

Logged By: Allan M. Frew
Hole No. LA97-5 Sheet No. 1 of 12

FIRST LABRADOR RESOURCES LTD.
DIAMOND DRILL RECORD

Name of Property: <u>Lake Bond</u>	Meterage	Dip	Azimuth	Meterage	Dip	Azimuth
Hole No. <u>LA97-5</u> Length <u>338.3 M.</u>						
Location <u>North of Lake Bond, Noranda's Grid</u>						
Latitude <u>6400N</u> Departure <u>5175 E</u>						
Elevation _____ Azimuth _____ Dip <u>-90°</u>						
Started <u>October 26, 1997</u> Finished <u>October 31, 1997</u>						
Core Size: <u>BTW</u>						

Meterage		Description	Remarks
From	To		
0	4.6	OVERBURDEN	CASING TO 4.6 CORE SIZE - BTW
4.6	17.5	<u>DIORITE:</u> Fine to medium grained, dark grey to greenish grey, weakly to moderately magnetic diorite. Massive, uniform texture with occasional sub-hedral to anhedral phenocrysts. Occasional hairline fracture filling by white carbonate, and/or epidote. The majority of the fractures cut the core at 50° to C.A. No visible pyrite. Contact at 17.5 is sharp at 20° to C.A. marked by tight fracture infilled with chlorite and white quartz-carbonate. The last 0.30 to 0.50 m. is finer grained - chilled margin - and blackish. The whole unit is very brittle.	
17.5	28.8	<u>MINERALIZED ZONE:</u> Fine grained, dark green to black, moderately chloritic, non-magnetic basalt, containing 5% sulfide mineralization consisting of pyrite and sphalerite predominantly with lesser amount of chalcopryite. The pyrite occurs as anastomizing irregular stringers and coarse crystalline disseminations with occasional vein up to 2 cm. wide, which cuts core at 50° to 55° to C.A. Some of the stringers have a swirly appearance. The sphalerite is a medium to tan brown and occurs in similar form as, and in association with, the pyrite (locally the sphalerite appears to be replacing the pyrite). The chalcopryite occurs as sub mm. to 2 mm. irregular, swirly stringers, small patches and locally associated with white quartz-carbonate. Throughout the unit there are 1 mm. to 3 mm. white, calcitic quartz-carbonate as stringers and veinlets. Out contact is sharp (marked by fracture) at 30° to C.A. (continued on next page)	SAMPLE: 17.5 - 18.5 53121 18.5 - 19.5 53122 19.5 - 20.1 53123 20.1 - 21.1 53124 21.1 - 22.1 53125 22.1 - 23.1 53126 23.1 - 24.1 53127 24.1 - 25.1 53128 25.1 - 25.7 53129 25.7 - 26.0 53130 26.0 - 27.0 53131

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Meterage		Description	Remarks
From	To		
17.5	28.8 (cont'd)	20.1: Sphalerite content decreases to practically nil beyond this point. 22.8: Beyond here the unit is auto-brecciated and variably silicified. 25.8 – 25.95: 30-35% pyrite as 1 to 2 cm. veins and stringers cutting the core at 50° and 55° to C.A. 28.0 - 28.3: 30-35% pyrite as irregular stringers and disseminations. Minor associated chalcopyrite 28.1: 4 cm. quartz-carbonate vein cuts core at 20° to C.A. contains masses of pyrite up to 1 cm. across (replacements)	SAMPLE: 27.0 – 28.0 53132 28.0 – 28.3 53133 28.3 – 28.8 53134
28.8	36.2	ANDESITE: Fine grained mixture of light green, dark green, medium grey, brownish grey, and greenish grey, auto-brecciated, variably bleached. Sections with silicified fragments up to 4 cm. x 10 cm. Abundant erratic, and anastomizing stringers of white quartz and quartz-carbonate. Narrow bands as well as fragments rich with amygdules (up to 1 cm. in diameter) filled with light brown-grey mineral. Short sections of fine-breccia with angular dark green fragments ranging from sub mm. to 5 mm. Out contact gradational. Unit is practically void of pyrite containing the occasional tiny crystal and 4 mm. bleb.	
36.2	40.7	BASALTIC ANDESITE: Fine to medium grained, light green with short sections of deep maroon, fine to aphanitic, material ranging from 4 cm. to 30 cm. wide. Tightly fractured locally with irregular and erratic stringers and fracture infilling by white calcitic quartz-carbonate, the volume of which has decreased markedly from previous unit. The maroon sections contain a fair number of pyrite crystals ranging from 2 mm. to 4 mm. across. Out contact is gradational.	
40.7	45.9	BASALT: Fine to medium grained, dark green-grey to dark green to black basalt. Moderately to strongly chloritic, weakly magnetic. Widely spaced veinlets and irregular stringers of white calcitic quartz-carbonate from sub mm. to 1 cm. wide. The prominent fracturing cuts core at 50° to 55° to C.A. (continued on next page)	

