GEOLOGICAL SURVEY

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF THE INTERIOR
INT-413

B

U.S.MAIL

83013002

Gyre 83-14 / Mattick
DFS V Log Sheets
Lines (2 and 2A)

2 OF 3

83-14 GYRE 103581

Gyre 83-14 / Mattick
DFS V Log Sheets
Lines (2 and 2A)

83013 0b2

U.S. GEOLOGICAL SURVEY

DFS V LOG

VESSEL RV/GYRE CRUISE NO. 83-14 DATE 11-7-83 311

SHOT INTERVAL (DISTANCE) 25 m OR TIME ~~10~~ sec.

OFFSET Guns to Near tr. 145 m PRIME NAVIGATION Wins - Loran C

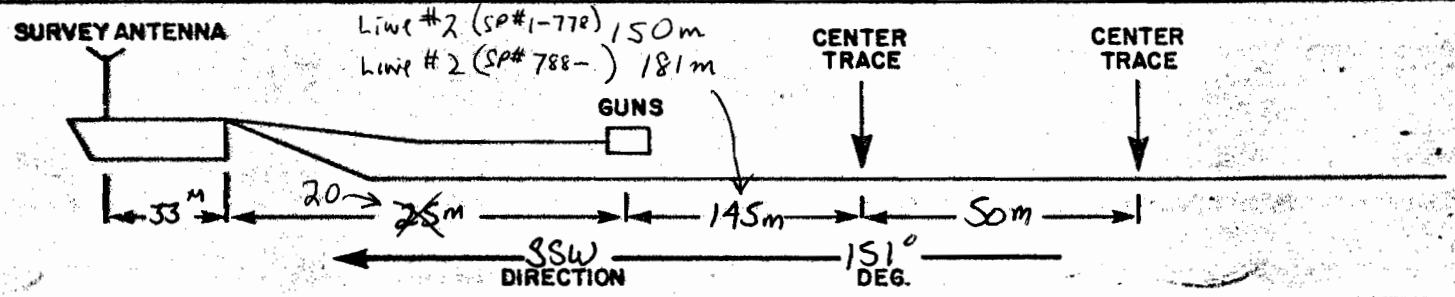
LINE NO. 2 DIR. ____ DEG. CABLE TYPE 24 Chan.

LOCATION OCS Texas TRACE INT. 50 m

SAMPLE RATE 2 MS. BPI 1600 SEG B FORMAT V

RECORD LENGTH 5 Sec. EXTENDED HEADER START WORD 49

SOUND SOURCE 2-540 in³ AIRGUN cu. in. @ 2000 psi @ 20 feet 5-8M depth (m)



RECORD				REPRODUCE				
INPUT GAIN (500 OHM IMP)	FILTERS LO/SLOPE	FILTERS HI	MAN / IFP	FILTERS LO	FILTERS HI	TRIP SENSE	INITIAL GAIN	MODE
2⁹	out	128	IFP	out	128	3	6	DEFLOAT

DECK NO.	REEL NO.	CONSTANTS DAY NO.	CONSTANTS LINE NO.	CONSTANTS DIR. DEG.	FILE NO. FROM	FILE NO. TO	SP NO. FROM	SP NO. TO	TIME Z START	TIME Z FINISH
1	26	311	02	151°	001	207	001	207	1328	1401
2	27				208	420	208	420	1401	1451
1	28				421	622	421	622	1451	1523
2	29				623	827	623	827	1523	1605
1	30				828	1037	828	1037	1605	1646
2	31				1038	1246	1038	1246	1646	1727
1	32			162°	1247	1455	1247	1455	1727	1809
2	33	311	02	166	1456	1662	1456	1662	1809	1850
1	34	311	02	159°	1663	1870	1663	1870	1850	1932
2	35	311	02	165	1871	2061	1871	2061	1932	2008
1	36	311	02	166	2062	?	2062	?	2008	? Deck 1 Ran Wild
2	37	311	02	—	2118	2312	2118	2312	2019	2057
1	38	311	02	168	2313	2515	2313	2515	2057	2135
2	39	311	02	168	2516	2726	2516	2726	2135	2216
1	40	311	02	167	2727	2937	2727	2937	2216	2255
2	41	311	02	166	2938	3148	2938	3148	2255	2334

U.S. GEOLOGICAL SURVEY

DFS V LOG

(2)

VESSEL R/V GYRE CRUISE NO. 83-14 DATE 311 11-7/83

SHOT INTERVAL (DISTANCE) 25 m OR TIME _____ sec.

See Sheet 1 OFFSET Guns To Near Trace 181 m PRIME NAVIGATION Wins - Loran C.

