

83-#121-#1122

NAKUSP RESOURCES LTD. <sup>3</sup>  
AIRBORNE MAGNETOMETER AND  
VLF ELECTROMAGNETOMETER SURVEYS  
TILLICUM MOUNTAIN AREA

Silver Mountain Project, Chieftain  
Project, Hat Project, Slocan M.D.,  
B. C.

Lat. 50°04'N, Long. 117°45'W,  
N.T.S. 82 F/13, 82K/4

AUTHOR: Glen E. White, P. Eng.

DATE OF WORK: November 1982,  
Jan., Feb., March/83

DATE OF REPORT: March 31, 1983

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

11,122

part 2  
of 2

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Figure 8 - VLF-EM, Seattle

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Figure 10 - VLF-EM, Difference

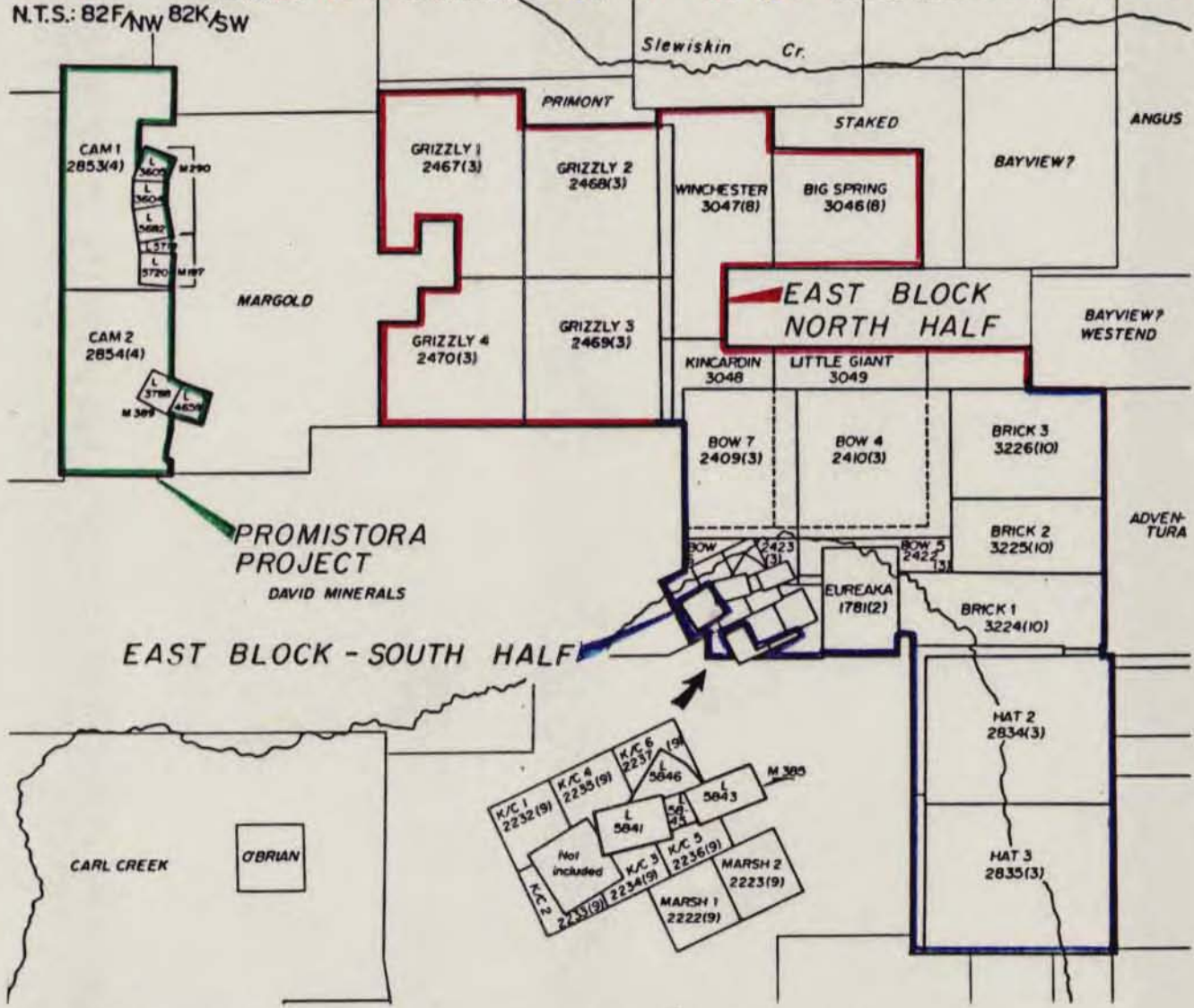
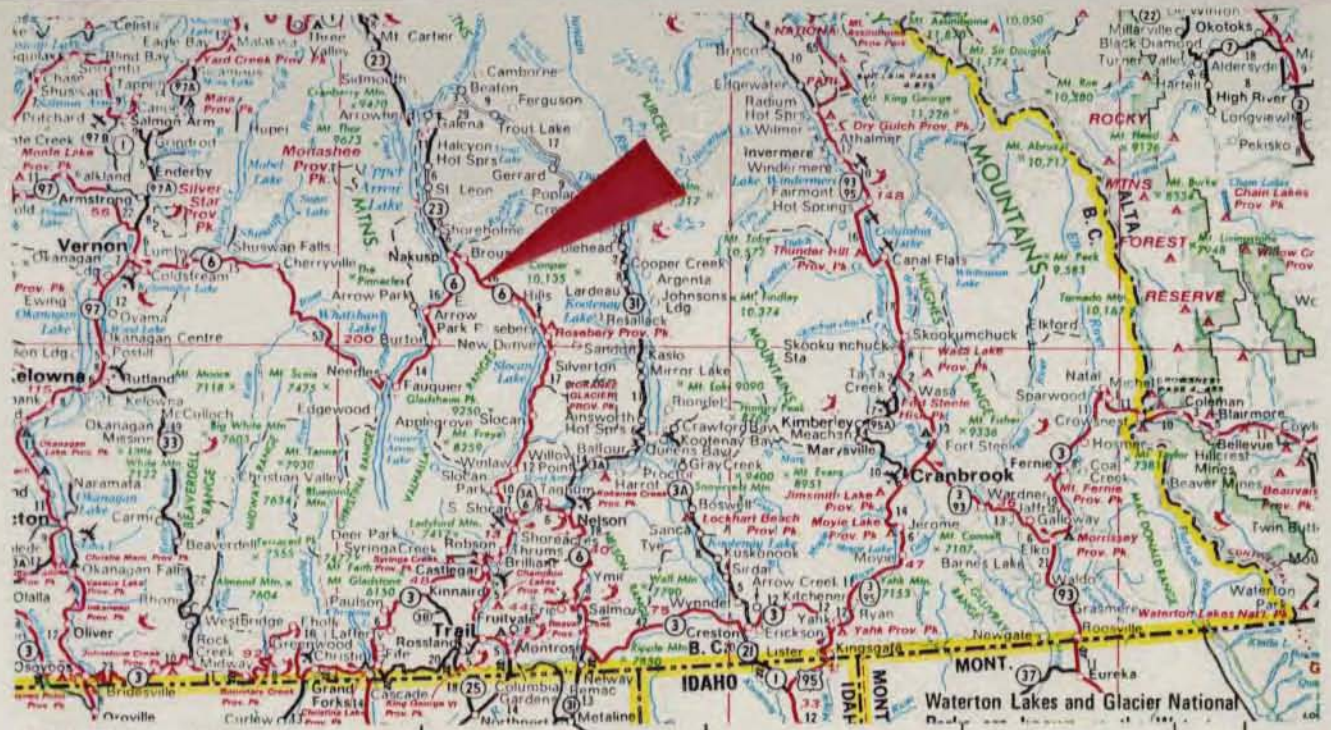
Figure 11 - Photomosaic

Plate 1 - General Geology

Appendix - Detail Claim Map, I.M. Watson

- Detail Claim Listing, I.M. Watson





**NAKUSP - RESOURCES LTD.  
LOCATION AND CLAIMS MAP**

FIGURE 1



## INTRODUCTION

Nakusp Resources Ltd. participated in a large regional airborne magnetometer and VLF electromagnetometer surveys centered on the Tillicum Mountain Gold Prospect during the month of November 1982. The survey was flown by Western Geophysical Aero Data Ltd.

The data was recorded on charts and magnetic tape and has been processed in two sections, as a north half and a south half. These two halves cover some 252 2-post claims and units which comprise the Eastern Block of claims held by Nakusp Resources Ltd.

The purpose of the survey was to try and delineate any variations in magnetic intensity and conductive responses that would assist in the search for gold or massive sulphide mineralization.

A "Geological Report on the Properties of Nakusp Resources Ltd." dated January 1983 by I.M. Watson and Associates Ltd. gives a detailed description of the geology and claims and was used as a basis for this report.

