

86 - 870 - 15627

Shangri-La Minerals Limited

REPORT ON AIRBORNE GEOPHYSICAL SURVEY

OF THE CASTLE CLAIMS

GREENWOOD MINING DIVISION, B.C.

NORTH LATITUDE 49° 00'

WEST LONGITUDE 118° 09'

NTS 82 E/1

BY

F. DISPIRITO, B.A.Sc., P.Eng.

J.C. GRAHAM, B.Sc., M.Eng.

FOR

NITRO RESOURCES INC.

7 JANUARY 1987

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,627

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SUMMARY

On October 8, 1986, an airborne geophysical survey of the Castle claim group was conducted. A total of 245 line-km was surveyed. The airborne survey is the preliminary phase of a more extensive exploration program of the Castle property undertaken by Shangri-La Minerals Limited for Nitro Resources Inc. The object of this program is to assess the economic mineral potential of the Castle property, particularly with respect to possible Platinum Group Elements (PGE's) within an ultramafic body known to exist on the property. The results of the airborne survey are presented in this report.

The Castle claim group consists of the Castle 1, 2, 3, and 4 claims. The Castle claims are situated approximately 3 km southeast of Christina Lake, British Columbia, within the Greenwood Mining Division. There is easy access to the property by road. The topography is gentle over most of the property, and steepens in the west. The property is moderately forested. A power line traverses the Castle property.

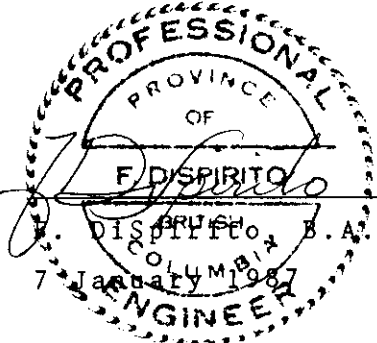
There are 7 Crown Granted mineral claims on the Castle property which are excepted from the Castle claims. Previous to the staking of the Castle claims, the property was a minor producer of chromite, and had been drilled extensively to define the extent of nickel mineralization in the ultramafic body. The Castle claims were recorded on October 11, 1985. Until the exploration program undertaken by Shangri-La Minerals Limited, there had been no work done on the property since the Castle claims were staked.

The dominant feature of the geology of the Castle claim group is an ultramafic body which comprises the west-central part of the Castle claim area. This body is known to contain chromium, and traces of nickel and PGE's have been reported. The platinum mineralization is thought to be contained within chromite. Andesites and metasediments occur on the property to the north and east of the ultramafic body.

The results of the airborne magnetic survey indicate the extent of the ultramafic body. The ultramafic body is characterized by an extremely strong and active magnetic field, with variations of 1000's of gammas. The magnetic relief is gentle over the rest of the Castle property.

The VLF-EM results are dominated by topography and the power line which traverses the Castle property. There do not appear to be any significant zones of conductivity which are unrelated to topography, indicating that any possible sulfide zones are not large and/or conductive enough to be detected by the airborne survey.

Respectfully submitted at Vancouver, B.C.

A circular professional seal for the Province of British Columbia. The outer ring contains the text "PROFESSIONAL ENGINEER". The inner ring contains "PROVINCE OF BRITISH COLUMBIA". In the center, the name "F. DISPIRITO" is written in a cursive script. Below the name, the text "F. DISPIRITO, B.A.Sc., P.Eng." is printed. At the bottom of the seal, the date "7 January 1987" is stamped. A horizontal line is drawn across the seal, passing through the name and the date.

F. DISPIRITO, B.A.Sc., P.Eng.
7 January 1987

INTRODUCTION

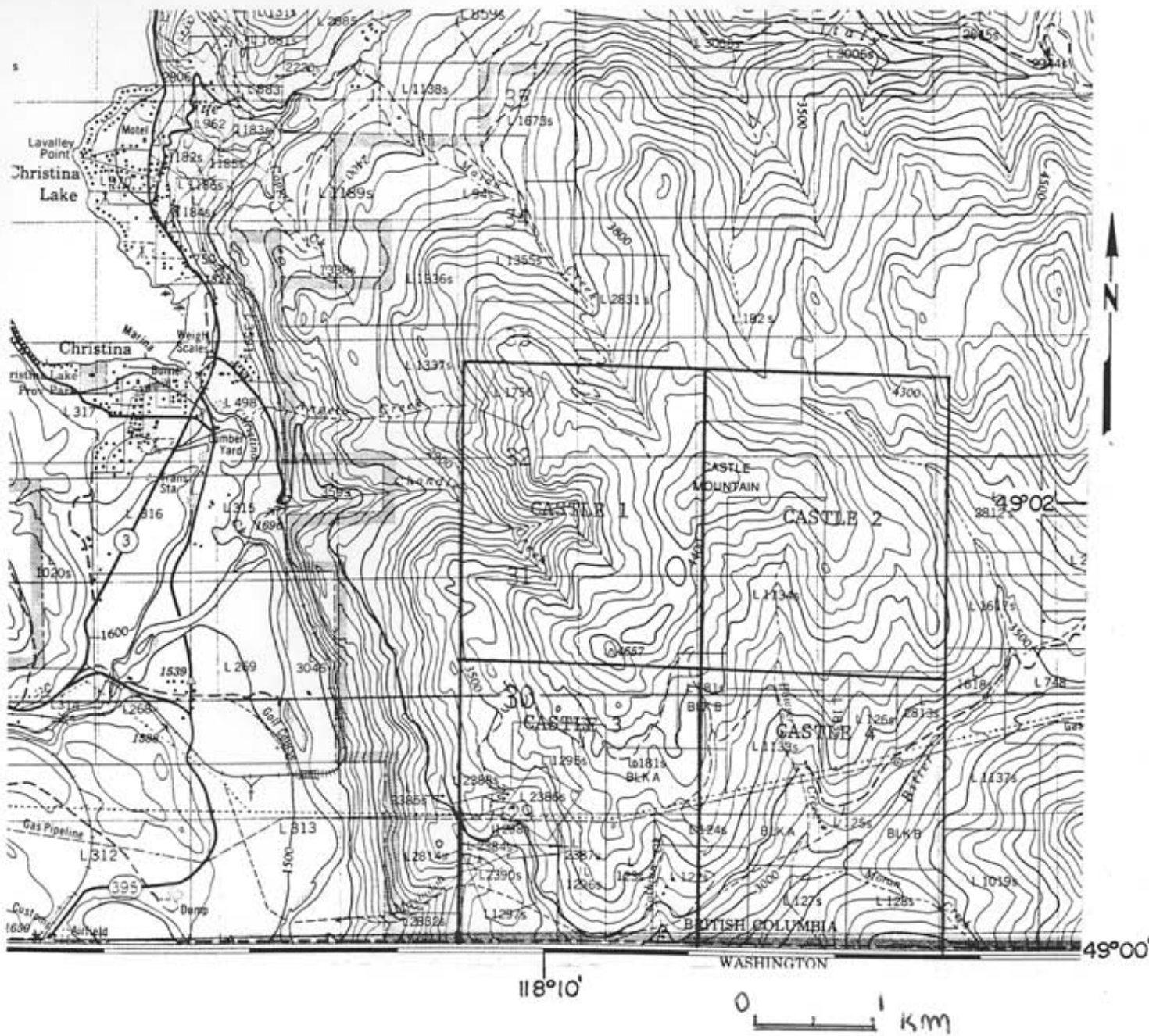
On October 8, 1986, an airborne geophysical survey of the Castle claim group was conducted. A total of 245 line-km was surveyed. The airborne survey is the preliminary phase of a more extensive exploration program of the Castle property undertaken by Shangri-La Minerals Limited for Nitro Resources Inc. The object of the program is to assess the economic mineral potential of the Castle property, particularly with respect to possible Platinum Group Elements (PGE's) within an ultramafic body known to exist on the property. The results of the airborne survey are presented in this report.

