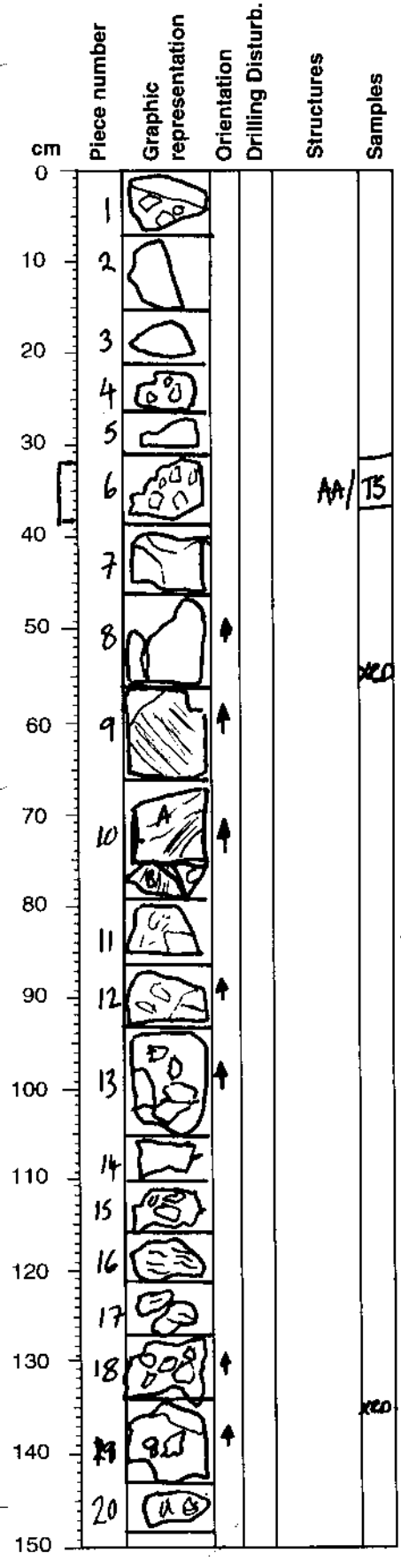
SULFIDE VISUAL CORE DESCRIPTION WORKSHEET

169- 1035H-2R-1 Observer: PET/DMC/TEQ.

SITE/HOLE/CORE/SECTION

BARREL SHEET SUMMARY:

SULFIDE BRECCIA: sulfide clasts supported in sulfide matrix (clast-supported)



* magnetite-hematite rich. * new mappable lithological unit!

Complex array of hydrothermal + clastic textures.

NB: Piece (2) Mineralised + silicified clast of altered mudstone with a sulfidic rim.

Pieces 1, 3-20:

Clasts: mm → cm's (10's of cm) in size
irregular, angular (a few are subrounded)

internal texture: some are layered
some plumose or massive

matrix: fine grained py-mt-hm-sil-cb. Pyrite is the most abundant matrix material in the uppermost 65cm of the section and hematite appears to become more abundant down core.

overall:

Pyrite (55%), Magnetite (20%), hematite (15%), milky white dolomite (5%), euhedral clear interstitial trigonal uniaxial -ve, highly birefringent ANKERITE (5%)

Possible sphalerite but hard to tell in amongst so much magnetite + hematite.

Summary + Comments:

Hydrothermally cemented chimney/mound talus fragments.
Progressive oxidation of Fe sulfides → Fe oxides.
Mg/Fe carbonates are interstitial to the sulfides + are ∴ probably paragenetically later + related to seawater influenced warm T° oxidation due to circulating hydrothermal-seawater mixed fluids.