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GEOPHYSICAL
ASSESSMENT REPORT

on the

VITAL CLAIM GROUP
LAC LA HACHE AREA
CLINTON MINING DIVISION

MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES

Rec'd DEC 02 1992

SUBJECT _____

FILE _____

VANCOUVER, B.C.

by

MURRAY S. MORRISON, B.Sc.

- CLAIMS: Vital 1-25 (25 units).
- LOCATION: The Vital Claim Group is situated 5 km south-east of Rail Lake, or 14 km northeast of Lac La Hache, B.C.
Lat. 51°55'; Long. 121°24';
N.T.S. Map 92-P-14W.
- OWNER: M. S. MORRISON
- OPERATOR: M. S. MORRISON
- DATE STARTED: AUGUST 18, 1992
- DATE COMPLETED: AUGUST 22, 1992

Kelowna, B.C. **GEOLOGICAL BRANCH**
ASSESSMENT REPORT November 15, 1992

22,660

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SUMMARY

The Vital property is situated at Timothy Creek, 14 km northeast of Lac La Hache in the Clinton Mining Division of British Columbia. The western half of the property was staked by the writer in early September, 1991, to cover the northern half of a strong oval-shaped airborne magnetic anomaly that is outlined on government aeromagnetic maps. The eastern half of the property was staked by the writer in late September, 1991, to cover a 4 km segment of the Timothy Creek Fault.

The property consists of a west group of claims, the Vital Claim Group, that is made up of the Vital 1-25, 2-post mineral claims, and an east group of claims, the Vital Group II, that is made up of the Vital 26-56, 2-post mineral claims.

The Vital property covers some ground formerly covered by the FF mineral claims of Anaconda American Brass Limited in 1966-67, and the WD mineral claims of Amax Exploration Inc. in 1972-73. Work by the previous operators in the area included geological mapping, soil geochemistry, magnetometer surveying, induced polarization surveying and trenching. Amax drilled 3 percussion drill holes totalling 275 metres on the WD mineral claims in 1973, apparently with negative results.

Amax Exploration conducted an extensive exploration program on properties south of Spout Lake (or 6 km north and northeast of the Vital property) in the late 1960's and early 1970's. Chalcocopyrite mineralization associated with magnetite was discovered on their WC property immediately south of Spout Lake and on their Peach Lake property south of Peach Lake. Neither property proved-up economic concentrations of copper.

Exploration work in the Spout Lake - Mount Timothy region more recently has produced some significant drill hole results. In 1991, Liberty Gold Corp. of Vancouver reported 41 metres of

Continued . . .

SUMMARY - Continued

0.40% copper, including 7 metres of 2.05% copper from drill hole 90-1, and 51.8 metres of 0.25% copper, including 5.2 metres of 1.02% copper from drill hole 90-10 on their Tim property near Timothy Mountain. During August of this year, GWR Resources Inc. reported 14 metres of 0.22% copper from drill hole 92-2 on the Miracle-Murphy property located immediately to the northeast of the Vital property.

The well-known Mount Polley copper-gold porphyry deposit located 64 km northwest of Spout Lake provides the best example of the type of target that should be sought in the Spout Lake area. The Mount Polley geology consists of an alkaline laccolith that is intrusive into Nicola Group rocks. The geology features a late breccia phase and mineralization that is made up of magnetite with economic values of chalcopyrite and gold (i.e. mineable reserves of 48.8 million tonnes of 0.388% copper and 0.556 grams of gold).

A preliminary magnetometer survey (8 km) conducted over 6 of the 26 western Vital mineral claims this year indicates that a highly magnetic body of rock intrudes rocks of the Upper Triassic Nicola Group on the property, and that the perimeters of the body have not yet been fully defined. Some late faulting has also been inferred from the survey data.

A recommendation is made to complete the magnetometer survey over the Vital 1-8, 15 & 16 mineral claims with 200 metre grid spacing, and to conduct the magnetometer survey at 100 metre grid spacing over the inferred intrusive. A VLF-EM survey is also recommended for the same grid.

A short-hole reverse circulation percussion drilling program is recommended as a follow-up to the geophysical surveys to test the intrusive(?) and nearby rock at several sites for copper and gold values.

INTRODUCTION

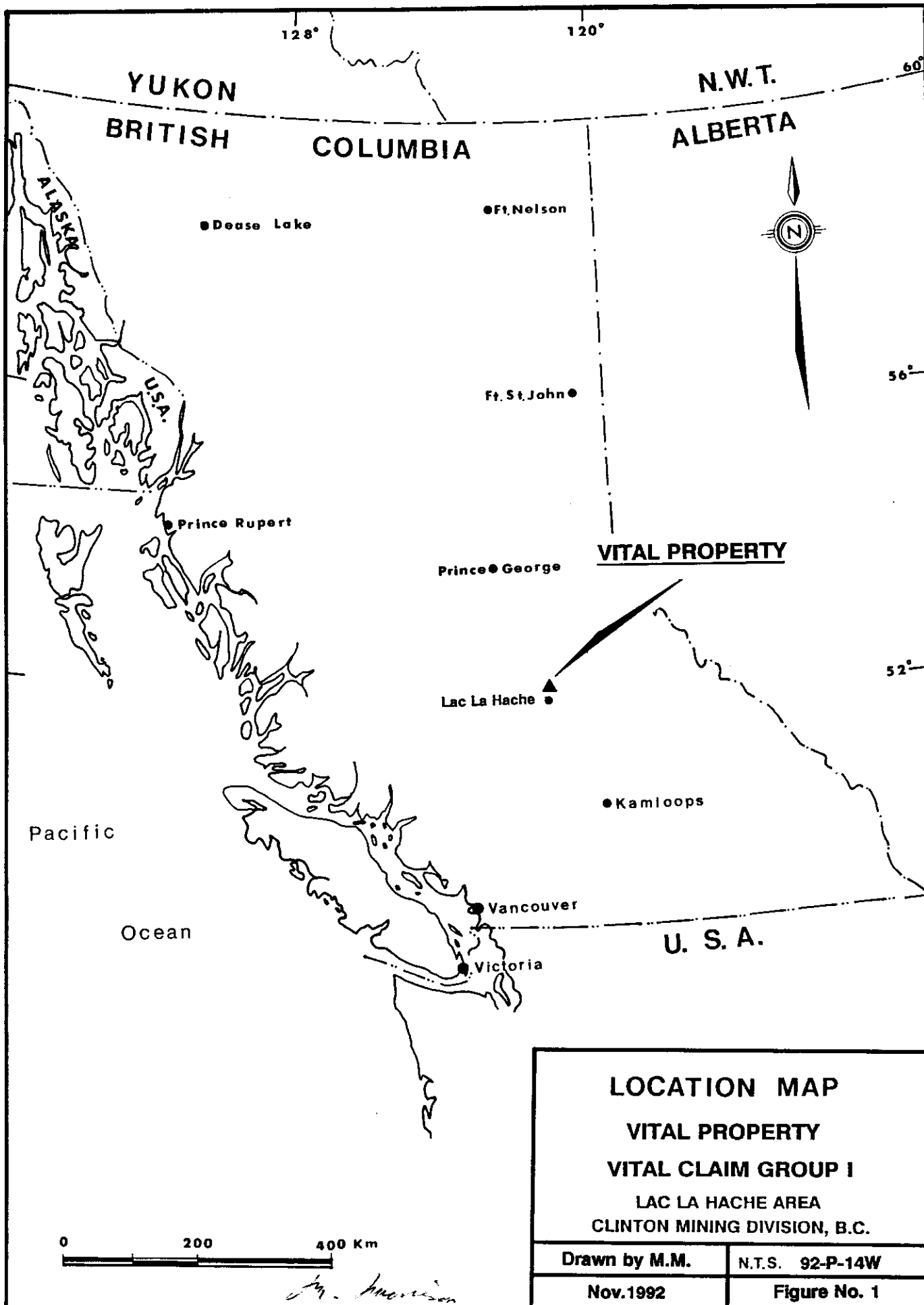
This report, written for government assessment work requirements, discusses the results of a preliminary ground magnetometer survey conducted over the Vital 9-14 mineral claims by the writer during August, 1992.

The Vital property is comprised of 56 contiguous 2-post mineral claims that were staked by the writer, M. Morrison, of Kelowna, B.C., during September, 1991. The mineral claims are located near Timothy Creek, 14 km northeast of Lac La Hache, B.C.

The property has been divided into a western "Vital Group" and an eastern "Vital Group II" for the purpose of conducting and filing assessment work. The Vital Group, with which this report is concerned, is comprised of the Vital 1-25 mineral claims which were staked to cover the northern half of an oval-shaped magnetic anomaly that is outlined on Government Aeromagnetic Map 5232G-Lac La Hache. The Vital Group II is comprised of the Vital 26-56 mineral claims which were staked to cover a 4 km segment of the Timothy Creek Fault outlined on government geology maps. The Vital Group II assessment work is described in a second report listed under the title References (see Morrison, 1992).

It is believed that the oval-shaped magnetic anomaly covered by the Vital Group could represent an alkaline body that is intrusive into the Upper Triassic Nicola Group rocks that are thought to underlie the property, and as such, could represent a potential for the existence of an "alkaline intrusive-hosted" copper-gold porphyry deposit on the Vital property. A similar geology occurs at the well-known Mount Polley deposit located 69 km to the northwest.

Continued . . .



INTRODUCTION - Continued

The Vital property is entirely mantled by glacial drift and till and the main purpose of this year's ground magnetometer survey was to accentuate some of the secondary magnetic features not defined by the airborne anomaly. First of all, it was hoped that the distinct boundaries of an alkaline intrusive might be outlined; second, that various phases of the intrusive might be distinguished; and third, that offsetting of the main intrusive boundaries of phase boundaries might be recognized as late fault structures cutting the intrusive body.

In this writer's opinion, the occurrence of late fault structures cutting a phased alkaline intrusive would constitute a very favorable drill target for copper-gold exploration.

The magnetic values obtained during this year's preliminary survey are displayed and contoured on Map V-92-1 accompanying this report.

