D8-5
check diffractogram
is the pyrite actually
hematite

Petrographic Descriptions

Cruise ID TT192

Sample # D8-5

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

[illegible] Both of these [illegible] colloform features that are isotropic in Polarized [illegible] these cores are dense. Under the 200 [illegible] (2000X) objective [illegible] lines visible. These dense colloform cores are surrounded by radial fibrous (usually) to [illegible] Mn. [illegible] the upper thin layer [illegible] are olive green to green brown in crossed polar reflected light. Both layers have the colloform features [illegible] from either side. Some pore space still exists [illegible] the thicker layer. This seems to support [illegible] into a void space refluid filled space.

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

The dense Mn columnar features are areas where grains are replaced by Mn. [illegible] Finer grained? or more pore space? There is layering or [illegible] areas also. The [illegible] areas have a [illegible] at appear to be [illegible].

Grain Supported

Cement Supported

Fracture Orientation

Fracture Fill

Porosity

Alteration and replacement of grains

Photo(s) Taken of

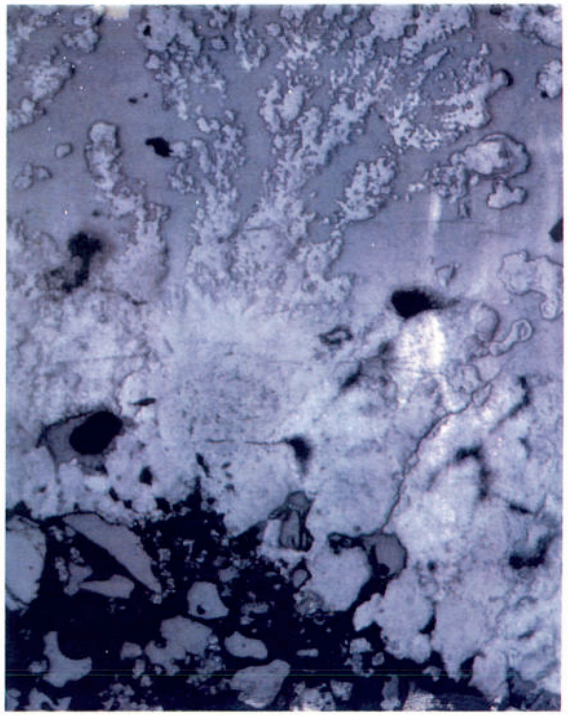
SEM: Check [illegible] cement [illegible] or pore space [illegible] cement

Microprobe

Grain Counts

	Unaltered	Altered
35	Volcanic Rock Fragments	
8	Volcanic Glass	
	Mineral Grains	
5	Pyroxene	
	Olivine	
17	Plagioclase	
	K-spar	
	Amphibole	
1	Quartz	
	Others	
	Microfossils	
	Others	
11	Matrix	
11	Pore Space	
92	Mn Cement	
	Other Cements	

Transmitted light

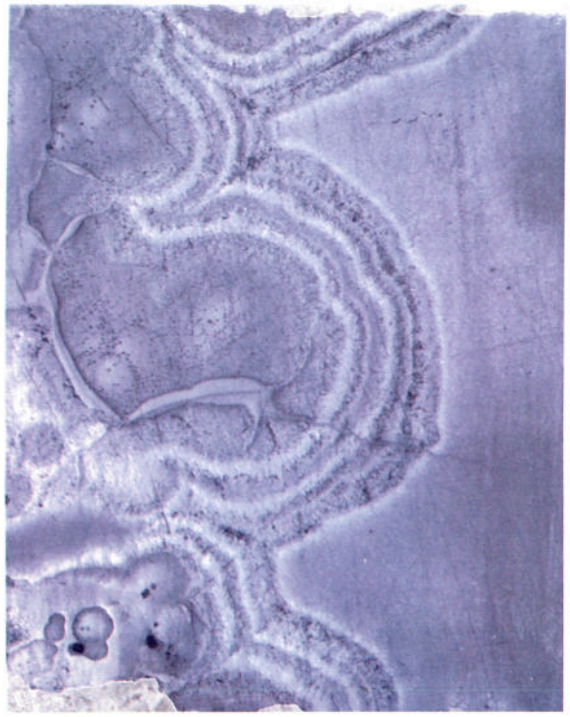


D8-5 10 x 10 , [illegible]

