# GEOLOGICAL BRANCH ASSESSMENT REPORT

# 15,150

GEOPHYSICAL REPORT

ON THE

1986 PHASE I PROCRAM

ON THE

EAGL PROPERTY

RECORD NO. 2912,2917

LIARD MINING DIVISION
BRITISH COLUMBIA

FILMED

NTS 104 P/3W

LATITUDE: 59°64' N

LONGITUDE: 129°28'W
27.2'

OWNER: \

CASAU EXPLORATION LTD.

OPERATOR: 102 SEPTEMENT OF LETT.

REPORT BY: A.E. HEAGY, P. GEOL.

WORK DONE: JUNE 24 - JULY 17, 1986

REPORT SUBMITTED: AUGUST 19, 1986

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#### SUMMARY

Casau Exploration Ltd.'s EAGL property is located in the Cassiar area of northern British Columbia, some 15 kilometres south of the Total Erickson Gold Mine.

Previous work carried out in 1983 and 1984 had located two types of mineralization. Several areas with quartz-sulphide vein mineralization with associated iron carbonate alteration zones, are located within strong linear structures which criss-cross the volcanic rocks of the Sylvester Group. Massive sulphide float located in an area of muskeg indicated a potential exhalative or manto-type massive sulphide deposit.

The first phase of the 1986 work program on the property consisted of detailed geophysical surveys. A total of 31.7 kilometres of picket lines were established on two areas of the property. Magnetometer and VLF-EM surveys were completed over the entire grid. VLF-EM resistivity surveys were completed over 14.6 line kilometres.

The magnetic background over the grid area was very uniform with most readings falling within a 50 gamma interval. Slightly lower levels are present in an area of chert arenite outcrop and subcrop. A large 150 gamma magnetic high is located to the south of the massive sulphide float. No outcrop is present and the cause of this feature is not known.

The VLF-EM and VLF resistivity surveys indicate the linear structures are generally conductors and have quite low resistivity. The chert arenite unit is a resistivity high while shale units have lower

resistivity than the volcanic unit. The detailed geophysical surveys are useful in mapping lithologies and outlining the linear structures but do not appear to be useful in distinguishing areas of quartz and/or sulphide mineralization within the favourable zones. An IP survey is needed prior to selecting drill targets.

#### INTRODUCTION

Casau Exploration Ltd.'s EAGL property is located in the Cassiar area of northern British Columbia. The EAGL 1 and EAGL 2 claim blocks, totalling 40 units, were staked in 1983 to cover polymetallic-sulphide-mineralized quartz veins and associated iron carbonate alteration zones. These mineralized zones occur along strong linear structures which criss-cross predominantly volcanic rocks of the Sylvester Group.

The geologic setting of the property is similar to that of Total Erickson Gold Mine, located in the McDame Creek Gold camp, 15 kilometres north of the EAGL property. The primary target on the EAGL property is a precious metal bearing vein system but there is also some potential for an exhalative or manto type silver-lead-zinc massive sulphide deposit.

Geological mapping and geochemical sampling carried out in 1983 and 1984 located several widespread areas with mineralization but attempts to define the extent of the mineralized zones using hand trenches and a wide spaced VLF-EM 16 survey met with limited success.

Late in 1984 Casau Exploration Ltd acquired 100% interest in the EAGL claims. A geological report on property was prepared by J.J. McDougall, P.Eng. The 1986 work program by Casau is based on the recommendations of the McDougall report.

The first phase of the 1986 program consisted of grid establishment, stadia surveys in the areas of the proposed drill holes, detailed magnetometer, VLF-EM and VLF-R geophysical surveys and localized detailed soil sampling. This report presents the results of the detailed geophysical survey carried out between June 24th and July 17th 1986. The surveys covered parts of both the EAGL 1 and 2 claims.

An IP geophysical survey carried out between July 17th and 24th 1986 is the subject of a separate report by A. Scott, Geophysicist. A comprehensive discussion of the results of all the geological, geophysical and geochemical surveys carried out on the EAGL property will be included in the report on the second phase program.

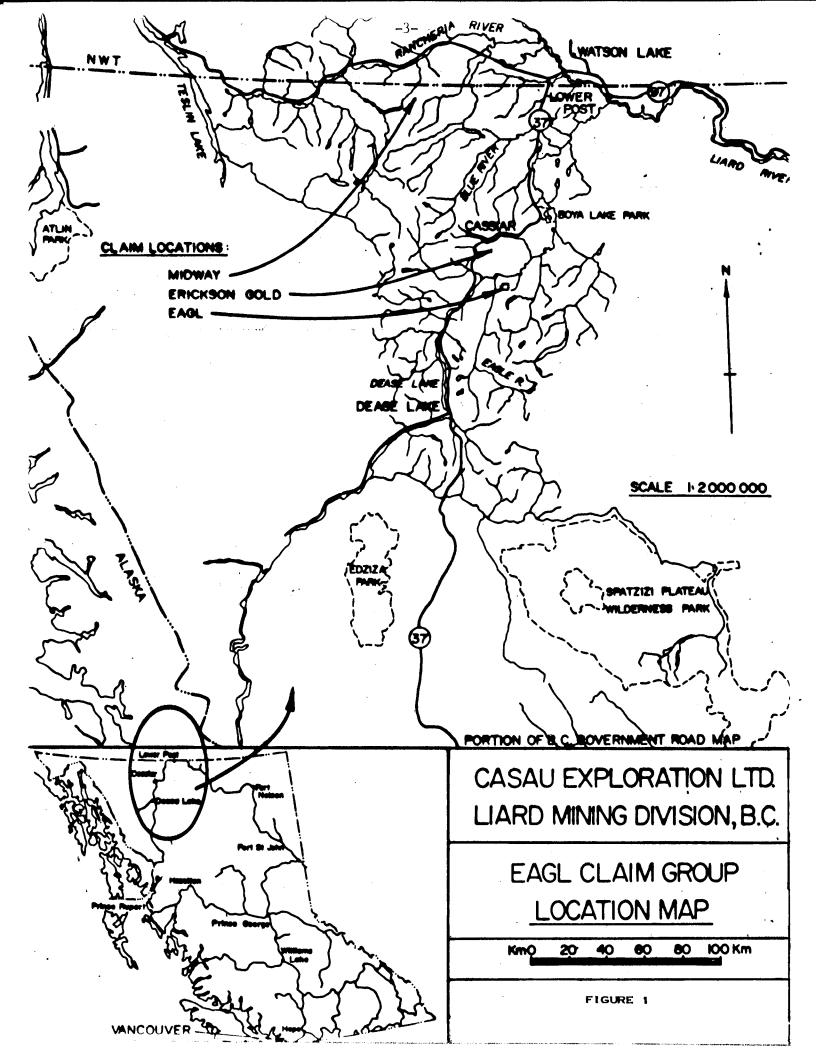
### LOCATION, ACCESS AND TOPOGRAPHY

The EAGL claim group is located in the Liard Mining Division, B.C., some 35 kilometres south-southeast of the town of Cassiar B.C. Figure 1 is a location map.

Access to the claims has been by helicopter from a cleared area adjacent to the Cassiar-Stewart Highway, 15 kilometres west of the property. The nearest helicopter bases are at Dease Lake, B.C. and Watson Lake, Y.T.

The property lies at between 4600 feet (1400 metres) and 5900 feet (1800 metres) elevation on a gently rolling easterly trending ridge back. The area is above the tree line except for scrubby timber along the three north draining creek valleys. Numerous small ponds are present on the property and several camp sites are available. Much of the area is covered by a thin layer of glacial drift but rounded outcrops, subcrops and felsenmeer are fairly common in most areas.

The linear structures, which form strong lineaments on the air photo, are topographic gullies, many of which remain filled with snow into late July.



#### PROPERTY

Figure 2 is a claim map showing the EAGL claims. The present report deals with work on the EAGL 1 and EAGL 2 claim blocks only.

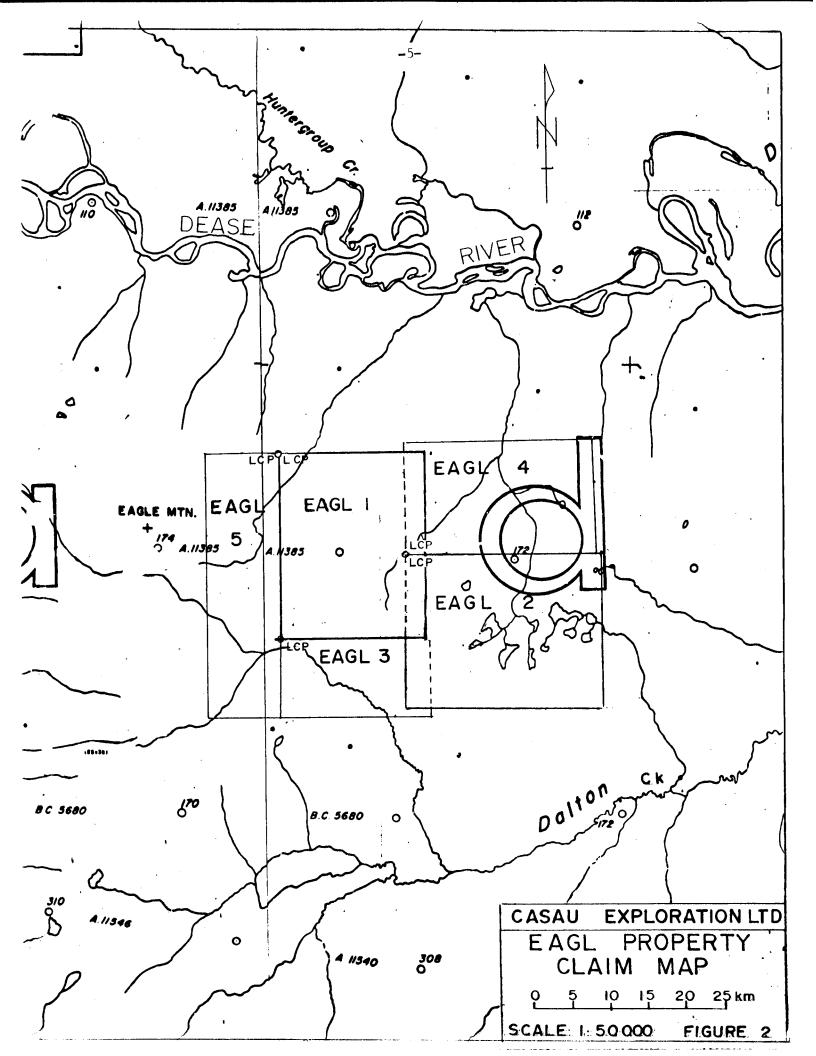
Claim	Record #	Claim U	nits Anni	versary Date	Expiry Year
EAGL 1	2912	20	Jı	ı1y 25	
EAGL 2	2917	20	Se	eptember 2	
EAGL 3')	3569	8		July 10	
EAGL 4 )	3570 Stake	d 15 :	in June-July	July 10	
EAGL 5 )	3571	14		July 10	

#### PREVIOUS WORK

There is no record of previous work on the claims prior to their being staked in 1983. The results of preliminary prospecting and geochemical mapping carried out in 1983 are the subject of Assessment Report No. 12218 "Geological and Geochemical Report on the EAGL Claim Group" A.E. Heagy, September 1983.

Further work carried out in 1984 included 1:8000 and 1:2000 scale geological mapping, grid establishment, a VLF-EM survey at a 50 metre station spacing and eight hand trenches. This work is the subject of Assessment Report No. 12495 "Geological and Sampling Report on the EAGL Claim Group", A.E. Heagy and J.C. Stephen, August 1984.

A geological report on the property was prepared in December 1984 by J.J. McDougall, P. Eng. for Casau Exploration Ltd. This report was used in the company's primary prospectus. The 1986 work program is based on the recommendations of the McDougall report.



## GEOLOGY

The regional geology as taken from GSC Map 1418A, Iskut River Compilation is shown in Figure 3.

The EAGL property lies within the northerly trending belt of Sylvester Group rocks lying just to the east of the Cassiar Batholith.

The Sylvester Group is an allocthonous oceanic terrane which has been thrust onto platformal clastic and carbonate rocks of the Cassiar platform.

The lithologies exposed on the EAGL property are typical of the Sylvester assemblage and include andesitic volcaniclastic, shales, argillites, chert and chert arenite.

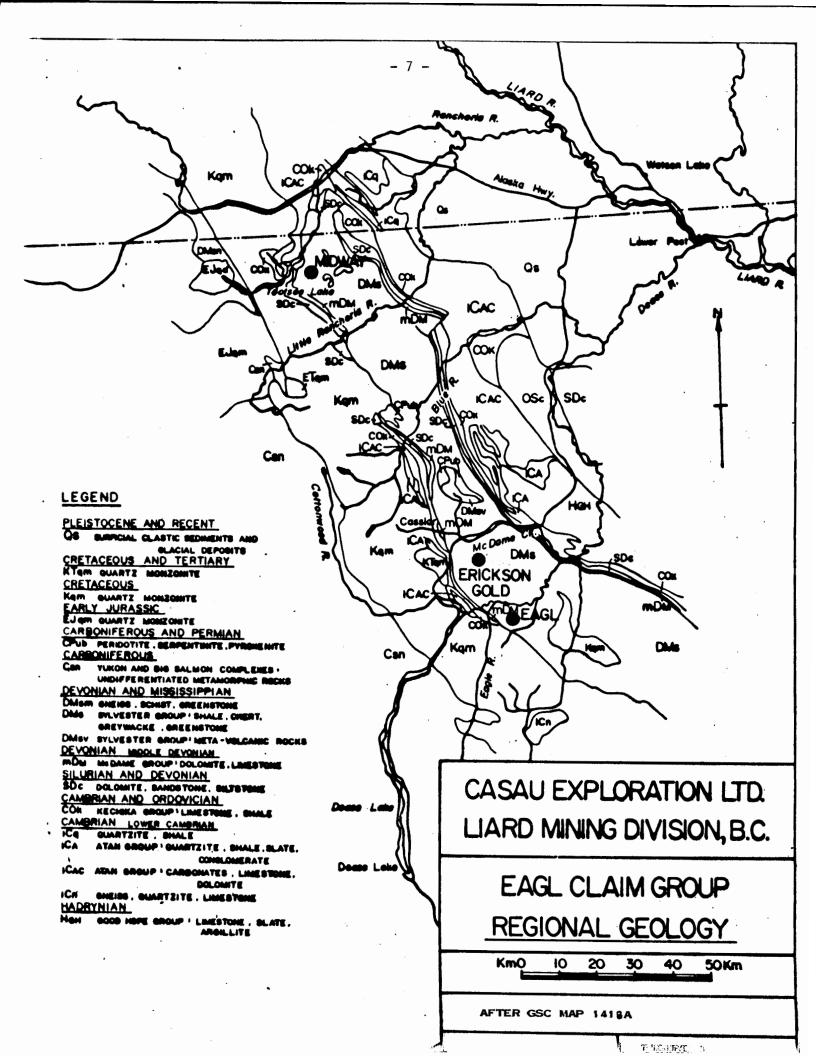
The majority of the outcroppings consist of a north-easterly dipping volcanic unit. A recessive weathering shaley package underlies the volcanic unit. A thin chert arenite unit is present near the top of the shale package.

The linear structures which criss-cross the property are believed to be high-angle fault or shear zones. One or more flat-lying thrust faults are suspected, but have not been delineated.

Mineralization identified to date consists of precious metal bearing polymetallic-sulphide quartz-carbonate veins associated with iron carbonate alteration zones. These zones are localized within the major linear structures and are poorly exposed, generally as frost heaved float material.

A few pieces of pyrite - sphalerite - galena massive sulphide float were located in a low lying swampy area in the south part of the EAGL 2 claim block. This area is believed to be underlain by a window of shale and may possibly host an exhalative or manto-type sulphide body.

For a more complete discussion of the property geology, mineralization and geochemistry the reader is referred to the previous reports.



#### 1986 PHASE I PROGRAM

# A. PHYSICAL WORK

# GRID ESTABLISHMENT

Two areas of the property were covered by picket grids. These areas in part overlap with the grid areas from the 1983 program. The same  $030^{\rm O}/120^{\rm O}$  orientation was used but since the new grid was more accurate, no attempt was made to re-establish the old pickets.

A transit was used to run two  $030^{\rm o}$  base lines, a  $120^{\rm o}$  tieline and to turn off the  $120^{\rm o}$  lines. Line spacing was generally  $100^{\rm o}$  metres but in areas of specific interest additional intermediate lines were also run.

All distances were chained using a polychain and approximate slope corrections were made where necessary. Pickets were placed at 25 metre intervals.

In the Stibnite Lake and southwest ponds area a set of perpendicular 030° trending lines were run between the 100 metre (in some cases 50 metre) stations on the east west lines. These cross lines were needed to cover easterly trending linear structures in those areas.

Total kilometres of picketed lines for the two grids are as follows: -

Grid	North Lines	East Lines	Total
Southwest Ponds	4.4 km	9.35	13.75
East Grid	4.35	13.6	17.95
TOTAL	8.75	22.95	31.7

 $_{\mbox{\tiny I}}$  MAP I shows the grid system superimposed on a 1:8000 scale air photo.

## B. GEOPHYSICAL SURVEYS

Detailed magnetometer and VLF-EM, VLFR surveys were carried out over the grid areas. Total coverage is as follows: -

Survey	Southwe	st Ponds	East	<u>Crid</u>	Total Kilometres
	N	E	N	E	
Magnetometer	4.4	9.35	4.35	13.6	31.7
VLF EM-16	4.4	9.35	4.35	13.6	31.7
VLFR	4.4	3.7	1.9	4.6	14.6

# 1. MAGNETIC SURVEY

## Purpose

The primary purpose of the magnetic survey was to establish if the carbonate alteration associated with the linear structures and the mineralization had a distinctive magnetic signature. A secondary consideration was that the survey might be useful for mapping out lithologic units of different magnetic backgrounds.

## Method

The instrument used for the survey was a Scintrex MP-2 proton precession magnetometer. This instrument measures the total magnetic field intensity and has a sensitivity of  $\pm\ 1$  gamma.

Readings were taken at a 12.5 metre station spacing. An approximate correction for diurnal variation was made by closing the survey on a previous station at regular intervals ( 2 hour maximum). The readings are the relative magnetic values in gammas and have an accuracy of  $\pm$  10 gammas.

# Results

The results of the magnetic survey are presented in plan format at a 1:2500 scale as Maps II and VIII.

 $\label{eq:theorem} \mbox{The values have been contoured using a 25 gamma\ contour} \mbox{interval where possible.}$ 

# 2. VLF EM-16 SURVEY

# Purpose

A preliminary VLF-EM survey carried out in 1983 indicated that many of the linear structures of interest could be identified as VLF conductors. The previous survey readings at 50 metre spacing were too coarse to clearly define the structures or to identify variations associated with areas of mineralization. The present survey was carried out at a 12.5 metre station interval to overcome these problems.