LOCATION, ACCESS, AND PHYSIOGRAPHY

The Castle property is approximately 3 km southeast of Christina Lake, in southeastern British Columbia, 22 km east of Grand Forks and approximately 560 km east of Vancouver, B.C. (Fig. 1). The southernmost claim boundary is coincident with the Canada/U.S. border.

There is easy access to the property via Highway #3 to the foot of Castle Mountain, and from there via the Santa Rosa Road and a network of forestry roads which traverse the property.

The topography is gentle over most of the property, and steepens in the west. Elevations range from 1600 to 2900 m at the summit of Castle Mountain. The property is moderately forested. A power line and gas pipeline traverse the Castle property.



CASTLE PROJECT	
for NITRO RESOURCES INC.	
by: SHANGRI-LA MINERALS LIMITED	
LOCATION MAP	
GREENWOOD M.D., B.C. SCALE 1:50,000	
N.T.S. 82E/1	Date: Sept. 1986
Drawn by: C.D.	Figure No. 1

CLAIM STATUS

The Castle claim group consists of the Castle 1, 2, 3, and 4 claims. These are modified grid system mineral claims in the Greenwood Mining Division, B.C. The claims are shown on Mineral Claim Map 82 E/1E. The area of each of the claims is nominally 20 units. The Castle 1 and 3 claims are not actually 20 unit claims since they surround Crown Granted mineral claims which are not owned by Nitro Resources Inc.

This report will be submitted to receive assessment credit.

Name	Units	Anniversary	Record No.
Castle 1	20*	11 Oct. 1986	4414
Castle 2	20	11 Oct. 1986	4415
Castle 3	20*	11 Oct. 1986	4416
Castle 4	20	11 Oct. 1986	4417

*The Castle 1 claim surrounds the Caledonia (L1756) Crown Grant, and the Castle 3 claim surrounds the Mammoth (L2385s), Mastodon (L2384s), Mastodon Fraction (L2388s), Canyon (L2390s), Pan (L2387s), and Dominion (L2386s) Crown Grants.

HISTORY

Previous to the staking of the Castle claims, the property was a minor producer of chromite, and had been drilled extensively to define the extent of nickel mineralization. The Castle claims were recorded on October 11, 1985. Until the exploration program undertaken by Shangri-La Minerals Limited, there had been no work done on the property since the Castle claims were staked.

GEOLOGY

The dominant feature of the geology of the Castle claim group is an ultramafic body which comprises the west-central portion of the Castle claim area. This body is known to contain chromium mineralization, and traces of platinum have been reported (Thomlinson, 1920). The platinum mineralization is thought to be contained within chromite. Andesites and metasediments occur on the Castle property to the north and east of the ultramafic body.

AIRBORNE VLF-EM AND MAGNETOMETER SURVEY SPECIFICATIONS

The survey system equipment simultaneously monitors and records the output signals from a proton precession magnetometer and two VLF-EM receivers installed in a bird which is towed over the survey area at an altitude of approximately 75 m by helicopter. The average flying speed while surveying is about 110 km/hr. Landmarks along the flight lines are plotted on aerial photographs as the lines are flown. This allows subsequent production of a flight line map on which to plot the survey results.

The two VLF-EM receivers respond to signals from two different transmitters - one in Seattle, Washington and one in Annapolis, Maryland. The Annapolis transmitter was not functioning during the survey, however, so only the Seattle results are available. Conductors will respond most strongly to the transmitter in the direction of their strike. The azimuth to the Seattle transmitter from the Castle property is 253°.

The geophysical data was recorded on chart recorders. The chart profiles were digitized and plotted by computer as contour maps. Instrument specifications are detailed in Appendix C.

The flight lines run north-south. The line spacing is roughly 100 m.