Dendrite dendritic

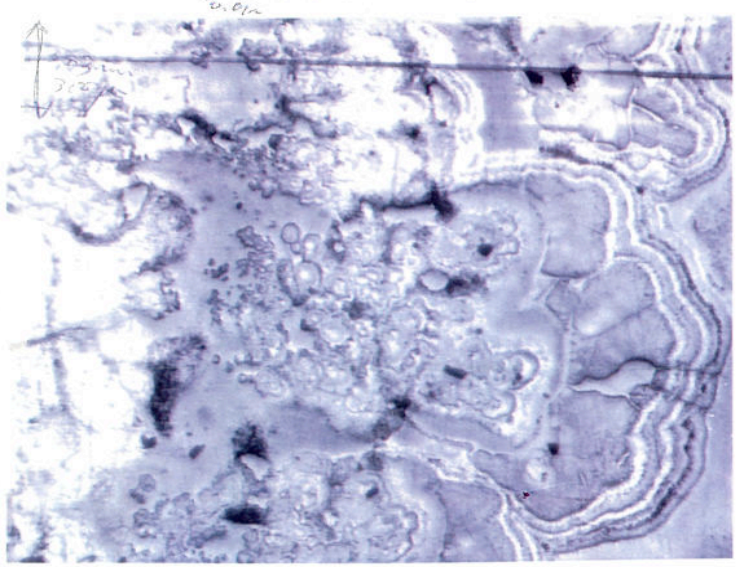
D8-5 20 x 10

bended radial Fibrous

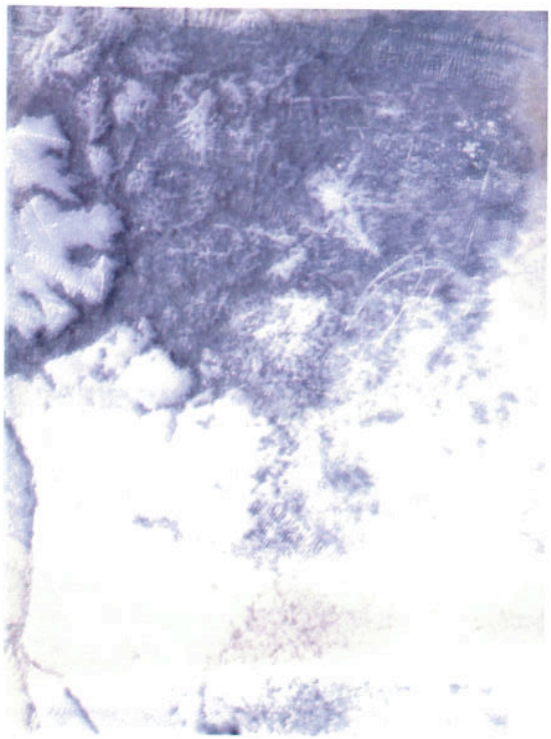


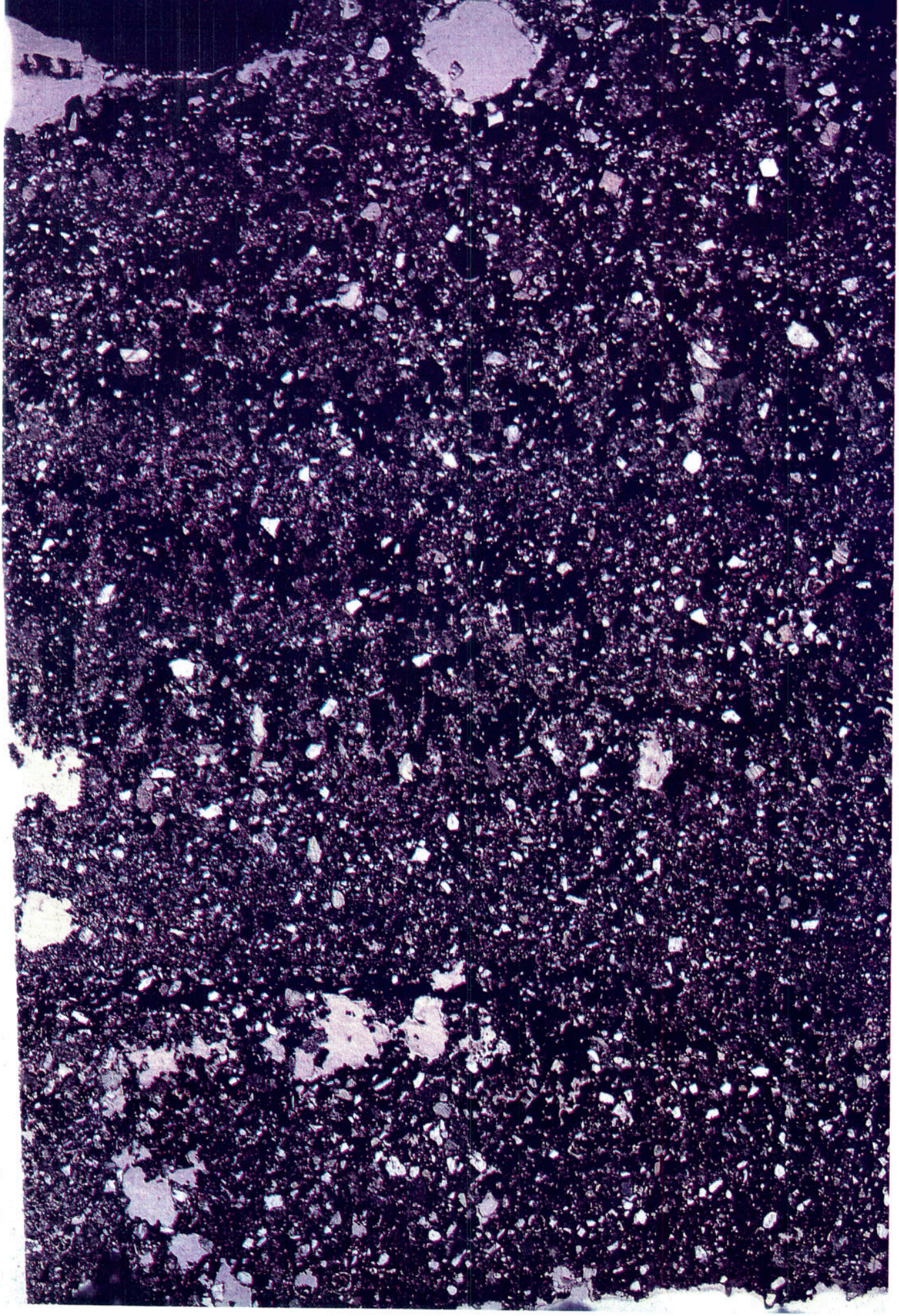
D8-5 20 x 10

10 x 10 , X/35 , SP. D8-5



Cellular (5)
[illegible]



D8-5 100x10 Plan Reflected Light

Hematite: Dark gray being replaced by
Mn-oxide dense light gray
This photo taken with a detrital grain