MAP NO.	ASSESSMENT REPORT X	DOCUMENT NO.: 092688	
	PROSPECTUS	MINING DISTRICT: Watson Lake	
105 G 12	CONFIDENTIAL X	TYPE OF WORK: Geophysical	
	OPEN FILE		

REPORT FILED UNDER: Del Norte Chrome Corp.

DATE PERFORMED: April 23,27, 1988 DATE FILED: 23 February 1989

LOCATION: LAT.: $61^{o}37'$N AREA: Hoole River

LONG.: $131^{o}49'$W VALUE $: 12,000.00

CLAIM NAME & NO.: SPITZ 1-120 YB11699-818

WORK DONE BY: C.K. Ikona, R.J. Darney (Pamicon Developments Ltd.)

WORK DONE FOR: Del Norte Chrome Corp.

DATE TO GOOD STANDING

REMARKS: #75 SPITZ Airborne electromagnetic, magnetic, and VLF-EM surveys revealed sharp magnetic lows which may indicate graben in the northwest. Oblong magnetic lows in the central property may be felsic intrusives. Five of twenty-five conductors warrent follow-up.

RECEIVED
23 FEB 1989
MINING RECORDER
WATSON LAKE, Y.T.
I.A. & N.D.

GEOLOGICAL AND GEOPHYSICAL REPORT
ON THE
CHOW 1-92 AND SPITZ 1-120
MINERAL CLAIMS

092688

Watson Lake Mining District

Chow 1-92	NTS 105F/16	61°47'N 132°16'W
Spitz 1-120	NTS 105G/12	61°37'N 131°49'W

- Prepared for -

DEL NORTE CHROME CORP.

- Prepared by -

C.K. IKONA, P.Eng.
R.J. DARNEY, Geologist

092688

February, 1989

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz [illegible]ining Act and is allowed as [illegible]presentation work in the amount [illegible] $ 12,000.00.

DA Emond

for R[illegible]al Manager, Exploration and [illegible]al Services for Commiss[illegible]er o[illegible] [illegible] Terr[illegible].

GEOLOGICAL and GEOPHYSICAL REPORT on the
CHOW 1-92 and SPITZ 1-120 MINERAL CLAIMS

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APPENDICES

1.0 INTRODUCTION

The Spitz 1-120 and Chow 1-92 mineral claims were staked in February 1988 by Mr. B. Macdonald following favourable results announced by Noranda Exploration and Golden Nevada Resources Ltd. on their Grew Creek gold property southeast of Faro in the Yukon Territory (Figure 1). These announcements sparked the interest of several Vancouver based mining companies including Welcome North Mines Ltd., Mintel International, Hemlo Explorations, Wildfire Resources, and Halcyon Resources (Figure 2). The result has been the acquisition of a narrow belt of claims running northwest-southeast from Faro to the Hoole River and paralleling the Tintina fault system.

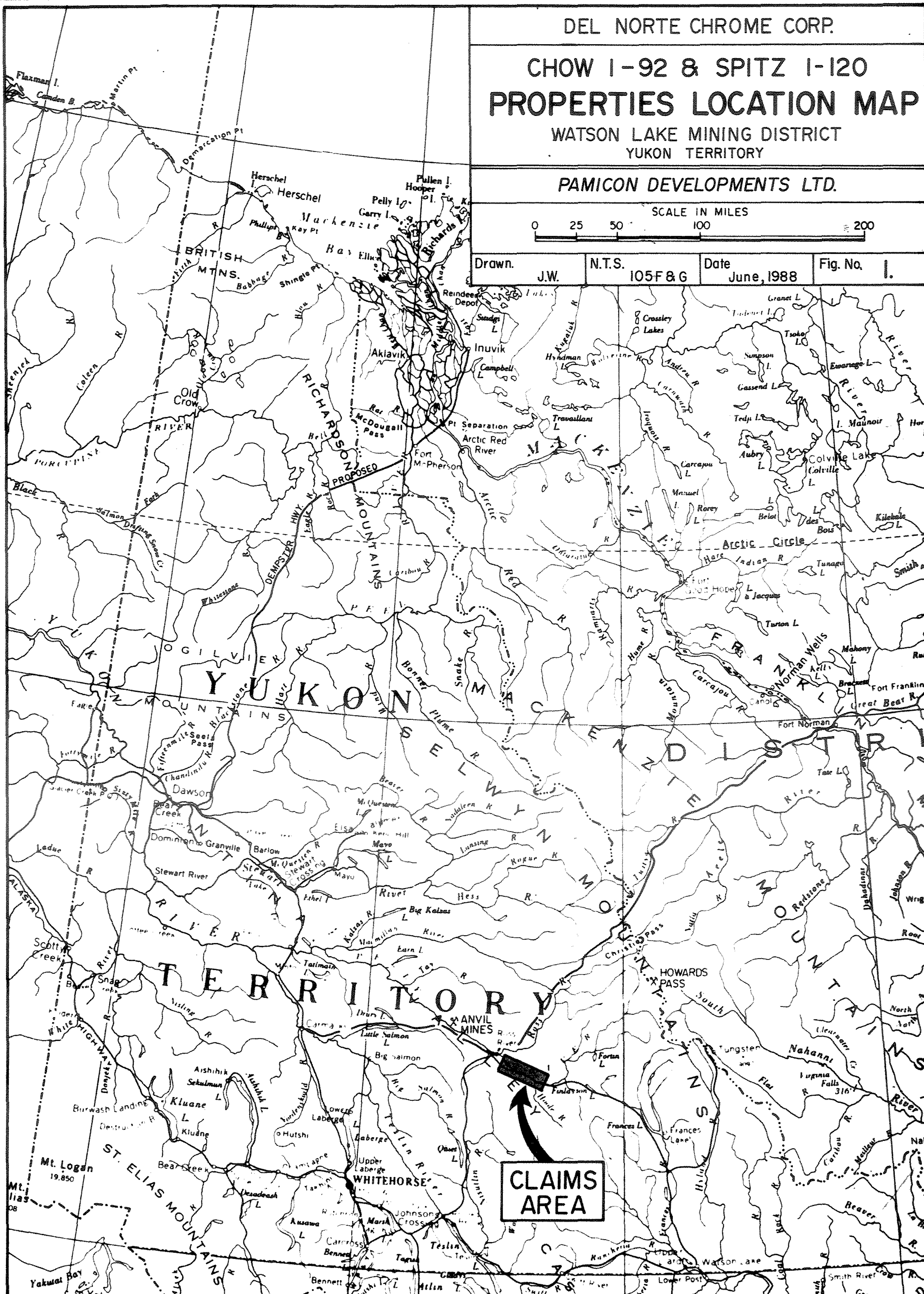
The Grew Creek discovery is hosted by altered Tertiary felsic pyroclastic and epiclastic rocks. Government mapping indicates further areas of Tertiary volcanics along the Tintina fault system now partially covered by recent staking. The Chow and Spitz claims now owned by Del Norte Chrome Corp. cover a portion of this favourable geologic belt.

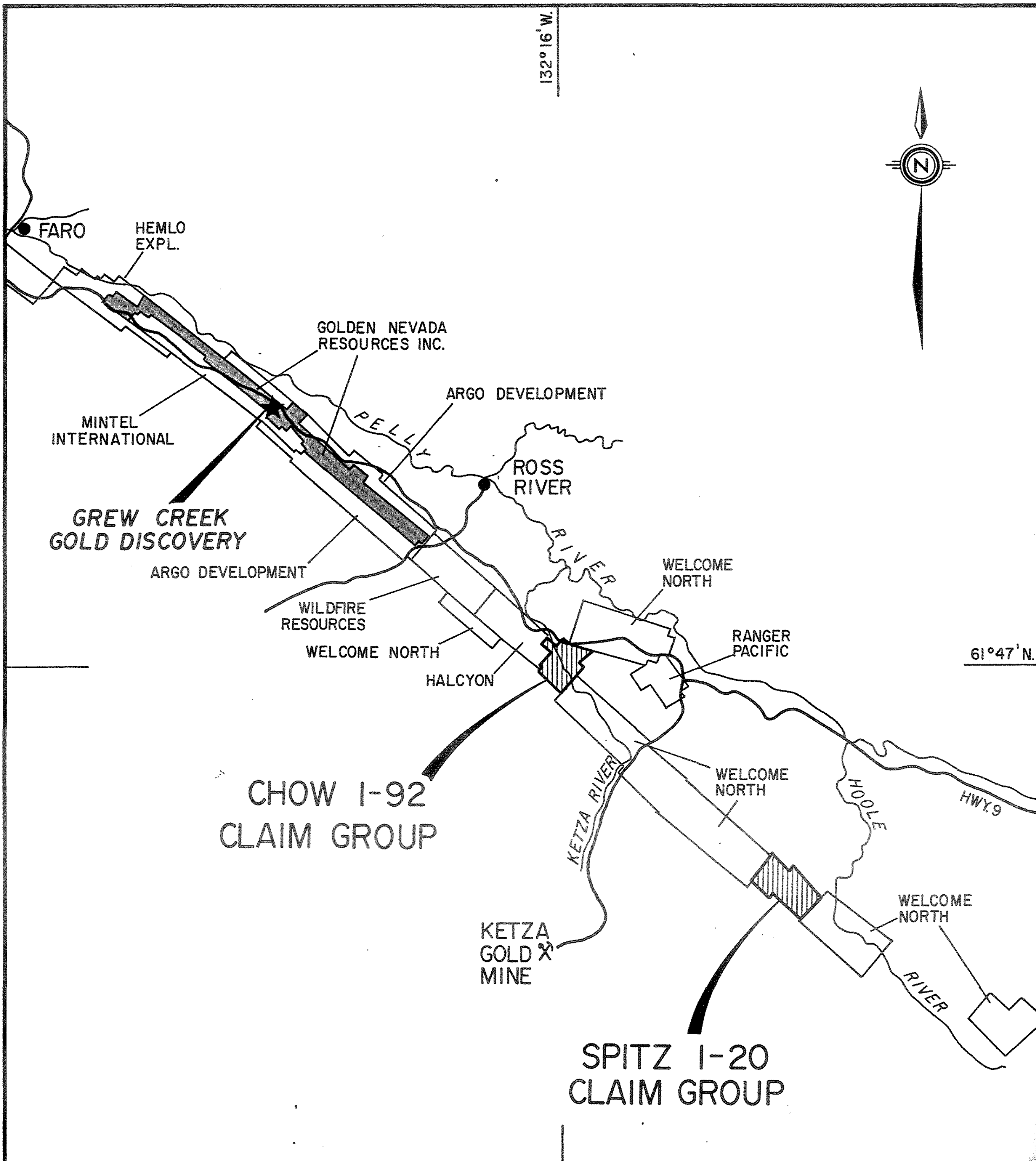
In April, 1988 an airborne geophysical magnetic, electromagnetic and VLF survey was conducted on the claim groups. The results of the survey are documented in Appendix C of this report.

This report is compiled from information supplied by Del Norte Chrome and available government data. The authors have not visited the subject properties but have considerable past experience in central Yukon.

2.0 LOCATION AND ACCESS

The Spitz mineral claims (Figure 3) are located 50 km southeast of Ross River, Yukon Territory on NTS 105G/12 at 61°37' north latitude and 131°49' west longitude. The northern boundary of the property lies 15 km south of the Robert Campbell Highway, however, helicopter is necessary to access the property.


DEL NORTE CHROME CORP.
CHOW 1-92 & SPITZ 1-120
PROPERTIES LOCATION MAP
WATSON LAKE MINING DISTRICT
YUKON TERRITORY
PAMICON DEVELOPMENTS LTD.
SCALE IN MILES
0 25 50 100 200
Drawn. J.W.
N.T.S. 105F & G
Date June, 1988
Fig. No. 1.
CLAIMS AREA
YUKON TERRITORY
MACKENZIE DISTRICT
HOWARDS PASS
ANVIL MINES
WHITEHORSE
Dawson
Inuvik
Aklavik
Old Crow
Fort McPherson
Watson Lake
Arctic Circle



DEL NORTE CHROME CORP.

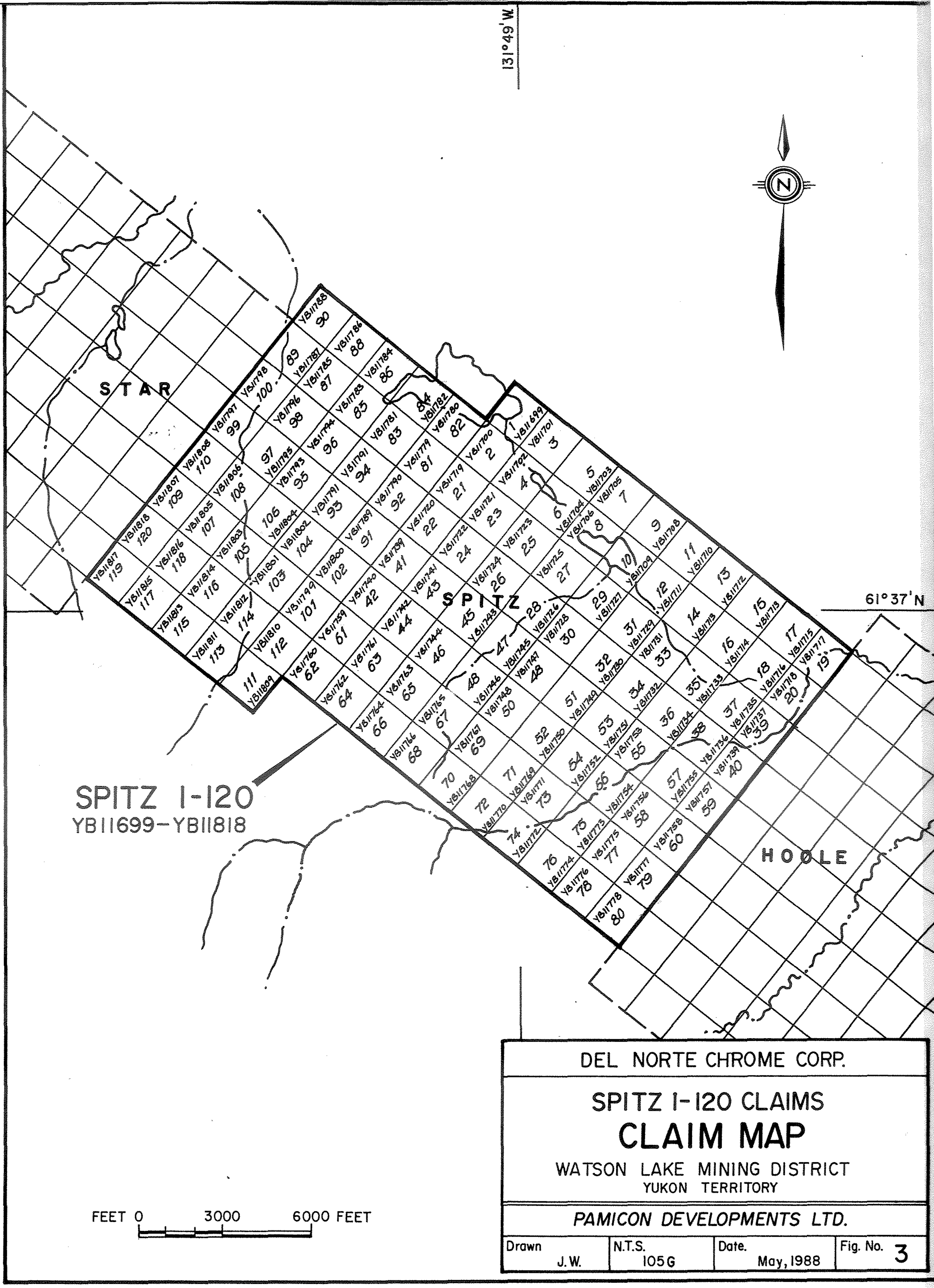
CHOW 1-92 & SPITZ 1-120
MINERAL CLAIMS

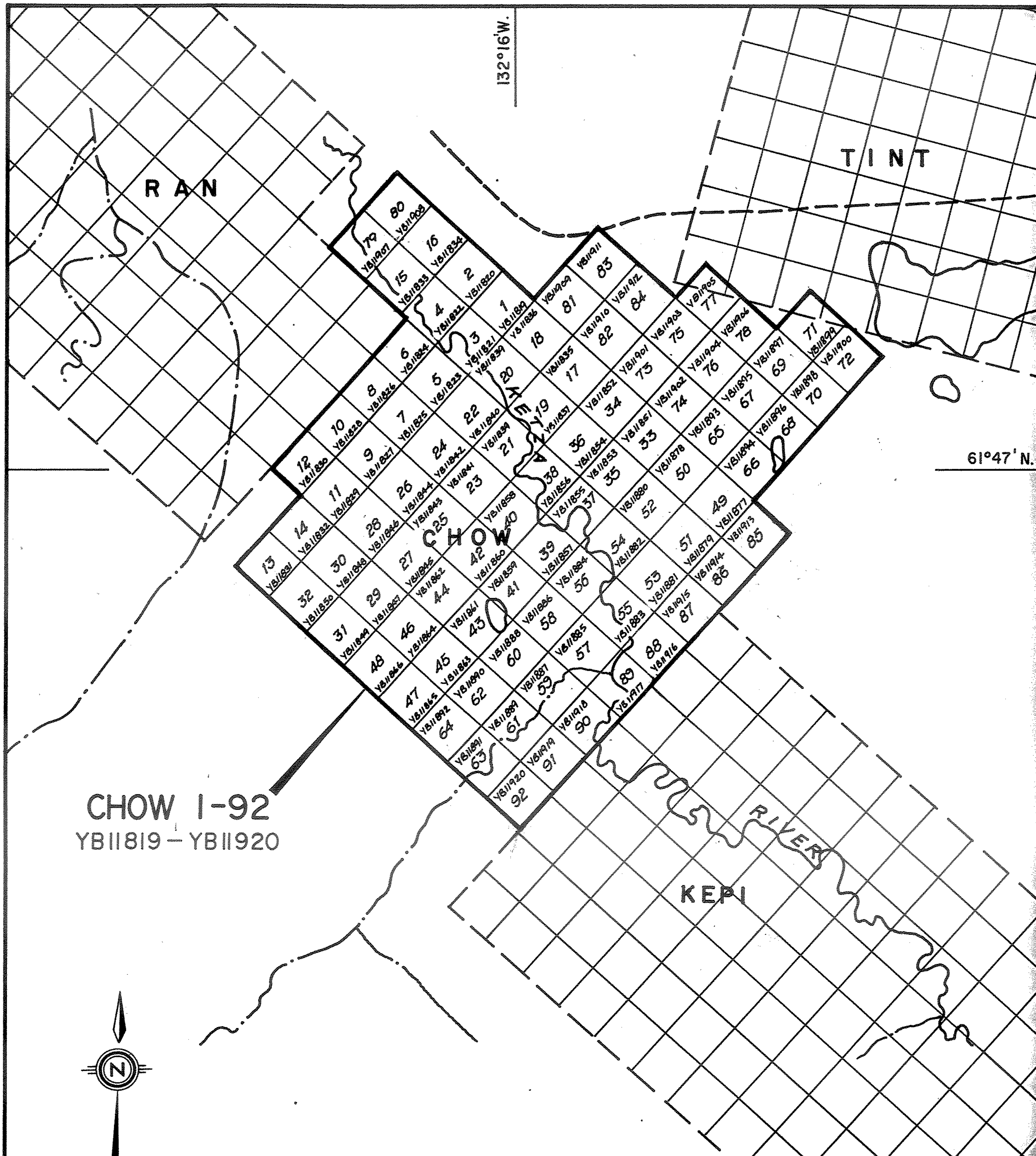
DISTRICT PROPERTY MAP

WATSON LAKE MINING DISTRICT, YUKON

PAMICON DEVELOPMENTS LTD.

