DREDGE 8

USGS DREDGE LOG

SHIP/LEG FARNELLA

STATION # 11

DREDGE # D8

DATE JD 261 LOCAL 18 September 1989

TIME GMT 0147 LOCAL

DEPTH INTERVAL(m) 1550 - 1180

LATITUDE 13°03.9' TO 13°04.6'

DEPTH(m)corrected 1550 - 1300

LONGITUDE 162°46.0' TO 162°45.6

TOTAL WEIGHT: DREDGE 2.5 CRUST 2.5

PERCENTAGE OF ROCK COVERED BY CRUST 100

PERCENT BROKEN FROM: OUTCROP 100 TALUS 0

THICKNESS OF MN CRUST: MAXIMUM 40 MINIMUM 10 AVERAGE 30

DOMINANT SURFACE TEXTURE Botryoidal

SUBSTRATE LITHOLOGY NONE

NODULES PRESENT 0

REMARKS: Hole in bottom of bag, probably lost much of the Crust

Several Complete Crusts

BIOLOGY: SILICEOUS SPONGE, SOFT CORAL (FROND-LIKE)

SAMPLE DESCRIPTION

Cruise Id: F10-89-CP Size: 16 x 17 x 3 max < 2 x 2 x 2 min (cm) Location: Seamount C

Sample Id: D8-1 Weight: 2.5 (kg) Depth: 1550-1300 (m)

Mn Crust Description

Surface Texture: Botryoidal, prominent

Mn Crust Thickness (mm):
Min: 15 Max: 40 Ave: ~28

Layers (Outer to Inner)(mm):

	Min	Max	Ave	Texture & Color
1.	3	11	6	porous massive
2.	5	10	8	V. porous brown
3.	11	22	15	massive dense black
4.				
5.				
6.				

Comments and XRD Mineralogy:
Some blebs of phosphorite in massive lower crust

There was a lot of clay trapped in vugs and pores of Layer 2

Substrate Description

Rock Type: Traces only of breccia or hyaloclastite

Description: yellowish-brown

Biology ?: Encrusting forams

ANALY

Subsample Number Analysis LayerThickness

D8-1-1A : CC (BULK), Pt, AU, REE XRD : 35mm (CC = 58.3 REE = 4.0

D8-1-1B : CC, REE, XRD : 7 mm CC = 22.8g REE 4.0g

D8-1-1C CC, REE, XRD (CC = 15.5g REE = 4.0g) 12 mm

D8-1-1D: CC, ~~REE~~ Pt, Au, REE, XRD : 16mm (CC = 30.2 REE = 4.0

D8-1-2,3,4: Surface CC 0-≤5mm (5.2g)

largest piece to HOKDI

Described By: HEIN

Subsampled By: Renee & Hein