

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

11,373

GEOCHEMICAL REPORT

- on the -

JOSEE #2 CLAIM  
NICOLA MINING DIVISION  
BRITISH COLUMBIA

- for -

JOSEPH M. MURPHY  
1119 LYNN VALLEY ROAD  
NORTH VANCOUVER, B.C. V7J 2A1

Covering: Josee #2 (20 units)  
Work Performed: May 27 to June 8, 1983  
Location: (1)  $49^{\circ} 50'N$ ,  $120^{\circ} 34'W$   
(2) NTS Map 92H/15E  
(3) 2 km. north of Missezula Lake

prepared by:

KERR, DAWSON AND ASSOCIATES LTD.,  
#210 - 310 NICOLA STREET,  
KAMLOOPS, B.C. V2C 2P5

James M. Dawson, P. Eng.  
June 16, 1983.

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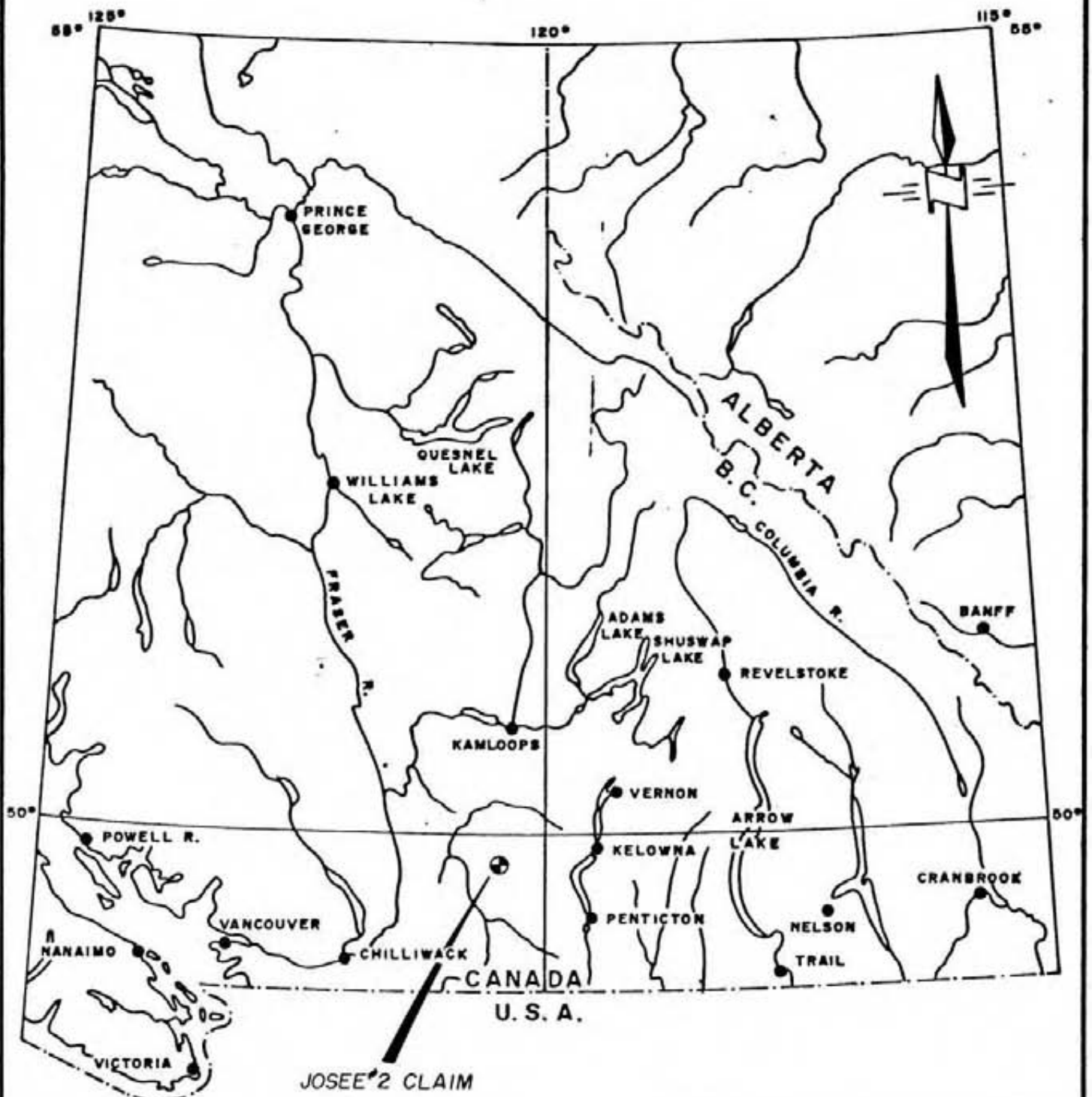
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Figure 273-1 Location Map

Figure 273-2 Claim Map

Figure 273-3 Geology Map

Figure 273-4 Copper Geochemistry



<b>LOCATION MAP</b> <b>JOSEE #2 CLAIM</b> NICOLA MINING DIVISION, B.C.	
Date: June, 1983.	Scale: 1" = 64 Miles
Done by: W.G.	Dwg no. 273-1

## INTRODUCTION

This report describes the results of a programme of geochemical soil sampling carried out on the Josee #2 claim.

A series of maps showing the claim location, property geology and results of geochemical sampling are included with this report.

## SUMMARY AND CONCLUSIONS

1. The subject property consists of one 20 unit metric claim located in moderate terrain near the south end of the Aspen Grove copper camp in south central British Columbia. It is easily accessible by road from Merritt or Princeton.
2. The Aspen Grove camp has been prospected since the early 1900's and the Daisy prospect located in the northern part of the subject claim was first worked on in 1915. Sporadic small scale work has probably been carried out over the years but the first modern exploration was carried out by Noranda in 1972-3. This company performed geological mapping, airborne and ground geophysics and limited drilling on a large block of ground of which the present property was a small part.
3. The property is underlain by a north to north-northwesterly trending succession of andesitic and basaltic flows, fragmentals and associated sediments of the Triassic Nicola group. A narrow, elongate body of diorite or quartz diorite is found in the center of the claim. Two splays of the regional Summers Creek Fault pass through the center of the claim.

4. There are possibly three copper occurrences on the property. Two are known to consist of copper carbonates, native copper and ? chalcocite associated with zones of shearing in the volcanics. The extent of these occurrences is not known since only one has been examined in a very cursory manner.
5. Soil geochemistry outlines a number of narrow, elongate, north to north-northwest trending copper anomalies paralleling regional structure and encompassing the areas of known copper mineralization.

#### PROPERTY

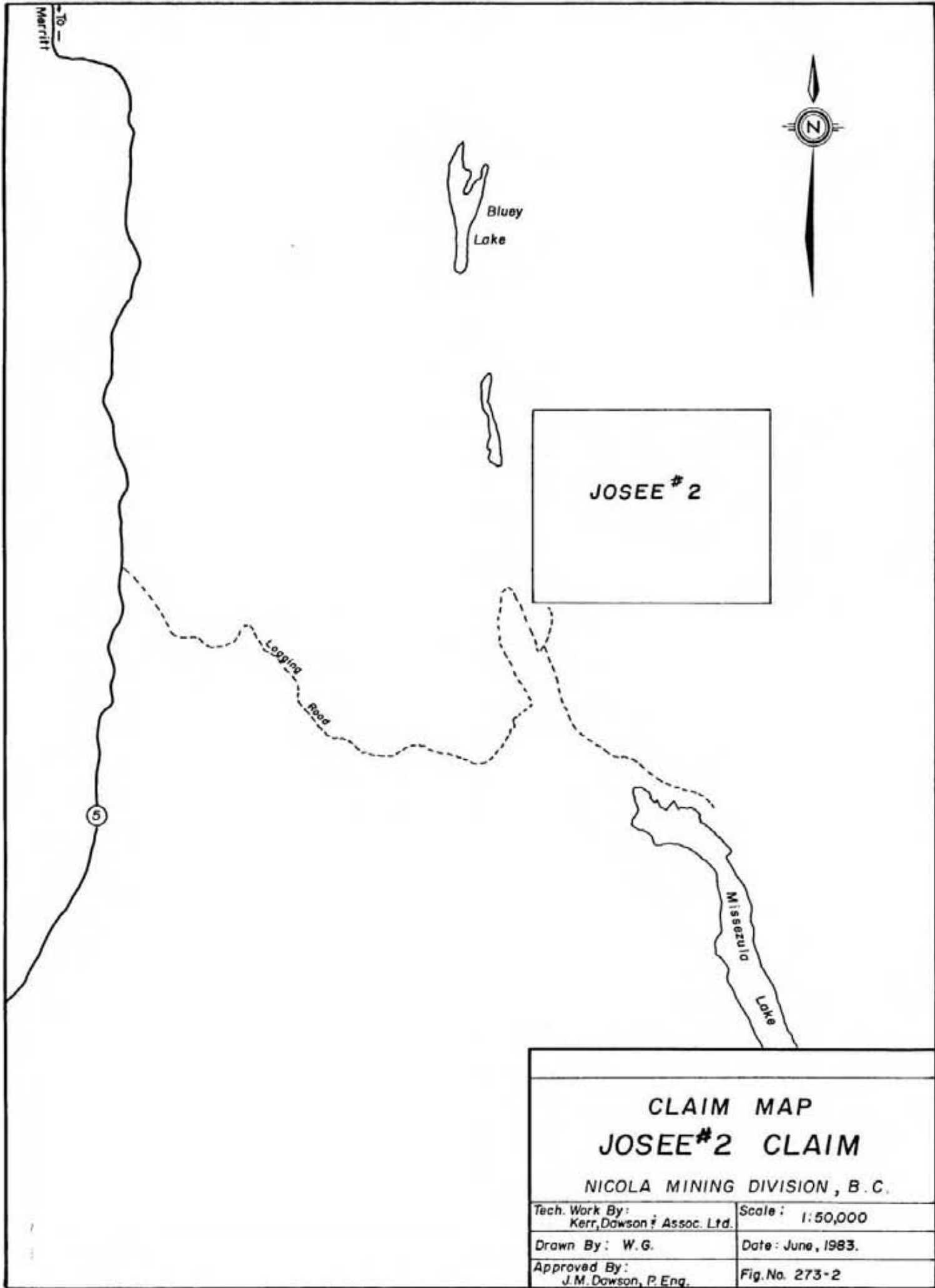
The property consists of one 20 unit metric claim as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>Tag No.</u>	<u>Expiry Date</u>
JOSEE #2	1252	66811	June 9/83

#### LOCATION AND ACCESS

The property is located in south-central British Columbia about 13 km. southeast of Aspen Grove and approximately 5 km. east of the Merritt-Princeton highway.

Access is gained via a logging road which leads easterly from Provincial Highway No. 5, about 15 road km. south of Aspen Grove. This logging road leads easterly for about 5 km. to the prominent valley containing Missezula Lake. The claim is located about  $\frac{1}{2}$  km. north-east of this road through relatively easy country.



### PHYSIOGRAPHY AND VEGETATION

The claim covers the southern part of a northerly-trending ridge which extends north from Missezula Lake for about 7 km. The central part of the claim lies in rolling upland country but the east and west margins drop off rapidly to deep fault-controlled valleys. Relief is in the order of 800 feet; the crest of the ridge being at about 4,500 feet a.s.l. and the east and west boundaries of the claim lying at between 3,500 to 3,800 feet a.s.l.

The property is lightly to moderately timbered with mature pine, spruce and fir. On south facing slopes the vegetation is less dense with occasional grassy meadows and openings here and along the ridgetop.

### HISTORY

The subject claim covers the old Daisy showing which is first mentioned in the Annual Report of the B.C. Minister of Mines for 1915. At that time there were three open cuts about 30 feet long and a 10 foot long adit.

In 1928, the showing was reported to be in a shear zone 80 feet wide in dacite or latite. A sample taken across 30 feet of oxidized copper minerals assayed Gold-trace, Silver-0.1 oz/ton and Copper-0.8%.

The next reported work was carried out by Noranda Exploration Company Ltd. in 1972 and 73. Noranda did detailed work on a large block of claims which encompassed the present property and a large area to the north and west. This work included geological mapping, ground and airborne magnetometer and electromagnetic surveys, and limited diamond drilling. It is not known how much of this work was actually done on the present claim block.

In 1979, Bulletin 69 of the B.C. Ministry of Energy, Mines and Petroleum Resources was published. The accompanying geological map as well as showing the position of the Daisy prospect in the north central part of the claim, also locates a copper occurrence in the southeastern part of the claim and another just outside the northern boundary. There is no previous record of either one of these occurrences.

#### GEOLOGY AND MINERALIZATION

The property is underlain by volcanic flows, fragmentals and lesser intercalated sediments of the Nicola Group, intruded by a linear body of diorite or quartz diorite. Several splays of prominent regional faults also cut through the property.

The property is bisected by the north-northwesterly trending Summers Creek Fault which separates facies of the Western Belt of the Nicola Group on the western half of the property from facies of the Central Belt in the east half.

On the Josee #2 claim the Central Belt rocks consist of reddish to green augite-plagioclase andesite and basalt flows as well as crystal and lithic tuffs, and red volcanic breccia and lahar deposits. The eastern belt facies of the Nicola rocks consists of purple and gray trachyandesite and trachybasalt porphyry flows; crystal, lithic and lapilli tuff; volcanic sandstone and siltstone; and massive to crudely layered lahar deposits.

A narrow linear body of diorite or quartz diorite is located just east of the eastern splay of the Summer's Creek Fault as it passes through the north-central part of the claim.



The Daisy prospect (see figure 272-3) is reported to consist of a shear zone up to 80 feet wide in andesite, agglomerate and breccia. Narrow bands of these fragmental rocks contain chalcocite, native copper and malachite concentrated in and around the fragments. Locally fractures are coated with malachite.

There are two other copper occurrences north and south respectively from the Daisy prospect. These have not been examined but presumably are similar. The only mineralization seen during this brief exploration programme was malachite stained fractures and minor native copper along the west claim boundary.

#### GEOCHEMISTRY

Soil samples were collected at 50 meter intervals on grid lines spaced 500 meters apart (see figure 273-4). Samples were collected from the 'B' horizon where possible (approximately 15 to 45 cm. deep). Sample stations were marked with flagging and the appropriate grid co-ordinates. After collection, samples were stored and shipped in waterproof kraft envelopes.

A total of 191 soil samples were collected and analysed for copper only. Analysis was performed by Acme Analytical Ltd. in their Vancouver laboratories. Samples were dried and sieved and an aliquot of the -80 mesh fraction obtained. Extraction was attained using hot dilute aqua regia with analysis by atomic absorption spectrophotometry.

The mean and standard deviation was computed and the data classified into the following categories:

Negative	0	Mean
Possibly Anomalous	Mean ---	(Mean + 1 Std. Dev.)
Probably Anomalous	(Mean + 1 Std. Dev.)--	(Mean + 2 Std. Dev.)
Definitely Anomalous	>	(Mean + 2 Std. Dev.)

The values were plotted on a 1:5000 scale base map of the property and definitely anomalous, probably anomalous and possibly anomalous areas were outlined (see figure 273-4).

Anomalous copper values on the whole are rather low but they do outline a number of narrow north to north-northwesterly trending zones which parallel the trends of individual bands of varying rock types as well as the strike of the major through-going faults. The occurrence of copper carbonates and native copper along the western boundary of the claim is reflected in a small local 'high'. A soil traverse did not pass over the immediate area of the Daisy prospect, however a linear anomaly encompasses the general area of this showing and extends a further 700 meters to the south.

APPENDIX A

REFERENCES

REFERENCES

Rice, H.M.A. (1960): Geology and Mineral Deposits of the Princeton Map Area; GSC Memoir 243.

Preto, V.A. (1979): Geology of the Nicola Group between Merritt and Princeton; B.C. Ministry of Energy, Mines and Petroleum Resources, Bulletin 69.

Annual Reports of B.C. Minister of Mines for 1915, 1928, 1972 and 1973.

APPENDIX B

PERSONNEL

PERSONNEL

J.M. Dawson, P. Eng.

Geologist

May 28, 1983.

M. Dawson

Senior Exploration  
Technician

June 1, 2, 3, 1983.

D. Davies

Prospector

June 1, 2, 3, 1983.

APPENDIX C

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

1. Labour:

J.M. Dawson, P. Eng			
1 day @ \$400/day		\$400.00	
M. Dawson			
3 days @ \$200/day		600.00	
K. Davies			
3 days @ \$160/day		<u>480.00</u>	
			\$1,480.00

2. Expenses and Disbursements:

(a) Room and Board		175.40	
(b) Truck Rental			
3 days @ \$40/day	120.00		
220 miles @ .40/mile	<u>88.00</u>	208.00	
(c) Geochemical Analyses		448.85	
(d) Base Map Preparation		122.30	
(e) Freight, telephone, flagging, sample bags, etc.		<u>92.40</u>	
			<u>1,046.95</u>

Total Costs . . . . . \$2,526.95



APPENDIX D  
WRITER'S CERTIFICATE

**JAMES M. DAWSON, P. ENG.**

Geological Engineer

#206 - 310 NICOLA STREET • KAMLOOPS, B.C. V2C 2P5 • TELEPHONE (604) 374-0544

CERTIFICATE

I, JAMES M. DAWSON OF KAMLOOPS, BRITISH COLUMBIA, DO HEREBY CERTIFY THAT:

- (1) I am a geologist employed by Kerr, Dawson and Associates Ltd. of Suite 206, 310 Nicola Street, Kamloops, B.C.
- (2) I am a graduate of the Memorial University of Newfoundland-B.Sc. (1960), M.Sc. (1963), a fellow of the Geological Association of Canada and a Member of the Association of Professional Engineers of British Columbia. I have practised my profession for 20 years.
- (3) I am the author of this report which is based on an exploration programme carried out on the subject property under my direct supervision.

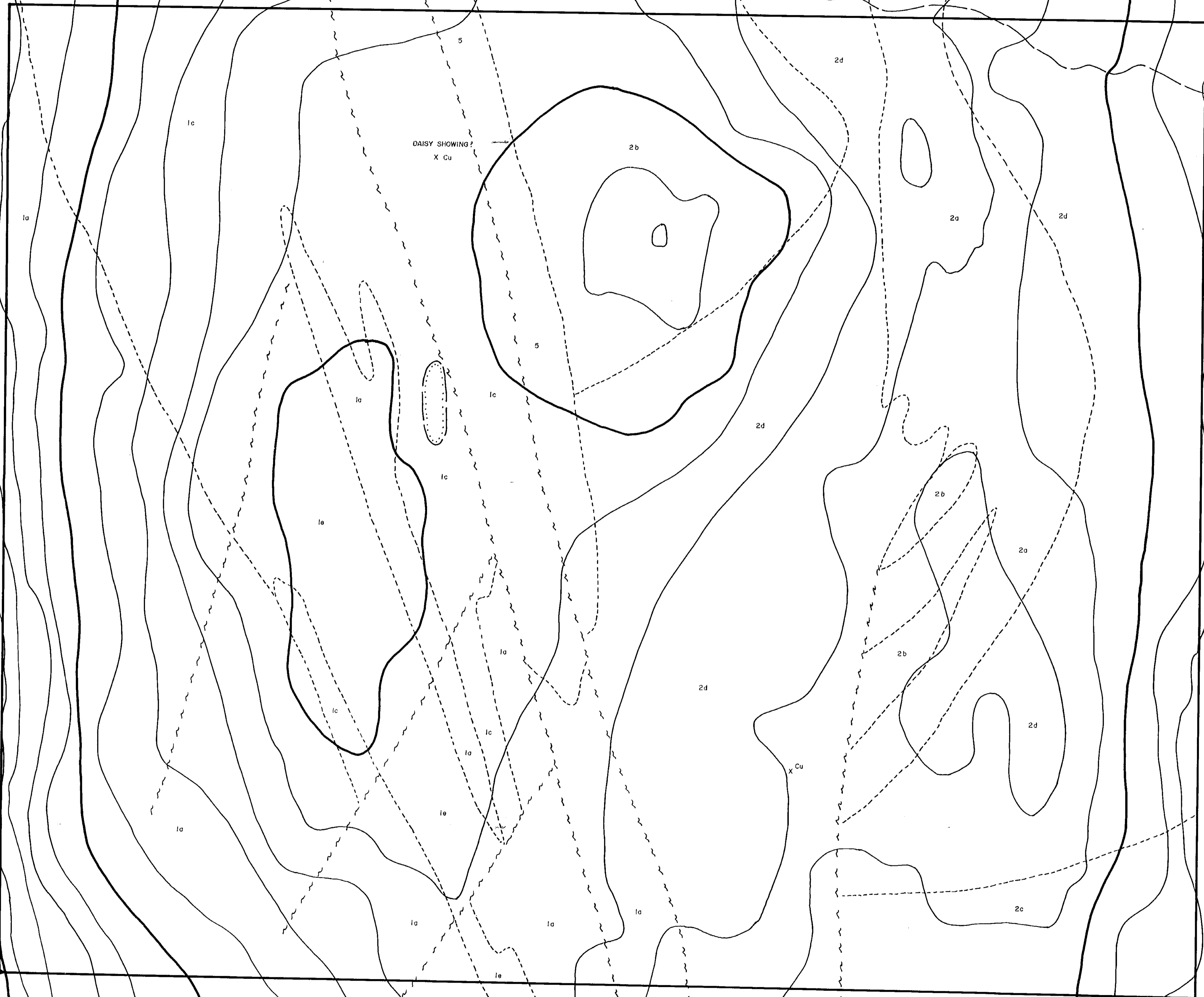
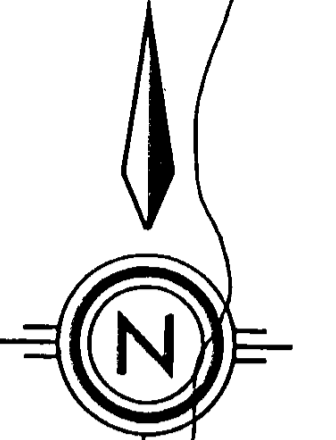


KERR, DAWSON AND ASSOCIATES LTD.,

*James M. Dawson*  
James M. Dawson, P. Eng.  
GEOLOGIST.

June 16, 1983.

Kamloops, B.C.



LEGEND

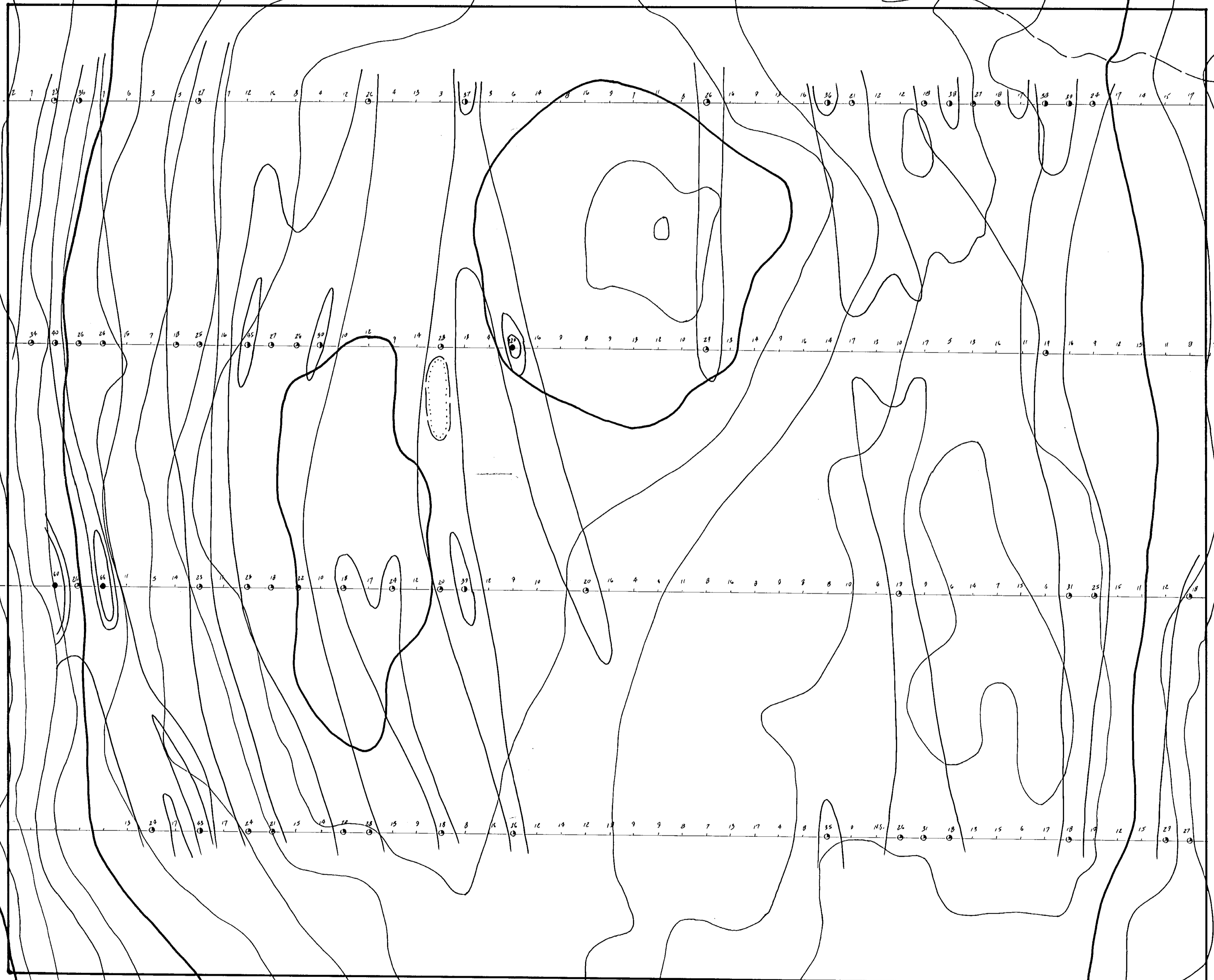
- CONTOURS
- CREEK
- CART TRACK
- LAKE
- INTERMITTENT LAKE
- 5 DIORITE, QUARTZ DIORITE, MONZONITE & DIORITE BRECCIA
- 2a TRACHYANDESITE & TRACHYBASALT FLOWS
- 2b REDDISH TO GREENISH CRYSTALLINE, LITHIC LAPILLI TUFFS
- 2c VOLCANIC SANDSTONE AND SILTSTONE
- 2d MASSIVE TO LAYERED LAHAR DEPOSITS
- 1a RED TO GREEN ANDESITE AND BASALT FLOWS
- 1b RED VOLCANIC BRECCIA AND LAHAR DEPOSITS
- 1c CRYSTAL AND LITHIC TUFF
- GEOLOGICAL CONTACT
- FAULT
- x Cu MINERAL OCCURRENCE (AFTER PRETO, 1979)

SURFACE GEOLOGY

JOSEE #2 CLAIM

NICOLA MINING DIVISION, BRITISH COLUMBIA

Technical Work By: KERR, DAWSON & ASSOC. LTD.	Scale: 1:5,000 
Dwn. By: T.Q., W.G.	Date: June, 1983
App'd. By: J.M. Dawson, P.Eng	Dwg. No.: 273- 3



LEGEND

- CONTOURS
- CREEK
- CART TRACK
- LAKE
- INTERMITTENT LAKE
- LOCATION OF GEOCHEMICAL SOIL SAMPLE

- 0 - 17 NEGATIVE
- ◐ 18 - 35 POSSIBLY ANOMALOUS
- ◑ 36 - 53 PROBABLY ANOMALOUS
- > 53 DEFINITELY ANOMALOUS

COPPER IN SOILS

JOSEE #2 CLAIM

NICOLA MINING DIVISION, BRITISH COLUMBIA

Technical Work By:  
KERR, DAWSON & ASSOC. LTD.

Scale: 1:5,000  
0 50 100m 200

Dwn. By: T. Q., W. G.

Date: June, 1983

App'd. By: J. M. Dawson, P. Eng

Dwg. No.: 273-4

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