

1987 GEOLOGICAL ASSESSMENT

5788

of

CAVE 1, HORNE 5, HORNE 6 CLAIMS
(Cave Group, Cathedral Property)

Nanaimo Mining Division 18"
NTS 92F/7E 49°20'N Lat., 124°43'W Long.
36"

for

Operator: NEXUS RESOURCE CORPORATION

February 28, 1987

G.R. Cope, B.Sc. & T.G. Hawkins, P.Geol.



16197

87-538-16197



1987 GEOLOGICAL ASSESSMENT

of

CAVE 1, HORNE 5, HORNE 6 CLAIMS
(Cave Group, Cathedral Property)

Nanaimo Mining Division 10"
NTS 92F/7E 49°20'N Lat., 124°43'W Long.

36"
for

Operator: NEXUS RESOURCE CORPORATION

February 28, 1987

G.R. Cope, B.Sc. & T.G. Hawkins, P.Geol.

Owner: Reward Resources Ltd.

FILMED

| | | |
|---|---|-----------------|
| C. DRILLING | (Details in report submitted as per section 8 of regulations.) (The itemized cost statement must be part of the report.) | COST |
| D. GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL | | |
| (Details in report submitted as per section 5, 6, or 7 of regulations.) (The itemized cost statement must be part of the report.) (State type of work in space below) | | |
| Geological, Geochemical | | 5,300.00 |
| | | |
| TOTAL OF C AND D | | 5,300.00 |

Where the above statement requires a technical report as per section C of the Mineral Act Regulations, the author of the report shall complete both copies of the ASSESSMENT REPORT TITLE PAGE AND SUMMARY form and include the completed forms in the assessment reports.

Who was the operator (provided the financing)?

Name **Nexus Resource Corporation**
 Address **#3270 - 666 Burrard St.**
Vancouver, B.C. V6C 2Z9

| | | |
|---|---------|---------------|
| Portable Assessment Credits (PAC) Withdrawal Request | | AMOUNT |
| Amount to be withdrawn from owner(s) or operator(s) account(s): | | |
| Name of Owner/Operator | | |
| [May be no more than 30 per cent of value of the approved work submitted as assessment work in C and (or) D.] | 1. | |
| | 2. | |
| | 3. | |
| TOTAL WITHDRAWAL | | |
| TOTAL OF C AND (OR) D PLUS PAC WITHDRAWAL | | |

I wish to apply \$ **5,300.00** of this work to the claims listed below.

(State number of years to be applied to each claim, its month of record, and identify each claim by name and record number.)

| | | | | | |
|----------------|----------------|-----------------|---------------|-----------------------|----------------|
| Cave 1 | 2383(5) | 20 units | (1986) | 1 year @ \$100 | \$2,000 |
| Horne 5 | 2434(7) | 18 units | (1986) | 1 year @ \$100 | \$1,800 |
| Horne 6 | 2435(7) | 15 units | (1986) | 1 year @ \$100 | \$1,500 |
| | | 53 units | | | |

Value of work to be credited to portable assessment credit (PAC) account(s).
 [May only be credited from the approved value of C and (or) D not applied to claims.]

| | | |
|------------------------|---------|---------------|
| Name | | AMOUNT |
| Name of owner/operator | 1. | |
| | 2. | |
| | 3. | |

I, the undersigned Free Miner, hereby acknowledge and understand that it is an offence to knowingly make a false statement or provide false information under the *Mineral Act*. I further acknowledge and understand that if the statements made, or information given, in this Statement of Exploration and Development are found to be false and the exploration and development has not been performed, as alleged in this Statement of Exploration and Development, then the work reported on this statement will be cancelled and the subject mineral claim(s) may, as a result, forfeit to and vest back to the Province.


 Signature of Applicant



(i)

SUMMARY

The Nexus Resource Corporation Cave Group (Cathedral Property) is entirely underlain by Paleozoic Sicker Group rocks of the Nitinat, Myra and Buttle Lake Formations. A major northwesterly striking fault zone runs through the property, with associated local shear deformation and listwanite alteration. The Sicker Group is a known host of economic polymetallic volcanogenic massive sulphide deposits.

Mineralization on the property is primarily represented by trace disseminated pyrite with local concentrations to 6% in association with listwanite alteration and silicification. Rock samples returned geochemical values of up to: 241 ppm Cu, 1426 ppm Mn, 110 ppm As (sample 506); 118 ppm Zn (sample 678); and 168 ppm Cr, 3480 ppm Ba (sample 1352).

A phase I exploration program consisting of detailed geological mapping and rock sampling, soil sampling and VLF-EM surveys is recommended, especially near major fault structures and in areas of listwanite alteration.



TABLE OF CONTENTS

| | Page |
|--|------|
| SUMMARY | (i) |
| 1.0 INTRODUCTION | 2 |
| 2.0 PROPERTY LOCATION, ACCESS, TITLE | 3 |
| 3.0 PREVIOUS WORK | 5 |
| 4.0 REGIONAL GEOLOGY | 7 |
| 4.1 Sicker Group | 7 |
| 4.2 Vancouver Group | 9 |
| 4.3 Bonanza Group | 9 |
| 4.4 Nanaimo Group | 10 |
| 4.5 Intrusive Rocks | 11 |
| 4.6 Structure | 11 |
| 4.7 Economic Setting | 12 |
| 5.0 1987 ASSESSMENT WORK | 17 |
| 5.1 Introduction | 17 |
| 5.2 Geology, Mineralization and Geochemistry | 17 |
| 5.3 Silt Sampling | 19 |
| 6.0 RECOMMENDED WORK PROGRAM | 20 |
| 6.1 Plan | 20 |
| 6.2 Budget | 21 |
| 6.3 Schedule | 22 |
| 7.0 CONCLUSIONS | 24 |
| 8.0 RECOMMENDATIONS | 25 |
| CERTIFICATES - G.R. Cope, B.Sc. | 26 |
| - T.G. Hawkins, P.Geol. | 27 |
| REFERENCES | 28 |

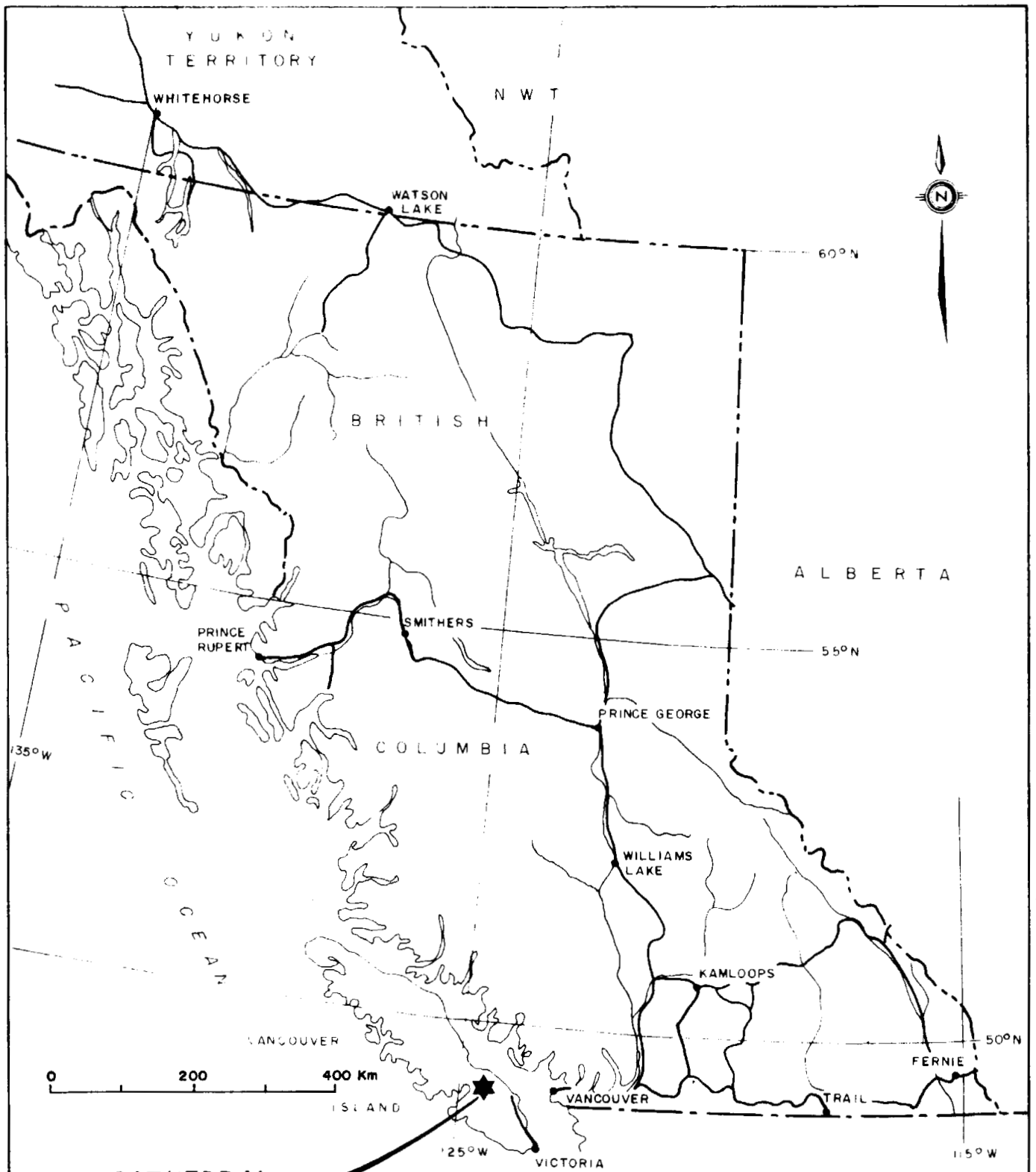


Appendices

- Appendix I - List of Personnel and Statement of Expenditures
- Appendix II - Rock Sample Descriptions and Lithogeochemistry Results
- Appendix IIIa - Certificates of Analysis
- Appendix IIIb - Analytical Techniques
- Appendix IV - Conversion Factors for Metric Units
- Appendix V - Copies of O/C 549 and O/C 394

List of Illustrations

| | Page |
|---|-----------|
| Figure 1 - General Location Map | 1 |
| Figure 2 - Claim Map | 4 |
| Figure 3 - Regional Geology Map | 8 |
| Figure 4 - Mineral Occurrences Location Map | 16 |
| Figure 5 - Property Plan, Geology and Rock Sample Sites | In Pocket |
| Table I - Phase I Project Schedule | 23 |



**CATHEDRAL
PROPERTY**

NEXUS RESOURCE CORPORATION

**GENERAL LOCATION MAP
CATHEDRAL PROPERTY
NANAIMO MINING DIVISION**

| | | | |
|------------|-------------|-------|------------|
| Project No | V 238 | By | T. N. |
| Scale | 1 8 000 000 | Drawn | J. S. |
| Drawing No | 1 | Date | FEB. 1987. |



MPH Consulting Limited



1.0 INTRODUCTION

This report on the Cave 1, Horne 5 and Horne 6 claims (Cathedral Property, Cave Group) has been prepared by MPH Consulting Limited upon the request of Nexus Resource Corporation. It represents a compilation of fieldwork carried out on the property in fulfillment of 1986 assessment work requirements. Work carried out includes reconnaissance geological mapping (1:10,000 scale), rock sampling, stream sediment sampling and prospecting

Included in this report is a description of property geology with conclusions and a recommended exploration program designed to explore the economic potential of the property. A summary of regional geology, mining exploration activity and a discussion of the economic setting of the property are also included.



