

REPORT ON THE GEOLOGY AND RESULTS OF
PROSPECTING OF THE MT. TOM PROPERTY;
MINERAL CLAIMS UPPER (3834), DOWNER (3633) AND DUCK (3832).

Mt. Tom, Sugar and Hardscrabble Creeks Area
Cariboo Mining Division, British Columbia
N.T.S. Map Area 93H/4E
Latitude 53° 09' N Longitude 121° 42' W

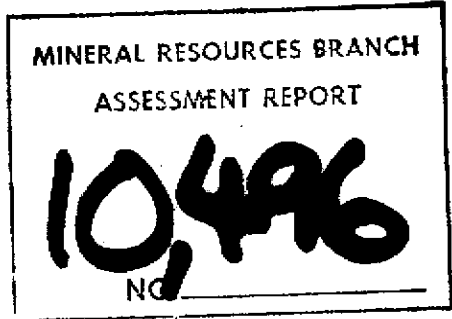
for

CANADIAN MINERAL CORPORATION
210 - 850 West Hastings St.
Vancouver, B.C.

by

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March 1982



SUMMARY

The Mt. Tom property of Canadian Mineral Corporation consists of 46 mineral claim units 10 km northwest of the village of Wells in central British Columbia. No previous mineral exploration activities on the claims are known of. Gold, silver, lead, zinc and tungsten occurrences are reported within one or two kilometers of the claims. The property was staked because of stream sediment anomalies and features of its geological situation.

Ordovician to Permian phyllite, argillite and limestone underlie the northern part of the claims. In the southern portion of the property Pennsylvanian to Permian oceanic crustal materials overlie older units. The black phyllite and argillite unit is the host for gold-quartz deposits to the southeast, along the regional trend of the Barkerville Gold Belt. This same unit has been correlated with black clastic units in the northern Cordillera which host stratiform lead-zinc deposits.

Prospecting and reconnaissance geochemical sampling indicates that the property has a high potential of containing gold-quartz deposits. Vein quartz float bearing 0.268 oz/ton gold and derived from lodgement till of local origin was found in the area of roughly coincident multielement geochemical anomalies. This and other anomalies, sites of abundant vein quartz blocks and a drainage lineament define what is interpreted to be a northwest trending mineralized fracture zone 5 km long across the claims. Geochemical anomalies of up to 675 ppm Pb, 2850 ppm Zn, 20 ppm W, 8.8 ppm Ag and 3000 ppb Au were found in silts and soils on the claims.

Additional soil sampling, lithogeochemical sampling and geophysical tests are proposed in order to explore the nature and extent of the reconnaissance geochemical anomalies and to find the source rocks of the gold-bearing float.

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I INTRODUCTION

This report presents the results of prospecting and reconnaissance soil and silt sampling on the Mt. Tom property located in the Cariboo Mining Division of central B.C. The property consists of three mineral claims owned by Canadian Mineral Corporation of Vancouver, B.C., who requested the work and this report. The claims were staked in June, 1981 because of stream sediment anomalies of gold, lead and zinc.

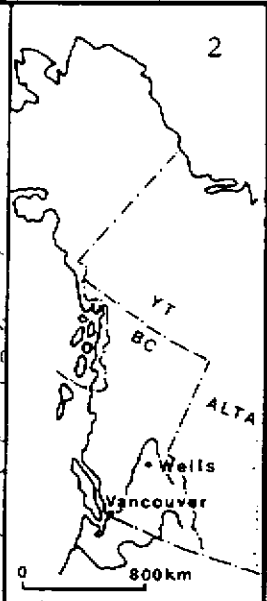
The geological setting is such that there is a potential for four types of mineral deposits; shale-hosted lead and zinc, gold-bearing pyritic replacement deposits, gold-quartz veins and scheelite-quartz or scheelite-carbonate veins. The exploration work was of a reconnaissance nature; namely to determine the cause of silt anomalies, to examine the mineralization potential and to determine an approach for additional exploration if warranted.

Field work was done at various times in June, July, August and October of 1981. Sixteen man-days were spent on the claims. The activities performed included prospecting of 30 km of stream courses and the collection of 116 geochemical samples and 11 rock samples. The details of the work are described in following technical sections.

1.1 Location and Access

The Mt. Tom property is located 10 km northwest of the village of Wells in central British Columbia (Figure 1). The claims are situated within National Topographic System area 93H/4E and are centered at approximately 53° 09'N latitude and 121° 42'W longitude.

Access to the property is by Hardscrabble Road which starts from the northwest corner of Wells. This road is



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Mt. Tom Property

Scale 1:250,000



Mar.15/82 93H

Figure 1

LOCATION MAP

suitable for 4-wheel drive vehicles and it is about 10 km to the property. The road is clear of snow from early June to early November. There are no trails on the claims but it is fairly easy to hike up the streams. There are two large meadows on the upland part of the claims in which a helicopter could land.

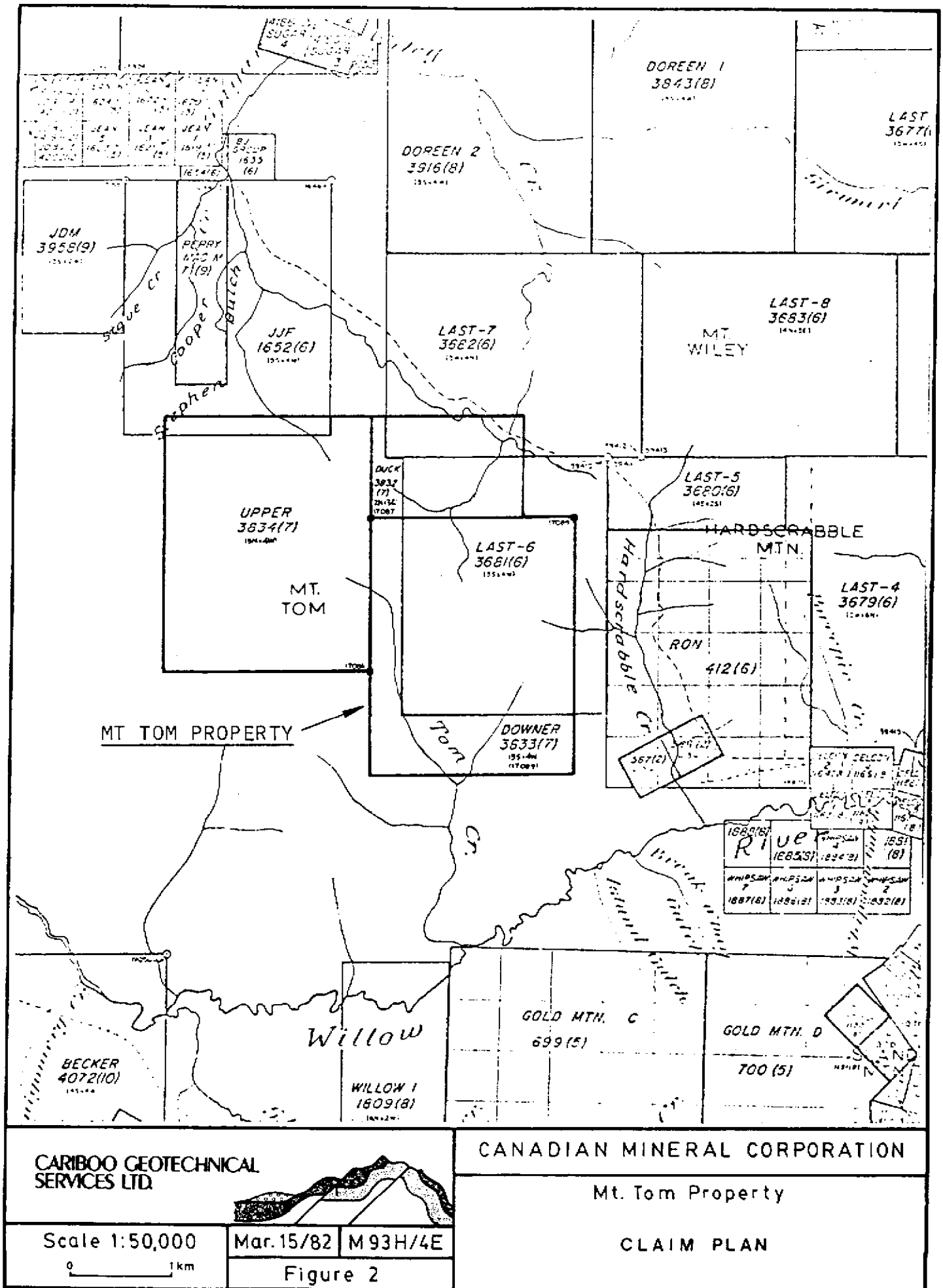
1.2 Ownership and Claims Status

The three mineral claims of the Mt. Tom property were staked on the behalf of, and are held by, Canadian Mineral Corporation. Figure 2 is a recent claim plan of the area. Table 1 summarizes particulars of the claims.

Table 1. Summary of claim information.

<u>Claim Name</u>	<u>Record No.</u>	<u>Units</u>	<u>Recording Date</u>	<u>Recorded Holder</u>
Upper	3834 (7)	20	July 17, 1981	Canadian Mineral Corp.
Downer	3833 (7)	20	July 17, 1981	"
Duck	3832 (7)	6	July 17, 1981	"

On July 22, 1981 a complaint on behalf of Canadian Mineral Corporation was filed by J. Boutwell with the Chief Gold Commissioner. Mr. Boutwell was employed as a prospector by Cariboo Geotechnical Services Ltd. and staked the Upper, Downer and Duck claims as an agent for Canadian Mineral Corporation. The complaint was under Section 50(1,a) of the Mineral Act concerning the improper staking of the mineral claims Last 6 and 7 (Figure 2) which were recorded as having been staked prior to the staking of the Upper, Downer and Duck claims. On October 7, 1981 the Claims Inspector, Mr. D. Lieutard made a site investigation. He concurred verbally to the author that the Last 6 and 7 claims had been improperly staked and recorded. At the time of this writing, Mid-March



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Scale 1:50,000

0 1km

Mar.15/82 M 93H/4E

Figure 2

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Mt. Tom Property

CLAIM PLAN

1982, the Claims Inspector had not completed his investigation nor submitted his findings to the Chief Gold Commissioner. Mr. Lieutard expected to do so when weather conditions permitted him to examine other sections of the Last claims not specifically related to the complaint.

1.3 References

There are no known public or private reports that reference the property area, apart from regional geologic studies. There are however, publications pertaining to mineral occurrences immediately northwest (Sugar Ck.) and southeast (Hardscrabble Mine) of the property and these are included in the following reference list.

- B.C. Minister of Mines Annual Reports for the years 1934, pages 26 and 27, and 1947, pages 117-123.
- Bowman, A., 1888, Report on the Geology of the Mining District of Cariboo, B.C., Geological Survey of Canada, Annual Report 1887-88, Volume 3, Part 1, pages 40-42.
- Uglow, W.L., 1922, Bedrocks and Quartz Veins of Barkerville Map-Area, Cariboo District, B.C., Geological Survey of Canada, Summary Report 1922, Part A, page 85.
- Johnston, W.A. and Uglow, W.L., 1932, Placer and Vein Gold Deposits of Barkerville, Cariboo District, B.C., Geological Survey of Canada, Summary Report 1932, Part A1, page 31.
- Hanson, G., 1935, Barkerville Gold Belt, Cariboo District, B.C., Geological Survey of Canada, Memoir 181, pages 37-38.
- Sutherland Brown, A., 1957, Geology of the Antler Creek Area, Cariboo District, B.C., B.C. Department of Mines Bulletin No. 38.
- Little, H.W., 1959, Tungsten Deposits of Canada, Geological Survey of Canada, Economic Geology Series, No. 17, pages 38, 62-67.
- Campbell, R.B., Mountjoy, E.W. and Young, F.G., 1972, Geology of the McBride Map-Area, B.C., Geological Survey of Canada, Paper 72-35.
- Struik, L.C., 1979, Stratigraphy and Structure of the Barkerville-Cariboo River Area, Central B.C., Geological Survey of Canada, Paper 79-1b, pages 33-38.

- Struik, L.C., 1981a, Showshoe Formation, Central B.C., Geological Survey of Canada, Paper 81-1a, pages 213-216.
- Struik, L.C., 1981b, Bedrock Geology of the Barkerville-Cariboo River area, Geological Survey of Canada, Open File Report.
- Struik, L.C., 1981c, A Re-examination of the Type Area of the Devono-Mississippian Cariboo Orogeny, Central British Columbia, Canadian Journal of Earth Sciences, Volume 18, pages 1767-1775.

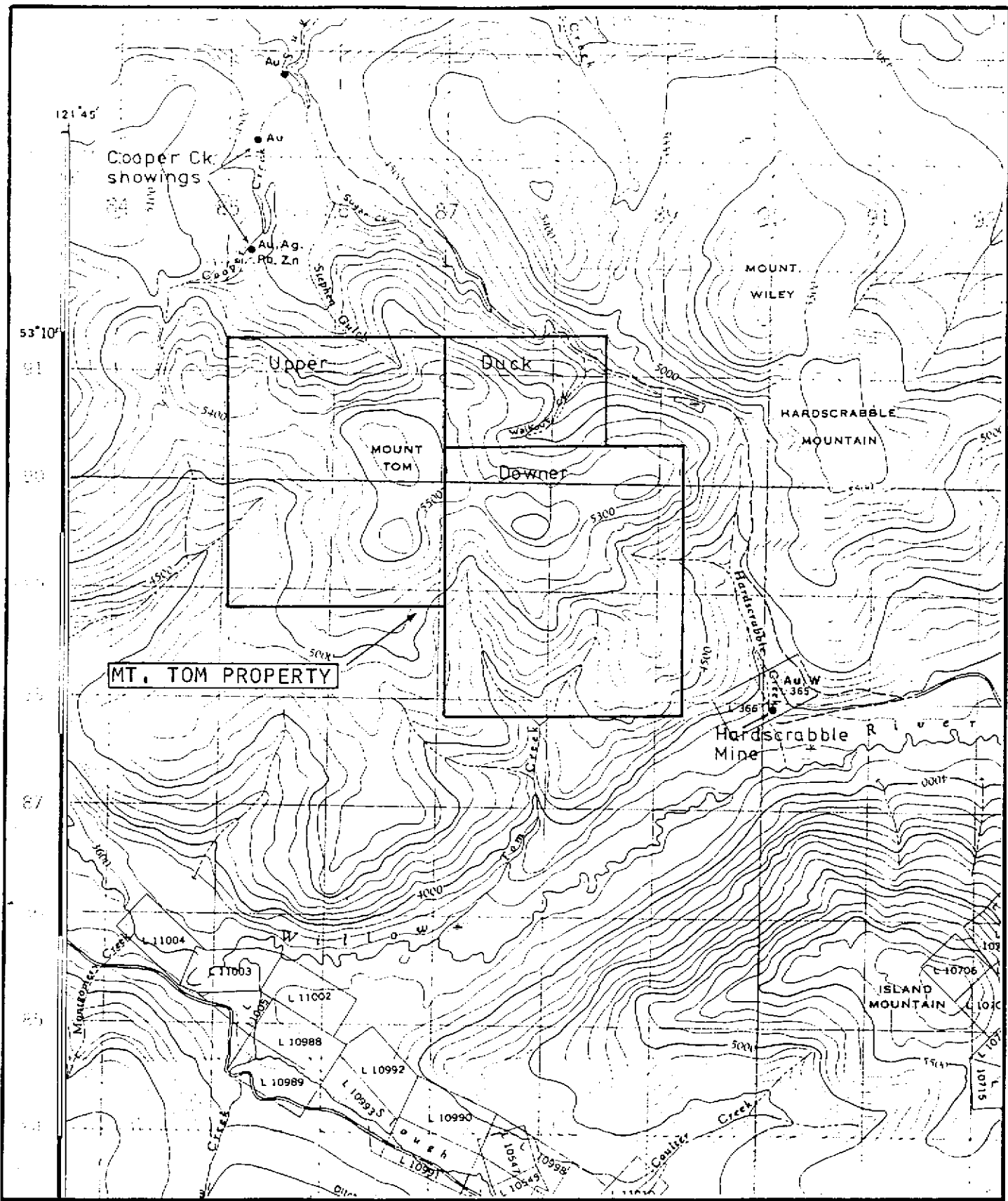
1.4 History

1.4.1 Regional


The Cariboo area is the oldest gold mining camp in British Columbia, the first prospectors arriving c.1858. The early miners focused on placer deposits but by the 1880's gold-quartz veins were being mined. Historical lode gold mines located 15 to 30 km southeast of the Mt. Tom property were the Island Mtn., Cariboo Gold Quartz, Canusa and Williams Creek Gold Mines. Gold was won from both gold-quartz veins and pyritic replacement bodies in limestone. The Hardscrabble Mine, less than 1 km southeast of the Mt. Tom property, produced a small amount of scheelite concentrate. Free gold-bearing quartz veins also occur at this site but they were never mined. The only active gold mine in the area is the Mosquito Creek Gold Mine lying 16 km southeast of Mt. Tom. All of the foregoing gold mines and the axis of the main placer deposits lie along what is called the Barkerville Gold Belt. The Mt. Tom property is at the northwest end of the known extension of this belt.

1.4.2 Property

Figure 3 shows the location of the place names and sites described below. The only known previous work in the claims area are placer workings of pre-1960 age on Sugar Creek near the confluence with its tributary, Walkout Creek, 1 km downstream from the small lake west of Hardscrabble Mtn. No



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Scale 1:50,000
0 1km

Mar.15/82 93H/4E
Figure 3

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Mt. Tom Property

TOPOGRAPHIC MAP

evidence was seen anywhere on the claims of prospect pits, soil sampling or line cutting.

The placer gold production of Sugar and Hardscrabble creeks is of relevance since the gold is generally considered (eg. Sutherland Brown, 1957) to have been derived from underlying gold-quartz veins. From 1879 to 1895 the combined production of Hardscrabble and Sugar Creeks totalled about 5,180 oz. Since 1913, 257 oz have been recorded from Sugar Ck. while between 1937 and 1941, 229 oz have been recorded from Cooper Ck (B.C. Minister of Mines Annual Report, 1947).

There are two areas of mineral occurrence that lie along the regional trend to the northwest and southeast and that are very near the property. These are in the vicinity of Cooper and Sugar Creeks and at the mouth of Hardscrabble Creek.

The mineral showings at Cooper and Sugar Creeks have been known since 1889 and surface prospected as recently as 1965. The following information comes from the B.C. Minister of Mines Annual Reports for 1934 and 1947. Two types of mineralization are reported; gold and silver-bearing quartz veins and fine to medium grained pyrite resembling the pyritic replacement ore at the Island Mtn. Mine 12 km to the southeast. Quartz veins have attitudes parallel, diagonal and transverse to the host phyllites and argillites. The highest assays reported from the quartz veins are 0.12 oz/ton gold and 4.7 oz/ton silver. The samples with the highest assays were taken from northeast trending veins in or adjacent to fault zones. Selected samples from pods of galena and sphalerite that are sparsely distributed in quartz veins in the Cooper Creek area are reported to carry 102.5 oz/ton silver and 0.10 oz/ton gold in 25.7% lead. A sample of massive pyrite float assayed 0.10 oz/ton gold and 10.1 oz/ton silver.

The tungsten deposit at the mouth of Hardscrabble Creek was explored and developed between 1904 and 1938. The deposit lies southeast along the regional strike from the Mt. Tom

property. The following information is from the report by H.W. Little, 1959. Scheelite occurs in quartz stringers both parallel and transverse to the bedding in host argillite, quartzite and impure limestone. Structural control by northwest trending fault zones is thought to be likely. About four tons of scheelite concentrate were made at the site. Free gold is also reported from this showing in several small quartz veins although no attempt was made to mine them.

The Upper, Downer and Duck claims were staked for Canadian Mineral Corporation as a direct result of favorable reconnaissance geochemical sampling coupled with the determination that the area satisfied structural and lithologic criteria typical of gold deposits along the Barkerville Gold Belt.

2 GEOMORPHOLOGY

2.1 Regional

The property lies within the Quesnel Highland physiographic region. A characteristic of this region are upland areas which are remnants of a highly dissected plateau of moderate relief. The plateau was formed in Tertiary times. Pleistocene ice covered most of the high areas and consequently most summits are rounded but cirques which developed on the north sides during late stage glaciation have sharpened the profiles of the highest peaks. Valley glaciers truncated spurs and deposited materials over much of the area.

2.2 Property

Figure 3 is a topographic map of the claims area. Relief is about 300m (1000 ft) from the rounded summit of Mt. Tom (1715 m, 5625 ft) to Sugar Ck. (1400 m, 4600 ft) a tributary of Big Valley Creek. The relief is slightly more in the direction of Tom Ck., a tributary of the Willow River. The principal

drainage divide lies along the northwest trending series of knolls that makes up an upland surface. This area, above a fairly well defined break in slope, is considered to be a Tertiary plateau remnant. Walkout Ck., east of Mt. Tom, is developed in what was an incipient cirque. It has four main tributaries cut deeply into thick deposits of glacial till. This till is of local origin and represents a ground moraine or lodgement till developed under the ice that lay on the plateau remnant. There are some glacio-fluvial deposits plastered on the sides of the Sugar Creek valley right beside the present stream course.

An unusual feature of the upland area are the several deeply cut, steep-sided and flat bottomed trenches or channels developed in the till. Some cross the watershed divide and are dry, others are developed just above the headwaters of existing streams. They are thought to be meltwater channels formed at the time of wasting of the Pleistocene ice that capped the plateau.

At several places on the northeast slopes sampling pits revealed surficial layers up to 1 m thick of light colored till material just under the moss and overlying well developed soil profiles. Such deposits are considered to be debris flows or colluvium slumps from tills upslope. There are numerous small landslides and slumps along the stream courses. It is reasonable to conclude that the great majority of stream load is contributed by mass wasting along the stream banks. This is of importance when interpreting the geochemical results.

The valleys are thickly timbered with spruce and hemlock. The upland areas have somewhat fewer trees but have very dense willow and alder thickets. There are few outcrops except along creekbeds and on bluffs.

3 GEOLOGY

3.1 Regional

Figure 4 illustrates a recent interpretation of the regional geology (L.C. Stuik, 1981-a) with tentative stratigraphy outlined in the legend. The area lies along the western part of the Omineca Tectonic Belt. Two regional tectonostratigraphic sequences are shown in Figure 4. These are (1) Upper Ordovician to Permian shale, dolostone, basalt, conglomerate and limestone (units 1 to 6 and 8, Figure 4) and (2) Permian and Pennsylvanian oceanic chert and mafic and ultramafic volcanic and intrusive rocks (unit 7, Figure 4). The latter sequence, the Antler Formation, has been thrust from the west over the basinal sequence. A third tectonostratigraphic sequence, Hadrynian to Cambrian quartzite, carbonate and shale, representing a continental terrace wedge is exposed to the east of the area shown in Figure 4.

Eastward thrusting of the Antler Formation commenced in post-Permian time and predated the folding and regional metamorphism of Jura-Cretaceous age that affected all rock units in the area. The major folds, such as the Lightning Creek anticlinorium, are relatively open. Several phases of faulting have affected the area.

