Schwab/ c FARNELLA Gulf of
Twichell FRNL F4-90-GMMexico
April 12-26, 1990
CORE LOG AND SUBSAMPLE LOG

104740

4-90 Data Forms

1. Detailed Description

0 - 100	100
100 - 200	100
200 - 300	100
300 - 1000	50 ea

2. Core Log 100

3. Subsample Log 200

4. Water Content 300

5. V.S. 300

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 67 / PC 67
DATE: 25 April, 1990 JD115
WEATHER: 25 kt breeze
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: Northern site at Charlie's Place
WATER DEPTH (m): 3307 m
NAVIGATION: Loran C
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: Hit looks like it may have fallen over. Yup it did - ~76 cm long.

CORE LOCATION

	Start	On-Bottom	End
Time:	1721 Z	1824 Z	
LAT:	26° 05.39' N	26° 05.48' N	
LONG:	84° 54.90' W	84° 54.98' W	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	150 lb
Barrel Length (m):	6 m	1 m
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	~25 m/min near bottom	
Max. Wire Out (m):	3237 m	
Pullout:	4.1 tons 3235 m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 66/PC66
APPROX. LOCATION: CHARLIE'S PLACE
DATE: APRIL 25, 1990 J.D. 115
WEATHER: FINE
WATER DEPTH (m): 3306m
RECORDED BY: MB
NAVIGATION: GPS
PROCESSORS: ~~THEM~~
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: No catcher sample to Trigger core. Piston core cut in 2 sections. Section B ~2m long - Total core ~3.5m

CORE LOCATION

	Start	On-Bottom	End
Time:	1406Z	1509Z	
LAT:	26°03.00'	26°02.89'	
LONG:	-094° 54.90'	-094° 54.90	
TD:			
TD: PULL OUT			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800	150
Barrel Length (m):	6m	1m
Total Penetration (m):	~6m	1+m
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3306m	

PULL OUT = 4.37 tons

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 65/PC65
DATE: 25 APRIL 1990 J.D. 115
WEATHER:
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: HIGH 13-S
5 · CO13E
WATER DEPTH (m): 3295m
NAVIGATION: GPS
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: REPEAT OF STA 64
STIFF MUD PLUG IN CATCHER
POOR RECOVERY

CORE LOCATION

	Start	On-Bottom	End
Time:	0820Z	0926Z	
LAT:	26°26.8'	26°26.79'	
LONG:	-85° 4.4'	-085° 04.20'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800	150
Barrel Length (m):	6	1
Total Penetration (m):	6	1
Recovery (m):	~1m	~50cm (??)
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3265m	
PULL OUT (tons)	4-2.	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 1.26	
2		
3		
4		
5		
6		
7		
8		
9		
10		

+ c/c

TC 65 0 - 0.38

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 64/PC 64 — APPROX. LOCATION: GULF OF CADIZ
DATE: 7/25/90 J.D. 115
WEATHER: CALM — WATER DEPTH (m): 3295m
RECORDED BY: ME — NAVIGATION: GPS
PROCESSORS: THEM — WINCH:

MISC. EQUIP: RICK RENDIGS
MISC.PROCEDURES: LEFT HANDED CIRCE JERK

COMMENTS: ALL IN GAP ON S. LOBE TRANSECT
PISTON LOOSE IN LINER : NO SAMPLE (TRY AGAIN)

CORE LOCATION

	Start	On-Bottom	End
Time:	0500 Z	0602 Z	
LAT:	26° 26.80'	26° 26.69'	
LONG:	-85° 4.40'	-085° 04.61'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800	
Barrel Length (m):	6	1
Total Penetration (m):	6	1
Recovery (m):	30cm FLOW IN	50cm
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3235m	
	PULL OUT	4.3 tons

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 ~ 0.24	
2		
3		
4		
5		
6		
7		
8		
9		
10		

+ c/c

TC 64 0 - 0.23
+c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 63/PC63
DATE: 25 April, 1990 JD115
WEATHER: 20 kt breeze
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: Moderate backscatter beyond end of youngest lobe
WATER DEPTH (m): 3285 m
NAVIGATION: GPS
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: Full trigger core. About 75 cm in piston core. Core cutter ended in mud with sand above it in the catcher.

CORE LOCATION

	Start	On-Bottom	End
Time:	0128Z	0228Z	0340Z
LAT:	26°29.75N	26° 29.72'N	26°29.63'N
LONG:	85°12.87W	85° 12.80'W	85°12.92'W
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	150 lb
Barrel Length (m):	6 m	1 m
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	25 m/min near bottom	
Max. Wire Out (m):	3219	
Pullout:	4.3 tons 3217 m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 – 0.43	
2		
3		
4		
5		
6		
7		
8		
9		
10		
	+ c/c	

TC63 0 – 0.76
+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 62/GC62
DATE: 24 April, 1990 JD 114
WEATHER: 15-20 kt breeze
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: High backscatter "youngest" lobe
WATER DEPTH (m): 3278m
NAVIGATION: GPS
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: Empty core

CORE LOCATION

	Start	On-Bottom	End
Time:	2243Z	2343Z	0050Z JD 115
LAT:	26°30.32'N	26° 30.47'N	26° 30.52'N
LONG:	85° 14.89'W	85° 14.99'W	85° 14.86'W
TD:			
TD:			

CORER/CORE INFORMATION

	~~Piston Core~~ Gravity	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	3 m	
Total Penetration (m):	~1 m	
Recovery (m):	0	
Flow-in (m):	0	
Lowering Rate (m/min.):	60 m/min	
Max. Wire Out (m):	3225	
Pullout:	3.5 tons 3219m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 61/GC61
DATE: 24 April, 1990 JD 114
WEATHER: Fine
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: N Levee of channel
WATER DEPTH (m): 3265m
NAVIGATION: Loran C
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: Nothing in the cutter, but mud in the catcher. About 30 cm of Holocene Flowin at the top of the core.

CORE LOCATION

	Start	On-Bottom	End
Time:	1924Z	2023Z	2130 Z
LAT:	26° 31.05'N	26° 31.12'N	26°31.43'N
LONG:	85° 22.50'W	85° 22.53'W	85° 22.56'W
TD:			
TD:			

CORER/CORE INFORMATION

	~~Piston Core~~ Gravity Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	3m	
Total Penetration (m):	~3 m	
Recovery (m):	~1.25m	
Flow-in (m):		
Lowering Rate (m/min.):	60 m/min	
Max. Wire Out (m):	3213 m	
Pullout:	3.8 tons 3208m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-1.43	Upper 0.20 m is flow-in
2		
3		
4		
5		
6		
7		
8		
9		
10		

+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 60/ GC60 APPROX. LOCATION: CHANNEL

DATE: APRIL 1990 50114

WEATHER: PERFECT WATER DEPTH (m): 3267m

RECORDED BY: Twitchell NAVIGATION: Loran C

PROCESSORS: WINCH:

MISC. EQUIP:

MISC.PROCEDURES:

COMMENTS: Looks like core went in on an angle. Mud up the barrel ~1.5m, but mud line was diagonal.

CORE LOCATION

	Start	On-Bottom	End
Time:	1640Z	1742Z	1850Z
LAT:	26°30.30'	26°30.31'N	
LONG:	-085° 22.28	85° 22.27'W	
TD:			
TD:			

CORER/CORE INFORMATION

	~~Piston Core~~ Gravity Core	Trigger Core
Core Head Wt (lbs.):	2800	
Barrel Length (m):	3	
Total Penetration (m):	~1.5m	
Recovery (m):	~1m	
Flow-in (m):		
Lowering Rate (m/min.):	60 m/min	
Max. Wire Out (m):	3213	
Pullout :	3.5 3208	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-0.91	
2		
3		
4		
5		
6		
7		
8		
9		
10		

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 59/GC59
DATE: APRIL 1990 / JD 114
WEATHER: WINDY
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: CHANNEL LEVEE CENTRAL LOBE
WATER DEPTH (m): 3266
NAVIGATION: RHO
WINCH: YES

MISC. EQUIP: RICK REHDIGS
MISC.PROCEDURES:

COMMENTS: REPEAT OF STA 58

NO RECOVERY except 1 washout

CORE LOCATION

	Start	On-Bottom	End
Time:	1352Z	1457Z	
LAT:	26°29.75'	26°29.79'	
LONG:	-085°22.08'	-085°22.01'	
TD:			
TD:			

CORER/CORE INFORMATION

	~~Piston~~ Core	~~Trigger Core~~
Core Head Wt (lbs.):	2800 lbs	
Barrel Length (m):	3	~~3~~
Total Penetration (m):	~1m	
Recovery (m):	~15cm	
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3202	
PULLOUT	3.1 tons	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-0.23	very disturbed
2		
3		
4		
5		
6		
7		
8		
9		
10		

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 58/ PC 58
DATE: APRIL 22, 1990 J·D·114
WEATHER: WINDY
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: START CHANNEL TRANSECT, CENTRAL DEEP LOBE
WATER DEPTH (m): 3266
NAVIGATION: GPS
WINCH:

MISC. EQUIP: THE MORON TWINS
MISC.PROCEDURES:

COMMENTS: ONLY 2 CORE CATCHER SAMPLES NO RECOVERY (SAND)

CORE LOCATION

	Start	On-Bottom	End
Time:	1100 Z	1208 Z	
LAT:	26° 29.75'	26° 29.70'	
LONG:	-085° 22.08'	-085° 22.06'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800	
Barrel Length (m):	6	1
Total Penetration (m):	5m (?)	1
Recovery (m):	0	0
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3203	
	POLL OUT 3203 m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	C/C ONLY	
2		
3		
4		
5		
6		
7		
8		
9		
10		

TC 58 C/C ONLY

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 57/GC57
DATE: APRIL 24, 1990 J.D. 114
WEATHER: WINDY
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: HIGH B.S. YOUNGER LOBE ON MAIN LOBE
WATER DEPTH (m): 3280m
NAVIGATION: GPS
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: SANDY WITH A PLUG OF MUD HOLDING IT IN THE CORE

CORE LOCATION

	Start	On-Bottom	End
Time:	0724z	0827z	
LAT:	26° 30.85'	26° 30.8[illegible]9'	
LONG:	-085° 16.20'	-085° 16.11'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	~~Trigger Core~~
Core Head Wt (lbs.):	2800 lbs	
Barrel Length (m):	3m	
Total Penetration (m):	~2m	
Recovery (m):	~1m	
Flow-in (m):	SAND FLOWING AT TOP - CORE HIGHLY DISTURBED	
Lowering Rate (m/min.):		
Max. Wire Out (m):	3220m	

POLL OUT = 3.8 tons

DO NOT SPLIT

core split 4-24 HC

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.78	
2		
3		
4		
5		
6		
7		
8		
9		
10		

+ C/C

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 56/PC 56
DATE: 24 April, 1990
WEATHER: 10-15 kt breeze
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: Low backscatter south of old lobe - southernmost core of transect
WATER DEPTH (m): 3295m
NAVIGATION: GPS
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: CORE APPEARS TO HAVE FELL OVER (HIT ON THE RUN?)

