

CYPRUS ANVIL MINING CORPORATIONDIAMOND DRILL CORE LOG

Hole Number: 80-A-03 Fabric Orientation Diagram: _____

Project: Pelmac

Location: Anise Claims

Claim: Anise 3

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

132°44'W Longitude E

Grid
Co-ords.: L 12 + 250, 28 + 60 W

Inclination: -90° All symmetry determinations looking
_____ with _____ dipping

Elevation: 4050 feet _____ with dip azimuth _____.

Total Depth: 490 feet (149.4 m)

Purpose: Test geochemical and electromagnetic anomalies

Logged by: L. Pigage Date(s) Logged: Sept. 14 - 17, 1980

Drilling Contractor: Arctic

Core:	Size	From	To	Collar Cased and Capped:
<u>BQ</u>	<u>40</u>	<u>490 feet</u>		<u>_____</u>
<u>_____</u>	<u>_____</u>	<u>_____</u>		<u>_____</u>
<u>_____</u>	<u>_____</u>	<u>_____</u>		<u>_____</u>

Started: Sept. 7, 1980 Completed: Sept. 10, 1980

LITHOLOGIC LOG

DDH 80-A-03

- 0.0 - 12.0 Triconed through overburden - no core.
1. 12.0 - 32.0 Noncalcareous, black phyllite with abundant thin grey siltstone laminae. Siltstone layers range up to 15 mm in thickness. Locally siltstone layers are slightly calcareous and/or contain disseminated fine to medium grained pyrite. Abundant quartz + carbonate veining. S_0 and S_1 are disrupted by later, brittle folding. Locally see development of a weak crenulation cleavage in association with this later folding.
- Core axis angle:
- | | | |
|--------------------------|------------|---------------|
| S_0/S_1 | 67° | 14.5 m |
| S_0 | 0° | } 16.5 m |
| S_2 | 25° | |
| S_3 | 49° | |
| S_0 parallel core axis | | 23.7 - 31.2 m |
2. 32.0 - 46.8 Interbanded on a small scale calcareous and noncalcareous black phyllite. Calcareous phyllite predominates. Minor thin grey siltstone bands which are slightly calcareous. Abundant quartz-calcite veining; locally the veins contain angular phyllite fragments. Siltstone bands tend to form wispy, discontinuous layers. Pyrite locally occurs as small nodules partly to completely surrounded by calcite.
- Core axis angle:
- | | | |
|--------------------------------------|------------|-------------------|
| S_1/S_0 | 22° | } 32.3 m |
| S_2 | 40° | |
| S_1 | 45° | 35.0 m |
| S_1/S_0 parallel to core axis | | 35.4 - 38.1 m |
| fracture S_2
X brittle fracture | S_2 | 62° 38.1 m |
| | | 38° |
| | S_1 | 40° 43.2 m |

3. 46.8 - 48.2 Noncalcareous, medium grey, felsic tuff. Contains recrystallized pyrite cubes scattered throughout. Common quartz-carbonate veins (carbonate fizzes only when powdered). Can see minor amounts of clasts elongate in S_1 foliation; generally a clastic texture is not visible.
4. 48.2 - 51.7 Noncalcareous black phyllite with thin calcite stringers. Stringers are abundant and delineate a possible S_0 . In places they are folded into microlithons. Fine-grained pyrite locally disseminated in calcite stringers. Minor amounts of medium grey pyritic felsic tuff (like last Unit). Pyrite in tuffs locally forms thin bands.
- Core axis angle:
- | | | |
|-------|------------|--------|
| S_2 | 54° | 49.5 m |
| S_0 | 55° | 51.7 m |
5. 51.7 - 65.8 Dark grey to black calcareous phyllite S_0 (?) delineated by thin calcareous stringers and laminae. Laminae are discontinuous locally. Minor small pyrite nodules enclosed by calcite. Minor crosscutting quartz-calcite veins and fracture fillings. Some of the calcite-rich bands appear to be disrupted, closely spaced fractures. At 64.2 m have pyritic band ~8 cm thick.
- Core axis angle:
- | | | |
|-------|------------|--------|
| S_1 | 40° | 52.8 m |
| S_2 | 30° | 56.0 m |
| S_1 | 47° | 58.4 m |
| S_2 | 62° | 64.0 m |
| S_1 | 30° | |
6. 65.8 - 93.5 Noncalcareous dark grey to black phyllite. Contains abundant grey siltstone bands. Bands range in thickness from 1 - 2 mm up to 10 cm. Siltstone is also noncalcareous. Commonly siltstone bands are disrupted, boudinaged and folded by S_1 deformation. Locally get extensive quartz-calcite veining. Pyrite as small aggregate both in phyllite and siltstone; commonly pyrite partly enclosed by quartz. Late folding locally disrupts S_0/S_1 surfaces into brittle kink style folds.

6. (continued)

Core axis angle:

S_0/S_1	parallel core axis for most of this interval	65.8 - 67.6
S_0/S_1	29^0	70.7 m
S_0/S_1	46^0	71.4 m
S_0/S_1	54^0	75.9 m
S_0/S_1	53^0	82.9 m
S_1	90^0	87.4 m
S_1	50^0	93.5 m

7. 93.5 - 97.8

Black calcareous phyllite. Like Unit #5. In places abundant calcite stringers give core a pinstripe appearance. Contains minor thin grey felsic tuff bands (like Unit #3). Pyrite in tuffs forms large cubes. Thin calcareous siltstone bands present.

Structure:

S_1	60^0	96.7 m
S_1/S_0	73^0	97.8 m

8. 97.8 - 105.8

Noncalcareous dark grey to black phyllite with numerous thin grey siltstone bands. Both phyllite and siltstone contain disseminated recrystallized pyrite. Near lower part of interval siltstone coarsens to become a sandstone. Minor thin felsic tuff bands occur in upper part of interval. Minor quartz veining.

Core axis angle:

S_1	62^0	101.2 m
S_1	60^0	104.1 m

9. 105.8 - 106.6

Noncalcareous chert pebble conglomerate. Medium grey. Clast size ranges up to 10 -15 mm although most clasts are less than 5 mm. Clasts include grey, chert, black chert, pyritic grey, grey shale, volcanic (?). Pyrite as small grains both within clasts and in matrix. Clasts elongate in S_1 foliation.

Core axis angle: S_1 60^0 106.2 m

10. 106.6 - 111.8 Noncalcareous black phyllite with abundant grey siltstone bands. Like Unit #8. Minor quartz + carbonate veining. In lower part of interval core much broken with minor fault gouge. Minor felsic grey tuffs in lower part of interval.
Structure: S_1 60° 111.8 m
11. 111.8 - 113.1 Fine-grained, light grey felsic tuff. Shows poor compositional banding. Pyrite both as discrete recrystallized cubes and diffuse zones up to 5 mm thick. Noncalcareous. Minor quartz-carbonate veining.
12. 113.1 - 113.5 Noncalcareous black phyllite. Core much broken with some fault gouge.
13. 113.5 - 114.9 Coarse grained carbonate (fizzes only when powdered) with 40 - 60% coarsely recrystallized pyrite.
14. 114.9 - 116.7 Noncalcareous, dark grey argillaceous conglomerate. Very elongate clasts in a grey carbonaceous, phyllite matrix. Pyrite as recrystallized grains up to 3 mm across. Brownish carbonate abundant as veins (fizzes only when powdered). Minor black, noncalcareous phyllite interbanded with conglomerate.
Structure: S_1 50° 115.9 m
15. 116.7 - 117.8 Medium grey, noncalcareous phyllite with numerous dark grey sandstone interbands. Pyrite as recrystallized grains scattered throughout. Minor quartz + carbonate veins. Pyrite locally occurs as fine-grained in matrix to form diffuse pyrite-rich bands.
Structure: S_1/S_0 58° 117.3 m
16. 117.8 - 125.6 Coarse dark grey grit to fine conglomerate. Noncalcareous. Clasts range up to 15 mm although most are ~2 mm. Clasts are subrounded. Pyrite-rich felsic material as clasts (fine-grained pyrite (70%) with fine-light coloured matrix). Pyrite occurs as larger clasts. Most clasts are cream tan - may be carbonate replacing feldspars. Minor grey shale clasts. Interval from 123.0 - 124.7 consists of fault gouge.
Structure: S_1 55° 120.2 m
 S_1 55° 122.8 m

17. 125.6 - 127.8 Pale olive green to grey-green tuff and lapilli tuff. Clasts/fragments locally up to 5 - 10 mm although most are about 1 - 2 mm. Minor interbands of dark grey to black grit (chert granule ?). Extremely fine-grained pyrite disseminated throughout. Minor quartz-carbonate veins.
- Structure: S_1 62° 127.2 m
18. 127.8 - 128.7 Noncalcareous dark grey conglomerate. Clasts are subrounded to subangular. Clast size ranges from 1 mm up to 35 mm. Clasts dominantly dark and light grey shale, aggregates of fine-grained pyrite, pyritic felsic volcanics. Minor quartz veins.
19. 128.7 - 141.8 Pale olive grey-green felsic tuff (metavolcanic ?). Both upper and lower margins are lapilli tuffs (visible clasts) and grade into more massive pale green phyllite. Minor quartz + carbonate veins. Pyrite occurs locally as fine-grained stringers and laminae. Also have diffuse zones with greater pyrite content. Noncalcareous. Locally looks like may be slightly broken with pyrite-chlorite forming matrix.
20. 141.8 - 149.4 Noncalcareous dark grey grit to fine-conglomerate. Elongate clasts in a carbonaceous grey matrix. Contains thin black to dark grey phyllite interbands. Clasts mainly light coloured. Also includes pyritic clasts (pyrite is very fine-grained).
- Structure: S_1/S_0 60° 141.8 m
 S_1 70° 145.1 m
 S_1/S_0 70° 148.8 m
- 149.4 END OF HOLE