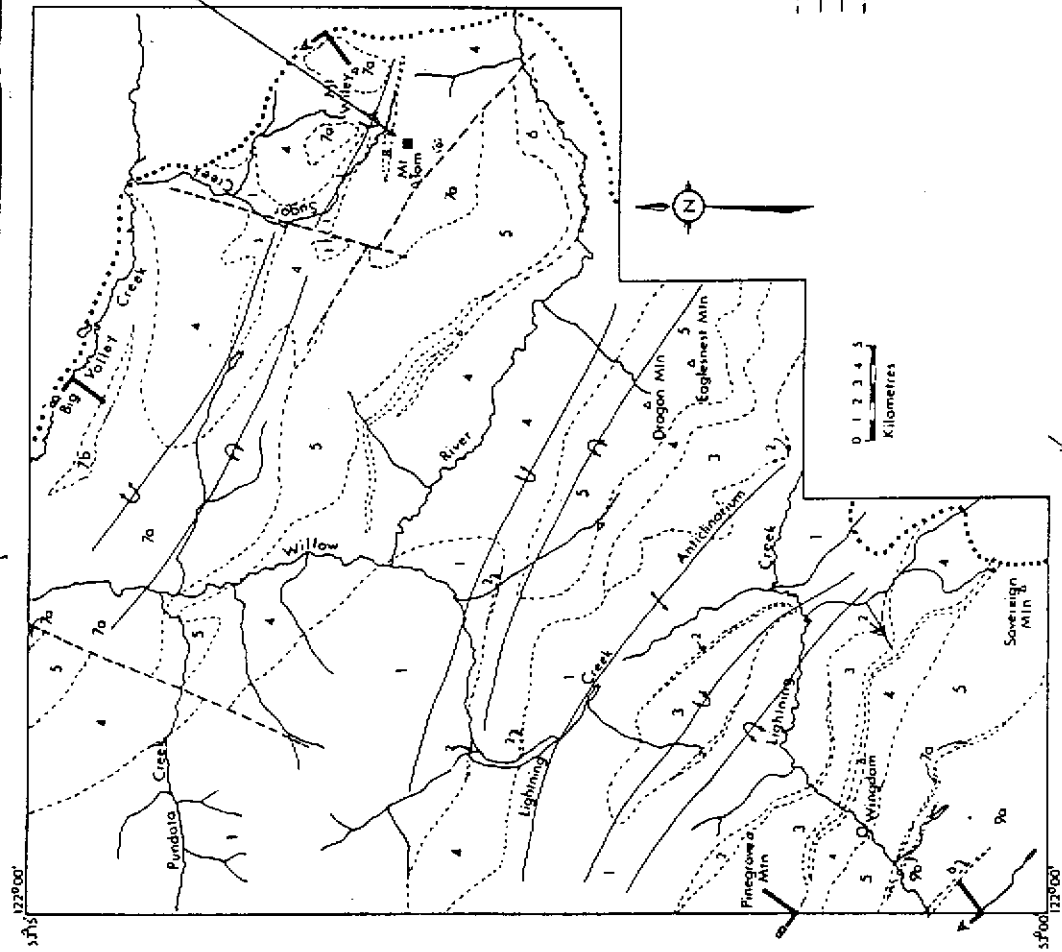
Recently (Stuik, 1981c) it has been realized that the Paleozoic sedimentary units making up most of the area contain stratigraphic equivalents of the major divisions of the Selwyn basin; the Ordovician to Devonian Road River Formation and the Devonian-Mississippian Earn Group, informally called the "black clastics". These units are hosts for stratiform lead and zinc deposits in the northern Cordillera. In the Cariboo district the Black Stuart Formation (unit 4, Figure 4) and the Greenberry Limestone Member (unit 8, Figure 4) are time and lithologic correlatives of the black clastic units in the northern Omineca and Mackenzie - Rocky Mtn. belts. The recognition of

MT. TOM PROPERTY

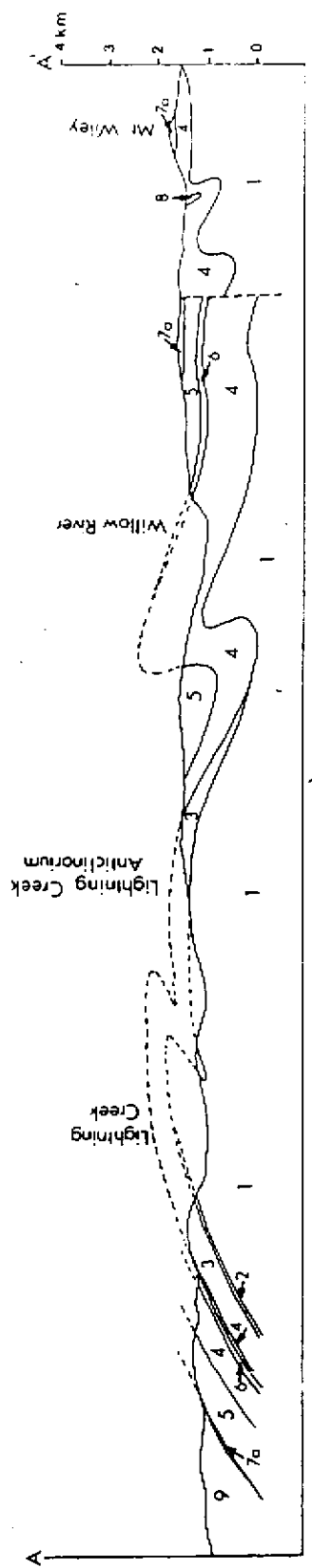
LEGEND

- TRIASSIC AND JURASSIC**
 9 a: dark grey slate and phyllite, sandstone
 minor limestone; b: conglomerate
- PENNSYLVANIAN**
 8 bioclastic limestone
- 7 Antler Formation: a: diorite, basalt, serpentinite, b: chert, grey-wacke
- 6 amphibolite, diorite, and sheared equivalents
- PALEOZOIC AND/OR OLDER**
 5 olive micaceous quartzite, dark grey phyllite
- 4 black argillite, slate, and siltite
 muddy conglomerate, limestone
- 3 grey siltite and quartzite
- 2 marble, calcareous sandstone, quartzite
 calcareous phyllite phyllite
- 1 olive micaceous quartzite, light olive grey phyllite and slate, garnet-biotite, muscovite schist

- Geologic contact (approx. and assum.)
 -|- Anticline (overturned)
 -|- Syncline (overturned)
 -|- Fault (approx. and assum.)



(Geology after Struik, 1981)



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Mt. Tom Property

REGIONAL GEOLOGY

Scale: as shown

Mar. 15/82 93H/4,5

Figure 4

this correlation gives the Mt. Tom area a potential for having similar deposits.

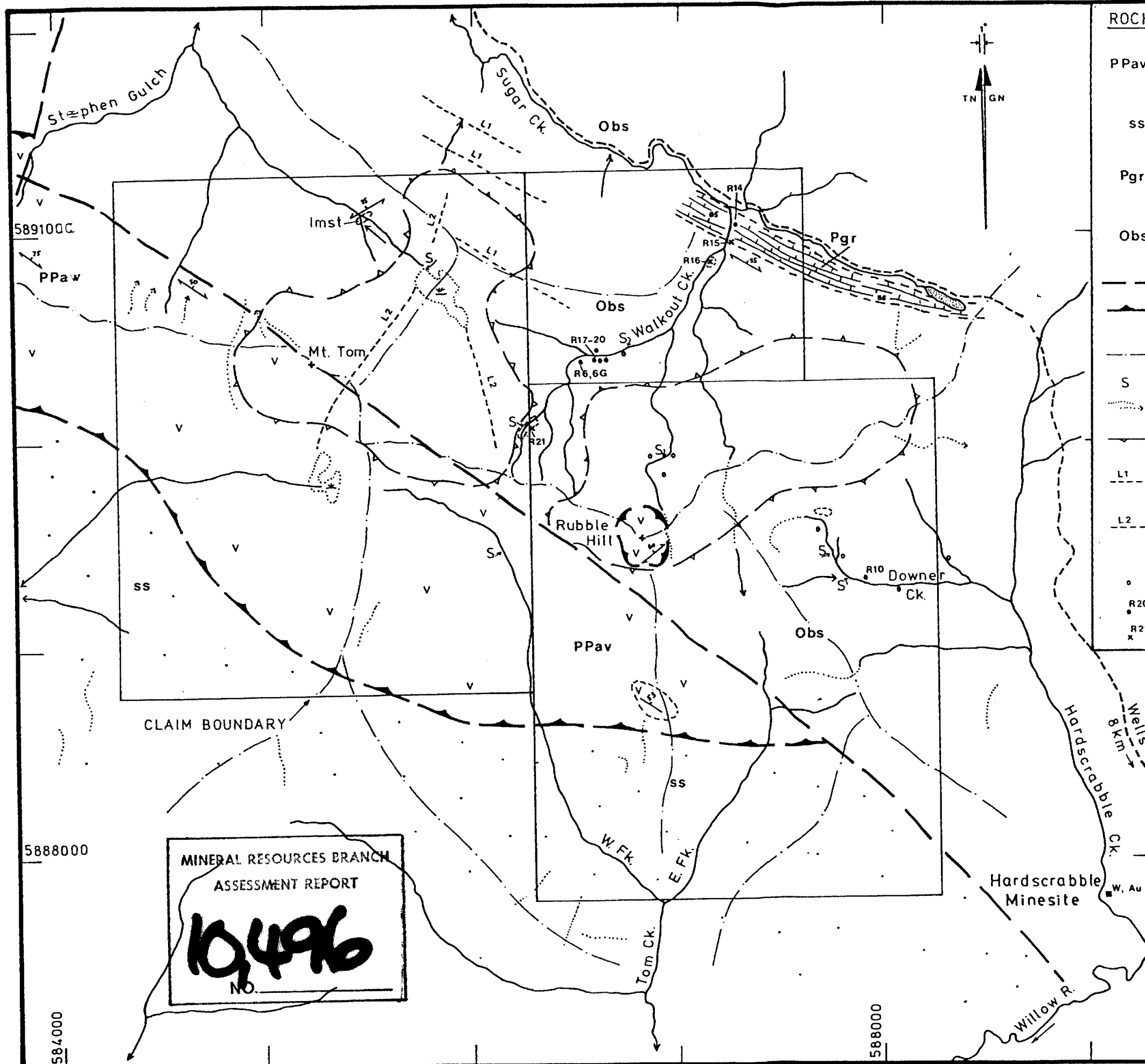
3.2 Property

















Figure 5 is a reconnaissance geological map of the Mt. Tom area. The rock formation nomenclature and the inferred thrust and high-angle faults are as shown by Struik (1981b). The few outcrops found are shown as the geomorphological features; meltwater channels and approximate extent of the upland plateau remnant. Assayed outcrop and float sample sites are indicated.

Outcrops of three units are found on the property. These are the black phyllite and argillite unit (Black Stuart Fm. or unit 4 of Figure 4), black micritic limestone (Greenberry Limestone Member or unit 8 of Figure 4) and greenstones (Antler Fm. or unit 7 of Figure 4).

The black phyllites and argillites are thinly interbedded, pyritiferous and iron-oxide stained. Coarse crenulations and minor folds plunge at moderate angles to the northwest or southeast. Towards Sugar Ck. the phyllite outcrops display porphyroblasts of siderite(?) to 1 cm diameter. The foliation of the phyllites dips at moderate to steep angles to the northeast. Representative analysed samples are H4R15, H4R16 and H4R21 (Table 2). These contain low lead, zinc, silver and gold.

The black limestone member forms the bluffs south of Sugar Ck. and the bedrock along the lowermost section of Walkout Ck. The rocks are fine grained to micritic, finely laminated and streaked. Narrow white quartz stringers and pods were seen in a variety of this member near Sugar Ck., a light gray even textured marble. Bedding dips steeply northeast. Black laminated limestone crops out in the upper reaches of the southeast tributary of Stephen Gulch. It is not thought to be a direct continuation of the limestone member to the east but to be an infolded segment or fault slice in the prominent



- ROCK FORMATIONS** (after Struik, 1981)
- PPav  Pennsylvanian-Permian Antler Fm; pillow basalt, diabase, chlorite schist, greenstone
 - ss  Snowshoe Fm; grit, phyllite, micaceous quartzite
 - Pgr  Mississippian-Permian Greenberry Fm; black micritic limestone, light gray marble
 - Obs  Ordovician-Mississippian Black Stuart Fm; black mudstone, slate, argillite, phyllite
-  high-angle fault (inferred)
 -  thrust fault (inferred)
 -  watershed divide
 -  seep with abundant iron oxide ppt.
 -  dry gully of meltwater origin
 -  upland area; gentle topography, rather featureless, above break in slope
 -  lineament, interpreted as marking lithologic change
 -  lineament, uncertain origin; shallow break in slope, alignment of small meadows
 -  vein quartz float
 -  outcrop
 -  R20 sampled vein quartz float
 -  R21 sampled outcrop

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10,496
NO.

CANADIAN MINERAL CORPORATION

MT TOM PROPERTY
Cariboo M.D., B.C.

GEOLOGY

0 1000m

Scale 1:20,000 March 9/82 Figure 5

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Table 2. Rock analyses and assays.

<u>Sample No.</u>	<u>Description</u>	<u>Rock Geochemical Analyses</u>	
H4R15	black phyllite and argillite, thin bdd, folded	1 ppm Pb, 88 ppm Zn, 0.3 ppm Ag, <10 ppb Au	
H4R16	black phyllite	10 ppm Pb, 49 ppm Zn, 1.0 ppm Ag, 10 ppb Au	
H4R21	black phyllite, pyritiferous, Fe-oxide surface stains	1 ppm Pb, 44 ppm Zn, 0.3 ppm Ag, 10 ppb Au	
		<u>Assays</u>	
H4R6	rusty white vein quartz boulder	0.36 oz/t Ag	0.268 oz/t Au
H4R6G	rusty white vein quartz boulder with pyrite and galena	33.20 oz/t Ag 49.30% Pb	0.006 oz/t Au
H4R10	vein quartz float in creek, minor galena	1.00 oz/t Ag 0.71% Pb	0.010 oz/t Au <0.01% Zn
H4R14	vein quartz float in creek	<0.01 oz/t Ag	<0.003 oz/t Au
H4R17	rusty white vein quartz boulder, + pyrite	0.05 oz/t Ag	0.006 oz/t Au
H4R18	rusty white vein quartz boulder, + pyrite	<0.01 oz/t Ag	0.017 oz/t Au
H4R19	rusty white vein quartz boulder, + pyrite	0.01 oz/t Ag	0.024 oz/t Au
H4R20	white vein quartz boulder, + pyrite	0.09 oz/t Ag	0.054 oz/t Au

northwest trending lineament marked by the tributary.

Varieties of the Antler Fm. (unit 7 in Figure 4) cropping out on the property are medium grained greenish gray foliated diorite and foliated greenstone which make up Rubble Hill. There are numerous irregular quartz veins and pods with manganese oxide-filled vugs in these outcrops.

White to rusty and vuggy vein quartz boulders and blocks are abundant along the stream courses. Angular quartz blocks to 4 m diameter occur in the upper reaches of Downer Ck., and angular boulders to 1½ m diameter were found in the stream banks of middle stretches of Walkout Ck. Stream prospecting and the follow-up of geochemical anomalies found two areas of galena-bearing quartz float, site H4R10 on Downer Ck. and site H4R6, R6G on Walkout Ck. (Figure 5). Pyrite-bearing quartz float was found in the stream bank a short distance downstream from the latter (samples H4R17-20). The sulphides are coarsely crystalline and fresh appearing. The assays of these samples are given in Table 2. The highest value of gold was that in H4R6, 0.268 oz/ton (with 0.36 oz/ton Ag) and the highest value of silver was that in H4R6G, 33.20 oz/ton Ag (with 49.3% Pb and 0.006 oz/ton Au).

Struik (1981a) has inferred and approximated a high-angle fault trending northwest which passes near to Mt. Tom. Its projection to the southeast is very near to the Hardscrabble Mine site. No definite fault structures were recognized on the ground or in aerial photographs. Lineaments L2 in Figure 5 are expressed by breaks in the slope and changes in vegetation type on the upland surface. As they are oriented transverse to the drainage and to regional stratigraphic attitudes they could reflect fractures in the bedrock. No outcrops were found in their vicinity. It is speculated that the southeast tributary of Stephen Gulch lies on a major fracture zone. When projected to the southeast this trend incorporates the area of gold-bearing quartz float and the large vein quartz blocks at the

headwaters of Downer Ck. Still farther to the southeast the projection of this inferred structure comes within a few hundred meters of the Hardscrabble Mine site, whose mineralization was controlled by northwest trending faults (Little, 1959).

4 GEOCHEMISTRY

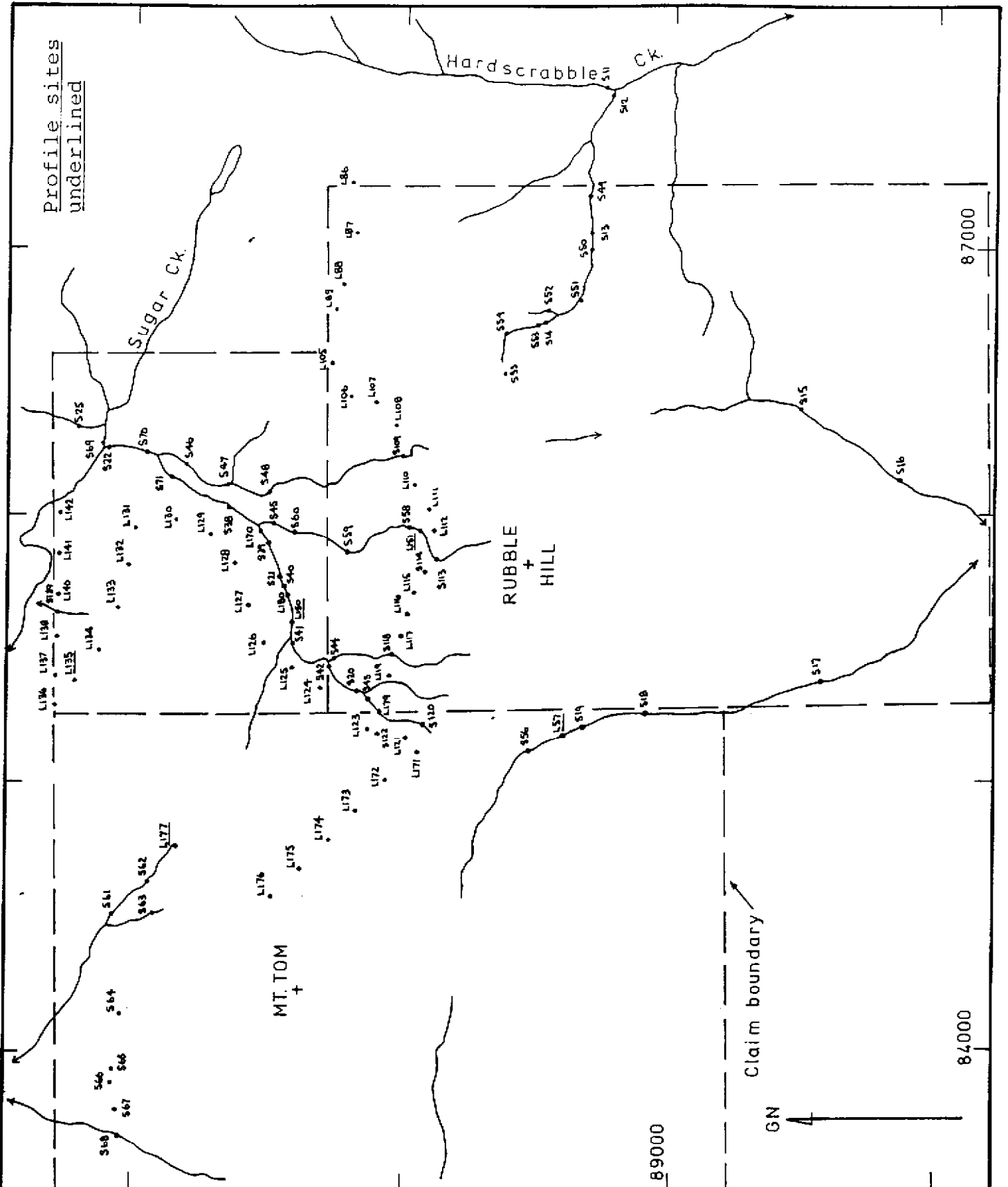
4.1 Introduction

The geochemical work was of a reconnaissance nature and accompanied the prospecting. Sixteen man-days were spent on these combined activities. 56 stream sediment samples and 60 soil samples were collected. There were three stages to the sampling. First, reconnaissance stream sediment sampling was done on the major tributaries. Because of promising results on Walkout and Downer Creeks additional samples were then taken at 200 m intervals along the creeks. The third stage of sampling was contour soil sampling at 150 m intervals along the northeasterly facing slope of the claims, soil profile sampling and additional sediment sampling. The objectives of the sampling were to determine the nature and distribution of geochemical anomalies.

A review of the literature showed that many, but not all, of the gold-quartz deposits are accompanied by argentiferous galena and/or sphalerite. For this reason lead, zinc and silver were used as pathfinder elements.

4.2 Sampling Method

Figure 6 is a geochemical sample location map. Soil samples are prefixed with an 'S' and soil samples with 'L'. Conventional sampling practices were followed. Samples were collected in 3½ x 6" Kraft paper bags and their sites marked by flags. Soil sampling was preceded by digging pits to 1 m deep with a spade and determining the local profile. At a few localities the entire profile was described and sampled. These results are



Profile sites
underlined

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Mt. Tom Property

Scale 1:20,000

Mar. 12/82 93H/4E

GEOCHEMICAL SAMPLE LOCATIONS

0 500m

Figure 6

(L-soil, S-sediment)

described in a following section. The BF horizon was preferentially sampled if it was present. As only the minus 80 fraction of both silt and soil samples was analysed coarse gravel and rock fragments were removed before bagging. Samples were air dried before sending to the laboratory.

Observations were recorded on field data cards, examples of which are shown in Appendix I. Appendix I also lists the soil and stream sediment samples and particulars on the sample sites.

4.3 Analytical Procedure

The geochemical samples were assayed by Chemex Labs Ltd., 212 Brooksbank Ave., North Vancouver, B.C. Conventional procedures, described in Appendix II, were followed on the minus 80 fraction of silts and soils.

4.4 Overburden Origin and Soil Profiles

Geomorphological features are indicated in Figure 5, including drainage basins and location of seeps. As described in Section 2.2 the claims area is covered by a thick mantle of locally derived till. In several places along the stream banks there are exposures of till more than 15 m high. On the gently sloping upland area pits were dug to 1½ m exposing compacted tills with angular black phyllite gravel.

Soil profiles are moderately well developed on the till. The organic mat is generally 5-10 cm thick and underlain by a BF horizon 10-20 cm thick. This in turn overlies the parent material. On the upland area the BF horizon was not developed, the only discernable layer between the A and C horizons was a BM layer, 10-20 cm thick. On the steep slopes along the northern part of the claims debris slumps of materials derived from till have buried the earlier soil profile. Commonly, up to ½ m of this till-like gray to bluish clayey angular gravel lie on top of a moderately well developed BF horizon overlying parent till material. These slopes are thickly forested so the slumping activity is of some age.

