

094277

**2000 GEOPHYSICAL
ASSESSMENT REPORT
ON THE McQUESTEN PROPERTY**



Comprising the Following Claims:

Doug 1-9
Mary 1-6
Lakehead 1-13
Hoito 1-8
Jarret 1 & 2, Twins 7 and South Fr

Located in the Mount Haldane - Keno Hill Area
Mayo Mining District
Yukon Territory, Canada

NTS 105 M-13
63° 53' N Latitude
135° 40' W Longitude

-prepared for-

NEWMONT EXPLORATION OF CANADA LTD
Denver, Colorado

-prepared by-

M.A. STAMMERS EXPLORATION MANAGEMENT INC.
M. A. Stammers, P.Geol.

Dates Work Performed: May 17-28, 2000
Date of Report: January 2001

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 \$ 6400.

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

2000 GEOPHYSICAL ASSESSMENT REPORT ON THE McQUESTEN PROPERTY

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1.0 INTRODUCTION

This report describes the airborne EM and magnetic geophysical survey completed on the McQuesten property. It is based on work carried out during May 2000 by Newmont Exploration of Canada Ltd. and contractor Fugro Airborne Services. Other work completed in 2000 included trenching, auger geochemistry, geological mapping and diamond drilling. The road accessible property is located in central Yukon, midway between Mayo and Keno Hill (Figure 1).

The area was prospected as early as 1887. During the summer of 1898, many prospectors discovered gold placers on Duncan Creek, 23 kilometres southeast of the property and, Haggart and Lynx Creeks north of the McQuesten River Valley. Recorded production of placer gold from various creeks in the district has continued intermittently since that time and is still active at the present time.

In addition to early placer mining, interest turned to silver-lead veins with the 1906 discovery on Galena Creek, the site of the Silver King veins. Interest then spread towards Keno Hill where a discovery of galena carrying high - grade silver was made in 1919. The Keno area deposits have produced more than 213 million ounces of silver, with millions of pounds of lead, zinc and cadmium.

The discovery of auriferous skarn and replacement gold mineralization within the McQuesten property in 1981, and gold to the south at the Aurex property in 1993 suggested that the area had potential for bulk tonnage gold mineralization. Within the confines of the property, the principal gold-tungsten-bismuth-arsenic mineralization occurs just north of and straddles the Silver Trail Highway. Gold-arsenic-antimony-bismuth mineralization occurs on the adjacent property on Aurex Hill and silver-lead-zinc lodes occur to the east on Keno and Galena Hills. The Silver King mine lies one kilometre to the north and the Husky Southwest silver-lead-zinc mine lies 3.2 kilometres east-northeast from the McQuesten claim boundary and smaller silver-lead-zinc deposits occur on Mount Haldane located 10 kilometres west of the McQuesten claim block.

2.0 LIST OF CLAIMS

The McQuesten claim group comprises 40 full or fractional quartz mineral claims located in the Mayo Mining District on NTS map sheet 105 M-13 (Figure 2). In 2000, Newmont Exploration of Canada Ltd. performed the work in partnership with underlying owners Nova Gold Resources Inc. and Eagle Plains Resources Ltd. Table 1 summarizes the list of claims names, numbers and expiry dates.

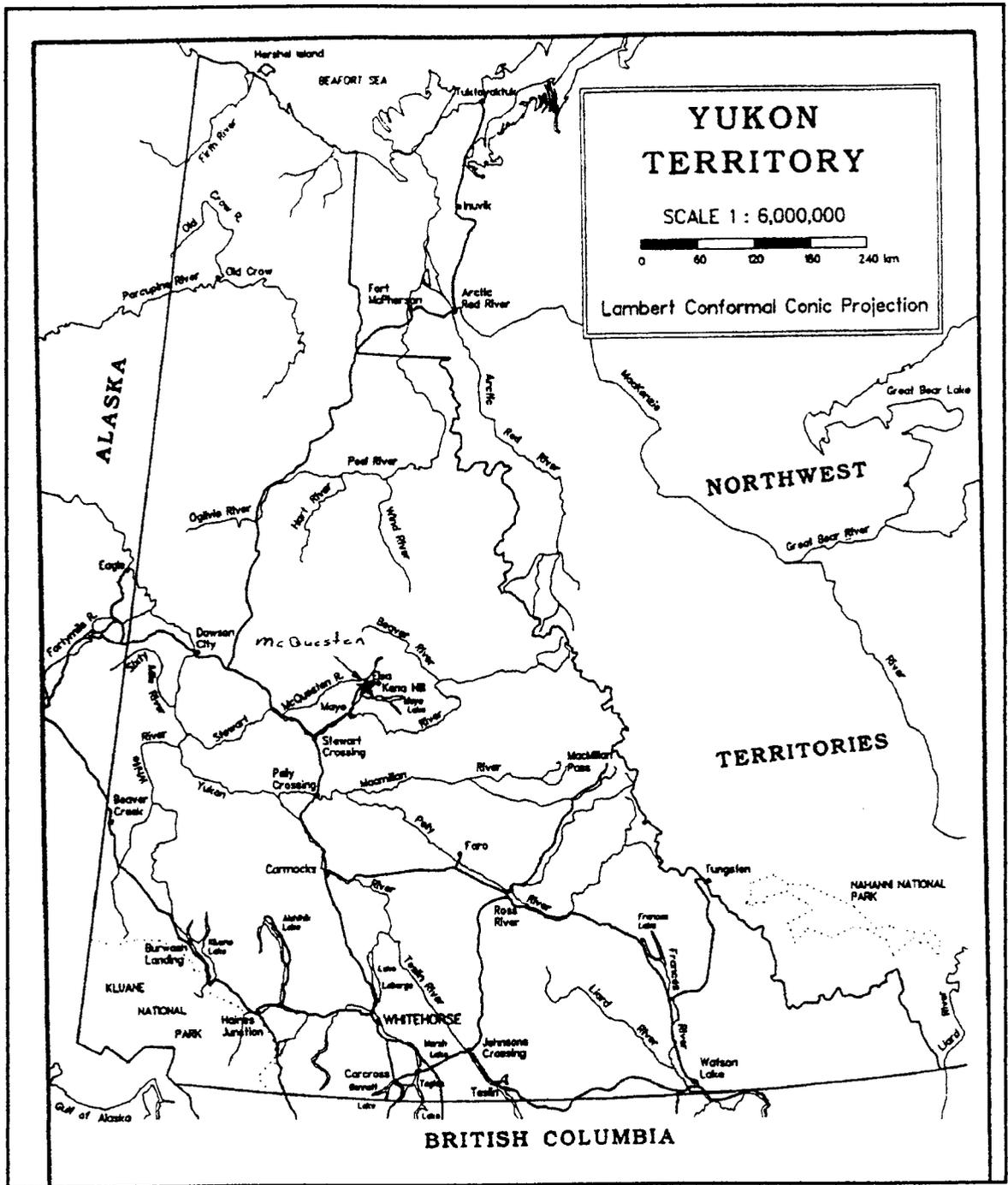
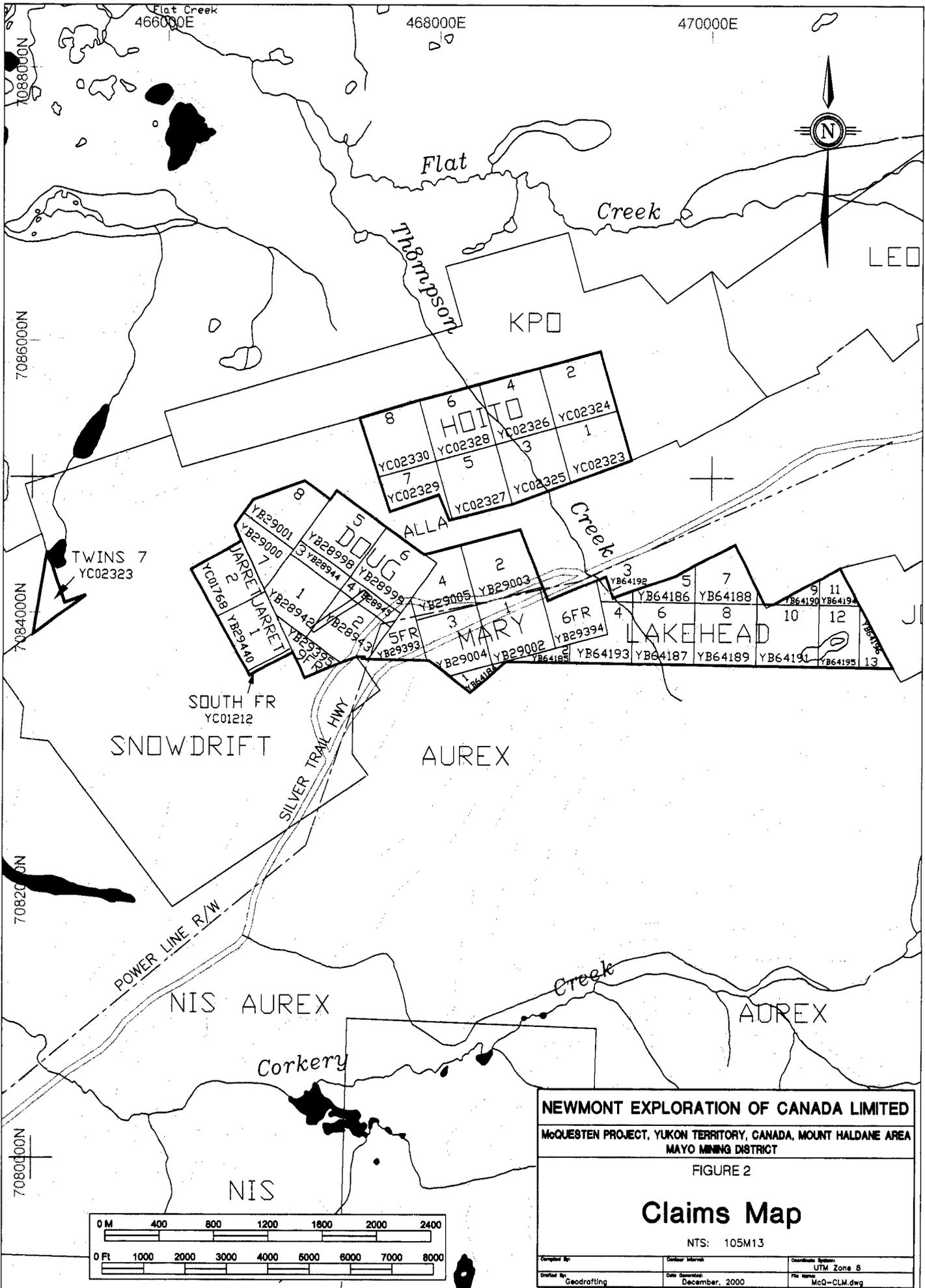


Figure 1
Yukon Location Map



Flat Creek
466000E

468000E

470000E



LED

Flat

Creek

Thompson

KPO

HOITO

8 6 4 2
YC02330 YC02328 YC02326 YC02324
7 5 3 1
YC02329 YC02327 YC02325 YC02323

ALLA

Creek

TWINS 7
YC02323

8 5
YB29001 YB28998
7 3
YB29000 YB28994
JARET JARET
2 1
YC01768 YB29440 YB28942 YB28941
1 2
YC01768 YB29440 YB28942 YB28941
5FR 2
YB29393 YB28943
4FR 4
YB28944 YB28945

DOUG

MARY

LAKEHEAD

SOUTH FR
YC01212

SNOWDRIFT

AUREX

SILVER TRAIL HWY

POWER LINE R/W

NIS AUREX

AUREX

Corkery

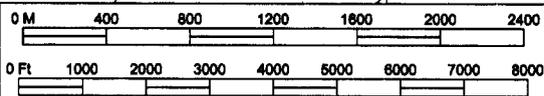
NIS

NEWMONT EXPLORATION OF CANADA LIMITED
McQUESTEN PROJECT, YUKON TERRITORY, CANADA, MOUNT HALDANE AREA
MAYO MINING DISTRICT

FIGURE 2

Claims Map

NTS: 105M13



Compiled By:	Colour Interval:	Coordinate System:
Drafted By: Geodrafting	Date Issued: December, 2000	UTM Zone 8 McQ-CLM.dwg

Table 1: List of Claims

Claim Name	Grant Numbers	Expiry	Pending Expiry*	No. of Claims
Doug 1 - 4	YB28942 - 945	March 4, 2012	March 4, 2014	4
Doug 5 - 8	YB28998 - 9001	March 4, 2012	March 4, 2014	4
Doug 9	YB29395	March 4, 2012	March 4, 2014	1
Mary 1, 2, 4, 6	YB29002, 003, 005, 394	March 4, 2009	March 4, 2011	4
Mary 3, 5	YB29004, 393	March 4, 2012	March 4, 2014	2
Jarret 1, Lakehead 1	YB29440, 64184	March 4, 2012	March 4, 2014	2
Lakehead 2 - 13	YB64185 - 196	March 4, 2009	March 4, 2011	12
South Fraction	YC01212	March 4, 2009	March 4, 2011	1
Jarret 2	YC01768	April 30, 2001	April 30, 2003	1
Twins 7, Hoito 1-8	YC02322-230	Dec. 29, 2000	Dec. 29, 2000	9
		* Pending government acceptance		40

3.0 LOCATION, ACCESS, PHYSIOGRAPHY AND CLIMATE

The McQuesten property is located in central Yukon (Figure 1), fifty-six kilometres northeast of Mayo and some 350 kilometres due north of Whitehorse. The Silver Trail Highway transects the claims immediately southwest of the abandoned town site of Elsa. A network of four-wheel drive roads and trails provides excellent access to nearly all of the property.

The terrain comprises broad flats to narrow, small valleys to rolling hills. Mount Haldane at 1840 metres is the most prominent feature in the area. It is flanked on the north by the McQuesten River Valley (702 metres) and on the east by Haldane Creek. The claim group is dominated by elevations below 830 metres, where rock outcrops are sparse, and slopes are covered with thick deposits of till, soil, rock debris, muck and muskeg. Black spruce, birch and aspen dominate. Rock outcrops are uncommon in the area with the exception of the creek cuts.

The hills surrounding the immediate property at or above 1000 metres elevation were glaciated during Pleistocene time by ice-sheets that spread from the east, over the entire area. Glacial till, gravel and other debris lie in a series of benches on the side slopes of the hills and floor the valleys. These deposits are generally 1.5 - 10.0 metres thick, but in some areas they are 20.0 metres thick, or more. The permafrost in the area is irregularly distributed and its occurrence is

dependent upon the elevation, hillside exposure, depth of overburden, amount of vegetative cover, and presence of flowing underground and surface water.

The climate of the central Yukon area is characterized by short, warm summers and long, cold winters with a mean annual temperature at the village of Mayo of -3°C . Temperatures as low as -62°C and as high as $+35^{\circ}\text{C}$ have been recorded. The average annual precipitation at Mayo is 28 centimetres. The snowfall is moderate and usually starts in early October.

4.0 EXPLORATION HISTORY

Previous explorers have defined gold, tungsten, bismuth and arsenic mineralization and occurrences in the McQuesten-Keno Hill area through soil sampling, trenching and drilling. A summary of the previous work since 1980 has been adapted from Brownlee:

In 1980 the property was optioned to Island Mining and Exploration Co. Ltd. (IME) and in 1981 they drilled 14 core holes across a silver-lead-zinc vein (Wayne showing) and cut several zones of significant auriferous skarn mineralization. In 1983, IME drilled 7 holes in 600 metres to the east and encountered similar gold grades and mineralogical associations.

In 1992 the property was re-staked by Bernard Kreft of Whitehorse, Yukon who mined 17 tons of limonite, pyrrhotite skarn material grading 1.29 oz/ton and achieved a gold recovery rate of 98.3%. In 1997, Eagle Plains Resources (EPR) drilled six RC drill holes returning values up to 21.0 metres of 3.21 g/t Au.

In October 1997 Viceroy International Exploration (VIE) cut nine trenches and conducted three bottle roll tests on samples collected from the 1997 RC drill samples. In 1998 Viceroy sampled all previously un-tested 1981 drill core (348 samples), excavated 26 trenches (3279 metres); and completed IP (4.8 line kilometres) and magnetic (5.15 line kilometres) geophysical surveys.

