FARNELLA 87-2
GEOPHYSICS 206
SCHLEE/ROBB

MID ATLANTIC

+

MASSCOMP
ERROR LOG

U.S. GEOLOGICAL SURVEY

OFFICE OF MARINE GEOLOGY

Woods Hole, Massachusetts

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U.S.G.S.
GEOPHYSICS
LOG

SHIP FARNELLA 87-2

CRUISE NO. 87-2

DATE MARCH 1-26, 1987

CHIEF SCIENTIST JOHN SCHLEE

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FARNELLA FRNL 87-2
Mid-Atlantic EEZ
J. Schlee/J. Robb
March 1-26, 1987
Seismic Line List
MassComp/Airgun 160 cu in/
Dual Channel Mecanique Streamer

Line#	Tape #	Date	JD/Time UTC	JD/Time UTC	Remarks
SOL MA1		Mar2	061/0719		
	1		061/0719	061/1530	
EOL MA1	1		061/1309		
SOL MA1B	1		061/1313		
	2		061/1530	061/2105	
	3		061/2108	062/0520	
	4	Mar3	062/0520		
EOL MA1B	4		062/0559		
SOL MA1C	4		062/0559		
EOL MA1C	4		062/0819		
SOL MA1D	4		062/0819		
EOL MA1D	4		062/0938		
SOL MA1E	4		062/0938		
EOL MA1E	4		062/1019		
SOl MA1F	4		062/1019		
EOL MA1F	4		062/1113		
	5		062/1122	062/1933	
SOL MA2	5		062/1122		
	6		062/1933	063/0344	
	7	Mar4	063/0344	063/1155	
EOL MA2	7		063/0555		
SOL MA2B	7		063/0555		
	8		063/1155	063/2007	
	9		063/2007	064/0418	
EOL MA2B	9	Mar5	064/0326		
SOL MA2C	9		064/0326	064/0640	
	10		064/0418	064/1230	
EOL MA2C	10		064/0640		
SOL MA2D	10		064/0640		
EOL MA2D	10		064/0840		
SOL MA2E	10		064/0840		
	11		064/1230	064/1358	
EOL MA2E	11		064/1358		
	12		064/1358	064/2209	
SOL MA3	12		064/1358		
EOL MA3	12		064/1530		
SOL MA3B	12		064/1540		
EOL MA3B	12		064/2002		
SOL MA3C	12		064/2002		
	13		064/2209	064/0627	
EOL MA3C	13	Mar6	065/0605		
SOL MA3D	13		065/0605		
	14		065/5627	065/1431	
	15		065/1531	065/1745	Change airgun.
EOL MA3D	15		065/1752		
SOL MA3E	15		065/1725		
	16		065/1844	065/2156	Change airgun.
	17		065/2252	066/0709	Redeploy same gun.
	18	Mar7	066/0701	066/1427	
EOL MA3E	18		066/0038		

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SOL	MA3F	18		066/0038	
EOL	MA3F	18		066/1230	
SOL	MA3G	18		066/1230	
EOL	MA3G	18		066/1427	
		19		066/1430	066/2239
SOL	MA4A	19		066/1430	
		20		066/2239	067/0653
EOL	MA4A	20	Mar8	067/0202	
SOL	MA4B	20		067/0204	
		21		067/0653	067/1026
EOL	MA4B	21		067/1026	
		22	Mar9	068/0204	068/1015
SOL	MA5A	22		068/0204	
		23		068/1015	068/1835
EOL	MA5A	23		068/1054	
SOL	MA5B	23		068/1054	
EOL	MA5B	23		068/1320	
SOL	MA5C	23		068/1321	
		24		068/1835	069/0237
EOL	MA5C	24	Mar10	069/0230	
SOL	MA5D	24		069/0231	
		25		069/0237	069/0330
EOL	MA5D	25		069/0354	
		26		069/0412	069/1223
SOL	MA6A	26		069/0412	
EOL	MA6A	26		069/1110	
SOL	MA6B	26		069/1110	
		27		069/1223	069/2034
EOL	MA6B	27		069/1605	
SOL	MA6C	27		069/1616	
		28		069/2034	069/2118 Accidentally stopped program.
		28			Lost approx. 5 min data.
		29		069/2118	070/0531
EOL	MA6C	29		069/2045	Turned off line-weather.
SOL	MA6X	29		069/2045	
		30	Mar11	070/0531	070/1342
		31		070/1342	070/2134
		32		070/2134	071/0605
		33	Mar12	071/0605	071/1327
EOL	MA6X	33		071/1100	
SOL	MA6Y	33		071/1100	
EOL	MA6Y	33		071/1327	Pulled airgun, maggie, GLORIA
		33			for repairs.
		34		071/1525	071/2216 No GLORIA.
SOL	MA7X	34		071/1525	
EOL	MA7X	34		071/1808	
SOL	MA7Y	34		071/1808	
EOL	MA7Y	34		071/2216	
		35		071/2336	072/0748
SOL	MA8A	35	Mar13	072/0036	
		36		072/0748	072/1558
EOL	MA8A	36		072/0910	
SOL	MA8B	36		072/0910	
		37		072/1558	
EOL	MA8B	37		072/1649	Pulled gear, bad weather.
SOL	MA8X	37		072/1654	Only fathometer online.
EOL	MA8X	37		072/0500	
		38	Mar14	073/2245	074/0659
SOL	MA9A	38		073/2245	
EOL	MA9A	38	Mar15	074/0505	

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SOL MA9B 38             074/0505
EOL MA9B 38             074/0616
SOL MA9C 38             074/0616
         39             074/0659        074/1507
         40             074/1507        074/2319
EOL MA9C 40             074/1749
SOL MA9D 40             074/1749
         41             074/2319        075/0730
EOL MA9D 41     Mar16   075/0641
SOL MA9E 41             075/0641
         42             075/0730        075/0822
EOL MA9E 42             075/0800
SOL MA10A42             075/0800
         43             075/0822        075/1646
EOL MA10A43             075/1439
SOL MA10B43             075/1441
         44             075/1646        075/1819        Airgun off to exchange it
         45             075/1854        076/0305        Airgun back online
         45             075/1926                        Magnetometer down for repairs
EOL MA10B45             075/1935
SOL MA10C45             075/1935
         46             075/0310        076/0937
EOL MA10C46     Mar17   076/0750
SOL MA10D46             076/0755
EOL MA10D46             076/0937
         47             076/0948        076/1756
SOL MA11A47             076/0948
         47             076/1230                        Magnetometer back online
         48             076/1756        077/0211
EOL MA11A48             076/2252
SOL MA11B48             076/2252
         49     Mar18   077/0211        077/1022
         50             077/1022        077/1311
EOL MA11B50             077/1133
SOL MA11C50             077/1140
EOL MA11C50             077/1311
         51             077/1319        077/2130        MassComp crashed; missing dat
a
SOL MA12A51             077/1319
         52             077/2151        078/0603
EOL MA12A52     Mar19   078/0152
SOL MA12B52             078/0156
         53             078/0603        078/1413
         54             078/1413        078/2224
         55             078/2224        079/0635
         56             079/0635        079/1010
EOL MA12B56     Mar19   079/0810
SOL MA12C56             079/0810
EOL MA12C56             079/0937
SOL MA12D56             079/0945
EOL MA12D56             079/1010
         57             079/1016        079/1827
SOL MA13A57             079/1016
         58             079/1827        080/0238
EOL MA13A58             079/2149
SOL MA13B58             079/2149
EOL MA13B58             079/0128
SOL MA13C58     Mar20   080/0133
         59             080/0238        080/0641        Airgun leaking-last hour tape
 blank.
EOL MA13C59             080/1301
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         60                 080/0824
EOL MA13C61                 080/1301
SOL MA13D61                 080/1309
EOL MA13D61                 080/1438
         61                 080/1446
SOL MA14A61                 080/1446
         62                 080/2257
EOL MA14A62      Mar27      081/0310
SOL MA14B62                 081/0314
         63                 081/0708
         64                 081/1519
         65      Mar23      082/0000
EOL MA14B65                 082/0121
         66                 082/0121
SOL MA14X66                 082/0132
EOL MA14X66                 082/0530
SOL MA14C66      Mar24      083/0621
EOL MA14C66      Mar25      084/0104
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Scientific Party

James Robb Chief Scientist (left ship 3/1/87) rejoined ship 3/8/87 AMG USGS

John Schlee Associate + Chief Scientist AMG USGS

Christopher Polloni - AMG USGS (joined ship 3/1/87) left ship 3/8/87

Nancy Soderberg - USGS-AMG

Michael Boyle - PMG-USGS

Millington Lockwood - NOAA

James Nelheisel - EPA

MAC Harris - IOS

Rob Bonner - IOS

Chris Flewellen - IOS

Dave Gunn - IOS

Linton Wedlock - IOS

Steve Williams - IOS

Master - ~~Richard Jowett~~ Michael Patterson - J. Marr & Son

SHIP/CRUISE NO./LEG R/V FARNELLA F2-87-EC

CHIEF SCIENTIST J. SCHLEE

LINE START / END	TIME	JULIAN ~~YYMMDD~~ DAYS	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA-1	0719	061	[illegible]	[illegible]	ABC	2-EM AIRGUN MASSCOMP
"	0749	061	[illegible]	[illegible]	"	
"	0756	061	015	7.8	"	
"	0823	061	016	8.0		"
"	0853	061	015	[illegible]		"
MA1	0943	061	015	7.8	ABC	"
MA1	1014	061	018	7.8	ABC	
	1030	061	[illegible]		LOST SIGNAL	2-3 MIN
MA1	1100	061	017	7.8		
MA1	1200	061	015	8.2		
MA1	1236	061	015	8.2		
MA1	1309	061	013	8.3		
MA1B	1313	061	38	8.3		
MA1B	1346	061	41	8.3		
MA1B	1400	061	41	8.1		
MA1B	1430	061	39	8.2		
MA1B	1500	061	40	8.5		
MA1B	1530	061	45	8.6		
MA1B	1600	061	43	8.3		
MA1B	1630	061	38	8.7		
MA1B	1700	061	43	8.4		
MA1B	1730	061	38	8.3		
MA1B	1800	061	38	7.8		
MA1B	1830	061	40	7.5		
MA1B	1900	061	42	8.4		
MA1B	1915					
MA1B	1930	061	43	8.4		
MA1B	2000	061	41	8.1		
MA1B	2030	061	45	8.1		
MA1B	2100	061	41	8.2		
MA1B	2105	"	40	6.8		
MA1B	2108	"	40	6.5		
MA1D	2142	061	036	7.2		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
			001	001		SOL 1
			"			
			"			1.8 END to 100 [illegible]
			"			
						Gain to 0
						C/C SOL MA1B (061/1317)
			002			EO Tape 1 1530/SO Tape 2
			"			
			"			
			"			
			"			
			"			
			"			
			"			
			"			Gain to 6
			"			
			"			
			"			
			"			EOT 2
			"			EOT 2
			003			SOT 3

SHIP/CRUISE NO./LEG R/V FARNELLA F2-87-EC

CHIEF SCIENTIST J Schlee

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA1D	2200	061	035	7.4	ABC	2-chl Airgun MASSCOMP
	2230	061	042	7.3	"	"
	2300	061	041	8.1	"	"
	2330	061	039	7.3	"	"
MA1B	0000	062	042	7.8	"	"
MA1B	0230	062	045	7.6	"	"
	0100	062	040	7.9	"	"
	0130	062	039	7.9	"	"
	0200	062	044	7.6	"	"
	0233	062	043	7.4	"	"
	0300	062	045	7.6	"	"
	0330	062	039	7.9	"	"
MA1B	0400	062	041	7.7	"	"
	0430	062	046	7.4	"	"
	0500	062	040	7.9	"	"
MA1B	0520	062			"	"
MA1B	0530	062	038	7.8	"	"
MA1C	0559	062	064	6.7	"	"
MA1C	0600	062	064	6.7	"	"
MA1C	0630	062	063	7.8	"	"
MA1C	0700	062	068	7.8	"	"
MA1C	0730	062	066	8.0	"	"
MA1C	0800	062	061	8.0	"	"
MA1D	0819	062	344	8.0	"	"
MA1D	0830	062	346	7.0	"	"
MA1D	0900	062	343	8.0	"	"
MA1D	0930	062	337	7.0	"	"
MA1E	0938	062	c/c	7.0	"	"
MA1E	0943	062	044	7.7	"	"
MA1E	1000	062	045	7.8	"	"
MA1F	1019	062	c/c	—	"	"
MA1F	1025	062	125	7.7	"	"
MA1F	1030	062	126	7.7	"	"

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	003	001		
			"			
			"			
			"			
			"			
			"			
			"			
			"			
			"			
			"			
			"			
			"			
			"			
			"			
			"			
			"			
			004			EOTape 3 062/0520/80 Tape 4
			"			
			"			Course Change MA1C 064°
			"			
			"			
			"			
			"			
			"			
			"			Course Change 344°; Line MA 1D
			"			
			"			
			004			
			"			CC 044
			"			ON Line
			"			~~CC 125~~
			"			CC 125
			"			ON LINE 1F
			"			

SHIP/CRUISE NO./LEG R/V FARNELLA F2-87-EC
CHIEF SCIENTIST J. Schlee

LINE START/END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA1F	1100	062	123	7.8	ABC	2-CHL Airgun MASSCOMP
MA2	1122	062	222	7.4	ABC	2-CHL AIRGUN
MA2	1130	062	222	7.8	"	"
MA2	1146	062	222	7.8	ABC	"
MA2	1201	062	222	8.2	ABC	"
MA2	1230	062	221	8.2	ABC	"
MA2	1300	062	222	8.3	ABC	2-CHL AIRGUN MASSCOMP
MA2	1330	062	221	7.7		
MA2	1400	062	221	9.0	"	"
MA2	1430	062	221	9.0		
"	1439	"	"	"	"	"
MA2	1500	062	221	8.6		
MA2	1530	062	220	9.5		
MA2	1600	062	223	9.4		
MA2	1630	062	223	8.9		
MA2	1700	062	223	8.3		
MA2	1730	062	221	9.0		
"	1743	"	"	"		
MA2	1800	062	221	8.1		
"	1809	"	"	"		
MA2	1830	062	218	8.2		
MA2	1900	062	222	9.2		
MA2	1930	062	223	8.3		
"	1933	"	"	"		
MA2	2000	062	222	7.7		
MA2	2030	062	224	8.5		
MA2	2100	062	218	8.2		
MA2	2130	062	218	8.2		
MA2	2200	062	222	8.1		
MA2	2228	062	222	8.3		
MA2	2300	062	219	8.4		
MA2	2330	062	222	8.7		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL# START / END	MAGNETICS	COMMENTS
4		15-80	004	001		
			005			1113 End of Line
4			005			1122 New Tape.
4			005			Delay=1
4			005			Delay=0
			"			
—			— "			—
4		15-80	005			
			"			
			"			
			"			
4			005			DELAY =1
			"			
			"			
			"			
			"			
			"			
			"			
4			005			DELAY =2
			"			
4			005			Gain to 12
			"			
			"			
			"			
4			006			EO Tap 5, SO Tape 6 1933
			"			
			"			
			"			
						Delay = 1

SHIP/CRUISE NO./LEG R/V Farnella F2-87-EC
CHIEF SCIENTIST John Schlee

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA2	0000	063	224	9.5	ABC	2-Chl-Airgun-Masscomp
MA2	0030	063	220	8.3		
MA2	0100	063	226	8.4	"	"
MA2	0130	063	224	9.0		
MA2	0200	063	223	8.8		
MA2	0230	063	217	9.0	"	"
MA2	0300	063	220	8.4	"	"
MA2	0330	063	220	8.0		
MA2	0344	063	221	8.1	"	"
MA2	0400	063	219	8.3	"	"
MA2	0430	063	220	8.3	"	"
MA2	0500	063	219	8.3		
MA2	0530	063	220	8.9	"	"
MA2B	0555	063	190	8.3	"	"
MA2B	0600	063	190	8.2	"	"
MA2B	0630	063	194	8.2	"	"
MA2B	0700	063	190	8.0	"	"
MA2B	0730	063	195	8.2	"	"
MA2B	0800	063	191	9.2		
MA2B	0830	063	195	7.8	"	"
MA2B	0900	063	190	8.8		
MA2B	0930	063	190	8.5		
MA2B	0938	063	190	8.[illegible]		
MA2B	1007	063	190	9.0		
MA2B	1028	063	191	8.1		
MA2B	1100	063	192	8.1		
MA2B	1113	063	190	8.4		
MA2B	1130	063	190	8.7		
MA2B	1155	063	190	8.7		
MA2B	1230	063	192	8.8		
MA2B	1300	063	192	8.6	"	"
MA2B	1330	063	194	8.5		
MA2B	1345	063	193	8.1		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	006	001		Delay = 1
"		"				
"		"	007			EOT 6 / SOT 7
"		"	"			
"		"	"			
"			"			
"	"		"			
"	"		007			CC 190° Line 2B
"			"			
"			"			
"			"			
"			"			
"			"			
"			"			
"			"			
"			"			
						Delay = 2 Sec
						Delay = 1 Sec
						Delay = 2
						C/C ≈ 2/3 0/19 To Avoid Ship
"						Delay = 1
						~~EOT 7 / SOT 8~~
						EOT 7 / SOT 8
			008			
4		"	"			
						Delay = 2

SHIP/CRUISE NO./LEG R/V FARNELLA F2-87-EC
CHIEF SCIENTIST J. Schlee

LINE START/END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA2B	1400	063	186	8.0	ABC	2-CHL AIRGUN MASSCOMP
MA2B	1430	063	194	8.1	"	"
MA2B	1500	063	191	8.6		
MA2B	1526	063	195	8.2		
MA2B	1530	063	194	8.5		
MA2B	1539	063	186	8.3		
MA2B	1600	063	186	8.0		
MA2B	1630	063	191	8.0		
MA2B	1633	063	186	8.3		
MA2B	1700	063	184	8.3		
MA2B	1730	063	184	9.0		
MA2B	1800	063	175	7.2		
MA2B	1830	063	180	7.9		
MA2B	1900	063	180	5.8		
MA2B	1930	063	180	5.4		
MA2B	2000	063	180	5.0		
MA2B	2005	063	187	5.0		
MA2B	2007	063	187	5.1		
MA2B	2030	063	180	4.7		
MA2B	2100	063	174	5.4		
MA2B	2130	063	180	4.8	ABC	2CHL Airgun MASSComp
MA2B	2200	063	180	4.8		
MA2B	2230	063	180	5.0		
MA2B	2300	063	180	48		
MA2B	2330	063	180	4.8		
MA2B	0000	064	180	53		
MA2B	0030	064	184	5.4		
MA2B	0100	064	191	5.6	ABC	2-CHL AIRGUN MASSCOMP
MA2B	0130	064	191	5.8	"	"
MA2B	0200	064	191	5.8		
MA2B	0230	064	190	6.4		
MA2B	0300	064	190	6.2	"	"
MA2C	0326	064	189	6.2		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	008	001		
		"	"	"		DELAY = 1
						DELAY = 2
						DELAY = 1
4			008			c/c EOL MA213 / SOL MA2C
"			"			
"			"			
"			"			
"			"			
"			"			
"			"			
"			"			
"			"			DELAY = 2
			009			EOT 8 / SOT 9
"			"			
"			"			
"			009			
4		15-80	009	001		DELAY = 3
"		"	"	"		
"		"	"	"		
						c/c EOL MA2C

SHIP/CRUISE NO./LEG R/V FARNELLA F2-87-EC
CHIEF SCIENTIST J. SCHLEE

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA2C	0233	064	213	5.9	ABC	2-CHL AIRGUN MASSCOMP
MA2C	0400	064	214	5.7	"	"
MA2C	0418	064			"	
MA2C	0430	064	214	5.4	"	"
MA2C	0500	064	227	5.3	"	"
MA2C	0530	064	222	5.3	"	"
MA2C	0600	064	213	6.0	"	"
MA2C	0630	064	204	5.9	"	"
MA2D	0640	064	125	6.9		"
MA2D	0700	064	120	7.2	"	"
MA2D	0730	064	127	6.7	"	"
MA2D	0800	064	116	5.0	"	"
MA2D	0830	064	124	6.5	"	"
MA2E	0840	064	124	7.0	"	"
MA2E	0850	064	226	6.9	"	"
MA2E	0900	064	223	7.8	"	"
MA2E	0904	064	224	7.3		
MA2E	0930	064	224	7.6		
MA2E	1000	064	224	7.2		
MA2E	1030	064	221	7.3	"	"
MA2E	1100	064	217	7.1		
MA2E	1130	064	216	7.0		
MA2E	1200	064	212	6.8		
MA2E	1230	064	212	7.4		
MA2E	1230	064	212	7.4		
MA2E	1300	064	217	8.2	ABC	2-CHL AIRGUN MASSCOMP
MA2E	1330	064	223	7.4	"	"
MA2E	1346	064	213	7.6		
MA2E	1358	064	127	9.0		
MA3	1358	064	127	9.0		
MA3	1400	064	113	9.1		
MA3	1430	064	120	8.6		
MA3	1500	064	120	9.3		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	009	001		ON LINE MA2D
			~~007~~	"		~~EOTAPE 9~~
4			010	"		SOTAPE 10/EOT 9
"			010	"		
"			010	"		
"			010	"		
"			010	"		
"			010	"		
"			010	"		CC 125° Line 2D
"			010	"		
"			010	"		
"			010	"		
"			010	"		
"			010	"		CC 216° Line 2E
"			010	"		Steady on new course
"			010	"		
			010			Delay 24 Sec
"	"	"	010	"	"	
			011			EOT 10 / START 11
4		15-80	011	001		
						c/c
			011			EOL MA2E / EOT 011
			012			SOT 012 / SOL MA3

SHIP/CRUISE NO./LEG R/V FARNELLA F2-87-EC
CHIEF SCIENTIST J. Schlee

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA3	1530	064	118	8.2	ABC	2-CHL AIRGUN 160^{3} -MASSCOMP
MA3B	1540	064	37	8.6		
MA3B	1600	064	36	7.4		
MA3B	1630	064	41	8.2		
MA3B	1700	064	38	8.2		
MA3B	1730	064	25	9.1	"	"
MA3B	1800	064	29	6.2	"	"
MA3B	1830	064	38	7.2	"	"
MA3B	1900	064	32	8.5	"	"
MA3B	1930	064	36	7.6	"	"
MA3B	2000	064	37	5.4	"	"
MA3C	2002	064	001	7.1	"	"
MA3C	2030	064	00	7.9	"	"
MA3C	2100	064	358	7.9	"	"
MA3C	2130	064	358	8.2		
MA3C	2200	064	001	7.6		
MA3C	2209	064				
MA3C	2230	064	001	7.4		
MA3C	2300	064	001	8.8		
MA3C	2330	064	002	8.6		
MA3C	0000	065	0002	7.8		
MA3C	0030	065	0002	8.3		
MA3C	0100	065	004	7.6		
MA3C	0130	065	002	8.5		
MA3C	0200	065	358	9.5		
MA3C	0230	065	004	8.9		
MA3C	0300	065	359	9.4		
MA3C	0330	065	000	9.7		
MA3C	0400	065	359	9.7		
MA3C	0430	065	003	9.9		
MA3C	0434	065	004	10.0		
MA3C	0500	065	002	10.3		
MA3C	0530	065	000	10.1		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	012	001		c/c LINE MA 3B
4	"	"	012			
"	"	"	012			
	"		"			
"	"		"			
"	"	"	"			
"	"	"	012			
	"	"	012			c/c 001° Line MA 3C
	"	"	012			
"	"	"	"			
						Enzy 012 START 013
			013			EO 012 SO 013
						Delay = 3 Sec
						DELAY = 2
4	"		013			

SHIP/CRUISE NO. / LEG R/V FARNELLA F2-87-EC

CHIEF SCIENTIST John Schlee

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA3C	0600	065	0.0	9.8	ABC	2CH AIRGUN 160 #2 MASSCOMP
MA3D	0605	065	012	9.8		
MA3D	0627	065			"	"
MA3D	0630	065	010	10.2	"	"
MA3D	0700	065	010	11.0	"	"
MA3D	0730	065	010	10.4	"	"
MA3D	0800	065	018	8.1	"	"
MA3D	0830	065	011	8.9	"	"
MA3D	0900	065	011	8.7	"	"
MA3D	0930	065	012	8.1	"	"
MA3D	1000	065	013	8.3		
MA3D	1030	065	007	8.3		
MA3D	1100	065	008	8.6		
MA3D	1130	065	008	8.4		
MA3D	1200	065	009	7.8		
MA3D	1230	065	007	8.3	"	"
MA3D	1300	065	007	7.8	ABC	2-CHNL AIRGUN 160² MASSCOMP
MA3D	1330	065	007	7.9		
MA3D	1400	065	008	8.1		
MA3D	1430	065	008	8.1		
MA3D	1431	065	008	8.5		
MA3D	1500	065	007	6.5		
MA3D	1530	065	010	7.6		
MA3D	1600	065	012	7.7		
MA3D	1630	065	007	7.9		
MA3D	1700	065	007	7.9		
MA3E	1722	065	049	7.7		
MA3E	1730	065	050	8.3		
MA3E	1739	065				
MA3E	1745	065				
MA3E	1800	065	049	8.3		
MA3E	1830	065	049	8.4		
MA3E	1844					

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL# START / END	MAGNETICS	COMMENTS
4		15-80	013	001		
4			013	"		Course change 012 Line 30
4			014	"		EOT 13, BOT 14
"			014	"		
"			014	"		
"			014	"		
"			014			
"			014			
"			014			
"		"	014			—
						<C/C 00> (Adjustment)
4		15-80	014			
						EOT 14 / SOT 15
			015			EOT 14 / SOT 15
4			015	"		
4			015			CC 049° Line 35
						1. Delay
			015			EOT 15 (Gun change)
"			—			
"			—			
"			016			BOT 016 Gun online

SHIP/CRUISE NO./LEG R/V Farnella F2-87-EC

CHIEF SCIENTIST John Schlee

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA3E	1846	065			ABC	2CH AIRGUN 160 in^2 MASSCOMP
MA3E	1900	065	050	8.3	"	"
MA3E	1930	065	050	8.6	"	"
MA3E	2000	065	046	8.3	"	"
MA3E	2030	065	050	8.4	"	"
MA3E	2100	065	045	7.8	"	"
MA3E	2130	065	051	8.0	"	"
MA3E	2156	065	—	—		
—	—		—	—	—	—
MA3E	2252	065				
MA3E	2300	065	050	8.3		
MA3E	2330	065	051	8.1		
MA3E	0000	066	052	8.1	—	—
MA3E	0030	066	052	8.1		
MA3F	0038	066	038	8.0		
MA3F	0042	066	038	8.0		
MA3F	0100	066	039	8.1	ABC	2CHL AIRGUN 160 in^2 MASSCOMP
MA3F	0130	066	037	7.9		
MA3F	0200	066	039	8.2		
MA3F	0217	066	042	8.3		
MA3F	0230	066	036	8.0		
MA3F	0300	066	039	8.0		
MA3F	0330	066	037	8.1		
MA3F	0400	066	038	8.3		
MA3F	0430	066	038	8.5		
MA3F	0500	066	036	8.5	"	"
MA3F	0530	066	038	8.6		
MA3F	0600	066	037	8.5	"	"
MA3F	0630	066	038	8.6	"	"
MA3F	0700	066	038	8.5	"	"
MA3F	0709					
MA3F	0730	066	037	9.1	"	"
MA3F	0800	066	040	8.9	"	"

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	016	001		Delay to 2
"		"	016	"		
"		"	016	"		
"		"	016	"		
"		"	016	"		
"		"	016	"		
						STOP To change AirGuns
						Remove Tape 016
—	—	—	—	—	—	
			017			EOT 17 [Replaced with Same Gun]
			017			
—	—					
						C/C 038 Delay = 3
						Delay = 2
4		15-80	017			
						Delay = 3
"			017			
"			017			
"			017			
"			"			
"			"			
"			018			EOT 17 Begin Tape 018
"			018			
"			018			

SHIP/CRUISE NO./LEG R.V Farnella F2-87-EC
CHIEF SCIENTIST John Schlee

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA3F	0830	066	038	8.5	ABC	2CH Air Gun 160 #2 MASSCOMP
MA3F	0834	066			"	"
MA3F	0836	066			"	"
MA3F	0851	066			"	"
MA3F	0900	066	038	8.6	"	"
MA3F	0930	066	037	8.6	"	"
MA3F	1000	066	038	8.4		
MA3F	1030	066	038	83	"	"
MA3F	1100	066	037	8.3	"	"
MA3F	1130	066	041	83		
MA3F	1200	066	032	8.3		
MA3G	1230	066	C/C	[illegible]		
MA3G	1236	066	133°	8.3		
MA3G	1300	066	137	7.9	ABC	2-CHL AIRGUN 160 MASSCOMP
MA3G	1330	066	135	8.0	"	"
MA3G	1400	066	133	7.9		
MA3G	1410	066	131	8.6		
MA3G	1417	066	C/C			
MA4A	1427	066	219	84		
MA4A	1430	066	223	8.9		
MA4A	1500	066	219	85		
MA4A	1513	066	219	8.4		
MA4A	1530	066	220	84		
MA4A	1600	066	219	8.4		
MA4A	1630	066	216	8.7		
MA4A	1633	066	215	8.8		
MA4A	1700	066	219	8.7		
MA4A	1730	066	221	8.4		
MA4A	1800	066	220	8.5		
MA4A	1830	066	220	8.9		
MA4A	1900	066	218	8.9		
MA4A	1930	066	218	8.3		
MA4A	2000	066	218	8.6		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL# START / END	MAGNETICS	COMMENTS
4		15-80	018	001		
"		"	018			Delay to 4
"		"	018			Delay to 3
"		"	018			Delay = 2
"		"	018			
"		"	"			"
"		"	"			
"		"	"			
						CC 133°
						Steady on 133°
4		15-80	018			
"			"			
						Delay = 3
						c/c 2190
			018			EOL MA36 / EOT 018
			019			SOL MA4A / SOT 019
			"			Delay = 2
			"			
			"			
			"			
			"			Delay = 3
			"			
			"			
			019			
4			019			
4			019			
4			019			
4			019			

SHIP/CRUISE NO./LEG R/V Farnella F2-87-EC

CHIEF SCIENTIST John Schlee

LINE START/END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA4A	2030	066	220	8.9	ABC	2CH AirGun 160$^{\#3}$ MASS COMP.
MA4A	2100	066	220	8.7		
MA4A	2130	066	220	8.5		
MA4A	2200	066	218	8.6		
MA4A	2230	066	219	8.7		
MA4A	2239	066	—	—	—	—
MA4A	2300	066	219	8.0		
MA4A	2330	066	219	8.0	—	—
MA4A	0000	067	219	8.2		
MA4A	0030	067	219	8.1		
MA4A	0100	067	221	8.5	ABC	2CHL AIRGUN 160^{2} MASSCOMP
MA4A	0130	067	217	8.3		
MA4A	0200	067	218	8.6		
MA4A	0202	067	C/C	8.6		
MA4B	0204	067	232	8.4		
MA4B	0230	067	230	8.8		
MA4B	0300	067	228	8.6		
MA4B	0330	067	229	9.0		
MA4B	0400	067	230	8.8		
MA4B	0430	067	231	8.9		
MA4B	0500	067	230	8.7		
MA4B	0530	067	230	9.1		
MA4B	0600	067	230	8.9		
MA4B	0630	067	233	8.7		
MA4B	0633	067				
MA4B	0653	067				
MA4B	0700	067	232	9.0		
MA4B	0730	067	233	8.8		
MA4B	0800	067	231	8.7		
MA4B	0830	067	230	8.5		
MA4B	0900	067	230	8.3		
MA4B	0930	067	230	8.1		
MA4B	1000	067	230	8.1		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	019	001		
"		"	019	"		
	—	—	—	—		DELAY = 3
						~~EOT 19~~
						~~EOT 19 / SOT 20~~
—						EOT 19 / SOT 20
			020			
—			020			
			020			
4		15-80	020			
						C/C 235° EOL MA4A
						SOL MA4B
4		15-80	020			
4			020			
4		"				
"		"	020			Delay = 2
			021			EOT 20, BOT 21
			021			
			021			
4			021			
"			021			

SHIP/CRUISE NO. / LEG R/V FARNELLA F2-87-EC

CHIEF SCIENTIST John Schlee

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA4B	1026	067			ABC	2CHL. AirGun 160"/MASSCOMP
	0145	068	059	6.0	ABC	2CHL AIRGUN 160^3/MASSCOMP
MA5A	0204	068	055	5.5		
MA5A	0230	068	054	8.1		
MA5A	0300	068	054	7.9		
MA5A	0330	068	055	8.1		
MA5A	0336	068	055	8.2		
MA5A	0400	068	055	8.3		
MA5A	0407	068	056	8.1		
MA5A	0430	068	057	8.2		
MA5A	0500	068	053	8.0		
MA5A	0530	068	057	8.0		
MA5A	0600	068	056	8.0		
MA5A	0630	068	056	8.0		
MA5A	0700	068	057	8.2		
MA5A	0730	068	052	8.0		
MA5A	0756	068				
MA5A	0800	068	054	7.9		
MA5A	0830	068	056	8.3		
MA5A	0900	068	055	8.4		
MA5A	0930	068	058	8.2	"	"
MA5A	1000	068	057	8.2		
MA5A	1015	068	058	8.1		
MA5A	1030	068	057	8.3		
MA5B	1054	068	045	8.4	—	—
MA5B	1100	068	045	8.3	—	—
MA5B	1130	068	046	8.1		
MA5B	1200	068	045	8.2		
MA5B	1230	068	047	8.4		—
MA5B	1300	068	045	8.4		
MA5B	1320	C/C				

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		80/15	021	001		Delay = 2 ENDOFLINE
						END OF ROLL 1 EOT 21
						Pulled gear
4		15-80		002		Gear in water
"		"	022			SOL MASA/SOT 022
						DELAY = 3
						DELAY = 2
4		"	022			
"		"	022			
"		"	022			
"		"	022			
"		"	022			
"		"	022			
"		"	022			DELAY = 3
"		"	022			
"		"	022			
"		"	022			
"		"	022			D = 3
"		"	022			
			EOT 022 SOT 023		EOT 022	SOT 023
			023			
4			023			C/C 045°
			023			
			023			
			023			
						C/C 048

SHIP/CRUISE NO./LEG FARNELLA F2-87-EC

CHIEF SCIENTIST SCHLEE/ROBB

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA5C	1321	068	045	8.2	ABC	2 CHL AIRGUN 160^3/MASSCOMP
MA5C	1330	068	039	8.6		
MA5C	1400	068	037	8.2		
MA5C	1430	068	037	8.2		
MA5C	1500	068	041	7.9		
MA5C	1530	068	041	7.6		
MA5C	1600	068	038	8.1		
MA5C	1630	068	041	8.1		
MA5C	1700	068	041	8.0		
MA5C	1730	068	039	9.0		
MA5C	1800	068	038	8.6		
MA5C	1830	068	043	8.6		
MA5C	1835	068				
MA5C	1900	068	039	8.2		
MA5C	1930	068	040	8.5		
MA5C	2000	068	040	8.6		
MA5C	2030	068	040	8.4		
MA5C	2100	068	038	8.3		
MA5C	2130	068	040	8.1		
MA5C	2200	068	040	8.0		
MA5C	2230	068	040	8.2		
MA5C	2300	068	040	7.1		
MA5C	2330	068	040	7.6		
MA5C	0000	069	041	7.4		
MA5C	0030	069	040	7.7		
MA5C	0100	069	041	7.1	ABC	2 CHL AIRGUN 160^3/MASSCOMP
MA5C	0130	069	041	7.2		
MA5C	0200	069	040	6.1		
MA5C	0220	069	C/C	5.1		
MA5C	0230	069	140	9.4		
MA5D	0231	069	140	9.4		
MA5D	0237	069	137	7.8		
MA5D	0300	069	130	8.0		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	023	002		SOL MA5C
"		"	023	002		
"		"	023	"		
"		"	023	"		
"		"	023	"		
			024			EOT 23 BOT 24
"			024			
"			024			
"			024			
"			"			
"			"			
4			024			Delay = 3
4		15-80	024	002		
						C/C 130° / EOL MA5C
						SOL MA5D
			025			EOT 24 / SOT 25

SHIP/CRUISE NO./LEG FARNELLA F2-87-EC

CHIEF SCIENTIST SCHLEE/ROBB

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA5D	0330	069	132	7.9	ABC	2-CHL AIRGUN 160^3/MASSCOMP
MA5D	0354	069	CC			
MA6A	0412	069	227	7.5		
MA6A	0430	069	216	8.7		
MA6A	0500	069	218	8.8		
MA6A	0530	069	218	8.8		
MA6A	0600	069	218	9.2		
MA6A	0630	069	219	8.9		
MA6A	0700	069	217	9.2		
MA6A	0730	069	218	9.2		
MA6A	0800	069	217	9.2		
MA6A	0830	069	218	9.4		
MA6A	0900	069	218	9.5		
MA6A	0930	069	218	8.5		
MA6A	1000	069	217	8.0		
MA6A	1030	069	217	8.3		
MA6A	1100	069	215	8.3		
MA6B	1110	069	220	8.3		
MA6B	1130	069	218	8.2		
MA6B	1200	069	219	8.0		
MA6B	1223	069	220	8.1		
MA6B	1230	069	220	8.1		
MA6B	1300	069	218	8.0	ABC	2-CHL AIRGUN 160^3/MASSCOMP
MA6B	1330	069	219	8.8		
MA6B	1400	069	217	8.4		
MA6B	1430	069	221	8.6		
MA6B	1431	069	221	8.6		
MA6B	1500	069	221	8.0		
MA6B	1530	069	221	7.9		
MA6B	1600	069	221	8.1		
MA6B	1605	069	C/C	8.1		
MA6C	1616	069	220	8.4		
MA6C	1630	069	234	8.4		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	025	2		EOT 025
						C/C 218° EOL MA5D
			026			SOT 026 (mis numbered restarted) SOL MA6A
"			026	2		
"			"	"		
"			"	"		
"			"	"		
"			"	"		
"			"	"		
"			"	"		
			026			
						C/C 220°
			026/027			EOT 026 / SOT 027
			027			
4			027	2		
						Delay = 4
						Delay = 3
						EOL MA6B C/C 234°
						SOL MA6C

SHIP/CRUISE NO./LEG FARNELLA 87-2

CHIEF SCIENTIST Schlee/Robb

LINE START/END	TIME	~~YYMMDD~~ JD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA6C	1700	069	234	8.2	ABC	2 CHL AIRGUN 160³/MASSCOMP
MA6C	1730	069	233	8.8		
MA6C	1800	069	237	8.7		
MA6C	1830	069	238	8.4	"	"
MA6C	1900	069	236	8.2		
MA6C	1930	069	236	8.5	"	"
MA6C	2000	069	236	8.2	"	"
MA6C	2030	069	233	8.4	"	"
MA6C	2034	069			"	"
MA6X	2045	069	217	8.4	"	"
MA6X	2100	069	215	7.9	"	"
MA6X	2118	069	215	7.7	"	"
MA6X	2124	069	215	7.7	"	"
MA6X	2130	069	214	8.1	"	"
MA6X	2200	069	210	7.7	"	"
MA6X	2230	069	211	7.7		
MA6X	2300	069	210	7.9	"	"
MA6X	2330	069	211	7.8		
MA6X	0000	070	211	7.8		
MA6X	0100	070	212	7.6	ABC	2 CHL AIRGUN 160³/MASSCOMP
MA6X	0130	070	213	6.6		
MA6X	0200	070	206	5.7		
MA6X	0230	070	202	5.9		
MA6X	0300	070	206	6.2		
MA6X	0330	070	207	5.3		
MA6X	0400	070	211	5.5		
MA6X	0430	070	215	5.3		
MA6X	0500	070	210	5.6		
MA6X	0530	070	213	6.0		
MA6X	0531					
MA6X	0600	070	224	5.9		
MA6X	0630	070	212	6.4		
MA6X	0700	070	213	6.2		

4/C OFF LINE

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AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	027	2		
"		"	"	"		
"		"	"	"		
"		"	"	"		
"		"	"	"		
"		"	"	"		
"		"	"	"		
"		"	"	"		
"		"	028			EOT 27 BOT 28
"		"	028			CC 217 (Turned off line - weather)
"		"	028			
	Accidently	stopped	Program			EOT 028/SOT 029
			029			Lost about 5 min of data
4			029			
4			029			
4		15-80	029	2		
4		15-80	029	2		
			030			EOT 29 BOT 30
4			030			
			030			
"			030			

SHIP/CRUISE NO./LEG Farnella 87-2

CHIEF SCIENTIST Schlee/Robb

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA6X	0730	070	208	6.4	ABC	2CHL AirGun 160 ^{3} in/MASS COMP
MA6X	0800	070	212	6.2	"	"
MA6X	0830	070	212	6.1	"	"
MA6X	0900	070	205	6.6	"	"
MA6X	0930	070	208	7.3	"	"
MA6X	1000	070	209	7.1		
MA6X	1030	070	201	7.5	"	"
MA6X	1100	070	204	6.9		
MA6X	1130	070	203	6.6	"	"
MA6X	1200	070	198	6.8		
MA6X	1230	070	197	6.6		
MA6X	1300	070	180	5.2	ABC	2-CHL AIRGUN 160 ^{3}/MASSCOMP
MA6X	1330	070	189	4.6		
MA6X	1342	070				
MA6X	1400	070	189	4.5		
MA6X	1430	070	187	4.1		
MA6X	1500	070	183	3.8		
MA6X	1530	070	190	4.2		
MA6X	1600	070	186	4.3		
MA6X	1630	070	210	4.5		
MA6X	1700	070	220	4.4		
MA6X	1730	070	210	4.5		
MA6X	1800	070	202	4.4		
MA6X	1830	070	216	5.1		
MA6X	1900	070	217	5.2		
MA6X	1930	070	225	4.9		
MA6X	2000	070	218	4.8		
MA6X	2030	070	227	4.9		
MA6X	2100	070	222	5.0		
MA6X	2130	070	220	4.8		
MA6X	2154	070	220	5.0		
MA6X	2200	070	219	4.5		
MA6X	2230	070	225	4.5		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4	1	1580	030	2		
"	"	"	030	"		
"		"	030	"		
"		"	030	"		
"		"	030	"		Delay = 3
"		"	"	"		"
4		1580	030	2		
			031			EOT 030/SOT 031
			031			
			031			
			031			
4		"	031	"		
4			031			
"			031			
"			"			
"			031			
"			031			
"			"			
			031			
			031/032			SOT 032 / EOT 031
			032			

SHIP/CRUISE NO./LEG FARNELLA/ 87-2 EC
CHIEF SCIENTIST Schlee/Robb

LINE START/END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA6X	2300	070	208	4.5	ABC	2CHL AirGun-160" (MASSCOMP)
MA6X	2330	070	203	4.7		
MA6X	0000	071	201	5.1		
MA6X	0030	071	206	4.7		
MA6X	0100	071	202	4.5	ABC	2CHL AIRGUN 160^3/MASSCOMP
MA6X	0130	071	198	5.0		
MA6X	0200	071	198	5.1		
MA6X	0230	071	189	5.7		
MA6X	0300	071	201	5.3		
MA6X	0330	071	207	4.9		
MA6X	0400	071	202	5.0		
MA6X	0430	071	192	5.7		
MA6X	0500	071	204	5.2		
MA6X	0530	071	201	5.4		
MA6X	0600	071	207	5.2		
MA6X	0605	071				
MA6X	0630	071	214	4.9		
MA6X	0700	071	212	4.9		
MA6X	0730	071	202	5.5		
MA6X	0800	071	197	6.0		
MA6X	0830	071	212	5.9		
MA6X	0900	071	199	6.2		
MA6X	0930	071	198	6.4		
MA6X	1000	071	205	5.6		
MA6X	1030	071	195	6.5		
MA6Y	1100	071	C/C			
MA6Y	1109	071	110°	–		
MA6Y	1130	071	109	7.8		
MA6Y	1200	071	108	7.4		
MA6Y	1230	071	112	7.9		
MA6Y	1300	071	117	8.2	ABC	2CHL AIRGUN 160^3/MASSCOMP
MA6Y	1327	071	034	7.9		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4	'	80/15	032	2	.	Delay = 3 Sec
4		15-80	032	2		
			032			
			"			
			032			
"			032			
			033			EOT 32 BOT 33
"			033			
"			033			
"			033			
"			033			
"			033			
"			033			
—			033			Delay = 4 sec
			033			C/C 110°
						Steady on new course
			033			—
4		15-80	033			
						EOT 33 / EOL MAG
						PULLED AIRGUN, MAGGIE
						PULLED GLORIA FOR REPAIR

SHIP/CRUISE NO./LEG FARNELLA F2-87-EC

CHIEF SCIENTIST Schlee/Robb

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA7X	1525	071	051	6.6	ABC	2CHL AIRGUN 160^3/MASSCOMP
MA7X	1530	071	039	7.0		
MA7X	1600	071	051	6.6		
MA7X	1630	071	041	7.4		
MA7X	1700	071	040	6.1		
MA7X	1730	071	044	6.6		
MA7X	1800	071	046	7.3		
MA7Y	1808	071				
MA7Y	1830	071	151	6.5		
MA7Y	1900	071	166	7.7		
MA7Y	1930	071	169	8.1		
MA7Y	2000	071	166	8.5		
MA7Y	2030	071	166	8.6		
MA7Y	2100	071	161	8.7		
MA7Y	2130	071	154	7.7		
MA7Y	2200	071	168	6.0		
MA7Y	2206	SLOWED DOWN			TO re-deploy GLORIA —	
MA8A	2336	071	—	—	Resume GLORIA Survey	
MA8A	2352	071	055			
MA8A	0000	072	060	72		
MA8A	0036	072	012		—	—
MA8A	0100	072	007	7.0	ABC	2-CHL AIRGUN 160^3/MASSCOMP
MA8A	0130	072	010	7.5		
MA8A	0200	072	015	6.6		
MA8A	0230	072	016	4.2		
MA8A	0300	072	005	6.3		
MA8A	0318	072	355	6.3		
MA8A	0330	072	010	5.3		
MA8A	0400	072	009	5.1		
MA8A	0430	072	005	4.9		
MA8A	0509	072	003	5.9		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	034	002		SOT 034/SOL MATX ~~GLORIA~~
4		"	034	"		
			034			
			034			change course 153 LINE 7Y
			034			
			034			
4			034			
4			034			
4			034			
4			034			
4			034			N = 5
x			034			—
stopped recording						E.O.T. 034
			035			SOT 035
						C/C ~~040~~ 055
						Delay = 5 sec
						START LINE 8A
4		15-80	035	002		
						DELAY = 4
			035			

SHIP/CRUISE NO./LEG FARNELLA F2-87-EC

CHIEF SCIENTIST Schlee/Robb

LINE START/END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA8A	0530	072	019	5.3	ABC	2CHL BIRGUN 160³/MASSCOMP
MA8A	0600	072	011	6.4	"	"
MA8A	0630	072	014	6.0	"	"
MA8A	0700	072	012	6.4	"	"
MA8A	0730	072	014	6.6	"	"
MA8A	0748	072			"	"
MA8A	0800	072	014	7.2	"	"
MA8A	0830	072	061	7.7	"	"
MA8A	0900	072	012	7.2	"	"
MA8B	0910	072	001		"	"
MA8B	0930	072	354	7.3	"	"
MA8B	1000	072	004	6.6	"	"
MA8B	1030	072	000	7.1		
MA8B	1100	072	006	7.3	"	"
MA8B	1130	072	004	6.9		
MA8B	1200	072	004	7.1		
MA8B	1230	072	359	7.7		
MA8B	1300	072	359	7.8	ABC	2-CHL AIRGUN 160³/MASSCOMP
MA8B	1330	072	006	7.3		
MA8B	1353	072	010	7.0		
MA8B	1400	072	360	7.9		
MA8B	1430	072	003	7.8		
MA8B	1500	072	003	8.5		
MA8B	1530	072	356	9.1		
MA8B	1558	072	360	8.5		
MA8B	1600	072	360	8.5		
MA8B	1630	072	359	8.5		
MA8B	1649	072	C/C	7.6		
MA8X	1654	072				Temp. shut down
MA8X	1700	072	276	4.0		NA
MA8X	1730	072	220	3.4		NA
MA8X	1800	072	004	4.0		NA
MA8X	1830	072	357	3.7		NA

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4	—	15-80	035	002	—	
"	—	"	035	"	—	
"	—	"	035	"	—	
"	—	"	035	"	—	
"	—	"	035	"	—	
"	—	"	036	"	—	EOT 35 / BOT 36
"	—	"	036	"		
"	—	"	036	"		
"	—	"	036	"		
						change conv
"		"	036	"	—	
"		"	036	"		
4		15-80	036	"		
						DELAY=3
			037			EOT 036 / BOT 037
						Bad weather — c/c Pull in gear
			NA			
			NA			
			NA			
			NA			
			NA			

SHIP/CRUISE NO./LEG Farnella FZ-87-EC

CHIEF SCIENTIST Schlee/Robb

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA8X	1900	072	000	3.1	ABC	Temporarily shut down
MA8X	1930	072	346	3.2	"	"
MA8X	2000	072	352	3.0	"	"
MA8X	2030	072	359	2.1	"	"
MA8X	2100	072	004	5.1	"	"
	0500	073	337	3.9		
					Re-Deploy	Grav-
MA9A	2245	073			ABC	mass comp -
MA9A	2300	073	008	6.8		
MA9A	2330	073	005	7.5		
MA9A	0000	074	005	7.6		
MA9A	0030	074	008	6.8		
MA9A	0100	074	007	7.6	ABC	2CHL AIRGUN 160^3 / MASSCOMP
MA9A	0130	074	009	7.4		
MA9A	0200	074	006	7.5		
MA9A	0230	074	004	8.2		
MA9A	0300	074	003	8.0		
MA9A	0330	074	004	7.7		
MA9A	0400	074				
MA9A	0430	074				
MA9A	0440	074	004	8.0		
MA9A	0500	074	004	8.3		
MA9B	0505	074				
MA9B	0530	074	238	10.0		
	0554	074				
MA9B	0600	074	239	9.1		
MA9C	0616	074				
MA9C	0630	074	134	8.6		
	0659	074				
MA9C	0700	074	051	8.1		
MA9C	0708					
MA9C	0730	074	063	9.0		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4	—	15-80	NA	002	—	Steering northerly course.
"	"	"	"	"		Only Fathometers on Line
"	"	"	"	"		GLORIA & seismic gear not
"	"	"	"	"		on line while sea is so
"	"	"	"	"		rough
4		15-80	038	003		DELAY = 3
4		15-80	038	003		
						IBM NAV SYSTEM DOWN
4		"	038	"		
4		"	038	"		cc 240, Line 9B
4		"	038	"		
"			038			delay = 2
"			038			
						cc 055, Line 9C
4			039			EOT 38, BOT 39
			039			
			039			delay = 3
4			039			

SHIP/CRUISE NO./LEG Farnella F-2-87-EC

CHIEF SCIENTIST Schlee/Robb

LINE START/END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA9C	0800	074	051	8.6	ABC	2 CHL AIR GUN 160^{3}/MASSCOMP
MA9C	0830	074	056	8.0	"	"
MA9C	0900	074	051	9.3	"	"
MA9C	0930	074	062	8.1		
MA9C	1000	074	053	7.5		
MA9C	1030	074	052	7.4		
MA9C	1100	074	060	8.2		
MA9C	1130	074	053	8.3		
MA9C	1200	074	055	9.0		
MA9C	1230	074	060	9.6		
MA9C	1300	074	064	9.0	ABC	2CHL AIRGUN 160^{3}/MASSCOMP
MA9C	1330	074	057	8.9		
MA9C	1400	074	054	9.2		
MA9C	1430	074	050	8.7		
MA9C	1500	074	053	8.3		
MA9C	1507	074	053	7.5		
MA9C	1530	074	055	8.4		
MA9C	1600	074	054	9.2		
MA9C	1630	074	055	8.5		
MA9C	1700	074	052	7.9		
MA9C	1730	074	058	6.3		
MA9D	1749	074				
MA9D	1756	074	038	8.3		
MA9D	1800	074	036	7.4		
MA9D	1830	074	037	8.1		
MA9D	1900	074	034	8.6		
MA9D	1930	074	036	9.1		
MA9D	2000	074	033	8.5		
MA9D	2030	074	039	8.4		
MA9D	2100	074	037	7.5		
MA9D	2130	074	037	8.2		
MA9D	2200	074	030	8.1		
MA9D	2230	074	038	8.8		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4	—	15-80	039	003	—	
"	—	"	039	"	—	
"	—	"	039	"	—	
			039			
4		15-80	039	003		
			040			EOT 039 / BOT 040
			040			
			040			
			040			
			040			
			040			
			040			CC 038 Line 9D
			040			ON Course 038
			040			
			040			
			040			
			040			
			040			
			040			
			040			
						Delay = 4
						Delay = 3

SHIP/CRUISE NO. / LEG FARNELLA F-2-87-EC

CHIEF SCIENTIST Schlee / Robb

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA9D	2300	074	038	8.1	ABC	2CHL Air Gun 160³/MASS comp
MA9D	2319	074	040	7.3		
MA9D	2330	074	040	7.3		
MA9D	0000	075	039	7.8		
MA9D	0030	075	038	8.1		
MA9D	0100	075	044	8.1		
MA9D	0130	075	039	8.6	ABC	2CHL AIRGUN 160³/MASSCOMP
MA9D	0200	075	037	8.6		
MA9D	0230	075	041	8.7		
MA9D	0300	075	047	8.2		
MA9D	0330	075	036	8.7		
MA9D	0400	075	041	7.8		
MA9D	0430	075	050	8.4		
MA9D	0500	075	032	8.1		
MA9D	0530	075	038	8.9		
MA9D	0600	075	041	8.2		
MA9D	0630	075	038	7.9		
MA9E	0641	075				
MA9E	0650	075				
MA9E	0700	075	120	8.6		
MA9E	0730	075	125	7.8		
MA9E	0730	075				
MA9E	0800	075	122	8.9		
MA10A	0822	075				
MA10A	0830	075	221	8.7		
MA10A	0900	075	217	8.9		
MA10A	0930	075	222	8.8		
MA10A	1000	075	220	8.2		
MA10A	1030	075	220	8.1		
MA10A	1100	075	217	9.1		
MA10A	1130	075	214	9.5		
MA10A	1200	075	213	9.1		
MA10A	1230	075	216	8.6		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4	–	15-80	040	003		Day = 3
			041			EOT 040 / SOT 041
			041			
			041			
4		15-80	041	003		
4		15-80	041	003		
"		"	041	"		
		"	041			
"		"	041			Change Course 124°, Line 9E
"			041			ON Course 124°
"		"	041	"		
"			041	"		
			042			EOT 041 BOT 042
						C218 B/O Line 10
"			043			EOT 42 BOT 43
"			043			
"			043			
"			043			
			043			
			043			

SHIP/CRUISE NO. / LEG FARNELLA F-2-87-EC

CHIEF SCIENTIST Schlee/Robb

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA10A	1300	075	214	8.4	ABC	2CHL AIRGUN-160³-massCOMP
MA10A	1330	075	223	8.4		
MA10A	1400	075	215	8.8		
MA10A	1430	075	215	8.5		
MA10A	1439	075	C/C			
MA10B	1441	075	208	7.7		
MA10B	1500	075	215	8.5		
MA10B	1530	075	222	8.5		
MA10B	1600	075	217	8.9		
MA10B	1630	075	216	8.6		
MA10B	1646	075	214	8.8		
MA10B	1700	075	228	7.8	"	"
MA10B	1730	075	217	9.3	"	"
MA10B	1800	075	218	8.5	"	"
MA10B	1819	075				
MA10B	1830	075	218	9.1	"	"
MA10B	1854	075			"	"
MA10B	1856	075			"	"
MA10B	1900	075	211	9.4	"	"
	1926	075			"	"
MA10B	1930	075	217	9.3	"	"
MA10C	1935	075				
MA10C	1938	075				
MA10C	2000	075	235	9.4		
MA10C	2030	075	235	8.0		"
MA10C	2100	075	227	7.6	"	"
MA10C	2130	075	237	7.5		
MA10C	2200	075	227	7.1		
MA10C	2230	075	241	6.4		
MA10C	2300	075	232	6.5		
MA10C	2330	075	238	6.8		
MA10C	0000	076	242	7.0		
MA10C	0030	076	237	7.5		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL# START / END	MAGNETICS	COMMENTS
4	-	15-80	043	003		
						C/C 216°
			044			EOT 043/SOT 044
4		"	044	"		
"		"	044	"		
"		"	044	"		
			—			Turn off air Gun temporarily. EOT 044 to change gun
"		"	—	"		
"			045			BOT 45, Air Gun on Line
"			045			Delay = 4
"			045			
			"			Magnetometer down for repair
"		"	045	"		
						Change Course 235° Line 10E
			045			ON Course 235°
			045			
"			045	"		
"		"	045	"		
						Delay = 3
			045			

SHIP/CRUISE NO./LEG Farnella F-2-87-EC

CHIEF SCIENTIST Schlee / Robb

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA10C	0100	076	236	8.1	ABC	2CHL.Airgun 160³/MASSCOMP
MA10C	0130	076	244	9.4		
MA10C	0200	076	242	9.2		
MA10C	0230	076	236	8.9		
MA10C	0300	076	247	9.1		
MA10C	0305	076	234	8.5		
MA10C	0310	076	222	8.5		
MA10C	0330	076	239	8.8		
MA10C	0400	076	No Data			
MA10C	0430	076	236	9.0		
MA10C	0500	076	242	8.9		
MA10C	0530	076	243	9.2		
MA10C	0600	076	232	8.9		
MA10C	0630	076	240	8.8		
MA10C	0700	076	221	8.8		
MA10C	0730	076	236	9.2		
	0750	076				
MA10D	0755	076	186	8.9		
MA10D	0800	076	184	8.3		
MA10D	0830	076	185	8.9		
MA10D	0900	076	176	10.7		
MA10D	0930	076	196	7.7		
MA10D	0937	076	Turning			
					New Line	
MA11A	0948	076	055			
MA11A	1000	076	057	8.3		
MA11A	1030	076	055	7.4		
MA11A	1100	076	061	7.2		
MA11A	1130	076	045	7.7		
MA11A	1200	076	053	7.8		
MA11A	1230	076	050	7.2		
MA11A	1300	076	065	7.2		
MA11A	1330	076	054	7.2		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	045	003		Delay = 3
			045			EOT 045
			046			SOT 046
4			046			
"			046			
"			"			
"			"			
"			"			
"			"			Change Course to 186°
"			"			On Course 186° Line 10D
"			"			
"			046			
"			046			
			046/			EOL 10D / EOT 046
			047			SOL 11A - SOT 47
			047			" "
						MAGNETOMETER BACK ON LINE

SHIP/CRUISE NO./LEG FARNELLA F2-87-EC

CHIEF SCIENTIST Schlee/Robb

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MAIIA	1400	076	049	7.3	ABC	2CHL AIRGUN 160^3 / MASSCOMP
MAIIA	1430	076	060	8.2		
MAIIA	1500	076	043	7.5		
"	1517	"				
MAIIA	1530	076	064	8.8		
MAIIA	1600	076	057	8.7		
MAIIA	1630	076	065	9.0		
MAIIA	1700	076	054	8.9		
MAIIA	1730	076	053	8.7		
MAIIA	1756	076	057	8.6		
MAIIA	1800	076	053	9.7		
MAIIA	1830	076	055	9.4		
MAIIA	1900	076	060	10.5		
MAIIA	1930	076	052	10.1		
MAIIA	1948	076	055	10.5		
MAIIA	2000	076	055	10.5		
MAIIA	2030	076	057	9.5		
MAIIA	2055	076				
MAIIA	2100	076	050	10.3		
MAIIA	2130	076	052	10.5		
MAIIA	2200	076	050	10.1		
MAIIA	2230	076	055	9.6		
MAIIB	2252	076	037		— New line	IIB -
MAIIB	2300	076	037	7.5		
MAIIB	2330	076	034	9.6		
MAIIB	0000	077	032	8.8		
MAIIB	0030	077	045	7.1		
MAIIB	0100	077	044	7.2		
MAIIB	0130	077	038	8.4	ABC	2CHL AIRGUN / MASSCOMP
MAIIB	0200	077	035	7.6		
MAIIB	0211	077	027	7.9		
MAIIB	0230	077	031	7.5		
MAIIB	0300	077	050	6.7		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	47	3		
			047	3		DELAY = 4 sec.
4			047	3		
			048	"		EOT 047 / SOT 048
			048			
			048			
			048			
4			048	3		
"			"	"		Delay = 3 sec
"			048	3		
"			048	"		
						Delay = 4 sec
4			048	3		
			048	3		
						c/c 037
4		15-80	048	3		
			049			EOT 048 / SOT 049

SHIP/CRUISE NO./LEG FARNELLA F2-87-EC

CHIEF SCIENTIST Schlee/Robb

LINE START/END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA11B	0330	077	030	6.7	ABC	2CHL AIRGUN/MASSCOMP
MA11B	0400	077	041	6.5		
MA11B	0430	077	040	6.1		
MA11B	0500	077	041	6.8		
MA11B	0530	077	029	8.0		
MA11B	0539	077				
MA11B	0600	077	036	7.4		
MA11B	0630	077	020	8.9		
MA11B	0700	077	040	8.6		
MA11B	0730	077	039	8.7		
MA11B	0800	077	025	9.3		
MA11B	0830	077	044	8.9		
MA11B	0900	077	024	8.6		
MA11B	0930	077	049	8.5	—	—
MA11B	1000	077	037	7.9		
MA11B	1022	077	—	—		
MA11B	1030	077	032	7.4		
MA11B	1100	077	037	8.7		
MA11B	1130	077	046	7.9		
	1133	077	Turning	—		
MA11C	1140	077	128°			
MA11C	1200	077	132	8.7		
MA11C	1230	077	129	7.2		
MA11C	1300	077	124	8.0	ABC	2CHL AIRGUN/MASSCOMP
MA11C	1311	077	210	8.0		
MA12A	1319	077	217	9.3		
MA12A	1330	077	219	8.8		
MA12A	1400	077	219	8.7		
MA12A	1430	077	226	8.8		
MA12A	1500	077	220	9.3		
MA12A	1526	077				
MA12A	1530	077	224	8.9		
MA12A	1600	077	215	8.8		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	049	3		
"				"		
"				"		
"				"		
"			049	"		
"			"			Delay = 3
"			"			
"			"			
"			"			
"			"			
"			"			
"			"			
"			"			
"			"			
			049			EOT 049 / SOT 050
			050			
			050			
						Ch. Count
4		15-80	050	3		
			050			0/0217° EOT050 / EOLMA11C
			051			SOT 051 / SOLMA12A
						DELAY = 4 SEC
			051	3		

SHIP/CRUISE NO./LEG FARNELLA F2-87-EC

CHIEF SCIENTIST Schlee/Robb

LINE START/END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA12A	1630	077	220	9.2	ABC	2-CHL AIRGUN 160^3/MASSCOMP
MA12A	1700	077	218	9.1		
MA12A	1730	077	222	9.4		
MA12A	1800	077	217	9.3		
MA12A	1830	077	218	8.9		
MA12A	1900	077	218	9.1		
MA12A	1930	077	216	8.7		
MA12A	2000	077	199	9.2		
MA12A	2030	077	219	9.1		
MA12A	2100	077	204	8.8		
MA12A	2130	077	211	7.4		
MA12A	2151	077	211	7.4		
MA12A	2200	077	212	6.5		
MA12A	2230	077	218	6.6		
MA12A	2300	077	216	6.5		
MA12A	2330	077	213	6.2		
MA12A	0000	078	210	6.2		
MA12A	0030	078	217	5.7		
MA12A	0100	078	219	5.6	ABC	2CHL AIRGUN 160^3/MASSCOMP
MA12A	0130	078	212	5.1		
MA12A	0152	078	C/C			
MA12B	0156	078	230	4.5		
MA12B	0200	078	249	5.5		
MA12B	0230	078	257	5.4		
MA12B	0300	078	266	5.0		
MA12B	0330	078	232	4.4		
MA12B	0400	078	239	3.9		
MA12B	0430	078	218	4.1		
MA12B	0500	078	241	4.2		
MA12B	0530	078	252	4.5		
MA12B	0600	078	248	3.8		

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AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	051	3		
"			051			
"			051			
"			051			
"			051			
"			051			
"			051			
"			"			
"			"			
			051/052			EOT 051 / [redacted]
						mass comp crash -
						missing Data -
			052			START 052
			052			
			052			
4		15-80	052	3		
						c/c 2340
4			052	3		

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SHIP/CRUISE NO./LEG FARNELLA F2-87-EC

CHIEF SCIENTIST Schlee/Robb

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA12B	0603	078			ABC	2CHL AirGun 160³/MASSCOMP
MA12B	0630	078	233	3.3		
MA12B	0700	078	244	3.6		
MA12B	0730	078	244	3.6		
MA12B	0800	078	247	4.6		
MA12B	0830	078	191	4.2		
MA12B	0900	078	239	4.7		
MA12B	0930	078	231	2.7		
MA12B	1000	078	253	4.1		
MA12B	1030	078	224	3.1		
MA12B	1100	078	224	3.1		
MA12B	1130	078	238	3.3	ABC	2CHL ARGON 160³/MASSCOMP
MA12B	1200	078	247	3.3		
MA12B	1230	078	230	3.5		
MA12B	1300	078	237	3.4		
MA12B	1330	078	222	3.4		
MA12B	1400	078	235	3.7		
MA12B	1413	078				
MA12B	1430	078	218	3.8		
MA12B	1500	078	246	4.2		
MA12B	1530	078	NO DATA	2.9		
MA12B	1600	078	245	4.4		
MA12B	1630	078	238	3.3		
MA12B	1700	078	239	3.8		
MA12B	1730	078	247	3.9		
MA12B	1800	078	245	3.7		
MA12B	1830	078	246	3.4		
MA12B	1900	078	246	3.4		
MA12B	1930	078	215	3.5		
MA12B	2000	078	233	2.8		
MA12B	2030	078	256	3.7		
MA12B	2100	078	237	3.2		
MA12B	2130	078	232	3.7		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL# START / END	MAGNETICS	COMMENTS
4	—	15-80	053	3	—	EOT052 BOT 053
4			053			
4			053			
4			053			
4			053			
4			053			
4			053			
			053			Gulf stream
4		15-80	053			
						—
			054			EOT053 / SOT054
4			054			
"			"			
"			"			
"			"			
"			"			
"			"			
"			"			
4			054			

SHIP/CRUISE NO./LEG Farnella F2-87-EC
CHIEF SCIENTIST Schlee/Robb

LINE START/END	TIME	J.D. ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA12B	2200	078	215	3.7	ABL	2CHL AirGun 160³''/masscomp
MA12B	2234	078	—	—		
MA12B	2230	078	226	3.9		
MA12B	2300	078	224	4.3		
MA12B	2330	078	240	5.3		
MA12B	0000	079	253	7.7		
MA12B	0030	079	235	7.0		
MA12B	0100	079	238	7.8		
MA12B	0130	079	245	8.7		
MA12B	0200	079	233	7.9		
MA12B	0230	079	234	8.5		
MA12B	0300	079	227	8.3		
MA12B	0330	079	229	8.0		
MA12B	0400	079	231	8.0		
MA12B	0403	079				
MA12B	0430	079	225	8.0		
MA12B	0500	079	212	8.4		
MA12B	0530	079	228	8.0		
MA12B	0600	079	246	9.2		
MA12B	0630	079	246	8.1		
MA12B	0635	079	242	8.2		
MA12B	0700	079	242	8.2		
MA12B	0730	079	252	9.7		
MA12B	0800	079	234	8.9		
MA12C	0810	079	~~[illegible]~~			
MA12C	0815	079	195	8.9		
MA12C	0830	079	193	8.2		
MA12C	0900	079	183	9.6		
MA12C	0930	079	200	9.6		
MA12D	0937	079	—	—		
MA12D	0945	079	090	8.7		
MA12D	1010	—	—			
MA13A	1016	079	—	—		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	054	3		
			055			EOT 054 / SOT 055
			055			
						Leaving Gulf
						Stream
				4		
						DELAY = 3
4			055	4		
"			"	"		
"			"	"		
"			"	"		
"			056	"		EOT 055 / SOT 056
"			056	"		
"			"	"		
"						
"			056			Change Course 195° Line 12C
			056			Steady on Course 195°
"			056	"		
"			056	"		
			056			
						End of Line 12C
			056			Delay = 3 New Line 12D
						EOL 12D - EOT 056
			057			SOL 13A - SOT 057

