FOX GEOLOGICAL SERVICES INC.

GEOLOGICAL AND GEOCHEMICAL REPORT

on the

LUCAS PROPERTY
CR 1 THROUGH 20 MINERAL CLAIMS

OMINECA MINING DIVISION
BRITISH COLUMBIA

NTS 93F/11
53° 32' 30" North Latitude
125° 14' 30" 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

November 30, 1995

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SUMMARY

The Lucas Property is situated in central British Columbia, approximately 98 kilometres southwest of Vanderhoof. Road access is available via the Kenny Dam Forest Service and subsidiary logging roads. An ATV trail provides access onto property.

A program of soil sampling, prospecting, geological mapping and rock sampling was conducted between July 20 and 23, 1995. Exploration focused on the western portion of the property where Cogema discovered significant alteration with local tufa and jasperiod veins during 1994.

The Lucas Property is situated in the Intermontaine Belt, within the central portion of the Stikine Terrane. It is primarily underlain by Kasalka Group andesitic tuffs, flow breccias and minor dacite. Endako Group andesites and basalts locally overlie Kasalka Group rocks. Two northwesterly trending quartz-eye rhyolite dykes are present in the north. Three subparallel northeasterly trending fault zones and a propylitic alteration zone cross the claim block. Within the propylitized zone, Kasalka tuffs are locally silicified, brecciated, quartz-chalcedony veined and pyritic.

Soil sampling on the Lucas property has defined an area with elevated silver, arsenic, antimony and mercury geochemistry, coincident with propylitized and locally silicified Kasalka volcanics in the west-central claim area. A single talus sample contained anomalous gold and silver with elevated lead and arsenic, however, no concentrations of precious or base metals were detected in outcrop.

INTRODUCTION

This report details an exploration program conducted on the Lucas Property between July 20 and 23, 1995. The results of this work are also reported herein.

LOCATION, ACCESS and PHYSIOGRAPHY

The Lucas Property is situated on the Nechako Plateau of central British Columbia, approximately 98 kilometres southwest of Vanderhoof. The northeastern claim boundary lies 1 kilometre southwest of Lucas Lake (see Figure 1).

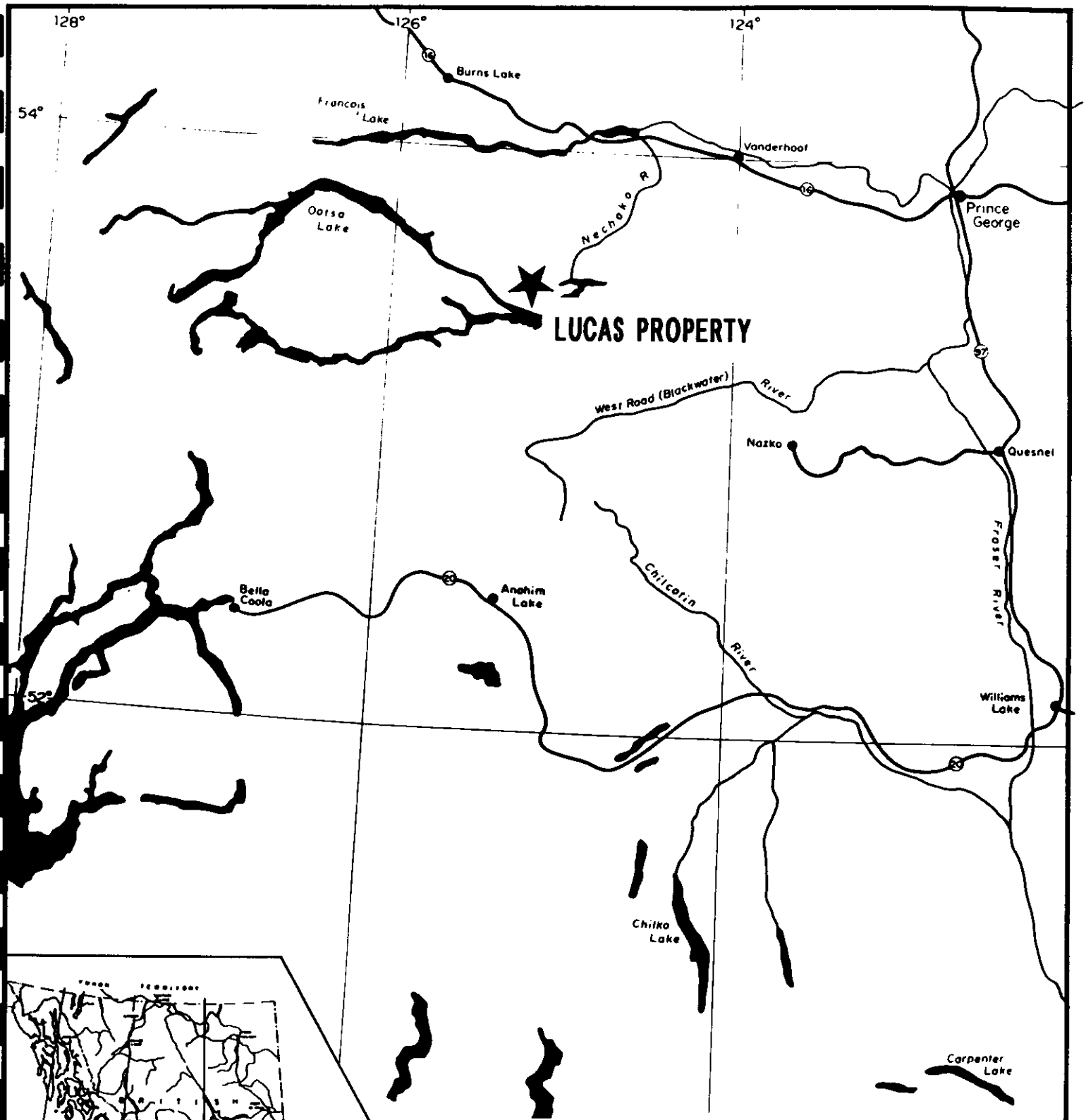
The property is accessible by road from Vanderhoof. The route entails travelling southwesterly along the Kenny Dam Forest Service Road to the 500 Road, then heading west to kilometre 37 where an ATV trail leads onto property.

Topography on the claims is generally hilly, with elevations ranging from below 945 metres in the northeast corner to 1067 metres and over in several places. A number of lakes are present, predominantly within the western half of the property.

CLAIM INFORMATION

The Lucas Property consists of twenty two-post claims, totalling 20 units, recorded in the Omineca Mining Division and shown on NTS map sheet 93F/11 (see Figure 2). Claim details are set out below. Expiry dates tabulated below assume that current work is accepted for assessment purposes.

The CR 1 through 20 claims comprise the Lucas Claim Group under a Notice to Group recorded October 11, 1995.



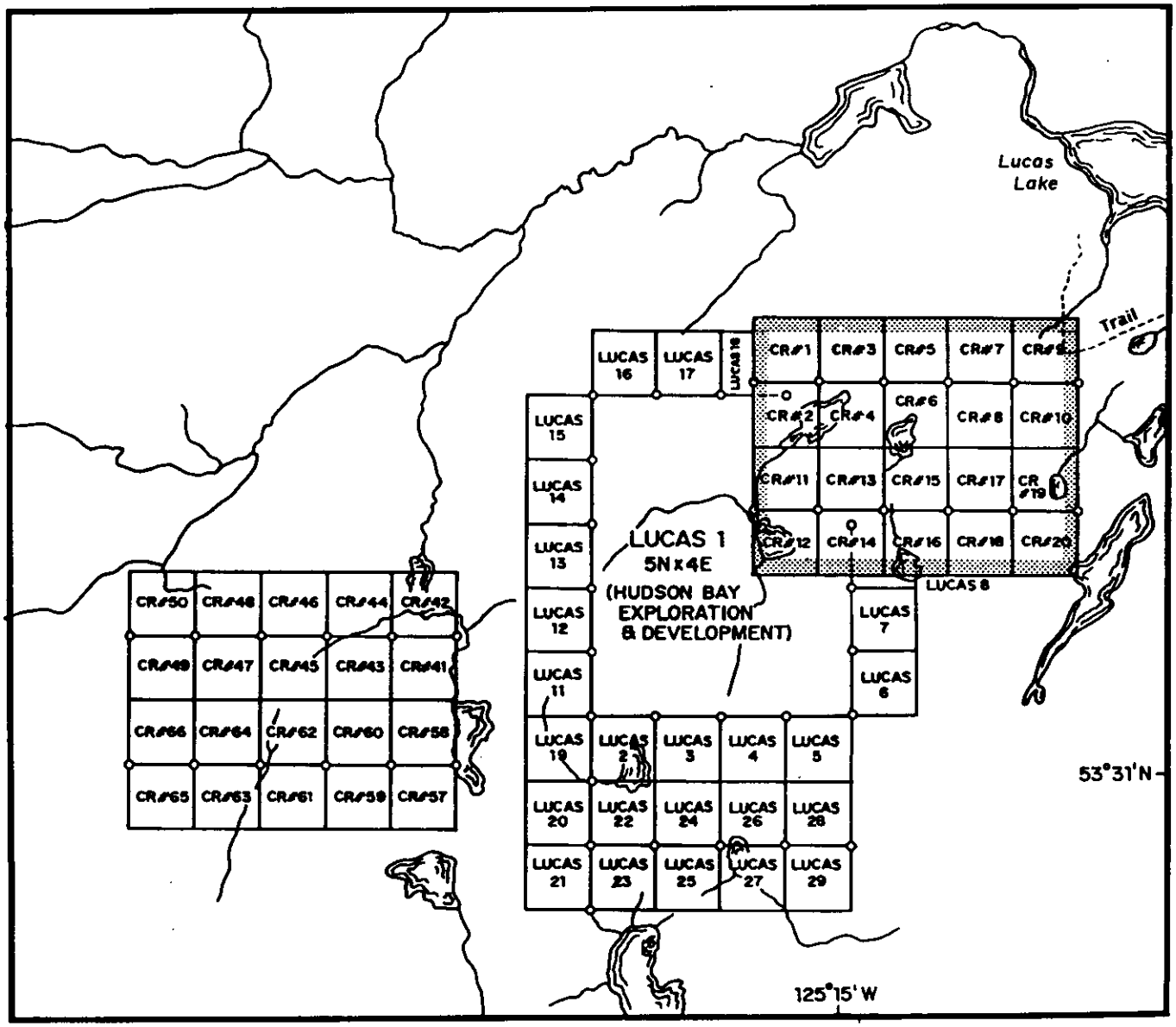
PHELPS DODGE CORP. OF CANADA LTD.			
PROJECT Nº 257		OMINECA M.D.	
PROPERTY LOCATION			
Fox Geological Consultants Ltd			
SCALE	DATE	NTS	FIG Nº
1:2,000,000	Nov. 1985	93F/11	1

Table 1

CLAIM NAME	RECORD NO.	NO. OF UNITS	EXPIRY DATE
CR 1	326603	1	June 3, 1999
CR 2	326604	1	June 3, 1999
CR 3	326605	1	June 3, 1999
CR 4	326606	1	June 3, 1999
CR 5	326607	1	June 3, 1999
CR 6	326608	1	June 3, 1999
CR 7	326609	1	June 3, 1999
CR 8	326610	1	June 3, 1999
CR 9	326611	1	June 3, 1999
CR 10	326612	1	June 3, 1999
CR 11	326613	1	June 3, 1999
CR 12	326614	1	June 3, 1999
CR 13	326615	1	June 3, 1999
CR 14	326616	1	June 3, 1999
CR 15	326617	1	June 3, 1999
CR 16	326618	1	June 3, 1999
CR 17	326619	1	June 3, 1999
CR 18	326620	1	June 3, 1999
CR 19	326621	1	June 3, 1999
CR 20	326622	1	June 3, 1999

HISTORY

The Lucas Property was staked by Cogema Resources Inc. in 1994, in response to anomalous gold detected in a Regional Geochemical Lake Sediment Survey released by the Geological Survey Branch. Cogema conducted geological mapping, prospecting and sampling during that same year. There is no record of any previous exploration work within the claim area.



Scale
0 1 2
km

PHELPS DODGE CORPORATION OF CANADA LIMITED			
PROJECT Nº 257		OMINECA M.D.	
LUCAS CLAIM MAP			
SCALE	DATE	NTS	DWG Nº
1:50,000	Nov.1995	93F/11	2

REGIONAL GEOLOGY

The Lucas Property is located in the Interior Plateau of British Columbia within the Intermontaine Belt, which consists late Palaeozoic to late Tertiary sedimentary and volcanic rocks belonging to the Stikinia, Cache Creek and Quesnellia Terranes. The Yalakom and Fraser Fault systems bound the plateau to the northeast and southwest. A third fault has been inferred from oil exploration data to bisect the plateau. The Anahim Volcanic Belt, which crosses the plateau in an east-west direction, is composed of a series of alkaline and peralkaline volcanoes of Miocene to Quaternary age which become younger from west to east.

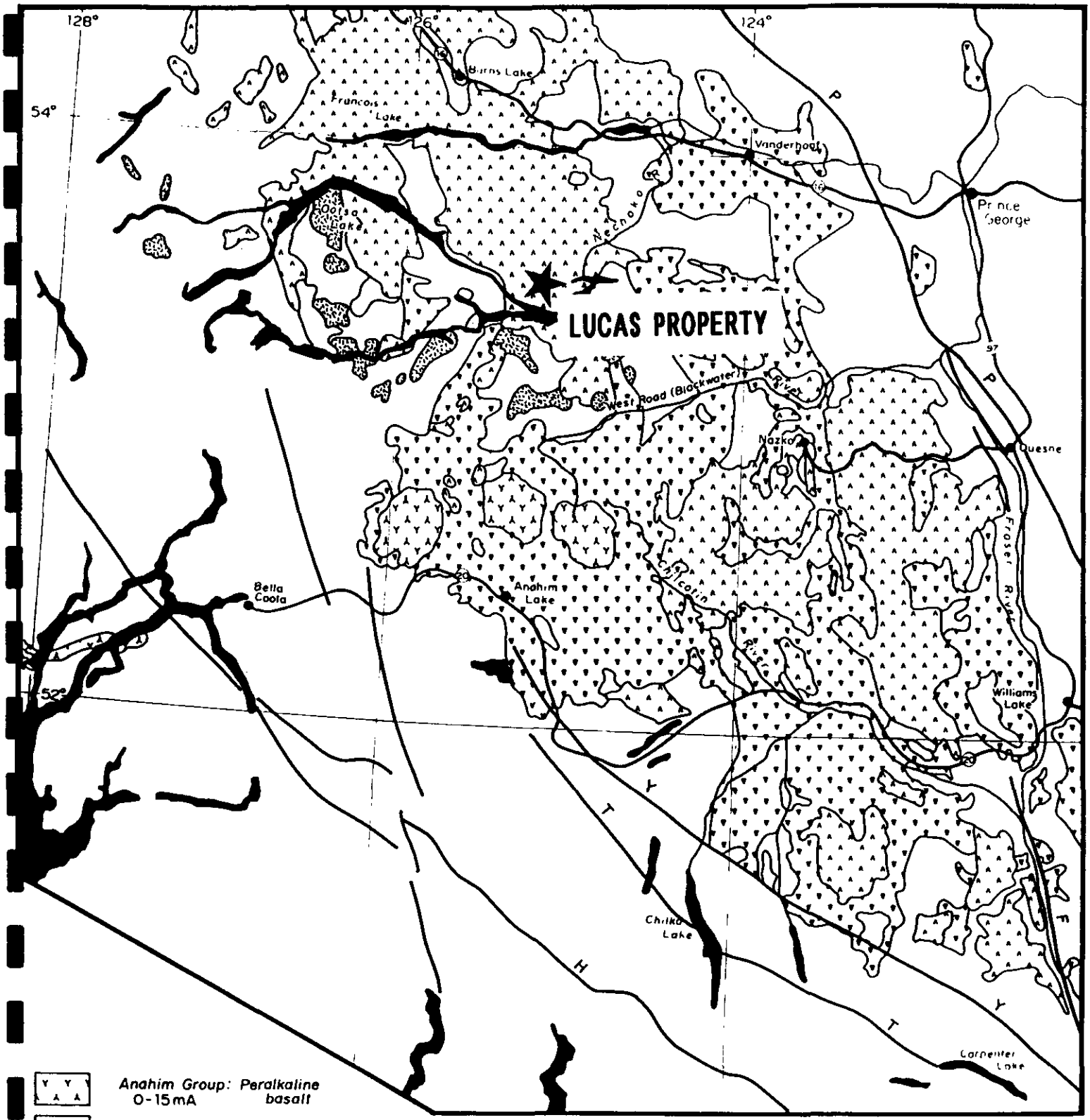
The CR claims lie within the central portion of the Stikine Terrane, which locally consists of three volcanic-stratigraphic groups ranging in age from upper Cretaceous to Miocene. An Eocene extensional tectonic event, which resulted in basin and range type
topography, is associated with epithermal, volcanic-hosted gold mineralization. Regional geology is presented in Figure 3.

PROPERTY GEOLOGY

Most of the Lucas Property is underlain by north dipping Cretaceous Kasalka Group andesitic lapilli, ash and crystal tuff and flow breccia. These rocks are maroon, green and grey mottled, commonly fine-grained and feldspar porphyritic. Locally within the lapilli tuff is weak quartz-chalcedony veining with <1% disseminated pyrite. Light green, fine-grained, massive Kasalka dacite underlies the andesite, outcropping in the western-central claim area.

Eocene Endako Group basalt and minor andesite overlie Kasalka Group rocks, outcropping at higher elevations in the east-central and northwestern claim areas. Two northwesterly trending quartz-eye rhyolite dykes are present in the northwestern and northeastern corners of the property. The northeastern dyke, which intrudes Kasalka andesites, is weakly clay altered but not mineralized.

Three subparallel northeasterly-trending faults, with associated splays and subsidiary faults, are interpreted to cross the claim block. A discontinuous belt of propylitized rocks (bedrock and float) occurs within 500 metres of the central fault. On the northwestern side of the fault, Kasalka Group rocks also contain local silicification, quartz breccia, chalcedony and jasper. Up to 2% pyrite occurs in propylitic tuffs in float and talus.



PHELPS DODGE CORP. OF CANADA LTD.

PROJECT Nº 257 OMINECA M.D.

REGIONAL GEOLOGY

Fox Geological Consultants Ltd

SCALE	DATE	NTS	FIG Nº
1:2,000,000	Nov.1995	93F/11	3

1995 WORK PROGRAM

The 1995 field program, conducted between July 20 and 23, focused on exploring the western portion of the property where Cogema discovered significant alteration with local tufa and jasperiod veins in 1994. A total of twelve man-days was spent on the property.

A 5.65 line-kilometre soil grid, oriented at 160°, was established. Lines 100+00 through 103+00 are spaced 150 metres apart and lines 103+00 through 109+00 have 300-metre spacing. A total of 92 soil samples was collected along lines at 50 metre-spaced intervals. Samples were obtained from the "B" horizon, where possible, stored in Kraft sample bags, tagged with a unique number and submitted to Acme Analytical Laboratories Ltd. in Vancouver, B.C. for analyses. Each sample was screened and an 80 mesh fraction analyzed for 34 elements by ICP techniques and for gold by geochemical atomic absorption analysis. Field notes detail location, topography, type and colour of material collected. Grid and sample locations are presented in Figure 6 and analytical method is set out in Appendix 2.

Approximately 2.5 square kilometres was prospected and geologically mapped at a scale of 1:5,000. Property geology shown in Figure 4 is modified after Cogema (1994). In addition, 27 rock samples were collected and sent to Acme Analytical Laboratories Ltd. for multi-element analysis. Rock sample locations are shown in Figure 5.

RESULTS

Soil sampling on the Lucas property has defined a northeast trending area of till containing elevated amounts of silver, arsenic, antimony and mercury geochemistry. This area coincides with a fault bound block of propylitized and locally silicified Kasalka volcanics in the west-central claim area. The distribution of gold (two samples: 62 and 205 ppb) and silver (three samples: 1029, 1161 and 1488 ppb) is erratic. Geochemical results for these elements are outlined in Table 2 below. Base metals are present at background levels only. Results for gold are given in Figure 7 and, for arsenic, in Figure 8. Analytical data are provided in Appendix 3.

Table 2

ELEMENT	RANGE	ELEVATED	ANOMALOUS
Gold	1 - 205 ppb		>50 ppb
Silver	<30 - 1488 ppb	500 - 999 ppb	>1000 ppb
Arsenic	0.8 - 42.3 ppm	>20 ppm	
Antimony	0.3 - 3.0 ppm	>2.0 ppm	
Mercury	23 - 296 ppb	>150 ppb	

Gold in altered, mineralized rock samples was found to be generally present in background levels with a single anomalous talus sample (sample 53416: 395 ppb Au) containing over 10 ppb. The same rock contained the only anomalous silver (1940 ppb) and lead (184.7 ppm), the highest arsenic (244.9 ppm) and lowly elevated antimony and mercury concentrations. Three float samples (samples 53426 to 53428), collected from the extreme northeastern corner of the property, contained anomalous mercury (247 to 3176 ppb), antimony (57.4 to 174.6 ppm), arsenic (37.6 to 225.3 ppm) and molybdenum (7.1 to 35.3 ppm). Bedrock samples contained only background levels of gold indicator elements, precious and base metals.

CONCLUSIONS

A broad area with elevated silver, arsenic, antimony and mercury concentrations in soil is partially coincident with a zone of propylitic alteration and local silicification. Anomalous gold concentrations in soil and bedrock, however, are sporadic.

DISBURSEMENTS

Expenditures to November 15, 1995 on the Lucas Property are $5,930.00, as tabulated below:

Labour		
C. Payne, Geologist	2 days @ $295day	590.00
K. Karchmer, Geologist	3 days @ $295/day	885.00
T. Archibald, Prospector	3 days @ $225/day	675.00
W. Zantvoort, Sampler	2 days @ $225/day	450.00
J. Goodall, Sampler	2 days @ $225/day	450.00
Accommodation & Board		650.00
Geochemical Analyses		
27 rock samples	@ $19.00/sample	513.00
92 soil samples	@ $15.00/sample	1,380.00
Truck Rental		337.00
TOTAL		**$ 5,930.00**

FOX GEOLOGICAL SERVICES INC.

P.E. Fox, Ph.D., P.Eng.
November 30, 1995

REPORT DISTRIBUTION:

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

REFERENCES

Cook, S.J. and Jackaman, W. (1994)
"Regional Lake Sediment and Water Geochemistry of part of the Nechako River Map Area (93F/2,3; parts of 93F/6,11,12,13,14)"; B.C. Ministry of Energy, Mines and Petroleum Resources, Open File 1994-19.

Schimann, K. (1995)
"Geology and Geochemistry, Lucas Property (Nechako Project)"; a report for 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.
November 30, 1995

APPENDIX I

ROCK SAMPLE DESCRIPTIONS

Table 3

SAMPLE	TYPE	MATERIAL	NOTES	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	As ppm	Sb ppm	Hg ppb	Au ppb
53416	GRAB	T	Cream-green, clay altered, brecciated, vuggy, with drusy qtz, 2cm qtz vein, minor chalcedony banding, host is volcanic tuff or lapilli, 1% pyrite.	3.7	70.4	184.7	52	1940	244.9	6.2	315	395
53417	GRAB	T	Orange/light green, angular float, weakly clay altered, lapilli tuff, clasts are feld porphyry, some clasts 10-15% euhedral pyrite, 1-2% euhedral pyrite throughout, fractured, clasts are1mm-2cm, angular, bleached in places.	0.9	22.2	4.4	55.8	141	11	0.6	28	9
53418	GRAB	T	Light purple/grey, lapilli tuff, weak clay alteration of feldspar phenos, weak copper stain (?) (azurite?).	0.6	8.7	3.8	63.8	30	2	0.3	14	1
53419	GRAB	B	Light purple/grey, lapilli tuff, weak clay alteration, brecciated in places, silica cement.	1.3	16.5	4.4	32.9	53	4.3	0.4	14	1
53420	GRAB	B	Tan-cream rhyolite, probably dyke, qtz eyes, biotite, clay weathering on surface.	1.5	3.7	8	46.5	30	3	0.3	10	3
53421	GRAB	B	Light green feldspar porphyry, flow & ash tuff, chalcedony banding, brecciated with chalcedony surrounding clasts; 1-2% sulphides, silicified, weak propylitic alteration, clay alteration of feldspars, hematite, red chalcedony bands.	1.6	21.1	4.6	78.6	32	2.8	0.7	21	1
53422	GRAB	T	Green & maroon feldspar porphyry, 1cm hematite band with 1mm green chalcedony band, silicified, propylitic alteration.	1.2	12.7	3.8	61.4	66	2.2	0.4	40	1
53423	GRAB	F	White-cream, subangular, feldspar porphyry, remnant phenos, clay altered, later silicified, brecciated, limonitic in places.	2	4.3	3.5	14.5	41	7.2	1.4	654	1
53424	GRAB	B	Green, aphanitic, ash tuff, moderate propylitic alteration.	1	12.8	6.3	61.9	58	1.7	0.5	30	1
53425	GRAB	F	Grey-blue-green, feldspar porphyry, silicified, subangular float.	1.4	14.2	5.6	63.9	46	1.5	0.9	15	2
53426	GRAB	F	Angular float from road bed, black chalcedony bx, numerous open vugs, angular clasts, white silica matrix, clast supported; clasts are angular, <1mm to 3cm in size, all black chalcedony, minor limonite stain.	7.1	8	1.1	2.4	30	37.6	57.4	247	1
53427	GRAB	F	Angular float from road, cream coloured, fractured and banded by black chalcedony, limonite stain, hematite.	35.3	8.6	1	5.8	30	202.8	174.6	3176	1
53428	GRAB	F	Angular float from road, black chalcedony, white oval tubes are brecciated (vesicles), minor vugs with drusy qtz, minor limonite stain.	24	8.5	4.8	5.1	30	225.3	80.9	1835	3
53429	GRAB	B	Light blue green stain on feldspars, lapilli tuff with 1-2cm ash interbeds, minor chalcedony brick red 1mm bands, 1mm eye shaped chalcedony bleb has clear center with brick red border.	0.9	13.1	3.9	81.7	30	16.5	1.1	42	1
53430	GRAB	F	Subcrop(?); angular float, lapilli tuff, brecciated, open vugs with drusy qtz, chalcedony bands, 1-2mm euhedral pyrite (1-2%), 1-2mm flesh coloured chalcedony bands, chlorite/clay alteration, silicified, clasts surrounded by chalcedony/qtz.	2.1	15.3	4.4	98.4	223	21.3	1.9	41	4
53431	GRAB	T	Green chlorite altered lapilli (intense), brecciated, healed by chalcedony (white & blue), abundant specular hematite replacing chlorite altered rock.	2.3	42.6	5.2	174.8	45	2.4	0.5	45	4
53432	GRAB	T	Grey & blue vesicular andesite, chalcedony filled vesicles, turquoise stain.	0.8	13.6	7.2	68.8	30	2.3	0.8	21	1
53433	GRAB	F	Subcrop(?); fine grained, rusty tuff, weakly altered, feldspar phyric (2mm), iron stain on fractures, 1-2% fine diss pyrite.	0.9	43.6	18	71.3	135	12.1	0.5	12	1
54042	GRAB	F	Feldspar porphyry andesite, breccia. nonmagnetic, weakly calcareous, unmineralized.	1.7	2.9	17.4	64.5	45	3.5	0.2	6	1
54043	GRAB	F	Subcrop(?); rusty weathering, vesicular/amygdaloidal basalt, calcareous.	0.8	34.7	3.3	87.3	30	2.5	0.2	20	4
54044	GRAB	F	Subcrop(?); propylitic alteration, andesite (?).	1.9	13.5	3.8	77.7	30	4.9	0.2	15	1
54045	GRAB	F	Subcrop(?); brecciated andesite, propylitic alteration.	2.1	4.3	4.1	35.4	30	4.7	0.6	12	1

Material. F=Float, B=Bedrock, T=Talus

APPENDIX 2

Analytical Method

ICP: A 15 gram sample is digested with 90 millilitres 3-1-2 HCl-HNO_3-H_2O at 95° Centigrade for one hour and is diluted to 100 millilitres 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 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.

Au^+: Gold is extracted by aqua-regia/MIBK extract, GF/AA finished.

APPENDIX 3

ROCK GEOCHEMICAL ANALYSES

[redacted] ANALYTICAL LABORATORIES LTD. [redacted] E. HASTINGS ST. VANCOUVER BC [redacted] 1R6 [redacted] PH [redacted] 604) [redacted]-31[redacted] FAX [redacted])25[redacted] 16 [redacted]

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 257 File # 95-2524 Page 1

1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: Geoff Goodall

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
52875	13.6	2.4	15.7	167.5	<30	<1	<1	295	9.89	14.1	<5	14	7	.12	4.8	<.1	9	.03	.015	44	4	.02	16	.02	<2	.41	.08	.17	2	.1	33	<.3	.4	3.6	5
52876	2.5	2.2	6.5	26.5	84	3	<1	149	.71	45.7	<5	14	7	.02	1.8	<.1	2	.04	.004	49	6	.02	13	<.01	3	.42	.05	.17	<2	.1	34	<.3	<.1	2.6	3
52877	9.6	21.3	6.4	9.6	56	49	16	102	1.97	82.9	<5	2	57	.08	4.5	.2	59	.13	.018	9	18	.08	164	<.01	<2	.37	.02	.07	2	.3	641	.3	.2	1.4	1
52878	5.7	11.1	.4	30.3	37	76	19	640	6.58	4.5	7	<1	39	.11	.3	.2	47	2.91	.022	2	8	1.78	29	<.01	<2	.07	.01	.01	2	<.1	30	<.3	.2	<.5	4
53416	3.7	70.4	184.7	52.0	1940	7	5	128	2.46	244.9	<5	1	42	.23	6.2	.2	14	.12	.034	5	10	.27	404	<.01	2	.69	.01	.18	<2	<.1	315	<.3	.2	2.5	395
53417	.9	22.2	4.4	55.8	141	6	7	274	2.30	11.0	<5	1	37	.07	.6	.2	21	.38	.082	17	10	.43	309	.01	3	1.10	.03	.23	<2	<.1	28	.5	.1	3.5	9
53418	.6	6.7	3.8	63.8	<30	7	9	331	2.53	2.0	<5	1	55	.07	.3	<.1	39	.76	.085	21	13	.60	127	.02	4	.97	.02	.23	2	<.1	14	<.3	<.1	2.3	<1
53419	1.3	16.5	4.4	32.9	53	4	5	311	1.72	4.3	<5	1	40	.07	.4	.2	33	.51	.085	21	11	.26	108	.02	<2	.65	.05	.18	<2	.1	14	<.3	.1	2.0	<1
53420	1.5	3.7	8.0	46.5	<30	2	1	358	.87	3.0	<5	17	8	.10	.3	.2	6	.07	.011	32	4	.07	73	.02	2	.47	.05	.22	2	.1	10	<.3	<.1	1.8	3
53421	1.6	21.1	4.6	78.6	32	4	9	704	3.19	2.8	<5	1	71	.15	.7	<.1	41	1.04	.105	17	5	.76	162	.02	<2	1.44	.05	.15	<2	.1	21	<.3	.1	5.1	1
53422	1.2	12.7	3.8	61.4	66	2	10	878	2.58	2.2	6	2	79	.15	.4	.1	23	1.39	.113	18	4	.63	296	.01	3	1.34	.04	.21	<2	<.1	40	<.3	.2	4.0	<1
53423	2.0	4.3	3.5	14.5	41	5	1	85	.36	7.2	<5	12	4	.08	1.4	.1	3	.02	.007	46	8	.01	30	<.01	2	.17	.02	.17	2	<.1	654	<.3	.1	1.3	<1
RE 53423	2.2	5.5	5.0	14.3	48	4	1	77	.34	9.9	<5	12	4	.12	1.6	.4	3	.02	.006	45	7	.01	28	<.01	2	.16	.03	.17	2	.1	634	.3	.1	1.1	2
RRE 53423	1.9	3.5	3.2	13.1	43	5	1	76	.33	6.2	<5	11	4	.06	1.4	<.1	3	.02	.006	43	7	.01	27	<.01	<2	.15	.03	.16	2	.1	611	<.3	.1	.7	<1
53424	1.0	12.8	6.3	61.9	58	2	10	1221	3.53	1.7	<5	2	88	.21	.5	<.1	28	1.55	.112	23	2	.54	112	.01	<2	1.35	.03	.32	<2	.1	30	<.3	.1	3.6	<1
53425	1.4	14.2	5.6	63.9	46	5	9	737	2.93	1.5	9	<1	53	.12	.9	<.1	36	1.12	.079	12	16	.57	175	.03	<2	1.15	.06	.21	<2	<.1	15	<.3	.3	5.5	2
53426	7.1	8.0	1.1	2.4	<30	10	1	205	.81	37.6	10	<1	4	.03	57.4	<.1	3	.04	.005	<1	19	.01	17	<.01	<2	.06	<.01	.01	6	<.1	247	<.3	<.1	<.5	<1
53427	35.3	8.6	1.0	5.8	<30	18	2	233	1.27	202.8	12	<1	7	.05	174.6	<.1	4	.05	.010	<1	20	.02	31	<.01	2	.07	<.01	.02	2	.2	3176	<.3	.3	<.5	<1
53428	24.0	8.5	4.8	5.1	<30	12	2	275	1.15	225.3	13	<1	2	.09	60.9	<.1	2	.02	<.002	<1	18	.01	14	<.01	2	.03	<.01	.01	4	.3	1935	<.3	.2	.5	3
53429	.9	13.1	3.9	81.7	<30	5	13	1020	3.81	16.5	9	1	157	.21	1.1	.1	59	2.22	.104	18	10	.99	525	.03	<2	1.52	.05	.21	<2	<.1	42	.6	.3	3.1	1
53430	2.1	15.3	4.4	98.4	223	10	16	431	4.14	21.3	10	1	15	.06	1.9	.1	30	.18	.044	9	9	1.03	248	<.01	<2	1.87	<.01	.21	<2	.1	41	<.3	<.1	4.8	4
53431	2.3	42.6	5.2	174.8	45	110	49	1562	11.55	2.4	<5	3	216	.38	.5	.2	145	3.88	.146	30	61	2.69	157	.07	<2	4.62	.05	.13	<2	<.1	45	<.3	.2	17.1	4
53432	.8	13.6	7.2	68.6	<30	28	15	496	5.21	2.3	<5	3	107	.15	.8	<.1	84	2.11	.220	43	72	.87	163	.04	<2	1.66	.03	.25	<2	<.1	21	<.3	.2	5.6	<1
RE 53432	.7	15.6	6.9	71.4	<30	29	14	517	5.43	2.4	<5	4	113	.15	.8	<.1	86	2.20	.229	45	73	.91	158	.04	<2	1.70	.03	.25	<2	<.1	13	<.3	.2	5.3	2
RRE 53432	.6	15.5	7.0	69.9	47	31	13	509	5.34	2.2	<5	4	111	.15	.9	.1	86	2.16	.225	44	73	.90	160	.04	<2	1.67	.03	.25	<2	<.1	15	<.3	.2	5.7	<1
53433	.9	43.6	18.0	71.3	135	9	14	787	5.23	12.1	18	1	66	.82	.5	.4	106	.32	.121	9	21	1.75	97	.01	<2	2.28	.09	.11	<2	.1	12	.8	.8	12.2	1
53434	4.4	3.6	19.8	144.3	36	<1	<1	3081	16.29	52.8	<5	12	32	.54	1.2	.1	12	.10	.024	32	5	.06	53	.01	<2	.68	.04	.16	<2	.4	76	<.3	.2	4.0	4
54042	1.7	2.9	17.4	64.5	45	6	1	608	1.05	3.5	10	6	66	.40	.2	.1	6	.56	.013	24	6	.06	99	.02	2	.41	.09	.16	2	.1	6	<.3	.1	2.4	<1
54043	.8	34.7	3.3	87.3	<30	65	24	771	5.74	2.5	<5	4	68	.22	<.2	.1	108	1.09	.185	40	86	.61	196	.06	<2	2.20	.07	.15	<2	<.1	20	<.3	.2	5.2	4
54044	1.9	13.5	3.8	77.7	<30	12	11	356	3.28	4.9	10	4	17	.08	<.2	<.1	53	.30	.086	21	15	.30	111	.08	3	.90	.06	.19	<2	<.1	15	<.3	.2	6.1	<1
54045	2.1	4.3	4.1	35.4	<30	1	1	276	.84	4.7	11	16	6	.05	.6	<.1	11	.06	.006	44	5	.17	42	.07	<2	.68	.03	.59	<2	.1	12	<.3	<.1	3.7	<1
STANDARD	22.8	124.9	94.4	266.2	1949	28	15	930	4.26	77.2	17	20	64	2.15	9.5	20.7	62	.63	.087	17	51	1.17	243	.14	28	2.29	.08	.71	19	1.9	489	.7	2.1	7.2	484

Standard is STANDARD D/AU-R.

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

- SAMPLE TYPE: P1 ROCK P2 SOIL AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 26 1995 **DATE REPORT MAILED:** Aug 3/95 **SIGNED BY.** D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
54010	1.5	27.0	8.8	111.8	92	25	14	923	4.73	1.5	<5	2	64	.27	.8	<.1	66	.65	.111	32	53	.57	406	.04	<2	1.93	.02	.22	<2	<.1	80	.4	<.1	6.5	3
54011	.9	8.3	5.7	37.0	128	5	5	146	2.21	6.9	<5	1	63	.18	.8	.1	48	.24	.061	10	19	.14	160	.05	<2	1.17	.01	.06	<2	<.1	58	<.3	.1	5.6	18
54012	.7	12.7	7.1	68.3	59	11	7	647	2.33	4.5	<5	2	98	.37	1.0	<.1	39	.47	.093	22	18	.31	198	.06	<2	1.20	.01	.11	<2	<.1	59	.3	<.1	4.3	<1
54013	1.2	10.6	9.4	82.4	66	4	8	509	2.08	2.1	<5	1	63	.41	.5	.1	33	.25	.088	24	12	.18	182	.01	<2	.94	.01	.10	<2	<.1	47	<.3	<.1	4.3	1
54014	.8	6.8	6.5	48.2	92	7	8	388	2.24	17.7	<5	2	62	.12	1.8	.1	41	.25	.115	13	17	.20	102	.06	<2	1.31	.01	.08	<2	<.1	80	<.3	<.1	4.4	2
54015	.7	8.2	6.0	45.1	96	9	6	218	2.58	6.9	<5	3	32	.09	1.0	<.1	46	.18	.080	10	19	.33	128	.09	<2	1.45	.01	.07	<2	<.1	86	<.3	.1	5.1	2
54016	.4	9.0	7.1	32.1	53	6	5	223	1.72	3.3	<5	2	73	.06	.8	<.1	31	.31	.036	21	14	.34	130	.09	<2	.96	.02	.07	<2	<.1	82	<.3	<.1	3.5	2
54017	.5	9.7	6.2	39.7	114	9	5	229	2.12	5.6	<5	2	180	.12	1.3	.1	33	.62	.023	16	19	.40	188	.07	<2	1.41	.03	.06	<2	<.1	109	.3	<.1	4.6	3
54018	.5	8.4	6.9	52.2	139	8	6	383	2.26	4.7	<5	2	72	.13	.9	<.1	44	.37	.032	15	19	.35	120	.09	<2	1.28	.02	.06	<2	<.1	57	<.3	<.1	4.7	2
54019	1.5	9.0	8.6	42.9	702	5	6	491	2.66	32.9	<5	1	73	.23	1.5	<.1	50	.42	.023	10	17	.25	102	.05	5	1.43	.02	.08	<2	.1	66	<.3	<.1	5.5	4
54020	1.4	10.4	9.1	65.3	361	8	8	765	2.81	17.6	<5	1	27	.20	1.9	.1	54	.19	.030	13	19	.26	132	.07	3	1.72	.02	.10	<2	.1	87	<.3	.1	7.2	2
RE 54020	1.4	10.5	9.4	63.6	320	9	8	781	2.83	16.2	<5	2	28	.21	2.0	.1	54	.19	.031	12	19	.27	135	.07	<2	1.74	.02	.10	<2	.1	101	<.3	.1	7.6	3
54021	1.4	19.7	10.4	105.6	527	10	10	1651	2.96	21.1	<5	2	67	.62	1.7	.1	40	.61	.086	19	13	.42	283	.02	<2	2.36	.01	.22	<2	.1	109	<.3	.1	7.6	2
54022	.5	8.0	6.5	60.4	103	7	8	510	3.16	2.7	<5	2	36	.10	1.4	.1	49	.30	.032	13	18	.46	200	.05	<2	1.43	.01	.12	<2	.1	89	<.3	.1	5.0	1
54023	.9	17.9	9.2	94.2	187	11	11	1310	3.20	1.0	<5	1	47	.23	.6	.1	50	.76	.133	18	20	.44	759	.01	2	3.09	.01	.14	<2	.1	101	<.3	.1	9.2	3
54024	.7	5.8	6.7	76.9	45	6	5	848	1.94	1.6	<5	1	32	.17	.6	.1	39	.32	.079	10	16	.19	117	.08	7	1.00	.02	.12	<2	.1	53	<.3	<.1	5.4	1
54025	.8	22.1	13.8	109.5	134	9	11	2330	3.03	2.7	<5	2	54	.72	.9	.1	49	.88	.081	25	15	.61	492	.11	<2	1.79	.01	.20	<2	.1	124	<.3	<.1	6.7	1
54026	1.0	41.5	24.6	74.8	1029	6	12	3713	2.57	21.9	<5	1	95	.69	1.0	.1	27	1.75	.170	53	7	.57	1023	.01	6	1.54	.01	.21	<2	.1	168	.4	.1	5.4	11
54027	1.2	8.4	7.9	55.4	116	6	7	306	2.91	8.0	<5	1	43	.15	1.0	.1	59	.32	.048	11	21	.35	156	.08	<2	1.62	.01	.08	<2	.1	93	<.3	.1	7.7	7
54028	.9	7.5	7.0	42.3	58	8	6	233	2.55	6.7	<5	2	28	.07	1.0	<.1	53	.21	.049	10	21	.31	184	.08	<2	1.33	.01	.06	<2	.1	70	<.3	.1	6.2	3
54029	.9	6.8	6.4	37.4	82	8	6	337	2.28	6.6	6	2	29	.07	1.0	<.1	49	.27	.060	10	21	.26	93	.09	<2	1.08	.02	.07	<2	<.1	76	<.3	.1	4.3	3
54030	.8	6.1	7.6	39.9	134	7	5	172	2.21	5.8	<5	2	40	.08	1.0	<.1	51	.26	.023	10	19	.21	108	.08	<2	1.18	.02	.04	<2	.1	64	<.3	.1	5.5	205
54031	1.4	9.7	9.3	54.5	222	4	5	424	2.98	14.1	<5	1	24	.12	1.3	.1	67	.30	.025	9	21	.27	87	.06	<2	1.64	.01	.05	<2	.2	76	<.3	.1	8.1	3
54032	.8	7.1	9.1	63.0	69	11	5	265	2.39	6.8	<5	2	23	.08	1.0	<.1	48	.26	.049	11	20	.29	94	.08	<2	1.74	.01	.07	<2	.1	79	<.3	.1	6.8	2
54033	1.0	10.8	6.8	87.5	171	5	9	927	2.98	4.6	<5	1	29	.20	.9	.1	52	.34	.074	10	17	.44	285	.03	<2	1.80	.01	.14	<2	.1	89	<.3	<.1	5.9	4
54034	1.2	9.6	5.6	37.9	644	4	6	412	2.77	10.2	<5	<1	63	.28	1.9	<.1	46	.57	.057	6	9	.26	268	.01	4	1.28	.01	.13	<2	.1	120	<.3	.1	4.4	1
54035	.8	16.0	9.8	53.4	133	9	9	530	2.98	13.3	<5	3	62	.08	2.6	.1	53	.49	.089	17	23	.61	191	.07	<2	1.32	.02	.12	<2	.1	147	<.3	.1	5.1	1
54036	.8	12.3	7.5	70.6	250	7	8	614	2.76	7.6	<5	1	48	.23	1.1	.1	48	.35	.088	13	21	.45	159	.06	<2	1.39	.01	.12	<2	<.1	85	<.3	.1	4.6	3
54037	.9	6.9	8.6	67.0	164	6	8	846	2.42	4.9	<5	2	27	.11	.7	.1	44	.33	.040	15	17	.28	543	.05	<2	1.53	.01	.10	<2	.1	65	<.3	<.1	5.6	2
54038	.5	9.3	6.3	83.1	116	6	9	284	3.18	1.5	5	1	28	.08	.7	.1	56	.37	.074	8	18	.65	252	.03	2	2.68	.01	.06	<2	<.1	87	<.3	<.1	8.7	1
54039	1.7	7.1	6.5	52.0	533	6	10	806	2.91	11.5	8	1	32	.13	.8	.2	52	.35	.041	10	15	.24	462	.02	<2	1.56	.01	.08	<2	.1	90	<.3	.1	5.9	3
54040	1.0	5.7	8.8	57.8	131	6	5	269	2.25	4.3	<5	2	32	.13	.9	.1	48	.26	.016	11	20	.25	149	.09	2	1.32	.01	.06	<2	.1	72	<.3	<.1	6.0	4
54041	.9	6.3	8.0	46.6	78	9	6	258	2.23	3.7	7	2	52	.12	.8	.1	45	.30	.023	10	19	.24	117	.09	<2	1.38	.01	.06	<2	.1	73	<.3	.1	5.8	3
STANDARD D/AU-S	23.7	126.1	91.7	261.5	1992	29	14	910	4.20	74.9	18	20	62	2.10	9.4	20.7	61	.69	.092	18	50	1.14	236	.13	21	2.26	.07	.72	20	2.3	432	.8	1.8	7.4	44

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

AC[illegible]NAI[illegible]CAL [illegible]ORA[illegible]ES [illegible]52 [illegible]AST[illegible] ST[illegible]ANCO[illegible]R BC [illegible]6A 1R6 PHONE(60[illegible])253-3158 FAX(60[illegible])253-1716

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 257 LUCAS File # 95-2523 Page 1

1409 - 409 Granville St., Vancouver BC V6T 1T2 Submitted by: Geoff Goodall

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
54101	.4	23.9	7.4	40.9	229	7	5	466	2.44	7.3	<5	4	166	.19	2.2	.1	40	.69	.028	21	21	.39	201	.07	<2	1.79	.03	.11	<2	<.1	112	.5	.1	5.0	2
54102	.5	8.2	6.2	70.1	60	7	7	473	2.47	4.8	9	3	52	.18	.9	.1	48	.34	.125	13	21	.30	134	.10	2	1.42	.02	.12	<2	.1	55	<.3	<.1	4.6	1
54103	.6	9.3	6.4	76.0	72	9	7	752	2.63	5.4	5	3	38	.21	.9	.1	52	.32	.061	13	19	.33	194	.09	4	1.38	.01	.17	<2	<.1	54	<.3	.1	4.6	2
54104	.7	12.9	17.0	117.7	153	5	12	2427	3.39	1.9	<5	2	145	.50	1.1	.1	48	.72	.131	23	13	.50	584	.02	2	1.76	.02	.17	<2	<.1	68	<.3	<.1	6.1	1
54105	1.0	15.0	11.3	92.8	55	4	11	2003	2.93	.9	<5	2	59	.26	.6	.1	53	.53	.055	16	8	.30	287	.02	2	1.43	.01	.19	<2	<.1	56	<.3	<.1	3.7	2
54106	.6	8.1	6.9	60.4	41	6	8	536	2.88	4.2	<5	2	41	.10	1.2	.1	53	.27	.038	15	17	.42	197	.06	6	1.34	.02	.11	<2	<.1	25	<.3	<.1	4.6	4
54107	1.3	11.8	12.0	93.5	524	5	11	914	3.44	42.3	<5	1	76	.33	1.7	.1	49	.58	.077	14	13	.45	213	.01	<2	1.81	.01	.13	<2	<.1	95	<.3	<.1	6.6	2
54108	.6	7.7	6.4	56.9	70	8	6	632	2.30	4.2	5	2	43	.09	1.2	<.1	51	.29	.040	11	20	.30	143	.10	<2	1.40	.02	.11	<2	.1	40	<.3	.1	4.5	<1
54109	.6	6.0	7.6	75.0	107	4	7	584	2.67	.8	<5	1	37	.13	.7	.1	54	.31	.030	13	13	.49	155	.04	4	1.42	.02	.09	<2	.1	40	<.3	.1	5.5	<1
RE 54109	.5	5.7	7.1	74.5	116	4	7	578	2.62	.8	<5	1	38	.13	.6	.1	53	.32	.030	13	13	.49	149	.04	3	1.41	.02	.09	<2	<.1	46	<.3	.1	5.1	3
54110	.8	9.7	8.6	67.5	78	5	6	778	2.03	4.3	5	2	23	.15	.8	.1	44	.30	.062	12	17	.25	202	.08	8	1.54	.01	.07	<2	<.1	69	<.3	.1	5.2	4
54111	.8	40.2	12.0	63.1	524	9	9	2110	3.07	12.5	<5	3	48	.33	2.1	.1	55	.73	.048	42	21	.48	454	.04	3	2.22	.01	.14	<2	.1	76	<.3	<.1	6.5	2
54112	.8	12.4	10.1	74.9	211	8	8	1559	2.74	14.4	<5	2	50	.44	1.3	.1	55	.53	.045	23	21	.34	441	.06	2	2.06	.02	.17	<2	<.1	75	<.3	.1	5.4	2
54113	1.8	15.2	11.7	49.9	232	6	12	2874	1.90	6.0	<5	1	144	1.83	.5	.1	28	1.25	.065	15	8	.22	510	.02	2	1.08	.01	.09	<2	<.1	152	<.3	.1	3.2	2
54114	.4	3.7	6.8	65.5	48	7	6	219	2.30	1.4	11	2	25	.08	.4	<.1	48	.19	.094	12	20	.23	98	.08	<2	1.38	.02	.06	<2	<.1	60	<.3	.1	3.8	<1
54115	.8	4.9	6.3	49.1	43	5	5	629	2.11	3.4	5	2	19	.09	.9	<.1	52	.15	.053	10	21	.16	64	.10	3	.93	.01	.05	<2	<.1	43	<.3	.1	4.7	1
54116	1.0	12.0	7.5	108.1	257	9	8	1935	2.71	6.6	<5	1	91	.66	.8	.1	58	.69	.073	11	21	.33	266	.06	15	1.32	.02	.09	<2	<.1	88	<.3	.1	4.5	1
54117	.8	8.0	6.8	48.1	68	6	7	330	2.65	7.6	6	2	33	.11	1.2	.1	60	.31	.042	11	22	.40	116	.10	<2	1.15	.02	.13	<2	.1	88	<.3	<.1	4.0	<1
54118	1.0	8.3	7.0	51.5	99	4	7	1078	2.41	3.6	<5	1	39	.24	.7	.1	56	.41	.048	10	22	.22	125	.07	2	.88	.01	.12	<2	<.1	59	<.3	.1	3.6	2
54119	1.3	7.3	5.8	38.9	88	6	7	278	2.85	5.1	10	1	40	.08	1.0	<.1	67	.28	.018	9	23	.37	130	.06	<2	1.39	.02	.06	<2	.1	101	<.3	.1	4.6	1
54120	.7	8.5	8.4	50.1	88	7	6	432	2.53	5.1	<5	3	33	.08	1.1	.1	58	.28	.044	14	23	.34	157	.08	3	1.68	.02	.06	<2	<.1	159	<.3	.1	5.0	<1
54121	1.4	25.2	16.7	55.8	275	10	11	2015	2.59	4.9	<5	2	136	.44	1.0	.1	47	.93	.073	64	20	.35	335	.04	2	2.48	.01	.12	<2	.1	117	<.3	<.1	6.1	1
54122	1.2	10.5	8.9	59.5	486	4	7	1148	3.25	4.3	<5	1	27	.23	.9	<.1	69	.31	.039	10	21	.28	127	.03	4	1.52	.02	.07	<2	<.1	80	<.3	.1	6.1	1
54123	.8	15.7	7.7	61.2	194	7	11	1190	3.02	3.3	<5	1	33	.25	1.0	.1	59	.33	.047	10	19	.52	239	.03	<2	1.73	.02	.10	<2	.1	101	<.3	<.1	5.6	1
54124	1.3	13.8	9.7	72.4	137	5	8	1207	2.79	5.0	<5	1	47	.46	.9	.1	62	.26	.045	11	23	.21	155	.08	2	1.21	.01	.09	<2	.1	67	<.3	<.1	5.2	1
54125	1.7	10.8	11.1	182.1	216	8	16	753	4.50	1.1	<5	2	58	.72	.6	.1	124	.34	.123	13	24	.62	182	.15	<2	1.33	.04	.06	<2	<.1	60	<.3	.1	8.3	4
54126	.4	6.6	6.2	35.3	53	6	4	203	1.48	3.2	8	2	61	.07	.9	<.1	32	.49	.032	15	14	.27	106	.08	<2	1.08	.02	.05	<2	<.1	94	<.3	<.1	3.2	1
54127	1.0	8.5	8.5	55.8	62	8	7	221	2.72	5.7	<5	3	22	.06	1.0	.1	57	.18	.103	11	20	.36	108	.07	<2	1.84	.01	.07	<2	<.1	60	<.3	.1	6.7	1
54128	.9	7.3	8.2	59.8	85	7	8	742	2.61	3.1	5	2	91	.20	1.1	.1	60	.35	.045	13	22	.32	225	.10	3	1.57	.02	.12	<2	.1	51	<.3	<.1	5.4	1
54129	.8	7.8	5.7	42.4	43	6	5	287	2.58	6.7	<5	2	49	.07	1.1	.1	59	.27	.072	12	23	.29	120	.11	<2	1.16	.02	.09	<2	.1	64	<.3	<.1	4.0	3
54130	.8	7.2	6.6	64.8	73	7	7	327	2.62	5.4	<5	2	28	.09	.9	.1	59	.22	.103	13	22	.28	104	.09	<2	1.40	.02	.07	<2	.1	69	<.3	.1	5.0	1
54131	1.2	29.1	8.4	74.3	287	14	9	1416	2.86	4.8	<5	2	156	.22	1.1	.1	49	1.29	.085	111	24	.42	319	.03	4	2.09	.02	.19	<2	.1	90	<.3	<.1	6.0	<1
54132	1.3	10.0	7.9	57.3	163	9	7	883	2.83	8.3	<5	2	48	.14	1.3	.1	58	.37	.031	17	22	.30	256	.08	<2	2.08	.02	.09	<2	.1	67	<.3	<.1	6.3	11
54133	1.5	10.7	9.0	53.4	580	9	8	1153	2.72	24.2	11	1	33	.20	1.5	.1	60	.33	.027	11	20	.26	159	.07	7	1.53	.02	.13	<2	.1	69	<.3	.1	5.7	1
STANDARD D/AU-S	24.0	121.8	82.7	267.3	1895	26	15	1031	4.32	81.4	21	20	63	2.14	9.9	19.8	69	.64	.087	18	53	1.17	232	.14	28	2.30	.08	.72	18	1.9	454	.8	1.8	6.8	54

ICP - 15 GRAM SAMPLE IS DIGESTED WITH 90 ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 100 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL. SOLUTION ANALYSED DIRECTLY BY ICP. MO CU PB ZN AG AS AU CD SB BI TL HG SE TE AND GA ARE EXTRACTED WITH MIBK-ALIQUAT 336 AND ANALYSED BY ICP.
- SAMPLE TYPE: SOIL AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 26 1995 DATE REPORT MAILED: July 31/95 SIGNED BY. C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
54134	1.9	20.4	8.3	84.2	329	7	11	1109	3.88	18.2	<5	3	68	.24	1.6	.1	48	.69	.040	28	17	.41	316	.03	<2	2.06	.01	.13	<2	.1	137	.4	.1	6.7	1
54135	1.4	61.0	9.4	90.2	1488	18	10	2711	2.98	8.9	<5	2	298	.78	2.3	.2	37	2.86	.100	143	17	.47	1135	.02	<2	3.10	.01	.13	2	.1	296	.8	.1	6.8	2
54136	.6	8.0	6.3	53.6	72	8	7	409	2.50	5.3	<5	3	37	.08	1.1	.1	47	.38	.092	14	20	.34	221	.09	<2	1.32	.02	.09	2	.1	85	<.3	.1	4.6	2
54137	.7	22.7	10.8	80.4	563	7	9	1387	2.69	5.2	<5	2	221	.33	1.4	.1	35	1.42	.073	33	16	.48	907	.03	<2	2.18	.01	.16	2	<.1	189	.3	.1	5.5	62
54138	1.9	9.7	7.8	55.0	147	4	7	1040	2.17	1.6	<5	1	62	.34	.6	.1	37	.46	.054	12	15	.18	280	.06	<2	1.02	.01	.06	<2	.1	90	<.3	.1	4.5	1
54140	.6	4.8	7.1	56.3	43	4	6	678	1.89	2.2	<5	2	20	.07	.5	.1	40	.17	.040	10	16	.18	110	.08	<2	1.11	.01	.05	<2	.1	61	<.3	.1	4.6	2
54141	.7	6.9	5.5	59.0	37	7	8	263	2.75	3.8	7	2	39	.07	.7	.1	53	.22	.048	9	20	.37	112	.04	3	1.63	.02	.07	<2	.1	65	<.3	.1	5.6	3
54142	.7	5.7	8.3	58.4	58	5	8	757	2.80	2.1	<5	2	28	.08	.6	.1	49	.24	.061	12	18	.35	137	.06	<2	1.86	.01	.06	2	<.1	91	<.3	.1	6.1	1
54143	.7	4.8	9.6	37.5	72	3	5	218	1.59	4.3	<5	2	40	.05	.7	.1	35	.25	.025	11	13	.22	104	.09	<2	1.03	.01	.06	<2	.1	157	<.3	.1	4.0	1
54144	.6	5.8	6.9	38.3	90	5	5	180	1.93	2.4	<5	2	74	.08	.7	<.1	41	.38	.013	10	17	.26	148	.07	<2	1.12	.01	.05	<2	<.1	74	<.3	.1	4.1	1
RE 54144	.6	5.7	6.4	38.2	73	5	4	182	1.96	2.2	<5	2	76	.08	.5	<.1	41	.39	.013	10	17	.27	155	.07	2	1.09	.01	.05	<2	<.1	70	<.3	<.1	3.6	1
54145	.7	7.8	7.7	94.8	32	7	11	1276	3.37	2.5	<5	2	41	.14	.4	<.1	68	.36	.050	10	28	.52	327	.05	<2	2.16	.01	.13	<2	.1	57	<.3	.1	6.9	7
54146	1.0	14.2	7.8	95.6	97	8	20	985	5.09	15.5	<5	2	52	.12	.3	.2	90	.48	.036	9	17	.87	671	.02	<2	3.34	.01	.18	3	.1	93	<.3	.1	9.6	2
54147	.9	8.1	7.7	71.5	134	6	10	416	2.98	9.9	<5	2	45	.11	.8	.1	52	.41	.052	11	15	.38	455	.01	<2	2.07	.01	.13	2	<.1	59	<.3	.2	7.7	1
54148	.5	6.0	7.3	61.0	32	6	6	345	2.41	3.9	5	3	34	.09	.6	.1	47	.24	.074	11	20	.29	170	.09	3	1.24	.01	.07	2	<.1	40	<.3	<.1	4.4	4
54149	.6	5.3	8.2	66.1	42	9	6	197	2.28	5.0	<5	3	29	.06	.6	<.1	42	.22	.126	11	19	.22	108	.08	<2	1.49	.01	.07	<2	.1	65	<.3	.1	4.5	1
54150	.7	8.1	7.8	87.7	72	6	7	413	2.61	7.5	6	2	38	.08	.8	.1	49	.35	.112	11	19	.25	176	.06	3	1.82	.01	.06	<2	<.1	175	<.3	.1	6.6	1
54151	.6	17.4	10.6	145.5	136	7	14	862	4.37	3.8	<5	2	41	.17	.3	.1	75	.52	.083	13	15	.98	346	.21	<2	4.23	.02	.09	3	<.1	79	<.3	.1	15.7	3
53182	.8	10.1	7.6	46.5	87	8	6	212	2.68	20.5	9	4	35	.05	3.0	.1	54	.25	.048	14	24	.30	130	.11	<2	1.91	.02	.06	2	<.1	104	<.3	.1	5.5	2
53183	.6	6.6	10.7	54.6	59	4	3	150	1.70	2.7	<5	3	22	.05	.5	.1	36	.22	.055	14	14	.16	149	.05	<2	1.51	.01	.05	<2	<.1	40	<.3	.1	6.7	8
53184	.6	9.0	7.2	89.3	80	7	7	772	2.53	1.7	6	2	44	.22	.6	<.1	40	.41	.076	13	15	.41	242	.05	6	1.28	.01	.16	<2	<.1	23	<.3	<.1	4.1	1
53185	.6	5.0	5.9	42.6	<30	5	5	250	1.91	5.2	12	3	26	.05	1.1	.1	42	.23	.039	11	19	.20	78	.10	<2	1.09	.01	.06	2	<.1	23	<.3	.1	4.2	<1
53186	1.0	49.1	7.7	77.6	1161	24	11	1238	3.78	15.8	<5	5	517	.33	2.4	.1	40	2.00	.075	54	31	.72	587	.01	2	5.54	.02	.22	3	.1	194	.4	.1	10.3	2
53187	.9	4.0	8.0	34.0	37	4	3	209	1.36	2.2	10	2	32	.05	.5	.1	30	.24	.016	10	11	.13	96	.07	<2	.86	<.01	.06	<2	<.1	36	<.3	.1	3.9	<1
53188	.8	5.6	7.0	58.0	46	6	6	379	2.19	3.4	11	2	35	.07	.5	<.1	42	.30	.068	11	16	.24	137	.06	2	1.24	.02	.07	<2	<.1	42	<.3	.1	4.4	1
53189	.5	6.7	7.7	87.1	30	7	6	510	2.47	2.1	9	2	23	.07	.4	<.1	43	.22	.034	12	15	.28	208	.05	<2	1.72	.01	.07	<2	<.1	28	<.3	.1	4.6	<1
53190	.9	5.1	8.3	84.0	34	7	7	1051	2.61	2.2	13	2	43	.16	.5	.1	45	.28	.087	12	18	.26	261	.08	<2	1.15	.02	.12	<2	<.1	38	<.3	.1	3.8	<1
53191	1.0	16.9	10.1	52.2	155	9	8	1427	2.66	3.1	<5	1	273	.18	.7	.1	42	.65	.056	22	16	.32	355	.05	<2	1.36	.01	.13	<2	.1	72	<.3	.2	4.3	1
STANDARD	24.0	121.6	85.0	272.8	1889	27	16	938	4.38	72.1	19	21	65	1.96	8.9	20.9	63	.72	.088	18	53	1.19	240	.14	26	2.32	.08	.72	20	2.0	450	.9	1.9	6.9	46

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

CLAIM BOUNDARY

3400

3200

351000mE

3935000mN

53°32'

125°15'

353000mE

5933000mN

Eor

Eor dyke

EEb

Ka

Kd

?

LEGEND

EOCENE

ENDAKO GROUP

EEb — Basalt, minor andesite

OOTSA LAKE GROUP

Eor — Rhyolite (quartz ±feldspar phyric) dyke/flows

KASALKA GROUP

Ka — Mottled maroon–green–grey fine grained andesite commonly feldspar porphyry

Kd — Light grey–green, fine grained, massive dacite

SYMBOLS

Geological contact (approximate)

Fault (approximate)

Arsenic value ppm
Grid line station
Soil sample location

Grid line coordinate

Lake / pond

Creek

Road/Trail

N

0 100 200 300 400
SCALE IN METRES

1

GEOLOGICAL BRANCH
ASSESSMENT REPORT

24,164

PHELPS DODGE CORP. CANADA LIMITED

PROJECT NO. 257 (Lucas Property) OMINECA M.D.

SOIL GEOCHEMICAL RESULTS
ARSENIC ppm

SCALE	DATE	BY	NTS NO.	FIGURE
1:5000	NOV/95	CWP	93 F/11	8

FOX GEOLOGICAL SERVICES INC.

CLAIM BOUNDARY

3400

3200

351000mE

5935000mN

Eor

Eor dyke

Eeb

Ka

Kd

?

53°32'

125°15'

353000mE

5933000mN

LEGEND

EOCENE

ENDAKO GROUP

Eeb — Basalt, minor andesite

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Eor — Rhyolite (quartz ±feldspar phyric) dyke/flows

KASALKA GROUP

Ka — Mottled maroon–green–grey fine grained andesite commonly feldspar porphyry

Kd — Light grey–green, fine grained, massive dacite

SYMBOLS

Geological contact (approximate)

Fault (approximate)

Gold value ppb
Grid line station
Soil sample location

Grid line coordinate

Lake / pond

Creek

Road/Trail

N

0 100 200 300 400
SCALE IN METRES

GEOLOGICAL BRANCH
ASSESSMENT REPORT

27,164

(2)

PHELPS DODGE CORP. CANADA LIMITED

PROJECT NO. 257 (Lucas Property) OMINECA M.D.

SOIL GEOCHEMICAL RESULTS
GOLD ppb

SCALE	DATE	BY	NTS NO.	FIGURE
1:5000	NOV/95	CWP	93 F/11	7

FOX GEOLOGICAL SERVICES INC.

CLAIM BOUNDARY

3400

3200

351000mE

5935000mN

53°32'

125°15'

353000mE

5933000mN

Ka

Kd

Eor

Eor dyke

Eob

?

SYMBOLS

Geological contact (approximate)

Fault (approximate)

Soil sample number
Grid line station
Soil sample location

Grid line coordinate

Lake / pond

Creek

Road/Trail

N

0 100 200 300 400
SCALE IN METRES

3

PHELPS DODGE CORP. CANADA LIMITED

PROJECT NO. 257 (Lucas Property) OMINECA M.D.

SOIL GEOCHEMICAL RESULTS
SOIL SAMPLE LOCATION AND NUMBER

SCALE	DATE	BY	NTS NO.	FIGURE
1:5000	NOV/95	CWP	93 F/11	6

FOX GEOLOGICAL SERVICES INC.

CLAIM BOUNDARY

GRID NORTHING

GRID EASTING

3400

3200

351000mE

5935000mN

5933000mN

53°32'

Ka

Kd

EEb

EOr

EOr dyke

?

53425 (2;46;1.5;15)

53424 (1;58;1.7;30)

53432 (1;30;2.3;21)

53421 (1;32;2.8;21)

53423 (1;41;7.2;654)

53422 (1;66;2.2;41)

53429 (1;30;16.5;42)

53430 (4;223;21.3;41)

53433 (1;39;2.7;12)

53419 (1;53;4.3;14)

53418 (1;30;2;14)

53416 (395;1940;244.9;35)

53417 (9;141;11;28)

54044 (1;30;4.9;15)

54045 (1;30;4.7;12)

54042 (1;45;3.5;6)

54043 (4;30;2.5;20)

53425 (1;30;37.6;247)

53426 (1;30;2.8;176)

53428 (3;30;225.3;935)

53420 (3;30;3;10)

LEGEND

EOCENE

ENDAKO GROUP

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OOTSA LAKE GROUP

EOr — Rhyolite (quartz ±feldspar phyric) dyke/flows

KASALKA GROUP

Ka — Mottled maroon–green–grey fine grained andesite commonly feldspar porphyry

Kd — Light grey–green, fine grained, massive dacite

SYMBOLS

Geological contact (approximate)

Fault (approximate)

53112 (1;74;2.3;34)

Mercury ppb
Arsenic ppm
Silver ppb
Gold ppb
Rock sample number
Outcrop
Float
Talus

Lake / pond

Creek

Road/Trail

N

0 100 200 300 400
SCALE IN METRES

4

PHELPS DODGE CORP. CANADA LIMITED

PROJECT NO. 257 (Lucas Property) OMINECA M.D.

ROCK SAMPLE LOCATIONS
ROCK GEOCHEMICAL RESULTS

SCALE	DATE	BY	NTS NO.	FIGURE
1:5000	NOV/95	CWP	93 F/11	5

FOX GEOLOGICAL SERVICES INC.

CLAIM BOUNDARY

3400

3200

351000mE

593500mN

593000mN

353000mE

53°32'

125°15'

Ka float

LEGEND

EOCENE

ENDAKO GROUP

EEb — Basalt, minor andesite

OOTSA LAKE GROUP

Eor — Rhyolite (quartz ±feldspar phyric) dyke/flows

KASALKA GROUP

Ka — Mottled maroon–green–grey fine grained andesite commonly feldspar porphyry

Kd — Light grey–green, fine grained, massive dacite

SYMBOLS

Geological contact (approximate)

Fault (approximate)

Outcrop

Shear (inclined, vertical)

Float

Lake / pond

Creek

Road/Trail

24,164

0 100 200 300 400
SCALE IN METRES

5

PHELPS DODGE CORP. CANADA LIMITED

PROJECT NO. 257 (Lucas Property) OMINECA M.D.

PROPERTY GEOLOGY

SCALE	DATE	BY	NTS NO.	FIGURE
1:5000	NOV,'95	CWP	93 F/11	4

FOX GEOLOGICAL SERVICES INC.