Appendix III shows five representative soil profiles along with geochemical analyses.

4.5 Data Handling

Site data were transferred from field data cards to a geochemical retrieval, sort and search program on a 64K Apple II Plus computer for subsequent analysis.

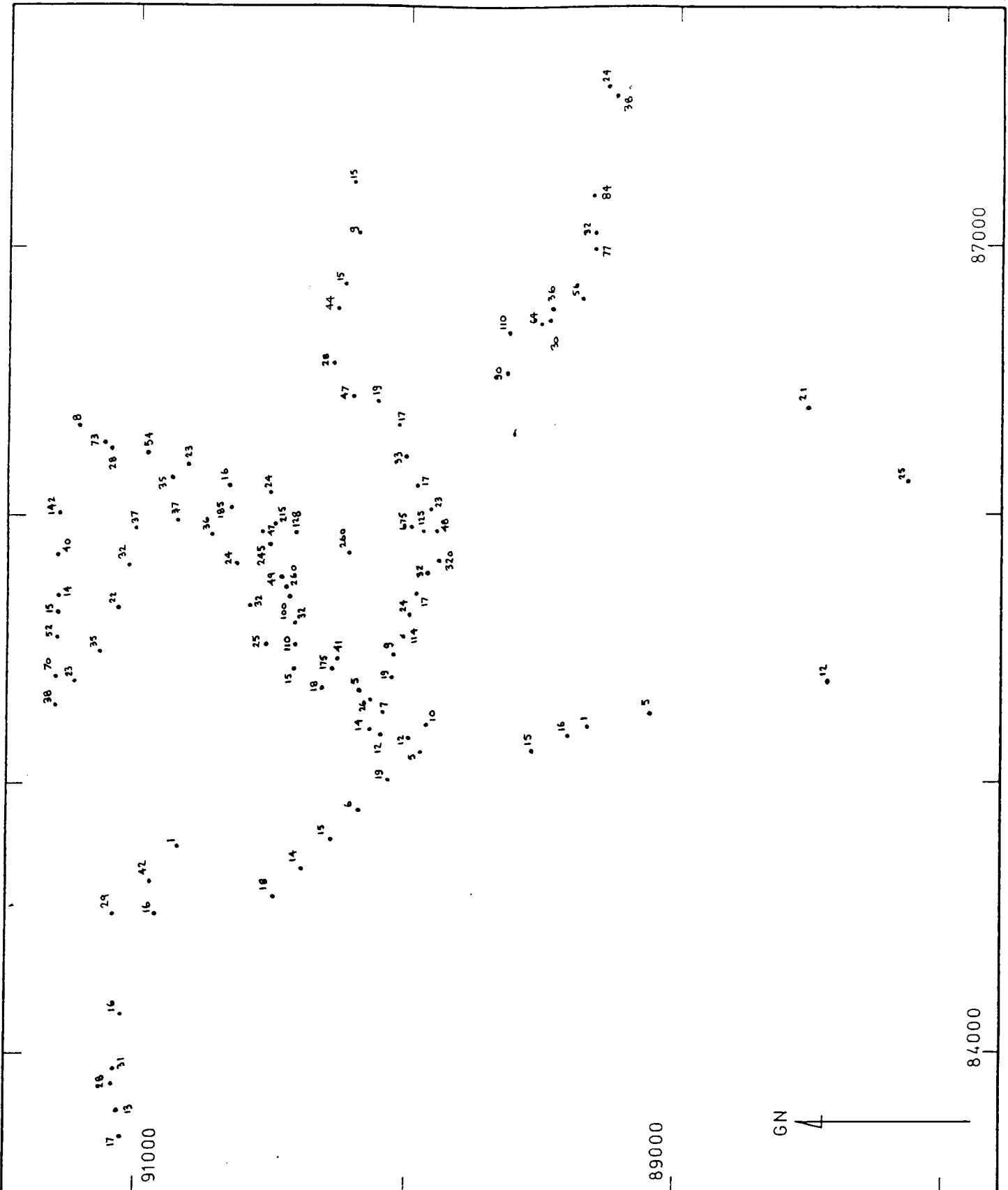
Figures 7 to 11 show the analytical results for Pb, Zn, Ag, W and Au. Histograms for Pb, Ag and Zn, both soil and silt data sets, are shown in Appendix IV. Table 3 summarizes statistical parameters of each data set.

The geochemical data were treated using a modified gradient analysis technique. All values were plotted in 'Clarke' (KK) units rather than parts per million (or billion) and using a factor of 2 between cell limits regardless of the statistical properties of the data set. The Clarke unit is an estimate of the abundance of an element in the Earth's crust and provides a convenient datum. The Clarke values used here are from Levinson, 1974 (Introduction to Exploration Geochemistry, Applied Publishing Ltd., Calgary). A KK of 1 indicates an average crustal abundance (12.5 ppm in the case of Pb). A KK of 2 indicates twice the average abundance, and so on.

Because the average abundance of gold, 4 ppb, lies below the detection level for the Chemex Labs determination, 10 ppb, the assignment of KK intervals was slightly modified from the procedure outlined above. All analyses reporting <10 ppb were assigned to the 1-2 KK interval, 10 ppb = 2-4 KK, 20 ppb = 4-8 KK, etc.

The Clarke values and KK intervals are listed in Table 4. The KK code numbers refer to intervals and were used to simplify computer processing. Appendix V contains histograms of the KK intervals represented in each data set for Pb, Zn, Ag and Au.

Appendix VI contains plots of lead vs zinc, silver vs lead, silver vs zinc and silver vs gold for all samples where one or more of these pairs were determined.



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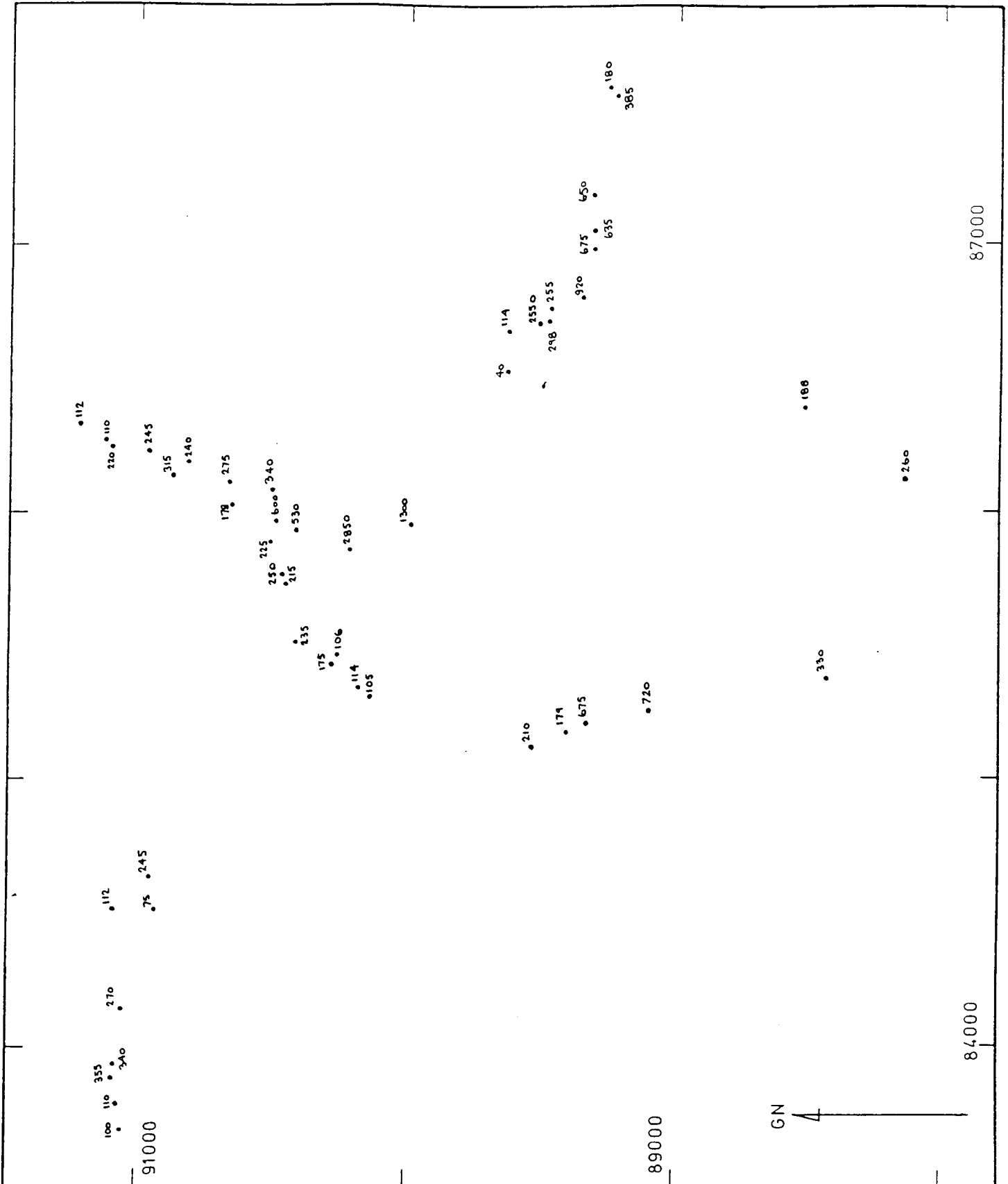
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Mt. Tom Property

Scale 1:20,000
 0 500m

Mar. 16/82 93H/4E
 Figure 7

GEOCHEMICAL RESULTS - Pb (ppm)



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Scale 1:20,000

0 500 m

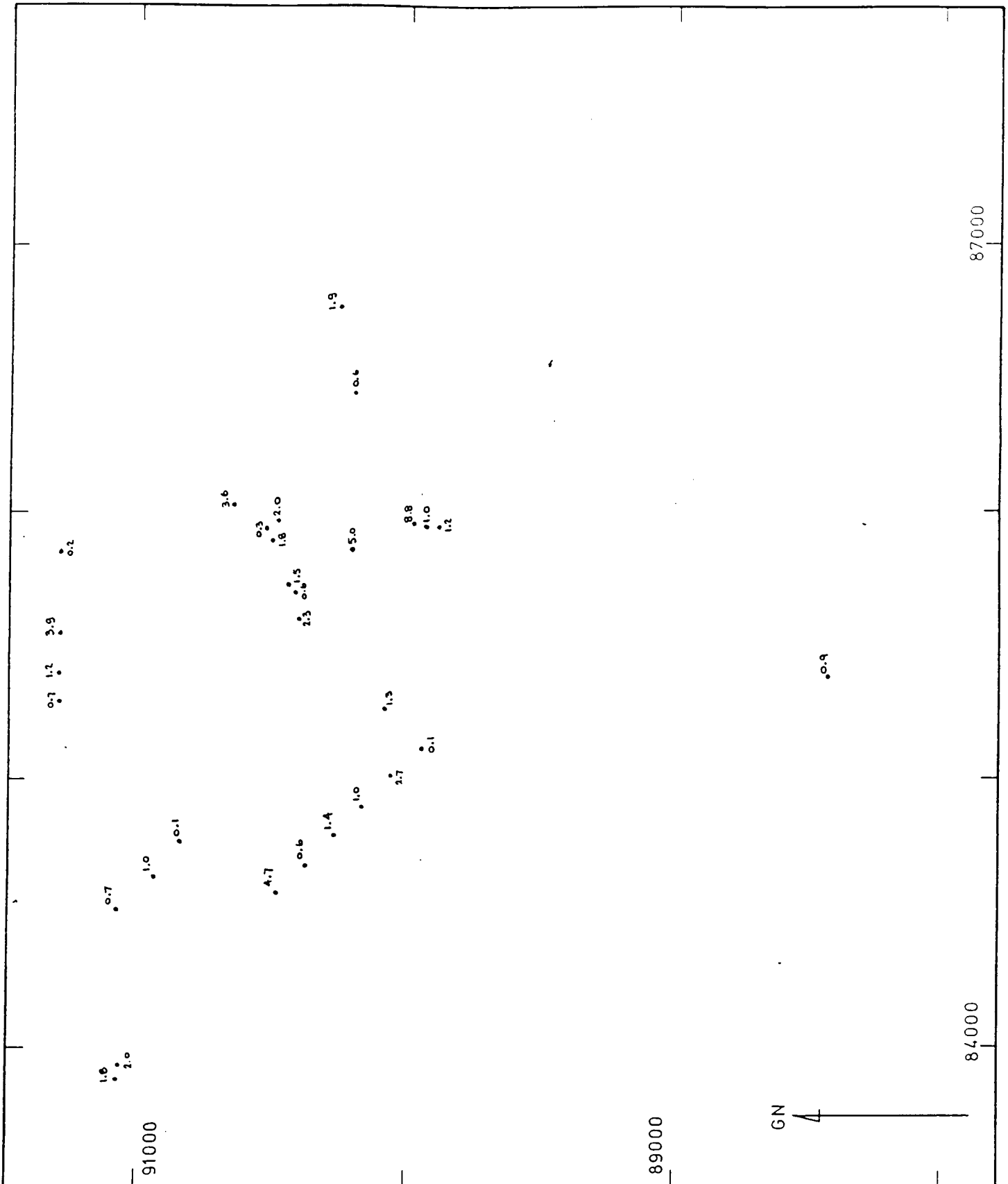
Mar. 16/82 93H/4E

Figure 8

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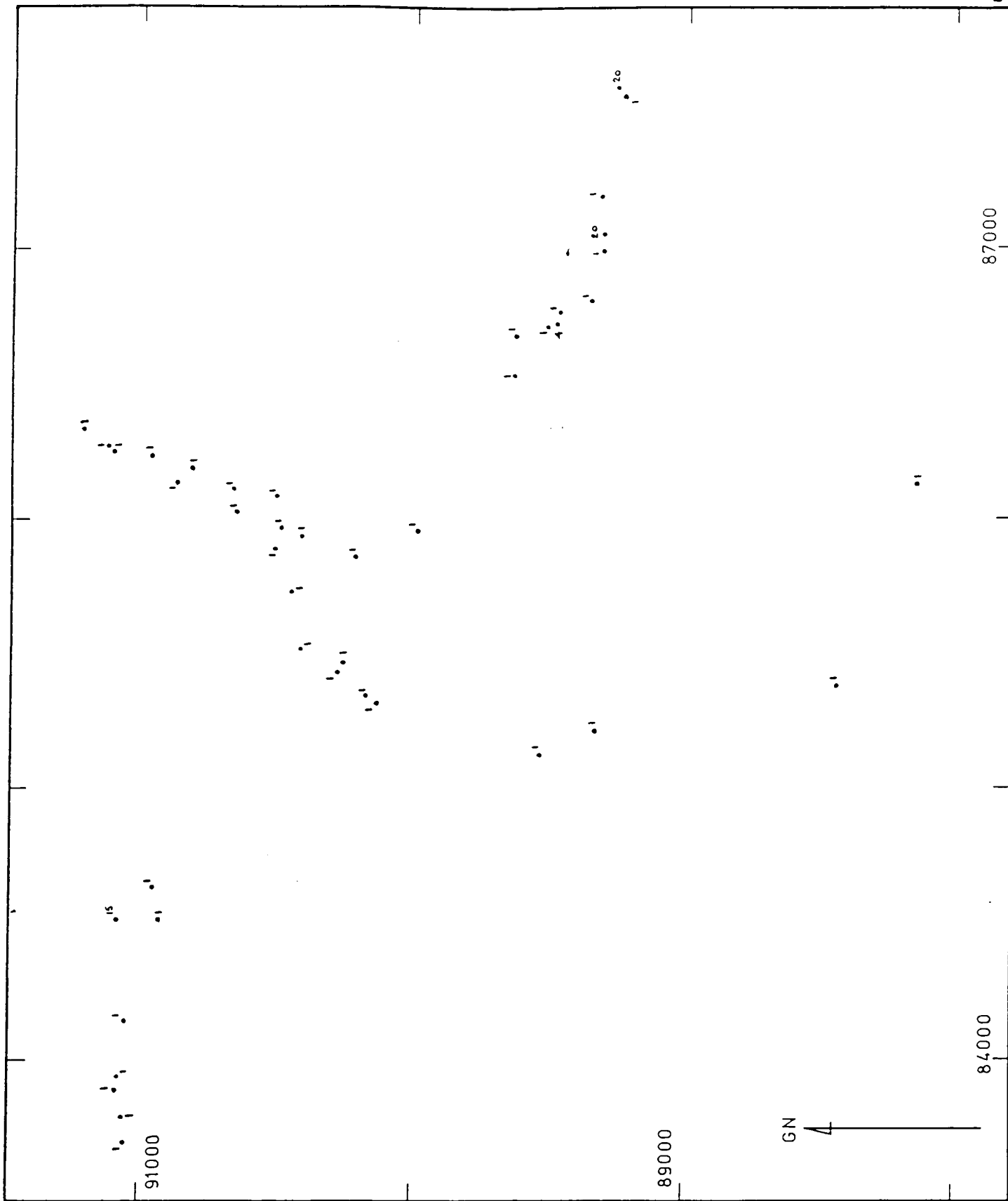
Mt. Tom Property

GEOCHEMICAL RESULTS - Zn (ppm)



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Scale 1:20,000 0 500m	Mar. 16/82 93H/4E	
Figure 9		

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Mt. Tom Property
GEOCHEMICAL RESULTS - Ag (ppm)



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Mt. Tom Property

Scale 1:20,000

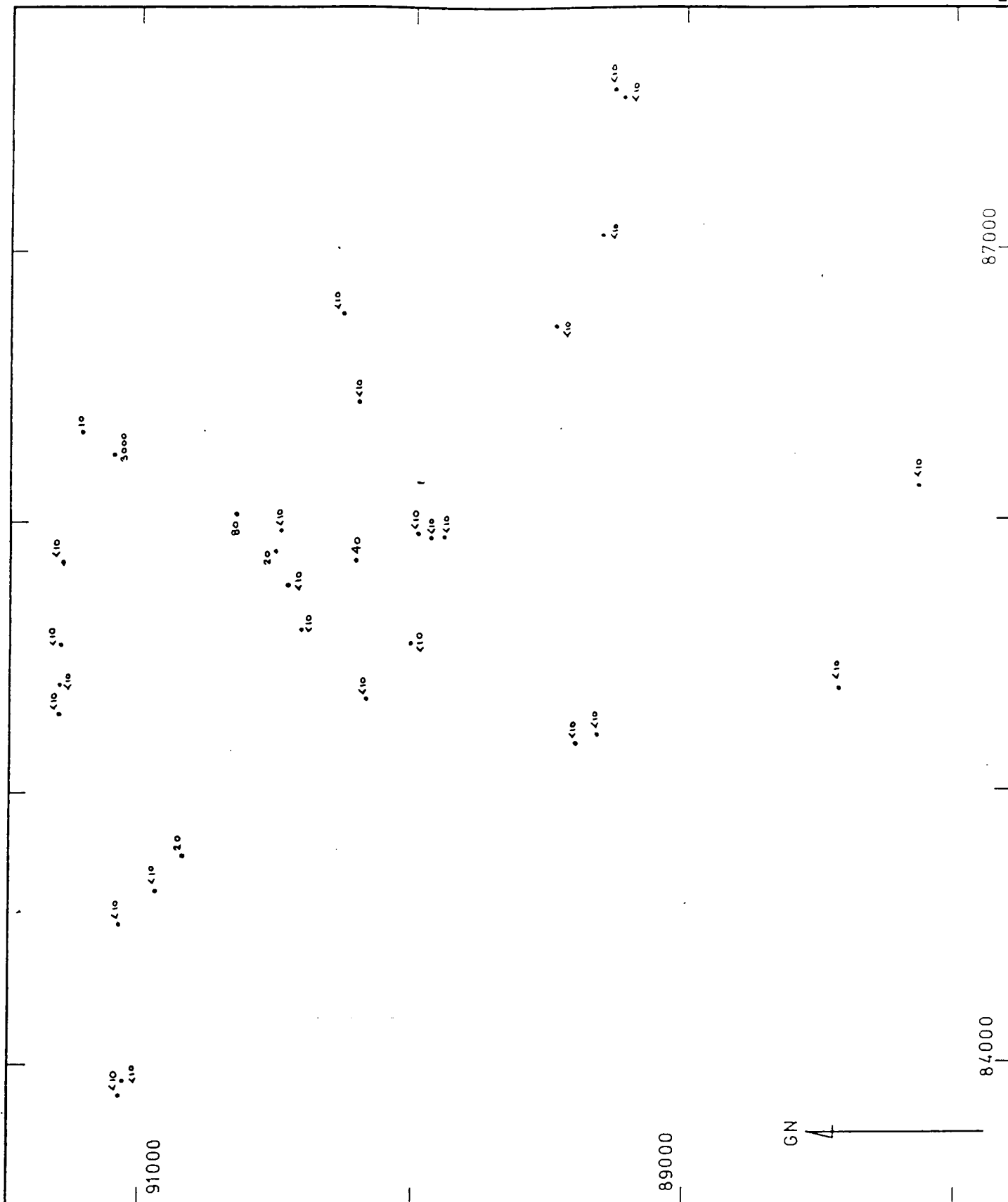


Mar. 16/82

93H/4E

Figure 10

GEOCHEMICAL RESULTS - W (ppm)



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	Scale 1:20,000 	Mar. 16/82 93H/4E Figure 11

CANADIAN MINERAL CORPORATION Mt. Tom Property
GEOCHEMICAL RESULTS - Au (ppb)

Table 3. Summary of geochemical statistics. Values in ppm except for Au (ppb).

<u>Silt Samples</u>	<u>Element</u>	<u>No. Samples</u>	<u>Range</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Statistical Threshold(1)</u>	<u>Local Threshold(2)</u>
	Pb	53	1-675	72.9	112.3	297	200 (16KK)
	Zn(3)	43	40-2850	296.1	206.2	708	1120 (16KK)
	Ag	10	0.6-8.8	2.82	2.45	7.7	1 (14KK)
	W(4)	46	1-20	nd	nd	nd	3 (2KK)
	Au(5)	20	<10-3000	nd	nd	nd	10 (2.5KK)
<u>Soil Samples</u>							
	Pb	48	1-125	30.3	25.8	82	70 (6KK)
	Ag	20	0.1-4.7	1.33	1.23	3.80	0.56 (8KK)
	Au(6)	12	10-20	nd	nd	nd	10 (2.5KK)

- (1) Mean + (2 standard deviations)
- (2) from regional work or gradient analysis
- (3) samples with 1300, 2550 and 2850 deleted from calculations
- (4) 42 samples with 1 ppm W
- (5) 15 samples with < 10 ppb Au
- (6) 11 samples with < 10 ppb Au

Table 4. Clarke values and KK intervals. Average crustal abundances from Levinson, 1974.

