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GALLANT GOLD MINES LTD.

01/86

GEOLOGICAL AND GEOPHYSICAL

REPORT ON THE

GEORGIA PROPERTY

TRAIL CREEK MINING DIVISION

BRITISH COLUMBIA

FILMED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

NTS 82 F/4

November 1984

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B.P. Butterworth, B.Sc.

14,236

CLAIMS WORKED

CLAIMS	TYPE	LOTS	RECORD	ANNIVERSARY
Mascot/Kapai Fr.	R.C.G.	1344/11012	776	January 16
St. Lawrence	R.C.G.	1197	777	January 16
Copper Jack/Michigamie/ G.B. Architect Fr.	R.C.G.	1185/1294/1707	778	January 16
North Star/Tip Top	R.C.G.	797/798	779	January 16
Kay	M.C.		774	January 23

Location: 49°05'/117°48'

Owners: M. & C. Delich and C. Sideco

Operator: Gallant Gold Mines Ltd.

Consultant: A.G.Troup of Archean Engineering Ltd.

Project Geologist: J.C. Freeze of Mark Management Ltd.

Geologist: B.P. Butterworth of Mark Management Ltd.

GALLANT GOLD MINES LTD.
REPORT ON THE
GEORGIA PROPERTY
TRAIL CREEK MINING DIVISION
BRITISH COLUMBIA
NTS 82 F/4

SUMMARY

The Georgia property is a gold prospect in the Rossland gold camp in the West Kootenay district of southeastern British Columbia. The prospect is within two kilometres of the former Cominco mines which produced over three million ounces of gold. The property consists of eight crown granted, eleven reverted crown granted mineral claims and a 20 unit modified grid claim. Gold was produced on a limited scale up to 1941 on several of the Georgia claims.

In 1982, a preliminary property examination and literature review was completed on behalf of Gallant Gold Mines Ltd. This work showed that previous exploration and development had proven vein-type mineralization to exist on the property.

Following that property examination, Gallant Gold Mines Ltd. completed an option agreement for the crown grants and seven of the reverted crown grants with the owners. In 1983, preliminary geophysical, geochemical and geological surveys were conducted in order to investigate the potential of the property for vein and stockwork-type mineralization. In 1984, the four additional reverted crown grants and the 20 unit mineral claim were optioned.

The results of the programmes indicate that several mineralized veins and zones carrying significant gold content occur on the property. The extent of these zones and the delineation of more extensive mineralization will require further work. Additional property work involving geological mapping, geophysics, trenching and possibly diamond drilling, is recommended.

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1. INTRODUCTION

In 1982 and 1984 Gallant Gold Mines Ltd. optioned the Georgia gold property located in the Rossland gold camp. A preliminary property examination and literature review completed in 1982 showed that vein-type mineralization exists on the property. Although some gold was produced from several of the claims up until 1941, drill indicated reserves at this time showed 38,500 tons averaging 0.228 oz/ton gold. Since 1941 the only attention paid to the Georgia property was by Cominco in 1980 testing for low-grade stockwork-type mineralization. A drill programme consisting of vertical percussion holes and rock geochemistry was carried out. Considering that the ore shoots are predominantly vertical, Cominco's results were inconclusive.

In 1983 and 1984, systematic exploration programmes were carried out by small crews stationed at the base of Red Mountain. Geophysical, geochemical and geological work was carried out over the property.

The purpose of the detailed programmes was to confirm the potential of the known vein system as described in old reports and to investigate the possibility of finding an extension to the mineralization.

The programme was supervised by Mark Management geologist, B.P. Butterworth, under the direction of project geologist, J.C. Freeze and Archean Engineering consulting geologist, A.G. Troup.

1.1 Location and Access

The Georgia property is located just north of Rossland, in the Trail Creek Mining Division of the West Kootenay District of Southeastern British Columbia (Fig. 1.1).

INSERT FIGURE 1.1

Centred on latitude 49°06' and longitude 117°47', the claims cover an area of 7.32 square kilometres on the north and east flanks of Monte Cristo and Columbia - Kootenay Mountains.

Good access to the crown grants and reverted crown grants is provided by a network of dirt and gravel roads that connect with the Rossland street system two kilometres to the south. The only access to the Kay claim is in the south-western corner where it overlaps the crown grants. From Rossland, the Cominco smelter at Trail is only ten kilometres away by paved highway.

1.2 Physiography

The Georgia property is situated on the gently sloping north and east flanks of Monte Cristo and Columbia - Kootenay mountains which reach an elevation of 4200 feet (1280 metres) and 4060 feet (1237 metres) respectively. The property extends from these peaks down to 2400 feet (732 metres).

There are no major creeks on most of the property but surface drainage flows into Acme creek to the north and northwest and Milkranck creek to the southeast. The area is well wooded with vegetation consisting predominantly of western hemlock, Douglas fir, western white pine, lodgepole pine, western red cedar, Engelmann spruce, white spruce, black cottonwood, aspen, common paper birch, larch, alpine fir, and grand fir.

In this Southern Interior climatic region, summers are temperate and dry while winters are cool with heavy snowfall. Precipitation averages 56 to 170 centimetres annually. Mean daily temperature in July is 16° to 18° C and in January is -5° to -10° C. The growing season lasts 181 days from April 15 to October 13.

1.3 Claim Information

The Georgia property is comprised of three adjacent groups of mineral claims referred to as the Georgia Group, the Georgia Extension and the Mining School Group. The Georgia Group, under option from Michael and Catherine Delich of Rosslund, consists of one crown grant, seven reverted crown granted claims and one 20 unit modified grid claim. The Georgia Extension consists of seven crown granted claims¹ under option from Michael M. Butorac, also of Rosslund. The Mining School Group is comprised of four reverted crown grants¹ under option from Crispulo C. Sideco of Trail, B.C. For assessment purposes all fifteen claims were grouped together in the Georgia group. The claims are all located in the Trail Creek Mining Division.

Additional claim information is given in Table 1.3

¹Although several of the claims were originally staked separately, contiguous claims have since been reissued together as one reverted crown grant where they form a combined total of 25 hectares or less.

TABLE 1.3
GEORGIA PROPERTY CLAIMS

GROUP	Owner	Claim Name	Status	Lot No.	Record No.	Expiry Date
Georgia	M.&C.Delich	Elanore	*R.C.G.	951	369	28 Mar 93
		Iron Colt	R.C.G.	795	367	23 Mar 93
		Viking	R.C.G.	4916	314	01 Sep 93
		Georgia	R.C.G.	928	165	25 Aug 93
		Pott	R.C.G.	733	363	09 Mar 93
		Caladonia/Putnam	R.C.G.	734/4917	364	09 Mar 93
		Buckeye	R.C.G.	534	365	09 Mar 93
		Silverine	C.G.	732		
		Kay	**M.G.C.	20 units	774	23 Jan 87
Georgia Extention	M.M.Butorac	Eden	***C.G.	1127		
		Blue Elephant	C.G.	1280		
		Evening Star	C.G.	801		
		Georgia Fraction	C.G.	4668		
		La Belle	C.G.	729		
		April Fool	C.G.	1212		
		Joker	C.G.	1690		
Mining School	C.C.Sideco	Mascot/Kapai Fr.	R.C.G.	1344/11012	776	16 Jan 88
		St. Lawrence	R.C.G.	1197	777	16 Jan 88
		Copper Jack/G.B.				
		Architect Fr./		1185/1707/		
		Michigami	R.C.G.	1294	778	16 Jan 88
		North Star/Tip Top	R.C.G.	797/798	779	16 Jan 88

*R.C.G. - Reverted Crown-Granted Mineral Claims.

**M.G.C. - Modified Grid Claims.

***C.G. - Crown-Granted Mineral Claims.

1.4 History and Previous Work

Gold was first discovered in the Rossland area in 1887 and in 1890 the first claims were staked on Red Mountain about two kilometers west of the Georgia property. The resulting exploration and development work led to discovery of high-grade gold veins on the War Eagle claim in 1894. In 1895, similar mineralization was discovered on the nearby Centre Star and LeRoi claims. This brought on a gold rush that lasted until 1896.

A smelter constructed at Trail to handle the Rossland ores eventually amalgamated with the larger producing mines to form the Consolidated Mining and Smelting Co. Ltd. (Cominco). Uninterrupted mining continued in the camp until 1927 when increased mining costs made the ores, averaging 0.285 oz./ton, uneconomic. In 1927, the Cominco mines were closed after producing over three million ounces of gold. Gold production from the camp continued until 1941 but at a much lower level.

The 16 claims under option to Gallant Gold Mines Ltd. were all staked during the gold rush years from 1890 to 1896. Although the claims have been held almost continuously since the 1890's, government records show that only five claims, the Georgia, Evening Star, Iron Colt, Buckeye and Silverine have had significant exploration or development.

1.4.1 Georgia

The Georgia was staked on August 27, 1893 and from 1893 to 1897 was explored with a series of trenches, shafts and two adits. In 1937 the property was optioned by the Gold Cup Mining Co. Ltd. and from 1937 to 1941 was explored with a series of trenches, diamond-drill holes and hundreds of feet of underground workings on three levels. This work led to the discovery of 12 veins with gold values ranging from trace to about 0.4 oz/ton. The best grades were obtained along

steeply dipping east-west veins where grades of from 0.15 to 0.25 oz/ton were repeatedly obtained across widths of five to ten feet. A company report dated 1940 states that reserves of 38,500 tons averaging 0.228 oz/ton were drilled off along veins 11, 11A and 12. In 1938 two ore shipments of 232 lbs. and 200 lbs. were sent for metallurgical testing. The shipments averaged 0.225 and 0.30 oz/ton. Lab tests indicated that 92.0% recovery could be obtained with cyanidation. A mining operation was recommended in the 1940 Engineer's report but was never undertaken.

In 1980 the property was optioned by Cominco and explored for a low-grade stockwork that could be mined by open-pit mining methods. Cominco tested the property with 20 vertical percussion drill holes ranging in depth from 20 to 270 feet. The drill holes were all subeconomic ranging from 54 to 312 ppb gold. Cominco's report suggests the results are inconclusive since vertical drilling was used to test mineralization controlled by vertical structures.

When the property was examined by A.G.Troup in July, 1982, a four-foot chip sample was taken across vein 11 where it was exposed in Adit #3. This sample assayed 0.036 oz/ton gold. A second four-foot chip sample of barren wall rock, also from Adit #3, assayed 0.022 oz/ton gold.

1.4.2 Evening Star

The Evening Star crown grant lies immediately northwest of the Georgia claims. Little information is available on this claim but B.C. Department of Mines records show that it was worked from 1896 to 1901, from 1907 to 1908 and from 1932 to 1941. An Engineer's Report by R. W. Hagen, dated 1940, states that in 1935 it was the largest shipper from the camp and up until 1940 has shipped several thousand tons of ore averaging 0.3 to 0.5 oz/ton gold.

In 1980 Cominco optioned the claim and explored it for a low-grade gold stockwork that could be mined by open-pit methods. Seven vertical percussion drill holes ranging in depth from 30 to 270 feet were put down. All were subeconomic. The best hole located near the former workings assayed only 47 ppb Au.

This claim was examined by the writer on July 6, 1982. Extensive underground workings were found to exist on the property with about 20,000 tons of waste on the dump in front of the lower adit. A chip sample taken across a six-inch quartz vein exposed in the lower adit assayed 0.402 oz/ton gold. Two composite samples of dump material assayed 0.042 and 0.030 oz/ton gold suggesting that mineralization extends into the wall rocks adjacent to the veins.

1.4.3 Iron Colt

The Iron Colt was staked on August 6, 1890 and worked intermittently from 1896 to 1939. The property was explored with two adits and more than 2,500 feet of underground workings. Massive sulphide ore carrying about 0.20 oz/ton gold is reported to have been discovered along the footwall of a monzonite dyke. No production records are available but small shipments averaging about 0.20 oz/ton gold are reported to have been made from the claim.

1.4.4 Buckeye

The Buckeye claim was staked in the early 1890's and explored with about 500 feet of underground workings prior to 1915. Two veins of 1 1/2 feet and 6 inches in width were encountered but there is no recorded production from the claim.

1.4.5 Silverine

The Silverine crown grant was staked in 1890 and explored intermittently until 1944. Government files contain no information

on the exploration or production history of this claim but the Trail smelter files show that 89 tons of ore averaging 0.54 oz/ton gold were shipped between 1934 and 1944. A dump containing an estimated 1,500 tons of waste was found on the claim.

1.5 Work by Gallant Gold Mines in 1984

In 1984, field work was conducted by Gallant Gold Mines Ltd. from October 27 to November 2. During this period the following surveys were completed:

- 1) The 1983 VLF-EM survey was extended to cover the recently acquired Mining School Group. The survey covered a total of 7.75 line kilometres.
- 2) Prospecting was carried out over the new VLF conductors.
- 3) Two rock chip samples were taken over mineralized zones discovered over the conductors.

2. GEOLOGY

2.1 General Geology

The geology of the Rossland area was mapped at a scale of 1:4,800 (1 inch to 400 feet) by G.A. Young of the Geological Survey of Canada in 1909. More recently the area was mapped at a scale of 1:253,440 by Geological Survey geologist H.W. Little in 1948-52. In 1940 the geology of the Georgia claim was mapped by the Gold Cup Mining Co. at a scale of 1:1,200 (1 inch to 100 feet) and in 1980 the southern half of the present property was mapped by Cominco at a scale of 1:2,400.

The property is underlain by sedimentary rocks of the Pennsylvanian Mt. Roberts Formation which are covered on the east and west by Lower Jurassic, Rossland Formation volcanics. The sediments and volcanics are cut off to the south by the Rossland Monzonite Stock and to the north by the Trail Batholith, both of Lower Cretaceous Age. Sills, dykes and irregular masses of augite porphyry intrude the Mt. Roberts Formation and extend into the Rossland Formation volcanics which are believed to be their extrusive equivalent. Numerous north-south striking lamprophyre dykes occur throughout the area. These cross-cut all other rocks in the camp and are believed to be post-mineralization.

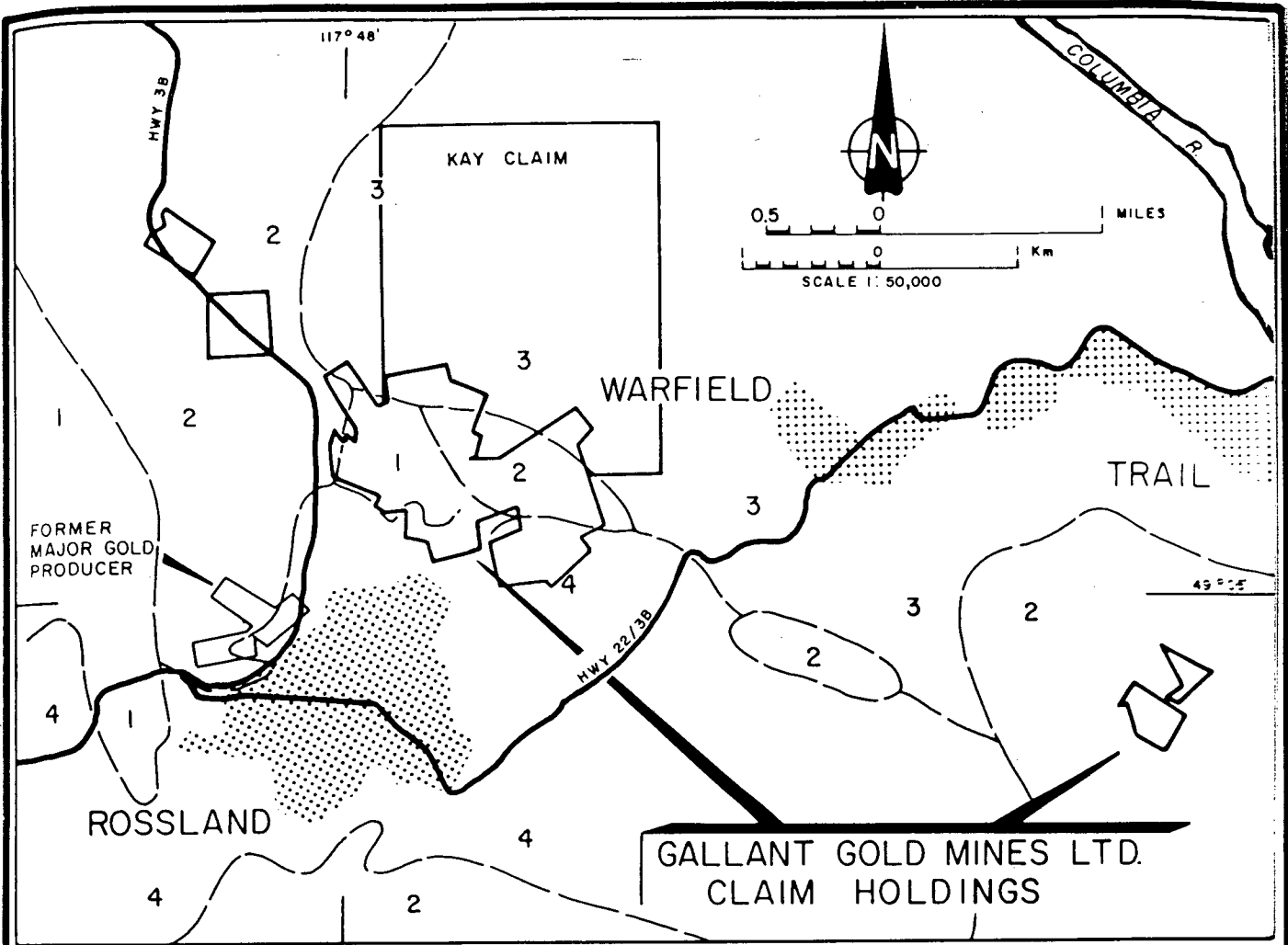
The Mt. Roberts Formation consists of finely laminated slates, argillites and siltstones. The rocks are locally carbonaceous and range from light grey to black in colour. They are generally highly silicified and locally grade into epidote hornfels. In the vicinity of the property the rocks strike north-south and dip from 20° to 60° west.

