

87-355-16116
3/88

GEOPHYSICAL REPORT
ON THE
ARCH #1 - #4 INCLUSIVE MINERAL CLAIMS
RECORD NOS. 4712(3) - 4715(3) INCL (40 UNITS)
WELLS - BARKERVILLE AREA, CARIBOO MINING DIVISION
BRITISH COLUMBIA

LATITUDE 53° 03.5'
LONGITUDE 121° 33'

NTS 93H/4E

FOR

Owner: ARCH A. PEEVER ET. AL.
13480 - 15A Avenue
Surrey, B.C.
V4A 5P1

AND

Operator: BLACKBERRY GOLD RESOURCES INC.
827 West Pender Street
Vancouver, B.C.
V6C 3G8

WM. HOWARD MYERS, P.Eng. (B.C.), P.Geol. (Alt)
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#309 - 543 Granville Street
Vancouver, B.C. V6C 1X8

May, 1987

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GEOLOGICAL
BRANCH
ASSESSMENT
REPORT

16,116

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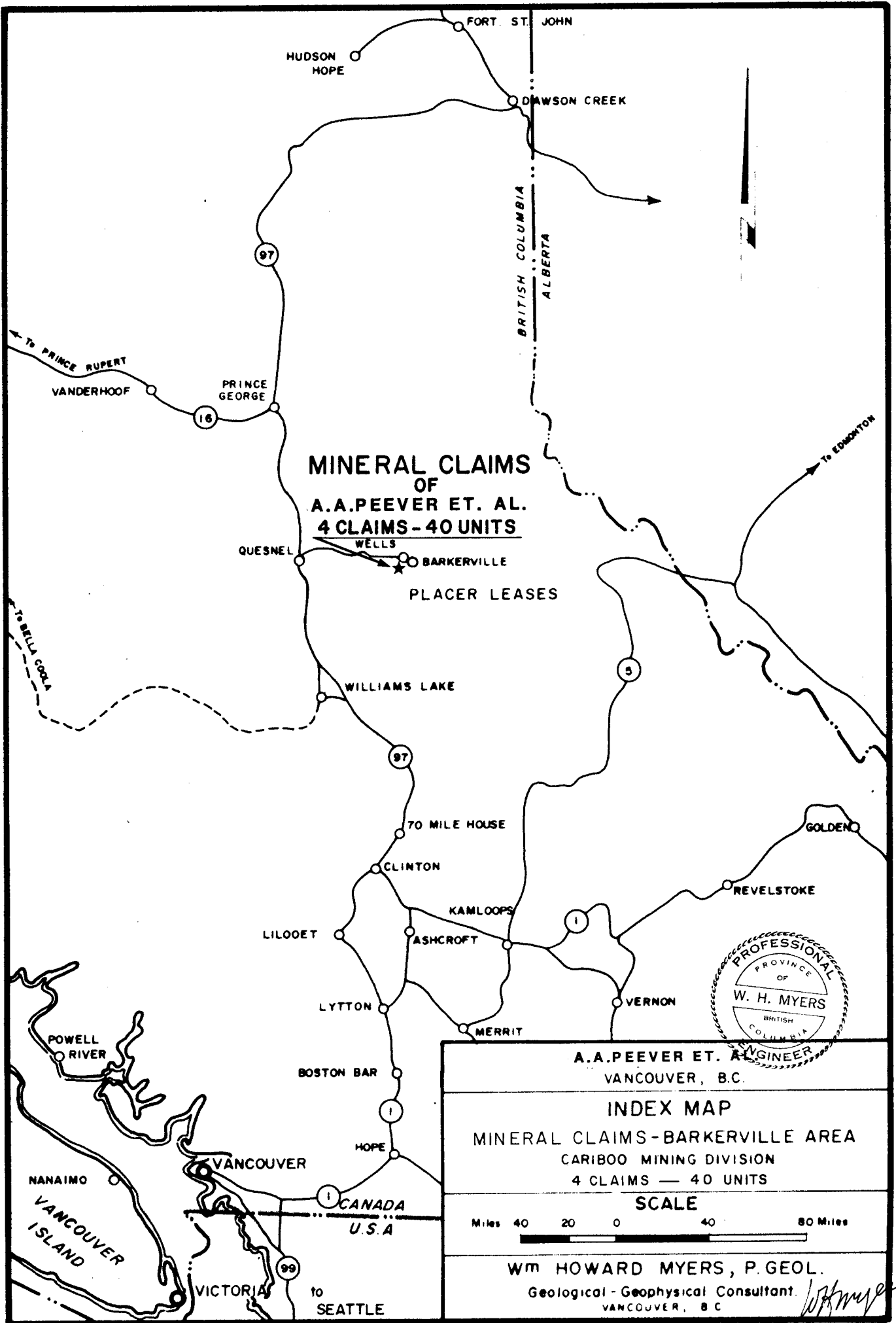
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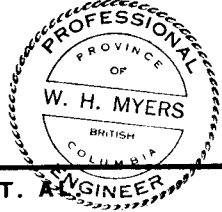
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**MINERAL CLAIMS
OF
A.A. PEEVER ET. AL.
4 CLAIMS - 40 UNITS**

PLACER LEASES



A.A. PEEVER ET. AL.
VANCOUVER, B.C.

INDEX MAP
MINERAL CLAIMS - BARKERVILLE AREA
CARIBOO MINING DIVISION
4 CLAIMS — 40 UNITS



Wm HOWARD MYERS, P. GEOL.
Geological - Geophysical Consultant.
VANCOUVER, B.C.

W.H. Myers

ABSTRACT

During the 1986 field season, some 35 kilometres of VLF-EM lines were run on the Arch 1-4 claim block. Most of the field work was carried out during the period January 10th to February 11th, 1987 on the snow when the going was easier. The "A" lines were intermediate lines run between east-west lines run during the 1985 season. This gives a line spacing of 100 metres over much of the area. On all lines the station spacing was 15 metres using Seattle Station NLK with a frequency of 18.6 KHz. The results of the electromag survey are very good and the raw data are plotted on the cross sections endorsed in the Appendix of the report.

The electromag work outlined a fairly strong and continuous anomaly or conductive zone with a north 40° west trend immediately north of Cow Mountain. This anomaly trend projected to the northwest intersects a northwest trending fault north of the Jack of Clubs Lake (mapped by Struik in GSC open file 858 map). Both features are shown on the enclosed geological map. This fault trend is parallel to the contact of the Isaac and Snowshoe Formations, and no doubt related to faulting associated with drag folding mapped in the area. Some north-south trending anomalies or conductive zones were mapped on the lines north of this strong northwest trend and may be associated with zones of alteration along the southerly extension of the Rainbow Fault. The fairly strong and continuous conductive zone to the east near the baseline with a north 17° to 22° west trend could very well be associated with the southeast extension of the Lowhee Split Fault mapped in the mine area to the northwest. Fewer north-south trending anomalies were recorded in the area south of the main north-south trending Lowhee Fault. Several north 20° west trends, parallel to the Lowhee Split trend were recorded in the area of the baseline. It is very possible that the Lowhee Fault does split to the southeast toward Richfield Mountain area.

Additional exploration work is recommended in the areas of intersections of the north-south anomalies and the more continuous northwest trending anomalies or conductive zones.

**GEOLOGICAL - GEOPHYSICAL REPORT
ARCH #1 - #4 CLAIMS**

INTRODUCTION

The field work and the report on the electromag survey during the 1986-87 season were commissioned by Mr. Antony S. Dyakowski, President of Blackberry Gold Resources Inc., who has an option to acquire the claim block. The costs of the field work and the report were paid for by Blackberry Gold Resources Inc. of Vancouver, B.C. The monies spent on the survey and the report were claimed as assessment work on the claim block and were filed on March 12th, 1987. A detailed breakdown of the costs and lines run, as well as costs per kilometre are enclosed in the Appendix of the report.

The claim block is composed of four claims identified as the Arch #1 - #4 inclusive with a total of 40 units. The name, record number, anniversary date together with the number of units in each claim are tabulated below:

<u>Claim Name</u>	<u>Record No.</u>	<u>Anniversary Date</u>	<u>No. Units</u>
Arch #1	4712(3)	March 23, 1983	20
Arch #2	4713(3)	March 23, 1983	4
Arch #3	4714(3)	March 23, 1983	10
Arch #4	4715(3)	March 23, 1983	<u>6</u>
TOTAL			<u><u>40</u></u>

As can be noted on the claim map the claim block does not contain a full 40 units. This is due to the restaking of the original two post claims on the grid system together with 4 two-post claims staked and recorded before the grid claims were recorded. It would appear that the block contains a net of some 30 units rather than the 40 units claimed. The details of the units in each claim is shown on the enclosed geological map and on the claim map taken from the B.C. Department of Mines and Petroleum Resources claim map #93H/4E, dated 86/01/16, enclosed with the report.

The claims are in good standing with assessment work filed to 1988. The claims were grouped March 8, 1984 with group number 2927.

The claim block is located on the northeast side of Cow and Richfield Mountains. The claims are bounded on the northeast by a northwest-southeast trending block of Crown granted claims belonging to the old Cariboo Gold Quartz Mine. The northern portion of the claims cover Cow Mountain and part of the northerly trending ridge which terminates near the village of Wells and the northern portion of the ridge contains the original Cariboo Gold Quartz Mine. The claim block is drained to the northeast by several northeast trending creeks or gulches which flow into Lowhee Creek or Stouts Gulch into Williams Creek, the original site of extensive placer gold operations and the restored town of Barkerville.

The terrain in the area of the claim block is quite varied with large flat treeless areas on the tops of the mountains and ridges to deeply incised creeks draining the northeast sides of Cow and Richfield Mountains. The treeless areas on the ridges contain fairly deep muskegs with small lakes and swamps. It is very possible that irregular shape of the treeless areas is due to the distribution of glacial drift on which small trees are growing and will support track equipment. The general outline and shape of these treeless areas is shown on the enclosed geological map. The terrain along the northeastern boundary of the claims contains isolated steep cuts due to the fairly large scale placer operations on Lowhee Creek and Stouts Gulch.

Access to the different portions of the claim block varies considerably and there are no roads cutting the claims in any direction. Access to the northeastern portion of the claims is by the old road up Stouts Gulch to the old placer workings. Access to the southwestern portion of the claims is by trail off the old Stanley Barkerville trail as shown on the enclosed claim and geological map. Part of the trail can be traversed with a 4x4 pick-up, but only a few times due to soft areas. The top of Richfield Mountain can only be reached with tracked equipment or all-terrain vehicle. The southwestern portion of the claims is accessible only by track equipment or ATV over trails and logging roads up the Jack of Clubs Creek as shown on the map. It is very possible that a 4x4 road can be constructed along the trail taking off the logging road at Stoney Creek to the ridge between Cow and

Richfield Mountains. This area on the southwest side of Richfield and Cow Mountains has been logged and the old logging roads can be upgraded to an access road to this portion of the claim block at a reasonable expense. An access road up the ridge from the old Cariboo Gold Quartz Mine in the northerly portion of the claim block could be quite expensive.

The climate in this portion of British Columbia is moderate to cold. The area does experience Chinook conditions during the winter months and the climate becomes very mild for brief periods of time. Snowfall in the area is moderate to heavy. In the summer the area experiences fairly consistent rain in early and late summer with extended dry hot spells in between.

The VLF EM lines were all run in an east-west direction using Seattle Station NLK with a frequency of 18.6 KHz. All readings were taken facing east with a 15 metre station spacing. All of the "A" lines are fill-in lines between the lines run in the 1985-86 season. This gives 100 metre spacing in the central portion of the claim block. A 200-metre line spacing exists to the south from line #7.

The data from the VLF-EM work has been plotted from notes taken in the field without any filter corrections on cross sections, included in the Appendix of the report. The horizontal scale on the cross section is ICM #15 metres and the vertical scale for the dip angle and field strength is shown in degrees.

A breakdown of the costs and times of the VLF-EM survey are detailed in the Appendix of the report.

Published and unpublished maps and reports used in the preparation of this report are tabulated under Bibliography in the Appendix of the report. My qualifications and experience for the report are detailed in the Certificate in the Appendix of the report.

