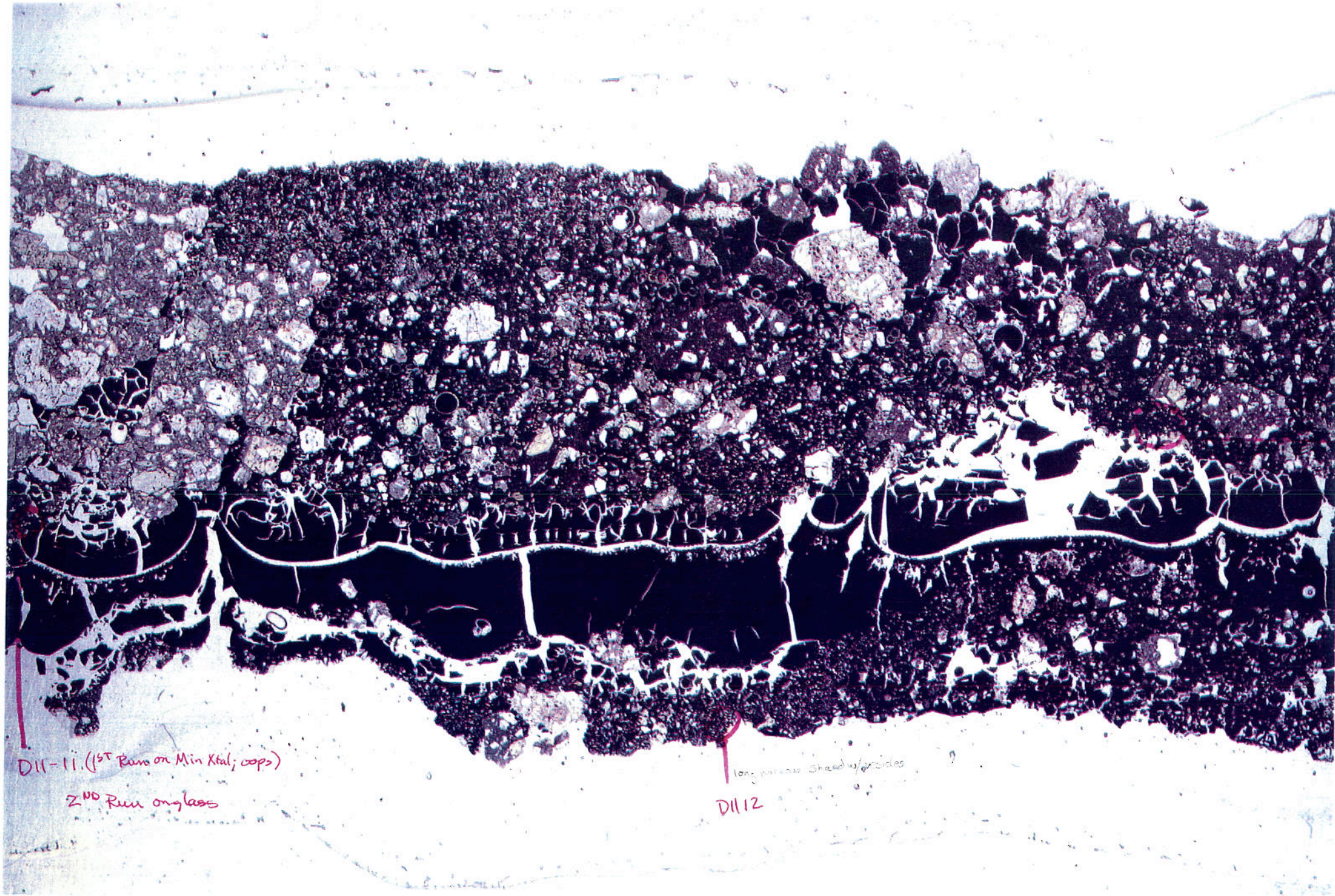
D11-11. (1ST Run on Min Xtal; oops)
2ND Run on glass
D1112

Petrographic Descriptions

Cruise ID TT192

Sample # D11-1

Stratabound oxide Layer

Stratabound oxide-replaced Sandstone

Stratabound oxide-cemented Sandstone ✓

Fe-Mn Crust

Mn Textures:

Dense
- Massive
- Laminated
  - Planar
  - Wavey

Colloform
- Columnar
- Laminated
- Aggregate Radial

Stockwork

Crystal Form: Radial-fibrous Spherulitic Aligned Tabular Euhedral Void Fill

Several Mn morphologies: Dense massive Dense laminated, planar & wavy, Radial Colloform
Much of the Stratabound Mn in this section is peeled off, probably during preparation of section.
Smooth dense laminae progresses into radial fibrous or wavy laminae, into wavy laminar radial
radial fibrous & wavy laminae are textured. The Colloform layer just above the dense featureless stratabound
Mn has hollow layers @ that are lined by xtalites not plucked out or worn away

Grain Supported

Cement Supported

Fracture Orientation

Fracture Fill

Porosity

Alteration and replacement of grains

Photo(s) Taken of

SEM:

Microprobe

Grain Counts

	Unaltered	Altered
90	Volcanic Rock Fragments	
11	Volcanic Glass	
	Mineral Grains	
2	Pyroxene	
	Olivine	
10	Plagioclase	
	K-spar	
	Amphibole	
	Quartz	
	Others	
10	Microfossils Foram	
	Others	
2	Matrix	
6	Pore Space	
69	Mn Cement	
	Other Cements	

Transmitted light Notes:

V.R.F, mineral grains and forams/roots, all fresh with not much alteration for this kind of stuff

Poorly sorted, angular in sub rounded One very large pebble volcanic rock fragment

Forams, well preserved all grains very fresh, clastic calcareous fragments (not forams)

bimodal size distribution (by observation not measurement) coarse VRF, & Fine mineral grains and glass fragments

green pleochroic mineral (probably an amphibole?)

Photo of a strange foram(?)