GEOPHYSICAL REPORT

on

AIRBORNE MAGNETOMETER SURVEYS

of

Marb (Torwest "A") and Crown (Torwest "C")

Claim Groups

Situated in the

Guichon Creek Area, Nicola Mining Division

The former centered at

Latitude 50°13'N; Longitude 120°58'W N.T.S. 92 I

The latter centered at

Latitude 50°19'N; Longitude 120°52'W N.T.S. 92 I

The surveys were conducted on behalf of

TORWEST RESOURCES 1962 LTD. (NPL)

by

Geo-X Surveys Ltd.
Vancouver, B.C.

Instrument Operator:
J. Pasche

Report by:
G. E. White, B. Sc.
D. R. Cochrane, P. Eng.
James Cerne, M.S.

JUNE 30, 1969

604-685-4296
TELEX 04-50404

GEO-X SURVEYS LTD 827 HORNBY STREET VANCOUVER 1, B.C.

1923

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SUMMARY and RECOMMENDATIONS:

Late in May, 1969, Geo-X Surveys Ltd. on behalf of Torwest Resources 1962 Ltd. completed 31.6 and 27.2 line miles of total field airborne magnetometer surveying over two separate claim areas, designated Torwest Area A and Torwest Area C respectively. Both claim areas are located in the Highland Valley area of British Columbia.

The survey was completed in an Excalibur 800 fixed wing aircraft with a Varian V4937A proton precession magnetometer ($\pm$1 gamma); SDV 4991 digital recorder and analogue chart recorders. Flight line positioning was facilitated by 35 mm. strip photography matched to mosaics prepared from Government airphotos (see accompanying Figure 3). Terrain clearance was recorder in analogue mode by a radar-type pulse altimeter.

Data processing was conducted by Geo-X Surveys Ltd. personnel using IBM equipment in Vancouver.

The total field isomagnetic plans (Figure 4 and 6, 1":1000') were plotted by an IBM computer-plotter unit at a contour interval of 100 and 25 gammas respectively.

The findings and recommendations for the two areas are as follows:

Torwest Area A:

The most interesting magnetic feature located by the survey over this area was a north-south trending magnetic embayment which correlated with a protrusion of quartz diorite

into a medium grained andesite breccia. Three zones of interest were located and these are designated A, B and C in order of priority (Figure 5).

__A__ is a steep magnetic high located on the eastern corner of where the quartz-diorite plunges into the medium grained andesite-breccia.

__B__ is of lesser magnitude than A but is located on the western corner of the same geologic contact.

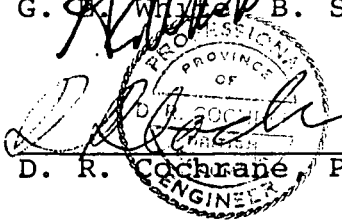
__C__ correlates well with known outcroppings of basalitic andesite; however it is located at the southern tip of the quartz-diorite embayment into the diorite-andesite breccia.

Torwest Area C:

Two principle features which reflect the two main directions of faulting and fracturing were located. The first, designated I, is a magnetic low on the edge of which is located the Aberdeen mineral zone. The second is a magnetic ridge shown in two sections II and III (Figure 7). The area between I and II and III could possibly reflect a contact between the Chataway variety of the Highland Valley phase and variety B of the Witches Brook phase of the Guichon Batholith.

Respectfully submitted,

G. E. White, B. Sc.



D. R. Cochrane, P. Eng.

James Cerne

James Cerne, M.S.

INTRODUCTION:

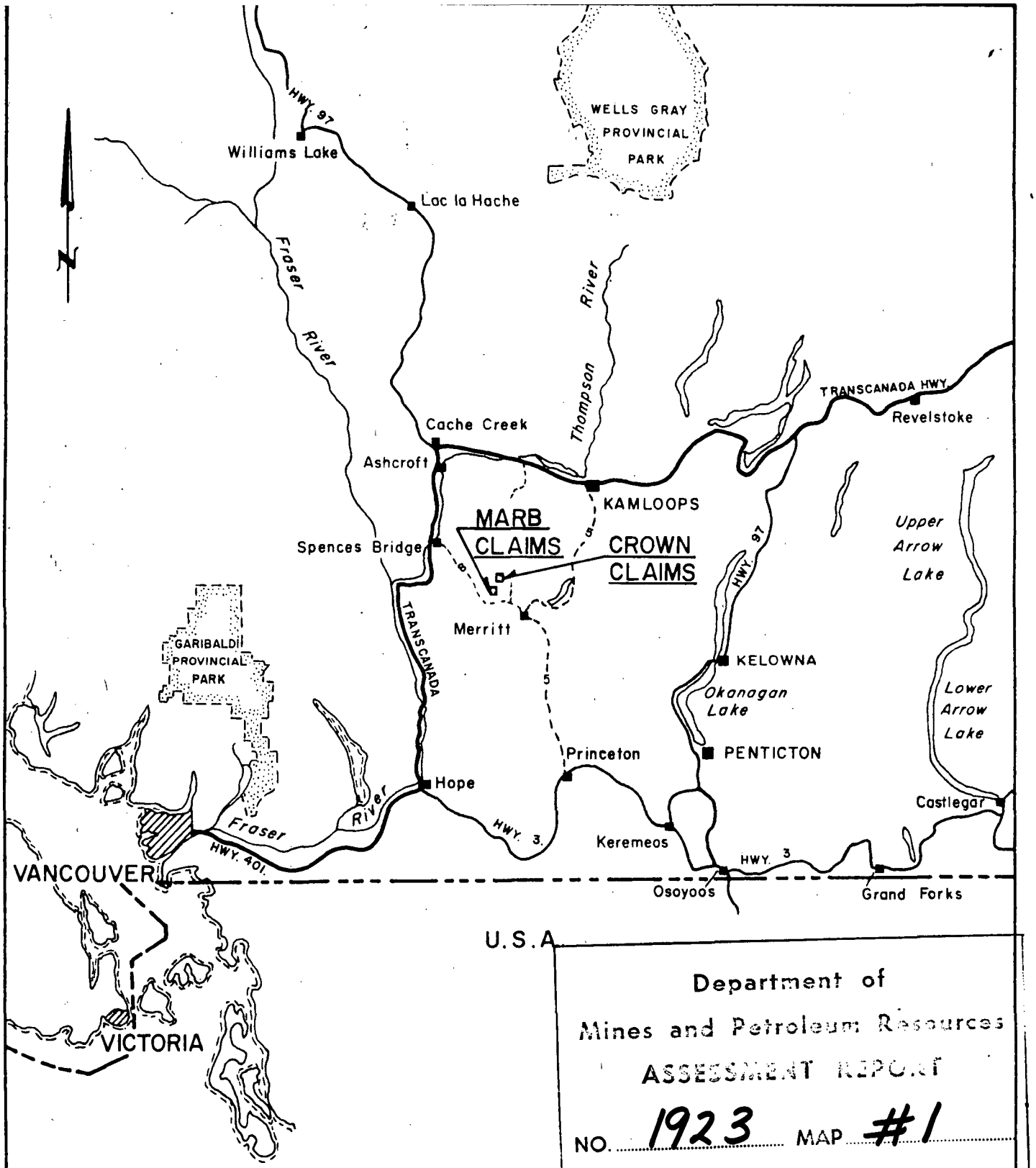
On May 30, 1969, Geo-X Surveys Ltd. of Vancouver, British Columbia, on behalf of Torwest Resources 1962 Ltd., conducted airborne magnetometer surveys over two separate groups of claims in the Highland Valley Area, Nicola Mining Division; Province of British Columbia.

A total of 58.8 line miles of total intensity airborne magnetometer surveying was conducted; 31.6 on the Marb claims and 27.2 on the Crown Claims. This report describes the instrumentation, field procedure and data processing, and discusses the results obtained.

LOCATION and ACCESS:

The Marb claim group (known herein as Torwest "A") is centered at Latitude 50°13'M and Longitude 120°58'W some 10 miles northwest of Merritt, B.C. The property lies to the west of Guichon Creek between the headwaters of Gorden and Shakelly Creeks. Access is by a dirt road north of highway 8 some 2 miles west of Lower Nicola.

The Crown claim group (known herein as Torwest "C") is centered at Latitude 50°19'N and Longitude 120°52'W some 14 air miles north-northwest of Merritt, B.C. The claims lie west of Guichon Creek and just south of the headwaters of Broom



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1923 MAP #1

0 40 80 120
SCALE : MILES

TORWEST RESOURCES (1962) LTD.
GUICHON CREEK AREA - KAMLOOPS & NICOLA M.D.
BRITISH COLUMBIA

LOCATION MAP

GEO - X SURVEYS LTD.

DRAWN R.K.	DATED JUNE 25, 1969	FIG. NO. 1
CHECKED [illegible]	JOB NO. 1088	

Creek. Access to the east side of the property is by gravel road some 12.5 road miles north from the town of Lower Nicola.

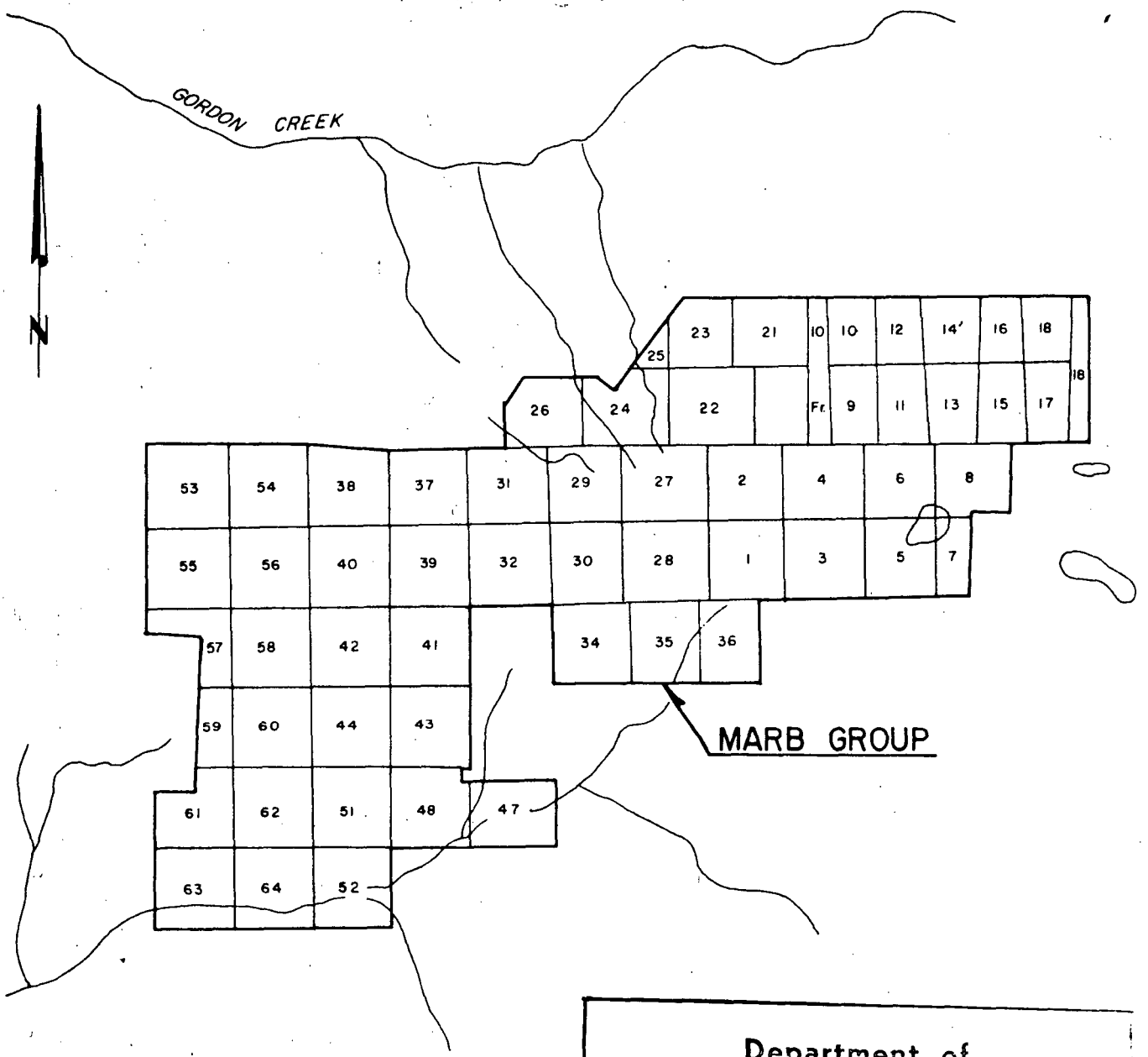
The National Topographic system reference square for topographic and claims maps for both areas is 92 I/SE.

CLAIMS and OWNERSHIP:

The Torwest "A" and Torwest "C" properties in the Guichon Creek area, Nicola Mining Division, on which the air-borne magnetometer survey was conducted consists of some 60 and some 43 contiguous mining claims respectively.

The claims and pertinent information are listed below:

Torwest "A" (Marb Group)		Torwest "C" (Crown Group)	
1-6	37327-332	1-8	36827-34
18	37333	9-11	36495-97
21-31	37334-44	13-29	36499-515
34-36	37345-47	31	36517
37-44	37688-95	33-35	36614-16
51-52	37696-97	37	39604
47-48	37826-27	39	39606
53-64	37828-39	1-3Fr.	39608-10
7-9	39762-64	38,40	39605, 39607
10-17	39766-74		
10 Fr.	39765		



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1923 MAP #2

Copied From B.C. Government Claim Map
and/or Information Supplied by Client

0 ½ 1 1½
MILES (APPROX.)

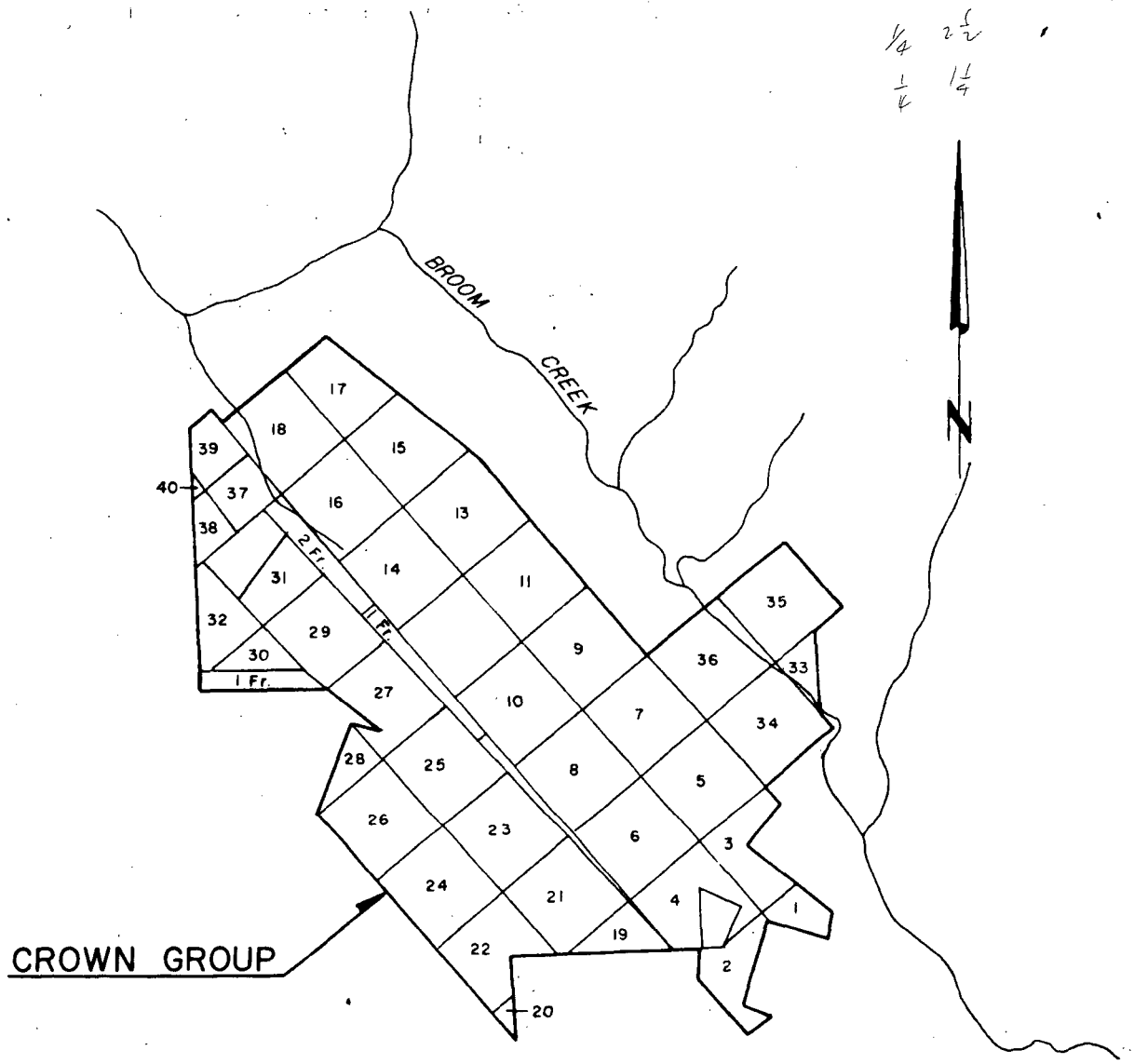
TORWEST RESOURCES (1962) LTD
GUICHON CREEK AREA - KAMLOOPS & NICOLA M.D.
BRITISH COLUMBIA

CLAIM MAP

TORWEST 'A'

GEO – X SURVEYS LTD.

Drawn D.E.Y.	Dated JUNE 25,1969	Fig. No. 2A
Checked	Job No. 1088	



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1923 MAP #3

Copied From B.C. Government Claim Map
and/or Information Supplied by Client

0 1/2 1 1 1/2
MILES (APPROX.)

TORWEST RESOURCES (1962) LTD.
GUICHON CREEK AREA - NICOLA M. D.
BRITISH COLUMBIA

CLAIM MAP

TORWEST 'C'

GEO - X SURVEYS LTD.

Drawn D. E. Y.	Dated JUNE 25, 1969	Fig. No. 2C
Checked	Job No. 1088	

GENERAL SETTING:

The mineral claims are situated just west of Guichon Creek in the Thompson Plateau subdivision of the Interior Plateau Physiographic division of British Columbia. The plateau is a gently rolling upland of low to moderate relief. The local Guichon Creek - Nicola Creek Highland Valley area is characterized by rounded hills up to just over 6,000 feet in elevation, and wide "U" shaped valleys.

The Torwest "A" area lies to the north of the Promontory Hills (elevation 5,688 feet) and is entrenched by Shakelly Creek on the west and Birkett Creek to the east. The elevation varies from 5,300 feet in the southeast to 4,000 feet in the southwest.

The Torwest "C" area lies on a long westerly slope extending from Guichon Creek (at an elevation of 3,000 feet) to the headwaters of Broom Creek (elevation 4,900 feet).

The complete area discussed here was covered by ice during the Pleistocene epoch and drift mantles most of the region. The climate is typical of the Interior Plateau region; dry, with scattered vegetation at lower elevations and south facing slopes.

The Torwest "C" and most of Torwest "A" areas are underlain by coast intrusives (Guichon Batholith) of granite, granodiorite and various hybrid phases believed to be of Jurassic Age (as shown on G.S.C. map 886 A).

The bedrock geology of Torwest "A" as mapped on a Reconnaissance scale by Northcote* consists of the Hybrid phase of the Guichon Batholith in contact with the Nicola series. This contact would appear to strike generally east-west to northwest-southeast across the property. Detail mapping of this claim group by A.C.A. Howe & Associates confirmed this contact and indicated that a large tongue of the Hybrid phase of the Guichon Batholith protrudes into the Nicola series, which consists of medium grained andesite-breccia in this vicinity.

The bedrock geology of Torwest "C" as mapped by Northcote indicates that a contact between the Highland Valley phase and the Witches Brook phase of the Guichon Batholith strikes generally north-northwest across the claim group.

AIRBORNE FIELD PROCEDURE:

The total intensity of the geomagnetic field was measured and recorded along 10 flight lines on a general SW-NE bearing in the Torwest "A" area and along 21 flight lines on a general N-S bearing in the Torwest "C" area. Terrain clearance averaged about 500 feet for both properties.

*K.E. Northcote, Ph. D. Thesis Geology and Geochronology of the Guichon Batholith, B.C. 1968.

The survey was flown in a fixed wing aircraft, towing an airfoil sensor. A proton magnetometer, digital and chart recorders, camera and altimeter were mounted in the aircraft. The magnetometer and chart recorder continuously measured and recorded the magnetic field intensity. At one second intervals, the field amplitude and fiducial number were recorded on punch tape by the digital recording system. At thirty second intervals, the time and line number were punched on the tape. At two second intervals, a split image camera simultaneously photographed (1) the terrain, and (2) the clock and fiducial display panel. Thus each terrain photograph is bordered by a photograph of the clock and fiducial number.

The terrain clearance was measured with a Bonzar pulse type radar altimeter and recorded by a G-2000 chart recorder.

Solar flare warning and predictions, issued daily at the Space Disturbance Forecast Center in Boulder, Colorado, were used to schedule the flight during a magnetically quiet period.

The punch tape, chart and strip photograph processing is described in the following section. Instrument specifications are in Appendix IV.

DATA PROCESSING:

The data processing procedure consisted of four steps, discussed under the following headings:

1. Flight line X-Y positioning.
2. Editing of the paper tape.
3. Tabulation of critical fiducial numbers and their X-Y coordinates.
4. Contour plotting.

1. Flight Line X-Y Positioning:

From the aircraft, while the lines were being flown, the flight lines were roughly positioned on government aerial photographs. In the office, the beginning and end of each flight line was marked on the strip photographs. From the strip photos Geo-X personnel transferred the flight lines on to a mosaic prepared from the government photos. An X-Y coordinate system was also superimposed on the flight line mosaic with +Y north and +X east (see Figures 3(a) and 3(c)). Thus, every position along a flight line was defined in terms of X (number of feet east of the origin) and Y (number of feet north of the origin), and has a corresponding magnetic value in gammas.

2. Editing of the Paper Tape:

A listing of the contents of the paper tape was made by IBM of Vancouver. The listing was examined and compared with the analog record as a guard against possible machine or operator error. The magnetic readings for areas of flight line intersection were compared as a check on the time variations of the geomagnetic field.

3. Tabulation of Critical Fiducial Numbers:

The first and last fiducial number on each line were tabulated along with their X-Y coordinates. In addition, points where the flight line changed direction were tabulated along with the appropriate fiducial number. The tabulated information was keypunched onto computer cards, and sent with the punch tape to IBM.

4. Contour Plotting:

IBM fed the punch tape to its computer, along with the X-Y coordinates of the start, end and any changes of direction that may have occurred in the flight line. The data sampling interval along the flight lines was roughly 160 feet and every other data point was plotted. The magnetometer readings were evenly spaced along the line segments and contoured by a computer-plotter unit at a contour interval of 100 gammas for Torwest "A" and 25 gammas for Torwest "C".

RESULTS/DISCUSSION/INTERPRETATION:

Introduction;

Since ferromagnetic susceptibility and natural rock magnetism change measurably from one rock type to another, accurate detailed mapping of the geomagnetic field often provides valuable information about the subsurface geology (even in heavily drift covered areas). Aeromagnetic surveys provide new knowledge of the type, general attitude, configuration and complexity of the geosuperstructure and often identifies local elements which sometimes indicate ore. Aeromagnetic prospecting can be applied to the delineation of buried contacts and disruptions, or the location of areas of possible plutonic differentiation and its varied products. Considerable speed and accuracy is inherent in this survey method. When it comes to interpretation, however, there are two factors which can exert considerable influence. The first is geologic control, which reduces the number of variables that the interpreter must consider. The second is data analysis, which is essentially the use of filtering techniques. Filtering can remove noise, regional variation, and the effects of various physical phenomena (such as the effect of topography, or changing depth of burial). In addition, interpretation techniques (explaining the data) must be flexible enough to be revised in the light of new geological, geochemical or geophysical information.

This Survey:

Total intensity isomagnetic field plans are presented as Figures 4 and 6. The horizontal scale is 1":1000' (approximately). The planimetry has been derived from uncontrolled airphoto mosaics. Some distortion is inevitable. The map depicts the intensity of the geomagnetic field present at the given nominal altitude on the particular flight day.

A general graphic interpretation for each property accompanies this report (see Figures 5 and 7). It is basically a "manual" qualitative analysis of the magnetic features rather than a "computational" quantitative one. Considerable reference has been made to the aerial photography, available geology and geophysics in the preparation of the accompanying interpretation maps.

General Description:

In order to facilitate description of the isomagnetic map, morphological terms were employed. Figures 4 and 6 therefore may be regarded as contoured "magnetic" surfaces or scapes" (magnetic terrains) complete with magnetic gradients, hills, valleys and linears.

INTERPRETATION:

Torwest "A": For the following discussion refer to Figures 4 and 5.

The recorded local total field magnetic intensity range varied between a maximum of 59230 gammas and a minimum of 57480 gammas. A geological map of the Marb group, produced by A.C.A. Howe & Associates Ltd., August, 1965, was used in the interpretation.

The general interpretation map (Figure 5) illustrates the primary features to be discussed, and has been contoured to draw attention to the various magnetic patterns.

The general magnetic intensity background for the area surveyed is approximately 58200 gammas. Three areas of high magnetic intensity have been delineated and have been designated A, B and C. The most diagnostic feature on the property is the magnetic embayments which starts at the magnetic low in the north, and forms an embayment to the south between areas A and B (Figures 4 and 5). Correlation of the magnetic data with the geology, indicates that this feature is possibly a contact between two phases of the Guichon Batholith; a medium grained diorite, or quartz diorite to the north, and an andesitic-dioritic-breccia to the south. This contact to the south as based on the magnetic values is rather vague but is projected in Figure 5 and is only slightly different from that marked as possible by A.C.A. Howe & Associates Ltd. The

andesitic-dioritic breccia, would appear to correlate with Northcote's Hybrid phase of the Guichon Batholith. Magnetic Highs A and B could possibly be attributed to recrystallized prebatholith rocks in the Hybrid phase, or in other words a local increase in the opaque minerals such as magnetite and/or mafic minerals such as hornblende and its alteration products. Magnetic High C correlates very well with outcroppings of Basalitic andesite which occur near the contact of the Hybrid phase of the Guichon Batholith with the rocks of the Nicola Group. The contact between the basalt and the medium grained andesitic breccia, as mapped by A.C.A. Howe & Associates Ltd., is not distinguishable magnetically and apparently both rock types are of nearly the same magnetic susceptibility.

Torwest "C": For the following discussion refer to Figures 6 and 7.

Figure 6 is the isomagnetic contour map of the area surveyed, and Figure 7 is the General Interpretation Map. The variation of the local total field magnetic intensity was between a maximum of 58100 gammas and a minimum of 57500 gammas.

A report on ground electromagnetic (EM 16) and magnetometer (MF-1) surveys by D.R. Cochrane, P. Eng., April 1969, was correlated with the airborne magnetometer survey. The airborne magnetometer data appeared to more accurately define the various magnetic patterns detected by the ground magnetometer survey, while the electromagnetic survey data located conductors which correlated very well with various magnetic linears indicated by the airborne survey.

Two prominent magnetic features were located, illustrated in Figure 7. The first is the northeast trending low designated I. The Aberdeen mineral zone is located on the northeastern end of this low. The second magnetic feature is the northwest trending magnetic ridge containing sections numbered II and III. These two features parallel the two principal directions of fracturing and faulting as is shown by the magnetic linears detected by the airborne magnetometer survey, and the electromagnetic conductors located by the ground EM-16 survey. It is possible that they reflect the contact of the Highland Valley phase and the Witches Brook phase of the Guichon Batholith.

Respectfully submitted,

G. E. Watterson, B. Sc.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA D. R. COCHRANE

D. R. Cochrane, P. Eng.

James Cerne

James Cerne, M.S.

APPENDIX I

PERSONNEL

NAME: COCHRANE, Donald Robert

EDUCATION: B.A.Sc. - University of Toronto
M.Sc. (Eng.) - Queen's University

PROFESSIONAL ASSOCIATIONS: Professional Engineer, (P. Eng.), registered in British Columbia, Ontario, Saskatchewan.

M.C.I.M.M., M.E.I.C., M.G.A.C., M.M.A.C.

EXPERIENCE: Engaged in the Profession since 1962 while employed with Noranda Exploration Co. Ltd., Quebec Cartier Mines Ltd., Meridian Exploration Syndicate.

Experience in West Indies, Central and South America, U.S.A. and Canada.

APPENDIX I

PERSONNEL

Name: WHITE, Glen E.

Education: B.Sc. Geophysics - Geology
University of British Columbia.

Professional Associations: Associate member of Society of Exploration Geophysicists.

Experience:

Pre-Graduate experience in Geology-Geochemistry-Geophysics with Anaconda American Brass.

Since Graduation in 1966 in Geophysics - Geology, has obtained experience in Mining Geophysics with Sulmac Explorations Ltd.

Airborne Geophysics with Spartan Air Services consulting on second derivative.

Micro-Gravity project with Velocity Surveys Ltd.

Recently acted as mining Geophysicist and technical Sales Manager in the Pacific north-west for W.P. McGill and Associates.

Presently employed as Airborne and Mining Geophysicist with Geo-X Surveys Ltd.

Active experience in all Geologic provinces of Canada has been obtained.

APPENDIX I

PERSONNEL

NAME: CERNE, James

EDUCATION:

B.S. Geology (June 1967)
Case Institute of Technology - Cleveland, Ohio.

M.S. Geophysics (August 1968)
California Institute of Technology - Pasadena, California.

EXPERIENCE:

July 1965 - June 1967 - Metallurgy Dept., Case Institute of Technology - Student Asst.

June - September 1967 - N.A.S.A. Manned Spacecraft CNT. Lunar and Earth Sciences Div., Geophysics Group, Houston, Texas.

September 1967 - August 1968 - California Institute of Technology, Seismological Laboratory, Graduate Research Asst.

September 1968 - present. Employed by Geo-X Surveys Ltd. as Geophysicist.

APPENDIX I

PERSONNEL

Name: WILSON, Norman George Robert

Education: Junior Matriculation equiv., Grade 13 Math.

2nd Year National Electrical Engineering.

Experience: 12 years Royal Air Force - Radar Technician.

6 months British Government Communications - Radio Technician.

Presently employed by Geo-X Surveys Ltd., since October 22nd, 1967 doing Induced Polarization, Electromagnetic and Magnetometer Surveys under Professional supervision.

PERSONNEL

NAME: SCOTT, Alan Richard

EDUCATION: Senior Matriculation - Southern Okanagan Secondary School, Oliver, B.C.

3rd Year Science - Geophysics Major University of British Columbia.

EXPERIENCE: Department of Water Resources, Southern Okanagan Lands Project, Oliver, B.C. - Instrument Operator (Transit - 5 months).

March to June 1968 - Employed by Geo-X Surveys Ltd. doing Induced Polarization, Electromagnetic and Magnetometer Surveys - all under professional supervision.

April 1969 - Presently employed by Geo-X Surveys Ltd. - same capacity as previous year.

APPENDIX I

PERSONNEL

NAME: DOBSON, Lionel John

EDUCATION: June 1966 - Grade 12; Brentwood College, Mill Bay, B.C.

May 1968 - 1st year University; University of Victoria, Victoria, B.C.

December 1968 - Private Pilot licence - Victoria Flying Club.

EXPERIENCE: September 1968 - April 1969 - Mapping Assistant.

May 1969 - June 1969 - Survey Assistant.

The above positions - Employed by B.C. Government, Victoria.

June 1969 - present - Employed by Geo-X Surveys Ltd. as Air Crew Navigator and Photo Co-ordinator.

APPENDIX I

PERSONNEL

Name:	KEY, Robert A.
Education:	Grade XII Diploma.
	1 year Petroleum Geology at the Institute of Technology and Arts in Calgary.
Experience:	2 years in Steam Heating Design Drafting.
	12 years with Mobil Oil Canada Limited, Senior Draftsman.

APPENDIX I

PERSONNEL

Name: YIP, David Edward

Education: Grade 12 - Majors: Science, Mathematics, Social Studies and Industrial Arts.
Lake Cowichan Secondary School

1 year - Vancouver Vocational Institute - Drafting Training.

Experience: Presently employed by Geo-X Surveys Ltd. since November 27, 1967 as Draftsman.

APPENDIX I

CERTIFICATE

NAME: MALESKU, Terrance D.

EDUCATION: Grade XII - Balfour Technical School, Regina, Saskatchewan.

EXPERIENCE: September 1961 - September 1965 as Geological Draftsman for Marathon Oil Co., Regina, Saskatchewan.

September 1965 - December 1968 as Structural Draftsman for Con-Force Products, Regina, Saskatchewan.

April 1969 - presently employed as Geological Draftsman for Geo-X Surveys Ltd.

APPENDIX II

PERSONNEL AND DATES WORKED

The following Geo-X Surveys Ltd. personnel were employed on the Torwest Resources (1962) Ltd. airborne magnetometer survey project.

A. FIELD WORK

G. E. White	Navigator	May 10, 30
N. Wilson	Flight Operator	May 30

B. DATA PROCESSING AND REPORT PREPARATION

G. E. White	Geophysicist	June 5, 18, 19, 23, 24.
J. Cerne	Geophysicist	June 10, 11, 27.
D. R. Cochrane	P. Eng.	June 23, 24.
L. Dobson		June 10
A. Scott		June 5

C. DRAFTING AND REPRODUCTION

R. Key	Draftsman	May 23, 1969 June 4, 9-11, 13, 17, 23-26.
D. Yip	Draftsman	June 11-13, 16-20.
J. Carvajal	Draftsman	July 2, 3
T. Malesku	Draftsman	June 11, 24, 26. July 2, 3.

APPENDIX III

COST BREAKDOWN

The following is a cost breakdown for an Airborne Magnetometer Survey conducted over the Marb (Torwest A) and Crown (Torwest C) Claim Groups by Geo-X Surveys Ltd. through an Agreement with Torwest Resources (1962) Ltd. dated April 14, 1969.

Geo-X Surveys Ltd. provided the following for an all inclusive price.

(a) Air Photo Mosaic

(b) Aeromagnetic Survey Coverage

(c) Base Map Preparation

(d) Preliminary Data Preparation

(e) Computer Data Processing

(f) Report Preparation

58.8 line miles at $79.93 per line mile

ALL INCLUSIVE TOTAL PRICE $4700.00

R. L. (Jim) Aitre,
Secretary-Treasurer.

Declared before me at the City of Vancouver, in the Province of British Columbia, this 16 day of July 1969, A.D.

A Commissioner for taking Affidavits within British Columbia
A Notary Public in and for the Province of British Columbia

SUB-MINING RECORDER

APPENDIX IV

SPECIFICATIONS OF THE V-4937A MAGNETOMETER SYSTEM

Performance

Range:	20,000 to 100,000 gamma (worldwide)
Sensitivity:	± 1/2 and ± 1 gamma in any field.
Sampling Rate:	manual and "clock" operation permits any timing sequence.

Power Requirements

22-30 V, 6 amps for magnetometer, 60 watts for analog recorder and 100 watt maximum for digital recorder.

Physical Specifications

Console:	size - 19 x 17 x 24 inches; Weight 68 lbs.
Analog Recorder:	dual channel - 15 x 10 x 10 inches, 30 lbs.
Scanner-coupler:	fucical counter, idént. control, 24 hr. clock, 40 lbs.
Recorder:	size - 14 x 11 x 28 inches; Weight 41 lbs.

Data Output

Digital Recording:	BCD 1-2-4-8 (four line output) "O" state - 18 to -30v through 100K ohms 1 state -1 to +3v through 100k ohms
Print Command:	Positive going 12 to 25v pulse; 15M second.
Auxiliary Channels:	A & B for radio altimeter and navigation equipment.
Analog Recording:	Galvanometric -1 mA full scale into 1500 ohms Potentiometric: 100mV full scale. Minimum load resistance 20K Full scale resolution of the least most significant digits of the total geomagnetic field 0-99, 0-999 at 1 gamma sensitivity; 0-49, 0-499 at 1/2 gamma sensitivity.

APPENDIX IV

Instrument Specifications

Camera

Type:	Neyhard Automax 35 m.m. pulse camera
Model:	G-2 with auxiliary data box
Pulse Rate:	Up to 10 frames per second
Film Format:	0.738" x 0.738" square picture with 0.200" x 0.738" data area.
Magazine:	Mitchell 400 foot 35 m.m.
Lenses:	(a) 17 m.m. F/14 Super-Takumar Fish-eye (b) 35 m.m. F/2.0 Super Takumar
Data Box:	(a) 24 hour Accutron Clock (b) Frame counter (c) Available for optional feature
Dimensions (less magazine):	8 3/8" high, 4 1/2" deep, 6 1/4" wide.
Weight (less lens and magazine):	12 lbs.

APPENDIX IV

INSTRUMENT SPECIFICATIONS

Aircraft

Type and Model:	Excalibur 800 (Beechcraft Twin Bonanza modified by Swearingen Aircraft, San Antonio, Texas)
Power:	Two 400 H.P. Lycoming 10-720-AIA engines.
Gross Weight:	7900 pounds
Empty Weight:	5300 pounds
Useful Load:	2600 pounds
Fuel Capacity:	230 gallons (U.S.)
Performance at	
7900 lbs. Gross:	Climb - 1535 feet per minute (at sea level) Cruise - 230 miles per hour. Range - 1200 miles.

OUTLINE OF AREA REQUESTED TO BE SURVEYED

PROJECTED CONTACT

A

B

C

10

5

0

5

15

+Y-Axis

+X-Axis

LEGEND

- MAGNETIC HIGH
- MAGNETIC LOW
- INTERMEDIATE MAGNETIC INTENSITY
- PROJECTED CONTACT OF DIORITE, QUARTZ DIORITE WITH COARSE GRAINED BRECCIA ANDESITE
- STEEP MAGNETIC GRADIENTS
- MAGNETIC LINEARS
- A-B-C AREAS OF INTEREST

1000 0 1000 2000 3000
FEET (APPROX.)

1923

TORWEST RESOURCES (1962) LTD.
GUICHON CREEK AREA - KAMLOOPS & NICOLA M.D.
BRITISH COLUMBIA

GENERAL INTERPRETATION MAP

TORWEST 'A'

TO ACCOMPANY THE GEOPHYSICAL REPORT ON THE AEROMAGNETIC SURVEY OVER MARB GROUP OF CLAIMS OWNED BY TORWEST RESOURCES (1962) LTD.
BY DONALD R. COCHRANE, P.ENG. - GLEN WHITE, GEOPHYSICIST ET AL
VANCOUVER, BRITISH COLUMBIA

GEO - X SURVEYS LTD.

DRAWN	D E Y	JOB NO	FIG NO
DATED	JUNE 25, 1969	1088	5
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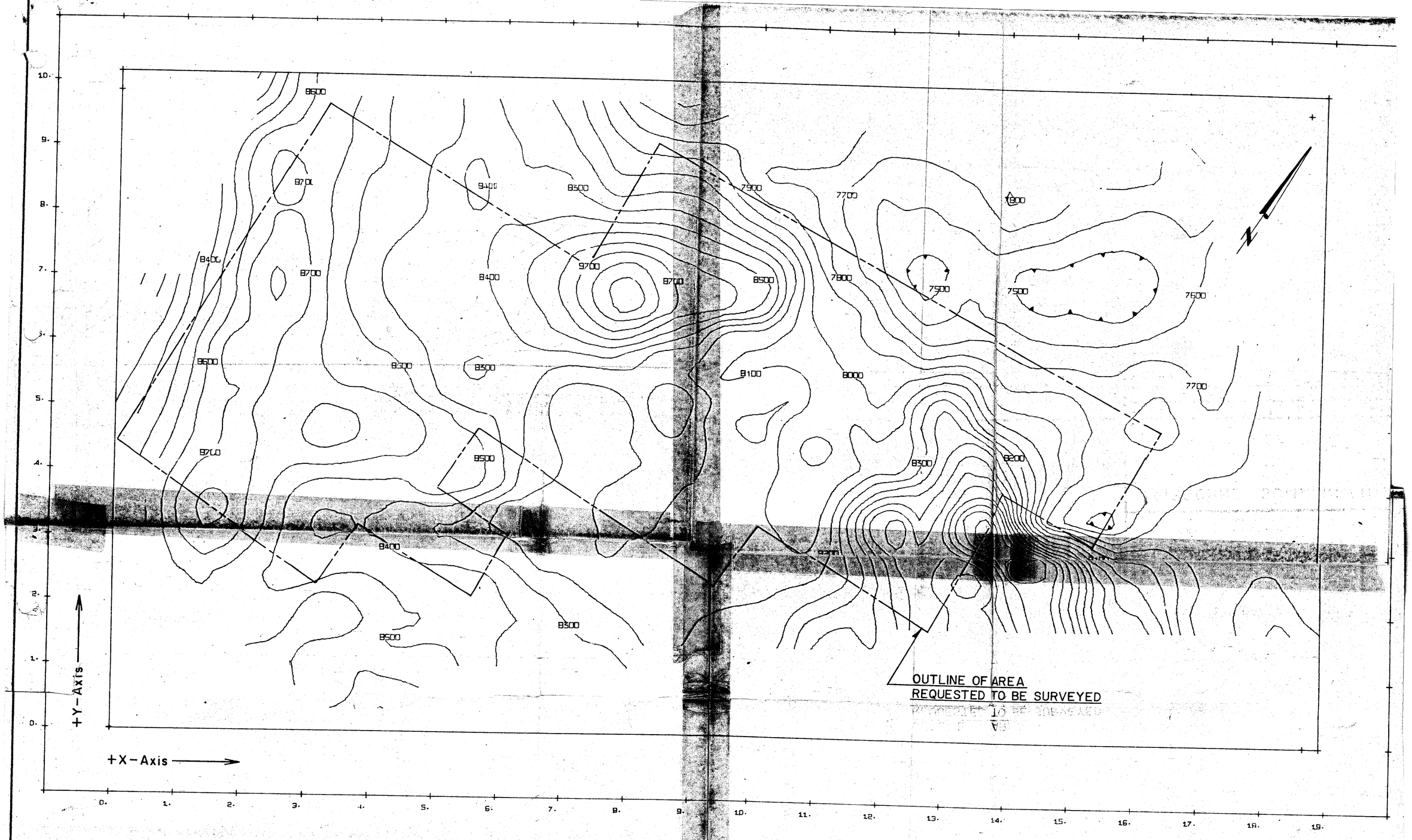

NOTE VARIAN PROTON MAGNETOMETER V4937A
VARIAN DIGITAL RECORDER SDV 4991
TOTAL INTENSITY, ADD 50,000 GAMMAS
CONTOUR INTERVAL 100 GAMMAS
EPOCH 1969.41

TO ACCOMPANY THE GEOPHYSICAL REPORT ON THE AEROMAGNETIC SURVEY OVER THE MARB GROUP OF CLAIMS OWNED BY TORWEST RESOURCES (1962) LTD.
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AIRBORNE ISOMAGNETIC PLAN

TORWEST 'A'

DRAWN	IBM	JOB NO.	FIG. NO.
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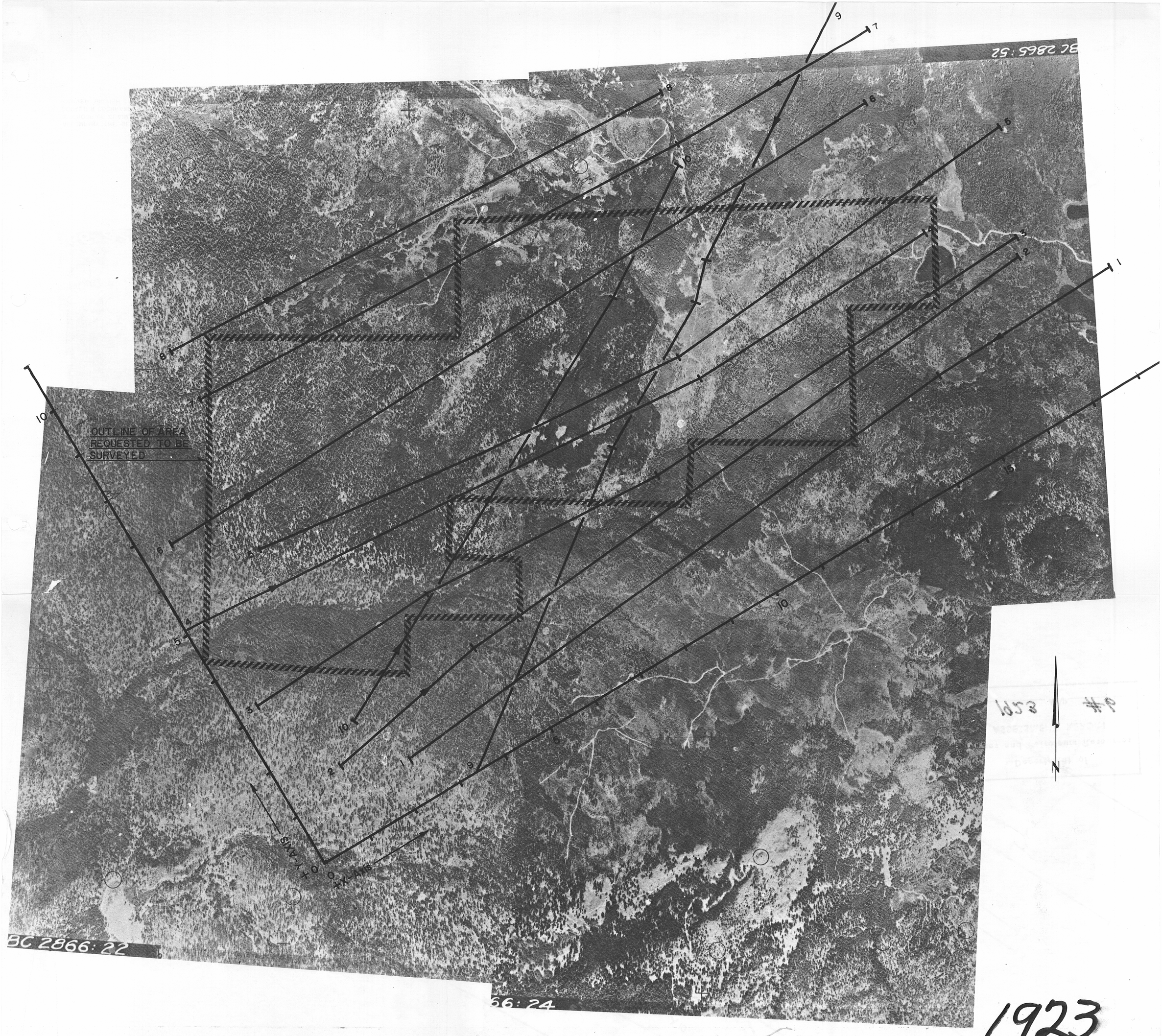

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Fig.3A FLIGHT LINES ON AERIAL MOSAIC
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