HISTORY

This area of the Cariboo has produced many millions of dollars in gold from both placer and lode type of deposits. The majority of the placer gold was produced during the gold rush which started around 1861 and tapered off substantially near 1898 when the gold rush started in the Yukon. There was a slight resurgence of placer gold production in this area during the depression of the thirties. Lode gold production started in 1933 from the Cariboo Gold Quartz Mine at Wells, B.C. The Cariboo Gold Quartz Mine took over the Island Mountain Mines on the other side of the Jack of Clubs Lake, and during the period January 10, 1933 through April 15th, 1967, when the mine was closed down, some 2,929,246 tons of ore grading an average of 0.4 oz. per ton produced a total of 1,253,683 ounces of gold. The foregoing figures are from the Canadian Mines Handbook 1982-83, page 337.

The original Mosquito Creek Mine produced gold from replacement type ore bodies in contrast to the gold produced from quartz veins with pyrite and gold in the original Cariboo Gold Quartz Mine. Limited work is now being carried out by the Mosquito Creek Mine and the mill is not operating.

The absence of outcrop on the claim block makes geophysical exploration work mandatory. Test profiles using both VLF and input electromag on the claim block have produced favourable results in outlining conductive zones produced by faulting on the larger and more persistent northerly trending faults and faulting and/or alteration along overturned and drag folding on the north limb of the anticlinorium. The refraction seismograph can be used to determine bedrock depths for lithochem samples in areas of shallower bedrock.

The quartz veins shown on the geological map in the southwest portion of the claim block have been prospected in the past but there is no specific data on any gold production. Government reports indicated gold was produced from some of the quartz veins in this general area by crushing the quartz and argillite with pyrite and panning with gold pan. It is reported that more gold was recovered this way than from stream gravels on some of the creeks. The argillites and graphitic schists adjacent to the quartz veins on the map did give significant gold values on assay of grab samples taken by the writer.

GEOLOGY

General

A wide spread mantle of glacial drift overgrown with trees and vegetation, limits the outcrop of bedrock largely to the tops of ridges, divides and individual mountains and along steep slopes of the more prominent rivers and streams. Outcrops of bedrock are not extensive even along the ridges and mountain tops. Local bedrock outcrops are found in the bottom of some of the incised streams.

On the Arch 1 and 2 claims, bedrock outcrops in places along the steep north side of Cow and Richfield Mountains. The remainder of the area contains a fairly thick mantle of glacial drift. There are numerous outcrops at the higher elevations along the headwaters of Williams Creek and Jack of Clubs Creek, along the north side of Elk Mountain, Mount Agnes as well as Bald Mountain. Many of these outcrops contain quartz veins and suspect gold mineralization.

Stratigraphy

The Cariboo group, which underlies the area of the claims, is composed of clastic rocks with lesser amounts of carbonate rocks. The rocks have been subjected to a low-grade regional metamorphism and intense deformation. The deformation has impressed a marked secondary foliation on most all the clastic rocks and some carbonate rocks. Despite the effects of deformation and regional metamorphism, the rocks still commonly show original bedding and other sedimentary features. Many of the rocks are difficult to name accurately because of their original sedimentary and subsequent metamorphic character. Many clastic rocks of the Cariboo group are composed of poorly sorted sediments of grains much larger than average. It is very difficult to assign a name to this type of rock even if not metamorphosed. Most of the clastic rocks and even some of the limestones are schistose, however, in any one unit the degree of schistosity may vary, depending on structural position. For example, an argillaceous rock may range from an argillite through phillite to a true schist or graphitic schist as it is traced from an open fold to a tight fold or its proximity to fault structures. In many places along

the northerly trending fault zones, as mapped by different geologists, argillites are changed to a very soft and possibly pure graphitic schist. At numerous places along the Last Chance-Nelson Creek Fault, as mapped by Stuart Holland in Bulletin 26 and identified by the writer in the field with electromag profiles, argillites were replaced by soft graphitic schist and abundant quartz veins with massive sulphides. The graphitic schists produce text-book conductive anomalies on the electromag profiles, making the electromag very useful as a tool for identifying major north trending faults.

The thickness of the formations in the Cariboo group cannot be measured directly and estimates are subject to considerable error due to poorness of exposures and the intricacy of structure. In many exposures of bedrock, the bedding can not be distinguished from schistosity with any degree of certainty. The folding is known in general but the details are very rarely recognizable and measurements are liable to include duplications. According to A. Sutherland Brown in Bulletin No. 38, the thickness in this area is deemed to be less than 1200 metres.

The age of the Cariboo group is now known to be Early Cambrian and younger. Earlier publications by Bowman, Jonston and Uglow, and George Hanson placed the age of the Cariboo group or series as Pre-Cambrian in age. No fossils have been found in the group in this general area and the age has been assigned on the basis of archaeocyathids and trilobites collected at Turks Nose Mt., Kimball Creek, and other localities within a thick limestone which has been traced into this general area and identified with the Cunningham limestone, which is the basal member of the Cariboo group.

Hydrothermal alteration has had a more severe effect on the various formations of the Cariboo group than the regional metamorphism. The alteration has obliterated all sedimentary structures and also a cleavage that is common in the unaltered limestone. The distribution of the alteration is patchy and in some instances, seems to bear an areal relation to major faults primarily the more persistent northerly trending faults in the area.

The rocks in the immediate area of the claims are argillites, quartzose phyllite, grey to brown micaceous quartzite, slate, and thin lenses of grey limestones of the Snowshoe and Midas Formations of the Cariboo group. In the central portion of the claims, quartz veins up to 2 feet in diameter are fairly abundant in the argillites and quartzites of the Snowshoe Formation. The quartz veins trend generally to the northeast and probably are of the Transverse and Diagonal types as classified by G. Hanson in Bulletin No. 181 of the Geological Survey of Canada. A few strike veins were also noted in this portion of the area.

Structure

The rocks of the Cariboo group within the claim block lie on the northeastern limb of a large northwesterly trending anticline or possible anticlinorium. The antiformal axis, as mapped by most observers, is situated immediately southwest of the claim blocks near the top of Mt. Burns, Mt. Amador and Mt. Nelson, with a N 50°-60° west bearing. The rocks strike northwest and dip to the northeast. In the main, the folding within the area of the claim seems simple, but in some places minor folds can be observed where the dip changes to 45° and some local evidence of overturning to the southwest. Many of the folds in the area have their original stratigraphic order disrupted by shearing, rupture and flowage. Some of the folds are so compressed that the actual texture cannot be recognized. The rocks of the Cariboo group have been folded at least twice. The more intense folding took place before the younger Slide Mountain group was laid down. It is rarely possible to identify the second generation folds in the Cariboo group, due partially to the less intense folding in the youngest folds. Schistosity and cleavage are well developed in the Cariboo group in the area of the claims. The difference in the development of the two features is due primarily to the intensity of folding and mineral composition. The characteristic rocks of the Cariboo group are phyllite and micaceous quartzite.

Faults are very common in the area of the claims. Several fairly large and continuous northerly trending faults have been mapped in the area. The Lowhee and Rainbow Faults cut the northwestern portion of the Arch 1 claim block. Several major northerly trending faults are mapped by A. Sutherland Brown in this

compression, tension and also torsion. The wall rock of the veins contains a great deal of coarsely crystalline pyrite. Pyrite cubes occur many feet from any vein also, but a great many examples serve to show that pyrite is more plentiful near veins, therefore there seems little doubt that the pyrite was formed from constituents moving outward from the vein fractures. The transverse and diagonal veins produced the majority of the gold ore in the Cariboo Gold Quartz Mine. The strike and bed veins are not too numerous and so far as known, have produced much lower gold values than the normal pyritic transverse and diagonal veins. Only a few bed veins have been observed. The bed veins are quite thin, composed of quartz and contain no pyrite or gold. Some ore shoots were mined on the strike vein, known as the B.C. Vein. Gold values were lower than in the transverse and diagonal veins. Other strike veins will have to be worked before this type of vein can be called uncommercial.

The other main type of lode gold deposit in the Cariboo group is one formed by the replacement of limestone. The ore is typically a solid mass of fine grained pyrite. This type of deposit was first recognized in the Cariboo in 1933. The largest of this type of deposit was found in the Island Mountain Mine. The presently producing Mosquito Creek Mine produces a great deal of its gold from this type of deposit. The ore in this type is in general, higher in gold values than the transverse and diagonal veins. The highest gold values are obtained from these massive fine grained pyrite replacement type ore bodies. Gold values as high as 5 ounces per ton are obtained from these massive fine grained pyrite deposits. The ore is massive but commonly contains bands of ore separated by bands of grey ankerite or phyllite. Near the fringes of the ore bodies, ankerite becomes dominant and pyrite becomes more sporadic and coarser grained. There may be some silicification also near the fringes of the ore body with minor amounts of galena, sphalerite, arsenopyrite and scheelite. The gold mineralization is believed to be later than the formation of the quartz veins. The quartz veins are later than the formation of the quartz veins. The quartz veins are later than most of the northerly trending faults because they are concentrated beside or near the northerly faults, they occur in a conjugate set of fractures related to the faults and in some instances, actually occur within the fault. The gold mineralization is believed to be older than the

gold bearing Tertiary gravels. This would date the gold mineralization in this area between the Carboniferous and Early Tertiary.

RESULTS OF THE VLF-EM SURVEY

The writer has used the VLF electromag on several different prospects in the Cariboo to outline conductive zones along the stronger and more persistent northerly trending faults, splits from the northerly faults with a N17°-24°W trend and conductive zones produced by drag folding and/or overturning on the northeast limb of the anticlinorium with a N35° to 45°W trend.

The 1986 - 1987 electromag work consisted of extending the electromag coverage of the claim block to the north and south and fill in lines giving a 100 meter line spacing in the central portions of the claim block. The location of the lines ran during the 1986-87 season are shown on the enclosed geological - geophysical map in the pocket of the report. The 1986-87 lines are dashed lines in contrast to solid lines for previous work. Line 2S was run again using the Geonics Limited EM-16 receiver in contrast to the Sabre #27 used to run the line in the 1985 season. This same line was ran again with the Sabre #27 and gave good correlation with the EM-16 receiver in contrast to the earlier poor correlation between the two instruments. A copy of all profiles ran during the 1986-87 season is enclosed in the Appendix of the report. All sections are made up from raw unfiltered field data and are plotted on percent rather than dip angle with indicated scales. All lines were ran using the Geonics Limited EM-16 receiver serial #19010.

