

1979 REPORT ON THE
GEOLOGY, GEOCHEMISTRY AND DIAMOND DRILLING
OF THE
BZT CLAIMS
HOODOO CREEK
VANCOUVER MINING DIVISION

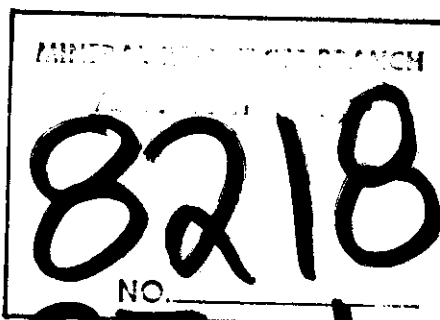
N.T.S. 92 N/5E
LAT. 51° 21' LONG. 125° 30'

OWNED BY
AMAX OF CANADA LIMITED

OPERATED BY
UTAH MINES LTD.

BY
J. R. DEIGHTON
UTAH MINES LTD.
MARCH 18, 1980

WORK PERFORMED BETWEEN JULY 28, 1979 AND MARCH 1980



PART 1 of 2

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Mo in ppm			
ROCK AND SOIL GEOCHEMISTRY 1978-1979	MAP 1	In Pocket
Cu in ppm			
ROCK AND SOIL GEOCHEMISTRY 1978-1979	MAP 1	In Pocket
Zn in ppm			
ROCK AND SOIL GEOCHEMISTRY 1978-1979	MAP 1	In Pocket
Ag in ppm			
ROCK AND SOIL GEOCHEMISTRY 1978-1979	MAP 1	In Pocket
Au in ppb			
ROCK AND SOIL GEOCHEMISTRY 1978-1979	MAP 2	In Pocket
Mo in ppm			
ROCK AND SOIL GEOCHEMISTRY 1978-1979	MAP 2	In Pocket
Cu in ppm			
ROCK AND SOIL GEOCHEMISTRY 1978-1979	MAP 2	In Pocket
Zn in ppm			
ROCK AND SOIL GEOCHEMISTRY 1978-1979	MAP 2	In Pocket
Ag in ppm			
ROCK AND SOIL GEOCHEMISTRY 1978-1979	MAP 2	In Pocket
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INTRODUCTION

SUMMARY

In 1979 Utah Mines Ltd. optioned the Hoodoo Creek property, BZT 1-9 claims totaling 103 units, from Amax Potash Limited. Field checking of Amax's mapping and additional mapping and sampling, mainly to the east and south of Amax's mapping, was done during June and July and August of 1979.

Camp construction and the drilling of two NQ diamond drill holes from a prepared setup took place from August to October, 1979.

The mapping and sampling program confirmed the presence of several mineralizing events which could indicate the presence of porphyry Cu-Mo, Mo or Cu deposits associated with the high level, young (Miocene) intrusive complexes at Hoodoo Creek.

Two diamond drill holes were angled at -45° @ 000° for 269.7 meters and -60° @ 291° for 243.2 meters to intersect and test two of the target areas from the same drill setup. The first hole was designed to test a highly altered and pyritized quartz porphyry unit carrying weak molybdenite mineralization. The second hole was designed to intersect the fringe of a large breccia unit. The first hole failed to test its target because as the target was reached the hole entered a post-mineral dyke and followed it for the duration of the hole. The second hole, designed to intersect the breccia fringe was successful although it did not reach its desired depth because of drilling difficulties. This hole intersected mineralized breccia containing mineralized (molybdenite) fragments.

LOCATION, TOPOGRAPHY

The Hoodoo Creek Mo-Cu property consists of nine claims (BZT 1-9) totaling 103 units centered on Hoodoo Creek, an eastern tributary of the Klinaklini River which drains the Mt. Waddington Range of the Coast Mountains. Hoodoo Creek is located approximately 32 km north of the head of Knight Inlet at latitude 51°21'N, longitude 125°39'.

The property lies in rugged terrain near the heart of the Coast Range Mountains. Relief is 1800 m (6000 feet); elevations range from 300 m (1000 feet) on lower Hoodoo Creek to 2150 m (7000 feet) on the ridge near the north-eastern corner of the property. Hill slopes and tributary streams are precipitous, and the lower reaches of Hoodoo Creek are incised to form an inaccessible canyon.

Tree line is about 1700 m elevation with mature stands of fir and spruce at lower elevations. On north-facing slopes, permanent snow and icefields extend down as far as 1400 m elevation.

Total precipitation has been estimated as 150 cm per year rain equivalent. Snowfall has been estimated as 500 cm per year above elevation 1000 m, making snow avalanches a major hazard at higher elevations.

LOGISTICS

Access to the property is gained by fixed wing aircraft from many points, the most convenient being Campbell River (Gulf

Air Aviation) to Kyuquot Logging Camp at the head of Knight Inlet, then by helicopter to the claims. Helicopters are available at Port McNeill (Okanagan), Port Hardy (Vancouver Island), Bella Coola (Transwest), and Campbell River (Okanagan). During part of the summer a helicopter was available at Knight Inlet (Transwest). A logging road extends 30 km from Knight Inlet to the southwestern portion of the property.

Bi-weekly boat service to Knight Inlet is available from Vancouver by Coast Ferries Ltd. to move heavy or large pieces of equipment. A barge service to Knight Inlet is also available for transporting of large pieces of equipment but the service is not run on a regular basis, only when fuel for the logging operations is needed, by North Arm Transportation.

Groceries and camp supplies were obtained in Campbell River from North Island Co-op and Cigas, and flown in by Gulf Air Aviation or Okanagan Helicopters to Knight Inlet or the property.

Kyuquot Logging Camp supplied food, accomodation, and ground transportation of men and materials from the dock to the end of the road during the mobilization and demobilization of drill equipment. They also supplied accomodation during the camp construction phase.

CAMP

Very few campsites are available on this steep-sided property. A mapping camp consisting of three tents (two 10x12 and one 14x16) was established at the Amax campsite at the 1650 meter elevation east of Main Gully. No water was available at the campsite. Water was obtained by collecting rainwater off tents and by melting snow in a tarpaulin.

The drill campsite was constructed at the 1800 meter elevation west of Main Gully. The camp consisted of five 14x16 wooden floored tents on aluminum or wood frames and one wooden framed 10x12 tent. Water was pumped from the nearest creek (450 meters) at the 1760 meter elevation.

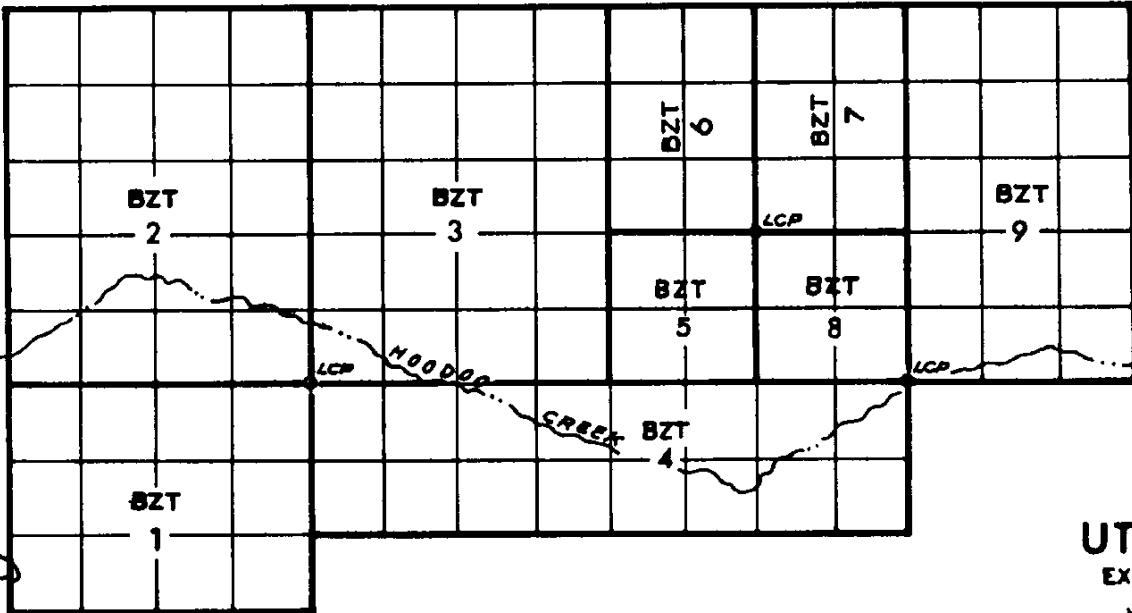
CLAIMS DATA

Claims and units are shown on Figure 1 below. Pertinent claims data are tabulated below:

CLAIM	UNIT NOS.	TOTAL NO. OF UNITS	LOCATION DATE	DATE RECORDED	EXPIRY DATE
BZT#1	1-3,14-19, 25-27	12	July 2/77	July 28/77	July 28/80
2	1-4,13-20, 24-31	20	July 2-4/77	July 28/77	July 28/80
3	1-5,12-21, 23-27	20	July 2-4/77	July 28/77	July 28/80
4	1-16	16	July 2/77	July 28/77	July 28/80
5	1,2,15,16	4	July 2-5/77	July 28/77	July 28/80
6	1,2,15-18	6	July 2-5/77	July 28/77	July 28/80
7	1-3,14-16	6	July 2-6/77	July 28/77	July 28/80
8	1,2,15,16	4	July 2-5/77	July 28/77	July 28/80
9	1-5,12-21	15	July 1-2/77	July 28/77	July 28/80



KLINAKLINI R.



UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA
HOODOO CREEK PROPERTY
BZT CLAIMS
Vancouver Mining Division - British Columbia

CLAIM MAP

- 92 N 5 -
1 : 50,000

PREVIOUS WORK

Kennco Explorations staked the Hoodoo North prospect in 1966 on the strength of a prominent oxidized zone enhanced by anomalous silt geochemistry. Twenty-eight claims were staked of which the westerly 20 were subsequently dropped and the remaining eight, approximately coincident with the present BZT #7 claim, were maintained by payments-in-lieu and by geological and geochemical assessment work (Ass. Rept. #1668 in 1968). This work demonstrated the presence of several porphyry plugs and pyritic breccias and coincident Mo-Cu-Pb-Zn-Ag soil anomalies.

Since 1968, the Hoodoo North prospect has been held by several other individuals, but no additional assessment work has been applied.

Part of the Hoodoo South showing was examined for Amax by Silversides in 1965 as the 46 claim McGowan MoS₂ property. No work was recommended by Silversides and the claims subsequently lapsed.

Amax staked the property in July, 1977 during a regional reconnaissance program. In 1978 Amax carried out a preliminary mapping and sampling program over BZT 5, 6, 7, and 8 mineral claims at 1:5000 scale.

GEOLOGY

REGIONAL GEOLOGY

The property lies near the centre of the Coast Crystalline Belt, a tectonic belt of gneisses, schists and granitoid rocks emplaced during the Mesozoic and Early Tertiary.

At Hoodoo Creek, an intrusive/extrusive complex of Miocene age is superimposed on the older Coast Crystalline Belt. This complex lies within a 70 km long northwesterly trending belt of Miocene-Pliocene rocks which extends from Franklin Glacier to Mt. Silverthrone. At Franklin Glacier, 16 km to the southeast, a quartz monzonite stock (6.9 m.y.) and younger porphyry dykes (3.2 m.y.)¹ intrude comagmatic rhyolitic and feldspar porphyry tuffs, agglomerates and flows². Between Franklin Glacier and Hoodoo Creek, pyritic Miocene stocks with traces of molybdenite are largely buried by ice fields which cover the ridge between Hoodoo Creek and Scimitar Glacier. In the Mt. Silverthrone area, 50 km northwest of Hoodoo Creek, undated but obviously pre-glacial columnar basalt and ash flows occur over an area of 300 sq. km and attain a maximum thickness of 1000 m. Small basalt plugs and minor quartz porphyry dykes were noted near the toe of the Klinaklini Glacier between Hoodoo Creek and Mt. Silverthrone.

1. G. Woodsworth, G.S.C., pers. comm.
2. B. McKnight, 1965, Tertiary Igneous Activity in the Franklin Glacier Area; B.Sc. Thesis, Univ. of B.C.

PROPERTY GEOLOGY

Map checking and additional rock and soil geochemical sampling was done on the area mapped by Amax in 1978, largely on BZT 3, 5-8 claims. Mapping, rock and soil geochemical sampling was done on a 1:5000 scale on an additional area to the east of Amax's 1978 mapping on BZT 9 claim and to the south on BZT 1 and parts of BZT 2 and 4 claims.

Survey control over BZT 9 was provided by a metric contoured orthophoto at 1:5000 scale done by McElhaney Survey Corp. Mapping and sampling control for the BZT 1, 2, and 4 claims was provided by 1:10,000 scale metric contoured topographic map used by Amax and surveyed road maps copied from Kyuquot Logging.

Rock Units

The rock units mapped this year are essentially the same as those described by Amax in their 1978 report. Two new units have been added and two units have been subdivided. The descriptions below are in part reproduced from the report by C. J. Hodgson "Hoodoo Creek Property 1978" of Amax Vancouver office.

Fifteen mappable units in the claim area are described below in order of apparent age.

Units 1-2 are all members of the Coast Plutonic Complex and are unrelated to mineralization. Coarse grained garnet-quartz-feldspar-biotite gneiss (Unit 1) of Mesozoic or earlier age occur in restricted areas in the Main Gully and the easternmost creek on the property.

Hornblende diorite and quartz diorite (Unit 2) is coarse grained, equigranular and unfoliated to gneissic. It forms massive outcrops near the ridgetop of the Main Gully and in the area covered by BZT 9 claim, but is highly fractured and rubbly weathering in the gullies south of the Main Gully below elevations of 1700 meters.

Quartz monzonite (breccia) (Unit 3) has been identified in only three outcrops near the western edge of the map area. It is coarse grained, leucocratic and massive-weathering. The outcrops, in part, are brecciated with a light grey matrix and by small white quartz veins (widely spaced).

Intrusive breccia (Unit 4 and 4a) occupies a circular area 1 km in diameter, with a "tail" to the southwest down Candy Gully. Its circular shape suggests that it was intruded as a pipe. The rock has an overall greenish-grey cast, and consists of 3 mm to 1 meter diameter subangular fragments of diorite, gneiss, felsic volcanics, rare quartz porphyry and purple volcanics, in a grey to grey-green clastic matrix. Near its margins the unit is commonly intensely pyritized. Pyrite tends to surround fragments, suggesting that the rock was largely unconsolidated at the time of pyritization. The unit has been divided into two sections.

Unit 4a is the coarse breccia unit with fragment sizes larger than 2 cm (size range is from 2 cm to 1 meter). The matrix is grey to greenish-grey amorphous siliceous rock which may or may not be sericitized to varying degrees. Pyrite is common as disseminations throughout this unit and may form up to 10 percent of the whole rock in places.

Unit 4 is the fine breccia with the majority of the fragments less than 2 cm in diameter. In the central portion of this unit the fragment size becomes 1-3 mm. The matrix is a grey or greenish-grey amorphous siliceous rock which may or may not be sericitized in part. Pyrite as grains within the matrix occurs but is generally less than one percent. Malachite as individual layered grains was found in one small outcrop within the central portion of this unit.

Quartz monzonite (quartz-feldspar-biotite-porphyry) of Unit 5 outcrops over much of East Gully and parts of South and Main Gullies. The stock is believed to pre-date the intrusive breccia (Unit 4), but evidence is inconclusive. It mainly consists of prominent quartz, feldspar and biotite phenocrysts in a fine grained, pale green groundmass. Lower down in East Gully the unit is sub-porphyritic, with minor quartz and/or feldspar phenocrysts in a grey, medium-grained, groundmass (Unit 5a).

Dacite dykes (Unit 6) form a prominent swarm in South Gully and below elevation 1600 m in Main Gully. These dykes are characteristically dark blue-grey, with feldspar and rare quartz phenocrysts in a flinty, siliceous matrix. Very minor pyrite and chalcopyrite occur as disseminations and on fractures in a few dacite dykes.

On the ridge top above Main Gully, a blue-grey feldspar porphyry stock (flow?) is tentatively correlated with the dacite dykes. Correlation is far from certain, since the stock is some distance away from the dyke swarm, and contains no sulphides.

Dacite breccia (Unit 7) of variable description outcrops in a number of small isolated areas. It is characterized by the presence of angular diorite fragments in a blue dacite groundmass. The largest occurrence, in South Gully, contains very large diorite blocks surrounded by pyritic dacite matrix. The breccia in Main Gully also contains abundant pyrite (10-15 percent). The two lower breccias in East Gully contain traces of disseminated pyrite and chalcopyrite. The upper breccia contains no sulphides and no apparent intrusive matrix (possibly a fault breccia?). The breccia in Candy Gully also carries disseminated sulphides (3-4 percent pyrite).

Rusty weathering, sericitic quartz porphyry (Unit 8) forms a stock on the ridgetop above Main Gully and in the Main Gully. Detailed mapping in an unnamed gully between Main and West Gullies indicates that pyritic quartz porphyry dykes are fairly abundant in the breccia near the intrusive contact. The rock contains 5 percent 2-3 mm quartz eyes, and 5 percent disseminated pyrite in a fine grained sericitic groundmass. The rock is largely leached of pyrite on surface. Minor amounts of disseminated molybdenite are seen in the quartz porphyry in Main Gully as well as molybdenite in small narrow quartz veinlets in the same area.

"Bughole" quartz porphyry dykes (Unit 9) are the most distinctive dykes on the property. Six or eight such dykes form a northwesterly-trending swarm 500 m wide and at least 2 km in strike length. Individual dykes are remarkably continuous along strike. Dips range from 55°N to vertical, and widths from 2 to 10 m. The dykes consist of large,

prominent quartz phenocrysts and blebs of leached kaolinite after feldspar in a creamy rhyolitic matrix. Up to one percent disseminated pyrite is present. Surface manganese staining is associated with these dykes.

Feldspar-hornblende-(quartz) porphyry dykes (Unit 10) post-date "Bughole" quartz porphyry dykes and form a dense swarm in the same general area. These dykes trend predominantly northwest with moderate to steep northeasterly dips. A subordinate dyke trend is northeast and vertical to easterly dips. Widths range from 1 to 50 m. The dykes are somewhat variable in composition and texture. Most consist of feldspar[±]hornblende[±]quartz phenocrysts in a felspathic groundmass. Narrow dykes commonly consist of fine grained, buff felsite and display slabby jointing parallel to the contacts. Clay alteration of feldspars (though not as intense as in "Bughole" porphyries) and chlorite alteration of mafics is usually present. Manganese staining varies from weak to intense. No sulphides are present in these dykes.

There appear to be two or more ages of the feldspar-hornblende-(quartz) porphyry dykes, as seen in the Main Gully at 1850 elevation. The first sequence of dykes are cut by and partly ingested by the quartz porphyry of Unit 8 while the second dyke set clearly cuts Unit 8 and all other units. No field distinction could be found between the two different ages of the dykes.

Lahar breccia (Unit 11). For lack of a better name, this unit has been called a lahar breccia, although it looks like a poorly consolidated conglomerate with very little fine material. The unit forms a prominent capping unit on the ridge north of BZT 3 and 6. It is about 600 m thick and covers an oval shaped area of some 4 square km. Its eastern contact is essentially vertical (?), whereas crude stratification within the unit is subhorizontal. Although localization of the breccia within a collapse caldera structure is suggested by Amax, it is believed that this unit may be the exhalitive equivalent to Unit 4, and that it has been laid down on a pre-existing land surface.

The unit consists of subrounded cobble to boulder sized fragment mainly of quartz diorite and gneiss of the Coast Range Complex and very minor amounts of granite and white siliceous rocks that were not seen on the property, cemented by a sandy clastic matrix. Amax suggests that units 4 through 10 are represented in this unit, but during our mapping no boulders of these units were positively identified.

Near the eastern margin conspicuous cobbles of quartz feldspar porphyry to granite containing disseminated and veined pyrite and chalcopryrite were found in the unit. These boulders make up less than one-half percent of the unit. No source rock for these boulders was seen on the Hoodoo Creek property although Amax geologists suggest that they may be related to Unit 8, the pyritic quartz porphyry.

Amax reports shingly weathering bands of grey, fine grained, air-fall tuff up to 5-10 m thick are locally present. They are not shown on the geology map but one such band was reported in talus at elevation 1640 m, and another was reported to be seen in a cliff face at elevation 2050 m. These bands are probably quite continuous along strike.

The lahar breccia, may in fact grade downwards and laterally into the intrusive breccia of Unit 4 near the western edge of the mapping on the north side of Hoodoo Creek. Insufficient outcrop or hazardous conditions (steepness of slope) precluded gathering of data to solve this question. If this unit and Unit 4 are related then the lahar breccia must be the higher portion of the breccia unit in which no intruded mineralization or matrix penetrated (ie. it may be the extruded equivalent to Unit 4)

Andesite dykes (Unit 12) are observed to cut all units except a late feldspar porphyry stock. These dykes are generally narrow, no more than 5 m wide, but very continuous along strike. In contrast to earlier dykes, their predominant trend is north-south. In contrast to dacite dykes, which they in part superficially resemble, these dykes are unmineralized and are granular rather than flinty. Dykes of basaltic composition are also included in this unit.

Feldspar porphyry (Unit 13) forms a small stock in lahar breccia (and intrusive breccia?). It consists of feldspar (+minor biotite) phenocrysts in a grey-green fine grained groundmass. Epidote blebs and Coast Range quartz monzonite

fragments are common in the vicinity of Candy Gully. Feldspar porphyry dykes in the vicinity of West Gully were mapped as Unit 13 but may belong to Unit 10.

Rhyolite breccia (Unit 14). This breccia unit contains fragments with an average grain size of less than 1 cm. The fragments may be of any rock type from acidic to diorite gneiss, contained in a light green aphanitic to quartz feldspar (biotite) porphyry matrix. The quartz eyes and white feldspars in the matrix are anhedral and 2-3 mm in size. The unit may relate in part to Unit 9, the "Bughole" quartz porphyry but generally lacks the pyrite content.

Andesitic pyroclastics and flows (Unit 15). This unit is exposed in the lower slopes of the West Gully on the north side of Hoodoo Creek. The unit consists of massive flows (?) and pyroclastics of andesitic composition. Less than one percent pyrite is disseminated throughout the unit. The unit may in part be the exhalitive equivalent of the matrix of Unit 4(?) as there appears to be a gradational change southwards downslope from Unit 4 to Unit 15 (the breccia to the pyroclastics). The southern contact of this unit was not seen because of the treacherous nature of the slope.

Geology of the North Side of Hoodoo Creek

The main intrusive and mineralizing events at Hoodoo Creek occur on the north side of Hoodoo Creek. Here several stocks, dykes and breccias of Tertiary age intrude into the Coast Range Complex of gneisses, diorites and granodiorites. The geology of South Side of Hoodoo Creek will be discussed in a later section of the report. The following remarks will deal with the geology on the North Side of Hoodoo Creek.

A quartz monzonite stock of unknown dimensions (Unit 3) appears to be the first intrusion into the Coast Range Complex (units 1 and 2) on the property. This intrusion is seen in Candy Gully and the creek immediately to the west. The stock appears to be brecciated on a large scale with individual fragments being one meter or greater in size. The matrix of the breccia is fragmented quartz monzonite or smokey white quartz veins. No sulphide mineralization is associated with this intrusion.

After the emplacement of the above quartz monzonite stock, the relationship of several intrusive events becomes somewhat questionable. Crosscutting evidence between different units are not conclusive as they are seen to cut one another.

Unit 4, the intrusive breccia unit, may be the next large intrusive phase although there is some evidence it may have been emplaced after units 5, 6, and 8. This breccia forms an east-west elongate oval from Main to Candy Gully. Gradational contacts between the intrusive breccia (Unit 4) and the andesitic pyroclastics and flows (Unit 15) exist in Candy Gully and the contacts with the lahar breccia (Unit 11). It is suggested that both these later units may be extrusive equivalents of Unit 4; the andesite pyroclastics and flows (Unit 15) being made up largely of the matrix of Unit 4, while the lahar breccia (Unit 11) is made up mainly of the blown off capping rock that the intrusive breccia pipe now occupies.

The disseminated pyrite, minor chalcopyrite, sphalerite, and in one case malachite, found within the matrix of the breccia indicate that the breccia and/or its intrusive stock equivalent at the base of the breccia pipe may contain a copper and/or molybdenum deposit. This target is probably deep. A test of this target is recommended but other shallower targets should be tested first.

The fragments of white siliceous rock containing molybdenite veinlets and disseminations found within the intrusive breccia indicate that the breccia has broken through a mineralized body containing molybdenum. Further testing of the edges of the intrusive breccia should isolate the source of the mineralized fragments.

The Unit 5, quartz monzonite stock, forms an east-west elongate stock on the southeast margin on the intrusive breccia from Main Gully eastwards for 1000 meters. This intrusive is highly fractured and contains pyrite, chalcopyrite and molybdenite as fracture filling and to a lesser extent in quartz veinlets. Pyrite is the main sulphide present within the intrusive with molybdenite and chalcopyrite forming only a minor constituent. The best mineralization is found in Main Gully between 1350 and 1550 elevation. A copper molybdenite deposit may be associated with this intrusive phase and a test of the Main Creek area of mineralization is planned in 1980.

Age relationships between Unit 4 and Unit 5 are not distinct or clear cut. Fragments which may be quartz monzonite of Unit 5 are found within the breccia, while at the 1500 meter elevation in Main Gully a sharp contact relationship between Unit 4 and Unit 5 shows that the quartz monzonite intrudes the intrusive breccia.

The dacite dykes of Unit 6 generally form a northwest-southeast trending swarm cutting many rock units on the north side of Hoodoo Creek. A small stock or large dyke occurs on the northern boundary of the claim block on the ridge to the east of Main Gully. No commercial mineralization appears to be associated with this intrusive phase.

Five small bodies of dacite breccia (Unit 7) are found along or near the southern margin of the quartz monzonite stock (Unit 5). These small stocks all intrude into diorites of the Coast Range Complex and contain minor amounts of sulphides, mainly pyrite with minor chalcopyrite as disseminations and fracture fillings. High geochemical response in copper is associated with these dykes. A possible porphyry copper deposit may be associated with this intrusive phase, but it is probably quite deep and therefore it is given low priority as a target.

A stock of pyritized quartz porphyry (Unit 8) underlies the ridge between Main and Candy Gully. This quartz porphyry is generally quite highly altered with the matrix or feldspars altered to sericite and/or kaolin. The alteration is pervasive.

The pyritized quartz porphyry (Unit 8) contains anomalous rock geochemical values in molybdenum and gold. This unit is the main target area for a possible porphyry molybdenum deposit. Drilling on this intrusive is recommended in 1980 to test the molybdenum porphyry theory.

Age relationships between this unit and the intrusive breccia (Unit 4) are uncertain as Unit 4 may contain fragments of quartz porphyry (mineralized molybdenite fragments within the intrusive breccia are believed to come from this unit) but dykes of quartz porphyry are mapped as cutting the intrusive breccia along its northern boundary as well.

Dykes of a "Bughole" quartz porphyry (Unit 9) form a northwest-southeast swarm from Hoodoo Creek in the southeast to the ridge above Main Gully. Minor pyrite is found within this unit and sericitization of feldspars is also common. Manganese staining of surface exposures is also common within this unit. The unit resembles in many respects a similar unit at the Henderson Mine in Colorado. At the Henderson Mine the "Bughole" quartz porphyry is associated with the mineralizing stock. This unit, at Hoodoo, could also be associated with a similar buried stock and mineralizing event. The target, a porphyry molybdenum deposit, is given a lower priority at this stage, until more information is obtained and until access to the property becomes easier.

Unit 10 dykes, feldspar-hornblende-(quartz) porphyry form a northwest-southeast dyke swarm through the property on the northside of Hoodoo Creek. At least two ages of these dykes

are seen, one pre and one post pyritized quartz porphyry (Unit 8). No economic mineralization appears to be associated with these dykes.

Andesitic to basaltic dykes (Unit 12) are found cutting all rock units on the property except Unit 3 and Unit 15. They generally have an almost north-south strike and vertical dips. No economic mineralization is associated with these dykes.

Rhyolite breccias (Unit 14) occur in the eastern portion of the property and form a northeast-southwest series of small breccia pipes. They generally occur up a creek valley that is partially fault controlled. The largest pipe is 100x200 meters in size. Minor amounts of disseminated pyrite in the matrix occurs within the breccias and carbonate alteration on veinlets is found within fault zones close to the breccias.

The rock geochemistry of the pipes is low in all the major elements assayed. A theoretical copper-molybdenum target exists but this target is given a low priority.

A large stock of feldspar porphyry (Unit 13) found at the head of West Gully appears to be the last intrusive event occurring on the property. It forms an elongated north-south mass +1000 meters in length and 600 meters wide. The northern contact of this stock has not been mapped. No sulphide mineralization is associated with this intrusive.

Some highly oxidized base metal veins occur throughout the property area. These veins, up to 20 cm wide, contain pyrite, chalcopyrite, sphalerite, and quartz. Some gold and silver values are also present within these veins. The veins are found within faults and shears and are characteristic of fault controlled mineralization in that they pinch and swell. Their importance as an economic identity is doubtful other than that similar veins occur around economic porphyry deposits in other places.

Geology of the South Side of Hoodoo Creek

Four days were spent sampling and mapping the roads on the south side of Hoodoo Creek on BZT 1 and parts of BZT 2 and 4.

The geology of the south side of Hoodoo Creek is essentially a quartz monzonite stock (Unit 5) intruding into Coast Range Complex diorite (Unit 1). At and near the contact, breccia zones are found carrying up to five percent pyrite.

The quartz monzonite stock emplacement on the south side of Hoodoo Creek into the Coast Range Complex (Unit 1 and 2) gneisses and diorites to quartz diorites has been partly controlled by faults. Little or no hydrothermic alteration is evident in the Coast Range Complex. The quartz monzonite stock is generally poorly fractured, except close to shatter or fault zones, with joints occurring 1-2 per meter.

Dyking is quite common in this area although it is not as regular as the dyke swarms on the north side of Hoodoo Creek. Dykes are seen to cut both major rock units, the quartz monzonite, and the diorite.

Quartz monzonite dykes of Unit 5 cut the diorites of the Coast Range near the contact of the two units, but were not generally observed outside the claim area.

Feldspar-hornblende-(quartz) porphyry dykes (Unit 10) were noted cutting both the quartz monzonite and the Coast Range diorites as were dykes of andesite (Unit 12). These two dyke types do not appear to have any preferred strike direction.

Several dacite dykes of Unit 6, some up to 10 meters wide, were noted between the 800 and 900 meter elevations on the middle road of Hoodoo Creek. These dykes cut the diorites of the Coast Range and generally seem to have a preferred strike direction that is northeast-southeast.

One rhyolite dyke, two meters wide, was noted to cut the quartz monzonite near its contact. The rhyolite dyke has been tentatively placed in Unit 9, the "Bughole" quartz porphyry, although it may belong to another unit or be a separate unit altogether.

Mineralization is restricted to the quartz monzonite stock and the breccia zones at the contact. These breccia zones contain up to five percent disseminated pyrite in the matrix with very minor amounts of chalcopyrite seen in places.

Mineralization within the quartz monzonite stock is mainly in widely-spaced quartz pyrite, pyrite, quartz molybdenite and/or quartz molybdenite chalcopyrite fracture coatings or veins. Disseminated pyrite is also noted near the contact in the quartz monzonite.

A very spectacular quartz-molybdenite-pyrite-chalcopyrite vein, 10 cm wide, was seen cutting the quartz monzonite near sample VH 91. This vein contains plus 90 percent sulphides of which 50 percent was coarse rosette molybdenite.

No mineralization appears to be associated with any of the dyking.

None of the mineralization on the south side of Hoodoo Creek is thought to be economic at this time, either because the mineralization on the fractures is weak or the fracturing and thus total mineralization is not pervasive enough to make ore.

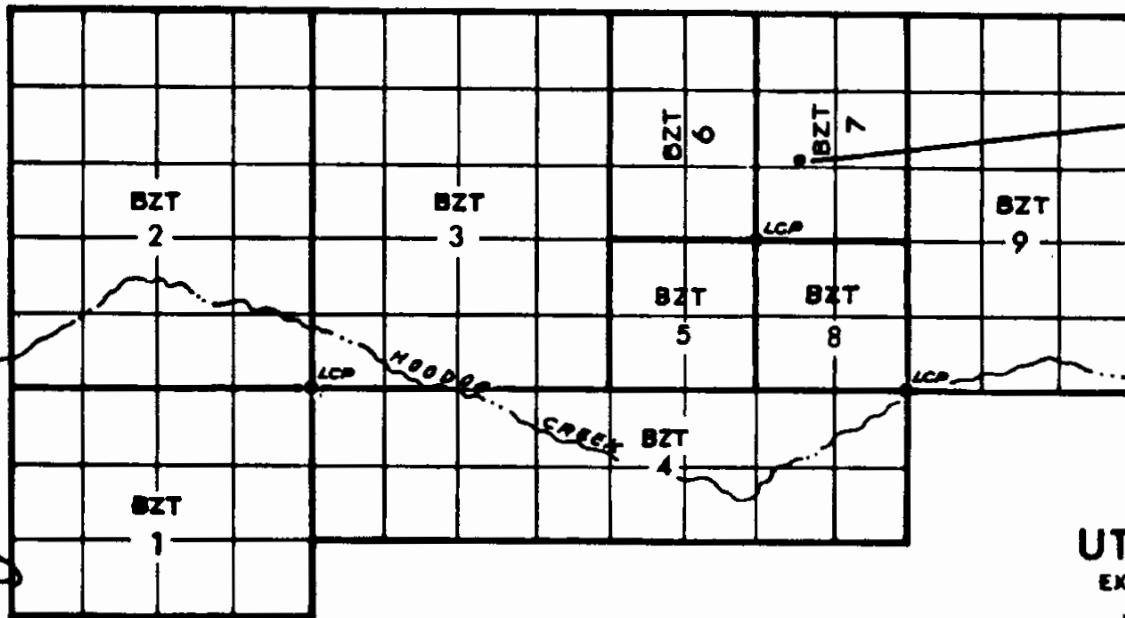
DIAMOND DRILLING

Two diamond drill holes were drilled at Hoodoo Creek from September 3rd to October 2nd, 1979. The first hole was designed to cut into the quartz porphyry (Unit 8) that contains 5-10 percent disseminated pyrite and minor amounts of molybdenite. The second hole was designed to cut into the pyritized breccia of Unit 4.

The contractor for the diamond drilling on Hoodoo Creek was Canadian Mine Service who used a Longyear Super 38 drill to drill 512.9 meters (1683 feet) of NQ core in the two holes.

Diamond drill hole 79-1, 269.7 meters (885 feet), was drilled from a prepared setup at the 1800 meter level in the Main Gully. The hole was drilled at -45° on a true bearing of 000° . The hole was designed to cut into the pyritized quartz porphyry unit (which contains minor amounts of molybdenite) at the head of the Main Gully.

The results of the hole were disappointing because when the pyritized quartz porphyry unit was reached the hole entered a post mineral dyke and remained within the dyke to the end of the hole. Only a short (13 meter) section of the pyritized quartz porphyry was cut from 143 to 156 meters with very minor amounts of MoS_2 and chalcopyrite present as disseminations and fracture fillings. The molybdenum content of this section in geochemical analyses ranged between 3 and 115 ppm Mo, up to 0.011 percent Mo and between 144 and 850 ppm Cu. The remainder of the hole cut either the Coast Range Complex or dykes of "Bughole" porphyry or feldspar-hornblende-(quartz) porphyry.



DDH 79-1 -45° @ 000°
DDH 79-2 -60° @ 291°

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA
HOODOO CREEK PROPERTY
BZT CLAIMS
Vancouver Mining Division - British Columbia
DRILL HOLE LOCATION MAP

-92N5-

1:50,000

Diamond drill hole 79-2, 243.2 meters (798 feet), was drilled from the same setup as 79-1 but was drilled at -60° on a 291° bearing. The hole was designed to cut into the breccia unit (Unit 4) which contains +5 percent pyrite.

The results of this hole are encouraging as the breccia was intersected in the bottom portion of the hole. Fifteen fragments of rock (within the breccia) contained vein or disseminated molybdenite mineralization. The matrix of the breccia also contains pyrite mineralization as disseminations or rims around some fragments. In one section of core, the matrix contained a 5 mm blotch of molybdenite.

The breccia, like the surrounding Coast Range Complex cut in the top of the hole, has vein or fracture filling pyrite, some minor veins of pyrite-chalcopyrite and minor veins of pyrite-sphalerite. This latter mineralization suggests that there is a mineralizing event that comes after the emplacement of the breccia.

The alteration encountered in hole 79-2 in the breccia unit is substantially lower grade alteration than is found on surface in the breccia. The surface alteration of the breccia was mapped as phyllic (sericite pyrite matrix with some silicification) while in the drill core, the grade of alteration is mainly propylitic (epidote, pyrite with minor sericite and silicification). There appears to be no logical explanation for this reverse change in the alteration sequence normally experienced except that of weathering.

