#820345M1

SAMPLE Log
Sheets
GYRE 82-6-11

101513

Geop. Log and ~~Dat~~ Station sheet format

Line #

L - TRANSIT

S - 1

S - 1b ??

L - 1

S - 2 a or b ?

L = line

S = Station

millisec x .75 = meters

Time

Zulu (GMT) assumed

24 hour clock

Crs / Hdg

?

Speed

PC - 1

PC - 2, etc.

Piston core

2-D = D-1

D - 1

D - 2, etc.

Dredge

D - 3 (S4)

D - 4 all at Station 4 (S4)

D - 5 (S4)

STA

1 - PC 1
2 - D1
2 - PC 2
2 - PC 3
2 - D2
3 - PC 4
3 - D3
C

PC 1
2D

Field Log Sheet

SAMPLE # 1 ≡ (PC 1)
STATION # 1

SHIP Cypre CRUISE # 82-G-11 DATE 19 Sept. 82

GENERAL AREA Off Cape Fear

EQUIPMENT Short barreled Piston Corer

METHOD OF POSITIONING Drift

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	33° 19.7	77° 17.6	0002Z ~~0810~~	38 m	____°
	LORANS:				____°
START UP					
	LORANS:				

RESULTS: # OF DROPS _____ IF MORE THAN 1, WHY? Penetrall ~ .6 m

DISTURBED? LOST MOST OF SAMPLE FROM CORER BECAUSE NO CLOTH BAG

Label Procedure--indicate--
Cruise No. 82-11
Station # 1
Core # 1
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

Phosphate sand size fraction

BIOLOGY: WHAT & WHERE?

Gastropods

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS: components: quartz sand, phosphate, shell debris, benthic forams quartz is angular to subrounded. Phosphate angular to rounded. few benthic forams (recent). Phosphate colors; light Brn., gray, dark gray, to black., highly polished, ovoid to spherical med to very coarse grain sized; also some agglomerates carbonate-phosphate mixtures

OBSERVERS:

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

1 2 3 4 5 6 7 8

Field Log Sheet

SAMPLE # I 2D ≡ D1
STATION # 2

SHIP GYRE CRUISE # 82-11 DATE Sept. 19 82

GENERAL AREA Blake Plateau (N.E., [illegible])

EQUIPMENT Dredge 48" chain drag

METHOD OF POSITIONING Loran - Satnav

at max 950 m out

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	32° 18.59 N	77° 41.48 W	1351 Z	550 m	(570 m °?)
	LORANS:				°
START UP	32 17.70 N	77° 40.97 W	1427 Z	530 m	
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED? collected 350 kg

Label Procedure--indicate--
Cruise No. 82-11 TOP
Station # 2
Core #
BOTTOM
Top/Bottom--and Sect.#
SECTION 1 2 3 4

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY? smooth cemented phosphatic cobbles (size range -); phosphorite slabs - dark brown rubbly texture (size range -). About 80% cobbles and pebbles, 20% slabs, some sand. One granite gneiss cobble ~15cm in diameter. One limestone fragment.

BIOLOGY: WHAT & WHERE? Recovered in dredge: Sea urchins, silicious sponges, skates (~8cm) Foram species: Globorotalia truncatulinoides, Neogloboquadrina dutertrei, Globorotalia menardii, Globigerinoides sacculifer, Globorotalia tumida, Turborotalia inflata, Globigerinoides ruber (red), Orbulina universa, Globigerinoides conglobatus, Globorotalia flexuosa, Pulleniatina obliquiloculata. Gastropods, several unidentified benthic forams.

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS: 550 m 1358 Z Iron-staining is present throughout sample. Several benthics showing signs of replacement or mineralization. Minor amounts of phosphate. Age of sample is Pleistocene.
3000 W - lip of 1412 Z
on deck of 1437 Z

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.
1 2 3 4 5 6 7 8

OBSERVERS: Lane, Aruscavage, Hall, [illegible]

Field Log Sheet

SAMPLE # ~~BC~~ 2A
STATION # 2

SHIP R/V Gyre CRUISE # 82-11 DATE 19 Sep 82

GENERAL AREA

EQUIPMENT

METHOD OF POSITIONING

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM					°
	LORANS:				°
START UP					
	LORANS:				

RESULTS: # OF DROPS _____. IF MORE THAN 1, WHY?

DISTURBED? _____

Label Procedure--indicate--
Cruise No.
Station #
Core #
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:

no recovery

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS:

Field Log Sheet

SAMPLE # ~~PC~~ 2B
STATION # 2

SHIP R/V Gyre CRUISE # 82-11 DATE 19 Sep 82

GENERAL AREA Blake Plateau (N.E. Phosphorite Region)

EQUIPMENT Short-barreled piston corer

METHOD OF POSITIONING ~~Drift~~ Satellite

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	32°19.28' ~~32°19.316'~~	77°41.33' ~~77°41.317'~~	1637Z	525m	537m
	LORANS:				
START UP					
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED? Only thin skin of sediment recovered in surgical glove catcher soup and grains

Label Procedure--indicate Cruise No. 82-11 Station # 2 Core # 2 TOP BOTTOM Top/Bottom--and Sect.# SECTION 1 2 3 4

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

Phosphatic sand with considerable glauconite and fallen foraminifera, sponge spicules; fragments of small larger phosphorite pieces (to 4m and round polished phosphorite

BIOLOGY: WHAT & WHERE? Sample rich in planktic foraminifera. Species include: Globorotalia truncatulinoides, Neogloboquadrina dutertrei, Globorotalia menardii, Globigerinoides sacculifer, Globorotalia tumida, Turborotalia inflata, Globigerinoides ruber, Globigerinella aequilateralis, Possibly Globorotalia —
Several unidentifiable benthics.
Scaphapods

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS: Sample contains a fair amount of glauconite. There is also a fair amount of oxidized sediment. Iron and phosphate are present, with only small amounts of reworked carbonate. Preservation of the carbonate is moderate. The age of this sample is Pleistocene to recent (probably recent).

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

1 2 3 4 5 6 7 8

OBSERVERS: DeYoung, Manheim, Hall

Field Log Sheet

SAMPLE # PC-3
STATION # 3

SHIP R/V Gyre CRUISE # 82-11 DATE 20 Sep 82

GENERAL AREA Blake Plateau (N.E. phosphorite pavement)

EQUIPMENT Short barreled piston corer

METHOD OF POSITIONING Satellite Calibrated Loran

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	A 32 11.653	77 45.433	1432Z	530	572 °
	LORANS:				°
START UP			1433Z		
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No. 82-11 TOP 1
Station # 3 2
Core # 3 3
BOTTOM 4
Top/Bottom--and Sect.#

SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

COMMENTS:
core drop 3A - Triggering did not function properly
core

OBSERVERS:

Field Log Sheet

SAMPLE # C-4
STATION # 3

SHIP GYRE CRUISE # Gyre 11-82 DATE 20 SEP 82

GENERAL AREA BLAKE Plateau

EQUIPMENT Gravity Core with hardened nose

METHOD OF POSITIONING Loran-Satnav

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	32° 11.48'N	77° 45.00'W	1650Z	545 m	597 m°
	LORANS:				°
START UP					
	LORANS:				

RESULTS: # OF DROPS 1. IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No. 82-11
Station # 3
Core # 4
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

COMMENTS: 3rd attempt on pavement. Removed piston see reverse

On Sta 1633 32°10.71 7744.68 557 m

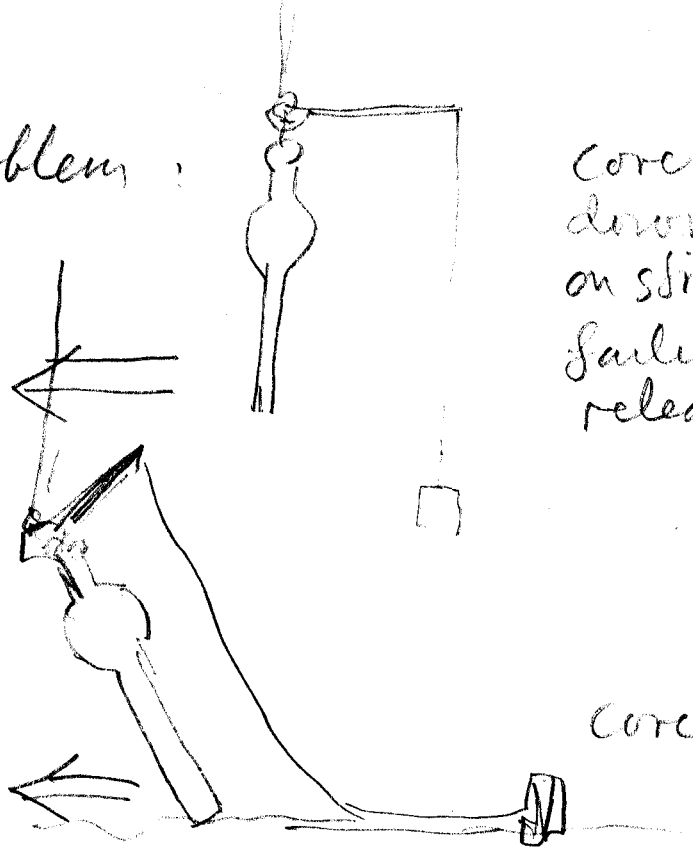
Dwn 1640.33 32 10.87 Depth 555 m

77 44.77

OBSERVERS:

(*)

Problem:



corer drifts down current on striking, causing failure of trigger wd to release

corer scrapes along bottom causing one side to be abraded

New system:

1) Reach station ½ mi upstream of current
Hold till corer ready
2) Stop ship, corer down (drift)
as rapidly as possible

Field Log Sheet

SAMPLE # C-5
STATION # 3

SHIP RN Gyre CRUISE # 82-11 DATE 20 Sep 82

GENERAL AREA Blake Plateau

EQUIPMENT Gravity core with hardened nose + 20' freefall

METHOD OF POSITIONING Loran Satnav

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	32° 11.0' N	77° 45.3' W	1802	551 m	582 m °
	LORANS:				°
START UP					
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED? Recovered core but lost it by banging core against vessel

Label Procedure--indicate--
Cruise No. 82-11 TOP
Station # 3
Core # 5 BOTTOM
Top/Bottom--and Sect.# 1 2 3 4 SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

Manganese smearing on nose indicates encountered pavement; phosphate on teeth shows hard substrate stopping core was phosphorite pavement.

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS: 4th attempt on pavement welded barrel to nose
1750 32 10.47 555 m
77 45.12

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

1 2 3 4 5 6 7 8

OBSERVERS:

Field Log Sheet

SAMPLE # C6
STATION # 3

SHIP R/V Gyre CRUISE # 82-11 DATE 20 Sep 82

GENERAL AREA Blake Plateau

EQUIPMENT Gravity core with hardened nose and 29' free fall

METHOD OF POSITIONING LORAN – Satnav (INS)

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	32° 11.9'	77° 43.9'	1956 Z	549 m	535m °
	LORANS:				°
START UP					
	LORANS:				

RESULTS: # OF DROPS 1. IF MORE THAN 1, WHY?

DISTURBED? rec. 8-10 ~~cm very~~ hard pavement

Label Procedure--indicate--
Cruise No. 82-11 TOP 1
Station # 3 2
Core # 6 3
BOTTOM 4
Top/Bottom--and Sect.#

SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY? Phosphate slab w/yellow sediment interlayered and - Surface of slab is black-brown polished, knobby; interior is mixed crystalline dense yellow phosphorite with, lenses or fracture filling of carbonate minerals

BIOLOGY: WHAT & WHERE? Globorotalia truncatulinoides, Globorotalia menardii, Globorotalia
Inner nose - Planktic foraminifers; tumida, Globigerinoides sacculifer, neogloboquadrina dutertrei, ? Turborotalia inflata. Several benthic foraminifera

Outer nose - Barren of Planktic or benthic foraminifers.

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?,
Bottom part of core not "soft" because fragments are all sharp, broken crystalline - vitreous in character but has been smashed by tremendous force of blow.

COMMENTS: LATER CONCLUSION
Seismic experiment estimated pavement thickness at ~2'

The inner nose contains a sparse planktic foraminiferal population, indicative of Pleistocene to recent. $CaCO_3$ makes up only a minor component. No nannoplankton was observed. The outer nose contains no forams and is composed mainly of phosphate.

outer nose contains some microcrystalline structure. Small amounts of what appear to be Phosphorite or [illegible]

OBSERVERS:

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

Scrapings

Field Log Sheet

SAMPLE # —
STATION # L1

SHIP Gyre CRUISE # 82-11 DATE 9/20/82

GENERAL AREA Blake Plateau

EQUIPMENT Datasonics Bottom Pinger (27kHz 0.2msec pulse)

METHOD OF POSITIONING Loran - Sofnav

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	32° 13.0	77° 44.7	2020Z	537m	500m °
	LORANS:				°
START UP					
	LORANS:				

RESULTS: # OF DROPS 2 IF MORE THAN 1, WHY? Not enough weigh on 1st deployment, pinger probably not vertical. Added weight for second run.

DISTURBED?

Label Procedure--indicate--
Cruise No.
Station #
Core #
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

COMMENTS:

Second bottom reflection lags first by 0.4 msec indicates subbottom at depth of .4-.8 m (2000-4000 m/s velocity)

OBSERVERS: Sundkvist

Field Log Sheet

SAMPLE # D2
STATION # 6

SHIP RV Gyre CRUISE # 82-11 DATE 21 Sep 82

GENERAL AREA Blake plateau (N.E. Nodule Area)

EQUIPMENT Dredge 48" chain

METHOD OF POSITIONING loran - SaTNav

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31°42.7N	77°29.4W	21 Sept 1501 Z	825m	1045m°
	LORANS:				°
START UP	31°42.8N	77°29.1W	1506		
	LORANS:				

RESULTS: # OF DROPS 1. IF MORE THAN 1, WHY?
10 Kg DISTURBED? collected ~

Label Procedure--indicate--
Cruise No. 82-11 TOP 1
Station # 6 2
Core # D2 3
BOTTOM 4
Top/Bottom--and Sect.#

SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?
~~Also~~ Mainly cemented carbonate ooze, 3-2 cm diam, brown stained in part, and much deepwater coral, both fresh and Mn-encrusted; one cobble probably phosphatic, but mixed with carbonate

BIOLOGY: WHAT & WHERE?
Deepwater corals, soft corals, brachiopods, brittle stars, siliceous sponges, tunicates, hydroids, mainly encrusting forms on corals

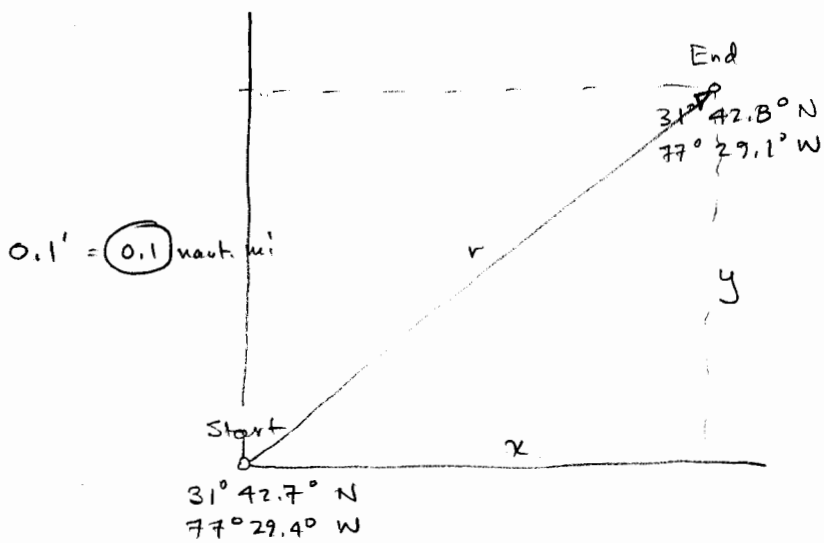
SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?
Foram species include: Spharoidinella dehiscens, Globigerinoides ruber, Globigerinoides conglobatus, Globigerinoides sacculifer, Neogloboquadrina dutertrei, Globorotalia menardii, Globorotalia tumida, Globorotalia crassula, Orbulina universa, Pulleniatina obliquiloculata

COMMENTS: See reverse Distance traveled on bottom = 0.28 naut. mi (See Reverse)
Forams indicate a Pleistocene age. Of Paleontologic interest is the fact the Spharoidinella dehiscens is one of the dominant Planktics. The sample is essentially all carbonate.

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS: Anscarage, Manheim, DeYoung

Station # 6 D2



0.3' = 0.26 naut. mi

1° Longitude ≈ 0.86° Latitude

$$r = \sqrt{x^2 + y^2}$$

$$r = \sqrt{(0.26)^2 + (0.1)^2}$$

$$r = 0.28 \text{ nautical mile}$$

(does not account for change in depth)

Field Log Sheet

SAMPLE # D3
STATION # 7

SHIP R\V Gyre CRUISE # 82-11 DATE 21 Sep 82

GENERAL AREA Blake Plateau (N.E. nodule area)

EQUIPMENT Dredge 48" chain

METHOD OF POSITIONING LORANS- INS

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31°38.9'N	77°25.6'W	1637Z	891 m	1150 m °
	LORANS:				°
START UP	31°39.3'N	77°25.2'W	1652Z	893m	
	LORANS:				

RESULTS: # OF DROPS IF MORE THAN 1, WHY? DISTURBED?
only 1 3cm ~~cobble recovered~~ but 1600lb massive ~~slab, partially~~ phosphorite fell off dredge

Label Procedure--indicate--
Cruise No. 82-11 TOP
Station # 7
~~Core~~ # D3 BOTTOM
Top/Bottom--and Sect.# SECTION 1 2 3 4

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY? green-yellow
1 small piece (5 cm) of pyritized glassy phosphorite
loaded with planktonic foraminiferal remains & molds
but hard to identify

BIOLOGY: WHAT & WHERE?

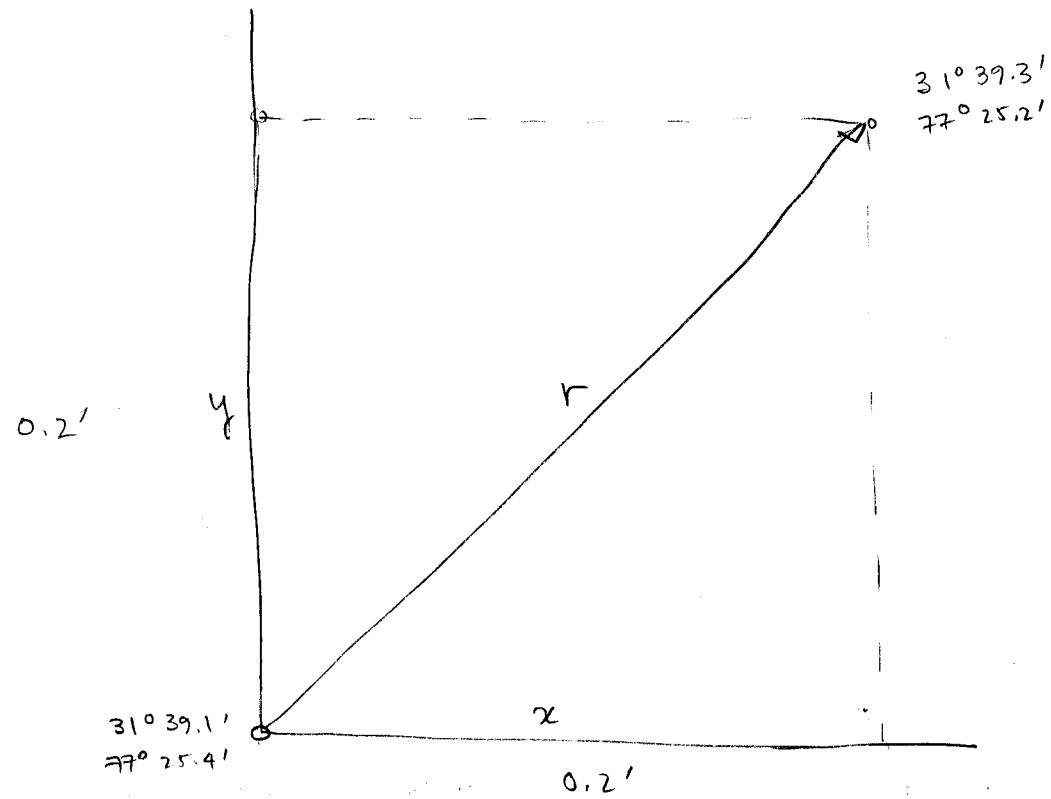
SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.
1 2 3 4 5 6 7 8

COMMENTS:
dropped ~ 1600 lb. rock on lift from bottom
dredging distance = 0.26 naut. mi (see reverse)

OBSERVERS: DeYoung, Manheim

Station # 7 D3



0.2' = 0.17 naut mi

1° Long ≈ 0.86° Lat.

$$r = \sqrt{x^2 + y^2}$$

$$r = \sqrt{(0.17)^2 + (0.2)^2}$$

r = 0.26 nautical miles

(does not account for 2 m depth change!)

Field Log Sheet

SAMPLE # D4
STATION # 7

SHIP R/V Gyre CRUISE # 82-11 DATE 21 Sep 82

GENERAL AREA Blake Plateau (N.E. nodule area)

EQUIPMENT Dredge - 48" chain

METHOD OF POSITIONING LORANS - INS

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31°40.3'N	77° 24.2'W	1721Z	891 m	1300 m°
	LORANS:				°
START UP	31° 41.1'N	77° 23.2' W	1748Z	900 m	
	LORANS:				

RESULTS: # OF DROPS 6 Kg DISTURBED? rock ~~cobbles~~

IF MORE THAN 1, WHY?

Label Procedure--indicate--
Cruise No. 82-11 TOP
Station #
~~Core~~ # D4 BOTTOM
Top/Bottom--and Sect.# 1 2 3 4 SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

a) Brownish to greenish (!) coated hard phosphorite cobbles 2 - 12 cm in diameter; semi-porous but little carbonate with them; some rough, subangular

BIOLOGY: WHAT & WHERE? highly irregular - knobby surface

b) Yellowish-green cemented carbonate ooze ~~with~~ some partly coated with hard phosphorite crust

c) One piece of "petrified pine bark" 2cm X 9 cm"

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

all phosphorite.

ASSUMPTION: relatively smooth hard phosphate pavement with occasional carbonate mounds

COMMENTS: dredging distance = 1.17 nait. mi (see reverse)

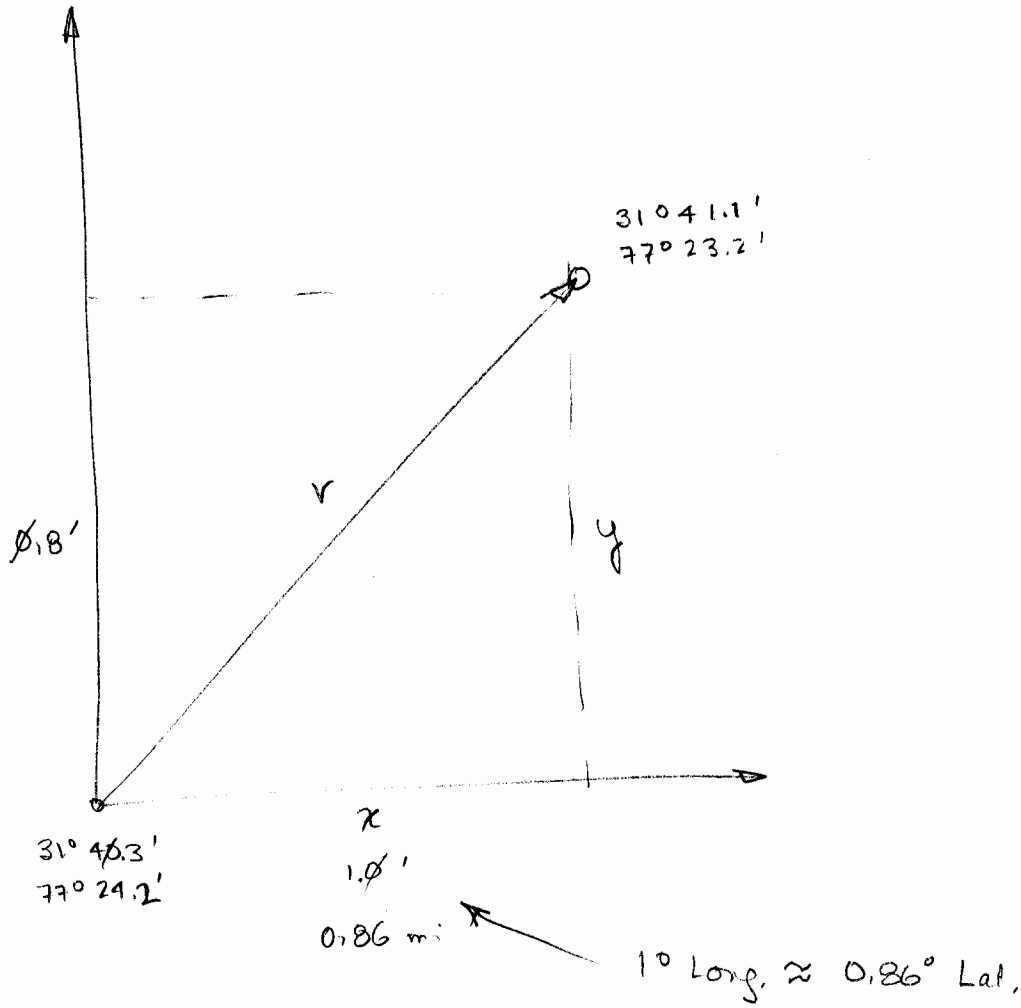
3 small sample bags, 1 large bag

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

1 2 3 4 5 6 7 8

OBSERVERS: DeYoung, Manheim

Station # 7 D4



$$r = \sqrt{x^2 + y^2}$$

$$r = \sqrt{(0.86)^2 + (0.8)^2}$$

$$r = 1.17 \ (\approx 1.0) \text{ nautical miles}$$

(does not account for 9 m depth change!)

Field Log Sheet

SAMPLE # D5
STATION # 8

SHIP R/V Gyre CRUISE # 82-11 DATE 21 Sep 82

GENERAL AREA Blake Plateau (N.E. nodule area)

EQUIPMENT Dredge - 48" chain

METHOD OF POSITIONING LORANS / INS

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH (max)
ON BOTTOM	31° 33.4' N	77° 22.2° W	2062 Z	952 m	1420 m. °
	LORANS:				°
START UP	31° 34.1' N	77° 21.4 W	2045 Z	957 m.	
	LORANS:				

RESULTS: # OF DROPS 1. IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No. 82-11 TOP 1
Station # 8 2
Core # D5 3
BOTTOM 4
Top/Bottom--and Sect.# SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY? 85% Phosphatic Plates and Cobbles, 10-15% Carbonate Ooze w/ less than 5% Mn Plates + Cobbles. About 800 - 1000 lbs of material.

BIOLOGY: WHAT & WHERE? Planktic forams: Globigerinoides sacculifer, Globigerinoides ruber (some red), Neogloboquadrina dutertrei, Globorotalia truncatulinoides, Globorotalia menardii, Globorotalia tumida. Some miliolids. Scaphapods, Gastropods,

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

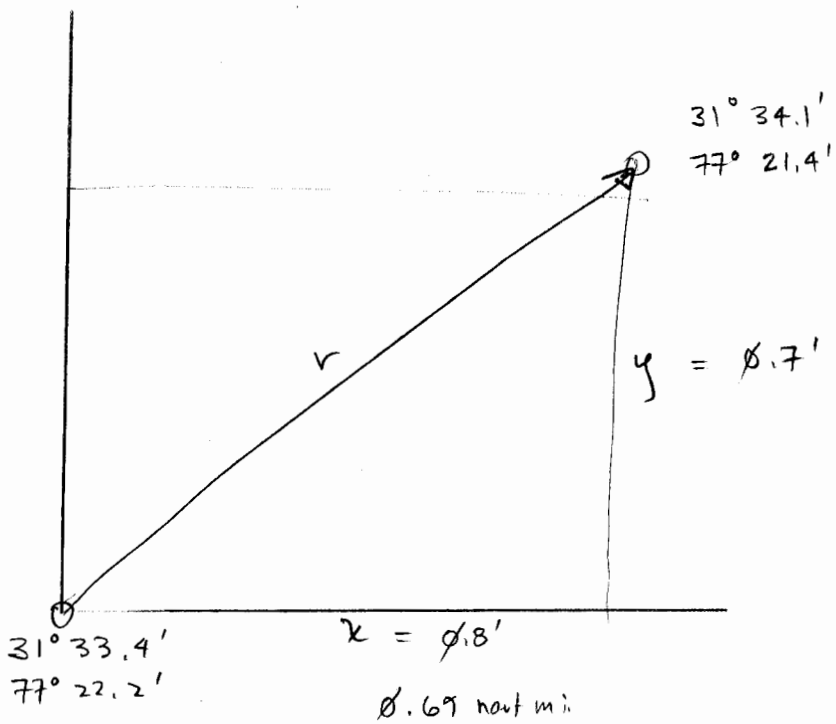
COMMENTS: ONE PRIME EXAMPLE of MN Nodule in 2 pieces. Stored in white sample bags (2) The age of the forams are Pleistocene. Small amount of [illegible] with strings.

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

1 2 3 4 5 6 7 8

OBSERVERS:

Station # 8 , D5



$$r = \sqrt{x^2 + y^2}$$

$$r = \sqrt{(Ø.69)^2 + (Ø.7)^2}$$

$$r = Ø.98 \approx 1.Ø \text{ nautical miles}$$

(does not account for 3 m depth change)

Field Log Sheet

SAMPLE # D6
STATION # 11

SHIP R/V Gyre CRUISE # 82-11 DATE 22 Sep 82

GENERAL AREA Blake Plateau - N.E. nodule area

EQUIPMENT Dredge - 48" chain

METHOD OF POSITIONING LORANS - INS

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 46.5' N	77° 45.0' W	~1756Z	~692 m	°
	LORANS:				°
START UP	31° 47.1'	77° 43.0	1833Z		
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No. 82-11 TOP
Station # 11
~~Core~~ # D6 BOTTOM
Top/Bottom--and Sect.#

SECTION # 1 2 3 4

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:

NO RECOVERY

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS:

Field Log Sheet

SAMPLE # D-7
STATION # S12

SHIP GYRE CRUISE # GYRE 82-6-11 DATE 22 SEPT 82

GENERAL AREA Blake Plateau N.E. nodule area

EQUIPMENT Dredge - 48" chain

METHOD OF POSITIONING LORAN-C Ins.

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31°43.4	77°41.7	2020Z	722 m	1045 m
	LORANS:				
START UP					
	LORANS:				

RESULTS: # OF DROPS _____ IF MORE THAN 1, WHY?

DISTURBED? _____

Label Procedure--indicate--
Cruise No.
Station #
Core #
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:

Lost dredge on bottom.

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS:

Field Log Sheet

SAMPLE # C7
STATION # 12

SHIP R\V Gyre CRUISE # 82-11 DATE 22 Sep 82

GENERAL AREA Blake Plateau N.E. nodule area

EQUIPMENT Gravity core

METHOD OF POSITIONING LORANS-INS

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31°42.8 N	77 41.5 W	2145Z	724 m	748 m °
	LORANS:				°
START UP					
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No. 8211
Station # 12
Core # 7
Top/Bottom--and Sect.#
TOP 1 2 3 4 BOTTOM
SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY? 6 Sections; core catcher, core cutter, top of barrel, bottom barrel, washings. Core nose - lithified carbonate tests

BIOLOGY: WHAT & WHERE? Planktic foraminifers: Globorotalia truncatulinoides Globorotalia menardii, Globigerinoides ruber (some red) Neogloboquadrina dutertrei, Globorotalia tumida, Globigerinoides sacculifer, Globigerinoides conglobatus, Turborotalia inflata, Orbulina universa, ~~C~~, Gastropods,

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS: Re-worked carbonate; iron-staining on carbonate. Age of forams are Pleistocene.

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS:

Field Log Sheet

SAMPLE # C-8
STATION # 14

SHIP R/V Gyre CRUISE # 82-11 DATE 23 Sep 82

GENERAL AREA Blake Plateau - N.E. pavement area

EQUIPMENT Gravity corer

METHOD OF POSITIONING LORANS- INS

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 55.5'	77° 36.4'	0902	705m	810 m°
	LORANS:				°
START UP					
	LORANS:				

RESULTS: # OF DROPS _____. IF MORE THAN 1, WHY? Core lost after core banged on side

DISTURBED? nearly 8000.ll ~~pullout~~ fine

Label Procedure--indicate--
Cruise No. 82-11 TOP
Station # 14
Core # 8 BOTTOM
Top/Bottom--and Sect.# 1 2 3 4 SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

1 2 3 4 5 6 7 8 *PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.*

COMMENTS: 1ST ATTEMPT UNSUCCESSFUL - SCRAPED SED. OFF OF OUTER CORE NOSE - APPEARS TO BE MANGANESE. SCRAPINGS FROM TEETH OF CORE NOSE POSITIVE PHOSPHATE TEST!

OBSERVERS:

Field Log Sheet

SAMPLE # C-9
STATION # 14

SHIP R/V GYRE CRUISE # GYRE 82-11 DATE 23 Sep 82

GENERAL AREA Blake Plateau N.E Pavement Area

EQUIPMENT Gravity Corer

METHOD OF POSITIONING Loran - INS

6500 lbs pull out tension

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 55.5' N	77° 36.7' W	1041	719 m	739 m °
	LORANS:				°
START UP					
	LORANS:				

RESULTS: # OF DROPS _____ IF MORE THAN 1, WHY? _____

DISTURBED? Received about 5" of core

Label Procedure--indicate--
Cruise No. 82-11
Station # 14
Core # 9
Top/Bottom--and Sect.#
TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?
Bottom of core nose yellowish, white phosphorite intensely fractured by impact, Above Manganese pavement (crud, pure, soft) about 3½-4 cm topped by thin layer of carbonate ooze

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS: No forams. Mineralogy: mixed manganese-phosphate phases, badly crushed disaggregated, grading to pure tan to buff phosphorite. Boundary zone shows dendritic encroachment of manganese. Some phosphates has ooid-type cavity fillings of manganese, possible recrystallization of phosphate around manganese. Very few polished phosphate grains. Reddish hematitic-looking material.

