DREDGE 80
Nishino
-jima

SAMPLE ID	Mn CHEM	Pt & Au	REE	Si Chem	P.Sect.	35mm Pho	Archive	Paleo				
D80-1-A				✓								
D80-2A				✓								
D81												

Mariana Islands

Cruise I.D: TT-192

Sample Description

Sample I.D: Sta: D80-1

Location: Nishino-Jima
Depth - 1600 - 1450 m

Size: 9x7.5x6 cm Weight: 512.9 gm

Mn crust thickness:

Total: min: <1 mm max: 1 mm ave: 1 mm

Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture:

Internal structure:

layered:
laminated:
massive:
porous:
dendritic:
other:

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: Basalt w/ small phenocrysts

Description: Basalt cobble with a patina of Mn crust, encrusting a vetter and one side of cobble has mud (yellow ochre colored) coated. Mud coating up to .5cm thick. After taking sample it is apparent that mud was matrix of Conglomerate. The cobble was broken out of. Other little cobbles were in the mud and mud in places had its own patina of Mn.

Mineralogy (XRD):

D80-1

Mariana Is TT192

Analyses and subsamples:

analysis:	analyst:
Silicate Chem D80-1-A	M. MORRISON 10-13-87

Mariana Islands

Cruise I.D: TT-192

Sample Description

Sample I.D: Sta: D80-2

Location: Nishino-jima

Depth 1600-1450m

Size: 22x16x12cm Weight: 5 Kgm

Mn crust thickness: crust patina only in lows on outside of rock

Total: min: max: ave:

Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture:

Internal structure:

layered:
laminated:
massive:
porous:
dendritic:
other:

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: Basalt porphyritic

Description: large basalt boulder, rim of alteration all around. Outer surface has Mn only in lows. Outside also coated with rust colored material. Alteration product perhaps? Bleached yellow mud along broken surface

One end has "mud" that has altered hydrothermally the color of this stuff reminds me of yellowstone river valley. yellows & reds. Sampled as much as I could ~1gm.

Mineralogy (XRD):

D80-2

Mariana Is TT192

Analyses and subsamples:

analysis:	analyst:
Silicate Chem hydrothermal mud D-80-2-A	M Morris 10-13-87

SAMPLE DESCRIPTION

Id: TT192 Size: _____ Location: W. Nishino-Jima

Sample Id: D81 Weight: _____ Depth: _____

Mn Crust Description

Surface Texture: _____

Mn Crust Thickness:

Min: _____ Max: _____ Ave: _____

Layers (Outer to Inner):

	Min	Max	Ave	Texture
1.				
2.				
3.				
4.				
5.				
6.				

D81

C[illegible]nts and XRD Mineralogy:

ANALYSES

Substrate Description

Rock Type: Siltstone

Description:

Bioturbated, bored siltstone

Upper surface has Red iron staining and some [illegible] [illegible] staining

Described By: JSM Subsampled By: