OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

INT-413
F

83013064

Gyre 83-14 / Mattick

Lines GMT-5, GMT-6
GMT-7, GMT-9, 9A, ESP4

DFS V Log Sheets

3 OF 4

103585

envelope
E

Gyre 83-1[illegible] Mattick

Lines GMT-5, GMT-6
GMT-7, GMT-9, 9A, ESP4

DFS IV Log Sheets

U.S. GEOLOGICAL SURVEY

83012266

DFS V LOG JD-320

VESSEL RV/GYRE CRUISE NO. 83-14 DATE 11-16-83

SHOT INTERVAL (DISTANCE) _____ m OR TIME Every Minute sec.

OFFSET Varied ~~Perpendicular~~ in/line m PRIME NAVIGATION _____

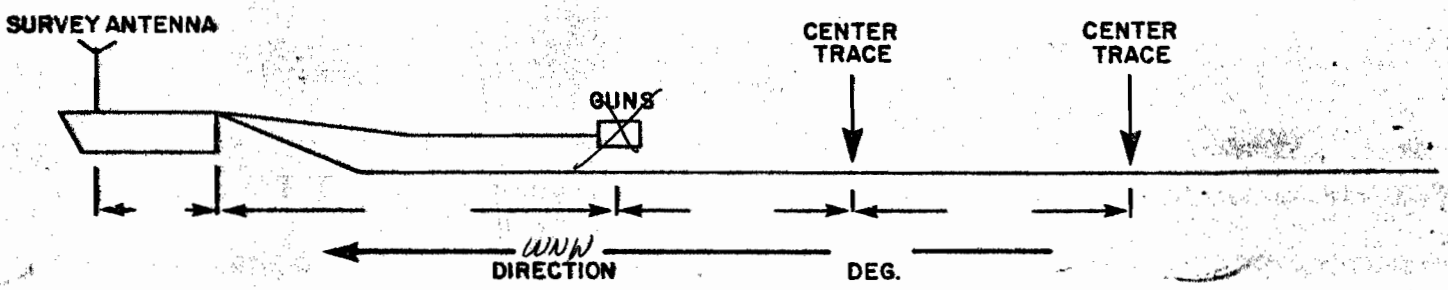
LINE NO. GMT5 ESP3 DIR. _____ DEG. CABLE TYPE 24 chan

LOCATION _____ TRACE INT. 50 m

SAMPLE RATE 4 MS. BPI _____ SEG B FORMAT ✓

RECORD LENGTH 40 Secs EXTENDED HEADER START WORD _____

SOUND SOURCE RV/Moore 2 2000 cu. in. @ _____ psi @ _____ 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	64	IFP	Out	64		~~AG~~ 5	AGC

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	132	320	GMT5 ESP3		001	057	001	057	04:30	05:39
2	133	320	GMT-5	281	058	116	058	116	05:39	0636
2	134	Data Lock Transport 1 go 2			120 [redacted]	179	120 [redacted]	179	[redacted]?	0739
1	135	320	GMT-5	281	180	237	180	237	0740	0837
2	136	320	GMT-5	296	238	295	238	295	0838	0935
1	137	320	GMT-5	293	296	341	296	341	0936	1021
2	138									

U.S. GEOLOGICAL SURVEY

DFS V LOG DD 320

VESSEL R/V GYRE CRUISE NO. 83-14 DATE 11-16-83

SHOT INTERVAL (DISTANCE) _____ m OR TIME 60 sec sec.

OFFSET COP ~~16890~~ ≈ 17,300 m PRIME NAVIGATION _____

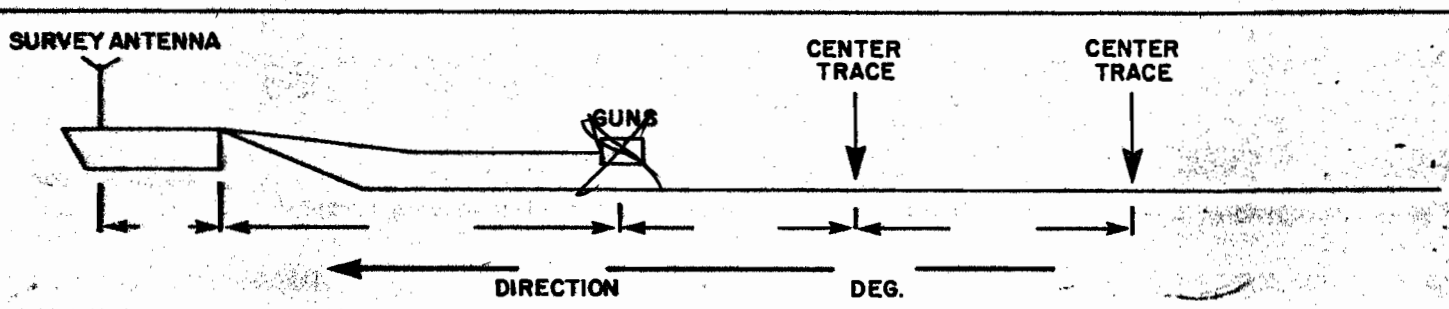
LINE NO. GMT-6 DIR. _____ DEG. CABLE TYPE 24 ch

LOCATION _____ TRACE INT. 50 m

SAMPLE RATE 4 MS. BPI _____ SEG B FORMAT ✓

RECORD LENGTH 20 sec EXTENDED HEADER START WORD _____

SOUND SOURCE R/V moore 3@2000 cu. in. @ _____ psi @ _____ depth (m)



RECORD				REPRODUCE				
INPUT GAIN (500 OHM IMP)	FILTERS		MAN / IFP	FILTERS		TRIP SENSE	INITIAL GAIN	MODE
	LO/SLOPE	HI		LO	HI			
28	OUT	64	IFP	OUT	64		5	AGC

DECK NO.	REEL NO.	CONSTANTS			FILE NO.		SP NO.		TIME	
		DAY NO.	LINE NO.	DIR. DEG.	FROM	TO	FROM	TO	START	FINISH
2	138	320	GMT-6	116	1	116	~~3~~-1	1164	1130	1342
1	139	320	GMT-6	115	117	229	11~~3~~5	227	1343	15:35 1784
2	140	320	GMT-6	122°	~~230~~	289	228	~~231~~	15:35	16:35

U.S. GEOLOGICAL SURVEY

DFS V LOG

VESSEL R/V GYRE CRUISE NO. 83-14 DATE 11-16-83

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

OFFSET 2000 ±100 KM m PRIME NAVIGATION _____

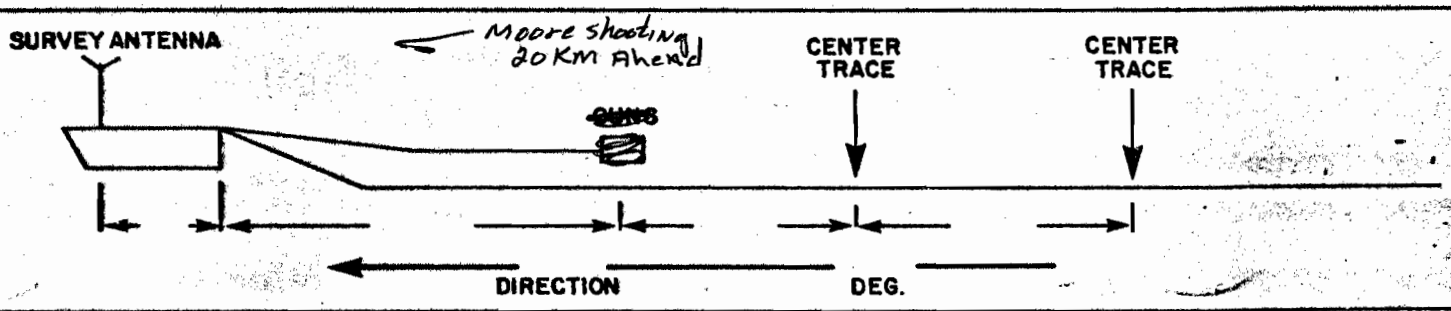
LINE NO. GMT 7 DIR. _____ DEG. CABLE TYPE 24 chan

LOCATION Offshore Texas TRACE INT. 5 m

SAMPLE RATE 4 MS. BPI 1600 SEG B FORMAT V

RECORD LENGTH 20 sec. EXTENDED HEADER START WORD _____

SOUND SOURCE _____ cu. in. @ _____ psi @ _____ depth (m)



RECORD				REPRODUCE				
INPUT GAIN (500 OHM IMP)	FILTERS		MAN / IFP	FILTERS		TRIP SENSE	INITIAL GAIN	MODE
	LO/SLOPE	HI		LO	HI			
20	out	64	IFP	out	64		S	AGC

