

GEOLOGY AND SOIL GEOCHEMISTRY

ROEN #1 AND #2 CLAIMS

LIARD MINING DIVISION

LOCATION: NTS 94K/4W, 94L/1E; 58°8' N, 125°59'W

OWNER: S.E.R.E.M. Ltd.

OPERATOR: S.E.R.E.M. Ltd.

7328

REPORT BY: J.F. CARNE

DATE: JUNE, 1979

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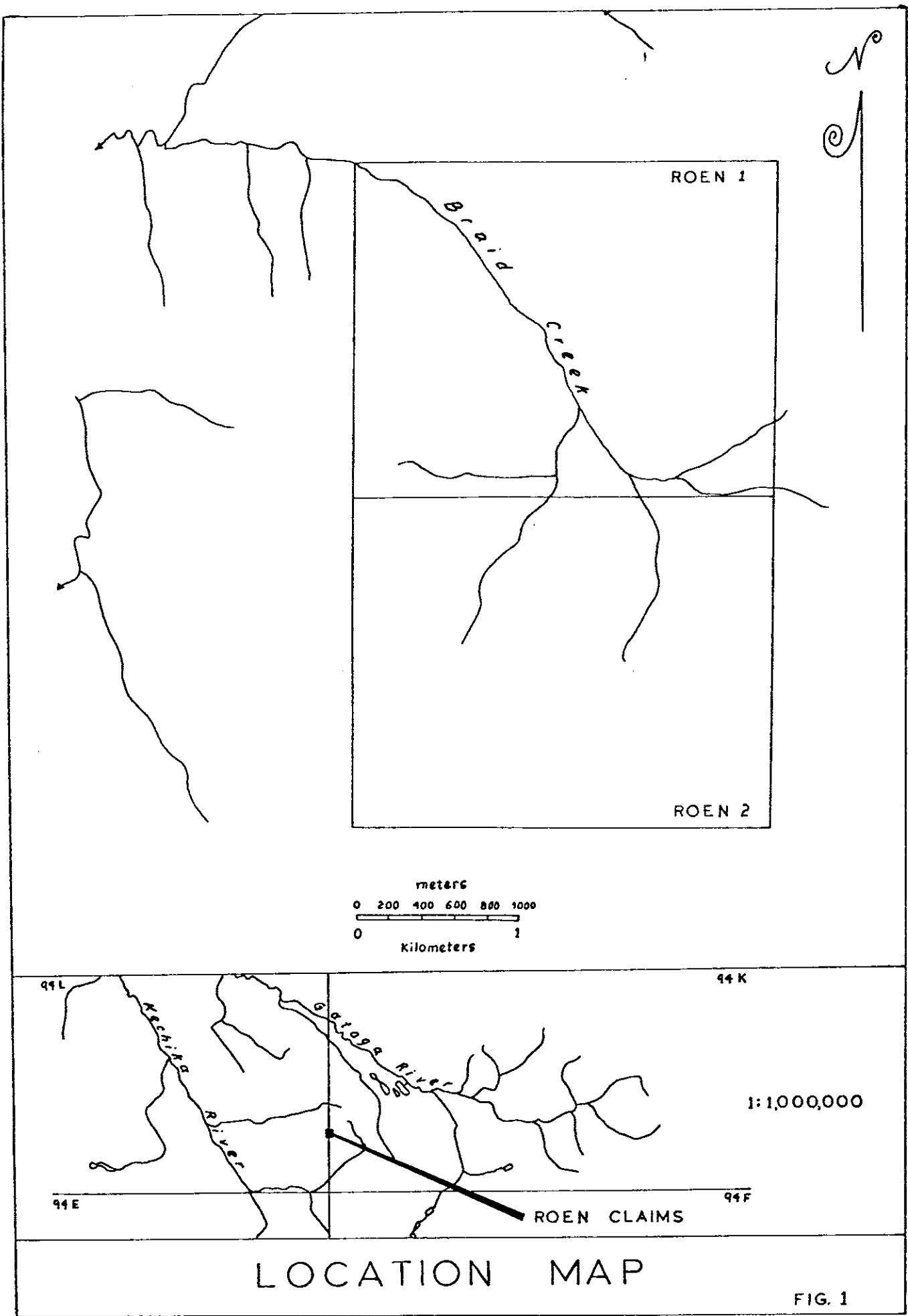
## INTRODUCTION

The Roen #1 and #2 claims are located approximately 90 km south-southwest of Muncho Lake, B.C. and 8 km north of Driftpile Creek (Figure 1). Access to the property is by floatplane to Mayfield Lake from Watson Lake or Muncho Lake and helicopter from Mayfield Lake. The nearest road is the Alaska Highway 75 km to the northeast.

The claims sit at an elevation between 4500 and 6000 feet and terrain varies from steep, bare shale slopes at upper elevations to partially forested, open valleys. Snow pack was heavy during the winter and north facing slopes remained partially covered throughout this project.

Roen #1 and #2 were staked in May, 1977 and were recorded June 21, 1977 by SEREM Ltd. They lie on the northwest extension of stratigraphy containing known Pb-Zn-barite mineralization in the Driftpile Creek area to the southeast.

This report describes geological mapping and geochemical sampling carried out on the Roen claims during June, 1979. Mapping at a scale of 1:10,000 covers 4.5 square Kilometers; ninety-three geochemical samples were collected along 8200 meters of grid lines and from gossans.



# LOCATION MAP

FIG. 1

GEOLOGICAL SURVEY

The Roen claims sit along a belt of Devonian to Mississippian black shales characterized by one or more horizons of bedded barite which is accompanied by lead-zinc mineralization in several areas. This barite horizon crosses the Roen claims (Figure 2).

The barite horizon is quite variable along its strike on both large and small scales. On the Roen claims where it is mapped as unit 3, the barite horizon is characterized by massive, bedded barite which grades upwards and laterally into silty banded shales with 1 - 2 cm thick blebby barite bands to silty shales with small (less than 1 cm) barite (?) nodules. This rock type has a warty appearance. Interbedded with the barite bearing beds are minor pyritic black mudstones and silvery weathering, and pinstriped, black shales.

Underlying Unit 3 is a partially silicified sequence of blocky weathering, black cherty argillite and silvery weathering black shale. A grey, white and black banded, tuffaceous looking shales is sometimes present near the top of this unit (Unit 2).

Below Unit 2 is a second sequence of blocky weathering, silty banded shale. Massive barite is absent from this horizon (Unit 1).

Overlying Unit 3 is a second cherty horizon which includes abundant "pinstriped" black shale (Unit 4). Much of this unit consists of carbonaceous shales, often occurring as graphites along shear surfaces.

A few outcrops of probable Road River rocks (RR) of Ordovician to Silurian age occur across major faults. Road River rocks here consist of very carbon rich, soft, black shale interbedded with black, bedded chert and limestone layers 10 - 15 cm thick.

The entire package exposed on the Roen claims appears to be the west limb of a NW trending anticline. It is complicated by several small drag folds and thrust faults which may have significant offsets. Some of the similarity between rock units described above may be a result of repetition of section along thrusts rather than actual stratigraphic section. Several NW trending lineaments can be traced. These normally have rusty springs associated with them and may be small thrust faults along axial planes of parasitic anticlines on the limb of the larger fold.

Northeasterly trending cross faults disrupt this structural style.

Besides minor amounts of pyrite in some shales of the barite horizon, no mineralization was found exposed on the Roen claims.

## GEOCHEMICAL SOIL SURVEY

### Sample Collection and Analysis

A soil survey was run along a baseline and four crossing lines spaced 600 meters apart and running near the crest of ridges to minimize the influence of downslope transport of float. Samples were taken at 100 m intervals on most lines and at 50 m intervals along the baseline where it crosses mineralized seeps. Generally soil horizons are poorly developed. A good B horizon was not present. Samples taken on the ridges east of the baseline usually are made up of shale chips and the soil developed from them. A total of 93 soil and gossan samples were taken. Their distribution is shown on Figure 3.

