Dredge 17

Sample Description

Cruise I.D: L5-83-HW Sample I.D: Sta: D17-A1 Location: Horizon

Size: 16x14x9cm Weight: 2.5 Kg

Mn crust thickness:

Total: min: 3mm max: 9mm ave: 8mm

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

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

Surface texture: Knobby, botryoidal-smooth

Internal structure:

layered:
laminated:
massive: ✓
porous:
dendritic:
other:

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: Basalt

Description: Altered fractured gray-brown aphanitic vesicular basalt w/ phenocrysts of plagioclase ? & olivine ?? Fractures & some vesicles are filled w/ a white well-indurated slightly effervescent sediment. but can scratch w/ knife.

Mineralogy (XRD):

L5-83-HW
D17-A1

Analyses and subsamples:

analysis:	analy
XRD	C. Dan
I: bulk Mn crust	
Mn crust chem. (Keston)	Jung-Keuk
I 0-5 mm 8 gm	Job # BZ
II 5-10 " 8 "	
35mm slide	G. Smith

Phosphate study

* The sample looked like one labelled D14-A2 (and also labelled ___-1) so we added it. It is the varnished piece. This piece did not look like D14-A2.

Sample Description

Cruise I.D: L5-83-HW Sample I.D: Sta: D17-A2 Location: Horizon Guyot

Size: 9x6x7cm Weight: 325g already cut in ½ w/ ½ missing

Mn crust thickness:

Total: min: 2mm max: 8mm ave: 12mm

Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture: Botryoidal

Internal structure:

layered:
laminated:
massive: ✓
porous:
dendritic:
other:

L5-83-HW
D17-A2

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: Basalt

Description: Highly-altered red-orange to brown slightly vesicular aphanitic basalt w/ cavities (eroded vesicles?) & vesicles filled w/ calcite ? (fizzes in HCl). Well rounded basalt clasts are floating in the Mn crust.

Mineralogy (XRD):

Analyses and subsamples:

analysis:	analyst:

Sample Description

Cruise I.D: L5-83-HW Sample I.D: Sta: D 17 - AX Location: Horizon Guyot

Size: 12x8x7cm Weight: 435 g

Mn crust thickness:

Total: min: 8 max: 13mm ave: 8mm

Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture: Smooth - very shiny

Internal structure:

layered:
laminated:
massive:
porous: ✓ tiny columns of botryoids
dendritic:
other:

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Fe oxides in crust

Substratum:

Rock type: Basalt

Description: Brown altered very fine grained basalt w/ phenocrysts of pyx? & olivine (altered)

Mineralogy (XRD):

L5-83-HW
D17-AX

Analyses and subsamples:

analysis:	analyst: or sample sent by
Samples to:	F. Manheim
	J. Putirous
	A. Davis
XRD - composite crust	Rosemary ?
Chemistry of bulk crust	
- Pt group (12/86)	Floyd Brown - Boston
- Au analysis (12/86)	Dave McKown - Denver
Min crust chem (Boston)	Jung-Keuk Kang 6/88
bulk 10g (from submittal sheet)	Job # BZ88

Sample Description

Cruise I.D: L5-83-HW Sample I.D: Sta: D17-B1 Location: Horizon

Size: ~~10x12x11cm~~ Weight: 1.86 kg (already cut on both ends - which are missing)

Mn crust thickness:

Total: min: 4mm max: 12mm ave: 6mm

Inner crust: min: ___ max: ___ ave: ___

Outer crust: min: ___ max: ___ ave: ___

Surface texture: Smooth

Internal structure: ___

layered: ___
laminated: ___
massive: ✓
porous: ___
dendritic: ___
other: ___

Mineralogy (XRD): ___

Associated alteration, phosphorite, or hydrothermal deposits: ___

Substratum:

Rock type: Basalt

Description: Altered brown aphanitic basalt w/ plag & olivine phenocrysts

Mineralogy (XRD): ___

LS-83-HW

D17-B1

Analyses and subsamples:

analysis:	analyst:

Sample Description

Cruise I.D: L5-83-HW Sample I.D: Sta: D 17-B2 Location: Horizon Guyot

Size: 10x10x7cm 2 pieces 6x5x4cm Weight: 810g

Mn crust thickness:

Total: min: 2 max: 8 ave: 5mm

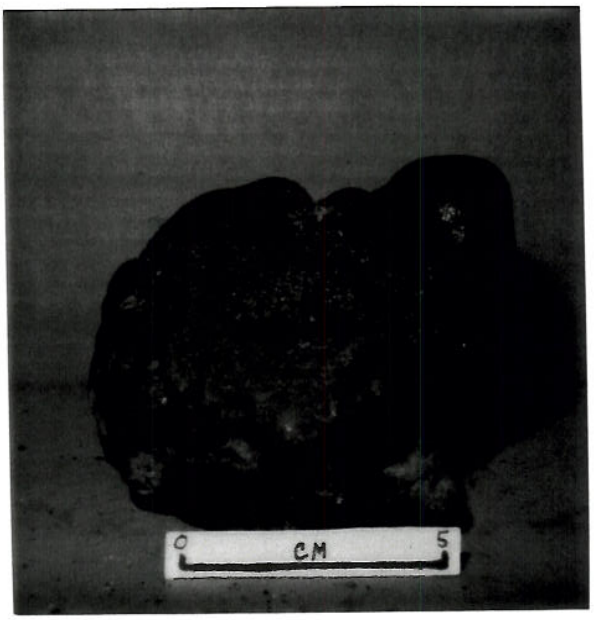
Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture: Smooth

Internal structure:

layered:
laminated:
massive: ✓
porous:
dendritic:
other:



L5-83-HW
D17-B2

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: Basalt

Description: Two basalt cobbles cemented together w/ Mn. One is gray aphanitic vesicular w/ olivine? + plag. phenocrysts. The other is brown, altered aphanitic w/ plag. & olivine phenocrysts. Both have a little phosphate? or carbonate material filling fractures or vesicles.

Mineralogy (XRD):

Analyses and subsamples:

analysis:	analyst:
XRD	C. Daniel
[illegible]	