

ORO MINES LTD. (N.P.L.)  
Geochemical Soil Survey  
MM and Rob Groups of Claims  
Kamloops Mining Division  
Two Miles South of Roscoe Lake  
120°, 50° SE

NO 3  
920/  
17W

by

Rae G. Jury, P. Eng.  
July 30 to Oct. 15, 1966

975

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ORO MINES LTD.  
Geochemical Soil Sampling  
MM, Oro and Rob Claims  
Highland Valley Area, B.C.

ALRAE EXPLORATION LTD.

March 3, 1967

TO PROTECT OUR CLIENTS, THE PUBLIC AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS AND EXTRACTS FROM OUR REPORTS MUST RECEIVE OUR WRITTEN APPROVAL.

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MAPS

Scale

*4, 5, 6*  
Claims and topography - 3 sheets

1" = 250 feet

Geochemical soil survey - 3 sheets

1" = 250 feet

# *1, 2, 3*

## INTRODUCTION

Oro Mines Ltd. holds 72 claims at the headwaters of Skuhun Creek, approximately 26 miles southeast of Spences Bridge, B.C. During the summer season of 1966, reconnaissance soil sampling was conducted over the entire claim area and samples were analysed for their copper content using the rubeanic acid method. Samples were taken along chain and compass lines between permanent base lines. The sampling lines were 400 feet apart and samples were collected each 100 feet along these lines.

Field work of this survey was under the direction of Mr. D.K. Bragg and general supervision of the project was by the writer.

Adjoining companies active in exploration in this immediate area are Chataway Exploration Co. Ltd., Stellako Mines Ltd., Lornex Mining Operation Ltd., and Highmont Mines Ltd.

## LOCATION AND ACCESS

The claims are located immediately west of the headwaters of Skuhun Creek, approximately 14 miles upstream from the mouth of the creek. Good bush road leads from the Spences Bridge to Merritt highway along Skuhun Creek and crosses the southernmost claims of the group to provide access to Chataway Lake and Stellako Mines Ltd. Oro Mines Ltd. has constructed a second access road diagonally across the claim group from the southeast corner towards the north-west boundary of the Oro claims and Alamo claims.

Best access is by 4-wheel drive vehicle along these bush roads from the Spences Bridge to Merritt highway. The network of secondary roads extends northward through Lornex Mines property, and the Jericho Mines group.

CLAIMS

Claims and their record numbers are as follows:

<u>Claim Name</u>	<u>Record Number</u>
MM 1 - 16	49752 - 49767
MM 18	49769
MM 20	49771
MM 22	49773
MM 24	49775
MM 27 - 46	49778 - 49797
Rob 1 - 8	60261 - 60268
Rob 9 - 14	60651 - 60656
Rob 17	60659
Rob 19	60661
Rob 21	60663
Rob 23 - 27	60665 - 60669
Oro 1 - 6	51037 - 51042
Oro 25	51053
Oro 26	51054

All 72 claims are within the Kamloops Mining Division.

PREVIOUS EXPLORATION WORK

Work during 1965 and 1966 on this group of claims has included approximately four miles of road construction, 12 bulldozer trenches, 80 miles of line location, and induced polarization survey of a selected portion of the claims on a total of 6.82 line miles of grid.

GEOLOGY

The area of the claims is completely underlain by the Jurassic Guichon batholith which is composed of granodiorite and related acid intrusive rocks. These rocks have intruded Triassic Nicola volcanics and sediments and commonly contain disseminated

pyrite, chalcopyrite, bornite and molybdenite. These minerals appear in their greatest concentrations in areas of intense rock alteration (sericite, potassium feldspar, carbonate) particularly in the zones of intense fracturing associated with major fault zones.

Bulldozer trenching on the MM claims indicates the presence of a major fault zone striking to the northeast, approximately at the centre of the claim group. Much sericite is associated with this zone and minor amounts of malachite were noted at several points along the shear zone.

Quartz veins, generally less than one foot in width, and aplite dykes, up to several feet in width, occasionally occur within the granodiorite and often contain bornite and chalcopyrite.

#### SAMPLING PROCEDURE

Base lines were established at various intervals across the claim group in an easterly direction and chained and flagged compass lines were located between these base lines. Lines were spaced 400 feet apart and soil samples collected each 100 feet along these lines. Individual samples were taken at depths of six to 12 inches in the soils and placed in numbered plastic bags.

Analysis of the samples was carried out in Vancouver, using the rubeanic acid procedure of estimating the copper content in the soils. Cold acetic acid was used as the extracting agent. Samples were graded for their relative copper content by assigning numbers from one to ten to each sample. Ten represents the test for pure malachite.

The accompanying map sheets show the values assigned to each sample and the interpretation of anomalous outlines from this work. Topographic map sheets show claim locations, drainage patterns, slopes, and type of vegetation.

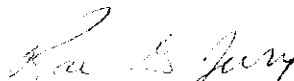
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CONCLUSIONS AND RECOMMENDATIONS

Reconnaissance soil sampling of the MM, Rob, and Oro claims has indicated the presence of several anomalous areas of copper content in the soils. In general these are grouped on the eastern and the southwestern quarters of the claim group.

Glacial overburden in the surveyed area varies in thickness and type and locally boulders containing copper sulphide mineralization have been encountered. There is a possibility, therefore, that some anomalous zones are due to copper minerals in the overburden which is not associated with mineralization in the underlying rocks. To test these anomalies for their economic significance, it is recommended that induced polarization survey test lines be run over the general anomalous zones to test the underlying rock for its sulphide mineral content. Induced polarization survey anomalies then may be tested by trenching or drilling.

Respectfully submitted,



Rae G. Jury, P. Eng.

APPENDIX I

Personnel employed in this survey work and the periods during which the work was completed are as follows:

<u>NAME</u>	<u>POSITION</u>	<u>PERIOD EMPLOYED</u>	<u>GROSS WAGES</u>
D. K. Bragg	Party Leader	July 30, 31/66 Aug. 11, 31/66 Sept. 16 - 30/66 Oct. 12 - 21/66	\$ 2,069.85
B. Clarke	Sampler	July 31/66 Aug. 7 - 21/66 Sept. 1 - 6/66	1,117.45
R. MacDonald	Sampler	July 30, 31/66 Aug. 1 - 4/66	377.01
J. Lebourdais	Line Cutter	July 30, 31/66	55.06
R. Sanders	Line Cutter	Aug. 20 - 31/66	324.84
J. Kirkland	Sampler	July 29, 31/66 Aug. 2 - 18/66	244.18
D. Pacey	Sampler	July 29, 31/66 Aug. 1 - 18/66	254.58
R. Martin	Line Cutter	July 29 - 31/66 Aug. 1 - 3/66	147.82
A. McElhinney	Sampler	Aug. 23 - 31/66 Sept. 1 - 20/66	986.35
M. Newton	Sampler	Aug. 25 - 31/66 Sept. 1 - 10/66	584.06
I. Gregg	Sampler	Aug. 23 - 31/66 Sept. 2 - 20/66	1,007.73
P. Kennedy	Line Cutter	Aug. 24 - 31/66	224.32
H. Carey	Cook	Aug. 24 - 31/66 Sept. 11 - 30/66	934.36
J. Hudson	Sampler	Aug. 25 - 31/66 Sept. 1 - 6/66	619.40
P. Saxton	Sampler	Aug. 25 - 31/66 Sept. 3 - 10/66	450.01
J. Altenburg	Line Cutter	Sept. 17 - 30/66	312.62
T. Altenburg	Line Cutter	Sept. 16 - 30/66	307.65
M. Makar	Line Cutter	Sept. 12 - 19/66	217.12

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<u>NAME</u>	<u>POSITION</u>	<u>PERIOD EMPLOYED</u>	<u>GROSS WAGES</u>
D. McDonnell	Sampler	Sept. 30/66	\$ 17.01
J. Philipzig	Sampler	Oct. 18 - 20/66	75.57
R. Smith	Cook	Oct. 20 - 21/66	72.14
W. Thomas	Sampler	Oct. 15 - 21/66	<u>186.83</u>
Total cost of the employees by contract was			\$ <u>10,585.96</u>

