

**BC Geological Survey
Assessment Report
38492**



Ministry of Energy, Mines & Petroleum Resources
Mining & Minerals Division
BC Geological Survey

**Assessment Report
Title Page and Summary**

TYPE OF REPORT [type of survey(s)]: Geochemical

TOTAL COST: \$8,500.00

AUTHOR(S): J. T. Shearer, M.Sc. P.Geo.

SIGNATURE(S):



NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): _____

YEAR OF WORK: 2019

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5748366

PROPERTY NAME: Monteith Bay Project (Morris Zone)

CLAIM NAME(S) (on which the work was done): 1050244

COMMODITIES SOUGHT: Alunite

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: _____

MINING DIVISION: Alberni Mining Division

NTS/BCGS: 92L/3W (92L.014)

LATITUDE: 50 ° 08 ' 09 " LONGITUDE: -127 ° 17 ' 57 " (at centre of work)

OWNER(S):

1) J. T. Shearer

2) _____

MAILING ADDRESS:

Unit 5 - 2330 Tyner Street

Port Coquitlam, BC V3C 2Z1

OPERATOR(S) [who paid for the work]:

1) Same as above

2) _____

MAILING ADDRESS:

Same as above

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Claims underlain by west striking dacitic to andesitic fragmental flows of the Lower Bonanza Group and the locus of intense silica and alumina alteration as a flow dome structure, several pyrophyllite and alunite zones are peripheral to the silica core.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: _____

Assessment Reports 12681, 11374

| TYPE OF WORK IN THIS REPORT | EXTENT OF WORK (IN METRIC UNITS) | ON WHICH CLAIMS | PROJECT COSTS APPORTIONED (incl. support) |
|--|----------------------------------|-----------------|---|
| GEOLOGICAL (scale, area) | | | |
| Ground, mapping | | | |
| Photo interpretation | | | |
| GEOPHYSICAL (line-kilometres) | | | |
| Ground | | | |
| Magnetic | | | |
| Electromagnetic | | | |
| Induced Polarization | | | |
| Radiometric | | | |
| Seismic | | | |
| Other | | | |
| Airborne | | | |
| GEOCHEMICAL (number of samples analysed for...) | | | |
| Soil | | | |
| Silt | | | |
| Rock 10 | | 1050244 | \$8,500.00 |
| Other | | | |
| DRILLING (total metres; number of holes, size) | | | |
| Core | | | |
| Non-core | | | |
| RELATED TECHNICAL | | | |
| Sampling/assaying | | | |
| Petrographic | | | |
| Mineralographic | | | |
| Metallurgic | | | |
| PROSPECTING (scale, area) | | | |
| PREPARATORY / PHYSICAL | | | |
| Line/grid (kilometres) | | | |
| Topographic/Photogrammetric (scale, area) | | | |
| Legal surveys (scale, area) | | | |
| Road, local access (kilometres)/trail | | | |
| Trench (metres) | | | |
| Underground dev. (metres) | | | |
| Other | | | |
| TOTAL COST: | | | \$8,500.00 |

GEOCHEMICAL ASSESSMENT REPORT

on the

MONTEITH BAY PROJECT

(Morris Showing)

Tenure #1050244

Kyuquot Sound Area, Vancouver Island

N.T.S. 92L/3W Lat. 50°08'09"N Long. 127°17'57"W

Alberni M.D.

Event # 5748366

Owned by

HOMEGOLD RESOURCES LTD.

#5-2330 Tyner St

Port Coquitlam, BC

V3C 2Z1

Prepared by

J.T.SHEARER, M.Sc., P.Geo.

#5-2330 Tyner St

Port Coquitlam, BC

V3C 2Z1

July 18, 2019

Work Completed Between May 1, 2019 and July 18, 2019

TABLE OF CONTENTS

| | <u>Page</u> |
|--|-------------|
| LIST OF ILLUSTRATIONS..... | ii |
| SUMMARY | iii |
| INTRODUCTION | 1 |
| LOCATION and ACCESS | 10 |
| CLAIM STATUS..... | 12 |
| HISTORY | 15 |
| GEOLOGY | 22 |
| EXPLORATION 2019 | 27 |
| CONCLUSIONS AND RECOMMENDATIONS | 30 |
| Cost of Future Work | 31 |
| REFERENCES | 32 |
| APPENDICES | |
| Appendix 1 Statement of Qualifications | 35 |
| Appendix 2 Statement of Costs on the Monteith Bay Alunite Project..... | 36 |
| Appendix 3 Assay Certificates XRF Methods | 37 |
| Appendix 4 Sample Descriptions | 38 |

LIST of ILLUSTRATIONS

| | <u>PAGE</u> |
|-----------|--|
| FIGURE 1 | Location Map 1:10,000,000..... 2 |
| FIGURE 1a | Detail Location Map 3 |
| FIGURE 2 | Access Map 1:100,000 6 |
| FIGURE 3 | Detail Location Map 1:50,000 7 |
| FIGURE 4 | Claim Map 1:20,000..... 11 |
| FIGURE 5 | Google Image of Area 14 |
| FIGURE 6 | General Geology and Previous Prospecting 18 |
| FIGURE 7 | Sample Locations and Results 2016..... 21 |
| FIGURE 8 | Monteith Bay Geyserite Deposit – Google Image 25 |
| FIGURE 9 | Road from Geyserite to Alunite Zone 26 |
| FIGURE 10 | Sample Locations and Results 2019..... 28 |
| FIGURE 11 | Photo of Alunite Showing 29 |

TABLES

| | |
|---------|-----------------------|
| TABLE 1 | Claim Status 12 |
|---------|-----------------------|

SUMMARY

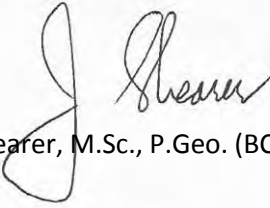
- 1) The Monteith Pyrophyllite-Alunite Property is adjacent and surrounding the Monteith Bay Geyselite Quarry.
- 2) The Monteith Bay Geyselite Quarry started commercial production in 1999, providing high-grade silica rock to the Cement Plant in Delta operated by Tilbury (Lehigh Northwest) Cement. Approximately 300,000 tonnes have been mined to date.
- 3) Initial exploration of the geyselite resource began in the latter part of 1992, diamond drilling in early 1993 with a 10,000 tonne bulk sample taken in July 1993. A "Mine Development Certificate" was issued in early 1995. The production reclamation bond was posted in 1999.
- 4) Drill holes MB93-1 to 5, 5A, 6 to 13 totalled 414.38m (1359.5 ft.) of core which was assayed at the Tilbury Cement Plant for major elements. It was subsequently found that the x-ray sulphur values did not give the accuracy needed for Acid Rock Drainage/Metal Leaching (ARD/ML) concerns. Reserves were calculated in 1993 to be 1,200,000 tonnes above sea level (at 3m) of 97% SiO₂, 0.1% Na, 0.2% K, 1.5% Al₂O₃ and 0.2% Fe₂O₃ from section 140m to 300m.
- 5) Mining in 2000 and 2001, which exposed dyke material in the 140m section area, highlighted the need to address ARD/ML concerns and water discharge to the south bay. A fill-in diamond drill program of 6 holes totalling 147.52m (484ft) was initiated in December 2001 to provide more detail information in the 220m section and west areas of the quarry for future mine planning. This program brings the total drilling completed to 561.9m (1843.5 ft.).
- 6) Previous work in 2016 consisted of and rock sampling assayed for major and trace elements within the western pyrophyllite zone (Deer Trail).
- 7) (Drilling on the old Morris Crown Grant in 1983 returned) In 1983, 1,066 meters of diamond drilling in seven holes was completed by Falconbridge, in joint venture with Cal Denver Resources Ltd., on the northern tip of the peninsula on the Morris Crown Grant. Detailed mineralogical and petrographic studies on the drill core delineated two recognizable alteration zones: (1) a quartz, alunite, pyrophyllite, kaolinite zone to a depth of approximately 140 meters below sea level (low pH zone) and (2) a gypsum with lesser anhydride zone below. An airborne geophysical survey of 128 line kilometres (3-frequency electromagnetics, magnetometer and VLF-EM) was carried out by Aerodat Ltd. in May 1985. The general magnetic trend appears to be east-northeasterly with several north-south orientations suggesting later structural overprinting.
- 8) Current work focussed on the Morris Showing of massive alunite. A total of 10 samples were assayed and results are shown in Appendix III and IV and plotted on Figure 10 (pg 28). Typically the massive alunite-quartz rock is a chalky white colour and fine-grained. Commonly rusty weathering in places.

XRF results show potassium content varies in the sample collected from a high of 2.35 to a low of 1.32. these potassium levels are lower than expected. Possibly the sodium end member Alunite is more abundant. Sulfur content varied from 7.92 down to 2.92, suggesting that sulfur is present. Silica is abundant with a high value of 19.10% Si indicating that quartz is a major component.

Sample #AL-9 was anomalous in having 4.46% Ca whereas the other samples have negligible CaO.

Future work should investigate the leachability of K₂O for organic fertilizer applications. Enough sample was collected for these types of tests.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "J. T. Shearer". The signature is written in a cursive style with a large initial "J".

J. T. Shearer, M.Sc., P.Geo. (BC & Ontario)

INTRODUCTION

The Monteith and Deer Trail Pyrophyllite and Morris Alunite zones are adjacent and surrounding the Monteith Bay "Geyserite Quarry".

Mining at the Monteith Bay Quarry began in 1999 to provide high grade silica (>97% SiO₂) to the Tilbury Cement Plant in Delta, B.C. The quarry is owned by Monteith Bay Resources Ltd. a wholly owned subsidiary of Lehigh Cement (Tilbury).

The area was first documented in 1908 when the unusual concentrations of massive alunite and pyrophyllite were discovered. Minor pyrophyllite was produced after 1910 for the manufacture of drain tiles and refractory bricks in Victoria.

Sampling, geological mapping, diamond drilling and bulk commercial testing was completed between late 1992 and August 1993. The area disturbed for the bulk sample was reclaimed in 1996.

As mining proceeded, it became apparent that more attention was needed toward Acid Rock Drainage/Metal Leaching (ARD/ML) concerns. The oxidation of pyrite contained within the sericite/chlorite altered andesite and diorite dykes was producing more ARD/ML products than originally anticipated.

A program of Acid-base accounting, Kinetic tests, detailed receiving environment monitoring and tightening up of mining practices (hydrology and waste disposal methods) was started before the 2001 mining campaign. Mining usually occurs over a three to four month period. A mobile radial telescoping stacker mounted on a barge loader. The ocean going 7500-8000 tonne barges were used for delivery to the Delta Cement Plant.

Preliminary exploration on the pyrophyllite and alunite deposits has resulted in the definition of a suitable source needed for the cement plant requirements and this source is located around the Easy Three and Easy "Eight" (converted 2005) mineral claims at Monteith Bay, Kyuquot Sound.

Portland cement manufacturing is a process of bringing together materials rich in lime (Ca), silica (Si), alumina (Al), iron (Fe), and gypsum (CaSO₄). These raw materials; limestone (CaO₃), shale and sand (silica), shale (alumina) and iron ore or industry mill scale (iron), are ground to extreme fineness for intimate mixing to meet precise chemistry. The pyrophyllite could replace both the current source of silica and alumina. The powder produced by grinding is then heated or "burned" in a rotary kiln to a temperature of 3,000 degrees, liquefying part of the powder and binding it together in what is called "clinker". Clinker consists of new components called hydraulic compounds. Hydraulic compounds enter into solution when water is added, forming a gel that binds to other minerals when set. The burned material clinker and added gypsum is then ground to extreme fineness. The resulting Portland cement becomes the "glue" to bond sand and aggregates together to form concrete.

Silica and alumina, the relatively minor constituents of Portland cement could be supplied from the Monteith Bay and Deer Trail Pyrophyllite property. The entire claim holdings cover about 60 hectares and are owned 100% by J. T. Shearer (Homegold Resources Ltd.). The company is committed to develop the deposit in a manner that does not cause significant environmental impact during operation or after mine closure.

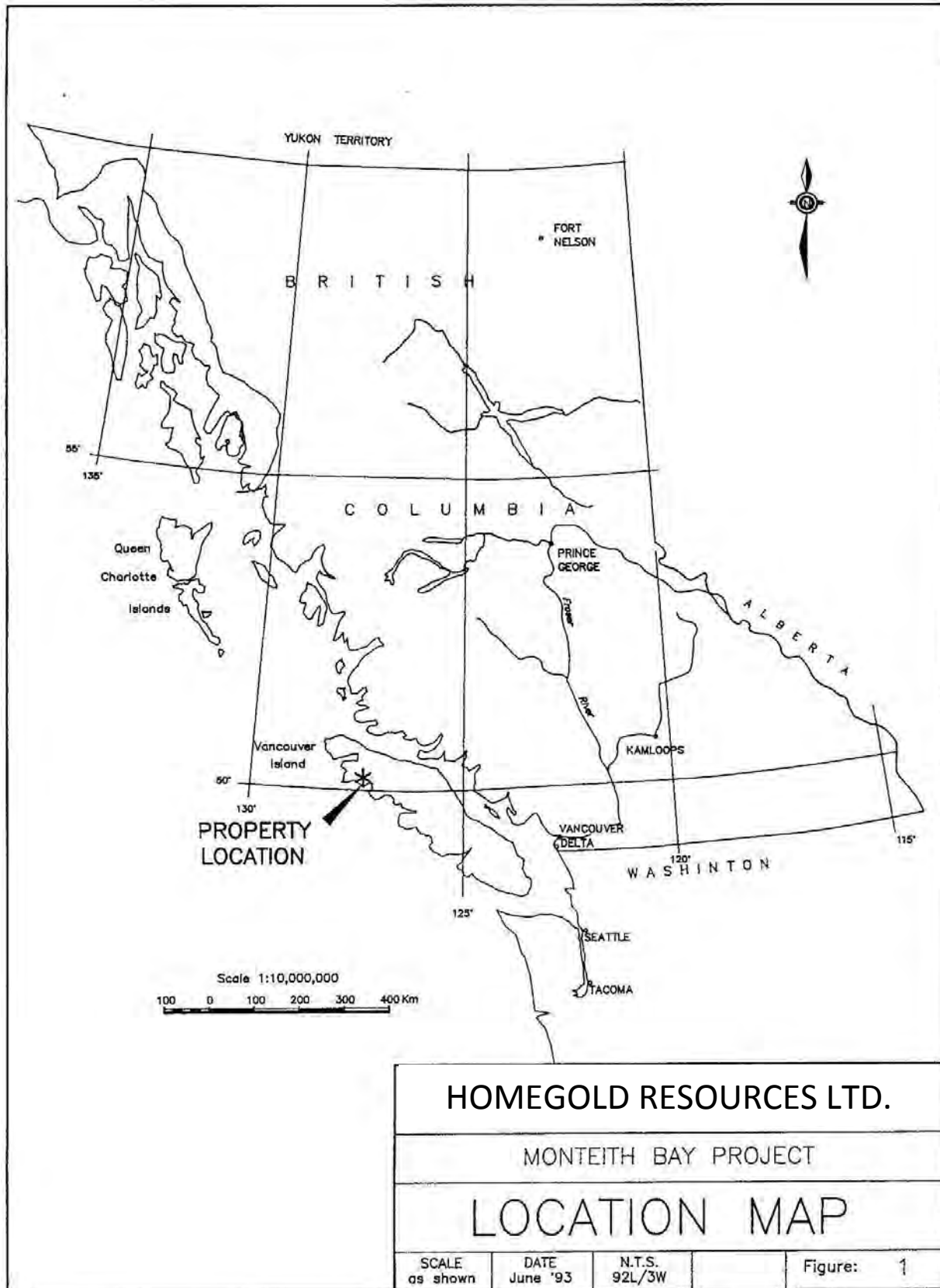
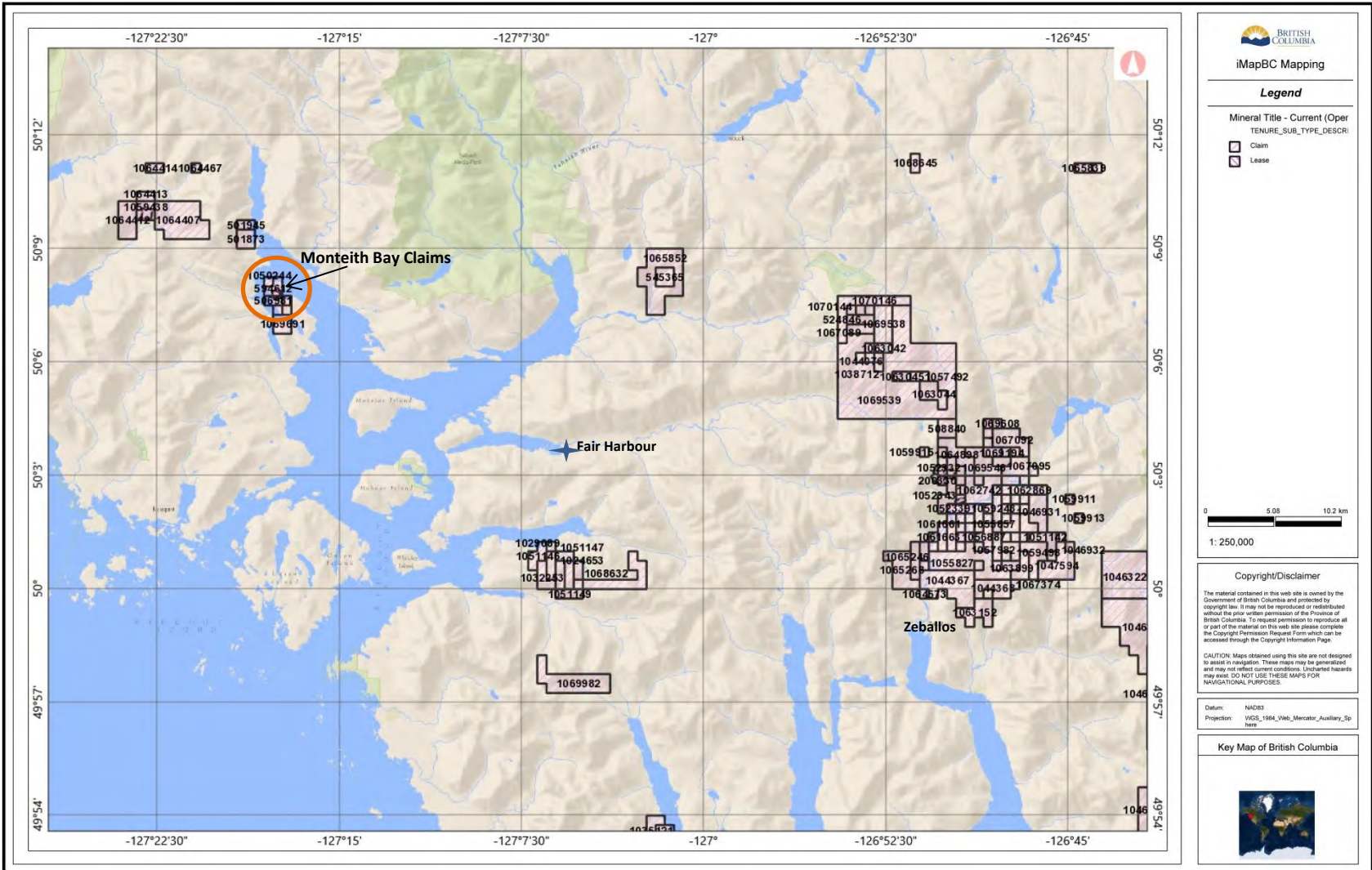


Figure 1 General Location Map

Figure 1a Detail Location Map



The international market for alunite and pyrophyllite is small (\$US 100 million approx.) compared with other mineral commodities. As a medium value (\$55/tonne) industrial mineral commodity, freight distances are limited and markets have regionalized and developed where mines and consumers are within three to four thousand kilometers.

Pyrophyllite is consumed in numerous markets and industry sectors where the major sectors are ceramics, refractories and insecticides. Since the latter two industry uses are declining and ceramics and other sectors are growing i.e., mineral fillers, cement and other miscellaneous uses, it is recommended that marketing efforts be focused on these as of increasing demand.

Industrial consumption in the short term is declining to relatively flat, as a result of the current recession. This is indicated by the following USBM figures:

World Pyrophyllite Production ('000 tonnes)

| <u>1987</u> | <u>1988</u> | <u>1989</u> | <u>1990</u> | <u>1991</u> |
|-------------|-------------|-------------|-------------|-------------|
| 2,190 | 2,333 | 2,440 | 2,228 | 2,168 |

(These figures are approximate since some pyrophyllite production is reported under talc.)

There is a general consensus that a modest level of pyrophyllite growth will take place as a result of the anticipated future expansion in the world economy.

While known internationally, Pyrophyllite is supplied and consumed in a few key regional markets in Asia (87.0%), North America (6.6%), and South America (5.8%). This "regionalized nature" is a function of:

- 1) The relatively low price of this commodity compared to high freight cost.
- 2) The need for deposits to be located near shipping facilities and/or manufacturers in order to develop a viable market share and
- 3) The global availability of many substitute products. For example, pyrophyllite, talc, steatite and soapstone all have common physical characteristics (layered structure, softness, whitish colour, soapy feel and pearly lustre) which in turn gives them common end uses.

In addition, unlike elemental metals each pyrophyllite and alunite deposit generally develops its own spectrum of products. One deposit may produce multiple products for multiple end uses which are totally exclusive from those products derived from a second pyrophyllite deposit. Generally there is not a clear definition of what pyrophyllite product. Producers are more inclined to think of themselves in terms of the markets they supply (e.g., refractory or ceramic raw material supplier) rather than calling themselves pyrophyllite producers.

Also, a high grade deposit of pyrophyllite is relatively rare compared with talc which is more commonly found. Even where high grade pyrophyllite exists, it rarely attains its theoretical composition (38.3% Al₂O₃, 66.7% SiO₂, 5% H₂O) but contains impurities such as, sericite, quartz, pyrite, chlorite, feldspar, haematite and magnetite.

The rocks hosting the Morris occurrence are west striking dacitic to andesitic fragmental flows of the Lower Jurassic Bonanza Group. Quartz diorite porphyry and andesitic dykes of the Early to Middle Jurassic Island Plutonic Suite intrude the volcanics. Pronounced quartz-sericite, quartz-alunite or quartz-pyrophyllite alteration occur along the contact zones. Pyrophyllite is prominent on Lots 988 (Morris) and

989 (Deertrail), occurring as compact dense masses ranging from cream, white, pink or light grey to dark bluish grey when pyrite is present. Minor limonite imparts a yellow to reddish brown stain on weathered surfaces.

In 1983, 1,066 meters of diamond drilling in seven holes was completed by Falconbridge, in joint venture with Cal Denver Resources Ltd., on the northern tip of the peninsula on the Morris Crown Grant. Detailed mineralogical and petrographic studies on the drill core delineated two recognizable alteration zones: (1) a quartz, alunite, pyrophyllite, kaolinite zone to a depth of approximately 140 meters below sea level (low pH zone) and (2) a gypsum with lesser anhydrite zone below. An airborne geophysical survey of 128 line kilometres (3-frequency electromagnetics, magnetometer and VLF-EM) was carried out by Aerodat Ltd. in May 1985. The general magnetic trend appears to be east-northeasterly with several north-south orientations suggesting later structural overprinting.

In thin section pyrophyllite flakes are about 0.01 millimetre in diameter and are readily crushed to a smooth fine powder. On the Deertrail showing, the ore is white to grey and contains 71 per cent pyrophyllite and 20 per cent quartz. An analysis of the showing returned 71.88 per cent silica, 23.56 per cent aluminum, 0.14 per cent ferric oxide, 0.36 per cent soda, 0.43 per cent potash, 3.24 per cent H₂O greater than 105 degrees Celsius (CANMET Report 803, pages 53 to 135).

Just as complex as the variable nature of alunite and pyrophyllite's chemistry is the number of products and markets of this commodity. The headers which follow list the key pyrophyllite market sectors. Under each header are descriptions about each market sector which also include a list of the component markets within that sector.

1) CERAMICS

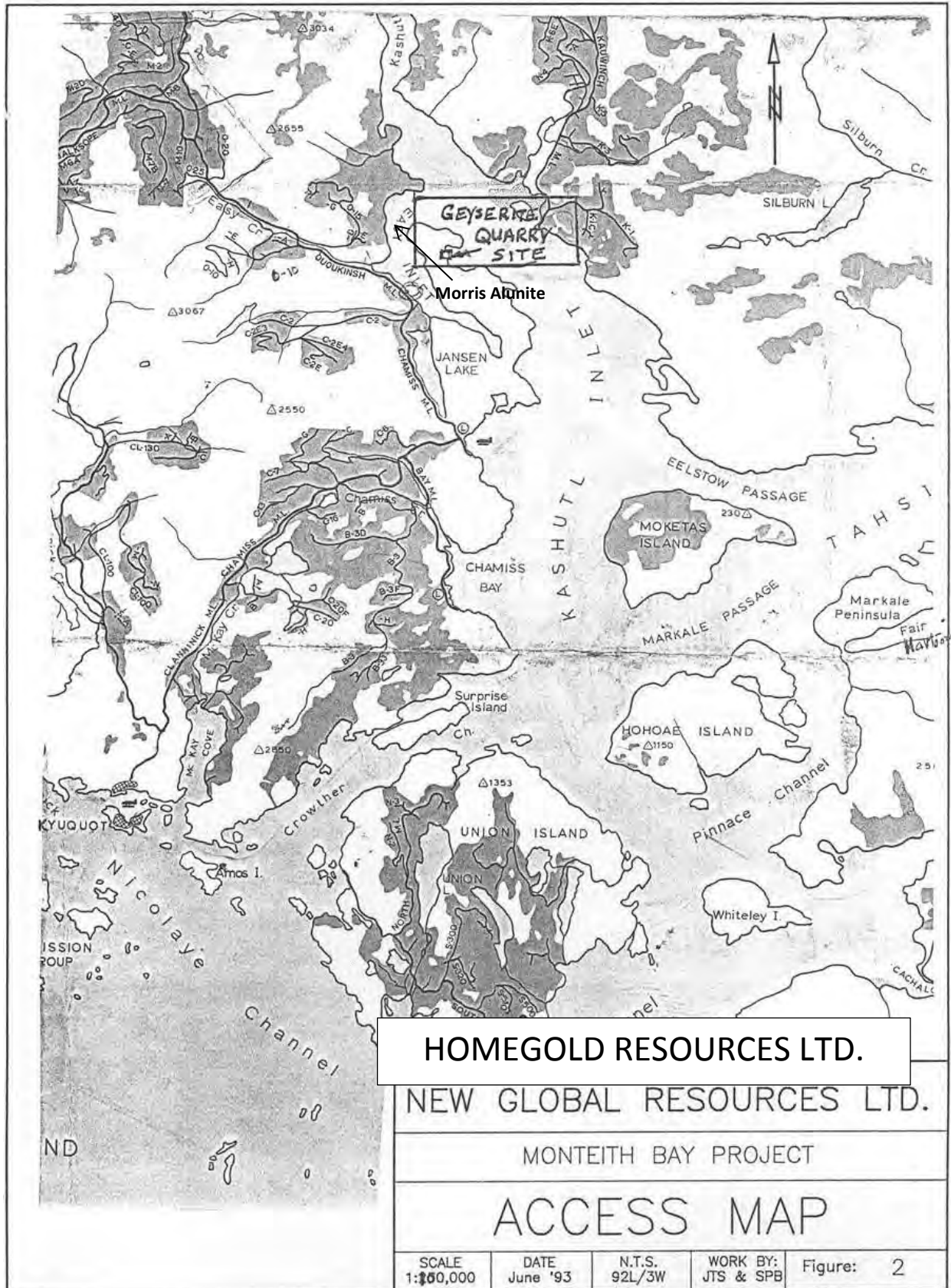
- Used in the manufacture of floor and wall tile, sanitary ware, crockery and electrical porcelain. In the USA more than 80% is used in the manufacture of ceramic floor and wall tile. The major portion of the remaining 20% is used in electrical porcelain, whiteware and masonry.
- Pyrophyllite lowers the firing temperature, suppresses the deformation and cracking, increases whiteness, lowers firing shrinkage and improves thermal shock resistance.

2) REFRACTORIES

- Used in the manufacture of insulating firebrick, stiff plastic refractory compositions, castables, gunning mixes, kiln car refractories, kiln furniture and refractory mortars.
- Pyrophyllite gives permanent expansion on firing temperature, excellent thermal stability, minimal deformation under load at high temperatures, low bulk density, low thermal conductivity and good resistance to corrosion by molten metals and basic slags.

3) INSECTICIDES

- Used as a carrier for insecticides.
- Consumption has greatly decreased due to the banning of DDT.
- Chemical composition is not critical. The presence of sericite is preferred to more abrasive quartz and the occurrence of platy pyrophyllite is preferred to more massive varieties.



4) MINERAL FILLERS

- Used when finely ground and quartz free as a substitute for talc in certain filler applications including paint, plastics, rubber, cosmetics and jointing compounds.
- Paint is currently the largest filler market for pyrophyllite.

5) CEMENT

- Used in the manufacture of white cement.
- Pyrophyllite with low iron content assists in maintaining high whiteness levels.

6) OTHER

- Other uses of pyrophyllite include roofing material, stucco products, paper coatings, fiberglass, road markings, high pressure seals in synthetic diamond manufacture, wallboard, floor coverings, asphalt filler, anti-skid aggregates, auto body patch and more.

The following table indicates the relative size of these market sectors in the two largest markets namely, the USA and Japan and shows the percent increase/decrease of each market sector in Japan over a three year period.

| Key Market Sector | | 1986 | 1986 | 1984 | 1987 | 1987 | % Change Japan | |
|-------------------|----|---------------|---------|-----------------|-----------------|--------------------|----------------|------|
| | | USA ('000 T.) | USA (%) | Japan ('000 T.) | Japan ('000 T.) | Japan (%) '84 -'87 | | |
| CERAMICS | 64 | 54 | | 275 | 242 | 29 | -12 | |
| REFRACTORIES | | 20 | 17 | | 357 | 244 | 29 | -32 |
| INSECTICIDES | | 13 | 11 | | 145 | 140 | 17 | - 3 |
| MINERAL FILLER6 | 5 | | | | | | | |
| CEMENT | | | | | 60 | 91 | 11 | 52 |
| OTHER | | 15 | 13 | | 110 | 127 | 15 | 15 |
| | | ==== | ==== | | ==== | ==== | ==== | ==== |
| TOTAL | | 118 | 100 | | 947 | 844 | 100 | -11 |

In both countries, ceramic, refractory and insecticide uses dominate consumption (over 75%). There is a decreasing trend in the consumption of refractories and insecticides (300,000 and 85,000 tonnes of refractories and insecticides respectively, were consumed by Japan in 1992) and an increasing trend in the consumption of cement and products in the other miscellaneous sectors. The two decreasing sectors have dropped in demand due to requirements for high steel quality and the reduction of insecticide carriers with the banning of DDT and other insecticides.

Considering the future outlook, industry experts feel that there will be a further decline in refractories and insecticides and that expansion will occur in the ceramic, cement and other sectors. Increase consumption of pyrophyllite will be related to increases in economic activity and the building industry, the development of new products (e.g., ceramics, extender-filler applications, etc.) and possible changes in environmental compliance (e.g., substitution by pyrophyllite away from tremolitic talc).

Pyrophyllite is a medium priced industrial mineral commodity ranging from \$US 40 to \$US 80/tonne FOB. The following are current price references:

- R.T. Vanderbilt: \$40 - \$50/tonne and \$50 - \$70/tonne bagged in 50lb. bags in 2,000 lb. pallets for minus 200 - 325 mesh product.

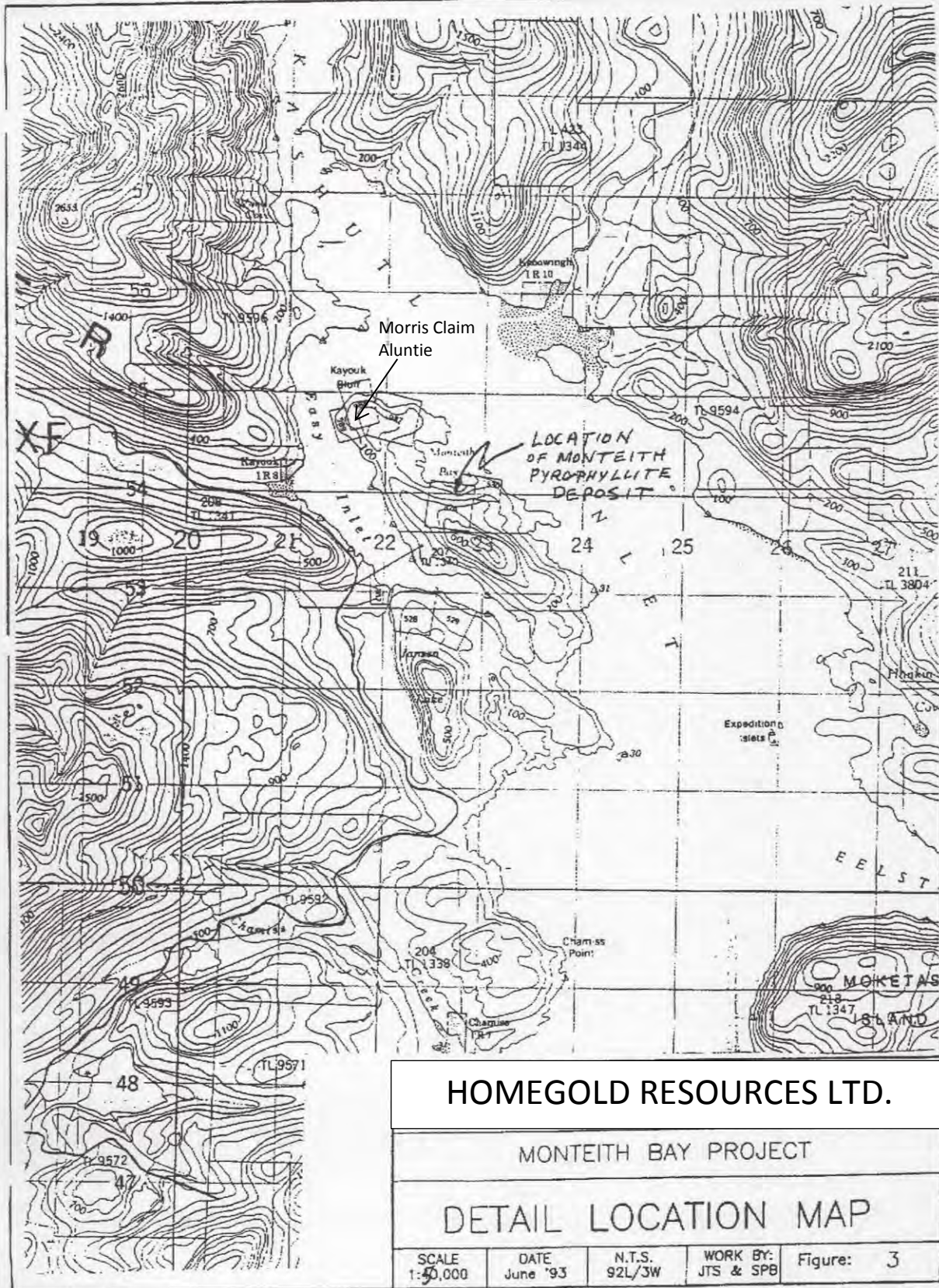
- USBM: \$17/ton crude and \$41/ton processed (1988).

- Vancouver Agent: Landed in Vancouver \$US 100/tonne with 85 GE brightness and 99.9% less than 400 mesh.

- Korea Export Prices: Refractory grade \$US 58/ton.
 Tile grade \$US 28/ton.
 Pottery grade \$US 72/ton.

Brightness, fineness and packaging have maximum impact on adding value notwithstanding freight which may account for 2/3 of the delivered cost to a consumer.

In summary, the medium price level of pyrophyllite (compared to other minerals) is a disadvantage in developing international markets. However, this same price level may be an advantage when competing for customers in the Pacific Northwest and California, against Eastern USA producers.



LOCATION and ACCESS

The Morris Alunite Claim is located on the northern shores of Monteith Bay between Kashutl and Easy Inlets. There is no road access to the property. Access is normally by boat from Fair Harbour (a distance of 15km) or from the mouth of the Artlish River (a distance of 16 km). The dock at Artlish has recently been removed.

Mining crews often stay at the Friell Lake Camp operated by Dennis and Shirley Siemens a distance of 6 km from the quarry site. The only other settlements are the INTERFOR Logging Camp at Chamiss Bay and the largely native community of Kyuquot about 14 km from the quarry site.

Mining at the nearby Monteith Geyselite Quarry was seasonal and usually takes about 3 to 4 months of drill/blast/crush/barge load to produce approximately 40,000 to 80,000 tonnes of product (2 years requirement). A mobile barge with a radial telescoping staking conveyor was used to load 7500 to 8000 tonne barges at the quarry site.



iMapBC Mapping

Legend

Contours - (1:20,000)

FCODE

- Contour - Index
- Contour - Index Indefinite
- Contour - Index Depression
- Contour - Index Depression Indi
- Contour - Intermediate
- Contour - Intermediate Indefinite
- Contour - Intermediate Depress
- Contour - Intermediate Depress

Mineral Title - Current (Oper TENURE_SUB_TYPE_DESCR)

- Claim
- Lease

0 0.41 0.81 km

1: 20,000

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Datum: NAD83

Projection: WGS_1984_Web_Mercator_Auxiliary_Sphere

Key Map of British Columbia

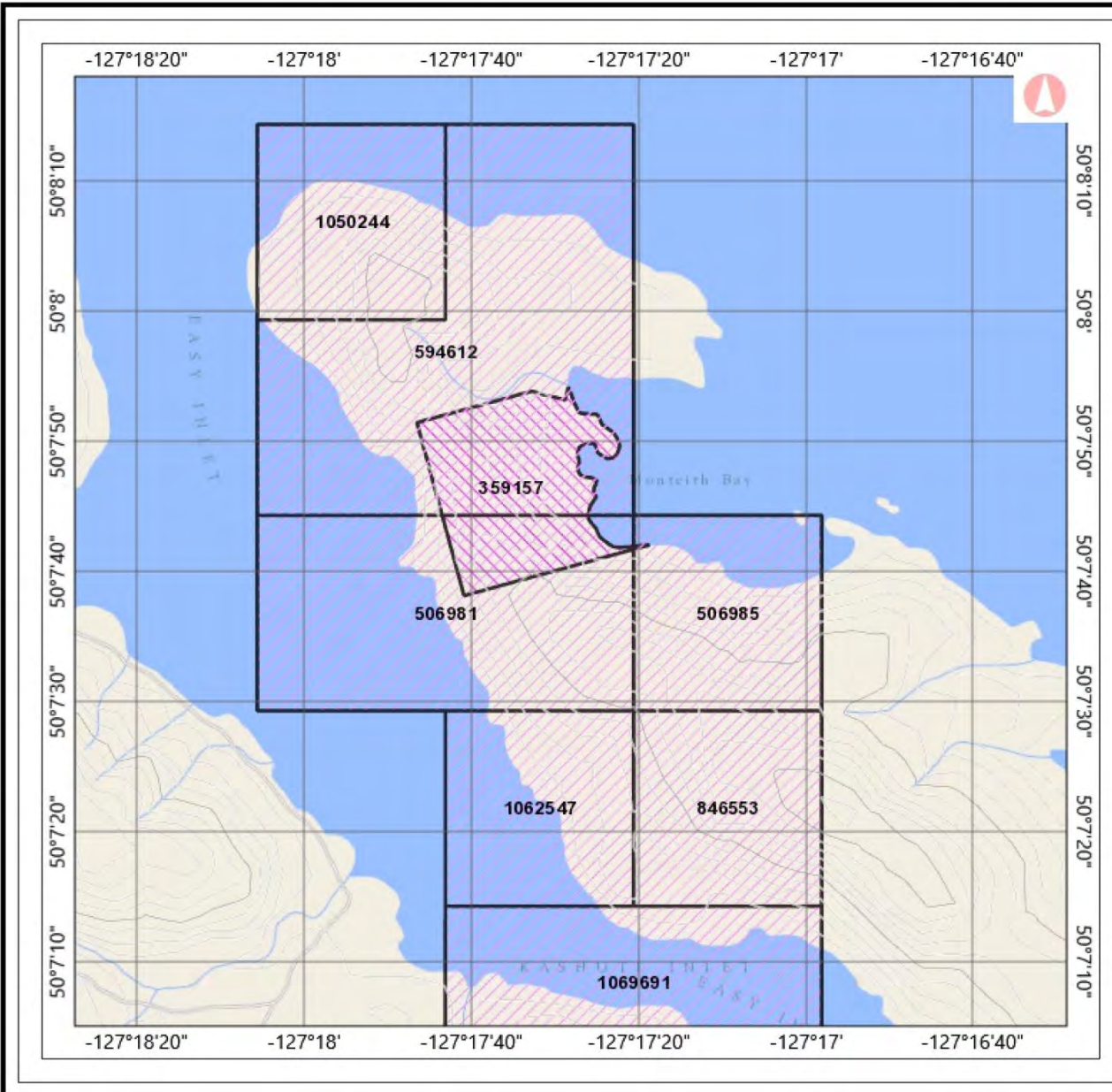


Figure 4 Claim Map

CLAIM STATUS

The Monteith Bay pyrophyllite and alunite property is located on Vancouver Island, a large island off the southwest coast of British Columbia, having a length of 480 km and width of 140 km. The Kyuquot Sound area is approximately 150 km northwest of Campbell River and 380 km northwest of Vancouver. Monteith Bay is a small sheltered bay located about halfway up the west side of Kashutl inlet, which is the northernmost inlet of Kyuquot Sound.

The main nearby centre is the village of Kyuquot located about 16 km south of Monteith Bay. Kyuquot is a mainly Native people's community with an area population of about 240 persons, with nearby non-Native residents totalling about 60. Fishing and small scale logging are the main work activities.

Topography of the area varies from a flat coastal plain along Rugged Point and Brooks Peninsula to the high peaks immediately east of Kyuquot. Monteith Bay is one of the small bays resulting from erosion controlled by major geological structures of the area.

Monteith Bay Resources owns 100% of the Too Easy mineral claim within the Alberni Mining Division, N.T.S. 92L/3W. The remaining claims are owned by Homegold Resources Ltd. in trust with J.T. Shearer. A foreshore lease application to cover the barge-loading facility area has been granted.

TABLE 1
List of Claims

| Tenure # | Name | Area (ha) | *Current Expiry Date | Registered Owner |
|----------|-----------|-----------|----------------------|------------------|
| 506981 | Westside | 41.44 | July 24, 2022 | J. T. Shearer |
| 506985 | Monteith | 20.72 | August 25, 2023 | J. T. Shearer |
| 594612 | Deer | 62.15 | July 21, 2022 | J. T. Shearer |
| 846553 | Easy S | 20.72 | August 21, 2022 | J. T. Shearer |
| 1050244 | (Morris) | 20.72 | July 23, 2023 | J. T. Shearer |
| 1062547 | East Easy | 20.72 | August 22, 2022 | J. T. Shearer |

Total 186.47 ha

* upon acceptance of assessment credits documented by this report.

Under the present status of mineral claims in British Columbia, the consideration of industrial minerals requires careful designation of the product end use. An industrial mineral is a rock or naturally occurring substance that can be mined and processed for its unique qualities and used for industrial purposes (as defined in the *Mineral Tenure Act*). It does not include "Quarry Resources". Quarry Resources includes earth, soil, marl, peat, sand and gravel, and rock, rip-rap and stone products that are used for construction purposes (as defined in the *Land Act*). Construction means the use of rock or other natural substances for roads, buildings, berms, breakwaters, runways, rip-rap and fills and includes crushed rock. Dimension stone means any rock or stone product that is cut or split on two or more sides, but does not include crushed rock.

Cash may be paid in lieu if no work is performed. Following revisions to the Mineral Tenures Act on July 1, 2012, claims bear the burden of \$5 per hectare for the initial two years, \$10 per hectare for year three and four, \$15 per hectare for year five and six and \$20 per hectare each year thereafter.

The nearby silica/alumina project extends from a barge dock at tide water on the east side of Monteith Bay along a 50-meter conveyor-crushing system to geyseric stockpiles and small quarry, a total distance of about 300 meters, with connecting roads to the Deertrail and Monteith and Morris pyrophyllite/alunite quarries.

The immediate Monteith Bay area has no previous residential developments nor are any planned. There are no surface facilities on the site at present. The general area is a very sparsely settled fjordland-mountainous region. Much of the upland area has been clear-cut logged in the recent past. Minor amounts of coastal 'A' frame logging was done in the late 1940s. The Monteith Bay area was logged from the shoreline between 1945 and 1948. The northwestern part of Monteith Bay was logged by a local hand logger about 18 years ago.

Access to the property is by boat, barge and float-equipped aircraft. The nearest road head is at Fair Harbour or the mouth of the Artlish River. Fair Harbour is 32 km by road from Zeballos and a further 45 km to the Island Highway. The Artlish road is about 50 km shorter than the Zeballos route. A large self-propelled ferry was available at Fair Harbour under contract with Intercan Resources Ltd, an aquaculture operation in the southern Kluane Sound. Major logging camps are located in nearby Chamiss Bay (INTERIOR) and Ououkinsh Inlet (Coulson Logging).

There is currently a small store, lodge and cabins in Fair Harbour as of 2019.



Figure 5 Google Image of Area

HISTORY

The claims covering the pyrophyllite were staked in 1908. Nearby pyrophyllite deposits provided material for fire clay, pipe and other industrial uses for the B.C. Pottery Company and the San Juan Mining and Manufacturing Company from 1910 onward. The pilings of the pyrophyllite dock can still be seen on the south shore of Monteith Bay.

Ries and Keele (1912) tested samples taken from the stockpiles at the Victoria plant, and found "it burns steel hard at cone 1, and shows good refractiveness; in fact, there are few more refractory clays thus far known in the western provinces."

Comprehensive mapping of the deposits was completed in 1913 by C.H. Clapp of the Geological Survey of Canada, who suggested that the alunite and pyrophyllite may have been formed by hydrothermal replacement of volcanic rocks by ascending sulphuric solutions.

The deposit was examined late in World War II as a possible source of paper filler, and testing determined it to be a 'highly satisfactory ingredient of whiteware batches for both slip-cast and dry process tiles, electric insulators and tableware' (Minister of Mines, B.C., Annual Report 1947, page 223).

In 1952, the Crown-granted claims on the north end of the peninsula were purchased by St. Eugene Mining Corporation, who subsequently optioned the property to Westport Chemical Inc. during 1959-60. Drill testing was completed on the alunite-pyrophyllite zone, but these results are presently not available.

Two packsack holes were drilled to a depth of 25 feet in the alunite area by Falconbridge Nickel Mines, who acquired the property from St. Eugene in 1962. No sample data are available, but drill logs note the presence of quartz, which was colloform-banded and crustified, containing disseminated pyrite in altered volcanics.

The Kyuquot syndicate was formed in 1970 as a joint venture between Falconbridge and MacDonald Consultants Inc. to explore the area for Porphyry copper deposits. Mapping and soil-sampling were completed near Easy inlet.

Kennco Exploration staked claims over the Kayouk Peninsula-Jansen lake area in 1972 and completed geological mapping and a rock geochemical survey. Analyses were completed for Mo, Cu, Zn, Pb, Ag, Au, Ni and Co with anomalous results being attributed to sulfides in quartz veins. C.S. Ney, in describing a siliceous bluff on the northwest side of Monteith Bay, suggested a similarity with 'geyserite' or siliceous sinter typical of hot springs activity.

The B.C. Gold Syndicate, supervised by J.T. Shearer explored the Easy claims in 1980 by prospecting, soil-sampling and geological mapping to better evaluate the intense alteration zones as defined by the areas of pyrophyllization-alunite. No geochemically anomalous response was reported from the rock or soil-sampling. The Too Easy claim was located at this time.

Semco completed an examination of the Sockeye property for a large US based industrial mineral company in 1980 as part of a program on three pyrophyllite occurrences in the area. Some drilling apparently took place on the Sockeye showings but the results of this work is not presently available.

A preliminary report for Falconbridge Nickel Mines Ltd. was completed by Mr. G. Albino in June 1982 covering historical, exploratory and geological data from past examinations and including geological mapping and geochemical sampling as completed by Mr. Albino and Mr. C. Niles. Falconbridge optioned the Too Easy Claim at this time to the BC Gold Syndicate as negotiated by J.T. Shearer.

In 1983, 1,066 meters of diamond drilling in seven holes was completed by Falconbridge, in joint venture with Cal Denver Resources Ltd., on the northern tip of the peninsula on the Morris Crown Grant. Detailed mineralogical and petrographic studies on the drill core delineated two recognizable alteration zones: (1) a quartz, alunite, pyrophyllite, kaolinite zone to a depth of approximately 140 meters below sea level (low pH zone) and (2) a gypsum with lesser anhydrite zone below. An airborne geophysical survey of 128 line kilometres (3-frequency electromagnetics, magnetometer and VLF-EM) was carried out by Aerodat Ltd. in May 1985. The general magnetic trend appears to be east-northeasterly with several north-south orientations suggesting later structural overprinting.

Monteith Bay Resources Ltd. initiated the purchase of the Too Easy claim in 1992 and completed detail geological mapping and sampling in November 1992 to January 1993. Accurate topographic surveying, hydrographic survey of Monteith Bay, biological study of the area and detail diamond-drilling were done between January and March 1993. A 9,000-tonne bulk sample and further diamond-drilling were done between March and July 1993. The Tilbury cement plant processed the geyselite during August and September 1993. A large volume of information is now available on the characteristics of the geyselite with respect to an industrial size trial on grindability, power consumption of the roller mills, abrasion, feed handling, burnability, consistent chemistry and ultimately the strength of cement and customer satisfaction.

Geological mapping was on a remeasured baseline and grid lines established in 1984. The 1,050-meter baseline trends 320 from the south boundary of the Too Easy Claim to the tip of the peninsula about 500 meters north of the northern claim line. The cross-lines trend at 230° at 75-m intervals with stations at 25 meters. Accurate topographic contours were measured with a transit and EDM unit and compiled at a scale of 1:500 by Wright Parry Taylor & Fuller, B.C. Land Surveyors and Consulting Engineers.

The 1994 program consisted of sample collection, geological mapping and prospecting on the known pyrophyllite deposits in conjunction with a search of literature regarding the uses of pyrophyllite.

The samples were sent for multi-element analysis at the internal laboratory at the Tilbury Cement Plant in Delta which is an X-ray unit which is mainly used for internal quality control, clinker consistency and special batch orders.

In 2001, topographic pick up was completed on October 10 by Western Survey Service Ltd. of Campbell River using a 0.5 metre topographic contour. A final pick up was done after the last barge was loaded in early 2002.

The 2016 program focussed on the geochemical characterization of the Deer Trail pyrophyllite zone and host rocks. The Deer Trail zone is located on the east shoreline of Easy Inlet to the west of Monteith Bay.

Assays were conducted by using an XRF Unit factory calibrated (Cert No. 0154-0557-1) on October 30,

2013, Instrument #540557 Type Olympus DPO-2000 Delta Premium. The instrument was calibrated using Alloy Certified reference materials by ARM1 and NIS5 standards. Only certified operators were employed and that were experienced in XRF assay procedures. Read times were 120 seconds or greater. Results are shown in Appendix III and plotted on Figure 8.

Brown weathering, fine grained “massive” brownish to light grey pyrophyllite (samples 1-3) contain 10.1 to 10.67% Al associated with Si values of 18.85 to 21.68% Si.

Samples 5 to 9 reflect a more geyseric facies which contain less Al (ranging from 2.57 to 7.23% Al) but significantly higher silica (ranging from 25.15 to 38.84% Si). This geyseric zone could be a western extension of the zone mined at the Cement Rock Quarry (Lehigh Northwest) quarry in Monteith Bay.

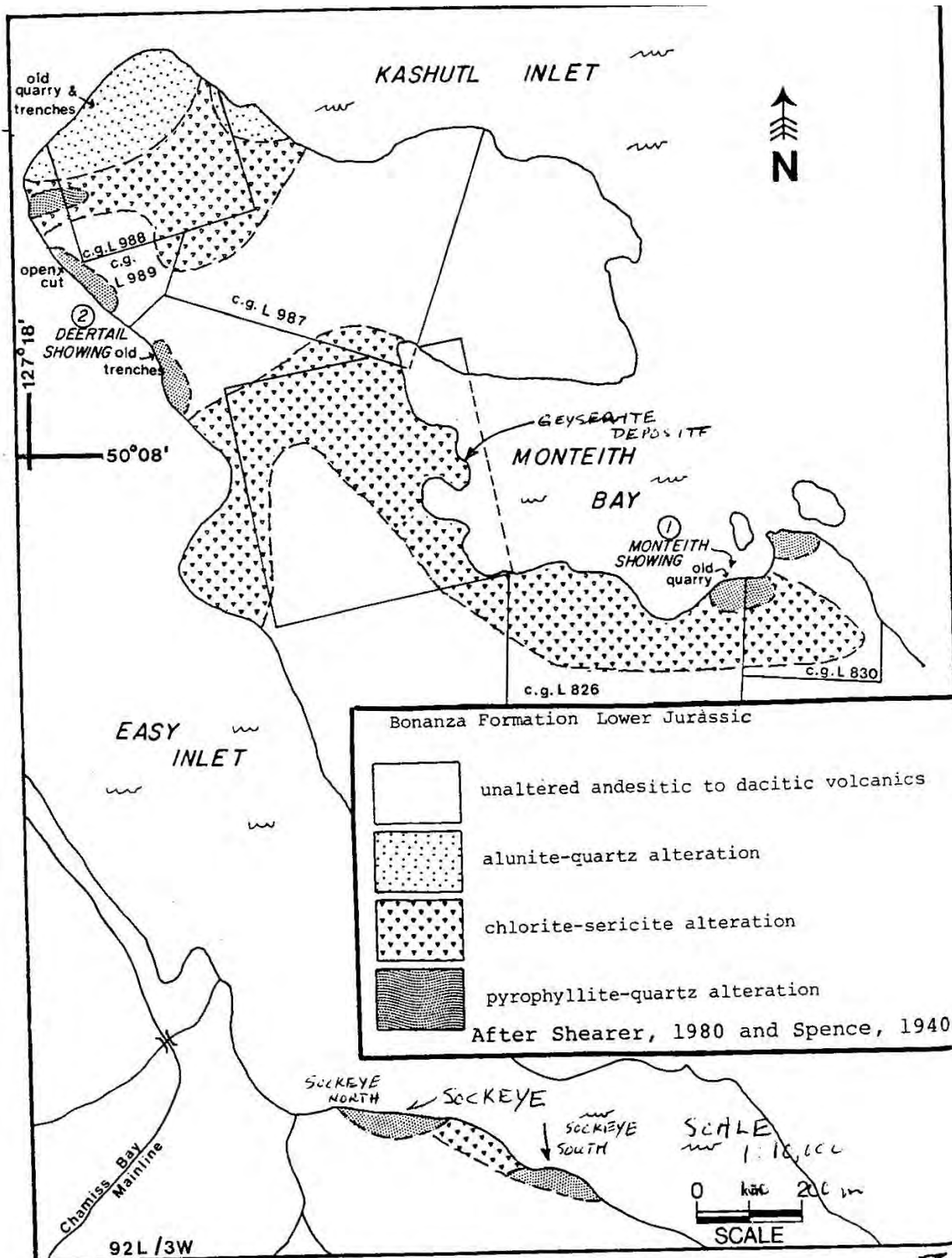


Figure 6 General Geology and Previous Prospecting

Between March and July 24, 1993 approximately 9,000 tonnes of geyselite were produced from an excavation and shipped by barge to the Tilbury cement plant in Delta, B.C. Considerable geological information was obtained from the new exposures. The cement plant processed the geyselite during August and September 1993. The geyselite was crushed on-site to 1 inch minus and the resulting product proved to be very uniform in its chemical composition. Detailed data are now available on the characteristics of the geyselite with respect to an industrial-size trial in respect to grindability, power consumption of the roller mills, abrasion, feed handling, burnability, ultimate strength of the resulting cement and customer satisfaction on the end-use construction site.

In early 1994 the adjacent pyrophyllite zones were examined and sampled in detail to define the consistency and grade of the aluminum content. There are three main pyrophyllite zones as follows:

- 1) Monteith Bay - old quarry area
- 2) Deertrail - on northeast side of Easy Inlet
- 3) Sockeye - on southwest side of Easy Inlet (North and South deposits)

The pyrophyllite zones are compact, dense and range from cream, white, pink or light gray to dark bluish grey when pyrite is present. Minor limonite imparts a yellow to reddish brown stain on the weathered surface. In thin section, the pyrophyllite flakes are about 0.01 millimetres in diameter; the material is readily crushed to a fine smooth powder.

On the Monteith showing (#1) the material is pinkish white and contains about 62 per cent pyrophyllite and 30 per cent quartz. On the Deertrail showing, the zone is white to grey and contains 71 per cent pyrophyllite and 20 per cent quartz. Chemical analyses of these two showings are as follows (in per cent) per Spence 1940:

| | 1 | 2 |
|------------------------|-------|-------|
| Silica | 81.94 | 71.88 |
| Aluminum | 15.29 | 23.56 |
| Ferric Oxide | 0.11 | 0.14 |
| Soda | 0.40 | 0.36 |
| Potash | 0.50 | 0.43 |
| H ₂ O>105°C | 2.40 | 3.24 |

(Spence, 1940)

The old Monteith quarry floor is now overgrown with moss but mapping clearly demonstrates the flat floor with side walls up to 15 metres high. A large outcrop of pyrophyllite occurs 60 metres to the northeast closer to tidewater and appears to be a continuation of the main quarry zone. Typically the higher content of pyrophyllite (greater than 13% Al₂O₃) has fragmental appearance with dark brown fragments in a light greenish matrix. Analytical results suggest that more quartz-rich layers having a white to light grey ground mass occur intercalated with pyrophyllite-rich zones. The highest Al₂O₃ content is sample #40 at 18.8% Al₂O₃ and 79% SiO₂. Diamond drilling along the south wall of the quarry and to the east and west is recommended to establish the size of the zone.

