alteration. Core	518009	pink	21.0	2.0		1 tr		1	5
		surfaces are chalky. Feldspars are clay altered around rims.	518010	pink	23.0	2.0		1 tr		1	1
			518011	pink	25.0	2.0		1 tr		1	4
			518012	pale green	27.0	2.0	sericite replacing chlorite?	1 tr		2	6
			518013	pale green	29.0	2.0	sericite replacing chlorite?	1 tr		2	22
			518014	pale green	31.0	2.0	sericite replacing chlorite?	1 tr		2	5
			518015	pink	33.0	2.0		1 tr		1	2
			518016	pink	35.0	2.0		1 tr		1	4
37.3	67	Diorite:	518017	pink	37.3	2.3		1	1	1	11
		Dark green, medium to fine grained. 70% white, 0.5-1mm subhedral plagioclase with 25% chlorite	518018	pink	38.2	0.9		3 tr		1	11
		and up to 1% magnetite and trace biotite. Chlorite has probably replaced biotite. Local very fine	518019	green	40.0	1.8		3 tr		1	4
		grained areas with sharp contrasts (clasts). Upper contact is bleached with small quartz veinlets	518020	green	42.0	2.0		3 tr		1	1
		with local vugs over 1 metre. Fracture surfaces are rough, planar, chloritic and covered with a	518021	green	44.0	2.0	very broken	3 tr		2	1
		chalky clay. Some surfaces are red hematitic. Chlorite altered ground mass with chloritic/argillic	518022	green	46.0	2.0	clay gouge-green	2 tr		3	2
		fractures. Moderate to strongly magnetic. 42-51m fine grained clay rich, locally gouge, bleached	518023	green	48.0	2.0	bleached- fine grained	1 tr		2	4
		non-magnetic zones. Fine grained bleached lower contact.	518024	buff	50.0	2.0	bleached- fine grained	1 tr		3	5
			518025	red/green	52.0	2.0		1 tr		2	2
			518026	green	54.0	2.0	olive green fracture surfaces	3 tr		1	5
			518027	green	56.0	2.0		3 tr		1	3
			518028	green	58.0	2.0	two pink granitic veinlets (1cm)	3 tr		1	3
			518029	green	60.0	2.0		1 tr		1	3
			518030	buff	62.0	2.0		1 tr		1	1
			518031	buff	64.0	2.0		1 tr		1	0
67	76.5	Granite:	518032	buff	66.0	2.0		1 tr		1	5
		Pink, medium grained, argillic. Chlorite hairline fracture stockwork. Rare vugs.	518033	buff	68.0	2.0	66.2m purple hematitic vein/shear	1 tr		1	174
			518034	pink	70.0	2.0		1 tr		2	11
			518035	pink	72.0	2.0	hairline stockwork	1 tr		2	1
			518036	pink	74.0	2.0	clast of magnetite at 74.3	1 tr		2	46
76.5	80	Diorite:	518037	pink	76.0	2.0		1 tr		2	5
		Dark green medium to fine grained chloritic, magnetic. Chilled margins.	518038	green	78.0	2.0		3 tr		1	2
80	89	Granite:	518039	pink	80.0	2.0	open vugs along fractures	3 tr		1	3
		Pink medium grained argillic. Chloritic hairline fracture stockwork.	518040	pink	82.0	2.0		3 tr		1	1
			518041	pink	84.0	2.0		3 tr		1	0
			518042	pink	86.0	2.0		3 tr		1	4
89	94	Diorite:	518043	pink/white	89.0	3.0		3 tr		1	3

Dark green, medium to fine grained magnetic. Chilled margins.

95.3 102.3 Granite:
Bleached pink, medium grained, chloritic vein stockworks.

102.3 127.5 Diorite:
Dark green to bleached green, medium to fine grained, chloritic alteration along fractures and breaks. Chilled margins at both upper an lower contacts.

127.5 132.2 Dacite Dyke:
Light grey to buff, aphanitic, clay rich, chloritic alteration, clay and chlorite along fractures. Fragments of dacite occur within chilled diorite along contacts. Soft-waxy white clay inclusions also occur within the diorite along the dacite contacts.

132.2 178.1 Diorite:
Dark green to pale green, medium to fine grained chloritic alteration, chlorite along fractures. 60% white subhedral plagioclase, 30% chlorite. Fine grained segments 0.7-1.3m. Slightly magnetic within harder-greener units, pinstripe chlorite-magnetite stockwork, fractures with rough surfaces and chlorite, pyrite and clay along them.

178.1 203.3 Granite:
Pink to pale green, medium to fine grained, subhedral. Pervasive sericite alteration, feldspars are waxy (green) and soft. Trace disseminated pyrite. Fractures contain clay+/- chlorite and diss. pyrite. Gradual intercalated upper contact with diorite for approximately 3.2m. Diorite and dacite

518044	green	91.0	2.0		3	tr	2	0
518045	green/white	94.0	2.0	93.6-95.3 diorite chill margin vague contact into granite	3	tr	2	0
518046	buff	95.3	1.3		2	tr	3	17
518047	pink	98.0	2.7		1	tr	1	14
518048	pink	100.0	2.0		2	tr	1	1
518049	pink	102.3	2.3		1	tr	1	18
518050	green	104.0	1.7		3	tr	1	1
518051	green	106.0	2.0		3	tr	1	1
518052	green	108.0	2.0	pyrite on face of fracture 109.1m	3	tr	1	16
518053	green	110.0	2.0		3	1	2	13
518054	green	112.0	2.0		3	tr	1	3
518055	green	114.0	2.0	112.7 bleached green 5cm contact	3	tr	2	26
518056	green	116.0	2.0		2	tr	2	13
518057	green	118.0	2.0		2	tr	2	2
518058	green	120.0	2.0	119.1 granitic 2cm dyke @ 30 degrees to c/a	2	tr	1	4
518059	green	122.0	2.0		3	tr	1	3
518060	green	124.0	2.0		2	tr	2	3
518061	green	126.0	2.0		3	tr	2	4
518062	green	127.5	1.5		2	tr	3	4
518063	green	129.0	1.5		1		3	1
518064	green	132.2	3.2		1		3	0
518065	green	134.0	1.8		3	tr	1	1
518066	green	136.0	2.0		2	tr	2	2
518067	green	138.0	2.0	136-139 fine grained	1	tr	2	3
518068	green	140.0	2.0		3	tr	1	6
518069	green	142.0	2.0		4	tr	1	3
518070	green	144.0	2.0		3	tr	1	1
518071	green	146.0	2.0		2	tr	2	2
518072	green	148.0	2.0		2	tr	2	2
518073	green	150.0	2.0	locally fine grained 149.5 (40cm)	1	tr	2	1
518074	green	152.0	2.0		2	tr	3	4
518075	green/white/blk	154.0	2.0	153.3-153.8 hbl porphyry dyke .5-3mm hbl,fresh sharp contacts	2	tr	1	1
518076	red/ollve	156.0	2.0	buff colour/heavy alteration	2	tr	1	9
518077	green	158.0	2.0		3	tr	1	2
518078	green	160.0	2.0	159.4 (10cm) qtz vein with pyrite @ vein contacts	3	tr	1	2
518079	green	162.0	2.0		3	tr	1	2
518080	green	164.0	2.0		2	tr	1	0
518081	green	166.0	2.0		2	tr	1	1
518082	green	168.0	2.0	2-3cm qtz-feld dyke 90 degrees to c/a	2	tr	1	1
518083	green	170.0	2.0		2	tr	1	2
518084	green	172.0	2.0		2	tr	1	3
518085	green	174.0	2.0		4	tr	1	5
518086	green	176.0	2.0		4	tr	1	1
518087	green	178.1	2.1	sharp contact	4	tr	1	1
518088	pink	180.0	1.9		2	tr	1	1
518089	light pink	182.0	2.0		2	tr	1	1
518090	pink/green	184.0	2.0	183-186.2 border with diorite and granite (intercalated twice).	2	tr	1	9

inclusions are found within the granite as well as some mafic clasts/dykes?

End of Hole

518091	pale green	186.0	2.0	185-186.2 chlorite rich, no sericite, 1cm granitic veins x-cutting granite diorite contact.	3	tr	1	1
518092	pale green	188.0	2.0		2	tr	1	39
518093	pale green	190.0	2.0		1	tr	2	3
518094	pale green	192.0	2.0	partially resorbed dacite and diorite inclusions	1	tr	1	4
518095	pale green	194.0	2.0		1	tr	2	1
518096	pale green	196.0	2.0	195.6-196 mafic unit @45 degrees to c/a.	1	tr	2	1
518097	pale green	198.0	2.0	197-197.2 mafic unit	1	tr	2	2
518098	pale green	200.0	2.0	198.2-198.4 mafic unit	1	tr	2	24
518099	pale green	202.0	2.0	7cm dacite dyke	2	tr	2	26
518100	pale green	203.3	1.3		2	tr	1	17

PHELPS DODGE CORPORATION OF CANADA, LIMITED

PROPERTY: Laidman
PROJECT No: 253
Location: L110E,108+10N
Azimuth: 356
Dip: -55
Start Date: August 13,1997
Complete Date: August 15,1997
Purpose:

Length(m): 200.3
Core Size: NQ
Dip Tests: -51

DRILL HOLE NO: 97-2
Elevation: 1405
Claim No:
Section:
Date Logged: August 17,1997
Logged by: Stephen Wetherup

From (metres)	To (metres)	Description	Colour	Sample #	To (metres)	Length (metres)	Comments	Chl	Py	Clay	Cpy	Au (ppb)
0	4.3	Casing										
4.3	65.7	Polylithic monzodiorite breccia: f.g. monzondiorite matrix comprises ~50% of the rock. Altered mostly to chlorite with 1% to trace pyrite within the matrix. Pyrite occurs adjacent to fragments as pods and lenses and along chlorite veinlets (~0.5mm wide). Fragments are mostly of granitic in composition with some diorite, bleached diorite, rhyolite, and aphyric dacite mixed in locally. Fragments are between 1 and 10 cm in size with some as large as 1m. These large clasts are typically granite. A few fresh monzonite dykes cross-cut this unit as well as minor carbonate veinlets.	grey	518101	6.0	1.7		3	2	2		6
			grey	518102	8.0	2.0		3	2	2		7
			grey	518103	10.0	2.0		3	2	2		3
			grey	518104	12.0	2.0		3	2	2		8
			grey	518105	14.0	2.0		3	2	2		10
			grey	518106	16.0	2.0		3	2	2		10
			grey	518107	18.0	2.0		3	2	2		107
			grey	518108	20.0	2.0	monzonite dyke between 19.6 and 20.0	3	2	2		13
			grey	518109	22.0	2.0		3	2	2		14
			dark grey	518110	24.0	2.0		3	2	2		10
			dark grey	518111	26.0	2.0		4	2	2		3
			grey	518112	28.0	2.0		4	2	2		2
			grey	518113	30.0	2.0		3	2	2		4
			grey	518114	32.0	2.0		3	2	2		2
			grey	518115	34.0	2.0		3	2	2		11
			grey	518116	36.0	2.0		3	2	2		18
			dark grey	518117	38.0	2.0		4	2	2		19
			dark grey	518118	40.0	2.0		4	2	2		12
			grey	518119	42.0	2.0		3	2	2		28
			grey	518120	44.0	2.0		3	2	3		74
			grey	518121	46.0	2.0		3	2	3		57
			grey	518122	48.0	2.0	granite clast 46.8-48.2 m	3	2	3		17
			grey	518123	50.0	2.0		3	2	3		9
			grey	518124	52.0	2.0	chalky blue dusting along fractures	3	2	3		34
			grey	518125	54.0	2.0		3	2	3	tr	52
			grey	518126	56.0	2.0		3	2	3	tr	10
			grey	518127	58.0	2.0		3	2	3	tr	9
			grey	518128	60.0	2.0	few dark grey siliceous veinlets b/n 59.0 and 59.3	2	2	3	tr	4
			grey	518129	62.0	2.0		2	2	3	tr	24
			grey	518130	64.0	2.0	Fresh monzonite dyke b/n 63.5 and 64.5	2	2	3	tr	9
			light grey	518131	66.0	2.0		2	2	3		43
			light grey	518132	68.0	2.0		2	2	3		12
			light grey	518133	70.0	2.0		2	2	3		14
			light grey	518134	72.0	2.0	nearly all granite	2	2	4	tr	152
			light grey	518135	74.0	2.0	nearly all granite 69.9-74.0	3	2	4	tr	26
			grey	518136	76.0	2.0		3	2	3	tr	14
			light grey	518137	78.0	2.0	mostly granite and rhyolite	2	2	4		3
			light grey	518138	80.0	2.0		2	2	4		8
			light grey	518139	82.0	2.0	mostly granite	2	2	4		29
			grey	518140	84.0	2.0	breccia material highly chloritized and almost black.	3	2	4		177

85.7	128	Granite:											
		Mafic minerals (likely biotite) completely altered to chlorite ~1-3%. K-feldspar are untouched by alteration but plagioclase is completely altered to sericite except within their cores which have been altered to epidote. K-feldspar and plagioclase are anhedral and intergrown. Grain size is 2-4											
		mm. Pyrite blebs, stringers and finely disseminated grains are ubiquitous throughout. Locally											
		sericite alteration grades into a pervasive argillic alteration which affects even the K-feldspar. Light olive, 1cm to 40 cm feldspar-porphyry dacite dykes cross-cut the granite in several places.											
128	135.7	Feldspar porphyry dacite:											
		25-30%, 1-4 mm feldspar phenocrysts within a greenish grey to grey aphanitic matrix. Feldspars altered to sericite (white) but locally to chlorite +/or smectite (green). Alteration, fracturing, and bleaching of the groundmass occurs predominantly near contacts with the granite. Abundant disseminated pyrite (0.5-1 mm) and pyrite veins (1 mm), up to 5% locally.											
135.7	190.4	Granite:											
		Plagioclase only partially altered to sericite, pyrite and other sulphides occur mainly as blebs and pods near aphyric dacite fragments, colour varies from light grey to light pinkish grey.											

grey	518141	86.0	2.0	breccia material highly chloritized and almost black.	3	2	4					24
light grey	518142	88.0	2.0		1	2	4					52
light grey	518143	90.0	2.0		1	2	4					49
light grey	518144	92.0	2.0	argillic zone begins @ 91.6 m	1	2	4					49
light grey	518145	94.0	2.0	argillic zone ends @ 93.0 m	1	2	4					103
light grey	518146	96.0	2.0	cross-cutting buff rhyolite dyke with disseminated pyrite and arsenopyrite?	1	2	4					192
light grey	518147	98.0	2.0	pyrite is podded and not disseminated in this zone	1	1	4					54
light grey	518148	100.0	2.0		1	2	4	tr				32
light grey	518149	102.0	2.0		1	2	4					84
light grey	518150	104.0	2.0		1	1	4					79
light grey	518151	106.0	2.0	a few grey veinlets accompany the pyrite	1	1	4	tr				48
light grey	518152	108.0	2.0	slightly more chloritic	2	1	4					55
light grey	518153	110.0	2.0		1	2	4					146
light grey	518154	112.0	2.0		1	1	4					37
light grey	518155	114.0	2.0		1	1	4					22
light grey	518156	116.0	2.0		1	1	4					8
light grey	518157	118.0	2.0		1	1	4					7
light grey	518158	120.0	2.0	sericite alteration decreasing	1	1	3					10
light grey	518159	122.0	2.0	sericite alteration decreasing	1	1	3					22
light grey	518160	124.0	2.0	plagioclase partially sericitized	1	1	3					16
light grey	518161	126.0	2.0		1	1	3					26
light grey	518162	128.0	2.0		1	1	3					11
grey	518163	130.0	2.0	bleached and fractured	1	2	4					78
grey	518164	132.0	2.0	some bleached zones	2	2	3					16
grey	518165	134.0	2.0		2	2	3					11
grey	518166	135.7	1.7	last 40cm bleached and fractured	2	2	4					8
light grey	518167	138.0	2.3	a few chalcopyrite blebs ~ 1 cm	tr	2	2		1			33
light grey	518168	140.0	2.0	dacite dyke starts at 139.7	tr	2	2	tr				8
light grey	518169	142.0	2.0	ends at 140.5	tr	2	2	tr				9
light grey	518170	144.0	2.0		tr	2	2	tr				16
light grey	518171	146.0	2.0	an aphanitic dark grey mafic fragment @ 145.3 with adjacent cpy. in the granite.	tr	2	2	tr				15
light grey	518172	148.0	2.0	few cpy blebs	tr	1	2		1			61
light grey	518173	150.0	2.0		tr	2	2	tr				21
light grey	518174	152.0	2.0	fresh section of granite b/n 152.0 and 152.5	tr	1	1					20
light grey	518175	154.0	2.0		tr	2	2	tr				32
light grey	518176	156.0	2.0		tr	2	2		1			46
light grey	518177	158.0	2.0		tr	2	2	tr				11
light grey	518178	160.0	2.0		tr	2	2	tr				31
light grey	518179	162.0	2.0		tr	1	2					11
light grey	518180	164.0	2.0	fresh granite	tr	1	1					3
light grey	518181	166.0	2.0	2-3 mm wide pyrite veinlets becoming prominent with some pods several cm's in size.		2	1	tr				0
light grey	518182	168.0	2.0	2-3 mm wide pyrite veinlets becoming prominent with some pods several cm's in size.		2	1	tr				3
light grey	518183	170.0	2.0	3cm qtz vein with ~30% pyrite cubes @ 168.5 m		2	1					20
light grey	518184	172.0	2.0	few 2-3 cm nests and pods of pyrite		2	1	tr				34
light grey	518185	174.0	2.0			2	tr	tr				4

light grey	518186	176.0	2.0				2	tr	tr	4
light grey	518187	178.0	2.0	mafic xenolith @ 176.3 with 2-3% pyrite within it.	tr		2	tr	tr	9
light grey	518188	180.0	2.0				1	tr		4
light grey	518189	182.0	2.0	4 cm wide pyrite vein @ 180.1			1	tr		3
light grey	518190	184.0	2.0	pyrite pods have stopped occurring leaving only the disseminated pyrite		tr		tr		3
light grey	518191	186.0	2.0				1	tr		3
light pink	518192	188.0	2.0			tr		tr		4
light pink	518193	190.4	2.4			tr		tr		6
greenish gre	518194	192.0	1.6	about 50% granite	tr	tr		tr		8
grey/pink	518195	194.0	2.0		tr	tr		tr		3
greenish gre	518196	196.0	2.0		tr	tr		tr		6
greenish gre	518197	198.0	2.0		tr	tr		tr		8
greenish gre	518198	200.3	2.3		tr	tr		tr		3

end

190.4 200.3 Feldspar porphyry dacite:
0-2%, 1-3 mm, hornblende. Generally not aletered except within 10-15 cm of granite contacts where feldspars are altered to sericite/smectite. Also, altered zones contain minor (<1%) pyrite veinlets (1-2 mm).

End of hole 200.3 m

PHELPS DODGE CORPORATION OF CANADA, LIMITED

PROPERTY: Laidman
PROJECT No: 253
Location: L110+50E, 110+00N
Azimuth: 003
Dip: -50
Start Date: August 15, 1997 5PM
Complete Date: August 17, 1997 1:30 AM

Length(m): 200.3
Core Size: NQ

Dip Tests: -53

DRILL HOLE NO: 97-3
Elevation: 1425
Claim No:
Section:

Date Logged:August 19, 1997
Logged by: Wetherup

Purpose: Test quartz breccia in the 110 zone

From (metres)	To (metres)	Description	Colour	Sample #	To (metres)	Length (metres)	Comments	Py	Clay	Qtz	Au (ppb)
0	4.6	Casing									
4.6	23.7	Weathered Granite:	yellow	518199	6.0	1.4		2	5	1	5
		Two Types: Red: Plagioclase sericitically altered and rusty red in colour. K-feldspar and quartz fresh	yellow	518200	8.0	2.0		2	5	1	8
		Yellow: plagioclase altered to kaolinite stained yellow K-feldspar altered to sericite. Both units	yellow	518201	10.0	2.0		2	4	2	6
		contain a few chalcedonic veins with ~5-10% pyrite, buff coloured rhyolite clasts localized within	orange	518202	12.0	2.0		1	3	2	12
		some zones. * A siliceous "chert" breccia cross-cuts the granite in the weathered zone. Its comprised of	red	518203	14.0	2.0		1	2	4	5
		of a dark grey cherty matrix with aphanitic white siliceous angular fragments.	orange	518204	16.0	2.0		2	4	4	8
			orange	518205	18.0	2.0		2	4	4	6
			red	518206	20.0	2.0		2	2	5	4
			dark grey	518207	22.0	2.0	chert breccia with abundant rusty fractures and pyrite veins.	2	tr	5	19
			grey and red	518208	23.7	1.7	up to 22.7m is chert breccia.	2	1	5	10
23.7	69.9	Altered Granite	white	518209	26.0	2.0	1cm pyrite vein @ 24.0m and a 4 cm qtz/py pod/vein @ 24.4m	3	5	1	6
		Alteration is mostly sericitic alteration of both feldspars. Few scattered quartz and/or pyrite pods .	white	518210	28.0	2.0	fresh to weakly sericitic	1	3	tr	4
		and veins. These veins are up to 3 cm thick but usually 0.5 cm. Disseminated and pods of pyrite	light pink	518211	30.0	2.0		1	3	1	4
		occur within the granite locally composing up to 5% of the rock. Quartz veining and silicification	light pink	518212	32.0	2.0		tr	3	tr	6
		occur sporadically within broad 1 to 2 m zones with up to 5-10% qtz. There are also a few fresh	white	518213	34.0	2.0		1	4	1	5
		sections of granite.	white	518214	36.0	2.0		1	4	1	21
			white	518215	38.0	2.0	from 37.2-38.0 argillic alteration.	2	5	2	4
			white	518216	40.0	2.0		2	5	2	7
			white	518217	42.0	2.0	minor argillic @39.6 m	2	5	1	5
			white	518218	44.0	2.0		2	5	tr	3
			light pink	518219	46.0	2.0	@ 44.8 m a qtz/py zone	2	4	1	4
			light pink	518220	48.0	2.0		1	5	tr	17
			white	518221	50.0	2.0		1	5	tr	13
			white	518222	52.0	2.0	few qtz/py pods and veins within argillically altered granite.	2	5	2	19
			white	518223	54.0	2.0	few qtz/py pods and veins within argillically altered granite.	2	5	3	15
			light yellow	518224	56.0	2.0		1	5	2	8
			white	518225	58.0	2.0	from 57.0-58.0 m several qtz and py pods.	2	5	3	20
			white	518226	60.0	2.0		2	5	3	15
			white	518227	62.0	2.0		2	5	4	14
			light grey	518228	64.0	2.0	@ 64.2-64.3 a cherty dacitic dyke and @ 65.8 small 2-3cm shear zone	2	5	2	11
			light pink	518229	66.0	2.0		1	5	1	9
			light pink	518230	68.0	2.0		tr	5	tr	7
			light pink	518231	70.0	2.0		tr	5	tr	8

