

87-617-16269

REPORT ON
COMBINED HELICOPTER BORNE
ELECTROMAGNETIC, MAGNETIC, AND VLF-EM
SURVEY

G-NORTH & PLASWAY PROPERTIES
CARIBOO MINING DISTRICT DIVISION
MCLEOD RIVER AREA
BRITISH COLUMBIA

93J/14E, 14W 930/3W 54°56'48" 123°15'

for
EZEKIEL EXPLORATION LTD.

by
AERODAT LIMITED

8/88

September 28, 1987

CLAIMS SURVEYED

CLAIM	UNITS	RECORD NUMBER	ANNIVERSARY
GNORTH 1	12	3310	APRIL 7
GN 2-4	50	3311-3313	APRIL 4
GN 6-9	80	3315-3318	APRIL 7
GN 11-12	40	6866, 3321	JUNE 14, APRIL 7
GN 14	20	3323	APRIL 7
GN 16-17	40	3965-3966	AUGUST 26
GN 18-19	26	4067, 5877	MARCH 19
SOL 1-2	40	8109-8110	NOVEMBER 21
SOL 3-4	36	8116-8117	NOVEMBER 26
SOL 5-6	36	8124, 8125	NOVEMBER 26
SOL 7-8	40	8249, 8246	FEBRUARY 2
SOL 9-10	36	8247-8248	FEBRUARY 2
DOE	20	8120	NOVEMBER 26
HORN 1-3	60	8127-8129	NOVEMBER 26
HORN 4	20	8126	NOVEMBER 26
HORN 5-7	58	8121-8123	NOVEMBER 26

OWNER: EZEKIEL EXPLORATIONS LTD.

OPERATOR: EZEKIEL EXPLORATIONS LTD.
GEOLOGICAL BRANCH
ASSESSMENT REPORT

Part 1
of 2

J8733

16,269

J. de Carle
Consulting Geophysicist

FILMED



Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)	TOTAL COST
GEOPHYSICAL	\$57,442.50

AUTHOR(S) ... R..J. deCarle SIGNATURE(S) *[Signature]* for

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED . August 25, 1987 . YEAR OF WORK 1987.

PROPERTY NAME(S) ... SYNDICATE, RUBY . JACK, HART .

COMMODITIES PRESENT ... Au, Mo

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN . 93J-13,23 . 930-10

MINING DIVISION ... Cariboo . NTS . 93J/14E, 93J/14W, 930/3W

LATITUDE .. 54° 56' 48" . LONGITUDE .. 123° 15'

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

... G. NORTH. 1, . GN. 2-4, . 6-9, . 11-12, . 14, . 16-19, . SOL #1-10, . DOE, . HORN #1-7, . (614 units).

OWNER(S) (1) . Ezekiel Explorations Ltd, (2)

MAILING ADDRESS . 1900-999 W. Hastings Street . Vancouver, B.C. V6C 2W2

OPERATOR(S) (that is, Company paying for the work) (1) . Ezekiel Explorations Ltd, (2)

MAILING ADDRESS . 1900-999 W. Hastings Street . Vancouver, B.C. V6C 2W2

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude): Mississippian Slide Mountain Group mudstone, siltstone and limestone are interbedded with basaltic volcanics. These are overlain by Triassic Takla Group andesite with minor interlaminated mudstone. Along a northeast trending fault zone, anomalous gold, silver and copper soil is coincident with magnetic lows. Gold mineralization is in quartz carbonate altered shear zones.

REFERENCES TO PREVIOUS WORK .

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LIST OF MAPS

(Scale 1:10,000)

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

1. PHOTOMOSAIC BASE MAP;
prepared from an uncontrolled photo laydown, showing registration crosses corresponding to NTS co-ordinates on survey maps.
2. FLIGHT LINE MAP;
showing all flight lines and fiducials.
3. AIRBORNE ELECTROMAGNETIC SURVEY INTERPRETATION MAP;
showing flight lines and major structural features.
4. TOTAL FIELD MAGNETIC CONTOURS;
showing magnetic values contoured at 2 nanoTesla intervals, flight lines and fiducials.
5. VERTICAL MAGNETIC GRADIENT CONTOURS;
showing magnetic gradient values contoured at 0.5 nanoTeslas per metre.
6. APPARENT RESISTIVITY CONTOURS;
showing contoured resistivity values, flight lines and fiducials.
7. VLF-EM TOTAL FIELD CONTOURS;
showing relative contours of the VLF Total Field response, flight lines and fiducials.

LIST OF MAPS (cont'd)

- 8(a) ELECTROMAGNETIC PROFILES;
showing low frequency coaxial inphase and quadrature
profiles, flight lines and fiducials.
- 8(b) ELECTROMAGNETIC PROFILES;
showing mid frequency coplanar inphase and quadrature
profiles, flight lines and fiducials.
- 8(c) ELECTROMAGNETIC PROFILES;
showing high frequency coaxial inphase and quadrature
profiles, flight lines and fiducials.

1. INTRODUCTION

This report describes an airborne geophysical survey carried out on behalf of Ezekiel Exploration Ltd. by Aerodat Limited. Equipment operated included a three frequency electromagnetic system, a high sensitivity cesium vapour magnetometer, a two frequency VLF-EM system, a film tracking camera and an altimeter. Electromagnetic, magnetic and altimeter data were recorded both in digital and analog form.

The survey area, comprising a block of ground in the Cariboo Mining District of British Columbia, is located approximately 115 kilometres north of Prince George, British Columbia.

Four flights, which were flown on July 3 and 4, 1987, were required to complete the survey with flight lines oriented at an Azimuth of 053-233 degrees and flown at a nominal spacing of 125 metres. Coverage and data quality were considered to be well within the specifications described in the contract.

The survey objective is the detection and location of poorly mineralized zones which can be directly or indirectly related to precious metal exploration targets. Of importance, therefore, are poorly mineralized conductors which may represent structural features which can play an essential role in the eventual location

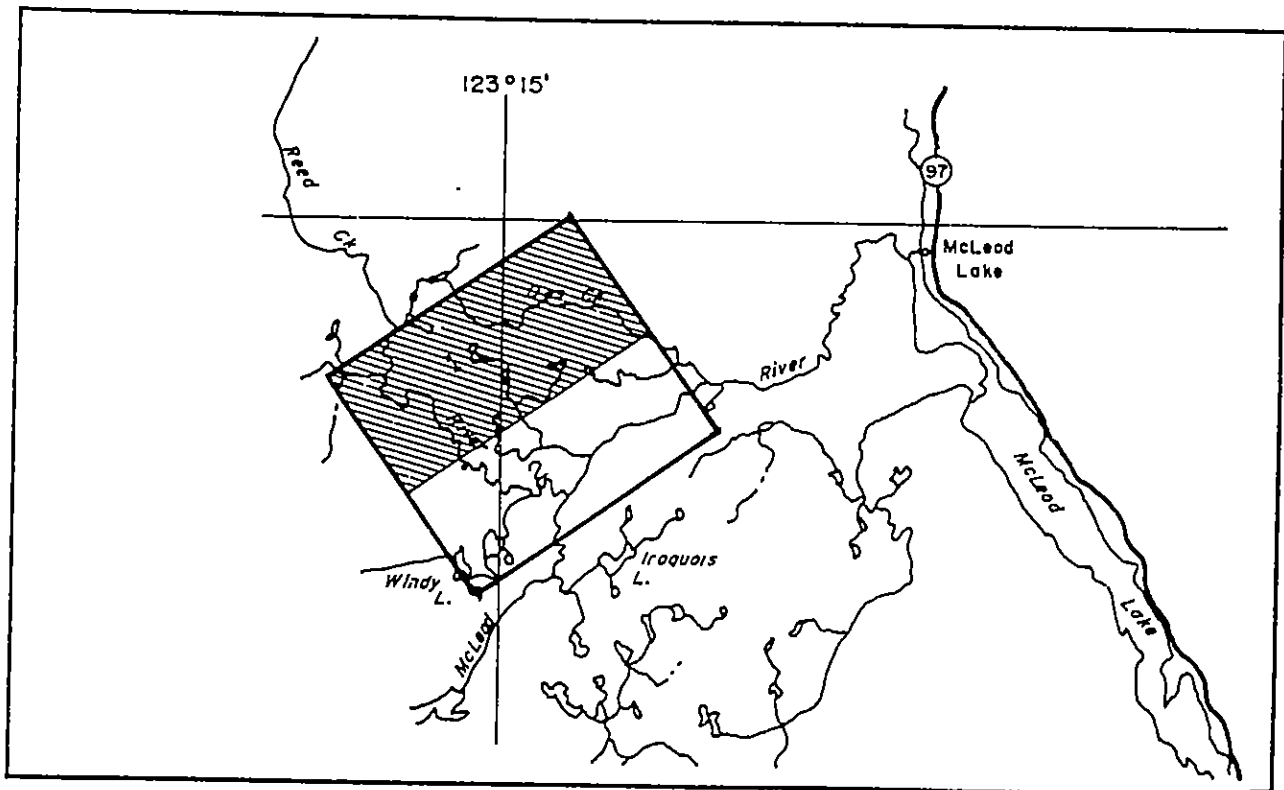
of primary minerals. Of interest as well, would be conductors that are in close proximity to intrusives which may have been the host for any primary minerals, including gold mineralization.

