

ARIS SUMMARY SHEET

District Geologist, Victoria

Off Confidential: 90.12.20

ASSESSMENT REPORT 19820

MINING DIVISION: Alberni

PROPERTY: SG
LOCATION: LAT 50 10 00 LONG 127 02 00
UTM 09 5558794 640457
NTS 092L03E

CAMP: 029 Zeballos - Kyuquot Area

CLAIM(S): S.G. 1-4

OPERATOR(S): Lone Trail Pros.

AUTHOR(S): Bilquist, R.

REPORT YEAR: 1989, 13 Pages

KEYWORDS: Triassic, Bonanza Group, Basalts, Andesites

WORK

DONE: Prospecting
PROS 100.0 ha

RELATED
REPORTS: 14618, 15562

REPORT ON THE PROSPECTING SURVEY
OF THE SG 1 - 4 CLAIMS

ALBERNI MINING DIVISION

NTS 92L/3

LAT. 50 10' LONG. 127 02'

OWNER/OPERATOR: LONE TRAIL PROSPECTING LTD.

AUTHOR: RON BILQUIST
DECEMBER, 1989

FILMED

LOG NO:	0323	RD.
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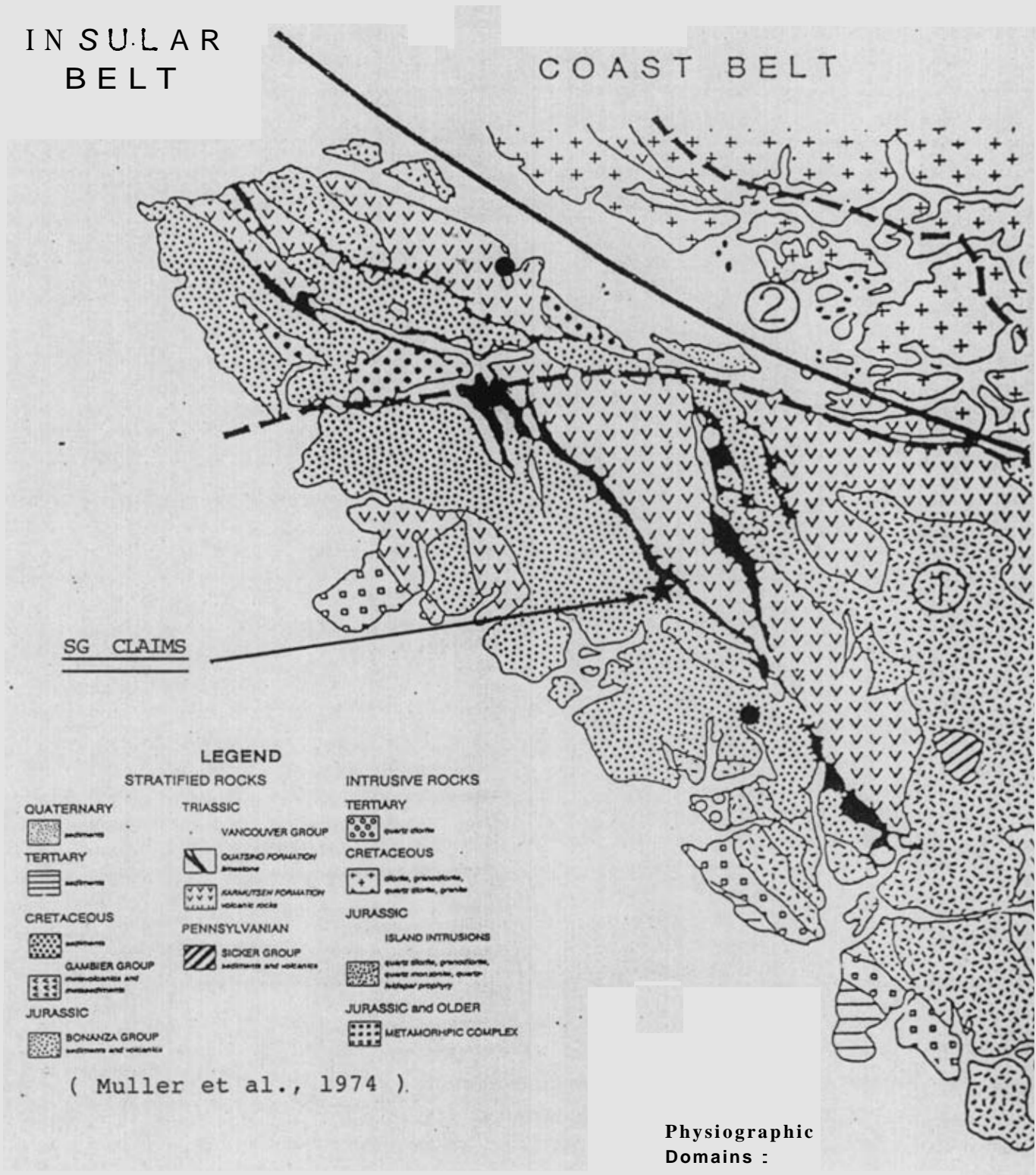
TABLE OF CONTENTS