69.9	72.2	Rhyolite dyke: Very light greenish grey, aphanitic, aphyric dyke with a few pyrite blebs (<1%); weakly altered.	greenish grey	518232	72.2	2.2		tr		1	tr		8
			light pink	518233	74.0	1.8		tr		5	tr		7
72.2	116	Altered Granite:	light pink	518234	76.0	2.0	small 1-3mm sulphide vein sub-parallel to c/a @75.0-75.4		1	5		1	6
			light pink	518235	78.0	2.0			1	5	tr		14
			light pink	518236	80.0	2.0	several grey veins with pyrite 0.5 to 2 cm wide		2	5	tr		8
			white	518237	82.0	2.0		tr		5	tr		7
			white	518238	84.0	2.0			1	5		1	4
			light pink	518239	86.0	2.0	sericitic alteration		1	5		1	9
			light pink	518240	88.0	2.0	qtz/py zone from 85.9 to 87.0		2	5		2	16
			light pink	518241	90.0	2.0			1	5		2	11
			light pink	518242	92.0	2.0	2 large qtz/py veins sub// to c/a		3	4		4	32
			light pink	518243	94.0	2.0			1	5		2	10
			light pink	518244	96.0	2.0	sulphide breccia vein 2cm wide		2	5		2	16
			light pink	518245	98.0	2.0	slightly argillic	tr		5		1	9
			light pink	518246	100.0	2.0	few qtz veins (minor py)		1	5		2	8
			light pink	518247	102.0	2.0	few qtz veins (minor py)	tr		5		2	8
			light pink	518248	104.0	2.0	trace of cpy in a pyrite bleb; @ 103.9 a chloritic slip surface.	tr		5		1	4
			light pink	518249	106.0	2.0	@ 105.0 a chloritic slip zone 2 mm wide 30-35 degrees from c/a.	tr		5	tr		9
			light pink	518250	108.0	2.0	small pyrite zone		1	5	tr		4
			light pink	518251	110.0	2.0	2 rhyolite dykes; 108.1-108.2 and 108.6-108.9.	tr		5	tr		7
			light pink	518252	112.0	2.0	chlorite slip zone sub// to c/a b/n 111.4-111.9	tr		5		1	6
			light pink	518253	114.0	2.0	becoming argillic	tr		5	tr		10
116	200.3	Granite with breccia units: Contact with the granite is a zone of very dark grey to black aphanitic matrix with small 1 mm to 1 cm comminuted and sheared fragments of bleached white granite. The overall unit is a mixture of (1) granite with brecciated fragments of aphanitic, aphyric light green dacite, and (2) green feldspar porphyry dacite dykes containing angular fragments of granite. These two units are cross-cut by qtz +/-py +/-dolomite +/-sphalerite veins. Alteration of the granite is either feldspar to epidote or smectite giving it a light apple green colour. Throughout is 0.5% disseminated pyrite. Some localized zones of fresh granite occur near the bottom of the hole.	light pink	518254	116.0	2.0	mostly argillic	tr		5	tr		5
			grey	518255	118.0	2.0			1	1		1	14
			light green	518256	120.0	2.0			1	2		1	15
			light green	518257	122.0	2.0			1	2		1	84
			light green	518258	124.0	2.0			1	3		2	12
			light green	518259	126.0	2.0	little matrix, mostly heavily silicified granite clasts.		1	3		3	23
			light green	518260	128.0	2.0	qtz veins b/n 128 and 129.0		1	2		3	22
			light pink	518261	130.0	2.0			1	2		4	13
			light green	518262	132.0	2.0	diorite clast from 131.5-132.0		2	2		2	5
			light green	518263	134.0	2.0	last 1m is rhyolite dyke	tr		1		1	13
			light green	518264	136.0	2.0	almost all fresh granite with py veins and a 5cm qtz vein		1	1		3	15
			light green	518265	138.0	2.0		tr		1		1	15
			light green	518266	140.0	2.0		tr		2		1	34
			light green	518267	142.0	2.0	several qtz veins minor sph.		1	2		3	26
			light green	518268	144.0	2.0			1	2		2	18
			light green	518269	146.0	2.0	epidote/smectite altered granite		1	4		1	16
			light green	518270	148.0	2.0			1	4		2	27
			light green	518271	150.0	2.0	minor dolomite in qtz/py veins		1	4		2	13
			light green	518272	152.0	2.0	numerous qtz-py-dol-sph veins		1	4		3	20
			light green	518273	154.0	2.0	feldspar-porphyry andesite dyke b/n 153.0 and 154.6	tr		3		1	7
			light green	518274	156.0	2.0			1	4		2	14

light green	518275	158.0	2.0	from 158.0-158.3 dacite with granite fragments		1	4	1	20
light green	518276	160.0	2.0			1	4	1	21
light green	518277	162.0	2.0		tr		4	1	19
light green	518278	164.0	2.0	few pyrite zones		2	4	1	17
light green	518279	166.0	2.0			1	4	1	37
light green	518280	168.0	2.0	massive aphyric dacite from 167.6-168.1		1	4	1	16
light green	518281	170.0	2.0	several qtz-dol-py veins		1	3	2	32
light green	518282	172.0	2.0			1	3	1	22
light green	518283	174.0	2.0	large qtz-dol veins (10cm) @ 172.1 with 1cm blebs of cpy. and disseminated sph.		1	3	3	25
light green	518284	176.0	2.0	minor cpy. in veins		1	3	3	36
light green	518285	178.0	2.0	poss. malachite within a dacite fragment.		1	4	2	10
light green	518286	180.0	2.0	feldspar-porphyry dacite dyke 178.1-179.0	tr		2	tr	1
light green	518287	182.0	2.0		tr		3	1	10
light green	518288	184.0	2.0	few chalcedonic veins.	tr		3	2	10
light pink	518289	186.0	2.0			1	3	3	4
light green	518290	188.0	2.0	few chalcedonic veins		1	3	3	3
light green	518291	190.0	2.0	few chalcedonic veins.		1	3	3	29
light green	518292	192.0	2.0			1	3	1	15
light green	518293	194.0	2.0			1	3	2	21
light green	518294	196.0	2.0			1	3	1	139
light green	518295	198.0	2.0			1	3	2	16
light green	518296	200.3	2.3			1	3	2	131

200.3 End of Hole

PHELPS DODGE CORPORATION OF CANADA, LIMITED

PROPERTY: Laidman
PROJECT No: 253
Location: L112+10E, 107+25N
Azimuth: 350
Dip: -55
Start Date: August 17,1997 5AM
Complete Date: August 18,1997 4PM

Length(m): 200.3
Core Size: NQ

Dip Tests: -54

DRILL HOLE NO: 97-4

Elevation: 1377
Claim No:
Section:

Date Logged: August 21, 1997
Logged by: Wetherup

Purpose: To test Au soil anomaly at the 110 zone.

From (metres)	To (metres)	Description	Colour	Sample #	To (metres)	Length (metres)	Comments	Chl	Clay	Py	Cpy	Au (ppb)
0	7.3	Casing										
7.3	65.1	Diorite to Monzodiorite:	grey	518297	10.0	2.7		4	1 tr			0
		medium grained, hornblende ~20%, biotite ~5-10%, mafic minerals are fresh to chlorite altered.	grey	518298	12.0	2.0		3	1 tr			
		Feldspars altered to sericite locally. Disseminated pyrite and pyrite along veinlets is common.	grey	518299	14.0	2.0		3	1	1		
		Few buff rhyolite dykes and 1-3mm calcite veins with chlorite selvages cross-cut the unit. Bleached diorite	grey	518300	16.0	2.0		3	1	1	tr	1
		zones accompanied by an increase in disseminated pyrite occur throughout. Trace epidote.	grey	518301	18.0	2.0	rhyolite dyke from 17.6-19.2	3	1	1		
			grey	518302	20.0	2.0		2	1	1		
			grey	518303	22.0	2.0	1m bleached diorite zone	2	2	2		4
			grey	518304	24.0	2.0	bleached diorite	2	2	2		
			grey	518305	26.0	2.0		2	2	1		
			grey	518306	28.0	2.0	small pink granitic dyke at 27.6	2 tr		1		2
			grey	518307	30.0	2.0	large cal-py vein @ 28.4 m. From 28.4-29.5 sub// to c/a granitic dyke (1cm)	2	1	1		
			grey	518308	32.0	2.0		2	1 tr			
			grey	518309	34.0	2.0		3	1 tr			1
			grey	518310	36.0	2.0		3	1 tr			
			grey	518311	38.0	2.0	argillic vein (1cm) sub// to c/a running from 38.5-38.9	3	1 tr			
			grey	518312	40.0	2.0	2 argillic veins @ 45 degrees to c/a	3	1 tr			2
			grey	518313	42.0	2.0		3	1 tr			
			grey	518314	44.0	2.0	few cal-py veins	3	1	1		
			grey	518315	46.0	2.0	few cal-py veins @ 30 degrees to c/a	3	1	1		3
			grey	518316	48.0	2.0		2 tr		1		
			grey	518317	50.0	2.0	~20-25 cal-py veins over 2m	3	2	1		
			grey	518319	52.0	2.0	bleached zone from 51.7-53.0	3	3	1		12
			grey	518320	54.0	2.0	poss. shear zone within ableached diorite zone @ 52.7-52.9 m	3	4	1		
			grey	518321	56.0	2.0	partially assimilated granite fragments within diorite.	3	3 tr			
			grey	518322	58.0	2.0	assimilated granite fragments to 57.0m then monzodiorite with diorite rounded fragments	2	1 tr			2
			grey	518323	60.0	2.0	rounded diorite clasts within a monzodiorite matrix	2	1	1		
			grey	518324	62.0	2.0	diorite with granite fragments in various stages of assimilation	3	1	1		

			grey	518325	64.0	2.0	diorite with granite fragments in various stages of assimilation	3	2	1	6
			grey	518326	65.1	1.1	diorite with granite fragments in various stages of assimilation	3	2	1	
65.1	84.4	Granite: m.g. to c.g. with rhyolite fragments. Fresh except for weak sericitic alteration along joints. Rare diorite clasts. 1m wide alteration zone within the diorite at its contact with the granite. Few blebs and minor disseminated pyrite. Rare f.g grey qtz veins. * Not cross-cut by the calcite-pyrite veins that are so common in the diorite.	grey	518327	67.0	1.9	~1m of altered diorite and 0.9m granite	2	3	1	
			light pink	518328	69.0	2.0			1	tr	12
			light pink	518329	71.0	2.0			1	1	
			light pink	518330	73.0	2.0	qtz vein @71.5		1	1	
			light pink	518331	75.0	2.0			1	1	6
			light pink	518332	77.0	2.0	few diorite clasts	1	1	1	
			light pink	518333	79.0	2.0			1	1	
			light pink	518334	81.0	2.0			1	1	2
			light pink	518335	83.0	2.0			1	1	
			light pink	518336	84.4	1.4		1	1	1	
84.4	106	Diorite:	grey	518337	86.0	1.6	bleached zone to 84.7 with bleached veinlets diminishing to 86.0	4	1	1	6
			grey	518338	88.0	2.0		4	1	1	
			grey	518339	90.0	2.0	olive dacite dyke with a 4cm qtz vein runs from 89.2-89.6	4	1	1	
			grey	518340	92.0	2.0	bleaching and cal-py veins increasing in volume and number	4	3	2	34
			grey	518341	94.0	2.0		4	3	2	
			grey	518342	96.0	2.0		4	3	2	
			grey	518343	98.0	2.0		4	2	1	20
			grey	518344	100.0	2.0		4	2	1	
			grey	518345	102.0	2.0		4	2	1	
			grey	518346	104.0	2.0	3cm qtz vein with py at 103.2	4	2	1	24
106	164.8	Altered Diorite: Bleached sericite and chlorite altered diorite. Interuded in several locations by granite dykes. Heavily cross-cut by cal-py+/-cpy veins and locally brecciated. ~5-10 veins per metre.	olive grey	518347	106.0	2.0	highly bleached with granite dyke from 105.8-106.0	4	3	3	
			olive grey	518348	108.0	2.0	granite dyke runs from 107.6-108.1	4	3	3	
			olive grey	518349	110.0	2.0	granite dyke from 109.2-110.2	4	3	3	121
			olive grey	518350	112.0	2.0	2 small granitic dykes.	4	3	3	
			olive grey	518351	114.0	2.0	diorite cross-cut by multitude of veins.	4	3	3	
			olive grey	518352	116.0	2.0		4	3	3	127
			olive grey	518353	118.0	2.0		4	3	3	
			olive grey	518354	120.0	2.0		4	3	3	
			olive grey	518355	122.0	2.0		4	3	3	102
			grey	518356	124.0	2.0		4	3	3	
			grey	518357	126.0	2.0		4	3	3	
			grey	518358	128.0	2.0		3	3	3	17
			grey	518359	130.0	2.0		3	3	3	
			grey	518360	132.0	2.0		3	3	3	
			grey	518361	134.0	2.0		3	3	3	tr 14
			grey	518362	136.0	2.0		3	2	1	tr
			grey	518363	138.0	2.0		3	2	1	tr
			grey	518364	140.0	2.0	silicified	3	2	3	tr 35
			grey	518365	142.0	2.0	sub// shear zone from 141.2-144.0, mineralized with calcite, py and a v.f.g grey mineral.	3	3	3	tr
			grey	518366	144.0	2.0		3	3	3	tr
			grey	518367	146.0	2.0	few silicified zones	3	3	3	103

			grey	518368	148.0	2.0	few silicified zones		3		3		3				
			grey	518369	150.0	2.0	few silicified zones		4		3		2				
			grey	518370	152.0	2.0			4		3		2				9
			grey	518371	154.0	2.0			4		3		2				
			grey	518372	156.0	2.0			4		3		2				
			grey	518373	158.0	2.0			4		3		3				5
			grey	518374	160.0	2.0			4		3		3				
			grey	518375	162.0	2.0			4		3		3				
164.8	200.3	Granite Breccia:	grey	518376	164.8	2.8			3		3		3	tr			5
		c.g. granite fragments (~20-30%) ~3mm to 3cm in size float within a f.g. grey granite matrix.	light pink	518377	166.0	1.2				tr			2	tr			
		The granite is visually unaltered and contains many pyrite +/- calcite veins and pods.	light pink	518378	170.0	2.0				tr			1				
			light pink	518379	172.0	2.0	cal-py pod from 170.3-170.4			tr			1				11
			light pink	518380	174.0	2.0				tr			1				
			light pink	518381	176.0	2.0				tr			2				
			light pink	518382	178.0	2.0				tr			2				13
			light pink	518383	180.0	2.0				tr			1	tr			
			light pink	518384	182.0	2.0				tr			1				
			light pink	518385	184.0	2.0				tr			1				4
			light pink	518386	186.0	2.0				tr			1	tr			
			light pink	518387	188.0	2.0		tr		tr			1	tr			
			light pink	518388	190.0	2.0		tr		tr			1	tr			9
			light pink	518389	192.0	2.0		tr			1	tr					
			light pink	518390	194.0	2.0		tr			1	tr					
			light pink	518391	196.0	2.0			1		1	tr					8
			light pink	518392	198.0	2.0					1	tr					
200.3		End of Hole	light pink	518393	200.3	2.3					1	tr					

PHELPS DODGE CORPORATION OF CANADA, LIMITED

PROPERTY: Laidman
PROJECT No: 253
Location: L111+00E, 107+70N
Azimuth: 360
Dip: -55
Start Date: August 18, 1997 11AM
Complete Date. August 20, 1997 10:45AM

Length(m): 200.3
Core Size: NQ

Dip Tests: -54.5

DRILL HOLE NO. 97-5

Elevation: 1397
Claim No:
Section:

Date Logged: August 22, 1997
Logged by: Wetherup

Purpose: Test Au and Ag soil anomaly south of 110 zone

From (metres)	To (metres)	Description	Colour	Sample #	To (metres)	Length (metres)	Comments	Chl	Clay	Py	Au (ppb)
0	4	Casing									
4	23.8	Granite:									
		mg.-cg., fresh to mildly sericitic. Aphanitic, aphyric rhyolite/dacite xenoliths common. Rare	light grey	518394	6.0	2.0	very mildly weathered		2	1	2
			light grey	518395	8.0	2.0	very mildly weathered		2	1	
		sulphide (py) veins and trace disseminated py. where altered. Rare argillic zones with sericitic alteration enveloping them (0.5m wide).	light grey	518396	10.0	2.0	very mildly weathered		2	1	
			light grey	518397	12.0	2.0	a small argillic zone @ 11.5 m with sericite alteration envelope		4	1	20
			light grey	518398	14.0	2.0			3	1	
			light grey	518399	16.0	2.0			4	tr	
			light grey	518400	18.0	2.0			3	tr	6
			light grey	518401	20.0	2.0			3	tr	
			light grey	518402	22.0	2.0	small black shear zone with py. b/n 21.3 and 21.4 (~30 deg. to c/a)		3	1	
23.8	30.6	Altered Diorite:	light grey	518403	23.8	1.8	argillic zone @ 23.3		3	1	4
		mg. to fg. with feldspar phenocrysts ~1-2mm, ~20-25%. Altered to a smectite (and/or sericite ??)	light green	518404	26.0	2.2	dark grey shear zone @ 25.7-26.1, ~20% py and 30% enargite +\or bornite.	3	4	3	27
		assemblage that is bleached to a light olive/tan colour. Py is disseminated throughout and	light green	518405	28.0	2.0		3	5	2	13
		abundant (3-5%). It is also found along dark grey veinlets where it comprises ~30% of the vein.	dark green	518406	30.6	2.6		5	3	1	
		Some zones are dark green and altered to chlorite with magnetite still present but little to no pyrite	light grey	518407	32.0	1.4	several py veins within the vacinity of the diorite contact.	1	5	2	
30.6	200.3	Granite:	light grey	518408	34.0	2.0	few py veins and diss. py.	1	5	2	18
		as before except local zones with very light green aphanitic aphyric rhyolite clasts and the odd	light grey	518409	36.0	2.0	few diorite clasts and py. veins	2	4	2	
		diorite clast. A few 0.5-1m olive coloured dacite and dark green mafic dykes.	light grey	518410	38.0	2.0	few diorite clasts and py. veins	2	3	2	
			light grey	518411	40.0	2.0		1	3	2	34
			light grey	518412	42.0	2.0	few dark grey veins with minor py.	1	3	2	
			light grey	518413	44.0	2.0		tr	3	1	
			light grey	518414	46.0	2.0	diss. py.		3	2	45
			light grey	518415	48.0	2.0	diss. py.		3	2	
			light grey	518416	50.0	2.0	diss. py. and grey veins withpy pods and stringers @ 49.5		3	2	
			light grey	518417	52.0	2.0	diss. py and stringers		3	2	6
			light grey	518418	54.0	2.0	few rhyolite clasts		3	2	
			light grey	518419	56.0	2.0	silicified zone with py stringers and dark grey veinlets.		3	2	
			light grey	518420	58.0	2.0	minor epidote		3	1	0
			light grey	518421	60.0	2.0	unaltered granite		2	1	
			light grey	518422	62.0	2.0	py vein @61.2	tr	2	1	
			light grey	518423	64.0	2.0			3	1	11
			light grey	518424	66.0	2.0	fresh granite		2	tr	
			light grey	518425	68.0	2.0	few thin py veins		2	1	
			light grey	518426	70.0	2.0	few argillic zones and py veins		4	2	9
			light grey	518427	72.0	2.0	10cm pyrite zone @70.8		2	2	

light grey	518428	74.0	2.0	fg. mafic clast with reaction rim and pyrite adjacent to it	1	3	1		
light grey	518429	76.0	2.0	pyrite diss., in blebs and stringers		3	2	10	
light grey	518430	78.0	2.0	1cm py vein at 77.2		3	2		
light grey	518431	80.0	2.0	few py blebs and sericitic alteration		3	2		
light grey	518432	82.0	2.0	small shear zone @81.3 with py mineralization		4	2	34	
light grey	518433	84.0	2.0	few soft steel grey veinlets and argillec zones		4	1		
light grey	518434	86.0	2.0	couple of slip surfaces with fg. dark grey mineral displaying slicks		4	1		
light grey	518435	88.0	2.0	shear zones @87.4 and 87.6 with chl., py.,and mo?		4	1	21	
light grey	518436	90.0	2.0			3	1		
light grey	518437	92.0	2.0		tr	2	tr		
light grey	518438	94.0	2.0	rhyolite clasts		2	tr		0
light grey	518439	96.0	2.0			2	tr		
light grey	518440	98.0	2.0	2 argillic zones		4	1		
light grey	518441	100.0	2.0			3	1	6	
light grey	518442	102.0	2.0			3	1		
light grey	518443	104.0	2.0			3	tr		
light grey	518444	106.0	2.0	few py pods		3	1	30	
light grey	518445	108.0	2.0	few mo.? veinlets		2	1		
light grey	518446	110.0	2.0	mo? veinlets from108.8 to 109.3		2	1		
light grey	518447	112.0	2.0	few argillic zones		4	1	21	
light grey	518448	114.0	2.0			2	tr		
light grey	518449	116.0	2.0			3	tr		
light grey	518450	118.0	2.0	few argillic zones		4	1	19	
light grey	518451	120.0	2.0	rhyolite dyke 119.2-120.5 with sericitic granite adjacent		4	2		
light grey	518452	122.0	2.0	several large py pods		3	2		
light grey	518453	124.0	2.0			3	1	12	
light grey	518454	126.0	2.0	heavily fractured and silicified zone with py and enargite		3	1	9	
light grey	518455	128.0	2.0	silicified granite with tr. cpy		1	1	13	
light grey	518456	130.0	2.0	from 128.8-130.2 dacite dyke	3	3	tr		56
light grey	518457	132.0	2.0	trace chlorite along fractures	tr	3	1	44	
light grey	518458	134.0	2.0	2 silicified zones @ 132.4 and 133.3-133.4 with enargite		3	1	30	
light grey	518459	136.0	2.0	shear zone @134.2 to 134.6 some silicification		4	1	33	
light grey	518460	137.9	1.9	dacite dyke 136.3-137.9	1	4	tr		12
light grey	518461	140.0	2.1	heavily silicified from dacite contact to 141	tr		3	904	
light grey	518462	142.0	2.0	mostly silicified		1	3	371	
light grey	518463	144.0	2.0	1m dacite dyke		2	1	11	
light grey	518464	146.0	2.0	fg. mafic dyke 1.6m	2	3	2	16	
light grey	518465	148.0	2.0			1	2	17	
light grey	518466	150.0	2.0			1	tr		
light grey	518467	152.0	2.0			1	1		
light grey	518468	154.0	2.0			3	1	17	
light grey	518469	156.0	2.0			3	2		
light grey	518470	158.0	2.0			3	2		
light grey	518471	160.0	2.0			3	2	40	
light grey	518472	162.0	2.0			3	2		

light grey	518473	164.0	2.0				3	2		
light grey	518474	166.0	2.0	black specks within pyrite blebs			3	2		25
light grey	518475	168.0	2.0				3	1		
light grey	518476	170.0	2.0	few grey and chalcedony veins			3	1		
light grey	518477	172.0	2.0				3	tr		19
light grey	518478	174.0	2.0	silicified zone 173.6-173.8			2		1	
light grey	518479	176.0	2.0	sulphide bleb 174.8-174.9 and flow banded rhyolite dyke 175.1-176.9			2		2	
light grey	518480	178.0	2.0				3		1	19
light grey	518481	180.0	2.0	diorite dyke from 179.3-181.0	3		3		1	
light grey	518482	182.0	2.0		3		1	tr		
light grey	518483	184.0	2.0			tr			1	32
light grey	518484	186.0	2.0			tr		tr		
light grey	518485	188.0	2.0				3		1	
light grey	518486	190.0	2.0			tr			1	22
light grey	518487	192.0	2.0			tr			2	
light grey	518488	194.0	2.0			tr			2	
light grey	518489	196.0	2.0			tr			2	99
light grey	518490	198.0	2.0			tr			2	
light grey	518491	200.3	2.3			tr			2	

200.3 End of Hole

APPENDIX II

Analytical Method and Certificates

Core Samples

ICP A 30 gram sample is digested with 180 millilitres 3-1-2 HCL-HNo_3-H_2O at 95° C for one hour and is diluted to 600 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 extract with GF/AA finished.

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 253 File # 97-4596

1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: Steve Wetherup

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
518185	6.4	15.0	15.0	8.8	780	4	2	201	1.55	4.2	<5	6	18	.11	.3	.8	2	.47	.016	5	15	.02	27	<.01	<3	.19	.05	.14	6	<.2	22	<.3	.2	.9	4
518186	3.5	11.2	13.9	8.4	611	3	2	235	1.38	5.4	<5	7	19	.14	.4	.5	2	.52	.016	9	15	.06	26	<.01	<3	.18	.05	.13	7	<.2	<10	<.3	.3	.8	4
518187	5.2	11.4	15.1	11.5	618	5	2	333	2.00	5.3	<5	7	24	.10	.4	.7	9	.73	.030	10	18	.20	36	<.01	<3	.34	.04	.20	6	<.2	19	<.3	<.2	1.4	9
518188	3.2	23.1	11.9	5.9	630	3	1	498	1.39	7.2	<5	6	21	.11	1.5	.4	2	.92	.019	5	15	.04	25	<.01	<3	.23	.03	.17	7	<.2	<10	<.3	.2	.9	4
518189	4.2	14.3	6.7	4.8	516	3	1	429	1.56	4.9	<5	6	19	.06	1.6	.4	2	.88	.018	10	15	.10	25	<.01	<3	.22	.04	.13	6	<.2	<10	<.3	<.2	.6	3
518190	3.2	9.5	8.9	<1	429	3	1	243	1.31	3.1	<5	7	17	.03	.5	.5	1	.56	.018	8	17	.04	25	<.01	<3	.24	.04	.16	9	<.2	<10	<.3	.2	.7	3
518191	4.1	10.7	7.5	<1	322	4	1	233	1.24	2.8	<5	8	17	<.01	.3	.4	1	.53	.020	8	16	.05	38	<.01	<3	.22	.04	.16	6	<.2	<10	<.3	.2	.6	3
518192	7.9	9.3	8.7	4.6	575	5	4	395	1.93	3.6	<5	8	39	.04	.7	.7	9	1.08	.032	9	16	.25	50	.01	<3	.38	.04	.23	8	<.2	<10	<.3	.4	1.4	4
518193	3.2	17.0	5.2	5.5	119	4	2	196	1.12	2.3	<5	8	15	.03	.3	.3	6	.45	.019	16	16	.15	49	.02	<3	.28	.06	.14	6	<.2	<10	<.3	<.2	1.6	6
518194	1.6	459.0	5.0	31.3	608	7	2	478	3.62	4.7	6	4	39	.08	.3	<.1	57	1.45	.079	12	21	1.04	84	.11	<3	1.19	.05	.22	6	<.2	68	<.3	.4	7.1	8
RE 518194	1.5	449.2	4.5	30.8	556	7	2	466	3.53	4.4	<5	4	38	.07	.2	.1	57	1.41	.077	11	20	1.01	82	.11	<3	1.16	.05	.21	7	<.2	58	<.3	.3	6.5	9
RRE 518194	1.9	463.1	4.4	31.3	549	8	2	479	3.62	4.5	8	4	39	.04	.2	<.1	60	1.44	.080	12	21	1.05	83	.11	<3	1.20	.06	.22	5	<.2	53	<.3	.2	7.0	10
518195	2.0	63.2	5.5	11.6	338	4	1	361	1.53	3.8	6	7	26	.03	1.4	.1	17	1.12	.022	17	16	.41	54	.03	<3	.53	.06	.25	7	.2	<10	<.3	<.2	3.0	3
518196	5.7	295.2	4.9	35.3	329	8	3	462	3.88	2.9	5	5	45	.08	.2	.4	62	.98	.086	9	21	1.12	146	.13	<3	1.24	.07	.29	9	<.2	36	<.3	.2	6.7	6
518197	3.8	291.2	6.4	42.7	738	8	8	536	3.86	6.3	<5	4	50	.06	1.7	.4	60	1.15	.088	9	21	1.06	122	.13	<3	1.23	.06	.14	58	<.2	56	<.3	.4	5.7	8
518198	4.2	260.0	2.7	39.3	292	7	5	482	3.51	1.7	<5	5	47	.03	<.2	.1	64	1.00	.092	9	21	1.04	200	.14	<3	1.21	.07	.12	23	<.2	18	<.3	.2	6.1	3
518199	17.3	32.4	51.5	65.7	1172	3	1	43	2.71	25.2	<5	8	5	.03	16.6	1.1	4	.02	.020	6	12	.03	89	<.01	<3	.59	.01	.23	6	<.2	36	1.4	1.1	2.1	5
518200	13.7	44.4	88.0	58.8	751	3	1	36	2.86	30.7	<5	8	4	.02	11.1	1.0	2	.01	.033	7	11	.02	59	<.01	<3	.53	<.01	.16	4	<.2	33	1.1	1.0	1.8	8
518201	15.4	23.7	56.9	10.8	1246	2	3	24	1.61	21.9	<5	5	4	.05	11.2	.5	2	<.01	.010	5	10	.02	73	<.01	<3	.47	.01	.14	5	<.2	49	1.3	.3	1.2	6
518202	21.9	54.4	349.4	45.1	951	2	1	38	2.18	42.4	<5	8	4	.04	13.1	2.1	7	.01	.032	9	8	.04	99	<.01	<3	.55	<.01	.26	2	<.2	70	8	.8	2.0	12
518203	15.8	39.7	107.9	28.8	574	1	1	29	1.44	13.9	<5	8	3	.01	5.3	1.0	2	<.01	.018	10	9	.01	206	<.01	<3	.47	<.01	.12	4	<.2	15	.5	.3	1.3	5
518204	27.9	74.1	130.3	53.6	683	2	1	31	2.30	16.3	<5	8	3	.03	3.3	.9	2	<.01	.036	8	8	.01	220	<.01	<3	.49	<.01	.12	3	<.2	37	.6	.2	1.7	8
518205	30.5	62.1	47.9	60.6	506	2	1	32	1.70	8.6	<5	8	4	.02	2.9	1.2	2	.01	.022	8	9	.01	101	<.01	<3	.50	<.01	.13	4	<.2	20	.3	.2	1.1	6
518206	24.8	39.8	41.1	33.9	874	2	2	22	1.78	7.3	<5	7	2	.01	1.9	.5	1	<.01	.012	5	10	.02	112	<.01	<3	.45	<.01	.14	3	.2	37	.4	<.2	1.2	4
RE 518206	25.0	39.8	40.4	33.4	931	3	2	25	1.83	7.6	<5	8	2	<.01	1.8	.4	1	<.01	.012	5	10	.02	111	<.01	<3	.45	<.01	.14	3	<.2	26	.4	<.2	1.1	3
RRE 518206	26.0	44.4	44.3	37.4	1103	2	2	28	1.86	7.8	<5	8	2	.01	2.0	.5	1	<.01	.013	4	10	.02	105	<.01	<3	.49	.01	.16	5	<.2	46	.4	.2	1.0	2
518207	385.5	737.3	144.8	159.1	7643	6	33	35	4.57	19.1	<5	7	4	2.57	6.0	<1.3	3	<.01	.023	4	15	.01	13	<.01	<3	.25	<.01	.11	5	<2.6	317	<3.9	<2.6	9.4	19
518208	66.8	472.1	63.7	74.4	2682	9	78	28	5.43	11.3	<5	6	2	.38	6.6	.4	3	<.01	.017	7	13	.01	15	<.01	<3	.39	<.01	.14	6	.3	145	2.2	.5	2.0	10
518209	36.3	88.0	86.2	83.4	1127	6	48	23	4.38	3.4	<5	6	5	1.47	2.4	.4	2	<.01	.006	11	12	.01	24	<.01	<3	.40	<.01	.12	4	.2	70	1.7	<.2	1.3	6
518210	7.7	31.9	27.2	47.6	497	3	2	43	.90	1.5	<5	8	6	1.81	1.2	.4	2	.01	.009	17	13	.02	55	<.01	<3	.45	.02	.12	6	<.2	11	.3	<.2	1.0	4
518211	18.8	13.2	20.4	88.6	549	4	3	428	1.08	1.5	<5	7	7	2.17	1.2	.4	2	.03	.012	14	13	.03	77	<.01	<3	.32	.03	.12	5	<.2	<10	<.3	<.2	.6	4
518212	31.0	12.8	41.6	244.9	638	4	7	46	1.37	1.7	<5	7	8	3.09	1.4	.4	1	.01	.012	12	16	.04	58	<.01	<3	.38	.02	.14	7	.2	<10	.4	<.2	9	6
518213	53.9	11.3	52.2	118.5	818	4	12	35	1.59	2.0	<5	7	5	2.44	1.5	.7	2	.01	.006	14	15	.03	39	<.01	<3	.41	.01	.13	5	.3	<10	<.3	<.2	.9	5
518214	39.9	2586.2	252.5	538.6	25901	3	13	31	1.96	88.5	<5	6	5	6.99	171.8	2.3	1	.01	.005	10	15	.01	33	<.01	<3	.33	.01	.16	7	<.6	1045	<.9	1.1	2.6	21
STANDARD DZ/HG-500/AU-R	25.7	129.9	107.1	271.8	2140	33	17	1081	4.86	74.5	19	22	58	2.19	9.6	21.3	78	.72	.114	19	60	1.29	264	.15	23	2.45	.05	.73	23	2.3	446	.3	2.1	7.5	528

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

DATE RECEIVED: AUG 22 1997 DATE REPORT MAILED: Aug 28/97 SIGNED BY. C. ... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Data # FA

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
518215	70.0	26.9	148.7	341.3	1287	4	11	25	1.98	3.4	<5	6	4	3.83	2.8	.6	1	<.01	.004	8	14	<.01	41	<.01	<3	.23	<.01	.13	6	.4	55	.9	<.2	.9	4
518216	44.4	64.1	188.9	526.3	5488	3	16	29	2.73	6.0	<5	6	4	4.53	15.2	1.1	1	<.01	.004	9	14	<.01	30	<.01	<3	.27	<.01	.13	7	.3	67	1.3	.4	.8	7
518217	43.2	13.8	126.7	203.3	1504	3	12	20	2.02	2.2	<5	5	3	1.74	2.2	.9	1	<.01	.002	7	13	<.01	32	<.01	<3	.23	<.01	.13	4	.3	19	1.0	.2	.8	5
518218	66.3	12.8	99.7	357.3	1553	3	10	27	2.00	1.3	<5	6	4	2.74	1.4	.8	2	<.01	.004	8	15	<.01	50	<.01	<3	.25	.01	.15	7	.3	34	1.0	<.2	.5	3
518219	73.0	12.5	120.9	580.1	1769	4	9	35	1.99	1.3	5	5	4	4.09	1.1	.8	1	.02	.007	8	14	<.01	58	<.01	<3	.26	<.01	.15	5	.4	46	1.0	<.2	.7	4
RE 518219	70.9	11.6	118.9	560.1	1808	4	9	32	1.93	1.1	6	5	4	4.11	1.3	.9	1	.02	.007	8	14	<.01	58	<.01	<3	.25	<.01	.15	5	.3	34	.9	<.2	<.5	5
RRE 518219	76.0	12.7	109.2	497.6	1755	4	9	37	1.91	1.3	<5	5	4	3.60	1.1	.7	<1	.02	.007	8	14	<.01	60	<.01	<3	.26	<.01	.15	8	.2	45	.9	<.2	<.5	4

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

Data___ FA ___

IE A TIC LAB ORI TD. 8 H NGS VA TVEF V R6 PHO)04) -31 FAX) 25)16

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 253 File # 97-4676 Page 1

1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: Stephen Wetherup

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
518220	54.1	21.1	160.4	363.8	3242	2	11	27	2.15	2.9	<5	5	3	2.97	6.8	1.1	1	.03	.012	6	8	.01	34	<.01	<3	.18	<.01	.11	2	.4	156	1.2	.2	.7	17
518221	36.2	10.1	115.0	165.3	1946	1	5	21	1.23	1.2	<5	7	4	1.36	2.2	1.0	1	.03	.012	8	7	.01	57	<.01	<3	.24	.01	.11	2	.4	73	.7	<.2	.6	13
518222	37.0	28.2	261.2	881.2	4983	3	17	23	3.46	6.5	<5	6	3	7.86	9.9	1.6	1	.04	.015	6	8	.01	14	<.01	3	.23	<.01	.15	2	.4	267	1.9	<.2	.5	19
518223	56.0	18.9	382.0	1152.8	3381	1	11	30	2.08	2.5	<5	4	3	8.86	6.0	2.0	1	.06	.020	7	7	.02	37	<.01	6	.25	<.01	.17	2	.5	154	1.1	<.2	.8	15
518224	44.7	14.6	280.7	262.1	1743	1	9	26	1.71	2.2	<5	5	3	2.21	3.9	1.3	1	.05	.019	6	7	.01	34	<.01	<3	.24	<.01	.16	2	.5	82	.9	.2	.7	8
518225	26.2	19.3	208.9	490.6	1809	<1	7	28	1.55	2.6	<5	5	3	4.27	6.2	1.2	2	.06	.022	7	7	.02	43	<.01	4	.32	<.01	.19	2	.4	65	.8	<.2	.7	20
518226	42.5	22.0	265.8	425.9	2202	2	11	26	1.89	3.2	<5	5	2	3.89	6.9	1.3	1	.05	.018	6	8	.01	46	<.01	6	.25	<.01	.17	<2	.4	84	1.1	<.2	.7	15
518227	19.4	39.2	324.9	447.7	4252	2	11	21	1.60	4.8	<5	4	2	4.06	16.2	1.2	1	.05	.016	6	7	.02	17	<.01	4	.24	<.01	.17	<2	.4	117	.9	<.2	.6	14
518228	6.1	17.7	60.3	73.0	1070	4	7	26	.77	4.5	<5	4	3	.63	5.2	.5	1	.04	.012	11	7	.01	17	<.01	4	.28	<.01	.10	4	.2	47	.4	<.2	.6	11
518229	7.0	25.3	21.9	60.4	580	2	3	91	.81	3.3	<5	7	4	.28	5.0	.3	2	.06	.017	14	8	.02	78	<.01	3	.36	<.01	.12	4	.3	35	.4	<.2	.7	9
518230	5.0	17.7	9.6	58.9	472	3	3	279	.83	2.4	<5	7	5	.25	3.5	.3	1	.10	.015	13	8	.03	77	<.01	<3	.34	<.01	.12	3	.3	30	.3	<.2	.7	7
RE 518230	4.2	17.1	9.0	57.7	463	3	4	275	.81	1.8	<5	6	5	.20	3.6	.3	1	.09	.014	12	7	.03	83	<.01	<3	.32	<.01	.12	3	.3	25	.3	<.2	.7	6
RRE 518230	4.0	16.9	6.3	58.1	441	2	4	286	.85	2.1	<5	7	6	.19	3.2	.3	1	.10	.016	13	8	.03	74	<.01	3	.35	<.01	.12	4	.2	33	.3	<.2	.7	7
518231	11.0	17.6	105.2	144.2	858	3	4	61	.91	3.3	<5	7	4	1.25	3.4	.5	1	.05	.014	10	8	.02	95	<.01	<3	.34	.01	.15	3	.3	52	.3	<.2	.7	8
518232	16.6	10.0	173.3	281.8	756	2	3	19	.71	5.2	<5	6	4	2.70	2.3	.4	1	.04	.012	7	5	.02	28	<.01	<3	.30	.01	.19	<2	.3	103	.3	<.2	.6	8
518233	10.1	40.2	38.8	68.1	990	2	1	477	.70	6.8	<5	6	4	.76	9.4	.4	1	.05	.015	12	6	.02	31	<.01	4	.34	.01	.12	4	.2	71	.3	<.2	.7	7
518234	9.8	18.1	32.5	20.3	552	2	3	97	1.16	4.6	<5	10	4	.22	3.6	.4	1	.08	.012	12	7	.03	68	<.01	<3	.37	.01	.14	3	.2	38	.4	<.2	.7	6
518235	16.9	25.2	24.7	24.3	612	3	5	102	.89	5.0	<5	7	4	.25	5.4	.3	1	.08	.012	16	7	.03	95	<.01	3	.33	.01	.13	5	.2	33	.3	.2	.6	14
518236	68.3	24.1	55.4	98.8	927	1	6	51	1.96	7.7	<5	7	4	.91	4.4	.6	1	.05	.011	23	9	.02	39	<.01	<3	.33	<.01	.14	3	.5	62	.9	.3	.8	8
518237	37.2	14.9	48.5	57.0	542	3	4	134	.83	3.4	<5	5	5	.42	3.0	.3	1	.14	.010	10	7	.05	109	<.01	<3	.27	<.01	.11	4	.4	17	.4	<.2	.8	7
518238	24.2	19.1	13.7	32.7	485	2	3	463	.81	3.0	<5	6	9	.29	3.3	.4	2	.31	.014	10	8	.11	150	<.01	<3	.33	<.01	.13	4	.3	31	<.3	<.2	.6	4
518239	17.7	23.7	55.3	188.7	873	3	4	731	1.39	8.5	<5	5	9	1.60	2.6	.6	2	.35	.018	8	6	.12	66	<.01	<3	.37	<.01	.14	<2	.2	68	.5	<.2	.5	9
518240	16.4	250.3	94.3	240.6	3236	1	12	316	2.22	40.6	<5	6	6	2.74	47.8	3.2	2	.24	.014	9	7	.08	33	<.01	<3	.33	<.01	.13	<2	.3	206	1.6	1.3	.7	16
RE 518240	16.6	258.1	97.4	246.1	3282	1	14	322	2.28	44.3	<5	6	6	2.74	49.7	3.4	2	.24	.014	9	8	.08	30	<.01	<3	.34	<.01	.14	2	.2	210	1.7	1.3	.8	19
RRE 518240	16.9	271.3	102.8	252.7	3140	3	13	323	2.16	45.5	<5	5	6	2.75	52.5	3.2	2	.24	.014	9	7	.08	31	<.01	4	.29	<.01	.11	2	.3	239	1.6	1.3	.7	21
518241	10.5	43.5	36.4	21.1	949	2	14	472	1.68	10.4	<5	6	7	.32	8.2	.7	1	.23	.012	9	9	.10	54	<.01	<3	.38	.01	.12	4	.2	46	1.2	1.1	.7	11
518242	38.5	62.2	189.4	29.5	2921	2	55	539	9.69	20.6	<5	5	3	.65	10.2	2.7	1	.11	.008	3	7	.03	<1	<.01	3	.18	<.01	.08	4	.2	112	9.4	6.0	<.5	32
518243	76.7	21.0	52.3	34.4	741	3	9	271	1.19	5.2	<5	5	6	.32	4.0	.7	1	.18	.014	10	9	.06	54	<.01	<3	.31	<.01	.12	4	.5	15	.8	.3	.8	10
518244	17.3	867.3	108.7	163.1	2724	3	7	337	1.80	176.0	<5	6	7	3.46	143.9	<.1	1	.33	.013	8	8	.09	39	<.01	<3	.29	<.01	.11	2	.2	472	1.5	.9	.6	16
518245	26.7	15.5	31.3	59.8	408	1	4	307	.83	2.9	<5	5	8	.50	1.9	.4	2	.31	.013	10	6	.09	100	<.01	<3	.33	.01	.11	3	.2	41	.4	.2	.9	9
518246	34.4	74.7	31.2	40.9	960	2	4	356	1.21	14.2	<5	6	7	.46	10.2	.3	1	.32	.012	10	7	.09	74	<.01	<3	.31	<.01	.11	4	.3	70	.5	.3	.9	8
518247	29.2	143.0	56.3	40.4	1464	1	5	359	.98	38.0	<5	6	9	.52	17.5	.5	1	.38	.012	12	7	.11	109	<.01	4	.37	.01	.13	4	.3	126	.4	.3	.9	8
518248	14.0	208.9	3.4	33.9	363	2	3	733	.88	10.0	<5	6	11	.22	12.7	<.1	3	.59	.018	11	7	.16	89	<.01	<3	.37	<.01	.12	4	.2	65	<.3	.2	.8	4
518249	6.6	12.2	2.4	22.9	198	1	3	625	.90	1.1	<5	7	9	.11	1.1	.2	3	.46	.013	11	9	.13	24	<.01	<3	.41	<.01	.13	4	.2	35	<.3	<.2	.8	9
STANDARD D	26.7	134.3	102.9	278.7	2137	33	17	1065	4.70	75.9	24	20	60	2.37	9.9	22.6	77	.71	.106	18	60	1.28	268	.15	29	2.38	.05	.75	23	2.8	453	.5	2.3	7.4	511

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

1CP - 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 600 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: CORE AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Recuns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 25 1997 DATE REPORT MAILED: Aug 29/97 SIGNED BY. D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Data___ FA ___

