USGS DREDGE LOG

No Recovery

CHIP/LEG F7-87-SC

STATION # 01

DREDGE # D1

DATE JD 336 LOCAL 4 Dec 87

TIME GMT 2300 LOCAL 1500

DEPTH INTERVAL(m) 1500-2062

DEPTH(m)corrected _____

LATITUDE 33 59.32 TO 34 0.58

LONGITUDE 120 59.97 TO 121 1.36

TOTAL WEIGHT: ∅ DREDGE _____ CRUST _____

PERCENTAGE OF ROCK COVERED BY CRUST _____

PERCENT BROKEN FROM: OUTCROP _____ TALUS _____

THICKNESS OF MN CRUST: MAXIMUM _____ MINIMUM _____ AVERAGE _____

DOMINANT SURFACE TEXTURE _____

SUBSTRATE LITHOLOGY _____

NODULES PRESENT _____

REMARKS: No Recovery

local date 12/4/87

CRUISE I.D. F7 87 SC
STATION NO. 01
DREDGE NO. D1

Cheif Scientist Hein, James R.
MT: Kevin O'toole

	ON STATION	DREDGE ON BOTTOM	DREDGE OFF BOTTOM	OFF STATION
GMT	2228	2324	0146	0230
LATITUDE	33° 58.76	33 59.32	34 0.58	34 0.84
LONGITUDE	121° 00.09	120 59.97	121 1.36	121 0.51
H_2O DEPTH		2062	1655	

OPERATION (ON/OFF BOTTOM, BITES)	GMT	DEPTH (M)	TENSION	W/O	COMMENTS
IN H_2O	2250 Z	2095			
	2322	~2080		~2000	weighting for pinger H_2O trace
on bottom	2324	2062		2054	still paying out scope
	2352	2045		2302	dredging proceding, no bites yet
	0002	2000			still coring, small nibbles
1st bite	0007	1970	1.89, 2.45	2478	many at 2.45 lat/lon: 33 59.28/121 0.70
					losing trace on 3.5 & 10 Khz pos b/c of talus
	0021	1885			going to bring in ~150 m wire
	0031	1850		~2150	weighting, weighting, Pinger still weak 33 59.78/121 1.23
	0052	1800		2150	everyone is impatient 33 59.99/121 1.35
	0111	1700		"	34 00.2/ 121 01.5
	0123	1500		2150	[SO1D2 in Bryan Ruppel's notes] 34 0.43/121 1.80 going to begin pulling in wire w/ship holding position
	[illegible]	[illegible]		1652	OFF Bottom
	[illegible]				DREDGE out of water
	[illegible]				[illegible]
	[illegible]	[illegible]			[illegible]

OTHER COMMENTS: 10.2 Khz pinger used 300 m above dredge
Big cave up completely empty - no recovery

USGS DREDGE LOG

SHIP/LEG F7 87 SC

STATION # 02

DREDGE # D2

DATE JD 339 LOCAL 12/11/87

TIME GMT _____ LOCAL _____

DEPTH INTERVAL(m) 1000-1500

DEPTH(m)corrected _____

LATITUDE 34° 0.22' TO 121° 0.70'

LONGITUDE 34° 1.03 TO 8.7' (permanently)

TOTAL WEIGHT: DREDGE 0 CRUST _____

PERCENTAGE OF ROCK COVERED BY CRUST _____

PERCENT BROKEN FROM: OUTCROP _____ TALUS _____

THICKNESS OF MN CRUST: MAXIMUM _____ MINIMUM _____ AVERAGE _____

DOMINANT SURFACE TEXTURE _____

SUBSTRATE LITHOLOGY _____

NODULES PRESENT 0

REMARKS: No recovery / lost dredge + 1300 m of wire

local 12/4/87

CRUISE I.D. F7 87 SC
STATION NO. 02
DREDGE NO. D2

Chief sci: Hein
MT: Ozaine

	ON STATION	DREDGE ON BOTTOM	DREDGE OFF BOTTOM	OFF STATION
GMT	0302	0337	0549	
LATITUDE	34° 0.23	34 0.22	lost dredge	
LONGITUDE	121° 1.27	121 0.70		
H_2O DEPTH		2430		

OPERATION	LON/OFF BOTTOM, BITES) GMT	DEPTH (M)	TENSION	W/O	COMMENTS
on H_2O	0304				34 0.94/121 1.23
on bottom	0337	2430			34 0.22/121 0.70
dredging	0345	1865		2400	beginning to dredge move plenty of slack out 34 0.23 / 121 0.71
	0400	1835			dredging, no bites 34 0.13/121 1.02
	0427	1750		2400	going to bring in wire to 2300, going up slope
	0430	1605		~2250	bringing wire to 2250 34 0.39/121 0.19
	0447	1250		>1600	bottom coming up fast. Pulling in wire ASAP to 1600m
	0452	1300		1860	34°075' / 121° 1.79'
	0455	1250		1670	no bites yet
	0456	1200		1600	continuing to slowly pull in wire
	0459	1125		1550	34° 0.78' / 121° 2.02'
1st bite	0525	1060	3.4, 3.4, 2.5	1450	bringing wire to ~1400 34° 0.83 / 121° 2.23'
2nd bite	0535	1030	2.5, 4.2	1330	many small bites 34° 0.87 / 121° 2.44
more bites	0543	1015	2.4, 4.1	1330	
bite	0545	1050	5.2		many small 2 size 34° 1.01 / 121° 2.65
more bites	0547		4.3, 4.0		34° 1.03 / 121° 2.67
WIRE BROKE	0549	1060		1330	wire broke, gear stripped off crane 34° 1.03' / 121° 2.71'
	Station	interrupted in order to			fix winch

OTHER COMMENTS: No pinger or TDR. At 0549 bite went up to 7 then snapped. Crane swung far left, wire broke probably on horizontal chev. Need to rethread wire.

USGS DREDGE LOG

CHIP/LEG F7-87-SC

STATION # 02

DREDGE # D3

DEPTH INTERVAL(m) 1580 - 1045 m

DEPTH(m)corrected _____

DATE JD 339 LOCAL _____

TIME GMT 0337-0549 LOCAL _____

LATITUDE 34 00.3 TO 34 0.9

LONGITUDE 121 01.7 TO 121 02.3

TOTAL WEIGHT: DREDGE ~150 kgm CRUST 10 kg

PERCENTAGE OF ROCK COVERED BY CRUST 80% patine to 2cm

PERCENT BROKEN FROM: OUTCROP 50% TALUS 50% Basalt

THICKNESS OF MN CRUST: MAXIMUM 22 MINIMUM patines AVERAGE 8

DOMINANT SURFACE TEXTURE Smooth

SUBSTRATE LITHOLOGY Basalt, Volcaniclast Sandstones, and Breccia

Coating of encrusting forams, Traghyite, phosphorite
50% Basalt Talus
50% Volcaniclast Rxs broken from outcrop
1 phosphatized Mudstone w/ burrows and borings
Basalts came from deeper bite - Large Boulders of V. Sandstone from shallower
Big bites - Volcanic Breccia cobble to sandstone Basalt clast, Phosphate cement in places

NODULES PRESENT None

REMARKS: Biota consists of big slimey worm and soft urchin (?) or jellyfish and brittle stars

[illegible] of highly altered V. Breccia w/ phosphorite matrix

Thicker Crusts have a layer of phosphate; distance from substrate to phos. layer Varies

Crusts thicker in lows than in the highs, 2 basic crust types brown & black

Already Threw overboard 3 kgm of material w/o crusts + 30 more kgm

12/4/87

Hein / O'Zanne

CRUISE I.D. F7 87 SC
STATION NO. D2
DREDGE NO. D3

	ON STATION	DREDGE ON BOTTOM	DREDGE OFF BOTTOM	OFF STATION
GMT	339/0302			1018
LATITUDE	34 0.23			34°00.9'
LONGITUDE	121 1.27			121°02.5'
H_2O DEPTH	(never ended station from D2)			

OPERATION (ON/OFF BOTTOM, BITES)	GMT	DEPTH (M)	TENSION	W/O	COMMENTS
dredge in H_2O	0739	1800 m		0	33° 59.99' 121° 1.37'
	0745	1760 m		1000	lowering dredge

OTHER COMMENTS:

USGS DREDGE LOG

Rodriguez

SHIP/LEG F7-87-SC

STATION # 03

DREDGE # D4

DEPTH INTERVAL(m) 900-820 m

DEPTH(m)corrected

DATE JD 339 LOCAL Dec 4 1987

TIME GMT 1143-1255 LOCAL 3.43-4.55

LATITUDE 34° 01.4' TO 34° 01.6'

LONGITUDE 121° 02.7' TO 121° 02.7'

TOTAL WEIGHT: DREDGE 80 kg CRUST 1 kg

PERCENTAGE OF ROCK COVERED BY CRUST 75% patina 5% crust

PERCENT BROKEN FROM: OUTCROP 5% TALUS 95%

THICKNESS OF MN CRUST: MAXIMUM 6mm MINIMUM Patina AVERAGE 3

DOMINANT SURFACE TEXTURE Smooth

SUBSTRATE LITHOLOGY Basalt cobbles + boulders + 1 volcanic breccia boulder + 1 kg Volc. Brec. pebbles + cobbles. 1 Trachyte cobble

NODULES PRESENT None

REMARKS: sea urchin came up with 1 [illegible] glance at the above water [illegible]. Silico sponge with thorny starfish also came up

12-5-87

Hein/O'tool, Torresan

CRUISE I.D. F7 87 SC

STATION NO. ~~[illegible]~~ 3

DREDGE NO. D4

	ON STATION	DREDGE ON BOTTOM	DREDGE OFF BOTTOM	OFF STATION
GMT	1106	1143	1255	1312
LATITUDE	34° 01.1	34° 01.4'	34° 01.6	34° 01.7'
LONGITUDE	121° 02.5	121° 02.7'	121° 02.7	121° 02.7'
H_2O DEPTH	925			

OPERATION (ON/OFF BOTTOM, BITES)	GMT	DEPTH (M)	TENSION	W/O	COMMENTS
[illegible]	1106	925			Continuation of D3 line
Moving into station	1132	950			
Dredge on bottom	1143	900		940	
Dredging	1204	815		1400	1400 meters of cable out & holding
Dredging	1213	775		"	Small nibbles ~1 Ton
"	1215	765	1.7	"	Small ~~[illegible]~~ Bite
"	1217	765	2.2	"	Small bite 2.2, 3.4, 2.2, 3.4
"	1219	750m	~~3.4~~ 4T	"	~~Bite~~ Bites 4.0, 4.0 4.2
"	1221	750	4.8, 3.1 3.0 4.4, 3.3		Bites
"	1223	775	3.3, 4.4, 4.7		~~[illegible]~~ hung up on bottom
	1250	805		1045m	Still hung up
OFF BOTTOM	1255	820		830m	Off bottom
On deck	1312				Dredge on deck

OTHER COMMENTS: