

1980 GEOLOGICAL and GEOCHEMICAL REPORT

on the

FEE CLAIM GROUP

ATLIN MINING DIVISION

BRITISH COLUMBIA

by

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and

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Dated: October 31, 1980

N.T.S. Sheet: 104M - 8W
Latitude: 59° 23' N
Longitude: 134° 18' W
Dates: June 3 to Sept 6, 1980

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Lead	
Silver	
Zinc	
Arsenic	

SUMMARY and CONCLUSIONS:-

A two to six person crew carried out detailed geological and geochemical surveys over approximately three-quarters of the FEE 1-6 Claims during the period June 3 to September 6, 1980.

Approximately 13623 m of grid lines were cut to provide control for the geochemistry survey, and 5403 soil samples were collected. These, and the 171 stream sediment samples collected at the same time, were analysed for arsenic, copper and gold. Thirty-five rock samples, mainly of quartz vein material, were assayed for gold, silver, and lead, and in some cases, also for zinc, copper, or molybdenum.

The property is located in mountainous terrain on the west side of Taku Arm of Tagish Lake, in northern British Columbia, approximately 145 km south-southeast of Whitehorse, Yukon. It lies within the metamorphic terranes of the Coast Plutonic Complex, west of the Whitehorse Trough. The rocks on the property consist of greenschist to amphibolite facies metamorphic rocks of Lower to Mid Paleozoic Age.

Eleven areas of vein mineralization were located during examination of the property, some of which may represent continuations of the same vein. The best mineralized vein exposure (Occurrence 'G') was 1.1 m wide. Assays of two chip samples, two metres apart, across this width, averaged 0.45 oz Au/ton, 7.14 oz Ag/ton, 9.85% Pb, 0.05% Zn and 0.02% Cu. Where exposed, the veins have a northwest trend but in many instances, only dump material could be examined.

Anomalous lead and silver geochemical results occur over many of these vein areas. Similar anomalies where no outcrop is exposed may represent additional veins. A larger anomalous area in zinc, lead and silver has sharply defined limits and may be structurally controlled. This appears to restrict zinc to the eastern portion of the property. These anomalies tend to have a northwest trends that are often complicated by downslope movement of materials.

RECOMMENDATIONS:-

A program of continued geological and geochemical investigation, including trenching, should be carried out to complete coverage of the property and explain the anomalies described in this report.

Particular attention should be directed toward defining the extent of mineralization in Occurrence 'G'.

INTRODUCTION:-

The FEE 1-6 Claims, comprising 110 units, were staked in October 1979, to cover an area of known quartz veins containing gold and silver mineralization, as described by D. D. Cairnes (1913). All but three Crown Grants on the property have lapsed.

During the period June 3rd to September 6th, 1980, two to six people conducted geological and geochemical surveys over approximately three-quarters of the property. Eleven areas of vein mineralization were located. The largest vein encountered had a maximum width of 1.4 m. In many cases, only dump material was observed. Geochemical anomalies in lead and silver, and to a lesser extent zinc and arsenic, outlined some of these zones, and indicated several additional areas of mineralization. Unexplained zinc and arsenic patterns require further investigation.

LOCATION and ACCESS:-

The FEE Claim Group lies on the west side of Taku Arm of Tagish Lake, at 59° 23'N latitude and 134° 18' W longitude, on N. T. S. Sheet 104M-8W (Figure 1). It is located approximately 35 km west-southwest of Atlin, British Columbia, and approximately 145 km south-southeast of Whitehorse, Yukon.

The property covers much of the northeast flank of White Moose Mountain from Buchan Creek, south a distance of about 5.5 km. The western boundary lies several hundred metres west of the 'FEE' glacier.

Access to the property was by Hughes 500C helicopter from Atlin, B. C., or by float equipped fixed wing aircraft from Whitehorse. Access by boat is also possible, but isn't considered practical.

PROPERTY:-

The FEE Claim Group (Figure 2), comprises six contiguous claims, totalling 110 units. Pertinent information is listed below. Assessment credits for work covered by this report were recorded on October 6, 1980. The new expiry dates are given below.



UNITED KENO HILL MINES LTD.
EXPLORATION DEPARTMENT
WHITEHORSE — YUKON

FEE CLAIM GROUP
Location Map

Mining District ATLIN, B.C.
N.T.S. Sheet No. 104-M-8
Scale 1cm = 25 km

Drawn by J.H.P.

Date Oct. 21 / 1980

<u>NAME</u>	<u>TAG NO.</u>	<u>UNITS</u>	<u>STAKED</u>	<u>RECORDED</u>	<u>RECORD NO.</u>	<u>EXPIRE</u>
FEE 1	50224	3S x 5W	10/2/79	10/4/79	810	10/4/83
FEE 2	50226	4N x 5W	10/3/79	"	811	"
FEE 3	50228	4N x 5W	10/4/79	"	812	10/4/84
FEE 4	50229	4N x 5E	10/4/79	"	813	"
FEE 5	50227	4N x 5E	10/3/79	"	814	"
FEE 6	50225	3S x 5E	10/2/79	"	815	"

All but three of the Crown Grants located in the area covered by the property have lapsed. The three remaining (L1279, L1280, L3282) are owned by the estate of Mr. P. Versluce.

HISTORY:-

The Engineer Mine Vein system, located directly across Taku Arm from the FEE Claim Group, was first staked in 1899. Thus, veins in the WhiteMoose Mountain (FEE) area were probably discovered at the same time.

Although more recent work may have been carried out in this area, the only information available on the veins was reported by Cairnes (1913). Both the White Moose and Rupert Groups (Cairnes) are covered by the FEE property.

The White Moose Group included two veins, called the North and South veins. The North Vein was covered by five claims along the shore of Taku Arm, while the South Vein was covered by three claims extending northwest from the southern most claim on the North Vein. (Note: Cairnes said that this adjoined the northernmost claim of the North Vein, but this appears to be a typographic error).

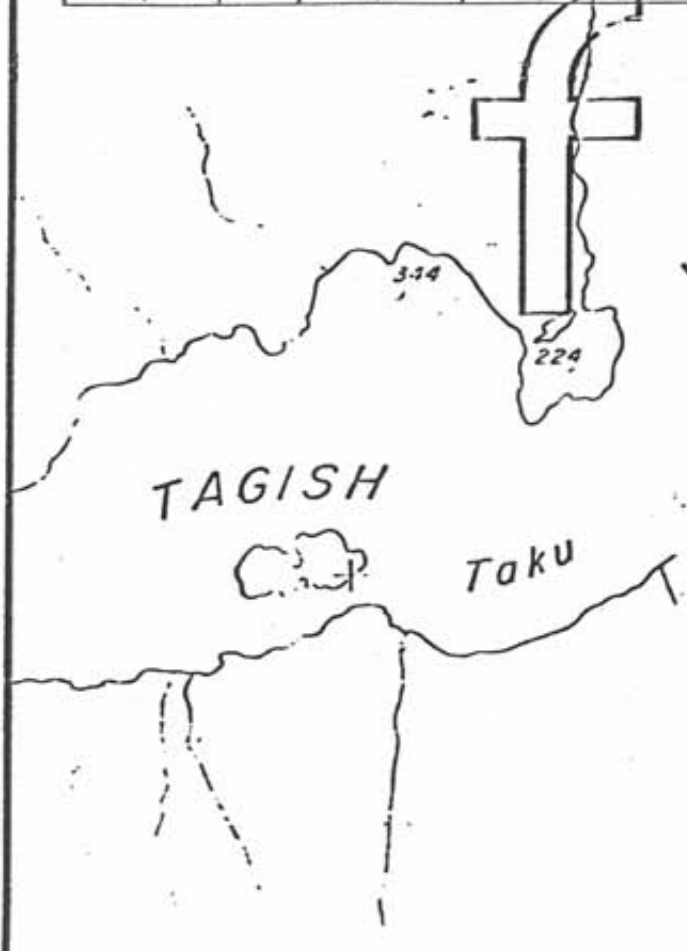
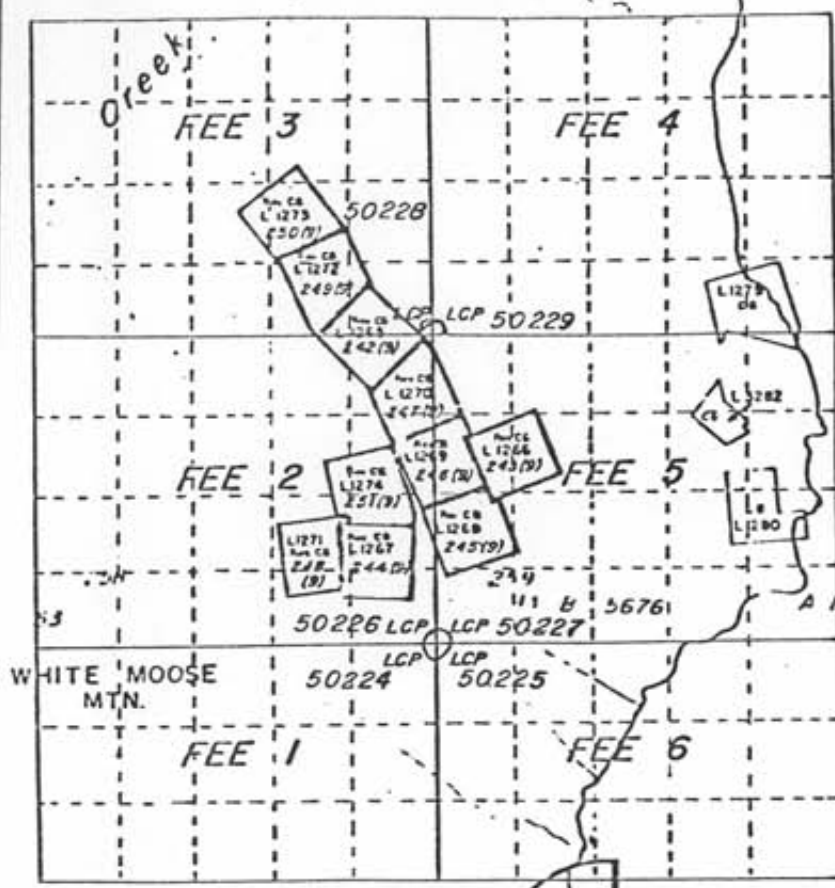
Cairnes reported that "outcrops that are thought to all be portions of the same vein - the North Vein - occur at intervals for a distance of over 5,000 feet, strike in a general direction of N40°W, and dip to the northeast at angles ranging from 40° to 60°". (Cairnes, 1913,p.993) The similarity of strike, dip and mineralogy suggest these are all exposures of the same vein. The vein was reported to vary from 0.45 to 1.2 m in width, consist predominantly of massive but occassionally vuggy quartz, Argentiferous tetrahedrite, pyrite and chalcopyrite were the main ore minerals seen, but galena and malachite were also noted.

According to Cairnes, a small shaft was sunk at the most northerly exposure of the vein, on the shore of Taku Arm. Here, the vein was reported to be 0.6 m thick, and in places, composed almost entirely of metalliferous minerals (tetrahedrite, chalcopyrite and galena, with pyrite and malachite). Towards the south end of the

DATE OF PHOTOGRAPHY 1948, 50, 74, 75

59°30' N

134°



UNITED KENO HILL MINES LTD.
 EXPLORATION DEPARTMENT
 WHITEHORSE — YUKON

FEE 1 - 6 Claim Group (110 units)

Mining District Atlin
 N.T.S. Sheet No. Part 104 M 8
 Scale 1:50,000

Drawn by R.J.J. Date 5/10/79

of these claims, Cairnes reported that "some trenches and open cuts have been made, a shallow prospect shaft has been sunk, and a crosscut tunnel has been commenced." (Cairnes, 1913, p. 94) At the shaft, the vein was seen to be 0.6m thick, and above the tunnel, 2.1m wide, but less well mineralized than in narrower zones. A number of assays were reported to give \$10.00 to \$15.00 in Au, and from 20 to 100 oz of Ag/ton, but no other information was given.

The south vein was seen as 2 to 3.1 m wide, striking 303° and dipping 50 to 70° S.W. Mainly quartz, with small amounts of disseminated galena and chalcopyrite was reported.

The Rupert Group was located south of the WhiteMoose Group, and consisted of five veins, plus float from a sixth, starting at an elevation of 518 m (1700 ft) above Taku Arm.

Vein No. 1 outcropped in a gulch at 1174m, with a strike of 280° and a width of 0.6 to 0.9m.

Vein No. 2, 91m vertically above No. 1, (at 1265m) was reported to be 1.8 to 2.4m wide, with a strike of 287° and a sub-vertical dip.

Vein No. 3 was found 21m above No. 2, (at 1286 m) and appeared to parallel it in strike and dip. It was 0.6 to 0.9m wide.

Vein No. 4, 290 m above No. 1, (at 1464 m) dipped at a high angle to the southwest, and was reported to be 0.1 to 0.3 m thick.

Vein No. 5 was seen as a 1.2 m wide vein at one location (no attitude), 396 m above vein no. 1 (at 1570 m elevation).

The first four of these veins were traced along the side hill for several hundred feet, with fairly persistent strikes and thicknesses, and similar mineralogy.

All five veins were reported to consist mainly of quartz, with some disseminated galena, and occasional pyrite and native Au. The No. 2 Vein was reported to be more heavily mineralized than the others, and native Au was best in No. 4.

Above Vein No. 5, on the top of the ridge, and along the edge of the glacier (which has retreated since that time) numerous angular pieces of ore were reported containing abundant pyrite and galena (versus little or no pyrite in the lower veins). Although no outcrops were seen, it was believed that a vein must exist under the ice.

Numerous small workings, trenches, dumps, and blasted pits were seen on the property. Most of these were probably excavated around the time that Cairnes did his work.

Claims were staked in this area during the 1960's. However, no evidence of recent work was found at the showings.

PHYSIOGRAPHY:-

The property is located in mountainous terrain, and extends from the shores of Taku Arm, at approximately 656 m elevation, to 1980 m elevation in the southwest part of the property, near the summit of WhiteMoose Mountain.

Slopes are generally steep up to the 1500 m elevation. Cliffs are common in the southeast portion of the property. Above the 1500 m elevation, the terrain changes into a gently rolling upland plateau surface.

Treeline is located at approximately 1370m in this area. The lower slopes of the property are often densely vegetated with a combination of alders and black spruce. In several areas, dense alder patches, several hundred metres wide, extend from treeline to lakeshore. Sampling and mapping were not attempted in these areas. Devil's Club was occasionally encountered in stream cuts. Open, park-like pine forest occurs over a small, restricted area along the lakeshore, in the central portion of the property.

The intermediate slopes are covered by dumps of spruce, juniper and alder, interspersed with open areas. The upper slopes are talus with some grass and moss cover.

A small glacier occupies approximately 1.3 sq km in the west central portion of the property. Lateral and terminal moraines extend for several hundred metres from the ice on the lower, northern side of the glacier.

Numerous minor streams are found throughout the area, with some forming prominent ravines in the upper, southeast end of the property. The north and west sides of the property are cut by Buchan Creek, a large, braided stream draining the FEE and WhiteMoose glaciers. Several small tarn lakes are found in the moraine material below the FEE glacier.

REGIONAL GEOLOGY:-

The FEE Claim Group lies within the metamorphic terranes of the Coast Plutonic Complex, that bound the Mesozoic strata of the Whitehorse Trough on the west (Bultman, 1979).

In this region, greenschist to amphibolite facies metamorphic rocks, referred to by Bultman as Coast Metamorphic Rocks, dominate the quartz diorite to granodiorite intrusions of the plutonic complex. The FEE group lies entirely within these metamorphic rocks.

Bultman (1979) classified these rocks as TrMm, and stated that this may include Lower or Mid-Paleozoic, and perhaps even some Precambrian rocks. Christie (1957) suggested that these rocks are mainly Pre-Permian (CPsn) and G.S.C. Open File 214, Iskut River, also used the CPsn designation.

Further northwest, it is believed that the Coast Plutonic rocks blend into the Yukon Crystalline Terrane. It is probable that the metamorphic rocks of the FEE area are equivalent to those of the Yukon Crystalline Terrane.

In the FEE area, Taku Arm represents a fault or unconformity which separates these metamorphic rocks from the younger Laberge Group sediments that host the Engineer Mine vein system.

Generally, the metamorphic rocks have a northwest trend that conforms to the regional structural pattern. Northwest trending folds are defined by a strongly developed foliation. These folds appear to be slightly overturned to the northeast.

GEOLOGICAL SURVEY:-

GENERAL:

The FEE Claims are underlain by various metamorphic units of the Coast Metamorphic Rocks (Geology Map in Pocket). These include pelitic schists, metavolcanics, amphibolitic gneisses, foliated intrusives and minor marble. Younger rhyolite, rhyodacite and basalt dikes cut these units. Both conformable and crosscutting bands of foliated, mafic-poor microgranite or aplite are present in some areas.

Several mineralized quartz veins were found on the property. Although variable orientations were recorded, northwest-trending veins appear to be the most strongly developed.

DETAILED GEOLOGY:

Unit 1 - Metasediments and Metavolcanics

This unit is represented by a series of schists and gneisses, of varying and gradational composition, but predominantly of a pelitic nature. Two major and two minor variations of this are indicated on the geology map. These are: mixed pelitic schists; hornblende (+ biotite) - feldspar - quartz gneiss; recrystallized impure limestone or marble; and chlorite schist.

Unit 1a: Mixed Pelitic Schists

This unit is dominated by fine-grained, feldspar-quartz-mafic schists, where mafics comprise 50 to 90% of the rock. The mafic minerals may be biotite and/or amphibole and/or chlorite. Garnet was identified at one location. Very fine-grained, black to dark green sections may be amphibolites, rather than schists.

Throughout the unit, schists of intermediate to felsic composition are interlayered with the mafic schists. The distinction between gneissic banding and thinly layered schists is somewhat arbitrary.

The felsic schists range from a fine-grained sugary textured, white to grey schist, to a very fine-grained, finely-laminated, pale green-beige to dark grey rock. Some of these resemble impure quartzite and contain up to 5% muscovite.

Distinct within these mixed schists, but not mappable because of scale, is a medium-grained, crenulated, muscovite-quartz schist. Muscovite makes up 35 to 50% of the rock. In some sections, 5-10% pyrite was visible as well formed cubes. Elsewhere, the unit was rusty and only minor pyrite remained. The maximum observed width of these bands was seven metres.

Occasional small veinlets of quartz and calcite were found throughout the entire unit. Calcite was also seen as disseminations in a few locations.

Both crosscutting and conformable felsic bands (aplite or microgranite?) are common in this unit. Since this material is foliated, it is often difficult to determine whether the conformable bands are part of the schists or are younger intrusives. Flaser structure was exhibited in one narrow felsic band, within the schists. Knots of feldspar crystals up to 1 cm across were augened by pale green, epidote-rich foliae. These foliated muscovite-feldspar-quartz bands are also found within the other units on the property and are more fully described as Unit 2a.

Unit 1b: Hornblende and/or Biotite-Feldspar-Quartz Gneiss

Medium-grained hornblende-feldspar-quartz gneisses cover the southwest section of the property. No contacts between this and Unit 1a were seen, although a mixed zone of the two units may exist to the west of Unit 2. Here, contacts are uncertain because of the amount of talus cover.

The rock is predominantly a hornblende gneiss, with hornblende ranging from 30 to 80%. However, up to 30% biotite is also found in some areas. Mafic minerals generally comprise 40 to 50% of the rock.

Mafic and felsic bands range from 2 mm to 1.5 cm in width. Some mafic bands contain well formed hornblende crystals up to 1 cm in diameter. Occasional sections of coarse-grained hornblende, surrounded by irregular patches of biotite-albite-quartz pegmatite (0.1 to 0.2m) were also encountered.

A hornblende-separate from this unit was dated by K-Ar methods, as 165 ± 3 My, but this is believed to represent a thermal resetting during post-metamorphic intrusions (Bultman, 1979).

Unit 1c: Recrystallized, Impure Limestone or Marble

Several small outcrops of carbonate-rich rock, ranging from impure marble to orange-weathering, limey schist were encountered. The main band of recrystallized limestone appears to be 2 to 4 m thick, but may comprise several narrow bands.

This unit contains bands up to 4 cm wide of dark brown-stained siliceous material, and amphibolite that resembles the surrounding rocks. The bands are highly contorted, and indicate the amount of deformation that has been absorbed by this unit.

Unit 1d: Chlorite Schist

One outcrop of this unit was found in a stream. It consisted of medium-grained, crenulated, quartz-chlorite schist. The quartz comprised 10 to 15% of the unit and was seen as blebs up to 5 mm, scattered throughout the rock. Several other outcrops revealed recessively weathered, thin bands of chlorite schists within the mafic schists.

Unit 2: Foliated Intrusives

A large portion of the property is underlain by a porphyritic foliated unit believed to be of intrusive origin, but intimately associated with Unit 1.

The intrusive is generally fine to medium-grained, and contains up to 40% white feldspar phenocrysts. These phenocrysts range up to 3 mm in diameter. Biotite, chlorite and hornblende constitute 40 to 60% of the rock, and the remainder is quartz. Generally chlorite (after biotite and hornblende) constitutes 20 to 35% of the rock, and biotite, 15%, while the hornblende content is variable.

Where chlorite and biotite are the dominant mafics, the rock has a schistose texture. A more gneissic texture is apparent where hornblende is abundant. However, the metamorphic fabric is not as well developed as in the adjacent schists and gneisses.

This unit is exposed in two areas on the property. The outcrop pattern suggests that these may join further north. The foliation appears to parallel that of the surrounding rocks.

Unit 2a: Foliated Microgranite or Aplite

In many places, Unit 2 is intruded by both conformable and crosscutting, fine-grained, foliated dikes or bands (aprites or mafic-poor microgranites). These bands are similar to those discussed in Unit 1a, but are more readily apparent because they contrast with the host rocks.

These bands are mainly composed of quartz and feldspar with minor muscovite and mafic minerals, and occasionally garnet. Bands pinch and swell along strike, and vary from less than 2 m to 15m in thickness. In some areas they comprise up to 20% of the outcrop.

At one location, a small mound of outcrop and loose blocks of a fine-grained felsic intrusive was mapped. This had a similar composition to the microgranite, although it also contained up to 10% chlorite and hornblende, and had a more irregular outline.

Although these intrusives occur throughout Unit 2, the narrow bands are separately labelled on the geology map only where measurements or samples were taken.

Unit 3: Dikes

Numerous dikes, up to 10m wide, crosscut all other units in the map area, and range in composition from rhyolite to basalt.

Pale beige, aphanitic rhyolite dikes (3a) are the most common. Both massive and porphyritic (quartz phenocrysts) varieties were observed. Some dikes contain both quartz and feldspar phenocrysts up to 5 mm in diameter, while those classified as rhyodacite (3b) also contain up to 5% mafic phenocrysts. The mafic phenocrysts are usually hornblende and/or chlorite, and maybe up to 2mm in size. Rhyolite and rhyodacite dikes appear to be associated with mineralization at several locations (see section on Mineralization).

A few dark green to black, very fine-grained to aphanitic basaltic dikes (3c) up to 3m wide, were also mapped. However, these do not appear to have any associated mineralization.

STRUCTURE:-

The metasedimentary rocks exposed in this area have undergone greenschist to amphibolite grade metamorphism. Intense deformation is reflected by a distinct compositional layering and a well-developed foliation. A Steronet plot (Figure 3) of the foliations reveals a strong northwest trend with moderate dips to the southwest (pole maxima - $307^{\circ} / 46^{\circ}$ SW). This feature is consistent with regional trends and indicates northeasterly overturned isoclinal to tight folds. The northeast and southeast dipping surfaces give some indication of the complex structural history of these rocks.

Several variably oriented small scale folds were observed.

A steronet plot (Figure 4) of quartz vein orientations reveals a wide scatter. However, there does appear to be some correlation with the foliation. The veins generally lie within or are perpendicular to the foliation. The mineralized veins, in particular, tend to lie within (strike direction at least) the foliation. Since many of the mineralized veins are poorly exposed they may not be adequately represented on this plot.

MINERALIZATION:-

During the geological survey, eleven areas of vein mineralization were encountered. In many instances the veins were seen only as float or as dump material, but, where seen in outcrop, widths of up to 1.4m were measured. These veins trend northwest and consist of massive to vuggy white quartz with minor galena, chalcopyrite, pyrite, malachite and azurite.

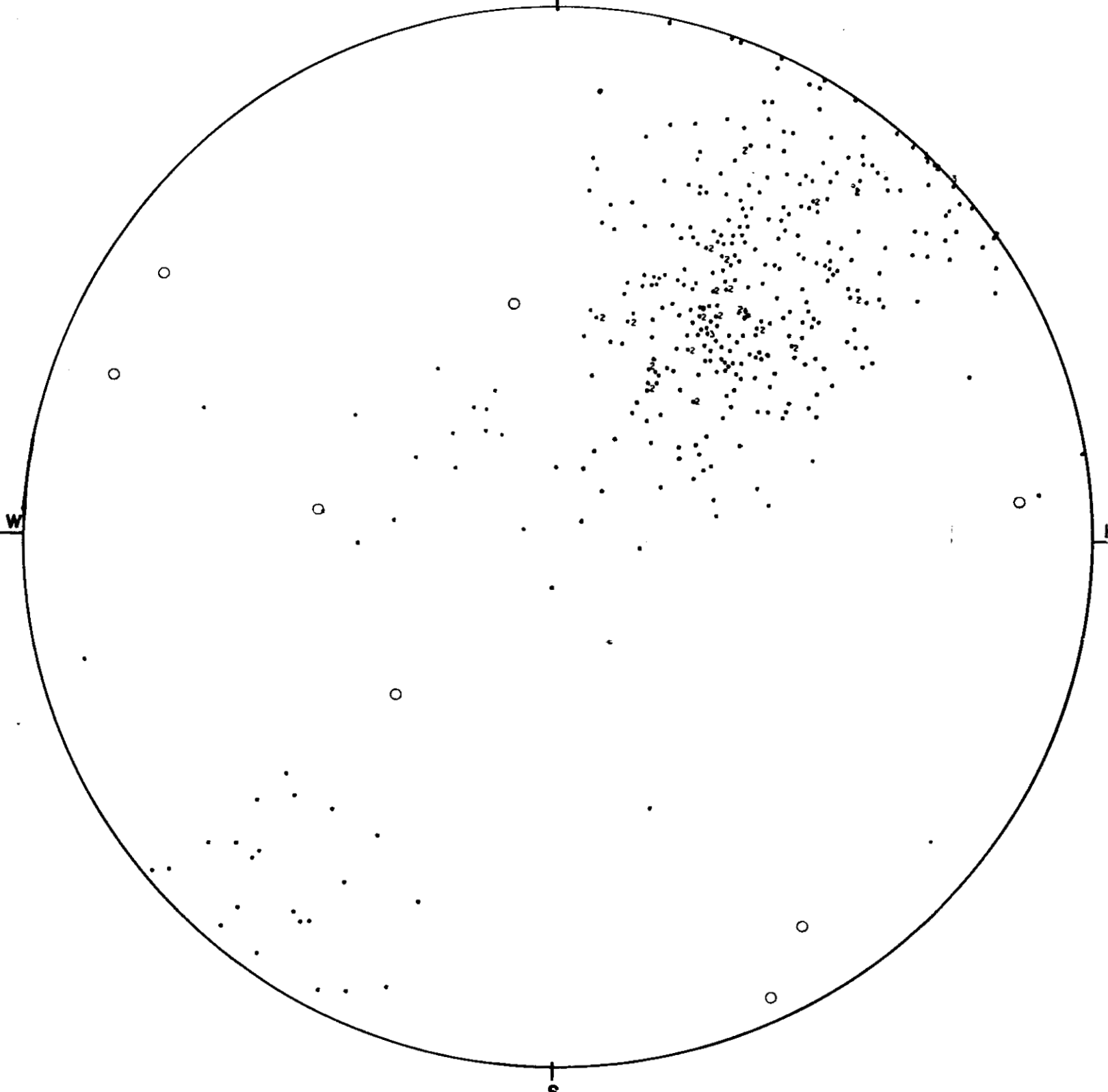
In addition to the vein mineralization disseminated pyrite was found in some outcrops, pyrrhotite was found as small concentrations in a few locations and molybdenum was seen on a shear in the intrusive unit.

The geology map shows the locations of quartz veins and mineralization found during mapping. Many of these veins are barren quartz, or carry only a few grains of pyrite. The eleven areas (Occurrences 'A' to 'K') of vein mineralization are described below, beginning near the lakeshore, with the North and South Veins (Cairnes, 1913).

Occurrence 'A': An old adit located on the lakeshore is probably the first exposure of the North Vein (RECON 7, F25). Blocks of mineralized quartz up to 20 cm wide that contain up to 8% sulphides, were found on the dump. The sulphides include chalcopyrite, bornite, galena and possibly tetrahedrite with minor sphalerite and malachite. A small quartz vein up to 12 cm wide and containing minor pyrite was

FEE CLAIM GROUP — POLES TO FOLIATIONS etc.

NORTH



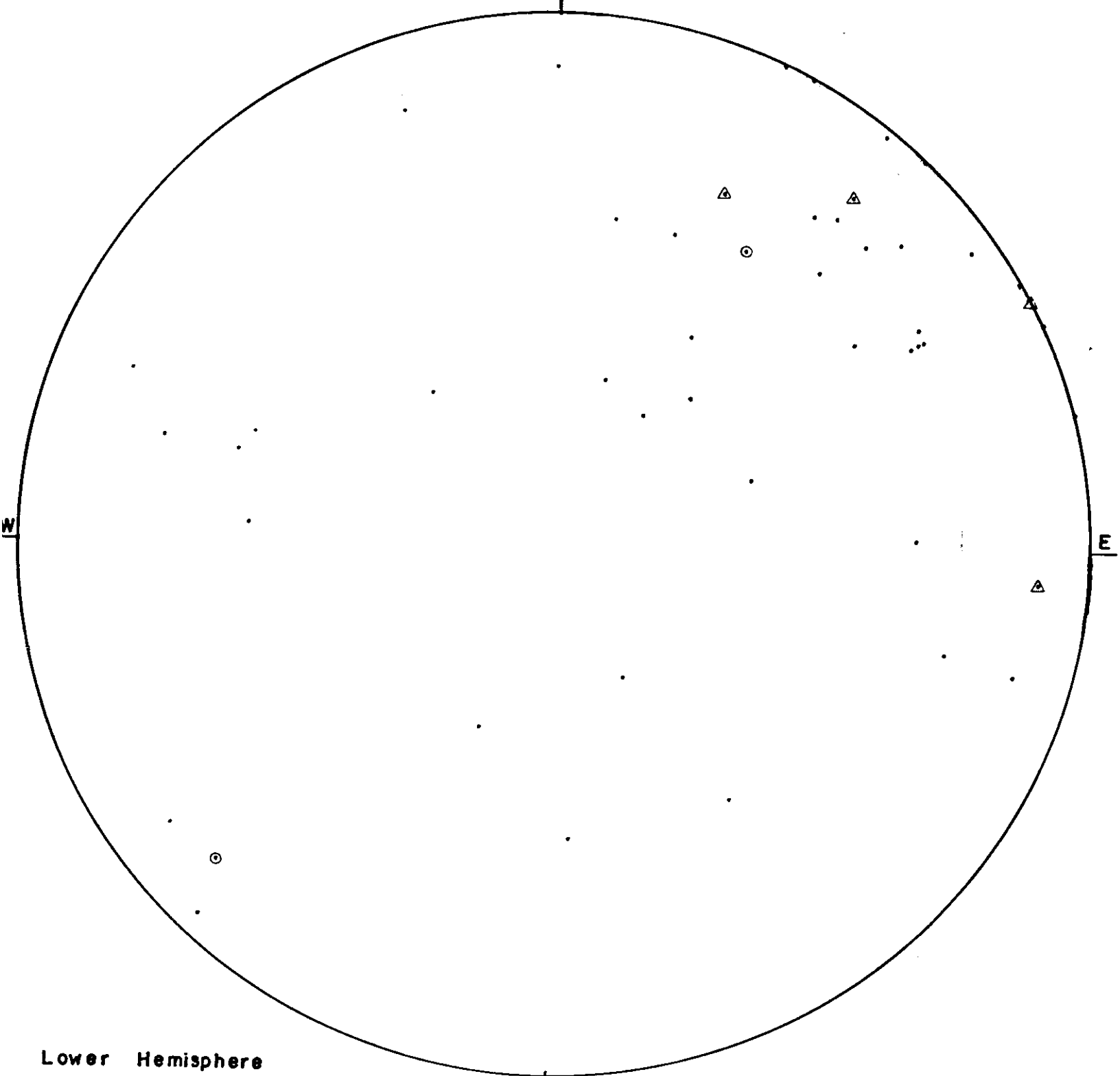
Lower Hemisphere
Equal Area Net Plot

• Poles to foliations (385 points)
○ Fold Axes (8 points)

Figure 3

FEE CLAIM GROUP POLES TO QUARTZ VEINS

NORTH



Lower Hemisphere
Equal Area Net Plot

- Poles to Quartz Veins
- ⊙ mineralized, > 1 m wide
- △ mineralized, < 1 m wide

seen just above the working (F25). This vein lies within the foliation and may or may not be related to the worked vein.

Several small quartz veins up to 15 cm wide lie within the foliation near this working, but these are all generally barren (F 23, F 24, F 137, F 138). Uphill and northwest of the working some mineralized blocks of quartz were found (F 148). These blocks assayed 0.08 oz Au/ton, 3.12 oz Ag/ton, 1.78% Pb and 0.01% Cu (see Appendix B for all assay data). A 17 cm wide quartz vein containing 5% galena, chalcopyrite and malachite (F 13) occurs to the south, on the lakeshore, and maybe the same vein exposed at RECON 7. It assayed trace Au, 0.01 oz Ag/ton, 0.13% Pb, 0.09% Zn and 0.09% Cu.

Occurrence 'B': A second grouping of showings consists of blocks of massive and vuggy quartz float which, in a few instances, were also seen as outcrop (F 76, F 77, F 84, F 86, F 88, F89, F90, F96). These blocks included barren, hematite-stained, and mineralized quartz. The mineralized blocks contained up to 5% galena and pyrite in 0.3m diameter blebs. Assays of grab samples from four of these showings averaged trace Au, 0.72 oz Ag/ton, and 0.9% Pb. These showings maybe part of the same vein as exposed on the lakeshore. Additional blocks of mineralized quartz (F 267, F 33) were observed further south along this trend. F 267 assayed trace Au, 2.09 oz Ag/ton, 1.34% Pb and 0.01% Cu. F 33 was found near an old campsite and may not be in place.

Occurrence 'C': The third area is marked by two shafts 35m apart. A 40 cm wide quartz vein is exposed along the side of one shaft and appears to lie along the rhyolite-schist contact. A chip sample taken across two thirds of this vein (F 106) contained 5 to 10% fine-grained galena, 4% pyrite as large blebs and minor chalcopyrite with associated malachite stain. It assayed 0.06 oz Au/ton, 0.80 oz Ag/ton, 2.45% Pb and 0.01% Cu. A sample of highly sheared and altered rhyolite from a small pit a few metres from one shaft (F 107), and a grab sample of mineralized quartz from around each shaft (F 64, F 108) averaged trace Au, 2.77 oz Ag/ton, 2.49% Pb and 0.02% Cu.

Occurrence 'D': A large working located 300 m southeast of the two shafts (F I, F II, F III) consists of a 60m long trench and collapsed adit. Quartz with minor malachite, pyrite and galena was observed, but the vein was not exposed and no samples were assayed.

Occurrence 'E': Another collapsed adit was encountered approximately 750 m southeast of Occurrence 'D'. As elsewhere, the vein was not exposed although barren quartz (F 326) was seen nearby. Quartz from the dump contained a few percent disseminated pyrite. Several samples contained massive blebs of pyrite up to 6 mm across in fragments of host rock caught up in the quartz. This assayed (F284) trace Au, 1.55 oz Ag/ton, 0.13% Pb and 0.01% Cu.

Several small veins were mapped along the shoreline throughout the zone described in 'C' to 'E' (F3, F 4, F 5, F 35, F 40, F 45, F 46, F 47, F 48, F 49). Most of these are narrow and barren, although some contain up to 8% galena, pyrite, and chalcopyrite or sphalerite. Assays of 6 of these averaged trace Au, 0.31 oz Ag/ton, 0.44% Pb, 0.51% Zn and 0.01% Cu.

Occurrence 'F': Further south along the lakeshore, several trenches and a collapsed adit were found (F 61, F 291, F 293, F 295, F 299, F 327). Blocks found in one trench contained concentrations of pyrite up to 3 cm across in the host rock adjacent to the quartz. Elsewhere, only minor pyrite was seen in the rock. No vein was exposed in outcrop at these locations and no samples were assayed.

Several small isolated quartz veins were also seen in the area uphill and west of these old workings. These are generally narrow (up to 20 cm) and barren, although some contain a few percent pyrite and are rusted (F 226, F 251, F 272). Assays of these three average trace Au, 0.50 oz Ag/ton, 0.09% Pb and 0.01% Cu.

The remaining showings were found above treeline, and constitute part of the Rupert Group. Starting in the north and working south there are five mineralized areas.

Occurrence 'G': One of the best vein exposures on the property is in the vicinity of samples F 374, F 375 and F 438. The vein is exposed for about 3m and is 1.1m wide. A number of workings extend 50m downhill from the outcrop. The vein contains two vuggy sections and carries a few percent disseminated mineralization along with a 7 to 12m wide band of massive galena. A few percent chalcopyrite is found in blebs within the massive galena. Two chip samples were taken across the width of the vein approximately 2m apart. These averaged 0.45 oz Au/ton, 7.14 oz Ag/ton, 9.85% Pb, 0.05% Zn and 0.20% Cu. Other grab samples contain 5% chalcopyrite and galena, with strong malachite and azurite staining. The vein is bounded on both sides by rhyodacite.

Occurrence 'H': This area contains two blast-pits approximately 100m apart (F 369, F 370). Blocks from both of these areas contain malachite and azurite with some pyrite, chalcopyrite, and galena. Small quartz veins were exposed in the walls of both pits. Two samples from F 370 were assayed. The first was a grab sample containing 5% pyrite, chalcopyrite and galena concentrated in the vuggy core of the vein. It assayed 0.02 oz Au/ton, 0.61 oz Ag/ton, 4.71% Pb, 0.07% Zn and 0.49% Cu. The second sample was of vein material from the wall. Small veinlets occur within a 20 cm wide zone of aphanitic rhyolite and contain less than 1% galena. This assayed trace Au, 0.20 oz Ag/ton, 0.36% Pb, 0.01% Zn and 0.03% Cu.

Occurrence 'I': In this area, a number of occurrences which probably represent the series of veins described as the Rupert Group were located.

First, a series of small pits, with some blocks of quartz containing 1-2% pyrite and galena, were examined (F 356, F 357). Then, possibly on strike and 250m away (F 352), another pit exposes a vuggy quartz vein. This vein is at least 0.6m wide and 6m long, and contains 1-2% galena and pyrite with minor chalcopyrite and malachite. These showings may be the Rupert No. 1 Vein.

A second series of showings (Rupert No. 2 Vein) was found approximately 90m southwest of these (F 350, F 353, F 354, F 355). The first of these (F 350) has been blasted but no in-place vein was visible. Here, "plates" of solid galena up to 2 cm wide were observed in blocks of quartz up to one metre wide. This quartz also contained disseminated galena and pyrite. A grab sample assayed 0.12 oz Au/ton, 1.57 oz Ag/ton, 11.77% Pb, 0.60% Zn, and 0.01% Cu. The remainder of these showings are poorly mineralized quartz (F 353 contains minor pyrite and galena) or are small blast pits.

Vein No. 3 (Rupert) was found 40 to 50m southwest of No. 2, and consisted of a 1 to 1.4m wide quartz vein (F 347) exposed for about 30m in a stream cut. A band of massive galena and pyrite 6 to 8 cm wide is present in this quartz vein. The quartz also contains a few percent sulphides disseminated throughout. A chip sample across 0.8m assayed trace Au, 6.93 oz Ag/ton, 0.26% Pb, 0.32% Zn and 0.01% Cu. The vein was exposed over one metre at F 349, and in a series of small pits between F 347 and F 349. Float downstream (F 340, F 341) consisted of both barren and weakly mineralized quartz.

Approximately 350m southwest of Vein No. 1 several small workings in the talus contain mineralized quartz in the dumps, although none was seen in outcrop (F 329, F 367, F 368). These mineralized fragments contained massive galena and vuggy quartz with minor pyrite, galena and chalcopyrite. These maybe Rupert No. 4 and 5 veins. Adjacent areas to the southwest have not yet been mapped.

Occurrence 'J': Several small pits were found in talus north of the moraine (F 427, F 430) but no mineralization was observed. These maybe Vein No. 6 of the Rupert Group. Numerous blocks of quartz, some with minor pyrite, were also seen in this area. Samples containing up to 10% pyrite and galena were found within the moraine (F 373, F 412).

Occurrence 'K': Another group of veins was exposed in an outcrop that is completely surrounded by ice. Access to the entire outcrop was not possible but a series of 10 Veins were seen along 100m of one face (F 421, F422, F423, F424, F425). These veins are up to 25cm wide and often erratic in form. They are highly oxidized, but still contain a few percent pyrite and may have contained other sulphides. Pyrrhotite was also seen in F 424. One face of the outcrop appeared to be a pyrite-mineralized shear surface. Assays of three of these veins returned trace Au, 0.20 oz Ag/ton, 0.01% Pb, 0.01% Zn and 0.02% Cu. This maybe the source of some of the mineralized material found in the moraine, but does not account for the larger blocks of quartz observed there.

Other Mineralization: Several other mineralized occurrences were examined on the property.

Within Unit 1a, there are several bands of medium-grained crenulated muscovite-quartz schists. Some of these are rusted and may contain up to 15% disseminated pyrite (F 37, F38, F42, F218, F228). Some outcrops also show malachite staining. Assays of 2 of these gave: trace Au, 0.01 oz Au/ton, 0.01% Pb, 0.04% Zn and 0.01% Cu; and trace Au, 0.46 oz Ag/ton, 0.23% Pb and 0.01% Cu.

A 15 cm band of altered mafic schist (metavolcanic?) containing 25% pyrite was exposed on the lakeshore (F26). It was assayed and contained trace Au, 0.01 oz Ag/ton, 0.02% Pb, 0.02% Zn and 0.07% Cu.

In the foliated intrusive, a silver-coloured mineral (possibly molybdenum) was seen with pyrite on a shear (309). It was assayed as trace Au, 0.61 oz Ag/ton, 0.10% Pb, 0.05% Zn and 0.01% Cu. The Mo result is not available at this time.

A section of recrystallized impure limestone (Unit 1c, F360) was found to contain 1 to 2% pyrrhotite as small concentrations up to 0.5 cm by 0.2 cm. Samples were exposed to ultraviolet light but no fluorescent minerals were present.

Pyrite was noted in most rock types on the property but was more common in Unit 1a than 1b, and was found more sporadically in Unit 2.

SUMMARY:

Although the better mineralization is associated with rhyolite or rhyodacite dikes in several areas, veins were observed within all three major rock units. The lack of exposure at old workings precludes any further discussion of favourability of certain host rocks. The relative age of dikes and mineralization is not known.

It should be noted that values for silver assays below 0.50 oz per ton maybe suspect because of contamination in the assay laboratory. However, in view of the grades required for a vein-type operation, this is not a particular concern.

GEOCHEMICAL SURVEY:-

GENERAL:

A reconnaissance soil sample survey was conducted over the property from June 18th to September 6th, 1980.

Since suitable scale topographic maps were not available, approximately 13623m of grid lines were cut to provide control for the geochem survey. This involved the establishment of a southwest (220°) oriented tieline and five northwest (310°) oriented baselines at approximately 1000m intervals. The tieline was not cut from baseline 0 northeast to the lakeshore.

Geochemical sample lines were run at 040°/220° using topofil or hipchain and compass at 100m spacings along the baselines. Samples were taken at 30m intervals along these lines, using mattocks and trowels. Stream sediment samples were taken wherever lines crossed streams.

Approximately three quarters of the property was sampled and 5403 soil samples collected. All samples were analysed for silver, lead and zinc, while some 2630 were also analysed for arsenic. A few samples were analysed for copper. One hundred and seventy-one (171) stream sediment samples were taken, and analysed for silver, lead, zinc, arsenic (145), copper (11) and gold (10). Statistics of the geochemistry results are summarized in Appendix C.

All analyses were carried out by Bondar-Clegg and Company Ltd., using standard analytical techniques (Appendix D).

Thirty-five rock samples (Appendix B), composed mainly of quartz vein material, were analysed for gold, silver and lead. Sixteen of these were analysed for zinc and 30 for copper. Seven samples were also analysed for molybdenum. These analyses were carried out by the U.K.H.M. assay lab, Elsa, Y.T.

PEDOLOGY:-

The Fee property is situated in an alpine area in which the B-horizon is poorly to moderately developed. Steep slopes generally consist of talus and slide rock with minimal organic and B-horizon soil cover. Numerous channels funnel spring runoff which has resulted in the widespread distribution of material downslope towards Taku Arm.