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
518250	27.9	669.0	9.9	123.0	23272	4	8	374	1.32	148.7	<5	5	6	3.12	168.6	.6	1	.23	.013	11	7	.07	24	<.01	<3	.36	<.01	.12	<2	.3	2666	1.1	.8	1.3	4
518251	10.7	17.3	46.1	96.2	730	3	3	189	.82	3.4	<5	5	5	.88	3.6	.5	1	.15	.012	8	6	.05	21	<.01	<3	.36	<.01	.14	2	.3	57	<.3	<.2	.8	7
518252	32.9	22.6	19.9	13.2	592	3	7	181	.98	3.6	5	5	6	.15	4.4	.5	1	.15	.013	7	6	.05	16	<.01	<3	.32	<.01	.11	4	.4	38	.3	<.2	1.0	6
518253	4.6	199.9	20.2	33.5	2291	3	1	156	.67	18.7	<5	6	5	.81	44.4	.1	1	.13	.008	7	6	.05	16	<.01	3	.38	<.01	.12	3	<.2	111	<.3	.2	.7	10
518254	4.6	29.4	22.4	20.9	693	3	4	136	.78	5.2	<5	7	3	.16	6.8	.4	1	.07	.010	7	5	.03	7	<.01	3	.33	<.01	.11	3	.2	32	<.3	<.2	.8	5
518255	22.5	65.8	85.4	60.8	1982	9	7	356	.93	19.1	<5	2	6	.68	20.3	1.1	1	.13	.015	6	6	.04	28	<.01	<3	.31	<.01	.12	2	.6	120	.5	.2	.9	14
518256	35.3	70.7	90.7	86.3	1348	3	7	367	1.15	13.4	<5	4	6	.88	18.3	.9	2	.25	.025	7	6	.07	22	<.01	<3	.23	.01	.13	3	.4	47	.6	.2	.5	15
518257	70.1	197.7	124.0	304.9	3960	2	6	431	1.35	19.5	<5	4	6	3.10	25.4	6.9	2	.27	.021	5	7	.06	20	<.01	3	.24	<.01	.14	<2	.6	113	.6	1.6	1.1	84
518258	14.2	136.6	218.3	461.0	2439	4	8	733	1.56	16.0	8	4	9	5.29	32.1	.8	5	.49	.047	9	5	.13	61	<.01	<3	.30	<.01	.16	<2	.3	173	.8	<.2	.9	12
518259	13.7	20.2	287.0	493.4	1277	3	3	438	1.02	25.9	6	4	5	5.15	5.2	1.0	1	.29	.024	5	7	.08	23	<.01	3	.31	<.01	.17	<2	.4	144	.5	<.2	1.0	23
518260	25.2	79.4	171.3	444.9	1864	3	6	539	1.52	22.6	10	5	7	4.65	9.0	1.7	1	.39	.016	5	8	.10	20	<.01	<3	.25	<.01	.19	3	.4	103	1.0	<.2	.9	22
RE 518260	25.6	77.3	168.4	438.5	1849	2	5	534	1.51	23.6	<5	4	7	4.58	8.9	1.8	1	.38	.017	5	8	.10	23	<.01	4	.25	<.01	.20	2	.4	87	.9	<.2	.9	26
RRE 518260	21.3	73.2	169.9	443.1	1878	1	6	526	1.53	21.4	6	5	7	4.61	9.0	1.6	1	.38	.017	5	8	.10	17	<.01	3	.26	<.01	.19	<2	.4	102	.9	.3	.8	26
518261	56.4	16.6	110.0	278.7	1504	4	3	542	1.25	9.3	<5	5	10	2.64	2.8	1.2	1	.47	.021	8	7	.14	56	<.01	3	.25	<.01	.16	<2	.5	122	.4	<.2	.8	13
518262	159.0	48.4	106.6	271.5	1005	1	6	715	1.59	7.5	<5	4	15	2.06	5.9	.6	10	.71	.039	8	9	.25	79	<.01	<3	.37	.01	.17	2	1.5	101	<1.5	<1	<2.5	5
518263	26.7	194.6	51.6	261.9	1269	3	4	702	1.65	19.5	<5	4	19	2.11	6.1	.4	9	.78	.039	6	6	.33	91	<.01	<3	.53	.01	.17	<2	.4	119	.5	<.2	1.6	13
518264	16.4	77.4	89.0	269.1	1506	1	6	697	1.42	13.7	<5	5	12	2.25	4.7	1.2	1	.49	.028	7	8	.15	56	<.01	3	.29	.01	.15	2	.3	83	.8	.3	.8	15
518265	17.0	40.1	116.8	335.9	1725	3	5	1099	1.78	17.6	<5	3	21	3.17	3.9	1.4	2	.96	.029	5	7	.30	94	<.01	<3	.36	.01	.17	<2	.3	73	.7	.2	1.0	15
518266	20.4	174.6	104.5	193.1	1890	3	11	1801	2.01	17.5	<5	3	18	2.13	11.8	1.6	7	1.07	.052	7	6	.29	33	<.01	<3	.35	<.01	.20	<2	.3	88	.8	.3	1.0	34
518267	31.7	196.2	360.9	1835.0	3250	5	13	1103	2.20	27.7	<5	3	7	15.86	13.3	2.6	2	.51	.031	5	9	.12	48	<.01	<3	.21	<.01	.19	3	.4	240	1.4	<.2	1.0	26
518268	16.1	244.8	79.3	294.5	1625	4	7	1578	2.72	8.5	<5	2	20	2.58	12.0	2.6	18	.84	.065	8	8	.37	42	.01	<3	.53	.01	.20	<2	.3	90	1.1	.4	1.8	18
518269	31.0	564.7	150.3	659.2	2316	3	2	1175	1.84	13.8	<5	2	19	5.56	28.5	.6	14	.75	.052	9	7	.36	72	.01	<3	.55	.01	.17	<2	.4	151	.4	<.2	2.1	16
518270	30.3	23.7	210.5	672.2	1483	3	2	682	.82	7.0	8	3	8	7.22	5.0	1.0	1	.45	.030	9	8	.12	60	<.01	4	.26	<.01	.17	<2	.4	104	.3	<.2	.8	27
RE 518270	29.1	23.6	208.3	656.9	1307	3	2	665	.80	5.3	<5	4	8	6.76	4.6	.9	1	.44	.029	10	7	.12	62	<.01	<3	.26	<.01	.17	2	.4	126	<.3	<.2	.7	122
RRE 518270	31.3	23.5	225.0	849.3	1576	4	2	687	.83	6.6	<5	3	8	8.53	5.0	1.1	1	.44	.028	11	8	.12	66	<.01	3	.28	<.01	.18	<2	.4	146	.3	<.2	.9	18
518271	19.2	56.8	170.8	863.4	1731	2	6	1387	1.40	8.6	<5	4	11	8.47	6.8	1.3	1	.75	.036	6	7	.19	45	<.01	3	.24	<.01	.19	<2	.4	205	.5	<.2	.7	13
518272	13.6	448.8	331.9	4074.0	38242	3	6	4193	2.00	58.8	<5	4	12	41.34	198.1	2.9	1	1.25	.028	6	8	.24	48	<.01	<3	.22	<.01	.21	4	1.3	2141	<1.8	<1.2	<3	20
518273	77.1	101.1	56.8	213.4	1251	3	8	1493	1.76	8.2	<5	4	27	2.68	10.3	.5	11	1.30	.050	7	7	.40	52	<.01	<3	.52	.01	.18	2	.6	93	.3	<.2	1.4	7
518274	21.5	69.4	329.5	385.2	2233	3	8	997	1.76	12.8	7	3	13	4.48	16.1	1.7	6	.85	.044	11	7	.22	47	<.01	<3	.31	<.01	.17	<2	.5	143	.7	<.2	1.3	14
518275	20.2	149.7	54.4	90.0	2110	3	5	806	1.37	22.7	5	4	16	1.20	8.0	1.7	2	.78	.034	6	7	.22	87	<.01	<3	.31	<.01	.16	3	.4	94	.5	.3	1.0	20
518276	28.7	49.2	33.4	66.7	1104	3	4	774	1.01	17.7	<5	5	14	.76	5.7	.9	1	.75	.020	7	7	.21	31	<.01	3	.29	<.01	.14	3	.4	51	.4	<.2	.8	21
518277	33.4	45.5	50.6	143.7	1436	2	6	636	1.02	9.1	<5	4	9	1.53	7.9	1.1	1	.52	.022	8	7	.14	40	<.01	4	.24	<.01	.13	2	.5	54	.6	.3	.9	19
518278	164.4	2918.3	57.8	190.9	6152	8	20	764	2.12	147.4	<5	7	12	1.77	41.7	<.6	1	.62	.017	5	6	.19	35	<.01	<3	.23	<.01	.12	<2	2.0	406	<1.8	1.2	3.1	17
518279	36.6	150.4	76.2	200.8	2287	3	5	1041	1.24	34.5	<5	5	14	1.72	23.5	1.5	1	.90	.026	7	8	.24	55	<.01	<3	.27	<.01	.15	2	.5	82	.4	.2	1.0	37
518280	22.3	26.5	39.1	118.1	1221	8	6	1835	1.54	7.2	<5	3	29	1.28	4.9	1.4	4	1.64	.070	6	5	.42	29	<.01	<3	.30	<.01	.19	<2	.4	60	.3	.2	.9	16
STANDARD D2/HG-500/AU-R	24.6	123.5	102.2	256.4	1957	32	16	998	4.41	72.4	19	17	56	2.39	9.8	23.7	72	.66	.101	17	55	1.19	261	.14	24	2.28	.05	.70	21	2.7	481	8	2.3	7.0	509

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

Data A FA ____

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	Sc ppm	Te ppm	Ga ppm	Au+ ppb
518281	24.7	211.6	88.0	284.8	3519	1	8	1082	1.57	49.2	<5	3	13	4.15	44.2	4.5	4	.97	.059	6	6	.25	32	<.01	<3	.30	.01	.17	<2	.3	173	<.3	<.2	1.3	32
518282	41.5	121.4	113.7	443.1	2029	3	6	452	1.31	28.9	<5	3	4	4.82	20.9	1.5	2	.32	.025	5	9	.08	26	<.01	<3	.23	<.01	.17	2	.3	182	<.3	<.2	1.0	22
518283	17.0	375.6	103.5	533.3	1840	4	4	7154	2.37	28.0	<5	5	13	5.52	17.0	1.6	2	.92	.025	7	7	.31	76	<.01	<3	.24	<.01	.15	2	.2	191	<.3	<.2	.9	25
518284	57.1	1022.9	53.6	86.7	3514	3	13	801	2.23	68.5	7	3	10	1.07	18.5	.9	1	.65	.020	4	8	.18	24	<.01	<3	.24	<.01	.13	3	.5	87	2.0	1.5	2.0	36
518285	52.4	153.7	53.2	99.7	1597	3	6	993	1.40	24.3	<5	2	15	1.02	12.8	1.0	3	1.06	.118	4	8	.24	29	<.01	<3	.31	<.01	.14	3	.4	45	<.3	.3	1.7	10
518286	18.9	132.2	44.9	181.5	713	4	5	1258	1.59	14.9	<5	2	16	1.70	12.8	.3	15	1.04	.090	9	7	.28	21	<.01	<3	.46	<.01	.13	<2	.3	63	<.3	<.2	1.4	1
518287	35.2	138.8	23.4	58.9	936	4	6	586	.98	24.4	<5	4	13	.46	8.4	.5	2	.63	.023	5	7	.19	117	<.01	<3	.26	.01	.13	3	.3	36	<.3	.2	1.2	10
518288	48.2	220.6	23.2	52.8	810	1	3	479	.83	21.5	6	4	8	.58	8.1	.3	1	.41	.015	5	8	.12	26	<.01	<3	.25	.01	.12	4	.3	38	<.3	<.2	1.2	10
518289	17.4	53.1	23.5	53.1	777	2	3	530	.93	11.6	8	3	9	.87	12.6	.6	1	.50	.020	8	7	.15	26	<.01	<3	.26	<.01	.11	2	.2	33	.3	<.2	.6	4
518290	17.4	109.5	71.6	217.0	1109	2	5	1009	1.32	16.2	<5	<2	12	3.73	23.3	.5	6	.93	.041	20	6	.24	20	<.01	<3	.34	.01	.13	<2	.3	145	<.3	<.2	.8	3
RE 518290	17.3	111.9	71.8	220.8	1169	4	5	1016	1.33	15.7	<5	<2	13	3.96	22.9	.5	6	.94	.041	20	7	.24	24	<.01	<3	.35	<.01	.14	<2	.2	144	<.3	<.2	1.0	5
RRE 518290	18.3	113.9	70.6	220.9	1210	<1	5	1027	1.33	19.8	<5	<2	12	4.23	25.5	.6	6	.95	.041	20	6	.24	20	<.01	<3	.34	<.01	.13	<2	.4	154	<.3	<.2	1.1	4
518291	41.9	99.7	49.3	207.2	1463	2	7	820	1.33	30.3	<5	2	14	2.50	18.0	1.0	3	.84	.042	12	6	.23	28	<.01	<3	.24	<.01	.15	<2	.4	67	<.3	<.2	1.0	29
518292	14.8	612.2	54.7	186.4	2360	1	6	998	1.44	39.0	<5	<2	13	2.71	53.2	1.9	6	.90	.048	10	6	.24	18	<.01	<3	.32	<.01	.15	<2	.3	153	<.3	.3	1.1	15
518293	53.7	126.2	114.6	348.3	2149	4	15	1240	1.91	33.3	<5	<2	15	4.65	27.3	2.0	4	1.19	.059	9	6	.30	25	<.01	<3	.24	.01	.19	<2	.4	96	<.3	<.2	1.4	21
518294	92.0	151.8	514.6	753.5	1274	2	8	1662	2.17	71.5	<5	2	30	9.20	5.7	.7	9	1.46	.063	6	7	.41	69	<.01	<3	.34	.01	.22	<2	.4	69	<.3	<.2	1.4	139
518295	57.2	46.0	57.6	149.3	932	1	5	775	.84	14.8	5	<2	24	1.15	4.3	.6	2	1.14	.029	8	6	.21	155	<.01	<3	.26	.01	.14	<2	.4	38	<.3	<.2	.7	16
518296	29.1	63.2	88.2	81.7	1723	3	8	1998	1.92	42.0	<5	2	42	.64	3.2	1.6	6	2.36	.057	7	7	.41	88	<.01	<3	.30	<.01	.20	<2	.3	69	.3	.3	1.0	131
STANDARD D	25.7	130.8	99.5	263.7	2023	32	16	1025	4.47	72.3	21	16	57	2.27	9.0	22.5	74	.68	.106	17	57	1.21	263	.14	25	2.28	.06	.72	21	2.7	436	.7	2.8	7.6	546

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

Data___ FA ____

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 253 File # 97-4843

1409 - 409 Granville St., Vancouver BC V6I 1T2 Submitted by: Stephen Wetherup

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
518297/518298/518299	1.5	34.6	1.7	85.5	59	15	13	574	4.03	3.9	<5	4	53	.52	.2	.2	110	1.33	.159	16	33	1.33	407	.25	<3	1.58	.09	.65	4	<.2	23	<.3	<.2	7.1	<1
518300/518301/518302	1.8	47.5	2.5	118.8	135	12	11	476	3.65	4.5	<5	4	73	1.47	.4	1.5	80	1.22	.122	14	29	1.00	107	.13	<3	1.32	.07	.39	6	<.2	<10	<.3	<.2	6.1	1
518303/518304/518305	2.0	68.8	2.6	64.0	117	12	12	528	3.56	3.7	<5	3	55	.24	.4	.4	86	1.95	.134	16	28	.96	109	.13	<3	1.37	.06	.39	6	.2	<10	<.3	<.2	6.8	4
518306/518307/518308	1.7	27.7	1.7	55.4	93	11	12	515	3.57	5.0	<5	3	57	.24	.2	4.4	93	1.49	.142	16	28	.92	146	.19	<3	1.15	.10	.41	4	<.2	<10	<.3	4.0	5.4	2
518309/518310/518311	1.3	17.7	1.4	45.6	36	12	11	494	3.95	2.8	<5	3	93	.04	<.2	2.7	114	1.17	.170	14	27	1.13	258	.25	<3	1.34	.11	.53	6	.2	<10	<.3	2.3	6.5	1
518312/518313/518314	.9	37.1	1.2	63.4	46	13	13	604	4.54	3.4	<5	2	129	.13	<.2	.2	123	1.58	.168	15	27	1.76	370	.29	<3	2.08	.08	1.04	5	.3	<10	<.3	<.2	8.6	2
518315/518316/518317	1.5	100.0	1.7	96.8	149	16	14	730	4.55	5.5	<5	2	57	.37	.2	.1	128	1.67	.167	16	35	1.76	198	.30	<3	1.94	.07	1.04	3	.3	<10	.3	<.2	8.7	3
518319/518320/518321	1.3	111.4	6.5	66.7	368	13	13	724	4.35	15.0	<5	2	53	.18	.6	.3	84	1.99	.140	16	25	1.27	86	.19	<3	1.55	.05	.78	4	.2	<10	<.3	<.2	7.2	12
518322/518323/518324	1.8	54.7	1.9	52.4	80	17	13	623	4.15	4.2	<5	5	49	.05	.2	.3	118	1.43	.148	19	42	1.53	244	.28	<3	1.75	.08	.86	4	.3	<10	<.3	<.2	7.9	2
518325/518326/518327	8.3	96.1	23.9	57.6	612	13	10	557	2.78	8.2	<5	5	40	.29	.9	.3	63	1.48	.082	15	28	.85	88	.15	<3	1.16	.06	.55	5	<.2	<10	.5	<.2	4.5	6
518328/518329/518330	3.8	23.9	38.3	16.1	1016	6	2	315	.87	7.3	<5	6	28	.14	.7	.8	8	.91	.025	13	23	.14	109	.01	<3	.36	.05	.21	7	<.2	<10	<.3	.2	1.3	12
518331/518332/518333	11.4	39.1	33.0	21.3	728	6	5	385	1.24	13.2	<5	6	36	.22	.9	.6	7	.91	.033	13	21	.20	94	.01	<3	.35	.05	.22	8	<.2	<10	.3	<.2	1.2	6
518334/518335/518336	6.8	69.3	19.4	20.8	621	7	3	238	.99	4.6	<5	6	33	.23	1.7	.1	10	.72	.026	14	20	.20	133	.01	<3	.35	.05	.22	7	<.2	<10	<.3	<.2	1.2	2
518337/518338/518339	1.7	84.6	3.1	54.4	211	54	18	1011	4.15	5.1	<5	3	108	.01	.3	<.1	138	2.32	.156	16	92	2.40	334	.31	<3	2.30	.08	1.37	4	.4	<10	.3	<.2	9.2	6
518340/518341/518342	1.7	44.2	5.3	60.6	583	39	19	1851	5.78	41.1	<5	2	84	.09	.3	1.2	120	2.55	.176	10	66	2.16	46	.16	<3	2.36	.06	.75	2	.3	<10	.4	.4	10.5	34
518343/518344/518345	3.5	133.9	1.9	49.9	234	29	17	1063	4.50	8.1	<5	2	117	.02	<.2	.2	156	2.09	.162	14	58	2.19	109	.32	<3	2.46	.08	1.04	7	.4	<10	.6	<.2	9.2	20
518346/518347/518348	4.2	199.4	13.1	76.1	1574	31	24	2121	7.12	49.6	<5	<2	76	.12	.3	1.4	144	1.88	.162	9	66	2.66	41	.16	<3	2.78	.05	.72	2	.4	16	1.2	.2	11.7	24
518349/518350/518351	2.5	55.9	25.4	46.8	1101	15	18	1658	4.86	64.9	<5	4	60	.22	.5	1.1	41	1.72	.113	6	18	1.25	32	.05	<3	.99	.03	.47	4	<.2	<10	.7	.3	3.7	121
518352/518353/518354	3.4	45.0	28.5	53.4	1426	21	24	2268	6.77	56.9	<5	2	76	.08	.2	1.5	59	2.37	.165	6	24	1.85	26	.06	<3	1.46	.03	.59	3	.2	18	1.8	.3	6.2	127
518355/518356/518357	5.7	34.0	9.8	60.7	1208	23	28	2167	7.91	116.5	<5	<2	51	.06	.2	2.1	81	1.77	.167	8	31	2.04	31	.03	<3	2.10	.05	.48	2	<.2	<10	2.1	.6	10.2	102
518358/518359/518360	2.1	60.1	8.6	46.2	751	20	19	1459	5.67	43.4	<5	3	55	<.01	<.2	1.9	82	1.60	.123	9	34	1.56	36	.11	<3	1.75	.06	.64	4	<.2	<10	1.7	.3	8.3	17
518361/518362/518363	2.0	133.6	11.3	57.7	1026	24	22	1786	6.29	27.4	<5	2	98	.02	.3	1.7	107	2.59	.149	11	35	1.78	30	.21	<3	1.97	.05	1.10	3	.4	<10	2.2	.3	9.3	14
518364/518365/518366	3.5	53.3	80.9	75.7	3125	17	15	2149	4.97	42.1	<5	2	78	.66	4.5	2.4	39	6.53	.111	8	18	.68	44	.04	<3	.84	.03	.42	4	.2	18	1.9	.3	3.4	35
RE 518364/518365/518366	3.6	51.3	79.4	73.1	3077	16	15	2093	4.83	40.1	<5	2	76	.65	4.3	2.4	38	6.38	.108	8	17	.66	43	.04	<3	.82	.03	.41	4	.2	12	1.9	.3	3.4	24
518367/518368/518369	1.9	35.7	89.2	42.6	1906	21	30	1341	9.90	70.8	8	2	83	.19	.9	2.9	64	3.02	.130	6	27	1.00	17	.06	<3	1.21	.02	.58	4	.3	21	3.3	.4	5.2	103
518370/518371/518372	1.6	112.6	7.6	60.7	378	26	22	1657	6.53	14.4	<5	<2	150	<.01	.7	1.1	139	3.89	.157	11	50	2.21	45	.20	<3	2.81	.04	1.11	3	.5	14	2.1	<.2	9.5	9
518373/518374/518375	1.5	92.1	5.4	34.4	290	18	17	1093	5.29	11.8	<5	2	108	<.01	.3	1.2	69	2.57	.135	10	25	1.31	29	.12	<3	1.33	.06	.64	3	<.2	<10	1.8	.3	5.7	5
518376/518377/518378	19.0	18.6	35.0	44.7	493	10	10	769	3.66	6.3	<5	4	56	.45	.3	1.0	31	1.96	.095	14	17	.65	30	.05	<3	.78	.06	.35	5	<.2	11	1.4	.3	3.1	5
518379/518380/518381	10.0	13.5	51.1	154.9	1196	7	10	541	4.75	21.6	<5	6	31	1.99	.4	1.8	7	.84	.051	5	15	.18	19	<.01	<3	.32	.05	.21	7	<.2	<10	1.6	<.2	1.4	11
518382/518383/518384	8.8	12.4	54.1	36.3	997	7	7	621	3.23	13.8	6	6	33	.51	.5	1.3	9	.84	.056	6	15	.29	31	<.01	<3	.42	.04	.25	7	<.2	<10	1.0	.2	1.4	13
518385/518386/518387	11.0	13.1	9.0	14.9	467	6	5	375	1.86	6.3	<5	7	26	.16	.3	.5	5	.64	.030	8	16	.20	29	<.01	<3	.26	.06	.16	7	<.2	<10	.8	<.2	1.1	4
518388/518389/518390	9.6	14.2	6.9	10.0	712	7	8	471	2.91	9.7	<5	6	26	.05	.5	.8	5	.67	.039	7	15	.21	27	<.01	<3	.27	.05	.17	7	<.2	<10	.8	.2	.9	9
518391/518392/518393	10.8	12.6	11.2	34.9	934	9	7	674	2.90	10.0	<5	5	28	.37	.8	1.0	10	.92	.052	7	16	.32	33	.01	<3	.44	.04	.21	7	<.2	10	.9	.3	1.6	8
STANDARD D2/HG-500/AU-R	24.9	130.0	100.8	259.1	2135	32	16	1015	4.51	70.2	18	20	59	2.16	10.1	22.5	78	.71	.118	18	58	1.21	263	.14	26	2.41	.05	.72	20	2.7	494	.7	1.9	7.8	521

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 600 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: P1 TO P3 CORE P4 COMPOSITE AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 28 1997 DATE REPORT MAILED: Sept 4/97 SIGNED BY. C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

 Data ___ FA ___

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 253 File # 97-4841 Page 4

1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: Stephen Wetherup

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
518394/518395/518396	8.5	49.2	40.2	161.5	556	4	3	405	.96	4.2	<5	7	13	1.19	1.9	.3	1	.10	.015	11	15	.05	103	<.01	3	.34	.04	.18	6	<.2	30	<.3	<.2	.6	2
518397/518398/518399	13.2	76.6	21.3	167.4	391	4	3	336	1.27	3.1	<5	8	9	1.01	.9	.3	1	.11	.014	8	14	.04	74	<.01	<3	.40	.04	.17	7	<.2	13	<.3	<.2	1.0	20
518400/518401/518402	22.5	131.3	80.6	101.3	491	5	3	106	1.11	9.8	<5	7	10	1.44	.7	.4	2	.07	.018	10	14	.04	42	<.01	<3	.43	.03	.16	5	<.2	12	<.3	.2	.8	6
518405/518406/518407	3.5	418.5	83.0	430.0	616	27	25	908	6.40	21.9	<5	2	26	8.17	.8	2.4	59	.67	.135	10	43	1.01	24	.08	5	1.64	.05	.59	4	.2	30	1.7	<.2	4.5	13
518408/518409/518410	5.9	14.7	16.3	168.9	458	7	9	684	2.61	26.7	<5	7	20	1.78	1.4	.4	10	.48	.027	17	17	.36	47	.01	<3	.50	.05	.21	6	<.2	12	1.0	<.2	1.6	18
518411/518412/518413	14.1	34.5	21.8	220.3	370	6	9	590	2.08	33.4	<5	4	14	2.64	.8	.4	11	.25	.035	14	16	.23	42	.01	<3	.54	.06	.23	7	<.2	<10	1.1	<.2	1.6	34
518414/518415/518416	17.5	30.0	56.5	224.7	714	7	9	743	2.11	33.6	<5	7	14	2.74	.7	.5	2	.33	.032	10	17	.11	33	<.01	3	.34	.03	.19	6	<.2	<10	.8	.2	.9	45
518417/518418/518419	10.8	18.5	17.0	186.0	359	6	6	622	1.83	14.9	<5	9	13	1.62	1.0	.5	4	.25	.016	14	16	.11	36	<.01	<3	.33	.05	.12	6	<.2	11	.9	<.2	.9	6
518420/518421/518422	14.5	11.7	5.2	123.2	132	5	4	360	1.47	5.7	<5	5	12	.99	.4	.3	3	.20	.013	12	16	.10	38	<.01	<3	.29	.06	.13	6	<.2	<10	.8	.2	.9	<1
518423/518424/518425	23.6	13.8	26.2	69.5	849	4	5	358	1.40	7.1	<5	5	11	.68	.9	.5	1	.20	.012	8	15	.09	33	<.01	<3	.28	.05	.13	7	<.2	<10	.7	.5	.9	11
518426/518427/518428	14.6	10.3	37.8	31.5	1164	5	5	400	1.59	7.0	<5	6	21	.48	.6	.8	5	.74	.016	8	16	.13	44	<.01	<3	.39	.05	.15	6	<.2	12	.7	.6	.9	9
518429/518430/518431	11.3	23.3	14.0	39.7	1035	4	6	463	1.62	15.2	<5	13	19	.64	.7	.8	5	.62	.018	10	14	.22	39	<.01	<3	.41	.06	.16	5	<.2	<10	1.0	.5	1.3	10
518432/518433/518434	13.5	74.8	31.4	335.0	1281	4	4	483	.91	49.4	<5	6	15	4.17	6.7	.5	2	.46	.014	6	12	.15	28	<.01	<3	.41	.04	.14	5	<.2	17	<.3	<.2	.9	34
518435/518436/518437	9.1	82.8	12.0	32.1	1201	3	5	432	.94	96.5	<5	10	16	.47	4.7	.2	2	.48	.018	8	13	.15	28	<.01	<3	.43	.06	.13	6	<.2	<10	<.3	<.2	1.3	21
518438/518439/518440	4.2	11.3	3.8	43.4	160	3	1	328	.57	3.8	<5	16	27	.55	.7	.1	1	.87	.012	15	14	.09	32	<.01	<3	.34	.07	.12	6	<.2	<10	<.3	<.2	.7	<1
518441/518442/518443	9.6	16.9	8.6	11.6	740	4	3	327	1.01	17.6	<5	36	21	.22	3.8	.4	3	.53	.017	11	15	.14	31	<.01	<3	.30	.07	.13	6	<.2	<10	<.3	.2	.9	6
518444/518445/518446	77.4	28.1	8.4	25.8	966	3	2	414	.71	37.0	<5	17	16	.35	2.4	.3	2	.40	.016	5	13	.11	37	<.01	<3	.24	.06	.15	5	<.2	<10	<.3	.8	1.1	30
518447/518448/518449	12.8	30.6	11.8	51.5	947	3	3	333	.68	21.2	<5	4	12	.64	4.3	.2	2	.27	.012	6	14	.09	29	<.01	<3	.31	.05	.14	6	<.2	<10	<.3	<.2	.8	21
518450/518451/518452	10.6	19.3	62.6	151.5	1171	3	3	204	.99	27.4	<5	5	8	1.88	2.3	.7	1	.13	.010	6	14	.05	29	<.01	<3	.34	.03	.17	6	<.2	20	<.3	<.2	.7	19
RE 518450/518451/518452	10.4	19.3	61.9	150.7	1183	3	3	202	.98	25.9	<5	4	8	1.98	2.3	.7	1	.13	.010	6	14	.05	29	<.01	<3	.33	.03	.16	5	<.2	<10	<.3	<.2	.8	16
518465/518466/518467	11.0	20.7	28.8	10.0	1116	3	3	360	1.32	25.2	<5	<2	25	.29	3.4	.2	2	.59	.019	4	15	.04	36	<.01	<3	.27	.04	.17	6	<.2	<10	<.3	<.2	.7	17
518468/518469/518470	13.0	32.3	15.4	8.8	1895	2	4	262	1.32	19.8	<5	<2	23	.24	10.2	.2	1	.62	.015	2	13	.04	28	<.01	<3	.28	.05	.14	6	<.2	<10	<.3	<.2	.8	17
518471/518472/518473	7.5	105.3	16.0	14.3	2944	4	7	446	1.83	46.0	<5	<2	26	.30	6.3	.7	2	.78	.027	4	14	.08	32	<.01	<3	.31	.04	.17	6	<.2	10	.3	.2	.7	40
518474/518475/518476	10.9	141.4	19.0	14.6	2825	4	7	287	1.25	47.1	<5	2	11	.20	4.1	.6	1	.31	.015	3	16	.05	32	<.01	<3	.27	.05	.17	6	<.2	13	<.3	.3	.8	25
518477/518478/518479	12.6	19.6	19.9	14.3	1498	3	4	241	1.14	32.8	<5	3	16	.24	1.2	.7	1	.38	.012	5	15	.05	36	<.01	<3	.29	.04	.18	5	<.2	16	<.3	.5	.7	19
518480/518481/518482	35.9	37.6	12.2	28.2	870	8	8	442	1.92	36.8	<5	3	42	.31	2.7	.2	30	1.01	.056	6	20	.49	78	.03	<3	.73	.02	.35	5	.3	<10	<.3	.4	2.6	19
518483/518484/518485	8.8	38.6	18.6	12.9	3311	4	5	272	.97	40.8	<5	2	19	.20	1.7	1.5	2	.49	.017	4	13	.05	39	<.01	<3	.26	.03	.19	5	<.2	<10	<.3	1.0	.7	32
518486/518487/518488	5.7	24.1	48.2	51.7	3909	4	5	324	1.47	20.7	<5	4	23	.68	1.7	1.9	3	.53	.028	6	13	.11	41	<.01	<3	.34	.03	.20	5	<.2	10	.3	1.2	.9	22
518489/518490/518491	15.2	61.6	16.1	22.5	2424	4	10	319	1.41	59.6	<5	<2	20	.36	3.9	.4	2	.49	.017	3	14	.05	35	<.01	<3	.25	.04	.17	6	<.2	<10	.6	.3	.8	99
STANDARD D2/HG-500/AU-R	25.5	131.0	101.4	268.0	2128	32	17	1049	4.55	69.2	26	20	59	2.14	10.1	22.6	78	.70	.120	18	60	1.20	265	.15	26	2.39	.05	.73	20	2.4	438	.4	2.1	7.5	448

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 600 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: P1 TO P3 CORE P4 COMPOSITE AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 27 1997 DATE REPORT MAILED: Sep 5/97 SIGNED BY. J.Wang .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Data___ FA ___

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 253 File # 97-4842

1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: Stephen Wetherup

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
518403	7.0	293.8	74.8	89.9	293	4	3	115	1.33	7.5	<5	7	10	.76	.6	.8	5	.15	.016	9	11	.12	27	<.01	<3	.53	.04	.13	4	<.2	29	.5	<.2	.6	4
518404	8.2	2145.1	580.9	1180.5	1192	35	42	2206	6.34	47.5	27	3	121	18.34	3.7	2.1	38	1.87	.224	13	20	.68	27	.02	10	1.39	.01	.42	<2	.7	57	2.5	<.2	2.4	27
518453	6.2	24.4	31.6	36.9	1273	3	2	753	.65	8.9	<5	3	14	.51	2.5	.2	1	.45	.018	5	13	.12	23	<.01	3	.29	.01	.18	4	<.2	11	<.3	<.2	.6	12
518454	2.7	32.0	28.1	90.0	958	2	7	1195	2.16	11.5	<5	4	132	.83	2.6	.1	14	3.09	.099	18	6	.86	88	<.01	5	.71	.01	.40	2	.2	78	<.3	<.2	1.1	9
518455	6.2	21.6	19.9	69.7	722	2	2	310	.54	12.1	<5	5	11	.94	1.8	.1	<1	.26	.010	6	13	.07	26	<.01	<3	.20	.04	.12	5	<.2	11	<.3	<.2	<.5	13
518456	7.9	68.7	394.4	947.3	4562	3	2	182	.55	23.6	<5	2	6	12.33	6.1	1.2	1	.15	.013	3	13	.03	26	<.01	<3	.22	.02	.15	5	<.2	54	<.3	<.2	<.5	56
518457	8.4	19.7	57.5	71.0	1065	3	7	416	.95	35.2	<5	10	32	1.36	1.8	.4	4	.85	.048	10	9	.24	33	<.01	<3	.41	.01	.19	3	<.2	22	<.3	<.2	.6	44
518458	8.8	28.8	120.3	208.6	848	3	2	214	.55	16.8	<5	<2	7	3.20	2.5	.3	<1	.22	.016	3	14	.05	24	<.01	<3	.34	.02	.13	6	<.2	11	<.3	<.2	.5	30
518459	26.3	28.2	155.1	359.3	1572	3	2	36	.44	21.8	<5	2	5	4.81	4.8	.1	1	.09	.018	3	12	.03	19	<.01	<3	.28	.01	.14	3	<.2	53	<.3	<.2	.6	33
518460	6.5	32.8	112.9	162.1	2054	3	10	1441	1.97	22.2	<5	3	95	1.88	7.0	.2	21	2.90	.101	15	5	.81	82	.01	3	.66	.01	.30	<2	1.0	79	<.3	<.2	1.6	12
RE 518460	6.4	31.9	110.6	161.4	2110	3	10	1442	1.98	21.9	<5	2	95	1.86	7.1	.1	22	2.90	.100	15	6	.82	86	.01	3	.74	.01	.32	2	1.1	78	<.3	<.2	1.5	9
RRE 518460	6.9	32.5	103.3	193.3	2020	3	9	1431	1.94	21.3	<5	2	93	2.20	6.8	.1	21	2.86	.099	15	5	.80	83	.01	3	.69	.01	.31	<2	1.0	81	<.3	<.2	1.3	11
518461	24.3	493.5	1501.2	2659.7	75483	3	17	188	3.38	358.2	<5	<2	9	34.69	204.2	2.0	2	.26	.020	2	11	.04	24	<.01	<3	.29	.01	.24	6	.2	1185	.9	<.2	1.1	904
518462	20.6	95.2	291.4	218.1	10907	2	14	295	3.09	213.4	<5	2	18	2.95	20.8	.7	3	.61	.033	4	10	.09	29	<.01	<3	.30	.02	.20	2	.2	51	1.1	<.2	.9	371
518463	7.0	13.1	27.6	29.7	725	5	6	1000	2.48	9.0	<5	2	52	.21	1.8	.2	14	2.15	.090	12	11	.45	70	.01	3	.73	.02	.27	4	<.2	16	.4	<.2	1.7	11
518464	13.2	12.8	10.5	26.7	5309	11	6	656	3.39	3.9	<5	2	53	.11	.8	4.1	42	1.66	.110	9	22	.75	32	.08	<3	1.04	.05	.40	3	.3	<10	.4	3.1	4.3	16
STANDARD D2/HG-500/AU-R	25.5	131.9	102.1	266.4	2108	32	17	1040	4.48	71.0	20	20	59	2.15	9.3	22.8	79	.72	.117	19	60	1.21	262	.15	25	2.39	.05	.72	20	2.5	452	.5	1.6	7.1	545

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

DATE RECEIVED: AUG 27 1997 **DATE REPORT MAILED:** Sep 8/97 **SIGNED BY.** ...D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Data___ FA ___

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 253 File # 97-4397 Page 1

1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: Greg Kulla

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
518001	2.4	2.7	2.6	11.3	34	<1	1	275	.80	.8	<5	7	5	.01	.2	<.1	4	.06	.016	21	12	.05	60	<.01	<3	.17	.04	.08	4	<.2	30	<.3	<.2	1.1	1
518002	2.8	2.5	2.7	13.5	<30	<1	1	320	.83	<.5	<5	6	4	<.01	<.2	<.1	5	.07	.018	20	11	.07	46	<.01	<3	.21	.04	.08	3	<.2	18	<.3	<.2	1.5	1
518003	4.8	7.1	4.0	16.2	70	<1	2	472	.98	1.6	<5	8	4	.02	.2	<.1	4	.07	.019	18	10	.07	57	<.01	<3	.21	.04	.09	3	<.2	19	<.3	<.2	1.1	2
518004	6.7	35.6	2.7	13.0	274	<1	2	232	.77	1.5	<5	7	4	.01	.2	<.1	4	.07	.018	22	11	.10	44	<.01	<3	.25	.04	.08	3	<.2	13	<.3	<.2	1.9	2
518005	19.7	22.0	2.3	12.9	279	<1	2	176	.75	4.5	<5	7	4	<.01	<.2	<.1	3	.05	.016	17	12	.09	66	<.01	<3	.28	.04	.09	4	.2	10	<.3	<.2	1.8	5
518006	2.4	3.9	2.6	12.3	64	<1	1	150	.74	1.8	<5	7	4	<.01	.2	<.1	4	.06	.017	18	11	.09	33	<.01	<3	.27	.04	.08	3	<.2	18	<.3	<.2	1.7	8
518007	11.3	2.2	2.3	12.3	<30	<1	1	178	.70	.7	<5	6	4	<.01	<.2	<.1	4	.06	.017	20	9	.09	34	<.01	<3	.21	.03	.06	<2	<.2	<10	<.3	<.2	1.5	1
518008	3.7	15.3	2.5	12.3	98	<1	2	351	.84	3.2	<5	7	4	<.01	.2	<.1	3	.07	.016	17	11	.06	70	<.01	<3	.17	.03	.08	2	<.2	<10	<.3	<.2	1.1	4
518009	7.7	3.1	3.1	12.3	105	<1	2	425	.93	2.6	<5	7	4	.02	<.2	.1	2	.07	.016	12	11	.05	61	<.01	<3	.18	.03	.11	3	.2	<10	<.3	<.2	1.0	5
518010	2.9	2.3	2.3	9.8	<30	<1	1	296	.77	.5	<5	8	5	<.01	<.2	<.1	3	.07	.016	23	10	.05	36	<.01	<3	.18	.03	.09	3	.2	14	<.3	<.2	1.1	1
RE 518010	3.2	2.2	2.3	9.9	<30	<1	1	298	.77	.5	<5	8	5	<.01	<.2	<.1	3	.07	.016	23	10	.05	36	<.01	<3	.19	.03	.09	3	<.2	21	<.3	<.2	.9	1
RRE 518010	2.5	2.4	2.3	10.4	30	<1	1	304	.81	.5	<5	7	5	<.01	.2	<.1	3	.07	.016	21	11	.05	37	<.01	<3	.19	.04	.10	3	<.2	14	<.3	<.2	.9	<1
518011	2.5	2.4	1.9	10.9	50	<1	2	465	.83	2.4	<5	7	5	.02	.2	<.1	1	.07	.016	14	9	.04	70	<.01	<3	.18	.02	.11	4	<.2	15	<.3	<.2	1.0	4
518012	1.4	7.2	8.4	20.0	550	<1	2	573	.90	10.9	<5	5	4	.10	1.8	<.1	1	.07	.016	14	10	.03	37	<.01	<3	.27	.02	.16	5	<.2	17	<.3	<.2	.9	6
518013	2.4	13.7	43.5	73.7	1454	4	5	1235	1.64	20.6	<5	7	4	.54	2.7	<.1	2	.09	.015	12	7	.06	63	<.01	<3	.30	.01	.15	2	<.2	37	<.3	<.2	.9	22
518014	2.9	2.6	5.5	20.0	195	<1	2	474	.95	14.6	<5	8	4	.09	.4	<.1	2	.07	.015	19	8	.05	55	<.01	<3	.22	.02	.15	2	<.2	14	<.3	<.2	1.1	5
518015	14.9	2.0	3.0	12.5	101	<1	2	365	.83	36.9	<5	7	5	.01	.2	<.1	2	.06	.015	15	9	.05	98	<.01	<3	.15	.03	.08	2	<.2	<10	<.3	<.2	1.0	2
518016	2.0	2.4	3.1	15.5	75	<1	3	468	.99	2.2	<5	7	5	.03	.2	<.1	3	.07	.017	18	10	.05	56	<.01	<3	.16	.03	.09	3	<.2	18	<.3	<.2	1.0	4
518017	1.9	2.7	2.8	22.4	142	3	5	834	1.35	3.4	<5	8	5	.04	.3	<.1	3	.08	.014	16	8	.06	28	<.01	<3	.22	.02	.10	3	<.2	13	<.3	<.2	1.0	11
518018	1.6	22.2	14.8	105.5	1106	28	25	3352	6.36	17.9	<5	4	11	.40	2.9	<.1	41	.46	.123	17	22	.35	48	<.01	<3	.54	.01	.28	<2	.5	110	<.3	<.2	1.7	11
518019	1.2	53.7	2.8	72.8	486	56	29	683	4.96	5.7	<5	<2	33	.03	.4	<.1	110	.53	.142	16	80	2.70	119	.01	<3	2.86	.02	.14	<2	<.2	38	<.3	<.2	9.3	4
518020	1.5	45.5	1.9	62.2	105	45	23	696	4.90	1.7	<5	<2	45	<.01	.3	<.1	137	.60	.159	20	76	2.74	215	.02	<3	2.78	.02	.14	<2	<.2	40	<.3	<.2	9.8	1
518021	1.3	30.4	1.3	49.9	76	32	19	902	4.21	1.2	<5	<2	19	.01	.2	<.1	107	.49	.150	18	55	1.84	39	.01	<3	1.92	.02	.11	<2	<.2	22	<.3	<.2	7.1	1
518022	1.1	83.7	2.6	106.9	151	53	37	3688	8.73	1.7	<5	4	24	.15	.4	<.1	116	.74	.162	20	64	1.10	104	.01	<3	1.46	.02	.16	<2	.2	58	<.3	<.2	5.5	2
RE 518022	1.2	88.6	2.7	112.7	205	56	40	3878	9.05	1.9	<5	5	25	.17	.4	<.1	124	.78	.169	22	67	1.14	107	.01	<3	1.51	.02	.17	<2	.2	69	<.3	<.2	5.7	6
RRE 518022	1.5	88.0	2.5	111.9	156	54	38	3923	9.11	1.8	<5	5	24	.16	.4	<.1	117	.76	.166	22	65	1.12	109	.01	<3	1.41	.02	.15	<2	.2	67	<.3	<.2	5.5	2
518023	1.2	17.9	2.6	109.3	84	25	24	3279	6.68	3.3	<5	5	18	.14	.2	<.1	63	.47	.119	20	22	.49	30	.01	<3	.76	.03	.14	<2	.2	44	<.3	<.2	3.2	4
518024	1.4	80.4	10.8	162.3	1059	45	36	4907	9.35	11.6	<5	5	22	.50	4.8	<.1	87	.63	.148	12	38	.46	29	<.01	<3	.69	.01	.26	<2	.5	102	<.3	<.2	1.9	5
518025	.8	81.3	5.0	97.1	337	55	34	2035	7.10	7.6	<5	<2	55	.16	6.3	<.1	156	.60	.104	10	75	2.18	1102	.02	<3	2.39	.02	.16	<2	.4	30	<.3	<.2	7.4	2
518026	1.1	97.8	1.5	88.7	347	60	36	930	6.30	2.6	<5	<2	43	.02	.3	<.1	179	.55	.124	10	120	3.93	365	.03	<3	3.80	.02	.08	<2	<.2	44	<.3	<.2	11.0	5
518027	.7	48.0	1.6	62.3	146	37	26	661	4.67	3.2	<5	<2	80	.01	.3	<.1	151	.79	.128	8	87	2.34	68	.16	<3	2.48	.04	.07	<2	<.2	37	<.3	<.2	8.2	3
518028	1.1	62.0	1.1	43.7	64	33	21	571	4.31	2.8	<5	<2	44	.03	<.2	<.1	146	.74	.143	8	71	1.74	43	.16	<3	1.78	.04	.05	<2	<.2	26	<.3	<.2	6.7	3
518029	.8	65.1	1.0	42.8	102	32	22	556	4.51	2.1	<5	<2	35	<.01	.2	<.1	160	.73	.160	8	79	1.65	274	.13	<3	1.76	.04	.08	<2	<.2	34	<.3	<.2	7.3	3
518030	1.0	35.1	2.4	129.3	<30	52	39	4415	9.78	3.6	<5	5	22	.15	1.5	<.1	135	.81	.196	13	60	.64	64	.01	<3	.82	.01	.18	2	.3	52	<.3	<.2	2.8	1
STANDARD D	27.3	137.2	102.8	287.1	2090	33	18	1095	4.66	77.6	19	20	60	2.13	9.9	22.0	80	.71	.109	18	59	1.20	264	.15	25	2.44	.05	.72	20	3.0	452	.6	2.1	7.8	472

Standard is STANDARD DZ/HG-500/AU-R.

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

DATE RECEIVED: AUG 15 1997 DATE REPORT MAILED: Aug 22/97 SIGNED BY. C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Data FA

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
518031	.8	80.7	3.0	106.2	274	40	32	3373	7.63	5.4	<5	2	19	.21	2.2	<.1	114	.81	.203	10	57	.46	17	<.01	<3	.83	.01	.21	4	.2	29	<.3	<.2	2.5	<1
518032	1.2	35.2	3.2	84.0	79	32	27	3041	6.99	4.4	<5	3	19	.15	3.1	<.1	118	.74	.197	12	53	.40	17	<.01	3	.76	.01	.17	4	.2	12	<.3	<.2	2.2	5
518033	1.7	36.9	3.5	83.7	100	21	21	2420	5.47	2.1	<5	5	18	.19	2.8	<.1	73	.54	.141	17	24	.37	35	.01	<3	.93	.02	.17	<2	.3	13	<.3	<.2	3.2	174
518034	1.7	2.6	2.6	18.6	129	3	5	928	1.38	1.6	<5	7	5	.03	<.2	<.1	5	.09	.018	18	6	.06	24	<.01	<3	.23	.02	.12	2	<.2	16	<.3	<.2	.9	11
518035	2.3	7.7	2.8	20.0	117	2	3	896	1.40	1.1	<5	6	5	.04	<.2	.1	4	.08	.016	17	8	.07	20	<.01	<3	.23	.02	.10	3	<.2	15	<.3	<.2	1.1	1
518036	1.8	2.9	4.5	34.8	218	7	7	1740	2.26	4.6	<5	10	5	.07	<.2	<.1	6	.11	.015	15	7	.08	18	<.01	<3	.24	.02	.12	3	<.2	16	<.3	<.2	.9	46
RE 518036	1.8	2.7	4.6	33.0	239	7	6	1652	2.15	4.3	<5	10	5	.07	<.2	<.1	6	.10	.014	15	8	.08	17	<.01	<3	.23	.01	.11	3	<.2	15	<.3	<.2	1.0	7
RRE 518036	1.4	2.9	4.1	33.3	225	6	7	1694	2.24	3.9	<5	9	5	.07	<.2	<.1	7	.11	.015	16	9	.08	20	<.01	<3	.26	.02	.12	5	<.2	<10	<.3	<.2	1.0	11
518037	1.2	2.5	2.3	18.5	121	2	4	943	1.36	.9	<5	7	5	.05	<.2	<.1	4	.08	.017	20	10	.06	22	<.01	<3	.20	.03	.11	3	<.2	<10	<.3	<.2	1.2	5

