

<b>TYPE OF REPORT (type of survey(s))</b>	<b>TOTAL COST</b>	<b>\$4,602.90</b>
Geochemical Sampling		

AUTHOR(S) \_\_\_\_\_ SIGNATURE(S) \_\_\_\_\_  
R. Tim Henneberry, P. Geo. "signed and sealed"

NOTICE OF WORK NUMBER(S) / DATE(S) \_\_\_\_\_ YEAR OF WORK 2008

STATEMENT OF WORK – CASH PAYMENT EVENT NUMBERS / DATE(S) 4241529

PROPERTY NAME Beaver

CLAIM NAME(S) (on which work was done) \_\_\_\_\_  
Beaver 1 314220, Beaver 2 314221, 571069, 571073

COMMODITIES SOUGHT Limestone for Industrial Fillers  
MINERAL INVENTORY MINFILE NUMBERS, IF KNOWN 092L 348  
MINING DIVISION Nanaimo NTS 092L/10W TRIM 092L056  
LATITUDE \_\_\_\_\_ LONGITUDE \_\_\_\_\_ (at centre of work)  
NORTHING 5596800 EASTING 648800 UTM ZONE 9 MAP DATUM NAD 83

OWNER 1 South Aggregate Resources Inc. OWNER 2 \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_  
1200 – 805 West Broadway \_\_\_\_\_  
Vancouver, B.C. V5Z 1K1 \_\_\_\_\_

OPERATORS (who paid for work) \_\_\_\_\_  
SAME \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size, attitude)  
The Beaver property is underlain by white marble of the Quatsino Formation of the Triassic Vancouver Group. The flat lying limestone was originally explored for dimension stone. The focus has changed to white limestone for filler applications. 9 samples were taken and sent to Acme Labs for whole rock analysis. The results ranged from 97.53% to 99.65% CaCO<sub>3</sub> with 0.62% to 2.20% insolubles.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS  
23066, 23476

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (In Metric Units)	On Which Claims	Project Costs Apportioned
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo Interpretation			
GEOPHYSICAL (line kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Siesmic			
Other			
Airborne			
GEOCHEMICAL			
(number of samples analyzed for)			
Soil			
Silt			
Rock	9 samples	314220, 314221, 571069, 571073	\$4,602.90
Other			
DRILLING			
(total metres, number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling / assaying			
Petrographic			
Mineralogical			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATION / PHYSICAL			
Line/grid (kilometres)			
Topographic / Photogrammatic (scale, area)			
Legal Surveys (scale, area)			
Road, local access (kilometres)			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST	<b>\$4,602.90</b>

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**BC Geological Survey  
Assessment Report  
30481**

**NORTH ISLAND CARBONATE PROJECT**  
**Cove Property TRIM Sheet 092L056 UTM NAD83 ZONE 9 649500E 5602000N**  
**Beaver Property TRIM Sheet 092L056 UTM NAD83 ZONE 9 648800E 5596800N**  
**Dump Property TRIM Sheet 092L026 UTM NAD83 ZONE 9 651000E 5572900N**

**2008 Exploration Program**

FOR

**SOUTH AGGREGATE RESOURCES INC.**  
1200 – 805 West Broadway  
Vancouver, B.C. V5Z 1K1

R.Tim Henneberry, P.Geol.  
December 31, 2008

-2-  
SUMMARY

South Aggregate Resources Inc. North Island Carbonate project consists of three wholly-owned, road accessible limestone properties near tidewater on the northern end of Vancouver Island:

- The Beaver Property, 17 kilometres southeast of Port McNeill, consisting of four claims totaling 91.1 hectares,
- The Cove Property, 15 kilometres east of Port McNeill, consisting of one claim totaling 225.85 hectares, and
- The Dump Property, 40 kilometres south of Port McNeill, consisting of one claim totaling 247.77 hectares.

All three properties are being explored for white limestone for industrial filler applications with the Quatsino Formation of the Triassic Vancouver Group. The Quatsino limestone outcrops as three narrow belts on northern Vancouver Island. While the limestone is generally brown-grey to light grey, areas proximal to the Jurassic Island Intrusions show varying degrees of metamorphism and become white in color. White to grey-white limestone has been mapped on all three properties during several phases of exploration in the early 1990's to mid 2000's. The white to grey-white limestone was sampled at regular intervals along strike or across stratigraphy as topography allowed. The samples were sent to Acme Labs for chemical analysis as follows:

- The 9 samples taken from a 250 metre by 250 metre area of white limestone on the Beaver property returned values ranging from 97.53% to 99.65% CaCO<sub>3</sub> with 0.62% to 2.20% impurities.
- The 8 samples taken from a 750 metre by 250 metre area of white-grey limestone on the Cove property returned values ranging from 69.02% to 99.43% CaCO<sub>3</sub> with 0.46% to 3.12% impurities.
- The 31 samples taken from a 1200 metre by 300 metre area of white limestone on the Dump property returned values ranging from 88.29% to 100% CaCO<sub>3</sub> with a dolomitic limestone bed in the northwest section of the property ranging from 2.05% to 11.67% MgCO<sub>3</sub>. Impurities range from 0.50% to 2.16%.

These analytical results show the white to white-grey limestone on each of the three properties lie within acceptable ranges for industrial filler applications based on CaCO<sub>3</sub> content and levels of insoluble impurities.

Further exploration is warranted based on these results. This program should consist of 1500 metres of diamond drilling, 500 metres for each of the three properties. Hole depths are expected to be in the range of 30 to 50 metres meaning each property should get 10 to 16 vertical drill holes. The purpose is the test the limestone in the third dimension: both chemically and optically and block out mineral resources to confirm and expand the initial non 43-101 compliant estimates of Munroe (2003). The cost of the drilling program is estimated at \$275,000.

The cost of the 2008 sampling program was \$14,437.17, broken down by property as follows: Beaver \$4,602.90, Dump \$5,298.24 and Cove \$4,536.03.

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## INTRODUCTION

The purpose of this Technical Report is to compile the results of the 2008 exploration program on the three properties comprising the North Island Carbonate Project for assessment credit: the Cove Property, the Beaver Property and the Dump Property. These three properties are being explored for white limestone for filler and extender applications.

This report was commissioned by Mr. Jim Ericksteen of South Aggregates Resources Inc., the property owner.

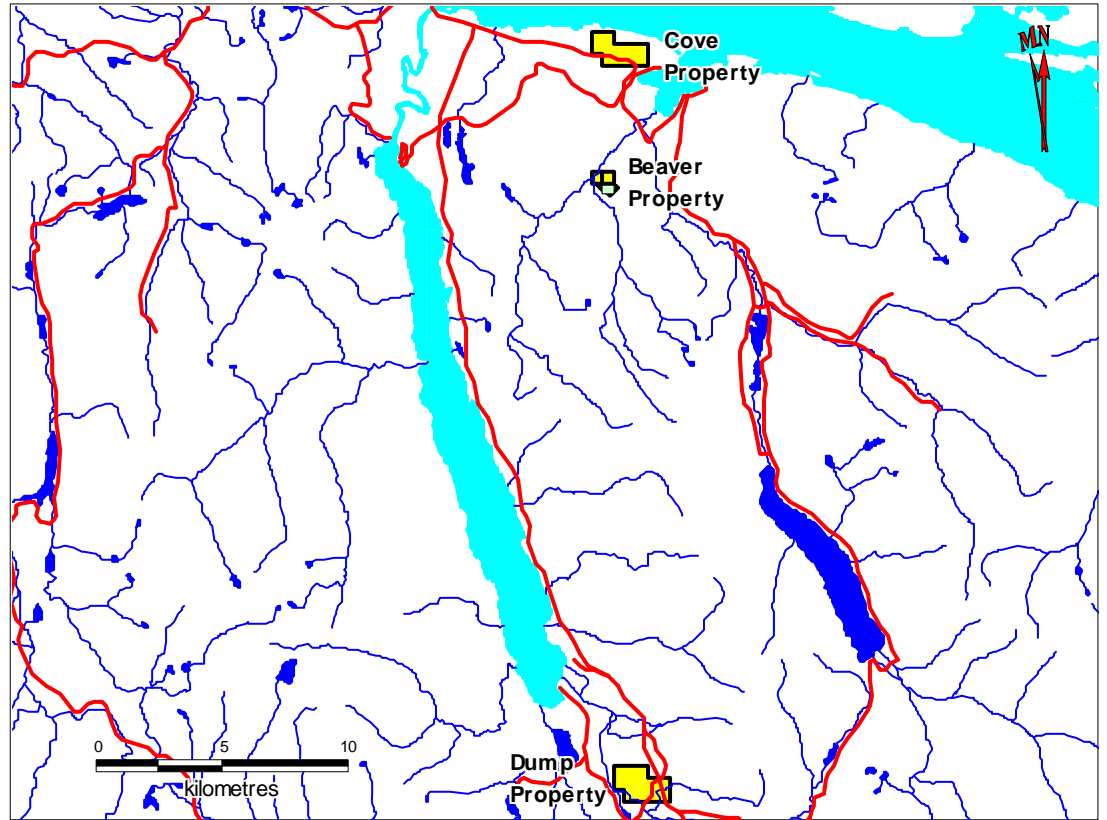
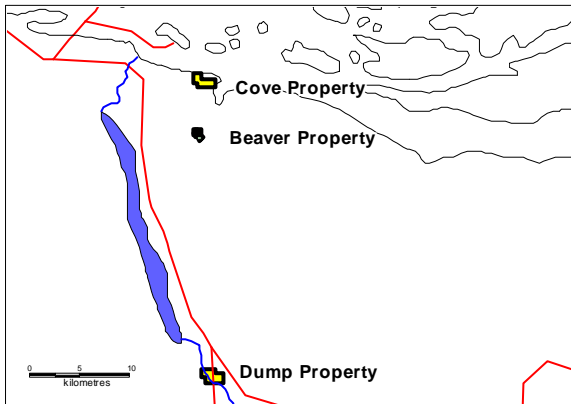
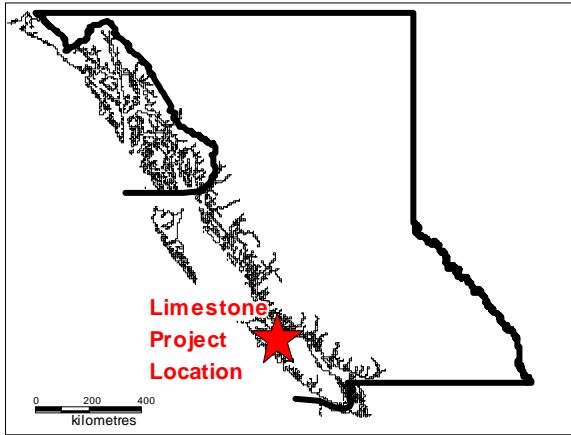
R. Tim Henneberry, P. Geo., serves as the Qualified Person responsible for preparing the Technical Report.

In preparing this report, the author relied on geological reports listed in the References (Section 21) of this report and his extensive years of mineral exploration experience in British Columbia. The author undertook the 2008 mapping and sampling program documented in this report. The author was on site between September 26 and September 28, 2008.

## RELIANCE ON OTHER EXPERTS

The author is not relying on a report or opinion of any experts. The ownership of the claims comprising the property and the ownership of the surrounding claims has been taken from the Mineral Titles Online database maintained by the British Columbia Ministry of Energy and Mines. The data on this site is assumed to be correct.

The section on the History of the property area has been taken from the British Columbia Ministry of Energy and Mines Assessment Files. The geological assessment reports have been written by competent geologists and engineers to the industry standards of the day. The rock, soil and silt analyses were completed by reputable Canadian assay labs, again to the industry standards of the day.



Projection: Latitude Longitude NAD 83

North Island Carbonate Project  
Location  
Figure 1



PROPERTY DESCRIPTION AND LOCATION

The 3 properties of the northern Vancouver Island carbonate project lie in the northern section of Vancouver Island:

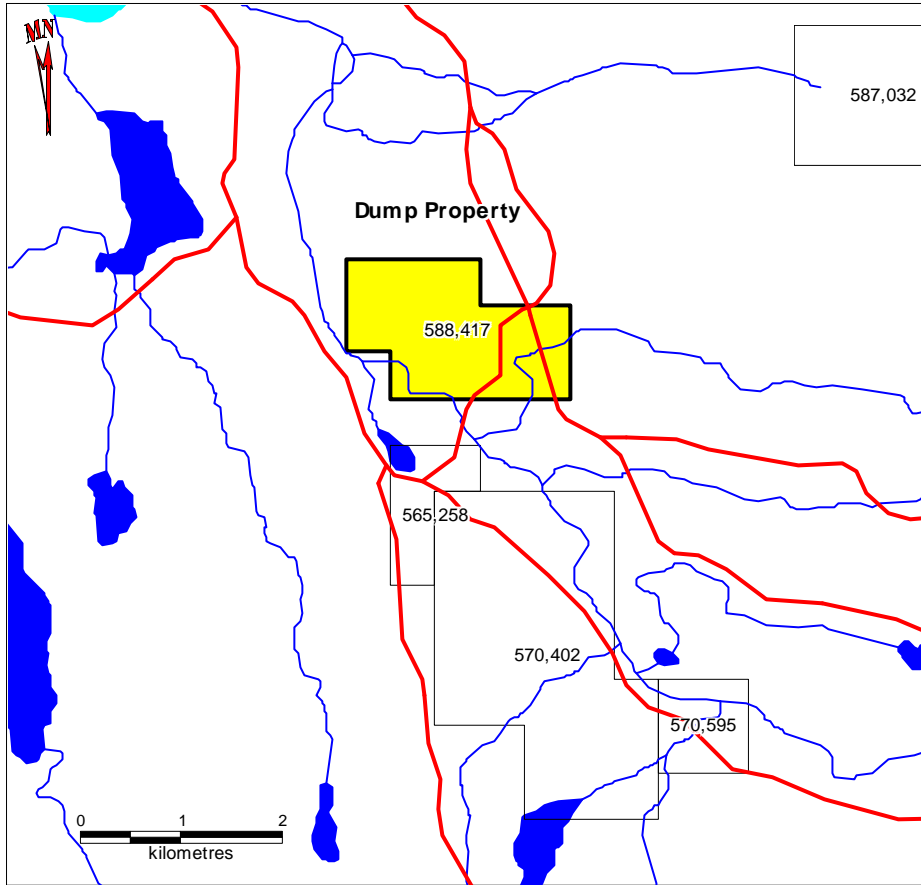
- The Cove Property consists of one claim totaling 225.85 hectares. It lies on TRIM Sheet 092L056 and the geographic centre is UTM NAD 82 Zone 9 649500E 5602000N.
- The Beaver Property consists of four claims totaling 91.1 hectares. It also lies on TRIM Sheet 092L056 and its geographic centre is UTM NAD 83 Zone 9 648800E 5596800N.
- The Dump Property consists of one claim totaling 247.77 hectares. It lies on TRIM Sheet 092L026 and the geographic centre is UTM NAD 82 Zone 9 651000E 5572900N