## Method

The instrument used for the VLF-EM survey was a Geonics EM-16 unit. The east lines were read facing  $120^{\rm O}$  using the Hawaii (NPM) transmitter frequency. The north lines were read facing  $030^{\rm O}$  using the Cutler, Maine (NAA) transmitter.

# Results

The in phase dip angle and quadrature readings were plotted in plan form at a 1:2500 scale and the values profiled. The Fraser filter was applied to the data and 1:2500 contour plans of the filtered data have also been prepared. The relevant Maps are

MAP	GRID	LINE DIRECTION	DATA	TREATMENT
111	Southwest Ponds	E-W	Dip Angle, Quadrature	Profiles
1.V	Southwest Ponds	N-S	Dip Angle, Quadrature	Profiles
ν	Southwest Ponds	E-W	Fraser Filter	Contour
VI	Southwest Ponds	N-S	Fraser Filter	Contour
ΙX	East Grid	E-W	Dip Angle, Quadrature	Profiles
X	East Crid	N-S	Dip Angle, Quadrature	Profiles
ΙX	East Grid	E-W	Fraser Filter	Contour
XII	East Crid	N-S.	Fraser Filter	Contour

## 3. VLF RESISTIVITY SURVEY

## Purpose

The VLF Resistivity Survey was carried out to see if zones of quartz veining or silica flooding within the low resistivity fault zones could be detected. The resistivity contrast between the shales and the volcanics also makes this method useful as a lithologic mapping tool.

## Method

The instrument used was the Geonics VLF-EM16R which is an attachment to the standard Geonics EM-16. This instrument measures the apparent resistivity of the ground in ohm - metres, and the phase angle between the horizontal electric and magnetic fields.

Readings were taken at 12.5 metre spacings using a 10 metre cable. The east lines were read using the Cutler, Maine (NAA) transmitter station with the instrument at the west end. The north lines were read using the Hawaii (NPM) transmitter station with the instrument at the south end.

# Results

The VLF-R results have been plotted in plan at 1:2500 scale on Maps VII and XIII. The data has been contoured at intervals of 250, 500, 1000, 2000, 5000 and 10 000 ohm - metres.

# DISCUSSION OF GEOPHYSICAL SURVEYS

#### SOUTHWEST PONDS GRID

The geophysical surveys proved useful both as a means of delineating the structural zones and as a lithologic mapping tool.

### Magnetic Survey

The magnetic survey over this grid indicated a very uniform background with most readings falling between 58 350 and 58 400 gammas (relative values). Slightly lower readings, 58 330 - 58 350 gammas, in the southwest corner of the grid appear to correlate to the distribution of the chert arenite unit. The magnetic background of the shales appear to be similar to that of the volcanics.

The two strongest magnetic features are paired high and low readings near 100 + 00N/50 +00E and 98+00N/53+75E. The former -400 to + 150 gamma anomaly is located immediately northwest of the main area of interest. The higher readings are in an area of non-distinct volcanic outcroppings while the low lies along a weak easterly trending linear/gully structure. The latter anomaly pair is associated with a rusty-weathering pyritic volcanic outcrop immediately north of the volcanic - sedimentary contact.

Several small areas with readings over 58 400 gammas are present but only the two irregular zones near the southwest ponds appear to be significant. The western anomaly lies in the major structural zone trending east through the ponds. The main body of the eastern magnetic feature also trends along this structural zone but appears confined to the southern margin of the zone. A >3m bank of snow in the linear structure during the survey may have affected the magnetic pattern. Two lobes extend southerly from the eastern anomaly; one along a northerly linear associated with a mineralized zone, one in an area of volcanic outcrop.

A strong magnetic low at the east end of line 99+00N is located at the east edge of a strong north-trending gully but appears to be very localized.

# VLF-Resistivity Survey

The need for careful planning of the VLF-R survey procedure is clearly demonstrated by the survey results on this grid. The northern part of the grid was covered by E-W lines only, the south-central area by N-S lines only and the small area of overlap was covered in both directions on 50 metre lines.

Since the lines in the northern area were at a low angle to lithologic contacts the resistivity pattern is difficult to interpret. The very low resistivity zones appear to be shaley units. The complexity of the resistivity may also reflect structural complexity and topographic effects. Local thick banks of snow may also have complicated the pattern.

The resistivity pattern in the southern area is quite regular since the lines were perpendicular to lithologies of strongly contrasting resistivity. The chert arenite unit is clearly delineated by the survey. A break in the resistivity high at 97+50N/48+50E may be a north to northeast trending fault with minor dextral offset.

Two strong parallel resistivity lows trend  $120^{\circ}$  across the grid to the north of the chert arenite. These are likely narrow shale horizons but the northern band cross cuts outcropping of volcanic rocks. The phase angle readings associated with the northern resistivity low are generally in the  $55^{\circ}$ to  $70^{\circ}$  range, indicating the presence of a higher resistivity layer near surface. These readings support an interpretation or a thin volcanic layer overlying the low resistivity, northerly-dipping shale unit.

The major east-trending structural zone through the ponds appears as a broad zone of low resistivity. This zone appears to weaken and/or split into several narrow to the west (48+00E) and east (51+50E). This weakening may in part be due to the presence of a thick snow patch along this structure at the time of the survey. In the zone where the N-S and E-W survey lines overlap the resistivity pattern is very complex. Some features such as the north-trending structure along 50+50E are outlined as resistivity lows. In some cases the volcanic outcrops are outlined as higher resistivity zones but elsewhere the resistivity pattern and outcrop are dissimilar.

The VLF-R geophysical method appears to be very useful as a litholigic mapping tool but the survey lines should be perpendicular to the strike of the units. It is also possible to use the method to define low resistivity fault or fracture zones but in areas such as this where more than one fracture direction is present, a very tight grid is needed and the complex resistivity pattern must be interpreted with care, taking into account all available geophysical and geological data.

## VLF-EM Survey

As expected the VLF-EM survey picked up several of the same features as the VLF-R survey. As with that survey, the N-S survey lines show a simpler pattern than the E-W lines.

A strong cross-over is associated with the main linear trending  $090^{\circ}$  through the ponds. This feature is much broader and weaker on the eastern lines, 51+50E, 52+00E. The Fraser filtered values indicates the zone is 50 metres wide between 48+00E and 50+00E but broadens to more than 100 metres width on line 52+00E. The structure may bend and or be offset in the vicinity of the eastern pond.

Several fairly strong crossovers are present at the north and south ends of the 50+00E baseline. These conductors are likely conductive shale units. The VLF survey did not indicate the low resistivity shale unit between the chert arenite and the volcanics.

The east-west survey lines also picked up the main linear through the ponds; particularly the segment through the west pond and the segment to the east of the east pond.

The strongest crossovers are on line 104+00N and correlate with subcrops of shale. The contoured filtered data indicates a  $080^{\rm O}$  trend to these features but that interpretation may not be correct since the character of the crossovers changes on lines 103+00N and 102+00N.

In the eastern areas of the grid the VLF profiles are very flat but the filtered values indicate broad weak conductors trending  $030^{\rm o}$  and  $050^{\rm o}$ . The strength of the conductors is enhanced where the two trends intersect.

In the southwest corner a set of conductors trend  $000^{\circ}$ . The strong crossover at the end of line 99+00N may be due to shales or a north trending fault zone.

The VLF pattern near the pond area is quite complex with apparent conductive trends of  $000^{\rm o}$ ,  $030^{\rm o}$ ,  $060^{\rm o}$  as well as the strong  $090^{\rm o}$  feature. These VLF conductors correlate with linear gullies and breaks on the ground and appear to be stronger at intersection points.

The VLF conductors do not appear to relate directly to the mineralized zones but do indicate the structural zones which contain the mineralization.

#### EAST GRID - STIBNITE LAKE AREA

# Magnetic Survey

The magnetic field in the Stibnite Lake area is very uniform with almost all readings in the 58380 to 58430 gamma range. The highest and lowest readings, 58504 and 58355, are from the east, and west shores of the lake. There appears to be a very weak correlation of the lower magnetic readings with the linear gully zones but the inherent inaccuracy of the readings ( $^{\pm}$  10 gammas) is as great as any real variation in the area. The results were not contoured since no significant pattern exists.

# VLF-EM Survey

The VLF-EM data on the N-S lines indicates a few weak to moderately strong cross-overs. Two moderately strong conductors trend easterly (090°) across the grid; one through Stibnite Lake, and one 200 metres to the north of the lake. The latter feature appears to be slightly offset by an  $030^{\circ}$  trending conductor running north from Stibnite Lake. This northerly trending feature broadens and weakens to the north.

The crossovers on the east-west line are less well defined than the north-south lines with most being quite broad and low amplitude features. The pattern of the filtered data is quite complicated with linear conductors trending  $030^{\rm O}$ ,  $060^{\rm O}$ ,  $090^{\rm O}$ ,  $115^{\rm O}$  and  $165^{\rm O}$ . Many of these features are quite short and segmented, in some cases appearing to be offset or truncated by cross-cutting zones.

The VLF-EM conductors correlate with the surface linear gully features. The quadrature signature of the conductors support their interpretation as fault or shear structures rather than sulphide mineralization.

# VLF-Resistivity Survey

The low resistivity zones agree well with the VLF-EM conductive features with the two east trending and cross-cutting north-trending structure being clearly defined. The branching of the Stibnite Lake linear to the east of the lake is similar to the pattern seen in the N-S VLF-EM filtered data.

# EAST GRID - MASSIVE SULPHIDE AREA

# Massive Sulphide Area

#### Magnetic Survey

The magnetic readings in the massive sulphides indicate a large, broad weak magnetic high feature. Readings ranged from the 58400 background level seen in the Stibnite Lake area to 58594 gammas. The 58450 gamma contour outlines an area some 500 metres N-S by 750 metres E-W that is open to the east. The 58500 contour outlines generally east-west trending core but several  $030^{\circ}$  -  $210^{\circ}$  fingers extend beyond this core area. The 58525 contour also indicates this  $030^{\circ}$  cross-fabric within the anomaly.

Most of the area of the anomaly is underlain by a wet muskeg swamp but some of the magnetic fingers extend into areas outcropping but are invariably associated with slightly depressed zones with glacial † vegetation cover within the outcrop areas. The core of the magnetic anomaly lies about 100 metres south of the area of massive sulphide float.

#### VLF-EM Survey

The area is covered only by east west lines except along the base line. A broad moderately strong conductor trends  $040^{\circ}$  immediately west of the base line. The conductor is up to 150 metres wide and some 500 metres long. At the north end the conductor splits into a weak  $340^{\circ}$  conductor, a weak to moderate strength  $060^{\circ}$  conductor and a moderately strong conductor which is somewhat irregular but generally trends  $080^{\circ}$ .

A narrow, subparallel moderate conductor lies 50 to 100 metres east of the main conductor, on the east side of the base line. The profile along the base line suggests that easterly conductors may be a branch structure of the main conductor.

# VLF-Resistivity Survey

The resistivity of this area is quite low even in areas of volcanic outcrops. The low resistivity zone shows a  $030^{\rm O}$  trend similar to that of the VLF-EM conductors.

The phase angle of the readings in the swamp area are quite low indicating the low resistivity may be a surficial feature. The two  $030^{\circ}$  low resistivity zones along 65+00E and 75+75E have more neutral phase angles and cross-cut topographic features and appear to be related to linear fault (?) structures.

#### CONCLUSIONS AND RECOMMENDATIONS

- The magnetic and VLF-Resistivity survey methods are useful as lithologic mapping tools. On both the present grids they clearly outline the chert arenite and shale units.
- 2. The VLF-Resistivity and VLF-EM surveys clearly define the trace of the linear gullies which are thought to be shear zones. These surveys do not appear to be useful as a means of indicating sulphide or silica rich zones within the favourable structures.
- 3. The presence of strong VLF-EM and VLF-Resistivity anomaly in the vicinity of the massive sulphide float supports the potential for a massive sulphide body in the area. However the out of phase response of both these methods suggest the conductivity may be a surficial feature.
- 4. The large weak magnetic high in the south area of the east grid is an anomalous feature that does not support the presence of the postulated shale in that area. It is possible that the magnetic response may be due to a slightly magnetic sulphide body.
- 5. The areas of interest indicated by these detailed magnetic and electromagnetic surveys should be covered by an induced polarization geophysical survey to determine the extent of sulphide mineralization in the favourable structures. Drill targets should be selected primarily on the basis of the IP survey results.

Respectfully submitted,

QE Heary

A.E. Heary, P. Geol.

APPENDIXA

STATEMENT OF COSTS

# STATEMENT OF COSTS

# FIELD PERSONNEL

Name	Position			
A.E. Heagy	Geologist-Supervisor	June 21 - July 17 27 days @ \$140/day	\$3780.	
T. Marr	Geophysical Operator	June 21 - July 17 27 days @ \$100/day	2700.	
A. Hamilton	Field Assistant	June 21 - July 17 27 days @ \$75/day	2025.	
S. Davies	Field Assistant	June 21 - July 17 27 days @ \$75/fsy	2025.	
M. Spittal	Camp Cook	July 9 - July 17 9 days @.\$100/day	900.	
	Statutory Benefits (15	% of wage rate)		\$11,430.00 1,714.50
	•	·		\$13,144.50
MOBILIZATION	(June 21 - 23 1986)			
Meals, room e	tc.		\$580.	•
Vehicle Renta	1			
Van	15 days @ \$20/day		300.	
Jimmy	17 days @ \$20/day		540.	
. Mileage	3600 km @ \$0.15/km		540.	
Gas			400.	
Trucking			340.	\$2,700.00
DOOM AND DOAD	n			
ROOM AND BOAR 109 man days				\$2,180.00
CAMP SUPPLIES				
Propane, Fuel			558.15	
Lathe, Lumber			626.40	
Flagging, bat	teries etc.		703.74	
	,			\$1,888.29

# EQUIPMENT RENTALS

Geonics EM-16R	1 month	\$853 <b>.9</b> 0
Scintrex MP-2 Magnetometer	21 days	800.10
Theodolite	1 month	75.00

\$1,729.00

# HELICOPTER SUPPORT

June 23	Ticket 1138	3.5 hours	\$1,901.40
July 4	Ticket 1148	1.0	588.00
July 10	Ticket 12 <b>9</b> 2	0.8	470.40

\$2,959.80

TOTAL

\$24,601.59

# APPENDIXB

STATEMENT OF QUALIFICATIONS

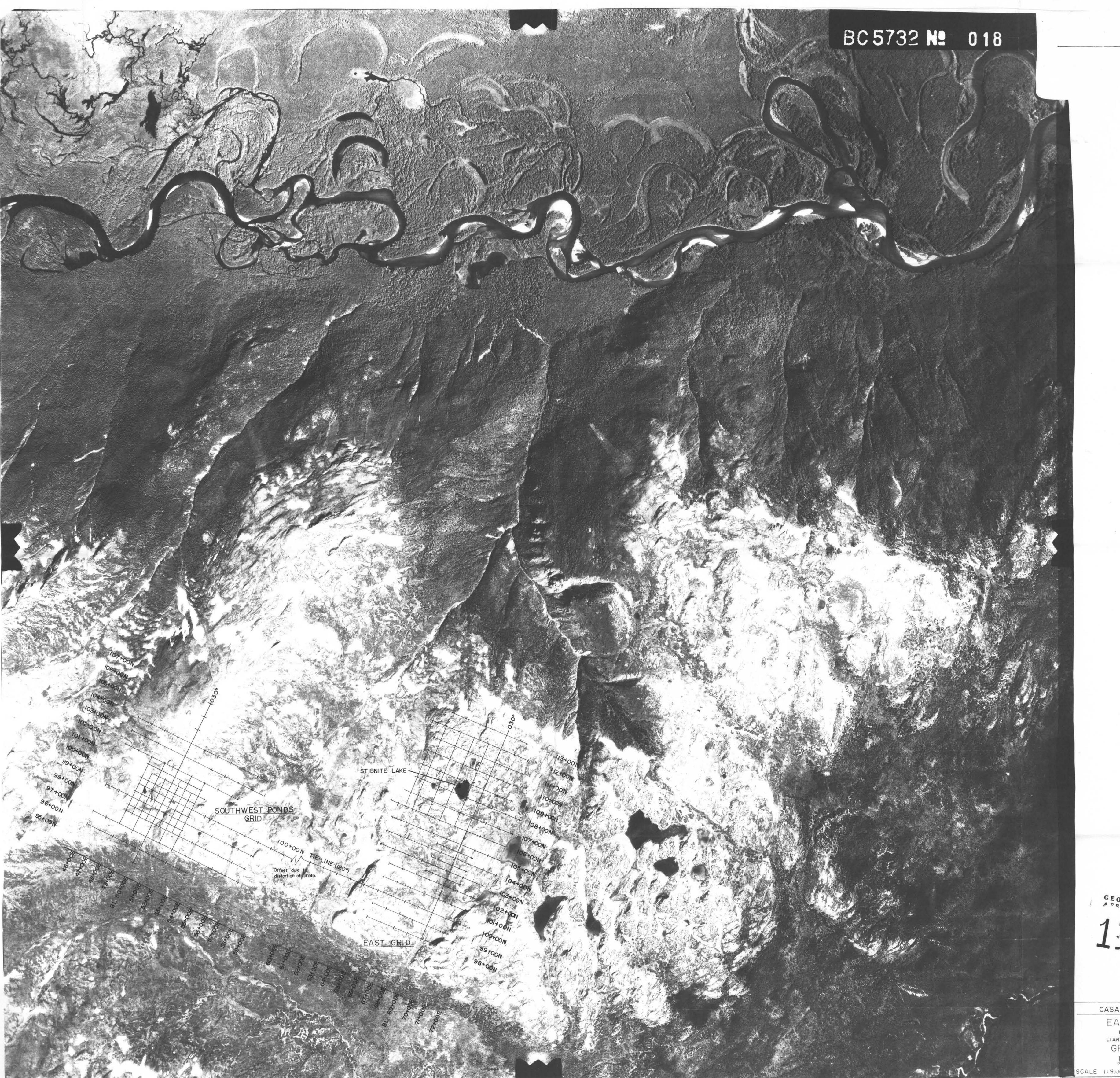
## STATEMENT OF QUALIFICATIONS

# I, Audrey Eileen Heagy certify that:

- I graduated from Queen's University at Kingston, Canada in May 1981 with an Honours Bachelor of Science degree in Geological Sciences.
- 2. I have since worked as a mineral exploration geologist.
- 3. I am licensed as a Professional Geologist by the Association of Professional Engineers, Ceologists and Geophysicists of Alberta. I am a member of the Yukon Professional Geoscientists Society.
- 4. I supervised the field exploration programs on the EAGL claim group in 1983, 1984 and 1986.

andry & Heagy

Audrey E. Heagy, P. Geol.



GEOLOGICAL BRANCH PERORT

CASAU EXPLORATION LTD.

