

23A/82

MAGNETOMETER SURVEY

Claims CLEO 1-24 incl.  
Rec. Nos. 57715 - 57738

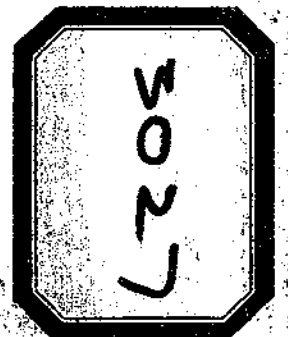
Location: 24 miles NNE of  
Lac La Hache.  
121°17' long: 52°2' latitude

Author: G.L. Kirwan, P.Eng.  
Super: G.L. Kirwan, U. Kelly

Owner: Nitro Developments Ltd.  
through G.L. Kirwan in trust

Work Done: Linecutting grid and  
geomagnetics from March 28/71 to  
April 10/71; office work from  
April 20-May 3/71

GERALD L. KIRWAN, B.Sc., F.G.A.C.  
Consulting Geologist  
Suite 214-475 Howe St., Vancouver, British Columbia  
Suite 205-160 Bay St., Toronto, Ontario



**Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT**

NO. **3027** MAP .....

3027

NITRO DEVELOPMENT INC.

GEOMAGNETIC SURVEY

CLEO CLAIM GROUP

CARIBOO MINING DISTRICT

BRITISH COLUMBIA

93 A / 3W

#1 Geomag Survey

SUMMARY:

On a grid of 400 ft. x 100 ft., a geomagnetic survey was completed over the 24 CLEO claims of Nitro Development Inc. located at the western head of Murphy Lake, Cariboo Mining District, south central British Columbia.

Geomagnetic results indicate an essentially magnetically flat area having very little relief although a number of large broad areas of positive response occur in the western one-half of area covered.

Observed rock structure consists wholly of granodiorite, outcrop confined to southwestern area of property, and is considered favourable host material in that region for large copper occurrences.

In accordance with recommendations contained in my report of March 22nd last, geochemical soil sampling should be completed over the property with copper determinations for an estimated cost of \$6,000.00. This work will assess copper potential of the property and will further evaluate known copper occurrences located in the region of claims 57724-57735.

Further work is contingent upon results of recommended work program.

*G. L. Kirwan*  
G.L. Kirwan, B.Sc., P. Eng.



Vancouver, B.C.

May 3rd, 1971.

Nitro Development Inc.,  
10th Floor,  
366 Bay Street,  
Toronto 110, Ontario.

Gentlemen:

This report covers results of a program of magnetometer coverage completed over your property located in British Columbia.

Assessment is made of geomagnetic results and recommendations are carried for further exploration work programs.

PROPERTY, LOCATION, ACCESS:

The Nitro holdings consist of 24 contiguous mineral claims, some 1,200 acres in all, referred to as CLEO 1-24 with respective Record Numbers 57715-57738 inclusive.

The property is located at the western head of Murphy Lake, some 24 miles north northeast of the townsite of Lac La Hache serviced by Highway 97 and Pacific Great Eastern Railroad. Coordinates of the property are 121° 17' Longitude, 52° 2' Latitude.

Access is best attained by charter aircraft from Lac La Hache to Murphy Lake.

An alternate route may be open in dry periods by logging roads via Spoot Lake from Lac La Hache.

GEOLOGY:

Geological coverage is meagre on the Nitro holdings, however G.S.C. reference Map 3-1961, Quesnel Lake, shows the south half of the property to be underlain by Jurassic - Cretaceous granodiorite, monzonite, and hornblende - biotite complex. The north portion is drift covered by Pleistocene and recent glacio - alluvial till and gravel, but is probably underlain by identical rock sequences as the remaining portion of the property.

Surface prospecting has uncovered a copper occurrences in the region of claims 57724-57735 in granodiorite material.

MAGNETOMETER SURVEY:

Control and Survey Method: A Sharpe MF-1 Fluxgate magnetometer was employed to measure the vertical component of the earth's magnetic field in gammas. Control was established through grid at 400 ft. spacings directed east and west to property limits from north - south base control line. Stations were established each 100 ft. along crosslines.

Field Procedure: Base stations for determining diurnal variations were established at 600 ft. intervals along the baseline. Enclosure method was employed where the instrument operator, commencing at baseline station, records readings along a crossline returning on adjacent crossline to original recording at the baseline.

Results: A total of 1,404 stations were established in the 26.6 mile survey.

Magnetic coverage confirms a general undisturbed geological pattern void of distortion, contortion, or major faulting. These conditions lend themselves well to large, continuous, mineralized deposits.

The area covered appears to be relatively flat geomagnetically with background in the -100 gamma area. Maximum response is in the order -1360 highest negative value and +2910 highest positive value.

Areas of positive geomagnetic relief occur in large areas in the western portion of area covered by survey.

Geologically, areas of rock outcrop were confined to the southeastern part of the property and consist wholly of granodiorite, a rock type favourable in the region large copper occurrences.

CONCLUSIONS AND RECOMMENDATIONS:

On a grid of 400 ft. x 100 ft., a geomagnetic survey was

completed over the 24 CLEO claims of Nitro Development Inc. located at the western head of Murphy Lake, Cariboo Mining District, south central British Columbia.

Geomagnetic results indicate an essentially magnetically flat area having very little relief although a number of large broad areas of positive response occur in the western one-half of area covered.

Observed rock structure consists wholly of granodiorite, outcrop confined to southwestern area of property, and is considered favourable host material in that region for large copper occurrences.

In accordance with recommendations contained in my report of March 22nd last, geochemical soil sampling should be completed over the property with copper determinations for an estimated cost of \$6,000.00. This work will assess copper potential of the property and will further evaluate known copper occurrence located in the region of claims 57724-57735.

Further work is contingent upon results of recommended work program.

Respectfully submitted,



Kirwan, B.Sc., P.Eng.

Vancouver, B.C.

May 3rd, 1971.



DETAILED COST BREAKDOWN

Ground Magnetic Survey - CLEO Group of Claims  
March 28 - April 10, 1971 (14 days)

Wages -

E. Dodd - March 28 to April 2 6 days @ \$75.00 per day	\$450.00	
U. Kelly - March 28 to April 10 14 days @ \$65.00 per day	910.00	
R. Gunn - March 29 to April 5 8 days @ \$35.00 per day	280.00	
P. Fairweather - April 5 to 10 6 days @ \$32.00 per day	<u>192.00</u>	\$1,832.00

Camp Maintenance -

34 man days @ \$7.50 per day	\$255.00	
Survey Materials (flagging, etc.)	47.25	
Truck Rental - 14 days @ \$15.00 per day	210.00	
Skidoo Rental - 14 days @ \$20.00 per day	<u>280.00</u>	<u>792.25</u>

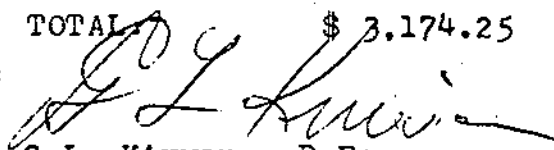
Field Expenses Total \$2,624.25

PLUS

Engineering -

Geophysical Mapping	N/A
Reports G.L. Kirwan	300.00
Engineering Fees	N/A
Instrument Rental	150.00
Office (telephone, typing, Xerox)	100.00

TOTAL \$ 3,174.25

  
G.L. Kirwan, P.Eng.

CERTIFICATE

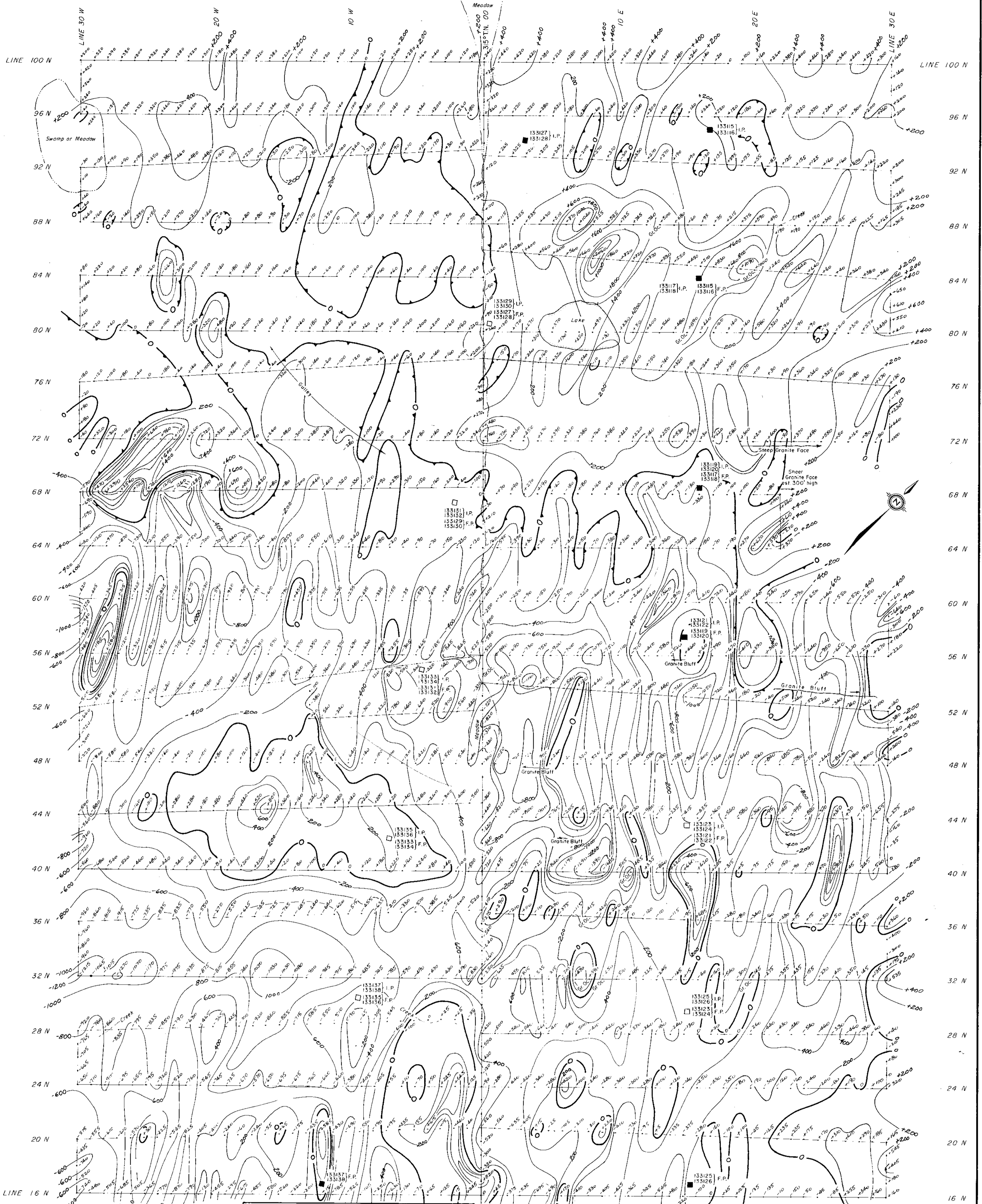
I, GERALD L. KIRWAN of the cities of Toronto and Vancouver, certify as follows:

1. THAT I am a Geologist with offices at Ste. 205 - 160 Bay Street, Toronto, and Ste. 214 - 475 Howe Street, Vancouver, B.C.
2. THAT I have been graduated from Carleton University, B.Sc., 1957, and that I have practised my profession continuously.
3. THAT I am registered with the Association of Professional Engineers of the Province of Ontario as a Professional Engineer, I am a Fellow of the Geological Association of Canada and a Member of the Canadian Institute of Mining and Metallurgy.
4. THAT I have no interest direct or indirect in the property of Nitro Development Inc., nor do I beneficially own directly or indirectly any security of the Company or affiliates thereof.
5. THAT the accompanying report has been prepared by myself and is based upon study of pertinent government reports and maps, upon a general knowledge of the subject area, upon a visit to the property March 16, 1970, and upon supervision of work programs covered herein.
6. THIS report herein may be used in the prospectus of the Company and amendments thereto.

DATED at the City of Vancouver, in the Province of British Columbia, this 3rd day of May, 1971.

*G.L. Kirwan*  
G.L. Kirwan, B.Sc.,





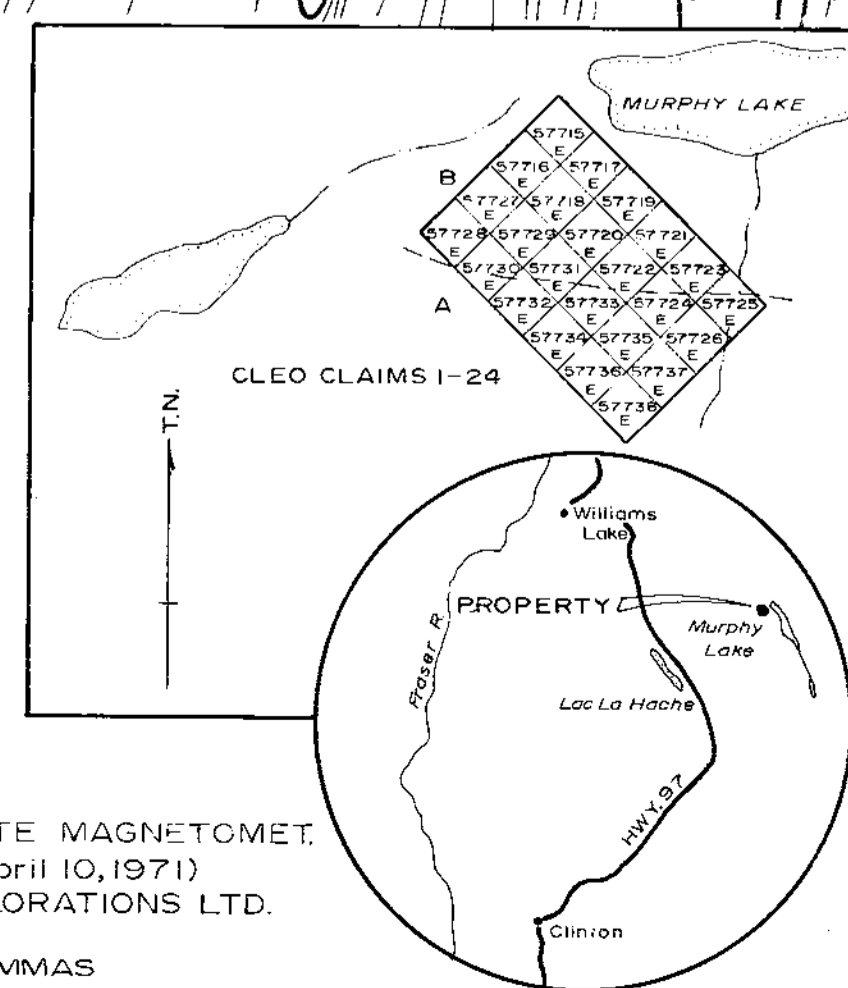
Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 3027 MAP #1

**LEGEND**

- LOCATED CLAIM POSTS
- ASSUMED CLAIM POSTS
- Gr: GRANITE OUTCROP

INSTRUMENT: SHARP-MF-1 FLUXGATE MAGNETOMET.  
DATA PLOTTED: U KELLY (March 28-April 10, 1971)  
TRANS ARCTIC EXPLORATIONS LTD.

○ MAGNETOMETER CONTOUR IN GAMMAS  
Contour Interval 200 gammas.



3027 M-1

NITRO DEVELOPMENT INC.  
CLEO CLAIM GROUP  
CARIBOO MINING DISTRICT, B.C.  
**GEOMAGNETIC SURVEY**  
BY  
GEO SURVEYS CONSULTANTS LTD.  
TORONTO-VANCOUVER

SCALE 400 0 400 800 FEET

