FOX GEOLOGICAL SERVICES INC.

GEOLOGICAL and GEOCHEMICAL REPORT

on the

CUT 21 and 22 MINERAL CLAIMS
CUTOFF PROPERTY

OMINECA MINING DIVISION
BRITISH COLUMBIA

NTS 93F/10
53° 33' 30" North Latitude
124° 52' 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

September 29, 1995

#1409 - 409 Granville Street, Vancouver, B.C. V6C 1T8 Telephone (604) 669-5736 Fax (604) 681-2999

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SUMMARY

The Cutoff Property is located approximately 60 kilometres southwest of Vanderhoof in central British Columbia, on the Nechako Plateau. The property is easily accessed by road from Vanderhoof. A series of secondary roads provides good access to all portions of the property.

During June and July of 1995, an exploration program consisting of soil sampling with geological mapping, prospecting and rock sampling was conducted. This report details work done on the Cut 21 and 22 claims, located in the southwest portion of the Cutoff property.

The Property is situated within the Intermontaine Belt, near the eastern edge of the Stikinia Terrane. It is underlain in the northeast by Upper Jurassic Hazelton Group felsic to intermediate volcanics, centrally by Upper Cretaceous Kasalka Group andesites and sediments, in the extreme southwest by Eocene Ootsa Lake Group rhyolites and volcanic sediments, and in the northwest by Eocene Endako Group basalts and sediments. These units generally trend northeasterly, dipping shallowly to the west.

Mineralization within the area of interest occurs along a structurally controlled valley which trends north-northeasterly from Stubb Bay on the Nechako Reservoir. The Stubb South area, at the southern end of this valley, is an area of propylitization, accompanied by silicification and pyritization. Gold (up to 4.5 gpt) is associated with quartz veins, stringers, stockworks and quartz breccia structures up to 3 metres wide.

Prospecting and mapping east of Stubb Bay located intensely silicified and locally brecciated andesite. Anomalous gold and silver are both present in rock samples, up to 321 ppb and 5762 ppb respectively. The best outcrop sample contained highs of 143 ppb gold. Gold and silver are also anomalous in soil samples, in a northeasterly trending area along the shore of Stubb Bay, within and east of the Stubb South showings.

INTRODUCTION

A program of soil sampling with geological mapping, prospecting and rock sampling was conducted on the Cut 21 and 22 claims between June 15 and June 29, 1995. The existing grid was extended to facilitate the search for extensions of exposed mineralization.

LOCATION, ACCESS and PHYSIOGRAPHY

The Cutoff Property is located approximately 60 kilometres southwest of Vanderhoof in central British Columbia. It is situated on the Nechako Plateau, part of the Interior Plateau of the Canadian Cordillera, between Knewstubb Lake and the Nechako River. The Cut 21 and 22 claims are centered at 53° 33' 30" north latitude and 124° 52' west longitude.

Access to the property is obtained by travelling southwest from Vanderhoof along the Kenney Dam Forest Service Road to the Nechako Reservoir Road which trends easterly through the subject claims. A series of secondary roads provides good access to all other portions of the property.

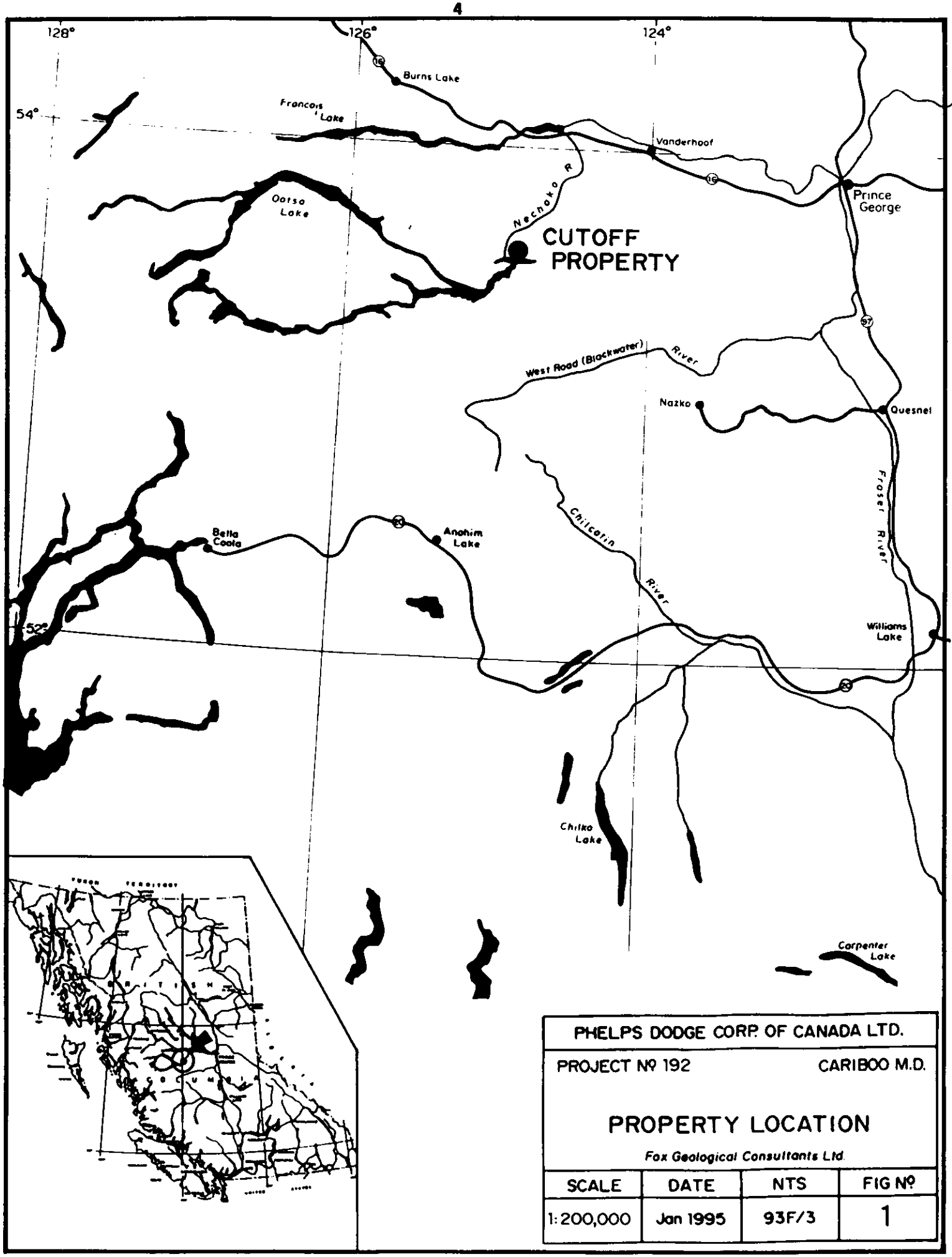
Topography is gentle, with isolated low-lying hills dissected by the northeast trending drainages of Cutoff and Swanson Creeks and numerous subsidiary creeks. Several small lakes are present and swampy ground is common along creeks and predominantly northeast trending lineaments. Elevations range from approximately 850 metres along major drainages and the shoreline of Knewstubb Lake to a rare high of 1070 metres on the northern slope of Cutoff Butte. The immediate area of the Cut 21 and 22 claims is relatively flat.

CLAIM INFORMATION

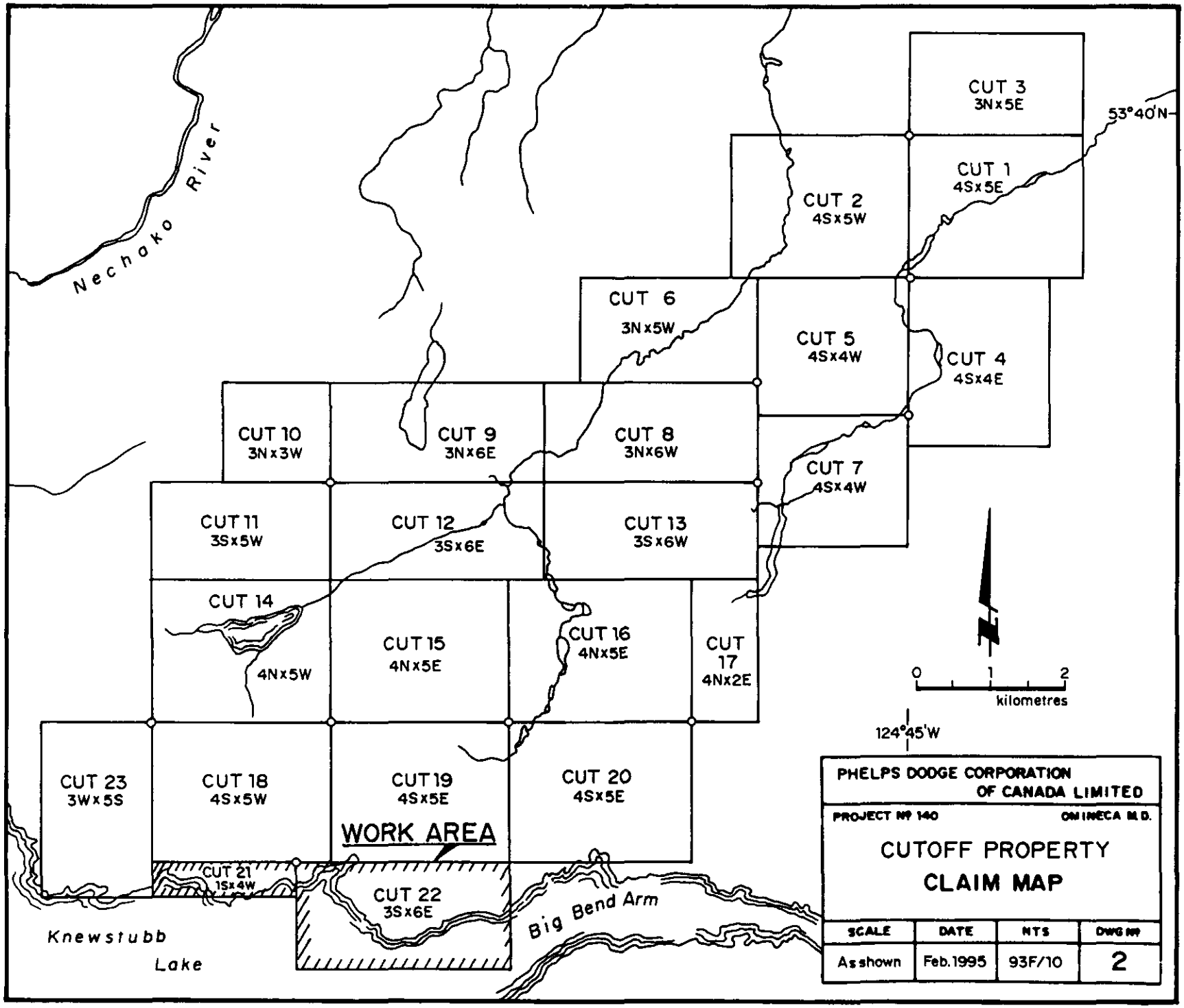
The Cutoff Property consists of twenty-two modified grid claims, totalling 368 units, recorded in the Omineca Mining Division and shown on NTS map sheet 93F/10 (Figure 1). The claims are currently under option from Cogema Resources Inc. Claim details are set out below. All are in good standing and appear to have been staked in accordance with the Mineral Act. Expiry dates tabulated below assume that current work is accepted for assessment purposes.

Table 1

Claim Name	Record #	Units	Years	Expiry Date
Cut 1	313251	20	0	Sept. 4, 1996
Cut 2	313252	20	0	Sept. 4, 1996
Cut 3	313253	15	0	Sept. 4, 1996
Cut 4	313828	20	0	Sept. 25, 1996
Cut 5	315029	16	0	Dec. 3, 1996
Cut 6	314671	15	0	Nov. 13, 1996
Cut 7	314672	16	0	Nov. 13, 1996
Cut 8	314673	18	0	Nov. 14, 1996
Cut 9	314674	18	0	Nov. 7, 1996
Cut 10	314675	9	0	Nov. 6, 1996
Cut 11	314676	15	0	Nov. 6, 1996
Cut 12	314677	18	0	Nov. 7, 1996
Cut 13	314678	18	0	Nov. 14, 1996
Cut 14	314679	20	0	Nov. 8, 1996
Cut 15	314680	20	0	Nov. 8, 1996
Cut 16	314681	20	0	Nov. 8, 1996
Cut 17	314682	8	0	Nov. 7, 1996
Cut 18	314683	20	0	Nov. 5, 1996
Cut 19	314684	20	0	Nov. 5, 1996
Cut 20	314685	20	0	Nov. 8, 1996
Cut 21	319031	4	1	July 1, 1998
Cut 22	319032	18	1	July 1, 1998



PHELPS DODGE CORP. OF CANADA LTD.			
PROJECT Nº 192		CARIBOO M.D.	
PROPERTY LOCATION			
Fox Geological Consultants Ltd.			
SCALE	DATE	NTS	FIG Nº
1:200,000	Jan 1995	93F/3	1


Nechako River
CUT 3
3N x 5E
53°40'N
CUT 1
4S x 5E
CUT 2
4S x 5W
CUT 6
3N x 5W
CUT 5
4S x 4W
CUT 4
4S x 4E
CUT 10
3N x 3W
CUT 9
3N x 6E
CUT 8
3N x 6W
CUT 7
4S x 4W
CUT 11
3S x 5W
CUT 12
3S x 6E
CUT 13
3S x 6W
CUT 14
4N x 5W
CUT 15
4N x 5E
CUT 16
4N x 5E
CUT 17
4N x 2E
0 1 2
kilometres
124°45'W
CUT 23
3W x 5S
CUT 18
4S x 5W
CUT 19
4S x 5E
CUT 20
4S x 5E
WORK AREA
CUT 21
1S x 4W
CUT 22
3S x 6E
Knewstubb
Lake
Big Bend Arm
PHELPS DODGE CORPORATION
OF CANADA LIMITED
PROJECT Nº 140
OMINECA M.D.
CUTOFF PROPERTY
CLAIM MAP
SCALE
As shown
DATE
Feb. 1995
NTS
93F/10
DWG Nº
2

REGIONAL GEOLOGY

The Cutoff Property is located in the Interior Plateau of British Columbia, within the Intermontaine Belt, which consists late Palaeozoic to late Tertiary sedimentary and volcanic 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.