Drawn	N.T.S.	Date.	Fig. No.
J.W.	105 F, G	June, 1988	2


131°49'W
61°37'N
N
STAR
SPITZ
HOOLE
SPITZ 1-120
YB11699–YB11818
FEET 0 3000 6000 FEET
DEL NORTE CHROME CORP.
SPITZ 1-120 CLAIMS
CLAIM MAP
WATSON LAKE MINING DISTRICT
YUKON TERRITORY
PAMICON DEVELOPMENTS LTD.
Drawn J.W.
N.T.S. 105G
Date. May, 1988
Fig. No. 3



DEL NORTE CHROME CORP.

CHOW 1-92 CLAIMS

CLAIM MAP

WATSON LAKE MINING DISTRICT

YUKON TERRITORY

PAMICON DEVELOPMENTS LTD.

Drawn	N.T.S.	Date.	Fig. No.
J. W.	105 F	May, 1988	4

The Chow mineral claims (Figure 4) are located 20 km south of Ross River at 61°47' north latitude and 132°16' west longitude on NTS 105F/16. The Robert Campbell Highway passes through the northern boundary of the claims and may be used for access to portions of the ground.

Both properties lie along the Tintina trench on the south side of the Pelly River. Topography is generally rolling with elevations varying between 1000 metres to 1300 metres above sea level.

All supplies necessary to support an initial exploration program are available in the town of Ross River.

3.0 LIST OF CLAIMS

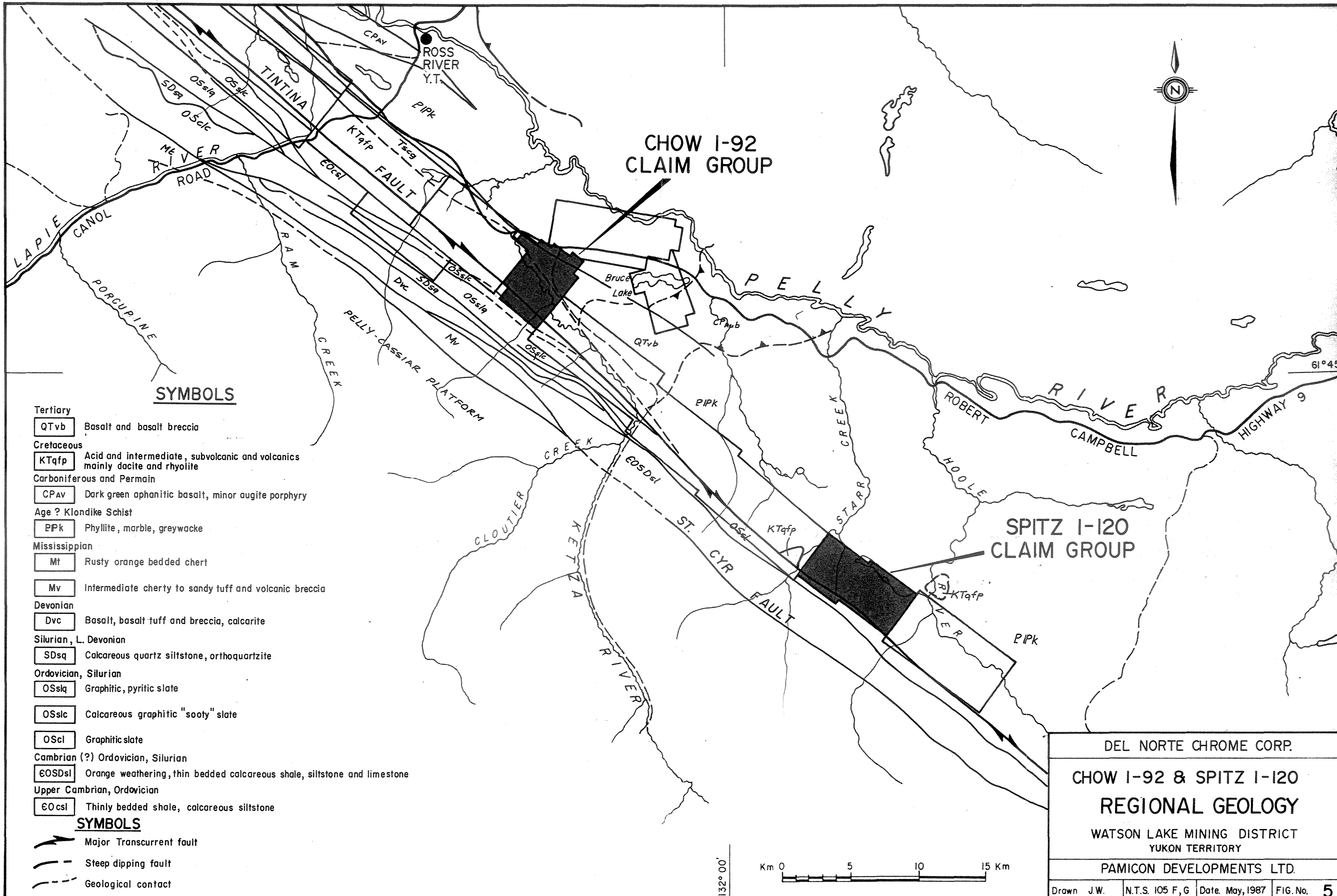
The Chow 1-92 and Spitz 1-120 mineral claims lie under the jurisdiction of the Watson Lake Mining District, Yukon Territory. The claims are beneficially owned by Del Norte Chrome Corp.

Claim Name	Grant Number	Anniversary Date
Chow 1-92	YB11819 - YB11910	February 29, 1989
Spitz 1-120	YB11699 - YB11818	February 29, 1989

4.0 REGIONAL GEOLOGY

The regional geology of the area is presented in Geological Survey of Canada, Open File 486 compiled by D. Tempelman-Kluit, 1977. Open File 486 covers the Quiet Lake (105F) and Finlayson Lake (105G) map sheets.

The area of interest lies within the northwest-southeast trending Tintina trench which is a zone of right lateral movement of up to 450 kilometres (Roddick, 1967, Tempelman-Kluit, 1979) in late Cretaceous and Tertiary time.



CHOW I-92
CLAIM GROUP
SPITZ I-120
CLAIM GROUP
ROSS RIVER Y.T.
TINTINA FAULT
ST. CYR FAULT
PELLY-CASSIAR PLATFORM
PELLY RIVER
ROBERT CAMPBELL HIGHWAY 9
LAPIE CANOL RIVER ROAD
RAM CREEK
PORCUPINE
CLOUTIER CREEK
KETZA RIVER
STARR CREEK
HOOLE RIVER
Bruce Lake
61°45'
132°00'
N
CPav
PIPk
KTqfp
Tscg
ЄOcsl
OSslq
OSslc
SDsq
OSclc
Dvc
Mv
QTvb
ЄOSDsl
OScl
SYMBOLS
Tertiary
QTvb Basalt and basalt breccia
Cretaceous
KTqfp Acid and intermediate, subvolcanic and volcanics mainly dacite and rhyolite
Carboniferous and Permain
CPav Dark green aphanitic basalt, minor augite porphyry
Age ? Klondike Schist
PIPk Phyllite, marble, greywacke
Mississippian
Mt Rusty orange bedded chert
Mv Intermediate cherty to sandy tuff and volcanic breccia
Devonian
Dvc Basalt, basalt tuff and breccia, calcarite
Silurian, L. Devonian
SDsq Calcareous quartz siltstone, orthoquartzite
Ordovician, Silurian
OSslq Graphitic, pyritic slate
OSslc Calcareous graphitic "sooty" slate
OScl Graphitic slate
Cambrian (?) Ordovician, Silurian
ЄOSDsl Orange weathering, thin bedded calcareous shale, siltstone and limestone
Upper Cambrian, Ordovician
ЄOcsl Thinly bedded shale, calcareous siltstone
SYMBOLS
Major Transcurrent fault
Steep dipping fault
Geological contact
Km 0 5 10 15 Km
DEL NORTE CHROME CORP.
CHOW I-92 & SPITZ I-120
REGIONAL GEOLOGY
WATSON LAKE MINING DISTRICT
YUKON TERRITORY
PAMICON DEVELOPMENTS LTD.
Drawn J.W.
N.T.S. 105 F, G
Date. May, 1987
FIG. No. 5

Rocks to the southeast of the Tintina fault zone consist of Paleozoic sediments and metasediments of the Pelly-Cassiar Platform. To the northwest lie rocks belonging to the Klondike schist series of unknown age and rocks belonging to the Anvil Allochthon (Figure 5). Tempelman-Kluit, 1979 and Gordey 1983 suggest the Anvil Allochthon represents eugeoclinal equivalents of the Selwyn Fold Belt that were thrust northeastward during the Mesozoic[1].

During Eocene, volcanism resulted in the emplacement of basaltic to rhyolitic rocks within the trench which has later been structurally deformed by a series of normal faults parallel to the Tintina fault. Jackson, Gordey, Armstrong and Harakal, 1986 refer to Tempelman-Kluit, 1972 and 1977 when describing the volcanics occurring in three tectonic environments;

1. Late Cretaceous to Tertiary intrusions into pre-Cretaceous bedrock, and possibly related felsic flows.

2. Steeply dipping basalts or basaltic tuffs and felsic tuffs occupying fault-bounded panels adjacent and subparallel to Tintina fault. These were assigned an early Tertiary age (Hughs and Long, 1979).

3. Flat-lying late Tertiary to Quaternary basalt flows occupying valley floors or with undetermined relations to underlying topography.

Recent work by Jackson, Gordey, Armstrong and Harakal indicates that the basalts described in example 3 are now of Eocene age.

Gold mineralization associated with Eocene felsic volcaniclastic rocks has been reported at Grew Creek approximately 12 kilometres northwest of Ross River.

[1] Duke and Godwin, 1986

5.0 LOCAL GEOLOGY

The Chow and Spitz groups are both located within Tintina trench immediately northeast of Tintina fault. No detailed geological mapping has been undertaken on the properties to date.

Mapping by the Geological Survey of Canada indicates the Chow claims are underlain primarily by Late Cretaceous to Tertiary acid to intermediate undifferentiated dacite and rhyolite. A narrow wedge of Late Tertiary sediments including sandstone, conglomerate and shale passes through the northeastern portion of the claims.

Mapping in the vicinity of the Spitz claims is less defined but regional mapping shows the claims to be underlain by Paleozoic schists. However, where outcrop is available, Tertiary acid volcanics have been mapped immediately to the northwest on Starr Creek and to the east near the Hoole River.

6.0 MINERALIZATION

On the Grew Creek property owned by Golden Nevada Resources Inc. gold occurs within dominantly felsic, crystal lithic lapilli tuff of Eocene age. Duke and Godwin, 1986 describe the mineralization as follows:

> "The mineralization is associated with the silicic alteration; chalcedonic quartz and K-feldspar veins in silicified material contain the highest values of precious metals.
>
> Gold, electrum, pyrite and silver selenide, occur as disseminated specks in and adjacent to quartz-potassium feldspar veins."

Alteration is described as both surficial and hydrothermal. Surficial alteration is ubiquitous, pervasive, and characterized by mixed-layer clays and carbonates. Hydrothermal alteration, responsible for the gold-silver mineralization is closely associated with rhyolitic dykes and is of three types: silicic, acid sulphate, and argillic acid sulphate.

A recent announcement by Noranda Exploration and joint venture partners Golden Nevada Resources and Brenda Mines shows significant gold values from six out of fifteen diamond drill holes. "Some of the higher grade intercepts included: 5 feet of 0.49 oz gold, 5 feet grading 0.43 oz, 5 feet of 0.37 oz and 5 feet averaging 0.2 oz. The remaining gold-bearing intercepts ranged from 9.9 feet of 0.11 oz gold to 5 feet grading 0.17 oz."[1]

Placer gold is known to occur along a portion of the Pelly River from Hoole River northwest to the town of Ross River, as well as in northerly to northeasterly flowing streams draining the area of Tertiary volcanics adjacent to Tintina fault.

Origin of the gold has not been determined, but concurrence of the limits of the Paleogene volcanics with the placers and certain surficial geologic features suggests a connection (Jackson, Gordey, Armstrong and Harakal, 1986). The existence of placer gold in Grew Creek may now be explained by the recent lode discovery.

Hydrothermal systems associated with similar felsic volcanic centres elsewhere in the region, perhaps unmapped or buried by drift, may be the ultimate source of the placer gold (Jackson, Gordey, Armstrong and Harakal, 1986). To date, no mineralization is known to occur on the Spitz and Chow groups. Therefore, a reconnaissance exploration program is necessary in order to fully evaluate the claims.

---

[1]The Northern Miner, Vol. 74, No. 13, p. 3, June 6, 1988

7.0 GEOPHYSICS

On April 23 and 27, 1988 an airborne geophysical survey employing a three frequency electromagnetic system, a high sensitivity cesium vapour magnetometer, a two frequency VLF-EM system, a film tracking camera, a radar positioning system, and an altimeter was completed on the Spitz and Chow claims.

A total of 256 kilometres of data was recorded on 200 metre spaced lines of azimuth 037 degrees. The data was compiled in map form which accompanies a comprehensive geophysical report by R.J. de Carle, Consulting Geophysicist, presented in Appendix C of this report.

In general, the survey indicates that both properties are covered by a somewhat conductive overburden. However, several bedrock conductors have been interpreted. These conductors have been designated C1, C2, etc. (Chow claims) and S1, S2, etc. (Spitz claims).

Calculation of the vertical magnetic gradient from the magnetic data appears to be helpful in the interpretation of subsurface geology. It was noted by Mr. de Carle "that the zero contour interval coincides directly or very close to geological contacts. It is because of this phenomenon that the calculated vertical gradient map can be compared to a pseudo-geological map." A few fault zones have also been indicated on each claim block.

8.0 CONCLUSIONS AND RECOMMENDATIONS

The Spitz and Chow claim groups are favourably located within a belt of Tertiary volcanic rocks known to host at least one epithermal gold occurrence. Placer gold distribution along the belt suggests the possibility of additional lode gold bearing zones.

The airborne geophysical survey has been successful in outlining several conductors on each of the Spitz and Chow claim blocks. In addition, calculation of the vertical magnetic gradient suggests that the magnetic data will be valuable in future interpretations of geological mapping especially in overburden covered areas. Several target areas for further exploration are detailed in Mr. de Carle's report (Appendix C).

A preliminary exploration program consisting of geological mapping, prospecting and geochemical sampling is recommended for the Spitz and Chow groups.

Respectfully submitted,

Charles K. Ikona, P.Eng.

Robert J. Darney, Geologist

APPENDIX A

BIBLIOGRAPHY

BIBLIOGRAPHY

de Carle, R.J. (1988): Report on a Combined Helicopter Borne Magnetic Electromagnetic and VLF Survey Chow and Spitz Properties, Pelly River Area, Yukon Territory (and accompanying maps 1 - 8)

Duke, J.L. and C.I. Godwin, (1986): Geology and Alteration of the Grew Creek Epithermal Gold-Silver Prospect, South-Central Yukon; in Yukon Geology, Vol. 1; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 72-82.

Jackson, L.E., S.P. Gordey, R.L. Armstrong and J.E. Harakal (1986): Bimodal Paleogene Volcanics Near Tintina Fault, East-Central Yukon, and Their Possible Relationship to Placer Gold; in Yukon Geology, Vol. 1; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 139-147.

Tempelman-Kluit, D.J. (1979): Geology of the Quiet Lake (105F) and Finlayson Lake (105G) Map Areas; Geological Survey of Canada Open File Report 486.

APPENDIX B

COST STATEMENT

COST STATEMENT

CHOW AND SPITZ MINERAL CLAIMS

Statement of costs on the Chow 1-92 and Spitz 1-120 mineral claims. Applicable costs are derived from attached invoices.

Aerodat Ltd.	
Re: Airborne Geophysical Survey	$20,000.00
Pamicon Developments Ltd.	
Re: Report, Reproduction and Recording Fees	4,982.50
Total costs incurred	$24,982.50
Less recording fees	1,060.00
Portion applicable for assessment	$23,922.50

AERODAT LIMITED
3883 NASHUA DRIVE • MISSISSAUGA • ONTARIO • CANADA • L4V 1R3
Telephone: (416) 671-2446 Telex: 06-968872 Fax: (416) 671-8160

STATEMENT

May 17, 1988

Del Norte Chrome Corporation
c/o # 615-625 Howe Street
Vancouver, British Columbia

Attn: R.G. Crompton

In Account with:

Aerodat Limited
3883 Nashua Drive
Mississauga, Ontario
L4V 1R3

RE: Airborne Geophysical Survey - Ross River, Yukon

Invoice No. 19-8845-0166	$ 7,000.00 May 17/88
Invoice No. 19-8845-0141	$ 6,500.00
Invoice No. 19-8845-0128	$ 6,500.00

The above three invoices have been
Paid in Full $20,000.00

Sincerely yours
P. A. Sebzda C.M.A.
Controller

PAMICON
DEVELOPMENTS LIMITED

PAMICON DEVELOPMENTS LIMITED
#711-675 WEST HASTINGS ST., VANCOUVER, B.C.
CANADA V6B 1N4
TELEPHONE: (604) 684-5901

INVOICE

To: Del Norte Chrome Corp.

Date: February 14, 1989
Amount: $4,982.50
Invoice No.: 1357

Re: Report and Filing
Chow and Spitz Claims

WAGES		
R. Darney - 8 days @ $350	$2,800.00	
C. Ikona - 1 day @ $400	400.00	
		$3,200.00
EXPENSES		
Drafting		390.00
Reproduction and Printing		100.00
Recording Fees		1,060.00
Management Fee		232.50
Total This Invoice		$4,982.50

Balances outstanding over 30 days subject to interest charges calculated at 1.5% per month (18% per annum)

APPENDIX C

GEOPHYSICAL REPORT by R.J. DE CARLE

Report on a Combined Helicopter Borne Magnetic Electromagnetic and VLF Survey Chow and Spitz Properties, Pelly River Area, Yukon Territory by R.J. de Carle, Consulting Geophysicist, July 15, 1988; Map Pocket: Accompanying Maps 1 - 8)

REPORT ON A
COMBINED HELICOPTER BORNE
MAGNETIC, ELECTROMAGNETIC AND VLF
SURVEY
CHOW AND SPITZ PROPERTIES
PELLY RIVER AREA
YUKON TERRITORY

FOR
DEL NORTE CHROME CORPORATION
BY
AERODAT LIMITED
July 15, 1988

J8845

R.J. de Carle
Consulting Geophysicist

TABLE OF CONTENTS

LIST OF MAPS

(Scale 1:10,000)

MAPS: (As listed under Appendix "B" of the Agreement)

1. PHOTOMOSAIC BASE MAP;
prepared from an uncontrolled photo laydown, showing registration crosses corresponding to NTS co-ordinates on survey maps.

2. FLIGHT LINE MAP;
showing all flight lines, anomalies and fiducials with the photomosaic base map.

3. AIRBORNE ELECTROMAGNETIC SURVEY INTERPRETATION MAP;
showing flight lines, fiducials, conductor axes and anomaly peaks along with inphase amplitudes and conductivity thickness ranges for the 4600 Hz coaxial coil system with the photomosaic base map.

4. TOTAL FIELD MAGNETIC CONTOURS;
showing magnetic values contoured at 2 nanoTesla intervals, flight lines and fiducials with the photomosaic base map.

5. VERTICAL MAGNETIC GRADIENT CONTOURS;
showing magnetic gradient values contoured at 0.2 nano-Teslas per metre with the photomosaic base map.

6. APPARENT RESISTIVITY CONTOURS;
showing contoured resistivity values, flight lines and fiducials with the photomosaic base map.

7. VLF-EM TOTAL FIELD CONTOURS;
showing VLF-EM values contoured at 1% intervals, flight lines and fiducials with the photomosaic base map.

8. ELECTROMAGNETIC PROFILES;
showing flight lines, fiducials, inphase and quadrature responses for the:
a) low frequency (935 Hz) coaxial system
b) low frequency (4175 Hz) coplanar system
c) high frequency (4600 Hz) coaxial system

1. INTRODUCTION

This report describes an airborne geophysical survey carried out on behalf of Del Norte Chrome Corporation by Aerodat Limited. Equipment operated included a three frequency electromagnetic system, a high sensitivity cesium vapour magnetometer, a two frequency VLF-EM system, a film tracking camera, a radar positioning system, and an altimeter. Electromagnetic, magnetic and altimeter data were recorded both in digital and analog form. Positioning data were stored in digital form and recorded on VHS video cassette film, as well as being marked on the flight path mosaic by the operator while in flight.

There are two survey blocks, known as the Chow block and Spitz block, and they are located approximately 20 kilometres and 53 kilometres respectively from Ross River, Yukon Territory. Two flights were needed to complete the survey and were flown on April 23 and 27, 1988. A flight direction of Azimuth 037 degrees was utilized for both blocks with a nominal line spacing of 200 metres. Coverage and data quality were considered to be well within the specifications described in the contract.

The survey objective is the detection and location of mineralized zones which can be directly or indirectly related to base metal exploration targets. Of importance, therefore, would be Vangorda type flat lying lead-zinc sulphide replacement deposits. The deposit comprises an overlapping series of horizontal lenses of sulphides that appear to replace a favourable sedimentary bed. Because of the expected poor conductivity associated with these types of mineralized zones, electromagnetic repsonses that display weak signatures may be of interest in any future ground program. Magnetics may or may not have any significance because of the presence of other magnetic zones.

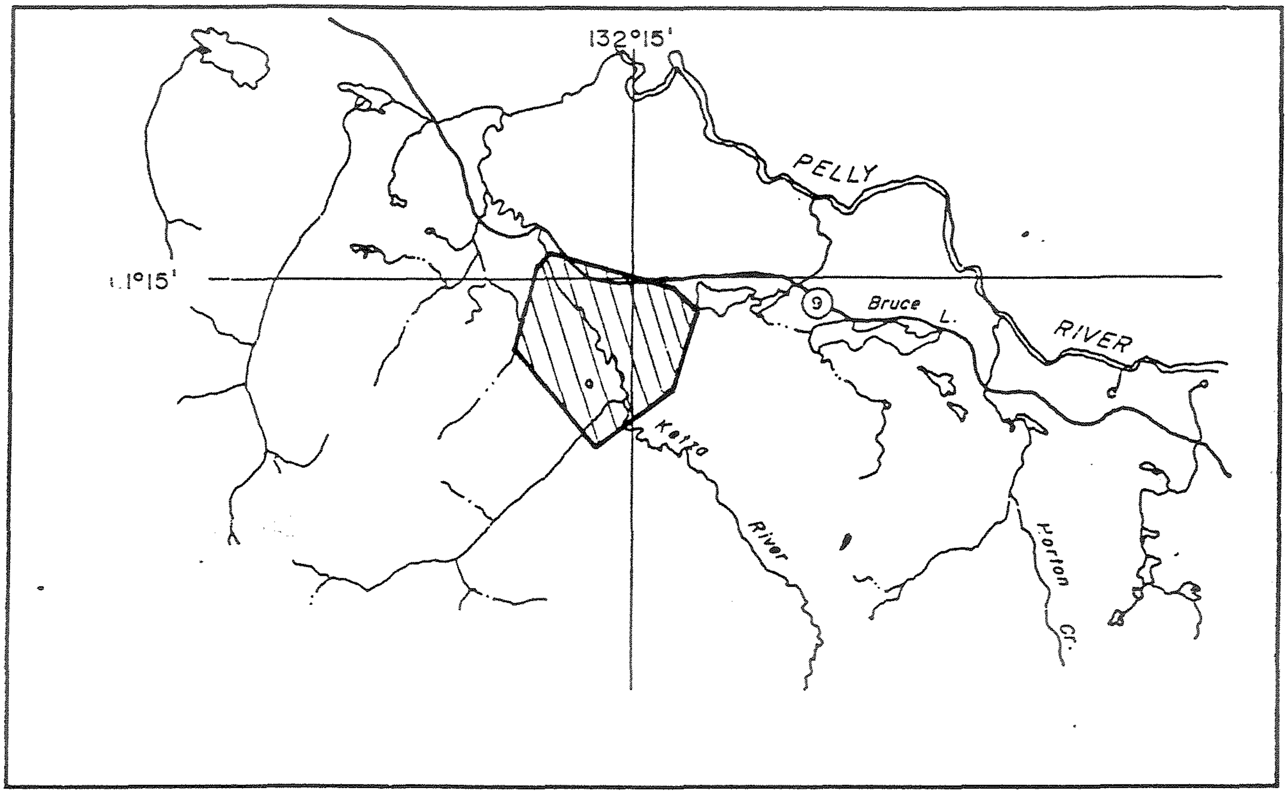
Also of considerable interest is the recent precious metal activity in the Grew Creek area, as well as the Ketza River gold properties.

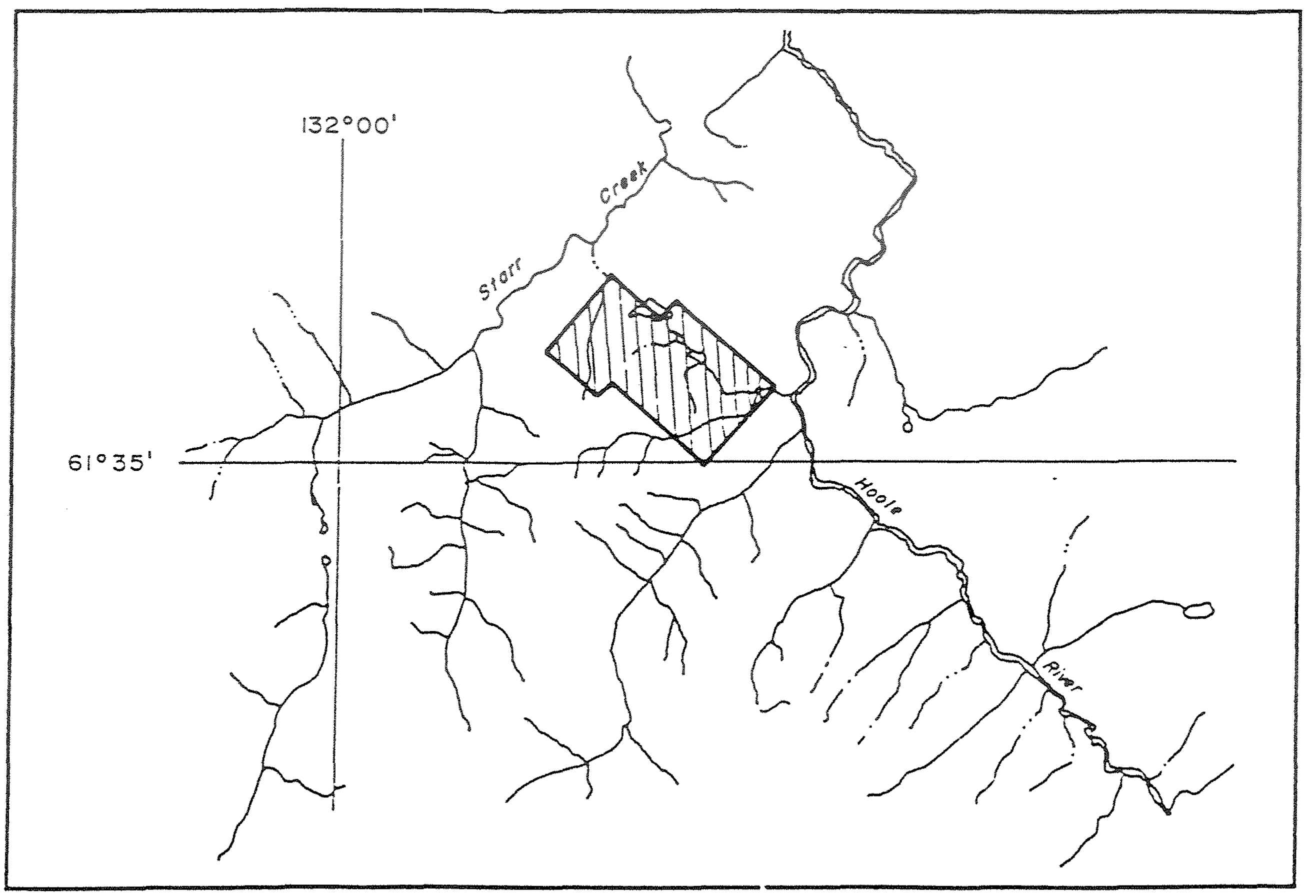
A total of 256 kilometres of the recorded data were compiled in map form and are presented as part of this report according to specifications outlined by Del Norte Chrome Corporation.

2. SURVEY AREA LOCATION

The survey blocks are depicted on the index map as shown. The Chow block is centered at Latitude 61 degrees 48 minutes north, Longitude 132 degrees 17 minutes west, approximately 20 kilometres southeast of Ross River, Yukon. As well, the Spitz block is centred at Latitude 61 degrees 36 minutes north, Longitude 131 degrees 48 minutes west, approximately 53 kilometres southeast of Ross River. Traversing across the north end of the Chow block is the Robert Campbell Highway and access to this block can also be made by a road leading south through the east central portion of the area. Access to the Spitz block is somewhat more difficult and seems that the only access is by helicopter from Ross River.

The terrain varies from north to south in both survey blocks with elevations generally in the order of 3000-3500 feet in the north to as high as 5000 feet at the south ends of each block.


132°15'
PELLY
RIVER
Bruce L.
9
Ketza
River
Horton Cr.


132°00'
61°35'
Starr Creek
Hoole
River

3. AIRCRAFT AND EQUIPMENT

3.1 Aircraft

An Aerospatiale A-Star 350D helicopter, (C-GBBX), owned and operated by Ranger Helicopters Limited, was used for the survey. Installation of the geophysical and ancillary equipment was carried out by Aerodat. The survey aircraft was flown at a mean terrain clearance of 60 metres.

3.2 Equipment

3.2.1 Electromagnetic System

The electromagnetic system was an Aerodat 3-frequency system. Two vertical coaxial coil pairs were operated at 935 Hz and 4600 Hz and a horizontal coplanar coil pair at 4175 Hz. The transmitter-receiver separation was 7 metres. Inphase and quadrature signals were measured simultaneously for the 3 frequencies with a time constant of 0.1 seconds. The electromagnetic bird was towed 30 metres below the transmitter.

3.2.2 VLF-EM System

The VLF-EM System was a Herz Totem 2A. This instrument measures the total field and quadrature components of two selected transmitters, preferably oriented at right angles to one another. The transmitters monitored were NLK, Jim Creek, Washington broadcasting at 24.8 kHz. for the Line station and NSS, Annapolis, Maryland broadcasting at 21.4 kHz. for the Orthogonal station.

3.2.3 Magnetometer

The magnetometer employed a Scintrex Model VIW-2321 H8 cesium, optically pumped magnetometer sensor. The sensitivity of this instrument was 0.1 nanoTeslas at a 0.2 second sampling rate. The sensor was towed in a bird 12 metres below the helicopter.

3.2.4 Magnetic Base Station

An IFG-2 proton precession magnetometer was operated at the base of operations to record diurnal variations of the earth's magnetic field. The clock of the base station was synchronized with that of the airborne system to facilitate later correlation.

3.2.5 Radar Altimeter

A King Air HRA-100 radar altimeter was used to record terrain clearance. The output from the instrument is a linear function of altitude for maximum accuracy.

3.2.6 Tracking Camera

A Panasonic video tracking camera was used to record flight path on VHS video tape. The camera was operated in continuous mode and the fiducial numbers and time marks for cross reference to the analog and digital data were encoded on the video tape.

