Final Report
Pre-dredge Survey

Client: NATCO

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Rt. 2, Box 219A
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Location: Georgetown Harbor Entrance Channel

Date: November 27 28, 1992

COE District: Charleston

Permitting agencies: SCWMRD (state) and NMFS (federal)

Area surveyed: Confine survey area to the Georgetown Harbor Entrance Channel. Travel a distance of approximately 1 1/2 to 2 miles (10,560). This area can be defined as the shipping channel starting from the jetties at the seaward entrance (33° 11' 13" N by 79° 07' 62" W located approximately .10 of a mile inshore of markers #5/#6) running out to the sea buoy.

Survey design: Approximate one 12-hour period during night and one 12-hour period during the day. Due to the unexpected, the allowed time for a trawl was one per hour giving the survey approximately 24 tows. The contract called for 20 - 30 rows, anticipating some down time from damaged rigging and torn nets. It was proposed that the day and night surveys be run back-to-back for a 24 hour period starting in the morning, depending on the condition of the crew.

Survey schedule: Surveys to be run during a 5-day window before dredging commences. The trawling survey was scheduled to begin Friday morning (27 November) and and Saturday morning (28 November) based on the estimate that the dredging would begin on December 1, 1992.

Personnel and Equipment: The commercial trawler used was the Mona Lisa out of Charleston, S.C. A staff of five were onboard the vessel, including one captain (Mike Cox from Charleston), two crew and two endangered species observers (Scott Edwards and Brown Widener). The project coordinators were James I. Richardson and Scott Edwards. This Final Report has been prepared and submitted by Scott Edwards.

Results: Thirty-one trawls were completed All being from 25 minutes to 30 minutes, except for four trawls which were 22 minutes, 23 minutes, 31 minutes and 33 minutes. A summary of each trawl has been attached to this report, including the latitude/longitude and loran coordinates for the beginning and ending of each trawl. First trawl was down at 0644 hours on 27 November 1992. Last trawl up at 0536 on 28 November 1992. Trawling continuous on 25 - 30 minute trawls throughout the survey. No damage was done to the nets, however there was a broken tickler which was repaired immediately. **Three turtles were caught.** One Kemp Ridley (Le Pidochelys Kempi) and two Loggerheads (Caretta Caretta). The Kemp Ridley was caught on trawl #4. The Loggerheads were caught on trawl #17 and #19. Location and other specifications are appended to this report.

The bycatch indicated that the nets were fishing on the bottom. In addition to bottom fish species such as skates, sting rays, croakers and spots, typical live specimens in bycatch of each trawl were whecks, sea pork, horseshoe crabs and spider crabs, all characteristics of benthic organisms.

Weather for the survey was overcast and periods of rain. Air temperature ranged from 50° to 60° F. Seas ranged from 2 to 4 feet and then laid down to 1 to 2 feet and calm. Winds from N.W. at 10 to 15 throughout survey.

Summary: It was proven that sea turtles are present in the Georgetown Harbor Entrance Channel at the time of 27 November 1992 - 28 November 1992 during the pre-dredge survey.

Note: One short-nosed sturgeon on trawl #2.

Original field records for this work at Georgetown have been archived at the U. S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MS. and are available from Dave Nelson or Dana Dickerson.

Water temperatures in the channel (Degrees C)

Date	Time	Mid-depth	Channel Vicinity	
27 Nov	1030	20c	331100N	790515W
27 Nov	1913	20c	331145N	790524W
27 Nov	2136	19c	331142	790564
28 Nov	0152	19c	331137	790481

Tides (Georgetown):

Date	Low	High	Low	High
27 Nov	0317	0930	1600	2130
28 Nov	0401	1000	1644	2210

SEA TURTLE INFORMATION

Channel: GEORGETOWN

[redacted]

[illegible] of [illegible]

Turtle Sp[illegible] Net: Port ☒ Starboard ☐

[illegible]		
Left:	GAT 308	
Right:	GAT 307	
Recapture:	This effort:	☐
	Previous effort:	☐

Sex:	
Male:	☐
Female:	☐
Unk:	☒

Weight:	
36	kg
	lbs

Head Width:	
11.7	cm
	in

Carapace S.L. Length:	
61.4	cm
	in

S.L. Width:	
51.1	cm
	in

Tail Length (from plastron to tip:)	
14	cm

Photos Taken:	
Yes	☐
No	☒

Blood Taken:	
Yes	☒
No	☐
Time:	2056

Telemetry Tag:	
Radio	☐
Sonic	☐
Satellite	☐

[illegible] SCAR ON RIGHT FLIPPER
GOOD CONDITION - BARNACLES ON CARAPACE - PLASTRON

Turtle Released:	
Date:	27 NOV 92
Time:	2054

Release Location	
Lat:	330839
Long:	790428

H_2O
TEMP 19° C.

SEA TURTLE INFORMATION

Channel: GEORGETOWN

[redacted]

1 of 2

Turtle Specimen: [illegible] Starboard ☐

[illegible]	Sex	Weight	Head Width
Left: QQT 304	Male: ☐	27 kg	11.8 cm
Right: QQT 303	Female: ☐	lbs	in
Recapture: This effort: ☐	Unk: ☒		
Previous effort: ☐			

Carapace S.L. Length	S.L. Width	Tail Length (from plastron to tip:)
55.4 cm	47.4 cm	13 cm
in	in	

Photos Taken	Blood Taken	Telemetry Tag
Yes ☐	Yes ☒	Radio ☐
No ☒	No ☐	Sonic ☐
	Time: 1925	Satellite ☐

[illegible] GARBAGES, CARAPACE + PLASTRON

VERY ACTIVE

Turtle Released	Release Location
Date: 27 NOV 92	Lat: 33 08 39
Time: 2054	Long: 79 04 28

H_2O TEMP 19° C

SEA TURTLE INFORMATION

Channel: GEORGETOWN

[redacted]

1 of 1

LEPIDOCHELYS KEMPI

Turtle Species: [redacted] Port ☐ Starboard ☒

[redacted]	Sex:	Weight:	Head Width:
Left: QQT 302	Male: ☐	15 kg	10.8 cm
Right: QQT 301	Female: ☐	lbs	in
Recapture: This effort: ☐	Unk: ☒		
Previous effort: ☐			

Carapace S.L. Length:	S.L. Width:	Tail Length:
47.2 cm	43.4 cm	(from plastron to tip:)
in	in	11 cm

Photos Taken:	Blood Taken:	Telemetry Tag:
Yes ☐	Yes ☐	Radio ☐
No ☒	No ☒	Sonic ☐
	Time: —	Satellite ☐

[redacted] GOOD SHAPE SOME OF SLUGHISH

DEN BARNACLES

Turtle Released:	Release Location:
Date: 27 NOV 92	Lat: 330827
Time: 1140	Long: 790563

Loran Coordinates for survey trawls, Georgetown, S.C.

Trawl Number	Loran Down 1	Loran Down 2	Loran Up 1	Loran Up 2
1	454239	599494	454271	599578
2	454293	599623	454233	599485
3	454220	599463	454285	599607
4	454249	599529	454318	599666
5	454316	599675	454247	599525
6	454224	599469	454293	599622
7	454323	599685	454239	599506
8	454219	599469	454286	599607
9	454292	599618	454230	599482
10	454223	599469	454280	599593
11	454277	599591	454214	599430
12	454217	599454	454285	599599
13	454299	599632	454231	599483
14	454233	599496	454289	599613
15	454314	599664	454247	599514
16	454232	599492	454307	599648
17	454315	599665	454247	599515
18	454227	599473	454307	599650
19	454313	599659	454231	599477
20	454248	599617	454323	599680
21	454306	599645	454230	599482
22	454210	599448	454294	599622
23	454298	599629	454228	599480
24	454215	599456	459623	599624
25	454309	599650	454232	599483
26	454211	599447	464278	599542
27	454299	599637	454244	599622
28	454239	599507	454312	599662
29	454278	599595	454220	599435
30	454214	599451	454290	599615
31	454293	599624	454222	599483

Latitude and Longitude for survey trawls, Georgetown, S.C.

trawl number	Lat Down	Long Down	Lat Up	Long Down
1	331148	790534	331136	790635
2	331140	790694	331145	790531
3	331141	790507	331135	790667
4	331139	790581	331145	790742
5	331130	790750	331138	790573
6	331145	790511	331139	790682
7	331140	790762	331139	790551
8	331138	790502	331137	790667
9	331139	790686	331141	790525
10	331142	790509	331139	790651
11	331141	790630	331154	790476
12	331143	790498	331143	790660
13	331140	790695	331143	790528
14	331139	790543	331139	790674
15	331140	790230	331146	790567
16	331138	790537	331141	790717
17	331138	790732	331145	790567
18	331145	790524	331137	790717
19	331142	790726	331148	790526
20	331142	790564	331141	790752
21	331140	790722	331142	790525
22	331137	790478	331139	790685
23	331136	790699	331139	790523
24	331140	790489	331139	790688
25	331144	790724	331145	790529
26	331137	790481	331137	790649
27	331136	790704	331135	790567
28	331137	790551	331141	790731
29	331139	790653	331159	790485
30	331142	790486	331142	790678
31	331137	790690	331129	790518

General information on survey trawls, Georgetown, S.C.

Trawl number	Date	Time Down	Time Up	Trawl Duration	Channel Position	Tow Direction
1	11/27/92	0644	0714	30	Green/Red	Out
2	11/27/92	0730	0755	25	Center	Out
3	11/27/92	0817	0845	28	Green	In
4	11/27/92	0914	0939	25	Red	In
5	11/27/92	0950	1020	30	Green	Out
6	11/27/92	1040	1107	27	Center	In
7	11/27/92	1211	1244	33	Center	Out
8	11/27/92	1305	1333	28	Green	In
9	11/27/92	1347	1410	23	Red	Out
10	11/27/92	1420	1445	25	Center	In
11	11/27/92	1455	1520	25	Red	Out
12	11/27/92	1526	1552	26	Red	In
13	11/27/92	1604	1631	27	Center	Out
14	11/27/92	1639	1701	22	Green	In
15	11/27/92	1171	1739	28	Red	Out
16	11/27/92	1750	1820	30	Green	In
17	11/27/92	1835	1902	27	Green	Out
18	11/27/92	1913	1943	30	Green	In
19	11/27/92	1951	2023	32	Red	Out
20	11/27/92	2136	2203	27	Center	In
21	11/27/92	2211	2241	30	Center	Out
22	11/27/92	2256	2326	30	Red	In
23	11/27/92	2337	2407	30	Green	Out
24	11/28/92	2415	2445	30	Center	In
25	11/28/92	2455	0125	30	Red	Out
26	11/28/92	0152	0222	30	Red	In
27	11/28/92	0235	0257	22	Center	Out
28	11/28/92	0307	0338	31	Center	In
29	11/28/92	0347	0415	28	Green	Out
30	11/28/92	0429	0458	29	Red	In
31	11/28/92	0509	0536	27	Center	Out