FARNELLA 87-4
MID-ATLANTIC
Robb/Popenoe
March 27 - April 8, 1987
GEOPHYSICS LOG

FARL 104493
87-4 #87015

U.S.G.S.
GEOPHYSICS
LOG

SHIP FARNELLA Sty # 87015

CRUISE NO. 87-4

DATE APRIL 27 - MAY 8, 1987

CHIEF SCIENTIST ROBB / POPENOE

Scientific Party

James Robb	Co-Chief Scientist USGS-AMG
Peter Popenoe	Co-Chief Scientist USGS-AMG
Nancy Soderberg	Watchstander USGS-AMG
Linda Sheetz	Watchstander USGS-AMG
~~Robert~~ BILL Wright	Watchstander USGS-~~PMG~~
Larry Kooker	Technician USGS-PMG
Derek Bishop	IOS Chief GLORIA Engineer
Quentin Hussett	IOS Geologist
Chris Flewellen	IOS GLORIA Engineer
Graham Lake	IOS Mechanical Technician
Emma Woodward	IOS Photo Manager
Dorial Jones	IOS Data Manager
Andrew Tizard	Marconi Watchstander

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST Robb/Popenoe

LINE START / END	TIME	JD YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
		118				
1	1720	870428	237	7.8	ABC	2CHL AIR/MASSCOMP
1	1730	118				
1	1748	118				
1	1800	118	234	7.7		
1	1830	118	226	7.2		
1	1900	118	216	5.3		
1	1930	118				
1	2000	118	243	4.6		
1	2030	118	232	4.5		
1	2100	118	232	4.2		
1	2130	118	235	4.5		
1	2200	118	238	4.8		
1	2230	118	236	4.6		
1	2300	118	227	4.8		
1	2330	118	235	4.6		
1	0000	119	242	4.3		
1	0013	119	—	—		119 00 13
1	0030	119	236	4.9		
1	0100	119	238	4.3		
1	0130	119	230	4.4		
1	0200	119	247	4.4		
1	0230	119	229	4.2		
1	0300	119	234	4.6		
1	0330	119	227	4.9		
1	0400	119	236	5.1		
1	0430	119	228	4.7		
1	0500	119	231	4.7		
1	0530	119	231	4.7		
1	0540	119	—	—		
1	0600	119	240	6.4		
1	0630	119	238	6.0		
1	0700	119	229	4.7		
1	0730	119	227	5.1		

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6	15	K-25	1	1		gear in water
						SOL 1 @ ~1720? / 118
						dwd = 5
						EOT 1/SOT 2
						EOT 1 / SOT 2
						dwd = 4

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST Robb/Popenoe

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
1	0748	119			ABC	2-CHL AIRGUN 160 IN^3/MASSCOMP
1	0800	119	231	5.5		
1	0821	119				
1	0830	119	234	4.9		
1	0900	119	238	4.3		
1	0930	119	233	4.7		
1	1000	119	234	4.7		
1	1030	119	252	5.3		
1	1100	119	231	5.1		
1	1128	119				
1	1131	119	239	5.2		
1	1200	119	240	4.7		
1	1230	119	238	5.8		
1	1300	119	232	5.1		
1	1330	119	232	5.1		
1	1400	119	236	4.9		
1	1430	119	238	5.6		
1	1500	119	235	5.6		
1	1530	119	238	5.6		
1	1600	119	235	5.5		
1	1630	119	227	5.7		
1	1631	119	S/C	5.6		
	1700	119	324	6.3		
	1730	119	052	11.1		
	1800	119	058	11.0		
	1830	119	079	8.3		
	1900	119	175	6.3		
1	1911	119	234	4.9		
1	1930	119	232	3.6		
1	2000	119	230	4.9		
	2029	119				
1	2030	119	234	5.4		
1	2100	119	231	5.4		

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6		15-75	~~2~~	1		EOT 2 MASSCOMP Buffer Error
			3			SOT 3
			3			SOT 3
			4			SOT 4
						SOL I @ 1:20/11
						shot ~ 1558
						Pull 3.5 fish for repair
						off line
						shot 2476
						Back online 1, 3.5 FISH STILL DOWN
			5			EOT 4 / SOT 5

