DREDGE 27

Dredge Sample Summary Sheet

Sample ID	Bulk CC	Layer CC	Pt & Au	Ree	OC	DPTS/TS	XRD	35mm Photo	Paleo	Archive
D27-1A	✓		✓	✓			✓			
-1B		✓	✓	✓			✓			
-1C		✓	✓	✓			✓			
D27-4	✓						✓			
D27-5 A	✓	✓	✓	✓			✓			
-5B		✓	✓	✓			✓			
-5C		✓	✓	✓			✓			
-5D		✓	✓	✓			✓			
-5E		✓	✓	✓			✓			
-5F		✓	✓	✓			✓			

SAMPLE DESCRIPTION

W. Side of Vlinder Guyot

Cruise Id: Tunes 6 Size (cm): 10½ x 12.3 x 8.2 Location: ~~V3-91-NP~~

Sample Id: D27-1 Weight (kg): 1.3 Depth (m):

Mn Crust Description

Surface Texture: Smooth lizard skin

Granular on the sides

Mn Crust Thickness (mm):

Min: 53 Max: 70 Ave: 62

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1	9	15	12	Brownish Black dense, slightly porous
~~2~~				altered
2 ~~3~~	44	55	50	Black, porous
4				Top-Vugs, sediment filled
5				
6				micro layers some phosphorite veins

Tunes6

D27-1

Comments and XRD Mineralogy:

Subsamp

D27-1A CC, XRD, Pt, REE Bulk Crust

-1B CC, " " " layer 1

1C " " " " " 2

Photograph other side of crust + w it w/ 2 layers.

D27-1A 118.5g 0-62mm

-1B 52.4g 0-14mm

-1C 105.3g 14-51mm

Substrate Description

Rock Type: Basalt

Grey

Description: Moderately vesicular aphanitic basalt Phosphorite filling some vesicules & cracks minor zeolites? in some vesicles Some

Biology (?): phosphorite veins or some cracks

Described by: JW

Subsampled by: JW

D27-1 Tunes 6

SAMPLE DESCRIPTION

W. Side of Vlinder Guyot

Cruise Id: Tunes 6 Size (cm): Cut 13 x 9 x 4.7 Location: ~~V3-91-NP~~

Sample Id: D27-2 Weight (kg): 0.72 Depth (m):

Mn Crust Description

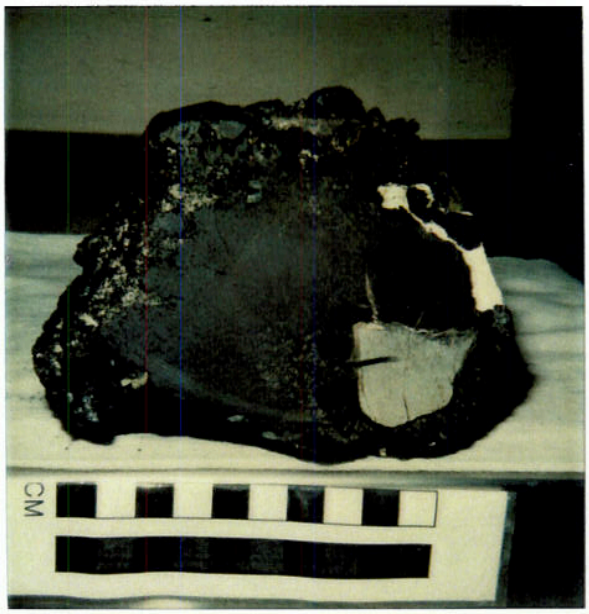
Surface Texture: Granular (Side Piece)

Mn Crust Thickness (mm):

Min: 30 Max: 65 Ave: 55

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1	3	10	8	Black + porous, phosphatic sediment filled vugs some alteration
~~2~~				
2 ~~3~~	27	55	47	Black, dense moderately porous some alteration near substrate
4				
5				
6				phosphorite filling pores + some phosphorite veins



D27-2 Tunes 6

Comments and XRD Mineralogy:

Subsam

Substrate Description

Rock Type: Basalt Breccia

Green

Description: Basalt Clasts with Phosphorite cement

Biology (?):

Described by: JW

Subsampled by:

W. Side of Winder Guyot

SAMPLE DESCRIPTION

Cruise Id: Tunes 6 Size (cm): 9½x4 x 4.7 Location: ~~V3-91-NB~~

Sample Id: D27-3 Weight (kg): 0.25 Depth (m):

Mn Crust Description

Surface Texture: Smooth, abraded

Mn Crust Thickness (mm):

Min: 16 Max: 25 Ave: 20

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1	5	10	7	Black dense some alteration slight porous rare Phosphorite clast
2	4	5	4	" " except minor phosphorite
3	4	5	5	Black dense, to porous Phosphatized sediment in vugs
4	3	5	4	Black, vuggy sediment in vugs
5				phosphatized
6				

TUNES 6
D27-3

Comments and XRD Mineralogy:

Subsamp

Substrate Description

Rock Type: Grey vesicular Basalt

Description: with alt phenocrysts phosphorite & zeolite filling vesicles

Biology (?):

Described by: JW

Subsampled by:

SAMPLE DESCRIPTION

W. Side of Vlinder Guyot

Cruise Id: TUNES 6 Size (cm): 10X4X4½ Location: ~~V2-91-CP~~

Sample Id: D27-4 Weight (kg): 0.25 Depth (m):

Mn Crust Description

Surface Texture: Smooth, abraded

Mn Crust Thickness (mm):

Min: 15 Max: 22 Ave: 18

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1	2	4	3	Black, Porous,
2				Some alteration through the whole crust
3	5	7	6	Black, Porous Sediment in pores
4				Partially phosphatized
5	8	11	9	Black, porous, Vuggy, Sediment
6				in vugs

D27-4

Comments and XRD Mineralogy:

Subsa

D27-4 CC, XRD Bulk Crust

45.9g 0-18mm

Substrate Description

Rock Type: Basalt

Grey

Description: Vesicular, aphanitic basalt w/ altered phenocrysts – amphiboles rare zeolite

Biology (?):

Described by: JW

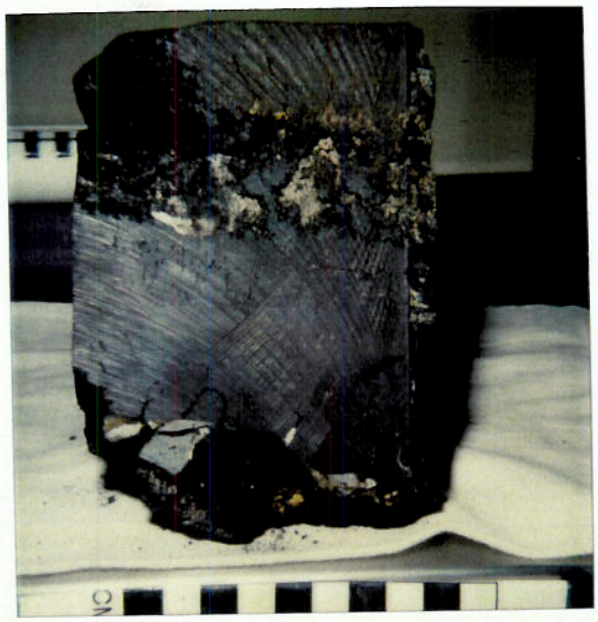
Subsampled by: JW

SAMPLE DESCRIPTION

W. Side of Vlinder Guyot

Cruise Id: Tunes 6 Size (cm): 13½x10x7½ Location: ~~V2-91=CP~~

Sample Id: D27-5 Weight (kg): 1.58 Depth (m):



D27-5

Mn Crust Description

Surface Texture: Smooth lizard skin

Mn Crust Thickness (mm):

Min: 95 Max: 122 Ave: 105

Outer to Inner Layers (mm)

		Min	Max	Ave	Texture & Color
Layer 1	1	5	7	6	Reddish Black alteration
	2	2	4	3	Black minor alteration
Layer 2	3	4	6	5	Reddish black alteration
	4	3	6	4	Black minor alteration
	5	2	4	3	Reddish black alteration
Layer 3	6	30	33	31	Black/Cream vuggy phosphorized sediment in vugs
Layer 4	7	25	31	30	Black, dense moderately porous, cracks, minor phosphorite infills and veins
Layer 5	8	25	31	23	Black dense moderately porous minor phosphorite veins

All Moderately dense

Comments and XRD Mineralogy:

Subsamp

0-114 D27-5 A 161.5g CC, XRD, PT, REE bulk crust

0-11mm 5B 29.8g " " " " layer 1

11-23mm 5C 26.2g " " " " 2

23-53mm 5D 61.5g " " " " 3

53-84mm 5E 46.4g " " " " 4

83-114 5F 40.6g " " " " 5

DPTS if Possible

not possible

Substrate Description

Rock Type: Sedimentary Breccia

Description: Poorly sorted mainly basalt clasts phosphorite & Mn oxide cement

Biology (?):

Described by: JW

Subsampled by: JW