



NUSPAR RESOURCES LTD.

A Report on a Geochemical Survey on the Sea Group  
Seagull Creek Area, Watson Lake M.D., Yukon Territory

Comprising

Sea 1-3, 9-22  
Seatu 21 & 22

Location

61° 30' N. Lat., 132° 38' W. Long.  
NTS Sheets 105-F-7 and 105-F-10

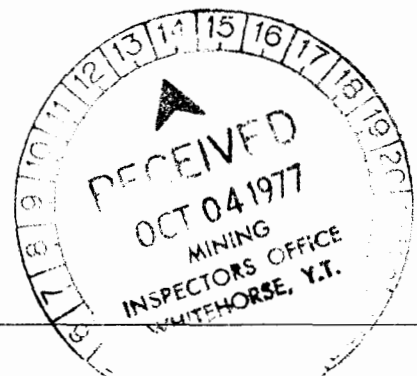
By

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

On

Work performed between July 17 and July 26, 1977

September 5, 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 \$ 3800.00 FOR GEOCHEMICAL & MAGNETIC SURVEYS.

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

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

*[Signature]*  
B. R. BAXTER  
Supervising Mining Recorder

*[Signature]*  
Commissioner of Yukon Territory

Office of The Supervising Mining Recorder  
OCT - 3 1977  
WHITEHORSE  
Yukon Territory

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NOV 18 1977  
WHITEHORSE  
Yukon Territory

SUMMARY

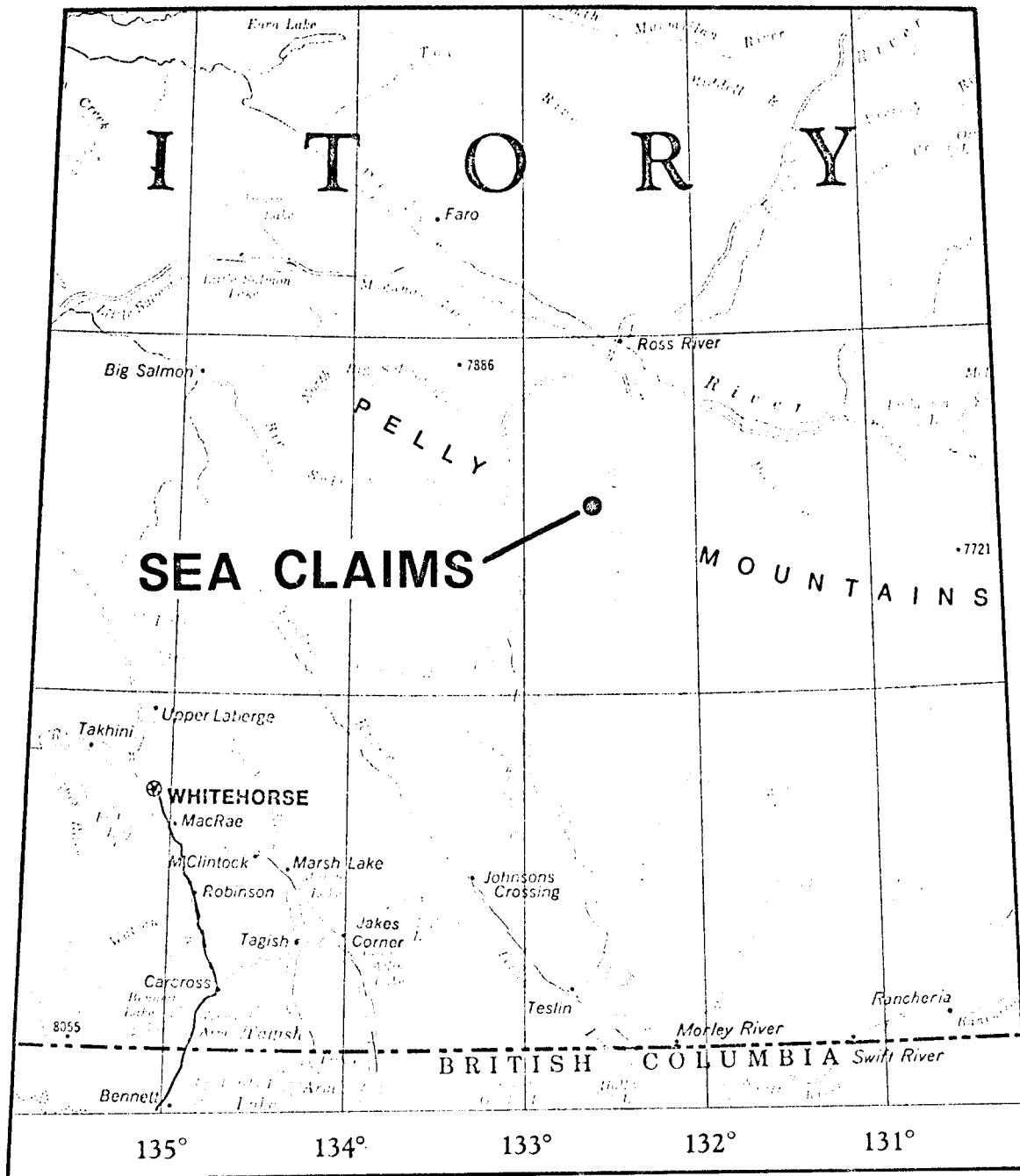
During July and August of 1977 a program of geochemical sampling was carried out on the Sea Claims located in the Valley of Seagull Creek, 35 miles south of Ross River, Yukon Territory. Bedrock in the claim area is completely mantled by overburden but extrapolations from adjacent ridges suggest that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

About 4 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 although four clusters of above background concentrations were identified. Three of these are tentatively interpreted as being derived from seeps of metal enriched ground water. The other occurs in a stream outwash and is attributed to sulphide occurrences known in the drainage basin east of the claims.

No follow up in the area under discussion is presently felt warranted but additional reconnaissance sampling in the untested southern part of the property is recommended.

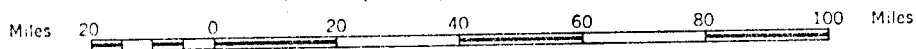
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Location Map	front
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Geochemical Map - Zinc	Rear Pocket
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SCALE 1:2,000,000

1 inch equals approximately 32 miles



## LOCATION MAP

DWG 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 program on the Sea Group by Nevin Sadlier-Brown Goodbrand Ltd. on behalf of Nuspar Resources Ltd., of Vancouver, B.C.

Recent exploration and development on adjacent claims has revealed several occurrences of zinc, copper, and lead which are generally felt to be of economic interest. The Sea and Seatu property is located in an area believed to be geologically similar to the terrane which hosts the showings and is at least partly underlain by a magnetic anomaly detected by a government airborne magnetic survey and plotted on Geophysical Map 7005 G, "Quiet Lake". As bedrock is virtually all obscured by overburden the initial exploration of the claims has been restricted to geophysical and geochemical prospecting methods.

The surveys were carried out on cut and chained picket lines using a metric grid totalling about 4 line kilometres (km). The field work was done by H.S. Aikins of 305-535 Thurlow Street, Vancouver, B.C., M. Cloutier of 1134 Kingsgrove Avenue, Richmond, B.C., and T.L. Sadlier-Brown of 503 - 134 Abbott Street, Vancouver, B.C. on the basis of recommendations contained in a report on the claims dated May 9, 1977 by Andrew E. Nevin, P.Eng. who visited the property in August 1976. The field party based at a camp established on the access road on the north side of Seagull Creek at a point just north of the claim boundary and about a mile northwest of Greyling Lake.

### 1.2 Claims and Ownership

The property under discussion is held by Nuspar Resources Ltd., of 535 Thurlow Street, Vancouver, B.C. and comprises the following contiguous claims:

Sea 1 - 3 incl.	YA 00971 - 73
Sea 9 - 18	YA 11034 - 43
Sea 19 - 22	YA 00967 - 70
Seatu 21 & 22	YA 11064 - 65

### 1.3 Location and Access

The Sea group lies in and near the valley of Seagull Creek immediately 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 Sea 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 Sea Claims lie within it on the lower slopes generally below about 4500 feet ASL. The central part of the property is flat valley bottom muskeg with numerous ponds, sloughs, and swamps while the northern and southern claims lie at the higher elevations on the forested lower slopes.

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 consists primarily of 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 extreme southern part of the Sea Group. They are of particular interest as they host the sulphide deposits on the MM Claims, south of the Sea Group and on the Mat Claims to the north and east.

### 3.0 GEOCHEMISTRY

#### 3.1 Survey and Analytical Methods

A total of 67 soil samples were taken in the northern part of the Sea Claim Group. Samples of "B" horizon material were taken with a mattock at 50 metre intervals on cut grid 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 in soils from the northern part of the claim group. Lead varied from 10 ppm to 49 ppm and zinc varied from 38 ppm to 154 ppm. Higher values (Pb + 35 ppm and Zn + 120 ppm) tend to form clusters which could be interpreted as marginal anomalies. There are four of these and they apply for both lead and zinc. Three occur on the main part of the grid on the Sea 17 and 18 fractional claims. Approximate coordinates of their centres are 1) 2+50 N -3 W; 2) 1+50 N -1+00 W; 3) 1 N - 1 E. The fourth is located on cross line 25 between 3+50 E and 6+00 E. The three northerly areas are underlain predominantly by glacial overburden

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which would obscure any possible local source. These might include 1) anomalous Pb Zn values in subcrop; 2) local glacial deposition of Zn and Pb bearing material; 3) metal enriched groundwater seeps. The latter is considered a strong possibility as areas 2 and 3 are in boggy ground.

The anomalous values on line 2 south coincide well with the limits of the outwash material (silt, sand and gravel) from the stream at 2S, 4+80 E. This stream originates in a cirque northeast of the Sea claims in an area mapped as Mississippian felsic volcanics. These rocks are reported to contain occurrences of base metals and are considered the most probable source of the Pb and Zn detected here.

#### 4.0 CONCLUSIONS AND RECOMMENDATIONS

Four marginally anomalous areas are present on the west facing slope on the east side of Seagull Creek. The three most northerly areas are tentatively attributed to metal enriched ground water seeping from glacial overburden. Both Pb and Zn content is quite low and, although no source has been established, material derived from mineralized Mississippian felsic volcanics located upslope to the east is considered to be most probable.

The coincident Pb and Zn marginal high on line 2S is attributed to alluvium derived from sulphide bearing felsic volcanic rocks cut by the stream which crosses the line at 4+80 E. The stream drains a considerable area underlain by these rocks near its headwaters in a cirque east of the Sea Group.

Results to date do not warrant any detailed follow up in the northeastern part of the property. The claims that lie west of Seagull Creek however have not been tested and recent mapping by the Geological Survey of Canada suggests that the southern part of this block might be underlain by the volcanic unit which hosts the mineralization discovered on the adjacent properties.

A geochemical reconnaissance of the part of the Sea Group east of the creek is recommended. This would comprise Sea 1-3, 9-13, and 19-22 inclusive. For expedience the work should be done on chain and compass lines bearing at about 030° T totalling about 6 line km and 120 samples.

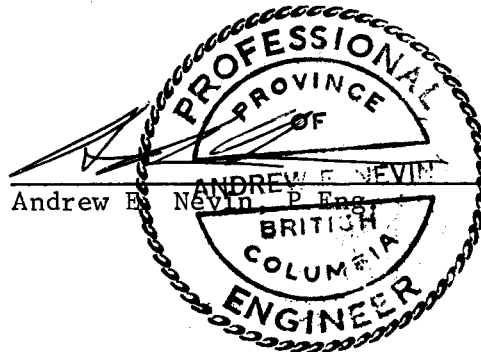
The location of the airborne magnetometer anomaly reported to occur in the area should also be established by a magnetometer survey which could be run in conjunction with the soil sampling.

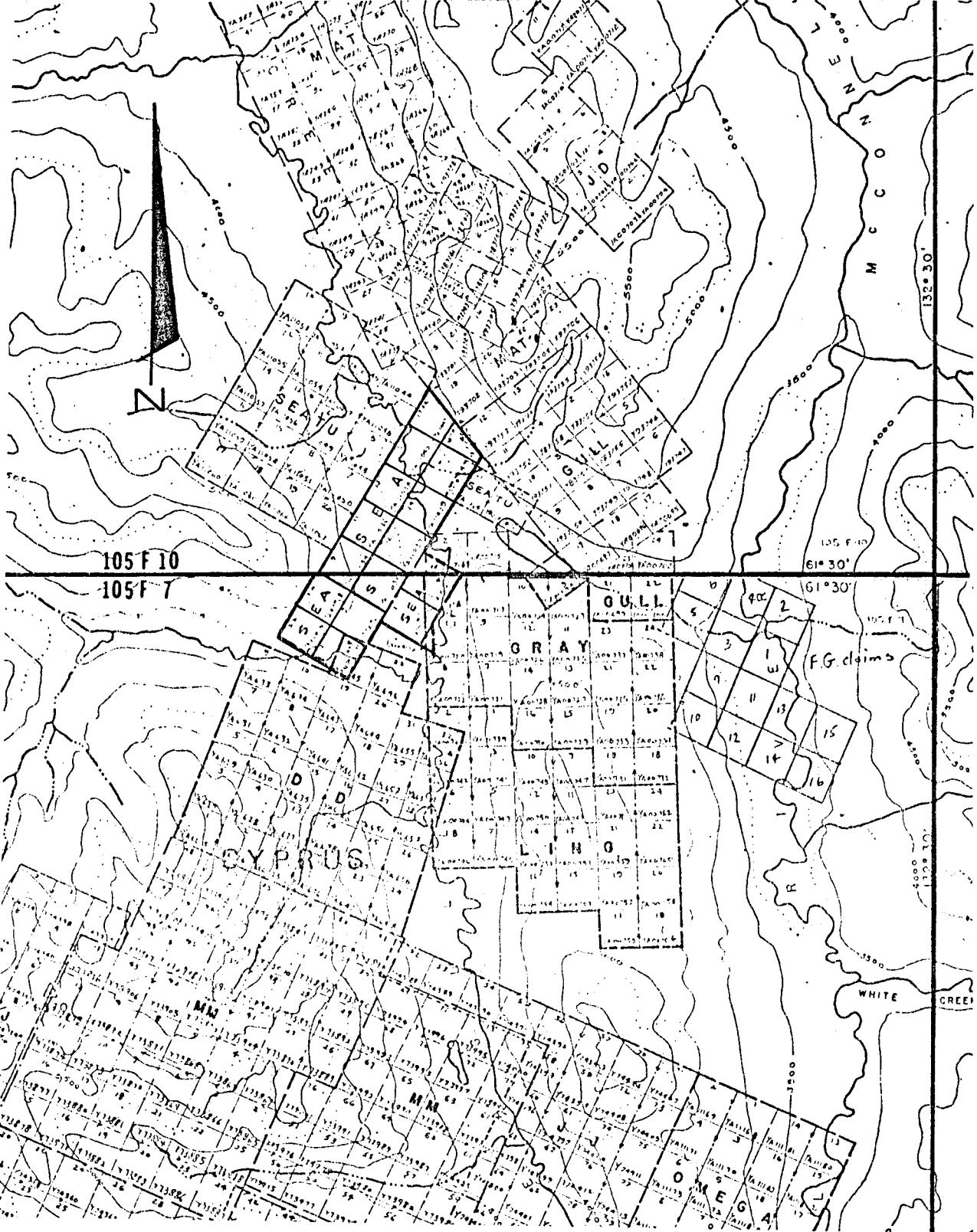
If the work described above develops any targets for detailed follow up a shoot back EM survey using a Crone CEM or similar unit could be carried out. This should be carried out on cut lines on any new anomaly as well as on lines 2N and 3N on the east side of Seagull Creek.

Respectfully submitted

NEVIN SADLIER-BROWN GOODBRAND LTD.

  
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T.L. Sadlier-Brown



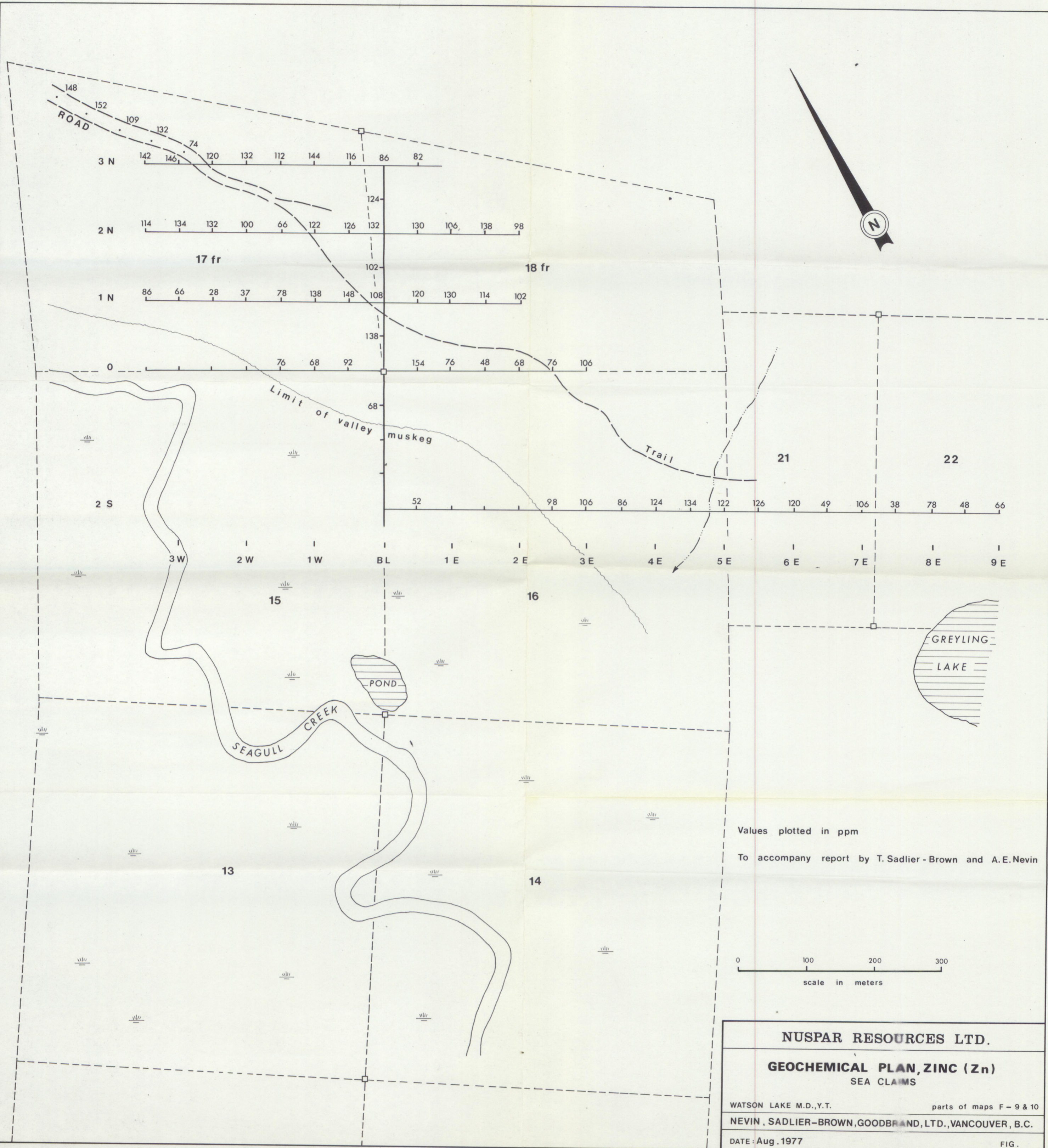
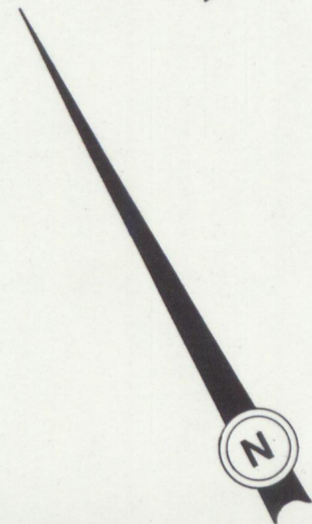


SEA CLAIMS

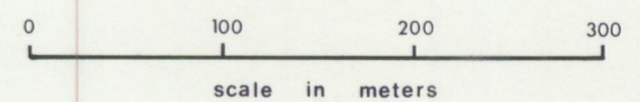
Watson Lake M.D. 105F-7/10

Scale 1" = 1 mile (Jan 1977)

DRAWING 2



Values plotted in ppm  
To accompany report by T. Sadlier-Brown and A.E. Nevin



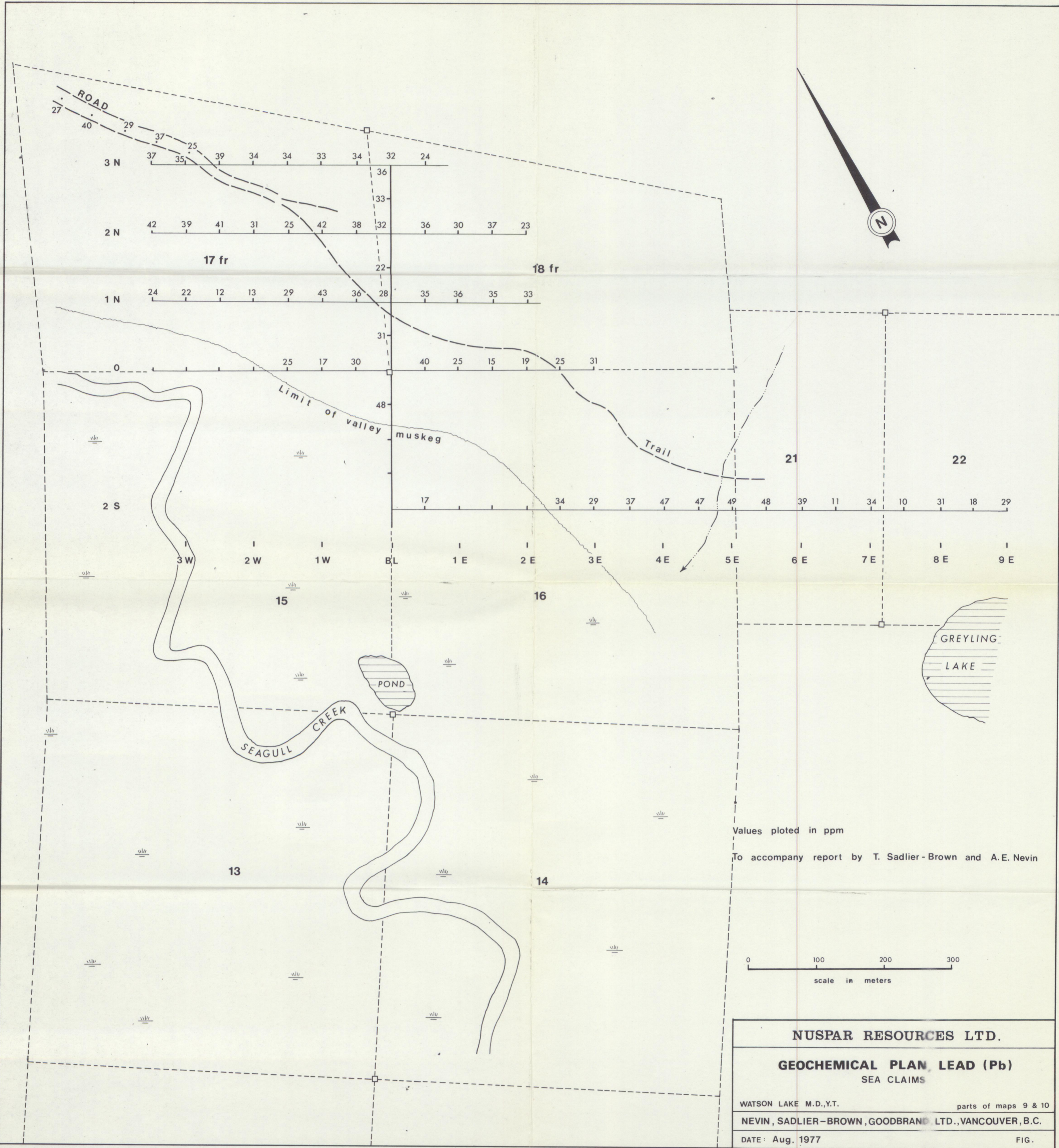
**NUSPAR RESOURCES LTD.**

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

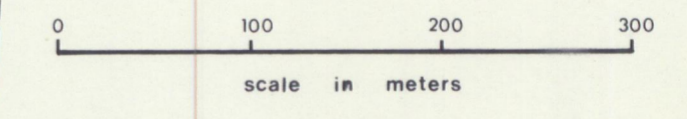
WATSON LAKE M.D., Y.T. parts of maps F-9 & 10

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

DATE: Aug. 1977 FIG.



Values plotted in ppm  
 To accompany report by T. Sadlier-Brown and A.E. Nevin



**NUSPAR RESOURCES LTD.**

**GEOCHEMICAL PLAN, LEAD (Pb)**  
 SEA CLAIMS

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

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

DATE: Aug. 1977 FIG.