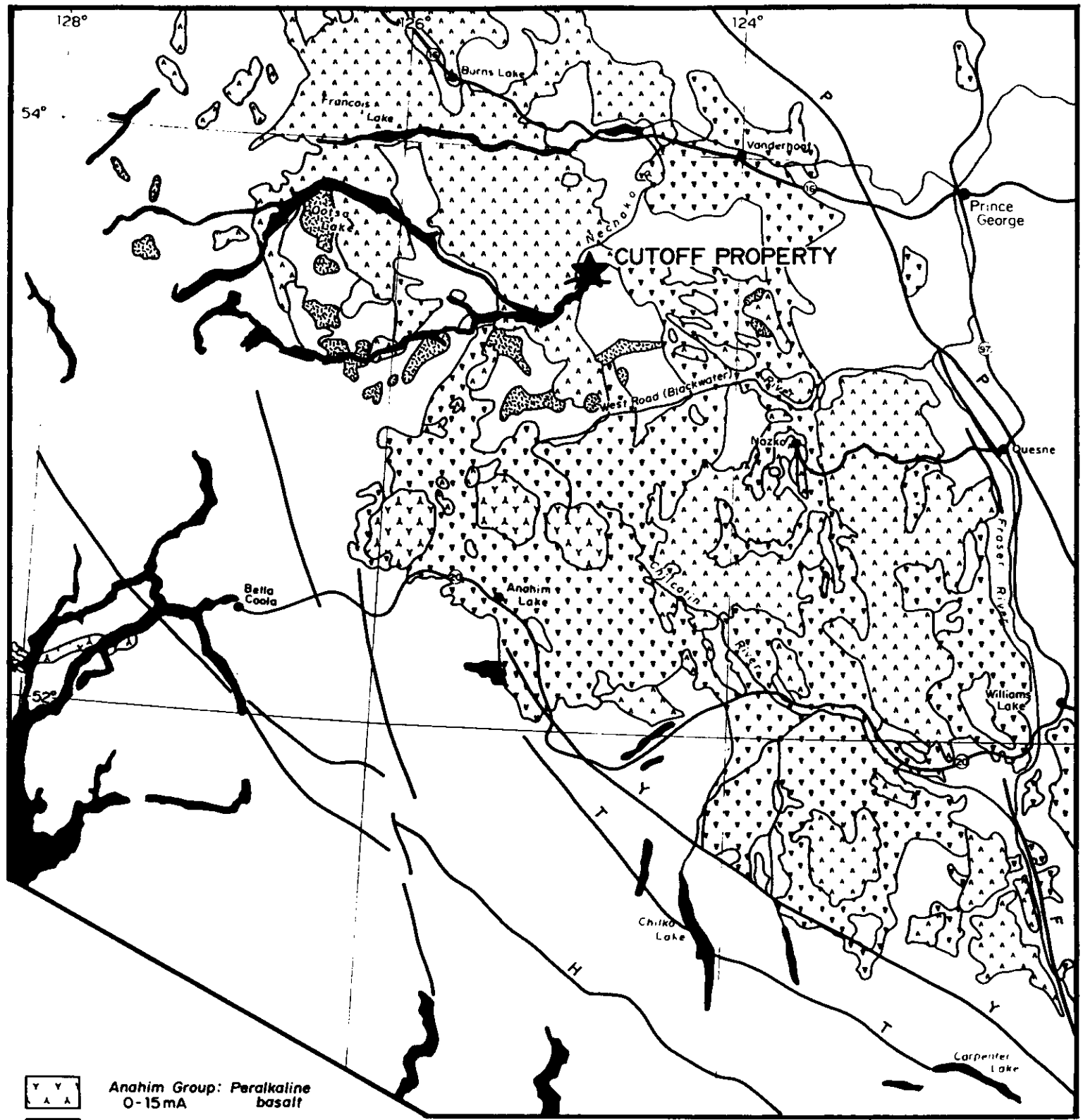
The Cutoff property is situated near the eastern edge of the Stikinia Terrane, on the southeastern edge of the Cheslatta Caldera Complex. The Natalkuz Fault, a regional northeast trending extensional structure which has been mapped to the southwest of property (Green and Diakow, 1993), may extend through the Cut claims. This structure juxtaposes pre-Tertiary strata against a dominantly Eocene and younger volcanic pile. Regional Geology is represented in Figure 2.

PROPERTY GEOLOGY

The Cutoff property is underlain in the northeast by Upper Jurassic Hazelton Group andesites, dacites and rhyolites, centrally by Upper Cretaceous Kasalka Group andesites and sediments, in the extreme southwest by Eocene Ootsa Lake Group rhyolites and volcanic sediments, and in the northwest by Eocene Endako Group basalts and sediments. These units generally trend northeasterly, dipping shallowly to the west.

Hazelton Group, Canyon Creek Assemblage volcanic rocks consist of rhyolitic to andesitic tuffs, breccias, flows and intrusive units with interbedded marine sedimentary rocks. These rocks were not seen during the 1995 field season.

The Upper Cretaceous Kasalka Group, Cutoff Volcanic Assemblage, which underlies the majority of the property, is interpreted to represent an eroded stratovolcano which was probably centered on the Cutoff Butte area. These rocks consist of mainly dark grey, medium to light green and less frequent maroon andesitic ash, crystal and lapilli tuffs, flows and flow breccias. Locally these rocks may be feldspar phyric (1-2 mm) and less frequently hornblende phyric (1-2 mm) and magnetic. The majority of rocks



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 - Tchaikazan, Y - Yalakom, F - Fraser, P - Pinchi

Scale 1:2,000,000

0 50 100 km

PHELPS DODGE CORP. OF CANADA LTD.

PROJECT Nº 205 OMINECA M.D.

CUTOFF PROPERTY
REGIONAL GEOLOGY

Fox Geological Services Inc.

SCALE	DATE	NTS	FIG Nº
1:2,000,000	Sept. 1995	93E/10	3

observed during the 1995 field season were of this type. Volcaniclastic rocks are also present, but are volumetrically less significant. These consist of poorly sorted, polylithic pebble to cobble conglomerate, pebbly sandstone, sandstone and siltstone. Weak to moderate propylitic, clay, or ankeritic alteration, and/or weak to strong silicification occurs locally.

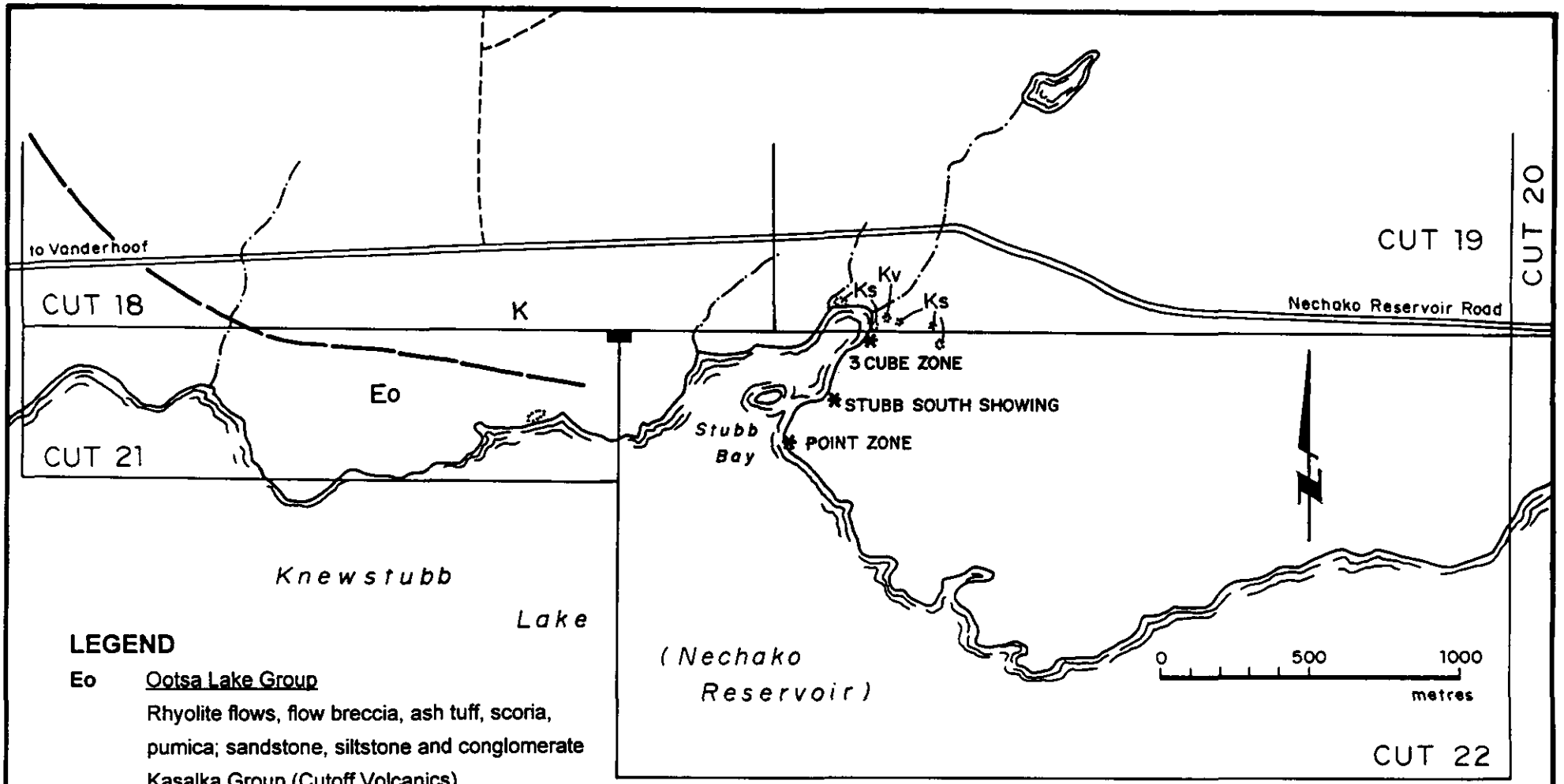
Eocene Ootsa Lake Group volcanics and sediments outcrop along the shore of Knewstubb Lake and along the "500" forestry road west of the property. Typical of these rocks are white to cream coloured quartz phyric rhyolite flows, flow breccias, ash tuffs, scoria, pumice, siltstone, sandstone, and conglomerate. These rocks exhibit weak to intense orange, red, and yellow staining, zeolite (?) amygdules, strong clay alteration and silicification.

Eocene Endako Group basalts with sparse sediments form prominent cliffs and cap rocks in the northwestern portion of the property. Dark grey to black basalt flows are vesicular, commonly olivine and occasionally feldspar phyric, with local red scoriaceous units containing chalcedony amygdules. Minor interbedded tuffaceous sediments are present; cream coloured siltstones were observed at one location on Cutoff Creek. Intrusive rocks outcropping on the property are rare. A pink to light green feldspar phyric monzonite with abundant hornblende and a dark grey, salt and pepper, hornblende-feldspar phyric, medium to coarse grained diorite were observed. Red, thermally oxidized, scoria and volcanic bombs present in the Gold Fish area indicate proximity to an Eocene vent environment.

MINERALIZATION

Three main showings occur on the Cutoff property, the Trout, Stubb South and Stubb North.

The Stubb showings occur along a structurally controlled valley which trends north-northeasterly from Stubb Bay on Knewstubb Lake. These showings are associated with a sedimentary or lapilli tuff unit and/or fault breccia accompanied by moderate propylitization, strong silica and/or carbonate flooding and locally may contain up to 5% pyrite. Gold mineralization is present in both silica-rich structures and propylitic wall rock. Mineralized structures in the Stubb area dip 45-60° to the northwest.



LEGEND

Eo Ootsa Lake Group
Rhyolite flows, flow breccia, ash tuff, scoria, pumica; sandstone, siltstone and conglomerate
Kasalka Group (Cutoff Volcanics)

Kv Andesitic ash tuff, crystal tuff, lapilli tuff, flows and flow breccia.

Ks Pebble to cobble conglomerate, sandstone and pebbly sandstone. Brown, grey, green and cream coloured; locally contain plant fragments.

SYMBOLS

Limit of outcrop

Geological contact (inferred)

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PROJECT Nº 140 OMINECA M.D.

CUTOFF PROPERTY
GEOLOGY

SCALE	DATE	NTS	DWG Nº
1:20,000	Sept.1995	93F/10	4

The **Stubb South** is an area of propylitization, accompanied by silicification and pyritization that was found in 1993 to carry up to 4.5 gpt gold. Anomalous gold is associated with quartz veins, stringers, stockworks and quartz breccia structures up to 3 metres wide, hosted in strongly propylitized feldspar porphyry, granodiorite and sediments. The Stubb South area includes the Camp, Grizley, 3-Cube and Point zones. The 3-Cube and Point zones both lie within the subject area of this assessment report, on the Cut 21 and 22 claims.

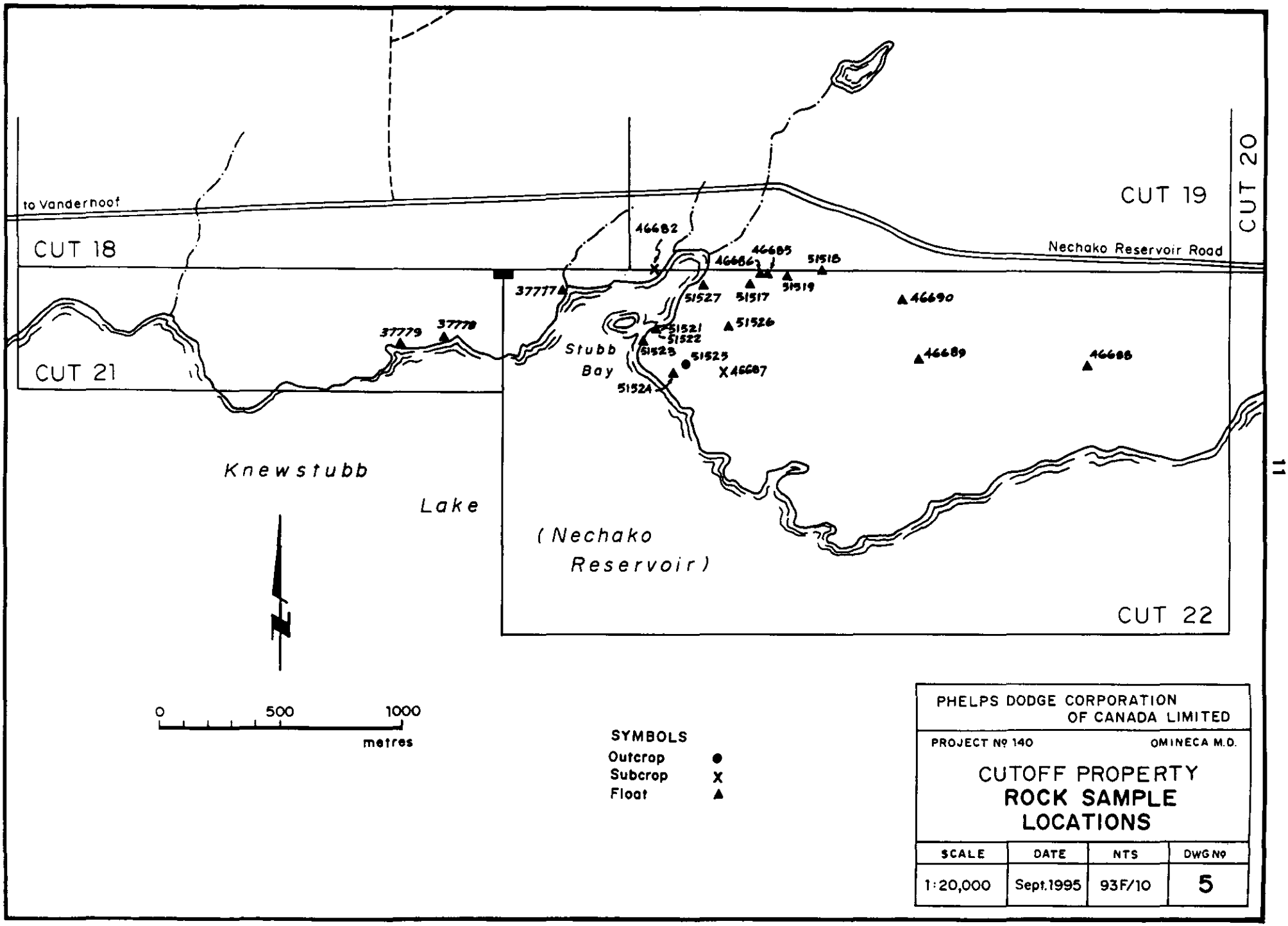
The **3-Cube Zone,** which outcrops along the lake shore, is a well-developed, mineralized quartz breccia structure that is hosted in a complex section of strongly propylitized andesitic tuffs. Trenching during 1994 yielded up to 2.87 gpt gold over 2 metres in an argillized shear zone. A single drill hole into this target intersected 6.1 metres of 0.5 gpt gold.

At the **Point Zone**, an outcrop of propylitized andesite contains a dense stockwork of quartz veins, surrounded by numerous angular boulders of similar material and a pyritic, silicified breccia. Trenching uncovered strongly propylitized andesite and a large area of pyritic fault gouge in basal till, however, the depth of overburden encountered suggests that the Stubb Point showing is probably not outcrop.

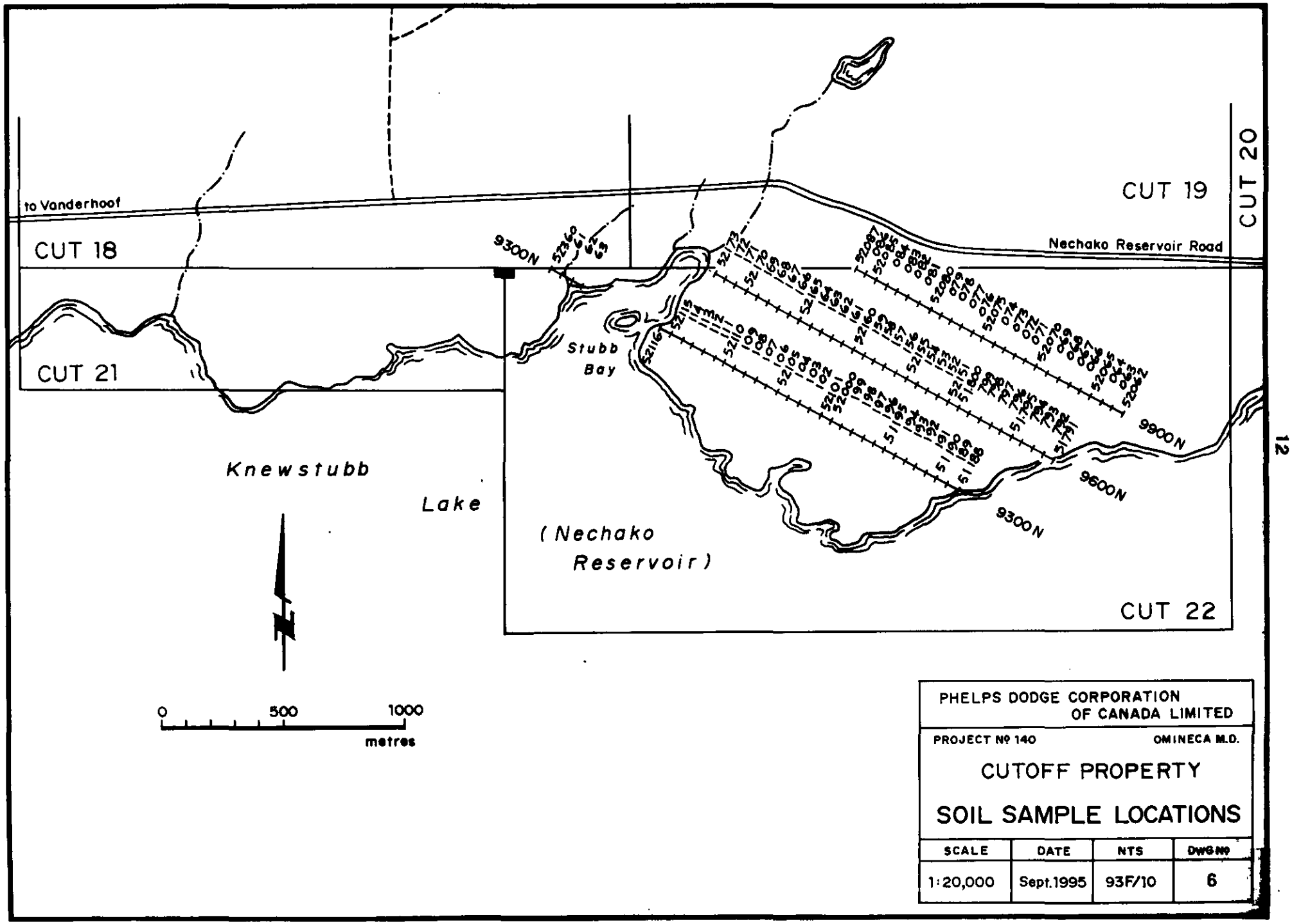
1995 WORK PROGRAM

Cogema's existing grid was extended to facilitate the search for extensions of the mineralization exposed along Stubb Bay. Lines 9300, 9600 and 9900 were each extended to the southeast, for a total of 2.45 line-kilometres of new grid.

Soil geochemical sampling was conducted along the new grid, at 50 metre intervals and over a portion of the old grid for correlation. A total of 91 samples was collected. 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 30 elements by ICP techniques and for gold by geochemical atomic absorption analysis. Field notes detailed location, topography, type and colour of material collected. Grid and Soil Sample Locations are presented in Figure 6 and Analytical method is set out as Appendix 2.



PHELPS DODGE CORPORATION OF CANADA LIMITED			
PROJECT Nº 140		OMINECA M.D.	
CUTOFF PROPERTY **ROCK SAMPLE LOCATIONS**			
SCALE	DATE	NTS	DWG Nº
1:20,000	Sept.1995	93F/10	5



PHELPS DODGE CORPORATION OF CANADA LIMITED			
PROJECT Nº 140		OMINECA M.D.	
CUTOFF PROPERTY			
SOIL SAMPLE LOCATIONS			
SCALE	DATE	NTS	DWG Nº
1:20,000	Sept.1995	93F/10	6

The subject claim area was thoroughly prospected and geological mapped at a scale of 1:20,000. A total of 20 rock samples was collected and analyzed by Analytical Laboratories Ltd. Rock sample locations comprise Figure 5.

RESULTS

A single exposure of Ootsa Lake Group outcrops along the shoreline on the east side of the Cut 21 claim. No alteration or mineralization were evident. Several small outcrops of Kasalka Group rocks are exposed near the head of Stubb Bay, in the vicinity of the Cut 19/22 claim line. These are predominantly volcaniclastics and sediments with a single exposure of volcanic rock.

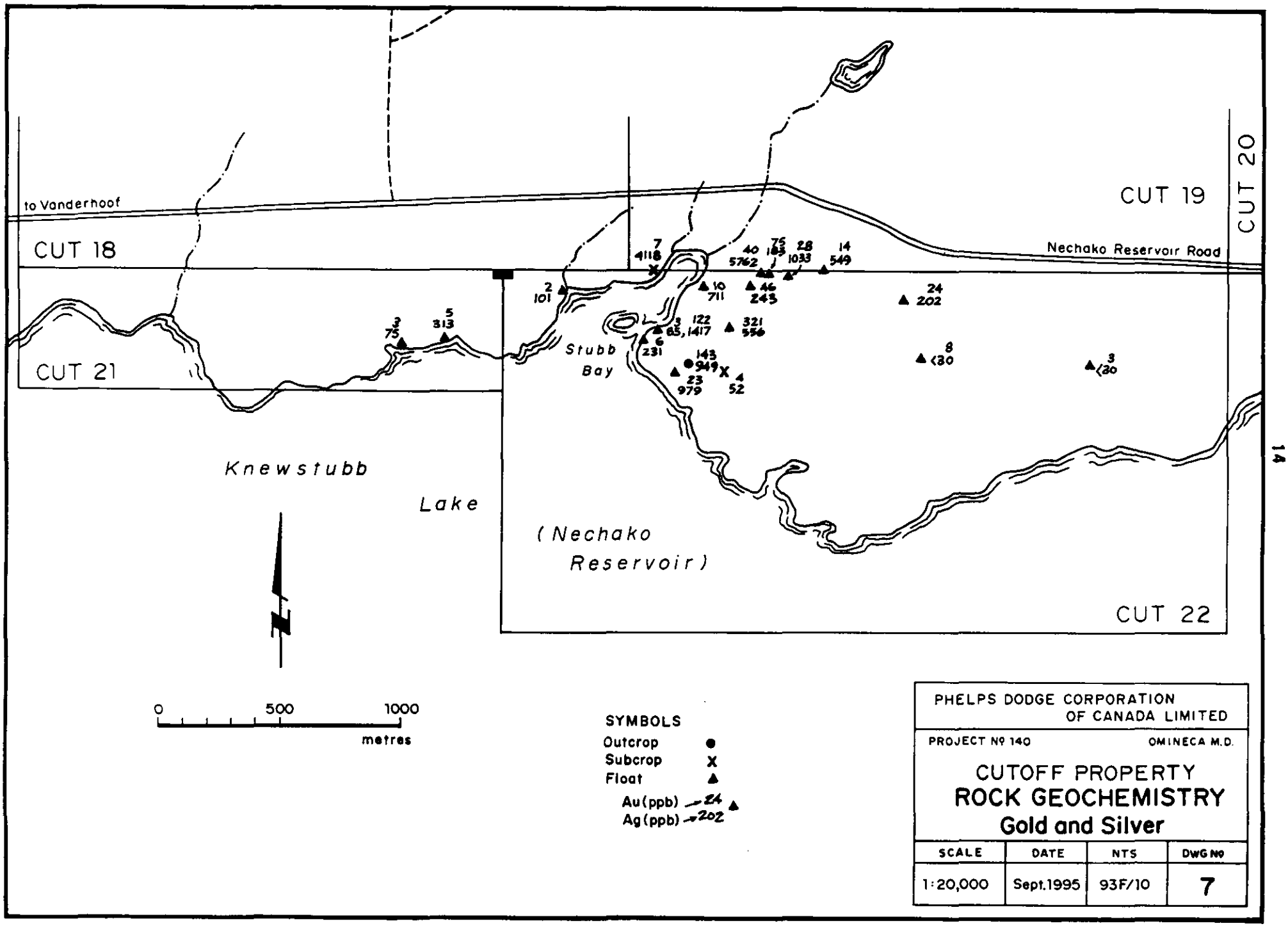
Prospecting and mapping east of Stubb Bay located several areas of intensely silicified and locally brecciated andesite. It is not clear, however, whether these rocks are float or subcrop. Anomalous gold and silver were present in rock samples, up to 321 ppb and 5762 ppb respectively, with isolated instances of anomalous Cu, Mo, Sb, As and Hg. Three in-situ samples (outcrop and subcrop) contained highs of 143 ppb gold, 4118 ppb Ag, 62.1 ppm Mo, 6.2 ppm Sb and 100 ppm Hg. Analytical results are provided in Appendix 2.

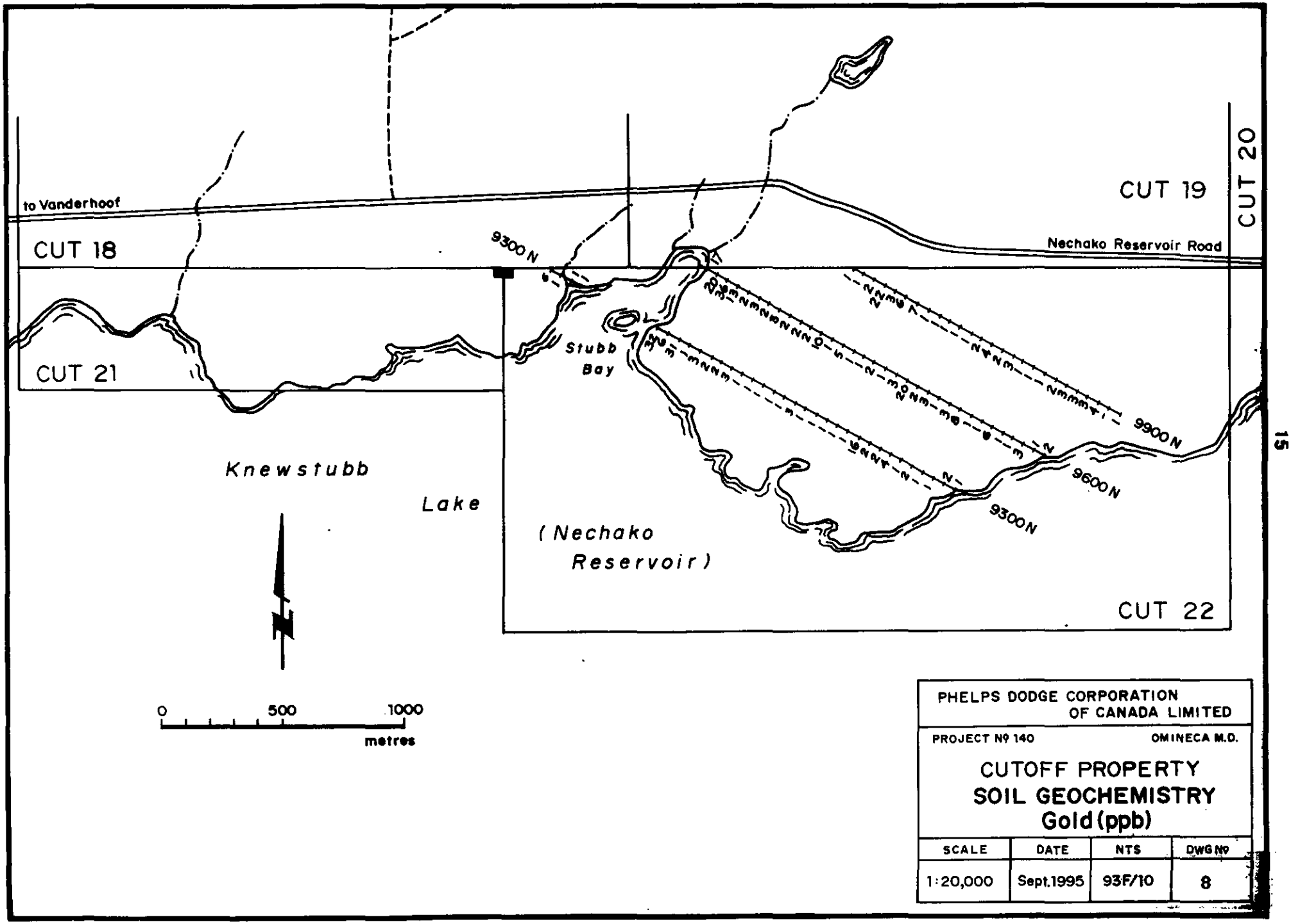
Gold and silver are the only geochemical species that occur in anomalous concentrations in soil samples. Base metals (copper, lead, zinc) and gold indicator elements (arsenic, antimony, mercury) are present in background levels only. Soil geochemical results for gold and silver are summarized below; Analytical results comprise Appendix 4.

Table 2

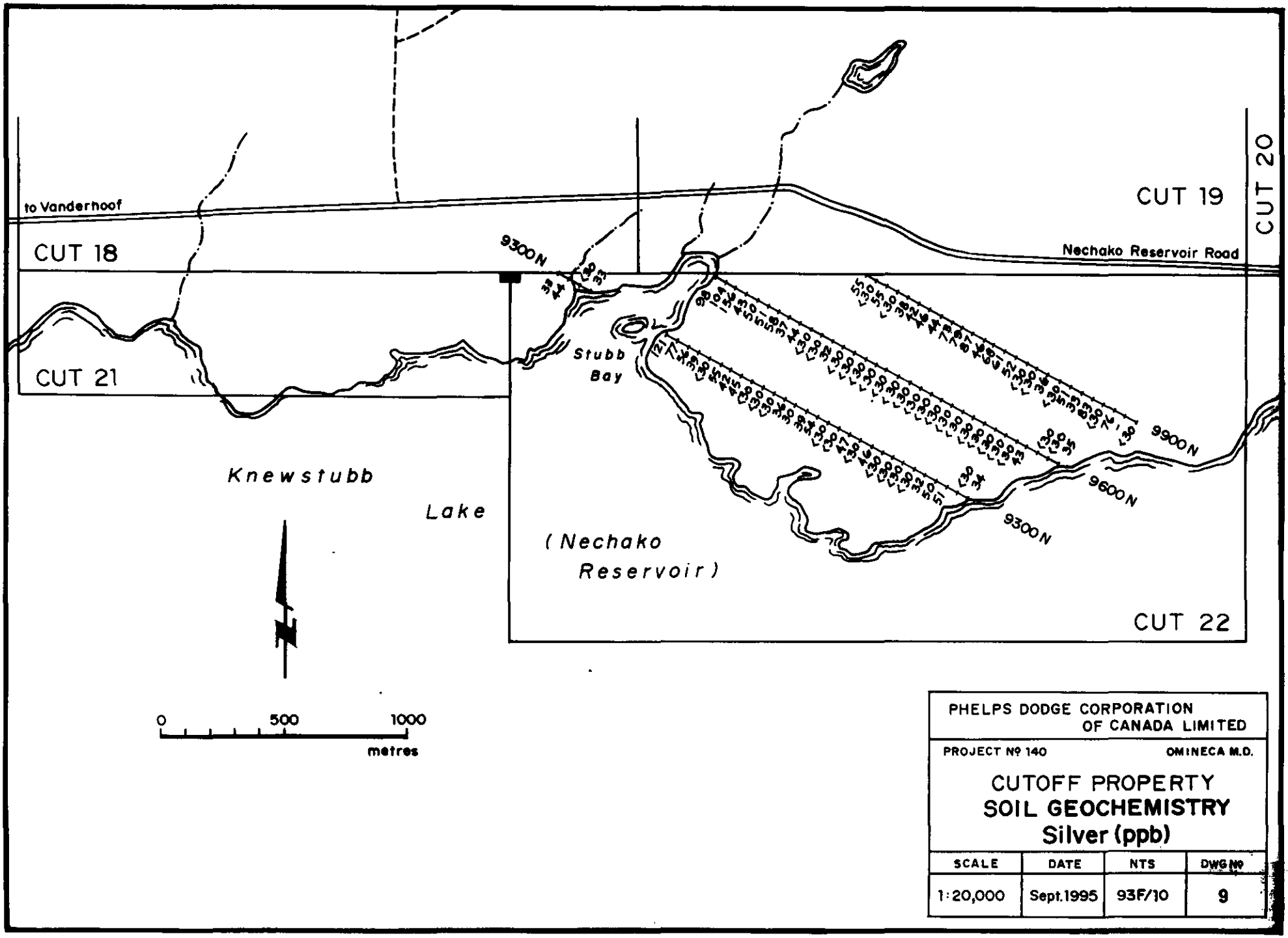
ELEMENT	GEOCHEMICAL SAMPLE RANGE	ELEVATED THRESHOLD	ANOMALOUS THRESHOLD
Gold	1 to 36 ppb	15 ppb	30 ppb
Silver	<30 to 156 ppb	70 ppb	100 ppb

Anomalous gold and silver are confined to a northeasterly trending area along the east shore of Stubb Bay, which coincides with the area of known mineralization. A few elevated gold and silver concentrations occur in isolated pockets to the east.


to Vanderhoof
CUT 18
CUT 19
CUT 20
CUT 21
CUT 22
Nechako Reservoir Road
Stubb Bay
Knewstubb Lake
(Nechako Reservoir)
0
500
1000
metres
SYMBOLS
Outcrop
Subcrop
Float
Au(ppb)
Ag(ppb)
PHELPS DODGE CORPORATION OF CANADA LIMITED
PROJECT Nº 140
OMINECA M.D.
CUTOFF PROPERTY
ROCK GEOCHEMISTRY
Gold and Silver
SCALE
1:20,000
DATE
Sept.1995
NTS
93F/10
DWG Nº
7



PHELPS DODGE CORPORATION OF CANADA LIMITED			
PROJECT Nº 140		OMINECA M.D.	
CUTOFF PROPERTY **SOIL GEOCHEMISTRY** **Gold (ppb)**			
SCALE	DATE	NTS	DWG Nº
1:20,000	Sept.1995	93F/10	8



PHELPS DODGE CORPORATION OF CANADA LIMITED

PROJECT Nº 140 OMINECA M.D.

CUTOFF PROPERTY
SOIL GEOCHEMISTRY
Silver (ppb)

SCALE	DATE	NTS	DWG Nº
1:20,000	Sept.1995	93F/10	9

CONCLUSIONS

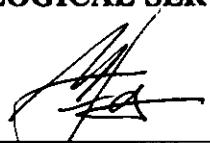
Rocks and soils on the Stubb Bay area of the Cutoff Property contain low to moderately anomalous gold and silver concentrations in a northeasterly trending zone that is roughly coincident with the Stubb South showing area.

DISBURSEMENTS

Expenditures to September 20,1995 for the Cutoff Property are $70,588.00 as tabulated below.

Accommodation and Board	11,100
Communication	1,299
Laboratory (rock samples)	3,048
Laboratory (soil samples)	8,637
Labour	40,256
Publication and Maps	670
Supplies and Services - Field	4,413
Transportation (truck, gas, etc.)	6,387
Miscellaneous Expense	315
Total Disbursements	**$ 76,125**

FOX GEOLOGICAL SERVICES INC.



P.E. Fox, Ph.D., P.Eng.
September 29, 1995

CERTIFICATE

I, Peter Edward Fox, certify to the following:

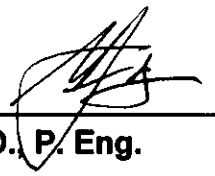
1. **I am a consulting geologist residing at #902 - 2077 Nelson Street, Vancouver, B.C.**

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.
September 29, 1995

APPENDIX 1

Rock Sample Descriptions

ROCK SAMPLE DESCRIPTIONS

Table 3

Number	Type	Description
37777	Float	None available.
37778	Float	None available.
37779	Float	None available.
46682	Chip Subcrop	From pyritic shear zone on beach. Orange, dark grey, fractured, hematite-stained calcite.
46685	Float	Sample is medium green coloured, brecciated, has moderate propylitic alteration, is locally vuggy, contains quartz after calcite, drusy quartz and 5% euhedral and blebby pyrite.
46686	Float	Red jasper from andesite, fractured, from large moss covered mound.
46687	Grab Subcrop	Grey, light-brown weathered, siltstone breccia is silicified with 5% pyrite. Contains hematite and limonite.
46688	Float	Medium grey-green, fine-grained andesite with weak propylitic alteration.
46689	Float	Light-medium grey ash tuff with weak propylitic alteration.
46690	Float	Light grey fractured, brecciated and silicified andesite, slightly vuggy with drusy quartz and weak propylitic alteration.
51517	Float	Two boulders, located a few metres apart, are of slightly pyritic, siliceous greenstone with a few feldspar crystals. (Each boulder had a faded, numberless pink flag but neither showed any indication of being hammered on.)
51518	Float	Bluish-tinged quartz, slightly brecciated, with trace pyrite and arsenopyrite.
51519	Float	Andesite with chloritic alteration, stringers of quartz-carbonate and disseminated pyrite.

51521	Float	Silicified rock, protolith uncertain. No visible mineralization.
51522	Float	Silicified rock, protolith uncertain. Minor brecciation, no visible mineralization.
51523	Float	Silicified breccia with drusy quartz on boulder surface. No visible mineralization.
51524	Float	Silicified breccia with no visible mineralization located 3m from a crystalized tuff.
51525	Grab Outcrop	Slightly brecciated, silicified, vuggy, with drusy quartz.
51526	Float	Silicified rock, protolith uncertain. Numerous small vugs.
51527	Float	Chloritic andesite rubble with trace pyrite.

APPENDIX 2

Analytical Method

ICP: A 15 gram sample is digested with 90 millilitres 3-1-2 HCl-HNO_3-H_2O at 90° Centigrade from 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-regio/MIBK extract, GF/AA finished.

APPENDIX 3

Rock Geochemical Analyses

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

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 249 File # 95-2053

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
37774	17.2	6.5	5.9	13.9	633	5	2	109	1.57	23.3	<5	<1	7	.01	1.1	<.1	25	.03	.020	2	7	.21	49	<.01	<2	.64	<.01	.09	<2	.1	9	<.3	.2	1.5	69
37775	4.8	2.6	8.7	10.8	160	5	<1	72	.72	71.7	<5	9	3	.03	1.6	1.3	2	.06	.003	46	5	.03	12	.01	<2	.34	.10	.17	<2	.1	51	<.3	.4	1.6	4
37776	1.4	4.0	3.9	47.6	217	5	5	361	1.65	12.4	<5	7	50	.13	.7	<.1	47	.91	.289	49	2	.10	192	.08	<2	.58	.09	.11	<2	.1	<5	<.3	.5	3.9	2
37777	.7	3.7	12.1	56.3	101	3	3	473	1.93	6.3	<5	5	14	.10	.5	<.1	10	.42	.132	52	2	.07	75	<.01	<2	.64	.03	.32	<2	<.1	<5	.3	.2	3.1	2
37778	149.5	22.9	22.1	271.2	313	223	65	1435	28.90	740.6	<5	4	10	.45	4.7	.7	176	.13	.073	13	2	.06	77	.02	<2	.46	.02	.09	<2	10.1	229	<.3	1.7	4.8	5
37779	6.5	50.9	3.7	107.4	75	82	49	2830	16.59	21.9	<5	3	71	.25	3.7	.1	169	1.73	.100	28	8	.72	677	.01	<2	1.87	<.01	.08	4	.1	88	<.3	.3	5.2	3
RE 37779	5.7	47.8	3.5	100.4	56	77	47	2700	15.41	21.8	<5	3	67	.23	3.5	.3	159	1.63	.093	25	7	.68	644	.01	<2	1.76	<.01	.07	4	.1	75	<.3	<.1	4.4	2
RRE 37779	5.6	47.9	3.3	101.1	72	79	49	2770	15.80	23.1	<5	3	68	.23	3.4	.3	162	1.69	.097	27	7	.70	655	.01	<2	1.75	<.01	.07	6	.1	72	.4	.2	4.5	2
37780	1.2	3.3	6.8	25.8	81	2	2	75	2.38	47.4	<5	10	23	.02	7.4	<.1	19	.30	.118	41	1	.06	49	<.01	<2	.73	.01	.07	<2	.1	737	<.3	.4	2.5	<1
37781	1.4	22.3	6.1	87.9	74	3	1	979	2.51	2.6	<5	3	3	.07	.4	.1	4	.09	.020	24	3	.43	82	<.01	2	1.15	.02	.23	<2	<.1	13	<.3	.1	2.7	<1
STANDARD	22.8	129.6	85.6	257.9	1911	26	13	960	4.36	73.4	17	21	52	2.36	10.0	20.8	64	.67	.092	17	49	1.14	237	.13	24	2.23	.04	.71	21	2.1	481	.9	2.1	6.9	530

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

DATE RECEIVED: JUN 29 1995 DATE REPORT MAILED: July 14/95 SIGNED BY .....D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

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

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 248 File # 95-2052 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
46669	5.0	9.0	12.0	10.2	41	31	7	659	4.77	7.8	<5	1	7	.03	5.5	.1	114	.06	.009	2	18	.04	34	.01	3	.13	.01	.01	6	.2	32	.6	.3	.8	21
46670	1.7	14.1	3.1	23.1	<30	10	3	612	3.07	10.8	<5	5	44	.03	1.2	<.1	63	.70	.168	29	5	.17	80	.05	<2	.53	.10	.21	<2	.3	24	<.3	.2	2.3	5
46671	.5	2.5	4.9	36.0	88	3	<1	171	.48	1.7	5	17	3	<.01	.6	<.1	6	.03	.005	47	3	.02	9	.05	<2	.18	.06	.10	<2	.2	5	.7	.3	1.1	4
46672	.8	29.5	1.4	153.2	41	33	21	1009	5.09	<.5	<5	5	65	.19	.3	.1	107	1.11	.122	25	31	.99	140	.14	<2	1.46	.23	.11	<2	.2	49	<.3	<.1	5.5	8
46673	1.4	27.4	5.4	100.4	52	19	11	328	4.41	<.5	<5	3	59	.10	.7	<.1	159	.98	.144	27	16	.55	81	.28	<2	.95	.22	.11	<2	<.1	25	<.3	<.1	4.9	8
46674	3.0	7.0	2.0	21.1	<30	11	2	240	.75	3.5	<5	<1	36	.06	1.8	.2	17	3.64	.008	1	10	.12	1588	.01	<2	.20	.01	.02	<2	.2	114	.4	<.1	1.1	4
46675	.4	26.0	6.2	60.3	186	8	15	1054	3.64	8.8	<5	<1	18	.10	3.4	.1	69	2.27	.052	4	4	.15	130	.01	2	.74	.01	.12	<2	.1	629	<.3	.1	2.9	5
46676	.8	213.7	2.5	165.1	105	157	43	910	8.94	<.5	5	1	38	.09	.3	<.1	207	.70	.134	10	90	2.71	22	1.49	<2	1.89	.93	.27	<2	.1	63	.3	<.1	13.2	9
46677	1.4	44.5	5.0	91.8	113	14	15	1128	4.69	4.6	<5	1	32	.13	.6	<.1	114	2.00	.048	10	22	1.97	171	.22	2	1.92	.11	.17	<2	.2	17	.3	<.1	9.2	11
46678	.9	10.5	6.3	120.8	<30	13	21	827	5.75	26.8	<5	1	83	.19	.4	<.1	146	2.03	.080	9	14	3.18	128	.34	6	3.64	.17	.08	<2	.1	13	.3	<.1	19.4	9
46679	2.0	9.7	4.7	12.0	<30	8	1	578	2.19	38.9	<5	<1	65	.04	6.1	<.1	44	4.84	.011	<1	10	.16	279	.01	<2	.08	.01	.02	3	.2	444	<.3	<.1	<.5	6
46680	2.5	8.3	3.7	27.3	<30	10	3	511	3.28	4.9	<5	<1	32	.05	2.5	.1	100	1.21	.056	1	9	.28	72	.01	<2	.47	.01	.09	<2	.1	33	<.3	<.1	2.0	6
RE 46680	2.6	8.8	4.2	28.8	<30	11	4	531	3.42	4.3	<5	<1	32	.05	2.1	.1	103	1.27	.059	1	10	.29	73	.01	3	.47	.01	.10	<2	.1	32	<.3	.1	1.3	5
RRE 46680	1.6	8.9	4.3	28.9	<30	8	4	504	3.30	4.6	<5	<1	32	.06	2.5	.1	100	1.19	.058	1	8	.30	67	.02	4	.46	.01	.08	3	.1	31	<.3	<.1	1.8	6
46681	2.1	114.4	4.3	77.3	1449	13	13	820	4.33	4.8	<5	<1	133	.13	1.1	.1	72	3.22	.045	4	6	1.70	151	<.01	<2	2.07	.02	.17	<2	.1	11	1.1	.1	6.8	96
46682	62.1	62.4	40.8	127.8	4118	30	6	181	5.72	30.2	<5	1	35	.81	6.2	.1	80	.37	.049	4	30	1.16	137	<.01	<2	2.39	.01	.18	<2	.8	100	2.9	.3	6.0	7
46683	1.4	24.0	3.8	57.1	390	4	8	871	3.15	4.8	<5	<1	78	.10	.4	<.1	29	3.78	.044	4	3	.75	139	<.01	<2	1.39	.01	.23	<2	.1	14	.3	<.1	2.9	20
46684	1.4	4.4	5.5	84.8	117	8	9	1027	4.63	3.8	<5	5	27	.11	.6	.1	46	.81	.247	47	4	.16	98	.04	<2	.56	.07	.15	<2	.1	32	<.3	<.1	2.9	7
46685	1.0	9.7	2.0	45.3	183	6	7	1030	1.99	3.5	<5	<1	70	.07	.7	.1	27	1.66	.036	8	4	.75	1060	<.01	2	1.15	.02	.16	<2	.2	7	<.3	.4	3.3	75
46686	3.2	1417.4	4.8	16.4	5762	11	4	687	2.72	8.7	<5	<1	56	.15	19.3	<.1	47	1.63	.008	1	9	.37	1026	<.01	2	.48	.01	.01	3	.1	23	.8	<.1	2.1	40
46687	1.6	13.4	3.5	91.8	52	9	10	865	2.06	3.8	<5	6	38	.10	.4	.2	45	.72	.195	44	3	.14	238	.09	<2	.56	.12	.20	<2	.2	14	<.3	<.1	1.8	4
46688	.4	7.0	3.3	63.3	<30	8	13	818	3.90	2.8	<5	<1	79	.05	.8	.3	72	2.85	.049	11	10	1.66	595	.02	2	1.49	.04	.10	<2	<.1	118	<.3	<.1	6.2	3
46689	.7	10.3	3.3	103.9	<30	2	9	939	5.12	<.5	<5	<1	29	.13	.4	.1	80	2.83	.063	14	2	1.93	91	.03	<2	2.93	.02	.21	<2	<.1	15	<.3	.2	9.6	8
46690	1.3	24.3	2.4	49.8	202	4	9	344	3.57	8.8	<5	1	16	.04	.4	<.1	73	.21	.037	5	8	1.10	216	<.01	<2	2.41	.01	.12	<2	.1	129	<.3	<.1	5.9	24
46691	.3	11.9	4.7	121.6	<30	6	14	1081	4.74	2.1	<5	<1	54	.07	.8	<.1	99	1.36	.070	10	14	1.56	682	.02	2	2.48	.06	.03	<2	.1	9	<.3	.2	12.0	5
46692	2.3	15.5	3.3	61.0	39	10	8	635	2.89	59.2	<5	5	58	.08	.3	.2	43	.66	.184	31	4	.09	117	.04	<2	.78	.11	.14	<2	.2	22	<.3	<.1	3.1	3
RE 46692	2.4	16.9	3.3	61.9	42	10	10	654	2.99	63.3	<5	5	60	.07	.4	.1	44	.69	.189	33	4	.09	124	.04	<2	.81	.12	.14	<2	.1	19	<.3	.2	2.7	6
RRE 46692	2.1	14.6	3.1	58.4	<30	8	9	662	2.94	66.0	<5	5	60	.06	<.2	.2	44	.67	.190	32	4	.09	125	.04	2	.77	.11	.14	<2	.2	9	<.3	<.1	2.0	2
46693	.5	7.8	3.7	66.7	<30	8	10	1238	4.18	6.9	<5	1	43	.08	.9	<.1	77	2.40	.063	17	7	1.73	87	.10	<2	1.49	.07	.09	<2	.1	<5	<.3	<.1	9.6	193
46694	.6	56.0	5.6	57.7	72	8	18	1046	4.92	24.7	<5	<1	106	.18	<.2	.1	69	4.37	.054	6	4	2.01	67	<.01	<2	3.42	.01	.13	<2	.1	14	<.3	<.1	5.6	15
46695	.5	7.5	4.3	53.0	<30	6	9	1148	3.07	2.4	<5	1	116	.09	<.2	.2	48	5.55	.037	4	5	1.51	915	<.01	<2	2.89	.01	.10	<2	<.1	111	<.3	<.1	4.3	4
46696	.3	539.1	1.6	118.7	32	137	23	1207	6.50	2.0	<5	1	56	.07	<.2	.5	125	5.90	.076	8	69	3.45	45	<.01	<2	3.20	.03	.08	<2	<.1	18	<.3	<.1	14.4	5
51515	12.7	14.0	5.7	26.1	1198	9	2	653	1.32	5.2	<5	<1	107	.06	.6	.2	21	2.06	.019	3	8	.37	771	<.01	<2	.62	<.01	.14	<2	.1	232	<.3	<.1	1.9	1666
51516	3.0	4.9	8.6	58.0	118	6	7	942	1.90	1.9	<5	<1	36	.11	.4	.1	28	.76	.031	4	5	.52	498	<.01	<2	.97	.01	.19	<2	.1	9	.4	<.1	2.2	19
STANDARD	22.8	125.0	82.9	278.8	2096	28	15	958	4.60	72.5	21	20	56	2.32	9.9	22.6	67	.72	.083	19	51	1.22	235	.15	23	2.40	.05	.76	18	1.9	463	.8	1.8	6.6	511

Standard is STANDARD D/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 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: ROCK AU+ - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 29 1995 DATE REPORT MAILED: July 13/95 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
51517	2.6	3.7	3.4	35.5	243	4	3	517	1.53	3.1	<5	<1	31	.06	.7	<.1	26	.74	.041	5	4	.56	99	<.01	<2	.85	<.01	.18	<2	.1	<5	.3	<.1	3.4	46
51518	12.9	6.4	7.7	9.7	549	4	1	157	.79	7.2	<5	<1	4	.03	1.4	<.1	8	.04	.013	4	10	.03	56	<.01	<2	.19	<.01	.06	<2	.3	6	.5	.2	1.3	14
51519	3.3	8.0	8.8	76.1	1033	19	15	1091	3.38	12.6	<5	<1	77	.21	1.8	<.1	63	1.81	.066	7	6	1.15	103	<.01	2	1.41	.01	.26	<2	.1	51	.3	.1	5.1	28
51520	4.9	6.6	4.9	35.5	289	8	7	1347	1.91	9.8	<5	<1	34	.14	1.1	.1	30	.59	.027	5	6	.52	855	<.01	<2	.77	.01	.17	<2	.1	6	.3	<.1	3.6	70
51521	59.5	7.9	6.9	12.9	1417	6	1	90	1.63	39.7	<5	<1	6	.01	1.5	<.1	22	.03	.025	4	8	.14	37	<.01	<2	.57	<.01	.15	<2	.7	<5	.4	.3	2.8	122
51522	2.7	4.1	1.9	46.0	85	7	3	515	2.06	<.5	<5	2	4	<.01	.5	<.1	37	.16	.030	10	6	.97	11	.01	<2	1.14	.10	.03	<2	.1	20	<.3	<.1	9.1	3
51523	5.2	7.0	2.8	20.8	231	11	2	126	1.15	11.9	<5	<1	5	<.01	.6	.1	17	.09	.038	7	11	.16	39	<.01	<2	.55	<.01	.11	<2	.1	<5	.4	<.1	1.6	6
51524	27.4	6.2	10.9	5.5	979	7	1	61	.64	17.2	<5	1	4	.01	2.2	.2	9	.02	.014	6	8	.02	29	<.01	<2	.16	<.01	.09	<2	.2	8	<.3	.5	1.2	23
51525	38.3	6.2	7.5	13.3	949	5	<1	78	1.17	12.3	<5	1	8	.01	1.5	.2	12	.04	.030	7	6	.05	34	<.01	<2	.33	<.01	.13	<2	.5	8	<.3	.4	2.5	119
RE 51525	33.8	5.1	6.1	13.3	798	6	1	80	1.17	12.1	<5	<1	8	.01	1.0	.1	11	.04	.030	8	6	.05	37	<.01	2	.32	.01	.13	<2	.2	<5	.5	<.1	2.1	143
RRE 51525	35.1	5.9	6.9	14.6	910	7	1	105	1.37	14.6	<5	1	9	.01	1.3	.1	13	.04	.034	8	8	.05	38	<.01	<2	.36	<.01	.13	<2	.5	<5	.3	.4	2.3	100
51526	3.2	16.9	2.9	39.5	556	7	5	143	2.08	21.1	<5	<1	5	<.01	.7	<.1	33	.06	.041	3	8	.28	154	<.01	<2	.84	<.01	.14	<2	.2	6	.4	.2	3.5	321
51527	.7	8.5	7.2	113.7	711	7	16	775	6.23	11.0	<5	1	12	.04	.6	<.1	115	.37	.122	8	2	1.49	112	.01	<2	2.54	.07	.09	<2	<.1	24	.5	.1	13.0	10
STANDARD D/AU-R	22.8	116.3	89.2	269.5	1882	29	12	930	4.02	74.2	20	18	51	2.11	9.2	21.0	60	.63	.086	17	46	1.05	226	.13	21	2.12	.04	.65	20	2.1	462	.9	2.0	6.3	511

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

APPENDIX 4

Soil Geochemical Analyses

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

GEOCHEMICAL EXTRACTION-ANALYSIS CERTIFICATE

Phelps Dodge Corp. PROJECT 248 File # 95-2055 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
51791	.5	10.8	6.2	51.6	35	11	7	579	2.86	4.2	<5	3	38	.14	.3	<.1	67	.45	.027	12	22	.33	89	.14	<2	1.02	.02	.14	<2	<.1	39	<.3	<.1	3.9	2
51792	.6	8.3	5.8	41.9	<30	9	6	510	2.72	2.2	<5	2	27	.08	.3	.1	67	.34	.021	11	22	.27	73	.16	<2	.91	.02	.12	<2	.1	23	<.3	<.1	3.8	1
51793	.7	4.2	4.7	84.9	<30	8	5	444	2.11	1.1	<5	2	16	.09	.2	.1	51	.20	.074	7	17	.18	77	.10	<2	.86	.01	.06	<2	.1	31	<.3	<.1	3.6	3
51794	.7	5.9	6.4	59.5	43	7	5	593	2.21	1.3	<5	2	21	.05	.3	.1	51	.28	.039	7	19	.24	83	.13	<2	1.08	.01	.06	<2	.1	28	<.3	.1	4.7	1
51795	.7	4.5	4.4	81.0	<30	9	6	616	2.48	.9	<5	2	15	.07	.2	<.1	60	.22	.057	7	20	.23	123	.11	<2	1.03	.01	.05	<2	.1	18	<.3	<.1	3.9	<1
51796	.6	4.2	5.1	73.7	<30	7	4	572	2.15	.7	<5	2	16	.09	.2	<.1	54	.23	.044	7	18	.17	88	.12	<2	.83	.01	.06	<2	.1	22	<.3	<.1	3.8	6
51797	.6	6.0	5.7	52.3	<30	9	6	400	2.36	1.8	<5	2	22	.06	.2	.1	55	.30	.054	8	20	.26	83	.12	<2	1.16	.01	.05	<2	<.1	21	<.3	<.1	4.4	1
51798	.7	7.9	5.7	59.7	<30	12	7	553	3.07	2.2	<5	2	22	.07	.3	<.1	75	.29	.049	9	28	.28	79	.16	<2	1.21	.01	.06	<2	.1	29	<.3	.1	4.7	1
51799	.8	6.3	6.2	85.1	<30	11	6	504	2.81	1.4	<5	2	16	.08	.3	.1	68	.23	.046	8	23	.27	102	.13	<2	1.29	.01	.05	<2	.1	28	<.3	<.1	5.2	3
RE 51799	.7	5.8	5.3	86.7	<30	10	6	513	2.76	1.9	<5	2	17	.08	.2	.1	67	.24	.046	8	23	.27	102	.14	<2	1.31	.01	.05	<2	<.1	21	<.3	<.1	4.8	8
51800	.8	6.8	5.8	74.1	<30	12	6	526	2.61	1.4	<5	2	21	.10	.2	<.1	61	.28	.058	8	26	.26	108	.15	10	1.23	.02	.06	<2	.1	23	<.3	<.1	3.8	3
51988	.5	8.5	6.9	41.7	34	10	6	393	2.65	1.7	<5	2	30	.05	.3	<.1	63	.37	.018	11	24	.28	79	.18	6	1.04	.02	.11	<2	.1	19	<.3	<.1	3.5	1
51989	.5	6.7	6.0	39.3	<30	10	6	345	2.44	2.6	<5	2	24	.04	.2	<.1	57	.31	.026	9	22	.29	61	.14	<2	1.09	.01	.08	<2	.1	17	<.3	<.1	3.5	2
51990	.6	9.8	7.7	44.7	51	10	8	614	2.90	2.1	<5	2	35	.05	.3	.1	66	.45	.039	12	26	.34	102	.17	<2	1.13	.02	.12	<2	.1	27	<.3	<.1	4.0	1
51991	.6	7.4	6.0	79.9	50	12	6	377	2.56	1.8	<5	2	26	.09	.2	<.1	60	.33	.044	10	25	.27	88	.16	<2	1.27	.02	.08	<2	.1	25	<.3	<.1	4.2	1
51992	.6	6.9	6.5	45.1	32	10	5	344	2.53	3.5	<5	2	26	.04	.3	.1	61	.31	.039	9	21	.27	73	.15	15	1.16	.02	.06	<2	.1	22	<.3	.1	3.9	2
51993	.5	8.2	6.8	39.0	<30	12	7	313	2.66	3.0	<5	2	27	.04	.2	.1	64	.34	.022	8	25	.30	65	.18	<2	1.15	.02	.09	<2	.1	21	<.3	<.1	4.3	1
51994	.5	6.6	5.5	62.1	<30	13	6	443	2.55	2.2	<5	2	20	.06	.2	.1	58	.25	.065	9	21	.28	87	.12	<2	1.26	.01	.06	<2	.1	19	<.3	<.1	3.9	4
51995	.5	5.1	6.1	46.7	<30	11	5	342	2.53	2.2	<5	2	20	.04	.3	<.1	61	.26	.056	8	21	.22	94	.14	<2	1.24	.01	.06	<2	.1	22	<.3	<.1	4.5	2
51996	.6	6.8	7.2	45.6	<30	11	5	330	2.49	3.6	<5	2	20	.06	.3	.1	57	.25	.063	8	20	.24	88	.14	<2	1.45	.01	.05	<2	<.1	26	<.3	<.1	4.9	2
51997	.6	6.1	6.3	92.4	46	10	5	545	2.35	2.5	<5	2	16	.11	.3	<.1	55	.21	.057	8	19	.23	99	.13	<2	1.34	.01	.06	<2	<.1	47	<.3	<.1	4.6	16
51998	.5	5.6	6.4	68.9	<30	11	6	353	2.53	2.9	<5	2	21	.06	.2	.1	58	.25	.053	8	20	.25	106	.13	<2	1.60	.01	.04	<2	<.1	32	<.3	<.1	5.0	1
51999	.6	6.7	8.9	134.7	47	9	4	202	2.02	2.0	<5	2	16	.11	.2	.1	44	.23	.162	10	19	.22	92	.12	<2	1.69	.01	.06	<2	.1	22	<.3	<.1	5.5	1
52000	.5	6.7	5.7	55.4	<30	9	6	303	2.51	2.5	<5	2	25	.06	.3	.1	61	.31	.039	10	21	.26	76	.16	<2	1.27	.01	.06	<2	<.1	25	<.3	.2	4.0	1
52062	.6	6.5	6.5	57.4	<30	9	6	509	2.22	2.1	<5	2	26	.07	.2	.1	48	.32	.089	9	19	.24	97	.11	<2	1.03	.01	.07	<2	<.1	28	<.3	<.1	3.7	1
52064	.7	7.8	8.3	66.8	76	9	7	751	3.13	4.5	<5	1	21	.11	.3	.1	72	.36	.035	8	23	.30	136	.14	<2	1.31	.01	.12	<2	.1	71	<.3	.1	4.8	4
52065	.6	8.6	6.9	50.8	<30	10	6	640	2.53	2.4	<5	1	33	.06	.2	<.1	57	.50	.050	10	22	.30	97	.14	<2	1.13	.02	.16	<2	<.1	48	<.3	<.1	3.6	3
52066	.6	6.8	6.7	49.5	83	10	6	730	2.95	2.9	<5	1	24	.07	.4	.1	71	.40	.037	8	24	.28	88	.16	4	1.16	.02	.09	<2	<.1	43	<.3	.1	4.6	3
52067	.6	8.9	7.7	48.5	33	9	6	675	2.70	1.3	<5	2	19	.05	.2	.1	67	.29	.031	7	22	.24	80	.16	<2	1.09	.01	.08	<2	<.1	35	<.3	<.1	2.8	3
52068	.7	6.6	6.6	55.2	51	9	6	578	2.77	2.5	<5	2	22	.09	.4	.1	64	.33	.073	9	23	.25	102	.15	<2	1.10	.02	.09	<2	<.1	33	<.3	.1	4.6	2
52069	.7	6.4	6.7	54.0	<30	11	6	443	2.96	2.6	<5	2	17	.07	.3	.1	67	.23	.064	8	23	.26	77	.15	44	1.27	.02	.05	<2	<.1	33	<.3	<.1	4.9	1
52070	.8	6.4	6.5	76.6	36	11	7	343	2.79	2.5	<5	2	16	.10	.3	.1	63	.24	.087	9	22	.27	66	.15	6	1.40	.02	.05	<2	.1	29	<.3	<.1	5.1	1
52071	.7	9.7	7.0	57.9	<30	9	6	349	2.68	3.0	<5	2	19	.05	.3	.1	63	.25	.056	10	23	.28	68	.14	3	1.26	.02	.05	<2	.1	24	<.3	<.1	3.9	1
52072	.6	9.5	6.9	61.2	<30	12	7	499	3.07	3.4	<5	3	20	.09	.3	.1	69	.28	.067	10	25	.36	88	.14	<2	1.63	.01	.05	<2	.1	19	<.3	<.1	4.9	3
STANDARD D/AU-S	23.7	117.7	87.5	289.3	1896	27	16	990	4.29	72.1	23	22	61	2.29	9.6	21.0	67	.75	.082	20	54	1.27	235	.16	26	2.30	.05	.80	20	2.1	449	.9	2.4	6.9	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: JUN 29 1995 DATE REPORT MAILED: July 12/95 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
52073	.6	7.6	5.8	59.4	52	10	5	355	3.03	3.1	<5	2	22	.09	.5	.1	69	.29	.056	9	23	.27	95	.15	<2	1.37	.02	.05	<2	.1	21	.4	.2	5.5	2
52074	.6	4.8	6.6	70.6	61	12	5	288	2.46	2.6	<5	2	22	.12	.5	.2	57	.26	.040	8	18	.21	93	.14	<2	1.29	.02	.05	<2	.2	46	<.3	.1	5.0	4
52075	.6	7.7	6.4	60.4	68	11	6	344	3.16	3.8	<5	2	21	.07	.6	.1	72	.29	.064	9	25	.30	81	.16	<2	1.38	.01	.07	<2	.1	17	<.3	.4	5.3	2
52076	.6	6.1	6.7	80.3	46	11	5	321	2.66	2.1	<5	2	19	.10	.4	.1	60	.26	.050	8	20	.23	100	.15	<2	1.44	.01	.05	<2	.1	42	<.3	.2	5.7	1
52077	.7	6.5	8.2	94.1	87	12	5	359	2.74	2.9	<5	2	19	.13	.5	.1	63	.26	.058	9	21	.23	97	.15	<2	1.40	.01	.05	<2	.2	32	.4	.3	5.8	<1
52078	.6	6.8	6.0	90.9	79	11	6	315	2.73	2.4	<5	2	21	.11	.5	.1	64	.29	.050	9	22	.25	98	.16	2	1.49	.02	.07	<2	.1	34	<.3	.2	5.7	<1
52079	.8	5.7	5.1	78.2	73	11	5	415	2.71	2.3	<5	2	17	.09	.4	.1	63	.22	.068	9	21	.20	97	.14	<2	1.43	.01	.05	<2	.1	27	<.3	.2	5.7	1
52080	.6	7.3	5.5	57.8	44	10	5	387	2.69	2.9	<5	2	23	.08	.5	.1	62	.27	.057	10	22	.23	93	.17	<2	1.53	.01	.05	<2	.1	24	.3	.1	5.8	<1
52081	.5	6.9	4.8	68.9	46	11	5	330	2.66	2.2	<5	2	22	.07	.4	.1	61	.30	.057	9	20	.25	97	.15	<2	1.46	.01	.07	<2	.2	16	<.3	.2	5.1	7
52082	.8	5.7	4.9	55.8	42	10	6	475	2.53	2.6	<5	2	23	.06	.4	.1	57	.28	.082	9	20	.23	96	.15	<2	1.48	.01	.06	<2	.1	34	<.3	.2	5.3	6
52083	.6	6.2	5.0	66.6	38	11	5	434	2.76	2.8	<5	2	23	.06	.4	.1	60	.28	.078	9	22	.27	107	.13	<2	1.65	.01	.08	<2	.1	16	<.3	.3	5.7	3
52084	.6	7.3	4.8	66.9	<30	13	6	418	3.03	3.0	<5	2	25	.08	.3	.1	69	.30	.079	11	23	.28	98	.16	<2	1.70	.01	.06	<2	.1	20	<.3	<.1	5.2	9
RE 52084	.6	7.7	4.9	69.0	55	13	6	421	3.03	3.6	<5	3	25	.07	.4	.2	69	.31	.080	11	24	.29	100	.17	<2	1.73	.01	.06	<2	.1	17	<.3	<.1	5.8	22
52085	.9	8.7	5.4	58.4	<30	10	6	406	3.09	3.2	<5	3	25	.07	.4	.1	71	.30	.074	11	23	.29	93	.17	<2	1.48	.01	.06	<2	.1	30	<.3	.1	5.3	2
52086	.5	6.4	5.7	35.9	55	7	2	146	1.09	1.3	<5	1	25	.04	.4	.1	32	.28	.032	12	13	.21	66	.12	14	1.14	.02	.11	<2	.1	38	.3	.1	4.6	1
52087	.3	4.8	5.6	34.4	44	5	2	94	.85	1.7	<5	<1	21	.01	.4	.1	30	.20	.008	11	11	.12	64	.11	<2	1.03	.01	.05	<2	.1	14	<.3	.2	3.3	<1
52088	.3	5.6	6.2	58.6	58	8	4	129	1.59	2.0	<5	2	28	.03	.4	.1	42	.31	.031	9	14	.19	95	.12	<2	1.24	.02	.06	<2	.1	13	.3	.1	5.0	16
52089	.6	5.4	6.2	42.0	51	5	2	157	1.00	1.5	<5	2	26	.03	.3	<.1	26	.24	.027	11	11	.18	74	.12	<2	1.17	.02	.08	<2	.1	25	<.3	.2	4.9	2
52090	1.1	6.7	5.5	151.8	81	14	8	1391	3.30	3.5	<5	2	26	.17	.4	.1	71	.30	.122	12	23	.25	224	.13	2	1.73	.01	.09	<2	.2	35	<.3	.2	5.8	1
52091	1.0	5.5	5.2	74.9	114	12	7	803	2.77	3.0	<5	2	24	.09	.3	.1	58	.31	.111	10	21	.21	157	.12	<2	1.72	.01	.07	<2	.1	42	<.3	<.1	5.7	2
52092	.9	7.6	4.5	59.0	68	18	8	301	3.65	7.0	<5	3	23	.07	.7	<.1	79	.33	.103	10	25	.38	142	.13	14	1.83	.02	.07	<2	.1	27	<.3	.1	4.9	1
52093	.4	4.2	4.2	34.2	31	4	3	194	1.45	1.3	<5	2	30	.03	.3	.1	32	.31	.013	12	14	.14	72	.11	<2	.94	.02	.06	<2	.1	26	<.3	<.1	3.0	1
52094	.8	6.5	6.3	112.4	31	16	7	389	2.50	2.1	<5	2	28	.07	.3	.1	45	.30	.135	12	19	.20	144	.11	<2	2.24	.01	.07	<2	.2	37	<.3	<.1	7.3	1
52095	.7	6.6	4.9	104.8	<30	14	6	268	2.33	2.8	<5	2	28	.07	.3	.1	45	.27	.110	13	20	.17	138	.12	<2	1.94	.02	.08	<2	.1	39	<.3	<.1	5.8	1
52096	.4	4.4	4.1	31.4	<30	5	2	160	1.63	1.7	<5	2	33	.01	.3	<.1	31	.30	.029	13	13	.15	77	.11	<2	1.06	.02	.06	<2	.2	34	<.3	.1	3.0	1
52097	.5	13.1	5.7	89.0	92	12	8	357	3.32	1.9	<5	3	60	.10	.5	.1	43	.78	.026	27	25	.39	125	.10	<2	2.26	.03	.10	<2	.2	63	<.3	.1	6.1	1
52098	.6	5.6	4.9	37.8	<30	4	3	140	1.67	1.1	<5	2	20	.03	.3	.1	36	.19	.022	10	14	.10	83	.13	<2	1.00	.02	.04	<2	.1	29	<.3	<.1	3.9	2
52099	.8	9.0	4.6	57.1	<30	14	6	275	3.16	7.4	<5	3	37	.04	.6	<.1	57	.34	.118	14	22	.20	119	.11	<2	1.68	.02	.07	<2	.1	30	<.3	<.1	4.7	1
52100	.9	7.4	6.5	105.9	33	12	5	543	2.19	2.6	<5	2	39	.06	.3	.1	40	.31	.143	14	18	.17	167	.09	<2	1.87	.01	.08	<2	.1	42	<.3	<.1	5.4	1
52101	.6	6.8	4.4	67.4	<30	11	5	385	2.86	1.9	<5	2	23	.07	.3	<.1	69	.30	.048	10	22	.25	83	.18	<2	1.33	.01	.05	<2	<.1	17	<.3	<.1	4.6	1
52102	.4	9.3	4.2	43.9	54	10	7	307	3.29	3.1	<5	3	24	.04	.3	<.1	77	.33	.051	10	24	.33	65	.16	2	1.41	.01	.05	<2	.1	12	<.3	.1	4.6	1
52103	.5	7.0	3.7	70.6	39	10	5	461	2.71	3.0	<5	2	18	.07	.2	.1	60	.23	.102	8	21	.25	106	.12	40	1.43	.01	.06	<2	.1	13	<.3	<.1	4.5	3
52104	.7	6.2	4.1	68.2	30	12	5	535	2.75	2.7	<5	2	20	.07	.2	<.1	61	.26	.078	9	21	.23	95	.14	<2	1.41	.01	.05	<2	.1	18	<.3	<.1	4.5	1
52105	.6	5.8	4.1	63.2	36	11	6	360	2.71	2.4	<5	2	20	.09	.3	.1	61	.25	.068	9	21	.21	98	.12	<2	1.29	.01	.05	<2	.2	22	<.3	<.1	4.6	1
STANDARD D/AU-S	20.5	121.9	83.2	269.6	1939	28	14	921	4.39	73.2	17	19	55	2.18	10.2	21.0	65	.67	.086	18	51	1.20	230	.15	26	2.29	.05	.74	19	2.1	439	1.0	2.2	6.8	50

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
52106	.5	2.8	3.2	28.9	<30	4	4	125	1.56	1.4	<5	2	18	.01	<.2	<.1	35	.23	.013	6	12	.16	64	.11	<2	.82	.01	.07	<2	<.1	21	<.3	<.1	1.8	<1
52107	.7	3.3	3.4	38.0	<30	4	4	269	1.57	1.0	<5	2	16	.02	<.2	<.1	35	.22	.030	6	12	.15	64	.11	<2	1.00	.01	.06	<2	<.1	27	<.3	<.1	2.4	<1
52108	.6	3.4	3.3	77.0	<30	7	4	268	1.95	.9	<5	2	13	.03	<.2	<.1	39	.17	.101	7	15	.14	86	.10	<2	1.15	.01	.06	<2	<.1	20	<.3	<.1	2.5	<1
52109	.5	5.5	3.6	52.3	45	9	5	236	2.56	2.3	<5	2	20	.05	.2	<.1	58	.26	.050	8	19	.24	94	.13	<2	1.23	.01	.05	<2	<.1	13	<.3	<.1	4.3	3
52110	.5	7.3	4.0	43.6	42	9	4	210	2.60	3.6	<5	3	21	.04	.3	<.1	62	.25	.029	9	19	.23	81	.13	2	1.06	.01	.05	<2	.1	23	<.3	<.1	4.2	2
52111	.6	6.9	4.2	54.9	55	10	5	346	2.40	2.6	<5	2	21	.06	.2	<.1	54	.24	.044	9	18	.23	98	.12	<2	1.27	.01	.05	<2	.1	34	<.3	.1	4.6	2
52112	.5	4.6	3.9	73.2	<30	11	5	342	2.31	1.2	<5	2	19	.05	<.2	<.1	52	.24	.052	8	17	.21	113	.13	<2	1.18	.01	.05	<2	<.1	11	<.3	<.1	3.8	3
52113	.7	5.0	4.1	76.6	39	10	4	840	2.22	1.6	<5	2	21	.06	<.2	.1	50	.26	.067	9	17	.20	120	.11	2	1.19	.01	.06	<2	<.1	18	<.3	<.1	4.4	1
52114	.7	4.9	4.2	55.9	56	11	5	383	2.68	2.8	<5	2	20	.05	.2	<.1	59	.25	.076	9	20	.22	110	.13	<2	1.25	.01	.05	<2	.1	17	<.3	<.1	4.8	31
52115	.5	7.0	3.9	46.2	77	6	6	343	2.97	4.0	<5	2	23	.06	.2	.1	69	.29	.042	9	22	.27	92	.15	2	1.18	.01	.04	<2	<.1	10	<.3	.1	4.0	6
52116	.7	5.4	5.4	55.6	121	9	5	259	2.70	8.9	<5	2	21	.07	.2	<.1	62	.28	.038	7	19	.24	76	.13	<2	1.22	.01	.06	<2	.1	13	.3	.1	5.4	32
RE 52116	.8	5.0	5.3	57.8	91	7	6	262	2.77	8.1	<5	1	21	.07	.2	<.1	63	.28	.040	7	20	.25	76	.13	<2	1.24	.01	.06	<2	.1	27	<.3	<.1	5.1	3
52117	.6	6.9	4.4	71.5	57	9	4	200	2.34	2.8	<5	2	35	.04	.3	<.1	46	.32	.058	12	18	.20	110	.11	2	1.31	.01	.07	<2	.1	37	<.3	.2	3.8	61
52118	.7	8.8	4.6	78.6	74	11	6	585	2.62	6.0	<5	2	45	.08	.7	.1	46	.32	.076	19	18	.20	142	.09	2	1.15	.02	.08	<2	.1	60	<.3	<.1	4.2	11
52119	.7	7.8	3.9	45.2	32	8	6	683	1.84	4.6	<5	2	56	.06	.4	.1	37	.74	.075	19	16	.25	92	.06	2	1.09	.03	.11	<2	<.1	91	<.3	<.1	2.7	2
52120	3.1	14.9	6.1	120.7	85	14	9	2653	2.84	2.1	<5	1	94	.50	.4	.1	36	1.28	.039	15	14	.39	213	.07	<2	1.44	.02	.19	<2	.1	74	<.3	<.1	4.3	4
52121	.6	7.2	4.8	114.9	32	14	6	279	2.65	4.8	<5	2	36	.07	.3	.1	47	.36	.091	11	19	.24	148	.10	3	2.08	.01	.09	<2	.1	51	<.3	<.1	5.7	<1
52122	.4	5.9	4.7	30.0	<30	6	3	201	1.57	3.3	<5	2	37	.02	.3	<.1	33	.41	.030	18	14	.18	86	.08	<2	1.10	.02	.05	<2	.1	48	<.3	<.1	3.1	<1
52123	.2	5.2	5.0	33.5	<30	5	4	125	1.43	2.5	<5	2	29	.02	.4	<.1	30	.27	.022	12	12	.18	85	.10	<2	1.05	.02	.04	<2	.1	46	<.3	.1	3.7	<1
52124	.4	6.3	5.7	44.2	<30	5	3	237	1.84	5.8	<5	2	32	.03	.3	.1	37	.33	.045	15	14	.20	93	.11	<2	1.05	.02	.06	<2	.1	51	<.3	<.1	3.3	<1
52125	.8	6.8	4.6	88.0	<30	14	6	244	2.53	3.4	<5	2	29	.04	.3	<.1	44	.24	.092	11	17	.19	151	.08	<2	2.01	.01	.06	<2	<.1	52	<.3	<.1	5.6	<1
52126	.6	5.7	3.9	40.3	<30	6	4	166	1.92	3.8	<5	2	24	.02	.3	.1	37	.20	.027	11	14	.16	94	.09	<2	1.24	.01	.05	<2	.1	32	<.3	.1	3.9	<1
52127	.4	5.6	4.0	41.2	<30	6	2	131	1.37	2.4	<5	2	28	.03	.2	<.1	28	.27	.027	12	11	.18	87	.10	<2	.97	.02	.05	<2	.1	24	<.3	<.1	2.6	<1
52128	.5	6.4	4.1	33.2	<30	6	3	243	1.47	3.1	<5	2	35	.03	.2	.1	28	.33	.034	16	12	.19	84	.10	<2	1.08	.02	.06	<2	<.1	54	<.3	<.1	2.4	<1
52129	.5	6.1	4.8	49.1	<30	7	4	185	2.03	2.8	<5	2	28	.03	.2	<.1	38	.28	.072	11	16	.19	114	.10	<2	1.44	.01	.05	<2	.1	39	<.3	<.1	3.8	<1
52130	.7	5.9	4.6	69.2	<30	10	5	267	2.43	2.3	<5	2	28	.06	.2	<.1	46	.28	.085	10	18	.17	133	.10	<2	1.43	.02	.08	<2	.1	37	<.3	<.1	4.9	<1
52131	.8	7.6	4.9	151.7	<30	19	8	1155	2.61	4.6	<5	2	28	.10	<.2	.1	50	.28	.087	12	20	.26	197	.11	<2	2.40	.01	.07	<2	.1	54	<.3	<.1	5.8	140
52132	.7	7.6	5.0	74.2	<30	15	6	294	2.43	6.2	<5	2	23	.13	.2	<.1	44	.25	.108	11	18	.22	132	.10	<2	2.26	.01	.06	<2	.1	44	<.3	<.1	5.7	<1
52133	.6	8.2	5.4	71.9	<30	9	3	347	2.08	2.1	<5	3	32	.09	.3	.1	39	.33	.055	13	18	.27	97	.11	<2	1.68	.01	.07	<2	.1	44	<.3	<.1	4.9	1
52134	.7	6.0	4.6	70.3	<30	10	5	401	1.96	2.4	<5	2	27	.04	.2	<.1	37	.28	.078	11	16	.23	115	.11	<2	1.70	.01	.08	<2	.1	53	<.3	<.1	4.3	<1
52135	.7	5.5	5.2	80.4	<30	10	5	806	1.75	1.4	<5	1	28	.06	<.2	<.1	35	.31	.068	11	14	.14	127	.10	<2	1.30	.01	.06	<2	<.1	32	<.3	<.1	4.4	<1
52136	.5	5.2	4.5	59.4	<30	8	4	251	1.80	2.1	<5	2	29	.04	<.2	<.1	35	.31	.049	11	14	.19	97	.11	5	1.35	.01	.06	<2	.1	98	.3	<.1	3.8	1
52137	.4	5.9	6.2	38.3	<30	5	3	208	1.56	1.5	<5	1	25	.03	.3	<.1	34	.29	.020	10	13	.18	58	.14	<2	1.01	.02	.05	<2	.1	15	<.3	.1	4.1	<1
52138	.2	3.3	3.5	23.8	<30	3	2	115	1.36	1.3	<5	2	22	.01	<.2	<.1	29	.25	.022	10	13	.15	53	.11	<2	.75	.02	.06	<2	<.1	10	<.3	<.1	1.4	<1
STANDARD D/AU-S	22.8	126.2	85.8	271.1	1944	29	14	929	4.47	74.4	20	20	56	2.34	9.7	20.5	66	.69	.087	18	50	1.18	246	.14	23	2.36	.05	.76	19	2.0	463	.9	2.0	6.4	48

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
52139	.5	6.0	5.1	46.7	<30	9	4	195	2.00	2.7	<5	2	23	.03	.2	<.1	40	.26	.050	8	18	.24	95	.12	<2	1.37	.02	.05	<2	<.1	25	<.3	.2	4.3	1
52140	.5	7.2	5.1	47.8	<30	9	4	174	2.46	3.4	<5	2	27	.04	.3	<.1	50	.26	.064	11	19	.20	101	.12	<2	1.20	.02	.05	<2	.1	32	<.3	<.1	4.1	2
52141	.7	7.1	5.2	55.5	<30	10	4	204	2.40	3.5	<5	2	21	.04	.3	<.1	48	.22	.076	10	19	.20	91	.13	<2	1.49	.01	.06	<2	.1	32	.3	.1	5.0	2
52142	.6	5.7	5.1	43.1	<30	9	3	252	2.21	2.1	<5	2	22	.03	<.2	<.1	43	.24	.070	10	17	.19	92	.11	<2	1.41	.01	.05	<2	<.1	20	<.3	.1	3.8	1
52143	.6	6.4	5.3	57.8	<30	10	5	356	2.18	1.8	<5	2	22	.03	<.2	<.1	44	.24	.065	11	18	.20	98	.12	30	1.53	.02	.05	<2	<.1	28	<.3	<.1	4.7	3
52144	.6	7.3	5.1	57.4	<30	11	5	256	2.14	2.4	<5	2	20	.05	.3	<.1	43	.23	.051	10	18	.22	100	.12	36	1.42	.02	.05	<2	.1	11	<.3	.1	4.9	1
RE 52144	.4	6.7	4.5	60.4	<30	10	5	261	2.20	2.4	<5	2	21	.04	.3	<.1	44	.24	.053	10	18	.23	101	.12	29	1.47	.02	.05	<2	.1	11	<.3	<.1	4.3	<1
52145	.6	5.6	4.5	75.9	<30	9	5	500	2.01	1.7	<5	2	22	.05	.2	<.1	42	.24	.066	10	17	.18	115	.11	2	1.44	.01	.06	<2	<.1	28	<.3	<.1	4.2	1
52146	.5	4.9	5.3	68.8	<30	8	3	298	1.81	1.0	<5	2	22	.05	.2	<.1	37	.25	.053	9	16	.17	103	.11	<2	1.19	.01	.06	<2	.1	12	<.3	.1	4.0	1
52147	.5	8.5	5.2	60.5	<30	10	5	334	2.41	3.7	<5	2	29	.07	.3	<.1	51	.32	.055	14	19	.24	87	.12	<2	1.26	.02	.07	<2	.1	27	<.3	<.1	4.2	5
52148	.5	7.1	5.6	63.2	77	9	3	305	2.07	1.6	<5	2	27	.06	.3	<.1	43	.31	.031	13	16	.21	82	.12	22	1.17	.02	.08	<2	.1	37	<.3	<.1	3.6	102
52149	.7	10.8	5.8	60.5	<30	9	6	431	2.55	6.7	<5	2	38	.09	.4	<.1	50	.44	.065	16	18	.26	108	.10	4	1.32	.02	.08	<2	.1	48	<.3	<.1	4.0	2
52150	.9	11.4	6.8	78.8	51	14	7	544	2.95	9.0	<5	2	39	.13	.4	.1	60	.38	.076	14	21	.30	171	.10	<2	1.99	.02	.08	<2	.1	61	<.3	.1	5.1	3
52151	.6	7.6	5.6	57.7	<30	11	7	697	3.45	3.2	<5	2	21	.06	.2	<.1	77	.29	.035	10	31	.25	113	.20	3	1.44	.01	.06	<2	<.1	24	<.3	<.1	4.4	1
52152	.7	5.6	4.9	81.7	<30	11	5	589	2.69	1.3	<5	2	19	.06	.2	<.1	61	.26	.046	8	22	.24	131	.14	<2	1.34	.01	.05	<2	.1	10	<.3	.1	5.0	3
52153	.9	5.7	5.1	61.3	<30	10	5	527	2.86	1.9	<5	2	17	.05	.3	.1	62	.23	.077	8	23	.23	98	.14	2	1.43	.01	.06	<2	.1	26	<.3	<.1	4.5	2
52154	.9	4.8	4.5	64.1	<30	10	6	520	2.28	2.2	<5	2	16	.06	.2	<.1	47	.21	.075	7	18	.20	88	.11	2	1.39	.01	.05	<2	<.1	41	<.3	<.1	4.2	20
52155	.7	7.2	5.7	80.1	<30	10	6	574	3.12	2.1	<5	3	18	.06	.2	<.1	67	.24	.069	10	22	.28	119	.12	<2	1.52	.01	.06	<2	<.1	17	<.3	<.1	4.5	3
52156	.6	5.3	4.7	70.2	<30	10	6	379	2.72	1.4	<5	2	18	.05	.2	<.1	59	.22	.069	9	20	.22	121	.12	15	1.44	.02	.06	<2	.1	17	<.3	<.1	4.4	1
52157	.7	5.1	4.7	86.3	<30	10	4	470	2.43	1.1	<5	2	17	.06	<.2	<.1	52	.21	.094	8	18	.19	117	.11	27	1.36	.02	.06	<2	<.1	16	<.3	<.1	4.6	2
52158	.6	5.9	5.3	89.3	<30	9	5	776	2.54	2.0	<5	2	21	.08	.2	<.1	59	.27	.046	8	19	.22	112	.13	<2	1.41	.01	.05	<2	.1	29	.3	<.1	4.3	1
52159	.7	7.8	5.1	64.0	<30	8	6	379	2.80	3.1	<5	2	24	.05	.2	.1	61	.30	.081	9	20	.26	115	.11	11	1.32	.01	.06	<2	<.1	27	<.3	<.1	3.7	1
52160	.8	6.9	6.5	89.6	<30	9	5	935	2.57	1.7	<5	2	21	.09	.2	<.1	59	.25	.069	9	19	.21	121	.12	6	1.27	.01	.07	<2	.1	29	<.3	<.1	4.9	5
52161	.7	4.3	6.0	66.1	<30	8	5	424	2.89	1.1	<5	2	16	.06	.2	<.1	64	.21	.116	8	22	.17	87	.13	3	1.32	.01	.05	<2	.1	26	<.3	<.1	5.2	1
52162	.7	5.8	4.8	63.4	32	10	6	376	2.49	1.9	<5	2	18	.05	.3	<.1	54	.22	.072	10	20	.22	95	.12	<2	1.48	.01	.05	<2	<.1	23	<.3	.1	4.5	10
52163	.7	5.5	4.6	65.1	<30	9	5	510	2.68	1.8	<5	2	16	.04	.2	<.1	61	.22	.067	9	21	.21	93	.12	<2	1.28	.01	.06	<2	<.1	13	<.3	<.1	3.9	2
52164	.6	4.5	4.6	62.4	<30	9	4	454	2.29	1.3	<5	2	17	.04	.2	<.1	47	.21	.094	8	16	.18	105	.10	<2	1.37	.01	.05	<2	<.1	14	<.3	<.1	3.8	2
52165	.8	3.5	5.0	50.8	44	8	4	373	1.97	1.1	<5	1	19	.03	<.2	<.1	46	.21	.046	8	15	.15	102	.11	<2	1.19	.01	.05	<2	<.1	34	<.3	<.1	2.8	2
52166	.7	5.4	5.3	70.7	37	8	5	449	2.48	1.2	<5	2	19	.06	<.2	<.1	54	.26	.085	8	19	.18	107	.14	2	1.34	.01	.06	<2	<.1	22	<.3	<.1	4.1	3
52167	.7	5.8	5.5	60.1	58	9	6	342	3.02	3.0	<5	2	24	.06	.2	<.1	67	.32	.098	9	23	.25	83	.15	2	1.37	.01	.06	<2	<.1	16	<.3	<.1	4.2	2
52168	.9	4.9	6.1	51.5	51	6	5	520	2.89	2.3	<5	2	21	.05	.2	<.1	66	.28	.067	9	20	.21	99	.14	<2	1.32	.01	.05	<2	<.1	25	<.3	<.1	4.8	3
52169	.6	5.4	5.3	67.6	50	10	5	268	2.53	2.8	<5	2	17	.04	<.2	<.1	51	.24	.111	8	18	.23	123	.11	2	1.58	.01	.05	<2	<.1	18	<.3	<.1	4.0	2
52170	.8	4.6	5.2	38.9	43	4	3	362	2.10	1.4	<5	1	20	.04	.2	<.1	49	.28	.026	9	15	.17	120	.10	<2	1.00	.01	.10	<2	<.1	36	<.3	.1	3.0	13
52171	1.5	5.9	6.3	54.2	156	3	4	397	2.27	3.7	<5	1	18	.07	.3	.1	47	.25	.038	9	16	.20	123	.09	3	1.17	.01	.07	<2	<.1	33	<.3	<.1	4.0	36
STANDARD D/AU-S	22.8	114.5	89.5	274.7	1968	27	13	942	4.47	72.2	21	20	55	2.14	9.7	20.4	66	.69	.088	18	50	1.18	241	.14	25	2.35	.05	.75	19	2.2	443	1.0	2.0	6.6	47

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
52172	1.6	16.3	5.4	50.0	104	8	8	450	3.45	12.6	<5	2	17	.05	.7	<.1	63	.26	.031	14	14	.56	173	.08	<2	1.45	.01	.08	<2	.1	74	.4	<.1	4.7	20
52173	.9	4.3	3.9	44.4	98	5	4	366	2.24	1.7	<5	1	19	.06	.3	<.1	51	.25	.039	8	14	.23	219	.08	<2	.98	.01	.05	<2	.1	40	.3	<.1	4.0	17
52174	.4	4.1	3.8	43.1	<30	6	4	291	1.44	1.7	<5	2	20	.01	.2	<.1	27	.18	.045	11	11	.12	83	.08	<2	1.09	.01	.06	<2	.1	54	<.3	.1	2.8	1
52175	.4	3.3	4.8	27.3	<30	5	2	110	1.14	.9	<5	2	20	.01	.2	<.1	26	.18	.020	9	11	.11	68	.10	2	.82	.01	.03	<2	.1	40	<.3	<.1	3.6	1
52176	.4	10.5	4.6	26.5	<30	11	3	156	2.04	1.9	<5	3	52	.01	.2	<.1	29	.59	.034	26	18	.22	127	.06	<2	1.98	.02	.06	<2	.1	88	<.3	<.1	4.9	2
52177	.3	5.2	5.3	30.3	<30	6	2	152	1.31	.9	<5	1	39	.02	.2	<.1	26	.38	.032	13	11	.16	96	.08	<2	1.26	.02	.04	<2	.1	61	<.3	<.1	3.8	2
52178	.5	5.8	4.6	38.6	<30	9	4	253	2.38	3.4	<5	3	33	.01	.3	<.1	43	.22	.075	13	16	.18	105	.09	<2	1.66	.02	.05	<2	.1	56	<.3	<.1	4.2	7
52179	.4	6.1	5.1	37.2	<30	10	3	132	2.03	1.4	<5	2	27	.01	.2	<.1	35	.22	.053	13	16	.16	89	.09	3	1.49	.02	.03	<2	.1	58	.3	<.1	4.9	14
52180	.6	5.7	4.6	54.4	<30	9	6	438	2.48	4.5	<5	2	36	.03	.2	<.1	47	.38	.099	12	18	.20	118	.10	<2	1.42	.01	.10	<2	.1	61	<.3	<.1	3.8	1
52181	.5	5.3	4.2	70.6	<30	8	4	596	1.83	2.2	<5	2	31	.04	.3	<.1	38	.24	.030	12	15	.15	105	.11	2	1.08	.02	.05	<2	.1	27	.3	.1	3.6	2
52182	.4	4.3	4.4	52.6	<30	6	2	298	1.56	1.5	<5	1	28	.02	.2	<.1	34	.26	.025	12	13	.14	93	.11	<2	.89	.02	.05	<2	.1	25	<.3	.1	3.1	2
52183	.4	6.9	5.2	58.4	<30	10	4	175	1.80	2.0	<5	2	34	.03	.3	.1	36	.33	.023	21	15	.17	100	.11	11	1.22	.02	.06	<2	.1	32	.4	<.1	4.0	2
52184	.5	5.1	4.9	56.0	<30	10	4	454	1.93	2.6	<5	2	29	.03	.4	.1	37	.23	.047	14	14	.16	123	.09	2	1.16	.02	.06	<2	.1	50	<.3	.1	3.4	1
52185	.8	5.3	5.1	80.3	30	13	6	961	2.24	3.6	<5	2	30	.08	.4	.1	43	.34	.065	13	18	.16	145	.10	2	1.51	.01	.11	<2	.1	70	.4	<.1	4.8	1
RE 52185	.8	5.0	4.8	76.0	30	12	5	926	2.13	3.6	<5	2	28	.08	.4	<.1	40	.32	.062	13	17	.15	142	.09	<2	1.43	.01	.11	<2	.1	67	.3	.2	4.6	18
52186	.5	7.8	4.9	42.5	<30	12	6	496	2.41	6.0	<5	3	34	.03	.6	.1	45	.30	.059	19	17	.19	111	.09	2	1.24	.02	.06	<2	.1	70	<.3	<.1	3.9	7
52187	.5	5.5	4.9	71.5	<30	14	5	394	2.11	2.1	<5	3	31	.04	.3	<.1	41	.28	.053	13	19	.21	137	.11	3	1.58	.02	.05	<2	.1	38	<.3	<.1	4.7	2
52188	.8	3.9	4.9	93.1	<30	9	5	518	2.14	1.8	<5	2	22	.05	.3	<.1	44	.23	.090	10	17	.13	107	.11	8	1.32	.02	.07	<2	.1	46	<.3	.1	5.4	1
52189	.7	8.5	4.8	40.9	<30	9	7	449	2.84	10.4	<5	3	44	.02	.7	<.1	48	.38	.054	16	18	.20	123	.09	<2	1.51	.02	.07	<2	.2	86	<.3	.1	4.7	2
52190	.9	4.6	6.2	71.7	<30	10	5	221	2.11	2.7	<5	2	22	.03	.3	<.1	40	.22	.116	11	17	.14	123	.11	<2	1.68	.01	.05	<2	.1	49	<.3	.1	6.7	2
52191	.5	4.4	6.2	30.8	<30	9	5	332	1.83	3.6	<5	3	32	.01	.2	<.1	37	.31	.035	16	15	.19	90	.11	<2	1.36	.02	.05	<2	.2	57	<.3	<.1	4.4	1
52192	.4	5.6	5.2	39.4	<30	9	3	317	1.64	2.9	<5	2	36	.02	.2	.1	34	.35	.030	15	14	.21	90	.13	<2	1.48	.02	.07	<2	.1	41	<.3	.1	4.4	1
52193	1.0	9.8	5.8	68.8	31	17	9	1301	2.96	4.0	<5	2	44	.03	.3	<.1	49	.42	.072	29	24	.26	175	.08	<2	2.76	.02	.09	<2	.2	74	<.3	.1	8.0	<1
52194	.5	5.6	4.4	29.6	101	8	5	239	2.05	7.1	<5	3	37	.02	.4	<.1	42	.38	.064	16	16	.20	73	.11	<2	1.03	.03	.06	<2	.1	57	<.3	<.1	3.0	198
52195	.5	4.2	5.8	48.1	<30	7	3	300	1.44	1.1	<5	1	25	.03	.2	<.1	34	.26	.031	11	12	.14	98	.10	<2	1.02	.01	.05	<2	.1	29	<.3	<.1	4.4	3
52196	.7	5.5	5.2	52.9	<30	10	4	611	2.02	3.2	<5	1	35	.03	.3	<.1	44	.33	.051	15	16	.19	109	.09	8	1.38	.02	.06	<2	.1	47	<.3	<.1	4.8	3
52197	.7	5.4	5.4	80.8	40	14	5	428	2.31	3.2	<5	1	28	.04	.2	.1	44	.31	.106	10	17	.17	134	.10	5	1.84	.02	.08	<2	.2	64	<.3	.1	6.6	3
52198	.8	5.1	6.6	82.9	32	10	4	693	1.89	1.5	<5	1	28	.10	.2	<.1	40	.31	.095	10	16	.15	122	.11	2	1.30	.01	.07	<2	.2	44	<.3	.1	6.0	1
52199	.7	6.1	5.6	66.8	33	11	5	282	2.11	2.9	<5	2	26	.05	.3	<.1	43	.26	.094	11	17	.18	101	.12	<2	1.61	.01	.06	<2	.1	40	<.3	.2	5.8	1
52200	.3	4.9	5.8	38.5	<30	10	3	183	1.47	.7	<5	2	33	.02	.2	<.1	28	.32	.029	13	14	.24	79	.12	2	1.42	.02	.07	<2	.1	36	<.3	.1	3.8	2
52201	.8	6.3	5.6	48.0	<30	9	4	202	1.94	2.9	<5	2	29	.02	.4	<.1	40	.25	.045	12	16	.18	93	.10	<2	1.38	.02	.05	<2	.1	30	<.3	.1	5.4	3
52202	.8	5.8	5.5	70.7	34	11	5	507	2.17	1.1	<5	1	30	.03	.2	<.1	42	.29	.061	12	18	.15	125	.08	4	1.47	.02	.07	<2	.1	41	<.3	.1	4.1	1
52203	.7	5.0	5.3	65.8	<30	9	4	319	1.81	1.7	<5	2	26	.03	.3	<.1	38	.24	.052	11	15	.13	107	.09	3	1.11	.02	.06	<2	.1	46	<.3	.1	4.1	5
52204	.7	5.8	5.6	45.4	<30	8	3	149	1.75	2.3	<5	2	25	.02	.3	<.1	36	.22	.044	9	13	.14	102	.11	<2	1.14	.02	.04	<2	.1	52	<.3	<.1	5.4	1
STANDARD D/AU-S	21.5	116.8	89.3	263.4	1943	28	14	1015	4.35	74.2	19	20	59	2.21	9.5	20.5	66	.72	.092	19	49	1.17	241	.15	24	2.38	.05	.75	19	2.1	467	1.0	2.1	6.6	48

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

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppb	Se ppm	Te ppm	Ga ppm	Au+ ppb
52334	.5	4.4	3.4	25.7	<30	2	4	239	1.68	1.5	<5	2	17	.03	.2	.1	41	.22	.042	7	13	.12	67	.11	<2	.76	.01	.06	<2	<.1	27	<.3	<.1	2.2	<1
52335	.6	5.6	5.3	45.6	46	7	4	304	1.81	2.1	<5	2	19	.06	.3	.1	41	.24	.066	8	15	.17	87	.12	<2	1.18	.01	.05	<2	.1	32	<.3	.1	4.2	<1
52336	.5	6.4	3.6	39.1	<30	9	5	257	2.47	3.3	<5	2	22	.04	.3	.1	58	.23	.046	9	20	.23	89	.15	3	1.32	.01	.05	<2	.1	23	<.3	<.1	3.3	1
52337	.6	4.9	4.8	41.0	37	7	4	234	2.11	2.2	<5	2	20	.04	.3	.1	47	.24	.069	8	16	.19	77	.12	<2	1.38	.01	.07	<2	<.1	25	<.3	.1	4.0	<1
52338	.9	5.5	5.3	56.8	<30	9	5	584	2.24	1.3	<5	2	20	.05	.2	.1	51	.23	.085	9	18	.18	92	.14	<2	1.33	.01	.05	<2	.1	39	<.3	<.1	4.7	<1
52339	.5	5.0	5.1	50.3	<30	6	5	274	2.08	1.6	<5	2	22	.05	.2	.1	47	.25	.062	9	17	.18	94	.14	<2	1.40	.01	.05	<2	.1	41	<.3	.1	4.0	<1
RE 52339	.5	5.9	5.3	50.7	<30	7	5	284	2.14	1.5	<5	2	22	.06	<.2	.2	48	.25	.062	10	17	.19	97	.14	<2	1.44	.01	.05	<2	.1	32	<.3	<.1	4.5	2
52340	.5	5.4	3.9	43.5	<30	7	4	429	2.08	2.1	<5	2	22	.05	.2	.1	48	.24	.043	8	17	.16	99	.11	<2	1.16	.01	.05	<2	.1	24	<.3	.1	3.4	<1
52351	.6	6.2	5.1	123.6	42	10	6	472	2.10	1.3	<5	2	25	.10	.3	.1	45	.27	.053	10	17	.24	146	.13	<2	1.63	.01	.07	<2	.1	32	<.3	.2	4.7	3
52352	1.0	9.8	6.3	85.0	49	12	7	664	3.02	4.1	<5	3	42	.12	.3	.1	63	.37	.093	16	22	.23	199	.09	<2	1.67	.02	.13	<2	.1	51	<.3	.1	4.6	1
52353	.5	6.8	4.6	48.3	<30	10	5	195	2.25	3.3	<5	2	25	.04	.2	.1	48	.30	.065	9	19	.25	105	.13	<2	1.46	.01	.07	<2	.1	25	<.3	<.1	4.1	3
52354	.5	6.1	4.8	64.7	<30	8	6	322	2.27	1.4	<5	2	24	.06	.2	.1	49	.26	.071	10	19	.20	102	.13	<2	1.50	.02	.07	<2	.1	28	<.3	.1	4.2	2
52355	.7	6.0	5.2	49.1	38	9	5	320	2.24	2.6	<5	2	18	.05	.3	.1	49	.19	.068	11	18	.17	96	.12	<2	1.41	.01	.05	<2	.1	40	<.3	.1	4.1	<1
52356	.6	6.4	5.4	67.3	30	9	5	402	1.98	1.8	<5	2	23	.06	.2	.1	42	.26	.057	10	17	.22	114	.13	5	1.59	.01	.07	<2	.1	27	<.3	.1	4.6	1
52357	.4	6.2	4.2	59.0	<30	6	6	259	2.22	1.9	<5	2	24	.08	<.2	.2	50	.27	.048	9	19	.21	91	.13	<2	1.25	.02	.06	<2	<.1	21	<.3	.1	3.6	<1
52358	.6	7.1	4.8	42.4	<30	9	5	220	2.40	2.5	<5	2	22	.05	.2	.1	52	.24	.064	9	19	.22	76	.13	<2	1.33	.02	.06	<2	<.1	25	<.3	.1	4.0	<1
52359	.4	5.6	4.3	41.9	<30	8	5	218	2.07	1.4	<5	2	25	.04	.2	.1	46	.28	.038	10	17	.18	83	.14	<2	1.15	.02	.07	<2	.1	15	<.3	.1	3.3	4
52360	.5	6.3	5.3	57.0	33	7	5	509	2.74	1.4	<5	3	25	.06	.2	.1	62	.28	.050	10	21	.20	117	.13	<2	1.16	.02	.10	<2	.1	27	<.3	<.1	3.6	6
52361	.4	5.5	4.7	41.2	44	5	4	266	2.09	1.0	<5	1	22	.06	.3	<.1	46	.31	.050	8	16	.20	71	.13	<2	1.03	.02	.06	<2	<.1	22	<.3	.1	3.7	<1
52362	.5	6.5	5.0	45.4	<30	8	4	318	2.32	2.2	<5	2	21	.05	.2	.1	51	.25	.076	8	18	.19	62	.13	<2	1.22	.01	.06	<2	<.1	13	<.3	<.1	3.9	<1
52363	.5	5.9	4.9	77.9	33	9	6	331	2.55	.9	<5	2	18	.05	.2	.1	54	.24	.072	8	19	.21	111	.13	<2	1.39	.01	.05	<2	.1	18	<.3	.1	3.9	<1
STANDARD D/AU-S	21.0	115.3	28.9	258.3	1979	29	14	960	4.19	74.0	22	19	57	2.01	9.3	22.7	65	.67	.091	18	49	1.10	237	.15	24	2.30	.05	.73	20	2.0	478	.9	2.2	6.6	52

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