

84-#172 - # 12401  
03/05

GEOCHEMICAL

REPORT ON THE RON 1 AND 2  
MINERAL CLAIMS

OMINECA MINING DIVISION

Lat. 057°03'N. Long. 126°52'N  
NTS. 94E 15W

2W

for

Pacific Ridge Resources

by

C. Von Einsiedel, B.Sc.,  
Geologist

October 21, 1983

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,401**



HI-TEC  
RESOURCE  
MANAGEMENT  
LIMITED

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## SUMMARY

At the request of Mr. H. Williams, President, Pacific Ridge Resources, Hi-Tec Resource Management carried out a limited exploration program on the Ron I mineral claim. The program included a small amount of trenching, soil chemistry and geologic mapping.

Existing showings were visited and further work yielded several interesting results. The skarn Pb-Zn-Cu-Ag mineralization at showing No. 4 (main zone - 1983) is considerably more extensive than was previously recognized. The shear controlled, volcanic hosted Cu-Ag-Au mineralization located in the SW part of Ron I has been better defined.

A review of existing reports (Assessment Report #2802-1970 and Sawyer Consultants, 1981), and new information suggests an interesting possibility. The known surface mineralization occurs roughly along a N to NNE striking axis. One of several, possible to probable, anomalies defined by a 1970 induced polarization survey appears to be approximately coincident with known surface mineralization. There are similarities in the composition of mineralization in both the limestones and volcanics (Cu-Ag and Pb-Zn ratios were most significant).

A possible explanation of the above could be that there exists a continuous, mineralized zone with a strike length of approximately 2 km located on the western side of the Ron I claim.

It is important to note that this is only one of several possible interpretations and that considerably more research would be required to establish the validity of this hypothesis.

## INTRODUCTION

This report summarizes the results of recent exploration activities on the Ron 1 and 2 mineral claims, located on the NE tip of Thutade Lake in the Omineca Mining Division, Northern British Columbia.

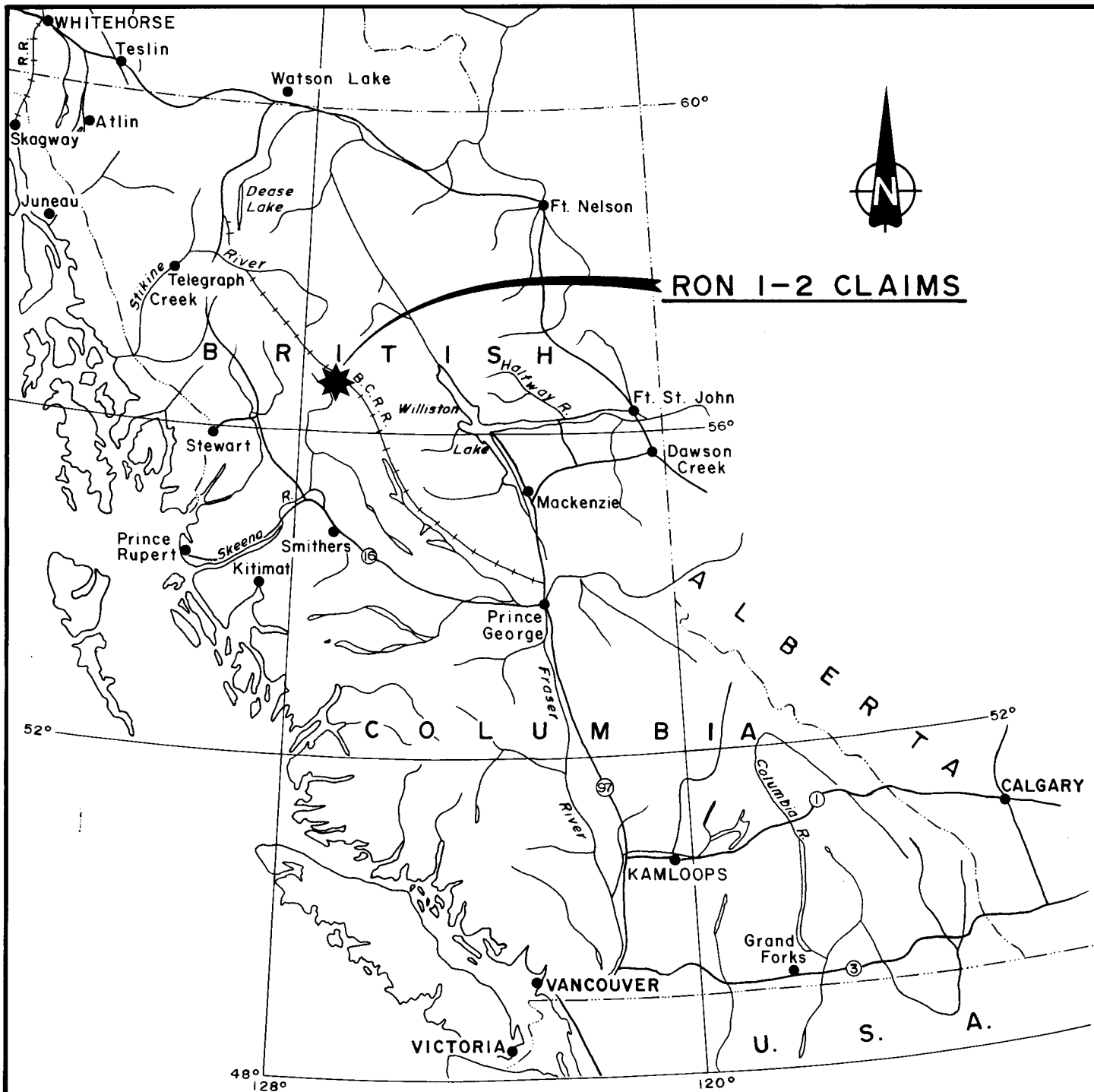
From August 29 to September 3 Hi-Tec Resource Management provided a geologist and blasting technician to evaluate previously known Pb-Zn-Cu-Ag skarn mineralization, initiate a soil geochemical survey and trench Cu-Ag-Au mineralization discovered during the 1981 field season.

## PROPERTY, LOCATION AND ACCESS

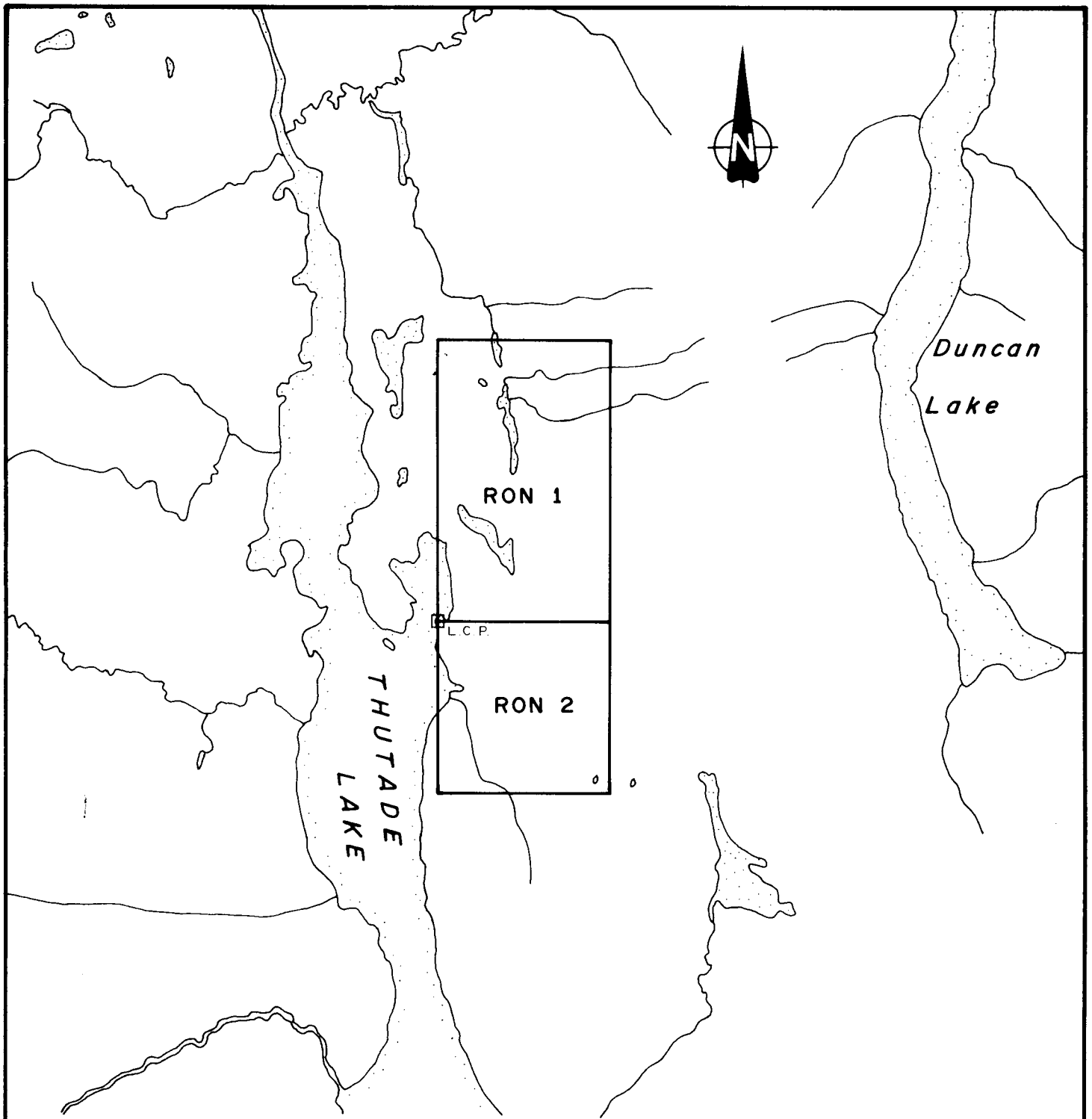
The property consists of the Ron 1 and 2 mineral claims located on map sheet 94E-15W at 126°52' longitude and 057°03' latitude. The claims were staked in February 1981 and titles are recorded as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>Registered Owner</u>	<u>Expiry</u>
Ron 1	3672(3)	I. Wong, Director Pacific Ridge Res.	03-03-84
Ron 2	3628(3)	H. Williams, President, Pacific Ridge Res.	03-03-84