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Meterage		Description	Remarks
From	To		
40.7	45.9 (cont'd)	44.0 – 44.4: 2% pyrite content as discontinuous stringers, blebs and crystals. Throughout the remainder of the unit pyrite occurs as widely spaced hairline stringers and occasional 2 mm. to 4 mm. bleb. Contact at 47.9 is sharp at 18° to C.A.	
45.9	48.8	<u>PORPHYRITIC ANDESITE</u> : Fine to medium grained (dioritic) groundmass which is dark greenish-grey to medium green and contains widely spaced euhedral and sub-hedral white feldspar phenocrysts ranging from sub mm. to 2 mm. across. The unit is moderately magnetic and contains the occasional shallow angled 1 mm. to 3 mm. fracture infilled by epidote. (10° - 25°). The in margin is chilled over 3 cm. as aphanitic and fine grained for 1.0 m. into unit. Pyrite occurs as widely spaced tiny blebs and irregular patches on fracture faces. The out contact does not appear to be chilled and cuts core at 20° to C.A.	
48.8	51.2	<u>DIORITE</u> : Medium grained, dark grey with light greenish tinge, weakly magnetic. The in contact is chilled over 10 cm. Throughout there are widely spaced sub mm. to 4 mm. fracture infilling of epidote at 60-62° to C.A. The out contact is sharp at 20° to C.A. and is chilled over 15-20 cm.	
51.2	51.5	<u>PORPHYRITIC ANDESITE DYKE</u> : Fine to medium grained, dark grey to dark greenish grey. Widely spaced 1 mm. to 3 mm. euhedral to anhedral white feldspar phenocrysts throughout. Weakly magnetic. In and out contacts are at 20° to C.A. and sharp.	
51.5	58.6	<u>ANDESITE PORPHYRY</u> : Similar to 45.9 – 48.8. Moderately magnetic. Contains several widely spaced 1 cm. veins of epidote cutting core at 50° to C.A. In contact is chilled and black colored over 5 to 10 cm. Out contact is similar over 8 cm. The out contact is sharp at 40° to C.A.	
58.6	60.4	<u>BASALT</u> : Fine grained to aphanitic, dark green to black, weakly magnetic. Abundant irregular, erratic, 1 mm. to 3 mm. stringers and veinlets of white calcitic quartz-carbonate throughout. Out contact at 10° to C.A. and sharp.	