SHIP/CRUISE NO./LEG FRNL-87-4

CHIEF SCIENTIST Robb/Popenoe

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
1	2102	119	-	-	ABC	2 CHN AG (Tower) / MASSCOMP
1	2130	119	230	5.0		
1	2200	119	232	4.6		
1	2230	119	241	5.3		
1	2300	119	243	5.2		
1	2330	119	242	3.6		
1	0000	120	233	4.6		
1	0030	120	226	3.5		
1	0100	120	230	2.6		
1	0130	120	262	3.7		
1	0200	120	245	2.7		
1	0230	120	231	3.7		
1	0300	120	240	3.5		
1	0330	120	233	1.2		
1	0400	120	254	2.1		
1	0430	120	227	1.2		
1	0440	120	192	1.5		
1	0500	120	Y/C			
1	0530	120	186	5.2		
	0600	120	176	6.4		
	0630	120	186	6.0		
	0700	120	177	7.0		
	0730	120	175	6.0		
	0744	120				
2	0756	120	053	8.8		
2	0800	120	055	9.3		
2	0830	120	063	9.4		
2	0900	120	042	9.1		
2	0930	120	054	9.4		
2	1000	120	050	9.8		
2	1030	120	054	9.5		
2	1100	120	062	10.4		
2	1130	120	057	9.8		

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6		75-15	5	1		3.5 STILL DOWN
		75	6			EOT 5 / SOT 6
						EOL 1 SHOT 119 @0500
						TRANSIT TO LINE 2
						EOL TRANSIT EOL 2
			7			SOL 2 / SOT 7
						@ 0754

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST ROBB / POPENOE

LINE START / END	TIME	~~YYMMDD~~ JD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
2	1200	120	053	9.6	ABC	2 CHL AIRGUN 160 IN³/MASSCOMP
2	1230	120	047	9.0		
2	1300	120	058	9.5		
2	1330	120	060	8.9		
2	1400	120	054	8.3		
2	1430	120	055	9.0		
2	1500	120	058	7.2		
2	1530	120	057	5.2		
2	1600	120	056	8.7		
2	1607	120	-	-		
2	1628	120	-	-		
2	1630	120	055	8.8		
2	1700	120	061	9.2		
2	1730	120	053	9.3		
2	1800	120	056	9.3		
2	1830	120	056	9.5		
2	1900	120	054	9.5		
2	1930	120	057	9.9		
2	2000	120	055	10.2		
2	2030	120	059	8.6		
2	2057	120	05			
2	2100	120	69	11.6		
TRANSIT	2130	120	171	7.7		
TRANSIT	2200	120	168	7.5		
TRANSIT	2230	120	167	8.0		
	2237	120				
3	2254	120				
3	2300	120	227	7.7		
3	2330	120	230	7.5		
3	0000	121	238	7.8		
3	0030	121	234	8.7		
3	0100	121	240	9.0		
3	0130	121	236	7.5		

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6		75-15	7	1		
			8			EOT 7 / SOT 8
						DWD = 5
						EOL 2 SHOOT 1736
						@2057/120
			8			END of TAPE 008
			9			SOL 3 @2254/120 / SOT 009
						@ 2254/120

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST ROBB/POPENOE

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
3	0200	121	228	8.1	ABC	2CHL AIRGUN 160 ^{3}IN /MASSCOMP
3	0230	121	228	8.1		
3	0300	121	235	7.2		
3	0330	121	243	9.3		
3	0400	121	243	8.7		
3	0430	121	228	7.7		
3	0500	121	238	8.5		
3	0530	121	244	8.7		
3	0600	121	224	7.6		
3	0630	121	239	8.8		
3	0700	121	234	9.2		
3	0705	121	234	8.6		
3	0730	121	242	7.6		
3	0800	121	231	7.5		
3	08300	121	239	8.5		
3	0900	121	229	7.9		
3	0930	121	234	8.3		
3	1000	121	241	8.5		
3	1030	121	233	7.9		
3	1100	121	236	7.5		
3	1109	121				Discontinue GLORIA - noisy
						L 35°14.0'N
						Lo 72°59.2'W
3	1130	121	325	9.0		
3	1156	121				
3	1200	121	356	9.1		HYDROPHONE OFF @1226
	1230	121	058	8.1		MAGNETOMETER OFF @1236
	1300	121	063	4.4		
	1330	121	224	3.4		
	1400	121	239	8.0		
	1430	121	229	8.5		
	1500	121	236	9.2		
	1530	121	236	9.6		

