1993
Geochemical and Diamond Drilling
Report on the Lorraine Property

Omineca Mining Division
NTS 93 N/14W

Latitude 55°24′ N Longitude 125° 25′ W

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

Prepared by: S. Bishop

February 25, 1994

SUMMARY

The Lorraine property comprises 36 claim units located in the Omineca Mining District, north-central British Columbia. The property is underlain by intrusive rocks of the Duckling Creek Syenite Complex, an Early Jurassic, alkaline phase of the Late Triassic-Early Cretaceous Hogem Batholith. Two significant zones of copper-gold mineralization have been explored to date on the property, the Main Zone (Upper and Lower deposits) and the Extension Zone. A combined geological resource was estimated in 1975 for the Main Zone deposits at 10Mt averaging 0.65% Cu and between 1.0g/t and 3.4g/t Au. Gold grades were estimated based on a limited number of gold analyses. The Extension Zone, discovered in 1990, is still at an exploration stage, however it is estimated to be considerably smaller than the Main Zone.

The 1993 exploration program at Lorraine focussed on the Main Zone, with the objectives of establishing the tenor of gold mineralization associated with copper and assessing the potential to increase reserves in the zone. Field work, completed on the property between July 1 and August 15, 1993, included extensive rock chip sampling over the exposed portion of the Main Zone and diamond drilling, to test for extensions of the Main Zone. Three holes were drilled; the first two intersected narrow widths of low grade copper-gold mineralization and the third was abandoned due to difficult drilling conditions. Analytical results from both surface sampling and drillcore indicates that, although there is a positive copper-gold correlation on the property, the tenor of gold mineralization is an order of magnitude lower than the historical predictions, and generally ranges from 0.1 to 0.5g/t Au. Final data compilation, report writing and drafting were completed between December 1993 and February 1994.

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1.0 INTRODUCTION

1.1 LOCATION, ACCESS AND PHYSIOGRAPHY

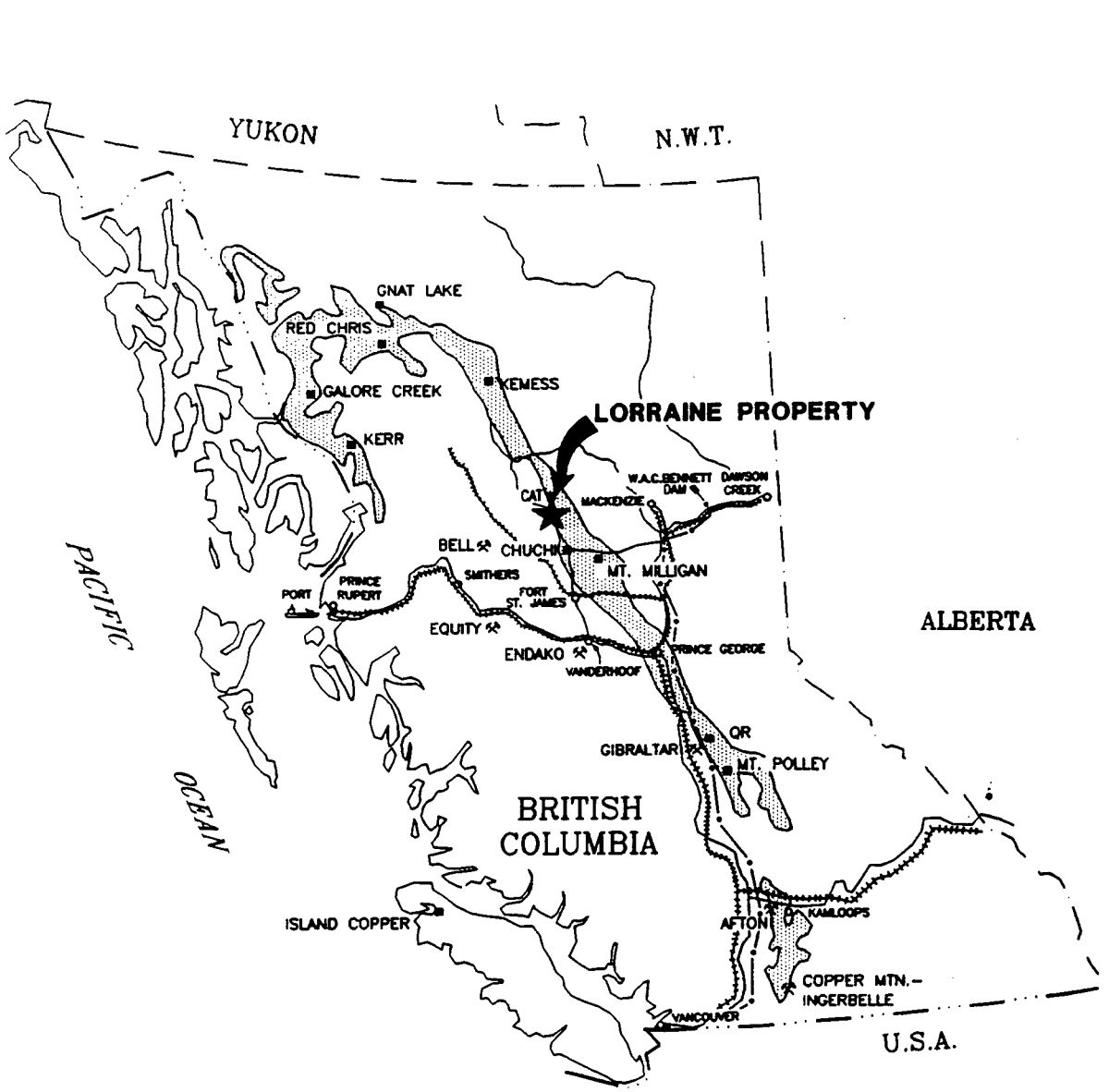
The Lorraine property is located approximately 45km west-northwest of Germansen Landing, in the Omineca Mining District, north-central British Columbia (Figure 1). Access is provided to the Lorraine claim area by a four wheel drive dirt road that was constructed for exploration in the 1970's. The access road is located 41km north of Germansen Landing along the Omineca Mining Road (Figure 2).

The property is situated in the Omineca Mountains. The area is typified by mountains of moderate relief with elevations that range from 1150m in the valleys to peaks of up to 2000m. Valleys are U-shaped and blanketed by glacial till which give way to steep, talus covered slopes and sharp ridges. Vegetation ranges from coniferous forests of spruce, balsam and pine in the valleys to alpine grasses and shrubs at elevations above 1600m. Outcrop is generally limited to elevations above 1600m.

1.2 CLAIM DATA

The Lorraine property is comprised of 36 single unit mineral claims or fractional claims, owned 100% by Kennecott Canada Inc. (Figure 3). Essential claim data is listed below. The expiry dates listed are the dates that apply once the assessment work from the 1993/94 program has been credited to the claims:

Claim Name	Record #	New Tenure #	Units	Record Date (M-D-Y)	Expiry Date (M-D-Y)
Lorraine 1	15672	243499	1	9-17-1947	9-17-2004
Lorraine 2	25673	243500	1	9-17-1947	9-17-2004
Lorraine 3	35674	243501	1	9-17-1947	9-17-2004
Lorraine 4	45675	243502	1	9-17-1947	9-17-2004
Lorraine 5	55676	243503	1	9-17-1947	9-17-2004
Lorraine 6	65677	243504	1	9-17-1947	9-17-2004
Lorraine 7	75678	243505	1	9-17-1947	9-17-2004
Lorraine 8	85679	243506	1	9-17-1947	9-17-2004
Lorraine 9	95917	243507	1	6-22-1948	6-22-2004
Lorraine 10	105918	243508	1	6-22-1948	6-22-2004
Lorraine 11	115919	243509	1	6-22-1948	6-22-2004
Lorraine 12	125920	243510	1	6-22-1948	6-22-2004
Lorraine1FR	110611	245449	1	5-31-1972	5-31-2004
Lorraine2FR	110612	245450	1	5-31-1972	5-31-2004
Lorraine3FR	110613	245451	1	5-31-1972	5-31-2004
Lorrex 1	14206	243646	1	9-4-1961	9-4-2004
Lorrex 2	14207	243647	1	9-4-1961	9-4-2004
GK 1	89161	245043	1	7-3-1970	7-3-2004



Kennecott Canada Inc.
Vancouver

LORRAINE

LOCATION MAP

BRITSH COLUMBIA, CANADA

Date:	FEB 1994	Author:	
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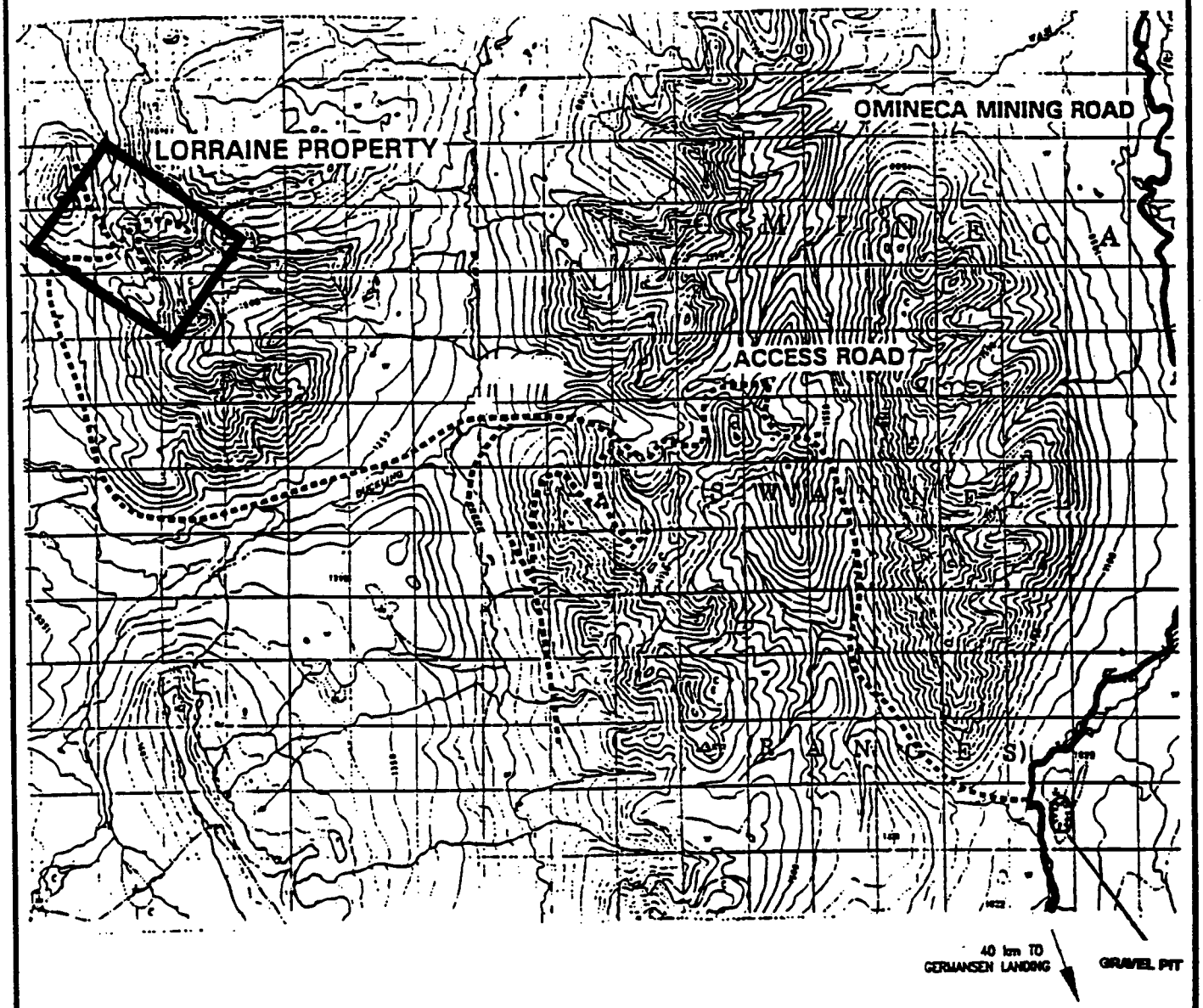
Figure 1

MJO

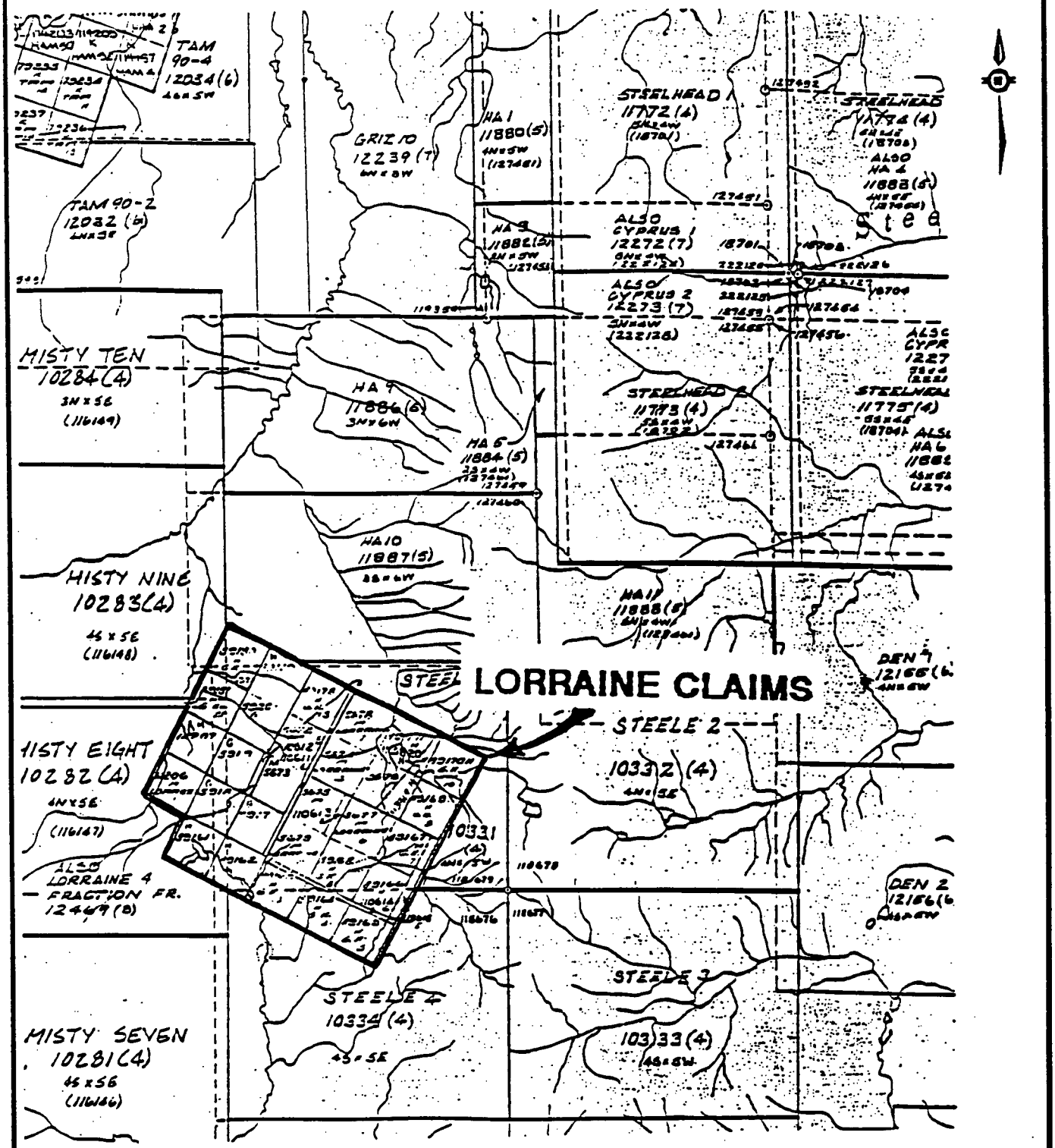


Kennecott Canada Inc.

LORRAINE

ACCESS

JANUARY, 1992 FIGURE 2



Kennecott Canada Inc.

LORRAINE

GOVERNMENT CLAIM MAP

JANUARY, 1992 FIGURE 3

Claim Name	Record #	New Tenure #	Units	Record Date (M-D-Y)	Expiry Date (M-D-Y)
GK 2	89162	245044	1	7-3-1970	7-3-2004
GK 3	89163	245045	1	7-3-1970	7-3-2004
GK 4	89164	245046	1	7-3-1970	7-3-2004
GK 5	89165	245047	1	7-3-1970	7-3-2004
GK 6	89166	245048	1	7-3-1970	7-3-2004
GK 7	89167	245049	1	7-3-1970	7-3-2004
GK 8	89168	245050	1	7-3-1970	7-3-2004
GK 9	89169	245051	1	7-3-1970	7-3-2004
GK10	89170	245052	1	7-3-1970	7-3-2004
GK11	89171	245053	1	7-3-1970	7-3-2004
GK18	89178	243054	1	7-3-1970	7-3-2004
GK19	89179	243055	1	7-3-1970	7-3-2004
GK20	89180	243056	1	7-3-1970	7-3-2004
GK21	89181	243057	1	7-3-1970	7-3-2004
GK109FR	110614	245452	1	5-31-1972	5-31-2004
GK110FR	110619	245530	1	7-25-1972	7-25-2004
GK111FR	110615	245453	1	5-31-1972	5-31-2004
GK112FR	113820	245531	1	7-25-1972	7-25-2004

NOTE: The Lorraine property is incorrectly positioned on the government claim map (Figure 3). The correct location of the property is approximately 2km to the east.

1.3 EXPLORATION HISTORY

The highly visible, malachite-stained bluffs at Lorraine Mountain were first brought to the attention of prospectors by local indigenous peoples during World War I. The earliest claims were reportedly staked in 1931 by F. Weber of Fort Graham. The Consolidated Mining and Smelting Company Limited acquired the property in 1943, but allowed the claims to lapse in 1947.

Later in 1947, the Lorraine claims were grubstaked by D. Heavenor for Northwestern Explorations Limited, a predecessor company to Kennco Explorations (Western) Ltd. and Kennecott Canada Inc. In 1948 the Main Zone copper showings were mapped and sampled. In 1949 five AX drill holes, totalling 965m, were completed to test the zone, which was later referred to as the Main Zone Upper deposit. In 1961, Kennco staked the Lorrex claims and conducted an extensive exploration program including soil and rock sampling, magnetometer and induced polarization (IP) surveys, in search of an extension of the Upper deposit. Two AX diamond drill holes, totalling 118m, were drilled in the cirque southwest of the Upper deposit.

In 1970, Granby Mining Corporation optioned the property from Kennco. Additional claims, the G.K. claims, were staked in 1970 and 1972. From 1970-73, Granby completed further exploration work that included geological mapping, soil and rock

sampling, magnetometer surveys, trenching and a total of 3992m of diamond drilling and 2470m of percussion drilling. This work led to the discovery of the Main Zone Lower deposit. A potential resource, calculated in 1975 for the Main Zone deposits, was reported as 4.5Mt grading 0.75% Cu and 3.4g/t Au in the Upper deposit and 5.5Mt grading 0.60% Cu and 1.0g/t Au in the Lower deposit, based on a cutoff grade of 0.4% Cu (Figure 4; Wilkinson et al., 1976). Gold grades were estimated based on a limited number of analyses.

The property lay dormant from 1975 to 1990, when Kennecott re-initiated exploration work at Lorraine to assess the tenor of gold mineralization associated with copper and to explore the areas peripheral to the Main Zone for additional mineralization. Work completed in 1990 and 1991 included soil and rock sampling, geological mapping, IP surveys and 2392m of diamond drilling in 12 holes. This work succeeded in discovering a new zone of mineralization, referred to as the Extension Zone (Figure 4). Analytical results from Extension Zone surface and drill core samples indicated that gold grades, associated with copper mineralization, were an order of magnitude lower than those reported historically, and generally ranged from 0.1 to 0.5g/t Au.

1.4 1993 EXPLORATION PROGRAM

The focus of the 1993 exploration program at Lorraine shifted back to the Main Zone, and was targeted to establish the tenor of gold mineralization associated with copper and to test for extensions of the zone. Work included continuous chip sampling across three lines through the Main Zone Upper deposit and the collection of composite grab samples, at regular intervals, across the north face of the mountain (Figure 5). Three diamond drill holes were completed to test for extensions to the Main Zone (Figure 6). In conjunction with the 1993 exploration program at the Lorraine Main Zone, additional work was completed on the Extension Zone to trace it beyond the Lorraine claim boundary onto the Boot/Steele claims that were under option to Kennecott. The results of the Extension Zone work are reported in a 1993 assessment report on the Boot/Steele claims (Bishop, 1993).

A total of 320 rock samples and 132 drillcore samples were collected and sent to Min-En Analytical Laboratories in Vancouver, B.C., for analysis. Samples were analyzed for 31 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 5, 6 & 7. Analytical techniques and detailed 31 element ICP, Cu and Au assay analytical results are provided in Appendix II.

Data compilation, report writing and drafting were completed between December 1993 and February 1994.

2.0 REGIONAL GEOLOGY

The Lorraine property is located in northern Quesnellia in the Intermontane Belt of British Columbia. Quesnellia comprises a northwest-trending sequence of Mesozoic volcano-sedimentary strata (Takla and Nicola Groups) representative of an intraoceanic volcanic arc environment (Souther, 1992), which was intruded by a series of coeval, comagmatic stocks and batholiths (Woodsworth et al., 1992).

The Lorraine claims lie entirely within the Hogem Batholith, a Late Triassic to Middle Jurassic multiphase intrusion of calc-alkaline to alkaline composition, intruded by Early Cretaceous granitic bodies (Garnett, 1978; Woodsworth et al., 1992). The three principal phases of the batholith are defined by distinct petrographic, chemical and geochronological signatures, represented by: (i) Phase 1 Hogem basic suite rocks and Hogem granodiorite, with K/Ar dates of 176-212 Ma, (ii) Phase 2 Duckling Creek and Chuchi syenite bodies, with K/Ar dates of 162-182 Ma, and (iii) Phase 3 granite/aplite dykes or plugs with considerably younger ages of 108-206 Ma. (Garnett, 1978). Constituent plutons are elongate northwesterly, suggesting long-lived structural control of plutonism (Woodsworth et al., 1992). The batholith intrudes volcanic rocks of the Takla Group to the east and is bounded to the west by the northerly trending Pinchi fault (Figure 1; Garnett, 1978).

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

3.0 PROPERTY GEOLOGY

3.1 GEOLOGY

Rock types on the property comprise a diverse alkaline suite ranging from pyroxenite through diorite to syenite, Units 1 to 5 (Figure 4). Unit 6 consists of late stage granite dikes. Intrusive paragenesis is complicated by: (i) repeated intrusion of Units 1 to 5 which display conflicting cross-cutting relationships, (ii) obscuring of contacts by alteration or local development of migmatitic fabrics, (iii) lack of observed sharp intrusive contacts, and (iv) compositional gradations, resulting from both primary differentiation and secondary alteration, which occur between all phases. Rock types were grouped into six units to simplify the geologic map (Figure 4), although compositional gradations exist between all units. In general, field relationships indicate that Unit 1 is oldest and Unit 6 youngest.