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Meterage		Description	Remarks
From	To		
60.4	96.9	ANDESITE: Dark grey, medium grained, weakly to moderately magnetic. Massive with very occasional amygdule of white quartz-carbonate as well as sub-hedral phenocrysts. Pyrite very weakly disseminated throughout as small (2 mm. to 3 mm.) blebs and occasional tiny crystal. The unit is dioritic looking locally and intruded by andesite porphyry as indicated: 69.1 – 70.5: Andesite porphyry similar to 45.9 – 48.8. In contact at 25° to C.A.; out contact at 20° to C.A. Both contacts are chilled – in for 5 cm., out for 10 cm. The out contact contains epidote as stringers.	
		73.4 – 74.8: andesite porphyry dyke – dark grey, fine grained groundmass with an abundance of close spaced sub-hedral and anhedral 1 mm. to 2 mm. white feldspar phenocrysts. Moderately to locally strongly magnetic. In contact at 30° to C.A., chilled over 6 cm.; out contact at 30° to C.A. and chilled over 5 cm. 77.4 – 79.5: Andesite porphyry dyke – same as 73.4 – 74.8. In contact at 30° to C.A. and chilled over 6 cm.; out contact at 25° to C.A. and chilled over 20 cm. 94.5 – 96.9: Finer grained, massive, fewer phenocrysts to very fine grained over last 0.6 m. 96.7 – 96.9: Tight breccia with white quartz-carbonate matrix. 96.9: Contact sharp at 30° to C.A.	
96.9	109.0	ANDESITE: Fine grained to medium grained, mixture of dark grey, dark green and black. Non-magnetic. Moderately to strongly chloritic. Several 0.5 m. to 1.0 m. sections with mottled appearance due to strong chloritization. Over first 6-8 m., there are many bleached, maroon-grey, aphanitic fragments up to 10 cm. across which are bleached and the product of flow-brecciation. Occasional shear surface coated with smeared pyrite. Last 0.7 m. is strongly chloritic, very schistose and badly broken. Out contact is a shear at 30° to C.A.	

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Meterage		Description	Remarks
From	To		
109.0	143.9	BASALT: Fine to medium grained, dark green to black, strongly chloritic and moderately to strongly magnetic basalt. Intensely schistose with foliation at varying angles to C.A. (some of the foliation is at shallow angles to C.A., ie. 5-15°). Blocky core. Numerous 1 mm. to 4 mm. calcite stringers and veinlets. Throughout the unit has a mottled appearance. 124.9 – 125.1: Several angular to sub-angular bleached dark grey fragments up to 3 cm. across. 125.5 – 126.0: Extremely schistose, very blocky 126.5 – 128.3: Extremely schistose, very blocky 128.6 – 129.2: Extremely schistose, very blocky 131.9 – 132.0: Extremely schistose, very blocky 140.2 – 141.5: Extremely schistose, very blocky The unit becomes more massive beyond 129.2 except as otherwise noted. Out contact sharp, marked by shear at 50° to C.A.	
143.9	148.4	DIORITE DYKE: Dark to medium grey, medium grained, massive diorite. Equigranular texture. Over first 20 cm. the rock is black, aphanitic with occasional phenocryst – chilled. The unit is weakly to moderately magnetic. Throughout there are widely spaced 1 mm. to 3 mm. irregular blebs of pyrite. There are widely spaced tight fractures at 40° to C.A. The out contact is chilled over 10 cm. however angle is obliterated by blocky core.	
148.4	156.0	BASALT: Dark grey to black, fine to medium grained, non-magnetic mottled looking texture. Massive. Moderately to strongly chloritic. 152.8 – 154.0: Bleached to dark grey due to shearing and hairline stringers of white quartz-carbonate. 152.8 – 153.1: Shear zone at 15° to 20° to C.A. 154.4 – 154.9: Shear zone at 15° to 20° to C.A. The out contact is destroyed by blocky core.	

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FIRST LABRADOR RESOURCES LTD. DIAMOND DRILL RECORD

Meterage		Description	Remarks
From	To		
156.0	168.9	PORPHYRITIC ANDESITE: Light to medium grey, fine grained to aphanitic groundmass with 25-40% 1 mm. to 3 mm. euhedral and sub-hedral white, light grey and dark green phenocrysts. The in contact is a chilled margin over 0.5 m.; the out contact is sharp, welded, cuts core at 60° to C.A. and is chilled over last 0.7 m. The unit is weakly magnetic throughout; widely spaced fractures (up to 1 cm.) cut core at 20° and infilled by white quartz-carbonate and epidote. Epidote also occurs as hairline to 2 mm. wide irregular fracture infilling. 158.6 – 161.5: Numerous 5 mm. to 1.5 cm. fracture infilling by white calcitic quartz-carbonate randomly oriented, however mostly at 5° to 10° to C.A. Strong associated epidote alteration up to 40% of core. 160.8 – 161.5: Blocky core. The whole unit is very brittle and fairly massive (except as noted). Throughout there is sparse, disseminated, pyrite as 1 mm. to 2 mm. irregular blebs and pinhead sized specks.	
168.9	173.6	BASALT: Fine grained to aphanitic, dark green to black, moderately to strongly magnetic massive basalt. The out contact is sharp and marked by a shear at 50° to C.A. Unit is strongly chloritic.	
173.6	184.9	PORPHYRITIC ANDESITE: Same as 156.0 – 168.9 except there is no epidote. There are several widely spaced 10-15° fracture infillings from 2 mm. to 5 mm. of white quartz-carbonate. Pyrite occurs as in previous porphyry. The unit is non-magnetic. The in margin is chilled over 0.8 m., the out margin is chilled over 0.4 m. Out contact sharp, marked by shear at 60° to C.A.	
184.9	211.6	BASALT: Same as 168.9 – 173.6 except this unit is strongly magnetic locally schistose and blocky. There are widely spaced 1 mm. to 2 cm. white calcitic quartz-carbonate veinlets. The foliation is talcous and at a number of angles to C.A.; from 10° to 70° with 30° being dominant. The unit is very strongly chloritic and contains no visible sulfide mineralization. Locally the unit has a weak mottled appearance. Slickensides indicate horizontal component to movement. (continued on next page)	

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Meterage		Description	Remarks
From	To		
184.9	211.6 (cont'd)	190.0 – 190.6: highly schistose and blocky 197.0 – 197.9: highly schistose and blocky 198.7 – 199.0: highly schistose and blocky 199.6 – 199.9: highly schistose and blocky 200.5 – 201.0: highly schistose and blocky Unit becomes massive beyond 202.2 with little to no schistosity. The out contact is sharp, welded and cuts core at 30° to C.A.; the last 0.2 m. appears to be chilled – aphanitic.	
211.6	214.7	ANDESITE: Medium grey, fine grained, weakly porphyritic over last 0.5 m. The in margin is chilled, very fine grained to aphanitic over 20 cm. The unit is non-magnetic, massive and brittle. No visible sulfides. There are widely spaced fractures at 30° to C.A. which have been infilled with up to 2 mm. calcitic white quartz-carbonate. Out contact is chilled, sharp at 30° to C.A. marked by pyrite coated shear.	
214.7	220.6	BASALT: Same as 184.9 – 211.6 – Schistose, very blocky locally. Strongly magnetic and chloritic. Numerous 1 mm. – 2 mm. irregular stringers – white calcitic quartz-carbonate. 215.0 – 215.4: blocky, brecciated 215.8 – 216.1: blocky schistose 216.4 – 217.3: blocky schistose 220.6: Out contact at 75° to C.A. marked by shear and 2 cm. fault gouge.	
220.6	233.2	ANDESITE: Medium to light grey, fine grained, non-magnetic andesite with small dark green to black 1 mm. to 2 mm. ferromagnesian phenocrysts. The unit contains an abundance of white quartz-carbonate and calcite stringers from 1 mm. to 2 cm. across, these have resulted in the unit being variably bleached throughout. Fractures and shear foliation are predominantly at 50° to 67° to C.A. Locally the unit is brecciated over 5 to 10 cm. widths. Out contact gradational at 75° to C.A. Pyrite mineralization as disseminations and 1 mm. to 2 mm. irregular stringers and small blebs begin at 232.2 and does not exceed 1%.	