6.0 2000 EXPLORATION PROGRAM

Newmont Exploration of Canada Ltd. completed an airborne EM and magnetic geophysical survey during the period May 17th to 28th, 2000 on the McQuesten group of mineral claims. Fugro Airborne Surveys of Mississauga, Ontario was contracted to complete the work. The total survey on claims and on adjacent open ground was 104 line kilometres. The survey was flown at 200-metre line spacing. Newmont Mining Corporation's Geophysicist, Jim Wright completed in-depth data compilation, interpretation and report writing.

7.0 REGIONAL GEOLOGY (Figure 3)

The regional geology of the Mayo Lake District was described recently by Murphy (1997) and in the past by McTaggart (1960), Kindle (1962) and Boyle (1965). Collectively, they described the local geology as being comprised of three main units. These are, from structurally higher to lower position: the Upper Schist formation, the Keno Hill Quartzite formation, and the Lower Schist formation.

The consolidated rocks underlying the McQuesten property and surrounding area are mainly sedimentary and include various types of schists, phyllites, argillites, limestone (marble) and quartzites of early Paleozoic age (Yukon Group). Conformable gabbro-diorite lenses and sills, of slightly later age occur throughout some of the sedimentary strata, and a few narrow quartz-biotite granodiorite and quartz-feldspar porphyry sills, of suggested Cretaceous age, are present locally. Granitic plutons crosscut the sedimentary rocks and gabbro sills at several locations; east of Mayo Lake, northwest of Hanson Lake and south and east of Dublin Gulch. The Roop Lake Pluton is of granodiorite, granite porphyry composition and is located 30 kilometres east of the McQuesten property. Figure 3 summarizes the regional geology.

8.0 PROPERTY GEOLOGY

In the McQuesten property area the sedimentary rocks dip gently south and are cut by early and late brittle fault zones. Most of the early faults strike northeast, dip steeply southeast, and contain lead-zinc-silver lodes at Keno and Galena Hill, high grade silver at the Silver King Mine, and gold-arsenic-antimony-bismuth mineralization at Aurex Hill, to the south of the McQuesten map area. Most of the late faults strike northwest, dip southwest, and offset the early faults. The age of these faults is uncertain, but as they are cut by the quartz-feldspar porphyry dykes and sills, and are probably Cretaceous or younger. The last recorded movement on these faults is likely post-Cretaceous.

Over much of the area the soils and glacial deposits are permanently frozen below the top few inches. The glacial deposits floor the main valleys and form benches on the lower slopes of the hills. They range in thickness from one metre to fifteen metres or more and consist mainly of till, glacio-fluvial deposits, glacio-lacustrine gravel, sand, silt and layers of peat.

Table 2 is a comprehensive list of rock units mapped on the McQuesten and adjoining claims. Most of the sediments fall into the low-grade, greenschist or quartz-sericite-muscovite facies of metamorphism. Next to granite intrusions, calc-silicate skarn and hornfels occurs. The Robert Service Thrust zone has created an additional extensive, shear - induced metamorphism where low angle shear planes have facilitated diffusion of hydrothermal fluids. The McQuesten property hosts a series of pyrrhotite-gold calc-silicate skarn lenses, where intense regional shear foliation and proximity to granite and gabbro intrusions clearly controls auriferous pyrrhotite mineralization.

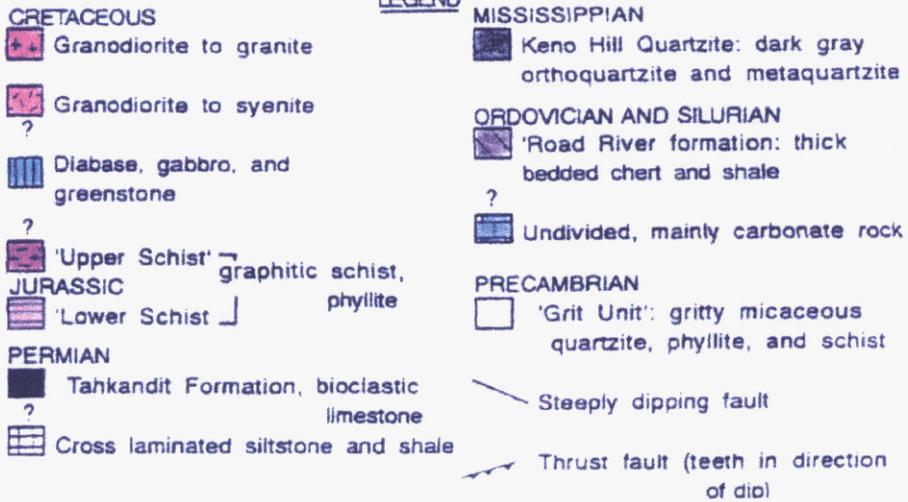
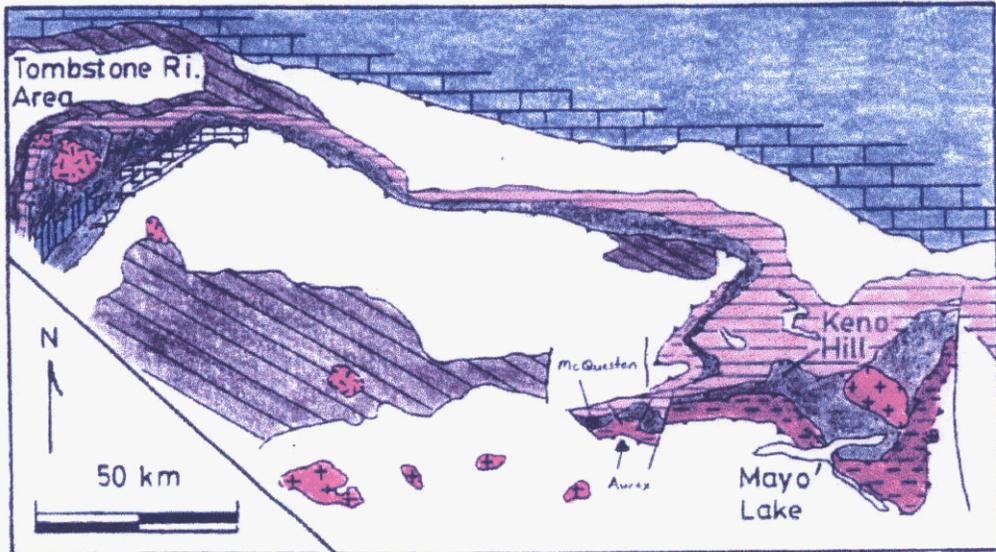


Figure 3
Regional Geology

Table 2: List of Formations**Mesozoic**

Quartz-feldspar porphyry dacite (hypabyssal equivalents of Unit 8-Cretaceous)
 8 Quartz-biotite granodiorite (Cretaceous)
 7 Diorite, gabbro (Triassic?)

UPPER SCHIST FORMATION (5,6) is the Devono-Mississippian Earn Group is thrust over the Mississippian Central Quartzite Formation by the Robert Service Thrust fault

Graphitic schist, graphitic phyllite, thin-bedded quartzite, argillite, quartz-mica schist, limestone (marble)

6a	Graphitic schist
6b	Graphitic phyllite
6c	Thin-bedded quartzite
6d	Argillite
6e	Quartz-mica schist
6f	Limestone (marble)

Quartz-sericite schist, quartz-eye siliceous-muscovite schist, marble, silver phyllite

5a	Quartz-sericite schist
5b	Quartz-eye siliceous-muscovite schist
5c	Marble
5d	Silver phyllite

ROBERT SERVICE THRUST FAULT**CENTRAL QUARTZITE FORMATION (3,4) Mississippian**

Thick-bedded quartzite, thin-bedded quartzite, graphitic phyllite, graphitic schist, argillite

4a	Thick-bedded quartzite
4b	Thin-bedded quartzite
4c	Graphitic phyllite
4d	Graphitic schist
4e	Argillite

White to pale grey, thick-bedded cherty quartzite

ROBERT SERVICE THRUST FAULT (exploited by felsic intrusions and hornblende porphyry)

