ARIS SUMMARY SHEET

District Geologist, Smithers — Off Confidential: 89.06.28

ASSESSMENT REPORT 17839 — MINING DIVISION: Atlin

PROPERTY: Cap
LOCATION: LAT 58 44 27 LONG 133 16 13
UTM 08 6512277 600119
NTS 104K11E 104K11W 104K14E 104K14W
CLAIM(S): Cap 2-4,Goat 1
OPERATOR(S): Omni Res.
AUTHOR(S): Murton, J.C.;Woods, D.V.
REPORT YEAR: 1988, 26 Pages
COMMODITIES
SEARCHED FOR: Copper,Iron,Silver,Gold
GEOLOGICAL
SUMMARY: The claims are underlain by Upper Triassic volcanics and clastic sediments which have been intruded by felsic stocks, sills and dykes. Hydrothermal alteration and sulphide enrichment is evident in micro-veinlets and associated base metal veins found throughout the property.

WORK
DONE: Geophysical
EMAB 92.0 km;VLF
Map(s) - 2; Scale(s) - 1:10 000
MAGA 92.0 km
Map(s) - 1; Scale(s) - 1:10 000

RELATED
REPORTS: 08959,09246,09592,10452,11089,11421
MINFILE: 104K 010,104K 060,104K 085

LOG NO: 1012 RD.
ACTION:

FILE NO:

OMNI RESOURCES INC.
GEOPHYSICAL REPORT ON AN
AIRBORNE MAGNETIC AND VLF-EM SURVEY
CAP 2, 3, 4 and GOAT 1 CLAIMS
ATLIN MINING DIVISION
LATITUDE: 58° 45'00''N LONGITUDE: 133° 15'00''W
NTS: 104K/11W & 104K/14W

AUTHORS: Jeff C. Murton, B.Sc., P.Geoph.(Alberta)
Geophysicist
Dennis V. Woods, Ph.D., P.Eng.
Consulting Geophysicist

DATE OF WORK: 1 June 1988
DATE OF REPORT: 23 September 1988

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VANCOUVER, B.C.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,839

WESTERN GEOPHYSICAL AERO DATA LTD.

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ILLUSTRATIONS

INTRODUCTION

On June 1, 1988 an airborne reconnaissance magnetic and VLF-EM survey was conducted over **Cap 2, Cap 3, Cap 4**, and **Goat 1** claims (referred to as the **Cap** claim group) by Western Geophysical Aero Data Ltd. for **Omni Resources Inc.** The property is 90 kilometers south of Atlin, British Columbia (Figure 1a).

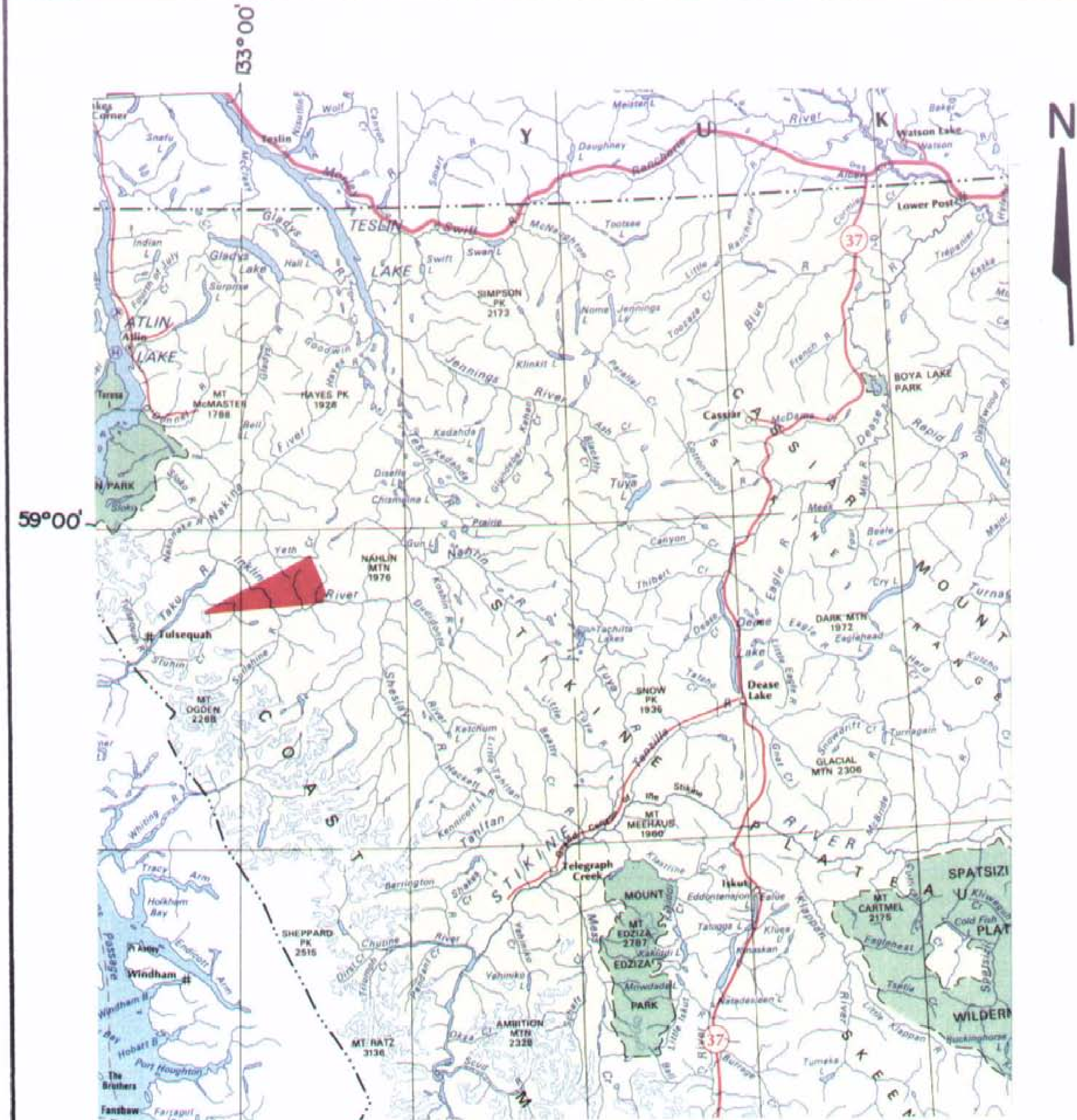
The intention of this survey is to direct further exploration to favorable target areas and to assist in the geological mapping of the property. Approximately 92 line kilometers of airborne magnetic and VLF-EM data has been collected, processed, and displayed in order to evaluate this property.

PROPERTY LOCATION AND ACCESS

The **Cap** claim group is owned and operated by **Omni Resources Inc.** The claims are described in the table below and illustrated in Figure 1b.

Claim Name	Units	Record No.	Expiry Date
Cap 2	20	1065	May 14, 1989
Cap 3	8	1936	July 14, 1988
Cap 4	20	1067	May 14, 1989
Goat 1	4	570	February 28, 1989

The property is located 90 kilometers south of Atlin, British Columbia, and 80 kilometers northeast of Juneau, Alaska. It is situated in the headwaters of Red Cap Creek, 5 kilometers east of the Taku River and immediately northwest of Mount Lester Jones. The property is in the Atlin Mining Division of British Columbia. The NTS coordinates of are 104K/11W and 104K/14W. The approximate geographical coordinates are 58° 45'00'' N latitude and 133° 15'00'' W longitude. Access to the claims is by helicopter from the Atlin airport.



OMNI RESOURCES INC.

GOAT 1, CAP 2,3 & 4 CLAIMS

LOCATION MAP

N.T.S. 104K/11W AND 104K/14W

SCALE = 1:2 000 000

FIG. 1a

LEGEND TO ACCOMPANY FIG. 2b

CENOZOIC

QUATERNARY
PLEISTOCENE AND RECENT

19 — *Fluviatile gravel, sand, silt; glacial outwash, till, alpine moraine and undifferentiated colluvium;* 19a, *landslides*

TERTIARY AND QUATERNARY
LATE TERTIARY AND PLEISTOCENE

LEVEL MOUNTAIN GROUP

18 — *Basalt, olivine basalt, related pyroclastic rocks; in part younger than some of 19*

17 — *HEART PEAKS FORMATION: rusty-weathering trachyte and rhyolite flows, pyroclastic rocks, and related intrusions*

CRETACEOUS AND TERTIARY
LATE CRETACEOUS AND EARLY TERTIARY

SLOKO GROUP

14 — *Light green, purple and white rhyolite, dacite, and trachyte flows, pyroclastic rocks, and derived sediments*

15 | 16 — *Probably genetically related to 14;*
15. Felsite, quartz-feldspar porphyry
16. Medium- to coarse-grained, pink, biotite-hornblende quartz monzonite

PRE-UPPER CRETACEOUS

13 — *CENTRAL PLUTONIC COMPLEX: granodiorite, quartz diorite; minor diorite, leuco-granite, migmatite and agmatite; age and relationship to 12 uncertain*

MESOZOIC

JURASSIC AND/OR CRETACEOUS
POST MIDDLE JURASSIC

12 — 12a, *hornblende-biotite granodiorite;* 12b, *biotite-hornblende quartz diorite;* 12c, *hornblende diorite;* 12d, *augite diorite. Age and relationship to 13 uncertain*

JURASSIC
LOWER AND MIDDLE JURASSIC

LABERGE GROUP (10, 11)

11 — *TAKWAHONI FORMATION: granite-boulder conglomerate, chert-pebble conglomerate, greywacke, quartzose sandstone, siltstone, shale*

10 — *INKLIN FORMATION: well bedded greywacke, graded siltstone and silty sandstone, pebbly mudstone, limy pebble conglomerate;* 10a, *limestone*

TRIASSIC
UPPER TRIASSIC

9 — *SINWA FORMATION: limestone; minor sandstone, argillite, chert*

STUHINI GROUP (7, 8)

7 | 8 — *7. Mainly volcanic rocks; andesite and basalt flows, pillow lava, volcanic breccia and agglomerate, lapilli tuff; minor volcanic sandstone, greywacke, and siltstone*
8. KING SALMON FORMATION: thick bedded, dark greywacke, conglomerate, mudstone, siltstone, and shale; minor andesitic lava, volcanic breccia, tuff, limestone, limy shale; locally enclosed in 7

LOWER OR MIDDLE TRIASSIC (?)

6 — *Fine- to medium-grained, strongly foliated diorite, quartz diorite, and minor granodiorite; age uncertain*

TRIASSIC AND EARLIER
PRE-UPPER TRIASSIC

4 — *Fine-grained, clastic sediments and intercalated volcanic rocks, largely altered to greenstone and phyllite; chert, jasper, greywacke, limestone;* 4a, *mainly chert, slate, argillite, minor greenstone;* 4b, *mainly greenstone;* 4c, *limestone; may include some 1*

5 — *Quartz-albite-amphibole gneiss, quartz-biotite schist, garnetiferous schist, augen gneiss, tremolite marble; mainly metamorphosed equivalents of 3 and 4; may be in part older than 3*

PALEOZOIC

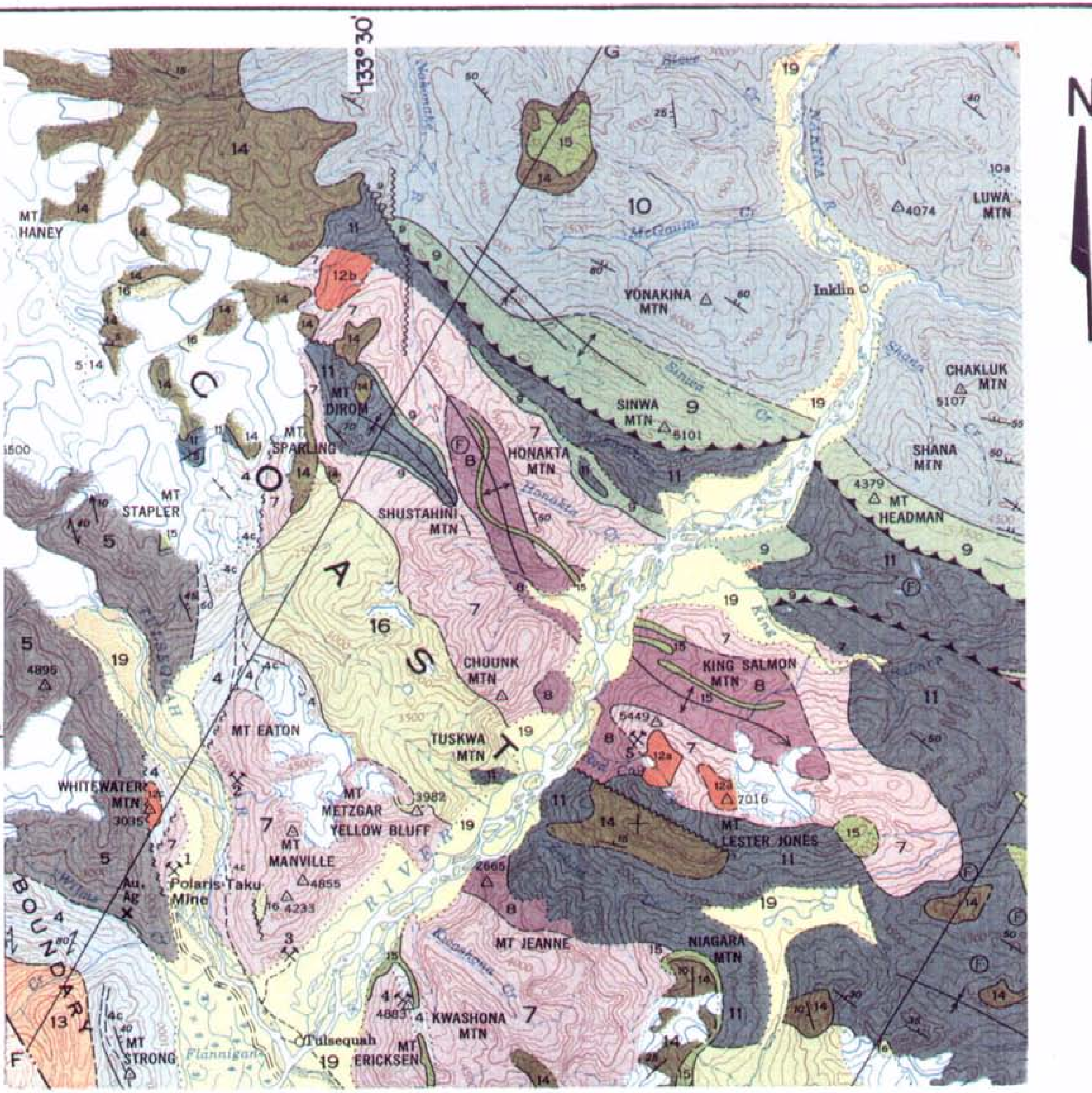
PERMIAN

3 — *Chiefly limestone and dolomitic limestone; minor chert, argillite, sandy limestone*

PERMIAN (?)

1 | 2 — *May not all be of the same age*
1. Peridotite, serpentinite, small irregular bodies of gabbro and pyroxene diorite
2. Fine- to medium-grained gabbro and pyroxene diorite

A — *Diorite gneiss, amphibolite, migmatite; age unknown*



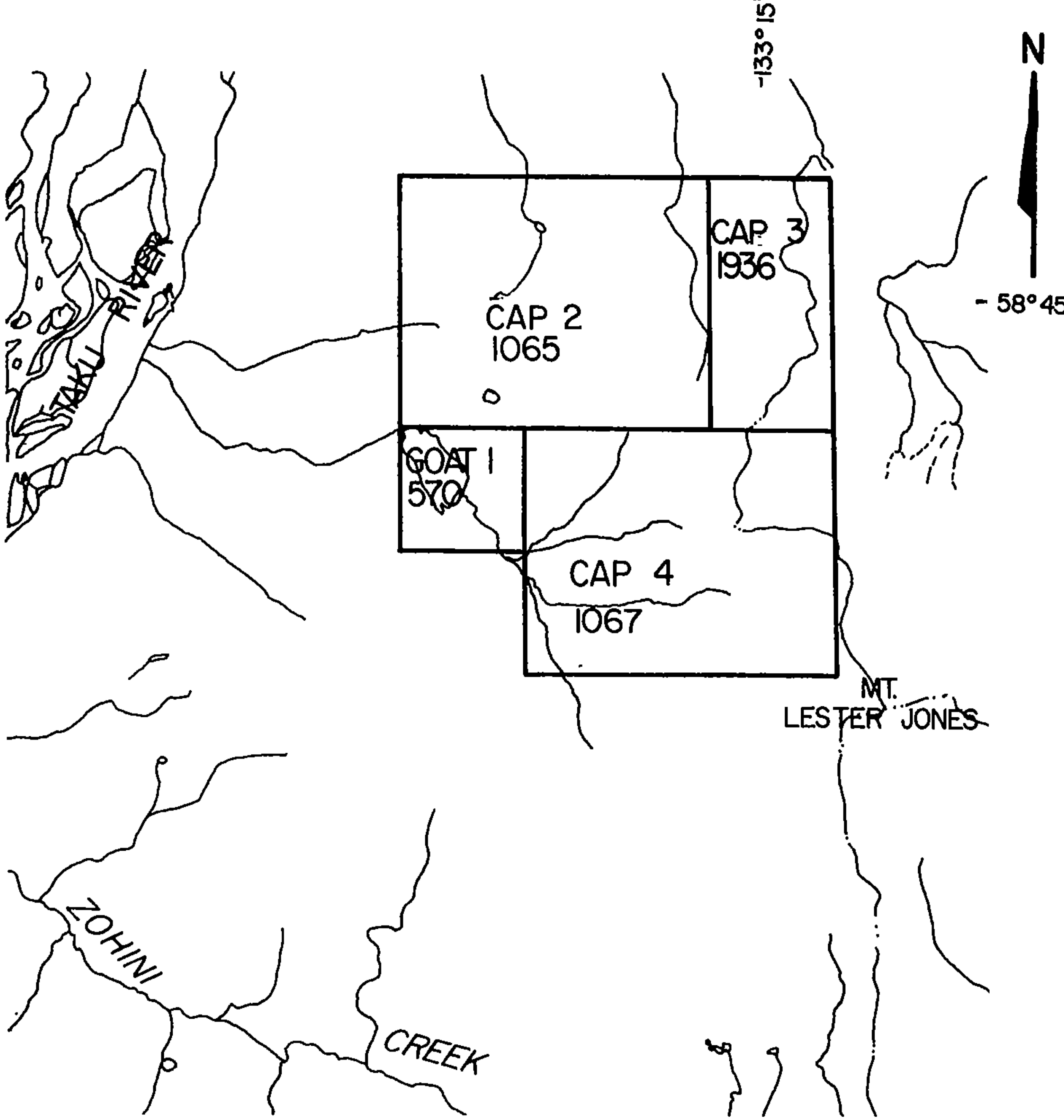
OMNI RESOURCES INC.

GOAT I, CAP 2,3 & 4 CLAIMS

LOCAL GEOLOGY

N.T.S. 104K/11W AND 104K/14W

Scale 1:250,000 (FROM GSC MAP 1262A GEOLOGY OF TULSEQUAH AND JUNEAU AREA) FIG. 2b



OMNI RESOURCES INC.

GOAT 1, CAP 2, 3 & 4 CLAIMS

CLAIMS MAP

N.T.S. 104K/11W AND 104K/14W

SCALE= 1:50 000

FIG. 1b

HISTORY AND PREVIOUS WORK

In the late 1890's the Taku River was used as an access route for prospectors and fortune hunters on their way to the Klondike gold fields. As a result, extensive prospecting was done the area accessible from the Taku River valley. The Tulsequah Chief property was discovered on the east side of Tulsequah River in 1923. It's development attracted interest in the lower part of the Taku River (Souther, 1971). In 1929 the Big Bull and Polaris Taku mines were discovered and this activity generated interest in the Eriksen-Ashby property (approximately ten kilometres southwest of the **Cap** claim group).

These base metal deposits are hosted in sheared Stuhuni volcanic rocks (Tusequah Chief and Big Bull) or in sheared Permian limestone (Ericksen-Ashby), and are associated with Cretaceous felsic intrusions.

The first recorded descriptions of the **Cap** property are in the 1930 and 1931 copies of the B.C. Minister of Mines and Annual Reports.

In 1959 and 1960 J.G. Souther mapped Red Cap Creek area as part of a regional survey of the Tulsequah region for the Geological Survey of Canada. In the early 1970's, Archer and Cathro Limited staked the property as the "Mike" claims for the Cordero Mining Company, a Sun Oil concern (Wahl, 1980). A small, shallow drilling program of six vertical holes totalling 88 feet on one of the upper benches above Red Cap Lake was completed.

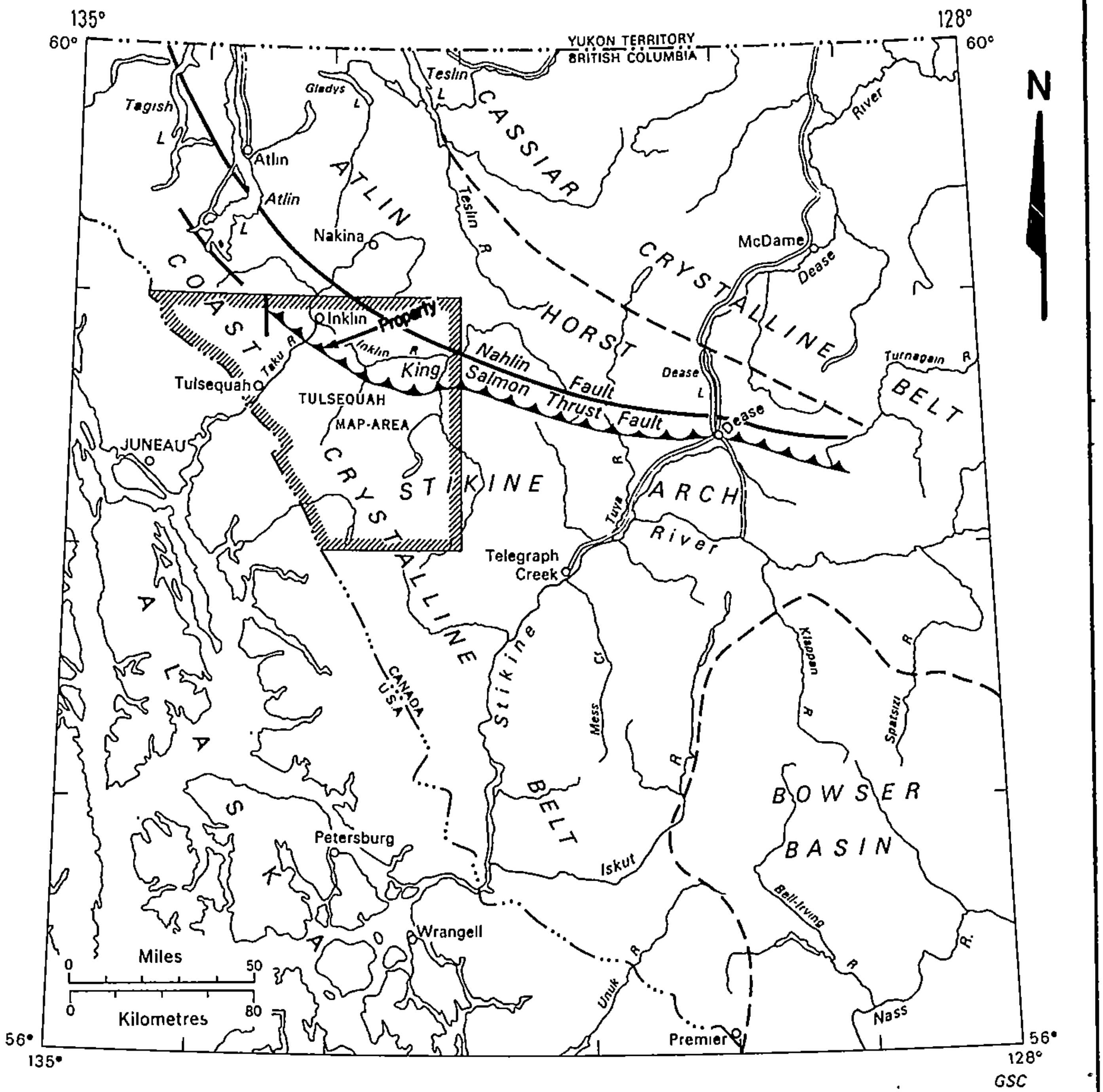
In 1979 **Omni Resources Inc.** acquired the **Goat** claim and, in 1980, initiated a program of prospecting and staking in the surrounding area. A geochemical survey was conducted in August, 1980 to "further define and evaluate the intensity and zonal distribution of copper, molybdenum, and silver in a large area of pyritization and alteration" (Clouthier, 1980). That September a hole was drilled on the **Cap 3** claim. Later in September and October, three exploratory diamond drill holes were conducted on the **Cap 11** claim in order to judge the extent of a "vein-fault known to contain gold in a quartz-arsenopyrite mineralization" (Elliott, 1980).

In the summer of 1981 a drilling program of seven holes totalling 3948 feet was completed in the area previously outlined by the geochemical survey as having "highly anomalous metal-bearing soil samples" (Elliott, 1982). The purpose of the drilling program was "to test the anomalous area for the possibility of locating a large-tonnage body of porphyry copper-molybdenum-gold mineralization".

REGIONAL GEOLOGY

The region is composed a Upper Triassic island-arc assemblage of volcanic and sedimentary formations which unconformably overlie an older Paleozoic basement of intensely folded and regionally metamorphosed units (Wahl, 1980). To the northeast, the Mesozoic volcanics and sediments (the Stuhuni Group and the King Salmon Group), are bounded by the southern edge of the Atlin Horst, a large wedge of fault-bounded Permian aged rocks and associated ultrabasic intrusions (Souther, 1971). The Coast Crystalline Belt forms the southwestern boundary of the upper Triassic rocks (Figure 2a).

In 1948, Kerr subdivided the Upper Triassic rocks of the Taku River area into the King Salmon Group of clastic sedimentary rocks and the Stuhuni Group, composed of mainly volcanic flows and breccias (Souther, 1971). The King Salmon and Stuhuni Groups together form a thick, extremely variable succession of eugeosynclinal rocks. The volcanics are recognized as andesite and basalt flows, pillow lava and volcanic breccia, with some sedimentary sequences of volcanic sandstone, greywacke and siltstone. The sedimentary rocks are mainly thick-bedded, dark



OMNI RESOURCES INC.

GOAT 1, CAP 2,3 & 4

MAJOR TECTONIC ELEMENTS OF NORTHWESTERN BRITISH COLUMBIA

N.T.S. 104K/11W AND 104K/14W

(From GSC Memoir 362)

FIG. 2a

greywacke, conglomerate, mud stone, siltstone and shale, and poorly sorted volcanic erosional detritus commonly mixed with ash and coarse pyroclastic debris. Rapid lateral changes are observed in both thickness and lithology. The poor correlation of these rocks over only short distances attest to their origin in extremely active tectonic conditions (Souther, 1971).

LOCAL GEOLOGY

Small stocks of hornblende-biotite granodiorite have intruded the Stuhuni volcanics in the vicinity of Red Cap Lake (Figure 2b). Their contacts are irregular and margins of the stock and surrounding volcanics are highly altered and pyritized. An intrusive diorite unit containing up to 20 per cent augite and a mafic content exceeding 40 percent is found on the southeast corner of the **Cap 4** claim (Souther, 1971). Minor intrusions to the north consisting of mainly felsic stocks, sills, and dykes are observed to bear a close spatial relationship to the younger Sloko volcanics and quartz monzonite phase of the Coast Plutonic Complex and are considered to be of Upper Cretaceous - early Tertiary age. The felsic intrusives show strong hydrothermal alteration including pyritization and dolomitization of both intrusive and country rock (Wahl, 1982).

Wahl views the property as "a variation of the closed-cell convection and thermal springs hydrothermal models". The intruded volcanics are viewed as a fractured silica cap or seal which initially blocked the upward flow of hydrothermal solutions. Later, the pressure buildup from below fractured the "cap" and a hydrothermal pulsé carried mineralization up and formed the micro veinlets of pyrite-copper-molybdenite (associated with the geochemical anomaly) and the polymetalic base metals veins found in shears along Copper and Moly Creeks. The same hydrothermal pulse may have formed a lateral fracture zone and created the silver-gold-arsenopyrite veins observed from drill hole RC81-1 on the ridge crest (Wahl, 1982).

AIRBORNE MAGNETIC AND VLF-ELECTROMAGNETIC SURVEY

This geophysical survey simultaneously monitors and records the output signal from a Develco tri-axis ringcore magnetometer and a Herz dual-frequency VLF-EM receiver. The sensors are installed in an aerodynamically stable "bird" which is towed sixty metres below a helicopter. Fixed to the helicopter skid is a shock and gimbal-mounted, downward-facing video camera. A video signal is recorded and later reviewed and correlated with a recent air photograph in order determine the precise locations of the flight paths. The elevation of the helicopter above the ground is recorded by a radar altimeter and monitored by the pilot and navigator in order to maintain a constant ground clearance.

A computer records readings of the magnitude of the earth's magnetic field and of the fields induced by two powerful VLF-EM transmitters (located in Annapolis, Maryland and Seattle, Washington). This data, the time and date it was observed, radar altimeter values, and survey fiducial points are all superimposed on the video image and recorded on both video cassettes and 3.5 inch computer diskettes.

Data quality is assured by the survey operator monitoring a real-time display of direct and unfiltered recordings of all the geophysical output signals while a navigator directs the helicopter pilot from an air photograph.

DATA PROCESSING

The video image, with superimposed fiducial points recording times and data, is correlated with both the navigator's and operator's field notes and topographic features observed from an air photograph. The "recovered" flight paths are digitized to obtain relative x and y positions which are then combined with *the field data. Subsequently, all* the geophysical data is filtered to remove spurious noise bursts and chatter, and then plotted as flight path profiles and contour maps for each of the sensors.

Both the total field magnetometer signal and the total field and quadrature components of VLF-EM signal are sensitive to topographic changes and bird oscillations. Short wavelength (less than 200 meters) oscillations, are attenuated by filtering the data with a digital low-pass filter. Long wavelength effects (anomalies greater than 2000 metres) attributed to topography, are also removed from the VLF-EM data by high-pass filtering.

DISCUSSION OF RESULTS

The **Cap 2-4 and Goat 1** claims were surveyed on June 1, 1988. Approximately 92 line kilometers of airborne magnetic and VLF-EM survey data have been recovered and evaluated.

Survey lines were flown northwest to southeast with an average spacing of 250 metres. The geophysical survey data were recorded two times per second for an effective average sampling interval of 15 metres. The sensors were towed below the helicopter with an average terrain clearance of 60 metres.

Magnetic data shown in Figure 3 are useful for mapping the position and extent of regional and local geological structures which have varying concentrations of magnetically susceptible minerals. Many lithological changes correlate with a change in magnetic signature. VLF-EM data is useful for mapping conductive zones. These zones usually consist of argillaceous graphitic horizons, conductive clays, water-saturated fault and shear zones, or conductive mineralized bodies. Conductors are located at a change in sign (cross-over) of the quadrature component over a total field VLF-EM high.

There are three distinct areas observed in the survey map which appear as magnetic highs. These are areas where the contoured total field strength is two to four hundred nanoTeslas (nT) greater than the surrounding areas. Two of these features correlate with the upper Jurassic granodiorite and augite diorite intrusions mapped on the property (Souther, 1971). The third area is approximataely 600 metres south of the **Cap 3** and **Cap 4** claim boundary and is aligned to the northeast.

The high magnetic field values of the first area, in the vicinity of Red Cap Lake and the granodiorite intrusion, are constrained to the northwest by what appears to be a north-northeast striking fault. One local magnetic high in this area, approximately 400 metres north of Red Cap Lake, is truncated by both this interpreted fault (marked by the creek just north of Red Cap Lake) and a northwest-southeast trending ridge. A second local magnetic high occurs further south along the ridge and is adjacent to the geochemical anomaly mapped in 1980. A third local high is located southeast of Red Cap Lake. The magnetic level gradually decreased to the southeast for 500 metres past what appears to be a southwest-northeast striking fault. This fault is interpreted from topographic lineations observed on the air photograph.

The second area, situated in the southeastern corner of the survey area, contains the largest magnetometer readings for the survey. This high also corresponds to the junction of three ridges in addition to the mapped location of the augite diorite intrusive.

The third area, located about 300 metres north of the mapped augite diorite intrusion, is an anomaly with a restricted lateral extent. This magnetic anomaly may be due to a diorite dike.

The magnetic highs are interpreted to correspond to diorite and granodiorite intrusions. Steep magnetic gradients follow major faults and shear zones. Adjacent magnetic lows, due to the depletion of magnetic minerals, are inferred as possible hydrothermal alteration zones.

Some of the VLF-EM conductive zones shown on Figures 4 and 5 correspond to topographic features such as creeks and ridges which reflect local geological structure. Overall the conductors induced by the Annapolis transmitter are stronger and better-imaged than the same conductors induced by the Seattle transmitter. This is because the coupling alignment of the conductors is better for the Annapolis, Maryland station than for the nearer Seattle, Washington station.

The longest mappable conductor, over one and one-half kilometres long and aligned roughly east-west, intersects the eastern part of the anomalous geochemical zone (Wahl, 1982). The conductor straddles the upper reaches of Moly Creek and continues to follow a ridge line to the east. A B.C Mineral Inventory occurrence of graphite is located in the same general area, which may explain the conductor, however its coincidence with a geochemical anomalous area suggests a mineralized structure, possibly containing graphite, as the source.

A few hundred metres south of the confluence of Copper and Moly Creeks and across the interpreted north-northeast striking fault, there is a short east-west striking conductor which may be a continuation of the conductor described above. Perhaps the separation between this and the previously noted conductor is due to the displacement of the same mineralized structure across a faulted contact marked by a gradient in both the magnetics and VLF-EM data along flight line L6. This gradient appears to correlate with the mapped contact between the volcanic and clastic sediment units (Figure 2b).

Along both the northwest-southeast trending ridge at the northeast boundary of the granodiorite intrusive, and the east-west trending ridge associated with the northern bounds of the augite diorite intrusive, are strong VLF-EM conductors coincident with steep magnetic gradients. Although this geophysical signature may be related to the topographic feature, they may also be due to a mineralized zone along the flanks of the intrusive.

Other VLF-EM conductors have been located throughout the survey area. Those which strike northwest-southeast, nearly parallel with the flight lines, may be related to a conductive sedimentary horizons (e.g. argillaceous layers). Those which strike east-northeast-west-southwest are more likely due to cross-cutting shear structures. The conductor on lines L14 and L15 immediately northwest of the interpreted, magnetic-high, intrusive six hundred metres south of the **Cap 3** and **Cap 4** claim boundary, is noteworthy as it is coincident with a magnetic low which could be due to hydrothermal alteration.

CONCLUSIONS AND RECOMMENDATIONS

The airborne magnetic and VLF-EM survey has indicated a number of locations which warrant further exploration. The geophysical signature of these target areas is a VLF-EM conductor associated with magnetic anomalies. This geophysical signature could represent a model of hydrothermal alteration and sulphide enrichment driven by a nearby intrusion. The intrusion is marked by a area of magnetic highs.

A few of these targets correspond to areas of visible surface mineralization. Those target areas which have not had similar geochemical and visual evaluation warrant further attention. In particular, the VLF-EM conductors marked on Figures 4 and 5 extending to the east and to the west of the anomalous geochemical zone should have the highest priority for follow-up work. The VLF-EM conductors along the ridges to the north and south of the anomalous geochemical zone also warrant high priority.

A recommended exploration program would consist of a detailed ground magnetic and VLF-EM survey to accurately position the conductors. A smaller induced polarization survey (an advanced geophysical technique) should be conducted over the conductor to determine approximate depth of burial and position future drill locations.

Respectfully submitted,

Jeff C. Murton, B.Sc., P.Geoph.(Alberta)

Dennis V. Woods, Ph.D., P.Eng.

REFERENCES

Clouthier, G.A., 1980: A Geochemical Report Concerning a Soil Sample Survey on the Red Cap Property, Cap Group #1 for Omni Resources Inc.

Clouthier, G.A., 1981: Red Cap Project: A Synopsis for Omni Resources Inc.

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Elliott, T.M., 1982: Assessment Report: Diamond Drilling on the Red Cap Claims.

Souther, J.G., 1971: Geology and Mineral Deposits of Tulsequah Map-Area, British Columbia: Geological Survey of Canada Memoir 362, Ottawa, Canada, 1971.

Wahl, H.J., 1980: Red Cap Property Preliminary Evaluation Report For Omni Resources Inc., Sept. 1980.

Wahl, H.J., 1982: Red Cap Property Review of 1980-81 Work Programs and Recommendations, Aug. 1981

INSTRUMENT SPECIFICATIONS

DEVELCO RINGCORE MAGNETOMETER

Model:	1210
Sensor:	3-axis ringcore fluxgate
Orthogonality:	±1° degree with respect to other axes and reference surface
Sensitivity:	0.0025 Milligauss (0.25 gamma)
Range:	±1000, ±300, ±100, ±30, ±10, ±3 mG
Analog Output:	±5V dc for above ranges
Output Impedance:	600 ohms
Zero Field Offset:	< ±7 mG absolute
Linearity:	±0.5%
Noise:	0.1 to 1 Hz, 0.0025 mG peak-to-peak 1.0 to 10 Hz, 0.0025 mG peak-to-peak 1.0 to 100 Hz, 0.01 mG peak-to-peak
Gain Stability:	±3%, 0 to +60° C
Field Nulling:	±0.04 mG to full scale
Low-Pass Filtering:	Switch selectable 1, 10, 100 and 500 Hz (-3 dB with -18 dB/octave roll-off, Butterworth response)
High-Pass Filtering:	Dc, 0.1, and 1Hz (-3 dB with -18 dB/octave roll-off, Butterworth response)
Notch Filter:	40-dB notch at 60 Hz, switch selectable, in or out
Battery Life:	25-hour minimum, rechargeable
AC Power:	115-230V; 1/4 A
Size:	Sensor: 3.2 cm x 3.5 cm x 10.16 cm Control Unit: 43 cm x 13 cm x 41 cm
Weight:	Sensor Probe: 0.62 kg Control Unit: 13.6 kg

INSTRUMENT SPECIFICATIONS

CONTROLLER AND RECORDING SYSTEM

Type:	Compaq Portable II
	An 80286 microprocessor
	640 Kbytes of RAM
	2 three and a half inch 720 Kbyte drives
	one 20-Megabyte fixed disk drive
	Monochrome, dual-mode, 9-inch internal monitor
	Asynchronous communications interface
	Parallel interface
	Composite-video monitor interface
	RGB monitor interface
	RF modulator interface
	Two expansion slots
	Real-time clock
	An 80287 coprocessor
	A HPIB Interface Card
Data Storage:	3 1/2 inch diskettes in ASCII
	Roland 1012 printer for printed output
	Beta I video cassettes
Power Requirements:	115 Volt AC at 60 Hz
Weight:	11 kg
Dimensions:	45 cm x 25 cm x 30 cm

INSTRUMENT SPECIFICATIONS

DATA ACQUIISITION UNIT

Model:	HP-3852A
Mainframe Supports:	Eight function module slots Data acquisition operating system System timer Measurement pacer Full alphanumeric keyboard, command and result displays
Number of Channels:	20 channel relay multiplexer HP44708A/H
Voltmeter:	5 1/2 to 3 1/2 digit intergrating voltmeter HP44701A measures: DC voltage resistance AC voltage Range ±30V, ±0.008%, +300uV Intergration Time 16.7 msec Number of converted digits 6 1/2

Reading rate (readings/ sec)	57
Min-Noise rejection (dB) Normal Mode Rejection at 60 Hz ±0.09%	60
DC Common Mode Rejection with 1 KΩ in low lead	120
Effective Common Mode Rejection at 60 Hz ±0.09% with 1 KΩ in low lead	150

Communication:	HPIB interface with Compaq
Power Requirements:	110/220 Volts AC at 60/50 Hz
Dimensions:	45.7 cm x 25.4 cm x 61.0 cm
Weight:	9.5 kg.

INSTRUMENT SPECIFICATIONS

HERZ TOTEM - 2A VLF-EM SYSTEM

Source of Primary Field:	-Global network of VLF "OMEGA" radio stations in the frequency range of 14 KHz to 30 KHz
Number of Channels:	Two; Field selectable by 100 Hz steps. Ex: Seattle, Washington at 24.8 KHz Annapolis, Maryland at 21.4 KHz
Type of Measurement:	Total Field Strength (Location of Conductors) Vertical Quadrature (useful in interpreting the quality and depth to a conductor) Horizontal Quadrature (orientation of field & structures)
Type of Sensor:	Ferrite antennae array of 3 orthoganal coils mounted in a fiberglass bird with preamp.
Output:	-0 to ± 1000 mV displayed on two switch selectable analogue meters. -noise monitoring light. - audio monitor speaker.

Filters:	Noise blanking spherics (lightning) Anti Aliasing filters (Adjacent Stations) Crystal Controlled Phase Lock loop digital tuning. 1 sec. output Time Constant.
Sensitivity:	130 micro V/m at 20 kHz.

STATEMENT OF QUALIFICATIONS

NAME:	MURTON, Jeff C.
PROFESSION:	Geophysicist
EDUCATION:	B.Sc - Geophysics Major University of British Columbia
PROFESSIONAL ASSOCIATIONS:	Society of Exploration Geophysicists Association of Professional Engineers, Geologists, and Geophysicists of Alberta
EXPERIENCE:	1984-88 - Geophysicist, Interactive Graphics with Western Geophysical Company of Canada Ltd. in Calgary, Alberta. 1988 - Geophysicist with White Geophysical Inc.

STATEMENT OF QUALIFICATIONS

NAME: WOODS, Dennis V.

PROFESSION: Geophysicist

EDUCATION:
B.Sc. Applied Geology
Queens' University

M.Sc. Applied Geophysics
Queen's University

Ph.D. Geophysics
Australian National University

PROFESSIONAL ASSOCIATIONS:
Registered Professional Engineer
Province of British Columbia

Society of Exploration Geophysicists

Canadian Society of Exploration Geophysicists

Australian Society of Exploration Geophysicists

President, B.C. Geophysical Society

EXPERIENCE:

1971-79
- Field Geologist with St. Joe Mineral Corp. and Selco Mining Corp. (summers).
- Teaching assistant at Queen's University and the Australian National University.

1979-86
- Professor of Applied Geophysics at Queen's University.
- Geophysical consultant with Paterson Grant & Watson Ltd., M.P.H. Consulting Ltd., James Neilson and Assoc. Ltd., Foundex Geophysics Geophysics Ltd.
- Visiting research scientist at Geological survey of Canada and the University of Washington.

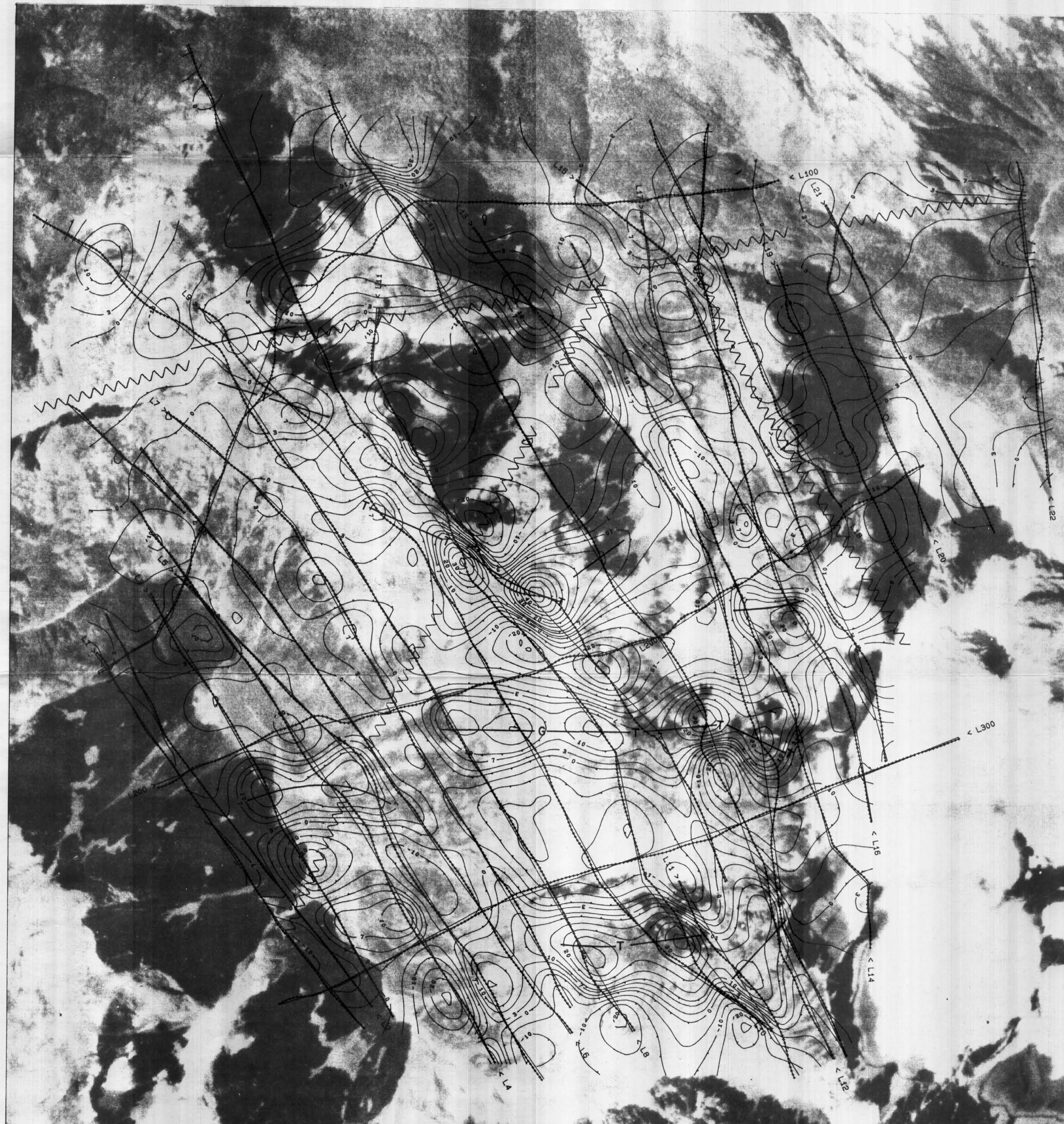
1986-88
- Project Geophysicist with Inverse Theory and Applications Inc.
- Chief Geophysicist with White Geophysical Inc.

COST BREAKDOWN

The geophysical data was collected, processed and analyzed. Geological information was researched and compiled. This report and survey was prepared for an all inclusive fee of $10,428.00. This total is based upon a survey acquisition and processing cost of $ 59 per kilometre of collected total field magnetic data and two stations of VLF-EM data. The survey was conducted by Western Geophysical Aero Data Ltd. employees Ian Braidek and Bob Acheson.

Mob/Demob - truck rental, helicopter ferry............	$ 3,000.00
Survey - 92 kilometers of magnetics and VLF-EM data at $ 59 per kilometre......................	$ 5,428.00
Report/Interpretation................................	$ 2,000.00
TOTAL	$10,428.00

TOTAL ASSESSMENT VALUE OF THIS REPORT **$10,428.00**

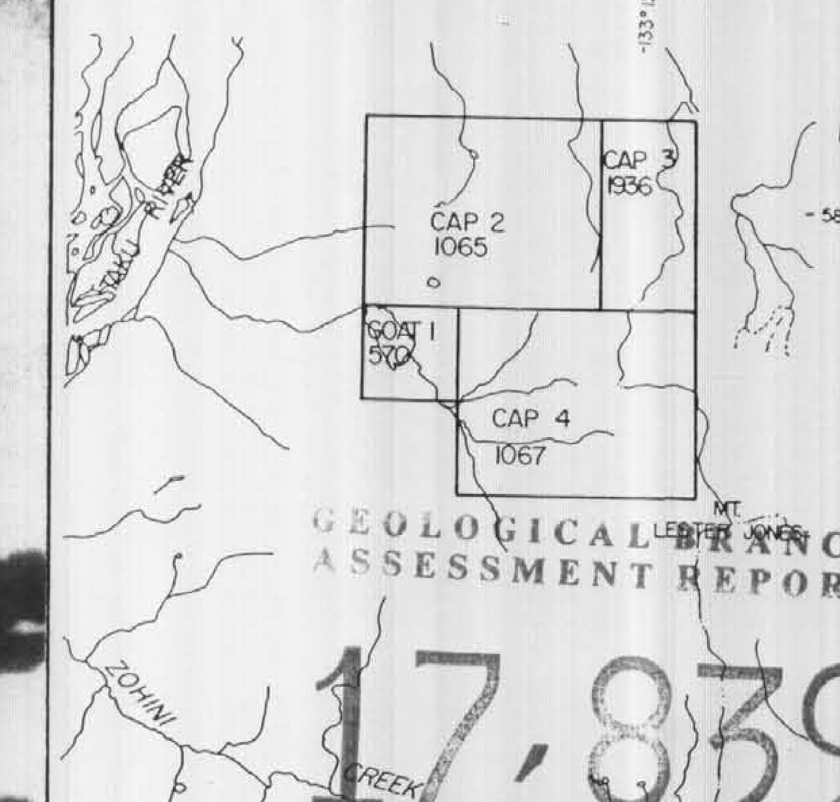


—T— CONDUCTOR CORRESPONDENCE WITH TOPOGRAPHIC FEATURE

—G— GRAPHITE CONDUCTOR

—— CONDUCTOR

NTS 104K/11W & 104/14W



OMNI RESOURCES INC.

CAP CLAIM GROUP
AIRBORNE VLF-EM SURVEY

CONTOURED TOTAL FIELD (TRANSMITTER - ANNAPOLIS)

Scale 1: 10000.0

0 200 400 600 800 1000 M

Date: September 1988	Survey: June 1988	Figure 4

WESTERN GEOPHYSICAL AERO DATA LTD.

— GRANODIORITE

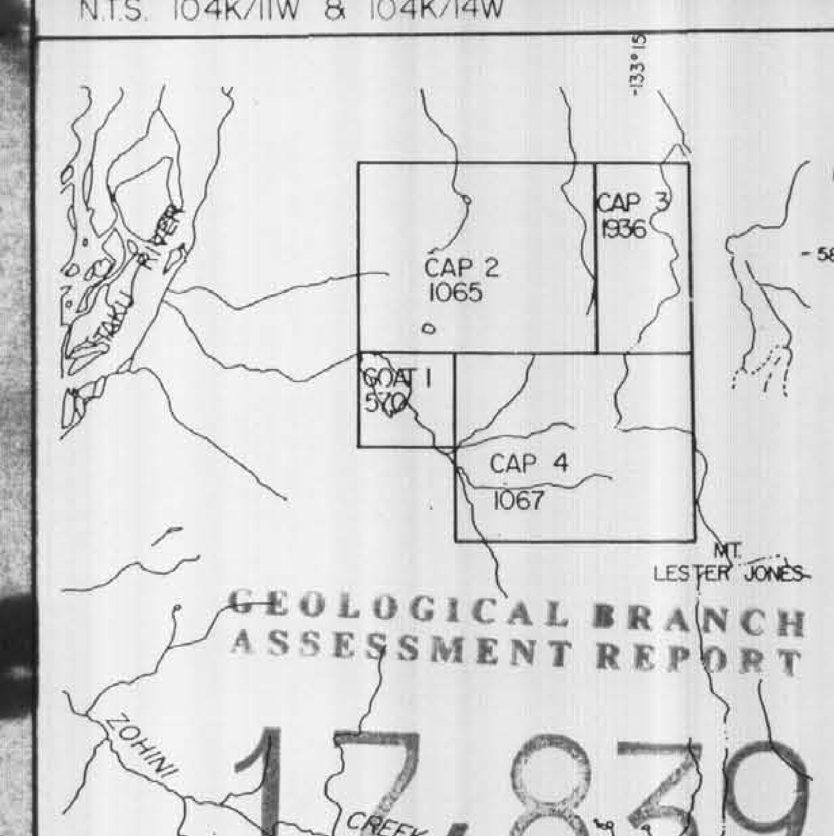
— AUGITE DIORITE

— INFERRED INTRUSIVES

— INTERPRETED FAULTS

— INFERRED FAULTS

N.T.S. 104K/11W & 104K/14W



GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,839

OMNI RESOURCES INC.

CAP CLAIM GROUP

AIRBORNE MAGNETOMETER SURVEY

CONTOURED TOTAL FIELD (n

Scale 1: 10000.0

0 200 400 600 800 1000 M

Date: September 1988	Survey: June 1988	Figure 3

WESTERN GEOPHYSICAL AERO DATA LTD.

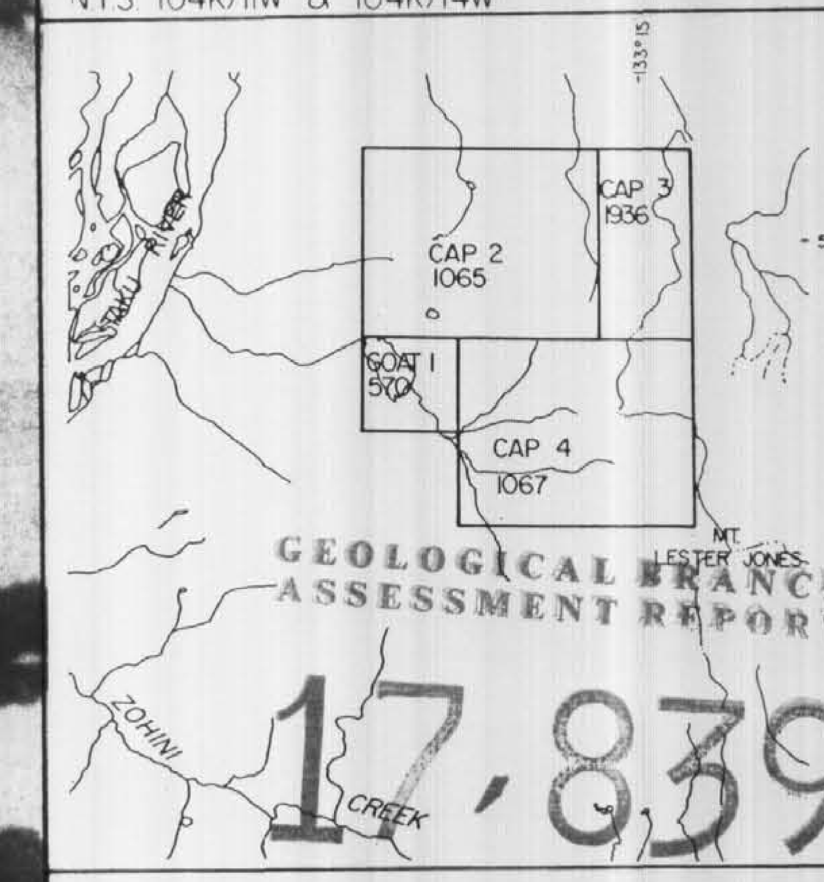
PROFESSIONAL ENGINEER D. V. WOODS

—T— CONDUCTOR CORRESPONDENCE WITH TOPOGRAPHIC FEATURE

—G— GRAPHITE CONDUCTOR

——— CONDUCTOR

NTS 104K/11W & 104K/14W



GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,839

OMNI RESOURCES INC.

CAP CLAIM GROUP
AIRBORNE VLF-EM SURVEY

CONTOURED TOTAL FIELD (TRANSMITTER - SEAT[TLE])

Scale 1: 10000.0

0 200 400 600 800 1000 M

Date: September 1988	Survey: June 1988	Figure 5

WESTERN GEOPHYSICAL AERO DATA LTD.

PROFESSIONAL ENGINEER D. V. WOODS