CORE LOG (IMI ~~STA.~~ / GC1)

EXPEDITION: INDOMED CORE # 1GC ~~(STA. 1 Core 1)~~

VESSEL: MELVILLE DATE: 24 Sept 77

LEG: 01 DEPTH 638 fm 1183 M

+7 = 645

	TIME	LOCATION LAT.	LONG.
OVERSIDE	Z		
ON BOTTOM	1210 Z	32° 37.3' N	117° 31.7' W
ON DECK	Z		

WIRE OUT 1190 M TOTAL 1145 M PULLOUT

meter wheel off

TENSION 800 TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION 60 cm dark greenish brown mud

LOCAL TOPOGRAPHY A. D. Trench

REMARKS always due to level line problems

+7 RPN 1,48

CORE LOG (IMI ~~STA.~~ / GC 2)

EXPEDITION: INPOMED CORE # 2 G

VESSEL: MELVILLE DATE: 24 Sept 77

LEG: 01 DEPTH 639 fm 1185'

+7 = 646

	TIME	LOCATION LAT. 6 (Satnav @ 1318Z)	LONG. 7
OVERSIDE	1300 Z		
ON BOTTOM	1320 Z	32° 37.3N	117° 31.2W
ON DECK	1340 Z		

WIRE OUT 1200 M TOTAL 1152 M PULLOUT

meter wheel off?

TENSION none TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION 54 cm dark greenish brown mud

LOCAL TOPOGRAPHY S.N. Trough

REMARKS

CORE LOG (IMI STA. 1 GC3)

EXPEDITION: INDOMED CORE # 3 GA

VESSEL: MELVILLE DATE: 24 Sept 77

LEG: 01 DEPTH 637 fm 118.3 m 7.8

+7=644

	TIME	LOCATION LAT. (Sat fix @ 1402Z)	LONG.
OVERSIDE	1350 Z		
ON BOTTOM	1410 Z	32° 37.7 N	117° 31.7 W
ON DECK	1435 Z		

WIRE OUT 1170 M TOTAL 1150 M PULLOUT

meter wheel off?

TENSION 750 TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION ~~Mud Sample~~ 57 cm

Dk. Brn. Mud

LOCAL TOPOGRAPHY S. D. Trough

REMARKS

CORE LOG (IMI ~~STATION~~ GC4)

EXPEDITION: INPOMED CORE # 4 GC

VESSEL: MELVILLE DATE: 24 Sept 77

LEG: 01 DEPTH 634 fm 117 ~~8~~ 2

+7 = 641

	TIME	LOCATION (Satfix @ 1506Z) LAT.	LONG
OVERSIDE	1445 Z		
ON BOTTOM	1505 Z	32°37.8N	117 31.4W
ON DECK	1525 Z		

WIRE OUT 1180 M TOTAL 1143 M PULLOUT
meter wheel off

TENSION _____ TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION ~~Sample~~ dk Brn. Mud
60 cm

LOCAL TOPOGRAPHY, S. N. Trough

REMARKS

CORE LOG (IMI Sta. 2 GC5)

EXPEDITION: INPOMED CORE #5GC

VESSEL: MELVILLE DATE: 24 Sept 79

LEG: 01 DEPTH 638 fm 1184 79

+7 = 645

	TIME	LOCATION LAT	LOCATION LONG
OVERSIDE	1615 Z	7.0'	7.9'
ON BOTTOM	1638 Z	32°36.9'N	117 38.8'W OR
ON DECK	1658 Z		

WIRE OUT 1162 M TOTAL 1150 M POLLOUT meter wheel off

TENSION — TOTAL — AVERAGE — DIFF.

DESCRIPTION No Sample

LOCAL TOPOGRAPHY S.D. Trough

REMARKS Core lost. Mud slid from barrel at surface. Could be due to a layer of sand

CORE LOG (INI ~~STA.~~ 2 GC 6)

EXPEDITION: INPOMED CORE # 6 GC

VESSEL: MELVILLE DATE: 24 Sept 77

LEG: 01 DEPTH 640 fm 1188 m

+72647

	TIME	LOCATION LAT 7.0'	LOCATION LONG 7.3'
OVERSIDE	1710 Z		
ON BOTTOM	1722 Z	32° 36.9N	117 38.2W
ON DECK	1757 Z		

WIRE OUT 1162 M TOTAL ——— M PULLOUT metered wheel off

TENSION ——— TOTAL not seen AVERAGE ——— DIFFERENCE

DESCRIPTION NO SAMPLE Saved

LOCAL TOPOGRAPHY A.B. Trough

REMARKS Part of core lost possibly due to a layer of Sand. Remaining core sample was not saved.

(IMI ~~STA.~~ 3 GCX) 7

CORE LOG

EXPEDITION: INDOMED CORE # 7 GC

VESSEL: MELVILLE DATE: 24 Sept 77

LEG: 01 DEPTH 640 fm ~~1158~~ m

+7 = 647

	TIME	LOCATION LAT.	LOCATION LONG.
OVERSIDE	~~1110~~ 1910 Z		
ON BOTTOM	~~1123~~ 1923 Z	32 ~~36.0'N~~	117 ~~37.0'W~~
ON DECK	~~1154~~ 1954 Z	37.1'N	36.4'W

WIRE OUT 1167 m TOTAL not seen m PULLOUT meter wheel off

TENSION ——— TOTAL ——— AVERAGE ——— DIFFERENCE

DESCRIPTION No Sample

LOCAL TOPOGRAPHY S.W. Trough

REMARKS No Sample

7e

CORE LOG (IMI SHA-3 GC 8)

EXPEDITION: INPOMED CORE # 8 GA

VESSEL: MELVILLE DATE: 24 Sept 77

LEG: 01 DEPTH 638 fm 1184

+7 = 645

	TIME	LOCATION LAT.	LONG.
OVERSIDE	~~1210~~ 2020 (mst.) Z		
ON BOTTOM	~~1229~~ 2029 Z	32° 27.8 N	117 ~~27.2~~ W
ON DECK	~~0101~~ 2101 Z	6'	31.2'

WIRE OUT 1174 M TOTAL _____ M PULLOUT

meter wheel off

TENSION Not Seen TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION MD Sample

LOCAL TOPOGRAPHY S. D. Through

REMARKS Meter wheel problems

MD Sample

CORE LOG (IM14GC9)

EXPEDITION: INDOMED CORE # 9 GC

VESSEL: MELVILLE DATE: 24 Sept 77

LEG: 01 DEPTH 638 fm 1184 79

+7 = 645

	TIME	LOCATION LAT.	LOCATION LONG.
OVERSIDE	~~1325~~ 2125 Z		
ON BOTTOM	~~1342~~ 2142 Z	32 37.8N	117 31.6W
ON DECK	~~1345~~ 2145 Z	5'N	29.4'W

WIRE OUT 1178 M TOTAL 1150 M PULLOUT

TENSION ? TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION 61 cm Dark green-Brown

LOCAL TOPOGRAPHY B.D. Trough

REMARKS Meter Wheel problems

3313

Slow 4050 dm to ~~4150~~ 4000 ?

CORE LOG

(IM15GC10)

EXPEDITION: INDOMED CORE # 10 GM

VESSEL: MELVILLE DATE: Sept 29, 77

LEG: 01 DEPTH ~~2183~~ fm ~~4093~~ 3942 m.

2107 + 49 = 2156

	TIME	LOCATION LAT.	LONG.
OVERSIDE	1331 z	15 38.1'	08.9
ON BOTTOM	1441 z	~~15 37.9N~~	~~108 9.1W~~
ON DECK	1607 z		

WIRE OUT 4200 ~~4180~~ M TOTAL 4092, 4165 + 4114m PULLOUT

not clear tension jump at

TENSION _____ TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION Sample size?

LOCAL TOPOGRAPHY Appeared to be side lobes

REMARKS Bottle on wire with 2813 m out
Bottle tripped with 3317 m out
lost pingers at 10 m below surface
good sample

CORE LOG (IM16GC11)

EXPEDITION: INDOMED CORE # 11GC

VESSEL: MELVILLE DATE: Sept. 30, 77

LEG: 01 DEPTH ~~1854~~ 1908 fm 3469

+41 = 1949

	TIME	LOCATION LAT	LONG
OVERSIDE	1334 z	12 39.6 N	106 32.8 W
ON BOTTOM	1440.36 z	12 ~~39.5~~ N 40.2	106 ~~33.8~~ W 27
ON DECK	1532 z		

WIRE OUT 3549 M TOTAL 3469 M PULLOUT

meter wheel off

TENSION 2200 TOTAL 2000 AVERAGE 200 DIFFERENCE

DESCRIPTION Alternating Tan & Chocolate Sediment

Top 2cm disturbed w/ knubby interface. 0-5cm dk. brown / 5-30cm lighter brn. & mottled 30-38cm dk. brown. 35-57cm mottled light brn. 57-62cm darker brown

LOCAL TOPOGRAPHY

REMARKS good Sample

2050

-INMD12GC - Core 9
Barrel 11

CORE LOG (IMI7GC12)

EXPEDITION: INPOMED CORE # 12 GC

VESSEL: MELVILLE DATE: Oct 3, 77

LEG: 01 DEPTH 1665 fm 3178

+36 = 1700

	TIME	LOCATION LAT.	LONG.
OVERSIDE	1919 z		
ON BOTTOM	2002 z	8 ~~47.7~~ N 48.7	104°01.5 W
ON DECK	2102 z		

should have been 3186 m WD

WIRE OUT 3077 m TOTAL not acc m POLLOCK

TENSION _____ TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION 0-5 cm 3077 75 Brown mud
5-22 cm mixture of intercalated brown mud & carbonate sand.

LOCAL TOPOGRAPHY Flat

REMARKS Site M near Rise crest
15 m East
paged out xtra 75 m WD
meter wheel OK
WMAL problems

CORE LOG IMI 7 ~~B~~ 13

EXPEDITION: INPOMED CORE # 13 B4

VESSEL: MELVILLE DATE: 10-7-77

LEG: 01 DEPTH 1670 fm 3119 m

136 = 1706

	TIME	LOCATION LAT.	LONG.
OVERSIDE	1545 Z		
ON BOTTOM	1747 Z	8° 47.8' N	103° 59.3' W
ON DECK	1905 Z		

WIRE OUT 3145 M TOTAL 3126 M

TENSION 8400 TOTAL 5000 AVERAGE 3400

DESCRIPTION 0-5.5 cm brown watery mud (5YR 4/4 - 10GY 3/4) no structure present - almost gelatinous behavior. Contact sharp. 5.5-12 cm sharp contrast in sed. type + stiffness. Major sedimentological break. Grayish Brn sandy silt or clay (5Y 5/6) alter — slug

LOCAL TOPOGRAPHY Sta. M

REMARKS Impromptu at 183 m WD

Pingers at 30 m WD. Tension drop 5600 to 4800 lbs @ 3145 m wire out. Pull out @ 3126 m. (8400 lb tension)

207 = 38m
183m = 97fm

183
18 20

38
183
221 X

746 = 400fms
967 X

746
1713 X

746
2459 X Last

~~746~~
~~3205~~

707 = 131m
207 × 37
= 168.
= 742
910 X

1670 m
742
1652 X

3113m 742
2394 X

742
3136

Description cont.
Contains forams + small sand sized fragments of material of indet. origin. Forams O speck. sed. Estimate ~5% or less of sed. volume
Gradational downward - contact seems irregular.
12-21cm Same. grades to light Gray green 10 GY 5/2
21-37 contact gradational. Darker green grayish 5 GY 3/2

see Witherow for core split identification + microscope workup.

CORE LOG

EXPEDITION: INDOMED CORE # 14 PG.

VESSEL: MELVILLE DATE: 7 OCT. 77

LEG: 01 DEPTH 1680 fm 3135

+36 = 1716

	TIME		LOCATION	
OVERSIDE	2058	Z	D1, 08° ~~47.2~~ N	LONG 103° ~~59.4~~ W
ON BOTTOM	2204	Z	8° 48.0' N	103° 59.8' W
ON DECK	2330	Z		

WIRE OUT 3120 M TOTAL 3110 M

TENSION _____ TOTAL _____ AVERAGE _____

DESCRIPTION 90 cm + 1 pt.
greenish/olive calcareous sediment with a superficial brown oxidized layer

LOCAL TOPOGRAPHY see 14P

REMARKS

CORE LOG

EXPEDITION: INPOMED CORE # 14P

VESSEL: MELVILLE DATE: 7 OCT. 77

LEG: 01 DEPTH 1680 fm 3135
+36 = 1716

	TIME		LOCATION	
OVERSIDE	2058	Z	DR. 08° 47.2 N	103° 59.4 W
ON BOTTOM	2204	Z	8° 48.0' N	103° 59.8' W
ON DECK	2330	Z		

WIRE OUT 3120 M TOTAL 3110 M PULLED

TENSION 11600 TOTAL 7500 AVERAGE 4100 DISPL.

DESCRIPTION 4 Sections 572cm total + 19T & 1pt.
SECT I (BOTTOM 425 - 572)
SECT II (275 - 425)
Sect III (150 - 275)
Sect IV (150 - 0) TOP - approx. 25cm lost from bottom of section see below
Greenish calcareous ooze with a superficial oxidized layer.
Base of core contained basalt chips: the entire sedimentary section at this site was sampled

LOCAL TOPOGRAPHY 15 E. of East Pacific Rise crest

REMARKS E. G. & G @ 50 fm Relay
Xponder @ 100 fm
Lost some core out of bottom of Sect. IV when cap came loose.
Core transponder navigated, exact locations can be obtained from Deeptow

IMI 7 BC15

CORE LOG

EXPEDITION: INDOMED CORE # 15 BX

VESSEL: MELVILLE DATE: 8 Oct 79

LEG: 01 DEPTH 1620 fm 3116

+36=1706

	TIME	LOCATION LAT.	LONG.
OVERSIDE	0035 Z 020155		
ON BOTTOM	[redacted] Z	08° 47.94'N	103° 57.91'W
ON DECK	0330 Z		

WIRE OUT 3152 M TOTAL 3140 M PULLED

TENSION 9000 TOTAL 6000-7000 AVERAGE 2-3000 DIFF.

DESCRIPTION Sediment colors same as BC 13. 0-4cm dark Brn. mud - sharp geotech properties 4-7cm Tan Sandy w/ burrows. 7-12cm Lt. gray green. 12-35cm mud gray greens.

SLW

LOCAL TOPOGRAPHY 15 mi. E. of East Pacific Rise Crest.

REMARKS Pinger at 20 kHz. Transponder at 183 MAD

Meter Reading 3045 - Tension 6200 ± 250

3152 - 5400

3140 - 9200

IMI7GC16

25.50

CORE LOG

EXPEDITION: INPOMED CORE # 16 GC

VESSEL: MELVILLE DATE: 10/10/77

LEG: 01 DEPTH 2610 fm 3903 m

+34=1644

	TIME	LOCATION LAT.	LOCATION LONG.
OVERSIDE	0109 Z		
ON BOTTOM	0146 Z	~~8°46.0'N~~	~~104°10.4'W~~
ON DECK	0245 Z	8°43.7'N	104°13.3'W

WIRE OUT 2664 M TOTAL _____ M PULLOUT

TENSION none visible TOTAL _____ AVERAGE _____ DIFF.

DESCRIPTION Dark Brown mud
Sandy late on foraams
Rock chips present
14 cm of sample

Dr. Lonsdale has in his possession
the entire sample exceptin for small amount
given to D. Kadko of LDGO

LOCAL TOPOGRAPHY

REMARKS Slow to 50 mpm at 2550 MWD
used stick & fingers

IMI 7GC17

CORE LOG

EXPEDITION: INDOMED CORE # 17G4

VESSEL: MELVILLE DATE: Oct 14 Zulu

LEG: 01 DEPTH 1660.5 fm 3100' CORRECTED

+36 = 1701

	TIME	LOCATION (ACCORDING TO MATTHEWS AREA 41) LAT.	LONG.
OVERSIDE	08:24 Z		
ON BOTTOM	09:15 Z	8°46.4'N	103° 56.8'W 59.5'
ON DECK	10:50 Z		

WIRE OUT 2995 m at ~~bot~~ apparent entry TOTAL _____ m PULLOUT

Tension meter not working

TENSION _____ TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION ~10 cm metalliferous sediment underlain by 50 cm blue-grey mud

LOCAL TOPOGRAPHY

REMARKS wire slipped sheave around the time it went into the bottom; put back on after core came out

IMI 7 GC18

CORE LOG

EXPEDITION: INDOMED CORE # 1864

VESSEL: MELVILLE DATE: Oct 17 1977

LEG: 01 DEPTH 1720 fm 3214 m

+38 = 1758

	TIME	LOCATION LAT.	LONG.
OVERSIDE	11:50 Z		
ON BOTTOM	12:52 Z	08° 48.34N	104° ~~00.41~~ W
ON DECK	13:40 Z	.4' ←	→ 01.0

estimated into bottom: 3150

WIRE OUT _____ m TOTAL _____ m PULLOUT

tensiometer off

TENSION _____ TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION 20 cm brown (metalliferous) gelatinous material underlain by 30 cm grey-green to turquoise mud.

LOCAL TOPOGRAPHY

REMARKS

CORE LOG

EXPEDITION: INDOMED CORE # 19 PG

VESSEL: MELVILLE DATE: 10-14-77

LEG: 01 DEPTH 1615 fm 3015 m

+34 = 1649

	TIME	LOCATION LAT.	LONG.
OVERSIDE	1639 Z		
ON BOTTOM	1807 Z	8°49.XN	103°53.5'W
ON DECK	1930 Z 2000 S		

WIRE OUT 3010 M TOTAL 2997 M PULLOUT

TENSION 24,000 TOTAL 9,-10,000 AVERAGE 14,0[illegible] DIFFERENCE

DESCRIPTION 91.5 cm no [illegible] core catcher

LOCAL TOPOGRAPHY

REMARKS

19PG

IMI7 PC 19

CORE LOG

EXPEDITION: INDOMED CORE # 19 P

VESSEL: MELVILLE DATE: 10-14-77

LEG: 01 DEPTH 1615 fm 3015 m

+34=1649

	TIME	LOCATION LAT.	LONG.
OVERSIDE	~~1300~~ 1639 Z		
ON BOTTOM	1802 Z	8°49.8 N	103° 57.1 W
ON DECK	~~1930~~ 2005 Z	.1 N	53.5 W

WIRE OUT 3010 M TOTAL 2997 M PULLOUT

TENSION 21,000 TOTAL 9,000-10,000 AVERAGE 11,000 DIFFERENCE

DESCRIPTION BTM SEC I 150 CM PG 91.5 CM

SEC II 150 CM

TOP: SEC III 91.6 CM

Sampled from a section that was ~5m thick on deep tow acoustic records. Probably sampled the entire section (nose cone was smashed, presumably on basalt). Sampled section was greenish calcareous ooze, with superficial oxidized zone.

LOCAL TOPOGRAPHY Young abyssal hills near EPR crest.

REMARKS Lost half nose cone and sleeve on sea floor. Bottom barrel bent inward.

CORE LOG IMI 7BC-75

EXPEDITION: INPOMED CORE # 20 BC

VESSEL: MELVILLE DATE: 10-15-75

LEG: 01 DEPTH 1675 fm 3125 m

+36 = 1711

	TIME	LOCATION LAT.	LONG.
OVERSIDE	0815 z		
ON BOTTOM	0933 z	8° 47.9' N	104° 00.0 W
ON DECK	1100 z		

WIRE OUT 3158 m TOTAL 3147 m PULLOUT

TENSION 11,000 TOTAL 7500 AVERAGE 3500 DIFFERENCE

DESCRIPTION Bottom to top. 44cm
0-16cm Greenish sediment
16-25cm Gray green
25-36cm Gray brown
36-44cm at 36cm break above metalliferous sediment

LOCAL TOPOGRAPHY flat

REMARKS
+ 6 shoulders still around wire

IMI 7GC

CORE LOG

EXPEDITION: INDOMED CORE # 21 G

VESSEL: MELVILLE DATE: 10-15-77

LEG: 01 DEPTH ~~1690~~ 1673 uncorr'd fm 3128 corr'd m.
+36 = 1709

	TIME	LOCATION LAT.	LONG.
OVERSIDE	1100/5 Z		
ON BOTTOM	1219.8 Z	8°48.0' N	103°59.6 W
ON DECK	1322.0 Z	47.9	

WIRE OUT 3087 M TOTAL + M PULLOUT

TENSION + TOTAL + AVERAGE + DIFFERENCE

DESCRIPTION ~~48~~ 44 = total length: very good top interface
0-15 cm: Reddish brown
15-44: pale olive grey

LOCAL TOPOGRAPHY

REMARKS
Wire jumped sheave on payout sometime before ~~1000 m out~~ - presumably due to high payout speed (> 100 m min⁻¹)

IMI 7GC 2

CORE LOG

EXPEDITION: INPOMED CORE # 22GC

VESSEL: MELVILLE DATE: 10-15-77

LEG: 01 DEPTH ~~1690~~ 1635 fm ~~3112~~ 3054

+35 = 1670

	TIME	LOCATION LAT.	LONG.
OVERSIDE	1920 Z		
ON BOTTOM	2015 Z	8° 47.8' N	104°01.8' W
ON DECK	~~2110~~ 07 Z		

WIRE OUT 3005 M TOTAL 3029 M PULLOUT

TENSION Meter Inoperative TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION 8.5" long Dark Brown gelatinous layer underlain by tan layer

LOCAL TOPOGRAPHY _____

REMARKS Rain squall
Core bag torn & contents lost
Analysis in upper 10 cm of sample
lost steering, lost gyro, lost engine, lost ship, lost heart

IMI 8BC23

CORE LOG

EXPEDITION: INPOMED CORE # 23 BX

VESSEL: MELVILLE DATE: 10/18/77

LEG: 01 DEPTH 1962 fm 3666 m

+43 = 2005

	TIME	LOCATION LAT.	LONG.
OVERSIDE	0339 Z		
ON BOTTOM	0454 Z	07° ~~6.3'N~~	96° ~~08.6'W~~
ON DECK	0612 Z	07.4'N	10.9'W

WIRE OUT 3728 M TOTAL 3710 M PULLOUT

TENSION ~~8000~~ TOTAL 7000 AVERAGE 1000 DIFFERENCE

DESCRIPTION 25-40cm sedr. Nodules in 1/2 of box.
Brn sed (~10cm) over stiff tan mud (bioturbated)
over brn mud (8 nodules collected)

3 lg. nodules

LOCAL TOPOGRAPHY Site B.

REMARKS Tow Bottom Radon.
B.C. came up with outhaul
line pulled about 1½ inches.

CORE LOG

EXPEDITION: INDOMED CORE # 24 PG

VESSEL: MELVILLE DATE: 10-19-77

LEG: 01 DEPTH 1905 fm 3558 m

+41 = 1946

	TIME	LOCATION LAT.	LONG.
OVERSIDE	~~1908~~ 1657 z		
ON BOTTOM	1800 1857 z	06°33.5 N	92°46.9 W
ON DECK	2030 z		

WIRE OUT 3566 M TOTAL 3560 M PULLOUT

TENSION 16,000 TOTAL 9500 AVERAGE 6500 DIFFERENCE

DESCRIPTION 138cm total 133cm

Top 115cm dark brown mud

23cm light brown mud

LOCAL TOPOGRAPHY ~~[illegible]~~ Site H, Flat

REMARKS Dark Br. & Br. mud

~~IMT 9 PG 24~~

CORE LOG

EXPEDITION: INPOMED CORE # 24 PC

VESSEL: MELVILLE DATE: 10-19-77

LEG: 01 DEPTH 1905 fm 3559 m
+41=1946

	TIME	LOCATION LAT.	LONG.
OVERSIDE	1708 Z		
ON BOTTOM	1800 Z	06° 38.5 N	92° 49.7 W
ON DECK	2030 Z		6.9

WIRE OUT 3566 M TOTAL 3560 M PULLOUT

TENSION 16,000 TOTAL 9500 AVERAGE 6500 DIFFERENCE

DESCRIPTION 60' piston rigged. 17' freefall cable. 77' of trip wire on gravity core. Took it in at 3:45pm
150 cm = 1st section Bottom of core?
101 cm = 2nd "
Total 251 cm Nk Bu Tuned
1 gt. No Secone Samp.

LOCAL TOPOGRAPHY Site H, East.

REMARKS Numerous tension jumps (~1000lb) during pullout. Winch was stopped for ~1 min during pullout due to being in high gear. Had to take in in low gear.
when recovered piston hanging out of barrel. Therefore sediment distorted when wire pulled thru liner to remove fig & piston.
Wire cut at shear & pulled thru core barrels toward nose cone end

IMI9BC25

CORE LOG

EXPEDITION: INPOMED CORE # 25 BX

VESSEL: MELVILLE DATE: 10-19-77

LEG: 01 DEPTH 1798? 1915, fm 3578

+42=1957

	TIME	LOCATION LAT.	LOCATION LONG.
OVERSIDE	2109 Z		
ON BOTTOM	2222 Z	06° 34.1'N	92° 47.9'W
ON DECK	2349 Z	32.9'N	45.7'W

WIRE OUT 3593 M TOTAL 3583 M PULLOUT

TENSION 8500 TOTAL 7500 AVERAGE 1000 DIFFERENCE

DESCRIPTION No core; box core didn't trip. Brought on board. No apparent malfunction. It is believed not to have reached the bottom after close observation of the somewhat negligible pinger trace.

LOCAL TOPOGRAPHY Site H - Flat

REMARKS

IMI 9BC26

CORE LOG

EXPEDITION: INDOMED CORE # 26 BX

VESSEL: MELVILLE DATE: 10-20-77

LEG: 01 DEPTH 1910 fm 3568

+41 = 1951

	TIME	LOCATION LAT.	LONG.
OVERSIDE	0010 Z		
ON BOTTOM	0136 Z	6° 30.9'N	92° 44.0'W
ON DECK	0309 Z	33.1'N	45.3'W

computer out. Obtain from Deep Tow transponder data

WIRE OUT 3619 M TOTAL 3598 M PULLOUT

TENSION 8000 TOTAL 7000 AVERAGE 1000 DIFFERENCE

DESCRIPTION Surface to base
0-18cm Solid Olive brn. mud. 5YR 2/2 + 5YR 3/2. Forams present ~12cm to base. Foram density increases to base. Transition grades over 1-2cm. 18-24cm mottling present. Combination of browns from surface + 5YR 4/4/10YR 5/4. Gradational to below. alen

LOCAL TOPOGRAPHY Site H. Flat

REMARKS
3 large Mn nodules, 4 small Mn nodules

3568m
1910m

25m
310
335m X
+ 746
1081 X
746
1827 X
746
2573 X
746
3319 X

3568
3319
249

Bottom 3568m

2070
746
2816
746
3562

24-34cm becomes lighter brown sediment (predominantly) still mottled combination 5YR 3/4 / 10YR 4/2 / 10YR 5/4 Gradation at interface

SLW

IMI9BC27

CORE LOG

EXPEDITION: INDOMED CORE # 27 ~~BC~~ BX

VESSEL: MELVILLE DATE: 10-~~19~~ 20-77

LEG: 01 DEPTH 1947 fm 3638 m

+43 = 1990

	TIME	LOCATION LAT.	LOCATION LONG.
OVERSIDE	0714 Z		
ON BOTTOM	0826 Z	~~06° 28.3 N~~	92° 50.8 W
ON DECK	~~#~~ 0958 Z	06° ~~29.85~~ N 28.3	

WIRE OUT 3689 M TOTAL 3568 M PULLOUT

TENSION 8500 TOTAL 7000 AVERAGE 1500 DIFFERENCE

DESCRIPTION ~ 100 mm Nodules ~~largest ~ 33 cm~~
Dark Brn. mud
largest ~ 30 cm ~~33~~ cm
Nodules desc. p15 Log Book

LOCAL TOPOGRAPHY Site H. Cliff Flat

REMARKS & rolling

CORE LOG

Sta 019

EXPEDITION: INPOMED CORE # 77-28

VESSEL: MELVILLE DATE: Oct. 23, 77

LEG: 01 DEPTH ~ X fm ~~3600~~ 6840 ft

3600 + 141 = 3741

	TIME		LOCATION LAT.	LONG.
OVERSIDE	0349 Z			
ON BOTTOM	Z	APX	6° ~~31.6'~~ N	92° ~~51.2~~ W
ON DECK	0520 Z		32.9' N	49.3' W

WIRE OUT _____ M TOTAL _____ M PULLOUT

TENSION _____ TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION 126 cm
Btm. 43 cm light brown mud
Top 83 cm darker brown mud

LOCAL TOPOGRAPHY Cliff. Side of a steep-walled depression, surveyed with deep tow.

REMARKS
Transponder positions available for the launch site

CORE LOG

Sta. 09

EXPEDITION: INDOMED CORE # ~~77~~ 29

VESSEL: MELVILLE DATE: Oct. 23, 77

LEG: 01 DEPTH (6840 ~~fm~~ m) (3600 fm)

3600+241 = 3841

	TIME	LOCATION	
OVERSIDE	0407 Z	6° LAT 33.0'N	LONG 92° 49.31'W
ON BOTTOM	Z	With a ship's	
ON DECK	0538 Z	length of 77-28	

WIRE OUT _____ M TOTAL _____ M PAYOUT

TENSION _____ TOTAL _____ AVERAGE _____ DIFFERENCE

107 cm

DESCRIPTION 126 cm Btm. 70 cm gray clay-like material (chalky below) Top 56 cm Soft Brn. mud

LOCAL TOPOGRAPHY On Cliff. Side of steep walled depression

REMARKS previously surveyed with deep tow.

IF 28, 29, 30 (lost) & 31 were attempts to sample an older calcareous sedimentary section exposed on the sides of an erosional (?) hollow ~ ½ km wide ~ 100 m deep.

CORE LOG

EXPEDITION: INDOMED CORE # STA. 09 ~~77-30~~

VESSEL: MELVILLE DATE: Oct. 23, 77

LEG: 01 DEPTH 3600 ? fm 6840 m
+141 = 3741

	TIME	LOCATION	
OVERSIDE	0413 Z	LAT. 6°33.1'N	LONG. 92°49.4'W
ON BOTTOM	Z	Within a Ships	
ON DECK	Z	length of 77C29	

WIRE OUT _____ M TOTAL _____ M PAYOUT

TENSION _____ TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION No Sample
flotation and ~~f~~ weighted

LOCAL TOPOGRAPHY

REMARKS

CORE LOG

EXPEDITION: INDOMED

VESSEL: MELVILLE

LEG: 01

CORE #: Sta. 09 FF ~~28~~ 31

DATE: Oct 23, 1977

DEPTH 3600 fm 6840 m

+141 = 3741

	TIME	LOCATION LAT.	LONG.
OVERSIDE	0419 Z		
ON BOTTOM	0545 Z	Same	
ON DECK	X Z	6° ~~37.6~~ 33.1'N	92° ~~57.2~~ 49.5'W

WIRE OUT _____ M TOTAL _____ M PULLOUT

TENSION _____ TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION Bottom 6 cm lite Brn Buff Clay
Top 66 cm dark Brn. Lumpy Mud
total 72 cm

LOCAL TOPOGRAPHY Cliffs

REMARKS The shallest of the string of 4 ~~BGS~~ FFS up the side of an erosional hollow (see 29FF)

CORE LOG

EXPEDITION: INDOMED CORE # 32 PG

VESSEL: MELVILLE DATE: 10/26/77

LEG: 01 DEPTH 1950 fm 3644'

+432/993

	TIME	LOCATION LAT.	LONG.
OVERSIDE	1221 Z		
ON BOTTOM	1359 Z	6°32.~~8~~ ~~44~~	92°48.~~8~~'W
ON DECK	1600 Z	.8 N	.4'

WIRE OUT 3645 M TOTAL 3631 M PULLOUT

TENSION 16000 TOTAL 9000 AVERAGE 7000 DIFFERENCE

DESCRIPTION 144 CM
BTM — LIGHT BRN CLAY (CATCHER & CUTTER)
MOTTLED — TOP 44 CM CONSISTS OF DK BRN CLAY
GRADING INTO MUD AT SURFACE
1 freezer disk

LOCAL TOPOGRAPHY

REMARKS

CORE LOG

EXPEDITION: INDOMED CORE # 32 P

VESSEL: MELVILLE DATE: 10/26/77

LEG: 01 DEPTH 1950 fm 3644 m

+23 = 1993

	TIME	LOCATION LAT.	LONG.
OVERSIDE	1221 Z		
ON BOTTOM	1359 Z	6° 32.7'N	92°48.8'W
ON DECK	1600 Z	.8'	.4'

WIRE OUT 3645 M TOTAL 3631 M PULLOUT

TENSION 16000 TOTAL 9000 AVERAGE 7000 DIFFERENCE

(Peter took some of nose core samp.
1 Nose core frozen dish)

DESCRIPTION 20' free fall wire – Gravity Core Trip 62'
SLEEVE – CHALKY MATERIAL – 1 Frozen Dish
BTM – SEC I – 150CM HARD CLAY (BRN)
SEC II – 88CM HARD CLAY (BRN)
SEC III – 150CM HARD BRN CLAY
SEC IV – 150 CM HARD BRN CLAY GRADING INTO SOFTER, DARKER BRN CLAY TOWARDS TOP – SEC V – 150CM MOTTLED DK BRN SOFT CLAY w/ BOUR
SEC VI – 94CM SOUPY DK BRN SEDIMENTS MOTTLED

LOCAL TOPOGRAPHY Bottom of 60 fm. depression in Site H area

REMARKS Winch unable to pull core out immed after core tripped & wire stopped. In bottom for 2-3 min before pullout. Trip observed at 3640 m. wire out. Level wind off adjustment at start of lowering. Meter wheel not switched on at start.

IMI 9BC 33

CORE LOG

EXPEDITION: INDOMED CORE # 33 BX

VESSEL: MELVILLE DATE: 10/26/77

LEG: 01 DEPTH ~~1905~~ ~~1920~~ fm ~~3557~~ 3591 ~~3587~~ m

42 + 1922 = 1964 3591 m

	TIME	LOCATION LAT.	LONG.
OVERSIDE	1735 Z		
ON BOTTOM	2027 Z	6° 35.1' N	92° 48.9' W
ON DECK	~2245 Z	34.9' N	.8'

WIRE OUT 3635 M TOTAL 3618 M PULLOUT

TENSION 9,000 TOTAL 7,000 AVERAGE 2,000 DIFFERENCE

DESCRIPTION Brown muds over Tan mottled muds
No nodules. 50cm thick
see Log Book for nodule population
44cm total. Tubing base to top.
0-12cm moderate brn 5YR 3/4 + mod. yellowish brn. 10YR 3/4. Some foraams. 12-20cm Interface. Mottling w/above colors & Grayish brn. 5YR 3/2 +

LOCAL TOPOGRAPHY "Bald Spot" in nodule field - Site H. area

REMARKS Relay Transponder @ 282m. (150 fm)
Hold ~188 m off bottom for ship locating over bald spot.

3561 ← 2
746

2815 — 4
746 ×

2069 — 3
746 ×

1323 — 2
746 ×

577 → 1

5

Dusky yellowish brn. 10YR 2/2. Many foraams present.
20-28cm mottling still present but w/darker browns predomenate. Foraams.
28-44cm darken than Dusky brown. 5YR 2/2 some foraams.

SLW

IMI 9B<34

CORE LOG

EXPEDITION: INDOMED CORE # 34BX

VESSEL: MELVILLE DATE: 10/27/77

LEG: 01 DEPTH 1906 fm 3561°

141 = 1947

	TIME	LOCATION LAT.	LOCATION LONG.
OVERSIDE	0000 Z		
ON BOTTOM	0240 Z	6° 32.8'N	92° 46.9'W.
ON DECK	Z		

WIRE OUT 3600 M TOTAL 3592 M PULLOUT

TENSION 8000 TOTAL 7000 AVERAGE 1000 DIFFERENCE

DESCRIPTION 39cm
from base = 0-20cm brn. to dk. tan
mottled mud. Gradational over
2-3 cm. 20-39cm dk. Brn. mud.

slw

LOCAL TOPOGRAPHY Site H Sand Spread area

REMARKS 40m. off bottom from 0140 until 0240 while positioning ship.
Missed Sand

CORE LOG

EXPEDITION: INDOMED CORE # 35 PG

VESSEL: MELVILLE DATE: 27 OCT 77

LEG: 01 DEPTH 1906 fm 356X°

+41 = 1947

	TIME	LOCATION LAT.	LONG.
OVERSIDE	0624 Z		
ON BOTTOM	0745 Z	06~~33.7~~ N	92.~~46.7~~ W
ON DECK	1000 Z	34.1' N	47.5' W

WIRE OUT 3569 M TOTAL 3569 M

TENSION 9500 TOTAL 14080 AVERAGE 4580

DESCRIPTION CATCHER - MOTTLED DK & LIGHT CLAYS
BTM 50 CM LT BRN CLAY
MIDDLE MOTTLED DK BRN CLAY
TOP 15 CM SOUPY VERY DK MUD (BRN)
TOTAL LENGTH 182 CM

LOCAL TOPOGRAPHY FLAT

REMARKS Woodhie Univ Wisconsin

CORE LOG

EXPEDITION: INDOMED CORE # 35 P

VESSEL: MELVILLE DATE: 27 Oct 77

LEG: 01 DEPTH 1906 fm 356X0 m

+41=1947

	TIME	LOCATION LAT.	LONG.
OVERSIDE	0624 z		
ON BOTTOM	0745 z	63 33.7 N	92 46.7 W
ON DECK	1002 z	34.1' N	47.5' W

WIRE OUT 3569 m TOTAL 3569 ~~1408~~ m PAYOUT

TENSION 9,500 TOTAL 14,088 AVERAGE 4580 DIFFE

CORE CUTTER CHALKY CLAY
CORE CATCHER (SLEEVE) CHALKY CLAY } 2 SEPARATE FREEZER CONTAINERS

DESCRIPTION SEC I (BTM) (150 CM) - CHALKY LT BRN CLAY; SEC II (150 CM) - CHALKY LT BRN CLAY; SEC III (150 CM) - CHALKY LT BRN CLAY MORE H_2O; SEC IV (90 CM) - CHALKY LT BRN CLAY W/ H_2O; SEC II (150 CM) - BTM 75 CM CHALKY LT BRN CLAY GRADING INTO DK BRN MOTTLED CLAY; SEC VI (150 CM) MOTTLED LT & DK BRN CLAY; SEC III (150 CM) BTM 75 CM MOTTLED DK BRN CLAY, TOP MORE UNIFORMLY DK BRN CLAY; SEC VIII (14 cm PAK) DK BRN CLAY GRADING INTO SOUPY MUD AT VERY TOP; FREEZER CONTAINER - VERY LIQUIDY MUD W/ NODULES (2 OR 3)

LOCAL TOPOGRAPHY Flat

REMARKS

Aaw! 2 trips?

TOP MATERIAL SOUPY - SLID UP CORE LINER - CORE WAS CUT AT SEDIMENT INTERFACE & SOUPY MATERIAL CONTAINING NODULES SAVED IN FREEZER CONTAINER

Oberlin Univ Wisconsin

IM19BC36

CORE LOG

EXPEDITION: INDOMED CORE # 36 BX

VESSEL: MELVILLE DATE: 27 Oct 1977

LEG: 01 DEPTH 1908 fm 3564'

+41=1949

	TIME	LOCATION LAT.	LOCATION LONG.
OVERSIDE	1235 Z		
ON BOTTOM	1552-1555 Z	6° 33.7'N	92° 47.2'W
ON DECK	~~0235~~ Z 1740	.6'	.5'

WIRE OUT 3597 M TOTAL 3582 M WIRE OUT

TENSION 9500 TOTAL 7500 AVERAGE 2000 DIFFERENCE

Relay Transponder at 293 m, Pinger @ 38 m.