The gneissic granodiorite to diorite rocks of the Coast Range Complex in this drilling are also high in rock geochemical values for the elements assayed. Values in the various elements range as follows:

Cu	30 - 3100 ppm
Mo	1 - 135 ppm
Zn	28 - 9800 ppm
Au	<10 - 240 ppb

The only other rock type cut in the diamond drilling done this year was the feldspar-hornblende-(quartz) porphyry (Unit 10). This unit is considered to be post mineral and the rock geochemistry of this unit is significantly lower than the other units in the area. Geochemical values for this unit are as follows:

Cu	10 - 705 ppm
Mo	1 - 15 ppm
Zn	104 - 1100 ppm
Au	<10 - 10 ppb

Most values in gold are below the detection limit (10 ppb) and only two samples are recorded at the detection limit. Zinc values are generally in the 100-500 ppm with the occasional sample in the higher range (300 to 1100 ppm). Copper values, like zinc, tend to be less than 100 ppm Cu except for one complicated dyke (a dyke in which three variations of the unit are detected) which gives values greater than 100 ppm Cu.

GEOCHEMISTRY

GEOCHEMICAL ANALYSIS OF THE 1979 DRILLING

Geochemical analysis of the diamond drill core was done on sections of split core from three meter sections, or smaller, if rock types changed. Analysis was done for four elements: copper, molybdenum, zinc, and gold.

The results of the geochemical analysis of the core shows some surprises. Sections of the Coast Range Complex (sheared and shattered) show extremely high geochemical values in most elements. The highest individual analyses in each element are 3100 ppm Cu, 135 ppm Mo, 9800 ppm Zn, and 240 ppb Au. The source of these values must come from some later mineralizing event.

The pyritized quartz porphyry unit (Unit 8) at the head of Main Gully, which was intersected for only 13 meters in drill hole 79-1, was shown to contain weak to moderate molybdenum, zinc, and copper geochemistry that may reflect a halo effect of a buried molybdenum deposit at depth. Molybdenum values ranged from 3 to 115 ppm in the six samples through this section, while copper values ranged between 144 and 850 ppm, and zinc between 285 and 3900 ppm, three of these samples being +1000 ppm Zn. Gold was also detected in some of the samples.

Rock geochemistry of the "Bughole" quartz porphyry (Unit 9) is also interesting. Values for the various elements range as follows:

Cu	26 - 590 ppm
Mo	1 - 10 ppm
Zn	24 - 1400 ppm
Au	<10 - 20 ppb

Higher zinc values occur at +100 meter depth in drill hole 79-2 in dykes of the "Bughole" porphyry. These values are all +600 ppm Zn in the two dykes intersected.

Only one gold value exceeds the detection limit of 10 ppb.

No pattern is observed in the copper or molybdenum geochemical values in the drill core for the "Bughole" quartz porphyry because of the lack of sufficient samples.

The intrusive breccia (Unit 4) is another interesting unit geochemically. This unit consistently has values of +10 ppm Mo with only one sample less than 10 ppm Mo. The highest molybdenum value in this unit is 41 ppm.

Copper ranges from 164 to 585 ppm and zinc ranges from 170 to 1750 ppm. Gold values range between <10 ppb and 20 ppb with a 12 meter section assaying greater than 10 ppb, this was the highest consecutive section of gold values obtained in the drilling.

GEOCHEMISTRY OF SOIL AND SURFACE ROCK SAMPLING

During the 1979 field season three soil lines were run east of the Main Gully to close off Amax's 1978 soil anomaly. Ninety-seven soil samples were collected. Histograms plotted of the assay results show the following threshold and anomalous values in ppm:

	Threshold	Anomalous
Cu	135	300
Mo	8	23
Zn	84	180
Ag	0.2	0.6

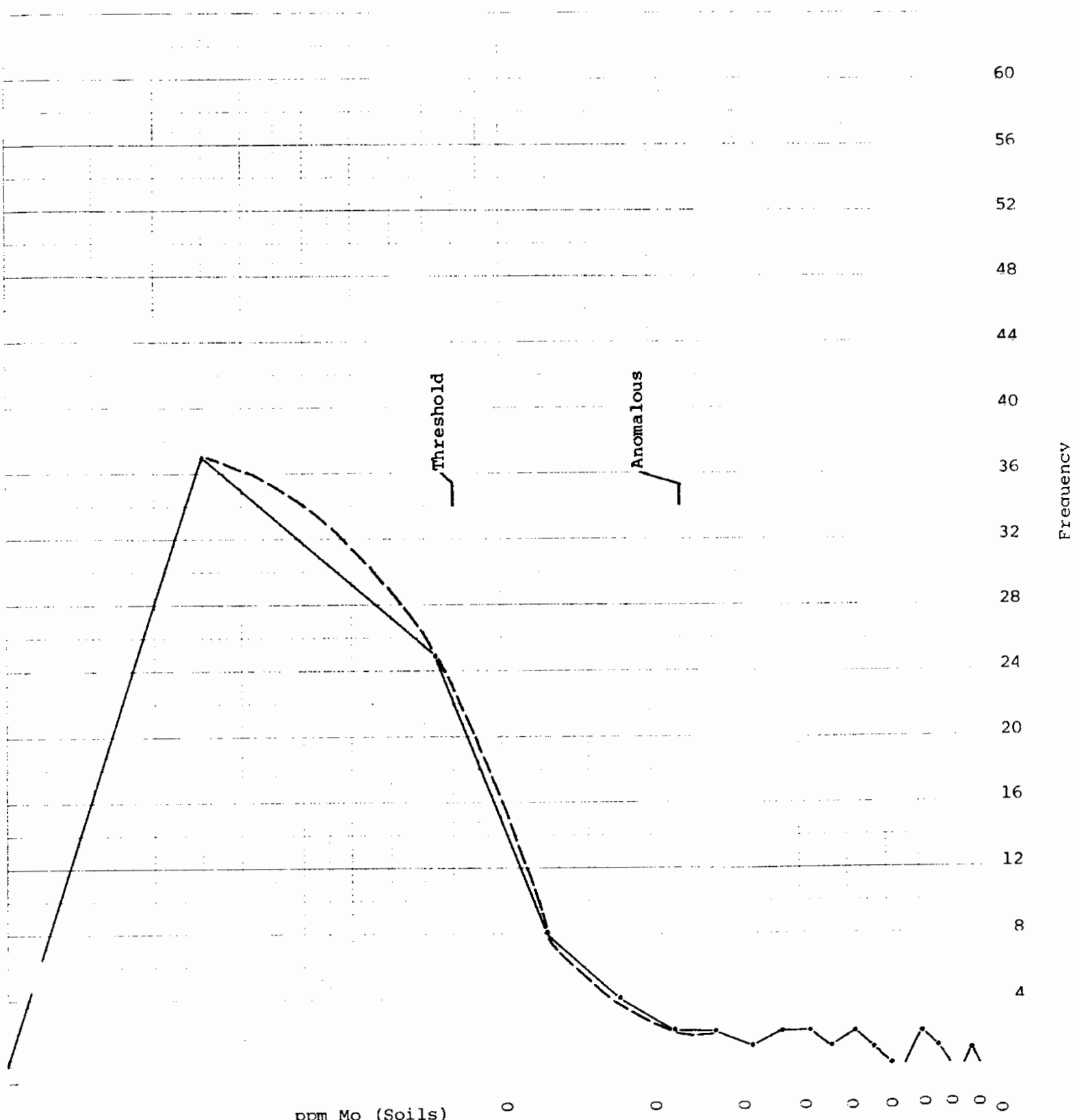
These lines closed off the various anomalies that are shown in Amax's 1978 report.

Rock chip samples were collected across the pyritized quartz porphyry (Unit 8) along contour elevations and down creek valleys on Main and the creek immediately west. These latter samples came mainly from Unit 4, the intrusive breccia. Histograms were plotted of the surface rock geochemical data from units 8 and 10 (units with a reasonable number of samples). Results of the histograms show the following threshold and anomalous results in ppm:

Unit 8 Pyritized quartz porphyry:

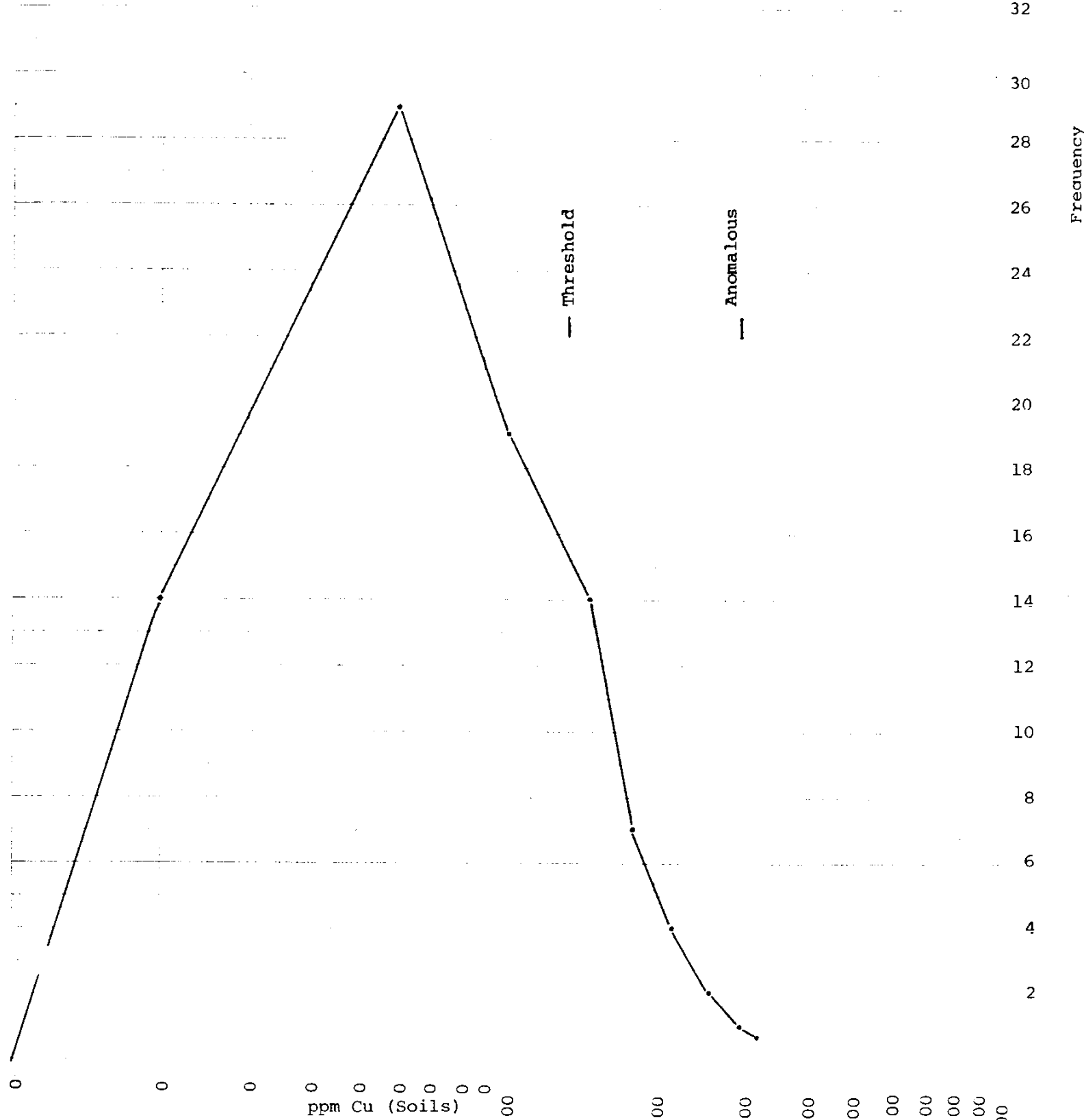
	Threshold	Anomalous
Cu	88	190
Mo	3	10
Zn	70	230
Ag	0.7	1.6

Hoodoo Creek
Normalized Frequency Distribution
Molybdenum in Soils
Figure 1

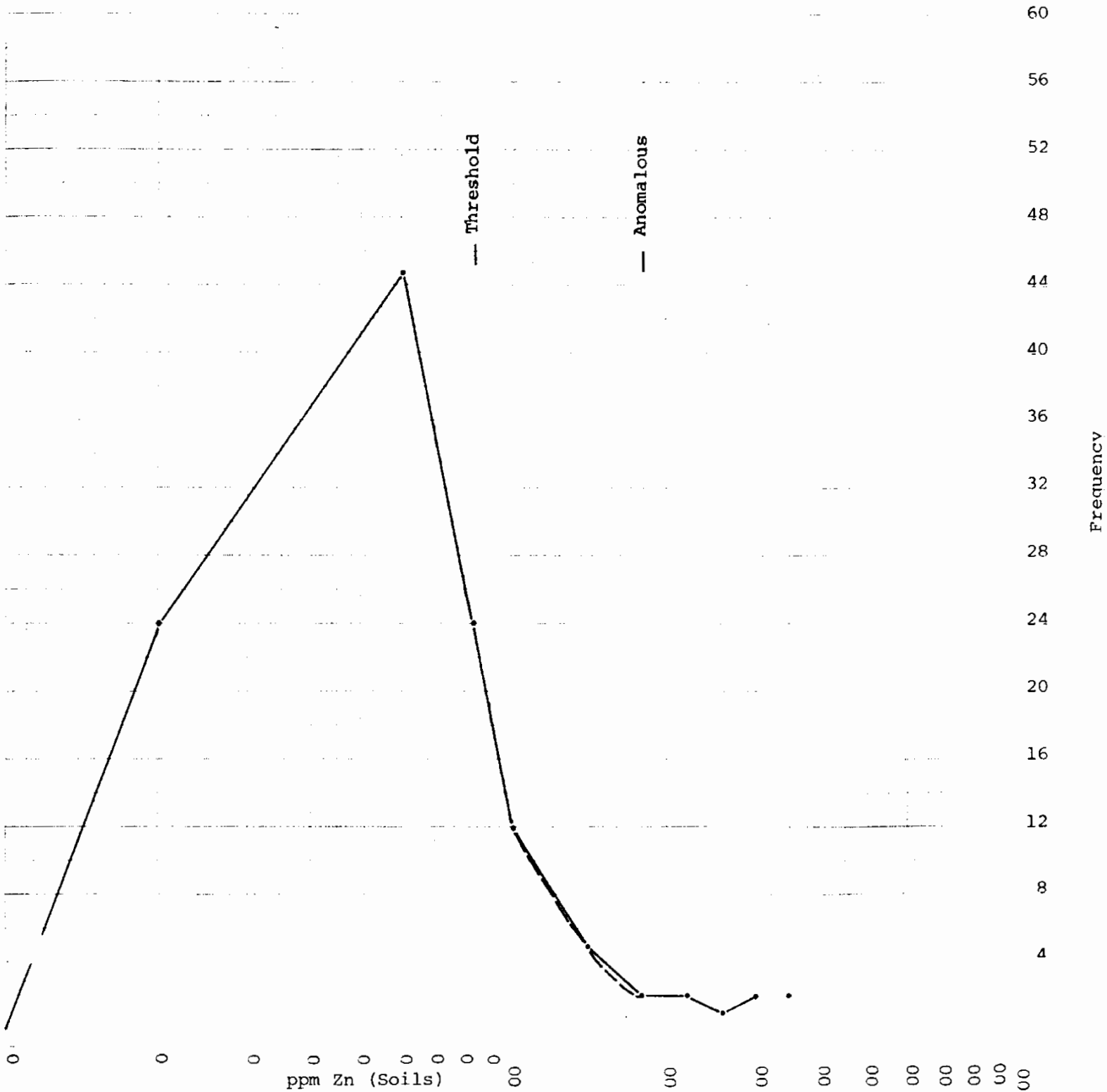


40
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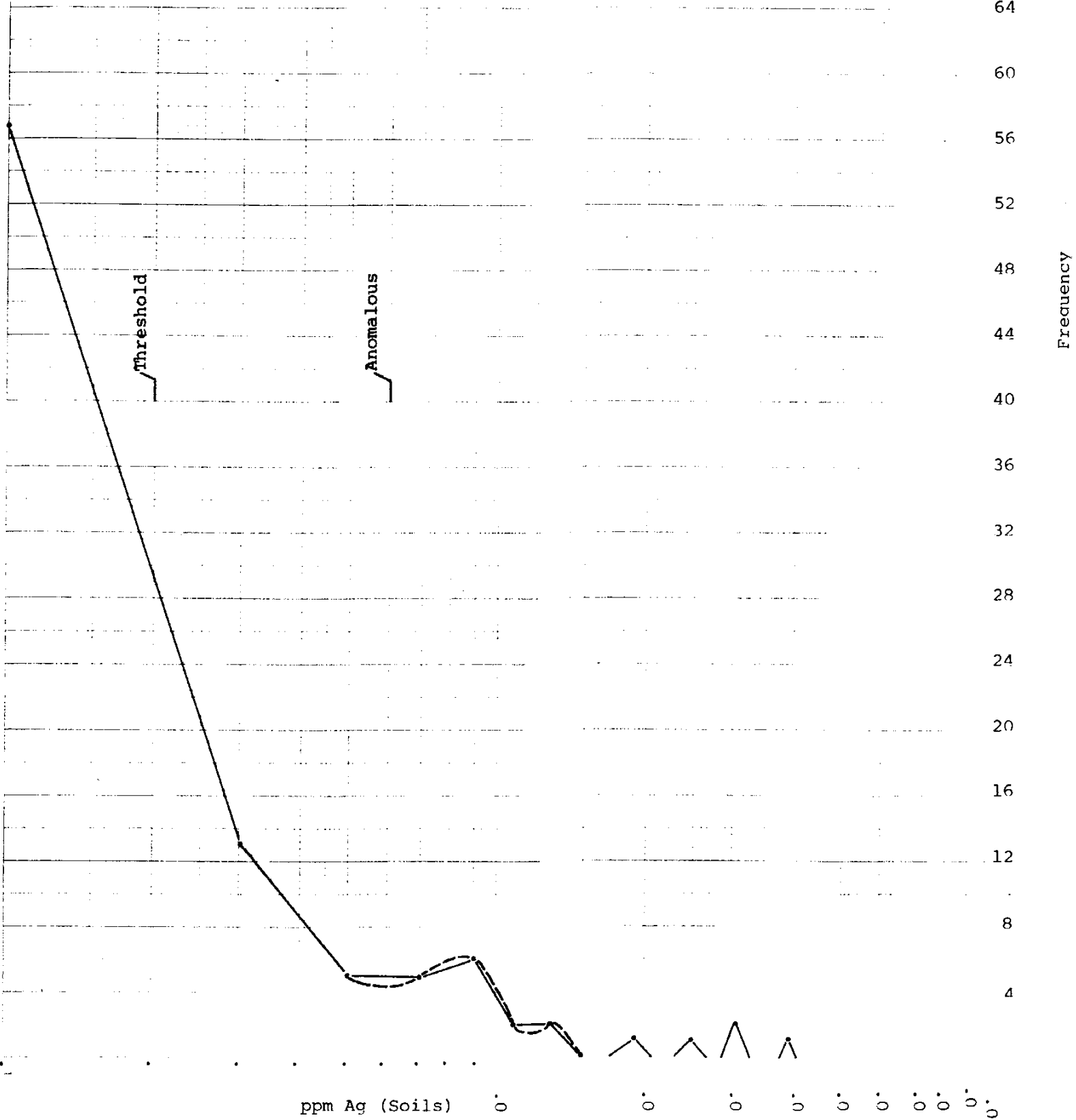
Hoodoo Creek
Normalized Frequency Distribution
Copper in Soils
Figure 2



Hoodoo Creek
Normalized Frequency Distribution
Zinc in Soils
Figure 3



Hoodoo Creek
Normalized Frequency Distribution
Silver in Soils
Figure 4



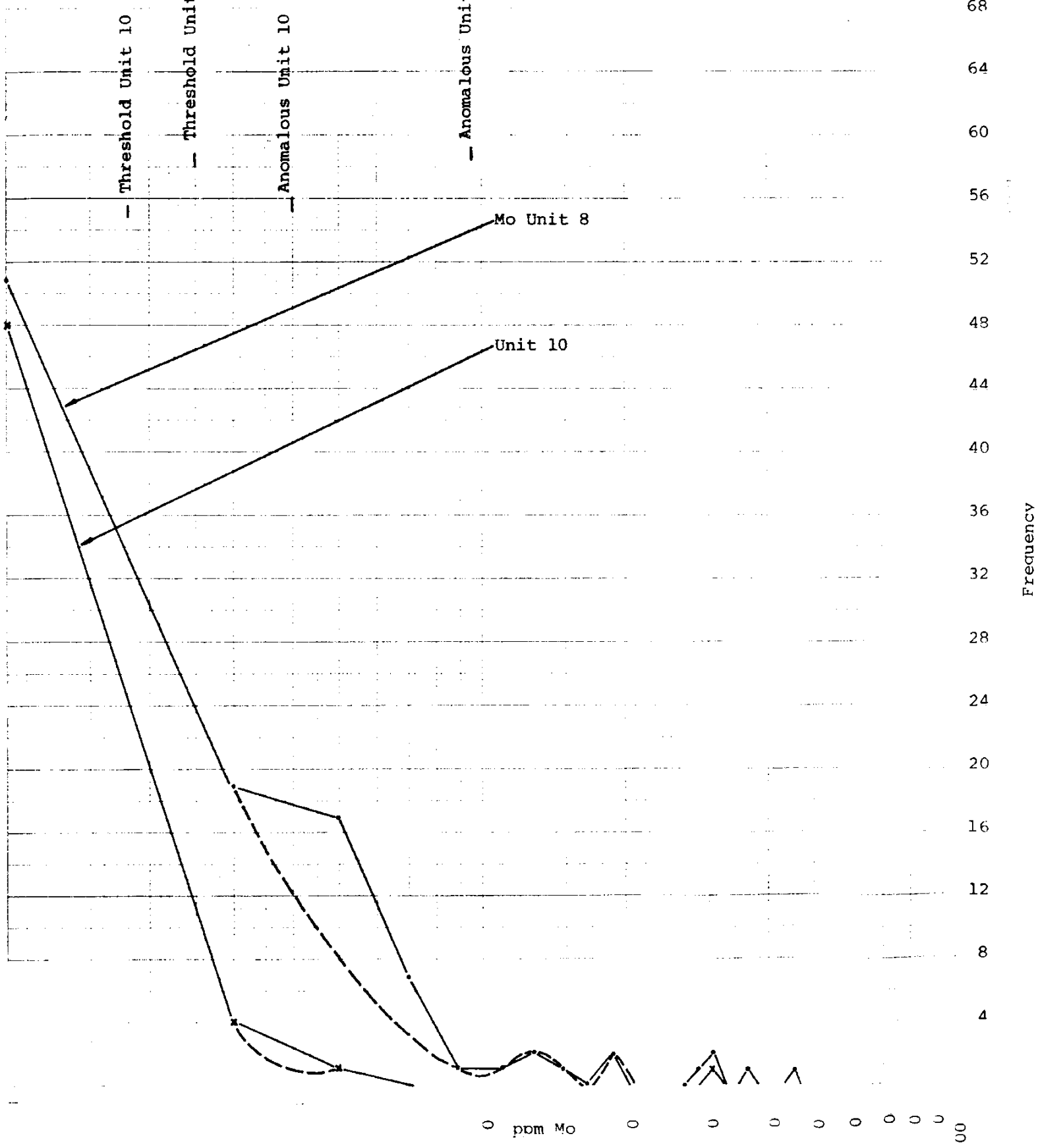
80
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72
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Hoodoo Creek
Normalized Frequency Distribution
Molybdenum in Rock
Figure 5

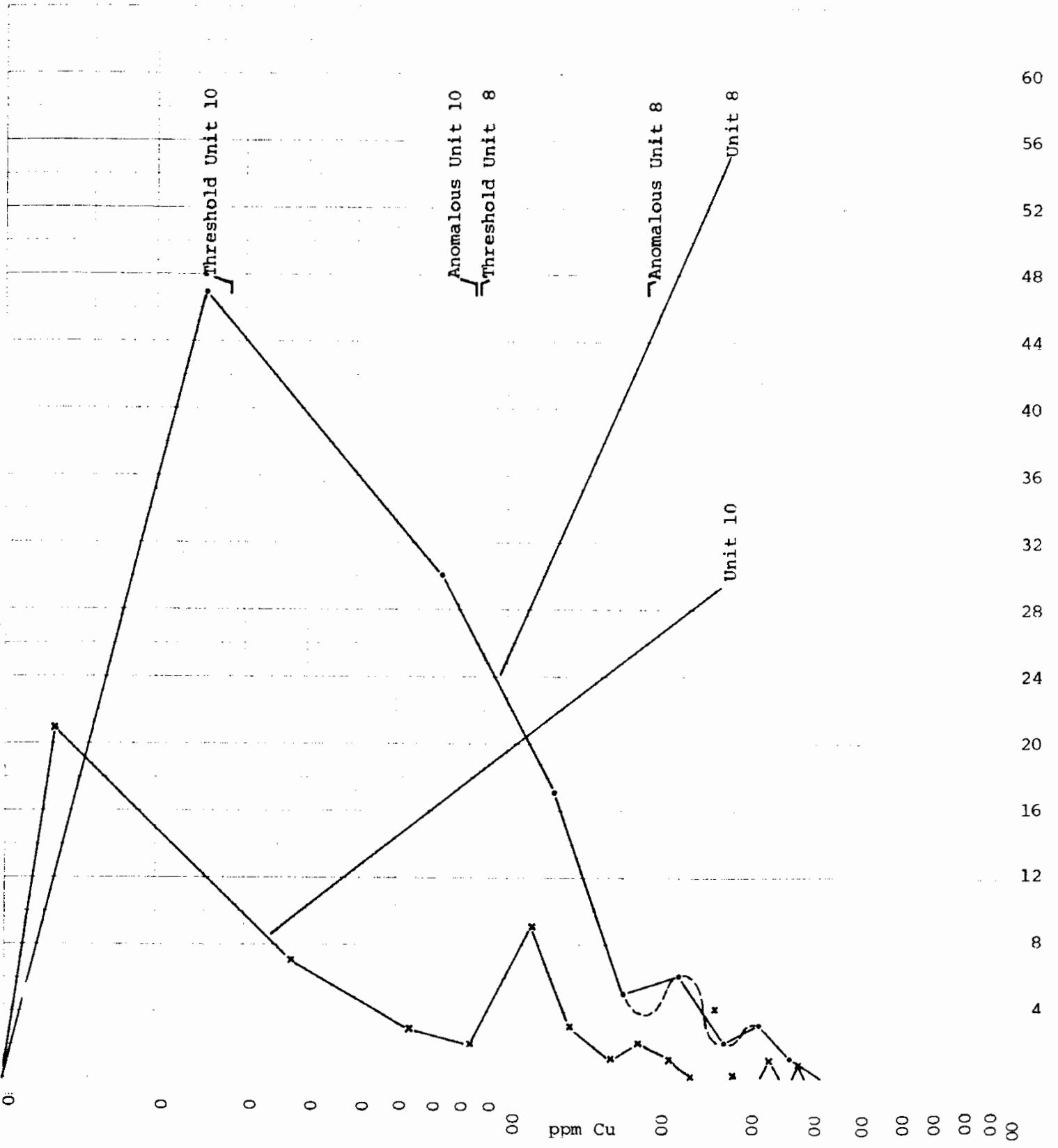
Threshold Unit 10
Threshold Unit 8
Anomalous Unit 10
Anomalous Unit 8

Mo Unit 8

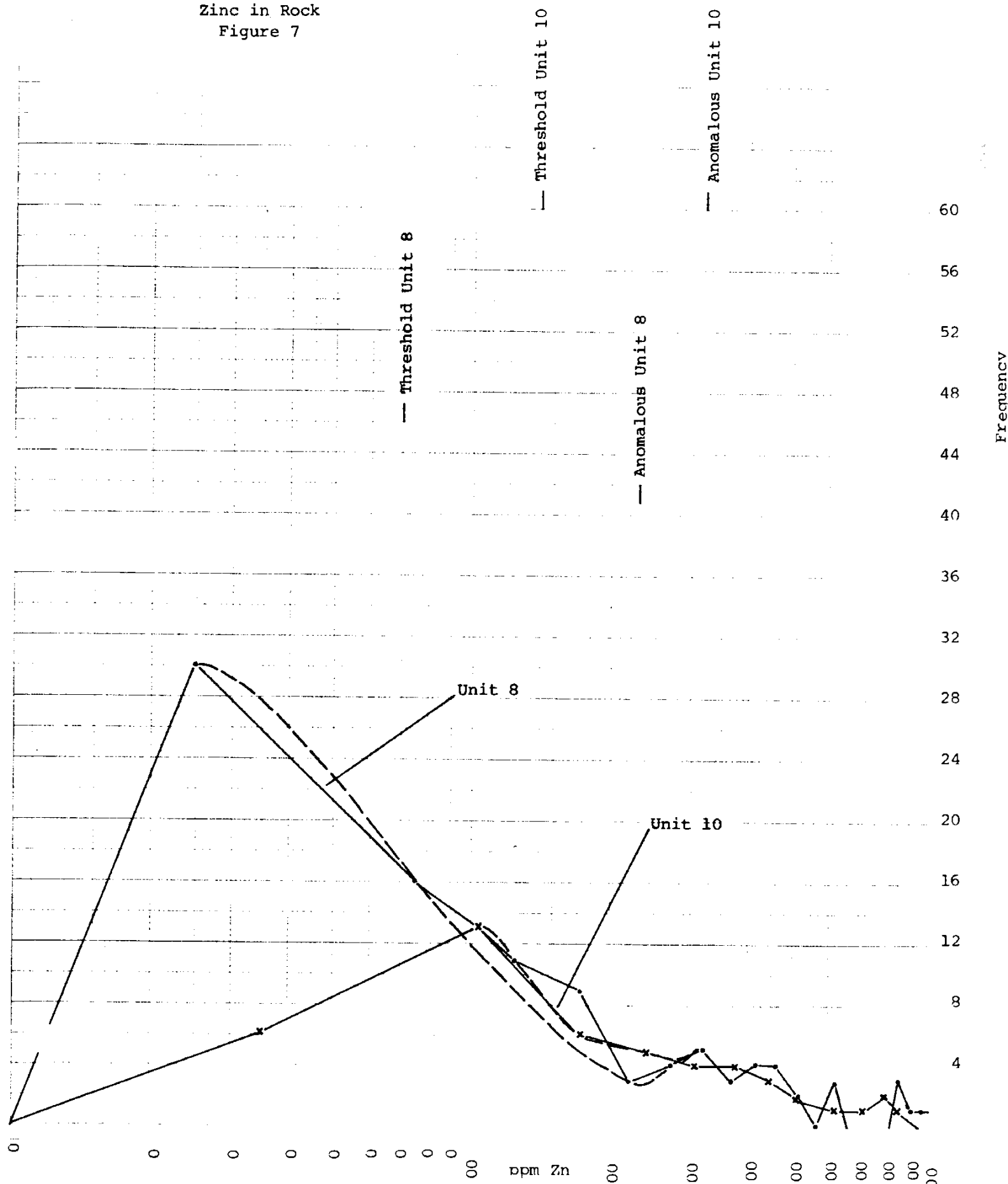
Unit 10



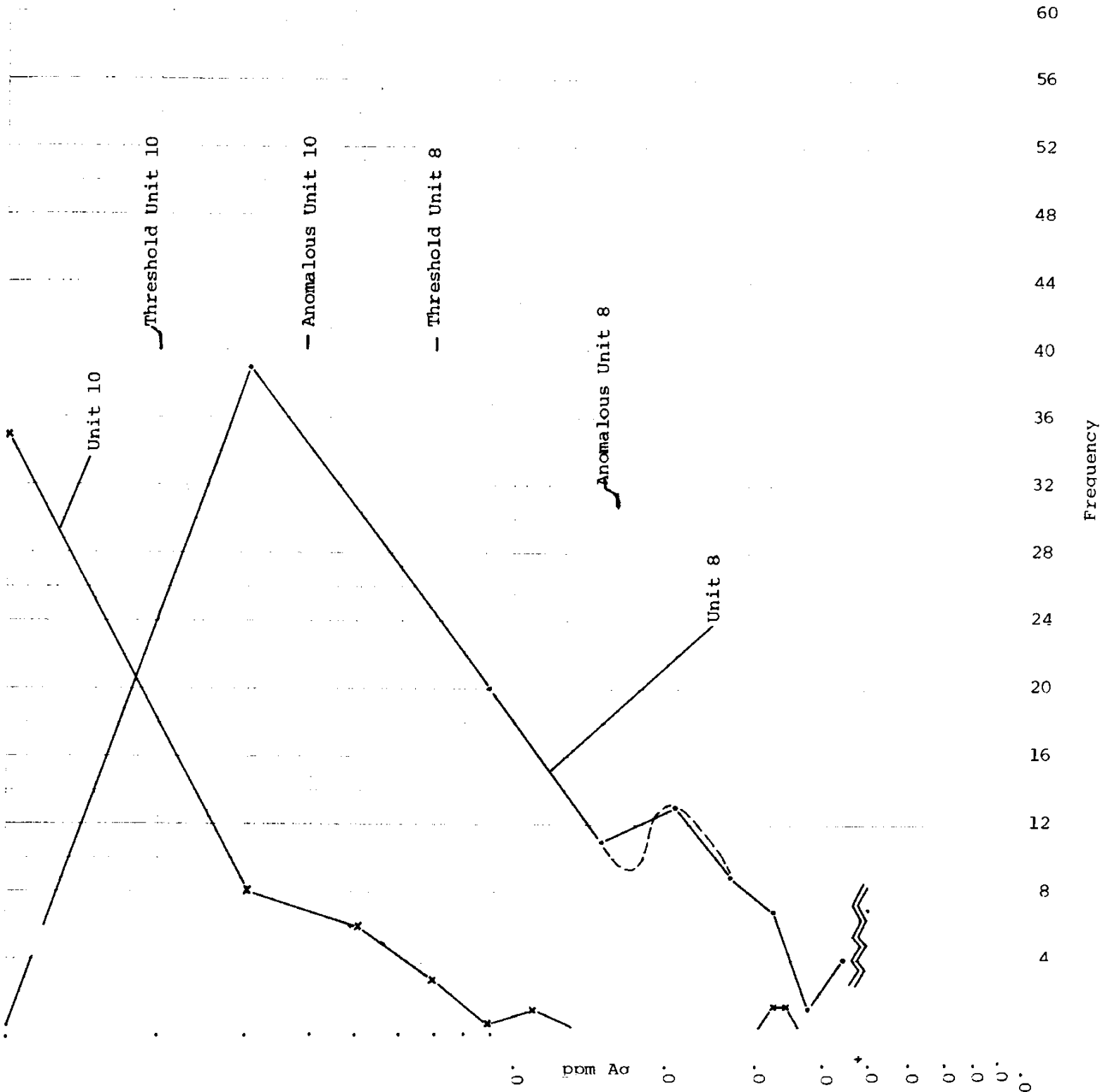
Hoodoo Creek
 Normalized Frequency Distribution
 Copper in Rock
 Figure 6



Hoodoo Creek
 Normalized Frequency Distribution
 Zinc in Rock
 Figure 7



Hoodoo Creek
 Normalized Frequency Distribution
 Silver in Rock
 Figure 8



Unit 10 Feldspar hornblende quartz porphyry:

	Threshold	Anomalous
Cu	28	86
Mo	2	4
Zn	140	320
Ag	0.2	0.4

Rock geochemical values in the remainder of the rock units have the following values in ppm:

		<u>Low</u>	<u>High</u>	<u>Most Common Values</u>
Unit 1 & 2	Cu	5	865	10 - 105
Coast Range Complex (diorite and gneiss) (52 samples)	Mo	1	+ 56	1 - 14
	Zn	20	+1100	50 - 200
	Ag	0.1	4.6	0.1- 1.2
	Unit 3	Cu	5	10
Quartz monzonite breccia (3 samples)	Mo	.2	.2	.2
	Zn	40	150	40 - 150
	Ag	0.1	0.6	0.1- 0.6
	Unit 4	Cu	6	2850
Intrusive breccia (44 samples)	Mo	2	+ 56	2 - 10
	Zn	20	+1100	20 - 390
	Ag	0.1	20.0	0.1- 1.0
	Unit 5	Cu	5	340
Quartz monzonite (26 samples)	Mo	2	+ 56	2 - 4
	Zn	20	200	20 - 100
	Ag	0.1	1.6	0.1- 1.2

		<u>Low</u>	<u>High</u>	<u>Most Common Values</u>
Unit 6	Cu	5	370	5 - 40
Dacite	Mo	2	4	2 - 4
(15 samples)	Zn	60	+1100	60 - 140
	Ag	0.1	11.0	0.1- 0.8
Unit 7	Cu	195	1100	930 -1100
Dacite breccia	Mo	2	+ 56	16
(4 samples)	Zn	80	200	80 - 200
	Ag	0.8	2.0	
Unit 8	Cu	5	395	5 - 135
Pyritized quartz	Mo	2	+ 56	2 - 8
porphyry	Zn	10	+1100	10 - 200
(109 samples)	Ag	0.1	3.6	0.1- 3.6
Unit 9	Cu	5	265	5 - 130
"Bughole" quartz	Mo	2	42	2 - 6
porphyry	Zn	40	+1100	40 - 150
(18 samples)	Ag	0.1	1.6	0.1- 1.6
Unit 10	Cu	5	34	5 - 135
Feldspar hornblende	Mo	2	48	2 - 5
quartz porphyry	Zn	40	+1100	40 - 330
(54 samples)	Ag	0.1	1.2	0.1- 0.8
Unit 11	Cu	120		
Lahar breccia	Mo	2		
(1 sample)	Zn	405		
	Ag	0.1		

		<u>Low</u>	<u>High</u>	<u>Most Common Values</u>
Unit 12	Cu	5	120	5 - 120
Andesite dykes (10 samples)	Mo	2	4	2 - 4
	Zn	10	860	70 - 130
	Ag	0.1	1.6	0.1- 0.6
Unit 13	Cu	5		
Feldspar porphyry (1 sample)	Mo	2		
	Zn	260		
	Ag	1.2		
Unit 14	Cu	1	175	1 - 15
Rhyolite breccia (7 samples)	Mo	2	6	2 - 6
	Zn	70	820	180 - 190
	Ag	0.1	2.2	0.4- 0.8
Unit 15	Cu	20		
Andesitic flows and pyroclastics (1 sample)	Mo	4		
	Zn	100		
	Ag	0.4		

ANOMALOUS AREAS

Surface chip and rock sample geochemistry show that there are areas that contain a number of anomalous samples. All samples in that area are not anomalous but generally the samples are higher in value.

