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GEOLOGICAL REPORT
on the
LOUISE LAKE PORPHYRY COPPER-GOLD PROSPECT

**Smithers Area
Omineca Mining Division
British Columbia**

**Latitude: 54°51' North
Longitude: 127°41' West
NTS: 93L/13E**

for
GLOBAL MINERAL AND CHEMICAL LTD.

by
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January 16, 1995**

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SUMMARY

Global Mineral and Chemical Ltd. holds an option agreement on the Louise Lake porphyry copper-gold prospect which is situated 35 km west of Smithers in west-central British Columbia.

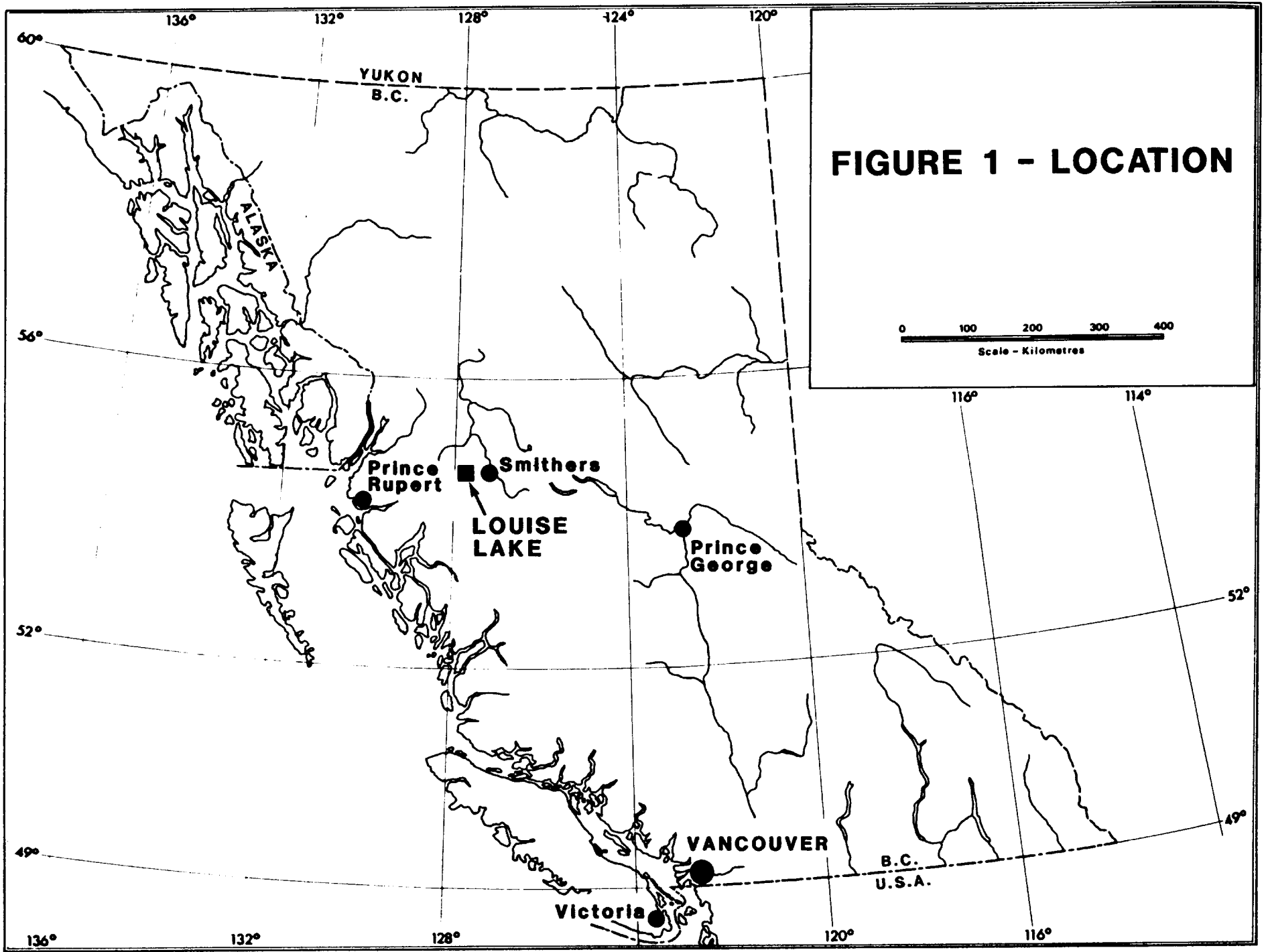
The property, originally located in 1968, has been partially tested by geological, geophysical and geochemical surveys and by trenching and 5588.6 metres of diamond drilling. The most recent diamond drilling program, completed in March and June of 1992, incurred expenditures of \$277,000.

Work to date has identified geological features and geochemical and geophysical signatures similar to those associated with significant porphyry deposits elsewhere in west-central British Columbia and the presence of copper-arsenic sulphide minerals suggests that at least some of the mineralization may be transitional between high-level porphyry copper and near-surface epithermal precious metals deposits.

Diamond drilling to date has partially delineated a tabular zone of copper-gold-molybdenum mineralization estimated to contain a possible resource of 50 million tonnes grading 0.30% copper and 0.31 g/t gold. A second zone, northeast of the main zone and adjacent to a regional fault structure, was intersected by one drill hole from which a 3

metre section returned appreciably higher base and precious metals grades.

The Louise Lake prospect merits additional exploratory work. A first phase program, designed to further test both of the known mineralized zones, is recommended to include a detailed compilation of the results of previous exploration work, Induced Polarization (IP) surveys and additional diamond drilling at an estimated cost of \$235,750.



INTRODUCTION

Global Mineral and Chemical Ltd. has recently concluded an option agreement for the purpose of carrying out additional exploratory work on mineral claims comprising the Louise Lake property in west-central British Columbia.

This geological report on the Louise Lake porphyry copper-gold prospect, prepared at the request of Global Mineral and Chemical Ltd., is based principally on three previous reports prepared by the writer for the Louise Lake property which include reports for 402774 B.C. Ltd. and New Canamin Resources Ltd., dated July 26 and November 18, 1991 respectively. A March 18, 1994 report, prepared for Conquest Exploration Ltd., included information derived from exploratory drilling programs conducted by Equity Silver Mines Limited in 1992.

Information used in the preparation of all reports includes records of previous exploration work conducted on the property since its discovery in the late 1960's. Much of this information is on public record and pertinent references are listed at the end of this report.

The writer originally examined and reported on the Louise Lake property in 1969 while in the employ of the then Provincial Department of Mines and Petroleum Resources.

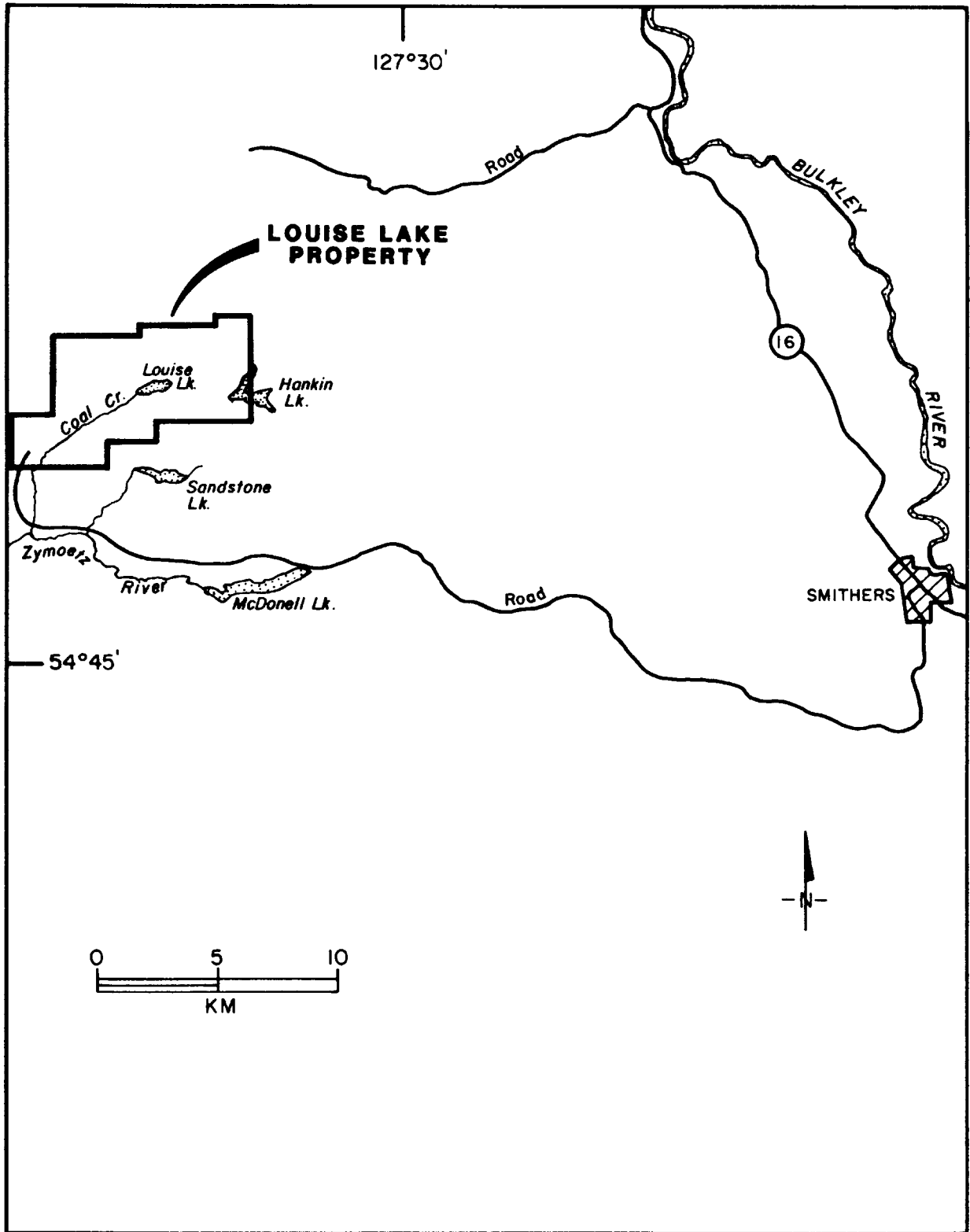


FIGURE 2 - LOCATION - LOUISE LAKE PROPERTY

contours are in Imperial units). Much of the claim area is tree-covered, broken by open, swampy areas east and west of Louise Lake.

Bedrock exposures are mainly restricted to steeper slopes north and south of Louise Lake and along Coal Creek, the shores of Louise Lake and the trenched areas west of the lake.

PREVIOUS WORK

Copper mineralization was discovered immediately west of Louise Lake by Mastodon-Highland Bell Mines Ltd. in 1968. Work by this company and partner Leitch Gold Mines Ltd. included geological, geochemical and geophysical surveys and 220 metres of bulldozer trenching prior to negotiating an option agreement with Canadian Superior Exploration Limited in late 1969. This company carried out additional geological and geochemical surveys, 42 line-km of Induced Polarization surveys and completed 17 diamond drill holes totalling 2021 metres prior to terminating the agreement in 1971.

The claims lapsed and were re-staked by Granby Mining Corporation in 1975. Work by Granby included a re-assessment of previous survey results and additional soil geochemistry. Granby's interests were acquired by Noranda Exploration Company, Limited in 1979 and this company carried out an

airborne VLF-EM and magnetometer survey and some rock and soil geochemistry before abandoning the property in 1985.

The property was staked by L.B. Warren and E.A. Shaede in 1986. A re-sampling of some of the original drill cores was undertaken and an option agreement was entered into with Lacana Mining Corporation (latterly Corona Corporation) in 1987. Work by Corona through 1989 included detailed re-sampling of Canadian Superior 1970 drill core, soil and rock geochemistry, geological mapping, geophysical surveys and 485 metres of backhoe trenching adjacent to the previously trenched areas. Five inclined diamond drill holes totalling 916 metres were also completed prior to Corona relinquishing the option agreement.

The Louise Lake mineral claims were acquired by 402274 B.C. Ltd. in early 1991 and an option agreement was negotiated with New Canamin Resources Ltd. in October of that year. New Canamin subsequently entered into an agreement with Equity Silver Mines Limited whereby Equity could earn a 70% interest in the underlying option agreement by undertaking a minimum \$250,000 exploration program in 1992 and assuming New Canamin's obligations pursuant to the option agreement with 402774 B.C. Ltd.

Equity's 1992 program included a re-evaluation of the results of previous exploration work and the completion of a

two-phase diamond drilling program consisting of 7 holes in March and 6 holes in June for a cumulative total of 2651.6 metres. Reclamation work included revegetation of access roads and drill sites and clean-up of the old camp site at the western end of Louise Lake.

Expenditures incurred by Equity Silver Mines Limited on the Louise Lake property in 1992 amounted to \$277,025.89 (Hanson, 1992).

REGIONAL GEOLOGICAL SETTING

The Louise Lake prospect is situated in west-central British Columbia, a region largely underlain by mid- to late Jurassic (Hazelton Group and Bowser Assemblage) and early to mid-Cretaceous volcanic and sedimentary rocks which together comprise Stikinia terrane of the Intermontane tectonic belt. Jurassic and older layered rocks are intruded by mainly coeval granitic rocks of the Topley intrusions and all volcanic and sedimentary sequences are cut by late Cretaceous and early Tertiary granitic rocks.

The older Topley intrusions occur along the the axis of the Skeena Arch, a major northeast-trending transverse uplift structure which marks the southern limits of the Bowser Basin and its contained clastic sediments of late Jurassic and early Cretaceous age. Skeena Arch, the northern limits of

which are 10 - 15 km south of Louise Lake, also marks the northern limits of areally extensive, early to mid-Tertiary continental volcanic rocks which overlie older Mesozoic assemblages.

The region is well known for its number and variety of mineral deposit types. Perhaps best known are porphyry copper and/or molybdenum deposits and prospects, some of which contain significant by-product gold contents. These porphyry deposits and prospects in west-central British Columbia are associated with granitic plutons of late Cretaceous (Bulkley intrusions - 70-80 million years) and Tertiary (Babine and Nanika intrusions - 50 million years) age which intrude Mesozoic volcanic and sedimentary rocks. The porphyry intrusions take the form of small stocks, plugs, dykes and dyke swarms of about 1 km in diameter. The intrusions range in composition from quartz diorite to granite and several phases of intrusion are evident at most deposits and prospects.

Porphyry deposits in this part of British Columbia are typical of the classic or stock-related type. Potassic, phyllic and propylitic silicate mineral alteration phases are developed in annular shells around the porphyry intrusions. Sulphide minerals occur within and adjacent to intrusions as disseminations, fracture fillings and in quartz veinlets and

display a lateral zoning with an inner, weakly mineralized zone surrounded successively by molybdenum and copper zones and a pyrite-rich halo or shell.

Secondary or supergene copper mineralization is known at several porphyry deposits in west-central British Columbia. Best known examples are Bell Copper and Berg where supergene effects are evident to depths of between 50 and 135 metres below present surface levels. In both cases, secondary chalcocite can enhance primary copper grades by 15 to 25%.

Porphyry deposits in the Babine Lake area, some 100 km east of Louise Lake, have been significant contributors to the local economy in the recent past. More than 125 million tonnes milled from the Granisle and Bell open pit mines between 1966 and 1991 had recovered grades of 0.40% copper and 0.15 - 0.20 g/t (0.004 - 0.006 oz/ton) gold.

This deposit type in west-central British Columbia has attracted renewed attention in response to ongoing work on the Huckleberry deposit situated immediately north of Tahtsa Reach and 135 km south-southeast of Louise Lake. Drill-indicated and inferred reserves in two zones at Huckleberry total 55 million tonnes grading 0.60% copper at a 0.40% copper cut-off grade.

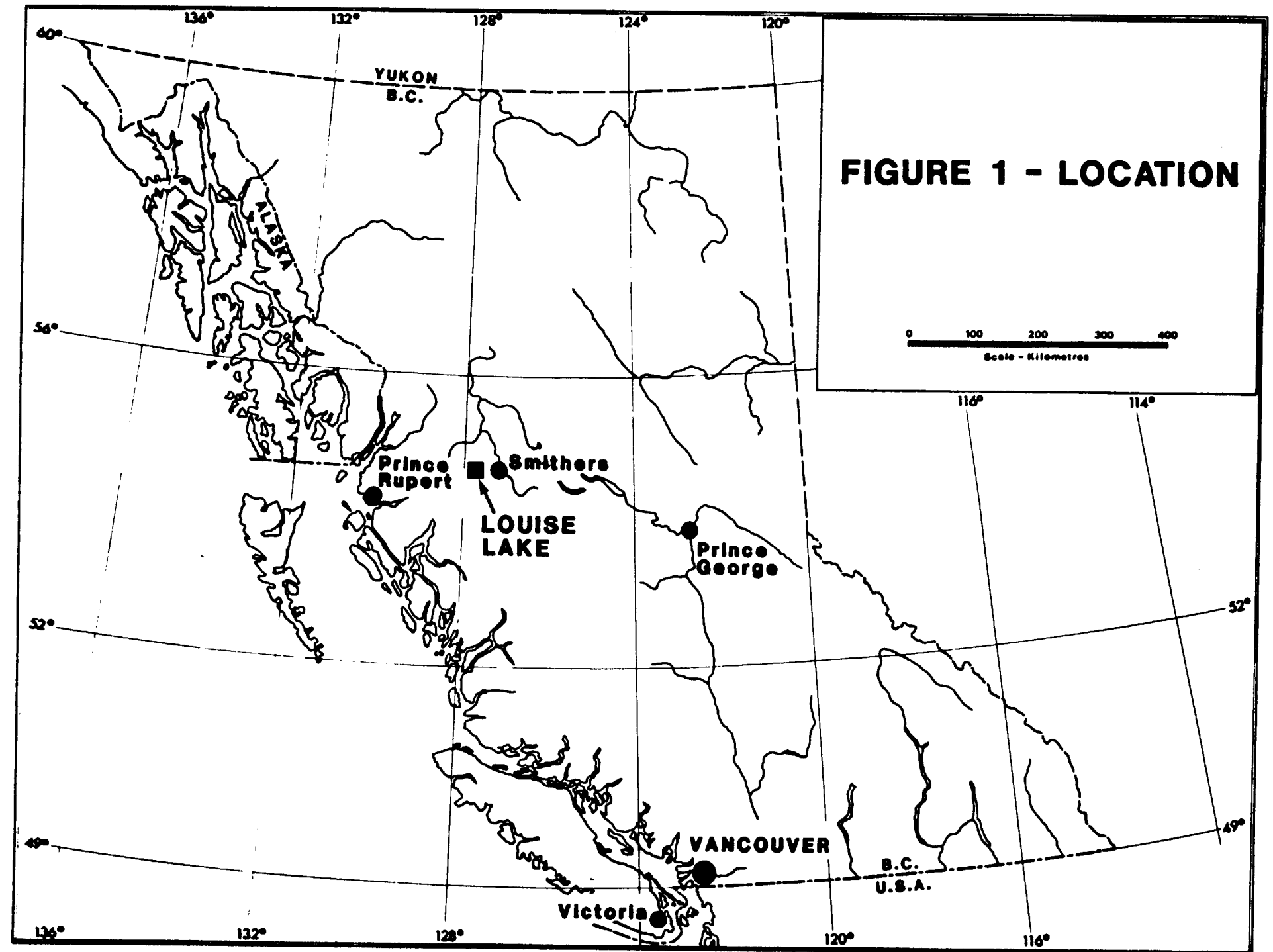
PROPERTY GEOLOGY, GEOPHYSICS, GEOCHEMICAL SIGNATURES AND MINERALIZATION***Geology***

The Louise Lake area is underlain by Mesozoic volcanic and sedimentary rocks which are intruded by several granitic plutons of varying composition (Figure 4). An east-northeast striking fault zone of regional extent, which follows Coal Creek and the north shore of Louise Lake, separates Middle Jurassic (Hazelton Group and Bowser Assemblage?) volcanics and sediments on the south from mid-Cretaceous (Skeena Group) rocks on the north.

Hazelton Group (and Bowser Assemblage?) rocks consist mainly of massive andesitic flows, tuffs and poorly sorted sediments. Skeena Group rocks north of the regional fault are comprised of more acidic tuffs, breccias and flow rocks with some interbedded sediments.

Granitic plutons include intensely altered feldspar porphyries in the main mineralized zone north of the regional fault, relatively unaltered quartz-eye feldspar porphyries along Coal Creek and south of Louise Lake, porphyritic granodiorites east of the lake and small diorite-gabbro bodies in the northern property area (Figure 4).

A small breccia pipe with rotated and rounded fragments in a fine-grained sericite-pyrite matrix was reported by Mastodon-Highland Bell immediately west of Louise Lake.



Trenched areas and some diamond drill core on the property were examined June 30, 1991.

LOCATION AND ACCESS

The Louise Lake property is situated 35 km west-northwest of Smithers in west-central British Columbia (Figure 1). The geographic centre of the property is at latitude 54°51' North and longitude 127°41' West in NTS map-area 93L/13E.

The quickest access to the property is by helicopter or floatplane. A winter road from Hankin Lake, 3 km east of Louise Lake (Figure 2), has been used for access in the recent past and an active logging road up Coal Creek has recently been extended into the property thereby affording conventional, all-season access.

MINERAL PROPERTY

The Louise Lake property consists of 13 Modified Grid or 4 Post mineral claims (184 mineral claim units) located in the Omineca Mining Division. The mineral claims are shown on Figure 3 and details are as follows:

<u>Claim Name</u>	<u>Record Number</u>	<u>Units</u>	<u>Expiry Date</u>
TENN	239324	20	October 23, 2002
TENN(2)	239530	20	July 20, 2002
TENN(3)	239531	20	July 20, 2002
TROUT	240168	4	October 12, 2002
TENN 4	305944	14	October 27, 1995

<u>Claim Name</u>	<u>Record Number</u>	<u>Units</u>	<u>Expiry Date</u>
TENN 5	305945	8	October 26,1995
TENN 6	305946	20	October 26,1995
TENN 7	305947	10	October 28,1995
TENN 8	305948	8	October 28,1995
TENN 9	305949	20	October 29,1995
TENN 10	305950	20	October 31,1995
TENN 11	305951	10	October 31,1995
TENN 12	305952	10	October 31,1995

The foregoing mineral claims are believed to have been located in accordance with procedures as specified by the Mineral Tenure Act Regulations for the Province of British Columbia. No claim posts or lines have been examined by the writer.

The mineral claims comprising the property were purchased by 402774 B.C. Ltd. March 27,1991 and are subject to an option agreement with Global Mineral and Chemical Ltd.

PHYSICAL SETTING

The property is situated in an area of relatively subdued topography within the Bulkley Ranges near the headwaters of Zymoetz River, a major tributary of Skeena River. Louise Lake is at the headwaters of Coal Creek which flows southwesterly into the Zymoetz River.

Elevations range from 915 metres above sea level along Coal Creek in the southwestern property area to more than 1100 metres north of Louise Lake (Figure 3 - note that

Similar breccias have been noted in surface exposures and in drill core within the trenched area. Some of the volcanic rocks in the area of the exposed mineralized zone may be extrusive equivalents of the high level feldspar porphyry pluton which is believed to be of late Cretaceous (Bulkley intrusions) age.

Intense quartz-sericite-clay minerals alteration within the main area of mineralization southwest of Louise Lake makes it difficult to distinguish between intrusive phases, possible extrusive equivalents and older country rocks (Hanson, 1992).

Geophysics

Principal geophysical signatures on the Louise Lake property are shown on Figure 5. The main area of interest west of Louise Lake occupies an area of lower magnetic susceptibility and is partly coincident with an east trending zone of high IP response, which as shown on Figure 5, is open to the west. The IP anomaly is offset by the east-northeast Coal Creek fault zone and its eastern extension underlies much of Louise Lake (Figure 5). A weaker zone of IP response south and east of the lake includes an area of argillically altered porphyritic granodiorite.

Geochemical Signatures

Results of soil geochemistry within and adjacent to the

main zone tested by drilling to date are shown on Figure 6. Better copper values (+100 ppm - range up to 3800 ppm) are most prevalent between the southern limits of the area of trenching and Coal Creek. Two holes (LL-02,-03 -Figure 6) drilled by Equity Silver, indicate that this feature is due to downslope migration. The copper in soils anomaly, however, is open to the southwest reflecting the trend of the main mineralized zone in this direction.

Better gold values in soils (+50 ppb - range up to 720 ppb) are more widespread and include part of the trenched area but are also coincident with higher copper values toward Coal Creek, which as noted, are due to downslope migration.

Higher zinc values in soils (+200 ppm - range up to 1030 ppm) border the copper and gold anomalies on the west (Figure 6).

Mineralization

The principal, or main known mineralized zone on the property underlies a low hill 800 metres west of Louise Lake. Several trenches expose intensely altered feldspar porphyry and possibly related acidic volcanic rocks. As previously noted, the intensity of quartz-sericite-clay minerals alteration makes it difficult to differentiate between intrusive and extrusive phases throughout much of this area.

Sulphide mineralization, developed within and adjacent

to the southern margin of the feldspar porphyry intrusion, consists principally of pyrite (5-10% by volume) which occurs as disseminations, fracture fillings and in 2-4 mm wide quartz veinlets. Minor molybdenite is present and copper minerals include tennantite and lesser chalcopyrite. Tennantite is the arsenic end member of tetrahedrite and its presence is reflected by higher arsenic values associated with most of the better grade copper sections in drill cores.

The presence of tennantite has also been confirmed by mineralogical work by the Geological Survey of Canada (L.B. Warren, personal communication). A well-mineralized sample from drill hole C-18 (Figures 7 and 7A) was also found to contain some enargite, which like tennantite is a copper-arsenic sulphide mineral.

Where exposed in trenches and in drill cores, density of fractures and quartz veinlets averages one per 2.5 cm. Fractures and quartz veinlets are nearly vertical and have preferred orientations of north, east-northeast and northwest. Some true stockworks are present, particularly marginal to an apparent east-west, moderately north-dipping fault zone which extends through the southern trenched area.

Better copper and gold grades obtained from sampling trenches and drill cores are near the southern limits of the trenched and drilled area. A good example is Corona drill

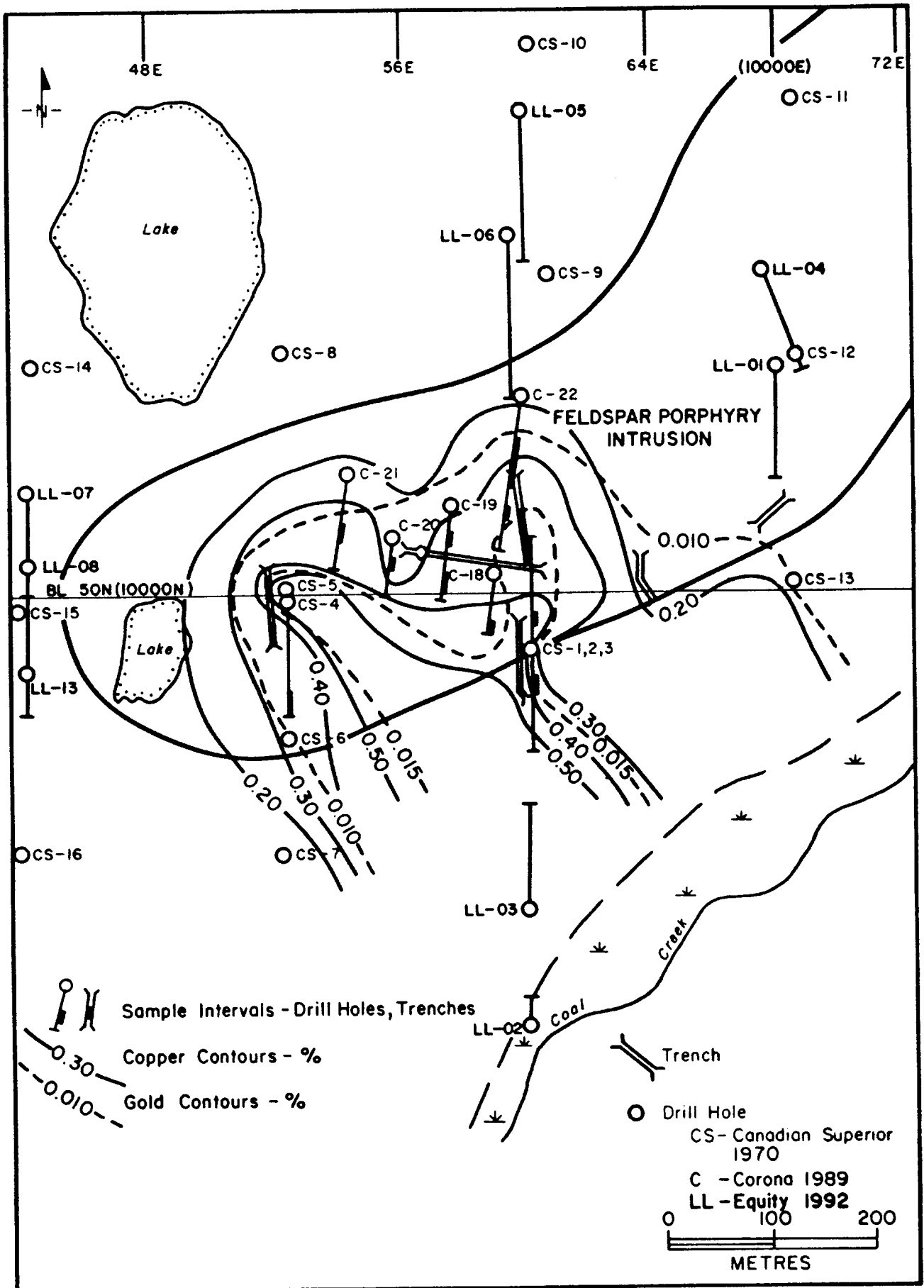


FIGURE 7 - COPPER AND GOLD IN BEDROCK

hole C-18 in which the last 26.4 metres returned values of 0.41% copper and 0.41 g/t (0.012 oz/ton) gold. An examination of drill core from this section disclosed the presence of locally abundant secondary or supergene chalcocite as coatings on pyrite.

A compilation of copper and gold values obtained from trench and pre-1992 drill core sampling is shown in contoured form on Figure 7. This diagram shows both copper and gold values increasing toward the southern limits of the area tested to date.

DIAMOND DRILLING RESULTS

Locations of drill holes completed by Canadian Superior (1970), Corona Corporation (1989) and Equity Silver Mines Limited (1992) within and adjacent to the main mineralized zone are shown on Figure 7A. Collectively, drilling to date on the Louise Lake property totals 5588.6 metres. Results obtained from the three drilling programs are summarized in Appendix I. Significant intersections (those containing more than 0.20% copper) are as follows:

Table 1

<u>Hole</u>	<u>Interval(m)</u>	<u>Length(m)</u>	<u>Cu(%)</u>	<u>Au(g/t)</u>	<u>Mo(%)</u>	<u>As(%)</u>
CS-1	12.5 - 53.9	41.4	0.30	0.16		
CS-2	19.4 - 55.0	35.6	0.30	0.15		
CS-3	49.1 - 139.6	59.2	0.35	0.42		
CS-4	18.9 - 37.8	18.9	0.27	0.27		
CS-5	20.4 - 79.6	59.2	0.47	0.52		
incl.	41.9 - 55.1	13.2	1.18	1.17		
CS-6	9.8 - 36.5	26.7	0.29	0.22		
	57.3 - 75.6	18.3	0.26	0.20		
C-18	3.7 - 121.0	117.3	0.25	0.27		
incl.	94.6 - 121.0	26.4	0.41	0.41		
C-19	3.7 - 182.0	178.3	0.24	0.27		
incl.	121.1 - 170.8	49.7	0.34	0.38		
C-20	33.2 - 55.9	22.7	0.26	0.34		
C-21	95.4 - 109.5	14.1	0.32	0.41		
C-22	9.1 - 306.9	297.8	0.20	0.24		
incl.	86.0 - 110.6	24.6	0.29	0.38		
	117.7 - 183.0	65.3	0.29	0.38		
LL-06	201.2 - 268.2	67.0	0.27	0.28	0.01	0.09
incl.	231.6 - 265.2	33.6	0.34	0.37	0.01	0.11
LL-07	112.8 - 173.7	60.9	0.36	0.34	0.02	0.08
incl.	149.3 - 173.7	24.4	0.46	0.42	0.03	0.08
(Note - hole stopped in mineralization due to adverse drilling conditions)						
LL-08	112.8 - 201.2	88.4	0.26	0.32	0.02	0.09
incl.	146.3 - 182.9	36.6	0.29	0.51	0.01	0.09
LL-10	67.1 - 112.8	45.7	0.12	0.20	NA	0.07
			(plus 0.52% Zn; 12.5 g/t Ag)			
incl.	97.5 - 100.6	2.9	1.46	1.92	NA	0.53
			(plus 1.15% Zn; 121.7 g/t Ag)			

Note: Cu, Mo, As and Zn values in percent are calculated from geochemical values expressed in parts per million (ppm); Au and Ag values in g/t (grams/tonne) calculated from geochemical values expressed in parts per billion (ppb) and parts per million (ppm) respectively.

As noted in Table 1, best results from initial Canadian Superior drilling were obtained from an area within and adjacent to previous trenching. Corona Corporation's 5 hole

drilling program in 1989 was designed to confirm results of earlier work and to test for higher grade copper and gold values.

A compilation of the results of these two drilling programs coupled with soil and rock geochemical survey results, carried out in 1991 (Carter, 1991), suggested two target areas within the main zone for additional investigation. One of these was south of the trenched area marginal to both the Coal Creek fault zone and the southern limits of the IP anomaly. Drilling and surface sampling results indicated an increase in both copper and gold grades in this direction but two 1992 Equity Silver drill holes (LL-02, -03 - Figure 7A) intersected sheared volcanic and sedimentary rocks containing only low metal values.

The second target was stockwork mineralization within and adjacent to an apparent north-dipping fault zone exposed in the trenches which would not have been intersected by shallow vertical holes drilled by Canadian Superior in 1970. This second target was investigated by 1992 Equity Silver drilling with some degree of success. Sample results from holes LL-06, -07 and -08, combined with results from earlier drilling, established the presence of an east-west tabular zone of +0.20% copper plus associated gold and molybdenum values. The zone, which dips gently to moderately (20° - 30°)

north and plunges 20° to the west, has an apparent thickness of between 70 and 130 metres, a strike length of 850 metres and a lateral or down-dip extent of 330 metres. The zone is open both down-dip and along strike to the west.

As illustrated on section 9750E (Figure 8), it is readily apparent that a number of previous holes were not drilled deep enough to intersect the zone. To the west of this section (Figure 7A), only Equity hole LL-08 adequately tested the zone. Hole LL-07 was terminated midway through the mineralized zone due to adverse drilling conditions and holes LL-11, -12 and -13, drilled with a smaller, portable drill rig, failed to reach the zone for similar reasons.

Better copper and gold grades within the +0.20% copper zone appear to be concentrated in the lower or footwall portion of the tabular zone (Table 1 and Appendix I). This concurs with the better grades encountered earlier in both trenching and Corona drilling near the southern limits or footwall of the zone.

Using a 0.20% copper cut-off grade, a possible resource of 50 million tonnes grading 0.30% copper and 0.31 g/t (0.009 oz/ton) gold plus some molybdenum has been calculated for the main zone by Equity Silver Mines Limited personnel (Hanson, 1992).

One 1992 drill hole (LL-10), drilled from the

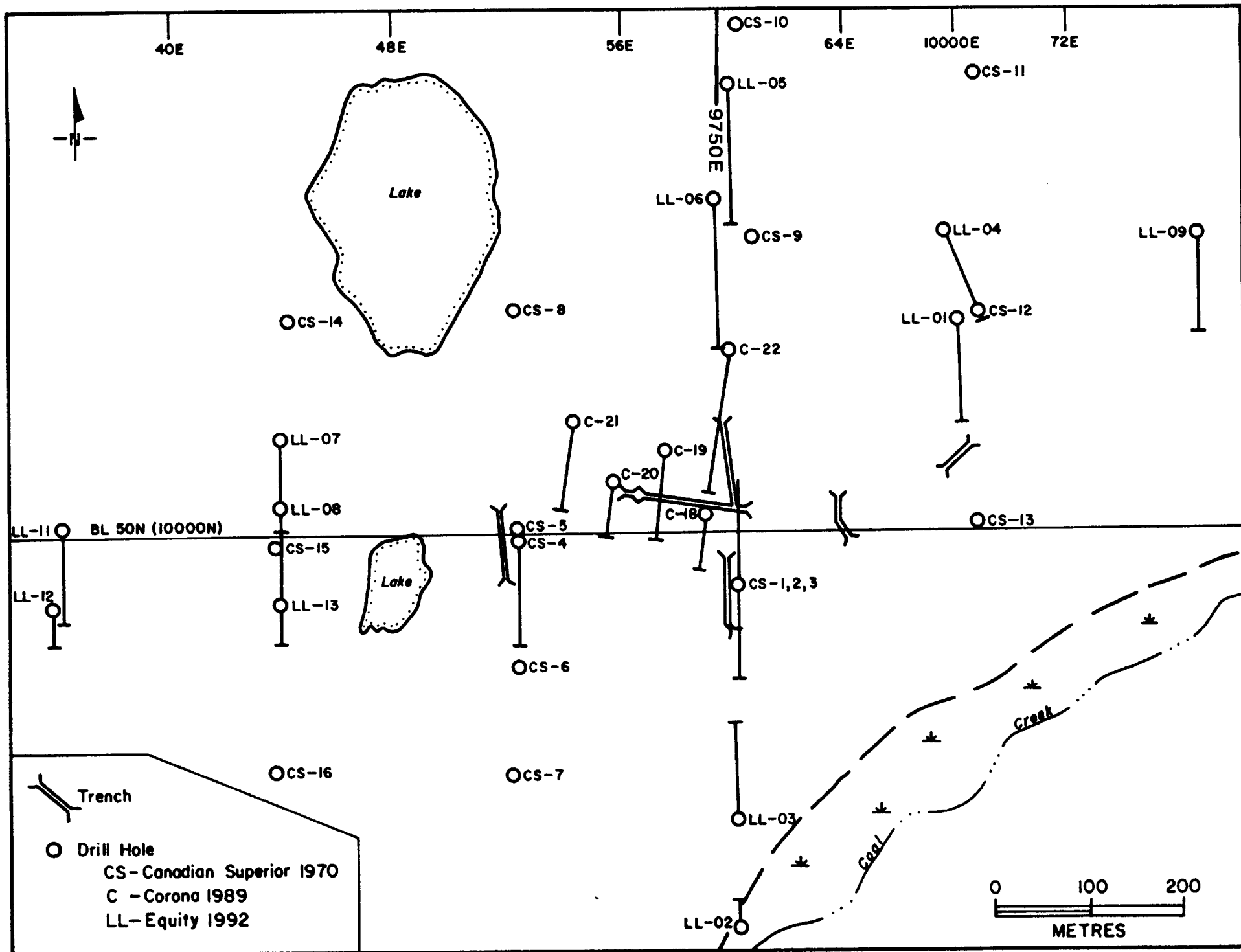


FIGURE 7A - DRILL HOLE PLAN

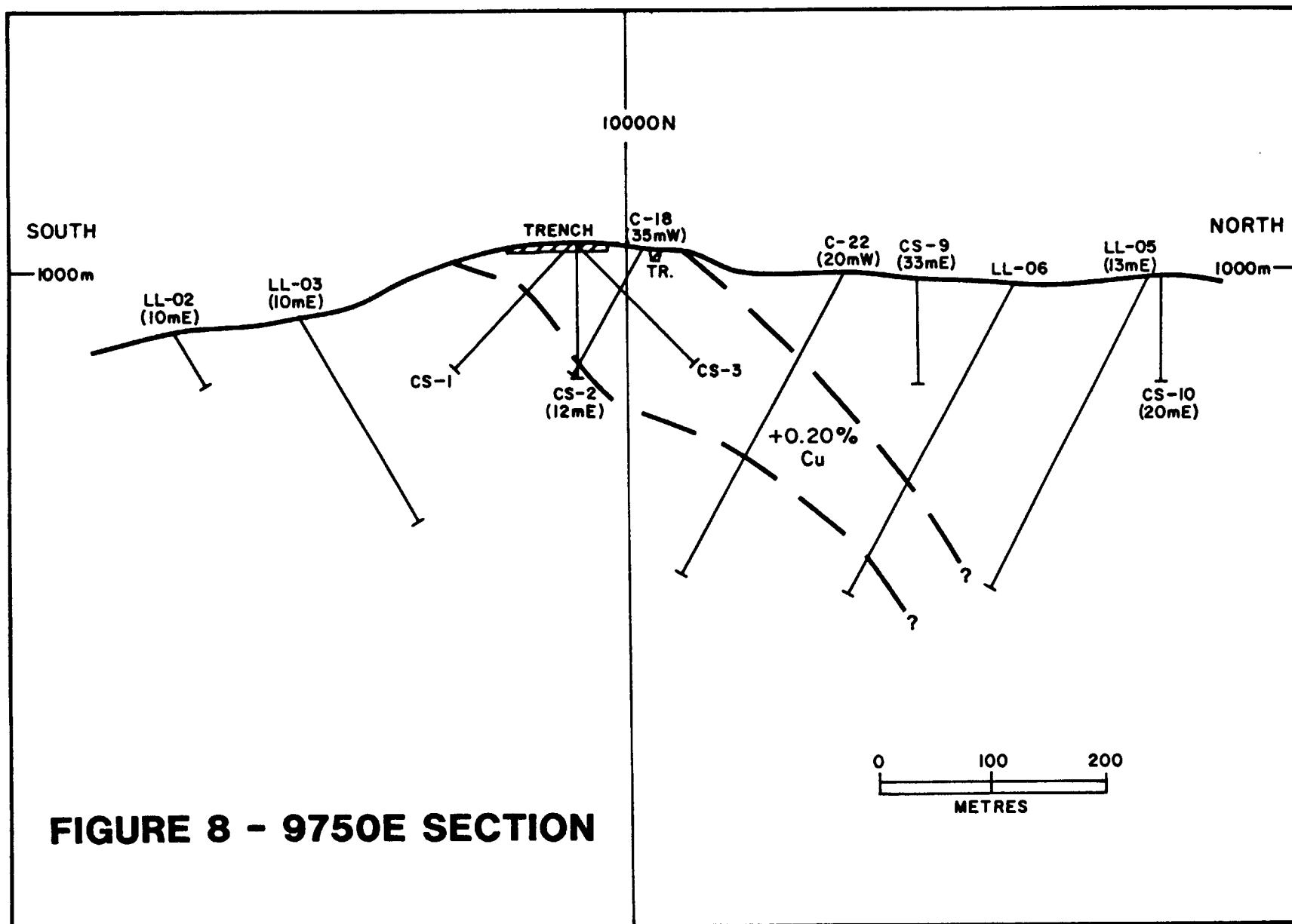


FIGURE 8 - 9750E SECTION

southwestern shore of Louise Lake to test the faulted extension of the IP anomaly under the lake (Figure 5), intersected a sequence of volcanic tuffs intruded by feldspar porphyry dykes. Quartz-sericite alteration, noted to a hole depth of 180 metres (Hanson, 1992), was accompanied by variable amounts of pyrite, chalcopyrite (+ tennantite?) plus sphalerite, galena and arsenopyrite, or a different mineralogy than that prevalent within the main zone southwest of Louise Lake. A 2.9 metre section, within a broader zone of lower grade mineralization (Table 1), yielded much higher grades than encountered elsewhere including 1.46% copper, 1.9 g/t (0.06 oz/ton) gold, 121.7 g/t (3.5 oz/ton) silver and 1.15% zinc.

CONCLUSIONS AND RECOMMENDATIONS

Exploratory work programs to date on the Louise Lake prospect have identified a tabular zone of copper-gold-molybdenum mineralization for which a possible resource of 50 million tonnes grading 0.30% copper and 0.31 g/t gold has been postulated. This gently dipping mineralized zone is open both down-dip and along strike to the west.

The presence of most copper mineralization in the form of tennantite plus the identification of enargite, both copper-arsenic sulphide minerals, suggests that Louise Lake

mineralization may be transitional between high-level subvolcanic porphyry copper and near-surface epithermal precious metals deposits. Such "transitional" deposit types (Panteleyev, 1992) are characterized by abundant pyrite and lesser chalcopyrite, chalcocite plus arsenic and antimony minerals including tetrahedrite-tennantite and enargite. Alteration mineral assemblages include abundant silica and argillic or clay minerals.

Worldwide examples of these deposit types include the Lepanto, Philippines enargite-type copper-gold-silver deposits and the high grade El Indio gold deposits in Chile. British Columbia examples include the currently producing Island Copper mine and the recently closed Equity silver-copper-gold mine south of Houston and 120 km southeast of Louise Lake.

The Louise Lake prospect is well deserving of additional exploratory work directed to further investigation of two areas of the property. Preparatory to this, a detailed compilation of previous work is recommended including a re-interpretation of the results of original IP surveys.

The main area of mineralization southwest of Louise Lake is coincident with the zone of highest IP response which, as noted previously, is open to the west or in the same direction as the apparent trend of the partially delineated

tabular zone of mineralization. Additional IP coverage, by way of four 2 km long north-south lines at 200 metres spacings immediately west of earlier surveys, is recommended to test for the extension of the main zone in this direction. First phase work on the main zone should also include the drilling of five inclined holes to depths of between 200 and 300 metres in the area of previous Equity Silver drilling to confirm and expand upon results obtained to date. The use of a larger drill capable of recovering larger diameter core is recommended to ensure completion of holes and enhanced core recovery.

The indications of a "transitional" style of mineralization on the Louise Lake property may be significant. Higher precious metals grades associated with this deposit type are well documented and the one hole (LL-10) drilled immediately south of the Coal Creek fault northeast of the main zone may be indicative of this feature. It is recommended that a reconnaissance IP survey be conducted across the Coal Creek fault zone immediately northeast of Louise Lake to determine the possible presence of extensions and/or repetitions of the zone underlying Louise Lake. Four 2 km north-south lines at 200 metres spacings are recommended, followed by drill testing of defined targets by way of two, shallow inclined holes.

COST ESTIMATE

Phase I

Compilation of previous data	\$15,000.00
Induced Polarization (IP) surveys - 16 line km @ \$1,250/km (all-inclusive)	\$20,000.00
Diamond Drilling - 7 inclined holes - 1550 metres @ \$100/metre (all-inclusive)	\$155,000.00
Supervision, reporting	\$15,000.00
Contingencies	\$30,750.00
Total, Phase I	\$235,750.00

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REFERENCES

- Carter, N.C. (1970): LOU in Geology Exploration and Mining in British Columbia 1969, p.80, B.C. Dept of Mines and Petroleum Resources
- _____ (1976): Regional Setting of Porphyry Deposits in West-Central British Columbia in Porphyry Deposits of the Canadian Cordillera, CIM Special Volume 15, pp. 227-238
- _____ (1981): Porphyry Copper and Molybdenum Deposits, West-Central British Columbia, BCMEMPR Bulletin 64
- _____ (1991): Summary Report on the Louise Lake Copper-Gold Prospect, Smithers Area, Omineca Mining Division, British Columbia, private report for 402774 B.C. Ltd.
- _____ (1991): Geological Report on the Louise Lake Porphyry Copper-Gold Prospect, Smithers Area, Omineca Mining Division, British Columbia, private report for New Canamin Resources Ltd.
- Goudie, M. and Halloff, P. (1970): IP Survey of the Louise Lake Property, BCMEMPR Assessment Report 2372
- Hanson, D.J. (1992): 1992 Diamond Drilling Assessment Report on the Louise Lake Mineral Property, Omineca Mining Division, British Columbia, BCMEMPR Assessment Report 22563
- Johnson, R.J. (1987): Assessment Report on 1987 Work, TENN Claims, Louise Lake, BCMEMPR Assessment Report 16869
- Klassen, R.W. (1989): Geology, Geophysics, Geochemistry and Diamond Drilling, TENN Claims, Louise Lake, BCMEMPR Assessment Report 18971
- McMillan, W.J. and Panteleyev, A. (1980): Porphyry Copper Deposits, Geoscience Canada Vol.7, No.2
- Mastodon-Highland Bell Mines Ltd. (1969): Line-cutting, BCMEMPR Assessment Report 1999

- _____ (1969): Plan of Trenches,
Louise Lake, private report
- Morris, A. (1980): Geochemical and IP Survey, Rob Claims
BCMEMP Assessment Report 7961
- Mullan, A. and Halloff, P. (1971): IP Survey, Louise Lake
Claims, BCMEMP Assessment Report 2937
- Myers, D.E. (1983): Geology, Rock Geochemistry, Petrography and
Soil Profiles Report, Louise Lake Claim,
BCMEMP Assessment Report 11772
- Overstall, R.J. and Murphy, J.D. (1970): Geological Report, LOU
163-172 Claims, BCMEMP Assessment Report
2697
- Overstall, R.J. (1970): Geochemical Report, LOU 163-172 Claims,
BCMEMP Assessment Report 2698
- Panteleyev, Andre (1992): Copper-Gold-Silver Deposits
Transitional between Subvolcanic
Porphyry and Epithermal Environment
in Geological Fieldwork 1991, BCMEMP
Paper 1992-1, pp.231-234
- Rainboth, W. (1970): Geochemical Report, Louise Lake Property,
BCMEMP Assessment Report 2278
- Walker, J.T. (1981): Airborne Geophysical Survey, Louise Lake
Mineral Claim, BCMEMP Assessment Report
8710
- Wilkinson, W.J. (1976): Geochemical Report, Louise Lake Mineral
Claims, BCMEMP Assessment Report 6105

CERTIFICATE

I, NICHOLAS C. CARTER, with residence and business address at 1410 Wende Road, Victoria, British Columbia, do hereby certify that:

1. I am a Consulting Geologist and have been registered with the Association of Professional Engineers and Geoscientists of British Columbia since 1966.
2. I am a graduate of the University of New Brunswick with B.Sc.(1960), Michigan Technological University with M.S.(1962) and the University of British Columbia with Ph.D.(1974).
3. I have practised my profession in eastern and western Canada and in parts of the United States for more than 25 years.
4. I am the author of the foregoing Geological Report on the Louise Lake Porphyry Copper-Gold Prospect, Omineca Mining Division, B.C., which is based on three previous reports prepared by me between 1991 and 1994 and which incorporate results of previous exploration work on the subject property.
5. I do not currently own, directly or indirectly, any interest in the mineral claims comprising the Louise Lake property or in any securities of Global Mineral and Chemical Ltd. nor do I expect to receive any such interest.
6. Permission is hereby granted to Global Mineral and Chemical Ltd. to use the foregoing report on the Louise Lake property in support of any documentation to be filed with regulatory authorities.

Dated at Victoria, British Columbia, this 16th day of January, 1995:

N.C. Carter, Ph.D. P.Eng.

APPENDIX I
RESULTS OF DIAMOND DRILLING

1970 Canadian Superior Drilling Program

Diamond drilling by Canadian Superior consisted of 17 holes totalling 2021 metres. 16 holes were drilled on the main zone west of Louise Lake; hole 'A' (#17) was drilled for assessment purposes northeast of the lake. Four holes were inclined at -45°, the remainder were vertical. Drill hole locations are shown on Figures 6 and 7 as CS-1 to -16.

Canadian Superior drill core samples were analyzed essentially for copper and molybdenum. Partial re-sampling of holes 3, 4, 5 and 10 was undertaken in 1986 by previous property owners L.B. Warren and E.A. Shaede - samples were analyzed for 30 elements by ICP; gold values were determined by fire assay.

Corona sampling in 1987 involved the collection of virtually entire sections of previously split core; continuous sample intervals ranged from 3 to 7 metres. Two or three representative pieces of core per sample interval were retained and stored in Smithers. Samples collected were analyzed by ICP methods; gold was determined by atomic absorption.

Some gaps in the Corona sampling are evident in holes 3 and 5. These probably reflect previous sampling by Warren and Shaede, results of which have been substituted where appropriate.

The following summary includes only those sections of drill core containing more than 2000 ppm copper. Note that values listed for copper and gold over specific hole intervals are arithmetic averages and not weighted averages.

Hole CS-1 -45° @ 180° 153.0 metres TD
 12.5 - 53.9m (41.4m) (9 samples; 3.7-6.3m sample intervals)
 3010 ppm Cu (0.30%)
 162 ppb Au (0.005 oz/ton)

Hole CS-2 -90° 120.7 metres TD
 19.4 - 55.0m (35.6m) (8 samples; 3.5-5.5m sample intervals)
 2965 ppm Cu (0.30%)
 149 ppb Au (0.004 oz/ton)

Hole CS-3 -45° @ 000° 150.3 metres TD

49.1 - 56.2m (7.1m) (2 samples)
 3614 ppm Cu (0.36%)
 315 ppb Au (0.009 oz/ton)

56.2-70.7m (14.5m) (4 samples; 3-4.6m sample intervals)
 (Warren and Shaede)
 4606 ppm Cu (0.46%)
 0.015 oz/ton Au (fire assay)

70.7-85.0m (14.3m) (3 samples; 3.3-6.1m sample intervals)
 2998 ppm Cu (0.30%)
 313 ppb Au (0.009 oz/ton)

85.0-99.4m (14.4m) (4 samples-3.0-4.3m sample intervals)
 (Warren and Shaede)
 4143 ppm Cu (0.41%)
 0.014 oz/ton Au (fire assay)

99.4-113.7m (14.7m) (3 samples; 4.0-5.7m sample intervals)
 2401 ppm Cu (0.24%)
 100 ppb Au (0.003 oz/ton)

113.7-128.0m (14.3m) (4 samples; 3.0-4.6m sample intervals)
 (Warren and Shaede)
 3607 ppm Cu (0.36%)
 0.02 oz/ton Au (fire assay)

128.0-139.6m (11.6m) (2 samples; 7.3 and 4.3m)
 3404 ppm Cu (0.34%)
 485 ppb Au (0.014 oz/ton)

Hole CS-4 -45° @ 180° 105.8 metres TD

18.9 - 37.8m (18.9m) (4 samples; 4.2-4.9m sample intervals)
 2748 ppm Cu (0.27%)
 268 ppb Au (0.008 oz/ton)

Hole CS-5 -90° 121.3 metres TD

20.4 - 41.9m (21.9m) (4 samples; 4.3-7.0m sample intervals)
 2680 ppm Cu (0.27%)
 384 ppb Au (0.011 oz/ton)

41.9- 55.5m (13.6m) (5 samples; 1.5-4.0m sample intervals)
 (Warren and Shaede)
 11750 ppm Cu (1.18%)
 0.034 oz/ton Au (fire assay)
 -includes 4.26m of 21177 ppm Cu (2.12%)
 0.047 oz/ton Au

55.5 - 79.6m (24.1m) (5 samples; 4.0-5.1m sample intervals)
 2532 ppm Cu (0.25%)
 277 ppb Au (0.008 oz/ton)

