Dredge 24

Jaluit Atoll

USGS DREDGE LOG

SHIP/LEG FARNELLA

STATION # 41

DREDGE # 24

DEPTH INTERVAL(m) 3030-2730

DEPTH(m)corrected 3030-2730

DATE JD 273 LOCAL 30 Sept. 1989

TIME GMT 0558 LOCAL 1758

LATITUDE 06°17.17' TO 06°17.46' N

LONGITUDE 169°18.5' TO 169°16.53' E

TOTAL WEIGHT: DREDGE 200 CRUST 1

PERCENTAGE OF ROCK COVERED BY CRUST All mudst. Exp. at seafloor has crust, deeper stratagraphic levels don't have crust

PERCENT BROKEN FROM: OUTCROP 100 TALUS 0

THICKNESS OF MN CRUST: MAXIMUM 2 MINIMUM <1 AVERAGE 1

DOMINANT SURFACE TEXTURE Granular

SUBSTRATE LITHOLOGY Pale brown mudstone / bioturbated

Large and small scale animal borings, some iron staining

NODULES PRESENT Ø

REMARKS: Threw all, but 20 kg, overboard

Dredge Sample Summary Sheet

Sample at ~~Lab~~

Sample ID	Bulk CC	Layer CC	Pt & Au	REE	OC	DPTS/TS	XRD	35mm Ph	Archive	Paleo
D24-1	~~✓~~				✓✓		✓✓✓			✓✓
D24-1-5	✓									

USGS DREDGE LOG

Depth Interval 3030-2720

Julian Date 273

Cruise I.D. F10-89 CP

Local Date (m/d/y) _____

Station No. 41

Chief Scientist Hein/Kang

Dredge No. 24

Tech on Watch O'Toole

	On Station (on station / 1st GPS fix)	Dredge on Btm	Dredge off btm	Off Station
GMT	* 0307/0309	0400	0558	0650
LATITUDE	6 17.15	06 17.1 rho rho	06 17.46	6 17.8
LONGITUDE	169 18.07	169 18.5	169 18.53	169 18.4
WATER DEPTH	3000m	3030	2720	2770

Site Description and Target : base of slope of Jaluit Atoll to Collect Basalt for age dating

OPERATION*	GMT	DEPTH (m)	WIRE OUT (m)	TENSION	HDG/SPD	COMMENTS
On bottom	0400	3030	3025			moving up line/paying out scope
Scope is out	0416	3020	3500			scope is out/taking up slack moving up line
Starting to dredge	0443	2700m	"			
Bite	0448	2650	"	2.7, 3.0		~~hung up~~ steady pull whi making headway - talu
Bite	0507	2480	3575	3.1		
Bite	0510	2460	"	2.8		
Bite	0511	"	"	3.2		
~~Bite~~ Hung	0514	2300 ~~2450~~ ?	"	6.6		Coming back picking up slack
Off ?	0553	2670	3100			
Off Bottom	0558	2720	2850			

*on/off bottom, bites, etc.

OTHER COMMENTS:

* position is from 0309 / when we finally got GPS in. We lost gps for an hour and rhorho tracked very well - However when we got GPS back again it was ~ 2000m off rhorho.

SAMPLE DESCRIPTION

Cruise Id: F10-89-CP Size: 2 boulders 5 cobbles (cm) Location: Jaluit Atoll

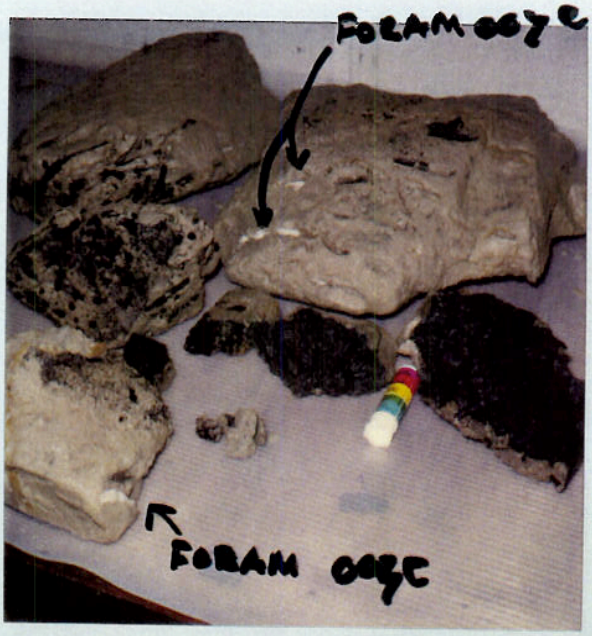
Sample Id: D24-1 Weight: 20 (kg) Depth: 3030-2730 (m)

Mn Crust Description
Surface Texture: granular

Mn Crust Thickness (mm):
Min: <1 Max: 2 Ave: 1

Layers (Outer to Inner)(mm):

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



D24-1
F10-89-CP

Comments and XRD Mineralogy:
Patina inside animal borings

Lt brown
Choc. brown

ANAL

Subsample Number	Analysis	Layer Thickness
D24-1-1,2	Paleo, XRD	
D24-1-3	Paleo, XRD, OC (12-15 cm below surface)	7 gm
D24-1-4	OC, XRD	(8 gm)
D24-1-5	ultrasonic → BULK CC (10.8 g) → XRD (removed as much mud as possible.)	

Substrate Description
Rock Type: Calcareous mudstone

chocolate brown for 25 mm beneath the crust

Description:
Pale brown, calcareous, fair amount of terrigenous residue after acid treatment, bioturbated; large and micro borings

Biology ?: Animal borings, foram mud in some borings.

Described By: RD Subsampled By: RD