An area at the head of Main Creek underlain by pyritized quartz porphyry is anomalous in gold and silver with scattered patchy zones of molybdenum and the occasional high in zinc.

The Main Gully area from 1250 to 1800 meter elevation is also anomalous in many of the elements assayed. It is anomalous in gold and copper and contains scattered anomalous values in molybdenum and silver. Zinc anomalous values in this area only occur in the head of this creek valley from 1600 to 1800 meter elevations.

The head of the unnamed gully immediately to the west of Main Creek is anomalous in two elements: zinc and silver. It also contains scattered values in copper. This area is underlain by the intrusive breccia with narrow dykes of the pyritized quartz porphyry.

Smaller areas of anomalous values occur in several localities: the head of East Gully, South Gully, Amax campsite, the head of West Gully, and the top of the ridge to the east of the lahar breccia. These smaller areas of anomalous values may be limited in size because of the limited rock exposures or accessibility of rock in those areas or by the limited rock type in the area of sampling.

The area at the head of West Gully is anomalous in gold with scattered anomalous values in silver, copper and zinc. The anomalous values all occur in the intrusive breccia unit in this area. The samples generally come from near the contact between the intrusive breccia and the Coast Range Complex.

The head of South Gully has scattered anomalous values in copper, molybdenum and gold. The anomalous copper values are associated with the small dacitic breccia in the area, while the molybdenum is associated with the quartz monzonite stock. Gold values are associated with both rock units.

The area, immediately east of the Amax campsite, is also anomalous. It contains values in zinc and silver along with the anomalous values in copper, molybdenum, and gold. All the samples in this anomalous area were taken by Amax in 1978. The area is underlain by a very fractured zone near or within the contacts of the quartz monzonite stock and dacite breccia (?) with the overlying Coast Range granodiorite.

Scattered anomalous values in copper, molybdenum, zinc, and a few anomalous values in silver occur at the head of East Gully. This area is underlain by the quartz monzonite stock cut by numerous dykes of "Bughole" quartz porphyry and feldspar hornblende quartz porphyry. Most of the anomalous samples from this area are again samples collected by Amax in 1978.

A relatively large, low order, gold anomaly in the pyritized quartz porphyry was found during the rock chip sampling program carried out in 1979. This anomaly is located on the ridge immediately east of the lahar on the northern edge of the claim block.

Scattered anomalous values in many of the elements occur throughout the map area as single sample anomalies. Some of these areas may warrant further geochemical rock chip sampling at a future date but it is not a priority item.

REMARKS

The geological mapping, sampling and drilling program conducted on Hoodoo Creek in 1979 confirmed the presence of several mineralized phases of intrusion present on the BZT claims. Some of these intrusions are anomalous in copper, molybdenum, gold, zinc, and silver.

Five different mineralized intrusive phases occur on the property and give several targets that need further testing. These targets are listed as follows:

- 1) The pyritized quartz porphyry for molybdenum and gold.
- 2) The main body of quartz monzonite on the north side of Hoodoo Creek for copper and molybdenum.
- 3) The intrusive breccia for a deep buried molybdenum and/or copper deposit.
- 4) The dacite breccias for a deep copper deposit.
- 5) Mineralization associated with the "Bughole" quartz porphyry dykes, a possible "Henderson" type molybdenum deposit at depth.
- 6) The source of the mineralized fragments within the intrusive breccia, once this probable source has been localized.

The drilling program conducted in 1979 was only partially successful as the hole designed to cut the pyritized quartz porphyry failed. The hole entered a post mineral dyke shortly after entering the pyritized quartz porphyry, only a 13 meter intersection was obtained. This intersection showed minor molybdenum (up to 0.012 percent Mo).

The hole intersecting the intrusive breccia was successful. Fifteen mineralized fragment containing disseminated and vein molybdenite were seen in the core. These fragments show that a molybdenite deposit was breached by the breccia.

512.9 meters (1683 feet) of NQ diamond drilling in two holes was carried out in 1979.

Transportation and communication problems plagued the program in 1979 mainly because of the property location. Several steps should be initiated to make transportation of men and equipment easier and communications better to save time and expense.

- 1) Radio equipped ground transportation capable of loading and moving drill equipment is essential at Knight Inlet.
- 2) The use of large helicopters in moving drill equipment and camp gear to and from the staging area.
- 3) A large multi-channel radio is essential for the drill camp as difficulties in phone communication were constantly encountered in 1979, mainly the ability to contact Vancouver radio, and the heavy traffic on channels.

RECOMMENDATIONS

Utah continue participation in the Hoodoo Creek Mo prospect.

The following targets should be tested in 1980 by drilling:

- a) The pyritized quartz porphyry, one or two holes approximately 1500 feet each from the ridge above Main Gully.
- b) The western edge of the mineralized quartz monzonite on the north side of Hoodoo Creek between the 1350 and 1550 meter elevation in the Main Gully. One hole approximately 1000 feet in length.
- c) The edges of the intrusive breccia from the top of the Main Gully and from 1350 to 1550 elevation in the Main Gully should be tested. The purpose is to find the focal point of mineralized fragments within the breccia, for a later deep test for source of mineralized fragments. Two holes approximately 1000 feet.

Further drilling if results are favourable, and drilling to test the deeper targets that may be associated with the "Bughole" quartz porphyry, the dacite breccias, and the intrusive breccia.

The western portion of the claim group should be mapped when access becomes reasonable ie. as the road progresses to make access to the area.

CERTIFICATION

I, JOHN RAYMOND DEIGHTON, of 3250 West 33rd Avenue, Vancouver, British Columbia, do hereby certify that:

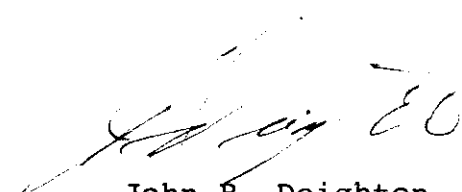
I am a graduate of the University of British Columbia, with a Bachelor of Science Degree in Geology, 1965.

Since graduation I have been engaged in Mineral Exploration in British Columbia, Yukon, Northwest Territories, Washington, Arizona and California.

I am a Fellow of the Geological Association of Canada and of the Canadian Institute of Mining and Metallurgy.

I am a Geologist

Vancouver, B. C.



John R. Deighton
Geologist

APPENDIX I

CERTIFICATES OF ANALYSIS



CHEMEX LABS LTD.

BROOKSBANK AVE.
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: [REDACTED] 984-0221
 AREA CODE: 604
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 51221

TO: Utah Mines Ltd.
 1600 - 1050 W. Pender St.
 Vancouver, B. C.

INVOICE NO. 33665

RECEIVED Oct. 23/79

ATTN: V6E 3S7

Rocks

ANALYSED Nov. 6/79

SAMPLE NO. :	PPM	PPM	PPB
	Cu	Mo	Au
51463	880	1	10
51464	600	12	< 10
51465	1500	13	20
51466	330	1	< 10
51467	1050	3	< 10
51468	1450	4	< 10
51469	320	5	< 10
51470	580	7	< 10
51471	640	5	< 10
51472	675	3	10
51473	75	1	< 10
51474	80	1	< 10
51475	80	1	< 10
85051	65	1	< 10
85052	25	1	< 10
85053	230	9	< 10
85054	445	41	10
85055	545	11	< 10
85056	430	11	< 10
85057	360	13	< 10
85058	10	1	< 10
85059	585	13	< 10
85060	25	1	< 10
85061	380	4	< 10
85062	215	2	< 10
85066	200	1	< 10
85067	500	25	10
85068	490	14	10
85069	510	31	20
85070	455	21	< 10

RECEIVED

NOV 14 1979

UTAH MINES LTD.
EXPLORATION SEPT.



MEMBER
 CANADIAN TESTING
 ASSOCIATION

CERTIFIED BY:

Hart Biddle



CHEMEX LABS LTD.

2 BROOKSBANK AVE.
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: 984-0221
 AREA CODE: 604
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 51220

TO: Utah Mines Ltd.
 1600 - 1050 W. Pender St.
 Vancouver, B. C.

INVOICE NO. 33665

RECEIVED Oct. 23/79

ATTN: V6E 3S7

ROCKS

ANALYSED Nov. 6/79

SAMPLE NO. :	PPM	PPM	PPB
	Cu	Mo	Au
51377	34	8	< 10
51378	30	24	< 10
51379	220	110	< 10
51380	178	18	< 10
51381	220	11	< 10
51382	178	9	< 10
51386	280	2	10
51390	485	11	< 10
51431	20	4	< 10
51432	44	2	< 10
51433	108	1	< 10
51434	26	1	< 10
51435	182	1	< 10
51436	310	2	< 10
51437	370	10	20
51438	675	1	< 10
51439	74	1	< 10
51440	705	1	< 10
51441	460	15	10
51442	1000	20	< 10
51443	1500	23	< 10
51444	975	2	20
51445	330	18	< 10
51446	1100	1	< 10
51447	590	18	< 10
51448	350	5	< 10
51449	410	1	20
51450	830	15	< 10
51451	1700	1	10
51452	630	2	< 10
51453	3100	2	10
51454	510	5	< 10
51455	700	7	< 10
51456	1800	1	240
51457	1300	1	10
51458	875	1	< 10
51459	625	18	10
51460	1100	4	10
51461	770	3	20
51462	320	2	< 10

RECEIVED

NOV 14 1979

UTAH :
EXPLORATION DIV.



MEMBER
 CANADIAN TESTING
 ASSOCIATION

CERTIFIED BY:

Hart Biddle



CHEMEX LABS LTD.

*file Howden
2017 Assays*

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 984-0221
AREA CODE: 604
TELEX: 043-52597

- ANALYTICAL CHEMISTS
- GEOCHEMISTS
- REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50928

TO: Utah Mines Ltd.,
1600 - 1050 W. Pender St.,
Vancouver, B.C.

INVOICE NO. 33176

RECEIVED September 27, 1979

ATTN: J.R. Deighton

Rocks

ANALYSED October 12, 1979

SAMPLE NO. :	PPM	PPM	PPB
	Cu	Mo	Au
51393	330	6	<10
51394	110	2	<10
51398	370	135	<10
51402	60	6	<10
51405	92	2	<10
51407	570	4	<10
51411	410	4	<10
51412	66	2	<10
51413	142	1	<10
51414	20	3	<10
51415	170	6	<10
51416	144	5	10
51417	200	5	<10
51418	850	3	<10
51419	730	115	<10
51420	340	10	<10
51421	615	80	10
51422	38	4	<10
51423	28	2	<10
51424	60	3	<10
51425	38	2	<10
51426	60	1	<10
51427	68	3	<10
51428	26	2	10
51429	20	2	10
51430	20	2	<10

RECEIVED

OCT 15 1979

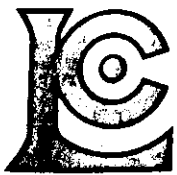
UTAH MINES
EXPLORATION



MEMBER
CANADIAN TESTING
ASSOCIATION

CERTIFIED BY:

Hank Bickle



CHEMEX LABS LTD.

File 115000
Frank

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: [REDACTED] 984-0221
AREA CODE: 604
FLEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS OCT 8 - 1979

TO: Utah Mines Ltd.,
1600 - 1050 W. Pender St.,
Vancouver, B.C.
V6E 3S7

UTAH MINES LTD.
EXPLORATION DEPT.

CERTIFICATE NO. 50720
INVOICE NO. 33038
RECEIVED Sept. 18/79
ANALYSED Oct. 4/79

ATTN: John Deighton - Hoodoo Creek

ROCK

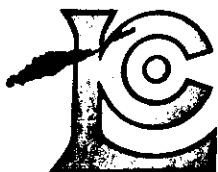
SAMPLE NO. :	PPM Cu	PPM Mo	PPM Pb	PPM Zn	PPM Ag	PPB Au
JF - 1	4	1	1	136	0.4	< 10
2	14	1	2	124	0.1	< 10
4	10	1	1	98	0.4	< 10
5	8	1	1	52	0.2	< 10
6	30	4	1	28	0.1	< 10
JF - 7	116	1	2	60	0.6	< 10
JH - 71	200	1	1	78	0.6	< 10
72	12	1	1	68	0.2	< 10
73	12	2	4	72	0.4	< 10
74	20	2	2	58	0.4	< 10
75	68	2	2	82	0.4	< 10
76	200	2	1	54	0.8	< 10
77	88	2	1	66	0.4	< 10
78A	340	164	1	32	1.0	< 10
78(1)	360	265	1	30	1.2	< 10
78(2)	92	2	1	82	0.4	< 10
79	38	4	1	78	0.4	< 10
80	126	36	1	46	0.2	< 10
81	86	4	4	100	0.2	< 10
82	54	2	1	80	0.2	< 10
83(1)	32	1	1	54	0.2	< 10
83(2)	24	1	1	56	0.2	< 10
84	44	1	6	66	0.1	< 10
85	215	4	4	56	0.8	< 10
86	98	8	2	58	0.4	< 10
87	20	14	4	36	0.2	< 10
88	50	1	1	82	0.2	< 10
89	120	102	1	68	0.8	< 10
90	6	2	1	64	0.1	< 10
91(1)	68	4	1	10	0.2	< 10
91(2)	94	6	1	12	0.1	10
92	74	8	1	60	0.2	< 10
93	128	76	1	44	0.2	10
94	12	2	1	54	0.4	< 10
JH - 95	74	4	2	18	0.1	< 10



MEMBER
CANADIAN TESTING
ASSOCIATION

CERTIFIED BY:

Hart Bickle



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: 984-0221
 AREA CODE: 604
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50128

TO: Utah Mines Ltd.,
 1600 - 1050 W Pender
 Vancouver, B. C.

INVOICE NO. 32557

ATTN: V6E 3S7
 J.R. Deighton

RECEIVED Aug. 27/79
 ANALYSED Sept. 14/79

RECEIVED
 SEP 21 1979

H00 D00

SAMPLE NO. :	PPM		PPM		PPM		PPB
	Cu	Mo	Pb	Pb	Au	Au	
JS 30	14	2	4	4	0.1	<10	
31	18	3	4	4	0.1	<10	
32	10	1	4	10	0.1	<10	
33	22	5	4	18	0.1	<10	
34	4	1	2	2	0.1	<10	
35	4	2	4	4	0.1	<10	
36	164	22	1	46	0.2	<10	
37	220	19	1	66	0.1	<10	
38	62	3	2	28	0.1	<10	
39	106	13	1	40	0.8 *	<10	
40	122	13	2	42	0.2	<10	
41	78	6	1	32	0.1	<10	
42	72	7	2	40	0.1	20	
43	122	9	2	44	0.4	<10	
44	220	12	2	68	0.1	<10	
45	76	2	1	46	0.4	<10	
46	152	8	1	58	0.1	10	
47	154	5	2	54	0.6	<10	
48	124	6	1	56	0.1	90 *	
49	72	2	1	48	0.1	<10	
50	34	1	2	18	0.1	<10	
51	20	2	4	22	0.1	20	
52	102	7	2	96	0.1	<10	
53	88	8	2	58	1.2 *	<10	
54	54	7	2	58	0.2	<10	
55	152	17	2	92	0.2	<10	
57	42	4	2	42	0.1	<10	
58	58	5	1	48	0.1	<10	
59	58	4	1	52	0.1	20	
60	86	3	2	44	0.6	<10	
61	200	10	2	46	0.8	<10	
62	198	10	2	38	1.0 *	<10	
63	60	3	1	56	0.2	<10	
64	172	10	1	92	0.1	<10	
65	210	14	2	88	0.1	10	
66	26	3	2	28	0.1	<10	
67	78	10	2	54	0.1	<10	
68	156	2	1	78	0.1	<10	
69	76	1	2	54	0.2	<10	
70	116	2	2	72	0.1	<10	

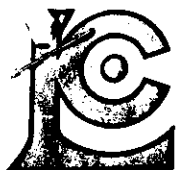
UTAH MINES LTD.
 EXPLORATION DEPT.



MEMBER
 CANADIAN TESTING
 ASSOCIATION

CERTIFIED BY:

Hart Biddle



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: 985-0648
 AREA CODE: 604 984-0221
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 50129
 INVOICE NO. 32557
 RECEIVED Aug. 27/79
 ANALYSED Sept. 14.79

TO: Utah Mines Ltd.,
 1600 - 1050 W. Pender
 Vancouver- B. C.

ATTN: J.R.Deighton

HOO DOO

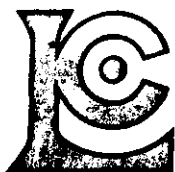
SAMPLE NO. :	PPM Cu	PPM Mo	PPM Pb	PPM Zn	PPM Ag	PPB Au
JS 71	79	1	1	52	2.0 *	<10
72	340	6	1	136	0.1	<10
73	40	1	1	66	3.2 *	<10
75	118	3	1	116	3.2 *	<10
76	94	2	2	74	1.0 *	<10
77	380	4	2	98	0.1	10
78	92	6	1	62	0.4	<10
79	154	14	1	106	0.4	<10
80	146	9	1	96	0.2	<10
81	100	7	1	62	0.2	<10
82	70	35	1	58	0.1	10
83	52	13	1	56	0.1	<10
84	44	21	2	34	0.1	<10
85	156	40	4	22	0.8	10
86	240	60	54	700 *	1.2 *	<10
87	280	94	2	116	1.0 *	10
88	104	73	2	54	0.1	10
89	106	44	2	28	0.1	<10
90	245	175 *	1	52	0.1	<10
91	148	36	1	24	0.1	30 *
92	104	6	1	58	0.1	<10
93	84	26	1	42	0.1	<10
94	310	72	1	40	0.4	<10
95	76	20	1	28	0.1	<10
96	90	54	1	42	1.0 *	<10
97	98	110 *	1	28	0.4	10
98	455	225 *	1	54	0.1	<10
99	28	50	6	20	0.2	<10
100	132	150 †	2	34	0.1	<10
101	46	77	4	30	0.2	<10
102	48	42	4	58	0.1	10
103	70	30	2	58	0.1	<10
104	114	54	4	42	0.4	<10
105	48	17	2	60	0.2	<10



MEMBER
 CANADIAN TESTING
 ASSOCIATION

CERTIFIED BY:

Harold Biddle



CHEMEX LABS LTD.

112 BROOKSBANK AVE.
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: 984-0221
 AREA CODE: 604
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 49194

TO: Utah Mines Ltd.
 1600 - 1050 W. Pender
 Vancouver, B.C.
 V6E 3S7

INVOICE NO. 31663

RECEIVED July 30/79

ATTN: HOODOO CR.

ROCK

ANALYSED Aug. 6/79

SAMPLE NO. :	PPM Cu	PPM Mo	PPM Zn	PPM Ag	PPB Au
JH - 34	56	2	295	1.2	< 10
35	30	2	840	0.8	< 10
36	4	2	260	1.2	10
37	50	4	345	1.6	< 10
38	76	3	595	2.2	< 10
40	4	1	40	0.4	< 10
40A	4	2	60	0.6	< 10
44	84	2	196	0.4	< 10
45	16	1	1750	0.6	< 10
46	6	3	320	0.4	< 10
47	370	3	3600	11	20
48	6	2	290	0.6	< 10
49	36	2	1100	0.8	10
50	4	1	78	0.2	< 10
51	30	2	94	0.4	< 10
52	6	1	86	0.2	10
54	4	1	66	0.1	< 10
55	50	2	240	0.4	10
56	2	1	96	0.2	< 10
57	4	1	156	0.6	< 10
57A	34	2	48	0.4	< 10
58	20	1	134	0.6	< 10
59	10	1	34	0.2	< 10
60	188	2	132	0.8	< 10
61	12	2	146	0.4	< 10
62	140	1	430	4.2	< 10
63	30	2	1050	0.6	< 10
64	290	1	490	6.2	40
65	18	1	230	0.6	< 10
67	6	1	120	0.2	< 10
68	6	1	148	0.4	< 10
JH - 69	4	2	220	0.2	10
GH - 1	570	2	124	0.6	< 10
2	1350	3	136	3.0	< 10
3	140	1	104	0.6	< 10
5	54	1	72	0.1	< 10
6	74	1	146	0.2	< 10
7	90	1	720	0.6	< 10
8	66	1	182	1.6	< 10
GH - 9	116	1	730	0.8	< 10

RECEIVED

AUG 8 1979

UTAH MINES LTD.
EXPLORATION DEPT.



MEMBER
 CANADIAN TESTING
 ASSOCIATION

CERTIFIED BY:

Hart Biele



CHEMEX LABS LTD.

12 BROOKSBANK AVE.
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: [REDACTED] 984-0221
 AREA CODE: 604
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO: Utah Mines Ltd.,
 1600 - 1050 W. Pender St.,
 Vancouver, B.C.
 V6E 3S7

ATTN: HOODOO CR.

ROCK

CERTIFICATE NO. 49195

INVOICE NO. 31663

RECEIVED July 30/79

ANALYSED Aug. 6/79

SAMPLE NO. :	PPM	PPM	PPM	PPM	PPB
	Cu	Mo	Zn	Ag	Au
GH - 10	12	1	186	0.1	< 10
11	44	1	138	0.4	< 10
12	48	3	186	0.6	20
13	46	1	196	0.1	< 10
14	150	2	58	0.6	< 10
15	4	1	98	0.4	< 10
17	192	2	72	0.8	< 10
18	68	3	46	0.6	< 10
19	1100	15	198	1.6	10
20	1100	165	172	1.4	< 10
21	930	16	106	2.0	10
22	44	4	34	0.4	< 10
23	50	3	40	0.1	< 10
24	74	40	28	0.8	10
25	28	2	134	0.4	< 10
25A	38	1	70	0.1	< 10
26	14	1	200	0.2	< 10
27	48	3	370	0.8	< 10
28	100	5	270	0.8	20
29	102	5	240	0.6	< 10
30	6	1	144	0.1	< 10
31	6	1	94	0.2	< 10
32	192	2	96	0.4	10
33	56	6	54	0.1	10
34	250	58	138	0.8	20
36	410	2	4000	2.6	40
36A	2850	14	4000	20	120
36FH	1300	6	4000	12	60
37	54	3	465	0.8	< 10
39	28	10	192	0.4	10
40	106	1	855	0.4	< 10
41	1300	36	1250	1.4	10
42	110	4	810	0.8	10
43	162	3	290	1.0	< 10
44	42	1	330	0.4	< 10
46	44	1	124	0.6	< 10
47	134	2	136	0.6	< 10
48	44	2	72	0.4	< 10
46GH48	32	4	116	0.8	10
GH - 49	12	2	62	0.2	< 10

RECEIVED

AUG 8 1979

UTAH MINES LTD.
 EXPLORATION DEPT.



MEMBER
 CANADIAN TESTING
 ASSOCIATION

CERTIFIED BY:

Hart Biddle



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: [REDACTED] 984-0221
 AREA CODE: 604
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 49196

TO: Utah Mines Ltd.,
 1600 - 1050 W. Pender St.,
 Vancouver, B.C.
 V6E 3S7
 ATTN: HOODOO CR.

INVOICE NO. 31663
 RECEIVED July 30/79
 ANALYSED Aug. 6/79

ROCK

SAMPLE NO. :	PPM	PPM	PPM	PPM	PPB
	Cu	Mo	Zn	Ag	Au
GH - 50	14	220	16	1.2	< 10
51	6	1	58	0.2	< 10
52	172	5	820	2.0	20
53	4	1	80	0.6	< 10
54	12	1	330	0.2	20
54A	6	2	198	2.0	< 10
55	6	1	126	0.4	< 10
56	36	1	178	0.6	10
57	8	2	68	0.4	10
58	10	1	162	0.4	< 10
59	2	1	96	0.2	< 10
60	12	1	94	0.6	20
61	4	2	250	0.6	< 10
61A	200	1	510	1.2	10
62	24	1	84	0.4	10
64	112	2	380	1.4	10
66	98	2	410	0.8	10
67	900	3	178	2.2	< 10
GH - 68	94	2	260	1.0	< 10
JH - 41	20	4	92	0.4	< 10

RECEIVED

AUG 8 1979

UTAH MINES LTD.
 EXPLORATION DEPT.



MEMBER
 CANADIAN TESTING
 ASSOCIATION

CERTIFIED BY:

Hart Bielle



CHEMEX LABS LTD.

*file 110000
sullivan*

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: [REDACTED] 954-0221
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ASSAY

CERTIFICATE NO. 65775

INVOICE NO. 31643

RECEIVED July 30/79

ANALYSED Aug. 6/79

TO: Utah Mines Ltd.
1600 - 1050 W. Pender St.
Vancouver, B.C.

ATTN: V6E 3S7
PROJECT: Hoodoo Creek

SAMPLE NO. :	%	%	%	%	oz/ton	oz/ton
	Cu	Mo	Pb	Zn	Ag	Au
GH 65	1.86		0.08	10.9	12.20	0.018
HD 11	0.01	0.010	0.01	0.05	0.22	<0.003

RECEIVED

AUG 8 1979

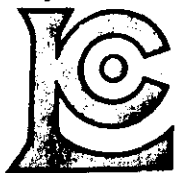
UTAH MINES LTD.
EXPLORATION DEPT.

B. L. Swaites

REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA



MEMBER
CANADIAN TESTING
ASSOCIATION



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: 604 964-0221
 AREA CODE: 604
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 48883
 INVOICE NO. 31445
 RECEIVED July 22, 1979
 ANALYSED July 30, 1979

TO: Utah Mines Ltd.,
 1600 - 1050 W. Pender St.,
 Vancouver, B.C.
 V6E 3S7
 ATTN: J. R. Deighton

ROCKS
 HOODOO

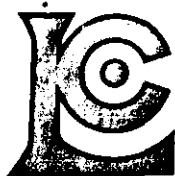
SAMPLE NO. :	PPM	PPM	PPM	PPM	PPB
	Cu	Mo	Zn	Ag	Au
JC 35	59	8	48	0.1	<10
36	84	2	26	0.1	<10
37	104	3	295	0.1	<10
38	54	1	28	0.1	<10
39	116	1	1500	0.1	<10
40	78	1	94	0.1	<10
41	10	3	8	0.1	<10
42	6	1	2	0.6	<10
43	28	1	126	0.1	<10
44	20	1	46	0.1	<10
45	18	1	100	0.1	<10
46	70	1	425	0.4	<10
47	128	1	78	2.2	10
48	154	1	78	4.6	50
49	78	1	1100	2.2	<10
50	12	1	100	0.1	10
51	2	2	80	0.1	10
52	16	1	90	0.1	<10
53	2	1	84	0.1	<10
54	6	1	126	0.1	<10
55	8	1	146	0.1	<10
56	24	3	162	0.1	<10
57	16	7	84	1.8	<10
58	14	1	1000	0.1	<10
59	24	1	235	0.6	<10
60	52	2	420	0.1	<10
61	44	1	136	0.1	<10
62	395	1	435	3.6	<10
63	10	6	28	0.2	<10
64	44	3	78	1.0	<10
65	128	1	450	0.1	20
66	250	2	200	0.8	10
67	730	9	300	2.4	<10
68	340	1	500	0.1	<10
69	122	2	445	0.1	<10
70	116	2	166	0.4	<10
71	122	3	400	0.8	<10
72	225	2	2350	1.2	<10
73	200	1	196	1.0	<10
JC 74	255	2	675	3.6	<10

RECEIVED
 JUL 31
 UTAH MINES LTD.
 EXPLORATION DEPT



MEMBER
 CANADIAN TESTING
 ASSOCIATION

CERTIFIED BY: *Hart Biddle*



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: [REDACTED]
 AREA CODE: 604
 TELEX: 043-52597

664-0221

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 48884

TO: Utah Mines Ltd.,
 1600 - 1050 W. Pender St.,
 Vancouver, B.C.
 V6E 3S7

INVOICE NO. 31445

RECEIVED July 22, 1979

ATTN:

ROCKS
 HOODOO

ANALYSED July 30, 1979

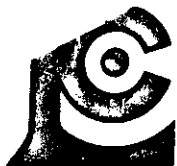
SAMPLE NO. :	PPM Cu	PPM Mo	PPM Zn	PPM Ag	PPB Au
JC 75	38	1	265	0.1	20
76	120	3	170	2.8	<10
77	104	3	245	0.2	<10
78	92	2	110	0.1	<10
79	140	1	315	0.1	<10
80	118	2	196	0.1	20
81	66	1	134	0.6	20
82	78	3	134	20	400
83	144	1	855	0.1	<10
84	22	2	70	3.2	480
85	74	3	96	1.2	10
86	40	1	390	1.0	<10
87	112	5	190	2.8	<10
88	32	1	28	1.4	<10
89	200	1	315	3.0	140
90	22	2	22	2.4	<10
91	112	3	320	1.0	<10
92	84	2	200	1.6	<10
93	102	2	845	0.2	<10
94	82	7	34	12	<10
95	220	3	895	0.8	<10
96	148	2	725	0.4	10
97	100	2	775	0.1	<10
98	156	2	1500	4.6	10
99	64	1	605	0.6	<10
100	34	1	350	0.1	<10
101	18	1	114	0.2	<10
102	24	2	385	0.1	<10
103	315	1	275	0.2	<10
104	865	37	130	2.2	10
105	114	22	20	0.1	<10
106	56	53	20	0.1	<10
107	120	48	56	0.1	<10
108	275	1	130	0.2	<10
109	200	1	58	0.4	10
110	102	37	26	0.1	20
111	66	44	52	0.6	<10
112	460	14	170	3.6	<10
113	110	2	98	0.2	<10
JC 114	240	7	315	2.2	<10

RECEIVED
 JUL 31
 UTAH MINES LTD.
 EXPLORATION DEPT.



MEMBER
 CANADIAN TESTING
 ASSOCIATION

CERTIFIED BY: *Hart Biddle*



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: [REDACTED] 984-0221
 AREA CODE: 604
 TELEX: 043-52597

* ANALYTICAL CHEMISTS * GEOCHEMISTS * REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO: Utah Mines Ltd.,
 1600 - 1050 W. Pender St.,
 Vancouver, B.C.
 V6E 3S7

ATTN:

ROCKS
 HOODOO

CERTIFICATE NO. 48885

INVOICE NO. 31445

RECEIVED July 22, 1979

ANALYSED July 30, 1979

SAMPLE NO. :	PPM Cu	PPM Mo	PPM Zn	PPM Ag	PPB Au
JC 115	250	14	300	2.2	<10
116	200	29	148	1.0	<10
117	265	31	345	1.2	<10
118	225	59	196	1.0	<10
119	122	31	124	3.4	<10
120	260	4	820	0.1	10
121	120	32	148	2.6	<10
122	166	19	88	1.8	<10
123	270	3	380	0.2	20
124	94	11	110	1.0	<10
125	265	41	124	1.6	10
126	172	5	300	0.6	<10
127	22	6	24	3.2	<10
128	42	12	58	2.6	20
129	18	5	14	2.0	10
130	22	5	48	3.2	<10
131	350	5	1000	3.2	<10
132	20	3	400	0.1	<10
133	40	5	1000	1.8	<10
134	22	6	20	0.2	<10
135	30	3	68	0.2	<10
136	38	6	36	1.8	10
137	26	2	255	0.4	<10
138	30	2	86	2.0	<10
139	16	1	440	0.2	<10
140	18	3	38	3.0	<10
141	30	6	46	4.2	20
142	64	6	34	3.6	20
143	14	2	14	0.6	<10
144	8	5	8	0.8	20
145	102	6	20	3.6	20
146	22	10	14	5.4	<10
147	68	20	36	2.4	10
148	34	19	78	0.4	<10
149	38	3	198	0.2	<10
150	12	2	255	0.2	<10
151	108	4	265	1.2	<10
152	16	2	210	0.2	10
153	102	3	860	0.8	<10
JC 154	94	2	435	1.0	20

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 EXPLORATION DEPT.



MEMBER
 CANADIAN TESTING
 ASSOCIATION

CERTIFIED BY:

Hart Biele



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: [REDACTED] 984-0221
 AREA CODE: 604
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 48886

TO: Utah Mines Ltd.,
 1600 - 1050 W. Pender St.,
 Vancouver, B.C.

INVOICE NO. 31445

RECEIVED July 22, 1979

ATTN: V6E 3S7

ROCKS
 HOODOO

ANALYSED July 30, 1979

SAMPLE NO. :	PPM	PPM	PPM	PPM	PPB
	Cu	Mo	Zn	Ag	Au
JC 155	64	1	500	1.0	<10
156	4	2	70	0.1	<10
157	4	3	8	1.4	20
158	40	2	32	2.4	<10
159	72	2	66	2.8	<10
160	84	1	54	6.8	80
161	38	1	610	0.4	<10
163	90	1	630	1.0	20
164	68	6	124	6.4	<10
165	134	14	98	4.4	<10
166	80	8	136	1.4	<10
167	200	7	1800	4.6	<10
168	112	7	365	1.8	<10
169	98	3	520	1.4	<10
170	320	4	945	3.0	40
171	275	4	2700	2.0	10
172	82	5	1800	2.8	<10
173	44	3	475	0.2	<10
174	8	2	152	0.2	10
175	134	4	1200	6.0	<10
176	60	5	780	0.6	<10
177	178	7	300	1.6	<10
178	64	2	184	0.4	<10
JC 179	168	5	1450	0.6	<10

RECEIVED
 JUL 31 1979

UTAH MINES LTD.
 EXPLORATION DEPT.

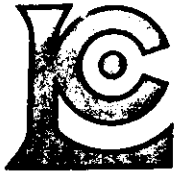
NOTE: JC 162 missing



MEMBER
 CANADIAN TESTING
 ASSOCIATION

CERTIFIED BY:

Hart Biddle



File Hoodoo
Chemex

CHEMEX LABS LTD.

12 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: [REDACTED] 984-0221
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO: Utah Mines Ltd.,
1600 - 1050 W. Pender St.,
Vancouver, B.C.
V6E 3S7
ATTN: J. Deighton

CERTIFICATE NO. 48700
INVOICE NO. 31315
RECEIVED July 17/79
ANALYSED July 23/79

HOODOO CR. ROCKS

SAMPLE NO. :	PPM	PPM	PPM	PPB
	Cu	Mo	Ag	Au
HD - 10A	40	1	0.4	< 10
10B	295	75	0.4	< 10
13A	8	10	0.6	< 10
13B	22	19	2.6	< 10
28A	72	12	1.4	< 10
28B	775	12	2.2	20
29A	305	100	1.0	< 10
HD - 29B	80	2	1.2	< 10

RECEIVED

JUL 25 1979

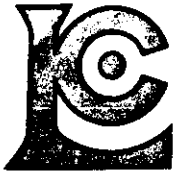
UTAH MINES LTD.
EXPLORATION DEPT.



MEMBER
CANADIAN TESTING
ASSOCIATION

CERTIFIED BY:

Hart Biddle



CHEMEX LABS LTD.

*W/O Hoodoo
Geochem*

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: [REDACTED] 984-0221
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 48545

TO: Utah Mines Ltd.
1600 - 1050 W. Pender St.
Vancouver, B.C.
V6E 3S7

INVOICE NO. 31255

RECEIVED July 13/79

ATTN: J.R. Deighton Hoodoo Cr. ROCKS

ANALYSED July 23/79

SAMPLE NO. :	PPM Cu	PPM Mo	PPM Zn	PPM Ag	PPB Au
HD 1	8	1	330	0.1	<10
2	146	1	128	0.1	<10
3	114	3	40	0.6	<10
4	10	5	990	0.1	<10
5	610	19	470	2.0	<10
6	48	1	530	0.2	<10
7	74	2	78	0.1	<10
7a	64	1	780	0.1	<10
8	130	1	60	1.0	<10
9	182	1	830	0.1	<10
12	52	1	98	0.1	<10
14	10	1	46	1.0	<10
15	54	1	48	2.0	<10
16	1450	2	1300	3.8	<10
17	120	1	320	0.8	<10
18	360	1	420	0.6	<10
19	116	1	320	0.4	<10
20	340	65	132	0.8	<10
21	18	2	70	0.6	<10
23	16	2	18	1.2	<10
24	8	1	500	0.4	<10
25	120	2	405	0.1	<10
26	72	1	152	0.1	<10
HD 27	560	7	140	0.8	<10

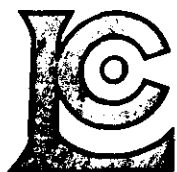
RECEIVED

JUL 23 1979

UTAH MINES LTD.
EXPLORATION DEPT.



CERTIFIED BY: *Hart Biddle*



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: [REDACTED] 984-0221
 AREA CODE: 604
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO: Utah Mines Ltd.,
 1600 - 1050 W. Pender St.,
 Vancouver, B.C.
 V6E 3S7

CERTIFICATE NO. 48543

INVOICE NO. 31240

RECEIVED July 13/79

ATTN: J. R. Deighton

Hoodoo Cr. ROCK

ANALYSED July 20/79

SAMPLE NO. :	PPM	PPM	PPM	PPM	PPB
	Cu	Mo	Zn	Ag	Au
JC #1	22	7	22	1.8	20
2	26	3	20	2.0	20
3	18	1	270	0.1	< 10
4	40	25	76	2.4	10
5	64	16	60	1.2	< 10
6	76	16	64	1.0	< 10
7	94	6	156	2.2	10
8	90	2	455	1.0	20
9	68	4	146	1.2	< 10
10	136	4	345	1.8	< 10
11	122	3	375	1.2	< 10
12	66	2	1800	0.4	< 10
13	116	2	440	1.0	< 10
14	186	2	955	1.4	< 10
15	240	2	1200	0.2	< 10
16	205	1	480	0.2	< 10
17	116	13	198	1.2	< 10
18	48	3	510	0.2	< 10
19	126	2	870	0.2	< 10
20	54	1	515	0.2	< 10
21	10	1	240	0.1	< 10
22	62	2	320	0.6	< 10
23	62	2	430	0.2	< 10
24	24	1	245	0.2	< 10
25	68	1	1000	2.0	< 10
26	46	2	875	0.8	< 10
27	82	4	150	2.8 *	< 10
28	36	2	265	0.4	< 10
29	186	19	2000	1.2	20
30	58	5	120	1.2	< 10
31	240	2	325	6.0 *	< 10
32	94	6	400	6.4 *	< 10
33	320	1	630	4.6 *	< 10
JC #34	84	3	1050	1.6	< 10

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 EXPLORATION DEPT.



MEMBER
 CANADIAN TESTING
 ASSOCIATION

CERTIFIED BY: *Hart Biddle*

APPENDIX II

STATEMENT OF COSTS

APPLICATION OF COSTS FOR ASSESSMENT

STATEMENT OF COSTS

PERSONNEL AND WAGES

J. R. Deighton - Senior Geologist		
4 months @ \$2350/month	\$9,400.00	
G. Norman - Geologist		
1 month @ \$2100/month	2,100.00	
K. Orleski - Warehouseman & Handyman		
1-1/2 months @ \$1700/month	2,550.00	
J. Howe - Fieldman & Assistant		
4 months @ \$1000/month	4,000.00	
C. Donders - Draftsman		
3/4 month @ \$1600/month	1,200.00	
P. Zell - Field Assistant		
1 month & 2 days @ \$875/month	942.30	
J. Kozak - Field Assistant		
1 month @ \$1075/month	1,075.00	
D. Schmidt - Field Assistant		
1-1/2 months @ \$775/month	<u>1,162.50</u>	
	Total Wages	\$22,429.80
	+ 10% Company Benefits	<u>2,242.98</u>
	PERSONNEL & WAGES TOTAL	\$ 24,672.78

SUPPORT COSTS

Camp Equipment and Supplies

Lumber, Plumbing Supplies, etc.	\$4,481.68	
Groceries	1,398.74	
Propane	<u>504.44</u>	
		6,384.86

COMMUNICATIONS

Telephone \$ 815.93

TRANSPORTATION

Barge Service

Camp \$ 617.60

Drill Equipment 6,744.97

Total Barge Service 7,362.57

Helicopter Support

Camp 8,565.40

Drill Mob & Demob 20,687.15

Total Helicopter Support 29,252.55

Fixed Wing Support 3,697.80

Truck Rental 143.93

ASSAYING

Rock and Soil Geochemistry 2,618.72

Drill Assaying 1,014.80

Total Assaying 3,633.52

FUEL (HELICOPTER) UTAH SUPPLIED 2,934.20

SUNDRY BILLS

Kyuquot Logging (Room, Board, Equipment Rentals) 6,933.88

D. Bragg (Plugger Rentals) 665.35

DRILLING COSTS

Direct Drilling Costs 32,823.00

Field Costs 26,184.62

Total Drilling Costs 59,007.62

TOTAL SUPPORT COSTS \$120,832.21

TOTAL COST OF PROGRAM \$145,504.99

Breakdown of total cost as applied to non-direct drilling costs (Geology, Geochemistry, and Camp Construction), and cost directly applied to drilling:

COSTS NOT DIRECTLY APPLIED TO DRILLING	\$54,106.35
COSTS APPLIED DIRECTLY TO DRILLING	91,398.64

APPLICATION OF COSTS FOR ASSESSMENT

COSTS NOT RELATED TO DRILLING - to be applied evenly
throughout claim block BZT 1-9 (103 units). \$ 54,106.35

$$\frac{54,106.35}{103} = \$525.30/\text{unit}$$

103

COSTS DIRECTLY RELATED TO DRILLING - which can only
be applied to "Blue Group". \$ 91,398.64

RED GROUP - BZT 1 & 2 (32 units)

Record 1 years work at \$100/unit work \$ 3,200.00
Record 3 years work at \$200/unit work 19,200.00
TOTAL \$ 21,400.00

Have done \$525.30/unit work as shown above.

Total work done this year on claim group:

\$525.30 x 32 = \$ 16,809.60
Withdraw from P.A.C. account - 4,590.40

TOTAL TO BE APPLIED TO RED GROUP \$ 21,400.00

ORANGE GROUP - BZT 3, 5, 6, & 8 (34 units)

Record 1 years work at \$100/unit \$ 3,400.00
Record 3 years work at \$200/unit 20,400.00
TOTAL \$ 23,800.00

Have done \$525.30/unit work as shown above.

Total work done on claim group:	
\$525.30 x 34 =	\$ 17,860.20
Withdraw from P.A.C. account -	<u>5,939.80</u>
TOTAL TO BE APPLIED TO ORANGE GROUP	<u>\$ 23,800.00</u>
BLUE GROUP - BZT 4, 7, & 9 (37 units)	
Record 1 years work at \$100/unit	\$ 3,700.00
Record 9 years work at \$200/unit	<u>66,600.00</u>
TOTAL	<u>\$ 70,300.00</u>
Have done \$525.30 work/unit that can be applied to claim block.	
525.30 x 37 =	\$ 19,436.10
Drilling carried out on Blue Group -	<u>91,398.64</u>
TOTAL WORK CARRIED OUT ON BLUE GROUP	<u>\$110,834.74</u>
TOTAL WORK FOR 10 YEAR MAXIMUM AS ABOVE	\$ 70,300.00
EXCESS WORK TO BE CREDITED TO P.A.C. ACCOUNT	\$ 40,534.74

APPENDIX III

MAJOR BILLS



GULF-AIR AVIATION LTD.

BOX 1461, CAMPBELL RIVER, B.C. V9W 5... PHONE (604) 287-8371

(PORT HARDY)

UTAH RINES LTD
SUITE 1600

CHARTERED TO

1050 W. PENDER ST.

VANCOUVER B.C.

V&E 352

6/22/79

DATE
Oct 16/79

PILOT	CF	TIME OUT	TIME IN	TOTAL	DISPATCH
Jam	BA				

FROM	TO	PASS	HOURS	STW	EXT LOG	MILES
St. Louis	St. Louis	1	1	1		1

RATE 160 MILES @ \$2 = 320

RATE _____ HOURS @ \$ _____

STAND-BY _____ HOURS @ \$ _____

EXTRA LANDING _____

MINIMUM FLIGHTS _____

OTHER _____ \$80

PAID CHARGE TOTAL AMOUNT \$240

PASSENGERS (PRINT)		PASSENGERS (SIGN)	
1	J.E. DELGADO	1	[Signature]
2	J. Howe	2	[Signature]
3	D. Howard	3	[Signature]
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
10		10	

04611 3-12

WE HEREBY ACCEPT THE CONDITIONS OF CHARTER AND CARRIAGE AS SHOWN ON THE REVERSE SIDE OF THIS COPY OF THIS CHARTER TICKET AND HEREBY AGREE TO THE ABOVE CHARGES.



GULF-AIR AVIATION LTD.

P.O. BOX 1461, CAMPBELL RIVER, B.C. V9W 5C7 - PHONE (604) 287-8371

(PORT HARDY)

CHARTERED TO

UTAH MINES LTD
SUITE 1600
1050 W PENDER ST
VANCOUVER B.C.
V6E 3S7

DATE
Oct 21/79

PILOT	CF	TIME OUT	TIME IN	TOTAL	DISPATCH
Chuck	ICP				90

FROM	TO	PASS	HOURS	W/B	EXT LDG	MILES
Edmonton	Halifax					80
						80

RATE 160 MILES • \$ 2.25 = \$ 360.00
 RATE _____ HOURS • \$ _____ = \$ _____
 STAND-BY _____ HOURS • \$ _____ = \$ _____
 EXTRA LANDING _____ • \$ _____ = \$ _____
 MINIMUM FLIGHTS _____ • \$ _____ = \$ _____
 OTHER _____ • \$ _____ = \$ _____

PAID CHARGE TOTAL AMOUNT \$ 360.00

PASSENGERS (PRINT)	PASSENGERS (SIGN)
1 W. Cote	
2	
3	
4	
5 PULFIELD	
6	
7 BERG	
8	
9	
10	

04264 12

WE HEREBY ACCEPT THE CONDITIONS OF CHARTER AND CARRIAGE AS SHOWN ON THE REVERSE SIDE OF THIS COPY OF THIS CHARTER TICKET AND HEREBY AGREE TO THE ABOVE CHARGES.



GULF-AIR AVIATION LTD.

P.O. BOX 1461, CAMPBELL RIVER, B.C. V9W 5C7 - PHONE (604) 287-8371

(PORT HARDY)

CHARTERED TO

UTAH MINES LTD
SUITE 1600
1050 W PENDER ST
VANCOUVER B.C.
V6E 3S7

DATE
Oct 21/79

PILOT	CF	TIME OUT	TIME IN	TOTAL	DISPATCH
Crazy	ICP				90

FROM	TO	PASS	HOURS	W/B	EXT LDG	MILES
Edmonton	Halifax					80
						80

RATE 160 MILES • \$ 1.75 = \$ 280.00
 RATE _____ HOURS • \$ _____ = \$ _____
 STAND-BY _____ HOURS • \$ _____ = \$ _____
 EXTRA LANDING _____ • \$ _____ = \$ _____
 MINIMUM FLIGHTS _____ • \$ _____ = \$ _____
 OTHER _____ • \$ _____ = \$ _____

PAID CHARGE TOTAL AMOUNT \$ 280.00

PASSENGERS (PRINT)	PASSENGERS (SIGN)
1 J.R. DEGENERON	
2 J. Howe	
3	
4	
5	
6	
7	
8	
9	
10	

04269 12

WE HEREBY ACCEPT THE CONDITIONS OF CHARTER AND CARRIAGE AS SHOWN ON THE REVERSE SIDE OF THIS COPY OF THIS CHARTER TICKET AND HEREBY AGREE TO THE ABOVE CHARGES.



GULF-AIR AVIATION LTD.

P.O. BOX 1451, CAMPBELL RIVER, B.C. V9W 5C7 / PHONE (604) 287-8371
(PORT HARDY (604) 242-6363)

CHARTERED TO

Utah Mines, (Canadian) Mines

DATE
Sept 21/79

1050 W Pender St. Vancouver

PILOT	CF	TIME OUT	TIME IN	TOTAL	DISPATCH
Mike T. Mann					ES

FROM	TO	PASS	HOURS	SIB	EXT LDG	MILES
Ed	to Langley	(4)				80

RATE 160 MILES @ \$ 1.75 = \$ 280.00
 RATE _____ HOURS @ \$ _____ = \$ _____
 STAND-BY _____ HOURS @ \$ _____ = \$ _____
 EXTRA LANDING _____ @ \$ _____ = \$ _____
 MINIMUM FLIGHTS _____ @ \$ _____ = \$ _____
 OTHER _____ @ \$ _____ = \$ _____

PAID CHARGE TOTAL AMOUNT \$ 280.00

PASSENGERS (PRINT)	PASSENGERS (SIGN)
W. COTE	1 [Signature]
R. HALL	2 [Signature]
Smc Blay	3 [Signature]
E. A. Carter	4 [Signature]
	5
	6
	7
	8
	9
	10

03437 / 4. 12

I/WE HEREBY ACCEPT THE CONDITIONS OF CHARTER AND CARRIAGE AS SHOWN ON THE REVERSE SIDE OF THIS COPY OF THIS CHARTER TICKET AND HEREBY AGREE TO THE ABOVE CHARGES.



GULF-AIR AVIATION LTD.

P.O. BOX 1451, CAMPBELL RIVER, B.C. V9W 5C7 / PHONE (604) 287-8371
(PORT HARDY (604) 242-6363)

CHARTERED TO

Utah Mines

DATE
Sept 19/79

PILOT	CF	TIME OUT	TIME IN	TOTAL	DISPATCH
Kevin Smith					ES

FROM	TO	PASS	HOURS	SIB	EXT LDG	MILES
Ed	to Langley	(4)				80
						80

sub.
 RATE 160 MILES @ \$ 1.45 = \$ 232.00
 RATE _____ HOURS @ \$ _____ = \$ _____
 STAND-BY _____ HOURS @ \$ _____ = \$ _____
 EXTRA LANDING _____ @ \$ _____ = \$ _____
 MINIMUM FLIGHTS _____ @ \$ _____ = \$ _____
 OTHER _____ @ \$ _____ = \$ _____

PAID CHARGE TOTAL AMOUNT \$ 232.00

PASSENGERS (PRINT)	PASSENGERS (SIGN)
Douglas Schmidt	1 [Signature]
	2
	3
	4
	5
	6
	7
	8
	9
	10

03555 / 12

I/WE HEREBY ACCEPT THE CONDITIONS OF CHARTER AND CARRIAGE AS SHOWN ON THE REVERSE SIDE OF THIS COPY OF THIS CHARTER TICKET AND HEREBY AGREE TO THE ABOVE CHARGES.



GULF AIR AVIATION LTD.

UTAH MINES LTD
SUITE 200
1050 W RENDERS ST
VANCOUVER B.C.

CHARTERED TO

DATE
Sept 10/79

PILOT	CF	TIME OUT	TIME IN	TOTAL	DISPATCH
Richard	ECB				172

FROM	TO	PASSENGERS	HOURS	SIB	EXT LDG	MILES
CI	Hd K... (2)					50
						50

RATE 160 MILES 320.00

RATE _____ HOURS \$ _____

STAND-BY _____ HOURS \$ _____

EXTRA LANDING _____ \$ _____

MINIMUM FLIGHTS _____ \$ _____

OTHER _____ \$ _____

PAID CHARGE TOTAL AMOUNT \$ 320.00

PASSENGERS (PRINT)	PASSENGERS (SIGN)
1 KEN ORLES	Ken Orles
2 PETER ZEM	
3	
4	
5	
6	
7	
8	
9	
10	

03649 2.12

I/WE HEREBY ACCEPT THE CONDITIONS OF CHARTER AND CARRIAGE AS SHOWN ON THE REVERSE SIDE OF THIS COPY OF THIS CHARTER TICKET AND HEREBY AGREE TO THE ABOVE CHARGES.



GULF AIR AVIATION LTD.

P.O. BOX 1451, CAMPBELL RIVER, B.C. V9W 5C7 / PHONE (604) 287-837

9/17/79

Utah Mines Vancouver
for a resident here, Berrisford

CHARTERED TO

DATE
Sep 21/79

PILOT	CF	TIME OUT	TIME IN	TOTAL	DISPATCH
James Bell					172

FROM	TO	PASSENGERS	HOURS	SIB	EXT LDG	MILES
CI	Hd K... (2)					80
						80

RATE 160 MILES 155 248.00

RATE _____ HOURS \$ _____

STAND-BY _____ HOURS \$ _____

EXTRA LANDING _____ \$ _____

MINIMUM FLIGHTS _____ \$ _____

OTHER _____ \$ _____

PAID CHARGE TOTAL AMOUNT \$ 248.00

PASSENGERS (PRINT)	PASSENGERS (SIGN)
1 Shane Berg BERRIS	Shane Berg
2	
3	
4	
5	
6	
7	
8	
9	
10	

03446 / 12

I/WE HEREBY ACCEPT THE CONDITIONS OF CHARTER AND CARRIAGE AS SHOWN ON THE REVERSE SIDE OF THIS COPY OF THIS CHARTER TICKET AND HEREBY AGREE TO THE ABOVE CHARGES.



GULF-AIR AVIATION LTD.

P.O. BOX 1451, CAMPBELL RIVER, B.C.
V9W 5L7

91579

BASE
21

AIRBILL
No. F. 45494

Aircraft Rental - Aircraft Charter - Sightseeing - Aircraft Instruction - Contracting - Aircraft Maintenance and Service

It is mutually agreed that the goods herein described are accepted in apparent good order (except as noted) for transportation as specified herein, subject to governing classifications and tariffs in effect as of the date hereof which are filed in accordance with law. Said classifications and tariffs, which are available for inspection at all Gulf-Air Aviation Ltd. Offices are hereby incorporated into and made a part of this contract.

FROM (CONSIGNOR) <i>Co-op</i>			TO (CONSIGNEE) <i>UTAH MINES</i>		
CONSIGNOR'S STREET ADDRESS <i>Ch... ..</i>			CONSIGNEE'S STREET ADDRESS <i>RD KNIGHT CREST</i>		
CITY	ZONE	PROVINCE	CITY	ZONE	PROVINCE

BY _____ CONSIGNOR'S No. _____

X NOTE CONDITION OF CARRIAGE ABOVE

DECLARED VALUE *NTN* Agreed and understood to be not more than the value stated in the governing tariffs for each pound on which charges are assessed, unless a higher value is declared and applicable charges paid thereon.

SPECIAL INSTRUCTIONS TO CARRIER

RECEIVED BY CARRIER AT

No. OF PIECES	DESCRIPTION OF PIECES AND CONTENTS
<i>2</i>	<i>GASCOIL</i>

RECEIVED IN APPARENT GOOD ORDER EXCEPT AS NOTED BY GULF-AIR AVIATION LTD.

AT *Ch* DATE *Aug 24 1979* TIME *1030*

AGENT *[Signature]*

RECEIVED IN GOOD ORDER EXCEPT AS NOTED

CONSIGNEE _____

DATE _____ 19 _____ TIME _____

ROUTING:

PAYMENT TERMS

CASH

PREPAY AND CHARGE CONSIGNOR

PREPAY AND CHARGE CONSIGNEE

NO C.O.D. OR COLLECT SHIPMENTS ACCEPTED

WEIGHT	RATE	\$
<i>700</i>	<i>.32</i>	<i>224.00</i>
ADVANCE CHARGES		
DELIVERY CHARGES		
PICK-UP CHARGES		
TOTAL CHARGES		<i>224.00</i>

WASINT LCP

LCL KNIGHT

SPECIAL DELIVERY SEAT RATE _____

AUTHORIZED BY _____

I/WE AGREE TO PAY ON DEMAND THE ABOVE CHARGES

FIRM NAME _____

AUTHORIZED REPRESENTATIVE _____

RECEIVED

SEP 4 1979

1 AUDIT COPY

OFFICE PHONES:
 CAMPBELL RIVER SPIT 287-8371
 CAMPBELL RIVER AIRPORT 923-8838
 PORT HARDY 949-8353
 BELLA BELLA 957-2272
 OCEAN FALLS 289-7777

AIR FREIGHT

UTAH MINES LTD.
EXPLORATION DEPT.



GULF-AIR AVIATION LTD.

BOX 1451, CAMPBELL RIVER, B.C. V9W 2S7 // PHONE (604) 287-8371
(PORT HARDY (604) 844-8353)

CHARTERED TO

UTAH MINES LTD.

DATE

Aug 15/79

VAN. B.C. VLE 357

1000 - 1050 W. VENDER ST.

PILOT	CL	TIME IN	TOTAL	DISTANCE
Kearns	LEA	11	11	11

FROM	TO	PASS	HOURS	SIG	EXT LDG	MILES
L.R.	Head of Knight Is	4				80
	P.R.					80

RATE 160 MILES 2.00 320.00

RATE HOURS

STAND-BY HOURS

EXTRA LANDING

MINIMUM FLIGHTS

OTHER Split with ticket # 02809 160.00

PAID CHARGE TOTAL AMOUNT 160.00

PASSENGERS (PRINT)	PASSENGERS (SIGN)
John Orban	<i>[Signature]</i>
John R. DeLorenzo	<i>[Signature]</i>
John F. Kozak	<i>[Signature]</i>
William J. Hawk	<i>[Signature]</i>
<i>[Signature]</i>	<i>[Signature]</i>
<i>[Signature]</i>	<i>[Signature]</i>

02809

6 12

WE HEREBY ACCEPT THE CONDITIONS OF CHARTER AND CARRIAGE AS SHOWN ON THE REVERSE SIDE OF THIS COPY OF THIS CHARTER TICKET AND HEREBY AGREE TO THE ABOVE CHARGES.

CHARTERED TO **UTAH MINES LTD**
~~ISLAND COPPER MINE~~
 P O BOX 370 **VANCOUVER**
 PORT HARDY B C **9101**
 VON ZPO

DATE **Aug 23/79**

PILOT	CF	TIME OUT	TIME IN	TOTAL	DISPATCH
Carl	JHJ				92

FROM	TO	PASS	HOURS	SIB	EXT LOG	MILES
L.R.	HO Knight	(3)				80
	ZT					95
	CR					152

RATE **288** MILES @ \$ **1.75** = \$ **504.00**
 RATE _____ HOURS @ \$ _____ = \$ _____
 STAND-BY **3.8** HOURS @ \$ **26.00** = \$ **98.80**
 EXTRA LANDING _____ @ \$ _____ = \$ _____
 MINIMUM FLIGHTS _____ @ \$ _____ = \$ _____
 OTHER _____ @ \$ _____ = \$ _____

PAID CHARGE TOTAL AMOUNT \$ **602.80**

PASSENGERS (PRINT)	PASSENGERS (SIGN)
1 A. SCHMIDT	1 A. Schmidt
2 M. J. YOUNG	2 M. Young
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10

Handoo

03090 **2** 12

WE HEREBY ACCEPT THE CONDITIONS OF CHARTER AND CARRIAGE AS SHOWN ON THE REVERSE SIDE OF THIS COPY OF THIS CHARTER TICKET AND HEREBY AGREE TO THE ABOVE CHARGES.

CHARTERED TO **UTAH MINES LTD** → **1600 - 1050 W. PENDEL**
~~ISLAND COPPER MINE~~
 P O BOX 370
 PORT HARDY B C **9101**
 VON ZPO

DATE **Aug 21/79**

PILOT	CF	TIME OUT	TIME IN	TOTAL	DISPATCH
Edward	XUY				21

FROM	TO	PASS	HOURS	SIB	EXT LOG	MILES
L.R.	HO Knight	(3)				80
	CR					80

RATE **160** MILES @ \$ **2.00** = \$ **320.00**
 RATE _____ HOURS @ \$ _____ = \$ _____
 STAND-BY _____ HOURS @ \$ _____ = \$ _____
 EXTRA LANDING _____ @ \$ _____ = \$ _____
 MINIMUM FLIGHTS _____ @ \$ _____ = \$ _____
 OTHER **Respect + 25.00** = \$ **63.00**

PAID CHARGE TOTAL AMOUNT \$ **257.00**

PASSENGERS (PRINT)	PASSENGERS (SIGN)
1 PETER ZELL	1 Peter Zell
2 DOUG SCHMIDT	2 Doug Schmidt
3	3
4	4
5	5
6	6
7 JOHN F. KOZAK	7 John F. Kozak
8	8
9	9
10	10

02984 **2** 12 **New Orleans**

WE HEREBY ACCEPT THE CONDITIONS OF CHARTER AND CARRIAGE AS SHOWN ON THE REVERSE SIDE OF THIS COPY OF THIS CHARTER TICKET AND HEREBY AGREE TO THE ABOVE CHARGES.



MARKETING DEPARTMENT

Please make remittances payable to IMPERIAL OIL LIMITED and mail to:

BOX 2356, EDMONTON, ALBERTA T5J 2R5

THIS IS YOUR INVOICE - DIRECT ALL INQUIRIES TO: CUSTOMER ORDER/RELEASE NO.

TERMS NET 30 DAYS FROM DELIVERY DATE FREIGHT PPD



SOLD OR DELIVERED TO: UTAH MINES LTD EXPLORATION OFFICE 1600 1050 W PENDER ST VANCOUVER B C

SHIPPED TO: UTAH MINES LTD KYUJUOT LOGGING HEAD OF KNIGHT INLET

DATE SHIPPED table with columns MONTH, DAY, YEAR and values 09, 12, 77

V6E 3S7

10/2/79

991755 0010 5 LOUGHEED TERMINAL-PAUL

A SERVICE CHARGE 1.75% MONTH 1.8% YEAR COMPOUNDED MONTHLY IS APPLICABLE TO ALL

Main invoice table with columns: PACKAGE NO., PACKAGE KIND, PRODUCT, QUANTITY, UNIT, PRICE, AMOUNT. Includes row for ESSO TURBO FUEL B and LIGHT STEEL DRUM 205 L.

REC stamp

UTAH MINE EXPLORATION stamp

Summary table with columns: FEDERAL SALES TAX LIC, PROV SALES TAX LIC, DATE OF INVOICE, STATION NO, DEBIT BALANCE

EXPLANATION OF UNIT CODE and EXPLANATION OF TAX COLUMNS

51101 11 79 13752

B. L. CRAIG, MITEC



MARKETING DEPARTMENT

Please make remittances payable to IMPERIAL OIL LIMITED and mail to

THIS IS YOUR INVOICE DIRECT ALL INQUIRIES TO →
CUSTOMER ORDER/RELEASE NO

BUA 2256, EDMONTON, ALBERTA T5J 2K5

FRIGHTLY

NET 30 DAYS FROM DELIVERY DAT



SOLD OR DELIVERED TO:
UTAH MINES LTD
EXPLORATION OFFICE
1800 1050 W PENDER ST
VANCOUVER B C

7/25/79

SHIPPED TO:
UTAH MINES LTD
KYUQUOT LOGGING
HEAD OF KNIGHT INLET

DATE SHIPPED
MONTH DAY YEAR
07 25 1979

V&E 357

991755 0010 5 LUGHEED TERMINAL-PROV

A SERVICE CHARGE 1.75¢ MONTH (12) YEAR COMPOUNDED MONTHLY

PACKAGE NO	PACKAGE KIND	PRODUCT	QUANTITY	UNIT	PRICE	AMOUNT
30	DRUM	BSSD TURBO FULL S LIGHT STEEL DRUM D.C. M.F. TAX 1.1 L 9.0 I.O.	1550.00A		1.020	1581.00
			30.00C		17.000	510.00
					5.00	150.00
		MEMO HOLLAND RL 116029				

RECEIVED

JUL 25 1979

UTAH MINES LTD.
EXPLORATION DEPT.

FEDERAL SALES TAX LIC	PROV SALES TAX LIC	DATE OF INVOICE MO DAY YEAR 07 25 1979	SECTION NO 46125	1415 5754	EXPLANATION OF TAX COLUMNS	170000
EXPLANATION OF UNIT CODE				EXPLANATION OF TAX COLUMNS		
A IMPERIAL GALLONS	F SHORT TONS	G POUNDS	H CWT	I METRE	J FEDERAL SALES TAX	K PROVINCIAL SALES TAX
L UNITS	M CUBIC METRE	N BARRELS	O	P	Q	R



8/2/79

INVOICE

CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: [REDACTED]
AREA CODE: 604
TELEX: 043-52597

984-0221

JUL 31 1979

TO: Utah Mines Ltd.,
1600 - 1050 W. Pender St.,
Vancouver, B.C.
ATTN: V6E 3S7
J.R. Deighton

UTAH MINES LTD.
EXPLORATION DEPT.

CERTIFICATE NO. 48883 to 48886
INVOICE NO. 31445
DATE July 30, 1979

	DESCRIPTION	SUB-TOTAL	TOTAL
	PROJECT HOODOO		
144	Analyzed for Cu, Mo, Zn, Ag, Au @ \$6.80	\$979.20	
144	Prepared @ \$1.75 (Rocks)	252.00	
		<u>1231.20</u>	
	Less 20%	246.24	
			\$984.96

TERMS-NET 30 DAYS

78-040

1% Per Month (18% Per Annum) Charged on Overdue Accounts



INVOICE

7/24/79

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 904-0221
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS

RECEIVED

REGISTERED ASSAYERS

TO: Utah Mines Ltd.

1600 - 1050 W. Pender St.

Vancouver, B.C. V6E 3S7

ATTN: J.R. Deighton

Hoodoo Cr.

JUL 23 1979

UTAH MINES LTD.
EXPLORATION DEPT.

CERTIFICATE NO. 48545

INVOICE NO. 31255

DATE July 23, 1979

	DESCRIPTION	SUB-TOTAL	TOTAL
24	Analyzed for Cu, Mo, Zn, Ag & Au @ \$6.80 Prepared (rock) @ \$1.75	\$163.20	
24		42.00	
		205.20	
	Less 20%	-41.04	
			\$164.16

TERMS-NET 30 DAYS

1% Per Month (18% Per Annum) Charged on Overdue Accounts

78-040



INVOICE

7/24/79

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: [REDACTED] 984-0221
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

TO: Utah Mines Ltd.,
1600 - 1050 W. Pender St.,
Vancouver, B.C.
V6E 3S7

CERTIFICATE NO. 48542-4

INVOICE NO. 31231

ATTN: J. R. Deighton

Hoodoo Cr.

DATE July 21/79

	DESCRIPTION	SUB-TOTAL	TOTAL
28	Analyzed for Cu, Mo, Zn & Ag @ \$3.30	\$92.40	
34	Analyzed for Cu, Mo, Zn, Ag & Au @ \$6.80	231.20	
41	Prepared @ \$1.75 (rocks)	71.75	
21	Prepared @ \$0.45	9.45	
		404.80	
	Less 20%	80.96	
			\$323.84

RECEIVED

JUL 23 1979

UTAH MINES LTD.

TERMS-NET 30 DAYS

78-040

1% Per Month (18% Per Annum) Charged on Overdue Accounts



INVOICE

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 984-0221
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

TO: Utah Mines Ltd.,
1600 - 1050 W. Pender St.,
Vancouver, B.C.
ATTN: V6E 3S7
HOODOO CR.

CERTIFICATE NO. 49194-96
INVOICE NO. 31663
DATE Aug. 7/79

8/9/79

	DESCRIPTION	SUB-TOTAL	TOTAL
100	Analyzed for Cu, Mo, Zn, Ag & Au @ \$6.80 Prepared @ \$1.75 (rocks) Less 20%	\$680.00	\$684.00
100		175.00	
		855.00	
		171.00	

RECEIVED

AUG 8 1979

UTAH MINES LTD.
EXPLORATION DEPT.

TERMS-NET 30 DAYS

1% Per Month (18% Per Annum) Charged on Overdue Accounts

78-040



INVOICE

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 984-0221
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GENERAL CHEMISTS • REGISTERED ASSAYERS

TO: Utah Mines Ltd.
1600 - 1050 W. Pender St.
Vancouver, B.C. V6E 3S7

10/2/79
RECEIVED
SEP 21 1979
UTAH MINES LTD.
EXPLORATION DEPT.

CERTIFICATE NO. 50128 & 50129

INVOICE NO. 32557

ATTN: Mr. J.R. Deighton

HOO DOO

DATE Sept. 20/79

	DESCRIPTION	SUB-TOTAL	TOTAL
74	Analyzed for Cu, Mo, Pb, Zn, Ag & Au @ \$7.35 Prepared @ \$0.45 Less 20%	\$543.90	
74		33.30	
		\$577.20	
		-115.44	
			<u>\$461.76</u>

TERMS-NET 30 DAYS

78-040

1½% Per Month (18% Per Annum) Charged on Overdue Accounts



10/9/79

INVOICE

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: [REDACTED] 984-0221
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

RECEIVED

OCT 8 - 1979

UTAH MINES LTD.
EXPLORATION DEPT.

CERTIFICATE NO. 50720

INVOICE NO. 33038

DATE Oct. 5/79

TO: Utah Mines Ltd.,
1600 - 1050 W. Pender St.,
Vancouver, B.C.
V6E 3S7

ATTN: John Deighton - Hoodoo Creek

	DESCRIPTION	SUB-TOTAL	TOTAL
35	Analyzed for Cu, Mo, Pb, Zn, Ag & Au @\$7.35 Prepared @ \$1.75 (rocks) Less 20%	\$257.25	\$254.80
35		61.25	
		318.50	
		63.70	

TERMS-NET 30 DAYS

78-040

1% Per Month (18% Per Annum) Charged on Overdue Accounts



INVOICE

10/16/79

CHEMEX LABS LTD.

RECEIVED

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 984-0221
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS REGISTERED ASSAYERS

OCT 15 1979

TO: Utah Mines Ltd.,
1600 - 1050 W. Pender St.,
Vancouver, B.C.
V6E 3S7
ATTN: J.R. Deighton

UTAH MINES LTD.
EXPLORATION DEPT.

CERTIFICATE NO. 50928
INVOICE NO. 33176
DATE October 13, 1979

	DESCRIPTION	SUB-TOTAL	TOTAL
26	Analyzed for Cu, Mo, Au @ \$5.65	\$ 146.90	
26	Prepared @ \$1.75 (Rocks)	45.50	
300 lbs	Overweight charge @ \$0.20/lb	60.00	
		<u>252.40</u>	
	Less 20%	50.48	
			\$ 201.92

TERMS-NET 30 DAYS

78-040

1% Per Month (18% Per Annum) Charged on Overdue Accounts



INVOICE

11/20/79

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: [REDACTED] 984-0221
AREA CODE: 604
TELEX: 043-52597

ANALYTICAL CHEMISTS

RECEIVED

REGISTERED ASSAYERS

TO: Utah Mines Ltd.
1600 - 1050 W. Pender St.
Vancouver, B.C.
V6E 3S7
ATTN: J. R. Deighton

NOV 19 1979

UTAH MINES LTD.
EXPLORATION DEPT.

CERTIFICATE NO. 51401
INVOICE NO. 33833
DATE Nov. 16/79

	DESCRIPTION	SUB-TOTAL	TOTAL
4	Analyzed for Cu, Mo & Au @ \$5.65 Prepared @ \$1.75 (rocks) Less 20%	\$22.60	
4		7.00	
		29.60	
		5.92	
			\$23.68

TERMS-NET 30 DAYS

78-040

1% Per Month (18% Per Annum) Charged on Overdue Accounts



11/22/79 INVOICE

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: [REDACTED] 904-0221
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

TO: Utah Mines Ltd.
1600 - 1050 W. Pender St.
Vancouver, B.C.
V6P 3S7
ATTN: HOODOO CREEK

RECEIVED

NOV 21 1979

UTAH MINES LTD.
EXPLORATION DEPT.

CERTIFICATE NO. 51444 to 51446

INVOICE NO. 33914

DATE Nov. 20/79

	DESCRIPTION	SUB-TOTAL	TOTAL
96	Analyzed for Zn @ \$1.50 No prep. charge	\$144.00	
	Less 20%	28.80	
			\$115.20

TERMS-NET 30 DAYS

78-040

1% Per Month (18% Per Annum) Charged on Overdue Accounts



12/4/79

INVOICE

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: [REDACTED] 984-0221
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS • REGISTERED ASSAYERS

RECEIVED

TO: Utah Mines Ltd.
1600 - 1050 W. Pender St.
Vancouver, B.C.
V6E 3S7
ATTN: J. R. Deighton

DEC 3 - 1979

UTAH MINES LTD.
EXPLORATION DEPT.

CERTIFICATE NO. 51608
INVOICE NO. 34110
DATE Nov. 30/79

	DESCRIPTION	SUB-TOTAL	TOTAL
4	Analyzed for Zn @ \$1.50 No prep. charge	\$6.00	
	Less 20%	1.20	
			\$4.80

TERMS--NET 30 DAYS

78-040

1% Per Month (18% Per Annum) Charged on Overdue Accounts



INVOICE

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: [REDACTED] 984-0221
 AREA CODE: 604
 TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

RECEIVED

TO: Utah Mines Ltd.
 1600 - 1050 W. Pender St.
 Vancouver, B.C.
 V6Z 3S7

NOV 14 1979

CERTIFICATE NO. 51220 & 51221

INVOICE NO. 33665

ATTN:

11/15/79

UTAH MINES LTD. DATE
 EXPLORATION DEPT.