2.0 LOCATION, ACCESS, TITLE

The Cave 1, Horne 5 and Horne 6 claims (Cathedral Property, Cave Group) are located on the south side of Horne Lake, 10 km northeast of Port Alberni, on NTS mapsheet 92 F/7, centred at about 49°20'N latitude, 124°43'W longitude in the Nanaimo Mining Division of British Columbia (Figures 1 and 2).

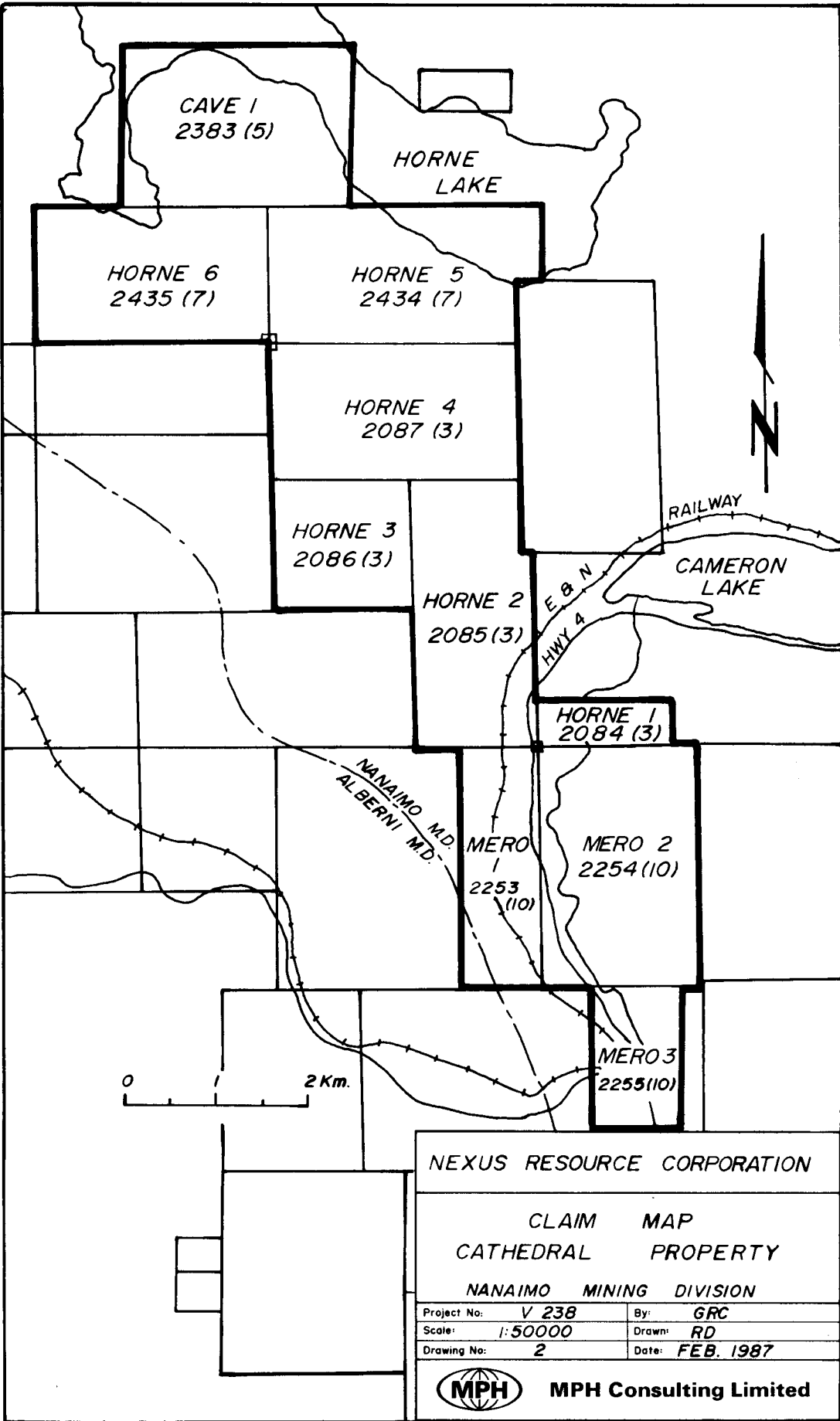
Access to the property is via MacMillan Bloedel's Horne Lake Road which turns north from Highway 4, 3 km east of Port Alberni. This road is regularly serviced up to the turnoff to the B.C. Tel microwave tower. Beyond this turnoff, old logging railway grades form the roadbed and are subject to frequent washouts necessitating the use of four wheel drive.

The Cave Group (grouped on May 26, 1987) consists of 3 mineral claims totalling 53 units as summarized below:

| Claim | Record No. | Units | Anniversary Date | Year Registered |
|---------|------------|-------|------------------|-----------------|
| Cave 1 | 2383(5) | 20 | May 26, 1988 | 1986 |
| Horne 5 | 2434(7) | 18 | July 17, 1988 | 1986 |
| Horne 6 | 2435(7) | 15 | July 17, 1988 | 1986 |

The Claims are owned by Reward Resources Ltd. and Nexus Resource Corporation is the operator.

The right-of way for the proposed Vancouver Island Gas Pipeline crosses the northwest corner of the Cathedral Property, imposing certain conditions on the claim owners, but not disallowing exploration and mining activities. Copies of O/C 549 and O/C 394 are included in Appendix V.



NEXUS RESOURCE CORPORATION

CLAIM MAP
CATHEDRAL PROPERTY

NANAIMO MINING DIVISION

| | | | |
|-------------|---------|--------|-----------|
| Project No: | V 238 | By: | GRC |
| Scale: | 1:50000 | Drawn: | RD |
| Drawing No: | 2 | Date: | FEB. 1987 |



MPH Consulting Limited



3.0 PREVIOUS WORK

Government geological work in the area includes mapping by C.H. Clapp (1912 and 1914), J.E. Muller and D.J.T. Carson (1969), J.E. Muller (1977 and 1980), and A. Sutherland Brown (1986).

A regional aeromagnetic survey flown by Hunting Survey Corp. Ltd. in 1962 included the area of the Cathedral Property.

From 1963 to 1966, Gunnex Ltd. carried out a regional mapping program over a large portion of the E&N Land Grant, with limited prospecting and silt sampling. They compiled a list of all known mineral occurrences in the area and visited many of them for rock sampling and more detailed mapping. A detailed geological mapping program (1:1320 scale) was carried out in the areas immediately to the west of the Cathedral Property over the three iron formation occurrences in that area.

Asarco Exploration Company of Canada Limited carried out a soil geochemistry survey over the Cave 1 claim (then known as the Sb claim) in 1982. A number of weak to moderate anomalies were outlined and further exploration of the area was recommended.

In June 1984, a limited amount of rock sampling on the Mero 1-3 ground (then known as the Comedy Group) was carried out during staking (Neale and Hawkins, 1984). A band of pyritic interbedded tuff, chert, and argillite within unmineralized but strongly carbonatized amygdaloidal basalt (andesite?) was located on the E&N Railway tracks. A sample of argillite returned anomalous values in Ag (1.2 pm) and Zn (540 ppm). The Comedy Group claims lapsed in July 1985 and were re-staked as the Mero 1-3 claims in September 1985.



6.

In 1986, MPH Consulting Limited carried out geological mapping and sampling on the Horne 1-4 claims (Hawkins 1986). Litho-geochemical values of up to 0.6 ppm Ag, 210 ppm As, 132 ppm Cu, and 100 ppm Zn were obtained in various grab samples, and silt sampling returned an anomalous gold value of 40 ppb and 300 ppm As in a background of less than 10 ppm.



4.0 REGIONAL GEOLOGY

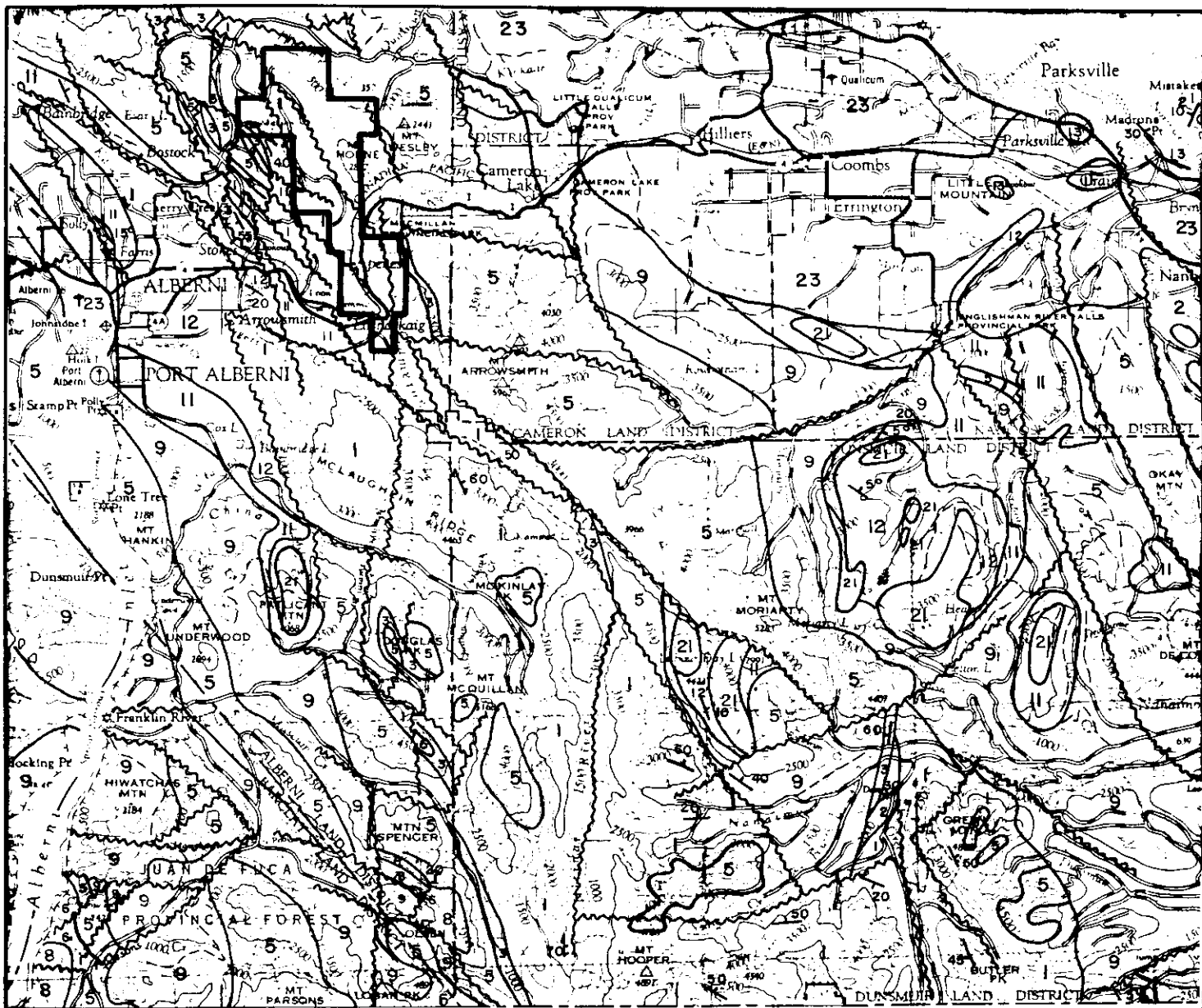
The predominant rock units in the Port Alberni-Cameron River area are the Upper Paleozoic Sicker Group rocks and the Lower Mesozoic Vancouver Group rocks. Both are eugeosynclinal sequences of volcanic and sedimentary rocks. Jurassic Bonanza Group volcanics may be present in moderate amounts in the southern part of the area. Lesser amounts of the Upper Cretaceous Nanaimo Group and of intrusive rocks of various ages also occur (Figure 3). A complete description of regional geology may be found in Getsinger (1987).

4.1 Sicker Group

The oldest rocks in the area are those of the Sicker Group. Muller (1980) proposed the following subdivisions of the Group from oldest to youngest: Nitinat Formation, Myra Formation, Sediment-Sill Unit, and Buttle Lake Formation.

The **Nitinat Formation** consists predominantly of mafic volcanic rocks, most commonly flow-breccias or agglomerates, including some massive flows, and rare pillow basalts. Locally, medium grained, generally massive basaltic tuff is interbedded with the flows.

The **Myra Formation** unconformably overlies the Nitinat Formation. In the Nitinat-Cameron River area, the Myra Formation is made up of a lower massive to widely banded basaltic tuff and breccia unit, a middle thinly banded albite-trachyte tuff and argillite unit, and an upper thick bedded, medium grained albite-trachyte tuff and breccia unit.



LEGEND

QUATERNARY

23 Glacial and alluvial deposits

TERTIARY

21 Hornblende quartz diorite, leucoquartz monzonite, porphyritic dacite, breccia.

UPPER CRETACEOUS NANAIMO GROUP

13 EXTENSION-PROTECTION FM.: sandstone, conglomerate, shale, coal.

12 HASLAM FM.: shale, siltstone, fine sandstone.

11 COMOX FM.: sandstone, conglomerate, shale, coal.

MIDDLE TO UPPER JURASSIC

9 ISLAND INTRUSIONS: biotite-hornblende granodiorite, quartz diorite.

LOWER JURASSIC

8 BONANZA GROUP: andesitic to latitic breccia, tuff, and lava; minor greywacke, argillite, and siltstone.

UPPER TRIASSIC VANCOUVER GROUP

6 QUATSINO FM.: massive to thick bedded limestone, minor thin bedded limestone.

5 KARMUTSEN FM.: pillow-basalt and pillow breccia, massive basalt flows; minor tuff, volcanic breccia; Jasperoid tuff, breccia and conglomerate at base.

TRIASSIC OR PERMIAN

4 Gabbro, peridotite diabase.

LOWER PERMIAN TO PENNSYLVANIAN SICKER GROUP

3 BUTTLE LAKE FM.: limestone, chert.

2 MYRA FM.: lower unit; argillite, greywacke, conglomerate, tuff, minor limestone. Upper unit; rhyodacite to rhyolite tuff, lapilli tuff, breccia lesser siliceous siltstone, argillite, quartz porphyry and mafic flows.

1 NITINAT FM.: basaltic uraltite porphyry, agglomerate, pillow lava; greenschist.

0 5 10 km



NEXUS RESOURCE CORPORATION

**REGIONAL GEOLOGY MAP
CATHEDRAL PROPERTY**

NANAIMO MINING DIVISION

| | | | |
|-------------|-------------|--------|------------|
| Project No: | V 238 | By: | T. N. |
| Scale: | 1 : 250,000 | Drawn: | J. S. |
| Drawing No: | 3 | Date: | FEB. 1987. |



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The **Sediment-Sill** Unit contains thinly bedded to massive argillite, siltstone, and chert with interlayered sills of diabase. It is transitional between the Myra and Buttle Lake Formations. It has not been mapped within the area of this report.

The **Buttle Lake Formation** consists of a basal green and maroon tuff and/or breccia, overlain by coarse grained crinoidal and calcarenitic limestone, fine grained limestone with chert nodules, and some dolomitic limestone. Lesser amounts of argillite, siltstone, greywacke, or chert may also be present.

4.2 Vancouver Group

The **Karmutsen Formation** volcanic rocks unconformably to paraconformably overlie the Buttle Lake Formation limestone, forming the base of the Vancouver Group. This is the thickest and most widely distributed sequence of rocks on Vancouver Island. The formation, which is well exposed southeast of Port Alberni, consists mainly of dark grey to black, or dark green, tholeiitic pillow basalt, massive basalt, and pillow breccia. Flows are commonly aphanitic, feldspar porphyritic, and amygdaloidal. Pillow lavas generally occur near the base of the section.

4.3 Bonanza Group

The **Bonanza Group** stratigraphy varies considerably from place to place, as it represents parts of several different eruptive centres of a volcanic arc. Basaltic, rhyolitic, and lesser



andesitic and dacitic lava, tuff, and breccia with intercalated beds and sequences of marine argillite and greywacke make up the Bonanza Group. In the area south of Mount Spencer and south of Corrigan Creek, it consists of light coloured andesite to latite breccia, tuff, and flows with minor greywacke, argillite, and siltstone. The Bonanza volcanics are considered to be extrusive equivalents of the Island Intrusions and to be of Early Jurassic age.

4.4 Nanaimo Group

Upper Cretaceous Nanaimo Group sedimentary rocks are scattered throughout the area. Extensive exposures occur near Port Alberni, Patlicant Mountain and south and northwest of Mount Moriarty. The formations present comprise the basal portions of the Nanaimo Group.

The **Comox Formation** consists mainly of quartzofeldspathic, cross-bedded beach facies sandstone and lesser conglomerate. Numerous intercalations of carbonaceous and fossiliferous shale and coal are characteristic.

The **Haslam Formation** is a near shore littoral depositional facies unit characterized by thickly bedded fossiliferous sandy shale, siltstone and shaly sandstone.

Interbedded coarse clastic conglomerate, pebbly sandstone and arkosic sandstone of the **Extension-Protection Formation** are beach and deltaic sands. Minor shale and coal are reported.

4.5 Intrusive Rocks

Gabbro, Peridotite, Diabase. Mafic and ultramafic rocks of Triassic or Permian age are scattered throughout the area. A large band is exposed approximately 8 km north of Port Alberni. Although mapped as intrusive, some of these rocks may be basal flow units of the Karmutsen Formation.

Island Intrusions. Exposures consisting mainly of quartz diorite and lesser biotite-hornblende granodiorite occur throughout the area and are assigned an age of Middle to Upper Jurassic.

Tertiary (Catface or Sooke) Intrusions. Sills and stocks of mainly hornblende-quartz diorite and dacitic hornblende-feldspar porphyry plus lesser leucocratic quartz monzonite may intrude Nanaimo Group sedimentary rocks and Sicker Group rocks.

4.6 Structure

The Buttle Lake Arch, Cowichan-Horne Lake Arch and Nanoose Uplift are north-northwesterly trending axial uplifts and are believed to be among the oldest structural elements in south central Vancouver Island. Folding and uplift occurred before the late Cretaceous, and possibly before the Mesozoic (Muller and Carson, 1969), and more tilting, folding, and uplift occurred after the late Cretaceous. Sicker Group volcanic and sedimentary rocks occur at the cores of these uplifts.



4.7 Economic Setting

The Sicker Group, and to a lesser extent, the Vancouver Group of volcanic rocks, have been explored intermittently since the 1890's for gold and base metal mineralization.

Until recently, deposits of copper and gold-silver in quartz veins and shear zones hosted by mafic to intermediate volcanic rocks and base metal plus gold-silver skarn deposits were the most widely recognized economic and subeconomic metal concentrations in the Port Alberni area. Placer mining for gold was carried out during the 1940's in various localities, especially in the China, Mineral and Corrigan Creeks areas.

At Buttle Lake, approximately 70 km northwest of Port Alberni, the Myra Formation hosts Westmin Resources' volcanogenic massive sulphide deposit. Initially discovered in 1917, it was not recognized as being a volcanogenic deposit until the late 1960's. Ore minerals including sphalerite, chalcopyrite, galena, tetrahedrite-tennantite, minor bornite and covellite are hosted by pyritic, rhyolitic to rhyodacitic volcanic and pyroclastic rocks of the Myra Formation.

Proven reserves of the Lynx (open pit), Price, and Myra deposits are 926,600 t grading 1% Cu, 0.9% Pb, 7.4% Zn, 2.06 g/t Au (0.06 oz/ton), 89.1 g/t Ag (2.6 oz/ton) (1983). Published reserves of the H-W zone are 13,901,000 t averaging 2.2% Cu, 5.3% Zn, 0.3% Pb, 2.40 g/t Au (0.07 oz/ton) and 37.7 g/t Ag (1.1 oz/ton) (Walker, 1983). In the 3 years 1980 to 1982, there were 811,987 t of ore milled producing 7,306,880 kg Cu, 43,706,118 kg Zn, 6,455,040 kg Pb, 1,740,000 g Au (56,000 oz), 78,630,000 g Ag (2,528,000 oz) and 58,500 kg Cd.



Another volcanogenic massive sulphide deposit in the Sicker Group is the Twin J Mine near Duncan on Mount Sicker, about 80 km southeast of the Cathedral Property. Two parallel orebodies, 46 m apart, each containing pyrite, chalcopyrite, sphalerite and minor galena in a barite quartz-calcite gangue and chalcopyrite in quartz, occur in schist believed to have been derived from acidic volcanics (Myra Formation).

Total production from 1898 to 1964 was 277,400 tonnes producing 1,383,803 g Au (44,491 oz), 29,066,440 g Ag (934,522 oz), 9,549,590 kg Cu and 20,803,750 kg Zn with at least 164,590 kg Pb and 4.5 kg Cd.

A significant recent development in the Sicker Group is the delineation of a large volcanogenic massive sulphide zone on the Lara property, 71 km southeast of the Cathedral Property. On the Lara property, (now Abermin Corporation) has completed at least 69 diamond drill holes on geochemical and geophysical anomalies. In January 1985, an intersection of 8.0 m (true thickness) of mineralization grading 3.4 g/t Au (0.1 oz/ton), 67.5 g/t Ag (1.97 oz/ton), 3.01% Zn, 0.68% Cu and 0.45% Pb was announced. This was the discovery hole of the Coronation Zone. By January 1986, the Coronation Zone had been outlined by drilling for a length of 500 m and to depths varying from 75 to 250 m. The width averages 6.15 m. The western 400 m of the zone averages 1.75 g/t Au (0.051 oz/ton), 38.4 g/t Ag (1.12 oz/ton), 1.98% Zn, 0.44% Cu, and 0.36% Pb; while the eastern, high-grade 120 m section averages 2.98 g/t Au (0.087 oz/ton), 69.9 g/t Ag (2.04 oz/ton), 3.8% Zn, 0.67% Cu, and 0.79% Pb. The Coronation Extension is located about 275 m southeast of the Coronation Zone. It has been explored over a strike length of 80 m and to depths of 150 m



and averages about 3 m in width. Several rich intersections have been drilled, including 3.7 m of 7.3 g/t Au (0.213 oz/ton), 2.6 g/t Ag (8.6 oz/ton), 9.22% Zn, 1.16% Cu, and 2.53% Pb. Both zones are open at depth and the Coronation Zone is open along strike. A feasibility study on the establishment of a 300-500 tonne per day milling operation is planned for early 1987.

The mineralized zones are stratiform and are hosted by porphyritic rhyolite of the Sicker Group. Metal ratios of the Coronation zone are similar to those of the Buttle Lake mines (Westmin Resources Ltd.). The Twin J Mine is located 9 km southeast of the Lara property (on strike) and is geologically similar.

Five past producing mines occur in the Port Alberni area. The Thistle Mine produced 85,844 g Au (2,760 oz), 65,938 g Ag (2,120 oz) and 309,090 kg Cu from 6,280 tonnes (6,920 tons) of ore. It was originally considered to be a skarn deposit (Stevenson, 1945; Carson, 1968). Disseminated and massive sulphide mineralization occurs as lenses and bands within pyritic quartz-sericite schist and at the contact of quartz-sericite schist with chloritized mafic volcanic rocks (Sicker Group). Disseminated sulphide mineralization occurs throughout the host rocks. The deposit is now believed to be of syngenetic-volcanogenic origin. Recent work by Westmin Resources Ltd. (1983, 1984) has located 16 significant Cu and/or Au occurrences over a strike length of 4.6 km grading up to 16.8 g/t Au (0.49 oz/ton) over 2.1 m. Nine diamond drill holes (1984) intersected numerous anomalous concentrations of Au, although no ore grade Au-Cu was intersected over mining widths. The Thistle Mine is located 20 km south of the Cathedral Property. A drilling project is currently underway on the Thistle property.

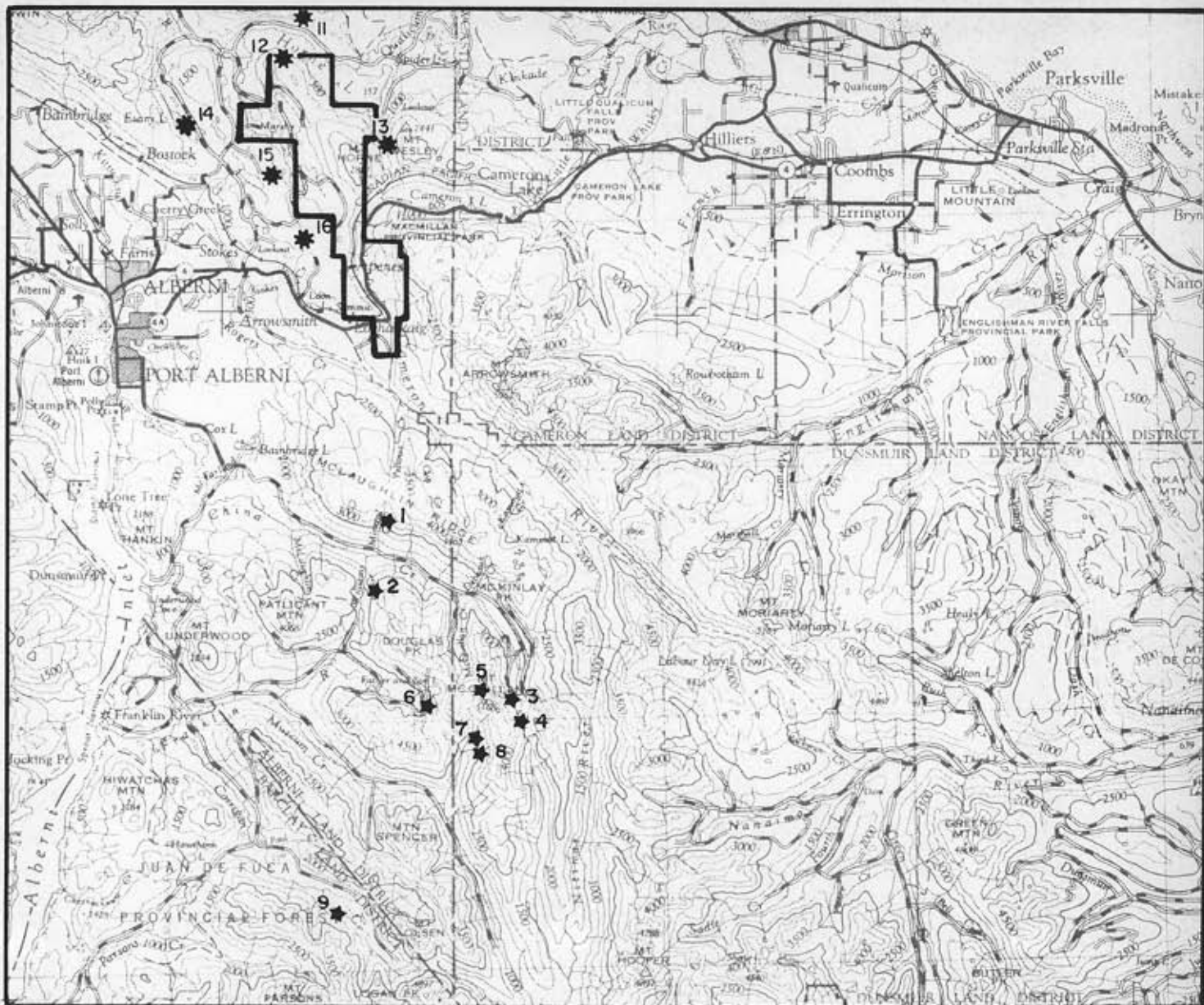


The Havilah Mine (950 t produced 8056 g Au (259 oz), 43,670 g Ag (1404 oz)) and the Vancouver Island Gold Mine (438 t produced 11,944 g Au (384 oz), 1,617 g Ag (52 oz)) are quartz vein deposits hosted by andesite and andesite tuff of the Sicker Group.

The Black Panther Mine is a quartz vein deposit hosted by a shear zone in Sicker Group andesite and Island Intrusions diorite located 23 km south-southeast of the Cathedral Property. Production of 1715 t of ore yielded 15,830 g Au (509 oz), 29,640 g Ag (953 oz), 5587 kg Pb and at least 2030 kg Zn and 226 kg Cu.

The other past producer in the area is the 3-W Mine (Corrigan Creek), which consists of gold-bearing quartz veins in Island Intrusions diorite and granodiorite. Production amounted to 105 t of ore grading 137 g/t Au (4.0 oz/ton), 147.4 g/t Ag (4.3 oz/ton), 0.23% Cu, and 1.1% Pb. The 3-W Mine is located 28 km south of the Cathedral Property.

Significant mineral occurrences of the Port Alberni area are shown in Figure 4. Details of individual occurrences may be found in Getsinger (1987).



GOLD DEPOSITS AND OCCURRENCES

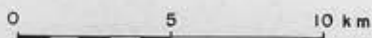
1. Vancouver Island Gold Mine
2. Regina
3. Golden Eagle
4. B & K
5. Havilah
6. Thistle
7. Black Panther
8. Black Lion
9. 3 - W *

OTHER OCCURRENCES

11. PD
12. Silver Bell
13. Mt. Wesley Copper
14. Esary Lake
15. Lacy Lake
16. Cameron Lake



* not described in Mineral Occurrences Section.



NEXUS RESOURCE CORPORATION

MINERAL OCCURRENCE
LOCATION MAP
CATHEDRAL PROPERTY

| | | | |
|-------------|-------------|--------|-----------|
| Project No: | V 238 | By: | T.N. |
| Scale: | 1 : 250,000 | Drawn: | J.S. |
| Drawing No: | 4 | Date: | FEB. 1987 |



MPH Consulting Limited



5.0 1987 ASSESSMENT WORK

5.1 Introduction

This section on property geology is based on field work performed by MPH Consulting Limited during the period August 7, 1986 to February 28, 1987. Work completed includes prospecting, reconnaissance geological mapping (1:10,000 scale) and rock and silt sampling. A custom topographic map was prepared by the McElhanney Group Ltd. for use as a basemap in the present and future exploration programs. Six (6) rock samples and two (2) silt samples were collected and subsequently analyzed geochemically for gold and for 30 elements by ICP. Property plan, geology and sample sites are shown in Figure 5. Rock sample descriptions and lithogeochemical results are found in Appendix II. Complete certificates of analyses and analytical techniques are located in Appendices IIIa and IIIb respectively.

5.2 Geology, Mineralization and Geochemistry

The Cave Group is entirely underlain by Paleozoic Sicker Group rocks. The dominant lithologies include Nitinat Formation flows, flow breccia, tuffs, pyroclastics and augite-bearing agglomerates, and Myra Formation felsic to intermediate volcanics and volcanoclastic sedimentary rocks and cherty tuff, with minor amounts of Buttle Lake Formation limestone and cherty volcanoclastics.

Unit 1, Nitinat Formation, is the dominant unit exposed in outcrop. Typically it is agglomeratic and composed of up to 80%



clasts in a fine tuffaceous matrix. Clasts are up to 15 cm long and contain 20-30%, 2-3 mm augite phenocrysts. Fine-grained, thin-bedded tuff and lithic lapilli tuff are exposed locally. Amygdaloidal basalt flows and flow breccia have limited exposure across the property.

Unit 2, Myra Formation, is primarily represented by thick-bedded to laminated tuffs which grade locally into cherty tuff and argillite. Knots of jasper up to 15 cm long were noted within the cherty tuff at the northern tip of the peninsula in the Cave 1 claim.

Exposure in the areas that have been mapped as Myra Formation includes outcrops of listwanite alteration in possible mafic volcanic host rocks. Listwanite alteration comprises sericite and quartz carbonate alteration along a very strong northwest-southeast structural trend. These highly sheared areas are also characterized by fine kink folding and layering that may be parallel to original bedding, although the schistosity may be due locally to northwesterly shearing. The best exposures of listwanite alteration are found along the access road to Cave 1 and at the northern tip of the peninsula.

According to government mapping, Unit 3, Buttle Lake Formation limestone and cherty volcanoclastic rocks are exposed in the southeast corner of Horne 5. This area, however, was not visited during the present assessment.

Mineralization on the property is primarily represented by disseminated pyrite. The pyrite occurs in trace amounts as a replacement of mafic minerals throughout Units 1 and 2.



Concentrations to 2% were noted in association with listwanite alteration. Sample 506, listwanitic basalt with 2% pyrite and trace chalcopyrite, returned elevated lithochemical values of 110 ppm As, 241 ppm Cu and 1426 ppm Mn. Sample 678, silicified basalt with 5% pyrite/pyrrhotite, returned the highest zinc analysis at 118 ppm Zn with 80 ppm Ba. A float sample of quartz vein with 2-6% disseminated pyrite returned an extremely anomalous barium analysis of 3480 ppm Ba (sample 1352).

5.3 Silt Sampling

Two silt samples were collected south of the Horne 6 Claim. However, the exact location of the samples is uncertain and should be investigated in the course of further exploration. It is possible that the samples were collected from streams draining the Horne 6 claim.

Sample HC-S1 returned geochemical analyses of 2.0 ppm Ag, 240 ppm Ba, 1.5 ppm Cd, 485 ppm Cr, 62 ppm Pb and 148 ppm Zn.

Sample HC-S2 returned geochemical analyses of 160 ppb Au, 0.8 ppm Ag, 310 ppm Ba, 1.0 ppm Cd, 514 ppm Cr and 2760 ppm Mn.

6.0 RECOMMENDED WORK PROGRAM

6.1 Plan

Assessment work on the Cave Group has included prospecting, reconnaissance geological mapping and minor road rehabilitation.

Phase I exploration of the Cave Group is to consist of detailed geological mapping (1:2500 scale) and rock sampling, soil sampling and VLF-EM surveys.

All rock and soil samples are to be analysed for 30 elements by ICP as well as for gold by AAS. Thin section studies and whole rock analyses of selected rock samples will be carried out to aid in determining mineralogic composition, metamorphism and alteration.

Soil and VLF-EM surveys are to be performed along grid lines established over the northwest portion of the peninsula in the Cave 1 claim. This will provide coverage of both the regional shear zone with associated listwanite alteration and the Silver Bell Antimony Showing. Geological mapping is to cover the entire property.

If warranted by Phase I results, Phase II will consist of detailed geological mapping and induced polarization surveys over potential drill targets. The following detailed cost estimate and program schedule are for Phase I work. Phase II cost estimate and program schedule are contingent upon Phase I results.



6.2 Budget

Phase I

Mob/Demob

| | | | |
|---------------|--------------------|------------|----------|
| Personnel | 16 mandays @ \$200 | \$3,200 | |
| Accommodation | 16 mandays @ 55 | 880 | |
| Equipment | 2 days @ 35 | 70 | |
| Vehicles | 4 truckdays @ 110 | <u>440</u> | \$ 4,590 |

Field Work

Personnel:

| | | | |
|------------------------|---------------------|--------------|--------|
| - Project Manager | 1 - 15 days @ \$375 | \$5,625 | |
| - Senior Consultant | 1 - 2 days @ 600 | 1,200 | |
| - Consulting Geologist | 1 - 2 days @ 500 | 1,000 | |
| - Project Coordinator | 1 - 1 day @ 350 | 350 | |
| - Junior Geophysicist | 1 - 6 days @ 250 | 1,500 | |
| - Field Assistants | 3 - 5 days @ 150 | <u>2,250</u> | 11,925 |

Equipment Rental:

| | | | |
|-------------|---------------------|------------|-------|
| - 4WD Truck | 1 - 15 days @ \$110 | \$1,650 | |
| - 4WD Truck | 1 - 6 days @ 110 | 660 | |
| - VLF-EM | 1 - 6 days @ 35 | <u>210</u> | 2,520 |

Accommodation:

| | | | |
|--------------------|--|--|-------|
| 41 mandays @ \$ 55 | | | 2,255 |
|--------------------|--|--|-------|

Analyses:

| | | | |
|------------------|---------------|------------|-------|
| - Rock (Au, 1CP) | 100 @ \$12.80 | \$1,280 | |
| - Rock (Whole) | 10 @ 32.00 | 320 | |
| - Soil (Au, 1CP) | 550 @ 11.00 | 6,050 | |
| - Thin Sections | 10 @ 55.00 | <u>550</u> | 8,200 |

Miscellaneous:

2,000

Field Work Subtotal

31,490

**Report****Personnel:**

| | | | |
|----------------------------------|------------------------|------------|--------------------------|
| - Project Manager | 1 - 5 days @ \$375 | \$1,875 | |
| - Senior Consultant | 1 - 1 day @ 600 | 600 | |
| - Consulting Geologist | 1 - 1 day @ 500 | 500 | |
| - Consulting Geophysicist | 1 - 1 day @ 500 | <u>500</u> | 3,475 |
| Drafting | 50 hours @ \$20 | | 1,000 |
| Materials/typing/copying | | | <u>1,000</u> |
| | Report Subtotal | | 5,475 |
| Administration @ 15% of \$12,200 | | | 1,830 |
| Contingency @ 15% of \$38,795 | | | <u>5,819</u> |
| | TOTAL COST, say | | \$44,600 ===== |

6.3 Schedule

The following table presents estimated time requirements to complete Phase I exploration.



Table I, Phase I Schedule

| Week | 1 | 2 | 3 | 4 |
|------------|---|---|---|---|
| Mob/Demob | — | | | |
| Geology | — | — | — | |
| Soils | — | | | |
| VLF-EM | — | — | | |
| Analyses | — | — | — | |
| Consulting | — | — | — | |
| Report | | | — | — |



7.0 CONCLUSIONS

1. The Cave Group is entirely underlain by Paleozoic Sicker Group volcanic and volcanoclastic sedimentary rocks.
2. Exploration targets on the property include structurally controlled vein systems with associated listwanite alteration and volcanogenic massive sulphide deposits for which the Myra Formation is a known host.
3. Rock samples returned the following elevated lithochemical values: 241 ppm Cu, 1426 ppm Mn, 110 ppm As (sample 506); 118 ppm Zn (sample 678); and 168 ppm Cr, 3480 ppm Ba (sample 1352).
4. A silt sample collected outside of the claim boundary returned a gold analysis of 160 ppm Au (sample HC-S2) and should be accurately located in the interest of determining the source of the gold.
5. Further exploration of the Cave Group is warranted, especially in areas of listwanite alteration.

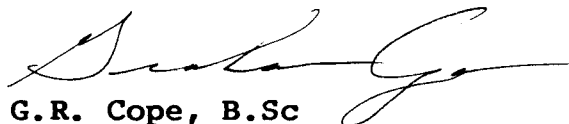


8.0 RECOMMENDATIONS

1. It is recommended that Phase I exploration of the Cave Group, consisting of detailed geological mapping and rock sampling, soil sampling and VLF-EM surveys, be carried out in conjunction with Phase IV exploration of the remainder of the Cathedral Property.
2. It is recommended that Phase I exploration be concentrated in areas of listwanite alteration in the interest of locating associated structurally controlled vein systems.
3. It is recommended that silt samples HC-S1 and HC-S2 be accurately located in the interest of determining the source of anomalous geochemical values.
4. It is recommended that the Silver Bell antimony showing/adit be located and sampled.
5. Phase I exploration is recommended at an estimated cost of \$44,600.

Respectfully submitted,

MPH Consulting Limited


G.R. Cope, B.Sc


T.G. Hawkins, P.Geol.


February 28, 1987



CERTIFICATE

I, G.R. Cope, do hereby certify:

1. That I am a graduate of the University of British Columbia (B.Sc., 1985).
2. That I have practised within the geological profession for the past three years.
3. That the opinions, conclusions, and recommendations contained herein are based on field work carried out on the property by myself and others from August 7, 1986 to February 28, 1987.
4. That I own no direct, indirect, or contingent interest in the area, the subject property, or shares or securities of Nexus Resource Corporation or associated companies.


G.R. Cope, B.Sc.

Vancouver, B.C.
February 28, 1987

**CERTIFICATE**

I, T.E. Gregory Hawkins, do hereby certify:

1. That I am Consulting Geologist with business offices at 2406 - 555 West Hastings Street, Vancouver, B.C. V6B 4N5.
2. That I am a graduate in geology of the University of Alberta, Edmonton (B.Sc. 1973), and of McGill University, Montreal, (M.Sc. 1979).
3. That I have practised within the geological profession for the past sixteen years.
4. That I am a Fellow of the Geological Association of Canada and a Professional Geologist registered in the Province of alberta.
5. That the opinions, conclusions and recommendations contained herein are based on field work carried out on the property between August 7, 1986 and February 28, 1987, and supervised by me.


T.E. Gregory Hawkins, P.Geol.

Vancouver, B.C.
February 28, 1987

REFERENCES

- Benvenuto, G. 1984. Thistle Mine - Summary of 1983, 1984 Exploration; for Westmin Resources Ltd.
- Brandon, M.T, Orchard, M.J., Parrish, R.R., Sutherland Brown, A., and Yorath, C.J. 1986. Fossil ages and isotopic dates from the Paleozoic Sicker Group and associated intrusive rocks, Vancouver Island, British Columbia; in Current Research, Part A, Geological Survey of Canada, Paper 86-1A, p 683-696.
- Carson, D.J.T. 1968. Metallogenic Study of Vancouver Island with Emphasis on the Relationships of Mineral Deposits to Plutonic Rocks; Ph.D. Thesis, Carleton University.
- Clapp, C.H. 1912. Southern Vancouver Island; G.S.C. Memoir 13.
1914. Geology of the Nanaimo Map Area; G.S.C. Memoir 51.
- Cowley, P. 1979. Correlation of Rhodonite Deposits on Vancouver Island and Saltspring Island, British Columbia; UBC B.Sc. Thesis, April 1979
- Getsinger, J.S. 1987: Geological Assessment of Mero 1, 2, 3 Claims (Cathedral Property), for Nexus Resource Corporation, January 14, 1987.
- Gunnex Ltd. 1966. Mineral Occurrences (Mines, Surface Workings, and Showings), E&N Land Grant, Vancouver Island, B.C.; internal company report.

- Hawkins, T.G. 1986. Reconnaissance Geological Mapping, Rock Sampling, and Silt Sampling, Cathedral Property, for Reward Resources Ltd., June 12, 1986.
- Isachsen, C. 1984. Geology, Geochemistry, and Geochronology of the Westcoast Crystalline Complex and Related Rocks, Vancouver Island, British Columbia; UBC M.Sc. Thesis, September 1984
- Muller, J.E. and D.J.T. Carson. 1969. Geology and Mineral Deposits of Alberni Map-Area, British Columbia (92F); GSC Paper 68-50.
- Muller, J.E. 1977. Geology of Vancouver Island (West Half); GSC Open file 463.
- Muller, J.E. 1980a. The Paleozoic Sicker Group of Vancouver Island, British Columbia; GSC Paper 79-30.
- Muller, J.E. 1980b. Geology, Victoria Map Area, Vancouver Island and Gulf Islands, British Columbia; GSC Open File Map 701.
- Muller, J.E. 1981. Insular and Pacific Belts; GAC-MAC-CGU, Annual Meeting, 1981, Calgary. Field Guides to Geology and Mineral Deposits, pp 316- 334.
- Muller, J.E. 1982. Geology of Nitinat Lake Map Area, British Columbia; GSC Open File 821.



Neale, T. and T.G. Hawkins. 1984. Preliminary Assessment and Recommended Work Program, Comedy Group, for Sunfield Management Ltd., July 25, 1984.

Stevenson, J.S. 1945. Geology and Ore Deposits of the China Creek Area, Vancouver Island, British Columbia; Annual Report of the Minister of Mines of the Province of British Columbia, 1944, pp A143-A161.

Sutherland Brown, A. 1986. Sicker Group in the Northwest Cowichan Uplift. G.S.C. Open File Map 862.

Walker, R.R. 1983. Ore Deposits at the Myra Falls Minesite; Western Miner, May 1983, pp 22-25.

Appendix I

LIST OF PERSONNEL

and

STATEMENT OF EXPENDITURES

LIST OF PERSONNEL AND STATEMENT OF EXPENDITURES

Personnel:

| | | | |
|--------------------------|----------------|-----------|------------|
| - G.R. Cope, B.Sc. | 5 days @ \$350 | \$1,750 | |
| - T. Naciuk, B.Sc. | 3 days @ 250 | 750 | |
| - H. Chaudet, Fld. Asst. | 3 days @ 150 | 450 | |
| - J.S. Getsinger, Ph.D. | 1/2 hr @ 50 | 25 | |
| - B. Thomas, B.Sc. | 2 hrs @ 35 | <u>70</u> | \$3,045.00 |

Support Costs:

| | | | |
|-----------------|-------------------|------------|--------|
| - Accommodation | 9 mandays @ \$ 55 | \$ 450 | |
| - 4x4 Truck | 3 days @ 90 | <u>270</u> | 765.00 |

Disbursements:

| | | | |
|-----------------------------|--|----------|--|
| - Analyses | | | |
| 6 rocks (Au, 1CP) @ \$12.20 | | \$ 73.20 | |
| 2 silts (Au, 1CP) @ \$10.60 | | 21.20 | |

| | |
|------------------------|--------|
| Custom Topographic Map | 518.63 |
|------------------------|--------|

| | |
|--------------------------------|--------|
| Report Costs (typing, copying) | 600.00 |
|--------------------------------|--------|

| | | |
|---------------|---------------|----------|
| Miscellaneous | <u>100.00</u> | 1,313.03 |
|---------------|---------------|----------|

| | | |
|------------------------------------|--|---------------|
| Administration @ 15% of \$1,313.03 | | <u>196.95</u> |
|------------------------------------|--|---------------|

\$5,319.98
=====

| | |
|---------------|------------|
| Work Required | \$5,300.00 |
| To P.A.C. | \$ 19.98 |

Appendix II

ROCK SAMPLE DESCRIPTIONS

and

LITHOGEOCHEMICAL RESULTS

| Sample No. | | Au ppb | As ppm | Ba ppm | Cr ppm | Other ppm |
|------------|---|-----------|-----------|-----------|-----------|--------------|
| 1352 | Location: 20 m N of Horne 6, 5W Corner Post Rock Type: Quartz Vein. Grab from float. Massive quartz- vein, locally vuggy. 2-6% dissemi- nated pyrite. | 5 | <5 | 3480 | 168 | |
| 1353 | Location: 40 m N on Road from Horne 6, 5W Corner Post Rock Type: Altered Basalt (?). Grab from outcrop. White to light grey, silicified with finely dis- seminated pyrite. | 5 | <5 | 70 | 46 | |

Appendix IIIa

CERTIFICATES OF ANALYSIS

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BURNABY, B.C. V5B 3N1
TEL : (604) 299 - 6910

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TO : MPH CONSULTING LTD.
301-409 GRANVILLE STREET
VANCOUVER B.C.
PROJECT: V 238
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86387
INVOICE#: 6691
DATE ENTERED: 86-09-02
FILE NAME: MPH86387
PAGE # : 1

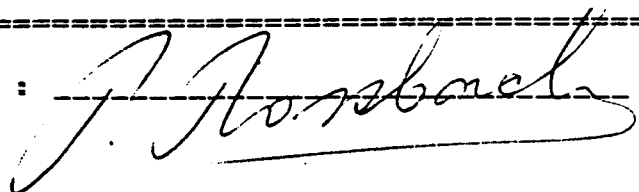
| PRE FIX | SAMPLE NAME | PPB Au | oz/t Au |
|------------|-------------|-----------|------------|
|------------|-------------|-----------|------------|

T

506

5

CERTIFIED BY :



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PROJECT: V 238
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86387
INVOICE#: 6691
DATE ENTERED: 86-09-02
FILE NAME: MPH86387
PAGE # : 2

| PRE FIX | SAMPLE NAME | PPB Au | oz/t Au |
|------------|-------------|-----------|------------|
|------------|-------------|-----------|------------|

678

5

CERTIFIED BY :

J. Rossbacher

ROSSBACHER LABORATORY LTD.

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TO : MPH CONSULTING LTD.
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VANCOUVER B.C.
PROJECT: V 238
TYPE OF ANALYSIS: GEOCHEMICAL

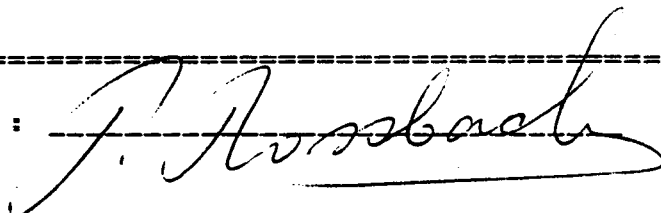
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INVOICE#: 6691
DATE ENTERED: 86-09-02
FILE NAME: MPH86387
PAGE # : 3

| PRE FIX | SAMPLE NAME | PPB Au | oz/t Au |
|------------|-------------|-----------|------------|
|------------|-------------|-----------|------------|

| | | | |
|---|------|---|--|
| T | 1178 | 5 | |
|---|------|---|--|

| | | | |
|---|-------|-----|--|
| T | HC-S1 | 5 | |
| T | HC-S2 | 160 | |

CERTIFIED BY :



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CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
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VANCOUVER B.C.

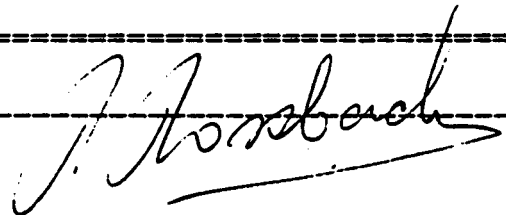
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INVOICE#: 7194
DATE ENTERED: 86-11-21
FILE NAME: MPH86650
PAGE # : 1

PROJECT: V 218 *238*
TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|-------------|-----------|
| A | 1351 | 5 |
| A | 1352 | 5 |
| A | 1353 | 5 |

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CERTIFIED BY :





Chemex Labs Ltd.

-Analytical Chemists -Geochemists -Registered Assayers

212 Brooksbank Ave.
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Canada V7J 2C1
Phone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED
2225 SOUTH SPRINGER AVENUE
BURNABY, B.C.
V5B 3N1

CERT. # : A8617466-001-A
INVOICE # : I8617466
DATE : 7-SEP-86
P.O. # : NONE
V-239

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :

| Sample description | Al | Ag | As | Ba | Be | Bi | Ca | Cd | Co | Cr | Cu | Fe | Ga | K | La | Mg | Mn | Mo | Na | Ni | P | Pb | Sb | Sr | Ti | Tl | U | V | W | Zn |
|--------------------|----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|----|-----|---|-----|----|-----|-----|----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|----|
| | % | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | % | ppm | % | ppm | % | ppm | ppm | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | ppm | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|------|-----|-----|----|------|----|------|------|----|----|-----|------|----|------|-----|------|------|----|------|----|-----|----|----|----|-------|-----|-----|----|-----|----|----|----|
| 506 | 0.77 | 0.2 | 110 | 50 | <0.5 | <2 | 5.19 | <0.5 | 24 | 44 | 241 | 6.05 | 20 | 0.16 | <10 | 1.48 | 1426 | <1 | 0.01 | 11 | 830 | 20 | 20 | 58 | <0.01 | <10 | <10 | 78 | <10 | 98 | -- | -- |
|-----|------|-----|-----|----|------|----|------|------|----|----|-----|------|----|------|-----|------|------|----|------|----|-----|----|----|----|-------|-----|-----|----|-----|----|----|----|

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Certified by Heidi Buchler



Chemex Labs Ltd.

Analytical Chemists Geochemists Registered Assayers

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North Vancouver, B.C.
Canada V7J2C1

Phone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : ROSSEACHER LABORATORY LIMITED

2225 SOUTH SPRINGER AVENUE
BURNABY, B.C.
V5B 3N1

CERT. # : A8617466-002-A
INVOICE # : I8617466
DATE : 7-SEP-86
P.O. # : NONE
V-238

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :

| Sample description | Al | Aq | As | Ba | Be | Bi | Ca | Cd | Co | Cr | Cu | Fe | Ga | K | La | Mg | Mn | Mo | Na | Ni | P | Pb | Sb | Sr | Ti | Tl | U | V | W | Zn |
|--------------------|----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|----|-----|---|-----|----|-----|-----|----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|
| | % | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | % | ppm | % | ppm | % | ppm | ppm | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|------|-----|----|----|------|----|------|------|----|----|----|------|----|------|-----|------|-----|---|------|----|------|----|-----|----|-------|-----|-----|-----|-----|-----|----|----|
| 578 | 4.11 | 0.2 | 10 | 80 | <0.5 | 12 | 2.01 | <0.5 | 34 | 29 | 31 | 3.34 | 50 | 0.05 | 110 | 2.68 | 922 | 1 | 0.01 | 11 | 1110 | 10 | <10 | 79 | <0.01 | <10 | <10 | 238 | <10 | 118 | -- | -- |
|-----|------|-----|----|----|------|----|------|------|----|----|----|------|----|------|-----|------|-----|---|------|----|------|----|-----|----|-------|-----|-----|-----|-----|-----|----|----|

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Telex: 043-52597

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TO : ROSSBACHER LABORATORY LIMITED

2225 SOUTH SPRINGER AVENUE
BURNABY, B.C.
V5B 3N1

CERT. # : A8617466-003-A
INVOICE # : I8617466
DATE : 7-SEP-86
P.O. # : NONE
V-238

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :

| Sample description | Al | Ag | As | Ba | Be | Bi | Ca | Cd | Co | Cr | Cu | Fe | Ga | K | La | Mg | Mn | Mo | Na | Ni | P | Pb | Sb | Sr | Ti | Tl | U | V | W | Zn |
|--------------------|----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|----|-----|---|-----|----|-----|-----|----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|
| | z | ppm | ppm | ppm | ppm | ppm | z | ppm | ppm | ppm | ppm | z | ppm | z | ppm | z | ppm | ppm | z | ppm | ppm | ppm | ppm | z | ppm | ppm | ppm | ppm | ppm | ppm |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|------|-----|----|----|------|----|------|------|----|----|----|------|----|------|-----|------|------|---|------|----|-----|---|-----|----|------|-----|-----|-----|-----|-----|----|----|
| 1178 | 2.98 | 0.2 | 10 | 90 | <0.5 | <2 | 2.77 | <0.5 | 33 | 76 | 39 | 7.99 | 20 | 0.02 | <10 | 2.38 | 1120 | 1 | 0.01 | 24 | 970 | 3 | <10 | 45 | 0.25 | <10 | <10 | 286 | <10 | 102 | -- | -- |
|------|------|-----|----|----|------|----|------|------|----|----|----|------|----|------|-----|------|------|---|------|----|-----|---|-----|----|------|-----|-----|-----|-----|-----|----|----|

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|------|-----|----|-----|------|----|------|-----|----|-----|----|------|----|------|----|------|------|---|------|----|-----|----|-----|----|------|-----|-----|-----|-----|-----|----|----|
| HC-S1 | 2.47 | 2.0 | 40 | 240 | <0.5 | <2 | 1.63 | 1.5 | 19 | 485 | 75 | 4.69 | 10 | 0.08 | 20 | 0.49 | 1886 | 2 | 0.02 | 59 | 950 | 62 | <10 | 25 | 0.15 | <10 | <10 | 117 | <10 | 148 | -- | -- |
| HC-S2 | 2.93 | 0.3 | 50 | 310 | <0.5 | <2 | 1.58 | 1.0 | 24 | 514 | 67 | 5.28 | 10 | 0.04 | 10 | 0.59 | 2760 | 1 | 0.02 | 61 | 950 | 38 | <10 | 21 | 0.17 | <10 | <10 | 130 | <10 | 119 | -- | -- |

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Certified by *Hart Bichler*



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TELEPHONE: (604) 984-0221
TELEX: 043-52597

ANALYSIS

3225 SOUTH SPRINGER AVENUE
BURNABY, B.C.
V5B 3N1

INVOICE # : I8621004
DATE : 30-NOV-86
P.O. # : NONE
V228 RACK C

Nitric-Aqua-Regia digestion of 0.5 gm of sample for ICP analysis.

Nitric-Aqua-Regia digestion of 0.5 gm of sample for ICP analysis. Since this digestion is incomplete for many minerals, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be determined qualitatively.

COMMENTS :
ATTN: PETER ROSSBACHER

| Sample description | Al % | Ag ppm | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | K % | La ppm | Hg % | Mn ppm | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm | | |
|--------------------|------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|------|--------|------|--------|------|--------|--------|-------|--------|-------|--------|--------|--------|-------|--------|-------|-------|-------|--------|----|----|
| 1351 | 0.43 | 0.6 | <5 | 10 | <0.5 | <2 | 15.00 | <0.5 | 3 | 19 | 8 | 0.95 | 40 | 0.04 | <10 | 0.54 | 692 | <1 | <0.01 | 6 | 360 | <2 | <5 | <1 | <0.01 | <10 | <10 | 8 | <5 | 28 | -- | -- |
| 1352 | 0.16 | 0.2 | <5 | 3480 | <0.5 | <2 | 0.30 | <0.5 | 3 | 168 | 10 | 0.61 | <10 | 0.02 | 10 | 0.09 | 304 | <1 | 0.01 | 9 | 90 | 22 | <5 | 45 | <0.01 | <10 | <10 | 11 | <5 | 18 | -- | -- |
| 1353 | 0.22 | 0.2 | 5 | 70 | <0.5 | <2 | 11.11 | <0.5 | 5 | 46 | 12 | 1.08 | 30 | 0.14 | <10 | 0.23 | 528 | <1 | 0.01 | 14 | 430 | 2 | <5 | 89 | <0.01 | <10 | <10 | 7 | <5 | 24 | -- | -- |

RECEIVED DEC 8 1986

Certified by *P. Rossbacher*

PL CRAIN INC

Appendix IIIb

ANALYTICAL TECHNIQUES

ANALYTICAL TECHNIQUES

A. Sample Preparation

1. Soil/Silt Geochemistry: Samples are dried out and sifted to minus 80 mesh, through stainless steel or nylon screens.
2. Rock Geochemistry: Samples are dried, crushed to minus 1/4 inch, split and pulverized to minus 100 mesh.
3. Rock Assay: Samples are dried, crushed to minus 1/8 inch, split and pulverized to minus 150 mesh.

B. Methods of Analysis

1. Geochemical Gold: A 10 gram sample is roasted at 550 C and digested with aqua regia. The dissolved gold is then extracted with methyl isobutyl ketone, and the resulting solution analysed using atomic absorption spectroscopy.
2. Fire Assay Gold: A 15 or 30 gram sample is fused using standard fire assay fluxes, the resulting gold/silver/lead button is cupelled, and the gold/silver bead analysed using atomic absorption or a gravimetric finish.
3. Multi-Element ICP: A 0.5 gram sample is digested with a 3-1-2 dilute aqua regia mixture and analysed using inductively coupled plasma spectroscopy.

Appendix IV

CONVERSION FACTORS FOR METRIC UNITS

CONVERSION FACTORS FOR METRIC UNITS

| | | |
|---------------------------|---|-------|
| 1 inch | = 25.4 millimetres | (mm) |
| | or 2.54 centimetres | (cm) |
| 1 cm | = 0.394 inch | |
| 1 foot | = 0.3048 metre | (m) |
| 1 m | = 3.281 feet | |
| 1 mile | = 1.609 kilometres | (km) |
| | | |
| 1 km | = 0.621 mile | |
| | | |
| 1 acre | = 0.4047 hectares | (ha) |
| 1 ha | = 2.471 acres | |
| 1 ha | = 100 m x 100 m = 10,000 m ² | |
| 1 km ² | = 100 ha | |
| | | |
| 1 troy ounce | = 31.103 grams | (g) |
| 1 g | = 0.032 troy oz | |
| 1 pound | = 0.454 kilogram | (kg) |
| 1 kg | = 2.20 lb | |
| 1 ton (2000 lb) | = 0.907 tonne | (t) |
| 1 tonne | = 1.102 ton = 2205 lb | |
| | | |
| 1 troy ounce/ton (oz/ton) | = 34.286 grams/tonne | (g/t) |
| 1 g/t | = 0.0292 oz/ton | |
| 1 g/t | = 1 part per million | (ppm) |
| 1 ppm | = 1000 parts per billion | (ppb) |
| 10,000 g/t | = 1% | |

Appendix V

COPIES OF O/C 549 AND O/C 394



549

APPROVED AND ORDERED FEB. 26. 1981

[Signature]
 Administrator
 Lieutenant-Governor

EXECUTIVE COUNCIL CHAMBERS, VICTORIA FEB. 26. 1981

On the recommendation of the undersigned, the ^{Administrator} ~~Lieutenant-Governor~~, by and with the advice and consent of the Executive Council, orders that

1. The following described land in the Victoria and Nanaimo Mining Divisions, Esquimalt, Goldstream, Malahat, Shawnigan, Saltspring Island, Comiaken, Somenos, Chemainus, Oyster, Bright, Cedar, Cranberry, Mountain, Dunsmuir, Nanoose, Cameron, Alberni, Newcastle, Nelson, Comox and Sayward Land Districts, is established as a mineral reserve and as a placer mining reserve until March 1, 1983. RE: O/C # 266 - FEB 21/83
1985.

An area 1 500 m wide, being 750 m on each side of the center line of the right-of-way of the proposed British Columbia Hydro and Power Authority Vancouver Island Gas Pipeline as shown on Maps 1-15, File 113(529), in the office of the Chief Gold Commissioner, Ministry of Energy, Mines and Petroleum Resources, Victoria, British Columbia.

2. No free miner shall obstruct, endanger or interfere with or allow any other person to obstruct, endanger or interfere with the construction, operation or maintenance of British Columbia Hydro and Power Authority's Vancouver Island Gas Pipeline in the reserve created by section 1.

