

DIAMOND DRILLING WHITEROCK CLAIMS I TO VII October – November 2003

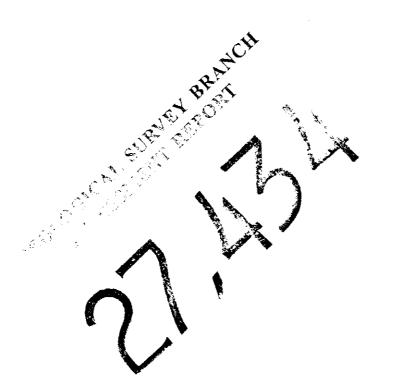
# TRAIL CREEK MINING DIVISION

NTS 8F/4W, BCGS 082F011 LAT 49°09'30"N Long. 117°50'15'W

Owned by Horst Klassen

Report for GRID CAPITAL CORPORATION

> By T.W. Muraro Consulting May, 2004



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#### INTRODUCTION

The Whitewater claims are 12.4 kilometers by paved Highway 3B north of Rossland B.C. Post Office (Fig. 1). Highway 3B crosses Hanna Creek 1500m southwest of the Whiterock claims at about 1420 meters above sea level and angles northheastward up the north side of the Hanna Creek draw, turns north and crosses over the ridge at 1490 meters above sea level (masl), 200m west of a saddle in the ridge. Contiguous 2- post claims (2 wide and 3 long) extend north-northeast from the corner on Highway 3B down the south side of the south fork of Murphy Creek (Fig. 2). This north- facing slope is cedar hemlock forest that was partially harvested 10 to 20 years ago and has filled in with coniferous and deciduous species (Fig.3).

About 100 meters east of the apex of the corner on Highway 3B, a large 20m x 100m exposure of wollastonite and carbonate has been created by two previous bulk sample programs. The pit is at the southern end of a natural outcrop bench that steps down to the east. The bottom of the bulk sample excavation is at the south end of an outcropping bench which steps down to the east and can be accessed from below by a haul road constructed in the early 1990's. This leads downhill southeasterly and curves left to northeasterly to a small flat area in the saddle of the ridge at elevation 1450 where it joins the Rossland water line road. The city of Rossland water line road crosses the ridge in this saddle (small white patch Fig. 3) and continues on contour northwesterly to a pick up site on the south fork of Murphy Creek. In the opposite direction the water line road leads south southwesterly one km to a logging access road that joins the southeast side of Highway 3B one km southwest of the project site (Fig. 3).

The top or hangingwall side of the wollastonite exposure is accessible by the short haul road constructed in 2000 by Matovich Mining for the purpose of a bulk sample test at the Teck Cominco smelter in Trail. This access road leaves the east side of Highway 3B about 300 meters southwest of the drill site, travels parallel to the highway for about 200 meters and then dog legs east and northward to the top of the outcrop above the bulk sample excavation. (Fig. 4)

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# HISTORY

Staked in 1989 by Horst Klassen, the property is owned by H. Klassen of Salmo, B.C., and is under option to Grid Capital Corporation, 1075 Duchess Avenue, West Vancouver, B.C.. See Table for property status as of filing work referenced by this report (Appendix 1). A report in Exploration in British Columbia 1991 by A. Legun, describes the Nancy Green wollastonite deposit (as it was then known) located on the east contact of the Coryell batholith. Legun states that wollastonite on the property is hosted by a carbonate rich sequence of the Pennsylvanian to Permian Mount Roberts Formation.

Early in 1990's, Nyco (a subdivision of Fording Coal), arranged to collect and ship a bulk sample of 18 tons to their facility in New York State for testing (personal communication). The results encouraged them to option the property with the objective of drilling to establish a reserve. Following the option payment, but prior to drilling, parent company Fording deflected their attention to their larger wollastonite resource near Hermosillo, Sonora, Mexico.

No further physical work took place during the 1990's but several groups studied the deposit and commissioned reports. A report for Hemphill Brothers Inc. of Seattle by Thomas Newman, a consultant from Colorado, pointed out the similarity of Rossland material to the Vanderbilt's producing deposit in New York.

Matovich Mining optioned the property in 2000 and shipped material to Trail for testing as a potential flux substitute for calcite and silica. Test work by Cominco was limited and short lived. Kivset smelter sensitivity and fluctuations in composition of delivered material contributed to the termination of the test.

