

CYPRUS ANVIL MINING CORPORATIONDIAMOND DRILL CORE LOG

Hole Number: 80-B-01 Fabric Orientation Diagram: _____

Project: Pelmac

Location: BNOB Claims

Claim: BNOB 7

Terr. Plane
Co-ords.: 61° 35' N Latitude N

132° 32' W Longitude E

Grid
Co-ords.: B.L. 40 W/16 S

Inclination: -60° in direction 160° All symmetry determinations looking
_____ with _____ dipping

Elevation: 4200 feet _____ with dip azimuth _____.

Total Depth: 848 feet (258.5 m)

Purpose: Test for barite horizon

Logged by: L.C. Pigage,
J.K. Mortensen Date(s) Logged: Aug. 16 - Sept. 1, 1980

Drilling
Contractor: Arctic Core: Size From To Collar Cased
and Capped: _____

BQ 0 ft. 848 ft.

Started: Aug. 16, 1980 Completed: Aug. 23, 1980

DIAMOND DRILL RECORD

80-8-01

COMPANY: _____
 PROPERTY: BNOB
 CLAIM NO: _____
 ELEVATION: _____
 ULTIMATE DEPTH: _____

HOLE NUMBER: ~~BN 80-01~~
 LATITUDE: _____
 DEPARTURE: _____
 AZIMUTH: 160°
 DIP: -60°

PAGE 1 OF _____
 LOGGED BY JKM & LCP

DRILLING PERIOD: Aug 16/80

FROM	TO	RECOV.	DESCRIPTION	SAMP NO.	INT.	ASSAYS			
0	11.1	—	overburden — tri-coned						
11.1	28.2	100%	<p>pale to med grey-green, non-calcareous, moderately pyritic felsic tuffs and lapilli tuffs. Generally Peruvianly altered (to varying degrees) to chlorite-muscovite ± clay assemblages. Lapilli fragments are subangular, to 4 cm in diameter. Pyrite is present throughout the rock, both disseminated in the lapilli fragments, and as disseminations, nodules and discrete fine-grained layers to 1 cm thick. Pyrite nodules locally have a narrow quartz shadow surrounding them.</p> <p>Core from 11.1 to 15.2 meters is broken and weathered; mud seams are present from 13.2 → 15.3.</p> <p>Structural measurements: 16.3 m → S₁ @ 20° to core axis 21.4 m → S₁ @ 25° 25.6 → 28.0 m → S₁ parallel to axis</p>						
2 28.2	33.6	100%	<p>fine-grained variably epidotized (± chloritized) pyritic felsic tuff. Pale to medium grey is where unaltered. Locally shows a streaked or mottled light and medium grey appearance. Pyrite occurs as fine-grained disseminations and as very irregular crosscutting stringers. Thin interbeds of pale green meta-tuffaceous shales are present. Locally extensive quartz veining.</p> <p style="text-align: center;">(cont'd over)</p>						

