#95012

BRANCH OF ATLANTIC MARINE GEOLOGY
U.S. GEOLOGICAL SURVEY
Woods Hole, MA 02543

CRUISE REPORT: Permit No. SBNMS-07-95

October 23, 1995

Ship name: NOAA Ship Ferrel FERL 95012

Cruise no: 9511

Project: Stellwagen Bank NMS Mapping Project

Funding agency: NOAA, USGS

Area of operations: Stellwagen Bank region

Cruise dates: October 7-13, 1995
Woods Hole, MA to Boston, MA

Chief scientist: Page Valentine

Scientific party:
Page Valentine, USGS
Dann Blackwood, USGS
Nancy Soderberg, USGS
Brent Taylor, USGS
Ed Roworth, USGS
Ken Parolski, USGS
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Cruise purposes:
Acquire sidescan sonar imagery and sediment samples and video images of the seabed that will be used to interpret sidescan sonar imagery and compile maps of Stellwagen Bank.

Navigation: GPS, and differential GPS

Scientific equipment:
100 kHz sidescan sonar system
Video and still photographic cameras
Van Veen sediment sampler

Days at sea: 7

Line miles surveyed with sidescan sonar: 247 nm
Stations occupied: (see attached sheets)
Total stations: 114
Bottom video camera footage: 114
Sediment samples collected: 102

Sample processing and archival:

Sediment grab samples, photographs, and video tapes will be processed and archived by the USGS, Woods Hole, MA.

CRUISE LOG:

Thursday, October 5, 1995

Mobilized vessel in Woods Hole, MA

Friday, October 6, 1995

Weather too windy to leave port. Will delay departure one day.

Saturday, October 7, 1995

Departed Woods Hole, MA at 0930 hours; weather windy. Proceede d
to Stellwagen Bank and attempted to sample. Completed one station, but swells from the Gulf of Maine were 6-8 ft high and sea too rough to continue. Went to Provincetown at about 1700 hours to wait for weather to improve.

Sunday, October 8, 1995

Departed Provincetown Harbor at 0730 hours and began sidescan operations on southern part of Stellwagen Bank. Surveyed through the night. Weather fine.

Monday, October 9, 1995

Continued sidescan surveys on southern Stellwagen Bank and in channel north of Cape Cod. Weather calm.

Tuesday, October 10, 1995

Continued sidescan surveys, including areas on the northeastern and middle parts the bank. Weather calm.

Wednesday, October 11, 1995

Continued sidescan surveys in middle and northwestern parts of the bank. Had to end sidescan operations due to presence of gill nets. Began video/sampling in sidescan survey areas and continued through the night. Weather calm.

Thursday, October 12, 1995

Continued video/sampling in sidescan survey areas. Weather calm.

Friday, October 13, 1995

Finished video/sampling operations with 2 stations in the Mass. Bay Disposal Site area to confirm presence of rock debris in the sanctuary. Departed study area at 0900 hours and arrived in Boston at 1130 hours. Demobilized ship and arrived in Woods Hole at 1530 hours.

Submitted by Page Valentine, October 23, 1995

STELLWAGEN BANK NMS AND MASSACHUSETTS BAY DISPOSAL SITE REGION
NOAA SHIP FERREL CRUISE 9511, OCTOBER 7-13, 1995

STA	LONGITUDE (W)	LATITUDE (N)	JD:TIME (UTC)	(M)	DEPTH SAMPLE	VIDEO/
1248	-70 24.7257	42 10.1840	280:20:30:40	62-61	X/X	
1249	-70 15.1285	42 6.0428	284:13:25:50	61	X/X	
1250	-70 14.4174	42 6.2580	284:13:50:40	62	X/X	
1251	-70 13.7876	42 6.3289	284:14:11:20	63-62	X/X	
1252	-70 13.2939	42 6.4485	284:14:41:00	63	X/X	
1253	-70 12.7173	42 6.5306	284:14:58:40	62-62	X/X	
1254	-70 12.9054	42 7.0760	284:15:16:50	60-59	X/X	
1255	-70 12.3401	42 6.6382	284:15:37:00	62-61	X/0	
1255A	-70 12.3772	42 6.6809	284:15:42:50	61	X/X	
1256	-70 12.0275	42 6.7939	284:16:04:10	59-58	X/X	
1257	-70 11.6505	42 6.7471	284:16:25:10	58-59	X/X	
1258	-70 11.0098	42 6.8768	284:16:43:10	55-58	X/X	
1259	-70 11.1768	42 6.9986	284:16:57:50	58-59	X/X	
1260	-70 10.4479	42 7.0025	284:17:15:40	50-52	X/X	
1261	-70 9.9136	42 7.1349	284:17:32:10	48-50	X/X	
1262	-70 9.4226	42 7.2005	284:17:47:30	48-51	X/X	
1263	-70 8.9570	42 7.3653	284:18:01:40	50-51	X/X	
1264	-70 8.2326	42 7.4998	284:18:18:00	48-50	X/X	
1265	-70 7.7826	42 7.4806	284:18:32:40	48-47	X/X	
1266	-70 7.1422	42 7.5960	284:18:48:10	47-46	X/X	
1267	-70 6.5822	42 7.6763	284:19:03:50	45-46	X/X	
1268	-70 5.8998	42 7.5313	284:19:25:50	43-42	X/X	

