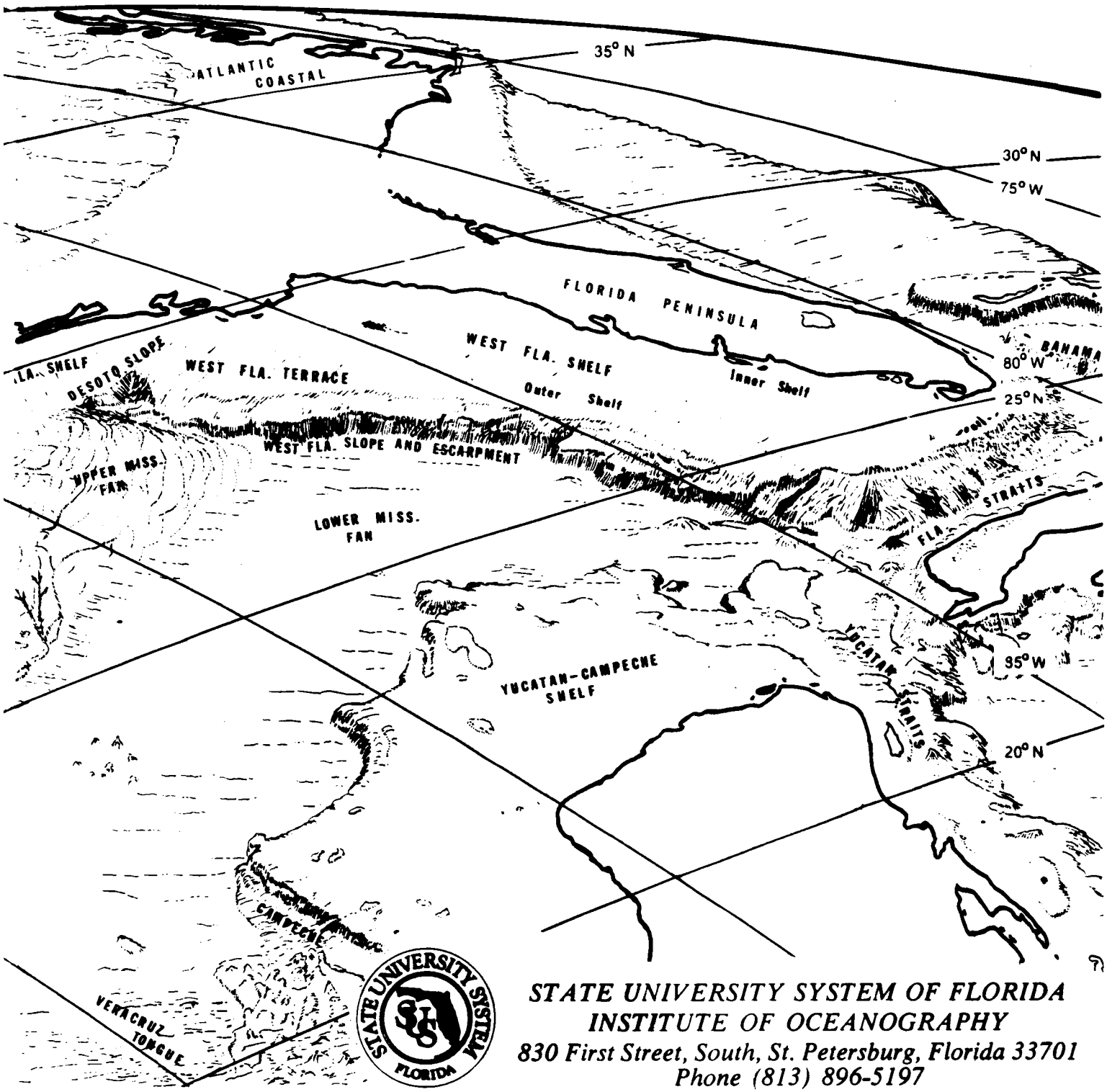
1977 - 27

MAFLA CORE ARCHIVE LOG AND MANUAL

BLM Contract No. 08550-CT5-30

Capital Equipment List
CT4-11
CT5-30



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...rsity of Florida ...esville · *Florida State University Tallahassee* · *Florida A. & M. University Tallahassee* · *University of South Florida Tampa* · *Florida Atlantic University Boca Raton*

...rsity of West Florida Pensacola · *Florida Technological University Orlando* · *University of North Florida Jacksonville* · *Florida International University Miami*

MAFLA CORE

ARCHIVE LOG AND MANUAL

INTRODUCTION

Included in this document are

1. A current list (to 21 May 1976) of all materials archived at the Florida State University facility under BLM Contract No. 08550-CT4-11 and 08550-CT5-30.
2. The geographic locations of the stations from which the samples were collected.
3. An explanation of the sample coding systems for each section.
4. A cruise report is included for each sampling effort.

Further information pertaining to these materials may be obtained through the State University System of Florida, Institute of Oceanography, or the Bureau of Land Management, Washington, D.C.

SECTION I

1974 SAMPLING SEASON

MAFLA AREA MONITORING

BLM CONTRACT NO. 08550-CT4-11

The 1974 "Area Baseline" sampling was conducted on sixty-five (65) stations located in five (5) regions of the MAFLA area. Ten (10) replicates, labelled A thru J, were taken on each of the 65 stations. A sub-core was removed from each of the replicates and archived.

TABLE NO. I

Identification of each box core by Cruise Number, Vessel, Collection Period, and Location

BLM CRUISE NO. 2
R/V MISS FREEPORT
16 May - 17 June 1974

STATION NO.	LOCATION* LATITUDE N.	LONGITUDE W.
1 A - J	29°55'	88°43.5'
2 A - J	29°55.5'	88°33.5'
3 A - J	29°53.5'	88°30'
4 A - J	29°48'	88°31.5'
5 A - J	29°55.5'	88°25'
6 A - H, J	28°58.5'	88°21'
7 A - J	29°56'	88°15'
8 A - J	30°01.5'	88°12'
9 A - J	29°53.5'	88°12.5'
10 A - J	29°48'	88°13'
11 A - J	29°43.5'	87°54.5'
12 A - J	29°45.5'	87°46.5'
13 A - J	29°38.5'	87°45'
14 A - J	29°36'	87°48'
15 A - J	29°30.5'	87°47'
16 A - J	29°40.5'	87°37'
17 A - J	29°36.5'	87°27'
18 A - J	29°33'	87°24'
19 A - J	29°27'	87°24.5'
20 A - J	29°34'	87°17.5'
21 A - J	29°59'	86°23'
22 A - J	29°49.5'	86°25.5'
23 A - J	29°56'	86°18.5'
24 A - J	29°51'	86°18.5'
25 A - J	29°46'	86°18.5'
26 B - J	29°54'	86°15.5'
27 A - J	29°48'	86°15.5'
28 A - J	29°43'	86°15.5'

*LORAC

STATION NO.	LOCATION LATITUDE N.	LONGITUDE W.
29 A - J	29°56'	86°12.5'
30 A - J	29°46'	86°12.5'
31 A - J	29°48'	86° 9.5'
32 C, D	29°43'	86° 9.5'
33 A - J	29°38'	86°10.5'
34 A - J	29°56'	86° 6.5'
35 A - J	29°51'	86° 6.5'
36 A - J	29°46'	86° 6.5'
37 A - J	29°48'	86° 3.5'
38 A - J	29°43'	86° 3.5'
39 A - I	29°45.5'	86° 0.5'
40 A - J	29°40.5'	86° 0.5'
41 A - J	29°47.5'	86°54.5'
42 A - J	28°42'	84°26.5'
43*		
44 A - J	28°26.5'	84°23.5'
45 A - J	28°21'	84°24'
46 A - D, F - J	28°42'	84°20'
47 A - J	28°34'	84°20.2'
48 A - J	28°29'	84°21'
49*		
50 A - J	28°19'	84°21'
51*		
52 A - J	28°14'	84°17.5'
53 A - J	28°42'	84°13'
54 C - F	28°29'	84°11'
55 A - J	27°56.5'	83°53'
56 A, C - J	28° 0.5'	83°45'
57 A - J	27°57.5'	83°42.5'
58*		
59*		

* no cores archived for these stations

BLM NO. 2 (cont.)

STATION NO.	LOCATION LATITUDE N.	LONGITUDE W.
60 A - J	28°01'	83°35.5'
61 A, B, D - J	27°52.5'	83°34'
62 A - J	27°50'	83°31'
63 A - J	27°56'	83°27.5'
64 A - J	27°50'	83°25'
65 A - J	27°45.5'	83°25.5'

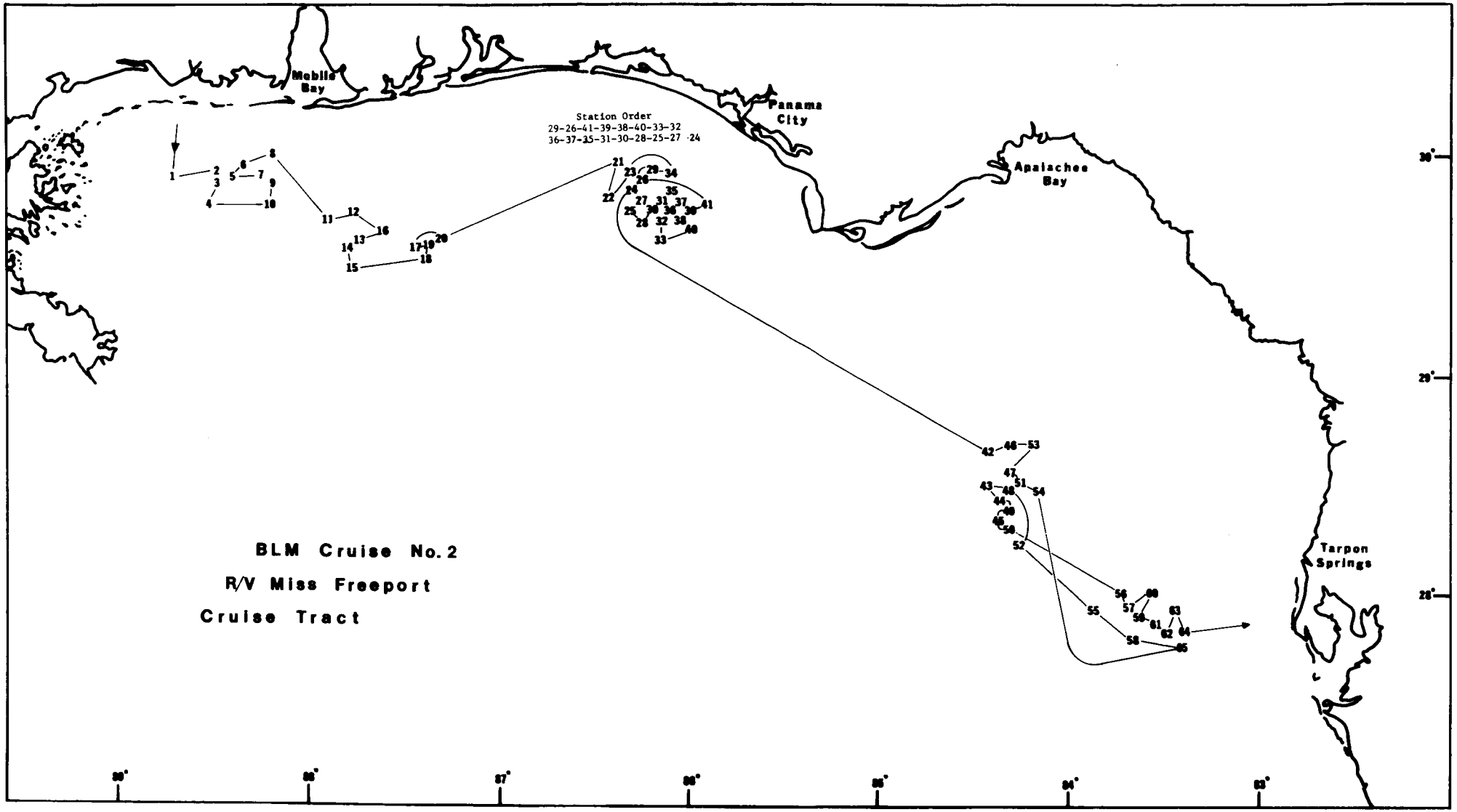
TABLE

Contents of each box of Archived Materials
at the Florida State University

F.S.U. BOX NO.	BOX CORE NO.
1	1 A - J 2 A - J
2	3 A - J 4 A - J
3	5 A - J 6 A, B, D - H, J
4	6 C, I 7 A - J
5	8 A - J 9 B, C
6	9 A, D - J 10 A - J 11 A, C - G, I, J
7	11 H, B 12 A - J 13 A - J
8	14 A - J 15 C - F, J
9	15 A, B, G - I 16 A - F, H - J
10	16 G 17 A - J 18 A - J 19 C, E, G
11	19 A, B, D, F, H - J 20 A, C - F, H - J
12	20 B, G 21 A - J 22 A, D - F, H, J
13	22 B, C, G, I 23 A - J 24 C, F, H, I, J

F.S.U. BOX NO.	BOX CORE NO.
14	24 A, B, D, E, G 25 A - J 26 E - J
15	26 B - D 27 A - J 28 A, C, G, H, J
16	28 B, D - F, I 29 A - J 30 A - J
17	31 A - J 32 C, D 33 A - J
18	34 A - J 35 A - J
19	36 A - J 37 A - J
20	38 A - J 39 A, C - J
21	40 A - J 41 A - J
22	42 A - J 44 A - J
23	45 A - J 46 A - D, F - J
24	47 A - J 48 A - J
25	50 A - J 52 C, E, G - I
26	52 A, B, D, F, J 53 A, B, D - J

F.S.U. BOX NO.	BOX CORE NO.
27	53 C
	54 C - F
	55 A - J
	56 A, C, E, H, I
28	56 D, F, G, J
	57 A - E, G - J
29	57 F
	60 A - J
	61 A, B, D, E, G, H, I
30	61 F, J
	62 A - J
	63 A, D - J
31	63 B, C
	64 A - J
	65 C - E, I, J
	65 A, B, F, G, H


Mobile Bay
Panama City
Apalachee Bay
Tarpon Springs
Station Order
29-26-41-39-38-40-33-32
36-37-35-31-30-28-25-27 -24
BLM Cruise No. 2
R/V Miss Freeport
Cruise Tract
30°
29°
28°
90°
86°
87°
86°
85°
84°
83°

STATE UNIVERSITY SYSTEM OF FLORIDA INSTITUTE OF OCEANOGRAPHY

CRUISE REPORT

R/V MISS FREEPORT

BLM 2 - LEG 1

16-18 May 1974

I. OBJECTIVES

Baseline boxcoring and camera survey of the MAFLA are of the eastern Gulf - sediments and benthic organisms - as outlined in BLM Contract No. 08550-CT4-11.

II. ACTUAL SCHEDULE

DATE May	TIME GMT	ACTIVITY
16	0010	Arrived at Station 1
	0342	Cherry-picker broke - departed Sta. 1 for Pascagoula, Miss.
	2250	Returned to Station 1, resumed coring
17	0107	Completed Station 1
	0425	Arrived Station 2
	0920	Completed Station 2
	1045	Arrived Station 3
	1925	Completed Station 3
	2105	Arrived Station 4
18	0315	Completed Station 4
	1330	Arrived Station 10
	1700	Completed Station 10
	1749	Arrived Station 9
	1849	Winch broke down
	1935	Departed Station 9 for Pascagoula, Miss.

III. STATION POSITIONS - Given in BLM-MAFLA Contract

Station No.	Photography	Completed 10 Box Cores	Processing With Following Exceptions:
1	X	X	X * Key Dominants, + Epoxy Peel
2	X	X	X * Key Dominants, + Epoxy Peel
3	X	X	X * Key Dominants, + Epoxy Peel
4	X	X	X * Key Dominants, + Epoxy Peel
10	X	X	X * Key Dominants, + Epoxy Peel
9	X	Only 2 cores	Only 2 cores processed

* Not enough fauna for archiving or analysis
+ Sediment structure unsuitable for peel

IV. PERSONNEL

Scientific Party:	
N. Blake, Chief Scientist	USF
S. Betzer	USF
D. Wallace	USF
C. Gluckman	USF
J. McCarthy	USF
T. Mayou	USF
B. Birdsall	USF
P. Bradin	USF
W. Bock	U. MIAMI
J. Behensky	U. MIAMI
J. Craft	FSU
D. Garlick	FSU
D. Savelle	FSU
M. Sand	FSU
S. Helwick	TAMU
B. Vittor	U. ALABAMA
Navigators:	
C. Taylor	LORAC
J. Smith	SUSIO

V. DESCRIPTION OF OPERATIONS

Bottom photography, box coring and processing of cores as described in BLM MAFLA contract.

VI. LOGS

Deck Log	SUSIO
Chief Scientist's Log	SUSIO
Dominant Macrofauna Log	Betzer-Blake, USF
Community Structure Log	Kritzler, FSU
Foram - Micromolluscs Log	Bock & Moore, Miami
Camera Log	Pyle, USF
Vane Shear, X-Ray Log	Doyle, USF
Sediment Descriptions	Doyle, USF
Navigation Log	LORAC and SUSIO

Submitted by: Norman J. Blake
University of South Florida

Approved by: _____
Murice O. Rinkel, Assistant Director
SUSIO

STATE UNIVERSITY SYSTEM OF FLORIDA INSTITUTE OF OCEANOGRAPHY

CRUISE REPORT

R/V MISS FREEPORT

BLM 2 - LEG II

May 23 - June 1, 1974

I. OBJECTIVES

Baseline boxcoring and camera survey of the MAFLA area of the eastern Gulf - sediment and benthic organisms as outlined in BLM Contract No. 08550-CT4-11.

II. ACTUAL SCHEDULE

DATE May	TIME GMT	ACTIVITY
23	0227	Station 9, Boxcores A,B,E,F,G,H,I,J taken successfully; bottom photos obtained.
24	1218	Station 7. All boxcores taken; bottom photos obtained. Depart 1500.
	1715	Station 5. All boxcores taken; bottom photos obtained. Depart 1920.
	2045	Station 6. All boxcores taken; bottom photos obtained. Depart 2300.
25	0030	Station 8. All boxcores and bottom photos taken. Depart 0300.
	2330	Station 11. All boxcores and bottom photos taken.
26	1200	Station 12. All boxcores and bottom photos taken. Cherry picker cable broke after bringing camera back on-board; departed for Pensacola with injured parties at 1530; arrived in Pensacola at 1830.
27	2010	Station 16. All boxcores and bottom photos taken.
28	2140	Station 13. All boxcores and bottom photos taken.
29	0300	Station 14. All boxcores and bottom photos taken. Depart 1420.
	1450	Station 15. All boxcore and bottom photos taken. Depart 1420.

II. ACTUAL SCHEDULE contd.

DATE May	TIME GMT	ACTIVITY
29	2220	Station 18. All boxcores and bottom photos taken. Location placed at 270 feet of depth. Depart 0230.
30	1230	Station 19. All boxcores and bottom photos taken. Depart 1555.
30	2000	Station 17. All boxcores and bottom photos taken.
30	2240	Station 20. All boxcores taken. Bottom camera failed, no photos obtained. Depart 0200.
31	0800	Station 21. All boxcores taken, no bottom photos taken. Depart 1525.
31	1630	Station 22. All boxcores taken, no bottom photos obtained. Depart 2035.
31	2150	Station 24. All boxcores and bottom photos taken. Depart 0135.
June 1	0215	Station 23. All boxcores and bottom photos taken. Depart 0520 for Panama City.

III. STATION POSITIONS

STATION NO.	TYPE	LAT. N.	LONG. W.	BOXCORE	BOTTOM PHOTO
5	C	29°55'30"	88°25'	X	X
6	M	29 58 30	88 21	X	X
7	M	29 56	88 15	X	X
8	C	30 01 30	88 12	X	X
9	M	29 53 30	88 12 30	(8 cores)	X
11	M	29 43 30	87 54 30	X	X
12	C	29 45 30	87 46 30	X	X
13	M	29 38 30	87 45	X	X
14	M	29 36	87 48	X	X
15	C	29 30 30	87 47	X	X
16	C	29 40 30	87 37	X	X
17	M	29 36 30	87 27	X	X
18	C	29 33	87 24	X	X
19	C	29 27	87 24 30	X	X
20	C	29 34	87 17 30	X	
21	C	29 59	86 23	X	
22	C	29 49 30	86 25 30	X	
23	M	29 56	86 18 30	X	X
24	M	29 51	86 18 30	X	X

IV. PERSONNEL

B. Vittor, Chief Scientist	UA
C. Gluckman	USF
J. McCarthy	USF
W. Hottman	TAMU
S. Powers	GCRL
J. Behensky	RSMAS
D. Savelle	FSU
D. Garlick	FSU
W. Bock	RSMAS
E. Eagleston	USF
P. Haley	RSMAS
S. Powers	GCRL
F. Ross	USF
P. Meyers	U of Michigan

V. DESCRIPTION OF OPERATIONS

Bottom photography, box coring and processing of cores as described in BLM MAFLA contract.

VI. LOGS

Chief Scientist log
Deck log
Camera log
Trace metal-Hydrocarbon-Histology log

Submitted by: B. A. Vittor
University of Alabama

Approved by: _____
Murice O. Rinkel
Assistant Director
SUSIO

CRUISE REPORT
R/V MISS FREEPORT
BLM 2 - LEG III
2-10 JUNE 1974

I. OBJECTIVES

Baseline boxcoring and camera survey of the MAFLA area of the eastern Gulf- sediments and benthic organisms - as outlined in BLM Contract No. 08550-CT4-11.

II. ACTUAL SCHEDULE

DATE June	TIME As listed in deck log	ACTIVITY
02		Arrived station 34
		Completed station 34
02		Arrived station 29
		Completed station 29
02		Arrived station 26
		Hydraulic ram broke, winch broke, box corer bent; departed station 26 for Panama City, Fla. for repairs
03 03		Returned to station 26
		Completed station 26
04		Arrived station 41
		Completed station 41 - hydraulic ram broke
04		Arrived station 39
		Bracket on corer broke, repaired at sea
		Completed station 39
04		Arrived station 38
		Completed station 38
04		Arrived station 40
		Completed station 40
05		Arrived station 33
		Completed station 333
05		Arrived station 32
		Completed station 32
05		Arrived station 36
		Completed station 36
05		Arrived station 37
		Completed station 37
06		Arrived station 35
		Lorac out: 1800-1845Z
		Completed station 35
06		Arrived station 31
		Completed station 31
06		Arrived station30
		Completed station 30
06		Arrived station 28
		Completed station 28
07		Arrived station 25
		Completed station 25

DATE June	TIME As listed in deck log	ACTIVITY
07		Arrived station 27 Completed station 27 - Departed station 27 for Carrabelle, Fla. to offload cores; repaired hydraulic ram
09		Arrived station 42 Completed station 42
09		Arrived station 46 - hydraulic ram broke Completed station 46
10		Arrived station 53 Completed station 53
10		Arrived station 47 Completed station 47
10		Arrived station 51 Completed station 51
10		Arrived station 54 Completed station 54 - cherry-picker broke - departed station 54 for St. Petersburg, Fla.

II. STATION POSITIONS - Given in BLM-MAFLA Contract

Station No.	Photography	Completed 11 Box Cores	Processing of cores With Following Exceptions:
34	x	x	x *Key Dominants
29	x	x	x *Key Dominants
26	x	x	x *Key Dominants
41	x	x	x *Key Dominants
39	x	x	x *Key Dominants
38	x	x	x *Key Dominants
40	x	x	x *Key Dominants
33	x	x	x *Key Dominants
32	x	Only 2 cores	Only 2 cores processed
36	x	x	x *Key Dominants
37	x	x	x *Key Dominants
35	x	x	x *Key Dominants
31	x	x	x *Key Dominants
30	x	x	x *Key Dominants
28	x	x	x *Key Dominants
25	x	x	x *Key Dominants
27	x	x	x *Key Dominants
42	x	x	x *Key Dominants
46	x	x	x *Key Dominants
53	x	x	x *Key Dominants
47	x	x	x *Key Dominants
51	x		Hard bottom, no cores or epoxy peels; 2 capetown dredges
54	x	Only 1 core	Hard bottom, no epoxy peel; 2 capetown dredges

* Not enough fauna for archiving or analysis

IV. PERSONNEL

Scientific Party	
S. Bock, Chief Scientist	UM
D. Moore	UM
P. Meyers	UMichigan
J. McCarthy	USF
P. Bradin	USF
D. Entsminger	FSU
C. Stiles	USF
J. Achee	USF
D. Garlick	FSU
D. Savelle	FSU
C. Berquist	FSU
M. Sand	FSU
P. Trabant	TAMU
A. Caruso	GCRL
W. Brehm	UAla
Navigators:	
J. Smith	SUSIO
LORAC Operator	LORAC

V. DESCRIPTION OF OPERATIONS

Bottom photography, box coring and processing of cores as described in BLM-MAFLA contract.

VI. LOGS

Deck Log	SUSIO
Chief Scientist's Log	SUSIO
Dominant Macrofauna Log	Betzer-Blake, USF
Community Structure Log	Kritzler, FSU
Foram-Micromolluscs Log	Bock & Moore, U. Miami
Camera Log	Pyle, USF
Sediment Descriptions	Doyle, USF
Vane Shear, X-ray Log	Doyle, USF
Navigation Log	LORAC & SUSIO

Submitted by: Wayne D. Bock
University of Miami

Approved by: _____
Murice O. Rinkel
Assistant Director
SUSIO

IV. PERSONNEL

Scientific Party:

W. Bock, Chief Scientist	U. Miami
D. Moore	U. Miami
P. Meyers	U. Michigan
J. McCarthy	USF
P. Bradin	USF
Blake Techician (Carol?)	USF
Graduate Student	USF
D. Garlick	FSU
D. Savelle	FSU
Graduate Student	FSU
Graduate Student	FSU
P. Trabant	TAMU
Graduate Student (Andy ?)	GCRL
Graduate Student	U. Alabama

Navigators:

LORAC Operator	LORAC
J. Smith	SUSIO

V. DESCRIPTION OF OPERATIONS

Bottom photography, box coring and processing of cores as described in BLM_MAFLA contract.

VI. LOGS

Deck Log	SUSIO
Chief Scientist's Log	SUSIO
Dominant Macrofauna Log	Betzer-Blake, USF
Community Structure Log	Kritzler, FSU
Foram-Micromolluscs Log	Bock & Moore, U. Miami
Camera Log	Pyle, USF
Sediment Descriptions	Doyle, USF
Vane Shear, X-ray Log	Doyle, USF
Navigation Log	LORAC & SUSIO

Submitted by: Wayne D. Bock
University of Miami

STATE UNIVERSITY SYSTEM OF FLORIDA INSTITUTE OF OCEANOGRAPHY

CRUISE REPORT

R/V MISS FREEPORT

BLM 2 - LEG IV

13-17 June 1974

I. OBJECTIVES

Baseline boxcoring and camera survey of the MAFLA area of the eastern Gulf - sediments and benthic organisms - as outlined in BLM Contract No. 08550-CT4-11.

II. ACTUAL SCHEDULE

DATE June	TIME GMT	ACTIVITY
13	1409	Station 65, all Boxcores complete. Bottom photos taken. Depart 1817
	1948*	Station 58, Five unsuccessful Boxcores, 2 capetown dredges completed. Bottom photos taken. Depart 2315
14	0030	Station 55, all Boxcores complete. Bottom photos taken. Depart 0400
	1130	Station 52, all Boxcores complete. Bottom photos taken. Depart 1435.
	1705	Station 48, all Boxcores complete. Bottom photos taken. Depart 1955.
	2030*	Station 43, two Boxcores complete. Two capetown dredges complete. Bottom photos taken. Depart 2345.
15	0145	Station 44, all Boxcores complete. Bottom photos taken.

II. ACTUAL SCHEDULE cont.

DATE June	TIME GMT	ACTIVITY
15	1445*	Station 49, two Boxcores complete. Two capetown dredges complete. Depart 1725.
	1750	Station 45, all Boxcores complete. Depart 2105.
	2125	Station 50, all Boxcores complete. Depart 0015
16	0400	Station 56, all Boxcores complete. Depart 1305.
	1327	Station 57, all Boxcores complete. Depart 1835.
	1915	Station 60, all Boxcores complete. Depart 2200.
	2300*	Station 59, Two Boxcores complete. Two capetown dredges complete. Depart 0040.
17	0110	Station 61, all Boxcores complete. Depart 0250
	0345	Station 62, all Boxcores complete. Depart 1105.
	1420	Station 64, all Boxcores complete. Depart 1628.

* Five boxcores were attempted unsuccessfully before securing boxcore operations.

III. STATION POSITIONS

STATION NO.	LAT. N.	LONG. W.	TYPE	CAPETOWN DREDGE	BOX-CORE	BOTTOM PHOTOGRAPHY
43	28°30'	84°28'	C	X	X	X
44	28 26 30"	84 23 30"	M		X	X
45	28 21	84 24	M		X	
48	28 29	84 21	M		X	X
49	28 24	84 21	M	X	X	
50	28 19	84 21	M		X	
52	28 14	84 17 30	C		X	X
55	27 56 30	83 53	C		X	X
56	28 00 30	83 45	M		X	
57	27 57 30	83 42 30	M		X	
58	27 48	83 41 30	C	X	X	X
59	27 55	83 39 30	M	X	X	
60	28 01	83 35 30	C		X	
61	27 52 30	83 34	M		X	
62	27 50	83 31	M		X	
64	27 50	83 25	M		X	
65	27 45 30	83 25 30	C		X	X

IV. PERSONNEL

N. Blake, Chief Scientist,	USF
D. Moore	UM
M. Sand	FSU
J. Achee	USF
S. Kraft	FSU
P. Trabant	TAMU
F. Idris	UM
A. Caruso	GCRL
P. Bradin	USF
E. Richardson	UM
D. Wallace	USF
J. McCarthy	USF
D. Savelle	FSU

V. DESCRIPTION OF OPERATIONS

Bottom photography, box coring and processing of cores as described in BLM MAFLA contract.

VI. LOGS

Deck Log
Chief Scientist's Log
Dominant Macrofauna Log
Community Structure Log
Foram-Micromolluscs Log
Camera Log
Vane Shear, X-Ray Log
Sediment Descriptions
Navigation Log

Submitted by: Norman J. Blake
University of South Florida

Approved by: _____
Murice O. Rinkel
Assistant Director
SUSIO

SECTION II

1975-76 SAMPLING SEASON

MAFLA AREA MONITORING

BLM CONTRACT NO. 08550-CT5-30

During the 1975-76 "Area Monitoring" certain of the sample station locations were changed along with the station designations.

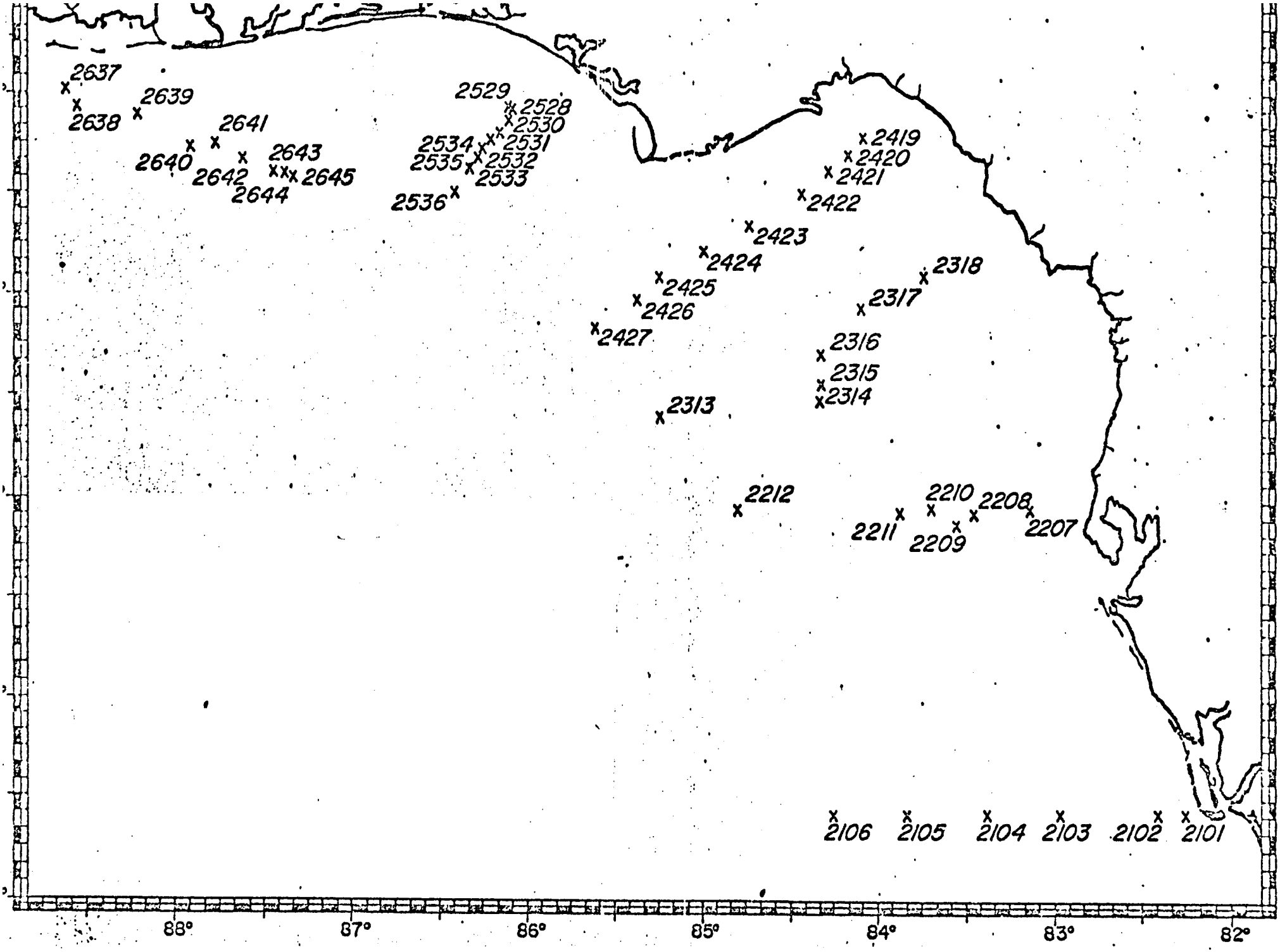
The designation was set up with a four digit code where the digits represent the following:

2 1 0 1

station number

transect number

indicates sampling method (box core)


2637
2639
2638
2641
2640
2643
2642
2645
2644
2529
2528
2530
2534
2531
2535
2532
2533
2536
2419
2420
2421
2422
2423
2424
2425
2426
2427
2318
2317
2316
2315
2314
2313
2212
2210
2208
2211
2209
2207
2106
2105
2104
2103
2102
2101
88°
87°
86°
85°
84°
83°
82°

TABLE

Identification of each box core by Cruise Number, Vessel Collection Period and Location

BLM NO. 10
R/V COLUMBUS ISELIN
27 May - 10 June 1975

	STATION OCCUPIED	LOCATION* LATITUDE	LONGITUDE
Station No.	2101	26.41668°N	82.25002°W
	2102	26.41673	82.41658
	2103	26.41652	82.96695
	2104	26.41666	83.38327
	2105	26.41661	83.83301
	2106	26.41632	84.25075
	2637	30.03405	88.61729
	2638	29.92532	88.55786
	2639	29.89107	88.20677
BOX NO. 1	2640	29.72534	87.90900
	2641	29.75964	87.77792
	2642	29.67466	87.61671
	2643	29.60677	87.45200
	2644	29.60290	87.39201
	2645	29.58356	87.33295
	2528	29.91655	86.08313
	2529	29.93314	86.10762
	2530	29.84985	86.10837
	2531	29.79978	86.15819
	2532	29.76628	86.20784
	2533	29.71648	86.25807
	2534	29.66639	86.28304
	2535	29.61636	86.33330
	2536	29.50040	86.41698
	2419	29.78298	84.08333
	2420	29.69955	84.18335
	2421	29.61635	84.28342
BOX NO. 2	2422	29.50006	84.45000
	2423	29.33335	84.73352
	2424	29.21669	84.99942
	2425	29.08292	85.25053
	2426	28.96591	85.38338
	2427	28.83333	85.61810
	2318	29.08311	83.75002
	2419	28.93336	84.10010

*LORAC

BLM NO. 10 (cont.)

	STATION OCCUPIED	LOCATION* LATITUDE	LONGITUDE	
	Station No. 2207	27.94984°N	83.15002°W	
	2208	27.93248	83.45892	
	2209	27.87512	83.56679	
	2210	27.95962	83.70741	
	2211	27.94144	83.88376	
BOX NO. 3	2212	27.95075	84.80042	
	2313	28.40121	85.24796	
	2314	28.48261	84.35017	
	2315	28.56744	84.33688	
	2316	28.70023	84.33350	
	2317	28.93386	84.10118	(2 cores)

*LORAC

STATE UNIVERSITY SYSTEM OF FLORIDA INSTITUTE OF OCEANOGRAPHY

CRUISE REPORT

BLM # 10 R/V COLUMBUS ISELIN (CI-7507)
27 May - 10 June 1975

I. OBJECTIVES ACCOMPLISHED

Collected box core samples from 34½ stations along five of six transects in the eastern Gulf of Mexico.

II. SCHEDULE

Date May	Time (local)	Activity
27	2230	Leave St. Petersburg
28	0030	Begin Transect AB
	0630	Arrive Calibration Point B
	0635	Leave Calibration Point B
	0849	Arrive C. Station 1
	1125	Leave Station 1
	1230	Arrive Station 2
	1402	Leave Station 2
	1640	Arrive Station 3
	1910	Leave Station 3
	2130	Arrive Station 4
		Deploy Buoy
29	0805	Leave Station 4
	1025	Arrive Station 5
	1302	Leave Station 5
	1520	Arrive Station 6
	1905	Leave Station 6
		Transect I Completed
		Begin Transect DA
30	0630	Arrive St. Petersburg Dock
	0800	Arrive Calibration Point A
		LORAC Network Not Operative
	1800	Leave Calibration Point A
	1900	Arrive St. Petersburg
31	0515	Leave St. Petersburg
	0715	Begin Transect AO
June		
1	1300	Arrive Calibration Point 0
		LORAC Receiver Missing Crystals for BC Network
	1430	Arrive Dock at Pascagoula, obtained Crystals for LORAC Receiver and Tape for SATNAV
	1630	Leave Pascagoula
	1741	Arrive Calibration Point 0

BLM # 10 R/V COLUMBUS ISELIN (CI-7507)
27 May - 10 June 1975

Date June	Time (local)	Activity
1	1745	Leave Calibration Point 0
	1900	Arrive Station 37
	2110	Leave Station 37
	2204	Arrive Station 38
	2350	Leave Station 38
2	0130	Arrive Station 39
	0313	Leave Station 39
	0453	Arrive Station 40
	0613	Leave Station 40
	0701	Arrive Station 41
	0910	Leave Station 41
	1345	Arrive Calibration Point N, Picked up LORAC Receiver
	1430	Leave Calibration Point N
	1902	Arrive Station 42
		Box Corer Arm Bent; Repaired on Board
3	0012	Leave Station 42
	0121	Arrive Station 43
	0324	Leave Station 43
	0358	Arrive Station 44
	0610	Leave Station 44
	0659	Arrive Station 45
	1000	Leave Station 45
		Completed Transect VI
	1305	LORAC Network Out, Heading for Panama City State 1 Tower to Recalibrate
	1755	Arrive Stage 1 Tower Checkpoint LORAC Network Still Out
	1945	LORAC Network Operative
	1950	Leave Stage 1 Checkpoint off Panama City
	2115	Arrive Station 28
	2254	Leave Station 28
	2337	Arrive Station 29
4	0055	Leave Station 29
	0212	Arrive Station 30
	0355	Leave Station 30
	0445	Arrive Station 31
	0615	Leave Station 31
	0645	Deployed Buoy
	1743	Began Station 32
		Arm On Box Corer Bent; Repaired on Board
	2010	Leave Station 32
	2130	Arrive Station 33, Buoy Dragged; Reanchored
	2315	Leave Station 33

BLM # 10 R/V COLUMBUS ISELIN (CI-7507)
27 May - 10 June 1975

Date June	Time (local)	Activity
5	0002	Arrive Station 34
	0225	Leave Station 34
	0245	Deployed Buoy
	0749	Begin Station 35
	1040	Leave Station 35
	1143	Arrive Station 36
	1520	Leave Station 36, Completed Transect V
	1840	Arrive Stage 1 Checkpoint Off Panama City
	1845	Begin Transect LK
6	0730	Arrive Carrabelle; Picked up Barrels for Macrofauna and Anchor Line for Buoys
	0943	Arrive Calibration Point K
	0955	Leave Calibration Point K, Begin Transect KI
	1309	Arrive Point I, Station 19
	1529	Leave Station 19; Tripping Arm Broken Off; Replaced
	1618	Arrive Station 20
	1722	Leave Station 20
	1821	Arrive Station 21 Arm on Box Corer Broken; Partially Repaired
	2345	Leave Station 21
7	0100	Deploy Buoy
	0523	Arrive Station 22 Additional Repairs Required on Box Corer
	0700	Leave Station 22
	0730	LORAC Network Out, Heading for Carrabelle to Recalibrate
	1805	LORAC Network Back On; Leave Point K
	2020	Arrive Station 23
	2205	Leave Station 23
	2352	Arrive Station 24 Buoy Drifted, Reanchored; More Repairs on Box Corer
8	0255	Leave Station 24
	0503	Arrive Station 25
	0640	Leave Station 25
	0740	Deploy Buoy
	1345	Begin Station 26 Buoy Drifted, Reanchored
	1548	Leave Station 26
	1720	Arrive Station 27 Winch Failed on Last Core; Core Brought in with Crane
	2100	Leave Station 27, Completed Transect IV Begin Transect JH

BLM # 10 R/V COLUMBUS ISELIN (CI-7507)
27 May - 10 June 1975

Date June	Time (local)	Activity
9	0548	Arrive Point H, Station 18 Winch Inoperable; Switched to Trawl Winch
	0912	Leave Station 18
	1113	Arrive Station 17 Arm on Box Corer Twisted on First Core; Repaired; Broken Again on Sixth Core; Metal on Arm Too Weak for Further Repairs; Cruise Terminated
	1500	Leave Station 17 Heading for St. Petersburg
10	0734	Arrive Calibration Point A
	0810	Arrive St. Petersburg

III. Personnel

W. Bock, Chief Scientist	UM
B. Birdsall	USF
D. Bishoff	USF
M. Crezee	UF
G. Gaston	UA
P. Gearing	GCRL
G. Hayward	USF
B. Henson	LORAC
G. Hower	SUSIO
F. Ross	USF
M. Sand	FSU
D. Savelle	FSU
R. Strickland	LORAC

IV. Description of Operations

Eleven box cores were taken at 34 stations and 6 at station 17 before the box corer was damaged beyond capability of repair at sea. It was found that the ship could be held more stationery over the bottom by holding position with the main engines and bow thruster than by riding at anchor and swinging on the anchor line, and since the deep anchoring capabilities of the vessel were lost with the loss of the winch anchor, the former method was employed at all stations subsequent to Transect I. The box cores were handled as follows:

1. Photographed and X-rayed.
2. Cored for chemical, geological and biological samples.
3. Sieved for removal of macroinvertebrates.

BLM # 10 R/V COLUMBUS ISELIN (CI-7507)
27 May - 10 June 1975

V. NAVIGATION

A. LORAC

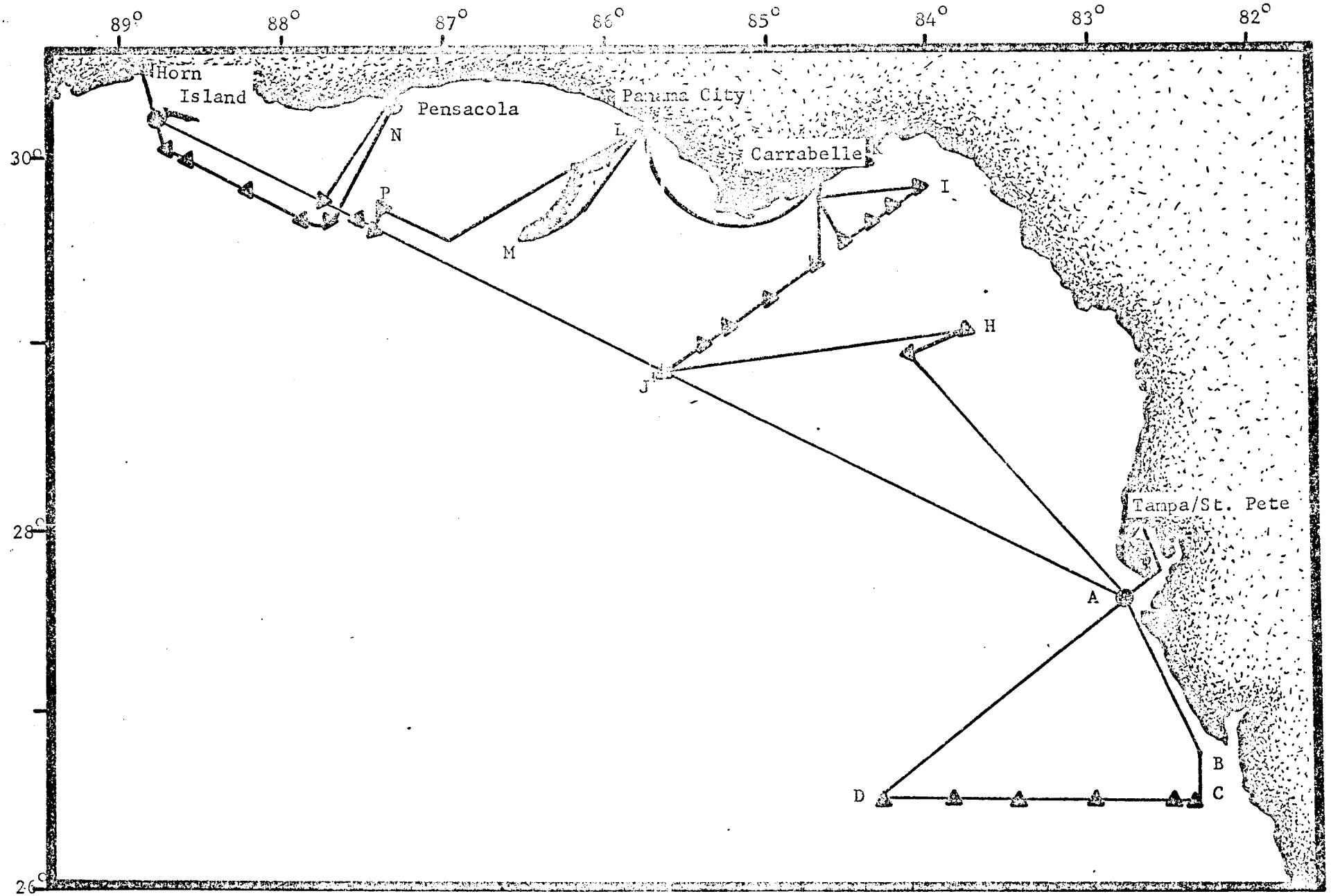
1. Navigation accuracy of ± 20 meters.
2. Buoy at every station.
3. Lighted buoy at every night station.

B. Satellite - rejected LORAC programs

VI. LOGS

Ship's Log	UM
Chief Scientist's Log	USF-SUSIO
LORAC Log	LORAC--SUSIO

Submitted by: Wayne D. Bock
June 10, 1975


89°
88°
87°
86°
85°
84°
83°
82°
30°
28°
26°
Horn Island
Pensacola
Panama City
Carrabelle
Tampa/St. Pete
A
B
C
D
H
I
J
K
L
M
N
P

TABLE

Identification of each box core by Cruise Number,
Vessel, Collection Period and Location

BLM NO. 21
R/V COLUMBUS ISELIN
12 - 29 September 1975

	STATION OCCUPIED	LOCATION* LATITUDE	LONGITUDE	
Station No.	2101	26°25.0' N	82°15.0' W	
	2102	26°25.0'	82°25.0'	
	2103	26°25.0'	82°58.0'	
	2104	26°25.0'	83°23.0'	
	2105	26°25.0'	83°50.0'	
	2106	26°25.0'	84°15.0'	
	2207	27°57.0'	83°09.0'	
	2208	27°56.0'	83°27.5'	
F.S.U. BOX NO. 1	2209	27°52.5'	83°34.0'	
	2210	27°57.5'	83°42.5'	
	2211	27°56.5'	83°53.0'	
	2212	27°57.0'	84°48.0'	
	2313	28°24.0'	85°15.1'	
	2314	28°29.0'	84°21.0'	*
	2315	28°34.0'	84°20.1'	
	2316	28°42.0'	84°20.0'	
	2317	28°56.0'	84°06.0'	
	2318	29°05.0'	84°45.0'	
	2419	29°47.0'	84°05.0'	
	2420	29°42.0'	84°11.0'	
	2421	29°37.0'	84°17.0'	
	2422	29°30.0'	84°27.0'	
	2423	29°20.0'	84°44.0'	
	2424	29°13.0'	85°00.0'	
	2425	29°05.0'	85°15.0'	
	2426	28°58.0'	85°23.0'	
F.S.U. BOX NO. 2	2427	28°50.0'	85°37.1'	
	2528	29°54.9'	86°05.0'	
	2529	29°56.0'	86°06.5'	
	2530	29°50.9'	86°06.4'	
	2531	29°48.0'	86°09.5'	
	2532	29°45.9'	86°12.3'	
	2533	29°42.9'	86°15.5'	
	2534	29°40.0'	86°17.0'	
	2535	29°37.0'	86°20.0'	
	2536	29°26.8'	86°13.3'	

*station not box cored.

BLM NO. 21 (cont.)

	STATION OCCUPIED	LOCATION LATITUDE	LONGITUDE
Station No.	2645	29°35.0' N	87°20.1' W
	2644	29°36.2'	87°23.5'
	2643	29°36.5'	87°27.0'
	2642	29°40.5'	87°37.0'
F.S.U. BOX NO. 3	2641	29°45.5'	87°46.5'
	2640	29°43.5'	87°54.5'
	2639	29°53.5'	88°12.5'
	2638	29°55.5'	88°33.5'
	2637	30°02.0'	88°37.0'

STATE UNIVERSITY SYSTEM OF FLORIDA INSTITUTE OF OCEANOGRAPHY

CRUISE REPORT

BLM #21 R/V COLUMBUS ISELIN (CI-7512)

12 September - 29 September 1975

I. OBJECTIVES:

To continue the seasonal, benthic sampling program along the previously established six transects extending outward across the MAFLA continental shelf.

II. ACTUAL SCHEDULE:

Date Sept.	Time Local	Activity
12	1800	Departed Miami
13	2015	Arrived at Boca Grande calibration point; problems with DECCA antenna
14	2207	Departed Boca Grande calibration point
15	0115	Began at Station 2101
	0253	Completed Station 2101
	0354	Began Station 2102
	0457	Completed Station 2102
	0815	Arrived Station 2103, deployed buoy
	1200	Began Station 2103
	1426	Completed Station 2103
	1643	Began Station 2104
	1832	Completed Station 2104
	2045	Arrived Station 2105
	2131	Began Station 2105
	2342	Completed Station 2105
16	0157	Began Station 2106
	0420	Completed Station 2106
	1230	Deployed navigation buoy
	1340	Deported navigation buoy after calibration
	1607	Began Station 2207
	1706	Completed Station 2207
	1850	Began Station 2208
	1948	Completed Station 2208
	2024	Arrived Station 2209
	2143	Began Station 2209
	2240	Completed Station 2209
	2338	Began Station 2210
17	0110	Completed Station 2210
	0212	Began Station 2211
	0350	Completed Station 2211
	0745	Lost DECCA lane count, returned to Station 2211 for calibration
	1120	Recalibrated at Station 2211
	1130	Underway to Station 2212
	1555	Began Station 2212
	1940	Completed Station 2212, standing by, DECCA failure
	2101	Departed Station 2212

Date	Time	Activity
18	0030	Returned to Station 2212; DECCA network off
	1115	Departed Station 2212
	1433	Began Station 2313
	1648	Completed Station 2313
	2105	Began Station 2314, hard bottom, completed 2 anchor dredges
	2240	Completed Station 2314
	2320	Began Station 2315
19	0045	Completed Station 2315
	0129	Began Station 2316
	0317	Completed Station 2316
	0504	Began Station 2317
	0902	Completed Station 2317
	1055	Began Station 2318
	1216	Completed Station 2318, stood by for DECCA to switch networks
	1300	Departed Station 2318
	1655	Began Station 2419
	1810	Completed Station 2419
	1934	Began Station 2420
	2104	Completed Station 2420
	2151	Deployed buoy at Station 2421
20	0758	Began Station 2421
	0846	Completed Station 2421
	0955	Began Station 2422
	1043	Completed Station 2422; en route to rendezvous with R/V TURSIOPS to pick up navigation buoys
	1230	Arrived at rendezvous point, stood by for R/V TURSIOPS' arrival
	1515	Transferred buoys from R/V TURSIOPS
	1530	Underway to Station 2423
	1835	Began Station 2423; winch problems caused corer to be stuck on bottom, winch repaired - corer damaged -switched to back-up corer, DECCA network down
	2213	Completed Station 2423 - DECCA network up
	2340	Returned to Station 2423; DECCA network down
21	0000	Departed Station 2423; DECCA network up
	0100	Deployed buoy at Station 2424
	0735	Began Station 2424
	0842	Completed Station 2424
	1011	Began Station 2425
	1110	Completed Station 2425, stood by DECCA down
	1120	Departed Station 2425, DECCA up
	1130	Returned to Station 2425, DECCA down
	1525	Departed Station 2425, DECCA up
	1642	Began Station 2426
	1933	Completed Station 2426
	2104	Began Station 2427
	2315	Completed Station 2427, stood by, sky wave interference
22	0030	Departed Station 2427
	0800	Calibrated at sea buoy off Cape San Blas
	0840	Headed SE out of path of hurricane Eloise- DECCA shore stations being dismantled
23	0300	Anchored in Tampa Bay
	0900	Arrived at St. Petersburg
24	0930	Departed St. Petersburg
25	0338	Calibrated on sea buoy off Cape San Blas

Date	Time	Activity
25	0720	Calibrated on sea buoy off Panama City
	0917	Began Station 2528
	1021	Completed Station 2528
	1103	Began Station 2529
	1235	Completed Station 2529
	1310	Began Station 2530
	1412	Completed Station 2530
	1452	Began Station 2531
	1558	Completed Station 2531
	1640	Began Station 2532
	1808	Completed Station 2532
	1825	Returned to Station 2532, DECCA down
	1847	Departed Station 2532, DECCA up
	1908	Returned to Station 2532, DECCA down
	2026	Departed Station 2532, DECCA up
	2103	Began Station 2533
	2240	Completed Station 2533
	2301	Began Station 2534
26	0115	Completed Station 2534
	0145	Deployed buoy at Station 2535
	0730	Began Station 2535
	0942	Completed Station 2535
	1045	Began Station 2536
	1500	Completed Station 2536
	1940	Began Station 2645
	2141	Completed Station 2645
	2228	Began Station 2644
27	0008	Completed Station 2644
	0035	Deployed buoy at Station 2643
	0729	Began Station 2643
	1000	Completed Station 2643
	1055	Began Station 2642
	1243	Completed Station 2642
	1343	Began Station 2641
	1445	Completed Station 2641
	1530	Began Station 2640
	1628	Completed Station 2640
	1710	DECCA calibration, departed Station 2640
	1852	Began Station 2639
	1951	Completed Station 2639
	2205	Began Station 2638
	2258	Completed Station 2638
	2353	Began Station 2637
28	0055	Completed Station 2637
	0124	Calibrated on NOAA buoy
29	0845	Arrived St. Petersburg

III. DESCRIPTION OF OPERATIONS:

Upon arrival at the station a buoy was deployed and its position rechecked for accuracy of positioning. Sea conditions permitting the ship was then placed on station with the stern to the seas.

If an acceptable core could not be obtained after two (2) attempts with the box core two samples were collected with the Sands anchor dredge. Once on deck all samples were processed immediately.

R/V COLUMBUS ISELIN CRUISE REPORT CONTINUED

III. DESCRIPTION OF OPERATIONS (continued)

Prior to departure from each station the buoys were recovered although, in those instances where the quality of the navigational signal, the location of the ship and atmospheric conditions warranted the buoy was left in place.

IV. NAVIGATION

All navigation was by the DECCA Hi fix system.

V. LOGS AND RECORDS

Ship's Log	UM
Chief Scientist's Log	USF-SUSIO
DECCA Log	DECCA-SUSIO

VI. TRANSFER OF SAMPLES

All samples were transferred in St. Petersburg, Florida to Dr. James E. Alexander.

VII. COMMENTS AND RECOMMENDATIONS

None

VIII. PERSONNEL AND UNIVERSITY AFFILIATION

W. Bock, Chief Scientist	UM
B. Birdsall	USF
D. Bishof	USF
M. Creeze	UF
M. Flandorfer	UM
K. Haddad	USF
G. Hower	SUSIO
S. Hughes	USF
P. Johnson	UA
M. Sand	FSU
D. Savelle	FSU
M. English	DECCA
W. Hudgins	DECCA

IX. EQUIPMENT

Equipment (all types and quantities) was similar to that present in the first seasonal sampling.

Submitted by: Wayne D. Bock
September 29, 1975

Approved by:_____
James E. Alexander
Program Manager

TABLE

Identification of each box core by Cruise Number, Vessel, Collection Period and Location

BLM NO. 29
R/V GYRE
15 January - 08 February 1976

	STATION OCCUPIED	LOCATION* LATITUDE	LONGITUDE
Station No.	2101	26°25.0' N	82°15.0' W
	2102	26°25.0'	82°25.0'
	2103	26°25.0'	82°58.0'
	2104	26°25.0'	83°23.0'
	2105	26°25.0'	83°50.0'
	2106	26°25.0'	84°15.0'
	2207	27°57.0'	83°09.0'
	2208	27°56.0'	83°27.6'
	2209	27°52.6'	83°34.0'
F.S.U. BOX NO. 1	2210	27°57.6'	83°42.5'
	2211	27°56.5'	83°53.0'
	2212	27°57.0'	84°48.0'
	2313**		
	2313R	28°24.1'	85°15.1'
	2314R	28°29.0'	84°21.0'
	2315**		
	2315R	28°34.0'	84°20.1'
	2316**		
	2316R	28°42.0'	84°20.0'
	2317**		
	2317R	28°56.0'	84°06.0'
	2318**		
	2318R	29°05.0'	83°45.0'
F.S.U. BOX NO. 2	2419**		
	2419R	29°47.0'	84°05.0'
	2420**		
	2420R	29°42.0'	84°11.0'
	2421R	29°37.0'	84°17.0'
	2422**		
	2423**		

*DECCA

**Station location not currently available.

	STATION OCCUPIED	LOCATION* LATITUDE	LONGITUDE
Station No.	2423R	29°20.0' N	84°44.0' W
	2424**		
	2424R	29°13.0'	85°00.0'
	2425**		
F.S.U. BOX NO. 2 (cont.)	2425R	29°05.0'	85°15.0'
	2426**		
	2426R	28°58.0'	85°23.0'
	2427**		
	2427R	28°50.0'	85°37.1'
	2528**		
	2528R	29°55.0'	86°05.0'
	2529**		
	2529R	29°56.0'	86°06.6'
	2530**		
	2530R	29°50.9'	86°06.5'
	2531**		
	2531R	29°48.0'	86°09.6'
F.S.U. BOX NO. 3	2532**		
	2532R	29°45.9'	86°12.4'
	2533**		
	2533R	29°42.9'	86°15.6'
	2534**		
	2534R	29°40.0'	86°17.0'
	2535**		
	2535R	29°37.0'	86°20.0'
	2536**		
	2536R	30°18.4'	86°12.0'
	2637	30°02.0'	88°37.0'
	2638	29°55.6'	88°33.5'
	2639	29°53.5'	88°12.5'
F.S.U. BOX NO. 4	2640	29°43.5'	87°54.5'
	2641	29°45.6'	87°46.5'
	2642	29°40.6'	87°37.0'
	2643	29°36.6'	87°26.9'
	2644	29°36.3'	87°23.6'
	2645	29°35.0'	87°20.1'

*DECCA

**Station location not currently available.

STATE UNIVERSITY SYSTEM OF FLORIDA
INSTITUTE OF OCEANOGRAPHY

CRUISE REPORT

R/V GYRE
BLM #29

15 January - 08 February 1976

I. OBJECTIVES:

A. To collect box core samples from 45 stations along six transects in the eastern Gulf of Mexico.

B. To collect epibenthic samples using an anchor dredge where the box core will not sample.

II. SCHEDULE:

DATE	TIME(EST)	ACTIVITY
15 Jan.	1535	Depart Pascagoula
	2200	Arrive calibration point at South Pass of Missippi Delta
	2320	Depart calibration point
16 Jan.	0400	Arrive station 2637; deployed buoy
	0730	Began station 2637
	1043	Completed station 2637
	1243	Arrive station 2638
	1530	Completed station 2638; DECCA shore station down, standing by
	1742	DECCA shore station operative
	1746	Depart station 2638
	1930	Deployed buoy at station 2639
	1955	Checked position of buoy; operations suspended due to rough seas; heading north for sheltered waters
	2300	Checked DECCA lane count on sea buoy outside Mobile Harbor
	2330	Anchored in lee of Horn Island
17 Jan.		Rode out rough seas
18 Jan.	0245	Weighed anchor
	0315	Checked DECCA lane count on sea buoy
	0736	Arrive station 2639
	0909	Completed station 2639
	1128	Arrive station 2640; buoy mast broke, launched 2nd buoy, buoy drifted, reset buoy
	1417	Completed station 2640
	1530	Arrive station 2641
	1645	Completed station 2641
	1831	Arrive station 2642
	1929	Completed station 2642
	2042	Arrive station 2643
	2240	Completed station 2643; DECCA lost lane count, returned to station 2641 buoy to calibrate
19 Jan.	0355	Reoccupied station 2643; reran station
	0535	Completed station 2643; standing by, bad sky waves
	0905	Depart station 2643
	0927	Arrive station 2644
	1148	Completed station 2644
	1230	Arrive station 2645
	1506	Completed station 2645; DECCA may have lost lane count, heading back to buoy at station 2643 for DECCA lane check

DATE	TIME (EST)	ACTIVITY
19 Jan.	1545	Checked lane count at station 2643 buoy; O.K.
	1635	Checked position of buoy at 2645; O.K.
	2220	Deployed navigation buoy between 2645 and 2536; first buoy sank; set 2nd buoy
20 Jan.	0030	DECCA position for station 2536 30 fathoms and 12 miles off; replotted position; wrong coordinates given DECCA operators
	0235	Arrive station 2536; buoy deployed 250 feet off; reset; still off; reset again; lost buoy anchor; rigged and launched another buoy; buoy sank; lost DECCA shore station before another buoy could be deployed
	0330	Heading back to navigation buoy to calibrate
	0515	Arrived vicinity of navigation buoy; buoy gone; heading for Panama City sea buoy to calibrate
	1130	Arrive at sea buoy off Panama City for DECCA calibration
	1140	Depart Panama City sea buoy
	1347	Arrive station 2528
	1451	Completed station 2528
	1522	Arrive station 2529
	1612	Completed station 2529
	1713	Arrive station 2530
	1828	Completed station 2530
	1918	Arrive station 2531
	2022	Completed station 2531
	2103	Arrive station 2532; port engine down 15 min. for repair
	2220	Completed station 2532
	2303	Arrive station 2533
21 Jan.	0016	Completed station 2533
	0100	Arrive station 2534
	0225	Completed station 2534
	0307	Arrive station 2535; reset buoy twice; current too strong for precision placement of buoys
	0711	Completed station 2535
	0855	Arrive station 2536; buoy sank, another buoy deployed
	1121	Completed station 2536
	1830	Rigged and launched navigation buoy; bad sky waves, standing by
	2130	Depart navigation buoy
	2250	Arrive station 2427; launched buoy
	2257	DECCA lost lane count, returning to navigation buoy
22 Jan.	0143	Rechecked lane count on navigation buoy
	0241	Reset buoy at station 2427
	0415	Completed station 2427, sky waves bad, returning to navigation buoy for calibration
	0740	Calibrated on navigation buoy, standing by for sky waves to improve
	1008	Arrive station 2426, DECCA lane count off after completion of station
	1328	Depart station 2426
	1456	Arrive station 2425
	1557	Completed station 2425
	1800	Arrive station 2424, launched 2 buoys
	2024	Completed station 2424, stood by for DECCA to repair recorder
	2100	Depart station 2424
	2250	Arrive station 2423

DATE	TIME (EST)	ACTIVITY
23 Jan.	0035	Completed station 2423, stood by, bad sky waves, DECCA repaired
	0110	Depart station 2423
	0333	Arrive station 2422
	0434	Completed station 2422
	0600	Arrive station 2421, tried 4 box cores, maximum recovery 4 cm, rigged anchor dredge, obtained 1 dredge, lost dredge on 2nd cast
	0922	Depart station 2421
	1023	Arrive station 2420
	1103	Completed station 2420
	1154	Arrive station 2419
	1251	Completed station 2419, stood by for DECCA network change
	1320	Depart station 2419
	1740	Arrive station 2318
	1823	Completed station 2318
	2042	Arrive station 2317
	2206	Completed station 2317
24 Jan.	0022	Arrive station 2316
	0117	Completed station 2316
	0218	Arrive station 2315
	0321	Completed station 2315
	0350	Arrive station 2314, depth discrepancy of 43 feet from Sept. cruise; since previous cruises proved this to be a dredge station we bypassed it and proceeded to station 2313; recheck of DECCA lane counts since calibration on Panama City sea buoy showed no loss in lane counts
	1107	Arrive station 2313, 22 foot depth discrepancy from Sept. cruise
	1345	Completed station 2313, stood by for contact with DECCA Houston office for calibration possibilities; LORAN and LAN fixes gave 7 mile position error
	1450	Depart station 2313 after DECCA network change, heading for Egmont sea buoy for calibration
25 Jan.	0110	Launched navigation buoy, bad sky waves
	0300	Arrive Egmont Key sea buoy; obtained DECCA reading on sea buoy, stood by, bad sky waves
	0815	Calibrated on Egmont sea buoy using data from Houston office
	0852	Depart Egmont sea buoy, headed for buoy #2 for DECCA check
	0910	DECCA reading on buoy #2
	1030	Calibration at Egmont sea buoy no good, headed for Boca Grande
	1700	Calibrated on range markers at Gasparilla
	1730	Depart calibration point
	1817	Obtained lane count on Boca Grande sea buoy
	1915	Rendezvous with Dr. Alexander who obtained DECCA tapes for check on positions of all stations in transects III, IV and V
	1937	Depart Boca Grande sea buoy
	2130	Arrive station 2101
	2210	Completed station 2101
	2314	Arrive station 2102

DATE	TIME (EST)	ACTIVITY
26 Jan.	0003	Completed station 2102, stood by, bad sky waves
	0048	Depart station 2102
	0356	Arrive station 2103
	0542	Completed station 2103, stood by, bad sky waves
	0930	Depart station 2103
	1200	Arrive station 2104
	1314	Completed station 2104
	1538	Arrive station 2105
	1738	Completed station 2105
	2104	Arrive station 2106
	2333	Completed station 2106, headed for St. Petersburg for resupply of scientific equipment
27 Jan.	0922	DECCA land count on Egmont sea buoy
	1108	Tried for DECCA lane count on forward range light cut "A", unable to approach, not enough water
	1131	DECCA lane count on St. Petersburg channel marker #2
	1221	Arrive St. Petersburg dock, all stations in transects III, IV and V to be rerun
28 Jan.	1433	Depart St. Petersburg
29 Jan.	0000	Arrive station 2207
	0123	Completed station 2207
	0321	Arrive station 2208
	0434	Completed station 2208
	0536	Arrive station 2209
	0640	Completed station 2209
	0803	Arrive station 2210
	0937	Completed station 2210
	1055	Arrive station 2211
	1158	Completed station 2211
	1709	Arrive station 2212
	1934	Completed station 2212, stood by, bad sky waves
30 Jan.	0811	DECCA lane count at station 2212 may be off, headed for station 2211 for lane count on buoy left there
	1255	Arrive at buoy at station 2211, DECCA lane count checked out
	1305	Depart station 2211 for station 2313
	1825	Launched navigation buoy, bad sky waves, stood by
31 Jan.	0753	Depart navigation buoy
	1027	Arrive station 2313
	1450	Completed station 2313
	1827	Launched navigation buoy, stood by, bad sky waves
01 Feb.	0800	Sky wave still bad, seas too rough to work
	1400	Navigation buoy blew loose from anchor, sustained 30-40 knot winds and 25 foot seas
	1800	Headed for Egmont sea buoy to calibrate and ride out rough seas
02 Feb.	1100	Arrive St. Petersburg to replace buoy anchor weights and a barrel which washed overboard and to repair winch
	1800	Depart St. Petersburg
	2030	Calibrated on Egmont sea buoy
03 Feb.	0709	Arrive station 2314, 49' depth discrepancy from Sept. DECCA positioning
	0935	Completed station 2314

DATE	TIME (EST)	ACTIVITY
03 Feb.	1026	Arrive station 2315
	1235	Completed station 2315
	1336	Arrive station 2316
	1455	Completed station 2316
	1648	Arrive station 2317
	1833	Completed station 2317, stood by for DECCA network change
	1850	Depart station 2317
	2108	Arrive station 2318
	2208	Completed station 2318
04 Feb.	0232	Arrive station 2419
	0322	Completed station 2419
	0400	Returned to station 2419, DECCA recorder with burned out transformer, stood by to see if backup recorder operative or if new recorders could be delivered, backup recorder
	0600	inoperative
05 Feb.	0645	Checked DECCA lane count on buoy at 2419
	0640	Depart station 2419
	0718	Arrive sea buoy "26" off Alligator Harbor for rendezvous with DECCA with replacement recorders
	0915	Rendezvous with boat with DECCA recorders
	0930	Underway to station 2419 for calibration
	1000	DECCA lane count on buoy "26"
	1129	Calibrated at station 2419
	1224	Arrive station 2420
	1305	Completed station 2420
	1400	Arrive station 2421
	1437	Completed station 2421, stood by for DECCA network change
	1448	Depart station 2421
	1607	Arrive station 2422; anchor dredge after only 2 successful cores in 9 attempts
	1807	Completed station 2422
	2011	Arrive station 2423
	2107	Completed station 2423
	2247	Arrive station 2424, 7 foot depth discrepancy from Sept. cruise
	2347	Completed station 2424
06 Feb.	0149	Arrive station 2425
	0256	Completed station 2425
	0444	Arrive station 2426
	0625	Completed station 2426
	0830	Arrive station 2427
	1103	Completed station 2427; stood by for DECCA network change
	1135	Depart station 2427
	1700	Arrive station 2536; 34 foot depth discrepancy, 1 mile off plotted position by LORAN fix; headed for stage 1 Navy platform to calibrate
	1730	Depart station 2536
	2115	Arrive stage 1; DECCA calibration OK
	2145	Depart stage 1
	2309	Arrive station 2528
07 Feb.	0055	Completed station 2528; stood by for DECCA to change tape
	0117	Depart station 2528
	0144	Arrive station 2529
	0313	Completed station 2529

DATE	TIME (EST)	ACTIVITY
07 Feb.	0439	Arrive station 2530, reset buoy
	0628	Completed station 2530
	0700	Arrive station 2531; deployed buoy, stood by due to rough seas
	1437	Began station 2531
	1552	Completed station 2531
	1638	Arrive station 2532
	1748	Completed station 2532
	1855	Arrive station 2533
	2000	Completed station 2533
	2042	Arrive station 2534; stood by for repair of hydraulic line on A-frame
	2335	Completed station 2534
08 Feb.	0008	Arrive station 2535
	0212	Completed station 2535
	0312	Arrive station 2536; 34 foot depth discrepancy from DECCA position on Sept. cruise, buoy line cut by prop, reset
	0503	Completed station 2536
	1015	Calibrated on stage 1
	1111	Lane count on Panama City sea buoy
	1200	Arrive Panama City

III. PERSONNEL:

LEG I - Pascagoula - St. Petersburg

W. Bock, Chief Scientist	UM
G. Babashoff	UM
J. Behensky	UM
G. Gaston	UA
G. Hower	SUSIO
B. Hunter	UH
D. Bishof	USF
N. Blake	USF
B. Birdsall	USF
D. Szidlick	USF
M. Crezee	UF
S. Huse	USF
D. Savelle	FSU
S. Bond	GCRL
J. Webb	DECCA
F. Settle	DECCA

LEG II - St. Petersburg - Panama City

W. Bock, Chief Scientist	UM
G. Babashoff	UM
J. Behensky	UM
G. Hower	SUSIO
J. Schneidmuller	SUSIO
B. Hunter	UH
G. Gaston	UA
D. Borsay	USF
D. Bode	USF
M. Crezee	UF
S. Huse	USF
D. Savelle	FSU
S. Bond	GCRL
J. Webb	DECCA

IV. DESCRIPTION OF OPERATIONS:

A. Box Coring

Over the stern, maximum depth 200 meters, 10 cores at each station (11 at designated stations). Specifically, box cores will be handled as follows:

1. Photographed and x-rayed
2. Cored for chemical, geological and biological samples
3. Sieved for removal of macroinvertebrates

B. Anchor Dredging

Over the stern, 5 min. tow at 2 knots. Only those stations where the box core will not sample.

V. NAVIGATION:

DECCA - 2 technicians

1. Navigation accuracy $\pm$ 30 meters
2. Buoy at every station
3. Lighted buoys every night

VI. LOGS:

Ship's Log	TAMU
Chief Scientist's Log	UM-SUSIO
DECCA Log	DECCA-SUSIO

Submitted by Wayne D. Bock
February 8, 1976

Approved by: James E. Alexander
James E. Alexander
Program Manager

SECTION III

1975-76 SAMPLING SEASON

RIG MONITORING

BLM CONTRACT NO. 08550-CT5-30

The 1975-76 "Rig Monitoring" effort took place off of Mustang Island, Texas. The rig site was sampled during three phases, pre- during- and post drilling.

The sampling pattern (see diagram on preceding page) was laid out in the form of a wheel with eight spokes with the drill site as the hub. Two of the spokes were oriented parallel to the bottom isobath and two of the other spokes were oriented perpendicular to these. The remaining four intersected each established quadrant at an angle of 45° thereby resulting in eight radii (spokes).

One sampling point was established at the proposed drill site and additional points at 100, 500, and 1,000 meters from the site along each spoke, thus producing twenty-five (25) sampling points (24 in the "during" phase).

A total of three (3) cores (one for foraminiferal analysis, one for standard sediment analysis, one for clay mineralogy) were collected by divers at each of the stations. The cores were marked using an 8 digit code where the digits represent the following:

5 5 1 3 0 1 A 1

core code*

dive no.

station no.

circle no. - 1= 100m; 5= 500m; 9= 1000m

indicates sampling method (diver)

* Core codes A 1 thru A 9 represent the following:

A 1, A 4, A 7 - Standard Sediment

A 2, A 5, A 8 - Clay Mineralogy

A 3, A 6, A 9 - Foraminiferal

TABLE NO.

Identification of each box core by Cruise Number, Ship, Collection Period and Location

BLM No. 24
R/V BELLOWS
20 November - 4 December 1975

STATION NO.	CORE NO.	LATITUDE	LONGITUDE
001	500102 A 1, A 2, A 3	27°37'13.40"	96°57'55.13"
102	510201 A 1, A 2, A 3	27°37'16.34"	96°57'52.96"
103	510301 A 1, A 2, A 3	27°37'14.55"	96°57'51.59"
104	510401 A 1, A 2, A 3	27°37'11.96"	96°57'52.06"
105	510501 A 1, A 2, A 3	27°37'10.70"	96°57' 54.50"
106	510601 A 1, A 2, A 3	27°37'11.03"	96°57' 57.09"
107	510701 A 1, A 2, A 3	27°37'13.19"	96°57'58.85"
108	510801 A 1, A 2, A 3	27°37'15.65"	96°57'57.98"
109	510901 A 1, A 2, A 3	27°37'17.04"	96°57'55.73"
510	551001 A 1, A 2, A 3	27°37'27.34"	96°57'45.30"
511	551101 A 1, A 2, A 3	27°37'17.10"	96°57'37.37"
512	551201 A 1, A 2, A 3	27°37'04.82"	96°57'40.17"
513	551301 A 1, A 2, A 3	27°36'57.87"	96°57'51.48"
514	551401 A 1, A 2, A 3	27°37'00.48"	96°58'05.52"
515	551501 A 1, A 2, A 3	27°37'10.77"	96°58'13.11"
516	551601 A 1, A 2, A 3	27°37'22.58"	96°58'10.49"
517	551701 A 1, A 2, A 3	27°37'29.85"	96°57'58.81"
918	591801 A 1, A 2, A 3	27°37'40.78"	96°57'35.22"
919	591901 A 1, A 2, A 3	27°37'20.18"	96°57'19.27"
920	592001 A 1, A 2, A 3	27°36'55.94"	96°57'25.07"
921	592101 A 1, A 2, A 3	27°36'42.07"	96°57'48.01"
922	592201 A 1, A 2, A 3	27°36'47.00"	96°58"15.54"
923	592301 A 1, A 2, A 3	27°37'07.52"	96°58'31.14"
924	592401 A 1, A 2, A 3	27°37'31.77"	96°58'25.70"
925	592501 A 1, A 2, A 3	27°37'45.65"	96°58'02.28"

CRUISE REPORT

R/V BELLOWS - B7517
BLM Cruise #24
20 November - 4 December, 1975

I. OBJECTIVES:

For the Rig Monitoring effort it was proposed that this cruise would accomplish the following objectives:

A. Make in situ one meter grid surveys of epibenthic flora and fauna using color photography (35 mm) with at least ten (10) photographs taken in each grid.

B. Collect surface sediment at each station for hydrocarbon and trace metal analysis.

C. Collect macroepifauna for chemical and histopathological analysis by participation institution.

D. Collect gravity (or dart) cores from each station for foraminifera standard sediment parameter and clay mineralogy analysis by the participating institutions.

It was proposed that all of these operation would be conducted prior to the emplacement of the drilling rig.

II. Actual SCHEDULE:

Date	Local Time	Activity	Location
20 Nov.	1500	Scientific party arrived at dockside, R/V Bellows	Port Aransas
	1600-2030	Take on fuel, water, make up vessel for operations	Port Aransas
21 Nov.	All day	Bad weather: laying to	Port Aransas
22 Nov.	0720	ABANDON ShIP and Fire Drill	Port Aransas
	0725	Depart Dockside	
	0855	Seas too heavy: turn back	
	1018	Dockside**	Port Aransas
23 Nov.	0739	Depart dockside for site	Port Aransas
	0834	1st Calibration Hifix	OPC-MU-749L-1

** We did not see small craft warnings which were displayed

Date	Local Time	Activity	Location
23 Nov.	0846	2nd Calibration with Hifix	on OPC-MU-749L-1
	0853	Lane Count on NW Corner OPL-MU-749L-1	PI 1091.49 PII 305.02
	0854	Underway to site	
	0959	Deploy station buoy X001-1	see 1018 entry
	1003	X001-2	see 1018 entry
	1007	X001-3	see 1018 entry
	1012	X001-4	see 1018 entry
	1018	Deploy Calibration buoy (X001)	PI 1045.01 PII 468.53
	1030	Retrieve station buoys & launch Whaler	PI 1045.01 PII 468.53
	1201	Divers in on X001	
	1217	Divers on surface-Visibility one meter	
	1230	Begin experimental coring	
	1300	Secure experimental coring: decision made to take all "cores" horizontally by diving; visibility to greatly reduced for photography.	X001
	1454	Divers in on X001	
	1515	Divers on surface with samples	X001
	1540	Lane count on Calibration buoy(X001)	PI 1044.73 PII 468.65
	1542	Underway to X918	
	1549	Deploy Station Buoy	Vicinity X918
	1555	Deploy Dive Buoy (X918)	PI 1054.62 PII 461.22
	1623	Divers in on X918	
	1638	Divers on surface with samples at X918	
	1722	Lane count on Dive Buoy(X918) & retrieve	PI 1054.27 PII 461.49
	1733	Lane Count on Calibration Buoy	PI 1044.76 PII 468.72
	1736	Anchor for night	at X001
	1923	Progress report to J. Alexander	
24 Nov.	0715	Weigh Anchor	X001
	0724	Anchor on board	
	0727	Lane count on Calibration Buoy	PI 1044.65 PII 468.61
	0728	Underway to deploy station buoys	
	0738	Turn outside X918 on reciprocal	
	0740	Deploy station buoy X510	Vicinity X510
	0743	Deploy station X102	Vicinity X102
	0745	Deploy station X106	Vicinity X106
	0747	Deploy station X514	Vicinity X514
	0750	Deploy station X922	Vicinity X922

Date	Local Time	Activity	Location
24 Nov.	0752	Turn on reciprocal to X510	Vicinity X922
	0806	Deploy Boston Whaler	X510
	0820	Deploy Dive Buoy X510 & retrieve station buoy	PI 1049.81 PII 464.76
	0857	Divers in water on X510	X510
	0900	Dive ladder lost over-board	
	0909	Divers on surface with samples	X510
	1008	Divers in water for ladder search	Vicinity X510
	1019	Divers on surface-ladder not found	Vicinity X510
	1030	Commence dragging for ladder	Vicinity X510
	1110	Secure dragging operations ladder not found	Vicinity X510
	1111	Lane count on Dive Buoy X510 & retrieve	PI 1049.44 PII 464.67
	1135	Deploy Dive Buoy X102 & retrieve station buoy X102	PI 1046.05 PII 467.74
	1154	Divers in water on X102	X102
	1215	Divers on surface with samples at X102	X102
	1238	Lane count on Dive Buoy X102 & retrieve	PI 1045.88 PII 467.67
	1240	Underway to X106	
	1242	Deploy Dive Buoy X106 & retrieve station buoy	PI 1044.11 PII 469.15
	1310	Divers in water on X106	X106
	1331	Divers on surface with samples; insufficient hydrocarbon sample	X106
	1350	Divers return for sample	X106
	1354	Divers on surface with samples	X106
	1408	Lane count on Dive Buoy X106 & retrieve	PI 1043.85 PII 469.06
	1415	Commence retrieval of Whaler & station buoys	X106
	1433	Underway to Calibration Buoy X001	
	1439	Lane count on Calibration Buoy & retrieve X001	PI 1044.99 PII 468.35
	1441	Underway to OPC-MU-749L-1	
	1525	Placed call via VHF (26) to Alexander's house-not home	
	1542	Lane count NW corner OPC-MU-749L-1	PI 1091.47 PII 305.10
	1640	Dockside & secure	Port Aransas

Date	Local time	Activity	Location
25 Nov.	0650	Depart dockside; sky clear; sea moderate	Port Aransas
	0740	Lane count NW corner OPL-MU-749L-1	PI 1091.54 PII 305.11
	0741	Underway to rig site	
	0835	Deploy station buoy X001	X001
	0841	Deploy Calibration Buoy X001 & retrieve station buoy	PI 1044.88 PII 468.37
	0847	Underway to X514	
	0850	Deploy station buoy X514	X514
	0857	Deploy station buoy X922	X922
	0905	Deploy station buoy X921	X921
	0908	Deploy station buoy X513	X513
	0912	Deploy station Buoy X105	X105
	0919	Deploy Dive buoy X514; retrieve station buoy; deploy Whaler	PI 1040.20 PII 471.95
	0940	Progress report to T. White, SUSIO(BLM)	
	0959	Divers in water on X514	X514
	1013	Divers on surface at X514; sample secure	X514
	1029	Lane count on Dive Buoy X514 & retrieve	PI 1040.27 PII 471.92
	1031	Underway to Station Buoy X922	
	1040	Deploy Dive Buoy X922 & retrieve station buoy	PI 1035.43 PII 475.63
	1058	Divers in water on X922	X922
	1113	Divers on surface at X922; one core short	X922
	1136	Divers in water on X922	
	1141	Divers on surface; all samples secure	
	1159	Lane count on X922; retrieve dive buoy	PI 1035.39 PII 475.63
	1204	Underway to X921	
	1212	Deploy Dive Buoy X921 & retrieve station buoy	PI 1042.69 PII 479.74
	1227	Divers in water at X921	X921
	1241	Divers up on X921; sample secure	X921
	1300	Lane count on X921 & retrieve dive buoy	PI 1042.64 PII 479.74
	1317	Deploy Dive Buoy X513 & retrieve station buoy	PI 1043.88 PII 474.10
	1418	Divers in water on X513	
	1432	Divers on surface at X513; Samples secure	X513
	1445	Lane count on Dive Buoy X513 & retrieve buoy	PI 1044.99 PII 474.00

Date	Local time	Activity	Location
25 Nov	1448	Underway to X105	
	1451	Deploy Dive Buoy X105 & retreive station buoy	PI 1044.81 PII 469.50
	1515	Divers in water at X105	X105
	1532	Divers on surface at X105; sample secure	X105
	1604	Lane count on X105 & retrieve buoy	PI 1044.88 PII 469.62
	1607	Underway to Calibration buoy X001	
	1612	Lane count on Calibration buoy & retrieve	PI 1045.18 PII 468.36
	1616	Underway to OPC-MU-749L-1; Whaler in tow; Seas 3-5'; wind south 18-20 kts.	
	1713	Lane count on OPC-MU-749L-1; underway	PI 1091.51 PII 305.10
	1812	Dockside & secure	Port Aransas
26 Nov.	All day	Lay to; small craft warings up	
27 Nov	0730	Decca not operation properly; dockside	Port Aransas
	0920	Decca stable & operative	
	0930	Depart dockside	Port Aransas
	1020	Lane count on NW corner OPC-MU-749L-1	PI 1091.87 PII 305.15
	1021	Underway to rig site	
	1119	Deploy station buoy X001-1	
	1121	Deploy station buoy X001-2	
	1138	Deploy Calibration Buoy X001	PI 1044.97 PII 468.47
	1141	Retrieve station buoys X001-1 & X001-2	
	1145	Underway to X925	
	1200	Deploy Station Buoy X925	Vicinity X925
	1203	Deploy Station Buoy X517	Vicinity X517
	1207	Deploy Station Buoy X109	Vicinity X109
	1208	Return to X001 for lane count	X109
	1212	Lane count on Calibration Buoy X001	PI 1044.72 PII 468.60
	1213	Underway to X925	
	1220	Deploy Dive buoy X925 & retrieve station buoy	PI 1047.57 PII 457.01
	1253	Deploy Whaler	X925
	1324	Divers in water for Photo & Sample	X925
	1339	Divers on surface; sample secure; visibility less than 10cm.	X925
	1355	Lane count on Dive Buoy X925 & retrieve station buoy	PI 1047.51 PII 457.02

Date	Local Time	Activity	Location
27 Nov.	1403	Deploy Dive Buoy X517 & retrieve station buoy	PI 1046.29 PII 462.65
	1420	Divers in water on X517	X517
	1441	Divers on surface at X517 sample secure	X517
	1456	Lane count on Dive Buoy X517 & retrieve	PI 1046.36 PII 462.71
	1459	Underway to X109; seas 3-4 wind SE, 15-20 kts, lost Decca signals; continue to premarked site at X109	
	1502	Deploy Dive Buoy at premarked site X109	PI 1045.35 PII 467.25
	1516	Divers in water on X109	X109
	1534	Divers on surface with samples	X109
	1602		
	1602	Lane count on Dive Buoy X109 & retrieve	PI 1044.88 PII 467.71
	1612	Lane count on Calibration Buoy & retrieve	PI 1044.82 PII 468.32
	1620	Underway to OPC-MU-749L-1 with Whaler in tow	
	1718	Lane count on OPC-MU-749L-1 (NW corner)	PI 1091.32 PII 305.02
	1719	Underway to dockside	
	1810	Pick up and stow Whaler	Port Aransas
	1819	Dockside & secure	Port Aransas
28 Nov.	0622	Depart Dockside	Port Aransas
	0712	At OPC-MU-749L-1 for Calibration	
	0720	Lane Count NW corner OPC-MU-749L-1	PI 1091.34 PII 305.05
	0721	Underway to rig site	
	0820	Deploy Calibration Buoy at X001	PI 1044.90 PII 468.40
	0821	Underway to X920	
	0827	Deploy Station Buoy X920	Vicinity X920
	0834	Deploy Station Buoy X104	Vicinity X104
	0836	Deploy Station Buoy X108	Vicinity X108
	0840	Deploy Station Buoy X924	Vicinity X924
	0845	Deploy Station Buoy X516	Vicinity X516
	0851	Deploy Dive Buoy X924 & retrieve station buoy	PI 1038.86 PII 459.59
	0855	Deploy Whaler; rig vessel for diving	X924
	0933	Divers in water on X924	X924
	0949	Divers on surface with sample	X924
	1007	Lane count on X924 & retrieve	PI 1038.85 PII 459.68
	1010	Underway to X516; seas 3-4 wind SE 10-15 kts.	

Date	Local Time	Activity	Location
23 Nov.	1013	Deploy Dive Buoy X516 & retrieve station buoy	PI 1041.90 PII 464.04
	1033	Divers in water on X516 for sample	X516
	1053	Divers on surface with samples	X516
	1111	Lane Count on X516 & retrieve Dive buoy	PI 1041.80 PII 464.09
	1115	Underway to X108; Sea & Wind rising	
	1121	Deploy Dive Buoy X108 & Retrieve station buoy	PI 1044.51 PII 467.51
	1135	Divers in water on X108 for sample & photo	X108
	1155	Divers on surface on X108 with samples	X108
	1213	Lane Count on X108 & Retrieve Dive Buoy	PI 1044.44 PII 467.52
	1216	Underway to X104	
	1230	Deploy Dive Buoy X104 & retrieve Station Buoy	PI 1045.69 PII 469.30
	1324	Divers in water on X104 for samples & photo	X104
	1338	Divers on surface on X104 with samples	X104
	1358	Lane Count on X104 & retrieve dive buoy	PI 1045.38 PII 468.48
	1403	Underway to X512; seas 5-7'; wind 15-20 from SE	
	1407	Deploy Station Buoy X512	
	1410	Deploy Dive Buoy X512 & retrieve Station Buoy	PI 1048.11 PII 472.81
	1432	Divers in water on X512 for samples & photo	X512
	1446	Divers on surface on X512 with samples	X512
	1508	Lane Count on Dive Buoy X512 & retrieve	PI 1047.99 PII 472.53
	1510	Underway to X920	
	1520	Deploy Dive Buoy X920 & retrieve station buoy	PI 1051.23 PII 477.23
	1535	Divers in water on X920 for samples & photo	X920
	1548	Divers on surface on X920 with samples	X920
	1615	Lane count on Dive Buoy X920 & retrieve	PI 1051.30 PII 477.29
	1619	Underway to Calibration Buoy	
	1626	Lane Count on Calibration Buoy X001 & retrieve	PI 1044.91 PII 468.22
	1635	Underway to OPC-MU-749L-1 with Whaler in tow	

Date	Local Time	Activity	Location
	1734	Lane Count on OPC-MU-749L-1 & underway in heavy seas	PI 1091.25 PII 305.02
	1820	Retrieve and stow Whaler	Port Aransas
	1830	Dockside & secure	Port Aransas
29 Nov.	All Day	Laying to; small craft warnings	Port Aransas
30 Nov.	All Day	Laying to; small craft warnings	Port Aransas
1 Dec.	All Day	Laying to; small craft warnings	Port Aransas
2 Dec.	0510	Depart Dockside	Port Aransas
	0559	Begin Calibration of Hifix	OPC-MU-749L-1
	0610	Lane Count NW corner OPC-MU-749L-1	PI 1091.50 PII 305.51
	0706	Deploy Station Buoy X001	Vicinity X001
	0710	Deploy Calibration Buoy (X001)	PI 1045.07 PII 468.46
	0719	Deploy Station Buoy X919	Vicinity X919
	0724	Deploy Station Buoy X511	Vicinity X511
	0726	Deploy Station Buoy X103	Vicinity X103
	0727	Deploy Station Buoy X107	Vicinity X107
	0728	Deploy Station Buoy X515	Vicinity X515
	0731	Deploy Station Buoy X923	Vicinity X923
	0733	Deploy Dive Buoy X923 & retrieve Station Buoy	PI 1033.83 PII 467.34
	0734	Deploy Whaler	
	0814	Divers in water on X923 for samples; visibility is nil	X923
	0840	CS decided that camera cannot be carried due to hazzard to divers safety	X923
	0850	Lane count on X923 & retrieve dive buoy	PI 1033.70 PII 467.41
	0853	Underway to X515	
	0900	Deploy Dive X515 & retrieve Station Buoy	PI 1039.47 PII 467.80
	0912	Divers in water on X515 for samples	X515
	0930	Divers up on surface on X515 with samples	X515
	0955	Lane Count on X515 & retrieve Dive Buoy	PI 1039.47 PII 467.75
	0958	Underway to X107	
	1000	Deploy Dive Buoy X107 & retrieve Station Buoy	PI 1043.91 PII 468.26
	1013	Divers in water on X107 for samples	X107
	1030	Divers up on surface on X107 with samples	X107

Date	Local Time	Activity	Location
2 Dec.	1047	Lane Count on X107 & retrieve Dive Buoy	PI 1043.87 PII 467.25
	1048	Underway to X103	
	1052	Deploy Dive Buoy X103 & retrieve Station Buoy	PI 1046.19 PII 468.47
	1055	Prepare Trawl for Deployment; experimental run from X511 to X919 at 750RPM	
	1137	Launch doors, net; small winch	
	1140	Trawl start; 100M wire out	X511
	1150	Trawl stop	X919
	1155	Trawl on deck & sorted	X919
	1220	Secure experimental trawl	
	1300	Rig for diving; winds 8-10 from North	
	1322	Divers in water on X103 for samples	X103
	1338	Divers on surface on X103 with samples	X103
	1353	Lane Count on X103 & retrieve Dive Buoy	PI 1046.08 PII 468.55
	1355	Underway to X511	
	1400	Deploy Dive Buoy X511 & retrieve Station Buoy	PI 1050.64 PII 568.95
	1411	Divers in water on X511 for samples	X511
	1429	Divers on surface on X511 with samples	X511
	1448	Lane Count on X511 & retrieve Dive Buoy	PI 1050.57 PII 468.94
	1450	Underway to X919	
	1453	Deploy Dive Buoy & retrieve Station Buoy	PI 1056.28 PII 469.68
	1507	Divers in water on X919 for samples	X919
	1525	Divers on surface on X919 with samples	X919
	1540	Lane Count on X919 & retrieve Dive Buoy	PI 1056.22 PII 469.70
	1542	Underway to Calibration Buoy (X001)	
	1550	Lane Count on Calibration Buoy & retrieve; retrieve & stow Whaler	PI 1044.80 PII 468.56
	1615	Underway to OPC-MU-749L-1; net washing	
	1630	Retrieve net & continue	
	1726	Lane Count on NW corner OPC-MU-749L-1	PI 1091.59 PII 305.59
	1820	Secure Dockside	Port Aransas

Date	Local Time	Activity	Location
3 Dec.	0500	Depart Dockside	Port Aransas
	0550	Lane Count on NW corner OPC-MU-749L-1	PI 1091.54 PII 305.54
	0643	Deploy Station Buoy at X001	
	0700	Deploy Calibration Buoy (X001) & retrieve station buoy	PI 1045.01 PII 468.25
	0705	Underway to X918	
	0711	Deploy Station Buoy X918	
	0717	Deploy Station Buoy X919	
	0721	Deploy Station Buoy X920	
	0724	Deploy Station Buoy X921	
	0728	Deploy Station Buoy X922	
	0723	Deploy Station Buoy X923	
	0737	Deploy Station Buoy X924	
	0742	Deploy Station Buoy X925	
	0743	Readying net; underway to X918	
	0758	Start trawl X918; 100M wire	PI 1054.40 PII 462.74
	0808	Stop trawl X918	PI 1055.73 PII 468.50
	0810	Underway to X919	
	0835	Start trawl X919; 100M wire	PI 1056.03 PII 470.57
	0845	Stop trawl X919	PI 1051.50 PII 477.19
	0847	Underway to X920	
	0918	Start trawl X920; 100M wire	PI 1041.60 PII 479.59
	0930	Underway to X921	
	0951	Start trawl X921; 100M wire	PI 1042.00 PII 480.44
	1001	Stop trawl X921	PI 1033.52 PII 479.02
	1003	Underway to X922	
	1025	Start trawl X922; 100M wire	PI 1032.11 PII 476.73
	1035	Stop trawl X922; 100M wire	PI 1031.90 PII 471.57
	1037	Underway to X923	
	1103	Start trawl X923; 100M wire	PI 1035.40 PII 463.15
	1113	Stop trawl X923	PI 1039.90 PII 461.70
	1115	Underway to X924	
	1137	Start trawl X924; 100M wire	PI 1038.34 PII 462.98
	1147	Stop trawl X924	PI 1041.35 PII 459.37
	1150	Underway to X925	
	1217	Start trawl X925; 100M wire	PI 1048.03 PII 457.42

Date	Local Time	Activity	Location
3 Dec.	1228	Stop trawl X925	PI 1052.40 PII 460.04
	1230	Underway to pick-up Station Buoy; 3 lost due to currect & wind	
	1407	Start trawl X510; 100M wire	PI 1050.47 PII 465.99
	1412	Stop trawl X510	PI 1050.54 PII 470.08
	1440	Start trawl X510; 100M wire	PI 1050.23 PII 465.98
	1446	Stop trawl X510	PI 1050.99 PII 470.11
	1448	Underway to X511	
	1506	Start trawl X511; 100M wire	PI 1049.67 PII 470.30
	1511	Stop trawl X511	PI 1047.73 PII 473.84
	1526	Start trawl X511; 100M wire	PI 1048.32 PII 472.78
	1534	Stop trawl X511	PI 1050.66 PII 467.98
	1535	Change to big winch & return to X512	
	1705	Start trawl X512; 100M wire	PI 1048.12 PII 472.75
	1709	Stop trawl X512	PI 1042.86 PII 473.47
	1725	Stop trawl X512	PI 1049.12 PII 472.99
	1742	Start trawl X512: 100M wire	PI 1045.06 PII 473.67
	1747	Stop trawl X512	PI 1041.86 PII 474.10
	1750	Underway to X513	
	1810	Start trawl X513; 100M wire	PI 1044.00 PII 472.99
	1815	Stop trawl X513; MO sample net torn	PI 1038.25 PII 472.38
	1845	Start trawl X513; 100M wire	PI 1043.49 PII 473.40
	1850	Stop trawl X513	PI 1038.25 PII 472.18
	1852	Underway to X514	
	1910	Big winch failed; return to small winch	X514
	2010	Start trawl X514; 100M wire	PI 1039.84 PII 466.70
	2020	Stop trawl X514	PI 1040.14 PII 473.70
	2022	Underway to X515	
	2045	Start trawl X515; 100M wire	PI 1038.86 PII 462.96

Date	Local Time	Activity	Location
3 Dec.	2054	Stop trawl X515	PI 1039.59
			PII 470.83
	2056	Underway to X516	
	2115	Start trawl X516; 100M wire	PI 1041.38
			PII 462.75
	2126	Stop trawl X516	PI 1048.35
			PII 462.75
	2130	Underway to X517	
	2154	Start trawl X517; 100M wire	PI 1045.62
			PII 463.68
	2204	Stop trawl X517	PI 1051.82
			PII
	2218	Lane Count on Calibration	PI 1044.78
		Buoy (X001) & retrieve	PII 468.35
	2220	Underway to X102	
	2231	Start trawl X102; 100M wire	PI 1045.32
			PII 467.37
	2236	Stop trawl X102	PI 1045.17
			PII 471.26
	2240	Underway to X104	
	2256	Start trawl X104; 100M wire	PI 1045.29
			PII 469.59
	2303	Stop trawl X104	PI 1042.10
			PII 469.04
	2305	Underway to X106	
	2326	Start trawl X106; 100M wire	PI 1043.80
			PII 468.37
	2329	Stop trawl X106	PI 1044.85
			PII 465.45
	2331	Underway to X108	
	2347	Start trawl X108; 100M wire	PI 1043.01
			PII 467.68
	2353	Stop trawl X108	PI 1048.03
			PII 467.45
	0005	Secure trawl operation; underway to OPC-MU-749L-1	
	0100	Lane count on NW corner OPC-MU-749L-1	PI 1091.52 PII 305.49
	0150	Dockside secure	Port Aransas
	0930	Commence unloading; Secure BLM 24	Port Aransas

III. DESCRIPTION OF OPERATIONS

A. Dive Station - Due to the inability of the Hifix navigator to "correct" for antenna position and current set our station positions were not as precise as I would have preferred. This problem was corrected to some extent on Dec. 1, 1975 by placing a repeater antenna on the starboard side.

As noted, an early decision was made to take all samples by hand with the sample container held parallel to the sediment surface. Five 30cm "cores" were taken for sediments; one 23cm "core" for trace metals; one Qt. Mason jar for hydrocarbons were taken routinely; on randomly selected stations, additional samples were taken for quality control. Packaging did not deviate markedly from written instructions.

We could not safely photograph the meter grid due to current and visibility; the photos we attempted have been processed and are "worthless" as we predicted.

We were unable to collect any fauna by hand.

B. Trawl Stations - Trawling with the 8 meter flat trawl provided by SUSIO was very satisfactory and consistantly provided samples adequate to our need. Capetown dredge was unsuitable to this substrate.

C. Disposition of Samples

1. Sediment Cores- Stored wet and capped; packed in boxes; delivered to T. White at dockside.

2. Sediments for chemical analyses- Stored in prescribed packaging, frozen, and delivered to T. White at dockside.

3. Forams- Preserved as prescribed and delivered to T. White at dockside.

4. Fauna for chemical analyses and Histopathology

Material collected for the above purposes were collected and handled as prescribed and delivered to T. White at dockside.

5. Ships lubricants, paint chips, etc.

Materials collected for the above purposes were handled as prescribed and delivered to T. White at dockside.

IV. STATION SUMMARY

1. There are no observational differences between dive stations worthy of note. In the case of trawling, however, we did note a sharp drop in catch-per-unit-time along with species diversity at stations x922, x923, and x924 in particular. The only plausible explanation for the observed decline was a concomittant increase in water current (moving SSW) during the time these stations were taken e.g. animals generally occupying the area earlier in the day were moving away in response to water conditions. Alternatively, there really are major differences in the area even though they are only 1000m apart at most! That would be most noteworthy. We will definitely be watching their situation very carefully during Rig-2 and Rig-3.

2. I feel that the sampling program for sediment trace metals and hydrocarbons needs improvement. I think we would get a better trace metal sample with an open NISKIN bottle manually shut 10cm over the mud-water interface. This is the unconsolidated layer which I think would be most important chemically. I suspect the hydrocarbon people want too much sample for us to do theirs in this fashion. The hydrocarbon people must however supply us with something better than glass for their samples. You cannot freeze mud in glass due to the differential expansion rates. I strongly urge that they purchase aluminum irrigation pipe (3") and cut it into the required lengths (6-9"), clean it properly, andlet us treat it as we do PVC Cores except that we will place aluminum foil over the ends.

V. LOGS-RECORDS

A. Ship Deck Log - M. O. Rinkel
B. Hifix Log - M. O. Rinkel
C. Radio Log - F. A. Davis
D. Chief Scientist's Log - T. White by xerox
E. Dive Log - T. White by xerox
F. Archiving Log - T. White by xerox
G. Station Log-Trawling - T. White by xerox
H. Film Log - T. White by xerox
I. Trace Metal Log - T. White by xerox

VI. PERSONNEL

T. S. Hopkins, UA[1]
D. R. Blizzard, UA[2]
J. K. Shaw, UA
M. O. Rinkel, SUSIO
I. Workman
D. Grimm
C. Lutz

1. Ch. Scientist, Diving Officer - Z. Archivist

Respectfully submitted,

Thomas S. Hopkins

Thomas S. Hopkins
Chief Scientist, BLM 24

TABLE

Identification of each box core by Cruise Number, Ship, Collection Period and Location

BLM NO. 27
R/V BELLOWS
7 - 21 January 1976

STATION NO.	CORE NO.	LATITUDE	LONGITUDE
001	NOTE: Station 001 not sampled during this season.		
102	510201 A 4, A 5, A 6	27°37'15.88"	96°57'52.96"
103	510301 A 4, A 5, A 6	27°37'13.13"	96°57'51.24"
104	510401 A 4, A 5, A 6	27°37'11.01"	96°57'52.04"
105	510501 A 4, A 5, A 6	27°37'09.07"	96°57'53.94"
106	510601 A 4, A 5, A 6	27°37'09.97"	96°57'56.54"
107	510701 A 4, A 5, A 6	27°37'11.24"	96°57'58.94"
108	510801 A 4, A 5, A 6	27°37'14.70"	96°57'57.57"
109	510901 A 4, A 5, A 6	27°37'16.03"	96°57'55.62"
510	551001 A 4, A 5, A 6	27°37'27.51"	96°57'45.21"
511	551101 A 4, A 5, A 6	27°37'17.08"	96°57'37.46"
512	551201 A 4, A 5, A 6	27°37'04.81"	96°57'40.72"
513	551301 A 4, A 5, A 6	27°36'57.77"	96°57'51.85"
514	551401 A 4, A 5, A 6	27°37'00.59"	96°58'04.54"
515	551501 A 4, A 5, A 6	27°37'10.76"	96°58'13.00"
516	551601 A 4, A 5, A 6	27°37'22.76"	96°58'10.59"
517	551701 A 4, A 5, A 6	27°37'29.66"	96°57'59.07"
918	591801 A 4, A 5, A 6	27°37'40.75"	96°57'34.51"
919	591901 A 4, A 5, A 6	27°37'19.92"	96°57'19.15"
920	592001 A 4, A 5, A 6	27°36'56.16"	96°57'24.93"
921	592101 A 4, A 5, A 6	27°36'41.99"	96°57'48.11"
922	592201 A 4, A 5, A 6	27°36'46.89"	96°58'15.63"
923	592301 A 4, A 5, A 6	27°37'07.40"	96°58'31.18"
924	592401 A 4, A 5, A 6	27°37'31.64"	96°58'25.88"
925	592501 A 4, A 5, A 6	27°37'45.61"	96°58'02.43"

STATE UNIVERSITY SYSTEM OF FLORIDA
INSTITUTE OF OCEANOGRAPHY

CRUISE REPORT

R/V BELLOWS - B7602
BLM Cruise #27

6-21 January 1976

I. OBJECTIVES:

For the Rig Monitoring effort it was proposed that this cruise would accomplish the following objectives:

A. Make *in situ* one meter grid surveys of epibenthic flora and fauna using color photography (35 mm) with at least ten (10) photographs taken in each grid.

B. Collect surface sediment at each station for foraminifera, hydrocarbon, and trace metal analysis by participating institutions.

C. Collect horizontal cores from each of 24 stations for standard sediment parameters and analysis of clay fraction mineralogy by participating institutions.

D. Collect macro-epifauna for chemical and histopathological analysis by participating institutions.

The objectives were to be met with the rig operating.

II. ACTUAL SCHEDULE:

Date	Time Local	Activity	Location
6 Jan.	1615	Scientific party arrived by air from Mobile. Party met by M.O. Rinkel	Corpus Christi Airport
7 Jan.	All day	Laying to; Bad Weather	UTMSI
8 Jan.	All day	Laying to; Bad Weather	UTMSI
9 Jan.	0625	Abandon ship and fire drill	UTMSI
	0655	Depart dockside	UTMSI
	0746	1st Calibration of Hi-Fix	OPC-MU-749L-1
	0753	2nd Calibration of Hi-Fix	OPC-MU-749L-1
	0755	Lane count on NW corner of OPC-MU-749L-1	PI 1091.54 PII 305.06
	0756	Underway to Rig Site and X 918	
	0914	Start trawl #1 @ X 918; 100M wire	PI 1055.18 PII 463.98
	0924	Stop trawl #1 @ X 918	PI 1056.47 PII 470.17
	0946	Start trawl #2 @ X 918; 100M wire	PI 1055.65 PII 464.02
	0956	Stop trawl #2 @ X 918	PI 1056.48 PII 469.81
	1003	Underway to X 919	
	1013	Start trawl #1 @ X 919; 100M wire	PI 1055.07 PII 470.06
	1025	Stop trawl #1 @ X 919	PI 1050.65 PII 477.29

Date	Time Local	Activity	Location
Jan. 9	1040	Start trawl #2 @ X 919; 100M wire	PI 1055.30 PII 470.55
	1052	Stop trawl #2 @ X 919	PI 1051.11 PII 477.29
	1100	Underway to X 920	
	1115	Start trawl #1 @ X 920; 100M wire	PI 1049.83 PII 477.32
	1125	Stop trawl #1 @ X 920	PI 1042.68 PII 479.98
	1147	Start trawl #2 @ X 920; 100M wire	PI 1049.55 PII 477.59
	1157	Stop trawl #2 @ X 920	PI 1042.68 PII 479.73
	1203	Underway to X 921	
	1213	Start trawl X 921; 100M wire	PI 1040.87 PII 478.72
	1224	Stop trawl X 921	PI 1035.45 PII 475.63
	1233	Underway to X 922	
	1243	Start trawl X 922; 100M wire	PI 1034.88 PII 474.72
	1253	Stop trawl X 922	PI 1033.68 PII 467.29
	1300	Underway to X 923	
	1317	Start trawl X 923; 100M wire	PI 1035.02 PII 466.19
	1327	Stop trawl X 923	PI 1038.51 PII 459.55
	1333	Underway to X 924	
	1342	Start trawl X 924; 100 wire	PI 1040.61 PII 458.89
	1353	Stop trawl X 924	PI 1047.57 PII 456.64
	1400	Underway to X 925	
	1411	Start trawl #1 @ X 925; 100M wire	PI 1050.07 PII 457.84
	1420	Stop trawl #1 @ X 925	PI 1054.72 PII 461.60
	1435	Start trawl #2 @ X 925; 100M wire	PI 1049.26 PII 457.78
	1447	Stop trawl #2 @ X925	PI 1054.73 PII 460.91
	1455	Underway to X 510	
	1507	Start trawl #1 @ X 510; 100M wire	PI 1050.03 PII 456.09
	1513	Stop trawl #1 @ X 510	PI 1051.61 PII 459.98
	1532	Start trawl #2 @ X 510; 100M wire	PI 1050.01 PII 465.45
	1536	Stop trawl #2 @ X 510	PI 1048.74 PII 463.66
	1545	Underway to X 511	
	1554	Start trawl #1 @ X 511; 100M wire	PI 1048.99 PII 470.19

Date	Time Local	Activity	Location
	1604	Stop trawl #1 @ X 511	PI 1047.24 PII 473.81
	1619	Start trawl #2 @ X 511; 100M	PI 1049.20 PII 472.07
	1627	Stop trawl #2 @ X 511	PI 1050.77
	1633	Underway to X 512	PII 467.98
	1648	Start trawl #1 @ X 512; 100M wire	PI 1046.79 PII 472.82
	1654	Stop trawl #1 @ X 512	PI 1042.83 PII 473.87
	1702	Start trawl #2 @ X 512; 100M wire	PI 1044.92 PII 474.90
	1712	Stop trawl #2 @ X 512	PI 1049.16 PII 472.64
	1720	Underway to X 106	
	1742	Start trawl #1 @ X 106; 100M wire	PI 1043.52 PII 469.25
	1750	Stop trawl #1 @ X 106	PI 1044.32 PII 465.90
	1806	Start trawl #2 @ X 106; 100M wire	PI 1043.23 PII 468.72
	1811	Stop trawl #2 @ X 106; secure OPMS.; storm to SE; seas rising	PI 1041.25 PII 471.51
	1825	Underway to OPC-MU-749L-1	
	1927	Lane count NW corner OPC-MU-749L-1	PI 1091.94 PII 305.13
	2020	Dockside secure; UTMSI	Port Aransas
Jan. 10	0715	Small craft flags posted; seas at beach are running 3-6'; wind from SE	
	0800	Depart dockside UTMSI	Port Aransas
	0902	Lane count on NW corner OPC-MU-749L-1	PI 1091.68 PII 305.05
	0903	Underway to station X 108	
	1013	Start trawl #1 @ X 108; 100M wire	PI 1044.83 PII 466.90
	1019	Stop trawl #1 @ X 108	PI 1047.95 PII 468.62
	1026	Start trawl #2 @ X 108; 100M wire	PI 1045.49 PII 467.05
	1031	Stop trawl # 2 @ X 108	PI 1042.41 PII 466.48
	1040	Underway to X 102	PI 1046.21 PII 468.56
	1059	Stop trawl #1 @ X 102	PI 1045.20 PII 471.67
	1109	Start trawl #2 @ X 102; 100M wire	PI 1046.52 PII 468.56
	1113	Stop trawl #2 @ X 102	PI 1045.60 PII 466.08
	1127	Underway to X 104	
	1135	Start trawl #1 @ X 104; 100M wire	PI 1044.69 PII 470.12
	1140	Stop trawl #1 @ X 104	PI 1047.64 PII 469.45

Date	Time Local	Activity	Location
Jan. 10	1147	Start trawl #2 @ X 104; 100M wire	PI 1044.55 PII 469.40
	1151	Stop trawl #2 @ X 104	PI 1042.06 PII 469.11
	1203	Underway to X 513	
	1213	Start trawl #1 @ X 513; 100M wire	PI 1042.83 PII 473.51
	1219	Stop trawl #1 @ X 513	PI 1038.75 PII 471.70
	1226	Start trawl #2 @ X 513; 100M wire	PI 1041.65 PII 473.06
	1233	Stop trawl #2 @ X 513	PI 1045.25 PII 475.06
	1243	Underway to X 514	
	1259	Start trawl #1 @ X 514; 100M wire	PI 1039.98 PII 470.43
	1304	Stop trawl #1 @ X 514	PI 1039.42 PII 466.33
	1317	Start trawl #2 @ X 514; 100M wire	PI 1040.28 PII 470.01
	1323	Stop trawl #2 @ X 514	PI 1040.14 PII 473.50
	1330	Underway to X 515	
	1340	Start trawl #1 @ X 515; 100M wire	PI 1040.33 PII 466.82
	1347	Stop trawl #1 @ X 515	PI 1041.62 PII 462.65
	1357	Start trawl #2 @ X 515; 100M wire	PI 1040.00 PII 464.87
	1404	Stop trawl #2 @ X 515	PI 1039.66 PII 469.33 ???
	1413	Underway to X 516	
	1422	Start trawl #1 @ X 516; 100M wire	PI 1043.32 PII 463.47
	1429	Stop trawl #1 @ X 516	PI 1047.57 PII 462.61
	1436	Start trawl #2 @ X 516; 100M wire	PI 1044.72 PII 463.30
	1445	Stop trawl #2 @ X 516	PI 1040.45 PII 463.79
	1450	Underway to X 517	
	1505	Start trawl #1 @ X 517; 100M wire	PI 1050.19 PII 464.48
	1513	Stop trawl #1 @ X 517; secure opns.	PI 1044.30 PII 461.63
	1522	Underway washing net	
	1630	Lane count NW corner OPC-MU-749L-1	PI 1091.53 PII 305.13
	1710	Dockside; secure UTMSI; unload trawl	Port Aransas
Jan. 11	All day	Clean ship; prepare ship for diving; rest for scientific party.	Port Aransas
Jan. 12	0512	Depart dockside UTMSI	Port Aransas
	0520	Launch whaler in channel	
	0622	Lane count on NW corner OPC-MU-749L-1	PI 1091.49 PII 305.09

Date	Time Local	Activity	Location
Jan. 12	0724	Deploy station buoy X 001	
	0731	Deploy calibration buoy X 001	PI 1045.03 PII 468.83
	0733	Pick up station buoy X 001; underway to X 924	
	0741	Deploy station buoy X 924	
	0745	Deploy station buoy X 516	
	0749	Deploy station buoy X 108	
	0750	Deploy station buoy X 104	
	0753	Deploy station buoy X 512	
	0755	Deploy station buoy X 920	
	0804	Deploy dive buoy X 920; retrieve station buoy	PI 1051.20 PII 477.18
	0848	Divers in water on X 920 for sample & photo	
	0908	Divers on surface w/samples at X 920; No photo	
	0925	Pick up dive buoy X 920	PI 1051.30 PII 477.17
	0928	Underway to X 512	
	0932	Deploy dive buoy X 512; retrieve station buoy	PI 1048.03 PII 472.82
	0956	Divers in water on X 512 for samples	
	1020	Divers on surface at X 512 w/samples	
	1034	Pick up dive buoy X 512	PI 1047.95 PII 472.76
	1036	Underway to X 104	
	1042	Deploy dive buoy X 104; pick up station buoy	PI 1045.64 PII 469.68
	1158	Divers in water on X 104 for samples	
	1212	Divers on surface at X 104 w/samples	
	1222	Pick up dive buoy X 104	PI 1045.56 PII 469.62
	1226	Underway to X 108	
	1228	Deploy dive buoy X 108; pick up station buoy	PI PII
	1328	Divers in water on X 108 for samples	
	1341	Divers on surface @ X 108 w/samples	
	1348	Pick up dive buoy X 108	PI 1044.49 PII 467.87
	1350	Underway to X 516	
	1402	Deploy dive buoy X 516; retrieve station buoy	PI 1042.01
	1423	Divers in water on X 516 for samples	PII 463.99
	1439	Divers on surface at X 516 w/samples	
	1453	Pick up dive buoy X 516	PI 1041.90 PII 463.97
	1457	Underway to X 924	
	1504	Deploy dive buoy X 924; pick up station buoy	PI 1038.83 PII 459.69

Date	Time Local	Activity	Location
Jan. 12	1547	Pick up calibration buoy X 001	PI 1045.03 PII 468.62
	1653	Divers in water on X 924 for samples	
	1708	Divers on surface at X 924 w/samples	
	1717	Pick up dive buoy X 924	PI 1038.79 PII 459.62
	1720	Pick up whaler and stow	
	1725	Underway to OPC-MU-749L-1	
	1817	Lane count on NW corner OPC-MU-749L-1	PI 1091.53 PII 305.09
	1900	Dockside; secure UTMSI	Port Aransas
Jan. 13	0500	Depart dockside UTMSI	Port Aransas
	0525	Turn about in 10' seas; heavy fog; all hands in life vests and on deck	
	0540	Dockside; secure at UTMSI Small craft warnings posted	Port Aransas
Jan. 14	0445	Wind-rain; cold front passing; bad weather day	Port Aransas
Jan. 15	0657	Depart dockside UTMSI	Port Aransas
	0747	Lane count on NW corner OPC-MU-749L-1	PI 1091.44 PII 305.02
	0848	Deploy station buoy X 001	
	0853	Deploy calibration buoy X 001 and retrieve station buoy	PI 1045.02 PII 468.81
	0901	Deploy station buoy X 921	
	0903	Deploy dive buoy X 921 and pick up station buoy	PI 1042.67 PII 479.82
	0916	Seas 4-6' - occasionally 8'; wind NE @ 15-20 current at least 2 kts; cancel dive plans; unsafe.	
	0921	Pick up dive buoy X 921	
	0928	Pick up calibration buoy X C01; MO lane count	
	1135	Dockside; secure at UTMSI	Port Aransas
Jan. 16	0520	Depart dockside UTMSI	Port Aransas
	0525	Launch whaler in waterway	
	0620	Lane count on NW corner OPC-MU-749L-1	PI 1091.54 PII 305.13
	0715	Deploy station buoy X 001	
	0718	Deploy calibration buoy X 001; pick up station buoy	PI 1045.03 PII 468.75
	0726	Deploy station buoy X 921	
	0729	Deploy dive buoy X 921; pick up station buoy	PI 1042.60 PII 474.75
	0808	Divers in water on X 921 for samples & photo	
	0823	Divers up on X 921 w/samples	
	0839	Pick up dive buoy X 921	PI 1042.65 PII 479.76
	0847	Deploy station buoy X 513	
	0848	Deploy dive buoy X 513; pick up station buoy	PI 1043.73 PII 474.17

Date	Time Local	Activity	Location
Jan. 16	0909	Divers in water on X 513 for samples	
	0928	Divers up on X 513 w/samples	
	0940	Pick up dive buoy X 513	PI 1043.76 PII 474.10
	0946	Deploy dive buoy X 105	PI 1044.82 PII 470.00
	1030	Divers in water on X 105 for samples	
	1045	Divers up on X 105 w/samples	
	1058	Pick up dive buoy X 105	PI 1044.74 PII 470.10
	1102	Deploy dive buoy X 109	PI 1045.27 PII 467.66
	1207	Divers in water on X 109 for samples	
	1220	Divers up on X 109 w/samples	
	1226	Pick up divebuoy X 109	PI 1045.24 PII 467.60
	1230	Deploy dive buoy X 517	PI 1046.22 PII 462.60
	1307	Divers in water on X 517 for samples	
	1321	Divers up on X 517 w/samples	
	1333	Pick up dive buoy X 517	PI 1046.19 PII 462.69
	1337	Deploy dive buoy X 925	PI 1047.52 PII 457.01
	1515	Divers in water on X 925 for samples	
	1527	Divers up on X 925 w/samples	
	1546	Pick up dive buoy X 925	PI 1047.52 PII 457.01
	1557	Pick up calibration buoy X 001; underway	PI 1044.90 PII 468.57
	1703	Lane count on NW corner OPC-MU-749L-1	PI 1091.41 PII 305.09
	1758	Dockside; secure at UTMSI	Port Aransas
Jan. 17	0520	Depart dockside UTMSI	Port Aransas
	0525	Launch whaler in channel	
	0615	Lane count NW corner OPC-MU-749L-1	
	0712	Deploy station buoy X 001	
	0714	Deploy calibration buoy X 001; pick up station buoy	PI 1045.01 PII 468.80
	0725	Backed down on whaler after deploying dive buoy; whaler pulled under stern; turned over	PI 1035.40 PII 475.13
	0730	Commence salvage operations	
	0815	All gear salvaged; boat upright in tow	
	0830	Pick up dive buoy	
	0835	Pick up calibration buoy X 001	
	0920	Accident reported to T. White *	
	1035	Take whaler aboard	Ship Channel
	1050	Dockside; secure UTMSI	Port Aransas
	2030	Acquired boat from UTMSI	
	2100	Rigged and ready to continue	

* A written accident report has been filed.

Date	Time Local	Activity	Location
Jan. 18	0505	Depart dockside UTMSI with whaler in tow	Port Aransas
	0556	Lane count on NW corner OPC-MU-749L-1	PI 1091.50 PII 305.14
	0704	Deploy station buoy X 001	
	0714	Deploy calibration buoy X 001; pick up station buoy	PI PII
	0721	Deploy dive buoy X 922	PI 1035.39 PII 475.58
	0808	Divers over on X 922 for samples	
	0819	Divers up on X 922 w/samples; visibility good	PI 1035.39 PII 475.66
	0836	Deploy dive buoy X 514	PI 1040.30 PII 472.00
	0858	Divers over on X 514 for sample & photo	
	0912	Divers up on X 514 w/samples & photo	
	0925	Pick up dive buoy X 514	PI 1040.50 PII 472.00
	0936	Deploy dive buoy X 106	PI 1044.08 PII 469.58
	1003	Divers in water on X 106 for sample & photo	
	1014	Divers up on X 106 w/sample & photo	
	1025	Pick up dive buoy X 106	PI 1044.12 PII 469.56
	1030	Deploy dive buoy X 102	PI 1045.93 PII 468.06
	1120	Divers in water on X 102 for sample & photo	
	1132	Divers up on X 102 w/sample and photo	
	1146	Pick up dive buoy X 102	PI 1046.00 PII 467.90
	1151	Deploy dive buoy X 510	PI 1049.90 PII 464.79
	1224	Divers in water on X 510 for sample & photo	
	1238	Divers up on X 510 w/ samples and photos	
	1329	Pick up dive buoy X 510	PI 1049.86 PII 464.71
	1344	Deploy dive buoy X 918	PI 1054.72 PII 461.28
	1413	Divers in water on X 918 for sample and photo	
	1424	Divers up on X 918 w/samples and photo	
	1441	Pick up dive buoy X 918	PI 1054.82 PII 461.30
	1447	Pick up calibration buoy X 001; underway	PI 1045.06 PII 461.81
	1545	Lane count on NW corner OPC-MU-749L-1	PI 1091.40 PII 305.13
	1634	Dockside; secure at UTMSI	Port Aransas

Date	Time Local	Activity	Location
Jan. 19	0505	Depart dockside UTMSI; whaler in tow	Port Aransas
	0529	Lane count on NW corner OPC-MU-749L-1	PI 1091.61 PII 304.92
	0745	At station X 919; abort station too hazardous for diving (wind & current); seas increasing.	
	0950	Bow eye parted on UT whaler; seas 8-10'; just outside channel area; whaler taken in tow by bow cleat and prayer! Seas very heavy now.	
	1030	Dockside secure UTMSI repair UT whaler	Port Aransas
Jan. 20	0730	Small craft warnings up; lay to all day	
Jan. 21	0545	Weather check - looks O.K.	
	0700	Depart dockside UTMSI; whaler in tow	Port Aransas
	0751	Lane count on NW corner OPC-MU-749L-1	PI 1091.55 PII 305.11
	0823	Progress report to J. E. Alexander via WOM	
	0850	Clear whaler away	
	0854	Deploy dive buoy X 919	PI 1056.28 PII 469.73
	0937	Divers in water on X 919 for samples/photo	
	0948	Divers on surface @ X 919 w/samples - too dirty for photo	
	0957	Pick up dive buoy X 919	PI 1056.28 PII 469.78
	1003	Deploy dive buoy X 511	PI 1050.65 PII 468.94
	1018	Divers in water on X 511 for samples	
	1031	Divers on surface @ X 511 w/samples	
	1044	Pick up dive buoy X 511	PI 1050.61 PII 468.95
	1050	Deploy dive buoy X 103	PI 1046.20 PII 468.89
	1112	Divers in water X 103 for samples	
	1122	Divers on surface @ X 103 w/samples	
	1131	Pick up dive buoy X 103	PI 1046.09 PII 468.98
	1139	Deploy dive buoy X 107	PI 1043.89 PII 468.69
	1236	Divers in water on X 107 for samples	
	1247	Divers on surface @ X 107 w/samples	
	1300	Pick up dive buoy X 107	PI 1043.67 PII 468.91
	1305	Deploy dive buoy X 515	PI 1039.50 PII 469.89
	1331	Divers in water on X 515 for samples	
	1345	Divers on surface @ X 515 w/samples	
	1354	Pick up dive buoy X 515	PI 1039.50 PII 469.81
	1359	Deploy dive buoy X 923	PI 1033.90 PII 467.36
	1537	Divers in water @ X923 for samples	
	1548	Divers on surface @ X 923 w/samples	
	1559	Pick up dive buoy X 923 & underway to OPC-MU-749L-1	PI 1033.89 PII 467.38

Date	Time Local	Activity	Location
Jan. 21	1701	Lane count on NW corner OPC-MU-749L-1	PI 1091.52 PII 305.13
	1741	Dockside; secure at UTMSI	Port Aransas
	1830	Commence cleaning and loading; load sniffing equipment.	
	2040	Secure loading; secure BLM 27	Port Aransas
Jan. 22	0700	Scientific party departs for Mobile	Corpus Christi
	1215	Scientific party arrives @ Mobile	Mobile

III. DESCRIPTION OF OPERATIONS:

A. Dive Station - Collection methods were generally described in the BLM 24 Cruise Report. Several modifications were implemented on this cruise. (1) Trace metals were taken from sediment core tubes. (2) hydrocarbons were collected in 1 qt. paint cans with aluminum foil covers. (3) we collected samples for F. Manheim in the containers provided. These containers are not appropriate collecting devices since they have had holes drilled in them and they were dangerous to handle underwater.

Photography was generally impossible due to visibility.

B. Trawl Stations - For whatever the reason, the faunal yield was very low compared to BLM 24. A better catch per unit effort was apparent nearer to the rig (subjective observation).

C. Disposition of Samples

1. Sediment Cores - Stored wet and capped; packed in wooden boxes; delivered to T. White in Tarpon Springs.
2. Sediments for Chemical analyses - (a) Trace metals - frozen in bags and sent to T. White at Tarpon Springs. (b) Hydrocarbons frozen and delivered to T. White in Tarpon Springs.
3. Forams - Prepared as described and delivered to T. White at Tarpon Springs.
4. Fauna for chemical analysis - (a) Trace Metals - frozen and delivered to Presley at Texas A&M by K. Shaw. (b) Hydrocarbon - frozen and delivered to T. White at Tarpon Springs.
5. Histopathology - Dietrich's buckets delivered to T. White at Tarpon Springs.
6. Ships lubricants, paint chips, etc. - delivered to T. White at Tarpon Springs.

IV. STATION SUMMARY

No significant commentary other than to note that the rig crew were responsible for serious littering problems. Samples of their garbage has been deposited in the BL,-SUSIO office. These were taken by trawl on the innermost trawls.

An accident report has been filed for the whaler incident.

V. LOGS-RECORDS

A. Ship Deck Log - M. O. Rinkel
B. Hi-Fix Log - M. O. Rinkel
C. Radio Log - F. A. Davis
D. Chief Scientist's Log - T. White by Xerox
E. Dive Log - T. White by Xerox
F. Station Trawl Log - T. White by Xerox
G. Archiving Log - T. White by Xerox
H. Film Log - T. White by Xerox
I. Trace Metal Log - T. White by Xerox

VI. PERSONNEL:

T. S. Hopkins, UA[1]

D. R. Blizzard, UA[2]

J. K. Shaw, UA

E. Livingston, UA

D. Grimm, UA

C. Sayre, UT - Jan. 9 only

S. Rabalais, UT - Jan. 9 only

UT - Jan. 10 only

1 Chief Scientist & Diving Officer

2 Archivist

Respectfully Submitted,

Thomas S. Hopkins
Chief Scientist, BLM #27

Approved by: James E. Alexander
James E. Alexander
Program Manager

TABLE

Identification of each box core by Cruise Number,
Ship, Collection Period and Location

BLM NO. 36
R/V TURSIOPS

STATION NO.	CORE NO.	LATITUDE	LONGITUDE
001	500101 A 4, A 5, A 6		
102	510201 A 7, A 8, A 9		
103	510301 A 7, A 8, A 9		
104	510401 A 7, A 8, A 9		
105	510501 A 7, A 8, A 9		
106	510601 A 7, A 8, A 9		
107	510701 A 7, A 8, A 9		
108	510801 A 7, A 8, A 9		
109	510901 A 7, A 8, A 9		
510	551001 A 7, A 8, A 9		
511	551101 A 7, A 8, A 9		
512	551201 A 7, A 8, A 9		
513	551301 A 7, A 8, A 9		
514	551401 A 7, A 8, A 9		
515	551501 A 7, A 8, A 9		
516	551601 A 7, A 8, A 9		
517	551701 A 7, A 8, A 9		
918	591801 A 7, A 8, A 9		
919	591901 A 7, A 8, A 9		
920	592001 A 7, A 8, A 9		
921	592101 A 7, A 8, A 9		
922	592201 A 7, A 8, A 9		
923	592301 A 7, A 8, A 9		
924	592401 A 7, A 8, A 9		
925	492501 A 7, A 8, A 9		

CRUISE REPORT

BLM #36, R/V TURSIOPS
25 March - 3 April, 1976

I. OBJECTIVES

The stated objectives of the cruise were:

A. Make in situ one meter grid surveys of epibenthic flora and fauna using color photography (35mm) and at least ten (10) photographs taken in each grid.

B. Collect surface sediments and biota at each station for hydrocarbon and trace metal analysis.

C. Collect cores by divers from each station for foraminifera, standard sediment parameter, and clay mineralogy analyses by the participating institution.

II. ACTUAL SCHEDULE

DATE	TIME (CST)	ACTIVITY	LOCATION
25 March	1500	Scientific party arrived at dockside, R/V Tursiops	Port Aransas
26 March	0615	Depart Dockside	Port Aransas
	0715	1st Calibration Series at OPC-MU-749L-1	PI 1091.13 PI 305.40
	0725	2nd Calibration Series at OPC-MU-749L-1	PI 1091.62 PII 305.32
	0735	Lane Count NW corner of OPC-MU-749L-1; Underway	PI 1091.49 PII 304.80
	0831	Deploy and lane count on Calibration Buoy	PI 1058.43 PII 460.71
	0920	Start trawl x918	PI 1054.59 PII 461.81
	0930	Stop trawl x918	PI 1056.70 PII 471.70
	0935	Underway to x919	
	1002	Start trawl x919	PI 1055.92 PII 470.83
	1011	Stop trawl on x919	PI 1050.85 PII 479.28
	1016	Underway to x920	
	1032	Start trawl @ x920	PI 1050.15 PI 478.22
	1040	Stop trawl @ x920	PI 1040.69 PII 479.43
	1045	Underway to x921	
	1057	Start trawl @ x921	PI 1041.30 PII 478.30

DATE	TIME (CST)	ACTIVITY	LOCATION
26 March (con't.)	1105	Stop trawl @ x921	PI 1033.63 PII 475.42
	1110	Underway to x922	
	1121	Start trawl @ x922	PI 1033.90 PII 474.67
	1130	Stop trawl @ x922	PI 1033.91 PI 465.42
	1135	Underway to x923	
	1152	Start trawl @ x923	PI 1033.53 PII 468.74
	1204	Stop trawl @ x923	PI 1038.12 PII 457.60
	1209	Underway to x924	
	1222	Start trawl @ x924	PI 1038.44 PII 459.00
	1234	Stop trawl @ x924	PI 1049.44 PII 456.85
	1239	Underway to x925	
	1252	Start trawl @ x925	PI 1046.74 PII 457.27
	1305	Stop trawl @ x925	PI 1056.67 PII 461.56
	1310	Underway to x510	
	1320	Start trawl @ x510	PI 1049.74 PII 465.56
	1325	Stop trawl @ x510	PI 1049.89 PII 470.98
	1330	Underway to x511	
	1348	Start trawl @ x511	PI 1049.40 PII 469.41
	1354	Stop trawl @ 511	PI 1047.95 PII 475.81
	1359	Underway to x512	
	1407	Start trawl @ x512	PI 1047.33 PII 473.33
	1412	Stop trawl @ x512	PI 1041.84 PII 475.94
	1417	Underway to x513	
	1428	Start trawl @ x513	PI 1038.18 PII 474.08
	1434	Stop trawl @ x513	PI 1038.18 PII 471.25
	1439	Underway to x514	
	1450	Start trawl @ x514	PI 1039.66 PII 471.43
	1456	Stop trawl @ x514	PI 1039.48 PII 465.78
	1501	Underway to x515	
	1514	Start trawl @ x515	PI 1038.96 PII 468.44

DATE	TIME (CST)	ACTIVITY	LOCATION
26 March (con't.)	1521	Stop trawl @ x515	PI 1041.57 PII 461.00
	1526	Underway to x516	
	1536	Start trawl @ x516	PI 1040.30 PII 463.91
	1545	Stop trawl @ x516	PI 1048.60 PII 462.45
	1650	Underway to x517	
	1607	Start trawl @ x517	PI 1045.19 PII 462.68
	1617	Stop trawl @ x517	PI 1051.99 PII 466.00
	1622	Underway to x102	
	1633	Start trawl at x102	PI 1045.50 PII 467.37
	1639	Stop trawl @ x102	PI 1045.55 PII 472.73
	1644	Underway to x104	
	1650	Decca recorder break down	
	1719	Start trawl @ x104; recorder operable	PI 1045.62 PII 469.74
	1722	Stop trawl @ x104	PI 1041.02 PII 469.27
	1729	Underway to x106	
	1741	Start trawl @ x106	PI 1043.37 PII 469.16
	1746	Stop trawl @ x106	PI 1044.34 PII 464.80
	1751	Underway to x108	
	1800	Start trawl @ x108	PI 1043.00 PII 468.08
	1807	Stop trawl @ x108	PI 1048.99 PII 468.57
	1812	Underway to Calibration Buoy	
	1824	Lane Count on Calibration Buoy; retrieve and underway	PI 1092.99 PII 304.83
	2130	Dockside UTMSI, Secure	Port Aransas
27 March	All day	Dockside; cleanup; refit	Port Aransas
28 March	0600-1040	Standing by in fog	Port Aransas
	1050	Depart dockside	Port Aransas
	1145	1st Calibration Series @ OPC-MU-749L-1	PI 1091.15 PII 305.83
	1150	2nd Calibration Series @ OPC-MU-749L-1	PI 1091.59 PII 305.33
	1156	Lane count NW corner OPC-MU-749L-1 and underway	PI 1091.50 PII 304.73
	1247	Arrive on station x918; deploy dive buoy	PI 1054.52 PII 461.22
	1330	Divers down on x918 for Samples	

DATE	TIME (CST)	ACTIVITY	LOCATION
28 March (con't.)	1342	Divers on surface with samples*	
	1355	Lane Count on dive buoy x918; retrieve and underway	PI 1054.70 PII 461.57
	1402	Arrive on x510; deploy dive buoy	PI 1049.77 PII 464.70
	1422	Divers down on x510 for samples	
	1441	Divers on surface with samples	
	1455	Lane Count on dive buoy x510; retrieve and underway	PI 1049.01 PII 465.74
	1512	Arrive on x102; deploy dive buoy	PI 1045.07 PII 468.07
	1531	Divers down on x102 for samples	
	1543	Divers on surface with samples	
	1554	Lane Count on dive buoy x102; retreive and underway	PI 1054.74 PII 468.08
	1605	Arrive on x001; deploy dive buoy	PI 1045.04 PII 468.43
	1620	Divers down on x001 for samples	
	1634	Divers on surface with samples	
	1650	Lane count on dive buoy x001; retrieve	PI 1043.99 PII 469.00
	1700	Underway to OPC-MU-749L-1	
	1805	Lane Count NW corner OPC-MU-749L-1 and underway	PI 1091.61 PII 304.95
	1855	Dockside UTMSI; secure	Port Aransas
29 March	0645 1100	Notified by M. Pennington that Decca unit was inoperable; later advised that lightening had damaged equipment. This day lost to equipment down.	Port Aransas
30 March	0630	Coast Guard land line advises that frontal system will arrive; we are under NOAA Small Craft Advisory Conditions:cancel operations due to bad weather.	Port Aransas
31 March	0845	Still under Small Craft Advisory cancel operations due to bad weather.	Port Aransas
1 April	0555	Depart UTMSI	Port Aransas
	0705	1st Calibration at OPC-MU-749L-1	PI 1091.72 PII 305.29

*Currents very strong: too dirty for photography.

DATE	TIME (CST)	ACTIVITY	LOCATION
1 April (con't)	0710	2nd Calibration @ OPC-MU-749L-1	PI 1091.65 PII 305.38
	0713	Lane Count on NW corner OPC-MU-749L-1 and underway to rig site	PI 1091.39 PII 304.63
	0813	Deploy dive buoy @ x106	PI 1044.14 PII 469.57
	0844	Divers down on x106 for samples	
	0856	Divers on surface with samples *	
	0907	Lane Count on dive buoy x106; retrieve and underway	PI 1044.16 PII 469.57
	0917	Deploy dive buoy @ x514	PI 1040.20 PII 472.01
	0930	Divers down on x514 for samples	
	0946	Divers on surface with samples	
	0958	Lane Count on x514 and retrieve; underway to x922	PI 1040.22 PII 472.07
	1005	Deploy dive buoy @ x922	PI 1035.40 PII 475.60
	1017	Divers down on x922 for samples	
	1028	Divers on surface @ x922 with samples	
	1039	Lane Count on dive buoy x922; retrieve and underway	PI 1035.40 PII 475.76
	1047	Deploy dive buoy @ x923	PI 1033.77 PII 467.34
	1101	Divers down on x923 for samples	
	1112	Divers on surface at x923 with samples	
	1121	Lane Count on dive buoy retrieve and underway	PI 1033.60 PII 467.45
	1128	Deploy dive buoy on x515	PI 1039.45 PII 467.74
	1226	Divers down on x515 for samples	
	1238	Divers up on x515 with samples	
	1247	Lane Count on dive buoy x515; retrieve and underway	PI 1039.37 PII 467.80
	1252	Deploy dive buoy on x107	PI 1043.91 PII 468.65
	1310	Divers down on x107 for samples	
	1320	Divers up on x107 with samples	

* Too dirty to photograph

DATE	TIME (CST)	ACTIVITY	LOCATION
1 April (con't)	1330	Lane Count on dive buoy x107; retrieve and underway	PI 1043.85 PII 468.75
	1336	Deploy dive buoy on x103	PI 1046.10 PII 468.94
	1421	Divers down on x103 for samples	
	1432	Divers up on x103 with samples	
	1440	Lane Count on dive buoy x103; retrieve and underway	PI 1046.02 PII 468.99
	1446	Deploy dive buoy on x511	PI 2050.62 PII 468.91
	1540	Divers down on x511 for samples	
	1554	Divers up on x511 with samples	
	1603	Lane Count on dive buoy x511; retrieve and underway	PI 1050.50 PII 469.00
	1612	Deploy dive buoy @ x919	PI 1056.24 PII 469.63
	1623	Divers down on x919 for samples	
	1633	Divers up on x919 with samples	
	1646	Lane Count on dive buoy x919; retrieve and underway	PI 1056.16 PII 469.76
	1650	Underway to OPC-MU-749L-1	From x919
	1745	Lane Count NW corner OPC-MU-749L-1	PI 1091.45 PII 304.70
	1830	Dockside UTMSI	Port Aransas
2 April	0552	Depart dockside UTMSI	Port Aransas
	0656	Lane Count NW corner OPC-MU-749L-1	PI 1091.49 PII 304.71
	0756	Deploy dive buoy on x924	PI 1038.74 PII 459.63
	0820	Divers down on x924 for samples	
	0830	Divers up on x924 with samples	
	0840	Lane Count on dive buoy x924; retrieve and underway	PI 1038.60 PII 459.59
	0848	Deploy dive buoy x516	PI 1041.90 PII 464.07
	0900	Divers down on x516 for samples	
	0912	Divers up on x516 with samples	
	0924	Lane Count on dive buoy x516; retreive and underway	PI 1041.71 PII 464.17
	0931	Deploy dive buoy on x108	PI 1044.41 PII 467.93
	0942	Divers down on x108 with samples	

DATE	TIME (CST)	ACTIVITY	LOCATION
2 April (con't)	0950	Divers up on x108 with samples	
	1001	Lane Count on dive buoy x108; retrieve and underway	PI 1044.43 PII 467.97
	1008	Deploy dive buoy on x104	PI 1045.55 PII 469.77
	1020	Divers down on x104 for samples	
	1032	Divers up on x104 with samples	
	1041	Lane Count on dive buoy x104; retrieve and underway	PI 1045.49 PII 469.78
	1048	Deploy dive buoy on x512	PI 1048.21 PII 472.84
	1110	Divers down on x512 for samples	
	1120	Divers up on x510 with samples	
	1133	Lane count on dive buoy x512; retrieve and underway	PI 1048.05 PII 472.92
	1143	Deploy dive buoy on x920	PI 1051.30 PII 477.24
	1153	Divers down on x920 for samples	
	1200	Divers up on x920 with samples	
	1211	Lane count on dive buoy x920; retrieve and underway	PI 1051.18 PII 477.33
	1219	Deploy dive buoy @ x921	PI 1042.64 PII 479.81
	1307	Divers down on x921 for samples	
	1319	Divers up on x921 with samples	
	1328	Lane Count on dive buoy @ x921; retrieve and underway	PI 1042.55 PII 479.94
	1334	Deploy dive buoy @ x513	PI 1043.83 PII 474.09
	1350	Divers down on x513 for samples	
	1358	Divers up on x513 with samples	
	1409	Lane Count on dive buoy @ x513; retrieve and underway	PI 1043.70 PII 473.97
	1419	Deploy dive buoy @ x105	PI 1044.64 PII 470.02
	1434	Divers down on x105 for samples	
	1445	Divers up on x105 with samples	
	1458	Lane Count on dive buoy @ x105; retrieve and underway	PI 1044.61 PII 467.65

DATE	TIME (CST)	ACTIVITY	LOCATION
2 April (con't)	1504	Deploy dive buoy @ x109	PI 1045.23 PII 467.65
	1527	Divers down on x109 for samples	
	1538	Divers up on x109 with samples	
	1547	Lane Count on dive buoy @ x109; retrieve and underway	PI 1045.13 PII 467.67
	1554	Deploy dive buoy @ x517	PI 1046.27 PII 462.69
	1609	Divers down on x517 for samples	
	1616	Divers up on x517 with samples	
	1631	Lane Count on dive buoy @ x517; retrieve and underway	PI 1046.15 PII 462.80
	1638	Deploy dive buoy x925	PI 1047.69 PII 456.99
	1650	Divers down on x925 for samples	
	1700	Divers up on x925 with samples	
	1710	Lane Count on dive buoy @ x925; retrieve	PI 1047.57 PII 457.01
	1714	Underway to OPC-MU-749L-1	From x925
	1804	Lane Count NW corner OPC-MU-749L-1; underway to Port Aransas	PI 1091.55 PII 304.89
	1845	Dockside UTMSI; begin clean-up; unloading	Port Aransas
	2130	Secure clean up	Port Aransas
3 April	0700	Resume preparations for departure	Port Aransas
	0815	Secure all preparations; secure BLM #36	Port Aransas
	1630	Scientific party arrives Mobile, Ala.	

III. DESCRIPTION OF OPERATIONS

A. Dive Stations - As noted on the two previous operations, we were unable to photograph at any of the dive sites. At each station we took three (3) long and three (3) short "cores" for sediments, trace metals, and forams; pre-cleaned "paint cans" were used for sediments hydrocarbons.

B. Trawl Stations - Trawl stations were carried out as described in previous rig reports.

C. Disposition of Samples -

1. Sediments Cores- Stored wet and capped; packed in boxes; delivered to T. White at dockside.
2. Sediments for chemical analyses- Stored in prescribed packaging, frozen, and delivered to T. White at dockside.
3. Forams- Preserved as prescribed and delivered to T. White at dockside.
4. Fauna for chemical analyses and Histopathology- Material collected for the above purposes were collected and handled as prescribed and delivered to T. White at dockside.
5. Ships lubricants, paint ships, etc. Materials collected for the above purposes were handled as prescribed and delivered to T. White at dockside.

IV. LOGS-RECORDS

A. Hifix Log- M. Pennington (Decca)
B. Chief Scientist's Log- T. White by xerox
C. Dive Log- T. White by xerox
D. Station Log (Trawling)- T. White by xerox
E. Trace Metal Log- T. White by xerox
F. Archiving Log- T. White by xerox

V. PERSONNEL

T.S. Hopkins [1]	UA	C. Lutz	UA
A.W. Blizzard [2]	UA	E. Livingston	UA
D. Gilbert	UA	D. Grimm	UA
T. White	SUSIO		

1. Chief Scientist, Diving Officer 2. Archivist

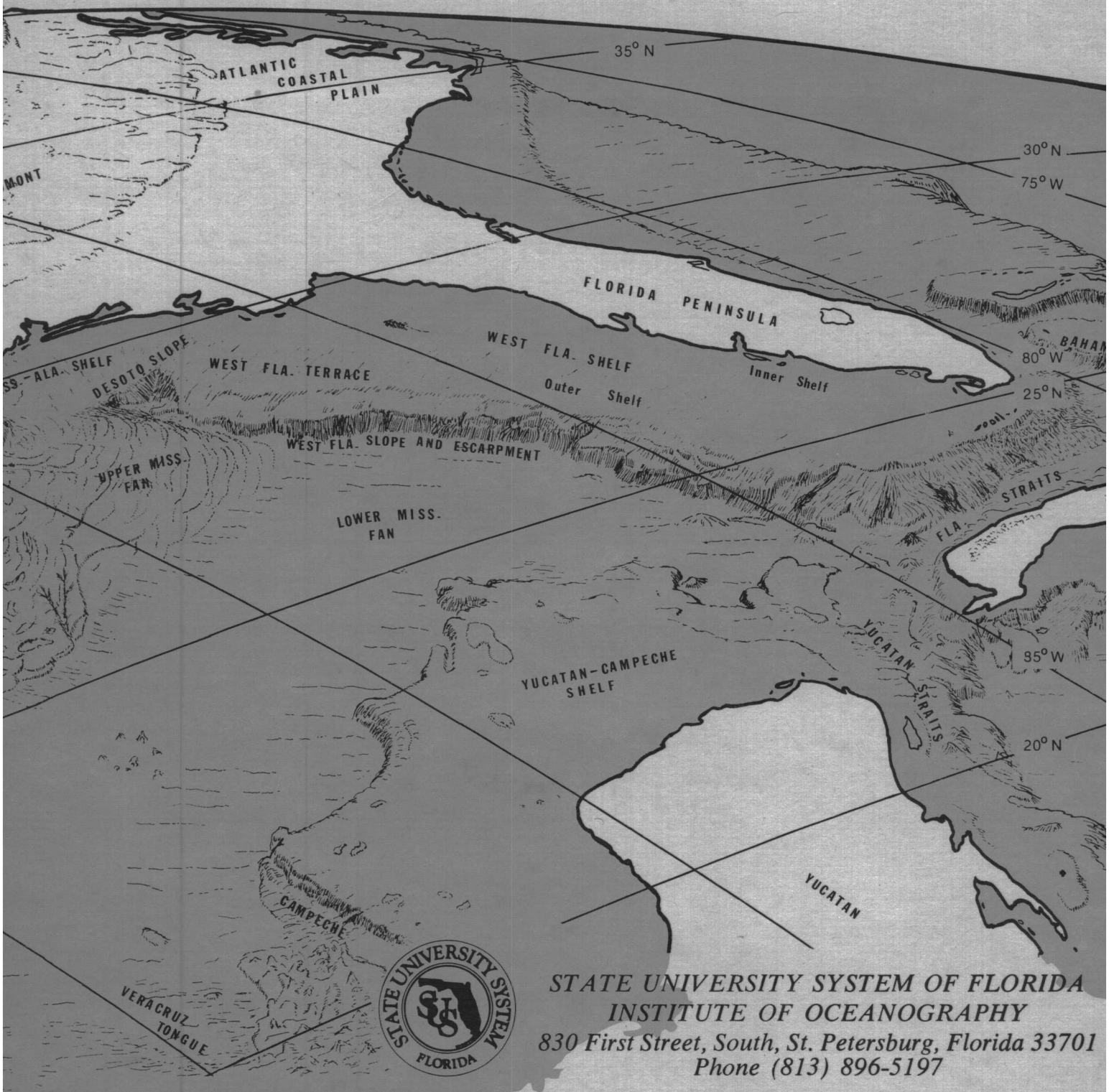
Respectfully submitted,

Thomas S. Hopkins

Thomas S. Hopkins
Chief Scientist, BLM #36

CAPITAL EQUIPMENT LIST

BLM CONTRACTS: 08550-CT4-11
08550-CT5-30



STATE UNIVERSITY SYSTEM OF FLORIDA
INSTITUTE OF OCEANOGRAPHY
830 First Street, South, St. Petersburg, Florida 33701
Phone (813) 896-5197

University of Florida, Gainesville · *Florida State University, Tallahassee* · *Florida A. & M. University, Tallahassee* · *University of South Florida, Tampa* · ***Florida Atlantic University, Boca Raton***
University of West Florida, Pensacola · *Florida Technological University, Orlando* · *University of North Florida, Jacksonville* · *Florida International University, Miami*

Capital Equipment List

Contracts: 08550-CT4-11
08550-CT5-30

as of 1 March 1976

TABLE OF CONTENTS

Capital Equipment Lists

The following tables list (by Institution) capital equipment items purchased under contracts CT4-11 and CT 5-30. Descriptors, disposition and location have been given for each item as required.

STATE UNIVERSITY SYSTEM - INSTITUTE OF OCEANOGRAPHY

BLM Contract No. 08550-CT4-11

State University System - Institute of Oceanography
830 First Street South
St. Petersburg, Florida 33701

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
		Box Corer includes $1,000 budgeted for Capetown Dredge which was not constructed. The $1,000 was used for the construction of the box corer.	6,470		6,470			

BLM Contract No. 08550-CT5-30
State University System - Institute of Oceanography
830 First Street South
St. Petersburg, Florida 33701

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
		Box Corer	$ 7,012		$ 7,012			
		Capetown Dredges 2 @ $185	370		370			
		Capetown Dredge inserts 5 @ $20	100		100			
		Carbon arc torch	114		114			
		1975 4HP Johnson outboard motor	328		328			
		90 liter Niskin bottles 2 @ $738	1,369		1,369		C1060-SS	
		1/2" Rockwell electric drill	71		71		767	
		Keller wet cut power hack saw, 5" x 5" series	575		575		1	
		Harper barrel hand truck	111		111		9468	
		Rockwell portable grinder	131		131			
		Wilton vise 2 @ $42.50	85		85		645	
		Rockwell circular saw	90		90		315	
		Calculators, HP-55 2 @ $395	790		790		55	

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
		Zodiac boat	$ 715		$ 715		509	
		OB motor bracket	52		52			
		Floorboard assembly	100		100			
		anchor	19		19			
		Simpson VOM meter	75		75		260	
		Hydraulic capstan head	320		320		C1000	
		Plessy STD	12,500		12,500		9060	
		Collator, Gathermate 16	925		925		1372	
		File, Pendaflexer	88		88		472	
		22.3 cu. ft. chest freezer, 2 @ $340	680		680		1563N	
		Single sideband radio	4,025		4,025		RF201	

UNIVERSITY OF SOUTH FLORIDA

BLM Contract No. 08550-CT4-11
Mr. Haskell L. Tinnen
Property Manager
Finance and Accounting
University of South Florida
Tampa, Florida 33620

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	83188	Perkin-Elmer Atomic Absorp.	14,499	9,079	23,578	Betzer, S.&P.		
	94839	Thelco Oven	275	275	550	Betzer, S.&P.	18	
	94846	Fume Hood	1,500	1,500	3,000	Betzer, S.&P.		
		* 8 30-l Niskin Bottles	1,740	1,740	3,480	Betzer, S.&P.		
	94841	Balance	250	250	500	Betzer, S.&P.		
	94844) 94845)---	Hotplate (4)	170	170	340	Betzer, S.&P.		
	Too small	Eppendorf Pipettes (6)	150	150	300	Betzer, S.&P.		
	94804	Heater-Stirrer (HAAKE)	125	125	250	Betzer, S.&P.		
	83229	Autotechnicon Tissue Process	3,200		3,200	Blake, N.		
	83216	Microtome	2,000		2,000	Blake, N.		
	94848	Pentax Camera, SLR	300		300	Doyle, L.		
	94849	Camera Strobe	50		50	Doyle, L.		
		* Silvercell Battery	125		125	Pyle, T.	B-B 646/V	
		Side-scan Sonar	17,900	17,900	35,800	Pyle, T.		
		Del Norte Signal Processor	4,000		4,000	Pyle, T.		

* Used under water. Not marked.

BLM Contract No. 08550-CT5-30
Haskell L. Tinnen
Property Manager
Finance and Accounting
University of South Florida
Tampa, Florida 33620

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	89593	Reverse osmosis system	1,000	1,000	2,000	P. Betzer		
	89592	Drainboard sink	210		210			
	89591	Flameless atomizer	4,290		4,290			61372
	89590	Low temp. freezer	592		592			
	89589	Env. clean room	3,476		3,476			
	94838	Step stool	14		14			
	94840	Water softener	75		150			
	94847	Deionizing tank	100	100	200			
	Expendable	Act. charcoal column	50	50	100			
	94817) 94816)	- - Insulated Tank	53		53			

BLM Contract No. 08550-CT5-30
University of South Florida - continued

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	89594	Low temp. asher	9,683		9,683	S. Betzer		5016-2 PM1010
	94818	Spex Mixer Mill	877		877			

BLM Contract No. 08550-CT5-30
University of South Florida - continued

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	94850	Zeiss photo microscope	13,510		13,510	Blake		
	94851	Res. microscope	1,122		1,122			
	94804	Cabinet	140		140			
	94802	Machine Stand	121		121		TX-200-C	
	94803	Regrigerator-freezer	260		260			
	94852	Stirrer	79		79			
	89599	Stereomicroscope	1,015		1,015			

BLM Contract No. 08550-CT5-30
University of South Florida - continued

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	89584	Drying Oven	120		120	L. Doyle	N8414	
	89587	Drying Oven	120		120		N8414	
		* Dart Corer	280		280			
	Doesn't belong to Univ.'	Freezer	225		225			
	89597, 89588	Vibra-Pads, No. 412 (2)	121		121		412	
	94805	Recorder	950		950		8382-32	
		* Dart Core	573		573			

* Used under water. Not marked

BLM Contract No. 08550-CT5-30
University of South Florida - continued

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	93256	Picoammeter	598		598	Braman and Manheim	414S	
	91858	Elec. Int. Chart recorder	950		950		25ZA	
	91804	Dewar flask - 5 liter	143		143			
	94764	Regulator	78		78			
		Transmissometer, Montedoro-Whitney with Depth-readout system	3,200	3,200	6,400			

BLM Contract No. 08550-CT5-30
University of South Florida - continued

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	89596	Map-o-graph Proj.	3,334		3,334	T. Pyle	55-C	
		*Hydrophones and acc.	5,192		5,192			

* Used under water per T. Pyle 2/27/76.

UNIVERSITY OF FLORIDA

BLM Contract No. 08550-CT4-11
Mr. R. M. Reeb
Manager, Property Accounting
Finance and Accounting
104 Tigert Hall
University of Florida
Gainesville, Florida 32611

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	559949	M-5 Stereo Mic. W/ACC	$1,113	$371	$1,485	F. Maturo	264-975	112821
	559950	M-5 Stereo Mic. W/ACC	1,113	371	1,485		264-975	112800
	591035	M-5 Stereo Mic. W/ACC	1,113	371	1,485		264-975	112957
	591036	M-5 Stereo Mic. W/ACC	1,113	371	1,485		264-975	112893
	590038	Plankton Splitter	231		231		Folsom	N/A
	590039	Differential Counter	128		128		S/P B 4120-4	N/A
	590040	Differential Counter	128		128		S/P B 4120-4	N/A
	590041	Differential Counter	128		128		S/P B 4120-4	N/A
	590042	Differential Counter	128		128		S/P B 4120-4	N/A

FLORIDA STATE UNIVERSITY

BLM Contract No. 08550-CT4-11
Mr. Robert M. Johnson
The Florida State University
Tallahassee, Florida 32306

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	234015	Automatic Gas Chromatograph	$10,900		$10,900	Calder, J.		1429A00117
	234016	Automatic Liquid Sampler	2,950		2,950	Calder, J.		1429A00635
	234017	Mettler balance	3,345		3,345	Calder, J.		525430
	234014	Rotary Evaporator	330		330	Calder, J.	5150	
	235448	Low Temp. Freezer	1,561		1,561	Calder, J.	675B	95015
	116805	Storage House	610		610	Kritzler, H.		
	234621	Refrigerator/Freezer	378		378	Iverson, R.	Signature	UF021230
	234018	Oven, gravity convection	185		185	Iverson, R.	OV18A550	
	234019	Pump, peristaltic	185		185	Iverson, R.		3142
	233480	Benthos-Time-Depth Recorder	760		760	Knauer, G.	1170250	593
	233589	Pump, Positive pressure Jabsco	160		160	Knauer, G.	17430001	AL 72
	235460	Pump, Millipore Vacuum	140		140	Knauer, G.		0974

BLM Contract No. 08550-CT5-30
Mr. Robert M. Johnson
The Florida State University
Tallahassee, Florida 32306

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	236820	Microscope, cpd., Olympus	$1,090		$1,090	Kritzler, H.	BH	200606
	236526	Meter, pH, Analog, Orion	449		449	LaRock, P.	301	030181
	236672	Photometer, Timer, Aminco	2,316	1,000 (NASA)	3,316	LaRock, P.		228283
	236289	Holder, Filter, Teflon, 142 mm	495		495	Knauer, G.		
		Muffle Furnace	127		127	Knauer, G.	116-616	
		Hot plate, therm.	101		101	Knauer, G.	137-158	

BLM Contract No. 08550-CT5-30
Mr. Robert M. Johnson
The Florida State University
Tallahassee, Florida 32306

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	236398	Oven, gravity	302		302	Calder, J.		RPA8520
	236399	Oven, electric	147		147	Calder, J.		21AE6
	236400	Rotavapor-Buch I	475		475	Calder, J.		89756
	236401	Rotavapor-Buch I	475		475	Calder, J.		88285
	236402	Hot plate	124		124	Calder, J.	2200	37
	236403	Gas chrom.-Hewlett	11,745		11,745	Calder, J.		527A0-1014
		shipping charges	83		83			
	236404	Compressor	194		194	Calder, J.		180493
		shipping charges	11		11			
	236405	Vacuum pump	214		214	Calder, J.	B&G	60648P

BLM Contract No. 08550-CT5-30
Mr. Robert M. Johnson
The Florida State University
Tallahassee, Florida 32306

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
		Olympus microscope parts:				Iverson, R.		
		Wild Fluiatar objective, 50/1 oil immersion	$ 230		$ 230		175126	
		Phase contrast 50/1 oil immersion	301		301		175136	
		Collector assembly	99		99		184682	
		epi Q-I lamp 12V-100V	466		466		255551	
		L.W.D. phase condenser	320		320		198216	
		Phase contrast 20/.6 oil immersion	218		218		217336	
		Reticle	26		26		175141	
		Base plate	20		20		250332	
		(2) compensating wide field 5X eye piece	240		240		198451	
		Photo tube	390		390		256546	

BLM Contract No. 08550-CT5-30
Mr. Robert M. Johnson
The Florida State University
Tallahassee, Florida 32306

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
		Flat field photo eye piece	$ 77		$ 77		334686	
		Miscellaneous parts	85		85			
					$2,472			
				less 5%	123			
					$2,349			

UNIVERSITY OF WEST FLORIDA

BLM Contract No. 08550-CT5-30
James F. Hayden
Fiscal Contract Office
University of West Florida
Pensacola, Florida 32504

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	015377	Folsom Plankton Splitter	$ 232		$ 232	Collard	31	
	015398	Floating Plankton Sampler	835		835	Collard		
	015398	Otter Trawl Doors with towing bridle and 2 30' semi balloon trawl with chaffing gear, floats 1/4" mesh bag	1,050		1,050	Bortone		

UNIVERSITY OF MIAMI

BLM Contract No. 08550-CT4-11
Mr. Dale C. Renegar
Ass't Director of Property Control
University of Miami
P.O. Box 248106
Coral Gables, Florida 33124

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	108723	Camera Honeywell Pentax Spotmatic F	$ 350		$ 350			

UNIVERSITY OF ALABAMA

BLM Contract No. 08550-CT4-11
Ivery Burt
University of Alabama in Birmingham
University Station
Birmingham, Alabama 35294

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
		Regulator	$ 94		$ 94	Hopkins	105MK	
		Regulator	94		94	Hopkins	105MK	
		Regulator	94		94	Hopkins	105MK	
		Regulator	94		94	Hopkins	105MK	
		Regulator	94		94	Hopkins	105MK	
		Regulator	94		94	Hopkins	105MK	
		Mako-8-CFM Compressor-Gas Powered	2,524		2,524	Hopkins	KA1485	
		Camera-Nikonos II with 28 mm lens	332		332	Hopkins		
		Camera-Nikonos Super 8X	299		299	Hopkins		
		Camera-Nikonos II with 35 mm lens	205		205	Hopkins		

Ivery Burt

University of Alabama in Birmingham
University Station
Birmingham, Alabama 35294

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	108576 108577	2 dissecting microscopes	$1,992		$1,992	Vittor		
	*	Stereomicroscope with accessories, wild	$7,077		$7,077	Hopkins		None
		Sub Sea Strobe	$ 480		$ 480	Hopkins	MK 150	
		Sub Sea Strobe	$ 480		$ 480	Hopkins	MK 150	
		Nikon Camera with 55 mm lens	$ 699.28		$ 699.28	Hopkins		
		Copylight set and CS-5 Stand	$ 107.65		$ 107.65	Hopkins		
		Nikonos II, 35 mm, 2.5	$ 215.25		$215.25	Hopkins	N II	

* WILD M-20 (1)
WILD M-5 (2)

TEXAS A&M RESEARCH FOUNDATION

BLM Contract No. 08550-CT5-30
Mrs. Dorothy Coppinger
Texas A&M Research Foundation
FE Box H
College Station, Texas 77843

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	RF-10821	P.E. Furnace, Graphite	4,360.		4,360.	Presley	HGA-2100	02690

UNIVERSITY OF GEORGIA

BLM Contract No. 08550-CT5-30
Mr. Charles E. Thompson
Head, Contracts and Grants
The University of Georgia
Athens, Georgia 30602

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
		Transducer (EG&G Model 230)	4900		4900	Henry, V.		
		Hot Splicer	575		575	Henry, V.		
		McCulloch Generator	407		407	Henry, V.	H-300	

UNIVERSITY OF MICHIGAN

Contract No. 08550-CT4-11
Mr. Richard E. Flanery
Asst. Property Supervisor
Office of Contract Administration
The University of Michigan
Ann Arbor, Michigan 48105

BLM ID#	Univ ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
None	2436	Gas Chromatograph & Rec.	5,934	None	5,934	Meyers, P.	5711A	1438A03840
None	2422	Virtis Homogenizer	337	None	337	Meyers, P.	45	311415
None	2421	Electrobalance	1,049	None	1,049	Meyers, P.	4400	29709
	2529	Pump, Dual Aspirator	414	None	414	Meyers, P.	2-9000	61503

BLM Contract No. 08550-CT5-30
Mr. Richard E. Flanery
Asst. Property Supervisor
Office of Contract Administration
The University of Michigan
Ann Arbor, Michigan 48105

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Invest.	Mod. No.	Serial No.
None	2436	Gas Chromatograph & Rec. w/Modif.	$ 7,463.72	None	$ 7,463.72	P. Meyers	5711A	1438A03840
None	2422	Virtis Homogenizer	337.00	None	337.00	P. Meyers	45	311415
None	2421	Electrobalance	1,049.00	None	1,049.00	P. Meyers	4400	29709
None	2507	Reporting Integrator, Hewlett Packard	5,200.00	None	5,200.00	P. Meyers	3380A	1534A01446
None	2516	Gas Chromatograph, Hewlett Packard	11,072.48	None	11,072.48	P. Meyers	5831A	1541A01257
None	2497	Sonic Dismembrator	1,087.00	None	1,087.00	P. Meyers	300	0454F
None	2496	Upright Freezer	420.00	None	420.00	P. Meyers	N23K	46475388
None	2503	Oven, 120V, Thelco	473.85	None	473.85	P. Meyers	18	21-AF-1
None	2502	Analytical Balance, Mettler	1,457.90	None	1,457.90	P. Meyers	H35AR	622837
None	2501	Centrifuge	758.30	None	758.30	P. Meyers	HN-s	34721855
None	2552	Rotovapor Flash evaporator	388.00	None	388.00	P. Meyers	4358-510	132056
None	2529	Pump, Dual Aspirator			414.64	P. Meyers	2-9000	61503
None	2436	Temperature Controller, Hewlett Packard	490.00	None	490.00	P. Meyers	5708A	1534A04999
None	2436	Heat Capillary Inlet Splitter, Hewlett Packard	450.00	None	450.00	P. Meyers	18704A	- - -
None	2436	Carrier Gas Rotameter Kit, Hewlett Packard	220.00	None	220.00	P. Meyers	18757A	- - - -
		Heated injection Port for Metal Columns	370.00	None	370.00	P. Meyers	18709A	- - -

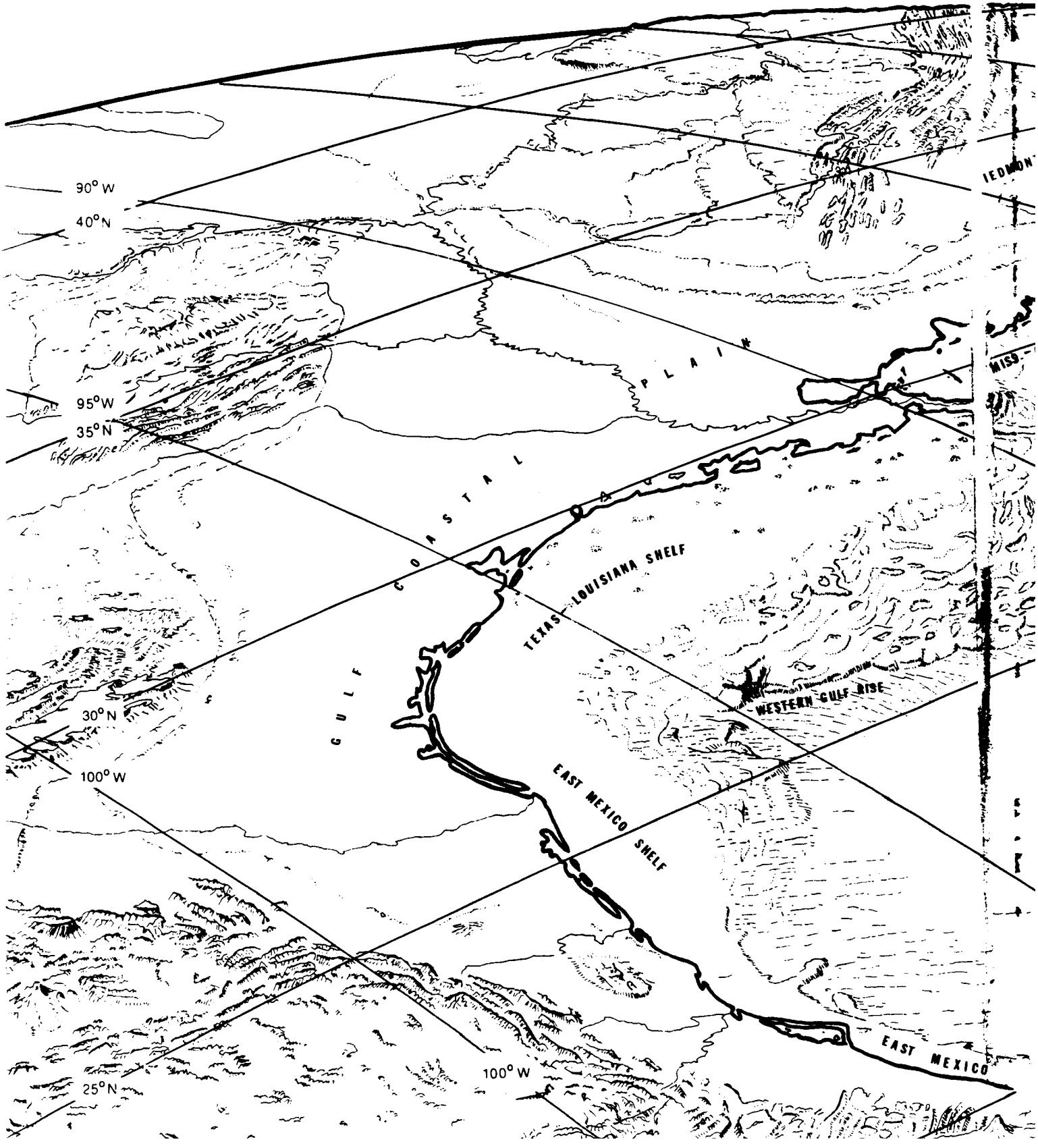
GULF COAST RESEARCH LABORATORIES

BLM Contract No. 08550-CT4-11
Mr. Andrew J. Murray
Gulf Coast Research Lab
P.O. Drawer AG
Ocean Springs, Mississippi 39564

BLM ID#	Univ. ID#	Equipment	Cost BLM	Cost Shared	Cost Total	Principal Investigator	Model Number	Serial Number
	GCRL 4510	Inverted Plankton Micr.	$ 2,975	$ 2,976	$ 5,951	Woodmansee, R.		0996
	GCRL 4506	Stereoscopic Micr.	1,040	1,040	2,081	Woodmansee, R.		113148
	BLM-1	Submersible pump	289		289	Woodmansee, R.		0474
		Metal filters & manifold (3)	420		420	Woodmansee, R.		
	BLM 2&3	Vacuum pump (2)	234		234	Woodmansee, R.		0374 & 0474
	BLM 4&5	Air Conditioning Unit (2)	320		320	Woodmansee, R.		324-34872 & 324-3491
	BLM-6	Niskin Open/Close Net System	3,991		3,991	Woodmansee, R.		
	GCRL 4483 GCRL 4484	Time-Depth-Recorder (2)	883	883	1,765	Woodmansee, R.	11750-250	592& 594
	GCRL 4571	PEP Gas Chromatograph	8,216	8,217	16,433	Lytle, T.	PEP-1	50995
	BLM-10	Waring blender	308		308	Lytle, T.		91-215
	BLM-7&8	Steel cabinets 2 @ $77	154		154			
	BLM 9	Calculator	325		325		HP-45	1350A-51801

BLM Contract No. 08550-CT5-30
Andrew J. Murray
Gulf Coast Research Lab
P.O. Drawer AG
Ocean Springs, MI 39564
Andrew J. Murray

BLM ID#	Univ. ID#	Equipment	BLM	Cost Shared	Total	Principal Investigator	Model Number	Serial Number
	BLM-27	Electric typewriter	510		510	Lytles		S/N:2730768
	BLM-28	Flash Evaporator-Buchler	365		365	Lytles	PTFE-1GN	
	BLM-29	Chromat. Interface	1,147		1,147	Lytles	3920	


90° W
40°N
95°W
35°N
30°N
100° W
25°N
100° W
GULF COASTAL PLAIN
TEXAS-LOUISIANA SHELF
WESTERN GULF RISE
EAST MEXICO SHELF
EAST MEXICO