<u>KK Code</u>	<u>KK (Clarke) Unit Intervals</u>	<u>Pb</u> (ppm)	<u>Zn</u> (ppm)	<u>W</u> (ppm)	<u>Ag</u> (ppm)	<u>Au</u> (ppb)
9	>128	-	-	-	-	> 640
8	64-128	-	-	-	4.48-8.96	320-640
7	32-64	400-800	2240-4480	-	2.24-4.48	160-320
6	16-32	200-400	1120-2240	-	1.12-2.24	80-160
5	8-16	100-200	560-1120	12-24	0.56-1.12	40-80
4	4-8	50-100	280-560	6-12	0.28-0.56	20-40
3	2-4	25-50	140-280	3-6	0.14-0.28	10-20
2	1-2	12.5-25	70-140	1.5-3	0.07-0.14	10
1	<1	<12.5	<70	<1.5	<0.07	-

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4.6 Results

4.6.1 Stream Sediments

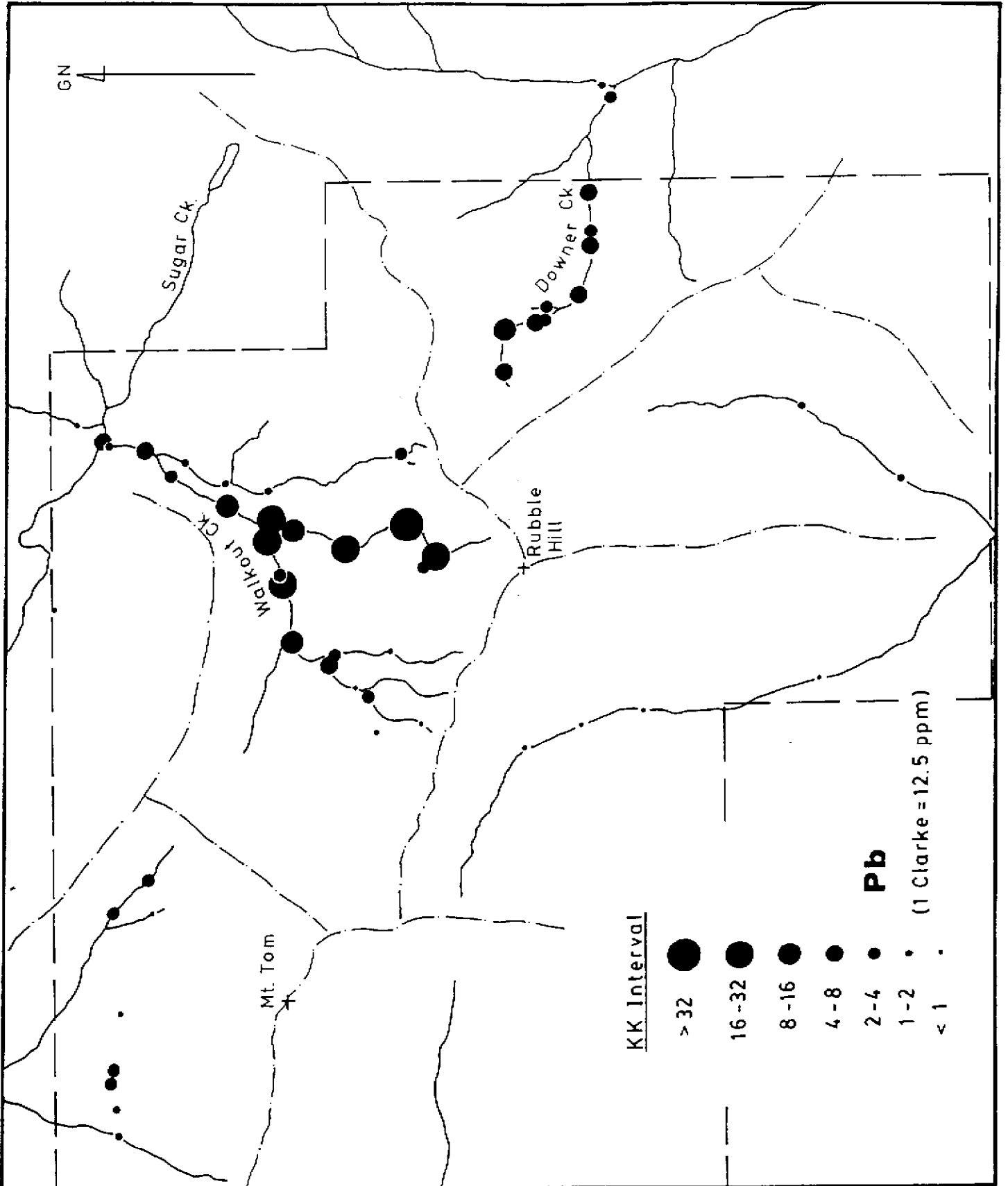
Lead (Figure 12)

Values greater than 2 Clarkes (25 ppm Pb) occur on the northeast side of the Mt. Tom - Rubble Hill ridge, an area underlain by black phyllites and argillites. Values greater than 16 KK (200 ppm Pb) are taken to be anomalous. These occur in Downer Creek and in tributaries of Walkout Ck. The gradient dot map (Figure 12) illustrates the increasing lead contents upstream along Downer Ck. and along the second tributary of Walkout Ck. north of Rubble Hill. The anomalous values are not related to seeps or to the break in slope below the upland surface, i.e. they are not considered to be seepage (hydromorphic) anomalies. This is well displayed on the southwestern tributary of Walkout Ck. where Pb contents are least at sites of Fe-oxide precipitate-rich seeps and increase downstream. Galena-bearing vein quartz was found in the vicinity of the anomalous lead area on Walkout Ck.

Zinc (Figure 13)

Up to 8 Clarkes (560 ppm Zn) are considered to be background over the black phyllite and argillite unit. Sites reporting more than 16 Clarkes (1120 ppm Zn) are taken to be anomalous. These occur on Downer Ck. and on the second tributary of Walkout Ck. north of Rubble Hill.

Three areas reporting moderate zinc contents, 635-920 ppm Zn, had rusty red precipitate oozing from nearby seeps and coating the stream sediments. These areas are on Downer Ck., Walkout Ck. and the west fork of Tom Ck. The spatial relation of precipitate-rich seeps and coated sediment yielding high zinc values would argue for hydromorphic accumulation of zinc. However, the one bog profile analysed at a precipitate-rich seepage area (H4L57, Appendix III) shows that the iron oxide coated muck contains less than one half the zinc that the



KK Interval

- > 32
- 16 - 32
- 8 - 16
- 4 - 8
- 2 - 4
- 1 - 2
- < 1

Pb

(1 Clarke = 12.5 ppm)

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Mt. Tom Property

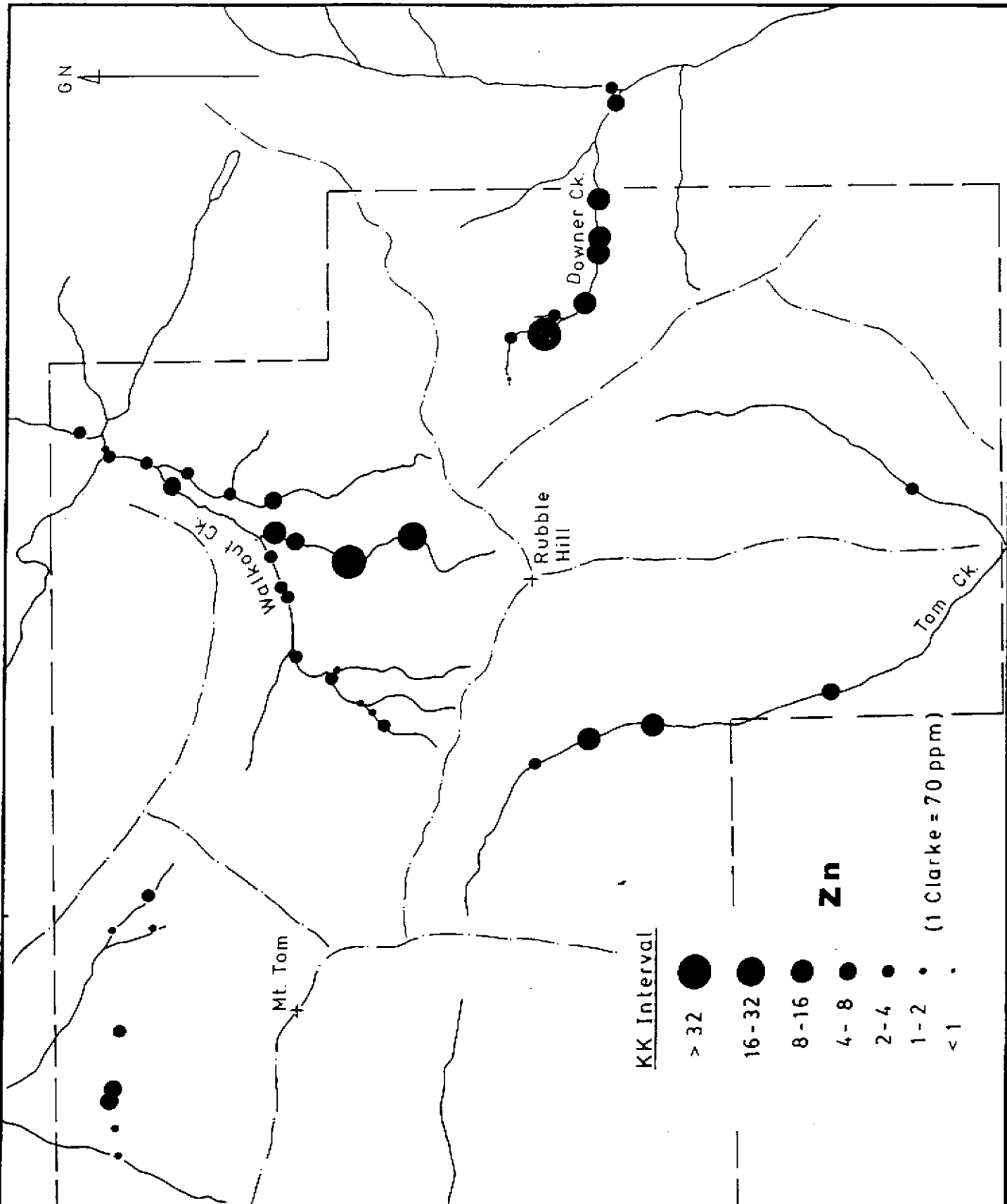
Scale 1:20,000




Mar.12/82 93H/4E

Figure 12

SEDIMENT GEOCHEMISTRY - Pb



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Scale 1:20,000

0 500m

Mar. 12/82 93H/4E

Figure 13

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Mt. Tom Property

SEDIMENT GEOCHEMISTRY - Zn

underlying unoxidized parent till contains. This is supporting evidence for the zinc anomalies being "real", at least in part.

Silver (Figure 14)

The samples chosen for analysis were preselected by having high Pb or Zn contents and being situated on the north slope. Therefore, statistical calculations on this data set are misleading. The regional mean of silver in silts from the Omineca Crystalline Belt is from 0.1 to 0.2 ppm (1-2 Clarkes) and anomalous values are taken to be those above 1 ppm. All ten silt samples contain more than 8 Clarkes Ag (0.56 ppm). The highest values, 5.0 and 8.8 ppm Ag, occur on Walkout Ck.

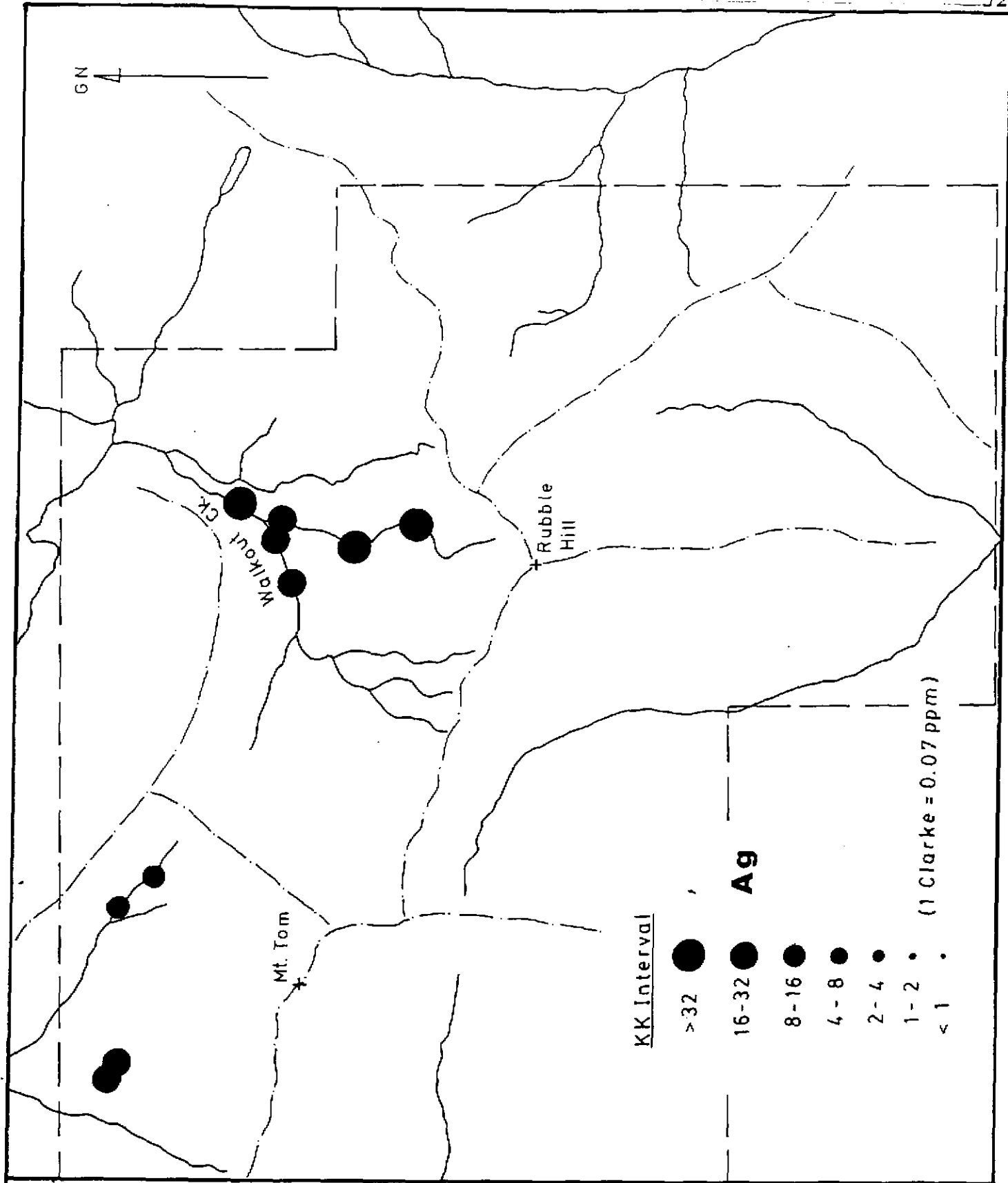
Tungsten (Figure 15)

Background W values are taken to be 1 ppm (<1 Clarke). Anomalous values, more than 2 Clarkes W, are reported in Downer Ck. and in the southern tributary of Stephen Gulch. The latter site was just below an outcrop of black limestone. No values greater than 1 ppm were found in the tributaries of Walkout Ck. Less than 200 m downstream from the two anomalous sites on Downer Ck. are sites with only 1 ppm W. This suggests that the source of W, presumably scheelite, has a relatively short, or at least not a uniform, dispersion train.

Gold (Figure 16)

The site reporting 3000 ppm Au was from an open flat of alluvial materials at the mouth of Walkout Ck. This site is very near historical placer tailings on Sugar Ck. and the gold could have been derived from upper Sugar Ck. In any case, the placer gold is locally derived either from the south slope of Mt. Wiley or from the Mt. Tom property.

Silts with more than 10 ppb Au, the detection limit for these analyses and equal to 2 Clarkes, are taken to be anomalous. Stream sediments with values more than 10 ppb Au



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Scale 1:20,000
0 500m

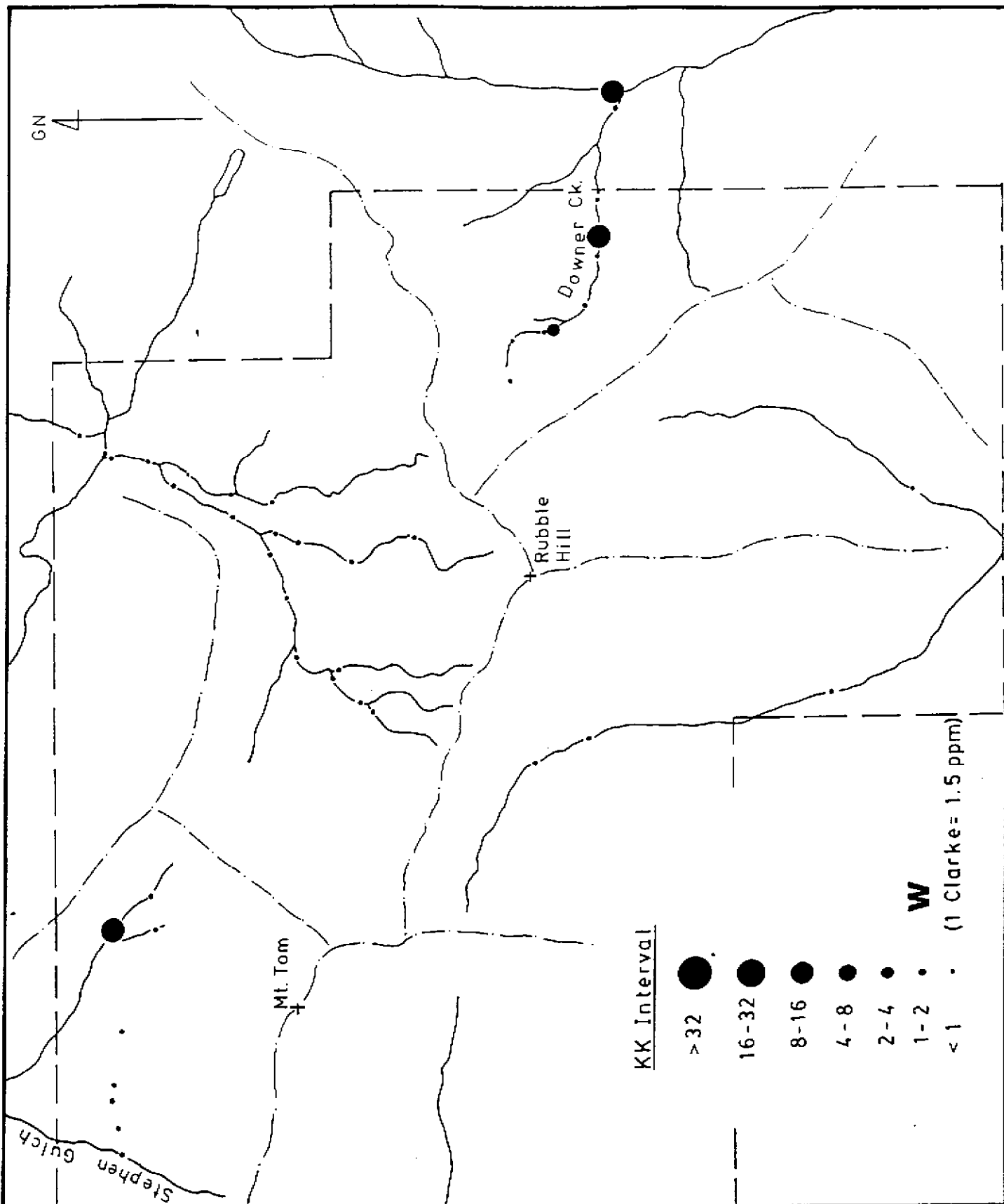
Mar.12/82 93 H/4 E

Figure 14

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Mt. Tom Property

SEDIMENT GEOCHEMISTRY - Ag



KK Interval

- >32
 - 16-32
 - 8-16
 - 4-8
 - 2-4
 - 1-2
 - <1
- W**
(1 Clarke = 1.5 ppm)

CARIBOO GEOTECHNICAL SERVICES LTD.



Scale 1:20,000
0 500m

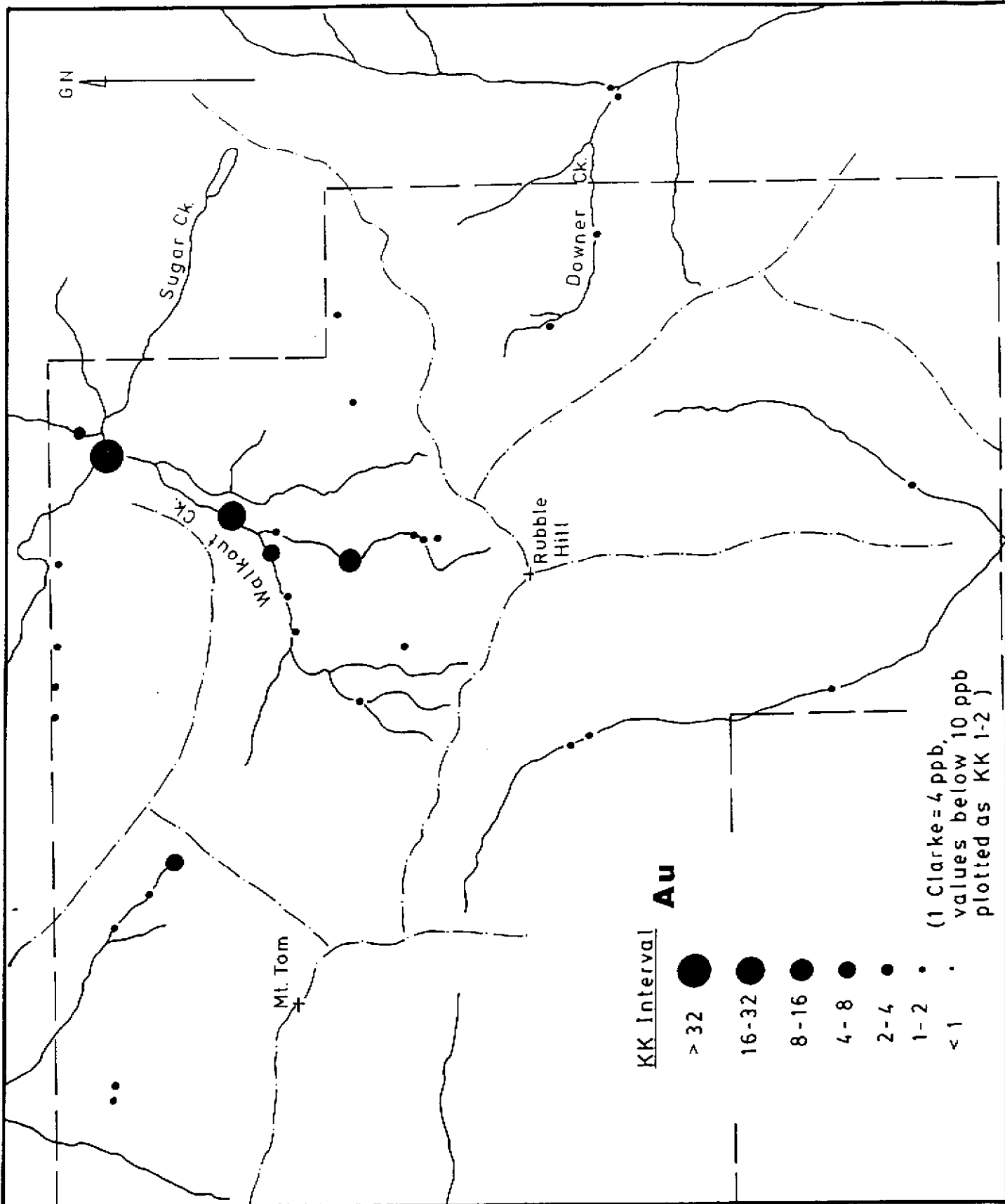
Mar.14/82 93H/4E

Figure 15

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Mt. Tom Property

SÉDIMENT GEOCHEMISTRY - W



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Scale 1:20,000



Mar. 12/82 93H/4E

Figure 16

CANADIAN MINERAL CORPORATION

Mt. Tom Property

SOIL AND SEDIMENT GEOCHEMISTRY - Au

are on Walkout Ck. The highest value, 80 ppb, is well upstream from any possible admixture of valley glaciation or placer activity on Sugar Ck. The gold is either from the lodgement tills that mantle the area or from the black phyllite bedrocks and their contained quartz veins.

