

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 2

PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	START	END	TOTAL
DATE(JD/DATE)	<u>9/9 Jan</u>	<u>9/9 Jan</u>	
TIME(Z)	<u>1428 Z</u>	<u>1818 Z</u>	<u>3:50</u>
LATITUDE	<u>44° 38.603'</u>	<u>44° 25'</u>	LINE LENGTH
LONGITUDE	<u>172° 43.265'</u>	<u>172° 25'</u>	<u>34 425 m</u>
SHOTPOINT	<u>1</u>	<u>2755</u>	<u>2755</u>
FILE #	<u>1</u>	<u>2755</u>	<u>2755</u>
TAPE #	<u>1</u>	<u>5</u>	<u>5</u>
WATER DEPTH	<u>417 m</u>	<u>88.5 m</u>	

REC LENGTH (S) 3.042 SAMP INT (MSEC) 1 # CHANNELS 96

SEIS CHANS 96 AUX CHANS none PROBLEM CHANS 19, intermittent

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1213.75 CHAN SEP (M) 12.5

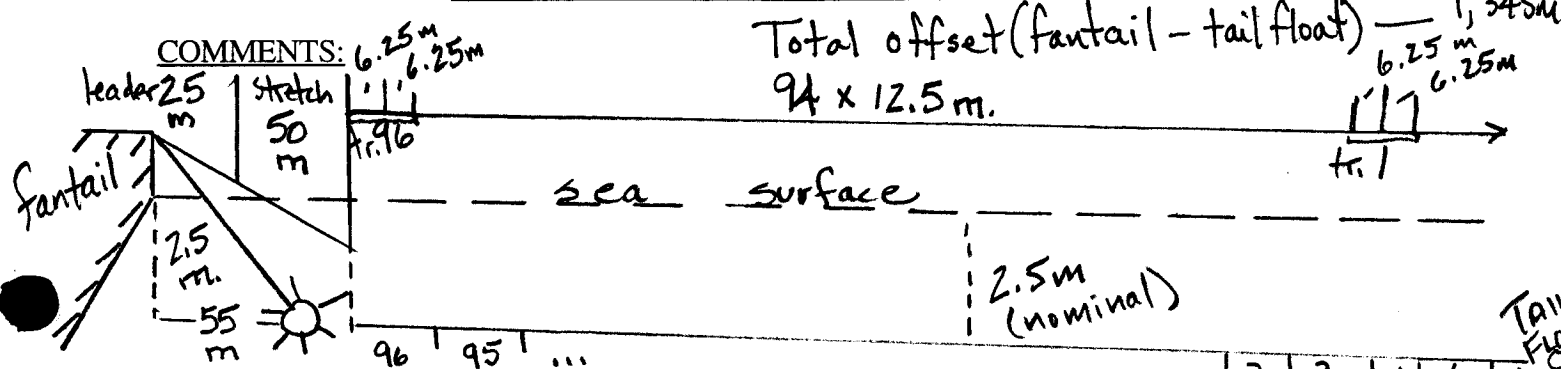
COURSE 314° (see diagram below) SPEED (KTS) 4.4 kts. (see diagram below) (@ SOL, ref. logs for updates)

SHOT ON (TIME / DIST) REP RATE (S) 5 (M)

SOURCE INFO 2 G.I guns, 45/45 configuration

NAV SYSTEM INFO DGPS

COMMENTS:



Fantail to mid-point, trace 96 = 81.25 m.

Source / mid-point near-trace offset = 81.25 - 55 = 26.25 m

Far offset = 26.25 + 6.25 + 11.75 (94 x 12.5) + 6.25 = 1213.75 m.

2/50m isolation section cable

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 4
PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>9/9 Jan.</u>	<u>9/9 Jan.</u>	
TIME(Z)	<u>1859 Z</u>	<u>2239 Z</u>	<u>3=40</u>
LATITUDE	<u>44° 26.792'</u>	<u>44° 39.779'</u>	
LONGITUDE	<u>172° 25.066'</u>	<u>172° 41.827'</u>	LINE LENGTH <u>33012.5 M</u>
SHOTPOINT	<u>3248</u>	<u>5889</u>	<u>2642</u>
FILE #	<u>1</u>	<u>2642</u>	<u>2642</u>
TAPE #	<u>6</u>	<u>10</u>	<u>5</u>
WATER DEPTH	<u>101 m</u>	<u>448.4</u>	

REC LENGTH (S) 3.042 SAMP INT (MSEC) 1 # CHANNELS 96
SEIS CHANS 96 AUX CHANS — PROBLEM CHANS 1, 19
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1213.75 CHAN SEP (M) 12.5m
COURSE 142° SPEED (KTS) 4.3 (SMG)
(CMG)
SHOT ON (TIME/DIST) REP RATE (S) 5 (M) —
SOURCE INFO Z.G.I. guns, 45/45 configuration
NAV SYSTEM INFO DGPSCOMMENTS: Some high-frequency noise on
channels 1+19.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 6PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>009/9 Jan.</u>	<u>010/10 Jan.</u>	
TIME(Z)	<u>2319 Z</u>	<u>0422 Z</u>	<u>5:03</u>
LATITUDE	<u>44° 40.271'</u>	<u>44° 22 522'</u>	
LONGITUDE	<u>172° 39.277'</u>	<u>172° 16.30'</u>	LINE LENGTH 45,000 m 45,400 m
SHOTPOINT	<u>6376</u>	<u>10008</u>	<u>3633</u>
FILE #	<u>1</u>	<u>3631</u>	<u>3631</u>
TAPE #	<u>011</u>	<u>016</u>	<u>6</u>
WATER DEPTH	<u>436 m</u>	<u>73.1</u>	

REC LENGTH (S) 3.042 SAMP INT (MSEC) 1 # CHANNELS 96
SEIS CHANS 96 AUX CHANS PROBLEM CHANS 19, 1 (occasionally)
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1213.75 CHAN SEP (M)
COURSE 311° SPEED (KTS) 4.8 kts
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 G.I. guns, 45/45 configuration
NAV SYSTEM INFO DGPS

COMMENTS:

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 8
PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>010/10 JAN</u>	<u>010/10 JAN</u>	
TIME(Z)	<u>0505Z</u>	<u>10:02Z</u>	<u>4:57</u>
LATITUDE	<u>44° 24.448'</u>	<u>44° 42.246'</u>	Line Length =
LONGITUDE	<u>172° 15.905'</u>	<u>172° 38.891'</u>	<u>44.2362.5 (m?)</u>
SHOTPOINT	<u>10521</u>	<u>14062</u>	<u>3542</u>
FILE #	<u>1</u>	<u>3547</u>	<u>3547</u>
TAPE #	<u>17</u>	<u>22</u>	<u>6</u>
WATER DEPTH	<u>77.7</u>	<u>488.6</u>	

REC LENGTH (S) 3.042 SAMP INT (MSEC) 1 # CHANNELS 96
SEIS CHANS 96 AUX CHANS PROBLEM CHANS 1, 19, 67
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1213.75 CHAN SEP (M)
COURSE 140.7° SPEED (KTS) 5.1 kts.
SHOT ON (TIME / DIST) REP RATE (S) 5 (M)
SOURCE INFO 2 G.I. guns, 45/45 configuration
NAV SYSTEM INFO DGPSCOMMENTS:see p. 11 of the Chief Scientist's log
for some information about file#/shot# discrepancies.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 23

PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>010/10 January</u>	<u>010/10 JANUARY</u>	
TIME(Z)	<u>1203Z</u>	<u>2245Z</u>	<u>10:42</u>
LATITUDE	<u>44° 35.011'</u>	<u>45° 07.907</u>	<u>LINE LENGTH</u> <u>96287.5m</u>
LONGITUDE	<u>172° 41.474'</u>	<u>171 54.18</u>	
SHOTPOINT	<u>15538</u>	<u>23241</u>	<u>7704</u>
FILE #	<u>1</u>	<u>7703</u>	<u>7703</u>
TAPE #	<u>23</u>	<u>35</u>	<u>13</u>
WATER DEPTH	<u>277.8</u>	<u>1168.3</u>	

REC LENGTH (S) 3.042 SAMP INT (MSEC) 1 # CHANNELS 96

SEIS CHANS 96 AUX CHANS — PROBLEM CHANS 1, 19, 67, 91

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1213.75 CHAN SEP (M)

COURSE 223° SPEED (KTS) 4.6 Kts.

SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 G.I. guns, 45/45 configuration

NAV SYSTEM INFO DGPS
CHANNELS 67, 91 - INTERMITTANT HIGH FREQ NOISE

COMMENTS:

1422Z - PORT SIDE GUN OFF-LINE FOR REPAIRS.

1517Z - Port gun back on-line

beginning ~ 1731Z noticed occasional MISFIRES on Starboard gun, and occasional double-peaked signatures from port gun.

