

A Report on a Geochemical Survey on the Seatu Claims  
Seagull Creek Area, Watson Lake M.D., Yukon

Comprising

Seatu Claims 1 to 20 (YA 11044 - YA 11063)

Location

61° 30' N. Lat., 132° 38' W. Long.

NTS Sheet 105-F-10

By

T.L. Sadlier-Brown and A.E. Nevin

On

Work performed between July 17 and August 5, 1977



Vancouver, B.C.  
September 15, 1977



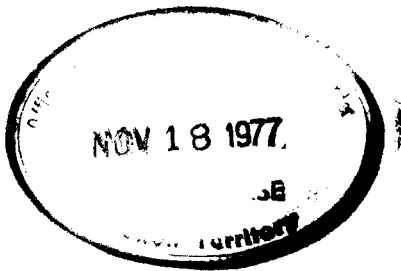


This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$ SEE MAGNETOMETER REPORT

[Signature]  
Resident Geologist or  
~~Resident Mining Engineer~~

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

[Signature]  
Commissioner of Yukon Territory



SUMMARY

During July and August of 1977 a program of geochemical sampling was carried out on the Seatu Claims located in the Valley of Seagull Creek, 35 miles south of Ross River, Yukon Territory. Bedrock in the claim area is completely mantled by overburden but extrapolations from adjacent ridges suggest that the claims may in part be underlain by a unit of Mississippian felsic volcanic rocks which are known to host sulphide mineralization nearby.

About 5 line kilometres were soil sampled at 50 meter intervals and the samples tested for Pb and Zn. Values for both Zn and Pb were generally low, and no follow up in the area under discussion is presently felt warranted. Additional reconnaissance sampling in the untested western part of the property is, however, recommended.

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Claim Group Location Map : Seatu Claims

Fig. 1

## 1.0 INTRODUCTION

### 1.1 Terms of Reference and Scope of Survey

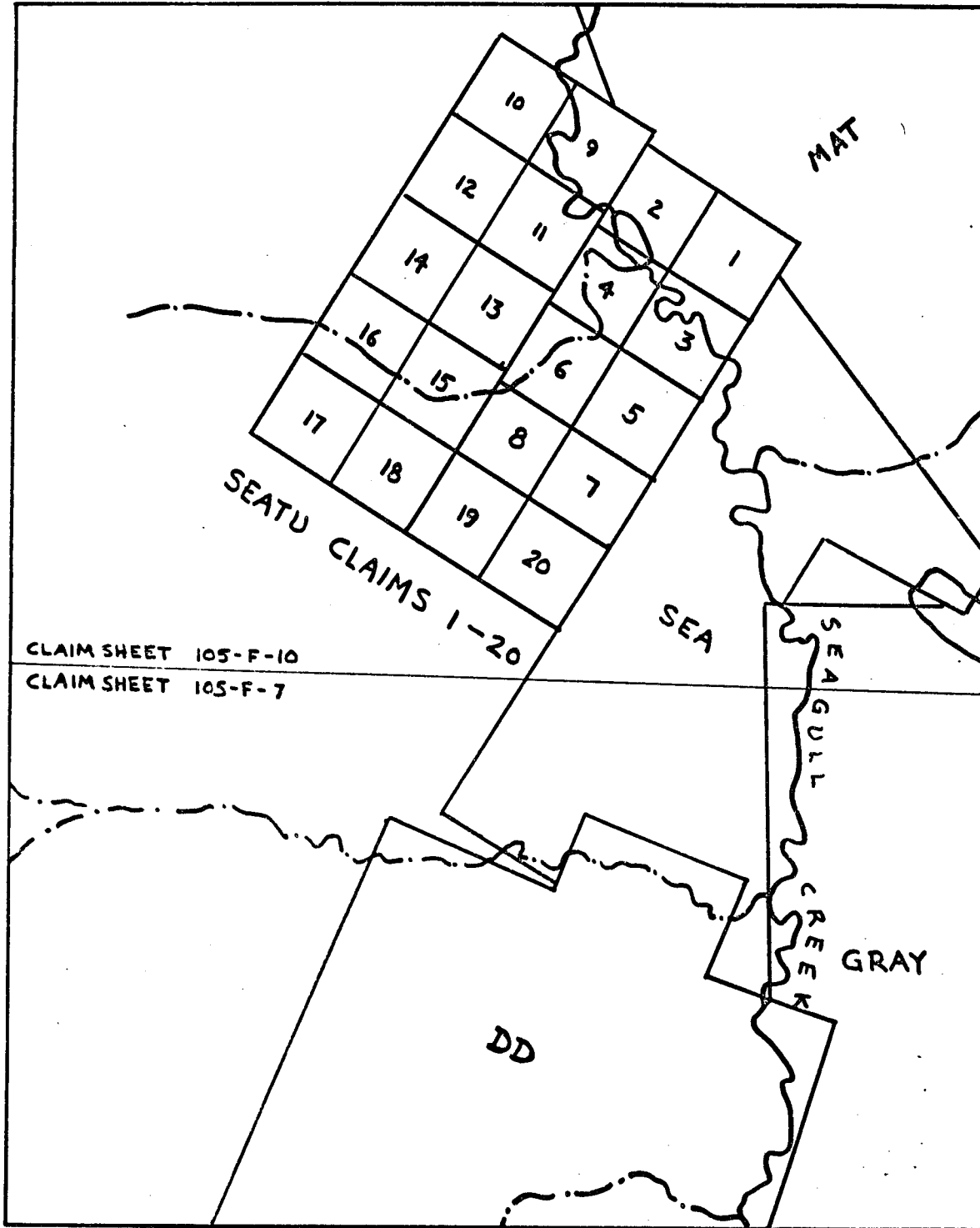
The work described in this report was carried out as part of a combined geochemical and geophysical (magnetometer) survey of the Seatu Claims by Nevin Sadlier-Brown Goodbrand Ltd. of Vancouver, B.C. Field work was supervised by T.L. Sadlier-Brown and was based upon recommendations of A.E. Nevin, P.Eng., who examined the property in August of 1976. Crew members were M. Cloutier of Richmond B.C. and J. Hill of Whitehorse, Yukon.

The surveys were carried out on cut and chained picket lines totalling about 5 line kilometres and on chain and compass lines totalling 1.6 line kilometres. They are intended to test the area for mineralization within a projected extension of the Mississippian felsic volcanic unit which hosts the zinc lead occurrence on the MM group to the south and on the Mat Group which adjoins the Seatu claims to the east. As no exposure is known on the claim group indirect methods were chosen for the initial phase of the project. Soil samples were tested for Zn and Pb and a magnetometer was employed to delineate the airborne magnetic anomaly plotted on Geophysical Map 7005 G (Dept. of Energy Mines and Resources, "Quiet Lake" Sheet).

It was anticipated that the heavy overburden in the area would tend to compromise soil geochemistry as an exploration tool but conclusions of this nature made prior to completion of a program were and are considered premature.

### 1.2 Claims and Ownership

The property consists of 20 contiguous mineral claims including Seatu 1 - 20 (Grant numbers YA 11044 to YA 11063 incl.) The claims are held by John Crandall of 2445 W. 8th Avenue, Vancouver, B.C., V6B 2B2. Work was performed on behalf of Tachyon Venture Management Ltd., of Calgary under the terms of an agreement with Mr. Crandall.



Claim Map: Seatu Group

Fig. 2

### 1.3 Location and Access

The Seatu Claims lie in and near the valley of Seagull Creek west of Greyling Lake and some 35 miles south of the Community of Ross River. The most convenient access is by helicopter from Ross River but there is a road which leads from the Canol road just south of Groundhog Creek easterly to Seagull Creek then down the east side of the Seagull Valley to the northern part of the property. The road was improved during the 1977 field season but it is rough and only negotiable by four wheel drive vehicles. It was the access route utilized during the course of the present survey.

### 1.4 Topography and Physiography

The area surrounding the Seatu Claims is mountainous and rugged with ridges exceeding 6000 feet ASL. The Seagull Creek Valley is, in the claim locality, at an elevation of 3600 to 3800 feet ASL and most of the claims lie within it and on the lower slopes to the east, generally below about 5000 feet ASL. The eastern part of the property is flat valley bottom muskeg with numerous ponds, sloughs, and swamps.

Drainage over much of the property is poor. Overburden appears to be fairly heavy and no outcrop was observed in the Survey area. Isolated occurrences have, however, been reported in Seagull Valley nearby.

