

81-#686  
-9490

PROSPECTING AND GRID SURVEY REPORT

ON THE

G. M. GROUP

Kamloops M.D. Southwest British Columbia

Lat. 50° 365' - Long. 120° 30'

Nts. 92 1/10E & 921 9W

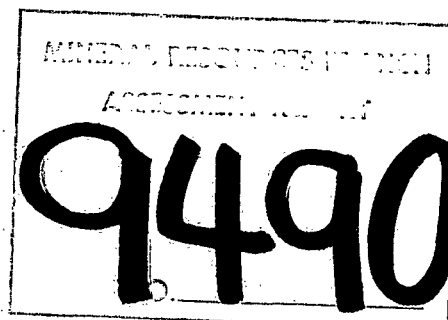
LOCATION: Immediately North of Dam Lake, 4.83 km. South of Trans  
Canada Hwy. (at Afton) and 14.48 km. Southwest of  
Kamloops at an altitude of 850 m.

CLAIM NAME: G.M. 2631 (6) 2 Units  
G.M. 1 FR. ~~3280 (4)~~ 3280 (4) 1 Fraction  
G.M. 2 2708 (6) 20 Units  
G.M. 3 2863 (8) 12 Units

WORK PERIOD: May 14 to July 31, 1981.

WORK DONE BY:

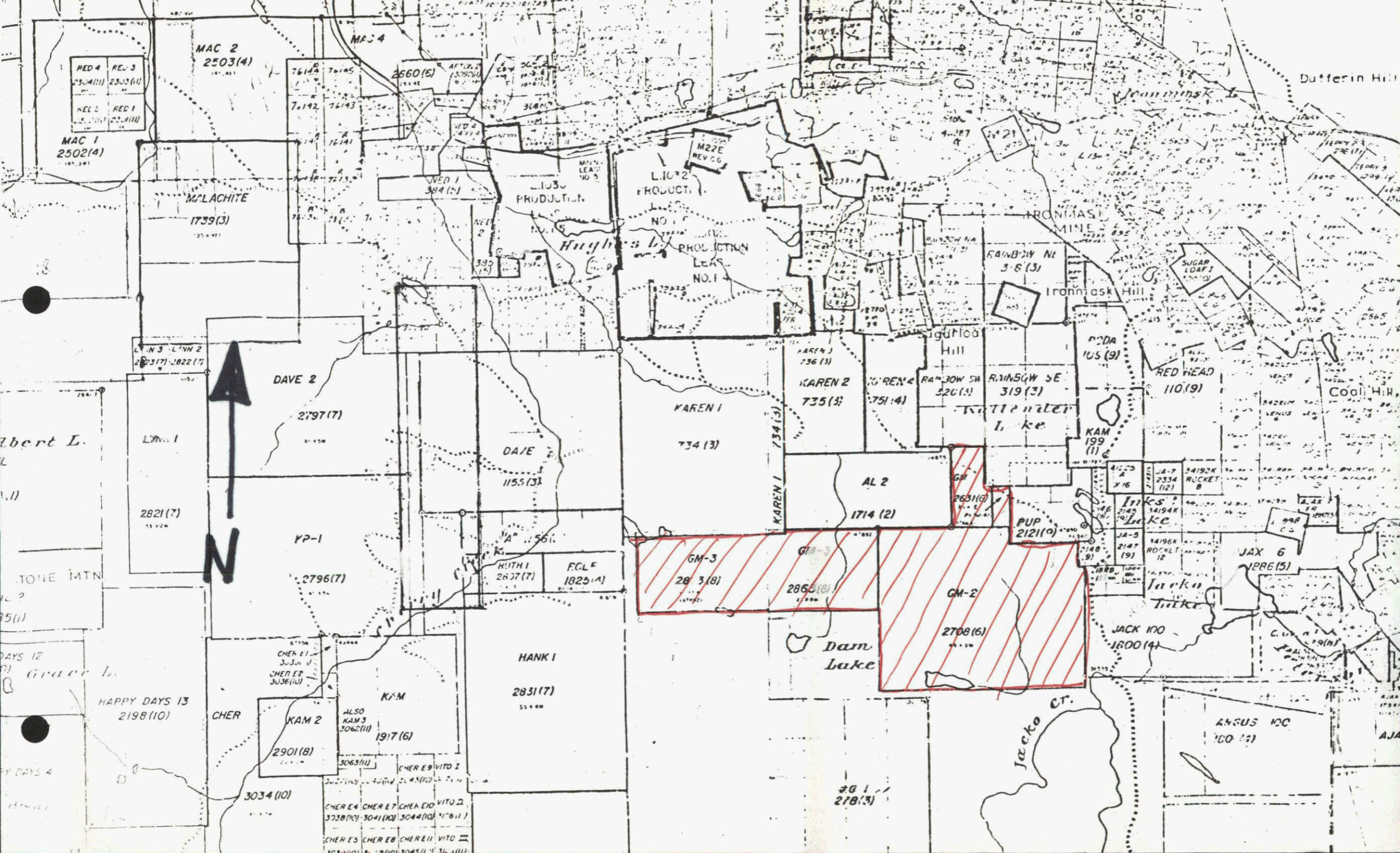
J. A. HILTON  
KAMLOOPS, BRITISH COLUMBIA  
August 6, 1981











RED 4  
2304(11)  
RED 3  
2303(11)  
RED 2  
2302(11)  
RED 1  
2301(11)

MAC 1  
2502(4)

MAC 2  
2503(4)

MALACHITE  
1739(3)

VED 1  
384(5)

LI 1030  
PRODUCTION

LI 1032  
PRODUCT

HUGHES  
PRODUCTION  
LEAS  
NO. 1

RAINBOW NE  
318(3)

IRONMASK  
MINE

SUGAR  
LOAF  
CC

LVN 3 LVN 2  
2823(7) 2822(7)

DAVE 2

2797(7)

DAVE

1155(3)

KAREN 1

734(3)

KAREN 3  
736(3)

KAREN 2  
735(3)

KAREN 4  
751(4)

RAINBOW SW  
320(3)

RAINBOW SE  
319(3)

RED HEAD  
110(9)

KAM  
199  
(1)

COAL HILL

Albert L.

LVN 1

2821(7)

KP-1

2796(7)

RUTH 1  
2637(7)

FCLE  
1825(4)

GM-3  
283(8)

GM-3  
2865(6)

GM-2  
2708(6)

PUP  
2121(9)

JA-6  
2334  
(12)

JA-7  
2334  
(12)

JA-8  
2334  
(12)

JA-5  
2147  
(9)

JA-5  
2147  
(9)

JA-5  
2147  
(9)

JAX 6  
1886(5)

JACKO  
TILKE

JACK 100  
1800(4)

DAM  
LAKE

JACKO CT.

ANGUS 100  
100(3)

HANK 1

2831(7)

CHER

KAM 2  
2901(8)

ALSO  
KAM 3  
3062(11)

3063(11)

1917(6)

3034(10)

CHER E4  
3038(10)

CHER E5  
3039(10)

HAPPY DAYS 13  
2198(10)

Grace L.

HAPPY DAYS 4

278(3)

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SUMMARY & CONCLUSION

The Property, consisting of 34 Units & 1 Fraction,  
G.M. 2631 (6)  
G.M. 1 2630 (6)  
G.M. 2 2708 (6)  
G.M. 3 2863 (8)

Is located in the Kamloops M.D. The altitude at the centre of the property is 850 m.

Access is by good secondary road, west of Inks Lake and the Jacko Lake turn off, 12.87 km. southwest of Kamloops, B.C.

Geologically the area is covered by the Nicola Group eg: Feldspar and Augite Porphyries in coarse Agglomerate Volcanic Breccia, aslo by some of the Sugarloaf, Posthook and Cherry Creek geological units. The economic mineralization involved is Copper, Silver, Molybdenite and Minor Gold.

Surface prospecting of the general area indicated this is an area of interest. Geochemical testing has indicated two anomalous areas on the G.M. 2 & 3 claims. Because of the proximity of the subject property to the Afton and Iron Mask properties, plus the indications on the G.M. property I feel a detailed programme is warranted.

## GEOGRAPHY AND HISTORY

Topography:

The subject property is located at an average elevation of 850 m. The area is characterized by low hills and ridges. The vegetation consists of Range Grass, Sagebrush with Pine and Fir Trees in the wooded areas. The area has been logged over the years, therefore access roads in the area are abundant.

Climate:

The semi-arid Kamloops area is in the Interior Dry Belt. Average precipitation is 16.51 cm. Annual snowfall is about 82.55 cm. over a three and one half (3½) month period.

History:

The first recorded work in the area was 1896, when over 200 claims were recorded by 1900 the Glen Mine (Magnetite) and the Copper King Mine at Cherry Bluff (Copper-Gold) and the Iron Mask Mine, Iron Cap, Kimberly, Python, Noonday, Luck Strike and Wheel Tamar, all Copper - Gold - Silver properties near Kamloops, had some type of underground work done on them. Most of these properties have produced tonnages of selected ores. Exploration has been carried on in this area up to this date, with the Afton property (immediately to the north of the subject property) going into production in the fall of 1977.

-1-

## PROSPECTING AND PROPERTY GEOLOGY

Prospecting of the G.M. Group was carried out by the writer, on the GM-3 Claim and on the West side of the GM-2 Claim. The prospecting was done on a North-South grid system, which enabled a geochem sampling programme to be carried out at the same time. The geochem and sampling methods are described separately. The grid is laid out with 250M spacing on East-West lines and with 100M stations on North-South lines. 47 rock samples were taken, but generally outcrops are scarce. Some hand trenching was done to get samples. The samples ranged from Diorite, Gabbro, Diabase, and Dacite. Some samples contained Iron Pyrite, Chalcopyrite, and Magnetite. Two samples from the 9+00S and 10+00S, L.27+50W---L.22+50W area contain specks of what appears to be Molybdenite. Approximately 65% of the hand samples are magnetic. Several samples contain specks of Malachite. The geochem results indicate an anomalous area between L.20+00W and L.15+00W at Sta. 2+00S to Sta. 10+00S, with a South-West trend. A second anomalous area is on the 2+50E line at Sta. 12+00S to 3+00S. At L.2+50E--Sta. 16+10S to Sta. 15+10S., there is a large outcrop of Dacite, which is magnetic and contains fine Iron Pyrite. 200M South of this point, there is a small outcrop of a green volcanic Breccia material that also contains fine Pyrite. In the area of the GM-3 L.C.P. there is an outcrop of Diorite which contains copper mineralization. West of this are, Chalcopyrite and Iron Pyrite was observed in what appears to be an altered Diorite. One other area from L.22+50W to L.27+50W at Sta. 6+00S to Sta. 7+50S could possibly be anomalous, but because of the wide line spacing, should be investigated in more detail. Some of the samples from the general assumed anomalous areas were also Gabbro and/or Diabase rock with sparse but visible mineralization.

STATEMENT OF COST

Wages

2 men x \$100/day x 6 days	\$ 1,200.00
1 man - Report Prep - 1.5 days @ \$100/day	150.00

Travel

4 x 4 rental \$40/day x 6 days	240.00
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Assays

Bondar - Clegg invoice #E-7263	211.47
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Consumables

Gas, Oil, Geochem Supplies, Flagging, String, Axe, etc. Drafting and office supplies, sample bags.	264.91
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Total	<u>\$ 2,066.38</u>
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STATEMENT OF QUALIFICATION

I have practised my profession for 16 years.

I have completed and passed a Government of B.C. approved  
Prospecting Course (Cariboo College).

I have completed and passed (Honours) a Geochemical  
Prospecting Course.

I have been employed by Hiltec Exploration as Owner-Manager  
for the past 2 years.

I was employed by Columbia Mining and Construction as  
Manager for 9 years.

J. A. Hilton

A handwritten signature in cursive script, appearing to read "J. A. Hilton", written in dark ink.

August 6, 1981

NOTES ON THE METHOD

This method of geochemical prospecting is based on the premise that some of the metal in a sample of soil or stream sediment is loosely attached to the surfaces of the mineral grains or organic materials. This absorbed or "loosely bonded" metal, which may amount to as much as 20% of the total metal in the sample, may be removed by leaching the sample with a dilute solution of ammonium citrate, or even water. The heavy metal thus removed is then determined by reacting it with dithizone to form a coloured product. The colour produced is a measure of the metal content of the sample.

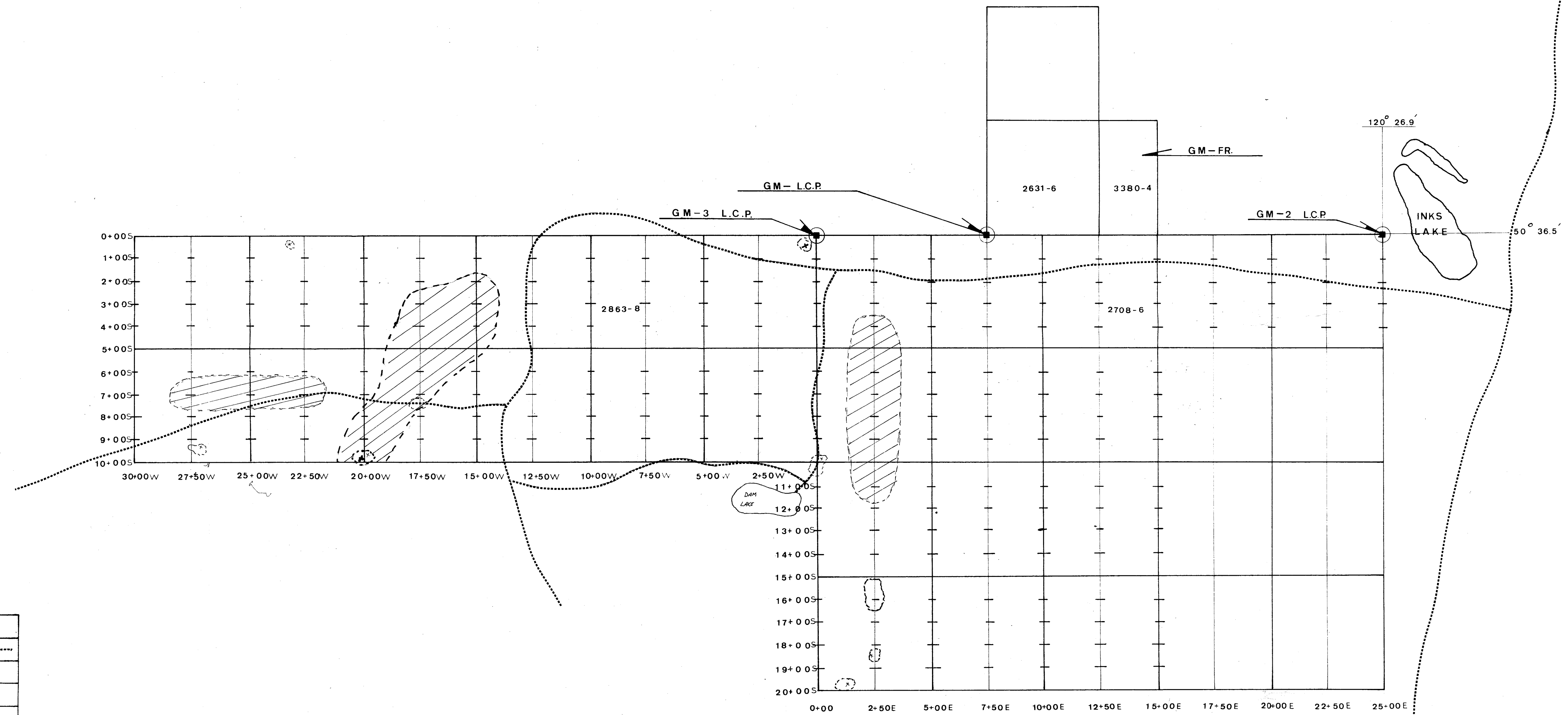
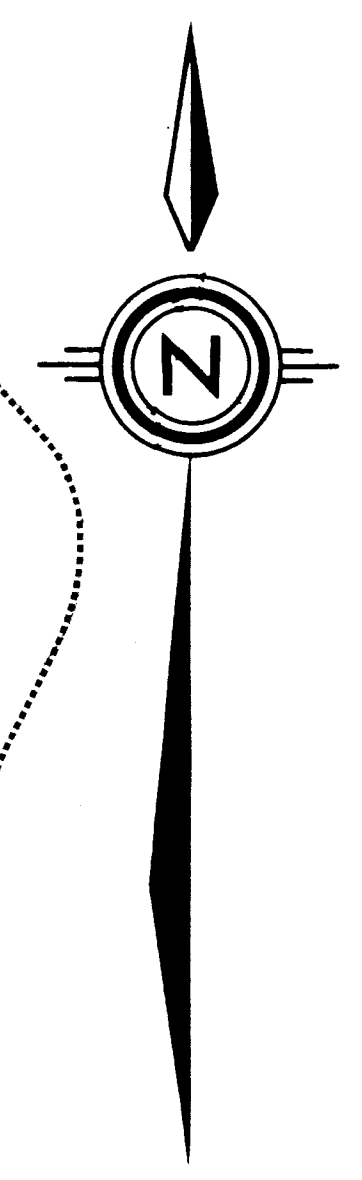
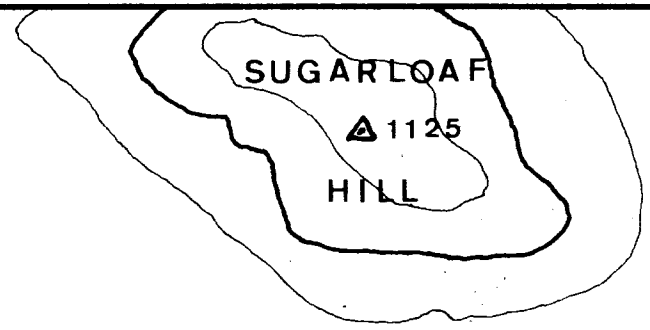
Because the method is designed for speed and ease of use in the field, samples are not weighed but are measured with a small scoop. A scoopful of the sample is placed in the analysis tube and the ammonium citrate buffer solution is added. The function of the buffer solution is to dissolve the "loosely bonded" metal referred to above, and to maintain the acidity of the sample solution at a pH of 8.5, the point at which the dithizone reacts most rapidly and completely with the greatest number of metals. The dithizone-<sup>toluene</sup> solution is then added to the tube, the tube is corked, and then shaken. The benzene layer is allowed to separate and is observed for a colour change which may range from the original bright green to red, through