LOWER SCHIST FORMATION (0,1,2) of Late Proterozoic age (?) has locally been thrust over the Mississippian Central Quartzite Formation and the Devono-Mississippian Earn Group

Quartz-sericite schist

Graphitic schist, graphitic phyllite, thin-bedded quartzite, argillite, calcareous schist (includes pelite schists)

1a	graphitic schist
1b	graphitic phyllite
1c	thin-bedded quartzite
1d	argillite
1e	calcareous schist (pelitic schist)

0 Thick-bedded quartzite, thin-bedded quartzite, phyllite, graphitic schist, meta-siltstones

0a	Thick-bedded quartzite
0b	Thin-bedded quartzite
0c	Phyllite
0d	Graphitic schist
0e	Meta-siltstone

There are at least two types of faults that occur within the map area: those that contain major concentrations of ore minerals, called 'vein faults'; and those with small amounts of ore minerals, generally of supergene origin, called cross-faults, bedding faults or other. Field mapping and magnetic-electromagnetic map interpretations by J. Wright, Geophysicist of Newmont Exploration of Canada indicate that there are at least three ages of faulting present. From oldest to youngest these are:

- Early low angle easterly-trending bedding faults.
- Northeasterly-trending vein faults. These show more than one period of movement. These faults are expressed at McQuesten where felsic intrusions exploit them, at Silver King where high-grade silver occurs, and at Aurex Hill where gold-arsenic-antimony-bismuth occurs. These faults are offset and disrupted along strike by later cross-faults.
- Late northwesterly cross-faults, that cut and offset the earlier low angle faults and bedding faults; can host silver-lead-zinc grades (e.g. Wayne showing) and can have both right lateral and left lateral offsets.

8.0 AIRBORNE GEOPHYSICAL SURVEY

Fugro Airborne Surveys flew a helicopter-borne magnetic – electromagnetic survey for Newmont Mining Corporation over the McQuesten property. A total of 104 line-kilometres was completed during the period of May 17-28, 2000 over the claims and surrounding open ground. A summary of survey statistics, personnel, and equipment is presented in Appendix E. The following presents details concerning instrumentation, data acquisition, data processing, and interpretation of the survey. Contoured colour plots, flight line plan, and interpretation are included in the accompanying map pocket at 1:5000 scale (see Plates 1a, 1b, 1c, 1d).

8.1 Equipment and Survey Procedure

Navigation

Video Flight Path Recording System

Type: Panasonic VHS Colour Video Camera (NTSC); **Model:** AG 2400/WVCD132

Fiducial numbers are recorded continuously and are displayed on the margin of each image. This procedure ensures accurate correlation of analog and digital data with respect to visible features on the ground.

Navigation (Global Positioning System)

Airborne Receiver

Model: Ashtech Glonass GG24

Type: SPS (L1 band), 24-channel, C/A code at 1575.42 MHz, S code at 0.5625 MHz, Real-time differential.

Sensitivity: -132 dBm, 0.5 second update

Accuracy: Manufacturer's stated accuracy is better than 10 metres real-time

Base Station

Model: Marconi Allstar OEM, CMT-1200

Type: Code and carrier tracking of L1 band, 12-channel, C/A code at 1575.42 MHz

Sensitivity: -90 dBm, 1.0 second update

Accuracy: Manufacturer's stated accuracy for differential corrected GPS is 2 metres

The Ashtech GG24 is a line of sight, satellite navigation system that utilizes time-coded signals from at least four of forty-eight available satellites. Both Russian GLONASS and American NAVSTAR satellite constellations are used to calculate the position and to provide real time guidance to the helicopter.

The Marconi Allstar OEM (CMT-1200) is operated as a base station and utilizes time-coded signals from at least four of the twenty-four NAVSTAR satellites. The base station raw XYZ data are recorded, thereby permitting post-survey processing for theoretical accuracy of better than 5 metres.

The Ashtech receiver is coupled with a PNAV navigation system for real-time guidance. Although the base station receiver is able to calculate its own latitude and longitude, a higher degree of accuracy can be obtained if the reference unit is established on a known benchmark or triangulation point. For this survey, the GPS station was located at latitude 63 36.90200N, longitude -135 52.60192W at an elevation of 516 metres a.m.s.l. The GPS records data relative to the WGS84 ellipsoid, which is the basis of the revised North American Datum (NAD83). Conversion software is used to transform the WGS84 coordinates to the NAD 27 system.

Magnetic Instrumentation

Airborne Magnetometer

Model: Picodas 3340 processor with Geometrics G822
 Type: Optically pumped cesium vapour
 Sensitivity: 0.01 nT
 Sample rate: 10 per second

The magnetometer sensor is housed in the EM bird, 30 m below the helicopter.

Magnetic Base Station

Model: GEM Systems GSM-19T
 Type: Digital recording proton precession
 Sensitivity: 0.10 nT
 Sample rate: 0.2 per second

Model: Picodas MEP-710 processor with Geometrics
 G823
 Type: Digital recording cesium vapour
 Sensitivity: 0.01 nT
 Sample rate: 1 per second

A digital recorder is operated in conjunction with the base station magnetometer to record the diurnal variations of the earth's magnetic field. The clock of the base station is synchronized with that of the airborne system to permit subsequent removal of diurnal drift.

Electromagnetic Instrumentation

Model: DIGHEM^V

Type: Towed bird, symmetric dipole configuration operated at a nominal survey altitude of 30 metres. Coil separation is 8 metres for 900 Hz, 5500 Hz and 7200 Hz, and 6.3 metres for the 56,000 Hz coil-pair.

Coil orientations/frequencies:	<u>orientation</u>	<u>nominal</u>	<u>actual</u>
	coaxial /	900 Hz	1068 Hz
	coplanar /	900 Hz	875 Hz
	coaxial /	5,500 Hz	5601 Hz
	coplanar /	7,200 Hz	7160 Hz
	coplanar /	56,000 Hz	55710 Hz

Channels recorded: 5 in-phase channels
5 quadrature channels
2 monitor channels

Sensitivity: 0.06 ppm at 900 Hz Cx
0.12 ppm at 900 Hz Cp
0.12 ppm at 5,500 Hz Cx
0.24 ppm at 7,200 Hz Cp
0.60 ppm at 56,000 Hz Cp

Sample rate: 10 per second, equivalent to 1 sample every 3 m, at a survey speed of 110 km/h.

The electromagnetic system utilizes a multi-coil coaxial/coplanar technique to energize conductors in different directions. The coaxial coils are vertical with their axes in the flight direction. The coplanar coils are horizontal. The secondary fields are sensed simultaneously by means of receiver coils, which are maximum coupled to their respective transmitter coils. The system yields an in-phase and a quadrature channel from each transmitter-receiver coil-pair.

The Dighem calibration procedure involves four stages; primary field bucking, phase calibration, gain calibration, and zero adjust. At the beginning of the survey, the primary field at each receiver coil is cancelled, or "bucked out", by precise positioning of five bucking coils.

The phase calibration adjusts the phase angle of the receiver to match that of the transmitter. A ferrite bar, which produces a purely in-phase anomaly, is positioned near each receiver coil. The bar is rotated from minimum to maximum field coupling and the responses for the in-phase and quadrature components for each coil pair/frequency are measured. The phase of the response is adjusted at the console to return an in-phase only response for each coil-pair. Phase checks are performed daily.

The gain calibration uses external coils designed to produce an equal response on in-phase and quadrature components for each frequency/coil-pair. The coil parameters and distances are designed to produce pre-determined responses at the receiver, due to the current induced in the

calibration coil by the transmitter when a switch closes the loop at the coil. The gain at the console is adjusted to yield secondary responses of exactly 100 ppm. Gain calibrations are carried out at the beginning and end of the survey.

The phase and gain calibrations each measure a relative change in the secondary field, rather than an absolute value. This removes any dependency of the calibration procedure on the secondary field due to the ground, except under circumstances of extreme ground conductivity.

During each survey flight, internal (Q-coil) calibration signals are generated to recheck system gain and to establish zero reference levels. These calibrations are carried out at intervals of approximately 20 minutes with the system out of ground effect. At a sensor height of more than 250 metres, there is no measurable secondary field from the earth. The remaining residual is therefore established as the zero level of the system. Linear system drift is automatically removed by re-establishing zero levels between the Q-coil calibrations.

Radar Altimeter

Manufacturer: Honeywell/Sperry
 Model: AA 330
 Type: Short pulse modulation, 4.3 GHz
 Sensitivity: 0.3 m

The radar altimeter measures the vertical distance between the helicopter and the ground. This information is used in the processing algorithm, which determines conductor depth.

Barometric Pressure and Temperature Sensors

Model: DIGHEM D 1300
 Type: Motorola MPX4115AP analog pressure sensor
 AD592AN high-impedance remote temperature sensors
 Sensitivity: Pressure: 150 mV/kPa
 Temperature: 100 mV/°C or 10 mV/°C (selectable)
 Sample rate: 10 per second

The D1300 circuit is used in conjunction with one barometric sensor and up to three temperature sensors. Two sensors (barometer and temperature) are installed in the EM console in the aircraft, to monitor pressure and internal operating temperatures.

8.2 Data Acquisition System

Digital Recorder

Manufacturer: RMS Instruments

Model: DGR 33

Recorder: Iomega Zip Plus drive

The data are stored on a 100 Mb Zip disk and are downloaded to the field workstation PC at the survey base for verification, backup and preparation of in-field products.

Analog Recorder

The analog profiles are recorded on chart paper in the aircraft during the survey. The table below lists the geophysical data channels and the vertical scale of each profile.

Manufacturer: RMS Instruments
 Type: DGR33 dot-matrix graphics recorder
 Resolution: 4x4 dots/mm
 Speed: 1.5 mm/sec

Table 3 - List of Analog Profiles

Channel Name	Parameter	Scale units/mm
1X9I	coaxial in-phase (1000 Hz)	2.5 ppm
1X9Q	coaxial quad (1000 Hz)	2.5 ppm
2P9I	coplanar in-phase (1000Hz)	2.5 ppm
2P9Q	coplanar quad (1000 Hz)	2.5 ppm
3P7I	coplanar in-phase (7200 Hz)	5 ppm
3P7Q	coplanar quad (7200 Hz)	5 ppm
4X7I	coaxial in-phase (5500 Hz)	5 ppm
4X7Q	coaxial quad (5500 Hz)	5 ppm
5P5I	coplanar in-phase (56000 Hz)	10 ppm
5P5Q	coplanar quad (56000 Hz)	10 ppm
ALTR	altimeter (radar)	3 m
MGC	magnetics, coarse	20 nT
MGF	magnetics, fine	2.0 nT
CXSP	coaxial sferics monitor	
CPSP	coplanar sferics monitor	
CXPL	coaxial powerline monitor	
CPPL	coplanar powerline monitor	
4XSP	coaxial sferics monitor	
1KPA	altimeter (barometric)	30 m
2TDC	internal (console) temperature	1° C
3TDC	external temperature	1° C

Field Workstation

Manufacturer: Dighem
 Model: FWS: V5.18
 Type: Pentium PC

A portable PC-based field workstation is used at the survey base to verify data quality and completeness. Flight data are transferred to the PC hard drive to permit the creation of a database. This process allows the field operators to display both the positional (flight path) and geophysical data on a screen or printer.

8.3 Data Processing

Projection Description

Datum: NAD27 (Yukon)
 Ellipsoid: Clarke 1866
 Projection: UTM (Zone:8)
 Central Meridian: -135⁰
 False Northing: 0
 False Easting: 500000
 Scale Factor: 0.9996
 WGS84 to Local Conversion: Molodensky
 Datum Shifts: DX:7 DY:-139 DZ:-181

Magnetic Data

The aeromagnetic data were corrected for diurnal variation using the magnetic base station data. Manual adjustments were applied to any lines that require leveling, as indicated by shadowed images of the gridded magnetic data or tie line/traverse line intercepts.

Electromagnetic Data

EM data are processed at the recorded sample rate of 10 samples/second. Spheric rejection median (1.1 second operator) and Hanning filters (1.1 second operator) were applied to reduce spheric noise to acceptable levels.

Apparent Resistivity

The apparent resistivity in ohm-m was generated from the in-phase and quadrature EM components for the three coplanar frequencies, using a pseudo-layer half-space model. The resistivity parameter portrays all the EM information for that frequency over the entire survey area. The large dynamic range makes the resistivity parameter an excellent mapping tool.

The preliminary resistivity maps and images were carefully inspected to locate any lines or line segments, which might require levelling adjustments. Subtle changes between in-flight calibrations

of the system can result in line-to-line differences, particularly in resistive (low signal amplitude) areas. Manual levelling was carried out to eliminate or minimize resistivity differences, which can be caused by changes in operating temperatures. These levelling adjustments are usually very subtle, and do not result in the degradation of anomalies from valid bedrock sources.

After the manual levelling process was completed, revised resistivity grids were created. Most interline noise appears to be caused by flying height deviations from line to line. Although the resistivity calculation is independent of flying height where sufficient quadrature and inphase signals exist, quadrature responses in relatively resistive areas will vary with flying height. This causes apparent busts in resistivity calculated using the pseudo-layer half-space model. Although other resistivity calculation methods do not suffer from this problem, the pseudo-layer method produces more contrast in responses from deep conductive sources.

8.4 Discussion of Results

Geophysical survey results are presented on 1:5000 scale sheets. Plates 1a, 1b, 1c and 1d cover the McQuesten property and include respectively flight line locations, magnetic results, electromagnetic results, and an interpretation. All plots are in the NAD 27 UTM Zone 8N projection. UTM coordinates are annotated at a 500-metre interval around the plot edges with internal ticks. Flight line numbers are positioned at the north end of each line, or line segment. Individual readings are annotated with a cross along each flight line.

Also accompanying the report is a CD with digital data in a MICROSOFT ACCESS (MDB) file located in a pocket at the rear. On the CD is a READ.ME file in ASCII format, which describes the data in the MDB file.

8.4.1 Magnetic Results (Plate 1b)

Magnetic data is presented in full colour image format contoured with a 5.0 nT interval ranging over 57750 to 58000 nT (approx). Elevated magnetic data are noted across the southern claim block's northern edge. These elevated data diminish to the north across the northern claim block. A deep-seated source is suggested, perhaps an intrusion. The coverage is too sparse as to allow any form of quantitative interpretation. Very strong negative responses occur along the southern claim block's south boundary. These are interpreted as sourced by reversely magnetized pyrrhotite. Gold mineralization on the property is noted to occur with pyrrhotite. The magnitude of the negative responses could be used as a qualitative tool for mapping pyrrhotite concentration, and therefore serve as an exploration guide.

8.4.1 Electromagnetic Results (Plate 1c)

Electromagnetic data is presented in full colour format contoured with a staged interval. The electromagnetic anomalies are expressed in ppm. A number of map products (see Table 3) are

available for plotting. Plate 1c shows the in-phase, coplanar, 1000 Hz secondary field. This parameter has the advantage of discrimination toward better conductors and simple anomaly shapes centred over the source conductor. The accompanying CD contains all the various other data types. Flight line effects are minimal in the data and present no problem for interpretation.

A number of strong electromagnetic conductors traverse the southern claim block from east to west. Electromagnetic responses on the northern block are considerably muted, probably due to increased overburden cover. Plate 1d presents the conductor axis, as well as an overall geophysical interpretation. The conductors are likely sourced by graphitic sediments within the Keno Hill Quartzite. A boundary between conductive terrain and nonconductive terrain approximately parallels the southern edge of the property. This boundary is interpreted as mapping the Robert Service Thrust. The thrust plate places felsic metavolcanics over the Keno Hill Quartzite. Cutting the contact is a number of northwest bearing cross faults, which uniformly exhibit an apparent right lateral displacement. The cross faults are reflected in the magnetics and electromagnetic as offsets and thinnings. Within the Keno Hill Quartzite are a number of inferred faults parallel to sub-parallel with the Robert Service Thrust. These features could either be high angle faults or, possibly thrust related to the Robert Service Thrust.

8.4.3 Summary of Geophysical Results

Plate 1d summarizes the interpretation. Magnetic anomalies, conductor axis, various faults, and the property outline are presented. The spotty nature of the data makes a definitive interpretation difficult. However, large structural features, such as the Robert Service Thrust, should be considered as exploration targets. This is particularly true in areas with coincident pyrrhotite mineralization, as reflected by the large negative magnetic responses. The cross cutting northwest faults may also have played a significant role in controlling gold mineralization.

9.0 RECOMMENDATIONS

Results from the 2000 mineral exploration campaign are encouraging and additional diamond drilling of defined targets is recommended. The next phase of work should include provision for about 1500 metres of core drilling. In addition, a detailed claims' survey needs to be completed with the boundary delineated on the ground with stakes and cut lines.

Respectively submitted,
M.A. STAMMERS EXPLORATION MANAGEMENT INC.


Michael A. Stammers, P. Geo.
January 2001



APPENDIX A
BIBLIOGRAPHY

BIBLIOGRAPHY

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APPENDIX B
LIST OF PERSONNEL

APPENDIX B

LIST OF PERSONNEL

Mike Stammers, P. Geo
941 Kennedy Avenue
North Vancouver, BC
V7R 1L4

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

CONTRACTORS

See Appendix D

APPENDIX C

STATEMENT OF EXPENDITURES

APPENDIX C

STATEMENT OF EXPENDITURES

McQuesten GROUP OF QUARTZ MINERAL CLAIMS

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

Doug 1-9, Mary 1-6, Lakehead 1-13, Hoito 1-8, Jarret 1 & 2,
Twins 7 and South Fr

I, Michael A. Stammers, P. Geo agent for 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 McQUESTEN Claim Group during
the period May 17 to 28, 2000.

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

AIRBORNE GEOPHYSICAL SURVEY

104 line-km @ \$91.15/line-km (all-inclusive)	\$9,479.60
---	------------

Dated at North Vancouver this 19 day of January 2001


Michael A. Stammers, P. Geo



APPENDIX D

AIRBORNE GEOPHYSICS – STATISTICS AND EQUIPMENT

APPENDIX D

AIRBORNE GEOPHYSICS - STATISTICS AND EQUIPMENT

Survey Dates: May 19-28 / 2000
Project Name: **McQUESTEN**
Project Location: Mayo Mining District, Yukon Territory
Survey Type: Airborne Magnetic & Electromagnetic
Flight-Line Direction: NS
Flight Line Spacing: 150m
Aircraft Height: 60 m
Bird Height: Magnetic – 30m
Electromagnetic – 30m
Navigation: GPS
Distance Flown: 104 Line Kilometres
Average Airspeed: 78 Km/h
Geophysical Operators:

Greg Paleolog	Manager, Helicopter Operations
Doug McConnell	Manager, Data Processing and Interpretation
Frank Corbin	Senior Geophysical Operator
Duane Griffith	Field Geophysicist
Bill Karmen	Pilot (Kluane Helicopters Ltd.)
Gordon Smith	Data Processing Supervisor
Lyn Vanderstarren	Drafting Supervisor
Susan Pothiah	Word Processing Operator
Albina Tonello	Secretary/Expeditior
James Wright	Geophysicist

All personnel are employees of Fugro Airborne Surveys, except for the pilot who is an employee of Kluane Helicopters Ltd, and James Wright who is employed by Newmont Mining Corp.

Aircraft Contractor:	Kluane Helicopter Ltd.
Magnetometer:	Picodas 3340 Processor / Geometrics G822
Magnetometer Base:	GEM Systems GSM-19T
Electromagnetic System:	DIGHEM V
Data Acquisition:	RMS Instruments DGR 33 / Iomega ZIP Drive
GPS:	Ashtech Glonass GG24
GPS Base:	Marconi Allstar OEM, CMT-1200
Radar Altimeter:	Honeywell / Sperry AA330
Helicopter:	AS350B2 Helicopter / Registration C-GKHS

APPENDIX E

GEOLOGIST CERTIFICATE

GEOLOGIST'S CERTIFICATE

I, Michael A. Stammers, of 941 Kennedy Avenue, North Vancouver, in the Province of British Columbia, Canada, DO HEREBY CERTIFY:

- 1 THAT I am a Consulting Geologist with offices at 941 Kennedy Avenue, North Vancouver, British Columbia, V7R 1L4 Canada.
- 2 THAT I have practiced in my profession with various mining companies in Yukon, British Columbia, Nova Scotia, Northwest Territories, Alaska, Oregon, Vanuatu and Venezuela for 27 years.
- 3 THAT I am a graduate of McMaster University (1977) and hold a combined Honours B.A. in Geology and Geography.
- 4 THAT I am duly registered as a Professional Geoscientist in the Province of British Columbia (#18883).
- 5 THAT I am a Fellow of the Geological Association of Canada.
- 6 THAT this report is based on property work that I supervised from May 1 to August 20, 2000.
- 7 THAT I have no interest in the property described herein, or in any securities of any company associated with the property, nor do I expect to receive any such interest.

DATED at North Vancouver, British Columbia, Canada, this 19 day of January 2001.



Michael A. Stammers, P. Geo., FGAC



SURVEY SPECIFICATIONS

Survey Date: May 19-28 / 2000
Operator: Fugro Airborne Surveys
Line Orientation: NS
Line Spacing: 150m
Sensor Height: 30m
Navigation: GPS
Aircraft: Helicopter
Instrument: GEM V Electromagnetic System

DATA PROCESSING

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Minimum Curvature Gridding (50m) Interpolating
and Contouring.

Contour Interval

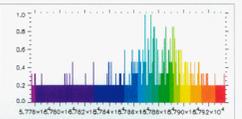
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LOCATION INFORMATION

Map Boundaries:

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7083000 - 7086500 mN

Map Projection: NAD 27 UTM Zone 8N



nT

094277

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0 200 400 600 Ft

SCALE 1: 5000

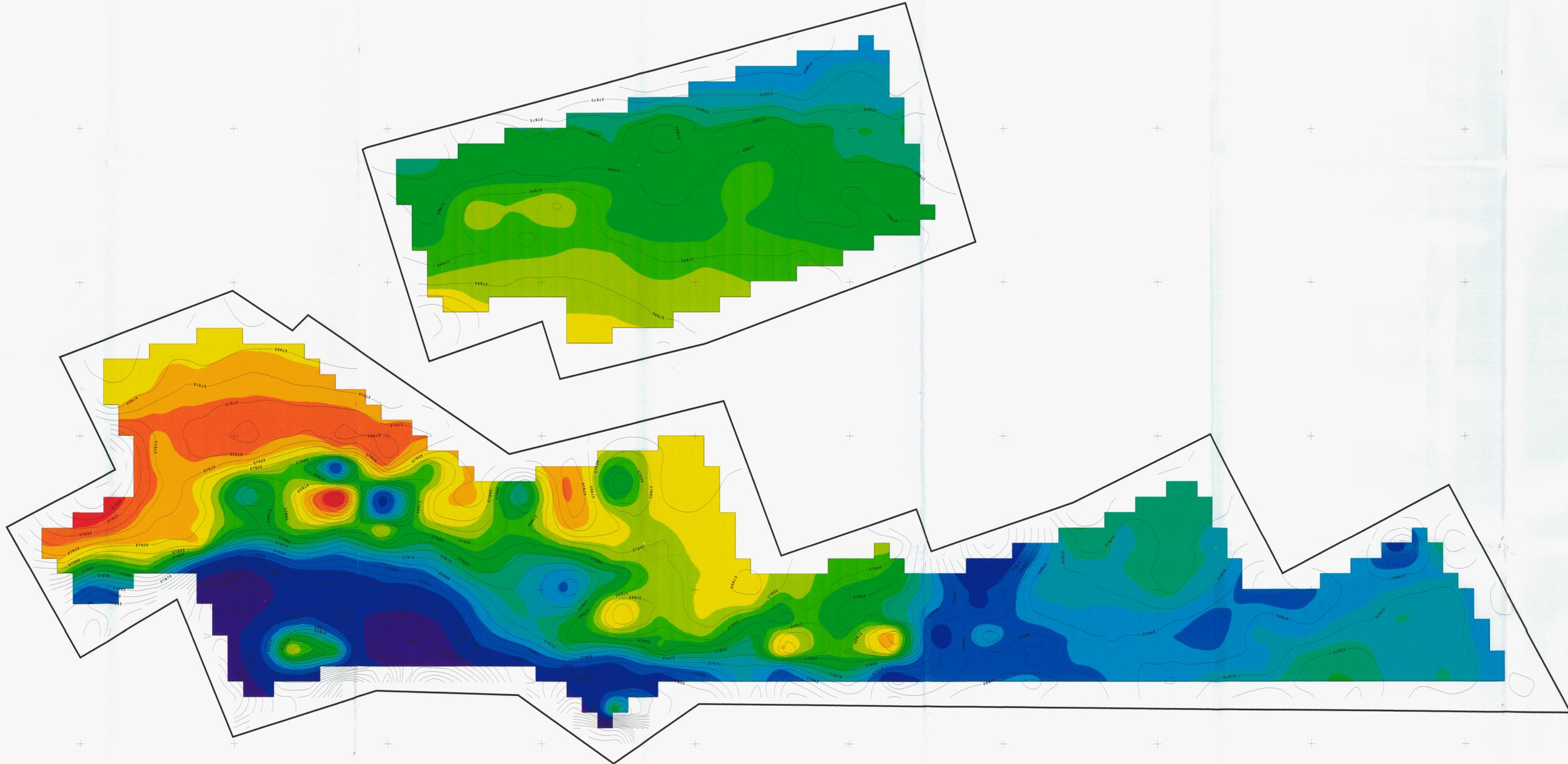
YUKON ENERGY, MINES
& RESOURCES LIBRARY
600, Main Street
Whitehorse, Yukon Y1A 2C8

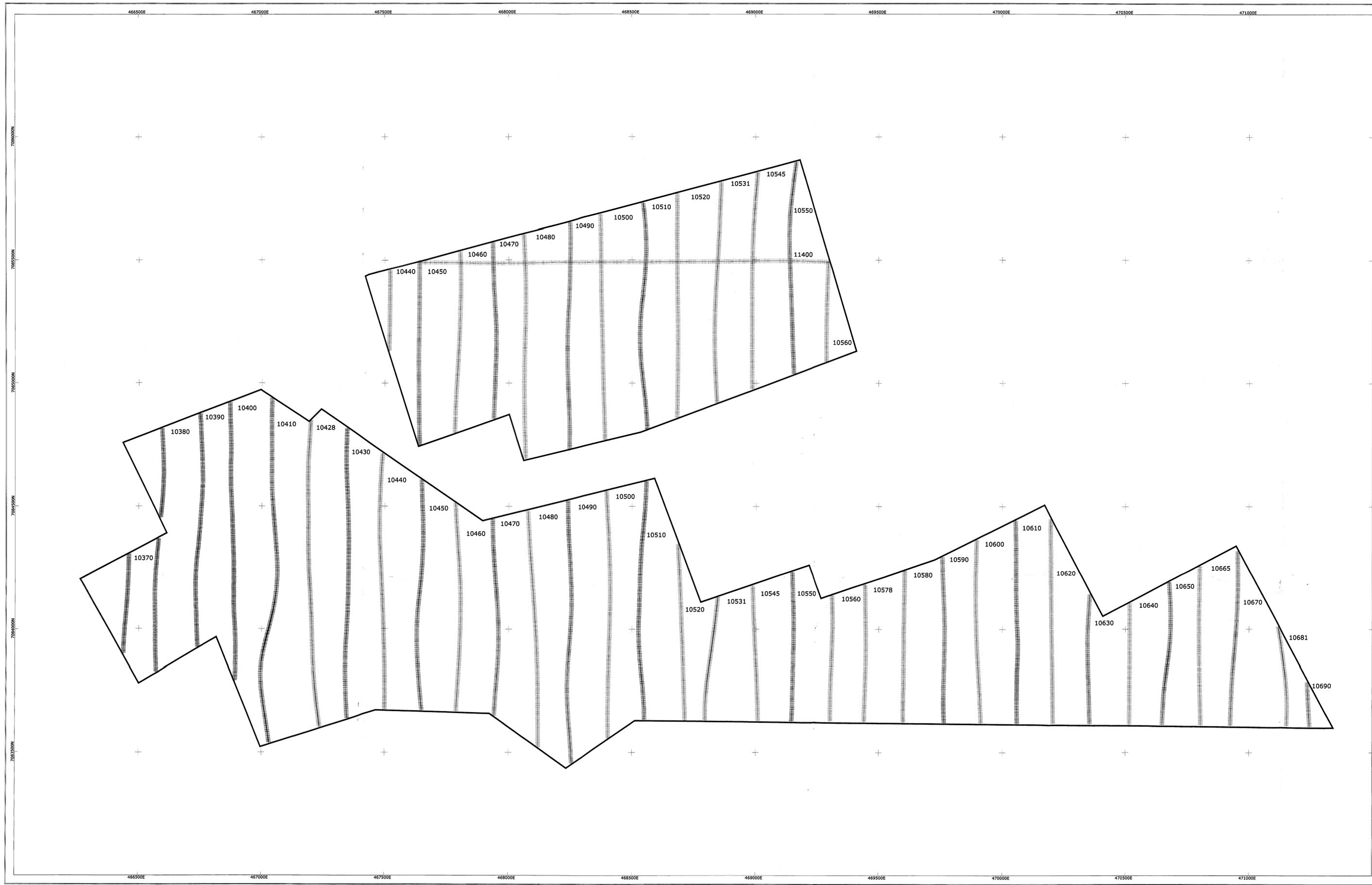
NEWMONT MINING CORPORATION

McQUEEN FOLIO

PLATE 1B
AIRBORNE MAGNETIC SURVEY
TOTAL FIELD (nT)

November 2000





SURVEY SPECIFICATIONS
 Survey Date: May 19-28 / 2000
 Operator: Fugro Airborne Surveys
 Line Orientation: NS
 Line Spacing: 150m
 Sensor Height: 30m
 Navigation: GPS
 Aircraft: Helicopter
 Instrument: DIGEM V Electromagnetic System

LOCATION INFORMATION

Map Boundaries:
 468000 - 471500 mE
 7083000 - 7086500 mN

Map Projection: NAD 27 / Zone 8N

094277

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SCALE 1:5000
M

0 200 400 600
SCALE 1:5000
Ft

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NEWMONT MINING CORPORATION
MCQUESTEN FOLIO
 PLATE 1A
 AIRBORNE GEOPHYSICAL SURVEY
 FLIGHT LINE PLOT
 November 2000

SURVEY SPECIFICATIONS

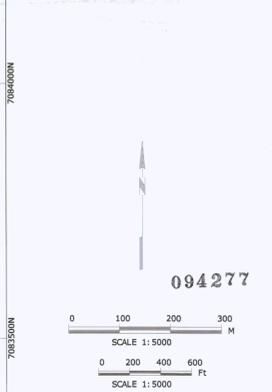
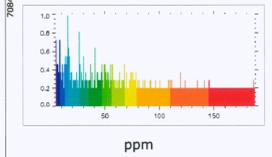
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Operator: Fugro Airborne Surveys
Line Orientation: NS
Line Spacing: 150m
Sensor Height: 30m
Navigation: GPS
Aircraft: Helicopter
Instrument: DEGEM V Electromagnetic System

DATA PROCESSING

Sampling @ 10 samples/sec, Spheric Rejection,
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@50m, Imagining, and Contouring.
Contour Interval
0 - 100 CI = 5 ppm
100 - 200 CI = 10 ppm