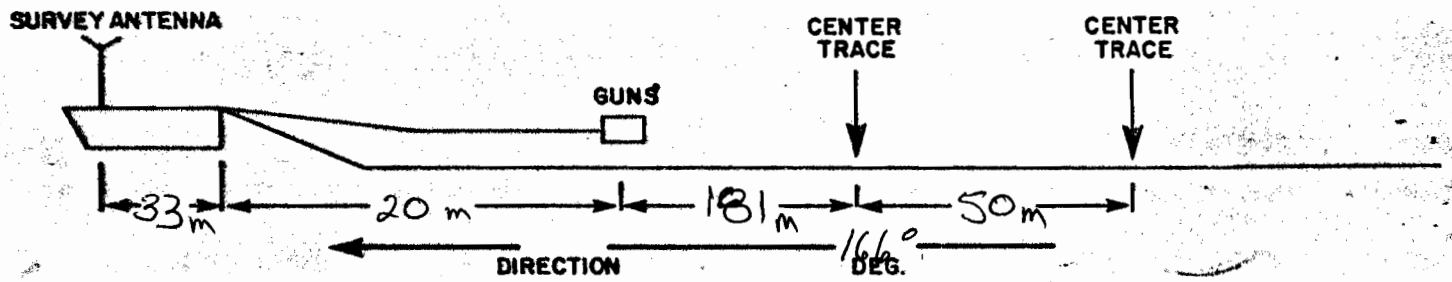
LINE NO. 2 DIR. ____ DEG. CABLE TYPE 24 Channel

LOCATION OCS Texas TRACE INT. 50 meter

SAMPLE RATE 2 MS. BPI 1600 SEG B FORMAT ✓

RECORD LENGTH 5 sec. EXTENDED HEADER START WORD 49

SOUND SOURCE 2 x 540 cu. in. @ 2000 psi @ 20 feet depth (m)



RECORD				REPRODUCE				
INPUT GAIN (500 OHM IMP)	FILTERS LO/SLOPE	FILTERS HI	MAN / IFP	FILTERS LO	FILTERS HI	TRIP SENSE	INITIAL GAIN	MODE
28	OUT	128		OUT	128	3	6	Defload

DECK NO.	REEL NO.	CONSTANTS DAY NO.	CONSTANTS LINE NO.	CONSTANTS DIR. DEG.	FILE NO. FROM	FILE NO. TO	SP NO. FROM	SP NO. TO	TIME START	TIME FINISH
1	42	311	0002	166°	3148	3355	3148	3355	2334	0014
		lost 3287 to 3293 because								
		of tape transport								
2	43	312	02	166°	3356	3566	3356	3566	0014	052
1	44				3567	3775	3567	3775	052	0130
2	45				3776	3986	3776	3986	0130	0:216
1	46				3987	4196	3987	4196	02:16	0:255
2	47	*SEE OB log lost Files*			4197	4431	4197	4431	02:55	03:37
1	48				4432	4639	4432	4639	03:37	04:14
2	49				4640	4851	4640	4851	04:14	04:51
1	50				4852	6058	4852	6058	04:51	05:28
2	51			Has to be 5059	5059	5272	5059	5273	05:28	0604
1	52	312	SP-File 02	Resync @ SP 5476 169	5273	5482	5274	5482	0604	0641 Resync 064 SP5[illegible]
2	53	312	02	170	5483	5693	5483	5693	0641	0717
1	54	312	02	172	5694	5902	5694	5902	0717	0754
2	55	312	02	171	5903	6113	5903	6113	0754	0831

U.S. GEOLOGICAL SURVEY

DFS V LOG 11-8-83

VESSEL RV Gyre CRUISE NO. 83-14 DATE 312

SHOT INTERVAL (DISTANCE) 25 m OR TIME _____ sec.

OFFSET Guns to Near Trace 181 m PRIME NAVIGATION WINS - Loran C/Sat.

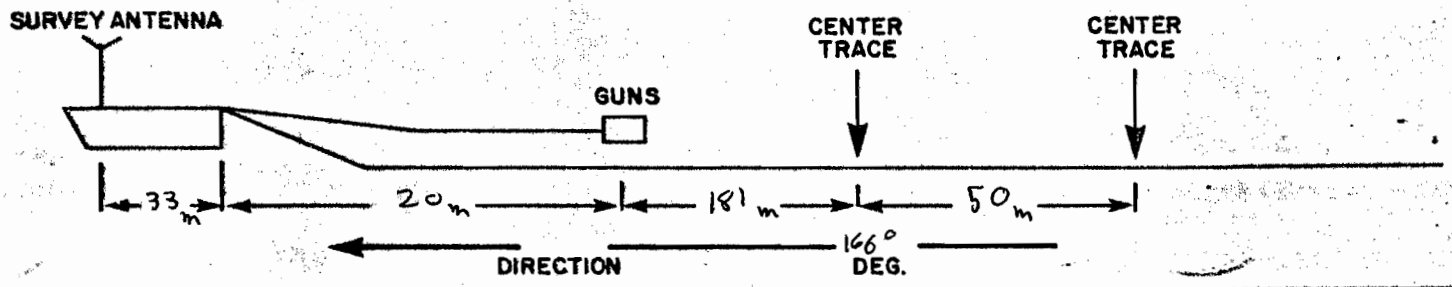
LINE NO. 2 DIR. ____ DEG. CABLE TYPE 24 CH