TRANSIT TO LINE 4 & TO REPAIR FISH

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6		75/15	9			
			10/			EOT 9/SOT 10
						C/C 325° @ 1468 EOL 3 @ 1109/121
						to C/C 056° ~ Hdt 1730 ON CRS/36° @ 1212
			10			EOT #10 @ 1248 @ FILE # 2059 (SYSTEM OFF)
						REPAIRS TO GLORIA & 3.5 KHz BATHY

SHIP/CRUISE NO./LEG FRNC 87-4

CHIEF SCIENTIST ROBB / PODESTA

LINE START / END	TIME	~~YYMMDD~~ JD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
–	1600	121	274	7.3	ABC	2-CHL AIRGUN 160 IN³/MASSCOMP
–	1615 1630	121	C/C	3.7		
4	1700	121	055	13.3		
4	1730	121	052	13.5		
4	1800	121	054	13.3		
4	1830	121	057	13.9		
4	1900	121	059	14.5		
4	1930	121	064	14.7		
4	2000	121	055	13.9		
4	2030	121	057°	13.8		
4	2100	121	057°	13.6		
4	2130	121	054°	13.3		
4	2200	121	057°	13.5		
4	2230	121	056°	13.5		
4	2235	121	C/C			
	2321	121				
	2330	121	157	8.3		
TRANSIT L4/L5	2344					ON LINE 5
	0000	122				
	0001	122				
5	0024	122	227	8.4		
5	0030	122	228	7.7		
5	0100	122	239	8.5		
5	0130	122	239	7.9		
5	0200	122	238	7.8		
5	0230	122	242	8.0		
5	0300	122	250	8.0		
5	0330	122	234	7.4		
5	0400	122	232	7.6		
5	0430	122	218	7.2		
5	0500	122	224	7.4		
5	0530	122	230	7.4		
5	0600	122	247	7.3		

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6		75/15	—	1		everything offline but echosounder
						1615 stopped ship ck LINE 4 to resurvey line 3 (line 5)
						SOL 4 @ 1630/121
						EOL 4 @ 2235/121
						START TRANSIT @ 2235 TO LINE 5
						Maggie, 3.5 + GLORIA in water
						Gloria ON
			11	1		SOT 11
						~~dwd = 4~~ dwd = 5
						ON SOL 5 @ 0024/122

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST Robb/Popenoe

LINE START / END	TIME	~~YYMMDD~~ JD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
5	0630	122	238	7.6	ABC	2-CHL AIRGUN 160 IN^3/MASSCOMP
5	0700	122	250	8.1		
5	0730	122	237	6.9		
5	0800	122	234	5.6		
5	0811	122				
5	0830	122	241	7.0		
5	0900	122	237	6.7		
5	0930	122	233	7.1		
5	1000	122	233	7.3		
5	1030	122	238	6.8		
5	1100	122	235	7.1		
5	1130	122	232	7.0		
5	1200	122	234	7.0		
5	1230	122	227	6.4		
5	1300	122	236	6.4		
5	1330	122	238	6.7		
5	1400	122	236	6.8		
5	1430	122	233	6.9		
5	1500	122	245	7.2		
5	1518	122	C/C			
TRANSIT		LINES 5 & 6				
6	1529	122	1.9	10.0		
6	1537	122	-	-		
6	1600	122	3.2	8.8		
6	1630	122	358	9.5		
6	1700	122	357	9.8		
6	1730	122	004	8.4		
6	1800	122	359	9.3		
6	1830	122	354	9.0		
6	1900	122	359	9.2		
6	1930	122	359	9.4		
6	2000	122	357	9.4		
6	2030	122	359	9.0		

AREA GMT

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6		75/15	11			
			SOT 12			EOT 11 / SOT 12
						DELAY CHANGED FROM 5SEC TO 4 SEC @ 1452 @ SHOT #2438
				1518		EOL 5 @ 1518/122
						TRANSIT EOT 12
			12			SOL 6 @ 1529/122
			13			SOT 13 @ 1537

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST Robb/Popenoe

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
6	2030	122	359	9.0	ABC	2 EHL AIRGUN 160 IN³/MASSCOMP
6	2033	122				
6B	2048					3.5KHz off
6B	2100	122	228	3.9		
6B	2120					3.5KHz on
6B	2200	122	230	4.9		
6B	2230	122	240	5.0		
6B	2300	122	209	5.2		
6B	2321	"				
7	2323					
7	2330	122	—	—		
7	0000	123	189	5.8		
7	0030	123	184	6.0		
7	0100	123	182	7.1		
7	0130	123	177	7.5		
7	0200	123	188	6.8		
7	0230	123	194	6.8		
7	0300	123	184	7.5		
7	0330	123	177	9.3		
7	0400	123	182	7.9		
7	0430	123	185	8.2		
7	0500	123	175	9.8		
7	0530	123	190	7.0		
7	0600	123	175	10.1		
7	0630	123	176	8.1		
7	0634	123	—	—		
7	0700	123	199	6.3		
7	0730	123	187	7.3		
7	0738	123				
7	0800	123	182	8.3		
7B	0823		c/c			
TRANSIT	0830	123	220	8.4		
	0900	123	285	10.0		

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6		75/15	13			c/c
						EOL 6 / Rec # 1773 To c 230° @ 2033
						SOL 6B @ 2048
						EOL 6B / EOT 13 @ 2321
			14			SOT / 14 SOL 7 @ 2323
						correct dwd to 4 origin start of tape 14
			15			EOT 14 / SOT 15
						EOL 7 @ 0823
						c/c 220° shot 265
						SOL 7B @ 0830 (2)

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST Robb/Poponoe

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
7B	0913	123			ABC	AIRGUN 2CH 160 IN³/MASSCOMP
8	0919	123				
8	0925	123				
—	0930	123	050	9.1		
8	0933	123				
8	1000	123	070	8.8		
8	1030	123	050	8.3		
8	1100	123	058	8.1		
8	1130	123	059	8.3		
8	1200	123	052	8.8		
8	1230	123	061	8.9		
8	1300	123	063	9.3		
8	1330	123	058	9.5		
8	1400	123	057	9.3		
8	1430	123	058	9.5		
8	1500	123	059	9.5		
8	1522	123				
8	1530	123	050	9.1		
8	1600	123	064	10.0		
8	1630	123	056	9.7		
8	1700	123	054	9.8		
8	1730	123	065	10.0		
8	1744	123	—	—		
8	1800	123	051	9.6		
8	1830	123	058	9.8		
8	1900	123	050	9.5		
8	1930	123	055	9.4		
8	2000	123	056	9.3		
8	2030	123	059	9.5		
8	2100	123	054	8.8		
8	2130	123	061	9.3		
8	2200	123	056	9.2		
8	2230	123	060	9.3		

AREA

TIME ZONE GMT / Z

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL# START / END	MAGNETICS	COMMENTS
6		75/15	15/14			EOT 15 EOL 7B @ 0913
			16/14			SOT 16 SOL 18
						abort SOT 16 & SOL 8
						SOT 16 SOL 8 @ 0933
						CHANGE DELAY 4 TO 5
			17/14			EOT 16/SOT 17

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST Robb / POPENOE

LINE START / END	TIME	~~YYMMDD~~ JD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM	
8	2300	123	060	9.2	ABC	AIRGUN 2CHS 1600 cu in / MASSCOMP	1
8	2323	123				AIRGun [illegible] recorders down for servic	2
8	2328	123				AIR Gun recorder Syst. Completed	3
8	2330	123	058	9.5			4
8	0000	124	054	9.3			5
8	0030	124	057	9.2			
8	0100	124	047	8.4			
8	0130	124	061	8.5			
8	0155	124	—	→			
8	0200	124	061	8.5			10
8	0230	124	062	8.6			
8	0300	124	061	7.9			
8b	0310	124	—	—			
8b	0313	124	—	—			
8b	0320	124	—	—			15
8b	0330	124	182	9.5			
8b	0350	124	—	—			
8b	0400	124	170	11			
8B	0430	124	183	9.2			
8B	0459	124	4C	—			20
—	0500	124	177	9.5			
9	0504	124	—	—			
9	0530	124	228	9.1			
9	0600	124	209	9.5			
9	0630	124	228	8.9			25
9	0700	124	237	9.2			
9	0730	124	242	8.8			
9	0800	124	230	8.5			
9	0830	124	236	8.8			
9	0900	124	225	8.5			30
9	0930	124	235	8.8			
9	1000	124	235	8.3			
9	1030	124	233	8.2			

AREA

TIME ZONE GMT, Z

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
5						
10			18			EOT 17 / SOT 18 @ 0455, SHOT 2946
						EOL 8C/C @ 0310
						AIRGUN OFF TO CHANGE EQUIPMENT @ 0313
15						SOL 8b @ 0320
						AIRGUN ON @ 0350
						EOL 8B @ 0459
20			18			EOT 18 @ 0459 C/C
						C/C
			19			SOL 9 / SOT 19 @ 0504
25						
30						

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST Robb/POPENOE

LINE START / END	TIME	~~YYMMDD~~ JD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
9	1100	124	237	8.2	ABC	airgun 2CHF 160in3 / Masscomp
9	1130	124	234	8.4		
9	1135	124				Change Strip chart Mag.
9	1200	124	228	7.8		
9	1230	124	246	8.0		
9	1300	124	223	7.6		
9	1330	124	229	7.6		
9	1332	124	—	—		
9	1400	124	234	8.0		
9	1430	124	232	7.7		
9	1500	124	234	7.8		
9	1530	124	241	8.0		
9	1600	124	248	8.6		
9	1630	124	239	8.1		
9	1700	124	242	8.0		
9	1730	124	240	8.0		
9	1800	124	239	7.9		
9	1830	124	229	8.5		
9	1900	124	242	8.6		
9	1930	124	225	8.2		
9	2000	124	244	8.4		
9	2030	124	241	8.2		
9	2100	124	238	7.9		
9	2125	124	—	—		
9	2130	124	243	8.0		
9	2200	124	235	8.4		
9	2230	124	229	8.6		
9	2300	124	244	9.0		
9	0000	125	237	8.2		
9	0030	125	224	8.3		
9	0048	125	—	—		
9B	0053	125				
9B	0100	125	203	6.8		

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
						EOT 19 @ 1314
			20			SOT 20 @ 1332 @ SHOT 107 (missing 1-106)
			21			EOT 20 & SOT 21 @ 2125
						SHOT 1213 &
						EOL 9 @ 0048 I/C 192°)
						SOL 9B @ 0053, SHOT 1246

SHIP/CRUISE NO./LEG FRNC 87-4

CHIEF SCIENTIST ROBB/PODESTA

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
QB	0130	125	183	8.9	ABC	AIRGUN 2CHL 160IN³/MASSCOMP
QB	0200	125	204	6.9		
QB	0230	125	183	8.9		
QB	0300	125	204	6.9		
QB	0311	125	—	—		
C/C	0321	125	—	—		
—	0330	125	078	7.9		
10	0333	125	—	-		
10	0334	125	—			
10	0400	125	046	7.6		
10	0430	125	071	7.6		
10	0500	125	062	7.2		
10	0530	125	054	7.8		
10	0600	125	052	8.5		
10	0630	125	053	8.2		
10	0700	125	066	9.0		
10	0730	125	056	8.4		
10	0800	125	041	8.0		
10	0830	125	050	8.15		
10	0900	125	051	8.2		
10	0930	125	065	8.15		
10	1000	125	065	8.16		
10	1030	125	047	8.8		
10	1100	125	048	8.8		
10	1130	125	062	8.9		
10	1145	125				
10	1200	125	066	8.8		
10	1230	125	053	8.5		
10	1300	125	066	9.0		
10	1330	125	061	8.8		
10	1400	125	058	8.4		
10	1430	125	063	8.4		
10	1500	125	054	8.3		