**Table 1. Mineral Tenure Details**

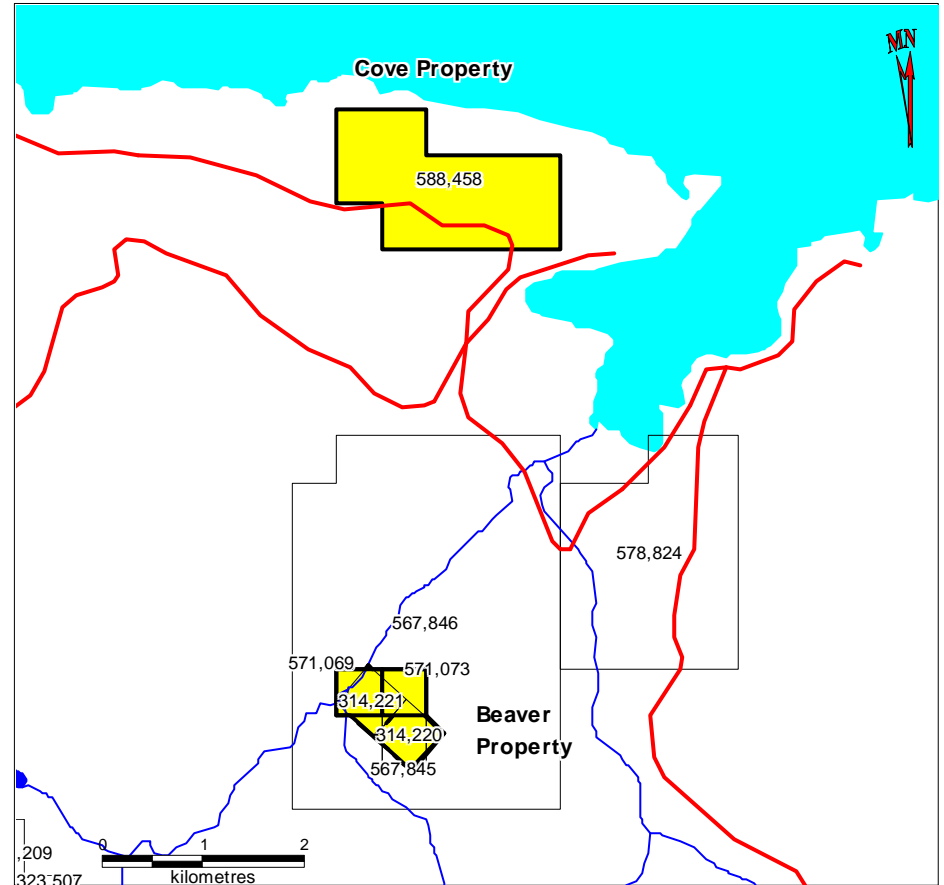
Tenure Number	Claim Name	Owner	Map Number	Good To Date	Area
<b>Beaver Property</b>					
314220	BEAVER #1	214170 (100%)	092L	2015/jul/25	25.00
314221	BEAVER #2	214170 (100%)	092L	2015/jul/25	25.00
571069		214170 (100%)	092L	2015/jul/25	20.55
571073		214170 (100%)	092L	2015/jul/25	20.55
					91.10
<b>Dump Property</b>					
588417		214170 (100%)	092L	2013/aug/18	247.77
<b>Cove Property</b>					
588458		214170 (100%)	092L	2013/jun/19	225.85

\* pending approval of 2008 assessment credits

All claims are registered in the name of South Aggregate Resources Inc. of Vancouver, British Columbia. The Beaver 1 and Beaver 2 claims were physically staked as two post claims with a common centre line. The remaining 4 claims are all map tenures acquired by selecting cells on the British Columbia Ministry of Energy, Mines and Petroleum Resource Mineral Title Online Database.



Projection: Latitude Longitude NAD 83



Projection: Latitude Longitude NAD 83

**North Island Carbonate Project**  
 Dump Claim Map  
 TRIM Sheet 092L026  
 Figure 2a

**North Island Carbonate Project**  
 Beaver and Cove Claim Map  
 TRIM Sheet 092L056  
 Figure 2b

## ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The three properties of the Northern Vancouver Island carbonate project are all road accessible and lie at various distances from Port McNeill, the regional population centre:

- The Cove property lies at kilometre 6 along Beaver Cove Road, 15 kilometres east of Port McNeill. The junction of Beaver Cove Road and Highway is 10 kilometres south of Port McNeill. An unnamed logging road provides access to the southern ½ of the property, though it has just recently been deactivated. The logging road providing access to the northern ½ of the property was deactivated a number of years ago and is now impassable. The elevation is relatively level, ranging from 60 to 90 metres above sea level.
- The Beaver property lies 2 kilometres along Branch road 104 which leaves the West Main logging road 500 metres south of the junction with Beaver Cover Road. West Main leaves Beaver Cove Road at kilometre 15 at the T-intersection. Branch 104 road bisects the property. The Beaver property lies 17 kilometres southeast of Port McNeill. The elevation ranges from 30 to 150 metres at the southern edge of the property.
- The Dump property lies 40 kilometres south of Port McNeill. Access is 40 kilometres south along the Island Highway to Zeballos Road, then 0.5 kilometres along the road to the property. Recent logging of the NI 022 road system has opened up the Dump property. The elevation is relatively level at 60 metres above sea level.

Northern Vancouver Island is the site of continual logging for cedar, hemlock and balsam. Underbrush is generally thick, especially along drainages. The Cove property has been more or less clear cut, with the northern ½ of the property hosting immature second growth and the southern ½ just replanted with seedlings. The Beaver property was logged a number of years ago and now has semi-mature to mature second growth timber. The Dump property has been recently clear cut and has recently been replanted with seedlings.

The climate on the north island is relatively mild. The summers are warm and generally dry, while the winters are cool and wet. Snow will accumulate on the higher peaks, but generally the valley bottoms and lower hills are clear for year round work.

There are numerous lakes, creeks and streams where water for diamond drilling is readily obtainable. Heavy-duty equipment for trenching, road building and quarrying will be accessible locally, in either Port Hardy or Port McNeill. Accommodation and lodging are readily available in Port McNeill.

This area is served by the Canfor Logging Railway from Nimpkish Lake. This railway passes beside the Dump property and crosses the Beaver property before it reaches tidewater at Beaver Cove. There are barge loading facilities at Beaver Cove.

## EXPLORATION HISTORY

The Quatsino Formation has a long exploration history, first for marble and later for limestone. The author has been exploring the limestone on the north end of Vancouver Island since the early 1990's and has held all of the current South Aggregate Resources Inc. claims at various times during this period.

### **Cove**

The author has conducted three previous exploration programs on the Cove property. The initial 1995 program consisted of prospecting, mapping and sampling. Two samples of grey-white to white limestone were sent for chemical analysis. A composite of the two samples was then tested for brightness. The tests confirmed the grey-white limestone is suitable for low end filler applications. (Henneberry, 1995).

A 1996 follow-up program consisted of a cross-stratigraphy sampling line. Seven samples were taken at regular intervals along the line. The samples were submitted for brightness testing and also for insolubles. These results confirmed the earlier findings, supporting the use of the Cove limestone for low end filler applications. (Henneberry, 1996a).

After logging succeeded in opening new sections of the property in 2005, a third mapping and sampling program was completed over the previously heavily forested areas. This program expanded the area of grey-white limestone. One of the 10 samples taken during this phase of the program was chemically analyzed and also tested for brightness. Again, the results confirmed the suitability for filler applications. (Henneberry, 2005a).

### **Beaver**

The author conducted two previous exploration programs on the Beaver property. The first program consisted of mapping, sampling and excavator trenching on a large white marble outcrop for dimension stone. No chemical analyses were completed. The mapping suggests the white marble is at least 150 metres thick. (Henneberry, 1993a).

The trenching program was followed up with an eight hole 189 metre diamond drilling program. The program confirmed the white marble encompasses an area 150 metres by 150 metres to a depth of 100 metres. (Henneberry, 1993b).

### **Dump**

The author has conducted four previous exploration programs on the Dump property. The initial 1993 program consisted of prospecting and mapping. A whole rock analysis was completed on one sample of grey white limestone. The test confirmed the grey-white limestone is suitable for low end filler applications. (Henneberry, 1993c).

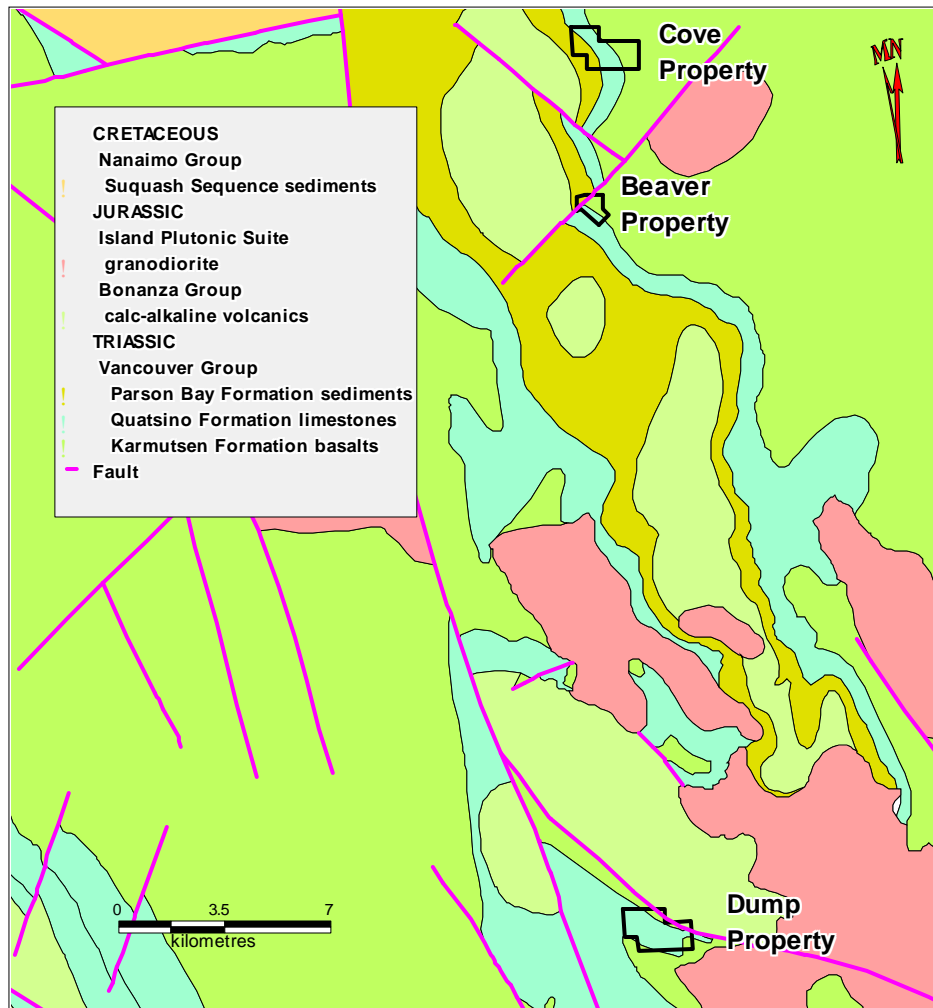
Two additional samples were tested in 1995 for both whole rock analyses and for brightness. These further tests confirmed the white-grey limestone on Dump property is suitable for low end filler applications. (Henneberry, 1996b).

A 1996 follow-up program consisted of a cross-stratigraphy sampling line. Eight samples were taken at regular intervals along the line. The samples were submitted for brightness testing and also for insolubles. These results confirmed the earlier findings, supporting the use of the Dump limestone for low end filler applications. (Henneberry, 1997).

After logging succeeded in opening a large exposure of white limestone in 2004, additional claims were staked and the new exposures were mapped and samples. Four of the samples were chemically analyzed and also tested for brightness. Again, the results confirmed the suitability for filler applications. (Henneberry, 2005b).

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GEOLOGICAL SETTING

The geology of northeast Vancouver Island has been described by Muller et al (1974). The area lies in the Insular Belt of the Canadian Cordillera. The map area is chiefly underlain by the middle to upper Triassic Vancouver Group, overlain by the lower Jurassic Bonanza Group. The Vancouver Group is intruded by large and small bodies of middle Jurassic Island. The region may be divided into several great structural blocks, separated mainly by important near-vertical faults and themselves fractured into many small fault segments.



Project NAD 83 Zone 9

North Island Carbonate Project

Regional Geology

Figure 3

The Vancouver Group is comprised of the lower Karmutsen Formation, middle Quatsino Formation and upper Parson Bay Formation. The Karmutsen Formation, the thickest and most widespread of the Vancouver Group formations, consists of basaltic pillow lavas, pillow breccias and lava flows with minor interbedded limestones, primarily in the upper part of the formation. Karmutsen rocks outcrop throughout northeastern Vancouver Island.

The Quatsino Formation overlies the basalts. The lower part of the Quatsino Formation consists of thick bedded to massive, brown-grey to light grey, grey to white weathering, fine to microcrystalline, commonly stylolitic limestone. The upper part is thin to thick bedded, darker brown and grey limestone, with fairly common layers of shell debris. The formation is in gradational contact with the overlying Parson Bay Formation by an increase in layers of calcareous pelites. Quatsino limestone outcrops as three narrow belts on the north part of Vancouver Island.

The Parson Bay Formation consists of a series of interbedded silty limestones and calcareous shales and sandstones, and occasional beds of pure limestone. Parson Bay rocks outcrop sporadically overlying the Quatsino limestone.

The Bonanza Group overlies the Vancouver Group. Bonanza Group rocks are primarily a Jurassic assemblage of interbedded lava, breccia and tuff with compositions ranging from basalt through andesite and dacite to rhyolite, deposited in a volcanic island arc environment. The Bonanza Group outcrops throughout the map area.

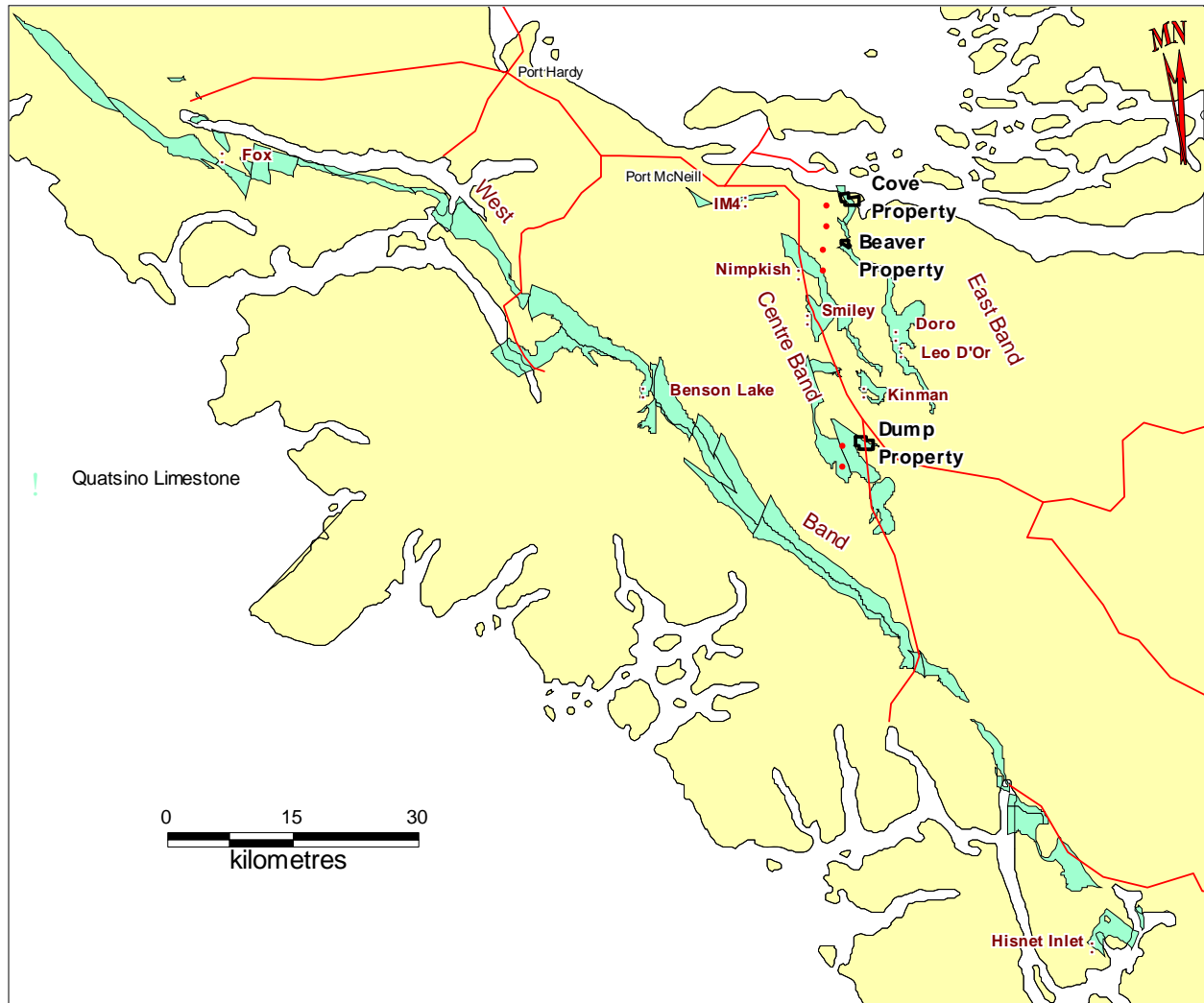
Granitoid batholiths and stocks of the Island Intrusions underlie the central core of Vancouver Island from one end to the other. These intrusions range in composition from quartz diorite and tonalite to granodiorite and granite. Island Intrusions outcrop throughout the map area.

The network of faults displayed on the north end of Vancouver Island appears to be the super position of two or more fracture patterns, each with a characteristic directions and of different age and origin.

### **Quatsino Formation**

The Quatsino Formation limestones are the main focus of the carbonate exploration. The larger, massive beds of limestone are white to grey in color and distinctly crystalline. Exceedingly fine-grained beds form a small percentage of the whole and siliceous or cherty varieties are likewise sparingly developed (Gunning, 1930). The Quatsino formation consists almost entirely of limestone, with a few thin flows of andesite or basalt. The limestone is fine to coarsely crystalline, and ranges from white to black, with various intermediate colors. Towards the base, it tends to be exceedingly fine grained, and grey and brownish or buff colors are characteristic. Midway of the formation the colors are predominantly white or grey, but towards the top the limestone becomes dark grey to black, due to a varying quantity of carbonaceous matter, and the formation grades upward into argillites and impure limestones of the overlying Parson Bay Formation. Even at the top, however, light grey or even white beds are interbedded with the darker varieties. The bedding, as represented by colour banding, is generally well preserved in the upper part of the formation but in the lower part, where white to brownish grey and buff colors predominate, it is poorly preserved. In the upper part, too, the beds are generally thin, thicknesses of 1-2 centimetres being common and more than 60-100 centimetres uncommon. The formation as a whole is dominantly a high-calcium limestone (Hoadley, 1953).

Within 1-3 kilometres of bodies of the Coast Intrusions, the limestone may be highly contorted and extremely jointed and fractured, cut by many acidic dykes, and partly to completely skarnified (Hoadley, 1953).



UTM NAD 83 Zone 9

**NORTH ISLAND CARBONATE PROJECT  
Quatsino Limestone**

Figure 4

Limestone outcrops in three relatively narrow discontinuous bands of varying lengths on the north end of Vancouver Island (McCammon, 1968). The East Band reaches from the hill just west of Beaver Cove southeast across Tsulton River to Bonanza Lake and down the west side of the lake to its west end. The Centre Band extends from 5 kilometres south of Port McNeill southeast to 15 kilometres past the south end of Nimpkish Lake. The West Band extends from west of Nahwitti Lake southeast to Tlupana Inlet. An additional limestone occurrence extends along the south shore of Holberg Inlet.



The Cove and Beaver properties lie in the East Band. Limestone from the East Band is generally grey-white to white in color with occasional beds of dark black. Structurally, this band is fairly competent in certain sections. There is potential for dimension stone marble from some of these structurally competent sections. Aside from South Aggregates Resources Inc., Homegold Resources Ltd. is also exploring for white limestone at the north end of the East Band. Leo D'or Mining opened a diamond wire marble quarry in the East Band at Bonanza Lake in the early 1990's. IMASCO opened the Doro adit to the north of the Leo D'or testing for white limestone in the late 1980's. Much of the remaining limestone in the East Band is held by Oyama (Canada) Inc.

The Dump property lies in the south end of the Centre Band. Limestone from the Centre Band is generally medium grey to black or dark brown to black. The limestone becomes darker and argillaceous towards the top of the formation (Gunning, 1932a). White to dark grey limestones occur at several places on Nimpkish Lake where they are recrystallized and somewhat faulted and obtain a thickness of 150 to 300 metres (Gunning, 1930). Along the east side of Nimpkish Lake a section of "dirty" sugary grey white limestone was observed. Both Gunning (1930) and Hoadley (1953) consider the outcroppings along Nimpkish Lake too jointed in many places to serve as a building stone.

The old IM4 quarry at the north end of the Centre Band supplied grey-white limestone for riprap at the logging load out facility at Port McNeill. Greymont Western Canada Inc. maintains a large holding on the northeast shore of Nimpkish Lake for chemical lime. Homegold Resources Ltd. is exploring the Smiley claims and Oyama (Canada) Inc. is exploring the Kinman property for white limestone in the central section of the Centre Band east of Nimpkish Lake.

The West Band limestones are the most colorful of the three bands, ranging from light brown, through medium grey-brown to dark grey, or dark brown to black. Hoadley (1953) describes an "inexhaustible supply of limestone" along the east side of Tahsis Inlet. Further north in the Zeballos area, Stevenson (1950) described the limestone as medium to coarsely crystalline and, owing to extensive recrystallization, as having lost all evidence of bedding. On weathered surfaces the limestone is grey, but on freshly broken surfaces it ranges from white to cream. In the vicinity of Kathleen and Alice lakes, Gunning (1930) describes small interbeds of lava within the lower portion of the limestone with a mixed series of argillites, quartzites and volcanics in which there are small beds of argillaceous limestone lying above it.

The West Band has undergone only sporadic exploration. IMASCO continues to mine white limestone at their Benson Lake quarry, shipping the stone through their barge facility at Port Alice. Matrix Marble (or Cowichan Terrazo and Ceramic Tile) quarries white marble at Hisnet Inlet at the south end of the West Band.

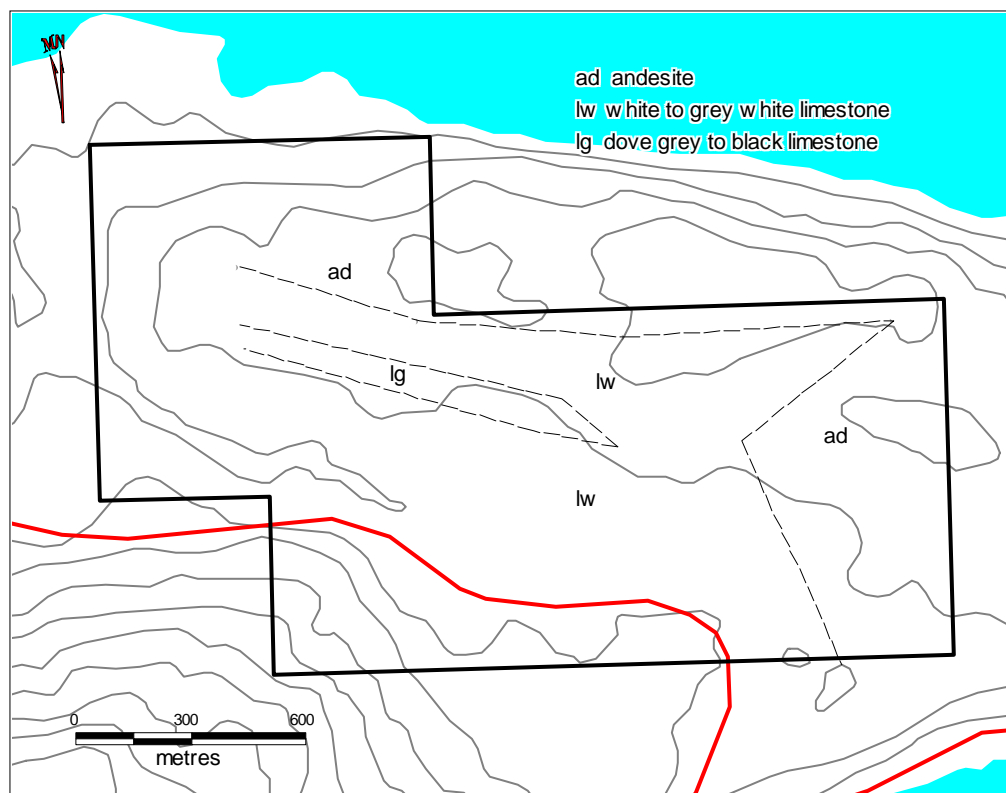
Quatsino Formation limestones are also mined in the high volume limestone quarrying operations on Texada Island. Sections of white limestone are selectively mined for filler applications at these quarry sites.

### Cove Property Geology (Henneberry, 1995; 1996a; 2005a)

The Cove property lies in the East Band of the Quatsino Limestone. The property is marked by ridges of grey-white limestone with some dove grey to black limestone beds, in suspected fault contact with Karmutsen Formation andesites. The grey-white stone is being explored as a potential source of filler and extender grade limestone.

The grey-white limestone appears to underlie the larger part of the property. It is a dense, fine- to medium-grained, well brecciated stone with a dull white-grey appearance. It can be delicately veined or "feathered" with dark material, believed to be stylolites. Traces of sulfides were noted, but only locally.

In outcrop, the limestone is well-fractured to broken. There are abundant limonite and clays along the fractures. Pieces of dark grey marble to 1 metre in size have been noted within the grey-white. Bedding has not yet been determined.



UTM NAD 83 Zone 9

NORTH ISLAND CARBONATE PROJECT

Cove Property Geology

Figure 5a

The dove grey limestone now appears to consist of a continuous 100 metre wide bed striking roughly east west through the centre of the property. This limestone is a fine-grained grey brown to black stone. It is cut by a criss-crossing network of white carbonate veinlets and micro-veinlets in exposures on the western side of the property, but not on the eastern side of the property.

The andesites are massive to blocky and underlie the northern extremity of the property and also the eastern part of the claim block. They range in color from dark green to black, with the black stone being almost basaltic in nature.

### **Beaver Property Geology** (Henneberry, 1993a; 1993b)

The Beaver property lies in the East Band of the Quatsino Limestone. The limestone is exposed in two small overgrown quarries and along the Canfor Logging Railway right-of-way. The difference between the quarry level and the rail level is at least 50 metres and the limestone continues about 100 metres below track level to the level of Tsulton River. Two dominant limestones were mapped a white to light grey massive unit and a dark grey black broken unit. The contact appears to be gradational as the excellent exposures along the rail line show a the limestone passing from black to interbedded black and white to white in an easterly direction.

Mapping has been confined to the existing "quarry site" and the rail line, as little additional outcrop has been found on the property. The "quarry site", now overgrown, has opened a large area of the white marble, while the rail line appears to traverse across section in an easterly direction, moving through black and interbedded black and white to massive white marble.

The most abundant limestone mapped is the dense, fine-grained, white to grey-white marble. This limestone appears to underlie the central and eastern sections of the property, having been mapped in two areas. This limestone was exposed in a road ballast quarry that has now been reclaimed. The excavation in 1993 was 30 metres wide by 15 metres long. The depth at the face is 15 metres. There is not a lot of variation in the marble with depth, other than in the top 50 centimetres. There are two small andesite dykes mapped within the quarry.

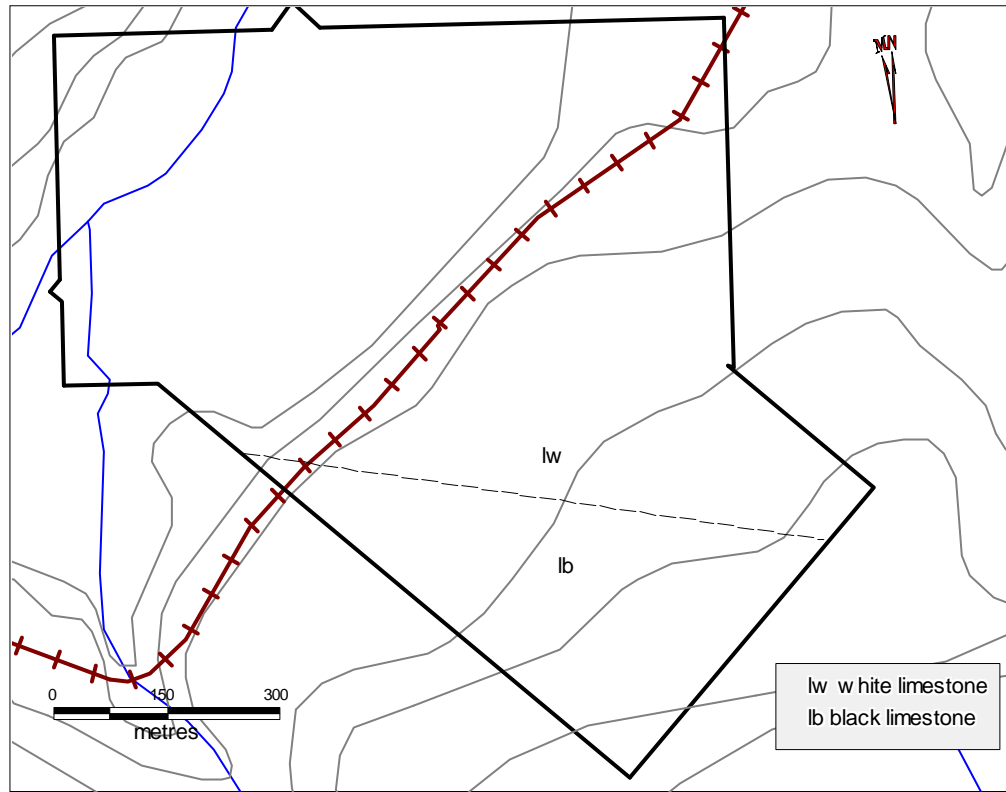
The marble in the top 50 centimetres is a dense blue-grey limestone with abundant limonite. This section also appears to be well brecciated, though it is hard to tell if this is a function of blasting or naturally occurring. The remaining 14.5 metres is dense, fine-grained white to grey white limestone with or without delicate blue-grey veining. The white to grey-white colorations give the stone a lot of contrast, yielding a very attractive appearance. The structure of the limestone is hard to obtain in the quarry, as most of the fracturing is due to blasting. One possible feature that suggests large blocks could be obtained is the large number of boulders (up to 2 metres by 2 metres in size) pushed over the side of the bank, at the quarry site.

There are thin (to 30 centimetres) halos containing 1-2% sulfides in marble at the andesite dyke contacts. Other than these locations, there are traces to 112% pyrite throughout the marble.

The semi-continuous rock cut exposure along the rail line was also mapped. Two distinct rock types were noted: the typical dense white to grey white and a darker grey to black. The white is generally massive, with few joints noted in the 5-15m high faces. The stone is a dense, fine-grained white to grey white limestone with or without delicate blue-grey veining, similar to the stone noted in the "quarry site". Again, the white to grey-white colorations give the stone a lot of contrast, yielding a very attractive appearance.

The limestone is locally cut by thin (to 30cm) andesite dykes. Three dykes were mapped along the rail cut with sub parallel strikes from 030°/80°E to 045°/80°E. These dykes show strong limonite within their contacts, and within 10 centimetres of the contact within the limestone.

The contact between the white and black is gradational, passing from black to a 50 metre wide zone of interbedded black and white through to white. The bedding looks to be relatively flat (124°/10°S).



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**NORTH ISLAND CARBONATE PROJECT**

**Beaver Property Geology**

Figure 5b

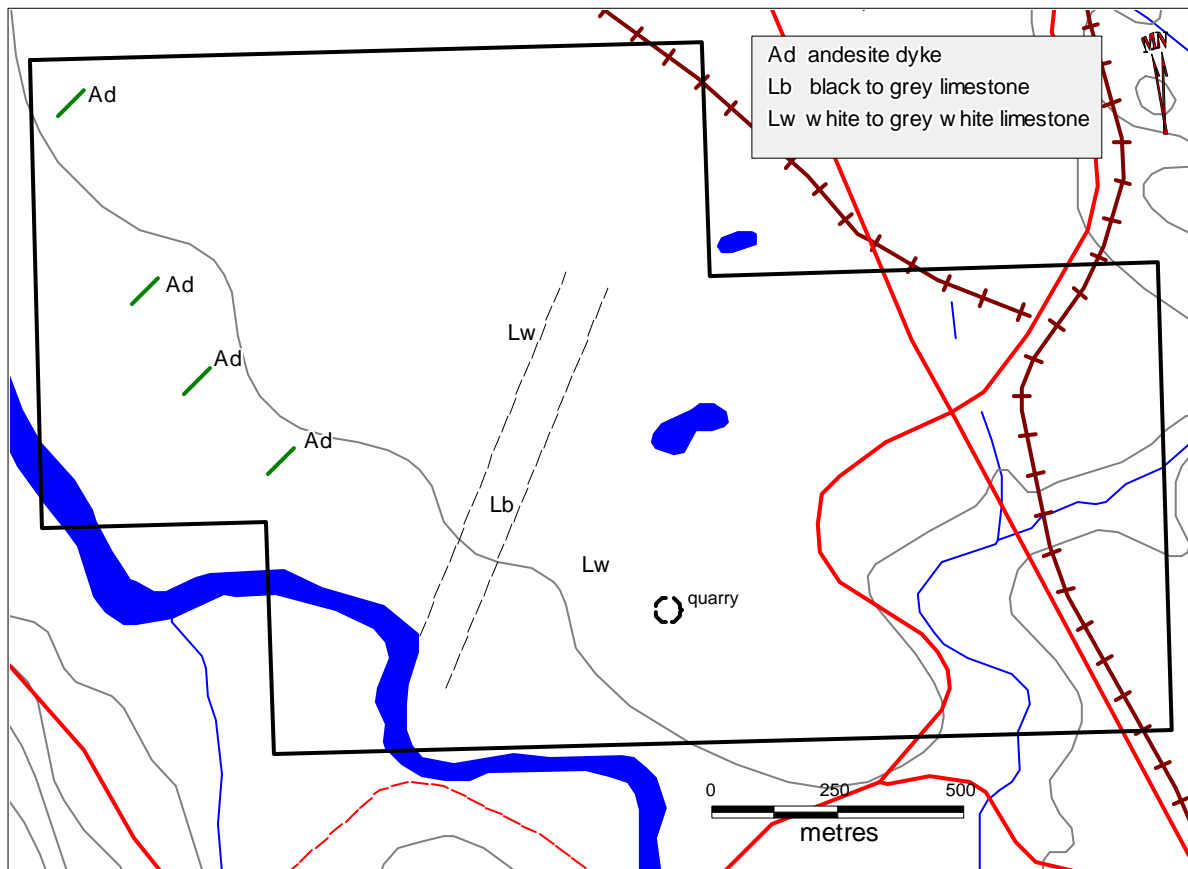
The black marble has been mapped on the west-central side of the property, in two exposures. The first is a small "pit" 250 metres west of the white "quarry site". The second is the western section of the massive exposure along the rail line.

The color limestone in the "pit" is medium grey-black. In polished sections the marble has been micro-brecciated and healed with white carbonate. The texture is very fine grained and dense. This limestone can show a small percentage (up to 1%) of white carbonate, as blebs and clots (to 2cm) and veinlet and microveinlet stockworks with individual veinlets ranging from 1-10mm. The clots and blebs are randomly dispersed throughout the stone.

The grey-black limestone along the rail line is similar in color and texture to that from the "pit", though white carbonate inclusions are nowhere near as abundant. The exposures are massive to broken, with horizontal fractures spaced at 60-100cm and vertical fractures spaced at 60-100cm.

### Dump Property Geology (Henneberry, 1993c; 1996b; 1997; 2005b)

The Dump property lies in the Centre Band of the Quatsino Limestone. The property is marked by a northwest trending ridge that mapping has shown to be composed primarily of white to grey white limestone. Mapping identified three primary types of limestone. The grey-white stone is being explored as a potential source of filler and extender grade limestone.



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### NORTH ISLAND CARBONATE PROJECT Dump Property Geology

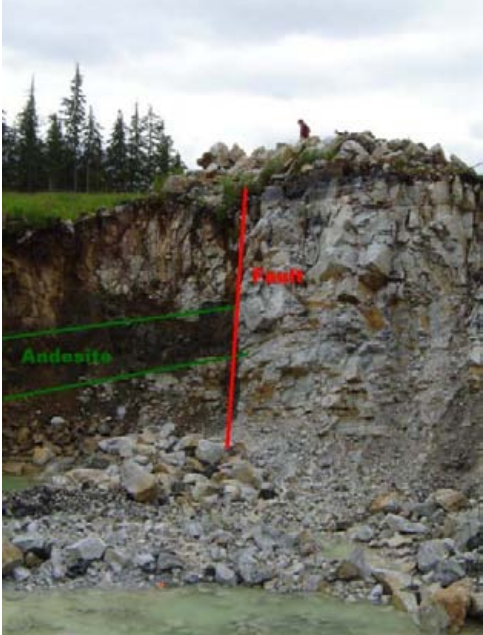
Figure 5c

The most common limestone varies in color from white through white-grey to grey-white. Texture ranges from fine (1mm) to coarse (4-5mm), though generally lies in the medium range (2-3mm). The stone ranges from clean to traces of fracture clays and limonite. Occasionally blebs of darker grey limestone (10-15mm) are encountered forming 1-2% of the total mass of the sample. Toward the northwest end of the property, the limestone commonly shows a slightly brownish hue giving the stone an ivory color. This may just be a phenomenon of near surface weathering.

A sugary grey medium grained limestone was mapped at several locations throughout the property. This limestone is generally clean looking with few impurities. It seems to form thin beds and in two locations yields a mottled texture of intermixing of grey and white stone. These occurrences seem to be very local in nature. This stone would give an interesting look on polished surface and may have some appeal as a sculpture stone.

A fine-grained black limestone was mapped on all three roads and appears to strike across the property. Locally the limestone appears almost grey in color, generally with a sugary texture.

A series of thin (centimetres to a few metres in thickness) andesitic dykes were also mapped. These dykes appear to exhibit this contact aureole, which may carry small amounts of pyrite.

 A photograph of a road cut quarry. A vertical red line is drawn on the rock face, labeled 'Fault' in red. A horizontal green line is drawn across the rock face, labeled 'Andesite' in green. The rock face shows a complex structure with a fault cutting through a sill. The foreground is a pile of rocks and debris.	<p>Andesite in road cut quarry. The andesite could be considered a sill in this location. Note the presence of limestone both above and below the sill..</p> <p>The sill appears to be cut off by a near vertical fault.</p> <p>The dimensions of the quarry are 35 by 20 metres. The depth of the quarry is approximately 25 metres.</p>
<p>Plate 1. Andesite dykes in Dump limestone</p>	

The three properties of the North Island Carbonate Project are being explored for white limestone for industrial filler applications. The following mineral deposit description is modified from the Marble Dimension Stone Mineral Deposit Profile (Hora, 2007). The section on

Limestone deposits range in age from Late Proterozoic to Mesozoic, though some limestones may be Tertiary. Limestone deposits form in subtropical and tropical shallow sea environments. Slightly magnesian limestone is the typical carbonate sediment, though dolomite is rather uncommon. Limestone is frequently deposited as aragonite that is later recrystallized into calcite. Most of dolomite is secondary with magnesium being introduced during lithification, diagenesis and regional hydrothermal dolomitization. Limestone and dolomite become parts of folded, faulted and thrust, sometimes metamorphosed and recrystallized geological units as parts of orogenic belts and uplifted, exposed platform sediments.

Limestones form along continental shelf and subsiding marginal marine basins and in island arc environments. Limestone deposits are stratiform, may be folded, and may have gradational contacts. The thicknesses of mineable limestones deposits range from 10 metres to several hundred metres. Limestone beds can extend for several kilometres along strike and often form parts of continuous carbonate belts (like in the Appalachian belt from Vermont to Alabama).

Associated host rocks vary depending on the tectonic setting at the time of deposition. In an island arc environment, the associated rocks are frequently a variety of volcanic, usually more mafic rocks and tuffaceous sediments, and sedimentary rocks, often greywacke, sandstone and argillite, with or without chert. Limestone may be contaminated by a tuffaceous component and form very colourful varieties. In a continental shelf setting, the volcanic component is usually missing and the associated rocks are argillites, sandstones, greywackes and the occasional conglomerate.

Limestones form as bedded rocks with compositional and colour layers. Consequently, limestones or their metamorphic equivalents (marbles) can display complexly folded bedding or breccias. In metamorphic marbles, the carbonate is so thoroughly recrystallized that much, or even all of the sedimentary features, are obliterated and replaced with an interlocking, mosaic texture. Highly metamorphosed varieties may exhibit features indicating a plastic flow, where original layering may be stretched or pulled apart and highly deformed. The limestones and weakly metamorphosed varieties may contain fossils and retain biological textures. In some deposits, fractured carbonate has been re-cemented to form a healed breccia texture.

The ore mineralogy is calcite and dolomite. There are a large number of gangue minerals that have varying effects on the limestone or marble: chert, other forms of silica, silicate minerals like garnet and spinel that cause grinding problems for fillers and polishing problems for marble; pyrite that causes oxidation and staining and soft minerals like graphite, phlogopite, chlorite, talc, tremolite, wollastonite, brucite that effect the filler properties and again cause polishing problems for marble.

Most limestone of economic importance were partly or wholly biologically derived from seawater and accumulated in a relatively shallow, subtropical and tropical marine environment. Calcium carbonate producing organisms, such as corals, algae and mollusks can build reef structures hundreds of kilometres long and kilometres wide. Limestones that form in a high-energy environment have more probability to be high-purity carbonate rocks. Very fine carbonate muds, sometimes contaminated with clay-sized particles of silica and silicate minerals, accumulate in a low-energy environment of lagoons and deep water. Under some specific conditions, original calcium carbonates may be enriched in magnesium, thus transforming original limestone into dolomite. Under both regional and contact metamorphism, carbonate rocks recrystallize, sometimes reacting with internal contaminants to form a new suite of minerals. Such recrystallization may result in a significant improvement of aesthetic appeal to the end user in resulting colour, structure and texture. Both contact and regional metamorphism may remove black or dark grey organic substances resulting in highly prized pure white carbonate.

Several processes contributed to the formation of the white, high purity limestone deposit. Limestone is a common rock type, found all over the earth, but white, high purity crystalline limestone deposits are uncommon in nature, are found only in restricted areas, and require several geologic processes over a long period of geologic time to form, including:

- 1) Deposition of originally pure limestone in high energy agitated, shallow marine environment.
- 2) Post depositional changes including metamorphism and/or magmatic processes to bleach and recrystallize the rock, and disperse any impurities which may have been present.
- 3) Structural controls including folding, faulting and orogenic processes to place the rocks in desirable structural settings.
- 4) Uplift and erosion.
- 5) Preservation through geologic time.

#### **High Calcium White Crystalline Limestone** (Blumenthal, 2006)

Because all the geologic processes are required, deposits of high calcium white crystalline limestone are relatively uncommon in nature, and are vastly different from common limestone. Deposits of high purity, high brightness crystalline limestone suitable for high quality filler and extender applications are limited and only occur in restricted areas.

High purity white crystalline limestones have a large number of uses and are classified as white fillers and extenders with value added characteristics. The products are finely ground, high brightness, high purity limestone, and are the whitest, purest, and most valuable per ton of all limestone products.



Desirable characteristics are high brightness (white color), low tint, uniform fine particle size, freedom from grit, and chemical purity. Color and purity are of utmost importance in virtually all applications. Limestone suitable for white fillers and extenders is limited to a minimum of 95%  $\text{CaCO}_3$ , and 2% or less of acid insolubles. Brightness requirements range from low 90's to greater than 95. Tint values are generally below 3.0.

The greatest uses of fillers and extenders are paint, rubber products, putty, pottery, paper, a variety of plastics, food, flooring, PVC pipe, white ink, tooth paste, wire coating, glue, caulking compounds, resins, and polyesters. Uses in the housing industry include ceiling and wall textures, dry wall mud, joint compounds, stucco, and fiberglass roofing shingles.

Limestone for most fillers and extenders applications requires not only pure limestone, but also white color. The restricted nature of the deposits and the fact that products are shipped as far as 2000 miles from currently mined sources, indicate a large demand by our society for these valuable products.

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MINERALIZATION

The mineralization on all three properties of the North Island Carbonate Project is white limestone for filler applications. There have been previous exploration programs completed on each of the three properties. Historical results are presented in Table 2.

**Table 2. Historic Sampling Results**

Property	Sample	CaCO <sub>3</sub>	MgCO <sub>3</sub>	CaO	MgO	Insoluble	Brightness	Reference
Dump	120911	95.72%	2.80%			3.71%		Henneberry, 1997
Dump	130701	98.10%	0.32%			0.32%		Henneberry, 1997
Dump	11101	96.20%	4.46%			0.97%		Henneberry, 1997
Dump	D1					0.66%	90.8	Henneberry, 1997
Dump	D2					0.98%	90.5	Henneberry, 1997
Dump	D3					0.82%	90.5	Henneberry, 1997
Dump	D4					1.20%	89.2	Henneberry, 1997
Dump	D5					1.84%	89.0	Henneberry, 1997
Dump	D6					1.10%	90.0	Henneberry, 1997
Dump	D7					1.41%	90.1	Henneberry, 1997
Dump	D8					1.58%	89.7	Henneberry, 1997
Dump	WP 44			85.60%	1.54%	0.88%	87.1	Henneberry, 2005b
Dump	WP 48			83.50%	6.00%	1.02%	89.3	Henneberry, 2005b
Dump	WP 101			80.50%	6.41%	1.49%	90.1	Henneberry, 2005b
Dump	WP 119			80.90%	2.89%	2.78%	88.4	Henneberry, 2005b
Cove	grey-white			54.10%	0.31%	1.60%		Henneberry, 1996a
Cove	brown-grey			54.38%	0.22%	0.22%		Henneberry, 1996a
Cove	C1					2.44%	91.0	Henneberry, 1996a
Cove	C2					1.50%	91.0	Henneberry, 1996a
Cove	C3					2.01%	91.0	Henneberry, 1996a
Cove	C4					1.94%	87.7	Henneberry, 1996a
Cove	C5					3.39%	86.9	Henneberry, 1996a
Cove	C6					1.65%	87.0	Henneberry, 1996a
Cove	C7					2.68%	86.5	Henneberry, 1996a
Cove	WP 34			84.10%	0.34%	5.90%	84.2	Henneberry, 2005a
Beaver	B1					0.93%	92.0	Previously unreleased
Beaver	B2					1.14%	91.1	Previously unreleased
Beaver	B3					1.65%	90.1	Previously unreleased
Beaver	B4					1.02%	88.8	Previously unreleased
Beaver	B5					1.49%	92.3	Previously unreleased
Beaver	B6					1.07%	92.5	Previously unreleased
Beaver	B7					2.05%	89.2	Previously unreleased
Beaver	B8					1.56%	89.7	Previously unreleased

These exploration results indicated the limestones from each of the Beaver, Cove and Dump properties have chemical and optical properties that meet the minimum requirements for industrial filler and extender applications.

The white limestone on the Beaver property covers an area approximately 250 metres by 250 metres (Henneberry, 1993b). Tom Newman of ECC International Ltd. made an initial evaluation of the Beaver property in 1996. He took a total of 8 samples from the property and completed brightness testing and also measured the percentage of insolubles within the limestone. These results are presented for the first time in Table 2. The results show the Beaver limestone meets the minimum requirements for white filler applications.

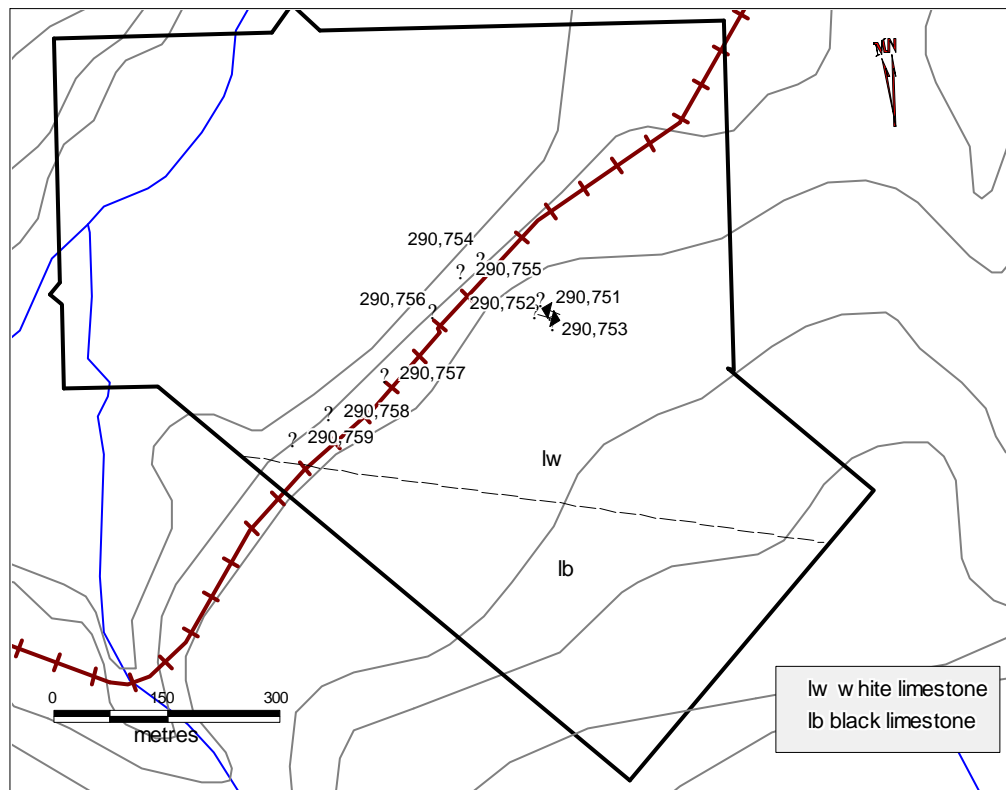
The white limestone on the Cove property covers an area approximately 750 metres long by 250 metres wide (Henneberry, 2005a). Previous sampling (Table 2) completed by the author and by Tom Newman as reported in Henneberry (1996a) indicates the Cove white limestone meets the minimum requirements for white filler applications.

The white limestone on the Dump property covers an area approximately 1200 metres long by 300 metres wide (Henneberry, 2005b). Previous sampling (Table 2) completed by the author and by Tom Newman as reported in Henneberry (1997) indicates the Dump white limestone meets the minimum requirements for white filler applications.

The 2008 exploration program consisted of mapping and sampling of the limestone exposures on each of the three properties comprising the North Island Carbonate Project.

### Beaver Property

The Beaver property was explored and drilled for dimension stone marble in the early 1990's (Henneberry, 1993a; 1993b). While the property was mapped and the core was logged the Beaver marble was never sampled for its chemical properties.



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**NORTH ISLAND CARBONATE PROJECT**  
**Beaver Property Sample Locations**  
Figure 6a

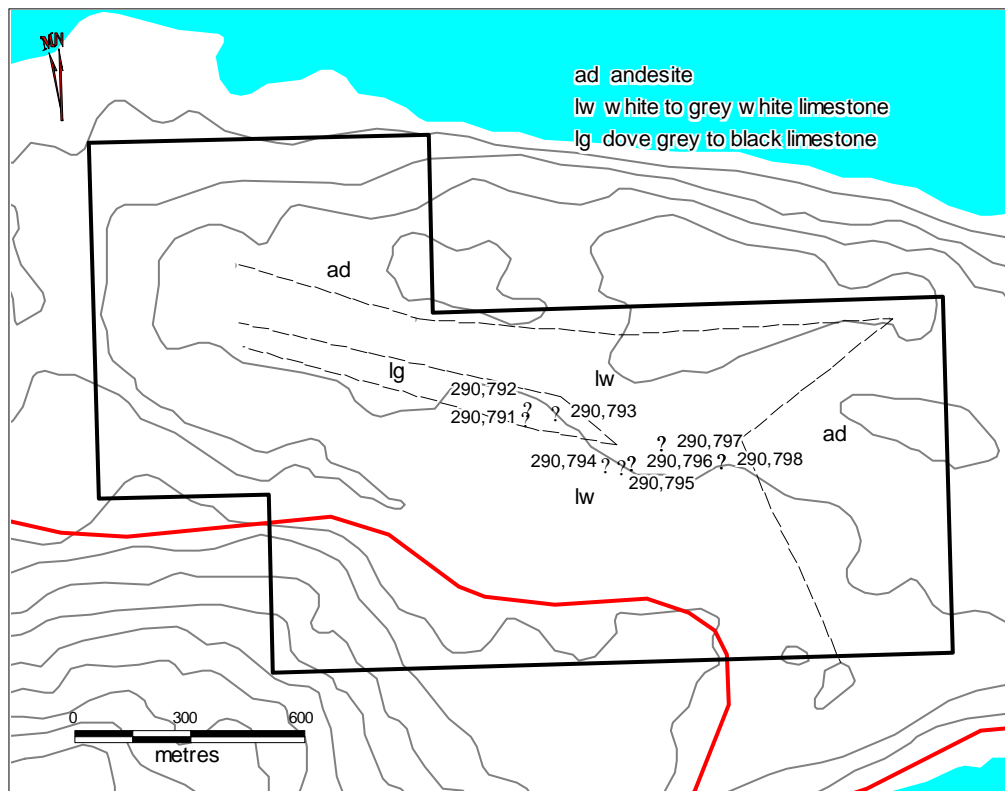
A total of 9 samples were taken on the Beaver property: three from the area of an overgrown quarry and six from exposures along the rail line. The limestone varied in color from white limestone to grey white limestone. Table 3 shows the limestone is an ultra high calcium stone (+97% CaCO<sub>3</sub>) with a minor dolomitic component. Except for sample 290756, the insoluble content is well within the acceptable range for filler applications.

**Table 3. Beaver 2008 Sample Results**

Sample No.	83Z09E	83Z09N	Composition	% CaCO <sub>3</sub>	% MgCO <sub>3</sub>	% Insolubles
290751	649005	5596880	white limestone	99.06	0.38	0.97
290752	649021	5596850	white limestone	99.65	0.38	0.87
290753	648996	5596866	white limestone	98.61	0.46	0.99
290754	648925	5596935	white limestone	98.59	0.46	1.58
290755	648899	5596917	white limestone	99.61	0.42	0.99
290756	648861	5596864	white grey limestone	97.33	0.52	2.20
290757	648798	5596781	white grey limestone	99.27	0.31	1.06
290758	648724	5596730	grey white limestone	99.27	0.56	0.62
290759	648677	5596697	white grey limestone	97.86	0.50	1.62

**Cove Property**

The white to grey white limestone of the Cove property was sampled over an area 500 metres long by 100 metres wide, resulting in a total of 8 samples. Table 4 shows the Cove limestone is also an ultra high calcium stone (+97% CaCO<sub>3</sub>) and again has a low dolomitic content. The insoluble content is considerably higher in this limestone, though the average of all samples except the black limestone (290793) is 1.64%, still within the acceptable range for low end filler applications.



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**NORTH ISLAND CARBONATE PROJECT  
Cove Property Sample Locations**

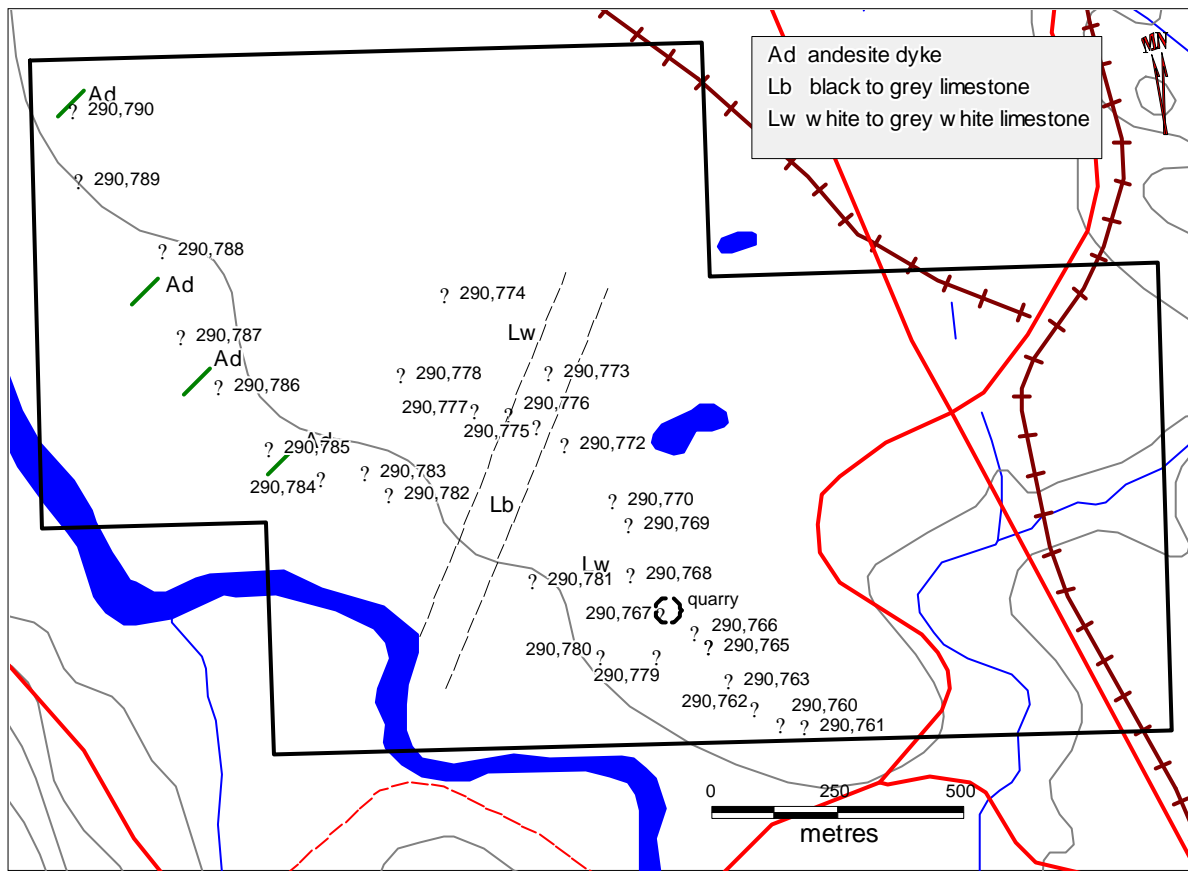
Figure 6b

**Table 4. Cove 2008 Sample Results**

Sample No.	83Z09E	83Z09N	Composition	% CaCO <sub>3</sub>	% MgCO <sub>3</sub>	% Insolubles
290792	649357	5602093	white brown limestone	97.58	0.40	2.89
290793	649428	5602085	black limestone	96.02	0.44	3.12
290794	649557	5601949	white grey limestone	97.61	0.40	2.21
290795	649601	5601943	grey white with interbed	97.54	0.46	2.23
290796	649629	5601954	white grey limestone	98.91	0.31	1.22
290797	649704	5602004	white grey limestone	98.77	0.44	0.81
290798	649861	5601957	white grey limestone	99.43	0.36	0.46

**Dump Property**

A total of 27 samples of the white to grey white limestone and 4 samples of the gray limestone were taken from the Dump property over an area 2200 metre long by 500 metres wide (Figure 6c and Table 5). The Dump limestone can be classified as a high calcium (+95% CaCO<sub>3</sub>) to ultra high calcium stone (+97% CaCO<sub>3</sub>) with the exception of the north western section which carries a high dolomite content (5.94% to 11.67% MgCO<sub>3</sub>).



**NORTH ISLAND CARBONATE PROJECT  
Dump Property Sample Locations**

Figure 6c

**Table 5. Dump 2008 Sample Results**

Sample No.	83Z09E	83Z09N	Composition	% CaCO <sub>3</sub>	% MgCO <sub>3</sub>	% Insolubles
290760	651412	5572311	white limestone	97.13	2.70	1.88
290761	651459	5572307	white limestone	98.47	0.77	1.34
290762	651359	5572343	white limestone	96.90	2.95	0.97
290763	651308	5572396	white limestone	96.70	1.02	0.96
290764	651267	5572464	grey limestone	101.34	0.50	0.92
290765	651267	5572464	white limestone	98.43	0.54	1.02
290766	651241	5572492	white limestone	101.36	0.44	0.75
290767	651173	5572528	white limestone	96.50	3.47	0.57
290768	651114	5572607	white limestone	97.59	1.90	0.55
290769	651109	5572706	white limestone	97.77	2.26	0.51
290770	651076	5572755	white limestone	98.18	1.69	0.63
290772	650984	5572866	grey limestone	98.90	0.94	1.10
290773	650951	5573007	white limestone	98.34	0.69	1.41
290774	650745	5573161	grey limestone	93.51	7.13	1.02
290775	650926	5572902	white limestone	98.06	1.99	0.52
290776	650872	5572926	grey limestone	98.59	0.90	1.59
290777	650804	5572933	white limestone	100.09	0.46	1.15
290778	650657	5573004	white limestone	92.36	7.45	0.66
290779	651165	5572444	white limestone	95.36	4.29	0.75
290780	651052	5572443	white grey limestone	98.50	0.84	1.42
290781	650919	5572595	white limestone	94.67	5.44	0.87
290782	650633	5572764	white limestone	98.74	0.96	0.50
290783	650586	5572810	white limestone	97.41	1.78	0.61
290784	650498	5572798	white limestone	97.65	2.74	0.68
290785	650394	5572858	white limestone	96.97	2.95	0.35
290786	650297	5572981	white grey limestone	93.59	5.94	0.58
290787	650221	5573081	white limestone	88.29	11.67	0.87
290788	650185	5573248	white limestone	91.45	8.51	0.84
290789	650017	5573390	white limestone	91.60	7.99	2.16
290790	650005	5573528	white limestone	97.04	2.05	1.11
290791	649351	5602068	white limestone	95.65	4.89	0.57

The insoluble content of the Dump white to grey white limestone is generally less than 1%, well suited for filler applications.

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DRILLING

The author is not aware of any drilling been done on the Cove or Dump properties. The author conducted a small drill program totaling 189 metres in 8 holes on the Beaver property in 1993. The focus of this program was dimension stone so the core was not sampled. The core was logged for gross lithology and geotechnical properties. Table 6 provides a brief summary of the drilling and gross lithologies intersected.

**Table 6. Beaver 1993 Drilling Summaries**

Hole	Grid N	Grid E	Elevation	Dip	From m	To m	Lithology
B93-01	1058	942	900.0	-90	0.00	11.28	white limestone
					11.28	12.80	grey black limestone
					12.80	16.46	grey white to white limestone
					16.46	19.20	andesite dyke
					19.20	31.39	grey white to white limestone
B93-02	1000	1000	906.4	-90	0.00	2.74	overburden
					2.74	13.93	grey white to white limestone
					16.67	15.24	grey black limestone
					15.24	17.98	andesite dyke
					17.98	24.38	grey white to white limestone
					24.38	25.60	grey black limestone
					25.60	30.78	grey white to white limestone
					30.78	31.39	grey black limestone
31.39	32.92	grey white to white limestone					
B93-03	915	764	903.6	-90	0.00	0.61	casing
					0.61	2.29	grey black limestone
					2.29	6.40	grey white to white limestone
					6.40	7.41	grey black limestone
					7.41	9.51	grey white to white limestone
					9.51	11.00	grey black limestone
					11.00	11.34	grey white to white limestone
					11.34	11.67	grey black limestone
11.67	21.64	grey white to white limestone					
B93-04	922	840	903.3	-90	0.00	3.66	overburden
					3.66	5.18	clay seam
					5.18	5.55	andesite dyke
					5.55	7.86	grey black limestone
					7.86	18.53	grey white to white limestone
					18.53	18.81	grey black limestone
					18.81	21.34	grey white to white limestone



**Table 6. Beaver 1993 Drilling Summaries (Continued)**

Hole	Grid N	Grid E	Elevation	Dip	From m	To m	Lithology
B93-05	967	870	903.0	-90	0.00	3.05	overburden
					3.05	8.23	road cobbles
					8.23	8.84	andesite dyke
					8.84	9.45	grey black limestone
					9.45	10.30	grey white to white limestone
					10.30	11.40	grey black limestone
					11.40	21.34	grey white to white limestone
B93-06	1004	930	904.5	-90	0.00	3.96	overburden
					3.96	6.37	andesite dyke
					6.37	21.95	grey white to white limestone
B93-07	1058	1003	902.8	-90	0.00	0.61	casing
					0.61	7.47	grey white to white limestone
					7.47	8.69	grey black limestone
					8.69	9.20	grey white to white limestone
					9.20	12.19	andesite dyke
					12.19	12.92	grey white to white limestone
					12.92	16.06	andesite dyke
16.06	22.25	grey white to white limestone					
B93-08	930	1050	907.2	-90	0.00	16.15	overburden

The drilling clearly indicates the bulk of the limestone on the Beaver property is white to grey white with minor grey black interbeds. There are 10 metre plus beds of white limestone intersected in several of the holes, suggesting there is a considerable volume of white limestone on the property.

#### SAMPLING METHOD AND APPROACH

The 2008 sampling program was concentrated at taking grab samples of the white limestone at regular intervals across stratigraphy and/or along strike. A total of 48 samples were taken during the program: 9 on the Beaver property, 8 on the Cove property and 31 on the Dump property. The Beaver sampling focused on the continuous 360 metre exposure along a section the Canfor Logging Railway right-of-way with samples taken at 50 to 150 metre intervals. Three additional samples were taken around the rim of a reclaimed ballast quarry. The Cove sampling focused on sampling the outcrop exposures throughout a 500 metre by 100 metre area. One sample was taken from each outcrop. The limestone exposure is much better on the Dump property, exposed along logging roads over a 2200 metre by 500 metre area. Samples were taken from each outcrop exposure along the roads, with multiple samples taken from the more continuous outcrops at 50 metre to 150 metre intervals.

A small piece of limestone 500 to 100 grams was taken from the outcrop exposure and placed in a Ziploc bag with a sequentially numbered two-part assay ticket. The GPS coordinates and waypoint number were recorded on the second part of the assay ticket and also within a field book for backup. A Garmin 76 set in the datum of NAD 83 Zone 9 was used to record the sample location coordinates. An aluminum tag, inscribed with the sample number, date and sampler was nailed into the outcrop or hung on an adjacent bush to mark the location.

Limestone beds are generally more or less continuous along strike and down dip. They also tend to be more homogeneous over considerable intervals so a sample density of 1 sample every 50 to 100 metres is more than adequate for an initial assessment of a limestone property. Therefore the current sampling can be considered representative of the limestone on each of the three properties.

Samples were taken from each outcrop exposure of homogeneous limestone so they can be considered representative of the limestone. This sampling approach ensures there is no bias in the sampling.

The rock type sampled was limestone. Again, a sample interval of 50 metres to 100 metres is considered adequate to provide representative results for the Beaver, Cove and Dump limestone.

The sampling found the Beaver limestone ranges from 97.53% to 99.65%  $\text{CaCO}_3$  with 0.62% to 2.20% impurities. The sampling found the Cove limestone ranges from 69.02% to 99.43%  $\text{CaCO}_3$  with 0.46% to 3.12% impurities. There appears to be a correlation between decreasing  $\text{CaCO}_3$  and increasing impurities for these two properties. The sampling found the Dump limestone ranges from 88.29% to 100%  $\text{CaCO}_3$  with a dolomitic limestone bed in the northwest section of the property ranging from 2.05% to 11.67%  $\text{MgCO}_3$ . Impurities range from 0.50% to 2.16%.

#### SAMPLE PREPARATION, ANALYSIS AND SECURITY

The author conducted the sampling program. He staked all of the claims but has no interest in any of the claims.

The analyses were completed by Acme Analytical Laboratories Ltd. of Vancouver, British Columbia. Acme Labs is currently registered with an International Standards Organization (ISO) 9001:2000 accreditation.

Each limestone sample was crushed to the point where 70% of the material will pass through a 10 mesh screen. A 250 gram split was taken and pulverized to a point where 85% will pass through a 200 mesh screen.

A 4GA whole rock analysis was completed on each sample. Elements are expressed as common oxides for each element (i.e. Al<sub>2</sub>O<sub>3</sub>, CaO, Cr<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>, K<sub>2</sub>O, MgO, MnO, Na<sub>2</sub>O, P<sub>2</sub>O<sub>5</sub>, TiO<sub>2</sub>). The analysis also includes the determination of volatile phases by loss on ignition (LOI), total carbon and sulphur by Leco as well as Ba, Ni, Sc, Sr, Y and Zr. The total abundances of the major oxides and several minor elements are reported on a 0.1 g sample analyzed by Inductively Coupled Plasma - Atomic Emission Spectrometer following a Lithium metaborate / tetraborate fusion and dilute nitric digestion. Loss on ignition (LOI) is by weigh difference after ignition at 1000°C. Total carbon and sulphur is determined by Leco, a technique where samples are heated in an induction furnace operating at >1650°C causing the volatilization of all C and S bearing minerals and compounds. The vapours are carried through an infrared spectrometric cell wherein the concentration of C and S is determined by absorption of specific infrared wavelengths.

**Table 7. Acme Duplicates, Standards and Blanks**

		% SiO <sub>2</sub>	% Al <sub>2</sub> O <sub>3</sub>	% Fe <sub>2</sub> O <sub>3</sub>	% MgO	% CaO	% Na <sub>2</sub> O	% K <sub>2</sub> O	% TiO <sub>2</sub>	% P <sub>2</sub> O <sub>5</sub>	% MnO	% Cr <sub>2</sub> O <sub>3</sub>
290756	Rock	1.93	0.16	0.12	0.25	54.53	<0.01	0.03	<0.01	<0.01	<0.01	<0.002
290756	Duplicate	1.93	0.16	0.12	0.25	54.53	<0.01	0.03	<0.01	<0.01	<0.01	<0.002
290759	Rock	1.43	0.07	0.13	0.24	54.83	<0.01	0.03	<0.01	0.01	0.01	<0.002
290759	Duplicate	1.43	0.07	0.13	0.24	54.83	<0.01	0.03	<0.01	0.01	0.01	<0.002
290762	Rock	0.74	0.12	0.12	1.41	54.29	<0.01	0.06	<0.01	<0.01	<0.01	<0.002
290762	Duplicate	0.74	0.12	0.12	1.41	54.29	<0.01	0.06	<0.01	<0.01	<0.01	<0.002
290770	Rock	0.47	0.05	0.12	0.81	55.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.002
290770	Duplicate	0.47	0.05	0.12	0.81	55.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.002
290773	Rock	1.18	0.12	0.12	0.33	55.10	<0.01	0.06	<0.01	0.01	0.01	<0.002
290773	Duplicate	1.18	0.12	0.12	0.33	55.10	<0.01	0.06	<0.01	0.01	0.01	<0.002
290794	Rock	2.03	0.10	0.09	0.19	54.69	<0.01	0.03	<0.01	0.01	0.01	<0.002
290794	Duplicate	2.03	0.10	0.09	0.19	54.69	<0.01	0.03	<0.01	0.01	0.01	<0.002
STD SO-18	STD	58.09	14.12	7.60	3.35	6.40	3.71	2.16	0.69	0.83	0.39	0.55
STD SO-18	STD	58.03	14.19	7.57	3.35	6.39	3.68	2.16	0.69	0.83	0.39	0.55
STD SO-18	STD	58.14	14.08	7.59	3.35	6.39	3.67	2.14	0.69	0.84	0.39	0.55
STD SO-18	STD	58.13	14.09	7.60	3.35	6.36	3.69	2.15	0.69	0.85	0.39	0.55
STD SO-18	STD	59.24	14.36	7.77	3.40	6.51	3.75	2.20	0.70	0.84	0.40	0.56
STD SO-18	STD	58.00	14.07	7.60	3.34	6.31	3.66	2.38	0.69	0.83	0.39	0.54
STD SO-18	STD	58.09	14.12	7.60	3.35	6.40	3.71	2.16	0.69	0.83	0.39	0.55
STD SO-18	STD	58.03	14.19	7.57	3.35	6.39	3.68	2.16	0.69	0.83	0.39	0.55
STD SO-18	STD	58.09	14.10	7.61	3.34	6.37	3.72	2.15	0.69	0.84	0.39	0.55
STD SO-18	STD	58.05	14.12	7.60	3.34	6.33	3.72	2.15	0.69	0.83	0.39	0.55
BLK	BLK	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002
BLK	BLK	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002
BLK	BLK	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	0.32	<0.01	<0.01	<0.01	<0.002
BLK	BLK	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002
BLK	BLK	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002

The quality control measures for the limestone exploration program was left to Acme Labs. Acme completed 7 duplicate analyses as shown in Table 7. The results compare very well. Acme also completed 10 analyses of an in-house standard as shown in Table 7. Again the results compare favorably. Finally Acme completed 5 analyses of an in-house blank as shown in Table 7. These results also show little variability.

The author is satisfied with the adequacy of the sample preparation, security and analytical procedures.

#### DATA VERIFICATION

The quality control measures for the limestone sampling program consisted of laboratory instituted duplicates, standards and blanks. The assay results from these measures show excellent correlation, giving this author confidence in the assay results.

The author has reviewed and verified the assay results by comparing them to the historical sampling of the limestones as shown in Table 2. The current results compare favorably to the historical results.

#### ADJACENT PROPERTIES

This report is not relying on data or information from any adjacent property.

#### MINERAL PROCESSING AND METALLURGICAL TESTING

The author is not aware of any mineral processing or metallurgical testing completed on the limestone of the Beaver, Cove or Dump properties.

#### MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

The Beaver, Cove and Dump properties do not have any current 43-101 compliant mineral resources or reserves. Munroe (2003) reviewed the claim holdings at that time and estimated a gross 37 million tonnes of limestone combined on the Beaver and Cove properties and a further 27 million tonnes on the Dump property. He calculated a fair market value of Canadian \$26,000,000 based on \$0.35 per tonne for the Beaver and Cove properties and \$0.50 per tonne for the Dump property. There was no information given on the grade or calcium content of the limestone. The author has not verified these reserve calculations and has only included them as an historical estimate.

OTHER RELEVANT DATA AND INFORMATION

There are two key aspects to consider in the evaluation of white limestone deposits. The first is the geology of the deposit and the stones ability to meet minimum standards with respect to color, insolubles and impurities to be considered for filler applications. The second aspect is location. Limestone is a bulk commodity so ready access to relatively cheap transportation is equally important to grade.

The primary market for the limestone from the Beaver, Cove and Dump properties is industrial applications and to a lesser extent, in landscape applications. The white color, brightness and generally low insoluble levels suggest a potential market as industrial fillers. The white color would also be suitable for crushed landscape stone.

The Beaver and Cove limestones lie proximal (5-10 kilometres from a load out barge facility at Beaver Cove. The Dump project is approximately 40 kilometres from tidewater. However, the Canadian Forest Products Ltd. (Canfor) logging railway lies on the eastern edge of the property. This line connects with tidewater at Beaver Cove. Northland Power has recently opened a wood chip processing facility adjacent to Canfor's Beaver Cove log sort. This facility includes barging facilities for the large Seaspan barges.

**Plate 2 . Northland Power's woodchip and barging facility at Beaver Cove.**



## INTERPRETATION AND CONCLUSIONS

The claims comprising the North Island Carbonate Project were first identified by the author in 1993 in a search for marble dimension stone. The focus gradually shifted to white limestone for filler applications, primarily after the poor performance of the white marble from the Leo D'Or property. This marble was found to exhibit differential hardness across 2 inch slabs making fine polishing difficult.

The purpose of the 2008 exploration program was to provide the first detailed chemical analyses of the North Island white limestones to assess their suitability for industrial filler applications. The sampling program met the objectives of the program as it showed the limestone from the Beaver and Dup properties and to a lesser extent the Cove property, met the  $\text{CaCO}_3$  content criteria for use as fillers. The sampling also found the impurities within the white limestone from the Beaver and Dump properties and to a lesser extent from the Cove property was within an acceptable range for use as fillers.

The sample density was sufficient for an initial assessment of a white limestone deposit so the results can be considered representative of the white limestone on each of the three South Aggregate Resources Inc. North Island Carbonate properties.

The results warrant further exploration. The next logical step would be to complete brightness testing on all of the samples. This should be followed by a drilling program on the Cove and Dump properties. Unfortunately, there has been considerable reclamation completed on the area of the 1993 Beaver drilling, so the drilling should be redone. The holes can be relatively widely spaced. The purpose is the test the limestone in the third dimension: both chemically and optically and block out mineral resources to confirm and expand the initial estimates of Munroe (2003).

The cost of the 2008 sampling program was \$14,437.17, broken down by property as follows: Beaver \$4,602.90, Dump \$5,298.24 and Cove \$4,536.03.

## RECOMMENDATIONS

Further work is required to continue with the exploration of the Beaver, Cove and Dump limestone properties for white limestone for filler applications.

Optical analyses should be completed on the 48 samples taken during this program.

The next phase should consist of small diamond drilling programs on each of the three properties. The purpose of the drilling program will be to test the limestone in the third dimension. The core should be sampled at regular intervals down hole for chemical and optical tests.

A total of 1500 metres of BQ wireline drilling is recommended: consisting of 500 metres for each of the three properties. Hole depths are expected to be in the range of 30 to 50 metres meaning each property should get 10 to 16 vertical drill holes. The cost of the drilling program is estimated at \$275,000.

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**NORTH ISLAND CARBONATE PROJECT**  
**2009 Drilling Budget**

Diamond Drilling

allow 500 metres - Beaver property  
allow 500 metres - Cove property  
allow 500 metres - Dump property  
allow 40 hours excavator

Project Manager	14	days	@	\$800	/day	\$11,200
Assistant	14	days	@	\$400	/day	\$5,600
Room & Board	56	days	@	\$125	/day	\$7,000
Vehicle + Fuel	14	days	@	\$150	/day	\$2,100
Excavator or cat Mob / Demob						\$2,500
Excavator (all in)	40	hours	@	\$150	/hour	\$6,000
Drill Mob / Demob						\$5,000
Drill footage (all in)	1500	metres	@	\$125	/metre	\$187,500
Analysis - core	200	sample	@	\$100	/sample	\$20,000
Analysis - standards	15	sample	@	\$100	/sample	\$1,500
Travel						\$2,500
Sundries						\$2,500
Contingency						\$21,600
<b>Total Budget</b>						<b>\$275,000</b>

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STATEMENT OF COSTS

**NORTH ISLAND LIMESTONE STATEMENT OF COSTS SEPTEMBER 26 TO 28, 2008**

Field Crew and Days					<b>Total</b>	<b>Beaver</b>	<b>Dump</b>	<b>Cove</b>	
Tim Henneberry		Sep 26,27,28				Sep 26	Sep 27	Sep 28	
Angie Stanta		Sep 26,27,28				Sep 26	Sep 27	Sep 28	
Leah Henneberry		Sep 26,27,28				Sep 26	Sep 27	Sep 28	
Report Time									
Tim Henneberry		Oct 10 to Dec 31							
Tim Henneberry	3	days	@	\$800	/day	\$2,400.00	\$800.00	\$800.00	\$800.00
Angie Stanta	3	days	@	\$500	/day	\$1,500.00	\$500.00	\$500.00	\$500.00
Leah Henneberry	3	days	@	\$400	/day	\$1,200.00	\$400.00	\$400.00	\$400.00
Vehicle	3	days	@	\$50	/day	\$150.00	\$50.00	\$50.00	\$50.00
Kilometres	1017	km	@	\$0.50	/km	\$508.50	\$169.50	\$169.50	\$169.50
Total Fuel						\$202.66	\$67.55	\$67.55	\$67.55
Room and Board						\$734.61	\$244.87	\$244.87	\$244.87
Supplies						\$44.84	\$14.95	\$14.95	\$14.95
Analysis VANI017966						\$1,051.37		\$1,051.37	
Analysis VANI017964						\$356.03	\$356.03		
Analysis VANI017946						\$289.16			\$289.16
Documentation									
Tim Henneberry	60	hours	@	\$100	/hour	\$6,000.00	\$2,000.00	\$2,000.00	\$2,000.00
<b>Assessment Credit Subtotal</b>						<b>\$14,437.17</b>	<b>\$4,602.90</b>	<b>\$5,298.24</b>	<b>\$4,536.03</b>

The total costs of the program were apportioned 1/3 each to Beaver, Cove and Dump with the exception of the analysis costs which were applied directly to each project.

The actual costs were higher than filed for Beaver and Cove and lower than filed for Dump. Adjustments will be required to PAC in all three instances.

	Actual	Filed	Required	PAC	Actual PAC
Beaver	\$4,602.90	\$4,548.82	\$4,392.36	\$156.46	\$210.54
Dump	\$5,298.24	\$5,320.17	\$5,123.65	\$196.82	\$174.59
Cove	\$4,536.03	\$4,481.72	\$4,368.48	\$113.24	\$167.55

CERTIFICATE OF RT HENNEBERRY

I, R.Tim Henneberry, P.Geo. of 2446 Bidston Road, Mill Bay, B.C. V0R 2P4 do hereby certify that I am a Qualified Person of:

**South Aggregate Resources Inc.**

1200 – 805 West Broadway  
Vancouver, B.C. V5Z 1K1

I earned a Bachelor of Science Degree majoring in geology from Dalhousie University, graduating in May 1980.

I am registered with the Association of Professional Engineers and Geoscientists in the Province of British Columbia as a Professional Geoscientist.

I have practiced my profession continuously for 29 years since graduation.

I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101. My relevant experience for the purpose of this Technical Report is:

- 29 years of exploration experience for base and precious metals and industrial minerals in the Canadian Cordillera

I am responsible for the preparation of the technical report titled “North Island Carbonate Project 2008 Exploration Program” and dated December 31, 2008, relating to the Beaver, Cove and Dump properties. I visited the Beaver property on September 26, the Dump property on September 27 and the Cove property on September 28.

I have had prior involvement with the each of the Beaver, Cove and Dump properties.

As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

I am independent of the issuer after applying all of the tests in section 1.4 of NI 43-101.

I have read NI 43-101 and Form 43-101F, and the Technical Report has been prepared in compliance with that instrument and form.

I make this Technical Report effective December 31, 2008.

Dated this 31<sup>st</sup> day of December, 2008.

“signed and sealed”

\_\_\_\_\_  
R.Tim Henneberry, P.Geo

**Sample Locations - UTM Coordinates NAD 83 Zone 9**

Sample No.	Project	83Z09E	83Z09N	Composition	% CaCO <sub>3</sub>	% MgCO <sub>3</sub>	% Insolubles
290751	Beaver	649005	5596880	white limestone	99.06	0.38	0.97
290752	Beaver	649021	5596850	white limestone	99.65	0.38	0.87
290753	Beaver	648996	5596866	white limestone	98.61	0.46	0.99
290754	Beaver	648925	5596935	white limestone	98.59	0.46	1.58
290755	Beaver	648899	5596917	white limestone	99.61	0.42	0.99
290756	Beaver	648861	5596864	white grey limestone	97.33	0.52	2.20
290757	Beaver	648798	5596781	white grey limestone	99.27	0.31	1.06
290758	Beaver	648724	5596730	grey white limestone	99.27	0.56	0.62
290759	Beaver	648677	5596697	white grey limestone	97.86	0.50	1.62
290760	Dump	651412	5572311	white limestone	97.13	2.70	1.88
290761	Dump	651459	5572307	white limestone	98.47	0.77	1.34
290762	Dump	651359	5572343	white limestone	96.90	2.95	0.97
290763	Dump	651308	5572396	white limestone	96.70	1.02	0.96
290764	Dump	651267	5572464	grey limestone	101.34	0.50	0.92
290765	Dump	651267	5572464	white limestone	98.43	0.54	1.02
290766	Dump	651241	5572492	white limestone	101.36	0.44	0.75
290767	Dump	651173	5572528	white limestone	96.50	3.47	0.57
290768	Dump	651114	5572607	white limestone	97.59	1.90	0.55
290769	Dump	651109	5572706	white limestone	97.77	2.26	0.51
290770	Dump	651076	5572755	white limestone	98.18	1.69	0.63
290772	Dump	650984	5572866	grey limestone	98.90	0.94	1.10
290773	Dump	650951	5573007	white limestone	98.34	0.69	1.41
290774	Dump	650745	5573161	grey limestone	93.51	7.13	1.02
290775	Dump	650926	5572902	white limestone	98.06	1.99	0.52
290776	Dump	650872	5572926	grey limestone	98.59	0.90	1.59
290777	Dump	650804	5572933	white limestone	100.09	0.46	1.15
290778	Dump	650657	5573004	white limestone	92.36	7.45	0.66
290779	Dump	651165	5572444	white limestone	95.36	4.29	0.75
290780	Dump	651052	5572443	white grey limestone	98.50	0.84	1.42
290781	Dump	650919	5572595	white limestone	94.67	5.44	0.87
290782	Dump	650633	5572764	white limestone	98.74	0.96	0.50
290783	Dump	650586	5572810	white limestone	97.41	1.78	0.61
290784	Dump	650498	5572798	white limestone	97.65	2.74	0.68
290785	Dump	650394	5572858	white limestone	96.97	2.95	0.35
290786	Dump	650297	5572981	white grey limestone	93.59	5.94	0.58
290787	Dump	650221	5573081	white limestone	88.29	11.67	0.87
290788	Dump	650185	5573248	white limestone	91.45	8.51	0.84
290789	Dump	650017	5573390	white limestone	91.60	7.99	2.16
290790	Dump	650005	5573528	white limestone	97.04	2.05	1.11
290791	Dump	649351	5602068	white limestone	95.65	4.89	0.57
290792	Cove	649357	5602093	white brown limestone	97.58	0.40	2.89
290793	Cove	649428	5602085	black limestone	96.02	0.44	3.12
290794	Cove	649557	5601949	white grey limestone	97.61	0.40	2.21
290795	Cove	649601	5601943	grey white with interbed	97.54	0.46	2.23
290796	Cove	649629	5601954	white grey limestone	98.91	0.31	1.22
290797	Cove	649704	5602004	white grey limestone	98.77	0.44	0.81
290798	Cove	649861	5601957	white grey limestone	99.43	0.36	0.46





ACME ANALYTICAL LABORATORIES LTD.  
1020 Cordova St. East Vancouver BC V6A 4A3 Canada  
Phone (604) 253-3158 Fax (604) 253-1716

[www.acmelab.com](http://www.acmelab.com)

**Client:** Mammoth Geological Ltd.

2446 Bidston Road  
Mill Bay BC V0R 2P4 Canada

Submitted By: R. Tim Henneberry

Receiving Lab: Canada-Vancouver

Received: October 01, 2008

Report Date: November 10, 2008

Page: 1 of 2

## CERTIFICATE OF ANALYSIS

VAN08009875.1

### CLIENT JOB INFORMATION

Project: Beaver  
Shipment ID: 9/30/2008  
P.O. Number  
Number of Samples: 9

### SAMPLE DISPOSAL

RTRN-PLP Return  
DISP-RJT Dispose of Reject After 90 days

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Mammoth Geological Ltd.  
2446 Bidston Road  
Mill Bay BC V0R 2P4  
Canada

CC:

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
R150	9	Crush, split and pulverize rock to 200 mesh		
4A	9	LiBO2/Li2B4O7 fusion ICP-ES analysis	0.2	Completed
DIS-RJT	9	Warehouse handling / Disposition of reject		

### ADDITIONAL COMMENTS



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.  
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.  
\*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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2446 Bidston Road  
 Mill Bay BC V0R 2P4 Canada

Project: Beaver

Report Date: November 10, 2008

Page: 2 of 2 Part 1

CERTIFICATE OF ANALYSIS

VAN08009875.1

Method	WGHT	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A
Analyte	Wgt	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Nb	Sc	LOI	
Unit	kg	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
MDL	0.01	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	5	20	2	5	3	5	1	-5.1	
290751	Rock	1.02	0.83	0.10	0.05	0.18	55.50	<0.01	0.04	<0.01	<0.01	<0.01	<0.002	12	<20	4416	<5	<3	<5	<1	42.7
290752	Rock	0.72	0.68	0.13	0.07	0.18	55.83	<0.01	0.04	<0.01	0.01	<0.01	<0.002	25	<20	2768	<5	<3	<5	<1	42.8
290753	Rock	0.91	0.81	0.08	0.11	0.22	55.25	<0.01	0.03	<0.01	0.02	<0.01	<0.002	20	<20	4988	<5	<3	<5	<1	42.9
290754	Rock	0.63	1.24	0.25	0.10	0.22	55.24	<0.01	0.10	<0.01	<0.01	<0.01	<0.002	30	<20	1689	<5	<3	<5	<1	42.7
290755	Rock	0.95	0.91	0.03	0.06	0.20	55.81	<0.01	<0.01	<0.01	<0.01	0.01	<0.002	10	<20	1032	<5	<3	<5	<1	42.8
290756	Rock	1.04	1.93	0.16	0.12	0.25	54.53	<0.01	0.03	<0.01	<0.01	<0.01	<0.002	30	<20	3769	<5	<3	<5	<1	42.5
290757	Rock	1.08	0.76	0.22	0.09	0.15	55.62	<0.01	0.04	<0.01	<0.01	<0.01	<0.002	15	<20	2663	<5	<3	<5	<1	42.8
290758	Rock	0.52	0.45	0.07	0.11	0.27	55.62	<0.01	0.03	<0.01	0.02	<0.01	<0.002	46	<20	2836	<5	<3	<5	<1	43.1
290759	Rock	1.26	1.43	0.07	0.13	0.24	54.83	<0.01	0.03	<0.01	0.01	0.01	<0.002	26	<20	4632	<5	<3	<5	<1	42.7





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Client:

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Mill Bay BC V0R 2P4 Canada

Project:

Beaver

Report Date:

November 10, 2008

Page:

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Part 2

## CERTIFICATE OF ANALYSIS

VAN08009875.1

Method	Analyte	4A 2A Leco 2A Leco		
		Sum	TOT/C	TOT/S
Unit		%	%	%
MDL		0.01	0.02	0.02
290751	Rock	99.98	12.49	0.05
290752	Rock	100.06	12.51	<0.02
290753	Rock	100.03	12.55	0.04
290754	Rock	100.04	12.21	<0.02
290755	Rock	100.00	12.18	<0.02
290756	Rock	99.94	12.53	0.05
290757	Rock	99.98	12.50	0.03
290758	Rock	99.99	12.62	0.07
290759	Rock	99.98	12.43	0.02

**QUALITY CONTROL REPORT**

**VAN08009875.1**

Method	WGHT	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	
Analyte	Wgt	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Nb	Sc	LOI	
Unit	kg	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	5	20	2	5	3	5	1	-5.1	
290759	Rock	1.26	1.43	0.07	0.13	0.24	54.83	<0.01	0.03	<0.01	0.01	0.01	<0.002	26	<20	4632	<5	<3	<5	<1	42.7
Pulp Duplicates																					
290756	Rock	1.04	1.93	0.16	0.12	0.25	54.53	<0.01	0.03	<0.01	<0.01	<0.01	<0.002	30	<20	3769	<5	<3	<5	<1	42.5
REP 290756	QC																				
Reference Materials																					
STD CSC	Standard																				
STD OREAS76A	Standard																				
STD SO-18	Standard	58.09	14.12	7.60	3.35	6.40	3.71	2.16	0.69	0.83	0.39	0.545	503	49	400	298	33	24	25	1.9	
STD SO-18	Standard	58.03	14.19	7.57	3.35	6.39	3.68	2.16	0.69	0.83	0.39	0.550	499	46	397	297	32	24	25	1.9	
STD SO-18	Standard	58.14	14.08	7.59	3.35	6.39	3.67	2.14	0.69	0.84	0.39	0.548	487	45	395	294	32	19	25	1.9	
STD SO-18	Standard	58.13	14.09	7.60	3.35	6.36	3.69	2.15	0.69	0.85	0.39	0.549	489	49	400	293	32	18	25	1.9	
STD SO-18	Standard	59.24	14.36	7.77	3.40	6.51	3.75	2.20	0.70	0.84	0.40	0.556	494	40	410	302	33	19	26	0.0	
STD SO-18	Standard	58.00	14.07	7.60	3.34	6.31	3.66	2.38	0.69	0.83	0.39	0.544	486	42	403	297	33	20	25	1.9	
STD CSC Expected																					
STD OREAS76A Expected																					
STD SO-18 Expected		58.47	14.23	7.67	3.35	6.42	3.71	2.17	0.69	0.83	0.39	0.55	515	44	402	280	33	21	25		
BLK	Blank	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<5	<20	<2	<5	<3	<5	<1	0.0	
BLK																					
BLK	Blank	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<5	<20	<2	<5	<3	<5	<1	0.0	
BLK	Blank	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	0.32	<0.01	<0.01	<0.002	<5	<20	<2	<5	<3	<5	<1	0.0	
Prep Wash																					
G1	Prep Blank	<0.01	67.49	15.33	3.48	1.25	3.61	3.48	3.58	0.41	0.21	0.09	0.003	975	<20	724	144	17	21	6	0.9

## QUALITY CONTROL REPORT

VAN08009875.1

Method	Analyte	4A 2A Leco 2A Leco		
		Sum	TOT/C	TOT/S
Unit		%	%	%
MDL		0.01	0.02	0.02
290759	Rock	99.98	12.43	0.02
Pulp Duplicates				
290756	Rock	99.94	12.53	0.05
REP 290756	QC		12.38	0.07
Reference Materials				
STD CSC	Standard		3.10	4.07
STD OREAS76A	Standard		0.25	18.08
STD SO-18	Standard	99.95		
STD SO-18	Standard	99.89		
STD SO-18	Standard	99.89		
STD SO-18	Standard	99.89		
STD SO-18	Standard	99.88		
STD SO-18	Standard	99.88		
STD CSC Expected			2.94	4.25
STD OREAS76A Expected			0.16	18
STD SO-18 Expected				
BLK	Blank	<0.01		
BLK	Blank		<0.02	<0.02
BLK	Blank	<0.01		
BLK	Blank	0.32		
Prep Wash				
G1	Prep Blank	100.04	0.04	<0.02