DREDGE 47
Ko-Hiyoshi
Smt

SAMPLE ID	Mn CHEM	Pt & Au	REE	Si Chem	P.Sect.	35mm Pho	Archive	Paleo				
D47-1												
D47-2				Large								

Mariana Islands
Cruise I.D: TT-192

Sample Description

Sample I.D: Sta: D47-1

Location: N. Hiyoshi Seamount
Depth 2040-1725m

Size: 6x4x2cm **Weight:** 60g
3 small pieces

Mn crust thickness: * 2 thin hydrothermal layers into the Mn-sst

Total: min: ____ max: ____ ave: 2 mm

Inner crust: min: ____ max: ____ ave: ____

Outer crust: min: ____ max: ____ ave: ____

Surface texture: Granular to botryoidal; porous

Internal structure: hydrothermal

- layered:
- laminated:
- massive: ✓ dense
- porous:
- dendritic:
- other:

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: Mn-sst & Mn-breccia

Description: 2 pieces are a gray-black manganiferous sandstone w/ some shiny hydrothermal Mn in thin layers. The other piece is a combination of Mn-sst and Mn-cemented breccia. It also has patches of shiny hydrothermal Mn.

Mineralogy (XRD):

Analyses and subsamples:

analysis:	analyst:
XRD:	
* D47-1-II: hydrothermal Mn-oxide	P. Fleishman

Mariana Islands

Cruise I.D: TT-192

Sample Description

Sample I.D: Sta: D 47-2

Location: N. Hiyoshi Seamount

Depth: 2070-1725m

Size: 25x25x60cm Weight: 2.5Kg

Mn crust thickness:

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):

ssociated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: Magnifer: Sandstone/Breccia

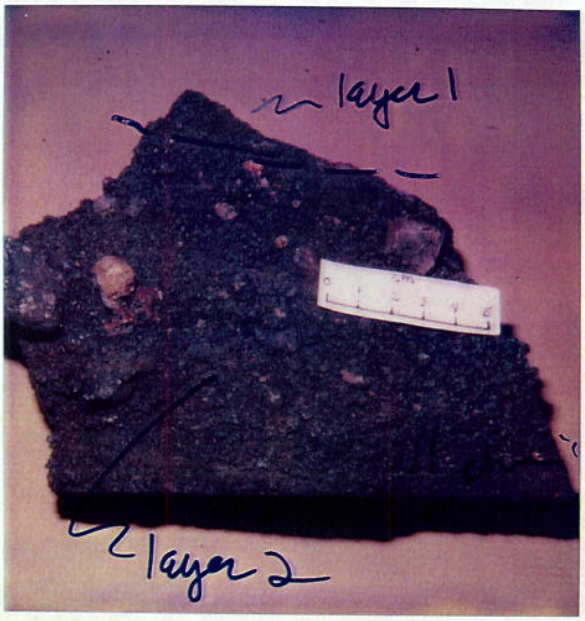
Description: Gray-black stratified volcaniclastic basalt debris flow all coated w/patina of Mn. Four distinct bedding planes - 2 sandstone & 2 pebble conglomerate

Mineralogy (XRD):

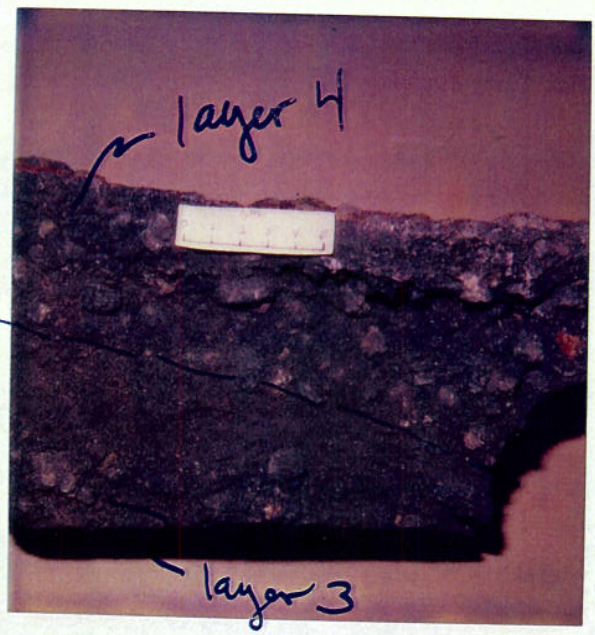
MARIANA ISLAND
D47-2

Analyses and subsamples:

analysis:	analyst:
XRD:	
D47-2-I bulk Mn-sst layer 1	C. Fleishman
-II " congl. layer 2	
-III " mn-sst " 3	
-IV " congl. " 4	
Chemistry: silicates	
D47-2-A: layer 1 same as above	
-B: layer 2	
-C: " 3	
-D: " 4	



MARIANA ISLANDS
D47-2 top view
smaller ½



MARIANA ISLANDS
D47-2 top view

Mariana Islands
Cruise I.D: TT-192

Sample Description

Sample I.D: Sta: D Location:

Size: Weight:

Mn crust thickness:

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:

Description:

Mineralogy (XRD):

Analyses and subsamples:

analysis:	analyst: