USGS DREDGE STATION LOG Taongi atoll

SHIP / LEG L9-84-CP

	on bottom	off bottom
LATITUDE	14°32.516	14°32.584
LONGITUDE	169°00.238	168.54.994

STATION NO. 018

LINE NO. Dredge 20

Depth ≈ 1950 m

DAY/MONTH/YEAR

DATE 6/8/84

TYPE OF STORAGE (check one)

☐ DRY ☐ COLD ☐ FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM

REMARKS: Total Recovery ≈ 3 lbs. of carbonates with very thin Mn coating on some.

NEBCO

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Sample Description

Cruise I.D: ~~[illegible]~~

Sample I.D: Sta: 18 D 20-1

Location: Taongi atoll

Size: 10x7x4 cm Weight: ≈0.3 kg

Depth = 1950 m

Mn crust thickness:

Total: min: 0 max: 2mm ave: <1mm

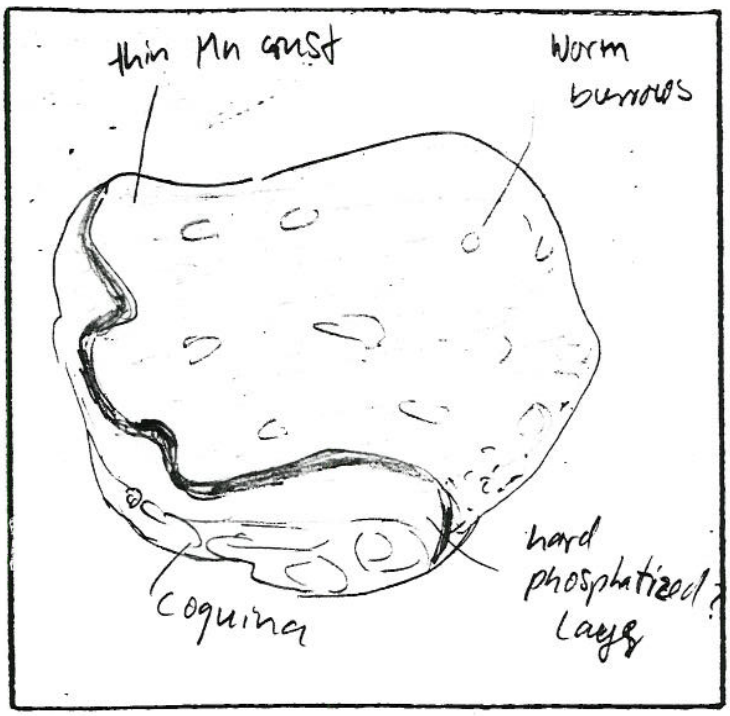
Inner crust: min: — max: — ave:

Outer crust: min: — max: — ave:

Surface texture: smooth and porous areas

Internal structure:

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



Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:
layer right below Mn crust appears phosphatized

Substratum:

Rock type: limestone coquina

Description:
looks very young + shallow [illegible] fossils?

Mineralogy (XRD):

Analyses and subsamples:

analysis:	analyst:
sample to	Lauren M. (Scripps)
sample to	Henry Meyer
most of sample to	Janet Hoggard
Sampled for XRD:	C. Daniel
D20-1-I - composite Mn & substrate	

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Sample Description

Cruise I.D: ~~[illegible]~~

Sample I.D: Sta: 18 D 20-2

Location: Taongi atoll

Size: 5x4x2 cm Weight: < 0.2 kg

Depth = 1950 m

Mn crust thickness:

Total: min: 0 max: < 1mm ave:

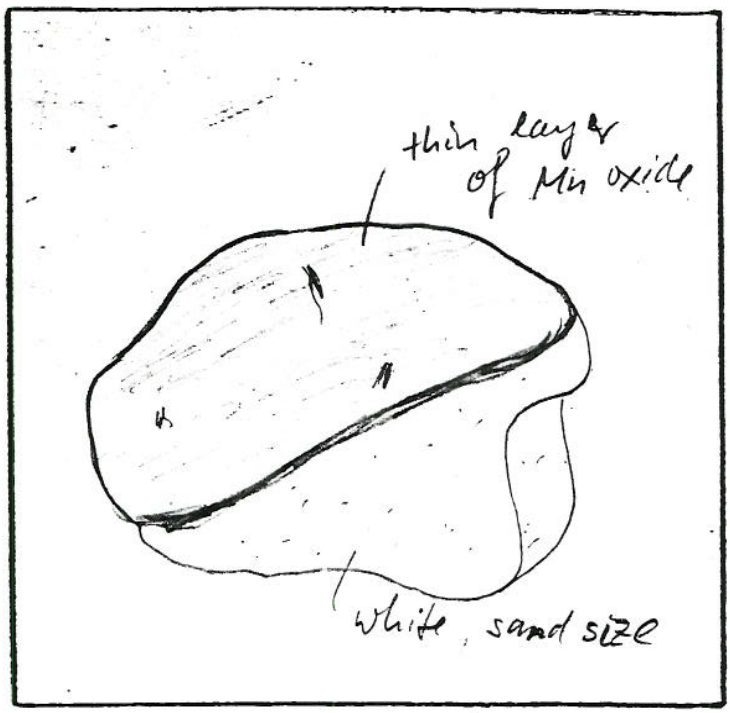
Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture: rough - granular

Internal structure:

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



Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: calcarenite (?)

Description:

Mineralogy (XRD):

Analyses and subsamples:

analysis:	analyst:
most of sample to	Janet Haggerty

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Sample Description

Cruise I.D: ~~[illegible]~~

Sample I.D: Sta: 18 D 20-3

Location: Taongi atoll

Size: 9x7x5 cm Weight: 0.4kg

Depth = 1950 m

Mn crust thickness: thin coating

Total: min: max: <1mm ave:

Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture: like substratum

Internal structure:

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

Mineralogy (XRD):

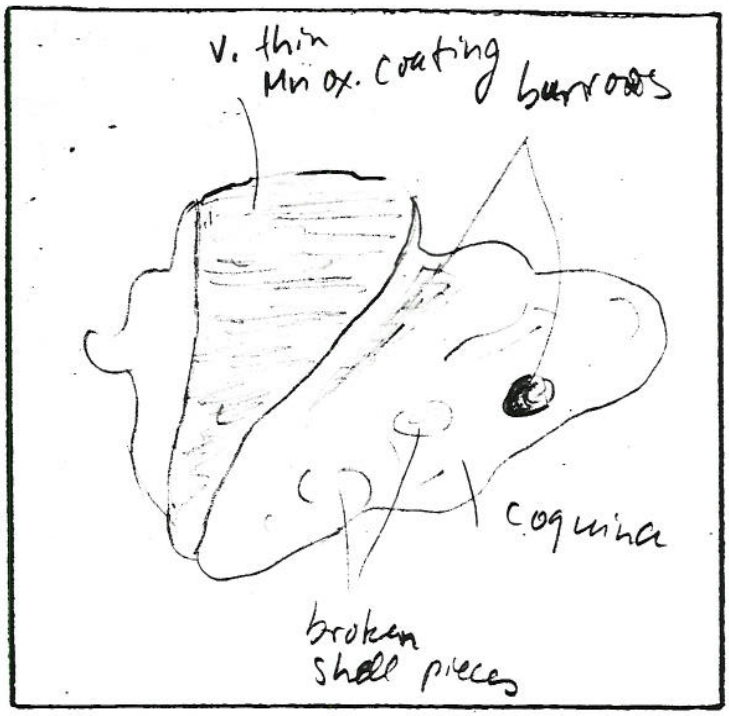
Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: limestone coquina

Description:

Mineralogy (XRD):



Analyses and subsamples:

analysis:	analyst:
most of samples to	Janet Haggerty

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Sample Description

Cruise I.D: ~~[illegible]~~ Sample I.D: Sta: 18 D 20-4 Location: Taongi atoll

Size: 1½cm to 5cm DIA Weight: < 0.2 kg Depth = 1950 m

Mn crust thickness: extremely thin coating on small pebbles

Total: min: max: ave:

Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture:

Internal structure:

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

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: limestone

Description:

Mineralogy (XRD):

bag of broken limestone pieces. Fairly well rounded lithology same as D20-2

Analyses and subsamples:

analysis:	analyst:
most of sample to	Janet Haggerty

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Sample Description

Cruise I.D: [illegible]

Sample I.D: Sta: 18 D 20 - 5

Location: Taongi atoll

Size: 2cm DIA

Weight: < 0.05kg.

Depth = 1950 m

Mn crust thickness:

Total: min: max: ave:

Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture:

Internal structure:

layered:

laminated:

massive:

porous:

dendritic:

other:

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: limestone coquina

Description:

Mineralogy (XRD):

bag of broken pieces of angular limestone Coquina. Lithology similar to D20-3.

Analyses and subsamples:

analysis:	analyst:

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Sample Description

Cruise I.D: ~~[illegible]~~ Sample I.D: Sta: 18 D 20-6 Location: Taongi atoll

Size: 2cm to 7cm DIA Weight: ≈ 0.1 kg Depth = 1950 m

Mn crust thickness: thin coating on some pieces

Total: min: max: ave:

Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture:

Internal structure:

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

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type: limestone coquina

Description:

Mineralogy (XRD):

broken pieces of coquina angular to subrounded. Lithology same as D20-1.

Analyses and subsamples:

analysis:	analyst:
most of sample to	Janet Hagerty

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Sample Description

Cruise I.D: ~~[illegible]~~ Sample I.D: Sta: 18 D 20-7 Location: Taungi atoll

2cm to 4cm DIA

Size: _____ Weight: <0.1 kg

Depth = 1950 m

Mn crust thickness:

Total: min: _____ max: _____ ave: _____

Inner crust: min: _____ max: _____ ave: _____

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

Surface texture: _____

Internal structure: _____

layered: _____
laminated: _____
massive: _____
porous: _____
dendritic: _____
other: _____

Mineralogy (XRD): _____

three well-rounded pebbles composed of Corals (?) or some calcareous algae (?)

Associated alteration, phosphorite, or hydrothermal deposits: _____

Substratum:

Rock type: limestone

Description: _____

Mineralogy (XRD): _____

Analyses and subsamples:

analysis:	analyst:

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Sample Description

Cruise I.D: ~~[illegible]~~ Sample I.D: Sta: D Location:

Size: Weight:

Depth =

Mn crust thickness:

Total: min: max: ave:

Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture:

Internal structure:

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

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type:

Description:

Mineralogy (XRD):

Analyses and subsamples:

analysis:	analyst:

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Sample Description

Cruise I.D: [illegible]

Sample I.D: Sta: D

Location:

Size: Weight:

Depth =

Mn crust thickness:

Total: min: max: ave:

Inner crust: min: max: ave:

Outer crust: min: max: ave:

Surface texture:

Internal structure:

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

Mineralogy (XRD):

Associated alteration, phosphorite, or hydrothermal deposits:

Substratum:

Rock type:

Description:

Mineralogy (XRD):

Analyses and subsamples:

analysis:	analyst: