

GEOPHYSICAL REPORT

ON

AIRBORNE MAGNETIC AND VLF-EM SURVEYS

OVER THE

RHYME, CANTO AND VERSE CLAIMS

KEEN CREEK, KASLO AREA

SLOCAN MINING DIVISION

BRITISH COLUMBIA

- PROPERTY** : Northeast part is 11.5 km due west of Kaslo, B.C.
- : 49° 54' north latitude
- : 117° 06' west longitude
- : N.T.S. 82F/14E

- WRITTEN FOR** : RAYRICK GRUBSTAKING SYNDICATE
- : #1120-1066 West Hastings Street
- : Vancouver, B.C., V6E 2E6

- SURVEYED BY** : COLUMBIA AIRBORNE GEOPHYSICAL SERVICES (1984) LTD.
- : #1808-1450 West Georgia Street
- : Vancouver, B.C. V6G 2T8

- WRITTEN BY** : David G. Mark, Geophys.
- : GEOTRONICS SURVEYS LTD.
- : #403-750 West Pender St.
- : Vancouver, B.C., V6C 2T8

- DATED** : May 16, 1985

13,673



GEOTRONICS SURVEYS LTD.
Engineering & Mining Geophysicists
VANCOUVER, CANADA

TABLE OF CONTENTS

SUMMARY	i
CONCLUSIONS	ii
RECOMMENDATIONS	iii
INTRODUCTION AND GENERAL REMARKS	1
PROPERTY AND OWNERSHIP	2
LOCATION AND ACCESS	2
PHYSIOGRAPHY	3
HISTORY OF PREVIOUS WORK	3
GEOLOGY	4
INSTRUMENTATION AND THEORY:	
a) <u>Magnetic Survey</u>	5
b) <u>VLF-EM Survey</u>	6
SURVEY PROCEDURE	7
DATA REDUCTION AND COMPILATION	8
DISCUSSION OF RESULTS:	
a) <u>Magnetics</u>	9
b) <u>VLF-EM</u>	11
c) <u>Lineations</u>	13
SELECTED BIBLIOGRAPHY	14
GEOPHYSICIST'S CERTIFICATE	16
AFFIDAVIT OF COSTS	17

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,673

LIST OF ILLUSTRATIONS

At Back of Report

Property Location Map 1: 8,600,000 Map 1

Claim Map 1: 50,000 Map 2

In Back Pocket

Airborne Magnetic 1: 10,000 Map 3
& VLF-EM Survey
Results

SUMMARY

Airborne magnetic and VLF-EM surveys were carried out over the Rhyme, Canto and Verse claims owned by Rayrick Grubstaking Syndicate of Vancouver, B.C. during January, 1985. The claims are located on Keen Creek, 11.5 km due west of the town of Kaslo. Access is gained by a helicopter or two-wheel drive vehicle and hiking. The terrain consists of mainly steep and rugged slopes forested with moderately dense coniferous trees. The purpose of the surveys was to aid in the mapping of geology as well as to locate probable areas for exploration of gold mineralization.

The property occurs within the Kootenay Arc. It is mostly underlain by porphyritic granite of the Nelson Batholith. Along the southeastern part of the property occur sediments of the Slocan Group. The magnetics indicate that the southern part is also underlain by Slocan sediments. Silver, lead, zinc, cadmium and gold mineralization occurs close to the southeastern boundary within the Slocan sediments adjacent to the Nelson Batholith. Also in the area occurs gold, silver, lead and zinc mineralization hosted by Slocan sediments to the east and by Nelson granite to the north and west. Soil sampling in the area has revealed strong anomalies in gold within the Slocan sediments.

The airborne surveys were flown at about a 50-meter terrain clearance on contour lines with a separation of 100 to 200 meters. The instruments used were a Sabre Electronics proton precession magnetometer and a Sabre Electronics VLF-EM receiver. The magnetic data were picked from the strip charts and hand contoured. The contours were drawn on a survey plan on which the VLF-EM anomalies were plotted as well.

CONCLUSIONS

1. The magnetic survey indicates that most of the property is underlain by the granites of Nelson Batholith as has been mapped by the G.S.C. It also maps the Slocan sediments along the southern part of the property. It shows the batholith contact is significantly different than has been mapped by the G.S.C.
2. The VLF-EM survey revealed seven conductors, two of which occur close to the Slocan/Nelson contact. This contact is known in the area to be related to gold and sulphide mineralization. The other conductors occur entirely within the granites of the Nelson Batholith which are known to carry some mineralization in proximity to the property.
3. Both the VLF-EM and magnetic surveys revealed lineations within the survey area that are likely caused by fault, shear and/or contact zones. These can be important indicators of sulphide and native gold mineralization especially where the lineations cross.

RECOMMENDATIONS

The airborne geophysics has revealed several target areas throughout the property such as the VLF-EM highs and the magnetically-indicated contact between the sediments and granites. It is recommended to check these out by prospecting, geological mapping and possibly soil geochemistry. Soil geochemistry lines could be run in the areas of interest, such as across the VLF-EM conductors and across the contact zone. Ground VLF-EM and magnetic surveying may be quite useful as well in finding and delineating more accurately the target areas.

It is not expected, however, that all gold-sulphide mineralization in the area will be reflected by the airborne magnetic and VLF-EM surveys. It is simply a start as far as defining target areas, since the property is so large.

However, if one wants to cover the property effectively, the following program is recommended:

1. Take large soil samples every 50 m along contour lines preferably about 100 m apart in elevation. In the lab, the total sample should be pulverized, and not screened at all in order to preclude the screening out of coarser gold. The anomalous samples should then be followed up by sampling on a tight grid, say 15 to 20 m centers on a grid, say 200 m square.
2. At the same time, careful geological mapping and prospecting should be carried out preferably by a geologist and prospector familiar with gold mineralization. One large benefit of this will be a better interpretation of any geophysics that are carried out. Special attention should be paid to the VLF-EM conductors and magnetic highs.

3. The defined soil anomalies in gold should then be 'cat' trenched, if access and terrain permit.
4. Resistivity - IP mapping and/or MaxMin EM should then be considered in order to optimize drill targets.
5. Diamond drilling should then be carried out using a large diameter drill and a face discharge bit.

GEOPHYSICAL REPORT
ON
AIRBORNE MAGNETIC AND VLF-EM SURVEYS
OVER THE
RHYME, CANTO AND VERSE CLAIMS
KEEN CREEK, KASLO AREA
SLOCAN MINING DIVISION
BRITISH COLUMBIA

INTRODUCTION AND GENERAL REMARKS

This report discusses the survey procedure, compilation of data and the interpretation of low-level airborne magnetic and VLF-EM surveys carried out over the Rhyme, Canto and Verse claims within the Kaslo area during January, 1985. The surveys were carried out by Lloyd Brewer, instrument operator and project manager, and John Kime, navigator, both of whom are of Columbia Airborne Geophysical Services (1984) Ltd. A total of 96 line km of airborne surveys were done over the property and surrounding area.

The object of the two surveys was to aid in the geological mapping of lithology and structure for the purpose of exploration of the type of gold mineralization as is found in the Kaslo area. Magnetic surveys have especially been proven to be a good geological mapping tool. Also the VLF-EM has responded to some of the mineralization in the area.

PROPERTY AND OWNERSHIP

The property consists of three claims containing 46 units as shown on Map 2 and as described below:

<u>Claim Name</u>	<u>No. Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
Rhyme	18	3721	Mar. 21, 1986
Canto	18	3722	Mar. 21, 1986
Verse	10	3723	Mar. 21, 1986

The expiry date shown takes into account the surveys under discussion as being accepted for assessment credits.

The property is owned by Rayrick Grubstaking Syndicate of Vancouver, British Columbia.

LOCATION AND ACCESS

The northeastern corner of the property is found 11.5 km due west of the town of Kaslo, B.C. on Keen Creek with most of the property being on the southern slope of Mount Carlyle.

The geographical coordinates for the center of the property are 49° 54' north latitude and 117° 06' west longitude.

Access to the property can be gained by vehicle by following the Keen Creek road southwesterly for 10 km from the junction with Highway 31A. The road traverses the southern part of the claims. For the rest of the property, access may be best by helicopter.

PHYSIOGRAPHY

The property is located within the Kokanee Range which is part of the Slocan Ranges. This mountain system lies on the eastern part of the Selkirk Mountains which is a physiographic division of the Columbia Mountains. The terrain is rugged with steep slopes throughout the whole property.

Elevations vary from 1,070 meters (3,500 feet) a.s.l. at the northeastern border of the property at Keen Creek, to 2,380 meters (7,800 feet) a.s.l. at a peak located within the north-western corner of the Rhyme claim. This gives a relief of 1,310 meters (4,300 feet).

The main water source would be the northeasterly-flowing Keen Creek traversing the southeastern part of the claims as well as its tributaries.

The forest cover is moderately dense and consists of hemlock, fir, cedar, spruce and tarmarack.

HISTORY OF PREVIOUS WORK

Exploration in the area probably dates back to the turn of the century. Prospecting has probably been done on the property and trenches, pits and adits could well be found throughout. Rayrick had preliminary soil sampling and a minor amount of geological mapping done on the property (along the Keen Creek road) in 1983. The results are given in a report by Goldsmith, et al, dated December 27, 1983.

GEOLOGY

The following is taken from Stewart's compilation of geological mapping done by government geologists.

The Rayrick property occurs on the western edge of the Kootenay Arc. The Arc is composed of a band of sedimentary, volcanic and metamorphic rocks that extend from northern Washington where they strike northeasterly, to north of Revelstoke where they strike northwesterly. The age of the rocks varies from Precambrian to Jurassic.

The Slocan Group is the oldest unit on the property and covers its southeastern part (though the magnetics indicate otherwise). It is Upper Triassic in age. The rocks are undifferentiated slate, argillite, limestone, quartzite and tuffaceous sediments with some dolomite.

occurring over the rest of the property is the Nelson Batholith of Jurassic age. In this area it consists mainly of porphyritic granite.

The only structure known on the property is the southeasterly contact between the Nelson Batholith and the Slocan Group. Much folding, foliation and schistosity occurs within the sedimentary rocks.

To date no mineralization is known to exist within the claims. However, mineral deposits are known to exist near the property. Along Keen Creek, nine deposits occur within the Slocan rocks next to the Nelson Batholith. Two of the better known ones are the Cork-Province and the B.N.A.. The following descriptions are taken from Little.

On the Cork-Province property, the underlying rocks are argillite, limestone and quartzite. These rocks are highly metamorphosed next to the batholith. The metallic minerals consist of sphalerite, galena, pyrite and some chalcopyrite in a gangue of siderite, calcite, quartz and fragments of wallrock. The property was mined at different intervals from 1900 to 1953 producing 169,433 reported tons of zinc, lead, silver, cadmium and gold ore.

The B.N.A. property is underlain by banded argillite and quartzite of the Slocan Group in a narrow belt flanked by porphyritic Nelson granite. The sedimentary rocks are metamorphosed and silicified. The mineralization consists of sphalerite and galena with some pyrite and native silver within a gangue cemented with calcite and a little quartz. 99 reported tons of silver, zinc, lead and gold ore were mined at sporadic intervals from 1900 to 1952.

Numerous deposits are found throughout the Nelson granites and consist of silver, gold, lead, zinc, and some cadmium. The deposits usually occur within veins with the gangue being quartz, calcite and/or siderite. In many cases, brecciated wall rock also acts as a gangue. The four closest deposits occur to the immediate north, northwest, and west of the property and are called the Martin, Flint, Mountain Con, and Comstock-Virginia.

INSTRUMENTATION AND THEORY

a) Magnetic Survey

The magnetic data are detected using a nuclear free precession proton magnetometer, manufactured by Sabre Electronic Instruments Ltd. of Burnaby, B.C. The magnetometer measures the total count of the earth's magnetic field intensity with a sensitivity

of one gamma. The data are recorded on magnetic tape and 12 cm analog strip chart.

The magnetic patterns obtained from a regional airborne survey are directly related to the distribution of magnetite in the survey area. However, the geology cannot be deduced from isomagnetic maps by simply assuming that all magnetic highs are underlain by gabbro or ultramafic rocks, and that all magnetic lows are caused by limestone or chert. The problem with such a simplistic approach is that magnetite is not uniformly distributed in any type of rock. Other problems arise from the fact that most geologic terrains have rocks of high susceptibility superimposed on less 'magnetic' rocks, and vice versa. Cultural features such as powerlines, pipelines and railways also complicate matters. So many variables can be involved that it may be impossible to make a strictly accurate analysis of the geology of an area from magnetic data alone. It is preferable to use other information such as geological, photogeological and electromagnetic in combination with magnetic data to obtain a more accurate geological analysis.

b) VLF-EM Survey

A two-frequency omni-directional receiver unit, manufactured by Sabre Electronic Instruments Ltd., of Burnaby, B.C., was used for the VLF-EM survey. The transmitter used was the one located at Annapolis, Maryland, transmitting at 21.4 KHz.

The VLF (Very Low Frequency) method uses powerful radio transmitters set up in various parts of the world for military communications. These powerful transmitters can induce electric currents in conductive bodies thousands of kilometers away from the radio source. The induced currents set up secondary magnetic fields which can be detected at surface through deviations in

the normal VLF field. The VLF method is inexpensive and can be a useful initial tool for mapping structure and prospecting. Successful use of the VLF requires that the strike of the conductor be in the direction of the transmitting station so that the lines of magnetic field from the transmitter cut the conductor. Thus, conductors with northeasterly to southeasterly strikes should respond to Annapolis transmissions.

It is impossible to determine the quality of conductors with any reliability, using field strength data alone. The question of linearity is in doubt if the conductor does not appear to cross the adjacent flight lines. The relatively high frequency results in a multitude of anomalies from unwanted sources such as swamps, creeks and cultural debris. However, the same characteristic also results in the detection of poor conductors such as faults, shear zones, and rock contacts, making the VLF-EM a powerful mapping tool.

The interpretive technique requires information from magnetic surveys, air photo analyses, and ground traverses to aid in discrimination between important and unwanted anomalies. Even armed with this information the interpreter can easily be misled.

SURVEY PROCEDURE

A two-meter bird was fitted with a magnetometer coil and two omni-directional EM receivers and towed beneath the helicopter on a 10-meter cable. The terrain clearance for the bird was 50 m.

The surveys were contour-line flown at an average line spacing of 200 m. Navigation was visual, using 1:50,000 scale maps blown up to 1:10,000.

The aircraft used to conduct this survey was a Bell Jet Ranger helicopter. Airspeed was a constant 60 KPH so that creek valleys and canyons were penetrated thoroughly. The slow airspeed provided safety, detailed coverage of boxed-in areas, and consistency of data retrieval, which is critical in rugged terrain, such as within this survey.

The number of line km flown as shown on Map 3 is 96.

The project supervisor, Mr. L. Brewer, has over 4 years of experience in conducting aerial magnetic and electromagnetic surveys from rotary-wing aircraft, under all types of terrain conditions.

DATA REDUCTION AND COMPILATION

The observant magnetic total field was recorded on analogue strip charts. These were played-back together with audio recordings containing fiducial markers, and the fiducial markers were transferred to the strip charts. The fiducial markers were identified with topographic features along the flight lines.

The magnetic data were taken from the strip charts and plotted at a scale of 1:10,000 (1 cm = 100 m). The data were then contoured at a 25-gamma interval onto Map 3.

The VLF-EM anomalies were taken from the strip charts and plotted on the sheet with the magnetics. A distinction has been made on the map between weaker and stronger anomalies.

DISCUSSION OF RESULTS

a) Magnetics

The magnetic field over the property has a very distinctive character that is probably caused by the contact of the two major rock units, which are the Slocan sediments and the Nelson granites.

As can be seen on Map 3, the magnetic field over the southeastern part of the Verse claim and over the southern parts of the Canto and Rhyme claims is characterized by a relatively low intensity, being in the order of 100 to 300 gammas, and by a very constant and quiet horizontal gradient (that is, little variation in the contours). This area is probably underlain by Slocan sediments.

The magnetic field over the rest of the property, central and northern parts, is characterized by a much stronger intensity, reaching a high of 1000 gammas and commonly above 600 gammas. It also has a much more variable horizontal gradient, going from 400 gammas to 600 or 700 gammas within the space of a few 100 meters. These magnetics are undoubtedly reflecting the Nelson Batholith.

The contact between the Nelson granites and the Slocan sediments may well occur between the 300- and 400-gamma contours. However, the granites could easily be altered close to the contact and thus the contact could be around the 200- to 300-gamma contours.

This suggested interpretation is significantly different from the geology as mapped by Little (1960). Within Rayrick's property, he shows the Slocan sediments only occurring within the southeastern corner of the Verse claim. However, Little's mapping, by necessity, is very coarse, and reconnaissance in

nature. Furthermore, much of the mapping within the southern part of the property may have been done from talus slides rather than actual outcrops.

In support of the magnetic interpretation of Slocan sediments occurring on the southern part of the property is the fact that Little shows a southeasterly-striking embayment of Slocan sediments ending just west of the Rhyme claim on Long Creek. The magnetics indicate, as discussed above, that this embayment continues onto the southern part of the property.

If the interpretation is not correct, then the quiet, low intensity magnetic field within the southern part of the property could be caused by (1) a relatively thin layer of the granites so that the mass effect of the magnetite causing the magnetic field is much less, (2) altered granites resulting in the magnetite being altered to other non-magnetic iron oxides, or (3) zoning within the Nelson Batholith so that the granites in this area carry little magnetite.

Magnetic lows often occur along creek valleys, and/or areas of low topography. The reasons for this are as follows:

1. Valleys almost always contain deeper overburden which means the detecting element is further from the bedrock causing the magnetic field.
2. If the survey is flown across the valley or gully, then the detecting element is also further from the bedrock.
3. Gullies and valleys are often caused by faults or shear zones which are often reflected by magnetic lows.

b) VLF-EM

The major cause of VLF-EM anomalies, as a rule, are geologic structure such as fault, shear and breccia zones. It is therefore logical to interpret VLF-EM anomalies to likely be caused by these structural zones. Of course, sulphides may also be a causative source. But in the writer's experience, when VLF-EM anomalies correlate with sulphide mineralization, the anomalies are usually reflecting the structure associated with the mineralization rather than the mineralization itself.

There is some variation in intensity from one VLF-EM anomaly to the next. This is not only due to the conductivity of a causative source, but also the direction it strikes relative to the direction to the transmitter. In other words, those conductors lying close to the same direction as the direction to the transmitter can be picked up easier than those that are lying at a greater angle. Depending upon its conductivity, a conductor may not be picked up at all if it is at too great an angle.

The Rhyme, Canto and Verse claims occur in extremely rough topography which adversely affects the VLF-EM results. The noise level is greatly increased which can thus obliterate signals from EM conductors such as geological structure and/or mineral zones. Therefore, the VLF-EM system may have responded to some of the known mineral zones but the signal may have been masked by the noise level.

However, seven EM conductors have been mapped which stand out above the noise level. These have been labelled by the lower case letters a to g, respectively.

The conductors vary in length from 250 m for conductor e, to 1,650 m for conductor c. Some, or possibly all of the conductors

may be caused by structure, with the longer, more lineal-shaped conductors being more indicative of geological structure. Examples are conductors b and c.

There is no uniform strike direction for EM conductors on the property. This factor as well as the location within rock units and the relative strength of anomalies allows for dividing the VLF-EM anomalies into the following categories:

- i) Anomalies b and c - both striking west-northwesterly, are believed to be of similar structural causative source.

Anomaly a - striking west-southwesterly, falls within the same category.

All three anomalies, a, b, and c, are located within Nelson granites and may be caused by additive effects of tectonics and differentiation of granites.

- ii) Anomaly d - striking east-northeasterly, located within granites, is probably caused by granite differentiation.

- iii) Anomalies f and g - striking, respectively, northeast and west-northwesterly, are located within Slocan sediments. Different strike directions and field strengths of those two anomalies may suggest their different origin.

Anomaly e, located within the granites but close to the contact with sediments, is striking to the north and is close in its character to the first category.

SELECTED BIBLIOGRAPHY

Barr, D.A. - Gold in the Canadian Cordillera, C.I.M. Bulletin Vol. 73, No. 818, P. 68-69, June 1980

Bayle - Geochemical Methods for the Discover of Blend Mineral Deposits, C.I.M. Bulletin, P. 113-132, Sept. 1982.

Berger B.R. and Eimon, P.I., Conceptual Models of Epithermal Silver-Gold Deposits, Collection of Unpublished Papers on Epithermal Silver-Gold Deposits, GAC, Cordilleran Section, 1983.

Boyle, R.W., The Geochemistry of Gold and Its Deposits, GSC Bulletin 280, 1979.

Buchanan, L.J., Precious Metal Deposits Associated with Volcanic Environments in the Southwest, Relations of Tectonics to Ore Deposits of the Southern Cordillera, Arizona Geological Society Digest, Vol. XIV, pp. 231-262, 1981.

Cairnes, C.E., Slocan Mining Camp, B.C., GSC Mem. 173, 1934

Cairnes, C.E., Description of Properties, Slocan Mining Camp, B.C., GSC Mem. 184, 1935.

Geology of Canadian Gold Deposits, C.I.M. 1982.

Geology of Canadian Ore Deposits, - 6th Commonwealth Mining and Metallurgical Congress Canada 1957, C.I.M. Geol. Div. 1957.

Giles, D.L., and Nelson C.E., Principal Features of Epithermal Lode Gold Deposits of the Circum-Pacific Rim, Collection of Unpublished Papers on Epithermal Silver-Gold Deposits, GAC, Cordilleran Section, 1983.

Goldsmith, L.B., and Kallock, P., Review of Base and Precious Metal Resources, Kaslo-Lardeau-Whitewater Area, B.C., for Rayrick Grubstaking Syndicate.

Goldsmith, L.B., Davidson, N.C., Logan, J.M. and Kallock, P., Geological, Geochemical and Geophysical Report, Nevermore,

Nevermore 2, Red Diamond, Snuffy and Lobo Mineral Claims, Slocan M.D., B.C., Private Report for Red Diamond Mines Ltd. by Arctex Engineering Services, June 10, 1983.

Goldsmith, L.B., and Kallock, P., Geological and Geochemical Investigation, Amaretto Mineral Claim, Slocan M.D., B.C., Prepared for Rayrick Grubstaking Syndicate, by Arctex Engineering Services, Jan. 18, 1983.

Goldsmith, L.B., Kallock, P., Ursel, N.H., Preliminary Geology and Soil Geochemistry, White Diamond Claim, Mount Holmes Area, Slocan M.D., B.C., Prepared for Rayrick Grubstaking Syndicate, by Arctex Engineering Services, Dec. 3, 1983.

Klepacki, D.W., Stratigraphic and Structural Relations of the Milford, Kaslo and Slocan Groups, Goat Range, Lardeau and Nelson Map Areas, B.C., 1984.

Klepacki, D.W., Stratigraphic and Structural Relations of the Milford, Kaslo and Slocan Groups, Roseberry Quadrangle, Lardeau Map Area, B.C., Current Research, Part A, GSC Paper 83-1A, pp. 229-233, 1983.

Little, H.W., Nelson Map-Area, West Half, British Columbia (82F W1/2), Mem. 308, GSC., 1960

Park, C.F.Jr. and MacDiarmid, R.A., Ore Deposits, W.H. Freeman and Company, pp. 289-311, 1963.

Read, P.B. and Sheeler, J.O., Lardeau West Half Geology Map 93E, GSC Open File 432, 1976.

Read, P.B., Lardeau West Half Mineral Deposits, 93E, GSC Open File 464, 1976.

Rice, H.M.A., Nelson Map-Area, East Half, British Columbia, Mem. 228, GSC., 1941.

Stewart, Ray, Gold Exploration Review, Blue Ridge Mountain Area, Kaslo-Lardeau-Whitewater, B.C., Slocan M.D., Prepared for Red Diamond Mines Ltd. by Blackstone Resources Ltd., March 30, 1984.

c) Lineations

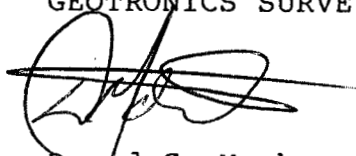
Lineal trends considered to be indicative of geological structure have been drawn on Map 3 taking into account:

- i) Magnetic lows which are often caused by the magnetite within the rocks being altered by geological structure processes.
- ii) VLF-EM anomalies which more often than not are reflecting structure.
- iii) Topographic depressions such as creek valleys which are usually caused by structure.

Several lineations that are indicative of faults and contacts have been mapped across the property striking in different directions. Some or parts of the lineations in other areas have been known to correlate directly with lithologic contacts and shear zones.

The lineations cross each other on the property in a few areas. Structure is often important for the emplacement of mineralizing fluids especially where lineations intersect. Thus these areas may have greater exploration interest.

Respectfully submitted,
GEOTRONICS SURVEYS LTD.



David G. Mark,
Geophysicist

May 16, 1985

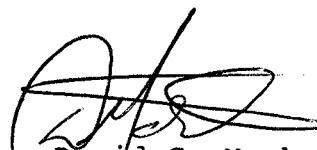
GEOPHYSICIST'S CERTIFICATE

I, DAVID G. MARK, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geophysicist of Geotronics Surveys Ltd., with offices located at #403-750 West Pender Street, Vancouver, British Columbia.

I further certify:

1. That I am a graduate of the University of British Columbia (1968) and hold a B.Sc. degree in Geophysics.
2. I have been practising my profession for the past 16 years and have been active in the mining industry for the past 19 years.
3. That I am an active member of the Society of Exploration Geophysicists and a member of the European Association for Exploration Geophysicists.
4. This report is compiled from data obtained from airborne magnetic and VLF-EM surveys carried out by Columbia Airborne Geophysical Services (1984) Ltd., under the supervision of L. Brewer during January 1985.
5. I have no direct or indirect interest in any of the properties mentioned within this report, nor in the Rayrick Grubstaking Syndicate, nor do I expect to receive any as a result of writing this report.


David G. Mark
Geophysicist

May 16, 1985

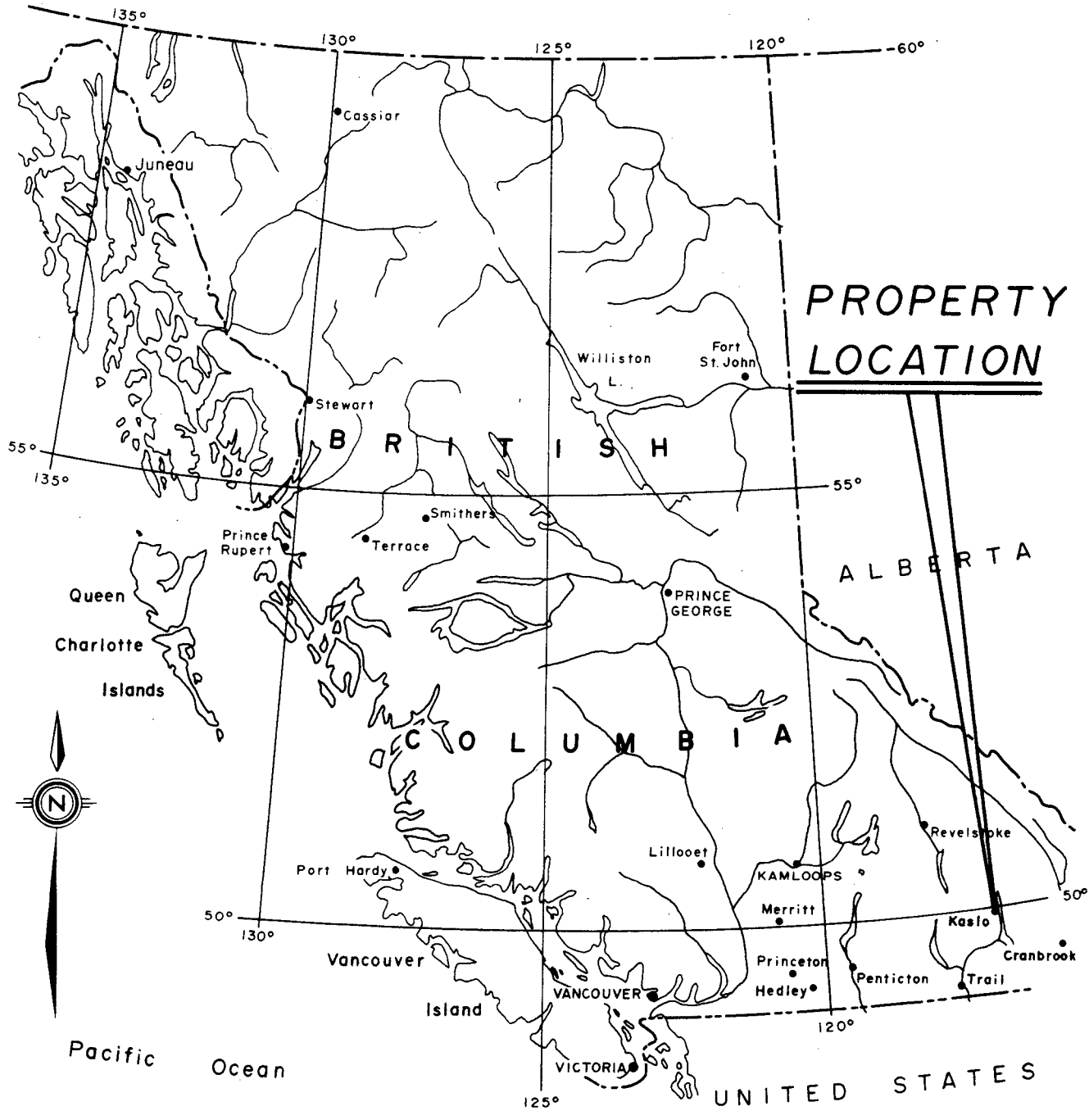
AFFIDAVIT OF COSTS

I, Lloyd Brewer, president of Columbia Airborne Geophysical Services (1984) Ltd., certify that the airborne magnetic and VLF-EM surveys were flown in January of 1985, and that they were flown at a cost of \$100/km, the total number of km being 96 to give a total cost of \$9,600.00.

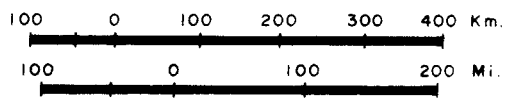


Lloyd Brewer

May 16, 1985

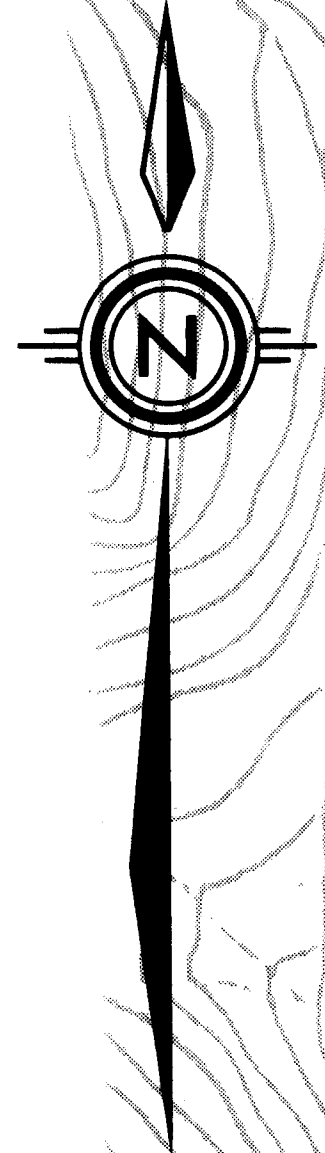


RHYME, CANTO & VERSE CLAIMS



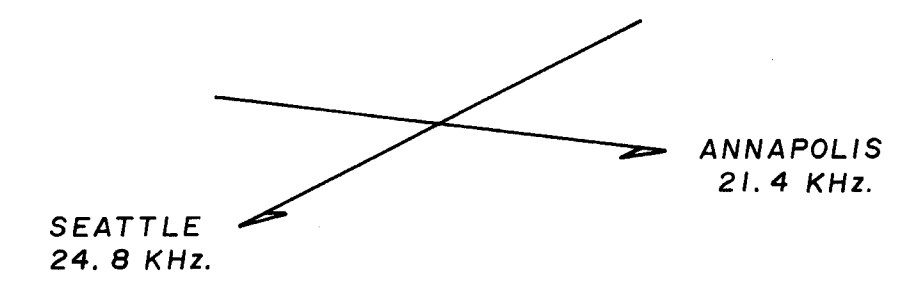
117° 07'

49° 55'



NOTE: The VLF-EM Survey measures field strength.
Very weak anomalies could be caused by terrain.

VLF-EM TRANSMITTER DIRECTION



LEGEND

- Legal corner post.
- Property boundary.
- Claim boundary.
- - - Flight line.
- Lineation produced from magnetic and EM results suggesting geological structure.

VLF-EM

- Very weak anomaly.
- Single line anomaly with no apparent strike.

MAGNETIC CONTOURS

- 1000 gamma
- 500 gamma
- 100 gamma
- 50 gamma
- Depression



Survey Carried Out By: COLUMBIA AIRBORNE GEOPHYSICAL SERVICES (1984) LTD.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,673

To Accompany Report By: DAVID G. MARK, Geophysicist.

RAYRICK GRUBSTAKING SYNDICATE

RHYME, CANTO & VERSE CLAIMS

KEEN CREEK, KASLO AREA, B.C.

SLOCAN M.D.

AIRBORNE SURVEY

MAGNETIC CONTOURS & VLF-EM ANOMALIES

SCALE: 1:10,000	N.T.S. 82 F / 14 E	DATE: May 85.	MAP: 3	DRAFTED BY: B.D.S.
--------------------	-----------------------	------------------	-----------	-----------------------