Biotite pyroxenite (Unit 1) is typically dark green to black, medium to coarse grained, and composed predominantly of clinopyroxene, porphyroblastic biotite, variable amounts of potassium feldspar, abundant magnetite (+/- ilmenite) and apatite. This

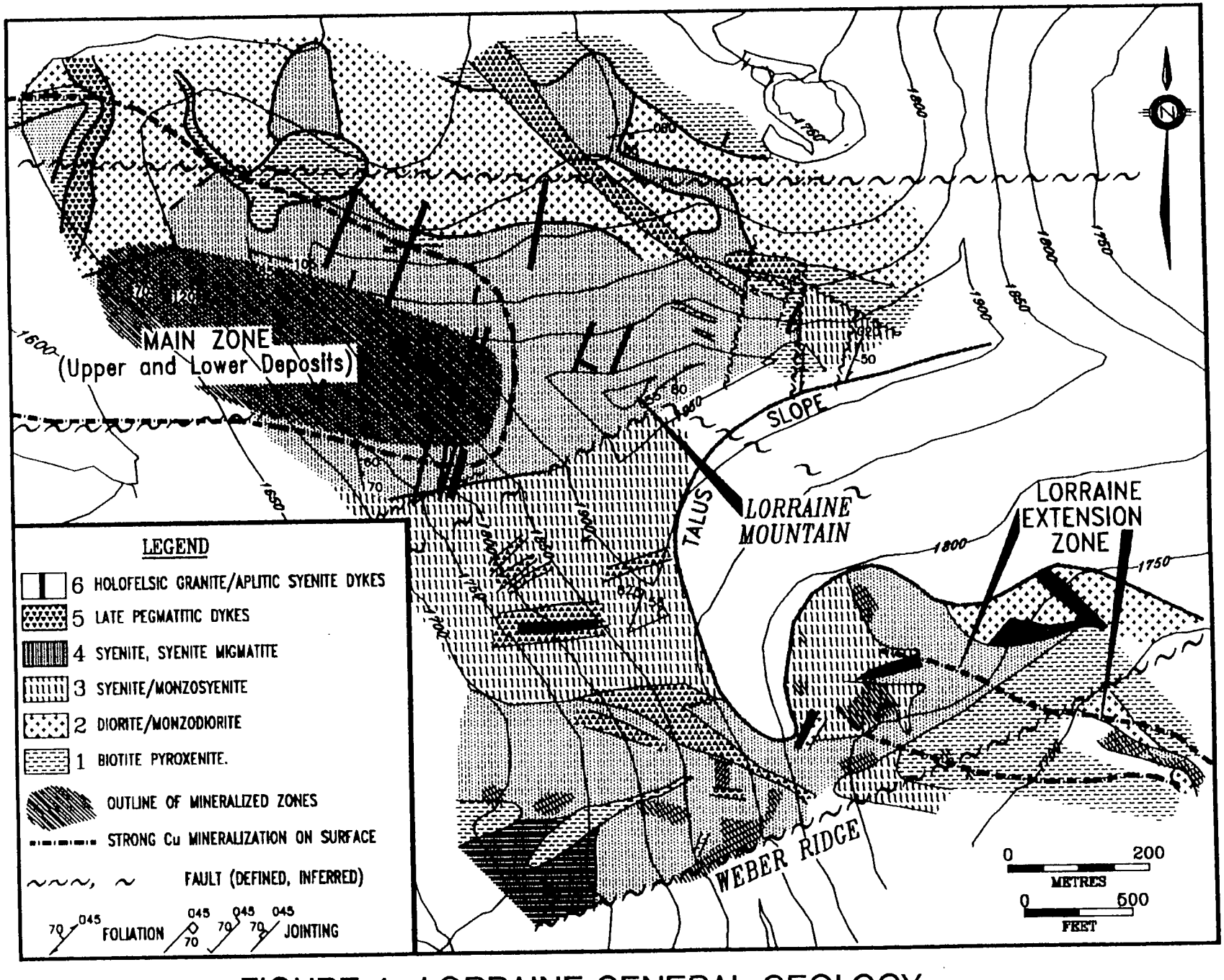


FIGURE 4: LORRAINE GENERAL GEOLOGY

unit commonly weathers to distinctive piles of coarse greenish black sand. With increasing potassium feldspar content, biotite pyroxenite grades into alkali gabbro. Locally, either an oikocrystic or porphyroblastic variety of pyroxenite, with prominent pink-orange potassium feldspar oikocrysts or porphyroblasts occurs. Further study is required to determine the origin of this texture.

In the Main Zone, pyroxenite occurs as irregular, lens-like bodies that generally crop out in areas of lower elevation. Previous mapping (Garnett, 1978) depicted these lenses as easterly trending and steeply dipping, parallel to the trend of the migmatitic foliation. Recent mapping in the Extension Zone (Bishop, 1993) has determined that a large body of pyroxenite to alkali gabbro, interpreted to represent a cumulate layer within the syenite complex, occurs southeast of the mineralized zone.

The northeastern portion of the property is dominated by a mass of relatively homogeneous monzodiorite to diorite (Unit 2). This unit is characteristically grey in colour, medium grained and equigranular, composed of 30-80% plagioclase, up to 50% potassium feldspar and up to 30% mafic minerals (clinopyroxene and biotite, with lesser hornblende). In the southern part of the property, a gradation from pyroxenite to melanocratic and leucocratic diorite occurs. With increasing potassium feldspar content, diorite grades into monzonite, monzosyenite and grey syenite (Unit 3). Grey syenite, composed primarily of potassium feldspar and clinopyroxene with minor biotite, magnetite and apatite, is restricted to the southern half of the property. In the central part of the property, grey syenite is in contact with syenite migmatite (Unit 4) along a fault which truncates the Upper Lorraine deposit (Figure 4).

Syenite migmatite (Unit 4) is distributed in a broad, northwest-trending area through the Main and Extension Zones. Its migmatitic texture is most pronounced in the Main Zone, however this unit grades into more texturally uniform leucocratic syenites in both the Main and Extension Zone areas. Unit 4 is the predominant host of mineralization on the property. Syenite migmatite is fine to medium grained and is agmatitic, migmatitic or gneissic with alternating pink-orange and grey banding. Principal minerals are potassium feldspar, biotite and clinopyroxene, with variable magnetite. In the Main Zone, foliated migmatitic syenite contains metasomatized xenoliths of pyroxenite, diorite, monzonite and metavolcanic "basement" rocks.

Cross-cutting, sub-vertical leucocratic syenite and plagiophyric syenite dikes (Unit 5) and granite dikes (Unit 6) post-date all rock types, alteration and mineralized zones. They vary from aplitic to pegmatitic in texture and range in width from 1 to 25m. The greatest density of dikes occurs at higher elevations in the Main Zone and along adjoining ridges, with lesser syenite dikes in the lower part of the Main Zone. Syenite and granite dikes commonly trend 0° to 020° whereas plagioclase porphyry dikes strike from 090° to 120°.

3.2 STRUCTURE

Igneous contacts and all ductile and brittle structural fabrics exhibit prominent trends at 020°, 060° and 110° to 120°. The main foliation in syenite migmatite strikes west-northwest and dips gently to the south. The intensity of migmatite development, fracture density and frequency of pegmatite and granite dike intrusion is greatest in the Main Zone.

Three significant east-west trending faults occur in the property area (Figure 4). The first cuts the northern property area, and is indicated by sheared pyroxenite exposures and by a series of igneous contacts that mark a compositional change from syenite migmatite to diorite and monzodiorite. Minor late-stage copper mineralization is localized along this structure. The second fault, trending through the centre of the property, is steeply south-dipping and truncates mineralization in the Main Zone to the southeast. A third east-west trending fault is interpreted to lie in the west central property area and to truncate or displace Main Zone mineralization to the south.

East-northeast trending structures are also prominent in the Lorraine property area. A major 060° trending fault was mapped across the middle of the Extension Zone and through the ridges on either side of the zone (Figure 4). Mineralization in the Extension Zone is not offset across this fault and localized pockets of mineralization occur along this structure where it transects Weber Ridge.

North-northeasterly trending structures are also significant at Lorraine. A 020° trending fault, located immediately west of the map area (Figure 4), parallels a tributary of Haha Creek. Lower Zone mineralization is interpreted to be bounded, or displaced to the west, by this fault.

Recent field work did not determine the relative ages nor the sense of motion of these structures. Outside the map area of Figure 4, slickensides indicate oblique-slip (normal and left lateral) displacement on 060° trending faults.

3.3 ALTERATION

Three major alteration stages are represented at Lorraine: (i) early potassium metasomatism resulting in secondary biotite, (ii) main-stage potassium feldspathization and (iii) late-stage, weak sericitization and propylitization (chlorite-epidote-carbonate). In addition, clay-sericite and quartz-sericite-carbonate alteration occur locally throughout the property. Minor quartz veins occur in the Main Zone area. The results of work completed to date has not indicated the presence of a systematic, property-scale, alteration zonation and evidence to define the temporal relationship of alteration assemblages is insufficient to propose a well defined paragenetic sequence of alteration.

Fine to coarse grained secondary biotite occurs as partial to near-complete replacement of pyroxenes in pyroxenite and melanocratic phases of the Duckling Creek Syenite Complex. Stringers and books of biotite are common in leucocratic phases. Potassium feldspathization, characterized by a pink-orange colour, is widespread and varies in intensity throughout the property. Potassium feldspar occurs as incipient grains, in stringers or as patchy, pervasive flooding. Potassium metasomatism is associated with emplacement of syenitic intrusions. Late stage sericite, only noted in thin section, occurs as partial replacement of plagioclase. Epidote occurs locally as patches, ranging in intensity to complete replacement of the protolith. Spectacular, late hydrothermal magnetite occurs as pegmatoidal aggregates, veinlets and as matrix to breccias.

3.4 MINERALIZATION

The greatest concentrations of mineralization occur in syenitic rocks and, locally, in biotite pyroxenite in the Main and Extension Zones. Elsewhere on the property copper mineralization occurs as localized patches or zones, hosted by all rock types except late granite dikes. These small zones of copper mineralization are generally discontinuous. The Weber Ridge (Figure 4) and Eckland Ridge (500m west-southwest of Weber Ridge, outside the area of Figure 4) occurrences contain the most significant concentrations of mineralization outside the Main and Extension Zones.

Copper sulphides that occur at Lorraine include chalcopyrite, bornite and rare covellite. Pyrite occurs in minor amounts (<1%), with an erratic distribution throughout the property. Malachite, azurite and chrysocolla occur in oxidized portions of the property. Sulphides are typically fine to medium grained and are disseminated throughout the host rock or concentrated along fractures and in narrow quartz veinlets. Rare net-textured sulphides were observed in pyroxenites in diamond drill core. Sulphide abundance ranges from trace amounts to greater than 7%.

4.0 1993 EXPLORATION PROGRAM RESULTS

4.1 ROCK CHIP SAMPLING

A total of 247 continuous rock chip samples were collected over three lines along the bluffs in the Main Zone. Samples were collected with hammer and chisel over 5m sample lengths. In addition to the continuous chip samples, a total of 68 composite grab samples were collected from the northwest face and along the ridge of Lorraine Mountain. Sample locations and copper-gold geochemistry are plotted on Figure 5. Sample descriptions are provided in Appendix I and 31 element ICP, copper and gold assay results are presented in Appendix II.

Results from sampling returned significant copper mineralization across the bluffs in the Main Zone, however mineralization in the zone is truncated to the southeast by a steeply dipping, easterly striking fault. Along these bluffs, copper values generally range from 0.1% to 1.0%Cu, with gold values between 50ppb and 500ppb Au. The highest values returned 2.0%Cu and 1365ppb Au. Summarized below are weighted averages of copper and gold values along the length of the three sample lines, to the point where the fault truncates mineralization (Figure 5). The upper line was sampled in discontinuous segments, reflecting the sporadic occurrence of outcrop. Results from the north face, composite chip sampling were disappointing and are reported on Figure 5.

LINE	LENGTH (m)	Cu(ppm)	Au(ppb)
Lower Bluffs	500	3623	243
Middle Bluffs	380	4675	217
Upper Bluffs	40	3415	98
Upper Bluffs	18	2736	66
Upper Bluffs	30	5262	535
Upper Bluffs	35	5388	140
Upper Bluffs	35	3920	215

When plotted on a scatterplot, analytical results show a strong correlation between copper and gold grades (Stanley, pers. comm), however the copper/gold ratio is unusually high (45000 in the Main Zone, 60000 in the Extension Zone) in comparison to other alkaline copper-gold prospects in Quesnellia, such as Afton/Ajax, Copper Mountain and Mount Polley, which have copper/gold ratios that range from 10000 to 25000 (Stanley, 1993). Work to date has not determined if gold has a greater association with any one copper sulphide.

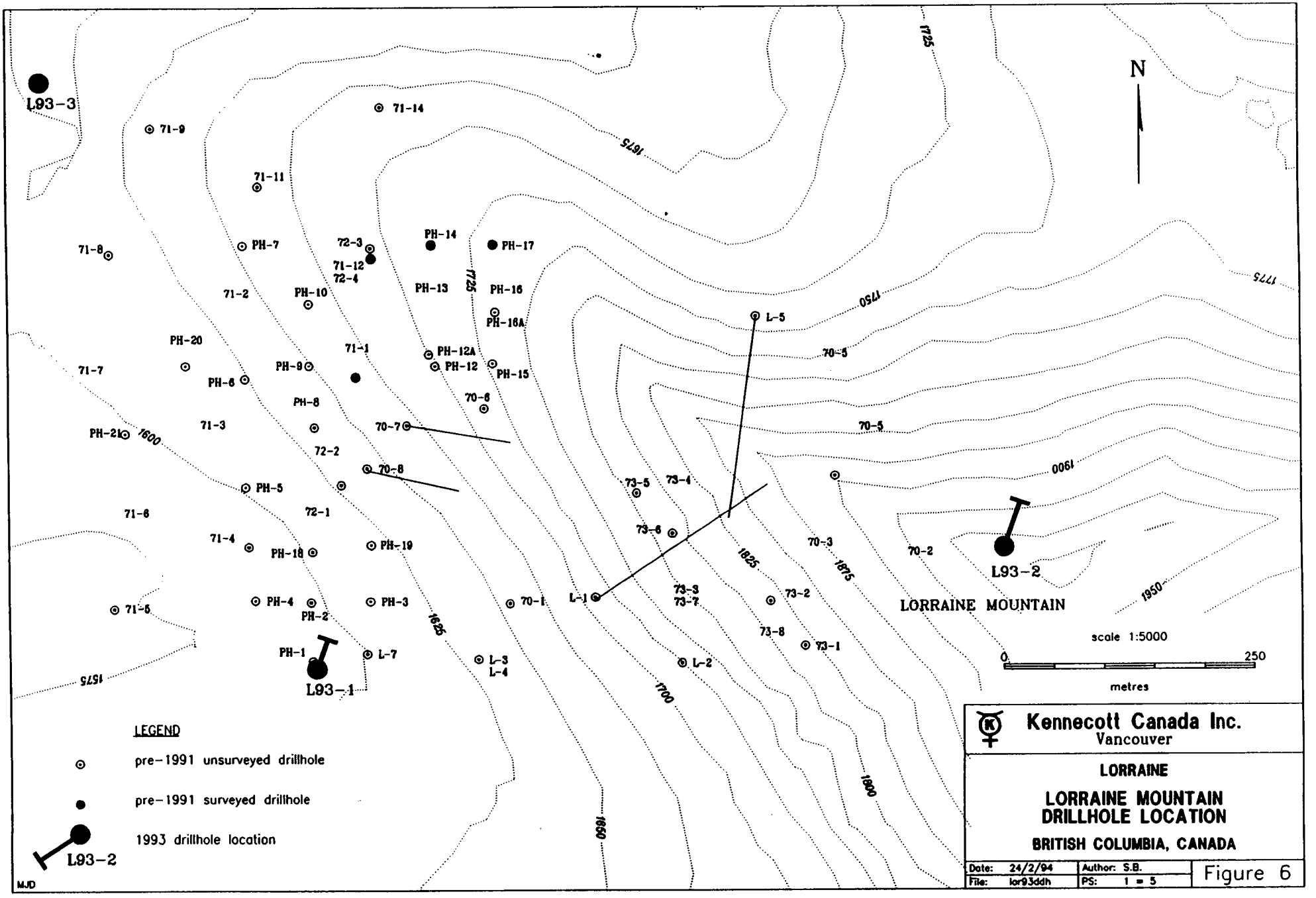
4.2 DRILLING

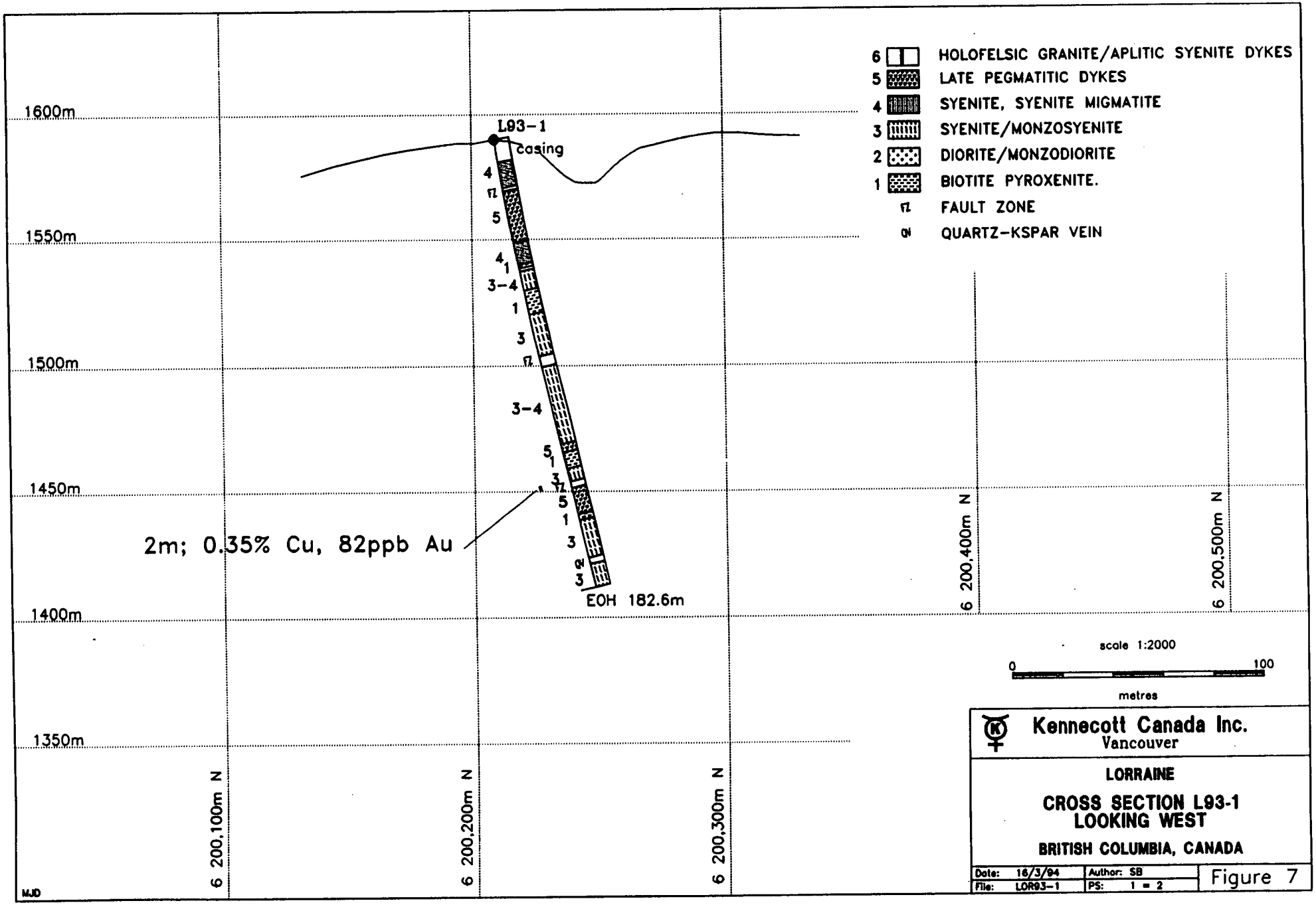
Three drillholes were completed to test for extensions to the Main Zone. Hole L93-1 was drilled southwest of the zone, L93-2 to the northeast and L93-3, west-northwest of the Main Zone. Drillhole locations are depicted in Figure 6 and cross sections for L93-1 & 2, in Figures 7 & 8. Drillhole L93-3 was lost due to difficult drilling conditions in overburden, therefore no cross section was drafted for this hole. Drill logs are presented in Appendix III and detailed 31 element ICP, copper and gold assay results in Appendix II .

Results from drilling were disappointing, the intersections that returned anomalous levels of mineralization are summarized below.

Drillhole	From (m)	To (m)	Width (m)	Cu (%)	Au (ppb)
L93-1	137.3	139.3	2.0	0.35	82
L93-2	3.0	28.0	25.0	0.21	105
L93-2	35.0	40.9	5.9	0.13	100
L93-2	44.8	52.5	6.3	0.12	24
L93-2	58.0	124.0	66.0	0.29	124
L93-2	130.6	257.0	126.4	0.17	99

No samples were collected from drillhole L93-3 as it was abandoned in overburden.


L93-3
71-9
71-14
71-11
71-8
PH-7
72-3
71-12
72-4
PH-14
PH-17
71-2
PH-10
PH-13
PH-16
PH-16A
L-5
PH-20
71-1
PH-12A
PH-12
PH-15
71-7
PH-6
PH-9
PH-8
70-6
70-5
PH-21
71-3
70-7
72-2
70-8
PH-5
73-5
73-4
71-6
72-1
73-6
71-4
PH-18
PH-19
70-3
70-2
L93-2
LORRAINE MOUNTAIN
71-5
PH-4
PH-3
PH-2
70-1
L-1
73-3
73-7
73-2
73-8
73-1
PH-1
L-7
L-3
L-4
L-2
1725
1675
1750
1775
1600
1625
1825
1875
1900
1950
1700
1650
N
scale 1:5000
0
250
metres
LEGEND
pre-1991 unsurveyed drillhole
pre-1991 surveyed drillhole
1993 drillhole location
L93-2
MJD
Kennecott Canada Inc.
Vancouver
LORRAINE
LORRAINE MOUNTAIN
DRILLHOLE LOCATION
BRITISH COLUMBIA, CANADA
Date: 24/2/94
Author: S.B.
File: lor93ddh
PS: 1 = 5
Figure 6



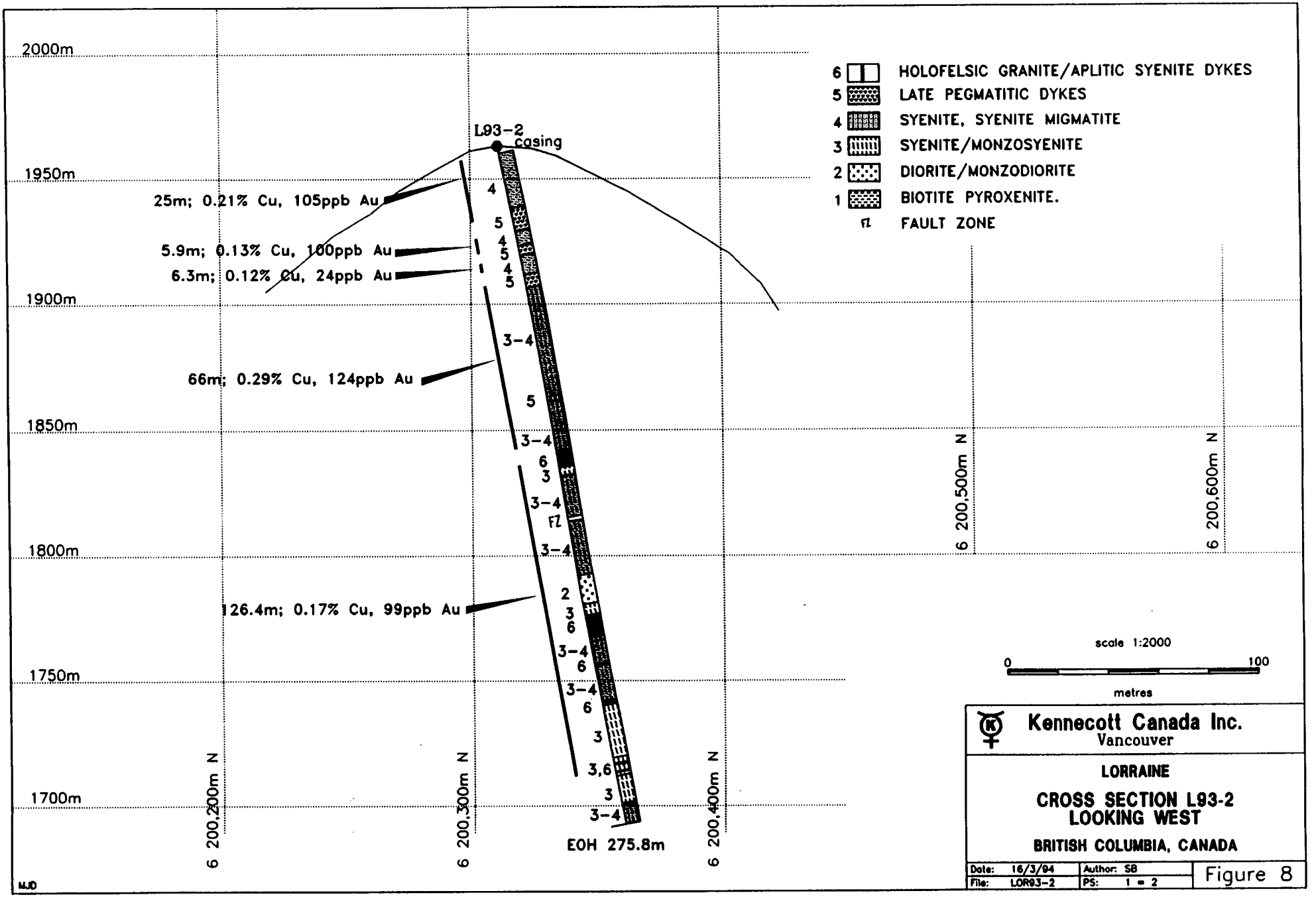
Kennecott Canada Inc.
Vancouver

LORRAINE

CROSS SECTION L93-1
LOOKING WEST

BRITISH COLUMBIA, CANADA

Date: 16/3/94	Author: SB	Figure 7
File: LOR93-1	PS: 1 = 2	


2000m
1950m
1900m
1850m
1800m
1750m
1700m
L93-2
casing
25m; 0.21% Cu, 105ppb Au
5.9m; 0.13% Cu, 100ppb Au
6.3m; 0.12% Cu, 24ppb Au
66m; 0.29% Cu, 124ppb Au
126.4m; 0.17% Cu, 99ppb Au
FZ
EOH 275.8m
6 HOLOFELSIC GRANITE/APLITIC SYENITE DYKES
5 LATE PEGMATITIC DYKES
4 SYENITE, SYENITE MIGMATITE
3 SYENITE/MONZOSYENITE
2 DIORITE/MONZODIORITE
1 BIOTITE PYROXENITE.
FAULT ZONE
6 200,200m N
6 200,300m N
6 200,400m N
6 200,500m N
6 200,600m N
scale 1:2000
0
100
metres
Kennecott Canada Inc.
Vancouver
LORRAINE
CROSS SECTION L93-2
LOOKING WEST
BRITISH COLUMBIA, CANADA
Date: 16/3/94
Author: SB
File: LOR93-2
PS: 1 = 2
Figure 8

5.0 CONCLUSIONS AND RECOMMENDATIONS

The 1993 exploration program at Lorraine succeeded in establishing that the tenor of gold mineralization associated with copper is an order of magnitude lower than that predicted by work completed in the 1970's. A combined geologic resource was estimated in 1975 for the Main Zone deposits at 10Mt averaging 0.7% Cu, and from 1.0 to 3.4g/t Au. The zone is more adequately represented by gold grades ranging from 0.1 to 0.4g/t Au. No statistical work has been completed to give more precise copper or gold grades.

A strong copper-gold correlation, with an unusually high copper/gold ratio, exists at Lorraine. Copper/gold ratios of 45000 in the Main Zone and 60000 in the Extension Zone contrast with 10000 to 25000 ratios exhibited by many of the other alkaline copper-gold systems in the Canadian Cordillera (Stanley, 1993).

Diamond drilling did not succeed in expanding the reserves, or in locating new zones of mineralization. The drill rig, however, was inadequate to penetrate depths of overburden exceeding 13m. Although the areas peripheral to the Main Zone have not been adequately drill tested to determine if extensions to the Main Zone mineralization exist, there appears to be little potential to develop a resource in the order of +150Mt. No further work is recommended for Kennecott at this time.

6.0 BIBLIOGRAPHY

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7.0 Statement of Expenditures

Fieldwork Salaries (work performed between July 4st and August 15th, 1993)		
S. Bishop (34 days @ $200/day)	$ 6,800	
T. Heah (18 days @ $200/day)	3,600	
S. Coombes (13 days @ $222/day)	2,886	
D. Coolidge (32 days @ $150/day)	4,800	
		$ 18,086
Diamond Drilling: 1577' @ $28/ft		$ 44,156
Helicopter Support for Drilling and Geology		
17hrs @ $750/hr		$ 12,750
Analytical (including sample prep, ICP, Cu and Au assay and shipping)		
452 rock samples @ $16.11/sple		$ 7,285
Room and Board		
97 man days @ $50/day		$ 4,850
Freight and Travel Expenses		$ 1,750
Truck Rental (includes gas, insurance and excess km charge)		
2 trucks @ $60/day for avg. 33 days		$ 3,960
Supplies (Radio rental, field gear etc.)		$ 518
Drafting, Wordprocessing and Report Writing		$ 2,000
	Total	**$ 95,355**

8.0 Statement of Qualifications

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

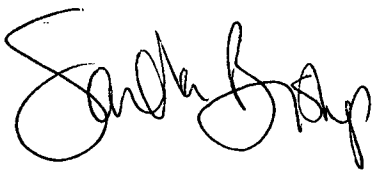
1) I am a staff geologist with Kennecott Canada Incorporated, with offices located at 354-200 Granville Street, Vancouver, British Columbia.

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 July and August, 1993.

Dated at Vancouver, in the Province of British Columbia, this 25th day of February, 1994.



Sandra T. Bishop, P. Geo.

20500N
20400N
20300N
20200N
20100N
20000N
19900N
19800N
19700N
19600N
19500N
19400N
19300N
19200N
19100N
19000N
18900N
18800N
18700N

19500E
19600E

131612
131611
131604
131602
131603
131607
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131605
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130561
130562
130563

L91-12

LORRAINE DEPOSIT

LORRAINE MOUNTAIN

NORTH ZONE

WEBER RIDGE

SOUTH WEST CIRQUE

L91-9

L91-8

WEBER ZONE

(see map 4b
for sample data)

ECKLAND

ECKLAND ZONE

RIDGE

130441
130440
130134
130439
130438
130432
130431
130430
130429
130428
130425
130426
130423
130424
130421

130436
130404
130420
130405
130419
130406
130415
130418
130417
130412
130413
130414
130416
130409
130410
130411
130407
130408

COPPER BOWL/
COPPER PEAK AREA

600N
500N
400N
300N
200N
100N

L91-1
L91-2
L91-3
L91-4
L91-5
L91-6
L91-7
L91-10
L91-11

BASELINE 000E

LORRAINE EXTENSION ZONE

SOUTHEAST CIRQUE

SCALE 1:2500

0 25 50 125 250
METRES

Cu value
Au value
Grab Sample

Cu value
Au value
Chip Sample

Copper Values
≤ 0.2%
0.2%<Cu<0.5%
≥ 0.5%

Gold Values
≤ 0.2g/T
0.2g/T<Au<0.5g/T
≥ 0.5g/T

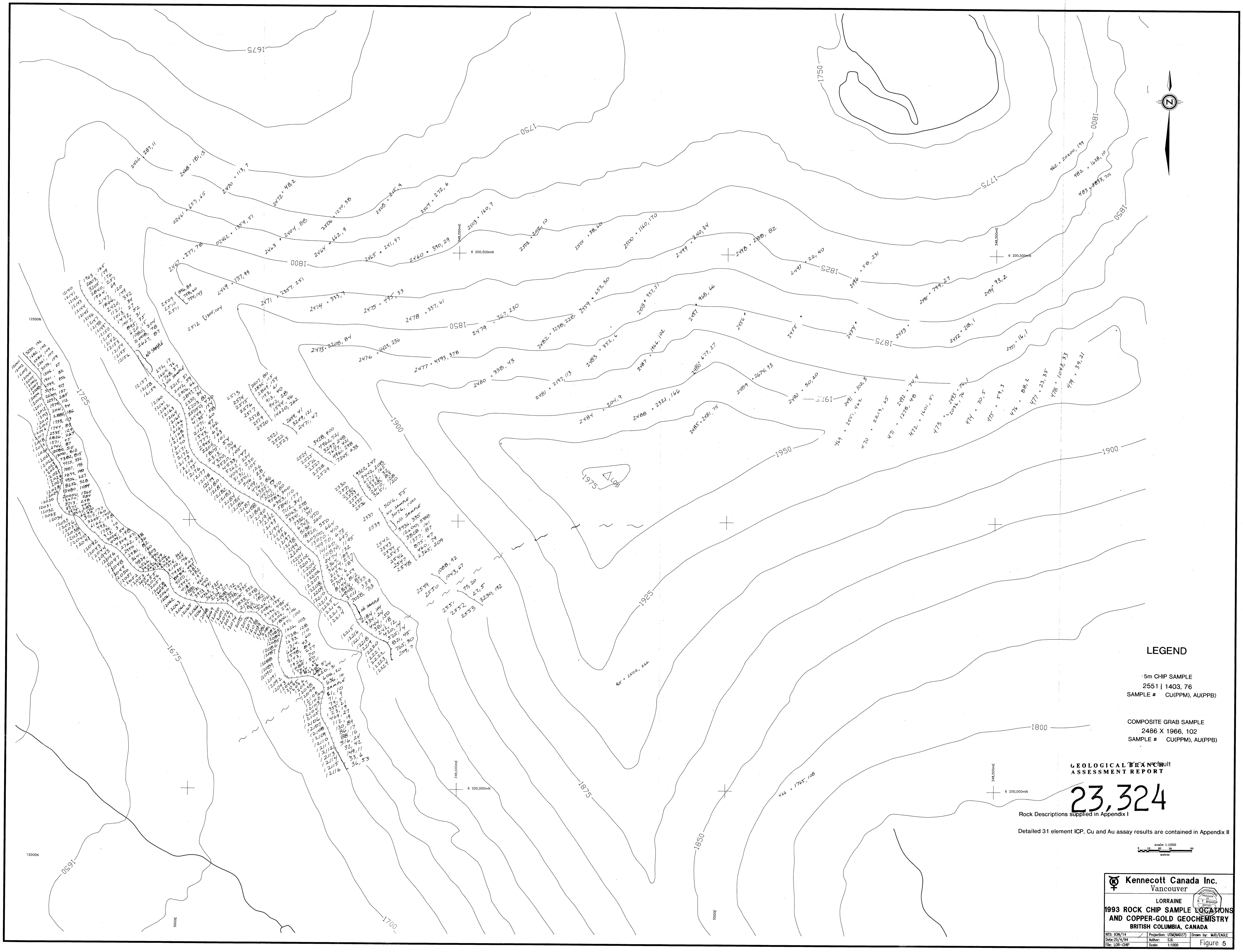
Kennecott Canada Inc.
138-200 Granville St, Vancouver, B.C., V6C 1S4

LORRAINE
OMINECA M.D., B.C.

SAMPLE LOCATIONS
WITH Cu-Au GEOCHEMISTRY

to accompany a report by: S. BISHOP

Drawn by: J. FINGLER	NTS: 93N/14	Acad file: LR2500
Date: FEB, 1992	Ref. no: 92405C02	Plate no: 1B


LEGEND
5m CHIP SAMPLE
2551 [1403, 76
SAMPLE # CU(PPM), AU(PPB)
COMPOSITE GRAB SAMPLE
2486 X 1966, 102
SAMPLE # CU(PPM), AU(PPB)
fault
GEOLOGICAL BRANCH
ASSESSMENT REPORT
23,324
Rock Descriptions supplied in Appendix I
Detailed 31 element ICP, Cu and Au assay results are contained in Appendix II
scale: 1:1000
metres
Kennecott Canada Inc.
Vancouver
LORRAINE
1993 ROCK CHIP SAMPLE LOCATIONS
AND COPPER-GOLD GEOCHEMISTRY
BRITISH COLUMBIA, CANADA
NTS: 93N/14
Date: 25/4/94
File: LOR-CHIP
Projection: UTM(NAD27)
Author: S.B.
Scale: 1:1000
Drawn by: MJD/EAGLE
Figure 5

APPENDIX I

Rock Sample Descriptions

Sample Number	Sample Description
0462	Grab sample, eastern extent of north face. High grade grab sample of biotitized migmatite with 5% bornite and 1% chalcopyrite as wisps along foliation, or in narrow quartz veinlets (<5cm wide).
0465	Grab sample, ridge between Extension and Main Zone. Malachite stained, salmon pink coloured monzonite.
0466	Grab sample, tracing sample 0465 downslope to Extension Zone. Similar malachite stained, salmon pink monzonite.
0482 & 0483	Grab samples, following up sample 0462. High grade bornite and chalcopyrite in white quartz veinlets (<5cm wide) in biotitized migmatite.
12001-12116	Lower bluffs, continuous 5m chip sampling through 580m total length. Predominant rock type is pink-orange coloured fine to medium grained syenite migmatite. Variable amounts, from 1-10%, disseminated magnetite and biotite. 1-5% fine grained chalcopyrite, disseminated or along fractures, occasional bornite, but it is so fine grained it is hard to quantify the amount. Trace pyrite. Malachite staining on some surfaces. Samples cross occasional pegmatite dykes, that generally host only trace amounts of sulphides.
12140-12225	Middle bluffs, continuous 5m chip sampling through 380m length. Similar to 12001-12116 above.
02509-02553	Upper Bluffs, continuous 5m chip sampling across sporadic outcrops of syenite migmatite. Similar to 12002-12116 above.
02451-02507	North face, composite grab samples collected across the north face of Lorraine mountain. Variable rock types, including grey diorite, pink syenite and syenite migmatite. Only rare sulphides observed throughout the face.
12117-12139 2268-12280	L93-1 drillcore samples; samples described in Appendix III drill logs.
12881-12377	L93-2 drillcore samples; samples described in Appendix III drilllogs.

APPENDIX II

Analytical Techniques and Detailed Analytical Results

COMP: KENNECOTT CANADA INC.
PROJ: #05-405
ATTN: SANDRA BISHOP

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-0359-RJ1+2
DATE: 93/07/22
* ROCK * (ACT:F31)

MAIN ZONE : LOWER BLUFF CHIP SAMPLES

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
12001	3.9	1.15	17	1	67	.6	12	1.03	.1	12	3230	2.11	.61	9	.64	433	4	.30	4	2650	9	9	127	107	1344	101.7	50	8	2	8	68	192
12002	3.2	.74	7	27	91	.1	12	.71	.1	14	1682	2.73	.61	10	.75	493	1	.04	1	1650	8	2	87	90	1849	138.7	49	9	1	8	76	142
12003	3.6	.92	12	13	105	.1	14	.71	.1	18	2584	3.43	.72	13	1.01	701	3	.04	1	1700	8	7	95	132	2323	189.6	81	12	2	10	102	109
12004	3.1	.88	11	21	74	.1	13	1.09	.1	15	2361	2.68	.44	7	.75	655	1	.04	3	1790	12	4	117	127	2095	129.1	64	10	2	8	68	107
12005	4.3	.70	10	15	82	.1	10	.99	.1	14	3076	2.69	.42	7	.62	591	2	.04	1	1770	14	4	109	96	1729	112.1	65	9	1	8	71	159
12006	1.6	.86	9	11	73	.2	10	.99	.1	11	1306	2.36	.25	4	.58	594	2	.04	1	1040	8	2	123	99	1578	109.1	56	8	1	7	65	27
12007	2.4	1.01	11	30	66	.4	10	1.57	.1	13	1901	2.95	.25	5	.59	651	3	.05	1	4250	5	4	214	149	1550	150.4	70	10	1	8	77	82
12008	7.9	1.13	9	31	67	.1	15	1.32	.1	21	6599	4.41	.44	10	.85	920	1	.04	1	2680	9	8	168	178	2829	225.0	103	14	1	11	83	456
12009	6.8	.88	12	21	53	.1	10	1.03	.1	16	5143	2.88	.33	6	.67	620	3	.04	1	1240	14	6	116	107	2096	138.0	84	10	2	9	97	415
12010	3.1	.95	14	8	57	.1	10	1.85	.1	11	2200	1.78	.22	6	.60	704	1	.04	2	550	12	3	95	102	1602	73.7	56	8	2	6	63	157
12011	3.7	.75	11	4	65	.1	9	.73	.1	10	2251	1.55	.33	7	.53	384	5	.04	1	610	5	2	63	80	1515	67.1	37	6	2	5	62	285
12012	2.2	.61	12	5	56	.2	9	.89	.1	10	1979	1.51	.25	4	.55	437	1	.03	1	490	5	2	57	79	1402	63.8	50	6	1	5	63	112
12013	2.6	.61	10	10	63	.1	10	1.06	.1	12	2061	1.85	.33	5	.67	542	2	.03	1	580	7	1	65	94	1916	80.0	54	7	3	7	76	94
12014	3.6	.82	6	11	148	.4	10	1.05	.1	13	2882	2.12	.22	4	.66	543	2	.03	1	480	5	3	96	94	1726	91.8	67	9	2	6	45	186
12015	2.8	.88	13	15	41	.2	13	1.15	.1	15	1733	2.39	.17	4	.73	629	2	.03	1	310	4	2	114	130	2280	107.5	76	10	2	8	74	113
12016	2.3	.59	32	20	41	.3	11	.85	.1	12	1744	1.60	.20	3	.48	428	1	.03	1	150	4	2	60	83	1825	66.1	49	7	3	5	42	83
12017	2.7	.45	10	15	71	.2	8	.63	.1	8	2535	1.20	.17	3	.36	292	1	.03	1	280	7	2	62	62	1280	44.1	32	4	1	5	56	129
12018	2.9	.86	10	29	82	.1	13	.75	.1	13	2826	2.07	.39	6	.77	500	1	.04	1	280	10	2	87	82	1961	82.2	61	8	2	7	60	267
12019	2.1	.82	7	36	54	.1	14	.79	.1	14	1571	2.11	.28	5	.59	412	1	.03	1	400	1	1	82	112	2371	78.5	43	8	3	6	47	95
12020	2.0	1.08	1	23	64	.1	10	.70	.1	21	2744	4.23	.42	7	.81	566	4	.03	1	200	9	3	109	136	2124	138.4	64	12	1	7	52	87
12021	10.9	.83	1	22	42	.1	7	1.00	.1	16	>10000	3.27	.23	4	.56	697	2	.03	1	1920	15	11	123	120	1949	144.6	72	9	1	7	45	515
12022	13.3	1.13	14	54	64	.2	7	1.92	.1	15	>10000	2.71	.37	8	.73	683	4	.06	1	7490	23	13	239	194	1826	108.2	78	10	1	8	64	812
12023	6.9	1.42	13	24	64	.8	9	1.84	.1	11	7382	2.33	.29	5	.50	603	5	.16	1	5280	16	10	224	159	1428	109.6	59	8	1	7	49	815
12024	5.1	1.74	15	32	82	1.0	14	1.59	.1	16	4925	2.65	.46	14	.74	695	4	.19	1	2520	16	9	256	153	2376	121.5	74	11	2	9	79	332
12025	3.4	1.20	10	10	41	1.2	4	1.28	.1	7	3887	1.33	.22	3	.25	319	5	.43	1	3120	7	7	133	86	633	59.2	40	5	1	5	45	198
12026	3.4	1.16	12	21	45	.6	7	1.61	.1	11	3899	1.99	.29	7	.60	702	3	.18	3	4480	6	6	240	125	1144	96.5	73	9	1	5	56	140
12027	4.4	.71	4	14	49	.2	4	1.30	.1	8	4936	1.56	.26	4	.29	396	2	.09	1	4030	9	6	187	98	1193	65.9	35	5	1	4	40	227
12028	7.2	.53	1	7	51	.1	1	.91	.1	10	8256	1.87	.28	6	.37	402	1	.05	3	2140	17	9	102	75	1204	62.0	43	5	1	4	34	528
12029	17.8	.92	12	35	56	.1	8	1.90	.1	11	>10000	1.90	.23	4	.40	484	5	.05	5	7150	24	14	304	204	1387	61.1	49	7	1	7	60	1034
12030	33.9	1.43	37	55	83	.4	22	4.24	.1	21	>10000	4.12	.36	8	.94	1313	7	.06	7	>10000	43	25	581	608	1630	162.0	108	16	1	11	56	1365
12031	9.5	.88	5	37	76	.5	7	1.90	.1	14	>10000	3.02	.38	5	.61	904	5	.06	1	9250	32	13	239	241	1353	119.7	88	10	1	7	65	584
12032	4.2	.60	6	26	65	.1	8	1.48	.1	13	3713	2.41	.23	3	.31	557	1	.04	1	6060	8	3	181	140	1553	113.7	51	7	1	6	50	248
12033	5.1	.56	1	20	57	.1	7	.93	.1	14	5177	3.17	.23	3	.25	519	2	.04	1	2820	7	6	127	103	1650	157.2	58	8	1	6	53	457
12034	3.3	.69	1	17	50	.1	9	1.06	.1	17	3475	4.15	.17	3	.34	792	1	.03	1	2490	3	4	148	109	1871	219.0	99	11	1	7	50	283
12035	5.5	1.12	1	19	77	.1	10	1.20	.1	19	5977	3.45	.39	10	.61	740	3	.04	1	2060	10	6	188	129	2123	168.2	122	12	1	7	48	170
12036	5.6	.89	2	13	58	.1	7	1.00	.1	15	6499	2.68	.20	4	.42	616	3	.04	1	1200	12	7	146	91	1616	123.8	86	8	1	6	45	177
12037	3.3	.72	1	20	66	.1	5	1.00	.1	11	3717	2.31	.22	2	.36	496	1	.04	1	2270	14	4	132	113	1133	105.3	65	6	1	5	39	160
12038	4.3	.85	2	13	48	.2	7	1.16	.1	12	3255	2.46	.20	5	.40	557	3	.04	1	2220	5	3	160	117	1371	106.2	69	7	1	5	47	140
12039	5.9	.80	1	23	50	.4	6	1.31	.1	12	6162	2.30	.20	4	.38	597	1	.07	1	4110	12	7	169	137	1464	98.2	73	7	1	5	37	158
12040	.1	.43	12	9	83	.1	4	.67	.1	5	493	1.34	.14	3	.19	293	2	.07	1	650	4	1	82	58	496	48.5	25	3	1	3	70	1
12041	.5	.80	1	15	98	.5	8	.96	.1	12	1734	2.76	.20	6	.43	544	1	.07	1	1400	3	4	126	87	1172	103.0	66	7	1	6	49	10
12042	.4	.38	7	12	92	.1	3	.64	.1	4	913	.94	.11	1	.13	222	1	.05	1	880	5	2	85	51	458	34.2	23	3	1	3	58	3
12043	2.8	1.74	5	20	51	1.9	13	1.30	.1	11	3025	2.25	.14	3	.23	507	5	.30	1	1530	12	13	420	109	1138	112.0	47	8	1	6	38	54
12044	3.9	1.73	4	21	47	1.9	13	1.38	.1	14	4091	3.10	.20	4	.27	692	6	.46	1	2170	19	13	225	124	1297	158.9	46	9	1	7	54	148
12045	4.2	1.56	6	22	42	1.7	10	1.46	.1	14	4349	3.54	.20	4	.24	569	4	.25	1	3830	4	9	203	136	1233	180.0	38	9	1	8	69	271
12046	2.7	.94	1	19	58	.1	9	1.35	.1	17	2762	4.45	.28	6	.46	796	3	.05	1	5170	12	3	241	182	1677	251.5	74	12	1	8	56	238
12047	2.0	1.00	2	21	64	.4	9	1.29	.1	16	2950	3.94	.25	8	.65	793	1	.05	1	3420	8	4	165	163	1501	212.0	81	12	1	8	69	136
12048	1.8	.70	1	23	75	.4	3	1.31	.1	12	2981	2.94	.23	4	.38	737	1	.04	1	2150	7	3	112	106	842	138.8	69	8	1	5	42	82

COMP: KENNECOTT CANADA INC.
PROJ: #05-405
ATTN: SANDRA BISHOP

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-0359-RJ3+4
DATE: 93/07/22
* ROCK * (ACT:F31)

N.W. FALE LORRAINE MTN / MAIN ZONE - LOWER SLOPES

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
12049	2.4	.63	1	14	84	.4	3	1.15	.1	10	3641	2.67	.22	6	.45	629	1	.03	1	2640	9	4	109	96	810	118.2	71	8	1	5	38	160
12050	3.3	.86	1	27	85	.3	2	1.31	.1	13	4839	3.56	.24	7	.42	729	2	.04	1	3340	8	6	122	133	694	166.4	82	10	1	7	60	303
12051	4.8	.89	3	21	85	.7	1	1.25	.1	9	6566	2.00	.20	6	.45	524	2	.05	1	3360	10	8	158	119	779	81.8	63	8	1	5	40	490
12052	2.7	.94	1	17	90	.3	7	1.16	.1	15	3902	3.77	.28	7	.58	822	3	.05	1	3170	12	4	217	134	1566	196.9	88	12	1	8	55	249
12053	2.3	.55	2	16	101	.1	7	1.27	.1	11	2649	2.54	.32	5	.38	565	1	.04	1	6090	12	3	160	139	1250	121.9	56	8	1	5	46	206
12054	3.5	1.00	6	16	60	1.3	7	1.31	.1	11	3219	2.28	.24	8	.36	490	3	.14	1	4680	32	5	230	132	1201	100.8	47	8	1	6	49	439
12055	2.2	.78	2	12	62	.5	10	.99	.1	14	2026	3.07	.27	7	.44	648	1	.05	1	2370	9	3	126	132	1929	150.2	67	10	1	7	48	264
12056	1.6	1.39	4	19	45	2.1	11	1.49	.1	14	1319	3.42	.25	7	.42	716	4	.26	1	3570	23	4	242	147	1451	175.4	59	12	1	8	59	124
12057	1.9	.55	5	13	72	.3	5	.93	.1	10	2150	2.23	.16	3	.44	549	1	.03	1	2000	6	2	128	94	1017	94.8	59	7	1	4	40	146
12058	7.6	.65	8	30	82	.6	1	1.62	.1	8	7935	1.70	.26	4	.56	651	1	.04	1	6420	19	9	167	152	726	63.5	54	8	1	5	53	527
12059	7.1	.73	2	54	92	.4	1	1.33	.1	11	8589	2.49	.26	4	.56	717	3	.04	1	3400	15	8	135	126	1123	104.4	76	9	1	7	57	495
12060	3.9	.71	7	23	81	.3	4	1.28	.1	8	4050	1.80	.21	3	.41	564	3	.04	1	3130	10	5	120	129	955	80.5	50	7	1	5	66	281
12061	4.7	.63	13	20	62	.3	4	1.18	.1	8	4942	1.53	.19	2	.37	385	3	.04	1	2950	16	5	113	114	1198	63.9	47	6	1	6	73	482
12062	3.5	.55	7	12	145	.4	3	.78	.1	7	4187	1.55	.30	6	.32	433	1	.04	1	1130	14	4	57	71	1008	68.8	49	6	1	5	53	197
12063	5.7	.60	9	8	45	.2	5	1.02	.1	11	5880	1.76	.20	3	.40	429	4	.04	1	1950	38	5	95	99	1540	75.0	43	7	1	7	80	465
12064	4.2	.97	13	26	38	.9	5	1.60	.1	10	4531	1.83	.16	5	.60	575	2	.04	1	4490	11	5	184	160	1409	79.3	56	10	1	6	51	440
12065	4.4	.71	14	11	44	.3	5	1.58	.1	9	3973	1.75	.24	4	.40	407	3	.04	1	6220	14	4	179	155	1221	73.9	43	8	1	6	69	491
12066	5.9	.67	10	14	43	.2	5	1.13	.1	11	4363	2.01	.18	3	.36	411	4	.04	1	2860	22	5	134	109	1411	79.5	47	7	1	6	60	535
12067	3.2	.89	11	33	55	1.0	6	1.38	.1	11	3667	2.36	.25	7	.63	623	3	.04	1	3870	8	5	146	144	1386	108.3	63	10	1	6	80	349
12068	2.4	.93	14	16	51	1.0	7	1.59	.1	9	2109	1.44	.20	4	.52	468	2	.04	1	5190	8	4	197	138	1166	61.0	45	8	1	5	59	217
12069	2.8	.75	15	21	43	.3	5	1.29	.1	9	2808	1.85	.19	3	.39	486	3	.04	1	3620	22	4	145	129	1096	76.5	50	8	1	6	73	172
12070	3.6	1.07	12	26	48	.9	7	1.59	.1	12	3535	2.54	.22	5	.54	608	2	.04	1	4330	15	4	196	157	1382	119.6	66	10	1	6	59	427
12071	2.7	1.16	12	22	45	1.3	7	1.83	.1	11	2798	2.29	.25	7	.67	634	3	.05	1	5370	10	4	211	186	1272	111.8	60	11	1	6	74	335
12072	2.6	1.15	7	31	42	1.2	5	1.75	.1	12	3005	2.63	.20	5	.57	666	3	.04	1	4810	9	4	247	184	1349	122.0	67	11	1	6	50	332
12073	1.8	.87	3	22	37	1.1	5	1.58	.1	11	1833	2.59	.24	6	.53	575	3	.05	1	5230	15	3	196	143	1006	119.5	63	9	1	6	55	258
12074	1.9	.94	14	13	48	.4	6	1.59	.1	11	2195	2.33	.24	6	.49	505	1	.04	1	5860	9	3	195	150	1115	106.0	70	9	1	5	45	174
12075	1.8	1.05	8	28	52	.6	8	1.62	.1	13	1810	2.90	.32	10	.64	648	1	.04	1	6260	8	3	224	217	1275	137.1	66	10	1	5	49	182
12076	1.5	1.17	19	35	64	.9	8	1.83	.1	12	966	2.40	.25	6	.58	621	3	.05	1	5460	11	2	230	203	1416	115.2	74	10	1	7	60	106
02451	.5	1.21	10	31	57	.1	7	1.29	.1	8	16	2.13	.27	6	.69	486	1	.04	1	1000	5	1	86	109	1077	35.2	35	9	1	6	87	1
02452	1.4	1.93	31	46	232	.1	20	1.57	.1	29	218	4.77	1.39	25	2.26	784	3	.12	68	2400	12	6	228	245	2674	150.3	70	20	1	15	206	1
02453	1.7	2.30	28	48	96	.6	20	1.88	.1	24	826	4.78	.80	25	1.53	1702	4	.14	22	1720	14	5	334	189	3265	185.0	139	19	1	12	121	2
02454	.6	.42	12	30	45	.2	1	.93	.1	2	13	.38	.32	3	.04	171	1	.01	1	300	1	1	17	28	42	11.4	4	2	1	2	37	21
02455	9.7	.53	3	20	90	.1	1	1.30	.1	19	>10000	3.46	.45	6	.72	704	2	.03	3	2400	18	14	113	128	1021	124.8	75	9	1	6	46	473
02456	2.4	1.03	1	33	65	.1	14	1.04	.1	37	2670	7.26	.69	13	1.01	1357	3	.05	22	1820	6	4	160	181	2879	341.9	216	19	1	13	116	126
02457	1.5	.80	1	22	39	.1	10	1.03	.1	19	968	3.84	.21	7	.39	743	1	.04	17	1360	1	1	126	104	2039	151.9	123	11	1	7	65	66
02458	1.6	.45	1	19	46	.1	7	.56	.1	11	937	2.27	.20	3	.24	531	2	.03	1	360	10	1	82	71	1395	87.6	64	7	1	4	42	51
02459	1.5	.31	11	14	55	.1	10	.66	.1	11	653	1.98	.20	2	.31	434	1	.03	9	310	8	1	47	89	1980	85.7	68	7	1	6	91	30
02460	1.0	.28	11	20	73	.1	8	.77	.1	9	390	1.65	.18	1	.25	375	1	.03	1	820	1	1	63	66	1556	75.0	28	5	1	5	72	29
02461	1.4	1.57	18	33	240	.1	14	1.45	.1	23	653	4.16	1.01	41	1.64	892	4	.06	22	2300	9	3	219	181	2455	152.0	79	16	1	10	133	65
02462	2.8	2.06	31	28	121	.1	20	1.58	.1	27	1359	5.07	1.82	62	2.74	965	4	.07	12	1320	11	5	143	260	3560	263.9	92	22	1	14	107	51
02463	2.2	.78	10	38	217	.3	3	1.27	.1	15	2404	2.42	.55	8	.64	501	3	.03	1	1340	9	3	78	79	692	84.4	52	7	1	5	57	88
02464	1.5	1.47	9	22	140	.1	14	1.22	.1	17	662	3.41	.73	28	1.35	478	2	.06	1	1920	4	2	265	142	2589	186.5	39	14	1	8	46	9
02465	.7	.84	4	16	38	.1	8	1.18	.1	13	241	2.91	.20	7	.31	366	2	.05	1	1650	6	1	184	84	1601	117.2	42	8	1	6	74	97
02466	1.0	1.15	4	24	110	.1	15	.69	.1	15	287	3.48	.77	14	.98	747	1	.05	1	770	6	1	100	108	2581	141.7	75	12	1	7	54	11
02467	.6	.31	12	19	37	.1	5	.23	.1	6	277	1.33	.24	5	.15	299	1	.05	1	140	4	1	22	54	963	57.1	28	5	1	5	78	78
02468	1.0	1.53	6	29	252	.1	19	1.56	.1	31	181	6.85	.73	15	1.30	985	4	.11	6	3960	6	3	354	216	3146	263.4	86	19	1	12	90	13
02469	2.0	.73	6	18	64	.1	12	.64	.1	15	1717	2.78	.40	4	.56	658	2	.03	1	350	4	2	82	76	2328	134.3	81	11	1	7	53	99
02470	1.2	1.71	13	42	70	.2	16	1.86	.1	16	113	3.73	.21	9	.62	910	2	.07	1	1450	17	2	399	131	2692	136.7	52	14	1	8	65	7

COMP: KENNECOTT CANADA INC.
PROJ: #05-405
ATTN: SANDRA BISHOP

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-0359-RJ5+6
DATE: 93/07/22
* ROCK * (ACT:F31)

MAIN ZONE UPPER BLUFFS N.W. FACE LORRAINE MTN COMPOSITE GRAB

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
02471	3.5	.67	2	18	70	.1	10	.61	.1	11	2357	1.85	.34	5	.32	318	1	.03	2	710	9	3	70	88	1601	65.5	44	6	1	4	38	251
02472	.1	.13	18	14	32	.1	1	.19	.1	1	48	.43	.09	1	.03	118	1	.05	2	30	2	1	9	47	105	8.4	5	1	1	5	123	2
02473	1.7	.50	1	33	45	.1	11	1.02	.1	19	2208	4.87	.26	5	.62	966	1	.04	1	140	19	1	65	122	2138	245.8	96	12	1	7	51	84
02474	.9	.57	5	27	43	.1	11	.93	.1	12	333	2.39	.16	3	.38	530	1	.03	1	620	4	1	92	99	1814	83.7	60	7	1	5	71	7
02475	.7	.55	1	13	45	.1	8	.68	.1	11	495	2.27	.23	7	.32	353	1	.04	1	1140	10	1	66	64	1101	90.6	37	5	1	4	37	33
02476	4.8	.69	1	26	26	.1	10	.91	.1	15	4429	3.80	.14	6	.39	668	1	.03	1	330	10	4	86	92	1662	169.1	101	10	1	7	83	236
02477	6.1	.90	1	40	44	.1	13	.85	.1	19	4593	5.27	.20	5	.52	865	1	.03	1	370	11	5	111	140	2019	256.7	98	13	1	9	60	378
02478	.8	.75	3	24	57	.1	10	.97	.1	15	337	3.30	.34	11	.72	523	2	.05	15	1670	7	1	114	113	1531	135.8	46	10	1	8	106	61
02479	1.3	.59	1	23	57	.2	7	1.18	.1	13	367	3.27	.17	4	.51	612	1	.04	3	1650	8	1	112	127	1125	137.2	63	10	1	6	59	230
02480	.5	.23	8	15	32	.1	4	.60	.1	6	338	1.37	.15	1	.24	345	1	.03	1	540	10	1	38	64	503	43.9	29	4	1	4	77	43
02481	1.8	1.71	1	26	45	1.2	14	1.48	.1	18	2197	5.14	.20	6	.44	1064	6	.15	1	1200	6	5	314	142	1756	262.3	95	14	1	9	61	113
02482	1.5	1.30	6	28	51	.1	17	1.00	.1	21	1238	3.75	.72	23	1.34	574	3	.06	1	810	5	2	147	148	2638	142.3	62	13	1	8	78	228
02483	1.0	1.88	10	38	37	.8	14	1.33	.1	14	352	2.95	.46	10	.61	647	5	.34	15	1720	14	8	640	135	1142	92.5	43	10	1	7	72	6
02484	.8	1.75	11	46	42	1.1	15	1.55	.1	14	204	3.33	.22	6	.44	628	3	.35	1	1630	11	7	374	137	1507	147.5	46	12	1	7	68	9
02485	2.5	.84	1	31	110	.9	6	2.09	.1	15	2481	4.16	.20	4	.53	788	1	.03	1	2770	9	4	113	177	518	151.1	108	10	1	5	42	75
02486	1.0	1.61	2	37	133	1.4	16	1.24	.1	17	677	4.16	.37	8	.46	943	3	.21	1	1450	8	7	360	132	1820	175.5	89	13	1	7	62	27
02487	2.2	.22	1	24	3078	.1	9	1.32	.1	11	1966	2.14	.18	2	.37	457	1	.05	2	6030	11	3	133	154	1178	76.0	46	7	1	4	36	102
02488	2.4	2.01	12	31	53	1.7	17	1.55	.1	16	2321	4.10	.21	5	.36	800	6	.31	1	570	14	11	288	147	1558	191.6	57	13	1	9	63	166
02489	2.6	.89	7	29	47	.3	13	.98	.1	16	2674	3.10	.22	4	.41	484	4	.10	1	1170	17	6	204	114	1590	110.6	52	8	1	6	66	93
02490	.6	.76	13	25	81	.3	8	1.57	.1	14	50	2.76	.41	13	.90	595	1	.04	13	2070	5	1	139	140	1063	86.9	38	10	1	7	89	20
02491	.3	1.23	1	34	31	.3	12	1.21	.1	13	102	3.00	.16	7	.62	985	2	.08	1	1080	18	1	175	107	1528	102.8	107	11	1	6	64	3
02492	.2	.78	1	35	27	.1	10	.94	.1	12	74	3.19	.21	9	.35	884	1	.10	1	1070	5	1	83	88	1518	127.2	65	9	1	6	52	4
02493	.7	1.79	24	41	207	.1	14	1.54	.1	23	76	4.33	1.08	32	1.92	1308	5	.08	47	2190	25	3	279	197	2207	152.6	121	18	1	12	155	1
02494	.4	.99	11	29	57	.5	10	.96	.1	10	93	2.19	.25	6	.44	448	2	.11	4	1240	10	3	399	99	1069	88.9	34	7	1	6	54	2
02495	.6	.69	1	14	49	.1	7	.94	.1	14	799	3.21	.19	4	.68	534	3	.04	1	1210	4	1	132	117	1486	121.3	66	9	1	5	66	27
02496	.6	.17	4	1	49	.1	1	.35	.1	2	58	.62	.15	1	.02	131	1	.03	1	50	6	1	14	42	25	6.4	5	1	1	3	73	231
02497	.5	1.01	10	20	354	.1	6	1.61	.1	6	22	1.72	.41	5	.57	525	3	.03	1	920	14	2	111	104	680	25.5	31	7	1	5	84	40
02498	.9	.95	7	28	87	.1	11	1.26	.1	13	288	2.84	.27	7	.49	539	2	.10	1	1450	11	2	258	125	1595	119.3	48	10	1	6	59	82
02499	.8	.65	6	29	123	.1	8	1.09	.1	11	240	2.20	.37	6	.75	467	2	.05	6	900	6	1	111	128	1253	71.1	41	8	1	7	99	34
02500	1.4	.51	4	7	114	.2	1	1.24	.1	4	1160	1.44	.33	4	.30	387	2	.03	1	820	8	2	43	92	228	29.1	35	4	1	3	45	170
02501	.2	.73	7	8	69	.1	4	1.67	.1	4	38	1.49	.46	3	.37	444	3	.03	1	880	9	2	51	100	217	19.0	27	4	1	4	80	60
02502	.4	.32	3	11	187	.1	3	.49	.1	6	202	1.35	.13	2	.17	178	1	.04	1	420	6	1	155	59	480	53.4	12	4	1	3	40	10
02503	1.1	1.13	12	35	133	.1	15	1.23	.1	22	160	4.05	.47	10	1.04	508	3	.06	19	1840	3	1	284	146	2513	155.2	52	14	1	12	171	7
02504	.3	.49	4	8	141	.1	4	.62	.1	5	272	1.04	.17	5	.26	160	2	.04	2	660	34	1	218	43	451	37.9	16	3	1	2	35	6
02505	.7	1.08	1	38	41	.2	13	1.17	.1	14	215	3.20	.27	4	.34	682	3	.19	1	1210	5	2	196	91	1851	118.8	58	11	1	7	74	9
02506	1.6	.49	5	18	81	.1	9	.64	.1	9	1270	1.51	.47	8	.58	527	2	.04	2	400	8	1	50	83	1467	72.3	61	7	2	5	41	38
02509	1.1	1.02	1	30	42	.1	12	1.00	.1	18	896	4.71	.35	8	.74	878	4	.04	1	600	3	1	104	141	2092	238.2	123	13	1	8	85	89
02510	.8	.78	1	28	38	.1	10	.91	.1	17	758	4.62	.23	5	.47	939	1	.03	1	360	2	1	87	110	1872	222.5	129	12	1	7	57	60
02511	.9	.68	1	23	42	.1	10	.60	.1	13	754	2.91	.29	6	.45	629	2	.02	1	190	5	1	62	77	1766	139.0	76	9	1	5	59	143
02512	1.3	.53	1	17	56	.1	6	.61	.1	12	1305	2.73	.32	5	.52	480	2	.03	3	1020	5	1	70	90	1142	132.8	66	8	1	4	40	104
02513	3.0	.65	15	33	52	.2	8	1.13	.1	10	2407	1.79	.21	3	.47	448	3	.03	1	2490	3	2	108	109	1391	93.0	60	7	1	5	70	80
02514	3.0	.46	5	14	53	.1	7	.84	.1	10	2835	1.68	.22	2	.39	412	1	.03	1	1400	4	2	70	97	1502	85.3	54	6	1	5	44	115
02515	3.7	.54	4	12	47	.1	8	.94	.1	11	2869	1.94	.19	2	.36	395	2	.03	1	1510	9	2	79	107	1634	104.5	56	7	1	5	66	154
02516	1.8	.81	1	16	32	.1	8	1.17	.1	12	1193	2.48	.16	5	.35	459	3	.04	1	1760	6	1	124	96	1618	127.0	58	8	1	5	44	61
02517	1.2	.86	1	16	56	.1	10	1.08	.1	14	913	3.30	.23	6	.48	556	2	.05	1	1620	6	1	141	96	1629	141.9	53	9	1	7	73	40
02518	1.0	.88	1	13	36	.1	10	1.11	.1	14	942	3.20	.15	9	.52	638	1	.04	1	1580	3	1	143	98	1523	136.6	70	10	1	5	39	28
02519	1.7	.79	6	13	50	.2	7	1.00	.1	11	1544	2.54	.15	5	.48	534	2	.04	1	1130	2	2	116	104	1174	122.9	64	8	1	5	56	46
02520	9.8	.46	2	10	37	.2	1	.73	.1	10	>10000	1.83	.21	2	.50	430	2	.03	1	1620	13	11	56	79	1097	89.6	66	6	1	6	37	262

COMP: KENNECOTT CANADA INC.
PROJ: LORRAINE 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-0363-RJ1+2
DATE: 93/07/29
* ROCK * (ACT:F31)

MAIN ZONE - LOWER BLUFFS - CHIP SAMPLING
MAIN ZONE - MID LINE BLUFFS

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
12077	1.9	.87	1	58	1328	.3	22	1.01	.1	14	3124	3.35	.45	7	.75	682	3	.03	1	3410	40	6	120	135	1577	164.1	213	11	1	7	53	173
12078	2.5	.78	1	49	223	.4	17	1.35	.1	10	2484	2.22	.29	5	.55	600	3	.04	1	3730	62	4	138	152	1186	93.9	78	7	1	7	70	155
12079	3.5	1.13	16	50	147	1.1	21	2.21	.1	11	3994	2.18	.22	6	.68	768	3	.05	1	8850	20	8	268	239	1278	100.8	83	11	1	7	57	485
12080	3.8	1.09	7	65	76	1.2	27	1.51	.1	15	4537	3.33	.19	6	.83	994	3	.03	1	3510	18	8	183	185	1525	157.1	98	15	1	9	84	275
12081	2.1	1.34	17	54	103	2.2	20	1.51	.1	9	2202	1.97	.16	6	.61	666	4	.05	1	2430	11	7	246	140	1489	87.0	68	11	1	7	49	91
12082	2.2	1.98	29	64	78	3.1	16	1.95	.1	8	1806	1.76	.18	6	.43	552	6	.26	1	4350	11	9	431	174	1040	79.8	53	10	1	8	79	106
12083	2.1	2.23	33	53	90	3.6	15	2.04	.1	8	1971	1.85	.16	6	.44	586	7	.41	2	3830	10	10	489	164	943	81.2	52	11	1	6	49	100
12084	1.7	1.73	23	51	93	2.1	18	1.91	.1	11	1626	2.41	.25	10	.63	769	6	.16	1	3400	10	7	452	166	1504	103.5	68	13	1	8	61	103
12085	2.0	1.70	20	41	91	1.8	16	2.01	.1	10	1738	2.10	.24	8	.70	799	5	.11	1	3590	15	7	405	158	1333	88.8	67	12	1	6	49	128
12086	1.4	1.40	2	51	58	.9	17	1.82	.1	14	1633	3.35	.15	7	.76	1047	4	.04	1	2840	14	6	233	146	1579	140.5	96	13	1	7	60	110
12087	1.1	1.06	2	56	69	.5	19	1.27	.1	15	1314	3.77	.14	9	.83	1088	3	.03	1	2690	9	5	192	125	1809	167.5	109	15	1	9	70	60
12088	.6	1.16	3	45	55	.2	15	1.42	.1	12	666	3.31	.13	4	.39	831	3	.08	1	2030	13	3	247	123	1479	152.3	76	11	1	7	56	43
12089	1.5	1.59	12	56	68	.6	20	1.76	.1	14	1598	3.47	.19	7	.66	955	10	.09	1	2040	27	7	381	144	1584	144.0	89	13	1	8	64	84
12090	2.7	1.44	1	51	73	.3	25	1.98	.1	16	3143	4.10	.20	9	1.06	1247	3	.05	1	2530	8	7	169	149	1748	170.4	113	16	1	8	60	277
12091	1.5	1.01	1	58	59	.3	19	1.53	.1	15	1926	3.61	.18	5	.71	912	2	.03	1	2690	14	4	170	137	1691	149.8	78	13	1	8	66	70
12092	1.0	1.35	6	51	54	.5	20	1.50	.1	14	1089	3.49	.19	7	.68	896	3	.08	1	1910	12	6	291	140	1745	154.9	74	13	1	9	68	50
12093	1.7	.99	1	37	63	.1	20	1.30	.1	14	1761	3.82	.19	5	.63	864	4	.04	1	2590	10	5	171	136	1696	180.6	75	13	1	8	74	411
12094	.7	.40	5	29	74	.2	5	1.01	.1	5	547	1.24	.19	1	.35	569	1	.05	1	700	2	2	48	78	443	50.2	19	7	1	4	58	67
12095	.1	.51	5	29	49	.3	4	1.03	.1	4	81	1.24	.15	2	.41	520	1	.03	1	420	5	1	32	72	275	45.0	17	6	1	4	56	6
12096	.6	.80	1	55	108	.2	15	1.52	.1	13	778	3.49	.15	3	.54	865	1	.03	1	1490	5	3	134	118	1448	144.1	61	12	1	7	62	51
12097	.5	1.40	1	57	90	1.0	16	2.39	.1	18	689	4.85	.14	6	1.05	1465	2	.03	1	2800	22	4	237	181	1824	201.9	104	17	1	10	77	44
12098	.9	1.39	1	62	87	.8	17	2.02	.1	15	620	3.68	.22	8	.82	1089	3	.04	1	2150	13	4	223	146	1867	157.7	78	15	1	8	68	31
12099	.8	.92	1	49	75	.2	18	1.44	.1	12	606	2.94	.15	4	.55	784	2	.03	1	1850	14	2	174	121	1969	127.7	61	12	1	6	60	20
12100	.8	1.17	1	69	111	.3	19	1.85	.1	14	637	3.46	.18	5	.70	918	4	.04	1	2410	13	3	250	134	2058	143.2	61	13	1	7	67	16
12102	.1	.67	1	43	69	.2	9	.95	.1	10	61	2.71	.10	6	.45	527	1	.03	1	1330	2	1	145	97	837	109.9	48	9	1	4	36	10
12103	.1	.88	1	39	88	.4	12	.96	.1	12	71	3.13	.23	10	.54	731	1	.05	1	1370	2	2	141	89	1405	120.4	47	9	1	5	48	9
12104	.1	.64	1	46	75	.2	8	1.06	.1	9	79	2.49	.15	3	.41	576	1	.04	1	1100	6	1	88	106	963	89.4	35	9	1	4	41	5
12105	.4	1.01	1	48	103	.3	13	1.34	.1	13	355	3.11	.18	5	.61	680	1	.05	1	1300	5	2	223	117	1558	124.7	43	11	1	6	57	21
12106	.2	1.02	1	66	466	.5	10	1.81	.1	12	123	3.17	.28	4	.53	876	1	.03	1	1270	15	3	168	126	1049	114.3	41	11	1	5	44	19
12140	1.4	.93	1	77	122	.1	23	.95	.1	23	1963	6.75	.73	17	.97	1242	1	.04	1	1980	5	2	81	167	2238	439.1	151	20	1	13	111	165
12141	2.0	1.34	1	73	100	.1	27	1.26	.1	28	2803	7.62	.71	14	1.16	1729	1	.03	1	2670	9	5	103	188	2817	429.2	231	24	1	12	61	179
12142	1.1	.96	1	62	92	.1	16	1.00	.1	23	3025	6.71	.41	6	.56	1249	1	.02	1	2140	38	5	81	148	1013	354.7	189	17	1	11	79	176
12143	1.7	.81	1	57	149	.1	24	.79	.1	24	2840	6.72	.58	8	.81	1019	1	.03	1	2140	4	3	88	149	2188	403.2	129	18	1	11	60	251
12144	.8	.85	1	79	89	.1	22	.90	.1	22	1964	6.54	.68	11	.86	1039	1	.04	1	2440	9	2	87	174	2112	405.1	134	19	1	12	108	69
12145	1.3	1.10	1	78	88	.1	25	1.01	.1	28	2147	8.71	.64	11	1.00	1193	1	.04	1	2040	1	2	109	177	3231	563.2	117	22	1	14	78	120
12146	1.6	.99	1	63	91	.1	24	.94	.1	24	1866	6.52	.69	11	.95	1000	1	.04	1	2040	8	2	87	140	2977	390.4	102	17	1	13	115	149
12147	3.2	.93	1	58	83	.1	21	.80	.1	22	2420	6.70	.35	5	.50	954	1	.03	1	2140	7	3	90	161	1799	429.0	100	17	1	14	125	352
12148	1.6	1.35	11	63	78	.5	20	1.32	.1	17	1121	3.25	.34	11	.75	782	2	.05	1	1520	11	4	133	124	2285	177.2	77	13	1	9	71	34
12149	.8	.68	1	53	123	.1	19	.71	.1	15	1013	3.90	.47	9	.58	785	1	.04	1	1040	26	1	67	109	1970	229.7	77	11	1	9	92	27
12150	1.3	.72	1	46	80	.1	15	1.13	.1	13	1472	2.90	.51	7	.70	674	1	.05	1	2470	5	1	79	112	1861	167.2	72	9	1	7	88	52
12151	1.1	.51	3	45	115	.1	17	.95	.1	9	1417	1.84	.34	5	.48	476	1	.05	1	2020	3	2	50	89	1846	123.5	86	7	1	6	71	31
12152	1.0	.72	1	61	335	.1	18	.94	.1	11	895	2.74	.36	7	.54	540	1	.04	1	1400	3	1	72	115	2032	166.2	98	10	1	8	85	75
12153	1.5	.23	4	41	42	.1	14	.48	.1	5	620	.71	.22	1	.22	198	1	.04	1	280	1	1	19	60	1551	34.7	32	4	3	3	45	15
12154	1.3	1.00	3	50	67	.1	20	1.10	.1	14	1080	3.54	.32	7	.73	794	2	.04	1	1140	6	2	100	116	2414	213.3	126	12	1	9	81	304
12155	2.1	1.12	1	57	60	.1	23	1.22	.1	16	2008	4.31	.27	9	.55	721	1	.06	1	1580	6	2	100	111	2434	281.9	93	11	1	8	57	78
12156	2.3	1.15	1	65	61	.1	26	1.25	.1	21	2627	5.67	.34	9	.78	949	2	.04	1	1800	6	3	116	152	3018	374.6	114	16	1	10	77	87
12157	.3	.19	5	36	74	.1	1	.05	.1	1	272	.46	.12	1	.02	127	1	.05	1	40	2	1	6	60	82	21.0	11	3	1	5	106	17
12158	2.0	.80	3	51	62	.1	18	1.08	.1	9	1664	1.48	.24	4	.50	419	2	.04	1	1350	7	4	90	100	1965	77.1	55	7	2	6	85	76

COMP: KENNECOTT CANADA INC.
PROJ: LORRAINE 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-0363-RJ3+4
DATE: 93/07/29
* ROCK * (ACT:F31)

MAIN ZONE - MIDDLE LYNE BLUFFS

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
12159	2.3	.62	5	50	48	.1	17	.84	.1	9	1768	1.52	.32	3	.54	406	2	.03	2	1510	9	3	65	76	1695	78.8	43	9	1	6	59	37
12160	2.4	.40	1	54	42	.1	21	.63	.1	9	2215	1.74	.28	2	.41	445	1	.03	1	870	9	2	38	68	1795	95.9	45	8	1	6	64	51
12161	2.9	.99	1	54	51	.2	26	1.15	.1	12	2442	2.25	.38	8	.75	526	2	.04	3	1920	14	4	99	89	2615	115.2	60	12	2	7	59	59
12162	4.2	.95	4	61	36	.2	28	1.20	.1	11	2906	1.85	.18	4	.53	494	2	.05	1	1060	14	6	98	97	2585	92.5	54	11	2	7	47	66
12163	3.6	.82	3	48	50	.1	24	1.01	.1	11	2897	2.21	.25	6	.51	510	11	.03	1	1270	13	4	84	91	2242	121.4	65	10	1	8	85	77
12164	2.6	.66	5	40	41	.4	19	1.40	.1	7	2370	1.53	.15	2	.41	567	1	.04	1	890	7	4	58	94	1401	70.7	40	10	1	6	48	34
12165	5.2	1.13	5	71	56	.4	28	1.17	.1	13	5203	2.61	.21	5	.61	680	4	.04	2	1370	12	12	133	91	2071	130.1	68	13	1	8	59	80
12166	25.9	.96	1	51	45	.4	77	1.18	.1	15	>10000	2.63	.23	6	.81	867	4	.03	1	3880	44	25	108	111	2215	129.0	102	14	1	9	33	430
12167	6.4	1.07	1	61	51	.1	33	1.17	.1	14	6449	3.51	.19	4	.57	752	3	.04	1	1740	24	11	173	105	2069	168.3	88	14	1	8	51	154
12168	2.2	1.47	1	80	52	.3	29	1.29	.1	20	4135	4.55	.32	11	1.06	936	4	.05	1	1980	21	9	153	131	2448	217.6	108	19	1	10	53	58
12169	1.3	1.20	1	78	39	.1	20	1.18	.1	15	1471	3.88	.22	8	.56	716	2	.07	1	1380	12	4	147	101	2176	204.4	91	14	1	8	52	60
12170	.9	.73	1	56	70	.1	16	.70	.1	12	2121	2.80	.17	4	.33	518	1	.06	1	580	5	3	78	62	1403	144.6	58	9	1	6	47	47
12171	1.9	1.06	1	67	44	.1	19	1.02	.1	16	1543	4.63	.21	6	.37	842	2	.06	1	1470	10	3	108	106	1996	250.9	81	14	1	8	51	162
12172	1.1	1.01	1	55	39	.1	18	1.15	.1	13	1777	3.53	.17	8	.50	757	2	.04	1	1380	5	4	100	98	1681	194.8	98	13	1	7	47	67
12173	2.2	.96	1	76	32	.2	19	1.17	.1	12	2945	3.38	.15	7	.47	676	2	.05	1	2180	12	5	116	111	1512	174.8	86	12	1	8	67	163
12174	1.9	1.26	1	68	43	.3	22	1.47	.1	13	2203	3.44	.17	8	.40	693	2	.04	1	1920	21	6	162	101	1853	205.9	76	13	1	8	61	101
12175	1.3	1.24	1	66	39	.3	18	1.32	.1	11	1805	3.13	.19	8	.46	614	2	.06	1	1320	9	5	143	82	1741	193.1	69	12	1	7	47	54
12176	1.7	1.28	1	65	48	.2	19	1.32	.1	12	2313	3.18	.19	7	.48	561	3	.05	1	1940	9	6	200	84	1720	189.5	67	13	1	8	63	170
12177	4.1	.90	1	53	43	.1	25	1.00	.1	13	4730	3.06	.16	4	.39	681	3	.04	1	1260	20	7	136	88	1572	177.8	73	11	1	7	42	179
12178	2.3	.82	1	50	35	.1	20	.94	.1	13	3520	3.51	.15	4	.38	730	1	.03	1	1110	12	5	104	84	1498	221.0	77	11	1	6	34	105
12179	4.2	1.22	1	57	67	.1	32	1.00	.1	19	4533	4.34	.47	14	1.04	1019	3	.04	1	1390	20	7	108	111	2744	260.9	114	19	1	11	47	147
12180	5.1	1.11	1	59	61	.1	35	1.02	.1	18	5262	4.31	.36	11	.81	945	2	.04	1	1680	17	7	93	111	2859	263.5	106	16	1	10	46	234
12181	3.6	1.26	1	59	61	.1	33	1.27	.1	20	4097	5.11	.29	7	.80	1040	4	.04	1	1810	20	7	123	129	2780	311.3	121	19	1	11	59	230
12182	3.5	1.04	1	57	58	.1	33	1.02	.1	18	3131	4.07	.33	9	.71	953	2	.05	1	1210	12	4	93	101	3455	236.0	87	16	1	9	52	105
12183	1.0	1.05	1	47	41	.1	20	.95	.1	13	2501	3.28	.32	8	.66	768	1	.05	1	1270	4	3	86	93	1706	175.2	97	10	1	7	51	126
12184	.2	1.09	1	61	30	.3	10	1.26	.1	10	546	2.74	.17	4	.49	726	2	.05	1	1330	11	2	126	103	1264	152.7	77	9	1	6	47	28
12185	.7	1.13	4	63	35	.2	14	1.21	.1	10	649	2.72	.16	6	.35	670	2	.08	1	1390	4	2	116	87	1589	156.4	69	10	1	6	49	25
12186	5.1	.99	1	49	44	.1	34	1.25	.1	15	4767	3.02	.17	4	.55	867	2	.04	1	1470	14	6	124	125	2987	170.6	108	12	1	9	59	86
12187	6.7	.86	9	52	47	.1	41	1.29	.1	11	6335	2.03	.14	2	.28	567	1	.04	1	1850	12	8	112	117	2993	113.6	63	8	2	7	63	93
12188	14.3	.80	29	63	36	.1	54	2.38	.1	13	>10000	2.68	.15	3	.44	773	5	.04	2	>10000	27	18	225	211	2172	151.2	95	10	1	9	68	310
12189	6.3	.72	13	51	59	.1	31	1.16	.1	10	5021	1.83	.17	2	.27	520	3	.04	1	1570	14	6	122	106	2038	90.9	58	8	1	7	63	180
12190	9.3	1.20	9	52	43	.1	39	1.84	.1	12	9589	2.52	.14	4	.44	872	3	.04	1	2670	15	13	168	123	2218	132.4	83	10	1	9	66	300
12191	5.4	1.19	2	44	43	.1	31	1.67	.1	12	6353	2.57	.17	7	.52	808	5	.04	1	2890	17	9	207	125	2008	133.0	81	9	1	7	47	110
12192	5.5	1.20	4	49	45	.2	27	1.26	.1	10	5841	2.08	.18	4	.33	570	5	.08	1	1850	20	8	233	87	1702	84.9	61	8	1	6	69	177
12193	7.3	1.10	10	52	42	.4	33	1.67	.1	11	7112	2.41	.17	5	.47	840	6	.04	1	3800	25	10	183	151	1789	92.9	90	10	1	6	44	347
12194	5.2	.70	8	47	33	.2	23	1.10	.1	8	5063	1.62	.16	3	.34	569	3	.04	1	1900	24	6	117	105	1258	58.1	70	7	1	5	64	248
12195	3.2	1.18	11	52	38	.5	23	1.64	.1	11	3341	2.44	.17	5	.43	874	4	.06	1	2190	17	5	176	118	1830	117.5	76	9	1	5	47	136
12196	6.5	1.28	12	46	42	.8	29	2.12	.1	10	7332	2.38	.18	5	.49	1175	4	.05	1	3620	22	10	191	137	1944	114.0	88	10	1	7	64	341
12197	6.4	1.65	15	48	49	1.9	29	1.83	.1	10	6743	2.05	.19	6	.54	955	6	.18	1	2560	21	11	360	112	1489	75.8	90	9	1	6	37	450
12198	4.7	1.37	7	52	71	.6	27	1.83	.1	11	5139	2.36	.17	3	.48	869	3	.04	1	3460	22	9	262	154	1503	104.0	94	10	1	7	64	260
12199	14.0	1.09	13	52	53	.7	58	1.41	.1	12	>10000	2.15	.14	4	.56	935	6	.03	1	2620	31	22	155	112	1630	74.1	99	9	1	7	34	550
12200	15.0	1.16	4	55	53	.6	64	1.50	.1	15	>10000	3.14	.19	4	.55	1081	6	.03	1	3530	34	25	178	129	1694	116.5	134	10	1	9	51	664
12201	10.6	1.19	9	49	38	.9	49	1.73	.1	12	>10000	2.34	.16	4	.58	892	6	.04	1	3170	29	16	181	131	1752	84.7	92	10	1	6	40	410
12202	12.8	1.18	2	59	48	.5	53	1.84	.1	13	>10000	2.98	.15	4	.61	1141	5	.04	1	3580	27	19	186	146	1787	126.6	122	13	1	8	65	673
12203	11.4	1.00	10	53	46	.4	37	1.85	.1	11	>10000	2.47	.17	4	.39	648	4	.04	1	6860	34	13	231	185	1285	84.3	94	9	1	6	52	695
12204	9.5	1.32	5	79	47	.6	36	2.39	.1	15	9978	3.86	.16	6	.57	1127	5	.04	1	8050	28	15	294	264	1619	165.5	117	13	1	9	74	1195
12205	2.2	1.03	7	50	57	.5	16	1.45	.1	10	2474	2.39	.18	5	.50	818	2	.04	2	2990	11	2	195	128	1453	94.8	86	9	1	6	50	132
12206	3.0	1.00	9	51	66	.6	19	1.43	.1	9	2364	2.10	.13	3	.45	685	4	.03	1	2330	16	5	204	136	1438	90.2	84	10	1	6	66	189

MAIN ZONE MID CLIFF BLUFFS

MAIN ZONE UPPER BLUFFS

VARIOUS GEAS

COMP: KENNECOTT CANADA INC.
PROJ: LORRAINE 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-0363-RJ5
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
12207	3.4	.63	2	57	48	.5	15	1.01	.1	7	3644	1.77	.13	3	.37	474	4	.04	1	2200	16	5	109	85	640	68.2	70	7	1	5	48	277
12208	1.6	.95	1	58	65	.3	17	1.47	.1	13	2153	4.23	.13	4	.35	910	2	.04	1	3450	11	4	161	127	1217	186.6	118	14	1	6	48	184
02521	2.6	1.06	1	252	55	.1	19	1.50	.1	13	2649	3.48	.27	5	.69	778	3	.05	1	1470	13	6	181	95	1558	214.9	56	16	1	8	61	41
02522	3.6	1.06	1	78	38	.4	24	1.65	.1	12	3249	2.96	.16	3	.52	721	3	.04	1	2310	10	7	201	97	1791	180.8	66	14	1	8	65	121
02523	2.9	.85	1	59	38	.1	22	1.30	.1	13	2471	3.10	.16	3	.44	592	3	.04	1	2210	10	5	164	83	1842	185.9	52	12	1	7	58	47
02524	6.9	.86	1	65	45	.1	32	1.06	.1	13	3428	2.68	.27	5	.48	564	2	.04	1	450	13	6	106	101	2781	149.8	61	13	1	9	93	400
02525	8.4	.93	1	71	34	.1	35	1.14	.1	12	4962	2.79	.17	4	.38	529	2	.05	1	810	19	8	112	104	2158	141.6	63	11	1	8	63	521
02526	4.2	1.05	1	64	32	.1	26	1.01	.1	12	3297	2.78	.17	7	.36	538	2	.09	1	640	14	5	102	83	2009	148.8	58	12	1	7	55	248
02527	7.6	1.16	1	51	37	.2	36	1.11	.1	11	7677	2.38	.14	8	.41	495	2	.10	1	880	23	12	127	86	1958	104.2	56	10	1	6	45	421
02528	6.9	.70	1	62	27	.1	30	1.01	.1	10	4961	2.70	.14	3	.25	522	3	.06	1	1860	9	7	95	101	1933	157.0	55	9	1	6	54	298
02529	8.8	.78	4	78	39	.1	39	1.30	.1	15	7245	4.04	.17	4	.39	763	1	.04	1	3140	17	10	128	134	2265	263.9	88	15	1	9	56	233
02530	10.8	1.14	1	66	49	.3	40	1.69	.1	13	9322	2.72	.18	4	.48	775	3	.05	1	3850	24	14	186	131	1781	112.4	85	13	1	7	51	247
02531	9.9	1.02	1	56	41	.3	42	1.30	.1	14	9442	3.01	.18	5	.46	699	3	.04	1	2580	30	13	143	125	1966	135.7	91	12	1	7	44	208
02532	7.0	.97	1	54	40	.4	33	1.33	.1	10	6771	1.90	.15	4	.33	497	3	.04	1	1880	15	10	121	92	1784	78.4	55	10	1	6	42	165
02533	1.9	1.09	1	62	52	.3	22	1.32	.1	11	2593	2.72	.20	6	.37	639	2	.06	1	1790	10	6	178	86	1677	123.8	68	11	1	6	57	32
02534	2.7	.57	1	48	109	.3	17	.85	.1	7	3328	1.60	.14	2	.27	436	2	.04	1	1240	9	5	90	66	979	66.7	44	7	1	6	67	83
0462	28.6	.38	2	47	92	.1	71	1.17	.1	12	>10000	2.25	.36	5	.69	424	3	.09	6	1970	108	22	70	75	1308	75.0	35	10	1	9	80	199
0463	.1	.38	1	93	25	.1	21	.64	.1	28	682	9.85	.17	4	.41	1436	1	.03	1	40	1	1	67	112	2689	577.8	92	22	1	12	64	25
0465	1.9	1.00	1	52	77	1.0	20	1.16	.1	14	2502	3.45	.18	5	.72	1016	2	.04	1	1420	21	5	157	120	1619	143.2	114	14	1	7	58	266
0466	1.1	.53	1	60	89	.1	15	.98	.1	16	1765	4.23	.19	2	.26	1034	1	.03	1	2530	10	1	93	181	1216	196.7	99	12	1	7	58	108

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
12209	.4	.21	12	27	27	.3	3	.16	.1	2	222	.42	.12	1	.04	133	3	.07	1	170	7	4	14	52	77	10.2	23	3	1	4	103	6
12210	8.0	.86	11	33	57	1.3	35	1.14	.1	9	7709	1.69	.17	5	.61	718	5	.07	4	1710	23	15	111	87	951	59.2	111	11	1	6	68	659
12211	8.8	1.55	22	51	72	2.3	38	2.49	.1	11	8144	2.16	.21	10	.69	900	9	.08	3	8550	26	17	280	274	1119	85.8	113	13	1	8	77	812
12212	7.1	1.12	6	46	59	.9	35	1.82	.1	13	6848	2.80	.24	6	.55	1001	5	.07	1	4310	23	15	208	173	1418	120.8	153	13	1	7	64	533
12213	2.9	1.48	5	45	39	1.4	22	2.08	.1	15	3011	3.25	.15	7	.83	1159	7	.06	2	3710	16	11	256	187	1349	124.5	190	14	1	7	64	339
12214	7.5	1.05	4	45	127	1.2	38	1.94	.1	15	7058	3.14	.27	5	.69	1118	5	.09	3	2210	26	17	151	156	1034	124.8	141	13	1	7	57	713
12215	1.3	1.20	1	42	78	.8	18	1.57	.1	16	2184	3.87	.25	8	.86	1257	5	.09	3	2020	27	10	160	143	1337	168.6	148	14	1	7	74	114
12216	.2	.92	3	37	61	.8	9	.81	.1	10	334	2.63	.18	7	.43	739	4	.07	1	880	11	7	103	88	922	102.0	91	11	1	5	49	24
12217	.6	.85	1	67	76	.4	10	1.02	.1	11	444	2.90	.16	7	.34	556	4	.04	1	1370	7	4	163	92	1441	113.6	83	11	1	6	71	150
12218	.5	.49	1	73	76	.4	8	1.11	.1	8	381	2.10	.16	3	.28	597	1	.06	4	1110	15	4	77	85	957	92.6	58	8	1	5	57	18
12219	.6	.93	1	76	99	.8	8	1.22	.1	10	242	2.77	.17	7	.34	597	3	.05	1	1200	3	5	151	96	1359	117.2	82	11	1	5	71	12
12220	.8	.82	1	73	73	.6	9	2.10	.1	9	420	2.40	.15	4	.56	859	2	.04	4	990	10	5	116	114	977	89.3	68	11	1	5	58	14
12221	.3	.93	1	80	51	1.2	5	1.82	.1	8	525	2.22	.29	3	.61	825	3	.02	1	1310	12	6	61	102	216	75.8	54	11	1	5	64	14
12222	.7	1.26	2	83	111	1.3	11	2.10	.1	13	821	3.37	.29	8	.88	946	3	.03	1	1510	13	9	154	126	952	129.2	79	14	1	6	67	45
12223	1.0	.95	7	89	93	.9	9	1.08	.1	10	765	2.34	.14	8	.52	573	5	.04	5	1160	9	5	171	90	1261	100.5	63	10	1	5	73	30
12224	.4	.29	6	55	55	.3	1	.28	.1	2	209	.59	.10	1	.08	179	1	.07	1	650	4	3	29	53	127	29.8	20	4	1	3	43	7
12225	1.9	1.48	9	88	63	1.9	14	2.37	.1	13	1854	3.24	.17	11	.62	1060	7	.05	1	7060	20	9	394	255	1183	152.7	117	15	1	7	68	84
12107	.5	1.07	1	96	96	1.1	8	1.67	.1	13	469	3.30	.27	10	.59	811	3	.08	1	1450	10	6	171	95	1161	125.7	55	12	1	6	51	27
12108	.3	1.07	2	72	44	.7	10	1.24	.1	12	112	3.19	.19	10	.37	563	4	.17	1	1540	9	5	272	105	1466	137.3	48	11	1	7	71	19
12109	.5	1.02	1	76	51	.8	11	1.22	.1	13	130	3.46	.18	8	.37	581	3	.11	1	1540	7	6	264	97	1584	150.9	74	11	1	6	56	89
12110	.6	.78	1	82	52	.3	8	1.22	.1	12	86	2.96	.15	6	.42	526	4	.05	1	1390	9	4	203	90	1355	126.4	59	10	1	6	67	17
12111	.4	1.08	10	68	56	.4	8	1.28	.1	13	88	2.84	.15	8	.72	602	2	.05	1	1610	11	5	363	95	1426	111.4	61	11	1	6	59	16
12112	.9	.82	3	67	90	.5	7	1.22	.1	13	316	2.63	.11	5	.48	461	4	.04	4	1230	11	4	217	90	1201	97.9	50	11	1	6	73	24
12113	.5	.28	7	65	152	.3	1	.81	.1	4	32	1.07	.12	1	.10	347	2	.07	1	460	20	3	46	71	324	43.9	22	6	1	3	52	42
12114	.1	.72	1	45	54	.1	12	1.15	.1	10	149	2.64	.13	3	.37	470	1	.05	1	1810	8	2	156	83	1164	110.1	41	8	1	6	59	11
12115	.3	.80	1	43	72	.1	11	1.15	.1	9	33	2.39	.12	3	.31	427	2	.04	1	1270	10	2	209	65	1287	102.1	39	7	1	6	59	6
12116	.1	.20	1	37	352	.1	1	.53	.1	1	36	.44	.12	1	.01	192	1	.06	1	90	16	1	33	37	29	10.2	7	2	1	4	67	53
02535	2.5	1.24	1	54	52	.3	26	1.27	.1	16	2610	3.99	.20	6	.47	935	6	.08	1	1330	7	7	179	110	2209	216.4	108	13	1	10	80	128
02536	3.6	1.51	1	59	50	.8	31	1.59	.1	19	3651	4.41	.19	7	.80	1298	21	.07	1	1680	26	10	190	141	2004	218.3	120	17	1	10	63	120
02537	3.3	1.48	1	64	63	.4	32	1.83	.1	21	5016	4.87	.19	7	1.03	1382	2	.03	1	1990	21	9	191	133	2317	205.9	196	17	1	10	78	55
02539	2.1	1.07	1	55	68	.4	23	1.27	.1	16	3076	4.31	.22	6	.74	1111	1	.04	1	1250	13	6	161	123	1652	190.7	135	16	1	9	66	100
02542	6.2	.83	1	43	62	.5	30	1.14	.1	11	5936	2.99	.17	3	.46	694	3	.04	1	2010	16	9	140	111	1405	149.2	94	10	1	8	69	335
02543	16.0	.68	2	52	53	.4	43	1.03	.1	8	>10000	1.83	.15	2	.44	551	2	.03	1	3110	25	26	113	97	865	73.1	73	7	1	6	46	588
02544	4.8	.57	1	45	50	.1	19	1.14	.1	8	3828	2.04	.16	2	.30	506	2	.04	1	3670	14	6	129	94	884	89.5	75	7	1	6	64	161
02545	1.2	.51	1	40	54	.1	15	1.07	.1	11	1377	3.84	.13	2	.24	832	2	.04	1	1990	10	3	112	108	1110	214.0	80	11	1	8	59	87
02546	.6	.63	1	42	60	.1	14	.98	.1	10	875	3.09	.14	3	.36	720	1	.05	1	1330	16	1	116	87	1128	147.4	91	8	1	6	66	47
02547	.1	.39	1	45	59	.2	8	.74	.1	7	460	2.16	.15	1	.23	535	1	.04	1	990	18	1	60	57	654	99.6	73	6	1	4	45	79
02548	3.1	1.07	1	53	47	.8	19	1.38	.1	11	2365	2.44	.17	6	.67	726	5	.04	1	1550	15	5	186	104	1590	101.6	105	11	1	7	76	209
02549	1.2	.90	1	46	38	.6	18	1.54	.1	13	1088	3.04	.11	5	.63	1025	2	.04	1	1680	14	4	151	109	1555	119.0	110	13	1	7	54	92
02550	.8	1.47	1	69	120	1.8	15	1.95	.1	14	1043	3.69	.19	10	.82	1287	2	.06	1	2520	21	5	315	169	1117	136.5	128	15	1	6	48	67
02551	.1	.30	1	38	133	.1	4	.55	.1	5	199	1.06	.15	1	.27	278	3	.04	1	450	8	1	49	38	471	42.1	21	5	1	4	60	9
02552	.1	.42	1	37	89	.1	5	1.22	.1	7	75	1.98	.13	2	.26	582	1	.03	1	700	7	2	60	73	472	90.8	39	7	1	4	46	20
02553	.1	.22	4	33	40	.1	4	.66	.1	2	27	.64	.11	1	.09	278	2	.05	1	110	4	1	22	57	293	29.1	10	4	1	4	72	5

