YUKON ENERGY, MINES
& RESOURCES LIBRARY
P.O. BOX 2703
WHITEHORSE, YUKON Y1A 2C6

2000 GEOPHYSICAL ASSESSMENT REPORT

ON THE

LAD CLAIM GROUP

094218

Comprising the Following Claims:

C.1

LAD 1-300, 303-325

Located in the Moosehorn Range,
Whitehorse Mining District
Yukon Territory, Canada

NTS 115N/01 and 115N/02
63° 06' North Latitude
140° 54' West Longitude

RECEIVED
DEC 2 9 2000
MINING RECORDER'S OFFICE
WHITEHORSE, YT

-prepared for-

Newmont Exploration Canada Ltd. and Troymin Resources Ltd.

-prepared by-

Newmont Exploration of Canada Ltd.
John Read, Geologist
Jim Wright, Geophysicist

Dates Work Performed: March 7 to 9, 2000
Date of Report: December 1, 2000

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 22,000.00.

M. B

for Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

2000 GEOPHYSICAL ASSESSMENT REPORT ON THE LAD CLAIM GROUP

TABLE OF CONTENTS

1.0 INTRODUCTION.....1

2.0 LOCATION, ACCESS AND PHYSIOGRAPHY.....1

3.0 CLAIM STATUS.....2

4.0 GEOLOGY.....2

5.0 AIRBORNE GEOPHYSICAL SURVEY.....3
- 5.1 Equipment and Survey Procedure.....4
- 5.2 Data Acquisition.....5
- 5.3 Data Processing.....5
- 5.4 Discussion of Results.....5

6.0 RECOMMENDATIONS.....6

APPENDICES

Appendix A List of Personnel
Appendix B Statement of Expenditures
Appendix C Airborne Geophysics - Statistics and Equipment, CDRom with digital data (in pocket)
Appendix D Geologist's Certificate

LIST OF TABLES

Table 1: Lad Claim Group.....2

LIST OF FIGURES

Figure 1: Property Location.....following page 1
Figure 2: LAD Claim Group.....following page 2
Figure 3: Moosehorn Region Geology.....following page 2

LIST OF PLATES (IN POCKET)

Plate 1A: Airborne Geophysical Survey--Flight Line Plot
Plate 1B: Airborne Magnetic Survey--Contoured Total Field Data
Plate 1C: Airborne Magnetic Survey--Geophysical Interpretation

1.0 INTRODUCTION

Troymin Resources' Moosehorn Project comprising the LAD claims is located in the Moosehorn Range in west-central Yukon, approximately 140 kilometres south-southwest of Dawson City (Fig. 1). The LAD claim group consists of 323 quartz claims 100% owned by Troymin Resources Ltd. The area is accessible year-round by fixed-wing aircraft or helicopter and during the winter months (February and March) via either one of two winter roads.

High-grade gold in quartz veins was initially discovered in the Moosehorn Range in the early 1970's. Since then, on the west side of the range, extensive placer and limited bedrock production has taken place. It is estimated that 1736 kilograms (54,000 ounces) of gold has been extracted from streams west of the Moosehorn Range (Kenyon, Swamp, and Soya creeks). A highly successful placer mine continues on the east side of the Range, operated by the Moosehorn Exploration Program Limited Partnership. This placer operation is within the LAD claim block.

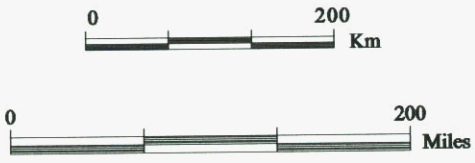
This report summarizes work performed on the LAD claims during 2000, comprising an airborne magnetic survey.

2.0 LOCATION, ACCESS AND PHYSIOGRAPHY

The Moosehorn property is situated within westernmost central Yukon near the Alaska border, approximately 80 kilometres north of Beaver Creek, YT and 140 kilometres south-southwest of Dawson City, YT. The area is accessible using fixed-wing aircraft (there is a gravel airstrip on the property and another just west of the property on the west side of the Moosehorn Range), helicopter, or via two winter roads. One of the roads may be constructed on Canadian territory, originating from the Alaska Highway 1.5 kilometres southeast of the Yukon/Alaska border (approximately 66 kilometres in length), and the other is located mostly within Alaska and also originates from the Alaska Highway (approximately 40 kilometres in length). Both roads are typically opened in early February and closed in late March but the dates could be changed depending on winter conditions. Government permits to construct and travel on either winter road are required.

On the property there are limited gravel roads and tracks, mostly in the area of the placer operations.

The Moosehorn property is characterized by rolling hills bounded on the west by the Moosehorn Range, a prominent north-northwest-south-southeast trending ridge. Elevation ranges from 1353 metres on the top of the Range, to approximately 600



NEWMONT EXPLORATION CANADA LTD.
TROYMIN RESOURCES LTD.