1269	-70	5.5407	42	7.7823	284:19:42:00	46	X/X
1270	-70	5.0951	42	7.9442	284:19:59:59	49-50	X/X
1271	-70	4.3592	42	8.0695	284:20:13:40	54-55	X/X
1272	-70	3.7611	42	8.1928	284:20:26:20	52-49	X/X
1273	-70	4.8374	42	9.4306	284:21:17:50	54-52	X/X
1274	-70	5.5393	42	9.2793	284:21:46:40	55-54	X/X
1275	-70	6.7881	42	9.0385	284:22:11:39	48-49	X/X
1276	-70	7.7386	42	8.9211	284:22:35:10	51-46	X/X
1277	-70	8.1826	42	9.5934	284:22:57:40	51-47	X/X
1278	-70	8.7958	42	8.6433	284:23:23:30	46-46	X/X
1279	-70	9.9493	42	8.5089	284:23:49:29	45-43	X/X
1280	-70	10.9595	42	8.3004	285:00:14:30	49	X/X
1281	-70	11.5904	42	8.1492	285:00:37:10	57-56	X/X
1282	-70	12.2698	42	8.0538	285:01:00:00	59-58	X/X
1283	-70	12.7720	42	7.9556	285:01:21:00	57-56	X/X
1284	-70	13.8882	42	7.7372	285:01:42:20	52-52	X/X
1285	-70	14.4304	42	7.6409	285:02:02:49	55-55	X/X
1286	-70	15.0259	42	7.5400	285:02:24:10	55-54	X/X

Note: Lat/lon coordinates represent sample site and end of video transect.
Depth (meters) values represent start of transect and end (if one value)
of transect (sample depth).
X = video observations recorded; sample collected, or notes taken on poor sample.
0 = no sample data.

1287	-70	14.8491	42	6.8659	285:02:43:50	62-62	X/X
1288	-70	16.1348	42	6.6796	285:03:10:10	62-62	X/X
1289	-70	16.8205	42	6.5212	285:03:33:59	62-62	X/X
1290	-70	17.4441	42	6.4063	285:03:58:10	62-62	X/X
1291	-70	18.8384	42	6.0896	285:04:27:00	60-62	X/X
1292	-70	20.3271	42	5.8298	285:04:52:40	61-62	X/0
1292A	-70	20.2976	42	5.8089	285:05:00:00	62-62	X/0
1302	-70	9.9089	42	15.1566	285:07:29:40	50-50	X/X
1303	-70	9.7398	42	15.5303	285:07:54:00	56-55	X/X
1304	-70	9.7203	42	16.0805	285:08:19:40	54	X/0
1299	-70	8.8484	42	16.3623	285:08:40:50	60	X/0
1300	-70	8.8833	42	15.6440	285:09:00:30	58	X/0
1301	-70	8.9307	42	15.3199	285:09:22:20	57	X/X
1305	-70	9.8314	42	16.7299	285:10:03:40	54-56	X/X
1306	-70	9.4228	42	17.9162	285:10:26:40	60-60	X/X