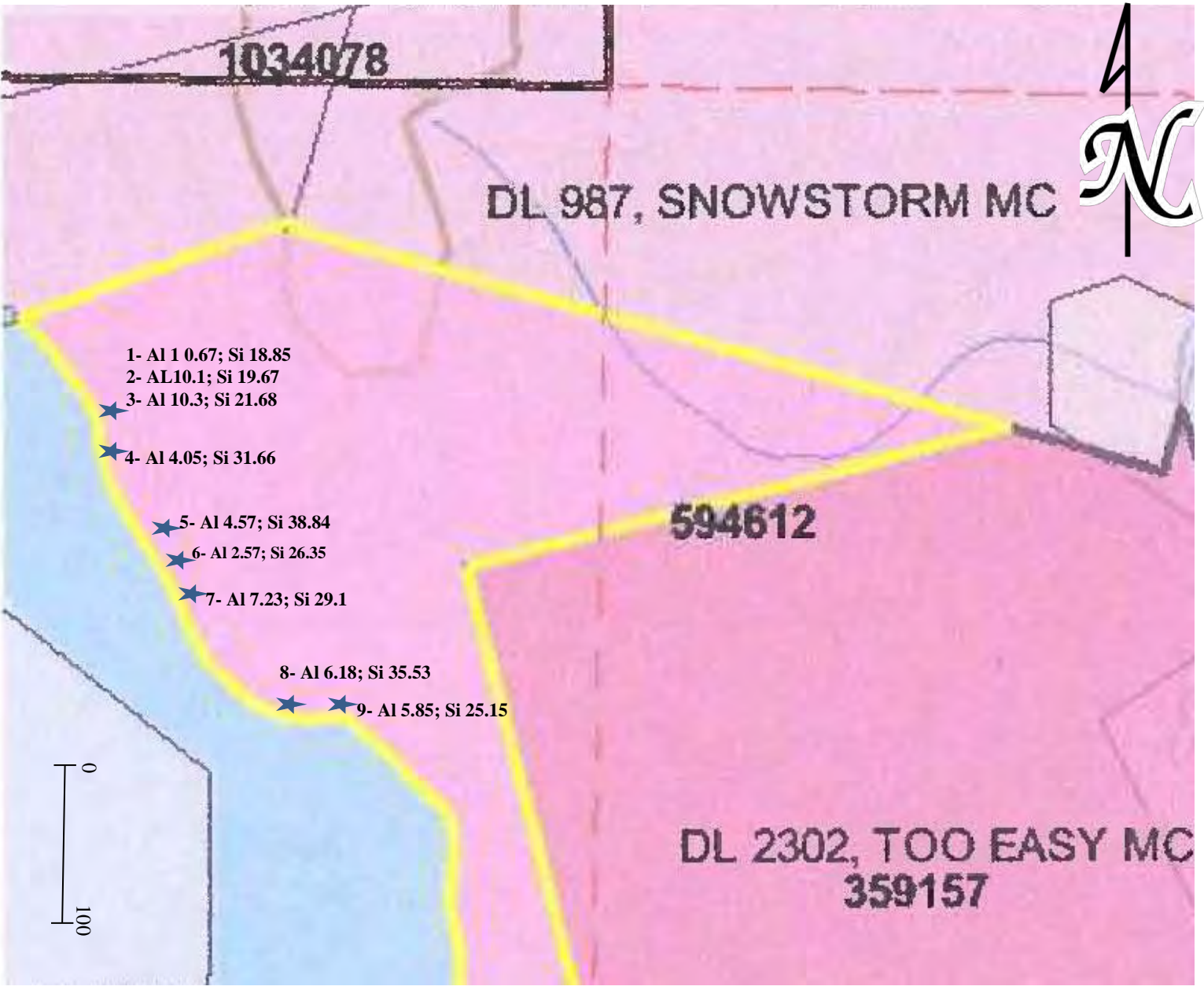
The Deertrail Area sample dump at the high tide elevation is from the small sloughed trench in which a small zone of pyrophyllite is exposed. Southwest of this trench about 35 metres is the main outcrop of the Deertrail Deposit extending about 50 metres in an east-west direction composed of cliffs up to 15 m high. Previous samples 06 through 16 average 15.7% Al₂O₃ with very low total alkalis and low sulfur. The Deertrail Deposit appears to contain more pyrophyllite than the Monteith Deposit or at least has less intercalated high silica layers. The Monteith samples #31-42 average 11.6% Al₂O₃ but with slightly

higher total alkalis. This suggests that perhaps some of the silica-rich layers at the Monteith quarry contain low levels of alunite. The alteration zone along the beach north of the Deertrail Deposit (samples #27-30 and #43-58) contain much higher total alkali and very high sulfur indicating abundant alunite.

On Easy Six claim a large white weathering alteration zone (samples #52 and 53) have very high SiO₂ content with Al₂O₃ below 6% and negligible alkali and sulfur. This zone outcrops along the beach for over 60 metres and could be similar in size to the Monteith Bay geyselite (SiO₂) deposit presently under development.

Also for completeness of data presentation, the Sockeye Deposits were sampled in 1993. The Sockeye area based on present work can be subdivided into Sockeye North, sample #17-26 and Sockeye South, samples #54-57. Old maps indicate continuity between the two zones, however present exposures and the cursory nature of recent work precludes making this correlation at this time. An accurate orthophoto and basemap at a scale of 1:500 or more detailed would be necessary for accurate geological mapping. The Sockeye South Deposit is exposed in a vertical cliff at least 30 m. in height within a complex alteration system. No previous work appears to have been done on the Sockeye South Deposit. Samples on the Sockeye South average 15.5% Al₂O₃. In contrast the Sockeye North Deposit has been trenched and excavated along a zone of over 100 metres in length. This zone is cut by one main fault with dissimilar material occur above and below the shearing. This area is 150 metres from the main logging road west of Jansen Lake.

The average Al₂O₃ content of the samples taken in the Sockeye North Deposit #17-26 is 14.3% with elevated alkali suggesting the presence of alunite although SO₃ is relatively low. Detailed mineralogical studies are required to fully document the minerals present.



★ Figure 7 Sample Locations and Results 2016
★ Rock Samples 2016 Al/Si Results

GEOLOGY

(2002) Comprehensive geological mapping of Northern Vancouver Island was carried out during the late 1960's, the bulk of it by Dr. Jan Muller of the Geological Survey of Canada with major assistance by Dr. Kenneth Northcote of the B.C. Department of Mines. The results of their mapping are summarized on G.S.C. Map 1552A. More recently, mapping was carried out on map sheets NTS 97L/ 12 and 92L/ 11W by Hammock, J. L. et. al. in the 1990's. The results of this work, which was produced by the Geological Survey Branch of the British Columbia government is available in both digital and hard copy formats at a scale of 1:50,000.

The basement upon which the rocks of northern Vancouver Island were laid down is probably of Middle to Upper Paleozoic Age. At the time of deposition, the landmass, which now makes up Vancouver Island, was located in the equatorial regions of the Pacific Ocean. It consisted of felsic to basic volcanics and associated carbonates deposited in a submarine environment (Sicker Group Rocks).

In Upper Triassic time (about 200 million years ago), these basement rocks were covered by a series of pillow lavas and flows largely of basaltic composition. Total thicknesses extruded probably exceed 2,400 metres. These rocks are known as the Karmutsen Formation.

Following this period of basaltic volcanism, carbonate rocks [the Quatsino Limestone] accumulated to thicknesses of about 300 metres, although a much thinner section appears to be the rule north of and south of the type section at Quatsino Narrows.

Above the Quatsino there is generally found an elastic section of which appears to be of slightly different age and of varying composition in different parts of northern Vancouver Island. Depending on age, composition and location, it is known as the Parson Bay Formation or the Harbledown Formation. The Parson Bay is somewhat calcareous and of upper-most Triassic age while the Harbledown is more argillitic and of lower-most Jurassic age. Above the sedimentary section are the Jurassic Bonanza Volcanics, an assemblage of flows, tuffs and fragmentals largely of andesitic composition, but with minor basaltic and rhyodacitic sections.

During and after eruption of the Bonanza Volcanics, granitic bodies were emplaced within the Karmutsen-Quatsino-Bonanza sequence. These bodies ranged in size from dykes and small plugs to masses of batholithic proportions. Some of these intrusives formed the underground reservoirs, which broke through to surface to deposit the Bonanza Volcanics.

Reaction between these very hot, high-level vent zones and circulating groundwater and seawater led to the development of numerous zones of highly altered rock, within or adjacent to which are copper-gold-molybdenum deposits. The alteration zones are generally characterized by the presence of large amounts of silica, clay minerals, pyrite, pyrophyllite and laumontite. Of the various alteration zones, perhaps 90% are located in the belt immediately north of Rupert and Holberg Inlets particularly in the vicinity of the PEM100 Quarry and Pemberton Hills, which are about 40 miles north of Monteith Bay.

At some time during the latter part of the Jurassic, following a long period of northward drift, the Vancouver Island - Queen Charlotte Islands - Southeast Alaska terrane, apparently somewhat fragmented, collided with and fused to the North American Continent. Following this accretion, and a general elevation of the landscape probably caused related to the mechanics of collision, highland

portions of the terrane were eroded into basinal areas, forming continental transgressive sandstones of Cretaceous age, which included numerous coal measures, those of the Nanaimo basin being most notable. One of the small Lower Cretaceous basins of sandstone extends from the western edge of the Island Copper Mill area to the vicinity of Apple Bay, Quatsino Sound, approximately 50 km north of Monteith Bay.

(1994) The pyrophyllite deposits consist mainly of replacement silica and pyrophyllite with a chemical composition of approximately 50% to 80% Pyrophyllite and 20% to 50% extra SiO₂ they are in part paleo-hot-springs deposit of massive thickness, originally of gently dipping bedding, now somewhat faulted, bent and dipping to the south about forty to fifty degrees. Surface samples were taken systematically over the area. The correlation and analysis was done by the Tilbury Cement laboratory and Chemex Labs Ltd.

Triassic to early Jurassic volcanic-sedimentary sequences underlie the northwest of Vancouver Island. The Triassic Karmutsen Formation consists of a very thick basaltic succession of pillow lavas and breccias, amygdaloidal and massive flows with infrequent interbedded tuffaceous sediments forming the lower part of the sequence.

Conformably overlaying the Karmutsen formation are the Quatsino and Parson Bay Formations which are mainly calcareous and shaly sedimentary sequences. These sediments are in turn overlain by the Bonanza Group of early Jurassic age, consisting of flows and pyroclastics ranging in composition from rhyolite to basalt. The pyrophyllite deposits are hosted by Bonanza Group volcanics.

The geysirite deposit consists mainly of replacement silica normally in a concentration greater than ninety-six percent SiO₂. It is a paleo-hot-springs deposit of variable thickness, originally of gently dipping bedding, now somewhat faulted, bent and dipping to the east-southeast at about 10°. Surface samples were taken systematically over the area and cores were taken from drill holes to determine the extent of the deposit. The correlation and analysis was done by the Tilbury Cement laboratory and Chemex Labs Ltd.

Muller et al (1974) have measured the stratigraphic sections of the Bonanza volcanics, indicating an average thickness of 2,500 m. Rhyodacite and siliceous units in the Kyuquot Sound area appear often as welded tuffs.

The Bonanza volcanics in the Monteith Bay area consist of porphyritic andesite with hornblende and plagioclase phenocrysts in an often siliceous, aphanitic groundmass. Frequently amygdaloidal flows occur and flow breccias are observed commonly in more mafic units. Felsic rocks located on the west shore of Kayouk Peninsula are generally limited in occurrence, appear to be banded, containing quartz phenocrysts and possibly fragments of pumice.

The Kashutl Inlet intrusive suite is one of a small linear set of plutons which have been emplaced near surface, within related volcanics and pyroclastics. Epithermal precious metal mineralization is found to the north of Easy Inlet within these intrusions.

The volcanics in the Monteith Bay area consist mainly of porphyritic andesite with hornblende and plagioclase phenocrysts in an often siliceous, aphanitic groundmass. Frequently amygdaloidal flows occur and flow breccias are observed commonly in more mafic units. Felsic rocks located on the west shore of Kayouk Peninsula are generally limited in occurrence, appear to be banded, containing quartz

phenocrysts and possibly fragments of pumice. The geyselite deposit appears to be on one of these felsic sheets.

Late intrusive rocks occur as fine-grained porphyritic andesite to dykes and sills with a dark grey-green groundmass. These dikes are discordant to the bedding within the general area.

Narrow dark green, fine grained andesite dykes were observed in the western part of the area striking 104° and dipping 78° to the north. Bright apple-green massive sericite is associated with alteration of the margins the dykes between holes 93-7 and 93-8.

Now that mining has progressed and sufficient rock has been exposed, it is apparent that small pyritic zones of 'less altered' and "partially digested" geyselite are situated between holes 93-9 and 93-6. These pyrite zones are now well exposed and intersected by drill holes MB-01-01, MB-02-03 and MB-02-06. This material is of particular concern since it carries elevated sulphur values.

The lower pyritic unit is exposed on the small peninsula on the east side of the deposit at an elevation just below mean tide level. This lower vaulted contact dips approximately 10° to the east-southeast between holes 93-12 at an elevation of -5m to hole 93-13 at -15m elevation. However, the lower pyritic unit in Hole 93-08 is at +11m elevation and dips about 20° east toward Hole 93-12. Clearly there are local variations. Current exposures suggest that the lower pyritic unit has been faulted up in the eastern part of the deposit. A junction of several faults can be observed in the vicinity of hole 93-03 and 93-02 (above and north of the present settling ponds).

The central lens of 'less altered' and a partially digested" geyselite is partly controlled by a series of arcuate steeply dipping north trending fractures and faults. This series of faults was not exposed sufficiently before mining to be recognized in 1993. As plotted on Figure 6 (in pocket) the north trending faults juxtapose zones of clean geyselite with lenses of pyritic material. Parts of these pyritic zones contain semi-massive pyrite up to 30cm thick, which, in some cases, dip at about 40° to the north.

A good example of the "partially altered" geyselite occurs in hole MB-02-05 from 0 to 6.90m. The bleaching is controlled by fracturing alternating with short sections of 'unaltered" pyritic material.

Alteration

Rocks in the general Easy Inlet area are altered to various degrees, with pyrophyllite, silicic and advanced argillic zones present. The lack of structural control, of associated large intrusions and overall distribution of the alteration assemblages suggest that the silicification took place contemporaneously with volcanism before significant structural dislocation. The sericite-rich alteration in Monteith Bay appears to correlate directly with the emplacement and shearing of the later andesite dykes. The presence of chalcedonic silica, alunite and pyrophyllite indicate a probable near surface origin for part of the main phase of alteration.

A typical analysis of pyrophyllite from Monteith Bay is shown below.

| A1203 % | CaO % | CR203 % | Fe203 % | K2O % | MgO % | MnO % |
|---------|-------|---------|---------|-------|-------|-------|
| 18.42 | 0.43 | 0.02 | 2.08 | 0.79 | 0.13 | |

| Na2O % | P2O5 % | Si102 % | TiO2 % | Loss on Ignition | Total | S % Total | FeO % |
|--------|--------|---------|--------|------------------|--------|-----------|-------|
| 0.57 | 0.28 | 70.54 | 1.23 | 5.85 | 100.35 | 0.061 | 1.02 |



Figure 8 Monteith Bay Geysirite Deposit – Google image

WORK PROGRAM 2019

The 2019 Work program consisted of sample collection from the Morris alunite zone.

Assays were conducted by using an XRF Unit factory calibrated (Cert No. 0154-0557-1) on October 30, 2013, Instrument #540557 Type Olympus DPO-2000 Delta Premium. Informal calibrations are done on a frequent basis on standards. The instrument was calibrated using Alloy Certified reference materials by ARM1 and NIS5 standards. Only certified operators were employed and that were experienced in XRF assay procedures. Read times were 120 seconds or greater.

A total of 10 samples were assayed and results are shown in Appendix III and IV and plotted on Figure 10 (pg 28). Typically the massive alunite-quartz rock is a chalky white colour and fine-grained. Commonly rusty weathering in places.

The composition of alunite is $K Al_3(SO_4)_2(OH)_6$.

Potassium content varies in the sample collected from a high of 2.35 to a low of 1.32. These potassium levels are lower than expected. Possibly the sodium end member Alunite is more abundant. Sulfur content varied from 7.92 down to 2.92, suggesting that sodium (Natro alunite/Almerite) when Na substitutes for K, is present. Silica is abundant with a high value of 19.10% Si indicating that quartz is a major component.

Sample #AL-9 was anomalous in having 4.46% Ca whereas the other samples have negligible CaO.

Future work should investigate the leachability of K_2O for organic fertilizer applications. Enough sample was collected for these types of tests.

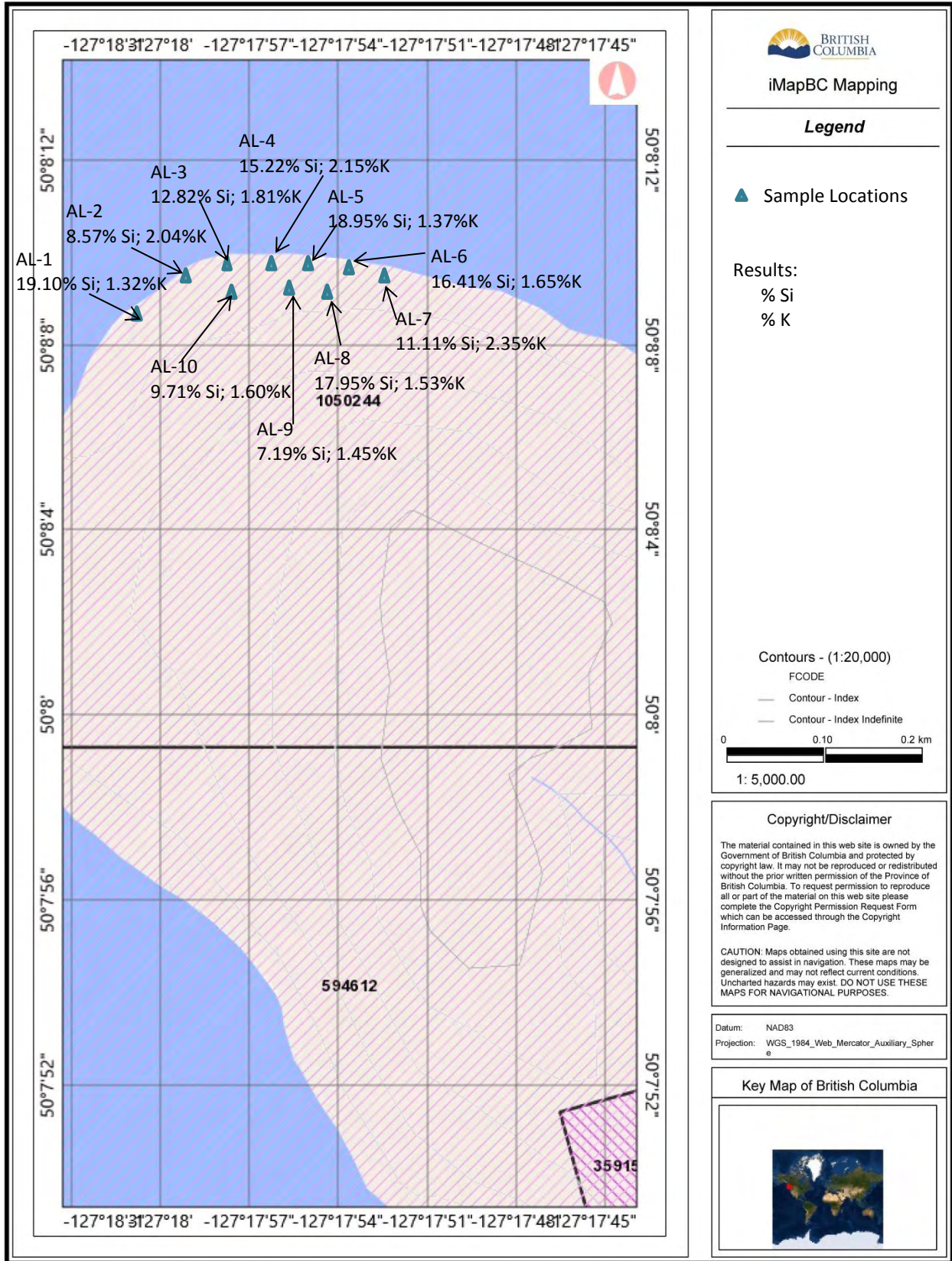


Figure 10 Sample Locations and Results 2019



Figure 11 Photo of Alunite Showing

CONCLUSIONS AND RECOMMENDATIONS

The Morris Alunite deposit is to the north of the Monteith Bay Geyserate Quarry.

Fill-in Diamond drilling was completed at the Monteith Bay Geyserate Quarry in December 2001 and January 2002 to give further definition to the ore reserve with special reference to sulphur values. Assaying on the 1993 drill core did not give accurate enough sulphur values to be used in current Acid Rock Drainage/Metal Leaching (ARD/ML) calculations.

The previous 2016 program focussed on geochemical characterization of the Deer Trail pyrophyllite zone and host rocks. Brown weathering, fine grained "massive" brownish to light grey pyrophyllite (samples 1-3) contain 10.1 to 10.67% Al associated with Si values of 18.85 to 21.68% Si.

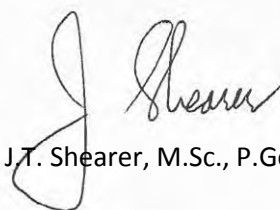
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Sample #AL-9 was anomalous in having 4.46% Ca whereas the other samples have megligible CaO.

Future work should investigate the leachability of K_2O for organic fertilizer applications. Enough sample was collected for these types of tests.

Respectfully submitted



J.T. Shearer, M.Sc., P.Geo. (BC & Ontario)

COST OF FUTURE WORK

Program: A) Shallow percussion drilling to obtain fresh material for brightness tests.
B) Detailed geological mapping of each deposit.
C) Preliminary Diamond drilling on the Morris Alunite deposit
- 2000 foot program.

| | | |
|-----------|---|------------------|
| Program A | 10 day Program | |
| | Wages and Benefits - 3 man crew | \$ 6,500 |
| | Transportation, including boat | 1,800 |
| | Board and Meals | 1,700 |
| | Drill rental | 500 |
| | Analytical | 3,000 |
| | Report Preparation | <u>1,500</u> |
| | Subtotal Cost A - | \$15,000 |
| Program B | 25 day Program | |
| | Wages and Benefits - 4 man crew | \$30,000 |
| | Transportation, including boat | 3,400 |
| | Board and Meals | 5,000 |
| | Base Map preparation by drone | 6,000 |
| | Analytical | 5,000 |
| | Report Preparation | <u>2,000</u> |
| | Subtotal Cost B - | \$51,400 |
| Program C | 35 day Program with Gopher Drill, 2000 ft. | |
| | Wages and Benefits - 2 man supervision & core splitting | \$21,000 |
| | Transportation, including boat | 4,400 |
| | Board and Meals | 3,800 |
| | Drill Contract 2000 @ \$23 per foot | 46,000 |
| | Analytical | 12,000 |
| | Mob & Demob. | 5,000 |
| | Report Preparation | <u>3,000</u> |
| | Subtotal Cost C - | \$95,200 |
| | GRAND TOTAL | \$161,000 |

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Appendix I

Statement of Qualifications

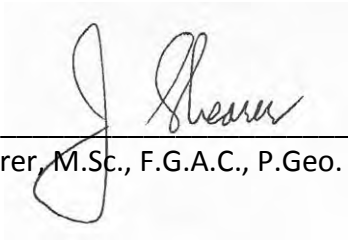
July 18, 2019

Appendix I
STATEMENT OF QUALIFICATIONS

I, JOHAN T. SHEARER, of 3572 Hamilton Street, in the City of Port Coquitlam, in the Province of British Columbia, do hereby certify:

1. I am a graduate of the University of British Columbia (B.Sc., 1973) in Honours Geology, and the University of London, Imperial College (M.Sc., 1977).
2. I have over 40 years' experience in exploration for base and precious metals and Industrial mineral commodities in the Cordillera of Western North America with such companies as McIntyre Mines Ltd., J.C. Stephen Explorations Ltd., Carolin Mines Ltd. and TRM Engineering Ltd.
3. I am a fellow in good standing of the Geological Association of Canada (Fellow No. F439) and I am a member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (Member No. 19,279).
4. I am an independent consulting geologist employed since December 1986 by Homegold Resources Ltd. at #5-2330 Tyner St., Port Coquitlam, B.C.
5. I am the author of a report entitled "Geochemical Assessment Report on the Monteith Bay Project, Kyuquot Sound Area, Vancouver Island, B.C. Alberni M.D., dated July 18, 2019.
6. I have visited the property on July 14, 15+16, 2019. I have examined the surface exposures of the Alunite and collected systematic surface samples. I am familiar with the regional geology and geology of nearby properties. I have become familiar with previous work conducted in the Monteith Bay area by examining in detail the available reports, plans and sections and have discussed previous work with persons knowledgeable of the area.
7. I own a direct interest in the property described herein

Dated at Vancouver, British Columbia, this 18th day of July, 2019



J.T. Shearer, M.Sc., F.G.A.C., P.Geo.

Appendix II

Statement of Costs

July 18, 2019

Appendix II
COST STATEMENT
MORRIS PROJECT 2019, MONTEITH BAY AREA
May 1, 2019 to July 18, 2019

| | Without HST |
|---|--------------------|
| Wages | |
| J. T. Shearer, M.Sc., P.Geo., Geologist 3 days @ \$700/day, July 14-16, 2019 | \$ 2,100.00 |
| Keith Hannan, Prospector 3 days @ \$300/day, July 14-16, 2019 | \$ 900.00 |
| Wages Sub-total | \$ 3,000.00 |
| Expenses | |
| Truck 1, Rental, fully equipped 4x4, 3 days @ \$125/day | 375.00 |
| Fuel | 450.00 |
| Ferries – Vancouver to Nanaimo – Return | 210.00 |
| Hotel, 6 man days @ \$125/day | 750.00 |
| Boat Rental, 3 days @ \$500/day | 1,500.00 |
| Food/Supplies | 250.00 |
| Rental and XRF Assays | 300.00 |
| XRF Operator | 350.00 |
| Computer Mapping and Data Interpretation | 200.00 |
| Report Preparation | 1,400.00 |
| Word Processing and Reproduction | 350.00 |
| Expenses Sub-total | \$ 6,045.00 |
| Grand Total | \$ 9,045.00 |

Event # 5748366
Date Filed July 18, 2019
Amount Filed \$8,500.00
PAC Filed \$1,944.84
Total Filed \$10,444.84

Appendix III

XRF Assay Results

July 18, 2019

2019 XRF Monteith Bay

All results in %

| Reading | Mg | Mg +/- | Al | Al +/- | Si | Si +/- | P | P +/- | S | S +/- | Cl | Cl +/- | K | K +/- | Ca | Ca +/- | Ti |
|---------|----|--------|------|--------|-------|--------|------|-------|------|-------|------|--------|------|-------|------|--------|------|
| AL-1 | ND | | 3.48 | 0.07 | 19.10 | 0.13 | 0.68 | 0.03 | 4.43 | 0.03 | 0.38 | 0.07 | 1.32 | 0.01 | 0.20 | 0.01 | 0.28 |
| AL-2 | ND | | 5.75 | 0.08 | 8.57 | 0.07 | 0.62 | 0.02 | 7.92 | 0.05 | ND | | 2.04 | 0.02 | 0.04 | 0.01 | 0.31 |
| AL-3 | ND | | 4.10 | 0.07 | 12.82 | 0.10 | 0.70 | 0.02 | 4.94 | 0.04 | ND | | 1.81 | 0.01 | 0.05 | 0.01 | 0.48 |
| AL-4 | ND | | 4.55 | 0.08 | 15.22 | 0.11 | 0.66 | 0.03 | 3.80 | 0.03 | ND | | 2.15 | 0.02 | 0.06 | 0.01 | 0.37 |
| AL-5 | ND | | 4.01 | 0.06 | 18.95 | 0.12 | 0.61 | 0.02 | 5.29 | 0.03 | ND | | 1.37 | 0.01 | ND | | 0.31 |
| AL-6 | ND | | 5.15 | 0.07 | 16.41 | 0.11 | 0.89 | 0.02 | 4.46 | 0.03 | ND | | 1.65 | 0.01 | 0.06 | 0.01 | 0.35 |
| AL-7 | ND | | 5.57 | 0.09 | 11.11 | 0.09 | 0.72 | 0.03 | 4.87 | 0.04 | ND | | 2.35 | 0.02 | 0.05 | 0.01 | 0.48 |
| AL-8 | ND | | 3.26 | 0.06 | 17.95 | 0.11 | 0.74 | 0.02 | 4.53 | 0.03 | ND | | 1.53 | 0.01 | 0.04 | 0.00 | 0.24 |
| AL-9 | ND | | 4.10 | 0.07 | 7.19 | 0.06 | 0.69 | 0.02 | 4.04 | 0.03 | ND | | 1.45 | 0.01 | 4.46 | 0.03 | 0.36 |
| AL-10 | ND | | 2.77 | 0.07 | 9.71 | 0.08 | 0.72 | 0.02 | 2.92 | 0.02 | 2.27 | 0.06 | 1.60 | 0.01 | 0.42 | 0.01 | 0.39 |

| Ti +/- | V | V +/- | Cr | Cr +/- | Mn | Mn +/- | Fe | Fe +/- | Co | Co +/- | Ni | Ni +/- | Cu | Cu +/- | Zn | Zn +/- | As |
|--------|------|-------|------|--------|------|--------|------|--------|----|--------|----|--------|------|--------|----|--------|------|
| 0.02 | 0.03 | 0.01 | ND | | ND | | 0.10 | 0.00 | ND | | ND | | 0.00 | 0.00 | ND | | ND |
| 0.02 | 0.04 | 0.01 | ND | | ND | | 0.62 | 0.01 | ND | | ND | | 0.00 | 0.00 | ND | | ND |
| 0.03 | ND | | ND | | ND | | 0.26 | 0.01 | ND | | ND | | 0.00 | 0.00 | ND | | ND |
| 0.02 | ND | | ND | | ND | | 0.14 | 0.01 | ND | | ND | | 0.00 | 0.00 | ND | | ND |
| 0.02 | 0.03 | 0.01 | ND | | ND | | 0.09 | 0.00 | ND | | ND | | 0.00 | 0.00 | ND | | ND |
| 0.02 | ND | | ND | | ND | | 0.14 | 0.01 | ND | | ND | | 0.00 | 0.00 | ND | | ND |
| 0.03 | ND | | ND | | ND | | 0.10 | 0.00 | ND | | ND | | 0.00 | 0.00 | ND | | ND |
| 0.02 | 0.03 | 0.01 | ND | | 0.01 | 0.00 | 0.11 | 0.00 | ND | | ND | | 0.00 | 0.00 | ND | | ND |
| 0.02 | 0.02 | 0.01 | 0.01 | 0.00 | ND | | 3.61 | 0.03 | ND | | ND | | 0.00 | 0.00 | ND | | 0.00 |
| 0.02 | ND | | 0.01 | 0.00 | ND | | 0.28 | 0.01 | ND | | ND | | 0.00 | 0.00 | ND | | ND |

| As +/- | Se | Se +/- | Rb | Rb +/- | Sr | Sr +/- | Y | Y +/- | Zr | Zr +/- | Mo | Mo +/- | Ag | Ag +/- | Cd | Cd +/- | Sn |
|--------|------|--------|------|--------|------|--------|------|-------|------|--------|------|--------|----|--------|----|--------|----|
| | ND | | ND | | 0.02 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | ND | | ND | | ND | | ND |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | ND | | ND | | ND | | ND |
| | ND | | ND | | 0.02 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | ND | | ND | | ND | | ND |
| | ND | | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | ND | | ND | | ND |
| | ND | | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | ND | | ND | | ND | | ND |
| | ND | | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | ND | | ND | | ND | | ND |
| | ND | | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | ND | | ND | | ND |
| | ND | | ND | | 0.02 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | ND | | ND | | ND | | ND |
| 0.00 | 0.00 | 0.00 | ND | | 0.07 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | ND | | ND | | ND | | ND |
| | ND | | ND | | 0.06 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | ND | | ND | | ND | | ND |

| Sn +/- | Sb | Sb +/- | W | W +/- | Hg | Hg +/- | Pb | Pb +/- | Bi | Bi +/- | Th | Th +/- | U | U +/- | LE | LE +/- |
|--------|----|--------|----|-------|----|--------|------|--------|----|--------|------|--------|------|-------|-------|--------|
| | ND | | ND | | ND | | 0.00 | 0.00 | ND | | ND | | ND | | 69.96 | 0.20 |
| | ND | | ND | | ND | | 0.00 | 0.00 | ND | | ND | | ND | | 74.03 | 0.18 |
| | ND | | ND | | ND | | 0.00 | 0.00 | ND | | ND | | ND | | 74.78 | 0.18 |
| | ND | | ND | | ND | | 0.00 | 0.00 | ND | | ND | | ND | | 72.98 | 0.19 |
| | ND | | ND | | ND | | 0.00 | 0.00 | ND | | ND | | ND | | 69.28 | 0.18 |
| | ND | | ND | | ND | | 0.00 | 0.00 | ND | | ND | | ND | | 70.82 | 0.19 |
| | ND | | ND | | ND | | 0.00 | 0.00 | ND | | 0.00 | 0.00 | ND | | 74.69 | 0.19 |
| | ND | | ND | | ND | | 0.00 | 0.00 | ND | | ND | | ND | | 71.51 | 0.17 |
| | ND | | ND | | ND | | 0.00 | 0.00 | ND | | ND | | ND | | 73.95 | 0.18 |
| | ND | | ND | | ND | | 0.00 | 0.00 | ND | | ND | | 0.00 | 0.00 | 78.81 | 0.17 |

Appendix IV

Sample Descriptions

July 18, 2019

Appendix IV Sample Descriptions

| Sample # | Si | K | Al | P ₂ O ₅ | CaO | S | Description |
|----------|-------|------|------|-------------------------------|--------|------|---|
| AL-1 | 19.10 | 1.32 | 3.48 | 0.6775 | 0.2031 | | Grey-green weathering, chalky white very fine-grained Alunite/Quartz rock |
| AL-2 | 8.57 | 2.04 | 5.75 | 0.6182 | 0.0438 | 7.92 | Rusty weathering, chalky grey-white, somewhat speckled ??? with 1mm dots, Alunite/Quartz rock |
| AL-3 | 12.82 | 1.81 | 4.10 | 0.7031 | 0.0509 | 4.94 | Rusty weathering, chalk white Alunite/Quartz rock |
| AL-4 | 15.22 | 2.15 | 4.55 | 0.6615 | 0.0631 | 3.80 | White chalky, vague white fragments, fine-grained Alunite/Quartz rock |
| AL-5 | 18.95 | 1.37 | 4.02 | 0.6685 | | 5.29 | White, slightly foliated, fine-grained Alunite/Quartz rock |
| AL-6 | 16.41 | 1.65 | 5.15 | 0.8871 | 0.0587 | 4.46 | Rusty weathering, white/creamy fine-grained Alunite/Quartz rock |
| AL-7 | 11.11 | 2.35 | 5.57 | 0.7229 | 0.0517 | 4.87 | Siliceous, brown weathering, white, fine-grained Alunite/Quartz rock |
| AL-8 | 17.95 | 1.53 | 3.26 | 0.7404 | 0.0430 | 4.53 | Dark grey weathering, white, fine-grained, pock marked Alunite/Quartz rock |
| AL-9 | 7.19 | 1.45 | 4.10 | 0.6898 | 4.46 | 4.04 | Slightly brown weathering, calcareous, fine-grained Alunite/Quartz rock |
| AL-10 | 9.71 | 1.60 | 2.77 | 0.7218 | 0.4206 | 2.92 | Brown/rusty weathering, greenish-grey indistinct dark fragments up to 3mm Alunite/Quartz rock |

Sample Locations

| Sample | Latitude | Longitude |
|--------|-----------|------------|
| AL-1 | 50.12366N | 127.30023W |
| AL-2 | 50.13596N | 127.29970W |
| AL-3 | 50.13599N | 127.29936W |
| AL-4 | 50.13605N | 127.29899W |
| AL-5 | 50.13606N | 127.29864W |
| AL-6 | 50.13598N | 127.29805W |
| AL-7 | 50.13590N | 127.29753W |
| AL-8 | 50.13586N | 127.29818W |
| AL-9 | 50.13584N | 127.29869W |
| AL-10 | 50.13588N | 127.29926W |