## 2003 MAPPING & DRILLING

Grid Capital Corp optioned the property from Horst Klassen in 2003, and the writer refreshed an existing grid; did two days of geological mapping at 1:500 scale and supervised the drilling by Kootenay Exploration Drilling Limited of 125 meters of NQ core in four short holes in October-November of 2003.

The 2003 1:500 scale mapping was done on Whiterock I to IV inclusive to determine strike and dip and stratigraphic constraints on the wollastonite zone. The 2003 drilling was done on Whiterock I and II to learn geometry and continuity of the wollastonite zone down dip(Fig.4).

On the west bank of Highway 3B at 870E on grid line 4950N, an outcrop of partially digested metavolcanics extends at least 90 meters south southwest, parallel to the highway.

One hundred meters north on line 5050 N, the highway cuts into a prominent outcrop which extends for several hundred meters along the upslope cut of the highway as it contours northwesterly to Murphy Creek. This outcrop is a medium grained felspar biotite rock and is accepted here as a mafic phase of Coryell.

East of the corner on the highway, just east of the access road, at grid 5020N and 955E, hornfelsed metavolcanics form the hangingwall of the wollastonite zone. Outcrop and hole 03-01 drilled easterly at -50° indicate a westerly dip of 30°. The exposure of the hangingwall rocks and the hangingwall contact are limited to about 20m of strike length.

Exposure of the wollastonite zone varies from 10 to 20m wide and is 100 meters long (from 5000N to 5100N). This outcrop forms the east edge of a north-striking bench on the crest of the ridge separating Hanna Creek on the south from Murphy Creek to the north. The foot of the 10 meter high bench is locally the eastern limit of outcrop. One to two meters of exposed marble lies conformably with sharp contact on a two meter exposure of hornfelsed calcsilicate with 1 - 3% disseminations and clots of laminated pyrrhotite. At 5075N and 995E, the contact strikes northerly and dips westerly at about 30°. This is the base of the wollastonite bearing carbonate zone (WM zone). A two meter by two meter decline, with the marble layer forming the back, extends down the dip westward for at least eight meters. The collar has been timber framed and a padlocked gate discourages entry.

Additional bedrock information for the work to date is based on NQ diamond drill core (Appendix 2 Diamond Drill Logs).

The original plan for diamond drilling was to section the wollastonite interval from hangingwall to footwall with a pair of holes on sections 25 meters apart on strike.

Drill hole 03-01 (the first hole of 2003 Fig. 5) collared on section 5000N and was directed eastward ( $100 \text{ }^{\circ}\text{Az}$ ) at -50°. This location is close to the southern limit of the outcrop face forming the west wall of the bulk sample cut. The three intervals of wollastonite rich material in the hole aggregate 7.5 meters separated by near meter intervals of aphanitic dike. The surface geometry had been interpreted to allow for 15 to 20 meters of wollastonite bearing section. Consequently a vertical hole on section 5000 was deferred in favour of moving northward to section 5050N.

Hole 03-02 (at 100°Az and -50°, Fig. 6) entered deeper overburden than expected (7 meters) and then entered a dike. Considering the 70° northeasterly dip of the prominent jointing in the sample cut, it seemed probable that the hole at -50° would remain in the dike, so it was stopped.

Drill hole 03-03 was collared on the same section but 19 meters east of 03-02 and was drilled on 100°Az at -60°. It entered wollastonite at 0.6 m and sectioned 30 meters of WM zone containing one 0.6m dike and was terminated at 33.83m in footwall hornfels.

Drill hole 03-04 drilled vertically from the same drill position as hole 03-03 entered the WM zone at 1.3m and then entered dike similar to hole 03-02 at 14.1m and was terminated in dike at 24.40m.

The drilling indicates that the WM zone can be about 30 meters thick and that the upper 15 to 20 meters can be predominately wollastonite.

## DISCUSSION

Mount Roberts Formation mapped and drilled to date, is a layered accumulation of metamorphosed carbonate sediments and subaqueous volcanic sediments, pyroclastics and possible flows.

Metamorphism, both regional (Jurrasic, Nelson Batholith) and contact (Eocene, Coryell Batholith) have converted the volcanic components to maroon/brown biotite hornfels and have produced a wollastonite-calcite marble assemblage in the carbonate interval (WM zone). The calcite marble occurs as discrete masses. Exposures in the bulk sample excavation and the drill core indicate that calcitic marble occurs predominately as conformable layers from a few centimeters thick to almost six meters thick (DH 03-03).

On section 5000N, DH 03-01 cuts an interval of wollastonite and marble and included dikes from 12.19 to 30.78 meters. The structurally uppermost part of the interval 12.19 to 21.18 (8.89m) includes 1.56 meters of dike leaving 7.33m of wollastonite rich material. The lower part of the interval, 21.18 to 30.78, contains 6.70m of calcitic marble and 2.48m of skarn.

Carbonate that has reacted to form wollastonite dominates the structurally higher part of the original carbonate interval.

Note that there is evidence in the core of folding in marble layers of intermediate thickness (see log for DH 03-03).

## **INTERPRETATION**

Two prominent outcrops dominate the surface geology on Whiterock claims I and II. The southern outcrop is a prominent knob that has been enlarged by stripping and benched down on its eastern side by bulk sampling. Exposed rock is 30m north south and pear shaped to 15m wide east west. The top is at 1485masl (meters above sea level) and the northeast face is controlled by prominent jointing which strikes 335°Az and dips 70°NE.

The northern outcrop is 10 to 20m wide and 60m long and 3 to 4m lower and has been expanded at its southern end by sampling (Fig.4). A covered gap of about 10 meters separates these two prominent exposures. This covered section is part of a depression which extends northwesterly into the area underlain by the dike encountered in hole 02. This same depression persists as a shallow draw to the southeast beyond the southern outcrop.

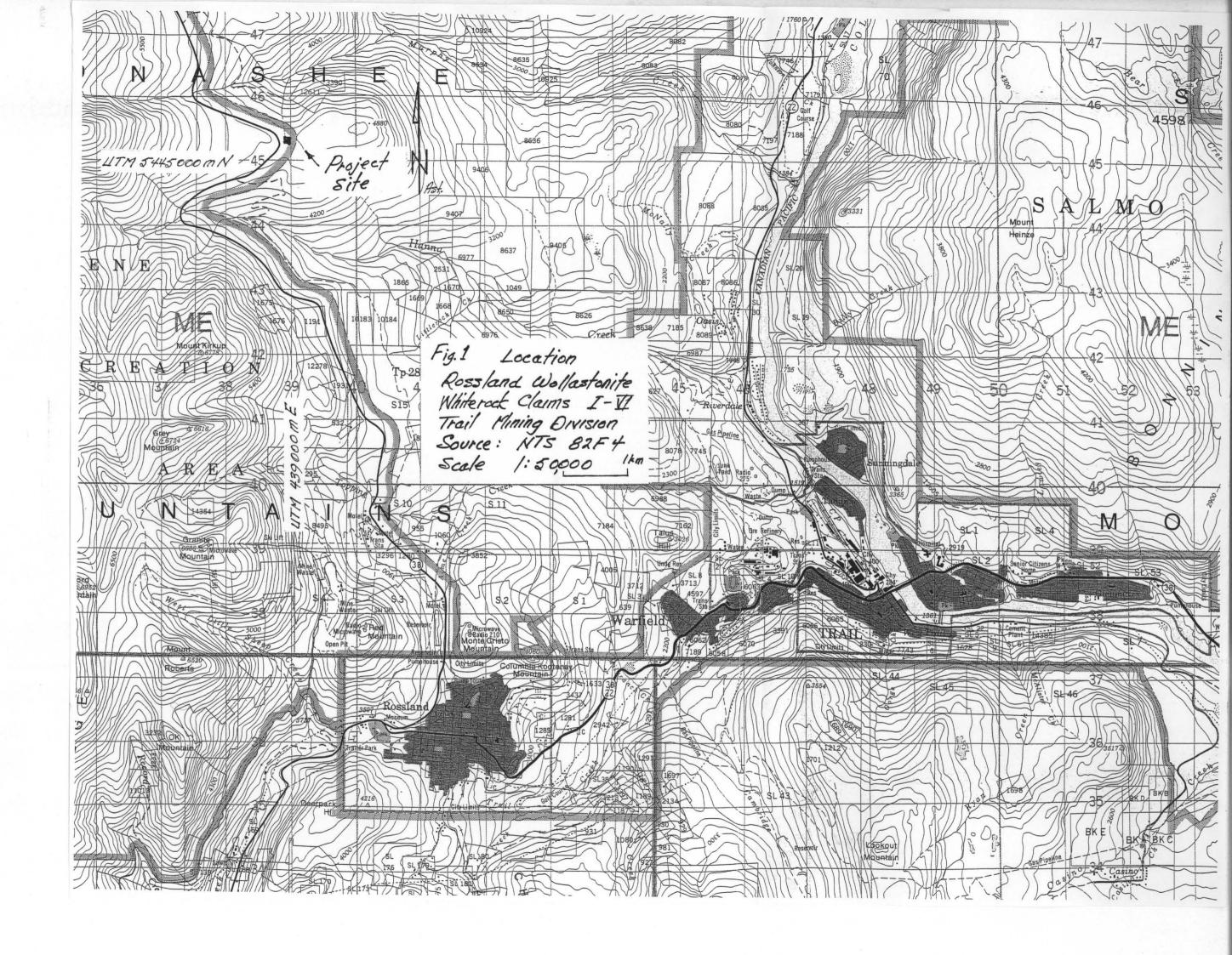
The prominent northwest jointing, the separation of the two outcrops along a northwesterly depression underlain by relatively recessive dike material suggests a discontinuity. Wollastonite intervals in holes 03 and 04, though not complete (the upper contact being eroded), do appear cleaner and more continuous than the material in hole 01.

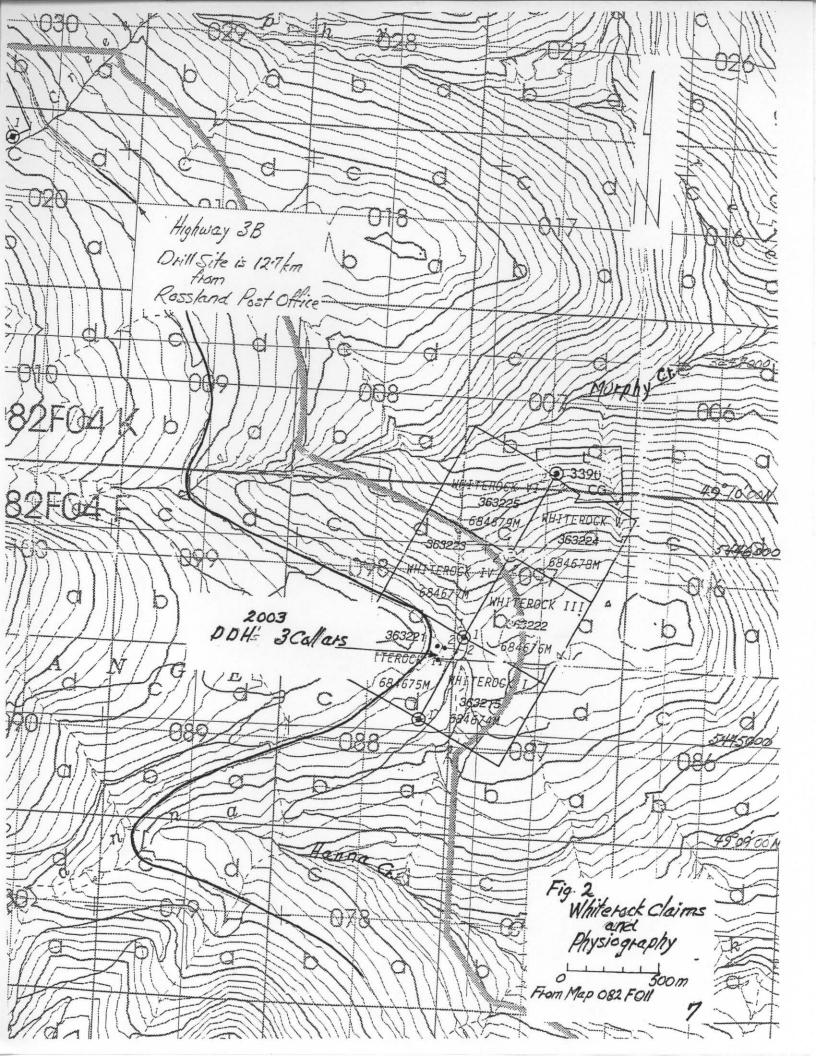
A northwesterly striking (335°Az) fault zone with a steep northeast dip occupied by a late dike complex appears to separate the two main exposures of WM zone. Moreover, the northern segment on current evidence is thicker and cleaner.

## RECOMMENDATIONS

It is recommended that future work concentrate on extending the northerly projection of theWM interval by mapping and additional drilling on sections 5075N, 5100N and 5125N.

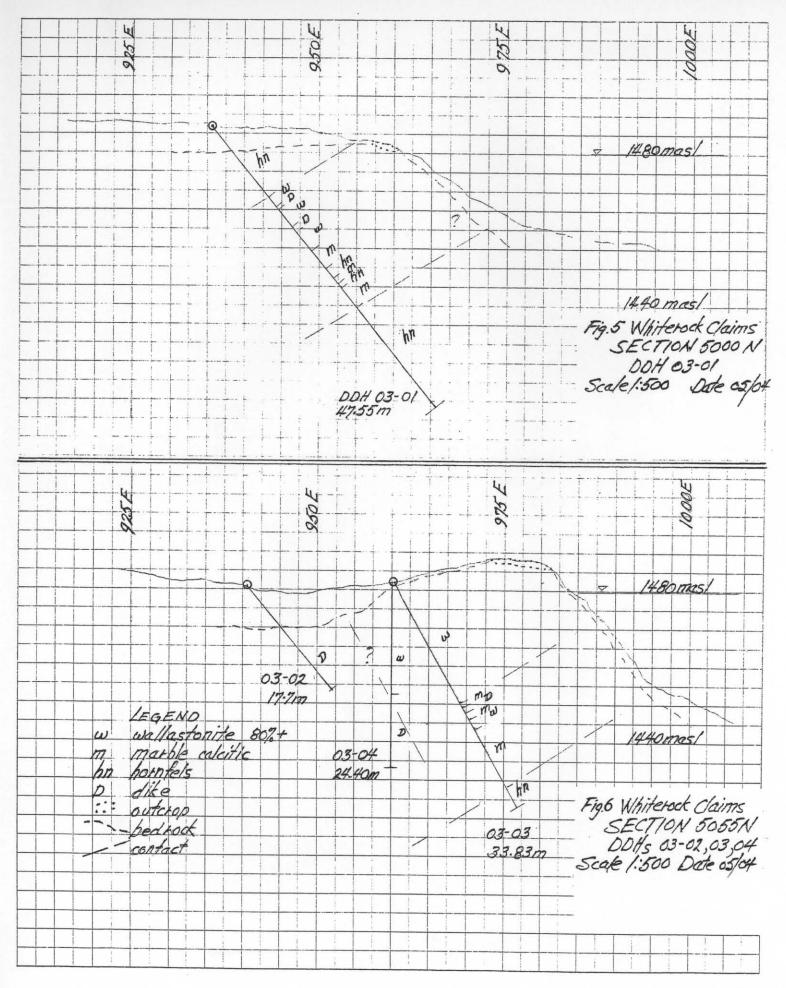
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Waterline Road -Saddle Highway 3B Logging Access Fig. 3 Air Photo 30BCB99011 #156 Scale Approx 1:15,000 300 450 m 150 0 8

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### STATEMENT OF QUALIFICATIONS

I, Theodore William Muraro certify that:

- 1. I am a graduate of the University of British Columbia with a degree in Geological Engineering (1956) and MSc. in Economic Geology from Queen's University, Kingston, Ontario (1962)
- 2. I am a consulting economic geologist residing at 4438 Stone Court, West Vancouver, British Columbia.
- 3. I have practiced professionally since 1956 with a senior Canadian mining company until 1990 and ,for the last 14 years, have worked as a consulting geologist for junior exploration companies and major international mining companies in North and South America, Africa, India, China, Thailand and parts of Europe.
- 4. I am a practicing member of the Association of Professional Engineers and Geoscientists of B.C. (License # 5480).
- 5. I mapped the drill area on Whiterock claims, laid out the drill holes, supervised the drilling, logged the core, submitted the statement of work for 2003, and wrote the accompanying report while retained by Grid Capital Corporation of West Vancouver, British Columbia.

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Theodore W. Muraro, P.Eng.

# REFERENCES

Legun, A. 1991 Nancy Green Wollastonite, p.67-70 incl. Exploration in British Columbia.

# **APPENDIX 1**

# **Property Status**

Claim Number	Tenure Number	Expiry Date (Y M D)
Whiterock I	363215	2004 09 01
Whiterock II	363221	2004 09 01
Whiterock III	363222	2004 09 01
Whiterock IV	363223	2004 09 01
Whiterock V	363224	2004 09 01
Whiterock VI	363225	2004 09 01

# APPENDIX II

# DIAMOND DRILL LOGS

# Magnetic Declination Applied 18°E Property Grid: 10°E of Astronomic north

# DDH No 03-01

Lat: 5000N	Direction 100°Az
Dep 936E	Dip -50°
El 1487m	Length 47.55m

#### m

ID	
0 - 4.57	overburden (casing
4.57 - 12.19	Hornfelsed pyroclastic volcanic, fabric of lappilli 30 - 40° to core axis
	(ca)
12.19 - 13.71	White rock mixture sharp contact at 45° to ca. Mixture of coarse
	grained calcitic marble and coarse grained satiny sheaves of
	wollastinite, radiating sheaves 1 to 3cm in length
13.71 - 14.17	Dike – mauve grey to brown aphanitic dike
14.17 - 17.22	Whiterock mixture as in 12.19 to 13.71
17.22 - 18.28	Dike -same as 13.71 – 14.17
18.28 - 21.18	Wollastonite very coarsely crystalline with sharp lower contact 30° to
	ca with underlying banded grey white marble
21.8 - 24,08	Marble grey and white banded coarsely crystalline calcite marble;
	2cm layer of wollastonite at 24.08 – contact with underlying skarn
24.08 - 25.60	Skarn – ragged textured hornfelsed skarn with calcite in matrix;
	maroon-brown
25.60 - 26.67	Marble light grey folded contact at 30 to core axis
26.67 - 27.43	Skarn ragged textured maroon-brown with calcite in matrix – looks
	same as 24.08 to 25.06 – suspect fold repetition
27.43 - 30.78	Marble-coarsely crystalline grey and white streaked to banded calcite
	marble
30.78 - 32.31	Mixed skarn and metavolcanic
32.31 - 35.05	Metavolcanic –single unit
35.05 - 46.63	Mixed skarn and metavolcanic
46.03 - 47.55	Dike –mauve aphanitic with grey
E of H	chilled margin

**DDH NO. 03 – 02** Lat 5055N **Direction 100°Az Dep 942E** Dip –50° El 1481m Length 17.7m

m

- 0 - 7 7
- overburden (casing) Dike medium grained uniform massive unfoliated fresh looking mafic -17.7 looking- biotite-feldspar rock. No contacts apparent
  - 17.7 End of Hole - intentionally terminated in dike

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DDH 03 – 03	
Lat. 5055N	Direction 100°Az
Dep 961E	Dip -60°
El 1482m	Length 33.83m

#### m

- 0 0.6 overburden(casing)
- 0.6 18.14 Whiterock. coarsely crystalline wollastonite as intergrown acicular sheaves of radiating crystals with a distinct white satin lustre on cleavage surfaces and patches of very pale translucent green colour on surfaces perpendicular to long axis of sheaves. Minor intervals of calcitic marble
- 18.15 -18.91 Marble: white to grey coarsely crystalline with 3cm wollastonite band 30°ca at 6cm above contact with dike
- 18.91 -19.52 Dike; brown aphanitic, xenolithic with grey chilled margins and grey internal streaks. Upper contact 45°ca, lower contact 3cm of healed breccia
- 19.52 20.74 Marble; grey white coarsely crystalline with minor calcsilicate minerals Interval displays fold loop

### 20.74 -22.26 Wollastonite; coarsely crystalline with upper contact at 45°ca

- 22.26 -23.47 Marble; white to grey coarsely crystalline, minor folds at 22.55 and 22.86
- 23.47 24.69 Marble; fine grained relatively pure sharp basal contact
- 24.69 24.84 Two layers of coarsely crystalline wollastonite 2cm and 3cm thick
- 24.84 30.78 Marble; light grey to white coarsely crystalline relatively pure
- 30.78 33.83 Skarn; hornfelsed, volcanoclastic
- End of Hole

DDH No. 03 – 04	
Lat 5055N	Direction n.a.
Dep 960E	Dip -90°
El 1482m	Length 24.4m.

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### APPENDIX III Statement of Costs

Field Personnel Consultant/Field supervisor: mapping, spotting holes, logging core 11 days @400.00/day 4400.00 Geotechnical assistance: mapping 2 days @ 200.00/day 400.00 Food: 12 man days @30.00/day 360.00 Truck rental: travel: Two trips Vancouver to Trail return & fuel 1280.00 Diamond drilling: 125meters NQ, all in 7800.00 14,240.00 Total