DECK NO.	REEL NO.	CONSTANTS			FILE NO.		SP NO.		TIME	
		DAY NO.	LINE NO.	DIR. DEG.	FROM	TO	FROM	TO	START	FINISH
2	141	320	GMT 7	127°	002	115	002	115	16:53	1846
1	142	320	GMT-7	100°	116	174	116	174	1847	1945
[redacted]		EOL GMT-7 @ 1945 Z			JD 320					[redacted]

U.S. GEOLOGICAL SURVEY

DFS V LOG JD 321

VESSEL R/V GYRE CRUISE NO. 83-14 DATE 11-17-83

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

OFFSET ~~255~~ 255 m PRIME NAVIGATION Wins - Loran C

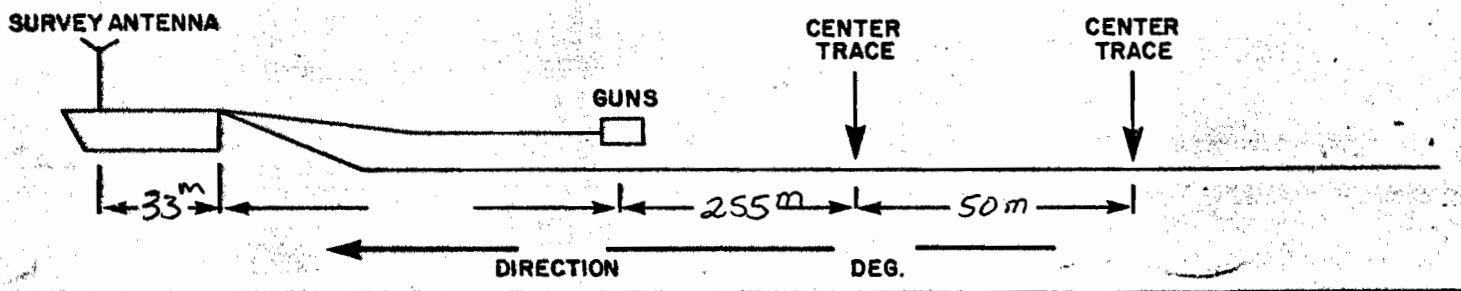
LINE NO GMT9 ESP4 (PRESHOOT) DIR. ____ DEG. CABLE TYPE 24 CHAN.

LOCATION Offshore Texas TRACE INT. 50

SAMPLE RATE 4 MS. BPI 1600 SEG B FORMAT V

RECORD LENGTH 12 Secs. EXTENDED HEADER START WORD ____

SOUND SOURCE 2000 Airgun cu. in. @ ____ psi @ ____ 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
2^6	Out	64	IFP	Out	64	+	5	AGC

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	143	321	GMT9 ESP4 (PRESHOOT)	61	7	95	7	95	324 0632	0709
2	144	321	GMT 9A	49	1	187	1	187	0940	1054
1	145	321	GMT 9A	52	188	372	188	~~372~~ 372	1054	1217:20
2	146	321	GMT 9A	50	373	500	373	500	1217:40	1319
1	147									

U.S. GEOLOGICAL SURVEY

DFS V LOG

VESSEL Gyre CRUISE NO. 83-14 DATE JD 321 11-17-83

SHOT INTERVAL (DISTANCE) _____ m OR TIME 60 sec.

OFFSET 255 m m PRIME NAVIGATION WINS - Loran C

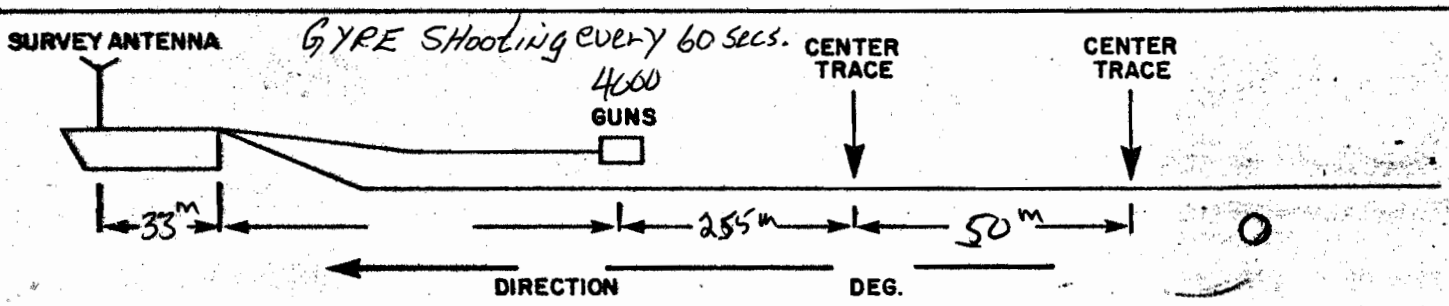
LINE NO. ESP - 4 DIR. _____ DEG. CABLE TYPE 24 ch

LOCATION _____ TRACE INT. 50 m

SAMPLE RATE 4 MS. BPI 1600 SEG B FORMAT ✓

RECORD LENGTH 12 sec EXTENDED HEADER START WORD _____

SOUND SOURCE 4000 cu. in. @ _____ psi @ _____ depth (m)



RECORD				REPRODUCE				
INPUT GAIN (500 OHM IMP)	FILTERS		MAN / IFP	FILTERS		TRIP SENSE	INITIAL GAIN	MODE
	LO/SLOPE	HI		LO	HI			
28	OUT	64	IFP	OUT	64	✓	5	AGC

DECK NO.	REEL NO.	CONSTANTS			FILE NO.		SP NO.		TIME	
		DAY NO.	LINE NO.	DIR. DEG.	FROM	TO	FROM	TO	START	FINISH
1	147	321	ESP-4	46	1	184	1	184	1334	16:37
2	148	321	ESP-4	36°	185	349	185	349	16:37	1922

OBSERVER'S MARINE REPORT

VESSEL RV/GYRE DATE 11-16-83 JD-320 # 1

Client USGS & TAMM Type Instrument DFS V Offset distance VARIED. EVERY SHOT

Area Offshore Texas OCS Record filter out-64 Group Interval [redacted] 50m

State Texas Sample rate 4ms Fold coverage 4

Observer Wise/Wells gun depth ON Moore Jn.³ of guns 2000 x 2

Pre-plot	Shotpoint	File No.	Time	#1 dir.	Cable Depth	W.D.	Reel No.	Line No.	Remarks
1	001	001	04:30	258°	12.8-11.4-11.6-11.2	1324	132	GMT5ES#3	Each Shot has A different
	020	020	05:00	271°	12.6-11.2-11.4-11.2	1335			offset
									[redacted]
									TRACES 1, 12, 15, 17, 19 BAD
									TB 165° Port
	80	80	0600	275	9.8/10.8/10.8/11.2	1410	133	GMT-5	chg watch to owen/zihlman TB=165°
	110	110	0630	279	9/10.6/10.4/11.8	[redacted] 1442	133	GMT-5	seas rough over 10' TB=165°
	117	117	0637	281			133/134	GMT-5	chg Tape (Parity error File 115)
	120			(File 117 to 120 Lost Data Lock)					Parity Error
LE	(Lost 117	to 120) Had to		switch back to			Transport #2		Data Lock on Transport #1
	131	131					134	GMT 5	Resync. SP & File File 130 void
	140	140	0700	279	9/10.4/10.8/11.8	1543	134	GMT-5	(Traces 1, 12, 15, 17, 19 off) TB=165°
	170	170	0730	279	8.6/10.8/10.6/11.8	1521	134	GMT 5	seas rough over 10' TB=165°
	180	180	0740	280			134/135	GMT 5	chg Tape
	200	200	0800	281	9.2/10.8/10.4/11.4	1488	135	GMT 5	TB=165°
	230	230	0830	281	9.2/10.6/11.6/11.4	1497	135	GMT 5	TB=170°
	238	238	0838	281			135/136	GMT 5	chg Tape
	260	260	0900	279	9.4/10.4/10.8/11.2	1489	136	GMT 5	TB=175°
	290	290	0930	293	10.6/10.8/10.8/11.2	1481	136	GMT 5	TB=175°
	296	296	0936	296			136/137	GMT 5	chg Tape
	309 [redacted]	309	0949	292	Aprox. Midpoint		137	GMT 5	.86 miles abeam Moore
	320	320	1000	293	9.2/10.8/10.8/11	1481	137	GMT 5	ON Line GMT-5 TB=170°
									chg watch @ 1000 to Jim & Allen
	341	341	1021	293	10/11.2/11.2/10.6		137	GMT-5	END OF ESP

OBSERVER'S MARINE REPORT

OD 320 # 1

CONSTANT OFFSET PROFILE VESSEL RV/GYRE DATE 11-16-83

Client USGS & TAMU Type Instrument DFS V Offset distance ≈ 17,100.