The Rossland Formation volcanics consist of agglomerate and tuff of andesite to basaltic-andesite composition. The agglomerate fragments can be up to 15 to 20 cm across and are elongate parallel to bedding. These rocks are often intruded by sills of augite porphyry.

The augite porphyry sills are believed to be the intrusive equivalent of the Rosslund Formation volcanics. This rock consists of black augite phenocrysts, up to 1 cm. or more in diameter, suspended in a light green to dark grey groundmass. It is extremely variable in composition and often exhibits abrupt changes in colour, grain size and phenocryst content.

The Trail Batholith outcrops to the north of the claims but at depth it is believed to underlie most of the property. This body is a light grey, medium-grained, hornblende, biotite granodiorite. A marginal facies of this body is of dioritic composition consisting of hornblende and feldspar phenocrysts suspended in a fine-grained, grey-green groundmass. Dykes of diorite outcrop on the property and elsewhere in the camp are intimately associated with mineralization.

The Rosslund Monzonite, situated along the south edge of the claims, is believed to be a late phase of the Trail granodiorite. This rock is grey-green to dark grey in colour and medium to coarse-grained. It is often porphyritic with large pyroxene and hornblende phenocrysts enclosed by light coloured plagioclase with minor brown biotite. The porphyritic monzonite is later than the main monzonite body and occurs as stocks and dykes crosscutting both the older monzonite and the adjacent sediments and volcanics. Much of the ore mined in the Rosslund camp has occurred along shear zones located marginal to the Rosslund Monzonite and related monzonite dykes.



LEGEND:

LOWER CRETACEOUS (?)

NELSON PLUTONIC ROCKS

4 ROSSLAND MONZONITE: monzonite, porphyritic monzonite

3 TRAIL BATHOLITH: granodiorite, diorite, quartz diorite.

LOWER JURASSIC

2 ROSSLAND FORMATION: andesite, latite, basalt, flow breccia, augite porphyry, agglomerate, tuff; minor shale.

PENNSYLVANIAN (?)

1 MOUNT ROBERTS FORMATION: slate, limestone, argillaceous quartzite, greenstone.

GALLANT GOLD MINES LTD.

GEOLOGY OF
THE ROSSLAND AREA

TRAIL CREEK M.D.-B.C.

NTS. 82-F-4

JCF./rwr.

FEB., 1985

FIGURE 2

2.2 Economic Geology

A detailed account of the Rosslund ore deposits was published in 1915 as Memoir 77 by Charles W. Drysdale of the Geological Survey of Canada. Drysdale gives the following description of the Rosslund ores:

"The Rosslund ore consists mainly of pyrrhotite and chalcopyrite, associated with a gangue of altered country rock containing some quartz and locally a little calcite. The sulphides form from 50 to 70 percent of the mass. The values are largely in gold (0.4 to 1.1 ounces), with some copper (0.7 to 3.6 percent), and a little silver (0.3 to 2.3 ounces). There are all transitions from typical ore to solid sulphides or to rock matter, or to gangue with little apparent mineralization but carrying values.

"Five main types of deposits have been recognized in the district, which may be enumerated as follows:

"1. Ore deposits in true replacement vein fissures with fairly definite hanging and foot-walls. Such veins display in contrast to the other types great uniformity in width and value of ore. The best examples of this type traverse augite porphyrite country rock.

"2. Ore deposits occurring along sheeted fissure or shear zones, in irregular, generally lens or tabular shaped shoots with intervening stretches of barren vein characterized by crushed country rock and fault gouge. The shoots as a rule, though not invariably, lie along the portion of the shear zone traversing a formational contact. In many cases only one definite wall is present, the other boundary being a commercial rather than a structural one, although there is generally a certain parallelism of lines of fracture for

short distances which may be mistaken for walls. The great majority of the ore deposits in the district belong to this type as for instance the main Centre Star-LeRoi vein.

"3. Ore deposits in cross fractures or fault fissure veins which are of very local occurrence and of not very great economic importance. In some cases, however, the intersections of such cross fractures with main vein fractures show enrichment, whereas in other cases they show impoverishment. Such cross fractures are often misleading in diamond-drill operations.