LOCATION AND ACCESS

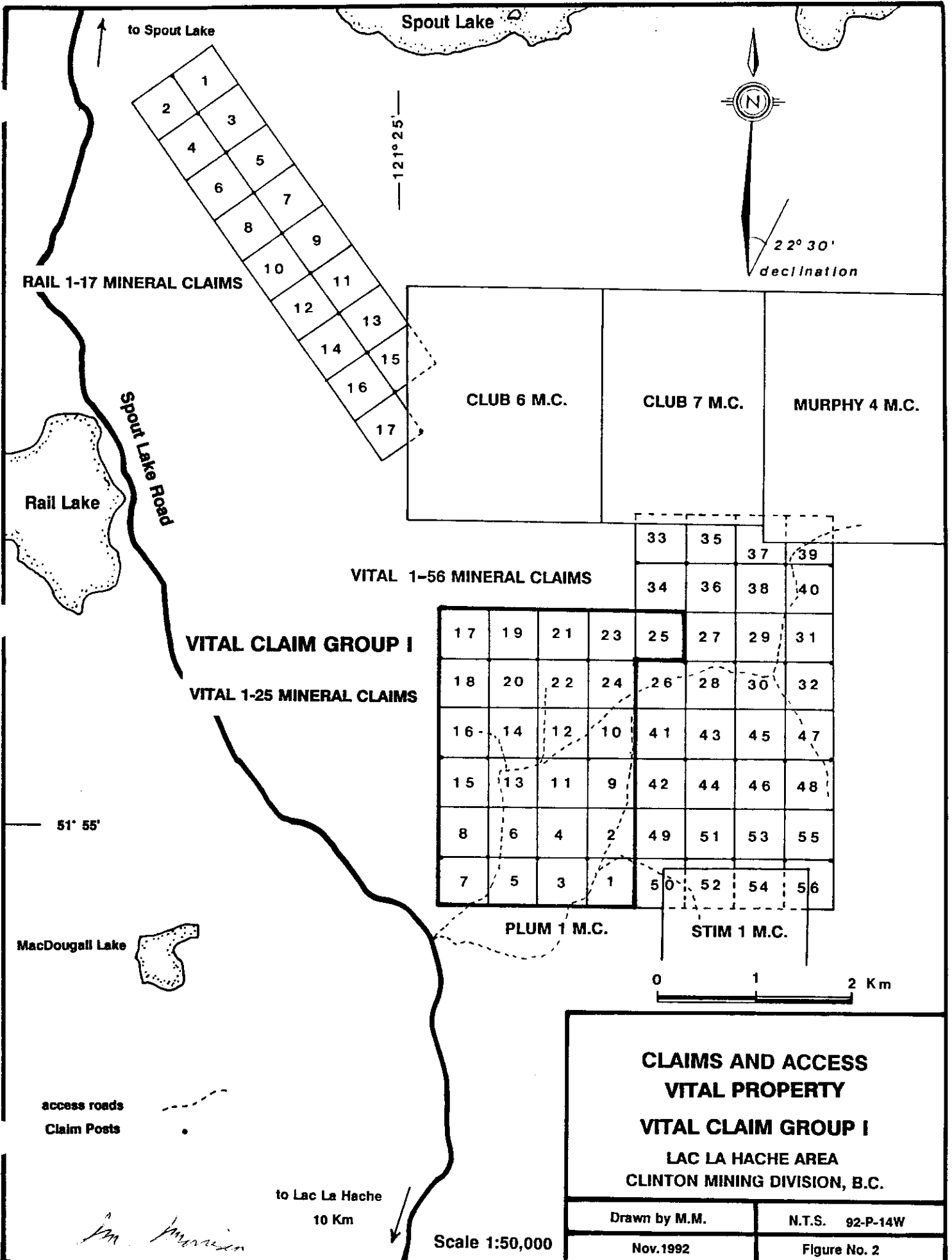
The Vital property is located at Timothy Creek, 5 km southeast of Rail Lake, or 14 km northeast of Lac La Hache, B.C. (Lat. $51^{\circ}55'$; Long. $121^{\circ}24'$; N.T.S. Map 92-P-14W).

Access to the property from Highway 97 at Lac La Hache is via the Spout Lake road (12.8 km) and the #151 logging road which transects the property as illustrated on Figure 2. Secondary dirt roads give access to most areas of the property.

PHYSICAL FEATURES AND CLIMATE

The Vital property covers an area of subdued relief at the 1140 metre elevation near the centre of the Fraser Plateau.

Continued . . .



**CLAIMS AND ACCESS
VITAL PROPERTY**

VITAL CLAIM GROUP I

LAC LA HACHE AREA
CLINTON MINING DIVISION, B.C.

Drawn by M.M.

N.T.S. 92-P-14W

Nov. 1992

Figure No. 2

PHYSICAL FEATURES AND CLIMATE - Continued

Timothy Creek, passing through the eastern half of the property, drains an upland region lying to the northeast of the property. Rail Creek, originating at Rail Lake, 5 km northwest of the property, flows through a shallow valley 2 km to the southwest of the property.

Much of the property is mantled by a clay till or glacial drift believed to range from 3 to 10 metres thick. Rock exposures are limited to a ridge which rises 80 metres above the surrounding countryside near the south central portion of the property.

Forest cover on the property is a mix of Lodgepole pine, poplar, spruce and Douglas fir. The forest cover reflects the drainage conditions on the property, with Lodgepole pine covering the well drained gravel drift covered regions, and spruce most abundant in low lying poorly drained regions. Mature poplar fringes the spruce forest, while large Douglas fir are most predominant on the rocky ridge that rises to the south from the south-central portion of the property.

A good deal of the pine forest on the property has been clear-cut logged in recent years.