	Page
INTRODUCTION	1.
PREVIOUS WORK	1.
REGIONAL GEOLOGY	2.
PURPOSE	2.
RESULTS AND INTERPRETATION	2 - 5.
CONCLUSIONS AND RECOMMENDATIONS	6.
STATEMENT OF COSTS	7.
STATEMENT OF QUALIFICATIONS	8.
ILLUSTRATIONS:	
REGIONAL GEOLOGY & LOCATION MAP	follows table of contents
PROSPECTORS MAP	in pocket at back of report

REGIONAL GEOLOGY AND LOCATION MAP

INSULAR
BELT

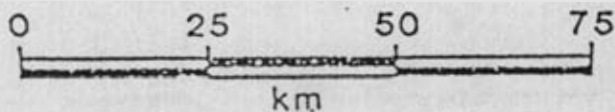
COAST BELT



(Muller et al., 1974).

**Physiographic
Domains :**

- ① Insular Mountains
- ② Coastal Trough
- ③ Coast Mountains



INTRODUCTION: This report concerns the prospecting carried out on the SG 1 - 4 mineral claims during 1989. The claims are two post claims and were recorded on December 29, 1988. The-record numbers are 3714 to 3716. The claims are located on northern Vancouver Island in a small valley about five kilometers north east of the north extremity of Tahsish Inlet. The elevation is between 600 feet and 2100 feet in moderate to steep terrain. Approximately 60% of the timber has recently been logged off. Access to the claims is via a logging road system which leaves the Island Highway about 10 kilometers south of Nimpkish.

PREVIOUS WORK:

1986 - Ass. Report #14618 by R.V. Longe for Mine-Quest Exploration Assoc. Ltd. The work consisted of very limited geology, rock and silt geochemistry and some prospecting.

1987 - Ass. Report #15562 by A.W. Gourlay for Mine-Quest Exploration Assoc. Ltd. Work consisted of silt sampling and limited geology.

1988 - Ass. Report #17134 by Linda J. Lee for Mine-Quest Exploration Assoc. Ltd. Limited geology, silt and soil sampling and rock geochemistry were carried out.

REGIONAL GEOLOGY: The north end of Vancouver Island was mapped for the GSC in 1974 by Muller, Northcote and Carlisle. A map showing the regional geology with **the** claim location -can be found following the table of contents. They describe the area where the SG Claims lie as the lower jurassic Bonanza Volcanic Group - andesitic to rhyodacite lava, tuff and breccia. At the north boundary **of** the claims it is shown that the volcanics are in contact with the late triassic Quatsino Limestone.

PURPOSE: The intent of work carried out in 1989 was to locate the source of the large angular boulders of rhyolitic rock which is fractured and flooded with sphalerite. It was also the intent of the prospector to get an overall picture of the geology and try relate this to the showings, if found.