2040Z - MISFIRES STILL BEING NOTED, ALSO RECORDED LISTED STARBOARD GUN MISFIRES ON REVERSE SIDE OF THIS SHEET (PORT GUN MISFIRE MAY ONLY BE A SOFTWARE PROBLEM)

- OVER -

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 82PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>010 / 11 Jan.</u>	<u>011 / 11 Jan.</u>	
TIME(Z)	<u>2350Z</u>	<u>0513Z</u>	<u>5:23</u>
LATITUDE	<u>45° 07.665'</u>	<u>44° 49.233</u>	
LONGITUDE	<u>171° 58.011'</u>	<u>171° 31.684</u>	<u>Line length 48,375m</u>
SHOTPOINT	<u>24028</u>	<u>27,898</u>	<u>3871</u>
FILE #	<u>1</u>	<u>3868 3868</u>	<u>3868</u>
TAPE #	<u>036</u>	<u>42</u>	<u>7</u>
WATER DEPTH	<u>118.6.3</u>	<u>56.8</u>	

REC LENGTH (S) 3.042 SAMP INT (MSEC) 1 # CHANNELS 96
SEIS CHANS 96 AUX CHANS — PROBLEM CHANS 19, 96 (but good signals)
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1213.75 CHAN SEP (M) 12.5
COURSE 315° SPEED (KTS) 4.9kts.
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 G.I. guns, 45/45 configuration
NAV SYSTEM INFO DGPS

COMMENTS:

MONITORING STARBOARD GUN FIRE WITH MEMORY SCOPE.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 80
PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>11 / Jan</u>	<u>11 JAN 2000</u>	
TIME(Z)	<u>0547 Z</u>	<u>1059 Z</u>	<u>5 HRS 12 MIN.</u>
LATITUDE	<u>44° 49.398</u>	<u>45° 07.0278</u>	LINE LENGTH 46846 m. 46850 m
LONGITUDE	<u>171° 33.904'</u>	<u>171° 59.178'</u>	
SHOTPOINT	<u>28301</u>	<u>32049</u>	<u>3748</u>
FILE #	<u>1</u>	<u>3748</u>	<u>3748</u>
TAPE #	<u>43</u>	<u>49</u>	<u>7</u>
WATER DEPTH	<u>65.0</u>	<u>1201</u>	
REC LENGTH (S)	<u>3.042</u>	SAMP INT (MSEC) <u>1</u>	# CHANNELS <u>96</u>
SEIS CHANS	<u>96</u>	AUX CHANS <u>—</u>	PROBLEM CHANS <u>19, 1 (Noisy, but signal OK)</u>
NEAR OFFSET (M)	<u>26.25</u>	FAR OFFSET (M)	<u>1213.75</u> CHAN SEP (M) <u>12.5</u>
COURSE	<u>134°</u>	SPEED (KTS)	<u>4.7 kts</u>
SHOT ON (<u>TIME</u> / DIST)		REP RATE (S)	<u>5</u> (M) <u>—</u>
SOURCE INFO	<u>2 G.I. Guns, 45/45 configuration</u>		
NAV SYSTEM INFO	<u>DGPS</u>		
<u>COMMENTS:</u>			

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 78
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>011 / 11 JAN.</u>	<u>011 / 11 JAN.</u>	
TIME(Z)	<u>1130 Z</u>	<u>1646</u>	<u>5:16</u>
LATITUDE	<u>45° 05.792' S</u>	<u>44° 47.879</u>	
LONGITUDE	<u>171° 59.843' E</u>	<u>171° 33.827</u>	<u>Line length</u> <u>4,387.5</u>
SHOTPOINT	<u>32421</u>	<u>36212</u>	<u>3792</u>
FILE #	<u>1</u>	<u>3791</u>	<u>3791</u>
TAPE #	<u>50</u>	<u>56</u>	<u>7</u>
WATER DEPTH	<u>1205.3</u>	<u>62.2</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 96
SEIS CHANS 96 AUX CHANS — PROBLEM CHANS 1, 19, 67, 91, 96
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1213.75 CHAN SEP (M) 12.5
COURSE 322° SPEED (KTS) 4.8 kts.
SHOT ON (TIME / DIST) REP RATE (S) 5 (M)
SOURCE INFO 2 G.I. guns / 45/45 configuration
NAV SYSTEM INFO DGPSCOMMENTS:

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 74
PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>11/11 Jan</u>	<u>11 JAN</u>	
TIME(Z)	<u>1725 Z</u>	<u>2231 Z</u>	<u>5:06</u>
LATITUDE	<u>44° 47.599'</u>	<u>45° 04.896'S</u>	
LONGITUDE	<u>171° 36.588'</u>	<u>172° 01.732 E.</u>	<u>45750 m.</u>
SHOTPOINT	<u>36682</u>	<u>40342</u>	<u>3661</u>
FILE #	<u>1</u>	<u>3660.</u>	<u>3660</u>
TAPE #	<u>57</u>	<u>63</u>	<u>7</u>
WATER DEPTH	<u>74.6 m</u>	<u>1209-3</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 96
SEIS CHANS 96 AUX CHANS — PROBLEM CHANS 19,67
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1213.75 CHAN SEP (M) 12.5
COURSE 135° SPEED (KTS) 4.8
SHOT ON (TIME / DIST) REP RATE (S) 5 (M)
SOURCE INFO 2 G.I. guns / 45/45 configuration
NAV SYSTEM INFO DGPS

COMMENTS:

(68)
B During transit to next line will extend streamer by 150m to reduce influence of multiples in near traces. ~~The extra traces far offset traces will be stacked and the near offset traces (where ability to distinguish between multiple and real data is impossible) will possibly be discarded during processing.~~

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 68
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>12/12 JAN.</u>	<u>12 JAN.</u>	
TIME(Z)	<u>0230 Z</u>	<u>0740 Z</u>	<u>5:10</u>
LATITUDE	<u>45°03.198'S</u>	<u>44°45.597</u>	
LONGITUDE	<u>172°02.788'E</u>	<u>171°37'48.1</u>	<u>LINE LENGTH + 46512.5m</u>
SHOTPOINT	<u>038</u>	<u>3759</u>	<u>3722</u>
FILE #	<u>1</u>	<u>3720</u>	<u>3720</u>
TAPE #	<u>64</u>	<u>71</u>	<u>8</u>
WATER DEPTH	<u>1177.3 m.</u>	<u>73.5</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 20*
SEIS CHANS 100* AUX CHANS — PROBLEM CHANS 1, 19, 31, 67, 91, 103
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 51 100 3.75* CHAN SEP (M) 12.5 m.
COURSE 3.15.1° SPEED (KTS) 4.8 kts.
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 G.I. GUNS — 45/45 CONFIGURATION
NAV SYSTEM INFO DGPS

COMMENTS: * → (SEE COMMENTS, profile 70, for additional information re: this line)
STREAMER MODIFICATIONS PRIOR TO THE
START OF THIS LINE, AS FOLLOWS:

- 300 m (2 sections) added ⇒ total of 24 traces ⇒ to the inboard end of the streamer. Will be traces 97-120, inclusive
- old isolation section (50m, lightweight) replaced by a new isolation section (50m, heavy duty)
- leader length / UNCHANGED. Total offset (see 1st line log) → 1345m + 300m = 1,645m.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 70
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>12 JAN /012</u>	<u>12 JAN /012</u>	
TIME(Z)	<u>0905Z</u>	<u>1410Z</u>	<u>5:05</u>
LATITUDE	<u>44° 47.022'S</u>	<u>45° 04.148'S</u>	
LONGITUDE	<u>171° 37.497'E</u>	<u>172° 02.423'E</u>	<u>Line length 45,737.5 m</u>
SHOTPOINT	<u>4779</u>	<u>8438</u>	<u>3659 3660</u>
FILE #	<u>1</u>	<u>3662</u>	<u>3662</u>
TAPE #	<u>72</u>	<u>79</u>	<u>8</u>
WATER DEPTH	<u>76.7m</u>	<u>1197.3</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 67, 91, 115
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 131.9 SPEED (KTS) 4.6 knts
SHOT ON (TIME) (DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI GUNS - 45/45
NAV SYSTEM INFO DGPS

COMMENTS:

- DURING TURN ONTO THIS LINE, STBD GUN + ~~BUOY~~ BUOY SANK. SHIP SLOWED & STRAIGHTENED SO GUN COULD BE PULLED OUT OF WATER. DAMAGE REPORT NEXT: BUOY ON GUN DEFLATED, GUN LOOKS OKAY. GUNNERS ARE REPLACING THE BUOY AND PLACING GUN BACK IN WATER. LOOK AT CHIEF SCIENTISTS LOG FOR MORE DETAILS.
- DUE TO GUN FLOAT MAINTENANCE, THIS LINE WILL START WITH A 3/4 MILE LEAD IN, STREAMER WILL BE STRAIGHT—
- BRIDGE WA INFORMED THAT LEAD-IN WILL ACTUALLY BE ~~0.8 NM~~ 0.8 NM

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 76PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>12 JAN. / 012</u>	<u>12 JAN / 012</u>	
TIME(Z)	<u>1450 Z</u>	<u>20.04</u>	<u>5:14</u>
LATITUDE	<u>45° 04.964' S</u>	<u>44 47.213' S</u>	
LONGITUDE	<u>172° 00.672' E</u>	<u>171 34.865</u>	<u>LINE LENGTH.</u> <u>47162.5m.</u>
SHOTPOINT	<u>8919</u>	<u>12692</u>	<u>3774</u>
FILE #	<u>1</u>	<u>3772</u>	<u>3772</u>
TAPE #	<u>80</u>	<u>87</u>	<u>8</u>
WATER DEPTH	<u>1191.3m.</u>	<u>64.9 m.</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120SEIS CHANS 120 AUX CHANS - PROBLEM CHANS 1, 19, 31, 67, 115NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5COURSE 305° SPEED (KTS) 4.6SHOT ON (TIME / DIST) REP RATE (S) 5 (M) SOURCE INFO 2 GI GUNS - 4/75 configurationNAV SYSTEM INFO DGPSCOMMENTS:

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 72
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>012/12 JAN</u>	<u>013/13 JAN</u>	
TIME(Z)	<u>2037Z</u>	<u>0152Z</u>	<u>5:15</u>
LATITUDE	<u>44° 47.078'S</u>	<u>45° 04.791'S</u>	<u>Length</u> <u>= 47,225 m</u>
LONGITUDE	<u>171° 36.757E</u>	<u>172° 02.448'E</u>	<u>3779</u>
SHOTPOINT	<u>13,084</u>	<u>16,862</u>	<u>3,778</u>
FILE #	<u>1</u>	<u>3778</u>	<u>3,778</u>
TAPE #	<u>88</u>	<u>95</u>	<u>8</u>
WATER DEPTH	<u>74.0 m.</u>	<u>1213.3 m.</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 67, 91, 115
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5m
COURSE 137.4 SPEED (KTS) 4.4
SHOT ON (TIME) DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI GUNS - 45/45 CONFIGURATION
NAV SYSTEM INFO DGPS.COMMENTS: LINE BEGUN ~ 3 MINUTES BEFORE SHIP HAS
CROSSED WAYPOINT.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 66
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>013/13 JAN</u>	<u>013/13 JAN.</u>	
TIME(Z)	<u>0240z</u>	<u>0748</u>	<u>5:08</u>
LATITUDE	<u>45°02.556'S</u>	<u>44 44.842</u>	<u>LINE LENGTH</u> <u>46250 M</u> <u>46,237.5</u> <u>M.</u>
LONGITUDE	<u>172°04.239'E</u>	<u>171 38.510E</u>	
SHOTPOINT	<u>17439</u>	<u>21138</u>	<u>3700</u>
FILE #	<u>1</u>	<u>3700</u>	<u>3700</u>
TAPE #	<u>96</u>	<u>03 *</u>	<u>8</u>
WATER DEPTH		<u>75.5</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 67, 91, 115
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 313 SPEED (KTS) 4.8
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO Z G.I. GUNS, 45/45 CONFIGURATION
NAV SYSTEM INFO DGPSCOMMENTS:REELS 100, 101, 102, 103 ARE LABELED 00, 01, 02,
03 RESPECTIVELY, SYNTRAK WAS RESTRICTED TO
2 DIGITS. FIXED FOR TAPE 104; LINE 62.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 62
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>013/13 JAN</u>	<u>013/13 JAN.</u>	
TIME(Z)	<u>0835Z</u>	<u>1345Z</u>	<u>5:10</u>
LATITUDE	<u>44°43.963'S</u>	<u>45°01.560'S</u>	LENGTH (m)
LONGITUDE	<u>171°41.634'E</u>	<u>172°07.186'E</u>	42675 <u>46425 m</u>
SHOTPOINT	<u>21703</u>	<u>25417</u>	<u>3715</u>
FILE #	<u>1</u>	<u>3716</u>	<u>3716</u>
TAPE #	<u>104</u>	<u>111</u>	<u>8</u>
WATER DEPTH	<u>83m</u>	<u>1193.3m</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 67, 104, 115, 116, 76, 91
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 133° SPEED (KTS) 5.1 Kts
SHOT ON (TIME/DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI GUNS 45/45 CONFIGURATION
NAV SYSTEM INFO DGPSCOMMENTS:

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 64

PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>013/13 JAN.</u>	<u>013/13 JAN.</u>	
TIME(Z)	<u>1415Z</u>	<u>19:27</u>	<u>5:12</u>
LATITUDE	<u>45°01.898'S</u>	<u>44°44.081'S</u>	<u>Line Length.</u>
LONGITUDE	<u>172°05.451'E</u>	<u>171°39.679'E</u>	<u>46875 m</u>
SHOTPOINT	<u>25,780</u>	<u>29530.</u>	<u>3751</u>
FILE #	<u>1</u>	<u>3751</u>	<u>3751</u>
TAPE #	<u>112</u>	<u>119</u>	<u>8</u>
WATER DEPTH	<u>1175.3 m</u>	<u>78.4</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — ^{Noisy} PROBLEM CHANS 1, 19, 67, 76, 91, 104, 115, 11

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5

COURSE 310 SPEED (KTS) 4.8 kts

SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 G.I. GUN, 45/45 CONFIG.

NAV SYSTEM INFO DGPS

COMMENTS:

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 58

PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>013 / 13 JAN.</u>	<u>014 / 14 JAN.</u>	
TIME(Z)	<u>20:28Z</u>	<u>0135Z</u>	<u>5:07</u>
LATITUDE	<u>44°42.568'S</u>	<u>45°00.072'S</u>	<u>LENGTH</u>
LONGITUDE	<u>171°43.954'E</u>	<u>172°09.142'E</u>	<u>45975 m</u>
SHOTPOINT	<u>30,257</u>	<u>33,935</u>	<u>3,679</u>
FILE #	<u>1</u>	<u>3681</u>	<u>3681</u>
TAPE #	<u>120</u>	<u>127</u>	<u>8</u>
WATER DEPTH	<u>86.3 m</u>	<u>1186.3 m</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 67, 79, 91, 104, 115, 116, 49 (line)

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5

COURSE 133° SPEED (KTS) 5.0 Kts.

SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 G1 GUNS, 45/45 CONFIGURATION

NAV SYSTEM INFO DGPS

COMMENTS:

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 60
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>014/14 JAN.</u>	<u>014</u>	
TIME(Z)	<u>0210Z</u>	<u>0720Z</u>	<u>5:10</u>
LATITUDE	<u>45°00.330'S</u>	<u>44 42.548'S</u>	
LONGITUDE	<u>172°07.359'E</u>	<u>171 41-820'E</u>	<u>line length.</u> <u>46500 m.</u>
SHOTPOINT	<u>34359</u>	<u>38079</u>	<u>3721</u>
FILE #	<u>1</u>	<u>3722</u>	<u>3722</u>
TAPE #	<u>128</u>	<u>135</u>	<u>8</u>
WATER DEPTH	<u>1176.3 m.</u>	<u>83.2m</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 7, 9, 67, 79, 91, 104, 115,
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 116' 12.5
COURSE 314° SPEED (KTS) 4.6 kts
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI GUNS, 45/45 CONFIGURATION
NAV SYSTEM INFO DGPSCOMMENTS:

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 54PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>014/14 Jan.</u>	<u>014/14 JAN.</u>	
TIME(Z)	<u>08:18 z</u>	<u>1330 z</u>	<u>5:12</u>
LATITUDE	<u>44°41.027'S</u>	<u>44°58.631'S</u>	<u>Line length</u> <u>46,787.5 m</u>
LONGITUDE	<u>171°45.910'E</u>	<u>172°11.278'E</u>	
SHOTPOINT	<u>38776</u>	<u>42,519</u>	<u>3,744</u>
FILE #	<u>1</u>	<u>3744</u>	<u>3,744</u>
TAPE #	<u>136</u>	<u>143</u>	<u>78</u>
WATER DEPTH	<u>86.4</u>	<u>1162.3 m.</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 7, 67, 91, 104, 115
116NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5COURSE 135° SPEED (KTS) 4.8 kts.SHOT ON (TIME/DIST) REP RATE (S) 5 (M) —SOURCE INFO 2 GI GUNS, 45/45 CONFIGURATIONNAV SYSTEM INFO DGPSCOMMENTS:LARGE SWELLS \Rightarrow SOME LOW FREQ. NOISE
IN THIS PROFILE.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 50

PROJECT CANTEKUKY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>014/14 JAN</u>	<u>14 JAN</u>	
TIME(Z)	<u>1420z</u>	<u>19:32</u>	<u>5:12</u>
LATITUDE	<u>44° 56.587'S</u>	<u>44 38.781</u>	<u>Line Length 46887.5m</u>
LONGITUDE	<u>172° 13.577'E</u>	<u>171 44.923</u>	
SHOTPOINT	<u>43,117</u>	<u>46868</u>	<u>3752</u>
FILE #	<u>1</u>	<u>3750</u>	<u>3750</u>
TAPE #	<u>1148</u>	<u>151</u>	<u>8</u>
WATER DEPTH	<u>1089.3m.</u>	<u>84.6</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 67, 97, 105, 116

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5

COURSE 323°
16 SPEED (KTS) 4.7 Kts.

SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 G.I. GUNS 45/45 CONFIG.

NAV SYSTEM INFO DGPS.

COMMENTS:

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 46PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>014/14 JANUARY</u>	<u>015/10 JANUARY</u>	
TIME(Z)	<u>20:28</u>	<u>0140Z</u>	<u>5:12</u>
LATITUDE	<u>44° 37.246'S</u>	<u>44° 54.923'S</u>	
LONGITUDE	<u>171° 51.834'E</u>	<u>172° 17.706'E</u>	<u>Line length 46,762.5 m</u>
SHOTPOINT	<u>47535</u>	<u>51,276</u>	<u>3,742</u>
FILE #	<u>1</u>	<u>3742</u>	<u>3742</u>
TAPE #	<u>152</u>	<u>159</u>	<u>8</u>
WATER DEPTH	<u>886</u>	<u>1040.3</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 6, 7, 49, 91, 105
1513-75 115, 116

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513-75 CHAN SEP (M) 12.5

COURSE 135° SPEED (KTS) 5.1 kts

SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 GI GUNS - 45/45

NAV SYSTEM INFO DGPS

COMMENTS:

PASSED SOL WAYPOINT JD14 20:31.
SWELL NOISE ALONG CABLE (LOW FREQUENCY, HIGH AMPLITUDE).

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 42PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>015/15 JAN.</u>	<u>15 JAN 2000.</u>	
TIME(Z)	<u>0235Z</u>	<u>0714</u>	<u>4:38</u>
LATITUDE	<u>44° 51.9 00 20'S</u>	<u>44° 35.974'S</u>	<u>Line Length</u>
LONGITUDE	<u>172° 19.510'E</u>	<u>171° 56.179'E</u>	<u>41725 m</u> <u>41725 m</u>
SHOTPOINT	<u>51,951</u>	<u>55 289</u>	<u>3339</u>
FILE #	<u>1</u>	<u>3338</u>	<u>3339</u>
TAPE #	<u>1681</u>	<u>167</u>	<u>8</u>
WATER DEPTH		<u>89.7</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 67, 91NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5COURSE 313° SPEED (KTS) 4.7 Kts.SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —SOURCE INFO 2 GI GUNS, 45/45 CONFIG.NAV SYSTEM INFO DGPS.COMMENTS:HEAVY SWELL CONTINUES.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 42PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>015/15 JAN.</u>	<u>15 JAN 2000.</u>	
TIME(Z)	<u>0235Z</u>	<u>0714</u>	<u>4:38</u>
LATITUDE	<u>44° 51.9 00 20'S</u>	<u>44° 35.974'S</u>	<u>Line Length</u>
LONGITUDE	<u>172° 19.510'E</u>	<u>171° 56.179'E</u>	<u>41725 m</u> <u>41725 m</u>
SHOTPOINT	<u>51,951</u>	<u>55 289</u>	<u>3339</u>
FILE #	<u>1</u>	<u>3338</u>	<u>3339</u>
TAPE #	<u>1681</u>	<u>167</u>	<u>8</u>
WATER DEPTH		<u>89.7</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 67, 91NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5COURSE 313° SPEED (KTS) 4.7 Kts.SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —SOURCE INFO 2 GI GUNS, 45/45 CONFIG.NAV SYSTEM INFO DGPS.COMMENTS:HEAVY SWELL CONTINUES.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 38

PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>015/15 JAN 2000</u>	<u>015/15 JAN 2000</u>	
TIME(Z)	<u>0815 Z</u>	<u>1255Z</u>	<u>4.40</u>
LATITUDE	<u>44° 34.452' S</u>	<u>44° 51.455' S</u>	
LONGITUDE	<u>172° 00.248' E</u>	<u>172° 22.283' E</u>	<u>LINE LENGTH</u> <u>41,975 m</u>
SHOTPOINT	<u>56,019</u>	<u>59,377</u>	<u>2,359</u>
FILE #	<u>1</u>	<u>3359</u>	<u>3,359</u>
TAPE #	<u>168</u>	<u>174</u>	<u>7</u>
WATER DEPTH	<u>918. m</u>	<u>906.4 m</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 67, 91, 104, 115, 116. ↑
intermi

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5

COURSE 145° SPEED (KTS) 5.1 Kts.

SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2G1 GUNS , 45/45 CONFIG.

NAV SYSTEM INFO DGPS.

COMMENTS:

SWELL NOISE CONTINUES.

9951 Z BRIDGE INFORMS US THAT A LARGE VESSEL IS
PASSING ACROSS OUR BOW - DISTANCE ~ 2 1/2 MILES.

SEE PAGES 25-27 FOR AN EXPLANATION OF HOW THIS
 CANTERBURY BASIN 2D SEISMIC SURVEY LINE WAS ACQU
 R/V MAURICE EWING OF LDEO, JANUARY 2000

LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 21 ~~PART 1~~PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>015/15 JAN</u>		
TIME(Z)	<u>1410Z</u>		
LATITUDE	<u>44° 48.828' S</u>		
LONGITUDE	<u>172° 18.786' E</u>		
SHOTPOINT	<u>60, 276</u>		
FILE #	<u>1</u>		
TAPE #	<u>175</u>		
WATER DEPTH	<u>468.5 m</u>		

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 67NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5COURSE 41° SPEED (KTS) 4.8 kts.SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —SOURCE INFO 2 GE / 45-45 CONFIGURATIONNAV SYSTEM INFO DGPSCOMMENTS:

Recording error @ 1548Z, data interrupted, streamer reset, and ship turned @ 1619 to reposition and reshoot missing portion of line. Approx. shotpoint where data stopped recording 61396. File # 1120.

Tapes 175, 176, 177 → first part of Line 21

Tapes 178, → second part of Line 21, after turning and repositioning

Data Restarted recording @ 1828Z; shotpoint 63374 44° 44.031' S
172° 25.413' E

1911Z SEISMIC CONTROLLER FAILED, FILE 502: SP 63869 44: 41.550'S, 172° 24.706'

PTD FOR MORE FUN.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 21 PART 1
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>015/15 JAN</u>	<u>015/15 JAN</u>	
TIME(Z)	<u>1410Z</u>	<u>1548Z</u>	<u>1:38</u>
LATITUDE	<u>44°48'828" S</u>	<u>44°42'638" S</u>	LINE 1 Length
LONGITUDE	<u>172°18'786" E.</u>	<u>172°27'439" E.</u>	<u>14000 m.</u>
SHOTPOINT	<u>60276</u>	<u>61396 (Approx.)</u>	<u>1121</u>
FILE #	<u>1</u>	<u>1120. (Approx.)</u>	<u>1120.</u>
TAPE #	<u>175</u>	<u>177</u>	<u>3</u>
WATER DEPTH	<u>468.5 m.</u>		

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 67
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 45° SPEED (KTS) 4.8 kts
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI 45/45 CONFIGURATION
NAV SYSTEM INFO DGPS

COMMENTS:

RECORDING ERROR AT 1548Z. DATA ACQUISITION INTERRUPTED,
STREAMER RESET. SHIP WILL TURN AROUND FOR A RESHOOT.
SHIP TURNED AT 1619 TO REPOSITION AND RESTART MISSING
PORTION OF LINE.

APPROX SHOTPOINT WHERE DATA STOPPED RECORDING 61396.
FILE 1120.

PLEASE SEE 21 PART 2 FOR RESHOOT.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

RESHOOT AFTER
TURN AROUND
↑

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 21 PART 2

PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>015/15 JAN</u>	<u>015/15 JAN</u>	
TIME(Z)	<u>1828</u>	<u>1911</u>	<u>:43</u>
LATITUDE	<u>44° 44.081'S</u>	<u>44° 41.550'S</u>	<u>Line length.</u>
LONGITUDE	<u>172° 25.413'E</u>	<u>172° 29.015'E</u>	<u>Approx. 6187.5m</u>
SHOTPOINT	<u>63374</u>	<u>63869</u>	<u>Approx 496</u>
FILE #	<u>1</u>	<u>502</u>	<u>502</u>
TAPE #	<u>178</u>	<u>179</u>	<u>1 FULL TAPE + 1/4</u>
WATER DEPTH	<u>~ 373</u>		<u>SEVERAL SHOTS ON TAPE 179</u>

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 66

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5

COURSE 45° SPEED (KTS) 4.8 kts

SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2G1 GUNS / 45-45 CONFIGURATION

NAV SYSTEM INFO DGPS

COMMENTS:

1828 Z DATA STARTED RECORDING FOR RESHOOT OF LINE 21
FILE # RESET TO 1, FIRST SP = 63374

1911 Z SEISMIC CONTROLLER FAILED

FILE 502, SP 63869 44° 41.550'S, 172° 29.015'E

CONTROLLER DOWN FOR 10 MINUTES → 120 SHOTS LOST
CRAIG DECIDED NOT TO TURN AGAIN. SEE SHEET 21 PART 3
FOR CONTINUATION

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000

LINE INFORMATION LOG

CONTINUATION AFTER
 SEISMIC CONTROLLER FAILED
 ↑ DID NOT TURN

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 21 PART 3
 PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>015/15 JAN.</u>	<u>015/15 JAN.</u>	
TIME(Z)	<u>1921</u>	<u>2130</u>	<u>2:09</u>
LATITUDE	<u>44° 41.064'S</u>	<u>44° 33.553'S</u>	
LONGITUDE	<u>172° 29.706'E</u>	<u>172° 40.299'E</u>	Line length. 19362.5m
SHOTPOINT	<u>1</u>	<u>1550</u>	<u>1550</u>
FILE #	<u>503</u>	<u>2052</u>	<u>1549</u>
TAPE #	<u>179 (cont)</u>	<u>182</u>	<u>3</u>
WATER DEPTH	<u>~308m</u>	<u>170.7</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
 SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 67, 19, 91, 115, 116
 NEAR OFFSET (M) 26.25 FAR OFFSET (M) 153.75 CHAN SEP (M) 12.5
 COURSE ~~45~~ 48° SPEED (KTS) 4.9
 SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
 SOURCE INFO 2 GI GUNS 45/45 CONFIGURATION
 NAV SYSTEM INFO DGPS

COMMENTS:

1921 SEISMIC CONTROLLER RESTARTED. TAPE 179 STILL ACTIVE
 LINE RESTARTED, FILE 503, SHOT 1. SHOTS RESET
 BY FAILURE. TAPE 179 SHOULD HAVE THE FOLLOWING

10 MIN
 GAP

FILE 488	SHOT 63855	SOT 179
FILE 502	SHOT 63869	— SEISMIC CONTROLLER FAILURE
FILE 503	SHOT 1	— SEISMIC CONTROLLER RESTART.
FILE 503 972	SHOT 471	— EDT 179.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 017

PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>015/15 JAN 2000</u>	<u>016/16 JAN. 2000</u>	
TIME(Z)	<u>2335Z</u>	<u>0925Z</u>	<u>9 HRS 50 MIN.</u>
LATITUDE	<u>44° 30.568' S</u>	<u>45° 02.678' S</u>	<u>LINE LENGTH</u>
LONGITUDE	<u>172° 36.357' E</u>	<u>171° 46.888' E</u>	<u>88550 m.</u>
SHOTPOINT	<u>3046</u>	<u>10130</u>	<u>7085</u>
FILE #	<u>1</u>	<u>7084</u>	<u>7084</u>
TAPE #	<u>183</u>	<u>197</u>	<u>15</u>
WATER DEPTH	<u>135.1 m.</u>	<u>150.4</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 7, 19, 67, 91, 104

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5 m.

COURSE 229° SPEED (KTS) 5.1 Kts

SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 G1 GUNS 45/45 CONFIGURATION

NAV SYSTEM INFO DGPS

COMMENTS: THERE'S BEEN A 5 FT FOLLOWING SEA FOR THE FULL LENGTH OF THIS LINE WITH WINDS ~~AT~~ AT 18-20 KNOTS FROM ASTERN. SO THERE IS NOISE. AFTER THE END OF THIS LINE WE WILL PULL THE ~~THE~~ TOW LEADER OF THE STREAMER AND WEIGHTING IT WITH CHAIN TO ATTEMPT TO KEEP IT LOWER & QUIETER.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 015

PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe
BASIN

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>016, 16 JAN. 2000</u>	<u>016, 16 JAN.</u>	
TIME(Z)	<u>10:26 Z</u>	<u>19:55 Z</u>	<u>9:29</u>
LATITUDE	<u>44°59.806'S</u>	<u>44°28.458</u>	<u>85337.5 m.</u>
LONGITUDE	<u>171°45'107'E</u>	<u>172°33.465</u>	
SHOTPOINT	<u>10864</u>	<u>17691</u>	<u>6828.</u>
FILE #	<u>1</u>	<u>6289 6829</u>	<u>6289 6829</u>
TAPE #	<u>198</u>	<u>212</u>	<u>14</u>
WATER DEPTH	<u>125.8 m.</u>	<u>116 116.5</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
 SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 115, 91, 56
 NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
 COURSE 49.9 SPEED (KTS) 4.9
 SHOT ON (TIME/DIST) REP RATE (S) 5 (M) —
 SOURCE INFO 2 GI GUNS - 45/45
 NAV SYSTEM INFO DGPS

COMMENTS:

~40lbs of lead tie-wrapped to the outboard end of the leader prior to the start of this line. Goal — to keep the inboard end down in following (head-on seas at least for strike lines). Geometry unchanged. Streamer performance appears improved.

DUE TO CALMER WIND AND SEAS, THIS ^{LINE} HAS STEADILY IMPROVED OVER ITS 9+ HR. LENGTH.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 13

PROJECT Canterbury Basin AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>016, 16 Jan</u>	<u>017, 17 Jan</u>	
TIME(Z)	<u>20:55 Z</u>	<u>06:54 Z</u>	<u>8:59 9:59</u>
LATITUDE	<u>44° 26' 52.4" S</u>	<u>44 59.201</u>	<u>Line Length</u>
LONGITUDE	<u>172° 32' 36.9" E</u>	<u>171 41.959</u>	<u>89875 m</u>
SHOTPOINT	<u>18410</u>	<u>25,600</u>	<u>7190</u>
FILE #	<u>1</u>	<u>7189</u>	<u>7189</u>
TAPE #	<u>213</u>	<u>227</u>	
WATER DEPTH	<u>110.3 m</u>	<u>120</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
 SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 7
1, 19, 49, 91, 97, 115
 NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
 COURSE 224° SPEED (KTS) 5.0
 SHOT ON (TIME/DIST) REP RATE (S) 5 (M) —
 SOURCE INFO 2 G1 GUNS - 45/45
 NAV SYSTEM INFO DGPS

COMMENTS:

2056 Pass waypoint sol 13.
 Optimal towing conditions.

JD 17, 0600 Z. Bubbles from starboard gun reaching surface consistently before those from port gun.

0730Z After line 13 ended pulled both guns and discovered ~~port~~ shackles on port gun had broken. ~~Gun essentially supported~~
~~by~~ Port gun has been towing deeper than starboard gun for an unknown time.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 11PROJECT Canterbury Basin AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>017, 17 Jan.</u>	<u>017, 17 Jan</u>	
TIME(Z)	<u>0940Z</u>	<u>19.56Z</u>	<u>10:16</u>
LATITUDE	<u>44° 57' 66.4" S 44° 57' 66.4" S</u>	<u>44° 23' 35.5" S</u>	<u>Line length</u>
LONGITUDE	<u>171° 41' 9.29" E</u>	<u>172° 34' 6.71" E</u>	<u>92525m.</u>
SHOTPOINT	<u>27591</u>	<u>34,993</u>	<u>7403</u>
FILE #	<u>1</u>	<u>7402</u>	<u>7402</u>
TAPE #	<u>228</u>	<u>243</u>	<u>16</u>
WATER DEPTH	<u>114.7</u>	<u>101.9</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 91, 115, 116NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5COURSE 48° SPEED (KTS) 4.9 ktsSHOT ON (TIME / DIST) REP RATE (S) 5 (M) —SOURCE INFO 2 GI GUNS 45/45NAV SYSTEM INFO DGPS.COMMENTS:

GUNS AND STREAMER BEHAVING WELL AT SOL.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 9

PROJECT Canterbury Basin AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>017, 17 Jan.</u>	<u>018, 18 JAN.</u>	
TIME(Z)	<u>21:29</u>	<u>08:51</u>	<u>11:22</u> <u>30</u>
LATITUDE	<u>44° 20' 07.9" S</u>	<u>44° 57' 54.5" S</u>	<u>Line length</u> <u>102300 m</u>
LONGITUDE	<u>172° 37' 39.3" E</u>	<u>171° 39' 84.9" E</u>	
SHOTPOINT	<u>36098</u>	<u>44282</u>	<u>8185</u>
FILE #	<u>1</u>	<u>8184</u>	<u>8184</u>
TAPE #	<u>244</u>	<u>260</u>	<u>16</u>
WATER DEPTH	<u>90.3</u>	<u>106.8 m</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
 SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 91, 104, 115, 116
 NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
 COURSE 227° SPEED (KTS) 5 kts.
 SHOT ON ((TIME)/DIST) REP RATE (S) 5 (M) —
 SOURCE INFO 2 GEI GUNS 45/45
 NAV SYSTEM INFO DGPS

COMMENTS:

→ for maintenance
~~Port~~ Starboard gun was pulled on transit to this line.
 Guns and streamer appear to be behaving well.

Line started early because had much longer lead in than usual.
 due to gun work.

0058-00592 COMPRESSOR MALFUNCTION. GUNS SHUT OFF For
 1-2 MINUTES. PROBABLY 12-15 SHOTS MISSED.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 7PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe
BASIN.

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>018, 18 JAN.</u>	<u>018, 18 JAN</u>	
TIME(Z)	<u>09:28</u>	<u>10.05 z</u>	<u>:37.</u>
LATITUDE	<u>44° 55.780'S</u>	<u>44° 53.808'S</u>	
LONGITUDE	<u>171° 39.487'E</u>	<u>171° 42.798'E</u>	
SHOTPOINT	<u>44726</u>	<u>45165</u>	<u>~4 ⁴⁰39</u>) <u>Approx</u>
FILE #	<u>1</u>	<u>450</u>	<u>450</u>
TAPE #	<u>261</u>	<u>261</u>	<u>1</u>
WATER DEPTH	<u>102 m</u>	<u>106 m</u>	

REC LENGTH (S) \$3 SAMP INT (MSEC) 1 # CHANNELS 120SEIS CHANS 120 AUX CHANS — PROBLEM CHANS NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5COURSE 48.5 SPEED (KTS) 4.9SHOT ON (TIME/DIST) REP RATE (S) 5 (M) —SOURCE INFO 2GI GUNS 45/45NAV SYSTEM INFO DGPS

COMMENTS: LINE HAS BEEN STOPPED BECAUSE THE MOST
INBOARD BIRD WAS RIDING VERY LOW (~5-5.5 m.)
IT WAS DECIDED TO CIRCLE BACK WHILE THEY
PULL IN THE FIRST SECTION OF THE STREAMER
AND CHECK IT.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 7A (KESSHOT OF 7)
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>018/18 JANUARY</u>	<u>018/18 JANUARY 2000</u>	
TIME(Z)	<u>1200Z</u>	<u>20:57</u>	<u>8:57</u>
LATITUDE	<u>44° 56.087' S</u>	<u>44° 26.338</u>	<u>LINE Length.</u>
LONGITUDE	<u>171° 39.002' E</u>	<u>172° 24.797</u>	<u>80550 m.</u>
SHOTPOINT	<u>46,548</u>	<u>52992</u>	<u>6445</u>
FILE #	<u>1</u>	<u>6442</u>	<u>6442</u>
TAPE #	<u>262</u>	<u>275</u>	<u>14</u>
WATER DEPTH	<u>102.1 m</u>	<u>94.7</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 91, 115
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 15-13.75 CHAN SEP (M) 12.5
COURSE 490 SPEED (KTS) 4.9 Kts.
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2CI GUNS / 45-45 CONFIG.
NAV SYSTEM INFO DGPS

COMMENTS:

NEW BIRD #12 (INBOARD END, TR. 120) INSTALLED AT
START OF THIS LINE.

20:56 35 kHz ran out of paper just before end of line

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 5
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>018/18 JAN 2000</u>	<u>019/19 JAN 2000</u>	
TIME(Z)	<u>2149Z</u>	<u>0645Z</u>	<u>8:56</u>
LATITUDE	<u>44°25.447'S</u>	<u>44°54.980'S</u>	<u>LINE LENGTH</u>
LONGITUDE	<u>172°21.679'E</u>	<u>171°36.235'E</u>	<u>79.125 79.137.5 m.</u>
SHOTPOINT	<u>53619</u>	<u>59,950</u>	<u>6,332</u>
FILE #	<u>1</u>	<u>6,316</u>	<u>6,316</u>
TAPE #	<u>276</u>	<u>288</u>	<u>13</u>
WATER DEPTH	<u>85.3 m.</u>	<u>90.0</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 6, 19, 49, 73, 67, 104, 115, 116
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 227.7° SPEED (KTS) 4.9
SHOT ON (TIME/DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2GE GUNS 45/45
NAV SYSTEM INFO DGPS

COMMENTS:

At 0001Z ACQUISITION STOPPED. SHOT TIMES NOT INCREMENTING. LAST ACQ FILE 1567, TAPE #279 (*SE 55, 183). PROBLEM WITH SEISMIC WINDOW (SEE WATCH LOG). ACQ. RESTARTED AT 0010Z, WITH SHOT NUMBER (ARBITRARY) SET TO 55200 (= ACQ FILE 1568). TOTAL TIME LOST ~ 9 MIN (108 SHOTS). PROBABLE DATA GAP.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 1PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>019/19 Jan 2000</u>	<u>019/19 JAN. 2000</u>	
TIME(Z)	<u>08:05</u>	<u>12:30</u>	<u>4:25</u>
LATITUDE	<u>44° 51.083' S</u>	<u>44° 36.491' S</u>	<u>Line length</u>
LONGITUDE	<u>171° 32.722' E</u>	<u>171° 55.329' E</u>	<u>39,637.5 m</u>
SHOTPOINT	<u>60913</u>	<u>64084</u>	<u>3172</u>
FILE #	<u>1</u>	<u>3172</u>	<u>3172</u>
TAPE #	<u>289</u>	<u>295</u>	<u>7</u>
WATER DEPTH	<u>62.3 m</u>	<u>91.3 m.</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 91, 104, 115, 116NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5COURSE 48° SPEED (KTS) 4.9SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —SOURCE INFO 2 GI Guns 45/45NAV SYSTEM INFO DGPSCOMMENTS:

- SWELL NOISE (LOW FREQUENCY) MIGRATING ALONG STREAMER.
- OCCASIONAL (SEVERAL / 80 SHOTS) MISFIRES TOWARDS THE END OF THE LINE (ACC. TO MONITORING SOFTWARE)

**CANTERBURY BASIN SEISMIC SURVEY
R/V MAURICE EWING OF LEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 34
PROJECT CANTERBURY BASIN AREA AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>019/19 JANUARY 2000</u>	<u>019/19 January 2000</u>	
TIME(Z)	<u>1350 Z</u>	<u>1744 Z</u>	<u>3.54</u>
LATITUDE	<u>44° 32.466' S</u>	<u>44° 46.347' S</u>	<u>Line length</u>
LONGITUDE	<u>172° 01.709' E</u>	<u>172° 19.826'</u>	<u>35,150 m</u>
SHOTPOINT	<u>65,045</u>	<u>67,857</u>	<u>2,813</u>
FILE #	<u>1</u>	<u>2,810</u>	<u>2,810</u>
TAPE #	<u>296</u>	<u>301</u>	<u>6</u>
WATER DEPTH	<u>87.0 m</u>	<u>352.6 m</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 6, 19, 115, 116, 104
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 135° 9' SPEED (KTS) 4.8 Kts
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI GUNS / 45/45 CONFIGURATION
NAV SYSTEM INFO DGPS

COMMENTS:

INTERMITTENT MISSED SHOTS ON GUN MONITOR.

Line cut short due to problem with ~~gun~~ port gun
(seaweed). Ship circled while gun repaired, and remainder
of line will continue as line 34A

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 34APROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>019/19 January 2000</u>	<u>019/19 JAN 2000</u>	
TIME(Z)	<u>1900Z</u>	<u>20:56</u>	<u>1:56</u>
LATITUDE	<u>44°46.289'S</u>	<u>44°53.276'S</u>	<u>LINE LENGTH</u>
LONGITUDE	<u>172°19.748E</u>	<u>172°28.897'E</u>	<u>17375m</u>
SHOTPOINT	<u>68768</u>	<u>70158</u>	<u>1391</u>
FILE #	<u>1</u>	<u>1391</u>	<u>1391</u>
TAPE #	<u>302</u>	<u>304</u>	<u>2</u>
WATER DEPTH	<u>341.2</u>	<u>1391</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 #CHANNELS 120
SEIS CHANS 120 AUX CHANS PROBLEM CHANS 1, 19, 115, 116, 104, 119
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 135.8 SPEED (KTS) 4.9
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI Guns / 45/45 Configuration
NAV SYSTEM INFO DGPS

COMMENTS:

CONTINUATION OF LINE 34 AFTER GUNS PULLED IN
TO REMOVE HEAVY SEA WEED

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 32

PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>019 / 19 JAN 2000</u>	<u>020 / 20 JANUARY 2000</u>	
TIME(Z)	<u>21:32 Z</u>	<u>03:11 Z</u>	<u>5:39</u>
LATITUDE	<u>44° 51.910' S</u>	<u>44° 31.762' S</u>	
LONGITUDE	<u>172° 29.223' E</u>	<u>172° 02.424' E</u>	<u>Line length 50,837.5 m</u>
SHOTPOINT	<u>70591</u>	<u>74658</u>	<u>4068</u>
FILE #	<u>1</u>	<u>4068</u>	<u>4068</u>
TAPE #	<u>305</u>	<u>313</u>	<u>9</u>
WATER DEPTH	<u>1124 m</u>	<u>85.1</u>	
REC LENGTH (S)	<u>3</u>	SAMP INT (MSEC) <u>1</u>	# CHANNELS <u>120</u>
SEIS CHANS	<u>120</u>	AUX CHANS <u>—</u>	PROBLEM CHANS <u>1, 49, 19, 91, 104, 115, 116</u>
NEAR OFFSET (M)	<u>26.25</u>	FAR OFFSET (M)	<u>1513.75</u> CHAN SEP (M) <u>12.5</u>
COURSE	<u>317°</u>	SPEED (KTS)	<u>5 kts.</u>
SHOT ON (TIME / DIST)		REP RATE (S)	<u>5</u> (M) <u>—</u>
SOURCE INFO	<u>2 GI GUNS</u>	<u>45/45</u>	CONFIGURATION
NAV SYSTEM INFO	<u>DGPS</u>		

COMMENTS:

- LOW FREQUENCY SWELL NOISE MOVING ALONG STREAMER.
- SOME OUTBOARD BIRD PROBLEMS, NEAR START OF LINE.
NO OBVIOUS EFFECT ON NOISE LEVELS. PROBLEM
CORRECTED WITHIN ~30 MINUTES.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 30
PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>020/20 January 2000</u>	<u>020/20 JAN., 2000</u>	
TIME(Z)	<u>0357Z</u>	<u>09:50 Z</u>	<u>5:53.</u>
LATITUDE	<u>44°32.049'S</u>	<u>44°52.775'S</u>	
LONGITUDE	<u>172°04.534'E</u>	<u>172°32.482'E</u>	<u>LINE LENGTH</u> <u>52937.5m</u>
SHOTPOINT	<u>75,211</u>	<u>79,446</u>	<u>4236</u>
FILE #	<u>1</u>	<u>4234</u>	<u>4234</u>
TAPE #	<u>314</u>	<u>322</u>	
WATER DEPTH	<u>87.0</u>	<u>1186.3</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS - PROBLEM CHANS 1, 19, 115, 104, 116, 103
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 133.3 SPEED (KTS) 4.9
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) -
SOURCE INFO 2 GI Guns 45/45 configuration
NAV SYSTEM INFO DGPSCOMMENTS:

CANTERBURY BASIN 2D SEISMIC SURVEY R/V MAURICE EWING OF LDEO, JANUARY 2000

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 26
PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	START	END	TOTAL
DATE(JD/DATE)	<u>020, 20 JAN, 2000</u>	<u>020, 20 JAN, 2000</u>	
TIME(Z)	<u>10:33Z</u>	<u>16:26Z</u>	<u>5:53</u>
LATITUDE	<u>44° 51.214 'S</u>	<u>44° 30.311 'S</u>	
LONGITUDE	<u>172° 32.848 'E</u>	<u>172° 04.614 'E</u>	<u>Line length 53,050 m</u>
SHOTPOINT	<u>79963</u>	<u>84207</u>	<u>4245</u>
FILE #	<u>1</u>	<u>4240</u>	<u>4240</u>
TAPE #	<u>323.</u>	<u>331</u>	<u>9</u>
WATER DEPTH	<u>1146 m.</u>	<u>833.5 83.5</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS PROBLEM CHANS 1, 19, 91, 103, 104, 115
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 317° SPEED (KTS) 4.8 kts.
SHOT ON (TIME / DIST) REP RATE (S) 5 (M)
SOURCE INFO 2 GI GUNS 45/45 CONFIGURATION.
NAV SYSTEM INFO DGPS.