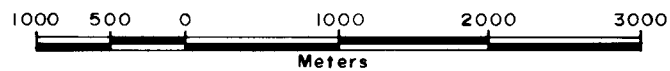
The claims are located on the NE tip of Thutade Lake which is located 250 km north of Smithers, B.C. in the Omineca M.D. Access to the property is by float plane from any of several nearby communities - Mackenzie - 300 km to the southeast, Smithers - 250 km to the south and Watson Lake - 345 km to the northwest. A cat track on the eastern side of the claim is believed to originate at Thorne Lake located approximately 18 km to the southeast. Cross country cat access to these claims could thus be accomplished with minimal difficulty.



PACIFIC RIDGE RESOURCES CORP.  
**LOCATION MAP**  
 OF  
**RON 1-2 CLAIMS**



PACIFIC RIDGE RESOURCES CORP.  
**CLAIM MAP**  
OF  
RON 1-2 CLAIMS



## HISTORY

The Ron 1 and 2 claim blocks constitute part of what was once the Thutade Lake property of Quebec Cartier Mining Co. The Thutade Lake property was staked in 1970 to cover a ring shaped magnetic anomaly defined by a reconnaissance airborne magnetometer survey conducted in 1969. During the summer of 1970, Quebec Cartier carried out an intensive geological, geochemical and geophysical evaluation of the property. Four Cu-Ag and Cu-Pb-Zn-Ag surface showings, several geochemical anomalies (Pb-Zn-Cu) and ground magnetic and induced polarization anomalies were identified, (Assessment Report No. 2~~X~~02). Further work was recommended but not carried out.

The Ron 1 and 2 claims were staked in 1981 and Sawyer Consultants provided a geological evaluation for Pacific Ridge Resources. The showings that were discovered during the 1970 exploration program were re-sampled and one new Cu-Ag-Au surface showing was defined in the southwest part of the Ron 1 claim. The latter mineralization is reportedly similar to the Chappelle discovery to the NW, (Sawyer Consultants, 1981).

## 1983 EXPLORATION PROGRAM

The current seasons work consisted of a limited soil geochemical survey and a small amount of trenching and litho-geochemical sampling on the Ron 1 mineral claim. Ten rock samples and approximately 150 soil samples were collected.

Rock samples were collected from several previously identified mineralized exposures including:

- (i) main zone (Pb-Zn-Cu-Ag skarn mineralization) showing No. 3 - 1981.
- (ii) showing No. 4 (Pb-Zn-Cu-Ag skarn mineralization)
- (iii) priority trench (volcanic hosted Cu-Ag-Au mineralization) - sample No.'s 56148, 56149 - 1981.

- (iv) showing No. 2 (volcanic hosted Cu-Ag mineralization)
- (v) showing No. 1 (shear zone in volcanics with limonitic alteration).

Wherever possible, soil samples were collected from the "B" horizon. The considerable amount of glacial overburden, especially in the south, central and southern parts of the Ron I claim, precluded "B" horizon sampling in these areas and therefore till samples were collected.

Principal structural features include major northwest and northerly trending faults which are believed to have played a significant role in the emplacement of the nearby Chappelle Au-Ag mineralization, (Sawyer Consultants, 1981).

## SUMMARY OF RESULTS

### **Trenching and Lithogeochemistry**

Trenching was limited to two areas of previously known mineralization. These include the Pb-Zn-Cu-Ag skarn mineralization at showing No. 4 (main zone) and the Cu-Ag-Au volcanic hosted mineralization (priority trench) located in the SW part of the Ron I claim. Showing No. 1 and No. 2 were also sampled.

### Main Zone

Despite earlier authors (Sanguinetti, 1970 - Sawyer Consultants, 1981) claims that the skarn mineralization is very "spotty" and irregular, extensions of earlier trenching revealed considerably more mineralization than was previously recognized. At this showing, a minimum width of 5 m and a minimum strike length of 20 m was noted. Six composite grab samples were collected and assays averaged 0.66% Cu, 4.36% Pb, 6.46% Zn, 1.63oz/ton Ag and trace Au. The mineralization dips into a swamp or below overburden on the north, south and eastern sides. Figure 5 shows the location of mineralized intersections in trenches.



### Priority Trench

This showing consists of a 1 m wide sulfide bearing, silicified shear zone with an equal width halo of phyllic alteration and limonitic staining. Principal sulfides include chalcopyrite - mostly altered to malachite, pyrite, galena and sphalerite. Wall rocks are highly fractured and show considerable chloritic alteration and extensive limonitic staining. A composite grab sample of the sulfide bearing material assayed 3.90% Cu, 0.90% Pb, 1.12% Zn, 4.49 oz/ton Ag and 0.012 oz/ton Au. Wall rocks assayed 0.61% Cu, 0.06% Pb, 0.11% Zn and 0.48 oz/ton Ag.

Sawyer Consultants report a 1.0 m wide quartz vein approximately 200 m to the north, however, 1981 assays of this material showed no significant mineralization.

### Showing No. 1 and No. 2

These showings consist of very low grade shear and fracture related Cu-Ag mineralization. At showing No. 2 malachite occurs as coatings on fracture surfaces in porphyritic andesites. Showing No. 1 consists of highly fractured volcanics with intensive limonitic and hematitic staining. Analytical results show little significant mineralization however these showings support the concept of a N to NNE striking zone of mineralization along the western part of the Ron I claim.

### **Soil Geochemistry**

As part of the current exploration program a small soil geochemical survey was conducted on the Ron I claim. Approximately 150 samples were collected at 25 m intervals on 750 m long E-W lines at 0, 200, 600, 800, 1200 and 1400 meters north of the southern boundary of the claim. It is extremely important to note that there exists a complex distribution of overburden types in the survey area.

Overburden types included residual soils, thick organics, lodgement tills, glacio-fluvial deposits, ablation tills and possibly aeolian sands. The latter 4 overburden types predominate on line 0+00N and 0+200N.

The principal aim of the survey was to test the hypothesis that a continuous N to NNE striking zone of mineralization exists between the northern and southern mineralized surface showings on the Ron I claim.

At the time of writing analytical results were not available and therefore no interpretation could be made.

### RECOMMENDATIONS

1. A complete compilation of existing data should be made.
2. An air photo mosaic should be constructed at a scale suitable to define regional linear trends and to provide any possible information regarding the spatial distribution of glacial deposits, swamps and exposed bedrock.
3. Upon completion of the above, a comprehensive geochemical orientation survey should be prepared in an attempt to define differences in the geochemical signature of mineralization covered by residual soil and glacial drift.
4. Further geochemical studies should be carried out to test the relationship between mineralization in the volcanics and carbonate rocks.
5. In addition to the geochemical orientation studies a variety of geophysical parameters should be tested. These might include magnetic susceptibility, self-potential, resistivity, chargeability and electromagnetic measurements. Results of this may suggest a "best" method for identifying blind mineralization or the location of the mineralized structure.

6. Finally, a several stage exploration program, tailored to the results of sections 1 through 5, should be implemented. This program should include cat trenching and diamond drilling.

Respectfully submitted



C. Von Einseidel, B.Sc.,  
Geologist

COST BREAKDOWN

<u>Personnel</u>	<u>Date</u>	<u>Wages</u>	<u>Days</u>	<u>Total</u>
C. Von Einsedel	Aug 30 - Sept. 4	\$275.00	6.0	\$ 1,650.00
I. Sommers	Aug. 30 - Sept. 4	\$275.00	6.0	1,650.00
Meals and Accomodation at \$34.50/man/day				414.00
Vehicle				292.00
Air Charter				360.00
Helicopter				572.00
Expediting				35.00
Drill Rental				93.00
Explosives				120.00
Radio				22.00
Materials				56.00
Assaying				315.00
Drafting and Reports				<u>850.00</u>
				<u>\$ 6,429.00</u>

**APPENDIX A**

**Geochemical Analytic Report**

VANGECHEM LAB LIMITED  
 1521 Pemberton Avenue  
 North Vancouver B.C. V7P 2S3  
 (604) 986-5211 Telex: 04-352578

PREPARED FOR: HI TEC RESOURCE  
 NOTES: nd = none detected  
 : -- = not analysed  
 : is = insufficient sample

REPORT NUMBER: 83-45-008

JOB NUMBER: 83316

PAGE 1 OF 1

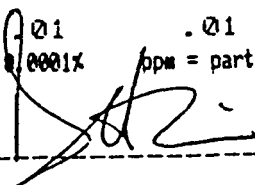
SAMPLE #	Cu %	Pb %	Zn %	Ag oz/st	Au oz/st
MAIN ZONE NO. 1	.28	7.84	11.20	1.15	<.005
MAIN ZONE NO. 2	.25	2.38	3.00	.61	<.005
MAIN ZONE NO. 3	1.32	6.23	14.00	3.67	.006
MAIN ZONE NO. 4	.90	3.20	.29	2.02	.006
MAIN ZONE NO. 5	1.28	5.83	9.30	1.66	<.005
MAIN ZONE NO. 6	.01	.71	1.08	.06	<.005
PRIORITY NO. 1	3.90	.90	1.12	4.94	.012
PRIORITY NO. 2	.61	.06	.11	.48	<.005
SHOWING NO. 1	.01	<.01	.02	.03	<.005
SHOWING NO. 2	.48	<.01	.01	.09	<.005

COPY

DETECTION LIMIT  
 1 Troy oz/short ton = 34.28 ppm

1 ppm = 1/10001%      .01      .01      .01      .005  
 ppm = parts per million

signed: \_\_\_\_\_



VANGEOCHEM LAB LIMITED  
1521 Pemberton Avenue  
North Vancouver B.C. V7P 2S3  
(604) 986-5211 Telex: 04-352578

PREPARED FOR: HI TEC RESOURCE  
NOTES: nd = none detected  
: -- = not analysed  
: is = insufficient sample

REPORT NUMBER: 83-45-014 JOB NUMBER: 83418

PAGE 1 OF 1

SAMPLE #	Cu %	Pb %	Zn %	Ag oz/st	Au oz/st
NO. 1	.04	.01	.22	.01	<.005
NO. 2	1.60	.44	5.60	.79	.008

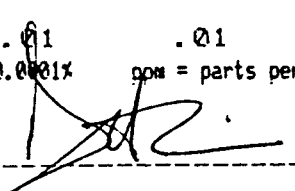
COPY

COPY

DETECTION LIMIT  
1 Troy oz/short ton = 34.28 ppm

.01 .01 .01 .01 .005  
1 ppm = 0.0001% ppm = parts per million

signed: \_\_\_\_\_



VANGECHEM LAB LIMITED  
1521 Pemberton Avenue  
North Vancouver B.C. V7P 2S3  
(604) 986-5211 Telex: 04-352578

PREPARED FOR: HI TEC RESOURCE  
NOTES: nd = none detected  
: -- = not analysed  
: is = insufficient sample

REPORT NUMBER: 83-45-015 JOB NUMBER: 83447

PAGE 1 OF 1

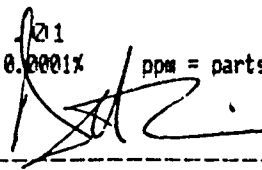
SAMPLE #	Cd %
MAIN ZONE #3	.11

COPY

DETECTION LIMIT  
1 Troy oz/short ton = 34.28 ppm

1 ppm = 0.0001% ppm = parts per million

signed: \_\_\_\_\_





APPENDIX B

**CERTIFICATE**

I, CARL A. VON EINSIEDEL, of the city of Vancouver, British Columbia, hereby certify that:

1. I am a Consulting Geologist with offices at 404 - 850 West Hastings Street, Vancouver, British Columbia.
2. I hold a degree of Bachelor of Science in Geology from Carleton University in Ottawa, April, 1982.
3. I have completed undergraduate and post graduate courses in exploration geochemistry, geostatistics and geophysics.
4. I have been employed in my profession for the past six years.
5. I have no interest either directly or indirectly, nor do I expect to receive any interest in the property covered in this report or in the shares of Pacific Ridge Resources Corp.
6. This report is based on field examinations made by myself between August 17 and August 29, 1983, evaluation of previous operators technical data, and on the results of recent geochemical and geophysical surveys.

Dated at Vancouver, British Columbia, this 8th day of August, 1984.

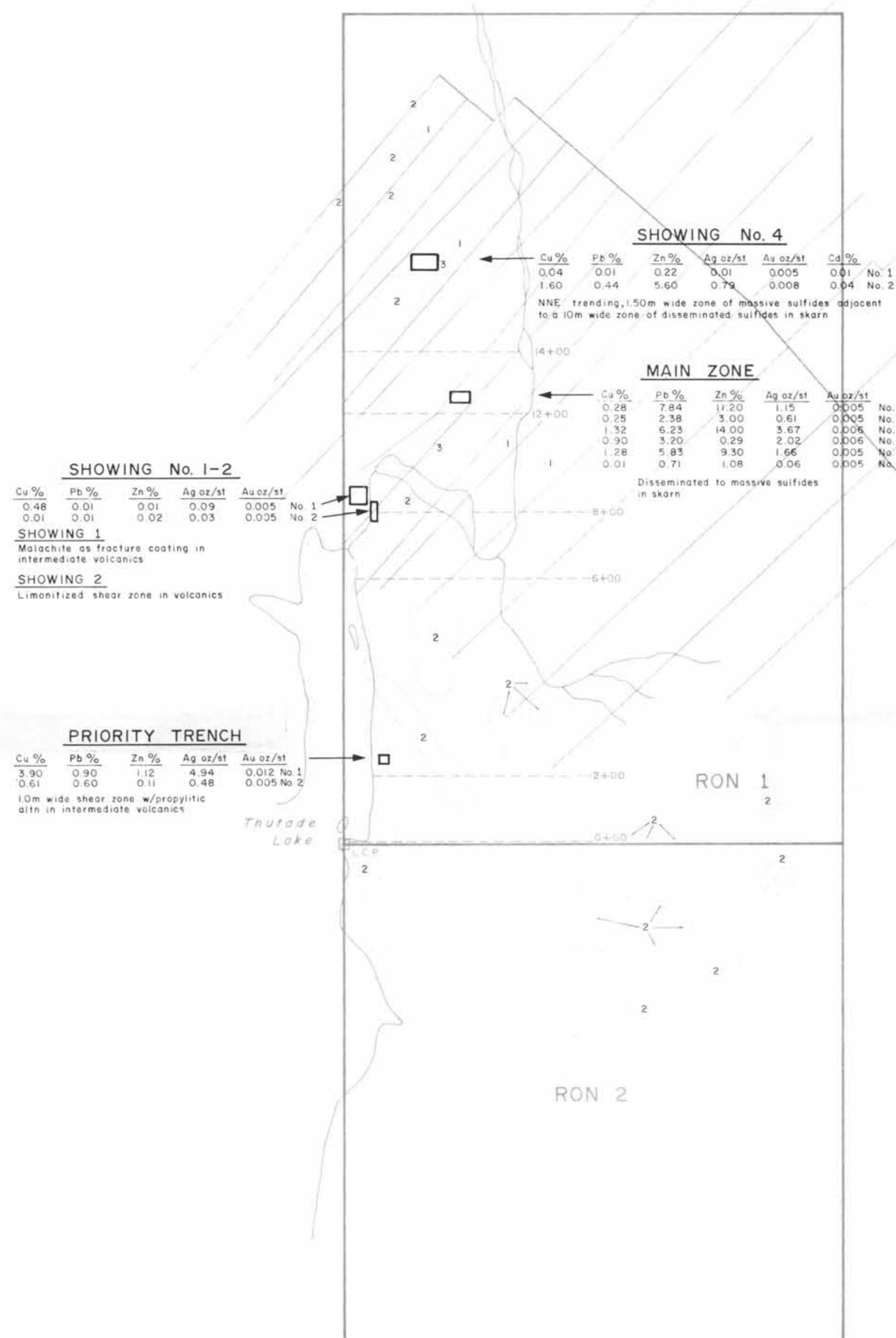


C. A. von Einsiedel  
Consulting Geologist



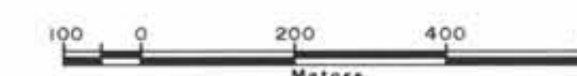
**LEGEND**

- Grid Lines (1970)  
--- Grid Lines (1983)
- 1 Omineca Intrusive - Quartz Monzonite  
2 Takla Limestone, Skarn, Chert  
3 Takla Volcanics - Andesites



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,401**



PACIFIC RIDGE RESOURCES CORP.  
— THUTADE LAKE AREA —  
RON 1-2 CLAIMS  
OMINECA MINING DIVISION — BRITISH COLUMBIA

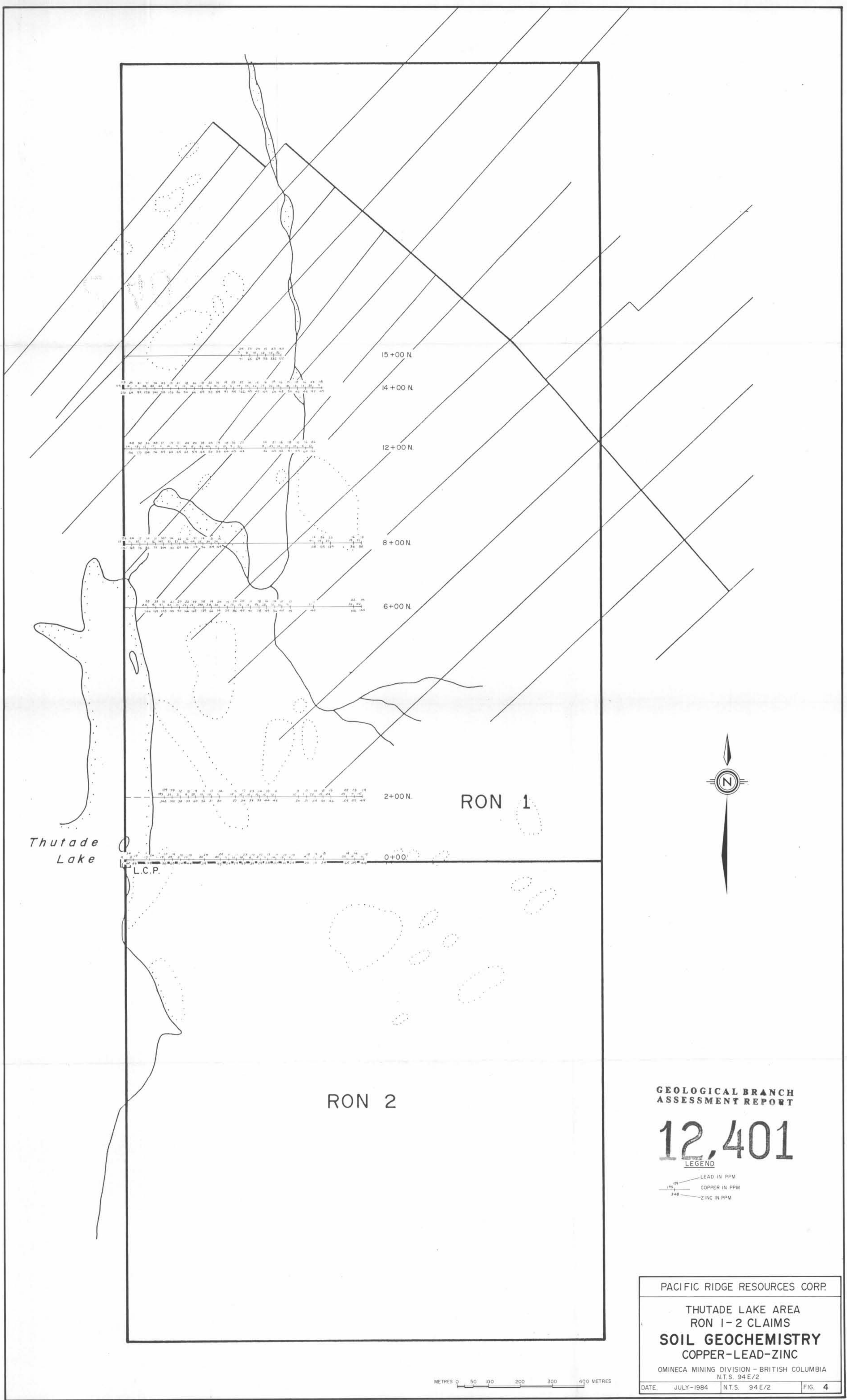
**GEOLOGY  
&  
ROCK SAMPLE LOCATIONS**



DWN. BY: T.M.  
CHK. BY:  
DATE: OCT. 1983  
N.T.S. 94 E/2

FIG. NO.

3



Thutade Lake

L.C.P.

RON 1

RON 2



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

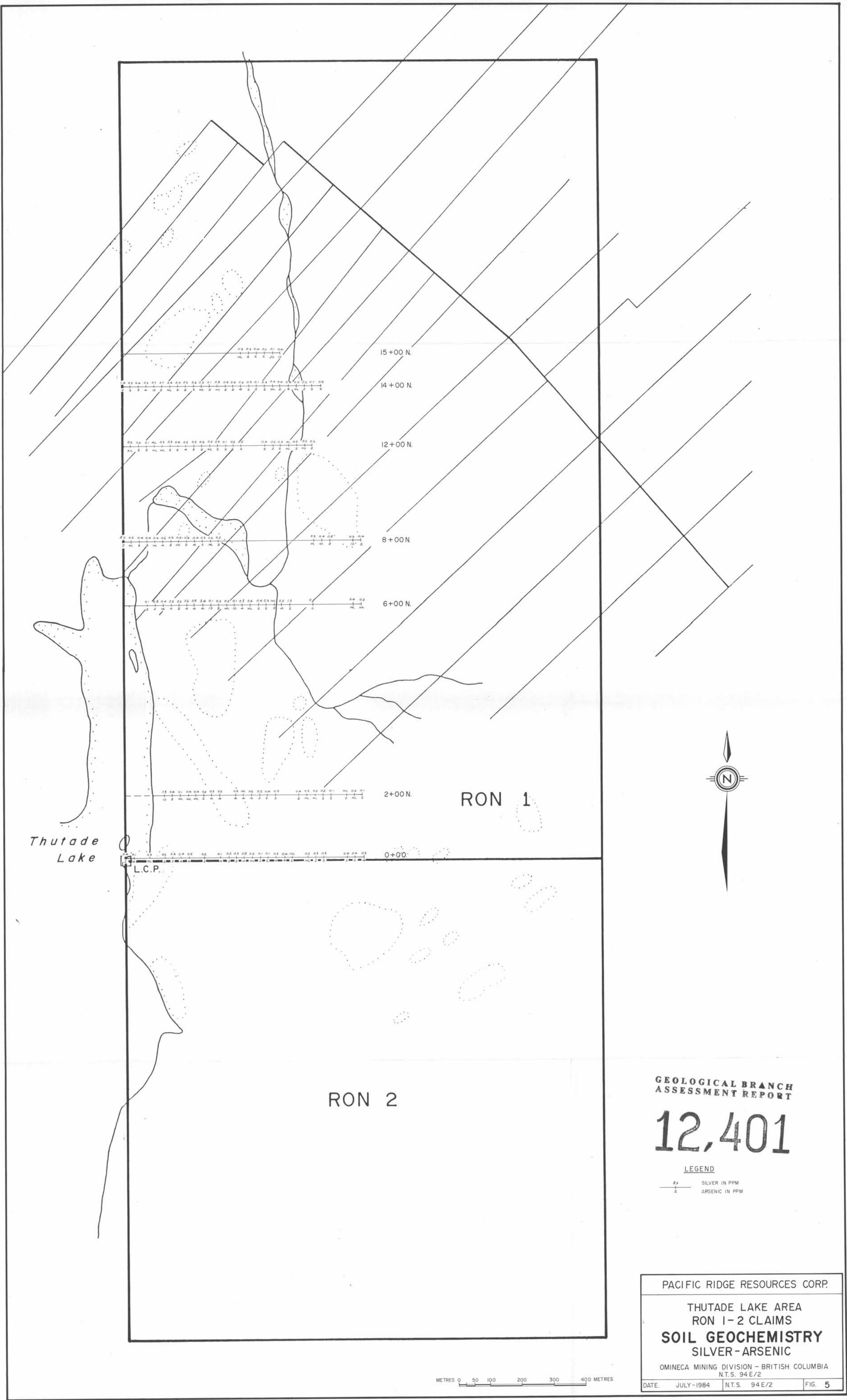
**12,401**

LEGEND

- LEAD IN PPM
- COPPER IN PPM
- ZINC IN PPM

PACIFIC RIDGE RESOURCES CORP.		
THUTADE LAKE AREA RON 1-2 CLAIMS		
<b>SOIL GEOCHEMISTRY</b> COPPER-LEAD-ZINC		
<small>OMINECA MINING DIVISION - BRITISH COLUMBIA N.T.S. 94E/2</small>		
DATE: JULY-1984	N.T.S. 94E/2	FIG. 4

METRES 0 50 100 200 300 400 METRES



Thutade  
Lake

L.C.P.

15+00 N.

14+00 N.

12+00 N.

8+00 N.

6+00 N.

2+00 N.

0+00 N.

RON 1

RON 2



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,401**

LEGEND

—•— SILVER IN PPM  
—•— ARSENIC IN PPM

METRES 0 50 100 200 300 400 METRES

PACIFIC RIDGE RESOURCES CORP.		
THUTADE LAKE AREA RON 1-2 CLAIMS		
<b>SOIL GEOCHEMISTRY</b> SILVER-ARSENIC		
OMINECA MINING DIVISION - BRITISH COLUMBIA N.T.S. 94E/2		
DATE. JULY-1984	N.T.S. 94E/2	FIG. 5