The minus 80 mesh fraction of each sample was analysed by Vangeochem Lab, North Vancouver, B.C, for lead and zinc using standard atomic absorption techniques. The values obtained are plotted on Figures 4 and 5.

### Results

High Pb values occur on the crossing lines 300 to 500 m east of the baseline. Though in one case this may reflect a fault, high values on the two southern lines may reflect unexposed mineralization. The barite horizon projects just under the surface on these dip slopes. Zn, however, does not correlate with the high lead values. High Zn, found

along the southern part of Braided Creek Valley, probably is a result of the major fault running along the valley. Source for Zn is the Road River Formation, known to have high background in Zn.

### CONCLUSIONS

There is some indication of lead-zinc mineralization in the barite horizon on the Roen claims although none is exposed. Further sampling is necessary in the vicinity of anomalous Pb followed by trenching if the values are sufficiently high.



COST STATEMENT

<u>Description</u>	<u>Cost</u>
<u>Salaries</u>	
G. Price - surveying, soil sampling; June 3 to June 20 18 days at \$45/day	810
J. Carne - mapping June 3 to June 20 18 days at \$80/day	1440
<u>Field expenses</u>	
36 man days at \$30/day	1080
<u>Transportation</u>	
Helicopter 6.2 hours at \$315/hr	1953
Fixed wing	170
CP air to Watson Lake	500
<u>Analyses</u>	
93 samples for Pb, Zn at \$2/sample	186
<u>Report expenses</u>	<u>50</u>
TOTAL COST	6189

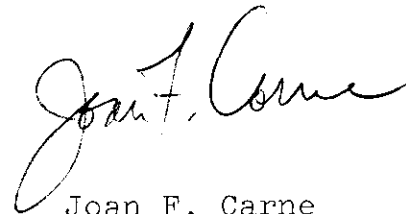
\$4000 of this total cost is to be applied to assessment work for one year on the Roen claims.

STATEMENT OF QUALIFICATIONS

I, Joan F. Carne, of Vancouver, B.C. hereby certify that:

1. I hold a B.A. in geology from Middlebury College, Middlebury, Vermont and an M.Sc. in geology from the University of British Columbia, Vancouver, B.C.
2. I am a geologist employed by S.E.R.E.M.Ltd of 505 - 850 West Hastings Street, Vancouver, B.C.
3. I have worked in geology and mineral exploration for two years and three summers.
4. The field work described in this report was carried out under my supervision.
5. I have no financial interest in the claims covered by this report or in S.E.R.E.M. Ltd.

Dated this 27th day of June, 1979 at Vancouver, B.C.

A handwritten signature in cursive script that reads "Joan F. Carne". The signature is written in dark ink and is positioned above the printed name and title.

Joan F. Carne  
Geologist

7328

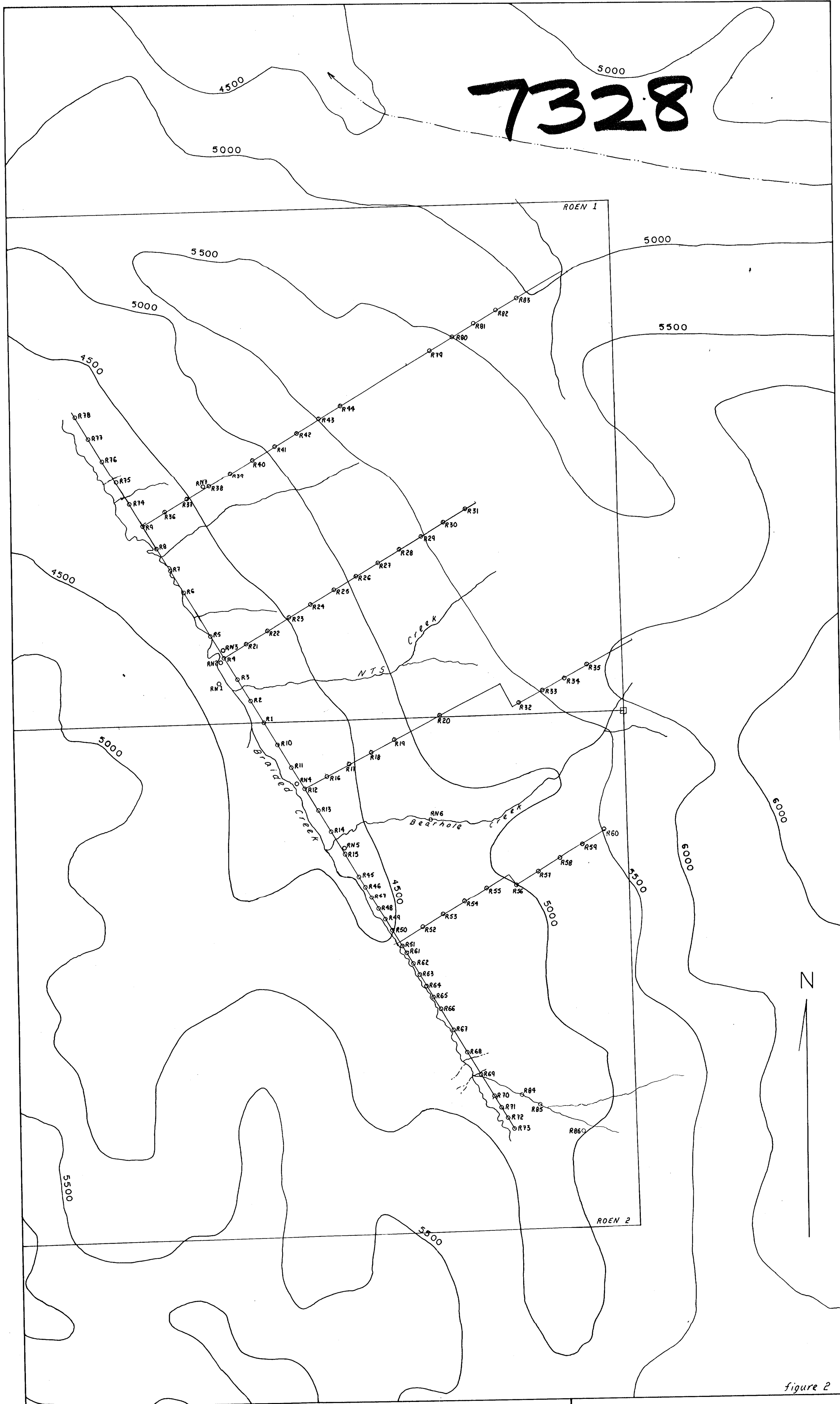


figure 2

ROEN CLAIMS  
SOIL SAMPLE LOCATIONS

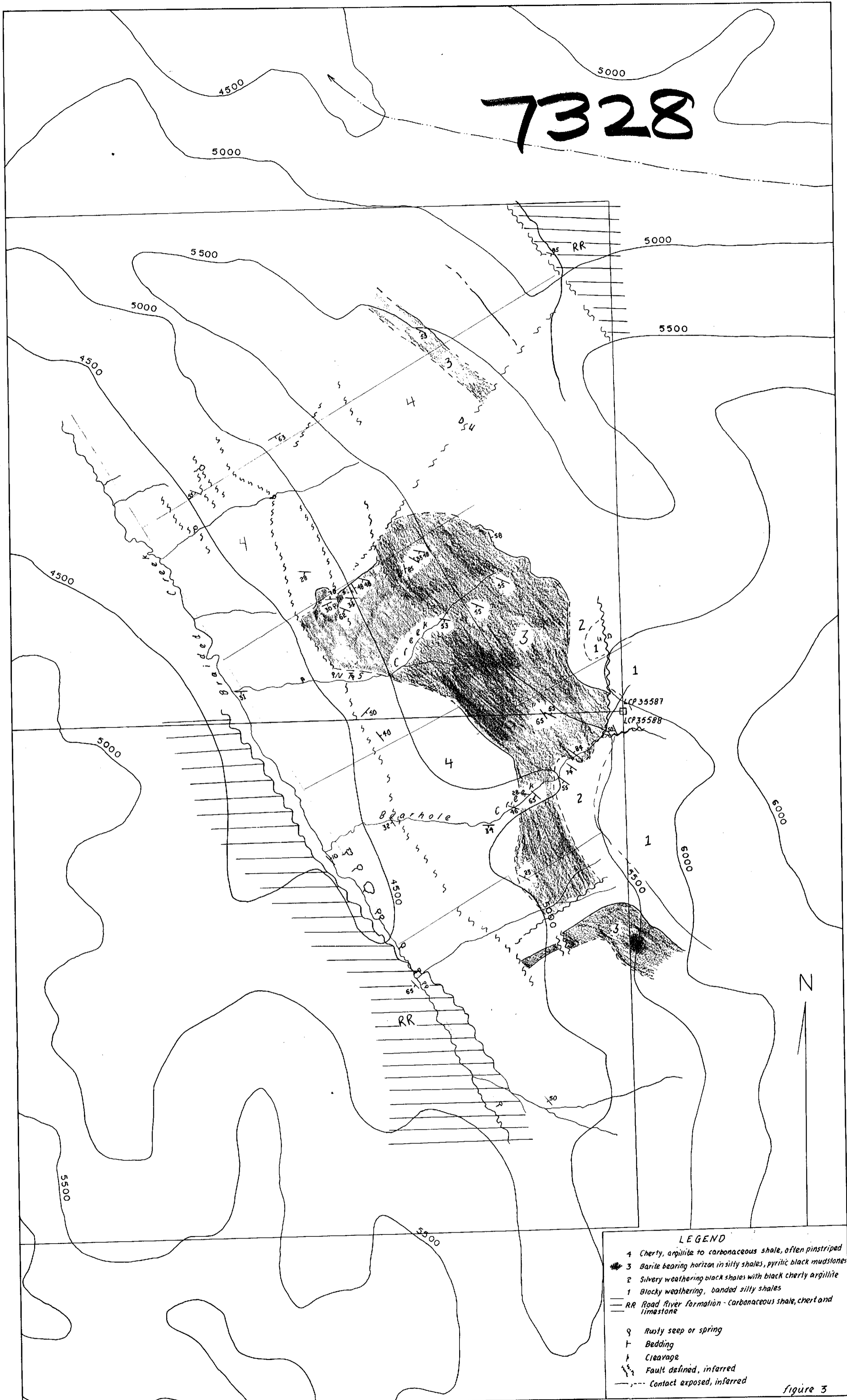
SEREM LTD

Scale:  
1:10,000  
1cm=100m

June 1979  
J. Carne

*J. Carne*

# 7328



### LEGEND

- 4 Cherty, argillite to carbonaceous shale, often pinstriped
- 3 Barite bearing horizon in silty shales, pyritic black mudstones
- 2 Silvery weathering black shales with black cherty argillite
- 1 Blocky weathering, banded silty shales
- RR Road River formation - Carbonaceous shale, chert and limestone
- q Rusty seep or spring
- ⊥ Bedding
- ⊥ Cleavage
- ⊥ Fault defined, inferred
- Contact exposed, inferred

Figure 3

ROEN CLAIMS  
GEOLOGY

SEREM LTD

Scale:  
1:10,000  
1cm=100m

June 1979

J. Carne

*Joan F. Carne*

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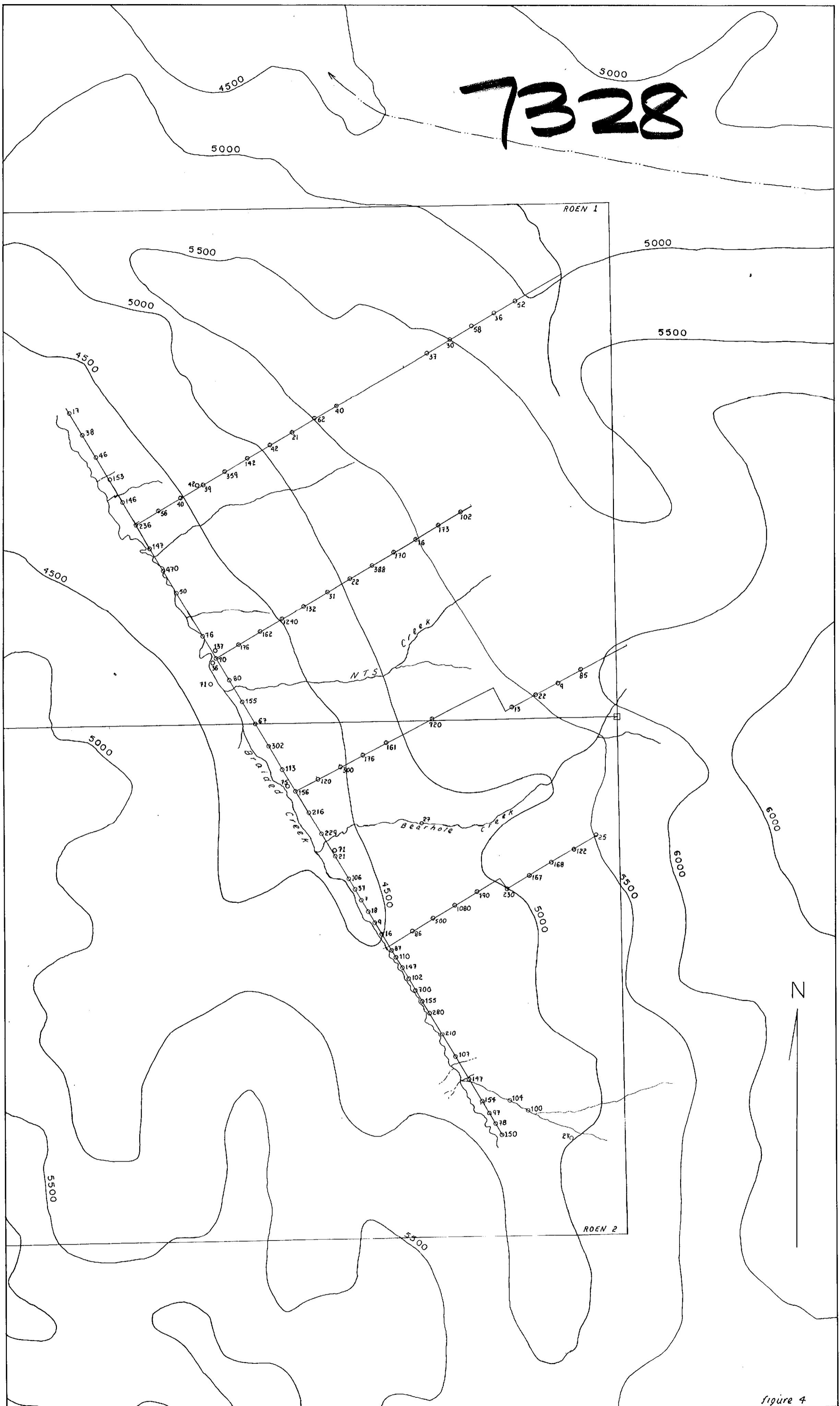


