DREDGE 54
Rodriguez Seamount

Rodrigues, 900 - 820 m

SAMPLE ID	*Mn CHEM	Pt & Au*	REE *	Si Chem*	P.Sect.	35mm Pho	Archive	Paleo	XRD				
D4-1	Bulk												
D4-2													
D4-3	Bulk								+				
D4-4				Bauer	TS								

* All chemistry samples have XRD mineralogy done also.

SAMPLE DESCRIPTION

Cruise Id: F7-87-SC Size: 18cm × 17cm × 6.5cm Location: Rodriguez Seamount

Sample Id: D4-1 Weight: ~2Kg Depth: 900-820 m

Mn Crust Description

Surface Texture: Smooth, lizard skin botryoids in places

Mn Crust Thickness:

Min: 1 mm Max: 4 mm Ave: 3 mm

Layers (Outer to Inner):

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

D4-1

F7-87-SC

Comments and XRD Mineralogy:

ANALYSI

Subsample & Type	Analysis	Weight
D4-1 A Bulk Crust	Mn CC, XRD	3 mm

Substrate Description

Rock Type: Vesicular Basalt

Description:

Gray aphanitic basalt w/ common vesicles 1-4 mm diam. Occasional vesicles lined w/clear cristobalite (?) others filled w/hard to soft yellow sediment

rotten, no sample

Described By: LBen Subsampled By: LBen

SAMPLE DESCRIPTION

Cruise Id: F7-87-SC Size: 36×33×15 cm Location: Rodriguez Seamount

Sample Id: D4-2 Weight: ~10kg Depth: 900-820 m

Mn Crust Description

Surface Texture: smooth

Mn Crust Thickness:

Min: 1mm Max: 3mm Ave: 3mm

Layers (Outer to Inner): possible 2 layers, not definite

	Min	Max	Ave	Texture
1.	0mm	2mm	2mm	
2.	1mm	2mm	1mm	darker colored
3.				
4.				
5.				
6.				

D4-2

Comments and XRD Mineralogy:

Growth laminae are discernable, may be 2 discrete layers

ANALYSES

Subsample & Type	Analysis	Weight

Substrate Description

Rock Type: Vesicular basalt

Description:

Dark blue-grey fine grained with vesicles 0.5-4mm. Tiny plag laths (?) give glinty look. Rare cpx (brown-orange, rectangular) phenos to 3×1mm.

Small encrusting organisms grow on upper & lower sample surfaces.

Described By: LB

Subsampled By: basalt good for bulk chem [illegible]

SAMPLE DESCRIPTION

Cruise Id: F7-87-SC Size: 50 x 40 x 12 cm Location: Rodriquez Seamount

Sample Id: D4-3 Weight: 24 kg Depth: 900-820 m

Mn Crust Description

Surface Texture: smooth w/tiny lizard skin botryoide in lums and on bottom surface

Mn Crust Thickness:

Min: <1mm Max: 4mm Ave: 1-2mm

Layers (Outer to Inner):

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

D4-3

Comments and XRD Mineralogy:

base of attached sponge. abundant encrusting foram. bryozoans

Common encrusting biology on upper surface

Substrate Description

Rock Type: Volcanic Breccia

Description:

Blocky blue-grey vesicular basalt clasts (10x7 cm to 0.75 cm²) and smaller altered rounded clasts (<0.5 cm²) lie in an orange-yellow matrix of phosphorite (?) and altered sand-sized grains

ANALYSES

Subsample & Type	Analysis	Weight
D4-3 A bulk crust	CC (4mm)	
MnCC sample contaminated by surface biology; NO substrate contamination		
D4-3 B matrix	XRD	

Described By: LB Subsampled By: LB

SAMPLE DESCRIPTION

Cruise Id: F7-87-SC Size: 30×27×19 cm Location: Rodriguez Seamount

Sample Id: D4-4 Weight: 13 kg Depth: 900-820 m

Mn Crust Description

Surface Texture: Smooth on highs; lizard skin elsewhere

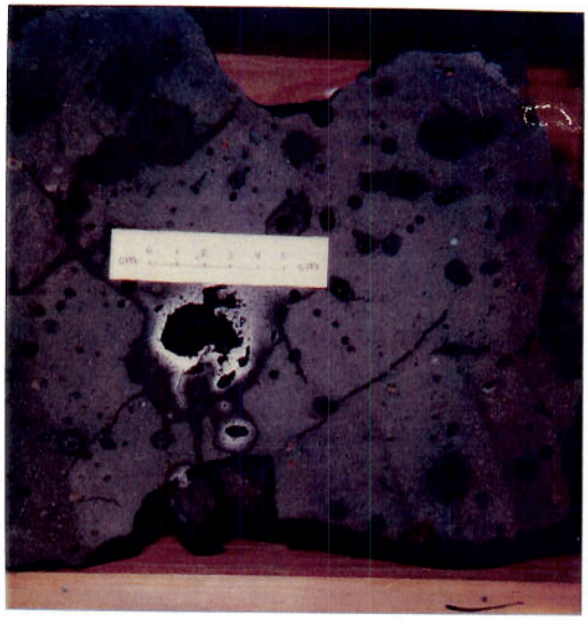
discontinuous

Mn Crust Thickness:

Min: Patina Max: 4 Ave: 1

Layers (Outer to Inner): massive

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



Comments and XRD Mineralogy:

ANALYSES

Subsample & Type	Analysis	Weight
D4-4	O.C.	Basalt
D4-4	Thin Section	
big piece taken for [illegible]		

Substrate Description

Rock Type: Altered Basalt

Description:

Amygdaloidal to vesicular moderately altered

Described By: KB, [illegible] Subsampled By: