ARIS SUMMARY SHEET

District Geologist, Prince George   Off Confidential: 94.10.25

ASSESSMENT REPORT 23249   MINING DIVISION: Omineca

PROPERTY: Boot-Steele
LOCATION: LAT 55 24 00 LONG 125 25 00
UTM 10 6141747 346961
NTS 093N14W
CLAIM(S): Steele 1-4,Boot 10
OPERATOR(S): Kennecott Can.
AUTHOR(S): Bishop, S.
REPORT YEAR: 1993, 45 Pages
COMMODITIES
SEARCHED FOR: Copper,Gold
KEYWORDS: Cretaceous,Hogem Batholith,Duckling Creek Syenite Complex,Syenites
Chalcopyrite,Bornite,Porphyry copper
WORK
DONE: Geological,Geochemical,Geophysical,Drilling,Physical
DIAD 78.9 m;BDBG
GEOL 25.0 ha
Map(s) - 1; Scale(s) - 1:2000
IPOL 5.0 km
LINE 8.0 km
ROAD 4.0 km
ROCK 3 sample(s) ;ME
SOIL 185 sample(s) ;ME
Map(s) - 1; Scale(s) - 1:5000
RELATED
REPORTS: 01012,03610,03995,04151,04152,04522,20130,21971,21992
MINFILE: 093N 003,093N 151

LOG NO: JAN 3 1 1994 RD.
ACTION.

FILE NO:

Geological, Geochemical, Geophysical and Diamond Drilling Report on the Boot/Steele Property

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,249

RECEIVED
JAN 24 1994
Gold Commissioner's Office
VANCOUVER, B.C.

Omineca Mining Division
NTS 93 N/14W

Latitude 55°24′ Longitude 125° 25′

By: S.T. Bishop
October 25, 1993

FILMED

Owners: Richard Haslinger
Box 335
Ft. St. James, B.C.
V0J 1P0

Larry Hewitt
Box 340
Telkwa, B.C.
V0S 2X0

Operator: Kennecott Canada Inc.
354-200 Granville St.
Vancouver, B.C.
V6C 1S4

SUMMARY

The Boot/Steele property covers an alkalic copper-gold porphyry prospect located in the Omineca Mining District, north central British Columbia. The property comprises 183 claim units optioned by Kennecott Canada Inc. from the owners, Richard Haslinger and Larry Hewitt. The Boot/Steele claims surround Kennecott's 100% owned Lorraine copper-gold property where exploration work completed in the 1970's outlined a mineral resource of 10Mt grading 0.65% Cu, 3.4g/t Au in the Main Zone. Gold grades were estimated based on a limited number of gold analyses. In 1990 and 1991, exploration work at Lorraine located a new zone of mineralization, referred to as the Extension Zone, in the southeast property area. The Boot/Steele property was optioned to evaluate the extension of this zone across the Lorraine claim boundary.

Field work was completed on the Boot/Steele property in conjunction with an exploration program at Lorraine, between July 1 and August 15, 1993. Report writing and drafting was completed during September and October, 1993. Field work consisted of geological mapping, soil sampling, and an I.P. survey over a 7km grid on the Steele #3 claim. A single diamond drill hole was completed in the grid area. In addition, reconnaissance soil samples were collected in the Cliff Lake, Jeno Ridge and north central Steele #1 & 2 claim areas.

Copper-gold mineralization in the Boot/Steele property area occurs as localized disseminations, fracture fillings or veinlets of chalcopyrite and bornite hosted in syenitic phases of the Middle Jurassic Duckling Creek Syenite Complex. The 1993 exploration program succeeded in tracing the Extension Zone mineralization 200m over the Lorraine claim boundary onto the Steele #3 claim. The rod-shaped zone was not traced beyond line 1900N on the extension grid and is interpreted to be either truncated by a fault or has been eroded away, if the rod plunges at an angle shallower than topography.

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1.0 INTRODUCTION

1.1 LOCATION, ACCESS AND PHYSIOGRAPHY

The Boot/Steele property is located approximately 45 kilometres west-northwest of Germansen Landing, in the Omineca Mining District, north central British Columbia (Figure 1).

Access is provided to the property by a four wheel drive dirt road that was built in the 1970's to access the Lorraine property. The access road is located 41kms north of Germansen Landing along the Omineca Mining Road (Figure 2).

The property is situated in the Omineca Mountains, approximately 20 kilometres north of the Omineca River. The area is typified by mountains of moderate relief with elevations of up to 2,000 metres, separated by glacial U-shaped, drift covered valleys.

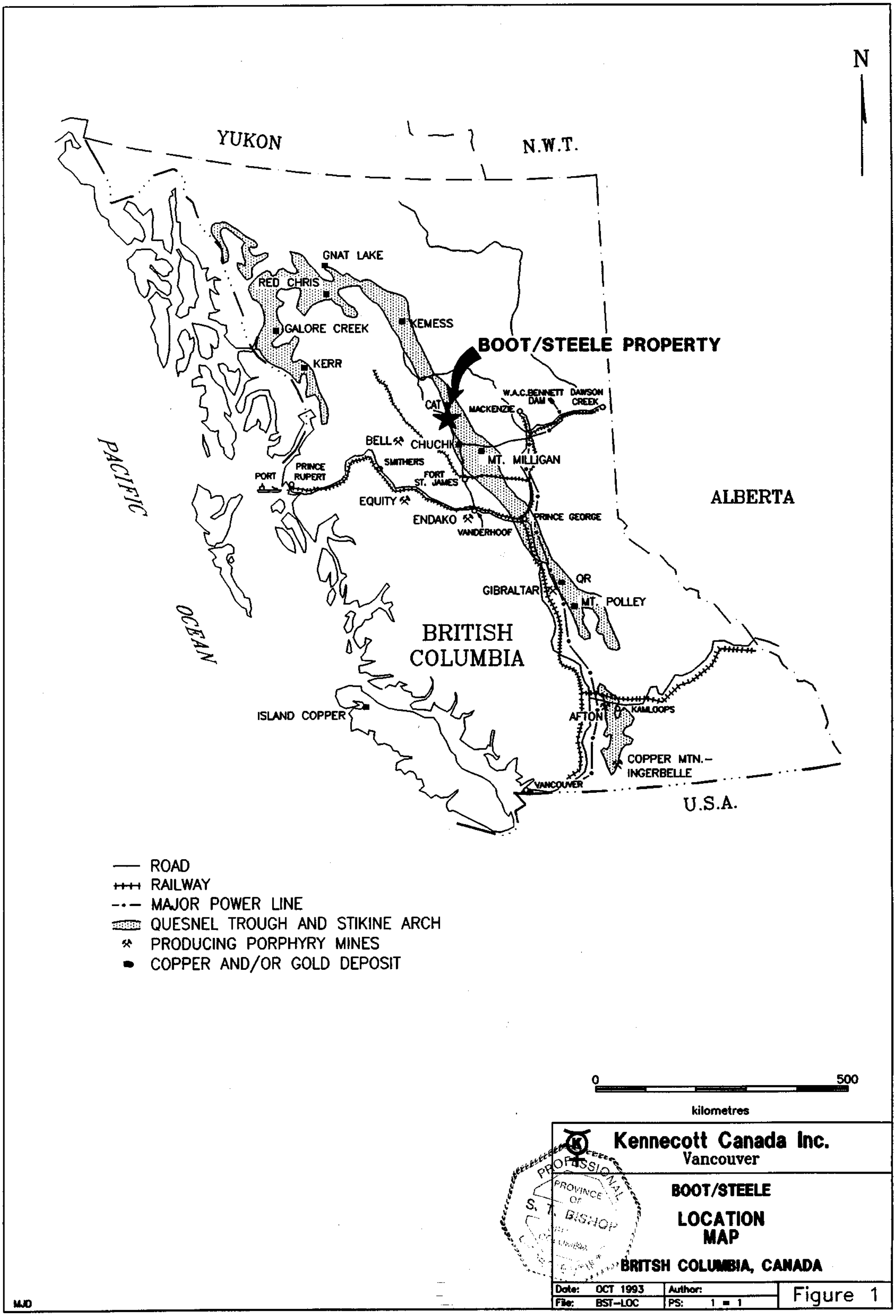
Vegetation ranges from coniferous forests of spruce, balsam and pine in the valleys to alpine grasses and shrubs at elevations above 1,600 metres.

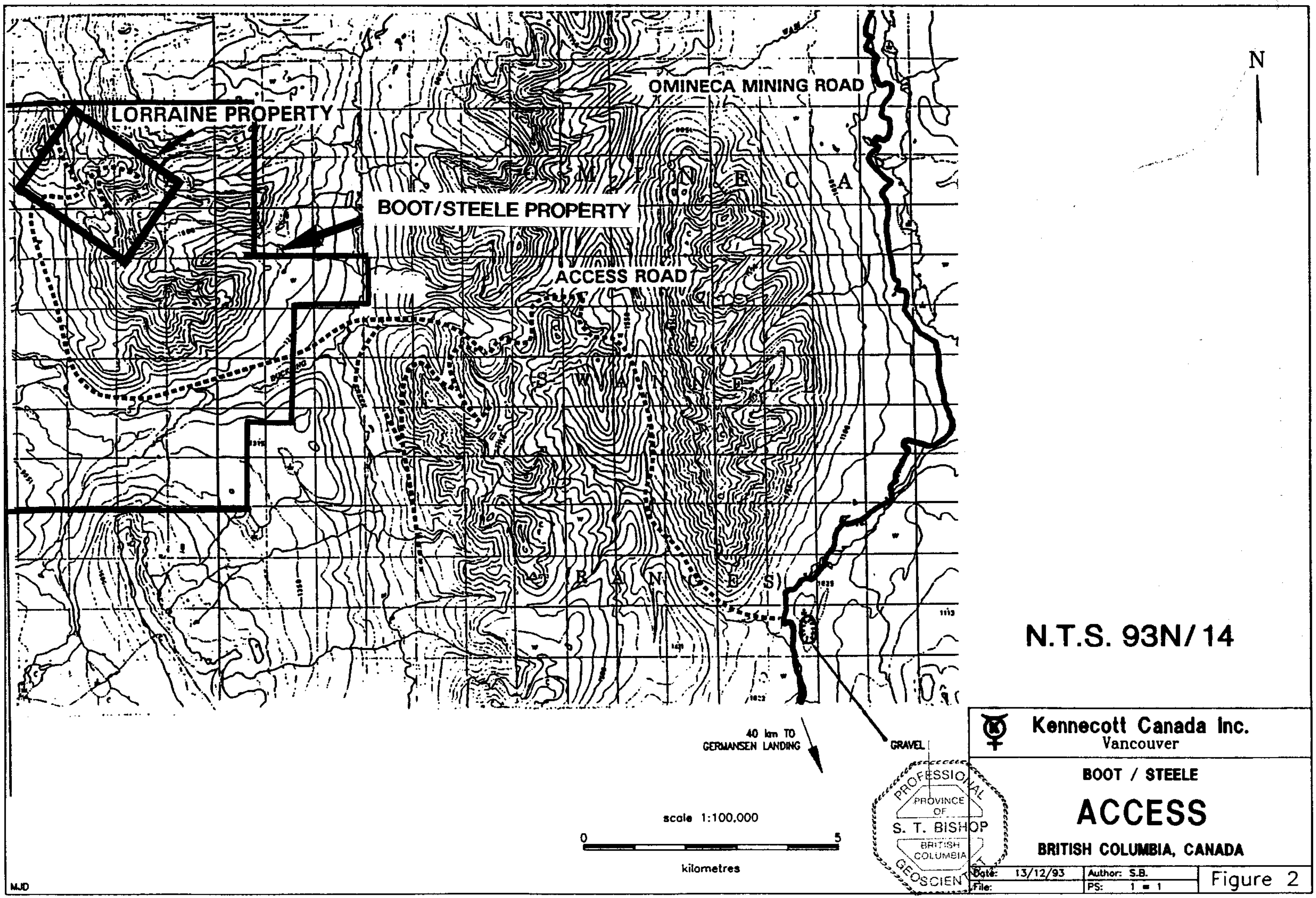
1.2 CLAIM DATA

The Boot/Steele property is comprised of 10 four-post mineral claims, containing a total of 183 units. The claims are owned 50% by Richard Haslinger and 50% by Larry Hewitt. The claims surround and overlie Kennecott Canada Inc.'s Lorraine property (Figure 3). Essential claim data is as follows, once the assessment work from the 1993 program has been credited to the claims:

Claim Name	Tenure #	Units	Record Date	Expiry Date
Steele #1	240496	20	Apr. 29, 1989	Apr. 29, 2000
Steele #2	240497	20	Apr. 29, 1989	Apr. 29, 2000
Steele #3	240498	20	Apr. 29, 1989	Apr. 29, 2000
Steele #4	240499	20	Apr. 29, 1989	Apr. 29, 2000
Boot #5	242899	8	Oct. 28, 1990	Oct. 28, 1993
Boot #6	242900	15	Oct. 30, 1990	Oct. 30, 1998
Boot #7	303689	20	Sept. 6, 1991	Sept. 6, 1994
Boot #8	303912	20	Sept. 6, 1991	Sept. 6, 1994
Boot #9	303690	20	Sept. 5, 1991	Sept. 5, 1994
Boot #10	303913	20	Sept. 5, 1991	Sept. 5, 1996

NOTE: The position of the Lorraine property is incorrect on the government claim map. The correct location of the Lorraine property is approximately 2km to the east.


N
YUKON
N.W.T.
ALBERTA
U.S.A.
PACIFIC
OCEAN
BRITISH
COLUMBIA
BOOT/STEELE PROPERTY
GNAT LAKE
RED CHRIS
GALORE CREEK
KERR
KEMESS
CAT
W.A.C.BENNETT DAM
DAWSON CREEK
MACKENZIE
BELL
CHUCHI
MT. MILLIGAN
SMITHERS
PORT
PRINCE RUPERT
FORT ST. JAMES
EQUITY
ENDAKO
VANDERHOOF
PRINCE GEORGE
QR
GIBRALTAR
MT. POLLEY
ISLAND COPPER
AFTON
KAMLOOPS
COPPER MTN.–INGERBELLE
VANCOUVER
ROAD
RAILWAY
MAJOR POWER LINE
QUESNEL TROUGH AND STIKINE ARCH
PRODUCING PORPHYRY MINES
COPPER AND/OR GOLD DEPOSIT
0
500
kilometres
Kennecott Canada Inc.
Vancouver
BOOT/STEELE
LOCATION
MAP
BRITSH COLUMBIA, CANADA
Date: OCT 1993
Author:
File: BST–LOC
PS: 1 = 1
Figure 1
MJD



PROFESSIONAL GEOSCIENTIST
PROVINCE OF BRITISH COLUMBIA
S. T. BISHOP

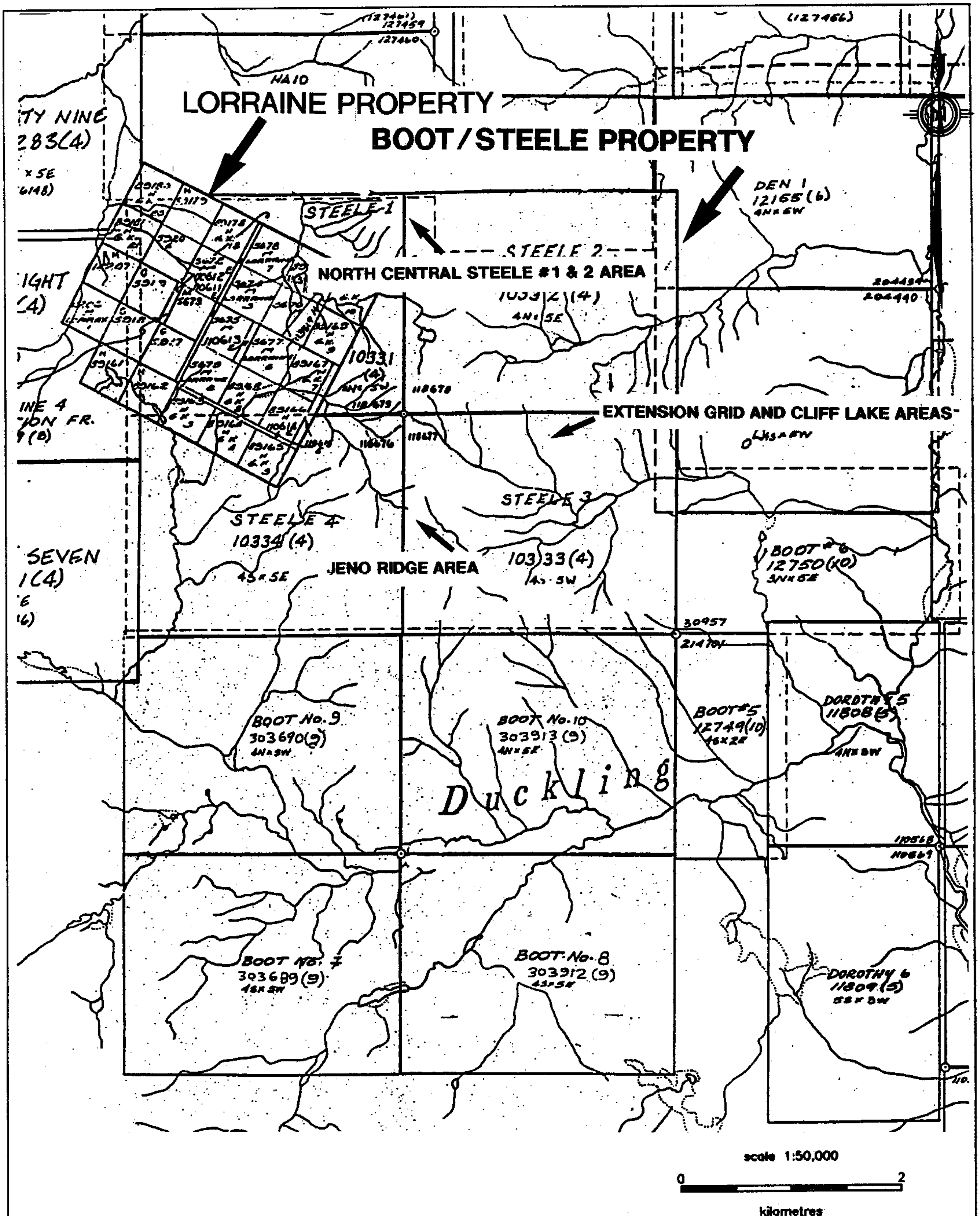
Kennecott Canada Inc.
Vancouver

BOOT / STEELE

ACCESS

BRITISH COLUMBIA, CANADA

Date: 13/12/93	Author: S.B.	Figure 2
File:	PS: 1 = 1	



Kennecott Canada Inc.
Vancouver

BOOT/STEELE PROPERTY

CLAIM MAP AND 1993 AREAS OF WORK

BRITISH COLUMBIA, CANADA

N.T.S. 93N/14

Date: OCT 1993	Author: S.B.	Figure 3
File:	PS: 1:50,000	

1.3 EXPLORATION HISTORY

Copper showings occur throughout the area and have been investigated by a number of companies and individuals since the early 1930's. However, the majority of exploration work conducted in the area was completed on the Lorraine property claims in the 1970's and early 1990's. Historical reserves on the Lorraine property comprise 10Mt grading 0.67% Cu, 3.4g/t Au in the Main Zone. Work in 1990 and 1991 concentrated on a new zone of mineralization, referred to as the Extension Zone, located near the southeastern part of Lorraine claim boundary.

Compared to the extensive work completed at Lorraine, little work has been done on the Boot/Steele claim area. A 1949 BCDM Annual Report describes the Jeno copper showing, located on a ridge southwest of the Lorraine property boundary. In 1966, Belcarra Explorations Ltd. completed a reconnaissance soil survey southeast of "Jeno Ridge", which outlined an area of weakly anomalous copper values, to 280ppm. This area is now overlain by the Boot #10 claims.

In 1972 Noranda completed a soil survey over the present day northwestern corner of the Steele claims. Results outlined a copper anomaly with values exceeding 387ppm over an area 1km by 0.5km in size, open to the northwest and southeast.

Tupco Mines Ltd. explored the area that now underlies the eastern edge of the Steele #2 and #3 claims in 1972. Spotty copper showings and copper soil anomalies were recorded. An I.P. survey was completed over this area which returned zones of weak to moderate chargeability responses.

Also in 1972, the LUC Syndicate completed exploration work along the northern border of the Steele claims, northeast of the Lorraine property. Their work recorded extensive copper and molybdenum soil anomalies in addition to spotty chalcopyrite and bornite showings.

In 1991, B.P. Resources Canada optioned the Boot and Steele claims and commissioned an airborne geophysical survey over the entire claim block. Their follow up work included reconnaissance prospecting, mapping, soil and silt sampling and several recce I.P. lines. B.P. mapped and sampled the trace of the Lorraine Extension Zone on the Steele #3 claim. Four diamond drill holes were drilled, three of which were designed to test the interpreted extension of the Lorraine Extension Zone. The fourth hole was completed to test a moderate I.P. chargeability anomaly along the property access road. None of the B.P. drillholes intersected appreciable copper mineralization.

1.4 1993 SUMMARY OF WORK DONE

Field work at the Boot/Steele property was completed in conjunction with an exploration program on the Lorraine property, between July 1st and August 15th, 1993. The objective of the Boot/Steele program was to evaluate the extension of the Lorraine Extension Zone. A grid was established to extend coverage from the Extension Zone to the southeast on the Steele #3 claim. An 800m baseline and seven, 1km crosslines were cut and flagged by chain and compass methods (Figures 3 & 4). Stations were marked at 25m intervals along the lines. Soil sampling, geological mapping and an I.P. survey were completed over the grid area and one diamond drill hole was drilled. In addition, reconnaissance soil sampling and prospecting was completed in the Jeno Ridge, Cliff Lake and in the north-central Steele #1, Steele #2 claim areas (Figures 3 & 5).

A total of 185 soil samples and 3 rock samples were collected and sent to one of two laboratories in Vancouver, B.C., Acme Analytical or Min-En Analytical Laboratories, for analysis. Samples were analyzed for 30 elements by ICP and by atomic absorption for gold. Rock samples that returned results of >2000ppm Cu and/or >300ppb Au were then assayed for copper or gold respectively. Rock sample descriptions are provided in Appendix I. Copper-gold analytical results are plotted on Figures 4, 5 & 6. Analytical techniques and detailed 30 element ICP, Cu and Au assay analytical results are provided in Appendix II.

2.0 REGIONAL GEOLOGY

The property is located in the northern part of the Quesnel Trough (Figure 1), in the Intermontane Belt of British Columbia. Quesnellia is comprised of a northwest trending, linear group of Mesozoic volcanic and sedimentary rocks (Takla and Nicola Groups) representative of an island arc environment, intruded by a series of coeval, comagmatic stocks and batholiths.

The claims lie entirely within the northwesterly trending Hogem Batholith, a composite intrusion which spans a period from Late Triassic to Early Cretaceous in age. The intrusion is bounded to the west by the Pinchi fault and intrudes volcanic rocks of the Takla Group to the east.

The principal phases of the Hogem Batholith are defined by distinctive petrographic, chemical and geochronological signatures. The three main phases include: Phase 1 Hogem basic suite rocks and Hogem granodiorite, with K/Ar dates between 176-212 Ma, Phase 2 Duckling Creek and Chuchi syenite bodies, dated within 162-182 Ma and Phase 3 granite/aplite dykes or plugs that date considerably younger, between 108-126 Ma (Garnett, 1978).

Numerous copper and/or gold prospects occur throughout the batholith. The most notorious, other than the Lorraine property, include the Cat Mountain (Lysander Gold), Tam (Major General/Canarc) and Col (Kookaburra) properties.

3.0 PROPERTY GEOLOGY, ALTERATION AND MINERALIZATION

The Boot/Steele claims are underlain by Phases 1 and 2 of the Hogem Batholith, the latter being of principal importance as the Duckling Creek Syenite Complex hosts significant copper-gold mineralization on the neighbouring Lorraine property. The Duckling Creek Syenite Complex forms a northwesterly-trending elliptical body approximately 5kms wide and 32kms long. The rocks within the Complex are highly variable in texture and mafic content but have been subdivided by Wilkinson et al. (1976) into two main types: 1) syenite migmatite, interpreted to have formed by a syenite magma intruding and metasomatizing layered monzonite-diorite-pyroxenite sequence; and 2) pink leucocratic syenite, that varies in texture from aplitic to pegmatitic. A hybrid zone of variably potassium-metasomatized monzonite marks much of the contact of the syenite complex.

The syenite complex contains lenses and rafts, up to 2.5km in size, of pyroxenite, which ranges in composition to alkali gabbro, and schistose basement rocks. Pyroxenite is composed of variable amounts of pyroxene, biotite, potassium feldspar and magnetite; large porphyroblasts or oikocrysts of potash feldspar are common. Pyroxenite may have formed as sill-like cumulate within the monzonites and diorites and were subsequently potassium metasomatized by the invading syenite magma.

Dominant regional structures are exemplified by the zones of strongly developed, west to northwest trending foliation within the Duckling Creek Syenite Complex, which also parallel the general trend of the Complex. These foliation zones contain the lenses of pyroxenite and basement schists and display textures ranging from alignment of phenocrysts to gneissic-like layering and migmatitic banding.

Three major alteration types have been recorded in the area: early potassium metasomatism resulting in secondary biotite, main stage potassium feldspathization and late stage propylitic (epidote, chlorite) +/- potassium feldspar, magnetite. Carbonate alteration occurs locally. Distinct alteration zones are not apparent.

Fine to coarse grained secondary biotite occurs as partial to near-complete replacement of pyroxenes in pyroxenites and melanocratic phases of the complex. Stringers and books of biotite are common in leucocratic phases.

Potassium feldspathization, characterized by salmon pink to orange colour, is associated with emplacement of syenitic intrusives. With varying intensity, potassium feldspar occurs as incipient grains, stringers, or as pervasive flooding.

Late stage epidotization ranges from local patches to complete replacements of the protolith. Spectacular, late hydrothermal magnetite occurs as pegmatoidal aggregates, veinlets and crackle breccias.

Both copper sulphides and oxides occur on the property. Sulphides comprise chalcopyrite, bornite and rare covellite; digenite and chalcocite have been reported in thin section samples from the Lorraine property Extension Zone (Leitch, 1992). Oxides comprise malachite and azurite. Pyrite occurs in minor amounts ($<1\%$). Sulphides are typically fine to medium grained and are disseminated throughout the host rock or concentrated locally along fractures or in narrow quartz veinlets. Sulphide abundances range from trace amounts to in excess of 7%.

Although copper mineralization appears to be spatially related to intense potassic alteration, intensely potassic altered rock may also be devoid of mineralization. Petrographic examination (Leitch, 1992) of rocks from the adjoining Lorraine property indicates that copper sulphides are associated with magnetite and apatite and that most of the sulphides occur interstitially, not along fractures. These observations suggest that mineralization is of a magmatic origin.

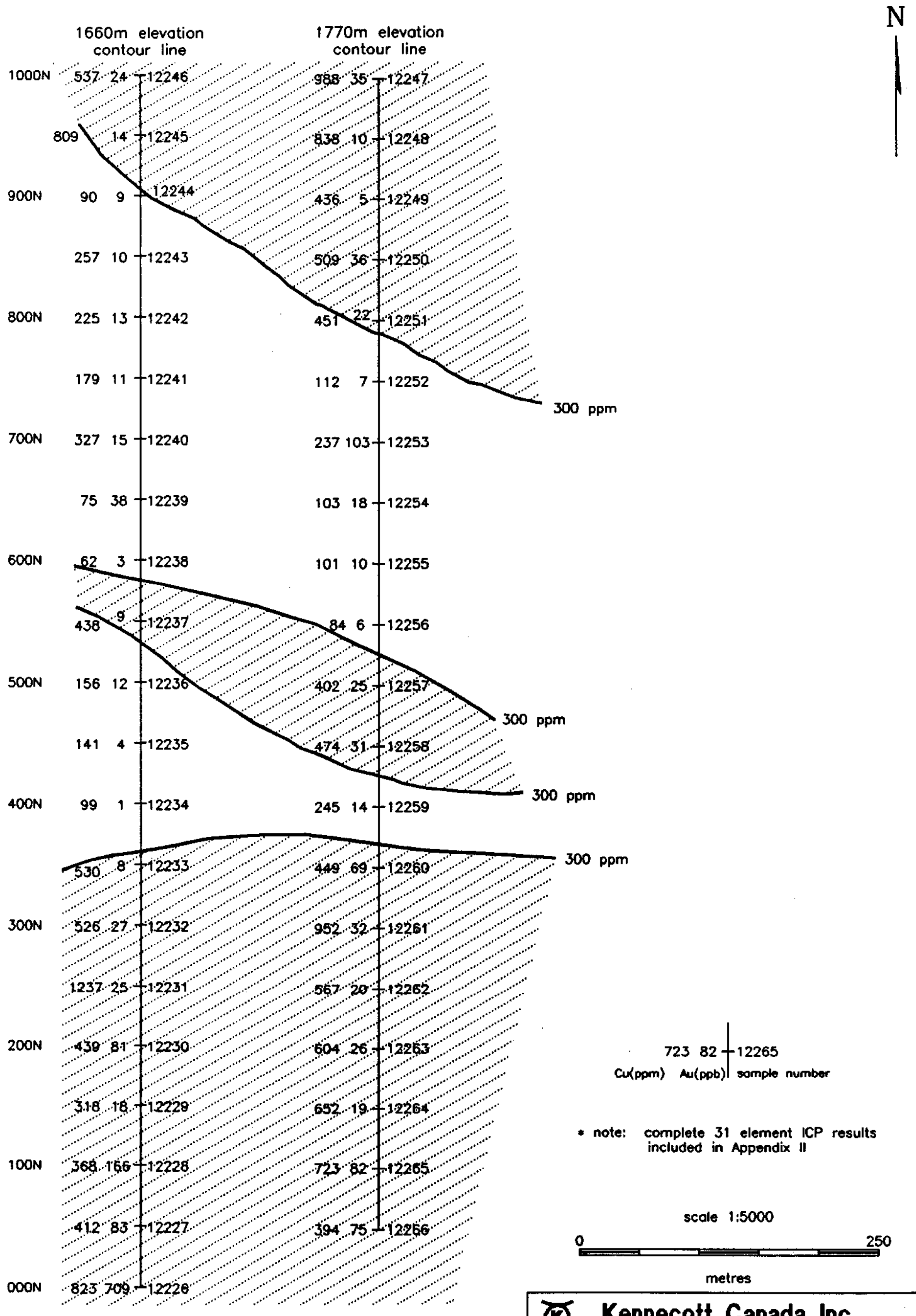
4.0 <u>1993 EXPLORATION PROGRAM</u>

4.1 MAPPING AND GEOCHEMISTRY

Geological mapping was completed at 1:200 scale over lines 2000N, 1900N and 1800N of the extension grid (Figure 4). Mapping was limited by the paucity of outcrop exposure in the grid area, but succeeded in locating the exposure of copper mineralization sampled by B.P. Resources in 1991, along the projected extent of the Lorraine Extension Zone. A single grab sample, collected in this area in 1993 (Figures 4 & 5), returned values grading 1.18% Cu and 0.57g/t Au.

Soil sampling was completed along five lines of the extension grid (Figure 5). In addition, reconnaissance soil samples were collected in three areas (Figures 5 & 6) to follow-up 1) a target generated by the 1991 Aerodat survey located between the extension grid and Cliff Lake, 2) the Jeno Ridge copper showing with a coincident, weak chargeability anomaly and 3) a geochemical anomaly extending over the northeast Lorraine claim boundary onto the Steele #1 & 2 claims. Soil samples were collected with a mattock at 50m spacings along the lines. Samples were taken of B-horizon soil where possible, at a depth ranging from 10cm to 50cm below surface. Talus fines were collected in areas devoid of soil.

Analytical results from soil sampling show a wide range of values; from 14 to 3986ppm copper and 1 to 709ppb gold. Thresholds, based on visual inspection of ICP results and histograms of Cu/Au data (excluding the extreme outlier values) were selected as follows: Cu - 300ppm, Au - 20ppb. Results from the extension grid clearly outline the trace of the mineralized zone (which, in places, outcrops on surface). The zone is characterized by a 300ppm Cu contour (Figure 5). Only isolated gold values exceeded the threshold on this grid. Results from the two lines completed between the extension grid and Cliff Lake returned only three Cu and six Au values above threshold, scattered erratically over the lines (Figure 5). The contour line below the Jeno Ridge showing returned values consistently below threshold values for both copper and gold (Figure 5). Results from the two contour lines completed northeast of the Lorraine claims returned numerous values above threshold for Cu and Au, and outlined two distinct, coincident Cu-Au anomalies located at the north and south ends of the lines (Figure 6). Prospecting in the area of these two lines located spotty copper mineralization in monzo-syenite.



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Vancouver

BOOT/STEELE

NORTH-CENTRAL STEELE 1 & 2
SOIL GEOCHEMISTRY

BRITISH COLUMBIA, CANADA

Date: 17/01/94	Author: SB	Figure 6
File: BST-GRD1	PS: 1 = 5	

HO

4.2 GEOPHYSICS

Geophysical surveys completed in 1990 and 1991 on the Lorraine property determined that I.P. (specifically chargeability) was an effective tool for locating copper mineralization in such a low sulphide system. Results indicated a 10msec threshold chargeability value. Values above 10msec, ranging to a maximum value of 25msec, were interpreted to be indicative of sulphide mineralization. In 1993, a total of 4.8 line-km were covered by I.P. and ground magnetometer surveys on the extension grid. A test line was completed over the southernmost Lorraine property grid line to ensure compatibility of the 1993 and 1991 results. Survey specifications, pseudosections and a magnetometer plan map are included in Appendix III.

Results from the 1993 survey clearly outline the trace of the Extension Zone mineralization, characterized by chargeability values greater than 10msec at N=1 through N=6 on pseudosections. The anomalous zone extends 200m in length and ranges in width from 150m to 50m. This zone extends from line 2100N to line 1900N, between stations 750E to 900E and between 875E and 925E respectively. The zone of anomalous chargeability is coincident with the area of copper mineralization that is interpreted to be the trace of the Lorraine Extension Zone. The anomaly terminates abruptly between lines 1900N and 1800N and is interpreted to represent either a major 060° trending fault structure or the erosion of the mineralized zone.

4.3 DRILLING

A single drillhole was drilled on line 1900N, station 940E, on the extension grid (Figure 4). The hole, L93-4, was drilled at -45° toward 225° and completed to a depth of 78.9m. It was designed to test below the zone of copper mineralization exposed on surface, coincident with the I.P. chargeability anomaly. The hole intersected biotite pyroxenite throughout its entire length, no copper mineralization was observed and no samples were collected from the core for analysis. The drill log for hole L93-4 is presented in Appendix IV.

B.P. Resources drilled two holes in this area in 1991 to test below the mineralized outcrop. Their drilling also intersected only biotite pyroxenite.

5.0 CONCLUSIONS

The Lorraine Extension Zone mineralization was traced by mapping, soil geochemistry and geophysics, for a length of 200m over the Lorraine claim boundary onto the Steele #3 claim. The results from surface mapping and drilling indicates that the mineralized syenite has a rod shaped geometry. The mineralized body terminates abruptly southeast of line 1900N. The zone is interpreted to be either truncated by a 060° fault southeast of line 1900N or, the mineralized rod is plunging at an angle shallower than topography and has been eroded away.

6.0 BIBLIOGRAPHY

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Stevenson, R.W. (1970); Resume of data on the Lorraine deposit, Omineca Mining Division, B.C., Kennco Explorations, (Western) Limited, 11p.

Wilkinson, W.J., et. al. (1976); Lorraine. in Porphyry Deposits of the Canadian Cordillera, C.I.M. Special Volume 15, ed: A. Sutherland Brown, p.397-401.

7.0 Statement of Expenditures

Fieldwork Salaries (work performed between July 1st and August 15th, 1993)		
S. Bishop (10 days @ $200/day)	$ 2,000	
T. Heah (2 days @ $200/day)	400	
D. Coolidge (10 days @ $150/day)	1,500	
		$ 3,900
Geophysics and Linecutting		$ 13,645
Diamond Drilling: 258' @ $30/ft		$ 7,740
Helicopter Support for Drilling and Geophysical Survey		
10 hrs @ $750/hr		$ 7,500
Analytical (including sample prep and shipping)		
185 soil samples @ $15/sple	$ 2,775	
3 rock samples @ $15/sple	45	
		$ 2,820
Room and Board		
22 man days @ $50/day		$ 1,100
Truck Rental		
10 days @ $50/day		$ 500
Supplies (Radio Rental etc.)		$ 795
Drafting and Report Writing		$ 2,000
	Total	**$ 40,000**

8.0 Statement of Qualifications

I, Sandra T. Bishop, of Vancouver, British Columbia do hereby certify that:

1) I am a staff geologist with Kennecott Canada Incorporated, with offices located at 354-200 Granville Street, Vancouver, British Columbia.

2) I am a graduate of the University of British Columbia with a B.Sc., Geology, 1985.

3) I am a member, in good standing, of the Geological Association of Canada and the Association for Professional Engineer's and Geoscientists of British Columbia (Registration No. 19229)

4) This report is a result of fieldwork and research performed by and overseen by me between June and August, 1993.

Dated at Vancouver, in the Province of British Columbia, this 13th day of January, 1994.

Sandra T. Bishop, P. Geo.

APPENDIX I

Rock Sample Descriptions

Sample Number	Sample Description
02439	Grab sample, Jeno Ridge area. Syenite megaporphyry with rare flow foliated K-spar megacrysts up to 5cm long. Fracture controlled pyrite, trace chalcopyrite and malachite on fractures.
02440	Chip sample across 4m, Jeno Ridge area. Grey, hornblende syenite megaporphyry with minor chalcopyrite and bornite along fractures.
0467	Grab sample, extension grid area. Pinky-orange monzosyenite, intense potash feldspar alteration, 3% disseminated chalcopyrite +/- fine grained bornite. Sample collected from mineralized zone.

APPENDIX II

Analytical Techniques and Detailed Analytical Results

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK: PROCEDURE FOR 31 ELEMENT TRACE ICP

Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, V, Zn, Ga, Sn, W, Cr

Samples are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver, using the following procedures.

After drying the samples at 95 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer or ring mill pulverizer.

0.5 gram of the sample is digested for 2 hours with an aqua regia mixture.

After cooling samples are diluted to standard volume. The solutions are analyzed by computer Jarrell Ash ICP (Inductively Coupled Plasma Spectrometers). Reports are formatted and printed using a laser printer.

PROCEDURE FOR Au GEOCHEM FIRE ASSAY

Samples are dried @ 65 C and when dry the Rock & Core samples are crushed on a jaw crusher. The 1/4 inch output of the jaw crusher is put through a secondary roll crusher to reduce it to 1/8 inch. The whole sample is then riffled on a Jones Riffle down to a statistically representative 300 gram sub-sample. This sub-sample is then pulverized on a ring pulverizer to 95% - 150 mesh, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

Soil and stream sediment samples are screened to - 80 mesh for analysis.

The samples are fluxed, a silver inquart added and mixed. The assays are fused in batches of 24 assays along with *a natural standard and a blank. This batch of 26* assays is carried through the whole procedure as a set. After cupellation the precious metal beads are transferred into new glassware, dissolved with aqua regia solution, diluted to volume and mixed.

These resulting solutions are analyzed on an atomic absorption spectrometer using a suitable standard set. The natural standard fused along with this set must be within 2 standard deviations of its known or the whole set is re-assayed.

10% of all assay per page are rechecked, then reported in PPB. The detection limit is 1 PPB.

ASSAY PROCEDURE FOR Au FIRE ASSAY

Samples are dried @ 95 C and when dry are crushed on a jaw crusher. The 1/4 inch output of the jaw crusher is put through a secondary roll crusher to reeduce it to - 1/8 inch. The sample is then riffled on a Jones Riffle down to a statistically representative 300 gram sub-sample (in accordance with G's statistical rules.) This sub-sample is then pulverized on a ring pulverizer to 95% minus - 150 mesh, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

Samples are fire assayed using one assay ton sample weight. The samples are fluxed, a silver inquart added and mixed. The assays are fused in batches of 24 assays along with a natural standard and a blank. This batch of 26 assays is carried through the whole procedure as a set. After cupellation the prcious metal beads are transferred into new glassware, dissolved, diluted to volume and mixed.

These aqua regia solutions are analyzed on an atomic absorption spectrometer using a suitable standard set. The natural standard fused along with this set must be within 2 standard deviations of its known or the whole set is re-assayed. Likewise the blank must be less than 0.015 g/tonne.

The top 10% of all assay per page are recheck and reported in duplicate along with the standard and blank.

Ag, Cu, Pb, Zn, Ni, AND Co ASSAY PRODEDURE

Samples are dried @ 95 C and when dry are crushed on a jaw crusher. The -1/4 inch output of the jaw crusher is put through a secondary roll crusher to reduce it to -1/8 mesh. The whole sample is then riffled on a Jones Riffle down to a statistically representative 500 gram sub-sample (in accordance with Gy's statistical rules.) This sub-sample is then pulverized in a ring pulverizer to 95% minus 140, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

A 0.200 to 2.000 gram sub-sample is weighed from the pulp bag for analysis. Each batch of 70 assays has a natural standard and a reagent blank included. The samples are digested using a HNO_3 - $KClO_3$ mixture and when reaction subsides, HCL is added before it is placed on a hotplate to digest. After digestion is complete the flasks are cooled, diluted to volume and mixed.

The resulting solutions are analyzed on an atomic absorption spectrometer using the appropriate standard sets. The natural standard digested along with this set must be within 2 standard deviations of it's known or the whole set is re-assayed. If any of the assays are >1% they are re-assayed at a lower weight. 10% of samples are assayed in duplicate.

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

GEOCHEMICAL ANALYSIS CERTIFICATE

Kennecott Canada Inc. PROJECT 05-444 File # 93-1982 Page 1

354 - 200 Granville St., Vancouver BC V6C 1S4 Submitted by: Sandra Bishop

EXTENSION GRID SOIL SAMPLES

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L20N 6+00E	65	196	11	140	.4	29	28	2331	7.50	<2	<5	<2	<2	264	1.6	<2	<2	243	1.43	.250	17	86	1.16	217	.12	<2	1.53	.02	.12	<1	10
L20N 6+50E	7	468	11	216	.1	63	29	1365	6.25	<2	<5	<2	<2	273	.6	<2	<2	144	1.56	.188	20	169	2.24	158	.16	2	2.19	.02	.43	1	9
L20N 7+00E	38	549	166	499	.3	30	24	4895	6.54	8	<5	<2	<2	217	2.3	<2	2	218	1.31	.252	24	69	2.07	248	.16	2	2.40	.05	.95	<1	9
L20N 7+50E	4	567	8	192	.1	30	34	1916	7.46	8	<5	<2	<2	101	.4	<2	<2	215	1.26	.337	25	60	2.05	137	.12	<2	2.33	.02	.18	1	26
L20N 8+00E	3	190	7	77	<.1	12	12	482	8.38	2	<5	<2	<2	73	.2	2	<2	299	.50	.113	5	33	.96	143	.30	<2	1.64	.03	.13	<1	14
L20N 8+50E	4	304	10	107	.1	23	18	942	7.22	2	<5	<2	<2	67	.4	<2	<2	202	.65	.110	10	76	1.39	92	.27	<2	2.09	.02	.09	<1	8
L20N 9+00E	3	3986	36	173	<.1	128	54	2464	8.11	4	<5	<2	<2	109	.8	<2	5	151	.66	.166	18	414	2.95	74	.17	5	2.64	.02	.06	<1	7
L20N 9+50E	7	642	4	124	<.1	129	40	930	7.65	4	<5	<2	<2	182	.4	<2	<2	175	1.16	.113	11	423	3.14	105	.20	5	2.16	.03	.18	1	3
L20N 10+00E	<1	14	<2	144	<.1	80	43	988	7.31	2	<5	<2	3	81	.2	<2	<2	165	1.64	.423	24	181	1.89	164	.26	<2	1.52	.03	.72	<1	1
L20N 10+50E	1	91	3	119	<.1	64	34	663	7.74	2	<5	<2	2	110	.4	<2	<2	202	1.35	.373	22	145	1.75	64	.18	<2	1.72	.02	.37	<1	3
L20N 11+00E	7	112	5	102	<.1	37	19	434	8.25	2	<5	<2	<2	75	.3	<2	<2	226	.54	.066	8	124	1.43	140	.21	<2	1.86	.03	.07	<1	3
L20N 11+50E	<1	115	<2	140	<.1	62	34	839	7.87	<2	<5	<2	<2	120	.3	<2	<2	175	1.20	.246	16	136	1.99	133	.24	<2	1.80	.03	.23	<1	12
L20N 12+00E	<1	45	6	54	.2	13	13	1374	5.93	<2	<5	<2	<2	69	<.2	<2	<2	180	.31	.055	7	68	.23	100	.10	2	.75	.02	.08	<1	39
L20N 12+50E	<1	103	4	103	.2	42	20	571	6.81	<2	<5	<2	<2	74	<.2	<2	<2	149	.92	.138	10	130	1.35	132	.23	<2	1.71	.03	.10	<1	3
L20N 13+00E	1	97	11	69	.6	15	9	1385	4.71	2	<5	<2	<2	43	.2	<2	<2	99	.23	.151	10	53	.38	105	.07	2	1.95	.02	.08	<1	8
L20N 13+50E	1	49	7	44	.1	12	6	468	4.00	2	<5	<2	<2	44	<.2	<2	<2	106	.16	.056	7	48	.17	59	.07	2	1.06	.02	.05	1	5
L20N 14+00E	<1	206	5	87	.8	17	10	477	3.56	<2	<5	<2	<2	88	<.2	2	<2	96	.41	.100	11	37	.89	152	.15	2	3.04	.02	.08	<1	2
L20N 14+50E	<1	171	3	88	.3	26	14	443	5.42	3	<5	<2	2	67	<.2	<2	<2	127	.67	.184	22	53	.95	93	.13	2	2.28	.02	.08	<1	9
L20N 15+00E	<1	71	4	101	.2	34	20	1254	8.12	<2	<5	<2	<2	55	<.2	2	<2	225	.29	.095	7	94	.89	136	.34	<2	1.24	.01	.08	<1	2
L20N 15+50E	<1	78	6	82	.3	34	25	2190	7.66	3	<5	<2	<2	118	<.2	3	<2	212	.52	.130	12	103	1.00	205	.26	2	1.48	.02	.11	<1	2
L19N 7+00E	1	734	11	164	.3	83	40	1422	6.29	7	5	<2	4	352	<.2	<2	<2	149	2.00	.364	27	141	2.94	289	.28	<2	2.08	.03	.87	<1	32
L19N 7+50E	11	504	7	192	.2	56	36	1470	8.11	8	<5	<2	<2	286	<.2	<2	<2	219	1.74	.384	31	135	2.20	88	.16	<2	1.97	.02	.24	<1	12
L19N 8+00E	<1	87	4	117	.5	28	20	899	8.21	4	5	<2	<2	59	<.2	<2	<2	278	.82	.183	10	72	1.54	138	.34	5	1.55	.03	.18	<1	5
L19N 8+50E	7	233	9	137	.3	26	20	1033	5.97	5	<5	<2	<2	184	<.2	2	<2	227	1.41	.201	17	70	1.41	121	.23	3	1.68	.02	.11	1	14
L19N 9+00E	1	3641	25	269	.5	67	47	1505	8.63	9	5	<2	3	94	.5	<2	5	233	1.38	.360	24	160	2.40	116	.22	<2	2.60	.02	.27	<1	50
L19N 9+50E	11	515	5	124	.1	71	40	2983	7.83	9	6	<2	<2	129	.5	<2	<2	289	1.40	.341	34	172	1.68	121	.13	<2	2.33	.03	.59	<1	4
L19N 10+00E	5	367	11	146	<.1	27	20	1086	4.33	3	<5	<2	<2	120	.5	<2	<2	134	.74	.104	11	69	1.05	138	.11	2	1.83	.02	.16	1	6
L19N 11+00E	4	206	6	118	<.1	34	25	1236	5.65	7	7	<2	<2	95	.4	<2	<2	177	1.04	.165	17	165	1.40	99	.11	<2	1.87	.02	.24	2	5
L19N 11+50E	1	82	4	148	<.1	40	32	1434	6.95	<2	<5	<2	<2	166	.6	<2	2	177	1.48	.184	13	110	1.76	170	.20	<2	1.69	.03	.28	<1	9
L19N 12+00E	1	73	7	67	<.1	16	12	720	6.41	<2	<5	<2	<2	79	.3	<2	<2	188	.61	.110	10	77	.55	110	.13	2	1.07	.03	.07	<1	12
L19N 12+50E	1	109	5	67	.2	13	9	636	5.53	<2	<5	<2	<2	51	.3	<2	<2	155	.32	.098	9	36	.60	68	.10	<2	1.84	.02	.06	<1	4
L19N 13+00E	1	26	5	44	<.1	9	11	1249	5.68	<2	<5	<2	<2	54	<.2	<2	2	180	.37	.042	5	50	.13	109	.15	2	.53	.02	.06	<1	16
L19N 13+50E	<1	98	<2	97	.3	18	18	740	5.18	<2	<5	<2	<2	134	<.2	<2	<2	176	1.25	.248	17	31	1.27	52	.19	<2	1.86	.06	.16	<1	10
L19N 14+00E	2	598	3	84	.2	11	11	586	7.43	3	<5	<2	<2	69	<.2	<2	<2	185	.33	.103	5	24	1.48	80	.29	<2	2.55	.02	.18	<1	5
RE L19N 14+00E	3	613	4	84	.2	11	11	591	7.50	5	<5	<2	<2	70	<.2	2	<2	183	.32	.102	5	25	1.50	82	.30	<2	2.63	.02	.17	<1	5
L19N 14+50E	<1	383	5	100	<.1	24	27	2898	8.43	<2	<5	<2	<2	70	.3	<2	<2	243	.38	.151	9	68	1.30	98	.33	<2	2.57	.02	.18	<1	11
L19N 15+00E	<1	96	5	65	<.1	12	13	570	6.30	<2	<5	<2	<2	46	.2	<2	<2	191	.26	.081	6	37	.92	75	.35	<2	1.88	.02	.07	<1	2
STANDARD C/AU-S	18	60	38	128	7.2	70	31	1038	3.96	39	16	7	35	53	19.0	15	20	57	.51	.087	41	59	.92	185	.09	33	1.88	.10	.16	11	52

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
- SAMPLE TYPE: SOIL AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: AUG 16 1993 DATE REPORT MAILED: Aug 19/93 SIGNED BY..........D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

EXTENSION GRID SOIL SAMPLES

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L19N 15+50E	<1	145	2	71	.3	22	12	456	5.99	2	<5	<2	<2	46	<.2	3	<2	141	.35	.129	10	62	1.08	112	.22	7	2.07	.02	.07	2	2
L19N 16+00E	<1	57	<2	114	.4	46	26	1413	7.72	<2	<5	<2	<2	93	<.2	2	<2	173	.85	.218	13	156	1.80	283	.33	8	2.25	.02	.30	1	1
L18N 7+00E	2	494	9	155	.4	28	32	1512	7.85	4	<5	<2	2	212	.2	2	<2	204	1.78	.307	24	43	1.84	117	.16	7	2.25	.03	.33	1	24
L18N 7+50E	3	551	4	130	.4	52	34	880	11.65	<2	<5	<2	2	289	<.2	2	<2	252	2.33	.482	33	160	1.63	91	.15	9	1.47	.03	.26	1	13
L18N 8+00E	2	2961	3	197	.2	31	32	1035	5.17	4	<5	<2	2	244	1.1	<2	3	109	2.70	.536	44	53	2.29	110	.13	3	2.14	.03	.10	1	11
L18N 8+50E	4	805	10	129	.2	69	36	1395	6.65	2	<5	<2	<2	182	.5	3	<2	151	1.35	.226	18	173	2.34	185	.23	6	1.75	.04	.37	1	24
L18N 9+00E	<1	163	6	111	1.0	56	27	1486	8.91	<2	<5	<2	<2	78	<.2	<2	<2	204	.77	.159	12	179	1.38	100	.25	7	1.65	.02	.10	<1	6
L18N 9+50E	2	225	5	114	.5	34	25	1481	5.75	<2	11	<2	<2	73	.2	<2	<2	159	.76	.166	13	92	1.24	68	.22	4	1.75	.02	.10	<1	7
L18N 10+00E	1	129	6	111	.3	39	21	1439	8.03	<2	<5	<2	<2	84	<.2	<2	<2	190	.65	.096	7	157	1.17	93	.30	5	1.66	.02	.14	<1	7
L18N 10+50E	2	544	10	152	.5	41	25	1133	7.34	<2	<5	<2	<2	105	.2	<2	<2	168	1.10	.213	20	105	1.66	68	.18	5	2.32	.03	.12	<1	35
L18N 11+00E	1	258	7	173	.3	44	26	1042	7.52	<2	<5	<2	<2	141	<.2	<2	<2	174	1.46	.235	16	104	1.96	144	.18	8	2.12	.03	.20	<1	12
L18N 12+00E	3	259	7	140	<.1	32	42	4815	7.71	2	<5	<2	<2	166	<.2	<2	<2	210	1.02	.140	18	123	.98	329	.20	7	1.64	.02	.31	<1	5
L18N 12+50E	<1	45	3	86	.2	39	24	1041	7.89	<2	<5	<2	<2	71	<.2	<2	<2	192	.75	.169	12	91	1.02	98	.26	9	1.22	.04	.22	<1	5
RE L18N 12+50E	<1	46	3	88	.2	40	25	1066	8.14	<2	<5	<2	<2	74	<.2	<2	<2	198	.79	.179	13	93	1.06	100	.27	7	1.23	.04	.22	<1	5
L18N 13+00E	<1	63	6	61	.3	14	11	538	6.97	<2	<5	<2	<2	67	<.2	<2	<2	204	.48	.084	8	47	.47	65	.19	5	.97	.03	.06	<1	13
L18N 13+50E	<1	101	3	97	.4	21	16	929	8.02	<2	<5	<2	<2	56	<.2	<2	<2	237	.40	.090	7	51	.88	56	.31	6	1.51	.03	.08	<1	9
L18N 14+00E	<1	86	6	58	.8	14	8	564	6.04	<2	5	<2	<2	59	<.2	<2	<2	186	.25	.069	8	45	.39	77	.16	5	1.18	.02	.06	<1	26
L18N 14+50E	<1	88	5	68	.9	21	11	639	7.44	<2	<5	<2	<2	52	<.2	<2	3	230	.30	.076	8	77	.72	70	.32	6	1.55	.02	.07	<1	4
L18N 15+00E	<1	63	6	59	.8	12	10	1862	7.09	<2	<5	<2	<2	49	<.2	<2	<2	243	.28	.113	8	44	.58	77	.33	6	1.93	.02	.07	<1	2
L18N 15+50E	<1	258	6	73	1.2	23	14	820	6.66	3	7	<2	<2	53	<.2	2	2	208	.33	.104	9	51	.91	77	.30	6	2.00	.02	.07	<1	4
L18N 16+00E	<1	61	2	111	.8	75	25	836	7.88	2	<5	<2	<2	106	<.2	<2	<2	167	.74	.189	13	260	1.97	125	.34	7	2.17	.02	.16	<1	2
L16N 7+50E	1	75	<2	128	.1	86	45	891	8.99	2	<5	<2	<2	149	<.2	<2	<2	196	1.76	.389	25	198	2.18	98	.24	7	1.78	.05	.26	<1	2
L16N 8+00E	1	42	4	94	<.1	38	24	832	7.90	<2	<5	<2	<2	89	.2	<2	<2	208	.88	.146	10	149	.98	119	.30	3	1.17	.03	.09	<1	13
L16N 8+50E	1	74	4	118	<.1	60	32	847	8.03	<2	<5	<2	<2	175	.3	<2	<2	169	1.34	.289	20	178	1.50	124	.19	3	1.48	.04	.30	<1	6
L16N 9+00E	1	122	9	86	<.1	36	19	781	7.41	<2	<5	<2	<2	75	<.2	<2	<2	192	.62	.132	11	121	1.13	55	.16	4	1.47	.02	.10	<1	19
L16N 9+50E	5	293	9	166	.1	34	32	3464	7.57	<2	<5	<2	<2	179	.7	<2	<2	189	1.16	.192	15	103	1.16	246	.12	<2	1.71	.03	.21	<1	9
L16N 10+00E	1	43	8	76	<.1	33	14	573	5.90	<2	<5	<2	<2	39	.4	<2	<2	192	1.52	.091	6	141	1.16	43	.25	2	1.31	.01	.06	<1	11
L16N 10+50E	3	325	5	148	.1	47	25	918	8.42	2	<5	<2	<2	81	.3	<2	<2	199	.99	.182	14	118	1.59	88	.23	4	1.93	.03	.10	<1	9
L16N 11+00E	2	176	14	100	.5	23	14	702	7.16	<2	<5	<2	<2	72	<.2	<2	<2	218	.78	.092	6	85	.74	61	.21	3	1.22	.02	.09	<1	17
L16N 11+50E	10	390	4	117	.1	40	27	1191	6.47	3	<5	<2	<2	173	<.2	<2	2	178	1.31	.219	20	123	1.36	120	.16	2	1.51	.03	.17	<1	10
L16N 12+00E	7	148	3	107	<.1	39	33	1976	6.27	2	<5	<2	<2	138	.2	<2	<2	184	1.13	.197	14	92	1.48	214	.17	4	1.63	.03	.28	<1	6
L16N 12+50E	2	518	3	109	.1	46	31	1073	6.77	2	<5	<2	<2	165	.4	<2	<2	197	1.30	.176	17	120	1.73	313	.22	4	1.77	.03	.37	2	6
L16N 13+00E	5	227	7	115	.1	32	25	1154	5.97	4	<5	<2	<2	184	.4	<2	<2	293	1.40	.139	16	112	1.31	270	.14	2	1.61	.02	.19	<1	4
L16N 13+50E	<1	734	<2	111	.4	76	38	957	7.64	3	<5	<2	<2	252	.4	<2	<2	198	1.97	.392	30	174	2.24	353	.22	3	2.25	.03	.61	<1	21
L16N 14+00E	<1	67	5	50	.4	10	9	776	4.48	<2	<5	<2	<2	69	<.2	<2	<2	166	.30	.058	6	41	.32	90	.19	<2	.74	.03	.09	<1	25
L16N 14+50E	1	140	4	116	.3	38	26	1229	7.17	3	<5	<2	<2	115	<.2	<2	<2	195	.91	.160	13	135	1.25	329	.17	4	1.50	.03	.18	<1	5
L16N 15+00E	1	220	6	116	.5	40	26	1387	5.71	4	<5	<2	<2	132	.2	<2	2	159	1.05	.167	19	105	1.40	386	.12	3	1.79	.03	.15	1	9
STANDARD C/AU-S	19	63	38	131	7.4	72	31	1056	3.97	42	20	7	37	52	18.7	14	20	60	.50	.087	40	60	.90	187	.09	34	1.88	.08	.16	11	49

Sample type: SOIL. Samples beginning 'RE' are duplicate samples.

ACME ANALYTICAL

EXTENSION GRID SOIL SPLIT

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L16N 15+50E	1	126	15	83	.3	34	33	2674	6.63	3	<5	<2	<2	117	<.2	3	<2	177	.66	.207	13	106	1.14	195	.17	4	1.73	.02	.21	<1	13
L16N 16+00E	<1	31	2	104	.2	50	24	1525	6.00	<2	<5	<2	<2	78	<.2	<2	<2	136	.95	.182	10	159	1.65	155	.28	3	1.76	.01	.21	<1	3
L14N 6+50E	<1	27	4	107	<.1	50	30	1662	7.46	<2	<5	<2	<2	83	<.2	<2	<2	167	.75	.188	11	147	1.30	80	.28	2	1.33	.02	.08	<1	3
L14N 7+00E	<1	139	2	116	.1	56	41	953	8.84	3	<5	<2	<2	249	<.2	3	<2	209	2.08	.482	28	117	2.00	156	.23	2	1.76	.03	.56	<1	7
L14N 7+50E	<1	70	3	104	.2	43	32	1360	9.36	<2	<5	<2	<2	105	<.2	<2	<2	230	1.04	.239	14	126	1.25	83	.16	<2	1.30	.02	.06	<1	5
L14N 8+00E	<1	57	6	74	.1	27	19	998	8.00	<2	<5	<2	<2	43	<.2	<2	<2	210	.55	.071	5	102	.81	69	.16	<2	1.05	.02	.05	<1	17
L14N 8+50E	4	354	4	122	.2	37	42	1225	9.18	<2	<5	<2	<2	239	<.2	<2	<2	292	1.92	.491	36	110	1.21	90	.08	<2	1.81	.02	.32	<1	11
L14N 9+00E	1	91	5	79	.1	29	19	589	6.31	<2	<5	<2	<2	96	<.2	<2	<2	168	.88	.153	12	98	.95	94	.18	3	1.13	.02	.10	<1	9
L14N 9+50E	1	136	4	116	.1	34	22	968	5.83	<2	<5	<2	<2	127	.2	<2	<2	134	.91	.117	10	84	1.75	133	.23	<2	1.74	.02	.35	<1	7
L14N 10+00E	<1	102	7	87	.2	36	19	498	5.85	<2	<5	<2	<2	162	<.2	<2	<2	158	.76	.177	12	107	1.16	101	.18	2	1.25	.02	.09	<1	8
L14N 10+50E	2	419	7	151	.1	44	25	868	6.62	<2	<5	<2	2	201	.6	<2	<2	157	1.50	.199	17	115	1.66	186	.20	<2	1.62	.02	.42	<1	35
L14N 11+00E	1	120	6	78	.2	26	15	524	7.12	<2	<5	<2	<2	60	<.2	<2	<2	200	.60	.109	7	99	.80	54	.23	<2	1.18	.01	.06	<1	12
L14N 11+50E	1	278	7	101	.3	19	15	652	6.82	5	<5	<2	<2	91	<.2	<2	2	192	1.17	.342	17	63	.85	38	.10	2	1.28	.01	.06	1	20
L14N 12+00E	4	308	9	85	.4	24	12	444	4.27	<2	<5	<2	<2	114	.2	<2	2	131	.82	.105	12	66	.90	110	.16	<2	1.34	.02	.09	<1	19
L14N 12+50E	1	140	9	114	.3	32	25	1963	6.73	<2	<5	<2	<2	127	.2	<2	<2	180	1.06	.178	13	103	1.11	375	.14	<2	1.38	.02	.15	<1	14
L14N 13+00E	1	160	5	117	.2	38	21	720	6.94	2	<5	<2	<2	130	<.2	<2	<2	190	1.31	.213	18	112	1.40	243	.17	<2	1.43	.02	.27	<1	12
L14N 13+50E	1	153	8	113	.7	39	38	2549	7.41	3	<5	<2	<2	117	.3	4	<2	210	.93	.125	14	117	1.34	406	.18	2	1.79	.02	.21	1	5
L14N 14+00E	<1	23	2	91	.1	66	24	973	5.87	<2	<5	<2	<2	105	.3	<2	<2	139	.80	.144	9	255	1.77	115	.34	<2	1.65	.02	.18	<1	6
L14N 14+50E	1	49	7	74	.4	31	15	1273	5.71	<2	<5	<2	<2	48	<.2	<2	<2	155	.36	.077	7	146	.79	86	.25	<2	1.26	.02	.10	<1	7
RE L14N 14+50E	1	47	8	72	.3	29	14	1223	5.38	<2	<5	<2	<2	47	<.2	<2	3	147	.35	.074	7	136	.74	83	.24	<2	1.23	.02	.10	<1	4
L14N 15+00E	1	58	4	95	<.1	45	19	783	7.46	<2	<5	<2	<2	84	.2	<2	<2	166	.63	.099	8	233	1.03	198	.25	<2	1.27	.02	.11	<1	5
L14N 15+50E	<1	42	5	68	.1	27	12	834	6.24	2	<5	<2	<2	39	<.2	2	<2	162	.37	.101	6	156	.62	87	.22	<2	1.04	.02	.07	<1	5
L14N 16+00E	<1	64	5	89	<.1	31	16	741	6.56	<2	<5	<2	2	60	<.2	<2	<2	182	.51	.123	9	109	.95	61	.24	<2	1.22	.02	.09	<1	13
STANDARD C/AU-S	18	62	39	131	7.0	71	32	1039	3.96	42	17	7	37	53	18.5	14	21	58	.49	.087	39	59	.94	186	.09	35	1.88	.08	.16	11	51

Sample type: SOIL. Samples beginning 'RE' are duplicate samples.

COMP: KENNECOTT CANADA
PROJ: LORRAIN 05-405
ATTN: SANDRA BISHOP / SCOTT MUELLER

SOIL

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 3V-0362-SJ1+2
DATE: 93/07/29
* SOIL * (ACT:F31)

JENO RIDGE AREA

CLIFF LAKE

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB
501	.1	4.00	1	91	158	1.4	4	1.21	.1	17	51	5.06	.08	31	1.05	831	4	.04	9	2900	13	9	154	84	1295	232.5	67	9	1	9	46	1
502	.1	4.39	1	95	151	1.8	9	1.24	.1	19	51	5.52	.09	26	1.02	942	6	.03	12	2870	18	10	154	85	1638	235.2	91	11	1	10	48	4
503	.1	3.30	1	101	147	1.0	9	.98	.1	20	48	5.69	.11	35	1.06	1791	3	.03	5	2920	14	2	145	38	2242	215.6	89	10	1	8	38	5
504	.1	3.03	1	93	130	.8	9	1.38	.1	26	130	7.20	.25	36	1.28	1191	1	.04	3	4730	14	1	218	61	2049	301.3	74	8	1	9	52	9
505	.1	2.14	1	65	82	.4	5	.98	.1	18	43	5.41	.16	36	1.04	1651	2	.05	6	2570	10	1	134	3	1400	218.4	81	5	1	5	32	6
506	.1	2.54	1	66	164	.5	6	1.28	.1	19	103	5.71	.29	111	1.18	770	1	.04	5	3620	1	1	208	11	1600	233.9	54	3	1	7	46	13
507	.1	1.15	1	56	58	.1	5	.69	.1	13	40	4.02	.10	24	.56	484	1	.02	1	1930	1	1	108	1	1599	156.6	43	1	1	3	20	12
508	.1	1.07	1	50	29	.1	1	.67	.1	12	43	4.14	.10	16	.46	420	1	.01	1	2570	1	1	125	1	1108	172.7	35	1	1	3	26	2
509	.1	.82	1	52	68	.1	4	.69	.1	13	32	3.60	.12	13	.48	633	1	.01	5	1560	1	1	96	1	1457	145.4	35	1	1	2	24	3
510	.1	1.69	1	55	68	.1	1	.80	.1	13	90	4.51	.10	17	.51	997	1	.01	4	4040	1	1	158	1	566	181.5	56	1	1	4	34	19
511	.1	1.52	1	70	175	.1	7	1.18	.1	31	110	8.40	.22	14	.67	4373	1	.01	1	3330	1	1	148	1	1525	315.1	95	11	1	6	48	6
512	.1	1.75	1	68	78	.1	11	.99	.1	27	171	8.64	.13	24	.93	964	1	.01	1	4450	2	1	181	65	2339	319.1	107	7	1	9	60	11
513	.1	1.53	384	60	87	.5	1	1.00	.1	18	300	4.58	.38	9	.76	535	17	.01	1	3550	2	1	143	1	419	202.4	45	1	1	3	21	29
514	.1	1.44	1	62	168	.1	9	1.65	.1	28	132	7.73	.43	17	1.10	1648	3	.01	1	3610	4	1	188	44	2171	331.3	110	8	1	7	48	10
515	.1	2.39	9	69	83	.1	18	.98	.1	32	71	9.67	.37	24	1.67	874	15	.02	27	4800	11	1	205	119	3128	329.3	106	13	1	15	179	5
516	.1	1.52	1	73	131	.1	6	1.14	.1	22	73	6.85	.20	15	.76	1462	3	.01	1	2360	1	1	166	25	1575	274.6	74	4	1	9	76	6
517	.1	2.41	1	81	98	.1	14	.72	.1	26	105	7.61	.13	18	1.68	928	1	.02	24	2870	3	1	157	74	2895	247.0	88	10	1	13	127	5
518	.1	1.40	1	81	131	.1	11	1.08	.1	27	66	9.09	.24	9	1.07	845	1	.02	11	2430	1	1	161	53	2433	313.4	72	7	1	12	141	4
519	.1	1.95	1	76	75	.1	13	.67	.1	23	70	8.30	.10	9	1.00	693	1	.02	2	2140	1	1	142	57	2996	313.6	80	8	1	11	113	6
520	.1	1.91	1	87	70	.1	13	.90	.1	26	76	8.39	.09	11	1.35	655	1	.01	18	2850	1	1	164	76	2458	279.2	78	9	1	13	142	13
522	.1	1.53	1	69	145	.1	13	.95	.1	19	183	6.05	.33	24	1.42	1760	5	.03	1	1640	16	1	144	25	2847	247.5	420	8	1	7	74	11
523	.1	2.36	1	77	299	.2	16	.75	.1	33	572	8.99	.22	51	1.07	8334	30	.01	4	1820	17	1	156	1	2872	376.2	326	25	1	10	76	21
524	.1	1.62	1	84	285	.1	11	1.11	.1	24	466	7.50	.10	31	.86	4137	12	.02	24	1570	1	1	188	1	2034	289.8	155	11	1	11	149	5
525	.1	.92	1	76	160	.1	16	.79	.1	30	125	9.22	.05	8	.26	2613	6	.01	8	690	1	1	145	12	2873	309.6	75	7	1	16	260	13
526	.1	1.33	1	66	138	.1	18	.89	.1	28	130	7.67	.06	29	.82	1263	6	.01	10	920	10	6	147	182	1914	300.3	133	21	1	14	150	12
527	.1	1.81	1	58	154	.1	27	1.08	.1	32	22	6.04	.23	28	1.93	1897	2	.02	61	1920	15	5	167	165	3180	165.9	91	24	1	16	192	5
528	.1	1.37	1	83	47	.1	26	.96	.1	28	60	9.01	.06	10	.79	559	1	.02	13	2000	4	5	168	219	2804	327.5	63	22	1	17	191	18
529	.3	1.29	1	52	58	.1	21	.49	.1	12	57	4.13	.05	5	.31	233	1	.01	1	800	7	4	105	113	2140	183.1	32	13	1	8	63	17
530	.1	1.81	1	64	116	.1	22	.77	.1	22	142	6.44	.09	15	.83	885	2	.02	9	1590	5	6	145	174	2528	231.6	86	19	1	11	81	24
531	.2	1.93	1	68	78	.1	18	.92	.1	24	162	8.38	.07	12	.83	449	3	.02	5	4460	7	8	269	199	1890	300.3	64	20	1	13	108	21
532	.1	1.58	1	62	98	.1	19	.62	.1	21	102	7.36	.08	8	.54	1650	1	.01	1	1700	6	5	180	160	2012	292.9	63	20	1	10	67	47
533	.1	2.16	1	68	101	.1	20	.76	.1	22	191	7.14	.07	13	.89	611	1	.02	2	3650	7	8	274	194	2050	272.3	86	20	1	11	70	16
534	.1	1.89	1	60	107	.1	20	.54	.1	18	138	6.12	.08	10	.59	648	2	.01	1	2410	2	8	197	162	2102	240.5	65	20	1	10	66	20
535	.1	2.12	1	63	65	.1	17	.98	.1	24	169	7.01	.09	21	1.13	580	3	.02	12	5260	10	10	221	189	1710	230.4	78	20	1	12	96	15
536	.1	1.54	1	71	132	.1	27	1.05	.1	34	81	9.29	.16	15	1.12	914	1	.02	17	3730	1	6	190	209	2995	331.1	110	26	1	15	135	3
537	.1	1.11	1	67	55	.1	22	.49	.1	20	60	7.39	.05	6	.31	997	1	.02	1	1330	1	3	128	145	2518	304.0	46	17	1	11	83	44
538	.1	.64	1	52	63	.1	20	.30	.1	17	32	6.63	.04	2	.12	1033	1	.01	1	800	1	2	102	125	2241	281.1	32	14	1	10	81	11
539	.1	1.60	1	62	43	.1	14	.41	.1	21	93	7.18	.04	8	.63	472	1	.01	7	1360	1	6	117	167	1356	265.3	54	18	1	12	100	12
540	.1	1.58	1	83	172	.1	31	2.19	.1	65	50	>15.00	.64	11	1.75	1254	1	.02	62	>10000	1	5	373	330	3878	623.7	126	38	1	29	356	1
541	.1	2.14	1	71	548	.1	14	1.32	.1	30	280	7.45	.15	25	1.11	5059	6	.01	17	3230	18	6	171	165	1133	363.5	128	31	1	15	158	4
542	.1	1.93	1	70	232	.1	19	1.40	.1	35	142	7.36	.20	23	1.69	2165	2	.02	30	3080	16	8	183	211	1994	303.3	101	28	1	19	218	3
543	.5	1.67	1	60	201	.1	21	.99	.1	22	127	4.35	.20	20	1.51	775	4	.02	26	1700	8	6	118	154	2352	164.3	101	19	1	11	86	6
544	.1	1.32	1	66	147	.1	29	1.01	.1	28	56	7.19	.11	10	1.22	719	1	.02	20	1240	6	4	133	170	3420	241.5	80	22	1	14	148	9
545	.1	1.42	1	65	64	.1	23	.95	.1	23	112	6.09	.10	10	1.01	723	2	.02	22	1650	10	5	117	149	2782	224.4	89	20	1	12	128	20
546	.1	1.15	1	59	85	.1	23	.94	.1	23	75	6.47	.09	7	.81	917	1	.02	12	1950	8	3	121	165	2628	240.0	79	19	1	12	122	20
547	.1	1.06	1	65	77	.1	22	.84	.1	25	129	6.88	.07	7	.50	963	1	.01	1	1040	14	3	103	152	2433	260.1	56	16	1	13	113	29
548	.3	1.39	1	67	160	.4	17	1.61	.1	25	839	6.50	.21	17	1.05	1004	2	.02	14	4680	4	7	217	191	1578	253.2	106	20	1	11	109	30
549	.1	.99	1	62	148	.1	12	1.33	.1	23	293	6.42	.19	12	.85	687	2	.02	18	3640	9	4	197	175	1314	237.6	78	17	1	12	132	14
550	.4	.83	1	62	88	.1	20	.88	.1	17	78	4.87	.06	8	.58	359	3	.01	8	1840	3	3	111	142	2299	285.0	56	16	1	11	90	20
480	.1	.72	1	64	47	.1	20	.95	.1	27	59	9.44	.06	4	.43	568	1	.01	3	1770	1	3	127	202	2411	378.4	50	19	1	15	174	19
481	.3	1.51	1	54	154	.1	16	1.30	.1	22	431	5.05	.15	24	1.17	733	5	.02	18	3720	10	6	181	161	1612	200.0	102	19	1	11	98	21

SOILS NW ANOMALY

COMP: KENNECOTT CANADA
PROJ: 05-444
ATTN: SANDRA BISHOP / SCOTT MUELLER

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 3V-0401-SJ1+2
DATE: 93/08/05
* SOIL * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB
12226	.1	1.35	1	319	164	.4	13	.82	.1	27	823	8.00	.08	12	.72	4736	2	.02	1	2820	78	3	60	105	643	261.9	123	29	1	7	17	709
12227	.1	1.46	1	265	130	.4	9	1.14	.1	17	412	4.74	.07	14	.71	3928	4	.02	1	2920	47	6	76	79	326	147.8	137	24	1	5	16	83
12228	.1	1.77	1	231	145	.8	9	.92	.1	21	368	5.67	.09	14	.79	4446	5	.02	1	3400	44	8	78	81	256	186.1	128	28	1	7	17	166
12229	.1	1.60	1	269	90	.7	10	1.14	.1	19	318	5.15	.10	17	1.27	3079	4	.03	1	3070	29	6	81	101	750	172.5	141	28	1	6	15	18
12230	.1	1.61	1	232	91	.6	11	.82	.1	20	439	5.89	.07	18	1.05	2906	4	.03	1	2880	49	6	71	99	808	200.9	112	27	1	7	15	81
12231	.1	1.67	1	195	128	.8	13	.96	.1	19	1237	4.87	.07	14	1.19	2732	4	.03	1	3090	54	12	100	101	441	155.3	118	26	1	6	14	25
12232	.1	1.65	1	192	87	.3	10	.81	.1	16	526	5.01	.06	11	.87	942	3	.02	1	3080	21	8	80	100	505	175.4	84	19	1	6	23	27
12233	.1	1.65	1	254	94	1.3	6	.61	.1	14	530	4.11	.08	22	.83	1507	3	.02	1	2330	25	8	54	77	195	143.5	99	18	1	5	12	8
12234	.1	1.15	1	198	92	.2	7	.69	.1	11	99	4.41	.04	7	.32	1417	14	.01	1	440	21	5	36	62	633	201.8	102	17	1	5	13	1
12235	.1	1.30	1	226	110	.1	10	.52	.1	15	141	4.34	.07	18	.99	2103	5	.03	1	1260	24	5	29	83	950	165.4	86	25	1	6	22	4
12236	.1	1.84	1	198	70	.7	12	.63	.1	21	156	5.77	.21	33	1.47	1724	3	.02	1	2960	56	8	38	118	1226	244.3	93	27	1	9	22	12
12237	.1	1.92	1	153	102	.4	8	.33	.1	16	438	3.08	.07	7	.64	1237	7	.01	1	1620	28	10	35	62	477	80.4	53	17	1	5	13	9
12238	.1	1.28	1	186	75	.1	9	.35	.1	13	62	3.95	.10	11	.96	754	4	.01	1	1600	17	5	29	75	783	154.3	64	20	1	6	13	3
12239	.1	.89	1	151	49	.1	6	.23	.1	10	75	3.56	.07	4	.45	620	2	.01	1	760	7	2	23	55	691	136.6	37	13	1	4	15	38
12240	.1	1.85	1	148	83	.2	11	.50	.1	21	327	4.46	.13	14	.98	1241	8	.01	2	2040	24	8	36	88	920	124.7	62	20	1	6	20	15
12241	.1	1.26	1	144	87	.1	8	.50	.1	16	178	4.88	.12	13	.77	555	10	.01	1	1730	14	4	37	79	923	159.7	61	16	1	6	20	11
12242	.1	1.33	1	134	92	.1	8	.49	.1	14	225	4.02	.09	11	.74	614	7	.01	1	1570	23	5	48	67	770	130.5	64	16	1	5	21	13
12243	.1	1.85	1	126	103	.1	13	.44	.1	22	257	6.12	.18	9	.99	1379	23	.01	1	1570	16	7	38	99	1040	162.9	69	23	1	8	16	10
12244	.1	.91	1	114	103	.1	9	.32	.1	12	90	4.03	.10	2	.30	1644	4	.01	1	850	14	2	29	44	775	134.8	40	13	1	4	22	9
12245	.1	2.35	1	105	114	.1	15	.50	.1	27	809	5.45	.37	15	1.39	1355	13	.01	1	1950	30	10	42	108	1585	150.7	75	25	1	8	17	14
12246	.1	1.49	1	106	78	.1	10	.53	.1	23	537	5.65	.13	9	.88	993	8	.01	1	2450	31	7	36	96	715	212.5	65	21	1	7	19	24
12247	.1	1.60	1	97	153	.1	10	.35	.1	22	988	4.47	.09	9	.75	1480	10	.01	1	1800	25	8	30	81	548	147.4	72	20	1	6	17	35
12248	.1	2.55	1	102	114	.1	15	.49	.1	25	838	5.38	.32	16	1.41	1431	10	.01	1	2040	30	11	37	109	1344	150.1	79	25	1	8	17	10
12249	.1	2.25	1	124	99	.1	12	.40	.1	21	436	5.03	.23	13	1.16	1253	11	.01	1	1800	26	10	36	102	1233	125.6	65	22	1	7	17	5
12250	.1	2.62	1	55	125	.1	15	.62	.1	25	509	7.59	.32	16	1.57	1402	6	.01	1	2110	14	7	49	115	2027	203.9	65	26	1	8	18	36
12251	.1	1.67	1	47	76	.1	11	.41	.1	15	451	5.12	.11	10	.78	606	11	.01	1	970	10	5	33	63	1229	166.5	52	17	1	5	12	22
12252	.1	1.81	1	63	146	.1	12	.55	.1	21	112	5.48	.09	8	.77	2743	7	.01	1	1290	16	4	35	69	1412	179.4	54	22	1	6	13	7
12253	.1	2.99	1	129	161	.1	19	.78	.1	28	237	5.89	.25	19	1.77	2726	9	.02	1	2070	40	11	61	131	2399	172.5	62	29	1	9	17	103
12254	.1	3.73	1	55	134	.2	15	1.06	.1	18	103	4.67	.19	22	2.06	1233	6	.01	1	1590	39	16	69	138	1833	140.7	45	27	1	8	13	18
12255	.1	2.26	1	56	85	.1	12	.60	.1	20	101	5.94	.13	8	.82	668	3	.01	1	1660	10	5	50	77	1748	176.7	53	17	1	6	17	10
12256	.1	1.58	1	58	103	.1	8	.46	.1	16	84	5.56	.08	6	.47	1163	6	.01	1	1070	10	3	30	63	1114	195.5	50	16	1	5	17	6
12257	.1	1.38	1	75	93	.1	11	.77	.1	17	402	6.32	.12	7	.56	1927	2	.02	1	1850	41	1	51	70	1175	226.9	92	16	1	5	15	25
12258	.1	1.49	1	56	77	.2	7	.61	.1	13	474	4.53	.08	8	.46	1870	2	.03	1	2200	44	4	53	53	596	167.9	65	15	1	4	13	31
12259	.1	1.36	1	38	64	.1	8	.77	.1	12	245	5.15	.08	8	.45	1570	2	.03	1	1070	24	3	48	64	913	186.9	81	15	1	5	9	14
12260	.1	1.08	1	31	296	1.0	9	.55	.1	10	449	4.02	.07	7	.30	2995	17	.01	1	950	42	1	49	55	372	134.3	103	14	1	3	9	69
12261	.1	2.34	1	50	83	.1	14	1.05	.1	20	952	6.44	.15	14	.98	1555	4	.07	1	3750	19	8	124	82	1412	239.9	85	21	1	7	25	32
12262	.1	1.78	1	67	97	.1	12	1.06	.1	21	567	7.82	.10	11	.95	1550	2	.04	1	2870	25	3	108	92	1358	291.8	90	21	1	8	24	20
12263	.1	2.01	1	52	85	.1	12	.84	.1	16	604	5.65	.11	11	.86	1444	4	.04	1	2170	17	6	68	75	1072	196.4	108	20	1	6	16	26
12264	.1	2.12	1	52	176	.7	8	.48	.1	11	652	4.49	.17	10	.42	1707	5	.01	1	1040	33	8	54	54	457	175.7	87	15	1	5	7	19
12265	.1	2.26	1	64	136	1.1	13	1.04	.1	18	723	5.96	.09	19	.86	2445	5	.03	1	2160	31	9	93	85	1271	218.5	108	22	1	7	17	82
12266	.1	1.73	1	59	65	.1	12	.74	.1	15	394	6.66	.09	8	.43	694	3	.02	1	730	10	4	84	66	1503	272.0	91	15	1	6	11	75

NORTH CENTRAL STEELE #1 AND #3
CONTOUR SOIL SAMPLING.

BOOT / STEELE 1993 ROCK SAMPLES

COMP: KENNECOTT CANADA
PROJ: LORRAIN 05-405
ATTN: SANDRA BISHOP / SCOTT MUELLER

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 3V-0362-RJ1+2
DATE: 93/07/29
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB
02439	.1	.14	1	34	22	.1	2	.02	.1	1	9	.49	.08	1	.01	135	1	.04	1	80	1	1	10	23	32	15.1	2	4	1	2	39	3
02440	1.3	1.60	1	80	249	.2	27	1.68	.1	25	2092	6.09	.37	21	1.16	890	2	.37	4	4250	11	7	233	156	2513	270.6	56	19	1	14	139	144
0467	15.2	.41	1	68	108	.1	40	.99	.1	23	>10000	7.00	.25	2	.25	906	1	.04	1	3950	29	11	140	181	1494	456.5	108	15	1	11	60	523

MIN • EN LABORATORIES
(DIVISION OF ASSAYERS CORP.)
SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
FAX (604) 980-9621

SMITHERS LAB.:
3176 TATLOW ROAD
SMITHERS, B.C. CANADA V0J 2N0
TELEPHONE (604) 847-3004
FAX (604) 847-3005

Assay Certificate

3V-0363-RA5

Company: **KENNECOTT CANADA INC.**
Project: LORRAINE 05-405
Attn: SANDRA BISHOP / SCOTT MUELLER

Date: JUL-29-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C.

We hereby certify the following Assay of 4 ROCK samples submitted JUL-21-93 by SANDRA BISHOP.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton
0467	.57	.017

MINERAL • ENVIRONMENTS LABORATORIES
(DIVISION OF ASSAYERS CORP.)
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3176 TATLOW ROAD
SMITHERS, B.C. CANADA V0J 2N0
TELEPHONE (604) 847-3004
FAX (604) 847-3005

Assay Certificate

3V-0363-PA5

Company: **KENNECOTT CANADA INC.**
Project: LORRAINE 05-405
Attn: SANDRA BISHOP / SCOTT MUELLER

Date: JUL-29-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C.

We hereby certify the following Assay of 19 PULP samples submitted JUL-21-93 by SANDRA BISHOP.

Sample Number	CU %
0467	1.182

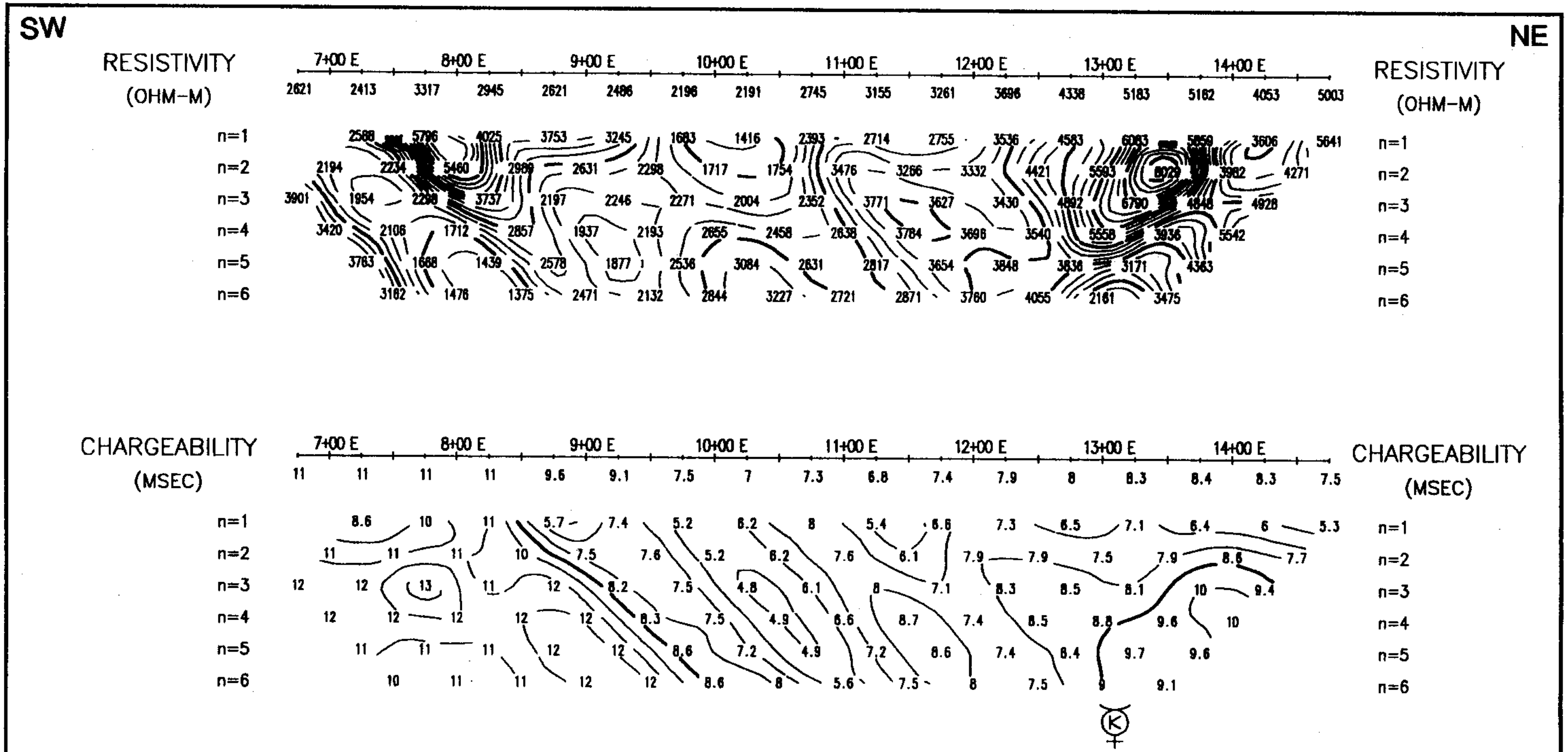
Certified by ____________

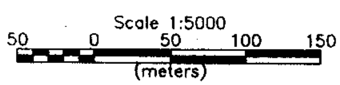
MIN-EN LABORATORIES

APPENDIX III

IP Survey Specifications, Pseudosections and Plan Maps

Induced Polarization (IP), resistivity and magnetic surveys were carried out on the Boot/Steele property by CME Consulting Ltd. between July 7th and 15th, 1993. The IP/resistivity measurements were made using an solid state BRGM IP-6 receiver. The signal used to make the measurements was provided by a Huntec 2.5kw generator/transmitter. IP effects were recorded as chargeability in milliseconds while apparent resistivity values were normalized in units of ohm-metres. The IP/resistivity survey was carried out using a pole-dipole array with an interelectrode ("a") spacing of 50 metres and six dipole separations ("n"). The total field magnetic survey employed a high resolution GEM MSM-19F continuous reading unit coupled with a base station.





Kennecott Canada Inc.
Vancouver

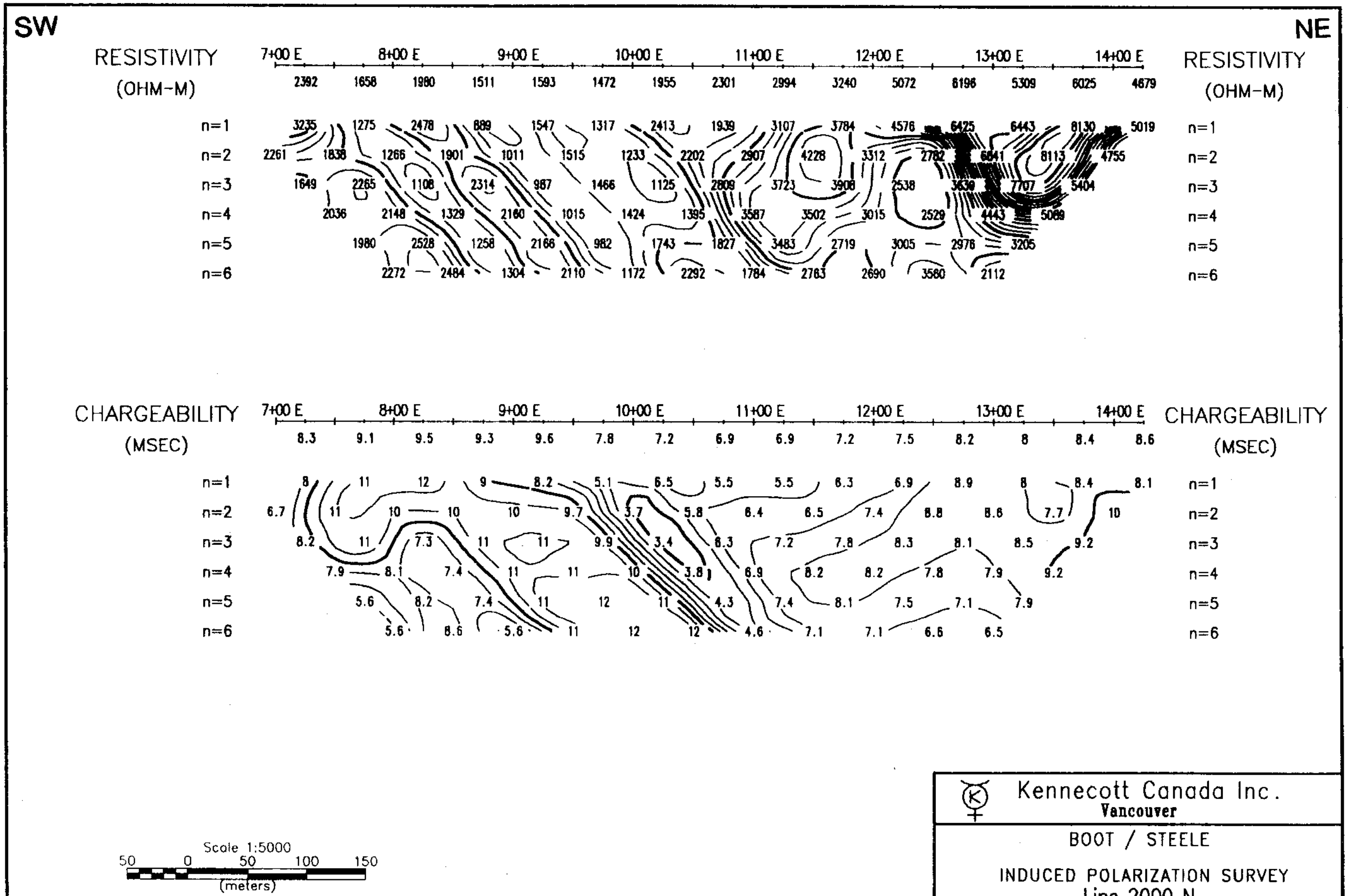
BOOT / STEELE

INDUCED POLARIZATION SURVEY
Line 2100 N
Looking Northwest

BRITISH COLUMBIA, CANADA

Contour Interval: Resistivity - 250 ohm-m   Chargeability - 1 Msec

Date: July 1993



Kennecott Canada Inc.
Vancouver

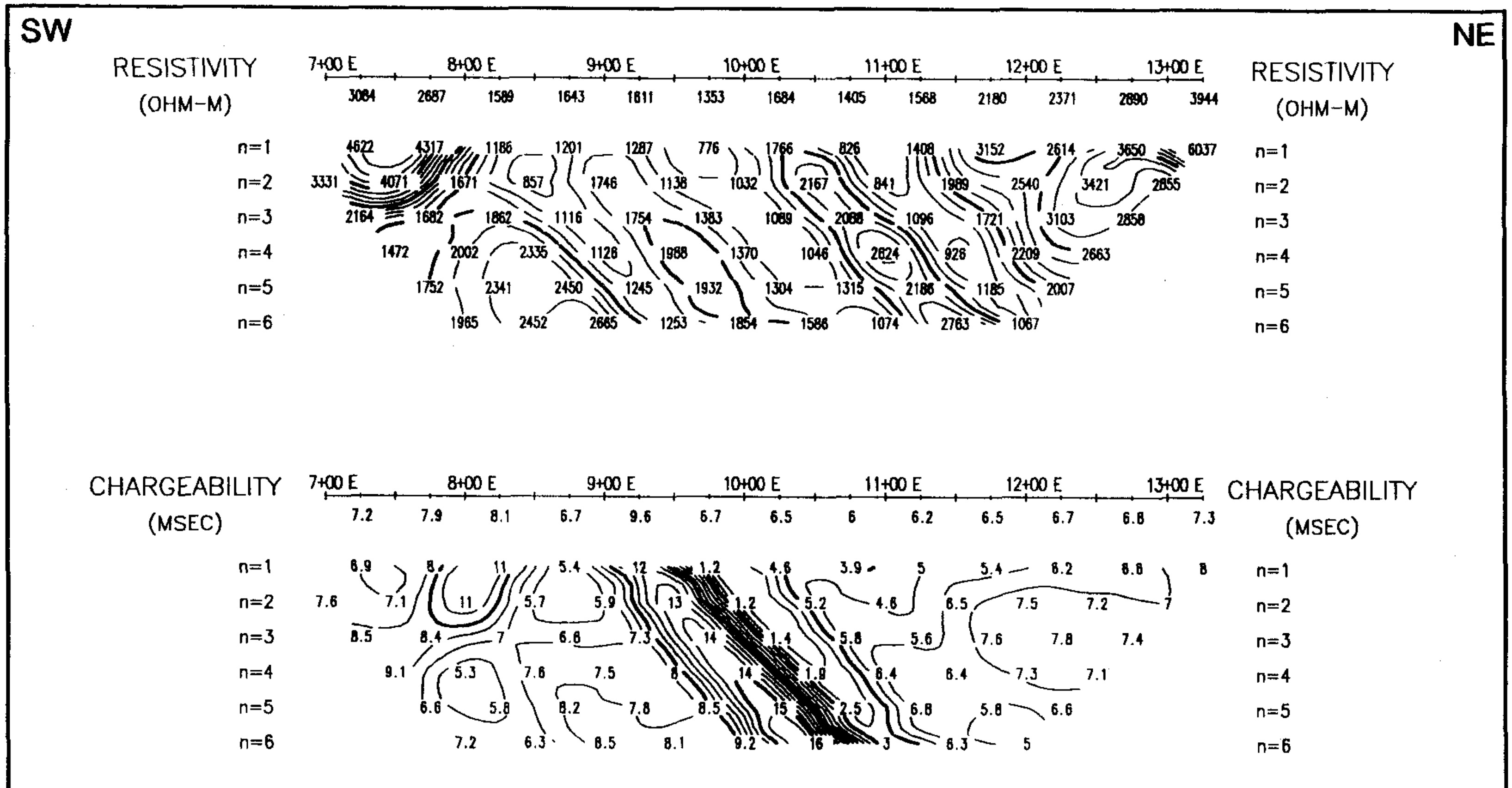
BOOT / STEELE

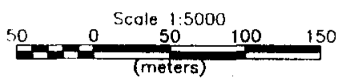
INDUCED POLARIZATION SURVEY
Line 2000 N
Looking Northwest

BRITISH COLUMBIA, CANADA

Contour Interval: Resistivity - 250 ohm-m   Chargeability - 1 Msec

Date: July 1993





Kennecott Canada Inc.
Vancouver

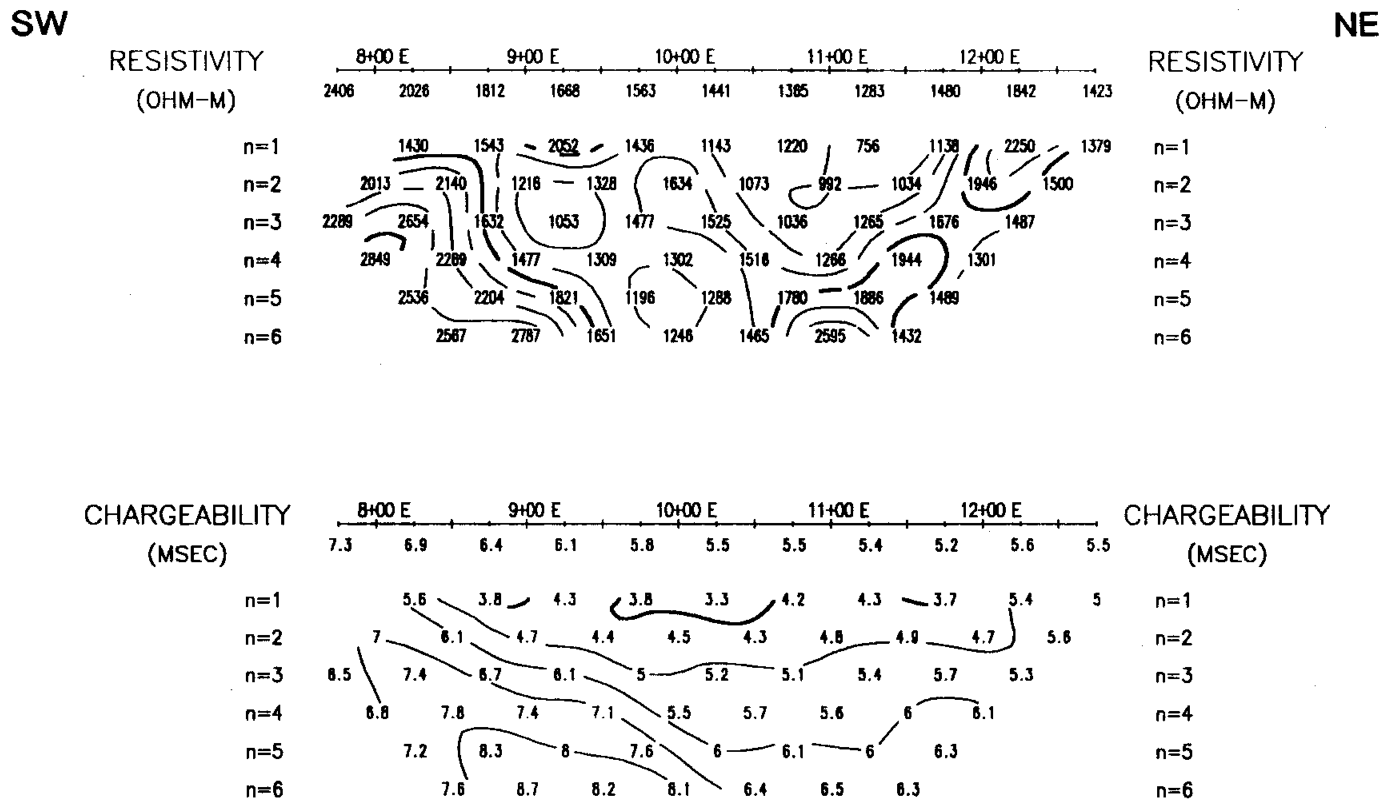
BOOT / STEELE

INDUCED POLARIZATION SURVEY
Line 1900 N
Looking Northwest

BRITISH COLUMBIA, CANADA

Contour Interval: Resistivity - 250 ohm-m   Chargeabiity - 1 Msec

Date: July 1993



Scale 1:5000
50 0 50 100 150
(meters)

Kennecott Canada Inc.
Vancouver

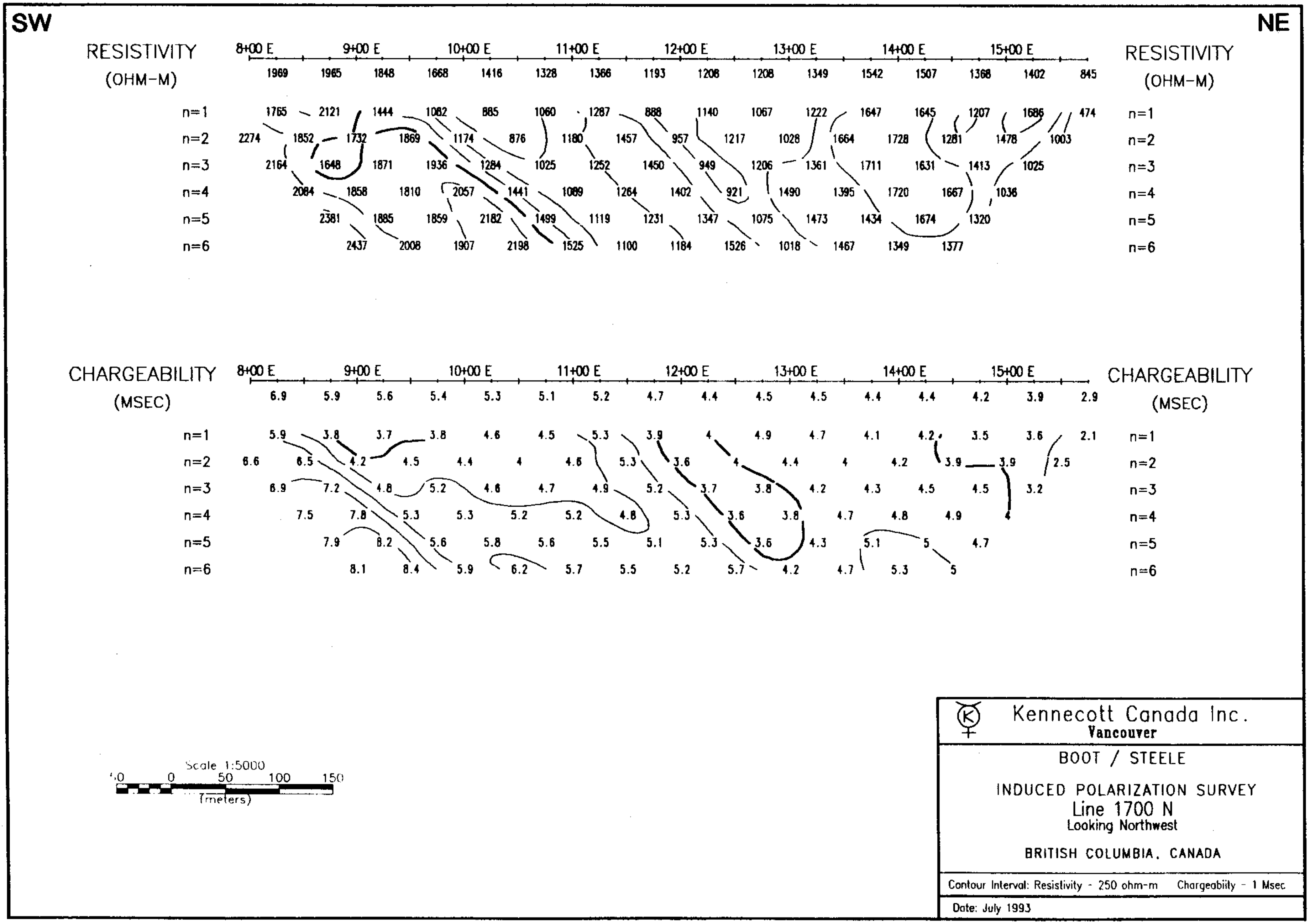
BOOT / STEELE

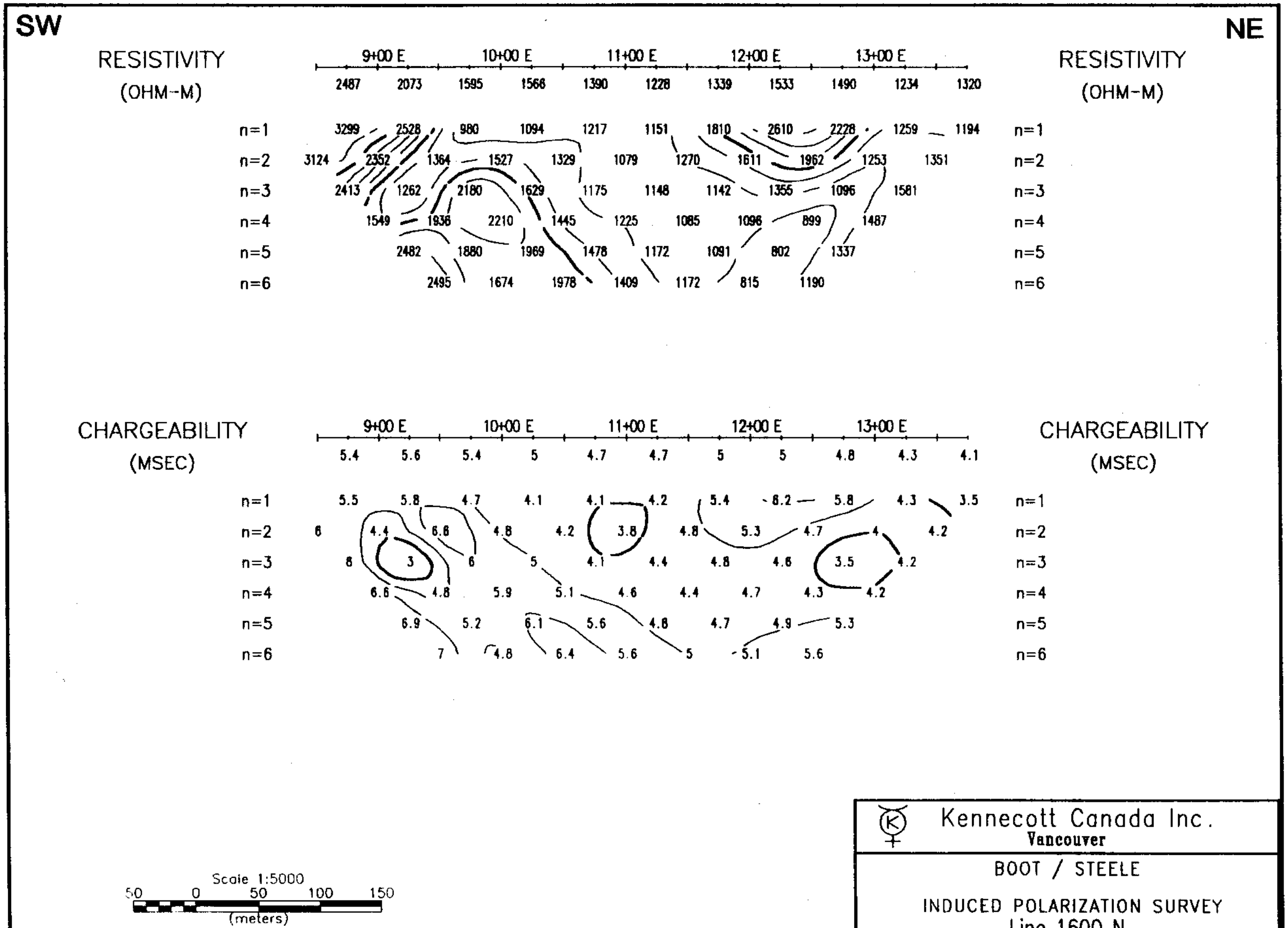
INDUCED POLARIZATION SURVEY
Line 1800 N
Looking Northwest

BRITISH COLUMBIA, CANADA

Contour Interval: Resistivity 250 ohm-m Chargeability - 1 Msec

Date: July 1993


SW
NE
RESISTIVITY
(OHM-M)
8+00 E 9+00 E 10+00 E 11+00 E 12+00 E 13+00 E 14+00 E 15+00 E
1969 1965 1848 1668 1416 1328 1366 1193 1208 1208 1349 1542 1507 1368 1402 845
n=1 1765 2121 1444 1082 885 1060 1287 888 1140 1067 1222 1647 1645 1207 1686 474
n=2 2274 1852 1732 1869 1174 876 1180 1457 957 1217 1028 1664 1728 1281 1478 1003
n=3 2164 1648 1871 1936 1284 1025 1252 1450 949 1206 1361 1711 1631 1413 1025
n=4 2084 1858 1810 2057 1441 1089 1264 1402 921 1490 1395 1720 1667 1036
n=5 2381 1885 1859 2182 1499 1119 1231 1347 1075 1473 1434 1674 1320
n=6 2437 2008 1907 2198 1525 1100 1184 1526 1018 1467 1349 1377
CHARGEABILITY
(MSEC)
8+00 E 9+00 E 10+00 E 11+00 E 12+00 E 13+00 E 14+00 E 15+00 E
6.9 5.9 5.6 5.4 5.3 5.1 5.2 4.7 4.4 4.5 4.5 4.4 4.4 4.2 3.9 2.9
n=1 5.9 3.8 3.7 3.8 4.6 4.5 5.3 3.9 4 4.9 4.7 4.1 4.2 3.5 3.6 2.1
n=2 6.6 6.5 4.2 4.5 4.4 4 4.6 5.3 3.6 4 4.4 4 4.2 3.9 3.9 2.5
n=3 6.9 7.2 4.8 5.2 4.6 4.7 4.9 5.2 3.7 3.8 4.2 4.3 4.5 4.5 3.2
n=4 7.5 7.8 5.3 5.3 5.2 5.2 4.8 5.3 3.6 3.8 4.7 4.8 4.9 4
n=5 7.9 8.2 5.6 5.8 5.6 5.5 5.1 5.3 3.6 4.3 5.1 5 4.7
n=6 8.1 8.4 5.9 6.2 5.7 5.5 5.2 5.7 4.2 4.7 5.3 5
Scale 1:5000
50 0 50 100 150
(meters)
Kennecott Canada Inc.
Vancouver
BOOT / STEELE
INDUCED POLARIZATION SURVEY
Line 1700 N
Looking Northwest
BRITISH COLUMBIA, CANADA
Contour Interval: Resistivity - 250 ohm-m Chargeability - 1 Msec
Date: July 1993



Kennecott Canada Inc.
Vancouver

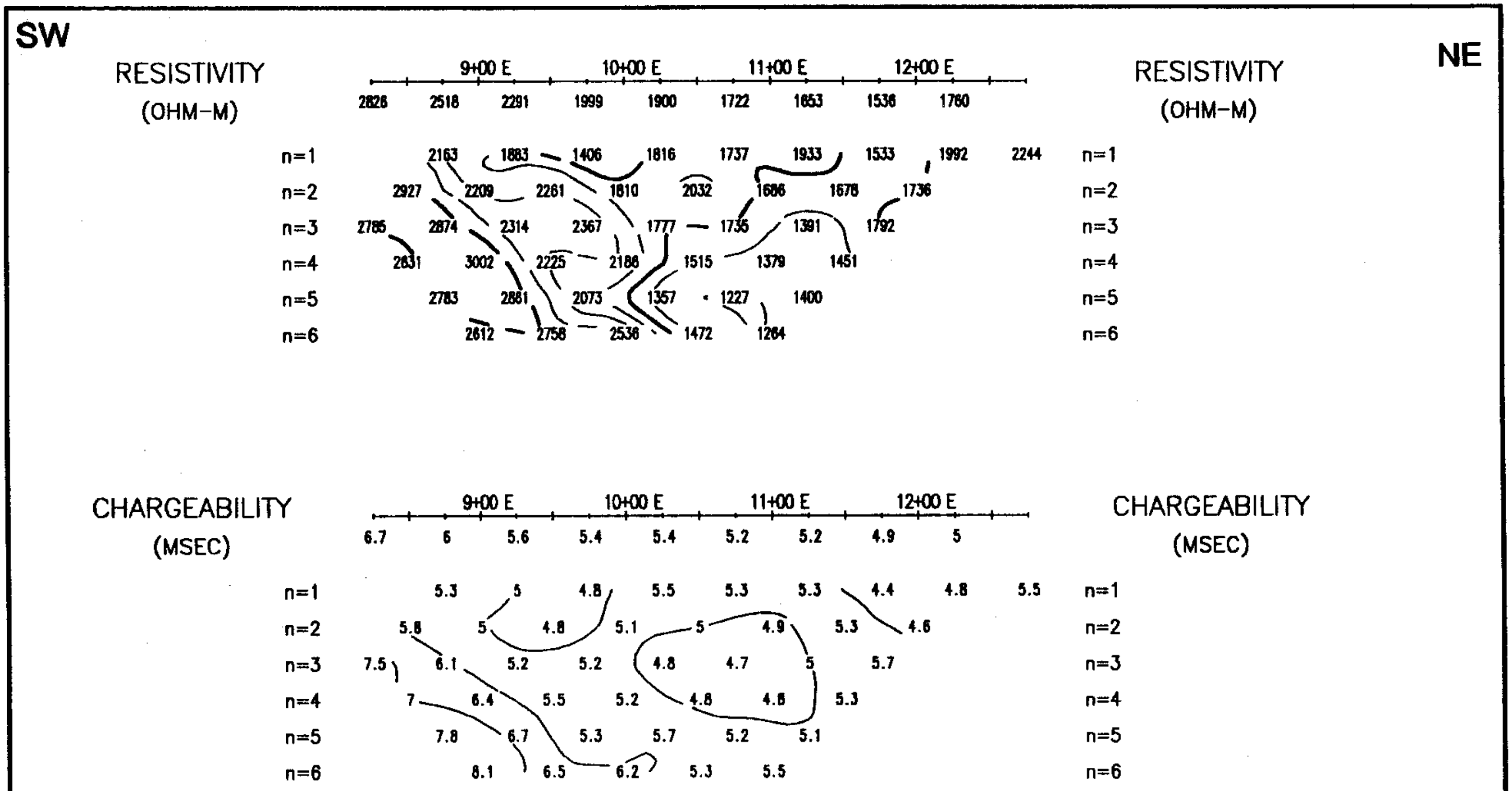
BOOT / STEELE

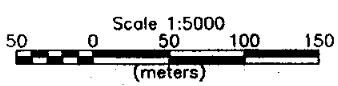
INDUCED POLARIZATION SURVEY
Line 1600 N
Looking Northwest

BRITISH COLUMBIA, CANADA

Contour Interval: Resistivity - 250 ohm-m   Chargeability - 1 Msec

Date: July 1993





Kennecott Canada Inc.
Vancouver

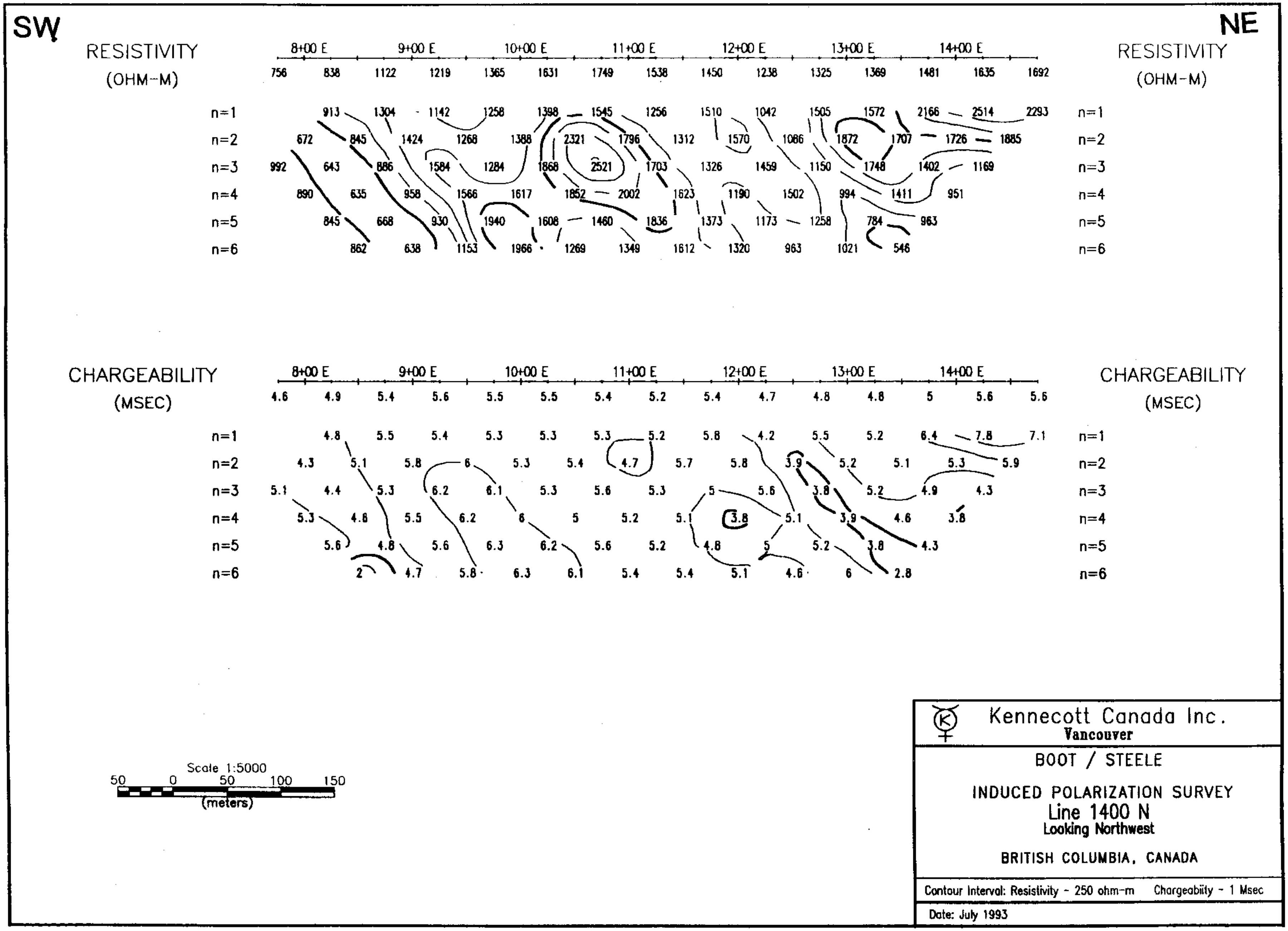
BOOT / STEELE

INDUCED POLARIZATION SURVEY
Line 1500 N
Looking Northwest

BRITISH COLUMBIA, CANADA

Contour Interval: Resistivity - 250 ohm-m   Chargeability - 1 Msec

Date: July 1993


SW
NE
RESISTIVITY
(OHM-M)
8+00 E 9+00 E 10+00 E 11+00 E 12+00 E 13+00 E 14+00 E
756 838 1122 1219 1365 1631 1749 1538 1450 1238 1325 1369 1481 1635 1692
n=1 913 1304 1142 1258 1398 1545 1256 1510 1042 1505 1572 2166 2514 2293
n=2 672 845 1424 1268 1388 2321 1796 1312 1570 1086 1872 1707 1726 1885
n=3 992 643 886 1584 1284 1868 2521 1703 1326 1459 1150 1748 1402 1169
n=4 890 635 958 1566 1617 1852 2002 1623 1190 1502 994 1411 951
n=5 845 668 930 1940 1608 1460 1836 1373 1173 1258 784 963
n=6 862 638 1153 1966 1269 1349 1612 1320 963 1021 546
CHARGEABILITY
(MSEC)
8+00 E 9+00 E 10+00 E 11+00 E 12+00 E 13+00 E 14+00 E
4.6 4.9 5.4 5.6 5.5 5.5 5.4 5.2 5.4 4.7 4.8 4.8 5 5.6 5.6
n=1 4.8 5.5 5.4 5.3 5.3 5.3 5.2 5.8 4.2 5.5 5.2 6.4 7.8 7.1
n=2 4.3 5.1 5.8 6 5.3 5.4 4.7 5.7 5.8 3.9 5.2 5.1 5.3 5.9
n=3 5.1 4.4 5.3 6.2 6.1 5.3 5.6 5.3 5 5.6 3.8 5.2 4.9 4.3
n=4 5.3 4.8 5.5 6.2 6 5 5.2 5.1 3.8 5.1 3.9 4.6 3.8
n=5 5.6 4.8 5.6 6.3 6.2 5.6 5.2 4.8 5 5.2 3.8 4.3
n=6 2 4.7 5.8 6.3 6.1 5.4 5.4 5.1 4.6 6 2.8
Scale 1:5000
50 0 50 100 150
(meters)
Kennecott Canada Inc.
Vancouver
BOOT / STEELE
INDUCED POLARIZATION SURVEY
Line 1400 N
Looking Northwest
BRITISH COLUMBIA, CANADA
Contour Interval: Resistivity - 250 ohm-m Chargeability - 1 Msec
Date: July 1993

APPENDIX IV

Drill Log

Hole Number: L93 - 4 | AZIMUTH: 225° | DATE STARTED: August 10, 1993

Location: 1895N | DIP: -45° | DATE COMPLETED: August 11, 1993

940E | DEPTH 78.9 m

TESTS: DEPTH 0 m | AZIMUTH: 225° | DIP: -45°

78.9 m | -42°

PROPERTY: BOOT/STEELE EXTENSION GRID

HOLE NO.: L93 - 4

PAGE: 1 of 1

DATE: August 11, 1993

LOGGED BY: S. Bishop

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
0-2.1	CASING								
2.1-78.9	BIOTITE PYROXENITE								
	Green, fine - med. grained gabbro-pyroxenite with 15-20 %								
	cm sized biotite porphyroblasts - possibly hydrothermal								
	w-m magnetic								
	w-m kspar as laths, primary or secondary?								
	i.e. could be called an "alkaline gabbro" in places kspar								
	is secondary; red - pink patchy and pervasive								
	no visible sulphides; NO SAMPLES COLLECTED								
	3.5 - 15.0 late syenite 'aplitic' dyke. Pink; m-grained,								
	w magnetic; HW, FW contacts 30° TCA								
	No visible SULPHIDES								
	78.9 EOH								

GEOLOGICAL BRANCH
ASSESSMENT REPORT

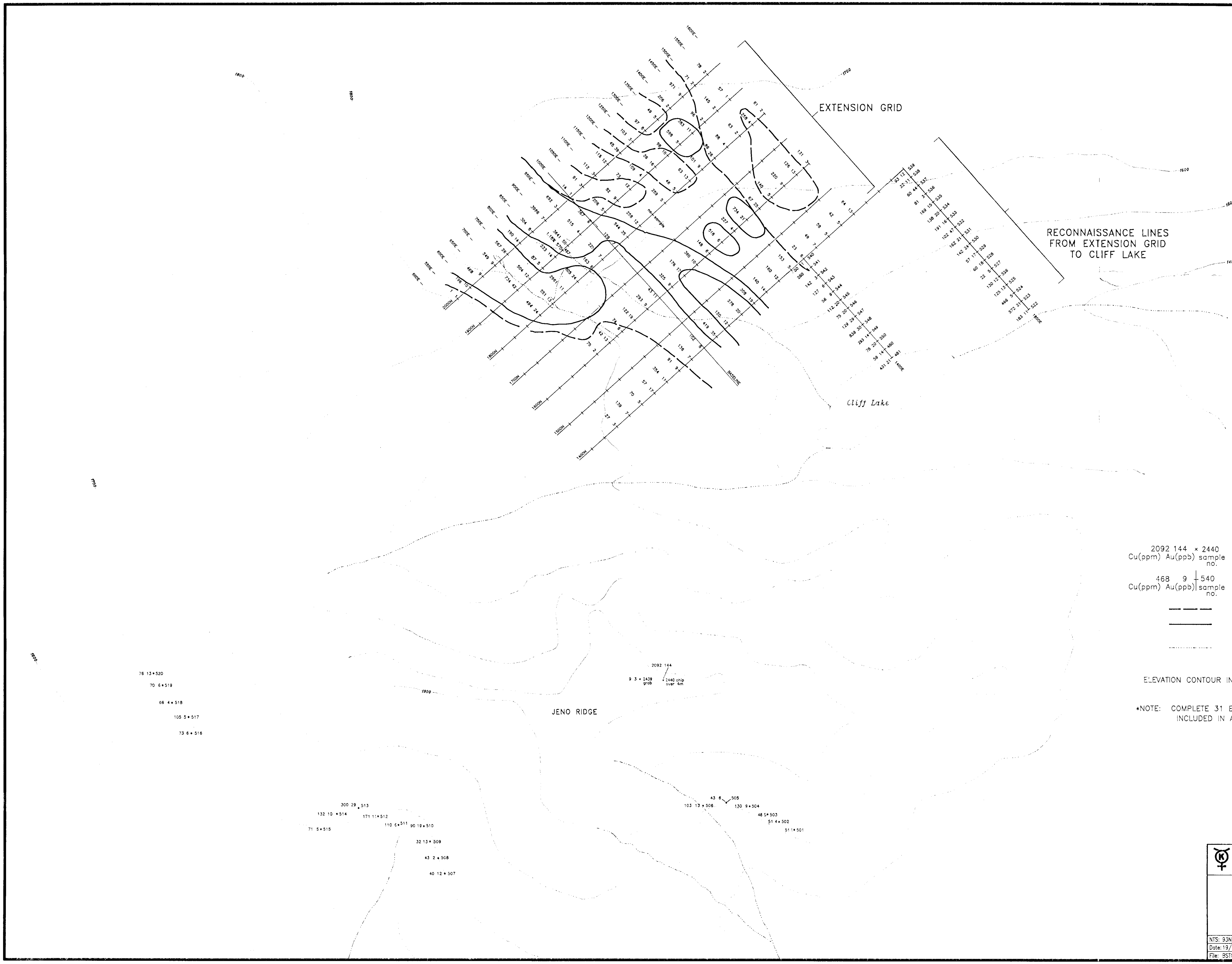
23,249

Kennecott Canada Inc.
Vancouver

BOOT/STEELE
EXTENSION GRID
GEOLOGY
BRITISH COLUMBIA, CANADA

NTS: 93N/14	Projection: UTM	Drawn by: HO
Date: 19/01/94	Author: SB	Figure 4
File: BSTGEOL	Scale: 1:2000	

PROFESSIONAL PROVINCE OF S. T. BISHOP BRITISH COLUMBIA GEOSCIENTIST



GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,249

2092 144 × 2440 Cu(ppm) Au(ppb) sample no. — ROCK GRAB SAMPLE (PREFIX VRO)

468 9 + 540 Cu(ppm) Au(ppb) sample no. — SOIL SAMPLE (PREFIX VR00)

— — — COPPER 100 PPM CONTOUR

——— COPPER 300 PPM CONTOUR

.... CREEK

ELEVATION CONTOUR INTERVAL 100 METRES

*NOTE: COMPLETE 31 ELEMENT ICP RESULTS INCLUDED IN APPENDIX II

scale: 1:5000
0 50 100 150 250
metres

Kennecott Canada Inc.
Vancouver

BOOT/STEELE
1993 COMPILATION
GEOCHEMISTRY
BRITISH COLUMBIA, CANADA

S. T. BISHOP

NTS: 93N/14	Projection: UTM	Drawn by: HO
Date: 19/01/94	Author: SB	Figure 5
File: BSTGCHM	Scale: 1:5000	