RESULTS AND INTERPRETATION: The overall geology within the claims is of the Bonanza Volcanic Formation as described earlier. There is more or less continuous outcrop along the road cut which cuts through the center of the claims from north to south. In outcrops beginning at the south end **of the** claims and heading north along the road cut, the rock is **a** fine to medium grained blue andesite with sparsely disseminated pyrite. There is a considerable frequency of small banded quartz stringers as

well at this location. The average attitude of the stringers is 152 80 (site 89-A on Prospectors Map). There is the occasional "bed" of cherty volcanics (89-B) and these have approximately 5 to 10% disseminated pyrite. At site 89-C an outcrop of light green quartz/feldspar porphyry is seen in the road cut. Slickenside is found on some fractures. Further along the road cut at site 89-D the outcrop is massive dark green vesicular basalt with the vesicles filled with a brittle black glassy material and occasionally calcite. The volcanics are definitely interbedded as the above mentioned rocks repeat themselves in the road cut a number of times. They also appear to be shallow dipping to the south. At notation site 89-E there are outcrops of volcanic grit which display graded bedding with the smaller particles at the top and grading to larger ones at the bottom. This would seem to indicate the deposition of the grits in a marine environment. This rock is followed down section to the north by the quartz/feldspar porphyry as described at site 89-C and then a dark green vesicular basalt as described at site 89-D. At site 89-F the rock changes once more to the volcanic grits with graded bedding. These continue on down into the calcareous sediments, which the author has identified as from the Parson Bay Formation. The Parson Bay Formation is upper triassic and is the package of calcareous sediments,

siltstones, greywacke and conglomerate usually found stratigraphically on top of the Quatsino Limestone and just below the Bonanza Volcanics. The Quatsino Limestone lies a short distance to the north of the claims and can be seen in road cuts on the way into the property. In Helen Creek, near the north claim boundary, a boulder of silicified limestone or calcareous sediment was found to have galena and sphalerite filling the fractures. Sample Art-110 was taken at this site. Further upstream (89-G) large angular boulders of a brecciated rhyolite are found over a widespread area in the creek bed as well as in the logging slash and bush on either side of the creek. Fractures in the boulders are flooded with sphalerite and where ever the sphalerite is found coatings of bright yellow greenockite are also found. Greenockite is a sulphide of cadmium. Although there is an abundance of these mineralized boulders no outcrops could be found of the material nearby, in fact there are no outcrops at all in this area. Traverses on the steep slopes of the eastern side of the claims did not provide any answers to the puzzle but did show geology similar to that found in the road cuts on the west side. Outcrops seen while traversing are shown on the accompanying Prospectors Map.

In that the mineralized boulders are found away from the creek bed, in some cases more than 25 meters, and that they they are sharply angular it is felt that they did not travel any distance and likely have either worked their

way to the surface, or the valley has eroded down to them. **No** samples were taken from **this** zone as enough samples have been taken by previous people (ass. reports 1986, 1987 & 1988) to adequately represent the mineralogy of the zone.

The silica altered boulder with galena and sphalerite filling fractures that was found near the north boundary when analysed had **44** ppb gold and 72.6 ppm silver. Anomalous values in other elements were zinc 18285 ppm, lead 17625 ppm and manganese 1159 ppm. Copper, cadmium and antimony were also slightly elevated.

From the limited evidence available near the area of mineralized boulders it appears that the most likely type of ore body that could be expected to be encountered would be a polymetallic massive sulphide of the Kuroko type. Calcareous sediments lie on the north boundary and to the north. The volcanics which overlay these dip about 20 to 30 degrees to the south and appear to be submarine near the contact where graded bedding can be observed. The rhyolite boulders with sphalerite and greenockite could represent the rhyolite 'dome' often found in the massive sulphide deposits. It could have been at the same time that the rhyolite dome was forming that the banded quartz veins were formed. The sphalerite mineralization took

place when a vent formed and the dome partially collapsed and was fractured and brecciated. Mineral bearing solutions flooded the fractures and worked their way to the surface where, hopefully, they were in such a magnitude that they entered the shallow marine sediments on mass and produced an economic **ore** body.

CONCLUSIONS AND RECOMMENDATIONS: It is concluded that further prospecting will not lead to the discovery of mineralization in outcrop. The mineralized rock does not outcrop but is likely local float that has worked its way to the surface from below. It appears that the deposit type we could expect here would fit the model of volcanogenic massive sulphide in the Kuroko style. The sphalerite flooded fractured rhyolite being the rhyolite dome often found below this type of deposit. The favorable host for the massive sulphides would be the Parson Bay sediments and/or the sediments in the lower Bonanza Volcanic unit.

It is recommended that tight grid control be established on the claims and that a geochemical survey be carried out with analysis for Cu, **Pb**, Zn, Ag and Au. Silt sampling of Helen Creek should be done to try locate a cut off point. The sampling should be fairly close spaced (about 50 m.) and should be done at low water in the late summer. The results from these surveys should aid in targeting other surveys.

STATEMENT OF COSTS

Wages;		
- Ron Bilquist - 5 days @ \$140./day		\$700.00
(May 11 & 12, Nov. 13 and half days		
Nov. 14 and Dec. 15, 1989)		
- T. Bilquist - 2 days @ \$100./day		\$200.00
(May 11 & 12, 1989)		
- K. Bilquist - 1.5 days @ \$100./day		\$150.00
(Nov 13 & 14, 1989)		
Truck Rental;	3.5 days @ \$40./day	\$140.00
Camp (Room & Board):	6 man days @ \$30./day	\$180.00
Fuel;		\$82.66
Copies;		\$2.30
Fax;		\$2.00
Ferry:		\$18.65
	Total	<hr/> \$1475.61

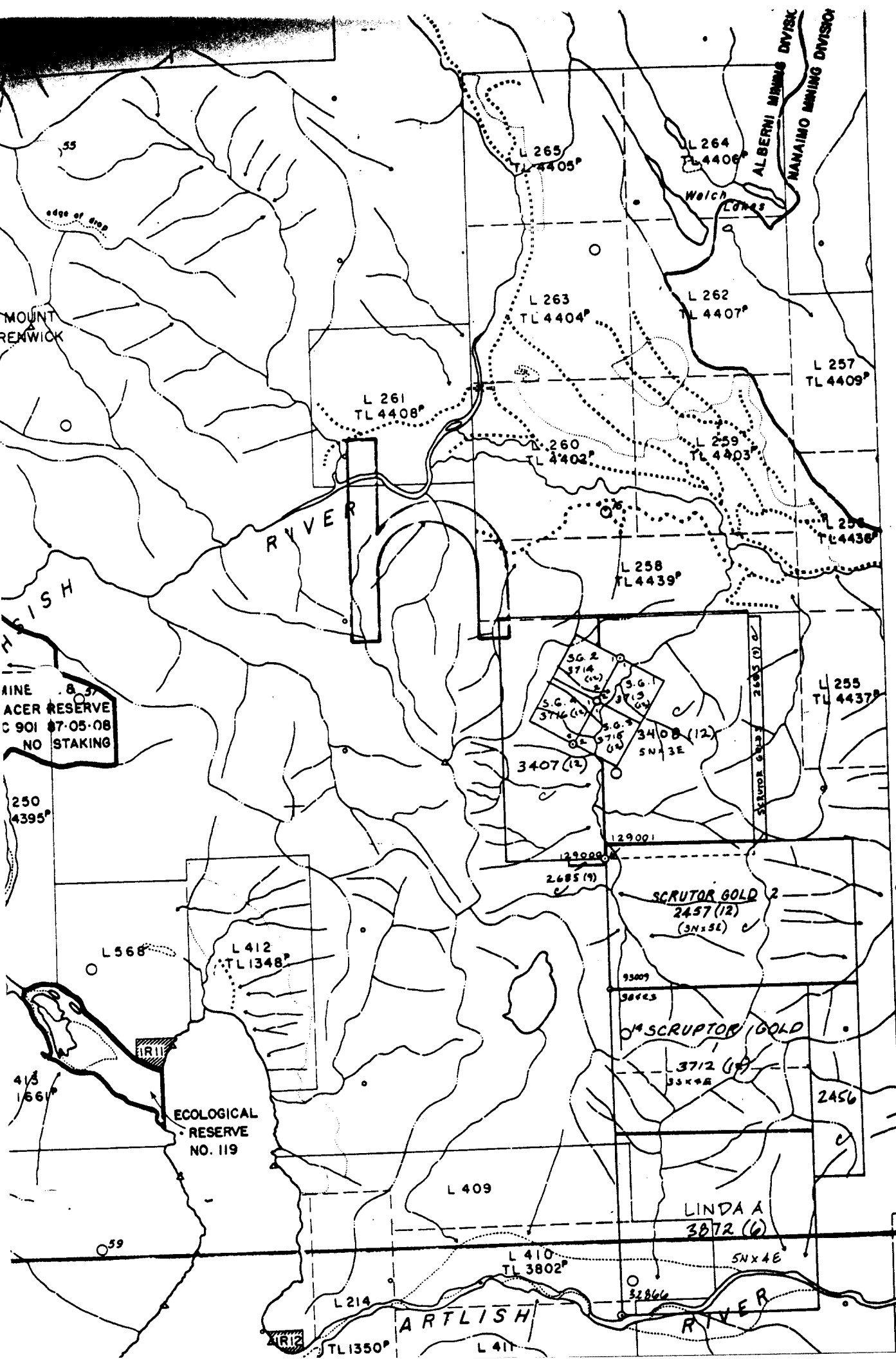
STATEMENT OF QUALIFICATIONS

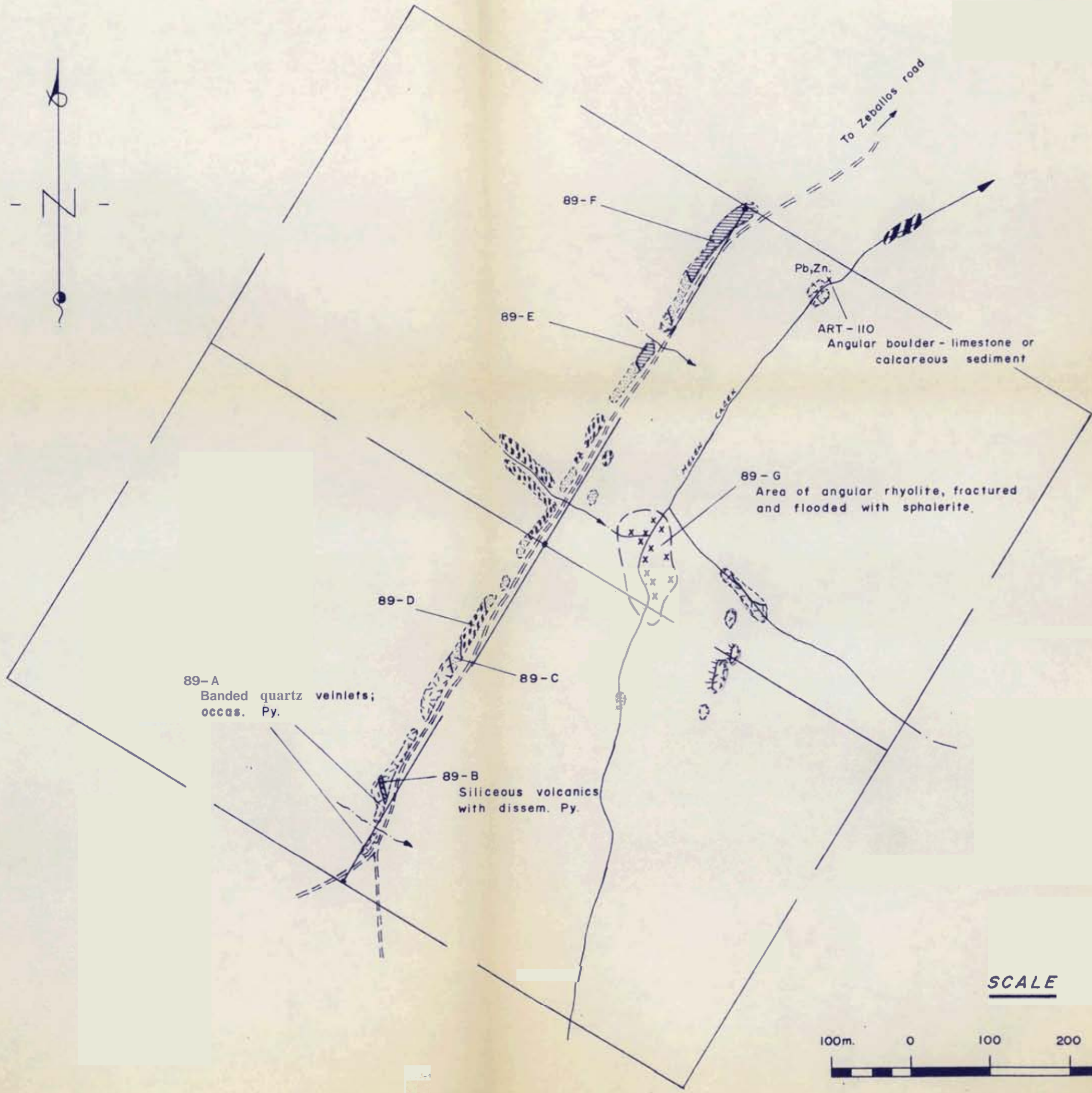
I have worked in the mining exploration business for a period of 20 years. During this time I, have been employed by numerous companies on both salary and contract basis. **My** duties have included prospecting, trenching, trench mapping, cobra drilling **and** blasting, claim staking, line-cutting, geochemical surveys, geophysical surveys, diamond drilling and drill supervision.

I have written an **exam** to qualify for the Prospectors Assistance Grants. This took place at the Department of Mines & Petroleum Resources office at Nanaimo in 1975 and was supervised by **W. C. Robinson, P. Eng.**