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Meterage		Description	Remarks
From	To		
233.2	234.9	SILICIFIED ANDESITE: Fine grained to aphanitic dark grey with short sections of porphyritic appearing rock containing 1 mm. to 2 mm. sub-hedral and anhedral dark green to black ferromagnesian phenocrysts. The whole unit has been weakly to moderately silicified with local sections being highly silicified to the point of having a cherty character. Randomly oriented irregular stringers of white calcitic quartz-carbonate as well as calcite, predominantly at sub mm. to 2 mm. widths. However at 232.6 – 232.8 there is a brecciated zone with white quartz-carbonate matrix. Throughout the unit there is pyrite occurring as narrow stringers, small blebs and disseminated specks (less than 1%). The cherty looking sections are at: 233.2 – 234.2; 234.5 – 234.9. Shearing and fracturing cut core at 50° to C.A. Contact at 234.9 is at 60° to C.A.	
234.9	262.2	ANDESITE: Medium green, fine to medium grained andesite. There are abundant irregular 1 mm. to 1 cm. stringers and fracture infilling of white calcitic quartz-carbonate. The fractures cut core at 25° and 40° to C.A. The unit is non-magnetic and void of sulfides. 237.0 – 237.7: Flow top breccia with dark green to black, chloritic matrix. 241.3 – 241.9: Flow top breccia, fragments are dominantly 2 cm. x 4 cm. and decrease in size from 4 cm. to 5 cm. to smaller dimensions with depth (tops down hole). These fragments are sub-rounded to rounded. 244.1 – 244.7: Flow banding at 35° to 50° to C.A. 246.6 – 246.9: Breccia – angular to sub-angular fragments with calcitic quartz-carbonate matrix. 247.4 – 250.3: Here the rock has a mottled appearance. 252.3 – 253.5: Flow breccia – numerous aphanitic light green irregularly shaped fragments up to 6 cm. across in a medium to dark green weakly chloritic groundmass. (Continued on next page)	

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Meterage		Description	Remarks
From	To		
234.9	262.2 (cont'd)	254.5 – 255.9: Porphyritic andesite dyke. In contact at 15° to C.A. – margin chilled – aphanitic over 4 cm., medium green, fine grained to very fine grained, groundmass with sub mm. to 2 mm., light grey to cream feldspar phenocrysts. At 255 m. there is a 20 cm. section bleached to a greenish-cream color with associated 4 mm. calcitic quartz-carbonate stringers. Out contact at 255.9 m. marked by 4 cm. white quartz-carbonate vein cutting core at 35° to C.A. 256.5 – 259.1: Porphyritic andesite dyke. In contact at 32° to C.A. – chilled over 6 cm. Same as 254.5 – 255.9. Out contact obliterated by blocky core. Beyond 259.1 the rock is more chloritic than previously and contains occasional sub-rounded to sub-angular greenish-cream fragment up to 3 cm. x 4.5 cm. Last 0.5 m. is flow breccia with minor epidote alteration. Contact at 262.2 m. is sharp at 40° to C.A.	
262.2	271.3	<u>PORPHYRITIC ANDESITE</u> : Medium to dark grey fine grained to aphanitic groundmass containing up to 5% white and light grey anhedral and sub-hedral feldspar phenocrysts – up to 2 mm. across. First 0.5 m. is chilled and dark grey to black color.	
262.2	271.3	The chilled contact zone contains abundant 1 mm. to 3 mm. irregular white calcitic quartz-carbonate stringers. The unit is weakly magnetic. The core is badly broken over first 1.5 m. due to vibration. Throughout the unit is brittle. Throughout there are hairline irregular stringers and fracture infillings of epidote – dominant fractures cut core at 75° to C.A. Out contact at 271.3 is sharp and cut core at 35° to C.A.	No visible sulfides.

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Meterage		Description	Remarks
From	To		
271.3	288.3	ANDESITE: Medium to dark green, fine grained, massive basaltic-andesite. Strongly magnetic. Widely spaced white calcitic-quartz-carbonate stringers and fracture infilling up to 4 mm. but mostly 1 mm. to 2 mm. cutting core at 35° to C.A. Practically void of sulfides except for occasional small (up to 4 mm. x 2 mm.) bleb over last 2 m. 283.8 – 284.4: Flow breccia 284.7: Several 8 cm. fragments(?) of porphyritic andesite 285.4 – 285.7: Flow breccia 287.6 – 288.3: Up to 1% disseminated 1 mm. – 2 mm. masses and 1 mm. wide stringers of pyrite in an aphanitic chilled margin. 288.3: Contact sharp at 40° to C.A.	
288.3	292.5	PORPHYRITIC ANDESITE: Same as 262.2 – 271.3 except there are occasional 2 mm. to 3 mm. blebs of pyrite. Out contact at 35° to C.A. Both margins are chilled for 3-4 cm.	
292.5	309.5	ANDESITE: Fine to medium grained, medium to dark green to black. Weakly to locally strongly chloritic. Weakly to moderately magnetic. 293.5 – 294.1: Flow top breccia – contains maroon fragments which are siliceous and aphanitic, as well as medium green sub-rounded fragments which contain up to 5% pyrite as disseminations and stringers up to 2 mm. across. The matrix is dark green to black and aphanitic. (continued on next page)	

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Meterage		Description	Remarks
From	To		
292.5	309.5 (cont'd)	294.1: Flow contact at 40° to C.A. The whole unit consists of a series of flows which are fine to medium grained at margins (over 2 – 3 m.) and medium to coarse grained locally porphyritic in the center of the flow; 4 cm. vein of white calcitic quartz-carbonated 300.0 – 300.4 at 5° - 10° to C.A. 300.6 – 301.0: Flow top breccia similar to 293.5 – 294.1 301.0: Flow contact at 50° to C.A. 307.5: Flow contact – sharp at 87° to C.A. Throughout the unit pyrite occurs as disseminated 1 mm. to 2 mm. crystals and blebs increasing in concentration towards flow contacts but never exceeding 2%. 309.5: Contact sharp at 40° to C.A.	
309.5	311.5	<u>PORPHYRITIC ANDESITE</u> : Same as 288.3 – 292.5 – in margin chilled over 10 cm. Out margin chilled over 20 cm. Out contact sharp at 15° to C.A.	
311.5	312.2	<u>DIORITE</u> : Dark grey to black, medium grained, weakly magnetic. Out contact sharp at 20° to C.A.	
312.5	314.1	<u>PORPHYRITIC ANDESITE</u> : Same as 309.5 – 311.5 – in margin is chilled over 15 cm., out margin is chilled over 40 cm. Out contact sharp at 25° to C.A.	
314.1	335.1	<u>DIORITE</u>: Dark greenish grey, medium grained, equigranular, and moderately magnetic diorite. Very occasional 1 mm. to 2 mm. pyrite bleb throughout. Occasional irregular white calcitic quartz carbonate stringer up to 1 cm. across as well as hairline fracture infilling with epidote. 329.6 – 331.7: Several 2 cm. to 4 cm. very fine grained andesite dykes cutting core at 3° to 10° to C.A. These are off shoots of the following unit. 335.1: Contact cuts core at 40° to C.A. marked by 5 mm. veinlet of white calcitic quartz-carbonate.	

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335.1	338.3	<u>ANDESITE</u> : Fine grained, dark to medium grey, moderately magnetic, massive andesite. The in margin is chilled over 30 cm., the first 3 cm. is aphanitic and black. Throughout there are irregular sub mm. to 2 mm. stringers of white calcitic quartz-carbonate. The unit contains 1% to 2% pyrite as pinheads and blebs up to 4 mm. across evenly disseminated throughout.	
	338.3	END OF HOLE	