Lines 1, 2 and 3 north are short lines due to the steep terrain in the area of the Lowhee hydraulic pit. The lines designated "A" are fill in lines between the original lines located some 200 meters apart. This gives a line spacing of 100 meters in the central portion of the claim block where continuity of the conductive zones was needed. All lines were run east-west with a station spacing of 15 meters and read facing east. Seattle station HLK with a frequency of 18.6 KHz, located almost due south of the prospect, was used for all lines. A total of 35 kilometers of line were ran during the survey from January 10, 1987 to February 11th, 1987.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,116

**ARCH CLAIM GROUP
LINE 1 NORTH
VLF-EM SURVEY**

INSTRUMENT: Geonics EM16

TRANSMITTER: Seattle Wash. NLK 18.6 KHz

East-West Lines Read East

STATION SPACING: 15 Metres

Raw Data Reported In Percent

SCALE: 1CM = 20M DATE: Jan-Feb 1987

SUPERVISION: Wm Howard Myers P.Eng. consultant

0+400W

0+300W

0+200W

0+100W

0+000W

READ
EAST →

SEATTLE NLK 18.6 KHz

80%

60%

40%

20%

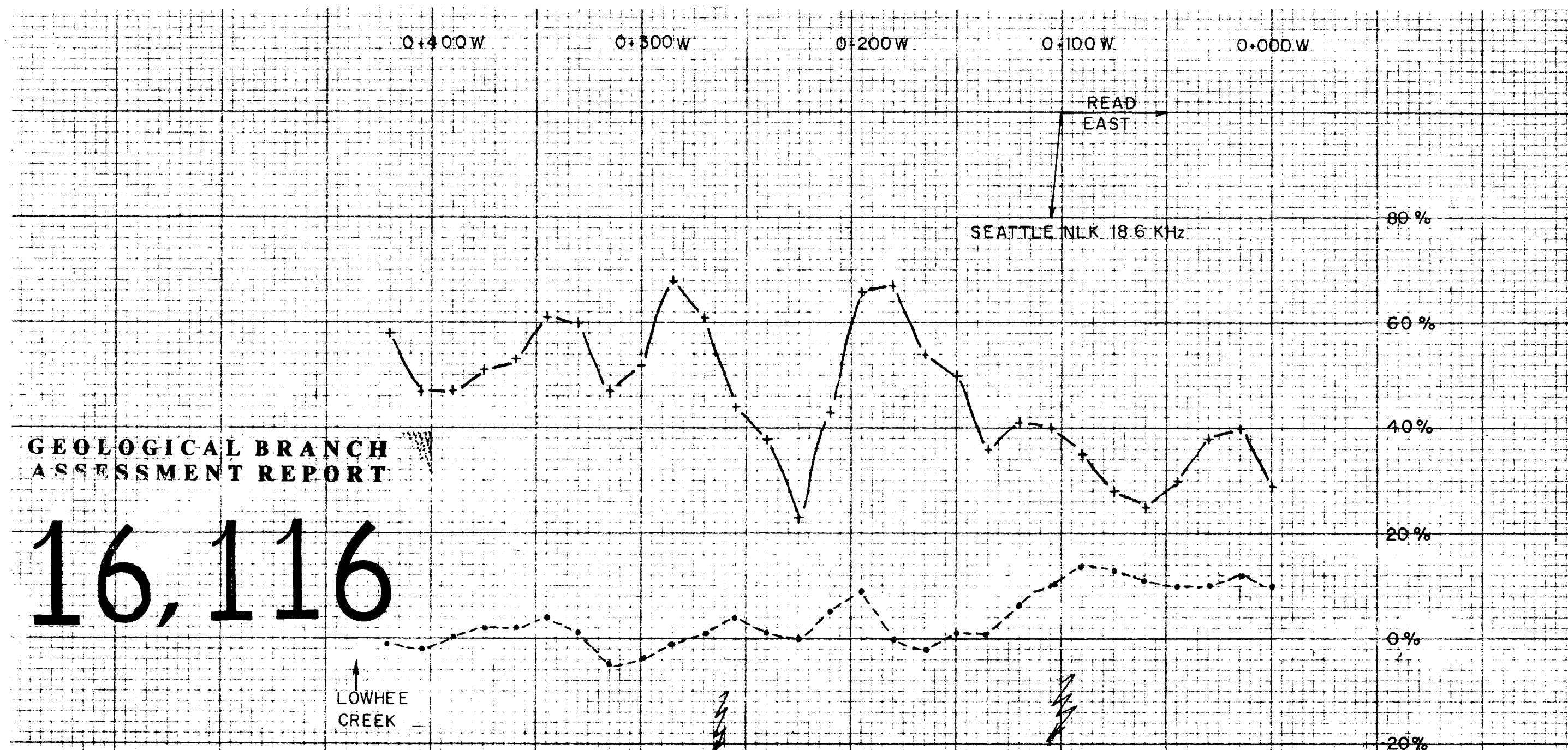
0%

20%

40%

INPHASE

QUADRATURE



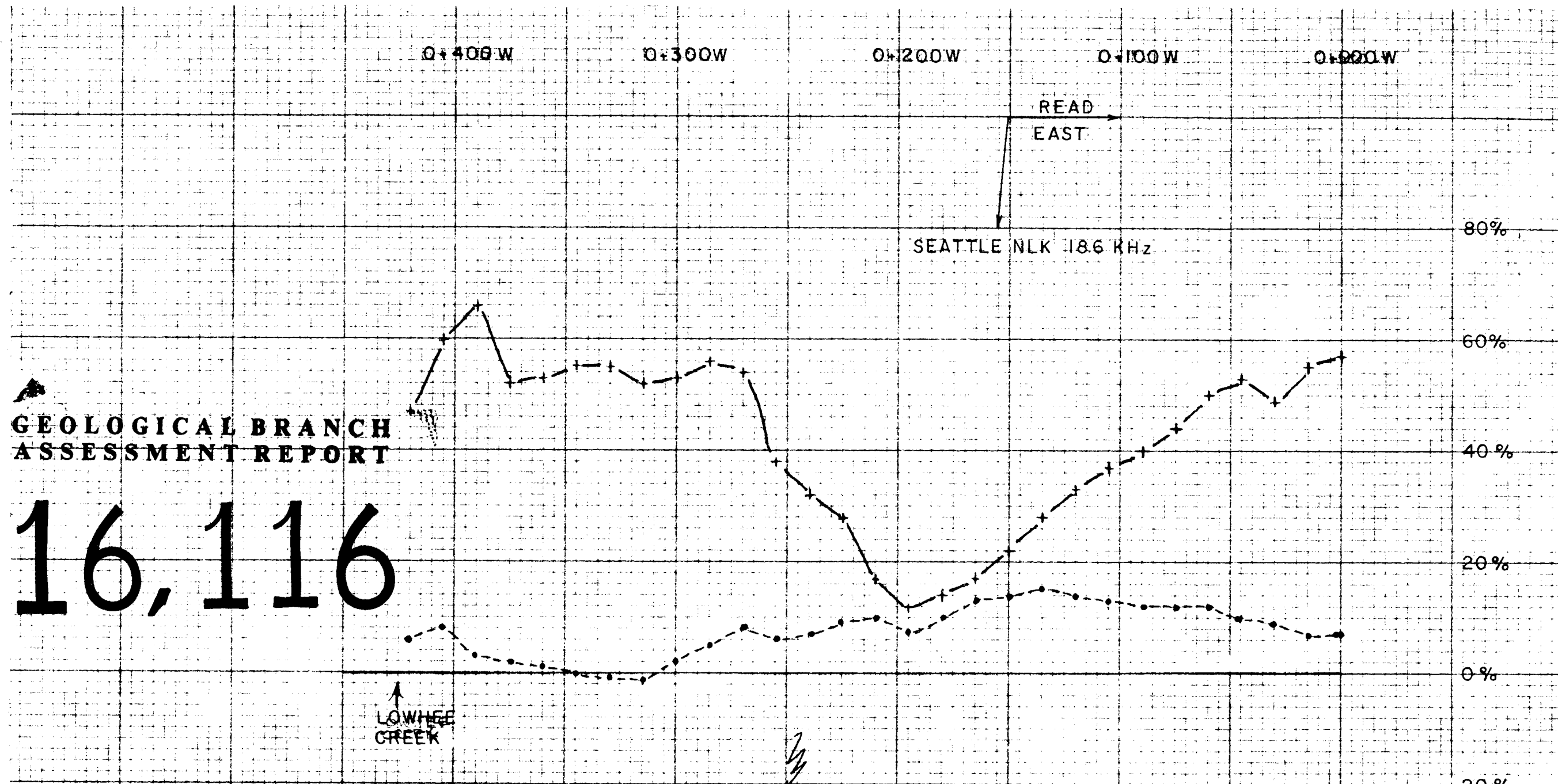
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,116

**ARCH CLAIM GROUP
LINE 2 NORTH
VLF-EM SURVEY**
 INSTRUMENT: Geonics EM16
 TRANSMITTER: Seattle Wash. NLK 18.6 KHz
 East-West Lines Read East
 STATION SPACING: 15 Metres
 Raw Data Reported In Percent
 SCALE: 1CM = 20M DATE: Jan-Feb 1987

INPHASE
 QUADRATURE

SUPERVISION: Wm Howard Myers P.Eng. consultant

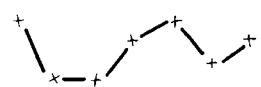



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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**ARCH CLAIM GROUP
LINE 3 NORTH
VLF-EM SURVEY**

INSTRUMENT: Geonics EM16
 TRANSMITTER: Seattle Wash. NLK 18.6 KHz
 East-West Lines Read East
 STATION SPACING: 15 Metres
 Raw Data Reported In Percent
 SCALE: 1CM = 20M DATE: Jan-Feb 1987

INPHASE 
 QUADRATURE 

SUPERVISION: Wm Howard Myers P.Eng. consultant

On Thursdays when the station was off for maintenance the field crew caught up on their plotting of the raw data.

A brief description of each line ran during the survey is given below with possible interpretation of the results.

Lines 1, 2 3 North

These three lines are located in the northern portion of the claim block. The lines are all short due to the steep terrain produced by the old Lowhee hydraulic pit. The terrain in the area of the lines is fairly flat with no steep slopes except west of the line. All three lines indicate possible north-south trending conductor zones on the east side of the Lowhee pit near the Lowhee fault.

Line 2S

This line was run with both the EM-16 receiver and the Sabre #27 instrument to clear-up a divergence of data by the two instruments run in the 1985 season. The terrain in the area of the line is moderate with no sharp or steep slopes. There is a gradual increase in elevations to the west. Both profiles indicate possible faults or contacts on the east and west ends of the line as well as near station 750 west. These zones correspond very well with northerly trending fault zones and the Lowhee split fault mapped in the mine area to the north.

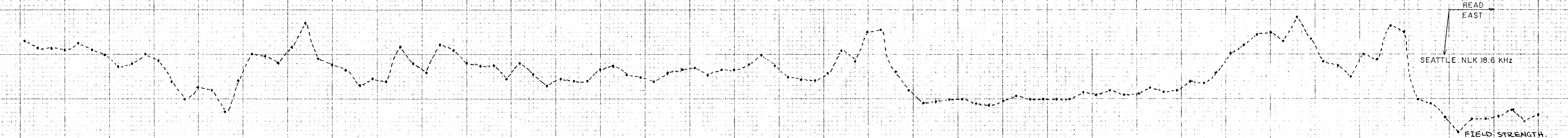
Line 2A South

The line is located 100 meters south of Line 2 South with moderate terrain and gradual increase in elevation to the west. Fairly well defined anomalies are shown on the east and west ends of the line which corresponds with known faulting in the areas of anomalies.

Line 3A South

This line is located 100 meters south of Line 2 South run earlier in the 1985 season. The terrain in the area of the line is moderate with a gradual increase in elevation

1+700W 1+600W 1+500W 1+400W 1+300W 1+200W 1+100W 1+000W 0+900W 0+800W 0+700W 0+600W 0+500W 0+400W 0+300W 0+200W 0+100W 0+000W



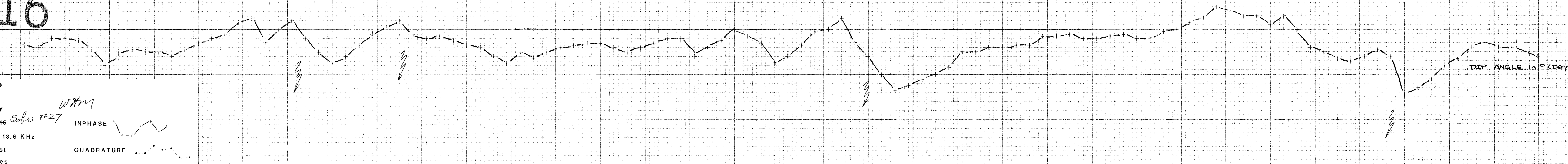
READ EAST

SEATTLE NLK 18.6 KHz

FIELD STRENGTH

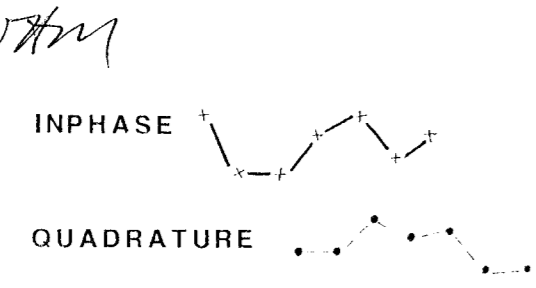
GEOLOGICAL BRANCH
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DIP ANGLE in Degrees

ARCH CLAIM GROUP
LINE 2 SOUTH
VLF-EM SURVEY
INSTRUMENT: Geonics EM16 *Sobri #27*
TRANSMITTER: Seattle Wash. NLK 18.6 KHz
East-West Lines Read East
STATION SPACING: 15 Metres
Raw Data Reported In Percent
SCALE: 1CM = 20M DATE: Jan-Feb 1987
SUPERVISION: Wm Howard Myers P.Eng. consultant



(1)

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ARCH CLAIM GROUP
LINE 2 SOUTH
VLF-EM SURVEY

INSTRUMENT: Geonics EM16
TRANSMITTER: Seattle Wash. NLK 18.6 KHz
East-West Lines Read East
STATION SPACING: 15 Metres
Raw Data Reported In Percent
SCALE: 1CM = 20M DATE: Jan-Feb 1987

SUPERVISION: Wm Howard Myers P.Eng. consultant

INPHASE

QUADRATURE

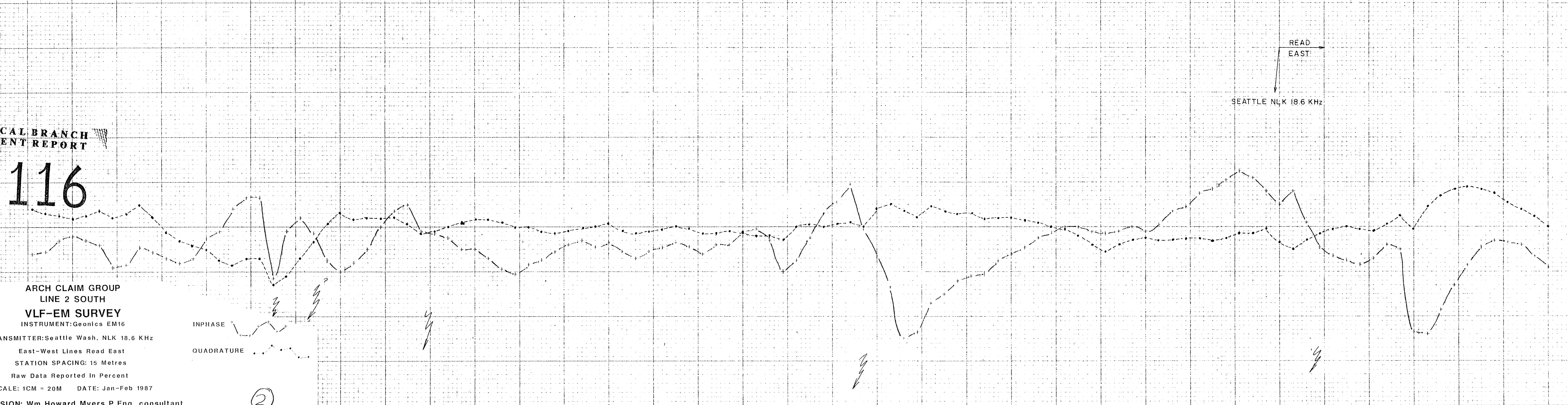
②

READ
EAST

SEATTLE NLK 18.6 KHz

1+700 W 1+600 W 1+500 W 1+400 W 1+300 W 1+200 W 1+100 W 1+000 W 0+900 W 0+800 W 0+700 W 0+600 W 0+500 W 0+400 W 0+300 W 0+200 W 0+100 W 0+000 W

60%
40%
0%
-20%
-40%



1+700 W 1+600 W 1+500 W 1+400 W 1+300 W 1+200 W 1+100 W 1+000 W 0+900 W 0+800 W 0+700 W 0+600 W 0+500 W 0+400 W 0+300 W 0+200 W 0+100 W 0+000 W

READ EAST
SEATTLE NLK 18.6 KHz

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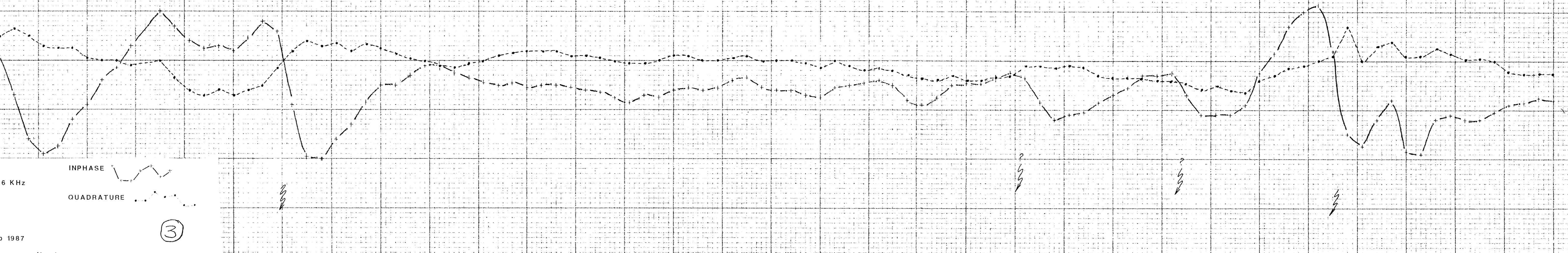
60%
40%
0%
-20%
-40%

ARCH CLAIM GROUP
LINE 2A SOUTH
VLF-EM SURVEY
INSTRUMENT: Geonics EM16
TRANSMITTER: Seattle Wash. NLK 18.6 KHz
East-West Lines Read East
STATION SPACING: 15 Metres
Raw Data Reported In Percent
SCALE: 1CM = 20M DATE: Jan-Feb 1987

INPHASE
QUADRATURE

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SUPERVISION: Wm Howard Myers P.Eng. consultant



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1+600W 1+500W 1+400W 1+300W 1+200W 1+100W 1+000W 0+900W 0+800W 0+700W 0+600W 0+500W 0+400W 0+300W 0+200W 0+100W 0+000W

READ
EAST
SEATTLE NLK 18.6 KHz

60%
40%
20%
0%
20%
40%

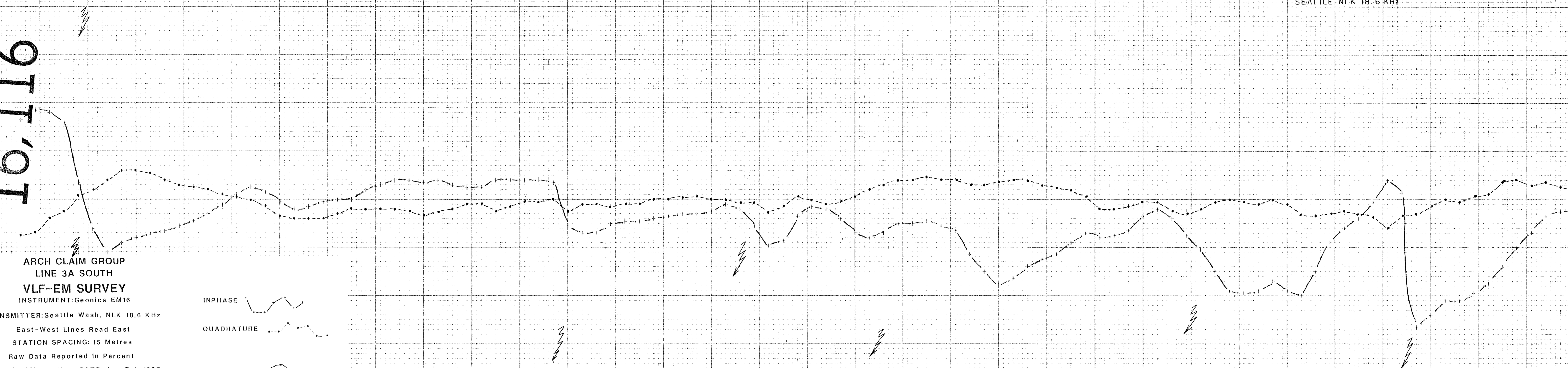
ARCH CLAIM GROUP
LINE 3A SOUTH
VLF-EM SURVEY
INSTRUMENT: Geonics EM16

TRANSMITTER: Seattle Wash. NLK 18.6 KHz
East-West Lines Read East
STATION SPACING: 15 Metres
Raw Data Reported In Percent
SCALE: 1CM = 20M DATE: Jan-Feb 1987

INPHASE
QUADRATURE

4

SUPERVISION: Wm Howard Myers P.Eng. consultant



0+000 E

0+100 E

0+200 E

0+300 E

0+400 E

0+500 E

0+600 E

0+700 E

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,116

READ
EAST

SEATTLE NLK 18.6 KHz

60%

40%

20%

0%

20

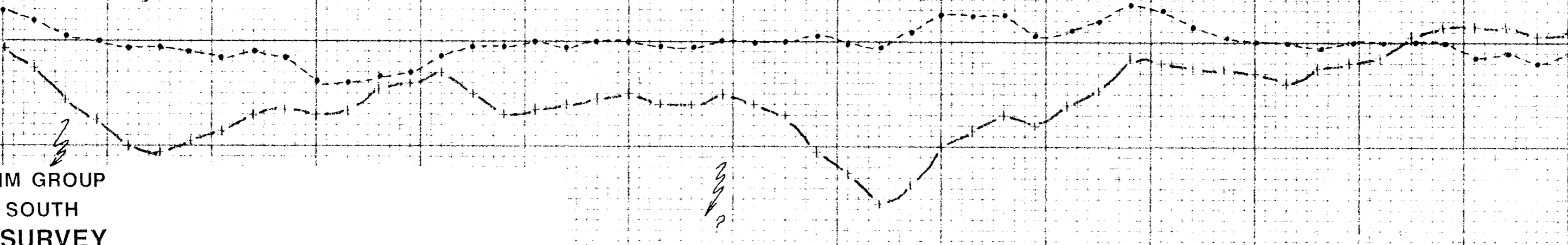
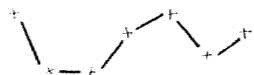
40

ARCH CLAIM GROUP
LINE 3A SOUTH
VLF-EM SURVEY

INSTRUMENT: Geonics EM16

TRANSMITTER: Seattle Wash. NLK 18.6 KHz

INPHASE



to the west. Possible faults or contacts or conductive zones are indicated near the east and west end of the line with several smaller zones in the center of the line. The strong conductive zone on the east end of the line corresponds with the southeast (17^o-22^o) trending Lowhee split fault mapped in the mine area to the northwest of the line is on line with the southerly projection of the Rainbow fault mapped in the underground workings of the Cariboo Gold Quartz mine. To the east of the baseline no definitive anomalies were recorded.

Line 4A South

This line is located 100 meters south of the previously run 4 Line. The terrain is moderate with a gradual increase in elevation to the west immediately north of Cow Mountain. This line is broken into two parts to the east and west of the baseline. Strong conductive zones were recorded on the east and west end of the line. These zones correspond to the same fault zones outlined on Line 34 South. East of the baseline there are very minor or no anomalies recorded on the electromag profiles.

Line 5A South

This line is located 100 meters south of Line 5 run last season. The terrain in the area of the line is moderate with a gradual increase in elevation to the west near Cow Mountain. This profile is divided into two sections to east and west of the baseline. West of the base line several fairly well defined anomalies were recorded representing possible fault zones or contacts. The strong anomaly near the west end of the line at Station 1000 west corresponds to the southerly projection of the Rainbow fault in the mine area to the north. East of the baseline the anomalies or conductors are poor.