MOOSEHORN PROJECT, MOOSEHORN RANGE, YUKON TERRITORY, CANADA
WHITEHORSE MINING DISTRICT

FIGURE 1

LAD CLAIMS
LOCATION MAP

NOVEMBER 2000

metres in the creek valleys. Creeks flowing from the Range typically are roughly V-shaped below their headwaters, grading quickly into more gentle slopes. Above approximately 1200 metres elevation, the vegetation is dominated by 1-2 metres high buckbrush and the occasional stunted spruce tree. Felsenmeer is common above this elevation. Below 1200 metres the area is variably forested, with spruce trees generally dominant on west and north facing slopes, mixed with white birch and aspen (dominant on east and south facing slopes). Willow and alder are abundant in creek valleys.

3.0 CLAIM STATUS

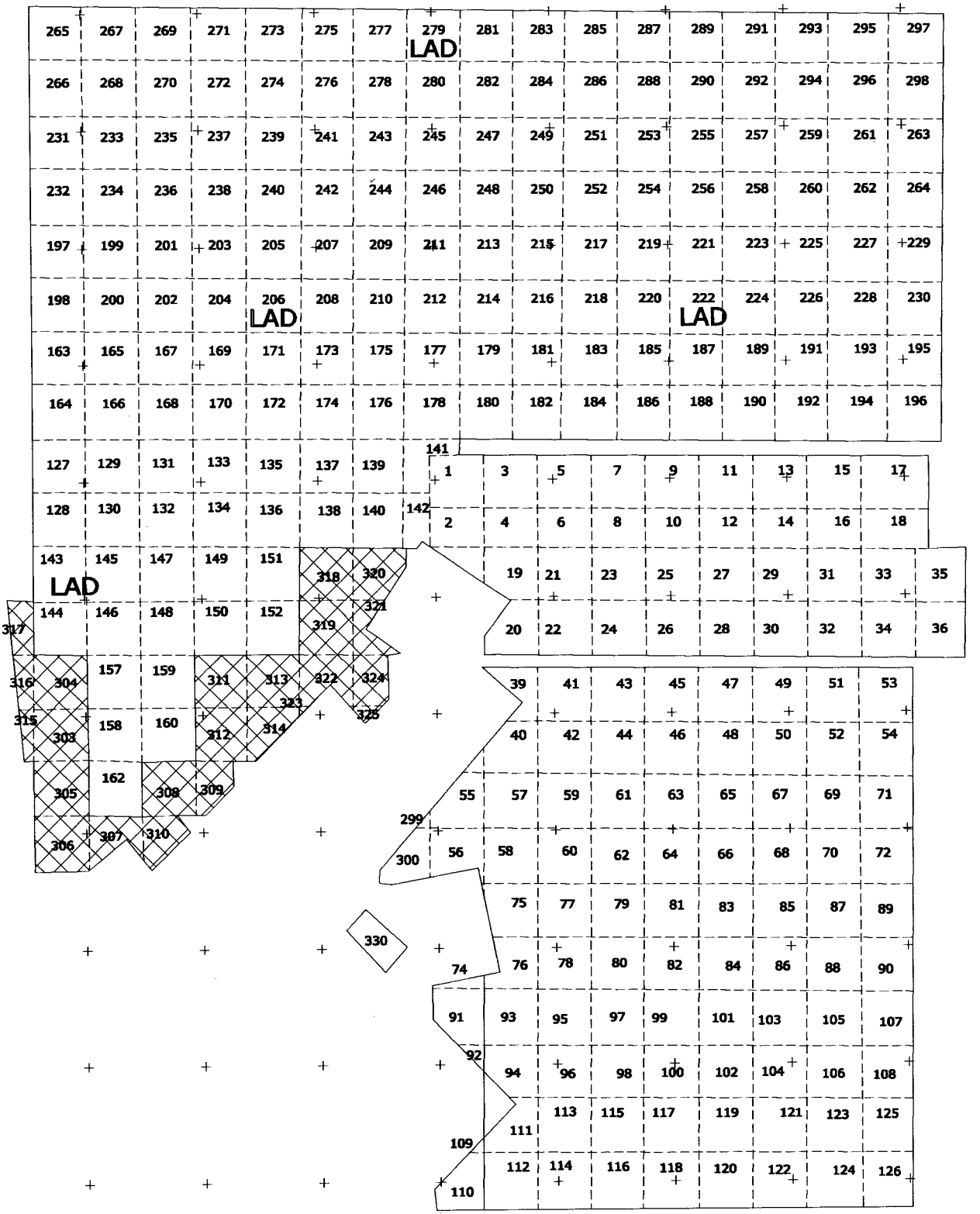
The Moosehorn property comprises a total of 323 quartz claims (full claims and fractions) located in the Whitehorse Mining District (Fig. 2). These claims are 100% owned by Troymin Resources Ltd. The table below lists the claims, record numbers and expiry dates.