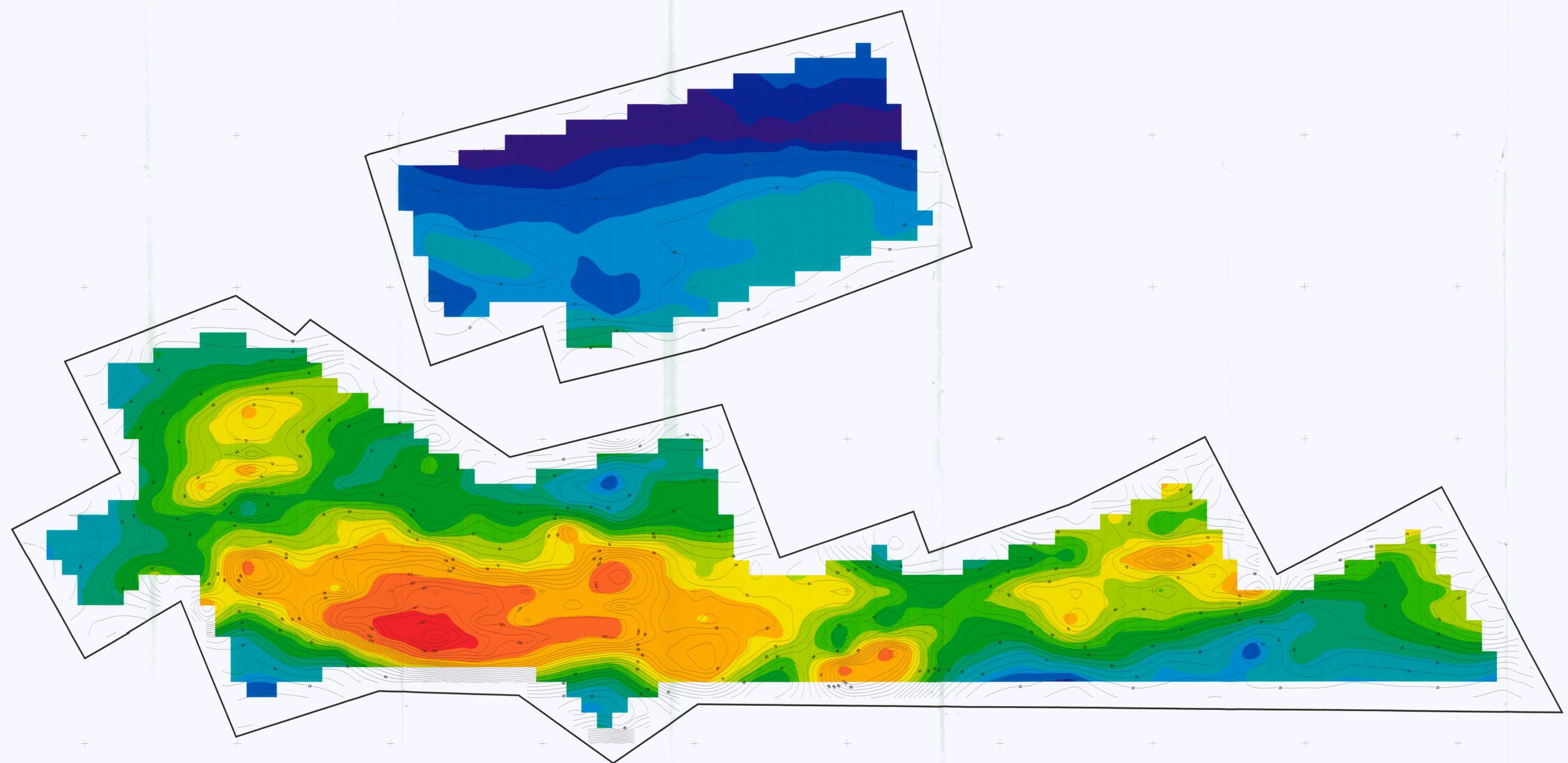
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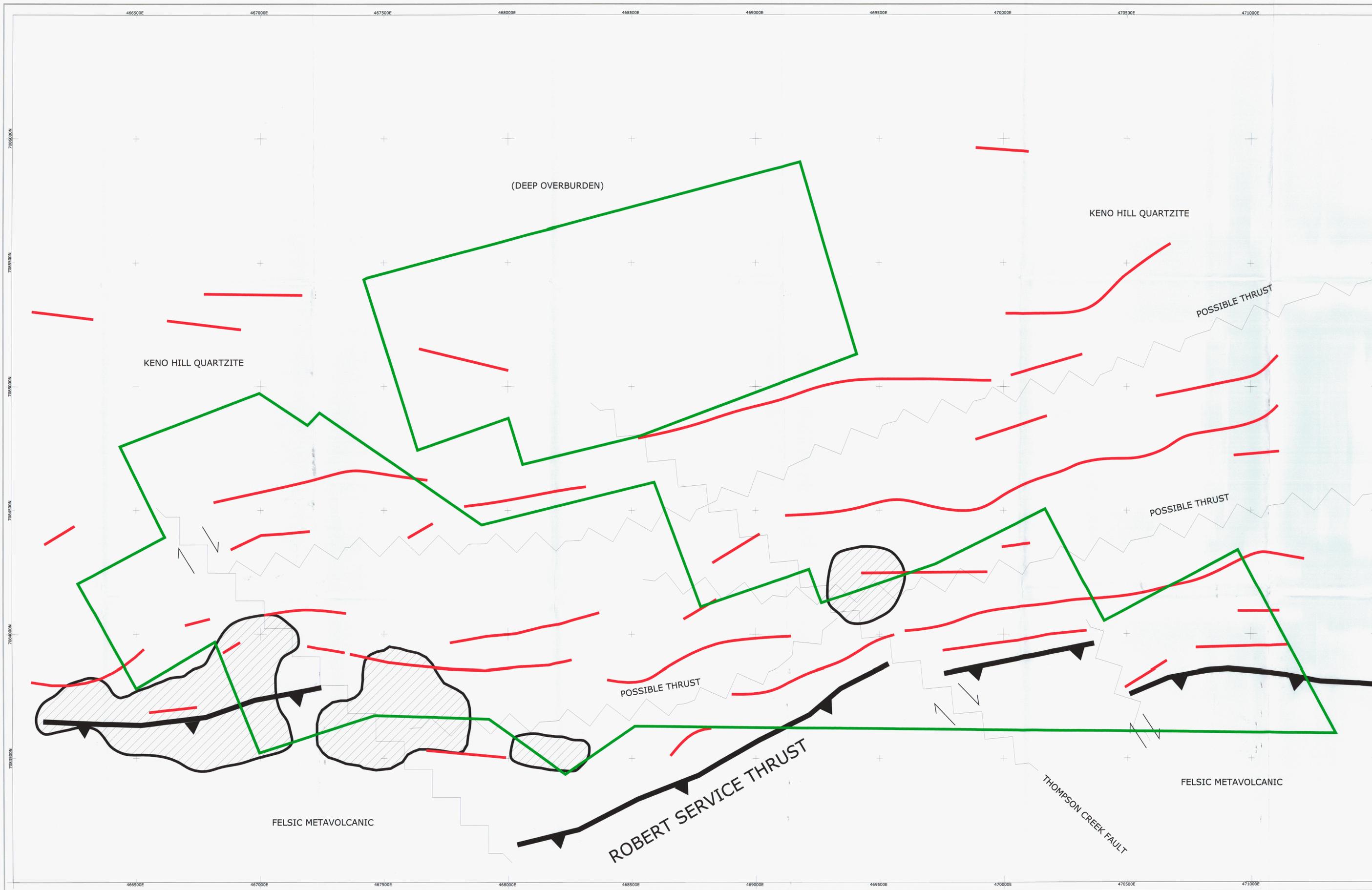
Mhp Boundaries:
466000 - 471500 mE
7083000 - 7086500 mN
Mhp Projection: NAD 27 / Zone 8N



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& RESOURCES LIBRARY
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Whitehorse, Yukon Y1A 2C6

NEWMONT MINING CORPORATION
McQUESTEN FOLIO
PLATE 1C
AIRBORNE ELECTROMAGNETIC SURVEY
1st PHASE COMPONENT: 1000Hz
November 2000





-  REMNANT MAGNETIC ANOMALY
-  CONDUCTOR AXIS
-  FAULT
-  THRUST FAULT
-  McQUESTEN PROPERTY BOUNDARY

SURVEY SPECIFICATIONS

Survey Date: May 19-28 / 2000
 Operator: Fugro Airborne Surveys
 Line Orientation: NS
 Line Spacing: 150m
 Sensor Height: 30m
 Navigation: GPS
 Aircraft: Helicopter
 Instrument: DIGHM V Electromagnetic System

LOCATION INFORMATION

Map Boundaries:
 466000 - 471500 mE
 7083000 - 7086500 mN

Map Projection: NAD 27 / Zone 8N