[Signature]

Minister of Energy, Mines and Petroleum Resources

[Signature]

Presiding Member of the Executive Council

FILED

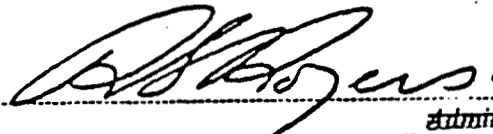
BRITISH



COLUMBIA

394

APPROVED AND ORDERED MAR-7 1985


Administrator
Lieutenant - Governor

EXECUTIVE COUNCIL CHAMBERS, VICTORIA MAR-6 1985

Lieutenant - Governor

On the recommendation of the undersigned, the ~~Administrator~~, by and with the advice and consent of the Executive Council, orders that

1. Section 1 of B.C. Reg. 103/81 and Section 1 of B.C. Reg. 181/81 be amended by striking out "March 1, 1985" and substituting "March 1, 1990".
2. The following described lands in the Nanaimo and Victoria Mining Divisions; Shawnigan, Helmcken, Quamichan, Somenos, Cranberry, Bright and Oyster Land Districts are established as a Mineral Reserve and, as a Placer Mining Reserve until March 1, 1990:

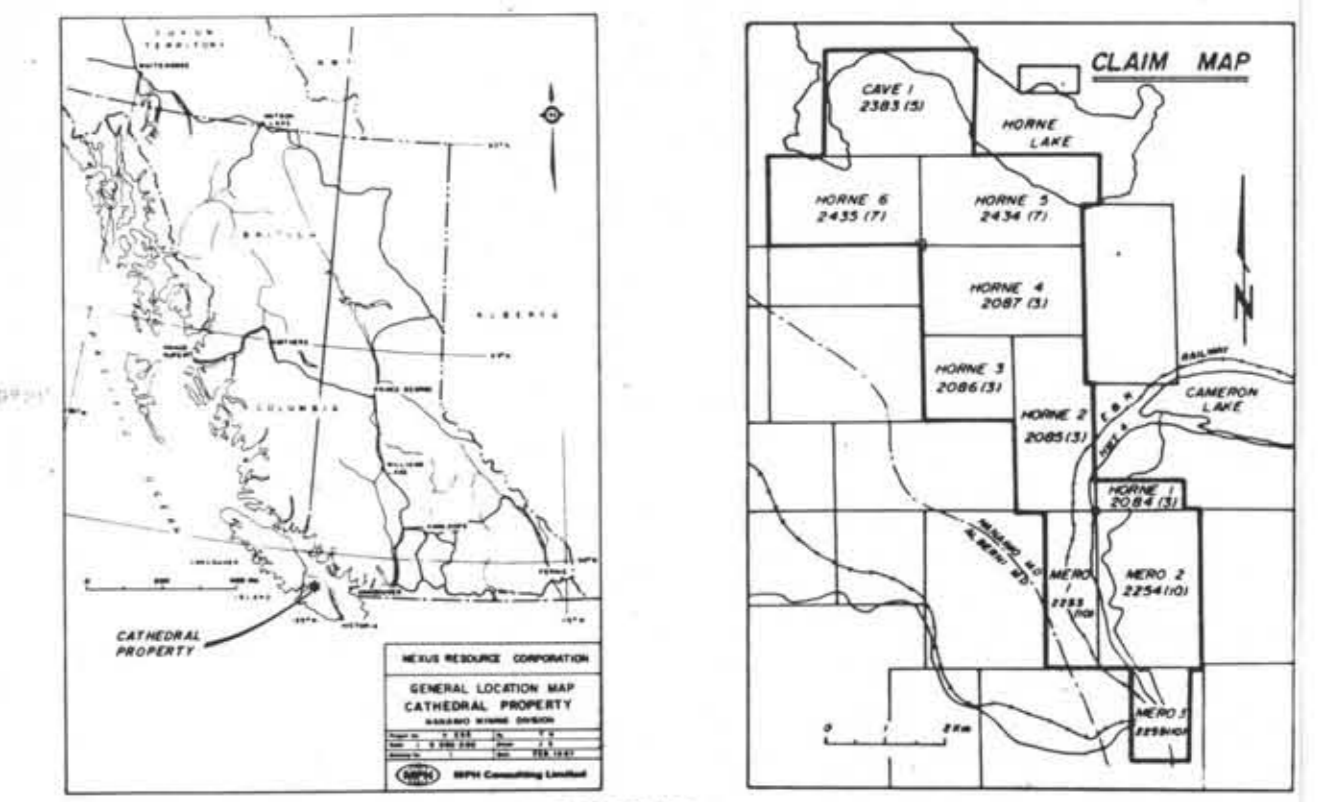
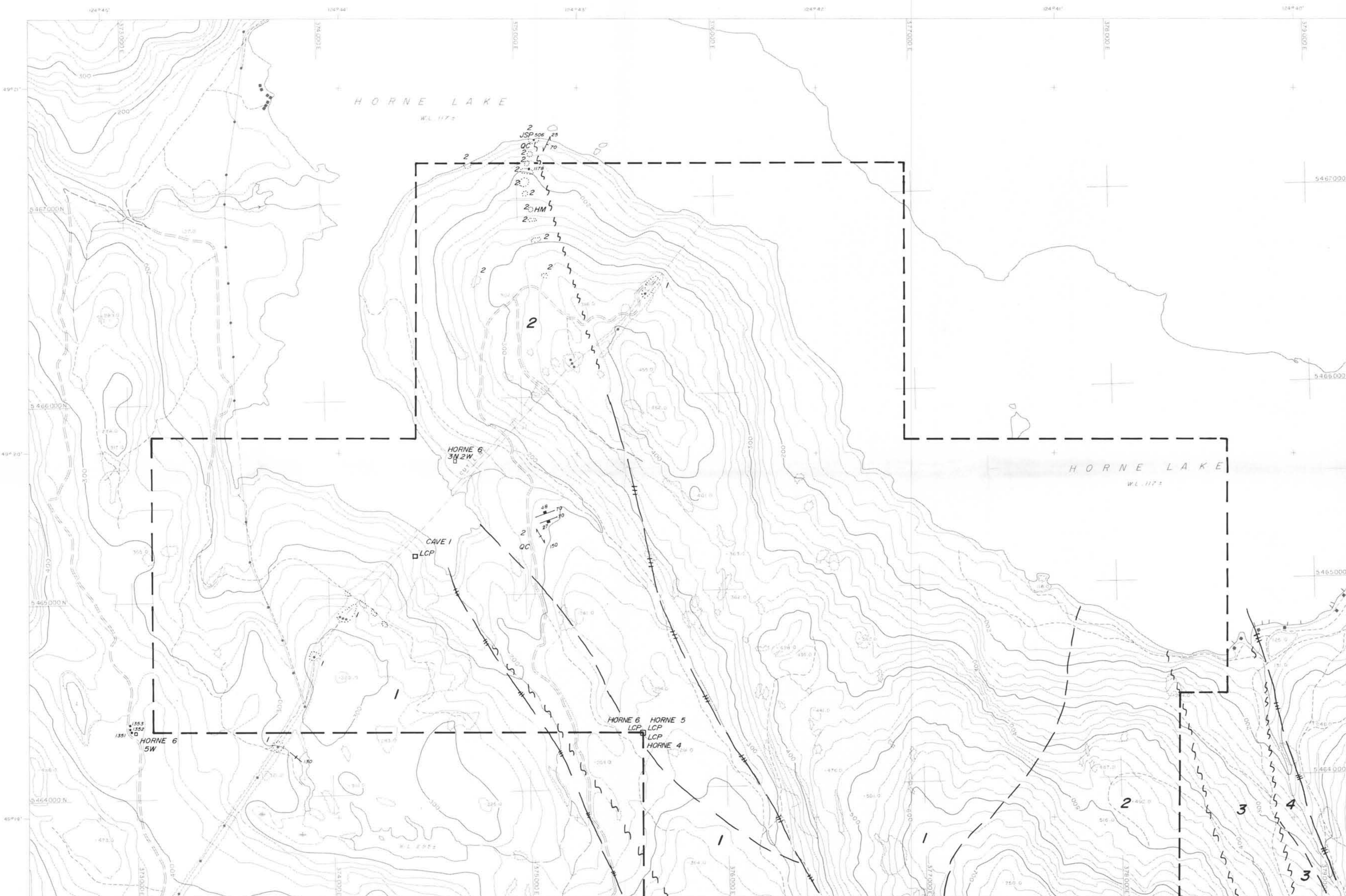
An area 1 500 metres wide being 750 metres on each side of each centre line of the right-of-way of the proposed British Columbia Hydro and Power Authority's Vancouver Island Natural Gas Pipeline as shown in red on the accompanying maps.

3. A Free Miner may locate or record a mineral claim or stake or acquire a location on all or part of the land in the Mineral Reserve and Placer Mining Reserve subject to the following conditions:

No Free Miner shall obstruct, endanger or interfere with the construction, operation or maintenance of a transmission line, pipeline or other work, structure or activity on all or part of the land in the Mineral Reserve and Placer Mining Reserve.


Minister of Energy, Mines and Petroleum Resources





LEGEND

- LITHOLOGIES**
- 4 KARMUTSEN FORMATION
pillow basalt, breccia, tuff, minor flows.
 - 3 BUTTE LAKE FORMATION
limestone, chert, wacke, argillite.
 - 2 VOLCANIC / SEDIMENTARY
(possibly correlative with Myra Formation)
wacke to lithic lapilli tuff with interbeds of chert, cherty tuff
graphitic argillite; discontinuous ferruginous chert.
 - 1 VOLCANIC
(possibly correlative with Nitinat Formation)
augite-bearing agglomerate, minor flows, flow breccia.

ALTERATION / MINERALIZATION

- QC Quartz - Carbonate
- JSP Jasper
- HM Hematite

SYMBOLS

- 506 Rock Sample Site and Number
- Geological Contact (approximate)
- ~ Fault Trace
- Airphoto Lineament
- Bedding
- Foliation
- Joint
- Area of Outcrop
- Claim Boundary
- LCP Legal Corner Post
- SW Corner Post (Corner Posts established using Hipchain, Compass and Topographic Control.)
- == 2 WD Road
- 4 WD Road / Trail
- Powerline
- ☀ Clearing
- ☹ Swamp

GEOLOGICAL BRANCH ASSESSMENT REPORT

16,197

NEXUS RESOURCE CORPORATION

PROPERTY PLAN, GEOLOGY AND
ROCK SAMPLE SITES
CATHEDRAL PROPERTY
(CAVE GROUP)
NANAIMO MINING DIVISION

| | |
|-------------------|-----------------|
| Project No: V 238 | By: GRC |
| Scale: 1:10000 | Drawn: RJD |
| Drawing No: 5 | Date: FEB, 1987 |

MPH MPH Consulting Limited