3.2.7 Analog Recorder

An RMS dot-matrix recorder was used to display the data during the survey. In addition to manual and time fiducials, the following data were recorded:

Channel	Input	Scale
CXI1	Low Frequency Coaxial Inphase	2 ppm/mm
CXQ1	Low Frequency Coaxial Quadrature	2 ppm/mm
CXI2	High Frequency Coaxial Inphase	2 ppm/mm
CXQ2	High Frequency Coaxial Quadrature	2 ppm/mm

Channel	Input	Scale
CPI1	Mid Frequency Coplanar Inphase	8 ppm/mm
CPQ1	Mid Frequency Coplanar Quadrature	8 ppm/mm
PWRL	Power Line	60 Hz
VLT	VLF-EM Total Field, Line	2.5%/mm
VLQ	VLF-EM Quadrature, Line	2.5%/mm
VOT	VLF-EM Total Field, Ortho	2.5%/mm
VOQ	VLF-EM Quadrature, Ortho	2.5%/mm
ALT	Altimeter	10 ft./mm
MAGF	Magnetometer, Fine	2.5 nT/mm
MAGC	Magnetometer, Coarse	25 nT/mm

3.2.8 Digital Recorder

A DGR 33 data system recorded the survey on magnetic tape. Information recorded was as follows:

Equipment	Recording Interval
EM system	0.1 seconds
VLF-EM	0.5 seconds
Magnetometer	0.2 seconds
Altimeter	1.0 seconds

3.2.9 Radar Positioning System

A Motorola Mini-Ranger III radar navigation system was used for both navigation and flight path recovery. Transponders sited at fixed locations were interrogated several times per second and the ranges from these points to the helicopter measured to a high degree of accuracy. A navigational computer triangulates the position of the helicopter and provides the pilot with navigation information. The range/range data was recorded on magnetic tape for subsequent flight path determination.

4. DATA PRESENTATION

4.1 Base Map

A photomosaic base at a scale of 1:10,000 was prepared from a photo lay down map, supplied by Aerodat, on a screened mylar base.

4.2 Flight Path Map

The flight path was derived from the Mini-Ranger radar positioning system. The distance from the helicopter to two established reference locations was measured several times per second and the position of the helicopter calculated by triangulation. It is estimated that the flight path is generally accurate to about 10 metres with respect to the topographic detail of the base map. The flight path map showing all flight lines, is presented on a Cronaflex copy of the photomosaic base map, with time markers and navigator's manual fiducials for cross reference to both the analog and digital data.

4.3 Airborne Electromagnetic Survey Interpretation Map

The electromagnetic data were recorded digitally at a sample rate of 10 per second with a time constant of 0.1 seconds. A two stage digital filtering process was carried out to reject major sferic events and to reduce system noise.

Local sferic activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major sferic events.

The signal to noise ratio was further enhanced by the application of a low pass digital filter. It has zero phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 0.25 seconds. This low effective time constant permits maximum profile shape resolution.

Following the filtering process, a base level correction was made. The correction applied is a linear function of time that ensures the corrected amplitude of the various inphase and quadrature components is zero when no conductive or permeable source is present. The filtered and levelled data were used in the interpretation of the electromagnetics.

An interpretation map was prepared showing peak locations of anomalies and conductivity thickness ranges along with the

Inphase amplitudes (computed from the 4600 Hz coaxial response) and conductor axes. The anomalous responses of the four coil configurations along with the interpreted conductor axes were plotted on a Cronaflex copy of the photomosaic base map.

4.4 Total Field Magnetic Contours

The aeromagnetic data were corrected for diurnal variations by adjustment with the digitally recorded base station magnetic values. No correction for regional variation was applied. The corrected profile data were interpolated onto a regular grid at a 25 metre true scale interval using a cubic spline technique. The grid provided the basis for threading the presented contours at a 2 nanoTesla interval.

The contoured aeromagnetic data have been presented on a Cronaflex copy of the photomosaic base map.

4.5 Vertical Magnetic Gradient Contours

The vertical gradient was computed from the total field magnetic data to obtain values in nanoteslas/metre.

The gridded data were compiled at a 25 metre true scale interval and contoured at an interval of 0.2 nanotesla per metre and presented with flight path on a Cronaflex copy of the photomosaic base map.

4.6 Apparent Resistivity Contours

The electromagnetic information was processed to yield a map of the apparent resistivity of the ground.

The approach taken in computing apparent resistivity was to assume a model of a 200 metre thick conductive layer (i.e., effectively a half space) over a resistive bedrock. The computer then generated, from nomograms for this model, the resistivity that would be consistent with the bird elevation and recorded amplitude for the 4600 hz coaxial frequency pair used. The apparent resistivity profile data were interpolated onto a regular grid at a 25 metres true scale interval using an Akima spline technique.

The contoured apparent resistivity data were presented on a Cronaflex copy of the photomosaic base map with the flight path.

4.7 VLF-EM Total Field Contours

The VLF-EM signals from NLK, (Jim Creek, Washington) was also gridded at a 25 metre interval and presented on a Cronaflex copy of the photomosaic base map along with the flight lines.

5. INTERPRETATION

5.1 Geology

The writer did not have access to any detailed geology maps for either block. However, available to the writer, were two generalized geology maps to the north, the Tay River Map Area, Map 19-1987, Sheet 2 of 3 and the Sheldon Lake Area, Map 19-1987, sheet 3 of 3.

To the north of the Chow block, there are known to be Pennsylvanian and Permian dark grey-green basalt, tuff and breccia. Possibly on strike to the northwest of this survey block is a group of Carboniferous to Triassic rocks indicated to be grey weathering muscovite, quartz blastomylonite and recessive, muscovitic quartzite and quartz-muscovite-biotite schist. Further to the west, Pennsylvanian and Permian serpentinite, as well as dark grey limestone and Tertiary laminated rhyolitic ash flow tuffs and flows have been mapped.

The writer is not, however, familiar at all with the geology in the Spitz block area.

The most notable discoveries in the general vicinity of the survey block are the Vangorda, Faro, Grum and Swim lead-zinc-silver deposits. All of these mineralized deposits are located on the north side of the Tintina Fault, within what are believed to be Lower Cambrian Gull Lake Formation rocks. They include slate, siltstone and schist. Edward O. Chisholm, 1957, has described the Vangorda deposit as an overlapping series of horizontal lenses of sulphides that appear to replace a favourable sedimentary bed. The host rocks comprise a flat lying sedimentary assemblage which can be divided into two main zones, namely, one predominately chloritic sericitic schist, and the other predominantly graphitic schist. They are intimately associated with much intercalation at the edges of the graphitic horizon.

The mineralization is a fine grained aggregate of sulphides in a siliceous matrix consisting of pyrite, sphalerite, galena, pyrrhotite, chalcopyrite and smaller amounts of arsenopyrite, magnetite, marcasite and tennantite. The assemblage indicates a hydrothermal replacement deposit.

Alteration is predominantly sericitic and chloritic and is intensified in an envelope surrounding the mineralized deposit.

The control of deposition appears to be lithological rather than structural but at this stage (1957) there is insufficient evidence to decide.

Two recent gold discoveries in close proximity to the survey area, are the Ketza River deposit owned by Canamax Resources Inc. and Pacific Trans-Ocean Resources Inc. and the Grew Creek deposit owned by Golden Nevada Res. and Noranda Exploration Co. Both deposits are located southeast of the survey area, near Ross River.

The writer does not have access to detailed geological or mineralogical information on the two deposits. However, the Ketza River deposit is known to be a pipe and manto deposit consisting of both primary sulphide and secondary oxide ores.

Diamond drilling has outlined an oxide reserve of 430,000 tons grading 0.51 oz. gold per ton as well as 195,000 tons of sulphide ore reserves grading 0.48 oz. gold per ton. There are at least three or four separate deposits.

The major stratigraphic units, from youngest to oldest, recognized on the property consist of black shale unconformably underlain by green mudstone-phyllite which is, in turn, underlain by limestone-dolomite containing archeoyathid fossils and irregular bands of oncoids or ooids. The base of the sequence is interbedded argillite-quartzite hornfels.

Mineralization on the Ketza property is hosted by the limestone-dolomite unit and is contained within irregularly shaped pipes and mantos of massive to semi-massive sulphide and their oxidized equivalents. The Northern Miner Magazine, January 1987.

The second deposit, known as the Grew Creek deposit, is located somewhat closer to the Chow survey area than the Spitz area. It is located just south of Highway 9 or Robert

Campbell Highway, along Grew Creek. The rocks are believed to be of Tertiary age and have been indicated to be felsic tuffs. Pyrite seems to be the main mineral which typically runs 1-2%. They are also getting minor mercury and arsenic values, a lack of which indicates they are out of the ore zone.

"The discovery appears to occur on a major structure which is believed to be related to the lead-zinc deposits at Faro, 25 miles to the northwest". It is interesting to note that a lead-zinc halo seems to be enveloping the gold zones near the Ketza River deposits. An interesting phenomenon.

The Grew Creek gold deposit appears to be stratabound with the gold values occuring in a tuff horizon, implying some tonnage potential. Structural events do seem to play an important role in the ore development stages.

5.2 Magnetics

The magnetic data from the high sensitivity cesium magnetometer provided virtually a continuous magnetic reading when recording at two tenth second intervals. The system is also free for all practical purposes.

The sensitivity of 0.1 nanoTesla allows for the mapping of very small inflections in the magnetic field, resulting in a contour map that is comparable in quality to ground data. Both the fine and coarse magnetic traces were recorded on digital tapes.

As mentioned previously, the writer did not have access to any detailed geology maps for either block so that a geological-geophysical interpretation was not possible.

Referring to the Chow block, the northwest-southeast trending magnetic feature along the southern quarter of the block may be related to Triassic quartz-muscovite-biotite schist. Associated magnetite within this horizon may be the cause of the magnetism. A southwesterly dip is interpreted for this feature.

The high intensity feature located towards the northeast corner of the Chow block may be related to Pennsylvanian and Permian serpentinite. It is a reasonably high intensity feature that may, in fact, be dipping towards the northeast.

The widespread region of magnetic lows throughout the Chow block may be related to limestone or it may be evidence of block faulting which has resulted in a somewhat deeper source.

In other words, the deeper seated source is the cause of the lower intensity magnetic features.

Referring to the Spitz block, the interesting aspect of this block are the extremely sharp magnetic lows. It is quite possible that there is a graben located towards the northwest corner of the survey block. The magnetic highs on either side of this feature are probably related to the same rock types as does the other magnetic highs to east, the north central portion and northeast corner of the survey block.

A somewhat oblong shaped magnetic low located in the centre of the Spitz survey block may be related to a felsic intrusive, as may the area to the west and southeast.

The bedding of the lithology within this survey block is either steeply dipping or to the south.

Because of the absence of any geology for the Spitz block, any geological-geophysical interpretation is not possible.

5.3 Vertical Magnetic Gradient

The areas of high intensity magnetics have been clearly broken into unique trends as a result of the computation of the vertical gradient. This interpretation is not as readily obvious when one refers to the magnetic total field map. These are the areas that have been related to the Tertiary granite - granodiorite group. There is a distinct difference in magnetic susceptibility between the granite-granodiorite group rocks and the surrounding basalts and limestones.

It should also be noted that the zero contour interval coincides directly or very close to geological contacts. It is because of this phenomenon that the calculated vertical gradient map can be compared to a pseudo-geological map. This is true for vertical bedding. However, with the bedding dipping at a steep to moderate angle to the south, it will be found that the geological contacts will be closer to the magnetic peaks by a small distance.

By using known or accurate geological information and combining this data with vertical gradient data, one can use the presented map as a pseudo-geological map. Obviously, the more that is know about an area geologically, the closer this type of presentation is to what the rock types are.

This type of presentation is an invaluable tool in helping to define complex geology, especially in drift covered areas. Not only in areas of complex geology but in areas of closely spaced geologic formations, has the calculated vertical gradient computation been of exceptional value. Since a good portion of the survey area is overlain with till, boulders and swamps, this particular presentation will be very useful.

This writer has indicated a few fault zones on the interpretation map for both blocks. Because of the nature of the computation of the vertical gradient data, magnetic anomalies produced by near surface features are emphasized with respect to those resulting from more deeply buried rock formation. As a result, much more detail is obtained, providing a better opportunity to recognize faults. As mentioned, some fault structures have been interpreted by the writer, however, it will become more apparent to the client as more field geological information is obtained, that other fault zones do exist.

It is quite conceivable that the well known major Tintina Fault traverses through the Chow block in a northwest-southeast direction. The writer has indicated a possible fault on this block, that traverses through the middle of the block. However, it is also possible that the Tintina Fault traverses through the extreme northeast corner of the block. A further analysis of this structural feature should be made by the client. Regarding the Spitz block, the writer is unsure of the exact location of the Tintina Fault.

Structural effects seem to play an extremely important role in the ore making process as is evident with the Ketza River deposit of Canamax - Pacific Trans Ocean and the Grew Creek discovery of Noranda Exploration - Golden Nevada. As such, a closer examination of the magnetic data for such structural effects is recommended.

This presentation will also, perhaps, change the client's mind about certain geological horizons and especially the location of contacts.

5.4 Electromagnetics

The electromagnetic data was first checked by a line-by-line examination of the analog records. Record quality was good with minor noise levels on the low frequency smoothing filter. Instrument noise was well within specifications. Geologic noise, in the form of surficial conductors, is present on the higher frequency responses and to a minor extent, on both the low frequency inphase and quadrature response.

Anomalies were picked off the analog traces of the low and high frequency coaxial responses and then validated on the coplanar profile data. These selections were then checked with a proprietary computerized selection program which can be adjusted for ambient and instrumental noise. The data were then edited and re-plotted on a copy of the profile map. This procedure ensured that every anomalous response spotted on the analog data was plotted on the final map and allowed for the rejection - or inclusion if warranted - of obvious surficial conductors. Each conductor or group of conductors was evaluated on the bases of magnetic (and lithologic, where applicable) correlations apparent on the analog data and man made or surficial features not obvious on the analog charts.

RESULTS

As a result of carrying out an airborne survey over the Chow block and the Spitz block, both areas demonstrate that a somewhat conductive overlying cover is widespread. Portions of the Chow block are resistive but for the most part, the overburden as well as lake bottom sediments are quite conductive. All areas in close proximity to the Ketza River contain sediments and silts that are conductive. It would also seem that the smaller lakes located to the south of the Ketza River display similar characteristics. An area located in the north central portion of the Chow block, just to the south of the Robert Campbell Highway, is also very conductive. It is an area that is quite wide, approximately 400 metres and its source is probably a low lying swamp. Another extremely conductive area, within the Chow block, is towards the south-west. At this point in time, it is not known whether it is overburden related or perhaps bedrock related.

Referring to the Spitz block, it will be noted that most, if not all, of this survey area is very conductive. It would seem that the areas that contain the most highly conductive sediments are the west to northwest regions. Areas to the east do not seem to be as conductive.

There were very few bedrock conductors intercepted within the Chow block during the course of flying this area. Nine conductors have been indicated on the interpretation map and have been labelled as C1, C2 etc. As mentioned previously, the writer did not have access to any detailed geological maps so that a geological-geophysical interpretation cannot be given.

Zone C1 displays an extremely poor electromagnetic response which seems to be correlating with the flank of a magnetic trend. There are no lakes or creeks in the area so that any conductive sources from these environments are not related. It is recommended that no further work be carried out on this trend or at least, should be treated as a low priority target.

The writer interprets Zone C2 as a long, linear bedrock conductor which, for the most part, seems to be dipping towards the north. It is somewhat unknown towards the west central portion of the trend as the conductor seems to be much wider and not half-plane conductors. The bedding, therefore, is perhaps near vertical. The location of the conductor is near the flank of a magnetic trend suggesting a possible relationship with either a geological contact or a structural feature. Areas to investigate along this trend are near intercepts 90A, 170A and 270B.

Zones C3 and C4 are believed to be bedrock related as they both display fair to good electromagnetic responses. In both cases, the trends are dipping towards the south. It would seem that Zone C3 is somewhat isolated whereas C4 could be part of a much longer trend. In fact, referring to the EM profile map of the Chow block, it will be noted that Zone C4 seems to be a part of the long, wide conductive horizon of which Zone C5 is also a part of. However, C4 seems to have the characteristics of a bedrock source.

It is suggested that any further follow-up on Zone C5 should be carried out in the vicinity of lines 190 and 200. These two intercepts display fair EM responses but have no magnetic association. Pyrite and/or graphite would seem to be the cause. It is also possible that the eastern extent of the conductor has been cut off by an interpreted fault zone. A ground reconnaissance survey is recommended.

Both Zones C6 and C7 seem to be isolated intercepts displaying fair EM responses. In both cases, they are correlating with a magnetic low. It is possible that the source for these two anomalies is similar to that for Zones C8 and C9. A ground reconnaissance check is advised. It seems that both trends are located near the bottom of the north side of a mountain.

As mentioned earlier, Zones C8 and C9 may be correlating with the same geological horizon as that for Zones C6 and C7. The former conductive trends are definitely bedrock related and it is not known at this particular time, whether or not there has been some effect from the interpreted fault zone which has been indicated just to the east of Zone C8.

Because of the number of conductors indicated on the interpretation map for the Spitz block, the writer will only give a few brief comments for each. Zone S1 is a very poor conductor that perhaps, does not warrant any further attention. Zone S2, on the other hand, also displays a poor EM response, but may be related to a poorly mineralized bedrock source. Zone S3 is definitely a low priority target, as is Zone S4. Only if other encouraging information for both of these areas exist, should further work be contemplated.

Zones S5, S6, S7, S8 and S9 all display poor electromagnetic responses. Only S8 has any signs of being caused by a bedrock source. It is also felt that Zone S7 may be an extention of Zone S8. A ground reconnaissance survey is suggested for this area.

Zones S10, S11 and S13 each display characteristics of being related to a bedrock source. S12, on the other hand, does not.

Zones S14 and S16 display extremely weak electromagnetic responses and ones that perhaps should not be pursued any further when in the field. Intercept 1220B within Zone S15, on the other hand, should be followed up because of its probable association with a bedrock source.

Zones S17 and S21 each display characteristics of being related to a bedrock source, with Zones S18 and S20 probably the better conductors. Zones S22 and S23 are not that well defined but perhaps should be given some attention while in the field. Zones S24 and S25 are rather poor conductors and further work on them is not warranted.

5.5 Apparent Resistivity

It is very apparent that not only has this data presentation shown that lake bottom sediments within the two survey blocks are conductive, but it has also shown that this method is also sensitive to what is interpreted as conductive overburden.

The region in close proximity to the Ketza River is rather conductive, in fact, showing apparent resistivities as low as 45 ohm-metres. Most other areas within the Chow block exhibit apparent resistivities in the order of 100 ohm-metres. It would seem that the Spitz block is somewhat more resistive than the Chow block. In this locale, the lowest apparent resistivity values are generally with the 100 to 500 ohm-metre range, with some areas being as low as 50 ohm-metres. As to be expected, lake bottom sediments display somewhat lower values.

There is little or no correlation between the apparent resistivity data and the magnetic data suggesting an absence of any relationship between the apparent resistivity information and the basement rocks. Referring to the Chow block, there is a subtle correlation between apparent resistivity lows and some of the magnetic highs. This, it can be said, may be an indication of a relationship between the apparent resistivity and the underlying rock types. A similar comparison cannot be made for the Spitz block, but then again, for the Chow block, this is just an observation.

Within the Chow block, all indicated conductors on the interpretation map have been defined on the apparent resistivity data presentation, with the exception of Zone C1. As mentioned previously, this trend was subsequently questioned as to its relationship with a bedrock source. Also questioned are Zones C3 and C4, however, both of these conductors are identified as bedrock zones.

A similar comparison of the Spitz block shows that not all of the outlined conductors correlate with the apparent resistivity data. This may be attributed to several phenomenon, one, conductors related to surficial sources, two, a lack of resolution of the apparent resistivity data with closely spaced bedrock conductors and three, the wrong model is being utilized for the type of bedrock conductors that exist in this block.

Generally speaking, the various lithological units within both survey blocks are not mappable utilizing this method. Without having more geological information for both areas, the writer cannot, at this time, elaborate any further on the geological relationships with the apparent resistivity data.

It is interesting to note that in some areas, the apparent resistivity can be used to extend strike length for some of the conductors. As well, the strike direction with apparent folding can also be interpreted.

5.6 VLF-EM Total Field

The VLF data within both survey blocks, in general, do not conform with the magnetic data at all. It is quite clear after examining the comparison of the two sets of data, VLF and the magnetics, that there are no similarities whatsoever.

In regards to the 3 frequency EM data, only where the conductors are reasonably strong is there any indications of a VLF response.

It is suggested that the VLF-EM system has been sensitive to the rather rough terrain in both areas. It will be noted that in a good many areas where there are sharp valleys or gouges, that a VLF low exists. These particular signatures are thought to be related to a weakening of the VLF transmitted signal when the helicopter has been hidden behind a hill. In areas of higher elevation, a VLF high or background reading seem to prevail.

In general then, the VLF-EM has not produced data of any significance.

5.7 Recommendations

It is strongly recommended to the client that a complete and comprehensive evaluation be made of the magnetic data and especially the calculated vertical gradient magnetic data. All available geological information should be obtained, either through geological maps, diamond drill holes or through the assessment files. Once such information is obtained, a broad scale geological map should be compiled and then, in reference to the calculated vertical gradient magnetic map, a reasonable pseudo-geological map can then be prepared.

Structural information should be obtained through a more comprehensive evaluation of the magnetic data and possibly through an overview of the apparent resistivity data. Cross-cutting faults are evident within both survey blocks and are extremely important with respect to any mineralogical controls and as such, the development of these structural events through interpreting the magnetic data, will be strongly advised.

As mentioned previously, there is a thin to thick layer of glacial till over most areas within both survey blocks. Over the most favourable areas geologically, till or soil sampling for gold is recommended with any correlation of subsequent anomalous areas and intercepted bedrock conductors being prime targets for drilling.

It is suggested that overburden reverse circulation drilling may be of some merit in certain areas. Such areas as Zones C3, C4, C5, C7, S8, S10, S11, S13 and S20 are just some of the conductors that should be followed up.

In regards to a follow-up geophysical system, any of the horizontal loop EM systems can be used. It would seem that detectability should be easy for any of the types of conductors intercepted in the survey areas. However, the use of a VLF-EM system is not considered an optimum system because of its lack of penetrating ability, its lack of resolution and the variable signal intensity being received. An induced polarization (IP) survey could be carried out in areas where anomalous gold values, from overburden drilling, have been obtained but EM systems have not responded. As well, the IP system may also be used in areas where ground EM methods have not defined the conductors fully or if disseminated sulphides are suspected.

Because of the proximity of the survey areas to the large lead-zinc sulphide deposits near Faro, it is recommended that one should keep an open mind to these types of mineralized targets besides the most sought after auriferous zones. It is interesting to note that a lead-zinc halo seems to be enveloping the gold zones near the Ketza River deposits.

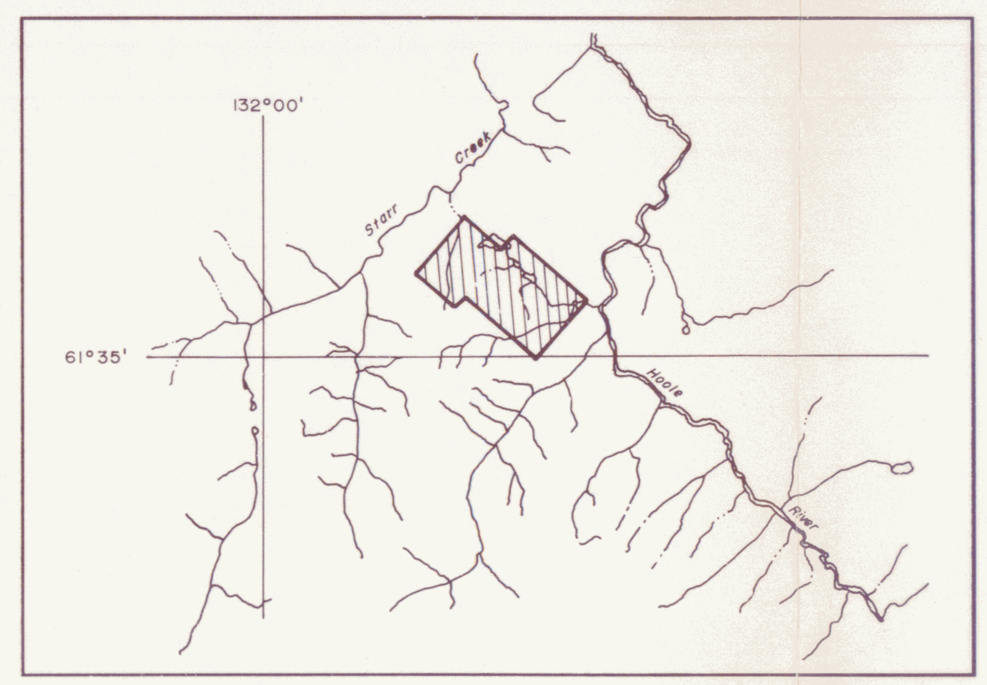
There is no question of the existence of bedrock conductors within the survey area. It is a matter of using all resources, including geophysics, drill information and the compilation of a pseudo-geological map. Reverse circulation drilling may render additional information, for some areas, that will lead to an exciting exploration program.

Respectfully submitted,

Robert J. de Carle

Robert J. de Carle
Consulting Geophysicist
For
AERODAT LIMITED
July 15, 1988

J8845



DEL NORTE CHROME CORPORATION

BASE MAP

SPITZ

YUKON TERRITORY

SCALE 1:10,000

0 330 660 1320 1/2 MILE

0 100 200 500 1 KILOMETRE

AERODAT LIMITED

DATE:	APRIL 1988
NTS No:	105 G/12
MAP No:	1 J8845

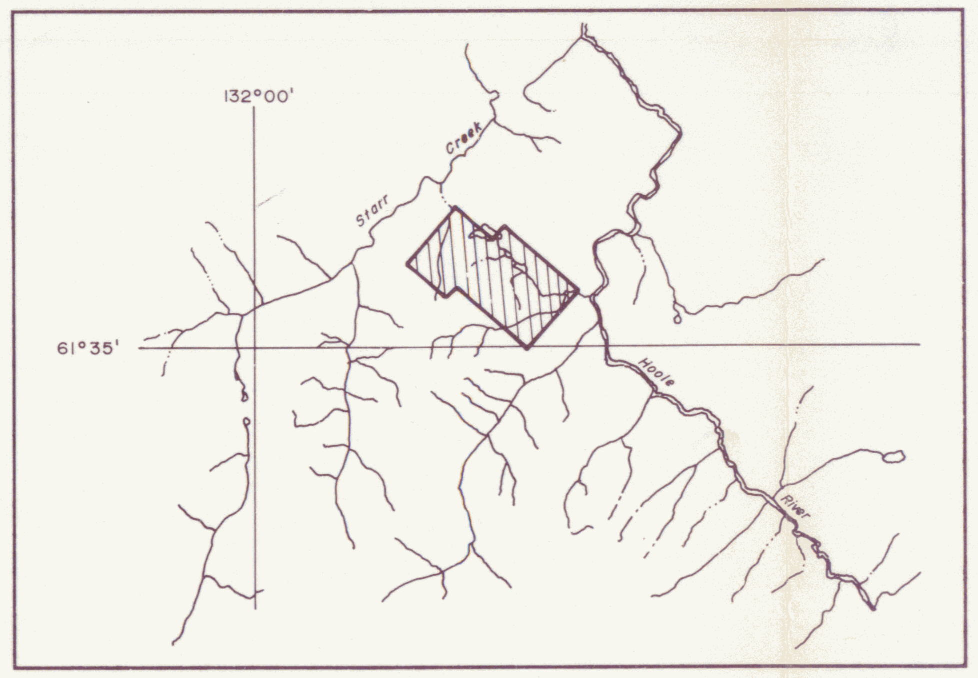
(2)

092688

Flight Path

Navigation and recovery using Motorola Mini-Ranger (MRS III) radar navigation system.

Average terrain clearance 60m
Average line spacing 200m



DEL NORTE CHROME CORPORATION

FLIGHT PATH

SPITZ

YUKON TERRITORY

SCALE 1:10,000

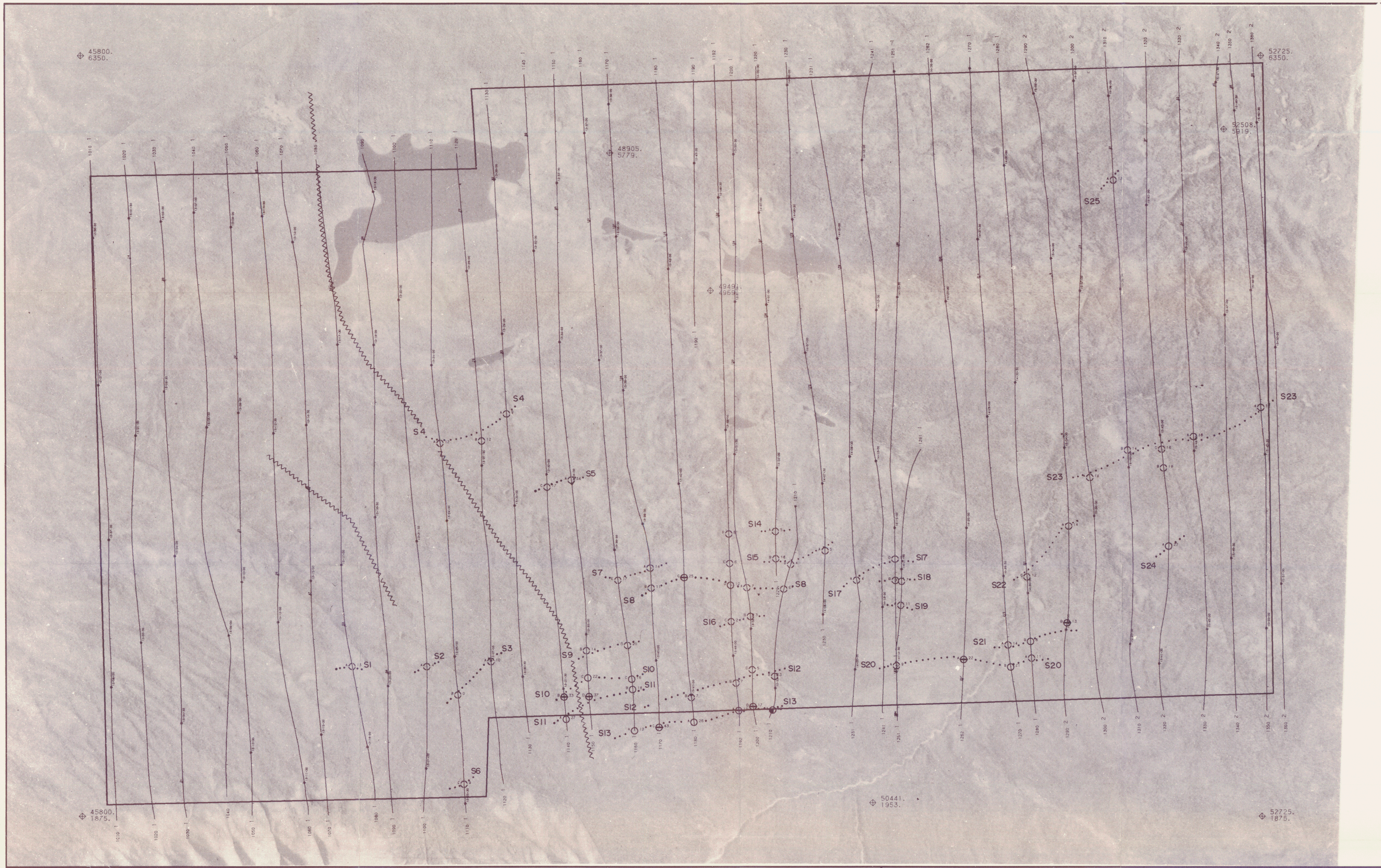
0 330 660 1320 1/2 MILE

0 100 200 500 1 KILOMETRE

AERODAT LIMITED

DATE:	APRIL 1988
NTS No:	105 G/12
MAP No:	2 J8845

(3) 092688



Flight Path

Navigation and recovery using Motorola Mini-Ranger (MRS III) radar navigation system.

Average terrain clearance 60m
Average line spacing 200m

INTERPRETATION LEGEND

Interpreted bedrock conductor axis

Possible bedrock conductor axis

Fault

Conductive Zone

S2 Selected target

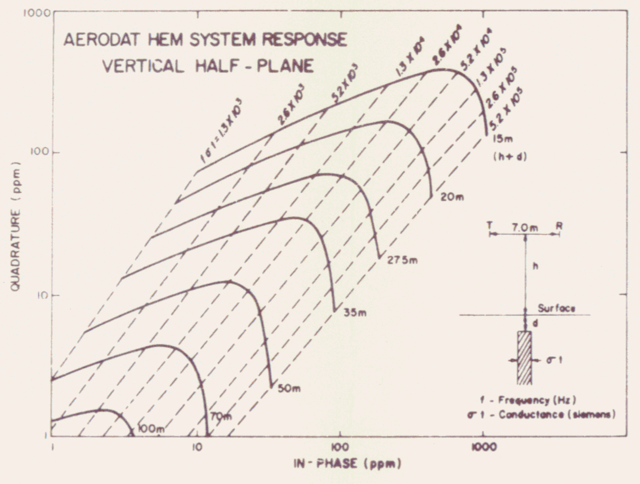
Direction of dip

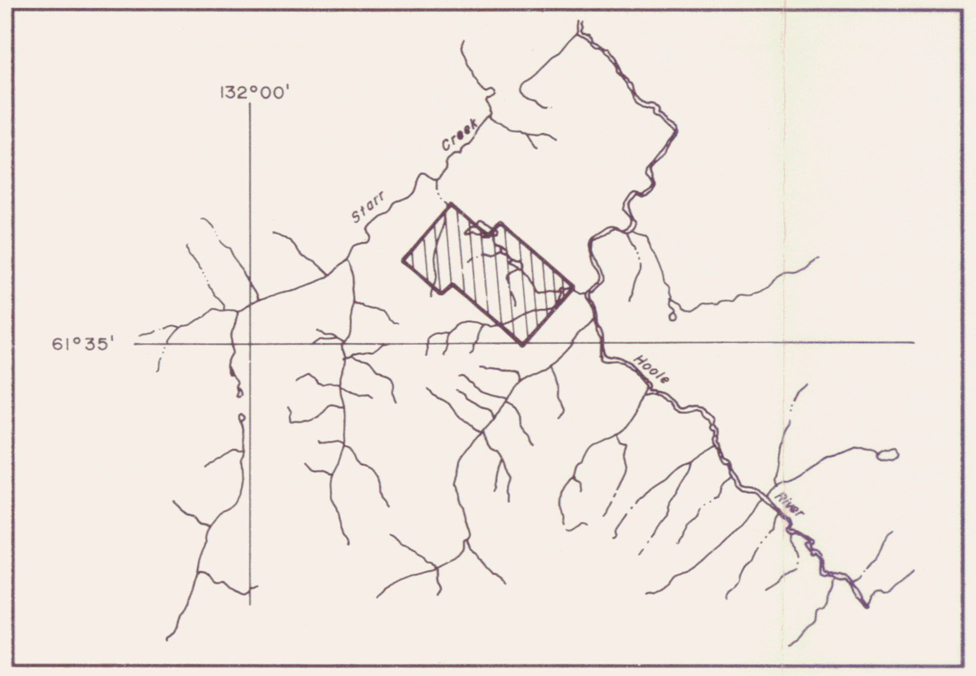
EM Anomalies

Conductivity Thickness (mhos)

0 - 1
1 - 2
2 - 4
4 - 8
8 - 15
15 - 30
> 30

EM Anomaly A, 4600 Hz
inphase amplitude 7 ppm.
Conductivity thickness
1-2 mhos (see code).





DEL NORTE CHROME CORPORATION

INTERPRETATION

SPITZ

YUKON TERRITORY

SCALE 1:10,000

0 330 660 1320 1/2 MILE

0 100 200 500 1 KILOMETRE

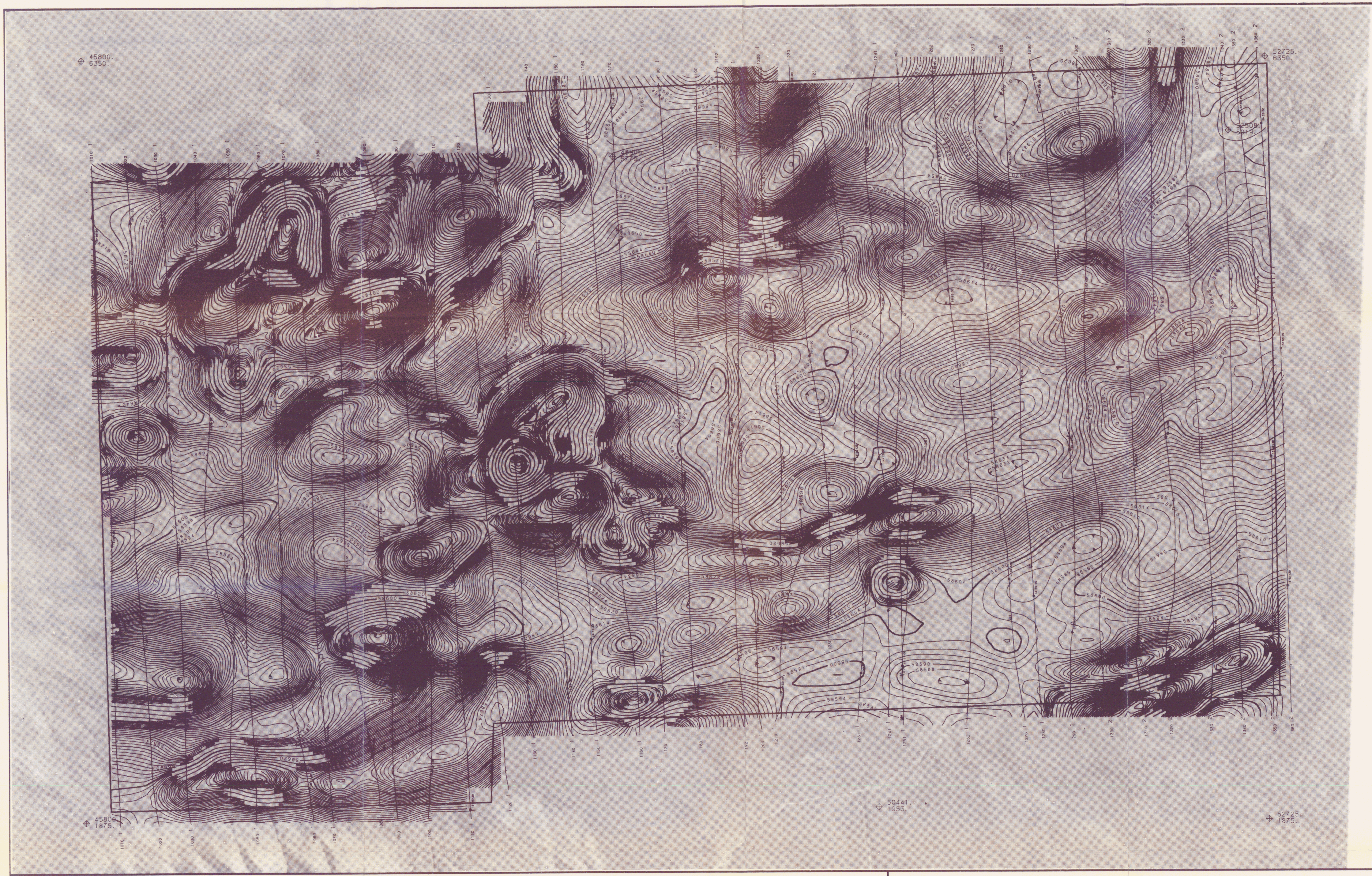
AERODAT LIMITED

DATE: APRIL 1988

NTS No: 105 G/12

MAP No: 3 J8845

(4) 062688



Flight Path

Navigation and recovery using Motorola Mini-Ranger (MRS III) radar navigation system.

Average terrain clearance 60m
Average line spacing 200m

Magnetics

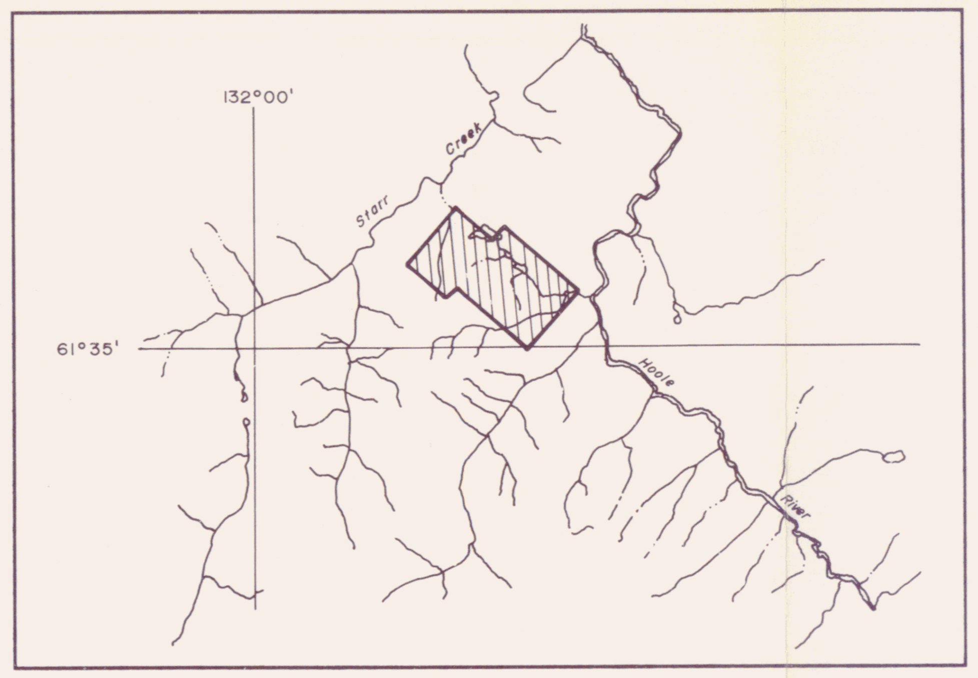
Total Field Magnetic intensity Contours in nT.

Cesium high sensitivity magnetometer.

Sensor elevation 45m

Map contours are multiples of those listed below

- 2 nT
- 10 nT
- 50 nT
- 200 nT
- 1000 nT



DEL NORTE CHROME CORPORATION

TOTAL FIELD MAGNETIC CONTOURS

SPITZ

YUKON TERRITORY

SCALE 1:10,000

0 330 660 1320 1/2 MILE

0 100 200 500 1 KILOMETRE

AERODAT LIMITED

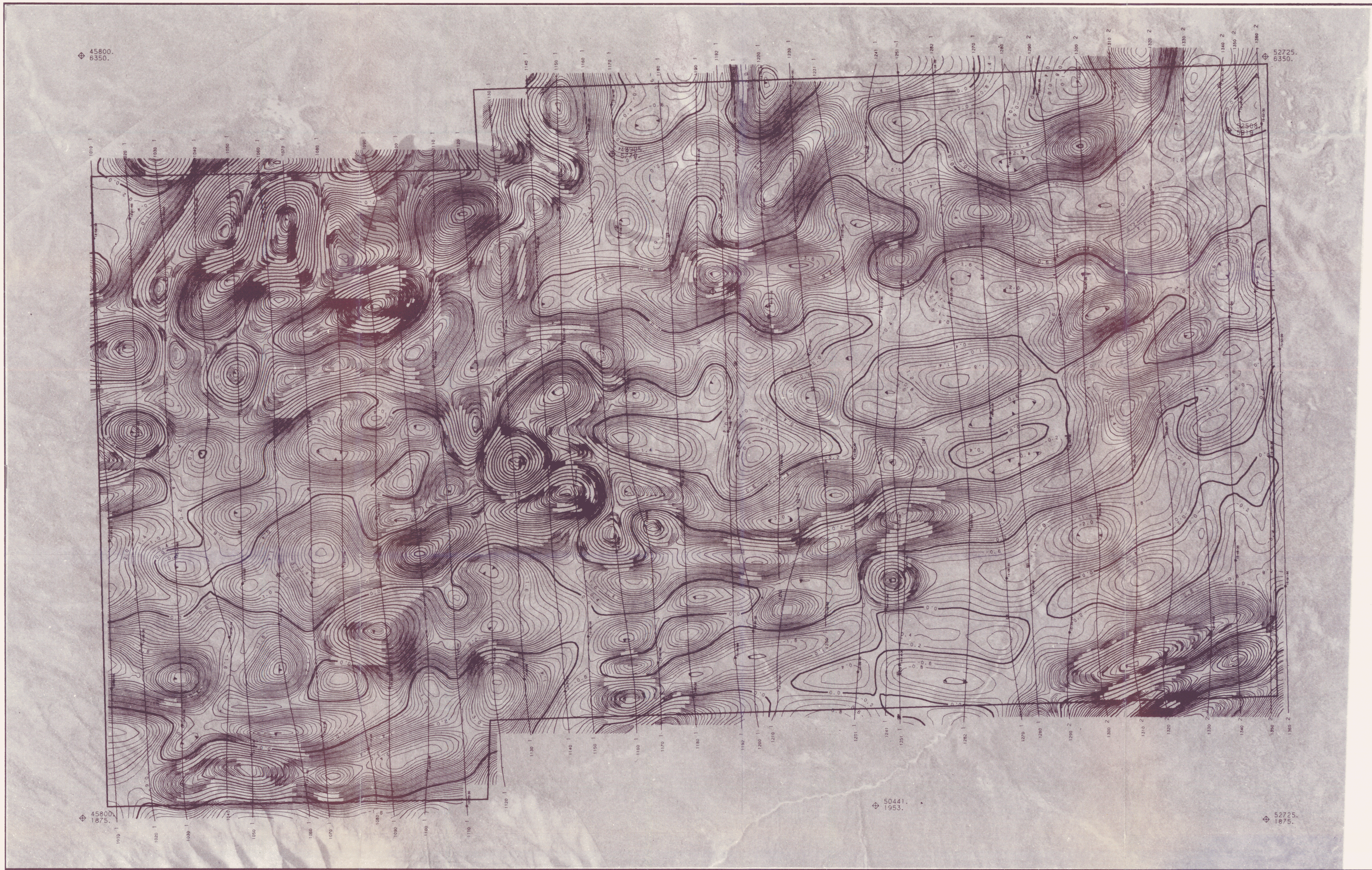
DATE: APRIL 1988

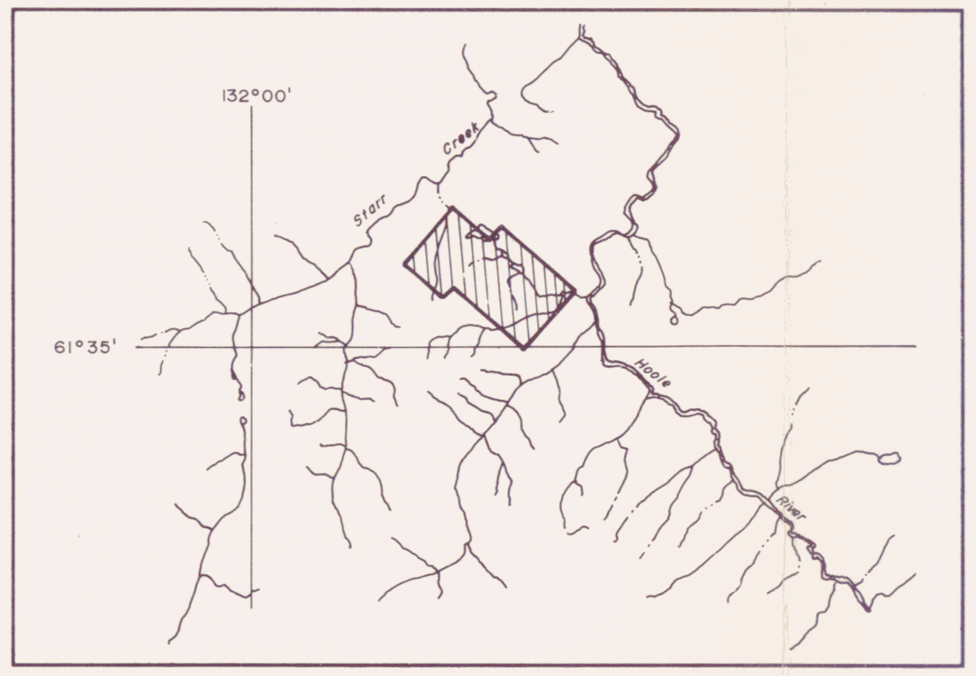
NTS No: 105 G/12

MAP No: 4 J8845

(5)

092688





Flight Path

Navigation and recovery using Motorola Mini-Ranger (MRS III) radar navigation system.

Average terrain clearance 60m
Average line spacing 200m

Vertical Gradient

Vertical Magnetic Gradient calculated from the total field magnetic intensity in nT/m.

Cesium high sensitivity magnetometer.

Sensor elevation 45m

Map contours are multiples of those listed below

0.2 nT/m
1.0 nT/m
5.0 nT/m
20. nT/m
100 nT/m

DEL NORTE CHROME CORPORATION

CALCULATED VERTICAL MAGNETIC GRADIENT

SPITZ

YUKON TERRITORY

SCALE 1:10,000

0 330 660 1320 1/2 MILE

0 100 200 500 1 KILOMETRE

AERODAT LIMITED

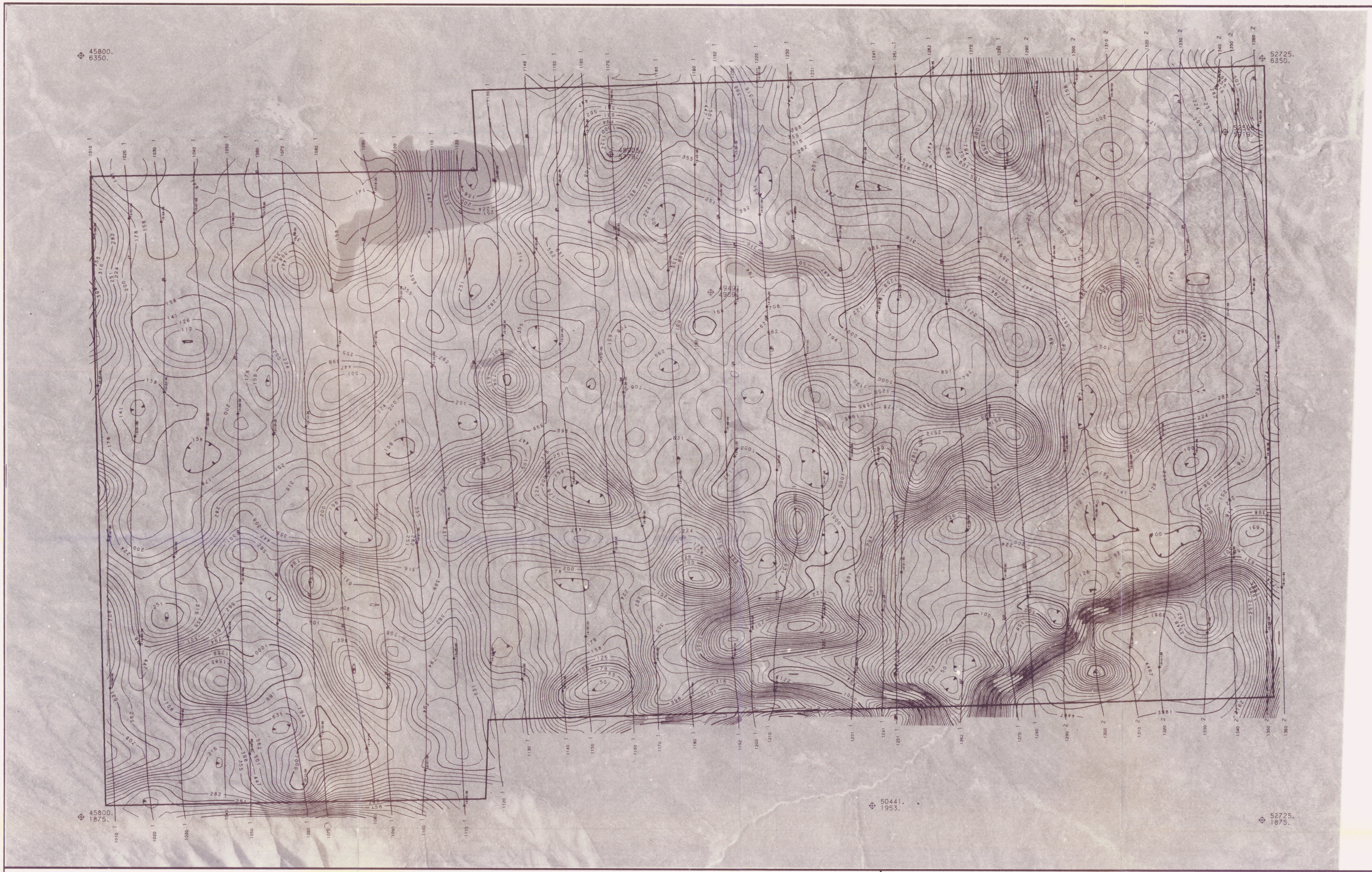
DATE: APRIL 1988

NTS No: 105 G/12

MAP No: 5 J8845

(6)

092688



Flight Path

Navigation and recovery using Motorola Mini-Ranger (MRS III) radar navigation system.

Average terrain clearance 60m
Average line spacing 200m

Apparent Resistivity

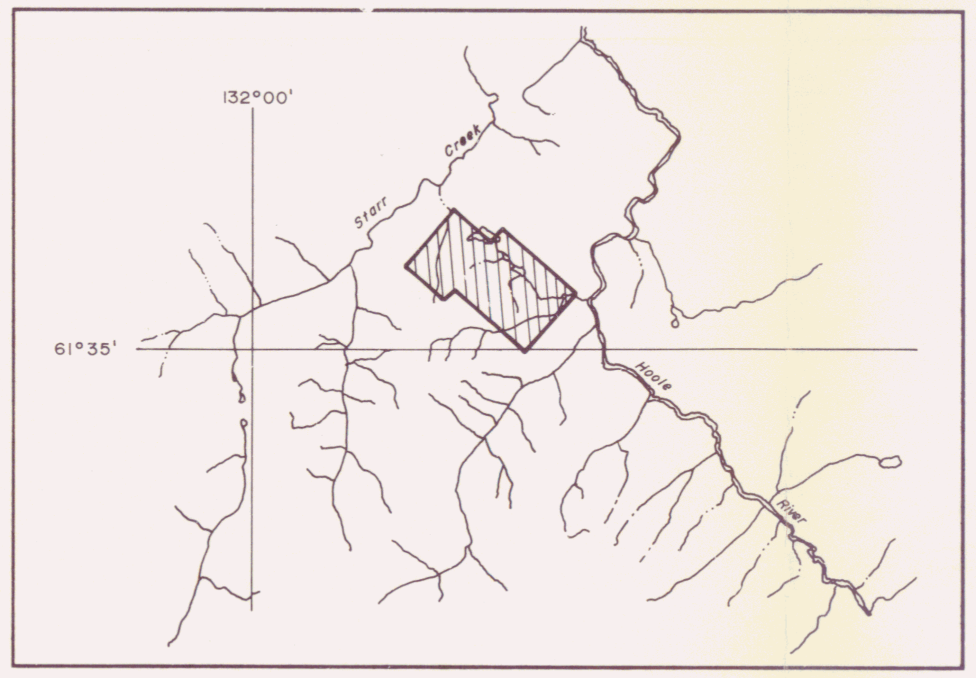
Calculated from 4600 Hz coaxial EM response assuming a 200 m conductive layer.

Contouring in ohm*m at logarithmic intervals.

Sensor elevation 30m

Map contours are multiples of those listed below

.05 log(ohm*m)
.2 log(ohm*m)
1. log(ohm*m)



DEL NORTE CHROME CORPORATION

APPARENT RESISTIVITY CONTOURS

SPITZ

YUKON TERRITORY

SCALE 1:10,000

0 330 660 1320 1/2 MILE

0 100 200 500 1 KILOMETRE

AERODAT LIMITED

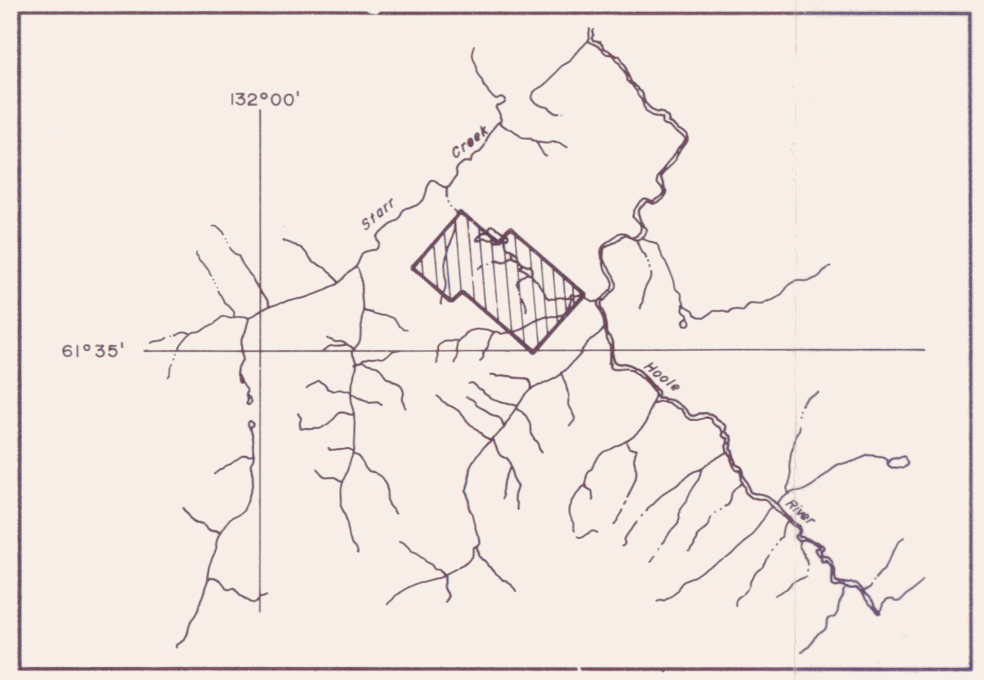
DATE: APRIL 1988

NTS No: 105 G/12

MAP No: 6 J8845

(7)

092688



Flight Path

Navigation and recovery using Motorola Mini-Ranger (MRS III) radar navigation system.

Average terrain clearance 60m
Average line spacing 200m

VLF-EM

VLF-EM Total Field Intensity in percent.

Station: NLK
Jim Creek, Washington
24.8 kHz

Sensor elevation 45m

Map contours are multiples of those listed below

1.0 %
5.0 %
25. %

DEL NORTE CHROME CORPORATION

VLF-EM TOTAL FIELD CONTOURS

SPITZ

YUKON TERRITORY

SCALE 1:10,000

0 330 660 1320 1/2 MILE

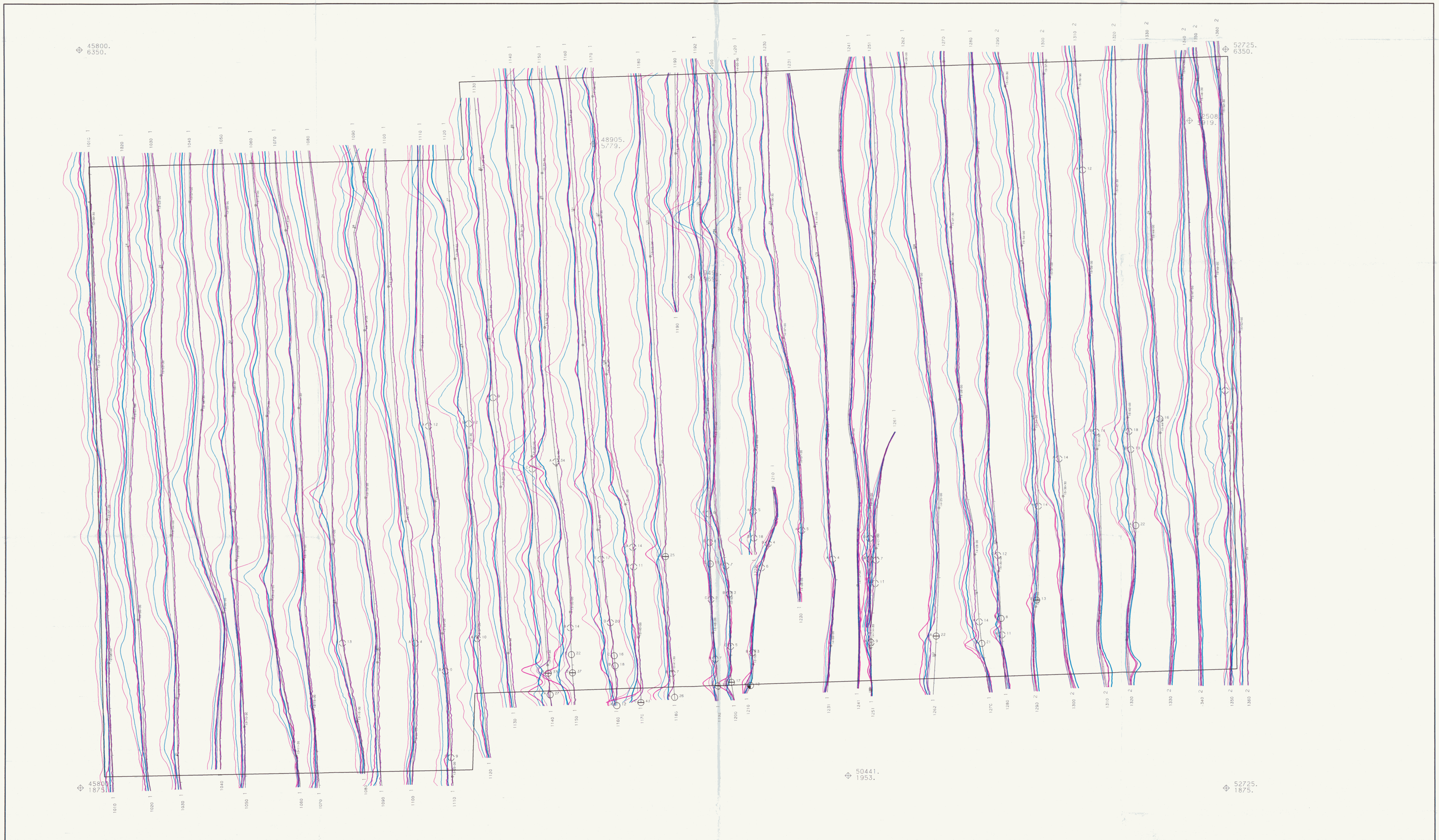
0 100 200 500 1 KILOMETRE

AERODAT LIMITED

DATE:	APRIL 1988
NTS No:	105 G/12
MAP No:	7 J8845

(8)

092688



Flight Path

Navigation and recovery using Motorola Mini-Ranger (MRS III) radar navigation system.

Average terrain clearance 60m
Average line spacing 200m

EM Profiles

Coaxial 2 ppm/mm
- 935 Hz inphase
- 935 Hz quadrature
- 4600 Hz inphase
- 4600 Hz quadrature

Coplanar 8 ppm/mm
- 4175 Hz inphase
- 4175 Hz quadrature

Sensor elevation..........30m
Coil separation............7m

EM Anomalies

Conductivity Thickness (mhos)

- 0 - 1
- 1 - 2
- 2 - 4
- 4 - 8
- 8 - 15
- 15 - 30
- > 30

EM Anomaly A, 4600 Hz inphase amplitude 7 ppm. Conductivity thickness 1-2 mhos (see code).

DEL NORTE CHROME CORPORATION

ELECTROMAGNETIC PROFILES

SPITZ

YUKON TERRITORY

SCALE 1:10,000

0 330 660 1320 1/2 MILE

0 100 200 500 1 KILOMETRE

AERODAT LIMITED

DATE:	APRIL 1988
NTS No:	105 G/12
MAP No:	8 J8845

(9)

APPENDIX I

REFERENCES

Chisholm, E.O.
1957: Geophysical Exploration of a Lead-Zinc deposity in Yukon Territory, Methods and Case Histories in Mining Geophysics, 6th Commonwealth Mining and Metallurgical Congress 1957, pages 269-277.

Gordey, S.P. Irwin, S.E.B.
1987: Geology, Sheldon Lake and Tay River map areas, Yukon Territory; Geological Survey of Canada, Map 19-1987 (3 sheets) scale 1:250,000.

APPENDIX II

CERTIFICATE OF QUALIFICATIONS

I, ROBERT J. DE CARLE, certify that: -

1. I hold a B. A. Sc. in Applied Geophysics with a minor in geology from Michigan Technological University, having graduated in 1970.

2. I reside at 28 Westview Crescent in the town of Palgrave, Ontario.

3. I have been continuously engaged in both professional and managerial roles in the minerals industry in Canada and abroad for the past eighteen years.

4. I have been an active member of the Society of Exploration Geophysicists since 1967 and hold memberships on other professional societies involved in the minerals extraction and exploration industry.

5. The accompanying report was prepared from information published by government agencies, materials supplied by Del Norte Chrome Corporation and from a review of the proprietary airborne geophysical survey flown by Aerodat Limited for Del Norte Chrome Corporation I have not personally visited the property.

6. I have no interest, direct or indirect, in the property described nor do I hold securities in Del Norte Chrome Corporation.

Signed,

Robert J. de Carle

Palgrave, Ontario
July 15, 1988

Robert J. de Carle
Consulting Geophysicist

APPENDIX III

PERSONNEL

FIELD

Flown - April, 1988

Pilot - H. MacRae

Operator - Bert Simon

OFFICE

Processing Geophysicist - Carl S. Marston

Interpretation and Report - Robert J. de Carle

APPENDIX IV

GENERAL INTERPRETIVE CONSIDERATIONS

Electromagnetic

The Aerodat three frequency system utilizes two different transmitter-receiver coil geometries. The traditional coaxial coil configuration is operated at two widely separated frequencies and the horizontal coplanar coil pair is operated at a frequency approximately aligned with one of the coaxial frequencies.

The electromagnetic response measured by the helicopter system is a function of the "electrical" and "geometrical" properties of the conductor. The "electrical" property of a conductor is determined largely by its electrical conductivity, magnetic susceptibility and its size and shape; the "geometrical" property of the response is largely a function of the conductor's shape and orientation with respect to the measuring transmitter and receiver.

Electrical Considerations

For a given conductive body the measure of its conductivity or conductance is closely related to the measured phase shift between the received and transmitted electromagnetic field. A small phase shift indicates a relatively high conductance, a large phase shift lower conductance. A small phase shift results in a large inphase to quadrature ratio and a large phase shift a low ratio. This relationship is shown quantitatively for a non-magnetic vertical half-plane model on the accompanying phasor diagram. Other physical models will show the same trend but different quantitative relationships.

The phasor diagram for the vertical half-plane model, as presented, is for the coaxial coil configuration with the amplitudes in parts per million (ppm) of the primary field as measured at the response peak over the conductor. To assist the interpretation of the survey results the computer is used to identify the apparent conductance and depth at selected anomalies. The results of this calculation are presented in table form in Appendix II and the conductance and inphase amplitude are presented in symbolized form on the map presentation.

The conductance and depth values as presented are correct only as far as the model approximates the real geological situation. The actual geological source may be of limited length, have significant dip, may be strongly magnetic, its conductivity and thickness may vary with depth and/or strike and adjacent bodies and overburden may have modified the response. In general the conductance estimate is less affected by these limitations than is the depth estimate, but both should be considered as relative rather than absolute guides to the anomaly's properties.

Conductance in mhos is the reciprocal of resistance in ohms and in the case of narrow slab-like bodies is the product of electrical conductivity and thickness.

Most overburden will have an indicated conductance of less than 2 mhos; however, more conductive clays may have an apparent conductance of say 2 to 4 mhos. Also in the low conductance range will be electrolytic conductors in faults and shears.

The higher ranges of conductance, greater than 4 mhos, indicate that a significant fraction of the electrical conduction is electronic rather than electrolytic in nature. Materials that conduct electronically are limited to certain metallic sulphides and to graphite. High conductance anomalies, roughly 10 mhos or greater, are generally limited to sulphide or graphite bearing rocks.

