DREDGE 18

D18 Yap H

Dredge Sample Summary Sheet

Sample ID	Bulk CC	Layer CC	Pt & Au	Ree	OC	DPTS/TS	XRD	35mm Photo	Paleo	Archive
D18-1									2X	
D18-2										
D18-3										
D18-4										
D18-5					X	X	X			
D18-6					X	X	X			
D18-7					X	X	X			
D18-8					X	X	X			
D18-9					X	X	X			
D18-10					X	X	X			
D18-11						X				
D18-12										
D18-13					X	X	X			

SAMPLE DESCRIPTION

Cruise Id: F11-90-CP Size (cm): ✓ Location: YAPH

Sample Id: D18-1 Weight (kg): 1 Depth (m): 2950-2600

Mn Crust Description

Surface Texture: —

Mn Crust Thickness (mm):

Min:_____ Max:_____ Ave:_____

No Photo

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1				
2				
3				
4				
5				
6				

Comments and XRD Mineralogy:

Analyses

Subsample No.	Analysis	Layer Thick.	Wt.(g)
D18-1-1	Paleo	Green	
D18-1-2	Paleo	- all to Brown paula	

Substrate Description

Rock Type: Mud

Description: ① stiff mud, Green, poorly sorted with basalt clasts + possibly forams (fine to coarse grained) (Q.) liquidy, Brown mud w/ abundant Forams - Calcitic

little flemmons

Biology (?):

Described by: G.S.

Subsampled by: G.S.

SAMPLE DESCRIPTION

Cruise Id: F11-90-CP Size (cm): Misc. Pebbles Location: NAR H

Sample Id: D8-2 Weight (kg): .50 Depth (m): 2950-2600?

Mn Crust Description

Surface Texture: Patina, smooth

Mn Crust Thickness (mm):

Min:_____ Max:_____ Ave:_____

NO Photo

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1				
2				
3				
4				
5				
6				

Comments and XRD Mineralogy:

Analyses

Subsample No.	Analysis	Layer Thick.	Wt.(g)

Substrate Description

Rock Type: Basalt?

Description: Brecc + Grey Basalt fragments high to little alteration? Representative sample of whole dredge.

Biology (?): From mud covering surface

Described by: GS.

Subsampled by:

SAMPLE DESCRIPTION

one boulder

Cruise Id: F11-90-CP Size (cm): 5 x 14 x 19 Location: YAPH

Sample Id: D18-3 Weight (kg): 25 Depth (m): 2950 - 2600

Mn Crust Description

Surface Texture: Patina Smooth

Mn Crust Thickness (mm):

Min:_____ Max:_____ Ave:_____

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1				
2				
3				
4				
5				
6				

D18 - 3

Comments and XRD Mineralogy:

Subs

T.S. D18-3

60% USGS

40% KORDT

Substrate Description

Rock Type: Basalt ?

Diabase ?

Same as D18-8 group

Description: Coarse grained porphyritic, mottled grey, green + white.

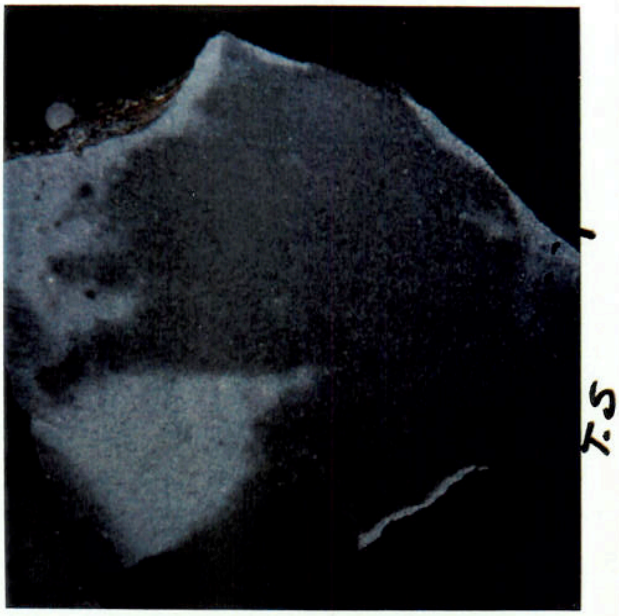
(snowflake) 50% plagioclase, 30% olivine, 20% hornblend (?) are present

Plag. not fresh - Alice Cat large piece on saw at office

Biology (?):

Described by: GS

Subsampled by: G.S.



D18-3

SAMPLE DESCRIPTION

Cruise Id: F11-90-CP Size (cm): 42.5 x 34 x 20 Location: Yar H

Sample Id: D18-4 Weight (kg): 50 Depth (m): 2950 - 2600

Mn Crust Description

Surface Texture: Smooth to granular
Tatma

Mn Crust Thickness (mm):

Min:_____ Max:_____ Ave:_____

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1				
2				
3				
4				
5				
6				

D18-4 Green

Comments and XRD Mineralogy:

Su

TS D18-4 Pictured on Back

Substrate Description

Rock Type: Andesite? Basalt?
(some kind of volcanic Rock!)

Alice Cut big piece on saw at work Can't tell what's up from the small Frags broken w/ 3 edge hammer

Description: Gray aphanitic ground mass w/ porphyry blast of quartz, radiating light green mineral + spherical <1mm black opaque vesicle fill? Vugs lined w/ green mineral with later quartz filled Plagioclase (euhedral) present in small %.

Biology (?): Alteration or Flow rims (see poloroid)
Phenocrysts of quartz as above

Cut 12/1

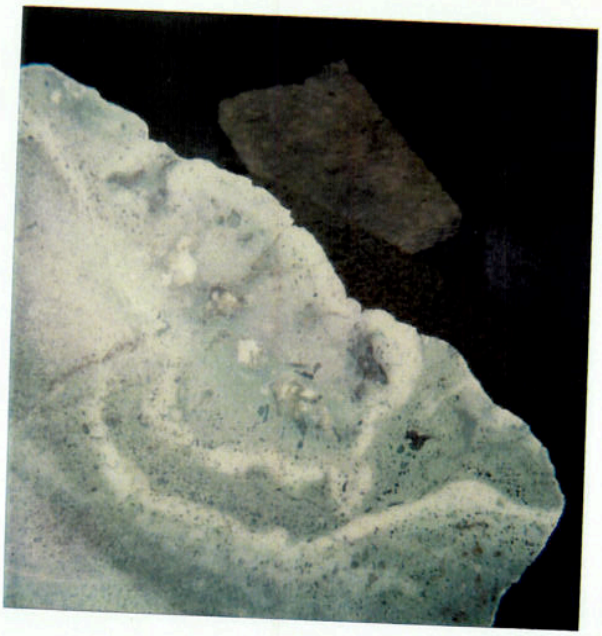
Described by: G.S. Hein
Pickthorn

Subsampled by: G.S.

10% HORDE
90% USGS

Similar to D18-5

D18-4



D18-4

SAMPLE DESCRIPTION

Cruise Id: F11-90-CP Size (cm): V. Large cobbles to pebbles Location: Yap H

Sample Id: D18-5 Weight (kg): 90 Depth (m): 2950-2600

D18-5

Mn Crust Description

Surface Texture: granular

Mn Crust Thickness (mm):

Min: patina Max: 1 Ave: <1

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1				
2				
3				
4				
5				
6				

Comments and XRD Mineralogy:

Sul

D18-5-1 OC 40.4g
D18-5-1 TS
D18-5-1 XRD

40% HORDI
60% USGS

Substrate Description

Rock Type: Volcanic Rock (Nephelinite?, Basaltic Andesite?)

Description: green-gray w/ black - medium grained
gray feldspar ?
green feldspathoid ?
black pyroxene, with sparse olivine - green mineral

Biology (?):

Described by: HE/N

Subsampled by:

SAMPLE DESCRIPTION

Cruise Id: F11-90-CP Size (cm): 28 x 10.5 x 11 Location: YAP H

Sample Id: D18-6 Weight (kg): 9.1 Depth (m): 2950-2000

Mn Crust Description

Surface Texture:

Mn Crust Thickness (mm):

Min:_____ Max:_____ Ave:_____

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1				
2				
3				
4				
5				
6				

D18-6

Comments and XRD Mineralogy:

Subs

D18-6-1 OC 30.6g
D18-6-1 TS
D18-6-1 XRD

Substrate Description

Rock Type: Very fine grained Dense "Basalt"

60% USGS
40% KORDI

Description: Dark Grey Aphanitic ground mass (Groundmass) with [illegible] of [illegible] radiating [illegible] [illegible] [illegible] small [illegible]

Biology (?):

Described by: G. S.

Subsampled by: JW

SAMPLE DESCRIPTION

Cruise Id: F11-90-CP Size (cm): large Cobbles to pebbles Location: Yap H

Sample Id: D18-7 Weight (kg): 110 Depth (m): 2950-2600

Mn Crust Description

Surface Texture: Patina, smooth to granular

Mn Crust Thickness (mm):

Min: patina Max: 1 Ave: < 1

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1				
2				
3				
4				
5				
6				

D18-7

Comments and XRD Mineralogy:

Su

D18-7-1 OC 34.2g
D18-7-1 TS
D18-7-1 XRD

Substrate Description

Rock Type: Basalt

60% USBS
40% KORDI

Description: medium grained, grey Plag & Pyroxene phyric in gray groundmass; pyroxene maybe altering to a pinkish mineral - maybe titanomagnetite - definitely magnetic

Biology (?): plag is fresh & altered

Described by: HEIN

Subsampled by: JW/

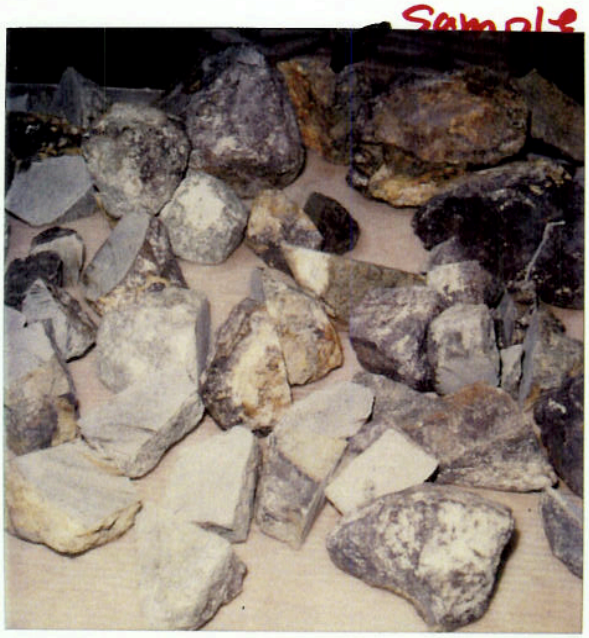
SAMPLE DESCRIPTION

many cobbles

Cruise Id: F11-90-CP Size (cm): 19x17x12 ~7x6x5 Location: YAP H

Sample Id: D18-8 Weight (kg): 55 Depth (m): 2950-2600

Sample



D18-8

Mn Crust Description

Surface Texture: Patina Smooth

Mn Crust Thickness (mm):

Min:_____ Max:_____ Ave:_____

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1				
2				
3				
4				
5				
6				

Comments and XRD Mineralogy:

Subsa

D18-8 OC 38.8 g
D18-8 TS
D18-8 XRD

Substrate Description

Rock Type: Basalt
Gabbro?

60% USGS
40% 40DDI

Description: Coarse grained (porphyritic) with 75% euhedral to shallow plag. 30-[illegible] 20% [illegible] similar to D18-2 with more [illegible] present
- [illegible] Pyrite present

Magnetic

Biology (?):

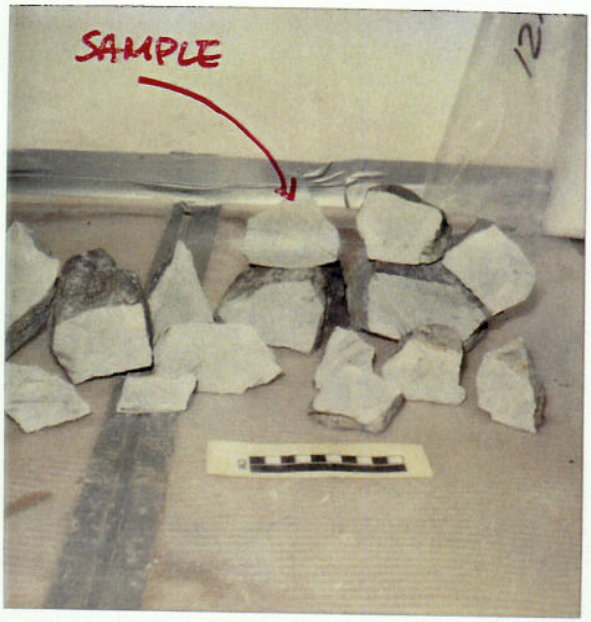
Described by: GS.

Subsampled by: [illegible]

SAMPLE DESCRIPTION

Cruise Id: F11-90-CP Size (cm): 13.5 x 10.5 x 5 / 7.3 x 4.5 x 4.5 Location: YAPH

Sample Id: D18-9 Weight (kg): 5.5 Depth (m): 2950-2600



D18-9

Mn Crust Description

Surface Texture: Smooth patina

Mn Crust Thickness (mm):

Min:_____ Max:_____ Ave:_____

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1				
2				
3				
4				
5				
6				

Comments and XRD Mineralogy:

Sub:

D18-9-1 OC 32g
D18-9-1 TS
D18-9-1 XRD

Substrate Description

Rock Type: Volcanic

60% GS
40% HORDP

Description: Pale 80% Green radiating mineral - fatty looking ground mass with Black amphibole (?) hornblende. Vugs of possible quartz FS stained with sulfides present (?) in vugs.

Biology (?):

Described by: G.S.

Subsampled by: JW

SAMPLE DESCRIPTION

Cruise Id: F11-90-CP Size (cm): 33 x 18 x 10 ~5 x 4 x 3 Location: YAP H

Sample Id: D18-10 Weight (kg): 30 Depth (m): 2950-2600

D18 -10

Mn Crust Description

Surface Texture: Smooth to granular Tatina

Mn Crust Thickness (mm):

Min:_____ Max:_____ Ave:_____

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1				
2				
3				
4				
5				
6				

Comments and XRD Mineralogy:

Subsa

D18-10-1 OC 40.0g
D18-10-1 TS
D18-10-1 XRD

50% TORI
50% USGS

Substrate Description

Rock Type: Feldspathoid ?
Basalt ? Metamorphosed ?

Description: Extremely fine grained light green ground mass with (crystalline) very fine grained [illegible] crystals in ground mass
Possible vesicles are filled with light green (mod. altered) radiating [illegible] (like D18-4) w/ quartz (?)

Biology (?):

Described by: G.S.

Subsampled by: JW

SAMPLE DESCRIPTION

Cruise Id: F11-90-CP Size (cm): 27 x 13 x 11 / 10 x 4.1 x 4.5 Location: Yard H

Sample Id: D18-11 Weight (kg): 7.3 Depth (m): 2950 - 2600

Mn Crust Description

Surface Texture: Granular

Mn Crust Thickness (mm):

Min: ? Max: 1 Ave: <1

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1				
2				
3				
4				
5				
6				

D18-11

Comments and XRD Mineralogy:

Subsa

D18-11A TS

XRD

60% HORDI

40% USGS

Substrate Description

Rock Type: Breccia

Description: clasts: Basalt from D18-8 (fine to coarse grained) matrix: In one its Fe stained mudstone to sandstone in another the sample is laminated (turbidite) alternating white to green grained & conglomeratic

Biology (?):

Described by: G.G.

Subsampled by: JW

SAMPLE DESCRIPTION

Cruise Id: F11-90-CP Size (cm): 9 x 4.6 x 5.8 / 4.8 x 3.5 x 2.5 Location: YAP

Sample Id: D18-12 Weight (kg): 1 Depth (m): 2950-2600

Mn Crust Description

Surface Texture: Smooth

Mn Crust Thickness (mm):

Min: Max: Patina Ave:

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1		Patina		Black
2				
3				
4				
5				
6				

D18-12

Comments and XRD Mineralogy:

Sub

Substrate Description

Rock Type: Basalt

grey, black, brown

Description: A variety of basalt, fine to medium grained

? Alterating or exfoliating in a concentric pattern least unaltered part is circular

Biology (?): defined by cracks around it

Described by: JW

Subsampled by:

SAMPLE DESCRIPTION

Cruise Id: F11-90-CP Size (cm): 11 X 14.6 X 9 Location: YAP H

Sample Id: D18-13 Weight (kg): 2.3 Depth (m): 2950-2600

Mn Crust Description

Surface Texture: Smooth

Mn Crust Thickness (mm):

Min:_____ Max: Patina Ave:_____

Outer to Inner Layers (mm)

	Min	Max	Ave	Texture & Color
1		Patina		Black, Red Iron Stained
2				
3				
4				
5				
6				

D18-13

Comments and XRD Mineralogy:

Note: Sample was brought in late so it was not included in a group Caught in Dredge bag -

Substrate Description

Rock Type: Basalt - Nephelenite?

Whitish Green

Description: coarse grained anhedral - subhedral black pyroxene?

anhedral White plag

Small green mineral olivine?

minor Fe stained

Biology (?):

Subsam

D18-13 A OC Dogram

TS

XRD

Described by:

J W

Subsampled by: