

DIAMOND DRILL CORE LOG

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PROJECT GRASS CLAIM GROUP BOOT CORE SIZE BQ
 STARTED Aug 1/80 FINISHED Aug 11/80 TOTAL DEPTH 961
 LOCATION 1N 6+45E COLLAR ELEVATION
 ANGLE 90 AZIMUTH - LOGGED BY U. Schmidt

FOOTAGE	DESCRIPTION	ASSAYS AND ANALYSES
10		
20	BEDROCK	
20	Kqm Pcs- Chloritic Schist - dark grey to grey green biotite schist; limy schist to micaceous marble - garnets 1-2 mm diameter occur in some sections; chlorite common, minor epidote, grades to chlorite schist Pcs and dark green Pam amphibolite	
30	60°	
40	black secondary amphibolite along fracture	
40	Garnet biotite chlorite schist to chlorite muscovite garnet schist Pcs? talcy?	
	Pale green to pale grey green chlorite schist; muscovite-biotite-garnet chlorite schist	
50	Kqm 1 1/2' core recovered	
60	Pcs broken core quartz vein	
60	20% core recovery	
70	Pcs pyroxene, garnet, vesuvianite	
70	Medium green and grey colour banded biotite chlorite schist, limy, dark green chloritized garnets	
80		

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ASSAYS AND ANALYSES

FOOTAGE	DESCRIPTION	ASSAYS AND ANALYSES
	Pcs Gradational Change	
	Pggi Grey and Green Banded -	
80-90°	<ul style="list-style-type: none"> - limy chlorite biotite garnet schist, grey biotite bands alternate with chloritic bands, may be pyroxene or amphibolite bearing in places - most garnets have gone to chlorite, minor pale garnet, vesuvianite in limier sections - cut by quartz veins, both parallel foliation and cross cutting 	
90	40°	
	20° Pmm Gradational to grey laminated limestone	
	40° Pcs Gradational to Pcs - limy chloritic micaceous schist, grey green colour banded	
100	50° minor pyrrhotite, vesuvianite	
	limy schist biotite, chlorite, epidote, amphiboles, interlaminated limy bands (volcanic affinity?)	
	Pmm grey green and white banded crystalline carbonate with	
110	Pcs Chlorite schist siliceous bands	
	laminated pyrrhotite	
	pyrrhotite, chalcopyrite, sphalerite?	
120	AP fractured core Kap	
	Pbcs Chloritic biotite schist, medium to dark grey chloritized biotite schist	
30	80	
	Kqm	
130		
	Pcs Pale to medium green chlorite, muscovite, black amphibolite? biotite schist	
140	replacing chlorite schist - biotite content increases locally to major mica	
	broken core	
150	AP Dark to medium grey biotite schist with chloritic sections, grades to biotite muscovite chloritic talcy schist	
	Pbmcs	
80	30	
160		
	Gradational	
	Pale green talcy schist	
	Pale green? quartz chlorite, minor biotite	
	Pcss Pyroxene, garnet, vesuvianite, wollastonite, calcite, skarn with grey crystalline limestone bands	
170	LS	
	Pggi Grey and green banded biotite schist, chloritic bands, with post flaser biotite porphyroblasts	
30	30	
180	Pcss Banded pyroxene-garnet-vesuvianite-wollastonite, calcite skarn	

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ASSAYS AND ANALYSES

FOOTAGE	DESCRIPTION	ASSAYS AND ANALYSES
180	<p>Pcss</p> <ul style="list-style-type: none"> - altered crystalline marble band - banded garnet vesuvianite pyroxene wollastonite skarn with crystalline marble bands - also chloritic sections derived from basic volcanic? <p>20" pegmatite dyke 50% core</p>	
190	<p>Pbmcs</p> <p>Biotite muscovite schist and marble, minor chlorite bands</p>	
200	<p>Pcss</p> <p>Banded pyroxene, garnet, vesuvianite, wollastonite, calcite</p> <ul style="list-style-type: none"> - banded calc-silicate gneiss with biotite and chlorite <p>Pbcs</p> <p>Dark grey to black siliceous biotite schist with minor limy banded calc-silicate sections (vesuvianite, garnet, wollastonite, calcite)</p> <p>Pcss</p> <ul style="list-style-type: none"> - also pale green chloritic sections which parallel and cross cut foliation (retrograde biotite) <p>Pcss</p> <ul style="list-style-type: none"> - altered basic schist with minor lime bands 	
210	25% core recovery	
220	<p>Pcss</p> <p>Wollastonite, garnet, vesuvianite, pale pyroxene, calcite - banded calc-silicate gneiss, with pale green chloritic matrix, also minor biotite bands</p> <ul style="list-style-type: none"> - altered siliceous limy basic schist 	
230	<p>2 pegmatite, quartz, tourmaline muscovite, feldspar</p> <p>Pbmcs</p> <p>Gradational</p> <p>Dark grey to black laminated siliceous biotite, chlorite-muscovite schist, with minor garnet and lime content, late retrograde chlorite bands in some laminae, and grey green mottled texture in altered sections</p> <ul style="list-style-type: none"> - broken ground - minor deformed quartz veins now parallel to foliation - late post strain biotite porphyroblasts appear in some areas 	
240	- chlorite epidote alteration	
250		
260	<p>Pcss</p> <p>Banded vesuvianite-garnet-pyroxene banded calc-silicate gneiss, with light green chloritic? matrix, also wollastonite, calcite</p>	
270	<p>Pggi</p> <p>Grey and Green Banded</p> <p>chloritic interlaminated biotite and chlorite schist, chlorite forming at the expense of biotite in alternating bands of 1-2 in. wide, garnets are rimmed by dark green chlorite, most with garnet cores, biotite to pale chlorite siliceous matrix, minor carbonate bearing veins and fractures, pre-strain quartz veins parallel foliation</p> <p>1 grain scheelite</p>	
280		