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

Data FA

MR YTI LAB ORI LTD 8 H NGS VI UVE V R6 PH(504 -31 FAX)25 716

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 253 File # 97-4423 Page 1

1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: Steve Wetherup

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
518038	.9	32.2	2.5	36.8	79	12	12	718	3.28	1.8	<5	3	19	.03	<.2	<.1	83	.47	.132	16	28	.75	53	.08	<3	1.13	.04	.21	<2	.2	<10	<.3	<.2	4.7	2
518039	1.6	54.8	2.6	51.7	98	22	18	758	4.25	2.2	<5	<2	21	.04	.2	<.1	127	.60	.172	12	52	1.25	193	.11	<3	1.58	.04	.26	<2	.3	<10	<.3	<.2	6.5	3
518040	1.1	5.1	1.7	11.0	39	<1	3	399	1.01	.5	<5	9	6	.01	<.2	<.1	7	.08	.021	21	9	.07	23	<.01	<3	.22	.03	.09	3	<.2	<10	<.3	<.2	.9	1
518041	3.9	3.8	2.0	8.7	94	<1	2	368	.92	.9	<5	9	5	.01	.2	<.1	3	.07	.015	26	11	.05	21	<.01	<3	.17	.04	.09	3	<.2	<10	<.3	<.2	.8	<1
518042	2.1	2.4	1.7	14.0	100	2	4	686	1.25	2.2	<5	9	5	.01	<.2	<.1	2	.08	.015	17	9	.06	20	<.01	<3	.27	.02	.12	2	.2	<10	<.3	<.2	.8	4
518043	3.2	3.7	1.7	15.3	97	4	5	625	1.29	1.1	<5	9	8	.02	.2	<.1	7	.10	.023	21	13	.06	296	<.01	<3	.24	.03	.12	3	.2	<10	<.3	<.2	.7	3
518044	1.6	37.1	2.6	66.0	82	34	20	1039	4.28	1.7	<5	<2	34	.02	.4	<.1	97	.67	.160	17	79	1.69	76	.04	<3	2.11	.03	.14	<2	<.2	<10	<.3	<.2	7.5	<1
518045	1.8	54.8	3.8	60.2	151	29	19	1386	4.62	2.0	<5	<2	34	.06	.6	<.1	89	.74	.168	15	54	1.13	63	.04	<3	1.83	.02	.25	<2	.2	<10	<.3	<.2	5.8	<1
518046	1.2	5.3	4.6	16.3	176	6	7	637	1.28	3.7	<5	8	9	.04	.2	<.1	7	.14	.019	16	10	.09	24	<.01	3	.36	.01	.14	3	.3	10	<.3	<.2	1.2	17
518047	1.0	2.6	2.5	32.1	114	5	7	1170	1.79	3.1	<5	8	6	.09	.2	<.1	6	.11	.013	16	6	.08	17	<.01	<3	.27	.01	.11	3	.2	15	<.3	<.2	.8	14
518048	.7	1.7	2.1	30.7	55	6	7	1078	1.82	1.2	<5	10	9	.08	<.2	<.1	6	.14	.012	20	7	.10	22	<.01	<3	.34	.01	.15	2	.2	<10	<.3	<.2	.9	1
RE 518048	.7	1.6	2.1	30.4	72	6	7	1060	1.78	1.1	<5	9	9	.08	<.2	<.1	6	.14	.012	20	7	.09	22	<.01	3	.34	.01	.15	2	<.2	14	<.3	<.2	.9	<1
RRE 518048	.9	1.6	2.1	29.0	85	7	7	1062	1.77	1.1	<5	10	9	.07	<.2	<.1	6	.14	.012	19	6	.09	21	<.01	<3	.31	.01	.14	3	.2	12	<.3	<.2	.9	<1
518049	1.6	4.4	2.7	16.0	360	2	5	512	1.05	4.9	<5	7	7	.04	.3	<.1	3	.14	.018	17	9	.06	26	<.01	<3	.26	.02	.15	3	<.2	<10	<.3	<.2	.8	18
518050	.7	69.3	3.0	66.3	132	33	23	1278	4.94	2.3	<5	<2	48	.05	1.9	<.1	98	1.38	.154	13	61	1.39	125	.02	<3	1.78	.02	.14	<2	.2	<10	<.3	<.2	6.0	1
518051	1.7	63.1	2.2	62.1	188	32	22	1111	4.69	2.9	<5	<2	71	.05	.5	<.1	106	1.12	.166	13	57	1.17	227	.12	<3	1.56	.03	.18	<2	<.2	<10	<.3	<.2	5.9	1
518052	.7	45.2	2.9	68.9	176	26	22	1436	5.61	2.9	<5	2	28	.06	.3	<.1	112	.70	.173	19	45	1.35	99	.03	<3	1.73	.02	.16	<2	<.2	<10	<.3	<.2	6.4	16
518053	.8	60.3	6.1	65.6	415	31	24	1006	4.71	9.2	<5	<2	32	.06	.6	<.1	96	.89	.162	21	46	1.50	68	.02	<3	1.79	.03	.19	<2	.2	<10	<.3	<.2	6.0	13
518054	.7	37.4	2.6	55.6	167	25	20	645	4.10	3.9	<5	<2	35	.01	<.2	<.1	114	.74	.167	14	48	1.72	133	.07	<3	1.94	.03	.12	<2	<.2	<10	<.3	<.2	7.1	3
518055	1.2	65.2	4.2	67.7	482	39	22	1609	4.40	3.8	<5	<2	40	.19	1.8	<.1	63	1.83	.154	14	68	1.25	167	.01	<3	1.19	.01	.27	2	.5	61	<.3	<.2	4.1	26
518056	1.2	42.3	10.0	91.7	836	28	23	2179	5.20	10.7	<5	<2	40	.22	1.0	<.1	62	1.70	.166	10	35	.83	197	<.01	<3	.67	.01	.27	2	.4	55	<.3	<.2	1.8	13
518057	1.0	22.9	5.8	71.1	202	24	20	1873	4.88	2.4	<5	4	61	.14	.9	<.1	77	2.30	.158	10	29	.99	270	<.01	<3	.75	.01	.27	3	.2	12	<.3	<.2	2.0	2
518058	3.1	46.7	4.2	43.3	246	19	15	765	3.24	3.1	<5	2	40	.05	.4	<.1	87	1.17	.138	18	42	.82	83	.05	<3	.97	.03	.19	<2	.2	<10	<.3	<.2	3.7	4
518059	1.2	53.2	12.5	102.8	426	27	20	1519	4.91	4.7	<5	3	30	.24	.8	<.1	100	.81	.162	16	37	.89	111	.05	<3	1.07	.04	.24	<2	.2	<10	<.3	<.2	3.6	3
518060	1.2	58.5	8.5	162.2	198	47	35	4628	10.05	3.0	<5	6	37	.34	.4	<.1	108	1.08	.169	20	60	.67	762	.02	<3	.89	.01	.25	<2	.3	<10	<.3	<.2	3.1	3
RE 518060	1.0	57.7	8.1	160.5	398	47	34	4575	9.89	2.3	<5	7	37	.33	.4	<.1	107	1.07	.168	20	57	.66	751	.02	<3	.87	.01	.24	<2	.2	10	<.3	<.2	2.8	98
RRE 518060	1.0	57.1	8.3	161.6	178	47	35	4621	9.91	2.2	<5	6	36	.33	.4	<.1	104	1.07	.168	20	56	.66	696	.02	<3	.79	.01	.23	2	.2	14	<.3	<.2	2.8	5
518061	1.0	49.1	8.2	78.5	105	24	20	1977	5.11	2.3	<5	3	35	.21	.6	<.1	84	.97	.191	22	30	.40	80	<.01	<3	.75	.02	.20	<2	.3	<10	<.3	<.2	2.0	4
518062	.9	40.8	8.6	64.7	194	21	16	1268	4.40	3.2	<5	3	42	.12	1.3	<.1	83	.95	.198	21	30	.35	27	.01	<3	1.00	.01	.20	<2	.3	14	<.3	<.2	3.0	4
518063	.5	3.1	2.8	21.7	45	5	8	502	1.21	.6	<5	5	34	.02	.2	<.1	11	.65	.070	16	6	.20	676	<.01	3	.41	.01	.19	<2	.3	34	<.3	<.2	1.0	1
518064	.2	4.9	3.7	32.8	37	4	8	802	2.03	.9	6	3	47	.08	.2	<.1	20	1.39	.110	17	3	.39	101	<.01	3	.47	.01	.24	<2	<.2	29	<.3	<.2	1.1	<1
518065	1.4	50.2	3.0	95.9	68	32	25	2208	6.64	1.4	<5	3	36	.11	.5	<.1	103	.87	.189	18	50	.61	58	.02	<3	1.32	.02	.23	<2	.2	33	<.3	<.2	4.1	1
518066	1.2	81.1	3.3	86.2	160	34	28	2056	5.90	2.7	<5	2	30	.08	.6	<.1	113	.77	.199	19	54	.81	118	.02	<3	1.23	.02	.20	<2	<.2	27	<.3	<.2	4.4	2
518067	1.9	59.5	3.8	92.3	761	35	28	3017	6.35	6.6	<5	3	17	.15	2.0	<.1	83	.70	.174	21	33	.42	85	<.01	<3	.68	.01	.23	3	.3	34	<.3	<.2	1.8	3
STANDARD D	25.5	131.0	99.2	278.9	1978	31	17	1045	4.52	70.7	22	19	65	2.01	8.8	21.6	77	.74	.106	17	57	1.16	262	.15	27	2.43	.06	.71	21	2.7	459	.6	1.8	7.3	540

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

ICP - 30 GRAM SAMPLE IS DIGESTED WITH 180ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 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: CORE AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 18 1997 **DATE REPORT MAILED:** Aug 22/97 **SIGNED BY.** C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Data L FA

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
518068	1.9	112.0	3.6	93.8	296	51	37	2123	6.39	3.0	<5	3	31	.12	.5	<.1	127	.77	.192	14	96	1.07	39	.03	<3	1.65	.03	.21	<2	.3	<10	<.3	<.2	5.2	6
518069	1.9	81.0	2.7	95.6	128	59	27	665	4.25	1.9	<5	<2	35	.05	1.5	<.1	119	.79	.149	8	162	1.57	111	.13	<3	1.90	.03	.10	<2	<.2	<10	<.3	<.2	6.0	3
518070	1.6	74.3	1.6	48.2	60	59	22	442	3.34	1.6	<5	<2	35	.03	<.2	<.1	102	.81	.138	6	167	1.37	79	.16	<3	1.65	.05	.13	<2	.2	<10	<.3	<.2	5.4	1
518071	2.0	99.8	4.0	118.9	427	67	37	2489	7.64	2.5	<5	3	38	.11	.9	<.1	150	.90	.149	13	101	1.29	61	.08	<3	1.61	.03	.17	<2	.2	<10	<.3	<.2	5.7	2
518072	1.7	87.9	5.0	61.3	537	45	26	1163	4.53	3.4	6	<2	34	.05	1.6	<.1	121	.68	.145	11	97	.71	30	.02	<3	1.39	.02	.17	<2	.4	<10	<.3	<.2	4.6	2
518073	2.6	73.2	8.6	144.9	1196	80	39	4203	7.32	2.2	<5	5	28	.13	.7	<.1	81	.61	.144	13	173	1.01	22	.01	<3	1.13	.01	.11	<2	.2	<10	<.3	<.2	3.4	1
518074	1.7	73.5	4.1	59.9	216	53	25	1113	3.95	2.1	<5	<2	38	.05	.5	<.1	113	.68	.150	11	166	1.20	29	.02	<3	2.04	.02	.15	<2	.2	<10	<.3	<.2	5.6	4
518075	1.6	43.7	4.0	97.8	308	59	27	2189	5.00	3.0	<5	3	35	.08	.5	<.1	77	.70	.157	11	124	1.32	25	.02	<3	1.67	.03	.13	<2	.2	<10	<.3	<.2	4.3	1
518076	1.0	70.7	13.3	121.1	1277	80	42	2493	6.45	14.2	<5	3	57	.37	6.8	<.1	114	.75	.139	11	101	.71	20	.01	<3	1.35	.01	.19	<2	.8	110	<.3	<.2	3.6	9
518077	1.4	78.2	4.6	95.5	198	77	33	1600	4.99	3.2	<5	2	28	.09	2.4	<.1	90	.70	.141	9	181	1.30	23	.09	<3	1.54	.03	.16	2	.2	<10	<.3	<.2	4.5	2
518078	.8	72.2	2.4	79.4	257	51	26	1531	4.96	3.1	<5	2	38	.08	.3	<.1	111	.78	.151	10	120	1.24	62	.07	<3	1.66	.03	.12	<2	<.2	<10	<.3	<.2	5.2	2
518079	1.1	93.6	1.9	94.6	89	66	37	1672	7.04	2.5	<5	<2	38	.07	1.2	<.1	165	.81	.167	16	178	1.76	22	.05	<3	2.22	.04	.16	<2	.2	<10	<.3	<.2	7.2	2
518080	.9	81.2	1.3	101.9	71	47	33	2127	7.54	1.6	<5	2	40	.09	.2	<.1	182	.84	.146	11	88	1.15	30	.08	<3	1.63	.05	.12	<2	<.2	<10	<.3	<.2	6.2	<1
RE 518080	.8	71.1	1.3	90.3	56	41	29	1882	6.57	1.2	<5	<2	35	.08	.2	<.1	160	.74	.130	9	76	1.02	26	.07	<3	1.43	.04	.10	<2	<.2	11	<.3	<.2	5.5	1
RRE 518080	.9	75.7	1.1	92.8	59	44	30	1960	6.93	1.8	<5	2	37	.08	<.2	<.1	168	.78	.139	10	84	1.09	26	.07	<3	1.52	.04	.11	<2	<.2	<10	<.3	<.2	5.8	1
518081	1.0	94.2	1.1	51.7	60	43	24	637	4.30	1.5	<5	<2	48	.03	<.2	<.1	124	.94	.139	6	104	1.45	28	.17	<3	1.70	.05	.08	<2	<.2	<10	<.3	<.2	5.5	1
518082	1.6	70.8	1.2	48.2	51	54	22	527	3.20	1.6	<5	2	37	.04	<.2	<.1	74	.83	.134	6	145	1.51	26	.16	<3	1.62	.04	.07	2	<.2	<10	<.3	<.2	4.5	1
518083	1.0	117.7	1.8	79.8	111	45	30	1391	5.93	2.8	<5	<2	45	.10	.4	<.1	139	.91	.151	10	71	1.22	62	.14	<3	1.60	.04	.14	2	.2	<10	.3	<.2	5.5	2
518084	1.0	63.1	2.3	185.5	162	69	43	4395	10.43	2.9	<5	4	46	.23	.3	<.1	143	.90	.129	14	106	1.54	288	.02	<3	1.88	.03	.11	<2	.2	<10	<.3	<.2	5.7	3
518085	1.0	87.8	2.2	66.0	151	54	27	1214	4.98	4.4	<5	<2	28	.06	<.2	<.1	122	.72	.154	7	122	1.20	87	.09	<3	1.50	.05	.16	<2	<.2	<10	<.3	<.2	5.5	5
518086	1.3	63.9	1.2	42.8	33	47	20	635	3.61	1.4	<5	<2	30	.02	<.2	<.1	91	.75	.146	6	116	1.04	156	.13	<3	1.27	.05	.18	2	<.2	<10	<.3	<.2	4.4	1
STANDARD D	26.3	132.5	100.4	283.4	1928	33	18	1004	4.61	72.3	24	20	59	1.97	8.8	23.9	76	.69	.108	17	57	1.16	264	.15	24	2.44	.05	.73	22	2.7	477	.7	2.0	7.1	465

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

Data FA

ME / YTI LAB ORI LTD. 8 . H NGS VA UVE V R6 PHC 504. -31 FAX) 25 716

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 253 File # 97-4571 Page 1

1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: Stephen Wetherup

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
518087	1.2	66.0	1.4	47.0	57	37	17	712	3.75	2.3	<5	3	34	.04	.2	<.1	112	.83	.164	11	99	.91	190	.12	<3	1.11	.06	.10	<2	<.2	39	<.3	<.2	3.9	1
518088	3.1	10.1	1.9	19.5	39	10	5	455	1.81	1.0	<5	5	18	.03	.3	<.1	24	.22	.057	17	19	.14	138	.02	<3	.39	.04	.10	2	<.2	23	<.3	<.2	1.6	1
518089	3.0	5.3	2.2	46.0	62	9	7	1173	2.27	2.0	<5	4	8	.09	.3	<.1	10	.15	.029	12	8	.05	174	<.01	<3	.35	.01	.12	3	.5	86	<.3	<.2	.9	1
518090	2.0	4.7	2.2	25.5	93	4	4	838	1.51	2.1	<5	6	6	.08	.3	<.1	8	.13	.030	15	8	.04	34	<.01	<3	.33	.02	.12	2	.3	39	<.3	<.2	.7	9
518091	1.9	38.2	2.7	31.3	60	10	8	581	2.34	1.2	<5	5	28	.05	.5	<.1	58	.42	.111	18	33	.35	66	.03	<3	.85	.04	.16	<2	.2	20	<.3	<.2	3.1	1
518092	1.4	23.4	8.0	91.3	828	11	11	2040	3.49	9.0	<5	4	11	.64	3.9	<.1	30	.35	.097	16	13	.13	268	<.01	<3	.56	.01	.17	2	.5	145	<.3	<.2	1.0	39
518093	3.0	33.5	5.9	61.4	200	19	14	1465	4.06	10.5	5	4	13	.31	4.3	<.1	55	.50	.134	14	29	.27	159	<.01	<3	.49	.01	.11	<2	2.3	511	<.3	<.2	1.2	3
518094	2.6	32.3	8.9	99.5	395	27	25	2056	5.25	8.7	5	3	13	.38	4.1	.2	69	.47	.117	12	22	.46	208	<.01	<3	.60	.01	.17	<2	1.4	245	<.3	<.2	1.7	4
518095	1.7	14.1	5.1	101.5	263	19	18	2774	5.79	4.7	<5	3	11	.20	1.5	.1	35	.43	.099	15	8	.24	287	<.01	3	.55	.01	.18	2	1.2	229	<.3	<.2	1.3	1
518096	2.0	2.4	1.7	11.4	57	2	3	469	.85	1.2	<5	5	9	.02	.3	<.1	7	.11	.029	13	6	.04	85	<.01	<3	.34	.01	.12	2	.3	59	<.3	<.2	.5	1
RE 518096	2.0	2.4	1.6	12.8	40	3	3	471	.85	1.1	<5	4	9	.07	.3	<.1	7	.11	.029	13	6	.04	86	<.01	<3	.34	.01	.12	2	.4	63	<.3	<.2	.8	1
RRE 518096	2.5	2.2	1.7	13.2	97	3	2	445	.80	1.1	<5	5	9	.05	.3	.1	7	.10	.029	13	6	.04	82	<.01	<3	.32	.01	.11	<2	.4	68	<.3	<.2	.6	1
518097	2.1	2.8	2.5	25.4	110	3	3	940	1.47	2.4	<5	5	9	.07	.4	<.1	10	.13	.030	13	7	.05	201	<.01	<3	.34	.01	.10	3	.7	106	<.3	<.2	1.0	2
518098	3.6	2.7	1.9	15.6	83	3	3	635	1.24	1.2	<5	6	8	.05	.2	<.1	6	.12	.034	15	8	.04	376	<.01	<3	.28	.02	.12	3	<.2	18	<.3	<.2	.7	24
518099	3.1	6.6	4.0	38.2	311	4	5	1351	1.87	6.9	<5	6	6	.19	.9	<.1	12	.16	.041	13	6	.08	86	<.01	<3	.39	<.01	.13	<2	.2	56	<.3	<.2	.6	26
518100	3.1	5.3	2.9	43.9	184	4	4	1697	1.99	4.9	<5	5	6	.17	.7	<.1	5	.13	.030	13	5	.05	94	<.01	<3	.32	<.01	.12	2	.2	32	<.3	<.2	.7	17
518101	3.8	89.9	11.3	114.9	1102	6	7	917	2.69	115.9	<5	5	46	1.57	1.7	.2	6	.86	.049	6	7	.50	29	<.01	<3	.30	.03	.15	2	<.2	19	.5	<.2	.7	6
518102	4.5	71.5	14.7	127.8	1489	7	7	1378	3.78	106.2	<5	4	56	1.44	3.5	.1	7	1.08	.084	6	6	.74	24	<.01	<3	.33	.03	.16	2	.3	10	.6	<.2	.9	7
518103	3.1	68.1	11.1	103.0	1076	9	7	1590	3.77	161.0	<5	3	81	1.32	2.4	.1	15	1.45	.096	7	7	.97	44	<.01	<3	.43	.03	.18	2	<.2	<10	.3	<.2	1.2	3
518104	6.3	46.4	14.9	62.8	946	7	7	1094	2.89	98.8	<5	4	59	.68	1.2	.3	18	1.05	.068	7	8	.77	27	<.01	<3	.42	.03	.14	2	.2	<10	.4	<.2	1.7	8
518105	2.4	59.6	19.6	78.3	1264	6	9	1348	3.30	109.9	<5	4	73	1.14	1.4	.2	8	1.30	.067	6	7	.75	26	<.01	<3	.28	.03	.16	3	.2	<10	.6	<.2	1.0	10
518106	3.9	63.1	19.0	70.9	1708	7	11	1096	3.61	92.3	<5	4	61	.72	1.4	.6	10	1.10	.071	7	10	.61	36	<.01	<3	.38	.03	.17	3	<.2	16	.7	.3	.9	10
518107	3.8	191.5	27.7	125.4	3080	9	22	1387	5.67	655.2	<5	4	47	1.14	2.0	.4	8	.99	.079	5	8	.55	25	<.01	<3	.39	.03	.17	2	<.2	22	1.7	.2	.6	107
518108	3.2	37.0	6.5	42.6	513	10	12	1091	4.62	89.7	<5	3	65	.20	.5	.5	64	1.50	.131	8	14	1.01	52	.05	<3	.83	.05	.24	2	.2	13	.5	.4	3.8	13
RE 518108	2.9	37.0	6.1	42.3	475	9	12	1091	4.62	86.8	<5	3	65	.19	.5	.5	64	1.50	.131	8	14	1.01	54	.05	<3	.84	.05	.24	2	<.2	<10	.5	.4	3.8	13
RRE 518108	2.9	40.5	6.4	44.5	508	10	13	1111	4.76	79.6	<5	3	67	.19	.5	.5	64	1.54	.134	7	14	1.02	56	.05	<3	.87	.06	.26	<2	.2	13	.5	.4	3.8	15
518109	3.3	77.4	23.0	88.1	1650	8	14	1571	4.18	147.4	<5	3	68	.80	2.5	.3	31	1.42	.098	6	8	.85	40	.01	<3	.57	.03	.16	2	.3	19	.6	.2	2.3	14
518110	3.1	61.1	10.5	106.3	852	12	15	1637	5.09	89.6	<5	3	60	.49	2.5	.4	77	1.36	.137	9	19	1.24	77	.04	<3	1.23	.05	.24	<2	.2	<10	.5	.2	6.7	10
518111	7.2	195.6	17.2	120.4	2562	9	11	1619	3.98	147.7	<5	4	70	.92	2.5	<.1	30	1.40	.089	7	9	.85	25	<.01	<3	.77	.03	.17	2	.2	16	.4	<.2	2.9	3
518112	4.7	319.8	7.7	218.4	2638	5	6	1054	2.12	23.5	<5	5	51	2.07	2.1	<.1	15	1.11	.068	9	9	.51	43	.01	<3	.46	.04	.17	2	.3	<10	.4	<.2	1.9	2
518113	9.3	751.2	8.3	195.3	4640	8	10	1052	2.72	18.8	5	5	53	1.90	3.0	<.1	18	1.34	.078	11	9	.67	33	<.01	<3	.51	.04	.15	2	.2	18	.4	.2	2.4	4
518114	5.6	135.4	6.4	63.7	930	4	5	708	1.93	10.4	<5	5	35	.70	1.0	<.1	8	.75	.046	10	9	.34	42	.01	<3	.35	.04	.14	2	.2	<10	.3	<.2	1.3	2
518115	7.9	120.0	11.7	80.0	1320	7	9	1404	3.17	153.3	<5	4	41	.65	1.2	.1	33	.94	.075	10	12	.74	110	.04	<3	.70	.04	.24	2	.2	<10	.3	.2	2.7	11
518116	3.1	114.5	16.0	80.0	1694	8	17	1583	4.55	137.6	<5	3	41	.46	1.6	.3	40	1.07	.112	8	9	.84	42	.01	<3	.90	.04	.19	<2	.2	10	.6	.2	3.4	18
STANDARD D	25.4	131.8	103.1	269.1	2110	32	17	1047	4.77	70.3	20	21	57	2.06	9.3	21.9	77	.71	.111	18	58	1.25	261	.14	25	2.42	.05	.71	22	2.5	420	.5	2.7	6.9	470

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

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

DATE RECEIVED: AUG 21 1997 **DATE REPORT MAILED:** Aug 27/97 **SIGNED BY.** ..D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Data__ FA ___