OBSERVERS:

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

1 2 3 4 5 6 7 8

Field Log Sheet

SAMPLE # D8
STATION # 15

SHIP RIV Gyre CRUISE # 82-11 DATE 23 Sep 82

GENERAL AREA Blake Plateau, south central pavement area

EQUIPMENT Dredge — 24" chain bag

METHOD OF POSITIONING LORANS - INS

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31°24.6'N	78°30.6'W	1947Z	635m	1000m °
	LORANS:				°
START UP	31° 24.3°N	78° 30.0'W	2013Z	632m	
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No. 82-11 TOP 1
Station # 15 2
~~Core~~ # D8 3
BOTTOM 4
Top/Bottom--and Sect.# SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY? Various sized Slabs of Phosphate w/Manganese coating

BIOLOGY: WHAT & WHERE? SPONGES, CORAL

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

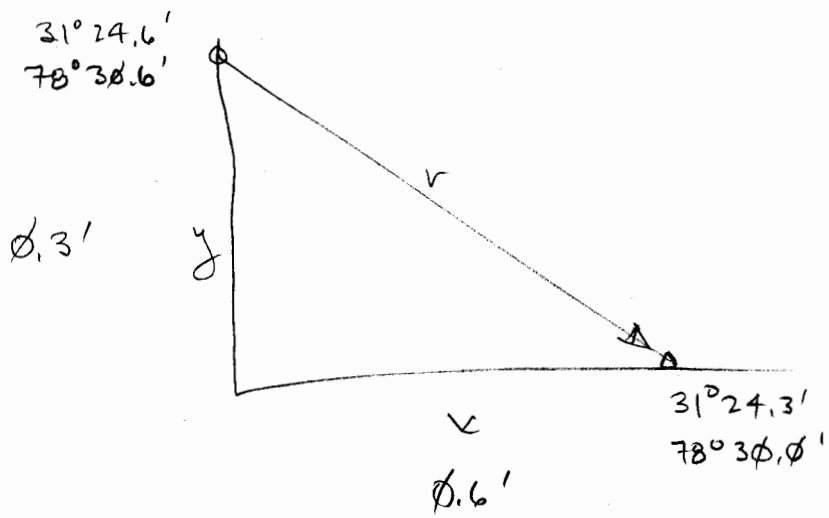
COMMENTS: flat bottom topography

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS: DeYoung,

Station 15, D8



$$r = \sqrt{x^2 + y^2}$$

$$r = \sqrt{(.51)^2 + (0.3)^2}$$

$r =$ Ø.59 naut mi $\approx$ Ø.6 naut mi

(does account for 3m depth change!)

Field Log Sheet

SAMPLE # 09
STATION # 17

SHIP R/V GYRE CRUISE # 82-11 DATE 24 SEPT 82

GENERAL AREA Blake Plateau Central [illegible]

EQUIPMENT Dredge 36" chain bag

METHOD OF POSITIONING LORANS - TRS

Lowered 2224

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 1.3' ~~31° 1.24~~	78° 23.2' ~~78° 23.31~~	2245Z ~~2247Z~~	796 m	1110 m °
	LORANS:				°
START UP	31° 1.3' ~~31° 1.33~~	78° 23.4' ~~78° 23.40~~	2300	✓	840 m
On deck	LORANS:		(2317)		

RESULTS: # OF DROPS 1. IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate Cruise No. Station # Core # Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY? ~~[illegible] kg.~~ 65 kgs. NODULES + SLABS

BIOLOGY: WHAT & WHERE? CORAL

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

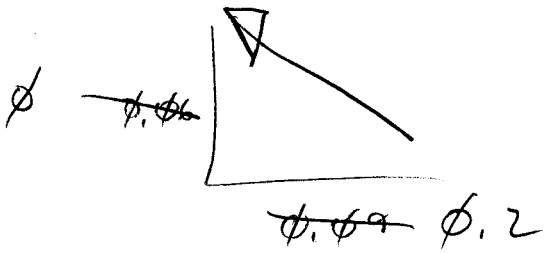
COMMENTS:

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS:

Poor Targeting



$$r = \sqrt{(.85x)^2 + y^2}$$

$r = 0.2$ naut. mi.

Field Log Sheet

SAMPLE # D10
STATION # 18

SHIP Gyre CRUISE # 82-6-11 DATE 24-25 Sep 82

GENERAL AREA Blake Plateau Patio Block Area

EQUIPMENT Middle Dredge 36" Chain Bag

METHOD OF POSITIONING LORANS - INS

over 9

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31°.099N	78°22.82'W	23527	800m	1200m°
	LORANS:				°
START UP	31°1.02	78°23.41'W	0029		
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No.
Station #
Core #
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?
~200 Kg nodules, igneous rock (1) [illegible] quartz, apatite, ?Hornblende, thin coating of manganese.

BIOLOGY: WHAT & WHERE?

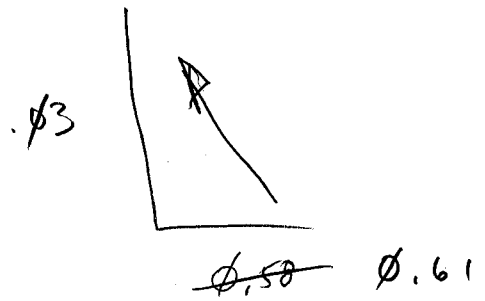
SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS:



$$r = \sqrt{(.35x)^2 + y^2}$$

r = 0.5 nautical mi.

Field Log Sheet

SAMPLE # D11
STATION # 19

SHIP Gyre CRUISE # 82-G-11 DATE ~~9/29/82~~ 25 Sep 82

GENERAL AREA Blake Plateau Patio Block Area

EQUIPMENT Small Dredge

METHOD OF POSITIONING Lorans - Ins.

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	30° 59.82~~6~~	78° 21.27~~4~~	0218	840	950°
	LORANS:				°
START UP	30° 59.8~~0~~	78° 21.~~8~~73	0241	825	
	LORANS:				

RESULTS: # OF DROPS _____. IF MORE THAN 1, WHY?

DISTURBED? _____

Label Procedure--indicate--
Cruise No. TOP 1
Station # 2
Core # 3
BOTTOM 4
Top/Bottom--and Sect.#

SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?
~ 400 lbs nodule, slabs, boulders
carbonate sand & gravel

BIOLOGY: WHAT & WHERE?
Deep water corals, Alcyonarian corals
& cemented carbonate

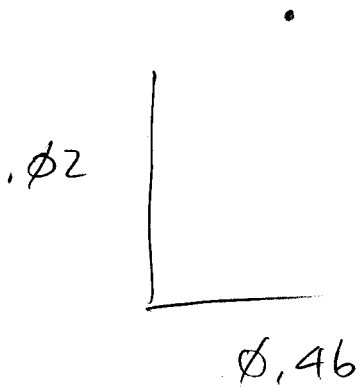
SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?
Rich in scaphapod, gastropods, & pterapods. Some miliolids. Planktic forams: Orbulina universa, Globigerinoides sacculifer, G. ruber, Globorotalia truncatulinoides, Globorotalia menardii, Globogirenella aequilateralis, Globorotalia tumida, Neogloboquadrina dutertrei, Pulleniatina obliquiloculata, Globorotalia scitula. Assemblage is tentatively Pleistocene. There are possibly several Pliocene toesensis, however, they may be atypica truncatulinoides

COMMENTS:
several pulls near 10,000 lb in hilly Terrain. only small amount of iron-staining.

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

1 2 3 4 5 6 7 8

OBSERVERS:



$$r = \sqrt{(.85x)^2 + y^2}$$

$$r = 0.4 \text{ naut. mi}$$

Field Log Sheet

SAMPLE # C-10
STATION # 20

SHIP Cyrt CRUISE # 82-11 DATE 25 Sept 82

GENERAL AREA Blake plateau patch Block area

EQUIPMENT Corer

METHOD OF POSITIONING Loran

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 00.03'	78° 23.34'	0407Z	800 m	____°
	LORANS:				____°
START UP					
	LORANS:				

RESULTS: # OF DROPS _____ IF MORE THAN 1, WHY?

DISTURBED? _____

Label Procedure--indicate--
Cruise No.
Station #
Core #
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:

lost core cutter on bottom - no sample

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS:

Field Log Sheet

SAMPLE # —
STATION # 20

SHIP Gyre CRUISE # 82-11 DATE 9-25-82

GENERAL AREA Blake Plateau Patio Block Area

EQUIPMENT Data Sonics bottom pinger (27 kHz, 0.2 msec pulse)

METHOD OF POSITIONING Loran - SatNav

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 1.0622' N	78° 23.582' W	0518	800 m	800 m °
	LORANS:				°
START UP	31° 0.9388' N	78° 24.296' W	0605		
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No.
Station #
Core #
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

COMMENTS: Bottom reflection disturbance at delay of .25 msec indicates subbottom depth of 0.25 – 0.5 m (2000 – 4000 m/s velocity)

OBSERVERS: Sundkvist

Field Log Sheet

SAMPLE # —
STATION # 20

SHIP Gyre CRUISE # 82-11 DATE 9-25-82

GENERAL AREA Blake Plateau Patio Block Area

EQUIPMENT Datu Sonics bottom pinger (15 kHz, 0.2 m sec pulse)

METHOD OF POSITIONING Loran - SatNavi

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 0.965' N	78° 23.353' W	0736	860 m	800m °
	~~LORANS:~~				°
START UP					
	LORANS:				

RESULTS: # OF DROPS 2. IF MORE THAN 1, WHY? NO SIGNAL UPON FIRST DEPLOYMENT

DISTURBED? _____

Label Procedure--indicate--
Cruise No.
Station #
Core #
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

COMMENTS:
Bottom reflection disturbance at time delay of 0.3 msec indicates subbottom depth of .3 - .6 m (2000-4000m/s velocity)

OBSERVERS: Sundquist

Field Log Sheet

SAMPLE # —
STATION # 20

SHIP Gyre CRUISE # 82-11 DATE 9-28-82

GENERAL AREA Blake Plateau Patio Block Area

EQUIPMENT Data Sonics Bottom Pinger (3.5 kHz, 2 msec pulse)

METHOD OF POSITIONING Loran - Sat Nav

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 0.9' N	78° 23.6' W	0920	800 m	°
	LORANS:				°
START UP	31° 0.8381 N	78° 23.984' W	0944		
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No.
Station #
Core #
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS: Sundkovsky

Field Log Sheet

SAMPLE # _____

STATION # 20

SHIP Gyre CRUISE # 82-11 DATE 9-25-82

GENERAL AREA Blake Plateau Patio Block Area

EQUIPMENT Data Sonics bottom pinger (27 kHz, 2 m sec pulse)

METHOD OF POSITIONING _____

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 0.9949' N	78° 23.950' W	1048	800 m	____ °
	LORANS:				____ °
START UP	31° 0.9299' N	78° 28.950' W	1112		
	LORANS:				

RESULTS: # OF DROPS 1. IF MORE THAN 1, WHY?

DISTURBED? _____

Label Procedure--indicate--
Cruise No.
Station #
Core #
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM

SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

COMMENTS:

.15 - .3 m sec amplitude and phase disturbance indicates [illegible] depth of .15 - .6 m (1000 [illegible] m/s velocity.)

OBSERVERS: SUNDERLY

Field Log Sheet

SAMPLE # C-11
STATION # 20

SHIP Gyre CRUISE # 82-11 DATE 9-25-82

GENERAL AREA Blake Plateau Patio Block Area

EQUIPMENT Piston Corer

METHOD OF POSITIONING Loran - Sat Nav

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 1.041'	78° 23.185'	1228	800 m	830 m °
	LORANS:				°
START UP					
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED? Recovered 6" of black pavement

Label Procedure--indicate--
Cruise No. 82-11 TOP 1
Station # 20 2
Core # 11 3
BOTTOM 4
Top/Bottom--and Sect.#

SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?
Top of sample knobby pavement overlain by thin carbonate sand (few mm). [Most of nose material not yet analyzed - waiting cutting of core off at WHOI] Bottom of core earthy, black soft Mn crust (possibly

BIOLOGY: WHAT & WHERE? bottom of slab. Some carbonate admixture sample scraped from broken pieces of core nose are phosphatic but it is not certain that the re-used cutters did not pick up a part of material in earlier drop. Probably not. Clearly, cutters slammed into very hard material —

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS? not cemented carbonate which is easily cut.

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

1 2 3 4 5 6 7 8

COMMENTS:
Pull-out tension 7000 lb
Core cutter distorted, and containing black material (manganese)
Core barrel further bent.

OBSERVERS:

Field Log Sheet

SAMPLE # 1
STATION # 21

SHIP Gyre CRUISE # 82-11 DATE 25 Sept. 82

GENERAL AREA Southwest Blake Plateau

EQUIPMENT Datasonics Bottom Pin...

METHOD OF POSITIONING Loran - Satnav

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 7.7545' N	78° 56.752' W	1643	660m	____°
	LORANS:				____°
START UP					
	LORANS:				

RESULTS: # OF DROPS 1. IF MORE THAN 1, WHY?

DISTURBED? _____

Label Procedure--indicate--
Cruise No. TOP 1
Station # 2
Core # 3
Top/Bottom--and Sect.# BOTTOM 4

SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

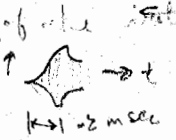
BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

COMMENTS: Initially a disturbance of the bottom affected signal was observed at 0.2m sec lag



indicating subbottom at .2-.4m depth (2000-4000 m/s velocity)

Later the disturbances moved through the signal - possibly due to scattering from bottom topography as we drifted by

OBSERVERS: Sundquist

Field Log Sheet

SAMPLE # _____

STATION # 21

SHIP Gyre CRUISE # 82-11 DATE 25 Sept 82

GENERAL AREA Southwest Blake Plateau

EQUIPMENT Datasonics Bottom pinger (8.5 kHz, .2 msec pulse) and streaming hydrophone on 1000 foot lead

METHOD OF POSITIONING _____

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 7.8135' N	78° 57.163' W	1857	660 m	____°
	LORANS:				____°
START UP					
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED? _____

Label Procedure--indicate--
Cruise No.
Station #
Core #
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS:

Field Log Sheet

SAMPLE # D-12
STATION # 23

SHIP GYRE CRUISE # 82-G-11 DATE 26 Sept 82

GENERAL AREA Blake plateau S.W. pavement Area

EQUIPMENT 38" Dredge

METHOD OF POSITIONING Lora

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31°7.4	78°56.6	0226	670 m	1000 m°
	LORANS:				°
START UP	31°7.8	78°56.7	0241	670 m	1000.0 m.
	LORANS:				

RESULTS: # OF DROPS 1. IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No.
Station # 23
Core #
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?
Sa Phos plates, P. Nodules!, chucks of carbonate

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS:

Field Log Sheet

SAMPLE # D-13
STATION # 24

SHIP R/V Gyre CRUISE # 82-11 DATE 26 Sep 82

GENERAL AREA Blake Plateau

EQUIPMENT Dredge - 24"

METHOD OF POSITIONING LORANS-INS

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 6.3'	78° 50.6'	0415 Z	710 - 735 m (canyon - 2 reflections)	°
	LORANS:				°
START UP	31° 6.7'	78° 51.1'	0443 Z	696 m	
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No. 82-11 TOP 1
Station # 24 2
Core # D-13 3
BOTTOM 4
Top/Bottom--and Sect.# SECTION #

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:

lost dredge

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS:

Field Log Sheet

SAMPLE # D-14
STATION # 24

SHIP R/V Gyre CRUISE # 82-11 DATE 26 Sep 82

GENERAL AREA Blake Plateau

EQUIPMENT Dredge - 24"

METHOD OF POSITIONING LORANS - INS

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31° 6.3'	78° 50.5'	0631 Z	718 m	> 1000m°
	LORANS:				°
START UP	31° 6.45'	78° 50.46'	0702 Z	702 m	
	LORANS:				

RESULTS: # OF DROPS 1. IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No. 8211
Station # 24
~~Core~~ # D-14
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION #

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

Small Mn-P plates

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS:

Field Log Sheet

SAMPLE # 015
STATION # 25

SHIP R/V GYRE CRUISE # 82-6-11 DATE 82 09 26

GENERAL AREA Southwest Blake Plateau - "triple junction"

EQUIPMENT Dredge 24" Chain

METHOD OF POSITIONING LORAN - INS

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	31 00.5	78 59.6	0859	777 m	1000 m °
	LORANS:				°
START UP	31 00.7	78 59.4	(0917) 0924	760 m	
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No.
Station #
Core #
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY? 15 kg. Pure Manganese Slabs
some carbonate (15%), soft ~~color~~ and hard coral (10%)

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS:

Field Log Sheet

SAMPLE # D-16
STATION # 26

SHIP R/V GYRE CRUISE # 82-6-11 DATE 26 SEPT 82

GENERAL AREA S. Blake Plateau

EQUIPMENT 24" Dredge Chain Bag

METHOD OF POSITIONING LORAN INS

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	30° 52.15	78° 49.47	1112	825m	1000m°
	LORANS:				°
START UP	30° 52.4	78° 48.8	1137	740m	
	LORANS:				

RESULTS: # OF DROPS 1. IF MORE THAN 1, WHY?

DISTURBED?

Label Procedure--indicate--
Cruise No.
Station #
Core #
Top/Bottom--and Sect.#

TOP 1 2 3 4 BOTTOM SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY? Carbonate chunks w/ coral hard, soft and one bowl only ~5 kgs.

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:

1 2 3 4 5 6 7 8

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

OBSERVERS: R. Hall C. Lane

Field Log Sheet

SAMPLE # D-17
STATION # 27

SHIP Gyre CRUISE # 82-11 DATE 26 Sept 1982

GENERAL AREA Blake Plateau S.W.

EQUIPMENT Small Dredge

METHOD OF POSITIONING Loran

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	30°42.89	78°37.83	1324	835 m	890°
	LORANS:				°
START UP	30°42.80	78°37.63	1334	835 m	1150 m
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED? ~10 kilos

Label Procedure--indicate--
Cruise No. 82-11
Station # 27
Core #
Top/Bottom--and Sect.#
TOP 1 2 3 4 BOTTOM
SECTION #

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?
2/3 cemented carbonate 5cm-25cm, bored + Fe stained
manganese-phosphate slabs to ~10cm, rounded, slabs & cobbles
some nodules are almost pure, others 50% phosphate

BIOLOGY: WHAT & WHERE?
large fan sponges, deep water coral heavily stained
with Fe + Mn. Pleistocene assemblage of planktic foraminifera on
both the weathered and underside.

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:
Found on flat terrain with slight surface
corrugation & acoustical double layering 15-20m

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.

1 2 3 4 5 6 7 8

OBSERVERS:

Field Log Sheet

SAMPLE # D-18
STATION # 28

SHIP GYRE CRUISE # 82-11 DATE 26 Sept 82

GENERAL AREA Blake plateau S.W. corner

EQUIPMENT Small dredge

METHOD OF POSITIONING Loran

	LATITUDE	LONGITUDE	TIME	SONIC DEPTH	WIRE DEPTH
ON BOTTOM	30°34.99	78°39.11	1501	815 m.	920 °
	LORANS:				°
START UP	30°34.8	78°38.3	1555	810 m	1250 m
	LORANS:				

RESULTS: # OF DROPS 1 IF MORE THAN 1, WHY?

DISTURBED? Only one fist-size carbonate ooze rocks + organisms

Label Procedure--indicate--
Cruise No. 11-82 TOP 1
Station # 28 2
Core # 18 BOTTOM 3 4
Top/Bottom--and Sect.#

SECTION

LITHOLOGY: TEXTURE, COLOR, HOMOGENEITY?

Carbonate ooze 5 x 8 cm yellowish stained and bored; several pink algomarian coarals on deepwater coral holdfasts

BIOLOGY: WHAT & WHERE?

SURFACE MORPHOLOGY: RIPPLES, SHELL DEBRIS, ORGANICS?

COMMENTS:

Several trigs 1:3500
no burlap in dredge 1 may have lost small pebble, seen in DSV TV scans.

OBSERVERS:

PLEASE INDICATE SECTION LENGTH IN APPROPRIATE BOX.