Sulphide minerals, with the exception of such ore minerals as sphalerite, cinnabar and stibnite, are good conductors; sulphides may occur in a disseminated manner that inhibits electrical conduction through the rock mass. In this case the apparent conductance can seriously underrate the quality of the conductor in geological terms. In a similar sense the relatively non-conducting sulphide minerals noted above may be present in significant consideration in association with minor conductive sulphides, and the electromagnetic response only relate to the minor associated mineralization. Indicated conductance is also of little direct significance for the identification of gold mineralization. Although gold is highly conductive, it would not be expected to exist in sufficient quantity to create a recognizable anomaly, but minor accessory sulphide mineralization could provide a useful indirect indication.

In summary, the estimated conductance of a conductor can provide a relatively positive identification of significant sulphide or graphite mineralization; however, a moderate to low conductance value does not rule out the possibility of significant economic mineralization.

Geometrical Considerations

Geometrical information about the geologic conductor can often be interpreted from the profile shape of the anomaly. The change in shape is primarily related to the change in inductive coupling among the transmitter, the target, and the receiver.

In the case of a thin, steeply dipping, sheet-like conductor, the coaxial coil pair will yield a near symmetric peak over the conductor. On the other hand, the coplanar coil pair will pass through a null couple relationship and yield a minimum over the conductor, flanked by positive side lobes. As the dip of the conductor decreased from vertical, the coaxial anomaly shape changes only slightly, but in the case of the coplanar coil pair the side lobe on the down dip side strengthens relative to that on the up dip side.

As the thickness of the conductor increases, induced current flow across the thickness of the conductor becomes relatively significant and complete null coupling with the coplanar coils is no longer possible. As a result, the apparent minimum of the coplanar response over the conductor diminishes with increasing thickness, and in the limiting case of a fully 3 dimensional body or a horizontal layer or half-space, the minimum disappears completely.

A horizontal conducting layer such as overburden will produce a response in the coaxial and coplanar coils that is a function of altitude (and conductivity if not uniform). The profile shape will be similar in both coil configurations with an amplitude ratio (coplanar:coaxial) of about 4:1*.

In the case of a spherical conductor, the induced currents are confined to the volume of the sphere, but not relatively restricted to any arbitrary plane as in the case of a sheet-like form. The response of the coplanar coil pair directly over the sphere may be up to 8* times greater than that of the coaxial pair.

In summary, a steeply dipping, sheet-like conductor will display a decrease in the coplanar response coincident with the peak of the coaxial response. The relative strength of this coplanar null is related inversely to the thickness of the conductor; a pronounced null indicates a relatively thin conductor. The dip of such a conductor can be inferred from the relative amplitudes of the side-lobes.

Massive conductors that could be approximated by a conducting sphere will display a simple single peak profile form on both coaxial and coplanar coils, with a ratio between the coplanar to coaxial response amplitudes as high as 8*.

Overburden anomalies often produce broad poorly defined anomaly profiles. In most cases, the response of the coplanar coils closely follows that of the coaxial coils with a relative amplitude ratio of 4*.

Occasionally, if the edge of an overburden zone is sharply defined with some significant depth extent, an edge effect will occur in the coaxial coils. In the case of a horizontal conductive ring or ribbon, the coaxial response will consist of two peaks, one over each edge; whereas the coplanar coil will yield a single peak.

* It should be noted at this point that Aerodat's definition of the measured ppm unit is related to the primary field sensed in the receiving coil without normalization to the maximum coupled (coaxial configuration). If such normalization were applied to the Aerodat units, the amplitude of the coplanar coil pair would be halved.

Magnetics

The Total Field Magnetic Map shows contours of the total magnetic field, uncorrected for regional variation. Whether an EM anomaly with a magnetic correlation is more likely to be caused by a sulphide deposit than one without depends on the type of mineralization. An apparent coincidence between an EM and a magnetic anomaly may be caused by a conductor which is also magnetic, or by a conductor which lies in close proximity to a magnetic body. The majority of conductors which are also magnetic are sulphides containing pyrrhotite and/or magnetite. Conductive and magnetic bodies in close association can be, and often are, graphite and magnetite. It is often very difficult to distinguish between these cases. If the conductor is also magnetic, it will usually produce an EM anomaly whose general pattern resembles that of the magnetics. Depending on the magnetic permeability of the conducting body, the amplitude of the inphase EM anomaly will be weakened, and if the conductivity is also weak, the inphase EM anomaly may even be reversed in sign.

VLF Electromagnetics

The VLF-EM method employs the radiation from powerful military radio transmitters as the primary signals. The magnetic field associated with the primary field is elliptically polarized in the vicinity of electrical conductors. The Herz Totem uses three coils in the X, Y, Z configuration to measure the total field and vertical quadrature component of the polarization ellipse.

The relatively high frequency of VLF (15-25) kHz provides high response factors for bodies of low conductance. Relatively "disconnected" sulphide ores have been found to produce measureable VLF signals. For the same reason, poor conductors such as sheared contacts, breccia zones, narrow faults, alteration zones and porous flow tops normally produce VLF anomalies. The method can therefore be used effectively for geological mapping. The only relative disadvantage of the method lies in its sensitivity to conductive overburden. In conductive ground the depth of exploration is severely limited.

The effect of strike direction is important in the sense of the relation of the conductor axis relative to the energizing electromagnetic field. A conductor aligned along a radius drawn from a transmitting station will be in a maximum coupled orientation and thereby produce a stronger response than a similar conductor at a different strike angle. Theoretically, it would be possible for a conductor, oriented tangentially to the transmitter to produce no signal. The most obvious effect of the strike angle consideration is that conductors favourably oriented with respect to the transmitter location and also near perpendicular to the flight direction are most clearly rendered and usually dominate the map presentation.

The total field response is an indicator of the existence and position of a conductivity anomaly. The response will be a maximum over the conductor, without any special filtering, and strongly favour the upper edge of the conductor even in the case of a relatively shallow dip.

The vertical quadrature component over steeply dipping sheet-like conductor will be a cross-over type response with the cross-over closely associated with the upper edge of the conductor.

The response is a cross-over type due to the fact that it is the vertical rather than total field quadrature component that is measured. The response shape is due largely to geometrical rather than conductivity considerations and the distance between the maximum and minimum on either side of the cross-over is related to target depth. For a given target geometry, the larger this distance the greater the depth.

The amplitude of the quadrature response, as opposed to shape is function of target conductance and depth as well as the conductivity of the overburden and host rock. As the primary field travels down to the conductor through conductive material it is both attenuated and phase shifted in a negative sense. The secondary field produced by this altered field at the target also has an associated phase shift. This phase shift is positive and is larger for relatively poor conductors. This secondary field is attenuated and phase shifted in a negative sense during return travel to the surface. The net effect of these 3 phase shifts determine the phase of the secondary field sensed at the receiver.

A relatively poor conductor in resistive ground will yield a net positive phase shift. A relatively good conductor in more conductive ground will yield a net negative phase shift. A combination is possible whereby the net phase shift is zero and the response is purely in-phase with no quadrature component.

A net positive phase shift combined with the geometrical cross-over shape will lead to a positive quadrature response on the side of approach and a negative on the side of departure. A net negative phase shift would produce the reverse. A further sign reversal occurs with a 180 degree change in instrument orientation as occurs on reciprocal line headings. During digital processing of the quadrature data for map presentation this is corrected for by normalizing the sign to one of the flight line headings.

APPENDIX V

ANOMALY LIST

J8845 - DEL NORTE CHROME CORP - CHOW

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM) INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
1	80	A	1	29.9	32.3	1.3	0	53
1	90	A	1	34.3	33.3	1.6	0	50
1	90	B	1	43.4	41.4	1.8	0	47
1	90	C	3	58.3	21.0	7.0	0	57
1	100	A	1	19.3	18.8	1.3	0	60
1	110	A	1	34.4	37.6	1.4	0	50
1	120	A	1	18.9	20.3	1.1	0	60
1	130	A	0	24.8	34.6	0.9	0	44
1	140	A	0	13.1	-1.3	0.0	0	96
1	140	B	1	32.3	32.8	1.5	0	49
1	150	A	1	25.0	19.8	1.9	0	53
1	150	B	4	74.4	21.1	10.4	0	51
1	150	C	4	22.3	4.5	11.4	0	67
1	150	D	4	39.7	11.3	8.6	0	63
1	160	A	4	79.3	19.0	13.2	0	53
1	160	B	1	27.7	23.1	1.8	0	53
1	170	A	2	40.3	34.8	2.0	0	45
1	170	B	4	87.1	25.8	10.3	0	48
1	180	A	3	40.7	14.7	6.3	0	58
1	180	B	2	36.6	22.2	3.1	0	56
1	190	A	2	28.5	20.9	2.2	0	57
1	190	B	3	44.5	17.6	5.8	0	55
1	200	A	3	17.3	7.0	4.1	0	80
1	200	B	4	20.3	4.7	9.4	0	65
1	200	C	3	56.1	23.0	5.9	0	54
1	200	D	1	26.2	21.7	1.8	0	58
1	210	A	1	23.1	19.6	1.7	0	53
1	210	B	4	28.3	6.2	11.1	0	59
1	210	C	3	30.0	9.1	7.3	0	62
1	220	A	3	77.1	31.1	6.6	0	50

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

J8845 - DEL NORTE CHROME CORP - CHOW

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM) INPHASE	AMPLITUDE (PPM) QUAD.	CONDUCTOR CTP MHOS	CONDUCTOR DEPTH MTRS	BIRD HEIGHT MTRS
1	220	B	3	44.6	14.3	7.5	0	55
1	220	C	2	12.1	7.7	2.0	0	69
1	230	A	2	17.7	12.3	2.0	0	63
1	230	B	3	25.4	9.4	5.3	0	64
1	240	A	2	15.9	9.6	2.3	0	57
1	250	A	2	29.9	19.0	2.7	0	62
1	260	A	2	16.3	8.5	2.9	0	73
1	270	A	0	17.1	20.3	0.9	0	50
1	270	B	2	40.3	26.1	2.9	0	54
1	280	A	2	21.0	9.5	3.8	0	76

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

J8845 - DEL NORTE CHROME CORP - SPITZ

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM) INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
1	1080	A	0	12.6	25.0	0.4	0	59
1	1100	A	0	4.4	20.8	0.0	0	45
1	1110	A	0	12.3	27.9	0.3	0	56
1	1110	B	0	0.4	16.9	0.0	0	48
1	1110	C	0	9.0	18.1	0.3	0	46
1	1120	A	0	10.2	21.4	0.3	0	59
1	1120	B	0	11.5	22.5	0.4	0	51
1	1130	A	0	9.3	25.1	0.2	0	54
1	1140	A	1	26.8	34.8	1.0	0	46
1	1140	B	2	32.6	21.6	2.6	0	53
1	1140	C	0	17.3	36.0	0.4	0	53
1	1150	A	0	34.4	70.0	0.6	0	42
1	1150	B	0	13.6	27.5	0.4	0	55
1	1150	C	1	21.7	21.2	1.3	0	56
1	1150	D	2	36.6	30.9	2.0	0	55
1	1160	A	1	11.5	10.3	1.2	0	66
1	1160	B	1	18.3	16.9	1.4	0	62
1	1160	C	1	15.7	14.5	1.3	0	57
1	1160	D	0	19.9	33.5	0.6	0	47
1	1160	E	0	16.6	30.8	0.5	0	53
1	1170	A	0	13.5	37.5	0.2	0	44
1	1170	B	0	10.6	21.3	0.4	0	49
1	1180	A	1	26.3	29.4	1.2	0	44
1	1180	B	0	6.5	17.0	0.2	0	53
1	1180	C	2	24.9	17.9	2.1	0	55
1	1192	A	2	18.8	11.5	2.4	0	67
1	1192	B	0	7.0	8.3	0.6	0	73
1	1192	C	0	1.8	4.1	0.1	0	69
1	1192	D	1	9.5	8.5	1.1	0	61
1	1192	E	0	6.3	13.6	0.2	0	56
1	1192	F	0	6.4	16.7	0.2	0	59
1	1200	A	0	6.9	12.3	0.3	0	53
1	1200	B	0	3.1	5.8	0.2	1	56

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

J8845 - DEL NORTE CHROME CORP - SPITZ

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM) INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
1	1200	C	0	5.0	8.7	0.3	0	59
1	1200	D	2	16.5	10.3	2.2	0	59
1	1210	A	3	11.7	4.0	4.6	0	69
1	1210	B	0	3.0	6.6	0.1	0	60
1	1210	C	0	6.3	14.3	0.2	0	60
1	1210	D	0	3.7	7.0	0.2	0	68
1	1220	A	0	5.1	17.8	0.1	0	52
1	1220	B	0	18.2	31.8	0.6	0	50
1	1230	A	0	5.1	20.7	0.1	0	50
1	1231	A	0	4.1	10.9	0.1	0	60
1	1251	A	0	9.0	9.9	0.8	0	75
1	1251	B	0	10.5	13.5	0.7	0	56
1	1251	C	0	10.5	13.5	0.7	0	56
1	1251	D	0	10.8	15.4	0.6	0	57
1	1261	A	0	11.1	13.3	0.8	0	57
1	1261	B	0	6.9	10.6	0.4	0	73
1	1262	A	2	21.8	12.0	3.0	0	68
1	1270	A	0	14.3	23.7	0.5	0	39
1	1270	B	1	21.4	20.3	1.4	0	46
1	1280	A	0	10.6	14.4	0.6	0	45
1	1280	B	1	8.3	7.3	1.1	3	55
1	1280	C	0	11.5	17.9	0.5	0	53
2	1290	A	0	14.4	17.3	0.9	0	49
2	1290	B	2	12.6	6.9	2.4	1	58
2	1300	A	0	14.3	24.2	0.5	0	51
2	1310	A	0	11.5	18.8	0.5	0	61
2	1310	B	0	13.8	29.2	0.4	0	44
2	1320	A	1	21.8	24.2	1.1	0	54
2	1320	B	0	19.1	28.0	0.7	0	45
2	1320	C	0	18.3	32.9	0.5	0	46
2	1330	A	0	15.8	21.4	0.8	0	55

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

J8845 - DEL NORTE CHROME CORP - SPITZ

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM) INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
2	1350	A	0	12.0	23.5	0.4	0	51

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

APPENDIX D

ENGINEER'S CERTIFICATE

ENGINEER'S CERTIFICATE

I, CHARLES K. IKONA, of 5 Cowley Court, Port Moody, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Consulting Mining Engineer with offices at Suite 711, 675 West Hastings Street, Vancouver, British Columbia.

2. THAT I am a graduate of the University of British Columbia with a degree in Mining Engineering.

3. THAT I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.

4. THAT this report is based on information supplied by Del Norte Chrome Corp., published information on the area and my own experience in the south central Yukon.

5. That I have not examined the property reported on, but have had extensive experience in the area.

6. THAT I have no interest in the property described herein, nor in securities of any company associated with the property, nor do I expect to acquire any such interest.

7. THAT I consent to the use by Del Norte Chrome Corp. of this report in a Prospectus or Statement of Material Facts or any other such document as may be required by the Vancouver Stock Exchange or the Office of the Superintendent of Brokers.

DATED at Vancouver, B.C., this 20th day of Feb, 1989.

PROFESSIONAL PROVINCE OF CHARLES K. IKONA BRITISH COLUMBIA ENGINEER

Charles K. Ikona, P.Eng.

APPENDIX E

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, ROBERT J. DARNEY, of R.R. #1, Sechelt, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Consulting Geologist with offices at Suite 711, 675 West Hastings Street, Vancouver, British Columbia.

2. THAT I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology.

3. THAT my primary employment since 1966 has been in the field of mineral exploration.

4. THAT my experience has encompassed a wide range of geological environments and has allowed considerable familiarization of exploration techniques for both lode and placer deposits.

5. THAT this report is based on a review of pertinent government geological data for the area and considerable familiarity with central Yukon geology.

6. THAT I have no interest in the property described herein, nor in securities of any company associated with the property; nor do I expect to acquire any such interest.

DATED at Vancouver, B.C., this 20th day of February, 1989.

R. Darney

Robert J. Darney, Geologist

Department of Indian Affairs and Northern Development
YUKON QUARTZ MINING ACT

FORM "C" - APPLICATION FOR A CERTIFICATE OF WORK

(This form required in duplicate with sketch showing location of work.)

RECEIVED
23 FEB 1989
MINING RECORDER
WATSON LAKE, Y.T.
I.A. & N.D.

OFFICE DATE STAMP

I (Name) KEVIN MILLEDGE Occupation MANAGER

(Postal Address) 711-675 W. HASTINGS ST. VANCOUVER, B.C. V6B-1N4

MAKE OATH AND SAY, THAT :-

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.
AGENT.

2. I have done, or caused to be done, work on the following mineral claim(s):
(Here list claims on which work was actually done by number and name)

SPITZ 1 - 120

situated at 61° 37' N.LAT. 131°49' W.LONG. Claim Sheet No. 105G/12

in the WATSON LAKE Mining District, to the value of at least $13,721.80 KM

dollars, since the 23 day of APRIL 1988,

to represent the following mineral claims under the authority of Grouping Certificate No. N/A

(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested.)

YB11699-YB11818 SPITZ 1-120 1 YEAR ON EACH

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53)

From April 23-27,1988, an airborne geophysical magnetic, electromagnetic and VLF survey was conducted on the claims.

Sworn before me at VANCOUVER, B.C.

this 16th day of FEBUARY 1989

H.S.D. [signature]

Notary Public

[signature]

Applicant.