Dredge 37

Dredge Sample Summary Sheet

Sample ID	Bulk CC	Layer CC	Pt & Au	Ree	OC	DPTS/TS	XRD	35mm Photo	Paleo	Archive
D37-1							✓			
D37-2	✓						✓			
D37-3						✓				
D37-4A	✓		✓	✓			✓			
-4B		✓	✓	✓			✓			
-4C		✓	✓	✓			✓			

SAMPLE DESCRIPTION

Cruise Id: Tunes 6 — Size (cm): cut 16.2 × 6.8 × 3.2 — Location: Golden Dragon ~~V3-91-NP~~ Seamount

Sample Id: D37-1 — Weight (kg): 0.57 — Depth (m):

Mn Crust Description

Surface Texture: Smooth

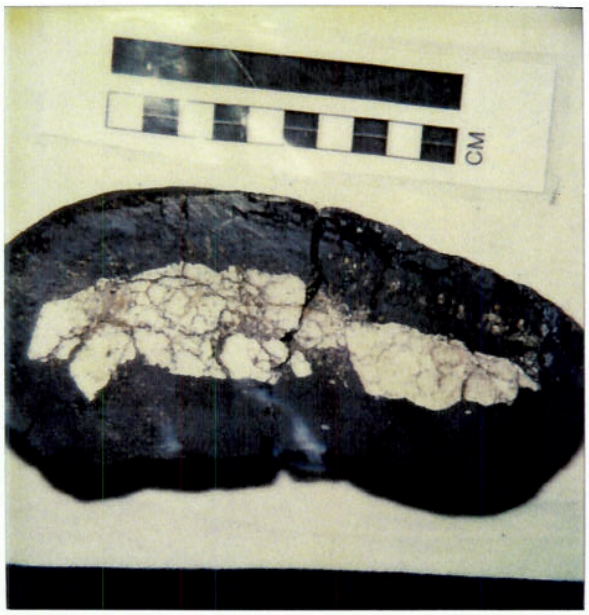
Nodule

Mn Crust Thickness (mm):

Min: 10 Max: 30 Ave: 18

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1	10	30	18	Black, slightly porous to porous some Fe staining one side there are several altered layers the other side near the substrate is very and filled w/ phosphatized Sediment between Phosphorite clasts in Mn
2				
3				
4				
5				
6				



D37-1 Tunes 6

Comments and XRD Mineralogy:

Subsamp

D37-1 XRD Substrate

Substrate Description

Rock Type: Phosphorite

Description: fractured, Cream

Biology (?):

Described by: JW

Subsampled by: JW

SAMPLE DESCRIPTION

Cruise Id: Tunes 6 Size (cm): cut 12½ x 8½ x 5½ Location: Golden Dragon ~~V3-91-NP~~

Sample Id: D37-2 Weight (kg): 0.78 Depth (m):

Mn Crust Description

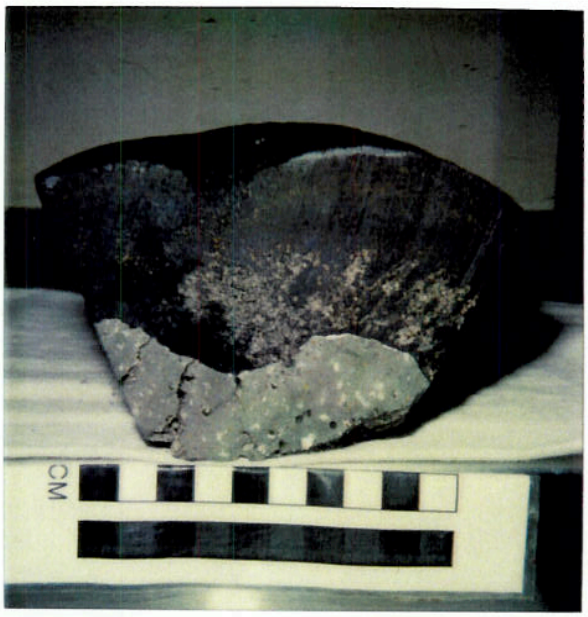
Surface Texture: Smooth abraded

Mn Crust Thickness (mm):

Min: 40 Max: 60 Ave: 47

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1	22	30	24	Black, porous, 4 altered layers within the layer
2			-	
3	18	30	23	Black, porous
4				sediment filled vugs
5				
6				



D37-2 Tunes 6

Comments and XRD Mineralogy:

Subsa

D37-2 CC, XRD bulk crust
125.8g 0-50mm

Substrate Description

Rock Type: Amygdaloid Basalt Grey

Description: Aphanitic Basalt plag phyric some altrd phenocrysts main phosphorite and zeolites? in voids

Biology (?): minor thin, broken-like phosphorite layer between the crust & substrate

Described by: JW

Subsampled by: JW

SAMPLE DESCRIPTION

Cruise Id: Tunes 6 Size (cm): cut 13½ x 7.6 x 4.8 Location: Golden Dragon, Seamount ~~V3-91-NP~~

Sample Id: D37-3 Weight (kg): 0.50 Depth (m):

Mn Crust Description

Surface Texture: smooth, abraded

Mn Crust Thickness (mm):

Min: 38 Max: 50 Ave: 44

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1	11	16	13	Brownish Black, porous some alteration
2	10	12	11	Black, porous some alteration
3	17	22	20	Black & Vuggy slightly porous
4				Vugs filled w/
5				sediment
6				

D37-3 TUNES 6

Comments and XRD Mineralogy:

Subsample

D37-3 DPTS Bulk Crust

Substrate Description

Rock Type: Amygdaloid Basalt Grey

Description: aphanitic groundmass w/ altered phenocryst phosphinite, calcite and zeolite in voids

Biology (?):

Described by: JW

Subsampled by: JW

SAMPLE DESCRIPTION

Cruise Id: Tunes6 Size (cm): cut C3XC4r Location: Golden Dragon ~~V3-91-NP~~ Seamount

Sample Id: D37-4 Weight (kg): 0.32 Depth (m):

Mn Crust Description

Surface Texture: Smooth

Mn Crust Thickness (mm):

Min: 46 Max: 51 Ave: 49

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1	27	30	29	Black, porous, moderately
2				6 minor altered laminated layers w/in the layer
3	19	21	20	Black, porous & vuggy
4				sediment filled vugs
5				
6				

Tunes 6
D37-4

Comments and XRD Mineralogy:

Subsam

~~DPTE~~

D37-4A	CC, XRD, Pt, REE	Bulk crust
D37-4B	" " " "	layer 1
D37-4C	" " " "	layer 2

Substrate Description

Rock Type: amygdaloid basalt

Brown

Description: altered aphanitic basalt

plag phyric

calcite, zeolites, phosphate

rare Mn in voids

Biology (?):

D37-4A	69.9g	0-50 mm
-4B	50.3g	0-30
-4C	35.8g	30-50

Described by: JW

Subsampled by: JW