

6105

GEOCHEMICAL REPORT

ON

MINERAL CLAIMS

LOUISE, LOUISE 2
(Record Nos. 188, 399)

OMINECA MINING DIVISION

93L/13E

November, 1976

93L/13E

LOUISE LAKE
BRITISH COLUMBIA
54°51'N, 127°41'W

LOUISE

Owned By: GRANBY MINING CORPORATION

Report By: W. J. WILKINSON, B.Sc.

Supervision By: W. J. WILKINSON, B.Sc. and D. H. JAMES, P.Eng.

Work completed between July 5th, 1976 and July 20, 1976

MINERAL RESOURCES BRANCH
EVALUATION REPORT
No. 6105

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Map
#1

INTRODUCTION

A geochemical survey was carried out on the Louise and Louise 2 Mineral Claims (Record Nos. 188, 399) by personnel employed by the owner (Granby Mining Corporation). The survey covers both units of the Louise 2 claim, and the 6 westernmost units of the Louise claim.

Field work was carried out between July 5th and July 20th, 1976.

The project was supervised by W. J. Wilkinson, B.Sc., under the general supervision of D. H. James, P. Eng.

LOCATION, ACCESS

The Louise claim is located over Louise Lake, which is situated about 34 kilometres WNW of Smithers, B. C. Access is by helicopter or float plane from Smithers. The Louise 2 claim adjoins the west side of the Louise claim, and lies just north of Coal Creek, which drains Louise Lake toward the west.

TOPOGRAPHY

The area covered by the claims ranges in elevation from 3,100' A.S.L. at the southwest limit of the claims, to approximately 3,400' A.S.L. on the hilly slopes north and south of Louise Lake.

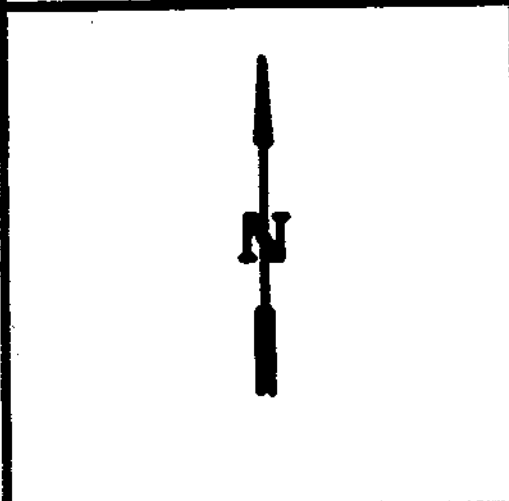
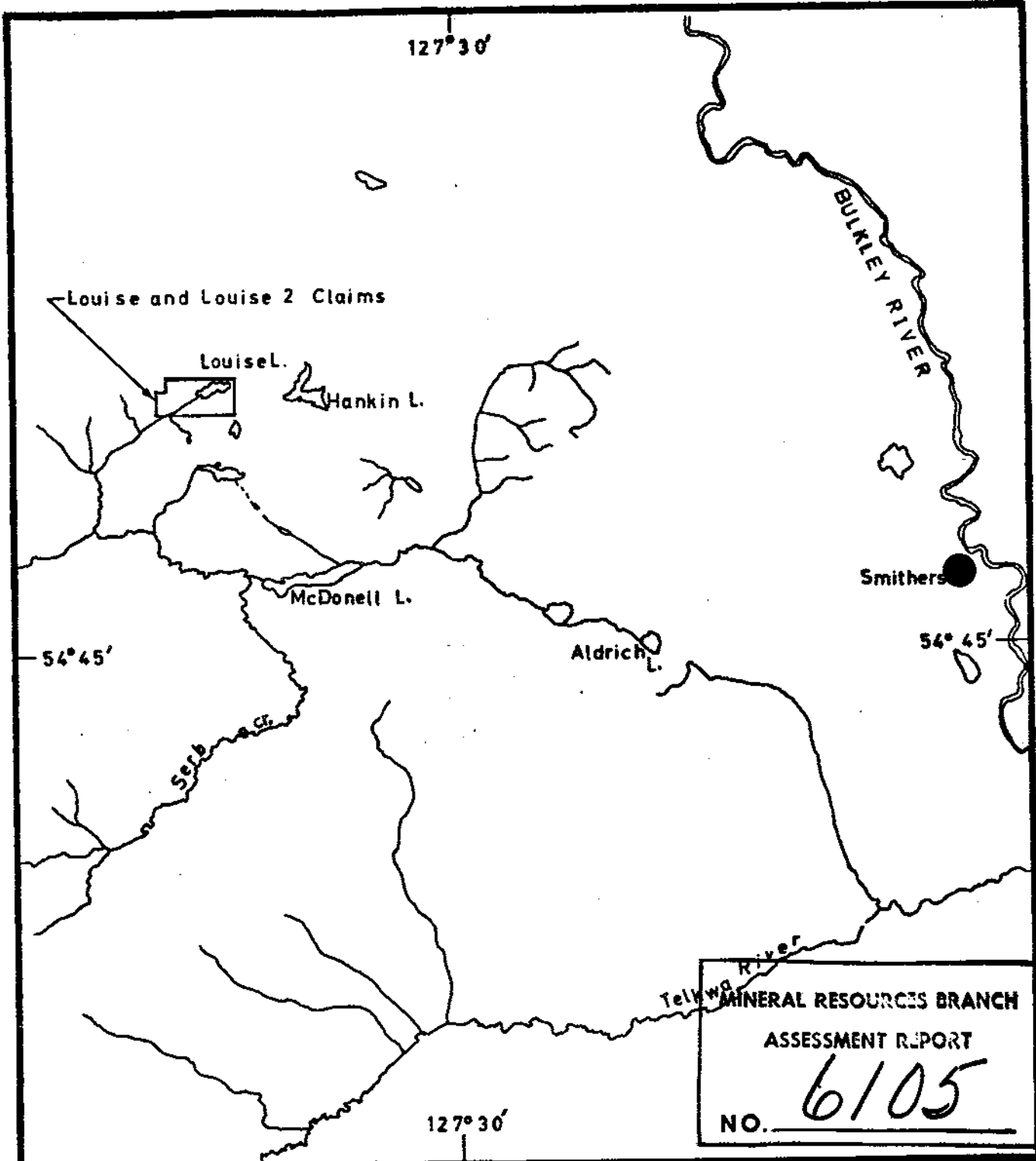
The terrain is quite irregular and hilly. Low hills alternating with swamps follow the regional east-northeasterly geological fabric, as does Louise Lake.

The area is lightly to heavily timbered with spruce, and locally, with pine.

SUMMARY, CONCLUSIONS

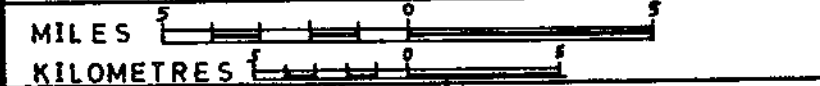
A geochemical soil survey was carried out on the Louise and Louise 2 Mineral Claims, located at Louise Lake. Samples were analyzed for copper using the atomic absorption method. Copper values ranged from 2 p.p.m. to 1,900 p.p.m., and of 251 samples analyzed, 199 were in the range 0-99 p.p.m. Cu, and 52 were in the range 100 p.p.m. Cu or higher. Values of 100 p.p.m. Cu or more were considered clearly anomalous.

The survey has delineated an area 650 metres long by 300 metres wide which is anomalous in copper. A prior Induced Potential survey which included this area indicated a "definitely anomalous" zone which was subsequently drill-tested, and a "probably anomalous" zone running through the southwestern portion of the geochemical anomaly. As a high pyrite content in the underlying rock appears to be the causative factor in the "definitely anomalous" I.P. zone, the presumably less pyritic "probably anomalous" I.P. zone coincident with anomalous copper geochemistry may be indicative of a zone of significant copper mineralization. This latter zone thus merits testing by drilling.



GRANBY MINING CORP.
SMITHERS B.C.

LOCATION MAP
LOUISE and LOUISE 2
MINERAL CLAIMS
LOUISE LAKE



NOVEMBER 1976

FIGURE 1

GEOLOGY

Geology of the area around Louise Lake is not well known. Hard, weathering-resistant dacite rocks outcrop on most high ground, while less resistant rocks underlie at least part of the low terrain and do not outcrop. The area has a very prominent "ribbed" fabric or topography, with a repetition of low hills and intervening swampy hollows aligned in an east-northeasterly direction.

Diamond drilling has revealed that pebble conglomerate bed(s) with a calcite-siderite matrix extend through the area of the survey, as well as volcanic tuffs and breccias. However, dacite and dacitic porphyry are predominant in the drill core. Much of the diamond drill core consists of strongly fractured, intensely altered rock - predominantly kaolin-sericite alteration with moderately to well-developed quartz-pyrite stockwork. The intensity of this alteration has obliterated the original character of many rock intersections.

GEOCHEMICAL SAMPLING TECHNIQUES

Reconnaissance soil sampling was done here previously on I.P. lines spaced 800' (242 metres) apart. The present survey was done at 200' (60 metres) line spacing between these I.P. lines, for the purpose of outlining areas of anomalous geochemistry indicated by the reconnaissance lines.

Sample lines were run using compass and chain, north and south from the previously cut 50+00 N Base Line (which is oriented due east). Lines were located from grid co-ordinates 30+00 E to 80+00 E, and were run from Coal Creek in the south to 62+00 North.

Samples were taken using an iron mattock with a 6" blade to dig a hole, then the soil sample was taken from the "B" soil horizon at an average depth of 10"-12". The samples were placed in high wet strength Kraft paper bags, and submitted for analysis to Bondar-Clegg and Company Ltd., 1500 Pemberton Ave., North Vancouver, B. C. Here they were first dried and screened, the -80 mesh fraction being used for assay. Analysis for copper was done using hot acid extraction and the atomic absorption spectrometer.

GEOCHEMICAL INTERPRETATION

A low anomalous threshold of in the order of 25 p.p.m. copper is apparent from the plot of assay results. This is confirmed by field observations of unaltered non-mineralized outcrops in areas of less than 25 p.p.m. copper in soils.

79% of copper analyses were in the range 0-99 p.p.m. Cu, and 21% were in the range 100 p.p.m. Cu or more. Values of 100 p.p.m. and over are considered to be clearly anomalous. Contouring at this level provides a clear definition of the anomalous areas. This 100 p.p.m. Cu contour outlines a somewhat irregular zone 650 metres long by 300 metres wide, oriented northeasterly along the north bank of Coal Creek. Along Coal Creek the anomaly is bounded by swamps from which samples could not be taken; the area of interest may therefore extend further toward the southeast.

This anomalous zone coincides with the southern extremity of an Induced Potential survey carried out by McPhar Geophysics in early 1970 (Assessment Report No. 2372). The northwestern portion of the geochemical anomaly was described as "definitely anomalous", and the southeastern portion was "probably anomalous" to I.P. (see Figure 2).

The "definitely anomalous" I.P. zone has been diamond drilled and was found to consist of a highly altered quartz-pyrite stockwork, with some low-grade copper intersections. Pyrite content was very high, and must account for much of the anomalous I.P. effect. The zone of weaker, "probably anomalous" I.P. response, over untested, anomalous copper geochemistry, may be underlain by stockwork with better-grade copper mineralization. This possibility is based upon the commonly accepted "porphyry model" in which a pyrite zone surrounds or is adjacent to a "potassic zone" containing a higher proportion of chalcopyrite.

CONCLUSIONS

A geochemical anomaly 650 metres long by 300 metres wide has been outlined by the anomalous 100 p.p.m. copper contour. The anomaly is open toward the southeast, where swampy ground along Coal Creek made sampling impractical. Toward the northwest, a portion of this anomaly has been tested by diamond drilling, where it coincides with "definitely anomalous" I.P. response. The remainder of the geochemical anomaly, closer to Coal Creek, was described as "probably anomalous", although the I.P. survey lines were not run far enough south to evaluate this area completely.

In view of the intense alteration and strong quartz-pyrite stockwork, indicative of the porphyry copper environment, this area merits further exploration. The zone of coincident anomalous geochemistry and anomalous I.P. along the north bank of Coal Creek presents the best target for further drill exploration of this property.

W. J. Wilkinson

W. J. WILKINSON



APPENDIX

STATEMENT OF EXPENDITURES

Employees: L. B. Warren, Prospector, Smithers, B. C.
July 5 - 20th; 11 days soil-sampling.

A. R. Davies, Sampler, Smithers, B. C.
July 5 - 20th; 11 days soil-sampling.

Rates of pay and amounts paid:

L. B. Warren	1/2 month at \$1250/mo.	\$ 625.00
A. R. Davies	1/2 month at \$700/mo.	<u>350.00</u>
		\$ 975.00

ASSAYS

Bondar-Clegg & Co. Invoice No. 8018 \$ 401.60

TRANSPORTATION

Smithers Air Services Invoice Nos. 484, 489, 499, 501 \$ 432.00

CAMP COSTS

22 man-days at \$12.00 per man per day \$ 264.00

Professional Supervision and Report Preparation \$ 500.00

TOTAL \$2,572.60

CANADA
PROVINCE OF
BRITISH COLUMBIA

In the Matter of

TO WIT:

I, William J. Wilkinson

of Smithers,

in the Province of British Columbia

do solemnly declare that expenditures in connection with the attached Geochemical Report on Mineral Claims Louise and Louise 2, Omineca Mining Division, are as detailed in the Appendix - "Statement of Expenditures" and amount in total to \$2,572.60.

AND I make this solemn declaration, conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath.

DECLARED before me at *Smithers* in the
Province of British Columbia, this *19th*
day of *November*

.1976.

W. J. Wilkinson

Auzello

A Notary Public in and for the Province of British Columbia.
A Commissioner for taking Affidavits for British Columbia.

Granby Mining Corporation

November 8, 1976

Department of Mines and Petroleum Resources,
VICTORIA, B. C.

Dear Sirs:

The work described in the accompanying report by W. J. Wilkinson, B.Sc. was performed under my general supervision as exploration manager for Granby Mining Corporation.

Mr. Wilkinson is employed by Granby as regional exploration geologist at Smithers, B. C. He received his B. Sc. degree in geology from U.B.C. in 1967, has worked in geological positions since then and has been employed by Granby for 6 years. I consider him competent to lay out and supervise the work described.

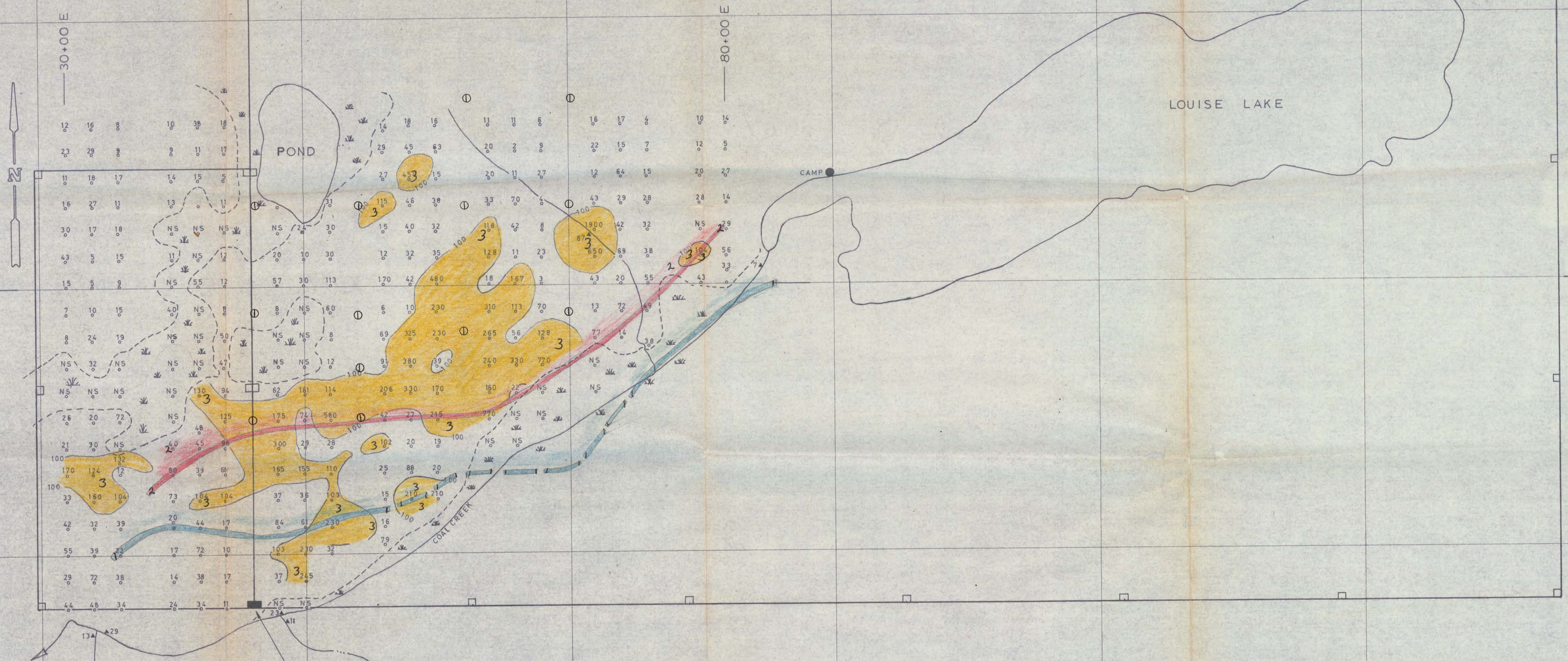
Yours truly,



D. H. JAMES, P. Eng.,
Manager, Metals Exploration

DHJ/eb

62 N
50 N
26 N



LOUISE LAKE

CAMP

POND

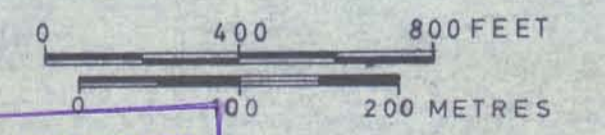
COAL CREEK

LEGAL CORNER POST FOR
LOUISE & LOUISE 2 M.C.
RECORD NOS. 188 & 399

LEGEND

- CLAIM BOUNDARY
- SOIL SAMPLE STATION
- 3 100 PLUS PPM COPPER
- ▲ SILT SAMPLE LOCATION
- ≡ SWAMP
- 2 LIMIT OF DEFINITE IP ANOMALY
- 1 LIMIT OF PROBABLE IP ANOMALY
- ⊙ DRILL SITE

6105
SCALE



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 6105
MAP NO. #1

To accompany geochemical report by W.J. Wilkinson, B.Sc. and D.H. James, P. Eng., on Louise and Louise 2 mineral claims, Louise Lake, Omineca Mining Division, B.C., dated November, 1978.

W. J. WILKINSON
[Signature]

DATE REVISED	BY	DRAWN BY: L.B. WARREN	THE GRANBY MINING CO. LTD.	TITLE
	CHECKED		PROJECT: LOUISE LAKE	GEOCHEMISTRY-COPPER
	APPROVED		SCALE: 1 INCH=400 FEET	NO.
	DATE			FIG. 2