Signed *Ron Bilquist*
Ronald J. Bilquist

dated at Gabriola, B.C. this
16th day **of** December, 1989.











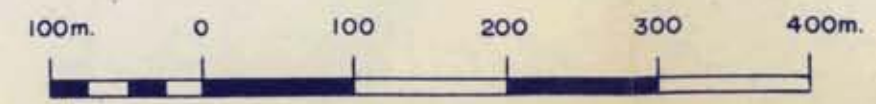
GEOLOGY

-  VOLCANIC GRITS; GRADED BEDDING
 -  DARK GREEN VESICULAR BASALTS
 -  LIGHT GREEN QTZ/FELDS. PORPHYRY
 -  MED. GRAINED 'BLUE' ANDESITE
 -  SILICEOUS VOLCANICS (RHYODACITE)
 -  CALCAREOUS SEDIMENTS
- Bonanza Subgroup →
- Parson Bay Sediments →

LEGEND

-  89-C DETAILED NOTATION SITE
-  OUTCROP
-  CLAIM LINE WITH POST
-  LOGGING ROAD
-  CLIFFS
-  MINERALIZED BOULDER LOCATION

SCALE



1 : 5000

19820

LONE TRAIL PROSPECTING LTD.

PROSPECTORS MAP

S.G. CLAIMS

Drawn by: R. BILQUIST	Date: DECEMBER '89
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