

Cruise Report: Georges Bank and Canyons - 1984

1. Ship's Name: R.V. Johnson and Johnson-Sea-Link submersible; Harbor Branch Foundation, Ft. Pierce, Florida.
2. Project: Georges Bank, Canyons, and Slope Undersea Study of Fishery Resources and Habitats in Oil and Gas Drilling Areas.
3. Funding Agency: NOAA
4. Area: Georges Bank; Lydonia, Oceanographer, Heel Tapper, Gilbert, Hydrographer, and Veatch Canyons; Continental Slope.
5. Dates: July 2-12, 1984; Woods Hole to Woods Hole.
6. Chief Scientist: R.A. Cooper, NMFS, Woods Hole.
7. Scientific Party: R.A. Cooper, NMFS
C. Newell, NMFS
K. Pecci, NMFS
C. Cooper, U. Conn.
P. Auster, U. Conn.
P. Valentine, USGS
8. Ship's Captain: William Abney
9. Purpose of Cruise: (1) revisit the eight (8) site specific monitoring stations at Lydonia, Oceanographer and Veatch submarine canyons and on the southern flank of Georges Bank for Northeast Monitoring Program studies relating to gas and oil drilling operations; (2) conduct transect surveys to define qualitatively and quantitatively the megafauna of the sea floor and their habitats; (3) collect faunal and substrate samples for contaminant (hydrocarbons, trace metals and PCB's) analyses; (4) conduct geological studies relating surficial geological and sedimentary features to animal abundance and distribution and describing these features as indicators of bottom current regime; and (5) to revisit the "deep water" monitoring station on the slope east of Oceanographer Canyon.
10. Navigation: Loran-C (Northstar 7000)
11. Scientific Equipment: Submersible with film and video cameras; faunal and sediment samplers.
12. Days at sea: 11
Stations occupied: 13
Submersible dives: 13 (JSL 2-862 to JSL 2-874)
(film and video employed at all dives)

<u>Sta No.</u>	<u>Date</u>	<u>L/L</u>	<u>Depth (m)</u>	<u>Sampling Device</u>	<u>Samples</u>
2	7-3-84	40°43.14' 67°28.64'	88	Submersible	2 sed. samples
3	7-3-84	40°37.87' 67°45.64'	78	"	3 " "
5	7-4-84	40°32.05' 67°43.35'	195	"	2 " "
5	7-4-84	40°32.69' 67°43.03'	139	"	3 " "
Lydonia C.	7-4-84	40°27.20' 67°38.49'	175	"	3 " "
6	7-5-84	40°27.93' 67°42.72'	152	"	3 " "
7	7-9-84	40°29.43' 68°10.52'	273	"	3 " "
8	7-9-84	40°25.05' 68°09.27'	227	"	3 " "
Heel Tapper C.	7-9-84	40°14.57' 68°16.05'	631	"	9 " "
11	7-10-84	40°15.96' 67°59.98'	412	"	5 " "
Gilbert C.	7-10-84	40°22.35' 67°53.34'	611	"	9 " "
Hydrographer C.	7-11-84	40°10.99' 69°05.60'	263	"	4 " "
9	7-11-84	40°00.05' 69°37.65'	134	"	4 " "
Oceanographer C.	7-9-84	40°29.86' 68°09.06'	173	Van Veen Grab	14 " "
11	7-10-84	40°16.95' 67°59.89'	301	" "	6 " "

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USGS, Woods Hole, MA

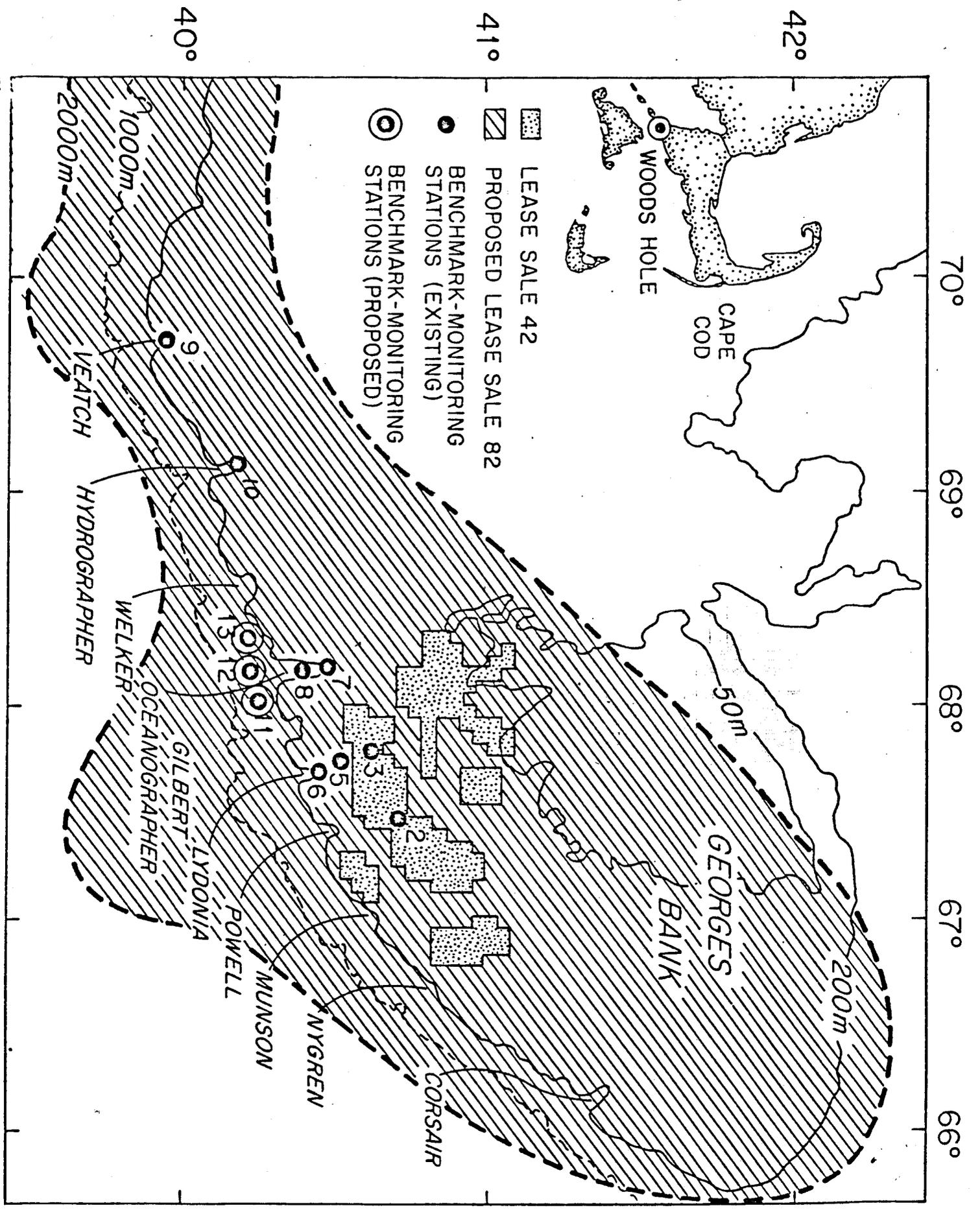


Figure 2. Distribution of undersea research monitoring stations on Georges Bank and related submarine canyons in relation to proposed drilling sites