87001sei

STARELLA STRL 87-1

GEOPHYSICS LOG

JANUARY 8 - 18, 1987

CAYMAN TROUGH DILLON/EDGAR

U.S. GEOLOGICAL SURVEY
OFFICE OF MARINE GEOLOGY

Woods Hole, Massachusetts
02543

104448

U.S.G.S.
GEOPHYSICS
LOG

SHIP R/V STARELLA

CRUISE NO. Cayman Trough - Jan '87

DATE 8 - 18 Jan 1987

CHIEF SCIENTIST Dillon / Edgar

SHIP/CRUISE NO./LEG Starella-87 EAST Cayman Trough

CHIEF SCIENTIST Dillon

LINE START / END	TIME Zulu	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
~~Select~~		[redacted]				
Line 2	2008	87Jan08 008	34.2	6.4	1831.905 76 10.619	Start recording seismic
						on Line 2
Line 2	2042:00	87Jan08 008	30.1	5.3		120 in^3 airgun
2	2100	87Jan08 008	30.9	5.5	1835.4 76 08.3	120 in^3 airgun
2	2101	"				
	2154					
	2200					
	2230					
Line 3	0100Z	JD009	110°T	6	o/c line 3 @ 0100	"
	0300					Lost pressure - working on it
						500 lb
	0334					Pressure up
~	0340					lost signal - pressure
	~~0344~~					ok.
	0345					problem
	~~0525~~					
	0530					
	0543					
	0546					
3	0600:24	87 Jan, 9 JD009	109.5	6.0	o/c line 3	120 in^3
3	0700		111	5.8	o/c line 3	120 in^3
	0733					
	0758					
3	0830	87 Jan, 9 JD009	110	5.8	o/c line 3	
	≈0845					
	~0845					
	0900		112	5.8	o/c line 3	
	0942					

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL# START / END	MAGNETICS	COMMENTS (all taped seis data is filtered)
1sec		31-300	1	Ø1	none	120 in^3 airgun
1sec		31-300		Ø1	none	
1sec		31-300		Ø1	none	tape count = 0440
						delay changed to 3.5 sec
2sec						change sweep to 2 sec.
						change delay to 3 sec
		25-300				change filter — VE 28:1
						c/c start line 3 (c/c @ 0100)
			EOT 1			EOT 1 tape OFF at tape count 2537
			SOT 2			SOT 2
						changed delay to 2 sec.
						seismic record disappeared momentarily
2sec		25-300	2	Ø1		routine
2sec		25-300	2	Ø1		routine
						delay change to 1.5 sec
						TAPE recording off - Tape got all
						tangled up ⇒ HARD COPY
						seismic record only until
						morning.
2sec		25-300		Ø1		beginning of
						TAPE #2 is destroyed
						loose connection on wires
						delay change to 2.0 sec
2sec		25-300				
						end line c/c

SHIP/CRUISE NO./LEG Starella, Cayman Trough

CHIEF SCIENTIST Dillon Jan 1987

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
~~4~~		JD 009				
4	0942	86/1/9	197°	6		120 in^3 airgun
	0950					
≈	1005					
					~~no seis = compressor down~~	
5	1102	7 86/1/9	287°	6	JD009	120 in^3, fire 8 sec, swp 25 sec delay 1.5 sec
	1230					
	1258					DELAY 1.5 SECS.
	1538					Delay 1.0 sec
5	1730					Delay 1.5 sec
	1808					Delay 2.0 sec
	1816					Delay 2.5 sec
	1832					delay 3.0 sec
	~~2036~~					
	~~2046~~					
	2038					
5	2046				o/c lines	
	2131					
	2207					
	2239					
	0038					
	~~23~~18	87/Jan/10				delay 4.0 sec
	~~23~~40					
	0330					
	0357					
	0425					
	0443					
	0435				19 06.4 76 45.9	
6	0438				19 6.5 76 46.2	o/c line 6
6	0540				o/c line 6	delay 5.0 sec
	0600					delay 4.0 sec

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL# START / END	MAGNETICS	COMMENTS
2s		25-300	2			S/O start line 4
						S/O
						shut down gun, check compressor
2 S		25-300				on course line 5
						change delay to 2.0 sec
						CHANGE DELAY from 2.0 to 1.5
2S		25-300				Change delay from 1.0 to 1.5
						Change delay from 1.5 to 2.0
			~~EOT2~~			~~EOT 2 — Change tape~~
			~~SOT3~~			~~START TAPE #3~~
			EOT2			END OF TAPE #2
2S		25-300	SOT3			START OF TAPE #3
					42551	
						delay 3.5sec
						delay 4.0 sec
						" 4.5 "
						delay 4.0 sec
						delay 3.5 sec
						delay 3.0 sec
						delay 2.5 sec
						delay 3.5 sec
						delay 2 sec / 4 sec sweep
						EOL 5
						SOL 6 SEISMIC NOT
						RECORDING — TOO DEEP
						TO RECORD
2 ~~62~~ S						Begin Recording Line 6
						Change delay from 5.0 sec to 4.0 sec

SHIP/CRUISE NO./LEG Starella Cayman Trough

CHIEF SCIENTIST Dillon Jan 1987

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
6	0603				o/c line 6	5 sec delay
	0636				o/c line 6	Shut down system for maintainence (Stopped tape recording)
6	0823	010 Jan, 10 1987			19 6.55 77 8.37	c/c turning for line 7
7	0835				19 6.49 77 9.66	o/c Line 7
	0843					System back on
	0847					Changed delay to 5.0 sec
	0930					
	~~0930~~ 1030					
	1102					
	1143					
	1144					
	1237					
	1341					Streamer decommed
	1348					streamer connected
	1351					
	1544					
	1551					
	1605					
	1730					
	1818					
	1922					
	1923					
	1932					
	1934					
	1949					
	2145					
	0025	JD 011				
	0053					
	0113					

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL# START / END	MAGNETICS	COMMENTS
2sec						change back to 5sec delay
						Losing seismic record again
						Back into very deep water
					tape recording	System shut off
					working on	compressor
						EOL 6 Turn off of Line 6
						SOL 7 on course for line 7
						but still working on compressor
2sec						compressor turned back on - begin
						tape recording
						delay 4.5 sec
						various delays to find bottom
						delay 4.5 sec
			EOT3			end tape #3
			SOT4			start ~~tape~~ #4
						fire 8 sec (10 sec above)
						delay 4.0 sec
						delay 3.5 sec.
						delay 3.0 sec
						delay 3.5
						delay 4.0 sec
						delay 3.5 sec
						delay 3.0 sec
						testing other cable - no record
						delay 2.0 sec
						delay 2.5 sec
						delay 3.0 sec
						" 2.5 "
						disconnect streamer for check
						restart line (still line #7)
						delay 1 sec

SHIP/CRUISE NO./LEG Starella Ceeyman Trough East

CHIEF SCIENTIST Dillon

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
7	0400	870110				
	0431					
	0515					
	0600					
	0830					
	0904					
	no line 8 - gun & compressor maintenance					
9	1111	87 JDOII	288	6		120 in³ airgun
	1122					
	1137					
	1153					
	1231				~1410	TAPE #5 - END
	1439					TAPE #6 - START
	1600					
	1719					
	1830					
	1836					
	1924					
	1955					
	2008					
	2030					
	2045					
	2112					
	0141	87/JAN/12				
	0146					
	0209					
	0223					End Tape #6.
	0226					Start tape #2
	0351					
	0511					
	0530					
	0544					
	0655					

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL# START / END	MAGNETICS	COMMENTS
						delay 1.3 sec
						delay 2.0 sec
						delay 1.5 sec
						delay 1.0 sec
						delay 0.8 sec
						end line 7
gun depth		increased			— tape	shut down
2	delay 2	25-300	5			G/C
						O/C line 9
						delay 2.5
						delay 2.0
						delay 1.0
						delay 1.5 sec
						delay 1.3 sec
						delay 1.0 sec
						delay 0.5 sec
						delay 0.0 sec
						delay 0.5 sec
						delay 1.0 sec
						delay 1.5 sec
						delay 2.0 sec
						1. 3.0 "
						delay 2.0 sec
						delay 3.0 sec.
						delay 3.5 sec
						delay 4.0 sec
						delay 4.5 sec
						maggie in the water
						change firing rate to 10 seconds
						delay 3.5 sec

SHIP/CRUISE NO./LEG Stavella Cayman Trough East

CHIEF SCIENTIST Dillon

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
9	0718					
	0731					
	0754					
	0800					
	0808					
	0924					
	0955					
	1151					
	1225					
	1240					
	1305					
	1446					end line 9
9A	1450			6		start Line 9a
	1525					~~9B~~ end line 9a
	1530					start line 9A
	1724					
	1727.10					
	~~9~~ 1734					
	~~1800~~					
	~~1803~~					
	1800					
	1803					
	1820					
	1846					
	2049					
	2113	JD012				
9B	2305	JD012	225°	5		120 in³ gun
	0433	JD013				End line 9B
9C	0438					~~start~~ line 9C
	0452					seis ~~started up~~
	0501					delay 5.5 sec
	0535					delay 5.0 sec
	0547					delay 5.5 sec

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL# START / END	MAGNETICS	COMMENTS
						delay 4.0sec
						delay 3.5sec
						delay 4.0sec
						delay 4.5sec
						delay 5.0sec
						tape ~~break~~ -restarted
						delay 5.5
						~~delay 5.5~~
						delay 6.5 - fire 10 sec
			EOT 7			end tape # 7
						delay 6.0
						Problem with tape recorder recorder off
						recorder back on
						at tape count 1434 Changed
	tape speed from	15/16 to 3 3/4.				
	tape count 1482	~~back to~~ 15/16				TAPE recorder off at count 1485
	Having trouble recording signal -				trouble	delay 5.5
	with batty also.					delay 6.0
						~~8~~ delay 4 sec
						delay 5.0sec
						delay 4.5 sec
						E/C end of line A
2		25-300				

SHIP/CRUISE NO./LEG Stavella Cayman Trough - East

CHIEF SCIENTIST Dillon

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
9C	0752					
	0823					
	0908					
9D	0916	1987, JD013	170°	5		120 in³ gun
	0925					
	1007					
9E	1015	"	"	"		"
9E	1751				lat = 18° 49.5' lon = 77° 45.8'	
10	1755			5.8	lat = 18° 49.4' lon = 77° 46.0'	120 in³ gun
	1759					
	1811					
	1833					4 sec sweep, 12.0 delay
	1841					3 sec delay
	1848					5 sec delay, 4 sec sweep
	1923					4 sec delay
10	2033					
11	2036			6	lat = 18° 38' lon = 77° 55'	o/c line 11
12	2109					c/c to line 12
	2120					o/c line 12
	2135					delay 5 sec
	2209					
13	2215					
13	0322					End line 13; s[redacted]
14	0330				18°38 78°36	start line 14
	0901					
	1128					
15	1134	1987 JD014	317°	6		120 in³ airgun
	1700					
	1823					
	1900					
	2108					
	2124					
	2136					

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL# START / END	MAGNETICS	COMMENTS
						delay 6.0 sec
						delay 5.5 sec
						c/c end line
2		20-300 Hz				s/o line
						delay 6.0
						c/c end line
"		"				s/o line
						EOL 9E
						SOL 10
8		20-300		ϕ1		delay 8 sec sweep
						2 sec. delay
4						
						EOL 10
4				ϕ1		SOL 11
						c/c EOL 12
						s/o SOL 13
						delay 4.0 sec
						c/c
4	4 sec swp 4 sec delay	20-300 Hz				start line 15
						recorder off - airgun maintenance
						recorder on
						delay 4.5 sec
						" 6.0 "
						delay 7
						delay 7, fire 1 sec

SHIP/CRUISE NO./LEG Starella, Cayman Trough

CHIEF SCIENTIST Dillon 1987, Jan

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
15	0006					
16	0012	1987 JD015		6		120 in^3 gun
	0335					delay 6 sec
	0347					delay 5 sec
	0400					delay 4 sec
	0411					delay 3 sec
16	0452					
17	0456					
	"					8 sec Sweep; 170 delay
	"					fire time 10 sec
	0600					fire time 11 sec delay 10 sec
	0621					3.0 sec delay
	0841					10 sec firing rate
	0848					11 sec firing rate
	1029					
	1030					
18	1036					
19	1829				19 10.7 81 7.7	
20	1835				19 10.6 81 8.1	
	2152					
21	2158					
	0136	870116				delay 1 sec
	0142					0 delay
	0156					compressor maintenance
22	0500					3 sec delay
	0650				CK end line 22	
23	0656					
	1101					
	1143					
	1217					
24	1223	1987, JD016	171°T	6		120 in^3 gun
25	1651					
	2114					

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL# START / END	MAGNETICS	COMMENTS
						c/c EOL
[redacted]		20-300 Hz				S/O start line
						c/c EOL 16
						S/O SOL 17
						delay 2 sec
						c/c
						S/O
						EOL 19 c/c
						SOL 20
						c/c end line
						S/O
						EOL 22
						SOL 23
						delay 2 sec
						Fire 10 sec
						c/c end line
8	delay 2 Fire 10	20-300 Hz				S/O
						SOL 25
						c/c end line

SHIP/CRUISE NO./LEG Cayman Trough, Starella

CHIEF SCIENTIST Dillon/Edgar Jan 1987

LINE START / END	TIME	YYMMDD	CRS/HDG	SPD	NAVIGATION	SEISMIC SYSTEM
26	2120	1987, JD06	253°T	6		120 in³ airgun
	2145					
	0012	JD017				
27	0020		141°T	"		"
27	0641					
~~28~~	~~0825~~					
28	0825					
	1214					
29	1217	"	134°T	"		"
	2056					1 sec delay
	2251					
30	2258	"	022°T	"		"
	~~0116~~					
	2335					4 sec sweep; 2 sec delay
	0116	870118				4 sec delay
30	0600					
31	0603					2 sec delay
	0741					
	1219	end	line			

AREA

TIME ZONE

SWP	PROGRAM / SCALE	FILTER HI/LO	TAPE NO. START / END	DATA ROLL # START / END	MAGNETICS	COMMENTS
8	delay 2 fire 10	20-300 Hz				s/o ~~start line~~
						start record – previous did not print
						c/c end line
"	"	"				s/o
						EOC 27 Shut down
						compressor for maintenance.
						SOC 28 compressor back on
						c/c end line
"	"	"				s/o new line
						c/c end line
"	delay 1 s fire 10 s	"				s/o new line
						EOC 30
						SOC 31

15 3/45