Nov. 7/79

	DESCRIPTION	SUB-TOTAL	TOTAL
70	Analyzed for Cu, Mo & Au @ \$5.65	\$395.50	
70	Prepared @ \$1.75 (rocks)	122.50	
		518.00	
	Less 20%	103.60	
			\$414.40

TERMS-NET 30 DAYS

78-040

1% Per Month (18% Per Annum) Charged on Overdue Accounts

DEAKIN EQUIPMENT LTD.

831 POWELL STREET, VANCOUVER, B.C. V6A 1H7
 TELEPHONE: 253-2685

RECEIVED

AUG 10 1979

INVOICE NUMBER
 No 33351

INVOICE

8/13/79

SOLD TO: Utah Mines Ltd UTAH MINES LTD
1600-1050 W. Renden St. EXPLORATION DEPT.
Vancouver B.C. P.O. Box 100
V6E 3S7 K. Uor

SHIPPING AND INVOICE DATE		SHIPPED VIA			PPD. COLL. PPD. CHG.		TERMS:	YOUR ORDER NO.	DATE ORDERED	
Aug 8/79		Air Truck			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1% 10 DAYS NET 30	2048	Aug 8/79
QTY. B.O.	QTY. ORDERED	DESCRIPTION				QTY. SHIPPED	UNIT PRICE	AMOUNT		
	3	10' oil floor board 1/2" x 1/2"				3	28.75	86	25	
	800	for 3/4" 100 PSI poly pipe 2 x 400'				800	25.34/c	202	72	
	1600	for 3/4" x 75 PSI poly pipe 4 x 400'				1600	15.04/c	240	64	
	12	3/4" plastic tees				12	34.00	4	08	
	12	3/4" 90° elbows				12	30.00	3	60	
	24	3/4" couplings				24	17.00	4	08	
	24	3/4" coup for 3/4" pipe thread plastic				24	17.00	4	08	
	12	as shown metal coup				12	1.24	14	28	
	70	only 1" gas clamps				70	55.00	38	50	
	50	the 2" C.W. nails				50	51.00/c	25	50	
	50	3 1/4" "				50	43.00/c	21	50	
	4	thumb latches				4	37.50	15	00	
	3	corn brooms *12				3	6.55	19	65	
	3	dust pans				3	2.66	7	98	
	4	78" x 30" x 3" foams				4	14.75	59	00	
	40	6" x 18" stove pipe				40	1.95	78	00	
	10	6" x 90° elbows				10	2.00	20	00	
	3	6" draft reg.				3	7.50	22	50	
	3	6" chimney caps				3	4.40	13	20	
	1	18 x 20 clean poly fly				1	112.00	112	00	
	12	tins 1317 brown primer				12	2.50	30	00	
	1	only 30 x 30 shower stall				1	129.60	129	60	
FEDERAL TAX INCL. <input checked="" type="checkbox"/> EXCL. <input type="checkbox"/>		FEDERAL TAX NO.			PROVINCIAL TAX LIC. NO.			TOTAL	1152 76	
								PROV. TAX	46 11	
								AMOUNT DUE	1198.27	

CUSTOMER COPY

8114179

GREY BIRD

SEAFORD BUILDING SUPPLIES LTD.

1422 MAIN STREET,
NORTH VANCOUVER, B.C. V7J 1C8
COMPLETE BUILDING SUPPLY CENTRE

RECEIVED

PHONE 987-9301

S O L D T O	UTAH MINES LTD EXPLORATION DEPT 1533 1350 W PENDER VANCOUVER B C	S H I P T O	AUG 13 1979
	UTAH MINES LTD. EXPLORATION DEPT.		DATE <u>Aug 7 1979</u> PHONE

CUST ORDR NO # 8044 JOB NO 36 CALL ⊙ SHIPPED ⊙ CASH CHGE ⊙ C O D ⊙ S S TAX NO FEDERAL TAX NO

CODE	QUANTITY	SHIPPED	DESCRIPTION	UNIT/FEET	PRICE	AMOUNT
0	30/12		2x4 2 1/2" x 4" fir	lin	25	90 00 N
0	60/14		" " " " " "	lin	25	210 00 N
0	10/16		" " " " " "	lin	28	40 00 N
0	00		EXPLORATION 1x4 VANCORUM fir	lin	16	64 00 N
6	30		4x8 5/16 D shtg	EA	9.20	192 00 N
0	20/18		4x4 5/4 S fir	lin	3.0	252 00 N
10	40	1/2	4x8 1/2 D shtg	EA	12.10	484 00 N
					SUB TOTAL	1332 00

FILLED BY <u>[Signature]</u>	CHECKED BY <u>[Signature]</u>	DELIVERY DATE	TERMS NET 2% PER MONTH (24% PER ANNUM) SERVICE CHARGE ON OVERDUE ACCOUNTS	S S TAX <u>53 28</u>
No goods will be accepted for credit unless returned with our permission. Claims for shortage on this delivery must be presented within 2 days. 10% handling charge on all goods returned at invoice price charged. Sellers liability restricted to the replacement of the materials only.			CUSTOMER'S SIGNATURE	CARTAGE
69016				TOTAL <u>1385 28</u>

CUSTOMER'S COPY

E & O E

SEAFORD BUILDING SUPPLIES LTD.

1422 MAIN STREET,
NORTH VANCOUVER, B.C. V7J 1C8
COMPLETE BUILDING SUPPLY CENTRE

RECEIVED

PHONE 987-9301

01/4/79

S O L D T O	UTAH MINES LTD EXPLORATION DEPT 1400 1350 W PENDER VANCOUVER B C	SHIPPED TO UTAH MINES LTD. EXPLORATION DEPT. DATE: <u>Aug 3/79</u>
	SHIP TO UTAH MINES LTD. EXPLORATION DEPT. DATE:	AUG 13 1979

CUST NO 8052 JOB NO CALL SHIPPED CASH CHGE C.O.D. SS TAX NO FEDERAL TAX NO.

QTY	SHIPPED	DESCRIPTION	UNIT/FEET	PRICE	AMOUNT
03/12	✓	2 x 4 x 10	lin 230	36/95	3420
0 100	✓	lin 1 x 4	lin 200	14	1400
3 1	✓	SQUARES		389	389
1 1	✓	ROLL - 6 mil x 240 x	2000 POLY		
			CLEAR	4890	4890

DISCOUNT = 10.07 SUB TOTAL 100.99

FILLED BY [Signature] CHECKED BY [Signature] DELIVERY DATE [Blank]
 TERMS NET 2% PER MONTH (24% PER ANNUM) SERVICE CHARGE ON OVERDUE ACCOUNTS
 CUSTOMER'S SIGNATURE [Signature: New Orleans]
 SS TAX 4.07
 CARTAGE
 TOTAL > 105.03
 E & O E

68977
CUSTOMER'S COPY

No goods will be accepted for credit unless returned with our permission. Claims for shortage on this delivery must be presented within 2 days. 10% handling charge on all goods returned at invoice price charged. Sellers liability restricted to the replacement of the materials only.

DISTRIBUTION: (FOR INTERNAL USE ONLY)

[Signature]

FEDERAL SALES TAX	
CHARGE <input type="checkbox"/>	EXEMPT <input type="checkbox"/>

IMPORTANT

- (1) USE INVOICE FOUR COPIES IMMEDIATELY GOODS ARE SHIPPED.
- (2) DO NOT SUBSTITUTE WITHOUT OUR CONSENT.

[Signature]
PURCHASING AGENT

P. 14/79

GREY BIRD

SEAFORD BUILDING SUPPLIES LTD

1422 MAIN STREET,
NORTH VANCOUVER, B.C. V7J 1C8
COMPLETE BUILDING SUPPLY CENTRE

RECEIVED

PHONE 987-9301

S O L D T O	UTAH MINES LTD	S H I P T O	AUG 13 1979
	EXPLORATION DEPT		UTAH MINES LTD.
	1633 1350 W PENDER		EXPLORATION DEPT.
	VANCOUVER B C		PHONE
CUST NO 30377		DATE: <u>Aug. 3/79</u>	

CASH CHGE C O D S.S. TAX NO FEDERAL TAX NO

QUANTITY	SHIPPED	DESCRIPTION	UNIT/FEET	PRICE	AMOUNT
6	1	SET of ANNUITY TAPERS	EA	1572	1572
6	2	GALV FITTINGS	EA	120	240
6	1	3/4 THREAD FITTINGS	EA	130	130
6	1	3/4 THREA FITTINGS	EA	138	138
6	1	GALV. PIPE FITTING	EA	108	108
3	1	A20 ROCKET HAMMER	EA	1750	1750
6	4	1/2" COPPER PIPE	LN	75	300
3	2	DOOR CATCHES	EA	159	318
2	3	1/2 x 4 x 8 DISTRICT	EA	1201	3603
2	3	5/8 x 4 x 8 D	EA	1339	4017
6	12/12	2 x 4 FINISH	EA	144/29	4176
DISCOUNT = 12.33			SUB TOTAL		16352

ORDERED BY: [Signature] CHECKED BY: [Signature] DELIVERY DATE: _____

No goods will be accepted for credit unless returned with our permission. Claims for shortage on this delivery must be presented within 2 days. 10% handling charge on all goods returned at invoice price charged. Sellers liability restricted to the replacement of the materials only.

TERMS NET
 2% PER MONTH (24% PER ANNUM)
 SERVICE CHARGE ON OVERDUE ACCOUNTS
 CUSTOMER'S SIGNATURE: Ken Orisk

SS TAX	654
CARTAGE	
TOTAL	17006

68976

CUSTOMER'S COPY

E & O E

SEAFORD BUILDING SUPPLIES LTD

1422 MAIN STREET,
NORTH VANCOUVER, B.C. V7J 1C8
COMPLETE BUILDING SUPPLY CENTRE

RECEIVED

PHONE 987-9301

811479

AUG 13 1979

S
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T
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UTAH MINES LTD
EXPLORATION DEPT
1433 1050 W PENDER
VANCOUVER B C

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I
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O
UTAH MINES LTD.
EXPLORATION DEPT.
DATE **AUG 7/79**

CUST ORDER NO 357 JOB NO CALL SHIPPED CASH CHGE C O D SS TAX NO FEDERAL TAX NO

CODE	QUANTITY	SHIPPED	DESCRIPTION	UNIT FEET	PRICE	AMOUNT
	1		Roll 91016 10-4000Y Green Clean polythene			2995
			<i>Howe</i>			

DISCOUNT = 299

SUB TOTAL 2995

ORDER NO 69023 CHECKED BY *As* DELIVERY DATE

TERMS NET
2% PER MONTH (24% PER ANNUM)
SERVICE CHARGE ON OVERDUE ACCOUNTS
CUSTOMER'S SIGNATURE

SS TAX	120
CARTAGE	
TOTAL	3115

No goods will be accepted for credit unless returned with our permission. Claims for shortage on this delivery must be presented within 2 days. 10% handling charge on all goods returned at invoice price charged. Sellers liability restricted to the replacement of the materials only.

CUSTOMER'S COPY

DISTRIBUTION: (FOR INTERNAL USE ONLY)

Howe

FEDERAL SALES TAX
CHARGE EXEMPT

IMPORTANT

- (1) PLEASE INVOICE FOUR COPIES IMMEDIATELY GOODS ARE SHIPPED.
- (2) NOT SUBSTITUTE WITHOUT OUR CONSENT.

[Signature]
PURCHASING AGENT

K. Orleski

SEAFORD BUILDING SUPPLIES LTD.

1422 MAIN STREET,
NORTH VANCOUVER, B.C. V7J 1C8
COMPLETE BUILDING SUPPLY CENTRE

RECEIVED

PHONE 987-9301

SOLD TO UTAH MINES LTD EXPLORATION DEPT 1001 1150 W PENDER VANCOUVER B C	SHIPPED TO UTAH MINES LTD. EXPLORATION DEPT. PHONE
8114179	AUG 13 1979
DATE <i>Aug 2/79</i>	

CUSTOMER NO: #8041 JOB NO: CALL: SHIPPED: CASH: CHGE: C.O.D: S.S. TAX NO: FEDERAL TAX NO:

CODE	QUANTITY	SHIPPED	DESCRIPTION	UNIT	FEET	PRICE	AMOUNT
3	3	—	pr changes	EA.		165	4 95
3	4	—	shackles	CP.		330	13 20
3	2	—	—	CP.		140	2 80
3	—	—	misc nuts & bolts				10 56
3	—	—	misc pipe fitting				12 84
3	1	—	offa knife	EA.		195	1 95
3	2	—	staples	B		748	7 48
3	1	—	chalk line	EA		415	4 15
3	6	—	pencils	CP		58	3 48
3	2	—	chalk	CP		195	3 90
3	—	—	—				2 80
3	—	—	misc elec				15 33
DISCOUNT = 8.34						SUB TOTAL	83 44

FILED BY: <i>[Signature]</i>	CHECKED BY: <i>[Signature]</i>	DELIVERY DATE:	TERMS NET 2% PER MONTH (24% PER ANNUM) SERVICE CHARGE ON OVERDUE ACCOUNTS	S.S. TAX 3 34
No goods will be accepted for credit unless returned with our permission. Claims for shortage on this delivery must be presented within 2 days. 10% handling charge on all goods returned at invoice price charged. Sellers liability restricted to the replacement of the materials only.			CUSTOMER'S SIGNATURE <i>[Signature]</i>	CARTAGE
68944				TOTAL > 86 78
CUSTOMER'S COPY				E & O E

DISTRIBUTION: (FOR INTERNAL USE ONLY) <i>[Handwritten]</i>	FEDERAL SALES TAX	
	CHARGE <input type="checkbox"/>	EXEMPT <input type="checkbox"/>

IMPORTANT

- (1) PLEASE INVOICE FOUR COPIES IMMEDIATELY GOODS ARE SHIPPED.
- (2) DO NOT SUBSTITUTE WITHOUT OUR CONSENT.

PURCHASING AGENT

[Handwritten Signature]

5114179



SEAFORD BUILDING SUPPLIES RECEIVED

1422 MAIN STREET,
NORTH VANCOUVER, B.C. V7J 1C8
COMPLETE BUILDING SUPPLY CENTRE

PHONE 987-9301

AUG 13 1979

S O L D T O	UTAH MINES LTD EXPLORATION DEPT 1400 1150 W FENDER VANCOUVER B.C.	S H I P T O	UTAH MINES LTD. EXPLORATION DEPT.
	DATE: Aug 2/79		PHONE:

CUST ORD NO: #8041 JOB NO: CALL: SHIPPED: CASH: CHGE: C.O.D: SS TAX NO: FEDERAL TAX NO:

CODE	QUANTITY	SHIPPED	DESCR	UNIT	FEET	PRICE	AMOUNT
10	5	-	4x8 x 1/2" 20 shlg	EA		12.01	60 05
10	5	-	1/2" 3/4" shlg	EA		14.55	72 75
10	2	-	5/8"	EA		16.78	33 56
0	2/12	-	2x4 comp fit	lin		29	41 76
0	100	✓	1x4 comp fit	lin		16	16 00
6	3	✓	basket strain	EA		5.59	16 77
6	4	✓	tail piece wash	EA		36	1 44
6	2	✓	nuts	EA		59	1 18
6	2	✓	tail pieces	EA		142	2 84
3	4	✓	hinges	EA		307	12 28
3	2	✓		EA		138	2 76
3	2	-		EA		149	2 98
DISCOUNT = 9.80						SUB TOTAL	264 37

FILED BY: <i>[Signature]</i>	CHECKED BY: <i>[Signature]</i>	DELIVERY DATE:	TERMS NET 2% PER MONTH (24% PER ANNUM) SERVICE CHARGE ON OVERDUE ACCOUNTS	SS TAX 10 57
No goods will be accepted for credit unless returned with our permission. Claims for shortage on this delivery must be presented within 2 days. 10% handling charge on all goods returned at invoice price charged. Sellers liability restricted to the replacement of the materials only.			CUSTOMER'S SIGNATURE <i>Ken Orboke</i>	CARTAGE
CUSTOMER'S COPY			TOTAL	274 94

E & O E

COAST FERRIES LIMITED

1400 KENT AVE. EAST, VANCOUVER, B.C. V5P 4N8 PHONE 321-6833

UTAH MINES
1600 - 1050 WEST PENDER
VANCOUVER, B.C.
V6E 3S7

SHIPPER CAN. MINES SERVICES
KNIGHT INLET, B.C.

RECEIVER CAN. MINE SERVICES
VANCOUVER, B.C.

11/13/79

DATE **OCT. 11/79** VOYAGE NO. **3-5** B/L NO. **79** SHIPPED VIA **TYEE PRINCESS** D TO D P & D DOCK TERMS: NET CASH

NO. OF PKGS.	ARTICLES	WEIGHT	RATE	FREIGHT	TOTAL
	<u>REBILLING</u>				
5	PIPE/FRAMES	211	690/2	727.95	
14	PUMPS/MIXER/BOXES/ETC.	409	730/2	1492.85	
5	VALVE/GAUGE/PRESS/ETC.	1430	730/c	104.40	
1	PLATFORM	100	690/c	6.90	
3	TANKS	42	300/2	63.00	
3	FREEZER/FRIDGE/STOVE	48	490/2	117.60	
				<u>2512.70</u>	
	PREVIOUSLY BILLED TO: CANADIAN MINE SERVICES VANCOUVER, B.C.				596275
	FREE TIME EXPIRES				

this is to
60
2512.70 ←

P. L. GRAIN LIMITED

E. & O. E. **DUPLICATE INVOICE** PRO. NO. XXXXXXXXXX REFER TO THIS NUMBER IN ALL CORRESPONDENCE

COAST FERRIES LIMITED
1400 KENT AVE. EAST
VANCOUVER, B.C.

V5P4N8

NOT NEGOTIABLE

⑆028792⑆ ⑆00010⑉010⑆ 92-03117⑆

COAST FERRIES LIMITED

1400 KENT AVE. EAST. VANCOUVER, B.C. V5P 4N8 PHONE 321 - 6833

TO

UTAH MINES
1600 - 1050 WEST PENDER ST.
ATN: A.J. SCHMIDT
VANCOUVER, B.C.
V6E 3S7

SHIPPER

GDN. MINE SERVICES
SURREY

RECEIVER

GDN. MINE SERV.
KNIGHT INLET

9/10/79

DATE: **AUG. 30/79** VOYAGE NO: **301** B/L NO: SHIPPED VIA: **LOUGHBOROUGH PRINCESS** FREIGHT EXPRESS: **TERMS: NET CASH**

NO OF PKGS	ARTICLES	CUBIC FEET	WEIGHT	RATE	FREIGHT	TOTAL
1	DRILL UNIT	160		730/2	584.00	
4	FRAME/MAST/LEGS	300	3300	730/2	1095.00	
1	BASKET		200	730/C	14.60	
5	LARGE WOODEN BOXES	90		730/2	328.50	
3	SMALL WOODEN BOXES		400	730/C	29.20	
1	PALLET PAILS OIL/ETC.		650	565/C	36.73	
2	PALLETS DRILL MUD		5850	450/C	263.25	
1	PALLET COOK STOVE	12		490/2	29.40	
1	PALLET FRIDGE/FREEZER	32		490/2	78.40	
1	DRUM OIL		450	565/C	25.43	
3	MUD TANKS	84		300/2	126.00	
3	ROD STAND WITH RODS		7000	690/C	483.00	
1	BDL. LUMBER		768FBM9640MBF		74.04	
1	ROLL WIRE LINE CABLE		100	415/C	4.15	
6	PIPE/HOSE	15		420/2	31.50	
1	FUEL TANK	6		300/2	9.00	
5	PLYWOOD	5		440/2	11.00	
1	DRILL STOVE	3		730/2	10.95	
4	PUMPS	76	730/2	730/2	277.40	
5	CORE BOXES/CASING/ETC.	33		690/2	113.85	
2	MUD MIXER/PWER PLANT		175	730/C	12.78	
1	HYD. RAM		75	730/C	5.48	
1	FORD TANSMISSION		400	730/C	29.20	

~~3688X28~~

3672.86

FREE TIME EXPIRES

E & O
DATE

INVOICE

PRO NO 594913 - H

P.L. CRAIN LIMITED

INVOICE

North Arm Transportation Ltd.

12924
 No 12924

Utah Mines Ltd.
 #1600 - 1050 West Pender Street,
 Vancouver, B.C.

321-0171
 2502 KENT AVENUE EAST
 VANCOUVER, B.C.
 V5S 2H8
 12E

9/17/79

DATE	DESCRIPTION	AMOUNT
Aug. 31/79	To transport of the following items from Vancouver to Knight Inlet, as per the attached Bill of Lading.	
	1 bundle plywood 1 bundle 4 x 4, 2 x 4, 1 x 2 1 bedframes 1 aluminum tent box 6 boxes 6 propane tanks 2 aluminum boxes 6 bundles plastic hose 2 wooden boxes 1 tent in plastic 4 boxes 3 oil heaters 8 barrels 1 steel frame 3 tents 1 water heater & 4 tarps	\$ 500 00
<p>DUPLICATE</p>		
<p>INTEREST CHARGED ON OVERDUE ACCOUNTS AT 12% PER ANNUM (1% PER MONTH) Provided that the tugboat owner uses diligence to keep the tugboat seaworthy, the tugboat owner shall not be liable for any loss or damage to the tow or its contents, howsoever such loss or damage occurs, even though such loss or damage be caused or contributed to by the Act, neglect or default of the tugboat owner, its servants or Agents.</p>		
<p>SM GAR 6-77</p>		



CAMERON McCUTCHEON DRILLING LIMITED

DIAMOND DRILLING CONTRACTORS

Telephone 253-5251
Telex: 04-54311

745 Clark Drive
Vancouver, B.C.
V5L 3J3

INVOICE NO. 12106
JOB NO. 404
SEPTEMBER 30, 1979

Utah Mines Ltd.
Suite 1600 - 1050 West Pender Street
Vancouver, B.C.
V6E 3S7

Attention: Mr. A.J. Schmidt

Billing No. 1
Surface Drilling, Hoodoo Creek, B.C.
September 1979

Schedule A	Mobilization	\$ 8,052.83
Schedule B	Hole Summary	32,823.00
Schedule C	Site Costs	2,928.20
Schedule D	Supply of Materials	7,041.36
Schedule E	Board	704.00
Schedule F	Demobilization	5,592.80
		<hr/>
		\$57,142.19
		<hr/> <hr/>

CM

11/16/79

CAMERON McCUTCHEON DRILLING LIMITED

DIAMOND DRILLING CONTRACTORS

Telephone 253-5251
Telex: 04-54311

W. S. H. Hoo 800

745 Clark Drive
Vancouver, B.C.
V5L 3J3

Invoice No. 12118
Job No. 404
November 3, 1979

Utah Mines Ltd.
Suite 1600-1050 West Pender Street
Vancouver, B.C.
V6E 3S7

Attention: Mt. A.J. Schmidt

Billing No. 2

Schedule A - Site Costs	\$ 50.00 cr
Schedule B - Supply of Materials	2005.43
Schedule C - Board	<u>90.00 cr</u>
	<u>1865.43</u>
Total Invoice Due	<u><u>\$ 2005.43</u></u>

Please note - Credit for site costs and Board were deducted from invoice No. 1 and our acknowledgment of credit on invoice No. 2. Therefore, total due on Invoice No. 2 is \$2005.43.
Thank you!



STATEMENT
NORTH ISLAND CONSUMER SERVICES
 CO-OPERATIVE

950 IRONWOOD RD.,
 CAMPBELL RIVER, B.C. V9W 5K7 TELEPHONE: 287-4131

ACCOUNTS DUE AND PAYABLE THE 10TH OF MONTH FOLLOWING.
 INTEREST CHARGED AT 18 PER CENT PER ANNUM ON OVERDUE ACCOUNTS

TO Utah Mines
Route #1600, 1050 W. Broadway
Vancouver, B.C. V6E 3S7.

10/9/79

MONTH OF Sept 1-15/79

AMOUNT OF REMITTANCE \$

PLEASE RETURN THIS PART WITH YOUR REMITTANCE

DETACH HERE

YOUR CO-OPERATIVE ASSOCIATION

IN ACCOUNT WITH KEEP THIS PA

DATE	PARTICULARS	DEBIT	CREDIT	BALANCE
	PREVIOUS BALANCE FORWARD			6.47
Aug				
Sept 11	137790	29 86		
11	137792	47 72		71.1

UTAH MINES LTD. - EXPLORATION DEPT.					
DISTRIBUTION					
Location	Major	Minor	Act.	Exp.	Amount
00		0	0	0	UTAH MINES LTD.
00		0	0	0	EXPLORATION DEPT.
00		006	0	0	77.58 Hood 06
00		0	0	0	
00		0	0	0	
Date Received			Amount		77.58
Ext. & Prices			Amount		
Approved by			Amount Payable		
Check No.			E.O.E.		

RECEIVED
 SEP 28 1979

STATEMENT

Please pay last amount: ... IN THIS CUT



L-507 LIMITED CO-OPERATIVE

Sold to Utah Mines Date Sept 11 1979

Address _____

DESCRIPTION	QTY	PRICE	MEMBER'S NO
<u>Utah Mines</u>			<u>3674-0</u>
<u>Utah Mines</u>	<u>47</u>	<u>72</u>	



L-507 LIMITED CO-OPERATIVE

Sold to Utah Mines Date Sept 11 1979

Address _____

DESCRIPTION	QTY	PRICE	MEMBER'S NO
<u>Utah Mines</u>			<u>3674-0</u>
<u>Utah Mines</u>	<u>29</u>	<u>86</u>	



STATEMENT
NORTH ISLAND CONSUMER SERVICES
CO-OPERATIVE

950 IRONWOOD RD.,

CAMPBELL RIVER, B.C. V9W 5K7

TELEPHONE: 287-4133

ACCOUNTS DUE AND PAYABLE THE 10TH OF MONTH FOLLOWING.
 INTEREST CHARGED AT 18 PER CENT PER ANNUM ON OVERDUE ACCOUNTS.

9/12/79

TO Utah Mines
Suite #1600, 1050 W Pender St
Vancouver, BC V6E 3S7.

MONTH OF Aug 15-31/79

RECEIVED

PLEASE RETURN THIS PART WITH YOUR REMITTANCE
SEP 10 1979

DETACH HERE

IN ACCOUNT WITH		YOUR CO - OPERATIVE ASSOCIATION				KEEP THIS PART	
DATE		PARTICULARS		UTAH MINES LTD.		BALANCE	
				EXPLORATION	DEPT.		
Aug 15		PREVIOUS BALANCE FORWARD				679	30
" 19		647	137810	64156		1321	16
Aug 23		Received on acct				679	30
						641	56
UTAH MINES LTD. - EXPLORATION DEPT.							
DISTRIBUTION							
	Location	Major	Minor	Act.	Exp.	Amount	
	00			0	0	641.56	Approved
	00			0	0		
	00			0	0		
	00			0	0		
	00			0	0		
	Date Received			Invoice Amount		641.56	
	Ex. & prices			Discount			
	Approved by			Amount Payable			
				Check No.			

E & O. E.

STATEMENT

PLEASE NOTE REVERSE

Please pay last amount...

IN THIS COLUMN

FORM L303 (REV 78)



VANCOUVER ISLAND HELICOPTERS LTD.

P.O. BOX 2095 SIDNEY, BRITISH COLUMBIA V8L 3S6 TELEPHONE 656-3987

S9/79

9/19/79

DATE SEPTEMBER 13, 1979

In Account With

UTAH MINES LTD.

1600 - 1050 WEST PENDER STREET

VANCOUVER, B.C.

RECEIVED

SEP 17 1979

UTAH MINES LTD.
EXPLOREMENT SEPT.

REFERENCE INVOICE # 19007, 19008, 19010

FLYING SERVICE FOR MONTH OF SEPT 9 & 10, 1979 19
AS PER ATTACHED FLIGHT INVOICES.

HELICOPTER TYPE BELL 47 TURBINE REG. No. C.F. YII

BASE OF OPERATION VICTORIA, B.C.

BALANCE FORWARD		
<u>12.3</u> HOURS	@ \$ <u>235.00</u> PER HR.	\$
<u>1.4</u> HOURS V.I.H. FUEL	@ \$ <u>27.50</u> PER HR.	
_____ HOURS	@ \$ _____ PER HR.	
_____ HOURS V.I.H. FUEL	@ \$ _____ PER HR.	
MINIMUM CHARGES (IF APPLICABLE)		
CREW EXPENSES		
ADDITIONAL CHARGES _____		
TOTAL CHARGES		\$ 2,929.00

ISLAND OUT-REAR FORMS

TERMS: 30 DAYS NET

Interest at 1 1/2% per month (18 per cent per annum) charged on overdue accounts.

This company complies with the CODE OF ETHICS of the Helicopter Association of America.





VANCOUVER ISLAND HELICOPTERS LTD.

P.O. BOX 2095 SIDNEY, BRITISH COLUMBIA V8L 3S6 TELEPHONE 656-3987

59/77

9/21/79

DATE SEPTEMBER 18, 1979

In Account With _____

UTAH MINES LIMITED

1500 - 1050 WEST PEPPER STREET

VANCOUVER, B.C.

REFERENCE INVOICE # 23980, 23982, 23983, 23987

FLYING SERVICE FOR MONTH OF SEPT 3, 6, 7, 10 19 79
AS PER ATTACHED FLIGHT INVOICES.

HELICOPTER TYPE BELL 206L-1 REG. No. C.F. VIX

BASE OF OPERATION PORT HARDY, B.C.

BALANCE FORWARD			
<u>15.1</u> HOURS	@ \$ <u>385.00</u>	PER HR.	\$
<u>6.3</u> HOURS V.I.H. FUEL	@ \$ <u>36.00</u>	PER HR.	
_____ HOURS	@ \$ _____	PER HR.	
_____ HOURS V.I.H. FUEL	@ \$ _____	PER HR.	
MINIMUM CHARGES (IF APPLICABLE)			
CREW EXPENSES			
ADDITIONAL CHARGES _____			
TOTAL CHARGES			\$ 6,040.10

ISLAND BUSINESS FORMS

TERMS: 30 DAYS NET

Interest at 1 1/2% per month (18 per cent per annum) charged on overdue accounts.

This company complies with the CODE OF ETHICS of the Helicopter Association of America.





TRANSWEST HELICOPTERS (1965) LTD.

P.O. BOX 16, PITT MEADOWS, B.C.
CANADA, V0M 1P0

INVOICE N°

0039

PHONE (604) 465-5151

TELEX - 04 - 507500

DATE **August 24, 1979**

P.O. NO.

**Utah Mines,
1600 - 1050 W. Pender St.,
Vancouver, b.c.,
V6E 3S7**

8/27/79

AIRCRAFT Hughes 500C CG-HOP		AREA 8.3	
PILOT Rob Skelly		RATE PER HOUR \$ 325.00	
DATE	FLIGHT TICKET NO.	HOURS	AMOUNT
8/16/79	2611	0.3	\$ 97.50

TERMS

A SERVICE CHARGE OF 1 1/4% PER MONTH, (18% PER ANNUM)
CHARGED ON OVERDUE ACCOUNTS.

PLEASE PAY FROM THIS INVOICE

SUB TOTAL	\$ 97.50
FUEL CHARGES	
MISC.	
INVOICE TOTAL	\$ 97.50

DUE AND PAYABLE WITHIN 10 DAYS

BASES PRINCE GEORGE
(604) 963-9711
WHITEHORSE
(403) 868-5504

GALS. FROM	AT	PER GAL
PILOTS NAME Rob Skelly		
SIGNATURE		
FLIGHT TICKET NO.	N°	2611

Area 8.3



TRANSWEST HELICOPTERS (1965) LTD.

P.O. BOX 16, PITT MEADOWS, B.C.
CANADA, V0M 1P0

INVOICE N°

0069

RECEIVED

DATE August 31, 1979

TELEPHONE (604) 465 - 5151

TELEX - 04 - 507500

SEP 13 1979

P.O. NO.

ORDER TO

Utah Mines Ltd.,
1600 - 1050 W. Pender St.,
Vancouver, b.c.,
V6E 3S7

9/13/79

UTAH MINES LTD.
EXPLORATION DEPT.

Replaces Cancelled
Flight Ticket #1214

AIRCRAFT Hughes 500C C-GHQP		AREA 8.3 - Knight Inlet	
PILOT Pat Quail		RATE PER HOUR \$ 325.00	
DATE	FLIGHT TICKET NO.	HOURS	AMOUNT
8/25/79 to 8/26/79	1216 to 1217	17.2	\$ 5,590.00

Note: Only 1-Way Ferry Flight Charged

SUB TOTAL	\$ 5,590.00
FUEL CHARGES	\$ 64.40
MISC.	
INVOICE TOTAL	\$ 5,654.40

TERMS

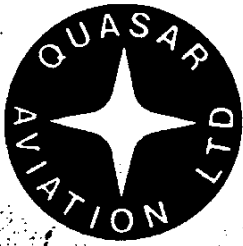
A SERVICE CHARGE OF 1 1/2% PER MONTH, (18% PER ANNUM)
CHARGED ON OVERDUE ACCOUNTS.

PLEASE PAY FROM THIS INVOICE

DUE AND PAYABLE WITHIN 10 DAYS

PRINCE GEORGE
(604) 963-9711
WHITEHORSE
(403) 668-5504

PRINCE GEORGE	AT	PER GAL	TOTAL \$
GALS. FROM	AT	PER GAL	
PILOTS NAME PATRICK QUAIL			
SIGNATURE <i>Pat Quail</i>			T.W. <input type="checkbox"/>
FLIGHT TICKET N° 1217		FUEL	
PRINCE GEORGE	AT	PER GAL	
GALS. FROM	AT	PER GAL	
PRINCE GEORGE	AT	PER GAL	
GALS. FROM	AT	PER GAL	
PRINCE GEORGE	AT	PER GAL	
GALS. FROM	AT	PER GAL	
PILOTS NAME PATRICK QUAIL			
SIGNATURE <i>Pat Quail</i>			
FLIGHT TICKET N° 1214			



QUASAR AVIATION
HELICOPTER CHARTER SERVICE

7600 SUNNYBANK AVE.
RICHMOND, B.C.
V6Y 1G5
(604) 271-5505

RECEIVED

SEP 4 1979 INVOICE

UTAH MINES LTD.
EXPLORATION DEPT. 79182

9/5/79

To: Utah Mines Ltd
1600 - 1050 West Pender Street
Vancouver, B.C.

Date: 27 August 1979

Customer Order No.
"Hoodoo"

Helicopter Type Hughes 500C	Registration C-GWQR	ATC Area 8.3	Period/Order Date 22 - 24 August 1979
---------------------------------------	-------------------------------	------------------------	---

Description	Amount
Flying Hours: 15.0 @ \$295.00	\$ 4,425.00
Fuel Supplied by Quasar: 37.0 gal. @ \$1.05/gal.	38.85
TOTAL	\$ 4,463.85

Hoodoo



OKANAGAN HELICOPTERS LTD.
 4391 AGAR DRIVE, INTERNATIONAL AIRPORT
 VANCOUVER, B.C. V7B 1A5
 TEL. (604) 278-5502 TELEX: 04-355594

FLIGHT DATE: 160979
 LAI MU YR

359077

TYPE OF CONTRACT — X CONTRACT NUMBER TYPE OF FLYING
 HOURLY DAILY MINIMUM 1-29 DAYS 30 DAYS OR MORE

BASE No.	BASE NAME	AIRCRAFT TYPE	AIRCRAFT CODE	AIRCRAFT CALL SIGN	FLIGHT LOCATION	FLIGHT LOCATION No.	IND. CLASS No.
020	Campbell Riv	706B	16	G Q Y U	KNIGHT INLET	5803	
CUSTOMER NAME AND ADDRESS				NAME		NUMBER	
UTAH MINES LTD				PILOT No. 1		4267	
1600-1050 WEST PENDER				PILOT No. 2			
VANCOUVER B.C.				ENGINEER No. 1		174	
P.O. NUMBER				ENGINEER No. 2			
No. PASSENGERS							
FREIGHT LBS.							
CARGO DECLARED VALUE							
3							

OPERATION	TAKE OFF	LAND	FLYING TIME
Campbell Riv - Hoodoo Mtn	16 40	17 41	1.0
HOOODOO LOCAL (SLING CORE BOXES (20))	17 55	18 09	.2
HOOODOO - BCFP KNIGHT INLET (FUEL)	18 35	18 49	.2
BCFP KNIGHT - CAMPBELL RIVER	19 04	19 49	.7

QUANTITY	UNIT	DESCRIPTION	AMOUNT	TOTAL HOURS	TARIFF RATE	AMOUNT
		EXTRA CHARGE OR ADJUSTMENT		2.1		
		TARIFF ZONE CODE	AX		350.00	735.00
		CUSTOMER FUEL HRS.				

TERMS OF PAYMENT ARE NET 30 DAYS FROM DATE OF INVOICE. INTEREST AT 1 1/2% PER MONTH (BEING 18% PER ANNUM) WILL BE CHARGED ON OVERDUE INVOICES.