Area Texas offshore Record filter OUT-64 Group interval 50 m

State Texas Sample rate 4 mil Fold coverage 4

Observer COOPER / WISE gun depth . In.³ of guns On Moore: 4000 cu in

Pre-plot	Shotpoint	File No.	Time	#1 dir.	Cable Depth	W.D.	Reel No.	Line No.	Remarks	Meters: Distance
	—	1	~~0930~~	120					START RECORDING	16890
	1	3							FIRST TWO FILES HAVE SP = -1	
	5	7	1136		8.4/11.2/11.8/10.8	1480	138	GMT-6	TB=180°	17041
	10	12								17154
	19	21								17225
	29	31	1200	120	9/11/11.6/10.8	1480	138	GMT-6		17376
	49	57								17537
	59	61	~~1300~~ 1230	117	8.4/11.2/11.4/11.4	1490	138	GMT-6		17566
	71	73	~~1312~~ 1242						ADD 5 SEC DELAY TO START	
	72	74	~~1313~~ 1243				add 10 sec and		CHANGE RECORD LENGTH TO 15 SEC.	
	73	75	~~1314~~						SCREW UP WITH FIRING PROGRAM	
	77	79	~~1318~~ 1248				138		ON FILES 74-79	
			RECORDING OFF TO RESTART SYSTEM AND						MAKE STREAMER ADJUSTMENT Brought in ~~20 FT.~~	
									BACK TO 20 SEC RECORD LENGTH	
	78	80	1306	114	8.4/10.8/11.4/11.0		138	GMT-6	Back on line	17550
	91	93	1319				138			17496
	93	95	1321		"				KILL TRACES 1, 12, 15, 17, 19	
	102	104	1330	121	8.6/11.2/11.8/11.2	1495	138	GMT-6	TB=190	17472
	114/115	116/117	1342/1343				138/139		CHANGE TAPE	17488
	135	137	1403	123°	8.4/10.8/11.4/10.8	1494	139	GMT-6		17480
	162	164	14:30	123°	8.4-11.2-11.6-10.8	1533	139		MOVING OUT TO A 20KM OFFSET	17404
	194	196	15:00	122°	8.8-11.2-11.8-11.0	1526	139			17515
2	252	254	16:00	126°	10.0-10.2-10.6-11.0	1331	140		MOORE HAS ONE GUN OUT	18781
2	282	284	16:30	129°	10.2-11.6-11.6-10.2	1265	140			
									FILE 089 IS EOL GMT 6	

OBSERVER'S MARINE REPORT

1

VESSEL *GYRE 83-14* DATE *11-16-83*

Client *USGS & TAMU* Type instrument *DFS V* Offset distance *2000 KM*

Area *Offshore Texas OCS* Record filter *out-64* Group interval *50 M*

State *TX.* Sample rate *4ms* Fold coverage *4*

Observer *WISE/Wells* gun depth _____ In.³ of guns *4000 CI Moore*

Pre-plot	Shotpoint	File No.	Time	#1 dir.	Cable Depth	W.D.	Reel No.	Line No.	Remarks
2	002	002	16:53	127°	9.8-10.8-10.8-10.4	1315	141	GMT 7	offset 21.4 KM one gun shooting
2	039	039	17:30	120°	8.4-11.2-11.6-10.8	1327	141		offset 22.5 KM
	69	69	1800	121	8.4/11.2/11.8/11	1175	141	GMT-7	on watch Owen/Zihlman 23 KM TB = 180°
			1809	(Traces 1, 12, 15, 17, 19 are still off)					chg course to 090
	[redacted]99	[redacted]99	1830	101	8.8/11.2/11.6/11	1209	141	GMT-7	Moore Range 22999 m TB = 190°
	116	116	1847	100	———		141/142	GMT-7	Chg. Type
			(SP 120 ~ 127 Data Lock)				142		120 lost 127 128 Resync.
	131	131	1903	94	9.8/10.8/10.8/10.4		142	GMT-7	Rng 22860 TB = 190°
	159	159	1930	101	9.4/10.8/10.8/10.4		142	GMT-7	Rng 22754 TB = 195°
	174	174	1945	100	———		142	GMT-7	EOL GMT-7 EOL GMT-7

OBSERVER'S MARINE REPORT

VESSEL Gyre 83-14 DATE JD 321 11-17-83 # 1 of 1

Client	USGS / Mattick	Type Instrument	DFS V	Offset distance	255.
Area	OCS	Record filter	out 64	Group Interval	50
State	Tx	Sample rate	4 ms	Fold coverage	12
Observer		gun depth	30-35-~~50~~ ft	In.³ of guns	2000

Pre-plot	Shotpoint	File No.	Time	#1 dir.	Cable Depth	W.D.	Reel No.	Line No.	Remarks
	1-6	1-6							data Lock up Lost 1-6
	7	7	0632	61	18/11.6/9.6/9.4	1619	143	GMT-9	
	72	72	0700	51	14.6/11.8/10.8/10.8	1533	143	GMT-9	
	95	95	0709	53	12.8/11.4/10.8/11	1523	143	GMT-9	EOL GMT-9
			START		COP				
	1	1	0940	49	11.6/11.4/11/11.2	1490	144	GMT-9A	SOL GMT-9A range ≈ TB = 170°
	53	53	1000	57	14.0/11.8/11.4/10.8	1485	144	GMT-9A	TB = 180°
	~~53~~ 87	~~53~~ 87	1013						LAST shot Before NAV pulse lost
	88	88	1015:20						& screwup a few shots
	89	89	1017:00						range 11656
	123	123	1030:00	52	11/11/11/10.8	1396	144	GMT-9A	12400
	187/188	187/188	1054/1054				144/145		13860
	200	200	1100	49	16/11/10/10.4	1416	145	GMT-9A	
	271	271	1130	46	15.2/11.2/10.2/10.8	1470	145	GMT-9A	TB=180° 16630
	336	336	1200	50	17.6/11.0/8.2/8.8	1400	145	GMT-9A	TB=180° 19330
	372/373	372/373	1217				145/146		
	402	402	~~1234~~ 1231	46	17.8/11.2/8.0/9.8	1400	146	GMT-9A	TB=180° 20390
	411	411	1236					~~GMT~~	~~GYRE~~ MOORE Breaking off line to Turn onto ES
	461	461	1300	48	18.6/10.4/7.6/9.2	1380	146	GMT-9A	18880
	500	500	1319		10.8/10.8/10.8/11.2	1390	146	GMT-9A	EOL 9A

OBSERVER'S MARINE REPORT

5D321 # 1 of 1

VESSEL GYRE 83-14 DATE 11-17-83

Client USGS + Texaco/Gulf Type instrument DFS V Offset distance 255

Area Texas Record filter out 64 Group interval 50

State Texas Sample rate 4 ms Fold coverage ≈ 4

Observer Wise/Wells gun depth 30-35 ~~40~~ ft In.³ of guns 4000 in³

Pre-plot	Shotpoint	File No.	Time	#1 dir.	Cable Depth	W.D.m	Reel No.	Line No.	Remarks
	1	1	1334	46	8.6/10.8/11.4/11.2	1390	147	ESP-4	~~SOL~~ Begin recording
	7	7	1340	~~TB~~ 9		1363			SOL ESP-4 ~~TB=~~ TB=190
	29	29	14:00	16°	7.6-11.2-12.0-11.2	1363	147		
	86	86	15:00	38°	10.6-11.2-11.6-12.0	1348	147		780m closest offset midpoint
	118	118	15:30	31°	10.0-11.6-11.6-10.8	1493	147		ESP4 TB 185°
	147	147	16:00	35°	9.8-11.2-11.4-10.8	1351	147		TB 185° 17454 feet
	179	179	16:30	36°	8.8-11.4-11.6-11.2	1308	147		
	207	207	17:00	33°	8.8-11.2-11.6-11.2	1280	148		TB 180°
	236	236	17:30	30°	8.4-11.2-11.6-11.2	1256	148		TB 180°
	266	266	18:00	32°	8.8-11.0-11.2-11.2	1228	148		TB 179°
	297	297	1830	32	8.8/11.2/11.6/11.2	1283	148	ESP-4	Watch chg @ 1800 owen/zihlman TB = 180°
	327	327	1900	31	8.6/11.2/11.4/11	1328	148	ESP-4	TB = 1800
	349	349	1922	29	8.4/10.8/11.2/11	1278	148	ESP-4	EOL ESP-4