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6		75/15	21	1		
5			21			EOT 21 @ 0311 SHOT 2072
						EOL 9B @ 0321 / c/cto 054
						SOL 10 @ 0333
			22			SOT 22 @ 0334
10						
15						
20						
25						EOT [illegible] SOT 23 @
						EOT 22 / SOT 23 @ 1145
30						

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST ROBB/POPENOE

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
10	1530	125	057	8.5	ABC	AIR60 W 2CHL 160IN³/MASSCOMP
10	1537	125	—	—		
10	1600	125	063	8.7		
10	1630	125	044	8.3		
10	1700	125	054	8.3		
10	1730	125	047	8.3		
10	1800	125	044	8.1		
10	1830	125	047	8.0		
10	1900	125	046	7.3		
10	1930	125	054	7.5		
10	1942	125				
10	1949	125				
10	1956	125				
10	2000	125	067	8.3		
10	2030	125	053	6.9		
10	2100	125	061	7.2		
10	2130	125	060	6.8		
10	2200	125	062	6.5		
10	2230	125	064	7.1		
10	2300	125	052	6.3		
10	2330	125	060	6.9		
10	0000	126	061	7.3		
10	0030	126	055	7.7		
10	0050	126	—	—		
c/c —	0100	126	166	9.4		
c/c —	0104	126	—	—		
10B	0106	126	—	—		
10B	0130	126	214	8.5		
10B	0200	126	186	10.8		
10B	0210	126	—	7.1		
10B	0230	126	178	11		
10B	0300	126	178	12		
10B	0311	126	—	—		

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6		75/15	23	1		LSR 1807 - OFF @ 1530 TO CHANGE PAPER
				2		LSR ON @ 1537
						recorder off to change paper on 3.5
						3.5 recorder online
			24			EOT 23 / SOT 24 @ 1956
						EOL 10 @ 0050 / C/C to 190°
						3.5 kHz OFF @ 0104 To Repair 3.5 FISH
						SOL 10B @ 0106
						3.5 ON @ 0210
			24			EOT 24 @ 0311 / TAPE NOT READING

TIMES / ERGO EOL 10B ON TAPE5 @ 0311

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST Robb/Popenoe

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
—	0330	126	183	11	ABC	AIRGUN 2@1L 160 in³/MASSCOMP
—	0334	126	—	—		
11	0336	126	—	-		
11	0400	126	245	11		
11	0430	126	223	9.8		
11	0500	126	233	10.3		
11	0530	126	247	10.2		
11	0600	126	237	9.8		
11	0630	126	236	9.9		
11	0700	126	240	9.2		
11	0730	126	236	10.0		
11	0800	126	240	9.1		
11	0830	126	241	9.7		
11	0900	126	221	9.0		
11	0530	126	241	9.1		
11	1000	126	233	8.8		
11	1030	126	238	8.6		
11	1100	126	236	8.8		
11	1130	126	226	8.5		
11	1145	126	—	—		
11	1200	126	242	8.9		
11	1230	126	229	8.3		
11	1300	126	233	8.5		
11	1330	126	226	8.5		
11	1400	126	231	8.3		
11	1430	126	235	8.6		
11	1500	126	235	8.4		
11	1530	126	238	8.9		
11	1600	126	235	9.2		
11	1630	126	233	8.8		
11	1700	126	242	8.9		
11	1730	126	235	9.2		
11	1800	126	245	9.5		

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6		75/15				TECH REPAIRED TIME MALFUNCTION
			25			SOT 25 @ 0334
						SOL 11 @ 0336
						SOT 26
			26			EOT 25 @ 1145