DESCRIPTION ~~32 cm (at front edge)~~
0-32 cm (from top) continuous gradation from dk. Brn. mud at surface to lighter brown at depth. Tubeworms visible at depth. >10 cm in core.
Buried module at 12-13 cm in center of BOX (hit while emplacing slicer). sla

LOCAL TOPOGRAPHY Flat

REMARKS Box Core rigged with 10 m sand spread arms, Battery, Sand Pump, and Transponder. Transponder used to turn on sand spread system. Attempt ~~Spread sand @ 1509 Z~~ Winch stopped momentarily @ 3522 on way up. Missed track by ~8 fm (15 m) missed sand

CORE LOG

EXPEDITION: INPOMED CORE # 37 PG

VESSEL: MELVILLE DATE: 27 OCT 77

LEG: 01 DEPTH 1950 fm 3644' m

+43 = 1993

	TIME	LOCATION LAT.	LOCATION LONG.
OVERSIDE	~~1905~~ 1914 Z		
ON BOTTOM	2040 - 2042 Z	6 31.4N	92 48.7W
ON DECK	2240 Z	32.3'N	.3'

WIRE OUT 3675 m TOTAL 3666 m PULLOUT

TENSION 9500 TOTAL 14000 AVERAGE 4500 DIFFERENCE

119 cm TW

DESCRIPTION LENGTH: 153CM

TOP 30CM: DK BRN MUD

NEXT 10CM: MED BRN

NEXT 30 CM: MOTTLED DK, MED, LT BRN W/BURROWS

NEXT 10 CM: MED BRN & DK BRN MOTTLED

REST MED BRN

+ SLEEVE & NOSECONE

LOCAL TOPOGRAPHY CLIFF

REMARKS see 37P

CORE LOG

EXPEDITION: INDOMED CORE # 37 P

VESSEL: MELVILLE DATE: 27 Oct 77

LEG: 01 DEPTH 1950 fm 3644'
+432=1993

	TIME	LOCATION LAT.	LONG.
OVERSIDE	1905 Z		
ON BOTTOM	2040 Z -2042	6 31.4N	92 48.7W
ON DECK	2240 Z	32.3'N	.3'

WIRE OUT 3675 M TOTAL 3666 M PULLOUT

TENSION 9,500 TOTAL 14,000 AVERAGE 4,500 DIFFERENCE

DESCRIPTION
NOSE: DUSTY COLORED CLAY
SLEEVE: MORE OF THE SAME
SEC I: 110CM LT BRN CLAY (Bottom?)
SEC II: 115CM LT BRN CLAY
SEC III: 150CM LT BRN CLAY
SEC IV: 156CM LT BRN CLAY
SEC V: 102CM MED BRN CLAY
SEC VI: 117CM MED BRN CLAY
SEC VII: 176CM TOP 60CM DK BRN MUD BTM LT BRN REDDISH MUD
MOTTLED

LOCAL TOPOGRAPHY Flat

REMARKS No Transponder on wire (ship partly transponder navigated).
Pinger at 25 meter

– on the side of erosional depression, where a slope truncates part of the older sedimentary section. Core was at the location of a deep tow seismic profile and some deep tow photographs

INDOMED II CORING

CORE #	DATE (1977)	LENGTH PISTON	CONDITION	LENGTH GRAVITY	CONDITION	# BARRELS PISTON	LENGTH GRAVITY BARREL
38 P & PG	15 NOV	602	Good	75	Good	40'	6'
41 P & PG	16 NOV	NONE	—	230 *	SEE BELOW	40'	6'
43 P & PG	17 NOV	326	Good	92	Good	20'	6'
46 P & PG	17 NOV	193	Good	160	Good	20'	6'
49 P & PG	19 NOV	NONE	—	NONE	—	20'	6'
52 P & PG	20 NOV	523	Good	11	Good	20'	6'
54 P & PG	21 NOV	369	Good	NONE	—	20'	6'
57 P & PG	22 NOV	NONE	—	48	Good	20'	6'
58 P & PG	22 NOV	431	Good	NONE		20'	6'
60 P & PG	23 NOV	161	POOR	NONE	—	20'	6'
63 P & PG	24 NOV	219	GOOD	31	GOOD	20'	6'
66 P & PG	25 NOV	171	FAIR	20	GOOD	20'	6'
71 P & PG	27 NOV	432	Good	82	Good	40'	6'

* 0-50 cm OVER PENETRATION

SIO

GEOLOGICAL SAMPLE LOG

Date 15 NOV. 77 Expedition INMD-2 Sample No. 38 PG + PG

Ship MELVILLE

Lat. 27°56.0N DR. 27°56.6N SATFIX 2002Z

Long 048° 51.6W 048° 54.4W

Geographic Area WEST. FLANK of RIDGE

BATHYMETRY
- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [x] Piston (P) 602 cm
- [x] Trip Gravity (PG) 75 cm
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 1847 Z On bottom 2016 Z Off Bottom 2018 Z On deck 2212 Z

DEPTH: Echo 2650 Fm/M Correction 90 Corrected Fm. 2740 M. 5010

LENGTH of core(s) or sections (cm) or size of haul TOTAL 602 CM + CORECATCHER SAMPLE
SECTIONS 0-40 // 40-115 // 115-190 // 190-265
265-340 // 340-415 // 415-490 // 490-565 // 565-602

DESCRIPTION of sample 10YR 3/4 BROWNISH CALCAREOUS CLAY - BOTTOM OF PISTON CORE PLIOCENE (NANNO?)

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) 12' FREEFALL - 63' TRIPPING WIRE.
5037 m @ PULLOUT
14,000 LBS. PULLOUT

SIO

GEOLOGICAL SAMPLE LOG

Date 15 NOV. 77 Expedition INMD-2 Sample No. 38 PC + PG

Ship MELVILLE

Lat. 27°56.0N DR. 27°56.6N SKTEK 2002Z

Long 048° 51.6W 048° 54.4W

Geographic Area WEST. FLANK of RIDGE

BATHYMETRY
- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [x] Piston (P) 602 cm
- [x] Trip Gravity (PG) 75 cm
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 1847 Z On bottom 2016 Z Off Bottom 2018 Z On deck 2212 Z

DEPTH: Echo 2650 Fm/M Correction 90 Corrected Fm. 2740 M. 5010

LENGTH of core(s) or sections (cm) or size of haul TOTAL 602 CM + CORECATCHER SAMPLE
SECTIONS 0-40 // 40-115 // 115-190 // 190-265
265-340 // 340-415 // 415-490 // 490-565 // 565-602

DESCRIPTION of sample 10YR 3/4 BROWNISH CALCAREOUS CLAY - BOTTOM OF PISTON CORE PLIOCENE (NANNO?)

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) 12' FREEFALL - 63' TRIPPING WIRE.
5037 m @ PULLOUT
14,000 LBS. PULLOUT

13

SIO

GEOLOGICAL SAMPLE LOG

Date ~~15~~ 16 - NOV-77 Expedition INMD-II Sample No. 39BX

Ship RV MELVILLE

Lat. 27° 55.6'N

Long. 48° ~~53.2W~~ 52.9'

Geographic Area WEST FLANK OF RIDGE

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down ~~Z~~ On bottom 0206 ~~Z~~ Off Bottom 0208 ~~Z~~ On deck ~~Z~~

DEPTH: Echo 2700 Fm/~~M~~ Correction 91 Corrected Fm. 2791 M. 5103

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample NO SAMPLE — NO TRIP

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) CALM SEAS, NO WIRE ANGLE

PULL OUT 11,000 lbs

TOTAL WIRE OUT WAS 5155 METERS

PIG TAIL PULLED OUT BUT BLOCK RELEASE DID NOT PULL OUT TO RELEASE WIRE - NEXT TIME WE PUT ON 2 RUBBER SPRINGS ON BLOCK

SIO

GEOLOGICAL SAMPLE LOG

Date 16 Nov 77 Expedition INMD II Sample No. INMD 40Bx

Ship R/V MELVILLE

Lat. 28° 20.8X N

Long. 47° 28.6 W

Geographic Area WEST OF FLANK

BATHYMETRY
- ☐ Flat bottom
- ☒ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☒ Box (Bx)
- ☐ Other

TIME: Start down ~~1200~~ 1225 z On bottom 1427 z Off Bottom 1432 z On deck 1610 z

DEPTH: Echo 2325 Fm/M Correction 73 Corrected Fm. 2398 M. 4385

LENGTH of core(s) or sections (cm) or size of haul 38 cm

DESCRIPTION of sample CALCAREOUS CLAY WITH ONE SMALL MN NODULE AT TOP.

CONDITION of sample O.K.

REMARKS: (Equipment function, weather, accidents, etc.) SOFT CALCAREOUS CLAY 2 RUBBER SURGICAL HOSES SEEM TO WORK WELL ON BLOCK PIN. PINGER NOT GIVING GOOD BX BOUNCE TRACE 40BX-4 SHOW ICE XTALS FROM SUB-SAMPLES FREEZING 40BX-4 WAS ORIGINALLY 34 CM LONG - NOW IS 32 CM FROM SETTLING

SIO

GEOLOGICAL SAMPLE LOG

Date 16 NOV 77 Expedition INDOMED II Sample No. INMD-41P & PG

Ship R/V MELVILLE

Lat. 28° 25.3' N

Long. 46° 58.5' W

Geographic Area

BATHYMETRY
- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [x] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [x] Piston (P) *
- [x] Trip Gravity (PG) *
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 1910 Z On bottom 2134 Z Off Bottom 2134 Z On deck Z
* 2035Z

DEPTH: Echo 2236 Fm/M Correction 71 Corrected Fm. 2341 M. 4281

LENGTH of core(s) or sections (cm) or size of haul * 50 cm (APPROX) OVERPENETRATION IN GRAVITY CORE PLUS - 180 cm IN BARREL
* EMPTY!

DESCRIPTION of sample MODERATE BROWN (10YR 5/3) CALCAREOUS CLAY.

CONDITION of sample & GRAVITY GOOD — NOTHING IN PISTON CORE! 50 cm OVERPENETRATION IN FREEZER BOX.

REMARKS: (Equipment function, weather, accidents, etc.) 12' FF & 63' TRIP. STOPPED WINCH WITH 600 METERS OUT FOUND A NEW BOTTOM & QUICKLY PUT THE CORER IN (I HOPE) TOTAL WIRE OUT 4279 m
PULLOUT @ 4270m — 14,500 lbs.
I BELIEVE CORER FISHTAILED - LAYED ON BOTTOM - WHEN PICKED UP - BENT THIRD & FORTH BARREL — NO SEDIMENT IN BARRELS

SIO

GEOLOGICAL SAMPLE LOG

Date 17-NOV-77 Expedition INMD Sample No. 42BX

Ship RV MELVILLE

Lat. 28° 34.4 N

Long. 46° 21.4 W

Geographic Area WEST FLANK

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 0443 Z On bottom 0600 Z Off Bottom 0602 Z On deck 0711 Z

DEPTH: Echo 2005 Fm/M Correction 59 Corrected Fm. 2064 M. ~~4155~~ 3774

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample CARBONATE OOZE

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.)

TOTAL WIRE OUT 3810 METERS

10,000 PULL OUT 3795 METER OUT WHEN PULL OUT

SIO

GEOLOGICAL SAMPLE LOG

Date 17 Nov 77 Expedition INMD II Sample No. 43 P & PG

Ship R/V MELVILLE

Lat. 28° 33.7 N (34.0') DR. @

Long. 46° 21.8 W (22.8) 1077

Geographic Area

BATHYMETRY
- ☐ Flat bottom
- ☒ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☒ Piston (P) *
- ☒ Trip Gravity (PG) *
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 0905 Z On bottom 1016 Z Off Bottom — Z On deck 1155 Z

DEPTH: Echo ~~1996~~ 2001 Fm/M Correction 59 Corrected Fm. ~~2054~~ 2060 M. ~~3755~~ 67

LENGTH of core(s) or sections (cm) or size of haul: * 326 cm: 0-26 (26cm-4), 26-76 (50cm-3), 76-101 (25-4), 101-176 (75-3), 176-251 (75-2) & 251-326 (75-1) + CATCHER

* 92 cm + CATCHER

DESCRIPTION of sample: MODERATE BROWN 10YR 6/3 CALCAREOUS CLAY

CONDITION of sample: Good!

REMARKS: (Equipment function, weather, accidents, etc.) 20' PISTON 10' FF 35' TRIPPING WIRE

PULLOUT @ 3776 m 14,500 lbs

SIO

GEOLOGICAL SAMPLE LOG

Date 17 NOV 77 Expedition INMD II Sample No. 44 BX

Ship MELVILLE

Lat. 29 01.57 N } Sat Fix
Long. 45 00.07 W } @ 2120Z

Geographic Area WEST FLANK of MAR

BATHYMETRY
- ☐ Flat bottom
- ☒ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☒ Box (Bx)
- ☐ Other

TIME: Start down 1950 Z On bottom 2110 Z Off Bottom 2112 Z On deck 2230 Z

DEPTH: Echo ~~2090~~ 2100 Fm/~~M~~ Correction 63 Corrected Fm. 2163 M. ~~3936~~ 3955

LENGTH of core(s) or sections (cm) or size of haul ~ 35 cm

DESCRIPTION of sample Appears box penetrated twice will try again

POOR SAMPLE

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) TOTAL WIRE OUT 3995 HIT AT 3989 METERS WIRE, 10,000 lbs PULL OUT. SET DOWN SECOND TIME AS CHECK. TENSION DROPED OFF AT 3983 INDICATING BOX TRIPED. LOWERED AT 25 M/MIN WITH SIGNIFICANT SIDE ROLLING. WILL TRY PISTON CORE ONLY WITH THESE SEAS.

Entry Rate

SIO

GEOLOGICAL SAMPLE LOG

Date 17-18 NOV 77 Expedition INMD 2 Sample No. 45BX

Ship MELVILLE

Lat. 29.01.4'N

Long. 45° 00.5'W

Geographic Area

BATHYMETRY

- [x] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 2315 Z On bottom 0035 Z Off Bottom Z On deck 0230 Z

DEPTH: Echo ~~2051~~ 2104 Fm Correction 63 Corrected Fm. 2167 M. ~~3862~~ 3962

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample No Sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

Box core did not trigger.
Trigger piston stuck.

SIO

GEOLOGICAL SAMPLE LOG

Date ~~17~~ 18 NOV 77 Expedition INDOMED Sample No. IN ~~DM~~ MD - 46 P & PG

29°01.5'N, 45°01.2'W

Ship R/V MELVILLE

Lat. SAT 0302Z 29° 01.5N DR 0424 29 01.7N

Long. 045°00.7W 045 00.7W

Geographic Area

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [x] Piston (P) *
- [x] Trip Gravity (PG) *
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 0300 Z On bottom 0418 Z Off Bottom 0422 Z On deck 0610 Z

DEPTH: Echo 2100 Fm/M Correction 63 Corrected Fm. 2163 M. 3955

LENGTH of core(s) or sections (cm) or size of haul * 193 cm : 0-43, 43-118, 118-193 cm + CATCHER * 160 cm + CATCHER

DESCRIPTION of sample MODERATE BROWN 10YR 6/3 CALCAREOUS CLAY

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.) 20', 10' FF, 35' TRIP WIRE

TOTAL WIRE OUT 3999 m

PULLOUT 3980 m 12,500 lbs.

SIO
GEOLOGICAL SAMPLE LOG

ONE MORE TIME

Date 18 NOV 77 Expedition INMD 2 Sample No. 47 BX

Ship MELVILLE
Lat. 29°01.3'N
Long. 45°01.4'W
Geographic Area West Flank M.A.R.

BATHYMETRY
- [x] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 0635 Z On bottom 0755 Z Off Bottom 0759 Z On deck 0930 Z

DEPTH: Echo 2105 Fm/M Correction 63 Corrected Fm. 2168 M. 3964

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample No Sample – box did not trip (Pigtail still in place).

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) 11,000 lb PULL OUT without shovel closing

Set down twice. PINGER BAD

SIO

GEOLOGICAL SAMPLE LOG

Date 18 Nov 77 Expedition IWMD II Sample No. 48 Bx

Ship MELVILLE

Lat. 29°48.8'N

Long. 43°13.3'W

Geographic Area

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 2014 Z On bottom 2125 Z Off Bottom 2126 Z On deck 2230 Z

DEPTH: Echo 1510 Fm/M Correction 42 Corrected Fm. 1552 M 2838

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample Good — CARBONATE WITH PTEROPODS

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 19 NOV 77 Expedition INDOMED Sample No. IN IMD - 49 P & PG

29° 47.1' N, 43° 13.6' W

Ship R/V MELVILLE

	SAT FIX 0024	DR 0115
Lat.	29° 46.9N	29 47.4N
Long.	43 13.5W	43° 12.1W

Geographic Area WEST FLANK

BATHYMETRY
- ☐ Flat bottom
- ☒ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☒ Piston (P)
- ☒ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 0030 Z On bottom 0108 Z Off Bottom 0110 Z On deck 0230? Z

DEPTH: Echo 1475 67 Fm/M Correction 41 Corrected Fm. 1516 08 M. 2772 57

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample NO SAMPLE

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) CHANGED TRIPPING WIRE TO 28' - 20' BARREL - 10' FF
TOTAL WIRE OUT 2854M
PULLOUT @ 10,000 lbs

SIO

GEOLOGICAL SAMPLE LOG

Date 19 NOV 77 Expedition INMD Sample No. 50BX

Ship RV MELVILLE

Lat. ~~31°43N~~ 31°10.7'N

Long. ~~39°35N~~ 39°40.9'W

Geographic Area MID ATLANTIC RIDGE

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 2203 Z On bottom 2320 Z Off Bottom 2322 Z On deck 0045 Z

DEPTH: Echo 1855.0 Fm/M Correction ~~3460~~ 3454 C.M. Corrected Fm. 1908.4 M. 3481

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample CALCAREOUS OOZE

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.) 12,500 PULL OUT 3532 TOTAL WIRE OUT

SIO

GEOLOGICAL SAMPLE LOG

Date 20-NOV-77 Expedition INMD Sample No. 51BX

Ship RV MELVILLE

Lat. 31° 39.2'N

Long. 37° 51.8'W

Geographic Area EAST FLANK OF RIDGE

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1115 Z On bottom 1253 Z Off Bottom 1255 Z On deck 1410 Z

DEPTH: Echo 193 ~~33~~ 44 4:1 Fm/M Correction 57 Corrected Fm. 2001 M. 3659 ~~3635~~

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample CALCAREOUS OOZE, VERY STIFF

CONDITION of sample FAIR

REMARKS: (Equipment function, weather, accidents, etc.) PUT INTO BOTTOM 3 TIMES TIME TO CHECK OUT RELEASE BLOCK.

SIO

GEOLOGICAL SAMPLE LOG

Date 20 NOV 77 Expedition INDO MED II Sample No. 52 P & PG

31°39.9'N, 37°52.0'W

Ship R/V MELVILLE

	1512 SBT	1628 Z DR.
Lat.	31° 39.6N	31° 39.9 N
Long.	37° 51.3W	37° 50.5W

Geographic Area EAST FLANK

BATHYMETRY
- ☐ Flat bottom
- ☒ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☒ Piston (P) *
- ☒ Trip Gravity (PG) *
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 1517 Z On bottom 1628 Z Off Bottom 1632 Z On deck 1737 Z

DEPTH: Echo 1924 (30) Fm/M Correction 56 Corrected Fm. 1978 (86) M. 3618 (31)

LENGTH of core(s) or sections (cm) or size of haul * 523 cm + CATCHER: 0-70 (70-7), 70-148 (78-6), 148-223 (75-5), 223-298 (75-4), 298-373 (75-3), 373-448 (75-2), 448-523 cm (75-1)

* 11 cm NO CATCHER

DESCRIPTION of sample MODERATE BROWN (10YR 5/3) CALCAREOUS CLAY

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) TRIP CHAIN ?

TOTAL WIREOUT 3670

pullout @ 3654 13,000 lbs.

SIO

GEOLOGICAL SAMPLE LOG

Date 21-NOV-77 Expedition INMD Sample No. 53BX

Ship MELVILLE

Lat. 32° 00.4'N

Long. 35°26.3'W

Geographic Area EAST FLANK

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 0605 Z On bottom 0718 Z Off Bottom 0720 Z On deck 0920 Z

DEPTH: Echo 1972 Fm/M Correction 58 Corrected Fm 2030 M. 3712

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample NO CORES TAKEN

CONDITION of sample Not So Good!!

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 21 NOV 77 Expedition INDOMED II Sample No. 54 P & PG

31°59.6'N, 35°28.9'W

Ship R/V MELVILLE

	1132 S.F.	1208Z DR
Lat.	31 59.8N	31 59.5N
Long.	35 28.8W	35 27.6W

Geographic Area EAST FLANK of MID-ATLANTIC RIDGE

BATHYMETRY
- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☒ Piston (P) *
- ☒ Trip Gravity (PG) *
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 1055 Z On bottom 1208 Z Off Bottom 1210 Z On deck ≈ 1340 Z

DEPTH: Echo 1965 Fm/M Correction 58 Corrected Fm 2023 M. 3698

LENGTH of core(s) or sections (cm) or size of haul * 369 cm 1e: 0-22, 22-79, 79-144, 144-219; 219-294; 294-369 cm

* EMPTY!

DESCRIPTION of sample MODERATE BROWN TO MILKY WHITE CALCAREOUS CLAY.

CONDITION of sample Good!

REMARKS: (Equipment function, weather, accidents, etc.)

TOTAL WIRE out 3733 m

pullout @ 3718 . 12,100 lbs

NO IDEA WHY THE GRAVITY CORE WAS EMPTY.