DISCUSSION OF RESULTS

Magnetometer Survey

The results of the magnetic survey are shown in Figure 2. The contour interval of the data is 500 gammas - a very coarse interval necessitated by the extreme magnetic relief encountered on the property. Ultramafic bodies are highly magnetic relative to other rock types.

The west-central portion of the claim area is an area of high magnetic field strength due to the presence of the ultramafic body. The area is also one of strong magnetic gradient, with values ranging from less than 500 to greater than 2500 gammas (relative to a datum level of 57000 gammas). This indicates that the ultramafic body is intruded by much less magnetic rock types, or simply that the magnetic mineral content of the body is erratic. The extent of the magnetically active zone indicates the extent of the ultramafic body.

The magnetic relief over the rest of the Castle property is relatively gentle, although there is still significant variation - on the order of 100's rather than 1000's of gammas. Areas of

higher magnetic field strength are probably due to the presence of andesite, which would be relatively magnetic with respect to the metasediments.

VLF-EM Survey

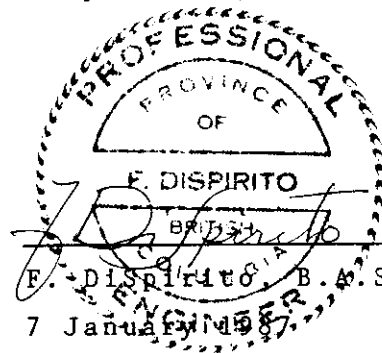
The VLF-EM results are dominated by topography and the power line which traverses the Castle property. There do not appear to be any significant zones of conductivity which are unrelated to topography or the power line, indicating that any possible sulfide zones are not large and/or conductive enough to be detected by the airborne survey. Any conductive areas located under the power line or on ridge tops could not be distinguished from the interference of these features.

CONCLUSIONS

The results of the airborne magnetic survey indicate the extent of the ultramafic body. The ultramafic body is characterized by an extremely strong and active magnetic field, with variations of 1000's of gammas. The magnetic relief is moderate over the rest of the Castle property, and areas of higher magnetic field probably indicate the presence of andesite.

The VLF-EM results are dominated by topography and the power line which traverses the Castle property. No conductors thought to be related to mineralization are apparent, although any conductive areas located under the power line or on ridge tops could not be distinguished from the interference of these features.

Respectfully submitted at Vancouver, B.C.,



F. Dispirito, B.Sc., P.Eng.

7 January 1987

REFERENCES

- Gale, R.E., Platinum deposits in British Columbia, Shangri-La
Fraser, A. Minerals Limited private report.
- Thomlinson, The sampling of some Platinum-bearing lodes and
 placers in British Columbia, Platinum Mineral In-
 vestigation - Munitions Reserve Commission,
 Canada, Final Report, 1920, p 161.

APPENDIX A

**COST BREAKDOWN
CASTLE AIRBORNE SURVEY**

245 line-km @ \$125/line-km \$30,625
(includes interpretation, report)

Total \$30,625

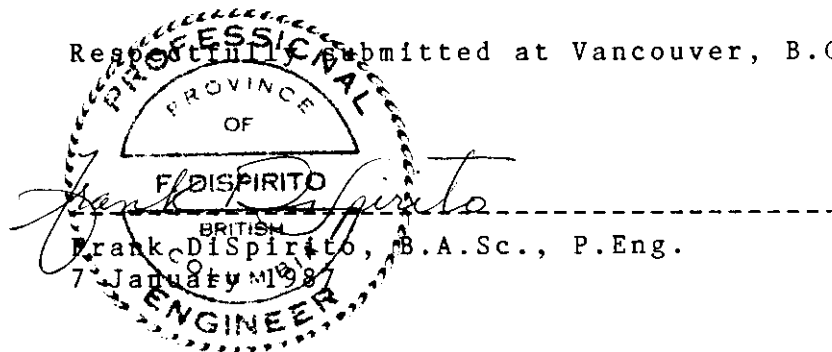
APPENDIX B

CERTIFICATE

I, Frank Di Spirito, of the City of Vancouver in the Province of British Columbia, do hereby certify:

- I) I am a Consulting Engineer with the firm of Shangri-La Minerals Limited, based at 706-675 West Hastings Street, Vancouver, B.C., V6B 1N2.
- II) I am a graduate of the University of British Columbia (1974) and hold a Bachelor of Applied Science in Geological Engineering.
- III) I am a registered member, in good standing, of the Association of Professional Engineers of British Columbia.
- IV) Since graduation, I have been involved in numerous mineral exploration programs throughout Canada and the United States of America.
- V) This report is based on an evaluation of data obtained by a Shangri-La Minerals Limited crew on October 8, 1986, and an evaluation of publicly and privately held data pertaining to the claim area.
- VI) I have no direct or indirect interest in the property described herein, or in any securities of Nitro Resources Inc., nor do I expect to receive any.
- VII) This report may be utilized by Nitro Resources Inc. for inclusion in a Prospectus or Statement of Material Facts.

Report submitted at Vancouver, B.C.

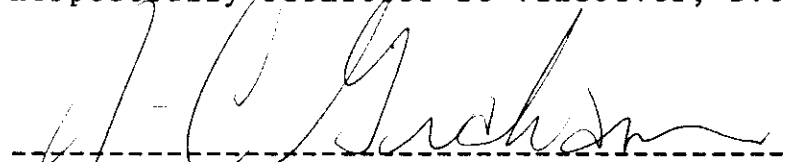


CERTIFICATE

I, James Campbell Graham of the City of Vancouver in the Province of British Columbia, do hereby certify:

- I) I am a Consulting Geophysical Engineer with the firm of Shangri-La Minerals Limited at 706-675 West Hastings Street, Vancouver, B.C., V6B 1N2.
- II) I graduated in 1985 with a M.Eng. degree in Geophysical Engineering and in 1982 with a B.Sc. in Geophysical Engineering from the Colorado School of Mines in Golden, Colorado.
- III) I have been involved in numerous mineral exploration programs since 1975.
- IV) This report is based upon field work carried out by this author and a Shangri-La Minerals Limited crew on October 8, 1986, and a review of published and privately held literature pertaining to the claim area.
- V) I hold no direct or indirect interest in the property described herein, or in any securities of Nitro Resources Inc., or in any associated companies, nor do I expect to receive any.
- VI) This report may be utilized by Nitro Resources Inc. for inclusion in a Prospectus or Statement of Material Facts.

Respectfully submitted at Vancouver, B.C.



J.C. Graham, B.Sc., M.Eng.
7 January 1987

APPENDIX C

AIRBORNE SYSTEM SPECIFICATIONS

Magnetometer

Proton Magnetometer (Elsec) Model 595

Measurement - Total magnetic field strength (gammas)
Sensitivity - +/- 0.5 gammas
Cycle Rate - 1, 2, 4, 8 seconds
Output - Digital display, analog for recording
Detector - Toroidal (in towed bird)

VLF-EM RECEIVER

VLF-EM Receiver system (Sabre Electronics Ltd.)

Primary field - VLF transmitters (15-30 kHz)
Measurement - Horizontal component, field strength of
2 stations simultaneously
Stations - choice of two:
Seattle, Annapolis, Cutler, Hawaii
Output - Field strength panel meters and con-
tinuous analog outputs for recording
Detector - Two omnidirectional antenna arrays