SHIP/CRUISE NO. / LEG FARNELLA F2-87-EC

CHIEF SCIENTIST Schlee / ROBB

LINE (START / END)	TIME	J.D. ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA13A	1030	079	044	8.4	ABC	2CHL AirGun 160 in³ / MASS comp
MA13A	1100	079	032	8.1		
MA13A	1130	079	052	8.7		
MA13A	1200	079	038	8.7		
MA13A	1230	079	053	9.1		
MA13A	1300	079	063	9.7		
MA13A	1330	079	054	10.0		
MA13A	1400	079	055	10.8		
MA13A	1430	079	058	11.7		
MA13A	1500	079	058	12.2		
MA13A	1530	079	051	12.5		
MA13A	1600	079	065	13.0		
MA13A	1630	079	061	12.8		
MA13A	1700	079	052	12.2		
MA13A	1730	079	057	11.9		
MA13A	1800	079	063	13.1		
MA13A	1827	079				EOT 057 / BOT 058
MA13A	1830	079	054	12.0		
MA13A	1900	079	062	11.9		
MA13A	1930	079	053	10.7		
MA13A	2000	079	053	10.5		
MA13A	2030	079	057	10.6		
MA13A	2100	079	050	9.4		
MA13A	2130	079	057	10.0		
MA13B	2149	079	059	-		
MA13B	2200	079	056	9.0		
MA13B	2230	079	062	9.0		
MA13B	2300	079	059	9.6		
MA13B	2330	079	063	8.6		
MA13B	0000	080	057	9.0		
MA13B	0030	080	060	10.1		
MA13B	0100	080	063	9.6		
MA13B	0128	080	C/C			

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	057	4		Delay = 3
						DELAY = 4
4		"	057	4		
"			058	"		EOT 057 / BOT 058
"			058	"		
"			058			
"			058			
"			058	"		
"			058	"		
"			058	"		
						C/C 059 - New Line
						Delay = 5
						C/C 0379

SHIP/CRUISE NO./LEG FARNELLA 87-EC

CHIEF SCIENTIST Schlee/Robb

LINE START / END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA13B	0130	080	052	9.9	ABC	2CHL AIRGUN /MASSCOMP
MA13C	0133	080	037	9.5		
MA13C	0200	080	034	9.9		
MA13C	0230	080	034	10.7		
MA13C	0238	080	048	10.1		
MA13C	0300	080	033	10.5		
MA13C	0330	080	038	10.3		
MA13C	0400	080	038	11.0		
MA13C	0430	080	032	9.8		
MA13C	0500	080	043	9.7		
MA13C	0530	080	031	7.9		
MA13C	0600	080	030	7.7		
MA13C	0630	080	026	7.9		
MA13C	0637	080				
	0641	080				
MA13C	0700		040	7.8		
MA13C	0730	080	035	7.9		
MA13C	0800	080	040	8.1		
MA13C	0824	080				
MA13C	0830	080	038	8.2		
MA13C	0900	080	050	8.1		
MA13C	0930	080	038	8.3		
MA13C	1000	080	041	7.8		
MA13C	1030	080	030	7.9		
MA13C	1100	080	035	8.3		
MA13C	1130	080	035	8.3		
MA13C	1200	080	042	8.2		
MA13C	1230	080	080	7.6		
MABC	1300	080	048	9.1		
MABC	1301	080	C/C			
MA13D	1309	080	129	7.7		
MA13D	1330	080	134	7.6		
MA13D	1400	080	130	8.2		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	058	4		
			059			EOT 058 / SOT 059
			059			
			"			
			"			
			"			
						Delay = 4
			—			Turn off air gun Air gun leaking EOT 59
			—			Last Hour of Tape is Blank
						[redacted]
			060			BOT 060 Air Gun Back on Line Start Tape 060
4			060	4		
4			060	4		
						c/c 128°

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SHIP/CRUISE NO./LEG FARNELLA 87-2 F2-87-EC

CHIEF SCIENTIST Schlee/Robb

LINE START/END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA13D	1430	080	129	8.6	ABC	2-CH AIRGUN / MASSCOMP
MA13D	1434	080	C/C			
MA13D	1438	080				
MA14A	1446	080	217	8.6		
MA14A	1500	080	217	9.6		
MA14A	1530	080	215	9.4		
MA14A	1600	080	223	9.2		
MA14A	1630	080	222	9.3		
MA14A	1700	080	220	9.1		
MA14A	1730	080	221	9.0		
MA14A	1800	080	218	8.8		
MA14A	1830	080	214	8.9		
MA14A	1900	080	214	8.8		
MA14A	1930	080	226	8.5		
MA14A	2000	080	216	8.2		
MA14A	2030	080	216	7.6		
MA14A	2100	080	210	6.2		
MA14A	2130	080	230	4.4		
MA14A	2200	080	222	5.2		
MA14A	2230	080	208	4.8		
MA14A	2257	080	219	5.4		
MA14A	2300	080	219	5.4		
MA14A	2330	080	205	6.4		
MA14A	0000	081	216	6.3		
MA14A	0030	081	225	7.0		
MA14A	0100	081	198	7.4		
MA14A	0130	081	211	8.2		
MA14A	0200	081	210	7.3		
MA14A	0230	081	210	8.4		
MA14A	0300	081	219	8.5		
MA14A	0310	081	C/C			
MA14B	0314	081	227	7.0		
MA14B	0330	081	240	7.1		

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	060	4		
						C/C 217° ~~EOT 060 / EOL MA13D~~
			060			EOL MA13D / EOT 060
			061			SOL MA14A / SOT 061
4			061	4		
"			"	"		
"			061	"		
"			"	"		
"			"	"		
"			"	"		
"			"	"		
						Delay = 5 sec
						GULF STREAM AGAIN
						Delay = 4
						Delay = 5
			~~061~~			EOT - 061 / SOT 062
			062			
			062			
			062			
						C/C 216° 236°

SHIP/CRUISE NO./LEG FARNELLA F2-87-EC

CHIEF SCIENTIST Schlee/Robb

LINE START/END	TIME	JD ~~YYMMDD~~	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA14B	0400	081	241	6.7	ABC	2CHL AIRGUN 160^3/MASSCOMP
MA14B	0430	081	217	6.4		
MA14B	0500	081	235	7.4		
MA14B	0530	081	228	7.6		
MA14B	0600	081	232	7.9		
MA14B	0630	081	247	8.4		
MA14B	0700	081	243	7.3		
	0708	081				
MA14B	0730	081	249	8.7		
MA14B	0800	081	224	6.8		
MA14B	0830	081	230	6.5		
	0834	081				
MA14B	0900	081	240	7.6		
MA14B	0930	081	248	6.8		
MA14B	1000	081	236	6.2		
MA14B	1030	081	246	6.9		
MA14B	1100	081	230	6.4		
MA14B	1130	081	238	6.8		
MA14B	1200	081	229	6.1		
MA14B	1230	081	228	6.2		
MA14B	1300	081	231	6.0		
MA14B	1330	081	226	6.3		
MA14B	1400	081	227	6.1		
MA14B	1430	081	234	6.2		
MA14B	1500	081	226	5.7		
MA14B	1519	081	232	6.8		
MA14B	1530	081	255	7.4		
MA14B	1600	081	225	5.6		
MA14B	1630	081	238	6.0		
MA14B	1700	081	226	4.8		
MA14B	1730	081	245	5.6		
MA14B	1800	081	243	4.3		
MA14B	1830	081	231	3.7		

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AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	062	4		
4			062			
"			"	"		
"						
			"	4		
			063			EOT 062 / BOT 063
"			063			
"			"			
"			"			
"			"			Delay = 4
"			063	"		
			063			
			063			
			064			EOT 063 / SOT 064

SHIP/CRUISE NO./LEG FARNELLA F2-87-EC

CHIEF SCIENTIST Schlee/Robb

LINE START/END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
MA14B	1900	081	229	3.4	ABC	2CHL AIRGUN 160^{43}/MASSCOMP
MA14B	1930	081	162	3.5		
MA14B	2000	081	247	3.4		
MA14B	2030	081	240	3.8		
MA14B	2100	081	247	4.1		
MA14B	2130	081	262	4.3		
MA14B	2200	081	217	3.4		
MA14B	2230	081	250	4.7		
MA14B	2300	081	245	5.5		
MA14B	2330	081	249	5.5		
MA14B	0000	082	212	4.9		
MA14B	0030	082	222	4.8		
MA14B	0121	082	241	4.1		
MA14X	0132	082	C/C			
MA14X	0500	082	58.8	9.7		
MA14X	0530	082	054	10.2		
MA14C	0021	083				
MA14C	0104	084				

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
4		15-80	064	4		
"			"	"		
"			064	"		
			064			
			064			
			064/065			EOT 064/ SOT 065
		SOT	065			
			065			
			065			EOT 065 /Pulled gun
						tangled in GLORIA cable
						On line 14 X.
						GLORIA etc - NO AIRGUN
						EOL MA14C

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