Line 6A South

This line is located 100 meters south of Line 6 South run last season. The terrain in the area of the line is moderate except for the area of the baseline where it crosses Emory Gulch where the creek is very incised with steep banks. West of the

1+400W 1+300W 1+200W 1+100W 1+000W 0+900W 0+800W 0+700W 0+600W 0+500W 0+400W 0+300W 0+200W 0+100W 0+000W

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,116

READ
EAST

SEATTLE NLK 18.6 KHZ

60%
40%
20%
0%
20%
40%

**ARCH CLAIM GROUP
LINE 4A SOUTH
VLF-EM SURVEY**
INSTRUMENT: Geonics EM16

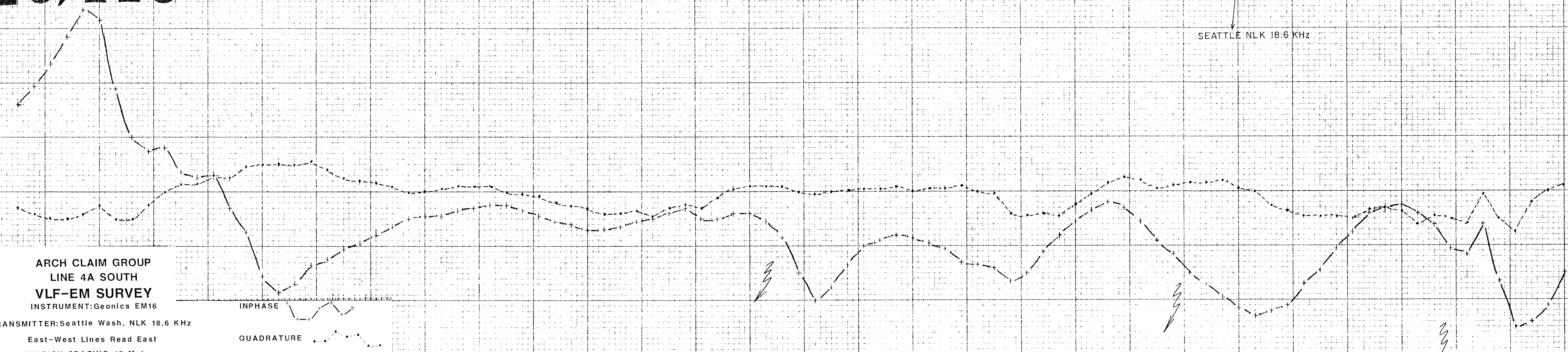
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East-West Lines Read East
STATION SPACING: 15 Metres
Raw Data Reported in Percent
SCALE: 1CM = 20M DATE: Jan-Feb 1987

INPHASE

QUADRATURE

6

SUPERVISION: Wm Howard Myers P.Eng. consultant



0+000

0+100E

0+200E

0+300E

0+400E

0+500E

0+600E

0+700E

ARCH CLAIM GROUP
LINE 4A SOUTH
VLF-EM SURVEY

INSTRUMENT: Geonics EM16

TRANSMITTER: Seattle Wash. NLK 18.6 KHz

East-West Lines Read East

STATION SPACING: 15 Metres

Raw Data Reported In Percent

SCALE: 1CM = 20M DATE: Jan-Feb 1987

SUPERVISION: Wm Howard Myers P.Eng. consultant

INPHASE

QUADRATURE

READ
EAST

SEATTLE NLK 18.6 KHz

60%

40%

20%

0%

-20%

-40%

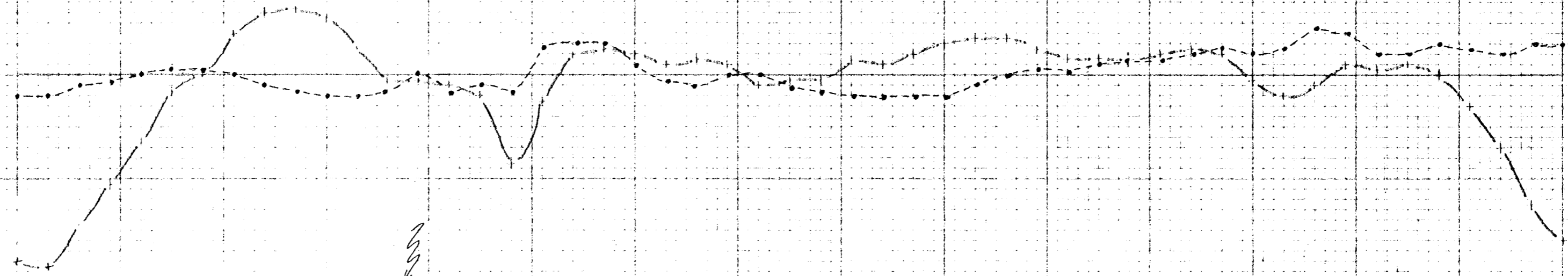
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,116

7

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0+000

0+100E

0+200E

0+300E

0+400E

0+500E

0+600E

0+700E

**ARCH CLAIM GROUP
LINE 5A SOUTH
VLF-EM SURVEY**

INSTRUMENT: Geonics EM16

TRANSMITTER: Seattle Wash. NLK 18.6 KHz

East-West Lines Read East

STATION SPACING: 15 Metres

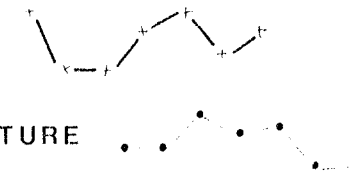
Raw Data Reported In Percent

SCALE: 1CM = 20M DATE: Jan-Feb 1987

SUPERVISION: Wm Howard Myers P.Eng. consultant

INPHASE

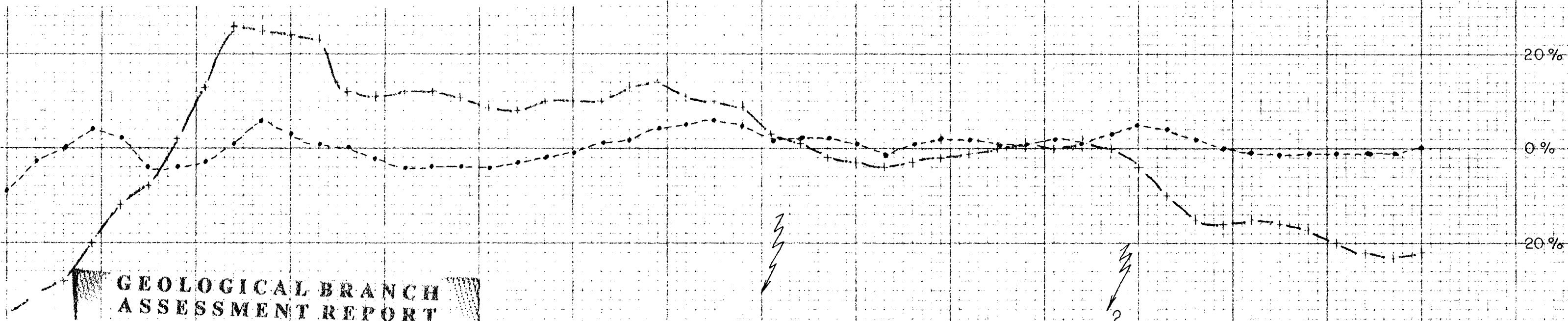
QUADRATURE



⑧

READ
EAST

SEATTLE NLK 18.6 KHz



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,116

1+300W 1+200W 1+100W 1+000W 0+900W 0+800W 0+700W 0+600W 0+500W 0+400W 0+300W 0+200W 0+100W 0+000W

READ EAST

SEATTLE NLK 18.6 KHz

60%
40%
20%
0%
-20%
-40%

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,116

**ARCH CLAIM GROUP
LINE 5A SOUTH
VLF-EM SURVEY**

INSTRUMENT: Geonics EM16

TRANSMITTER: Seattle Wash. NLK 18.6 KHz

East-West Lines Read East

STATION SPACING: 15 Metres

Raw Data Reported In Percent

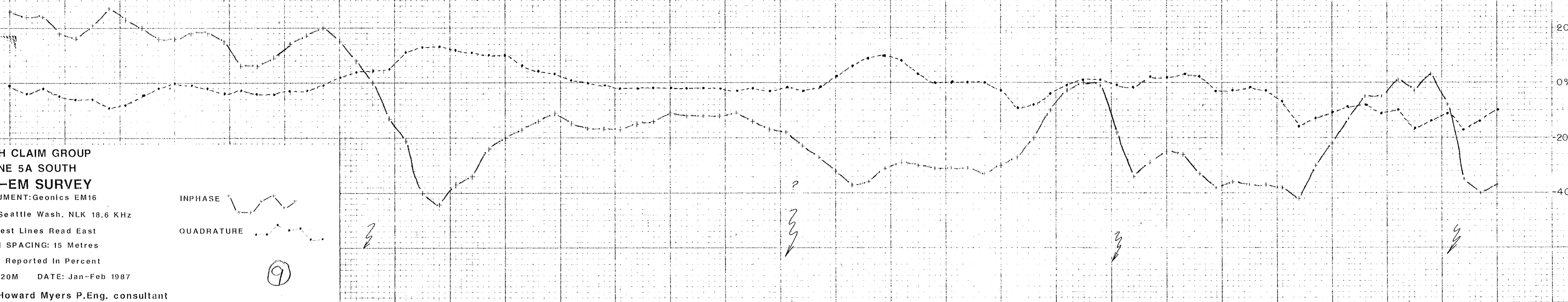
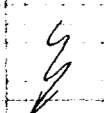
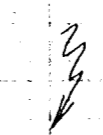
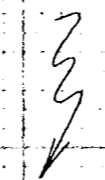
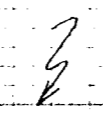
SCALE: 1CM = 20M DATE: Jan-Feb 1987

SUPERVISION: Wm Howard Myers P.Eng. consultant

INPHASE

QUADRATURE

9



0+000 0+100E 0+200E 0+300E 0+400E 0+500E 0+600E 0+700E

BASELINE

READ EAST

SEATTLE NLK 18.6 KHz

60%
40%
20%
0%
20%
40%

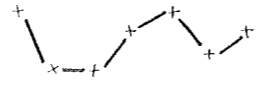

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16, 116

**ARCH CLAIM GROUP
LINE 6A SOUTH
VLF-EM SURVEY**

INSTRUMENT: Geonics EM16
TRANSMITTER: Seattle Wash. NLK 18.6 KHz
East-West Lines Read East
STATION SPACING: 15 Metres
Raw Data Reported In Percent
SCALE: 1CM = 20M DATE: Jan-Feb 1987

SUPERVISION: Wm Howard Myers P.Eng. consultant

INPHASE 
QUADRATURE 

10

1+300W 1+200W 1+100W 1+000W 0+900W 0+800W 0+700W 0+600W 0+500W 0+400W 0+300W 0+200W 0+100W 0+000W

READ EAST
SEATTLE NLK 18.6 KHz

60%
40%
20%
0%
20%
40%

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,116

ARCH CLAIM GROUP
LINE 6A SOUTH
VLF-EM SURVEY

INSTRUMENT: Geonics EM16
TRANSMITTER: Seattle Wash. NLK 18.6 KHz
East-West Lines Read East
STATION SPACING: 15 Metres
Raw Data Reported In Percent
SCALE: 1CM = 20M DATE: Jan-Feb 1987

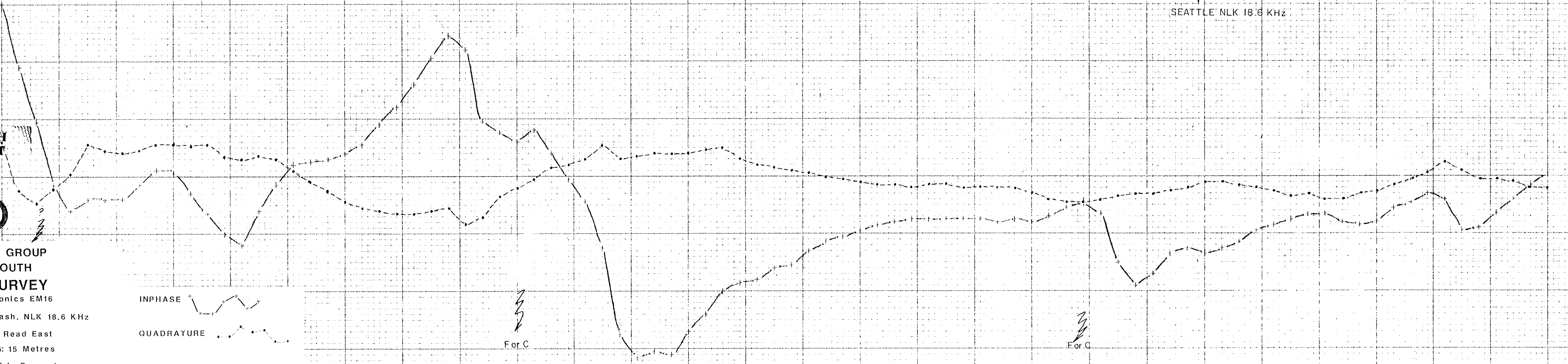
INPHASE
QUADRATURE

For C

For C

11

SUPERVISION: Wm Howard Myers P.Eng. consultant



baseline near the west end of the line, very strong anomalies were recorded. These strong anomalies are in the area of the southerly projection of the Rainbow fault. East of the baseline and Emory Creek several fairly sharp possible fault or contact zones were recorded from Station 50 to 350 east of the baseline.