At higher elevations, more moderate slopes are encountered and large areas are covered with talus material. In places well-developed linear and polygonal-shaped patterns are exhibited by frost-heaved boulders.

The area below the FEE glacier is covered by lateral and recessional glacial moraines. This material consists primarily of blocks from 0.2 to 0.3m across and contains several small tarns. Soils in this area are assumed to be completely transported.

On the lower portions of the property, sample depths ranged from 15 to 50 cm, while above treeline, depths ranged from 5 to 20 cm.

Where no B-horizon material was available, talus fines and organic material was collected.

INTERPRETATION of RESULTS:-

GENERAL:

Results for soils and stream sediment samples were tabulated for each element and are summarized in Appendix C. Histograms were drawn for all elements except Cu in soils which had too few values to be statistically significant.

The threshold value for Pb in soils was established as 50 ppm, with 89.5% of the values lying below the threshold (Figure 5). Values greater than 800 ppm (maximum 6900 ppm) were considered to be highly anomalous (0.1%).

About 86% of the silver values lie below a threshold of 0.5 ppm (Figure 6). Those greater than 8.0 ppm were considered highly anomalous (0.1%). A maximum of 28.0 ppm was returned for the same sample with the maximum Pb value.

The zinc threshold of 200 ppm eliminates 87% of the values (Figure 7). In this case 1600 ppm or greater (maximum 3680 ppm) was considered highly anomalous (0.3%).

Approximately one-half of the samples were analysed for arsenic. About 92% of these fall below the threshold of 25 ppm (Figure 8). All samples over 100 ppm (maximum 1000 ppm) were considered to be highly anomalous (0.6%).

FEE CLAIM GROUP

HISTOGRAM of Lead Results for 5403 Soil Samples

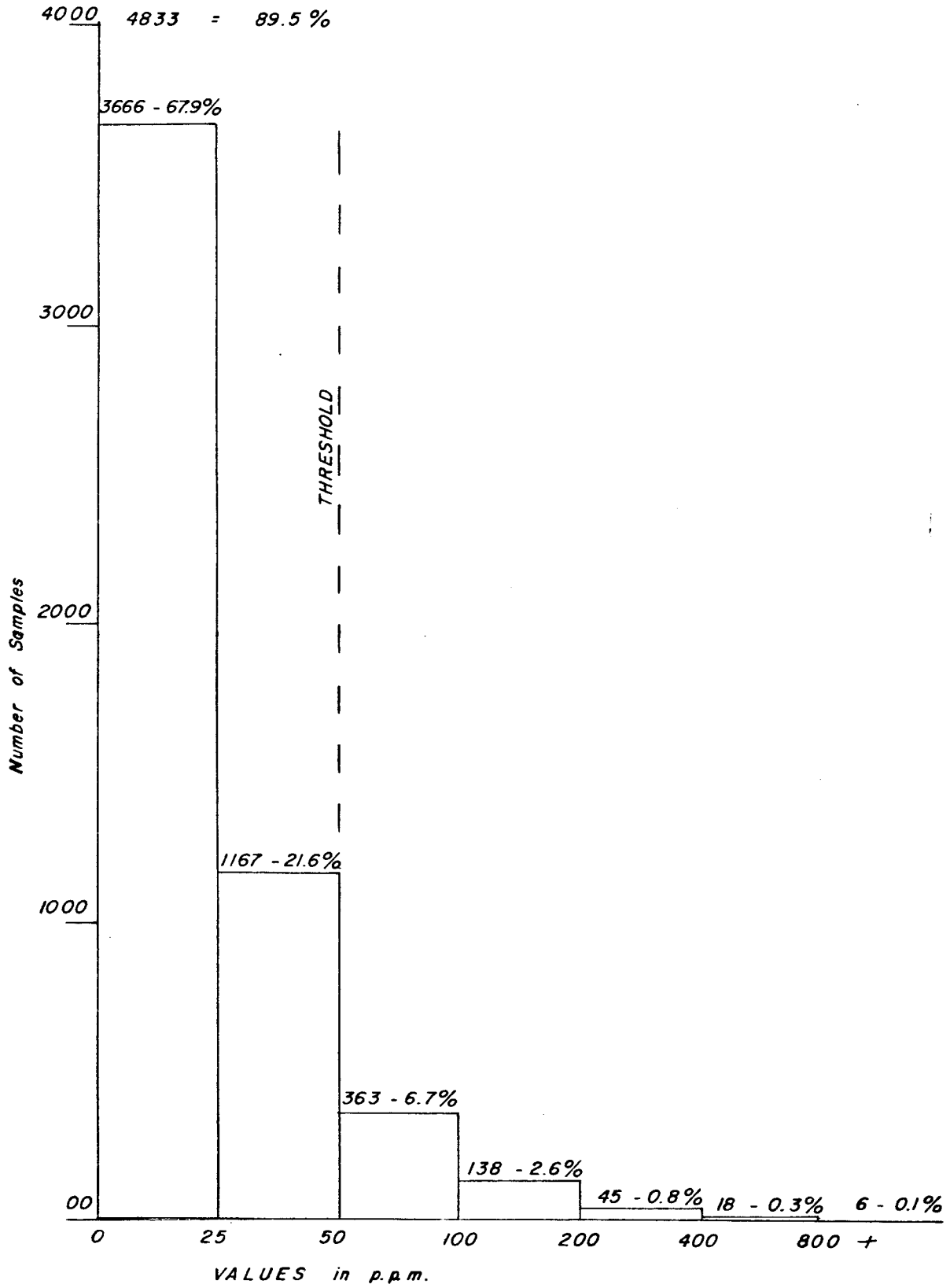


Figure No 5

FEE CLAIM GROUP

HISTOGRAM of Silver Results for 5398 Soil Samples

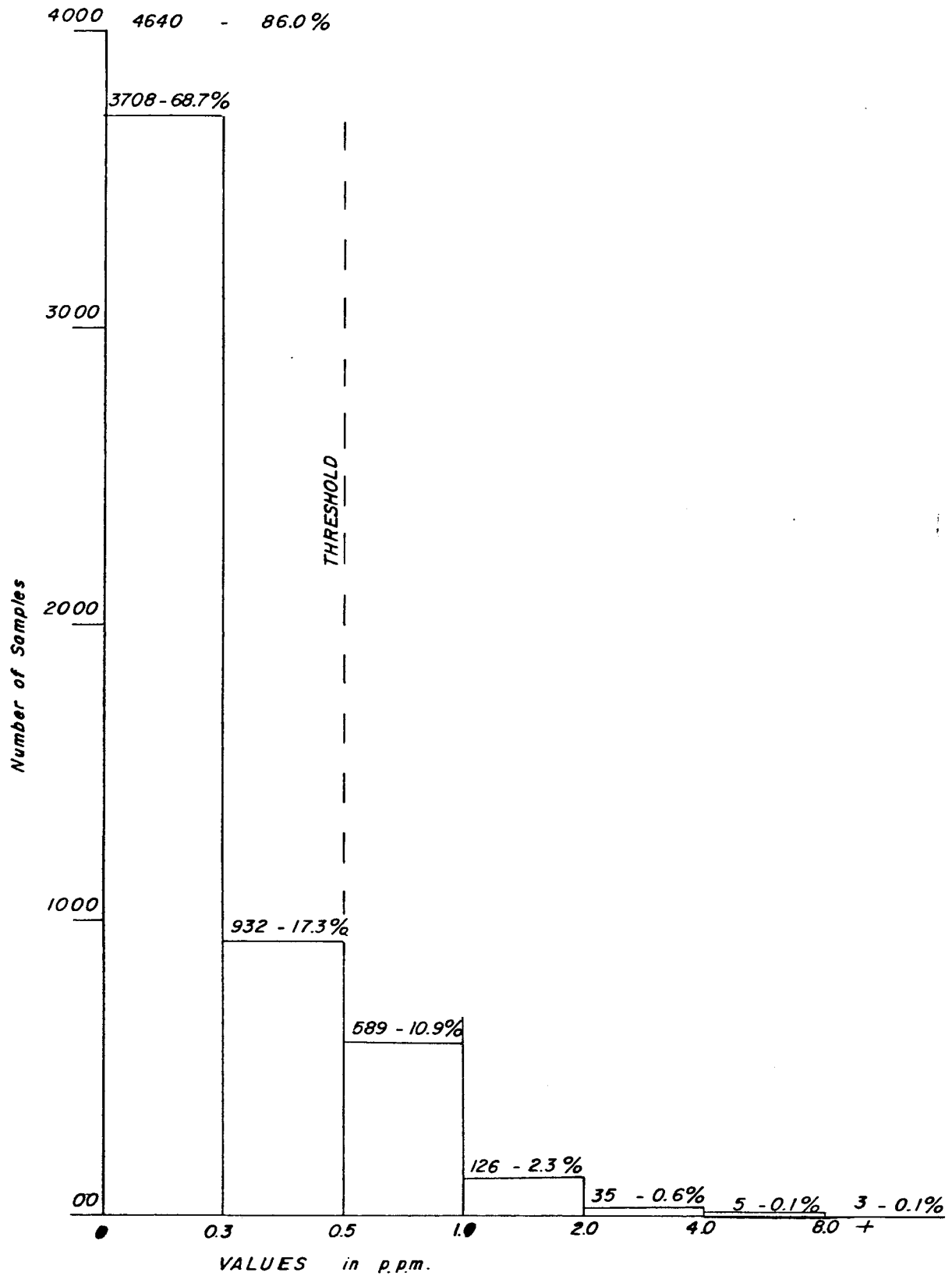
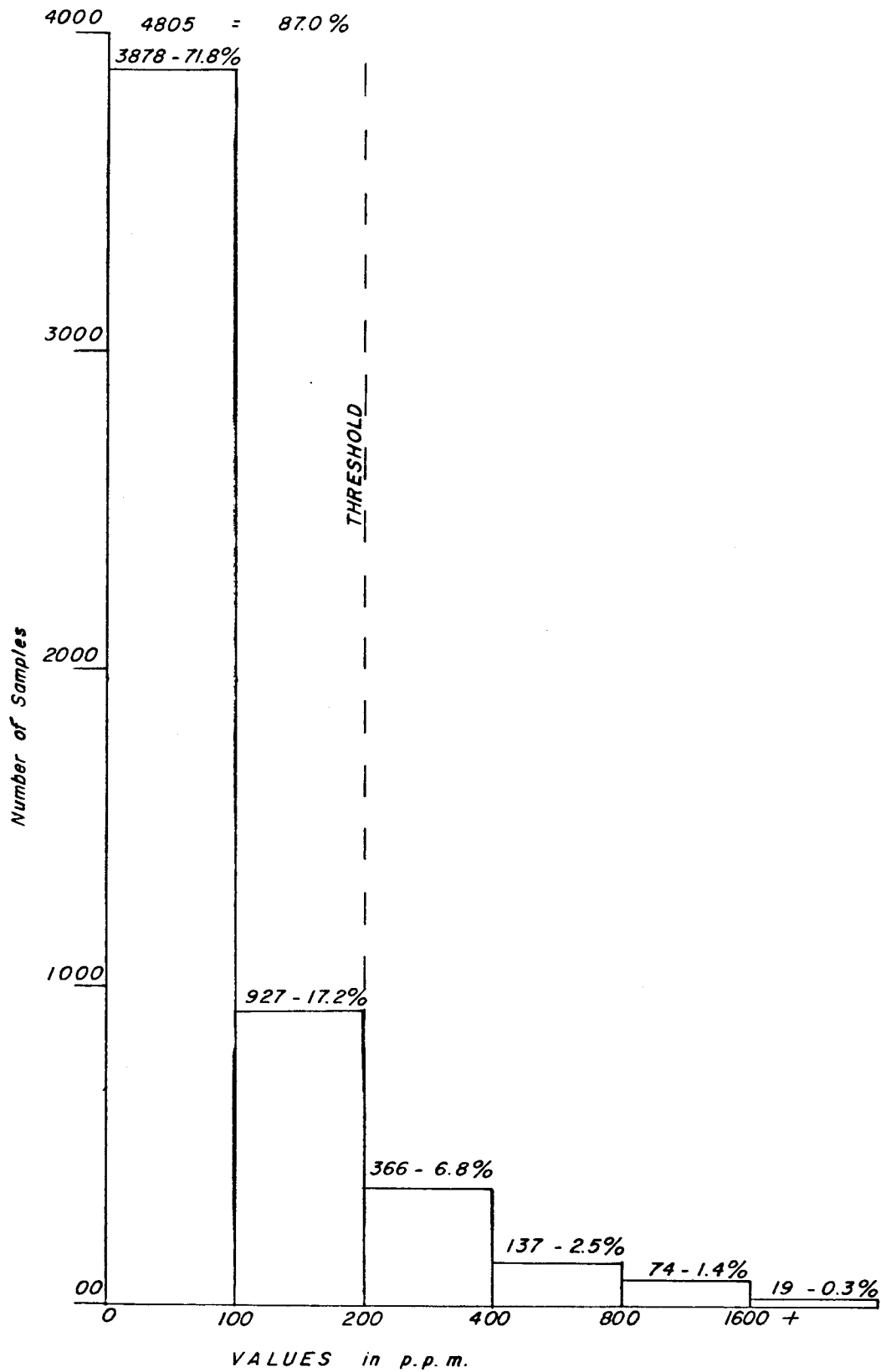


Figure No 6

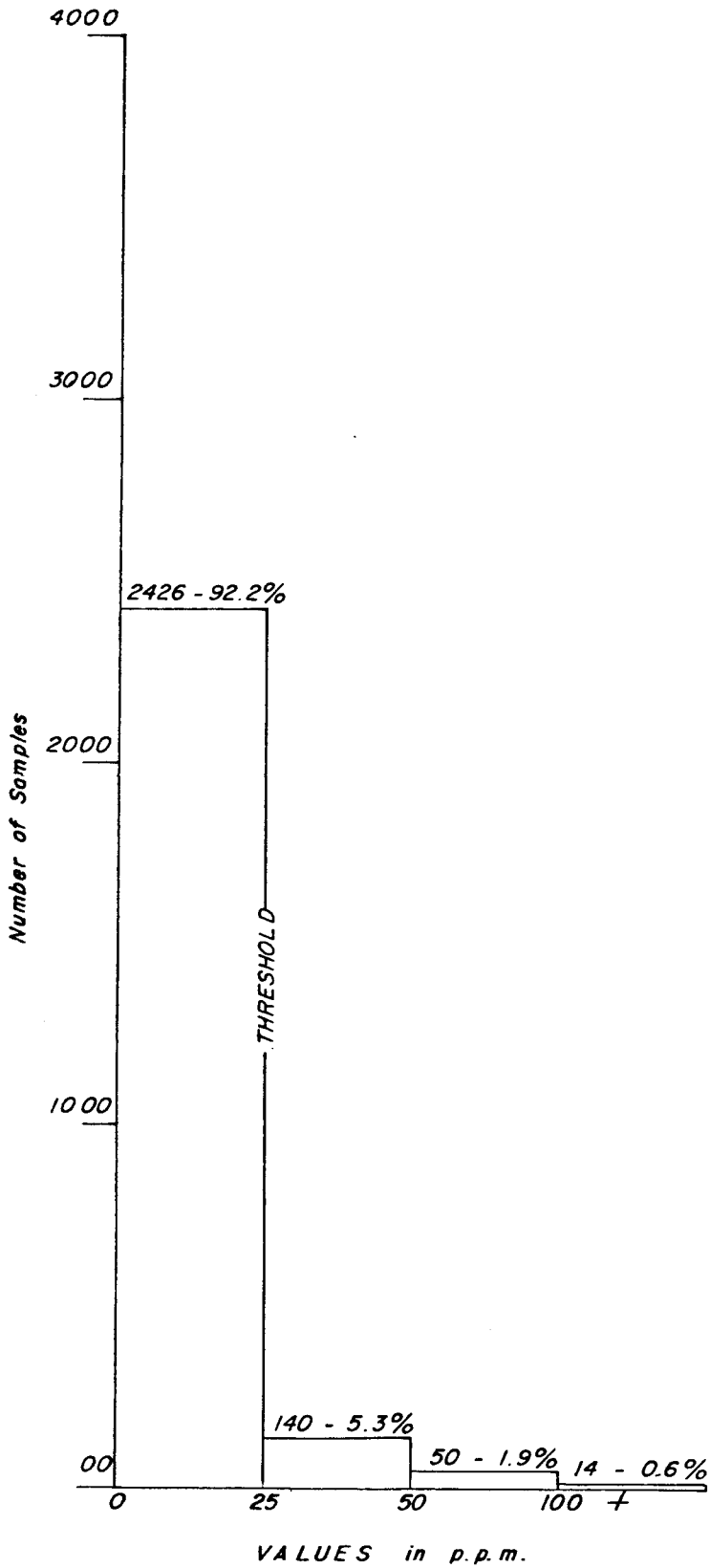
FEE CLAIM GROUP

HISTOGRAM of Zinc Results for 5401 Soil Samples



FEE CLAIM GROUP

HISTOGRAM of Arsenic Results for 2630 Soil Samples



FEE CLAIM GROUP

HISTOGRAMS of Results for Steam Sediment Samples

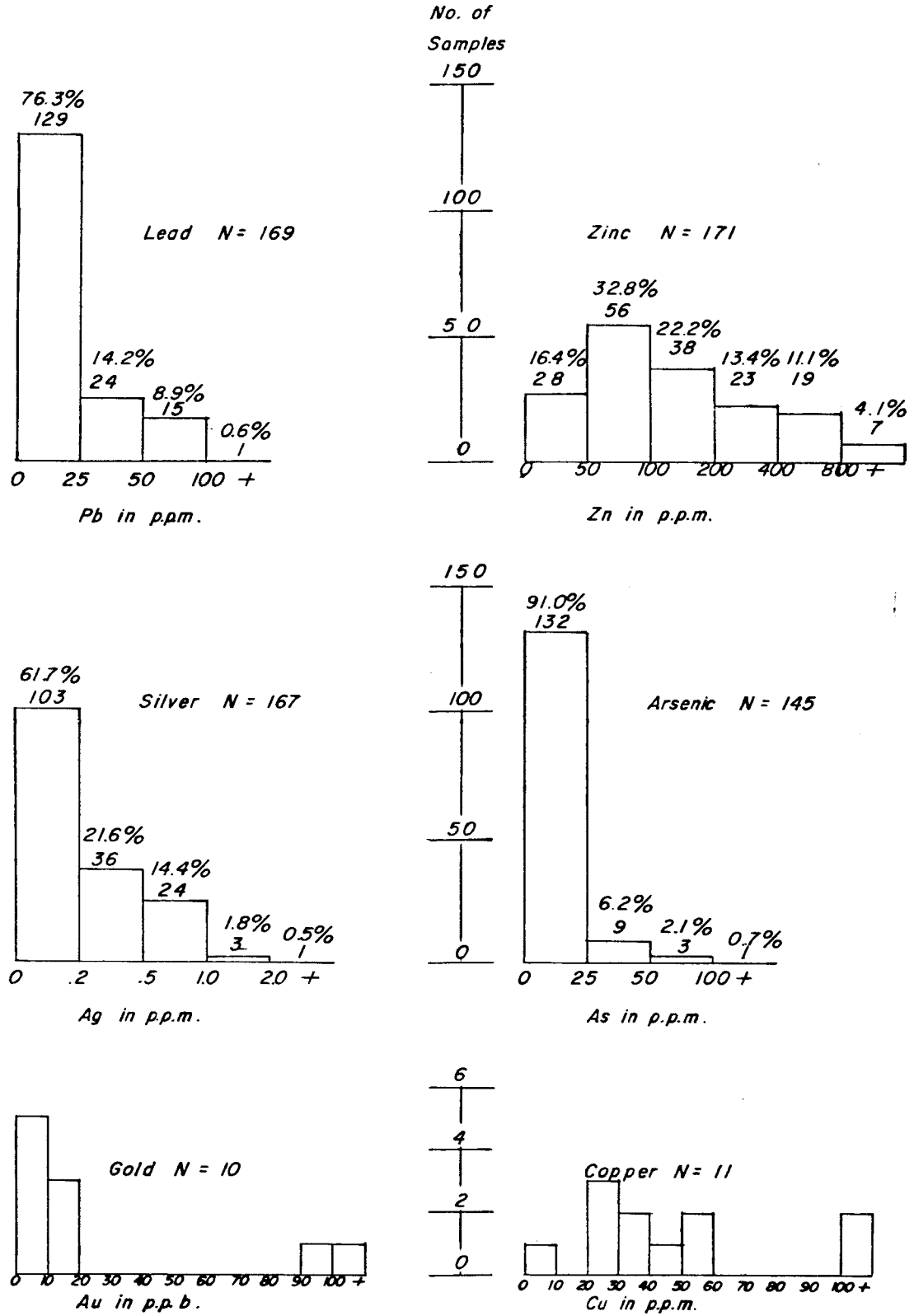


Figure No. 9

Contoured soil sample plots were compiled for Pb, Ag, Zn and As (in pocket). Stream sediment values were also plotted on these maps, but not used in the contouring except as guidelines. Stream sediment sample histograms are shown in Figure 9.

Several distinct anomalies appear on some or all of the sample plots. Silver and lead anomalies are usually coincident, although silver is often less defined and more sporadic. Zinc shows similar patterns to these elements in some areas but is conspicuously lacking in other parts of the property.

Two different patterns characterize anomalous zones. The first is that of well-defined, restricted zones of a few high values with few supportive values. These probably indicate mineralized veins. The second pattern covers a much more extensive area and consists of a series of highly anomalous values, surrounded by moderate values. These often have linear trends and are separated by background levels.

Both patterns are complicated by downslope movement of materials. This results in an east-southeast or north-northwest trend (depending on location on property) superimposed on a more general northwest trend. Streams are often delineated by anomalous values.

DETAILED:

A lead-silver anomaly is associated with Occurrence 'G'. Zinc values are below threshold. The lead plot reveals a very distinct linear north-northwest trend extending 800m downslope from the vein outcrop. This anomaly is about 75m wide. The silver anomaly is less precise with a sharp high below the outcrop, and unconnected one or two sample anomalies coincident with the rest of the Pb anomaly. There are also scattered, weakly anomalous samples in the surrounding area but no pattern is apparent.

A second anomalous zone is outlined in the moraine at the northeast end of the ice. There, lead and silver have very similar anomalous patterns over an area 500m by 150m. The zinc anomaly is less pronounced and covers a smaller area (400m by 100m). The anomaly lies entirely within the moraine, and its boundary follows the small valley marking the edge of the moraine. Several weak to moderate anomalies of all three elements are also found elsewhere along the boundary and within it. The main anomaly may or may not relate to bedrock mineralization and sampling must be completed to the southeast before any conclusions can be drawn. The small anomalies within the moraine are probably caused by transported material and show no major trends.

A third anomalous area consists of two to three small anomalies in three elements located south of the glacier. Lead and silver anomalies are almost identical (over 200m by 100m) while the zinc anomaly is of smaller dimensions. The form of this anomaly is similar to that related to Occurrence 'G', and may indicate a mineralized vein. There is no bedrock exposure in the area to confirm this, so further examination is necessary.

Samples collected along the claim lines in the southwest corner of the property show a moderate silver anomaly over 400m by 300m. A moderate 100m zinc and two weak lead anomalies are also present.

An anomalous area near Occurrence 'H' contains four moderately high lead values. These may represent two or three veins approximately 150m apart. The trend extends 400m northwest and 300m northeast over three separate segments. These anomalies may lie along strike with Occurrence 'G'. Silver shows high values coincident with some of those for lead but the anomaly is more widespread and less defined. In this area zinc has only weak spot anomalies. Arsenic shows a distinct 400m wide anomaly that extends 500m downslope. Some of the highly anomalous arsenic values are coincident with lead and silver, but this anomaly extends downslope several hundred metres beyond the others. Several of the high values are within background areas for the other elements. Further south, another 50m wide arsenic anomaly extends 200 to 300m downslope. No associated anomalies are evident in results for the other elements.

The anomalous area over Occurrence 'I' contains the highest lead and silver values on the property (6900 ppm and 28 ppm, respectively). Three or four northwest (and downslope) trends are visible over 1600m along Baseline 1. This anomaly is open to the southeast and the southwest. At least three veins are known in this area which can be related to the anomaly. Several more veins may be implied from the anomaly. When sampling of the surrounding area is completed, a more precise interpretation may be attempted. The silver anomaly here tends to parallel the stream channel directions and define several smaller downslope anomalies within the lead zone rather than show the vein system trends as lead does. The main zinc anomaly covers only 200m by 75m. It is coincident with the strongest lead and silver anomaly. Most of these samples were not analysed for arsenic, although a single high is correlative with moderate silver and lead values.

Further downslope in the same area, lead and silver show small, weakly anomalous zones apparently related to stream cuts, but open into the alders. The zinc shows much stronger and more extensive trends. Some of these have no associated anomalous lead and silver. These extend for 200 to 300m downslope and are open into the alders.

A large lead anomaly occurs between Baseline 0 and Baseline 1, from 12 + 00NW to the lakeshore (700 to 1000m wide by 2000m long). This zone is much more extensive than others seen on the property. Within this area, five to six distinct, downslope, north-northwest-trending highly anomalous zones occur. These are generally 100m to 150m wide and are separated by similar sized areas of background values. It is possible that these represent a series of veins, but the size of the total anomaly suggests that other factors maybe involved. Only the two highly anomalous zones closest to the lake can be related to known mineralization (Occurrences 'B', 'D' and 'E'). A more detailed look at the geology is necessary for the remainder of the area. A sharp boundary exists along Baseline 0 with no lead anomalies in several areas of known mineralization northeast of it. Below Tieline 0, the geological contact seems to match that of the anomaly, but to the northwest of the Tieline, the contact is marked by background values with anomalous values occurring on both sides of it. The silver anomaly covers a larger area, from 15 + 00NW to the lake, and from Baseline 1 to the lake, but most of this is only weakly anomalous. The three silver highs coincide with lead values, and the linear trend between Baseline 1 and Baseline 0, of highs separated by background values, is repeated. Between Baseline 0 and the lake, where there is no related lead anomaly, the weakly anomalous silver values occur as small clusters without any distinctive trend. Arsenic shows a few weak anomalies over lead highs in this area. One of the two single high values, upslope of Occurrence 'F', coincides with moderate lead and silver anomalies. The remainder of this area has background arsenic values. The zinc anomaly covers a similar area to lead and also terminates sharply at Baseline 0. However, it also extends in a band close to Tieline 0, across to Baseline 2. This is open into alders to the northwest and the southwest. There are a series of 17 highly anomalous zones in northwest linear trends. These are similar to, but more extensive than, the lead anomalies. In two instances, the zinc anomalies are partially located in swampy ground, which may account for the high zinc concentrations. In these areas only moderate lead and silver values are present. In addition to the coincident anomalies, a series of zinc anomalies between Baseline 2 and Baseline 1 have no accompanying silver and lead. These extend 200 to 300m downslope from Tieline 0 and are open to the northwest. Several, two to three sample, moderate to high silver and lead anomalies are found within this band, uphill from Occurrence 'F'.

Arsenic displays a moderately anomalous zone at the southeast end of the property, without accompanying silver, lead or zinc anomalies. This consists of two trends. One extends downslope 800m and is open to the northwest and southeast. The other is located 300m to the northeast and extends 700m downslope from the edge of sampling. Further work is required to explain these anomalies.

Several of these anomalies indicate known veins, while others resemble these, though no related vein was seen. Further, more detailed investigation of all of these should be carried out following the completion of sampling and mapping in the remaining sections.

The distinctive pattern near the lake could represent a series of veins, or a broader, anomalous zone. The prominent lack of zinc values above background levels on the upper half of the property maybe related to this pattern. An examination of the airphoto shows a prominent northeast lineament which seems to parallel the northwest boundary of anomalous zinc, between Baseline 1 and Baseline 0. It is not certain if this trend continues to the southwest, due to gaps in sampling in this region, but this lineament may have controlled the zinc mineralization on the property. Lead and silver anomalies extend across this lineament between Baseline 1 and Baseline 0, but less pronounced northwest-southeast trends evident on the airphoto may relate to these anomalies. Approximately 100 samples are being tested to determine whether the zinc in this large anomaly is derived from sulphides or by precipitation from groundwater solutions.