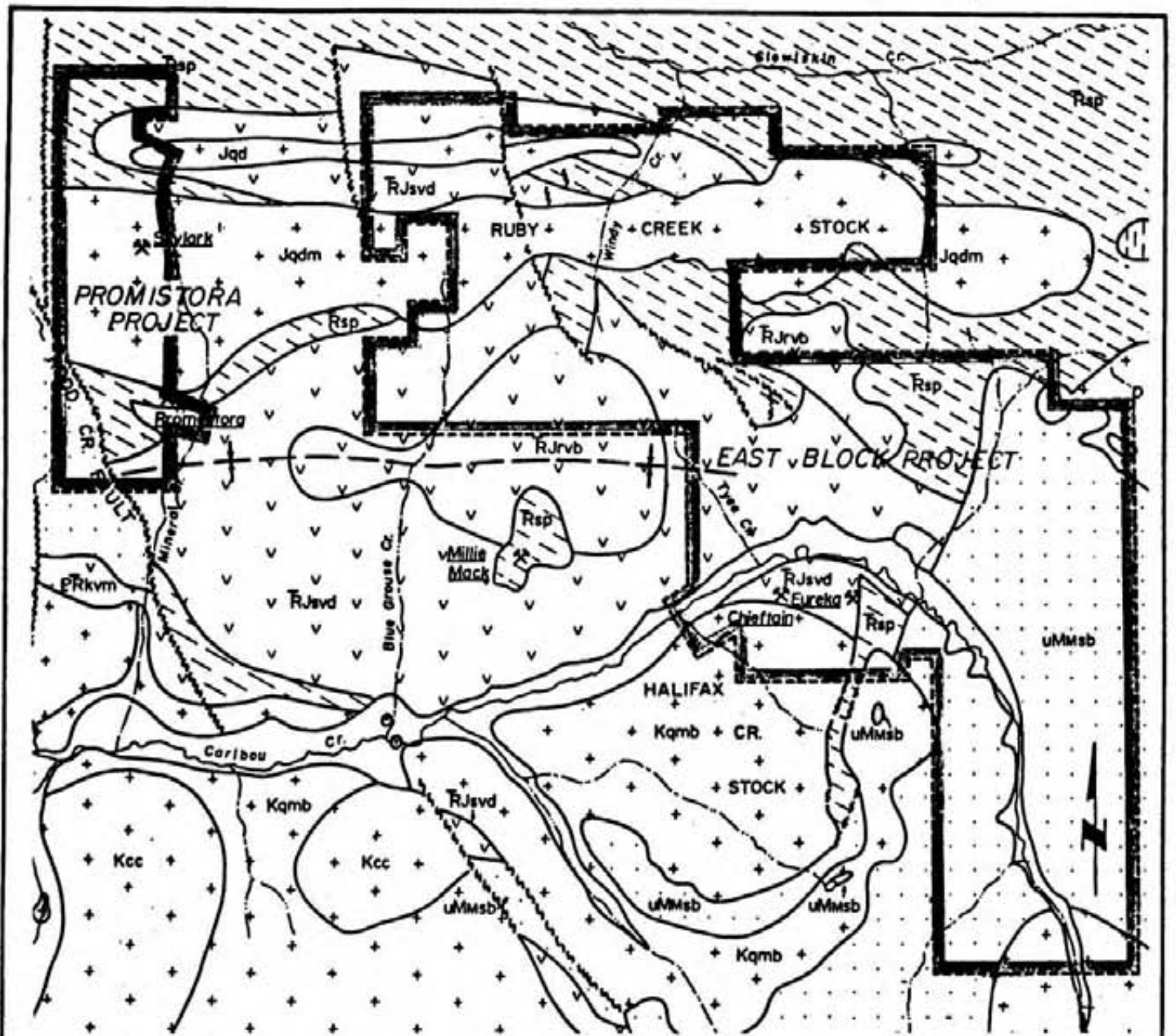
## PROPERTY

A generalized property map is shown in Figure 1 which outlines the northern half and the southern half of the claim block as discussed in this report. A detailed claim map and claim listing from I. M. Watson's report is illustrated in the Appendix.

## LOCATION AND ACCESS

The survey area is located some 15 km southeast of Nakusp and some 12 km northeast of Burton, B. C. The Latitude and Longitude for the northern block is: Lat.  $50^{\circ}04'N$ , Long.  $117^{\circ}45'W$  and for the southern block: Lat.  $50^{\circ}02'N$ , Long.  $117^{\circ}40'W$ , N.T.S. 82F/13 and 82K/4, Slokan Mining Division, B. C.





**LEGEND**

**CRETACEOUS &/OR JURASSIC**

**LOWER CARIBOU CREEK PLUTON**

[Kcc] Quartz monzonite, granodiorite

**GOATCANYON-HALIFAX CR.-WRAGGE CR. STOCK**

[Kamb] Quartz monzonite

**SNOWSLIDE-WRAGGE CR. STOCKS**

[Kam] Qtz. monzonite, qtz diorite, granodiorite

**JURASSIC &/OR CRETACEOUS**

**RUBY RANGE STOCK**

[Jqdm] Biotite hornblende quartz diorite

**MEADOW MTN & E. CARIBOU STOCKS**

[Jqd] Hornblende quartz diorite

**JURASSIC**

**ALLSHOUSE PEAK STOCK**

[Jkx] Quartz monzonite

**LOWER JURASSIC**

**ROSSLAND GROUP**

[Rjrvb] Meta-basalt

**TRIASSIC TO LOWER JURASSIC**

**SLOCAN GROUP**

[Rjvvd] Meta-andesite to meta-dacite

[Rsp] Phyllite, argillite, tuff

**PERMIAN &/OR TRIASSIC**

**KASLO GROUP**

[Pjkvm] Amphibolite, meta-basalt

**UPPER MISSISSIPPIAN TO PENNSYLVANIAN OR PERMIAN**

**MILFORD GROUP**

[uMmsb] Metasediments, pelitic schist, quartzite, calc-silicates

[uMmsc] Metasediments, pelitic schist, quartzite, calc-silicates

[uMmsb] Metasediments, pelitic schist, quartzite, calc-silicates

[uMmsc] Metasediments, pelitic schist, quartzite, calc-silicates

[uMmsb] Metasediments, pelitic schist, quartzite, calc-silicates

[uMmsc] Metasediments, pelitic schist, quartzite, calc-silicates

[uMmsb] Metasediments, pelitic schist, quartzite, calc-silicates

[uMmsc] Metasediments, pelitic schist, quartzite, calc-silicates

[uMmsb] Metasediments, pelitic schist, quartzite, calc-silicates

[uMmsc] Metasediments, pelitic schist, quartzite, calc-silicates

[uMmsb] Metasediments, pelitic schist, quartzite, calc-silicates

[uMmsc] Metasediments, pelitic schist, quartzite, calc-silicates

[uMmsb] Metasediments, pelitic schist, quartzite, calc-silicates

[uMmsc] Metasediments, pelitic schist, quartzite, calc-silicates

**NAKUSP RESOURCES LTD.  
GENERAL GEOLOGY**



- [Symbol] Fault
- [Symbol] Synclinal axis
- [Symbol] Mineral showing
- [Symbol] Property boundary

Access to the claims is by logging road up Slewish Creek, south of Nakusp, or east along the Caribou Creek logging roads northeast of Burton.

#### GENERAL GEOLOGY

A general geological description by I. M. Watson page 7, is as follows:

"The Nakusp Resources properties lie on the southern limb of the Slocan synclinorium, which strikes east-south-east through the Valhalla Range, swinging southerly to the east of Slocan Lake. The fold is terminated to the west by the Rodd Creek Fault, a branch of the Columbia River Fault Zone. The north and south limits of the syncline are marked by the Kuskanax Batholith and the Valhalla Dome respectively.

The rocks within the syncline are highly deformed metasediments and metavolcanics of Permian to early Jurassic age intruded by granitic plutons of Jurassic to Cretaceous age. The regional metamorphism predates the intrusions, and the grade of metamorphism is lowest (green schist facies) in the structural troughs, rising to staurolite facies towards the flanks. The bulk of the rocks within the Slocan syncline has been assigned to the Slocan Group (Triassic - Lower Jurassic) and consists of a thick succession of argillites overlain by about 1200 meters of volcanics. The volcanics form the cores of the synclinal folds."



Page 8 describes the mineralization:

"The commonest type of deposit is lead-zinc-silver-gold bearing quartz veins in graphitic shear zones. Host rocks are usually schistose argillites, which have been mapped as part of the Slocan or possibly Rossland Groups. Examples of this type include the Promestora, Chieftain, Eureka and Millie Mack deposits.

Less abundant are the gold and/or silver veins hosted by calc-silicates within the metasediments of the Milford Group. The Esperanza-LeTeko Tillicum gold deposit is of this type; there the host rocks occur in a transition zone which is thought to overlie a sequence of basic volcanics. Structural control is evident in the presence of fracturing, folding and brecciation (Vincent, 1981). The Hailstorm and Silver Queen silver-lead-zinc deposits occur in calcite zones associated with calc-silicates along a presumed shear zone through Grey Wolf Mountain and Hailstorm Peak (J. S. Brock et al, 1982)."

The eastern block contains two old workings, the Eureka zone and the Chieftain zone; these are outlined on page 21 as follows:

"The Eureka zone occurs within a strong northeasterly striking, north-westerly dipping graphitic shear along the west bank of the Eureka Creek gully. The shear is intermittently exposed along a strike length of at least 370 metres, and separates grey argillites on the western (hanging wall) side from grey, maroon and green mottled



andesites on the eastern (foot wall) side. Both the argillites and volcanics are moderately silicified, and the argillites contain finely disseminated pyrite. The argillites strike north-east and dip moderately to the north-west."

The other working is as follows on page 24:

"The vein consists of quartz veinlets and lenses within a two metre thick graphitic shear in dark grey argillites. The shear strikes west-north-west and dips south-west at about  $30^{\circ}$ . The argillites occur as a bed or lense within a sequence of buff weathering, grey to dark grey mottled andesitic flows, or tuffs, reputed to belong to the Slocan Group. Sulphides in the quartz veins consist of patchily disseminated pyrite and galena. The argillites and volcanic rocks also contain finely disseminated pyrite."





AIRBORNE VLF-ELECTROMAGNETIC AND MAGNETIC SURVEY

This survey system simultaneously monitors and records the output signal from a proton precession magnetometer and two VLF-EM receivers installed in a bird designed to be towed 100 feet below a helicopter. A gimbal and shock mounted TV camera, fixed to the helicopter skid, provides input signal to a video cassette recorder allowing for accurate flight path recovery by correlation between the flight path cassette and air photographs of the survey area. A KING KRA-10A radar altimeter allows the pilot to continually monitor and control terrain clearance along any flight path.

Continuous measurements of the earth's total magnetic field intensity and of the total horizontal VLF-EM field strength of two transmission frequencies are stored in three independent modes: an analogue strip chart recorder, digital magnetic tapes and a digital video recovery system. A three-pen analogue power recorder provides direct, unfiltered recordings of the three geophysical instrument output signals. A Hewlett-Packard 9875 tape drive system digitally records all information as it is processed through an on-board micro-computer. The magnetic and electromagnetic data is also processed through the onboard micro-computer, incorporating an analogue to digital converter and a character generator, then superimposed along with the date, real time and terrain clearance upon the actual flight path video recording to allow exact correlation between geophysical data and ground location. The continuous input magnetic signal is processed at the maximum A/D converter rate, averaged and updated on the video display every second. Correlation between the strip chart, digital tape and the video flight path recovery tape is controlled via fiducial marks common to all systems. Line identification, flight direction and pertinent survey information are recorded on the audio track of the video recording tape.

### DATA PROCESSING

Field data is digitally recorded on magnetic cassettes in a format compatible with the Hewlett-Packard 9845 computer. The flight path locations are digitized, thus the information can be processed as either time series or space point data.

Total field intensity magnetic information is routinely edited for noise spikes and corrected for any diurnal variations recorded on a base magnetometer located in the survey area.

Total field intensity VLF-EM signals are sensitive to topographic changes and receiver oscillation. Oscillation effects can be removed by filters tuned to the dominant period. Long period terrain effects can be removed by subtracting a polynomial fitted base level from the data. The degree of the polynomial can be selected to best represent terrain variations observed in the survey area.

Short period terrain effects often have similar response parameters to target conductive features. An interpretational technique often useful in distinguishing between terrain anomalies and conductor anomalies is to observe the difference between the responses from two transmitter stations. Terrain variations normally affect both data sets to a similar degree and are much reduced on a difference plot. The amplitude of the response due to a conductive body is dependent upon the relationship between the conductors' strike and direction to the transmitter station. In most instances the anomalous responses will vary between frequencies and therefore remain evident on the difference plot.

## DISCUSSION OF RESULTS

### North Half

The northern half of the survey shows considerable magnetic variations. Background is some 850 gammas with the highs being in the order of 1150 gammas, some 300 gammas above the background level. Magnetic intensity variations of this magnitude are usually associated with changes in lithology, fault zones, or moderate concentrations of magnetic and/or pyrrhotite mineralization. The total field magnetic intensity map, Figure 2, shows the interpreted fault zones, E-W magnetic linears which can reflect geological contact and/or structural zones, and the VLF electromagnetic conductor trends. The E-W lineaments would appear to relate to the synform and antiform directions in this area. The Ruby Range Stock trends in an east-west direction in the northern half of this upper map sheet. It can not be directly correlated with the magnetic intensity information. The same can be said of the Mountain Meadow Pluton. The upper portion of this map sheet is crosscut with NE directed faults. A well defined magnetic high was detected on Line 35 and 36 in the northwest corner of the survey grid. This high would appear to be associated with volcanic rocks. Moreover, this area shows some definite VLF-EM responses. Just to the south on Line 39, is situated the best VLF-EM response detected by this survey. It occurs near the intersection of an inferred NE-SW fault and an E-W linear. The largest magnetic high in size is found in the Big Spring claim in the eastern part of this map. The area of this magnetic high is mapped as Ruby Range Granitic Stock. However, since the stock extends westward across the claims as moderate magnetic



intensities, this magnetic anomaly is anomalous to the trend. Thus, there may be two phases of intrusive and/or the magnetic high represents a more magnetic dioritic phase which underlies this area. Dyke-like tentacles appear to extend southward in the Slocan Group of sediments. A major fault system occurs to the east of this anomaly. A southwestern extension of this magnetic tentacle terminates as a narrow, strong magnetic high on Lines 46 and 47 in the center of the survey area. It is associated with a VLF-EM conductor and a NW-SE fault. Just to the northwest of this anomaly is a series of intersecting inferred faults which could be of tectonic interest. Several small magnetic anomalies occur at the western side of the survey area around Line 44 near the Grizzly 3 L.C.P. The magnetic features appear to be cut by a NW-SE fault. The VLF-EM data shows two parallel NW-SE directed conductors.

#### South Half

The southern half of this survey shows a much more moderate pattern of magnetic responses than the northern half. This map sheet appears to be dominated by a strong WSW-ENE fault in the upper part and a NW-SE one in the lower part. This latter fault appears to be a pronounced lineament which trends into the north half of the survey and is parallel to the Rodd Creek Fault and may possibly be a splay from the Columbia River Fault. Thus, an important area of tectonic intersection would be just north of the Eureka claim block. This area is also an arcuate magnetic low which on other detail magnetic maps covered by this regional survey has had gold and





silver mineralization. The Eureka claim contains a broad magnetic high which may possibly reflect an underlying diorite intrusive. A small magnetite-bearing diorite dyke was noted by I. M. Watson on the Chieftain claim just to the west. Two VLF-EM conductors were detected on the Eureka claim. They trend NE into the claim block and appear to be closely coincident with NE trending graphitic shears as noted by Mr. Watson, P. Eng. VLF-EM conductors were noted near the tie line in the upper part of this survey sheet where there is no particular magnetic response. A strong possibly E-W conductor was delineated in the lower part of this map sheet. It is parallel to an E-W linear and a small magnetic anomaly.

#### CONCLUSION AND RECOMMENDATIONS

##### North Half

The north half of the survey showed the greatest magnetic variations giving several magnetic anomalies and areas of intersecting inferred faults that are areas of interest. Six such areas of interest were noted and should be examined by normal exploration techniques.

##### South Half

The southern half of the survey is more quiet magnetically but is traversed by several pronounced fault zones. Six areas of interest were also noted and should be further investigated.



In conclusion, this magnetic and VLF electromagnetic survey has outlined magnetic features which would suggest a change in rock type or some variation or increased metamorphic activity than that shown on the regional map. It is also apparent that the area is traversed by major faults and conjugate fault sets that can provide the necessary dilatency for hydrothermal mineralization. Thus, it is recommended that as the regional exploration program progresses, this airborne data be re-evaluated since the geophysical interpretation at this stage is of a preliminary nature.

Respectfully submitted,



Glen E. White, P. Eng.  
Consulting Geophysicist



Instrument SpecificationsSABRE AIRBORNE VLF SYSTEM

- Source of Primary Field: VLF radio stations in the frequency range of 14  $\text{KH}_z$  to 30  $\text{KH}_z$ .
- Type of Measurement: - Horizontal field strength
- Number of Channels: - Two; Seattle, Washington at 18.6  $\text{KH}_z$   
- Annapolis, Maryland at 21.4  $\text{KH}_z$
- Type of Sensor: - Two ferrite antennae arrays, one for each channel, mounted in magnetometer bird.
- Output: - 0 - 100 mV displayed on two analogue meters (one for each channel)  
- recorder output posts mounted on rear of instrument panel
- Power Supply: - Eight alkaline 'AA' cells in main instrument case (life 100 hours)  
- Two 9-volt alkaline transistor batteries in bird (life 300 hours)
- Instrument Console: - Dimensions - 30 cm x 10 cm x 25 cm  
- Weight - 3.5 Kg.



INSTRUMENT SPECIFICATIONSFLIGHT PATH RECOVERY SYSTEMi) T.V. Camera

Model: RCA TC2055 Vidicon  
Power Supply: 12 volt dc  
Lens: variable, selected on basis of expected terrain clearance  
Mounting: Gimbal and shock mounted to housing  
- housing bolted to helicopter skid

ii) Video Recorder

Model: Sony SLO - 340  
Power Supply: 12 volt dc / 120 volt AC (60Hz)  
Tape: Betamax  $\frac{1}{2}$ " video cassette - optional length  
Dimensions: 30 cm X 13 cm X 35 cm  
Weight: 8.8 Kg  
Audio Input: Microphone in - 60 db low impedance microphone  
Video Input: 1.0 volt P-P, 75 $\Omega$  unbalanced, sync negative from camera

iii) Altimeter

Model: KING KRA-10A Radar Altimeter  
Power Supply: 27.5 volts dc  
Output: 0-25 volt (1 volt /1000 feet) dc signal to analogue meter, 0-10 v (4mv/ft) analogue signal to microprocessor  
Mounting: fixed to T.V. camera housing, attached to helicopter skid





INSTRUMENT SPECIFICATIONSBARRINGER AIRBORNE MAGNETOMETER

**MODEL:** Nimbin M-123  
**TYPE:** Proton Precession  
**RANGE:** 20,000 to 100,000 gammas  
**ACCURACY:**  $\pm 1$  gamma at 24 V d.c.  
**SENSITIVITY:** 1 gamma throughout range  
**CYCLE RATES:**  
     Continuous 0.6, 0.8, 1.2 and 1.9 seconds  
     Automatic 2 seconds to 99 minutes in 1 second steps  
     Manual Pushbutton single cycling at 1.9 seconds  
     External Actuated by a 2.5 to 12 volt pulse longer than 1 millisecond.

**OUTPUTS:**  
     Analogue 0 to 99 gammas or 0 to 990 gammas  
             - automatic stepping  
     Visual 5 digit numeric display directly in gammas

**EXTERNAL OUTPUTS:**  
     Analogue 2 channels, 0 to 99 gammas or 0 to 990 gammas at 1 m.a. or 1 volt full scale deflection.  
     Digital BCD 1, 2, 4, 8 code, TTL compatible.

**SIZE:** Instrument set in console  
           30 cm X 10 cm X 25 cm

**WEIGHT:** 3.5 Kg

**POWER REQUIREMENTS:** 12 to 30 volts dc, 60 to 200 milliamps maximum.

**DETECTOR:** Noise cancelling torroidal coil installed in airfoil.

INSTRUMENT SPECIFICATIONS

DATA RECORDING SYSTEM

i) Chart Recorder

Type: Esterline Angus Miniservo III Bench AC Ammeter -  
Voltmeter Power Recorder

Model: MS 413 B

Specification: S-22719, 3-pen servo recorder

Amplifiers: Three independent isolated DC amplifiers  
(1 per channel) providing range of acceptable input signals

Chart: 10 cm calibrated width 2-fold chart

Chart Drive: Multispeed stepper motor chart drive,  
Type D850, with speeds of 2, 5, 10, 15,  
30 and 60 cm/hr. and cm/min.

Controls: Separate front mounted slide switches for  
power on-off, chart drive on-off, chart  
speed cm/hr - cm/min. Six position chart  
speed selector. Individual front zero  
controls for each channel.

Power Requirements: 115/230 volts AC at 50/60 Hz  
(Approximately 30 VA)

Writing System: Disposable fibre tipped ink cartridge  
(variable colors)

Dimensions: 38.6 cm X 16.5 cm X 43.2 cm

Weight: 9.3 Kg

ii) Digital Video Recording System

Type: L.M. Microcontrols Ltd. Microprocessor Control  
Data Acquisition System

Model: DADG - 68

Power Requirements: 10-14 volts dc, Maximum 2 amps

Input Signal: 3, 0-100 mvolt dc signals

1, 0-25 volt dc signal

Microprocessor: Motorola MC-6800

CRT Controller: Motorola MC-6845

Character Generator: Motorola MCM-6670

Analogue/Digital Convertor: Intersil 7109

Multiplexer: Intersil IH 6208

Digital Clock: National MM 5318 chip

9 volt internal rechargeable nickle-  
cadmium battery

Fiducial Generator: Internally variable time set controls  
relay contact and audio output

Dimensions: 30 cm X 30 cm X 13 cm

Weight: 3 Kg

DATA RECORDING SYSTEM (CON'T)iii) Digital Magnetic Tape

Type: Hewlett Packard cartridge tape unit

Model: 9875A

Power Requirements: 24 volt d.c.

Data Format: HP's Standard Interchange Format (SIF)

Tape Cartridge: HP 98200A 225K byte cartridge compatible with HP Series 9800 desktop computers.

Tape Drive: Dual tape drives providing up to 8 hours continual recording time.

Controller: Internal micro-computer provides 23 built in commands.

: External computer generated commands.

STATEMENT OF QUALIFICATIONS

NAME: WHITE, Glen E., P.Eng.

PROFESSION: Geophysicist

EDUCATION: B.Sc. Geophysicist - Geology  
University of British Columbia.

PROFESSIONAL ASSOCIATIONS: Registered Professional Engineer,  
Province of British Columbia.  
Associate member of Society of Exploration Geophysicists.  
Past President of B.C. Society of Mining Geophysicists.

EXPERIENCE: Pre-Graduate experience in Geology -  
Geochemistry - Geophysics with Anaconda  
American Brass.  
Two years Mining Geophysicist with  
Sulmac Exploration Ltd. and Airborne  
Geophysics with Spartan Air Services  
Ltd.  
One year Mining Geophysicist and Technical Sales Manager in the Pacific  
north-west for W.P. McGill and Associates.  
Two years Mining Geophysicist and  
supervisor Airborne and Ground Geophysical Divisions with Geo-X Surveys  
Ltd.  
Two years Chief Geophysicist Tri-Con  
Exploration Surveys Ltd.  
Twelve years Consulting Geophysicist.  
Active experience in all Geologic provinces of Canada.



COST BREAKDOWN

SURVEY DATE: November, 1982

PERSONNEL :

Survey: M. McDermitt, Technician  
J. Behenna, Technician  
T. Pezzot, Geophysicist

Data Processing: December 1982 - Mqrch 1983  
M. McDermitt, Technician  
J. Behenna, Technician  
T. Pezzot, Geophysicist  
N. Porter, Draftsperson

Supervisor and Reports: March 15-31, 1983  
Glen E. White, P. Eng.

PROJECT FEE:

This survey was flown and data processed for an all inclusive fee of \$26,000 which covers some 252 claim units.



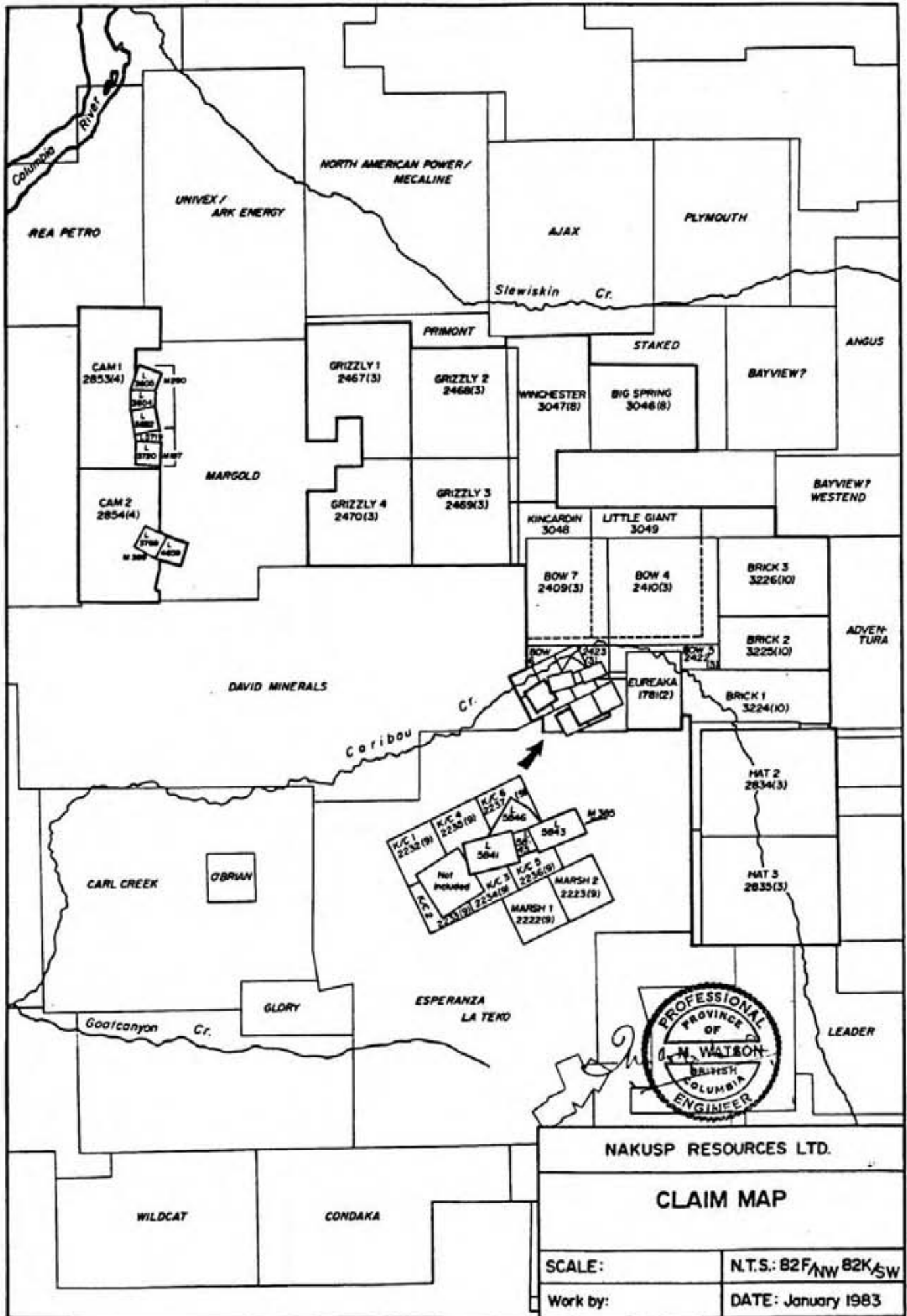


FIG. 3

EASTERN BLOCK

<u>Claim Name</u>	<u>Grant Number</u>	<u>Recording Date</u>	<u>Due Date</u>	<u>No. of Units/ Claims</u>	<u>Total</u>
<u>SILVER MOUNTAIN PROJECT</u>					
BIG SPRING	3046	Aug. 31, 1982	Aug. 31, 1983	20	20
BRICK #1 - #3	3224 - 3226	Oct. 4, 1982	Oct. 4, 1983	32	32
EUREKA	1781	Feb. 26, 1980	Feb. 26, 1984	6	6
GRIZZLY #1, #4	3027 - 3028	Aug. 26, 1982	Aug. 26, 1983	36	
#2, #3	2468 - 2469	Mar. 25, 1981	Mar. 25, 1983	<u>40</u>	76
KINCARDIN	3048	Aug. 31, 1982	Aug. 31, 1983	15	15
LITTLE GIANT	3049	Aug. 31, 1982	Aug. 31, 1983	20	20
ORA	2434	Feb. 25, 1981	Feb. 25, 1985	6	6
WINCHESTER	3047	Aug. 31, 1982	Aug. 31, 1983	18	<u>18</u>
					<u>193</u>

CHIEFTAIN PROJECT

BOW 5 - 6	2422 - 2423	Mar. 11, 1981	Mar. 11, 1983	7	7
K/C #1 - #6	2232 - 2237	Sept. 19, 1980	Sept. 19, 1983	6	6
MARSH #1 - #2	2222 - 2223	Sept. 19, 1980	Sept. 19, 1983	2	2
MINERAL LEASE #385					
Chieftain	Lot no. 5845		Aug. 14, 1983	1	
Duchess	Lot No. 5846		Aug. 14, 1983	1	
Dundas	Lot No. 5843		Aug. 14, 1983	1	
Mammoth #2	Lot No. 5841		Aug. 14, 1983	<u>1</u>	<u>4</u>
					<u>19</u>

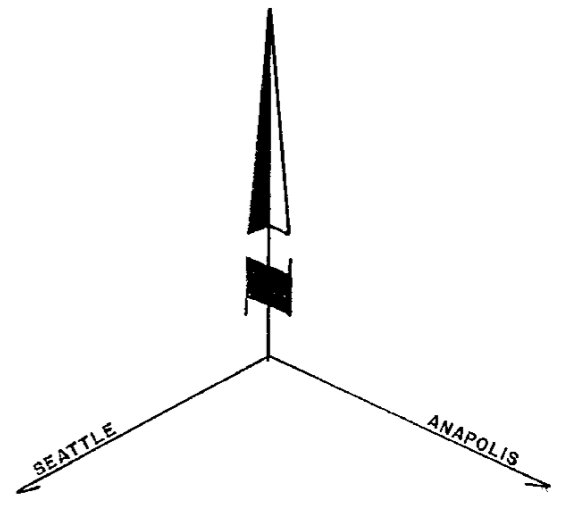
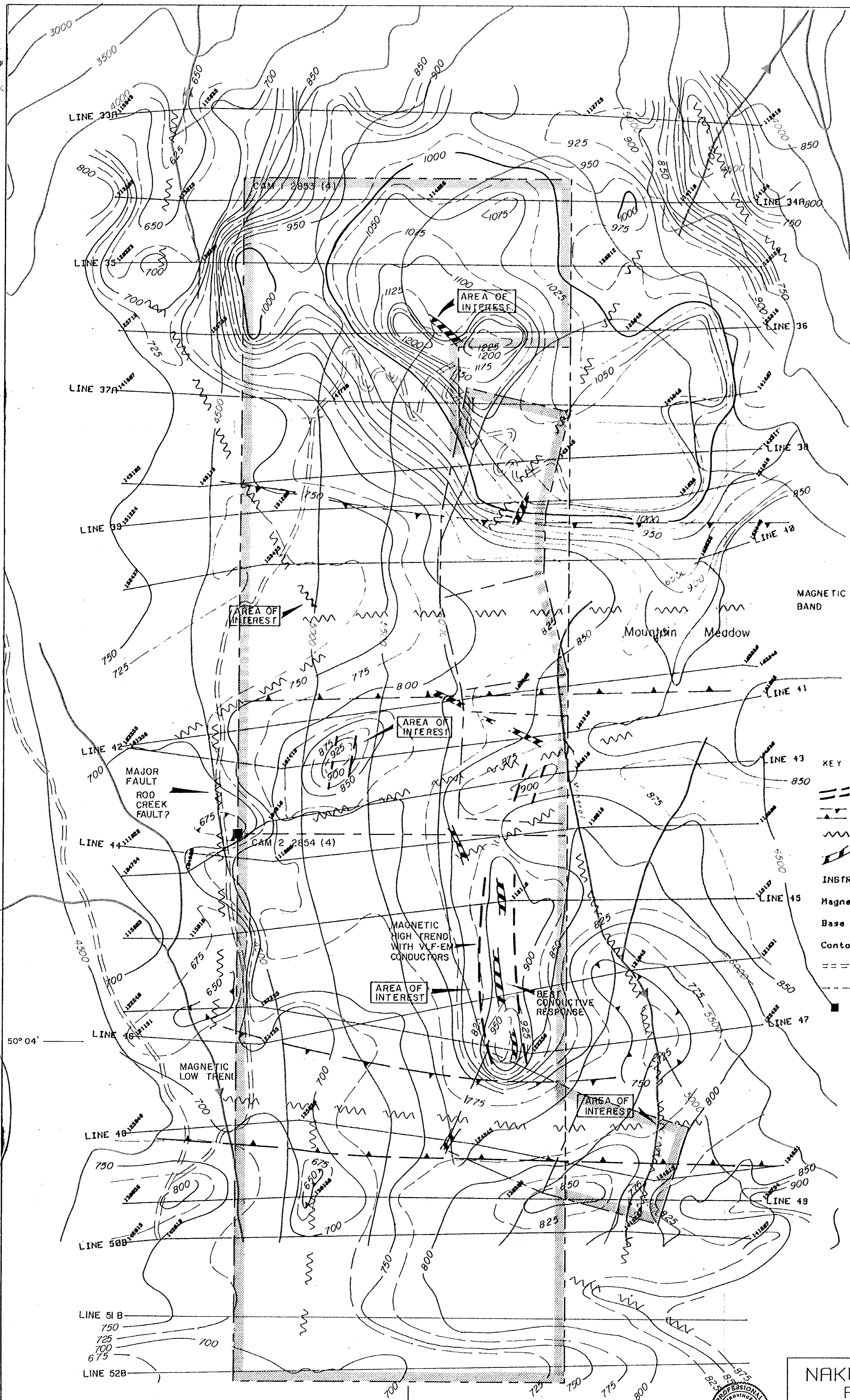
HAT PROJECT

HAT 2, 3	2834 - 2835	Mar. 4, 1982	Mar. 4, 1983	40	<u>40</u>
					<u>40</u>

NAKUSP RESOURCES LTD.  
CLAIM SUMMARY (BY PROJECT)

WESTERN BLOCK - PROMESTORA PROJECT

<u>Claim Name</u>	<u>Grant Number</u>	<u>Recording Date</u>	<u>Due Date</u>	<u>No. of Units/ Claims</u>	<u>Total</u>
CAM #1 - #2	2853 - 2854	Apr. 2, 1982	Apr. 2, 1983	33	33
MINERAL LEASE #197					
Shakespeare	Lot No. 5720		Nov. 1, 1982	1	
Skylark	Lot No. 5719		Nov. 1, 1982	<u>1</u>	2
MINERAL LEASE #290					
Meadow	Lot No. 5862		Jan. 30, 1983	1	
Meadow Queen	Lot No. 3605		Jan. 30, 1983	1	
Mountain Meadow	Lot No. 3604		Jan. 30, 1983	<u>1</u>	3
MINERAL LEASE #389					
Ora Granda	Lot No. 4659		Nov. 2, 1982	1	
Promestora	Lot No. 3788		Nov. 2, 1982	<u>1</u>	<u>2</u>
					<u>40</u>



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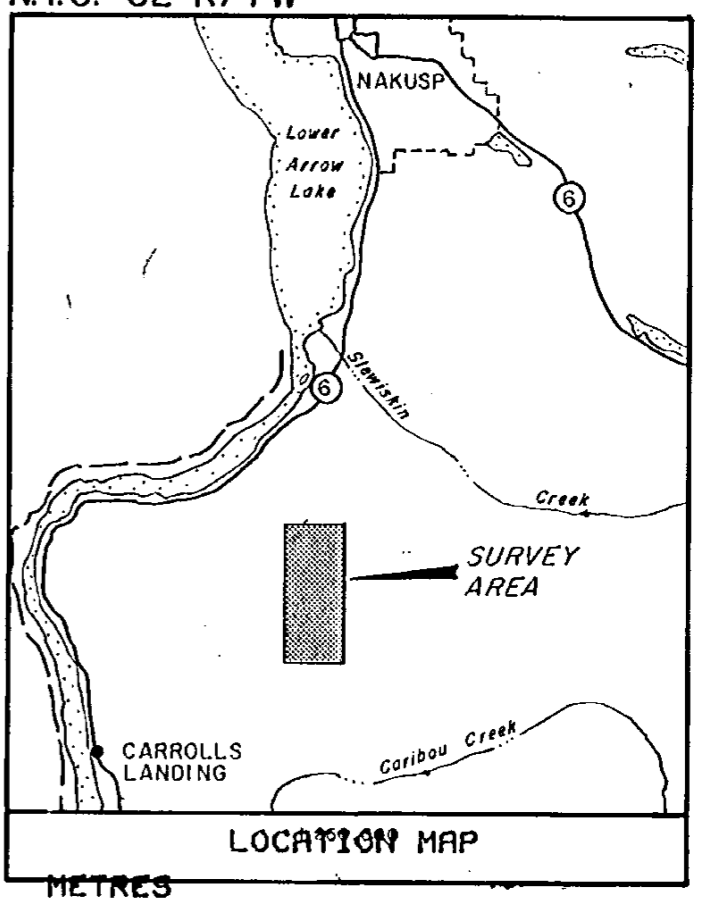
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KEY

- Magnetic High Trend
- Magnetic Low Trend
- Inferred Fault
- VLF-EM Conductors
- INSTRUMENT: Barringer M-123 Magnetometer
- Magnetic data corrected for diurnals
- Base value = 57000 gammas
- Contour interval = 25 gammas
- Roads
- Claim boundary
- Claim post

N.T.S. 82 K/4W



NAKUSP RESOURCES LTD.  
PROMESTORA PROJECT  
MAGNETIC CONTOUR MAP  
TOTAL FIELD INTENSITY (gammas)

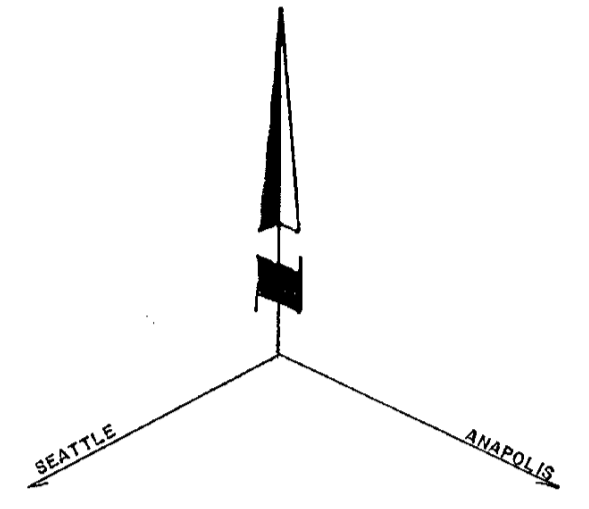
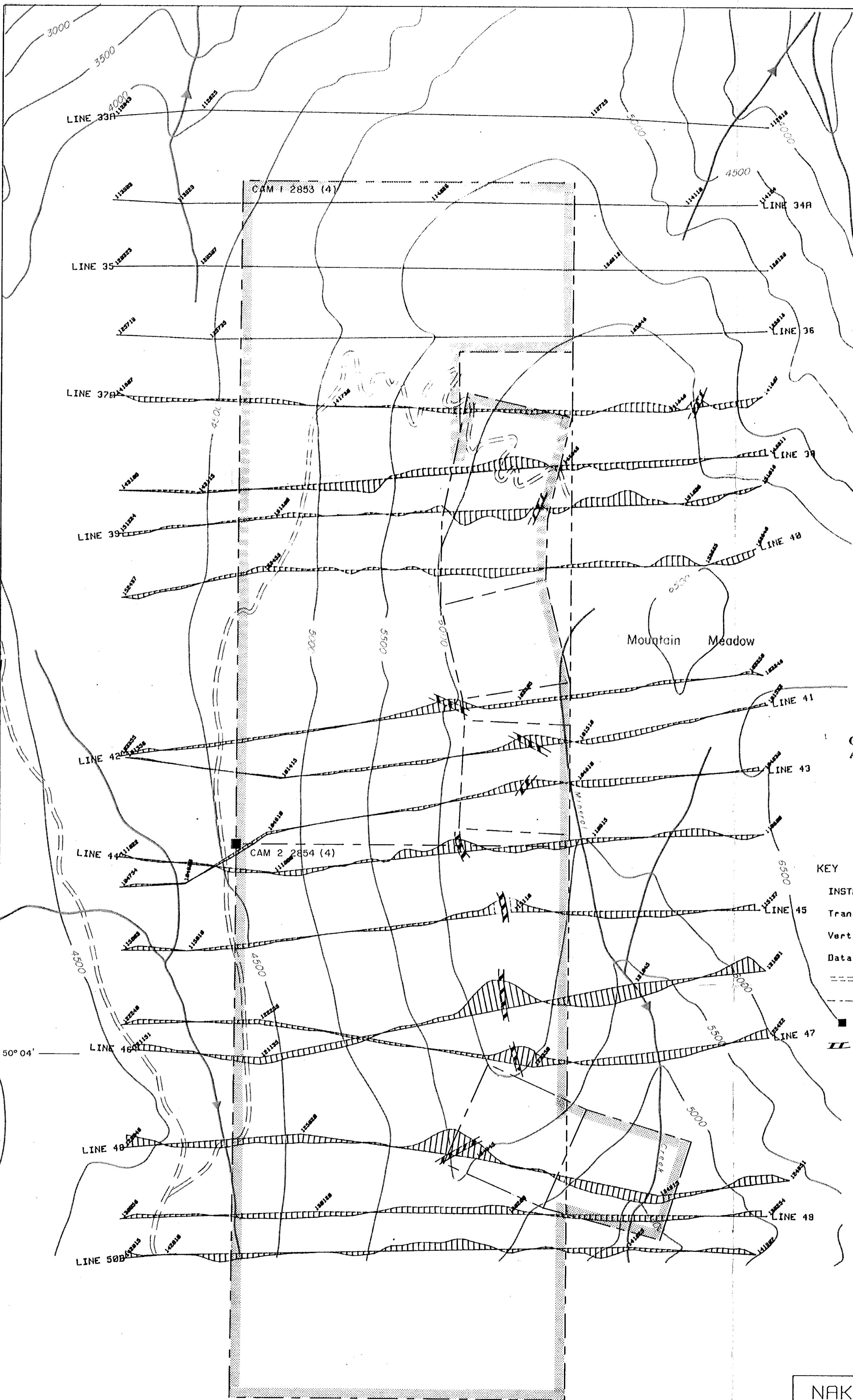
DATE: NOV/82

FIG.: 2

Western  
Geophysical  
Aero Data Ltd.

To accompany the Geophysical Report on the Promestora Project



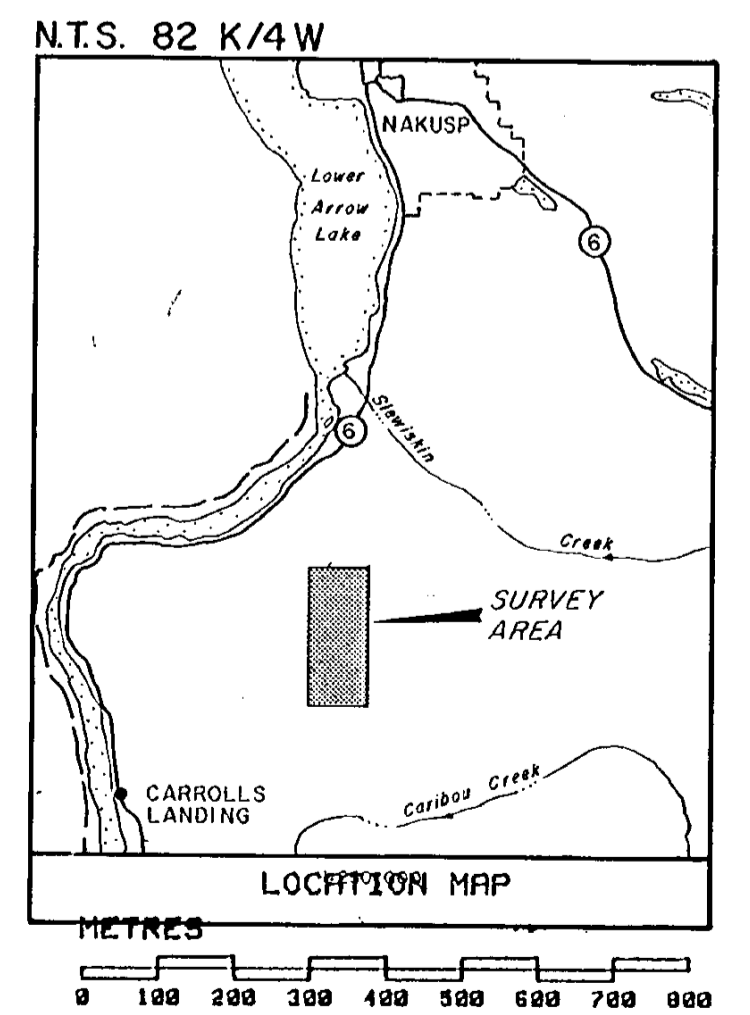


part 1  
of 2

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

11,122

- KEY
- INSTRUMENT: Sabre Total Field Intensity VLF-EM
  - Transmitter Station, Seattle (24.8 Khz)
  - Vertical Scale, 10%/cm.
  - Data corrected for long period terrain effects
  - Roads
  - - - Claim boundary
  - Claim post
  - || Conductor Trend



Western  
Geophysical  
Servo Data Ltd.

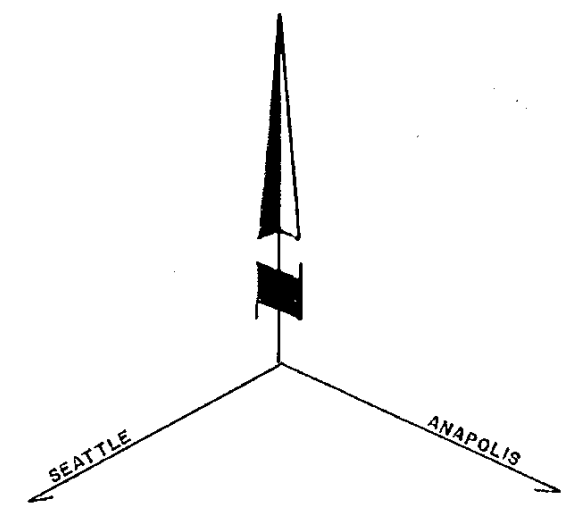
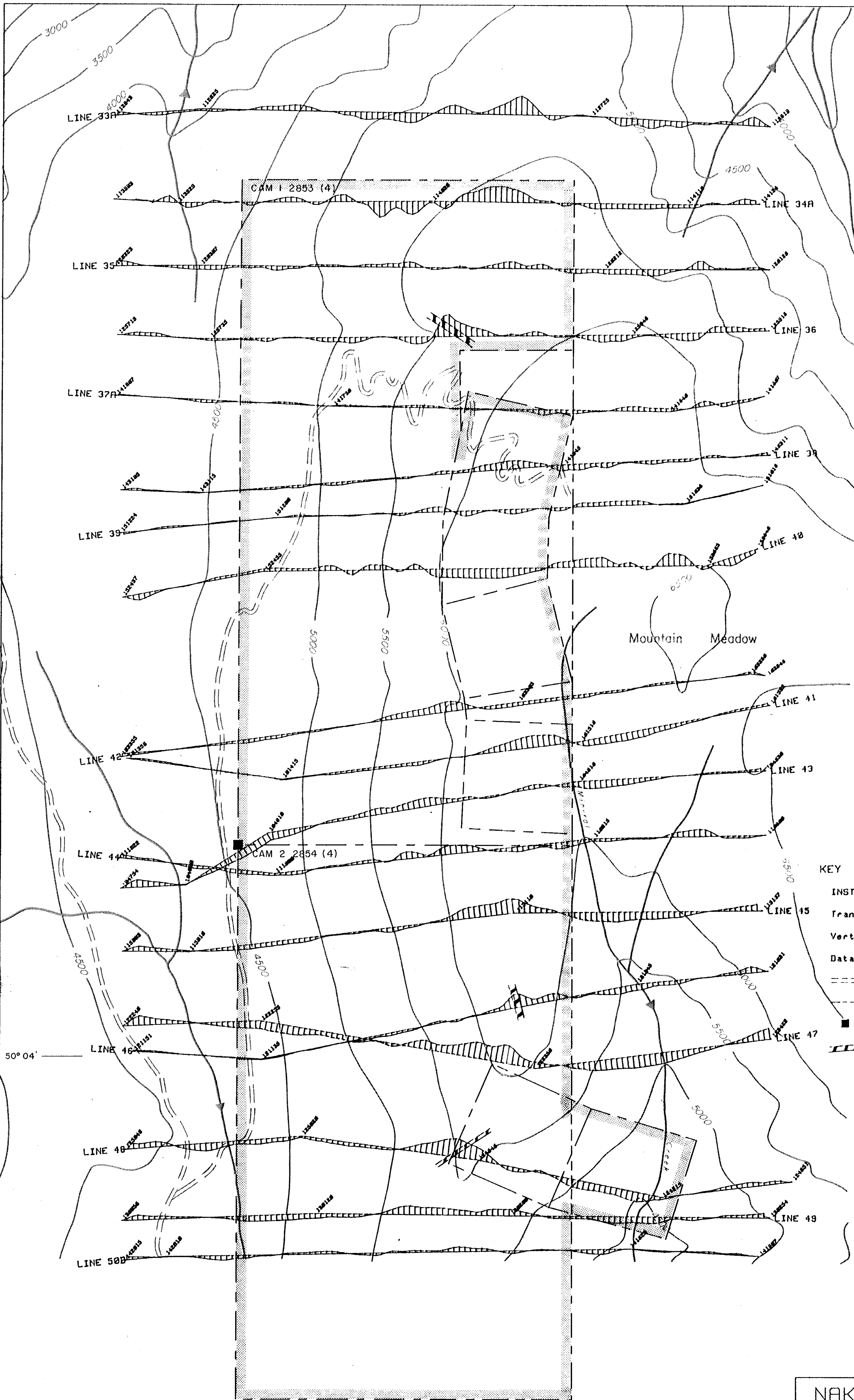
To accompany the Geophysical Report on the Promestora Project



NAKUSP RESOURCES LTD.  
PROMESTORA PROJECT  
VLF-EM PROFILES (SEATTLE)  
TOTAL FIELD INTENSITY

DATE: NOV/82

FIG.: 3

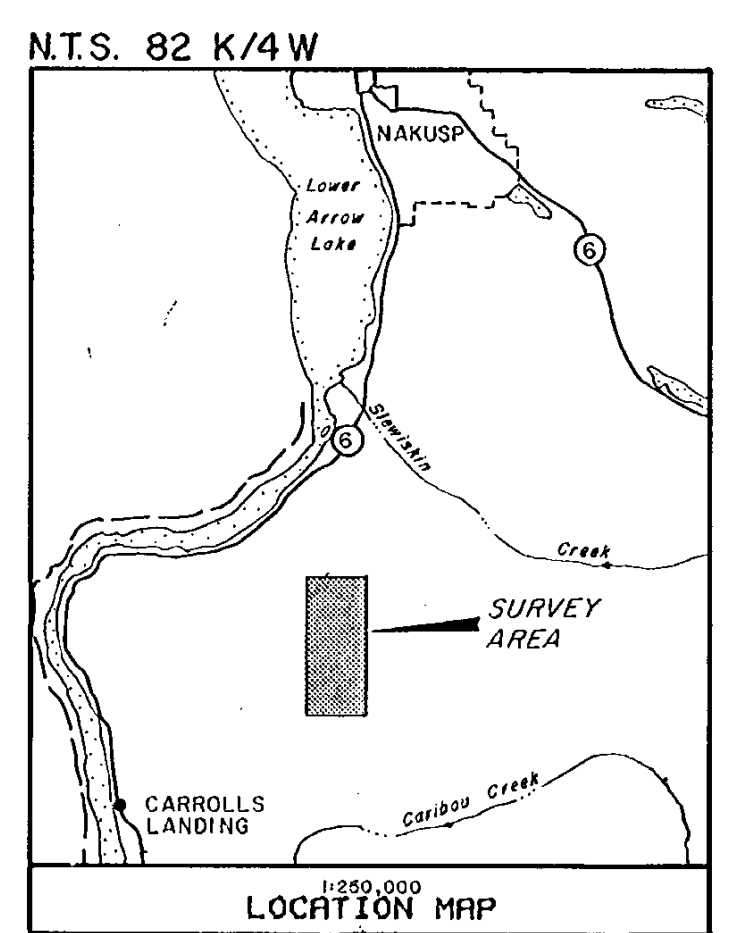


part 1  
of 2

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

11,122

- KEY
- INSTRUMENT: Sabre Total Field Intensity VLF-EM
  - Transmitter Station, Annapolis (22.4 Khz)
  - Vertical Scale, 10%/cm.
  - Data corrected for long period terrain effects
  - == Roads
  - - - Claim boundary
  - Claim post
  - ▨ Conductor Trend



Western  
Geophysical  
Data Lib.

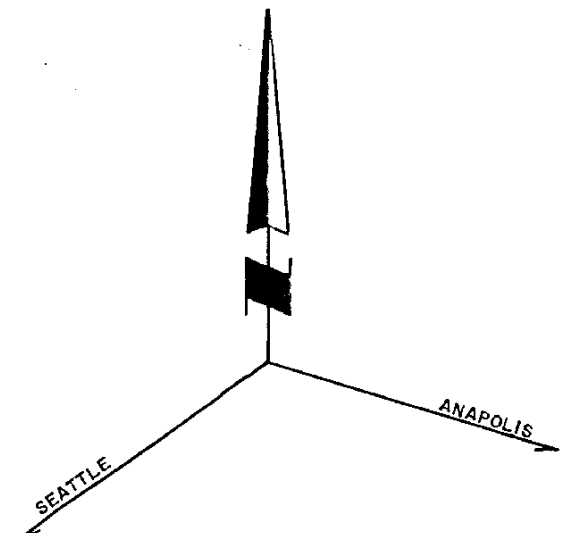
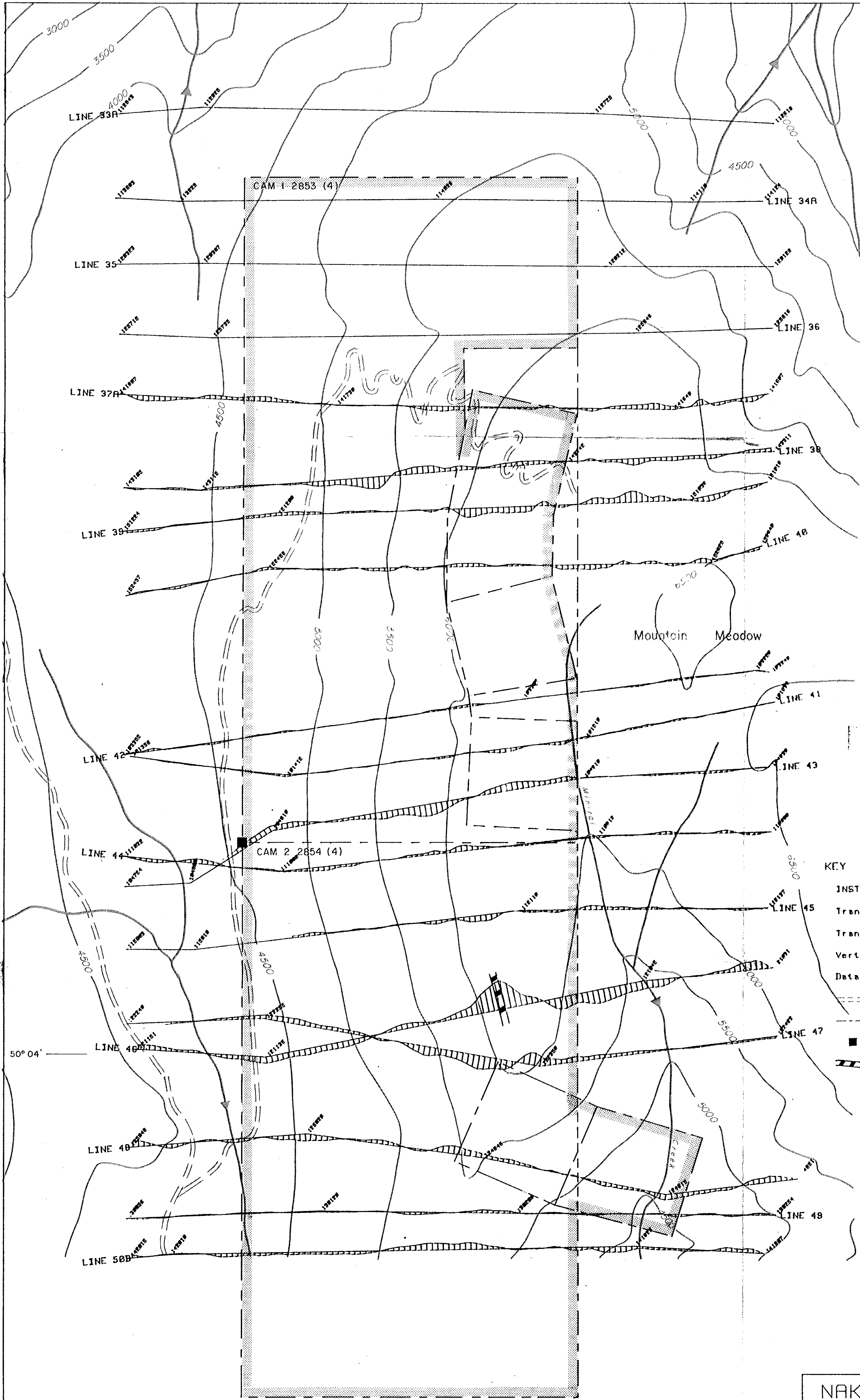
117° 48' W

To accompany the Geophysical Report on the Promestora Project

NAKUSP RESOURCES LTD.  
PROMESTORA PROJECT  
VLF-EM PROFILES (ANNAPOLIS)  
TOTAL FIELD INTENSITY

DATE: NOV/82

FIG.: 4



Part 1  
of 2

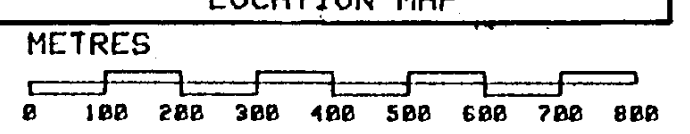
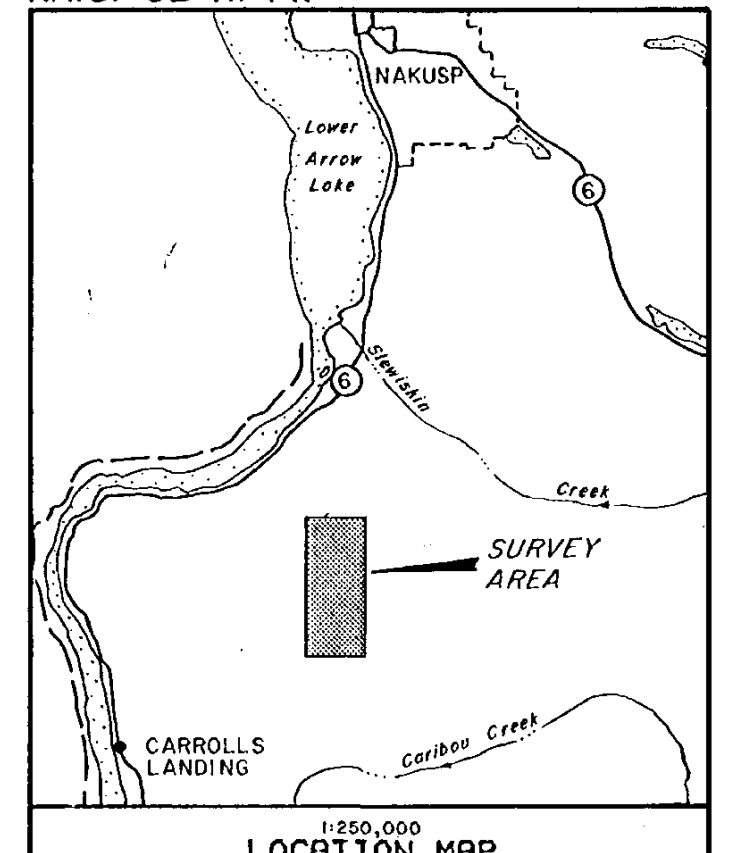
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

11,122

KEY

INSTRUMENTS: Sabre Total Field Intensity VLF-CHS  
 Transmitter Station #1, Seattle (24.8 KHz)  
 Transmitter Station #2, Annapolis (22.4 KHz)  
 Vertical Scale, 10%/cm.  
 Data corrected for long period terrain effects

- Roads
- - - Claim boundary
- Claim post
- ▨ N.S. 82 K/4 W



Western  
Geophysical  
Serv. Data Ltd.

To accompany the Geophysical Report on the Promestora Project

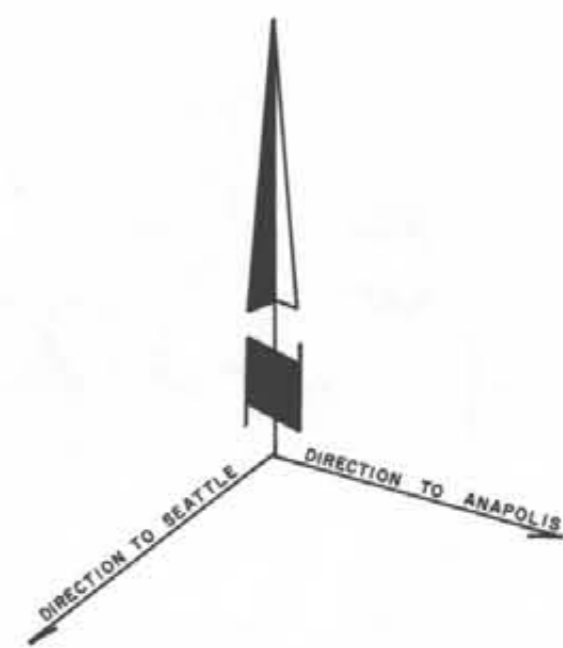
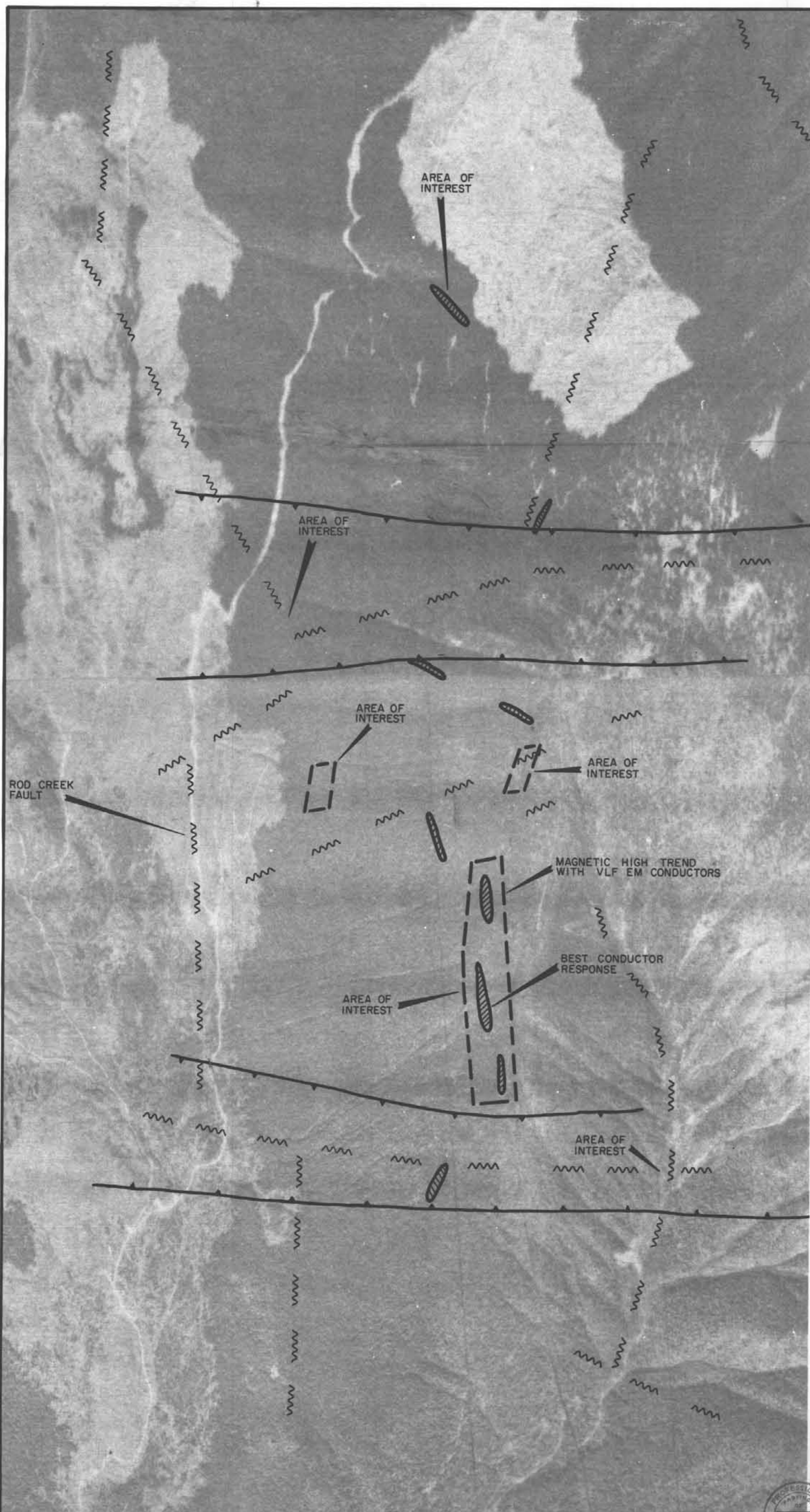








NAKUSP RESOURCES LTD.  
 PROMESTORA PROJECT  
 VLF-EM DIFFERENCE PROFILES  
 (SEATTLE - ANNAPOLIS)

DATE: NOV/82

FIG.: 5





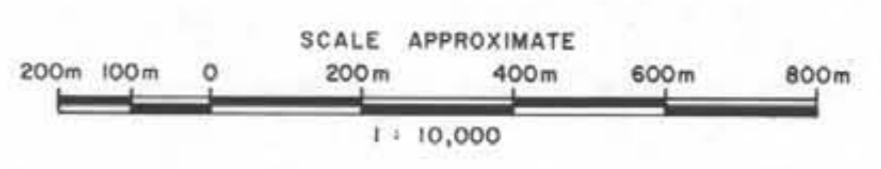
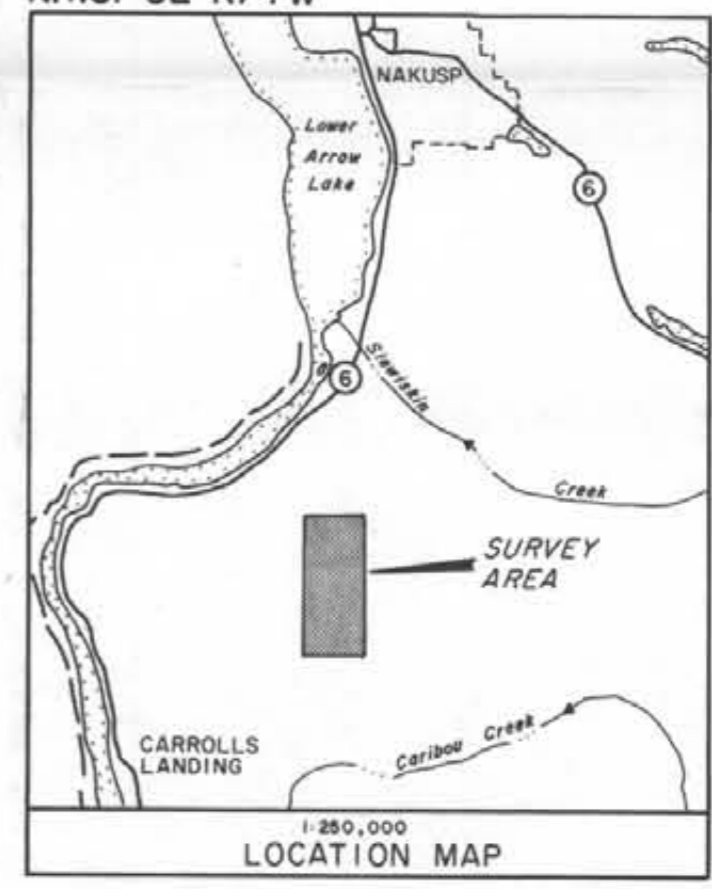
- KEY
-  Magnetic High Trend
  -  Magnetic Low Band
  -  VLF EM Conductors
  -  Faults
  -  Claim Boundry
  -  Claim Post

*part 1  
of 2*

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

11,122

N.T.S. 82 K/4W



NAKUSP RESOURCES LTD.  
PROMESTORA PROJECT  
SLOCAN MINING DIVISION — BRITISH COLUMBIA

GEOPHYSICAL INTERPRETATION MAP



*Western  
Geophysical  
Aero Data Ltd.*

Interpreted By : G.E.W.  
Drawn By : FINELINE DRAFTING  
Checked By : G.E.W.  
Date : MARCH / 83  
Fig. No. : 6