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

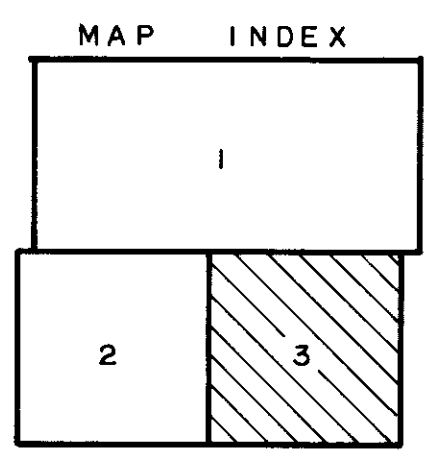
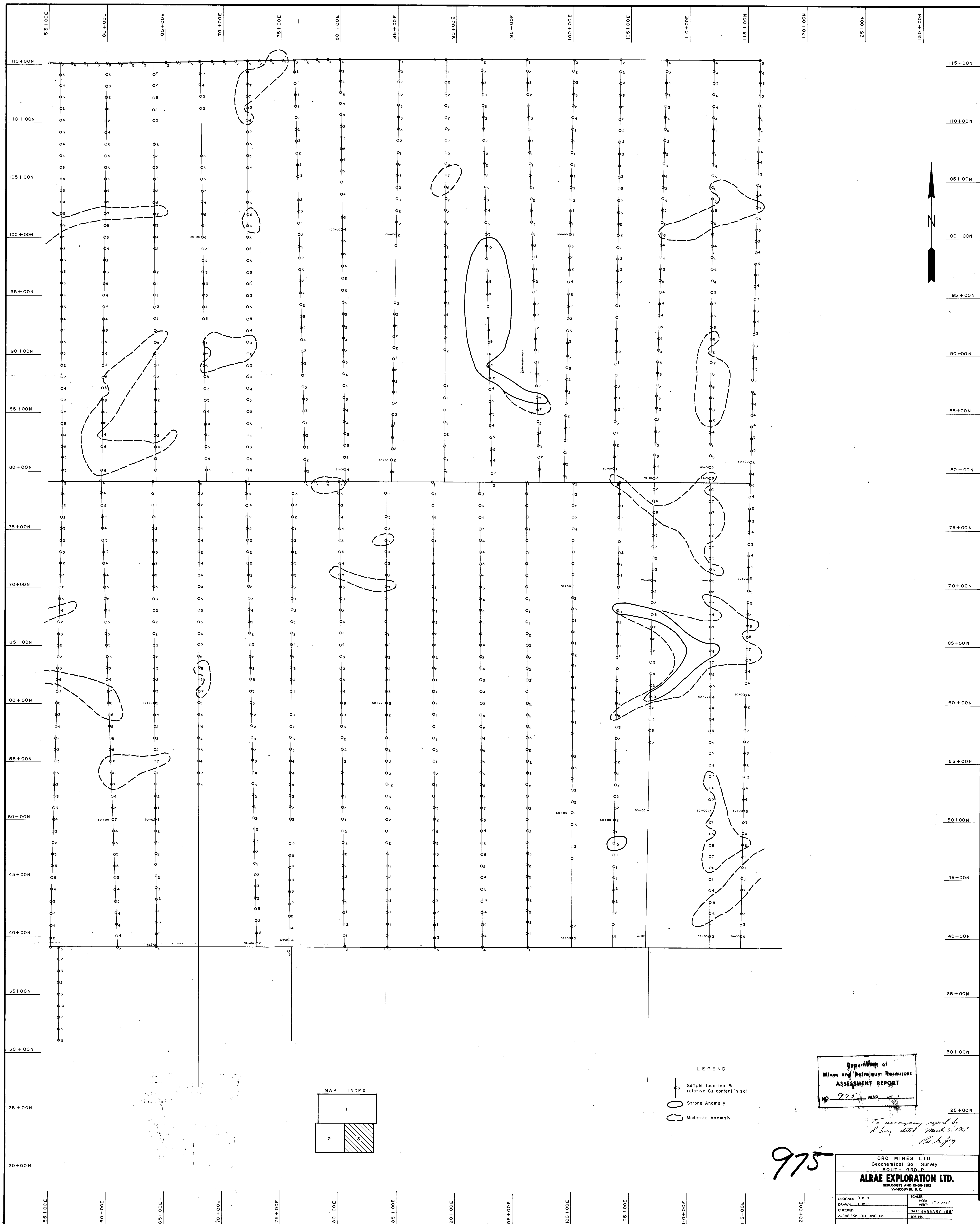
Declared before me at the City  
of Vancouver, in the  
Province of British Columbia, this 8  
day of May, A.D. 67

*Rae E. Jurey*

*W. H. De Mours*

*A Commissioner for taking Affidavits for British Columbia or  
A Notary Public in and for the Province of British Columbia.*

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LEGEND

- Sample location & relative Cu. content in soil
- Strong Anomaly
- Moderate Anomaly

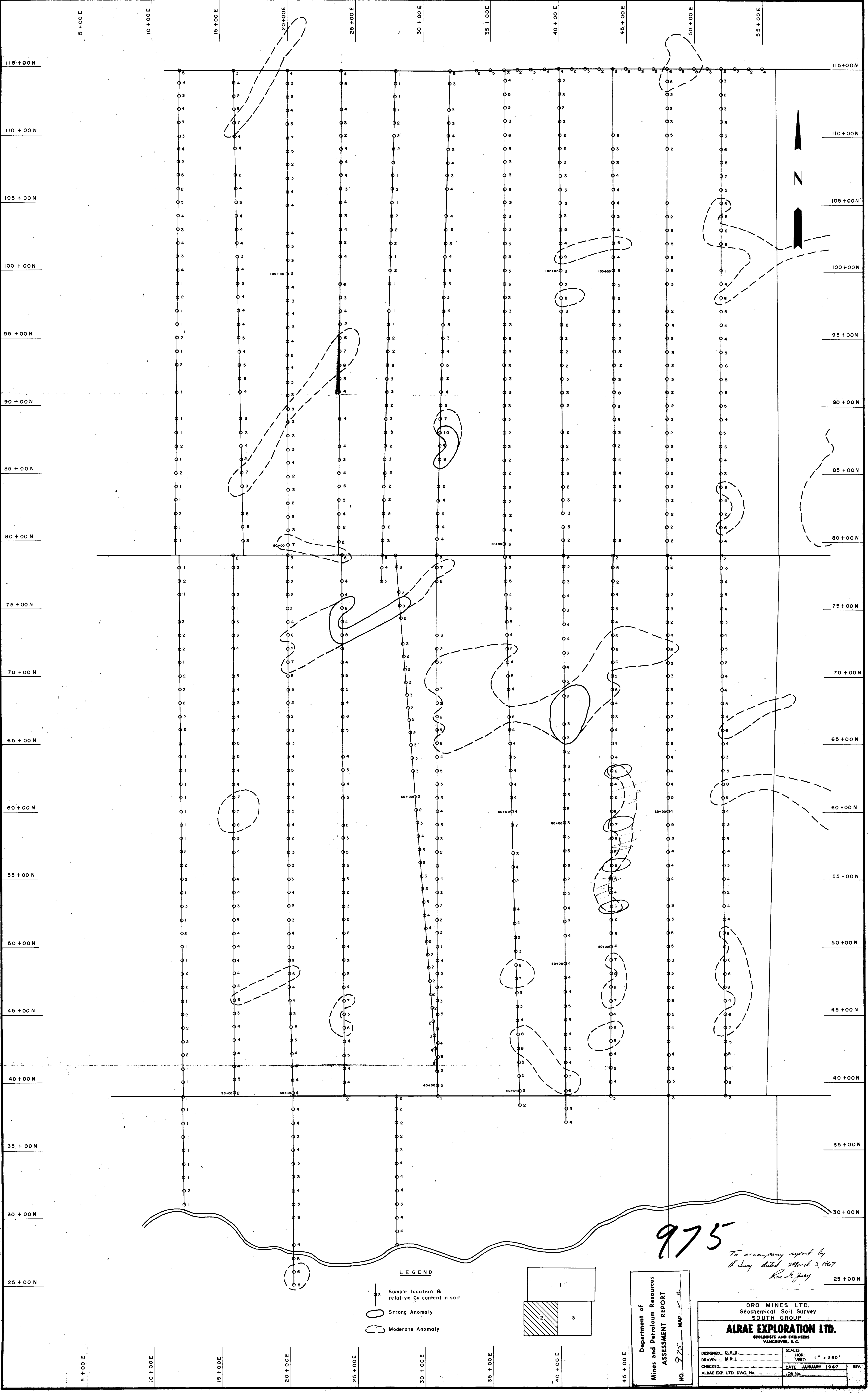
Department of  
Mines and Petroleum Resources  
**ASSESSMENT REPORT**  
No. 975 MAP 41

To accompany report by  
R. Long dated March 3, 1967  
R. Leffing

975

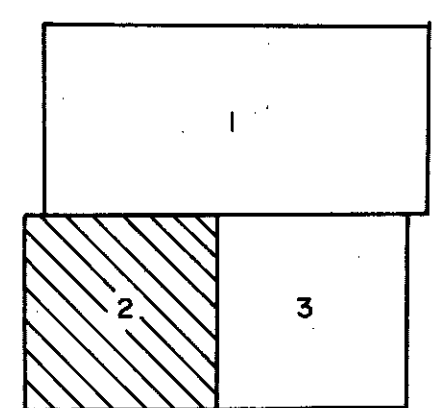
ORO MINES LTD  
Geochemical Soil Survey  
SOUTH GROUP  
**ALRAE EXPLORATION LTD.**  
GEOLOGISTS AND ENGINEERS  
VANCOUVER, B.C.

DESIGNED: D.K.B. SCALES: HOR. 1" / 250'  
DRAWN: H.W.C. VERT. VERT.  
CHECKED: DATE: JANUARY 1967  
ALRAE EXP. LTD. DWG. No. JOB No.



LEGEND

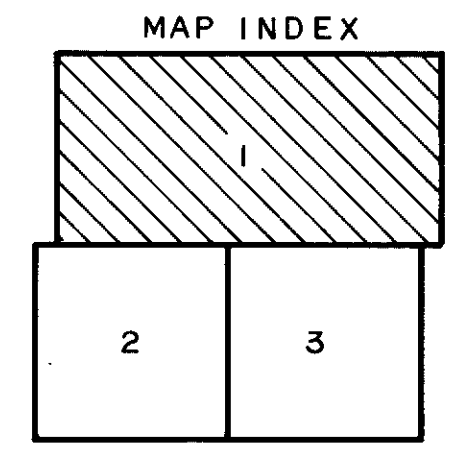
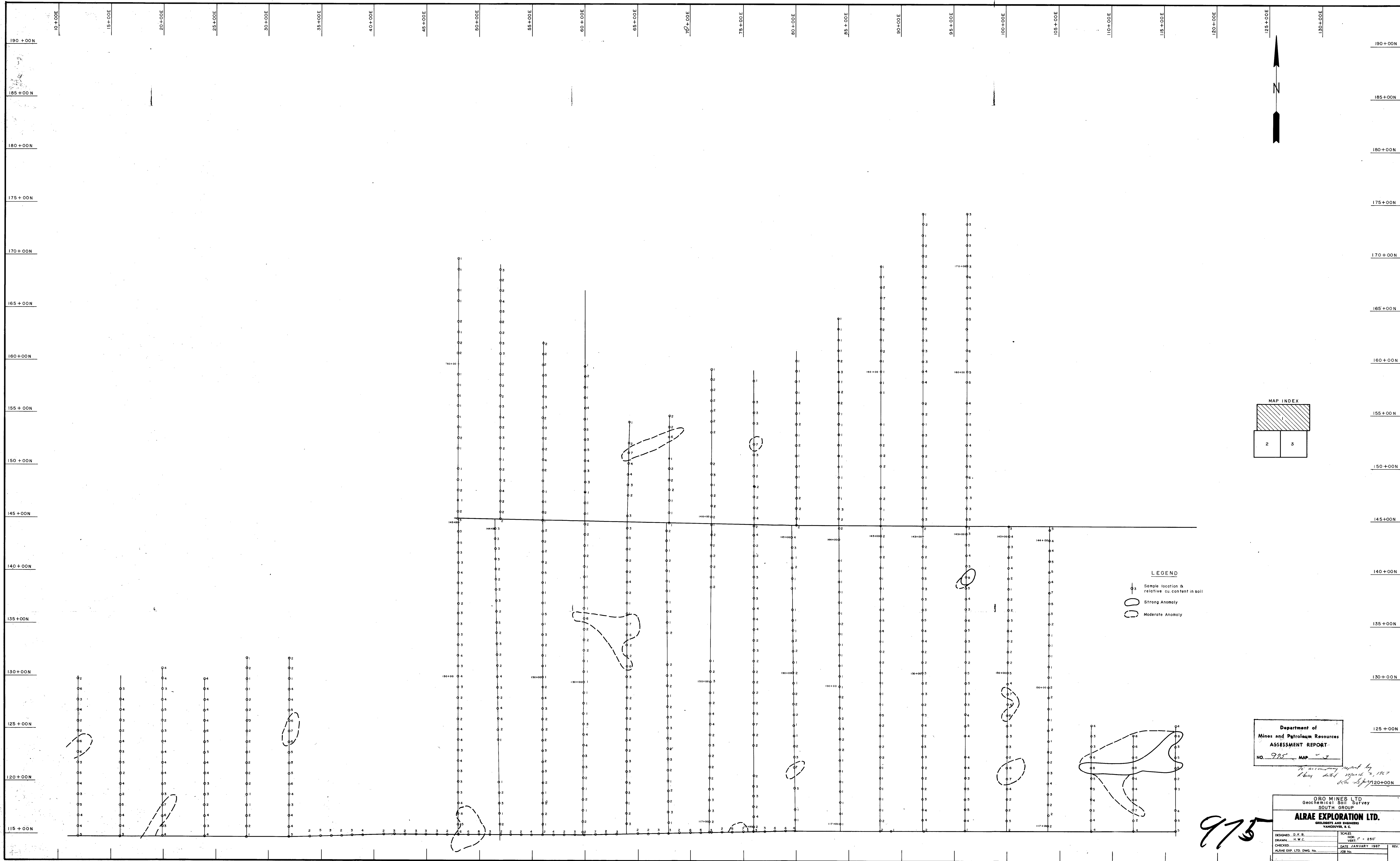
- Sample location & relative Cu content in soil
- Strong Anomaly
- Moderate Anomaly



Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 975 MAP 2

975  
To accompany report by  
B. J. J. dated March 3, 1967  
Rae & J. J.

ORO MINES LTD. Geochemical Soil Survey SOUTH GROUP <b>ALRAE EXPLORATION LTD.</b> GEOLOGISTS AND ENGINEERS VANCOUVER, B. C.	
DESIGNED: D.K.B. DRAWN: M.R.L. CHECKED: _____ ALRAE EXP. LTD. DWG. No. _____	SCALES HOR: _____ VERT: 1" = 250' DATE: JANUARY 1967 JOB No. _____



**LEGEND**

- Sample location & relative cu content in soil
- ⊖ Strong Anomaly
- ⊕ Moderate Anomaly

Department of  
Mines and Petroleum Resources  
**ASSESSMENT REPORT**  
NO. 925 MAP 2

To accompany report by  
A. King dated August 23, 1967  
Sheet 2 of 2  
120+00N

ORO MINES LTD Geotechnical Soil Survey SOUTH GROUP <b>ALRAE EXPLORATION LTD.</b> GEOLOGISTS AND ENGINEERS VANCOUVER, B. C.	
DESIGNED: D.K.B.	SCALE: HORIZ. 1" = 250'
DRAWN: H.W.C.	VERT. 1" = 250'
CHECKED:	DATE: JANUARY 1967
ALRAE EXP. LTD. DWG. No.	JOB No.

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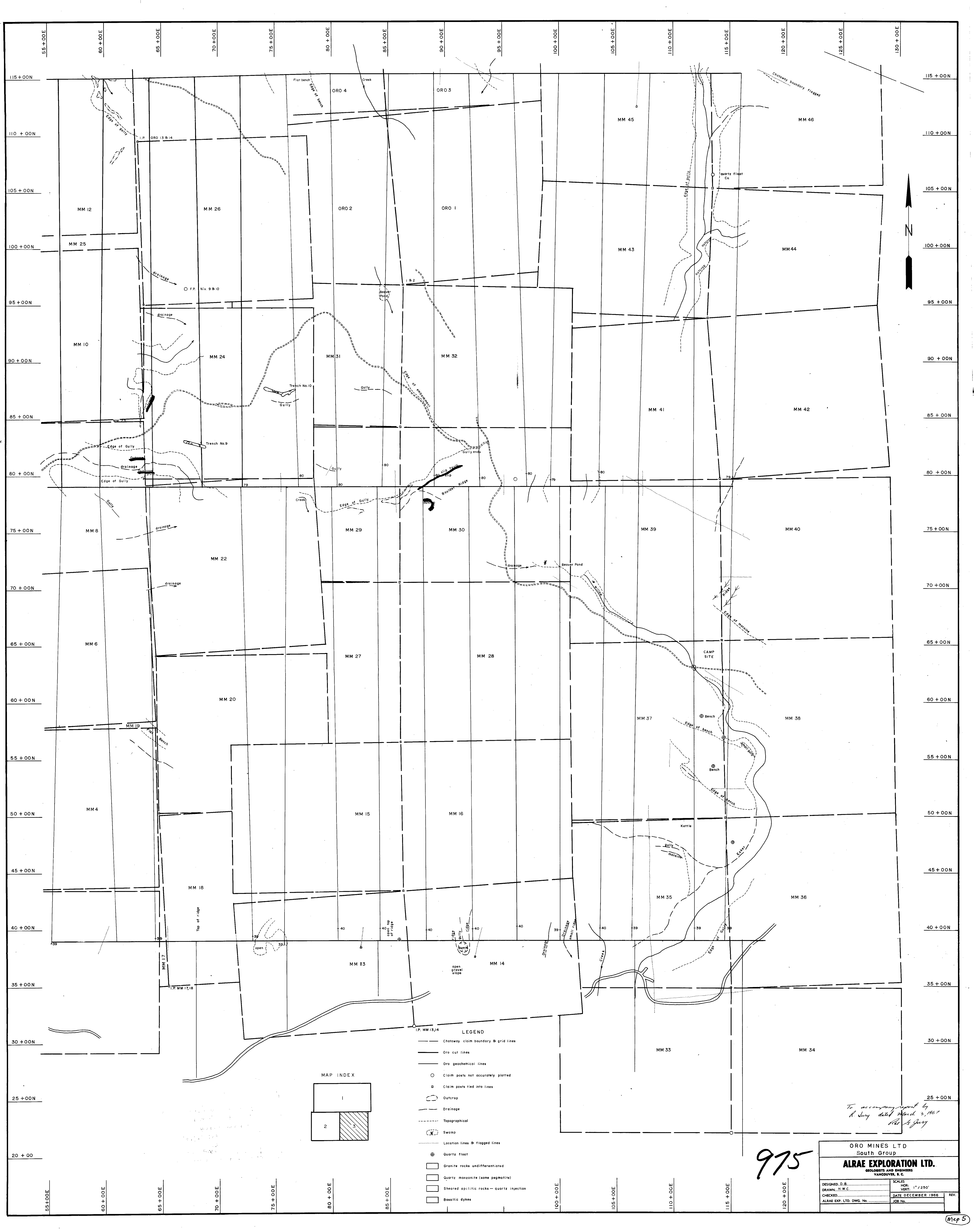


975 To accompany report  
 by R. J. ... dated March 2, 1967  
 R. J. ...

ORO MINES LTD  
 South Group  
**ALRAE EXPLORATION LTD.**  
 GEOLOGISTS AND ENGINEERS  
 VANCOUVER, B.C.

DESIGNED: D.B.	SCALE: 1" = 250'
DRAWN: H.W.C.	DATE: JANUARY 1967
CHECKED: _____	REV: _____
ALRAE EXP. LTD. DWG. No. _____	JOB No. _____

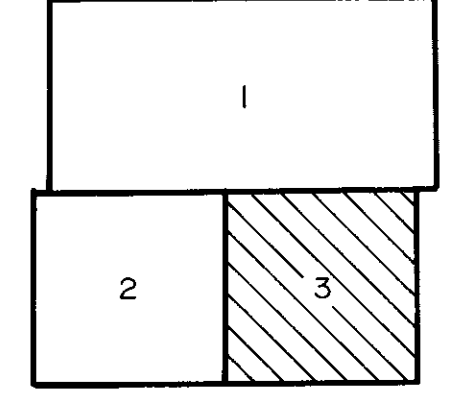
Map 8



LEGEND

- Chataway claim boundary & grid lines
- Oro cut lines
- Oro geochemical lines
- Claim posts not accurately plotted
- Claim posts tied into lines
- Outcrop
- Drainage
- Topographical
- Swamp
- Location lines & flagged lines
- ⊕ Quartz float
- Granite rocks undifferentiated
- Quartz monzonite (some pegmatite)
- Sheared aplitic rocks - quartz injection
- Basaltic dykes

MAP INDEX



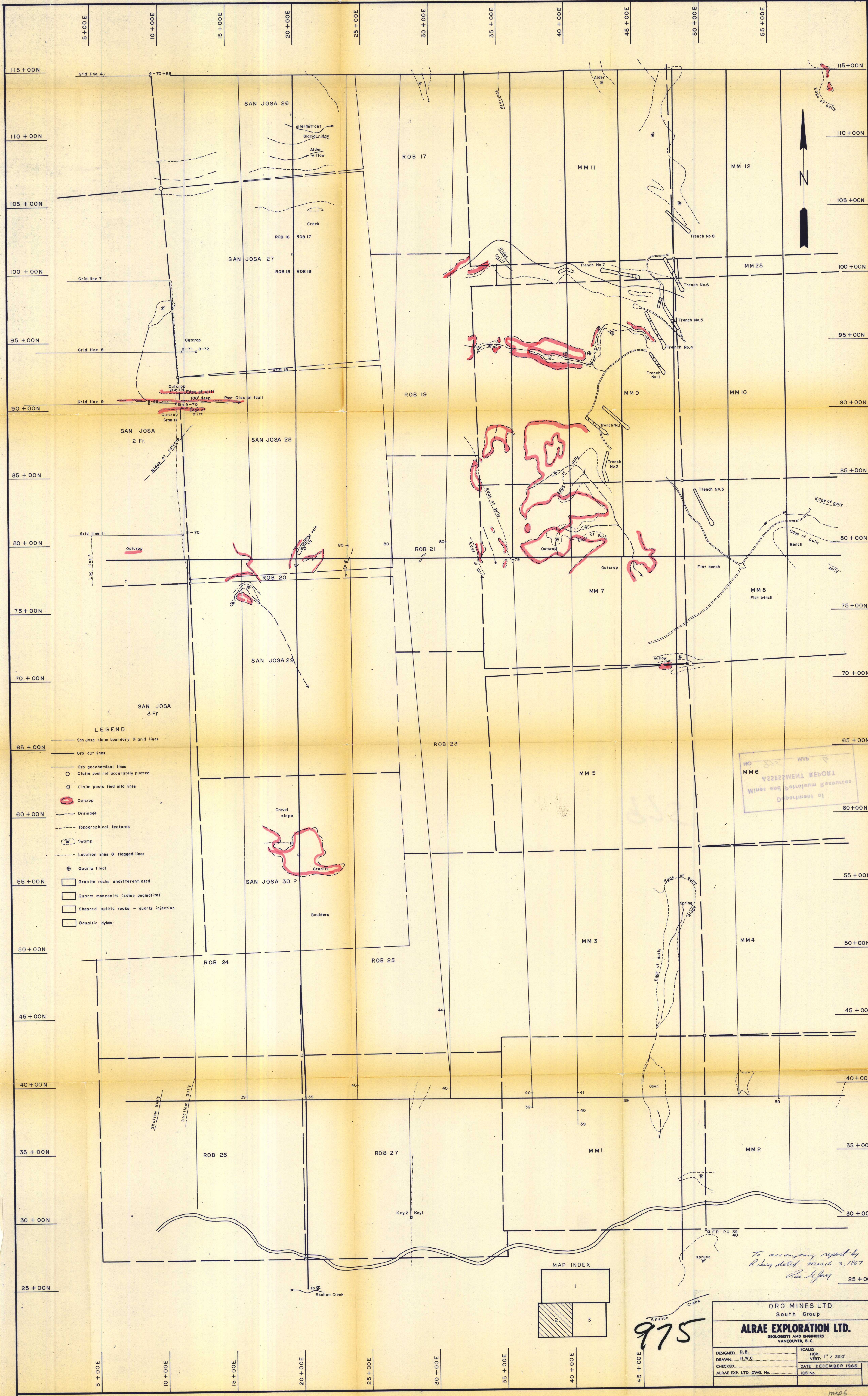
*To accompany report by  
A. J. J. dated March 2, 1967  
R. S. J. J.*

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South Group  
**ALRAE EXPLORATION LTD.**  
GEOLOGISTS AND ENGINEERS  
VANCOUVER, B. C.

DESIGNED: D.B.	SCALE: 1" = 250'	REV.
DRAWN: J.W.C.	HOR. VERT.	
CHECKED:	DATE: DECEMBER 1966	
ALRAE EXP. LTD. DWG. No.	JOB No.	



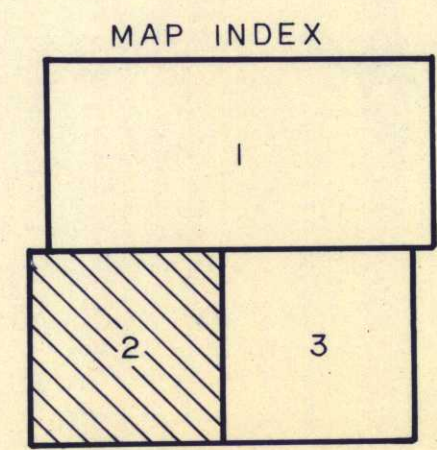


**LEGEND**

- San Josa claim boundary & grid lines
- Ore cut lines
- Ore geochemical lines
- Claim post not accurately plotted
- Claim posts tied into lines
- Outcrop
- Drainage
- - - Topographical features
- ⊖ Swamp
- - - Location lines & flagged lines
- ⊕ Quartz float
- Granite rocks undifferentiated
- Quartz monzonite (some pegmatite)
- Sheared aplitic rocks - quartz injection
- Basaltic dykes

NO. 975  
 MM 6  
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 Department of  
 Geology

*To accompany report by  
 R. J. J. dated March 3, 1967  
 R. J. J.*



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**ORO MINES LTD**  
 South Group

**ALRAE EXPLORATION LTD.**  
 GEOLOGISTS AND ENGINEERS  
 VANCOUVER, B. C.

DESIGNED: D. B.	SCALES: HOR: 1" / 250'
DRAWN: H. W. C.	VERT: _____
CHECKED: _____	DATE: DECEMBER 1966
ALRAE EXP. LTD. DWG. No. _____	JOB No. _____