DREDGE 5

USGS DREDGE LOG

SHIP/LEG F10-89-CP

STATION # 9

DREDGE # 5

DEPTH INTERVAL(m) 1870-1900

DEPTH(m)corrected 1900-2000 m

DATE JD 260 LOCAL 261

TIME GMT 15:32:37 LOCAL

LATITUDE 13°00.18'N TO 13°00.16'N

LONGITUDE 162°44.04'E TO 162°43.91'E

TOTAL WEIGHT: DREDGE 1.5 kg CRUST 1.3 kg

PERCENTAGE OF ROCK COVERED BY CRUST 100

PERCENT BROKEN FROM: OUTCROP 100 TALUS 0

THICKNESS OF MN CRUST: MAXIMUM 3 cm MINIMUM .5 cm AVERAGE 2 cm

DOMINANT SURFACE TEXTURE Granular and porous - semi botryoidal

SUBSTRATE LITHOLOGY Altered Breccia - Volcaniclastic

NODULES PRESENT No

REMARKS: as close to an empty dredge as we can get without really being empty

Scraped the tops off, no crusts with all layers present

1 x .5 x .5 (smallest)

Cruise Id: F10-89-CP Size: 9x8x2.5 (largest) (cm) Location: C Seamount

Sample Id: D5-1 Weight: 1.5 (kg) Depth: 1870-1900 (m)

Mn Crust Description

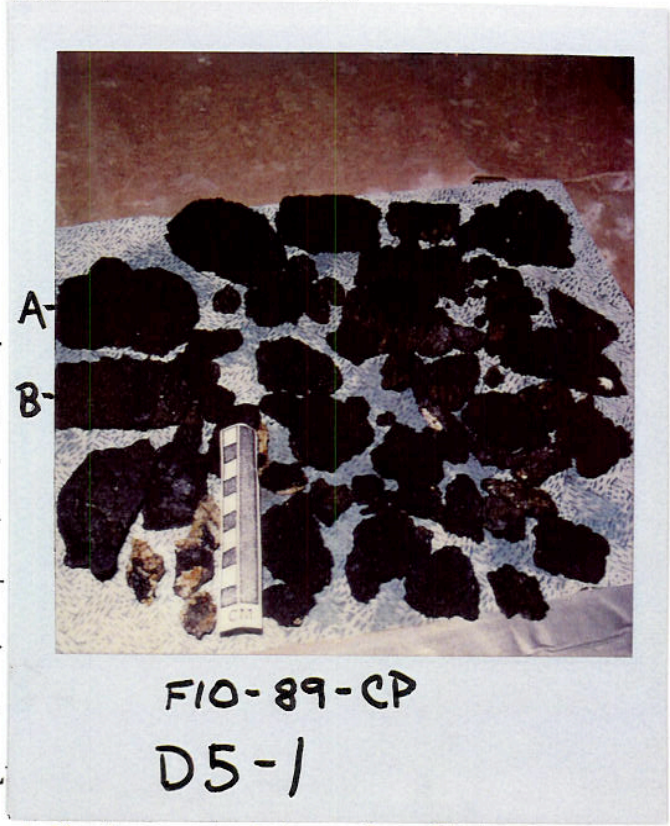
Surface Texture: Porous granular subbotryoidal

Mn Crust Thickness (mm):

Min: <5 Max: 25 Ave: 10

Layers (Outer to Inner)(mm):

	Min	Max	Ave	Texture & Color
D5-1-1 1.	2	5	3	Black, granular and porous layer, (cauliflower outer texture)
D5-1-1 2.	10	19	14	Porous Fe-Stained granular columnar
D5-1-2 3.	1	3	1.5	Dense inner layer
4.				
5.				
6.				



Comments and XRD Mineralogy:

Crusts w/ porous columnar layer and outer porous granular layer (like dredge 4) or chips of dense inner layer.

Sample for Chem. 1 has Outer porous layer and middle columnar layer, some tan clay between columns

Sample for Chem 2 - probably all 3 layers, but it is probably a side piece; columnar layer is not well developed

Substrate Description

Rock Type: Altered Breccia - probably volcaniclastic

Description:

Biology ?: one small <1 cm encrusting siliceous sponge.

ANAL

Subsample Number	Analysis	LayerThickness
D5-1-1	CC - Bulk	120 gm
D5-1-2	CC - Bulk	80 gm

35 mm of textures

Described By: JS Subsampled By: JS