LOCATION Tx OCS TRACE INT. 50 m

SAMPLE RATE 2 MS. BPI 1600 SEG B FORMAT ✓

RECORD LENGTH 5 sec. EXTENDED HEADER START WORD 49

SOUND SOURCE 2 x 540 cu. in. @ 2000 psi @ 20 feet depth (m)



RECORD				REPRODUCE				
INPUT GAIN (500 OHM IMP)	FILTERS LO/SLOPE	FILTERS HI	MAN / IFP	FILTERS LO	FILTERS HI	TRIP SENSE	INITIAL GAIN	MODE
2^8	out	128		out	128	3	7	defloat

DECK NO.	REEL NO.	CONSTANTS DAY NO.	CONSTANTS LINE NO.	CONSTANTS DIR. DEG.	FILE NO. FROM	FILE NO. TO	SP NO. FROM	SP NO. TO	TIME START	TIME FINISH
1	56	312	02	173	6114	6322	6114	6322	0831	0908
2	57	312	02	172	6323	6535	6323	6535	0908	0946
1	58	312	02	168	6536	6745	6536	6745	0946	1025
2	59	312	02	168	6746	6956	6746	6956	1025	1105
1	60	312	02	167	6957	7165	6957	7165	1105	1143
2	61	312	02	168	7166	7376	7166	7376	1143	1221
1	62	312	02	167	7377	7586	7377	7586	1221	1302
2	63	312	02	172	7587	7796	7587	7796	1302	1342
1	64	312	02	177	7797	8008	7796	8008	1342	14:22
2	65				8009	8219	8009	8219	14:22	1459
1	66				8220	8449	8220	8449	14:59	15:40
2	67			174°	8450	8661	8450	8661	15:40	16:13
1	68				8662	8871	8662	8871	16:13	16:47
2	69				8872	9084	8872	9084	16:47	17:21
1	70				9085	9289	9085	9289	17:21	17:53
2	71	312	02	187	9290	9493	9290	9493	17:53	1823

U.S. GEOLOGICAL SURVEY

DFS V LOG 11-8-83

(4)

VESSEL Gyre CRUISE NO. 83-14 DATE 312

SHOT INTERVAL (DISTANCE) 25 m OR TIME _____ sec.

OFFSET Guns to Near Trace 181 m PRIME NAVIGATION WINS - Loranc / Sat.

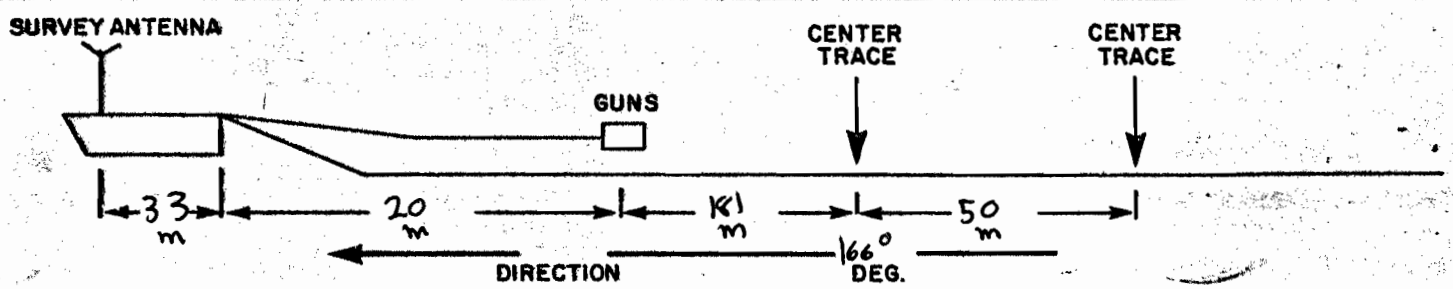
LINE NO. 2 DIR. ____ DEG. CABLE TYPE 24 CH

