

CYPRUS ANVIL MINING CORPORATIONDIAMOND DRILL CORE LOG

Hole Number: 80-A-01 Fabric Orientation Diagram: \_\_\_\_\_

Project: Pelmac

Location: Anise Claims

Claim: Anise 24

Terr. Plane  
Co-ords.: 61°37'N Latitude N

132°43'W Longitude E

Grid  
Co-ords.: Line 104, +28W

Inclination: -90° All symmetry determinations looking  
\_\_\_\_\_ with \_\_\_\_\_ dipping

Elevation: 4000 feet \_\_\_\_\_ with dip azimuth \_\_\_\_\_.

Total Depth: 676 feet (205.1 m)

Purpose:- To test geochemical anomaly.

Logged by: L. Pigage and J. Mortensen Date(s) Logged: August 30 - September 7, 1980

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

BQ 20 676 (feet)

\_\_\_\_\_  
\_\_\_\_\_

Started: August 27/80 Completed: August 30/80

# LITHOLOGIC LOG

DDH 80-A-01

- 0.0 - 7.5 Triconed in overburden.
1. 7.5 - 9.3 Pale grey, fine to medium grained, locally slightly calcareous, slightly pyritic quartzite with medium to dark grey, slightly carbonaceous phyllitic partings.  
Structure: at 7.8 m  $S_0/S_1$   $69^\circ$  to core axis  
8.3 m  $S_2$   $35^\circ$  to core axis
2. 9.3 - 11.5 Banded pale to medium grey moderately calcareous phyllitic quartzite and medium green chloritic calcareous quartzite. Irregular blebs of pyrite and pyrrhotite.  
Structure: 9.9 m  $S_1$  at  $55^\circ$
3. 11.5 - 33.1 Highly magnetiferous serpentinite and metabasite. Section from 11.5 to 24.4 m consists of serpentinite with magnetite + calcite (+ minor hematite) inter-growths occurring as irregular zones and broad bands. Irregular zones, bands, and stringers of pyrite are also present. Section from 24.4 - 32.7 m is slightly to moderately calcareous, pale to dark green metabasite; fine-grained and non-magnetic. Section from 32.7 - 33.1 m is banded and mottled medium green and brownish grey, noncalcareous calc-silicate.  
Structure: at 17.6 foliation at  $65^\circ$   
25.8 "  $33^\circ$   
31.2 "  $48^\circ$
4. 33.1 - 39.7 90% of section is highly pyritic and marcasitic massive quartz. Remainder of the section is noncalcareous pale to dark grey phyllite.
5. 39.7 - 46.5 Thinly banded pale to dark grey phyllite, becoming calcareous towards the bottom of the section. Some bands are very slightly brownish (biotitic?).  
Structure: 41.7 m  $S_1$  at  $50^\circ$   
 $S_2$  at  $50^\circ$  (opposite direction)  
46.0 m  $S_1$  at  $51^\circ$

6. 46.5 - 51.9 Thinly interbanded black phyllite and pale grey quartzite. Abundant narrow carbonate stringers.  
Structure: 50.1 m  $S_1$  at  $42^\circ$
7. 51.9 - 62.5 Pale grey to grey green muscovite-chlorite-quartz-feldspar phyllite, locally with traces of biotite. Noncalcareous, with trace amounts of carbonate in narrow stringers. Trace of galena in a stringer at 58.2 meters.  
Structure: Abundant gouge 51.9 to 54.7 m  
at 56.7  $S_1$  at  $56^\circ$   
at 61.4  $S_1$  at  $43^\circ$
8. 62.5 - 68.3 Gouge zone. Breccia fragments of the above material with minor amounts of dark grey phyllite fragments.
9. 68.3 - 72.2 Pale grey muscovite-quartz-feldspar-chlorite phyllite. Similar to Unit #7, but with less abundant chlorite. Non-to slightly calcareous with carbonate also present in narrow stringers. Minor amounts of pyrite as stringers.  
Structure: 69.7 m  $S_1$  at  $75^\circ$   
72.0 m  $S_1$  at  $52^\circ$   
later brittle fracture at  $80^\circ$  in opposite direction
10. 72.2 - 75.3 Thinly banded dark grey to black, noncalcareous, slightly pyritic phyllite. Abundant narrow quartz stringers (or coarse grained siltstone bands) parallel to foliation. Quartzose bands contain disseminated pyrite. Pyrite also occurs disseminated in the black phyllite.  
Structure: 73.7 m  $S_1$  at  $74^\circ$
11. 75.3 - 76.8 Medium grey, slightly to highly pyritic, carbonaceous phyllite. Pyrite occurs as disseminations, disrupted narrow bands, and with quartz and carbonate as stringers.  
Structure: 75.8 m  $S_1$  at  $74^\circ$   
later  $S_2$  at  $51^\circ$  (same direction)

12. 76.8 - 100.3 Dark grey to black, noncalcareous, slightly pyritic siliceous phyllite with abundant non to slightly calcareous pale grey siltstone interbands. Also present are several narrow ( ~0.2 m) dark grey quartzose bands.  
Structure: 82.9 m  $S_1$  at  $72^\circ$   
87.4 - 96.6  $S_1$  parallel to core axis  
92.5 m  $S_1$  at  $66^\circ$
13. 100.3 - 108.7 Slightly to highly calcareous thinly laminated pale grey siltstone and dark grey phyllite - siltstone makes up ~ 60% of the section. Parts of the highly calcareous siltstone is approaching a phyllitic marble in composition.  
Structure: 100.3 - 103.5 core is broken, much quartz veining  
103.7  $S_1$  at  $44^\circ$   
 $S_2$  (brittle kink) at  $48^\circ$   
 $S_1$  and  $S_2$  at ~  $65^\circ$  to each other  
105.5  $S_1$  at  $55^\circ$   
108.1  $S_1$  at  $68^\circ$
14. 108.7 - 109.1 Chlorite-muscovite-quartz  $\pm$  feldspar phyllite. Fine-grained, pale grey-green. Finely disseminated pyrite and discontinuous pyrite laminae. Trace of calcite on stringers.
15. 109.1 - 121.7 Moderately to highly calcareous thinly laminated pale to dark grey phyllite. Abundant quartz-calcite veining. Pyrite is present locally as blebs and discontinuous stringers.  
Structure: 111.8 m  $S_1$  at  $67^\circ$   
116.2 m  $S_1$  at  $68^\circ$   
119.2 m  $S_1$  at  $64^\circ$
16. 121.7 - 122.0 Slightly pyritic, noncalcareous quartz-feldspar-muscovite-chlorite phyllite. Medium grey-green. Calcite in fractures.

17. 122.0 - 140.8 Thinly laminated, highly calcareous pale and dark grey phyllites. Pale grey bands tend to be more calcareous. Pyrite occurs disseminated and as narrow often discontinuous bands and stringers. Minor quartz-calcite veining. Trace amounts of biotite are present in some bands at 125.4 meters and 129.4 meters.
- Structure: 123.5 m  $S_1$  at  $44^\circ$   
128.3 m  $S_1$  at  $70^\circ$   
131.4 m  $S_1$  at  $69^\circ$   
134.4 m  $S_1$  at  $66^\circ$
18. 140.8 - 143.0 Non to moderately calcareous, thinly laminated, pale and dark grey phyllites. Minor brecciation and abundant quartz veining present. Minor discontinuous narrow bands of pyrite and pyrrhotite in the interval 141.8 - 142.0 m.
- Structure: 141.9 m  $S_0/S_1$  at  $57^\circ$
19. 143.0 - 152.8 Moderately to highly calcareous, thinly laminated, pale and dark grey phyllites. Similar to Unit #17. Locally slightly biotitic with books of biotite also present. in quartz veins in the interval 149.1 - 149.6 m.
- Structure: 143.6 m  $S_1$  at  $64^\circ$   
146.2 m  $S_1$  at  $52^\circ$   
149.3 m  $S_1$  at  $63^\circ$
20. 152.8 - 160.3 Moderately to highly calcareous thinly banded pale and dark grey phyllite as above. Locally brecciated. Abundant pyrrhotite and pyrite and traces of chalcopyrite associated with quartz and quartz-carbonate veins. Pyrrhotite and chalcopyrite are early phases; they are cut by later pyrite stringers.
- Structure: 156.7 m  $S_1$  at  $52^\circ$   
158.5 m  $S_2$  at  $58^\circ$

21. 160.3 - 167.9 Non to slightly calcareous banded pale to dark grey phyllite as above with much brecciation (quartz and quartz-carbonate matrix) and abundant pyrrhotite and pyrite w/ trace amounts chalcopyrite. Section from 166.4 - 167.3 m is 70% sulphides (primarily pyrite) as fine grained breccia matrix.  
Structure: 163.7 m  $S_1$  at  $50^\circ$
22. 167.9 - 174.1 Moderately to highly calcareous, thinly laminated pale to dark grey phyllite. Abundant quartz carbonate veining locally with pyrite and pyrrhotite. Much brecciation and irregular deformation of laminations.  
Structure: 171.1 m  $S_1$  at  $52^\circ$   
173.7 m  $S_1$  at  $45^\circ$
23. 174.1 - 205.1 Moderately to highly calcareous, thinly laminated phyllite as above, with rare interbands to 20 cm thick of calcareous biotitic, pale brown metatuff (?) with blebs of pyrite and minor pyrrhotite. The entire sequence contains 2 - 3% pyrite as disseminations and narrow discontinuous bands.  
Structure: 175.2 m  $S_2$  at  $43^\circ$   
182.6 m  $S_1$  at  $64^\circ$   
186.4 m  $S_2$  at  $45^\circ$   
188.4 m  $S_2$  at  $68^\circ$   
192.1 m  $S_1$  at  $50^\circ$   
195.2 m  $S_1$  at  $58^\circ$   
201.1 m  $S_2$  at  $52^\circ$   
203.9 m  $S_1$  or  $S_2$  at  $43^\circ$
- 205.1 END OF HOLE