D20-1

Petrographic Descriptions

Cruise ID TT192

Sample # D20-1

Stratabound oxide Layer ✓

Stratabound oxide-replaced Sandstone

Stratabound oxide-cemented Sandstone

Fe-Mn Crust

Mn Textures:

Dense	Massive dense layers, Radial colloform layers, bubble columns or pearl strands,
Massive	develop into columns - rather chaotic areas
Laminated	Fibrous porous areas
Planar	Microcrystalline dense areas
Wavey	
Colloform	
Columnar	
Laminated	
Aggregate Radial	
Stockwork	

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

Grain Supported

Cement Supported

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		

Transmitted light:

large Vesicular porphyritic glass, pebble; have elongated vesicles with pleochroic amphiboles (hornblende?)