LOCATION Tx OCS TRACE INT. 50 m

SAMPLE RATE 2 MS. BPI 1600 SEG B FORMAT Yes

RECORD LENGTH 5sec EXTENDED HEADER START WORD 49

SOUND SOURCE 2 x 540 Air Guns cu. in. @ 2000 psi @ 20 feet ~~depth (m)~~



RECORD				REPRODUCE				
INPUT GAIN (500 OHM IMP)	FILTERS LO/SLOPE	FILTERS HI	MAN / IFP	FILTERS LO	FILTERS HI	TRIP SENSE	INITIAL GAIN	MODE
2^8	out	128	IFP	out	128	3	7	defloat

DECK NO.	REEL NO.	CONSTANTS DAY NO.	CONSTANTS LINE NO.	CONSTANTS DIR. DEG.	FILE NO. FROM	FILE NO. TO	SP NO. FROM	SP NO. TO	TIME START	TIME FINISH
1	72	312	02	186	9494	9700	9494	9700	1823	1854
2	73	312	02	185	9701	9910	9701	9910	1854	1925
1	74	312	02	188	9911	120	9911	10120	1925	1956
2	75	312	02	195	121	322	~~321~~	~~322~~	1956	2030
1	76	312	02	200	323	520	10323	520	2030	2103
2	77	312	02	187	521	721	521	721	2103	2135
1	78	312	02	—	722	843	722	843	2135	2159
2	79	312	02A	181	850	1055	850	1055	2159	2255
1	80	312	02A	183	1056	1255	1056	1255	2255	2340
2	81	312	02A	183	1256	1461	1256	1461	2340	0043
1	82	313	02A	173	1462	1671	1462	1671	0043	0139
2	83	313	02A	172	1672	1880	1672	11880	0139	02:35
1	84	313	2A	—	1881	2080	11881	12080	02:35	03:30
2	85	313	2A	—	2081	2286	12081	12286	03:30	04:21
1	86	313	2A	—	2287	2487	12287	12487	04:21	05:22
2	87	313	2A	—	2488	2695	12488	2695	05:22	0622

U.S. GEOLOGICAL SURVEY

DFS V LOG 11-9-83

VESSEL RV Gyre CRUISE NO. 83-14 DATE 313

SHOT INTERVAL (DISTANCE) 50 m OR TIME _____ sec.

OFFSET Guns to Near Trace m PRIME NAVIGATION WINS - Loran C / Sat.

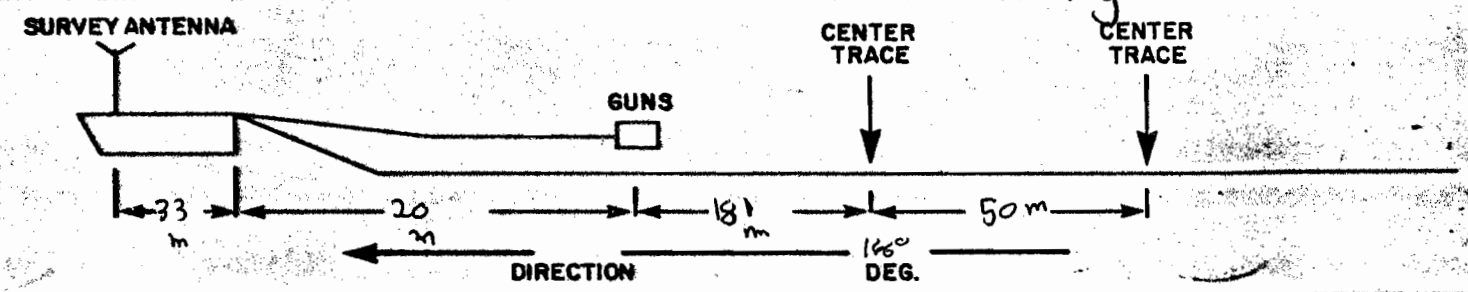
LINE NO. 2A DIR. ____ DEG. CABLE TYPE 24 CH

LOCATION Tx OCS TRACE INT. 50 m

SAMPLE RATE 2 MS. BPI ____ SEG B FORMAT Yes

RECORD LENGTH 5 sec EXTENDED HEADER START WORD 49

SOUND SOURCE 2 x 540 Air cu. in. @ 2000 or psi @ 20 feet depth (m)
@ 1500 see other log



RECORD				REPRODUCE				
INPUT GAIN (500 OHM IMP)	FILTERS LO/SLOPE	FILTERS HI	MAN / IFP	FILTERS LO	FILTERS HI	TRIP SENSE	INITIAL GAIN	MODE
2^8	out	128	IFP	out	128	3	7	deflect

DECK NO.	REEL NO.	CONSTANTS DAY NO.	CONSTANTS LINE NO.	CONSTANTS DIR. DEG.	FILE NO. FROM	FILE NO. TO	SP NO. FROM	SP NO. TO	TIME START	TIME FINISH
1	88	313	2A	155	2696	2897	2696	2897	0622	0726
1	89	313	2A	159	2898	3102	2898	3102	0726	0832
1	90	313	2A	158	3103	3311	3103	3311	0832	0938
1	91	313	2A	158	3312	≈3450	3312	≈3450	0938	≈1020
~~1~~	~~92~~									

E.O.L. 2A

OBSERVER'S MARINE REPORT

311 #1

TAIL BUOY OFF +20°

VESSEL RV/GYRE DATE 11-9-83

Client	USGS/Mattick	Type Instrument	DFS V	Offset distance	150m
Area	OCS/# Galveston	Record filter	out-128	Group Interval	50m
State	Texas	Sample rate	2ms	Fold coverage	24
Observer	WISE/Wells	gun depth	20'	in.³ of guns	2x540

Pre-plot	Shotpoint	File No.	Time	#1 dir.	Cable Depth	Meters W.D.	Reel No.	Line No.	Remarks
1	001	001	13:28	151	6.6-7.0-5.6-8.0	18	26	2	Start of line #2
~~168~~	168	168	14:00	149	5.8-6.8-7.0-8.0	22	26	2	ON Watch > PATTERSON/LEINBACH
	330	330	14:30	152	5.8-6.8-7.2-7.8	22	27	2	SEAS: B2 Weather: Good
	488	488	15:00	153	5.6-7.2-7.2-8.8	24	28	2	Dead Traces 1, 15
	656	656	15:30	156	6.2-8.6-7.4-9.0	24	28	2	
	763	763		158	6.5-7.2-8.4	24	29	2	ON Watch 14:00 Wells/WISE
	803	803	16:00	156	7.8-8.6-4.2-5.4	24	29	2	Sp 168 Tr 17 Killed for Line
	955	955	16:30	161	8.2-8.4- -8.4	24	30	2	* Sp 465 Starbord GUN OUT **
	1106	1106	17:00	162	8.0-8.4-6.8-8.4	23	31	2	Sp 694 Both guns UP
	1260	1260	17:30	165	8.0-8.2-6.6-8.2	21	32	2	Kill Files 621, 622, 623
									* Sp 778 Changing offset 181M
									Kill Files 778 - 789
									Streamer Noise 788 settling down
									" Noise 788 to 811 3.4 Knots
									** SEE BACK ***
									* File 961 Strbord gun Out
									one gun out Files 961 →
	1409	1409	1800	165	7.6/8/7.6/8.4	23	32	2	OWEN/Zihlman take over watch
	1562	1562	1830	164	7.8/8.4/8.2/8.4	25	33	2	ON Line #2
	1709	1709	1900	162	7.4/8/7.8/8	28	34	2	Tape chg 33 to 34 @ SP 1663
	1860	1860	1930	165	7.2/8.2/8/8.4	34	34	2	ON Line #2
	1871	1871	1932	165	—	—	34/35	2	chge Tape
			1959		—	—			Both Guns ON
	2017	2017	2000	168	7.4/8.2/7.6/7.8	36	35	2	ON Line #2 Trace 1,15,17 off
	2062	2062	2008	166	—	—	35/36	2	chg Tape (Deck I ran wild)
	2118	2118	2019	(SP 2062 to 2118 out of sync/file)			36/37	2	chg Tape Resynch SP & File
	2173	2173	2030	170	7.2/8.2/7.6/7.8	36	37	2	ON Line #2
	2313	2313	2057	168	—	—	37/38	2	chg Tape
	2330	2330	2100	169	7.2/8/7.2/8.2	38	38	2	ON Line #2
	2486	2486	2130	168	7.2/8/7.6/8.2	41	38	2	ON Line #2
	2516	2516	2135	168	—	—	38/39	2	chg Tape
	2646	2646	2200	167	6.8/8.0/7.6/8.2	45	39	2	TB 185°
	2727	2727	2216	167			40	1	TAPE CHG FSP 2727
	2803	2803	2230	166	7.2/8.0/7.6/8.2	48	40	1	TB 185°
	2836	2836	2236						CHANNEL 12 BAD - TURNED OFF
	2938	2938	2255	166			41	2	TAPE CHANGE FSP 2938
	2963	2963	2300	167	7.0/8.0/7.4/8.0		41	2	TB 185°

Note Tapes 37 and 38 many gain changes

LINE 2 Process files 1–778 offset 150 m

2A START file 788 offset 181 m

OBSERVER'S MARINE REPORT

Tail Buoy off 20°

VESSEL R/V Gyre DATE 311 11-7-83 # 2

Client	USGS/Mattick	Type Instrument	DFS V	Offset distance (See Sheet 1 →)	181 m
Area	OCS Galver.	Record filter	OUT - 128	Group Interval	50 m
State	Texas	Sample rate	2 ms	Fold coverage	24
Observer	Wise/Wells	gun depth	~~20~~ 30'	In.³ of guns	2x540

Pre-plot	Shotpoint	File No.	GMT Time	#1 dir.	Cable Depth	Meters W.D.	Reel No.	Line No.	Remarks
	3126	3126		166	6.8/7.6/7.8/8.4	55	41	2	Tail Buoy 185°
	3287	3287		157	7.0/7.6/7.2/7.6	[redacted]	42	2	tape transport bad
	~~3293~~	~~3293~~				157			lost between 3287 + 3293
	3355	3355	0014		7.2/8.8/9.0/9.0	[redacted]	43	2	Tape change, 3355 last record
	3395	3395	0018						* LOST STB GUN *
	3447	3447	0020	179	6.6/8.0/8.2/8.0	60	43	2	still on port gun only
	3567	3567	0052	176		60	44	2	3567 FSP on tape
	3602	3602	0058						* STBGUN on Line *
	3608	3608	60	177		65			
	3762	3762	130	153		67	44	2	[redacted]
	3776		130	153	6.8/7.0/7.6/8.0	68	45	2	TAPE CHANGE FSP 3776
	New Watch Wise/Wells								T.B 195°
	3911	3911	0:200	152	6.8-7.8-7.2-7.8	65	45	2	File 3980 One gun out
	4065	4065	02:30	161°	6.8-7.8-8.0-8.0	67	46	2	File 4028 Both guns on
	~~4206~~	~~4206~~	03:00	169°		72	47	2	File 4114 Starboard Gun out
	4392	4392	03:30	166°	6.8-7.8-7.8-8.0	80			File 4170 Both guns on
	4559	4559	04:00	166°	7.0-7.8-7.8-8.0	88	48	2	
	4730	4730	04:30	167°	7.2-8.0-7.8-8.0	85	49	2	# Missed 11 shots Tape
	4901	4901	05:00	175°	7.0-7.8-7.8-7.8	~~85~~ 105	50	2	Drive in local Not remote
	5072	5072	05:30	174°	7.2-7.8-7.8-8.0	141	51	2	Pad 11 shots 4197 - 4209
									Reset File Count OK
	* ALL Delay Times Should Include								File 4374 Starboard gun Down
	560 ms Ramp Time for DFS V Example								File 4901 Depth 105 meters
	1 Sec. Delay = 1+560 30 ∴ 1.560 ms Delay								* File 5165 Both guns on *
	5248	5247	0600	169	7.2/8/7.8/8.4	155	51	2	File & SP off TB = 190°
	Note: Somewhere between 0530 & 0600						SP & File off		@ 0600 Owen/Zihlman on watch
	5273	5274	0604	169	—	—	51/52	2	chg. tape
	5420	5419	0630	168	7.2/8.2/8/8	138	52	2	ON Line #2 TB = 190
	5476	5476	0640		—	—	52	2	Resync SP & File
	5482	5482	0641	168	—	—	52/53	2	chg Tape
	5592	5592	0700	172	6.8/8/7.8/8	158	53	2	ON Line #2 (Guns drifting a lot) TB = 190°
	5694	5694	0717	170	—	—	53/54	2	chg Tape
	5765	5765	0730	172	7.2/8/8/8	215	54	2	ON Line #2 TB = 185°
	5903	5903	0754	172	—	—	54/55	2	chg Tape
	5937	5937	0800	172	6.8/8/8/8	185	55	2	ON Line #2 TB = 195°
	6108	6108	0830	171	7/8/8/8.4	240	55	2	ON Line #2 TB = 190°
	6114	6114	0831	171	—	—	55/56	2	chg Tape
	6276	6276	0900	173	6.8/8/8/8	250	56	2	ON Line #2 TB = 190°

OBSERVER'S MARINE REPORT

312 #3

Tail Buoy off 20°

VESSEL RV ~ Gyre DATE 11-8-83

Client	USGS/Mattick	Type Instrument	DFS V	Offset distance	181 m.
Area	OCS	Record filter	out 128	Group Interval	50 m
State	Tx	Sample rate	2 ms	Fold coverage	24
Observer	owen/Zihlman	gun depth	20'	in.³ of guns	2X540