A total of 645 kilometres of the recorded data were compiled in map form and are presented as part of this report according to specifications outlined by Ezekiel Exploration Limited.

2. SURVEY AREA LOCATION

The survey area is depicted on the index map shown. It is centred at Latitude 54 degrees 57 minutes, Longitude 123 degrees 14 minutes west, approximately 115 kilometres north of Prince George, British Columbia (NTS Reference Map No. 93 J/14). The survey area is also centred approximately 15 kilometres southwest of McLeod Lake, British Columbia. There do not appear to be any secondary roads or in fact, bush roads leading into the survey area or the proximity to it. Access to any part of the survey area would seem to be by helicopter or for some areas, by water transportation.

The terrain is of a gentle rolling nature with elevation ranging from 2800 feet to 3300 feet.



3. AIRCRAFT AND EQUIPMENT

3.1 Aircraft

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

3.2 Equipment

3.2.1 Electromagnetic System

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

3.2.2 VLF-EM System

The transmitters monitored were Jim Creek, Washington at 24.8 kHz for the Line station and Cutler, Maine at 24.0 kHz for the Orthogonal station.

3.2.3 Magnetometer

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

3.2.4 Magnetic Base Station

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

3.2.5 Radar Altimeter

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

3.2.6 Tracking Camera

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

data were encoded on the video tape.

3.2.7 Analog Recorder

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

Channel	Input	Scale
CXI1	Low Frequency Inphase	2 ppm/mm
CXQ1	Low Frequency Quadrature	2 ppm/mm
CXI2	High Frequency Inphase	2 ppm/mm
CXQ2	High Frequency Quadrature	2 ppm/mm
CPI1	Mid Frequency Inphase	8 ppm/mm
CPQ1	Mid Frequency Quadrature	8 ppm/mm
VLT	VLF-EM Total Field, Line	2.5%/mm
VLQ	VLF-EM Quadrature, Line	2.5%/mm
VOT	VLF-EM Total Field, Ortho	2.5%/mm
VOQ	VLF-EM Quadrature, Ortho	2.5%/mm
ALT	Altimeter (150 m at top of chart)	3 m/mm
MAGF	Magnetometer, fine	2.5 nT/mm
MAGC	Magnetometer, coarse	25 nT/mm

3.2.8 Digital Recorder

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

<u>Equipment</u>	<u>Recording Interval</u>
EM system	0.1 seconds
VLF-EM	0.2 seconds
Magnetometer	0.2 seconds
Altimeter	0.2 seconds

4. DATA PRESENTATION

4.1 Base Map

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

4.2 Flight Path Map

The flight path was manually recovered onto the photomosaic base using the VHS video tape. The recovered points were then digitized, transformed to a local metric grid and merged with the data base. The flight path map showing all flight lines, is presented on a Cronaflex copy of the base map, with camera frame and navigator's manual fiducials for cross reference to both the analog and digital data.

4.3 Airborne Electromagnetic Survey Interpretation Map

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

Local spheric activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude

but leave a broader residual response that can be confused with geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major spheric events.

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

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

4.4 Total Field Magnetic Contours

The aeromagnetic data were corrected for diurnal variations by adjustment with the digitally recorded base station magnetic values. No correction for regional variation was applied. The corrected profile data were interpolated onto a regular grid

at a 25 metre true scale interval using an Akima spline technique. The grid provided the basis for threading the presented contours at a 2 nanoTesla interval.

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

4.5 Vertical Magnetic Gradient Contours

The vertical magnetic gradient was calculated from the gridded total field magnetic data. Contoured at a 0.5 nT/m interval, the gradient data were presented on a Cronaflex copy of the photomosaic base map.

4.6 Apparent Resistivity Contours

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

The approach taken in computing apparent resistivity was to assume a model of a 200 metre thick conductive layer (i.e., effectively a half space) over a resistive bedrock. The computer then generated, from nomograms for this model, the resistivity that would be consistent with the bird elevation and recorded amplitude for the 4600 Hz coaxial frequency pair used. The apparent resistivity profile data were interpolated

onto a regular grid at a 25 metres true scale interval using an Akima spline technique.

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

4.7 VLF-EM Total Field Contours

The VLF-EM signals from NLK, Jim Creek, Washington, broadcasting at 24.8 kHz were compiled. The NLK data were compiled in contour map form and presented on a Cronaflex copy of the photomosaic base map.

5. INTERPRETATION

5.1 Geology

There were no geology maps available to the writer so that a geological-geophysical interpretation was not possible. The area is thought to be underlain by extensive glacial drift with depths in excess of tens of metres. The direction of the glacial thrust was in a southwest direction.

5.2 Magnetics

The magnetic total field presentation suggests an east-west to northwest-southeast trending lithology. The extreme north-eastern portion of the area is a rather featureless area magnetically, suggesting a rock type displaying a uniform texture.

Referring to the north map sheet, sheet no. 1, it will be noted that the central portion of the map sheet reflects an interlayering or interbedding of variable magnetic intensity type rock formations and without the geological detail, it is impossible for the writer to correlate the two suites of information. Another inactive area magnetically, is towards the western third portion of sheet no. 1. It is probable that this area is underlain with similar rocks as that which may

exist within the northeastern corner. Could there be a felsic intrusive towards the northwestern corner of map sheet no. 1?

Direction of dip is generally to the southwest, with some areas interpreted as being vertical or near vertical. Towards the extreme north end of the central formation of map sheet no. 1, it will be noted that direction of dip is towards the northeast.

Much the same interpretation can be explained for the southern map sheet. The western half of this map sheet is magnetically inactive with most magnetic trends being somewhat disoriented, with no semblance of strike direction. The eastern half, on the otherhand, seems to indicate an east-west trending lithology. As well, towards the extreme eastern portion of this map sheet, there are a couple of high intensity magnetic features which may reflect a mafic to ultramafic volcanic rock type. And to the immediate east of this horizon, is another inactive magnetic region, again suggesting perhaps a sedimentary or felsic rock unit.

For the most part, dip of the bedding within the area of the south map sheet, is thought to be vertical or near vertical.

5.3 Vertical Magnetic Gradient Contours

This presentation has clearly defined those areas shown previously on the magnetic total field. It has shown that the inactive areas are extremely featureless, again emphasizing the uniform rock texture. The trends within the middle of map sheet no. 1 are clearly identified with evidence of an interlayering nature within what could be interpreted as metavolcanics.

The writer has indicated a few cross-cutting fault zones on the maps which may be of some significance as a mechanism for the control for any migration of any mineralization. There may also be some strike slip faults within the survey area and there certainly seems to be sufficient evidence of this phenomenon from the magnetics. However, the writer has not indicated any of these structural effects on the map as a thorough study of the magnetics should be carried out first.

The southern map sheet, except for the eastern third of the area, is extremely inactive, showing no signs of any interbedding between various rock types. The eastern portion, however, does point out the previously interpreted mafic to ultramafic metavolcanics quite nicely.

It should be noted that the zero contour interval coincides directly or very close to geological contacts. It is because of this phenomenon that the calculated vertical gradient map can be compared to a pseudo-geological map.

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

5.4 Electromagnetics

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

Anomalies were picked off the analog traces of the low and high frequency coaxial responses and then validated on the coplanar profile data. These selections were then checked with

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

RESULTS

As a result of this airborne survey being carried out, a few bedrock conductors have been intercepted. Most tend to display low amplitude electromagnetic responses which is probably attributable to the thick glacial cover. For the most part, the indicated conductors within the north map sheet, sheet no. 1, have little or no magnetic correlation. In fact, most conductors tend to be associated with magnetic lows. A few trends, however, do seem to be correlating with the flank of magnetic features suggesting a relationship with geological contacts.

It is also interesting to note that most of the conductive trends seem to be located within or very close to the western extremities of the two aforementioned magnetically inactive areas. Are these magnetically inactive areas associated with metasedimentary rocks which are abutting against metavolcanics?

All of the conductive zones outlined on the EM anomaly maps by the writer, display rather broad electromagnetic responses. As mentioned earlier, this may be attributable to the thick glacial cover or it may be associated with wide packages of conductive rock. There is also the possibility that some of the flight lines may have been flown at an oblique angle to the strike of the geology. These are all considerations when evaluating the various conductors as to the broadness of their responses.

The writer has indicated on the EM anomaly maps, a number for these conductors and these have been assigned as a reference only. Not having access to any detailed geological maps, it is impossible for the writer to give any geological-geophysical deliberations on these targets.

ZONE 1 is not a well defined response. It displays an extremely low amplitude response besides being somewhat

broad. There is no magnetic association and there is no direct association with the apparent resistivity data. Conductive glacial till is the probable source.

ZONE 2 displays a reasonable electromagnetic response, but again, has low amplitudes. It is interpreted to be caused by a bedrock source. A relationship with a geological contact is suspected. ZONE 3 seems to be located on the western edge of a highly conductive source. The writer believes that the trend, which is approximately 200 metres long, could be due to an edge effect to the highly conductive source which is located to the east. Note its relationship to a magnetic flank and the interpreted fault zone.

ZONE 4 displays similar electromagnetic responses as ZONE 3 and may very well be associated with the same geological environment. Amplitudes are a little stronger for ZONE 4 and as such, any preliminary work along this horizon may want to be initiated in this area. ZONE 4 coincides with a magnetic low suggesting a possible relationship with a fault zone.

Referring to the apparent resistivity map, ZONE 5 displays reasonable conductivity and is flanking a magnetic feature.

Follow-up on this conductor is certainly warranted.

ZONE 6 is not a well defined conductive trend and should be considered a low priority target. Intercept 1230B displays the best EM response and if any work was to be carried out on this trend, this is the area that it should be carried out on. ZONE 7 is an isolated response displaying rather poor conductivity. ZONES 8, 9, 11 and 12 are in much the same category.

Intercept 1340A of ZONE 10 displays a reasonably good electromagnetic response and would seem to be correlating with a magnetic low. Non-magnetic sulphides and/or graphite is the probable cause. Of all the anomalies selected within the northern map sheet, this area is probably the best looking EM response.

ZONES 13 and 14 display low amplitude responses, however, the response characteristics for ZONE 14 are quite interesting. They represent fair conductivity and are correlating with the flank of a magnetic trend.

No further work is warranted for ZONES 15 or 17. ZONE 16 displays only a fair electromagnetic response and if any work is

to be carried out on this trend, it should be done in the proximity of intercept 1520A.

ZONES 18 to 26 are all rather poor electrical conductors, each displaying poor conductivity and each having little or no magnetic association. However, ZONES 18, 21 and 23 could be looked at, as well as ZONES 24 and 25.

5.5 Apparent Resistivity

There are some similarities in the data presentations between the magnetics and the apparent resistivity. However, it is the writer's opinion that the apparent resistivity presentation is a reflection to a greater degree, from the basement rocks and not from the overlying glacial till. In a few of the areas however, one sees the apparent resistivity data cutting obliquely across the magnetics, again suggesting a possible non-relationship between the two environments.

In some areas, low resistivity responses are correlating with the rivers and creeks. However, there does not always seem to be the same association with lakes. It can be assumed that glacial clay deposits are the source.

The region, as a whole, displays a rather conductive environment, encompassing the entire area. It is quite possible that areas of higher resistivity may be reflecting areas of thinner overburden cover.

5.6 VLF-EM Total Field

The VLF-EM data shows only faint correlation with the magnetic total field data. Both sets of data seem to indicate an approximate northwest-southeast trending lithology. In some areas, however, the VLF reveals a north-south direction which indicates a biasing effect to the strike direction of the geology, in this direction, because of the VLF transmitting station being used.

It will be noted that along some of the rivers and creeks, there is a VLF low correlating. This would seem to contradict the fact that a resistivity low also correlates with these same rivers and creeks. An explanation is not readily available to explain this phenomenon. One possible explanation is that VLF highs, or conductors, are reflecting somewhat thicker portion of the overlying glacial till than in areas surrounding the lakes, rivers and creeks.

Referring to the south map sheet, it will be seen that, for the most part, the direction of the VLF trends do not conform with the strike direction of the magnetics, suggesting, of course, a non-relationship between the two environments.

5.7 Recommendations

On the basis of the results of this airborne survey, ground follow-up work is recommended for a few of the selected targets as outlined by the writer on the interpretation map. These zones may be base metal targets because of their shorter strike lengths or they may be indicator horizons for precious metal targets.

Because of the difficulty to access the survey area, choice of a follow up method will be based on the most cost effective means of acquiring as much information as possible.

Ground geophysical surveying, by any means, will be expensive because of the nature for the need of cut lines. This would include horizontal loop EM, magnetometer surveys, VLF-EM and induced polarization surveys. However, one method that may be considered in any future follow-up programme, is a vertical loop EM survey, with the broadside or standard method. With this method, no reference cable is needed and the

transmitter-receiver separation is not restricted. It means greater mobility in being able to locate any of the conductors. It also means greater depth of penetration as well, because of a larger transmitter-receiver spread. Location and detection is the basis for this type of system. Once defined, the conductor may then be given a more refined ground EM survey such as with a Genie EM or MaxMin II EM system.

However, realizing the nature of the electromagnetic responses within this survey area, one wonders if only an induced polarization (IP) survey could intercept these responses.

A glacial till sampling programme may also be of interest for a few of the selected targets. Three or four of the targets could be selected and if results are encouraging, then other conductors should be looked at seriously.

Some of the better looking conductors intercepted as a result of the airborne survey and ones that should be investigated in the field are ZONES 2, 3, 4, 5, 9, 10, 16 and 21. It is recommended that ZONE 10, especially intercept 1340A, be given priority while in the field.

Robert J. de Carle

Robert J. de Carle

Consulting Geophysicist

for

AERODAT LIMITED

September 28, 1987

J8736

APPENDIX II

CERTIFICATE OF QUALIFICATIONS

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

1. I hold a B. A. Sc. in Applied Geophysics with a minor in geology from Michigan Technological University, having graduated in 1970.
2. I reside at 28 Westview Crescent in the town of Palgrave, Ontario.
3. I have been continuously engaged in both professional and managerial roles in the minerals industry in Canada and abroad for the past eighteen years.
4. I have been an active member of the Society of Exploration Geophysicists since 1967 and hold memberships on other professional societies involved in the minerals extraction and exploration industry.
5. The accompanying report was prepared from information published by government agencies, materials supplied by Ezekiel Exploration Ltd. and from a review of the proprietary airborne geophysical survey flown by Aerodat Limited for Ezekiel Exploration Ltd. I have not personally visited the property.
6. I have no interest, direct or indirect, in the property described nor do I hold securities in Ezekiel Exploration Ltd.
7. I hereby consent to the use of this report in a Statement of Material Facts of the Company and for the preparation of a prospectus for submission to the British Columbia Securities Commission and/or other regulatory authorities.

Signed,

Robert J. de Carle

Robert J. de Carle

Consulting Geophysicist

Palgrave, Ontario

September 28, 1987

APPENDIX III

ANOMALY LIST

J8736 McLEOD PROPERTY, BRITISH COLUMBIA

FLIGHT -----	LINE -----	ANOMALY -----	CATEGORY -----	AMPLITUDE (PPM)		CONDUCTOR		BIRD HEIGHT MTRS -----
				INPHASE -----	QUAD. -----	CTP DEPTH MHOS -----	MTRS -----	
4	1020	A	3	13.4	4.6	4.8	4	57
4	1110	A	1	7.7	7.2	1.0	7	52
4	1120	A	0	8.3	8.3	0.9	3	52
4	1130	A	1	14.1	9.8	1.8	0	60
3	1200	A	0	12.5	14.2	0.9	17	29
3	1200	B	2	11.2	6.8	2.0	12	47
3	1210	A	2	12.1	5.8	2.9	0	62
3	1220	A	1	12.8	11.6	1.2	12	37
3	1220	B	2	16.9	7.4	3.7	7	48
3	1230	A	2	10.1	4.5	3.0	1	64
3	1230	B	1	12.0	10.7	1.2	14	37
3	1250	A	1	10.6	6.9	1.8	9	50
3	1260	A	1	11.6	9.6	1.3	8	46
3	1260	B	1	12.5	9.1	1.6	10	44
3	1260	C	1	12.7	10.4	1.4	16	36
3	1270	A	1	9.7	8.3	1.2	15	41
3	1270	B	1	8.7	7.7	1.1	11	47
3	1280	A	0	7.5	7.3	0.9	14	45
3	1280	B	2	14.6	8.2	2.5	6	50
3	1290	A	2	11.6	6.8	2.2	15	44
3	1300	A	1	11.9	9.9	1.3	6	47
3	1300	B	1	11.1	7.5	1.7	29	30
3	1300	C	2	14.0	6.9	2.9	17	41
3	1310	A	2	9.1	4.7	2.4	0	72
3	1310	B	1	10.3	6.4	1.9	18	43
3	1310	C	0	5.6	5.2	0.8	21	45
3	1320	A	0	5.2	6.0	0.6	27	34
3	1320	B	1	12.9	8.5	1.9	16	40
3	1330	A	1	8.0	4.9	1.8	9	58

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

J8736 McLEOD PROPERTY, BRITISH COLUMBIA

FLIGHT -----	LINE -----	ANOMALY -----	CATEGORY -----	AMPLITUDE (PPM)		CONDUCTOR		BIRD HEIGHT MTRS -----
				INPHASE -----	QUAD. -----	CTF MHOS -----	DEPTH MTRS -----	
3	1330	B	0	4.7	5.9	0.5	11	50
3	1340	A	0	10.5	12.3	0.8	19	28
3	1340	B	1	8.4	5.1	1.8	12	54
3	1350	A	1	7.9	6.5	1.2	4	57
3	1350	B	1	7.5	5.7	1.3	0	66
3	1360	A	1	9.3	7.4	1.3	4	55
3	1410	A	0	4.4	8.4	0.2	0	51
2	1460	A	0	5.7	6.1	0.7	0	68
2	1460	B	1	8.1	5.6	1.5	0	65
2	1470	A	0	6.9	8.0	0.7	8	47
2	1470	B	1	9.9	8.6	1.2	4	52
2	1480	A	1	10.8	7.2	1.8	6	53
2	1480	B	0	9.7	11.5	0.7	22	27
2	1480	C	0	7.3	7.4	0.8	18	40
2	1490	A	2	11.6	6.1	2.5	3	58
2	1500	A	3	9.1	2.9	4.7	22	49
2	1510	A	2	9.5	4.1	3.1	0	72
2	1520	A	2	10.5	4.7	3.0	22	43
2	1530	A	1	15.1	10.3	1.9	0	55
2	1540	A	2	16.6	11.1	2.1	9	42
2	1560	A	2	17.0	7.4	3.7	0	58
2	1560	B	1	12.5	8.2	1.9	14	43
2	1570	A	2	13.9	8.6	2.1	13	42
2	1570	B	2	8.7	3.8	3.0	25	44
1	1580	A	2	15.0	7.5	3.0	12	44
1	1580	B	1	9.5	6.6	1.6	20	41
1	1580	C	2	15.7	8.9	2.5	24	30
1	1590	A	1	11.1	7.4	1.8	11	48

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

J8736 McLEOD PROPERTY, BRITISH COLUMBIA

FLIGHT -----	LINE -----	ANOMALY -----	CATEGORY -----	AMPLITUDE (PPM)		CONDUCTOR		BIRD
				INPHASE -----	QUAD. -----	CTP DEPTH MHOS MTRS -----	HEIGHT MTRS -----	
1	1590	B	2	11.8	5.6	2.9	7	55
1	1600	A	1	16.1	11.6	1.8	12	38
1	1600	B	2	14.5	9.0	2.2	7	48
1	1640	A	1	10.9	11.1	1.0	8	42
1	1650	A	1	10.4	7.9	1.4	3	54
1	1660	A	1	14.6	12.5	1.4	16	33
1	1660	B	1	8.2	7.3	1.0	16	43
1	1670	A	1	6.1	4.8	1.1	21	47
1	1700	A	2	14.3	9.1	2.1	22	32

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

COST STATEMENT
AIRBORNE GEOPHYSICAL SURVEY
3-4 JULY 1987

Aerodat Limited - 666 Line Km @ \$75.00	\$49,950.00
Mark Management - Planning, Supervision, Reporting	7,492.50
TOTAL COST	<u>\$57,442.50</u> <u>=====</u>

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

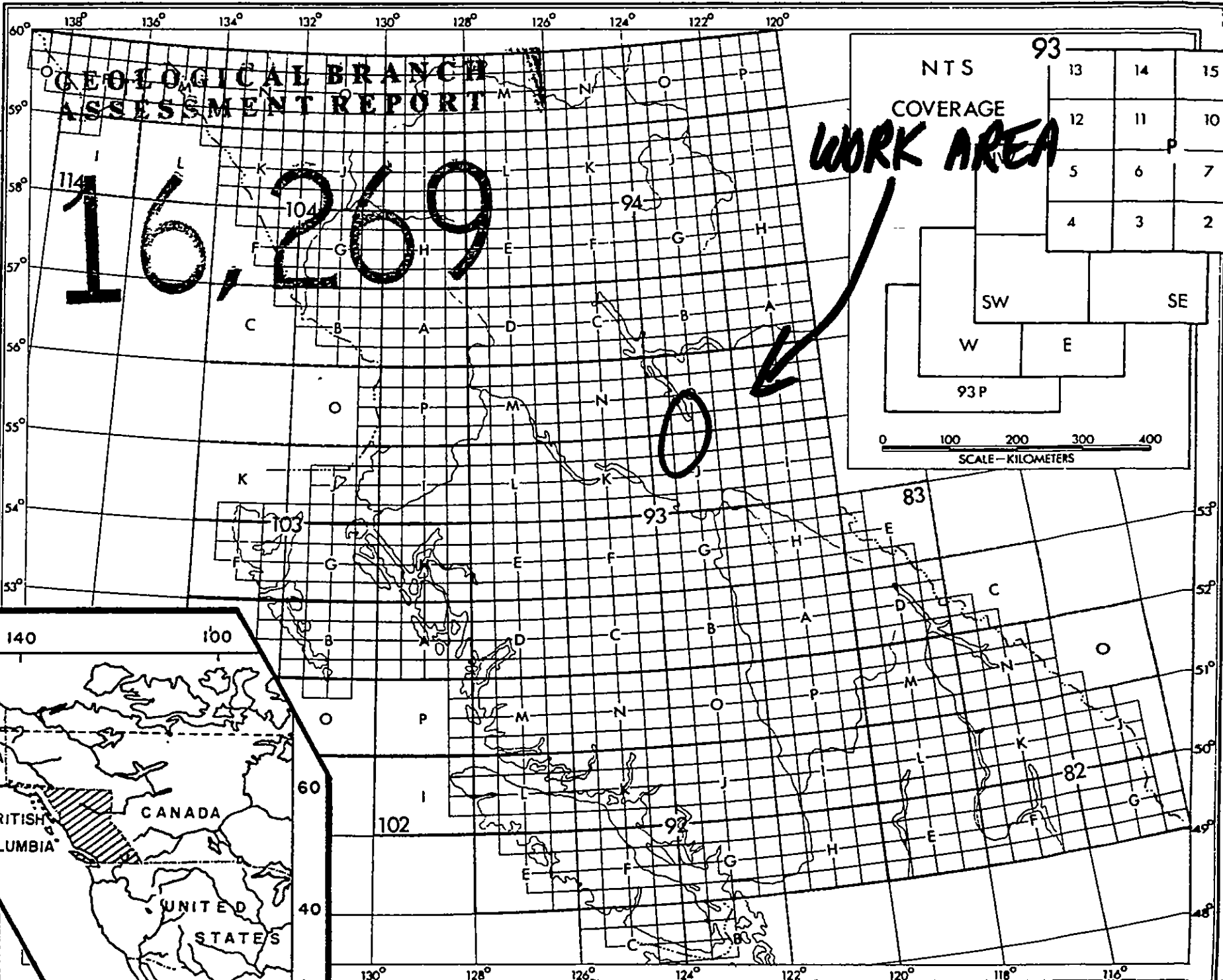
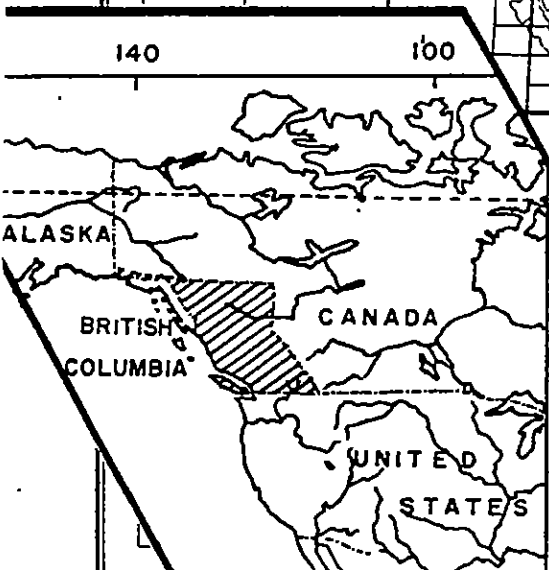
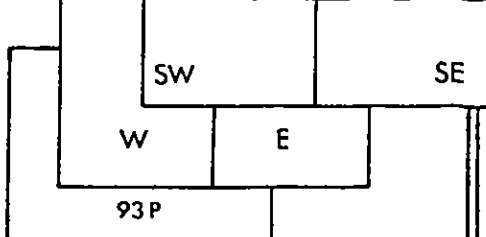
16,269

WORK AREA



NTS 93
COVERAGE

13	14	15	W 16
12	11	10	9
5	6	7	8
4	3	2	1



GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,269

93J/14E,14W
930/3W

N
4

1:68,18Z

601.82 metres