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ASSAYS AND ANALYSES

FOOTAGE	DESCRIPTION	ASSAYS AND ANALYSES
280	Pggi	
	Faulted Contact	
	PCSS 80	- vesuvianite-garnet-pyroxene? banded calc-silicate gneiss in white calcite and pale green chloritic siliceous groundmass
290	Pbmcs	Dark grey biotite-chlorite-muscovite-garnet schist, siliceous, with minor interbands of pale chlorite after biotite, also garnet to chlorite
	-traces pyrrhotite	
300	PCSS	- vesuvianite-garnet-wollastonite-pyroxene? banded calc-silicate gneiss in light grey to pale green chloritic groundmass, minor crystalline marble, pale green groundmass believed to be alteration of biotite schist
	-quartz vein	- alteration of limy biotite schist
	70°	- calc-silicate in crystalline marble matrix
	-chloritized schist	
	quartz vein	
	chloritized schist	
310		- banded calc-silicate gneiss and calc-silicate bearing schist
	-scheelite in vesuvianite- wollastonite fragment	- wispy to mottled grain boundaries of calc-silicate minerals in siliceous chloritic matrix
	-biotite-chlorite- muscovite-garnet schist	
	-scheelite grain	
320	-amphibolitic alteration	
	-pegmatite vein - quartz-feldspar-tourmaline	
	- amphibolitic alteration, black amphibolite replacing chlorite epidote siliceous groundmass near fractures and pegmatite	
	- pegmatite and schist cut by late carbonate vein	
	PCSS	- vesuvianite-pyroxene?-wollastonite-calc-silicate gneiss
		- white wollastonite-calcite groundmass to chloritic groundmass
330	Pggi	Grey and green interbanded altered biotite schist, pale green chlorite after biotite, garnet to chlorite, minor garnet wollastonite
	Pbmcs	Dark grey biotite-chlorite-muscovite-garnet siliceous schist with minor lime bands, minor pyrrhotite in fractures perpendicular to foliation
	80	
340	-pyrrhotite in fracture	
	-pyrrhotite remobilized along fractures	
	-interbands of chlorite from biotite	
350	Kqm	Medium to coarse grained equigranular biotite quartz monzonite
	40	- minor weak alteration at contact epidote chlorite variable biotite content
	40	
360		
	Pbmcs	Dark grey to grey green biotite-chlorite-muscovite-garnet schist with siliceous and limy bands and late calcite filled hairline fractures
370	-broken ground	
380	PCSS	-vesuvianite-garnet-wollastonite in chloritic siliceous schist with minor biotite bands, garnet to chlorite

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ASSAYS AND ANALYSES

FOOTAGE	DESCRIPTION	ASSAYS AND ANALYSES
380	Pcss pale green groundmass in calc-silicate bearing schist	
	Pbmcs Dark grey to black biotite-chlorite-muscovite	
	80 calcite in fracture	
390	calcite in fracture grades to Pggi	
	Pggi Grey and pale green chloritic siliceous biotite schist, chlorite after biotite, garnet to chlorite, minor calc-silicates in schist	
400	Gradational	
	Pcss Pale green siliceous vesuvianite-garnet-wollastonite-pyroxene? schist - chloritic calc-silicate bearing schist derived from limy biotite schist, retrograde garnet to chlorite, biotite to pale chlorite	
410	20 quartz vein	
	darker altered equivalents of mafic schists, chlorite epidote, vesuvianite, amphibolite? Faulted	
420	KTqfp Dark green massive chloritic hornblende feldspar porphyry, age equivalent to Kqm, minor quartz phenocrysts	
	40	
	Fractured Contact	
430	Kqm	
	Pbmcs Dark grey to grey green biotite-chlorite-muscovite-garnet schist, variable silica and lime content, also minor epidote, and calcite along hairline fractures, derived from basic igneous rocks?	
	20	
	Kqm dyke	
440	black amphibole alteration envelopes quartz vein	
	Kqm dyke	
	Kqm quartz feldspar dyke	
450	70	
	40	
	garnets common	
460	schist turns to olive grey colour, possibly caused by presence of epidote alteration	
	Kqm	
	Kqm	
470	quartz veins	
	hornblende alteration along narrow vein	
480	20 garnets to chlorite	

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FOOTAGE	DESCRIPTION	ASSAYS AND ANALYSES
480	<p>Pbmcs</p> <p>broken ground</p> <p>Biotite-Chlorite-Muscovite-Garnet Schist</p> <p>- garnet to chlorite, some biotite to chlorite and groundmass to pale olive green alteration along fractures, epidote et al</p>	
490	<p>- calcite filled fractures 10°</p> <p>- dark grey to black biotite schist with graphite</p>	
500	<p>quartz filled fractures</p> <p>pyrrhotite along hairline fractures</p> <p>- quartz tourmaline vein and tourmaline replacement in schist, pale brown biotite schist to olive grey green altered equivalent of biotite muscovite schist, biotite, chlorite, epidote et al</p>	
510	<p>schist</p> <p>Pcss</p> <p>marble</p> <p>- pale green to light grey banded garnet-vesuvianite-wollastonite-pyroxene schist to marble to skarn</p> <p>- pale green siliceous chloritic matrix grades to grey crystalline carbonate matrix</p> <p>- schist calcite vein 50°</p>	
520	<p>Pbmcs</p> <p>- grey to olive grey green biotite-chlorite-muscovite-garnet schist with epidote alteration</p> <p>Kqm quartz-feldspar tourmaline dyke</p> <p>broken ground</p> <p>- tourmaline quartz replacement</p> <p>- graphitic biotite schist</p> <p>- quartz vein with minor pyrrhotite</p> <p>- grey green altered biotite-muscovite schist equivalent, epidote et al</p> <p>- quartz vein, pyrrhotite</p>	
530	<p>Pcss</p> <p>schist</p> <p>- amphiboles</p> <p>- banded garnet-vesuvianite-wollastonite-pyroxene? calc-silicate schist to marble, contains minor epidote, possibly amphiboles</p> <p>- marble</p> <p>- garnet-vesuvianite-wollastonite in crystalline carbonate matrix</p>	
540	<p>schist</p> <p>- dark green amphiboles</p> <p>- intermittent biotite bands, minor garnet to chlorite banded garnet-vesuvianite-wollastonite in pale green siliceous chlorite groundmass with minor biotite bands</p>	
550	<p>Kqm</p> <p>aplitic</p> <p>- medium to coarse grained</p> <p>- grey medium grained biotite-quartz-monzonite to coarse porphyritic, altered in part, chlorite-epidote-calcite, large feldspar phenocrysts, indistinct grain boundaries, opaque white</p> <p>- brittle joints abundant</p>	
560	<p>coarse porphyritic altered feldspar biotite to chlorite</p>	
570	<p>- coarse equigranular Kqm biotite, 10-30% quartz, up to 30% remaining K-feldspar minor plag</p>	
580	<p>- altered biotite schist, biotite to chlorite</p> <p>Pbcs</p>	

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FOOTAGE	DESCRIPTION	ASSAYS AND ANALYSES
580	Kqm continued equigranular medium grained biotite quartz monzonite	
590	<p>Pcss schist 70-80°</p> <p>Banded vesuvianite-garnet-wollastonite, pyroxene? schist to banded calc-silicate gneiss, minor biotite schist bands; pale green siliceous chloritic groundmass varying to white, calcite-wollastonite-bearing groundmass</p>	
600	Kqm Medium grained equigranular quartz monzonite biotite 20% to 5% core; biotite to chlorite	
610	<p>Pcss biotite schist marble marble</p> <p>Vesuvianite-garnet wollastonite calcite calc-silicate schist to gneiss; pale green chloritic groundmass to white calcite wollastonite groundmass, grading to grey marble sections, minor biotite bands in schist sections</p>	
620	schist	
630	<p>Broken Contact</p> <p>KTqfp 30</p> <p>Dark green hornblende feldspar quartz porphyry. - age equivalent to Kqm, massive aphanitic matrix containing disseminated dark green 1-2mm chlorite clots after hornblende - quartz circular to subrounded clots 2-4mm diameter - no penetrative deformation</p>	
640		
650	<p>3 cm clot of altered equigranular chlorite quartz rock, possibly Kqm quartz clot</p> <p>schist xenolith 3x2 cm 15° joint filled with silica</p>	
660	<p>20° calc filled fracture</p>	
670	30	
680		

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ASSAYS AND ANALYSES

FOOTAGE	DESCRIPTION	ASSAYS AND ANALYSES
680	KTqfp continued Dark green massive hornblende quartz feldspar porphyry age equivalent to Kqm	
30		
690		
40		
700		
20		
710	10 10 Contact fault - with calcite along joint	
Pcss	Banded vesuvianite-garnet-wollastonite-pyroxene? schist- in pale green siliceous chloritic matrix, minor remnant biotite bands and chloritized garnet remaining, altered limy biotite monzonite schist	
720	80 50 Kqm quartz feldspar hornblende?- or tourmaline, pegmatite	
730	Dark grey biotite interbands 1-4 cm wide more common, some biotite porphyroblasts exhibit post strain growth, minor epidote et al in chloritic sections	
40	40% epidote at contact	
740	KTqfp Dark green massive hornblende quartz feldspar porphyry - hornblende to chlorite, 1-2 mm clots disseminated - no penetrative deformation	
40		
750		
40		
760		
finer grained		
770	20 Jointed contact	
Pbcs	Dark to light grey siliceous biotite schist	
60	- pale green chloritic equivalent	
Kqm	Medium grey siliceous biotite schist, post strain biotite porphyroblasts common, also pre strain quartz veins which are now "foliation"	
Kqm		
780		

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ASSAYS AND ANALYSES

FOOTAGE	DESCRIPTION	ASSAYS AND ANALYSES
780	Pbcs continued Pale grey siliceous biotite schist	
	pegmatite vein	
	limy equivalent	
790	Pale grey olive green equivalent of siliceous biotite schist	
	tourmaline quartz vein	
	Kqm vein	
800	Pbmcs Dark to medium grey biotite chlorite muscovite schist	
	quartz vein	
810	broken ground Pale olive green altered equivalent grey biotite siliceous, schist, medium to dark grey	
	Fractured Contact	
	KTqfp Dark green massive hornblende, feldspar, quartz porphyry, hornblende to chlorite intermittent quartz clasts	
820		
	20	
830		
	10	
840	20 fractured intrusive contact	
	Pbmcs Dark to light grey siliceous biotite schist, chloritized equivalents grading to biotite-chlorite-muscovite-garnet schist, and light grey quartz schist	
	chlorite	
	biotite, muscovite, chlorite, garnet schist	
850	Pale olive green grey sections in biotite schist, (epidote? etc), also early quartz veins now deformed parallel foliation	
	70	
860	Dark grey to black biotite schist, higher siliceous sections with chlorite	
870	50	
	minor pale green chloritic bands	
	early deformed quartz gneiss	
880		

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ASSAYS AND ANALYSES

FOOTAGE	DESCRIPTION	ASSAYS AND ANALYSES
880	70° 30° Intrusive Contact Pbmcs KTqfp Dark green hornblende-feldspar-quartz porphyry, hornblende-chlorite, minor quartz inclusions, also euhedral pyrite disseminated	
890	Pbmcs Kqm Dark grey colour banded biotite-chlorite-garnet siliceous schist, minor pale chloritic altered bands	
900	50° quartz vein, early, remobilized - biotite-chlorite-muscovite-garnet-quartz	
910	Kqm 40° Medium grey coarsely crystalline to porphyritic biotite-quartz-monzonite, also pale grey aplitic sections, weak alteration throughout, some biotite to chlorite, cloudy feldspars 10° 50°	
920		
930	40° Intrusive Contact KTqfp 40° Intrusive Contact Kqm Light grey coarsely porphyritic biotite-quartz-monzonite, weakly altered throughout chloritic some biotite to chlorite 30° - fault breccia with fragments of KTqfp in Kqm - xenoliths of KTqfp in Kqm, Kqm chloritic around xenoliths	
940	20° KTqfp - large xenoliths of KTqfp in Kqm with calc. inclusion 30° KTqfp - medium grey, more mafic than normal - 20%+biotite, coarse indistinct feldspar phenocrysts	
950	20° Intrusive Contact KTqfp Normal dark green hornblende-feldspar-quartz porphyry, hornblende to chlorite	
960	END OF HOLE	
970		