Pre-plot	Shotpoint	File No.	Time	#1 dir.	Cable Depth	W.D.	Reel No.	Line No.	Remarks
	6323	6323	0908	173	—	—	56/57	2	chg. Tape
	6445	6445	0930	172	7.2/8/8/7.8	188	57	2	TB = 190°
	6536	6536	0946	172	—	—	57/58	2	chg. Tape
			1000				58	2	SHIFT CHG: PATTERSON/
	6613	6613	1000	172	7.2/8.2/8.4/8.0	355	58	2	LEINBACH T.B 190°
	6746	6746	1025				59	2	TAPE CHG. FSP 6746
	6781	6781	1031	168	7/8/8/8	460	59	2	TB 190°
	6930	6930	1100	168	6.6/8/8/8	510	59	2	TB 187°
	6957	6957	1105				60	2	TAPE CHG FSP 6957
	7092	7092	1130	166	6.6/8/7.6/7.8	600	60	2	TB 190°
	7166	7166	1143	168					TAPE CHG FSP 7166
	7258	7258	1200	166	7/8/8/8.2	630	61	2	TB 190°
	7377	7377	1221						TAPE CHG FSP 7377
	7429	7429	1231	166	7.2/8/8/8	650	62	2	TB 185°
	7574	7574	1300	170	7/8.4/8.4/8	590	62	2	TB 183°
	7730	7730	1330	176	6.8/8/8/8.2	720	63	2	TB 185°
	Watch	change	WISE	/wells -					
	7888	7888	14:00	176°	6.8-6.2-6.0-6.4	925	64	2	File 7962 Starboard gun out
	8051	8051	14:30	170°	6.6-6.2-6.0-6.4	1235	65	2 *	File 7973 NG setting Delay
		*File 7974			Took 560 ms	OUT	Playing with Delay		~~1.0 sec delay 7974-7975~~ ***
	8223	8223	15:00		6.6-6.4-6.0-6.4	935	66	2 **	Missed File 7989 Set Sp. SYNC.
	8401	8401	15:30	179°	6.4-6.4-6.0-6.0	867	66		~~** File 8080 8081 2 sec delay~~
**	Lost	Pops 8410 to 8449			Due to Tape Problem			**	8037 No delay working on
8582	8582	8582	16:00	174	6.8-6.0-5.4-6.4	800	67		System delay.
	8766	8766	16:30	176°	6.8-6.4-6.0-6.2	1240	68		* 1.0 Sec. delay app 8080 * 1.56
	8950	8950	17:00	180°	6.6-6.0, 5.4-6.4	1453	69		File 8180 Both Guns ON
	9139	9139	17:30	188°	6.2-6.4, 6.0-6.2	1413	70		File 8190 500ms Delay
	9340	9340	18:00	187	6.4/6.4/5.6/6.4	1243	71		File 8331-0-delay
									Traces 1+15 OK Now File 8370
									Traces 12+17 out.
									Trace 1 out (noisy)
									File 8732 N/G Setting Delay
					1.56 Sec. Delay ← *			**	File 8733 1.0 Sec delay
									File 9258 N/G Delay checking
			1800						Shif Chg to Owen/Zihlman
	9494	9494	1823	187	—	—	71/72	2	chg. Tape
	9538	9538	1830	188	6.4/6.6/6/6.4	1271	72	2	on Line #2 TB = 180°
	9660	9660	1848	—	—	—	72	2	Stb. Gun off Line

OBSERVER'S MARINE REPORT

Tail Buoy off 20° VESSEL RV Gyre DATE 312 11-8-83 # 4

Client USGS/Mattick Type Instrument DFS V Offset distance 181 m.

Area OCS Record filter out 128 Group Interval 50 m

State Tx Sample rate 2 ms Fold coverage 24

Observer Owen/Zihlman gun depth 20' In.³ of guns 2X540 air guns

Pre-plot	Shotpoint	File No.	Time	#1 dir.	Cable Depth	m W.D.	Reel No.	Line No.	Remarks
							72	2	Traces 1-12-17 off
									* ALL TIME DELAYS SHOULD INCLUDE THE 560 ms RAMP UP TIME OF THE DFS V. EXAMPLE 1 SECOND WATER COLUMN DELAY = 1 SEC. + 560 ms RAMP SO FOR PROCESSING DELAY SHOULD READ 1.56 sec.
	9701	9701	1854	186			72/73	2	Chg Tape
	9739	9739	1900	186	6.2/6.2/6.2/6.8	1263	73	2	ON Line #2 TB = 185°
	9764	9764	1903				73	2	Stb Gun Back on Line
	9911	9911	1925	185			73/74	2	Chg Tape
	9948	9948	1930	185	6/6/5.6/6.2	1242	74	2	ON Line #2 TB = 180°
			1938				74	2	Miss SP #3 sp & File Flip
			1944				74	2	Port Gun Down
	121	121	1956	188			74/75	2	Chg. Tape
	142	142	2000	188	6.4/6.4/5/4.2	1348	75	2	ON Line #2 TB = 180°
	241	241	2016				75	2	Both Guns on Line
	321	321	2030	195	6.2/6/3.6/6	1393	75/76	2	Tape Chg TB = 185
	340	340	2033				76	2	Port Gun Down
	501	501	2100	202	5.4/5.4/4.6/6.4	1468	76	2	ON Line #2 TB = 180°
	521	521	2103	200			76/77	2	chg Tape
	685	685	2130	189	5/5.2/2.4/3.6	1423	77	2	TB = 180°
	722	722	2135	187			77/78	2	chg Tape
	843	843	2155				78	2	system down
	850	850	2159				78/79	2A	SOL 2A "12 Fold"
	851	851							VOID
	961	961	2230	183	5/7.4/8.0/8.2	1640	79	2A	TB 195°
	1056	1056	2255	183			80	2A	TAPE CHG FSP 1056
	1081	1081	2331	178	5/7/8/8	1775	80	2A	TB 185°
	1302	1302	2330	179	4.6/7.6/8.6/8.6	1830	81	2A	TB 190°
	1414	1414	0030	177	5/7.6/8.2/8.4	1850	81	2A	TB 195°
	1462	1462	0043				82	2A	TAPE CHG FSP 1462
	1528	1528	0100	172	5.0/7.4/8.8/8.4	1526	82	2A	TB 195°
	1654	1654	0134	172	5/8/8.8/8.8	1875	82	2A	TB 195°

OBSERVER'S MARINE REPORT

VESSEL RV Gyre DATE _____ #5

Client	USGS Mattick	Type instrument	DFS V	Offset distance	181 m
Area	off Texas OCS	Record filter	out-128	Group interval	50 m
State	Texas	Sample rate	2 ms	Fold coverage	12
Observer	Wise/Wells	gun depth	6 M	in.³ of guns	2x540 in³

Pre-plot	Shotpoint	File No.	Time	#1 dir.	Cable Depth	W.D.	Reel No.	Line No.	Remarks
	11748	1748	02:00	173°	5.0-7.8-8.4-8.8	1885	83	2A	Cable Noise entire length due to
	11859	1859	02:30	172°	5.0-7.6-8.4-8.8	1970	84		strong Current.
	1970	1970	03:00	167°	5.0-7.6-8.8-8.8	1950	84		12 Fold Data
	~~20~~ 2081	2081	03:30	166°	4.6-7.8-2.0-8.8	2115	85	2A	*Delay (System) 1.560 ms
	12191	2191	04:00	162°	5.4-8.0-8.4-8.8	2439	85		1876 Both gun out
	12299	2299	04:30	165°	5.6-7.6-8.6-8.6	2769	86	2A	#1913 → 2.560 Delay
	12408	2408	05:00	162°	5.0-7.6-8.8-8.4	3147	86		#1978
	12515	2515	05:30	159°	5.0-7.8-8.8-8.8	3182	87	2A	#1979 2.060 Delay
									#2121 Both guns on 03:41 Z
									#2322 3.060 Delay
Note:	(Guns	are @	1500	lbs	and both on @		watch	chg.)	#2500 Starbgun out
	2619	2619	0600	163	5.4/8/8.8/9.2	3214	87	2A	on watch owen/zihlman TB = 190°
	2696	2696	0622	165			87/88	2A	chg Tape
	2721	2721	0630	164	5/7.6/8.4/8.4	3244	88	2A	Traces 1,12,15,17 off TB = 190°
Anytime one gun 2000 lbs	2816	2816	0700	[redacted]	5.6/7.8/8.4/8.8	3279	88	2A	TB = 185°
	2898	2898	0726	158			88/89	2A	chg Tape
	2909	2909	0730	155	5.8/8/8.4/8.8	3299	89	2A	TB = 185°
Anytime Both Guns 1500 lbs	3002	3002	0800	155	5.8/8.2/8.8/8.6	3324	89	2A	TB = 190°
	3091	3091	0828				89	2A	Port Gun Down
	3095	3095	0830	158	5.8/8.6/8.6/8.6	3344	89	2A	TB = 190°
	3102	3102	0832	159			89/90	2A	chg Tape
Running on one compressor	3111	3111	0835	159			90	2A	Both Guns Up @ 1500 lbs
	3134	3134	0842	158			90	2A	Port Gun Down Again
	3147	3147	0846	158			90	2A	Both Guns Up @ 1500 lbs
	3156	3156	0849	158			90	2A	Stb. Gun Down
	3191	3191	0900	157	5.4/8.2/8.6/8.4	3357	90	2A	Port Gun @ 2000 lbs TB = 185°
	3287	3287	0930	156	5.4/8/8.8/8.8	3374	90	2A	TB = 185°
	3312	3312	0938	158		~~3370~~	90/91	2A	Chg Tape
	3380	3380	1000	158	6.0/8.2/9.0/8.4	[redacted]	91	2A	Lombach/Pat on watch TB = 185°
	3466	3466	1030	155	5.8/8.0/8.2/8.2	3420	91	2A	TB = 185°
									Port gun quit working
								SP	≈ 3450 to 3460

END 2A