

DIAMOND DRILL HOLE SUMMARYFBC-83-1

0.0 - 3.0 m Casing.

3.0 -34.4 m Black knotted phyllite with 10-30% knots.

These knots vary in size from 2-6 mm and are aligned parallel to the foliation. At surface all the knots are strongly limonitic, by 3.0 m, however, only knots adjacent to open fractures are limonitic. Foliation is moderately developed at  $85^{\circ}$ - $90^{\circ}$  to C.A. The phyllite has only trace sulphides. 17.7 - 34.4 m is a quartz vein zone with 17% quartz. Veins are subparallel to foliation and contain only minor sulphides. The phyllite adjacent to the veins is often carbonaceous.

34.4-54.05 m Siliceous sediment interbedded with lesser chert. Contacts are about  $70^{\circ}$  to C.A. Section has about 10% quartz veining with minor sulphides associated. Veins are generally subparallel to bedding, however, there are a few exceptions.

54.05-149.6 m Black knotted phyllite, black carbonaceous phyllite with lesser siliceous sediment. Bedding is about  $80^{\circ}$  to C.A., while foliation is  $70^{\circ}$  to C.A. Occasionally folding on a less than 1 meter scale is noted, with crenulations developed on these folds. The phyllite has 1-2% Po,Py and generally less than 5% quartz. 103.9-111.75 m is an exception with 24% quartz. Visible gold was noted at 106.9 m in a 70 cm wide quartz vein.

149.6-196.2 m Black knotted phyllite (10-30% knots) with minor fine-grained banded phyllite and light gray siliceous sediment interbedded. The interval 153.45 m - 182.1 m has 9.4% quartz, the remainder has less than 2% quartz. Sulphide content is variable from 0.1% to 1.0% with short intervals containing up to 2-5%. Carbonaceous material is moderate throughout, and strong as selvages to quartz veining. Quartz veins have up to 20% quartz carbonate and 5-10% sulphides.

196.2 - 196.4 m Light gray siliceous sediment.

Contacts are sharp at 65° to C.A.

196.4-220.05 m Black banded phyllite with minor knotted phyllite interbedded. There is only weak carbonaceous development except adjacent to quartz veins. The veins have varying amounts of Po, Py and quartz carbonate associated. The phyllite has 2-3% Py, Po with short sections containing up to 5-7% sulphides.

220.45-254.5 m Interbedded black carbonaceous phyllite and gray siliceous sediment to chert. The siliceous bands vary in size from less than 1 mm to several centimeters. Bedding when present is at 70°-90° to C.A. Foliation varies and is often refolded. This section has only weak quartz veining. The interval 223.85 - 239.0 m contains the strongest veining with 6.6%. Elsewhere there is less than 2% quartz. The phyllite has 2-4% Py, Po with the majority being pyrite. Veins have both Po and Py and often are folded.

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254.5-267.3 m Fine-grained light to dark gray siliceous sediment interbedded with short sections of black carbonaceous phyllite. The siliceous units appear to be silty. This section has only 4.3% quartz. The phyllite has 3% disseminated Py and only trace Po. Sections of the phyllite are strongly crenulated.

267.3-328.3 m Black phyllite with interbedded sections of weakly knotted phyllite and siliceous sediment. Foliation is generally 70°-90° to C.A., however, sections are strongly folded causing foliation to vary to 0° to C.A. From 291.8-306.5 m there is a quartz zone with 12% quartz. Elsewhere, there is less than 3% quartz. Most of the quartz veins have abundant Py and only trace Po associated. The phyllite has only 1-2% sulphides.

328.3 m is E.O.H.

TABLE III  
SUMMARY OF GOLD ASSAY RESULTS FBC 83-1

FROM	TO	INTERVAL	ORIGINAL ASSAY	METALLIC ASSAY
3.0	97.5	94.5 M	0.002	-
97.5	103.5	6.0 M	0.010	-
103.5	108.5	4.5 M	0.180	0.083
108.5	132.0	23.5 M	0.006	-
132.0	147.0	15.0 M	0.013	0.010
147.0	160.5	13.5 M	0.002	-
160.5	162.0	1.5 M	0.030	0.012
162.0	198.0	36.0 M	0.003	-
198.0	208.5	10.5 M	0.027	0.039
208.5	249.0	40.5 M	0.002	-
249.0	250.5	1.5 M	0.039	0.004
250.5	328.3	77.8 M	0.001	-

102.5-103.5 F.A. 0.074 Metallic 0.078  
 103.5-105.0 .060 .069  
 -106.5 .003 .002  
 -108.0 .477 .179  
 -109.5 .002 .002

198.0-199.5 F.A. 0.01 Metallic 0.023  
 -201. .022 .082  
 -202.5 .011 .028  
 -204 .003 .003  
 -205.5 .004 .003  
 -207 .009 .012  
 -208.5 .130 .123  
 -210 .001 .001

FBC-83-2

0.0 - 15.2 m Casing.

15.2 - 140.0 m Black knotted phyllite (10-30% knots) with minor interbedded banded phyllite and 1-2 cm. bands of siliceous sediment. Foliation in the knotted phyllite is about 70° to C.A. Down to 27 m, there is limonite associated with the quartz veins. The phyllite has low sulphide content 0.1-0.2%. From 15.2 - 38.4 m, there is a quartz vein zone with 13% quartz. Limonite is associated with the veins to 27 m, below which py is present. No pyrrhotite is noted until 36.5 m. Veins contain up to 10% quartz carbonate material. Sericite is noted in both the veins and in vein selvages. The vein selvages are also often carbonaceous. From 46.2-91.1 m, 9.3% is quartz. Veins are evenly distributed throughout. Below 53 m, there appears to be an increase in sulphide content associated with the quartz veins. Sulphides in the phyllite are still low. 111.5-114.4 m - quartz vein; with phyllite inclusions and several specks of visible gold. The remainder of this section has low (2%) quartz content.

140.0-140.3 m Fine-grained light gray siliceous sediment. Bedding is at 80° to C.A.

140.3-148.8 m Black knotted phyllite (30% knots). Foliation is developed at 80° to C.A. This section averages 10% quartz and the majority is in the interval 144.3-146.5 m. Phyllite adjacent to the veins is strongly carbonaceous. At 144.3 m, 15 specks of visible gold were noted. Unfortunately the sample only assayed 0.045 oz. Au/ton.

148.8 - 211.6 m Interbedded knotted phyllite with short 10-50 cm. units of siliceous sediment. Foliation is developed at  $70-90^{\circ}$  to C.A. The sulphide content of the phyllite is about 0.5%. This section has two strong quartz vein zones; 148.8-174.0 m 7.3% quartz and 203.3-211.6 m 13.3% quartz. The intervening interval has only 2% quartz. Bedding when present is about  $70^{\circ}$  to C.A. Parts of this section are folded with crenulations developed on the folds. Quartz veins are also noted to be folded. The interval 183-190 m has 2-3% sulphides. The quartz veins generally have good sulphide and quartz carbonate content.

211.6-268.8 m Black banded phyllite with black carbonaceous phyllite and minor knotted phyllite and siliceous sediment. Carbonaceous development is strong throughout especially adjacent to quartz vein zones. The phyllite generally has 2-3% Py and Po with short intervals having up to 5% sulphides. This interval has several zones of good quartz veining separated by zones containing less than 2.0% quartz. These quartz rich zones include 217.7-224.6 m 19.6%; 231.3-241.5 m 13.7%; 253.6-256.2 m 15% and 261.9-268.8 m 20.3%. Quartz veins have up to 10% Po, Py and up to 10% quartz carbonate. Visible gold was noted in quartz veins at 237.4 m and 237.55 m.

268.8 - 286.95 m Light to medium gray siliceous sediment with minor knotted phyllite. Bedding is about  $80^{\circ}$  to C.A. Folding on a 20-100 cm scale is noted. Fold axis is  $75^{\circ}-90^{\circ}$

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to C.A. Quartz veining in this interval is low  $< 5\%$ . The veins have minor sulphides and quartz carbonate. The knotted phyllite has 1-3% sulphides with less in the siliceous sediment.

286.95 - 322.2 m Interbedded black banded phyllite, black phyllite and siliceous sediment. This interval has only 2.4% quartz. The veins appear to have fewer sulphides than those further up hole. In the interval 296.8-322.2 m, fine-grained disseminated carbonate is noted.

322.2 m is E.O.H.

TABLE IV  
SUMMARY OF GOLD ASSAY RESULTS FBC-83-2

FROM	TO	INTERVAL	ORIGINAL ASSAY	METALLIC ASSAY
15.2	61.5	46.3 M	0.001	
61.5	66.0	4.5 M	0.092	0.050
66.0	111.0	45.0 M	0.003	
111.0	115.5	4.5 M	0.128	0.125
115.5	129.0	13.5 M	0.004	
129.0	130.5	1.5 M	0.051	0.070
130.5	136.5	6.0 M	0.004	
136.5	147.0	10.5 M	0.020	0.026
147.0	237.0	90.0 M	0.005	
237.0	238.5	1.5 M	0.130	0.112
238.5	255.0	16.5 M	0.002	
255.0	256.5	1.5 M	0.056	0.042
256.5	262.5	6.0 M	0.011	
262.5	265.5	3.0 M	0.076	0.057
265.5	322.2	56.7 M	0.001	

*Handwritten calculations and corrections:*

60.0-61.5    0.01    0.002  
 61.5-66.0    .195    .130  
 66.0    .014    .005  
 66.0    .072    .015  
 .001    .012  
 .001    .003

109.5-111    .025    .031  
 111.0-115.5    .060    .0425  
 115.5    .265    .0224  
 115.5    .060    .026  
 117    .009    .005

237.5-237.0    .001    .001  
 238.5    .130  
 240.0    .005    .001

257.5-258    .001    .012  
 258.5    .056    .042  
 258    .025    .010  
 259.5    .016    .015

261-262.5    .002    .001  
 262.5    .045    .053  
 265.5    .107    .061  
 267    .009    .005

FBC-83-3

0.0 - 3.0 m Casing.

3.0 - 51.5 m Black knotted phyllite (10-30% knots) with minor siliceous sediment. Down to 12 m, the knots are limonitic. Foliation is generally  $80^{\circ}$  to C.A. Quartz veins are noted to be folded with foliation wrapping around the vein. From 29.45 - 51.5 m, there is 15.9% quartz. Veins are generally parallel to subparallel to foliation, however, some of the quartz veins cut foliation at an angle greater than  $20^{\circ}$ . Veins generally have 2-5% sulphides and up to 5-10% quartz carbonate. At 41.55 m several specks of visible gold were noted. The phyllite has only 0.2 - 0.3% sulphides.

51.5 - 66.0 m Fine-grained light gray siliceous sediment. Lower contact is at  $85^{\circ}$  to C.A. Short intervals such as 55.3 - 56.2 m appear to be close to chert in composition. This section of siliceous sediment has short intervals of knotted phyllite interbedded. This interval has 6.3% quartz, the majority of which occurs in two veins. A vein at 53.9 m in addition to having pyrite and quartz carbonate, contains trace amounts of chalcopyrite and sphalerite.

66.0 - 150.7 m Knotted phyllite with short units of siliceous sediment interbedded. The knotted phyllite is only strongly carbonaceous adjacent to quartz veins. There is trace to 0.5% sulphides in the phyllite. This section has two short intervals of moderate quartz veining with the remainder of the interval having less than 3% quartz. The quartz rich intervals occur at 66.0 - 74.0 m, 8%, and 84.3-

91.5 m, 12.1%. Veins are generally parallel to subparallel to foliation which is at  $80^{\circ}$ - $90^{\circ}$  to C.A. A few veins cut foliation. Veins have 5-10% quartz carbonate, however, there is usually low sulphide content.

150.7 - 226.1 m Interbedded black banded phyllite, knotted phyllite and siliceous sediment. This section has variable sulphide content. 150.7 - 180 m 2-3% Po, Py; 180.0 - 213.5 m less than 1% sulphides and mainly Py; 213.5 - 220.0 m 2-3% Po, Py and 220 - 226.1 m less than 1% sulphides. Foliation in the knotted phyllite is about  $70^{\circ}$  -  $80^{\circ}$  to C.A., which is subparallel to bedding in the interbedded siliceous sediment. Folding of the foliation is noted locally. A quartz vein zone containing 11.7% quartz occurs in the interval 160.0 - 171.0 m. Elsewhere, there are several short sections containing up to 5% quartz, however, the majority of this section has less than 2% quartz.

226.1 - 248.4 m Fine-grained black banded phyllite - strongly carbonaceous. The phyllite has 2-3% stringers and disseminated Py, Po throughout. No pyrrhotite is noted in the interval 237 - 284 m. Foliation is generally  $70^{\circ}$  -  $90^{\circ}$  to C.A. Folding of foliation is present locally. The interval 226.1 - 236.7 m has 18.9% quartz. Foliation has been noted to fold around quartz veins. The veins generally have good sulphide and quartz carbonate content. Below 239 m, disseminated  $\text{CaCO}_3$  is noted. Below 236.7 m, there is 6.8% quartz. These veins are noted to have blebs of white calcite, and only trace sulphides at best.



248.4 - 324.9 m A mixture of interbedded black banded phyllite, siliceous sediment and lesser black carbonaceous phyllite. The phyllite and siliceous sediment are often strongly folded. Bedding when not folded is at 70° - 90° to C.A. The phyllite has 2-3% pyrite to 295 m, below which there is less than 2% Py. Pyrrhotite reappears at 284 m, however, there is only a minor amount present. Below 251.3 m, there is only minor disseminated CaCO<sub>3</sub>. To 295 m, the phyllite is carbonaceous. Quartz vein zones occur at 265.15 - 268.1 m 48%, 288.1 - 294.9 m 17.6% and 294.9 - 305.1 m 5.9%. Elsewhere there is less than 3% quartz. Veins are generally low in sulphide content, however, trace amounts of chalcopyrite, galena and sphalerite are noted. Below 288 m, there appears to be an increase in sulphide and quartz carbonate content in veins.

TABLE V  
SUMMARY OF GOLD ASSAY RESULTS FBC-83-3

FROM	TO	INTERVAL	ORIGINAL ASSAY	METALLIC ASSAY
3.0	31.5	28.5 M	0.003	
31.5	33.0	1.5 M	0.039 <sup>.005 .002</sup>	0.023 <sup>.004</sup>
33.0	40.5	7.5 M	0.003	
<sup>39.0</sup> 40.5	<sup>40.5</sup> 42.0	1.5 M	0.075 <sup>.001</sup>	0.068 <sup>.001</sup>
<sup>42.0</sup> 42.0	<sup>43.5</sup>	78.0 M	0.004 <sup>.005</sup>	<sup>.006</sup>
120.0	124.5	4.5 M	0.031 <sup>.004</sup>	0.030 <sup>.006</sup>
124.5	190.5	66.0 M	0.004 <sup>.023</sup>	<sup>.005</sup>
190.5	193.5	3.0 M	0.028 <sup>.036</sup>	0.032 <sup>.019</sup>
193.5	324.9	131.4 M	0.003 <sup>.034</sup>	<sup>.005</sup>
			<sup>.007</sup>	<sup>.003</sup>
			<sup>.010</sup>	<sup>.010</sup>
			<sup>.036</sup>	<sup>.046</sup>
			<sup>.020</sup>	<sup>.017</sup>
			<sup>.009</sup>	<sup>.015</sup>
			<sup>.010</sup>	<sup>.006</sup>

FBC-83-4

010 - 6.1 m Casing.

6.1 - 164.9 m Black knotted phyllite (10-30% knots). Below 64 meters, there is an introduction of narrow bands less than 10 cm. wide of siliceous sediment. Total content of siliceous sediment is low, however, concentration is increasing downhole. Down to 22.6 m, the majority of the knots are limonitic, below which limonitic knots are adjacent to fractures. Foliation is variable, however, it is generally  $70^{\circ}$  -  $80^{\circ}$  to C.A. Bedding appears to be subparallel to foliation. This interval has several zones with higher than average quartz content. These occur at 27.2 - 41.6 m 13.9%, 45.0 - 60.1 m 11.3%, 101.5 - 107.6 m 18.5%, 114.8 - 120.0 m 27.7% and 144.0 - 164.6 m 15.5%. The remainder of this section has very low quartz content. The sulphide content in the phyllite is low but increases downhole. From 6.1 - 83 m, there is less than 0.5% pyrite and trace pyrrhotite, except for the interval 60 - 64 m which has 2-4% Py, Po. From 83 - 144 m, there is up to 1% sulphides. 144 - 164.9 m there is 2-3% Po, Py. Down to 90 m, the quartz carbonate content of veins is low, below 90 m, there is 5-30% quartz carbonate and up to 20% Po, Py in the veins.

164.9 - 239.9 m A mixture of interbedded black banded phyllite with lesser siliceous sediment and black knotted phyllite with interbedded black banded phyllite. Foliation is strong at  $70^{\circ}$  -  $90^{\circ}$  to C.A. From 165-170 m, there is fine-grained disseminated  $\text{CaCO}_3$  in the phyllite. The phyllite has varying sulphide content. 164.9 - 174.5 m

1-2% Po, Py, 174.5 - 214 m less than 2% Po, Py; 214 - 235 m  
 2-7% Po, Py and 235 - 239.9 m less than 0.5% sulphides.

Quartz veining is weak with the strongest in the intervals  
 214 - 219.6 m 12.9% quartz and 219.6 - 237.0 m 6% quartz.

Carbonaceous development is noted adjacent to some of the  
 quartz veins. There is up to 20% sulphides and 5-20%  
 quartz carbonate in the veins.

239.9 m E.O.H.

TABLE VI

SUMMARY OF GOLD ASSAY RESULTS FBC-83-4

FROM	TO	INTERVAL	ORIGINAL ASSAY	METALLIC ASSAY
6.1	115.5	109.4 M	0.002	
115.5	118.5	3.0 M	0.076 <sup>.019</sup> <sub>.101 .051 .021</sub>	0.064 <sup>.017</sup> <sub>.073 .054 .014</sub>
118.5	172.5	54.0 M	0.005	
172.5	174.0	1.5 M	0.047 <sup>.002</sup> <sub>.047 .010</sub>	0.025 <sup>.002</sup> <sub>.025 .025</sub>
174.0	201.0	27.0 M	0.003	
201.0	202.5	1.5 M	0.051 <sup>.007</sup> <sub>.002</sub>	0.024 <sup>.008</sup> <sub>.004</sub>
202.5	239.9	37.4 M	0.002	

FBC-83-5

0.0 - 3.0 m Casing.

3.0 - 133.8 m Black knotted phyllite with lesser black banded phyllite and minor siliceous sediment. Foliation is strong at  $70^{\circ}$  -  $90^{\circ}$  to C.A. Down to 14.3 m, 40-50% of the knots are limonitic. The phyllite has low sulphide content generally less than 0.5%. This section has several quartz vein zones. These zones occur at 10.4 - 16.3 m 20.3%, 77.15 - 92.5 m 19.3%, and 121.55 - 133.8 m 17.1% quartz. To 77 m, quartz veins tend to have 3-10% quartz carbonate and only trace sulphides. In the vein zone at 77.15 - 92.5 m, there is up to 10% quartz carbonate and 5-7% Po,Py. The phyllite adjacent to many of the veins is carbonaceous. Veins are generally parallel to foliation. In places, the veins are folded with foliation wrapped around the vein. The siliceous tuff occurs in less than 1 to 10 cm. bands. Bedding is  $80^{\circ}$  -  $90^{\circ}$  to C.A. Total siliceous sediment content is low, less than 3%, however, short intervals such as 109.5 - 114.4 m, may have up to 15%.

133.8 - 163.4 m Gray siliceous sediment to chert with minor knotted phyllite. Bedding is well preserved and is at  $65^{\circ}$  -  $90^{\circ}$  to C.A. The unit appears to be folded and this probably explains why it was not intersected in FBC-83-2, which is located 55 m vertically above FBC-83-5. This siliceous sediment has very low vein quartz content, less than 2%. There is only trace pyrite in the siliceous

sediment with only slightly higher sulphide content in the interbedded knotted phyllite.

163.4 - 243.55 m Black knotted phyllite with minor siliceous sediment usually less than 5%. Below 218 m, there is an increase in siliceous sediment content. Foliation is strong at  $70^{\circ}$  -  $90^{\circ}$  to C.A. Except for the interval 181.9 - 185.03 m which has 16.3% quartz, this section has less than 3% quartz. The phyllite adjacent to the veins is strongly carbonaceous. The veins generally have 5-15% quartz carbonate and up to 15% sulphides.

243.55 - 345.8 m Interbedded black banded phyllite, knotted phyllite and siliceous sediment. The following intervals have varying siliceous sediment contents as indicated:

243.55 - 264 m 20%, 264 - 330 m 5-15% with 40% knotted phyllite, 330 - 345.8 m 5-20% siliceous sediment with no knotted phyllite. Disseminated  $\text{CaCO}_3$  is first noted at 335 m. The banded phyllite has 2-4% Po,Py throughout, while the siliceous sediment has  $< 1\%$  sulphides. Pyrrhotite is noted to decrease downhole. The phyllite adjacent to quartz veins is strongly carbonaceous. Bedding in the siliceous sediment is  $80^{\circ}$  to C.A. Folding is noted especially associated with some of the quartz veins. This interval has two good quartz vein zones. These occur at 243.55 - 267.35 m 15.4% quartz and 277.6 - 286.3 m 17.4% quartz. Except for 2-4 m intervals, the remainder of this section has less than 3% quartz. Veins generally have good quartz carbonate and sulphides associated.

345.8 - 354.1 m Gray siliceous sediment and lesser black phyllite. Upper contact gradational at  $90^{\circ}$  to C.A. The siliceous sediment has less than 1% disseminated pyrite and no pyrrhotite. There is only very weak quartz veining.

354.1 - 385.9 m Interbedded gray calcareous siltstone and black phyllite. Bedding and foliation are about  $80^{\circ}$  -  $90^{\circ}$  to C.A. Folding of a 30-50 cm scale is noted. This section has only minor quartz veining with trace pyrite associated. The siltstone has 1-3% pyrite and no pyrrhotite to 379.7 m.

385.9 - 428.9 m Gray siliceous sediment interbedded with black banded phyllite. Strong folding on a 10-30 cm scale is noted. This section has minor calcareous siltstone. Foliation is strongly developed at  $80^{\circ}$  to C.A. The banded phyllite has 2-4% sulphides while the siliceous sediment has only 1-1½% sulphides. The interval 385.94 - 396 m has 13.4% quartz. Veins have varying amounts of Po, Py and minor quartz carbonate.

428.9 m E.O.H.

TABLE VII

SUMMARY OF GOLD ASSAY RESULTS FBC-83-5

FROM	TO	INTERVAL	ORIGINAL ASSAY	METALLIC ASSAY
3.0	267.0	264.0 M	0.001	
267.0	277.5	10.5 M	0.010	
277.5	279.0	1.5 M	0.110 <sup>.026</sup> <sub>.001</sub>	0.081 <sup>.021</sup> <sub>.002</sub>
279.0	307.5	28.5 M	0.005	
307.5	309.0	1.5 M	0.087 <sup>.002</sup> <sub>.010</sub>	0.039 <sup>.003</sup> <sub>.010</sub>
309.0	428.9	119.9 M	0.001	