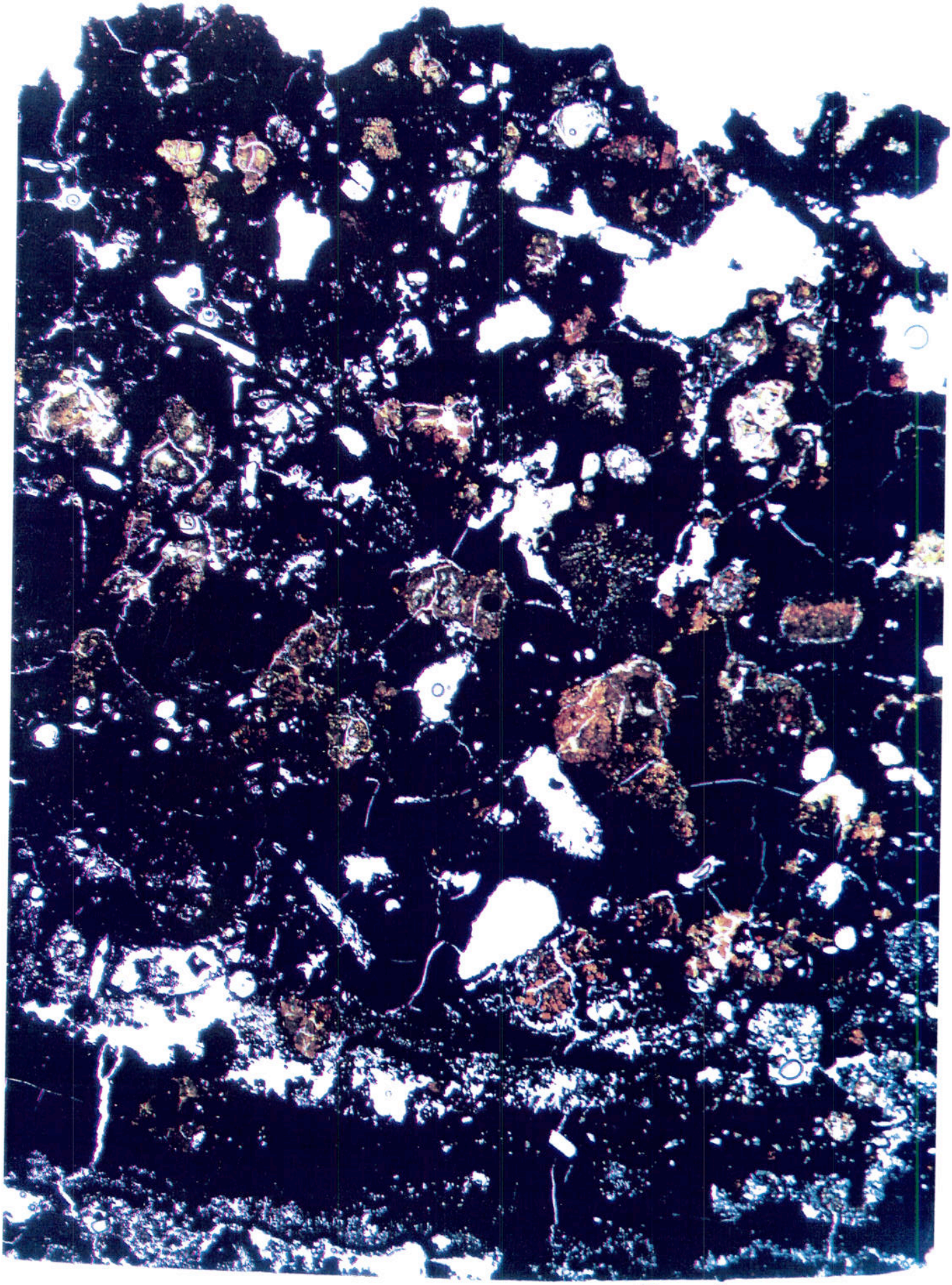
D52-5



Petrographic Descriptions

Cruise ID TT192

Sample # D52-5

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

Grain Supported

Cement Supported in plane light appears cemented supported; is this because grains are replaced

Fracture Orientation

Fracture Fill

Porosity

Alteration and replacement of grains

Photo(s) Taken of

SEM:

Microprobe

Grain Counts

	Unaltered	Altered
Volcanic Rock Fragments		
Volcanic Glass		
Mineral Grains		
Pyroxene		
Olivine		
Plagioclase		
K-spar		
Amphibole		
Quartz		
Others		
Microfossils		
Others		
Matrix		
Pore Space		
Mn Cement		
Other Cements		

Mn possibly detrital & recemented

plane transmitted light Notes

grains are either altered beyond recognition or fresh.. Altered grains a a green-yellowish green mineral w/ very small crystallites, and appears to have dessicated when dried (ie it has pulled away from sides of cement and shows dessication cracks) There are outlines of radiolarian forams and what I think are agglutanating forams, also a series of holes in Mn which appear biogenic (?) ie, dissolved forams

Fresh Glass w/ plag laths enclosed, fresh grains large and small size (bimodal?) are angular, to subangular

porosity made be misleading because of grains plucked out during thin sectioning

Second Slide has a sandy layer w/ fresh glass clasts & mineral grains

altered grains [illegible]