CUSTOMER NUMBER: 1850277 INVOICE DATE: DAY NO. YR.

OUR FUEL 48.00 @ 1.00 = 48.00
 OUR FUEL GALS. @
 OUR FUEL GALS. @
 OUR OIL 2.1 HRS. @ 1.00 = 2.10

PRINT NAME OF PERSON AUTHORIZED TO SIGN FOR CHARTERER

SIGNED FOR CHARTERER BY: [Signature] SIGNED FOR CARRIER BY: [Signature]

EXTRA CHARGES — SUB TOTAL

TOTAL \$ 785.10

INVOICE



OKANAGAN HELICOPTERS LTD.
 4391 AGAR DRIVE, INTERNATIONAL AIRPORT
 VANCOUVER, B.C. V7B 1A5
 TEL. (604) 278-8502 TELEX: 04-355594

FLIGHT DATE	DAY	MO.	YR.	843884
	19	09	79	
TYPE OF CONTRACT - X		CONTRACT NUMBER		TYPE OF FLYING
DAILY MINIMUM 1-29 DAYS		30 DAYS OR MORE		

BASE No.	BASE NAME	AIRCRAFT TYPE	AIRCRAFT CODE	AIRCRAFT CALL SIGN	FLIGHT LOCATION	FLIGHT LOCATION No.	IND CLASS No.
01210	Campbell River	2060	16	FICQ E	Hoodoo Crk	578	03
CUSTOMER NAME AND ADDRESS				NAME		NUMBER	
UTAH Mining Co				BILL Hill		1321	
1600-1050 West Prud'homme				ENGINEER No. 1		1741	
VANCOUVER, B.C.				ENGINEER No. 2			
P.O. NUMBER	No. PASSENGERS	FREIGHT LBS.	CARGO DECLARED VALUE				
	1						

OPERATION	TAKE OFF	LAND	FLYING TIME
CR - Hoodoo Crk - New Crk - Gravel			.9
- Movie Cam. & 3 mi drums			.1
- CR			.9

BRIDGE CODE	BL	DIV.	SUB	EXTRA CHARGE OR ADJUSTMENT	AMOUNT	NON REV. HRS.	REV. HRS.	TOTAL HOURS	TARIFF RATE	AMOUNT
							1.9		350.00	665.00

TERMS OF PAYMENT ARE NET 30 DAYS FROM DATE OF INVOICE, INTEREST AT 1 1/2% PER MONTH (BEING 18% PER ANNUM) WILL BE CHARGED ON OVERDUE INVOICES.

CUSTOMER NUMBER	INVOICE DATE	DAY	MO.	YR.	OUR FUEL	OUR FUEL	OUR FUEL	OUR OIL
851027					45 GALS @ 1.00			1.9 @ 1.00
THE CARRIAGE OF PASSENGERS, BAGGAGE AND GOODS BY OKANAGAN HELICOPTERS LTD. IS SUBJECT TO THE TERMS, CONDITIONS AND LIMITATIONS OF LIABILITY SET FORTH IN ITS TARIFF (E.G. LIABILITY FOR LOSS OR DAMAGE TO GOODS IS LIMITED TO 50 CENTS PER POUND) FILED WITH THE ATC, AN EXTRACT OF WHICH IS AVAILABLE FOR EXAMINATION AT THE OFFICE OF OKANAGAN HELICOPTERS LTD.								

PRINT NAME OF PERSON AUTHORIZED TO SIGN FOR CHARTERER				EXTRA CHARGES - SUB TOTAL			
SIGNED FOR CHARTERER BY				SIGNED FOR CARRIER BY			
D. Norman				Bill Hill			
TOTAL				\$ 711.90			

INVOICE



OKANAGAN HELICOPTERS LTD.
 4391 AGAR DRIVE, INTERNATIONAL AIRPORT
 VANCOUVER, B.C. V7B 1A5
 TEL: (604) 278-5502 TELEX: 04-355594

FLIGHT DATE	25 09 79		843754
TYPE OF CONTRACT	- X		CONTRACT NUMBER
NO. OF DAILY MINIMUM 1-29 DAYS	30 DAYS OR MORE		TYPE OF FLYING

BASE No.	BASE NAME	AIRCRAFT TYPE	AIRCRAFT CODE	AIRCRAFT CALL SIGN	FLIGHT LOCATION	FLIGHT LOCATION No.	IND. CLASS No.
020	Campbell P. ULM	206B	16	G Q Y U	KNIGHT'S INLET	5803	
CUSTOMER NAME AND ADDRESS				NAME		NUMBER	
UTAH MILLS				PILOT No. 1		5678	
1600-1050 W. PEUDER ST				PILOT No. 2			
VANCOUVER, B.C.				ENGINEER No. 1			
				ENGINEER No. 2			
P.O. NUMBER	No. PASSENGERS	FREIGHT LBS.	CARGO DECLARED VALUE				

OPERATION	TAKE OFF	LAND	FLYING TIME
CA - HUDUD CALL			.8
SLUR, COME SAMPLES + 500 LBS			.4
HUDUD - CA AIRPORT - SAT.			1.0

UNIT	QTY.	UNIT	EXTRA CHARGE OR ADJUSTMENT	AMOUNT	NON REV. HRS.	REV. HRS.	TOTAL HOURS	TARIFF RATE	AMOUNT
				1		2.2	2.2	350.00	770.00

TERMS OF PAYMENT ARE NET 30 DAYS FROM DATE OF INVOICE, INTEREST AT 1 1/2% PER MONTH (BEING 18% PER ANNUM) WILL BE CHARGED ON OVERDUE INVOICES.

CUSTOMER NUMBER: 1850127

INVOICE DATE: DAY MO. YR.

THE CARRIAGE OF PASSENGERS, BAGGAGE AND GOODS BY OKANAGAN HELICOPTERS LTD. IS SUBJECT TO THE TERMS, CONDITIONS AND LIMITATIONS OF LIABILITY SET FORTH IN ITS TARIFF (E.G. LIABILITY FOR LOSS OR DAMAGE TO GOODS IS LIMITED TO 50 CENTS PER POUND) FILED WITH THE ATC. AN EXTRACT OF WHICH IS AVAILABLE FOR EXAMINATION AT THE OFFICE OF OKANAGAN HELICOPTERS LTD.

OUR FUEL (GALS. @)	1.10	55.00
OUR FUEL (GALS. @)		
OUR FUEL (GALS. @)		
OUR OIL (LRS. @)	1.60	2.20

PRINT NAME OF PERSON AUTHORIZED TO SIGN FOR CHARTERER

SIGNED FOR CHARTERER BY: D. Harmon

SIGNED FOR CARRIER BY: [Signature]

EXTRA CHARGES - SUB TOTAL	
TOTAL	\$ 827.20

INVOICE



OKANAGAN HELICOPTERS LTD.
 4391 AGAR DRIVE, INTERNATIONAL AIRPORT
 VANCOUVER, B.C. V7B 1A5
 TEL. (604) 278-5502 TELEX: 04-355594

FLIGHT DATE **280979**

358207

TYPE OF CONTRACT — X CONTRACT NUMBER TYPE OF FLYING
 DAILY WITHIN 1-29 30 DAYS OR MORE

BASE No.	BASE NAME	AIRCRAFT TYPE	AIRCRAFT CODE	AIRCRAFT CALL SIGN	FLIGHT LOCATION	FLIGHT LOCATION No.	IND CLASS No.
9.02	VR Dood	205A38		G O H R	the Knight Inlet	59	03
CUSTOMER NAME AND ADDRESS				PILOT No. 1		NUMBER	
Utah Miner 1600 1050 W. Bender Vancouver B.C.				Hickman		257	
P.O. NUMBER				PILOT No. 2		NUMBER	
				ENGINEER No. 1		NUMBER	
				Tymerich		18573	
No. PASSENGERS				ENGINEER No. 2		NUMBER	
FREIGHT LBS.							
CARGO DECLARED VALUE							

OPERATION	TAKE OFF	LAND	FLYING TIME
VR - Knight Inlet To move shell & equipment return VR			6.8

BLANK CODE	Q.L.	Q.V.	Q.SB	EXTRA CHARGE OR ADJUSTMENT	AMOUNT	NON REV. HRS.	REV. HRS.	TOTAL HOURS	TARIFF RATE	AMOUNT
							68	6.8	850.00	5,780.00

TERMS OF PAYMENT ARE NET 30 DAYS FROM DATE OF INVOICE, INTEREST AT 1 1/2% PER MONTH (BEING 18% PER ANNUM) WILL BE CHARGED ON OVERDUE INVOICES.

CUSTOMER NUMBER **18510127** INVOICE DATE DAY MO. YR.

THE CARRIAGE OF PASSENGERS, BAGGAGE AND GOODS BY OKANAGAN HELICOPTERS LTD IS SUBJECT TO THE TERMS, CONDITIONS AND LIMITATIONS OF LIABILITY SET FORTH IN ITS TARIFF (F.G. LIABILITY FOR LOSS OR DAMAGE TO GOODS IS LIMITED TO 50 CENTS PER POUND) FILED WITH THE ATC. AN EXTRACT OF WHICH IS AVAILABLE FOR EXAMINATION AT THE OFFICE OF OKANAGAN HELICOPTERS LTD.

PRINT NAME OF PERSON AUTHORIZED TO SIGN FOR CHARTERER
 SIGNED FOR CHARTERER *[Signature]* SIGNED FOR CARRIER BY *[Signature]*

OUR FUEL GALS. @	1.00	160.00
OUR FUEL GALS. @		
OUR FUEL GALS. @		
OUR FUEL GALS. @	1.25	8.50
EXTRA CHARGES — SUB TOTAL		
TOTAL	\$	5,948.50

INVOICE



OKANAGAN HELICOPTERS LTD.
 4391 AGAR DRIVE, INTERNATIONAL AIRPORT
 VANCOUVER, B.C. V7B 1A5
 TEL. (604) 278-5502 TELEX: 04-355594

FLIGHT DATE	11/09/79	843792
TYPE OF CONTRACT	X	CONTRACT NUMBER
DAILY MINIMUM 1-29 DAYS	30 DAYS OR MORE	TYPE OF FLYING

BASE No.	BASE NAME	AIRCRAFT TYPE	AIRCRAFT CODE	AIRCRAFT CALL SIGN	FLIGHT LOCATION	FLIGHT LOCATION No.	IND CLASS No.
020	Campbell River	206B	16	GQYU	Knights Inlet	58	03

CUSTOMER NAME AND ADDRESS				NAME		NUMBER	
UTAH MINES LTD				PILOT No. 1		4267	
1600 - 1050 WEST PENDER				PILOT No. 2			
VANCOUVER BC				ENGINEER No. 1		174	
P.O. NUMBER				ENGINEER No. 2			
No. PASSENGERS		FREIGHT LBS.		CARGO DECLARED VALUE			
		600					

OPERATION	TAKE OFF	LAND	FLYING TIME
CAMPBELL RIVER - HOODOO CREEK CAMP	13 42	14 45	1 0
HOODOO CREEK - R.P.P. (KNIGHT INLET)	15 14	15 24	0 2
KNIGHT INLET - SONORA ISLE	15 46	16 16	0 5
MAIL TO: EXPLORATION DEPT. (GROCERIES)			

EXTRA CHARGE OR ADJUSTMENT	AMOUNT	NON REV. HRS.	REV. HRS.	TOTAL HOURS	TARIFF RATE	AMOUNT
			1 7	1 7	350 00	595 00

TERMS OF PAYMENT ARE NET 30 DAYS FROM DATE OF INVOICE, INTEREST AT 1 1/2% PER MONTH (BEING 18% PER ANNUM) WILL BE CHARGED ON OVERDUE INVOICES.

CUSTOMER NUMBER: 1851027

INVOICE DATE: DAY MO. YR.

THE CARRIAGE OF PASSENGERS, BAGGAGE AND GOODS BY OKANAGAN HELICOPTERS LTD. IS SUBJECT TO THE TERMS, CONDITIONS AND LIMITATIONS OF LIABILITY SET FORTH IN ITS TARIFF (E.G. LIABILITY FOR LOSS OR DAMAGE TO GOODS IS LIMITED TO 50 CENTS PER POUND) FILED WITH THE ATC. AN EXTRACT OF WHICH IS AVAILABLE FOR EXAMINATION AT THE OFFICE OF OKANAGAN HELICOPTERS LTD.

OUR FUEL	39 GALS. @	1 00	39 00
OUR FUEL	GALS. @		
OUR FUEL	GALS. @		
OUR OIL	1.7 HRS. @	1 00	1 70

PRINT NAME OF PERSON AUTHORIZED TO SIGN FOR CHARTERER

SIGNED FOR CHARTERER BY: Ken Orleski

SIGNED FOR COMPANY BY: R.S. Scott

EXTRA CHARGES - SUB TOTAL	
TOTAL	\$ 635.70

INVOICE



OKANAGAN HELICOPTERS LTD.
 4391 AGAR DRIVE, INTERNATIONAL AIRPORT
 VANCOUVER, B.C. V7B 1A5
 TEL. (604) 278-5502 TELEX: 04-355594

FLIGHT DATE	JAN	MO	YR.	843592
	16	08	79	
TYPE OF CONTRACT — I		CONTRACT NUMBER		TYPE OF FLYING
HOURS	DAILY MINIMUM 1-29 DAYS	30 DAYS OR MORE		

BASE No.	BASE NAME	AIRCRAFT TYPE	AIRCRAFT CODE	AIRCRAFT CALL SIGN	FLIGHT LOCATION	FLIGHT LOCATION No.	IND. CLASS No.
020	CAMPBELL PULP	206B	16	G9Y4	C.N.	5803	
CUSTOMER NAME AND ADDRESS				NAME		NUMBER	
UTAH MINES LTD				R. HAWTHORNE		5678	
11000 - 1050 W. PLYMOUTH				PILOT No. 1			
VANCOUVER, B.C.				PILOT No. 2			
				ENGINEER No. 1			
				ENGINEER No. 2			
P.O. NUMBER	No. PASSENGERS	FREIGHT LBS.	CARGO DECLARED VALUE				

OPERATION	TAKE OFF	LAND	FLYING TIME
CNLR PICK-UP P.M.			
11000 CNLR, KINLOCH'S INLET	1530		4

INVOICE CODE	CL.	QTY.	UNIT	EXTRA CHARGE OR ADJUSTMENT	AMOUNT	NON REV. HRS.	REV. HRS.	TOTAL HOURS	TARIFF RATE	AMOUNT
							4		350.00	140.00

TERMS OF PAYMENT ARE NET 30 DAYS FROM DATE OF INVOICE, INTEREST AT 1 1/2% PER MONTH (BEING 18% PER ANNUM) WILL BE CHARGED ON OVERDUE INVOICES.

CUSTOMER NUMBER	INVOICE DATE	DAY	MO.	YR.	OUR FUEL GALS. @			
81510217					9	1.00	9.00	
THE CARRIAGE OF PASSENGERS, BAGGAGE AND GOODS BY OKANAGAN HELICOPTERS LTD. IS SUBJECT TO THE TERMS, CONDITIONS AND LIMITATIONS OF LIABILITY SET FORTH IN ITS TARIFF (E.G. LIABILITY FOR LOSS OR DAMAGE TO GOODS IS LIMITED TO 50 CENTS PER POUND) FILED WITH THE ATC, AN EXTRACT OF WHICH IS AVAILABLE FOR EXAMINATION AT THE OFFICE OF OKANAGAN HELICOPTERS LTD.					OUR FUEL GALS. @			
					OUR FUEL GALS. @			
					OUR OIL HRS. @			40
PRINT NAME OF PERSON AUTHORIZED TO SIGN FOR CHARTERER					EXTRA CHARGES — SUB TOTAL			
SIGNED FOR CHARTERER BY					TOTAL \$			
L.P. DEIGHTON					149.40			
SIGNED FOR OWNER BY								
[Signature]								

INVOICE



OKANAGAN HELICOPTERS LTD.
 4391 AGAR DRIVE, INTERNATIONAL AIRPORT
 VANCOUVER, B.C. V7B 1A5
 TEL. (604) 278-5502 TELEX: 04-355594

FLIGHT DATE	DAY	MO	YR	843656
210879				
TYPE OF CONTRACT - X		CONTRACT NUMBER		TYPE OF FLYING
<input checked="" type="checkbox"/> HOURLY	DAILY MINIMUM 1-29 DAYS	30 DAYS OR MORE		

BASE No.	BASE NAME	AIRCRAFT TYPE	AIRCRAFT CODE	AIRCRAFT CALL SIGN	FLIGHT LOCATION	FLIGHT LOCATION No.	IPD CLASS No.
020	Campbell River	206B	16	F.C.Q.E	Head of Knight Islet	5803	
CUSTOMER NAME AND ADDRESS				PILOT No. 1		NUMBER	
UTAH MINES LTD				R. SCOTT		4267	
1600-1050 West Pender				PILOT No. 2			
Vancouver B.C.				ENGINEER No. 1		174	
				ENGINEER No. 2			
P.O. NUMBER	No. PASSENGERS	FREIGHT LBS.	CARGO DECLARED VALUE				
	2						

OPERATION	TAKE OFF	LAND	FLYING TIME
Head of Knight Islet - Hoodoo Mtn	14:52	15:21	05
Hoodoo Local - Perry Camp (Knight Islet)	15:45	16:07	04

SOURCE CODE	Q.L.	DIV.	SUB	EXTRA CHARGE OR ADJUSTMENT	AMOUNT	NON REV. HRS.	REV. HRS.	TOTAL HOURS	TARIFF RATE	AMOUNT
							09			
								350.00		315.00

TERMS OF PAYMENT ARE NET 30 DAYS FROM DATE OF INVOICE, INTEREST AT 1 1/2% PER MONTH (BEING 18% PER ANNUM) WILL BE CHARGED ON OVERDUE INVOICES.

CUSTOMER NUMBER	INVOICE DATE	DAY	MO.	YR.
185101217				

THE CARRIAGE OF PASSENGERS, BAGGAGE AND GOODS BY OKANAGAN HELICOPTERS LTD. IS SUBJECT TO THE TERMS, CONDITIONS AND LIMITATIONS OF LIABILITY SET FORTH IN ITS TARIFF (E.G. LIABILITY FOR LOSS OR DAMAGE TO GOODS IS LIMITED TO 50 CENTS PER POUND) FILED WITH THE ATC, AN EXTRACT OF WHICH IS AVAILABLE FOR EXAMINATION AT THE OFFICE OF OKANAGAN HELICOPTERS LTD.

OUR FUEL	21.00 @	1.00	21.00
OUR FUEL	GALS. @		
OUR FUEL	GALS. @		
OUR OIL	9 HRS. @	1.00	90

PRINT NAME OF PERSON AUTHORIZED TO SIGN FOR CHARTERER
 JOHN NEUBERGER

SIGNED FOR CHARTERER BY *[Signature]*

SIGNED FOR CHARTERER BY *[Signature]*

EXTRA CHARGES - SUB TOTAL	
TOTAL	\$ 336.90

INVOICE

RECEIVED

DEC 17 1979

INVOICE

UTAH MINES LTD.
EXPLORATION DEPT.

D. K. Bragg
3567 west 27th Ave.,
Vancouver, B.C. V6S 1P9

12/19/79

IN ACCOUNT WITH:
Utah Mines Ltd.,
1600 - 1050 W. Pender Street.,
Vancouver B.C. V6E 3S7

Dec. 12 1979

To rent on two plugger drills Aug. 13 to Oct 23 Two and one third months at \$ 250.00 per month	\$ 582.50
Lost	
1 - 4 ft' steel	\$ 25.31
1 bit	\$ 19.24
2 Condensers @ \$ 1.09 each	\$ 2.18
2 coils @ \$ 8.06 each	\$ 16.12
Sharpening 4 bits	\$ 20.00
Total	\$ 665.35

OK 1/21

Howdoo

UTAH MINES LTD. -- EXPLORATION DEPT.					
DISTRIBUTION					
Location	Major	Minor	Act.	Exp.	Amount
00	A338	006 0	0	0	665.35
00		0	0	0	
00		0	0	0	
00		0	0	0	
00		0	0	0	
Date Received			Invoice Amount		665.35
Ext. & Prices			Discount		
Approved by			Amount Payable		
			Check No.		

Kyngemat Duggis Hill.
9/11/79

September 5, 1979

Utah Mines Ltd.
1600 - 1050 West Pender Street
Vancouver, B.C.

RECEIVED

SEP 5 1979

UTAH MINES LTD.
EXPLORATION DEPT.

Knight Inlet Charges

Room & Board:

Deighton	13 2/3 Days
Howe	13 2/3
Kosac	5 1/3
Skally	1 2/3
Zell	8 1/3
Schwidt	8 1/3
Orgecki	4 2/3
Purdy	2 2/3
Quail	<u>1</u>

62 1/3 Days @ 30.00

\$ 1,870.00

Equipment:

Unloading barge August 26		
Hiab - 2 hours @ 25.00	50.00	
Flatdeck - 2 @ 25.00	50.00	
Moving equipment to Hoodoo August 27		
Hiab - 6 @ 25.00	150.00	
Flatdeck - 6 @ 25.00	150.00	
D7 Cat - 2 @ 62.30	<u>124.60</u>	524.60

Labour:

2 hours @ 11.47	22.94	
6 @ 9.645	57.87	
6 @ 10.23	<u>61.38</u>	142.19
Benefits @ 50%	71.10	
Board loss - 14 hours @ 3.45	<u>48.30</u>	<u>261.59</u>

\$ 2,656.19

Kyugnot Logging Ltd.

10/4/79

October 3, 1979

Utah Mines Ltd.
1600 - 1050 West Pender Street
Vancouver, B.C.

KNIGHT INLET CHARGES:

RECEIVED

OCT 4 - 1979

UTAH MINES LTD.
EXPLORATION DEPT

Room & Board:

Deighton	3 days			
Cote	6	2 meals		
Carter	3	1		
Hall	6	2		
McClay	3	1		
Berg	6			
Moony (Pilot)	1			
Ross "	1	2		
Liard "	<u>1</u>	<u>1</u>		
	<u>30</u>	<u>9</u>	33 man days @ 30.00	\$ 990.00

Equipment:

Skidder	4 hours @ 58.50	234.00
Crummy	2 days @ 50.00	100.00
Hiab	11 hours @ 25.00	275.00
Flatdeck	5 hours @ 25.00	125.00

Labour: Unloading boat

3 hours @ 17.205	51.62	
3 @ 14.265	42.80	
6 @ 14.4675	86.80	
2 @ 10.78	21.56	
2 @ 16.17	<u>32.34</u>	235.12
Benefits @ 50%		117.56
Board loss - 16 hours @ 3.45		<u>55.20</u> 407.88
		<hr/>
		<u>\$ 2,131.88</u>

Kyuqmot Logging Ltd.

10/24/79

October 24, 1979

Utah Mines Ltd.
1600 - 1050 West Pender Street
Vancouver

Knight Inlet Charges to October 15

<u>Board:</u>	Deighton	4 Days	1 Meal
	Howe	4	1
	Crawfield	3	2
	Cote	3	2
	Berg	3	2
	Carter	3	2
	Crowe		2

24 man days @ 30.00 \$ 720.00

Phone

6.50

Equipment:

Lowbed	- 8 hours @ 68.50	548.00
FE Loader	- 4 @ 68.50	274.00
Hiab	- 4½ @ 25.00	112.50
Crummy	- 2 days @ 50.00	100.00

Labour:

8 hours @ 10.78	86.24	
4 @ 10.23	40.92	
4½ @ 9.61	43.24	
3½ @ 11.47	<u>40.14</u>	210.54
Benefits @ 50%		105.27
Board loss - 20 hours @ 3.45		<u>69.00</u>
		<u>384.81</u>
		<u>\$ 2,145.81</u>

RECEIVED

OCT 24 1979

UTAH MINES LTD.
EXPLORATION DEPT.

HOLE NO 79-2

COLLAR ELEV.:

COORDINATES:

INCLINATION -60°

GROUND ELEV.:

N E

BEARING 291°

PROJECT: HOODOO CREEK

DATE STARTED: SEPT 19, 1979

DATE FINISHED: SEPT 26, 1979

TOTAL DEPTH: 243.2 M.

PAGE NO.: 1 OF 17

REF. TO CLAIM CORNER:

SCALE: 1cm:1M

LOGGED BY: G.E.N. & J.R.D.

SECTION	ALTERATION				FRACTURING	MINERAL GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP. INT	ESTI-MATED	
	Silica	sericite	Clay	Chl/ep												
0							0-1.5 <u>Over burden</u> & <u>Rock Rubble</u>									
						limonite Fr.	1.5-2.8 <u>Quartz Vein.</u> mod limonite on Fr.			1.5			1.5			
					mod.					2.1						
5					mod.	<ul style="list-style-type: none"> limonite Fr. Amoellin Fspar → clay Fspar → ser + py Groundmass Qtz + ser pervasive str lim. py blackish blue oxide? after cpy? cpy speck. str dissem py 3mm Qtz py. mod lim 1mm Qtz py vuggy Qtz, py. py w/ black tarnish. mod to str lim. 	2.8-19.5 <u>Bug Hole Quartz Porphyry #9</u> Lt grey to white colored porphyritic rock. Contains ~40% 2-3mm whitish fsp phenos → ser + clay py. These phenos have been leached out to various degrees (dependent on alteration) giving the rock a vuggy appearance (Hence the term "Bug hole"), also -10-15% 2-3mm rounded to diamond shaped Qtz phenos (invariably cracked). The above is set in a greyish groundmass of Qtz-ser. Dissem py ~4% as well as Fr fills. A black blue mineral after cpy is also present. Sometimes as tarnish on py. Some cpy grains visible.	4%				3.3		2.8		
										4.3						
										5.8			5.8			
										7.9						
										9.4			8.8			
10										11.0						
										12.5			11.8			
										14.0						
15													14.8			

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8218
NO.

PART lot 2

HOLE NO 79-2

COLLAR ELEV.:

COORDINATES:

INCLINATION -60°

GROUND ELEV.:

N E

BEARING: 291°

PROJECT: Hoodoo Creek

DATE STARTED: Sept 19, 1979

DATE FINISHED:

TOTAL DEPTH:

PAGE NO. 2 of 17

REF. TO CLAIM CORNER:

SCALE: 1cm:1m

LOGGED BY: G.E.N.

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP INT	ESTI-MATED	
	Silica	sericite	Clay	Chl-ep													
15								<p><u>Bug Hole Quartz Porphyry #9 Cont'd.</u></p> <p>line py, qtz.</p> <p>wk dissemin epy.</p> <p>sericitic Frag w/ py.</p> <p>Fspar → gran ser (chl)</p> <p>wk dissemin epy & blebs</p> <p>chl str grind ra @ contact</p> <p>fine grained nagi plagioclase minor fsp. siliceous gndmass near contact</p>		15.5							
										4-5	16.2						
											17.7			17.0			
											19.2			19.5			
20								<p>19.5-22.5 <u>Quartz Biotite Feldspar Gneiss #1</u></p> <p>wkly foliated gneiss w/ granular texture of qtz, biot, feldspar. rock is strly silicified near contact w/ chl. Some patches strong sericite. strong dissemin py w/ minor specks epy. Silicification weakens away from upper contact.</p> <p>pyt minor epy = chl.</p> <p>str silicification @ contact w/ chl</p> <p>anisocisity w/ 5% to CA</p>		4	21.0						
														22.5			
								<p>22.5-22.9 <u>Quartz Feldspar Hornblende Porphyry.</u></p> <p>H greenish colored rock - 60% 4-5mm anhed plagiophanos → chl clay, 5% 3-4mm cracked qtz phenos. 5% hb → chl phenos. contained in a med. str. siliceous gndmass → chl w/ 2% dissemin py.</p> <p>70% to CA.</p> <p>hb → ser</p> <p>Fspar → clay chl</p> <p>dissem Mt; wk py.</p> <p>Grndmass - chl, clay.</p> <p>f. grain w/ flow text. sharp @ 45</p>		2	22.9						
25								<p>22.9-25.7 <u>Feldspar Hornblende Porphyry #10</u></p> <p>Lt greyish green colored rock w/ 40% 3mm anhed feldspar phenos → clay - chl. 5% whitish 1mm hornblende phenos → ser^{tt}. In a gray green grndmass of qtz & f. feldspar → chl clay ser. wkly dissemin f. Mt minor dissemin. py. wk plagiocl</p> <p>hb latns → ser⁺</p> <p>clay chl alter fsp clay + ser hb → chl. sharp @ 45</p>		<0.5%	25.9			25.7			
														26.3			
								<p>25.7-28.3 <u>Alter'd Quartz Feldspar Hornblende Porphyry</u></p> <p>Similar to Bug Hole qtz porphy - Not as alter'd - w/ remnant hb phenos → ser 10% 5% 2-5mm cracked qtz phenos. 5% fsp → ser^{tt} clay - 4% py as dissemin. Fr fill med. sil. gndmass.</p> <p>good py stockwork</p> <p>w/ 30% C.A.</p>		2-3%	27.7						
														28.3			
30								<p>28.3-30.0 <u>Silicified dike</u></p> <p>description next page</p> <p>qtz py & v-f. MoS₂</p>		6%	29.3						

NGWL

HOLE NO: 79-2

COLLAR ELEV.:

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INCLINATION -60°

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N E

BEARING 291°

PROJECT: Hoodoo Creek

DATE STARTED: Sept 19, 1979

DATE FINISHED:

TOTAL DEPTH:

PAGE NO.: 3 of 17

REF. TO CLAIM CORNER:

SCALE: 1cm:1m

LOGGED BY: GEN.

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP. INT	ESTI-MATED
	silica	sericite	clay	chl-e-p												
30							<p>qtz, py, MoS₂ vns. MoS₂ rim 1cm qtz un.</p> <p>bio → chl =</p> <p>fsp → clay -</p> <p>wk lim</p> <p>Gneissosity @ 20°/40°</p> <p>ep</p>	<p><u>Silicified Dike #10? Cont'd</u></p> <p>Lt grey strong silicified dike. Strong Fr w/ py & qtz py infilling. Minor remnant hb letters → ser; fsp → pheno → ser-qtz. Contain % py.</p>		30.0						
							<p>30.0 - 39.3</p> <p><u>Quartz Biotite Feldspar Gneiss #1</u></p> <p>Biot rich gneiss - wk gneissosity, intergrowth w/ qtz, fsp. - upper contact silicified w/ some ser, also qtz, py, MoS₂ vns.</p>		m	32.3				33.0		
35							<p>str limonite</p> <p>34.1 - 35.1 <u>Fault</u></p> <p>Rock Rubble.</p>			35.3				36.0		
							<p>str lim</p> <p>lum qtz py, traces MoS₂ trace py.</p> <p>1cm py un.</p> <p>35.1 - 39.3 <u>Quartz Biotite Feldspar Gneiss #1</u></p> <p>str Fract rock. near Fault w/ str lim; py.</p>			38.4						
40							<p>Gneissosity @ 70°/40°</p> <p>str broken; Fr.</p> <p>39.3 - 40.0 <u>Feldspar Porphyry</u></p> <p>Grey colored strongly siliceous rock. 30% 2-3mm feldspar phenos → clay set in a grey siliceous matrix (some clay) Good py stockwork</p>		3%	39.9			39.3			
							<p>Sharp @ 40° to CA.</p> <p>py qtz MoS₂ qtz un py stockwork trace MoS₂</p> <p>40.0 - 41.4 <u>Quartz Biotite Feldspar Gneiss #1</u></p> <p>ser qtz 1mm vns.</p> <p>4mm qtz py</p> <p>fsp → clay</p>		5%	41.4			40.0			
							<p>2cm qtz vns.</p> <p>str MoS₂ / Fr</p> <p>41.4 - 43.1 <u>Bug Hole Quartz Porphyry.</u></p> <p>v-str Fr; broken rock. str qtz ser alter'n rx almost completely gone. minor qtz remain str vuggy; w/ MoS₂ Fr.</p>		m				41.4			
							<p>str broken; Fr. rx.</p> <p>43.1 - <u>Quartz Biotite Feldspar Gneiss #1</u></p>		<1				43.1			
45							<p>2m qtz vns</p> <p>43.1 - 42.6 <u>biot rich gneiss</u></p> <p>42.6 - 45.8 <u>inter banded qtz & biot qtz feldspar, py</u></p> <p>Gneissosity 20°-40°</p>		2	44.2						

NQWL

HOLE NO: 79-2

COLLAR ELEV.:

COORDINATES:

INCLINATION -60°

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N E

BEARING 291°

PROJECT: Hoodoo Creek

DATE STARTED: Sept 19, 1979

DATE FINISHED:

TOTAL DEPTH:

PAGE NO: 4 of 17

REF TO CLAIM CORNER:

SCALE: 1cm/1m

LOGGED BY: GEN

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP INT	ESTI-MATED	
	Silica	Sericite	Clay	CHL-EP													
45							<p>vegy w/ py - conchiosity 2/10 to c.a.</p> <p>vegy 9/2 vein - heavy py MIN STAIN ON FRACTURES - py vein - heavy calc on ground MIN STAINED</p>	<p>Quartz Biotite Feldspar Gneiss Contd #1</p> <p>- mafic content increases to 30% Fault?</p>									
50							<p>breccia section</p> <p>contact 60' zone axis</p> <p>py py mod 9/2 vein</p>	<p>- containing bands of 9/2 feld perphyry - with feldspar altered to sericite - KALIN 3% interstitial pyrite</p> <p>- breccia - fragments from 3 mm to 4 cm in size - mostly a sericite 9/2 feld perphyry altered about 1-2% py - interstitial pyrite 2-3% mod (5%) matrix compaction sericitized.</p> <p>51.5</p>									
55							<p>single thin fault</p> <p>py py 9/2</p> <p>py py mod 9/2 vein</p>	<p>QUARTZ FELDSPAR BIOTITE PERPHYRY (R)</p> <p>- 3 mm QUARTZ EYES VIRTUALLY ALL THAT REMAINS IN A WHITE STAINING & SERICITE GROUNDMASS - sericite matrix 2-3 mm KALIN IN BELLON AFTER FELDSPAR AND BIOTITE TO SERICITE AND KALIN (probably 2-3%) 2% disseminated pyrite</p> <p>53.0 - QUARTZ-BIOTITE FELDSPAR GNEISS #1</p> <p>PORTIONED IN 36° TO CORE AXIS - BIOTITE TO CHLORITE ALMOST 100% SERICITIZED SECTIONS ONLY ARE ACTUALLY AND HEAVY HEAVILY PYRITIZED 5-8% OTHERWISE AS PYRITIZED IN FOLIATION PLANES 1-2% AND BY X CUTTING VENS 1-2%</p>									
60							<p>py py heavy 9/2 vein</p> <p>zone 15m 36° core axis</p> <p>py 9/2 py</p> <p>- according to sample silicification + THIS MIGHT PYRITE 5%</p>										

NQWL

HOLE NO 79-2

COLLAR ELEV.:

COORDINATES

INCLINATION -60°

GROUND ELEV.:

N E

BEARING 291°

PROJECT Hoodoo Creek

DATE STARTED: Sept 19, 1979

DATE FINISHED

TOTAL DEPTH:

PAGE NO. 5 of 17

REF TO CLAIM CORNER

SCALE: 1cm:10m

LOGGED BY: GEN.

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP INT	ESTI-MATED
	silica	sericite	clay	chl-ep												
60								<p>SEE LOG SHEET FOR 60-65M - 65-70M - 70-75M - 75-80M - 80-85M - 85-90M - 90-95M - 95-100M - 100-105M - 105-110M - 110-115M - 115-120M - 120-125M - 125-130M - 130-135M - 135-140M - 140-145M - 145-150M - 150-155M - 155-160M - 160-165M - 165-170M - 170-175M - 175-180M - 180-185M - 185-190M - 190-195M - 195-200M - 200-205M - 205-210M - 210-215M - 215-220M - 220-225M - 225-230M - 230-235M - 235-240M - 240-245M - 245-250M - 250-255M - 255-260M - 260-265M - 265-270M - 270-275M - 275-280M - 280-285M - 285-290M - 290-295M - 295-300M - 300-305M - 305-310M - 310-315M - 315-320M - 320-325M - 325-330M - 330-335M - 335-340M - 340-345M - 345-350M - 350-355M - 355-360M - 360-365M - 365-370M - 370-375M - 375-380M - 380-385M - 385-390M - 390-395M - 395-400M - 400-405M - 405-410M - 410-415M - 415-420M - 420-425M - 425-430M - 430-435M - 435-440M - 440-445M - 445-450M - 450-455M - 455-460M - 460-465M - 465-470M - 470-475M - 475-480M - 480-485M - 485-490M - 490-495M - 495-500M - 500-505M - 505-510M - 510-515M - 515-520M - 520-525M - 525-530M - 530-535M - 535-540M - 540-545M - 545-550M - 550-555M - 555-560M - 560-565M - 565-570M - 570-575M - 575-580M - 580-585M - 585-590M - 590-595M - 595-600M - 600-605M - 605-610M - 610-615M - 615-620M - 620-625M - 625-630M - 630-635M - 635-640M - 640-645M - 645-650M - 650-655M - 655-660M - 660-665M - 665-670M - 670-675M - 675-680M - 680-685M - 685-690M - 690-695M - 695-700M - 700-705M - 705-710M - 710-715M - 715-720M - 720-725M - 725-730M - 730-735M - 735-740M - 740-745M - 745-750M - 750-755M - 755-760M - 760-765M - 765-770M - 770-775M - 775-780M - 780-785M - 785-790M - 790-795M - 795-800M - 800-805M - 805-810M - 810-815M - 815-820M - 820-825M - 825-830M - 830-835M - 835-840M - 840-845M - 845-850M - 850-855M - 855-860M - 860-865M - 865-870M - 870-875M - 875-880M - 880-885M - 885-890M - 890-895M - 895-900M - 900-905M - 905-910M - 910-915M - 915-920M - 920-925M - 925-930M - 930-935M - 935-940M - 940-945M - 945-950M - 950-955M - 955-960M - 960-965M - 965-970M - 970-975M - 975-980M - 980-985M - 985-990M - 990-995M - 995-1000M - 1000-1005M - 1005-1010M - 1010-1015M - 1015-1020M - 1020-1025M - 1025-1030M - 1030-1035M - 1035-1040M - 1040-1045M - 1045-1050M - 1050-1055M - 1055-1060M - 1060-1065M - 1065-1070M - 1070-1075M - 1075-1080M - 1080-1085M - 1085-1090M - 1090-1095M - 1095-1100M - 1100-1105M - 1105-1110M - 1110-1115M - 1115-1120M - 1120-1125M - 1125-1130M - 1130-1135M - 1135-1140M - 1140-1145M - 1145-1150M - 1150-1155M - 1155-1160M - 1160-1165M - 1165-1170M - 1170-1175M - 1175-1180M - 1180-1185M - 1185-1190M - 1190-1195M - 1195-1200M - 1200-1205M - 1205-1210M - 1210-1215M - 1215-1220M - 1220-1225M - 1225-1230M - 1230-1235M - 1235-1240M - 1240-1245M - 1245-1250M - 1250-1255M - 1255-1260M - 1260-1265M - 1265-1270M - 1270-1275M - 1275-1280M - 1280-1285M - 1285-1290M - 1290-1295M - 1295-1300M - 1300-1305M - 1305-1310M - 1310-1315M - 1315-1320M - 1320-1325M - 1325-1330M - 1330-1335M - 1335-1340M - 1340-1345M - 1345-1350M - 1350-1355M - 1355-1360M - 1360-1365M - 1365-1370M - 1370-1375M - 1375-1380M - 1380-1385M - 1385-1390M - 1390-1395M - 1395-1400M - 1400-1405M - 1405-1410M - 1410-1415M - 1415-1420M - 1420-1425M - 1425-1430M - 1430-1435M - 1435-1440M - 1440-1445M - 1445-1450M - 1450-1455M - 1455-1460M - 1460-1465M - 1465-1470M - 1470-1475M - 1475-1480M - 1480-1485M - 1485-1490M - 1490-1495M - 1495-1500M - 1500-1505M - 1505-1510M - 1510-1515M - 1515-1520M - 1520-1525M - 1525-1530M - 1530-1535M - 1535-1540M - 1540-1545M - 1545-1550M - 1550-1555M - 1555-1560M - 1560-1565M - 1565-1570M - 1570-1575M - 1575-1580M - 1580-1585M - 1585-1590M - 1590-1595M - 1595-1600M - 1600-1605M - 1605-1610M - 1610-1615M - 1615-1620M - 1620-1625M - 1625-1630M - 1630-1635M - 1635-1640M - 1640-1645M - 1645-1650M - 1650-1655M - 1655-1660M - 1660-1665M - 1665-1670M - 1670-1675M - 1675-1680M - 1680-1685M - 1685-1690M - 1690-1695M - 1695-1700M - 1700-1705M - 1705-1710M - 1710-1715M - 1715-1720M - 1720-1725M - 1725-1730M - 1730-1735M - 1735-1740M - 1740-1745M - 1745-1750M - 1750-1755M - 1755-1760M - 1760-1765M - 1765-1770M - 1770-1775M - 1775-1780M - 1780-1785M - 1785-1790M - 1790-1795M - 1795-1800M - 1800-1805M - 1805-1810M - 1810-1815M - 1815-1820M - 1820-1825M - 1825-1830M - 1830-1835M - 1835-1840M - 1840-1845M - 1845-1850M - 1850-1855M - 1855-1860M - 1860-1865M - 1865-1870M - 1870-1875M - 1875-1880M - 1880-1885M - 1885-1890M - 1890-1895M - 1895-1900M - 1900-1905M - 1905-1910M - 1910-1915M - 1915-1920M - 1920-1925M - 1925-1930M - 1930-1935M - 1935-1940M - 1940-1945M - 1945-1950M - 1950-1955M - 1955-1960M - 1960-1965M - 1965-1970M - 1970-1975M - 1975-1980M - 1980-1985M - 1985-1990M - 1990-1995M - 1995-2000M - 2000-2005M - 2005-2010M - 2010-2015M - 2015-2020M - 2020-2025M - 2025-2030M - 2030-2035M - 2035-2040M - 2040-2045M - 2045-2050M - 2050-2055M - 2055-2060M - 2060-2065M - 2065-2070M - 2070-2075M - 2075-2080M - 2080-2085M - 2085-2090M - 2090-2095M - 2095-2100M - 2100-2105M - 2105-2110M - 2110-2115M - 2115-2120M - 2120-2125M - 2125-2130M - 2130-2135M - 2135-2140M - 2140-2145M - 2145-2150M - 2150-2155M - 2155-2160M - 2160-2165M - 2165-2170M - 2170-2175M - 2175-2180M - 2180-2185M - 2185-2190M - 2190-2195M - 2195-2200M - 2200-2205M - 2205-2210M - 2210-2215M - 2215-2220M - 2220-2225M - 2225-2230M - 2230-2235M - 2235-2240M - 2240-2245M - 2245-2250M - 2250-2255M - 2255-2260M - 2260-2265M - 2265-2270M - 2270-2275M - 2275-2280M - 2280-2285M - 2285-2290M - 2290-2295M - 2295-2300M - 2300-2305M - 2305-2310M - 2310-2315M - 2315-2320M - 2320-2325M - 2325-2330M - 2330-2335M - 2335-2340M - 2340-2345M - 2345-2350M - 2350-2355M - 2355-2360M - 2360-2365M - 2365-2370M - 2370-2375M - 2375-2380M - 2380-2385M - 2385-2390M - 2390-2395M - 2395-2400M - 2400-2405M - 2405-2410M - 2410-2415M - 2415-2420M - 2420-2425M - 2425-2430M - 2430-2435M - 2435-2440M - 2440-2445M - 2445-2450M - 2450-2455M - 2455-2460M - 2460-2465M - 2465-2470M - 2470-2475M - 2475-2480M - 2480-2485M - 2485-2490M - 2490-2495M - 2495-2500M - 2500-2505M - 2505-2510M - 2510-2515M - 2515-2520M - 2520-2525M - 2525-2530M - 2530-2535M - 2535-2540M - 2540-2545M - 2545-2550M - 2550-2555M - 2555-2560M - 2560-2565M - 2565-2570M - 2570-2575M - 2575-2580M - 2580-2585M - 2585-2590M - 2590-2595M - 2595-2600M - 2600-2605M - 2605-2610M - 2610-2615M - 2615-2620M - 2620-2625M - 2625-2630M - 2630-2635M - 2635-2640M - 2640-2645M - 2645-2650M - 2650-2655M - 2655-2660M - 2660-2665M - 2665-2670M - 2670-2675M - 2675-2680M - 2680-2685M - 2685-2690M - 2690-2695M - 2695-2700M - 2700-2705M - 2705-2710M - 2710-2715M - 2715-2720M - 2720-2725M - 2725-2730M - 2730-2735M - 2735-2740M - 2740-2745M - 2745-2750M - 2750-2755M - 2755-2760M - 2760-2765M - 2765-2770M - 2770-2775M - 2775-2780M - 2780-2785M - 2785-2790M - 2790-2795M - 2795-2800M - 2800-2805M - 2805-2810M - 2810-2815M - 2815-2820M - 2820-2825M - 2825-2830M - 2830-2835M - 2835-2840M - 2840-2845M - 2845-2850M - 2850-2855M - 2855-2860M - 2860-2865M - 2865-2870M - 2870-2875M - 2875-2880M - 2880-2885M - 2885-2890M - 2890-2895M - 2895-2900M - 2900-2905M - 2905-2910M - 2910-2915M - 2915-2920M - 2920-2925M - 2925-2930M - 2930-2935M - 2935-2940M - 2940-2945M - 2945-2950M - 2950-2955M - 2955-2960M - 2960-2965M - 2965-2970M - 2970-2975M - 2975-2980M - 2980-2985M - 2985-2990M - 2990-2995M - 2995-3000M - 3000-3005M - 3005-3010M - 3010-3015M - 3015-3020M - 3020-3025M - 3025-3030M - 3030-3035M - 3035-3040M - 3040-3045M - 3045-3050M - 3050-3055M - 3055-3060M - 3060-3065M - 3065-3070M - 3070-3075M - 3075-3080M - 3080-3085M - 3085-3090M - 3090-3095M - 3095-3100M - 3100-3105M - 3105-3110M - 3110-3115M - 3115-3120M - 3120-3125M - 3125-3130M - 3130-3135M - 3135-3140M - 3140-3145M - 3145-3150M - 3150-3155M - 3155-3160M - 3160-3165M - 3165-3170M - 3170-3175M - 3175-3180M - 3180-3185M - 3185-3190M - 3190-3195M - 3195-3200M - 3200-3205M - 3205-3210M - 3210-3215M - 3215-3220M - 3220-3225M - 3225-3230M - 3230-3235M - 3235-3240M - 3240-3245M - 3245-3250M - 3250-3255M - 3255-3260M - 3260-3265M - 3265-3270M - 3270-3275M - 3275-3280M - 3280-3285M - 3285-3290M - 3290-3295M - 3295-3300M - 3300-3305M - 3305-3310M - 3310-3315M - 3315-3320M - 3320-3325M - 3325-3330M - 3330-3335M - 3335-3340M - 3340-3345M - 3345-3350M - 3350-3355M - 3355-3360M - 3360-3365M - 3365-3370M - 3370-3375M - 3375-3380M - 3380-3385M - 3385-3390M - 3390-3395M - 3395-3400M - 3400-3405M - 3405-3410M - 3410-3415M - 3415-3420M - 3420-3425M - 3425-3430M - 3430-3435M - 3435-3440M - 3440-3445M - 3445-3450M - 3450-3455M - 3455-3460M - 3460-3465M - 3465-3470M - 3470-3475M - 3475-3480M - 3480-3485M - 3485-3490M - 3490-3495M - 3495-3500M - 3500-3505M - 3505-3510M - 3510-3515M - 3515-3520M - 3520-3525M - 3525-3530M - 3530-3535M - 3535-3540M - 3540-3545M - 3545-3550M - 3550-3555M - 3555-3560M - 3560-3565M - 3565-3570M - 3570-3575M - 3575-3580M - 3580-3585M - 3585-3590M - 3590-3595M - 3595-3600M - 3600-3605M - 3605-3610M - 3610-3615M - 3615-3620M - 3620-3625M - 3625-3630M - 3630-3635M - 3635-3640M - 3640-3645M - 3645-3650M - 3650-3655M - 3655-3660M - 3660-3665M - 3665-3670M - 3670-3675M - 3675-3680M - 3680-3685M - 3685-3690M - 3690-3695M - 3695-3700M - 3700-3705M - 3705-3710M - 3710-3715M - 3715-3720M - 3720-3725M - 3725-3730M - 3730-3735M - 3735-3740M - 3740-3745M - 3745-3750M - 3750-3755M - 3755-3760M - 3760-3765M - 3765-3770M - 3770-3775M - 3775-3780M - 3780-3785M - 3785-3790M - 3790-3795M - 3795-3800M - 3800-3805M - 3805-3810M - 3810-3815M - 3815-3820M - 3820-3825M - 3825-3830M - 3830-3835M - 3835-3840M - 3840-3845M - 3845-3850M - 3850-3855M - 3855-3860M - 3860-3865M - 3865-3870M - 3870-3875M - 3875-3880M - 3880-3885M - 3885-3890M - 3890-3895M - 3895-3900M - 3900-3905M - 3905-3910M - 3910-3915M - 3915-3920M - 3920-3925M - 3925-3930M - 3930-3935M - 3935-3940M - 3940-3945M - 3945-3950M - 3950-3955M - 3955-3960M - 3960-3965M - 3965-3970M - 3970-3975M - 3975-3980M - 3980-3985M - 3985-3990M - 3990-3995M - 3995-4000M - 4000-4005M - 4005-4010M - 4010-4015M - 4015-4020M - 4020-4025M - 4025-4030M - 4030-4035M - 4035-4040M - 4040-4045M - 4045-4050M - 4050-4055M - 4055-4060M - 4060-4065M - 4065-4070M - 4070-4075M - 4075-4080M - 4080-4085M - 4085-4090M - 4090-4095M - 4095-4100M - 4100-4105M - 4105-4110M - 4110-4115M - 4115-4120M - 4120-4125M - 4125-4130M - 4130-4135M - 4135-4140M - 4140-4145M - 4145-4150M - 4150-4155M - 4155-4160M - 4160-4165M - 4165-4170M - 4170-4175M - 4175-4180M - 4180-4185M - 4185-4190M - 4190-4195M - 4195-4200M - 4200-4205M - 4205-4210M - 4210-4215M - 4215-4220M - 4220-4225M - 4225-4230M - 4230-4235M - 4235-4240M - 4240-4245M - 4245-4250M - 4250-4255M - 4255-4260M - 4260-4265M - 4265-4270M - 4270-4275M - 4275-4280M - 4280-4285M - 4285-4290M - 4290-4295M - 4295-4300M - 4300-4305M - 4305-4310M - 4310-4315M - 4315-4320M - 4320-4325M - 4325-4330M - 4330-4335M - 4335-4340M - 4340-4345M - 4345-4350M - 4350-4355M - 4355-4360M - 4360-4365M - 4365-4370M - 4370-4375M - 4375-4380M - 4380-4385M - 4385-4390M - 4390-4395M - 4395-4400M - 4400-4405M - 4405-4410M - 4410-4415M - 4415-4420M - 4420-4425M - 4425-4430M - 4430-4435M - 4435-4440M - 4440-4445M - 4445-4450M - 4450-4455M - 4455-4460M - 4460-4465M - 4465-4470M - 4470-4475M - 4475-4480M - 4480-4485M - 4485-4490M - 4490-4495M - 4495-4500M - 4500-4505M - 4505-4510M - 4510-4515M - 4515-4520M - 4520-4525M - 4525-4530M - 4530-4535M - 4535-4540M - 4540-4545M - 4545-4550M - 4550-4555M - 4555-4560M - 4560-4565M - 4565-4570M - 4570-4575M - 4575-4580M - 4580-4585M - 4585-4590M - 4590-4595M - 4595-4600M - 4600-4605M - 4605-4610M - 4610-4615M - 4615-4620M - 4620-4625M - 4625-4630M - 4630-4635M - 4635-4640M - 4640-4645M - 4645-4650M - 4650-4655M - 4655-4660M - 4660-4665M - 4665-4670M - 4670-4675M - 4675-4680M - 4680-4685M - 4685-4690M - 4690-4695M - 4695-4700M - 4700-4705M - 4705-4710M - 4710-4715M - 4715-4720M - 4720-4725M - 4725-4730M - 4730-4735M - 4735-4740M - 4740-4745M - 4745-4750M - 4750-4755M - 4755-4760M - 4760-4765M - 4765-4770M - 4770-4775M - 4775-4780M - 4780-4785M - 4785-4790M - 4790-4795M - 4795-4800M - 4800-4805M - 4805-4810M - 4810-4815M - 4815-4820M - 4820-4825M - 4825-4830M - 4830-4835M - 4835-4840M - 4840-4845M - 4845-4850M - 4850-4855M - 4855-4860M - 4860-4865M - 4865-4870M - 4870-4875M - 4875-4880M - 4880-4885M - 4885-4890M - 4890-4895M - 4895-4900M - 4900-4905M - 4905-4910M - 4910-4915M - 4915-4920M - 4920-4925M - 4925-4930M - 4930-4935M - 4935-4940M - 4940-4945M - 4945-4950M - 4950-4955M - 4955-4960M - 4960-4965M - 4965-4970M - 4970-4975M - 4975-4980M - 4980-4985M - 4985-4990M - 4990-4995M - 4995-5000M - 5000-5005M - 5005-501</p>								

HOLE NO. 79-2

COLLAR ELEV.:

COORDINATES:

INCLINATION -60

GROUND ELEV.:

N. E.

BEARING 291°

PROJECT: Hoodoo Creek

DATE STARTED: Sept 19, 1979

DATE FINISHED:

TOTAL DEPTH:

PAGE NO.: 7 OF 17

REF. TO CLAIM CORNER:

SCALE: 1cm: 1m

LOGGED BY JRB.

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP INT	ESTI-MATED
	Silica	seritise	clay	chl-eP												
90								<p>QUARTZ VEIN</p> <p>MUSCOY QZ BY SPY VEIN</p> <p>AT VEIN OR STATE NOT DOWN</p> <p>- GOUGE - FINEST GRUNNED AND STRAINED</p>								
95								<p>BADLY SOUNDED GROUND</p> <p>AND STRAINED</p> <p>92.2 QUARTZ MONZONITE INTRUSIVE UNIT 5'</p> <p>EQUIGRANULAR QUARTZ MONZONITE WITH BIFURCATED</p> <p>ALTERED TO CALCITE AND OR SERICITE AND CONTAINING 1-2% DISSEMINATED PYRITE FRAGMENTS PARTIALLY ALIGNED & CLUSTERS</p> <p>92.9 GNEISS - UNIT 3 QUARTZ Biotite FELDSPAR</p> <p>AS ABOVE</p>								
100								<p>BADLY SOUNDED GROUND</p> <p>RUSTY MEDIUM AND STRAIN</p>								
105								<p>- BADLY SOUNDED GROUND</p> <p>RUSTY MEDIUM AND STRAIN</p> <p>- WHICH SECTION OF GRANULITE UNIT 2 - 1/2 M.</p>								

MONZONITE TO GROUND 410 / M

PYRITE

NQWL

HOLE NO 49-2

PROJECT: *Madoc Creek*

PAGE NO.: 8 OF 17

COLLAR ELEV.:

GROUND ELEV.:

DATE STARTED: *Sept 19, 1979*

REF. TO CLAIM CORNER:

COORDINATES:

N E

DATE FINISHED:

SCALE:

INCLINATION: *-60°*BEARING: *291°*

TOTAL DEPTH:

LOGGED BY: *J.R.D.*

SECTION	ALTERATION				FRACTURING	MINERAL GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP INT	ESTI-MATED
	SOIL	SPALLS	CLAY	CHL - EPID											
105															
							90								
							91								
							92								
							93								
							94								
							95								
							96								
							97								
							98								
							99								
							100								
							101								
							102								
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							117								
							118								
							119								
							120								
							121								
							122								
							123								
							124								
							125								
							126								
							127								
							128								
							129								
							130								

BRICKY BRANCHED GROUND
POOR CORE RECOVERY

CONTACT 60° TO CORE AXIS
1.3M UP STRIKE SLIP RD.
1.4M ABL CORE SHOW
GROUND

BRICKY BRANCHED GROUND
FACULTY'S RUSY & NW STRIKE SLIP
WELL CHARTERED

90
QUARTZ VEIN OR SILECIOUS ZONE
EARLIEST TEMPERATURE SILICA BUT 10-20% LIGHT GREEN SERICITE
PATCHES AND MINOR 2ND ORDER 1% DISSEMINATED PYRITE
MA STRIKE OF CONTACTS NEARBY ASSUMED BY BRICKY BRANCHED

91
GRANODIORITE - UNIT 2 AND QUARTZ BIOTITE - FRODOVING GNEISS UNIT
GRANODIORITE COMPLETELY CHARACTERIZED BY HIGH ANGLE GRANODIORITE
WITH LITTLE OR NO PYRITE - FRODOVING MAY BE ALTERED TO SERICITE
OR TRAY PYRITE USUALLY MAINLY AT VENEER - WELL TO UNDERSTAND
CHARACTERIZED IN THIS SECTION. 35%

92
SILECIOUS ZONE OF QUARTZ VEIN
11.8

93
ANDESITE DYKE - UNIT V21
113.5 MAINLY CHARACTERIZED AND UNMINERALIZED

94
CONTACT 60° TO CORE AXIS
1.3M UP STRIKE SLIP RD.
1.4M ABL CORE SHOW
GROUND
95
QUARTZ MONZONITE UNIT 5
ALTERED TO SERICITE - BIOTITE TO CHLORITE - FRODOVING
PARTIALLY TO SERICITE AND TRAY 1-2% PYRITIC AS VENEER
WELL CHARACTERIZED

96
UNIT FRODOVING MONZONITE COMPLETELY UNIT 10
LIGHT GREEN GNEISS IN PLACE WITH 40% SMALL ANHEDRAL
FRODOVING PSEUDOMORPHS & 10% ENHANCED MONZONITE PSEUDOMORPHS
FRODOVING ALTERED TO SERICITE AND OR KALIFIT VERY MINOR
WEAKLY DISSEMINATED PYRITE - GROUNDWALL ABL TO SERICITE
TRAY BUT CONTAINS SOME QUARTZ

HOLE NO. 73-1

PROJECT: Hoodoo Creek

PAGE NO.: 3 of 18

COLLAR ELEV.:

GROUND ELEV.:

DATE STARTED:

REF TO CLAIM CORNER:

COORDINATES

N E

DATE FINISHED:

SCALE: 1cm/1m

INCLINATION -45°

BEARING 0°

TOTAL DEPTH:

LOGGED BY: GEN

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP INT	ESTI-MATED
	silica	sericite	clay	chlo-ep												
30							str limon, clay v-str broken	Quartz Biotite Feldspar Gneiss Cont'd			30.5					
					Strong		gneissosity 225°/001° str. limonite axis			1-5%	32.3				31.3	
							minor qtz								34.3	
5							gauge ground rock frag.	35.0-39. Fault Zone			35.3					
							limonitic gauge	Section of gauge and broken rock. Strong clay alteration. limonite w/gaugy sections.								
							str limonite on Fr.								37.3	
							limonite			100%	38.4					
							1cm. folded qtz vns			2-3%	41.4				40.0	
							str limon 0.5cm py vn. 1cm py-qtz vn								43.0	
							gneissosity @ 30°				44.5					

HOLE NO: 79-1

PROJECT: Hoodoo Creek

PAGE NO.: 5 OF 18

COLLAR ELEV.:

GROUND ELEV.:

DATE STARTED:

REF TO CLAIM CORNER:

COORDINATES:

N E

DATE FINISHED:

SCALE: 1cm: 1m

INCLINATION -45°

BEARING 0°

TOTAL DEPTH:

LOGGED BY: G.F.N.

SECTION	ALTERATION				FRACTURING	MINERAL GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	% SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP INT	ESTIMATED
	Silica	Sulphate	Clay	Chlorop											
30						limonite wk. gndmass wk with plty py wk clay Fspar clay ser.	<u>Feldspar Hornblende Porphyry Contd</u> - not as str alter'n in gndmass - wker clay, clay. although Fspar ptens → ser clay + mafic → ser gndmass has ~ 30% 1mm anhedral Fspar		Trace				61.7		
						Gneissosity.	61.7-76.0 <u>Quartz Biotite Feldspar Gneiss (1)</u> as before. Gneissosity ~ 5° to core axis increase in py content as Fr fills.		2-3%	62.2					
5						2mm qtz py vn biot chl Gneissosity @ 5°	65.0-67.0 Gneiss becomes more qtz rich.		3%	64.9			65.0		
						py // Gneissosity.				65.8					
						2mm qtz ser w/ gray black metallic mineral not described under py.			3-4%				66.0		
						5mm qtz-py vn spotty w/ chl Gneissosity @ 20° w/ Traces spg - str distor py				68.9					
10						qtz rich Gneissosity @ 20°	70.7-71.5 Extremely qtz rich section.						71.0		
						Fr w/ py / MnO ₂ ? 2cm py vn, wussy w/ some qtz str lim? wussy, py spg biot chl			1-2%	71.9					
						qtz py chl → lum vns							74.0		
15						5cm py qtz vn.			3%	75.0					

HOLE NO 39-1
 COLLAR ELEV.:
 COORDINATES N E
 INCLINATION -15° BEARING 0°

PROJECT: Hoodoo Creek
 DATE STARTED: Sept 14, 1979
 DATE FINISHED: Sept 18, 1979
 TOTAL DEPTH: 269.1m (885')

PAGE NO: 7 of 18
 REF TO CLAIM CORNER:
 SCALE: 1cm/m
 LOGGED BY: GEN

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP INT	ESTI-MATED	
	silica	epidote	clay	ch/ep													
30							<p>Quartz Feldspar Hornblende Porphyry (cont'd) (10)</p> <p>increase in ser → contad</p>			30.1							
25							<p>93.6-94.0 Hybrid zone - fspar phenos within hb rich rx</p> <p>94.0-109.4 Quartz Biotite Feldspar Gneiss (1)</p> <p>Gneiss appears to be more biot rich than below - 40% biot - Gneissosity - 20° to 40°. Increase in py & pyqtz vining trace MnS₂ / py spotty ep w/ py qtz unq.</p>			20.5%	93.3				94.0		
20							<p>ep</p> <p>3mm qtz py vn</p> <p>1.5cm qtz py vn</p> <p>1cm qtz py vn w/ MnS₂</p> <p>Gneissosity @ 20°</p> <p>1cm py, qtz vn. grey tanish on py MnS₂</p> <p>Gneissosity @ 25 to 40°</p> <p>1cm py vn w/ qtz rim / minor ep.</p> <p>1.5cm py vn w/ MnS₂</p> <p>ep py</p> <p>Gneissosity @ 20° to 40°</p>			4-5%	96.3			27.0			
15										2%							
10										4%	99.4			100.0			
5										1-2%							
0										4%	102.9			103.0			

HOLE NO. 78-1

COLLAR ELEV.:

COORDINATES

INCLINATION

GROUND ELEV.:

N E

BEARING

PROJECT: Hend Creek

DATE STARTED: Sept 11, 1979

DATE FINISHED: Sept 16, 1979

TOTAL DEPTH: 269.7

PAGE NO.: 11 OF 18

REF TO CLAIM CORNER:

SCALE: 1 cm = 1 m

LOGGED BY: GCN

DEPTH	ALTERATION	FRACTURING	MINERAL GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP INT	ESTIMATED
0-156.0			<p>str dissem py v-f blackish mineral granular traces 1 cm py vn Fault w/ 40 to CA 0.2m gouge</p>	<p><u>Pyritic Quartz Porphyry Unit # 8</u></p>		10%	151.2			152.1		
156.0-160.2			<p>py & black Cu oxide? v-f. d. ls. black mineral Cu oxide on MoS₂? py w/ trace epy qtz vns w/ f. gng Min. & MoS₂ py & py qtz py v-f. MoS₂ g. sp. py py gns w/ MoS₂ py w/ ser. qtz py e vchp F. spar → eP hb → chl</p>	<p>156.0 end of qtz phenocrysts - appears to be either a chilled zone of unit # 8 or a gradational contact of altered feldspar hornblende porphyry (#10) phenos alter'n not as strong as above. (156-160.2) Some altered ser lath shaped phenos would appear to remnant hb. The rock appears to be gradually less altered down hole from 156.0</p>		5-10%	154.2			156.0		
160.2-163.5			<p>no visible contact broken rock str qtz alter w/ traces MoS₂</p>	<p>160.2-163.5 <u>Quartz Biotite Feldspar Gneiss # 1</u> str qtz-ser. hornbl 160-161.5 w/ py & MoS₂</p>		5%	157.3			159.0		
163.5-269.7			<p>1.3cm qtz py MoS₂ vn sharp w/ 60 to CA. 1.5 ft green color w/ minor intra. no feldspar phenos.</p>	<p>163.5-269.7 <u>Feldspar Hornblende Porphyry # 10</u> see description next page.</p>		4-5%	160.3			160.2		
							163.9			163.5		

HOLE NO. 79-1

COLLAR ELEV.:

COORDINATES

INCLINATION -45°

GROUND ELEV.:

N E

BEARING 0°

PROJECT. *Hoods Creek*

DATE STARTED *Sept 11, 1979*

DATE FINISHED *Sept 18, 1979*

TOTAL DEPTH: *269.7*

PAGE NO.: *12 of 18*

REF TO CLAIM CORNER:

SCALE: *1cm:1m*

LOGGED BY: *GEN*

DEPTH	ALTERATION				FRACTURING	MINERAL GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP. INT	ESTI-MATED
	Silica	Serpentine	clay	chlo											
							DESCRIPTIVE GEOLOGY								
							<u>Feldspar Hornblende Porphyry #10 (cont'd)</u>								
							It gray green colored rock. - shows m-g porphyry texture in hb and feldspar. Mod to strong alter'd.			166.4			166.5		
							Fspar → ser ⁺⁺ (remnant blotches)			162.5					
							hb → chl ⁺ ser ⁻ , Mt or ser ⁺⁺ Mt								
							gndmass → ser ⁺ clay ⁻ chl ⁻								
							hb → chl ⁺ ser ⁻ Mt								
							Ser ⁻ clay								
							Fspar → ser ⁺⁺								
							gndmass → ser ⁺ chl ⁻ clay								
										172.5					
							str ser alter								
							hb Fspar } → Ser								
							gndmass			175.5			176.0		
							wkly dissem Mt								
										178.6			179.0		

HOLE NO 79-1

COLLAR ELEV.:

COORDINATES:

INCLINATION -45°

GROUND ELEV.:

N

E

BEARING 0°

PROJECT: Hoodo Creek

DATE STARTED: Sept 11, 1979

DATE FINISHED: Sept 18, 1979

TOTAL DEPTH 269.7

PAGE NO.: 13 of 18

REF TO CLAIM CORNER:

SCALE: 1cm:1m

LOGGED BY: GEN

ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP INT	ESTIMATED	
Silica	Sericite	Clay	chl + p													
							<p>Fieldspar Hornblende Porphyry Cont'd #10</p> <p>- alteration appears to be mainly chl + clay fspar → clay chl ser? hb → chl + r. Mt andmoss → clay chl ser? dissemt. Mt.</p>									
										1817						
										1847						
										1875						
										1880						
										1908						
										1938						

HOLE NO 77-1

COLLAR ELEV.:

COORDINATES

INCLINATION -45

GROUND ELEV.:

N E

BEARING 0°

PROJECT: Hoodoo Creek

DATE STARTED: Sept 11, 1979

DATE FINISHED: Sept 18, 1979

TOTAL DEPTH 269.7

PAGE NO.: 14 of 18

REF TO CLAIM CORNER:

SCALE: 1cm:1m

LOGGED BY: GEN

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP INT	ESTI-MATED
	silica	sericite	slay	chl/sp												
75																
80																
85																
90																
95																
100																
105																
110																
115																
120																
125																
130																
135																
140																
145																
150																
155																
160																
165																
170																
175																
180																
185																
190																
195																
200																
205																
210																
215																
220																
225																
230																
235																
240																
245																
250																
255																
260																
265																
270																
275																
280																
285																
290																
295																
300																

DESCRIPTIVE GEOLOGY

Feldspar Hornblende Porphyry Cont'd #10

nil

18.9

200.0

201.2

201.4

203.0

206.0

209.1

NGWL

200.0

203.0

ESTI-MATED

HOLE NO 77-1

COLLAR ELEV.:

COORDINATES

INCLINATION -15°

GROUND ELEV.:

N E

BEARING 00°

PROJECT: Hooto Creek

DATE STARTED: Sept 11, 1979

DATE FINISHED: Sept 18, 1979

TOTAL DEPTH: 269.7

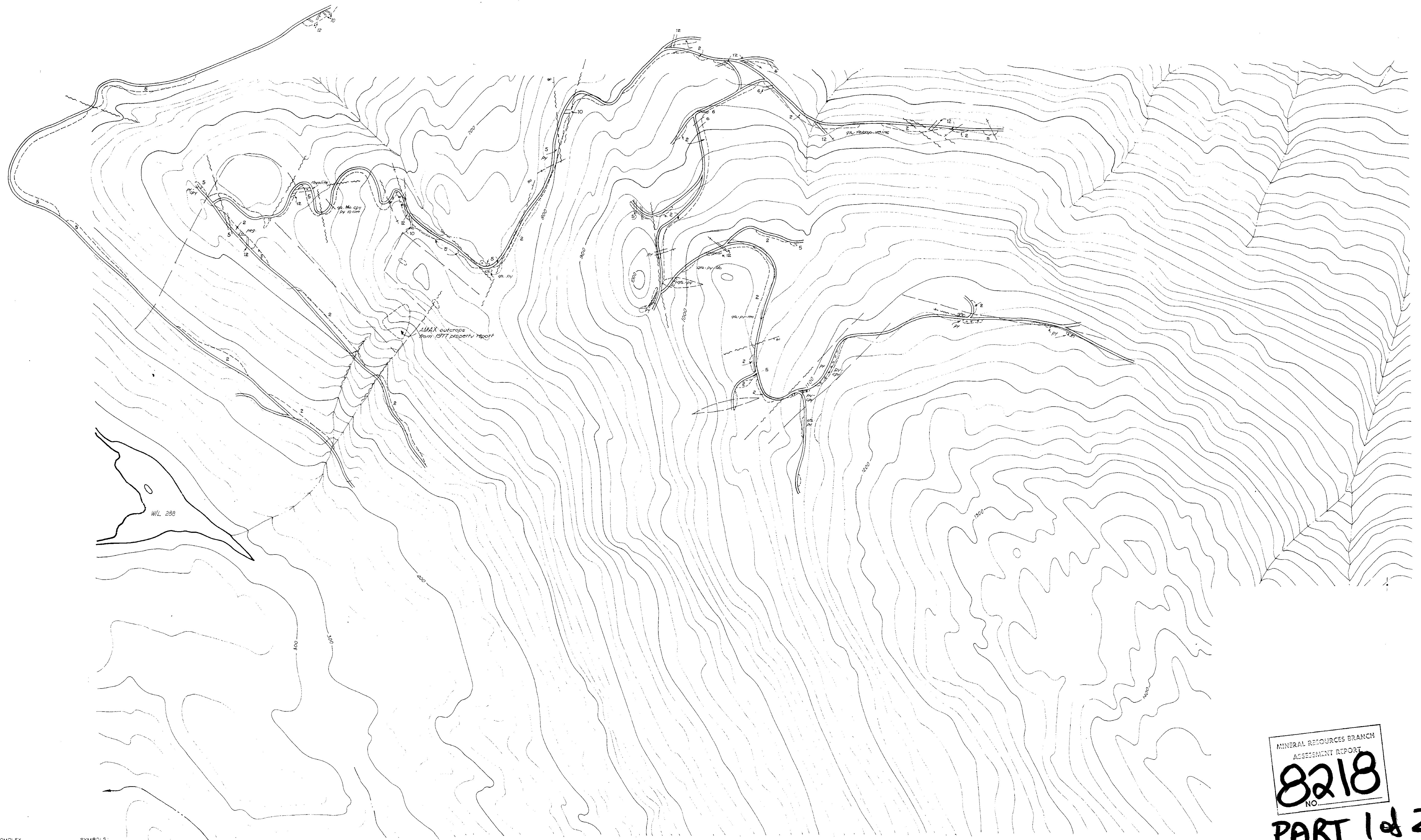
PAGE NO. 17 of 18

REF. TO CLAIM CORNER:

SCALE: 1cm = 1m

LOGGED BY: GEN.