MAIN ZONE MID LINE BLUFFS

MAIN ZONE Lower Bluffs

UPPER BLUFFS MAIN ZONE

COMP: KENNECOTT CANADA
PROJ: LORRAINE 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-0456-RJ1+2
DATE: 93/08/13
* CORE * (ACT:F31)

Drillhole L-93-1

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
12117	.1	1.05	1	26	73	.1	12	.49	.1	44	27	14.40	.65	16	1.33	2601	1	.04	1	10	6	1	142	113	1886	339.6	236	24	1	8	24	1
12118	.1	.88	1	53	41	.1	12	.61	.1	46	27	>15.00	.31	8	.96	2141	1	.04	1	10	1	1	90	121	1814	365.7	279	20	1	8	21	10
12119	.1	.97	1	20	55	.1	17	.68	.1	38	597	11.32	.25	10	.78	2009	1	.04	1	10	9	1	129	92	1770	288.9	233	20	1	7	30	25
12120	.1	1.41	1	1	81	.1	19	.92	.1	53	155	>15.00	.59	10	1.33	2999	1	.05	1	10	1	1	148	129	2850	449.7	205	28	1	9	12	42
12121	.1	1.25	1	1	127	.1	19	1.03	.1	48	57	>15.00	.45	11	1.20	2426	1	.03	1	10	1	1	185	120	2790	422.9	156	25	1	9	16	91
12122	.1	1.20	8	1	114	.1	19	2.00	.1	27	13	5.88	.78	10	1.77	866	4	.05	25	2160	20	3	139	92	2485	215.0	90	26	1	13	143	21
12123	1.0	.71	6	16	137	.3	15	.73	.1	19	1101	2.36	.18	4	.25	218	13	.04	4	250	12	6	229	61	1123	42.5	32	9	1	5	55	36
12124	1.1	.31	7	52	215	.1	6	.49	.1	4	122	.76	.18	1	.12	124	4	.04	1	100	9	3	187	37	580	19.4	15	6	1	3	47	20
12125	.1	.75	1	13	58	.1	17	1.73	.1	31	10	7.82	.58	9	1.33	863	1	.05	12	4350	7	1	83	95	2274	297.8	81	23	1	12	117	7
12126	.1	1.26	5	1	108	.3	18	2.66	.1	29	87	6.29	.34	12	1.48	1484	2	.03	5	3190	19	5	207	91	1969	252.8	120	29	1	10	75	7
12127	.1	1.31	2	1	107	.4	13	2.01	.1	18	222	5.73	.16	8	.68	1432	3	.05	1	1560	15	5	227	75	1482	244.5	158	21	1	7	46	13
12128	.1	1.19	10	1	55	.4	15	2.46	.1	17	380	4.28	.13	7	.82	1816	6	.04	1	950	22	8	150	70	1266	164.7	137	25	1	7	55	86
12129	.4	1.34	8	1	149	.2	15	2.28	.1	12	981	3.50	.14	7	.50	1052	3	.07	1	7420	17	9	195	106	1005	144.6	102	18	1	6	52	38
12130	.1	1.12	5	1	97	.4	12	2.10	.1	13	365	3.80	.14	6	.37	873	2	.05	1	6140	15	8	235	123	1124	153.9	116	16	1	6	53	23
12131	.1	.68	4	1	117	.1	13	.95	.1	14	466	4.53	.15	4	.29	855	1	.04	1	1470	7	1	248	87	1384	185.8	116	14	1	6	46	17
12132	.1	1.01	1	1	241	.1	14	1.32	.1	20	608	6.05	.18	7	.50	1181	1	.04	1	850	14	1	573	82	1267	226.3	139	18	1	7	50	59
12133	.1	.92	1	1	104	.4	17	.90	.1	26	1179	4.66	.16	7	.41	786	2	.06	1	730	13	2	218	68	1252	152.8	110	13	1	6	45	11
12134	.1	1.03	1	1	94	.1	16	.95	.1	36	118	13.67	.14	11	.51	1992	1	.06	1	1850	1	1	134	126	2293	518.7	161	19	1	9	28	3
12135	.6	.97	7	1	70	.6	14	1.38	.1	13	343	2.72	.20	7	.75	989	7	.05	1	140	28	7	282	65	1483	73.2	107	19	1	6	46	11
12136	.1	1.80	1	1	1678	.1	24	2.27	.1	43	340	9.39	1.45	19	2.91	1241	1	.05	5	6820	18	2	259	121	3143	380.1	104	32	1	12	67	28
12137	.1	1.20	10	1	539	1.5	16	2.59	.1	25	252	5.39	.74	11	1.73	1303	2	.04	1	3550	23	7	186	97	1457	242.9	97	30	1	9	41	26
12138	2.3	1.12	1	1	176	.3	31	1.60	.1	16	3464	3.98	.55	10	.95	957	3	.07	1	1250	27	9	107	63	1514	187.0	110	21	1	8	57	82
12139	.1	1.46	3	1	336	1.2	14	2.67	.1	19	1233	4.73	.54	4	.87	1219	5	.03	1	1850	23	11	108	72	328	164.2	91	23	1	7	38	27
12267	.3	.56	16	1	112	.5	9	2.07	.1	10	193	2.68	.16	5	.63	853	3	.04	1	630	16	5	98	65	617	104.5	58	19	1	6	55	4
12268	.1	.62	1	3	169	.5	9	1.18	.1	10	160	2.91	.12	5	.70	634	3	.04	1	700	14	1	145	61	973	94.7	55	15	1	5	43	2
12269	.1	.73	1	5	59	.9	11	1.82	.1	11	337	3.22	.17	6	.73	702	2	.04	1	800	13	3	122	55	968	102.1	61	16	1	5	36	17
12270	.1	.88	1	1	60	.9	11	2.24	.1	14	301	4.11	.17	7	.78	978	2	.04	1	920	14	2	136	50	1020	128.8	68	17	1	5	34	13
12271	1.9	.26	6	28	27	.2	11	.90	.1	3	1348	1.11	.10	1	.14	412	4	.05	1	100	11	4	28	55	76	42.4	23	7	1	3	46	15
12272	.1	.78	3	1	386	.8	11	2.43	.1	13	296	3.44	.12	6	.97	1197	5	.04	1	380	17	4	130	55	975	117.0	65	20	1	5	30	11
12273	.1	.50	15	28	47	.9	8	2.13	.1	9	187	2.02	.11	4	1.13	1090	2	.04	2	60	22	4	60	47	621	93.0	55	20	1	5	36	6
12274	.1	.85	1	5	77	.5	13	1.89	.1	12	239	3.18	.26	5	.92	830	3	.05	1	950	34	4	115	58	1412	116.3	66	18	1	6	41	7
12275	.1	1.46	1	1	62	1.8	9	2.66	.1	16	111	4.26	.32	6	.83	1400	3	.03	1	640	27	9	117	53	504	99.4	99	21	1	5	25	6
12276	.1	1.17	3	1	132	1.4	12	3.06	.1	15	331	4.30	.36	5	.84	2101	3	.03	1	400	127	9	156	45	851	152.8	113	25	1	7	48	3
12277	.1	.94	1	1	201	.5	13	1.99	.1	15	168	4.09	.20	5	.95	948	5	.05	1	620	12	1	178	49	1605	129.6	91	17	1	6	39	4
12278	.1	1.08	1	1	89	.5	13	2.42	.1	18	162	5.23	.52	5	.99	1305	5	.05	1	2730	16	2	139	83	1320	166.3	104	21	1	7	41	1
12279	.1	1.09	1	1	48	1.1	13	2.18	.1	12	1199	3.56	.27	3	.89	899	11	.04	1	1070	51	7	107	59	160	105.0	99	17	1	5	26	13
12280	.1	.31	16	45	457	.3	8	2.96	.1	9	426	2.81	.06	1	.57	1057	3	.05	1	1010	17	3	418	47	186	258.3	52	18	1	7	43	55

COMP: KENNECOTT CANADA
PROJ: 05-405
ATTN: SANDRA BISHOP

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-0489-RJ1+2
DATE: 93/08/24
* CORE * (ACT:F31)

DRILLHOLE L 93-2

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
12281	1.1	1.30	1	1	67	1.3	33	2.31	.1	16	4222	4.69	.42	10	1.06	1415	3	.04	1	1530	919	11	78	78	1262	187.5	1484	22	1	8	77	209
12282	3.8	1.06	6	1	138	1.2	45	1.67	.1	14	6090	4.00	.32	5	.78	1073	2	.04	1	2060	264	12	108	86	1118	170.9	507	19	1	6	38	315
12283	.1	.97	1	1	77	1.1	17	1.29	.1	10	1450	2.93	.34	5	.76	981	2	.06	1	900	33	5	108	63	1346	115.8	101	16	1	7	84	57
12284	.8	1.36	1	1	63	1.2	27	1.67	.1	15	2732	4.08	.39	9	.86	1238	2	.06	1	1710	34	9	143	86	1493	182.6	144	21	1	7	42	82
12285	.5	1.29	1	1	111	1.5	25	1.74	.1	17	2491	4.49	.51	13	1.07	1325	5	.06	1	1550	37	7	187	80	1658	191.1	151	22	1	8	71	96
12286	.3	1.04	3	1	46	.7	17	1.39	.1	14	1133	3.14	.28	6	.65	884	4	.06	1	940	23	7	186	69	1568	129.0	106	16	1	6	46	39
12287	.4	1.14	3	3	56	.8	15	2.12	.1	12	722	3.28	.32	8	.72	1016	4	.06	1	1530	27	8	255	73	1617	137.1	105	18	1	8	77	48
12288	.5	1.04	1	1	52	.8	20	1.66	.1	17	1555	4.12	.27	5	.77	1156	2	.05	1	730	22	5	155	75	1642	177.9	138	19	1	7	47	121
12289	.2	1.06	5	1	97	1.0	16	2.31	.1	16	953	3.44	.41	11	.89	1114	5	.05	1	1090	22	6	162	60	1417	137.7	108	20	1	7	77	40
12290	.2	.34	3	1	31	.2	4	.62	.1	3	94	1.20	.18	1	.10	203	1	.06	1	90	16	2	53	24	388	44.5	16	5	1	3	50	46
12291	.1	1.56	1	1	100	2.3	19	3.00	.1	16	1199	4.77	.49	17	.99	1344	2	.05	1	590	25	9	165	55	1254	194.5	142	23	1	8	58	91
12292	.5	1.48	1	1	220	1.5	18	2.85	.1	13	1491	3.72	.49	17	.80	1008	3	.08	1	1250	24	10	379	44	1206	147.1	92	19	1	7	51	110
12293	.7	1.62	1	1	57	1.5	18	1.38	.1	12	1220	3.78	.30	7	.46	860	6	.24	1	540	19	12	393	62	1487	176.1	110	15	1	8	61	23
12294	.2	1.05	1	1	105	1.1	19	1.54	.1	14	1568	4.45	.41	13	.65	1120	1	.07	1	390	15	4	167	59	1655	195.6	137	17	1	7	49	44
12295	.7	1.28	1	1	172	1.1	18	1.38	.1	11	1110	3.19	.39	19	.72	904	2	.06	1	670	23	7	274	60	1702	132.6	101	18	1	7	67	15
12296	.4	1.03	1	1	135	.8	12	1.20	.1	6	900	1.96	.31	7	.40	545	5	.12	1	440	15	6	319	40	1056	81.9	60	9	1	5	48	14
12297	1.6	.93	1	1	72	1.0	22	1.57	.1	11	2137	3.01	.25	8	.76	1002	3	.05	1	730	25	7	151	66	1519	129.4	95	17	1	6	57	59
12298	3.5	.98	6	1	61	1.5	37	2.48	.1	12	4585	3.41	.30	5	.83	1260	6	.04	1	600	26	10	102	58	1295	141.6	136	21	1	7	48	202
12299	4.6	.92	1	1	62	.9	49	2.02	.1	10	6847	2.82	.22	4	.70	1035	4	.06	1	690	26	12	134	63	1395	122.7	98	16	1	7	70	283
12300	4.5	1.11	1	1	50	1.7	43	2.77	.1	13	5753	3.45	.26	5	.74	1124	4	.03	3	970	32	12	139	51	1076	130.6	152	18	1	6	38	198
12301	.8	1.14	1	1	87	1.4	21	1.81	.1	11	2013	2.89	.32	7	.67	895	2	.06	1	1400	22	9	161	61	1278	126.5	90	16	1	7	63	52
12302	3.1	1.29	1	1	78	1.9	34	1.66	.1	12	3961	2.90	.33	6	.71	922	4	.07	1	970	28	11	147	68	1462	126.8	111	17	1	6	46	105
12303	4.7	.95	11	1	57	1.0	48	1.32	.1	11	5818	2.87	.27	5	.56	772	3	.06	1	620	26	10	170	72	1571	122.6	105	15	1	7	65	199
12304	1.5	1.23	6	1	55	1.3	20	1.39	.1	9	1620	2.25	.28	7	.51	652	4	.08	1	630	23	10	426	74	1319	99.0	71	14	1	6	48	49
12305	3.8	.93	12	22	34	.9	32	1.12	.1	11	3853	2.46	.28	13	.58	579	4	.06	4	1640	23	11	189	67	1044	99.6	77	15	1	6	36	243
12306	4.8	.91	19	1	35	.9	32	1.42	.1	8	3528	1.67	.29	11	.65	755	3	.04	2	520	26	15	131	73	946	67.1	89	19	1	5	35	286
12307	1.2	1.29	11	1	39	1.8	17	1.44	.1	11	1135	2.82	.32	8	.56	723	3	.12	1	800	19	12	292	71	1220	107.3	80	17	1	5	30	53
12308	1.9	1.13	22	1	54	1.3	21	1.52	.1	11	1398	2.82	.26	8	.64	842	2	.06	1	500	21	13	205	84	1403	122.7	101	22	1	6	37	64
12309	2.2	.99	22	1	78	1.0	19	1.76	.1	11	1125	2.44	.30	8	.72	851	3	.04	1	380	22	12	182	86	1421	102.0	102	23	1	6	33	61
12310	2.3	1.17	23	1	122	1.1	24	2.22	.1	13	1644	2.94	.41	11	.86	1043	3	.04	3	570	25	13	192	85	1728	123.7	117	26	1	7	41	66
12311	1.8	1.30	24	1	72	1.2	19	1.78	.1	11	1035	2.53	.31	9	.71	854	3	.06	2	510	63	14	351	81	1554	104.7	255	21	1	6	39	38
12312	2.4	1.16	19	1	63	.8	24	2.11	.1	12	1791	3.12	.28	8	.69	1029	4	.04	1	730	29	13	195	86	1611	139.0	112	24	1	7	44	61
12313	1.5	.67	23	1	41	.6	12	1.31	.1	8	575	1.81	.17	6	.47	649	2	.03	1	480	19	8	117	67	902	81.0	85	17	1	4	21	25
12314	1.4	.81	10	1	56	.9	20	1.45	.1	13	1429	3.98	.22	6	.55	823	1	.09	1	1140	15	7	131	81	1607	168.9	90	17	1	6	36	94
12315	1.6	.23	16	19	68	.3	7	.69	.1	3	225	.87	.12	1	.07	206	1	.04	1	140	9	4	48	68	519	32.8	22	9	1	4	47	20
12316	4.7	.72	11	53	58	.8	35	1.64	.1	9	3986	2.41	.12	4	.34	600	2	.05	1	790	13	11	122	61	1276	94.6	57	14	1	5	28	231
12317	2.7	.52	20	1	22	.5	18	1.36	.1	7	1594	1.82	.10	4	.34	582	2	.03	1	510	13	9	73	58	781	89.6	60	15	1	4	19	99
12318	4.3	.64	15	1	40	.6	34	1.29	.1	9	3833	2.03	.17	5	.40	581	4	.03	1	1030	21	11	91	75	1066	91.0	77	15	1	4	28	223
12319	2.8	.90	17	9	52	1.3	29	1.37	.1	11	2890	2.75	.22	8	.58	793	5	.05	1	1130	24	13	164	81	1195	126.7	100	20	1	6	24	134
12320	2.7	.72	19	1	32	.6	23	1.28	.1	9	2189	2.36	.22	5	.47	621	3	.03	1	1330	18	10	174	74	1083	105.5	77	17	1	5	33	59
12321	12.8	.83	24	18	43	.8	103	1.55	.1	14	>10000	3.19	.25	6	.68	852	6	.03	2	2860	43	24	146	99	1233	127.6	126	22	1	7	31	241
12322	3.6	1.20	17	1	42	1.1	31	1.78	.1	11	3136	2.76	.32	10	.70	880	6	.06	1	1060	27	16	335	79	1266	115.3	97	21	1	6	36	105
12323	1.3	1.22	7	1	104	1.1	21	1.68	.1	13	1776	3.42	.33	11	.76	968	2	.05	1	1300	18	10	247	78	1393	142.1	105	20	1	6	32	63
12324	.7	.57	9	14	74	1.0	12	1.63	.1	11	468	3.90	.15	4	.31	632	1	.08	1	1190	7	3	153	66	1446	152.6	52	13	1	5	37	51
12325	.8	.85	17	51	73	.7	18	1.66	.1	17	861	4.31	.46	13	1.00	821	1	.08	9	1850	15	6	122	95	1835	160.8	80	22	1	8	57	73
12326	2.9	.94	16	30	105	1.1	24	2.36	.1	14	2141	3.91	.36	12	.86	977	3	.04	1	2010	29	10	156	89	1247	164.9	111	23	1	7	37	283
12327	1.7	1.00	18	89	102	.9	21	1.48	.1	13	1905	3.28	.27	13	.65	745	2	.04	1	2810	20	10	231	85	1275	158.1	89	19	1	6	28	80
12328	1.8	.96	18	94	143	1.0	27	1.88	.1	16	2333	4.27	.46	16	.76	897	3	.04	1	2710	27	10	172	92	1470	186.1	99	21	1	7	31	159