Forest cover is primarily northern black spruce with minor amounts of balsam. Underbrush consisting of dwarf birch, willow, and alder is heavy and tends both to hamper travel on the ground and to make linecutting slow and costly.

## 2.0 GEOLOGY

The geology of the area was recently mapped by D.J. Templeman-Kluit (see GSC Open File Map 486). Virtually all bedrock on the claim group is obscured by overburden so the property geology is only speculative being based on extrapolations from adjacent areas.

The oldest rocks lie in the western part of the area of interest on the ridges west of Seagull Creek. They consist of a sequence of clastic sedimentary rocks, carbonates, and minor volcanics of proterozoic, lower Cambrian, and Cambro-Ordovician ages and are unconformably overlain by Siluro-Devonian dolomite near the west boundary of the claims. The youngest rocks are the Mississippian felsic volcanics which occur immediately east of Seagull Creek as well as in the cirque west of Seagull Creek and southwest of Greyling Lake. They may also underly the northern and possibly the extreme southern part of the Seatu Group. They are of particular interest as they host the sulphide deposits on the MM Claims, to the south and on the Mat Claims to the east.

### 3.0 GEOCHEMISTRY

#### 3.1 Survey and Analytical Methods

A total of 71 soil samples were taken in the southern and eastern parts of the Claim Group. Samples of "B" horizon material were taken with a mattock at 50 metre intervals along chained lines. Samples were placed in paper envelopes marked with grid coordinates and sent to Acme Analytical Laboratories in Ross River, Yukon Territory to be tested for lead and zinc.

Analysis was by Atomic Absorption methods following hot acid digestion of a 1 gm sample of -80 mesh material from each envelope. Results were reported in parts per million (ppm) zinc and lead and were plotted directly onto the accompanying maps.

#### 3.2 Observations and Discussion of Results

Values of both lead and zinc are generally low. Lead varied from 11 ppm to 50 ppm and zinc varied from 38 ppm to 166 ppm. Higher values (Pb + 35 ppm and Zn + 120 ppm) tend to occur in samples taken along the road in the northern part of the claim area. This may reflect shallower overburden or closer proximity to the felsic volcanic unit. The values are not considered high enough to constitute an anomaly.

Spot threshold values on the grid west of Seagull Creek

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are attributed to variations in metal content within the overburden which is quite heavy in this area and not to any bedrock source. This is believed to be the general situation in the lower part of the valley where glacial material is abundant and it suggests that geochemical results in these areas do not give a conclusive assessment of bedrock metal content.

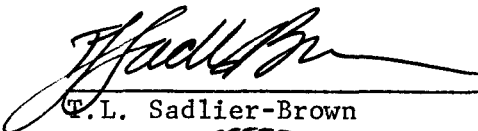
#### 4.0 CONCLUSIONS AND RECOMMENDATIONS

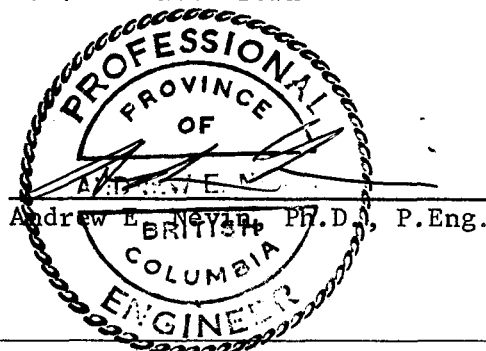
No geochemical values considered to warrant follow up work were detected. The results, however, should be considered inconclusive rather than negative as heavy glacial overburden in the survey area severely compromises the use of geochemistry as an exploration tool.

Although soil geochemistry is not reliable at lower elevations it may be useful higher on the slopes where overburden is mainly colluvial. It is therefore recommended that additional sampling be carried out in the extreme western part of the property. Reconnaissance lines trending along the slope in a north-south direction should be run using a chain and compass. Samples should be tested for Pb, Zn and Cu.

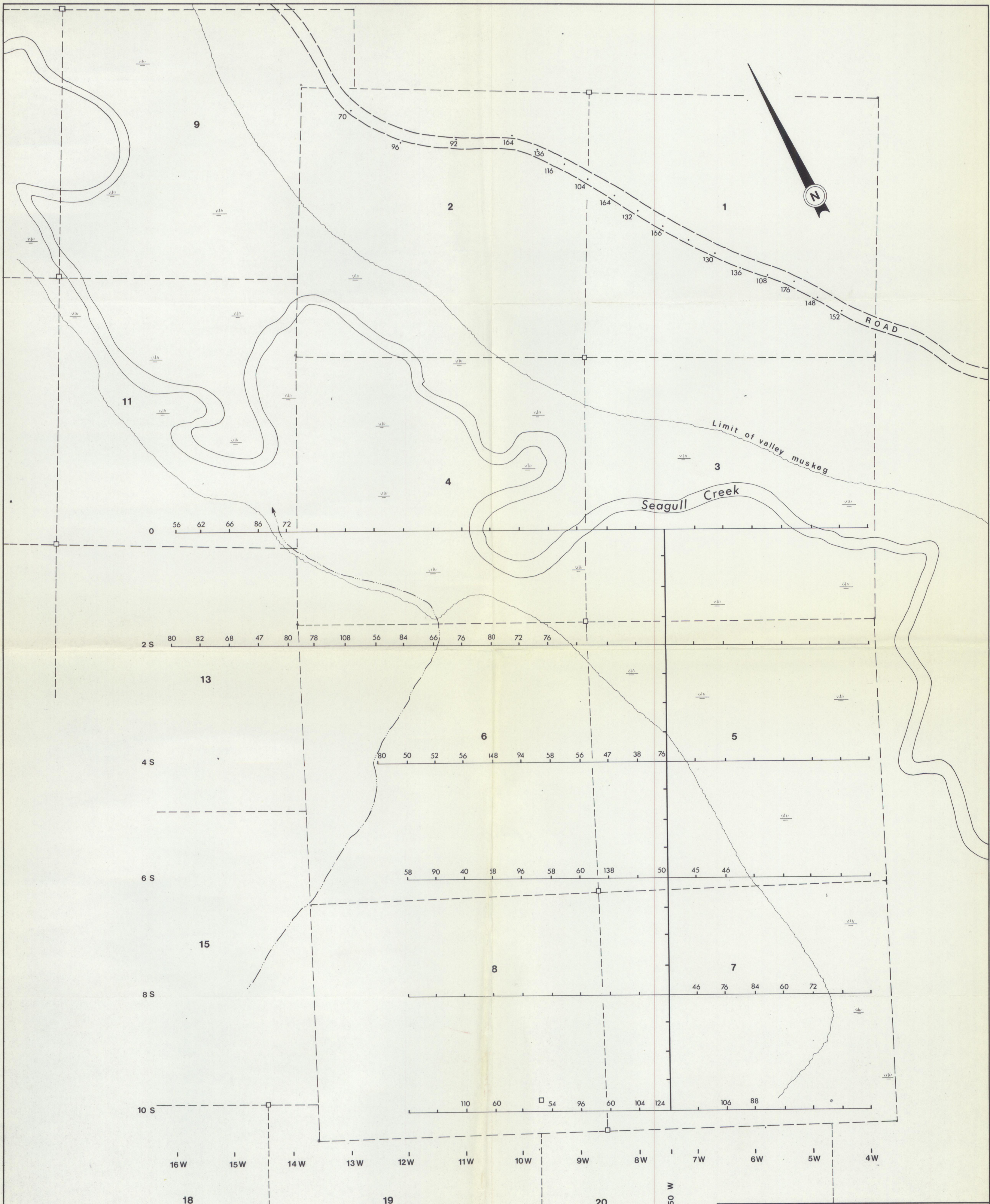
Respectfully submitted,

NEVIN SADLIER-BROWN GOODBRAND LTD.

  
T.L. Sadlier-Brown



September 15, 1977



Values plotted in ppm

To accompany report by T. Sadlier-Brown and A. E. Nevin

**GEOCHEMICAL PLAN, ZINC (Zn)**  
SEATU CLAIMS

WATSON LAKE M.D., Y.T. parts of maps F-9 & 10

NEVIN, SADLIER-BROWN, GOODBRAND, LTD., VANCOUVER, B.C.

DATE: Aug. 1977 FIG.