SECTION	ALTERATION				FRACTURING	MINERAL	GEOLOGY	COMMENTS:	AVE CORE REC'Y / HOLE	SULPHIDES	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y SAMP INT	ESTI-MATED
	Silica	Sericite	Clay	Chlor												
40								Feldspar Hornblende Porphyry Cont'd (#10)								
							str. goodmass ser			nil	242.6					
											245.7					
											246.7					
							S. diagen Mt. & hb ser									
							Fspar → clay ser			nil	251.8					
							hb → ser									
											254.8					



MINERAL RESOURCES BRANCH
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- MIOCENE: HOODOO CREEK COMPLEX**
- 15 Anasazi sandstone and silt
 - 14 Anasazi breccia
 - 13 Anasazi sandstone
 - 12 Anasazi breccia
 - 11 Lateral breccia
 - 10 Fluvio-lacustrine quartzite-porphyr dykes
 - 9 Sphagnum quartzite-porphyr dykes
 - 8 Puritic quartzite-porphyr
 - 7 Quartzite breccia
 - 6 Quartzite
 - 5 Quartzite-porphyr breccia
 - 4 29 Supersaturated gneiss
 - 3 Anasazi breccia
 - 2 19 Gneiss phase
- ESSENE (1) AND OLDER
COAST PLUTONIC COMPLEX**
- 1 Quartzite
 - 2 Diorite, quartz diorite
 - 3 Gneiss

- SYMBOLS**
- Pit trap
 - * Breccia
 - * * * Fault
 - Geological contact (defined, approximate, assumed)
 - Fault (defined, approximate, assumed)
 - Bearing structure
 - Dike with top shown
 - Oblique foliation
 - Thin, steep vein
 - Boundary of 1% quartz zone
 - ★ AMAX sample, UTAH compare
 - Legal corner post (location established by chain comparison)
 - South-faceted and/or corner post, claim boundary (square, uncolored)
 - Limit of snow
 - Stream
 - Topographic contour (contour interval 10 meters)

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

HOODOO CREEK
Mo PROPERTY BZT CLAIMS
GEOLOGY

Work by: J.R.D. Date: Jan. 1980 NTS Ref. 92 N-5E
Drawn by: Revised:

SCALE: 1:5000



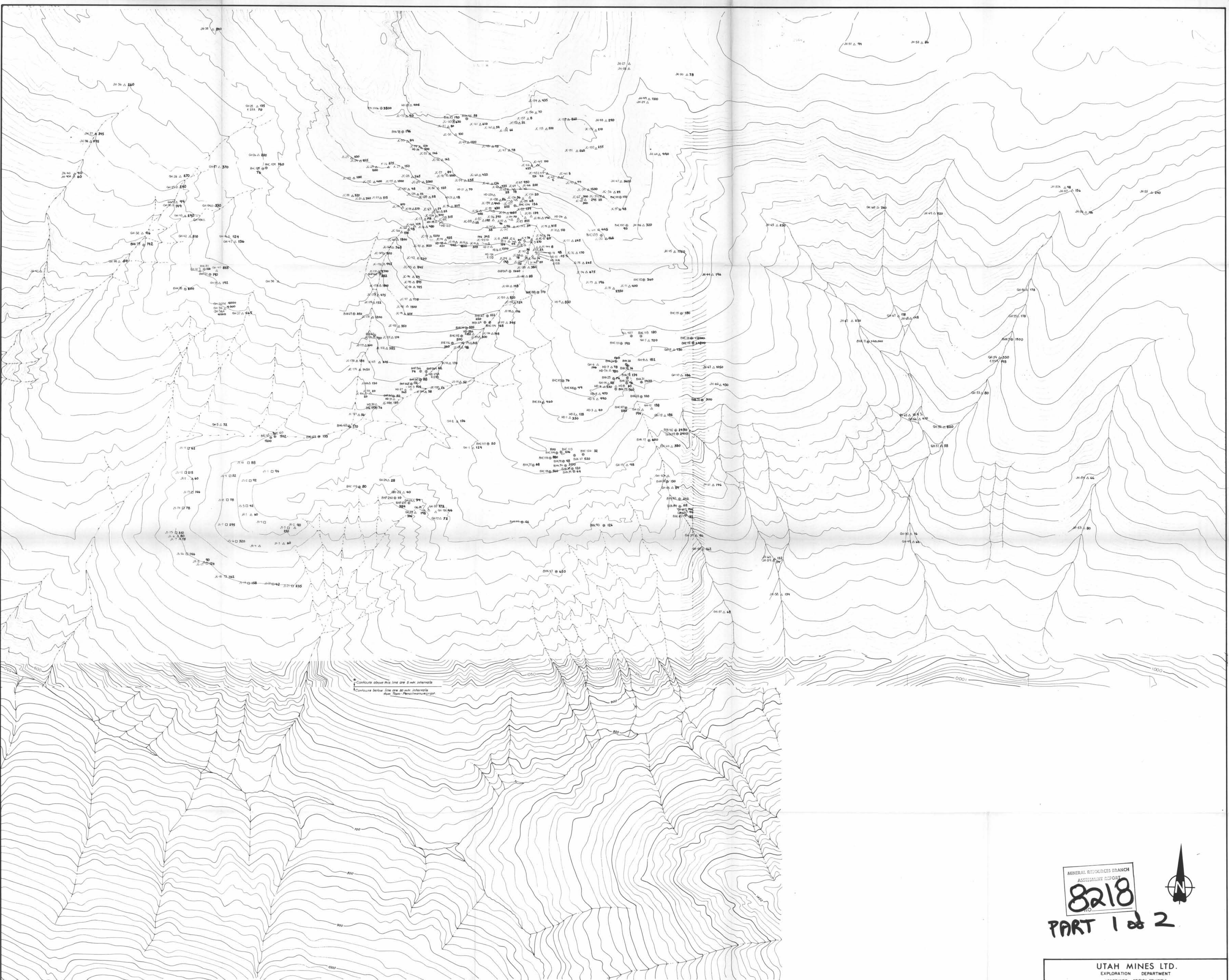
Pb in ppm

- ⊕ AMAX rock chip sample
- △^{1/2} UTAH rock & rock chip sample
- ⁴ UTAH soil sample

MINERAL RESOURCES BRANCH
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UTAH MINES LTD. EXPLORATION DEPARTMENT <small>VANCOUVER BRITISH COLUMBIA</small>		
HOODOO CREEK Mo PROPERTY BZT CLAIMS ROCK & SOIL GEOCHEMISTRY 1978 - 1979		
<small>Work by: J.R.D.</small> <small>Drawn by:</small>	<small>Date: Jan. 1980</small>	<small>MTS Ref: 92-N-3-E</small>
SCALE: 1:5000		



Contours above this line are 5 mtr. intervals
 Contours below this line are 10 mtr. intervals
 from 1000 ft. to 10000 ft.

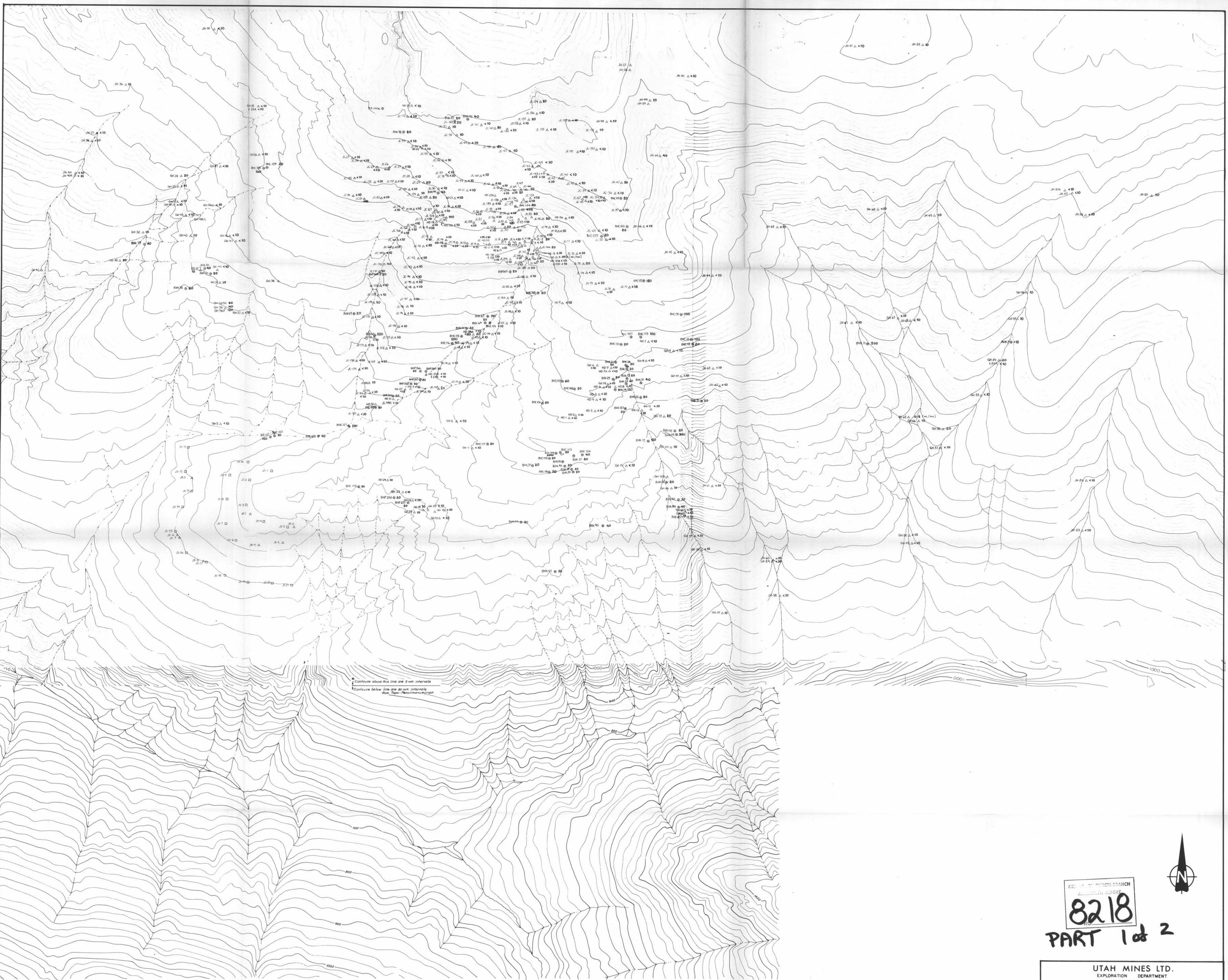
Zn in ppm

- ⊕ Amex rock chip sample
- △ Utah rock & rock chip sample
- Utah soil sample

MINERAL RESOURCES BRANCH
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UTAH MINES LTD. EXPLORATION DEPARTMENT VANCOUVER BRITISH COLUMBIA		
HOODOO CREEK Mo PROSPECT		
BZT CLAIMS		
ROCK & SOIL GEOCHEMISTRY		
1978-1979		
Work by TRD	Date: Feb 1980	NTS Ref 92 N-5E
Drawn by C.D.J.H.	Revised	
SCALE: 1:5000 Meters		



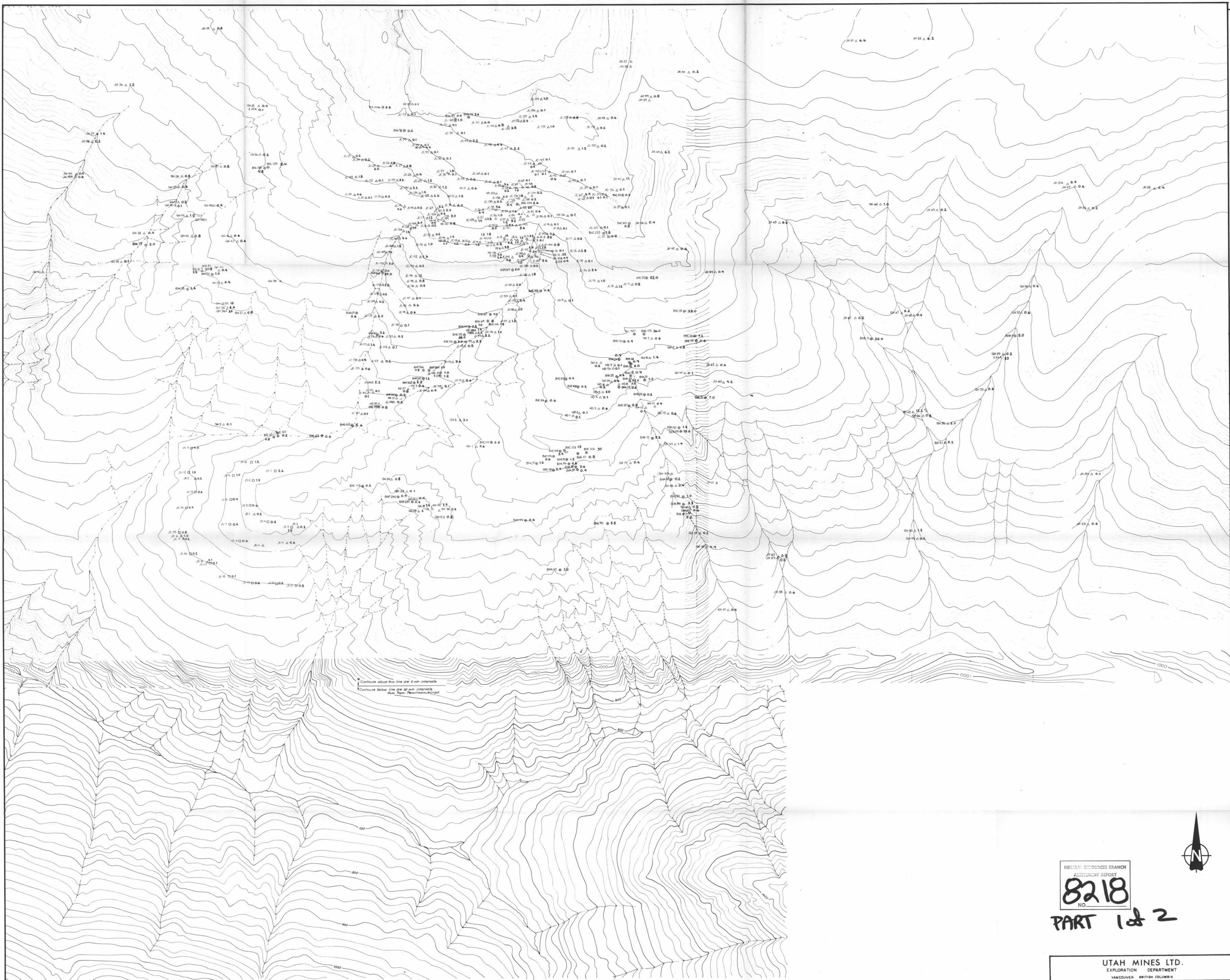
Au in ppb

- ⊕ Amax rock chip sample
- △ Utah rock & rock chip sample
- Utah soil sample

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UTAH MINES LTD. EXPLORATION DEPARTMENT VANCOUVER BRITISH COLUMBIA		
HOODOO CREEK Mo PROSPECT BZT CLAIMS ROCK & SOIL GEOCHEMISTRY 1978-1979		
Work by J.R.D.	Date Feb. 1980	NTS Ref. 92 N-5 E
Drawn by C.D.J.M.	Revised	
SCALE: 1:5000 Meters		



* Contours above this line are 5 meter intervals
 † Contours below this line are 20 meter intervals
 from "Topo" Resurvey/Map

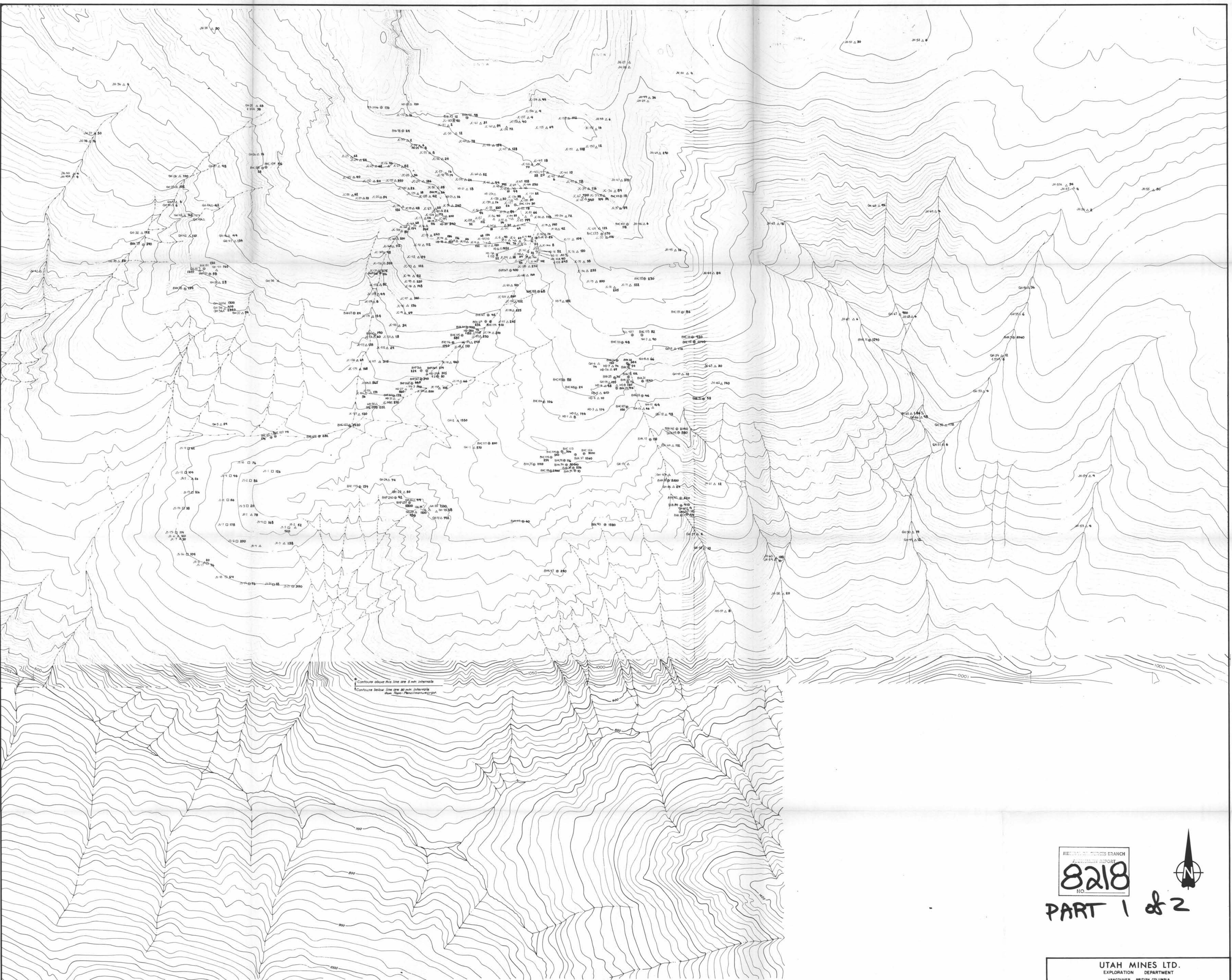
Ag in ppm

- ⊕ Amex rock chip sample
- △ Utah rock/rock chip sample
- Utah soil sample

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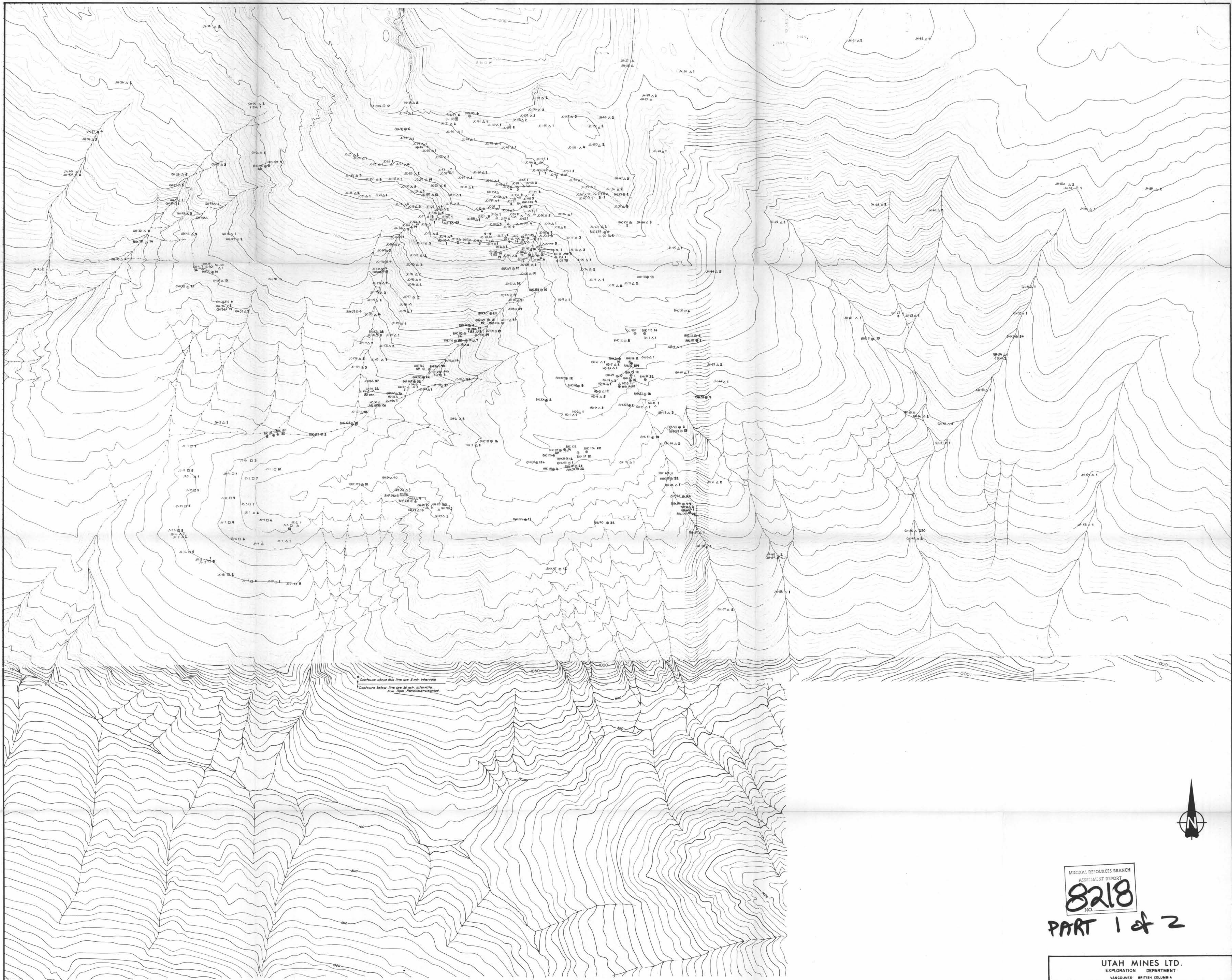
UTAH MINES LTD. EXPLORATION DEPARTMENT VANCOUVER BRITISH COLUMBIA		
HOODOO CREEK Mo PROSPECT BZT CLAIMS ROCK & SOIL GEOCHEMISTRY 1978-1979		
Work by J.R.D.	Date Feb. 1980	NTS Ref 92 N-5E
Drawn by C.D.J.H.	Revised	
SCALE: 1:5000 Meters		



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UTAH MINES LTD. EXPLORATION DEPARTMENT VANCOUVER BRITISH COLUMBIA		
HOODOO CREEK Mo PROSPECT BZT CLAIMS ROCK & SOIL GEOCHEMISTRY 1978-1979		
Work by J.R.D. Drawn by C.D.J.H.	Date Feb. 1980 Revised	NTS Ref. 92 N-5E
SCALE: 1:5000 Meters		



* Contours above this line are 5 mtr intervals
 * Contours below this line are 10 mtr intervals
 * See Topo/Planimeter/Chart

Mo in ppm

- ⊕ Amax rock chip sample
- △ Utah rock & rock chip sample
- Utah soil sample



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UTAH MINES LTD. EXPLORATION DEPARTMENT VANCOUVER BRITISH COLUMBIA		
HOODOO CREEK Mo PROSPECT BZT CLAIMS ROCK & SOIL GEOCHEMISTRY 1978-1979		
Work by: J.R.D.	Date: Feb 1980	NTS Ref: 92 N-5 E
Drawn by: C.D. J.M.	Revised:	
SCALE: 1:5000 Meters		



Cu in ppm

- ⊕ AMAX rock chip sample
- △^{34 52} UTAH rock & rock chip sample
- ^{25 49} UTAH soil sample

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UTAH MINES LTD. EXPLORATION DEPARTMENT <small>VANCOUVER BRITISH COLUMBIA</small>		
HOODOO CREEK Mo PROPERTY BZT CLAIMS ROCK & SOIL GEOCHEMISTRY 1978 - 1979		
Work by: J.R.D.	Date: Jan. 1980	NTS Ref: 92 N-5 E
Drawn by:	Revised:	
SCALE: 1:5000		



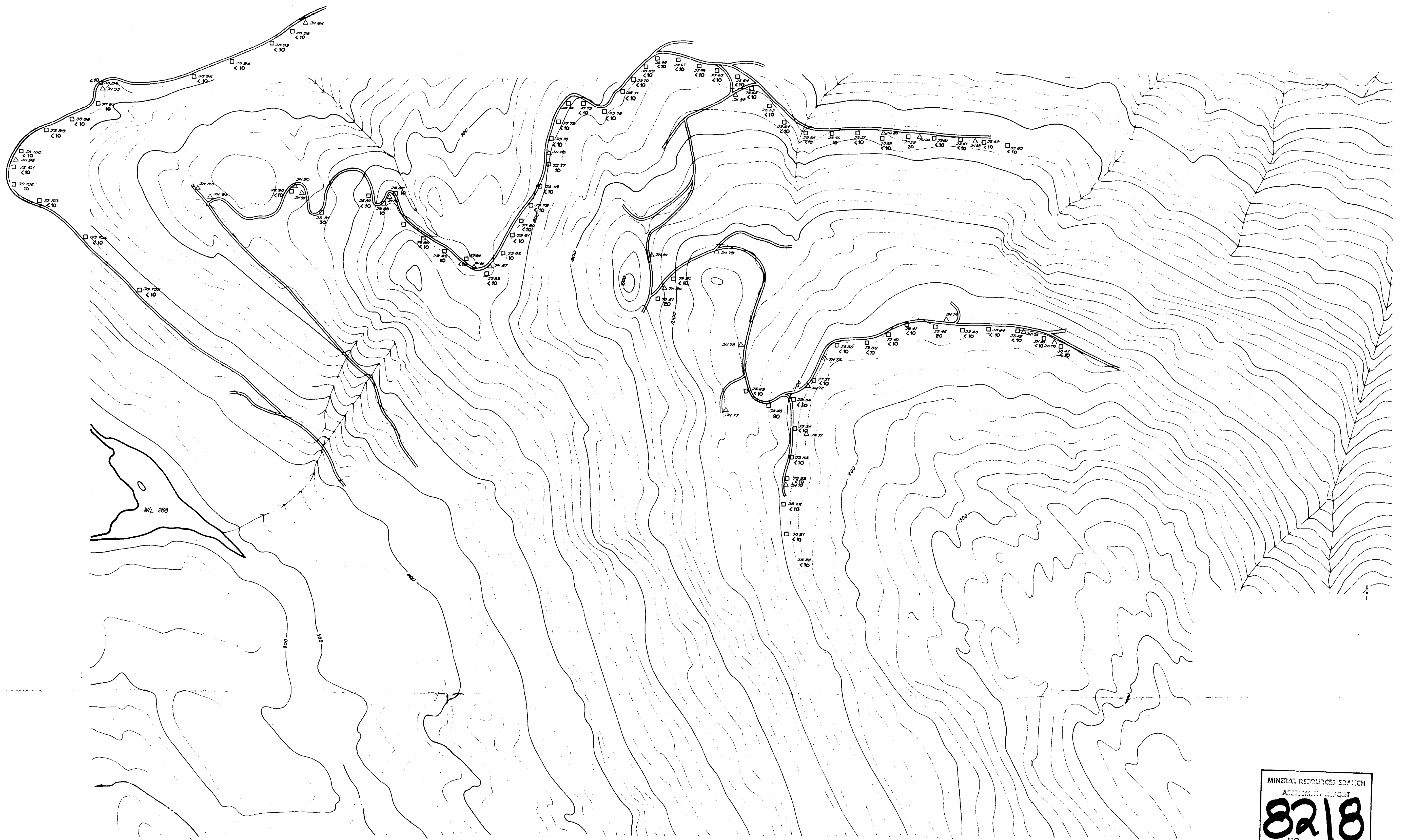
Mo in ppm

- ⊕ AMAX rock chip sample
- △ UTAH rock & rock chip sample
- UTAH soil sample

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UTAH MINES LTD. EXPLORATION DEPARTMENT <small>VANCOUVER BRITISH COLUMBIA</small>		
HOODOO CREEK Mo PROPERTY BZT CLAIMS ROCK & SOIL GEOCHEMISTRY 1978 - 1979		
Work by: J.R.D.	Date: Jan / 1980	NTS Ref: 92 N-5 E
Drawn by:	Revised:	
SCALE: 1:5000		



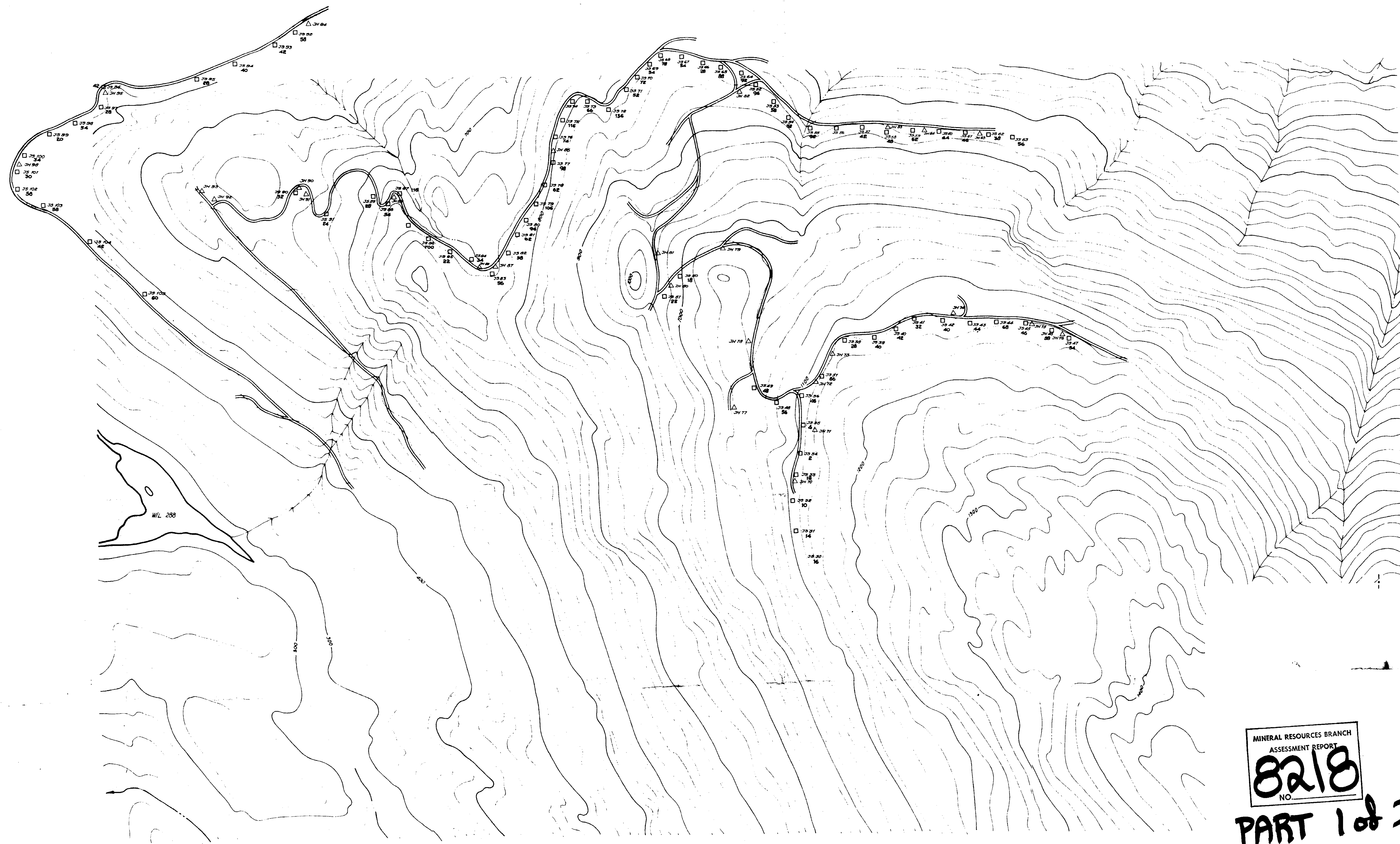
Au in ppb

- ⊕ AMAX rock chip sample
- △²⁴ UTAH rock / rock chip sample
- ²⁴ UTAH soil sample

MINERAL RESOURCES BRANCH
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 1:0

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UTAH MINES LTD. EXPLORATION DEPARTMENT <small>VANCOUVER BRITISH COLUMBIA</small>			
HOODOO CREEK Mo PROPERTY BZT CLAIMS ROCK & SOIL GEOCHEMISTRY 1978 - 1979			
Work by: J.R.D.	Date: Jan. 1980	MTS Ref: 92N-5E	
Drawn by:	Revised:		
SCALE: 1:5000			

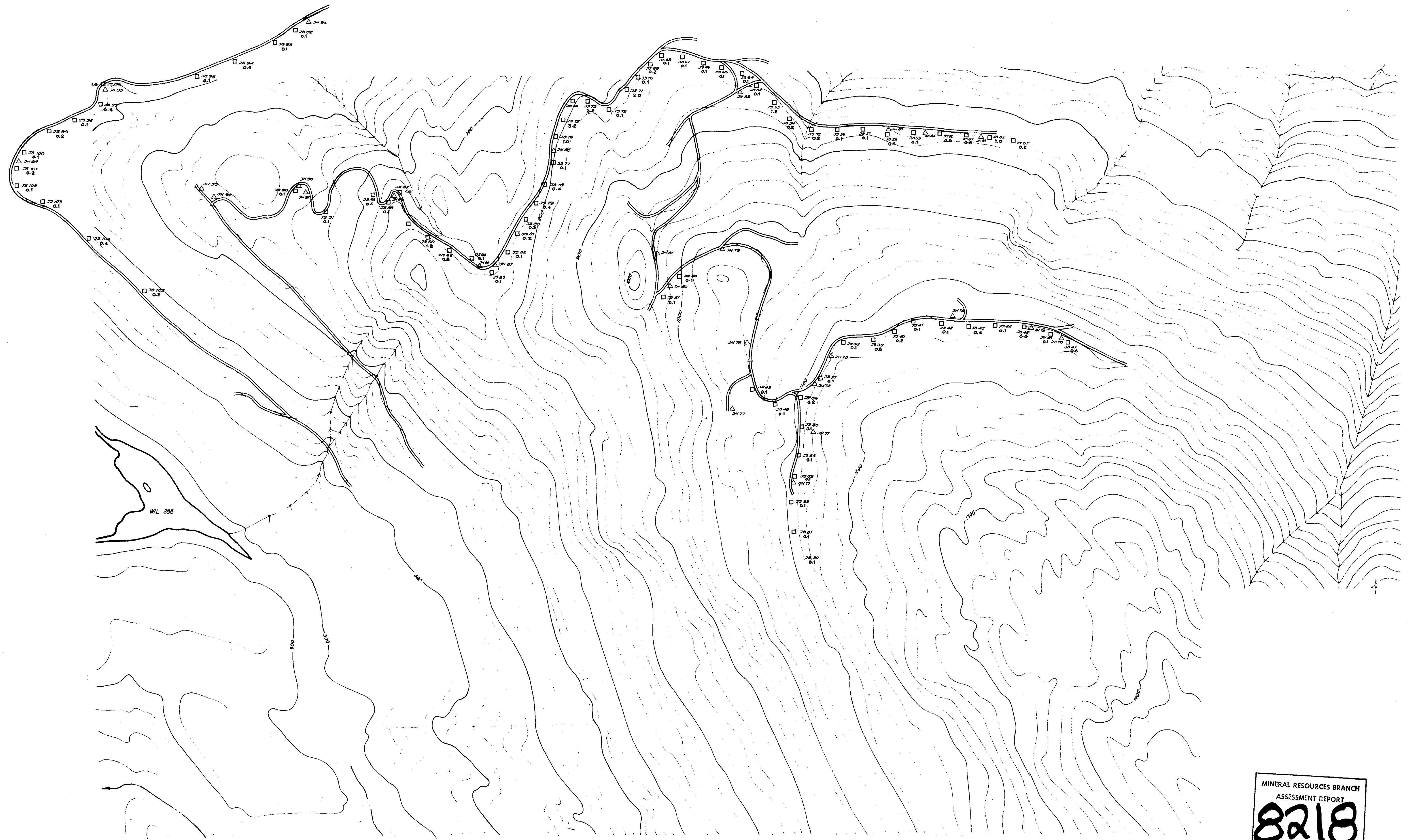


Zn in ppm

- ⊕ AMAX rock chip sample
- △^{24 32} UTAH rock & rock chip sample
- ^{33 40} UTAH soil sample

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UTAH MINES LTD. EXPLORATION DEPARTMENT <small>VANCOUVER BRITISH COLUMBIA</small>		
HOODOO CREEK Mo PROPERTY BZT CLAIMS ROCK & SOIL GEOCHEMISTRY 1978 - 1979		
<small>Work by: J.R.D.</small> <small>Drawn by:</small>	<small>Date: Jan. 1980</small>	<small>MTS Ref: 92 N-5 E</small>
SCALE: 1:5000		



Ag in ppm

- ⊕ AMAX rock chip sample
- △^{34 52} UTAH rock & rock chip sample
- ^{33 49}_{0.1} UTAH soil sample

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UTAH MINES LTD. EXPLORATION DEPARTMENT <small>VANCOUVER BRITISH COLUMBIA</small>		
HOODOO CREEK Mo PROPERTY BZT CLAIMS ROCK & SOIL GEOCHEMISTRY 1978 - 1979		
Work by: J.R.D.	Date: Jan. 1980	NTS Ref: 82N-5E
Drawn by:	Revised:	
SCALE: 1:8000		