The property is used as summer rangeland for livestock.

The Fraser Plateau has a moderate climate with summer highs seldom exceeding 30°C and winter lows usually not dropping below -30°C. Precipitation equals approximately 40 cm annually and one-third of it occurs in the form of snow. The snow begins to accumulate around the first of November and generally lingers in the forested areas until early April.

CLAIM STATUS

The Vital 1-25, 2-post mineral claims, making up the Vital Claim Group, were staked during September, 1991, by the writer, M. Morrison, of Kelowna, B.C. They were recorded in the writer's name in the Clinton Mining Division.

The following table lists the mineral claims comprising the Vital Claim Group:

<u>CLAIM NAME</u>	<u>UNITS</u>	<u>TENURE NO.</u>	<u>DATE OF RECORD</u>	<u>EXPIRY* DATE</u>
Vital 1	1	304245	September 6, 1991	September 6, 1993
Vital 2	1	304246	" "	" "
Vital 3	1	304247	" "	" "
Vital 4	1	304248	" "	" "
Vital 5	1	304249	" "	" "
Vital 6	1	304250	" "	" "
Vital 7	1	304251	" "	" "
Vital 8	1	304252	" "	" "
Vital 9	1	304253	September 7, 1991	September 7, 1993
Vital 10	1	304254	" "	" "
Vital 11	1	304255	" "	" "
Vital 12	1	304256	" "	" "
Vital 13	1	304257	" "	" "
Vital 14	1	304258	" "	" "
Vital 15	1	304259	" "	" "
Vital 16	1	304260	" "	" "
Vital 17	1	304871	September 20, 1991	September 20, 1993
Vital 18	1	304872	" "	" "
Vital 19	1	304873	" "	" "
Vital 20	1	304874	" "	" "
Vital 21	1	304875	" "	" "
Vital 22	1	304876	" "	" "
Vital 23	1	304877	September 21, 1991	September 21, 1993
Vital 24	1	304878	" "	" "
Vital 25	1	304879	" "	" "

HISTORY

The Vital property covers a portion of ground that was formerly covered by the WD mineral claims of Amax Exploration Inc. (1972-73) and the FF mineral claims of Anaconda American Brass Limited (1966-67). Both the WD and FF properties may have extended further south than the current Vital property.

Exploration work on the FF mineral claims by Anaconda included silt and soil geochemistry, geological mapping, and Induced Polarization (I.P.) surveying in 1966, and further mapping, geophysical surveying and trenching in 1967 (Lode Metals in British Columbia, 1966 & 67).

In 1972, Amax restaked some of the FF property with the WD 1-28 mineral claims and carried out geological, geochemical (soil) and geophysical (magnetometer and I.P.) surveys. Further I.P. surveys in 1973 were followed-up with the drilling of three percussion drill holes, totalling 275 metres, on the WD 5, 13, and 22 mineral claims (G.E.M., 1972&73). Apparently the results were negative and the ground was allowed to lapse.

Some of the old exploration access roads on the Vital property are still suitable for travel.

REGIONAL GEOLOGY

The regional geology of the Lac La Hache area is illustrated on the Bonaparte Lake, 1"=4 mile, map sheet (#1278A) of the Geological Survey of Canada (Campbell and Tipper, 1971). Much of the Fraser Plateau to the west and south of Lac La Hache is mantled with thick Tertiary lava flows of Miocene and/or Pliocene age. However, a wide window in the Tertiary volcanics east of Lac La Hache exposes a 16 by 40 km belt of Upper Triassic Nicola Group volcanics and sediments. The large Takomkane Batholith of Triassic or Jurassic age intrudes the Nicola Group rocks at Spout Lake, Mount Timothy, Timothy Lake and Spring Lake 17 km to the east of Lac La Hache. A 6.5 km wide dioritic and syenodioritic contact phase of the batholith extends 11 km from Mount Timothy to Spout Lake.

REGIONAL GEOLOGY - Continued

A late fault coincident with Timothy Creek cuts through the centre of the Nicola Group belt on the Bonaparte Map and crosses the eastern portion of the Vital property.

An outlier of the Skull Hill Formation of Eocene and(?) Oligocene underlies a ridge extending southward from the south-central portion of the Vital property on the southwest side of the Timothy Creek Fault.

An outcropping of coarse grained monzonite immediately south of the Vital property and west of the outlier suggests that much of the large oval-shaped magnetic anomaly that underlies the Vital property could represent an alkaline to basic body that is intrusive into the Nicola Group rock that is believed to underlie the property.

Shallow Pleistocene boulder-clay till blankets the western half of the Vital property, while glacial gravel ridges and terraced benches occupy the valley of Timothy Creek.

REGIONAL MINERALIZATION

Copper occurrences are common east of the Timothy Creek Fault within basaltic and andesitic volcanic rocks of the Nicola Group, particularly where they are intruded by micro-dioritic, syenodioritic or monzonitic intrusive bodies. Mineralization consists of chalcopyrite or bornite and ranges from low grade disseminations to higher grade veinlets associated with shearing. Skarn development has also been noted at intrusive-volcanic contacts on the old WC property of Amax Exploration Inc. located immediately south of Spout Lake. Chalcopyrite occurs with magnetite at the skarn occurrences.