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
518117	5.9	160.2	21.4	103.8	3162	9	18	1289	4.27	508.7	<5	4	53	1.00	1.3	.3	24	1.23	.093	7	12	.69	26	<.01	<3	.70	.03	.17	4	.2	12	1.0	.4	2.4	19
518118	5.9	115.3	8.3	33.5	1519	7	19	1244	4.21	73.9	<5	4	44	.18	1.2	.2	22	1.08	.082	9	11	.73	26	<.01	<3	.62	.03	.16	3	.2	<10	.7	.3	2.8	12
518119	4.7	98.9	12.4	28.5	1906	6	12	1050	3.60	484.6	<5	4	46	.16	1.6	.3	20	1.07	.078	8	9	.66	26	<.01	<3	.53	.03	.15	2	.2	<10	.7	.4	2.2	28
518120	3.0	115.4	17.2	44.1	2875	8	13	1332	4.81	906.5	<5	3	76	.29	1.9	.2	46	1.54	.129	8	11	.86	32	.01	<3	.55	.04	.22	<2	.2	<10	.6	.6	1.9	74
518121	5.7	48.7	13.5	16.0	1363	5	9	1169	3.13	1608.7	<5	4	65	<.06	1.4	<.6	6	1.33	.090	5	6	.58	20	<.01	<3	.25	.03	.16	2	<1.2	12	<1.8	<1.2	<3	57
518122	5.0	95.4	10.8	35.6	1801	5	6	1213	2.55	559.6	<5	4	83	.35	1.0	<.1	9	1.54	.076	8	6	.71	25	<.01	<3	.28	.03	.16	2	<.2	<10	<.3	.2	<.5	17
518123	6.3	53.4	10.2	38.6	745	5	5	1124	2.56	395.2	<5	6	86	.36	.5	.2	16	1.64	.056	10	9	.75	26	<.01	<3	.46	.04	.13	3	.2	<10	<.3	<.2	2.0	9
518124	6.2	136.6	12.1	59.3	1573	6	9	1118	3.18	50.0	<5	4	77	.33	1.8	<.1	27	1.59	.093	9	10	.81	85	.02	<3	.65	.04	.21	2	<.2	<10	.4	<.2	3.1	34
518125	8.2	423.0	6.7	59.7	2690	9	11	873	4.09	72.7	<5	4	71	.31	3.0	.5	36	1.48	.101	9	11	.84	69	.02	<3	.74	.04	.20	3	.2	13	.7	.4	3.6	52
518126	6.6	73.8	9.4	43.5	878	7	8	920	3.44	69.1	<5	5	69	.23	.8	.6	14	1.30	.079	12	9	.61	33	<.01	<3	.52	.03	.19	3	<.2	13	.4	.3	1.6	10
518127	5.7	101.4	13.0	27.9	1378	7	8	983	3.93	130.5	<5	4	93	.19	.6	.4	11	1.63	.079	9	8	.76	26	<.01	<3	.29	.03	.16	3	<.2	11	.7	.3	1.1	9
518128	5.2	145.2	11.5	30.3	2135	5	7	847	2.97	158.1	<5	4	91	.25	1.3	.3	7	1.54	.066	8	7	.69	29	<.01	<3	.25	.03	.17	3	<.2	10	.6	.3	.7	4
518129	4.8	556.3	16.3	60.9	5205	9	9	1264	4.28	673.8	<5	3	112	.45	.7	.7	24	2.05	.103	8	9	1.01	32	<.01	<3	.41	.03	.19	2	<.2	16	.6	.8	1.4	24
518130	4.2	255.8	13.1	47.6	2909	9	8	777	3.53	196.2	<5	4	77	.35	.4	.6	49	1.55	.120	11	15	.93	176	.09	<3	.66	.05	.30	2	.2	<10	.3	.4	3.3	9
RE 518130	4.1	240.1	12.6	44.7	2673	8	8	726	3.26	183.7	<5	4	71	.34	.4	1.2	45	1.46	.113	10	13	.87	154	.09	<3	.61	.05	.28	2	.2	<10	.3	.4	3.2	6
RRE 518130	4.9	257.4	13.5	42.8	3027	8	8	778	3.49	183.1	<5	4	75	.33	.4	<.1	47	1.54	.120	11	14	.92	155	.09	<3	.62	.05	.28	2	<.2	10	.5	.5	3.3	7
518131	5.8	423.8	52.0	49.1	7452	6	4	1194	2.80	922.1	<5	4	81	.41	1.0	1.0	27	1.77	.096	8	10	.61	93	.02	<3	.41	.03	.17	2	<.2	23	.4	.9	1.5	43
518132	6.8	415.7	17.0	322.6	6093	4	2	1090	1.49	671.0	<5	5	65	3.68	.9	.2	4	1.58	.054	8	7	.49	22	<.01	<3	.21	.03	.14	2	<.2	25	.4	<.2	1.0	12
518133	9.0	338.7	22.9	50.5	5392	3	4	924	1.72	567.8	<5	4	60	.61	.8	<.1	3	1.32	.046	8	8	.41	23	<.01	<3	.22	.03	.14	3	<.2	15	.3	.3	<.5	14
518134	9.6	135.2	36.8	72.0	2563	6	5	1136	2.21	3520.6	<5	5	56	.75	1.6	<.8	3	1.36	.052	9	7	.44	18	<.01	<3	.20	.03	.14	3	<1.6	<10	<2.4	<1.6	<4	152
518135	3.9	41.6	9.9	22.6	731	2	2	719	1.21	612.4	<5	6	38	.21	.7	.1	3	.86	.031	11	8	.30	20	<.01	<3	.22	.03	.13	3	<.2	<10	.3	<.2	.7	26
518136	3.4	74.7	17.9	51.3	1181	6	5	1264	3.28	777.0	<5	4	79	.42	1.0	.1	8	1.84	.092	13	7	.76	27	<.01	<3	.35	.03	.17	2	<.2	<10	.6	<.2	1.0	14
518137	3.2	53.4	11.4	35.7	564	6	4	1019	2.97	80.9	<5	5	53	.21	.9	.3	28	1.38	.080	14	11	.81	36	.01	<3	.63	.04	.18	3	<.2	<10	.3	.2	2.9	3
518138	5.9	20.8	26.4	40.7	722	3	2	680	1.04	66.3	<5	6	25	.45	1.2	.1	2	.76	.031	8	8	.25	22	<.01	<3	.22	.02	.12	3	<.2	<10	<.3	<.2	.5	8
518139	7.8	56.3	25.5	60.4	1449	5	8	1089	2.18	1139.7	<5	5	44	.78	<1.2	<.6	3	1.33	.047	10	7	.48	18	<.01	<3	.26	.03	.15	3	<1.2	<10	<1.8	<1.2	<3	29
518140	5.3	380.4	128.9	517.2	3717	18	18	2411	5.51	4116.2	<5	3	74	6.03	4.6	<1	67	2.62	.139	12	22	1.65	44	.02	<3	1.19	.03	.29	<2	<2	10	<3	<2	5.1	177
RE 518140	5.0	363.2	122.2	498.0	3443	18	18	2301	5.26	3926.1	<5	3	70	5.60	4.1	<1	64	2.51	.133	12	22	1.58	43	.02	<3	1.15	.03	.27	<2	<2	17	<3	<2	<5	184
RRE 518140	6.2	343.7	90.5	364.9	3516	16	17	2142	5.04	2631.2	<5	3	66	4.63	3.6	<1.2	65	2.36	.130	11	22	1.55	44	.02	<3	1.18	.03	.28	<2	<2.4	15	<3.6	<2.4	<6	119
518141	5.0	118.8	20.4	59.6	1609	15	18	1641	5.68	590.9	<5	3	52	.30	2.9	.5	53	1.77	.116	10	20	1.20	49	.03	<3	1.19	.03	.31	<2	.3	<10	.7	.3	4.3	24
518142	7.3	49.8	26.4	102.3	687	2	7	802	1.30	708.7	<5	6	21	1.15	1.0	.1	1	.70	.014	6	10	.16	20	<.01	<3	.19	.02	.16	3	<.2	<10	<.3	<.2	<.5	52
518143	14.6	65.6	33.9	98.0	644	3	5	751	1.11	838.4	<5	7	20	1.11	1.7	<.1	2	.66	.015	9	10	.17	21	<.01	<3	.22	.02	.14	3	<.2	12	<.3	<.2	.8	49
518144	10.9	41.1	15.3	59.8	697	2	6	684	1.20	598.3	<5	7	20	.75	2.0	<.1	1	.64	.015	6	9	.16	19	<.01	<3	.20	.03	.13	3	<.2	<10	.4	<.2	.6	49
518145	5.8	80.4	14.6	26.5	1376	3	13	624	2.30	1681.1	<5	7	16	.28	6.4	<.6	1	.56	.015	4	9	.15	18	<.01	<3	.24	.02	.14	4	<1.2	12	<1.8	<1.2	<3	103
518146	4.3	50.8	21.1	42.0	1192	2	13	372	2.22	617.1	<5	7	12	.58	4.3	.1	<1	.35	.014	3	8	.08	20	<.01	<3	.20	.02	.14	4	<.2	<10	1.0	.3	<.5	192
518147	6.9	71.3	17.7	104.5	1069	3	6	506	1.16	412.4	<5	7	17	1.18	2.4	<.1	1	.51	.016	10	10	.14	19	<.01	3	.23	.03	.11	4	<.2	<10	.5	<.2	<.5	54
STANDARD D	26.1	132.6	101.8	270.9	2044	32	17	1055	4.75	78.5	17	21	57	2.47	9.7	23.3	77	.71	.111	19	58	1.25	259	.14	25	2.42	.05	.70	23	2.7	425	.6	2.1	7.6	457

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

Data FA

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
518148	4.4	21.1	42.6	99.2	570	3	6	871	1.60	95.4	<5	6	82	1.08	1.5	.3	9	1.73	.058	14	11	.49	177	<.01	3	.42	.03	.23	3	.2	20	<.3	<.2	1.2	32
518149	13.5	76.6	27.0	68.2	870	3	11	627	1.73	135.6	<5	6	52	.77	1.2	<.1	5	1.14	.030	9	15	.23	99	<.01	4	.32	.04	.21	5	<.2	11	.3	.2	.7	84
518150	14.2	58.3	34.9	78.4	806	4	7	576	.87	116.3	<5	7	33	1.00	.7	.1	1	.89	.011	5	18	.03	29	<.01	<3	.25	.02	.20	5	.2	<10	<.3	<.2	.5	79
518151	11.5	21.8	21.4	39.9	635	4	4	576	.87	58.1	<5	6	26	.53	.7	.1	1	.70	.017	10	22	.12	30	<.01	<3	.30	.05	.20	7	.2	<10	<.3	<.2	1.2	48
518152	12.1	105.6	36.5	103.2	915	4	13	525	1.28	105.0	<5	8	24	1.35	1.4	<.1	3	.69	.019	13	19	.14	41	<.01	<3	.29	.05	.16	5	<.2	<10	.4	<.2	1.2	55
518153	10.8	117.1	34.2	66.3	1175	6	18	1140	1.85	1080.3	<5	6	37	.92	1.4	<.5	3	1.14	.053	8	16	.27	26	<.01	<3	.29	.04	.20	5	<1	10	<1.5	<1	<2.5	146
518154	18.1	34.0	5.9	19.5	352	3	3	635	.60	25.8	<5	7	22	.23	1.1	<.1	1	.66	.015	6	18	.11	24	<.01	<3	.20	.04	.15	4	<.2	<10	<.3	<.2	<.5	37
518155	10.9	11.3	7.0	31.1	179	3	2	494	.49	22.5	<5	7	23	.39	.5	<.1	1	.66	.013	11	19	.08	28	<.01	<3	.24	.05	.17	6	.2	10	<.3	<.2	.8	22
518156	5.1	11.9	5.9	27.6	139	3	1	733	.42	15.3	<5	8	28	.39	.3	.3	1	.84	.013	7	20	.08	27	<.01	<3	.22	.03	.18	4	<.2	<10	<.3	<.2	.7	8
518157	11.7	11.8	5.2	25.7	156	3	1	576	.52	10.6	<5	7	23	.33	.3	.2	1	.64	.016	8	20	.09	33	<.01	<3	.26	.06	.20	7	<.2	<10	<.3	<.2	.5	7
518158	10.2	15.0	5.5	16.0	109	2	1	545	.47	11.7	<5	8	20	.16	.3	.1	1	.59	.016	8	18	.10	27	<.01	<3	.19	.05	.14	4	<.2	<10	<.3	<.2	.8	10
518159	5.4	17.1	17.6	31.2	267	2	3	582	.62	32.1	<5	7	20	.40	.4	.1	1	.59	.016	7	15	.10	27	<.01	<3	.17	.04	.15	6	<.2	<10	<.3	<.2	<.5	22
518160	6.0	11.9	7.7	33.6	191	3	2	391	.52	56.8	<5	7	16	.42	.7	.1	2	.50	.017	10	14	.08	26	<.01	<3	.19	.05	.13	4	<.2	<10	<.3	<.2	.7	16
RE 518160	5.2	12.0	6.8	34.5	159	3	2	397	.54	59.9	<5	7	17	.39	.6	<.1	1	.51	.017	11	15	.08	27	<.01	<3	.19	.05	.14	5	<.2	<10	<.3	<.2	<.5	16
RRE 518160	5.7	13.4	7.4	31.2	183	3	2	393	.59	57.5	<5	7	17	.38	.6	<.1	1	.49	.016	11	17	.08	31	<.01	<3	.22	.06	.15	7	<.2	10	<.3	<.2	.8	15
518161	16.6	52.3	35.2	34.8	440	3	3	504	.51	53.3	<5	7	24	.39	.7	.1	<1	.69	.017	7	15	.05	28	<.01	<3	.18	.04	.15	5	<.2	<10	<.3	<.2	.5	26
518162	11.3	16.2	29.3	81.9	241	2	2	537	.50	31.1	<5	8	18	.92	.5	.1	1	.56	.017	4	16	.06	28	<.01	<3	.21	.04	.16	6	<.2	13	<.3	<.2	<.5	11
518163	23.8	38.0	67.4	144.5	966	5	11	1232	2.49	590.6	<5	4	46	1.55	.9	.8	5	1.41	.086	5	10	.39	33	<.01	<3	.34	.02	.22	4	<.2	<10	.4	<.2	.8	78
518164	8.7	218.5	12.0	28.5	1970	6	9	755	2.63	14.1	<5	4	53	.16	7.1	1.5	21	1.47	.082	9	15	.64	74	.02	<3	.72	.04	.27	7	.2	<10	.7	.6	3.3	16
518165	5.0	164.1	7.8	29.5	1732	7	7	636	2.85	12.4	<5	4	40	.24	14.5	.9	18	1.44	.069	10	13	.52	60	.02	<3	.65	.04	.22	5	<.2	<10	1.0	.9	2.7	11
518166	4.3	344.4	17.6	43.7	2788	5	8	736	2.75	2.9	<5	4	47	.35	2.1	1.3	20	1.69	.077	13	12	.66	66	.02	<3	.78	.04	.29	6	.3	<10	1.2	.8	3.2	8
518167	10.9	682.9	9.6	39.2	10207	3	5	247	.97	13.0	<5	7	24	.66	13.2	4.0	2	.61	.020	7	14	.09	29	<.01	<3	.19	.04	.14	4	.2	<10	.6	3.2	1.3	33
518168	10.6	274.7	3.7	29.7	1928	5	9	322	2.26	12.3	<5	6	30	.23	3.4	.8	17	.81	.042	8	16	.36	54	.02	<3	.45	.05	.16	7	<.2	<10	1.1	.6	2.9	8
518169	7.2	508.3	5.3	87.4	3830	5	5	351	1.49	18.0	<5	6	34	.88	4.4	2.3	9	.90	.036	8	15	.26	112	.01	<3	.34	.05	.15	4	<.2	<10	.7	1.1	1.9	9
518170	4.1	332.1	14.8	94.6	4088	3	2	409	.58	7.2	<5	7	24	.95	4.6	.5	2	.67	.021	11	15	.12	58	<.01	<3	.21	.04	.14	6	<.2	<10	.3	.5	.7	16
RE 518170	4.6	326.2	16.0	93.2	4390	2	2	399	.56	6.7	<5	6	24	1.01	5.2	.3	2	.65	.020	11	15	.12	57	<.01	<3	.21	.04	.14	6	<.2	<10	.3	.4	.8	14
RRE 518170	4.8	325.5	15.3	102.4	4245	3	2	412	.55	7.0	<5	7	25	1.03	5.1	.2	2	.69	.021	12	15	.12	54	<.01	<3	.22	.04	.14	5	<.2	<10	<.3	.5	.6	18
518171	9.9	236.9	16.5	93.2	4250	5	4	421	.94	15.2	<5	5	33	1.00	1.7	3.1	18	.84	.048	8	20	.24	46	.04	<3	.63	.06	.29	7	.3	<10	<.3	1.6	2.3	15
518172	15.0	183.0	25.7	7.5	12278	3	1	239	.35	4.7	<5	6	20	.11	1.2	7.4	1	.57	.016	6	15	.02	30	<.01	<3	.16	.04	.13	4	<.2	<10	<.3	5.1	.6	61
518173	7.3	103.6	5.7	50.9	1749	3	3	256	.83	14.3	<5	7	18	.45	.9	.4	3	.50	.016	11	17	.09	34	<.01	<3	.25	.06	.15	6	<.2	<10	<.3	.5	1.0	21
518174	4.9	120.8	5.2	64.3	1474	3	2	222	.84	137.9	<5	8	17	.56	1.3	.1	3	.46	.015	8	15	.07	32	.01	<3	.23	.05	.15	5	<.2	<10	<.3	.2	1.0	20
518175	5.1	228.1	8.8	58.1	2304	3	3	264	1.01	72.5	<5	6	20	.54	.6	1.4	2	.54	.015	7	15	.05	28	<.01	<3	.19	.05	.14	6	<.2	<10	.3	.7	.6	32
518176	4.4	258.0	9.1	34.6	2954	3	2	249	.64	395.9	<5	6	21	.35	.6	.7	1	.59	.019	4	13	.02	27	<.01	<3	.18	.04	.15	4	<.2	<10	<.3	.7	.7	46
518177	3.8	59.9	4.4	19.2	453	3	1	264	.86	22.4	<5	8	17	.14	.5	.1	5	.49	.016	16	17	.12	32	.01	<3	.28	.06	.13	7	<.2	<10	<.3	<.2	1.6	11
518178	3.9	245.8	20.1	107.2	5549	3	1	277	.57	14.0	<5	6	21	.97	14.1	1.8	3	.57	.017	7	14	.07	36	<.01	<3	.21	.05	.12	4	<.2	<10	<.3	1.2	.9	31
STANDARD D	26.5	133.8	101.8	281.1	2187	33	18	1071	4.47	78.0	17	22	59	2.35	9.7	21.5	78	.72	.116	19	60	1.27	269	.15	25	2.48	.05	.74	20	2.7	450	<.3	2.4	7.9	531

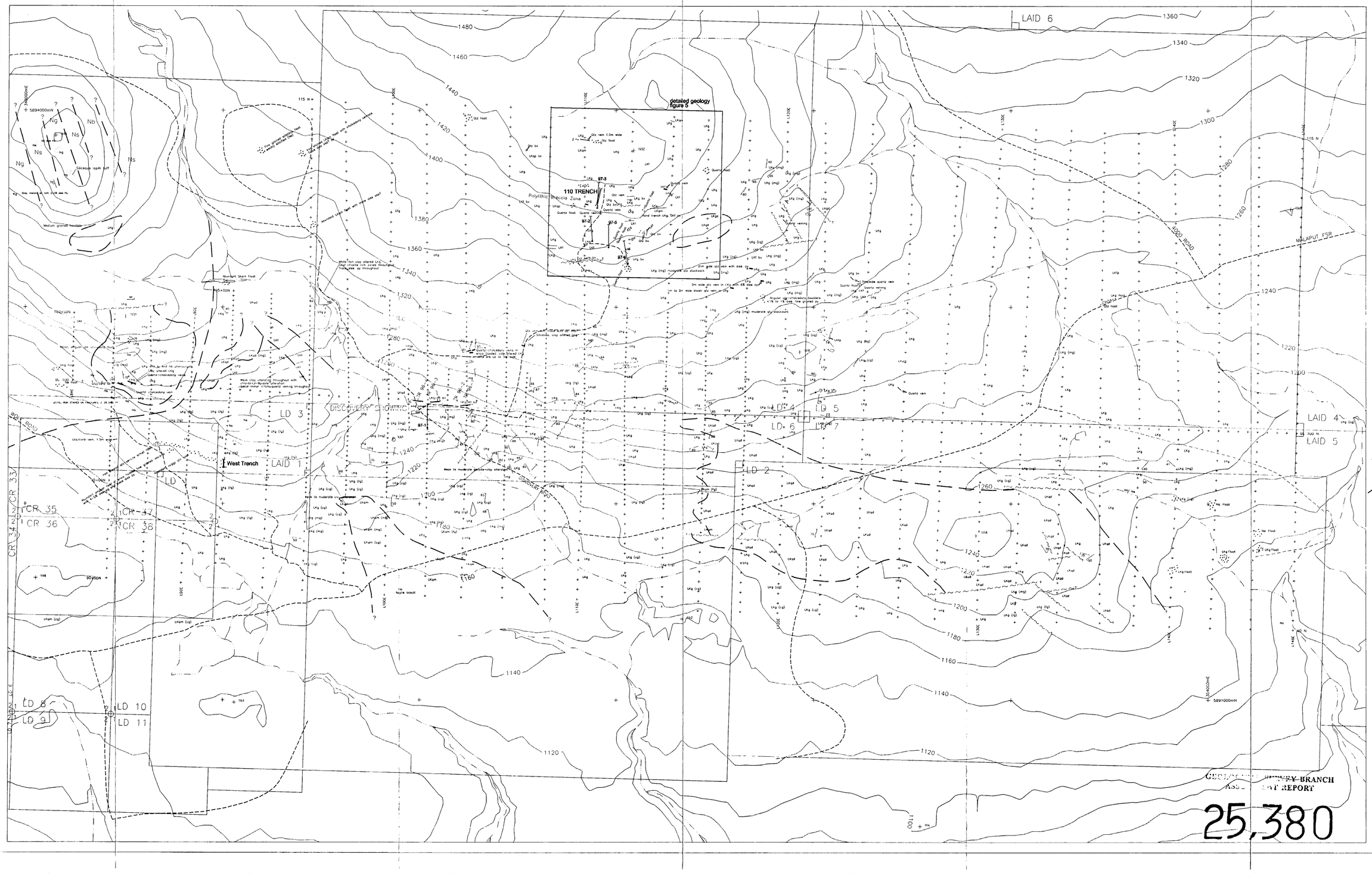
Standard is STANDARD D2/HG-500/AU-R. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

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
518179	3.3	163.2	6.7	62.0	2882	2	2	367	.78	20.4	<5	8	26	.78	15.0	.2	1	.71	.019	8	14	.07	26	<.01	<3	.19	.05	.13	7	<.2	14	.3	.4	.9	11
518180	4.1	29.8	6.6	10.8	1078	4	1	309	1.10	8.9	<5	8	21	.14	2.2	.6	2	.55	.017	9	15	.10	31	<.01	<3	.23	.05	.14	5	<.2	<10	<.3	.3	<.5	3
518181	8.2	22.7	5.1	5.5	736	3	2	262	.97	5.9	<5	6	25	.10	2.1	.4	1	.59	.016	6	15	.06	83	<.01	<3	.18	.05	.14	8	.2	<10	<.3	.2	.8	<1
518182	6.0	17.2	11.5	8.9	1141	3	1	279	2.28	7.5	<5	7	23	.12	1.3	.9	2	.58	.018	7	15	.08	37	<.01	<3	.18	.05	.12	7	<.2	<10	.3	.5	.9	3
518183	3.3	50.6	38.7	13.5	4411	3	5	492	3.62	16.2	<5	6	29	.23	1.8	3.0	3	.95	.027	6	14	.09	28	<.01	<3	.20	.04	.15	10	.2	<10	.6	1.9	1.0	20
RE 518183	3.0	50.3	38.0	13.6	4814	3	5	487	3.63	14.0	<5	6	29	.19	1.7	2.8	3	.95	.027	7	14	.09	29	<.01	<3	.20	.04	.15	10	<.2	<10	.6	2.0	.7	20
RRE 518183	3.3	59.2	44.5	16.8	5620	4	6	535	4.09	14.5	<5	6	30	.23	1.5	4.0	3	1.05	.026	6	14	.09	26	<.01	<3	.19	.04	.13	8	<.2	<10	.8	2.5	.5	25
518184	4.3	16.7	67.5	33.2	6351	2	3	256	1.48	9.1	<5	7	21	.46	2.5	3.6	3	.45	.017	9	14	.07	58	<.01	<3	.22	.05	.13	8	<.2	<10	.3	2.7	.8	34

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

Data ___ FA ___



LEGEND

LATE CRETACEOUS or YOUNGER ?

- LKfp — FELSPAR PORPHYRY DYKE: Light grey to cream very fine grained rock with rounded to subangular feldspar phenocrysts to 5mm.
- LKqp — QUARTZ PORPHYRY DYKE: Up to 6mm rounded quartz phenocrysts set in a very fine grained light grey to cream fine grained matrix.
- LKf — FELSIC DYKE: Grey to cream, fine grained locally siliceous and locally brecciated.
- LKm — MAFIC DYKE: Dark grey to greenish black andesite dyke. Locally with angular <5mm plagioclase phenocrysts. Rock is weakly chloritic.

LATE CRETACEOUS

LAKEAAN BATHOLITH

- LKg — GRANITE: Pink to grey fine to coarse grained, locally with up to 5% biotite. Finer grained varieties are porphyritic.
- LKgd — GRANODIORITE: Fine to medium grained grey with biotite and hornblende phenocrysts set in a fine grained sugary textured matrix. Locally the biotite and hornblende are weakly to moderately chloritized.
- LKqm — QUARTZ MONZONITE: Fine to medium grained pink to cream to grey feldspar and quartz phenocrysts set in a pink fine grained matrix.

METAMORPHIC

HAZELTON GROUP (ANGUSTON FORMATION)

- hs — QUARTZITE, LIMESTONE, CALTSILICATE: Orange to black locally intensely silicified sedimentary rocks.
- hg — GABBRO, DIORITE: Fine to coarse grained basalt locally with angular to subrounded, <3mm pyroxene phenocrysts.
- hs — ANDESITE: Greenish grey fine grained volcanic andesite
- hm — BASALT: Dark grey to fine grained basalt locally with angular to subrounded, <3mm pyroxene phenocrysts.

(fg) Fine grained
(mg) medium grained
(cg) coarse grained

SYMBOLS

- River
- Roads
- Geological Contact
- Fault (assumed)
- Joint (inclined, vertical)
- Shear (inclined, vertical)
- Foliation (inclined)
- Quartz vein
- Glacial Stries
- Float

61356 (20) — 1997 bedrock sample site, sample number (gold in ppb)

63799(7b) — 1997 float/talus sample site, sample number (gold in ppb)

Bx - Breccia or brecciated
Py - Pyrite
Po - Pyrrhotite
qtz - Quartz
Bt - Biotite
Hb - Hornblende

0 150 300 450 600
SCALE IN METRES

To Accompany 1996 Report on the Ladmon Gold Prospect

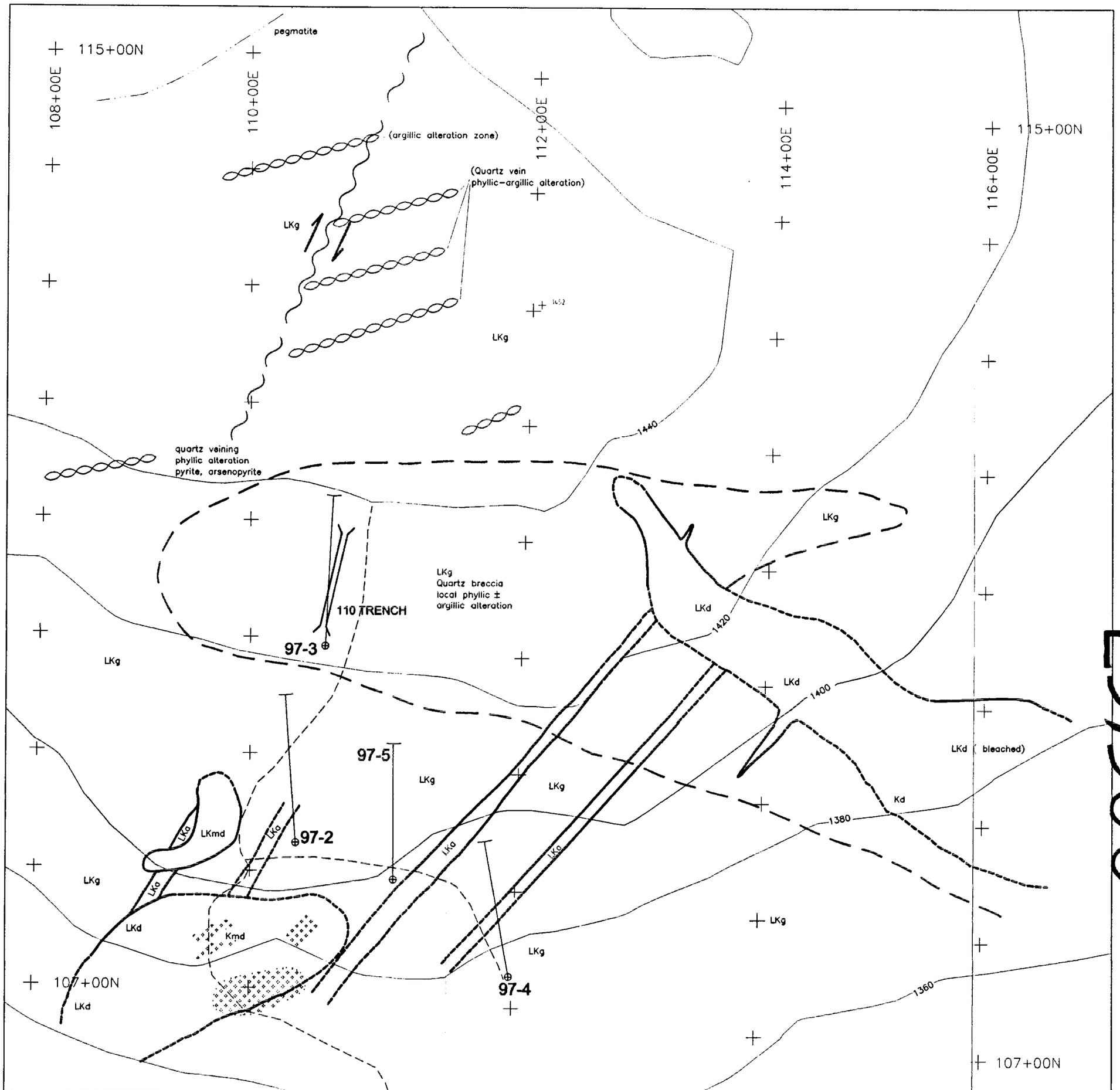
PHELPS DODGE CORP. OF CANADA LIMITED

PROJECT NO.: 253 (LADMAN PROPERTY) — LADMON MINING DIVISION

GEOLOGY, 1997 DRILL HOLE AND TRENCH LOCATIONS

SCALE	DATE	BY	NTS NO.	FIGURE
1:7500	FEB/98	CWP	93 F/3	4

FOX GEOLOGICAL SERVICES INC.



Late Cretaceous or Younger

LKmd → monzodiorite: f.g. olive coloured 0–10% disseminated pyrite

brecciated zones with Kmd for matrix:clasts of LKd, LKg, LKa

LKd → diorite: m.g., salt + pepper local fg. border phases and carbonate/quartz veins

Late Cretaceous
Laidman Batholith

LKa → aplite dykes: light pink, grey, cream, two generations ① An aphyric phase ② qtz eye phase with 5–10%, euhedral qtz phenocrysts, local pyrite up to 5%

LKg → granite to qtz monzonite: greyish pink to pink; local phyllic to weak argillic alteration and silification, three phases:
① qtz eye granite with 2–4mm qtz agglomerocrysts, quartz eyes
② granite with eutectic growth textures
③ qtz monzonite with similar eutectic textures as granite phase.

- qtz breccia boundary
- geological contact
- inferred geological contact
- qtz veining with alteration envelope
- fault, infered fault, relative motion indicated

25,380

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

N

0 150 300 450 600
SCALE IN METRES

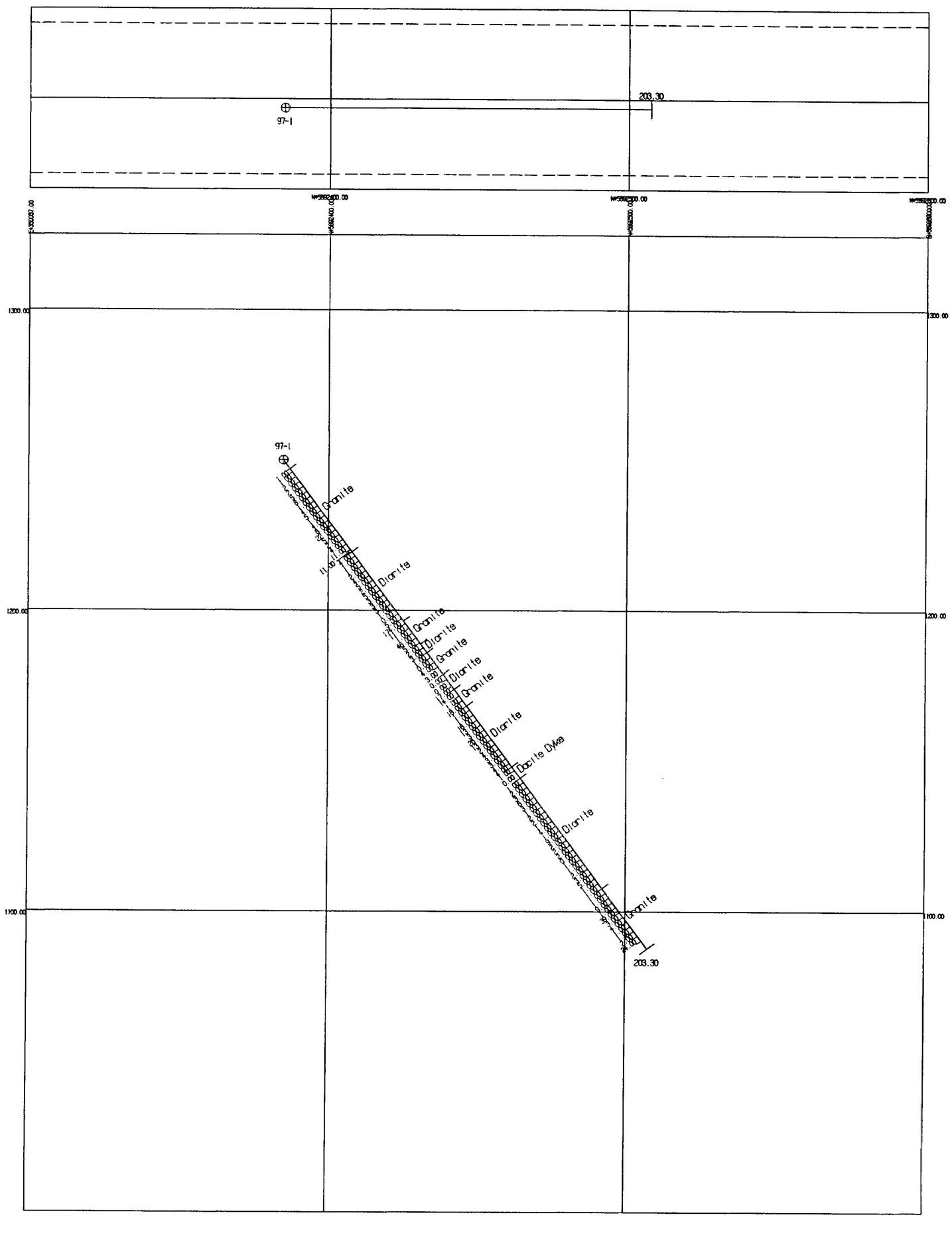
PHELPS DODGE CORP. OF CANADA LIMITED

PROJECT NO.: 253 (LAIDMAN PROPERTY) OMENICA MINING DIVISION

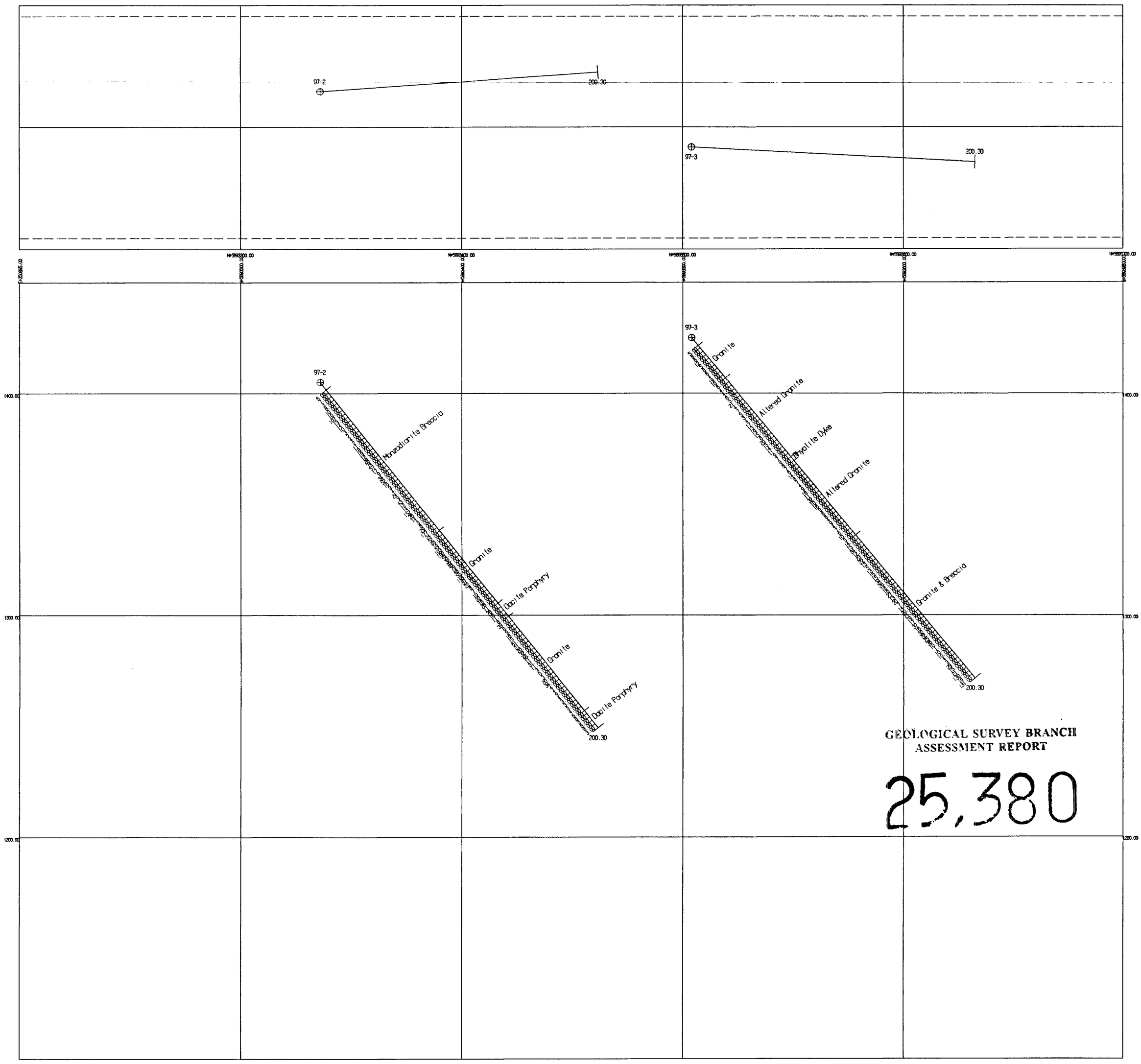
DETAILED GEOLOGY 110 ZONE

SCALE	DATE	BY	NTS NO.	FIGURE
1:2500	JAN/98	SW	93 F/3	5

FOX GEOLOGICAL SERVICES INC.



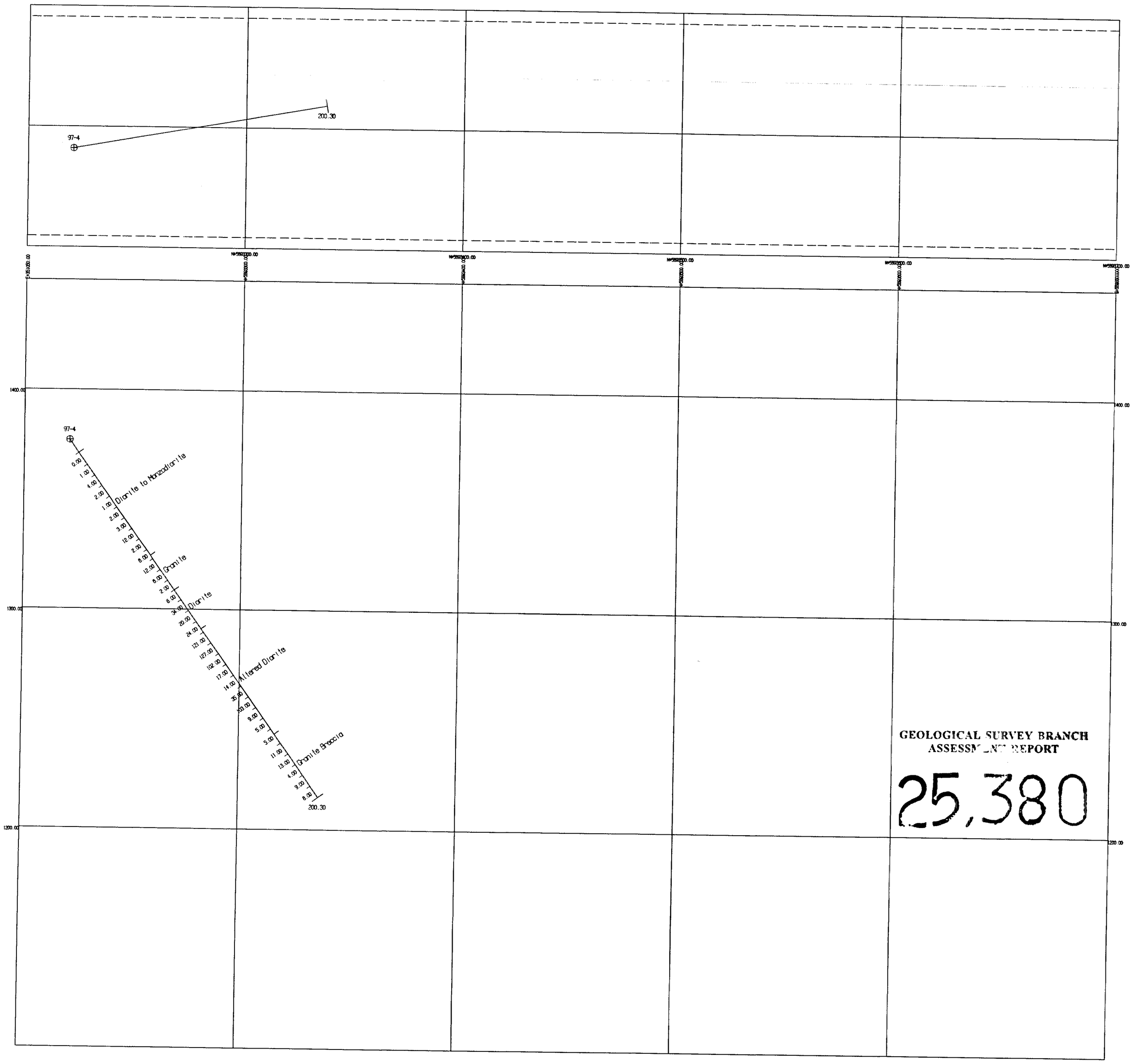
Vancouver Office 1409 - 409 Granville Street Vancouver, BC V6C 1T8	Fox Geological Consultants Ltd.
UNITS : METRES DATE: 98/01/26 TIME: 14:04:44	PHELPS DODGE CORPORATION OF CANADA LIMITED
Drawn By :	Geology and Gold Results in ppb
	CROSS-SECTION 97-1 25380
	LAIDMAN PROPERTY, BRITISH COLOUMBIA FIG 6a



-20 0 20 40 60
Scale 1:1000

Vancouver Office 1409 - 409 Granville Street Vancouver, BC V6C 1T8	Fox Geological Consultants Ltd.
UNITS : METRES DATE: 98/01/28 TIME: 14:18:27	PHELPS DODGE CORPORATION OF CANADA LIMITED
Drawn By :	Geology and Gold Results in ppb
	CROSS-SECTION 97-2, 97-3 25380
	LAIDMAN PROPERTY, BRITISH COLOUMBIA FIG 6b

Software by GEOSOFT Services, Inc.

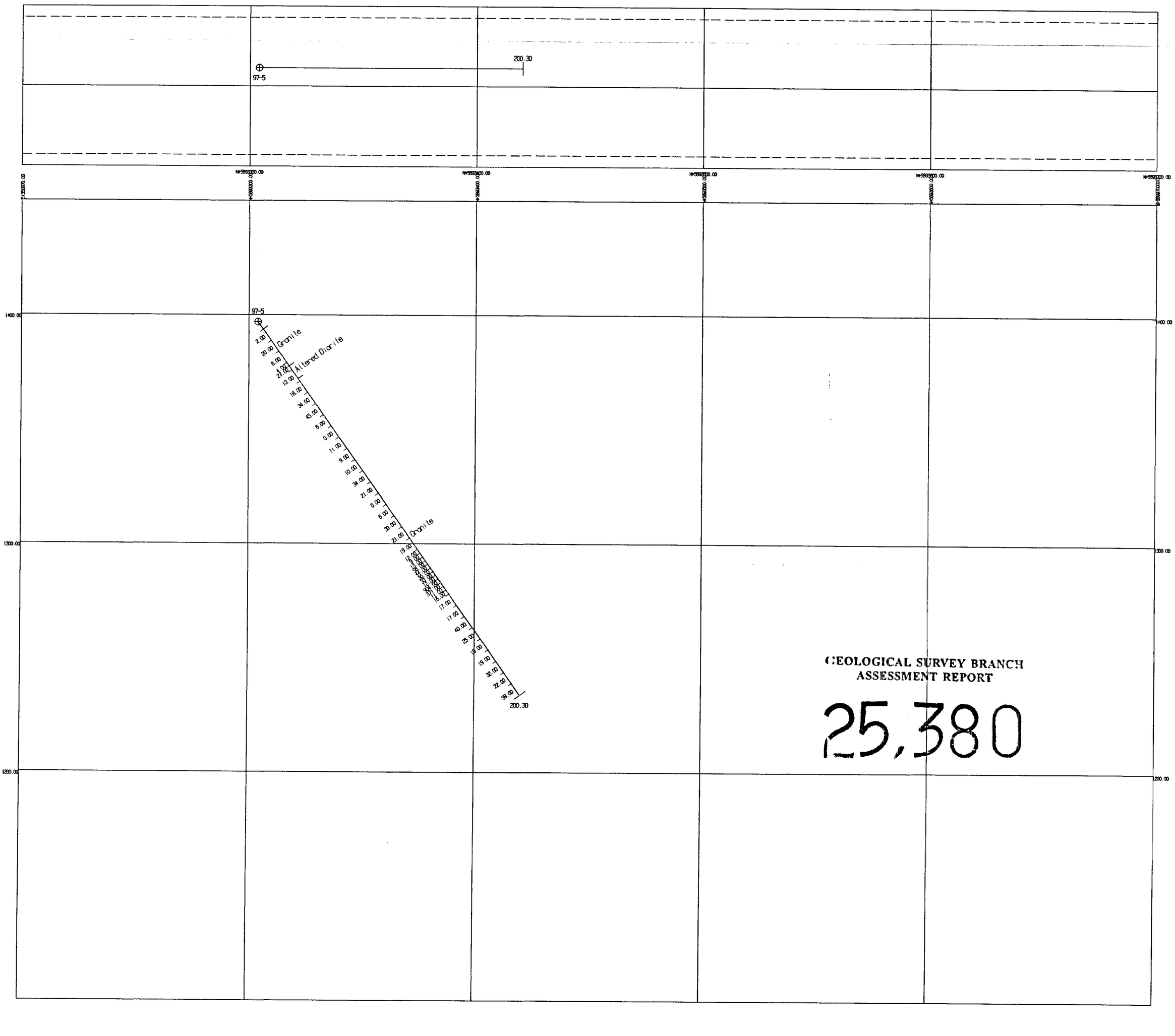


GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,380

Vancouver Office 1409 - 409 Granville Street Vancouver, BC V6C 1T8	Fox Geological Consultants Ltd.
UNITS : METRES DATE: 98/01/28 TIME: 14:26:12	PHELPS DODGE CORPORATION OF CANADA LIMITED
Drawn By :	Geology and Gold Results in ppb
	CROSS-SECTION 97-4 25380
	LAIDMAN PROPERTY, BRITISH COLOUMBIA FIG 6c

Software by GEOSOFT Services, Inc.



Vancouver Office 1409 - 409 Granville Street Vancouver, BC V6C 1T8	Fox Geological Consultants Ltd.	
UNITS : METRES DATE: 98/01/28 TIME: 14:34:22	PHELPS DODGE CORPORATION OF CANADA LIMITED	
Drawn By :	Geology and Gold Results in ppb	
	CROSS-SECTION 97-5 25380	
	LAIDMAN PROPERTY, BRITISH COLOUMBIA FIG 6d	