Line 8 South

This line is located 200 meters south of Line 7 South, run during the 1985 field season. Relief along this line is also moderate with a gradual increase in elevation to the west near the ridge or divide between Cow and Richfield Mountains except for the area where the line cuts Emory Gulch immediately east of the baseline. For some 100 meters on either side of the Creek, the terrain is very steep due to the incised stream. The electromag data in this immediate area may be unreliable. West of the baseline near Station 650 West, there is a well defined fault or contact on the electromag profile. This anomaly could well be due to the strong north 30°-40° west fault zone mapped by Struik to the northwest of the Jack of Clubs Lake in the area of the Island Mountain Mine, and recorded on the ends of other lines in the area to the northwest. Possible faults or contacts are indicated east of the baseline near Station 500 East and 675 East.

Line 9 South

This line is located 200 meters south of Line 8 South. The terrain along the line is moderate with a gradual increase in elevation near the west end of the line, where it crosses the divide between Cow and Richfield Mountains. Again, the terrain is sharp where the line crosses Emory Gulch for some 200 meters. The strong anomaly west of the baseline near Station 450 West corresponds with the northwest trending fault zone on Line 8 to the north. The trend on this strong anomaly is north 40° west as shown on the enclosed map. The other well defined anomaly near Station 1250 West lines up very well with the southerly projection of the Rainbow fault zone described earlier. East of the baseline there is a weak anomaly near Station 200 East.

1+500W 1+400W 1+300W 1+200W 1+100W 1+000W 0+900W 0+800W 0+700W 0+600W 0+500W 0+400W 0+300W 0+200W 0+100W 0+000W

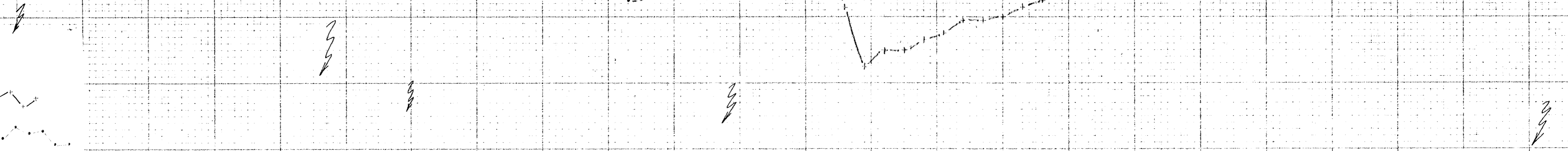
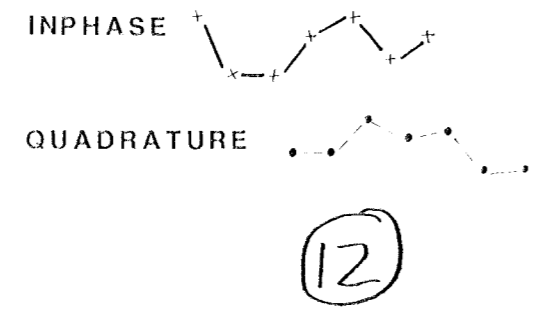
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,116

READ EAST
SEATTLE NLK 18.6 KHz

60%
40%
20%
0%
-20%
-40%

**ARCH CLAIM GROUP
LINE 8 SOUTH
VLF-EM SURVEY**
INSTRUMENT: Geonics EM16
TRANSMITTER: Seattle Wash. NLK 18.6 KHz
East-West Lines Read East
STATION SPACING: 15 Metres
Raw Data Reported In Percent
SCALE: 1CM = 20M DATE: Jan-Feb 1987



SUPERVISION: Wm Howard Myers P.Eng. consultant

0+000

0+100E

0+200E

0+300E

0+400E

0+500E

0+600E

0+700E

BASELINE

READ
EAST

SEATTLE NLK 18.6 KHz

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,116

60%
40%
20%
0%
20%
40%

**ARCH CLAIM GROUP
LINE 8 SOUTH
VLF-EM SURVEY**

INSTRUMENT: Geonics EM16

TRANSMITTER: Seattle Wash. NLK 18.6 KHz

East-West Lines Read East

STATION SPACING: 15 Metres

Raw Data Reported In Percent

SCALE: 1CM = 20M DATE: Jan-Feb 1987

SUPERVISION: Wm Howard Myers P.Eng. consultant

INPHASE

QUADRATURE

(13)

1+500W 1+400W 1+300W 1+200W 1+100W 1+000W 0+900W 0+800W 0+700W 0+600W 0+500W 0+400W 0+300W 0+200W 0+100W 0+000W

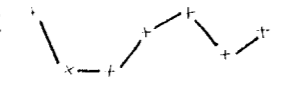

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,116

READ
EAST →

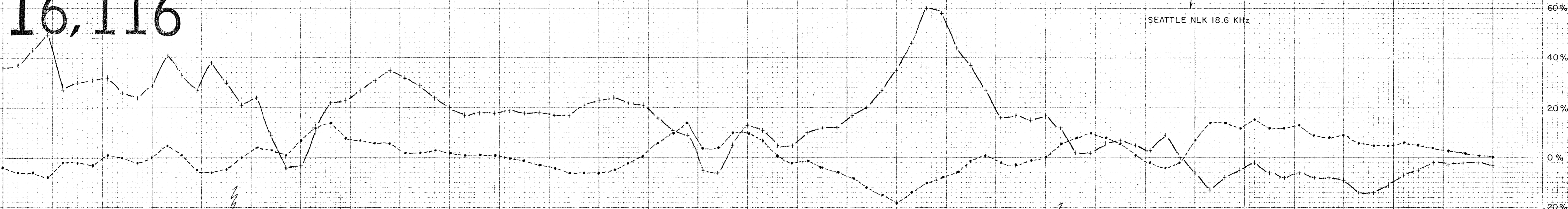
SEATTLE NLK 18.6 KHz

**ARCH CLAIM GROUP
LINE 9 SOUTH
VLF-EM SURVEY**
INSTRUMENT: Geonics EM16
TRANSMITTER: Seattle Wash. NLK 18.6 KHz
East-West Lines Read East
STATION SPACING: 15 Metres
Raw Data Reported In Percent

INPHASE 
QUADRATURE 

(14)

SCALE: 1CM = 20M DATE: Jan-Feb 1987
SUPERVISION: Wm Howard Myers P.Eng. consultant



0+000 0+100E 0+200E 0+300E 0+400E 0+500E 0+600E 0+700E

BASELINE

READ
EAST

SEATTLE NLK 18.6 KHz

60%

40%

20%

0%

-20%

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,116

ARCH CLAIM GROUP
LINE 9 SOUTH
VLF-EM SURVEY

INSTRUMENT: Geonics EM16

TRANSMITTER: Seattle Wash. NLK 18.6 KHz

East-West Lines Read East

STATION SPACING: 15 Metres

Raw Data Reported In Percent

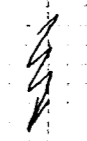
SCALE: 1CM = 20M DATE: Jan-Feb 1987

SUPERVISION: Wm Howard Myers P.Eng. consultant

INPHASE

QUADRATURE

15



Line 11 South

Line 11 South is located 200 meters south of Line 9 South. This line is relatively flat being located on and near the fault area between Cow and Richfield Mountains. Much of the area of the line is covered with muskeg with some small trees shown on the map. In most of the area, the muskeg or overburden is not too deep, but may have some effect on the electromag survey. West of the baseline near Station 350 West there appears to be a fairly well defined fault or contact. This is in line with the northwest trending anomalies, faults or contacts described on earlier lines. East of the baseline near Station 300 East there is a very sharp crossover or fault. This anomaly corresponds with the projection of the Lowhee split fault to the northwest and described earlier.

Line 12 South

This line is located 200 meters south of Line 11 South. The terrain along the line is moderate except for a fairly steep drop off near the east end of the line going down into the Black Jack Gulch drainage. West of the baseline there are a number of possible faults or contacts recorded on the VLF electromag profiles. Immediately east of the baseline near Stations 100 East and 350 East there are two well defined contacts or faults on the electromag profile. These two zones correspond with Lowhee split fault to the northwest. Near the east end of the line, there are several possible contacts or fault zones.

Line 13 South

The line is located 200 meters south of Line 12 South. The terrain along the line is very moderate with a steady decline in elevation near the east end of the line in the vicinity of Walkers Gulch. The changes are not severe and overburden is no big problem. This entire line contains numerous strong anomalies. The ones on the east end of the line are no doubt related to the major fault shown on the geological-geophysical map. This northerly-northeasterly trending fault is roughly parallel to the strong and continuous Williams Creek Fault, shown on the map. The strong anomaly near Station 200 West has a north 40° west trend which is parallel

1+500W 1+400W 1+300W 1+200W 1+100W 1+000W 0+900W 0+800W 0+700W 0+600W 0+500W 0+400W 0+300W 0+200W 0+100W 0+000 0+100E 0+200E 0+300E 0+400E 0+500E 0+600E 0+700E 0+800E 0+900E 1+000E 1+100E 1+200E

BASELINE

READ EAST

SEATTLE NLK 18.6 KHz

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,116

ARCH CLAIM GROUP
LINE 11 SOUTH
VLF-EM SURVEY

INSTRUMENT: Geonics EM16

TRANSMITTER: Seattle Wash. NLK 18.6 KHz

East-West Lines Read East

STATION SPACING: 15 Metres

Raw Data Reported In Percent

SCALE: 1CM = 20M DATE: Jan-Feb 1987

SUPERVISION: Wm Howard Myers P.Eng. consultant

INPHASE

QUADRATURE

For C

For C

For C

For C

16

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EUGENE DIEZGEN CO

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EUGENE DIEZGEN CO

60%

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0%

20%

40%

0+500W 0+400W 0+300W 0+200W 0+100W 0+000 0+100E 0+200E 0+300E 0+400E 0+500E 0+600E 0+700E 0+800E 0+900E 1+000E 1+100E 1+200E 1+300E

BASELINE

READ EAST

SEATTLE NLK 18.6 KHz

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,116

ARCH CLAIM GROUP
LINE 12 SOUTH
VLF-EM SURVEY
INSTRUMENT: Geonics EM16

TRANSMITTER: Seattle Wash. NLK 18.6 KHz
East-West Lines Read East
STATION SPACING: 15 Metres
Raw Data Reported in Percent
SCALE: 1CM = 20M DATE: Jan-Feb 1987

SUPERVISION: Wm Howard Myers P.Eng. consultant

INPHASE
QUADRATURE

17

60%
40%
20%
0%
20%
40%

0+500W 0+400W 0+300W 0+200W 0+100W 0+000E 0+100E 0+200E 0+300E 0+400E 0+500E 0+600E 0+700E 0+800E 0+900E 1+000E 1+100E 1+200E 1+300E

BASELINE

READ EAST

SEATTLE NLK 18.6 KHz

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,116

60%
40%
20%
0%
20%
40%

ARCH CLAIM GROUP
LINE 13 SOUTH
VLF-EM SURVEY
INSTRUMENT: Geonics EM16
TRANSMITTER: Seattle Wash. NLK 18.6 KHz
East-West Lines Read East
STATION SPACING: 15 Metres
Raw Data Reported in Percent
SCALE: 1CM = 20M DATE: Jan-Feb 1987

