DREDGE
14

Little Joe Seamount 2530 - 2175 m

SAMPLE ID	*Mn CHEM	Pt & Au*	REE *	Si Chem*	P.Sect.	35mm Pho	Archive	Paleo	XRD				
D14-1	Bulk top Bulk bottom				TS								
D14-2	Layer			Phosphorite	TS			X					
D14-3	Bulk			Phosphorite	TS								
D14-4	Bulk	Bulk	Bulk										

* All chemistry samples have XRD mineralogy done also.

SAMPLE DESCRIPTION

Cruise Id: F7-87-SC Size: 42 x 34 x 12 cm Location: [illegible]

Sample Id: D14-1 Weight: 18 kg Depth: 2175-2530 m

Mn Crust Description

Surface Texture: [illegible]

Mn Crust Thickness:

Min: 10 Max: 65 Ave: 40 mm

Layers (Outer to Inner):

	Min	Max	Ave	Texture
1.	6	10	7 mm	black, laminated
2.	10	55	30	black, massive
3.				
4.				
5.				
6.				

D14-1

Comments and XRD Mineralogy:

ANALYSES

Subsample & Type	Analysis	Weight
D14-1A	CC	top Mn crust (upper 40 mm)
[illegible]	t5	[illegible]
D14-1C	CC	[illegible] crust (15 mm)
D14-1d	glass	for [illegible]

Samples taken near the end of the rock at center crust is min 15 mm max 40 mm average 22 mm

Substrate Description

Rock Type: Basalt

Description:

[illegible]

big piece of basalt taken for K Ar dating + bulk chem. (A.D.)

blue grey porphyritic basalt
w/ common phenocrysts
up to 1mm of __?__
pyroxene. Drill margin 5-6mm
thick lines one side of clast.
Dark colored __?__ margin is
glassy for 1mm on outer edge.
big piece of basalt taken for K
Ar dating + bulk chem. (A.D.)

Described By: LB Subsampled By: LB

SAMPLE DESCRIPTION

Cruise Id: F7-87-SC Size: [illegible] Location: Little Joe

Sample Id: D14-2 Weight: 2kg Depth: 2175-2530

Mn Crust Description

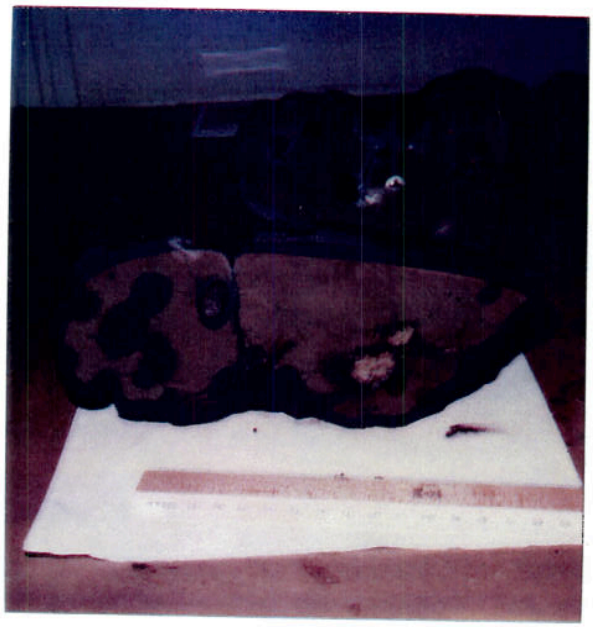
Surface Texture: [illegible]

Mn Crust Thickness:

Min: 5 Max: 15 Ave: 10 mm

Layers (Outer to Inner):

	Min	Max	Ave	Texture
1.	[illegible]	9	5mm	[illegible]
2.	5	8	6	[illegible] to granular
3.				
4.				
5.				
6.				



D14-2

Comments and XRD Mineralogy:

[illegible]

Qtz 51%; Plag. 29%; Phillipsite 6%; Dolomite 12%; Smectite 2%

Substrate Description

Rock Type: Dolomitic Mudstone ~~Phosphorite~~ mudstone ~~or [illegible]~~ ~~or calcite~~ dolomite mudstone

Description:

[illegible]

ANALYSE

Subsample & Type	Analysis	Weight
D14-2 A	OC	from phosphate Mn. (probably contaminated by fracture filling)
B	ts	" " [illegible]
(6 mm) C	CC	* bulk upper crust [illegible]
(5 mm) D	CC	outer lower crust
(6 mm) E	CC	* inner lower crust
F	CC	enclosed burrow filling Mn
G	Paleo	mud from enclosed [illegible]

did not sample this b/c when rock broke open, it became obvious that all burrows reached to the outside & were infilled by the inner Mn layer of 14D-2C, 2[illegible]

* [illegible]

Described By: LB Subsampled By: LB

D 14-2

SAMPLE DESCRIPTION

Cruise Id: F7-87-SC Size: [illegible] Location: Little Joe

Sample Id: D14-3 Weight: [illegible] Depth: 2475 - 2530

Mn Crust Description

Surface Texture: [illegible]

Mn Crust Thickness:

Min: [illegible] Max: [illegible] Ave: [illegible] mm

Layers (Outer to Inner):

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

D14-3

Comments and XRD Mineralogy:

[illegible]

ANALYSE

Subsample & Type	Analysis	Weight
D14-3 A	[illegible]	
A	[illegible]	[illegible] breccia
B	[illegible]	[illegible] (9 m
35mm Slide	4/90	G. Smith

Substrate Description

Rock Type: Pavement Breccia

Description: [illegible]

Described By: LP Subsampled By: GSM

2 Cut [illegible]
1 " " fragments during cutting, which was used for [illegible]

SAMPLE DESCRIPTION

Cruise Id: F7-87-SC Size: 9.5 x 8 x 4 cm Location: Little Joseph

Sample Id: D14-4 Weight: ~600 gms Depth: 2175-2530

Mn Crust Description

Surface Texture: smooth [illegible], granular

Mn Crust Thickness:
Min: 15 Max: 42 Ave: 40 mm

Layers (Outer to Inner):

	Min	Max	Ave	Texture
1.	9	17	11 mm	laminated brown
2.	6	20	30	submetallic, black massive w/occasional lams
3.				
4.				
5.				
6.				

D14-4

Comments and XRD Mineralogy:

ANALYSI

Subsample & Type	Analysis	Weight
D14-4 A	CC bulk	40 mm
A	REE bulk	
A	Pt, Au bulk	

Substrate Description

Rock Type: Basalt

Description:

Blue-gray basalt w/ common glassy brown cyl phenos up to 1mm across.

Described By: LB Subsampled By: JSM