SIO

GEOLOGICAL SAMPLE LOG

Date 21 NOV 77 Expedition ~~LADOMED~~ Sample No. 55 BX

32° 25.0'N, 34° 05.6'N

Ship MELVILLE

Lat. 32° 25.9'N

Long. 34° 5.5'W

Geographic Area EAST FLANK OF M-A-RIDGE

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 2100 ~~Z~~ On bottom 2215 ~~Z~~ Off Bottom 2218 ~~Z~~ On deck 2338 ~~Z~~

DEPTH: Echo 2060 Fm/M Correction 61 Corrected Fm. 2101 M. ~~3879~~ 384X

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample CALCAREOUS OOZE

CONDITION of sample POOR

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 22-NOV-77 Expedition INMD Sample No. 56BX

Ship MELVILLE

Lat. 32°27.4N

Long. 34° 3.9W04.4'N

Geographic Area EAST FLANK OF MID-A-RIDGE

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 0040 Z On bottom 0208 Z Off Bottom 0210 Z On deck 0340 Z

DEPTH: Echo 2025 Fm/M Correction 60 Corrected Fm. 2085 M. 3812

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample BROWN CALCAREOUS OOZE: WORM AT SURFACE

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) NO TENSIONOMETER

13

SIO

GEOLOGICAL SAMPLE LOG

Date 22 Nov 77 Expedition INDOMED II Sample No. INMD-57P & PG

32°29.1'N, 34°05.1'W

Ship R/V MELVILLE

	0458 S.F.	0553 OR
Lat.	32° 28.6N	32°29.1N
Long.	34 05.0W	34 04.9W

Geographic Area

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [x] Piston (P) * NC
- [x] Trip Gravity (PG) *
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 0440 Z On bottom 0553 Z Off Bottom 0559 Z On deck 0715 Z

DEPTH: Echo 2078 Fm/M Correction 59 Corrected Fm. 2077 M. 3799

LENGTH of core(s) or sections (cm) or size of haul * 48 cm + CATCHER

* EMPTY

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

TOTAL WIRE OUT 3809 m

PULLOUT @ 3795 m 12,000 lbs

SIO

GEOLOGICAL SAMPLE LOG

Date 22 Nov 77 Expedition INDOMED II Sample No. INMD-58 P & PG

Ship R/V MELVILLE

Lat. 33° 20.0' N Sat 7-4

Long. 32° 18.1' W 1838 z

Geographic Area EAST FLANK

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [x] Piston (P) *
- [x] Trip Gravity (PG) * NL
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 1730 z On bottom 1838 z Off Bottom 1840 z On deck 1945 z

DEPTH: Echo 1775 (8) Fm/M Correction 47 Corrected Fm. 1828 (8) M. 3339 (7)

LENGTH of core(s) or sections (cm) or size of haul * 431 cm + CATCHER: 0-60 (60-6); 60-131 (71-5), 131-206 (75-4), 206-281 (75-3), 281-356 (75-2), 356-431 cm (75-1)

* None

DESCRIPTION of sample

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 22-NOV-77 Expedition INMD Sample No. 59BX

Ship MELVILLE

Lat. 33°22' 9'N

Long. 32°17.5' W

Geographic Area EAST FLANK OF M-A-RISE

BATHYMETRY

- ☐ Flat bottom
- ☑ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☑ Box (Bx)
- ☐ Other

TIME: Start down 2015 Z On bottom 2145 Z Off Bottom 2151 Z On deck 2319 Z

DEPTH: Echo 1185 Fm/M Correction 51 Corrected Fm. 1836 M. 3358

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) LET CORE STAY ON BOTTOM FOR 6 MIN. WITH EXTRA WEIGHT

13

SIO

GEOLOGICAL SAMPLE LOG

Date 23 Nov 77 Expedition INDOMED II Sample No. INMD-60P & PG

34°10.4'N, 30°59.0'W

Ship R/V MELVILLE

	0848Z	0914Z
Lat.	34° 10.8N	34° 16.6N
Long.	30° 59.4W	30 49.5N

Geographic Area ATLANTIS FZ

BATHYMETRY
- [ ] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [x] Piston (P) *
- [x] Trip Gravity (PG) *
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 0815 Z On bottom 0924 Z Off Bottom 927 Z On deck 1015 Z

DEPTH: Echo 1655 Fm/M Correction 46 Corrected Fm. 1696 M. 3107

LENGTH of core(s) or sections (cm) or size of haul * 161 cm + CATCHER 1e: 0-80; 80-161 cm

* EMPTY —

DESCRIPTION of sample BROWN CALCAREOUS CLAY - MANY FORAMS.

CONDITION of sample POOR - WATER IN SEDIMENT COLUMN

REMARKS: (Equipment function, weather, accidents, etc.)

TOTAL WIRE OUT 3136 m

pullout @ 3124 m only 10,000 lbs

SIO

GEOLOGICAL SAMPLE LOG

Date 23-NOV-77 Expedition INMD Sample No. 61BX

Ship MELVILLE

Lat. 34°09.8'N

Long. 38°S 8.1'W (30°S 9.1')

Geographic Area EAST FLANK OF M-A-RIDGE

BATHYMETRY
- ☐ Flat bottom
- ☑ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☑ Box (Bx)
- ☐ Other

TIME: Start down 1200 Z On bottom 1330 Z Off Bottom 1335 Z On deck 1500 Z

DEPTH: Echo 1655 Fm/M Correction 46 Corrected Fm. 1701 M. 3120

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample NO SAMPLE

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) PIG TAIL FAILED TO PULL OUT (HEAVY SEAS). PINGER AT 18M ABOVE CORER AND TRACE FINALLY LOOKS GOOD.

SIO

GEOLOGICAL SAMPLE LOG

Date 23-NOV-77 Expedition INMD II Sample No. 62BX

Ship MELVILLE

Lat. 34°08.4'N

Long. 30°56.6'W

Geographic Area EAST FLANK OF M-A RIDGE

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1525 Z On bottom 1638 Z Off Bottom 1640 Z On deck 1753 Z

DEPTH: Echo 1630 Fm/M Correction 45 Corrected Fm. 1675 M. 3063

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) PINGER 18M ABOVE BOX

HAPPY TURKEY

SIO

GEOLOGICAL SAMPLE LOG

Date 24 NOV 77 Expedition INDOMED II Sample No. INMD-63 P&PG

Ship R/V MELVILLE

Lat. 1220Z S.F. 34 41.7N | 1247Z 34° 41.7N

Long. 30° 20.1W | 30° 20.1W

Geographic Area

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [x] Piston (P) *
- [x] Trip Gravity (PG) *
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 1145 Z On bottom 1247 Z Off Bottom 1250 Z On deck 1350 Z

DEPTH: Echo 1818 Fm/M Correction 52 Corrected Fm. 1870 M. 3420

LENGTH of core(s) or sections (cm) or size of haul * 219 cm + CATCHER: 69-3 0-69, 69-144 75-2, 144-219 75-1.
* 31 cm w/o CATCHER SAMPLE

DESCRIPTION of sample BLUISH WHITE CALCAREOUS CLAY IN PISTON CORE. GRAVITY HAS SMALL MANGANESE NODULES @ TOP OF CORE of CALCAREOUS CLAY

CONDITION of sample Good.

REMARKS: (Equipment function, weather, accidents, etc.)

TOTAL WIRE OUT 3455 m

pull out 3445 m 12,000

SIO

GEOLOGICAL SAMPLE LOG

Date 24-MAY-77 Expedition INMD II Sample No. 64BX

34°39.2'N, 30°22.7'W

Ship MELVILLE

Lat. 34° 39.2N

Long. 36° 22.7W

Geographic Area EAST FLANK OF RISE

BATHYMETRY

- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1530Z On bottom 1648Z Off Bottom 1650Z On deck 1750Z

DEPTH: Echo 1810 Fm/M Correction 52 Corrected Fm. 1862 M. 3405

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample FAIR - CALLAREOUS OOZE

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) 3450 m TOTAL WIRE OUT 9,500 lb PULL OUT

SIO

GEOLOGICAL SAMPLE LOG

Date 24-25-NOV-77 Expedition INMD II Sample No. 65 BX

Ship MELVILLE

Lat. 34° 37.1' N

Long. 29° 59.3' W

Geographic Area EAST FLANK OF M-A-RIDGE

BATHYMETRY

- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 2030 Z On bottom 2255 Z Off Bottom 2258 Z On deck 2012 Z

DEPTH: Echo 1835 Fm/M Correction 53 Corrected Fm. 1888 M. 3452

LENGTH of core(s) or sections (cm) or size of haul APPROX: 35 cm

DESCRIPTION of sample

CONDITION of sample Good!

REMARKS: (Equipment function, weather, accidents, etc.) 3473 TOTAL WIRE OUT

SIO

GEOLOGICAL SAMPLE LOG

Date 25 NOV 77 Expedition IWDOMED II Sample No. IWMD-66P & PG

34°50.9'N, 28°45.9'W

Ship R/V MELVILLE

	1122Z S.F.	1234Z DR.
Lat.	34 51.3N	34 50.2N
Long.	28 44.8W	28°42.9W

Geographic Area EAST of MA RIDGE SOUTH of AZORES

BATHYMETRY
- [x] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [x] Piston (P) *
- [x] Trip Gravity (PG) *
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down ~~0855~~ 0114 Z On bottom 1230 Z Off Bottom 1234 Z On deck ~~Z~~1345Z

DEPTH: Echo ~~1942~~ 1925 Fm/M Correction 56 Corrected Fm. ~~1999~~ 1981 M. ~~3655~~ 3622

LENGTH of core(s) or sections (cm) or size of haul * 171 cm + CATCHER: 0-85 cm (85-2) & 85-171 cm (86-1)

* 20 cm

DESCRIPTION of sample LIGHT BROWN CALCAREOUS CLAY TO BLUISH WHITE CALCAREOUS CLAY.

CONDITION of sample PISTON CORE - FAIR
GRAVITY CORE - Good.

REMARKS: (Equipment function, weather, accidents, etc.) 0902 WINCH TROUBLE 450 METERS OUT/BRINGING BACK IN TO CUT WIRE - CUT 500 METERS

NO OBVIOUS TRIP PUT OUT 3682 m. pulled in WIRE TO 3657 m got good trip and then 13,500 lbs pullout. PISTON CORE LINER COLLAPSED JUST ABOVE SEDIMENT - PISTON DIDN'T BREAK - ALL PROBABLY DUE TO LATE TRIP OF PISTON CORER. (ALSO ORFICE IN PISTON CLOGGED.)

SIO

GEOLOGICAL SAMPLE LOG

Date 25 Nov 77 Expedition INMD II Sample No. 67 BX

Ship MELVILLE

Lat. 34 49.2 N

Long. 28 ~~45.8~~ W 46.8' W

Geographic Area E. FLANK OF RISE

BATHYMETRY

- [x] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1431 Z On bottom 1548 Z Off Bottom 1550 Z On deck 1710 Z

DEPTH: Echo 1945 Fm/M Correction 57 Corrected Fm. 2002 M. 3660

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample CALCAREOUS

CONDITION of sample POOR

REMARKS: (Equipment function, weather, accidents, etc.)

THIS ATTEMP WAS WITH ~ 70 lb MORE Pb in stem.

SIO

GEOLOGICAL SAMPLE LOG

Date 25-NOV-77 Expedition INMD II Sample No. 68BX

Ship MELVILLE

Lat. 34°48.3' N

Long. 28°21.5' W

Geographic Area PLATO [Plateau?] AREA

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 21:25 Z On bottom 22:15 Z Off Bottom 22:20 Z On deck 23.20 Z

DEPTH: Echo 1342 Fm/M Correction 36 Corrected Fm. 1378 M. 2520

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample Calcareous Ooze

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.) full weights

SIO

GEOLOGICAL SAMPLE LOG

Date 26-NOV-77 Expedition INMD II Sample No. 69BX

Ship MELVILLE

Lat. 34° 48.8'N

Long. 26° ~~8.4W~~ 17.7'W

Geographic Area

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1035 z On bottom 1158 z Off Bottom 1200 z On deck 1323 z

DEPTH: Echo 2475 Fm/M Correction 82 Corrected Fm. 2557 M. 4675

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample Calcareous ooze 44½ cm !
7 sub samples taken

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.) 4718 TOTAL WIRE OUT
PULL OUT 14,500 lbs, full WEIGHTS

SIO

GEOLOGICAL SAMPLE LOG

Date 26-NOV-77 (27) Expedition INDOMED II Sample No. 70BX

34°57.9'N, 24°18.5'W

Ship MELVILLE

Lat. ~~34°58.2'N~~

Long. ~~24° 16.5'W~~

Geographic Area

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 2320 Z On bottom 0048 Z Off Bottom 0050 Z On deck 0220 Z

DEPTH: Echo 2708 Fm/M Correction 91 Corrected Fm. 2799 M. 5118

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample Calcareous Ooze

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.)

Used Jack Schilling technique of keeping tension on box, on deck, until HRD drawn out.

FULL WEIGHTS

SIO

GEOLOGICAL SAMPLE LOG

Date 27 NOV 77 Expedition INDOMED II Sample No. IND-71 P & PG

SAT: 604Z, 34° 58.3' N, 24° 15.9' W

Ship R/V MELVILLE

Lat. 34° 59.9' N

Long. 24° 16.0' W

Geographic Area CAPE VERDE MADEIRA ABYSSAL PLAIN

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [x] Piston (P) A
- [x] Trip Gravity (PG) B
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down ~~0348~~ 0422 Z On bottom 0607 Z Off Bottom 0608 Z On deck 0800 Z

DEPTH: Echo 2706 Fm/M Correction 91 Corrected Fm ~~2803~~ 2797 M. ~~5129~~ 14

LENGTH of core(s) or sections (cm) or size of haul A: 432 cm + CATCHER: 0-57 (57-5), 57-132 (75-4), 132-207 (75-3), 207-282 (75-2), 282-357 (75-1), 357-432 cm; B - 82 cm NO CATCHER

DESCRIPTION of sample MODERATE BROWN CALCAREOUS CLAY (10YR 5/3) TO BLUISH WHITE CAL. CLAY 10YR 8/1 —

CONDITION of sample VERY GOOD

REMARKS: (Equipment function, weather, accidents, etc.) 40' BARREL, 15' FF STOPPED WINCH WITH 250M PLAYOUT - DRIFTED ONTO SEAMOUNT - TOTAL WIRE OUT 5160 m pullout @ 5136 m 15500 lbs

SIO

GEOLOGICAL SAMPLE LOG

Date 27-NOV-77 · Expedition INMD II Sample No. 72BX

34°57.0'N, 21°40.1'W

Ship MELVILLE

Lat. ~~34° 54.4N~~

Long. ~~21°33.8W~~

Geographic Area

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1943 Z On bottom 2103 Z Off Bottom 2105 Z On deck ~2215 Z

DEPTH: Echo 27~~40~~ 35 Fm/M Correction 93 Corrected Fm. 2826 M. 5182 71

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.) 5226 TOTAL METERS OUT 14,000 lbs pull out FULL WEIGHTS

SIO

GEOLOGICAL SAMPLE LOG

Date 28-NOV-77 Expedition INMD II Sample No. 73BX

34°58.1'N, 17°21.6'W

Ship MELVILLE

Lat. ~~35° 0.1N~~

Long. ~~170° 12.3W~~

Geographic Area

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1843 Z On bottom 2013 Z Off Bottom 2015 Z On deck 2135 Z

DEPTH: Echo 2150 Fm/M Correction 66 Corrected Fm. 2216 M. 4052

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) TOTAL WIRE 4090 HIT

TOTAL WIRE OUT 4098

SIO

GEOLOGICAL SAMPLE LOG

Date 29 Nov 77 Expedition LNDOMED II Sample No. 74 BX

35°10.8'N, 72°37.1 W

Ship R/V MELVILLE

Lat. ~~35° 13.7N~~

Long. 12°27.9W

Geographic Area

BATHYMETRY

- ☐ Flat bottom
- ☒ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☒ Box (Bx)
- ☐ Other

TIME: Start down 1950 ~~Z~~ On bottom 2056 ~~Z~~ Off Bottom 2058 ~~Z~~ On deck ~~2200Z~~

DEPTH: Echo ~~1865~~ 1850 Fm/M Correction 46 Corrected Fm. ~~1904~~ 1896 M. ~~3126~~ ~~3505~~ 3467

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) 3538 TOTAL WIRE OUT

SIO

GEOLOGICAL SAMPLE LOG

Date 6/10/78 Expedition INMD 9 Sample No. Bx 75

Ship Melville

Lat. 12° ~~11.9'~~ N 10.6'N

Long. 50° ~~22.2~~ E 24.5'E

Geographic Area Gulf of Aden

BATHYMETRY

- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [x] Other Edge of Trench Axis

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down ~~1437~~ z On bottom 1533 z Off Bottom 1535 z On deck 1628 z

DEPTH: Echo ~~1202~~ 1195 / ~~2198~~ 2198 Fm/M Correction 33 Corrected Fm. ~~1235~~ 1228 M. ~~2258~~ 2246

LENGTH of core(s) or sections (cm) or size of haul ~ 32 cm.

DESCRIPTION of sample Carbonate mud. 2-3 cm brown silty mud w abund forams over stiff sy green carb. mud.

CONDITION of sample Good. Water drained off top during recovery.

REMARKS: (Equipment function, weather, accidents, etc.) Seas flat calm. Pinger time base started shifting badly during overside operations. Bottom trace only when near contact. Average tension 4800 lbs, 2247 m. wire out @ start. Tension dropped to 4100 lbs, 2260 total wire out, Pullout tension 5200 lbs.

Reyssin S1

SIO

GEOLOGICAL SAMPLE LOG

Date 6/19/78 Expedition INMD 9 Sample No. Bx 76

Ship Melville

Lat. 19° ~~38'~~N 36.9'N

Long. 38° ~~42'~~E 46.9'E

Geographic Area Red Sea

BATHYMETRY

- ☐ Flat bottom
- ☐ Hills
- ☒ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☒ Box (Bx)
- ☐ Other

TIME: Start down 0245 Z On bottom 0341 Z Off Bottom 0344 Z On deck 0451 Z

DEPTH: Echo 1455 8 Fm/M Correction 94 Corrected Fm. 15~~46~~ 52 M. 2834 8

LENGTH of core(s) or sections (cm) or size of haul >50cm. Core overpenetrated. Sed./water contact ~10cm above top of box. Top lost during dissy. of box from corer. One subcore taken thru "vanes" to sample top 10cm.

DESCRIPTION of sample Varicolored, laminated mud and spicule sand. Colors range from black, gray green, cream, tan, and red brown. Spectacular core.

CONDITION of sample Good. See above for notes on top 10cm.

REMARKS: (Equipment function, weather, accidents, etc.) 2-3' seas. Smooth recovery. Pullout ~2000 lbs over average.

SIO

GEOLOGICAL SAMPLE LOG

Date 19 JUNE 78 Expedition INMD 9 Sample No. 77 PC & 77 PG

Ship MELUILLE

Lat. 19° ~~37.3~~ N 36.9' N

Long. 38° ~~47.12~~ E 46.7' E

Geographic Area Red Sea (Suakin Deep)

BATHYMETRY
- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☑ Other Brine Pool

TYPE OF SAMPLE
- ☒ Piston (P)
- ☒ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 0632 Z On bottom 0715 Z Off Bottom 0720 Z On deck 0830 Z

DEPTH: Echo 1458 Fm/M Correction ~~2837m~~ 9.4 Corrected Fm. 1552 M. 2838

LENGTH of core(s) or sections (cm) or size of haul SECT 1 = 45 cm (39); SECT 2 = 161 cm (139)
SECT 3 = ~~1~~ 90 cm (79)
GRAVITY CORE 107 cm

DESCRIPTION of sample homogeneous olive green mud w/ glass chips in Sect 1
gravity core - homogeneous olive green mud with dangerous sponge spicules

CONDITION of sample NOT GOOD

Core broken piston didn't separate and mud on weight stand

REMARKS: (Equipment function, weather, accidents, etc.)
40' length barrels
48' Trip Chain
6' free fall
failed to see trip and let out 25m of extra wire. Didn't see any pullout.
Core hit hard rock @ about 10' appear to have fallen over mud entered through top and plugged orifice creating suction which pulled core sample apart.

SIO

GEOLOGICAL SAMPLE LOG

Date 19 June Expedition INMD-9 Sample No. 78P & 78PG

Ship MELVILLE

Lat. 19° 37.37'N

Long. 38° 47.2'E

Geographic Area Red Sea

BATHYMETRY

- [ ] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other Brine pool

TYPE OF SAMPLE

- [x] Piston (P)
- [ ] Trip Gravity (PG)
- [x] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 1725 Z On bottom 1815 Z Off Bottom 1817 Z On deck ~1900 Z

Trip @ 2827 m

DEPTH: Echo 1450 Fm/M Correction 93 Corrected Fm. 1543 M. 2822 m

LENGTH of core(s) or sections (cm) or size of haul: Sect. 1 = 137 cm (bottom) 136; Sect. 2 = 132 cm 130; Sect. 3 = 150 cm 147; Sect. 4 = 150 cm 146; Sect. 5 = 132 cm 131 → 81 cm; Sect. 6 = 99 cm 98

Gravity Core = 138 cm

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

30' barrels; 43' Trip, 11' free fall
heat probes attached to barrels had to leave on bottom ~7 min. & pay out 30 extra m.
good Trip NO apparent pullout
~25' of well preserved core. lower half piston on top of core NO water cap. Nose cone badly mashed. Do not understand pullout.

51

SIO

GEOLOGICAL SAMPLE LOG

Date 6/20/78 Expedition INMD 9 Sample No. 79 Bx

Ship Melville

Lat. 19° ~~40.5~~' N 37.1'N

Long. 38° 48.8 E

Geographic Area Red Sea

BATHYMETRY

- [ ] Flat bottom
- [ ] Hills
- [x] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 2232 z On bottom 2345 z Off Bottom z On deck 0101 z

DEPTH: Echo 1423 Fm/M Correction 91 Corrected Fm. 1514 M. 2768

LENGTH of core(s) or sections (cm) or size of haul > 50cm. Overpenetrated as before. Contact ~ 10cm. above box.

DESCRIPTION of sample Similar to 76 Bx. Layers ~ 2-3 cm thick

CONDITION of sample Good.

REMARKS: (Equipment function, weather, accidents, etc.) Smooth Seas. (3-4')

Tried slow entry (5m/min) to avoid overpenetration, but seemed to make no difference.

SIO

GEOLOGICAL SAMPLE LOG

Date 20-June Expedition INMD9 Sample No. 80P & 80PG

Ship melville

Lat. 19° 37N 36.9'N

Long. 38 47 E 45.6'E

Geographic Area Red Sea

BATHYMETRY

- [ ] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other brine pool

TYPE OF SAMPLE

- [x] Piston (P)
- [x] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 0203 Z On bottom 0311 Z Off Bottom Z On deck Z

DEPTH: Echo 1394 Fm/M Correction 89 Corrected Fm. 1483 M. 2711 M

LENGTH of core(s) or sections (cm) or size of haul: Sect 1 (bottom) = 150cm thru Sect 6 = 150cm; Sect 7 = 140 cm; Sect 8 = 48 cm; PG = 182 cm

DESCRIPTION of sample: VIII 0-47; VII 47-184 (137); VI 184-330 (146); V 330-478 (148); VI 478-626 (148); VIII 626-775 (149); VII 775-925 (150); I 925-1062 (137).

CONDITION of sample: good over penetration of both P & PG.

REMARKS: (Equipment function, weather, accidents, etc.)

40' barrels; 48' Trip; 7' freefall; final lowering Spd = 40 m/min

7500 lbs aver. 10,000 lbs. pullout

No water cap on core

SIO

GEOLOGICAL SAMPLE LOG

Date 6/25/78 Expedition INDOMED 9 Sample No. 81 BC 81Bx

Ship Melville

Lat. ~~20° 20.4'~~ 21° 04.7' N

Long. 38° ~~05.5'~~ E

Geographic Area Red Sea - Atlantis II Deep

BATHYMETRY

- ☐ Flat bottom
- ☐ Hills
- ☑ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☑ Box (Bx)
- ☐ Other

TIME: Start down 1549 Z On bottom 16:52 Z Off Bottom 16: Z On deck Z

u/w @ 1756

DEPTH: Echo 1123 Fm/M Correction 65 Corrected Fm. 1188 M. 2173

LENGTH of core(s) or sections (cm) or size of haul Overpenetrated. Soliquid that level lowered 20 cm on deck. (oozed out 1/4" crack at bottom of box)

DESCRIPTION of sample Brown Black hot mud.

CONDITION of sample Overpenetrated. Very watery sediment.

REMARKS: (Equipment function, weather, accidents, etc.)

4-6' seas, wind 10-15 kt. Virtually no pullout tension.

SIO

GEOLOGICAL SAMPLE LOG

51

Date 6/25/78 Expedition INDOMED 9 Sample No. 82 P + 82 PG

Ship Melville

Lat. 21° 20.46'N

Long. 38° 04.4'E

Geographic Area Red Sea - Atlantis II

BATHYMETRY

- ☐ Flat bottom
- ☐ Hills
- ☒ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

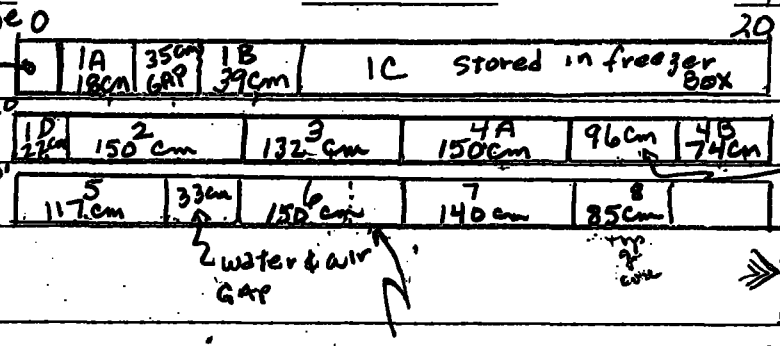
TYPE OF SAMPLE

- ☒ Piston (P)
- ☒ Trip Gravity (PG) 109 cm.
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 1909 Z On bottom 2022 Z Off Bottom 2024 Z On deck ≈ 2125 Z

DEPTH: Echo 1120 Fm/M Correction 65 Corrected Fm. 1185 M. 2167

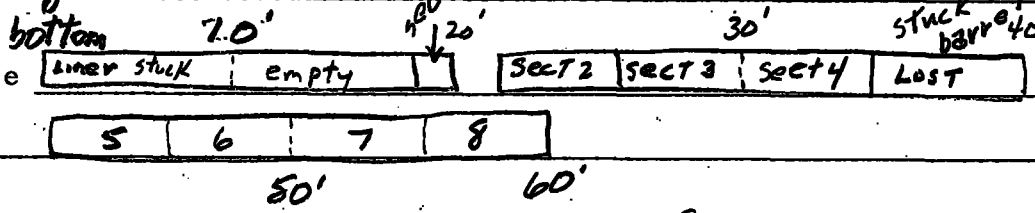
LENGTH of core(s) or sections (cm) or size of haul



DESCRIPTION of sample 908-1425 cm in freezer boxes in Lowsdales case

N.B. on Aug 7, 78 discovered Top of section 6 HAD Large Air cap. AT THAT Time I Cut section in two Thus There are 15 one sect. Labelled 6 top and one labelled 6 bottom

CONDITION of sample

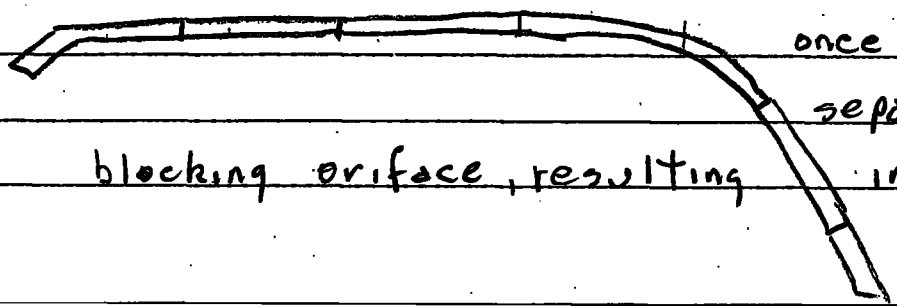


REMARKS: (Equipment function, weather, accidents, etc.) 908-1425 cm in freezer boxes

60' barrels, 74' Trip, 6' f.f.

5400 lbs. Aver. Tens. 6000 lbs @ pullout 2185 m out @ Trip.

NOSE CONE SMASHED barrels bent



once again piston didn't separate because of mud blocking oriface, resulting in sucked core.

82 PG - 109 cm

0-82
82-180
180-283
283-392
392-466
466-608
608-738
738-886
886-908
missing
1425-1464

a total of approx 1075 cm of core ~~[illegible]~~
Material in line complete with air + water pores and a portion of crushed line.

SIO

GEOLOGICAL SAMPLE LOG

51

Date 6/25/78 (26) Expedition Inzomed 9 Sample No. BC 83

Ship Melville

Lat. 21° 22.7'N

Long. 38° 06.7'E

Geographic Area Red Sea-Atlantis II

BATHYMETRY

- ☐ Flat bottom
- ☐ Hills
- ☒ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☒ Box (Bx)
- ☐ Other

TIME: Start down 2225 Z On bottom 2320 Z Off Bottom 2325 Z On deck 0010 Z

DEPTH: Echo 1048 Fm/M Correction 59 Corrected Fm. 1107 M. 2025

LENGTH of core(s) or sections (cm) or size of haul No core. Didn't trip.

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

Trigger pin hung up. Dirt in mechanism & not well lubed before it went over the side.

SIO

GEOLOGICAL SAMPLE LOG

Date 6/26/78 Expedition Indomed 9 Sample No. 84 BC

Ship Melville

Lat. ~~20°~~ 21° 20.5' N

Long. 38° 06.54 E

Geographic Area Red Sea-Atlantis II

BATHYMETRY

- ☐ Flat bottom
- ☐ Hills
- ☒ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☒ Box (Bx)
- ☐ Other

TIME: Start down 0955 Z On bottom 1047 Z Off Bottom 1050 Z On deck 1150 Z

DEPTH: Echo ~~1040~~ 33 Fm/M Correction 56 Corrected Fm. 1099 M. ~~2011~~ 1995

LENGTH of core(s) or sections (cm) or size of haul Overpenetrated by ~ 20cm.

DESCRIPTION of sample Brown + Black banded muz. Sharp layering on 1-3 cm. scale. Muz Temperature = 42°C

CONDITION of sample Good preservation

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 1 JULY 78 Expedition INMD-9 Sample No. 85P & PG

Ship melville

Lat. 23° ~~09'N~~ 08.8'N

Long. 37° 16.6'E

Geographic Area Red Sea

BATHYMETRY
- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [x] Piston (P)
- [x] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

(0389z 602 fwd ayd.)

TIME: Start down 0118 z On bottom 0222 z Off Bottom z On deck 0338 z

DEPTH: Echo 1210 Fm/M Correction 73 Corrected Fm. 1283 M. 2346

LENGTH of core(s) or sections (cm) or size of haul: Sect 1 = 150cm (Bottom) 139 (2 sections on out); Sect 2 = 96 cm; Sect 2A = 27 cm 27; Sect 3 = 125 cm 119; Sect 4 = 112 cm 102. 85 PG = 183 cm 119

DESCRIPTION of sample

CONDITION of sample: PG over penetrated 2A was left in top of 1st sect of barrel. It was extruded into piece of liner.

REMARKS: (Equipment function, weather, accidents, etc.)

30' barrel, 43' Trip, 6' f.f.
2351 m out @ Trip NO apparent pullout

a large piece of basalt was lodged in the nose cone. - samples slabs taken by S. Bloomer

SIO

GEOLOGICAL SAMPLE LOG

13

Date 16 AUG Expedition INMD-11 Sample No. 86 P.C. & P.G.

Ship Melville

Lat. 33°22.7'N

Long. 11° 37.4'W

Geographic Area (Moroccan) MORROCAN Rise

BATHYMETRY

- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [x] Piston (P)
- [x] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 0542 z On bottom 0727 z Off Bottom 0730 z On deck 0935 z

DEPTH: Echo 2275 Fm/M Correction 71 Corrected Fm. 2346 M. 4290'

LENGTH of core(s) or sections (cm) or size of haul sect 1 (bottom) = 150; sect 2 = 118; sect 3 = 150; sect 4 = 150
sect 5 = 92
+2 catcher samples + 86 PG = 104 + 1 catcher

DESCRIPTION of sample

CONDITION of sample sect 5 collapsed liner

REMARKS: (Equipment function, weather, accidents, etc.)
50' barrel length; 60' trip chain, 6' ff.
4311m out @ trip
pullout @ 4297 m, 14,800 lb over load = 11,500 lb

SIO

GEOLOGICAL SAMPLE LOG

Date 16 Aug 78 Expedition INAD-11 Sample No. 87 PG

Ship Melville

Lat. 33° ~~28 N~~ 23.3' N

Long. 11° ~~56 W~~ 37.5' W

Geographic Area MERIDIAN RISE

BATHYMETRY
- [1] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [4] Piston (P)
- [3] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 1345 Z On bottom 1529 Z Off Bottom 1532 Z On deck 1745 Z

DEPTH: Echo 2282 Fm/M Correction 71 Corrected Fm. 2353 M. 4300 ~~X~~

LENGTH of core(s) or sections (cm) or size of haul: sect 1 = 150 (Bottom) 130; sect 2 = 150; sect 3 = 150 144; sect 4 = 87 67; sect 5A = free fall 10 cm + 30 = 30 Box; sect 5B = 33 cm 33; sect 6 = 48 44 + 1 catcher sample + 87 PG = 151 cm + 1 catcher sample

DESCRIPTION of sample

CONDITION of sample: sect 4 crushed liner wrap w/ plastic bag; sect 5A & 5B extruded from pipe

REMARKS: (Equipment function, weather, accidents, etc.)

40' barrel, 10' f.f. 48' trip catcher

4322 total out

13000 pullout over load 10,000 lbs

SIO

GEOLOGICAL SAMPLE LOG

Date 23AUG.78 Expedition INMD-11 Sample No. 88P & P.G.

Ship melville

Lat. 25° 54.5N

Long. 19° 48.0W

Geographic Area SAHARAN RISE

BATHYMETRY
- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☒ Other cont. Rise

TYPE OF SAMPLE
- ☒ Piston (P)
- ☒ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 0359 Z On bottom 0524 Z Off Bottom Z On deck 0710 Z

DEPTH: Echo 2115 Fm/M Correction 64 Corrected Fm. 2179 M. 3984

LENGTH of core(s) or sections (cm) or size of haul: sect 1 = 98cm, sect 2 = 150cm sect 3 = 150 sect 4 = 150cm; sect 5 = 150cm sect 6 = 144 + 2 catcher samples + P.G. 88cm + 1 catcher sample

DESCRIPTION of sample
VI 0-132 - 132
V 132-286 - 154
IV 286-434 - 148
III 434-586 - 152
II 586-735 - 149
I 735-830 - 95

CONDITION of sample excellent

REMARKS: (Equipment function, weather, accidents, etc.)
40' barrel; 16' f.f.; 59' trip leng
3997 m out @ trip; pullout 11,500 lb over 9500 lb
38' penetration; 25' core
~~Bg~~ bottom sect. of liner driven inside
~~bottom~~ top sect ≈ 3½ ft
No water sap

SIO

GEOLOGICAL SAMPLE LOG

Date 23AU678 Expedition INMD-11 Sample No. 89P & PG

Ship melville

Lat. 25° 54.5 N

Long. 19° ~~52.0~~ 51.9 W

Geographic Area SAHARAN RISE

BATHYMETRY
- [ ] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [x] Other CONT. Rise

TYPE OF SAMPLE
- [x] Piston (P)
- [x] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down ~~0648~~ 0815 Z On bottom 0948 Z Off Bottom Z On deck 1138 Z

DEPTH: Echo 2132 Fm/M Correction 65 Corrected Fm. 2197 M. 4018

LENGTH of core(s) or sections (cm) or size of haul: sect 1 = 150 (148); sect 2 = 150 (147); ~~sect 2 = 150 cm~~ sect 3 = 150 (149) cm; sect 4 = 127 (122); ~~sect 5 X~~ sect 5 = 11; sect 6 = 98 (86) + 3 catcher samples + P.G. = 143 cm

DESCRIPTION of sample

CONDITION of sample excellent textbook core

~~Bottom 8" (20 cm) of section 6 extruded itself - was pushed back in but became 6" (15 cm) by compression.~~

REMARKS: (Equipment function, weather, accidents, etc.)

40' barrel; f.f. = 14 ft; Trip. = 59'

4031 m out @ trip; 4021 m @ pullout

12,500 lbs pullout; 9500 lbs Aver.

23' core 35' penet.

5' water cap

SIO

GEOLOGICAL SAMPLE LOG

Date 23 Aug 78 Expedition INMD-11 Sample No. 90P & PG.

Ship Melville

Lat. 25° 55.5'N

Long. 19° ~~49~~ 48.7'W

Geographic Area SAHARA Rise

BATHYMETRY
- [ ] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [x] Other CONT. RISE

TYPE OF SAMPLE
- [x] Piston (P)
- [x] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 1411 z On bottom 1534 z Off Bottom z On deck 1640 z

DEPTH: Echo 2123 Fm/M Correction 64 Corrected Fm. 2187 M. 4000

LENGTH of core(s) or sections (cm) or size of haul: sect. 1 = 150 cm (147); sect. 2 = 150 cm (148); sect 3 = 150 cm (150); sect 4 = 130 cm (129); sect 5 = 120 cm (104); sect 6 = 120 cm (117); sect 7 = 120 cm (103) + 2 catcher samples + P.G. = 8.5 cm

DESCRIPTION of sample

CONDITION of sample: sect 5, sect 6, sect 7; have slip liner taped entire length

REMARKS: (Equipment function, weather, accidents, etc.)

40' barrel, 14' ft; 59 Trip chain

Hull m out @ Trip 11,500 lbs pullout 10,000 lbs

shear pin did not break. It probably wasn't seated properly

SIO

GEOLOGICAL SAMPLE LOG

Date 11 Sept. 78 Expedition INMD-11 Sample No. 91G

Ship melville

Lat. 29° 51.1'N

Long. 068° 5.0.5'W

Geographic Area S.W. Bermuda Rise

BATHYMETRY

- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☒ Other wire lowered free fall

TIME: Start down 1705 Z On bottom 1800 Z Off Bottom 1803 Z On deck 1855 Z

DEPTH: Echo 2770 Fm/M Correction 99 Corrected Fm. 2869 M. 5247

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample MUD

CONDITION of sample excellent

REMARKS: (Equipment function, weather, accidents, etc.)

Benthos freefall Corer wire lowered on ~~hydrocast~~ hydro wire
5135 total wire out

SIO

GEOLOGICAL SAMPLE LOG

Date 11 Sept. 78 Expedition INMD-11 Sample No. 92G

Ship melville

Lat. 29° 57.2' N

Long. 068° 51.2' W

Geographic Area S.W. Bermuda Rise

BATHYMETRY

- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☒ Other free fall on wire

TIME: Start down 1917 z (1907?) On bottom 2008 z Off Bottom 2014 z On deck 2106 z

DEPTH: Echo 2777 Fm/M Correction 100 Corrected Fm. 2877 M. 5255 (61)

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample light-med brown mud

CONDITION of sample excellent

REMARKS: (Equipment function, weather, accidents, etc.) Same as 91G

5162m total out

TOM WALSH - 2037

10/29/78

INDOMED - 12

UTAH SAMPLES IN REFRIGERATED VAN (MELVILLE):

2 - GREEN WOODEN BOXES (CONTAINING 10 MUD SLABS EACH FOR X-RAY RADIOGRAPHY & DETAILED SAMPLING BACK HOME) - LABELLED "CORE SAMPLES A" & "B"

1 - GREEN SCREEN (FOR COARSE SIEVING OF MUD)

4 - SUBCORES FROM BOXES ("BX 120 -3", "BX 125-UTAH", "BX 128-UTAH", "BX 129-UTAH") - THESE ARE STORED WITH ALL THE REST OF WOLF'S SUBCORES

2 - CARDBOARD BOXES CONTAINING SEDIMENT SAMPLES (IN VIALS & PLASTIC BAGS), MISC. HAND TOOLS, & MISC. SUPPLIES

PICKED UP BY LEE & SHARON 25 JUN 79 TW

DR. TONY EKDALE
DEPT. OF GEOLOGY & GEOPHYSICS
UNIVERSITY OF UTAH
SALT LAKE CITY, UTAH 84112

PHONE: (801) 581-7266 OFFICE
(801) 278-8164 HOME

THE FOLLOWING SUBCORES WERE OBTAINED BY TOM JOHNSON AND JAMES BICKEL ON INDOMED LEG 12:

BOX CORE #:	1¼"x3" SUBCORE	≅3½"x3" SUBCORE	≅3½"x5"-8" SUBCORE
93Bx	3	1	0
94Bx	2	1	0
96BX	2	0	0
97Bx	4	1	0
98Bx	2	1	0
100Bx	2	1	0
101Bx	2	1	0
103Bx	2	1	0
104Bx	2	1	0
106Bx	2	1	0
109 Bx	2	1	0
110Bx	2	1	0
111Bx	2	1	0
113Bx	0	0	1
115Bx	0	0	1
116Bx	0	0	1
117Bx	0	0	1
120Bx	2	1	0
121Bx	0	0	1
122Bx	0	0	1
123Bx	0	0	1
127Bx	0	0	1
129Bx	0	0	1

THE SUBCORES BRACKETED IN BLUE ARE REMAINING ABOARD THE MELVILLE UNTIL IT REACHES SAN DIEGO. WE WOULD APPRECIATE THEM BEING CHILLED AND LEFT IN SEAWATER; WE WOULD ALSO LIKE NOTIFICATION UPON THEIR ARRIVAL AT SCRIPP'S, SO WE CAN MAKE

ARRANGEMENTS FOR ~~THE~~ TRANSFERAL TO MINNESOTA. THE 1¼"x3" AND 3½"x3" SUBCORES WILL BE IN A SMALL WODDEN BOX WITH TOM JOHNSON'S NAME ON IT. THE 3½"x5"-8" SUBCORES WILL BE KEPT IN THE BARREL WITH HAMILTON'S SUBCORES [EACH IS ENGRAVED WITH TOM JOHNSON'S NAME]. THE SAMPLES WILL ALL BE STORED IN THE OUTSIDE REFRIGERATOR. PLEASE ADDRESS ANY QUESTIONS OR CORRESPONDENCE TO:

TOM JOHNSON
104 PILSBURY HALL
UNIVERSITY OF MINN.
MINNEAPOLIS, MINN. 55455

THANK YOU.

James Bickel

SIO

GEOLOGICAL SAMPLE LOG

Date 10-1-78 Expedition INMD 12 Sample No. 93BX

Ship R.V. MELVILLE

Lat. 16°58.3'N

Long. 54° ~~48.4'W~~ 52.0'W

Geographic Area WEST CENTRAL ATLANTIC

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1335 Z On bottom 1540 Z Off Bottom 1591 Z On deck 1755 Z

DEPTH: Echo 3010 Fm/M Correction 106 Corrected Fm. 3141 M. 5708

LENGTH of core(s) or sections (cm) or size of haul ≈ 50cm

DESCRIPTION of sample 10YR 3/3 DARK REDISH BROWN UNFOSSILIFEROUS CLAY WITH FERROMANGANESE.

CONDITION of sample GOOD!

REMARKS: (Equipment function, weather, accidents, etc.)

AREA 12/CLOSE TO 11 (STANDARD SET UP WITH WOOD BLOCKS BANDED TO BX TO PREVENT OVERPEN. 45,000lb pull out = 25/80 IS CORRECTION FACTOR FOR METER

Good Core ≈ 50cm

WEIGHED TO 3/4 CAPACITY

ONE LEG OF CORER COLLAPSED BECAUSE VENT HOLE BECAME CLOSED

LEG WELDED + NEW VENT HOLE DRILLED.

SIO

GEOLOGICAL SAMPLE LOG

Date 10-2-78 Expedition INMD 12 Sample No. 94BX

Ship R.V. MELVILLE

Lat. 16° 43.8' N

Long. 51° 38.7' W

Geographic Area WEST CENTRAL ATLANTIC

BATHYMETRY

- ☐ Flat bottom
- ☑ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☑ Box (Bx)
- ☐ Other

TIME: Start down 1332 Z On bottom 1506 Z Off Bottom 1507 Z On deck 1650 Z

DEPTH: Echo 2332 Fm/M Correction 69 Corrected Fm. 2401 M. 4398M

LENGTH of core(s) or sections (cm) or size of haul ≈ 42cm

DESCRIPTION of sample

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.)

AREA 11 - SAME SET UP AT 93+ ≈ 60lbs WEIGHT

4440 METER WIRE OUT

38,000 lb PULL OUT

SIO

GEOLOGICAL SAMPLE LOG

Date 2 Oct 78 Expedition LWMD-12 Sample No. 95P & PG

Ship R/V MELVILLE

Lat. 16° 43.0' N

Long. 51° 19.3' W

Geographic Area WEST CENTRAL ATLAN

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [x] Piston (P) *
- [x] Trip Gravity (PG) *
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 1931 Z On bottom 2106 Z Off Bottom 2110 Z On deck 2240 Z

DEPTH: Echo 2484 Fm/M Correction 76 Corrected Fm. 2560 M. 4688

LENGTH of core(s) or sections (cm) or size of haul * 158 cm & CATCHER * 873 cm & CATCHER — (15) (1) 0-8 IN PLASTIC BOX - (14) 8-83 75, (13) 83-158 75, (12) 158-243 85, (11) 243-264 21, (10) 264-339 75, (9) 339-414 75, (8) 414-489 75, (7) 489-564 75, (6) 564-582 18, (5) 582-597 15, (1) (4) 597-672 75, (3) 672-747 75, (2) 747-822 75 & (1) 822-873 cm (1) IN PLASTIC BOX

DESCRIPTION of sample LIGHT YELLOWISH BROWN (10YR 4/4) CALCAREOUS CLAY - MANY FORAMS. SHEAR SLIDE INDICATES BOTTOM OF LOKE STILL IN QUATERNARY.

CONDITION of sample GOOD!

REMARKS: (Equipment function, weather, accidents, etc.) 40' BARREL IS FREEFALL

SIO

GEOLOGICAL SAMPLE LOG

Date 10-3-78 Expedition INMD 12 Sample No. 96BX

Ship RV MELVILLE

Lat. 16° 41.1'N

Long. 49° 23.6 W

Geographic Area

BATHYMETRY

- [x] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1158 z On bottom 1350 z Off Bottom 1351 z On deck 1536 z

DEPTH: Echo 2435 Fm/M Correction 74 Corrected Fm. 2509 M. 4588

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample

CONDITION of sample Muy MAL!

REMARKS: (Equipment function, weather, accidents, etc.)

SAME SETUP AS 94BX + 40lbs.

TOTAL WIRE OUT 4641

39,000 lbs PULL OUT

SIO

GEOLOGICAL SAMPLE LOG

Date 10-4-78 Expedition INMD 12 Sample No. 97BX

Ship R.V. MELVILLE

Lat. 16° 39.2'N

Long. 46° 07.6'W

Geographic Area MID ATLANTIC RIDGE

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1210 Z On bottom 1359 Z Off Bottom 1400 Z On deck 1529 Z

DEPTH: Echo 1928 Fm/M Correction 51 Corrected Fm. 1979 M. 3619

LENGTH of core(s) or sections (cm) or size of haul ≈ 42 cm

DESCRIPTION of sample CALCAREOUS CLAY

CONDITION of sample VERY GOOD

REMARKS: (Equipment function, weather, accidents, etc.) 6-7 ft SWELL

3644 TOTAL METERS OUT

45,000 lbs PULL OUT

AREA II

SIO

GEOLOGICAL SAMPLE LOG

Date 10-5-78 Expedition INMD 12 Sample No. 98BX

Ship RV MELVILLE

Lat. 15° 36.6' N

Long. 42° 56.8' W

Geographic Area EAST FLANK MID ATLANTIC RIDGE

BATHYMETRY
- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1300 Z On bottom 1441 Z Off Bottom 1444 Z On deck 1640 Z

DEPTH: Echo 2515 Fm/M Correction 78 Corrected Fm. 2593 M. 4744

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.)

47,000 lb PULL OUT

4790 PULL OUT

4816 TOTAL WIRE OUT

SIO

GEOLOGICAL SAMPLE LOG

Date 5 Oct 78 Expedition INMD-12 Sample No. 99 P & PG

Ship R/V MELVILLE

Lat. 15° 01.6' N

Long. 41° ~~42.0~~ 53.0' W

Geographic Area EAST ATLANTIC

BATHYMETRY

- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☒ Piston (P) *
- ☒ Trip Gravity (PG) *
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 2335 Z On bottom 0159 Z Off Bottom 0202 Z On deck 0430 Z

DEPTH: Echo 2628 Fm/M Correction 86 Corrected Fm. 2714 M. 4963 m

LENGTH of core(s) or sections (cm) or size of haul * OVERPENETRATION OF GRAVITY CORE: LOST 20 cm FROM TOP. 7 cm SAVED - CORE 1820 cm + CATCHER. NO SEDIMENT IN PISTON CORE!

DESCRIPTION of sample LIGHT YELLOWISH BROWN (10YR 6/4) CALCAREOUS CLAY.

CONDITION of sample RECOVERED PART - GOOD.

REMARKS: (Equipment function, weather, accidents, etc.) 40' PISTON CORE - 15' FREEFALL. HAVE NO IDEA WHY NO SEDIMENT IN CORER. THE OUTSIDE BARRELS INDICATE COMPLETE PENETRATION.

SIO

GEOLOGICAL SAMPLE LOG

Date 10-8-76 Expedition INMD 12 Sample No. 100BX

Ship RV MELVILLE

Lat. 10° ~~58.8N~~ 59.6'N

Long. 34° ~~8.8W~~ 10.4'W

Geographic Area

BATHYMETRY
- ☐ Flat bottom
- ☑ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☑ Box (Bx)
- ☐ Other

TIME: Start down ~~0900~~ 1010 Z On bottom 1202 Z Off Bottom 1203 Z On deck ~~Z~~ 1354 Z

DEPTH: Echo 2849 Fm/M Correction 96 Corrected Fm. 2945 M. ~~5393~~ 5385

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample ~~GOOD~~ CALCAREOUS CLAY & SILICEOUS CLAY

CONDITION of sample ~~GOOD~~

REMARKS: (Equipment function, weather, accidents, etc.) AREA 11?

5455 TOTAL WIRE OUT

SMALL PULLOUT

SIO

GEOLOGICAL SAMPLE LOG

Date OCT 10 Expedition INMD 12 Sample No. 101BX

SAT FIX 1918 Z

Ship R.V. MELVILLE

Lat. 06° 56.8' N

Long. 26° 26.8' W

Geographic Area

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1730 Z On bottom 1917 Z Off Bottom 1919 Z On deck 2100 Z

DEPTH: Echo 2180 Fm/M Correction 56 Corrected Fm. 2236 M. ~~4100~~ 4092 M

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample CALCAREOUS / SILICEOUS CLAY : WELL PRESERVED RADIOLARIA (QUAT)

CONDITION of sample V GOOD

REMARKS: (Equipment function, weather, accidents, etc.)

4142T WIRE OUT

SIO

GEOLOGICAL SAMPLE LOG

Date 11 OCT 78 Expedition INDOMED-12 Sample No. 102 P & PG

SAT 0630 6°16.3'N 25°10.7'W

Ship R/V MELVILLE

Lat. 6° 16.4' N

Long. 25° 10.7' W Sat Fix @0630Z (as corrected)

Geographic Area

BATHYMETRY
- ☐ Flat bottom
- ☑ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☑ Piston (P) *
- ☑ Trip Gravity (PG) *
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 0500 Z On bottom 0628 Z Off Bottom 0626 Z On deck 0800 Z

DEPTH: Echo 2238 Fm/M Correction 61 Corrected Fm. 2299 M. 4204

LENGTH of core(s) or sections (cm) or size of haul GRAVITY - 147 cm; PISTON - 1081 cm Section lengths?

DESCRIPTION of sample CALCAREOUS/SILICEOUS CLAY - ALL CONTEMPORARY (RADS & FORAMS)

CONDITION of sample GOOD

REMARKS: (Equipment function, weather, accidents, etc.) 40' PISTON - 15' FF 6' GRAVITY BARREL - NOSE CONE APPEARS TO VE HIT SOME BIGGER ROCK - A LITTLE TSATTERED

SIO

GEOLOGICAL SAMPLE LOG

Date OCT-11-78 Expedition INMD 12 Sample No. 103BX

Ship RV MELVILLE

Lat. 5° ~~51.3N~~ 52.9'N

Long. 24° ~~27.0W~~ 28.0'W

Geographic Area SIERRA LEONE RISE

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1254 z On bottom 1438 z Off Bottom 1440 z On deck 1635 z

DEPTH: Echo 2382 Fm/M Correction 67 Corrected Fm. 2449 M. ~~4492~~ 4478

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample ≈50CM GRAY CALCAREOUS SILTY FORAM SAND ON TOP MOST PART WITH REDISH CLAY ON BOTTOM MOST HALF.

CONDITION of sample VERY GOOD

REMARKS: (Equipment function, weather, accidents, etc.)

4548 40,000lb PULL OUT

SIO

GEOLOGICAL SAMPLE LOG

Date OCT-12-78 Expedition INMD 12 Sample No. 104BX

Ship RV MELVILLE

Lat. 40 14.7'N

Long. 21° 55.5'W

Geographic Area SIERRA LEONE RIE

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 0953 z On bottom 1125 z Off Bottom 1128 z On deck 1243 z

DEPTH: Echo 1754 Fm/M Correction 39 Corrected Fm. 1793 M. 3279

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample DARK GRAY GRITTY CALCAREOUS SAND BLENDING INTO FINER CALCAREOUS CLAY

CONDITION of sample V-Good

REMARKS: (Equipment function, weather, accidents, etc.)

Good Pull out 3331 TOTAL WIRE OUT

SIO

GEOLOGICAL SAMPLE LOG

Date 12 Oct 78 Expedition LUDOMED-12 Sample No. 105 P & PG

SAT Fix: 21 28-30°18.3 N 21°19.8 W

Ship R/V MELVILLE

Lat 30°18' N 30°18.4' N DR

Long. 21°19.8 W

Geographic Area

BATHYMETRY
- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☒ Piston (P)
- ☒ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 2010 Z On bottom 2156 Z Off Bottom 2151 Z On deck 2330 Z

DEPTH: Echo 2746 Fm/M Correction 68 Corrected Fm. 2511 M. 459 X

LENGTH of core(s) or sections (cm) or size of haul GRAVITY: 212 cm, TOP 30 cm LOST (1) + CATCHER

PISTON: 872 cm — (12) 0-75, (11) 75-150, (10) 150-225, (9) 225-262, (8) 262-337, (7) 337-412, (6) 412-487, (5) 487-562, (4) 562-637, (3) 637-712, (2) 712-787, (1) 787-872 + CATCHER

DESCRIPTION of sample TOP 265 cm BLUISH GRAY 5Y 4/1 CALCAREOUS CLAY — REST OF CORE BLUISH-GRAY CALCAREOUS CLAY. 10 YR 4/1

CONDITION of sample FAIR — SOME WATER POCKETS IN VARIOUS SECTIONS

REMARKS: (Equipment function, weather, accidents, etc.) 40' LENGTH — 15' FF, 6' GRAVITY & 60' TRIP WIRE.

(N) OVERPENETRATION

SIO

GEOLOGICAL SAMPLE LOG

Date 13-OCT-78 Expedition INMD Sample No. 106BX

Ship RV MELVILLE

Lat. 2° ~~11.2~~N 43.9'N

Long. 20° ~~54.9~~W 56.3'W

Geographic Area

BATHYMETRY
- [x] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 0500 Z On bottom 0635 Z Off Bottom 0636 Z On deck 0818 Z

DEPTH: Echo 2500 Fm/M Correction 71 Corrected Fm. 2571 M. 4701 M

LENGTH of core(s) or sections (cm) or size of haul ≈50 cm

DESCRIPTION of sample GRITTY CALCAREOUS SAND ON TOP WITH FINER CLAY TOWARDS BOTTOM

CONDITION of sample V-GOOD

REMARKS: (Equipment function, weather, accidents, etc.)

4765 m. wire out

1228 - 0° 29.7'S, 18°59.0'W
1443 - 0° 24.1'S, 19°00.1'W

SIO
GEOLOGICAL SAMPLE LOG

20

Date 14 OCT 78 Expedition IWMD-12 Sample No. CAM-107 C

Ship R/V MELVILLE
Lat. 00°26.1'S / 00°24.22.4'S
Long. 18°57.5'W / 19°00.2'W
Geographic Area ROMANCHE F.Z.

BATHYMETRY
- ☐ Flat bottom
- ☐ Hills
- ☑ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☑ Other CAMERA EG&G

TIME: Start down 1033 Z On bottom ~~1415~~ 1228 Z Off Bottom 1443 Z On deck 1700 Z

DEPTH: Echo 418.5 ~~Fm~~/M Correction _____ Corrected Fm. _____ M. _____
556 Z METERS
START
FINISH

LENGTH of core(s) or sections (cm) or size of haul _____

DESCRIPTION of sample 75' OF FILM TAKEN UP ON BOTH CAMERAS. BOTH HAVE B&W FILM PLUS X RAR-2496

CONDITION of sample _____

REMARKS: (Equipment function, weather, accidents, etc.) 1ST ATTEMPT EG&G PINGER FAILURE! 2ND BENTHOS PINGER 36 METERS ABOVE CAMERA - STROBE NOT FLASHING WHEN BROUGHT ON BOARD. REFLECTOR DRAGGING.

CAMERA LOG

Ship R/V MELVILLE
Lat. 00° 25.5' S
Long. 19° 00.0' W
Bathymetry ROMANCHE FRACTURE ZONE

Expedition INDOMED-12
Date 14 OCT 78
Station # 107 Camera lowering # 1
Technician L. Walsh

Type camera EG&G
Film left camera B&W* Length 150'
Film right camera B&W* Length 150'
Type camera frame ~~WHO CARES!~~ SHEPIK

Time set 1033 Z
Delay + 100 MINUTES
Camera goes on 1213 Z
Camera operating + 150 MIN
Camera goes off 1443

Start down 1037 Z
On bottom 1228 Z
On deck 1700

REMARKS:

EG&G PINGER FAILED AFTER PLAYOUT OF 300 METERS - RESET TIMER & PUT BENTHOS PINGER 36 METERS ABOVE CAMERA AT ABOVE TIMES - BOTTOM FALLING OFF 100 fm AS CAMERAS START FIRING. ON BOTTOM 15 MIN LATE.

75' OF FILM TAKEN UP ON BOTH CAMERAS: IE, WHICH MEANS BATTERY WASNT UP TO FULL CHARGE (PROBABLY TOO OLD, LIKE THE OPERATOR) NEED A BETTER CHARGER!

SIO

GEOLOGICAL SAMPLE LOG

Date 16 OCT 78 Expedition INMD-12 Sample No. 108 P & PG

Ship R/V MELVILLE

Lat. 4° ~~50.4~~ 48.1' S DL

Long. 16° ~~25.2~~ 24.3' W

Geographic Area CENTRAL ATLANTIC

BATHYMETRY

- ☐ Flat bottom
- ☒ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☒ Piston (P)
- ☒ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 0042 Z On bottom 0203 Z Off Bottom 0204 Z On deck 0330 Z

DEPTH: Echo 2224 Fm/M Correction 58 Corrected Fm. 2282 M. 4173'

LENGTH of core(s) or sections (cm) or size of haul GRAVITY - 182 cm (NOTHING LOST) + CATCHER PISTON CORE EMPTY.

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) 40' BARREL - 6' GRAVITY 15' FREEFALL - BREAK-AWAY PISTON FELL OUT OF THE BARREL ?? ON WAY DOWN ?? NO IDEA WHY.

SIO

GEOLOGICAL SAMPLE LOG

Date 16-OCT-78 Expedition INMD 12 Sample No. 109BX

Ship R.V. MELVILLE

Lat. 5° 27.9' S

Long. 15° 57.5' W

Geographic Area S. EQUATORIAL M.A.R.

BATHYMETRY

- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 0925 Z On bottom 1100 Z Off Bottom 1103 Z On deck 1225 Z

DEPTH: Echo 2078 Fm/M Correction 52 Corrected Fm. 2130 M. 3895

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample CALCAREOUS OOZE

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.)

3938 T METERS WIRE OUT

1st TIME DIDN'T TRIP - PUT DOWN + TRIPED 2nd TIME

SIO

GEOLOGICAL SAMPLE LOG

Date 18-OCT-78 Expedition INMD 12 Sample No. 110 BX

Ship R/V MELVILLE

Lat. 10° ~~5.15~~ 02.3' S

Long. 13° ~~26.6 W~~ 23.4' W

Geographic Area

BATHYMETRY

- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 0105 z On bottom 0202 z Off Bottom 0205 z On deck ~~310~~ 0310 z

DEPTH: Echo ~~108~~ 51 Q Fm/M Correction 20 Corrected Fm. 1071 M. ~~1975~~ 58

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample PTEROPOD SAND

CONDITION of sample GOOD

REMARKS: (Equipment function, weather, accidents, etc.)

Good Run out

02,038 total wire out

SIO

GEOLOGICAL SAMPLE LOG

Date OCT-18-78 Expedition INMD-12 Sample No. 111BX

Ship R/V MELVILLE

Lat. 12° ~~39.2~~ S 38.5'S

Long. 13° ~~47.1~~ W 50.8'W

Geographic Area EQUATORIAL SVMID ATLANTIC RIDGE

BATHYMETRY
- [x] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1912 Z On bottom 2016 Z Off Bottom 2019 Z On deck 2124 Z

DEPTH: Echo 1643 Fm/M Correction 35 Corrected Fm. 1678 M. 3069

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample CALCAREOUS OOZE

CONDITION of sample VERY GOOD

REMARKS: (Equipment function, weather, accidents, etc.)

3112 TMOUT — LARGE PULL OUT - EVEN MORE WEIGHT ADDED TO FRAME

SIO

GEOLOGICAL SAMPLE LOG

Date 19 Oct 78 Expedition INDOAFD-12 Sample No. 112 P ½ PG

Ship R/V MELVILLE

Lat. 14° ~~49.3'~~ S 50.3'S

Long. 14° ~~33.5'~~ W 38.9'W

Geographic Area So. CEN. ATLANTIC

BATHYMETRY
- ☐ Flat bottom
- ☒ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☒ Piston (P)
- ☒ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 1130 z On bottom 1231/~~32~~ Off Bottom 1253 z On deck 1415 z

DEPTH: Echo 1930 Fm/M Correction 47 Corrected Fm. 1977 M. 3613/5

LENGTH of core(s) or sections (cm) or size of haul GRAVITY: 155 cm NO CATCHER
PISTON CORE — EMPTY

DESCRIPTION of sample LIGHT BROWN CALCAREOUS OOZE

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.) 30' PISTON W/15' FREEFALL. MADE MODIFICATION ON BREAK-AWAY PISTON IE: DRILLED HOLE IN FACE-PLATE THAT RETAINS GASKET & INTO SOLID SECTION. INSERTED CARTER KEY THRU THEM & GASKET FOR TWO PURPOSES, 1) STOP GASKET FROM TIGHTENING WHEN WILD WIRE IS TRIPPED. 2) HOLDS FACE-PLATE & GASKET TO MAIN SECTION OF BREAKAWAY PISTON

FLAPPER DIDN'T FLAP

T-Walsh

SIO

GEOLOGICAL SAMPLE LOG

Date 19-OCT-78 Expedition INMD 12 Sample No. 113BX

Ship RV MELVILLE

Lat. 15°15.8'S

Long. 14°~~54.2'W~~ 57.6'W

Geographic Area SOUTH EQUAT MID ATLANTIC RIDGE

BATHYMETRY

- [x] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1755 Z On bottom 1918 Z Off Bottom 1922 Z On deck 2053 Z

DEPTH: Echo 1853 Fm/M Correction 45 Corrected Fm. 1898 M. 3470

LENGTH of core(s) or sections (cm) or size of haul ≈38 cm

DESCRIPTION of sample CALCAREOUS CLAY - VERY STIFF

CONDITION of sample Good to Fair

REMARKS: (Equipment function, weather, accidents, etc.)

LOW PULLOUT

SIO

GEOLOGICAL SAMPLE LOG

Date 20 Oct 78 Expedition ~~IWMD~~ - 12 Sample No. 114 P & PG

Ship HV MELVILLE

Lat. 17 ~~33.1~~ 37.0' S

Long. 16 ~~8.4~~ 09.5' W

Geographic Area

BATHYMETRY
- [ ] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [x] Piston (P)
- [x] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 1153 z On bottom 1257 z Off Bottom 1258 z On deck ~~1440~~ 1426 z

DEPTH: Echo 1813 Fm/M Correction 43 Corrected Fm. 1856 M. 3394

LENGTH of core(s) or sections (cm) or size of haul GRAVITY - 98 cm + CATCHER
PISTON: 142 cm No CATCHER

DESCRIPTION of sample CALCAREOUS OOZE

CONDITION of sample PISTON WAS LOOSELY PACKED - GRAVITY Good.

REMARKS: (Equipment function, weather, accidents, etc.) 30' CORE 15' FF ONE BARREL BADLY BENT - DOUBTFUL for SALVAGE! SECOND BARREL SLIGHTLY BENT WILL USE IF NEEDED. TOUGH SEDIMENT TO PENETRATE.

SIO

GEOLOGICAL SAMPLE LOG

Date 20-OCT-78 Expedition LNMD 12 Sample No. 115BX

Ship RV MELVILLE

Lat. 17° ~~37.85~~ 38.3'S

Long. 16° ~~9.0W~~ 12.7'W

Geographic Area SOUTH WEST MID ATLANTIC RIDGE

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1545 z On bottom 1658 z Off Bottom ~~1665~~ 1705 z On deck 1815 z

DEPTH: Echo 1830 Fm/M Correction 44 Corrected Fm. 1874 M. 3427

LENGTH of core(s) or sections (cm) or size of haul ≈ 40 cm

DESCRIPTION of sample CALCAREOUS CLAY

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.)

3486 + M WIRE OUT, SMALL PULL OUT

SIO

GEOLOGICAL SAMPLE LOG

Date 21-OCT-78 Expedition INMD 12 Sample No. 116 BX

Ship RV MELVILLE

Lat. 21° 54.2'S

Long. 18° ~~44.8'~~ 40.5'W

Geographic Area S-WEST FLANK OF MID ATLANTIC RIDGE

BATHYMETRY

- [x] Flat bottom
- [x] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 2125 Z On bottom 2300 Z Off Bottom 2303 Z On deck 0047 Z

DEPTH: Echo 2508 Fm/M Correction 74 Corrected Fm. 2582 M. ~~4718~~ 4722

LENGTH of core(s) or sections (cm) or size of haul ≈58 cm

DESCRIPTION of sample Reddish Brown Siliceous Clay with Mn-Nodules

CONDITION of sample VERY GOOD

REMARKS: (Equipment function, weather, accidents, etc.)

4783 TM WIRE OUT

SIO

GEOLOGICAL SAMPLE LOG

Date 22 OCT-78 Expedition INMS XII Sample No. 117BX

Ship R/V MELVILLE

Lat. 24°04.5'S set out @ 1626 on wire

Long. 19° ~~56.8'W~~ 50.4'W

Geographic Area

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1455 Z On bottom 1623 Z Off Bottom 1626 Z On deck 1802 Z

DEPTH: Echo 2340 Fm/M Correction 65 Corrected Fm. 2405 M. 4398

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

~~4433~~ 4443 TRAWL OUT

SIO

GEOLOGICAL SAMPLE LOG

Date OCT-25-78 Expedition INMD 12 Sample No. BX118

Ship RV MELVILLE

Lat. 28°~~42.4~~ S 43.0'S

Long. 30°~~50.4~~ W 48.3'W

Geographic Area

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1220 Z On bottom 1300 Z Off Bottom 1302 Z On deck 1345 Z

DEPTH: Echo 910 Fm/M Correction 16 Corrected Fm. 926 M. 1693

LENGTH of core(s) or sections (cm) or size of haul ≈ 20-28cm

DESCRIPTION of sample ~~POOR~~ PTEROPOD SAND

CONDITION of sample POOR

REMARKS: (Equipment function, weather, accidents, etc.)

NOT ENOUGH PENITRATION TO MAKE A GOOD CORE. WHEN SHOVEL CAME UNDER IT BENT SOME OF THE SEDIMENT

20

SIO

GEOLOGICAL SAMPLE LOG

Date 25 Oct 78 Expedition LUMD - 12 Sample No. 119 P & PG

Ship R/V MELVILLE

Lat. 25°50.6'S

Long. 31°14.2'W

Geographic Area SO ATLANTIC RIO GRANDE RISE

BATHYMETRY

- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☒ Piston (P)
- ☒ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 1630 Z On bottom 1710 Z Off Bottom 1714 Z On deck 1754 Z

DEPTH: Echo 1058 Fm/M Correction 20 Corrected Fm. 1078 M. 1971

LENGTH of core(s) or sections (cm) or size of haul EMPTY CATCHER IN GRAVITY ONLY MARKED 119PG SAMPLE TOTAL

DESCRIPTION of sample FORAM OOZE - ONE SMALL VIAL

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 25 Oct Expedition CNMI - 12 Sample No. 120 Bx

Ship R/V MELVILLE

Lat. 28° ~~50.0'S~~ 49.8'S

Long. 31° ~~18.1'W~~ 16.6'W

Geographic Area RIO GRANDE RISE

Sally Pratt 1992 as corrected

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1843 Z On bottom 1925 Z Off Bottom 1936 Z On deck 2018? Z

DEPTH: Echo 1040 Fm/M Correction 19 Corrected Fm. 1049 M. 1937

LENGTH of core(s) or sections (cm) or size of haul ≈ 38 cm

DESCRIPTION of sample PTENOPOD SAND

CONDITION of sample VERY GOOD

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 26 OCT Expedition INMD 12 Sample No. 121 BX

Ship R/V MELVILLE

Lat. 28° 58.9' S ~~56.7~~ } Sat 4 @ 0150Z as corrected

Long. 32° 00.5' W ~~31° 39.7 W~~

Geographic Area

BATHYMETRY
- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☒ Box (Bx)
- ☐ Other

TIME: Start down 0032 Z On bottom 0202 Z Off Bottom 0205 Z On deck 0351 Z

DEPTH: Echo 2085 Fm/M Correction 52 Corrected Fm. 2137 M. 3906

LENGTH of core(s) or sections (cm) or size of haul ≈ 38cm

DESCRIPTION of sample CALCAREOUS CLAY

CONDITION of sample GOOD

REMARKS: (Equipment function, weather, accidents, etc.) WIRE OUT 3943 m

SIO

GEOLOGICAL SAMPLE LOG

Date 26 Oct 78. Expedition INDOME D-12 Sample No. 122 BX

Ship R/V MELVILLE

Lat. 29° ~~17.1~~ S 18.0' S DR

Long. 33° ~~03.8~~ W 00.5' W

Geographic Area RIO GRANDE RISE

BATHYMETRY
- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☒ Box (Bx)
- ☐ Other

TIME: Start down 0930 Z On bottom 1051 Z Off Bottom 1100 Z On deck 1215 Z

DEPTH: Echo 1648 Fm/M Correction 37 Corrected Fm. 1685 M. 3078

WIRE: 3151 m

LENGTH of core(s) or sections (cm) or size of haul 38 cm

DESCRIPTION of sample LIGHT BROWN CALCAREOUS CLAY W/ LAYER OF PTEROPODS AT TOP.

CONDITION of sample Good!

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 26 Oct. 78 Expedition INMD-12 Sample No. 123 Bx

Ship R/V MELVILLE

Lat. 29° 31.0' S

Long. 33° 14.4' W

Geographic Area

BATHYMETRY

- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1525 Z On bottom 1633 Z Off Bottom 1643 Z On deck 1745 Z

DEPTH: Echo 1795 Fm/M Correction 43 Corrected Fm. 1838 M. 3361

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

3475 T. M. WIRE OUT

20

SIO

GEOLOGICAL SAMPLE LOG

Date 26 Oct 78 Expedition LUMI D - XII Sample No. 124 P & PG

Ship R/V MELVILLE

Lat. 29 37.0' S

Long. 33 08.0 W

Geographic Area RIO GRANDE RISE

BATHYMETRY

- ☐ Flat bottom
- ☒ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☒ Piston (P)
- ☒ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 1915 z On bottom 2030 z Off Bottom 2035 z On deck 2210 z

DEPTH: Echo 1860 Fm/M Correction 43 Corrected Fm. 1905 M. 3480

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample NO P.C. Sample
Gravity: 98cm + CATCHER

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

20

SIO

GEOLOGICAL SAMPLE LOG

Date 26-27 OCT 78 Expedition INMD 12 Sample No. 125 BX

Ship R/V MELVILLE

Lat. 29° ~~45.4~~ S 44.3'S

Long. ~~32° 58.5 W~~ 33° 02.0'W

Geographic Area

BATHYMETRY

- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 2324 z On bottom 0042 z Off Bottom 0047z On deck 0207z

DEPTH: Echo 1888 Fm/M Correction 45 Corrected Fm. 1933 M. 3534

LENGTH of core(s) or sections (cm) or size of haul ≈ 48cm

DESCRIPTION of sample CALCAREOUS OOZE

CONDITION of sample Good

REMARKS: (Equipment function, weather, accidents, etc.) IN AT 40M/MIN. MAX WT ON BX CORER, SEA STATE MODERATE, FLAT BOTTOM Good Pull out 42,000

20

SIO

GEOLOGICAL SAMPLE LOG

Date 27 Oct 78 Expedition TWMD-12 Sample No. 126P & PG

Ship R/V MELVILLE

Lat. 29° 45.5' S

Long. 30° 57.9' W 59.2'

Geographic Area RIO GRANDE RISE

BATHYMETRY
- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☑ Piston (P)
- ☒ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 0309 z On bottom 0435 z Off Bottom 0438 z On deck 0615 z

DEPTH: Echo 1892' Fm/M Correction 45 Corrected Fm. 1936 M. ~~3541~~ 3540

LENGTH of core(s) or sections (cm) or size of haul GRAVITY: 136 cm
PISTON — EMPTY

DESCRIPTION of sample CALCAREOUS OOZE

CONDITION of sample Good!

REMARKS: (Equipment function, weather, accidents, etc.) 20' BARREL 20' FF
42' TRIP WIRE - USED 'FINGER' TYPE NOSE CONE
Pullout ~9500# In at ~40 mpm
Wire out 3555

WASH-OUT AT SURFACE.

SIO

GEOLOGICAL SAMPLE LOG

Date OCT 27-~~28~~ 4 Expedition INMD 12 Sample No. 127BX

Ship R.V. MELVILLE

Lat. 29° ~~52.6S~~ 53.1'S

Long. ~~34° 0.1W~~ 33° 58.8'W

Geographic Area

BATHYMETRY
- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1150 z On bottom ~~1159~~ 1249 z Off Bottom 1258 z On deck ~~1025~~ 1346 z

DEPTH: Echo ~~1348~~ 1346 Fm/M Correction 26 Corrected Fm. 1372 M. ~~2514~~ 2509

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) SMALL PULL OUT

SIO

GEOLOGICAL SAMPLE LOG

Date 27 Oct. 78 Expedition INMD 12 Sample No. 128 BX

Ship R/V MELVILLE

Lat. 29°55.1'S

Long. ~~34° 22.9W~~

Geographic Area 34°21.2W

BATHYMETRY

- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1555z On bottom 1626z Off Bottom 1646z On deck 1715z

DEPTH: Echo 772 Fm/M Correction 13 Corrected Fm. 785 M. 1436

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) 20 MIN SET TIME

1464 TM WIRE OUT 1450 PULL OUT VERY SMALL

SIO

GEOLOGICAL SAMPLE LOG

Date 21 Oct 78 Expedition INMD 12 Sample No. 129BX

Ship R.V. MELVILLE

Lat. 29°56.0'S

Long. 340 34.8'W

Geographic Area

BATHYMETRY

- [x] Flat bottom
- [ ] Hills
- [ ] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [ ] Dredge (D)
- [x] Box (Bx)
- [ ] Other

TIME: Start down 1846 Z On bottom 1919 Z Off Bottom 1921 Z On deck 1956 Z

DEPTH: Echo 794 Fm/M Correction 14 Corrected Fm. 808 M. 1478

LENGTH of core(s) or sections (cm) or size of haul ≈ 45cm

DESCRIPTION of sample CALCAREOUS OOZE

CONDITION of sample VERY GOOD

REMARKS: (Equipment function, weather, accidents, etc.) 1500 TM WIRE OUT AT TRIP

20

SIO

GEOLOGICAL SAMPLE LOG

Date 27 OCT 78 Expedition TWMD - 12 Sample No. 130P & PG

Ship R/V MELVILLE

Lat. 29 ~~56.8~~ 57.3 S

Long. 34 ~~45.4~~ 43.9' W

Geographic Area RIO GRANDE RISE

BATHYMETRY

- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☒ Piston (P)
- ☒ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 2057 Z On bottom 2128 Z Off Bottom 2134 Z On deck 2220 Z

DEPTH: Echo 798 Fm/M Correction 14 Corrected Fm. 812 M. 1485

LENGTH of core(s) or sections (cm) or size of haul GRAVITY: cm — w/ CATCHER
PISTON: ~~325~~ 272 cm — ~~w/~~ CATCHER SAMPLE

DESCRIPTION of sample MODERATE BROWN 10YR 4/3 CALCAREOUS CLAY

CONDITION of sample FAIR!

REMARKS: (Equipment function, weather, accidents, etc.) 20' BARREL, 20' FF FINGER TYPE NOSE CONE

1490 WIRE OUT

~~Core~~ Dredge LOG

EXPEDITION: INPOMED ~~Core~~ Dredge # 01 D

VESSEL: MELVILLE DATE: 10-15-77

LEG: 01 DEPTH 1010 fm 1882

+19 = 1029

	TIME		LOCATION LAT. '	LONG. '
OVERSIDE	~~2210~~	Z 2210		
ON BOTTOM	2346	Z 2303 0107	08 47.59N	103 54.04W
ON DECK	0204	Z 0203	to 8°47.9	103°53.6'W

2918.5

WIRE OUT ~~2000~~ M TOTAL _____ M PULLOUT

TENSION 24000 TOTAL _____ AVERAGE _____ DIFFERENCE

DESCRIPTION Mn Nodules & Mn Crust on Volcanic Rocks
1 Bag plastic
1 Tupperware container lg. nodules & crust
1 to Nelson lab
~ 8 to Honolulu

LOCAL TOPOGRAPHY

REMARKS Dredging Seamount (Cratered) appears to be nodules inside the smaller craters
Seamount had been previously surveyed with deep tow

S10

GEOLOGICAL SAMPLE LOG

Date 2 May 1978 Expedition INDOMED - 6 Sample No. INMD 2D

Ship R/V Melville

Lat. 26°06.8'S - 26°07.4'S

Long. 47°43.5'E - 47°43.0'E

Geographic Area Scarp on east flank, north end of Madagascar Ridge, depths of 2100-1700 fm.

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

Position data sheet + u/w log = 0605.

TIME: Start down 0051 Z On bottom 0342 Z Off bottom 0436 Z On deck 0503 Z

DEPTH: Echo 2002 - 2006 Fm/M Correction 50 - 50 Corrected Fm. 2052 - 2056 M. 3753-3760

LENGTH of core(s) or sections (cm) or size of haul: Main dredge empty - Mud sock sample in refrigerator jar.

DESCRIPTION of sample: Mud sock: light brown, creamy mud.

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

S10

GEOLOGICAL SAMPLE LOG

Date 8 May 1978 Expedition INDOMED - 8 Sample No. INMD 3D

Ship R/V Melville

Lat. 34°28.1'S - 34°28.6'S

Long. 43°26.3'E - 43°26.5'E

Geographic Area northeast flank of guyot in groups on southwest corner of Madagascar Ridge

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 0733 Z On bottom 0836 Z Off bottom 0902 Z On deck 1000 Z

DEPTH: Echo 984-1020-986 Fm/M Correction 21-22-21 Corrected Fm. 1005-1042-1007 M. 1838-1906-1842

LENGTH of core(s) or sections (cm) or size of haul Two gunny sacks

DESCRIPTION of sample 5 large blocks of Mn crust 6" thick, sporting hornconals, worm tubes & bryozoa; sandy sediment, brown mudstone.

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 11-12 May 1978 Expedition INDOMED - 6 Sample No. INMD 4D

Ship R/V Melville

Lat. 42°03.3'S - 42°03.6'S

Long. 42°43.0'E - 42°43.3'E

Geographic Area Cross-fracture @ 42°30'E.

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other _____

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other _____

TIME: Start down 2222 Z On bottom 0058 Z Off bottom [0116] Z On deck 0133 Z wire cut - lost dr.

DEPTH: Echo — Fm/M Correction _____ Corrected Fm. _____ M. _____

LENGTH of core(s) or sections (cm) or size of haul No sample -

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) Lost dredge, pinger and 4,310 meters of wire when wire was cut

SIO

GEOLOGICAL SAMPLE LOG

Date 12 May 1978 Expedition INDOMED - 8 Sample No. INMD 5D

Ship R/V Melville

Lat. 42°00.5'S - 41°58.3'S

Long. 42°43.7'E - 42°44.1'E

Geographic Area large N-S cross-fracture near 42°45'E

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 0541 Z On bottom 0634 Z Off bottom 0711 Z On deck 0755 Z

DEPTH: Echo 876 - 668 Fm/M Correction 10 - 8 Corrected Fm. 886-676 M. 1620-1236

LENGTH of core(s) or sections (cm) or size of haul 3 gunny sacks - 100-150 lbs

DESCRIPTION of sample Blocky and shattered, extremely angular boulders of diabase, basalt and serpentine; some horn corals and a damaged lobster preserved separately.

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 12 May 1976 Expedition INDOMED - 8 Sample No. IMM D 6 D

Ship R/V Melville

Lat. 41°57.2'S - 41°57.9'S

Long. 42° 39.3'E - 42°41.3'E

Geographic Area Lower east flank of 42°30' cross-fracture

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 0940 Z On bottom 1321 Z Off bottom 1515 Z On deck 1745 Z

DEPTH: Echo 2460 - 1297 Fm/M Correction 59 - 18 Corrected Fm. 2519 - 1315 M. 4607 - 2405

LENGTH of core(s) or sections (cm) or size of haul Dredge Empty

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

S10

GEOLOGICAL SAMPLE LOG

Date 12 May 1976 Expedition INDOMEO - 8 Sample No. INMO 7D

Ship R/V Melville

Lat. 41°57.9'S - 41°58.7'S

Long. 42°37.9'E - 42°40.2'E

Geographic Area Lower east flank of 42°30' cross-fracture

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 1840 Z On bottom ~~2013~~ 1945.8 Z Off bottom 2120 Z On deck 2240 Z

DEPTH: Echo 2385 @ 1948 2227 (2037) - 2123 Fm/M Correction 56 - 49 - 44 Corrected Fm. 2441 - 2276 - 2167 M. 4464 - 4162 - 3963

LENGTH of core(s) or sections (cm) or size of haul Dredge Empty

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

S10

GEOLOGICAL SAMPLE LOG

Date 12-13 May 1978 Expedition HYDONED - 8 Sample No. HND 8D

Ship R/V Melville

Lat. 42°00.4'S - 42°01.8'S

Long. 42° 41.0'E - 42° 41.4'E

Geographic Area near base of east flank of N-S trending cross-fracture near 42°30'.

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 2356 Z On bottom 0402 Z Off bottom 0504 Z On deck 0647 Z

DEPTH: Echo 1990 - ? Fm/M Correction 40 - ? Corrected Fm. 2030 - ? M. 3712 - ?

LENGTH of core(s) or sections (cm) or size of haul 8 gunny sacks - about 300-350 lbs.

DESCRIPTION of sample Angular & rounded boulders and cobbles of porphyritic basalts, gabbros, metagneiss, serpentinite, and exotics (grey sediment, diorite (?), plagioclase-mica pebble).

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 16-17 May 1978 Expedition INDOMED - 6 Sample No. INMD 9D

Ship R/V Melville

Lat. 37°50.7'S - 37°52.8'S

Long. 46°30.0'E - 46°24.9'E

Geographic Area Lower west flank of N-S trending narrow cross-fracture near 37°50'S, 46°20'E.

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 2043 Z On bottom 2225 Z Off bottom 0200 Z On deck 0407 Z

DEPTH: Echo 2355 - 2477 Fm/M Correction 58 - 63 Corrected Fm. 2413 - 2534 M. 4413 - 4634

LENGTH of core(s) or sections (cm) or size of haul: Small quantity

DESCRIPTION of sample: Mn crusts; 1 crinoid(?) with broken stalk, pale white on retrieval and extended; preserved in alcohol.

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 17 May 1978 Expedition INDOMED-8 Sample No. INMD 10 D

Ship R/V Melville

Lat. 38°28.2'S - 38°28.5'S

Long. 46°46.2'E - 46°44.7'E

Geographic Area on 56 fm. summit of ridge or seamount capping east face of N-S cross-fracture near 46°30'E. (Peak near 38°30'S, 46°45'E)

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 1148 Z On bottom 1152 Z Off bottom 1213 Z On deck 1223 Z

DEPTH: Echo 90 - 120 Fm/M Correction 3 - 3 Corrected Fm. 93-123 M. 170-225

LENGTH of core(s) or sections (cm) or size of haul

DESCRIPTION of sample A sample of cobbles of coarse-grained anorthosite gabbro and small piece of chlorite schist (in vial). Also, several sponges - yellow, cream + red-horn coral, gorgonian coral and two crabs: wild life preserved in alcohol.

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 21 May 1978 Expedition INDOMED - 8 Sample No. IMD 11D

Ship R/V Melville

Lat. 36°50.0'S

Long. 52°04.2'E

Geographic Area Shoal west lip of 52°20' cross-fracture.

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 1700 Z On bottom 1718 Z Off bottom 1807 Z (prob. lost Dr.) On deck 1853 Z

DEPTH: Echo 335 - 250 Fm/M Correction 5 - 5 Corrected Fm. 340 - 255 M. 622 - 466

LENGTH of core(s) or sections (cm) or size of haul: Lost Dredge - wire all right.

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

S10

GEOLOGICAL SAMPLE LOG

Date 21-22 May 1976 Expedition INDOMED - 8 Sample No. INMD 12D

Ship R/V Melville

Lat. 36°39.1'S - 36°39.2'S

Long. 52°24.9'E - 52°26.4'E

Geographic Area middle portion, east flank of N-S trending cross-fracture near 36°40'S, 52°20'E.

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 2214 Z On bottom 2355 Z Off bottom 0039 Z On deck 0225 Z

DEPTH: Echo 2330 - 2149 Fm/M Correction 57 - 49 Corrected Fm. 2387 - 2198 M. 4365 - 4020

LENGTH of core(s) or sections (cm) or size of haul 1 gunny sack - 25-30 lbs.

DESCRIPTION of sample Angular & rounded cobbles of serpentinized mafics (gabbro?) and, principally, ultramafics, all with thin Mn coating complete or partial.

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 22 May 1976 Expedition INDOMED - 8 Sample No. IMMD 13D

Ship R/V Melville

Lat. 36°41.7'S - 36°42.0'S

Long. 52°12.9'E - 52°13.2'E

Geographic Area lower mid slope of west flank of N-S trending cross-fracture near 52°20'E, depth 5200-4800 meters

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 0554 Z On bottom 0741 Z Off bottom 0837 Z On deck 1005 Z

DEPTH: Echo 2800? - 2500? Fm/M Correction 81? - 64? Corrected Fm. 2881? - 2564? M. 5269-4689

LENGTH of core(s) or sections (cm) or size of haul 1 gunny sack - about 15 lbs

DESCRIPTION of sample Rounded, earthy serpentinized ultramafics.

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

S10

GEOLOGICAL SAMPLE LOG

Date 22 May 1978 Expedition INDOMED - 8 Sample No. INMD 14D

Ship s/v Melville

Lat. 36°38.6'S - 36°38.8'S

Long. 52°06.8'E - 52°05.9'E

Geographic Area near summit west lip of 52°20'E cross-fracture

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 1144 Z On bottom 1210 Z Off bottom 1237 Z On deck 1315 Z

DEPTH: Echo 436 - 526 Fm/M Correction 6 - 7 Corrected Fm. 442 - 533 M. 808 - 975

LENGTH of core(s) or sections (cm) or size of haul "Large load"

DESCRIPTION of sample Dead branching coral, gorgonians, cushion star, basket star, two small lobsters, crabs.

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 22 May 1976 Expedition INDOMED - 8 Sample No. INMD 15D

Ship R/V Melville

Lat. 36°51.1'S - 36°49.9'S

Long. 52°06.6'E - 52°06.8'E

Geographic Area Shallowest portion of west lip of N-S cross-fracture near 52°21' E. Down slope from peak where 110 was lost, about 500-550 meters

BATHYMETRY

- ☐ Flat Bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☐ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 1450 Z On bottom 1519 Z Off bottom 1549 Z On deck 1605 Z

DEPTH: Echo 333 - 312 Fm/M Correction 5 - 5 Corrected Fm. 338 - 317 M. 618 - 580

LENGTH of core(s) or sections (cm) or size of haul 6 gunny sacks - about 150 lbs

DESCRIPTION of sample Serpentinite cobbles, calcareous crusts, black rock and reef-type debris

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 19 June 78 Expedition INMD-9 Sample No. DR-16

Ship MELVILLE

Lat. 19°36.6'N - 19°36.2'N

Long. 38°44.6'E - 38°45.0'E

Geographic Area Red Sea

BATHYMETRY

- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other brine pool

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☒ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 0957 Z On bottom 1046 Z Off Bottom ~~1319~~ 1335 Z On deck 1438 Z

DEPTH: Echo 1475-1501 Fm (M) Correction 95-97 Corrected Fm. 1570-1597 M. 2871-2921

LENGTH of core(s) or sections (cm) or size of haul approx. 40 lbs

DESCRIPTION of sample 40 lbs basalt and carbonate

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) basalts and glass samples taken by S. Bloomer (under J.W. Hawkins)

21°20.8'N, 37°57.8'E –
21°20.5'N, 37°58.4'E (Sor 74@0434Z) SIO

GEOLOGICAL SAMPLE LOG

Date 26 June Expedition INDOMED 9 Sample No. DR-17

Ship MELVILLE

Lat. ~~21° 20.4N~~

Long. 38° ~~58.2E~~ 01.7

Geographic Area Red Sea
Valdivia Deep

BATHYMETRY
- ☐ Flat bottom
- ☐ Hills
- ☑ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other 0240

TYPE OF SAMPLE
- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☑ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 0150 Z On bottom 0248 Z Off Bottom 0439 Z On deck 0500 Z

DEPTH: Echo 730-680 Fm/M (1375-1340m) Correction 40-36 Corrected Fm. 770-696 M. 1408-1273

LENGTH of core(s) or sections (cm) or size of haul 4 bags approx. 60 lbs.

DESCRIPTION of sample carbonate slabs a-d 1 metalliferous precipitate
Buff slabs of carbonate with abundant sponge spicules, frequently Mn-coated.

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) precipitate sampled by S. Bloomer

21°21.0'N, 37°58.3'E -

SIO

GEOLOGICAL SAMPLE LOG

51

Date 26 June Expedition INMD 9 Sample No. DR-18

Ship MELVILLE

Lat. ~~21° 21' N~~

Long. ~~38° 02.6 E~~

Geographic Area Red Sea

Atlantis II deep

BATHYMETRY	TYPE OF SAMPLE
☐ Flat bottom	☐ Piston (P)
☐ Hills	☐ Trip Gravity (PG)
☒ Trench/Deep	☐ Gravity (G)
☐ Seamount/Guyot	☒ Dredge (D)
☐ Continental Shelf	☐ Box (Bx)
☐ Other	☐ Other

TIME: Start down ~~0500~~ 0545 z On bottom ~~0545~~ 0654 z Off Bottom ~~0730~~ 0741 z On deck ~~0730~~ 0825? z

DEPTH: Echo 765-760 Fm/M (1474 m.) Correction 42-42 Corrected Fm. 807-802 M. 1476-1467

LENGTH of core(s) or sections (cm) or size of haul 1 bag - 5 lbs.

DESCRIPTION of sample 5 lbs rock; mud washings, Mn-coated carbonate; buff, porous sediment w/ fossils; small piece of shale.

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

21°19.5'N, 38°05.9'E —
21°20.7'N, 38°05.2'E

51

SIO
GEOLOGICAL SAMPLE LOG

Date 26 June Expedition IN MD 9 Sample No. DR-19

Ship Melville

Lat. ~~21° 19.4N~~

Long. ~~38 05.9 E~~

Geographic Area Red Sea
Atlantis II deep

BATHYMETRY
- ☐ Flat bottom
- ☐ Hills
- ☒ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☒ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 1214 Z On bottom 1310 Z Off Bottom 1453 Z On deck 1345 Z
@1430Z-1005f

DEPTH: Echo 1100 Fm/M Correction 63 - 58 Corrected Fm. 1163-1089 M. 2127-1992
[2080-1970m] of slope

LENGTH of core(s) or sections (cm) or size of haul 9 bags = ~ 20 lb.

DESCRIPTION of sample Mn-crusted carbonate, breccias (basalt?), evaporites, claystone, hematitic nodules, sulfides

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) breccias and precipitate sampled by S. Bloomer

23° 08.3'N, 37°14.1'E -
23° 08.5'N, 37° 13.6'E

51

SIO
GEOLOGICAL SAMPLE LOG

Date 30 June Expedition INMD9 Sample No. DR-20

Ship melville
Lat. ~~23°N 09° N~~
Long. ~~37° 16° E~~
Geographic Area Red Sea
Kebrens Deep

BATHYMETRY
- [ ] Flat bottom
- [ ] Hills
- [x] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE
- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [x] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 1624 Z On bottom 1714 Z Off Bottom 1914 Z On deck 1950 Z

DEPTH: Echo ~~1120~~ 1165-1130 Fm/M Correction 69-66 Corrected Fm. 1234-1196 M. ~~2166~~ 2257-2187

LENGTH of core(s) or sections (cm) or size of haul 5 pieces = 4 carb. + 1 basalt

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)
Hung up dredge early into operation had to manuever back over spot to break loose. - 5 pieces in possession of S. Bloomer

23°08.2' N, 37°15.1' E –
23°08.3' N, 37°14.8' E

51

SIO

GEOLOGICAL SAMPLE LOG

Date 30-31 June Expedition INMD9 Sample No. DR-21

Ship Melville

~~Lat.~~ ~~LONG~~ ~~37° 16.2 E~~

~~Long.~~ ~~LAT~~ ~~23° 08.9 N~~

Geographic Area Red Sea

BATHYMETRY
- ☐ Flat bottom
- ☒ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE
- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☒ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 2120 Z On bottom 2206 Z Off Bottom ~~2320~~ 2314 Z On deck 0010 Z

DEPTH: Echo 1200-1117 Fm/M Correction 72-64 Corrected Fm. 1272-1181 M. ~~2365~~ 2426-2160

LENGTH of core(s) or sections (cm) or size of haul 1 bag – 5 lbs.

DESCRIPTION of sample MN & Buff Carb crusts with burrows

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

23°12.6'N, 37°14.7'W –
23°12.8'N, 37°15.3'W

SIO
GEOLOGICAL SAMPLE LOG

51

Date 1 July Expedition INMD-9 Sample No. DR-22

Ship melville
Lat. 23° 13.2 N
Long. 37° 14.5 E
Geographic Area Red Sea
Nereus Deep eastern slope

BATHYMETRY
- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☑ Other CLIFF

TYPE OF SAMPLE
- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☑ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down 1154 z On bottom 1242 z Off Bottom 1522 z On deck 1600 z

DEPTH: Echo 1220-804 Fm/M Correction 74-44 Corrected Fm. 1294-848 M. 2365-1551

LENGTH of core(s) or sections (cm) or size of haul 1 bag – 50 lbs.

DESCRIPTION of sample CARb. Crust & basalt & chert
One large piece of basalt; one large piece of chert (to P. Lonsdale) and several smaller pieces

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.) S. Bloomer sampled basalt

SIO

GEOLOGICAL SAMPLE LOG

Date 1 July 78 Expedition FNMD-9 Sample No. DR-23

Ship Melville

Lat. 23 10.x'N

Long. 37° 17.x'E

Geographic Area Red Sea

BATHYMETRY

- [ ] Flat bottom
- [ ] Hills
- [x] Trench/Deep
- [ ] Seamount/Guyot
- [ ] Continental Shelf
- [ ] Other

TYPE OF SAMPLE

- [ ] Piston (P)
- [ ] Trip Gravity (PG)
- [ ] Gravity (G)
- [x] Dredge (D)
- [ ] Box (Bx)
- [ ] Other

TIME: Start down 2207 Z On bottom ~~2300~~ 2255 Z Off Bottom 0055 Z On deck 0150 Z

DEPTH: Echo 1220-930 Fm/M Correction 74-53 Corrected Fm. 1254-983 M. 2365-1798

LENGTH of core(s) or sections (cm) or size of haul lost dredge

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

LOST DREDGE - swivel broke on 22000 lb pull. swivel was made by M.D.S.

COPY

ROCK CURATION SHEET - DREDGE SAMPLES
Dredge Log

Expedition INMD - 17 Station D- 131 Date 12 APRIL 79

Ship Melville Site description EPR axial zone Site 1A 21° N

Location:

AMF transponders peter puff paul

	Time	Latitude Y	Longitude X	Depth(fm)	(meters)
Dredge in water	1854 Z	13141	5801	1437	2672
Dredge on bottom	2034	11764	7513	1439 1430	2659 2658
Dredge off bottom	2247	10064	9098	1344 1323	2458
Dredge on deck	2351				
Dredge course	135°				

Pinger used? ✓ Sediment catcher? NO

Sea and weather: Sea state 2-3 fair weather wind < 10 kts

hdg 175

Date	Time	cse	wind	tension	~~comments~~ Locations
					20°55.1'N, 109°02.5'W -
					20°54.2'N, 109°01.5'W

Sample Description: weight 1100 lbs

Rock types: Basalt

Burlap Bag #1 four large pillow chunks

#2 one very large pillow

#3 one very large pillow

#4 pl phyre pillow, aphyre pillow, small fragments

#5 pillows + sheet flow small pcs

#6 pillow 10"x8"x6" + smaller pcs.

Pillow basalts

Photograph or sketch of dredge site from GDR records _____

Sample preservation:

COPY

ROCK CURATION SHEET - DREDGE SAMPLES
Dredge Log

Expedition INMD-17 (RISE II) Station D- 132 Date 15 APR 1979

Ship Melville Site description EPR 21 N SITE 1B axial zone

Location:

	Time	Latitude Y	Longitude X	Depth(fm)	(meters)
Dredge in water	0655Z	6365.9	1151.9	1410	2621
Dredge on bottom	0824Z	5011.7	1398.9	1420 +23 1397	2598
Dredge off bottom	0942	4226.4	2148.2	1414 +23 1391	2585
Dredge on deck	1055				
Dredge course					

2640 in wire out

Pinger used? Yes Sediment catcher? _____

Sea and weather: Sea state ~2, fair weather, wind ~5 kts

Date	Time	cse	wind	tension	~~comments~~ Location
					20°51.6'N, 109°05.9'W –
					20°51.1'N, 109°05.4'W

Sample Description: weight _____

Rock types: Basalt

Photograph or sketch of dredge site from GDR records _____

Sample preservation:

COPY

ROCK CURATION SHEET - DREDGE SAMPLES
Dredge Log

Expedition INMD-17 /RISE II Station D- 133 Date 16 APR 79

Ship Melville Site description EPR-axial zone, northern area

Location:

	Time	Latitude	Longitude	Depth(fm)	(meters)
Dredge in water	1759 Z	20°56.0'N	109° 01.5'W	1435	2668
Dredge on bottom	1909 Z	20°55.9'N	109°01.1'W	1444 1420 24	2640 *
Dredge off bottom	2108 Z	20°56.1'N	109° 00.9'W	1403 1380 23	2565 ✓
Dredge on deck	2306 Z				
Dredge course	~295				

* location bad according to transponders

Pinger used? transponder ✓ Sediment catcher? _____

Sea and weather: gentle swell from N 15-20 KT wind

Date	Time	cse	wind	tension	~~comments~~ Location
					From Sat nav.-
					20°55.9'N, 109°01.1'W
					20°56.1'N, 109°00.9'W

Sample Description: weight ~1 Kg

Rock types: fresh black basalt glass, No Mn or palagonite
Largely thin glass plates 3-7 mm thick, a few pcs. of aphyric basalt w/ thin glass rinds. PL phenos in a few glass plates on the inner side of the plate only.

Photograph or sketch of dredge site from GDR records _____

Sample preservation: 3 2 gallon plastic bags of glass, 18 numbered samples 11 large 7 glass pcs.

COPY

ROCK CURATION SHEET - DREDGE SAMPLES
Dredge Log

Expedition INMD-17 (RISE-II) Station D-134 Date 17 APR 79 Z

Ship Melville Site description axial zone, EPR - southern area from Zone 2 - (Ballard - Argus data)

Location:

	Time	Latitude	Longitude	Depth(fm)	(meters)
Dredge in water	0433			1400	2602
Dredge on bottom	0542		fish transponder X=1706 Y=4306	1393 X, wire 23 depth	2628 ~~2590~~
Dredge off bottom	0806		ship X=2560 Y=3038	1406 23 1385	wire 2667 depth 2574 2575
Dredge on deck					
Dredge course	~120				

transponder (went dead at 0557)

Pinger used? ✓ Sediment catcher? No

Sea and weather: gentle sea, wind 280° @ 20 kts

Date	Time	cse	wind	tension	~~comments~~ Locations
					~~20°50.7'N, 109°05.2'W~~
					~~20°50.4'N~~,
					20°51.2'N, 109°05.72'W -
					20°50.5'N, 109°08.0'W

Sample Description: weight _____

Rock types: Basalt, pillow buds, glass plates

Photograph or sketch of dredge site from GDR records _____

Sample preservation:

ROCK CURATION SHEET - DREDGE SAMPLES
Dredge Log

Expedition ~~HDP~~ PNAD-17 (RISE II) Station D- 135 Date 17 APR 79

Ship Melville Site description axial valley-ridge EPR

Location: EPR

	Time	Latitude Y	Longitude X	Depth(fm)	(meters)
Dredge in water	1159Z	4286	-300	1372	
Dredge on bottom	1426	@1431Z ship 3432	0498	2510 on wire out	
Dredge off bottom	1554	@1558 ship 3432 fish 2627 2965	1499 1022	1416 +23 1395	2593
Dredge on deck					
Dredge course					

Pinger used? transponder ✓ Sediment catcher? _____

Sea and weather: low swell 10 Kt wind 270°

Date	Time	cse	wind	tension	~~comments~~ Locations
					20°50.7' N, 109°06.4' W -
					20°50.3' N, 109°05.8' W

Sample Description: weight ~2 Kg

Rock types: glassy Basalt

Photograph or sketch of dredge site from GDR records _____

Sample preservation:

COPY

ROCK CURATION SHEET - DREDGE SAMPLES
Dredge Log

Expedition INMD-17 (RISE II) Station D- 136 Date 17 APR 1979

Ship Melville Site description EPR-axial rift

Location:

	Time	Latitude Y	Longitude X	Depth(fm)	(meters)
Dredge in water	2143			1420	
Dredge on bottom	2308/17	20°54.0S		1435 1412 +23	2624
Dredge off bottom	0006/18	@ 2357.3 fish@ 9856	8374	1451 1427 +24	2653
Dredge on deck		@ 0000 ship@ 9570	9174		
Dredge course					

bad side echo

Transponder ✓

Pinger used? ✓ Sediment catcher? No

Sea and weather:

Date	Time	cse	wind	tension	~~comments~~ Location
					20°53.9'N, 109°01.5'W
					(off bottom loc. only)

Sample Description: weight ~70 lbs

Rock types: mostly flat plates or "slaggy" basalt glass w/ very large and abundant vesicles, several cm diam., and tubes. Some worms growing on samples, warm water indicators. a few beds & pillow fragments Some palagonite ftn on striated outer sfcs

Photograph or sketch of dredge site from GDR records

Sample preservation:

SIO

GEOLOGICAL SAMPLE LOG

Date 22 April 1979 Expedition INDOMED Sample No. INMD 137D

Ship R/V Melville

Lat. 20°46.3'N - 20°46.6'N

Long. 109°16.6'W - 109°15.2'W

Geographic Area

BATHYMETRY

- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☑ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down ~~Z~~ On bottom ? 1242 ? ~~Z~~ Off Bottom ? 1545 ? ~~Z~~ On deck ~~Z~~

DEPTH: Echo Fm/M Correction Corrected Fm. M. 2810 ~~Fm~~

LENGTH of core(s) or sections (cm) or size of haul No sample.

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)

SIO

GEOLOGICAL SAMPLE LOG

Date 22 April 1979 Expedition INDOMED Sample No. INMD 137D

Ship R/V Melville

Lat. 20°46.3' N - 20°46.6' N

Long. 109°16.6' W - 109°15.2' W

Geographic Area

BATHYMETRY

- ☐ Flat bottom
- ☐ Hills
- ☐ Trench/Deep
- ☐ Seamount/Guyot
- ☐ Continental Shelf
- ☐ Other

TYPE OF SAMPLE

- ☐ Piston (P)
- ☐ Trip Gravity (PG)
- ☐ Gravity (G)
- ☑ Dredge (D)
- ☐ Box (Bx)
- ☐ Other

TIME: Start down Z On bottom ? 1242 ? Z Off Bottom ? 1545 ? Z On deck Z

DEPTH: Echo Fm/M Correction Corrected Fm. M. 2810 m

LENGTH of core(s) or sections (cm) or size of haul No sample.

DESCRIPTION of sample

CONDITION of sample

REMARKS: (Equipment function, weather, accidents, etc.)