

3254

GEOCHEMICAL SURVEY

ON THE

CHELASLIE PROPERTY

53°28'N, 125°32'W

93F/5E

GAVIN E. DIROM, P.ENG.

JAMES D. KNAUER

NORANDA EXPLORATION COMPANY, LIMITED

OMINECA MINING DIVISION, BRITISH COLUMBIA

May 27, 1971 - July 13, 1971

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 3254 MAP

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
#1 Location Map	<i>packet</i>
2 <i>Soil Survey</i>	
GENERAL GEOLOGY	2
GRID PREPARATION	2
GEOCHEMICAL SOIL SURVEY	3
Sampling Method	3
Laboratory Determination Method	3
Presentation of Results	4
Discussion of Results	4
RECOMMENDATIONS AND CONCLUSIONS	4
Statement of Qualifications	Appended
James D. Knauer	

REPORT ON A
GEOCHEMICAL SURVEY
ON THE
CHELASLIE PROPERTY

NORANDA EXPLORATION COMPANY, LIMITED

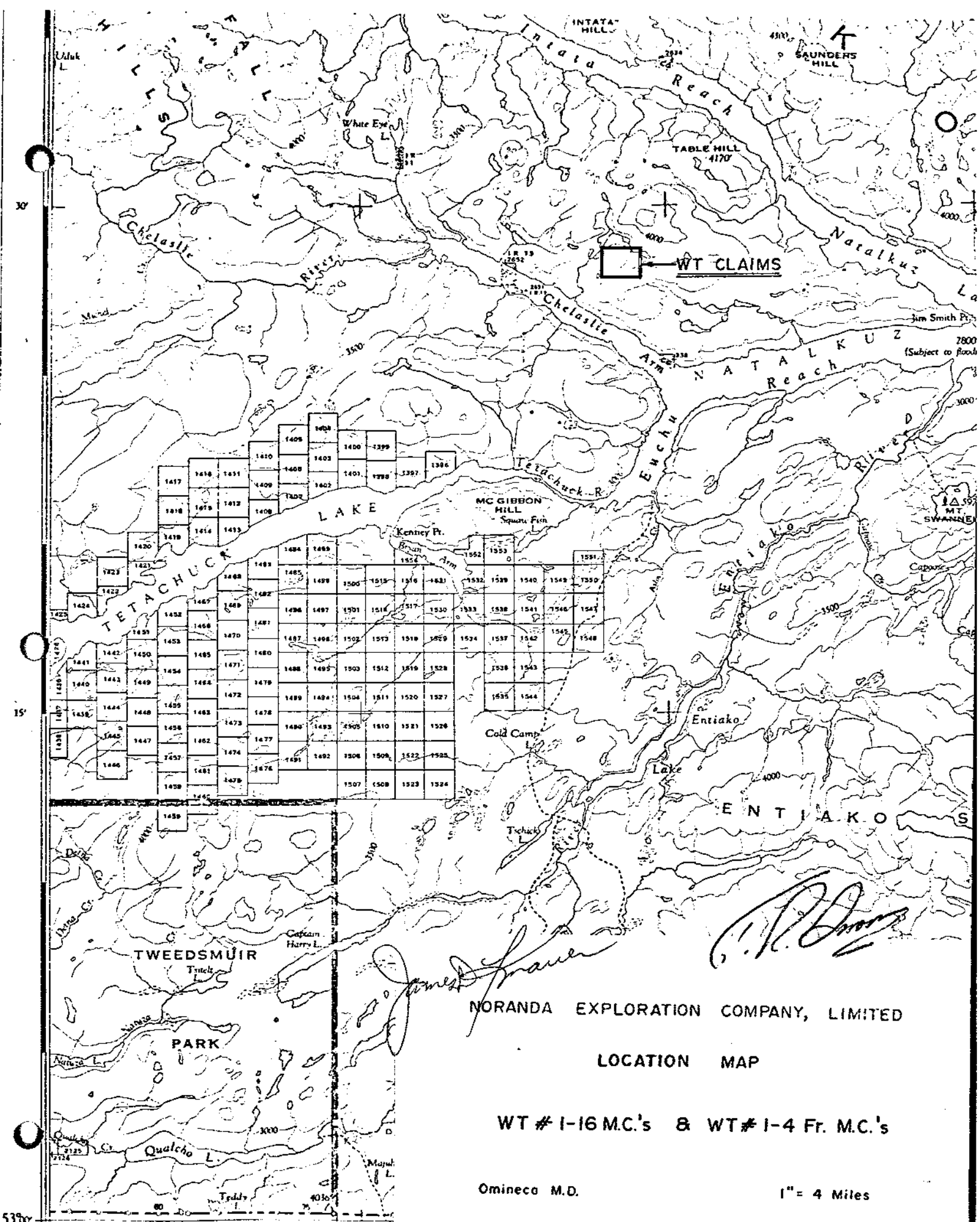
INTRODUCTION:

The Chelaslie Property referred to in this report is located approximately fifty three airmiles south of Burns Lake, B.C. near a small unnamed lake three miles north of Chelaslie Arm (See Figure 1). Access to the property is by fixed wing float equipped aircraft from Maclure Lake near Telkwa, B.C. to the unnamed lake within the claim group.

Elevations range from 3,500 to 4,000 feet on the property.

The property consists of 20 contiguous mineral claims in the Omineca Mining Division of British Columbia (See Figure 1) which were staked following a reconnaissance geochemical program. The claims are as follows:

<u>Claims</u>	<u>Record Numbers</u>	<u>Recording Dates</u>	<u>Owner</u>
W.T. #1	89550	July 13, 1970	Noranda Exploration Company, Limited
W.T. #2	89551	"	" "
W.T. #3	89552	"	" "
W.T. #4	89553	"	" "
W.T. #5	89554	"	" "
W.T. #6	89555	"	" "
W.T. #7	89556	"	" "
W.T. #8	89557	"	" "
W.T. #9	89558	"	" "
W.T. #10	89559	"	" "
W.T. #11	89560	"	" "
W.T. #12	89561	"	" "
W.T. #1 Fr.	89562	"	" "
W.T. #2 Fr.	89563	"	" "
W.T. #3 Fr.	89564	"	" "
W.T. #4 Fr.	89565	"	" "



WT CLAIMS

NORANDA EXPLORATION COMPANY, LIMITED

LOCATION MAP

WT # 1-16 M.C.'s & WT # 1-4 Fr. M.C.'s

Omineca M.D.

1" = 4 Miles

93 F/5 E

FIG. A

53°00'

126°00'

45'

<u>Claims</u>	<u>Record Numbers</u>	<u>Recording Dates</u>	<u>Owner</u>
W.T. #13	99332	June 15, 1971	Noranda Exploration Company, Limited
W.T. #14	99333	"	" "
W.T. #15	99334	"	" "
W.T. #16	99335	"	" "

The geochemical soil survey described in this report was carried out in an attempt to locate the source giving rise to anomalous stream sediment values located by earlier work. The geochemical survey along with necessary line preparation was carried out by a two man Noranda Exploration Company, Limited geochemical crew and a two man contract line cutting crew under the direction and supervision of G.E. Dirom, P.Eng. and J.D. Knauer between May 27, 1971 and July 13, 1971.

GENERAL GEOLOGY:

The Chelaslie property is centered over two north-south oriented topographic highs or domes. The dome to the north is underlain in part by monzonite and locally quartz monzonite. The dome to the south is underlain by latite and latite porphyry. In contact with both monzonite and latite are intermediate to basic volcanic rocks believed to be part of the Takla Group. These volcanic rocks consist predominantly of propylitized andesites and andesite porphyries and, to a lesser extent, amygdaloidal basalt. G.S.C. Memoir 324, Nechako River Map-Area (H.W. Tipper, 1963) provides an insight into the regional geological setting of the Chelaslie property.

GRID PREPARATION:

To carry out the geochemical survey, a grid was laid out to cover the known areas of interest on the Chelaslie property.

A cut base line designated 100+00E was established in a north-south direction for a distance of 5,600 feet. Utilizing this base line, 12 east-west grid lines were chained, flagged and picketed. Stations were established at 100-foot intervals where practical on all grid lines. Two tie lines parallel to the

base line were established for control. A two man contract line cutting crew assisted by a two man Noranda Exploration Company, Limited crew developed the 14.8 miles of line on this property.

GEOCHEMICAL SOIL SURVEY:

All samples were analyzed for copper and molybdenum in the Noranda Exploration Company, Limited laboratory located at 1050 Davie Street, Vancouver, B.C., analyst, Evert vanLeeuwen.

Sampling Method:

Samples were obtained by digging holes with a shovel and steel bar, to a depth at which the visible grey C Horizon or sub-outcrop was encountered. The C Horizon was sampled and the lower part of the B Horizon, where visible, was also sampled. The samples were placed in "Hi Wet Strength Kraft 3 1/2" x 6 1/8" Open End" envelopes and the grid station location was marked on the envelopes with indelible felt pens. Soil samples were taken at 200-foot intervals along the grid lines.

Laboratory Determination Method:

The samples are first hung in a drying cabinet for a period of 24 to 48 hours. They are then mechanically screened and sifted to obtain a -80 mesh fraction.

The determination procedure for total copper and total molybdenum is as follows: 0.200 grams of -80 mesh material is digested in 2 ml. of HClO_4 and 0.5 ml. of HNO_3 for approximately four hours. Following digestion each sample is diluted to 5 ml. with demineralized H_2O . A Varian Techtron Model AA-5 Atomic Absorption spectrophotometer was used to determine the parts per million Cu and Mo in each sample.

The theory of Atomic Absorption spectrophotometry is fully described in the literature and will not be described in this report.

Presentation of Results:

Results of this survey are presented in Dwg. 1 of this report, a plan map showing copper and molybdenum determinations in parts per million. Copper values greater than 100 p.p.m. are outlined by solid lines. Molybdenum values greater than 7 p.p.m. are outlined by dashed lines.

Discussion of Results:

Values for total copper range from a background of less than 60 p.p.m. to anomalous values greater than 100 p.p.m. Total molybdenum values range from a background of 0 to 5 p.p.m. with anomalous values greater than 7 p.p.m. Results for copper indicate anomalous zones as shown in Dwg. 1 in the NW portion of the grid. Anomalous molybdenum results coincide quite well with the anomalous copper values. The main portion of the samples were taken in transported soils, however some residual samples were obtained. Swampy conditions and rolling topography probably play an important part in the displacement of some of the anomalous values. Reconnaissance geology indicates copper mineralization was found in some of the exposed outcrop, therefore the soil geochemistry has definitely indicated an area of interest.

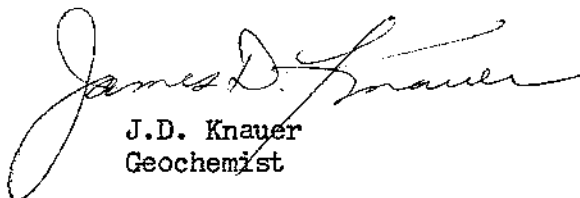
RECOMMENDATIONS AND CONCLUSIONS:

No further soil sampling is recommended within the boundaries of the present grid system. A study of detailed geologic mapping in conjunction with I.P. survey results will determine further work.

Respectfully submitted,



G.E. Dirom, P.Eng.



J.D. Knauer
Geochemist

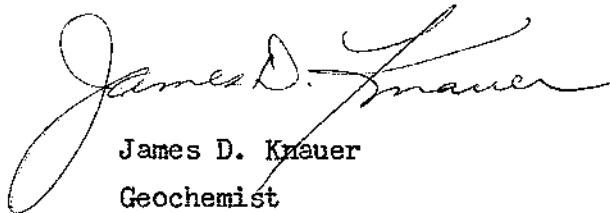
July 28, 1971

Statement of Qualifications

I, James D. Knauer of the City of Vancouver, Province of British Columbia do certify that:

1. I have been an employee of Noranda Exploration Company, Limited since August 1964.
2. I am a graduate of the University of New Mexico with a Bachelor of Science Degree in Geology.
3. I am a member of the Geochemical Society.
4. I have held the position of Geochemist for Noranda Exploration Company, Limited, British Columbia since June 1965.

Dated at Vancouver
this 28th day of
July, 1971



James D. Knauer
Geochemist

Noranda Exploration Company, Limited
(No Personal Liability)

CERTIFICATE

I, GAVIN EWAN DIROM, of the Town of Smithers, Province of British Columbia, do certify that:

1. I am a Geological Engineer residing at 52 North 14th Avenue, Smithers, B.C.
2. I am a graduate of the University of British Columbia with a B.A.Sc Degree (1962) in the geophysical option of Geological Engineering and a M.A.Sc Degree (1965) in Geophysics.
3. I am a Member of the Canadian Institute of Mining and Metallurgy.
4. I am a registered Professional Engineer in the Provinces of British Columbia and Ontario.
5. I have been employed as a geologist for Noranda Exploration Company, Limited since June, 1962 and have held the position of District Geologist - Northern B.C. since March, 1967

Dated at Smithers this 12 day of August, 1971



GAVIN E. DIROM, M.A.Sc., P.Eng.

SUPPLEMENT TO THE GEOCHEMICAL SURVEY ON THE CHELASLIE PROPERTY
OF NORANDA EXPLORATION COMPANY, LIMITED BY GAVIN E. DIROM, P.ENG.
AND J.D.KNAUER.

QUALIFICATIONS OF FIELD PERSONNEL:

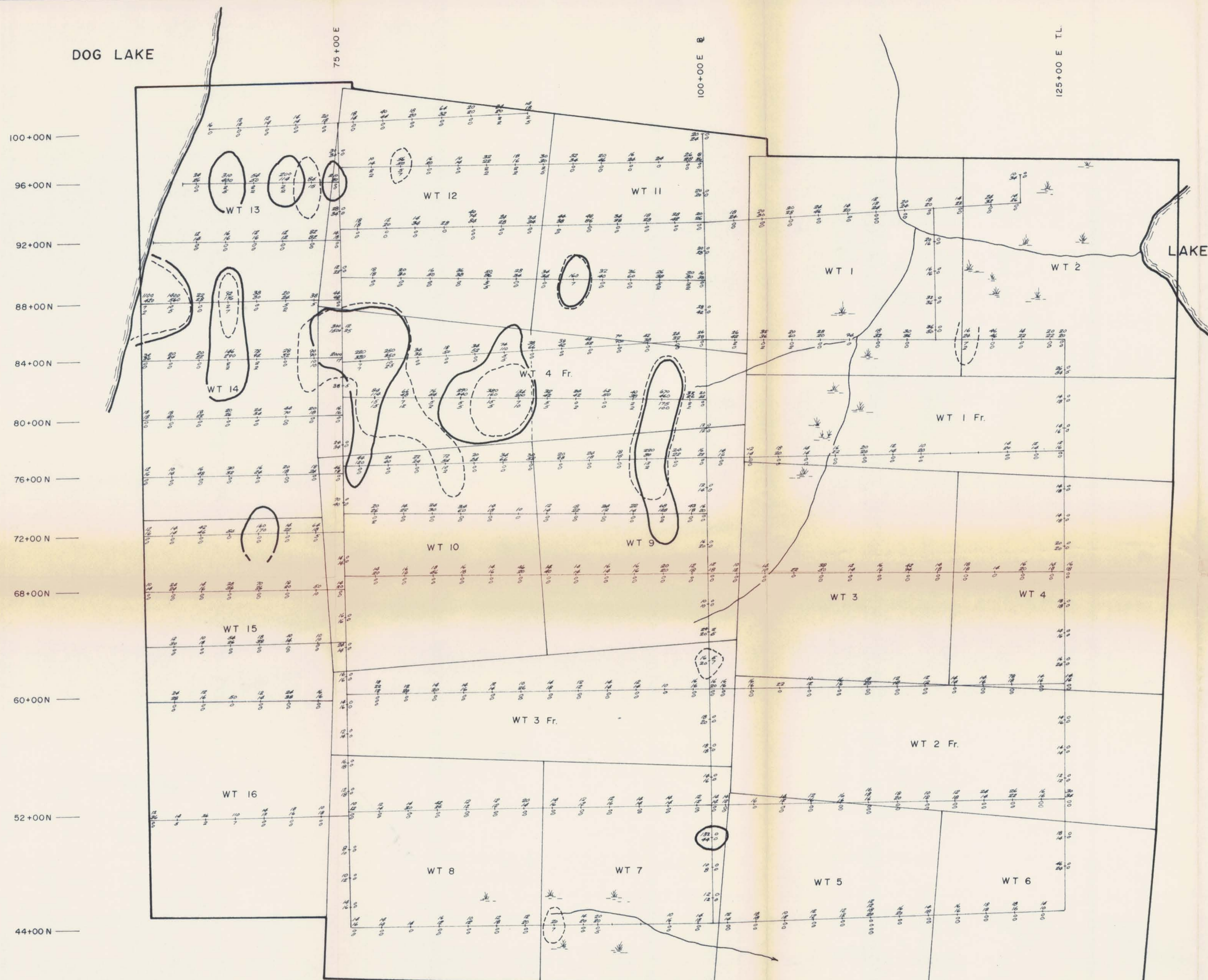
Mr. J. Rowlands is a senior party leader and has been employed by Noranda Exploration Company, Limited for the periods July 1969 to July 1970 and October 1970 to the present time.

Mr. M. Vetterli is employed by Noranda Exploration Company, Limited as a field assistant and is currently working for the third consecutive summer in this capacity.

Mr. Rowlands and Vetterli were trained in field procedures by Mr. G.E.Dirom P.Eng., District Geologist, Noranda Exploration Company, Limited and Mr. J. D.Knauer, Geochemist for Noranda Exploration Company, Limited Vancouver Office.



Gavin E. Dirom P.Eng.



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3254 MAP #2

ANOMALOUS AREAS
 Cu - 100ppm plus
 Mo - 7 ppm plus

To accompany Geochemical Report by Gavin E. Dirom, P. Eng., and J. D. Knauer, Geochimist, on the WT # 1-16 M.C.'s and WT # 1-4 Fr. M.C.'s.

Omineca Mining Division: Dated: July 28, 1971

James J. Lawrence *G. E. Dirom*

3254 M-2

Values
 Ppm Total Cu
 Ppm Total Mo
 Ppm Total Cu / Ppm Total Mo

REVISED	CHELASLIE PROPERTY	
	SOIL SURVEY	
PROJECT:		
PROJ. NO.	SURVEYED BY:	DATE: JULY, 1971
N.T.S. 93F/5E	DRAWN BY:	SCALE: 1" = 400'
DWG. NO.	NORANDA EXPLORATION CO. LTD.	
	OFFICE: SMITHERS	