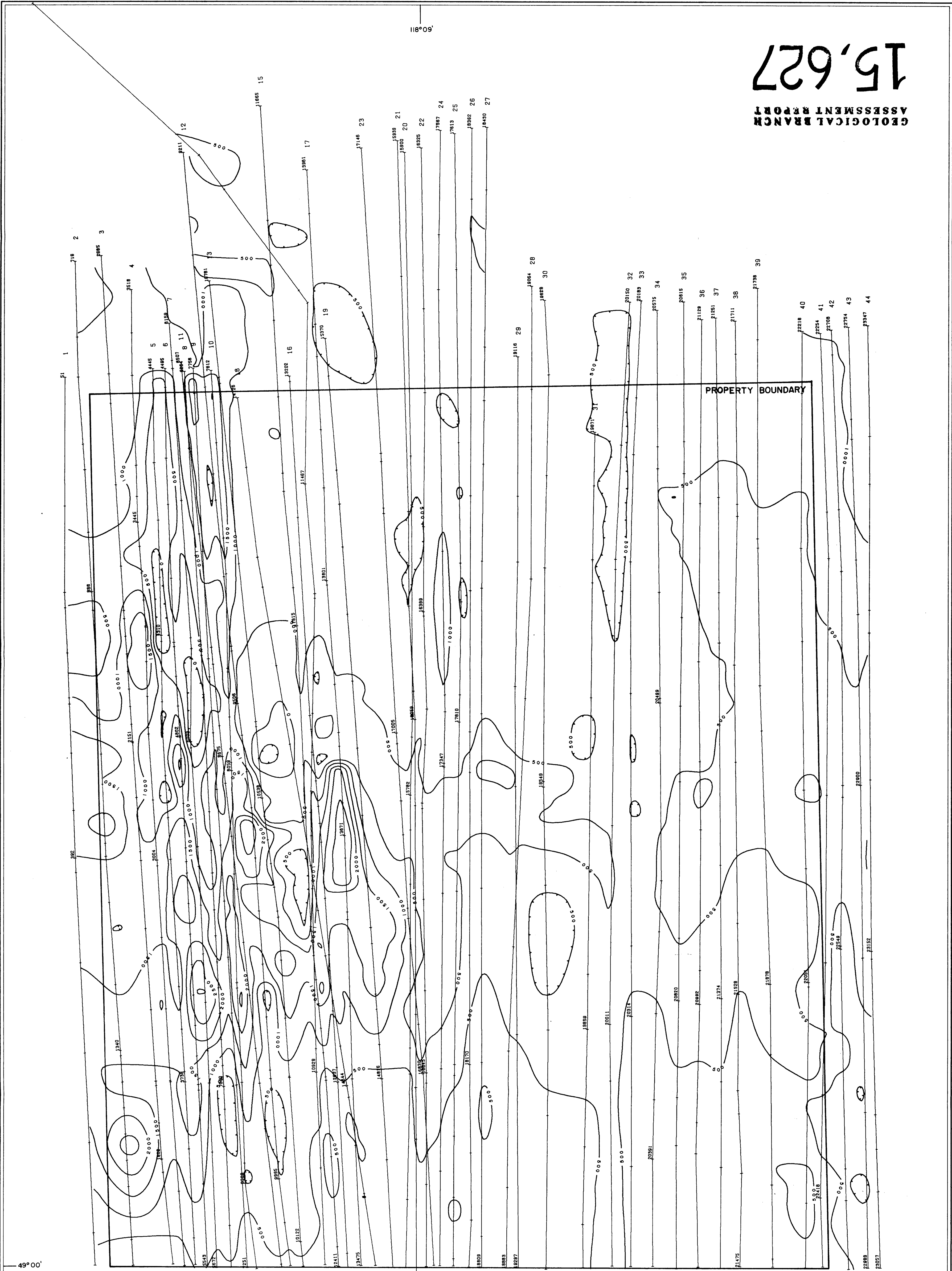
RECORDING SYSTEM

Magnetic Data

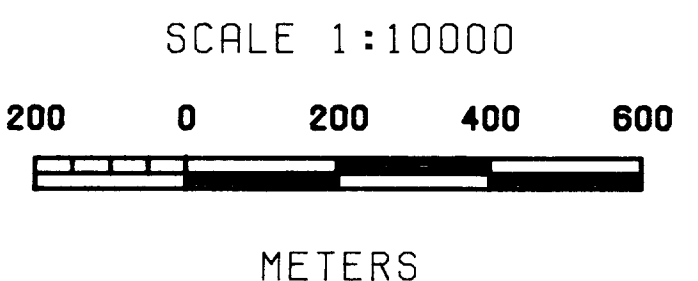
1 pen chart recorder - Hewlett Packard Model 7155B
Chart width - 120 mm calibrated width
Full scale - 0-100 or 0-1000 gammas
Chart speed - 60 mm/min

VLF-EM Data

2 pen chart recorder - Soltec Corp. Model VP623S
Chart width - 2x60 mm calibrated width
Full scale (per station) - 0-100% relative strength
Chart speed - 80 mm/min

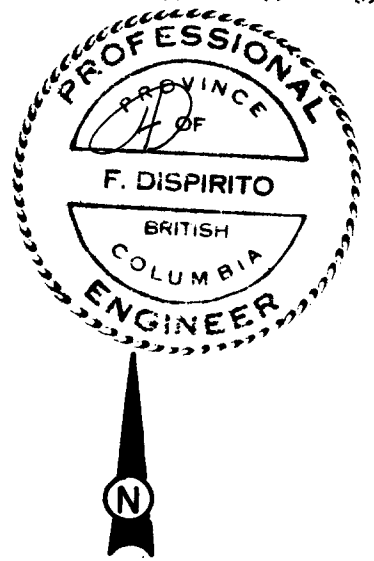


49° 00'



BASE VALUE: 57000 GAMMAS
CONTOUR INTERVAL: 500 GAMMAS

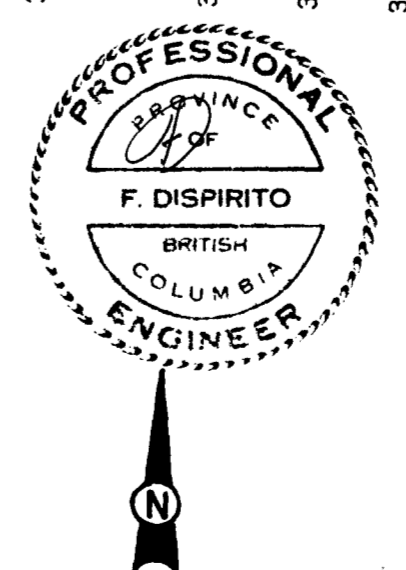
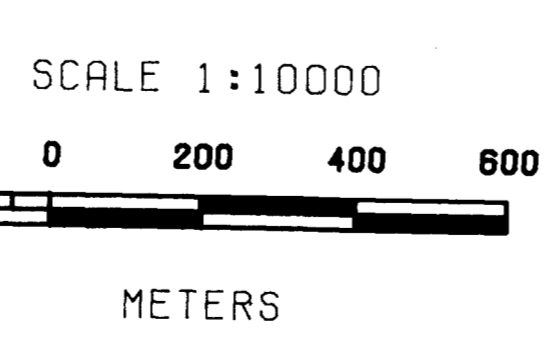
TO ACCOMPANY REPORT BY
F. DISPIRITO, P.ENG.



CASTLE PROJECT	
FOR: NITRO RESOURCES INC.	
BY: SHANGRI-LA MINERALS LIMITED	
AIRBORNE SURVEY	
TOTAL MAGNETIC FIELD STRENGTH	
GREENWOOD M.D., B.C.	
N.T.S. 02 E / 1 E	DATE: JANUARY 1987
PLOTTED BY: R.P.H.	FIGURE NO. 2



49° 00'



CONTOUR INTERVAL: 5 PERCENT

TO ACCOMPANY REPORT BY
 F. DISPIRITO, P.ENG.

CASTLE PROJECT	
FOR: NITRO RESOURCES INC.	
BY: SHANGRI-LA MINERALS LIMITED	
AIRBORNE SURVEY	
VLF - EM (SEATTLE)	
GREENWOOD M.D., B.C.	
N.T.S.: B2 E / 1 E	DATE: JANUARY 1987
PLOTTED BY: R.P.H.	FIGURE NO. 3