1) **SHIP NAME**: R/V FERREL/NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION(NOAA)

#940074

2)**CRUISE LEG**:FER 94-3

3) **PROJECT NUMBER AND NAME**: 9470-31442/STELLWAGEN BANK SANCTUARY

4) **FUNDING AGENCY**: U.S.GEOLOGICAL SURVEY(USGS)/NOAA

5) **CONTRACT:** N/A

6) **AREA OF OPERATIONS**: CAPE COD BAY/STELLWAGEN BANK/MASSACHUSETTS BAY

7) **DATES AND PORTS OF CALL**: 10/18/94-10/22-94
PROVINCETOWN,MASS.
WOODS HOLE,MASS.

8) **CHIEF SCIENTIST**: RICK RENDIGS
BRANCH PRINCIPAL: ROBERT OLDALE

9) **SCIENTIFIC PARTY**: DAVE NICHOLS-SEISMIC SPECIALIST(USGS)
RICK RENDIGS-GEOLOGIST(USGS)
VEE ANN CROSS-SEISMIC SPECIALIST(USGS)
BYRON STONE-GEOLOGIST(USGS)

10) **SHIP CAPTAIN**: CPTN. NOVARO(NOAA)

11) **PURPOSE OF CRUISE**: Collection of seismic reflection data for determining the geologic framework of Stellwagen Bank and nearby areas.

12) **NAVIGATION TECHNIQUES**: DIFFERENTIAL GLOBAL POSITIONING(DGPS)

13) **SCIENTIFIC EQUIPMENT**: 15 CUBIC INCH WATER GUN
EPC RECORDER(#9082)
MASSCOMP DIGITAL ACQUISITION SYSTEM
AIR POWER COMPRESSOR
GEOPULSE RECEIVER
DGPS NAVAGATIONAL DISPLAY AND DATA ACQUISITION SYSTEM

14) **TABULATED INFORMATION**:
DAYS AT SEA: 5
CONTINOUS DATA: 650km. of seismic reflection data
TRANSCET LINES: 32

TRANSCET LINE INFORMATION

LINE #	DATE	LAT(N)/LONG(W)
1	10/18/94	41°55.40'/70°17.60' 42°06.32'/70°29.40'
2		42°06.32'/70°29.40' 42°06.40'/69°59.74'
3	10/19/94	42°06.68'/69°58.68' 42°10.41'/70°02.01'
4		42°10.40'/70°02.39' 42°10.40'/70°29.98'
5		42°11.33'/70°30.27' 42°14.52'/70°31.18'
6		42°14.47'/70°30.86' 42°14.39'/70°07.21'
7		42°14.39'/70°07.21' 42°17.72'/69°59.79'
8		42°17.72'/69°59.79' 42°16.38'/70°00.72'
9		42°16.38'/70°00.72' 42°18.40'/70°13.02'
10		42°18.42'/70°13.02' 42°18.43'/70°25.67'
11		42°18.43'/70°25.67' 42°21.78'/70°33.15'
12		42°21.78'/70°33.15' 42°22.42'/70°20.89'
13		42°22.42'/70°20.89' 42°22.43'/70°04.95'