DIAMOND DRILL RECORD

COMPANY: _____
 PROPERTY: BNOB
 CLAIM NO: BNOB 7
 ELEVATION: 4200
 ULTIMATE DEPTH: _____

HOLE NUMBER: 80-B-01
 LATITUDE: _____
 DEPARTURE: _____
 AZIMUTH: 160°
 DIP: 60°

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 LOGGED BY JKM/LCP

DRILLING PERIOD: _____

FROM	TO	RECOV.	DESCRIPTION	SAMP NO.	INT.	ASSAYS				
2			<p>S_1 poorly developed except in pale green meta-tuff bands.</p> <p>Structural measurements: @ 31.1 m $\rightarrow S_1 @ 10^\circ$ to core axis</p>							
3	33.6	36.6	100%	<p>Dark to medium green pyritic felsic meta-tuff. Lapilli size fragments are absent, otherwise the unit is similar to Unit 1.</p> <p>Pyrite occurs both as fine-grained disseminations and as bands (parallel to S_1) to 2 cm thick. Locally abundant quartz-carbonate (or quartz- altered feldspar) veining.</p> <p>Structures: @ 33.7 $\rightarrow F_2$ fold nose - no measurement possible @ 34.3 $\rightarrow S_1 @ 40^\circ$ to core axis @ 34.9 $\rightarrow S_2 @ 64^\circ$</p>						
4	36.6	39.0	100%	<p>Meta-tuff as in Unit 3 but with higher-pyrite content.</p> <p>Pyrite content is 15 \rightarrow 20% throughout, both as diffuse bands and nodules.</p> <p>Structure: @ 37.0 m $\rightarrow S_1 @ 64^\circ$</p>						

DIAMOND DRILL RECORD

COMPANY: _____
 PROPERTY: _____
 CLAIM NO: _____
 ELEVATION: _____
 ULTIMATE DEPTH: _____

HOLE NUMBER: 80-BN-01
 LATITUDE: _____
 DEPARTURE: _____
 AZIMUTH: _____
 DIP: _____

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 LOGGED BY JRM & LCP
 DRILLING PERIOD: _____

FROM	TO	RECOV.	DESCRIPTION	SAMP NO.	INT.	ASSAYS			
5 39.0	51.8	100%	<p>pale green to grey green, non-calcareous slightly pyritic highly altered (to chlorite-muscovite phyllite) felsic tuff and fine with fine grained lapilli tuff interbeds. Pyrite is present throughout the matrix and is locally present within tuff fragments as well. Some of the fragments are either slightly dolomitic or contain fine-grained carbonate as an alteration. Quartz-calcite veining is locally abundant</p> <p>Structures:- @ 39.3 m S/s @ 57° to core axis 45.0 m S @ 52° 48.2 m S/s @ 33° 51.4 m S/s @ 50°</p>						
6 51.8	53.8	100%	<p>highly altered tuff as above with abundant distinctive pyritic bands 0.5 cm thick Pyrite content in these bands is 50% → 60%. Fine grained tuff predominates with only minor coarser tuff interbeds. The altered tuff is slightly more yellowish-green than the previous unit.</p> <p>Structures: 53.7 m S/s @ 45°</p>						
7 53.8	55.7	100%	<p>altered tuff as above (similar yellowish-green color) but with narrower and less abundant pyrite bands. Some pyrite bands appear to be disrupted</p>						

DIAMOND DRILL RECORD

 PROPERTY: BN08

 HOLE NUMBER: 80-BN-01

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FROM	TO	RECOV.	DESCRIPTION	SAMP. NO.	INT.	ASSAYS			
8 55.7	61.9	100%	<p>Pale to medium grey, thinly laminated, non calcareous moderately to highly pyritic felsic tuff with minor fine-grained, lapilli tuff becoming increasingly abundant towards the bottom of the section. Pyrite occurs both in pervasive disseminations and as discrete bands.</p> <p>Structure: @ (60.4 m S/S, @ 62° to core axis 56.2 m S/S @ 56° " " "</p>						
9 61.9	65.2	100%	<p>Medium grey moderately pyritic felsic lapilli tuff. Pyrite occurs in the matrix and as fine disseminations in some clasts, as well as in stringers.</p>						
10 65.2	70.6	100%	<p>Pyritic lapilli tuff as above. Medium brownish grey (brown color due to fine-grained biotite in the matrix.) Pyrite occurs predominantly as disseminations in the matrix but is also present in trace amounts in lapilli fragments. Most fragments are unaltered, but in some the feldspars are extensively sericitized. The matrix is distinctly gray in appearance.</p> <p>Structure: @ 66.7 m S/S, @ 25°</p>						
11 70.6	73.9	100%	<p>Lapilli tuff as above. Medium gray, with a very fine grained matrix. Clasts have very diffuse, indistinct borders.</p>						
12 73.9	81.8	100%	<p>Lapilli tuff similar to Unit 10. Contains both very sharp, well defined clasts, and the more diffuse ones as in Unit 11. Fragments are poorly sorted.</p> <p>Structures: @ 74.0 m S @ 41°</p>						

