

IDA GREEN CRUISE REPORT

Cruise No. 15-1 & 2      Dates of Cruise 9 May 75      to 10 June 75

Members: Crew	<u>Capt. Otis Murray</u>	Scientific	<u>J. Watkins, CS</u>
	<u>F. Cobb, Eng.</u>	<u>J. Mifsud, Asst. Eng.</u>	<u>K. Griffiths</u> <u>R. Elliott</u>
	<u>R. Ash, A.B.</u>	<u>D. Patterson, O.S.</u>	<u>G. Barksdale</u> <u>R. Cunningham</u>
	<u>R. Hundley, A.B.</u>	<u>G. Theisen, Cook</u>	<u>R. Buffler</u> <u>G. Schuster</u> <u>T. Shipley</u> <u>(U of Houston)</u>
Project:	_____		<u>G. Putman</u> _____

Reason (be specific): \_\_\_\_\_

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- REMARKS: Departed Galveston about 1410, 9 May 1975. IDA GREEN 15, Leg 1
- 10 May We hooked up the waste heat evaporator. The excess heat dissipated through the evaporator. It now keeps the port engine cool--which was running hot.
  - 11 May Deployed single channel streamer to collect data on Sigsbee Scarp where it intersects the Mississippi Cone. Completed single channel work at 2200. Ship's air conditioning went out.
  - 13 May Began single channel work in Straits of Florida about 0600. Ship's air conditioning working again after repairs. Gun #4 leaking badly. Data are so-so, probably because of relatively high speed.
  - 15 May Put out long streamer. Repaired numerous leaks due to winding streamer too tightly on drum following last cruise. At 2200 began USGS lines in Southeast Georgia Embayment (24-fold; R. Buffler, project scientist). Severe reverberation observed on monitor. Continual problems with guns; we have been able to keep no more than 3 working. Loran-C working well.
  - 18 May Continuing USGS work. Dropped one sonobuoy to test system which appears all right. Minor overhaul on compressors following completion of long north-south line.
  - 19 May No. 1 depth transducer out. Difficult to maintain course in the Gulf Stream. Necessary to crab up 50°.
  - 21 May Pulled streamer for repairs. Six of nine birds had ruptured diaphragms. Distal end running shallow and noisy as a result. A shark got two sections.
  - 22 May Streamer repaired and out; inboard end still running slightly deep.
  - 23 May Observed butte and mesa-type structures on Blake Plateau indicating resistant beds control erosion there as on land. Marked change in sea state upon entering the Gulf Stream. Water calm outside the Stream; 2-3' swells inside the Stream. Perceptible vibration in engines. More often than not, we lose Loran-C at dusk and dawn. Otherwise it appears to work well. Radio transmitter problems.
  - 25 May Completed USGS work. Gear in at 2030.
  - 26 May Arrived at Port Canaveral about 1030 CDT. Took on food, fuel, got radio repaired.

- 27 May Departed Port Canaveral, Florida 1430. IDA GREEN 15, Leg 2
- 28 May Began Blake Plateau bootleg line, 12-fold. After air conditioner in Lab out. Streamer running slightly shallow (20-25 ft.) on inboard side due to removal of additional lead.
- 30 May Completed Blake Plateau line. Possible subbasement reflectors observed in parts of line. Interesting structure. Shipley and Buffler will work up data. Minor problems with DFS due to inadequate refrigeration in Lab.
- 31 May 0009--Began IPOD survey (24-fold). Tom Shipley, project scientist.
- 1 Jun Leak in line leading from fresh water tank to cofferdam. Patched the leak but lost quite a bit of fresh water. Emergency water restrictions ordered for 2-3 days to allow evaporator to build up surplus. Welder required in Bermuda to make permanent repair.
- 3 Jun IPOD shooting going smoothly. Began shooting NW-SE sonobuoy line.
- 5 Jun Completed IPOD work at 1705 CDT. Began running 12-fold line from IPOD area to DSDP Hole 105. IPOD data looks good. Possible deep reflection  $\leq 6.5$  seconds subbottom, i.e., all the way to bottom multiple.
- 6 Jun Completed 12-fold line to DSDP Hole 105. Pulled streamer. All birds operational; no leaks. Deployed single channel streamer. c/c for Bermuda.
- 7 Jun 1000--Starboard flopper stopper failed. Vertical bolt at base of boom snapped. Anchor windlass motor failed. Pulled in flopper stoppers by hand. Pull all gear, continue to Bermuda.
- 8 Jun 0930--Arrived St. Georges, Bermuda.
- 10 Jun I departed St. Georges. Water tank repaired, aft air conditioner installed, and flopper stopper repair underway. Departed 1330.

  
J. S. Watkins  
Chief Scientist