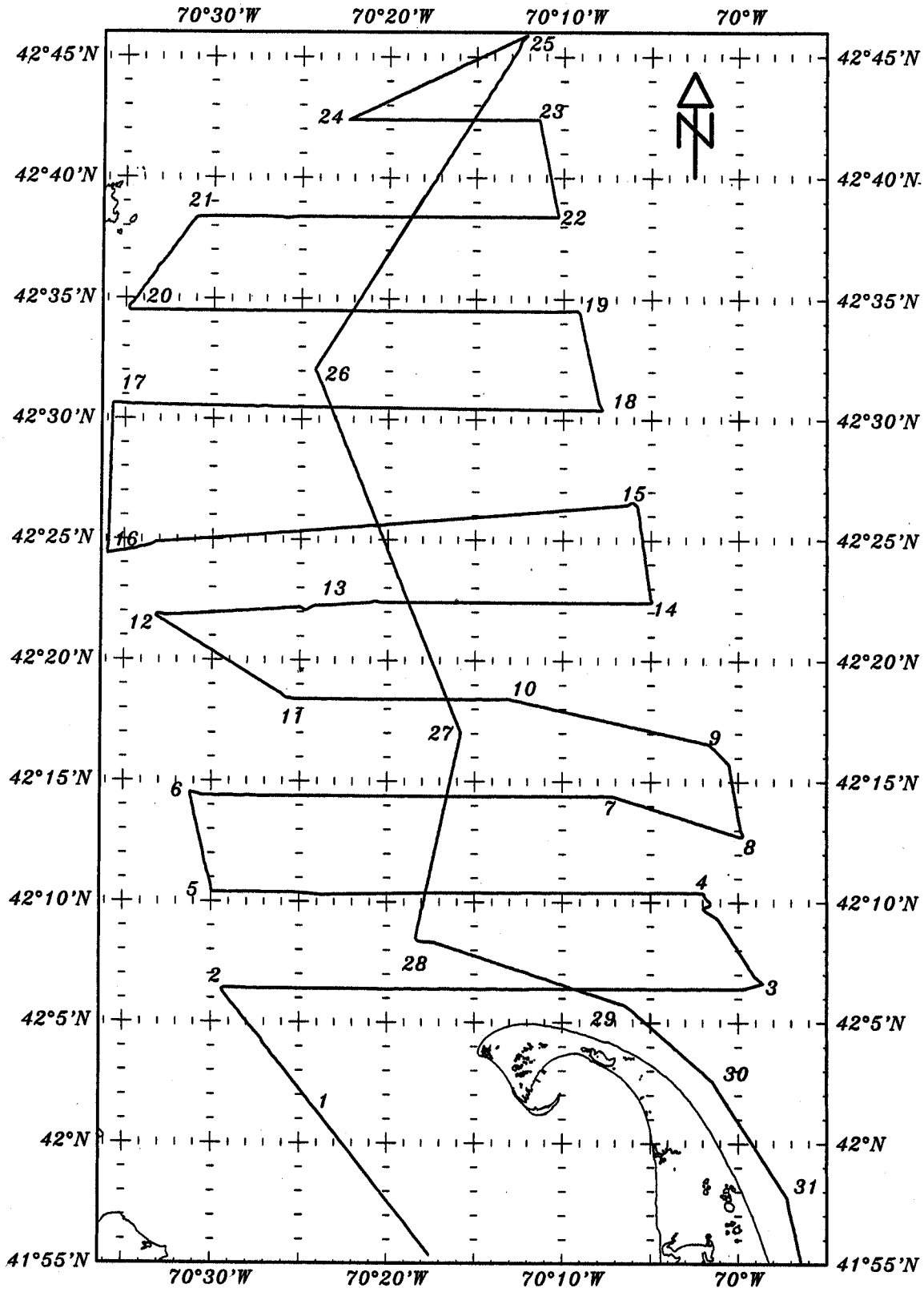
14		42°22.49'/70°04.96' 42°26.53'/70°05.85'
15	10/20/94	42°26.56'/70°06.13' 42°24.40'/70°35.94'
16		42°24.54'/70°35.94' 42°30.64'/70°35.63'
17		42°30.55'/70°30.67' 42°30.50'/70°07.83'
18		42°30.49'/70°07.82' 42°34.46'/70°09.10'
19		42°34.46'/70°09.28' 42°34.52'/70°34.83'
20		42°34.64'/70°34.82' 42°38.32'/70°31.05'
21		42°38.39'/70°30.91' 42°38.40'/70°10.33'
22		42°38.45'/70°10.29' 42°42.39'/70°11.40'
23		42°42.41'/70°11.46' 42°42.39'/70°22 35'
24	10/21/94	42°42.57'/70°21.81' 42°45.87'/70°12.07'
25		42°45.65'/70°12.43' 42°32.03'/70°24.19'
26		42°32.03'/70°24.19' 42°16.98'/70°15.80'
27		42°16.98'/70°15.80' 42°08.57'/70°18.32'
28		42°08.07'/70°16.29' 42°05.72'/70°06.49'

29	42°05.72'/70°06.49' 42°02.59'/70°01.47'
30	42°02.59'/70°01.47' 41°57.71'/69°57.23'
31	41°57.71'/69°57.23' 41°42.58'/69°52.56'
32	41°42.58'/69°52.56' 41°36.18'/69°51.99'

SUBMITTED BY: RICK RENDIGS

COMMENTS: The cruise was very successful in accomplishing all the original "landside" expectations for total trackline coverage. Data quality was excellent and overall resolution of the reflectors was enhanced by displaying the data on two channels of the epc recorder at different sweep rates. Interpretation of the acoustic basement reflectors should be possible from this data set resulting in a more complete understanding of the geologic framework of Stellwagen Bank.

I would like to thank the captain and crew of the R/V FERREL for their capable handling of the vessel and their professionalism and flexibility during the cruise.



SCALE 1:10,000

Alber's Equal Area Projection

TRACKLINE MAP STELLWAGEN BANK
FERREL-94-3