DIAMOND DRILL RECORD

PROPERTY: BNOB

HOLE NUMBER: 80-BN-01

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FROM	TO	RECOV.	DESCRIPTION	SAMP. NO.	INT.	ASSAYS			
13 81.8	91.5 101.4	100%	<p>and grey brown Medium to dark grey brown lapilli tuff. Tuff fragments are pale to medium grey. Matrix is slightly biotitic. Pyrite occurs as fine cubes throughout the matrix. Fragments are all slightly flattened.</p> <p>Structures @ 81.9 flattening of fragments (S?) @ 62° 84.4 " " (S?) @ 47° 85.1 → 90.0 core badly broken 92.6 flattening of fragments (S?) @ 37° 94.6 " " (S?) @ 35° 96.5 " " @ 30° 99.9 S₀/S₁ @ 30°</p>						
14 101.4	125.1	100%	<p>pale to medium grey, slightly to moderately pyritic felsic lapilli tuff. Abundant quartz-carbonate veins from 109.7 to 112.3 m. Pyrite occurs primarily as disseminations throughout the groundmass, and less commonly as irregular stringers and deformed diffuse bands to 2 cm thick. Clasts are angular to subangular, and are locally flattened in the plane of tabulation.</p> <p>Structures: @ 103.1 m S₀/S₁ @ 53° to core axis @ 107.4 m S₀/S₁ flattening of clasts @ 58° @ 113.2 m flattening of clasts (S?) @ 54° @ 116.5 m " " " @ 52° @ 120.4 m " " " @ 52° @ 123.5 m S₀/S₁ @ 55°</p>						

DIAMOND DRILL RECORD

PROPERTY: BN03

HOLE NUMBER: _____

PAGE _____ OF _____

FROM	TO	RECOV.	DESCRIPTION	SAMP. NO.	INT.	ASSAYS					
15	125.1	128.1	100%	Felsic lapilli tuff as above w/ increased pyrite content (15-25%) Pyrite occurs as diffuse locally disrupted bands to 2 cm thick							
16	128.1	144.1	100%	slightly pyritic fine grained lapilli tuff. Unit is pale grey from 128.1 to 128.6 and medium to dark green (variably chloritic) 128.6 to 141.4 and medium grey 141.4 to 144.1. Clast size is generally less than 0.5 cm, but fragments of felsic fine grained volcanic to 3.0 cm diameter are present in the interval 136.0 to 138.0. Pyrite occurs disseminated in the matrix, as disrupted discrete bands, and disseminated in chert structures: @ 129.5 m S ₁ @ 61° to core axis 141.3 m S ₁ @ 60° 144.0 m S ₁ @ 40°							
17	144.1	146.1	100%	highly phoned pyritic felsic lapilli tuff. Mud seam from 144.6 to 145.1. Clasts are pyritic Structure: 145.7 S ₁ // flattening of clasts @ 52°							
18	146.1	152.4	100%	Very highly pyritic fine grained medium grey tuff or volcanic. Abundant Qtz veining locally with drusey veins lined with Qtz crystals. Pyrite comprises 30 to 70% of the matrix, consisting of fine to medium grained stringers and broad diffuse bands and irregular zones. Single blebs of chalcopyrite occurs with a quartz vein @ 152.1 m. Structure @ 152.7 m S ₁ @ 65°							

DIAMOND DRILL RECORD

PROPERTY: _____

HOLE NUMBER: _____

PAGE ____ OF ____

FROM	TO	RECOV.	DESCRIPTION	SAMP. NO.	INT.	ASSAYS			
23 185.7	187.6	100%	Grey, fine-grained felsic tuff or metavolcanic. Both pyrite and chlorite occurs as thin irregular stringers. Core is broken. Carbonate veins present. Unit has a waxy translucent appearance when wet.						
24 187.6	190.8	100%	Grey to greenish grey tuffs interbedded with black phyllite. Tuffs are locally highly pyritic with fine-grained disseminated pyrite. Black phyllite typically have disseminated, fine-grained pyrite-quartz streaks about 2mm in length. Quartz-carbonate veining common in both rock types. Individual units are 10cm to 1.5m in length. Core axis angle S_0 57° 190.8M S_1 62° 189.6M						
25 190.8	203.3	100%	Grey to greenish grey tuffs with minor black phyllite interbeds. Black phyllite units become thicker near bottom of interval. Tuffs contain minor scattered white fragments; in some cases these are rectangular and look like small euhedral feldspar crystals. Fragments now altered to carbonate + clays. Pyrite in tuffs fine grained or irregular nodules. Fine-grained pyrite disseminated in thin pyritic laminae. Irregular quartz-carbonate veining in both units. Interval affected by post- S_1 deformation. Core locally broken with minor gouge. Core axis angle S_1 47° 195.2M S_0 essentially parallel core axis with numerous 197.7 - 200.6M folds (post- S_1) 201.6M S_0/S_1 30° 202.6M						

DIAMOND DRILL RECORD

PROPERTY: _____

HOLE NUMBER: _____

PAGE ____ OF ____

FROM	TO	RECOV.	DESCRIPTION	SAMP. NO.	INT.	ASSAYS			
26. 203.3	213.4	100%	<p>Black, noncalcareous phyllite with thin grey siltstone interbeds. Siltstones here are laminated with thin black laminae. Siltstones also contain fine-grained, disseminated pyrite and are slightly calcareous. locally phyllite contains some ^{concentration} part-S₁ crenulation cleavage.</p> <p>Core axis angle S₁/S₀ 51° 204.5 M S₂ dips 30° away { S₁/S₀ 51° } 205.2 M from S₁ } S₂ 54° } S₁ \ S₂</p> <p style="text-align: center;">S₁ 69° 207.0 M</p> <p>208.4 M - 213.4 M - broken core + gauge</p>						
27. 213.4	219.1	100%	<p>Fine grained grey to greenish grey felsic tuff locally can see small clasts. Abundant quartz-calcite veins. Pyrite ^{occurs in minor amounts} disseminated as small grains and as massive fine-grained bands. At 214.8 M quartz-calcite vein includes scattered pyrite and galena.</p> <p>Core axis angle { S₁ 90° } 214.5 M { S₂ 58° } S₁ 64° 215.3 M S₂ 61° From 218.3 - 218.9 M S₁ is parallel core axis.</p>						
28. 219.1	224.9	100%	<p>Noncalcareous black phyllite with numerous thin interbeds of noncalcareous grey siltstone. Siltstones contain minor disseminated, fine-grained pyrite. Siltstone bands range up to 1cm in thickness.</p> <p>Core axis angle S₁/S₀ 80° 220.7 M S₂ { S₁/S₀ 80° } 222.2 M S₁ } S₂ 65° } S₂ { S₁ 35° } 223.6 M S₂ } S₂ 61° }</p>						

DIAMOND DRILL RECORD

PROPERTY: _____

HOLE NUMBER: _____

PAGE ____ OF ____

FROM	TO	RECOV.	DESCRIPTION	SAMP. NO.	INT.	ASSAYS			
239.7	240.2	100%	Grey-green tuff. Same as Unit # 29. 239.4-240.2M consists of quartz-carbonate vein						
240.2	258.5	100%	Black, non-aluminous phyllite with diffuse grey siltstone bands. Siltstones are not as common as in previous phyllite unit. Pyrite is not stable present. Minor quartz & carbonate veins. Core is broken. Core axis angle S ₁ /S ₀ 54° 241.5M X S ₁ S ₁ 75° } 244.3M S ₂ S ₂ 54° } S ₁ /S ₀ 75° 250.2M S ₁ 64° 254.8M S ₁ /S ₀ 73° 257.1M						
258.5			END OF HOLE						