CORE LOCATION

	Start	On-Bottom	End
Time:	0315Z	0423Z	
LAT:	26°23.78'N	26°23.71'	
LONG:	85° 02.96'W	-085° 03.03'	
TD:	GPS		
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800	
Barrel Length (m):	9m	1m
Total Penetration (m):	~6m	
Recovery (m):	~1.75m	
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3226 = WIRE OUT	POLL = 4.1 TONS

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.51	
2	0.51 - 2.00	
3		
4		
5		
6		
7		
8		
9		
10		

+ C/C

TC 56 47cm (double penet.)

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 55/PC55
DATE: 23-24 April, 1990
WEATHER: Calm
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: Low backscatter South of old lobe
WATER DEPTH (m): 3295 m
NAVIGATION: GPS
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: 5 sections trap long (E) only ~50 cm
Mud in catcher & lot sand on catcher

CORE LOCATION

	Start	On-Bottom	End
Time:	2355Z	JD114 0101Z	0215
LAT:	26°24.99'N	26°24.87'N	26°25.09'N
LONG:	85°03.52'W	85°03.53'W	85°03.87'W
TD:	GPS	GPS	GPS
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	150 lb
Barrel Length (m):	9m	1m
Total Penetration (m):	~9m	1+m
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	~25 m/min near the bottom	
Max. Wire Out (m):	3225m	
Pullout	4.5 tons 3221 m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.37	
2	0.37 - 1.87	
3	1.87 - 3.37	
4	3.37 - 4.72	
5	4.72 - 6.21	
6		
7		
8		
9		
10		

5 sections

+ c/c

TC 55

0 - 0.24
+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 54/PC54
DATE: 23 April, 1990 JD113
WEATHER: Calm
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: Southern edge of southern lobe
WATER DEPTH (m): 3295m
NAVIGATION: Loran C
WINCH:

MISC. EQUIP:
MISC.PROCEDURES: 3rd core in transect across older lobe. Visited by Const Guard before launching core. ~1200m SE of target
COMMENTS: Core landed ~1200m SE of target, but still in high backscatter. 5 sections ~6.5m long total - mud in core catcher, but sandy on the outside

CORE LOCATION

	Start	On-Bottom	End
Time:	2045Z	2147	
LAT:	26° 25.93'N	26° 25.79'N	
LONG:	85° 04.11'W	85° 03.65'W	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	150 lb
Barrel Length (m):	9m	1m
Total Penetration (m):	~9m	1+m
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	~25m/min near bottom	
Max. Wire Out (m):	3227	
Pullout :	4.4 3224m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.64	
2	0.64 - 2.13	
3	2.13 - 3.67	
4	3.67 - 4.96	
5	4.96 - 6.45	
10		
	+ c/c	
TC54	0 - 0.30	
	+ c/c	

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 53/PC53 APPROX. LOCATION: Southern Cauliflower Lobe
DATE: 23 April, 1990
WEATHER: Calm WATER DEPTH (m): 3293 m
RECORDED BY: Twichell NAVIGATION: Loran C
PROCESSORS: WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: 2nd core in transect
Trig Core only ~30cm long. Nails on catcher + 1st sleeve were bent, but we could get them out. 4 sections - core ~6m

CORE LOCATION

	Start	On-Bottom	End
Time:	1711Z	1815Z	1920Z
LAT:	26° 27.70'N	26° 27.85'N	26° 28.17'N
LONG:	85° 04.74'W	85° 04.70'W	85° 04.20'W
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	150 lb
Barrel Length (m):	9m	1m
Total Penetration (m):	~8m	1+m
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	25 m/min near bottom	
Max. Wire Out (m):	3224 m	
Pullout:	3220 m 4.5 tons	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-0.92	
2	0.92-2.42	
3	2.42-3.70	
4	3.70-5.19	
5		
6	TC	
7		
8		
9		
10		

TC53 0-0.29

F-4-9[illegible]

Gulf of Mexico - [illegible]il 1990

R/V Farnella

STATION/ CORE ID: 52/PC52
DATE: APRIL 23, 1990 113 J.D.
WEATHER: Calm
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: SOUTHERN CAULIFLOWER LOBE
WATER DEPTH (m): 3294
NAVIGATION: SHIP - GPS/
WINCH: YES

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: FIRST (NW) IN SERIES OF TRANSECT CORES ON THE SOUTHERN DISTAL LOBE, USING SHIP NAVIGATION. Buried the core head + fairly soft in the core catcher

CORE LOCATION

	Start	On-Bottom	End
Time:	1340Z	1451	1603Z
LAT:	26° 28.70'	26° 28.86	26° 28.54'N
LONG:	-085° 05.16'	-085° 05.04	85° 04.71'W
TD:	GPS	GPS	Loran C
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800	150
Barrel Length (m):	6m	1m
Total Penetration (m):	mud no weight	1+ m
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	~20 m/min near bottom	
Max. Wire Out (m):	pull out = 4-3 tons	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-1.27	
2	1.27-2.74	
3		
4	+ c/c	
5		
6		
7		
8		
9		
10		

TC 52 0-0.78
+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 51/GC 51
DATE: 22 April 1990 JD 112
WEATHER: Calm
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: Distal end of dep lobe
WATER DEPTH (m): 3283 m
NAVIGATION: Transponder
WINCH:

MISC. EQUIP: Relay 100 m above core.
MISC.PROCEDURES:

COMMENTS: Buried at least to shackle above core head - core probably tipped over. ~75 cm of sediment - ~5 cm flown in at the top & sealed on the outside of the cutter

CORE LOCATION

	Start	On-Bottom	End
Time:	2155Z	2254	
LAT:	26 44.34	26° 44.2605 N	
LONG:	85° 08.43	85° 08.3799 W	
TD:	Loran C	11 & m E of target	
TD:			

CORER/CORE INFORMATION

	~~Piston Core~~ Gravity Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	3 m	
Total Penetration (m):	4 m	
Recovery (m):	~75 cm	
Flow-in (m):		
Lowering Rate (m/min.):	60 m/min	
Max. Wire Out (m):	3226	
Pullout :	5.5 3225 m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-0.71	
2		
3	+ c/c	
4		
5		
6		
7		
8		
9		
10		

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 50/6C50
DATE: 22 April, 1990
WEATHER: Calm
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: High backscatter channel floor
WATER DEPTH (m): 3283 m
NAVIGATION: Transponder
WINCH:

MISC. EQUIP: Relay 100 m above gravity core
MISC.PROCEDURES:

COMMENTS: recovered ~1m of core - No core catcher - sand at base of core

CORE LOCATION

	Start	On-Bottom	End
Time:	1915Z	2012Z	
LAT:	26°42.81'N	26° 42.7511 N	
LONG:	85° 10.99'W	85° 11.0057 W	
TD:			
TD:		8 m W of target	

CORER/CORE INFORMATION

	~~Piston Core~~ Gravity core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	3 m	
Total Penetration (m):	~2m	
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60 m/min.	
Max. Wire Out (m):	3226 m	
Pullout:	3.9 3222 m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-1.07	
2		
3		
4		
5		
6		
7		
8		
9		
10		

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 49/ GC 49
APPROX. LOCATION: HIGH BACKSCATTER LOBE - Geotech core
DATE: APRIL 22, 1990, 112 JD
WEATHER: GREAT
WATER DEPTH (m): 3283
RECORDED BY: Twichell
NAVIGATION: ACOUSTIC
PROCESSORS:
WINCH:

MISC. EQUIP: Relay 100 m above core
MISC.PROCEDURES:

COMMENTS: GEOTECH CORE
110 cm long - ended in sand

CORE LOCATION

	Start	On-Bottom	End
Time:	1645Z	1744Z	
26°42.6'N LAT:	~~26° 44.44'~~	26° 42.4967	
85°11.18'W LONG:	~~085° 10.62~~	85° 11.2228	
TD:		~21m E of target	
TD:			

CORER/CORE INFORMATION

	~~Piston Core~~ Gravity Core	Trigger Core
Core Head Wt (lbs.):	2800/65	
Barrel Length (m):	3m	
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3231	
Pullout:	3.3	3228 m

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-0.58	
2	0.58-1.08	
3		
4	+c/c -	contains considerable sand.
5		
6		
7		
8		
9		
10		

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 47/PC47
DATE: APRIL 22, 1990 112 J.D
WEATHER: GREAT
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: SAND STRINGERS ?
SOUTH OF LOBE
WATER DEPTH (m): 3282m
NAVIGATION: ACOUSTIC
WINCH:

MISC. EQUIP: Relay ~100m ABOVE CORE
MISC.PROCEDURES:

COMMENTS: IMPLODED LINER

CORE LOCATION

	Start	On-Bottom	End
Time:	1049Z	1148Z	
LAT:	26° 40.46'	26° 40.6578'	
LONG:	-085° 10.40'	85 10.4194'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lbs	
Barrel Length (m):	9m	[illegible] /
Total Penetration (m):	6m	/
Recovery (m):	2m	1m
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3218m PULLOUT = 4-3	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.64	
2	0.64 - 2.11	
3		
4	+ c/c	
5		
6		
7		
8		
9		
10		