Similar chalcopyrite-magnetite mineralization occurs at the contact of an alkalic intrusive complex emplaced into Nicola Group rocks on the old Peach Lake property of Amax Exploration Inc. located just 4 km east of Spout Lake.

REGIONAL MINERALIZATION - Continued

The WC and Peach Lake properties are located 6 km north and northeast of the Vital property respectively. Neither the WC nor the Peach Lake properties have yielded economic mineral deposits to date.

In recent years native copper, chalcopyrite and chalcocite mineralization has been reported by Liberty Gold Corp. from their Tim property located near Mount Timothy, 7 km southeast of the Vital property. In 1990, drill hole 90-1 on the Tim property returned 41 metres of 0.40% copper, including 7.0 metres of 2.05% copper, and drill hole 90-10 returned 51.8 metres of 0.25% copper, including 5.2 metres of 1.02% copper (Vancouver Stockwatch, October 17, 1991, p. 39).

During August of this year GWR Resources Inc. of Vancouver reported 14 metres of 0.22% copper from drill hole 92-2 on the Miracle-Murphy mineral claims located just 1-3 km northeast of the Vital property. Mineralization is reported to consist of native copper, chalcopyrite and bornite (Northern Miner, August 31, 1992, p. 7).

As early as 1968, A. Sutherland Brown noted the "marked similarity of the Spout Lake geology with that of the Cariboo Bell area (now called Mount Polley area) located 65 km northwest of Spout Lake (Report of the Minister of Mines, 1968, pp. 155-159).

The main feature of the Mount Polley geology is an alkaline multiphase laccolith that is intrusive into (and coeval with) Nicola Group rocks. The phases range from syenodiorites to

REGIONAL MINERALIZATION - Continued

to monzonites to pyroxenites, and include a very important semi-discordant breccia phase that has been mineralized with late magnetite and chalcopyrite. Native gold occurs within chalcopyrite grains. A pyrite "halo" extends east (or geologically above) 1000 metres from the chalcopyrite-magnetite mineralization.

The current mineable reserves at the Mount Polley property are stated at 48.8 million tonnes grading 0.388% copper and 0.556 grams of gold (Nikic, 1992) and the development of a mine at the property is planned.

PROPERTY GEOLOGY

The only outcrop that occurs on the Vital property is located on a ridge near the south-central portion of the property (on the Vital 1&50 mineral claims) and on a slope at the northeast corner of the property (on the Vital 39&40 mineral claims). In both cases the rock observed appears to be an andesite of the Skull Hill Formation - Eocene and(?) Oligocene. Elsewhere the property is covered by Pleistocene boulder-clay till and gravel drift.

The boulder-clay till covers much of the property southwest of Timothy Creek and probably ranges from depths of 3 to 10 metres. The broad valley of Timothy Creek has been in-filled with Pleistocene sand and gravels that have been shaped into glacial ridges and terraces - some rising to 20 metres above the valley. The thickness of glacial gravels increases to an unknown depth towards the northeast away from Timothy Creek.

A coarse grained monzonite intrudes Upper Triassic Nicola Group rock at road exposures immediately south of the Vital 3 mineral claim. The contact zone is made up of brecciated monzonite and hornfels clasts set in a matrix of secondary biotite.

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PROPERTY GEOLOGY - Continued

This year's magnetometer survey suggests that the monzonite outcrop is just a sample of a large alkalic to basic intrusive plug that intrudes much of the western half of the Vital property (see Ground Magnetometer Survey - Discussion).

The high clay content of the till on the western half of the property and the deposits of thick glacial gravels on the eastern half of the property are believed to have hampered previous soil geochemical surveys in the area.

GROUND MAGNETOMETER SURVEY

Grid

A decision was made to measure out a 1400 metre Baseline sub-parallel to the Location Line of the Vital 9-14 mineral claims in a westerly direction (270 degrees azimuth) after reviewing the government aeromagnetic map for the region. Eight flagged grid lines at 200 metre intervals were then run perpendicular from the Baseline to the boundaries of the Rail 9-14 mineral claims as illustrated on Map V-92-1. Stations were marked at each 25 metre measure along the grid lines. A topolite belt chain and a Silva Ranger compass were used to establish the 8 km of grid line which was laid-out in conjunction with the ground magnetometer survey.

The deflection of the western half of the Baseline away from the mineral claim Location Line as illustrated on Map V-92-1 was checked several times in the field, and it was determined that the Location Line maintained a true bearing of 270 degrees azimuth, and that the Baseline did deflect south.

GROUND MAGNETOMETER SURVEY - Continued

Program

A Scintrex MF-2 Portable Fluxgate Magnetometer was used to survey the property. The magnetometer with a resolution of 5 gammas was considered suitable for the survey.

Baseline station values were established by making a double traverse along the baseline on a day of slight diurnal variation. The baseline stations were then corrected for diurnal variations, and the corrected values were used during the survey.

Looped traverses were made along pairs of grid lines, starting and ending at baseline stations (usually within 1 to 2 hours), and corrections were made to all values for diurnal variations. During this year's survey, intermediate readings were taken midway between all flagged grid stations in addition to the grid station readings to increase the detail of the survey. All of the corrected readings are plotted on the contoured magnetometer map, V-92-1, accompanying this report. A constant value of 50,000 gammas has been subtracted from all of the values on the map for ease of plotting and clarity.

Results

Note: The following discussion refers to the magnetic values plotted on Map V-92-1. As mentioned earlier, a constant value of 50,000 gammas has been subtracted from all field readings for easier plotting on the map.

The magnetic character of the data illustrated on Map V-92-1 can be clearly divided into two domains by the 1000 gamma contour line that crosses the survey area from grid 18+00N on L21W to 21+75N on L35W. Northeast of the 1000 gamma contour line there is low magnetic relief (-80 to 1000 gammas), while southwest of the same contour line the magnetic relief is high (1000 to 9900 gammas).

Continued . . .

GROUND MAGNETOMETER SURVEY - Continued

Results - Continued

Although there is no outcrop in the survey area it seems clear from the magnetic data that a country rock of low magnetic content (probably Nicola Group sedimentary rock) is intruded by a body of highly magnetic rock, and that the intrusive contact is roughly coincident with the 1000 gamma contour.

The area of low magnetic relief north of the 1000 gamma contour line is so lacking in character that nothing can be said about the Nicola Group rocks with any confidence. However, the magnetic data southwest of the 1000 contour line has many second-order features that could be interpreted as representing phases within a large multiphase intrusive.

First of all, a zone of high magnetics occurs near the northern edge of the intrusive(?) with values up to 9600 gammas between 17+50N and 18+75N on L25W, up to 7900 gammas between 18+00N and 19+50N on L29W, and up to 9900 gammas north of the Baseline on L35W. The zone of high magnetics could represent a pyroxenitic or gabbroic phase of the intrusive.

Secondly, a zone of moderately high magnetics occurs 150 to 200 metres south of the above mentioned zone. It has values as high as 6050 gammas at 16+75N on L27W, and as high as 5930 gammas at 16+25N on L29W. This zone may also be represented by the 4800 gamma reading at 15+25N on L33W and by the 4940 gamma reading at 14+85N on L35W. The zone of moderately high magnetics could represent a gabbroic phase of the intrusive.

Elsewhere southwest of the 1000 gamma contour line magnetic values of 1500 to 4800 gammas possibly represent monzonitic or syenodioritic phases of the intrusive.

Continued . . .

GROUND MAGNETOMETER SURVEY - Continued

Results - Continued

A magnetic "low" (1250 to 2500 gammas) which crosses the southern portion of the survey area from 15+00N to 16+00N on grid lines 23W to 29W could represent a phase of the intrusive with low magnetite content or could simply represent a portion of the property with heavy till cover.

The general 110 degree attitude of the northern contact of the intrusive, as represented by the 1000 gamma contour line, is offset approximately 180 metres to the south, west of L33W. It appears that a fault is coincident with L33W and that the zone represented by high magnetic values (pyroxenite phase of the intrusive as mentioned previously) and the zone represented by moderately high magnetic values (gabbroic phase of the intrusive, also mentioned previously) are each offset 180 metres to the south, west of L33W.

Pockets of low magnetic values (less than 2500 gammas) occur along L33W south of the Baseline. The low values could either represent a leaching of magnetite from rocks near the fault zone, or an in-filling of glacial drift into a narrow pre-glacial valley coincident with the fault.

Summary of Results

The magnetic data indicates that a basic to ultrabasic body intrudes sedimentary rocks of the Nicola Group on the Vital 9-14 mineral claims. There are magnetic zones of variable intensity that could represent phases within the intrusive body. One phase represented could be a pyroxenite and another could be a gabbro. The bulk of the intrusive is thought to be of monzonitic or sy-enodioritic composition.

Continued . . .

GROUND MAGNETOMETER SURVEY - Continued

Summary of Results - Continued

The intrusive appears to be cut by a late fault coincident with L33W and offset approximately 180 metres to the south, west of the fault.

Discussion

The intrusive on the Vital property could represent a multi-phased body similar to the one which occurs at Mount Polley (see Regional Mineralization), and as such, could have a late component mineralized with copper and gold.

The Vital property warrants further exploration as a copper and gold prospect and should be tested with additional geophysical studies. The groundmagnetometer survey at 200 metre grid spacing should be expanded south of the present coverage area to include the Rail 1-8 mineral claims. Intermediate grid lines at 100 metre spacing should then be established over that portion of the property believed to be underlain by intrusive rock in an attempt to delineate separate phases of the intrusive and any late faulting that might cut the intrusive. Once the grid lines are established a VLF-EM survey could be conducted over the entire grid in an attempt to confirm fault zones delineated by the magnetometer survey.

After all of the geophysical data is analyzed a low cost program of short-hole reverse circulation drilling should be conducted to sample bedrock for copper or gold values from several sites across the property.

CONCLUSIONS AND RECOMMENDATIONS

The preliminary ground magnetometer survey conducted over the Vital 9-14 mineral claims in 1992 outlined an area of strong magnetics on the Vital 9, 11 & 13 mineral claims. The survey also indicated that the zone of strong magnetics extends west, east and south from the current survey area.

The zone of strong magnetics is interpreted to represent a basic to ultrabasic zoned body that is intrusive into Upper Triassic Nicola Group sediments and volcanics(?).

The intrusive is believed to be cut by a fault on the western side of the survey (coincident with L33W) that has an apparent left-lateral displacement of approximately 180 metres.

The "model type" for exploration on the Vital property is the well-known Mount Polley deposit as mentioned earlier within this report (see Regional Mineralization). The key features are an alkaline intrusive with late breccia and mineralizing phases. The minerals at Mount Polley include magnetite with economic values of chalcopyrite and native gold.

The magnetics on the Vital property suggest that a possible multiphased intrusion does occur on the property and that it is cut by late faulting.

It is recommended that the magnetometer survey be expanded to the Vital 14 & 15 mineral claims to the west and to the Vital 1-8 mineral claims to the south of the current survey area at the same grid spacing (200 metre line intervals) as was used this year. Intermediate grid lines of 100 metre spacing should then be established over areas of the property believed to be underlain by the intrusive. A VLF-EM survey should be conducted over

Continued . . .

CONCLUSIONS AND RECOMMENDATIONS - Continued

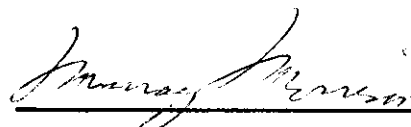
the same grid in an attempt to confirm fault zones identified during the magnetometer survey.

Soil geochemistry is not recommended on the property due to the high clay content of the extensive till on the western side of the property and the deep glacial gravels on the eastern side of the property.

Once the geophysical results have been analyzed for the entire survey area, a low cost short-hole reverse circulation percussion drill program is recommended to test several sites on or near the intrusive to obtain bedrock samples for copper and gold analysis.

The property is readily accessible and very amenable to testing with a reverse circulation percussion drill.

November 15, 1992
Kelowna, B.C.



Murray Morrison - B.Sc.

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1992: Mount Polley Summary Report, Imperial Metals Corporation, public company report for the Cordilleran Round-up.


APPENDIX A

STATEMENT OF QUALIFICATIONS

I, Murray Morrison, of the City of Kelowna, in the Province of British Columbia, do hereby state that:

1. I graduated from the University of British Columbia in 1969 with a B.Sc. Degree in Geology.
2. I have been working in all phases of mining exploration in Canada for the past twenty-two years.
3. During the past twenty-two years, I have intermittently held responsible positions as a geologist with various mineral exploration companies in Canada.
4. I have conducted several geological, geochemical, and geophysical surveys on mineral properties in Southern British Columbia during the past twenty-two years.
5. I conducted the magnetometer survey outlined in this report.
6. I own a 100% interest in the Vital 1-56 mineral claims.

November 15, 1992
Kelowna, B.C.



Murray Morrison - B.Sc.

APPENDIX B

STATEMENT OF EXPENDITURES - ON THE VITAL CLAIM GROUP

Statement of Expenditures in connection with a Ground Magnetometer Survey carried out on the Vital Claim Group, located 14 km north-east of Lac La Hache, B.C. (N.T.S. Map 92-P-14W) for the year 1992.

MAGNETOMETER SURVEY (8.0 km)


M. Morrison, geologist	5 days @ \$250.00/day	\$ 1250.
Truck, 4x4 (including gaso- line and insurance)	5 days @ \$ 75.00/day	375.
Meals and Lodging	5 days @ \$ 58.00/day	290.
Flagging and belt chain thread		30.
Magnetometer rental	5 days @ \$ 25.00/day	125.
	sub-total:	<u>\$ 2070.</u>