4.6.2 Soil Samples

Lead (Figure 17)

Background values are those with up to 6 Clarkes (70 ppm Pb). Anomalous sites, with more than 4 Clarkes, occur north of Rubble Hill, along cut-banks of lodgement till on Walkout Ck. near the galena-bearing vein quartz float and on the north facing slope in the northern part of the claims.

Silver (Figure 18)

The data set is too small for meaningful statistical determination of background. Silver contents greater than 8 Clarkes (0.56 ppm Ag) are taken to be anomalous, based on regional work outside of the report area.

The highest values of silver occur in soils developed on the upland area (4.7 ppm), along the north boundary of the Duck claims (3.9 ppm) and along Walkout Ck. (2.3 ppm). Because of the limited data set no trends are drawn. However, the generalization is made that the northern slope of Mt. Tom-Rubble Hill watershed is characterized by soils with anomalous and significant silver contents.

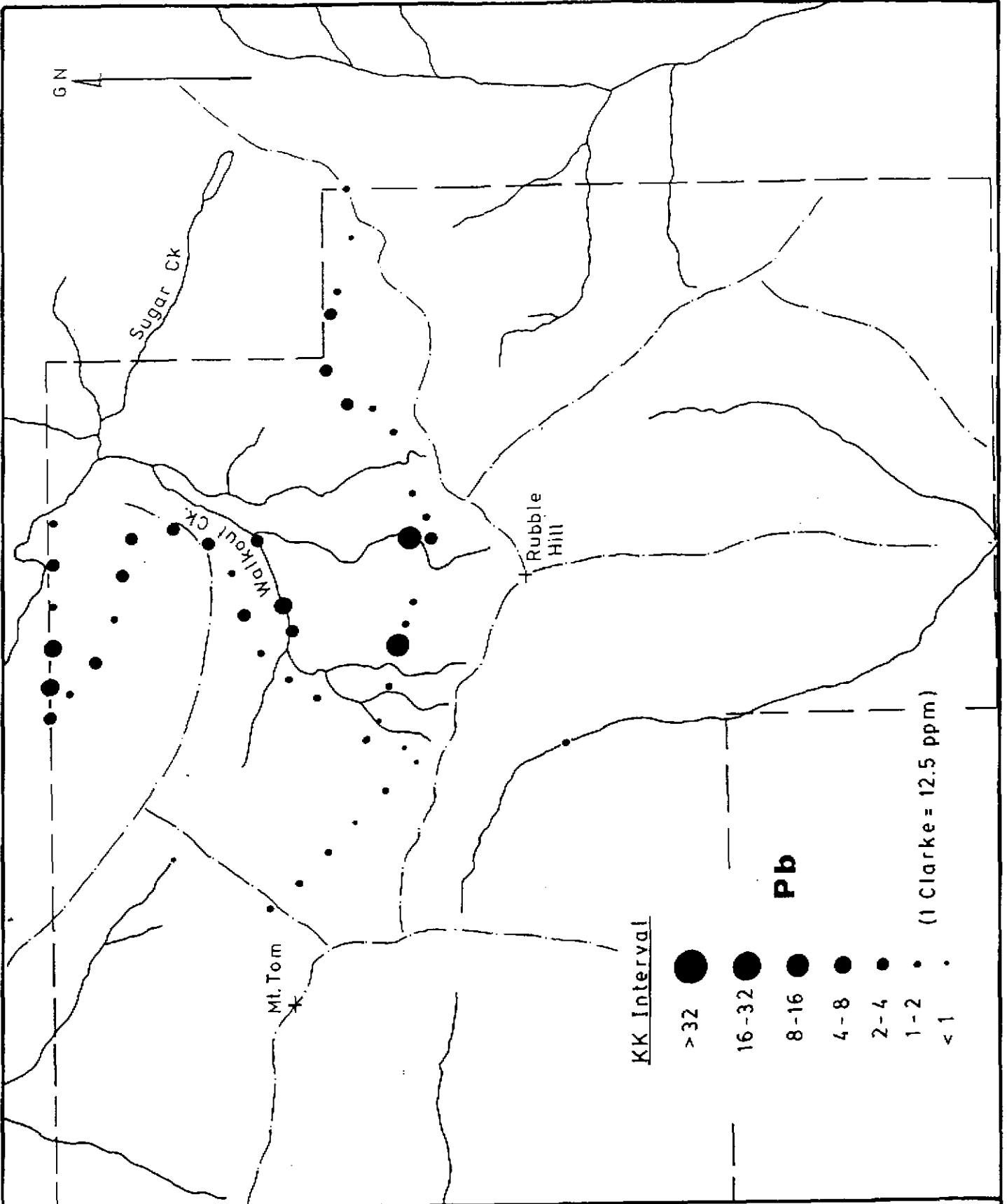
Gold (Figure 16)

The BF horizon at site H4L177 in the northwest corner of the large meadow contains 20 ppb Au, the highest value reported from the few soil samples analysed.

4.6.3 Soil Profiles

Appendix III describes the profile at five sites and presents plots of the variation in metal contents with depth.

Profile H4L57 was measured on the southern slope near the headwaters of Tom Ck. There is widespread brilliant orange and



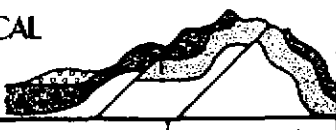
KK Interval

- > 32
- 16 - 32
- 8 - 16
- 4 - 8
- 2 - 4
- 1 - 2
- < 1

Pb

(1 Clarke = 12.5 ppm)

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CANADIAN MINERAL CORPORATION

Mt. Tom Property

Scale 1:20,000

Mar. 12/82

93H/4E

SOIL GEOCHEMISTRY - Pb

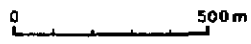
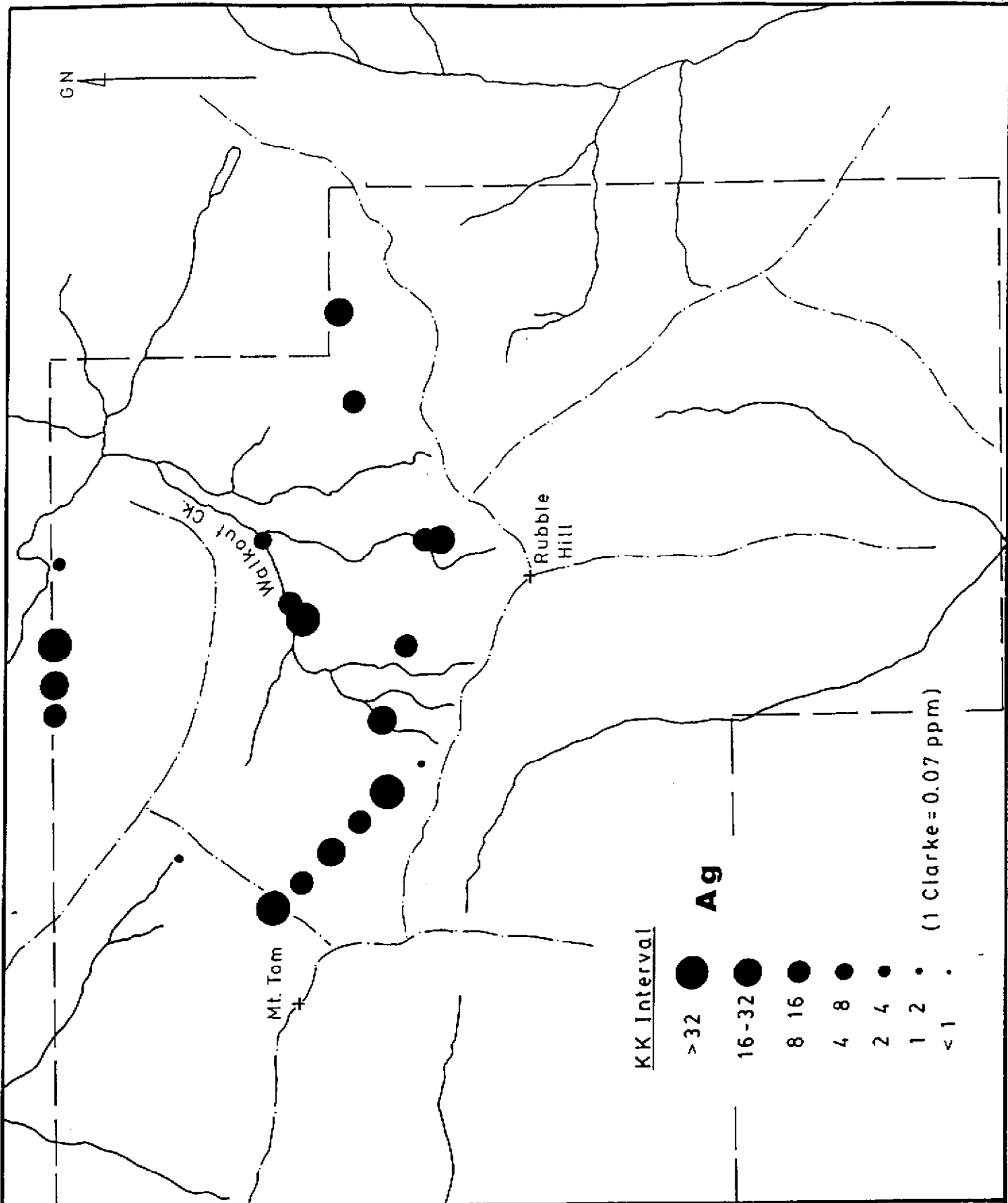


Figure 17



Ag

KK Interval

>32	●
16-32	●
8-16	●
4-8	●
2-4	●
1-2	●
<1	●

(1 Clarke = 0.07 ppm)

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Scale 1:20,000
0 500m

Mar.12/82 93H/4E
Figure 18

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Mt. Tom Property

SOIL GEOCHEMISTRY - Ag

red precipitate in the stream and on the stream banks cut into the meadow at this site. The content of Pb, As and Zn increase with depth into the unoxidized parent till. The till has 15 times as much Pb and more than twice as much Zn than the precipitate muck. Antimony contents are constant below the red organic muck.

Profile H4L135 is from the northern slope of the claims area where slumped till-derived materials have buried an earlier profile. Here the covering gravels carry more lead than the underlying BF horizon. At this site a BM horizon was developed over the compacted clayey gravel which in turn overlies the BF horizon.

Profile H4L150 and L151 are from stream banks cut into colluvium slopes. Lead and silver contents increase with depth.

Profile H4L177 was sited at the downslope, northeast corner of a large meadow on the Upper claims. There was abundant iron oxide precipitate in the stream issuing from this bog. The thickness of the bog was not great, less than 20 cm in a half dozen shallow scoops dug in the general area. The profile was well developed here, including a pronounced dark greasy layer above the till. Lead contents are constant and low in the peat, BF and clay horizons, increasing sharply in the unoxidized till. Like the till at site H4L57 it contains about 15 times as much lead as does the surface precipitate-rich muck. The content of arsenic is somewhat erratic, peaking to 230 ppm in the clay layer.

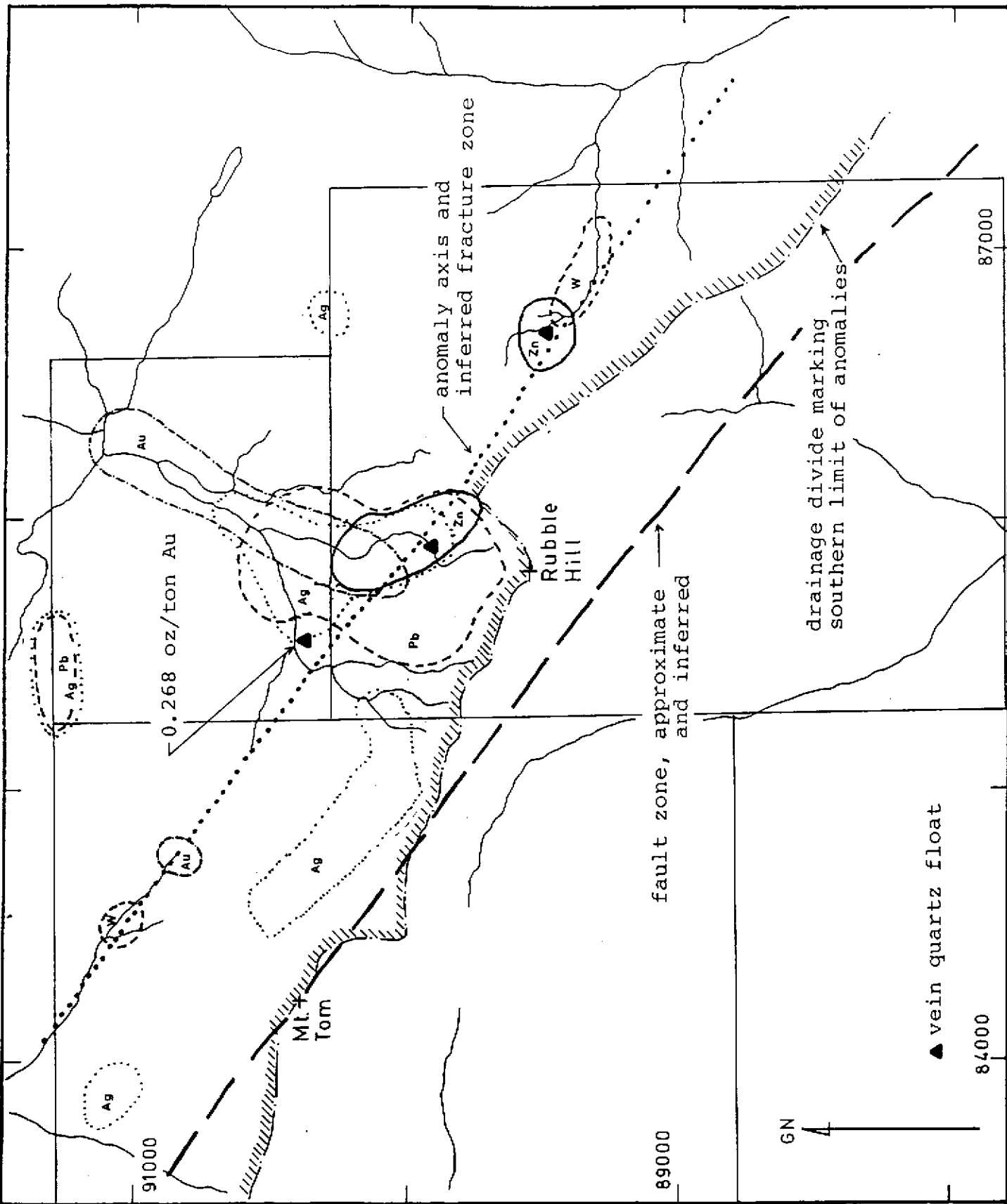
Four of the five analysed soil profiles display an increase of lead, zinc and silver with depth into the parent till material. The one exception, H4L135, is from a site where till colluvium overlies a BF horizon. The parent till was not exposed or sampled at this location.

4.6.4 Metal Ratios

Appendix VI shows plots of metal pairs present in the same sample. There is little correlation between lead and silver in the soil samples. Stream sediments show a much better correlation, silver increasing in a crude fashion with an increase of lead. This observation must be tempered with the fact that only silts with high Pb were re-analysed for Ag. Silver also increase in a general way with increasing zinc content. There is however, no apparent relation between lead and zinc in stream sediments. Of 26 samples with both gold and silver determined five reported gold of 10 ppb or more. The gold vs silver plots of 4 of these 5 samples show a crude positive correlation.

4.7 Discussion of Results and Interpretation

The reconnaissance geochemical silt and soil sampling established that the areas underlain by the black phyllite and limestone units have multielement geochemical anomalies of lead, zinc, silver, tungsten and gold. These are shown in Figure 19. Of particular interest for further exploration are the headwaters of Downer Ck., middle stretches of Walkout Ck. and its tributary north of Rubble Hill, the southeast tributary of Stephen Gulch, the upland area northeast of Mt. Tom and along the north facing slope of the Duck claims. The inferred and approximate axis of the anomalies has a northwest trend, parallel to the regional bedding attitude. It has been drawn to coincide with an inferred fracture on the southeast tributary of Stephen Gulch and the areas where there are abundant large blocks of vein quartz. Possibly it is significant that when this axis is projected to the southeast it passes less than 200 m north of the northwest faults at the Hardscrabble Mine site. According to Little (1959) the northwest faults controlled tungsten and gold mineralization at that mine.



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Scale 1:20,000
0 500m

Mar. 16/82 93H/4E
Figure 19

CANADIAN MINERAL CORPORATION

Mt. Tom Property

INTERPRETATION OF RESULTS

(showing geochemical anomalies)

The source of the lead, silver and gold anomalies is considered to be quartz veins. The interpretation model for mineralization is that one or a number of quartz veins have been emplaced along one or more northwest fracture zones in the black phyllite and limestone rock units. The veining is the result of metamorphic secretion and the ultimate source of the base and precious metals was the black clastic host shale and carbonate.

Of the four elements Pb, Zn, Ag and Au, none appear to be infallible pathfinders for gold-quartz deposits. Au has complications because of possible placer contributions, Ag and the other metals may or may not be present with gold. The best approach would therefore be to analyse for all four elements, taking advantage of the mobility of Zn, the comminution property of galena and the general presence of silver with gold.

5 CONCLUSIONS

5.1 Geomorphology

A ground moraine or lodgement till covers most of the moderately dissected hilly claims area. The upland areas are remnant of a Tertiary plateau. At present this area has a gentle topography with a few rounded hills. It lacks surface drainageways apart from small streams draining its few sub-alpine meadows. Below the break in slope marking the edge of the upland surface are numerous springs and seeps, many of which have iron-oxide precipitates.

On the northern slopes streams have cut deeply into the thick till mantle exposing bedrock at a few localities. The till is locally derived and its composition reflects the underlying lithology.

5.2 Lithology

Three rock units crop out in the claims area. These are

black phyllites and argillites of the Ordovician - Mississippian Black Stuart Fm., black limestone of the Mississippian - Permian Greenberry Limestone Member, and diorite and greenstone of the Pennsylvannian - Permian Antler Fm.

Angular vein quartz boulders up to 4 m diameter were found in the upper sections of creeks underlain by the black phyllite and argillite unit. The vein quartz is presumed to have come from this unit.

5.3 Structure

Bedding and foliation of the black phyllite and argillite unit dip at moderate to steep angles northeast. Rocks of the Antler Fm. have been overthrust onto the Mt. Tom ridge and make up a klippe. No faults were observed in outcrop. A major northwest fault inferred by Struik (1981a) separates Antler Fm. rocks on the south side of Mt. Tom from Black Stuart Fm. rocks on the north side. When projected to the southeast this fault(s) passes just south of the Hardscrabble Mine site. 500 m north of this fault is a parallel feature interpreted from the coincidence of a drainage lineament, locations of coarse vein quartz float and axis of geochemical anomalies. This feature is inferred to represent a fracture zone, along which mineralization has been localized or controlled.

5.4 Mineralization

Three representative samples of black argillite and phyllite from Walkout Creek were analysed. These contain up to 10 ppm Pb, 88 ppm Zn, 0.3 ppm Ag and 10 ppb Au.

Eight samples of vein quartz float were assayed. The majority and most metalliferous were from the vicinity of the geochemical anomalies on Walkout Ck. Gold assayed 0.268 oz/ton and silver 0.36 oz/ton in a sample with no visible sulphides. The gold content is more than any reported from Cooper or Sugar Creeks. A galena-rich sample carried

33.2 oz/ton silver with 49.3% Pb and 0.006 oz/ton Au. Of eight vein quartz samples 7 contained gold above the detection limit, 0.003 oz/ton.

The presence of quartz float with significant gold and silver values indicates that there is a high potential of gold-quartz vein deposits on the property. Not enough outcrop was found to make a conclusion on the potential for stratiform lead-zinc deposits or for auriferous replacement deposits.

5.5 Geochemistry

Anomalies of Pb to 675 ppm, silver to 8.8 ppm, gold to 80 ppb, tungsten to 20 ppm, and zinc to 2850 ppm occur in silts and soils north of the main drainage divide on the Mt. Tom ridge. These anomalies fall in 4 smaller drainage basins which are underlain by rocks of the Black Stuart Fm. and the Greenberry Limestone Member. One silt site at the mouth of Walkout Ck. carried 3000 ppb Au but it could be argued that its presence was because of placer mining on Sugar Ck.

With the possible exception of some part of the zinc anomalies, the metal accumulations are not considered to be seepage anomalies. Metal contents increase with soil profile depth, both in meadows and bogs and in soils developed directly on till.

The geochemical anomalies are interpreted to be aligned in a northwest - southeast direction. This geochemical axis projects to the same general vicinities as the mineral showings on Cooper and Sugar Creeks and the Hardscrabble Mine site. It is interpreted that this alignment marks a mineralized fracture trace. Further exploration should test the possibility of such a fracture.

The tungsten anomaly near the limestone outcrop north of Mt. Tom indicates a good potential for scheelite-quartz or carbonate veins being found.

6 RECOMMENDATIONS

It is recommended that Canadian Mineral Corporation pursue exploration for gold and silver-bearing vein quartz deposits on the Mt. Tom property. In order to locate the sources of the geochemical anomalies and the gold-bearing quartz float the following tactics are proposed.

- 1) A sampling grid with 25 m centers should be established on the upland surface. The grid should extend from the main drainage divide on the Mt. Tom - Rubble Hill ridge north and east as far as the break in slope. The C horizon should be sampled and analysed for Au, Ag, Pb and Zn. Priority areas for testing are firstly, in the vicinity of the large meadow northeast of Mt. Tom, and secondly, on the ridge between Downer and Walkout Creeks.
- 2) The remainder of the claims area north and east of the main drainage divide should be soil sampled on a grid with 50 m centers. The same horizon and analyses would be made on this part of the ground as in proposal (1).
- 3) It is proposed that geophysical tests be done with a VLF-EM 16R on traverses across the inferred northwest trending fractures on the upland surface to determine if they can be identified.
- 4) Outcrop mapping and rock geochemical sampling should be done along the Mt. Tom - Rubble Hill ridge from the Willow River to Cooper Ck. Details of vein and fracture attitudes, bedding/cleavage relations and minor structures need to be studied for the purpose of understanding structural controls of mineralization and lithology. The geochemical work would indicate if there are metal-rich lithologies in the Black Stuart Fm. or Greenberry Limestone Member.
- 5) After results from the soil sampling, geological mapping and possible geophysical testing have been analysed and evaluated targeted sites or zones could be explored by trenching or percussion drilling depending on conditions of terrain and access.

7 ITEMIZED COST STATEMENT

In the matter of prospecting, rock sampling, geochemical soil and silt sampling on the Mt. Tom property, Mineral Claims Upper, Downer, and Duck, 93H/4E, Cariboo Mining Division, B.C. on behalf of Canadian Mineral Corporation of 210 - 850 West Hastings St., Vancouver, B.C., I, K.V. Campbell of Cariboo Geotechnical Services Ltd., Wells, B.C., declare that the following expenses were incurred during the course of the work between June 26 and October 2, 1981 and during the ensuing report preparation.

a) Wages paid; as per attached Schedule A	\$ 2,636.00
b) Camp costs, Nelson Ck., Wells, B.C. 16 man days @ \$50/day	800.00
c) Transportation, Wells to work site 12 day trips, June 27, July 2,4,9,11,23,24,25, 27, August 3,10, October 2 Truck rental (\$34.33/day), kilometerage (18¢/km) 20 km round trip	455.15
d) Assays and analyses 11 rock samples for Ag, Au @ \$9.00/sample ... 5 rock samples for Au,Ag,Pb,Zn @ \$9.75/sample	99.00 48.75
60 soil samples for Ag,Au,Pb,Zn @ \$5/sample . 56 silt samples for Ag,Au,Pb,Zn @ \$5/sample .	300.00 280.00
e) Data compilation, computer processing, drafting, report preparation	1,495.00
f) Reprographics	74.89
g) Maps, photos, expendible field supplies	100.00
	<hr/>
Total cost	\$ 6,288.79

I make this solemn declaration conscientiously believing it to be true and knowing is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

July 15, 1981

K. Vincent Campbell

K. Vincent Campbell
CARIBOO GEOTECHNICAL SERVICES LTD.

ITEMIZED COST STATEMENT - SCHEDULE A - Mt. Tom Property Wages 1981

<u>Employee</u>	<u>Dates on Site</u>	<u>Total Days</u>	<u>Rate/d</u>	<u>Total Wages Paid</u>
J. Boutwell 2770 Windermere Cumberland, B.C. (prospector)	June 27, July 4, 9,11,23,24,25,27, August 10, October 2	8	\$125	\$1,000
M. Kozak Box 98 Wells, B.C. (prospector)	July 2, August 3	2	\$125	\$ 250
K.V.Campbell Box 66 Wells, B.C. (geologist)	July 4,9,24,25, August 3, 10	6	\$231	\$1386
		<hr/>		<hr/>
		16		\$ 2,636

8 CERTIFICATE

I, KENNETH VINCENT CAMPBELL, resident of Wells, Province of British Columbia, hereby certify as follows:

1. I am a Consulting Geologist with an office at the corner of Dawson and Blair Avenues, Wells, B.C.
2. I graduated with a degree of Bachelor of Science, Honours Geology, from the University of British Columbia in 1966, a degree of Master of Science, Geology, from the University of Washington in 1969, and a degree of Doctor of Philosophy, Geology, from the University of Washington in 1971.
3. I have practiced my profession for 11 years. I have been a member of the Geological Association of Canada since 1969.
4. I have no direct, indirect, or contingent interest in shares of the Canadian Mineral Corporation, nor do I intend to have any such interest.
5. This report, dated March 25th, 1982, is based on my field work on the Mt. Tom property of Canadian Mineral Corporation and my examination of analyses, assays and available reports.

Dated at Wells, Province of British Columbia,
this 25th day of March, 1982.

K. Vincent Campbell

K. Vincent Campbell, Ph.D.
Geologist

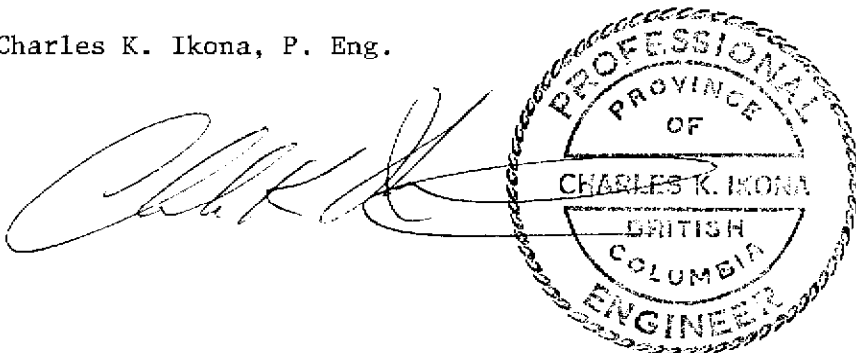
ENGINEERS CERTIFICATE

I, Charles K. Ikona, of 5 Cowley Court, Port Moody in the Province of British Columbia DO HEREBY CERTIFY THAT:

1. I am a Consulting Mining Engineer with offices at 208 - 850 West Hastings Street, Vancouver, B.C.
2. I am a graduate of the University of British Columbia with a degree in Mining Engineering.
3. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
4. I have not examined the property reported on herein however, a field examination was carried out by V. Campbell, Phd, Geologist under my direction.

DATED at Vancouver, British Columbia this 6th of July / 82

Charles K. Ikona, P. Eng.



APPENDIX I

Sample Information

SOIL REPORT

PROJECT No. _____ AREA _____ SAMPLE No. _____

NTS _____ ELEVATION _____ UTM GRID N _____ E _____ SAMPLER _____ DATE _____

SITE TOPOGRAPHY

- Hill Top
 Gentle slope
 Steep slope > 20°
 Base of slope
 Valley floor
 Depression
 Level
 Rolling
 Bog

SAMPLE ENVIRONMENT

- Tundra-hummocky
 Tundra-dry
 Tundra-swampy
 Grassland, meadows
 Peat mounds
 Bog in depression
 Forest-coniferous
 Forest-deciduous
 Forest-mixed
 Alder or willows
 Cultivated land
 Desert, semi-arid
 Barren
 Talus fan
 Bank soil-stream
 Bank soil-lake
 Road cut Logged

SITE DRAINAGE

- Dry
 Moist
 Wet
 Saturated

WATER MOVEMENT

- Seepage

OVERBURDEN ORIGIN

- Till-angular boulders
 Outwash-sandy, rounded boulders
 Lake sediment-sand/silt
 Alluvium-stream deposit
 Peat-bog
 Colluvium
 Lake sediment-clay
 Talus
 Residual
 Frost boil *
 Seepage boil *
 Boulder field *
 Gravel *
 Rock chips

* Use only if formed origin cannot be identified.

BEDROCK

- Mineralized
 Present within 100m-200m upslope
 Present within 100m-200m downslope
 Underlies sample site
 Gossan
 Fe surface stains
 Radioactivity

SAMPLE TEXTURE

- Organic muck
 Fibrous, peaty organic matter
 Very sandy
 Sandy
 Sand-silt
 Sand-silt-clay
 Silt
 Silt-clay
 Clay
 Gravel Rock chips

OVERBURDEN TRANSPORT

- Local
 Extensive
 Unknown
 Mixed - two sources

SOIL HORIZON

- LH Leaf, humus layer, undecomposed vegetation lying on the ground surface (do not sample)
 AH Dark grey to black, organic-rich mineral horizon usually no deeper than 15 cm from the surface (do not sample)
 AE Grey to white (occasionally brown) leached mineral horizon near ground surface, usually sandy; accompanied by BF or BT horizon at depth (do not sample)
 BH Black, organic-rich mineral horizon at depths greater than 15 cm (do not sample)
 BF Red brown, iron-rich horizon
 BT Brown, clay-rich horizon
 BG Horizon which is water-saturated most of the year, identified by red brown mottles
 BM Brown horizon which is only slightly different in appearance from under-lying parent material
 C1, C2, C3, etc.-Parent material for soil
 CA White calcium carbonate precipitate in C horizon
 O1 O2, O3 etc.—Bog samples at various depths
 TF Talus fines

SOIL TYPE

- Chernozem-prairie soil usually under grassland or meadow, thick Ah 10cm.
 CA horizon at depth Solonchak saline soil, high content of NaCl
 Luvisol-BT horizon diagnostic
 Podzol-BF horizon diagnostic
 Brunisol-BM horizon is only B horizon of profile
 Regosol-little or no soil development. No B soil horizon, only LH (maybe) and C horizon
 Gleysol-BG horizon diagnostic
 Organic soil-bog vegetation-no mineral matter

GLACIAL TILL

- present above sample interval
 present below sample interval
 sampled
_____ thickness of top till

CONTAMINATION

- none
 possible
 definite

SHAPE OF COARSE FRAGMENTS

- Angular
 Rounded
 Subrounded, subangular
 Mixed above types

_____ % COARSE FRAGMENTS

_____ APPROXIMATE SLOPE DIRECTION

_____ APPROXIMATE SLOPE ANGLE

_____ TOP OF SAMPLE INTERVAL-CM

_____ BOTTOM OF SAMPLE INTERVAL-CM

LOCAL BEDROCK

_____ COMPOSITION

Estimate—use lists 1-4

_____ COLOUR —Munsell

notation or abbreviation

CARIBOO GEOTECHNICAL SERVICES LTD.

STREAM SEDIMENT REPORT

PROJECT No. _____ AREA _____ SAMPLE No. _____

NTS _____ UTM GRID N _____ E _____ CREEK _____

ELEVATION _____ SAMPLER _____ DATE _____

SAMPLE ENVIRONMENT

- Next to bank
 Behind boulders
 Among roots below stream bank
 Middle of stream
 Among grass or reeds of creek bed
 Bar in creek
 Middle-very wide, shallow creek
 Base of slope
 Composite across stream
 Soil

PRECIPITATE

OVERBURDEN TRANSPORT

- Local
 Extensive Mixed local & extensive
 Unknown

OVERBURDEN ORIGIN

- Till-angular boulders
 Outwash-sandy, rounded boulders
 Lake sediment-sand/silt
 Alluvium-stream deposit
 Peat-bog
 Colluvium *
 Lake sediment-clay
 Talus
 Residual
 Frost boil *
 Seepage boil *
 Boulder field *
 Gravel *
 Soil *
* use only if former origin cannot be identified.

BEDROCK

- Mineralized
 Present within 100m-200m upslope
 Present within 100m-200m downslope
 Underlies sample site
 Gossan
 Fe surface stains

SAMPLE TEXTURE

- Organic-decomposed
 Clay
 Silt and fine sand
 Sand
 Gravel
 Frozen
 Cemented
 Precipitate
 Twigs or undecomposed organic matter

_____ AVERAGE WIDTH OF STREAM-M

_____ AVERAGE DEPTH OF STREAM-CM

STREAM VELOCITY

- Dry
 Stagnant
 Slow
 Moderate
 Fast
 Turbulent

INDICATE AS TRIBUTARY

- Stream enters on right looking down main stream
 Stream enters on left looking down main stream

LOCAL BEDROCK

_____ COMPOSITION

Estimate - use list 1 - 4

CONTAMINATION

- none
 possible
 definite

ORGANIC FRACTION

- Minor amount of undecomposed twigs, leaves, etc.
 Large amount of undecomposed twigs, leaves, etc.
 Minor amount of well-decomposed vegetation
 Large amount of well-decomposed vegetation
 Mosses
 Some sediment grains coated in organic matter
 All sediment grains coated in organic matter
 Looks like lake sediment material

MINERAL FRACTION

- Primarily light coloured silicate materials
 Primarily carbonate sand
 Minor, but notable content of mafic minerals, resistates etc.
 High proportion of mafics, resistates

_____ APPROXIMATE SLOPE DIRECTION

_____ APPROXIMATE SLOPE ANGLE

CARIBOO GEOTECHNICAL SERVICES LTD

MT. TOM PROPERTY STREAM SEDIMENT SAMPLE INFORMATION

<u>Sample #</u>	<u>Environment</u>	<u>Overburden Origin</u>	<u>Width</u>	<u>Depth</u>
H4 S109	STREAM COMPOSITE	TILL	0.4 M	5 CM
H4 S11	NEXT TO BANK	ALLUVIUM	2 M	20 CM
H4 S113	STREAM COMPOSITE	TILL	0.3 M	8 CM
H4 S114	STREAM COMPOSITE	TILL	0.2 M	4 CM
H4 S118	STREAM COMPOSITE	TILL	0.5 M	10 CM
H4 S12	NEXT TO BANK	ALLUVIUM	1 M	10 CM
H4 S120	STREAM COMPOSITE	TILL	4 M	8 CM
H4 S122	STREAM COMPOSITE	TILL	0.3 M	5 CM
H4 S13	BAR IN CREEK	ALLUVIUM	1 M	10 CM
H4 S139	NEXT TO BANK	COLLUVIUM	0.2 M	3 CM
H4 S14	SOIL	COLLUVIUM	5 M	2 CM
H4 S15	MIDDLE OF STREAM	COLLUVIUM	0.3 M	3 CM
H4 S16	NEXT TO BANK	COLLUVIUM	0.8 M	5 CM
H4 S17	NEXT TO BANK	ALLUVIUM	1.5 M	15 CM
H4 S18	NEXT TO BANK	ALLUVIUM	1 M	15 CM
H4 S19	MIDDLE OF STREAM	OUTWASH	0.5 M	10 CM
H4 S20	BEHIND BOULDERS	ALLUVIUM	0.5 M	10 CM
H4 S21	NEXT TO BANK	TILL	1 M	20 CM
H4 S22	NEXT TO BANK	ALLUVIUM	2 M	15 CM
H4 S25	BAR IN CREEK	TILL	1 M	5 CM
H4 S38	BAR IN CREEK	COLLUVIUM	1 M	10 CM
H4 S39	BAR IN CREEK	TILL	2 M	10 CM
H4 S40	BAR IN CREEK	TILL	1.5 M	10 CM
H4 S41	BAR IN CREEK	OUTWASH	1 M	5 CM
H4 S42	BAR IN CREEK	COLLUVIUM	1 M	5 CM
H4 S43	BAR IN CREEK	COLLUVIUM	0.5 M	3 CM
H4 S44	AMONG ROOTS	TILL	2 M	10 CM
H4 S45	BAR IN CREEK	TILL	0.5 M	3 CM
H4 S46	BAR IN CREEK	COLLUVIUM	1 M	3 CM
H4 S47	BAR IN CREEK	TILL	0.5 M	4 CM
H4 S48	BAR IN CREEK	TILL	1 M	2 CM
H4 S49	BAR IN CREEK	TILL	1 M	5 CM
H4 S50	BAR IN CREEK	COLLUVIUM	1 M	5 CM
H4 S51	BAR IN CREEK	COLLUVIUM	1 M	5 CM
H4 S52	BAR IN CREEK	COLLUVIUM	0.5 M	4 CM
H4 S53	BAR IN CREEK	COLLUVIUM	0.5 M	10 CM
H4 S54	BAR IN CREEK	COLLUVIUM	0.5 M	5 CM
H4 S55	MIDDLE OF STREAM	COLLUVIUM	0.5 M	4 CM
H4 S56	BAR IN CREEK	TILL	0.3 M	8 CM
H4 S58	BAR IN CREEK	COLLUVIUM	0.5 M	10 CM
H4 S59	BAR IN CREEK	COLLUVIUM	0.5 M	5 CM
H4 S60	BAR IN CREEK	COLLUVIUM	0.5 M	4 CM
H4 S61	MIDDLE OF STREAM	OUTWASH	0.5 M	5 CM
H4 S62	NEXT TO BANK	COLLUVIUM	0.4 M	5 CM
H4 S63	STREAM COMPOSITE	OUTWASH	0.3 M	3 CM
H4 S64	NEXT TO BANK	COLLUVIUM	0.3 M	3 CM

MT. TOM PROPERTY STREAM SEDIMENT SAMPLE INFORMATION (con'td)

<u>Sample #</u>	<u>Environment</u>	<u>Overburden Origin</u>	<u>Width</u>	<u>Depth</u>
H4 S65	BAR IN CREEK	COLLUVIUM	.25 M	3 CM
H4 S66	NEXT TO BANK	COLLUVIUM	0.4 M	3 CM
H4 S67	NEXT TO BANK	COLLUVIUM	1 M	5 CM
H4 S68	NEXT TO BANK	COLLUVIUM	0.4 M	3 CM
H4 S69	BAR IN CREEK	TILL	2 M	15 CM
H4 S70	BAR IN CREEK	COLLUVIUM	2 M	5 CM
H4 S71	BAR IN CREEK	COLLUVIUM	1.5 M	15 CM

MT. TOM PROPERTY SOIL SAMPLE INFORMATION

<u>Sample #</u>	<u>Site Topography</u>	<u>Overburden Origin</u>	<u>Soil Horizon</u>	<u>Sample Interval</u>
H4 L105	GENTLE SLOPE	TILL	BF	15-20 CM
H4 L106	GENTLE SLOPE	TILL	BF	15-20 CM
H4 L107	GENTLE SLOPE	TILL	BT	20-25 CM
H4 L107	GENTLE SLOPE	TILL	BT	20-25 CM
H4 L108	GENTLE SLOPE	TILL	BF	20-25 CM
H4 L110	STEEP SLOPE	TILL	BF	20-25 CM
H4 L111	STEEP SLOPE	TILL	BF	15-20 CM
H4 L112	GENTLE SLOPE	TILL	BF	15-20 CM
H4 L115	GENTLE SLOPE	TILL	BF	15-20 CM
H4 L116	GENTLE SLOPE	TILL	BF	15-20 CM
H4 L117	STEEP SLOPE	TILL	BF	10-15 CM
H4 L119	STEEP SLOPE	TILL	BF	20-25 CM
H4 L121	GENTLE SLOPE	TILL	BF	15-20 CM
H4 L123	GENTLE SLOPE	TILL	BF	10-15 CM
H4 L124	STEEP SLOPE	TILL	BF	10-20 CM
H4 L125	STEEP SLOPE	TILL	BF	10-20 CM
H4 L126	STEEP SLOPE	COLLUVIUM	BF	10-20 CM
H4 L127	GENTLE SLOPE	COLLUVIUM	BF	20-30 CM
H4 L128	STEEP SLOPE	TILL	BF	15-25 CM
H4 L128	STEEP SLOPE	COLLUVIUM	BF	15-25 CM
H4 L129	STEEP SLOPE	TILL	BF	15-25 CM
H4 L130	STEEP SLOPE	TILL	BF	43-53 CM
H4 L131	STEEP SLOPE	TILL	BF	20-35 CM
H4 L132	STEEP SLOPE	TILL	BF	20-35 CM
H4 L133	STEEP SLOPE	TILL	BF	15-30 CM

MT. TOM PROPERTY SOIL SAMPLE INFORMATION (con'td)

<u>Sample #</u>	<u>Site Topography</u>	<u>Overburden Origin</u>	<u>Soil Horizon</u>	<u>Sample Interval</u>
H4 L134	STEEP SLOPE	TILL	BT	03-25 CM
H4 L135C	STEEP SLOPE	TILL	BF	50-80 CM
H4 L136	STEEP SLOPE	TILL	BF	20-30 CM
H4 L137	STEEP SLOPE	TILL	BF	15-25 CM
H4 L138	STEEP SLOPE	TILL	BF	15-25 CM
H4 L140	STEEP SLOPE	TILL	BF	20-30 CM
H4 L141	STEEP SLOPE	OUTWASH	BF	20-30 CM
H4 L142	STEEP SLOPE	OUTWASH	MB	20-30 CM
H4 L150A	STEEP SLOPE	COLLUVIUM	BF	15-20 CM
H4 L151B	STEEP SLOPE	TILL	BF	25-55 CM
H4 L170	BASE OF SLOPE	COLLUVIUM	C	200-250
H4 L171	B0G	PEAT B0G	B0G SAMPLE	45-50 CM
H4 L172	GENTLE SLOPE	TILL	BM	20-25 CM
H4 L173	GENTLE SLOPE	TILL	BM	20-30 CM
H4 L174	GENTLE SLOPE	TILL	BM	30-40 CM
H4 L175	GENTLE SLOPE	TILL	BM	35-40 CM
H4 L176	GENTLE SLOPE	TILL	BM	30-40 CM
H4 L177B	B0G	TILL	BF	5-25 CM
H4 L179	STEEP SLOPE	COLLUVIUM	BM	25-30 CM
H4 L180	B0G	PEAT B0G	BF	25-30 CM
H4 L57C	GENTLE SLOPE	TILL	BF	25-35 CM
H4 L86	GENTLE SLOPE	TILL	BF	15-20 CM
H4 L87	GENTLE SLOPE	TILL	C	15-20 CM
H4 L88	GENTLE SLOPE	TILL	AE	10-15 CM
H4 L89	GENTLE SLOPE	TILL	BF	25-30 CM

APPENDIX II
Analytical Procedures

1. Geochemical samples (soils, silts) are dried at 80 C for a period of 12 to 24 hours. The dried sample is sieved to -80 mesh fraction through a nylon and stainless steel sieve. Rock geochemical materials are crushed, dried and pulverized to -100 mesh.
2. A 1.00 gram portion of the sample is weighed into a calibrated test tube. The sample is digested using hot 70% HClO₄ and concentrated HNO₃. Digestion time = 2 hours.
3. Sample volume is adjusted to 25 mls. using demineralized water. Sample solutions are homogenized and allowed to settle before being analysed by atomic absorption procedures.
4. Detection limits using Techtron A.A.5 atomic absorption unit are as follows.

Zinc	- 1 ppm
Silver	- 0.2 ppm*
Lead	- 1 ppm*

* Silver and lead are corrected for background absorption.

5. Elements present in concentrations below the detection limit are reported as one half the detection limit, i.e. Ag - 0.1 ppm.
6. Other elements.

PPM Antimony:

A 2.0 gm sample digested with conc. HCl in hot water bath. The iron is reduced to Fe⁺² state and the Sb complexed with I⁻. The complex is extracted with TOPO-MIBK and analysed by A.A. Correcting for background absorption 0.2 ppm \pm 0.2. Detection limit = 0.2 ppm.

PPM Arsenic:

A 1.0 gm sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with NaBH₄ and the arsenic content determined using flameless atomic absorption. Detection limit = 1 ppm.

PPM Tungsten:

0.50 gm sample is fused with potassium bisulphate and leached with hydrochloric acid. The reduced form of tungsten is complexed with toluene 3,4 dithiol and extracted into an organic phase. The resulting color is visually compared to similarly prepared standards. Detection limit = 2 ppm

APPENDIX III
Soil Profiles

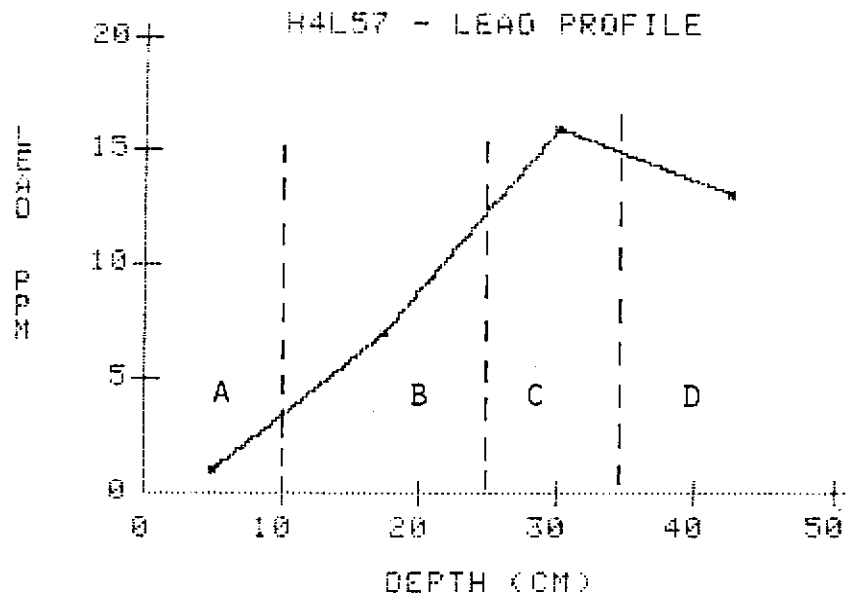
MT. TOM PROPERTY - Soil Profile

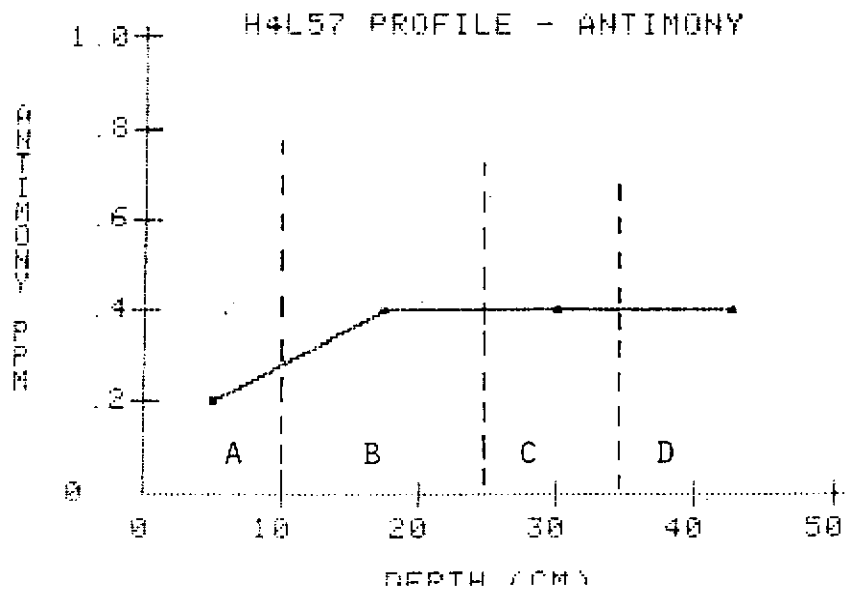
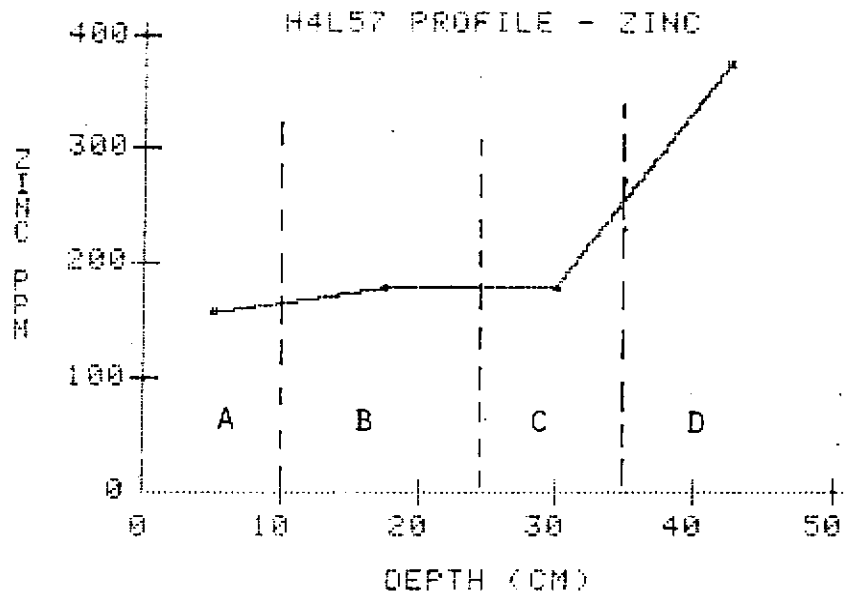
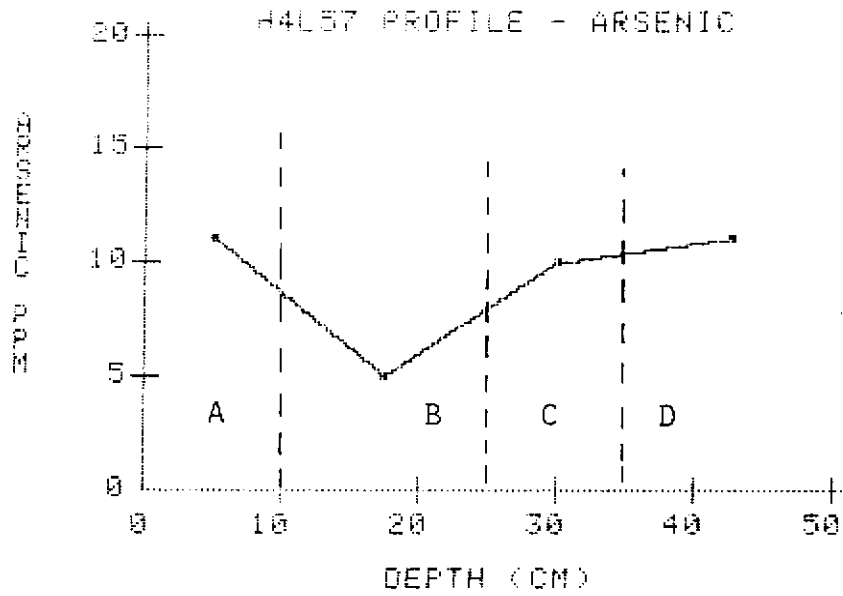
Sample # H4-L57 UTM 5889400N, 587200E

Site: gentle slope near edge of meadow, abundant thick bright orange-red precipitate

Overburden: till, local transport

<u>Sample</u>	<u>Interval (cm)</u>	<u>Description</u>
A	0-10	dark red-brown organic muck and clay with abundant rootlets (A ₀)
B	10-25	dark brown-black greasy clay, few fragments of wood, very even texture
C	25-35	orange-brown silt (BF)
D	35-50	brown, sandy boulder clay (C)





MT. TOM PROPERTY - Soil Profile

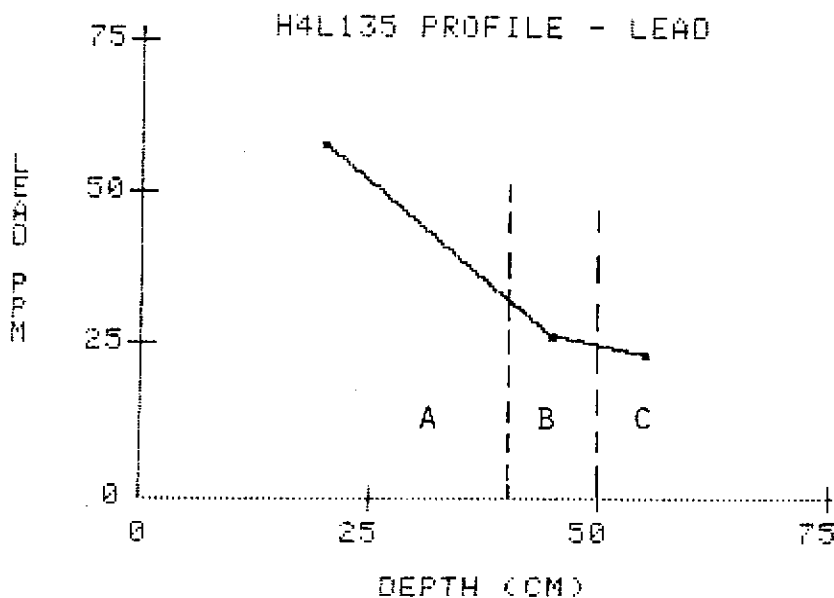
Sample # H4-L135 UTM 5891925N, 587140E

Site: steep slope, coniferous forest, moist soil

Overburden: till and colluvium, local transport

<u>Sample</u>	<u>Interval</u> (cm)	<u>Description</u>
A	3-40	dark gray-brown sandy, silty gravel (BM)*
B	40-50	gray clayey, silty gravel, compact with angular phyllite fragments (C) *
C	50-60	red-brown silt and sand, typical BF horizon

* samples 135-A,B are interpreted to have slumped over C, and to represent post-glacial locally transported debris



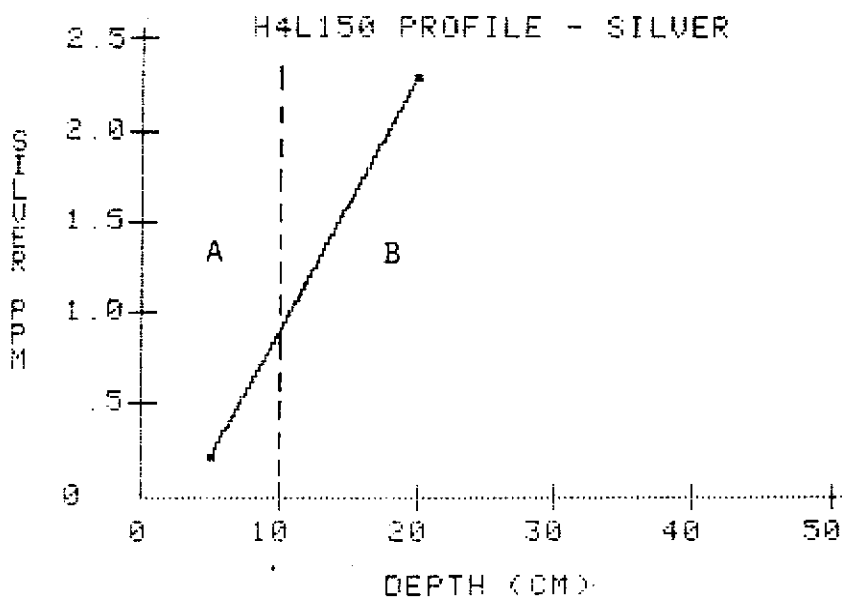
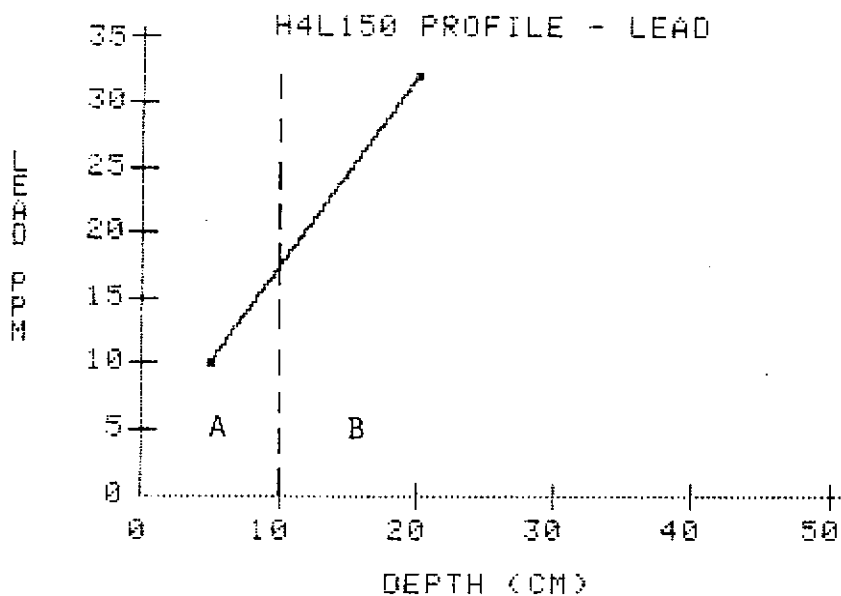
MT. TOM PROPERTY - Soil Profile

Sample # H4-L150 UTM 5890400N, 587620E

Site: steep slope, coniferous forest, moist soil

Overburden: till and colluvium, local transport

<u>Sample</u>	<u>Interval</u> (cm)	<u>Description</u>
B	0-10	dark gray gravel of angular phyllite with talus fines of sand and silt
A	10-30	dark red-brown sand and silt (BF)



MT. TOM PROPERTY - Soil Profile

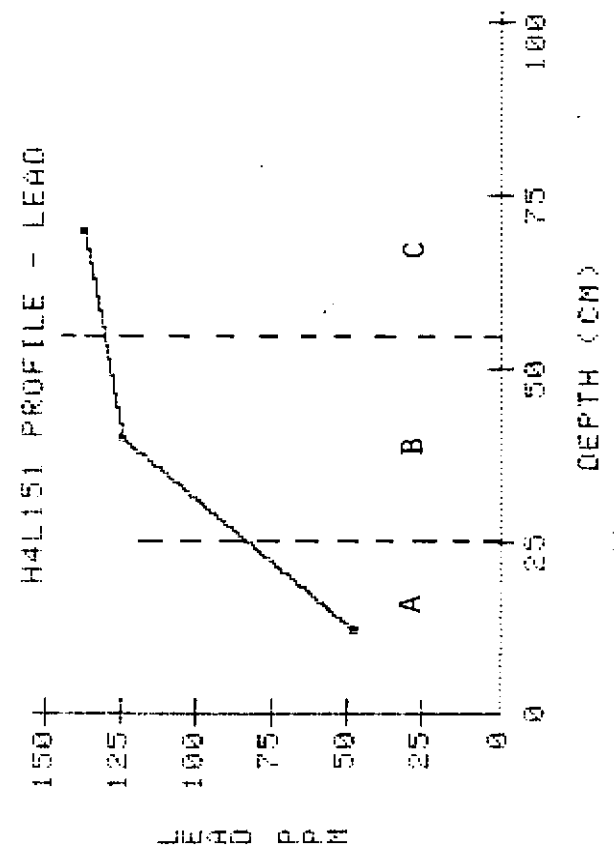
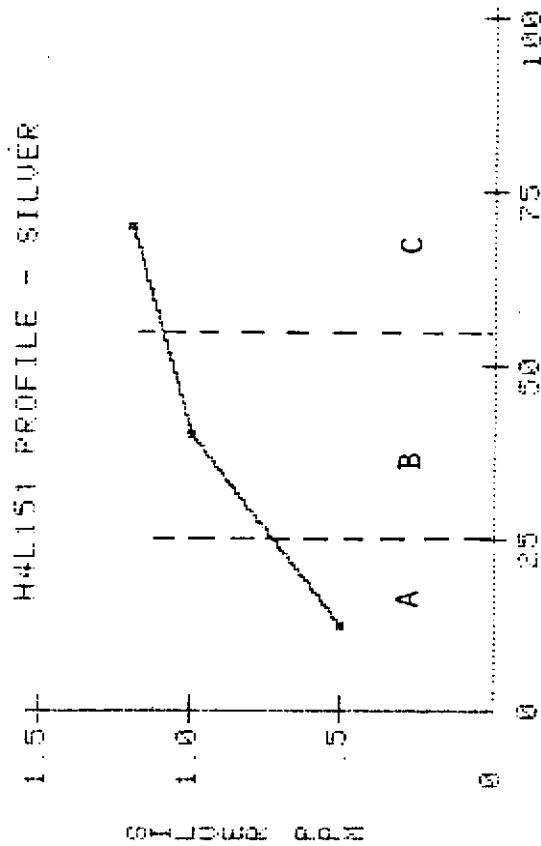
Sample # H4-L151 UTM 5889940N, 587950E

Site: steep slope, meadow, moist soil

Overburden: till and colluvium, local transport

<u>Sample</u>	<u>Interval</u> (cm)	<u>Description</u>
A	0-25	bluish gray, sand, silt and clay with angular black phyllite *
B	25-55	red-brown sand and silt (BF) with subrounded to subangular cobbles of oxidized mica schist
C	55-85	brown gravelly sandy till, with angular oxidized mica schist

* interpreted as post-glacial debris



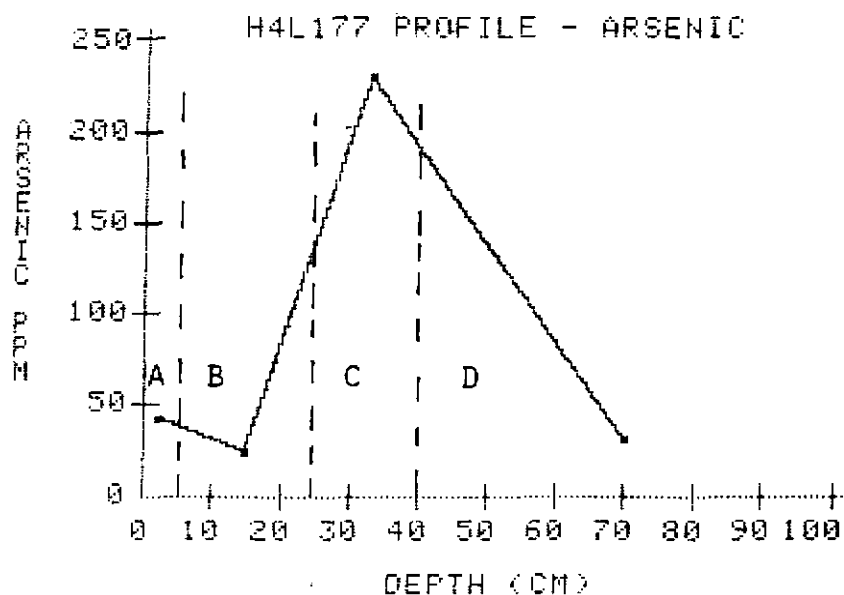
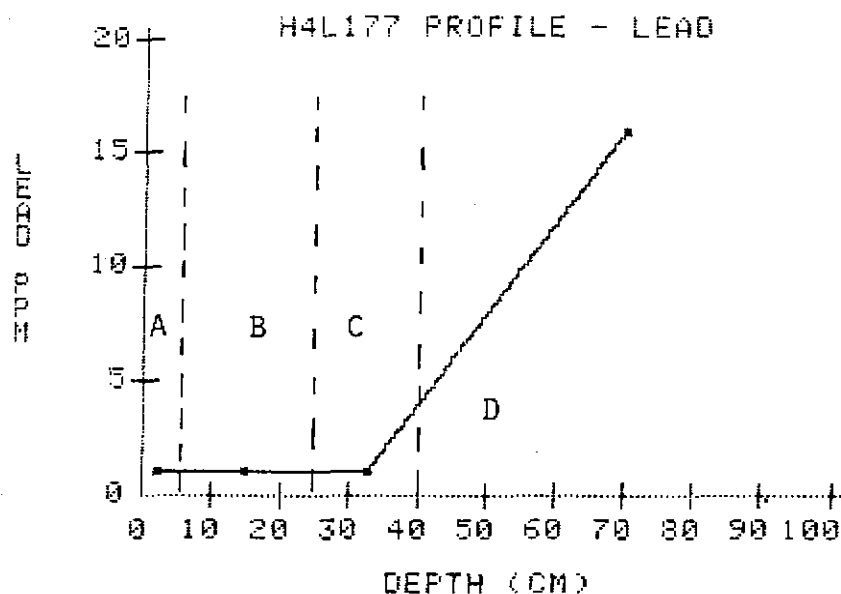
MT. TOM PROPERTY - Soil Profile

Sample # H4-L177 UTM 5890830N, 586760E

Site: bog at northeast corner of large meadow, saturated soil with seep

Overburden: till of local origin

<u>Sample</u>	<u>Interval</u> (cm)	<u>Description</u>
A	0-5	dark brown peat
B	5-25	red-brown silt and clay (BF)
C	25-40	dark brown to olive brown clay
D	40-100	black gravel of angular phyllite (C)



APPENDIX IV

Histograms of Sample Analyses

MT TOM PROPERTY - Stream Sediment Samples

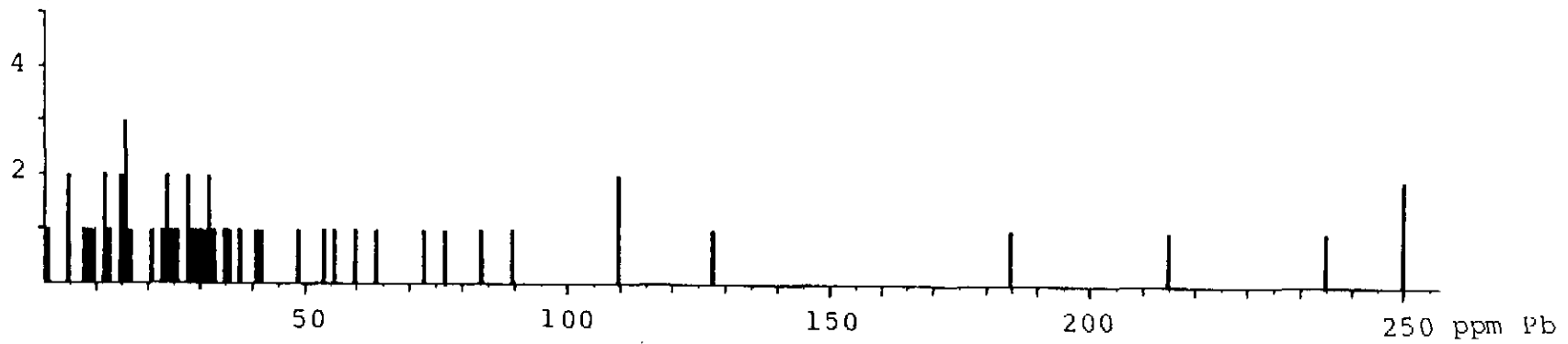
Histogram of 53 Pb analyses

Mean = 72.89

Standard Deviation = 112.30

Range of analyses = 1-675 ppm

Note: Samples 320 and 675 ppm not shown



MT TOM PROPERTY - Stream Sediment Samples

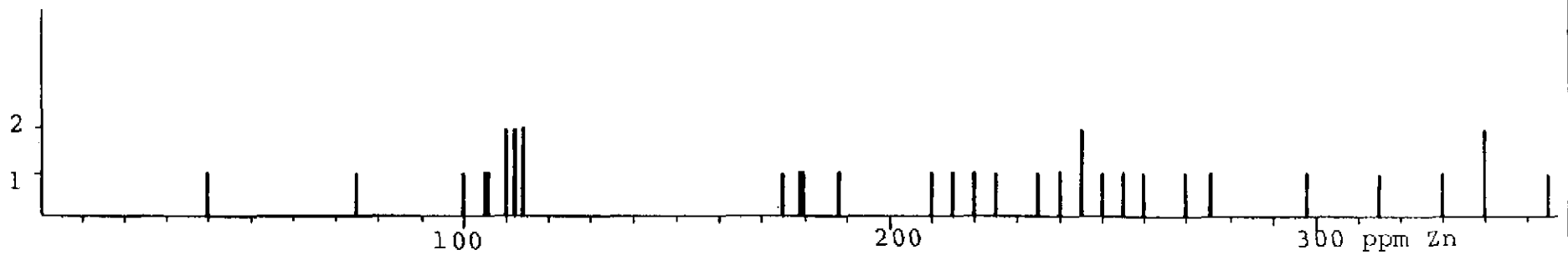
Histogram of 43 Zn analyses, not included in calculations are three samples containing 1300, 2550, 2850 ppm Zn.