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST Robb/Popenoe

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
11	1830	126	236	9.7	ABC	AIRGUN 2CH2 160 IN^3/MASSCOMP
11	1900	126	239	10.1		
11	1930	126	237	9.5		
11	1956	126				
11	2000	126	246	10.0		
11	2025	126				
11B	2030	126	—	—		
11B	2100	126	208	8.4		
11B	2130	126	194	10.7		
11B	2200	126	202	8.7		
11B	2203	126				
11B	2214	126				
11B	2230	126	217	7.7		
11B	2300	126	200	9.7		
11B	2330	126	214	8.4		
11B	2345	126	—	—		
11B	000	127	218	8.7		
11B	0012	127	—	—		
C/C	0024	127	—	—		
—	0030	127	152	12.2		
12	0053	127	—	—		
12	0055	127	—	—		
12	0056	127	—	—		
12	0100	127	048	7.7		
12	0120	127				
12	0130	127	067	8.1		
12	0200	127	076	8.7		
12	0211	127	—	—		
12	0212	127	—	—		
12	0230	127	085	8.7		
12	0300	127	060	7.6		
12	0330	127	067	8.1		
12	0400	127	044	9.0		

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6		75/15	26			
			27			EOT 26 / SOT 27 @ 1956
5						
						EOL 11 @ 2025 Shoot 17
						C/C 210° SOL 11B @ 2030
10						
					@ 2203	Airgun recorder down for Server
					@ 2214	" " back on
15						Entire airgun system down @ 2345
			27			EOT 27 @ 0012
						EOL 11B @ 0024, C/C to 056°
20						
						SOL 12 @ 0053
						AIRGUN BACK ON @ 0055
			(28)		*	SOT 28 @ 0056 *
25						AIRGUN OFF @ 0120
					*	ABORTED TAPE 28 / WILL RESTART WHEN AIRGUN IS AGAIN ON LINE
			28			SOT 28 @ 0211 / AIRGUN ON
30						

ONLY EPC RECORDER PRINTING LSR NOT RUNNING (75/150)

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST Robb/Popenoe

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
12	0417	127	—	—	ABC	AIRGUN 2CHL 160 IN³/MASCOMP
12	0430					
12	0436					
12	0439					
12	0500	127	052	8.2		
12	0530	127	060	8.2		
12	0600	127	050	8.2		
12	0607	127				
	0624	c/c				
	0633	127				
	0655	127				
	0745	127				
12	0748	127				
12	0800	127	052	8.8		
12	0830	127	066	8.7		
12	0900	127	054	8.1		
12	0930	127	065	8.2		
12	1000	127	056	8.4		
12	1030	127	053	8.3		
12	1100	127	052	8.1		
12	1130	127	055	8.2		
12	1200	127	060	8.1		
12	1230	127	058	7.8		
12	1300	127	058	7.6		
12	1330	127	053	7.3		
12	1400	127	058	7.3		
12	1430	127	061	7.8		
12	1500	127	058	7.6		
12	1530	127	056	7.9		
12	1600	127	055	7.9		
12	1559	127	—	—		
12	1608	127	—	—		
12	1610	127	—	—		

TRNST TO line 12

5

10

15

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6		75/15	28			LSR FILTER 15-75 ON @ 0417
			28			MASSCOMP DOWN EOT 28
			29			SOT 29 @ 0439
5						
						AIRGUN 3.5
					@607	220 Power failure GLOKLA
					c/c to	Restart line 12
10			29			EOT 29 / Power off again
			30			SOT 30, restarted Messie 3.5
			30		@0745	EOT 30 / End of tape
			31		@0748	SOT 31 re-run line 12
15						
			32A			EOT 31 / SOT 32A
			32A			EOT 32A
			32B			SOT 32B

SHIP/CRUISE NO./LEG FRNL 87-4

CHIEF SCIENTIST Robb/Poponoe

LINE START / END	TIME	~~YYMMDD~~ JD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
12	1630	127	052	7.8	ABC	AIRGUN Sethl 160 IN³/MASSCOMP
12	1700	127	056	7.9		
12	1730	127	051	7.1		
12	1800	127	056	7.5		
12	1830	127	055	7.4		
12	1832	127	or	—		

AREA

TIME ZONE GMT

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
6		75/15	32B			
						Maggie off
						EOT #32B EOL 12
						@ 1832