the sequence, green, blue-green, blue, blue-purple, purple, and finally red. Any colour other than green is an indication of the presence of metal. Additional amounts of the dithizone-benzene solution are added with shaking until a standard colour, or end point, usually a blue or grey-blue, is reached. The amount of dithizone required to reach this point is then a measure of the cold extractable heavy-metal content of the sample.

#### PREPARATION OF SAMPLE

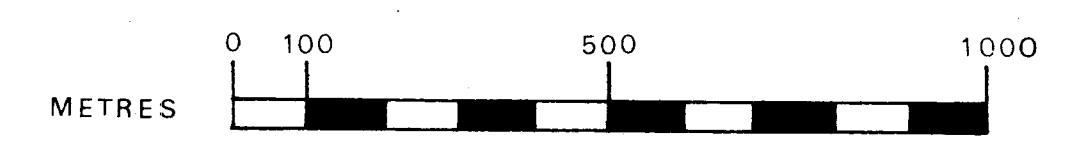
The samples are taken from the "B" Horizon (10 cm. to 15.3 cm. in depth). The sample is then placed in a Kraft Paper sample bag; with excessively wet material, a plastic liner is used. The sample material is then dried and screened to 80-mesh size. At this point, the material is ready for geochem testing.





LEGEND	
ROADS	-----
SURVEY STATION	+
SAMPLE SITE	+
LEGAL CORNER POST	⊕
SURVEY CONTROL STATION - MAIN -	Δ
OUTCROP BOUNDARY	⊖
MINERAL OCCURANCE	X
ANOMALOUS AREA	

9490



<b>G.M. GROUP</b>	
SCALE: 1:10 000	APPROVED BY: <i>[Signature]</i>
DATE: 25/6/81	REVISED: <i>[Signature]</i>
<b>GRID CONTROL SURVEY</b>	
<b>KAMLOOPS M.D. 81-37</b>	