COMMENTS:

— SEA STATE — 4-6' SWELLS FROM THE SE.
AFFECTING NOISE LEVELS OVERALL. WINDS CLOSE TO 20 KTS.
— THROUGHOUT LINE, INTERMITTENT MISFIRES ON GUN
MONITOR.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 24
PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>020, 20 Jan, 2000</u>	<u>020/20 JAN 2000</u>	
TIME(Z)	<u>1656Z</u>	<u>22:50</u>	<u>5:54</u>
LATITUDE	<u>44°30.371'S</u>	<u>44°51.279</u>	<u>Line Length</u>
LONGITUDE	<u>172°06.819'E</u>	<u>172°35.043</u>	<u>53,137.5 m</u>
SHOTPOINT	<u>84,558</u>	<u>88809</u>	<u>4252</u>
FILE #	<u>1</u>	<u>4252</u>	<u>4252</u>
TAPE #	<u>332</u>	<u>340.</u>	<u>19</u>
WATER DEPTH	<u>87.8</u>	<u>1154.3</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 9, 103, 104, 115, 116
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 137° SPEED (KTS) 4.9 kts.
SHOT ON (TIME/DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI Guns, 45/45 Configuration
NAV SYSTEM INFO DGPSCOMMENTS:

Intermittant Misfires on gun monitor.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 28PROJECT CANTERBURY BASIN AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>020/20 JANUARY 2000</u>	<u>021/21 January 2000</u>	
TIME(Z)	<u>2325Z</u>	<u>0534Z</u>	<u>6:14</u>
LATITUDE	<u>44°52.179'S</u>	<u>44°30.745</u>	<u>Line length</u>
LONGITUDE	<u>172°33.022'E</u>	<u>172°03.978</u>	<u>55,250m</u>
SHOTPOINT	<u>89240</u>	<u>93,660</u>	<u>4421</u>
FILE #	<u>1</u>	<u>4417</u>	<u>4417</u>
TAPE #	<u>341</u>	<u>350</u>	<u>10</u>
WATER DEPTH	<u>1156.3m</u>	<u>83.5</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
(SEE NOTE - FRONT OF WATCH LOG - BOOK #2)
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 91, 115, 116
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 137° SPEED (KTS) 4.9 kts
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI GUNS — 45/45 CONFIGURATION
NAV SYSTEM INFO DGPS

COMMENTS:

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CANTERBURY BASIN 2D SEISMIC SURVEY R/V MAURICE EWING OF LDEO, JANUARY 2000

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 22

PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	START	END	TOTAL
DATE(JD/DATE)	<u>021/21 JANUARY 2000</u>	<u>021/21 JANUARY 2000</u>	
TIME(Z)	<u>08:41Z</u>	<u>1447Z</u>	<u>6:06</u>
LATITUDE	<u>44°29.638'S</u>	<u>44°51.272'S</u>	<u>Line length</u>
LONGITUDE	<u>172°07.965'E</u>	<u>172°36.948'E</u>	<u>57,862.5</u> (but includes data gap - see below)
SHOTPOINT	<u>95904</u>	<u>100,293</u>	<u>4389 4390</u>
FILE #	<u>1</u>	<u>4375</u>	<u>4375</u>
TAPE #	<u>352</u>	<u>361 (SEE NOTES)</u>	
WATER DEPTH	<u>84.6 m.</u>	<u>1175.3 m.</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 7, 19, 91, 104, 115, 116

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5

COURSE 136.8 SPEED (KTS) 4.9

SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 GI GUNS 45/45 CONFIGURATION

NAV SYSTEM INFO DGPS

COMMENTS:

*1042Z - 1126Z ⇒ POSSIBLE RESHOOT.

— TAPE 351 DOES NOT EXIST. LINE RE-STARTED. GUN PROBLEM

— TAPE 356 DOES NOT EXIST — SPONTANEOUSLY UNLOADED. LOST ~17 SHOTS. SEE TAPE LOG.

— WINDS IN EXCESS OF 20 KTS. BUILDING SEAS.

— STEFFEN INFORMS THAT TAPE 355 HAS ONLY ONE SHOT. MUST HAVE BEEN OVERWRITTEN WHEN 356 UNLOADED AND BOTH DRIVES WERE QUICKLY (SEE ABOVE) RELOADED — DATA GAP!*

CANTERBURY BASIN 2D SEISMIC SURVEY R/V MAURICE EWING OF LDEO, JANUARY 2000

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 20
PROJECT CANTERBURY BASIN AREA Canterbury Basin P.I. C. Fulthorpe

	START	END	TOTAL
DATE(JD/DATE)	<u>021/21 JAN.</u>	<u>021/21 JAN.</u>	
TIME(Z)	<u>1646Z</u>	<u>22:52</u>	<u>6:06</u>
LATITUDE	<u>44°49.894' S</u>	<u>44°28.113' S</u>	
LONGITUDE	<u>172°37.060' E</u>	<u>172°07.992' E</u>	<u>Line length 54,962.5 m</u>
SHOTPOINT	<u>101,719</u>	<u>106,116</u>	<u>4,398</u>
FILE #	<u>1</u>	<u>4386</u>	<u>4386</u>
TAPE #	<u>362</u>	<u>371</u>	<u>10</u>
WATER DEPTH	<u>1147.3 m</u>	<u>78.5 m</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 7, 19, 31, 49, 91, 103, 115
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 303° SPEED (KTS) 4.8 kts.
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GE GUNS / 45-45 CONFIG.
NAV SYSTEM INFO DGPS.

COMMENTS:

- Sea State 2-5' causing low-frequency noise along streamer
- Intermittent MISFIRES on gun monitor

CANTERBURY BASIN 2D SEISMIC SURVEY **R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 18

PROJECT CANTERBURY BASIN AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>021 / 21 JAN. 2000</u>	<u>022 / 22 JAN 2000</u>	
TIME(Z)	<u>2345Z</u>	<u>0612Z</u>	<u>6:27</u>
LATITUDE	<u>44° 27.548'S</u>	<u>44° 50.657'S</u>	
LONGITUDE	<u>172° 09.354'E</u>	<u>172° 40.034'E</u>	<u>Line length</u> <u>58,087.5 m</u>
SHOTPOINT	<u>106, 743</u>	<u>111390</u>	<u>4,648</u>
FILE #	<u>1</u>	<u>4650</u>	<u>4,650</u>
TAPE #	<u>372</u>	<u>381 381</u>	<u>10</u>
WATER DEPTH	<u>78.8 m.</u>	<u>1169.3</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 7, 19, 31, 49, 91, 103, 115

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5

COURSE 138° SPEED (KTS) 5.1 Kts.

SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 GI GUNS — 40/45 CONFIGURATION

NAV SYSTEM INFO DGPS

COMMENTS:

Line shot with port gun only from 0305Z-0310Z while
 Starboard gun was pulled and cleaned of seaweed.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 16

PROJECT Canterbury Basin AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>022/22 Jan 2000</u>	<u>022/22 JANUARY</u>	
TIME(Z)	<u>0725Z</u>	<u>1345Z</u>	
LATITUDE	<u>44°49.204'S</u>	<u>44°26.704'S</u>	Line length
LONGITUDE	<u>172°40.056'E</u>	<u>172°10.390'E</u>	<u>56,8875 km</u>
SHOTPOINT	<u>112269</u>	<u>116,820</u>	<u>4552</u>
FILE #	<u>1</u>	<u>4553</u>	<u>4553</u>
TAPE #	<u>382</u>	<u>391</u>	<u>10</u>
WATER DEPTH	<u>1172.3 m</u>	<u>76.4 m.</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS - PROBLEM CHANS 1,7,19,31,73,79,91,97,103,104,116,120.

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5

COURSE 317° SPEED (KTS) 4.7 (SEE BELOW)

SHOT ON (TIME / DIST) REP RATE (S) 5 (M) -

SOURCE INFO 2 GI Guns - 45/45 Configuration

NAV SYSTEM INFO DGPS

COMMENTS: 0830 BRIDGE INFORMS US THAT SEA AND WIND CONDITIONS ARE PREVENTING THEM FROM MAINTAINING THE OPTIMAL SPEED OF 4.9 KNOTS. THEY WILL TRY TO HOLD TO 4.7 TO 4.8 KNOTS. 10:00Z - NOTED THAT SPEED HAS BEEN BROUGHT BACK TO 4.9. BACK UP TO SPEED LATER ON.

