DREDGE 36

# Dredge Sample Summary Sheet

| Sample ID | Bulk CC | Layer CC | Pt & Au | Ree | OC | DPTS/TS | XRD | 35mm Photo | Paleo | Archive |
|---|---|---|---|---|---|---|---|---|---|---|
| D36-1 | ✓ | | | | | | ✓ | | | |
| | | | | | | | | | | |
| D36-2 | | | | | | | | | | |
| | | | | | | | | | | |
| D36-3A | ✓ | | ✓ | ✓ | | | ✓ | | | |
| -3B | | ✓ | ✓ | ✓ | | | ✓ | | | |
| -3C | | ✓ | ✓ | ✓ | | | ✓ | | | |
| -3D | | ✓ | ✓ | ✓ | | | ✓ | | | |
| | | | | | | | | | | |
| D36-4 | ✓ | | | | | | ✓ | | | |

# SAMPLE DESCRIPTION

Cruise Id: Tunes 6 | Size (cm): Cut 14.3 x 14 x 3.4 | Location: Golden Dragon Seamount ~~V3-91-NP~~

Sample Id: D36-1 | Weight (kg): 1.08 | Depth (m):

## Mn Crust Description

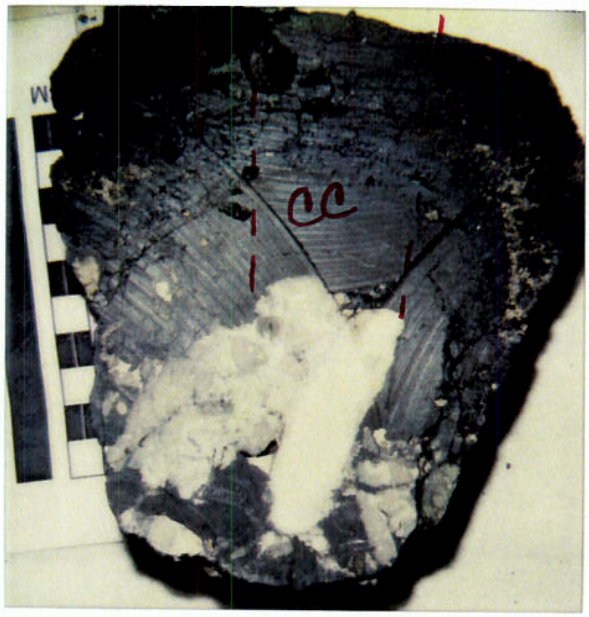
Surface Texture: Smooth

## Mn Crust Thickness (mm):

Min: 65 Max: 105 Ave: 85

## Outer to Inner Layers (mm)

| | Min | Max | Ave | Texture & Color |
|---|---|---|---|---|
| 1 | 30 | 45 | 40 | Black, porous Few sediment filled vugs near surface Fe stained |
| 2 | | | | |
| 3 | 35 | 55 | 45 | Black, Porous toward top ~~vugs~~ w/ sediment |
| 4 | | | | |
| 5 | | | | some fractures w/ phosphorite |
| 6 | | | | near substrate some nodule & phosphorite veins |




## Comments and XRD Mineralogy:

Subsan

D36-1 CC, XRD Bulk crust

16.43 g 72 mm

## Substrate Description

Rock Type: Phosphorite Breccia

Whitish Grey

Description: Poorly sorted clasts with a phosphorite matrix

Biology (?):

Described by: JW

Subsampled by: JW

# SAMPLE DESCRIPTION

Cruise Id: Tunes 6 Size (cm): cut 14 r 7½ x 4½ Location: ~~V2=S1=CP~~ Golden Dragon Seamount

Sample Id: D36-2 Weight (kg): 0.64 Depth (m):

## Mn Crust Description

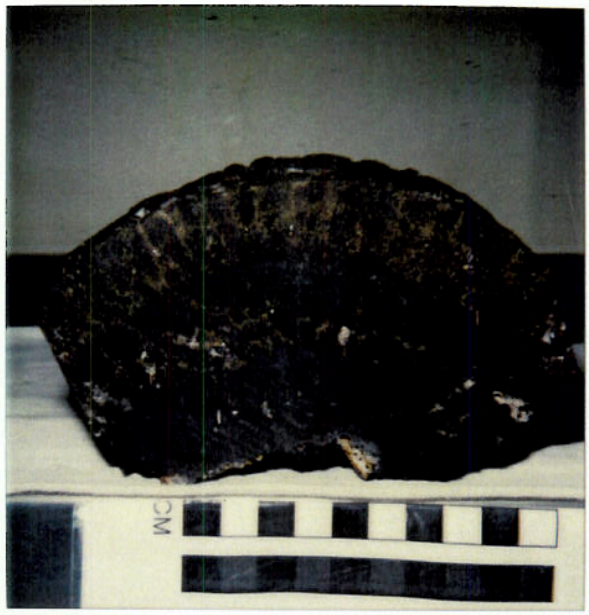
Surface Texture: smooth botryoidal

## Mn Crust Thickness (mm):

Min: 60 Max: 74 Ave: 69

## Outer to Inner Layers (mm)

| | Min | Max | Ave | Texture & Color |
|---|---|---|---|---|
| 1 | 16 | 20 | 19 | Black, porous, some vugs w/ sediment |
| 2 | 10 | 12 | 11 | Orange altered alteration black, porous |
| 3 | 10 | 12 | 11 | Black, porous, vuggy some sediment in vugs |
| 4 | | | | Orange red alteration |
| 5 | 24 | 30 | 28 | Black, moderately porous some fractures, rare phosphorite & clasts in Mn |
| 6 | | | | |



D36-2 Tunes 6

## Comments and XRD Mineralogy:

Subsam

D36-2 Shark tooth

## Substrate Description

Rock Type: hyaloclastite

red/yellow

Description: almost completely altered hyaloclastite

Biology (?): encrusting forams on top

Shark tooth embedded between bottom of Crust & Substrate

Described by: JW

Subsampled by: JW

# SAMPLE DESCRIPTION

Cruise Id: Tunes 6 cut  Size (cm): 10x7x6.8  Location: Golden Dragon [redacted] Seamount

Sample Id: D36-3  Weight (kg): 0.78  Depth (m):

## Mn Crust Description

Surface Texture: Rough abraded granular botryoids

## Mn Crust Thickness (mm):

Min: 74 Max: 83 Ave: 78

## Outer to Inner Layers (mm)

| | Min | Max | Ave | Texture & Color |
|---|---|---|---|---|
| 1 | 16 | 19 | 18 | Black, porous, minor sediment, some oxidation |
| 2 | | | | |
| 3 | 29 | 31 | 30 | Black, porous, vuggy, sediment in vugs, some oxidation |
| 4 | | | | |
| 5 | 29 | 33 | 30 | Black dense to porous, rare clast, some sediment in Mn |
| 6 | | | | |

D36-3 Tunes 6

## Comments and XRD Mineralogy:

Subsample

| | | | |
|---|---|---|---|
| D36-3A | CC, PT, XRD, REE | Bulk Crust | |
| -3B | " " " " | layer 1 | |
| 3C | " " " " | " 2 | |
| 3D | " " " " | " 3 | |

## Substrate Description

Rock Type: NONE

Description:

Biology (?):

| | | |
|---|---|---|
| D36-3A | 52.9g | 0-78 mm |
| 3B | 33.1g | 0-18 |
| 3C | 93.4g | 18-49 |
| 3D | 67.6g | 49-81 |

Described by: JW

Subsampled by: JW

# SAMPLE DESCRIPTION

Cruise Id: Tunes 6 Size (cm): 9 X 8 X 5 Location: ~~V2-91-CP~~ Golden Dragon Seamount

Sample Id: D36-4 Weight (kg): 6.45 Depth (m):

## Mn Crust Description

Surface Texture: Rough, abraded Botryoids

## Mn Crust Thickness (mm):

Min: 70 Max: 80 Ave: 75

## Outer to Inner Layers (mm)

| | Min | Max | Ave | Texture & Color |
|---|---|---|---|---|
| 1 | 16 | 18 | 17 | Black, porous sediment infills |
| 2 | | | | outline a layer of the botryoids |
| 3 | 26 | 29 | 28 | Black, porous, some vugs w/ some sediment |
| 4 | | | | some oxidation |
| 5 | 28 | 32 | 30 | Black, dense to porous few vugs |
| 6 | | | | minor phosphorite & rare clasts in Mn |

## Comments and XRD Mineralogy:

Subsan

D36-4 CC, XRD Bulk Crust

173.5g 0-76mm

## Substrate Description

Rock Type: NONE

Description:

Biology (?):

Described by: JW

Subsampled by: JW