LINE 37A - LABEL 37A

OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT	OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT	OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT
101	101				
↓	↓				
152	152				
NO RECORD	153				
153	154				
↓	↓				
212	213				
NO RECORD	214				
213	215				
↓	↓				
227	229				
NO RECORD	230				
228	231				
229	232				
NO RECORD	233				
230	234				
↓	↓				
237	241				
NO RECORD	242				
238	243				
↓	↓				
685	690				
NO RECORD	691				
686	692				
↓	↓				
715	721				
RECORD	722				
716	723				
↓	↓				
1086	1093				

MARINE SEISMIC OBSERVER'S LOG

PAGE 1 OF 3 PAGES

1 CLIENT: U.S.G.S.	2 PROSPECT: AOCS	3 AREA: EAST COAST U.S.	4 LINE NO.: 37 A
5 VESSEL: CARINO	6 PARTY NO: 2912	7 INST. ENG.	8 DATE: MO JUNE DAY 13 YR 78

9 CAMERA DISPLAY: ☒ 1 SYSTEM ☐ 2 SYSTEMS ☐ NEAR AND FARS ☐ ODD AND EVEN

10 TYPE: ☐ DFS III ☒ DFS IV OTHER ____

11 ☒ 9 TRACK ☐ 21 TRACK

12 FORMAT: SEG B "PE" ☒ GAPPED ☐ UNGAPPED

13 NO. BYTES IN HEADER: 132

14 NO. BYTES IN RECORD ID: 2

15 NO. OF BYTES IN SCAN: 134

16 TIMING TRACE CHANNEL:

17 RECORD NUMBERS: ☒ DEC. ☐ OCT.

18 PACKING DENSITY: (LO) ☐ 356 ☐ 800 (HI) ☐ 712 ☒ 1600

19 SAMPLE RATE: ☐ 1 ☐ 2 ☒ 4 ☐ 8 OTHER ____

20 RECORD LENGTH: 12 SEC.

21 DELAY START RECORD MODULE: (T_0) = ____ SEC

22 GAIN CONSTANT: 30dB

23 MAIN STREAMER RECORDING:
NUMBER OF TRACES ____
TRACE NUMBERS ____
CHANNEL NOS. (ON MAG TAPE) ____

24 WATER BREAK RECORDING: 1 2 3 4 5 6
LOCATION
CHANNEL (ON TAPE)
TRACE (ON DISPLAY)

25 MINI STREAMER RECORDING:
NUMBER OF TRACES ____
TRACE NUMBERS ____
CHANNEL NOS. (ON MAG TAPE) ____

26 DIRECTION: N W E S 14°

27 GROUP INTERVAL ____ M STREAMER LENGTH ____ M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

28 CABLE NOISE: MAIN ____ μBARS | MINI ____ μBARS

29 GROUP INTERVAL ____ M STREAMER LENGTH ____ M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

30 COVERAGE: 36 FOLD

31 SHOTPOINT INTERVAL: 50 M

32 SHOTPOINT INCREMENT: -1

33 GUN DEPTH: 21 ft

34 WATER VELOCITY: ____ M/SEC

35 FILTERS MAIN STREAMER: LOW 8/18 HIGH 62

36 FILTERS MINI STREAMER: LOW ____ HIGH ____

37 RECORD GAIN MODE: ☐ INIT ☐ MAN ☐ OPER ☒ IFP

38 REPRODUCE MODE: ☐ FLOAT ☐ DEFLOAT ☒ AGC

39 AIRGUN ARRAY: 2000 IN^3

40 AIRGUN PRESSURE: 2000 PSI

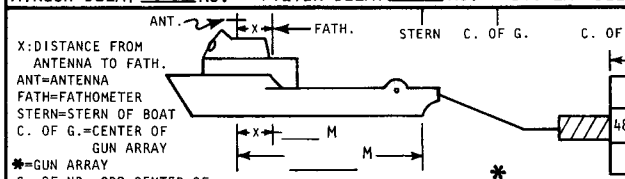
41 SYSTEM DELAYS: AIRGUN DELAY 51 MS. FILTER DELAY ____ MS. DISPLAY DELAY 51 MS.

POLARITY: PRESSURE INCREASE ON PHONE: ☒ NEGATIVE ☐ POSITIVE } NUMBERS ON TAPE; ☒ DOWNBREAK ☐ UPBREAK } ON DISPLAY

42 ALIASING FILTER 62

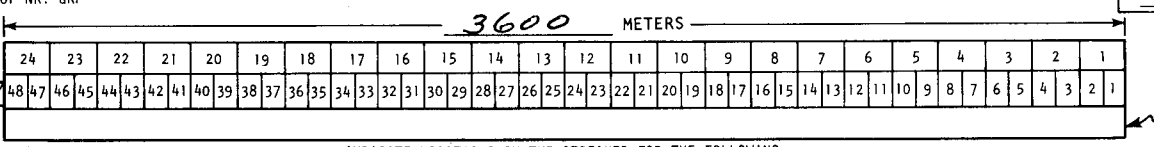
43

44 POP PER SHOTPOINT 1



INDICATE ALL DISTANCES (WITH UNITS OF MEASUREMENT-FEET OR METERS)

3600 METERS



NOTE: INDICATE STREAMER DIAGRAM IF DIFFERENT THAN THE ABOVE GROUPS HERE

INDICATE LOCATIONS ON THE STREAMER FOR THE FOLLOWING:
STREAMER DEPTH SENSORS=△; WATER BREAK SENSORS=X; STREAMER POS. SENSORS=Ⓧ; CON DEP FINS (BIRDS)=↑

	43 SHOTPOINT	RPT	44 REC # OR DUMMY (-1)	45 REEL NUMBER	XPORT	46 W. DEPTH (M)	47 OFFSET (M)	48 STREAMER DEPTH SHTR 5	4	3	2	TAIL	49 MINI STR	50 MINI-STR OFFSET(M)	51 POP SP	52 TIME ~~LOCAL~~ GMT	53 F S 0101 / 54 L S	55 F R 001 / 56 L R	57 A Z	58 I N X	59 N	60 L I N E - 37 A	61
1	0101		001	755263	B	28	371	404	55	57	25	34				1956							START OF LINE
2	103		-1													1956							AF
3	154		54																				1.1 SEC RECORD
4	214		114	755264	A	29	368	404	55	50	20	20				2026							TB 180 SB 9° AF
5	230		130																				1.9 SEC RECORD
6	286		186																				9 SEC RECORD
7	336		-1																				PARITY
8	347		247	755265	B	36.7	372	424	05.0	49	20	25				2059							TB 179 SB 12.8
9	385		-1																				PARITY
10	426		326																				1.0 SEC RECORD
11	449		349																				1.1 SEC RECORD
12	481		381	755266	A	33.9	371	44	42	50	48	20	20			2131							TB 178° SB 8.6
13	486		-1																				HIGH PARITY AND O.D
14	539		-1																				PARITY
15	598		498	755267	B	33.8	371	44	44	50	50	20	25			2201							TB 191° SB 6.5°
16	637		-1																				PARITY
17	6		-1																				PARITY

TI-23287A

MARINE SEISMIC OBSERVER'S LOG

PAGE 2 OF 3 PAGES

CLIENT: USGS [1] | PROSPECT: AOCS [2] | AREA: EAST COAST US [3] | LINE NO.: 37A [4]

VESSEL: m/v CARINO [5] | PARTY NO: 2912 [6] | INST. ENG. [7] | DATE: MO JUNE DAY 13 YR 78 [8]

CAMERA DISPLAY: [9] ☐ 1 SYSTEM ☐ 2 SYSTEMS ☐ NEAR AND FARS ☐ ODD AND EVEN

TYPE: [10] ☐ DFS III ☐ DFS IV OTHER ____ ☐ 9 TRACK ☐ 21 TRACK

FORMAT: [11] ☐ GAPPED ☐ UNGAPPED [12] SEG ____

NO. BYTES IN HEADER: [13] | NO. BYTES IN RECORD ID: [14] | NO. OF BYTES IN SCAN: [15] | TIMING TRACE CHANNEL: [16] | RECORD NUMBERS: [17] ☐ DEC. ☐ OCT. | PACKING DENSITY: [18] (LO) ☐ 356 ☐ 800 (HI) ☐ 712 ☐ 1600

SAMPLE RATE: [19] ☐ 1 ☐ 2 ☐ 4 ☐ 8 OTHER ____ | RECORD LENGTH: [20] ____ SEC. | DELAY START RECORD MODULE: [21] (T_o) = ____ SEC | GAIN CONSTANT: [22]

MAIN STREAMER RECORDING: [23]
NUMBER OF TRACES ____
TRACE NUMBERS ____
CHANNEL NOS. (ON MAG TAPE) ____

WATER BREAK RECORDING: [24]

	1	2	3	4	5	6
LOCATION						
CHANNEL (ON TAPE)						
TRACE (ON DISPLAY)						

MINI STREAMER RECORDING: [25]
NUMBER OF TRACES ____
TRACE NUMBERS ____
CHANNEL NOS. (ON MAG TAPE) ____

DIRECTION: [26] N W E S 140°

GROUP INTERVAL ____ M STREAMER LENGTH ____ M [27]
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

CABLE NOISE: MAIN ____ μBARS | MINI ____ μBARS [28]

GROUP INTERVAL ____ M STREAMER LENGTH ____ M [29]
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

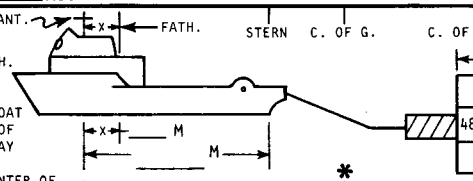
COVERAGE: [30] ____ FOLD | SHOTPOINT INTERVAL: [31] ____ M | SHOTPOINT INCREMENT: [32] | GUN DEPTH: [33] ____ M | WATER VELOCITY: [34] ____ M/SEC

FILTERS MAIN STREAMER: [35] LOW ____ HIGH ____ | FILTERS MINI STREAMER: [36] LOW ____ HIGH ____ | RECORD GAIN MODE: [37] ☐ INIT ☐ MAN ☐ OPER ☐ IFP | REPRODUCE MODE: [38] ☐ FLOAT ☐ DEFLOAT ☐ AGC | AIRGUN ARRAY: [39] ____ IN^3 | AIRGUN PRESSURE: [40] ____ PSI

SYSTEM DELAYS: [41] AIRGUN DELAY ____ MS. FILTER DELAY ____ MS. DISPLAY DELAY ____ MS.

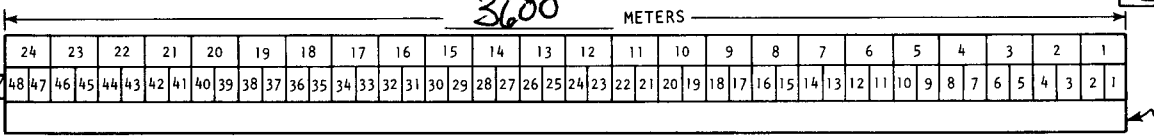
POLARITY: PRESSURE INCREASE ON PHONE: ☐ NEGATIVE ☐ POSITIVE } NUMBERS ON TAPE ☐ DOWNBREAK ☐ UPBREAK } ON DISPLAY [42]

ALIASING FILTER [43] | POP PER SHOTPOINT [44]



INDICATE ALL DISTANCES (WITH UNITS OF MEASUREMENT-FEET OR METERS)

3600 METERS



NOTE: INDICATE STREAMER DIAGRAM IF DIFFERENT THAN THE ABOVE GROUPS HERE

INDICATE LOCATIONS ON THE STREAMER FOR THE FOLLOWING:
STREAMER DEPTH SENSORS=△; WATER BREAK SENSORS=X; STREAMER POS. SENSORS=Ⓧ; CON DEP FINS (BIRDS)=↑

	SHOTPOINT [43] (1–5)	RPT (6)	REC # OR DUMMY (-1) [44] (7–11)	REEL NUMBER (12–17)	XPORT [45] (18)	W. DEPTH (M) [46] (19–23)	OFFSET (M) [47] (24–27)	STREAMER DEPTH [48] 6 (28–29)	5 (30–31)	4 (32–33)	3 (34–35)	2 (36–37)	X (38–39)	MINI STR [49] (40–41)	MINI-STR OFFSET(M) [50] (42–45)	POP SP [51] (46)	TIME LOCAL/GMT [52] (47–50)	F S [53] / A Z [57] (51–52)	L S [54] / I N X [58] (53–54)	F R [55] / N [59] (55–56)	L R [56] / L I N E [60] (57–60)	[61] (61–80)
1	709		609	755268	A	37	37	42	41	52	50	-	27				2230					TB=177° HEADING 013°
2	758		-1																			PARITY
3	773		-1																			PARITY
4	798		-1																			PARITY
5	817		717	755269	B	37		42	43	58	54	-	25				2301					TB 178° SB 013°
6	854		-1																			PARITY
7	889		-1																			PARITY
8	910		-1																			PARITY
9	918		-1																			PARITY
10	925		825	755270	A	25	36	64	34	57	56	-	30				2329					TB=178° HEADING 012°
11	980		-1																			MISSED RECORD
12	1034		933	755271	A	30	37	04	44	54	53	-	33				2359					TB=178° HEADING 014°
13	1036		-1																			PARITY
14	1052		-1																			PARITY
15	1086		985														0013					END OF 37A
16						BEGIN DOGLEG 37B																
17																						

T1-23287A

LINE 37D - LABEL 37B

OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT	OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT	OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT
1087	1094				
↓	↓				
1400	1407				

MARINE SEISMIC OBSERVER'S LOG

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CLIENT: USGS [1]	PROSPECT: AOCS [2]	AREA: EAST COAST US [3]	LINE NO.: 37B [4]
VESSEL: m/v CARINO [5]	PARTY NO. 2912 [6]	INST. ENG. [7]	DATE: MO 14 DAY JUNE YR 78 [8]

CAMERA DISPLAY: [9] ☑ 1 SYSTEM ☐ 2 SYSTEMS ☐ NEAR AND FARS ☐ ODD AND EVEN

TYPE: [10] ☐ DFS III ☑ DFS IV OTHER ____

[11] ☑ 9 TRACK ☐ 21 TRACK

FORMAT: [12] SEG 3 ☑ GAPPED ☐ UNGAPPED

NO. BYTES IN HEADER: [13] 132 (?)

NO. BYTES IN RECORD ID: [14] 2

NO. OF BYTES IN SCAN: [15]

TIMING TRACE CHANNEL: [16]

RECORD NUMBERS: [17] ☑ DEC. ☐ OCT.

PACKING DENSITY: [18] (LO) ☐ 356 ☐ 800 (HI) ☐ 712 ☑ 1600

SAMPLE RATE: [19] ☐ 1 ☐ 2 ☑ 4 ☐ 8 OTHER ____

RECORD LENGTH: [20] 12 SEC.

DELAY START RECORD MODULE: [21] (T_o) = 0 SEC

GAIN CONSTANT: [22] 30

MAIN STREAMER RECORDING: [23]
NUMBER OF TRACES 48
TRACE NUMBERS 1-48
CHANNEL NOS. (ON MAG TAPE) 1-48
GROUP INTERVAL ____ M STREAMER LENGTH ____ M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

WATER BREAK RECORDING: [24]
LOCATION
CHANNEL (ON TAPE)
TRACE (ON DISPLAY)

MINI STREAMER RECORDING: [25]
NUMBER OF TRACES
TRACE NUMBERS
CHANNEL NOS. (ON MAG TAPE)
GROUP INTERVAL ____ M STREAMER LENGTH ____ M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

DIRECTION: [26] N W E S 268°

CABLE NOISE: [27] MAIN ____ μBARS [28] MINI ____ μBARS

COVERAGE: [30] 36 FOLD

SHOTPOINT INTERVAL: [31] 50 M

SHOTPOINT INCREMENT: [32] 1

GUN DEPTH: [33] 6 M

WATER VELOCITY: [34] ±1511.5 M/SEC

FILTERS MAIN STREAMER: [35] LOW 8/18 HIGH 62

FILTERS MINI STREAMER: [36] LOW ____ HIGH ____

RECORD GAIN MODE: [37] ☐ INIT ☐ MAN ☐ OPER ☑ IFP

REPRODUCE MODE: [38] ☐ FLOAT ☐ DEFLOAT ☑ AGC

AIRGUN ARRAY: [39] 2000 IN^3

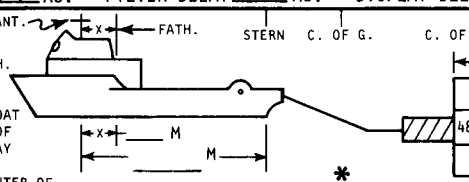
AIRGUN PRESSURE: [40] 2000 PSI

SYSTEM DELAYS: [41] AIRGUN DELAY 51 MS. FILTER DELAY ____ MS. DISPLAY DELAY ____ MS.

POLARITY: PRESSURE INCREASE ON PHONE: ☑ NEGATIVE ☐ POSITIVE } NUMBERS ON TAPE ☑ DOWNBREAK ☐ UPBREAK } ON DISPLAY

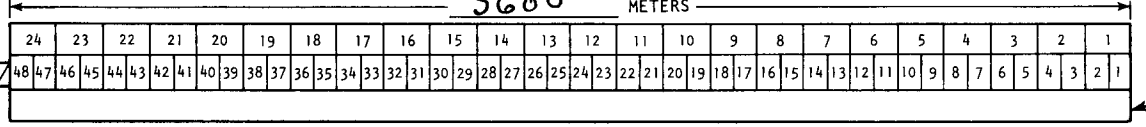
ALIASING FILTER: [42] [43]

POP PER SHOTPOINT: [44] 1



INDICATE ALL DISTANCES (WITH UNITS OF MEASUREMENT-FEET OR METERS)

3600 METERS



NOTE: INDICATE STREAMER DIAGRAM IF DIFFERENT THAN THE ABOVE GROUPS HERE

INDICATE LOCATIONS ON THE STREAMER FOR THE FOLLOWING:
STREAMER DEPTH SENSORS=△; WATER BREAK SENSORS=X; STREAMER POS. SENSORS=Ⓧ; CON DEP FINS (BIRDS)=↑

	SHOTPOINT [43] (1–5)	RPT (6)	REC # OR DUMMY (-1) [44] (7–11)	REEL NUMBER (12–17)	XPORT [45] (18)	W. DEPTH (M) [46] (19–23)	OFFSET (M) [47] (24–27)	STREAMER DEPTH [48] 6 (28–29)	5 (30–31)	4 (32–33)	3 (34–35)	2 (36–37)	1 (38–39)	MINI STR [49] (40–41)	MINI-STR OFFSET(M) [50] (42–45)	POPSP [51] (46)	TIME LOCAL/GMT [52] (47–50)	FS 101 [53] LS 140 [54] FR 001 [55] LR 300 [56] (51–60)	AZ [57] INX [58] N [59] LINE -37A & 37B [60] (61–80)
1	1087		9886	755272A		32		42	40	51	50	-	26				0013		BEGIN DOGLEG 37B
2	1100		001																SEQUENCE COUNTER ADVANCE
3	1123		-1																PARITY
4	1196		96	755273B		32	369	43	42	53	49	-	27				0044		TB=181° HEADING 018°
5	1204		-1																PARITY
6	1249		-1														0110		PARITY
7	1280		-1																SMALL PARITY
8	1305		205	755274		32	369	43	44	55	56	-	27				0116		TB 182° SB 021°
9	1400		300			32	371	43	44	52	55	-	30				0141		
10			301																NOISE @ 60db NG
11			302																NOISE @ 60db
12																			
13																			
14																			
15																			
16																			
17																			

TI-23287A

LINE 37B - LABEL 37B

OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT	OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT	OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT
3001	3001				
↓	↓				
1357	1357				

NO NAVIGATION CHANGES

MARINE SEISMIC OBSERVER'S LOG

PAGE 1 OF 5 PAGES

1 CLIENT: U.S.G.S.	2 PROSPECT: AOCS	3 AREA: EAST COAST	4 LINE NO.: 137B
5 VESSEL: CARINO	6 PARTY NO: 2912	7 INST. ENG.	8 DATE: MO JUNE DAY 19 YR 78

9 CAMERA DISPLAY: [X] 1 SYSTEM [ ] 2 SYSTEMS [ ] NEAR AND FARS [ ] ODD AND EVEN

10 TYPE: [ ] DFS III [X] DFS IV OTHER ____

11 [X] 9 TRACK [ ] 21 TRACK

12 FORMAT: SEG B "PE" [X] GAPPED [ ] UNGAPPED

13 NO. BYTES IN HEADER: 132

14 NO. BYTES IN RECORD ID: 2

15 NO. OF BYTES IN SCAN: 134

16 TIMING TRACE CHANNEL: 8

17 RECORD NUMBERS: [X] DEC. [ ] OCT.

18 PACKING DENSITY: (LO) [ ] 356 [ ] 800 (HI) [ ] 712 [X] 1600

19 SAMPLE RATE: [ ] 1 [ ] 2 [X] 4 [ ] 8 OTHER ____

20 RECORD LENGTH: 12 SEC.

21 DELAY START RECORD MODULE: (T_o) = 0 SEC

22 GAIN CONSTANT: 30dB

23 MAIN STREAMER RECORDING:
NUMBER OF TRACES 48
TRACE NUMBERS 1-48
CHANNEL NOS. (ON MAG TAPE) 1-48

WATER BREAK RECORDING:

	1	2	3	4	5	6
LOCATION						
CHANNEL (ON TAPE)						
TRACE (ON DISPLAY)						

24 MINI STREAMER RECORDING:
NUMBER OF TRACES ____
TRACE NUMBERS ____
CHANNEL NOS. (ON MAG TAPE) ____

25 DIRECTION: N W E S 207

GROUP INTERVAL 100+50 M STREAMER LENGTH 3600 M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

27 CABLE NOISE: MAIN ____ μBARS | MINI ____ μBARS

28 GROUP INTERVAL ____ M STREAMER LENGTH ____ M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

29

30 COVERAGE: 36 FOLD

31 SHOTPOINT INTERVAL: 50 M

32 SHOTPOINT INCREMENT: -1

33 GUN DEPTH: 21 ft

34 WATER VELOCITY: ____ M/SEC

35 FILTERS MAIN STREAMER: LOW 8/18 HIGH 62

36 FILTERS MINI STREAMER: LOW ____ HIGH ____

37 RECORD GAIN MODE: [ ] INIT [ ] MAN [ ] OPER [X] FP

38 REPRODUCE MODE: [ ] FLOAT [ ] DEFLOAT [X] AGC

39 AIRGUN ARRAY: 2000 IN^3

40 AIRGUN PRESSURE: 2000 PSI

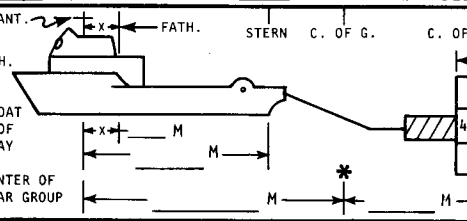
41 SYSTEM DELAYS: AIRGUN DELAY 51 MS. FILTER DELAY ____ MS. DISPLAY DELAY 51 MS.

POLARITY: PRESSURE INCREASE ON PHONE: [X] NEGATIVE [ ] POSITIVE } NUMBERS ON TAPE; [ ] DOWNBREAK [ ] UPBREAK } ON DISPLAY

42 ALIASING FILTER 62

43

44 POP PER SHOTPOINT 1



INDICATE ALL DISTANCES (WITH UNITS OF MEASUREMENT-FEET OR METERS)

3600 METERS

24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
48 47	46 45	44 43	42 41	40 39	38 37	36 35	34 33	32 31	30 29	28 27	26 25	24 23	22 21	20 19	18 17	16 15	14 13	12 11	10 9	8 7	6 5	4 3	2 1

NOTE: INDICATE STREAMER DIAGRAM IF DIFFERENT THAN THE ABOVE GROUPS HERE

INDICATE LOCATIONS ON THE STREAMER FOR THE FOLLOWING:
STREAMER DEPTH SENSORS=△; WATER BREAK SENSORS=X; STREAMER POS. SENSORS=Ⓧ; CON DEP FINS (BIRDS)=↑

	43 SHOTPOINT (1–5)	RPT (6)	44 REC # OR DUMMY (-1) (7–11)	45 REEL NUMBER (12–17)	XPORT (18)	46 W. DEPTH (M) (19–23)	47 OFFSET (M) (24–27)	48 STREAMER DEPTH 6 (28–29)	5 (30–31)	4 (32–33)	3 (34–35)	2 (36–37)	1 (38–39)	49 MINI STR (40–41)	50 MINI-STR OFFSET(M) (42–45)	51 POP SP (46)	52 TIME ~~LOCAL~~/GMT (47–50)	53 FS 3901 / 54 LS / 55 FR 219 / 56 LR / 57 AZ / 58 INX / 59 N / 60 LINE 137B (51–60)	61 (61–80)
1	3001		0.01	755459	B	30	376	40	34	28	32	27	26				2009		START OF LINE
2	2893		1.09	755450	A	38	378	42	35	30	32	30	25				4040		TA 180° HEADING 205°
3	2783		2.19	755461	B	24.7	372	40	36	29	34	30	30				2110		TB 184° HEADING 200°
4	2675		3.27	755462	A	26	374	40	35	29	34	32	29				2141		TB 182° HEADING 202
5	2627		-1																PARITY
6	2612		-1																PARITY
7	2566		4.36	755463	B	26	376	40	36	30	35	32	31				2211		TAPE CHG FSP 2566 FRN 436
8	2524		-1																PARITY
9	2477		-1																PARITY
10	2465		-1																PARITY
11	2458		5.44	755464	A	33	378	40	35	30	35	32	30				2243		TB 181°
12	2453		-1																PARITY
13	2450																		MISSED REC DFS M4 FN
14	2449																		MISSED REC DFS M4 FN
15	2448		5.52	755465	B	32	379	40	35	30	35	32	30				2246		TB CHG
16	2444		-1																PARITY
17	2435		-1																PARITY

TI-23287A

1400 A

MARINE SEISMIC OBSERVER'S LOG

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CLIENT: U.S.G.S.	PROSPECT: AOCS	AREA: EAST COAST U.S.	LINE NO.: 137 B
VESSEL: CARINO	PARTY NO: 2912	INST. ENG.	DATE: MO JUNE DAY 19 YR 78

CAMERA DISPLAY: [X] 1 SYSTEM [ ] 2 SYSTEMS [ ] NEAR AND FARS [ ] ODD AND EVEN

TYPE: [ ] DFS III [X] DFS IV OTHER ____ [X] 9 TRACK [ ] 21 TRACK

FORMAT: SEG B "PE" [X] GAPPED [ ] UNGAPPED

NO. BYTES IN HEADER: 132 | NO. BYTES IN RECORD ID: 2 | NO. OF BYTES IN SCAN: 134 | TIMING TRACE CHANNEL: 8 | RECORD NUMBERS: [X] DEC. [ ] OCT.

PACKING DENSITY: (LO) [ ] 356 [ ] 800 (HI) [ ] 712 [X] 1600

SAMPLE RATE: [ ] 1 [ ] 2 [X] 4 [ ] 8 OTHER ____ | RECORD LENGTH: 12 SEC. | DELAY START RECORD MODULE: (T_0) = 0 SEC | GAIN CONSTANT: 30dB

MAIN STREAMER RECORDING:
NUMBER OF TRACES 48
TRACE NUMBERS 1-48
CHANNEL NOS. (ON MAG TAPE) 1-48

WATER BREAK RECORDING: 1 2 3 4 5 6
LOCATION
CHANNEL (ON TAPE)
TRACE (ON DISPLAY)

MINI STREAMER RECORDING:
NUMBER OF TRACES
TRACE NUMBERS
CHANNEL NOS. (ON MAG TAPE)

DIRECTION: N W E S 207°

GROUP INTERVAL 100+50 M STREAMER LENGTH 3600 M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

CABLE NOISE: MAIN ____ μBARS | MINI ____ μBARS

GROUP INTERVAL ____ M STREAMER LENGTH ____ M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

COVERAGE: 36 FOLD | SHOTPOINT INTERVAL: 50 M | SHOTPOINT INCREMENT: -1 | GUN DEPTH: 21 ft | WATER VELOCITY: ____ M/SEC

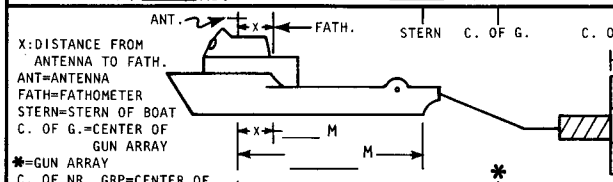
FILTERS MAIN STREAMER: LOW 8/18 HIGH 62 | FILTERS MINI STREAMER: LOW ____ HIGH ____ | RECORD GAIN MODE: [ ] INIT [ ] MAN [ ] OPER [X] IFP | REPRODUCE MODE: [ ] FLOAT [ ] DEFLOAT [X] AGC | AIRGUN ARRAY: 2K IN³ | AIRGUN PRESSURE: 2K PSI

SYSTEM DELAYS: AIRGUN DELAY 51 MS. FILTER DELAY ____ MS. DISPLAY DELAY 5 MS.

POLARITY: PRESSURE INCREASE ON PHONE: [X] NEGATIVE [ ] POSITIVE } NUMBERS ON TAPE; [X] DOWNBREAK [ ] UPBREAK } ON DISPLAY

ALIASING FILTER: 62

POP PER SHOTPOINT: 1



INDICATE ALL DISTANCES (WITH UNITS OF MEASUREMENT-FEET OR METERS)

3600 METERS

24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
48 47	46 45	44 43	42 41	40 39	38 37	36 35	34 33	32 31	30 29	28 27	26 25	24 23	22 21	20 19	18 17	16 15	14 13	12 11	10 9	8 7	6 5	4 3	2 1

NOTE: INDICATE STREAMER DIAGRAM IF DIFFERENT THAN THE ABOVE GROUPS HERE

INDICATE LOCATIONS ON THE STREAMER FOR THE FOLLOWING:
STREAMER DEPTH SENSORS=△; WATER BREAK SENSORS=X; STREAMER POS. SENSORS=⊗; CON DEP FINS (BIRDS)=↑

	SHOTPOINT (1-5)	RPT (6)	REC # OR DUMMY (-1) (7-11)	REEL NUMBER (12-17)	XPORT (18)	W. DEPTH (M) (19-23)	OFFSET (M) (24-27)	STREAMER DEPTH 6 (28-29)	5 (30-31)	4 (32-33)	3 (34-35)	2 (36-37)	1 (38-39)	MINI STR (40-41)	MINI-STR OFFSET(M) (42-45)	POP SP (46)	TIME ~~LOCAL~~/GMT (47-50)	(51-60)	(61-80)
																		FS 2386	FR 614 LR 211
																		AZ	IN X N LINE 137B
1	2386		-1																PARITY
2	2364		-1																PARITY
3	2340		660	755466	A	29	374	43	36	30	34	34	30				2317		TAPE CHG FSP 2340 FRN 660
4	2336		664																TB 176° HEADING 212°
5	2317		-1																SYNC
6	2254		-1																PARITY
7	2231		769	755467	B	35	377	40	35	30	32	33	30				2348		TB 180° HEADING 207 PARITY
8	2227		-1																PARITY
9	2123		877	755468	A	37	377	40	35	30	33	32	29				0020		TB 178° HEADING 208 PARITY
10	2116																		MISSED REC DFS MLFU
11	2115		884	755469	B	35		40	35	30	33	32	29				0023		TP CHG
12	2007		992	755470	A	31	374	35	35	28	35	33	30				0053		TB 179° HEADING 208
13	1999		991																COUNTER ADVANCE
14	1898		1027	755471	B	33	372	35	39	30	35	34	30				0125		TB 176° HEADING 215
15	1897		-1																PARITY
16	1892		-1																PARITY
17	1789		211	755472	A	38.7	377	32	35	28	35	32	29				0156		TB 178° HEADING 212°

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MARINE SEISMIC OBSERVER'S LOG

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CLIENT: U.S.G.S.	PROSPECT: AOCS	AREA: EAST COAST U.S.	LINE NO.: 137B
VESSEL: CARINO	PARTY NO: 2912	INST. ENG.	DATE: MO JUNE DAY 20 YR 78

CAMERA DISPLAY: [X] 1 SYSTEM [ ] 2 SYSTEMS [ ] NEAR AND FARS [ ] ODD AND EVEN

TYPE: [ ] DFS III [X] DFS IV OTHER ____

[X] 9 TRACK [ ] 21 TRACK

FORMAT: SEG B [X] GAPPED [ ] UNGAPPED

NO. BYTES IN HEADER: 132

NO. BYTES IN RECORD ID: 2

NO. OF BYTES IN SCAN: 134

TIMING TRACE CHANNEL:

RECORD NUMBERS: [X] DEC. [ ] OCT.

PACKING DENSITY: (LO) [ ] 356 [ ] 800 (HI) [ ] 712 [X] 1600

SAMPLE RATE: [ ] 1 [ ] 2 [X] 4 [ ] 8 OTHER ____

RECORD LENGTH: 12 SEC.

DELAY START RECORD MODULE: (T_o) = 0 SEC

GAIN CONSTANT: 30dB

MAIN STREAMER RECORDING:
NUMBER OF TRACES 48
TRACE NUMBERS 1-48
CHANNEL NOS. (ON MAG TAPE) 1-48

WATER BREAK RECORDING: 1 2 3 4 5 6
LOCATION
CHANNEL (ON TAPE)
TRACE (ON DISPLAY)

MINI STREAMER RECORDING:
NUMBER OF TRACES
TRACE NUMBERS
CHANNEL NOS. (ON MAG TAPE)

DIRECTION: N W E S 207°

GROUP INTERVAL 100+500 M STREAMER LENGTH 3600 M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

CABLE NOISE: MAIN ____ μBARS MINI ____ μBARS

GROUP INTERVAL ____ M STREAMER LENGTH ____ M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

COVERAGE: 36 FOLD

SHOTPOINT INTERVAL: 50 M

SHOTPOINT INCREMENT: -1

GUN DEPTH: 21 ft

WATER VELOCITY: ____ M/SEC

FILTERS MAIN STREAMER: LOW 8/18 HIGH 62

FILTERS MINI STREAMER: LOW ____ HIGH ____

RECORD GAIN MODE: [ ] INIT [ ] MAN [ ] OPER [X] IFP

REPRODUCE MODE: [ ] FLOAT [ ] DEFLOAT [X] AGC

AIRGUN ARRAY: 2K IN^3

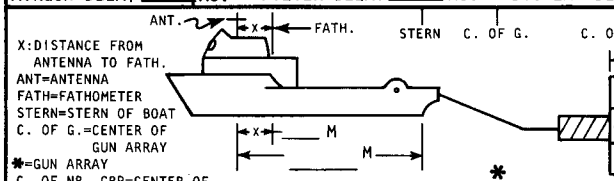
AIRGUN PRESSURE: 2K PSI

SYSTEM DELAYS: AIRGUN DELAY 5 MS. FILTER DELAY ____ MS. DISPLAY DELAY 5 MS.

POLARITY: PRESSURE INCREASE ON PHONE: [X] NEGATIVE [ ] POSITIVE } NUMBERS ON TAPE; [X] DOWNBREAK [ ] UPBREAK } ON DISPLAY

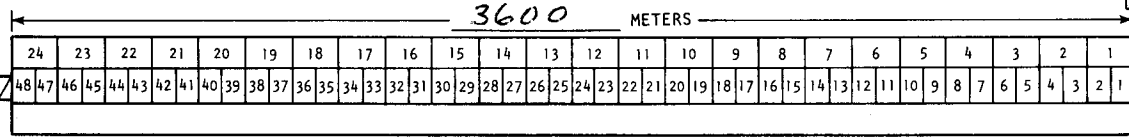
ALIASING FILTER 62

POP PER SHOTPOINT 1



INDICATE ALL DISTANCES (WITH UNITS OF MEASUREMENT-FEET OR METERS)

3600 METERS



NOTE: INDICATE STREAMER DIAGRAM IF DIFFERENT THAN THE ABOVE GROUPS HERE

INDICATE LOCATIONS ON THE STREAMER FOR THE FOLLOWING:
STREAMER DEPTH SENSORS=△; WATER BREAK SENSORS=X; STREAMER POS. SENSORS=Ⓧ; CON DEP FINS (BIRDS)=↑

	SHOTPOINT (43)	RPT	REC # OR DUMMY (-1) (44)	REEL NUMBER	XPORT (45)	W. DEPTH (M) (46)	OFFSET (M) (47)	STREAMER DEPTH (48) 6	5	4	3	2	1	MINI STR (49)	MINI-STR OFFSET(M) (50)	POP SP (51)	TIME (52)	FS 1777 (53) / LS (54) / FR 223 (55) / LR (56) / AZ (57) / INX (58) / N (59) / LINE 137B (60)	(61)
1	1777		-1																PARITY
2	1679		321	7554738		32	378	32	35	30	34	32	30				0228		TB 182° HEADING 212°
3	1651		-1																PARITY
4	1570		430	7554744A		37	370	34	37	32	34	30	29				0258		TB 177° HEADING 216°
5	1460		540	7554758		35	375	30	35	30	36	30	30				0328		TB 181° HEADING 208°
6	1456		-1																HIGH PARITY
7	1400A						377										0346		FIRST "A" SHOT POINT
8	1357A		643	7554758		32.7	~~321~~	30	35	30	35	33	32				0356		LINE terminated.
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			

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LINE 37E – LABEL 37B

OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT	OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT	OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT
		NO NAVIGATION CHANGES			

MARINE SEISMIC OBSERVER'S LOG

PAGE 1 OF 4 PAGES

1 CLIENT: USGS	2 PROSPECT: AOCS	3 AREA: EAST COAST	4 LINE NO.: 237 "B"
5 VESSEL: CARINO	6 PARTY NO: 2912	7 INST. ENG.	8 DATE: MO 6 DAY 20 YR 70

9 CAMERA DISPLAY: ☑ 1 SYSTEM ☐ 2 SYSTEMS ☐ NEAR AND FARS ☐ ODD AND EVEN

10 TYPE: ☐ DFS III ☑ DFS IV OTHER ____

11 ☑ 9 TRACK ☐ 21 TRACK

12 FORMAT: SEG B PE ☑ GAPPED ☐ UNGAPPED

13 NO. BYTES IN HEADER: ~~64~~ 132

14 NO. BYTES IN RECORD ID: 2

15 NO. OF BYTES IN SCAN: 164

16 TIMING TRACE CHANNEL: 8

17 RECORD NUMBERS: ☑ DEC. ☐ OCT.

18 PACKING DENSITY: (LO) ☐ 356 ☐ 800 (HI) ☐ 712 ☑ 1600

19 SAMPLE RATE: ☐ 1 ☐ 2 ☑ 4 ☐ 8 OTHER ____

20 RECORD LENGTH: 12 SEC.

21 DELAY START RECORD MODULE: (T_o) = 0.8 SEC

22 GAIN CONSTANT: 30 db

23 MAIN STREAMER RECORDING:
NUMBER OF TRACES 48
TRACE NUMBERS 1-48
CHANNEL NOS. (ON MAG TAPE) 1-48

24 WATER BREAK RECORDING:

	1	2	3	4	5	6
LOCATION	STR 48					
CHANNEL (ON TAPE)						
TRACE (ON DISPLAY)						

25 MINI STREAMER RECORDING:
NUMBER OF TRACES ____
TRACE NUMBERS ____
CHANNEL NOS. (ON MAG TAPE) ____

26 DIRECTION: N W E S 17°

27 GROUP INTERVAL 50 100 M STREAMER LENGTH 3600 M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: 375 M

28 CABLE NOISE: MAIN 1.5-2.5 μBARS | MINI ____ μBARS

29 GROUP INTERVAL ____ M STREAMER LENGTH ____ M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

30 COVERAGE: 36 FOLD

31 SHOTPOINT INTERVAL: 50 M

32 SHOTPOINT INCREMENT: INCREASING

33 GUN DEPTH: 21 FT. M

34 WATER VELOCITY: 1520 M/SEC

35 FILTERS MAIN STREAMER: LOW 8/18 HIGH 62

36 FILTERS MINI STREAMER: LOW ____ HIGH ____

37 RECORD GAIN MODE: ☐ INIT ☐ MAN ☐ OPER ☑ FP

38 REPRODUCE MODE: ☐ FLOAT ☐ DEFLOAT ☑ AGC

39 AIRGUN ARRAY 2K IN³

40 AIRGUN PRESSURE: 2K PSI

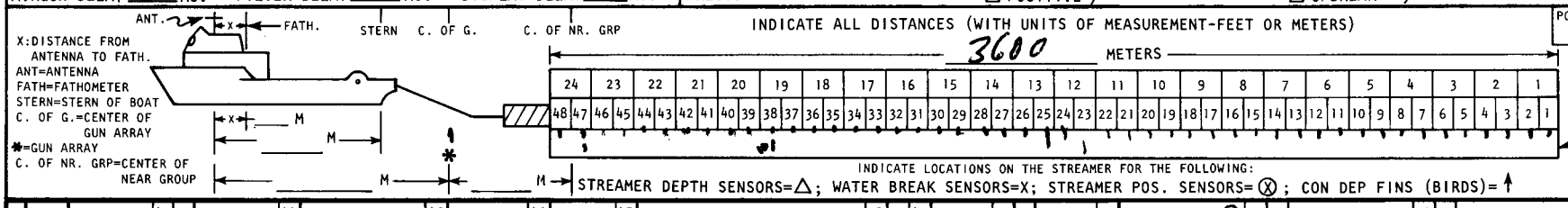
41 SYSTEM DELAYS: AIRGUN DELAY 51 MS. FILTER DELAY ____ MS. DISPLAY DELAY ____ MS.

POLARITY: PRESSURE INCREASE ON PHONE: ☑ NEGATIVE ☐ POSITIVE } NUMBERS ON TAPE; ☑ DOWNBREAK ☐ UPBREAK } ON DISPLAY

42 ALIASING FILTER 62

43

44 POP PER SHOTPOINT 1



	43 SHOTPOINT (1-5)	RPT (6)	44 REC # OR DUMMY (-1) (7-11)	45 REEL NUMBER (12-17)	XPORT (18)	46 W. DEPTH (M) (19-23)	47 OFFSET (M) (24-27)	48 STREAMER DEPTH (28-39)	49 MINI STR (40-41)	50 MINI-STR OFFSET(M) (42-45)	51 POP SP (46)	52 TIME ~~LOCAL~~ GMT (47-50)	53 F S / A Z	54 L S	55 F R / 57 I N X	56 L R / 58 N	59 L I N E	60 (51-60)	61 (61-80)
1	2929	A	001	7554 76	A	28	375	37 35 30 33 30 29				1146							SH 27° TB 180°
2	2936	A	008									1147							GOOD
3	3002	A	072									1202							OVERLAP COMPLETED
4	3040		111	7554 77	B			42 35 33 30 29 29											TAPE CH FSP 3040 FRN 111
5	3089		-1 160																A/F
6	3090		-1 161																A/F
7	3092		-1 163																A/F
8	3130		-1 201																PARITY
9	3148		219																GOOD RECORD
10	3149		-1																DFS MALFUNCTION
11	3150		-1																DFS MALF.
12	3151		-1																DFS MALF.
13	3152		-1																DFS MALF.
14	3153		220	7554 78	B														TAPE CH FSP 3153 FRN 220
15	3172		239				28	375 3735 3430 3230				1240							SH 29° TB 179°
16	3173		-1																DFS MALFUNCTION
17	3174		-1																DFS MALFUNCTION

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MARINE SEISMIC OBSERVER'S LOG

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CLIENT: USGS [1] | PROSPECT: AOCS [2] | AREA: EAST COAST [3] | LINE NO.: 237B [4]

VESSEL: CARINO [5] | PARTY NO: 2912 [6] | INST. ENG. [7] | DATE: MO 6 DAY 20 YR 78 [8]

CAMERA DISPLAY: [9] ☐ 1 SYSTEM ☐ 2 SYSTEMS ☐ NEAR AND FARS ☐ ODD AND EVEN

TYPE: [10] ☐ DFS III ☐ DFS IV OTHER ____ ☐ 9 TRACK ☐ 21 TRACK [11]

FORMAT: [12] ☐ GAPPED ☐ UNGAPPED SEG ____

NO. BYTES IN HEADER: [13] | NO. BYTES IN RECORD ID: [14] | NO. OF BYTES IN SCAN: [15] | TIMING TRACE CHANNEL: [16] | RECORD NUMBERS: [17] ☐ DEC. ☐ OCT.

PACKING DENSITY: [18] (LO) ☐ 356 ☐ 800 (HI) ☐ 712 ☐ 1600

SAMPLE RATE: [19] ☐ 1 ☐ 2 ☐ 4 ☐ 8 OTHER ____ | RECORD LENGTH: [20] ____ SEC. | DELAY START RECORD MODULE: [21] (T_o) = ____ SEC | GAIN CONSTANT: [22]

MAIN STREAMER RECORDING: [23]
NUMBER OF TRACES ____
TRACE NUMBERS ____
CHANNEL NOS. (ON MAG TAPE) ____
GROUP INTERVAL ____ M STREAMER LENGTH ____ M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

WATER BREAK RECORDING: [24]
LOCATION 1 2 3 4 5 6
CHANNEL (ON TAPE)
TRACE (ON DISPLAY)

MINI STREAMER RECORDING: [25]
NUMBER OF TRACES ____
TRACE NUMBERS ____
CHANNEL NOS. (ON MAG TAPE) ____
GROUP INTERVAL ____ M STREAMER LENGTH ____ M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M [29]

DIRECTION: [26] N W E S

CABLE NOISE: [28] MAIN ____ μBARS | MINI ____ μBARS

COVERAGE: [30] ____ FOLD | SHOTPOINT INTERVAL: [31] ____ M | SHOTPOINT INCREMENT: [32] | GUN DEPTH: [33] ____ M | WATER VELOCITY: [34] ____ M/SEC

FILTERS MAIN STREAMER: [35] LOW ____ HIGH ____ | FILTERS MINI STREAMER: [36] LOW ____ HIGH ____

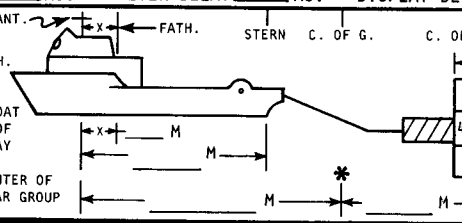
RECORD GAIN MODE: [37] ☐ INIT ☐ MAN ☐ OPER ☐ IFP | REPRODUCE MODE: [38] ☐ FLOAT ☐ DEFLOAT ☐ AGC | AIRGUN ARRAY: [39] ____ IN^3 | AIRGUN PRESSURE: [40] ____ PSI

SYSTEM DELAYS: AIRGUN DELAY ____ MS. FILTER DELAY ____ MS. DISPLAY DELAY ____ MS. [41]

POLARITY: PRESSURE INCREASE ON PHONE: ☐ NEGATIVE ☐ POSITIVE } NUMBERS ON TAPE ☐ DOWNBREAK ☐ UPBREAK } ON DISPLAY [42]

ALIASING FILTER [43] ____

POP PER SHOTPOINT [44] ____



X: DISTANCE FROM ANTENNA TO FATH.
ANT=ANTENNA
FATH=FATHOMETER
STERN=STERN OF BOAT
C. OF G.=CENTER OF GUN ARRAY
✱=GUN ARRAY
C. OF NR. GRP=CENTER OF NEAR GROUP

INDICATE ALL DISTANCES (WITH UNITS OF MEASUREMENT-FEET OR METERS)

METERS

24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
48 47	46 45	44 43	42 41	40 39	38 37	36 35	34 33	32 31	30 29	28 27	26 25	24 23	22 21	20 19	18 17	16 15	14 13	12 11	10 9	8 7	6 5	4 3	2 1

NOTE: INDICATE STREAMER DIAGRAM IF DIFFERENT THAN THE ABOVE GROUPS HERE

INDICATE LOCATIONS ON THE STREAMER FOR THE FOLLOWING:
STREAMER DEPTH SENSORS=△; WATER BREAK SENSORS=X; STREAMER POS. SENSORS=Ⓧ; CON DEP FINS (BIRDS)=↑

	SHOTPOINT [43] (1–5)	RPT (6)	REC # OR DUMMY (-1) [44] (7–11)	REEL NUMBER [45] (12–17)	XPORT (18)	W. DEPTH (M) [46] (19–23)	OFFSET (M) [47] (24–27)	STREAMER DEPTH [48] (28–39)	MINI STR [49] (40–41)	MINI-STR OFFSET(M) [50] (42–45)	POP SP [51] (46)	TIME ~~LOCAL~~ GMT [52] (47–50)	FS [53] / AZ [57] (51–52)	LS [54] / INX [58] (53–54)	FR [55] / NI [59] (55–56)	LR / LINE- [60] (57–60)	(61–80)
1	3175		-1														NO RECORD
2	3176		241	755479A													TAPE CH. FSP 3176 FRN 241
3	3212		-1														A/F
4	3214		-1														A/F
5	3284		349	755480B													TAPE CH. FSP 3284 FRN 349
6	3284		353			27		40 30 31 31 30 30				1320					SH 24° TG 180°
7	3382		447			26		40 30 30 30 32 27				1345					TG 25° SH 177°
8	3394		459	755481A													tapech: FSP 3394 FRN 459
9	3405		370					40 32 30 32 32 25									
10	3434		-1 499														Aynne EMA
11	3503		568	755482B				40 30 30 32 25 38				1418					TAPE CH. FSP 3503 FRN 568
12	3510		575														SHIPS HDG 16 TA 148.04 1717
13	3531		-1														1 TB SP 3530 = RN 595
14	3532		596														GOOP RECORD
15	3599		-1				375										NO RECORD
16	3613		677	755483A								1456					TAPE CH. FSP 3613 FRN 677
17	3616		-1														NO RECORD

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LINE 37C - LABEL 37C

OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT	OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT	OBSERVER'S LOG SHOT POINT	NAVIGATION SHOT POINT
		NO NAVIGATION CHANGES			

MARINE SEISMIC OBSERVER'S LOG

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CLIENT: USGS [1] | PROSPECT: AGCS [2] | AREA: EAST COAST [3] | LINE NO.: 237C [4]

VESSEL: MV CARINO [5] | PARTY NO: 2912 [6] | INST. ENG. [7] | DATE: MO 6 DAY 20 YR 78 [8]

CAMERA DISPLAY: [9] ☐ 1 SYSTEM ☐ 2 SYSTEMS ☐ NEAR AND FARS ☐ ODD AND EVEN

TYPE: [10] ☐ DFS III ☐ DFS IV OTHER _____ ☐ 9 TRACK ☐ 21 TRACK [11]

FORMAT: [12] ☐ GAPPED ☐ UNGAPPED SEG _____

NO. BYTES IN HEADER: [13] | NO. BYTES IN RECORD ID: [14] | NO. OF BYTES IN SCAN: [15] | TIMING TRACE CHANNEL: [16] | RECORD NUMBERS: [17] ☐ DEC. ☐ OCT.

PACKING DENSITY: [18] (LO) ☐ 356 ☐ 800 (HI) ☐ 712 ☐ 1600

SAMPLE RATE: [19] ☐ 1 ☐ 2 ☐ 4 ☐ 8 OTHER _____ | RECORD LENGTH: [20] _____ SEC. | DELAY START RECORD MODULE: [21] (T_0) = _____ SEC | GAIN CONSTANT: [22]

MAIN STREAMER RECORDING: [23]
NUMBER OF TRACES _____
TRACE NUMBERS _____
CHANNEL NOS. (ON MAG TAPE) _____

WATER BREAK RECORDING: [24]
LOCATION
CHANNEL (ON TAPE)
TRACE (ON DISPLAY)

MINI STREAMER RECORDING: [25]
NUMBER OF TRACES _____
TRACE NUMBERS _____
CHANNEL NOS. (ON MAG TAPE) _____

DIRECTION: [26] N W E S

GROUP INTERVAL _____ M STREAMER LENGTH _____ M [27]
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: _____ M

CABLE NOISE: [28] MAIN _____ μBARS | MINI _____ μBARS

GROUP INTERVAL _____ M STREAMER LENGTH _____ M [29]
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: _____ M

COVERAGE: _____ FOLD [30] | SHOTPOINT INTERVAL: _____ M [31] | SHOTPOINT INCREMENT: [32] | GUN DEPTH: _____ M [33] | WATER VELOCITY: _____ M/SEC [34]

FILTERS MAIN STREAMER: [35] LOW _____ HIGH _____ | FILTERS MINI STREAMER: [36] LOW _____ HIGH _____

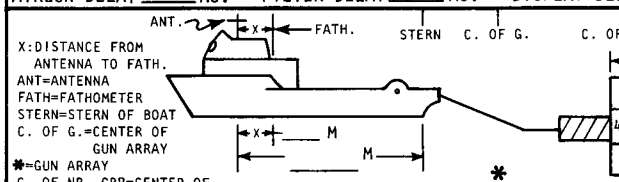
RECORD GAIN MODE: [37] ☐ INIT ☐ MAN ☐ OPER ☐ IFP | REPRODUCE MODE: [38] ☐ FLOAT ☐ DEFLOAT ☐ AGC | AIRGUN ARRAY: _____ IN^3 [39] | AIRGUN PRESSURE: _____ PSI [40]

SYSTEM DELAYS: [41] AIRGUN DELAY _____ MS. FILTER DELAY _____ MS. DISPLAY DELAY _____ MS.

POLARITY: PRESSURE INCREASE ON PHONE: ☐ NEGATIVE ☐ POSITIVE } NUMBERS ON TAPE ☐ DOWNBREAK ☐ UPBREAK } ON DISPLAY

ALIASING FILTER [42] [43]

POP PER SHOTPOINT [44]



INDICATE ALL DISTANCES (WITH UNITS OF MEASUREMENT-FEET OR METERS)

METERS

24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

NOTE: INDICATE STREAMER DIAGRAM IF DIFFERENT THAN THE ABOVE GROUPS HERE

INDICATE LOCATIONS ON THE STREAMER FOR THE FOLLOWING:
STREAMER DEPTH SENSORS=△; WATER BREAK SENSORS=X; STREAMER POS. SENSORS=Ⓧ; CON DEP FINS (BIRDS)=↑

	SHOTPOINT [43]	RPT	REC # OR DUMMY (-1) [44]	REEL NUMBER [45]	XPORT	W. DEPTH (M) [46]	OFFSET (M) [47]	STREAMER DEPTH [48]	MINI STR [49]	MINI-STR OFFSET(M) [50]	POPSP [51]	TIME ~~LOCAL~~ GMT [52]	F S / A Z [53]	L S / I N X [54]	F R / N [55]	L R / L I N E [56]	[57] [58] [59] [60]	[61]
1	~~3630~~		~~694~~			~~27~~		~~45 40 40 30 32 35~~				~~14 55~~				~~25~~		~~177~~
2	3617		-1															NAVIGATION
3	~~3630~~		~~694~~			~~27~~	~~330~~	~~45 40 40 30 32 35~~				~~14 53~~						
4	3618		682				330											
5	3630		684			27	330	45 40 40 30 32 35				14 53						
6	3723		2017 755+1148															TAPE CHANGE RSP 3723 FRN 787
7	3726		790			27	33	33 43 30 30 32 32 27				15 26						SH 27° BH 177°
8	3746		-1															PARITY
9	3781		845									15 44						START LOG LEG LINE 237C"
10	3832		896	755485	A	28		32 29 30 32 35 27				160 1						TB 184° HEADING 17°
11	3936		001															COUNTER ADVANCE
12	3941		006	755486	B	30		36 30 30 32 35 29				16 36						TB 183° HEADING 20°
13	4049		114	755487	A	23		35 30 30 35 35 32				17 09						TB 182° HEADING 20°
14	4052		-1															HIGH PARITY
15	4158		223	755488	B	26.6		30 30 30 33 34 30				17 43						TB 179° HEADING 21°
16	4206		-1															PARITY
17	4267		332	755489	A	28		31 30 30 35 32 31				18 14						TAPE CHG FSP 4267 FRN 332

TI-23287A

MARINE SEISMIC OBSERVER'S LOG

CLIENT: USGS [1] | PROSPECT: AOCS [2] | AREA: EAST COAST US [3] | LINE NO.: 237C [4]

VESSEL: m/v CARINO [5] | PARTY NO: 2912 [6] | INST. ENG. [7] | DATE: MO JUNE DAY 20 YR 78 [8]

CAMERA DISPLAY: [9] ☐ 1 SYSTEM ☐ 2 SYSTEMS ☐ NEAR AND FARS ☐ ODD AND EVEN | TYPE: [10] ☐ DFS III ☐ DFS IV OTHER ____ ☐ 9 TRACK ☐ 21 TRACK [11] | FORMAT: [12] ☐ GAPPED ☐ UNGAPPED SEG ____

NO. BYTES IN HEADER: [13] | NO. BYTES IN RECORD ID: [14] | NO. OF BYTES IN SCAN: [15] | TIMING TRACE CHANNEL: [16] | RECORD NUMBERS: [17] ☐ DEC. ☐ OCT. | PACKING DENSITY: [18] (LO) ☐ 356 ☐ 800 (HI) ☐ 712 ☐ 1600

SAMPLE RATE: [19] ☐ 1 ☐ 2 ☐ 4 ☐ 8 OTHER ____ | RECORD LENGTH: [20] ____ SEC. | DELAY START RECORD MODULE: [21] (T_o) = ____ SEC | GAIN CONSTANT: [22]

MAIN STREAMER RECORDING: [23]
NUMBER OF TRACES ____
TRACE NUMBERS ____
CHANNEL NOS. (ON MAG TAPE) ____
GROUP INTERVAL ____ M STREAMER LENGTH ____ M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

WATER BREAK RECORDING: [24]

	1	2	3	4	5	6
LOCATION						
CHANNEL (ON TAPE)						
TRACE (ON DISPLAY)						

MINI STREAMER RECORDING: [25]
NUMBER OF TRACES ____
TRACE NUMBERS ____
CHANNEL NOS. (ON MAG TAPE) ____
GROUP INTERVAL ____ M STREAMER LENGTH ____ M
DISTANCE FROM CENTER GUN TO CENTER NEAR GRP: ____ M

DIRECTION: [26] N W E S

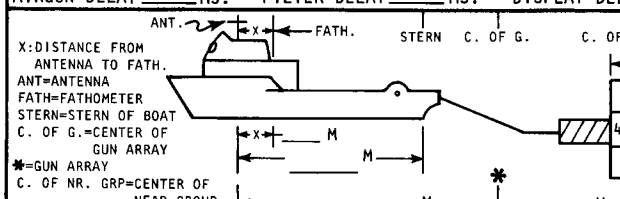
CABLE NOISE: [28] MAIN ____ μBARS | MINI ____ μBARS

COVERAGE: [30] ____ FOLD | SHOTPOINT INTERVAL: [31] ____ M | SHOTPOINT INCREMENT: [32] | GUN DEPTH: [33] ____ M | WATER VELOCITY: [34] ____ M/SEC

FILTERS MAIN STREAMER: [35] LOW ____ HIGH ____ | FILTERS MINI STREAMER: [36] LOW ____ HIGH ____ | RECORD GAIN MODE: [37] ☐ INIT ☐ MAN ☐ OPER ☐ IFP | REPRODUCE MODE: [38] ☐ FLOAT ☐ DEFLOAT ☐ AGC | AIRGUN ARRAY: [39] ____ IN^3 | AIRGUN PRESSURE: [40] ____ PSI

SYSTEM DELAYS: [41] AIRGUN DELAY ____ MS. FILTER DELAY ____ MS. DISPLAY DELAY ____ MS. | POLARITY: PRESSURE INCREASE ON PHONE: ☐ NEGATIVE ☐ POSITIVE } NUMBERS ON TAPE ☐ DOWNBREAK ☐ UPBREAK } ON DISPLAY | ALIASING FILTER: [42] [43]

POP PER SHOTPOINT [44]



INDICATE ALL DISTANCES (WITH UNITS OF MEASUREMENT-FEET OR METERS)

METERS

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INDICATE LOCATIONS ON THE STREAMER FOR THE FOLLOWING:
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	SHOTPOINT [43]	RPT	REC # OR DUMMY (-1) [44]	REEL NUMBER	XPORT [45]	W. DEPTH (M) [46]	OFFSET (M) [47]	STREAMER DEPTH [48] 6	5	4	3	2	1	MINI STR [49]	MINI-STR OFFSET(M) [50]	POP SP [51]	TIME LOCAL/GMT [52]	FS / AZ [53] [57]	LS / INX [54] [58]	FR / N [55] [59]	LR / LINE [56] [60]	[61]
1	4376		441	7554 9.0	B	32		29	27	30	34	31	31				1843					TAPE CHG FSP 4376 FRN 441
2	4382		447																			TB = 181° HEADING 027°
3	4411		-1																			MISSED SP DFS FAULT
4	4412		-1																			PARITY
5	4486		549	7554 9.1	B	33		31	32	31	34	31	32				1913					TAPE CHG FSP 4486 FRN 549
6	4561		-1																			PARITY
7	4565		628														1932					TB 179° HEADING 23°
8	4595		658	7554 9.2	B	33		31	29	29	36	31	33				1942					TB 181° S.K 023°
9	4599		-1														1942					MIGH PARITY
10	4703		766	7554 9.3	A	38		33	30	30	29	35	32	34			2010					TAPE CHG FSP 4703 FRN 766
11	4732		-1																			PARITY
12	4812		875	7554 9.4	B	35		33	32	30	31	36	34	35			2040					TAPE CHG FSP 4812 FRN 875
13	4872		967														2054					BEGIN DOGLEG TO 36A
14																						
15																						
16																						
17																						

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