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APPENDIX A
STRUCTURAL MEASUREMENTS

Foliations

006/25E	112/15SW	120/52SW(2)	125/65SW	132/65SW
006/36E	112/45SW	120/55SW	125/72SW	132/82SW
020/05E	112/52SW	120/56SW	125/76SW	132/90
020/60SE	112/60SW	120/58SW	126/23SW	133/36SW
030/25SE	112/61SW	120/60SW	126/40SW(3)	133/38SW
030/37SE	112/75SW	120/62SW	126/42SW	133/46SW(2)
034/19SE	113/37SW	120/65SW	126/60SW	133/47SW
045/23SE	113/54SW	120/68SW	126/62SW	133/61SW
055/32SE	113/61SW	120/74SW	126/67SW	133/80SW
057/20SE	114/40SW	120/78SW	127/38SW	134/21SW
058/24SE	114/53SW	120/89SW	127/50SW	134/30SW(2)
062/18SE	114/65SW	120/90	127/55SW	134/37SW
062/23SE	114/74SW	121/30SW	127/68SW	134/38SW
067/25SE	115/35SW	121/43SW	127/69SW(2)	134/39SW
090/12S	115/45SW	121/50SW	127/74SW	134/45SW
095/56S	115/47SW	121/57SW	127/76SW	134/48SW
095/62S	115/52SW	121/59SW	127/80SW	134/56SW
095/74S (2)	115/68SW	121/85SW	127/85SW	134/62SW
096/60S	115/81SW	122/29SW	128/38SW	134/63SW
097/32S	115/88SW	122/35SW	128/40SW	134/66SW
098/36S	115/90	122/38SW	128/46SW	134/70SW
098/51S	116/41SW	122/40SW	128/52SW	134/82SW
099/547S	116/45SW	122/42SW(2)	128/56SW	134/90 (3)
100/35S (2)	116/62SW	122/43SW	128/63SW	135/50SW
100/50S	116/72SW(2)	122/46SW(2)	128/68SW	135/52SW
102/26SW	116/82SW	122/52SW	128/71SW	135/62SW
102/55SW	117/52SW(2)	122/53SW	128/82SW	135/90 (2)
102/67SW	115/55SW	122/56SW	129/25SW	136/40SW
102/90	117/78SW	122/70SW	129/30SW	136/42SW
105/32SW	118/30SW(2)	123/32SW	129/36SW	136/55SW
105/40SW	118/32SW	123/44SW	129/47SW(2)	136/60SW
105/42SW	118/40SW	123/49SW	129/56SW	136/62SW
105/52SW	118/45SW	123/53SW	129/81SW	136/63SW
105/70SW	118/46SW	123/62SW	130/34SW	136/66SW
106/60SW	118/54SW	124/32SW	130/37SW	136/87SW
108/32SW	118/55SW	124/36SW(2)	130/40SW	137/38SW
108/36SW(2)	118/58SW	124/39SW	130/42SW	137/42SW
108/37SW	118/62SW	124/40SW	130/46SW	137/43SW
108/42SW	118/65SW	124/45SW	130/47SW	137/54SW
108/44SW	118/73SW	124/48SW(2)	130/60SW	138/38SW
108/72SW	119/54SW	124/50SW	130/76SW(2)	138/43SW
109/90	119/61SW	124/56SW	130/78SW	138/44SW
110/12SW	119/77SW	124/65SW	130/82SW	138/49SW
110/43SW	119/88SW	124/70-75SW	130/90	138/52SW
110/44SW	120/18SW	124/72SW	131/60SW	138/72SW
110/53SW	120/23SW	124/81SW	131/82SW	138/90 (3)
110/61SW	120/25SW	124/90	132/10SW	139/35SW
110/66SW	120/27SW	125/trend	132/38SW	139/36SW
110/67SW	120/28SW(2)	125/41SW	132/40SW	139/54SW
110/90	120/30SW	125/42SW	132/42SW	139/62SW
111/42SW	120/42SW	125/43SW(2)	132/43SW	139/78SW
111/43SW	120/49SW	125/63SW	132/52SW	140/05SW

Foliations (con't)

140/40SW	152/18SW	<u>Quartz Veins</u>	
140/48SW(2)	152/32SW		
140/50SW	152/45SW	003/48E	266/46N
140/53SW	154/25SW	015/65SE	280 trend
140/54SW	154/26SW	016/52SE	291/30N
140/62SW(2)	154/45SW	020/50SE	313/85NE
140/63SW	155/23SW	022/75SE	316/75NE
140/68SW	158/72SW	050/30SE	
140/80SW	162/42SW	070/76S	
140/85SW	165/25SW	100/53S	
140/86SW	165/32SW	106/27SW	
140/89SW	170/25W	110/53SW	<u>Fold Axes</u>
141/75SW	170/33W	110-115/90	
141/90	170/90	115/63SW	085/14E
142/24SW	174/80W	118/90	148/14SE
142/34SW	185/13W	122/39SW	155/04SE
142/43SW	218/80NW	122/56SW	225/55SW
142/47SW	240/18NW	123/25SW	277/53W
142/63SW	250/75NW	127/68SW	290/12NW
142/77SW	274/07N	128/89SW	304/12NW
142/82SW	290/63N	130/70SW	350/52N
142/85SW	290/80N	130-140/75SW	
143/32SW	294/84NE	131/31SW	
143/65SW	297/86NE	133/61SW	
144/41SW	300/55NE	133/90	
144/48SW	301/65NE	135/70SW	
144/58SW	302/75NE	138/75SW	
144/65SW	303/76NE	139/35SW	
144/80SW	304/75NE	139/78SW	
145/23SW	305/86NE	141/90	
145/28SW	306/75NE	142/85SW	
145/50SW	309/56NE	143-145/78E-85W	
145/56SW	310/81NE	143/65SW	
145/87SW	310/86NE	145/57SW	
145/90 (2)	313/70NE	148/68SW	
146/26SW	313/72NE	150 trend	
146/70SW	315/58NE	150/65SW	
147/37SW	316/72NE	150/67SW	
147/50SW	318/57NE	150/68SW	
147/57SW	318/64NE	150/90	
148/26SW	318/76NE	152/90	
148/38SW	319/85NE	155/90	
148/58SW	320/88NE	160/32SW	
148/87SW	345/81NE	165/90	
149/42SW	358/31E	170 trend	
150/41SW		178/57W	
150/47SW		180 trend	
150/50SW		184/80W	
150/56SW		195/78W	
150/58SW		195/65W	
150/84SW		234/48NW	
151/40SW		240/23NW	

APPENDIX B

ASSAY RESULT FORM

DATE			Tag No.	Location and Description	ASSAY RESULTS								
D	Mo.	Yr.			Au oz/ton	Ag oz/ton	Pb %	Zn %	Cu %	Mo %	W %		
12	6	80	5024 'C'	FEE 3:15 cm band of Qtz & fragments of siliceous rock, with blebs of ga & py (10%)-strike length 1 m	tr	0.38	1.95	1.22	0.01				
12	6	80	5025 'C'	FEE 5:8 cm band (by .8 m), Qtz in schist, containing 5-10% Py in blebs to 1 cm.	tr	0.18	0.03	0.03	0.01				
12	6	80	5140 'C'	FEE 4.1 m section of finely laminated, rusty siliceous rock, containing up to 10% py on foliation & shears	tr	0.01	0.04	0.04	0.04				
12	6	80	5141 'A'	FEE 13:17 cm Qtz vein in schist, with minor cp, mal, ga	tr	0.01	0.13	0.09	0.09				
13	6	80	5142	FEE 26: altered mafic rock (volcanic), 15 cm band in schist, with 25% py and minor chalcopyrite	tr	0.01	0.02	0.02	0.07				
13	6	80	5143	FEE 31:7-8 cm Qtz vein crosscutting schists; some vugs; contains 1% py and minor galena	tr	0.01	0.01	0.02	0.05				

ASSAY RESULT FORM

DATE			Tag No.	Location and Description	ASSAY RESULTS								
D	Mo.	Yr.			Au oz/ton	Ag oz/ton	Pb %	Zn %	Cu %	Mo %	W %		
14	6	80	5144 'C'	FEE 34: 6 cm Qtz vein in siliceous schists near rhyolite contact; few % pyrite in vugs	tr	0.01	0.02	0.19	0.01				
14	6	80	5145	FEE 37: medium grained Qtz-musc (40%) schist, with 5% disseminated pyrite; grab sample	tr	0.01	0.01	0.04	0.01				
14	6	80	5146 'C'	FEE 40: 7-8 cm Qtz vein in gneisses, with 5% sulphides, py (in vugs), galena, sphalerite	tr	0.01	0.12	0.10	0.01				
14	6	80	5147 'C'	FEE 45: 2-3 cm Qtz vein with 5% sulphides, ga, sp, py, minor cp	tr	1.30	.46	1.50	0.01				
16	6	80	5148 'C'	FEE 64: vein grab samples from shaft, with ga, py and possibly cp?	tr	0.35	3.20	2.39	0.01				
20	6	80	5149 'B'	FEE 76: grab samples of Qtz from boulders; massive & vuggy; occas. py & ga in blebs to 3 cm	tr	0.56	0.80						
20	6	80	5150 'B'	FEE 77: grab samples of Qtz from boulders, some ga (up to few %) pyrite	tr	1.24	1.48						

ASSAY RESULT FORM

DATE			Tag No.	Location and Description	ASSAY RESULTS							
D	Mo.	Yr.			Au oz/ton	Ag oz/ton	Pb %	Zn %	Cu %	Mo %	W %	
21	6	80	5192 'B'	FEE 86: grab samples of Qtz from boulders, up to 5% qa, vuggy in spots, most non-min'd.	tr	0.72	0.85					
21	6	80	5193 'B'	FEE 90: blocks and outcrop. (20 cm wide); assay from 8"x8" block with 2-5% qa in blebs to 1 cm	tr	0.37	0.98					
22	6	80	5194 'C'	FEE 106: 2/3 of 40 cm wide vein at edge of shaft; qtz with 5-10% qa, few % cp, minor pyrite	0.06	0.80	2.45		0.01			
22	6	80	5195 'C'	FEE 107: highly rusted, siliceous, sheared rock with minor py; from pit near shaft; 30 cm wide	tr	0.33	0.23		0.01			
22	6	80	5196 'C'	FEE 108: grab sample near shaft; qtz with massive py (10-20%), massive qa (10%) and mal.	tr	7.62	4.04		0.04			
23	6	80	5197 'A'	FEE 148: grab sample from loose blocks; rusty f.g. vuggy qtz with 5% qa and minor pyrite	0.08	3.12	1.78		0.01			

ASSAY RESULT FORM

DATE			Tag No.	Location and Description	ASSAY RESULTS							
D	Mo.	Yr.			Au oz/ton	Ag oz/ton	Pb %	Zn %	Cu %	Mo %	W %	
13	7	80	2026 'B'	FEE 267; grab sample; hematite-stained qtz float; 1-2% ga seen; up to 15 cm wide?	tr	2.09	1.34		0.01	<.01		
13	7	80	2027 'F'	FEE 272: 20-24 cm qtz vein, in mafic schists; some rust, 5% py (cubes & f.g.), minor ga; sampled over 18 cm	tr	0.63	0.06		0.01	<.01		
21	7	80	2028 'E'	FEE 284; massive & disseminated py in v.f.g. siliceous host rock; assoc with qtz; off dump by adit	tr	1.55	0.13		0.01	<.01		
09	8	80	2029 'I'	FEE 347: 1.4 m qtz vein in streamcut, with 8 cm band of ga & py & rusty qtz; partial chip sample	tr	6.93	0.26	0.32	0.01			
09	8	80	2030 'G'	FEE 375: chip sample over 1.3 m qtz vein; massive & vuggy with 7-12 cm band of massive ga with some cp, mal, azu	0.62	4.26	12.80	0.08	0.35			
25	8	80	2031 'K'	FEE 424: 10-20 cm qtz vein in hbde gneiss; oxidized, vuggy, qtz, with py po (blebs to 1 cm), poss cp, ga	tr	0.15	0.01	0.01	0.01			

po (blebs to 1 cm), poss cp, ga

ASSAY RESULT FORM

DATE			Tag No.	Location and Description	ASSAY RESULTS								
					Au oz/ton	Ag oz/ton	Pb %	Zn %	Cu %	Mo %	W %		
25	8	80	2032 'K'	FEE 422: grab sample of 24 cm wide, vuggy, rusty qtz vein; py & possibly some ga	tr	0.23	0.01	0.01	0.01				
25	8	80	2033 'K'	FEE 423: 5-10 cm qtz vein; highly altered & crumbled, vuggy; some ga? & py	tr	0.22	0.01	0.01	0.05				
26	9	80	2034	FEE 309: sample of m.g. fol. intrusive, with py and possibly mo on fracture	tr	0.61	0.10	0.05	0.01				
26	9	80	2035 'I'	FEE 350: up to 15% ga (in plates to 2 cm thick); some py, vuggy qtz; grab sample	0.12	1.57	11.77	0.60	0.01				
26	9	80	2036 'H'	FEE 370 1: grab from dump; vuggy qtz, mineralized in core with cp, py, ga, mal & azu to 5%	0.02	0.61	4.71	0.07	0.49				
26	9	80	2037 'H'	FEE 370 2: sample from 'vein'; 1% ga in small stringer; mainly rhyolite, rather than qtz.	tr	0.20	0.36	0.01	0.03				

~~XXXX~~ / SOIL SAMPLE STATISTICS

Project: No. 45 FEE CLAIMS Dates of Program: June 3, 1980
to Sept. 6, 1980

Number of Samples Collected: 5403 (5574 including
silt samples)

Metals Analyzed: Pb Zn Ag As Cu

Samplers: S. Corden, J. Haase, P. Kynas,
P. Maheux, R. Moore, R. Saunders
P. Watson

Man days: 136 (operating)

Samples collected / man - day: 40.9 (including streams)

	Values in ppm	No. in Range	% of Total		Values in ppm	No. in Range	% of Total
Pb	0- 24	3666	67.92	89.5	10-19	1	
	25- 49	1167	21.6		20-29	2	
	50- 99	363	6.7		30-39	5	
	100-199	138	2.6		40-49	6	
	200-399	45	0.8		50-59	6	
	400-799	18	0.3		60-69	9	
	800+	6	0.1		70-79	5	
	<u>5403</u>	<u>100.0</u>		80-89	<u>1</u>		
					<u>35</u>		
							Cu
Zn	0- 49	2084	38.6	87.0	0-24	2426	92.2
	50- 99	1794	33.2		25-49	140	5.3
	100-199	927	17.2		50-99	50	1.9
	200-399	366	6.8		100+	<u>14</u>	<u>0.6</u>
	400-799	74	1.4			<u>2630</u>	<u>100.0</u>
	800-1599	19	0.3				
	1600+						
	<u>5401</u>	<u>100.0</u>					
Ag	0-0.2	3708	68.77	85.0			
	0.3-0.4	932	17.3				
	0.5-0.9	589	10.9				
	1.0-1.9	125	2.3				
	2.0-3.9	35	0.6				
	4.0-4.9	5	0.1				
	8.0+	4	0.1				
	<u>5398</u>	<u>100.0</u>					

~~XXXX~~
SILT / ~~XXXX~~ SAMPLE STATISTICS

Project: No. 45 FEE Claim Dates of Program: June 3, 1980
to Sept. 6, 1980

Number of Samples Collected: 171

Metals Analyzed: Pb Zn Ag As Cu Au

Samplers: S. Corden, J. Haase, R. Kynas,
P. Maheux, R. Moore, R. Saunders,
P. Watson

Man days: 136

Samples collected / man - day: see soils

	Values in ppm	No. in Range	% of Total		Values in ppm	No. in Range	% of Total
Pb	0- 24	129	76.3	} 90.5	0- 9	1	
	25- 49	24	14.2		10-19	0	
	50- 99	15	8.9		20-29	3	
	100-199	1	0.6		30-39	2	
	200-399	0	0		40-49	1	
	400-799	0	0		50-59	2	
	800+	0	0		110-120	1	
	169	100.0		150-160	1		
				11			
Zn	0- 49	28	16.4	} 71.4	0-24	132	91.0
	50- 99	56	32.8		25-49	9	6.2
	100-199	38	22.2		50-99	3	2.1
	200-399	23	13.4		100+	1	0.7
	400-799	19	11.1			145	100.0
	800-1599	7	4.1				
		171	100.0				
Ag	0+0.2	103	61.7	} 83.3	0- 9	5	
	0.3-0.4	36	21.6		10-19	3	
	0.5-0.9	24	14.4		90-99	1	
	1.0-1.9	3	1.8		100-110	1	
	2.0-3.9	1	0.5			10	
	4.0-7.9	0	0				
	8.0+	0	0				
	167	100.0					

APPENDIX D



BONDAR-CLEGG & COMPANY LTD.

geochemists • assayers • analytical chemists

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B.C.
PHONE: 988-5315 TELEX: 04-54554
136 Industrial Rd., Whitehorse

ANALYSIS BY ATOMIC ABSORPTION

Ag, Cd, Co, Cu, Pb, Mn, Mo, Ni, Zn, & Cr, Fe, V (acid soluble)

Each prepared* sample is weighed at 0.5 gm and placed in to a test tube then 1.5 ml of HNO_3 is added and the sample is heated in a hot water bath for one-half hour. Then 0.5 ml of HCl are added and the sample is heated for $1\frac{1}{2}$ hours further. The sample is then removed from the bath and the mixture is diluted to 10 ml with water (a solution containing 1000 ppm AlCl_3 is used when analyzing for Mo, Mn, Fe). The sample is then mixed and allowed to settle before analyzing. The samples are analyzed by atomic absorption using standards with a similar matrix.

NOTE

Silver must be analyzed within one-half hour of digestion. Any silver values greater than 4.0 ppm are checked using a 2.0 ml HNO_3 digestion.

*-80 mesh for soils

-100 mesh for rocks



BONDAR-CLEGG & COMPANY LTD.

geochemists • assayers • analytical chemists

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B.C.

PHONE: 988-5315

TELEX: 04-54554

136 Industrial Rd., Whitehorse

Analysis for Arsenic

A prepared* sample weighing 0.1 g. is treated in a test tube with an acid mixture of $\text{HNO}_3\text{-HClO}_4$ on a sand bath for 4 hours or until all the HNO_3 is driven off.

After cooling the sample is diluted and potassium iodide solution added, followed by stannous chloride, Arsine is then produced by the addition of 20 mesh zinc. This gas is generated into an absorbing solution of silver diethyldithiocarbamate in pyridine. The resulting colour is compared with standards carried through this colour procedure in order to determine the arsenic content in ppm.

- * -80 mesh for soils
- 100 mesh for rocks



BONDAR-CLEGG & COMPANY LTD.

geochemists • assayers • analytical chemists

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B.C.

PHONE: 988-5315

TELEX: 04-54554

Analysis of Gold

A prepared* sample weighing 10.0 g. is mixed with flux and heated in the fire assay furnace. The molten mixture is then poured and the lead button containing the previous metals is separated from the slag. The button is then placed in a cupel and heated so that the lead is removed and the noble metals remain behind as a small bead.

The bead is transferred to a test tube and treated with nitric acid followed by aqua regia to dissolve it completely. The solution is then analyzed by atomic absorption using standards with a similar matrix.

* -80 mesh for soils

*-100 mesh for rocks

APPENDIX E

LOGISTICS and PERSONNEL

LOGISTICS:-

PROJECT: FEE Claim Group, Code No. 45

TERRAIN: MOUNTAINOUS

MAINBASE: Whitehorse

OPERATING CAMPS: Four; two on lakeshore, two above treeline

CREW: Geologist, an Assistant, and up to four soil samplers

SUPPORT AIRCRAFT: Hughes 500C, Keystone Helicopters, Atlin B.C.
Bell 206 Long Jet Ranger, Keystone Whitehorse, Y.T.
Bell 206 Jet Ranger, Shirley Helicopters, Whitehorse
Cessna, Float equipped aircraft, Whitehorse, Y.T.
Beaver, Float equipped aircraft, Whitehorse, Y.T.

HELICOPTER TIME DISTRIBUTION:

A total of 20.5 hrs of helicopter and fixed wing time was utilized for camp moves and supply.

OPERATING MAN DAYS: (June 3 to Sept 6, 1980)

	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>Total</u>	<u>%</u>
Possible days	82	124	144	24	374	
Operating Days:						
Geochemistry	24	47	65	0	136	36.4
Geology	41	19	18	1	79	21.1
	<u>65</u>	<u>66</u>	<u>83</u>	<u>1</u>	<u>215</u>	<u>57.5</u>
Lost Days:						
Camp move	2	8	4	4	18	4.8
Supply days	10	6	15	0	31	8.3
Weather & Other	3	18	26	19	66	17.6
R & R	2	26	16	0	44	11.8
						<u>100.0</u>

PERSONNEL:-

Pat Watson	Geologist	Party Chief	\$1500/mo.	3/06/80 - 31/10/80
J. Haase	Student	Assistant	\$1200/mo.	3/06/80 - 5/09/80
S. Corden	Student	Soil Sampler	\$ 975/mo.	18/06/80 - 5/09/80
R. Saunders	Student	Soil Sampler	\$1000/mo.	18/06/80 - 5/09/80
P. Maheux	Student	Soil Sampler	\$ 975/mo.	14/08/80 - 9/09/80
P. Kynas	Student	Soil Sampler	\$ 975/mo.	15/08/80 - 11/09/80
R. Moore	Student	Soil Sampler	\$ 975/mo.	27/08/80 - 10/09/80

Supervisors:-

R. Joy, Senior Exploration Geologist
R. E. VanTassell, Exploration Manager

CONTRACTORS:-

LINE CUTTING:

McCrary Holdings (Yukon) Ltd.,
307 Jarvis Street,
Whitehorse, Y.T.
Y1A 2H3

AIRCRAFT SUPPORT:

Keystone Helicopters Ltd.,
Atlin, British Columbia and Whitehorse Airport,
Whitehorse, Y.T.

Air North Charter and Training,
Hanger 'B', Airport,
Whitehorse, Y.T.

Shirley Helicopters,
Whitehorse Airport,
Whitehorse, Y.T.

GEOCHEMICAL ANALYSES:

Bondar-Clegg and Company Ltd.,
136B Industrial Rd.,
Whitehorse, Y.T.

ASSAY DETERMINATIONS:

Assay Laboratory,
United Keno Hill Mines Limited,
Elsa, Yukon

APPENDIX F

PROJECT COSTS

Project No. 45, Period January 1 to September 30, 1980

GENERAL:-

Salaries and wages	\$3,337.00	
Labour Overhead (30%)	1,001.00	
Hiring Expenses	1,218.00	
Legal	178.00	
Communications	17.00	
Publications and Maps	33.00	
Travel - Staff	1,606.00	
Due and Subscriptions	4.00	
	<u>7,394.00</u>	\$ 7,394.00

PROPERTY ACQUISITION:-

Recording Fees, Assessment Fees	20.00	
	<u>20.00</u>	20.00

LINE CUTTING:-

Contract Labour and Expenses	7,650.00	
Company Equipment & Supplies	7.00	
Aircraft Charter	436.00	
	<u>8,093.00</u>	8,093.00

GEOLOGICAL:-

Company Labour	10,436.00	
Labour Overhead (30%)	3,131.00	
Equipment & Supplies	47.00	
	<u>13,614.00</u>	\$13,614.00

GEOCHEMICAL:-

Sampling Equipment & Supplies	1,600.00	
Company Labour	7,916.00	
Labour Overhead (30%)	2,375.00	
Contract Analysis	23,266.00	
	<u>35,157.00</u>	35,157.00

CAMP OPERATION:-

Company Equipment & Supplies	1,638.00	
Food	3,654.00	
Fuel	103.00	
Freight & Transportation	17.00	
	<u>5,412.00</u>	\$ 5,412.00

AIRCRAFT CHARTER:-

Helicopter Charter	6,416.00	
Fixed-Wing Charter	1,243.00	
	<u>7,659.00</u>	7,659.00

VEHICLES:-

Operating Supplies & Maintenance	598.00	
	<u>598.00</u>	<u>598.00</u>

TOTAL		\$77,947.00
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APPENDIX G

A F F I D A V I T

I, Robert E. Van Tassell, of Whitehorse, in the Yukon Territory,
Exploration Superintendent, do solemnly declare:

1.

That I am duly appointed agent of United Keno Hill Mines Limited,
and except where otherwise stated have a personal knowledge of the
facts and matters herein, and swear to the value of work contained
in Appendix F.

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

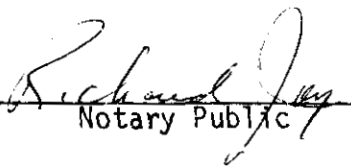
Declared before me at

Whitehorse, in

The Yukon Territory,

this 30th day of

October 19 80.


Notary Public

APPENDIX H

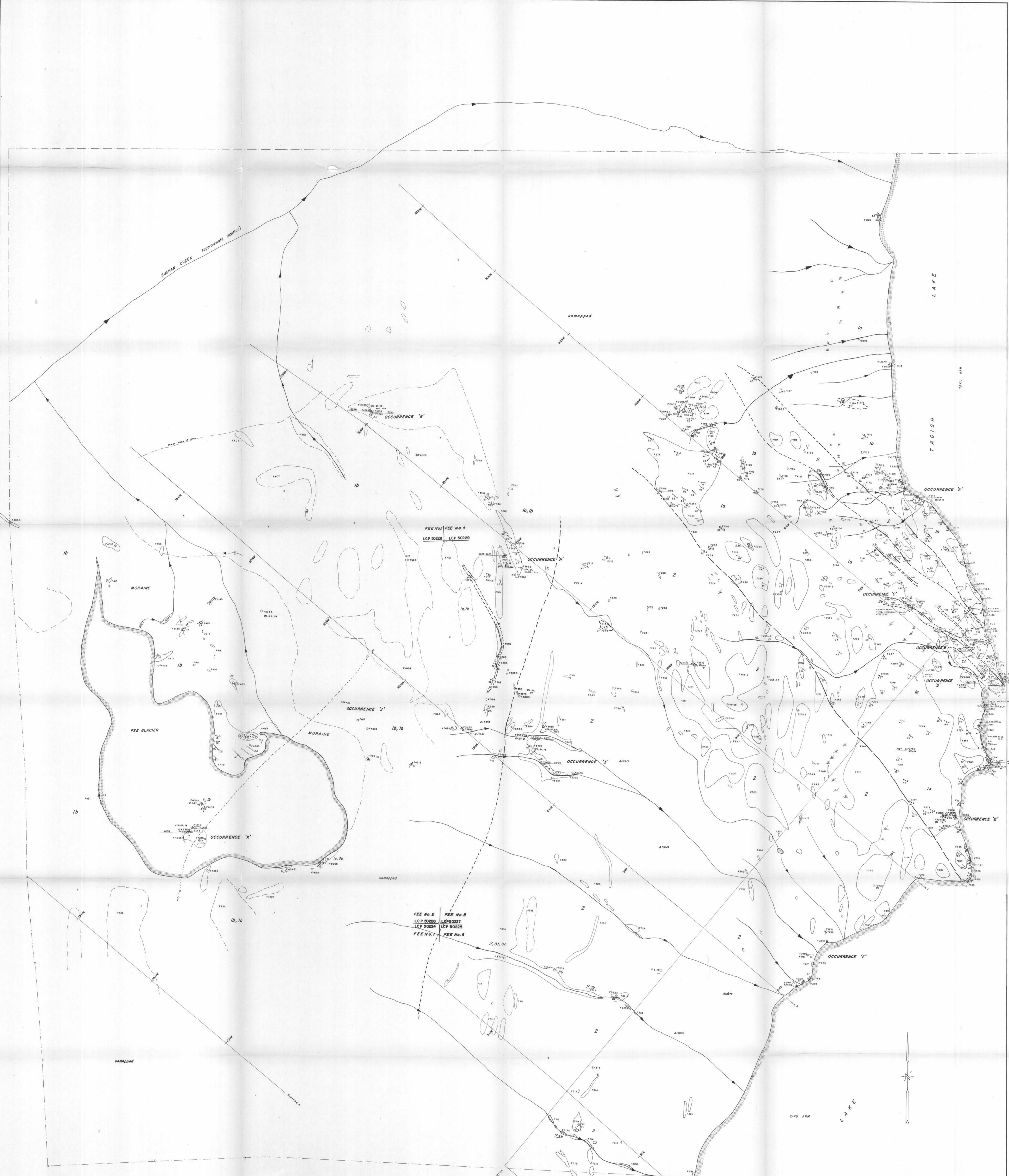
STATEMENT OF QUALIFICATIONS

I, Richard J. Joy, of the City of Whitehorse, Yukon Territory, do hereby certify that:

1. I am a geologist, residing at 20 Stewart Road, Whitehorse, Yukon Territory.
2. I have received a B. Sc.(honours) in Geology from Memorial University of Newfoundland.
3. I have attained the status of Fellow in the Geological Association of Canada.
4. I have been actively engaged in the mineral exploration field since 1968.
5. I am presently employed as Senior Exploration Geologist with United Keno Hill Mines Limited.
6. I have supervised the work described in this report.

Dated at Whitehorse, Y.T. this 31st day of October, 1980





ASSAY RESULTS

No.	Ag	As	Au	Cu	Fe	Pb	Zn	Mo	Bi
3025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3142	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3143	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3144	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3146	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3147	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3148	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3149	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3151	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3152	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3153	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3154	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3156	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3157	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3158	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3159	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3161	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3162	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3163	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3164	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3166	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3167	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3168	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3169	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3171	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3172	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3173	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3174	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3176	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3177	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3178	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3179	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

LEGEND

GEOLOGY

- Geological contact, defined, approximate, assumed
- Foliation
- Fold axis
- Contact, vein
- Contact, dike
- quartz, usually as vein
- pyrite
- chalcocite, malachite, azurite
- malachite
- suberite
- pyrrhotite
- Outcrop No., with sample
- Assay sample location
- shear zone

TOPOGRAPHY

- Claim Group boundary
- Claim Posts
- Identification Posts
- Creek with flow direction
- Swamp
- Glacier and Lakes
- Small blast pit or working
- Camp site
- Adit or Dump
- Moraine boundary
- outcrop
- float or talus
- shaft

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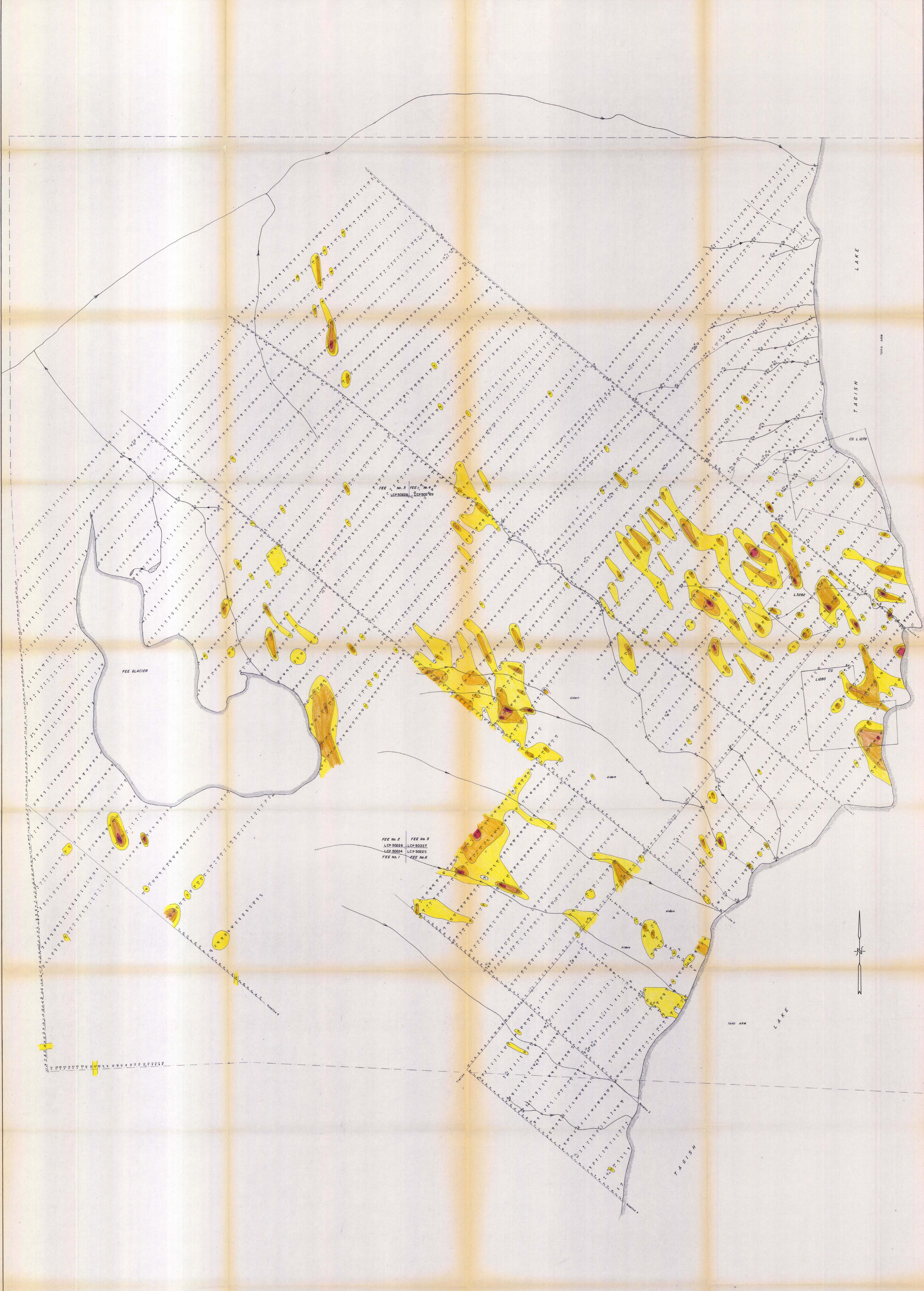
FEE CLAIM GROUP
N. T.S. SHEET 104 - M - 8

GEOLOGY

MINERAL RESOURCES BRANCH
8384

Scale 1:5000

Date: 28/03/80



Contour Intervals

50 - 99 p.p.m.
100 - 199 p.p.m.
200 - 399 p.p.m.
400 - 799 p.p.m.
800 + p.p.m.