INPHASE
QUADRATURE

18

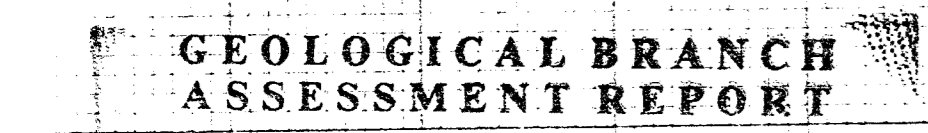
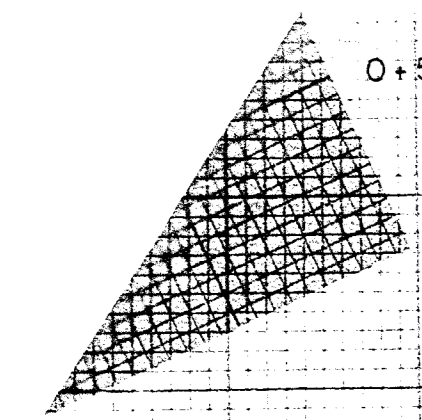
SUPERVISION: Wm Howard Myers P.Eng. consultant

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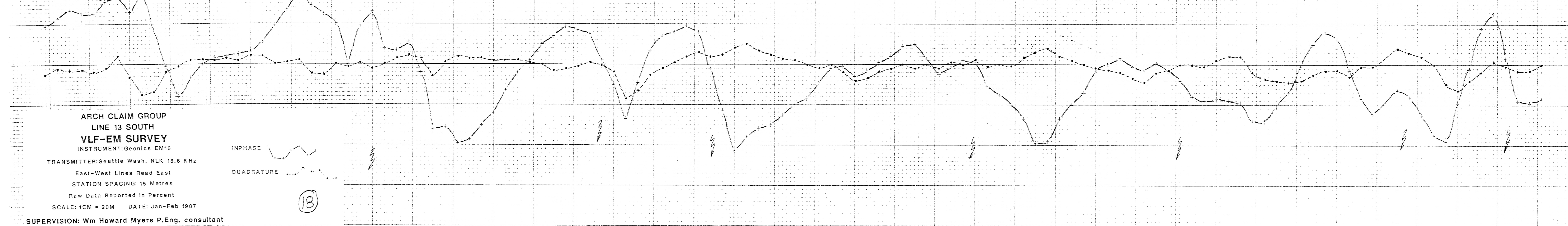
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EUGENE DIEZGEN CO

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PERFECT cross section
10 x 10 - ONE INCH
EUGENE DIEZGEN CO



16,116



SUPERVISION: Wm Howard Myers P.Eng. consultant

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PERFECT cross section
10 x 10 - ONE INCH
EUGENE DIEZGEN CO

to the strong northwest anomaly to the east. Additional lines should be run in this area to establish more control on the trend of these anomalies.

Line 14 South

The line is located 200 meters south of Line 13 South. The terrain in the area of the line is moderate with some steeper dips on lower elevation on the east end near Walkers Gulch. The configuration of the crossovers near the west end of the line suggests possible bedding or contacts of bedding in this area. There is very little evidence of faulting on the east end of the line near the northerly trending fault shown on the map. This possibly could be due to thick overburden near the headwaters of Walkers Gulch.

Line 15 South

The line is located some 200 meters south of Line 14 South. The terrain along the line is moderate with higher elevations near the west end of the line near Richfield Mountain. The strong anomaly or fault zone near the west end of the line at Station 250 West is very sharp and well defined. As shown on the map this anomaly could have a north-northeast trend and lines up very well with the Emory Gulch to the north-northeast. The other weak anomalies shown on the cross-section do not correspond with any mapped structures.

CONCLUSIONS

The VLF-EM reconnaissance type profiles on the Arch claims, run during the 1986-87 field season, has produced some very interesting and possibly potential areas for further exploration work for possible gold mineralization. The strong and continuous N 40° W trend located immediately northeast of Cow Mountain, outlined on the electromag work, can be projected to the northwest into the strong northwest trending surface fault mapped by Struik in GSC O.F. 858 in the Mosquito Creek Mine area. The two trends are shown on the enclosed geological map. The north-south trend of the anomalies on the electromag lines immediately north of

0+500W 0+400W 0+300W 0+200W 0+100W 0+000 0+100E 0+200E 0+300E 0+400E 0+500E 0+600E 0+700E 0+800E 0+900E 1+000E

BASELINE

READ EAST

SEATTLE NLK 18.6 KHz

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,116

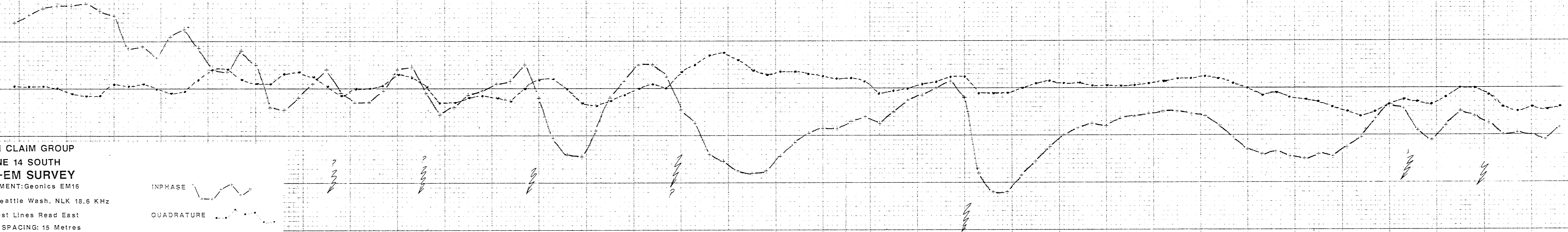
ARCH CLAIM GROUP
LINE 14 SOUTH
VLF-EM SURVEY
INSTRUMENT: Geonics EM16

TRANSMITTER: Seattle Wash. NLK 18.6 KHz
East-West Lines Read East
STATION SPACING: 15 Metres
Raw Data Reported In Percent
SCALE: 1CM = 20M DATE: Jan-Feb 1987

SUPERVISION: Wm Howard Myers P.Eng. consultant

INPHASE
QUADRATURE

19



0+500W

0+400W

0+300W

0+200W

0+100W

0+000

0+100E

0+200E

0+300E

0+400E

0+500E

0+600E

0+700E

0+800E

0+900E

1+000E

BASELINE

READ EAST

SEATTLE NLK 18.6 KHz

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,116

60%

40%

20%

0%

-20%

-40%

ARCH CLAIM GROUP
LINE 15 SOUTH
VLF-EM SURVEY
INSTRUMENT: Geonics EM16

TRANSMITTER: Seattle Wash. NLK 18.6 KHz

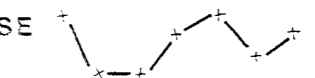
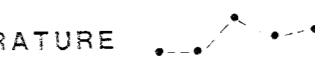
East-West Lines Read East

STATION SPACING: 15 Metres

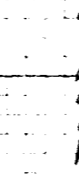
Raw Data Reported in Percent

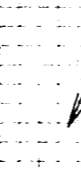
SCALE: 1CM = 20M DATE: Jan-Feb 1987

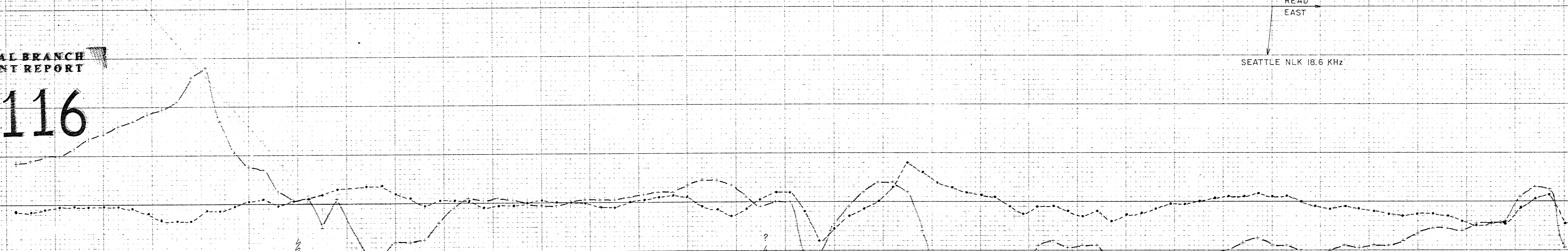
SUPERVISION: Wm Howard Myers P.Eng. consultant

INPHASE 
QUADRATURE 

20







this northwest trend and near the west end of the lines could very well be due to alteration along the north-south Rainbow Fault projected into this area. There is some suggestion of possible southeast splits from the main fault. These splits have a north 14° - 21° west trend to the northeast as splits off the Lowhee Fault. There are several fairly strong and continuous northwest trends indicated on the electromag lines further east near the baseline and southeast of the main Lowhee Fault mapped in the Cariboo Gold Quartz Mine underground workings. These trends vary from north 14 degrees west to 22 degrees west, which is more northerly than the strong anomaly near Cow Mountain. The southerly projection of the Lowhee Fault does not produce as many northerly trending anomalies on the electromag survey as shown on the southerly extension of the Rainbow Fault.

RECOMMENDATIONS

The intersection of the strong and continuous $N 40^{\circ} W$ anomaly mapped on the electromag work north-northwest of Cow Mountain and the northerly trending anomalies immediately north of this trend and on line with the southerly projection of the Rainbow Fault would be a very potential area for further exploration. Further exploration work is also recommended along the projection of the Lowhee Split Fault where a strong and continuous anomaly was recorded on the reconnaissance electromag profiles west of the baseline. The work should be in the form of more detail electromag work with possible input electromag as well as VLF, Self Potential surveys and possible shallow drilling with limited geochem analysis. Access to the areas of further exploration work may be a problem due to the muskeg areas on Cow Mountain.

This is considered to be a very worthwhile exploration programme and well worth the expenditure of monies to carry out the recommended work.

Respectfully submitted,



Wm. Howard Myers, P.Eng., P.Geol.
Geological - Geophysical Consultant



May 1987

APPENDIX

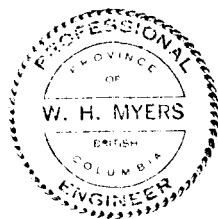
CERTIFICATE


I, William Howard Myers, do hereby certify that I am an independent geological-geophysical consultant with offices at Suite 309 - 543 Granville Street, Vancouver, B.C., V6C 1X8, British Columbia. I have been actively engaged in my profession as an independent consultant in both oil and mining since 1952. I am a professional geologist, P.Geol., #16704 of the Association of Professional Engineers, Geologists and Geophysicists of Alberta. I am also a member P.Eng., #14056, of the Professional Engineers of British Columbia. I now hold a Life Membership in both Societies.

I graduated from Fresno State College, Fresno, California in 1939 with high honors and a B.Sc. degree in Geology. I did graduate work at Stanford University, Stanford California for M.Sc. degree in Geology, 1939-1941. After graduating I spent three years with the U.S. Geological Survey as field geologist and eleven years in the field of geophysical exploration for oil and minerals.

During the past 21 years since 1964, I have spent the majority of my time in the field and consulting for gold exploration in the Cariboo Area of British Columbia. In the past four years, I have carried out extensive geophysical surveys and research programmes for gold exploration in the Cariboo Area of British Columbia. Much of the work involved the techniques recommended by R.W. Boyle in Bulletin 280 of the Geological Survey of Canada. This publication does not follow the older conventional exploration techniques.

Information for this report is from published and unpublished maps and reports of this general area together with my personal experience in the Cariboo Area, exploring for gold over the past 21 years. Specific field work on the Arch claims during the 1986 field season, is given in detail in the introduction of the report.




Wm. Howard Myers, P.Eng. (B.C.)
P.Geol. (Aita)
Geological-Geophysical Consultant
Vancouver, B.C.

May 1987

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Bulletin 149, 1926, Johnson and Unglow

Paper 72-35, 1973, J.R. Campbell, E.H.

Mountjoy and F.G. Young

Annual Report 1887-88, V.III Amos Brown, 1889

Map 335A Willow River Sheet (west half), G. Hanson

Map 336A Willow River Sheet (east half), G. Hanson

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COST ANALYSIS FOR 1986-87 VLF-EM SURVEY OF ARCH #1 - #4 CLAIMS

Detail daily field expenses:

1 Chief geophysicist at \$125/day	\$ 125.00
1 Helper at \$75/day	75.00
1 Skidoo rental at \$50/day	50.00
1 EM-16 rental per day at \$25	25.00
Subsistence, 2 men at \$50/day/man	<u>100.00</u>
	375.00

January 10th to February 11th, 1987

23 days of field work at \$375/day	8,625.00
Plotting data, 4 days at \$125/day	500.00

Report, supervision, layout work

Wm. Howard Myers, P.Eng.

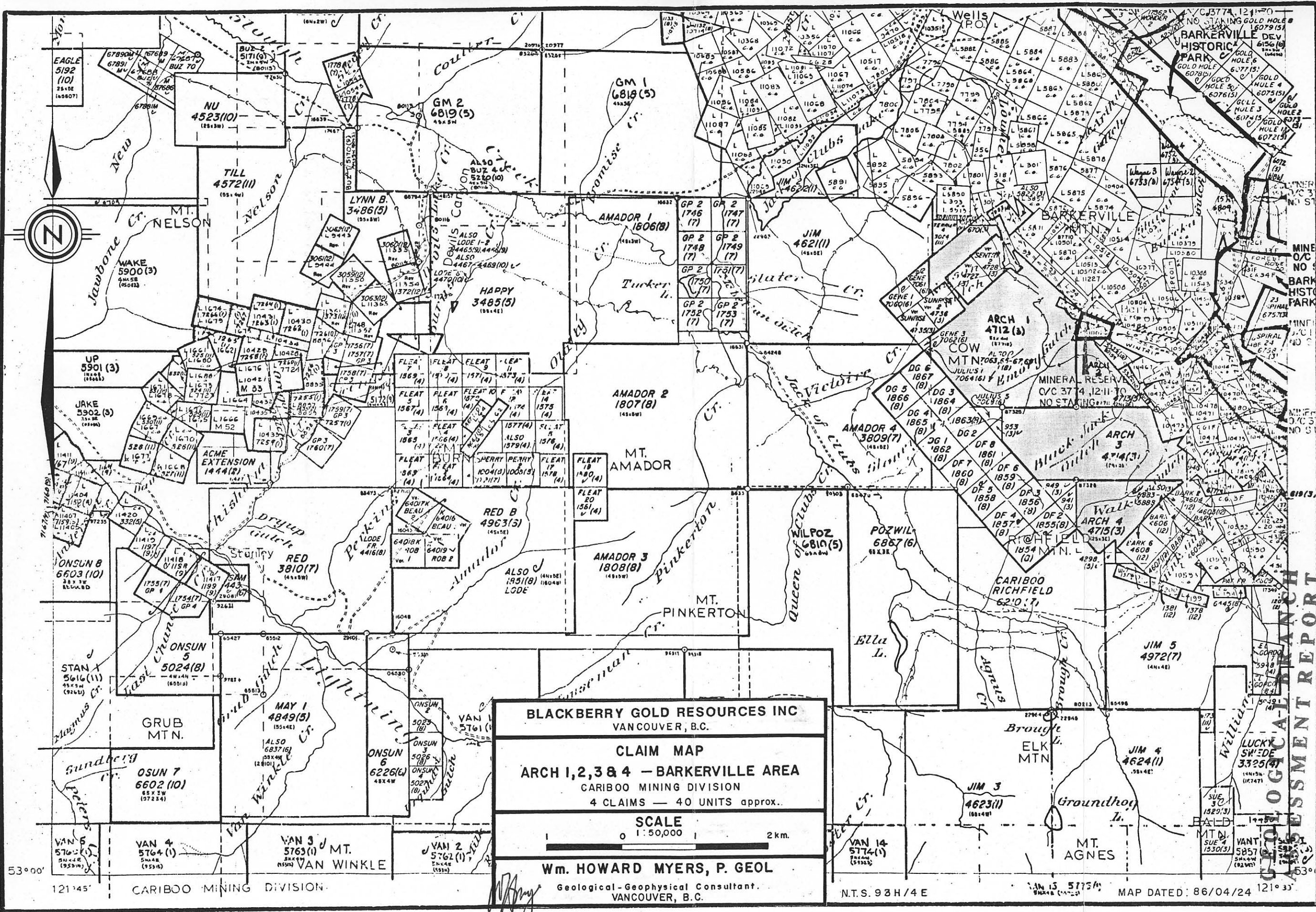
6 days at \$250/day	1,500.00
Typing, drafting and printing	<u>350.00</u>

Total Costs **\$10,975.00**

Total line run = 35.0 km
Line run per day = 1.52 km
Cost per km = \$313.57
including supervision and report

KM OF VLF-EM SURVEY, 1986-87 SEASON

<u>Line #</u>	<u>km</u>
1N	.3
2N	.4
3N	.4
2S	1.7
2AS	1.7
2S Sabre	1.7
3AS	2.35
4AS	2.15
5AS	2.05
6AS	2.05
8S	2.25
9S	2.25
11S	2.65
12S	1.85
13S	1.88
14S	1.65
15S	1.60
21N	2.00
23N	2.00
25N	<u>2.00</u>
Total	34.88 = 35 km



BLACKBERRY GOLD RESOURCES INC
 VANCOUVER, B.C.

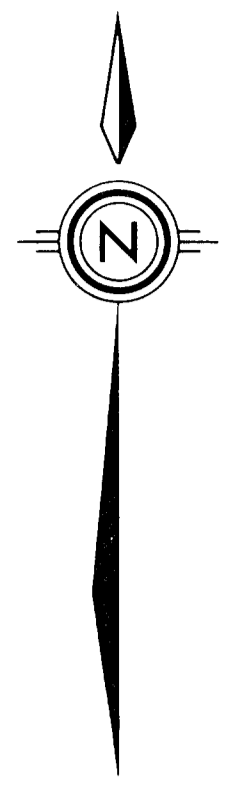
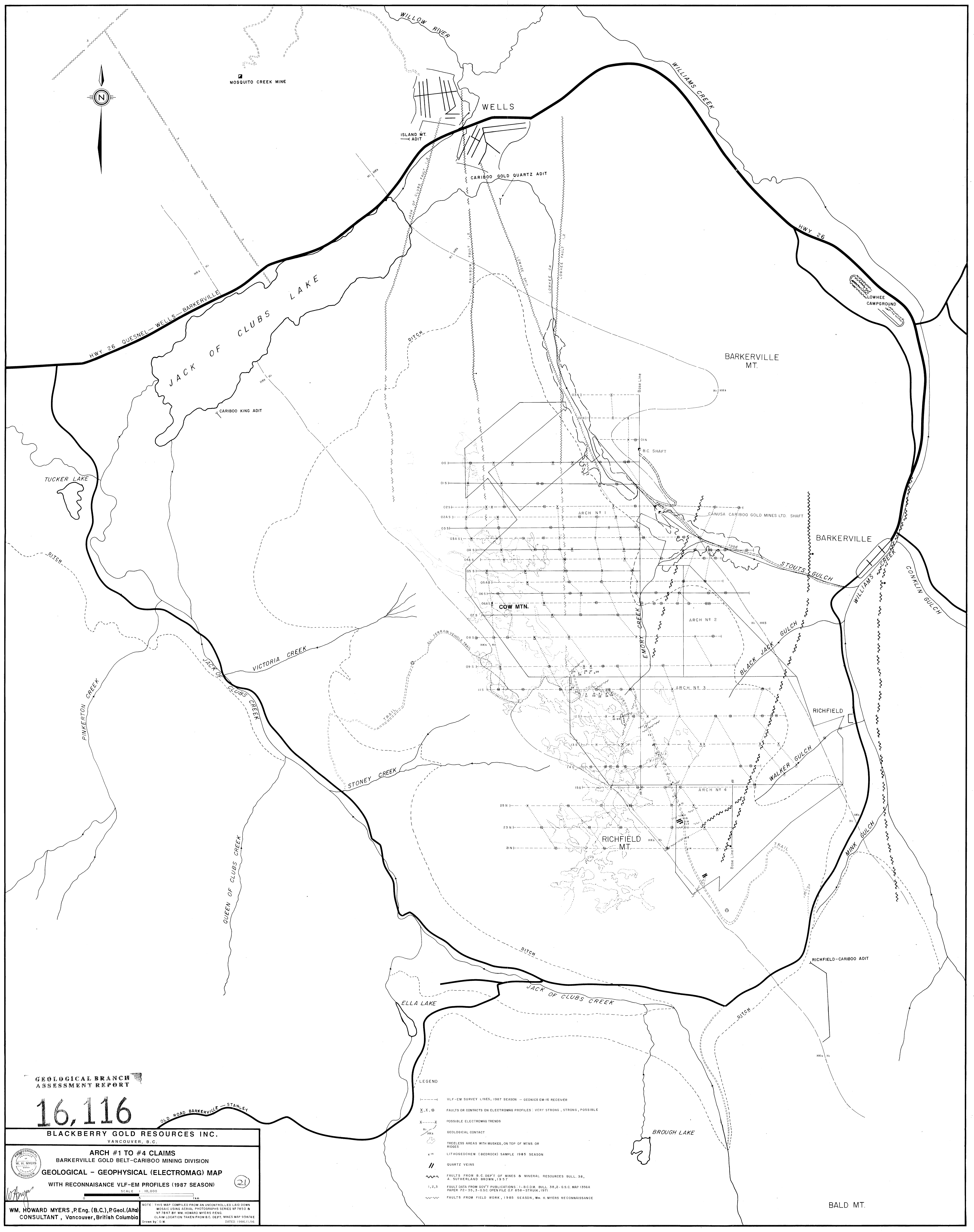
CLAIM MAP
ARCH 1, 2, 3 & 4 - BARKERVILLE AREA
 CARIBOO MINING DIVISION
 4 CLAIMS - 40 UNITS approx.

SCALE
 1 : 50,000 2 km.

Wm. HOWARD MYERS, P. GEOL
 Geological-Geophysical Consultant,
 VANCOUVER, B.C.

GEOLOGICAL ASSESSMENT REPORT

16,116



GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,116

BLACKBERRY GOLD RESOURCES INC.
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ARCH #1 TO #4 CLAIMS
BARKERVILLE GOLD BELT-CARIBOO MINING DIVISION
GEOLOGICAL - GEOPHYSICAL (ELECTROMAG) MAP
WITH RECONNAISSANCE VLF-EM PROFILES (1987 SEASON)

NOTE: THIS MAP COMPILED FROM AN UNCONTROLLED Laid DOWN
MOSAIC USING AERIAL PHOTOGRAPHS SERIES W7850 &
N7847 BY WM. HOWARD MYERS P.ENG.
CLAIM LOCATION TAKEN FROM B.C. DEPT. MINES MAP 13448
Drawn by: G.W. DATED: 1986/1/16

LEGEND

- VLF-EM SURVEY LINES, 1987 SEASON - GEONICS EM-16 RECEIVER
- X, X, O FAULTS OR CONTACTS ON ELECTROMAG PROFILES: VERY STRONG, STRONG, POSSIBLE
- X..... POSSIBLE ELECTROMAG TRENDS
- GEOLOGICAL CONTACT
- TREELESS AREAS WITH MUSKED, ON TOP OF MINS OR RIDGES
- X¹⁶ LITHOGEOCHEM (BEDROCK) SAMPLE 1985 SEASON
- // QUARTZ VEINS
- FAULTS FROM B.C. DEPT. OF MINES & MINERAL RESOURCES BULL. 38, A, SUTHERLAND, BROWN, 1957
- 1, 2, 3 FAULT DATA FROM GOVT PUBLICATIONS: 1-B.C.M. BULL. 39, 2-O.S.C. MAP 1306A PAPER 72-35, 3-O.S.C. OPEN FILE OF B58-STRUK, 1971
- FAULTS FROM FIELD WORK, 1985 SEASON, WM. H. MYERS RECONNAISSANCE

BALD MT.