DREDGE 9
W. Flank
Karin Ridge

AMPLE ID	Mn CHEM	Pt & Au	REE	Si Chem	TP Sect	35mm Pho	Archive	Paleo	Xtk - XRD				
JTD-9-1	Bulk			V. Breccia									
JTD9-2	Layers + bulk	Layers + Bulk	Layers										
JTD9-3	Bulk			Basalt					Alteration Rims Samples				

F7-86-HW
Karin Ridge
Johnston Is

Sample Description

Cruise I.D: 15X7 4.5

Sample I.D: Sta: 11 JTD 9-1

Location: W Flank Karin Ridge

Size: _____ **Weight:** 0.3 kg

Mn crust thickness:

Total: min: 1.8 max: 2.2 ave: 2.1

Inner crust: min: — max: — ave: —

Outer crust: min: _____ max: _____ ave: _____

Surface texture: Smooth

Internal structure:

layered:
laminated:
massive: X
porous: in places
dendritic:
other:

Mineralogy (XRD):

JTD9-1

F7-86-HW
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Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: Volcanic Breccia

Description: Brown + reddish-brown clasts of Basalt + phosphorite clasts (or cement) in a pea-green clay matrix - probably smectite, alteration from Volc. Debris. Paper-thin layers of phosph. separates crust from the Breccia

Transparent clear or pink of ? in the green matrix

Mineralogy (XRD):

Analyses and subsamples:

analysis:	analyst:
Mn Crust Chem JTD 9-1A Bulk	
Silicate Chem JTD9-1B	
XRD - JTD9-1C green min. & x'tals	
D.P. Section - did not send	
XRD of Green Matrix & [illegible]	

F7-86-HW
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Sample Description

Cruise I.D: 25 [illegible]

Sample I.D: Sta: 11 JTD9-2

Location: W [illegible]

Size: _____ **Weight:** 4 kg

Mn crust thickness:

Total: min: 3.1 cm max: 4.1 cm ave: 3.3 cm

Inner crust: min: ____ max: ____ ave: ____

Outer crust: min: ____ max: ____ ave: ____

Surface texture: Smooth (lizard skin botryoids)

Internal structure:

layered: 5 or more
laminated:
massive: X
porous:
dendritic:
other:
Divided into 3 layers [illegible]

JTD 9-2

F7-86-HW
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Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: Siltstone

Description: greenish Brown siltstone, bored in places. Mn lines burrows. Light yellowish brown mud fills burrows. Seems more extensively [illegible] contact w/ crust. Small Mn dendrites [illegible]. Large areas of sediment fill in crust near siltstone. Maybe these areas were open spaces betw. botryoids.

Mineralogy (XRD):

Analyses and subsamples:

analysis: (OVER)	analyst:
Chemistry: [illegible]	[illegible]
[illegible]	
[illegible]	
[illegible]	
[illegible] 32.27 mm ← Not submitted	
XRD	[illegible]
[illegible]	
[illegible]	
[illegible]	
[illegible]	
[illegible] mud that fills burrows [illegible]	
P.T.S. [illegible]	[illegible]
JTD9-2C submitted for Hg Chem	

crust is so massive, it's difficult to distinguish layers on slabbed surfaces. Can best distinguish layers when [illegible] at site. Thicknesses are approx.

Layer 1 (outermost) - 6 mm

Layer 2 - 2 mm

" 3 - 5-6 mm

" 4 - 3-6 mm

" 5 (innermost) - 5-7 mm

Much sediment infilling in innermost layers ← (see photo). Note floating clasts also.

JTD 9-2

This slab sent for chem. **photo 2**

F7-86-HW
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Chemistry: Crust sent for: "Manheim pkg", [illegible]

A = Layer 1 (outermost): Thickness sent for chem 6-8 mm

Wt. sent 53.6g, (17.2g [illegible], 36.4g [illegible]). Porous w/ orange (Fe-oxide) infilling near surface. [illegible] patina (cures thereof) between the layer & layer below.

B = Layers 2-5: Thickness sent for chem 26-29

Wt. sent 74.0g, (30.0 [illegible], 44.0g [illegible]). Greenish patina between [illegible] above. [illegible]

C = Bulk: Thickness sent for chem 32-37 mm Wt sent 53.8g, (13.1g [illegible], 40.7g [illegible])

See notes under A + B.

F7-86-HW
Karin Ridge
Johnston Is

Sample Description

Cruise I.D: 42Y28X12

Sample I.D: Sta: 11 JTD9-3

Location: W. Flank Karin Ridge

Size: _____ Weight: 5 kg

Mn crust thickness:

Total: min: 2.3 max: 4.5 ave: 3.0

Inner crust: min: — max: — ave: —

Outer crust: min: _____ max: _____ ave: _____

Surface texture: Smooth

Internal structure:

layered:
laminated:
massive: X
porous:
dendritic:
other:

SAMPLED FOR XRD JTD9-3BI

SAMPLED FOR XRD JTD9-3B

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: Basalt

Description: Greenish-brown, highly vesicular basalt w/ red-brown alteration rim immediately adjacent to the crust in places & a cream-colored alteration in other parts & through the basalt w/ basalt chips included.

Mineralogy (XRD):

F7-86-HW
Karin Ridge
Johnston Is

JTD9-3

Analyses and subsamples:

analysis:	analyst:
Mn Crust Chem	
JTD9-3A Bulk	0-40 mm
Silicate Chem	
JTD9-3B Basalt	
XRD	
JTD9-3BI	
JTD9-3BE	
JTD9-3BII	
D.P. Section - Check for glass in white [illegible]	- did not - Dnd

F7-86-HW
Karin Ridge
Johnston Is

)9-3

Sample

JTD9-3

JTD9-3

Chem &
P Section