TC47 0 - 0.74
+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 46/PC 46
DATE: APRIL 22, 1990 112 J.D.
WEATHER: CALM
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: SAND STRINGS (?) SOUTH OF LOBE
WATER DEPTH (m): 3282 m
NAVIGATION: ACOUSTIC NAV.
WINCH:

MISC. EQUIP: RELAY ~100m ABOVE CORE
MISC.PROCEDURES:

COMMENTS: PC WASHED OUT - PISTON GASKETS DAMAGED

CORE LOCATION

	Start	On-Bottom	End
Time:	0833Z	0843Z	
LAT:	26° 40.75'	26° 40.7559'	
LONG:	-085° 10.63'	-085° 10.6225'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800	
Barrel Length (m):	6	1
Total Penetration (m):	6 m	
Recovery (m):	0	
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3215	

PULL OUT = 4.3 tons

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	NO PC	
2		
3		
4		
5		
6		
7		
8		
9		
10		

TC 46 0 < 0.72 c/c

GEOTECH

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 45/PC45 — APPROX. LOCATION: REPEAT OF STA 38

DATE: APRIL 22, 1990 1125 JD

WEATHER: — WATER DEPTH (m): 3283m

RECORDED BY: — NAVIGATION: TRANSPONDER

PROCESSORS: — WINCH:

MISC. EQUIP: RELAY 100m ABOVE

MISC.PROCEDURES:

COMMENTS: GEOTECH: CORE → BOTTOMED OUT IN A PRISE SAND SHEARED OFF WALL HEADS & BROKE WIRE - FUN, FUN FUN.
CUT OFF ~16m OF WIRE

CORE LOCATION

	Start	On-Bottom	End
Time:	0340Z	0443Z	
LAT:	26°42.50'	26° 42.5051'	
LONG:	85°11.23'	-085° 11.2481'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lbs.	
Barrel Length (m):	6m	1m
Total Penetration (m):	~5m	
Recovery (m):	~150cm	
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3215m	

PULL OUT = 4.7 tons

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.45	
2	0.45 - 0.95	WAXED
3	0.95 - 1.45	
4		
5		
6		
7		
8		
9		
10		

+ c/c

TC45 0 - 0.37 WAXED
0.37 - 0.87
+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: GC 44
DATE: 22 April, 1990
WEATHER: Calm
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: Dep lobe
WATER DEPTH (m): 3283 m
NAVIGATION: Transponder Nav
WINCH:

MISC. EQUIP: Relay 100 m above gravity core
MISC.PROCEDURES:

COMMENTS: 2 sections upper 75 cm of B is flow in from the Top. About the bottom 50 cm of B is good;
Top Flow In Section Jettisoned 4-24-90 @ 0340;

CORE LOCATION

	Start	On-Bottom	End
Time:	0035Z	0134	
LAT:	26°43.44N	26°43.3996N	
LONG:	85°09.17W	85°09.1476W	
TD:	Loran C		
TD:			

CORER/CORE INFORMATION

	~~Piston Core~~ Gravity	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	3 m	
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60 m/min	
Max. Wire Out (m):	3231	

Pullout : 3.8 3222 m

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.28	
2	0.28 - 1.78	
3		
4		
5		
6		
7		
8		
9		
10		

2 sections

+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 43 PC43
DATE: 21 April 1990
WEATHER: 10 Kt Breeze 3-4ft seas
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: Eastern end of Dep lobe
WATER DEPTH (m): 3283 m
NAVIGATION: Acoustic Nav
WINCH:

MISC. EQUIP: Relay 100m above core
MISC.PROCEDURES:

COMMENTS: Trigger core longer than piston core - piston core ~40cm

CORE LOCATION

	Start	On-Bottom	End
Time:	2140Z	2241Z	
LAT:	26°44.48'N	26°44.3136N	
LONG:	85°08.46'W	85°08.5144W	
TD:	Loran C	35m NW of target	
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	28006	
Barrel Length (m):	6m	1m
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	3213	
Max. Wire Out (m):	60m/min 6 3150m / 25m/min to bottom	
Pullout:	4.2 3210m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-0.39	
2		
3		
4		
5		
6		
7		
8		
9		
10		

1 Sec.

+ c/c

TC 43 0-0.82

+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 42/PC42
DATE: 21 April, 1990 JD 111
WEATHER: 10 kt breeze 3-4ft seas
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: N levee of northern low backscatter channel
WATER DEPTH (m): 3280 m
NAVIGATION: Transponder
WINCH:

MISC. EQUIP: Relay 100 m above gore
MISC.PROCEDURES:

COMMENTS: ~1 m piston core - a lot of black charcoal fragments on outside of core & above core catcher.

CORE LOCATION

	Start	On-Bottom	End
Time:	1805Z	1907	
LAT:	26°43.77'N	26°43.6998N	
LONG:	85° 13.10'W	85° 13.2132'W	
TD:	Loran C	23 m west of target	
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	6 m	1 m
Total Penetration (m):	~5 m	1+ m
Recovery (m):	~1 m	
Flow-in (m):		
Lowering Rate (m/min.):	60 m/min to 3150 m ~25 m/min to bottom	
Max. Wire Out (m):	3212	
Pullout:	4.2 tons 3209 m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.91	
2		
3		
4		
5		
6		
7		
8		
9		
10		

1 Section

+ c/c

TC42 0 - 0.79 DOUBLE PEN.

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 41/PC41
DATE: APRIL 21, 1990 JD 111
WEATHER: CALM
RECORDED BY: DON OF "De BAGS"
PROCESSORS:

APPROX. LOCATION: FEEDER CHANNEL TO N. CORE? - Low backscatter
WATER DEPTH (m): 3280
NAVIGATION: TRANSPONDER
WINCH: RICK THE DICK

MISC. EQUIP: Relay 100m up wire
MISC.PROCEDURES:

COMMENTS: PC liner shattered at top of Sec B ~2.5m before break ~3m. Section C only ~50 cm + probably well disturbed!

CORE LOCATION

	Start	On-Bottom	End
Time:	1430Z	1546Z	1700Z
LAT:	26°43.44'	26° 43.4336'	
LONG:	85° 12.52	85° 12.5323'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lbs	
Barrel Length (m):	6	2
Total Penetration (m):	6+m	1+m - no trigger catcher sample
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3218m	

PULL OUT = 4.1 tons

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-0.36	liner shattered
2	0.36-1.54	lots of sand
3	1.54-3.05	banded mud
4		
5	+C/C	
6		
7		
8		
9		
10		

+ TC41 0-0.58

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: ~~40~~ / PC ~~40~~ 40 APPROX. LOCATION: HIGH BACKSCATTER REPEAT OF STA 39

DATE: APRIL 21, 1990 JD 111 WEATHER: WINDY WATER DEPTH (m): 3283m

RECORDED BY: NAVIGATION:

PROCESSORS: WINCH:

MISC. EQUIP: Relay 100m ABOVE CORE

MISC.PROCEDURES:

COMMENTS: 2ND TRY HERE
ONCE AGAIN PC EMPTY.
& TRIGGER CORE FULL

CORE LOCATION

	Start	On-Bottom	End
Time:	1118Z	1220Z	
LAT:	26°42.70'	26° 42.7203'	
LONG:	-85°11.30'	-085° 11.3107'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800/65	
Barrel Length (m):	6	3
Total Penetration (m):	0	
Recovery (m):	0	
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3215m	

PULL OUT 4-2 tons

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	No PC -	
2	0-1.5 - mud	
3		
4		
5		
6		
7		
8		
9		
10		
TC 40	0-0.15 bagged 0.15-0.68 + c/c	(double penetration)

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 39/PC39
DATE: APRIL 21, 1990 JD 111
WEATHER:
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: HIGH BACKSCATTER NEAR (N) DARK FLOORED CHANNEL
WATER DEPTH (m): 3283 m
NAVIGATION: TRANSPONDER
WINCH:

MISC. EQUIP: Relay 100m above core
MISC.PROCEDURES:

COMMENTS: CORE T [redacted] EMPTY
TRIGGER ~ 3/4m

CORE LOCATION

	Start	On-Bottom	End
Time:	0738Z	0840Z	
LAT:	26° 42.70'	26° 42.7116'	
LONG:	85° 11.30'	-085° 11.2842'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2000/65	
Barrel Length (m):	6	3
Total Penetration (m):	3 m	
Recovery (m):	0	
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3213	

PULL OUT = 4.6 tons

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1		
2	No PC	
3		
4		
5		
6		
7		
8		
9		
10		

TC 39 0-67
+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 38/PC38
DATE: 21 April, 1990 JD 111
WEATHER: 20-25kt NE breeze
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: High backscatter near dark floored channel?
WATER DEPTH (m): 3283 m
NAVIGATION: Transponder
WINCH:

MISC. EQUIP: Relay 100m above core
MISC.PROCEDURES:

COMMENTS: Detailed (@2cm) sampling for density

CORE LOCATION

	Start	On-Bottom	End
Time:	0340Z	0441Z	
LAT:	26°42.60N	26°42.4969'	
LONG:	85°11.22W	85°11.2330	
TD:	GPS		
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	28006	
Barrel Length (m):	6m	1m
Total Penetration (m):	6m	
Recovery (m):	~2m	
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3215m	

PULL OUT = 4-3 tons

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-0.62	
2	0.62-2.12	3rd unit 1.14-1.40
3		
4		
5		
6		
7		
8		
9		
10		

TC38 0-0.69 + c/c

+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 37/PC37
DATE: 28 April 1990 JD110
WEATHER: 15-20kt NE breeze
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: Large high backscatter area
WATER DEPTH (m): 3283 m
NAVIGATION: Transponder
WINCH:

MISC. EQUIP: Relay 100m above core
MISC.PROCEDURES:

COMMENTS: 1 section with medium sand in the cutter + catcher. Core only about 1.25m long.

