

974

ORO MINES LTD.  
Geochemical Soil Sampling  
North Group of Price and CW Claims  
Highland Valley Area, B.C.

ALRAE EXPLORATION LTD.

April 4, 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
→ 1 Geochemical Survey, North Group	1" = 250 ft.
* 2 Geochemical Survey, North Group	1" = 250 ft.

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## INTRODUCTION

During the summer season of 1966, the writer supervised field work of Mr. D.K. Bragg and his crew in the gathering of soil samples on a selected portion of the Oro Mines Ltd. North Group of 102 mineral claims. Samples were collected each 100 feet along lines 100 feet apart. Areas of detailed sampling were selected from a previous reconnaissance soil survey. Samples were collected at depths from 6 to 12 inches and placed in numbered plastic bags, analysis of the samples was completed in Vancouver, using the rubeanic acid method.

Claims on which the surveying was conducted are the Price 77, 78, 79, 80, 135, 136B, CN 1 fr., CN 2, Price 141, 194, 196, and 514 fr. Altogether, 11.72 line miles of soil testing was completed in this detailed study. Approximately 600 samples were analysed.

## LOCATION AND ACCESS

The North Group of claims is located north and east of Billy Lake, which is approximately 40 miles southeast of Ashcroft, B.C. Best access to the claims is by secondary road from the Highland Valley road. The entrance to this secondary road is approximately six miles east of Bethlehem Mines Ltd. and 1/2 mile southwest of the Jericho Mines Ltd. camp. The claims are approximately five miles by road south of the Highland Valley.

The B.C. Hydro & Power Authority transmission line from Mamit Lake to Bethlehem Mine crosses the northern portion of the claims and a bulldozer service road along the power line right-of-way provides access to the northernmost claims.

## GEOLOGY

The area of the North Group of Oro Mines Ltd. claims is underlain by the Jurassic Guichon batholith which is composed of

granodiorite and related acid intrusive rocks. This batholith has intruded Triassic Nicola volcanics and sediments. Sulphide minerals of economic importance which have been found at various points throughout the batholith consist of chalcopyrite, bornite, and molybdenite. These minerals are generally associated with sericite and potassium feldspar alteration zones in regions of brecciation caused by major fault zones.

Much of the claim group is covered with glacial overburden to depths from 5 to 50 feet. Major fault zones and alteration zones have been discovered on the claim group and in some cases contain malachite staining.

#### SAMPLING PROCEDURE

Samples were collected from each 100 feet along lines 100 feet apart. Sampling depth was from 6 inches to 12 inches, depending on the depth of humus material and type of vegetation. Records were kept of each sample station, describing the depth of sampling, type of vegetation, and general slope of the surface. Each sample was placed in a numbered bag and sent to Vancouver for analysis.

The rubeanic acid method was used to test all samples. Each sample was assigned a number from one to ten, depending on the relative copper content in the soils, as shown by the rubeanic test. Ten represents the test for pure malachite. As may be seen on the accompanying map sheet, four large and four small anomalous areas were outlined in the region studied.

#### CONCLUSIONS AND RECOMMENDATIONS

Eight geochemical soil sampling anomalies have been outlined by the detailed soil sampling on the two selected portions of the North Group of claims.

Chalcopyrite and molybdenite have been found in some glacial boulders in the North Group of claims and may be the source of some of the outlined anomalies. The most southerly anomalies, near Billy Lake, however, are in regions of relatively thin overburden, in which no mineralized boulders were discovered.

To test the anomalous zones outlined by the soil sampling survey, it is recommended the induced polarization survey lines be run across the anomalous zones to test the underlying granitic rocks for their sulphide content. Anomalies confirmed by this method may then be tested by trenching or drilling.

Respectfully submitted,

  
Rae G. Jury, P. Eng.

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APPENDIX 1

Personnel employed in this survey work and the periods during which they worked are as follows:

<u>NAME</u>	<u>POSITION</u>	<u>PERIOD EMPLOYED</u>
D.K. Bragg	Field Supervisor	June 15 - 30, 1966 July 1 - 4, 1966 Aug. 1 - 7, 1966 Sept. 1, 3, 9, 11-15 Oct. 1 - 11, 1966
R. McBean	Sampler	June 15 - 22, 1966
T. Wixon	Sampler	June 15 - 30, 1966 July 1 - 3, 1966
B. Clarke	Sampler	June 18 - 30, 1966 July 1 - 10, 1966 Aug. 1 - 3, 1966
R. McDonald	Sampler	June 18 - 30, 1966 July 1 - 9, 1966
J. Lebourdais	Line cutter	June 23 - 30, 1966 July 1 - 9, 1966
W. Fowler	Line cutter	July 1 - 8, 1966
R. Dalby	Line cutter	July 1 - 10, 1966
R. Sanders	Line cutter	Aug. 9, 22 - 24, 1966
J. Kirkland	Line cutter	Aug. 1, 1966
J. Altenburg	Line cutter	Sept. 5 - 16, 1966 Oct. 1 - 13, 1966
T. Altenburg	Line cutter	Sept. 5 - 15, 1966 Oct. 1 - 13, 1966
H. Carey	Cook	Sept. 1 - 10, 1966 Oct. 1 - 4, 1966
R. Smith	Cook	Oct. 6 - 19, 1966
D. McDonnel	Line cutter	Sept 22 - 29, 1966 Oct. 1 - 13, 1966
J. Philipzig	Line cutter	Sept 25 - 30, 1966 Oct. 1 - 17, 1966

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<u>NAME</u>	<u>POSITION</u>	<u>PERIOD EMPLOYED</u>
L. Auclair	Sampler	Oct. 3 - 12, 1966
G. House	Geologist	Sept 27 - 30, 1966 Oct. 1, 1966
B. Cory	Drafting	June 18, 1966
H. Gerlitzki	Lab Technician	July
W. Thomas	Sampler	Oct. 7 - 14, 1966
M. Newton	Sampler	Aug. 22 - 24, 1966
A. McElhinney	Sampler	Aug. 22, 1966
I. Gregg	Sampler	Aug. 22, 1966 Sept 1, 1966
P. Kennedy	Sampler	Aug. 22, 23, 1966
P. Saxton	Sampler	Aug. 24, 1966 Sept. 1, 1966

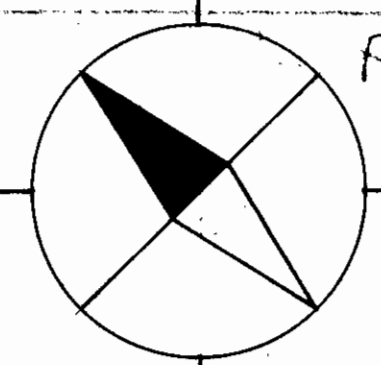
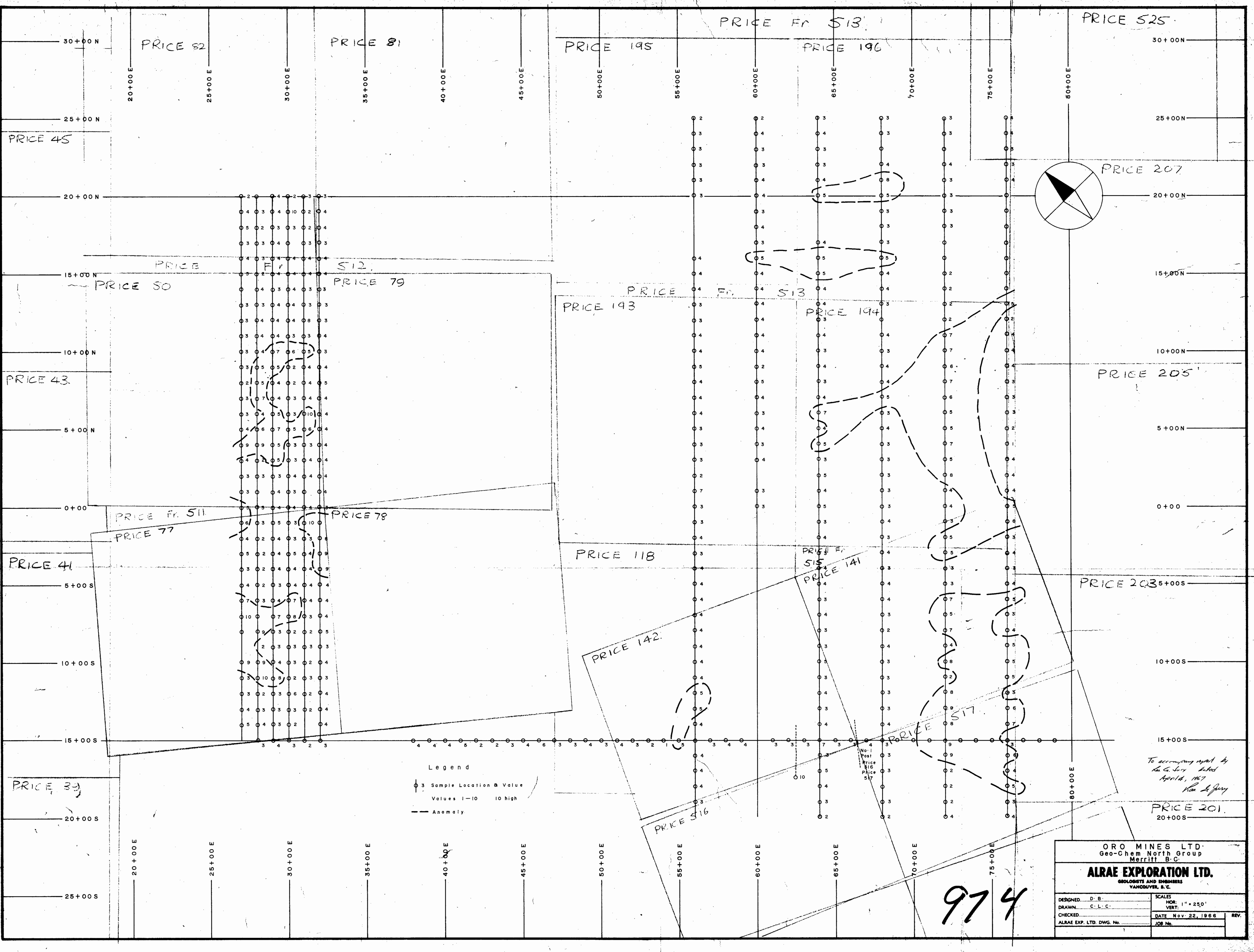
Total cost of the above employees on geochemical soil survey and line cutting work by contract was \$10,074.42.

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 7  
day of April 1967, A.D.

*Rae Leary*

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



Legend  
 ○ Sample Location & Value  
 Values 1-10 10 high  
 - - - Anomaly

To accompany report by  
 Geo-Chem North Group  
 April 1, 1967  
 Ron L. Gray

ORO MINES LTD.  
 Geo-Chem North Group  
 Merritt B.C.

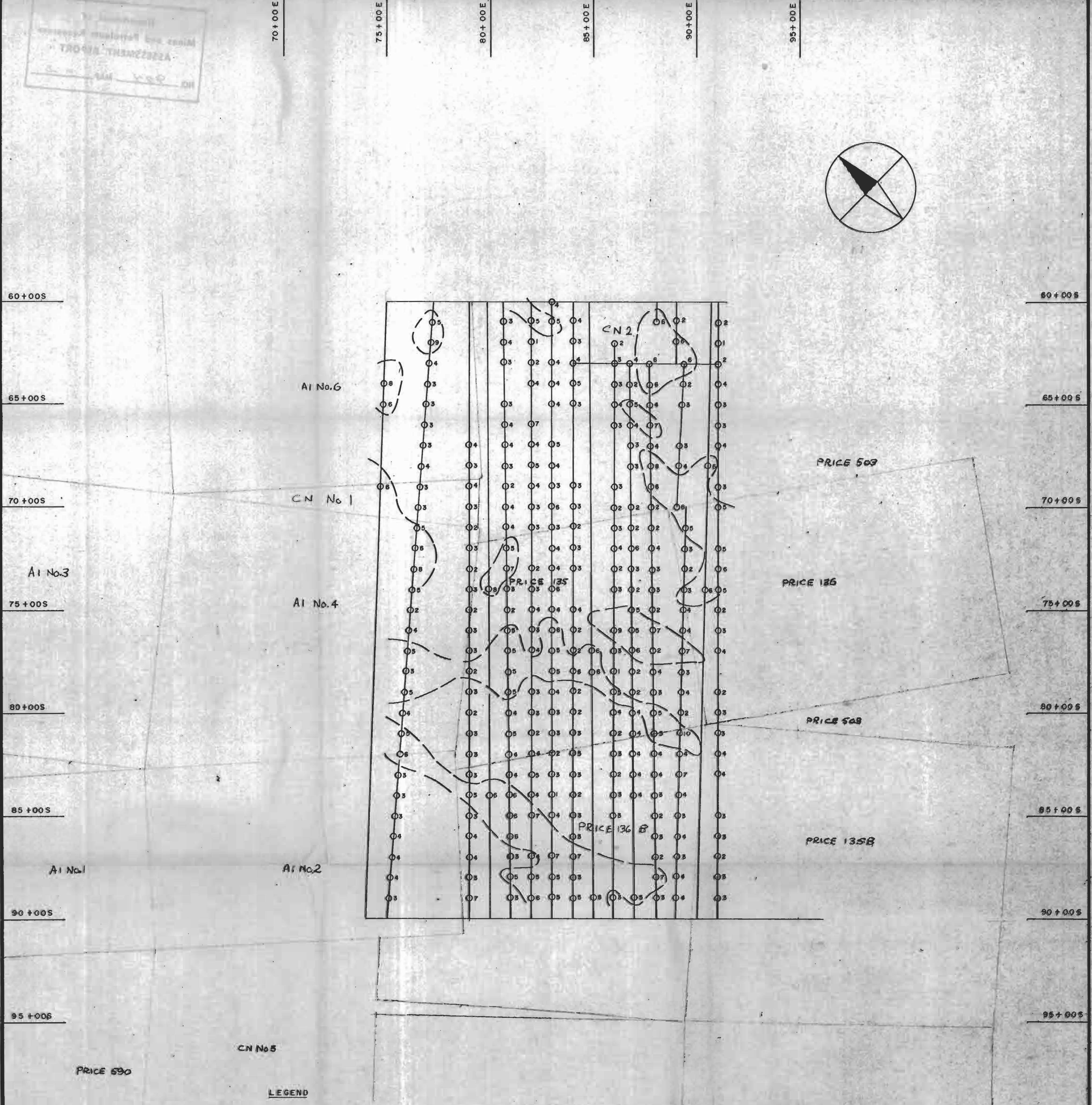
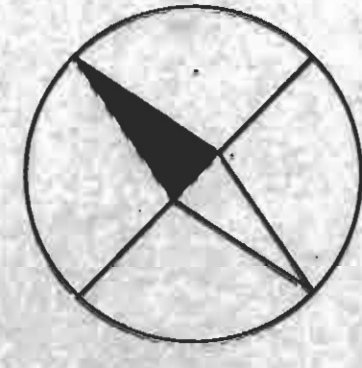
**ALRAE EXPLORATION LTD.**  
 GEOLOGISTS AND ENGINEERS  
 VANCOUVER, B.C.

DESIGNED: D. B.	SCALE: HOR. 1" = 250'
DRAWN: C. L. C.	VERT. 1" = 250'
CHECKED: _____	DATE: Nov. 22, 1966
ALRAE EXP. LTD. DWG. No. _____	JOB No. _____

974



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 ASSESSMENT REPORT  
 NO. 974  
 VANCOUVER, B.C.



100+00S  
 95+00S  
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 70+00S  
 65+00S  
 60+00S

70+00E  
 75+00E  
 80+00E  
 85+00E  
 90+00E  
 95+00E

**LEGEND**

○ Sample position and rubidic acid test results graded 1 to 10: 10 high.

— Outlined anomalous area.

*To see copy report by  
 see to July of 1964 April 1967  
 Ken S. Jones*

<b>ALRAE EXPLORATION LTD.</b> GEOLOGISTS AND ENGINEERS VANCOUVER, B.C.	
DESIGNED: D.H. DRAWN: M.H.L. CHECKED: ALRAE EXP. LTD. (INC. No.	SCALE: HORIZ. 1" = 250' VERT. DATE: DECEMBER 1966 JOB No.

CRISIS 2  
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75+00E  
 80+00E  
 85+00E  
 90+00E  
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