Hole CS-6 -90° 107.3metres TD
 9.8 - 36.5m (26.7m) (7 samples; 4.2-5.8m sample intervals)
 2929 ppm Cu (0.29%)
 223 ppb Au (0.006 oz/ton)
 57.3 - 75.6m (18.3m) (4 samples; 4.5m sample intervals)
 2595 ppm Cu (0.26%)
 201 ppb Au (0.006 oz/ton)

Hole CS-7 -90° 61.8 metres TD
 No significant Cu or Au values

Hole CS-8 -90° 107.0 metres TD
 No significant Cu values; 64 - 240 ppb Au

Hole CS-9 -90° 93.9 metres TD
 No significant Cu values; 88 - 230 ppb Au

Hole CS-10 -90° 92.7 metres TD
 No significant Cu or Au values

Hole CS-11 -90° 106.7 metres TD
 No significant Cu or Au values

Hole CS-12 -90° 104.9 metres TD
 No significant Cu or Au values

Hole CS-13 -90° 106.7 metres TD
 No significant Cu or Au values

Hole CS-14 -90° 107.3 metres TD
 No significant Cu or Au values

Hole CS-15 -90° 106.7 metres TD
 No significant Cu or Au values

Hole CS-16 -90° 106.7 metres TD
 No significant Cu or Au values

Hole 'A' (-17) -45° @ 180° 199.0 metres TD
 Northeast of Louise Lake

24 - 25m - 62 ppm Cu;616 ppm Pb;1159 ppm Zn;187 ppm As
 132-136m - 2340 ppm Cu;817 ppm As;148 ppm Sb;0.6 ppm Ag

1989 Corona Drilling Program

Corona drilling consisted of five inclined holes totalling 916 metres. These are shown as holes C-18 to -22 on Figures 6 and 7.

All holes were drilled at -60° and azimuths of 189° . All core was sampled and sample intervals ranged from 0.6 to 4.7 metres with an overall average of 3 metres. Samples were analyzed for 30 elements by ICP; gold was determined by atomic absorption.

The more significant intersections are listed below and include only those hole sections containing more than 2000 ppm (0.20%) copper.

<u>Hole C-18</u>	-60° @ 189°	121.0 metres TD		
3.7 - 121.0	(117.3m)		0.25% Cu	0.008 oz/ton Au
including	94.6-121.0 (26.4m)		0.41% Cu	0.012 oz/ton Au
<u>Hole C-19</u>	-60° @ 189°	185.0 metres TD		
3.7 - 182.0	(178.3m)		0.24% Cu	0.008 oz/ton Au
including	121.1-170.8 (49.7m)		0.34% Cu	0.011 oz/ton Au
<u>Hole C-20</u>	-60° @ 189°	121.0 metres TD		
33.2 - 55.9	(22.7m)		0.26% Cu	0.010 oz/ton Au
<u>Hole C-21</u>	-60° @ 189°	185.0 metres TD		
95.4 - 109.5	(14.1m)		0.32% Cu	0.012 oz/ton Au
<u>Hole C-22</u>	-60° @ 189°	306.9 metres TD		
9.1 - 306.9	(297.8m)		0.20% Cu	0.007 oz/ton Au
including	86.0-110.6 (24.6m)		0.29% Cu	0.011 oz/ton Au
	117.7-183.0 (65.3m)		0.29% Cu	0.011 oz/ton Au

Note: Copper and Gold values converted from ppm and ppb respectively

1992 Equity Silver Drilling Program

The Equity drilling program consisted of 13 inclined holes totalling 2651.6 metres. These are shown as holes LL-01- 09 and LL-11 - 13 on Figure 5A. Hole LL-10, not shown on Figure 5A, was drilled on the northwest shore of Louise Lake at 10606N, 11146E.

All holes were drilled at inclinations of between -55° and -72° on north-south azimuths. All core was sampled with sample intervals averaging 3 metres. Samples were analyzed for 31 elements by ICP; selected sample intervals were subsequently analyzed for gold by fire assay.

The more significant intersections listed below include only sample intervals containing more than 2000 ppm (0.20%) copper. All values are expressed as parts per million (ppm) except for gold which is in parts per billion (ppb).

<u>Hole LL-01</u>	-60° @ 000°	201.2 metres TD	
	No significant Cu Values (<1000 ppm)		
<u>Hole LL-02</u>	-60° @ 359°	57.9 metres TD	
	No significant Cu values (hole lost)		
<u>Hole LL-03</u>	-60° @ 360°	204.2 metres TD	
	No significant Cu values (<1000 ppm)		
<u>Hole LL-04</u>	-60° @ 160°	204.2 metres TD	
	No significant Cu values (<1000 ppm)		
<u>Hole LL-05</u>	-62° @ 179°	310.9 metres TD	
	No significant Cu values (274.3 - 298.7 - 1039 - 1954 ppm Cu; 120 - 160 ppb Au)		
<u>Hole LL-06</u>	-60° @ 179°	304.8 metres TD	
	201.2 - 268.2 (67 m)	2687 Cu 275 Au 118 Mo 940 As	
	-including 231.6-265.2 (33.6 m)	3424 Cu 370 Au 97 Mo 1074 As	
<u>Hole LL-07</u>	-60° @ 179°	173.7 metres TD	
	112.8 - 173.7 (60.9 m)	3629 Cu 335 Au 224 Mo 790	
	As-including 149.3-173.7 (24.4 m)	4633 Cu 416 Au 215 Mo 814	
	As * Note -hole terminated in mineralization due to adverse drilling conditions.		

Hole LL-08 -60°@ 179° 283.5 metres TD
 112.8 - 201.2 (88.4 m) 2648 Cu 315 Au 160 Mo 900 As
 -including 146.3-182.9 (36.6 m) 2892 Cu 510 Au 142 Mo 944 As

Hole LL-09 -55°@ 000° 198.1 metres TD
 No significant Cu values (<1000 ppm)

Hole LL-10 -55°@ 176° 228.6 metres TD
 67.1 - 112.8 (45.7 m) 1180 Cu 195 Au 12.5 Ag 5200 Zn 724 As-
 including 97.5-100.6 (2.9 m) 14561 Cu 1920 Au 121.7 Ag 11455
 Zn 5292 As

Hole LL-11 -70°@ 180° 296.3 metres TD
 No significant Cu values (<1000 ppm)

Hole LL-12 -72°@ 178° 125.0 metres TD
 No significant Cu values (hole lost)

Hole LL-13 -60°@ 180° 82.3 metres TD
 No significant Cu values (137 - 1092 ppm - hole
 lost)

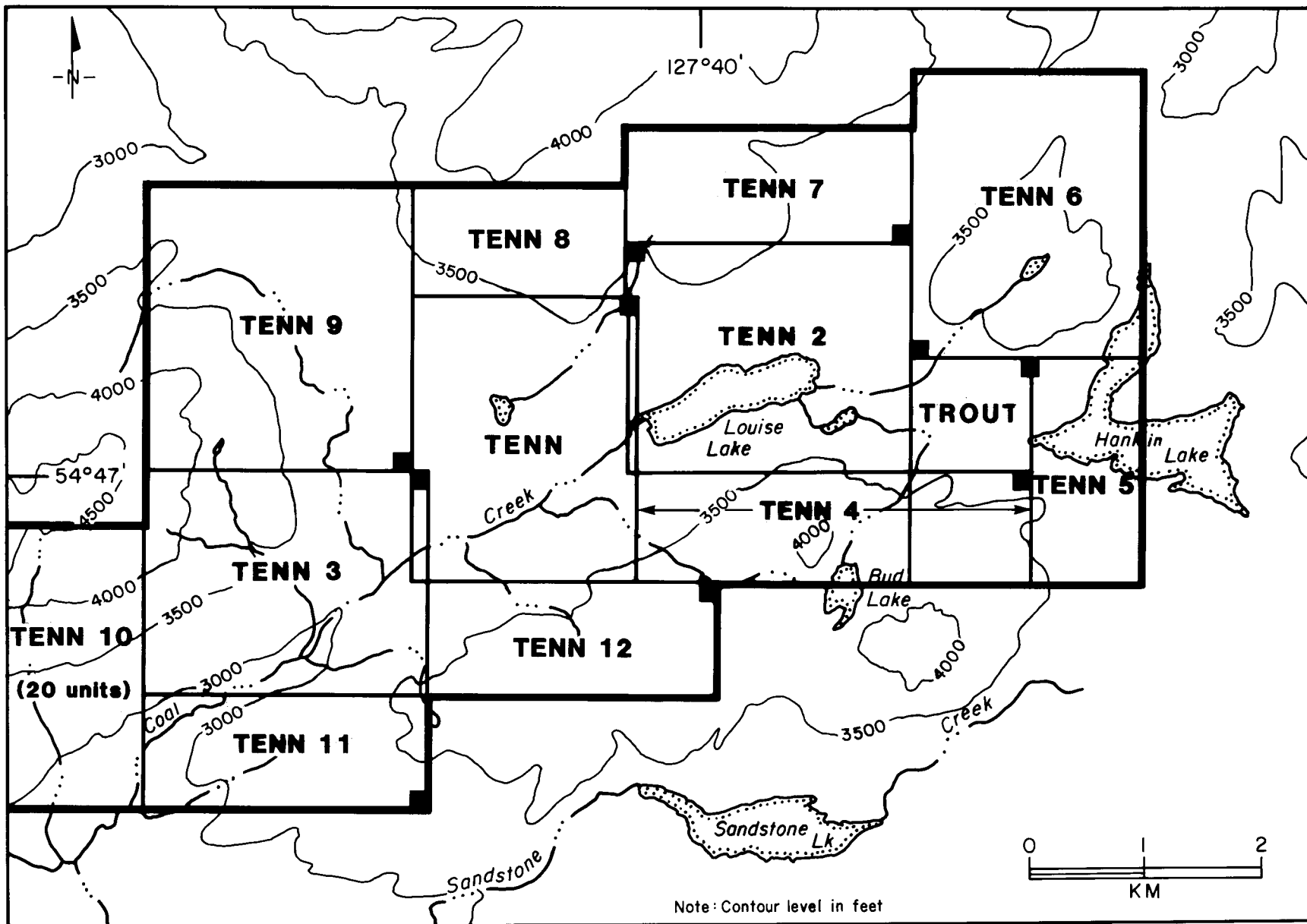


FIGURE 3 - MINERAL CLAIMS

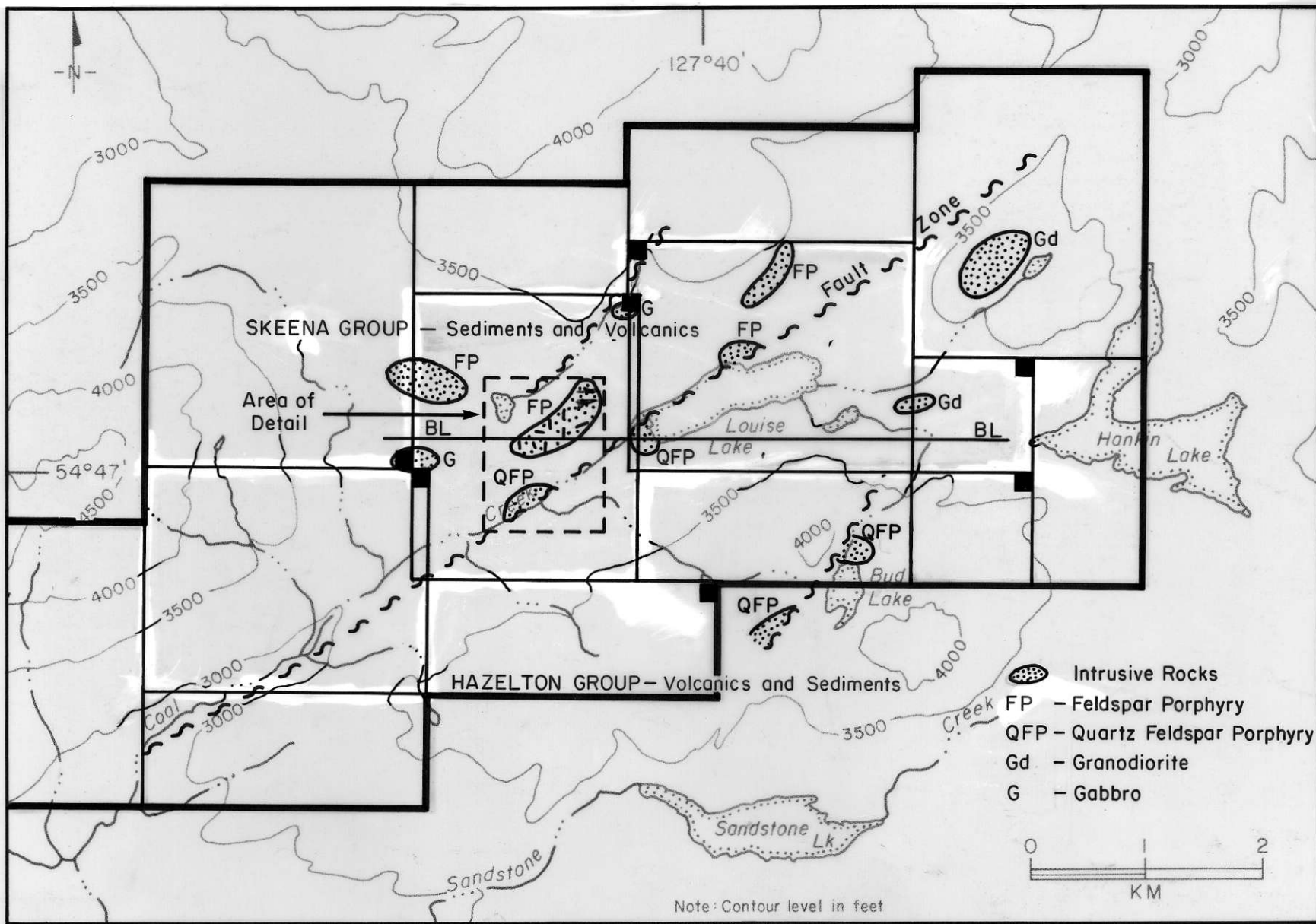


FIGURE 4 - GEOLOGICAL SETTING

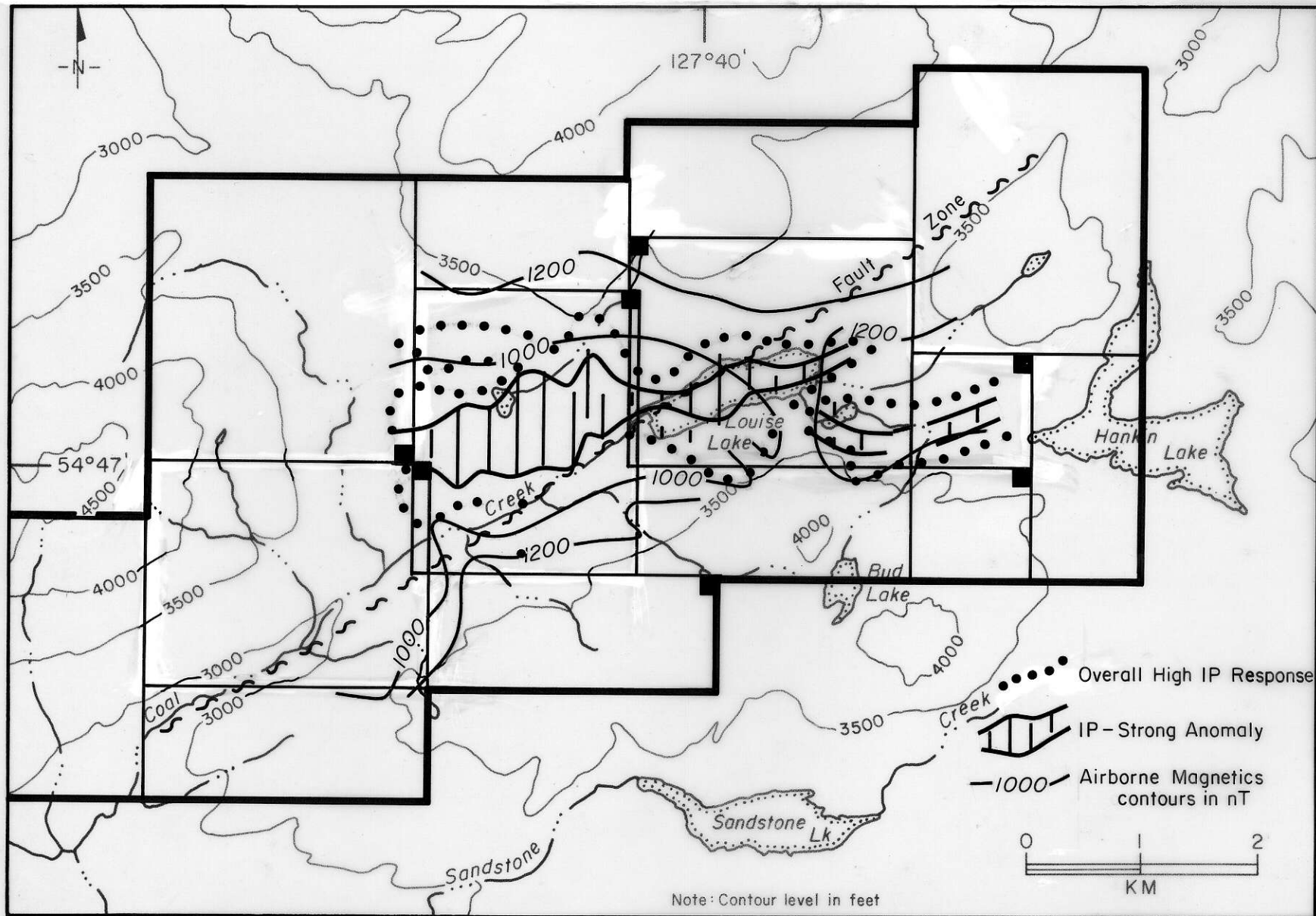


FIGURE 5 - GEOPHYSICAL RESPONSE

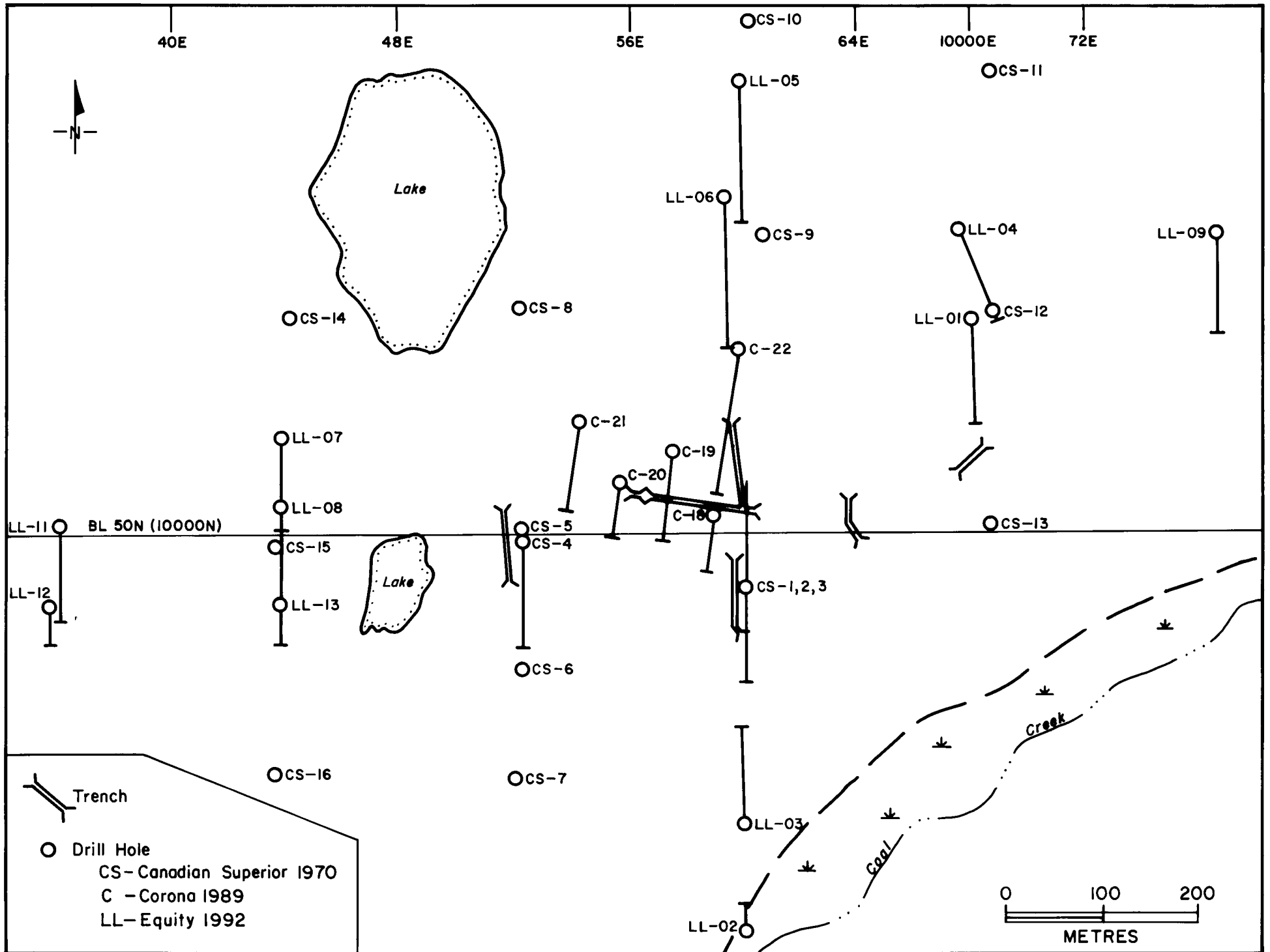


FIGURE 5A - DRILL HOLE PLAN

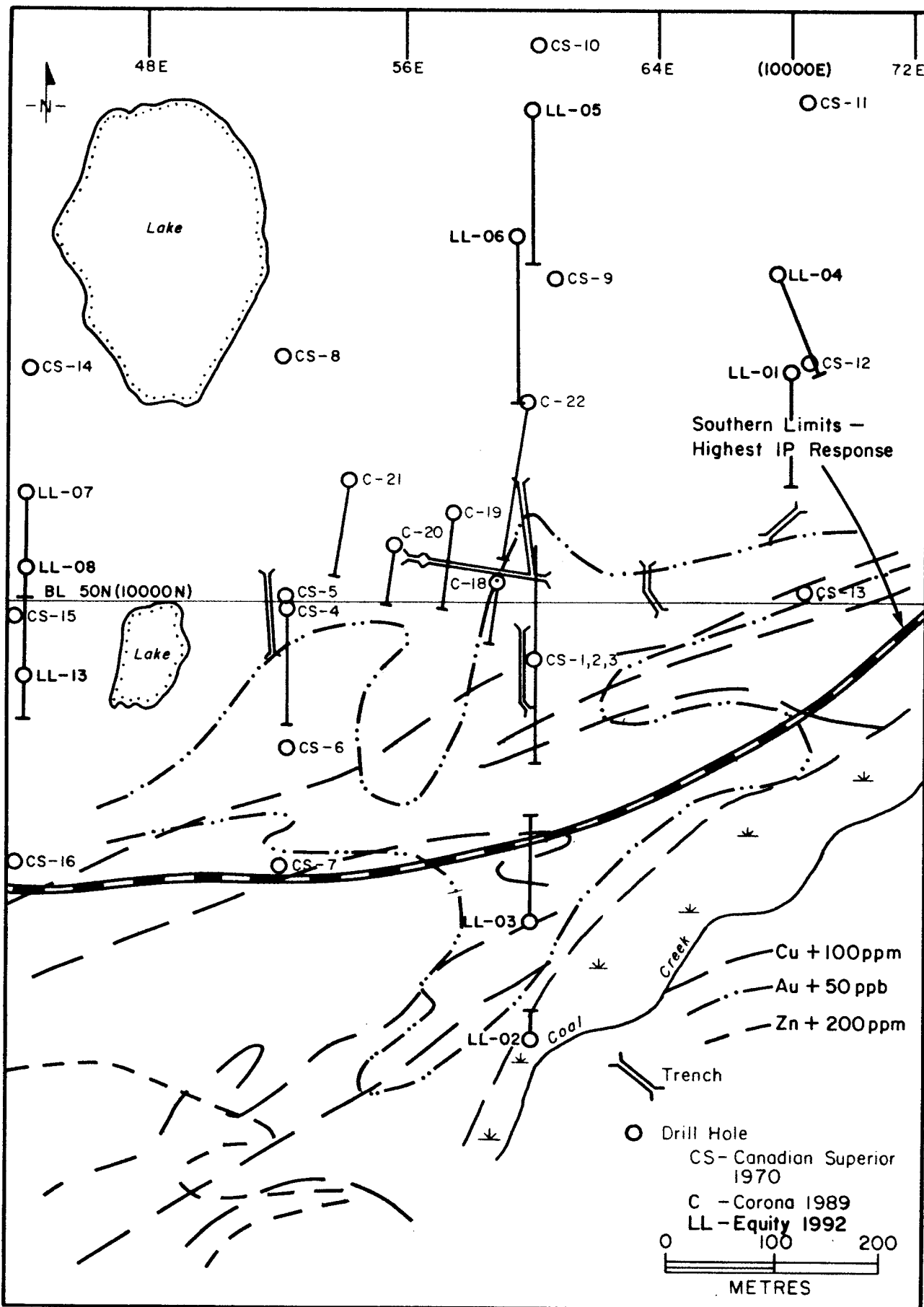


FIGURE 6 - SOIL GEOCHEMISTRY

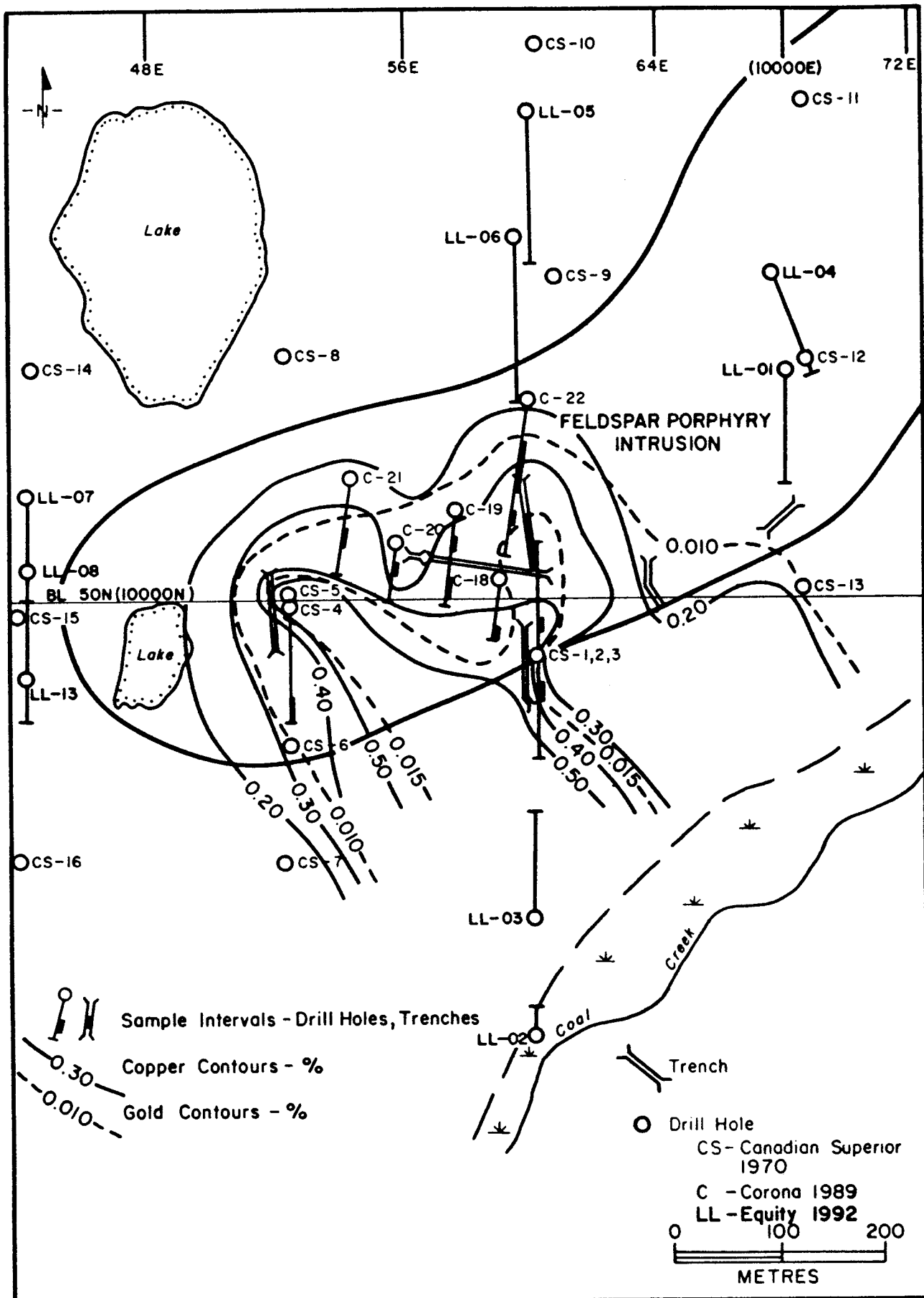


FIGURE 7 - COPPER AND GOLD IN BEDROCK

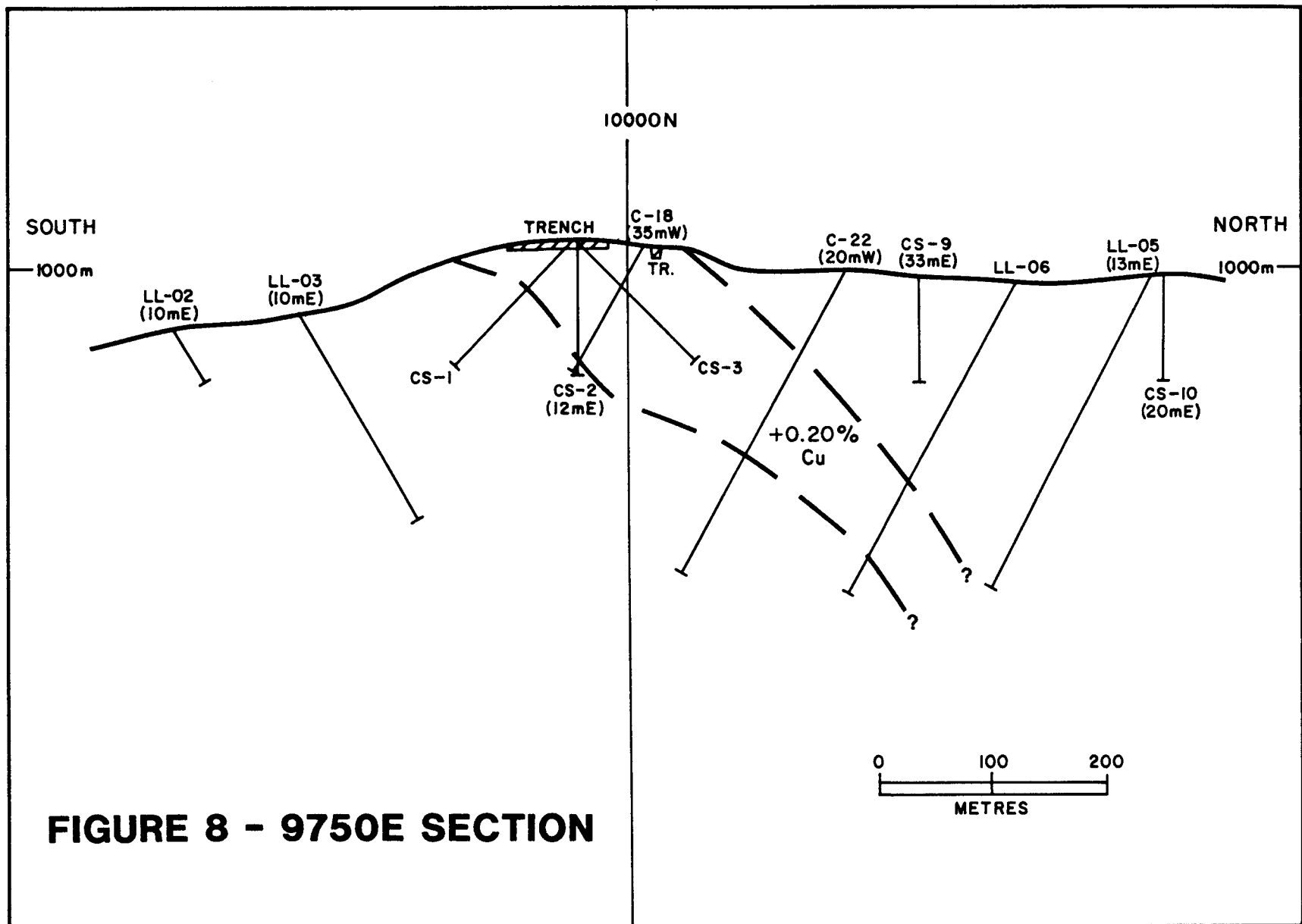


FIGURE 8 - 9750E SECTION