CORE LOCATION

	Start	On-Bottom	End
Time:	0000Z	0103	
LAT:	26°41.46'N	26° 41.3955'N	
LONG:	85° 10.59'W	85° 10.6190'W	
TD:		32m west of target	
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	28001b	
Barrel Length (m):	9m	1m
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60m/min to 3150m / 20m/min to bottom	
Max. Wire Out (m):	3215m	
Pullout:	3.7tms 3208m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 1.08	
2		
3		
4		
5		
6		
7		
8		
9		
10		

1 section

TC 37 0 - 0.76 + c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 36/PC36
DATE: 20 April, 1990 JD110
WEATHER: 25-30kt NE breeze
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: Small cauliflower on S side of lobe
WATER DEPTH (m): 3285m
NAVIGATION: Transponder
WINCH:

MISC. EQUIP: Relay 100m above core
MISC.PROCEDURES:

COMMENTS: 4 sections - Top one ~1m long - Foram sand at Top of core is highly disturbed.

CORE LOCATION

	Start	On-Bottom	End
Time:	1735	1844:30	1957
LAT:	26°42.19N	26° .42.0989N	26°42.19'N
LONG:	85° 08.85W	85° 08.9238W	85° 09.15'W
TD:	Loran C	missed the target	
TD:		by 6m.	

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800/6	
Barrel Length (m):	9m	1m
Total Penetration (m):	~8m	1+m
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60m/min to 3150	~25m/min to bottom
Max. Wire Out (m):	3214m	
Pullout:	4.5 3210m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.88	
2	0.88 - 2.35	
3	2.52 - 3.76	
4	3.76 - 5.26	
5		
6		
7		
8		
9		
10		

+ c/c

TC36 0 - 0.85

GEOTECH

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 35/PC35
DATE: APRIL 20, 1990 / 110 JD
WEATHER: WIND 30 kts
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: LOW BACKSCATTER AREA - N. LOBE
WATER DEPTH (m): 3285 m
NAVIGATION: TRANSPONDER
WINCH:

MISC. EQUIP: Relay 100 m above RC
MISC. PROCEDURES:

COMMENTS: GEOTECH CORE - Lost trigger core
Top of core = Holocene Sand - was well washed while we were cutting the liner
4 sections + ~30 cm section between sections B + C

CORE LOCATION

	Start	On-Bottom	End
Time:	1345	1448	
LAT:	26° 42.191'	26° 42.1956'	
LONG:	85° 07.54	85° 07.5283'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lbs	
Barrel Length (m):	9m	1m
Total Penetration (m):	~7m	
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	POLE OUT = 4.7 ton	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.30	
2	0.30 - 0.80	
3	0.80 - 1.30	
4	1.30 - 1.80	
5	1.80 - 2.30	
6	2.30 - 3.03	
7	3.03 - 3.50	
8	3.50 - 4.00	
9	4.00 - 4.53	
10		
	+ C/C	

4 sections + ~30 cm piece between B + C

NOT ACCOUNTED FOR IN CORE LABELS!

SEE NOTE

BOTTOM INTERVALS ARE WRONG!

No TC

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 34/PC 34
DATE: APRIL 20, 1990 / 110 JD
WEATHER: HI WIND ~ 8' SEAS
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: LOW BACKSCATTER [redacted] AREA OFF N. WBR
WATER DEPTH (m): 3285 m
NAVIGATION: TRANSPONDER
WINCH:

MISC. EQUIP: Relay ~100m above core
MISC.PROCEDURES:

COMMENTS: STRAT CORE

CORE LOCATION

	Start	On-Bottom	End
Time:	0850Z	1009Z	
LAT:	26° 42.17'	26° 42.1879'	
LONG:	85° 07.54'	85° 07.5389'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lbs	
Barrel Length (m):	9m	1m
Total Penetration (m):	ALL WAY THROUGH	3RD BARREL
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3285	

4.6 ton pullout

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 1.48	
2	1.48 - 2.96	
3	2.96 - 4.21	
4	4.21 - 5.70	
5		
6	+c/c	
7		
8		
9		
10		

TC34 - 77cm +c/c

GEOTECH

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 33/PC33
DATE: 20 April, 1990
WEATHER:
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: Low backscatter same location as PC32
WATER DEPTH (m): 3285 m
NAVIGATION: Transponder
WINCH:

MISC. EQUIP: Relay 100m above core
MISC.PROCEDURES:

COMMENTS: Geotech core ⇒ SHORT CORE??

CORE LOCATION

	Start	On-Bottom	End
Time:	0425Z	0547Z	
LAT:	26° 41.48'	26° 41.4802'	
LONG:	85° 7.57'	85° 7.6022'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800	
Barrel Length (m):	9 m	1 m
Total Penetration (m):		
Recovery (m):	~2 m	NO RECOVERY
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3210 m	

PULL OUT = 4.7 tons

THIS MAY BE INCORRECT

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 – 0.68	
2	0.68 – 1.17	
3	1.17 – 1.66	
4	1.66 – 2.16	
5	2.16 – 2.65	
6		
7		
8		
9		
10		

+ c/c

DETAILED (2cm) SUBSAMPLING

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 32/PC32
DATE: 20 April, 1990
WEATHER: 15-20kt breeze
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: low backscatter ~1.5km from end of lap lobe
WATER DEPTH (m): 3283m
NAVIGATION: Transponder not
WINCH:

MISC. EQUIP: Responder 100m above core
MISC.PROCEDURES:

COMMENTS:

CORE LOCATION

	Start	On-Bottom	End
Time:	0100Z	0204Z	
LAT:	26°41.48'N	26°41.4836N	
LONG:	85° 07.45W	85° 07.5715W	
TD:	GPS	76m NE of	
TD:		target	

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	28006	
Barrel Length (m):	9m	1m
Total Penetration (m):	9m	1±m
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60m/min to 3150 / 22 m/min	
Max. Wire Out (m):	3215m	
Pullout:	4.5 3212	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.75	
2	0.75 - 2.24	
3	2.24 - 3.73	
4	3.73 - 5.05	
5	5.05 - 6.56	
6		
7		
8		
9		
10		

5 sections

+ c/c

TC32 0 - 0.79

+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 31/PC31
DATE: 19 April, 1990 JD109
WEATHER: 15-20 kt
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: in low backscatter SE of high backscatter lobe
WATER DEPTH (m): 3283 m
NAVIGATION: Acoustic Nav.
WINCH:

MISC. EQUIP: Responder 100m above core
MISC.PROCEDURES:

COMMENTS: Target 26° 41.7'N
85° 08.4'W
Acoustic nav hung up for a while on the way down.

CORE LOCATION

	Start	On-Bottom	End
Time:	2105Z	2208Z	2315Z
LAT:	26° 41.84N	26° 41.7797 N	26° 41.84'N
LONG:	85° 08.28'W	85° 08.2940 W	85° 08.27'W
TD:	Loran C	~230m NE of target	Loran C
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800	
Barrel Length (m):	9m	4m
Total Penetration (m):	9m	4m
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60 m/min to 3150 ~25 m/min to bottom	
Max. Wire Out (m):	3215 m	
Pullout:	4.6 3210m	

4 sections ~5.5m

SECT. NO.		INTERVAL (m)	COMMENTS (Disturbance...)
1	D	0-1.20	
2	C	1.20-2.70	
3		2.70-2.78	BAGGED SAMPLE (BETWEEN B&C)
4	B	2.78-4.01	
5	A	4.01-5.51	
6			
7			
8			
9			
10			

+ C/C

TC31 0-0.68

+ C/C

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 30/ PC 30
DATE: 19 April 1990 JD 109
WEATHER: 15-20kt breeze
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: in high backscatter near the boundary
WATER DEPTH (m): 3283 m
NAVIGATION: Transponder Nav
WINCH:

MISC. EQUIP: Acoustic relay for navigation 100 m above core
MISC.PROCEDURES:

COMMENTS:

CORE LOCATION

	Start	On-Bottom	End
Time:	1650Z	1751Z	1905Z
LAT:	26°42.47'N	26°42.419	
LONG:	85°09.02'W	85°09.012	
TD:	Loran C	~40 m NW of target	
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	28001b	
Barrel Length (m):	9 m	1 m
Total Penetration (m):	9 m	1+ m
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	3212 m wire out	
Max. Wire Out (m):	60 m/min to 3150 - 25 m/min to bottom	
Pull out:	4.6 tons at 3208 m wire	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-1.52	
2	1.52-1.59	Material from btwn two liner pieces -
3	1.59-2.85	
4	2.85-4.35	
5		
6	+c/c	
7		
8		
9		
10		

3 sections ~4.7 m

+ TC30 88 cm +CC

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 29/PC 29
DATE: APRIL 19,
WEATHER: ~20 kt WINDS
RECORDED BY: J. DANFORTH QUAYLE
PROCESSORS:

APPROX. LOCATION: ON NORTHERN FAN LOBOID
WATER DEPTH (m): 3283m
NAVIGATION: YES
WINCH:

MISC. EQUIP: TRANSPONDER WAY!
MISC.PROCEDURES:

COMMENTS: Relay 100m above trigger arm

CORE LOCATION

	Start	On-Bottom	End
Time:	1245	1348Z	
LAT:	26° 42.70'	26° 42.733	
LONG:	85° 9.50'	85° 9.5086	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2000	
Barrel Length (m):	6m	1m
Total Penetration (m):	up to weight	buried weight
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3218m POLL OUT = 5.5 tons	

3 sections core ~ 3.5m log

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-0.67	
2	0.67-2.16	
3	2.16-3.66	
4		
5		
6		
7	+c/c	
8		
9		
10		

TC29 — 85 cm +c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 28/PC 28 APPROX. LOCATION: [redacted] OFF

DATE: APRIL 19, 1990/ 109 J.D. NORTHERN FAN LOBE HIGH BACKSCATTER

WEATHER: STILL JUST FINE WATER DEPTH (m): 3288m

RECORDED BY: GEORGE BUSH NAVIGATION: TRANSPONDER NET

PROCESSORS: WINTERS, LUBINSKI, KENYON WINCH:

MISC. EQUIP: TRANSPONDER ON WIRE

MISC.PROCEDURES:

COMMENTS:

CORE LOCATION

	Start	On-Bottom	End
Time:	0926Z	1024 Z	
LAT:	26° 43.0'	~~26° 43.66'~~	26° 43.0449'
LONG:	85° 10.5'	~~85° 10.46'~~	85° 10.4756'
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2000	
Barrel Length (m):	6m	1m
Total Penetration (m):	TO BARREL	
Recovery (m):	~2.5m	
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3215m PULL OUT = 5.6 tons	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.85	
2	0.85 - 2.35	
3		
4		
5		
6		
7		
8		
9		
10		
	+C/C	
TC 28	0 - 0.76	
	+ %C	

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 27/PC27
DATE: 18 April, 1990 JD108
WEATHER: Mill pond
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: Sill in northern canyon
WATER DEPTH (m): 3332 m
NAVIGATION: Loran C
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS:

CORE LOCATION

	Start	On-Bottom	End
Time:	1952	2055Z	2155Z
LAT:	25° 20.25'N	25°20.27'N	25°20.75N
LONG:	84° 43.66'W	84°43.65'W	84°43.68W
TD:		Loran C	
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	6 m	1 m
Total Penetration (m):	wt buried	wt buried
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60m/min to 3150m then ~20m/min	
Max. Wire Out (m):	3286 m	
Payout:	4.8 tons at 3283m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 1.0	
2	1.0 - 1.7	
3	1.7 - 3.2	
4		
5		
6		
7		
8		
9		
10		
	+ c/c	
TC27	0 - 0.68	
	+ c/c	

2 sections
top one 170cm long
bottom one 150 cm

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 26/PC 26
DATE: 18 April, 1990 JD 108
WEATHER: Perfect
RECORDED BY: Twichell
PROCESSORS: Lee/Nelson/Barber/Paull

APPROX. LOCATION: Sill in Southern Canyon
WATER DEPTH (m): 3250 m
NAVIGATION: Loran C
WINCH: Yes

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: Core cutter had 2 dings in it, so we hit something hard.

CORE LOCATION

	Start	On-Bottom	End
Time:	1559Z	1659Z	1810Z
LAT:	25° 17.59'N	25° 17.64'N	25° 16.95'N
LONG:	84° 41.60'W	84° 41.60'W	84° 41.71'W
TD:	Loran C	Loran C	
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	6m	1m
Total Penetration (m):	Bung up weight	Bung up weight.
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60 m/min to 3150 m 20 m/min to bottom	
Max. Wire Out (m):	3210 m	
Pullout:	4.3 tons at 3208 m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-0.86	
2	0.86 - 2.34	
3		
4		
5		
6		
7	+C/C	
8		
9		
10		

+CC
TC 26 0-0.73
+CC

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 25/PC25
DATE: April 18 1990 TD 108
WEATHER: calm
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: OFF Mouth Southern Canyon
WATER DEPTH (m): 3360
NAVIGATION: GPS
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:
COMMENTS:

CORE LOCATION

	Start	On-Bottom	End
Time:	1124	1227 Z	1330
LAT:	25° 16.4'	25° 16.41' N	25° 15.59' N
LONG:	84° 43.4'	84° 43.48' W	84° 43.60' W
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800#	
Barrel Length (m):	9m	1m
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3294m Pullout = 4.9 tons	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.73	
2	0.73 - 0.91 ***	Salvaged flow out boom sect 1 & 2
3	0.91 - 2.23 *	
4	2.23 - 3.74 **	
5		
6		
7	* labelled 73-196 on deck	
8	** labelled 214-365 on deck	
9	*** labelled 196-214 on deck	
10		

TC 25 81cm +c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 24/PC24
DATE: 18 April, 1990 JD108
WEATHER: Calm
RECORDED BY: Schwab
PROCESSORS:

APPROX. LOCATION: Head of southern canyon
WATER DEPTH (m): ~~3380~~ m 3375m
NAVIGATION: GPS
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: 3 BARREL CORE IN ~~NW~~ BATHY DEPRESSION (HEAD OF BOX CANYON).

CORE LOCATION

	Start	On-Bottom	End
Time:	0723	0822	
LAT:	25°17.82'	25° 17.78'	
LONG:	084° 40.37'	84° 40.41'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	9m	1m
Total Penetration (m):	Full	
Recovery (m):	4 SECTIONS	
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3318 m	

POLL OUT = 5.0 tons

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-1.21	
2	1.21-2.71	
3	2.71-4.05	
4	4.05-5.55	Flow-in 4.17 – 5.46
5	+CC (bagged)	
6		
7		
8		
9		
10		

TC 24 - 0-088 m
+ck (bagged)

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 23/PC 23
DATE: 18 April, 1990 JD 108
WEATHER: calm
RECORDED BY: Twichell
PROCESSORS: Nelson/Lee/Barber/Paull/Ussler

APPROX. LOCATION: Pool at head of northern box canyon
WATER DEPTH (m): 3410 m
NAVIGATION: GPS
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS:

CORE LOCATION

	Start	On-Bottom	End
Time:	0300	0401	0500 Z
LAT:	25° 20.60'N	25° 20.63'N	25° 20.63'N
LONG:	84° 42.71'W	84° 42.72'W	84° 42.66'W
TD:	GPS fix	GPS fix	
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	9m	1m
Total Penetration (m):	50cm below waterline	to top of weight
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3346m wire out	
Pullout:	4.9	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 1.63	
2	1.63 - 3.12	
3	3.12 - 4.31	
4	4.31 - 5.86	
5		
6		
7		
8		
9		
10		

+ c/c

TC 23 0 - 0.80
+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 22/BC22
DATE: 17 April, 1990 JD107
WEATHER: Flat calm
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: pool at base of headwall of northern canyon
WATER DEPTH (m): 3410 m
NAVIGATION: ~~Loran C~~ GPS
WINCH:

MISC. EQUIP: bottles 8m & 16m above core head
MISC.PROCEDURES:

COMMENTS: This is a 2 barrel (6m) gravity core
Messenger on at 2330Z

CORE LOCATION

	Start	On-Bottom	End
Time:	2232	2351	0110Z
LAT:	25°20.70'N	25°20.70'N	25°20.47'N
LONG:	84°42.70'W	84°42.71'W	84°42.75'W
TD:		GPS Fix	
TD:			

CORER/CORE INFORMATION

	~~Piston~~ Core Gravity core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	6 m	X
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3363	
Pullout:	4.9	3356m

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 1.10	
2	1.10 - 2.61	
3	2.61 - 4.12	
4		
5		
6		
7		
8		
9		
10		

3 good sections
1 flown at top "BRAIN SEO"

+ c/c

Top bottle 21m up wire. #2 Bottle
10m #1

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: PC 21
DATE: 17 April, 1990 JD 107
WEATHER: Calm, clear, hot
RECORDED BY: Twichell
PROCESSORS: Lee/Barber/Nelson/Paull
APPROX. LOCATION: Mouth of Lox canyon
WATER DEPTH (m): 3353m
NAVIGATION: Loran C
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:
COMMENTS:

CORE LOCATION

	Start	On-Bottom	End
Time:	1855Z	2001Z	2115Z
LAT:	25°19.50'N	25°19.48'N	25°19.52'N
LONG:	84°44.93'W	84°44.95'W	84°45.00'W
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 16	
Barrel Length (m):	6m	1m
Total Penetration (m):	mud on wt stand	
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60 m/min to 3200 then ~20 m/min.	
Max. Wire Out (m):	3287	
Pull out:	4.9 3284m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-1.45	
2	1.45-2.95	
3		
4		
5		
6		
7		
8		
9		
10		

2 sections

+ c/c (bagged)
+ TC21 - 75cm + c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 20/20PC
DATE: 16 April/1990
WEATHER: Calm
RECORDED BY: Twichell
PROCESSORS: Lee/Barber/Nelson

APPROX. LOCATION: 2nd try in channel to dep lobe
WATER DEPTH (m): 3627
NAVIGATION: Transponder
WINCH:

MISC. EQUIP: Acoustic relay 100 m above core
MISC.PROCEDURES:

COMMENTS: Core taken about 80 m south of PC 18 based on transponder nav.

CORE LOCATION

	Start	On-Bottom	End
Time:	2130Z	2229Z	~2330
LAT:	26° 15.29N	26° 15.1398N	26° 15.25N
LONG:	86° 16.77'W	86° 16.8975W	86° 16.99'W
TD:		transponder fix	
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	6 m	1 m
Total Penetration (m):	mud on wt stand	mud to base of weight
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3064 m	
Pullout:	3059 m 4.7	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 1.00	
2	1.00 - 1.70	
3		
4		
5		
6		
7		
8		
9		
10		

1 section

+ c/c

TC20 0 - 0.74
+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 19/PC19
DATE: 16 April, 1990 JD106
WEATHER: Even greater
RECORDED BY: Turichell
PROCESSORS: Lee/Nelson/Barber

APPROX. LOCATION: South levee of dep lobe channel
WATER DEPTH (m): 3118 m
NAVIGATION: Transponder nav
WINCH:

MISC. EQUIP: Acoustic relay 100m above core head
MISC.PROCEDURES:

COMMENTS: Core hit ~40m from planned site.

CORE LOCATION

	Start	On-Bottom	End
Time:	1820	1919Z	2025
LAT:	26°14.50'N	26° 14.4297N	26°14.26'N
LONG:	86°16.39'W	86° 16.6088W	86° 15.84'W
TD:		xponder fix	
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	28006	
Barrel Length (m):	6m	1m
Total Penetration (m):	½ way up wt stand.	
Recovery (m):		empty trigger core
Flow-in (m):		
Lowering Rate (m/min.):	3070 m	
Max. Wire Out (m):	60m/min to 3000m 14 m/min to bottom	
Pullout:	4.5 3066m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

4 sections

+ C/C

TC 19 V. Small Bagged Sample

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 18/PC18
DATE: J.D 106
WEATHER: GREATER
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: CHANNEL PROXIMAL END ON FAN LOBE
WATER DEPTH (m): 3125
NAVIGATION: TRANSPONDER
WINCH:

MISC. EQUIP: ACOUSTIC TRANSPONDER
MISC.PROCEDURES:

COMMENTS: PICKED CHANNEL USING 3.5kHz BATHY
Looks like corer fell over - mud on one side of core head.

CORE LOCATION

	Start	On-Bottom	End
Time:	1500Z	1608Z	1730Z
LAT:	26° 15.00'	26° 15.1800'N	26° 14.91'N
LONG:	86° 16.80	86° 16.8693'W	86° 15.08'W
TD:		transponder nav.	
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	28000 16	
Barrel Length (m):	6m	1m
Total Penetration (m):	looks like corer fell over ~1m	
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60m/min to 3000m	~10m/min to bottom
Max. Wire Out (m):	3087m	
	Pullout	4.6 at 3086m

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-0.84	
2		
3		
4		
5		
6		
7		
8		
9		
10		

+ c/c

TC18 0-0.77m

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 17/PC17
DATE: APRIL 16, 1990 106 JD
WEATHER: GREAT
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: YOUNG CHANNEL LEVEE, E. LOBE
WATER DEPTH (m): 3122m
NAVIGATION:
WINCH:

MISC. EQUIP: TRANSPONDER NAV !
MISC.PROCEDURES:

COMMENTS: HIGH BACKSCATTER AREA
CORE ~ 170cm LONG --- POOR PENETRATION
--- NO EXPLANATION:

CORE LOCATION

	Start	On-Bottom	End
Time:	1100 Z	1216 Z	
LAT:	26° 15.70'	26° 15.6963'	
LONG:	86° 16.85	86° 16.8675	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):		
Barrel Length (m):	6m	1m
Total Penetration (m):	0m	
Recovery (m):	POOR ~170cm	
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3086m PULL OUT = 5:1	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-0.23	
2	0.23-1.73	
3		
4		
5		
6		
7		
8		
9		
10		

+ c/c

TC 17 0-0.23
+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 16/PC16
DATE: APRIL 16, 1990 106JD
WEATHER: GOOD
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: MOTTLED AREA N. OF MAIN CHANNEL
WATER DEPTH (m): 3165m
NAVIGATION: GPS
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: STRAT CORE IN MOTTLED AREA.

CORE LOCATION

	Start	On-Bottom	End
Time:	0720Z	0821Z	
LAT:	26° 20.5'	26° 20.47'	
LONG:	86° 14.0'	86° 13.96	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):		
Barrel Length (m):	6m	1m
Total Penetration (m):	6m	
Recovery (m):	3m	
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3113m	

POLL OUT = 4.0

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.70	
2	0.7 - 1.7	
3	1.7 - 3.2	
4		
5		
6		
7		
8		
9		
10		

+ c/c

TC16 0 - 0.80 DOUBLE PEN.

+ c/c

GEOTECH

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 15/PC15
DATE: 16 APRIL, 1990 J.D. 106
WEATHER: 25 kt BREEZE
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: MOTTLED AREA NORTH OF CHANNEL BREAKOUT
WATER DEPTH (m): 3140m
NAVIGATION:
WINCH:

MISC. EQUIP: ACOUSTIC RELAY 100m ABOVE CORE
MISC.PROCEDURES:

COMMENTS: GEOTECH CORE (CLOSE TO STATION 14)

CORE LOCATION

	Start	On-Bottom	End
Time:	0259Z	0440Z	
LAT:	26°18.46'N	26° 18.4792'	
LONG:	86° 19.98'W	86° 19.7768'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lbs	
Barrel Length (m):	6m	1m
Total Penetration (m):	(50cm) 10 SECTIONS (5.0m)	FULL (1m)
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60-3000m 10m/MIN TO BOTTOM	
Max. Wire Out (m):	3089m PULL OUT = 5.0	

TO WEIGHT STAND

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
✓ TOP 1	0 - 0.56	ALL WORKED ON BOTTOM
✓ I 2	0.56 - 1.06	
✓ H 3	1.06 - 1.56	
✓ G 4	1.56 - 2.06	
✓ F 5	2.06 - 2.56	
✓ E 6	2.56 - 3.06	
D 7	3.06 - 3.56	
C 8	3.56 - 4.06	
✓ B 9	4.06 - 4.56	
A 10	4.56 - 5.06	

TC 15 0-0.35
0.35-0.85
+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 14/PC 14
DATE: 16 April, 1990 JD106
WEATHER: 25 kt breeze
RECORDED BY: Twichell
PROCESSORS:

APPROX. LOCATION: Mottled area north of channel
WATER DEPTH (m): 3140 m
NAVIGATION: Transponder nav
WINCH:

MISC. EQUIP: Acoustic relay 100 m above core
MISC.PROCEDURES:

COMMENTS:

CORE LOCATION

	Start	On-Bottom	End
Time:	0000Z	0103 Z	0210
LAT:	26° 18.46 N	26° 18.4718N	
LONG:	86°19.98W	86° 19.6730W	
TD:	GPS fix	transponder fix	
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	6 m	1 m
Total Penetration (m):	mud to base of weight	mud on pad - probably tipped over
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60 @ 3000 m 18 m/min to bottom.	
Max. Wire Out (m):	3089 m	
	Pelton 5.1 at 3084 m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 1.55	Soupy Oxidized Top (15 cm)
2		
3		
4		
5		
6		
7		
8		
9		
10		

TC 14 0 - 0.16 + c/c — Not Split - Too Soupy & Short

GEOTECH

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 13/PC 13
DATE: 15 April, 1990 JD 105
WEATHER: Clear - 15 kt NE breeze
RECORDED BY: Twichell
PROCESSORS: Lee/Barber/Nelson

APPROX. LOCATION: Mottled area north of channel
WATER DEPTH (m): 3140 m
NAVIGATION: Transponders
WINCH:

MISC. EQUIP: Acoustic relay on wire up 100 m
MISC.PROCEDURES:

COMMENTS: Wire length between core head + trigger arm increased 2 ft to 20 ft
Taken for geotech analyses

CORE LOCATION

	Start	On-Bottom	End
Time:	2005Z	2148Z	2305Z
LAT:	26°18.20'N	26°17.8551'N	28°18.01'N
LONG:	86°20.37'W	86°20.4618W	86°20.25'W
TD:		Transponder location	
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	6 m	1 m
Total Penetration (m):	4 avg up core weight	to top of cover
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	18 m/min near bottom	
Max. Wire Out (m):	3094 m	
	Pulbout: 4.8	3090 m

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.32	
2	0.32 - 0.82	
3	0.82 - 1.32	
4	1.32 - 1.82	
5	1.82 - 2.32	
6	2.32 - 2.82	
7	+ c/c	
8		
9		
10		

2 sections

TC 13 76 cm → 0 - 26 cm, 26 - 76 cm } Burrow In Middle

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 12/PC12
DATE: 16 April, 1990 JD 105
WEATHER: Fine
RECORDED BY: Twichell
PROCESSORS: Lee/Barber/Nelson

APPROX. LOCATION: Mottled area north of channel.
WATER DEPTH (m): 3140 m
NAVIGATION: Transponder Nav.
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: Pinger 100m above core - Offset between core + ship ~258 m

CORE LOCATION

	Start	On-Bottom	End
Time:	1615	1740	1845
loran C LAT:	26°17.91	26° 17.8261N	26°16.97'N
LONG:	86°20.33	86° 20.5142W	86° 18.39'W
TD:		core location from	
TD:		Xponders	

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	28001b	
Barrel Length (m):	6m	1m
Total Penetration (m):	~50cm below weight	1m - mud in top of wt stand
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60 m/min	
Max. Wire Out (m):	3087 m	

Parlant 4.7 at 3083 m wire out

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-0.29	upper section was recompacted + allowed to settle - very disturbed
2	0.29 - 1.79	
3	1.79 - 3.29	
4	+ CC	
5		
6		
7		
8		
9		
10		

+ TC 12 77cm + C/C

3 MULTIPLE PEN.
NO GEOTECH DONE

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 11/PC11
DATE: APRIL 15, 1990 105 JD
WEATHER: STORMY IN DISTANCE
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: SLOPE FAILURE IN CHANNEL BREAKOUT AREA.
WATER DEPTH (m): 3090m
NAVIGATION:
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: ATTEMP CORE IN AREA OF SLOPE FAILURE USING TRANSPONDER NAV. * HIT WITHIN 100M OF TARGET

CORE LOCATION

	Start	On-Bottom	End
Time:	1045Z	1258Z	1405
LAT:	26°13.63'	26°13.61'	26°12.61 U
LONG:	86°22.10'	86°22.08'	86°21.05'W
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	6m	1m
Total Penetration (m):	to base of core head	1m on outside of pipe
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	3040 m	
Max. Wire Out (m):	POLI OUT 4.5	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-1.43	
2		
3		
4		
5		
6		
7		
8		
9		
10		

1 section

TC11 ~60cm

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: ~~8~~ PC 10 APPROX. LOCATION: Southern levee

DATE: 15 April, 1990 JD 105 Main channel - Miss Fan

WEATHER: Fair → STORM 45 KNOT WINDS!! WATER DEPTH (m): 3072 m

RECORDED BY: NAVIGATION:

PROCESSORS: WINCH:

MISC. EQUIP:

MISC.PROCEDURES:

COMMENTS: TRIED TO LOWER CORE SLOWLY INTO BOTTOM = POOR POLLOUT?? 3-8-4-0
CORE CAME UP WITHOUT TRIGGERING → LOWERED TO BOTTOM IMMEDIATELY. . . . . s

CORE LOCATION

	Start	On-Bottom (FIRST HIT → MISSED BOTTOM)	End (2ND HIT GOOD POLLOUT)
Time:	0430Z	0546Z	0812Z
LAT:	26° 13.48N	26° 13.22'	26° 13.22'
LONG:	86° 26.78W	86° 26.74'	86° 26.75'
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):		
Barrel Length (m):		
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	~~3015m~~ 4.7 POLLOUT	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-1.5	
2	1.5-3.0	
3	3.0-4.49	
4		
5		
6		
7		
8		
9		
10		

+ c/c

TC10 23 cm
+ CORE CATCHER
+ CORE CUTTER

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 9/PC 9
DATE: JD 105 15 April, 1990
WEATHER: Fair
RECORDED BY: Twichell
PROCESSORS: Lee/Barber/Nelson

APPROX. LOCATION: Low backscatter area north of main channel
WATER DEPTH (m): 3105 m
NAVIGATION: Loran C
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: Length of wire between core head + trigger arm lengthened to 18'

CORE LOCATION

	Start	On-Bottom	End
Time:	0003	0101	0220
LAT:	26° 16.86 N	26° 16.81 N	26° 16.96 N
LONG:	86° 29.40 W	86° 24.42 W	86° 23.24 W
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	6 m	1 m
Total Penetration (m):	to base of core head	trigger core was dragged - had mud on top of it.
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	60	
Max. Wire Out (m):	3060	

Pullout 4.5 at 3060 m

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.84	
2	0.84 - 2.33	
3		
4		
5		
6		
7		
8		
9		
10		

2 sections

+ C/C

TC 9 0-58 cm

MULTIPLE PENETRATIONS NOT TESTED

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 8/PC 8
DATE: JD 104 / 14 April, 1990
WEATHER: Fair
RECORDED BY: Twichell
PROCESSORS: Lee/Barber/Nelson

APPROX. LOCATION: North Levee Flank Mississippi channel
WATER DEPTH (m): 3063m
NAVIGATION: Loran C
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: Made both the trigger core wire & the loop of free fall wire 2 ft longer than on the previous cores.

CORE LOCATION

	Start	On-Bottom	End
Time:	2054Z	2148	2300
LAT:	26°15.03	26°15.01	26°15.32N
LONG:	86°26.06	86° 26.09	86°25.71W
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800	
Barrel Length (m):	6m	1m
Total Penetration (m):	To core head	~50cm
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3010	

Pull out: 4.5 3007m

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-75cm	tdc - Saved for geotech
2		
3		
4		
5		
6		
7		
8		
9		
10		

TC 8 -31cm - Saved for geotech

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 7/PC7
DATE: APRIL 14, 1990 104 J.D.
WEATHER: Cloudy, 15k+ breeze 3ft seas
RECORDED BY: Twichell
PROCESSORS: Lee/Barber/Nelson

APPROX. LOCATION: LEVEE FLANK (N) MAIN MISS CHANNEL.
WATER DEPTH (m): ~3063
NAVIGATION: Loran C
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: THIS IS A REL: LOW REFLECTIVITY AREA OF THE LEVEE

CORE LOCATION

	Start	On-Bottom	End
Time:	1750Z	1845	1950
LAT:	26°15.0'	26° 14.99 N	26° 15.12 N
LONG:	86° 26.1'	86° 26.11 W	86° 25.98 W
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800 lb	
Barrel Length (m):	6 m	1m
Total Penetration (m):	to core head	~50 cm
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	50 m/min	
Max. Wire Out (m):	3011 m	

Parlout 4.6 at 3005m

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-84	
2	+ c/c	- stiff clay
3		
4		
5		
6		
7		
8		
9		
10		

1 section

TC7 - 37cm

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 6/PC6
DATE: APRIL 14, 1990 104 J.D.
WEATHER: NICE
RECORDED BY:
PROCESSORS:

APPROX. LOCATION: LEVEE CREST MAIN MISS. CHANNEL
WATER DEPTH (m): 3060m
NAVIGATION:
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: ATTEMPT TO TAKE A GEOTECH CORE. RECOVERED ABOUT 3m

CORE LOCATION

	Start	On-Bottom	End
Time:	1410Z	1455Z	1610Z
LAT:	26° 14.76'	26° 14.72'	
LONG:	86° 26.05'	86° 26.12'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):		
Barrel Length (m):	6m	
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3015m POLLOOT = 4.6	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-22	unsplit - run through
2	22-71	velocimeter - bottoms
3	71-121	waxed
4	121-171	
5	171-221	
6	221-271	
7	+ small clc sample bagged	
8		
9		
10		

TC 6 - clc only - bagged

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 5/PC5
DATE: APRIL 14 1990 JD 104
WEATHER: FINE
RECORDED BY: Schwab
PROCESSORS:

APPROX. LOCATION: NORTH LEVEE CREST OF MAIN CHANNEL - MISS FAN
WATER DEPTH (m): 3060m
NAVIGATION:
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: LEVEE CREST SAMPLE FOR GEOTECH.
TRIGGER LOOP GOT HUNG-UP ⇒ SHORT CORE
WILL TRY AGAIN

CORE LOCATION

	Start	On-Bottom	End
Time:	0940	1052 Z	
LAT:	26°14.64'	26° 14.73'	
LONG:	86° 26.20'	86° 26.15'	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):		
Barrel Length (m):		
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3015 m POLL OUT = 4.3	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0-44	Core bottom waxed
2	44-94	core not split
3		
4		
5		
6		
7		
8		
9		
10		

+ c/c
TC 5 - 34 cm - waxed bottom unsplit

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 4/PC4
DATE: 14 April, 1990 JD104
WEATHER:
RECORDED BY:
PROCESSORS: WJW, DL, NK

APPROX. LOCATION: North levee crest of MAIN CHANNEL - MISS FAN
WATER DEPTH (m): 3060 m
NAVIGATION:
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: SAMPLE ON LEVEE CREST (WIRE OUT @ POUCOUT 3007m)
APPEARS TO HAVE PENETRATED UP TO WEIGHT STAND ⇒ CORE ONLY A BIT OVER 3m HOWEVER...

CORE LOCATION

	Start	On-Bottom	End
Time:	0545Z	0645Z	
LAT:	26° 14.70'	26°14.73'	
LONG:	86° 26.09'	86°26.12'W	
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800	
Barrel Length (m):	6m	1m
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	4.4 POUCOUT ⇒	*POSSIBLE THAT CORE FELL OUT

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 0.23	
2	0.23 - 1.73	
3	1.73 - 3.26	
4		
5		
6		
7		
8		
9		
10		

+ c/c

TC 4 C/C ONLY

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 3/PC 3 APPROX. LOCATION: Main Channel
DATE: 14 April, 1990 JD 104 Mississippi Fan
WEATHER: 15kt breeze 1kt current WATER DEPTH (m): 3095 m
RECORDED BY: Twichell NAVIGATION: Loran C
PROCESSORS: Lee/Barber/Nelson WINCH:
WTW, DL, NK

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: We missed the channel on the first try, but came back across a broad patch of highly reflective material. Should be a good hit on the channel. Penetration ~ 5m on outside of barrel

CORE LOCATION

	Start	On-Bottom	End
Time:	0145Z	0300	0415
LAT:	26°13.92N	26°13.86'N	26°13.62N
LONG:	86°26.36W	86°26.16'W	86°25.75W
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800	
Barrel Length (m):	6m	1m
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3047m pull out 4.5	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 – 0.29	
2 (2 sections)	0.29 – 1.81	
3		
4		
5		
6		
7		
8		
9		
10		

+ c/c

TC3 0-0.88
+ c/c

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 2/PC2
DATE: JD 103 13 April, 1990
WEATHER: Fine
RECORDED BY: Twichell
PROCESSORS: Lee

APPROX. LOCATION: Main Channel - Miss Fan
WATER DEPTH (m): 3095m
NAVIGATION: Loran C
WINCH:

MISC. EQUIP:
MISC.PROCEDURES:
COMMENTS: Penetrated bottom 10 cm of core head

2nd try
↓
2140Z

CORE LOCATION

	Start	On-Bottom	End
Time:	~~2120~~ 2140	2240	23437
26° 13.90N LAT:	~~26°14.04N~~	26° 13.97	26°14.01 N
86° 25.98W LONG:	~~86°25.94W~~	86° 26.20	86° 25.62 W
TD:			
TD:			

CORER/CORE INFORMATION

	Piston Core	Trigger Core
Core Head Wt (lbs.):	2800	
Barrel Length (m):	6m	1m long
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):	50	
Max. Wire Out (m):	3070	
	Pull out	4.6 at 3066

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 1.43	
2	1.43 - 2.94	
3		
4		
5		
6		
7		
8		
9		
10		

2 sections

+ clc

TC2 0 - 0.78
+ clc

2142
ch floor

F-4-90

Gulf of Mexico - April 1990

R/V Farnella

STATION/ CORE ID: 1/GC1 — APPROX. LOCATION: MAIN FEEDER CHANNEL
DATE: 103 JD — WATER DEPTH (m): ~3095m
WEATHER: JUST FINE — NAVIGATION: LORAN
RECORDED BY: ME — WINCH: YES
PROCESSORS: LEE/WINTERS

MISC. EQUIP:
MISC.PROCEDURES:

COMMENTS: THIS IS A FIRST TRY 1 BARREL GRAVITY CORE. 3060 m wire out on bottom. We think we are in the main channel floor, but there were some side echoes, so we may have been to one side - Buried head.

1 section

Depth in water 3100 m

CORE LOCATION

	Start	On-Bottom	End
Time:	~~1837~~ 1632	1811Z 3095m	1914Z
LAT:	26° 13.97N	26° 13.87N	26° 14.37N
LONG:	86° 26.38W	86° 26.34'W	86° 25.83W
TD:			
TD:			

CORER/CORE INFORMATION

	~~Piston~~ Core	~~Trigger Core~~
Core Head Wt (lbs.):	1500	pull out 3.8
Barrel Length (m):	3m	
Total Penetration (m):		
Recovery (m):		
Flow-in (m):		
Lowering Rate (m/min.):		
Max. Wire Out (m):	3060m	

SECT. NO.	INTERVAL (m)	COMMENTS (Disturbance...)
1	0 - 1.33	MAN-MADE (?) SED. CYLINDERS ON TOP;
2		~ 3 cm STICKING OUT OF CORE CATCHER,
3		STICKY
4		
5		
6		
7		
8		
9		
10		

+ CORE CATCHER (BAGGED)
+ CUTTING HEAD (BAGGED) ~ INTACT

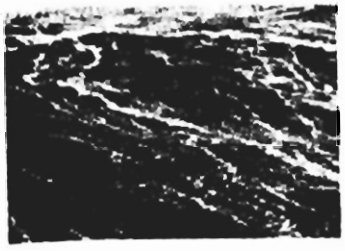


TABLE 12-3

DETERMINATION OF WIND SPEED BY SEA CONDITION

Knots	Descriptive	Sea Conditions	Wind force (Beaufort)	Probable wave height (in ft.)
0-1	Calm	Sea smooth and mirror-like.	0	—
1-3	Light air	Scale-like ripples without foam crests.	1	¼
4-6	Light breeze	Small, short wavelets; crests have a glassy appearance and do not break.	2	½
7-10	Gentle breeze	Large wavelets; some crests begin to break; foam of glassy appearance. Occasional white foam crests.	3	2
11-16	Moderate breeze	Small waves, becoming longer; fairly frequent white foam crests.	4	4
17-21	Fresh breeze	Moderate waves, taking a more pronounced long form; many white foam crests; there may be some spray.	5	6
22-27	Strong breeze	Large waves begin to form; white foam crests are more extensive everywhere; there may be some spray.	6	10
28-33	Near gale	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind; spindrift begins.	7	14
34-40	Gale	Moderately high waves of greater length; edges of crests break into spindrift; foam is blown in well-marked streaks along the direction of the wind.	8	18
41-47	Strong gale	High waves; dense streaks of foam along the direction of the wind; crests of waves begin to topple, tumble, and roll over; spray may reduce visibility.	9	23
48-55	Storm	Very high waves with long overhanging crests. The resulting foam in great patches is blown in dense white streaks along the direction of the wind. On the whole, the surface of the sea is white in appearance. The tumbling of the sea becomes heavy and shock-like. Visibility is reduced.	10	29
56-63	Violent Storm	Exceptionally high waves that may obscure small and medium-sized ships. The sea is completely covered with long white patches of foam lying along the direction of the wind. Everywhere the edges of the wave crests are blown into froth. Visibility reduced.	11	37
64-71	Hurricane	The air is filled with foam and spray. Sea completely white with driving spray; visibility very much reduced.	12	45

(Courtesy U.S. Weather Bureau)

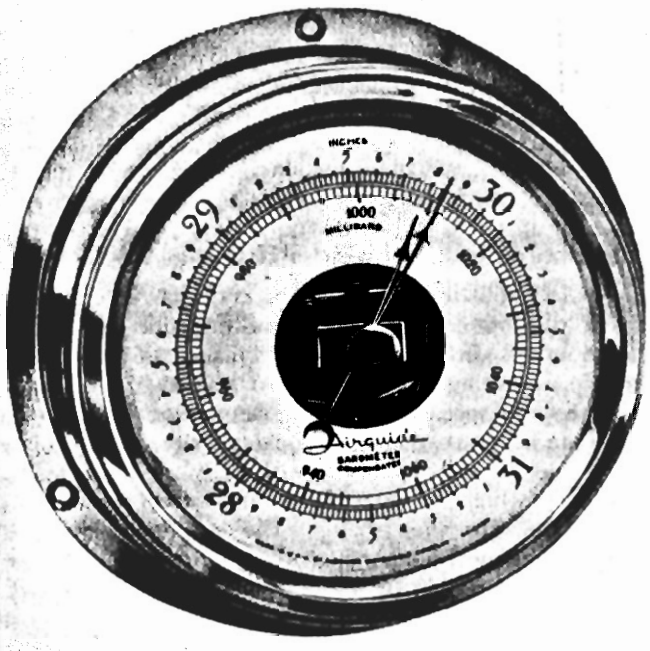


FIG. 1236 A modern aneroid barometer, graduated in both millibars (inner scale) and inches of mercury (outer scale). Pointer indicates reading at last setting.
(Courtesy Airguide Instrument Company)

THE BAROMETER

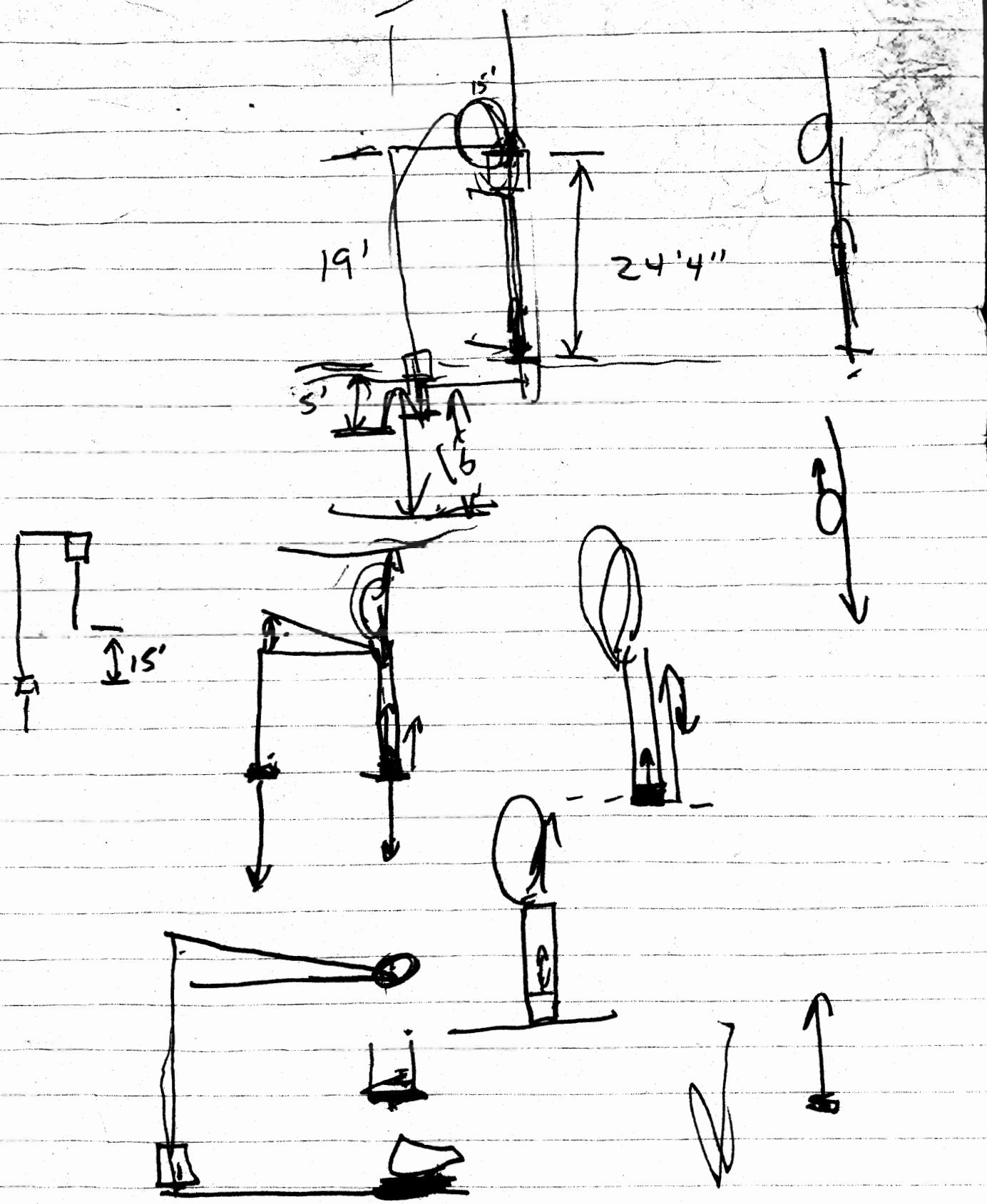
Another weather instrument with which we are all familiar is the *aneroid barometer*. The one illustrated (fig. 1236) has several interesting features.

First, there are two *pressure scales*. Not a few of us are accustomed to thinking of barometric pressure in terms of *inches of mercury*, so the outer scale is graduated in these units. Weather maps are now printed with the pressures shown in *millibars* and many radio weather reports specify this value. Consequently, the inner scale is graduated in millibars, and so we don't have to worry about conversions between units.

Second, it is a rugged instrument, a feature not to be despised on board a 40-footer. It has a high order of accuracy.

Third, it has the usual reference hand, so we can keep track of changes in pressure.

The words "Fair—Change—Rain," in themselves, when they appear on the face of an aneroid barometer, are meaningless. It is not the actual barometric pressure that is so important in forecasting; it is the *direction* and *rate of change of pressure*. The words may be misleading if this fact is not clearly understood.


15'
19'
24'4"
5'
15'
15'

SUBSAMPLE FORM

F-4-90

DATE: 4/13/90 STATION / CORE: PC2+TC-2

COMMENTS: H. Nelson Texture
Pauve/Hausler - PW

Subsample Interval (cm)	Section	Subsample Type	Analyzer	Comments
0-3	TC 2	T		
15-18	↓	↓		
75-78	↓	↓		
140-143	PC 2	↓		
		↓		
		↓		
		↓		
		↓		
		↓		
TC-5-15cm	TC	PW		
TC-61-71cm	TC	PW		
118-128	PC	↓		
269-280	PC	PW		

SUBSAMPLE FORM

F-4-90

DATE: 4-13-90 STATION / CORE: GC1

COMMENTS: CHARLIE, PAUL, BILL USSLER - GEOCHEM
H. Nelson Texture

Subsample Interval (cm)	Section	Subsample Type	Analyzer	Comments
22-31		GEOCHEM	CP, BU	
110-118		"	"	
2-4cm	T			
48-51	T			
102-105	T			
123-126	T			
148-151	T			