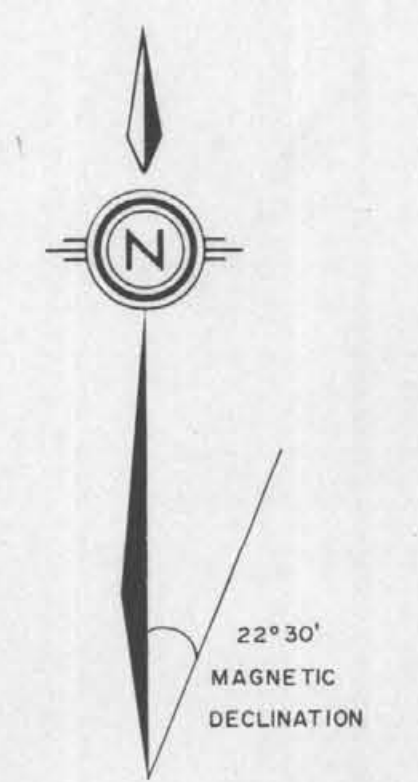
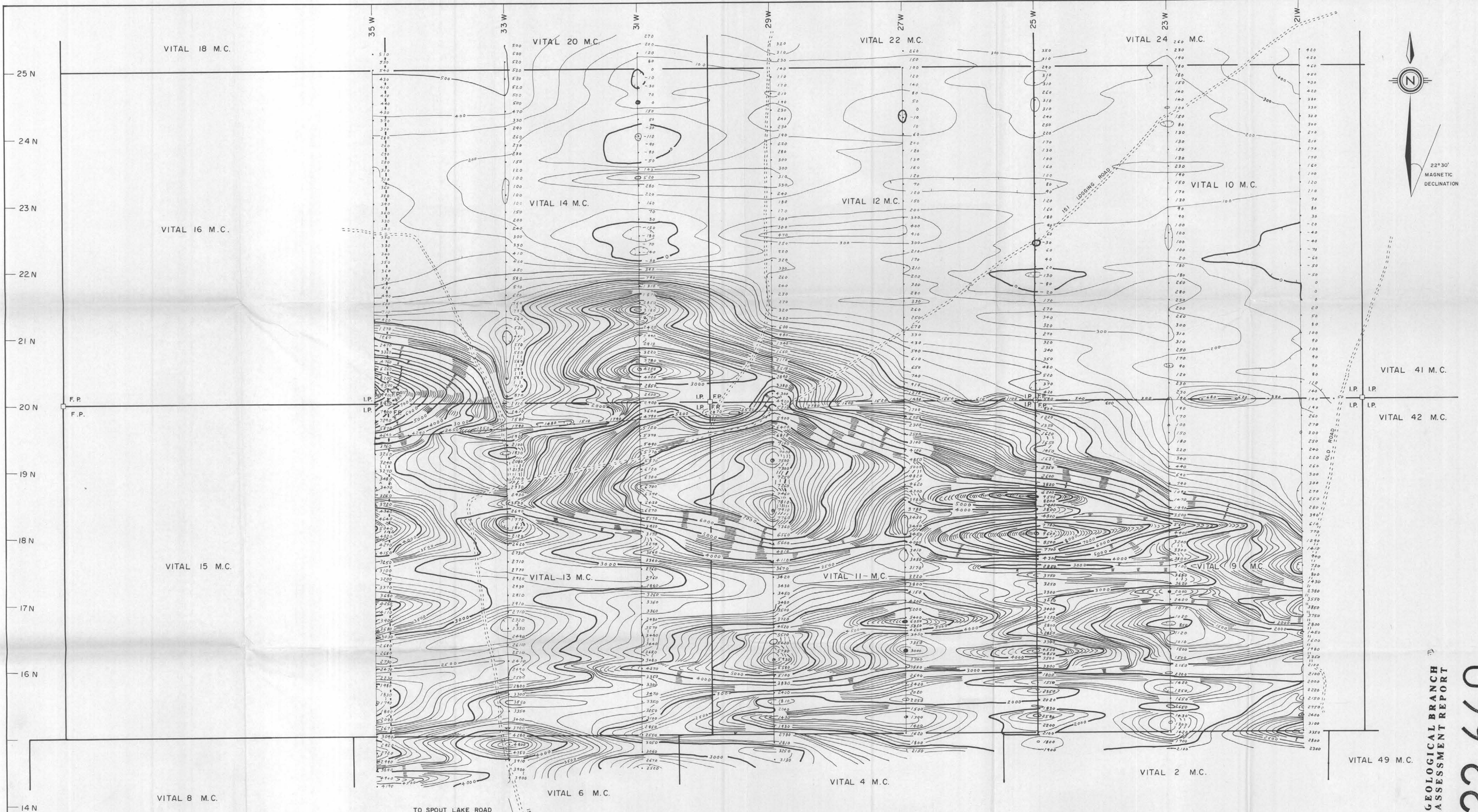
REPORT PREPARATION COSTS

M. Morrison, geologist	1½ days @ \$250.00/day	\$ 375.
(correcting magnetometer readings for diurnal varia- tion; plotting and contouring magnetometer readings; analyzing material and writing report).		
Drafting		38.
Typing		53.
Copying reports		20.
	sub-total:	<u>\$ 486.</u>
	<u>GRAND TOTAL</u>	<u>\$ 2556.</u>

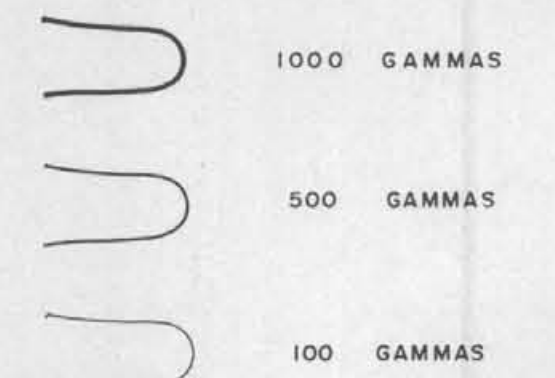
I hereby certify that the preceding statement is a true statement of monies expended in connection with the Ground Magnetometer Survey carried out August 18-22, 1992.

November 15, 1992

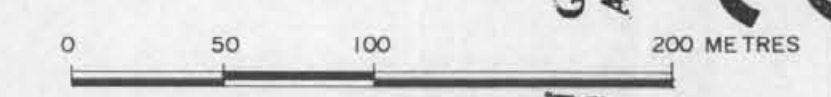

Murray Morrison - Geologist



ISOMAGNETIC CONTOURS (ADD 50,000 GAMMAS FOR VERTICAL FIELD)



INSTRUMENT - SCINTREX MF-2-100 PORTABLE FLUXGATE MAGNETOMETER
CLAIM POSTS WERE TIED IN TO GRID WITH COMPASS AND BELT CHAIN



TO ACCOMPANY A GEOPHYSICAL REPORT BY M. MORRISON

VITAL CLAIM GROUP LAC LA HACHE AREA, CLINTON MINING DIVISION, B.C.		
GROUND MAGNETOMETER SURVEY VITAL 9-14 MINERAL CLAIMS		
SURVEY BY: M.M.	NOVEMBER 1992	N.T.S. 92-P-14 W
DRAWN BY: M.M.	SCALE 1:2500	MAP V-92-1

GEOLOGICAL BRANCH
ASSESSMENT REPORT
22,660