Figure 4

ROEN CLAIMS

• Pb ppm

SEREM LTD

Scale:  
1:10,000  
1cm=100m

June 1979

J. Carne

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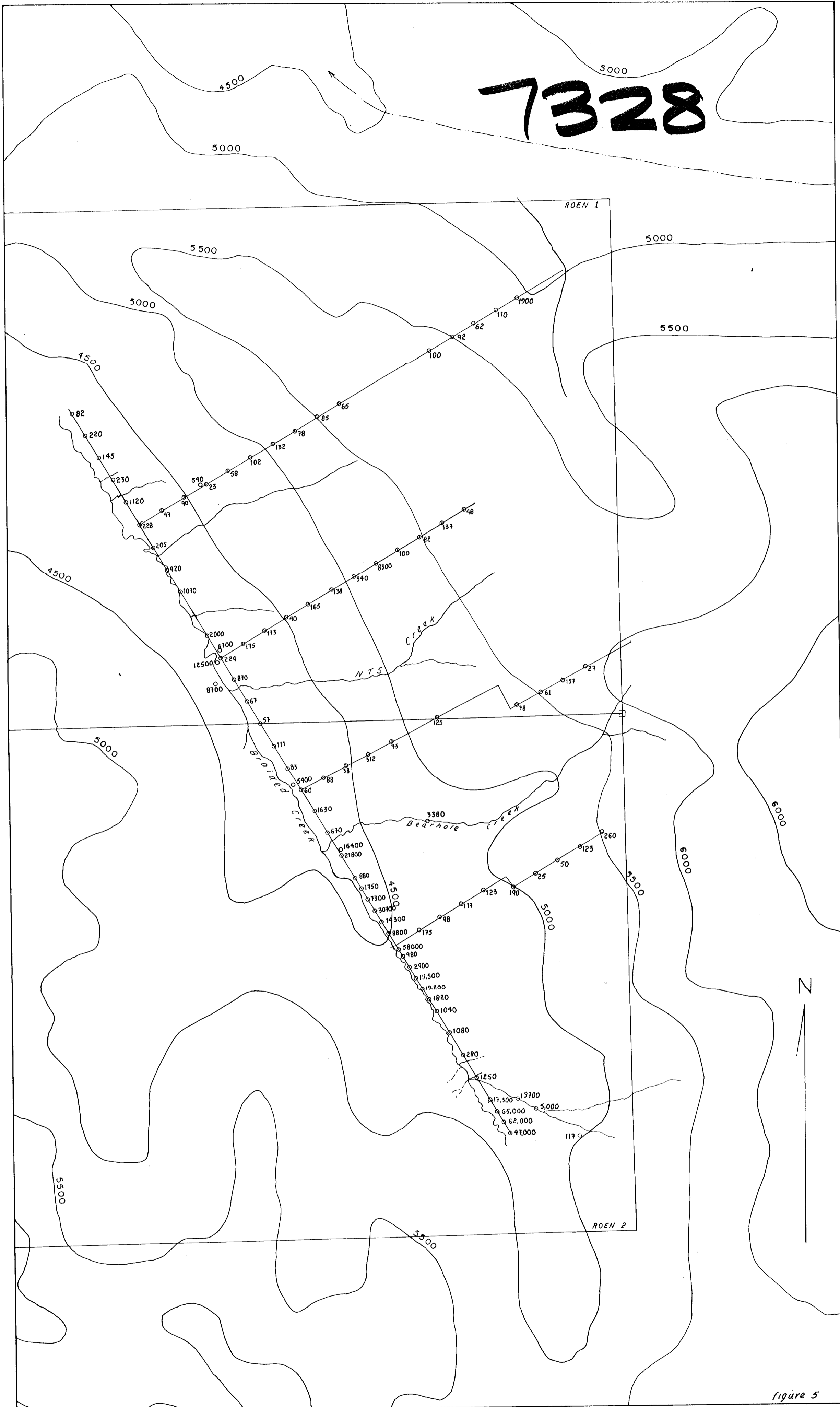


figure 5

ROEN CLAIMS  
Zn ppm

SEREM LTD

Scale:  
1:10,000  
1cm=100m

June 1979

J. Carne

*J. Carne*