COMP: KENNECOTT CANADA
PROJ: 05-405
ATTN: SANDRA BISHOP

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-0489-RJ3+4+5
DATE: 93/08/24
* CORE * (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
12329	4.0	.66	2	2	185	.2	42	1.44	.1	14	6417	3.56	.36	11	.62	757	4	.03	1	3180	24	8	131	72	632	154.6	94	14	1	6	32	271
12330	.2	.81	3	2	79	.8	18	1.44	.1	12	1792	3.01	.23	12	.65	929	3	.03	1	1860	16	6	120	58	859	150.7	116	16	1	5	24	90
12331	.1	.92	1	2	81	.8	17	1.89	.1	13	1598	3.83	.20	9	.64	869	2	.04	1	1450	16	4	115	54	884	192.1	124	17	1	6	33	64
12332	.2	.58	6	1	133	.4	13	1.82	.1	10	1023	3.35	.29	5	.37	692	2	.04	1	710	10	2	101	45	657	152.4	90	13	1	4	32	77
12333	.4	.71	3	2	108	.4	18	1.11	.1	12	1522	3.35	.34	11	.64	740	3	.05	1	1150	18	4	144	65	1091	139.1	78	14	1	6	51	60
12334	.4	.92	3	1	65	.2	15	1.12	.1	13	706	2.83	.35	16	.79	804	4	.05	6	1250	29	5	294	64	1502	103.0	96	16	1	6	53	24
12335	1.0	.89	11	1	144	.2	20	1.90	.1	16	1747	3.88	.62	12	1.09	905	4	.04	5	1910	53	6	139	67	1093	150.5	92	20	1	7	60	113
12336	.5	.71	7	2	108	.2	23	1.28	.1	14	2247	4.29	.40	10	.69	893	3	.04	2	2470	22	3	105	84	1109	213.9	95	17	1	9	84	62
12337	1.2	.64	1	2	82	.1	34	.79	.1	15	3995	5.38	.35	9	.49	830	3	.04	1	1910	20	2	72	82	1427	299.0	114	14	1	8	45	74
12338	1.2	.50	1	2	134	.1	28	.95	.1	12	3643	4.15	.28	6	.33	711	3	.04	1	2610	18	2	97	94	877	227.5	98	12	1	7	67	89
12339	1.3	.63	2	2	244	.4	20	1.30	.1	11	2678	3.95	.38	8	.38	693	2	.04	1	1990	14	4	110	86	451	217.4	92	13	1	6	41	58
12340	.1	1.19	1	1	164	.3	26	.99	.1	17	2775	5.73	.36	6	.49	935	3	.10	1	2760	14	4	454	104	1258	325.8	112	16	1	9	59	83
12341	2.8	.90	1	1	150	.3	37	.92	.1	12	4885	3.78	.28	4	.30	623	3	.09	1	3650	16	8	357	111	1019	202.8	91	12	1	6	32	141
12342	1.2	1.11	1	1	110	.6	19	.95	.1	11	1648	3.70	.31	5	.28	629	6	.21	1	880	14	7	256	57	1248	187.1	74	11	1	7	61	39
12343	.6	1.46	1	1	61	.7	24	.95	.1	14	2306	4.51	.35	5	.35	753	4	.35	1	1190	14	8	274	64	1401	243.6	91	13	1	7	34	80
12344	.6	1.79	1	1	34	1.3	21	1.24	.1	12	1881	3.96	.29	5	.31	671	6	.44	1	3070	15	13	270	94	1196	196.2	86	13	1	7	54	93
12345	.1	1.90	1	1	35	2.0	17	1.11	.1	12	1304	4.16	.24	5	.25	727	5	.41	1	1100	18	13	301	60	1220	209.7	79	12	1	6	29	46
12346	.7	1.05	1	2	118	.7	31	.91	.1	17	3830	5.07	.35	9	.63	834	3	.10	1	1020	16	6	332	70	1350	226.7	104	16	1	8	67	162
12347	.9	1.08	1	2	149	.7	31	1.11	.1	18	3517	4.78	.48	14	.93	993	10	.05	1	1770	22	6	253	82	1401	214.3	136	19	1	8	51	66
12348	.1	1.78	1	1	239	.1	18	1.22	.1	32	34	5.03	1.68	24	3.14	794	3	.05	107	1650	35	10	96	110	2248	129.9	84	28	1	18	281	5
12349	.1	1.88	1	1	256	.2	24	1.25	.1	35	1292	5.53	1.44	21	3.35	829	3	.05	109	1890	26	11	114	118	2104	140.3	81	29	1	19	286	40
12350	2.1	1.11	4	2	179	1.0	32	2.01	.1	20	3903	3.87	.68	24	1.44	793	3	.06	31	2920	26	10	173	97	1243	129.5	69	21	1	9	83	159
12351	.1	1.98	1	2	243	.1	20	1.04	.1	36	246	5.32	1.81	21	3.83	847	4	.05	124	1300	32	13	99	120	2179	130.8	77	32	1	21	317	7
12352	.2	1.05	10	2	170	.7	14	1.11	.1	14	520	2.82	.46	26	.91	808	4	.05	5	1550	18	6	197	79	1445	110.7	82	19	1	8	91	21
12353	.6	.82	1	1	78	.5	12	1.01	.1	9	1159	2.16	.30	13	.51	440	3	.06	7	1250	13	6	227	59	808	81.8	43	11	1	5	41	68
12354	.5	.87	2	2	131	.6	11	1.05	.1	9	601	1.98	.33	14	.60	439	2	.07	8	1260	12	6	250	53	838	78.1	44	12	1	5	41	43
12355	.9	1.28	12	1	287	.8	17	3.02	.1	17	510	2.84	1.15	23	1.81	814	29	.04	26	1930	30	10	150	75	1623	90.6	64	24	1	9	89	17
12356	.8	1.43	4	1	265	.1	17	1.65	.1	22	32	3.59	1.35	26	2.22	912	6	.05	44	2480	37	10	123	93	2116	113.7	87	26	1	10	97	47
12357	.8	.63	14	2	72	.2	8	1.26	.1	9	14	1.58	.43	11	.75	618	3	.04	7	1730	25	6	85	63	626	24.9	60	14	1	4	31	51
12358	.3	.70	7	1	90	.1	8	1.16	.1	10	47	2.07	.45	14	.76	713	2	.06	8	1800	17	10	104	57	706	36.4	66	15	1	4	29	63
12359	.1	.67	3	1	102	.1	8	1.21	.1	12	6	3.03	.44	9	.79	731	2	.04	5	1820	10	4	94	69	795	60.6	60	16	1	4	28	10
12360	1.5	.82	14	1	195	.6	21	1.65	.1	15	1978	3.02	.49	26	1.03	901	4	.03	10	1710	20	7	108	82	953	125.8	101	20	1	7	47	81
12361	.9	1.24	7	1	176	.2	19	2.35	.1	20	951	4.39	.93	22	1.75	923	6	.04	41	1950	24	9	107	101	1484	168.2	100	26	1	10	102	57
12362	1.6	1.17	11	1	329	.1	20	1.44	.1	19	776	3.08	.97	18	1.75	617	4	.04	40	1360	47	10	110	102	1850	98.1	68	24	1	9	95	71
12363	1.6	.47	4	1	56	.1	22	.86	.1	13	2542	2.87	.34	6	.57	326	5	.06	1	1410	9	4	71	53	1101	120.0	49	12	1	5	29	276
12364	2.0	.30	11	2	38	.1	22	.63	.1	8	3315	1.61	.21	3	.25	184	2	.06	2	1020	13	6	70	47	569	51.7	30	9	1	4	29	424
12365	1.6	.86	1	1	101	.1	25	.70	.1	14	2237	2.98	.80	22	1.04	308	3	.07	1	1210	21	7	70	66	1851	112.2	40	17	1	6	34	269
12366	.8	.60	5	2	51	.1	16	.85	.1	11	1081	2.76	.32	10	.61	327	4	.06	1	1470	12	3	159	60	1307	108.8	43	14	1	5	38	85
12367	1.5	.62	17	5	92	.1	19	.77	.1	11	1400	2.75	.48	13	.70	315	4	.07	7	1020	15	5	149	67	1512	101.6	47	15	1	6	53	100
12368	1.1	.34	12	1	33	.1	19	.86	.1	11	1477	3.26	.15	4	.28	350	2	.05	1	1960	10	4	177	92	920	126.2	50	13	1	5	42	202
12369	2.1	.70	22	1	77	.1	28	1.18	.1	16	2192	4.16	.47	10	.95	569	6	.05	6	1150	20	8	131	103	1669	154.4	74	22	1	8	47	305
12370	2.2	.74	22	1	59	.1	30	1.12	.1	16	2244	3.98	.48	10	.89	672	9	.05	3	1370	31	8	112	105	1629	156.1	88	22	1	8	71	156
12371	1.8	.92	14	2	58	.1	25	1.10	.1	16	1524	3.88	.61	13	1.07	647	7	.06	3	1580	28	9	117	111	1653	154.1	89	23	1	8	52	73
12372	1.5	.67	22	1	73	.1	22	1.15	.1	18	1315	4.24	.43	9	.87	695	6	.05	10	1800	20	7	142	111	1469	160.9	101	23	1	9	82	103
12373	.8	1.17	22	2	191	.1	20	1.07	.1	24	271	4.44	.97	27	1.65	653	6	.05	33	2490	24	9	210	123	1898	158.6	68	26	1	11	117	34
12374	1.2	.77	18	2	132	.1	18	1.13	.1	16	922	3.64	.48	10	.95	589	7	.04	6	1780	21	8	146	92	1085	102.7	79	21	1	7	61	61
12375	1.5	.51	23	2	95	.4	13	1.31	.1	9	493	2.20	.29	5	.61	612	9	.04	4	800	17	7	125	75	748	83.3	53	18	1	5	32	50
12376	1.2	.27	24	2	56	.2	6	.67	.1	5	121	1.03	.16	2	.40	316	3	.04	2	290	12	5	62	62	441	35.1	28	12	1	4	42	18
12377	2.4	.36	25	2	58	.1	15	.80	.1	7	461	1.48	.20	4	.30	327	3	.05	1	630	12	6	114	78	1265	53.0	44	14	1	5	45	29

DRILLHOLE 93-2

COMP: KENNECOTT CANADA INC.
PROJ: LORRAINE 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-0380-RJ1
DATE: 93/07/30
• ROCK • (ACT:F31)

RIDGE TOP

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
00469	1.3	.63	1	89	218	.1	17	1.01	.1	11	2551	3.36	.26	5	.54	696	1	.04	1	2060	13	2	103	85	1068	129.3	97	10	1	6	59	462
00470	.1	1.26	1	95	155	.1	23	1.17	.1	29	2219	9.30	.53	11	1.26	1330	1	.11	2	1310	14	1	80	127	2608	327.0	178	21	1	15	155	65
00471	.3	1.50	1	79	158	.1	14	1.10	.1	18	1279	4.84	.69	13	.86	908	1	.03	1	1480	6	2	74	87	1674	202.2	232	15	1	7	43	48
00472	1.2	1.32	1	99	112	.1	21	1.01	.1	21	1601	5.14	.63	10	.98	1236	1	.05	1	1020	9	1	149	89	3154	215.5	248	16	1	8	54	51
00473	1.4	1.64	1	95	134	.1	23	1.22	.1	23	2036	5.36	.95	21	1.24	1440	2	.09	1	2040	16	2	132	110	3244	227.7	280	20	1	9	41	76
00474	.1	1.06	1	75	55	.1	13	1.00	.1	11	70	3.59	.28	3	.38	925	1	.25	1	1140	5	1	112	66	2217	137.0	56	10	1	7	68	5
00475	.1	.97	1	74	52	.1	13	.91	.1	11	59	3.71	.26	9	.37	1095	1	.09	1	1150	8	1	109	77	2354	145.7	109	11	1	5	42	3
00476	1.3	2.25	39	122	473	.1	27	1.17	.1	36	88	4.83	1.69	36	3.68	898	3	.09	86	2810	22	6	54	158	4737	145.9	132	27	1	19	254	2
00477	.1	1.19	7	94	1078	.1	10	1.00	.1	16	23	3.47	.85	20	1.24	756	3	.06	18	1290	12	2	101	99	1491	91.3	55	14	1	7	85	35
00478	1.3	1.88	8	95	113	.8	17	1.11	.1	17	1043	3.90	.74	12	.92	674	5	.31	14	970	19	5	314	95	2284	155.0	81	14	1	9	91	33
00479	.1	1.02	7	50	169	.2	3	1.29	.1	5	39	2.12	.30	3	.55	523	2	.05	1	930	17	2	91	84	568	40.0	40	9	1	5	75	21
02507	.1	.39	2	44	231	.4	2	1.00	.1	1	340	.64	.28	1	.04	191	1	.06	1	700	1	1	82	49	98	18.1	15	2	1	2	44	22
00482	.1	.82	1	59	112	.1	14	.81	.1	26	1628	4.30	.33	3	.62	279	1	.06	1	1310	1	1	65	57	1506	74.2	9	8	1	4	34	10
00483	2.5	.59	2	65	320	.1	17	1.19	.1	10	3833	2.80	.39	4	.64	299	1	.04	1	1650	5	5	165	67	632	104.4	14	8	1	5	44	701

MINERAL
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(DIVISION OF ASSAYERS CORP.)

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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-0380-PA1

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

Date: JUL-30-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C.

We hereby certify the following Assay of 4 PULP samples submitted JUL-26-93 by S. BISHOP.

Sample Number	CU %
00482	.460

Certified by _____

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

Geochemical Analysis Certificate

3V-0380-RG1

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

Date: JUL-30-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 2 ROCK samples submitted JUL-26-93 by S. BISHOP.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton
00483	.66	.019

Certified by _____

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TELEPHONE (604) 847-3004
FAX (604) 847-3005

Assay Certificate

3V-0359-RA4

Company: KENNECOTT CANADA INC.
Project: #05-405
Attn: SANDRA BISHOP

Date: JUL-22-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C

We hereby certify the following Assay of 3 ROCK samples submitted JUL-19-93 by S. BISHOP.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton
02455	.47	.014

Certified by _____

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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-0359-RA5

Company: KENNECOTT CANADA INC.
Project: #05-405
Attn: SANDRA BISHOP

Date: JUL-22-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C

We hereby certify the following Assay of 5 ROCK samples submitted JUL-19-93 by S. BISHOP.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton
02477	.33	.010

Certified by _____

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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-0359-RA1

Company: KENNECOTT CANADA INC.
Project: #05-405
Attn: SANDRA BISHOP

Date: JUL-22-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C

We hereby certify the following Assay of 6 ROCK samples submitted JUL-19-93 by S. BISHOP.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton
12008	.45	.013
12009	.40	.012
12021	.55	.016
12022	.71	.021
12023	.78	.023
12024	.34	.010

Certified by _____

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

Assay Certificate

3V-0359-RA2

Company: KENNECOTT CANADA INC.
Project: #05-405
Attn: SANDRA BISHOP

Date: JUL-22-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C

We hereby certify the following Assay of 5 ROCK samples submitted JUL-19-93 by S. BISHOP.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton
12028	.50	.015
12029	1.02	.030
12030	1.24	.036
12031	.58	.017
12033	.41	.012

Certified by _____

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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-0359-RA3

Company: KENNECOTT CANADA INC.
Project: #05-405
Attn: SANDRA BISHOP

Date: JUL-22-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C

We hereby certify the following Assay of 14 ROCK samples submitted JUL-19-93 by S. BISHOP.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton
12050	.30	.009
12051	.51	.015
12054	.44	.013
12058	.54	.016
12059	.52	.015
12061	.43	.013
12063	.47	.014
12064	.40	.012
12065	.45	.013
12066	.50	.015
12067	.33	.010
12070	.43	.013
12071	.31	.009
12072	.32	.009

Certified by _____

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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-RA1

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 ROCK samples submitted JUL-21-93 by SANDRA BISHOP.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton
12079	.52	.015
12093	.39	.011

Certified by _____

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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-RA2

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 2 ROCK samples submitted JUL-21-93 by SANDRA BISHOP.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton
12147	.44	.013
12154	.34	.010

Certified by _____

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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-RA3

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 1 ROCK samples submitted JUL-21-93 by SANDRA BISHOP.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton
12166	.48	.014

Certified by _____

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Assay Certificate

3V-0363-RA4

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 11 ROCK samples submitted JUL-21-93 by SANDRA BISHOP.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton
12188	.32	.009
12190	.33	.010
12193	.38	.011
12196	.35	.010
12197	.47	.014
12199	.57	.017
12200	.78	.023
12201	.44	.013
12202	.72	.021
12203	.77	.022
12204	1.09	.032

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Assay Certificate

3V-0362-RA1

Company: **KENNECOTT CANADA**
Project: LORRAIN 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 5 ROCK samples submitted JUL-21-93 by SANDRA BISHOP.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton
12210	.74	.022
12211	.87	.025
12212	.61	.018
12213	.32	.009
12214	.62	.018

Certified by _____

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SMITHERS LAB.:
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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
02524	.36	.011
02525	.47	.014
02527	.42	.012
0467	.57	.017

Certified by _____

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Assay Certificate

3V-0362-RA2

Company: **KENNECOTT CANADA**
Project: LORRAIN 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 2 ROCK samples submitted JUL-21-93 by SANDRA BISHOP.

Sample Number	AU-FIRE g/tonne	AU-FIRE oz/ton
02542	.33	.010
02543	.62	.018

Certified by _____

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Assay Certificate

3V-0359-PA1

Company: KENNECOTT CANADA INC.
Project: #05-405
Attn: SANDRA BISHOP

Date: JUL-26-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C.

We hereby certify the following Assay of 18 PULP samples submitted JUL-19-93 by S. BISHOP.

Sample Number	CU %
12001	.264
12003	.265
12004	.263
12005	.336
12008	.721
12009	.515
12010	.228
12011	.276
12012	.226
12013	.234
12014	.323
12017	.305
12018	.301
12020	.293
12021	1.208
12022	1.300
12023	.853
12024	.494

Certified by _____

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Assay Certificate

3V-0359-PA2

Company: KENNECOTT CANADA INC.
Project: #05-405
Attn: SANDRA BISHOP

Date: JUL-26-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C.

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

Sample Number	CU %
12025	.423
12026	.422
12027	.559
12028	.974
12029	1.348
12030	2.005
12031	1.267
12032	.390
12033	.590
12034	.368
12035	.654
12036	.705
12037	.382
12038	.352
12039	.663
12043	.310
12044	.412
12045	.460
12046	.295
12047	.303
12048	.331

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SMITHERS LAB.:
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TELEPHONE (604) 847-3004
FAX (604) 847-3005

Assay Certificate

3V-0359-PA3

Company: KENNECOTT CANADA INC.
Project: #05-405
Attn: SANDRA BISHOP

Date: JUL-26-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C.

We hereby certify the following Assay of 23 PULP samples submitted JUL-19-93 by S. BISHOP.

Sample Number	CU %
12049	.433
12050	.543
12051	.736
12052	.409
12053	.289
12054	.360
12055	.225
12057	.246
12058	.941
12059	1.059
12060	.470
12061	.542
12062	.468
12063	.676
12064	.505
12065	.432
12066	.534
12067	.397
12068	.241
12069	.325
12070	.401
12071	.305
12072	.338

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Assay Certificate

3V-0359-PA4

Company: KENNECOTT CANADA INC.
Project: #05-405
Attn: SANDRA BISHOP

Date: JUL-26-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C.

We hereby certify the following Assay of 4 PULP samples submitted JUL-19-93 by S. BISHOP.

Sample Number	CU %
12074	.248
02455	1.369
02456	.286
02463	.292

Certified by _____

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SMITHERS LAB.:
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FAX (604) 847-3005

Assay Certificate

3V-0359-PA5

Company: KENNECOTT CANADA INC.
Project: #05-405
Attn: SANDRA BISHOP

Date: JUL-26-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C.

We hereby certify the following Assay of 8 PULP samples submitted JUL-19-93 by S. BISHOP.

Sample Number	CU %
02471	.283
02473	.254
02476	.500
02477	.542
02481	.240
02485	.302
02488	.259
02489	.309

Certified by _____

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Assay Certificate

3V-0359-PA6

Company: **KENNECOTT CANADA INC.**
Project: #05-405
Attn: SANDRA BISHOP

Date: JUL-26-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C.

We hereby certify the following Assay of 4 PULP samples submitted JUL-19-93 by S. BISHOP.

Sample Number	CU %
02513	.275
02514	.340
02515	.338
02520	1.462

Certified by _____

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

Assay Certificate

3V-0362-PA2

Company: KENNECOTT CANADA
Project: LORRAIN 05-405
Attn: SANDRA BISHOP / SCOTT MUELLER

Date: JUL-30-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C.

We hereby certify the following Assay of 9 PULP samples submitted JUL-21-93 by SANDRA BISHOP.

Sample Number	CU %
02535	.277
02536	.404
02537	.521
02539	.344
02542	.652
02543	1.260
02544	.428
02548	.261
02440	.224

Certified by _____

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TELEPHONE (604) 847-3004
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Assay Certificate

3V-0363-PA1

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 8 PULP samples submitted JUL-21-93 by SANDRA BISHOP.

Sample Number	CU %
12077	.354
12078	.266
12079	.426
12080	.508
12081	.243
12083	.218
12090	.358
12091	.221

Certified by _____

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Assay Certificate

3V-0363-PA2

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 7 PULP samples submitted JUL-21-93 by SANDRA BISHOP.

Sample Number	CU %
12141	.298
12142	.337
12143	.316
12145	.229
12147	.269
12155	.217
12156	.272

Certified by _____

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Assay Certificate

3V-0363-PA3

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 %
12160	.253
12161	.269
12162	.331
12163	.346
12164	.279
12165	.577
12166	2.505
12167	.709
12168	.444
12170	.254
12173	.326
12174	.254
12176	.274
12177	.556
12178	.420
12179	.542
12180	.486
12181	.478
12182	.380

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Assay Certificate

3V-0363-PA4

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 22 PULP samples submitted JUL-21-93 by SANDRA BISHOP.

Sample Number	CU %
12183	.296
12186	.550
12187	.772
12188	1.453
12189	.589
12190	1.048
12191	.688
12192	.620
12193	.782
12194	.574
12195	.386
12196	.803
12197	.745
12198	.567
12199	1.892
12200	2.050
12201	1.307
12202	1.497
12203	1.146
12204	1.087
12205	.291
12206	.302

Certified by _____

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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 %
12207	.422
12208	.242
02521	.307
02522	.368
02523	.290
02524	.403
02525	.567
02526	.381
02527	.821
02528	.553
02529	.823
02530	1.018
02531	1.048
02532	.797
02533	.298
02534	.390
0462	2.020
0465	.297
0467	1.182

Certified by _____

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Assay Certificate

3V-0362-PA1

Company: **KENNECOTT CANADA**
Project: LORRAIN 05-405
Attn: SANDRA BISHOP / SCOTT MUELLER

Date: JUL-30-93
Copy 1. KENNECOTT CANADA INC., VANCOUVER, B.C.

We hereby certify the following Assay of 6 PULP samples submitted JUL-21-93 by SANDRA BISHOP.

Sample Number	CU %
12210	.867
12211	.861
12212	.727
12213	.342
12214	.772
12215	.233

Certified by _____

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SMITHERS LAB.:
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TELEPHONE (604) 847-3004
FAX (604) 847-3005

Geochemical Analysis Certificate

3V-0489-RG1

Company: KENNECOTT CANADA
Project: 05-405
Attn: SANDRA BISHOP

Date: AUG-24-93
Copy 1. KENNECOTT CANADA, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of 4 CORE samples submitted AUG-16-93 by S. BISHOP.

Sample Number	CU-OXIDE AS CU %	CU %
12281		.426
12282		.689
12283	.036	
12284	.127	.285
12285	.117	.243
12286	.050	.128
12297		.230
12298		.504
12299		.729
12300		.623
12301		.231
12302		.429
12303		.631

Certified by _____

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SMITHERS, B.C. CANADA V0J 2N0
TELEPHONE (604) 847-3004
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Geochemical Analysis Certificate

3V-0489-RG2

Company: **KENNECOTT CANADA**
Project: 05-405
Attn: SANDRA BISHOP

Date: AUG-24-93
Copy 1. KENNECOTT CANADA, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of CORE samples submitted AUG-16-93 by S. BISHOP.

Sample Number	CU-OXIDE AS CU %	CU %
12305		.567
12306		.581
12316		.512
12318		.659
12319		.431
12320		.385
12321		2.090
12322		.428
12326		.272
12327		.258
12328	.120	.301

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

Geochemical Analysis Certificate

3V-0489-RG3

Company: **KENNECOTT CANADA**
Project: 05-405
Attn: SANDRA BISHOP

Date: AUG-24-93
Copy 1. KENNECOTT CANADA, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of CORE samples submitted AUG-16-93 by S. BISHOP.

Sample Number	CU-OXIDE AS CU %	CU %
12329	.116	.707
12330	.074	.208
12336		.243
12337		.429
12338		.397
12339		.281
12340		.291
12341		.542
12343		.254
12346		.410
12347		.368
12350		.406

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

Geochemical Analysis Certificate

3V-0489-RG4

Company: KENNECOTT CANADA
Project: 05-405
Attn: SANDRA BISHOP

Date: AUG-24-93
Copy 1. KENNECOTT CANADA, VANCOUVER, B.C.

We hereby certify the following Geochemical Analysis of CORE samples submitted AUG-16-93 by S. BISHOP.

Sample Number	CU %
12363	.278
12364	.367
12365	.242
12369	.247
12370	.243

Certified by _____

MIN-EN LABORATORIES

APPENDIX III

Drill Logs

Hole Number: L93-1 AZIMUTH: 020° DATE STARTED: July 31, 1993

Location: 19600 N DIP: -80° DATE COMPLETED: August 2, 1993

19800 E DEPTH

TESTS: DEPTH 0m AZIMUTH: 020° DIP: -80° (ACID TESTS)

91.4m -80°

182.6m -76°

PROPERTY: LORRAINE-LOWER MAIN ZONE

HOLE NO.: L93-1

PAGE: 1 of 10

DATE: August 1-3, 1993

LOGGED BY: S. Bishop

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
0-9.1	CASING - **NOTE:** core generally has a high recovery rate --								
	good, competent core, a bit blocky.	12117	14.2	16.2	2.0	27		1	.1
9.1-51	Syenite Migmatite - Magnetite Breccia								
	-mottled salmon pink and grey/green,	12118	23.5	26.5	3.0	27		10	.1
	fine to medium grained syenite, weak-moderately foliated								
	at approx. 60° TCA								
	- 5-10% magnetite, disseminated grains and,								
	predominantly, as massive veinlets -								
	forms a crackle breccia to intrusion breccia texture								
	(locally to 25% coarse mgt); often 50-60° TCA								
	kspar alt'n occurs as veinlets and patches or areas of								
	flooding - classic "salmon pink" coloured								
	occasional coarse biotite								
	Epidote alteration occurs along fractures and as patches;								
	Not certain of degree of chlorite alteration								
	Occasional white quartz veinlets, up to 3 cm wide,								
	60° TCA Rare carbonate alteration								
	NO VISIBLE SULPHIDES (NVS)								
19.6-21	RUBBLY CORE								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
23.8-24.2	kspar pegmatite veinlet 50-60° TCA								
	pink and grey coarse grained kspar								
33-33.2	RUBBLY CORE (possible fault)								
36.1-37.8	kspar pegmatite vein (1.7m wide) 25-30° TCA								
	coarse grey kspar with 1-2% coarse mgt and biotite,								
	minor mottled pink ksp	12119	41.4	44.4	3.0	597		25	.1
		12120	44.4	47.4	3.0	155		42	.1
42.1-51	trace to 1% fine to m. g. pyrite disseminated in mgt	12121	47.4	51.0	2.6	57		91	.1
	breccia matrix; possibly trace cpy								
51.0-52.5	BIOTITE PYROXENITE	12122	51.0	52.5	1.5	13		21	.1
	dark green, fine-med grained, highly altered pyroxenite								
	altered to biotite as coarse crystals in a fine grained								
	chloritic (?) - magnetite matrix - intensely magnetic;								
	minor patchy kspar								
	minor epidote NO VISIBLE SULPHIDES								
	FW angle TCA = 40°								
52.5-53.8	LATE SYENITE DYKE								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
	massive, salmon pink coloured, m-c. grained syenite.	12123	53.3	56	2.2	1101		36	1.0
	<2% mafics, biotite (+/- magnetite) disseminated, N.V.S.								
	FW angle TCA = 50°								
53.8-56.0	MONZOSYENITE (Mesocratic)								
	mottled grey pink, f-m grained (monzo?) syenite; weakly								
	foliated in places 30° TCA - looks murky, altered --								
	possibly albitized?? or silicified??; weakly magnetic								
	late pick kspar along some fractures								
	5-10% f.g diss PYRITE								
	--GRADATIONAL CONTACT-- INTO								
56.0-61.5	SYENITE TO PEGMATITE	12124	56.0	58.0	2.0	122		20	1.1
	browny pink, mod-strongly foliated 50° TCA								
	very hard--either silicified or albitized--								
	minor buff-white albite (?) veinlets @ 20°-30° TCA;								
	w magnetite; this foliation possibly represents a shear								
	zone--slickensides in places @ 10° TCA								
	remnant megacrysts (ksp, bi) wispy along foliation, trace								
	diss pyrite								
	HW contact sheared strongly foliated 25° TCA								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
61.5-71.3	BIOTITE CHLORITE PYROXENITE	12125	66.8	69.8	3.0	10		7	.1
	dark green-fine grained, alt'd pyroxenite								
	remnant biotite megacrysts in v.f.g.								
	chlorite/magnetite ±ksp matrix, imparts a 'spotty look'								
	intensely sheared + foliated H.W. contact								
	25° TCA and 4 cm hematite band @ FW 55-60° TCA								
	N.V.S.								
71.3-92.6	MELANOCRATIC SYENITE								
	mottled, foliated, grey-pink syenite								
	m.g. (recrystallized) patchy salmon pink kspar;								
	m-i diss mgt; epidote along fract's, foliation 60-75° TCA								
	trace diss cpy								
71.3-72.3	1m width at contact is distinctly "oikocrystic" with	12126	71.3	72.3	1.0	87		7	.1
	pink kspar phenocrysts in fg mafic matrix - intensely	12127	72.3	74.3	2.0	222		13	.1
	foliated 60° TCA also minor 1 cm wide calcite veinlets	12128	74.3	76.3	2.0	380		86	.1
	with open space textures 30° TCA	12129	76.3	78.8	2.5	981		38	.4
		12130	78.8	81.3	2.5	365		23	.1
83.5-84.5	fracture (fault) with calcite crystals	12131	81.3	83.8	2.5	466		17	.1
	and epidote 5° TCA								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
84.9-88.1	rubbly broken, core	12132	83.8	86.3	2.5	608		59	.1
	Moderate Fault Zone	12133	86.3	88.7	2.4	1179		11	.1
88.1-92.6	m-intensely magnetic syenite - with massive magnetite	12134	87.9	91.1	1.2	118		3	.1
	veinleting between 90.1-90.6 m								
92.6-124.3	MESOCRATIC MONZOSYENITE								
	pinky-grey coloured, plag + kspar + mafic intrusive								
	med grained, weak to moderately foliated in places								
	45-60° TCA								
	m-i kspar alteration - along fractures and as patches	12135	103	105.5	2.5	343		11	.6
	m-i chlorite alteration of mafics								
	m-i magnetite throuhout section								
	only trace of sulphides (pyrite) observed								
	occasional hematitic slickenside surfaces								
118.5-121.6	35° TCA and from 118.5-121.6								
	i fractured core, rubbly, hematitic coatings,								
	some with slickensides								
	FAULT ZONE								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
124.3-127.7	PEGMATITE								
	Grey and pink, coarse grained pegmatite, minor coarse								
	biotite, N.V.S. HW and FW contacts 25-30° TCA								
127.7-134.1	BIOTITE PYROXENITE								
	dark green, fine grained, chloritic matrix with m grained								
	angular biotite and magnetite								
	w. pervasive carbonate alteration, minor hairline								
	carbonate, qtz veinlets								
134.1-134.3	HYBRID CONTACT	12136	133.2	135.2	2.0	340	28		.1
		12137	135.2	137.3	2.1	252	26		.1
134.3-139.5	MELANOCRATIC SYENITE ('PORPHYRY')								
	grey-green fine grained matrix with 10% pink/grey								
	orthoclase phenocrysts,								
	angular up to 1 cm x 0.5 cm in size								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
	in places it looks like the biotite pyroxenite described								
	above, but with kspar phenocrysts-- i.e. lots of								
	chloritic (f.g. matrix) and m.g. biotite;								
	also v. strongly magnetic. and a w. pervasive carbonate								
	alteration								
136-136.8	patchy ksp PEGMATITE 0° TCA	12138	137.3	139.3	2.0	3464		82	2.3
@ 137.3	this unit grades into a strongly foliated 45-60° TCA								
	grey f.g. version, mottled with pink ksp fracture								
	envelopes, highly magnetic, also w. pervasive carbonate								
	and ≤ 0.5% f.g. diss. cpy; tr py								
139.3-142.1	FAULT ZONE	12139	139.3	142.1	2.8	1233		27	.1
	? Volcanic Xenolith?? Alt'd SYENITE?								
	dark green - black, fine grained, chloritic,								
	non magnetic, foliated, hematitic fractures,								
	v. weak carbonate alteration.								
	a small (30 cm) interval with ksp phenocrysts								
	5% fg diss py								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
142.1-153	MONZONITE - MONZOSYENITE	12267	142.1	144.1	2.0	193		4	.3
	grey & brick red. m-grained monzosyenite	12268	144.1	146.1	2.0	160		2	.1
	m kspar alteration as patches and along veinlets, 5-10%								
	diss mgt, 1-2% patchy epidote. v. w. to no foliation								
	minor (<1 %) f g diss cpy +/- py								
147.6-147.8	PEG- Veinlet 20° TCA	12269	146.1	148.1	2.0	337		17	.1
		12270	148.1	149.7	1.6	301		13	.1
149.7-150.7	PEGMATITE VEINLET (DYKE)	12271	149.7	150.7	1.0	1348		15	1.9
	pinky brown (brick red) m foliated 50° TCA	12272	150.7	153.0	2.3	296		11	.1
	HW, FW contacts @ 20-30° TCA								
	<1% blotchy cpy								
	minor coarse magnetite								
153-155.5	MELANOCRATIC SYENITE	12273	153.0	155.5	2.5	187		6	.1
	v. dark grey; pink f-g syenite								
	w. magnetic, minor calcite chlorite alt'd mafics								
	and kspar; tr cpy throughout								

				HOLE: L93-1 PAGE: 9 of 10					
Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
155.5-167.7	MONZONITE - MONZOSYENITE	12274	155.5	158.0	2.5	239		7	.1
	m. grained monzosyenite, grey and pink - patchy and	12275	158.0	160.5	2.5	111		6	.1
	veinlet controlled kspar	12276	160.5	162.5	2.0	331		3	.1
	intensely magnetic; weak patchy epidote	12277	162.5	165.0	2.5	168		4	.1
	weak pervasive carbonate ?possibly albitized?	12278	165.0	167.5	2.5	162		1	.1
	trace fg diss cpy throughout								
	158.8-159.2 Shear Zone 30° TCA								
	160.5-161.1 Shear Zone, QTZ carbonate veinlet 20-30° TCA								
167.7-170.7	HYBRID CONTACT ZONE	12279	167.5	169.6	2.1	1199		13	.1
	f.g. dark grey/black and pink mottled,	12280	169.6	172.2	2.6	426		55	.1
	looks like altered or sheared syentie to pegmatite								
	trace cpy.								
170.7-173.2	QTZ/(KSP) VEIN, Crackle breccia								
	light grey/white mottled, qtz								
	trace cpy, py								
173.2-182.6	MONZONITE/MONZOSYENITE								
	grey/pink, fine to med grained mottled massive								
	monzosyenite patchy + veinlet pink kspar alteration								

HOLE: L93-1

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
	patchy epidote alteration								
	minor clacite along fractures								
	coarse biotite along fractures, and in patches								
	moderately magnetic								
	NO VISIBLE SULPHIDES								
	182.6m EOH								

Hole Number: L 93-2 AZIMUTH: N/A DATE STARTED: August 3, 1993

Location: 19800N DIP: -77° DATE COMPLETED: August 8, 1993

20500E DEPTH 275.8 m

TESTS: DEPTH 0 m AZIMUTH: 025° DIP: -77°

127.7 m -80°

237.4 m -79°

275.8 m -78°

PROPERTY: LORRAINE - UPPER ZONE

HOLE NO.: L93-2

PAGE: 1 of 12

DATE: August 4, 1993

LOGGED BY: S. Bishop

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
0 - 3	CASING	12281	3.0	5.5	2.5	4222	.426	209	1.1
		12282	5.5	8.0	2.5	6090	.689	315	3.8
3 - 255	(MONZO) SYENITE	12283	8.0	10.5	2.5	1450		57	.1
		12284	10.5	13.0	2.5	2732	.285	82	.8
	Pink grey, mottled, fine to medium grained syenite	12285	13.0	15.5	2.5	2491	.243	96	.5
	(migmatite?) - possibly monzonitic	12286	15.5	18.0	2.5	1133	.128	39	.3
		12287	18.0	20.5	2.5	722		48	.4
	intense potassic alteration - brick/salmon red/pink	12288	20.5	23.0	2.5	1555		121	.5
	patchy kspar and numerous kspar veinlets, also biotite	12289	23.0	25.5	2.5	953		40	.2
	(fine to med grained); m-i biotite to chlorite alteration								
	variable magnetite, w to intense in places								
	w - m patchy epidote alteration								
	no distinct foliation								
	trace visible fine grained chalcopyrite and pyrite								
	malachite staining on fracture surfaces.								
	17.9 - 18.3 kspar pegmatite vein 25° TCA								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
25.5 - 35.0	KSPAR PEGMATITE BRECCIA/DYKE	12290	25.5	28.0	2.5	94		46	.2
	Pink and grey coarse grained Kspar pegmatite dyke -								
	variably mottled to phenocrysts with a trachytic texture.								
	kspar crysts up to 5 cm x 0.5 cm								
	occasional coarse magnetite clots & sericitized xenoliths								
	No VISIBLE SULPHIDES								
	therefore only one sample collected								
	(post mineral unit)								
	HW 60° FW 70° TCA								
35.0 - 40.9	MONZONITE								
	grey, pink, fine to medium grained monzonite with patchy	12291	35.0	38.0	3.0	1199		91	.1
	pink potassic alteration	12292	38.0	40.9	2.9	1491		110	.5
	possibly weak - sericite alteration								
	m - i diss magnetite, moderate chlorite - epidote								
	alteration of mafics								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
	also mgt to hematite								
	variable sulphides: from tr - 1% cpy in places								
	(38.3 - 39.3 rubbly core - FLT?)								
40.9 - 44.8	KSPAR PEGMATITE DYKE								
	grey - white coarse grained kspar (trachytic) albite								
	pegmatite; albite primary or secondary ??								
	HW and FW 10-20° TCA								
44.8 - 52.5	MONZONITE	12293	44.8	46.4	1.6	1220		23	.7
	As from 35.0 - 40.9 above.	12294	46.4	48.0	1.6	1568		44	.2
		12295	48.9	50.4	1.5	1110		15	.7
	48 - 48.9 Pegmatite dyke 40° TCA HW, FW	12296	50.9	52.5	1.6	900		14	.4
	50.4 - 50.9 Pegmatite dyke HW 50° TCA, FW 20° TCA								
52.5 - 58.0	KSPAR PEGMATITE DYKE								
	HW 40° FW 25° TCA								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
58.0 - 102	MONZONITE - MONZOSYENITE	12297	58.0	60.5	2.5	2137	.230	59	1.6
	-very continuous, homogenous section	12298	60.5	63.0	2.5	4585	.504	202	3.5
	grey, pink, mottled monzonite - monzosyenite	12299	63.0	65.5	2.5	6847	.729	283	4.6
	m - i potassic alteration as patchy and veinlet pink	12300	65.5	68.0	2.5	5753	.623	198	4.5
	kspar - and biotite throughout; m - i mgt, w ep, m chl?	12301	68.0	70.5	2.5	2013	.231	52	0.8
	w foliation 50 - 60° TCA	12302	70.5	73.0	2.5	3961	.429	105	3.1
	Ksp fract's and veinlets @ 25° TCA	12303	73.0	75.5	2.5	5818	.631	199	4.7
		12304	75.5	78.0	2.5	1620		49	1.5
	malachite on fracture surfaces, + 1% cpy, py								
	64 - 64.6 milky grey-white QV 30 cm wide with trace,								
	coarse cpy blebs; vein 30° TCA								
	66.8 - 68 RUBBLY FRACT'D CORE - FAULT ZONE	12305	78.0	80.5	2.5	3853	.567	243	3.8
		12306	80.5	83.0	2.5	3528	.581	286	4.8
	- 1% Malachite specks throughout, < 1% fvg cpy, PY	12307	83.0	85.5	2.5	1135		53	1.2
		12308	85.5	88.0	2.5	1398		64	1.9
	69.1 - 20 cm grey white qtz ksp? veinlets	12309	88	90.5	2.5	1125		61	2.2
	25° TCA, trace py	12310	90.5	93.0	2.5	1644		66	2.3
		12311	93	95.5	2.5	1035		38	1.8
	74.3 - mottled 30 cm vein 70° TCA	12312	95.5	98.0	2.5	1791		61	2.4
	qtz? Ksp	12313	98.0	100.5	2.5	575		25	1.5
		12314	100.5	102.0	1.5	1429		94	1.4
	76.1 - pegmatite veinlet 30 cm wide 20° TCA	12315	102	104	2.0	225		20	1.6

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
	80.2 - 81 1-2% malachite in fracture surfaces								
	--GRADATIONAL INTO--								
	84 - weaker potassic (pink kspar, biotite) alteration								
102 - 104	LATE SYENITE DYKE -- ALASKITE--	12316	104	106.5	2.5	3986	.512	231	4.7
	pink -brick reddy pink, mg to coarse grained in places	12317	106.5	109.0	2.5	1594		99	2.7
	syenite - monzosyenite dyke --	12318	109.0	111.5	2.5	3833	.659	223	4.3
	primarily composed of feldspars - minor mafics -	12319	111.5	114.0	2.5	2890	.431	134	2.8
	non-magnetic	12320	114.0	116.5	2.5	2189	.385	59	2.7
	HW 60° FW 30° TCA	12321	116.5	119.0	2.5	>10000	2.090	241	12.8
		12322	119.0	121.5	2.5	3136	.428	105	3.6
104 - 124	MONZONITE - MONZOSYENITE	12323	121.5	124	2.5	1776		63	1.3
	as from 58 - 102 m,								
	104-106 1-2% malachite along fractures and as specics								
	trace - <1% cpy throughout section								
124 - 130.6	LATE SYENITE - ALASKITE DYKE								
	buff pink f - mg aplitic in places only trace cpy on								
	occasional fractures near HW & FW contacts								
	HW 30°, FW 55° TCA								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
130.6 - 134	MONZONITE - mesocratic - leucocratic	12324	130.6	133.1	2.5	468		51	.7
	buff, pinky grey m - c grained monzonite, especially	12325	133.1	135.6	2.5	861		73	.8
	buff coloured from 131 - 134 possibly albitized?	12326	135.6	138.1	2.5	2141	.272	283	2.9
	patchy pink ksp alteration	12327	138.1	140.6	2.5	1905	.258	80	1.7
	5-10% diss mgt	12328	140.6	143.1	2.5	2333	.301	159	1.8
	clots of mafics (biotite, amph) with i chlorite	12329	143.1	145.6	2.5	6417	.707	271	4.0
	alteration	12330	145.6	148.1	2.5	1792	.208	90	.2
	trace py > cpy	12331	148.1	150.6	2.5	1598		64	.1
		12332	150.6	153.1	2.5	1023		77	.2
134 - 135.9	MONZOSYENITE - melanocratic	12333	153.1	155.6	2.5	1522		60	.4
	similar to above but grey pink mottled colour; higher	12334	155.6	158.1	2.5	706		24	.4
	mafic content, m-i chlorite alteration, patchy and	12335	158.1	160.6	2.5	1747		113	1.0
	veinlet pink kspar	12336	160.6	163.1	2.5	2247	.243	62	.5
	m-coarse grained, weak foliation 50° TCA	12337	163.1	165.6	2.5	3995	.429	74	1.2
	N.V.S.	12338	165.6	168.1	2.5	3643	.397	89	1.2
	GRADATIONAL INTO	12339	168.1	170.6	2.5	2678	.281	58	1.3
		12340	170.6	173.1	2.5	2775	.291	83	.1
135.9 - 174.4	MONZOSYENITE - melanocratic	12341	173.1	175.6	2.5	4885	.542	141	2.8
	fine to medium grained and strongly foliated (otherwise								
	similar to above unit)								
	50 - 60° TCA to 70° TCA								

HOLE: L93-2

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
	<1% malachite flecks throughout, even on split surfaces;								
	trace cpy; py								
	136.4 - 136.55 grey qtz vein with 15% m-c. grained								
	pyrite, < 1% cpy 50° TCA								
.	@ 142.5m, grades into pink-grey m grained with i potassic								
	alteration pervasive ksp.								
	about 145.3m 1% cpy fg.								
(150.6 - 152.4)	VERY RUBBLY, BROKEN UP CORE -- FAULT ZONE--								
	158.8 - 159.2 silicified, grey qtz veinlets in								
	monzosyenite 80° TCA with 1-3% coarse pyrite blebs								
	still traces of cpy throughout, m - i brick red-pink								
	potassic alteration								
174.4 - 186.1	DIORITE	12342	175.6	178.1	2.5	1648		39	1.2
	grey, m - c grey mottled diorite	12343	178.1	180.6	2.5	2306	.254	80	.6
	w to, in places, m diss mgt, w-m chlorite w kspar patches	12344	180.6	183.1	2.5	1881		93	.6
	or xstals (1°?); minor chlorite veinlets < 2 cm wide	12345	183.1	185.6	2.5	1304		46	.1
	in places quite hard and murky looking - possibly								
	silicified? or albitized?								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
	w - m foliation in places 50° TCA								
	approx. 1% fg cpy mostly along fract's & with mafics								
	HW contact unclear, FW sharp 45° TCA								
186.1 - 190.7	MONZOSYENITE - MESOCRATIC	12346	185.6	188.1	2.5	3830	.410	162	.7
	pink-green-grey, f - m - grained moderately foliated	12347	188.1	190.7	2.6	3517	.368	66	.9
	60° TCA								
	m-i chl/epidote alteration of mafics along foliation								
	m - i pink kspar								
	i mgt - diss, as foliations and veinlets up to 1 cm wide								
	50° TCA								
	trace cpy, mal. along fractures								
190.7 - 199.4	BIOTITE PYROXENITE	12348	190.7	193.7	3.0	34		5	.1
	green, highly chloritized spotted biotite pyroxenite:	12349	193.7	194.8	1.1	1292		40	.1
	w-m magnetic	12350	194.8	195.9	1.1	3903	.406	159	2.1
	top portion of unit is moderately foliated 55° TCA	12351	195.9	199.4	3.5	246		7	.1
	No visible sulphides								
	HW 60° TCA, FW broken contact looks about 35° TCA??								
	191.8 - 193.7 3-4 pegmatite veinlets up to 25 cm wide,								
	30 and 50° TCA								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
	numerous fract. surfaces with blue amphibole like mineral								
	coatings								
	194.8-195.85 ? xenolith? / dyke? / inclusion of								
	monzosyenite unit (as from 186.1 - 190.7)								
199.4 - 210.4	(MONZO) SYENITE (MESOCRATIC)	12352	199.4	202	2.6	510		21	.2
	pink grey mottled fine to medium grained, variable	12353	202	204.5	2.5	1159		68	.6
	texture, monzosyenite	12354	204.5	207	2.5	601		43	.5
	-occasional ksp megacryst (phenocryst) lath 2 cm x 0.5 cm	12355	207	209.5	2.5	510		17	.9
	i pink kspar alteration or flooding, patches and veinlets	12356	209.5	212	2.5	32		47	.8
	w diss mgt, with clots of msv mgt	12357	212	214.5	2.5	14		51	.8
	patchy chlorite alteration of mafics, weak epidote along	12358	214.5	217	2.5	47		63	.3
	some fractures	12359	217	219.5	2.5	6		10	.1
	variably foliated 50-60° TCA								
	only trace cpy, py observed								
	except at 209.4 3 cm white qtz vein. with coarse cpy;								
	50° TCA and galena								
210.4 - 211.1	BIOTITE PYROXENITE XENOLITH								
211.1- 220	MELANOCRATIC MONZOSYENITE								

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
	Very dark grey, very mottled, porphyritic monzosyenite -								
	relict kspar (alt'd)? and plag phenocrysts in fg dark								
	matrix								
	-looks murky, alt'd								
	only weakly magnetic								
	m-i potassic kspar alt'n 1° as fracture coatings,								
	20-70° TCA and patches								
	rare SX along fracture (PY +/- cpy)								
220 - 225.6	MESOCRATIC MONZOSYENITE	12360	219.5	222	2.5	1978		81	1.5
	as from 199.4 - 210.4m rare cpy, py	12361	222	224.5	2.5	951		57	.9
		12362	224.5	227.3	2.8	776		71	1.6
225.6 - 226.2	PEGMATITE DYKELET								
	pinky red, c.g. kspar pegmatite vein 70° TCA								
226.2 - 227.3	BIOTITE PYROXONITE	12363	227.3	229.6	2.5	2542	.278	276	1.6
	green, chlorite rich, with coarse biotite	12364	229.6	232.1	2.5	3315	.367	424	2.0
		12365	232.1	234.2	2.1	2237	.242	269	1.6
227.3 - 248.7	MONZONITE ?	12366	234.1	237	2.9	1081		85	.8
	grey - pink grey - murky looking, mottled	12367	237	239.5	2.5	1400		100	1.5

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
	v.f.g. light grey matrix with mm sized mafic phenocryst	12368	239.5	242	2.5	1477		202	1.1
	(pxy > amph?, biot to chlorite	12369	242	244.5	2.5	2192	.247	305	2.1
	- portions with 0.5 cm plag lath phenocrysts - generally	12370	244.5	247	2.5	2244	.243	156	2.2
	non magnetic, occasional clots of magnetite	12371	247	249.5	2.5	1524		73	1.8
	+ 1% fg cpy throughout								
	234.2-236.6 MESOCRATIC MONZOSYENITE interval								
	pink/grey f-mg. foliated approx. 50° TCA								
	NVS								
	241-241.7 - mesocratic monzosyenite interval								
	after 237.4 m - less % cpy → only trace								
	and unit is moderately foliated 50° TCA								
	LOOKS LIKE SYENITE MIGMATITE								
248.7 - 256.1	INTERLAYERED MESOCRATIC MONZOSYENITE AND BIOTITE PYROXENITE								
	intervals of each unit 0.5 - 1.0 m in width	12372	249.5	252	2.5	1315		103	1.5
	contacts at 50 - 60° TCA,	12373	252	254.5	2.5	271		34	.8
	moderately foliated 50 - 60° TCA	12374	254.5	257	2.5	922		61	1.2
	pink kspar alt'd (pervasive) monzosyenite and chloritized								
	bi pxy.								
	rare suphide seen py> cpy								

				HOLE: L93-2 PAGE: 12 of 12					
Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
256.1 - 267.3	MESOCRATIC (MONZO) SYENITE								
		12375	263	265.5	2.5	493		50	1.5
	pink grey, m grained, m - i potassic alt'n	12376	267.3	269.9	2.6	121		18	
	pervasive, and veinlet ksp.	12377	273.7	275.8	2.1	461		291	2.4
	NVS								
	258.2 - 259.8 - DIORITIC INTERVAL								
267.3 - 272	(MONZO) SYENITE								
	dark green, pink intense chlorite alteration of mafics								
	- N.V.S.								
272 - 275.8	(MONZO) SYENITE								
	grey, pink, mottled monzosyenite								
	i potassic alt'n ; pink kspar along veinlets and patchy								
	N.V.S.								
	275.8 m EOH								

Hole Number: L93-3 AZIMUTH: 320° DATE STARTED: Aug 9/93

Location: 20150N DIP: -80° DATE COMPLETED: Aug 10/93

L19500E DEPTH 13.5 m

TESTS: DEPTH _____ AZIMUTH: _____ DIP: _____

_____ _____ _____

_____ _____ _____

PROPERTY: LORRAINE

HOLE NO.: L93-3

PAGE: 1 of 1

DATE: August 9/93

LOGGED BY: S. Bishop

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
0 - 13.5	OVERBURDEN								
	HOLE LOST IN OVERBURDEN								

Hole Number: L93-3 AZIMUTH: 320° DATE STARTED: Aug 9/93

Location: 20150N DIP: -80° DATE COMPLETED: Aug 10/93

L19500E DEPTH 13.5 m

TESTS: DEPTH _____ AZIMUTH: _____ DIP: _____

_____ _____ _____

_____ _____ _____

PROPERTY: LORRAINE

HOLE NO.: L93-3

PAGE: 1 of 1

DATE: August 9/93

LOGGED BY: S. Bishop

Interval (m)	Description	Sample No.	From	To	Width (m)	Cu ppm	Cu %	Au ppb	Ag ppm
0 - 13.5	OVERBURDEN								
	HOLE LOST IN OVERBURDEN								