Mean = 296.12

Standard Deviation = 206.19

Range of analyses = 40-920 ppm

Note: Samples 530, 600, 635, 650, 675, 675, 720 and 920 ppm not shown



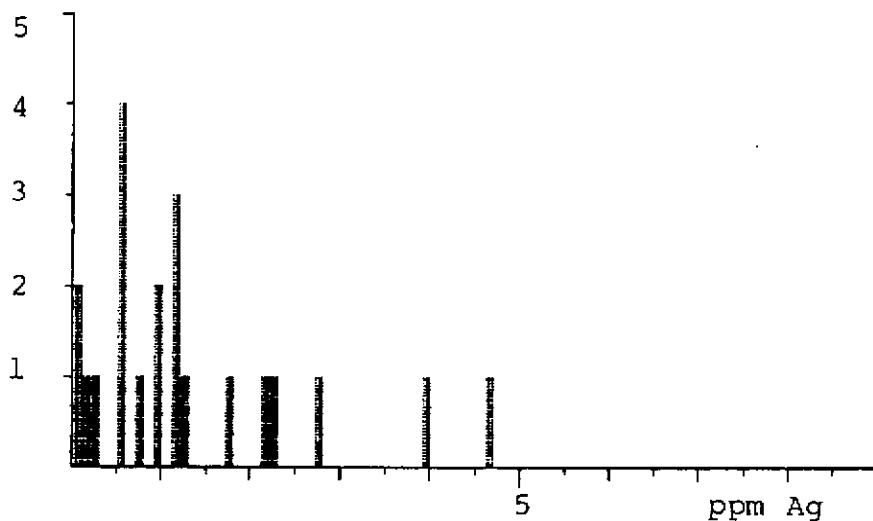
MT TOM PROPERTY - Soil Samples

Histogram of 20 Ag analyses

Mean = 1.33

Standard Deviation = 1.23

Range of analyses = 0.1-4.7 ppm

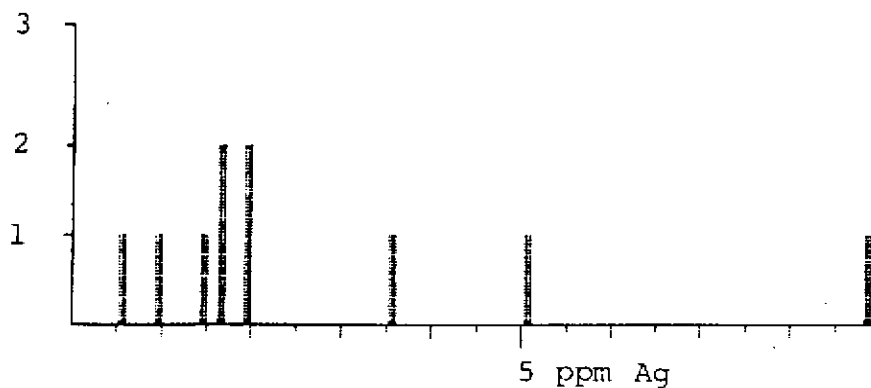
MT TOM PROPERTY - Stream Sediment Samples

Histogram of 10 Ag analyses

Mean = 2.82

Standard Deviation = 2.45

Range of analyses = 0.6- 8.8 ppm



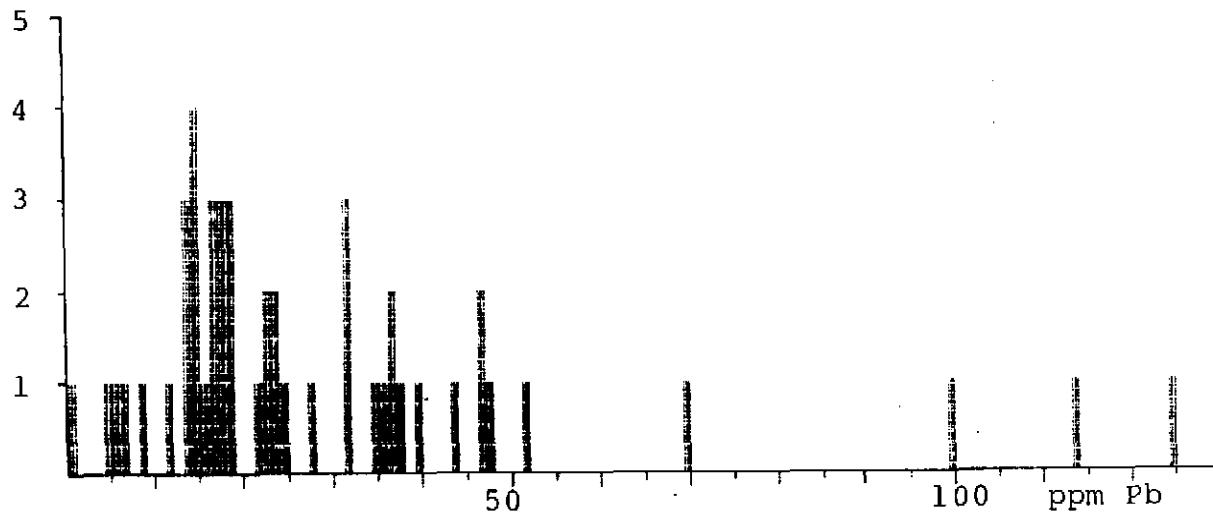
MT TOM PROPERTY - Soil Samples

Histogram of 48 Pb analyses

Mean = 30.31

Standard Deviation = 25.79

Range of analyses = 1-125 ppm

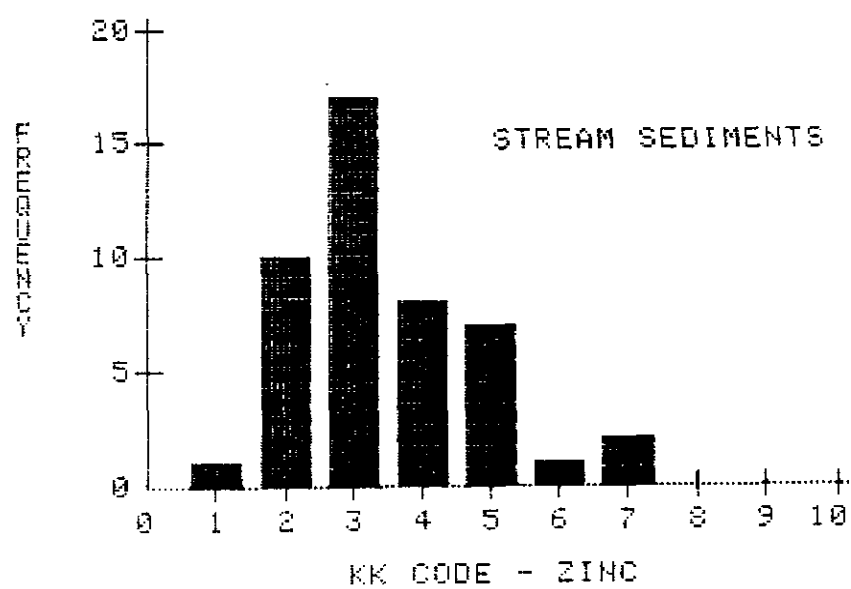
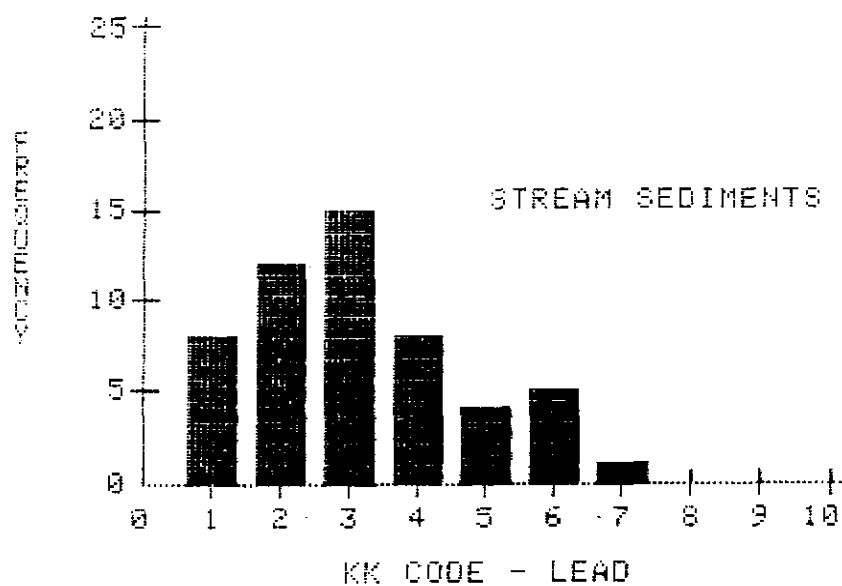


APPENDIX V

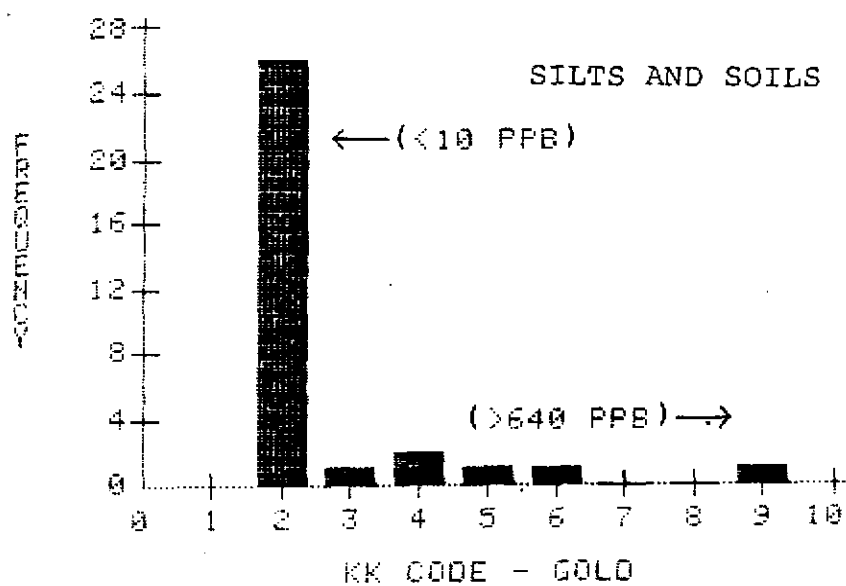
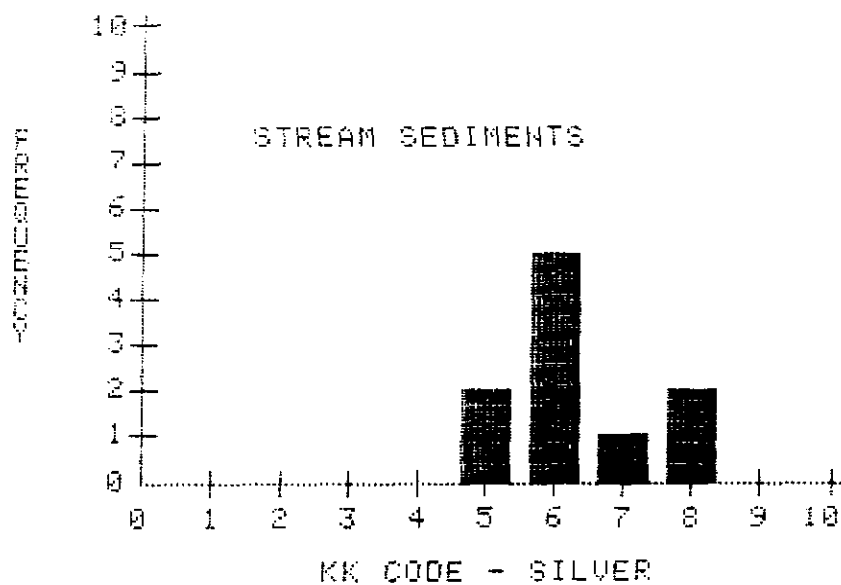
Clarke Interval Histograms

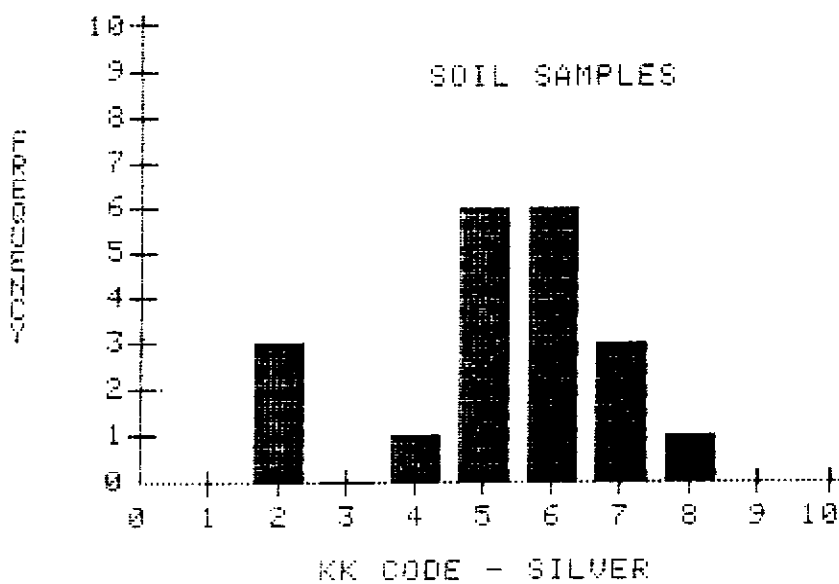
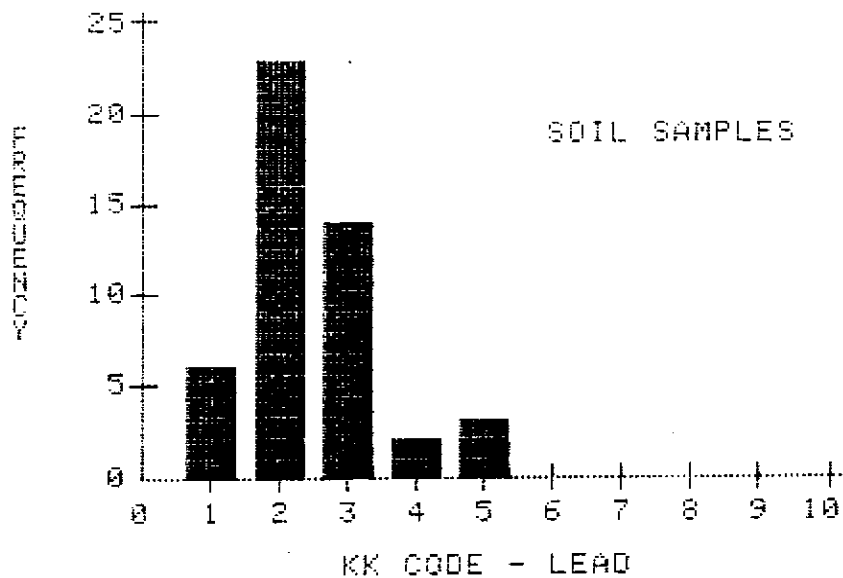
The following histograms illustrate the distribution of element analyses by their respective KK intervals. For the sake of brevity the intervals are coded on the graphs as indicated below.

KK Code	KK (Clarke) Unit Intervals	Pb (ppm)	Ag (ppm)	Au (ppb)	Zn (ppm)
9	>128			> 640	
8	64-128		4.48-8.96	320-640	
7	32-64	400-800	2.24-4.48	160-320	2240-4480
6	16-32	200-400	1.12-2.24	80-160	1120-2240
5	8-16	100-200	0.56-1.12	40-80	560-1120
4	4-8	50-100	0.28-0.56	20-40	280-560
3	2-4	25-50	0.14-0.28	10-20	140-280
2	1-2	12.5-25	0.07-0.14	< 10	70-140
1	< 1	< 12.5	< 0.07		< 70

MT TOM PROPERTY - Clarke Interval Histograms

MT TOM PROPERTY - Clarke Interval Histograms

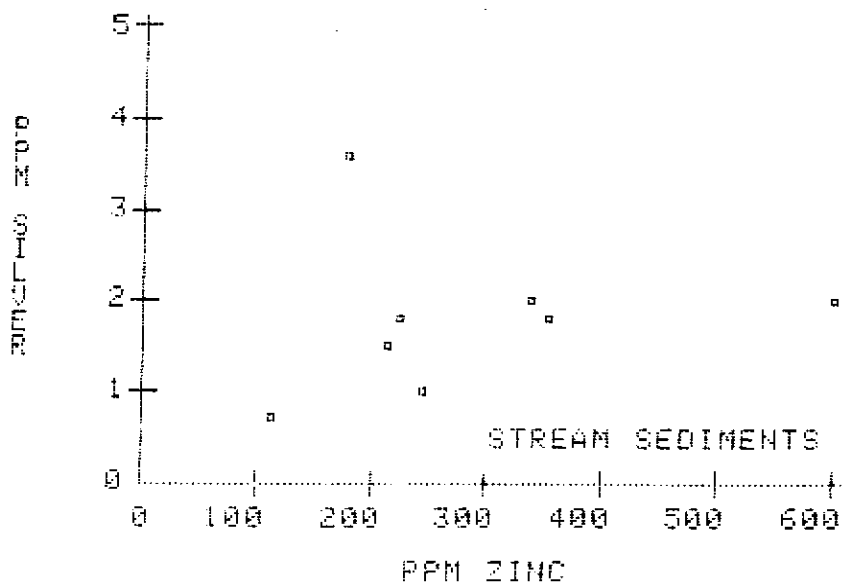
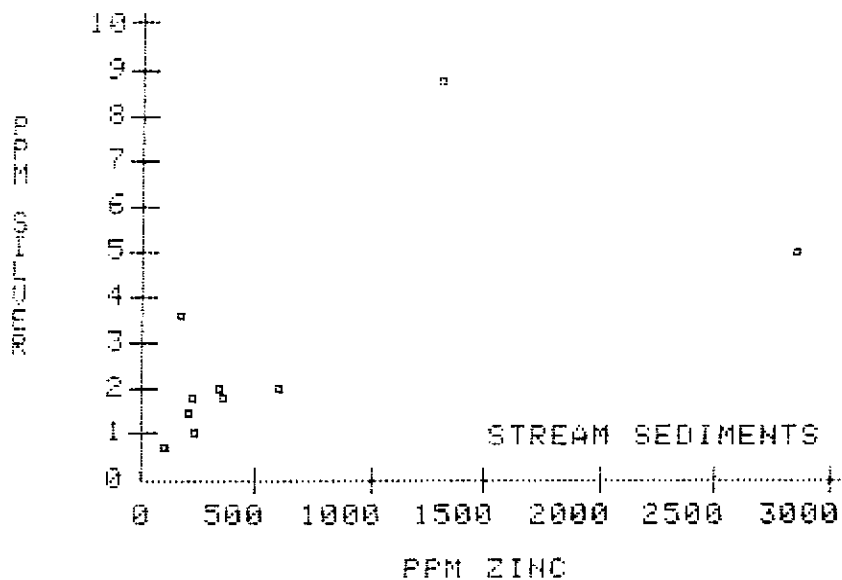


MT TOM PROPERTY - Clarke Interval Histograms

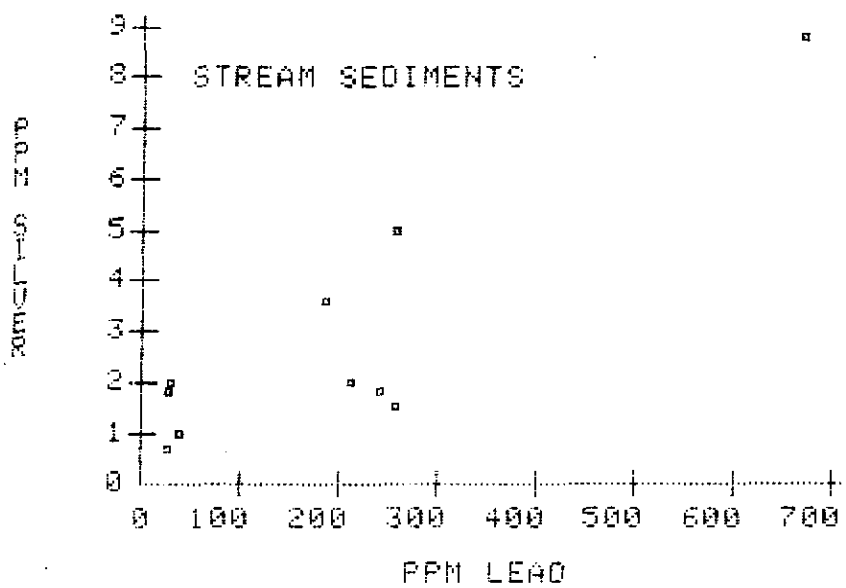
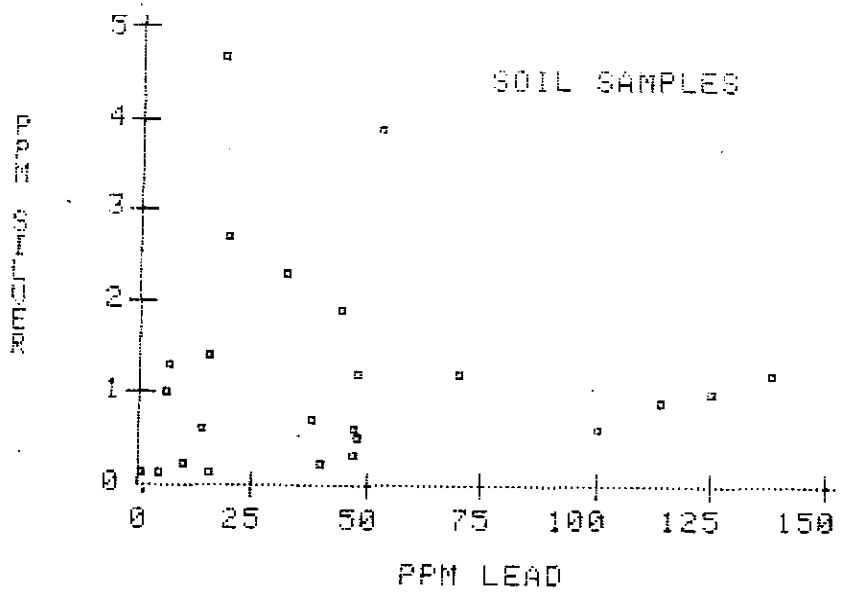
APPENDIX VI

Plots of Metal vs Metal From Same Sample

MT TOM PROPERTY - Plots of Metal vs Metal
from same sample



MT TOM PROPERTY - Plots of Metal vs Metal
from same sample



MT TOM PROPERTY - Plots of Metal vs Metal
from same sample

