

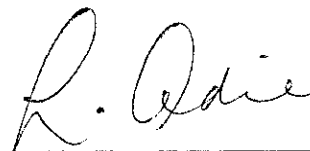
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STATEMENT OF QUALIFICATIONS

The following report is based on field work carried out under my direction by Geoffrey Bird, who holds a B.Sc. degree in Geology obtained in the University of British Columbia in 1965.

Since graduation Mr. Bird has worked directly under my supervision and I personally inspected the field work carried out for the preparation of this report.

We therefore submit that the report is of a professional standard acceptable for recording as assessment work under the requirements of the Mineral Act.



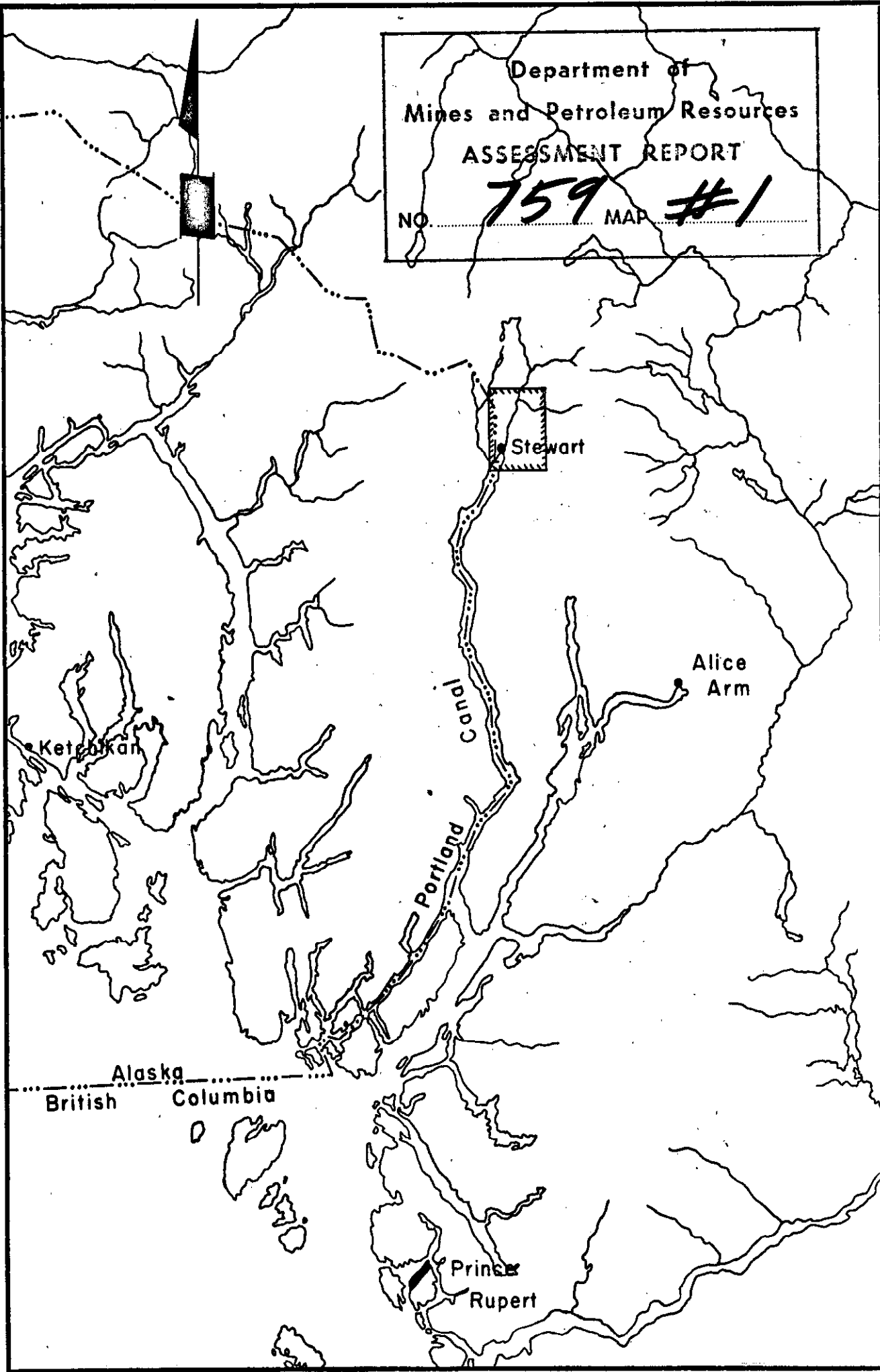
L. ADIE, P. Eng.

/ja

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Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **759** MAP **#1**



DRAWN	SCALE 1" = 17.75 mi.	CANEX AERIAL EXPLORATION LTD.		LOCATION	MAP
		TRACED	DATE		
APPROVED					FILE NO.

VENTURE 74 - AZTEC GROUP

Summary

The six claims and two fractions of the Aztec group are located on the east side of the Bear River Ridge, eight miles north of Stewart, B. C.

A geological, geochemical and geophysical examination was made from July 20 to August 2, 1965.

The surrounding rocks are the clastic volcanics of the Hazelton Group, locally known as the Bear River Formation. These units are strongly faulted, most commonly by near-vertical 150° and 080° striking zones which are filled with broken rock and have been recemented with quartz. They contain copious pyrite mineralization as well as galena, sphalerite and minor chalcopyrite, and often are followed by lamprophyre dikes.

A survey with the Jalander magnetometer shows weak magnetic anomalies, about 700 gammas above the background, over mineralized areas.

The geochemical survey also indicates a minor anomaly surrounded by a low background.

Visual examination showed the valuable mineralization to be sparse and localized, and the geochemical and geophysical surveys indicate that there is little of noteworthy size.

Therefore, it is recommended that no further work be done.

Introduction

The examination of the Aztec claim group was performed by G. Bird, F. Syberg, A. Patrick, and G. Pinhorn from July 20 to August 2, 1965, and consisted of geologic mapping, geophysics (magnetometer survey) and geochemical soil sampling.

This group consists of six claims and two fractions on the east side of the Bear River Ridge, almost opposite the mouth of Bitter Creek, eight miles from Stewart, B. C. They are owned by Bob Hutchings and Angello Bugnello, of Stewart.

The Bear River Ridge rises steeply from the valley floor in a series of narrow benches which were formed by glaciation during the last ice age. Several northwesterly trending faults cross the property, in which streams have cut deep canyons.

Treeline is at 3,000 feet elevation, and most of the property lies above this. Below treeline, thick growths of pine and spruce and an underbrush of alder, willow and devil's club make travelling very difficult.

Abundant outcrop greatly simplified the mapping.

History

The immediate area of the claims is a large gossan, very obvious from the valley floor, and for this reason has probably undergone many examinations. The development work done on the property consists only of a few trenches blasted across the width of several mineralized shear zones. Old reports say that there are many such trenches, but the thick underbrush made it impossible to find them. Only one trench was found below treeline and only one was found above.

Geology

The rocks of this area are the Jurassic volcanics of the Hazelton Group, locally known as the Bear River Formation. These volcanics are almost entirely clastics, namely volcanic sandstones, tuffs, breccias and agglomerates.

They trend in a northerly direction, parallel to the Bear River Ridge, and dip steeply to the west.

The most common rock type is a structureless volcanic sandstone. This rock is dense, hard and dark green when fresh, but weathers to a lighter green color. The rock is characterized by the presence of feldspar clasts set in a fine, dark, sandy matrix. This gives the rock a porphyritic appearance, but close examination shows them to be fragments and not crystals. A variation of this particular type is also common, having a dark red matrix and small black specks scattered throughout.

Also very abundant is a volcanic breccia, but made up of several different types. Most of it is green and fairly fine with fragments of green chert about $\frac{1}{2}$ inch in diameter set in a fine matrix. Higher up the hill, the fragments become coarser, and up around 6,000 feet elevation they are of fragmental volcanics and conglomerate and average a foot or more in diameter.

Occurring infrequently as an apparent facies change is a dark, almost black scoria breccia made up of fragments of scoria about three inches in diameter in a volcanic sandstone matrix.

A dark, coarse, volcanic agglomerate, interbedded with fine hematite-stained banded tuffs, which undulate and stand almost vertically, occurs at the head of the main creek and extends through to the top of the formation. This unit trends more westerly than the others, but probably has had its position altered due to faulting.

Lying between two units of the clastic volcanics is a unit of sedimentary volcanics, reported to be very early. It has a light tan color, is fine grained, and is distinguished by the fact that it has a structure in the form of fine colored bands.

A volcanic sandstone, similar to the older series, but without the structure, occurs on the same level, although it is separated from it by a fault.

Near the lower end of the claims are two units or sills of an augite-hornblende-feldspar porphyry. This also is very dark green when fresh, but weathers to a light grey color, thus making the dark phenocrysts stand out. This unit is not continuous along strike, but occurs as a series of lenses.

Intrusives, in the form of quartz diorite, quartz monzonite and lamprophyre dikes, cut across the volcanics, and generally follow the northwesterly faults.

On top of the Bear River Ridge, and parallel to it, is an unconformity which marks the contact of the coarse volcanic breccia with an upper series of volcanics dipping gently to the west. This series was not examined.

Structure

As mentioned previously, the formations trend northerly and dip steeply to the west. These rocks are cut by two major fault structures: one, which strikes approximately 150° and is vertical and another lesser one, also vertical, which strikes approximately 080° . These faults control the topography and the location of the mineralization.

Mineralization

The mineralization is confined to the shear zones, which are invariably filled with shattered rock and are recemented with quartz. Pyrite is the most common mineral, appearing in all the shear zones and causing them to be rusty.

Only one fault zone, (500 feet south of the main creek) contained any significant amount of valuable mineralization. Associated with the quartz and copious pyrite, and exposed by a trench at elevation 3,900 feet are galena, sphalerite and a minor amount of chalcopyrite over a width of eight feet.

This lead and zinc mineralization is fairly high-grade at this point, but the zone is cut off by a fault immediately below. Although the shear itself continues right over the ridge-top in the other direction, the high-grade portion does not extend very far. Small fracture fillings of galena and sphalerite can be found at random intervals along this upper portion, but they are certainly not of commercial grade. At elevation 3,800 feet in the main creek, a few narrow quartz veins, sometimes up to a foot wide and approximately 300 feet long, contain galena and chalcopyrite mineralization, but they too are far from commercial grade.

Malachite stain occurs infrequently at random, isolated locations, and hematite often gives the rocks a reddish color.

About $1\frac{1}{2}$ miles to the south of Mt. Stevenson, at elevation 5,150 feet, a north-northwesterly striking quartz vein from one foot to three feet wide contains small nodules of tetrahedrite, but they do not form a very impressive showing.

Geophysics

A geophysical survey using the Jalander magnetometer was carried out over two large gossan areas adjacent to Dundee Creek, just on the northern edge of the claims; in an attempt to locate possible geophysical anomalies characteristic of the region.

Three magnetic high zones were found, over mineralized gossans of a quartz-replacement fault breccia, and one occurred over an unmineralized augite-hornblende-feldspar porphyry lens.

The anomalies were only in the order of 700 gammas over the mineralized zones, and aside from pyrite, the obvious mineralization is thinly disseminated throughout.

Geochemistry

Fifty geochemical soil samples were taken at 100 foot intervals along lines 500 feet apart to cover an area approximately 1,500 feet square. This area is located below 2,800 feet elevation and adjacent to the south side of the main creek running through the property.

The method used is as follows: A hole, about 12 inches deep was dug with a mattock, and a few ounces of the brown horizon below the leached top layer were removed with an aluminum spoon and placed in a paper sample bag. The soil was quite coarse and occasionally the bedrock was too close to surface for a sample to be taken.

The portion of the sample of minus 80 mesh size was taken and analyzed for copper, lead and zinc. The copper values were obtained by the 2,2' biquinoline method and the lead and zinc by the dithizone method. Both types were prepared by pyrosulfate fusion.

The samples were analyzed at the Canex Aerial Exploration Laboratory in Vancouver by R. E. Cribbs, geochemist.

The topography is steep, the underbrush is thick, and the soil is shallow.

The results show a low background, with a minor anomaly to the

another small one at 2,700 feet elevation.

The whole area has a low geochemical background, and the anomalies are not considered to be significant.

Conclusions and Recommendations

The property is extensively faulted and these zones have been recemented with quartz and impregnated with sulfides, mainly pyrite. The valuable mineralization of galena, sphalerite and minor chalcopyrite is present only in small quantities and these are generally localized and are not continuous throughout the fault zones.

The geophysics shows that the mineralized zones appear as slight magnetic highs, approximately 700 gammas above the background, but, as mentioned above, little valuable mineralization was observed in these locations.

The geochemistry indicates that there is little valuable mineralization hidden in the area covered by the grid.

In the light of these results, it is believed that the property has little potential and that no further work should be done.

Respectfully submitted,


G. BIRD

GB:ja

Financial Statement

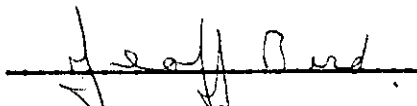
Salaries:

G. Bird	- July 20 to August 2, 1965	\$ 225.82
A. Patrick	- July 20 to August 2, 1965	180.60
J. Pinhorn	- July 20 to July 29, 1965	129.00

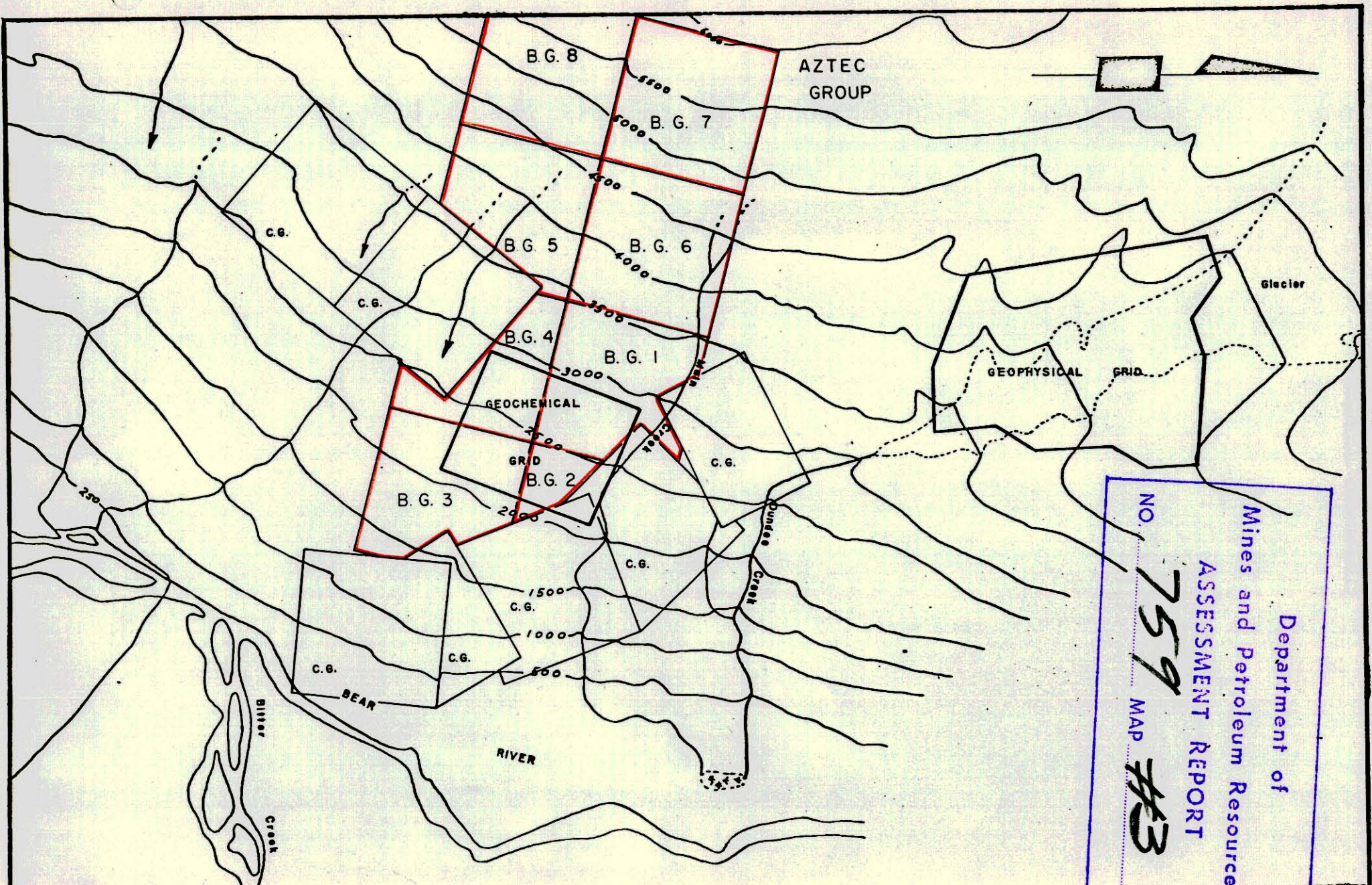
Time Distribution:

	<u>Geology</u>	<u>Geochemistry</u>
G. Bird	10 days	4 days
A. Patrick	10 days	4 days
J. Pinhorn	6 days	4 days

Compensations and Benefits @ 15%	80.00
Geochemical Costs	115.00
Transportation while on the property	
One hour in Hiller SL-4 helicopter	145.00
Camp Costs	242.00
Supervision and overhead @ 20%	107.00
	<hr/>
TOTAL	\$1,224.42

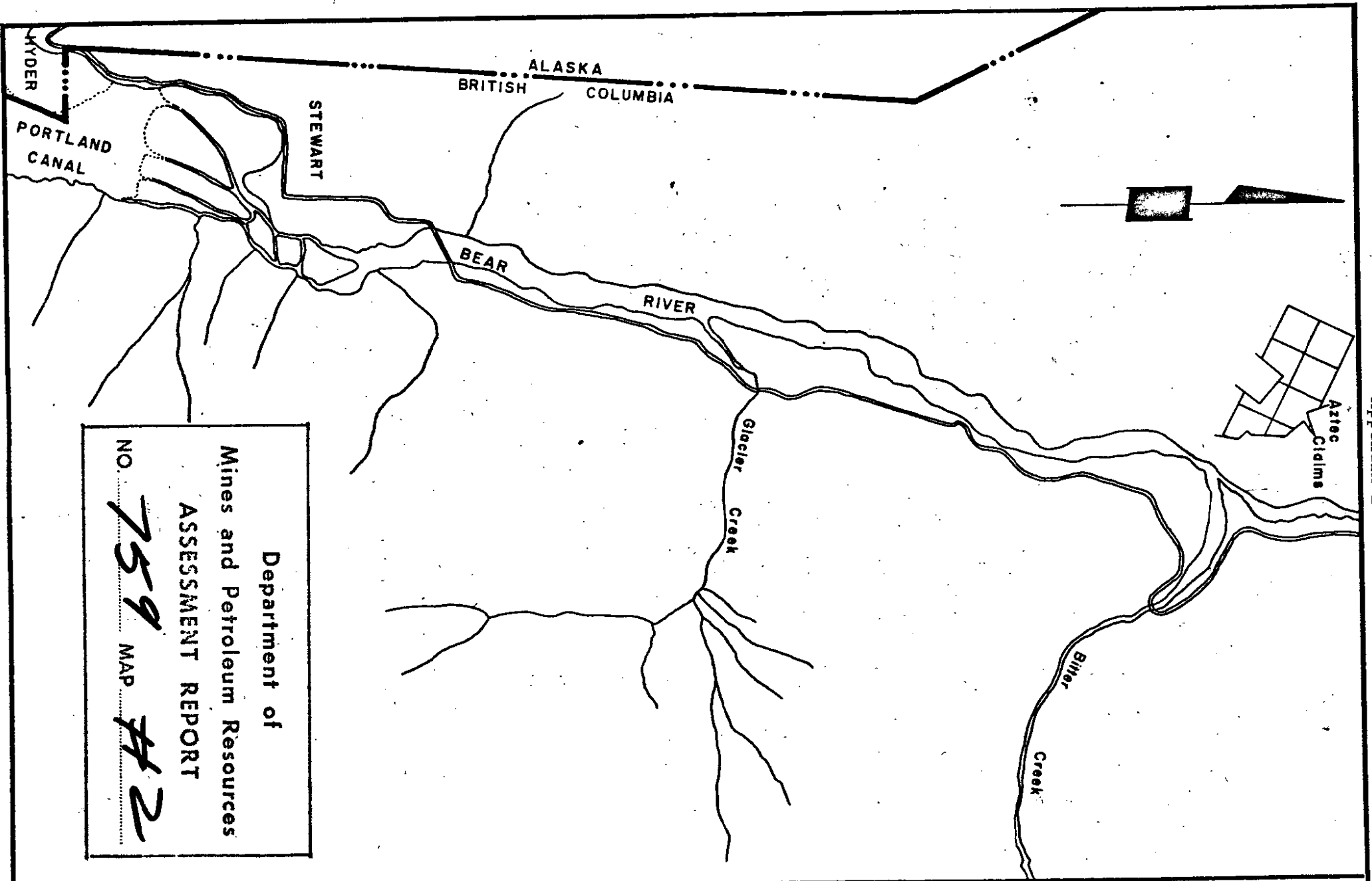

G. BIRD

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Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 759 MAP #13

DRAWN	SCALE 1" = 1320'	CANEX AERIAL EXPLORATION LTD.	
TRACED	DATE	AZTEC, VENTURE 74	FILE NO.
APPROVED			



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. **759** MAP # **2**

Appendix I

DRAWN	SCALE 1" = 1mi	CANEX AERIAL EXPLORATION LTD.	LOCATION OF CLAIMS
TRACED	DATE	AZTEC, VENTURE 74	FILE NO.
APPROVED			

Appendix III
CANEX AERIAL EXPLORATION LTD.

Area V-74

Analyst Wilson & Sy.

Date Sept 15, 16 + 17/65.

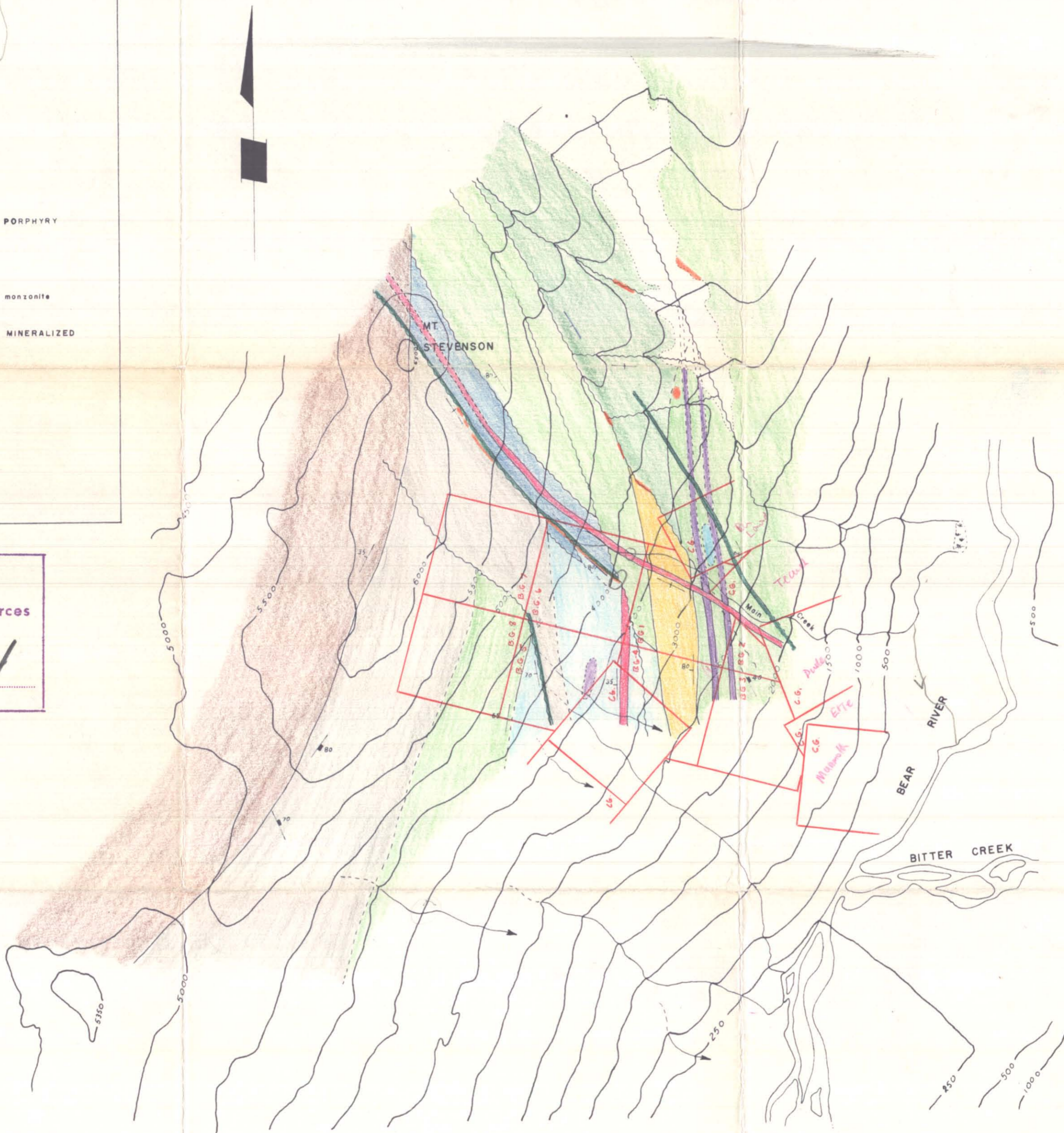
Page No. 1

Sample No.	ppm in soil or sediment					Remarks
	Mo	Cu	Zn	Pb		
V-74 A-7 NE 700		200	100	100		
A-14 SW 1100		13	40-	20-		
1000		15	50	20-		
900		15	75	28		
800		20	165	45		
700		25	290	115		
500		40	85	125		
400		15	50	30		
200		10	60	20-		
100		10	40-	20-		
NE 200		10-	50	20-		
300		13	160	95		
400		38	80	20-		
500		13	40-	25		
600		50	120	115		
700		33	125	75		
A-0 SW 300		23	70	220		
200		20	500	260		
100		13	220	110		
A-1 SW 200		10-	40-	20-		
100		20	70	33		
NE 100		10	45	70		
200		10-	40-	23		
300		20	45	50		
400		10-	40-	20-		
500		18	50	110		
600		10	60	20		
700		10	175	145		
A-7 SW 1000		25	60	50		
900		20	125	30		
700		15	180	120		
600		25	150	200		
500		18	250	150		
400		10-	40-	20-		
300		15	240	145		
200		65.	160	80		
100		20	50	20		
NE 100		25	70	30		
200		30	80	55		
300		15	50	20		
400		200	120	35		
500		23	40-	20-		
600		285	45	70		

LEGEND

- FRAGMENTAL VOLCANICS
- VOLCANIC BRECCIA
- VERY COARSE VOLCANIC BRECCIA
- UPPER SERIES OF VOLCANICS
- VOLCANIC SANDSTONE
- BANDED VOLCANICS,
- LAMPROPHYRE DIKE
- AUGITE - HORNBLende - FELDSPAR PORPHYRY
- AGGLOMERATE
- INTRUSIVE, Quartz diorite or Quartz monzonite
- QUARTZ REPLACEMENT BRECCIA, MINERALIZED
- STRIKE AND DIP OF CONTACTS
- FAULT, DEFINED, ASSUMED
- CONTACT, DEFINED, ASSUMED

Department of
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NO. **759** MAP **#4**

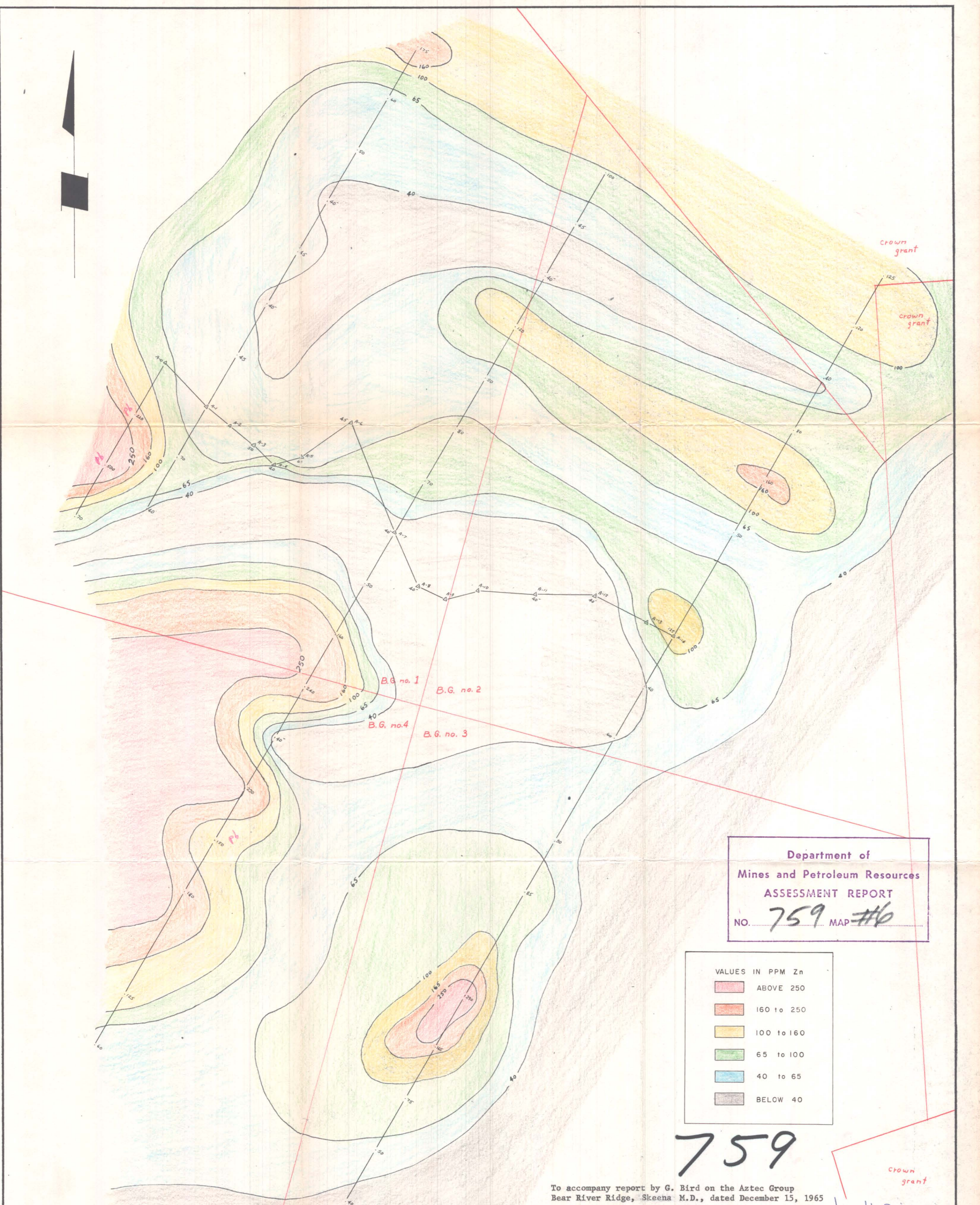


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To accompany report by G. Bird on the Aztec Group
Bear River Ridge, Skeena M.D., dated December 15, 1965

G. Bird

DRAWN G. BIRD	SCALE 1" = 1320'	CANEX AERIAL EXPLORATION LIMITED	GEOLOGIC MAP
TRACED	DATE JULY/65	AZTEC, VENTURE 74	FILE NO.
APPROVED			



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NO. **759** MAP #**6**

VALUES IN PPM Zn	
	ABOVE 250
	160 to 250
	100 to 160
	65 to 100
	40 to 65
	BELOW 40

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To accompany report by G. Bird on the Aztec Group
Bear River Ridge, Skeena M.D., dated December 15, 1965

Leaf Bird

DRAWN G. BIRD	SCALE 1" = 100'	CANEX AERIAL EXPL. AZTEC, VENTURE 74	GEOCHEMICAL MAP
TRACED	DATE JULY /65		
APPROVED		FILE NO.	Values in ppm Zn