

Diamond Drill Record

LOCATION: L6+00W;0+65N		HOLE NO87A0R TIB3	Page 1 of 6
AZIMUTH: VERTICAL	DIPS - collar VERTICAL °	CONTRACTOR: ARCTIC DIAMOND DRILLING	PROPERTY: ARBOR-TIBURON
ELEVATION:	- m °	LOGGED BY: WENDY SISSON	CLAIM NO. 144
LENGTH: 311 FEET	- m °	DATE: JANUARY 17, 1987	SECTION NO. DAWSON
CORE SIZE: n Q	- m °		STARTED: JANUARY 13, 1987 0:700 hrs.
PURPOSE: TO DRILL CENTRE OF MAG. HIGH.			COMPLETED: JANUARY 14, 1987 23:45 hrs.

Section		ROCK DESCRIPTION	Interval		ALTERATION. MINERALIZATION etc.	VEINLETS		
from xft	to xft		from xft	to xft		Thickness mm	Angle to core	minerals in decreasing abundance
0	83	Casing.						Recovery:
83	134	Clay Alteration Zone. Rusty orange, fine grained to gritty clays, soft. Angular fragments of peridotite and serpentinite are matrix-supported within clays. Fragments 1 cm to 10 cm in size, comprise approximately 30-40% of section. Fragments are most abundant 107 - 121 feet. Zone isn't calcareous.			Rusty limonite staining affects entire interval. Fragments are subject to limonite stain along fracture surfaces and on outer surfaces. Fracture surfaces within fragments also have clay developed as partings along them. Peridotite fragments are affected by serpentinization to varying degrees.			83 - 92 = 5' 92 - 97 = 4.5' 97 - 102 = 100% 102 - 104 = 1.5' 104 - 106 = 0.5' 106 - 122 = 100% 122 - 127 = 1.5' 127 - 176.5 = 100%
134	168.5	Serpentinite.						
134	137	Top of interval occupied by fine grained, dark green, massive peridotite which is partially serpentinized. Hard, heavy rock, fairly magnetic. Magnetism attributed to disseminated magnetite, (2-3%).			Limonite staining affects top of interval forming rusty partings along fracture surfaces. MnO is also associated with this staining. Magnetite is seen to be oxidized, yielding rusty specks and blebs within host rock.			

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from Xft	to Xft		from Xft	to Xft		Thickness mm	Angle to core	minerals in decreasing abundance
137	168.5	<p>Grey, coarse grained, fairly competent rock. Rock appears to be fairly homogeneous in its composition with majority being comprised of a soft, grey brown, waxy opaque mineral with amorphous appearance, lacking cleavage (thought to be serpentine), also have small clear faceted crystals with distinct cleavage (thought to be plagioclase) set within surrounding serpentine. Rock is fairly magnetic, with magnetite as fine disseminated crystals within serpentine. Serpentine approximately 55 - 60% Plagioclase approximately 30 - 35% Magnetite = 2 - 3% Limonitic staining and clay development along fractures = 2 - 5%.</p>			<p>Serpentinite is extensively fractured by numerous cross-cutting, hairline fractures. Fractures commonly have limonitic staining associated with them, this becomes less evident towards the base of the section. Some fractures have "chalky" clay-rich, (talc?) material developed along them. Quartz carbonate stringers also take advantage of fracture surfaces, approximately 2% of section, averaging 1 - 3 mm across, up to .5 cm, commonly creamy orange colour. Magnetite crystals appear to be affected by oxidization, yielding rusty specks within serpentine. Sections where clay development is extensive along fracture surfaces, rock is fairly friable. Clay-rich talcy partings average 1 mm thick up to 1 cm thick along fractures.</p>			

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from xft	to xft		from xft	to xft		Thickness mm	Angle to core	minerals in decreasing abundance
168.5	202	<p>Peridotite.</p> <p>Dark green, massive fine grained, equigranular rock.</p> <p>Very competent, hard with blocky fracture.</p> <p>Rock appears to have a gradational contact with overlying serpentinite, top of peridotite is mottled by patches of serpentine as well as being more fractured. Peridotite is homogenous in its appearance and appears to be comprised of dark green to black mafics which are glassy, opaque to translucent with well developed cleavage (pyroxenes), also colourless or white, glassy, well cleaved mineral (plagioclase), plus possible lighter green mineral vitreous hard, difficult to tell identity since rock is very fine grained, (possibly olivine?).</p> <p>Magnetite also present, rock is fairly to strongly magnetic.</p> <p>Approximate composition is:</p> <p>Pyroxene(s): 50 - 55%</p> <p>Plagioclase: 25 - 30%</p> <p>Olivine (?): 10%</p> <p>Magnetite: 10%</p> <p>Rock lacks foliation.</p> <p>Longer contact of peridotite with underlying serpentinite is gradational.</p>			<p>Limonite staining weakly developed along fracture surfaces.</p> <p>Fractures commonly have partings of serpentine developed along them.</p> <p>Quartz carbonate stringers noted crosscutting unit, approximately 1% of section, average .3 to .5 cm thick, creamy orange in colour.</p>			<p>127 - 176.5 = 100%</p> <p>176.5 - 182 = 5'</p> <p>182 - 311 = 100%</p>

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from Rft	to Rft		from Rft	to Rft		Thickness mm	Angle to core	minerals in decreasing abundance
202	311	Serpentinite. Top of unit has 1 foot section of serpentinite with remnant peridotitic patches within it.						182 - 311 = 100%
202	217	Unit begins by being sililar to serpentinite (see above 134 - 168.5). Coarse, grey brown, fairly massive in appearance, soft rock. Composition defined primarily by serpentine approximately 70%, remnant plagioclase approximately 20%, limonite stain and clays approximately 10%, magnetite 2 - 3%. Magnetite disseminated throughout, also as blebby concentrations.	215	217	As seen before, serpentinite crosscut by numerous fractures with limonitic staining and clay-rich partings developed along them. Magnetite affected by oxidation yielding rusty specks and blebs within serpentine. Quartz carbonate stringers found crosscutting and paralleling fracture surfaces, approximately 2-3% of section, averaging 1 - 3 mm thickness, cream orange colour. White talcy clays are well developed here causing rock to be very soft and friable. Rock weakly fractured with limonite stain and serpentine developed along fracture surfaces.			
217	221	Zone of serpentinitized peridotite where dark green ultra-mafic is mottled by lighter green serpentinite patches.						
221	234	Interval of very fine grained, light apple green, fairly soft rock with "chalky" appearance, competent. Suspected to be made up primarily of secondary minerals such as talc, serpentine etc. Very fine grain size makes distinguishing individual crystals difficult.			Very minor rusty staining along fractures, serpentine forms partings along fractures often associated with talcy, clay-rich minerals. Quartz carbonate stringers cross-cut rock and follow fractures, average 1 mm in thickness, approximately 1-3% of section.			

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Section		ROCK DESCRIPTION	Interval		ALTERATION, MINERALIZATION etc.	VEINLETS		
from Xft	to Xft		from Xft	to Xft		Thickness mm	Angle to core	minerals in decreasing abundance
234	292	<p>Magnetite 5 - 10% as blebby concentrations in groundmass, also seen disseminated as fine crystals and as discontinuous partings along fracture surfaces. Towards 234 feet rock becomes mottled by patches of coarse grey, waxy serpentine.</p> <p>Below 234 note rock is mottled dark green to maroon with light apple green inclusions, very fine grained, (suspected to be same as rock above).</p> <p>Groundmass is comprised of crystalline to serpentized peridotitic rock (as in 168.5 - 202), and coarse, waxy serpentinite. Inclusions of apple green rock appear to be fragments within groundmass. They are sub-rounded, elongate, 1 - 2 cm across or smeared-out, lenticular forms averaging .2 to 1.0 cm in thickness. Allignment of inclusions gives rock foliated appearance in parts with angle to C.A. variable from 05° to 45°.</p> <p>Magnetite disseminated throughout (5-10%) as crystals less than or equal to 1 mm across, (subhedral). Also seen as blebby concentrations and as discontinuous partings along fractures.</p>			<p>Rusty red partings line fractures, also note clay-rich partings along some fractures.</p> <p>Quartz carbonate stringers crosscut and parallel fracture surfaces, approximately 2 - 3% of section, averaging 1 mm thick.</p>			
287	292	<p>Rock becomes less fragmental in appearance.</p>						

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Section		ROCK DESCRIPTION	Interval		ALTERATION MINERALIZATION etc.	VEINLETS		
from ft	to ft		from ft	to ft		Thickness mm	Angle to core	minerals in decreasing abundance
292	311	<p>After 292 rock has fine grained, equigranular crystalline appearance and is mottled dark and pistachio green (limy green) in colour.</p> <p>Lighter green minerals appear to represent alteration of darker ultrabasic, possibly serpentine.</p> <p>Magnetite 5 - 10%, disseminated as fine crystals, blebby concentrations and partings along fractures.</p> <p>Rock is competent with blocky fracture.</p>			<p>Very minor limonitic staining along fractures, talcy clay-rich minerals also developed as partings along fractures.</p> <p>Quartz carbonate stringers, 2 - 3% of section, crosscut and follow fracture surfaces, average 1 mm thickness.</p>			

87 AOR

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From ft.	To ft.	Length ft.	Ag ppm	Au ppb	Au oz FA	Cu %	Cu ppm	Fe%	Zn ppm	Pb ppm	Rock	Sample Number		
210.5	215	4.5										37609G		
215	217	2.0										37610		
217	220	4.0										37611		
220	224.5	3.5										37612		
224.5	229.5	5.0										37613		
229.5	234	4.5										37614		
234.0	238	4.0										37615		
238	243	5.0										37616		
243	247	4.0										37617		
247	252	5.0										37618		
252	256.5	4.5										37619		
256.5	261.5	5.0										37620G		
261.5	266	4.5										37621		
266	271	5.0										37622		
271	275	4.0										37623		
275	280	5.0										37624		
280	285	5.0										37625		
285	289	4.0										37626		
289	292	3.0										37627		
292	297	5.0										37628		
297	302	5.0										37629		
302	307	5.0										37630		
307	311	4.0										37631G		