"4. Ore deposits as irregular impregnations of country rock; in part somewhat resembling stockworks. This type of deposit occurs in areas underlain by the Mount Roberts Formation.

"5. Gold-bearing quartz fissure veins carrying iron, copper, and lead sulphides as well as gold. This type of deposit is more in the nature of cavity fillings than replacement veins."

2.3 Property Geology

Mineralization on the Georgia property falls into all five of Drysdale's deposit categories but types 1, 5 and 4 are the most common. Mineralization in the form of massive sulphide veins, veinlets and sulphide disseminations occur in silicified sediments of the Mount Roberts Formation and in the Rossland Monzonite as well as along the contact between these two. Sulphides include pyrrhotite, arsenopyrite, chalcopyrite and pyrite. In most cases these zones assay high in gold.

3. GEOCHEMISTRY

3.1 ROCK CHIP SAMPLING

3.1.1 Sampling, Sample Preparation and Analytical Procedures

A rock chip sample was taken across a massive sulphide vein discovered over a VLF conductor. A grab sample was collected from a waste dump near one of the old workings found over the same conductor.

The samples were placed in numbered plastic bags and sent to Chemex Labs Ltd. in North Vancouver for analysis. In the laboratory, samples were put through primary and secondary jaw crushers and a tertiary cone crusher. A sub-sample of approximately 250 grams was then pulverized in a rotary pulverizer. Pulp for precious metal analysis was screened to minus 100 mesh and examined for 'metallics'. The pulp was then fire assayed for Au, Ag and Cu.

3.1.2 Presentation and Discussion of Results

Assay results, locations and descriptions of samples are given in Table 3.1 and on Map 4.1.

Both samples contain copper and gold values however, the siliceous sample has a much higher content than the massive sulphides.

TABLE 3.1

LOCATIONS, ASSAYS AND DESCRIPTIONS
OF ROCK CHIP SAMPLES

SAMPLE #	LOCATION	% oz/ton			DESCRIPTION
		CU	AG	AU	
83171	4+00 NE	0.35	0.01	0.024	Msv sulf vein - Aspy + Cpy .45m wide 030°/88° NW
	5+60 SE				
83172	8+00 NE	0.44	0.12	0.179	Msv Aspy + Cpy in silic. matrix - Dump grab. S.
	7+20 SE				

4. GEOPHYSICS

4.1 VLF-EM Survey

4.1.1 Instrument and Survey Techniques

A geonics EM-16 unit was used to extend the 1983 VLF-EM survey to cover the Mining School Group. The 24.8 kHz, Seattle, Washington submarine transmitting station was used throughout the survey with in-phase and quadrature readings taken in a northwesterly (350°) direction to insure that south dips would be indicated as negative readings by the instrument. The in-phase dip angle readings were later converted by means of the Fraser filtering techniques (Fraser, 1969) to data which could be contoured.

Seven lines were run at 200 metre intervals with readings taken at 20 metre stations. A total of 7.75 line kilometres covered all of the reverted crown grants and the southern portion of the Kay claim.

4.1.2 Presentation and Discussion of Results

The results of the VLF-EM surveys are shown on Map 4.1. This map shows the in-phase dip angle and filtered dip angle results (Fraser, 1969) with the filtered data contoured at a 10% contour interval.

The VLF survey outlined several strong conductors on the group similar to those outlined previously on the Georgia Group. Several of the conductors coincide with known mineralized structures as shown on old maps.

The strong conductor extending from the Iron Colt claim through the Columbia and Kootenay claims, coincides with the Columbia-Kootenay vein and has been found in outcrop. Two rock chip samples of massive arsenopyrite and chalcopyrite contain .35% Cu and 0.024 oz/ton Au, and 0.44% Cu and 0.179 oz/ton Au respectively.

Geological investigation of the other conductors was impeded by heavy snow fall during the time of this programme.

5. CONCLUSIONS

A systematic exploration programme involving an electromagnetic survey, geological mapping and rock chip sampling was carried out to investigate the potential for vein and stockwork mineralization on the Mining School Claim Group.

The VLF survey outlined several strong conductors in the group similar to those outlined in 1983 on the rest of the property. Many of the conductors coincide with gold bearing massive sulphide veins which have either been mapped and sampled, or are shown on old maps.

Further work is required to fully assess the extent of mineralization on the property.

6. RECOMMENDATIONS

In 1982, three successive phases of work were recommended to assess the potential of this property. The first phase was carried out in 1983. In 1984, Gallant acquired additional ground which also required the Phase I assessment programme. Based on the favourable results from the 1983 and 1984 programmes the second phase is recommended for next field season.

PHASE II

- 1) An Induced Polarization (geophysical) survey should be carried out to outline areas of greatest sulphide concentration. A narrow electrode spacing should be used in order to define veins as well as disseminated sulphides.
- 2) Detailed mapping of the entire property at a scale of 1:1,000. Emphasis should be given to showings and geophysical anomalies located during Phase I and II.
- 3) Trenching and diamond drilling of all important veins, showings and geophysical conductors.

If results from the Phase II programme are encouraging a Phase III programme will be recommended.

PHASE III

- 1) Systematic diamond drilling of all important areas of mineralization discovered during Phase II.


Respectfully submitted

B.P. Butterworth

B.P. Butterworth

J.C. Freeze

J.C. Freeze

A.G.  A circular seal for a Professional Engineer in the Province of British Columbia. The seal contains the text "PROFESSIONAL ENGINEER OF BRITISH COLUMBIA" around the perimeter. A signature, "A.G.", is written across the seal.

A.G.

7. BIBLIOGRAPHY

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- Young, G.A., 1909: Special Map of Rossland, B.C.. Geological Sheet, G.S.C. Map No. 1002.

STATEMENT OF QUALIFICATIONS

A.G. TROUP, P.ENG.

ACADEMIC

1967	B.Sc. Geology	McMaster University, Ontario
1969	M.Sc. Geochemistry	McMaster University, Ontario

PRACTICAL

1981 -	3605 Creery Ave. West Vancouver, B.C	Consulting Geologist with Archean Engineering Ltd.
1977 - 1980	Geological Survey of Malaysia	Project Manager on a CIDA supported mineral explora- tion survey over peninsular Malaysia.
1969 - 1977	Rio Tinto Canadian Exploration Ltd. Vancouver, B.C.	Geologist involved in all aspects of mineral explora- tion in B.C., the Yukon and N.W.T.
1968	McMaster University Dept. of Geology Hamilton, Ontario	M.Sc. thesis work. Reconnaissance mapping and geochemical study, Lake Shubenicadia area, Nova Scotia.
1967 (summer)	Canex Aerial Exploration Ltd. Toronto, Ontario	Geologist in charge of detailed mapping and reconnaissance geochemical program in Gaspé, Quebec
1966 (summer)	McMaster University Dept. of Geology Hamilton, Ontario	Detailed and reconnaissance mapping in Northern Ontario.
1965 (summer)	International Nickel Co. of Canada Thompson, Manitoba	Detailed mapping in the Thompson area, Manitoba.
1964 (summer)	Geological Survey of Canada Ottawa, Ontario	Regional geochemical survey in the Keno Hill area, Yukon.

STATEMENT OF QUALIFICATIONS

J.C. FREEZE (nee RIDLEY), B.SC.

Academic

1978	B.A. Geography	University of Western Ontario
1981	B.Sc. Geology	University of British Columbia

Practical

1981 - Present	Mark Management Ltd. Vancouver, B.C.	Project Geologist. Involved with geological, geochemical and geophysical aspects of precious metals exploration in B.C.
1980 - 1981	Utah Mines Vancouver, B.C.	Temporary Summer and part-time Winter Geologist in Charge of mapping and diamond drilling of a coal property in N.E. B.C. logging of rotary drilling chip samples on another coal property in N.E. B.C.
1979	Utah Mines Vancouver, B.C.	Temporary Summer. Reconnaissance and detailed mapping, logging of diamond drill core on coal properties in N.E. B.C.

COSTS STATEMENT
GALLANT GOLD MINES LTD.
GEORGIA PROPERTY
GEOLOGICAL AND GEOPHYSICAL SURVEYS
27 October - 2 November 1984

GENERAL COSTS

FOOD AND ACCOMMODATION

2 Pers, 14 man days @ \$29.72 \$ 416.06

SUPPLIES

29.37

SHIPPING & POSTAGE

11.56

FUEL

169.25

TELEPHONE CHARGES

30.96

RENTALS

U-Haul Trailer, 26Oct-3Nov, 8days @ \$13.66	\$ 109.30	
Mark 4wd Bronco, 8 days @ \$43	344.00	
Mitron Radio Phone, 8 days @ \$5	40.00	
Gabriel SBX11A, 8 days @ \$11	88.00	
Gabriel/Ezekiel Camp Equipment		
14 man days @ \$6	<u>84.00</u>	665.30

PROJECT PREPARATION

392.64

CONSULTANT FEES

Archean Engineering 505.00

REPORT PREPARATION

2,115.00

TOTAL GENERAL COSTS

\$ 4,335.14
=====

GEOLOGICAL SURVEY COSTS

SALARIES & WAGES

2 Pers, 4 man days @ \$92.39 \$ 369.56

BENEFITS @ 20%

73.91

ASSAYS - Chemex Labs

2 Rocks for CU, AG, AU @ \$19.75 39.50

GENERAL COSTS

4/14 X \$ 4,335.14

1,238.61TOTAL GEOLOGY SURVEY COSTS\$1,721.58
=====GEOPHYSICS SURVEY COSTSSALARIES & WAGES

2 Pers, 10 man days @ \$92.39

\$ 923.90

BENEFITS @ 20%

184.78

RENTALS

Gabriel EM-16, 7 days @ \$27

189.00

GENERAL COSTS

10/14 X \$ 4,335.14

3,096.53TOTAL GEOPHYSICS SURVEY COSTS\$ 4,394.21
=====

GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,236



MAP KEY
SHEET 2
SHEET 1

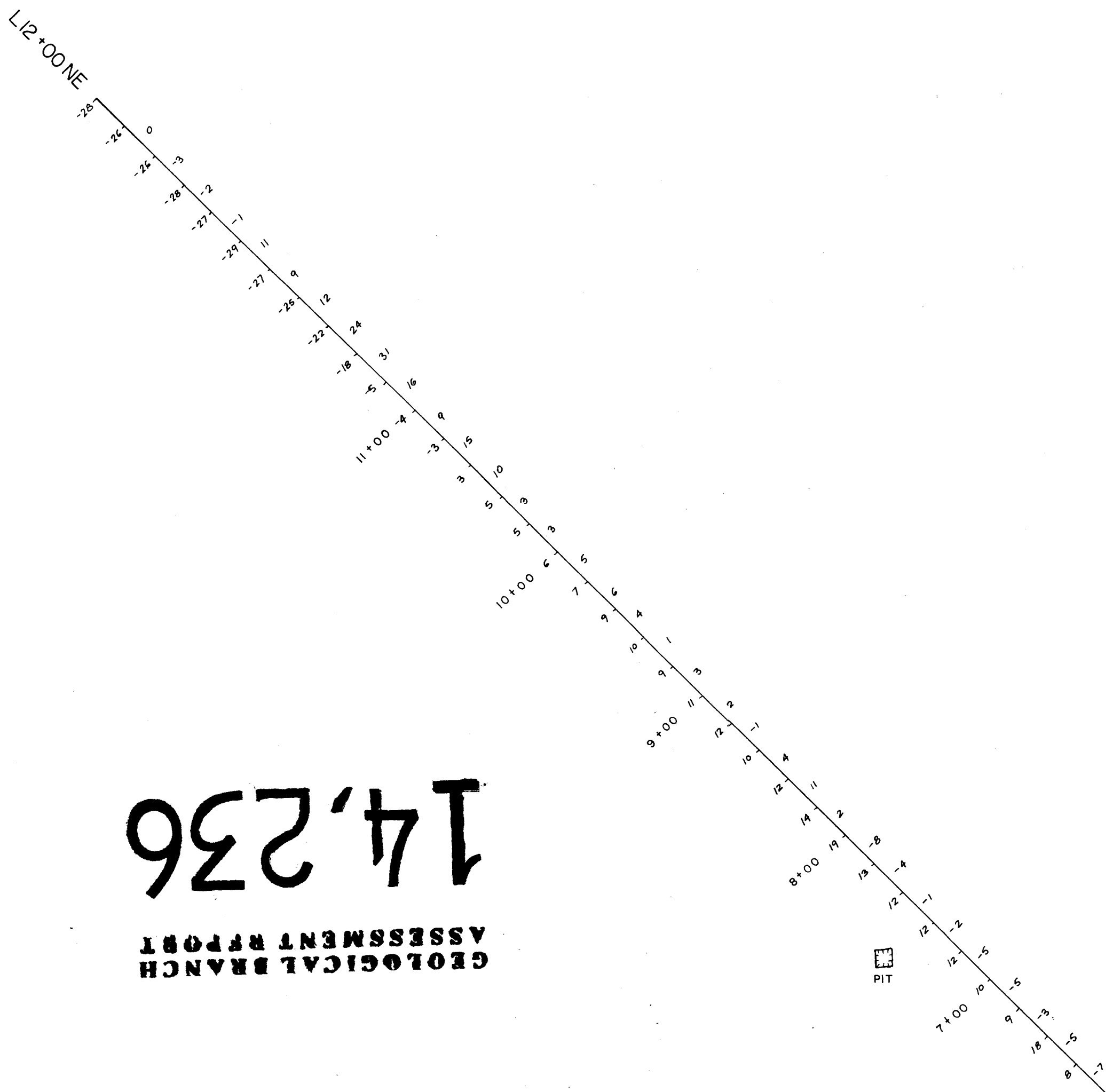
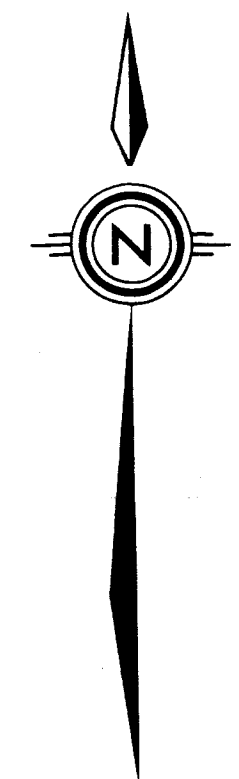
LEGEND
FRASER FILTER RESULT %
INPHASE READINGS
INSTRUMENT: GEONICS EM-16

GALLANT GOLD MINES LTD.
GEORGIA PROPERTY, TRAIL CREEK MD., BC.

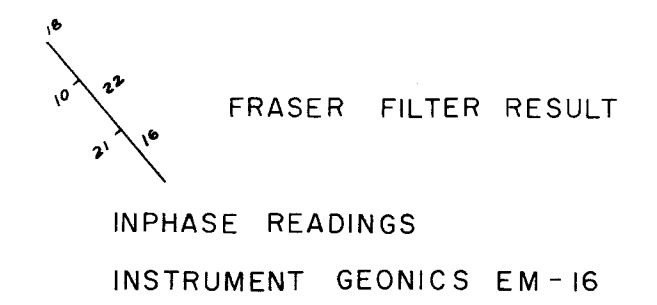
VLF-EM SURVEY
FRASER FILTER CONTOURS (%)

0 50 100 200m
1:2000

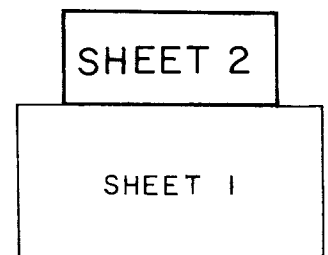
NTS B2-F-4
DATE JAN, 1985 By B.P.B., J.C.F./r.w. MAP 51A



LEGEND



MAP KEY



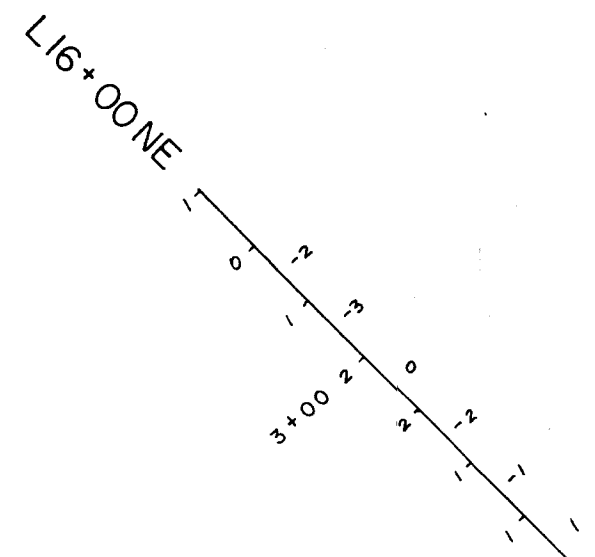
14,236
ASSESSMENT REPORT
GEOLOGICAL BRANCH