GEOCHEMISTRY

⊙	Compsite
•	Sample location with results
○	Sample location no metal detected
•	Sample location no sample taken

LEGEND

TOPOGRAPHY

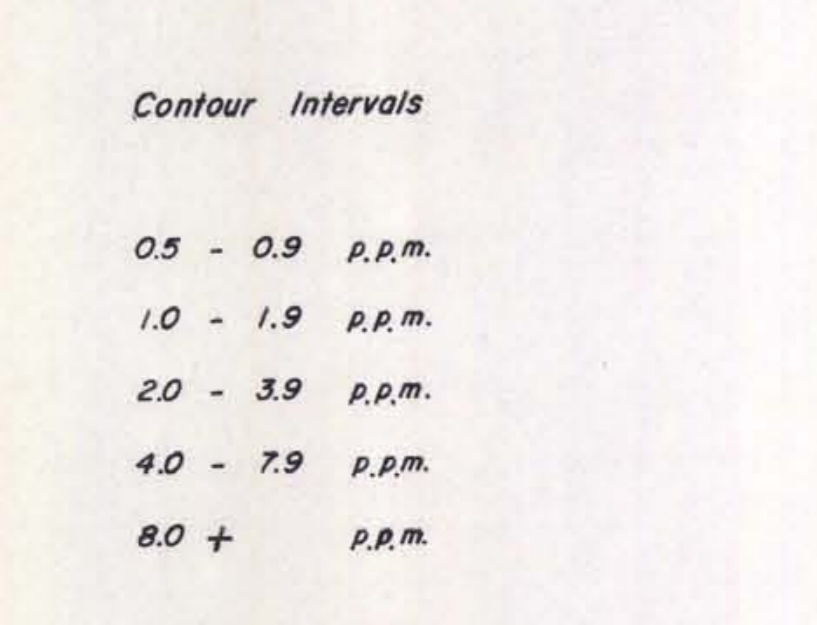
---	Claim Group boundary
---	Claim Plate
---	Identification Posts
---	Creek with flow direction
---	Swamp
---	Glacier and Lakes
---	Creek Grant

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 EXPLORATION DEPARTMENT WHITEHORSE, Y. T.
FEE CLAIM GROUP
 N. T. S. SHEET 104 - M - 8
LEAD PLOT

MINERAL RESOURCES BRANCH
 8384

Scale 1" = 5000

10 p.p.m.
0 100 200 300 400 500 600 700 800 900 1000
Drawn by: J.M.P. DWG
Date: 28/08/80 NO.



GEOCHEMISTRY

0 Sample location with results
 0 Sample location no metal detected
 0 Sample location no sample taken

LEGEND

TOPOGRAPHY

- - - Claim Group boundary
- - - Claim Posts
- - - Identification Posts
- - - Creek with flow direction
- - - Camp
- - - Glacier and Lakes
- - - Crown Grant

UNITED KENO HILL MINES LTD.
 EXPLORATION DEPARTMENT WHITEHORSE, Y. T.

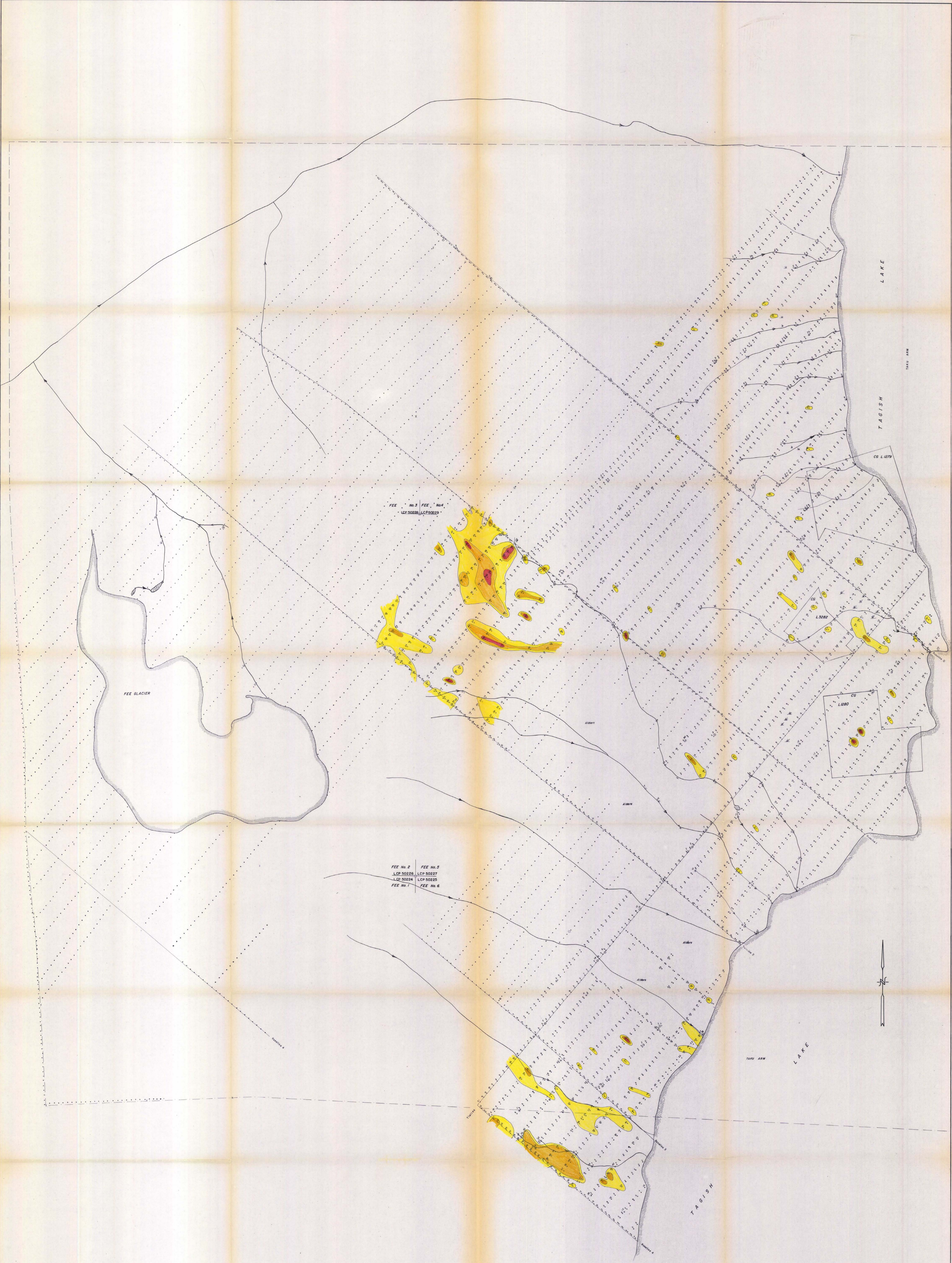
8384

FEE CLAIM GROUP
 N. T. S. SHEET 104 - M - B

SILVER PLOT
 in P.P.M.

Scale 1 = 5000

Drawn By: J.M.P. DWG
 Date: 08/08/80 NO.



FEE No. 3 FEE No. 4
LCP 50226 LCP 50227
LCP 50224 LCP 50225

FEE No. 2 FEE No. 5
LCP 50228 LCP 50227
LCP 50224 LCP 50225
FEE No. 1 FEE No. 6

Contour Intervals
 25 - 49 ppm
 50 - 99 ppm
 100 + ppm

GEOCHEMISTRY

LEGEND

§ Conspire
 23 Sample location with results
 0 Sample location no metal detected
 M Sample location no sample taken

TOPOGRAPHY

--- Claim Group boundary
 --- Claim Posts
 --- Identification Posts
 --- Cross with flow direction
 --- Swamp
 --- Glacier and Lakes
 --- Crown Grant

UNITED KENO HILL MINES LTD.
 EXPLORATION DEPARTMENT WHITEHORSE, Y. T.
 FEE CLAIM GROUP

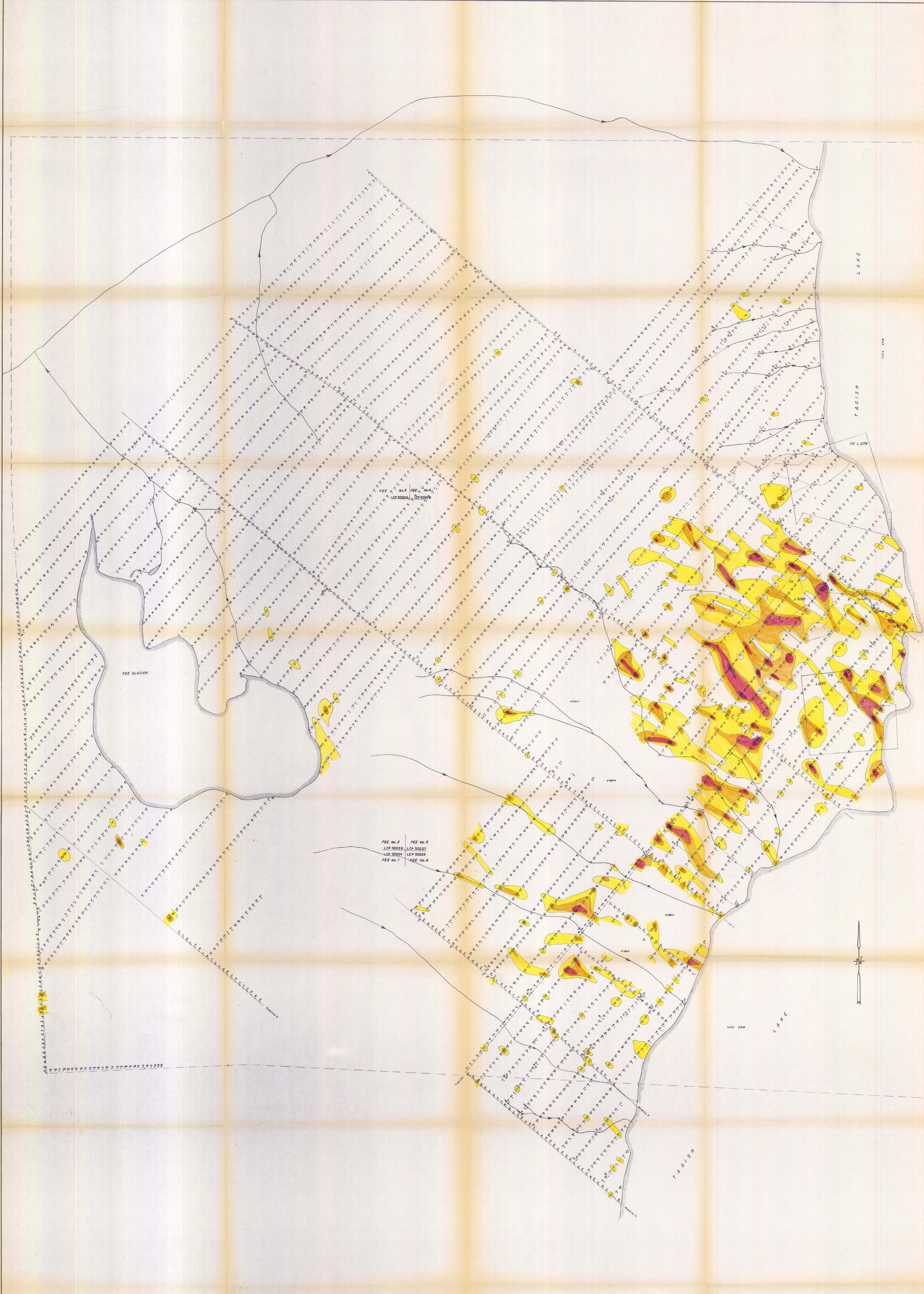
N. T. S. SHEET 104 - M - 8

MINERAL RESOURCES BRANCH
 ACCESSIBLE SHEETS
8384

ARSENIC PLOT
 1 in ppm

Scale 1 = 5000

Drawn by	J. H. P.	DWG
Date	28/08/80	NO.



FEE No. 3 FEE No. 4
LCP 50226 LCP 50227
LCP 50224 LCP 50225

FEE No. 2 FEE No. 5
LCP 50226 LCP 50227
LCP 50224 LCP 50225
FEE No. 7 FEE No. 8

Contour Intervals

200 - 399 p.p.m.
400 - 799 p.p.m.
800 - 1599 p.p.m.
1600 + p.p.m.

GEOCHEMISTRY

LEGEND

- ⊙ Composite
- ⊙ Sample location with results
- Sample location no metal detected
- ⊙ Sample location no sample taken

TOPOGRAPHY

- Claim Group boundary
- Claim Pasts
- X Identification Pasts
- Creek with flow direction
- Swamp
- Glacier and Lakes
- Crown Grant

UNITED KENO HILL MINES LTD.
EXPLORATION DEPARTMENT WHITEHORSE, Y. T.

FEE CLAIM GROUP
N. T. S. SHEET 104 - M - 8

MINERAL RIGHTS SEARCH
8384

ZINC PLOT
in p.p.m.

Scale 1 = 5000

25	50	75	100	125	150	175	200	225	250
0	25	50	75	100	125	150	175	200	225

Drawn by: J.K.P. DWG
Date: 28/08/80 NO.