

# 2481

This is Geophysical Report No. EM-70-106  
For Tanjo Mines Ltd. (NPL)  
Dor Claims Group  
4 Mi. North of Aspen Grove, B. C.  
June 3rd, 1970

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## TABLE OF CONTENTS

	<u>PAGE</u>
Purpose	1
Instrumentation	1
Geological Reference	2
Location	2
Presentation	2
Results	3
Summary	4
Conclusions	5
Statement of Costs	6

## PLANS

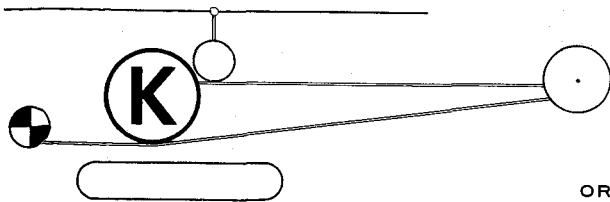
#1 Anomalous Plan

EM-70-106 (*Rev*)

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Klyceptor International Air Surveys Ltd.  
250 North Grosvenor Avenue  
Burnaby 2, B. C.  
Tel: 298-9619

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2481 MAP



KLYCEPTOR  
INTERNATIONAL AIR SURVEYS LTD.

ORIGINATORS OF GEOELECTROMAGNETIC SURVEYS BY AIR  
CUSTOM GEOPHYSICAL INTERPRETATIONS

KLYCEPTOR EM GEOPHYSICAL SURVEY REPORT COVERING THE  
DOR CLAIMS GROUP OF TANJO MINES LTD. (N.P.L.) LOCATED  
IN THE NICOLA MINING DISTRICT, APPROXIMATELY 4 MILES  
NORTH OF ASPEN GROVE, B.C. (50° N. - 120° W.)  
COMMENCED MAY 8TH TO JUNE 3RD, 1970

PURPOSE:

The purpose of this survey was to obtain a geophysical assessment by the determination of the anomalous configurations over areas of coverage with little geological information. The infinite source EM Method of instrumentation was utilized as the best method for determining relative conduction and interfacial reactions from the geological formations.

INSTRUMENTATION:

The survey was conducted with a Type EM-16 Ronka Instrument operating on 18.6 HKZ from the U. S. Navy Station in Arlington, Washington.

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GEOLOGICAL REFERENCE:

Geological reference Geological Service of Canada Maps number 886A and number 888A. Geological and Mineral Deposits of Nicola Map/Area, B. C., Memo 249 by W. E. Cockfield.

LOCATION:

The survey covered 18.5 miles of grid lines over the Dor Claims located around and on Courtenay Lake and Number Five Highway approximately 10 miles southeast of Merritt, B. C., in the Nicola Mining District, Latitude 50° North Longitude 120° West.

PRESENTATION:

The presentation as shown on Plan EM-70-106 is indicated in profile form wherein the grid lines are represented as the 0 base line for each traverse. The vertical and horizontal components of the NPG signals are shown on separate profiles as

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indicated on the plan and the interpretation is based on the relative amplitude and phase relation of the two components.

The profiles are derived from sequential readings with an average spacing of 100 feet. The zero baseline is north and south on the east side of the lake with the eastwest grid lines spaced at 500 foot intervals.

RESULTS:

The western portion of the survey is largely obscured by the anomalous features from the powerline associated with the highway curving through the property. In broad formation extending from the southeast to the northwest of the property parallel to the east side of the lake indicated as F1 has characteristically low anomalous features and appears to be the division of formations on each side of the lake. The most anomalous area is shown between

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the linear strike lines L3 and L4. Within this anomalous zone L2 is the principal conductive linear anomaly. The linear anomaly L1 to the west is relatively narrow and appears to be associated with old workings on the north end.

The Z2 zone on the north end of the lake is bracketed by the linear anomalies L5 and L6. This zone shows an increase in anomalous strength to the northeast.

SUMMARY:

The influence of the powerline obscures any linear anomalies on the western portion of the survey. However, there is some indication that at least one anomaly exists to the north and parallel to L1. These linear anomalies appear to extend into the lake. The F1 formation appears to be a fault zone dividing the formations between the southwest and northeast.

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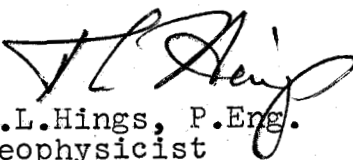
CONCLUSIONS:

It appears the lake marks the division of three or possibly four geological formations:

1. The area south and west of F1 and north of L4.
2. The area north and east of F1 and south of L6.
3. The northern portion between F1 and L6.
4. The southern portion between L4 and F1.

The absence of survey data from the Courtenay Lake area prevents obtaining a more comprehensive picture, however, a winter survey on the ice over this area is justified if the geological contacts are considered of sufficient importance.

The anomalous zones Z1 and Z2 warrant geological assessment. The L1 linear anomaly also might provide geological information of interest.

  
D.L.Hings, P.Eng.  
Geophysicist

A STATEMENT OF COSTS FOR GEOPHYSICAL SURVEY NO.  
EM-70-106 COVERING THE DOR CLAIMS GROUP, NICOLA  
MINING DISTRICT, APPROXIMATELY 4 MILES NORTH OF  
ASPEN GROVE, B. C. BY KLYCEPTOR INTERNATIONAL  
AIR SURVEYS LTD., MAY 8TH TO JUNE 3RD, 1970

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Survey Crew:

D.Cramer	3 days/\$60	\$ 180.00	
G.Olheiser	19 days/\$40	760.00	
W.Mather	12 days/\$30	360.00	
R.Reece	10 days/\$60	<u>600.00</u>	
			\$ 1,900.00

Transportation:

Truck	19 days/\$12	\$ 228.00	
	900 mi./\$.12	<u>84.00</u>	
			\$ 312.00

Living Costs:

Living	44 man/days/\$6	\$ 264.00	
Food	44 man/days/\$5	<u>220.00</u>	
			\$ 484.00

Equipment and Supplies:

Misc.		\$ 100.00	\$ 100.00
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Instrument Rental:

19 days/\$10	\$ 190.00	\$ 190.00
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Data Processing and Drafting:

D.Cramer	6 days/\$60	\$ 360.00	\$ 360.00
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Interpretation and Report:

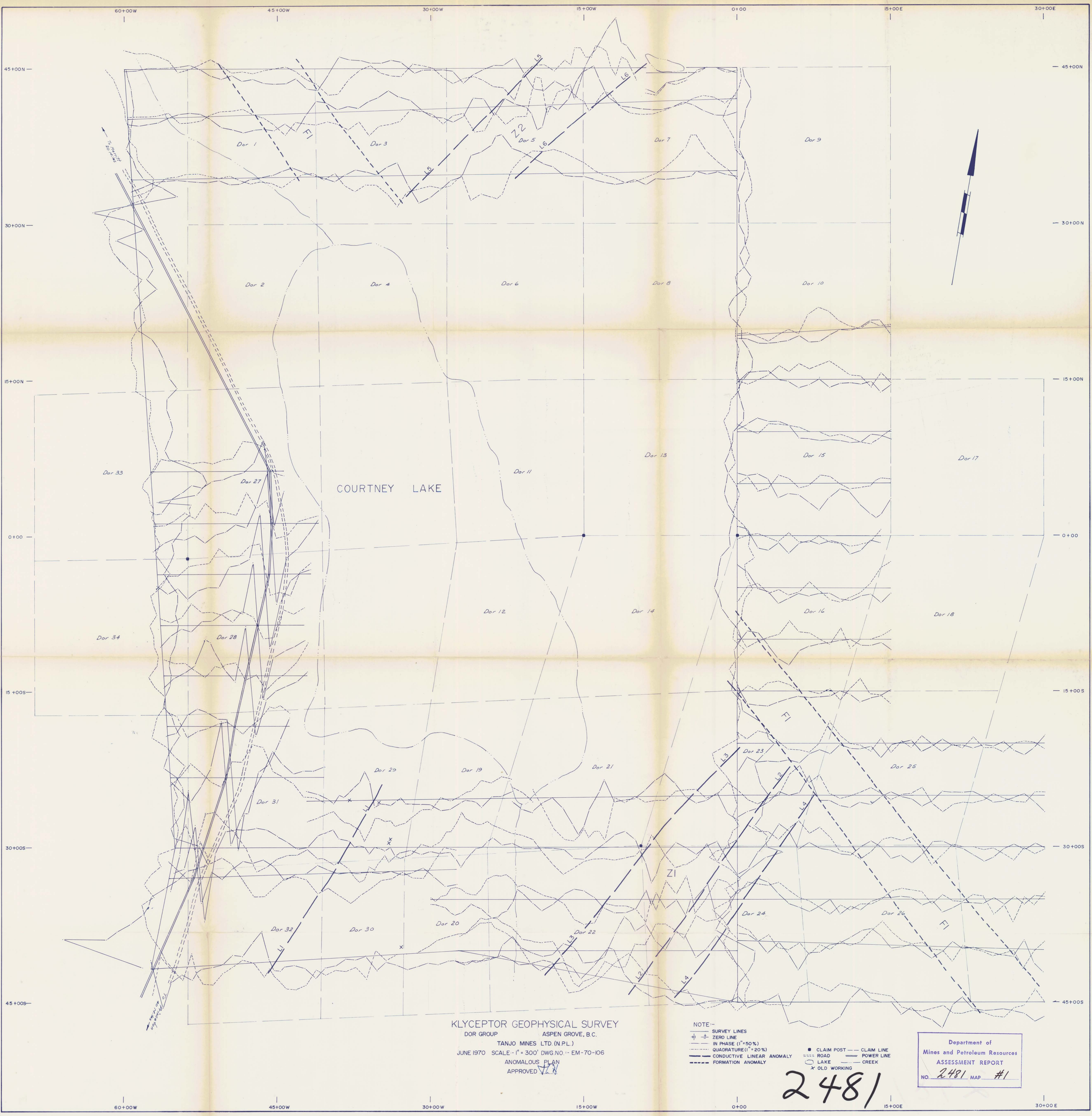
D.L.Hings, P.Eng.		\$ 300.00	\$ 300.00
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TOTAL			<u>\$ 3,646.00</u>
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KLYCEPTOR GEOPHYSICAL SURVEY  
 DOR GROUP ASPEN GROVE, B.C.  
 TANJO MINES LTD (N.P.L.)  
 JUNE 1970 SCALE - 1" = 300' DWG. NO. - EM-70-106  
 ANOMALOUS PLAN  
 APPROVED *[Signature]*

NOTE -  
 SURVEY LINES  
 ZERO LINE  
 IN PHASE (1" = 50%)  
 QUADRATURE (1" = 20%)  
 CONDUCTIVE LINEAR ANOMALY  
 FORMATION ANOMALY  
 CLAIM POST  
 ROAD  
 LAKE  
 OLD WORKING  
 CLAIM LINE  
 POWER LINE  
 CREEK

Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 2481 MAP #1

2481