1307	-70	9.1712	42	18.9053	285:10:47:00	65-65	X/0
1308	-70	8.8642	42	19.5373	285:11:12:40	72-72	X/X
1309	-70	8.4098	42	20.3794	285:11:33:10	75-78	X/X
1310	-70	7.8785	42	21.5021	285:12:12:00	77-77	X/X
1311	-70	8.2661	42	21.6206	285:12:37:20	78-78	X/X
1312	-70	8.0811	42	22.1193	285:12:57:30	76-76	X/0
1313	-70	7.9594	42	22.3951	285:13:17:40	76-76	X/X
1314	-70	7.6790	42	23.4367	285:13:47:10	77-77	X/X
1315	-70	6.2801	42	23.2136	285:14:09:30	77-78	X/X
1316	-70	6.4940	42	22.6611	285:14:29:40	76-77	X/X
1317	-70	6.6629	42	22.1399	285:14:49:20	82-82	X/X
1327	-70	6.7235	42	21.4151	285:15:09:50	78-78	X/X
1318	-70	7.4737	42	21.2846	285:15:31:00	82-82	X/X
1319	-70	8.4876	42	21.1069	285:16:16:40	76-78	X/X
1320	-70	7.1040	42	20.9708	285:16:37:20	78-77	X/X
1328	-70	7.0918	42	20.5668	285:16:56:10	76-75	X/X
1321	-70	7.3729	42	20.0239	285:17:18:40	79-77	X/X
1329	-70	7.0340	42	19.4372	285:17:38:40	75-75	X/X
1322	-70	7.5730	42	19.2240	285:18:00:00	80-80	X/X
1323	-70	7.8214	42	18.4867	285:18:21:20	77-74	X/X
1324	-70	8.1373	42	17.6936	285:18:45:10	75-76	X/X
1330	-70	7.1027	42	17.7562	285:19:03:00	71	X/X
1331	-70	6.3487	42	17.6194	285:19:20:20	108-108	X/X
1325	-70	7.3988	42	17.1740	285:19:47:40	74-73	X/X
1326	-70	8.4237	42	16.6712	285:20:10:50	66-67	X/X
1298	-70	7.5444	42	16.7764	285:20:27:30	70-73	X/X
1297	-70	7.6559	42	16.0814	285:21:07:10	72-76	X/X
1296	-70	7.6841	42	15.3301	285:21:25:40	70-72	X/X
1295	-70	7.6568	42	14.6904	285:21:45:50	66-71	X/X
1294	-70	7.6133	42	14.1533	285:22:07:00	60-67	X/X
1332	-70	11.9656	42	10.2326	286:00:55:00	34-35	X/X
1333	-70	10.5775	42	10.2773	286:01:15:00	38-40	X/X
1334	-70	9.1225	42	10.2578	286:01:36:00	48-48	X/X
1335	-70	7.7652	42	10.2652	286:01:56:00	50-50	X/X
1336	-70	6.3941	42	10.2528	286:02:14:20	48-48	X/X
1337	-70	5.6850	42	10.2414	286:02:32:00	51-51	X/X
1338	-70	5.0583	42	10.1975	286:02:49:40	52-52	X/X
1339	-70	5.4767	42	12.0882	286:03:34:20	85-84	X/X
1340	-70	6.2879	42	12.1506	286:03:55:40	73-73	X/X
1341	-70	6.9908	42	12.1156	286:04:13:10	59-59	X/X
1342	-70	7.7070	42	12.1204	286:04:31:10	51-51	X/X
1343	-70	9.1146	42	12.1467	286:05:08:50	43-43	X/X
1344	-70	10.5306	42	12.1400	286:05:29:50	41-41	X/X

1345	-70 11.8892	42 12.1905	286:05:47:20	37-37	X/X
1346	-70 21.7311	42 18.4001	286:07:06:50	64-64	X/X
1347	-70 21.3270	42 18.5207	286:07:23:50	61-62	X/X
1348	-70 20.9605	42 18.7017	286:07:44:10	59-60	X/X
1349	-70 20.3963	42 18.8054	286:07:59:50	61-61	X/X
1350	-70 19.6533	42 19.1097	286:08:18:10	53-53	X/X
1351	-70 18.7830	42 19.4270	286:08:39:00	30	X/X
1352	-70 18.2643	42 19.5906	286:09:00:20	30-30	X/0
1353	-70 17.3494	42 19.8873	286:09:21:10	34-34	X/X
1356	-70 15.6039	42 20.5706	286:09:52:40	38-38	X/X
1357	-70 14.9461	42 20.8864	286:10:13:30	40-40	X/0
1357A	-70 14.8892	42 20.8765	286:10:19:20	40	X/X
1355	-70 16.1458	42 20.4093	286:10:41:10	34-34	X/X
1354	-70 16.4665	42 20.1899	286:11:05:10	34-34	X/X
1358	-70 33.0744	42 24.7883	286:12:39:20	89-89	X/0
1359	-70 33.3339	42 25.6492	286:12:58:30	84-84	X/0

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