Table 1: LAD Claim Group

Claim	Numbers	Record No.	Expiry Date
LAD	1-5	YC09351-YC09355	15-March-2003
LAD	6-137	YC09356-YC09486	15-March-2002
LAD	138-142	YC09487-YC09491	15-March-2003
LAD	143-174	YC09492-YC09523	15-March-2002
LAD	175-180	YC09524-YC09529	15-March-2003
LAD	181-208	YC09530-YC09557	15-March-2002
LAD	209-214	YC09558-YC09563	15-March-2003
LAD	215-244	YC09564-YC09593	15-March-2002
LAD	245-250	YC09594-YC09599	15-March-2003
LAD	251-280	YC09600-YC09629	15-March-2002
LAD	281-284	YC09630-YC09633	15-March-2003
LAD	285-300	YC09634-YC09649	15-March-2002
LAD	303-325	YC17923-YC17945	6-July-2001

4.0 GEOLOGY

The Moosehorn Range region is underlain by crystalline rocks of the Yukon-Tanana terrane, comprising Proterozoic to Mesozoic metasedimentary rocks and Mesozoic age intrusive rocks (Fig. 3). The oldest rocks are metasedimentary rocks thought to be of late Proterozoic to early Paleozoic age. Metasedimentary rocks are intruded by dominantly Cretaceous plutonic rocks of the Dawson Range batholith. The youngest rocks in the region are mafic to intermediate volcanic rocks of the uppermost Cretaceous Carmacks Group.



LOCATION INFORMATION

Map boundaries:

UTM
502000 - 511000 mE
6990500 - 7001500 mN

Map Projection: NAD 27 / UTM Zone 7N

0 1000 M

0 5000 Ft

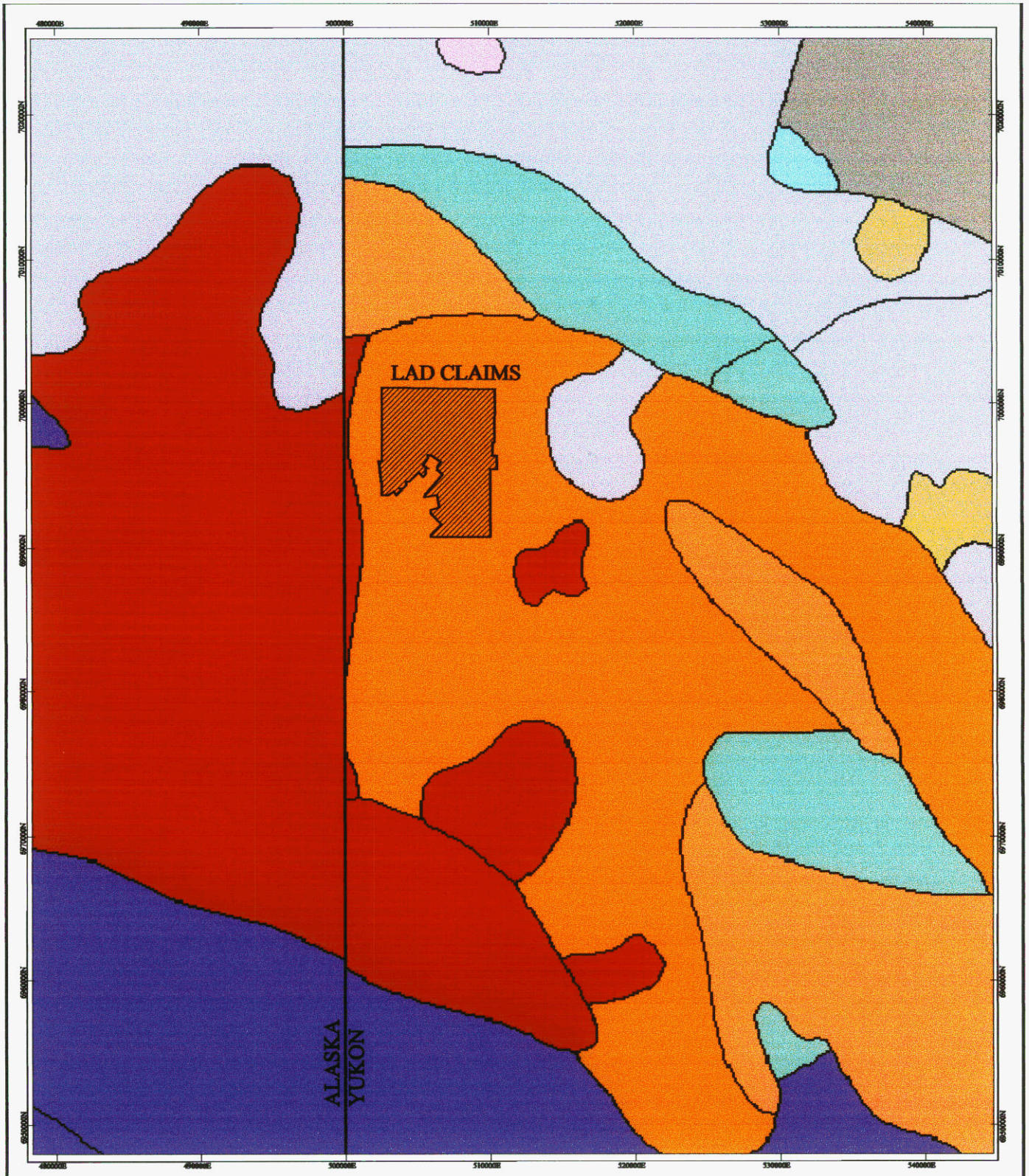
N

NEWMONT EXPLORATION CANADA LTD.
TROYGOR RESOURCES LTD.

ROOSEHORN PROJECT, ROOSEHORN RANGE, YUKON TERRITORY, CANADA
WHITEHORSE MINING DISTRICT

FIGURE 2
LAD CLAIM GROUP

NOVEMBER 2000



CARMACKS FORMATION
VOLCANICS

WHITEHORSE PLUTONIC SUITE
HORNBLENDE GRANODIORITE

KLOTASSIN PLUTONIC SUITE
BIOTITE HORNBLENDE GRANODIORITE

SIMPSON RANGE PLUTONIC SUITE
HORNBLENDE GRANODIORITE / QUARTZ MONZONITE

WHITE RIVER GROUP
METASEDIMENTS

SLIDE MOUNTAIN GROUP
METAVOLCANIC / METASEDIMENTARY

NISULTLIN
METASEDIMENTS

NISLING FORMATION
METASEDIMENTS / METAVOLCANICS

NEWMONT EXPLORATION CANADA LTD.
TROYMIN RESOURCES LTD.

MOOSEHORN PROJECT, MOOSEHORN RANGE, YUKON TERRITORY, CANADA
WHITEHORSE MINING DISTRICT

FIGURE 3
REGIONAL GEOLOGY

The geology surrounding the Moosehorn property consists of locally foliated biotite>hornblende granodiorite which crops out on top of the Moosehorn Range, hornblende granodiorite and gneissic metasediments. The biotite>hornblende granodiorite has been mapped as Klotassin plutonic suite of Triassic-Jurassic age. Both granodiorites are locally intruded by a variety of dykes including andesite, diorite, porphyritic granodiorite, leucogranite and fine-grained rhyolite. Based on age date determinations (N. MacDonald, University of B.C. MSc. thesis, in prep.), these dikes and the hornblende granodiorite pluton are of mid-Cretaceous age. In addition, fine-grained andesitic dykes have been observed on top of and on the west side of the Moosehorn Range and these dykes cut all other units, including gold-bearing quartz veins.

Thin gold-bearing quartz veins occur at the top of the Moosehorn Range cutting foliated biotite>hornblende granodiorite. These veins strike NNW and dip shallowly to the east. Several gold-quartz veins of similar orientation discovered during placer mining occur on the west side of the Range hosted by hornblende granodiorite.

Although geologic mapping was not undertaken on the LAD claims during the 2000 field season, outcrops and float of biotite>hornblende granodiorite as well as gneissic metasediments have been observed on the property. Gneissic metasediments have been noted near the airstrip on the northern portion of the claim block and although these rocks do not appear on the broad-scale GSC geologic map (Fig. 3), their existence is consistent with geophysical interpretation (see Section 5.4).

5.0 AIRBORNE GEOPHYSICAL SURVEY

A helicopter-borne magnetometer survey was flown by Newmont Exploration Canada Ltd. over the LAD Claims in the Moosehorn Range area of the Yukon Territory. The survey, which comprised 531 line–km, was flown during the period of March 7 to 9, 2000. Personnel and support equipment were staged out of Northway, Alaska. The work was done using Newmont's Rapid Mapping System (NRMS), installed in a Bell 206 aircraft operated by Capital Helicopters of Whitehorse. The survey was flown in an east-west direction at a flight line interval of 100 metres and a nometresinal terrain clearance of 100 metres for the helicopter and 30 metres for the towed magnetometer bird.

A summary of survey statistics and equipment used is included in Appendix C. A CD Rom with raw digital data is also included in pocket. The following chapter describes the survey procedures, data processing and results obtained. Flight line plots, colour total magnetic field, and an interpretation can be found in map pockets in the rear (Plates 1A,B,C). All plots are at a scale of 1:15,000 in the NAD 27 projection and UTM Zone 7N coordinate system. Each plot is annotated around the edge with UTM ticks every 1000 metres and crossing ticks internal to the plot.

5.1 EQUIPMENT AND SURVEY PROCEDURE

Navigation

The NRMS navigation system relies on the GPS system of satellites for navigation and positioning. It is backed up by an inertial guidance system (INS) in areas of poor GPS information. A Magnavox GPS Engine and antenna are mounted onboard the aircraft to monitor position. A Magellan MBS-1 is stationed on the ground in order to record GPS base-station data.

A plan of survey lines is installed in the navigation computer. The path to the commencement of a survey line is indicated to the pilot on a navigation screen. The pilot is guided by the navigation system to follow the correct path and terrain clearance and is then guided to follow each flight line in sequence. Air speed and flying direction are monitored in a back-up inertial guidance system, and this system provides short-term guidance where the GPS fails. The survey line number is recorded whenever the aircraft follows a designated survey line.

The data from the GPS base-station are combined with data from the helicopter mobile GPS to provide differentially corrected navigation information every 1.0 seconds. Repeated readings at the base location averaged to a position of 137° 08' 38.25" W and 63° 50' 15.05" N with altitude 1007.5 metres, using the WGS 84 datum.

Ground clearance is measured using a King 10A radar altimeter. Barometric elevation and air speed are also measured using a pitot tube and propeller mounted on the outside of the aircraft.

Magnetic Instrumentation

The magnetic field is measured with a potassium vapour magnetometer developed and constructed by Dr. Bonch-Bruevich at the State Optical Institute in St. Petersburg. The magnetometer is towed below the helicopter at the end of a 30 metres cable. Readings are recorded every 0.1 second.

A Newmont-manufactured base magnetometer is used to record the magnetic field at a location near the centre of the survey. Readings from the base magnetometer are used to correct for diurnal fluctuations encountered during survey flights. The base magnetometer was located in a low-gradient magnetic region near the centre of the survey.

5.2 Data Acquisition

Positioning and magnetic data are recorded during flight by Newmont's "Gold Box" data acquisition and navigation system, which is mounted on the rear seat of the helicopter. The Gold Box incorporates directional and vertical gyros, a hard drive, a GPS subsystem, an INS sub-system, a magnetometer sub-system, A/D converters, a video card, a power supply and interface cards. The system is controlled by an Industrial CS386 CPU and software developed by Newmont.

The acquisition system records GPS position, barometric pressure, radar altimeter elevation, air speed, and temperature, as well as the magnetic and radiometric data. With the exception of the magnetic field, which is measured every 0.1 seconds, all other parameters are recorded at one second intervals.

5.3 Data Processing

Navigation

Raw flight-line data are downloaded from the data acquisition system for processing in the field. Recovered flight paths are viewed with the aid of a laptop computer and any portions of flight lines that are out of specifications are edited. The base-station GPS files are obtained from the base unit and differential corrections calculated and applied to the mobile GPS data

Magnetic Data

Raw magnetic profiles from the Potassium Magnetometer are viewed on a PC screen, and any data defects are removed manually or through the use of a de-spiking routine. Magnetic field data downloaded from the base magnetometer are used to apply diurnal corrections to the survey data.

The corrected magnetic data are gridded using a minimum curvature gridding routine. If necessary, minor flight-line effects are removed with the application of a decorrugation filter. Colour images of the magnetic field and its derivatives are created using Newmont's proprietary software.

Plate 1A presents a plot of flight lines with line numbers annotated along the eastern end of each line. Individual readings are plotted as crosses along the flight lines.

5.4 Discussion of Results

Plate 1B presents total field magnetic data in a contoured full colour format, and Plate 1C summarizes the interpretation. Total magnetic field strength is expressed in

nanoteslas (nT) with contouring spanning –1000 to 550 nT. A staged contour interval of 20 and 100 nT is employed to span the relatively large data range.

Magnetic features can be grouped into three major categories related to lithology:

- Isoclinally folded older metasediments;
- A large intrusive body displacing metasediments;
- A young, highly magnetic dike crosscutting metasediments.

The oldest unit appears to be a metasedimentary package typified by a moderate amplitude magnetic layering. The magnetic layers appear to be steep dipping and isoclinally folded with plunges to the north. Three such fold closures can be identified in the data (Plate 1C). In certain locales, the individual beds either coalesce, or are structurally compressed, to form "knots". These areas are reflected in the magnetics as broader highs, which are outlined and hatched on the interpretive plot.

A large intrusive body is interpreted across much of the survey's eastern edge, and open to the east. Magnetically the area is one of a slightly elevated uniform background. Isolated magnetic highs within the intrusive are likely xenoliths of the surrounding metasediments. The intrusive abruptly terminates many of the magnetic linears associated with the metasediments. In two instances (57500E/6999050N & 508050E/699744N), the intrusion appears to have compressed and/or folded the metasediments during emplacement. In the survey's southeast corner, south of the intrusion, the metasediments appear to be severely deformed making identification of individual magnetic markers impossible.

The most prominent magnetic feature is a relatively large amplitude magnetic high trending northwest or slightly more northerly than the predominant metasedimentary strike. This represents a dike cross-cutting the metasediments and likely the large intrusive. Dip is vertical or steep to the east. Thinning in the magnetic response suggests crosscutting faults at two locales.

A very strong magnetic low occurs at 506600E/6998450N. Such closed negative features are typical of reversed remnant magnetization. Mafic intrusive rocks at other locales in the vicinity exhibit a similar response.

6.0 RECOMMENDATIONS

The Moosehorn Range is situated in a geological and geochemical environment favourable for gold deposits associated with mid-Cretaceous granitic intrusions. Important gold deposits of this class include Brewery Creek and Dublin Gulch, YT and

Fort Knox and Pogo, Alaska. In view of the occurrence of high-grade gold-quartz veins and past and current production of placer gold in the region (including an active operation on the claim block), further work would be recommended. Mapping, prospecting and soil sampling could be carried out. Of particular interest is the linear northwest-striking magnetic high mentioned above. This likely represents a dike-filled structure with an orientation parallel to that of known gold-quartz veins in the area. As such, it could possibly represent a mineralizing "feeder" structure. Due to its location below the ridge line, outcrop is sparse and the most effective method of prospecting here would be soil sampling.

Respectfully submitted,

John J. Read, geologist
Elko, Nevada
December 1, 2000

APPENDIX A

LIST OF PERSONNEL

LIST OF PERSONNEL

John Read
10101 East Dry Creek Road
Englewood, Colorado USA
80112

Jim Wright
P.O. Box 669
Carlin, Nevada USA
89822

Victor Bonch-Bruevich
10101 East Dry Creek Road
Englewood, Colorado USA
80112

Michael Stammers
941 Kennedy Avenue
North Vancouver, British Columbia CANADA
V7R 1L4

Randy Laskowski
928 23rd Street
Fairbanks, Alaska USA
99701

APPENDIX B

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

LAD GROUP OF QUARTZ MINERAL CLAIMS

CANADA -- In the matter of geophysical assessment work on the ***LAD Claim Group*** comprising the following claims:

LAD 1-300, 303-325

I, John J. Read of Newmont Exploration Canada Limited, 1700 Lincoln Street, Denver, Colorado, do solemnly declare that a program consisting of an airborne geophysical survey was carried out on the ***LAD Claim Group*** during the period March 7 to 9, 2000.

The following expenses were incurred during the course of this work and in the compilation and reporting of the results:

AIRBORNE GEOPHYSICAL SURVEY

531 line-km @ $90/line-km (all-inclusive)	$47,790

Dated at Elko, Nevada this 1 day of December 2000

John J. Read, Geologist

APPENDIX C

AIRBORNE GEOPHYSICS – STATISTICS AND EQUIPMENT

AIRBORNE GEOPHYSICS - STATISTICS AND EQUIPMENT

Survey dates	: March 7 to 9, 2000
Project name	: LAD Claims
Project location	: Moosehorn Range, Yukon Territory
Survey type	: Airborne magnetometer
Flight-line direction	: East-west
Flight-line spacing	: 100 metres
Aircraft height	: 100 metres agl
Bird height	: 30 metres agl (magnetometer)
Navigation	: GPS, INS
Distance flown	: 531.0 kilometres
Average airspeed	: 80.5 kph
Geophysical operators:	Victor Bonch-Bruevich – Englewood, Co.
Supervision	: Mike Stammers – North Vancouver, B.C.
	: Randy Laskowski – Fairbanks, Alaska
Aircraft contractor	: Capital Helicopters – Whitehorse, Yk.
Pilot	: Delmar Washington – Whitehorse, Yk.
Magnetometer	: Optically pumped potassium vapour
Data acquisition	: NRMS Gold Box #1988
GPS	: Magellan MBS-1 – base station unit
	: Magnavox GPS Engine – mobile unit
Radar altimeter	: King 10a #1968
Magnetometer (base):	Newmont Overhauser magnetometer
Helicopter	: Bell 206B

APPENDIX D

GEOLOGIST CERTIFICATE

GEOLOGIST CERTIFICATE

I, John J. Read, of 10101 East Dry Creek Road, Englewood Colorado, USA, DO HEREBY CERTIFY:

1 THAT I am a geologist employed by Newmont Mining Corporation with offices at 10101 East Dry Creek Road, Englewood Colorado, 80112 USA

2 THAT I have practiced in my profession with various mining companies in the United States, Canada, Mexico and Brazil for 16 years.

3 THAT I am a graduate of University of Minnesota (BS degree in geology, 1977) and Washington State University (MSc. degree in geology, 1985).

4 THAT I am a member of the Society for Mining, Metallurgy and Exploration, AIME.

DATED at Elko Nevada, this 1 day of December 2000.

John J. Read, Geologist

SURVEY SPECIFICATIONS

Survey Dates: March 7-9 / 2000
Line Orientation: East-West
Line Spacing: 100m
Sensor Height: 30m
Navigation: Differential GPS (Post Processed)
Magnetometer: Potassium Vapor
Operator: Newmont Mining Corp
Aircraft: Bell 206 / Capital Helicopter

LOCATION INFORMATION

Map boudaries:

UTM
502000 - 511000 mE
6990500 - 7001500 mN

Map Projection: NAD 27 / UTM Zone 7N

0 200 400 600 M
SCALE 1:15000

0 1000 2000 3000 Ft
SCALE 1:15000

094218
YUKON ENERGY, MINES & RESOURCES LIBRARY
P.O. BOX 2703
WHITEHORSE, YUKON Y1A 2C6

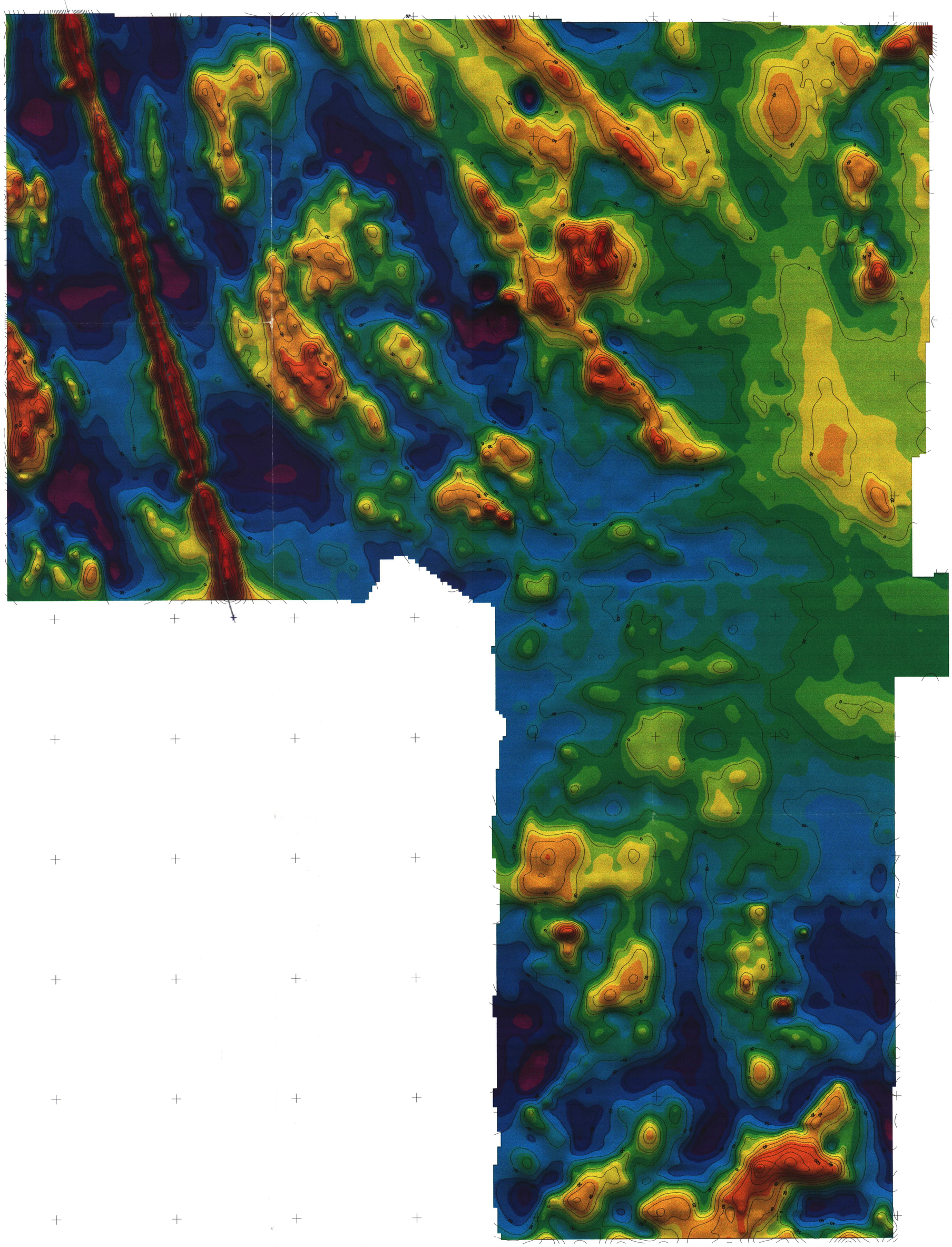
NEWMONT EXPLORATION CANADA LTD.
TROYMIN RESOURCES LTD.

MOOSEHORN PROJECT, MOOSEHORN RANGE, YUKON TERRITORY, CANADA
WHITEHORSE MINING DISTRICT

PLATE 1A

LAD CLAIMS
AIRBORNE GEOPHYSICAL SURVEY
FLIGHT LINE PLOT

NOVEMBER 2000



SURVEY SPECIFICATIONS

Survey Dates: March 7-9 / 2000
Line Orientation: East-West
Line Spacing: 100m
Sensor Height: 30m
Navigation: Differential GPS (Post Processed)
Magnetometer: Potassium Vapor
Operator: Newmont Mining Corp
Aircraft: Bell 206 / Capital Helicopter

DATA PROCESSING

Flight Line Recovery, Diurnal Correction, Gridding @80m Imaging, and Contouring.

CONTOUR INTERVAL
-1000 to -120 CI = 100 nT
-120 to 160 CI = 20 nT
160 to 550 CI = 100 nT

Imaging:

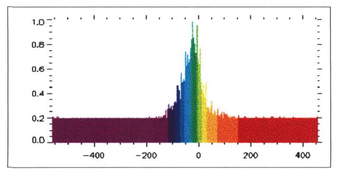
Azimuth - 0 degrees
Inclination - 45 degrees

LOCATION INFORMATION

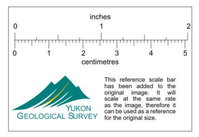
Map boudaries:

UTM
502000 - 511000 mE
6990500 - 7001500 mN

Map Projection: NAD 27 / UTM Zone 7N



nT



0 200 400 600 M
SCALE 1:15000

0 1000 2000 3000 Ft
SCALE 1:15000

& RESOURCES LIBRARY
P.O. BOX 2703
WHITEHORSE, YUKON Y1A 2C6
094218

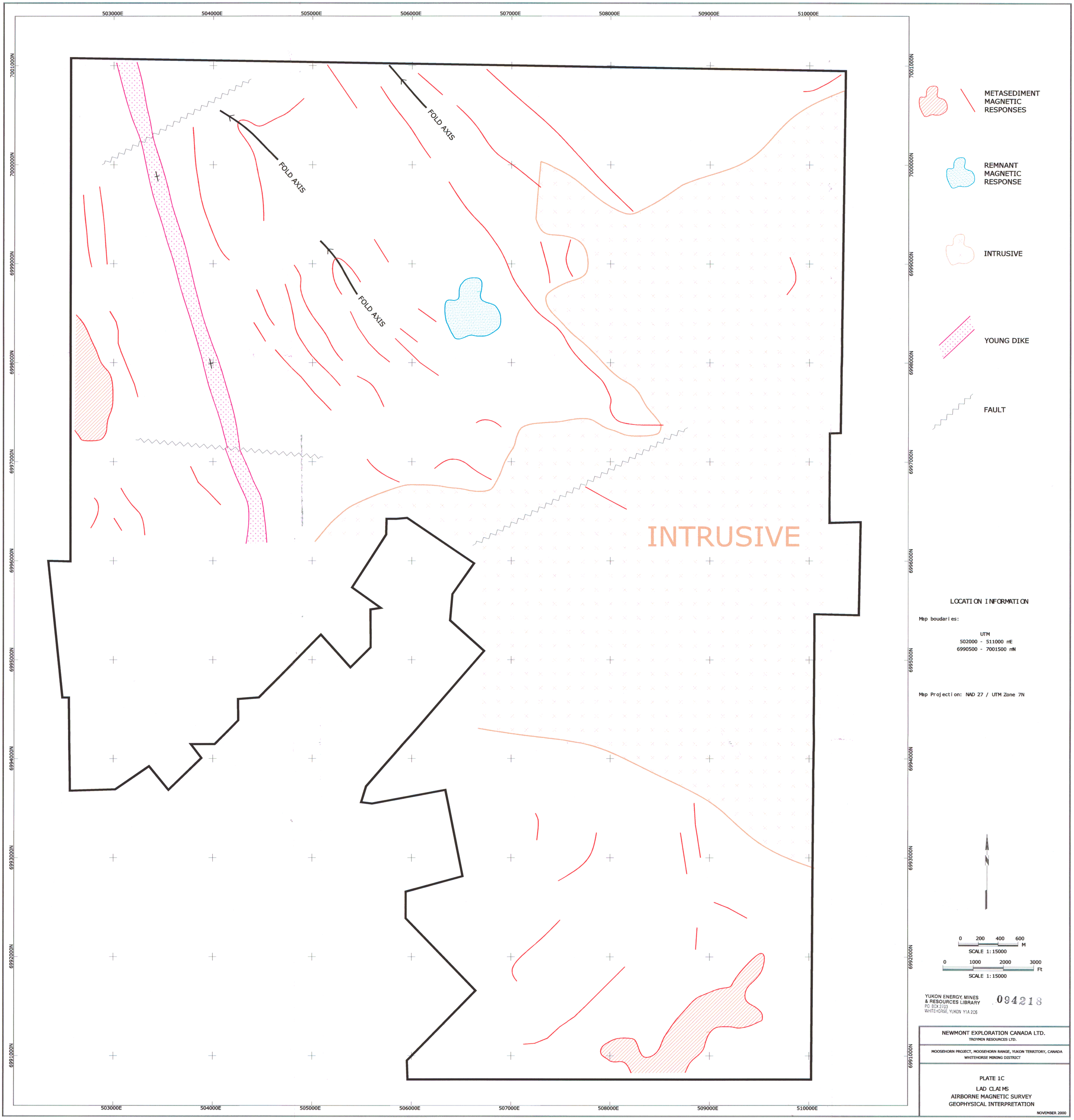
NEWMONT EXPLORATION CANADA LTD.
TROYMIN RESOURCES LTD.

MOOSEHORN PROJECT, MOOSEHORN RANGE, YUKON TERRITORY, CANADA
WHITEHORSE MINING DISTRICT

PLATE 1B

LAD CLAIMS
AIRBORNE MAGNETIC SURVEY
TOTAL FIELD (nT)

NOVEMBER 2000


503000E
504000E
505000E
506000E
507000E
508000E
509000E
510000E
7001000N
7000000N
6999000N
6998000N
6997000N
6996000N
6995000N
6994000N
6993000N
6992000N
6991000N
FOLD AXIS
FOLD AXIS
FOLD AXIS
INTRUSIVE
METASEDIMENT MAGNETIC RESPONSES
REMNANT MAGNETIC RESPONSE
INTRUSIVE
YOUNG DIKE
FAULT
LOCATION INFORMATION
Map boudaries:
UTM
502000 - 511000 mE
6990500 - 7001500 mN
Map Projection: NAD 27 / UTM Zone 7N
N
0 200 400 600 M
SCALE 1:15000
0 1000 2000 3000 Ft
SCALE 1:15000
YUKON ENERGY, MINES & RESOURCES LIBRARY
PO BOX 2703
WHITEHORSE, YUKON Y1A 2C6
094218
NEWMONT EXPLORATION CANADA LTD.
TROYMIN RESOURCES LTD.
MOOSEHORN PROJECT, MOOSEHORN RANGE, YUKON TERRITORY, CANADA
WHITEHORSE MINING DISTRICT
PLATE 1C
LAD CLAIMS
AIRBORNE MAGNETIC SURVEY
GEOPHYSICAL INTERPRETATION
NOVEMBER 2000