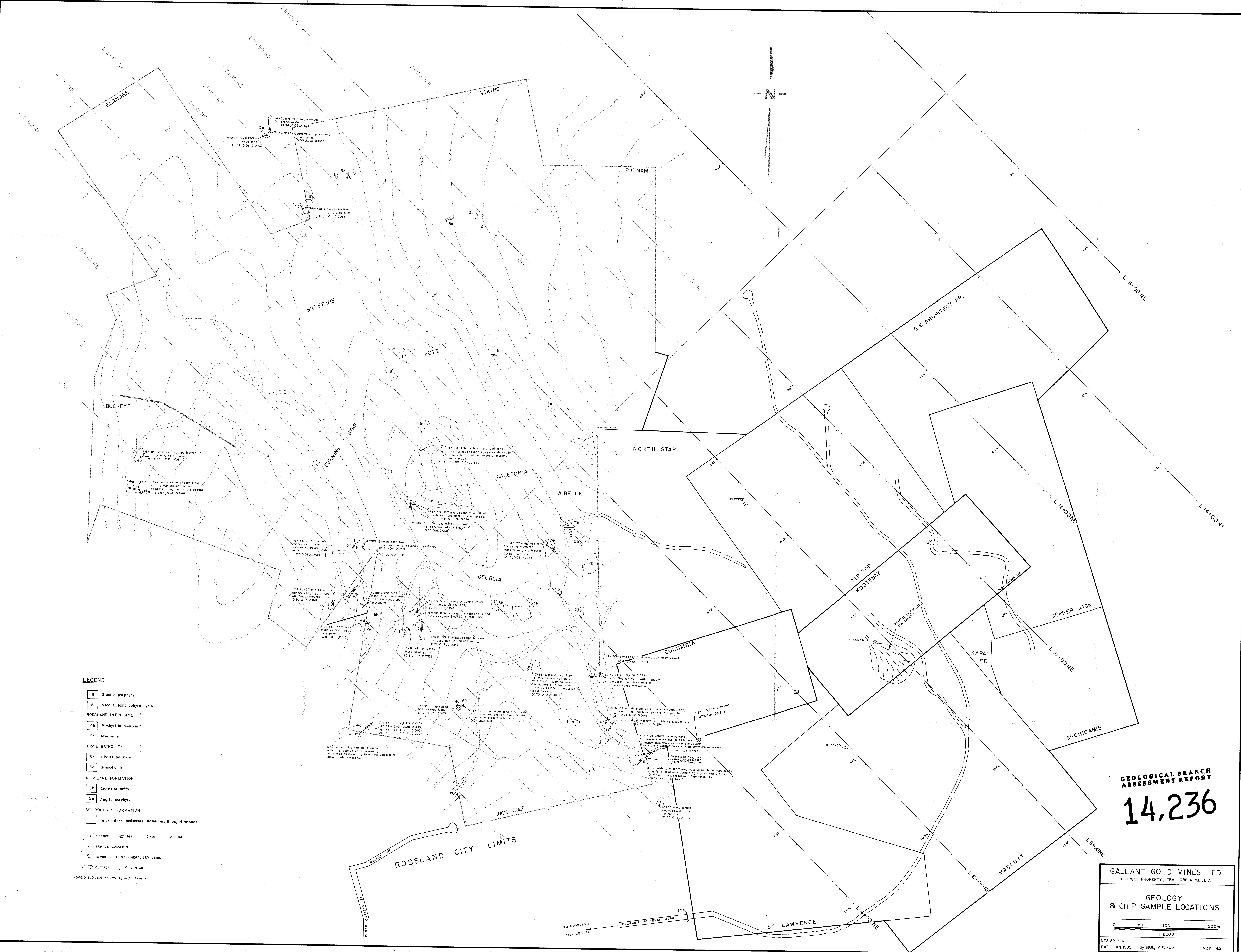
GALLANT GOLD MINES LTD.
GEORGIA PROPERTY; TRAIL CREEK M.D., B.C.

VLF-EM SURVEY
FRASER FILTER CONTOURS (%)

0 50 100 200m
1:2000

NTS 82-F-4
DATE: Feb. 7, 1985 By: B.P.B., J.C.F./r.w.r. MAP: 4.1B





- LEGEND**
- 6 Granite porphyry
 - 5 Mica & lamprophyre dykes
 - ROSSLAND INTRUSIVE**
 - 4b Porphyritic monzonite
 - 4a Monzonite
 - TRAIL BATHOLITH**
 - 3b Diorite porphyry
 - 3a Granodiorite
 - ROSSLAND FORMATION**
 - 2b Andesite tuffs
 - 2a Augite porphyry
 - MT. ROBERTS FORMATION**
 - 1 Interbedded sediments, slates, argillites, siltstones
- TRENCH PIT ADIT SHAFT
 SAMPLE LOCATION
 STRIKE & DIP OF MINERALIZED VEINS
 OUTCROP CONTACT
- (0.04, 0.13, 0.230) = Cu %, Ag mg/l, Au g/t

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

14,236

GALLANT GOLD MINES LTD.
GEORGIA PROPERTY, TRAIL CREEK MD, B.C.

**GEOLOGY
& CHIP SAMPLE LOCATIONS**

0 50 100 200m
1:2000

NTS 82-F-4
DATE: JAN 1985 By BPP, JCF/rwc MAP 22