- STREAMER NOISY. HEADWINDS CREATING SHIP MOTION WHICH IS PULLING STREAMER UP.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 14
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe
BASIN

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>022/22 JAN 2000</u>	<u>022</u>	
TIME(Z)	<u>1440Z</u>	<u>2126Z</u>	<u>6:46</u>
LATITUDE	<u>44° 25.868'S</u>	<u>44° 50.037'S</u>	<u>LINE LENGTH</u>
LONGITUDE	<u>172° 11.349'E</u>	<u>172° 43.302</u>	<u>60975m</u>
SHOTPOINT	<u>401</u>	<u>245279</u>	<u>4879</u>
FILE #	<u>1</u>	<u>4876</u>	<u>4876</u>
TAPE #	<u>392</u>	<u>402</u>	
WATER DEPTH	<u>76.8m</u>	<u>1159.3</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 91, 115, 116
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 139° SPEED (KTS) 4.6 kts.
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI GUNS — 45/45 CONFIGURATION
NAV SYSTEM INFO DGPSCOMMENTS:PROBLEMS WITH NAVIGATION SCREEN FROM 15:42 CAN ONLY BE
FIX WITH A RESTART DURING TRANSIT TO NEXT LINE

MINOR-LOW AMPLITUDE SWELL NOISE

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 12PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>022/22 JAN</u>	<u>023/23 JAN.</u>	
TIME(Z)	<u>22:39Z</u>	<u>0519Z</u>	<u>6:40</u>
LATITUDE	<u>44°48.742'S</u>	<u>44°25.196'S</u>	<u>Line length</u>
LONGITUDE	<u>172°43.394'E</u>	<u>172°12.533'E</u>	<u>59,875m</u>
SHOTPOINT	<u>6146</u>	<u>10936</u>	<u>4,791</u>
FILE #	<u>1</u>	<u>4,791</u>	<u>4,791</u>
TAPE #	<u>403</u>	<u>412</u>	<u>10</u>
WATER DEPTH	<u>1180.3m</u>	<u>76.5</u>	

REC LENGTH (S) 3.0 SAMP INT (MSEC) 1.0 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 91 (+bird section)
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 317° SPEED (KTS) 4.9kts.
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI GUNS 45/45 CONFIGURATION
NAV SYSTEM INFO DGPS

COMMENTS:

— ON THIS LINE (AND IN THE WATCH LOG), CMG AND SMG SUPPLIED FROM THE BRIDGE. LAB DISPLAY NOT WORKING PROPERLY.

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CANTERBURY BASIN 2D SEISMIC SURVEY R/V MAURICE EWING OF LDEO, JANUARY 2000

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 10

PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	START	END	TOTAL
DATE(JD/DATE)	<u>023/23 Jan, 2000</u>	<u>023/23 JAN 2000</u>	
TIME(Z)	<u>0611Z</u>	<u>1255Z</u>	<u>6:44</u>
LATITUDE	<u>44° 25.142'S</u>	<u>44° 49.110'S</u>	
LONGITUDE	<u>172° 14.611'E</u>	<u>172° 45.933'E</u>	<u>Line length 60,562.5 m</u>
SHOTPOINT	<u>11,560</u>	<u>16,405</u>	<u>4,845</u>
FILE #	<u>1</u>	<u>4,845</u>	<u>4,845</u>
TAPE #	<u>413</u>	<u>422</u>	<u>10</u>
WATER DEPTH	<u>81.0 m.</u>	<u>1168.3 m</u>	

REC LENGTH (S) 3.0 SAMP INT (MSEC) 1.0 # CHANNELS 120
 SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 19, 91, 103, 104, 115, 116
 NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
 COURSE 137° SPEED (KTS) 4.9 kts
 SHOT ON (TIME/DIST) REP RATE (S) 5 (M) —
 SOURCE INFO 2 GI Guns, 45/45 Configuration
 NAV SYSTEM INFO DGPS

COMMENTS:

— Line shot with port gun only from start of line at 0611Z until 0620Z while starboard gun was pulled and cleaned of seaweed.

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**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 31
PROJECT CANTERBURY BASIN AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>023/23 JANUARY 2000</u>	<u>023/23 JANUARY 2000</u>	
TIME(Z)	<u>1600Z</u>	<u>2020Z</u>	<u>4:20</u>
LATITUDE	<u>44° 37.337'S</u>	<u>44° 51.609'S</u>	<u>LINE LENGTH</u> <u>39075 m.</u>
LONGITUDE	<u>172° 43.039'E</u>	<u>172° 22.546'E</u>	
SHOTPOINT	<u>18628</u>	<u>21754</u>	<u>3127</u>
FILE #	<u>1</u>	<u>3122</u>	<u>3123</u>
TAPE #	<u>423</u>	<u>429</u>	<u>7</u>
WATER DEPTH	<u>385.6</u>	<u>884.4</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 31, 91, 104, 115, 116
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 224° SPEED (KTS) 4.6
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 G.I. GUNS — 45/45 CONFIGURATION
NAV SYSTEM INFO DGPS

COMMENTS:

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 36
PROJECT Canterbury AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>023/23 January</u>	<u>024/24 JAN. 2000</u>	
TIME(Z)	<u>21:22Z</u>	<u>0230Z</u>	<u>5:08</u>
LATITUDE	<u>44° 50.933</u>	<u>44° 32.833'S</u>	Line length:
LONGITUDE	<u>172° 23.868</u>	<u>172° 00.142'E</u>	<u>46,062.5</u>
SHOTPOINT	<u>22,499</u>	<u>26,184</u>	<u>3,686</u>
FILE #	<u>1</u>	<u>3686</u>	<u>3686</u>
TAPE #	<u>430</u>	<u>437</u>	<u>8</u>
WATER DEPTH	<u>887 887-4m</u>	<u>85.6 m.</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS PROBLEM CHANS 1, 7, 19, 31, 79, 91
103, 104, 115, 120
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 316° SPEED (KTS) 5 kts.
SHOT ON (TIME / DIST) REP RATE (S) 5 (M)
SOURCE INFO 2 GI GUNS - 45/45 CONFIGURATION
NAV SYSTEM INFO DGPS

COMMENTS:

- AT START OF LINE THERE WAS SIGNIFICANT LOW AMPLITUDE SWELL NOISE.
- 22:46Z DROP BIRDS FROM 2.5M TO 3.5M. SEAS 2-3M (PORT SIDE, QUARTERING), WINDS 25-30 GUSTING TO OVER 40KTS.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 40
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>024/24 JAN 2000</u>	<u>024/24 JAN 200</u>	
TIME(Z)	<u>0411Z</u>	<u>0515.</u>	<u>1:04</u>
LATITUDE	<u>44° 35.189'</u>	<u>44° 38.447</u>	
LONGITUDE	<u>171° 59.285'</u>	<u>172° 03.477</u>	<u>Line length 9662.5 m.</u>
SHOTPOINT	<u>27398</u>	<u>28171</u>	<u>774</u>
FILE #	<u>1</u>	<u>515 772</u>	<u>773.</u>
TAPE #	<u>438</u>	<u>439.</u>	<u>2.</u>
WATER DEPTH	<u>94.0</u>	<u>136.6.</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 137° SPEED (KTS) 4.0
SHOT ON (TIME / DIST) REP RATE (S) 5 (M)
SOURCE INFO 2 GI GUNS — 45/45 CONFIGURATION
NAV SYSTEM INFO DGPS

COMMENTS:

Due to high sea state, speed is slower on this line (~4.0 kts) due to tension on line.

Birds set at 35 m due to high seas

Moderate low-frequency streamer noise due to rough weather

Recording interrupted at 0515Z due to weather conditions; guns pulled.
Recording will resume when conditions improve. Line stopped at 44°38.447'S
172°03.477'E

CANTERBURY BASIN 2D SEISMIC SURVEY R/V MAURICE EWING OF LDEO, JANUARY 2000

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 44
 PROJECT CANTERBURY BASIN AREA Canterbury Basin P.I. C. Fulthorpe

	START	END	TOTAL
DATE(JD/DATE)	⁰²⁴ 24 JANUARY 2000	024/24 January 2000	
TIME(Z)	1220Z	1734Z	5:14
LATITUDE	44° 53.574'S	44° 35.682'S	Line Length
LONGITUDE	172° 18.711'E	171° 52.612'E	47,225 m
SHOTPOINT	29,600	33,378	3779
FILE #	1	33378 3777	3777
TAPE #	440	447	8
WATER DEPTH	937.4 m.	84.6	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
 SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 7, 19, 31, 115
 NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
 COURSE 313° SPEED (KTS) 5 kts.
 SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
 SOURCE INFO 2 GI GUNS — 45/45 CONFIGURATION
 NAV SYSTEM INFO DGPS

COMMENTS:

Starboard gun may not have been towing correctly during later part of line, although it did not appear to be tangled in streamer.
 Streamer still at 3.5 m

CANTERBURY BASIN 2D SEISMIC SURVEY **R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 48

PROJECT Canterbury Basin AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>024/24 January, 2000</u>	<u>024/24 JANUARY 2000</u>	
TIME(Z)	<u>1840 Z</u>	<u>2355 Z</u>	<u>5:15</u>
LATITUDE	<u>44° 38.512'S</u>	<u>44° 56.152'S</u>	
LONGITUDE	<u>171° 50.571'E</u>	<u>172° 15.959'E</u>	<u>Line length 47, 112.8 m.</u>
SHOTPOINT	<u>34172</u>	<u>37,941</u>	<u>3,770</u>
FILE #	<u>1</u>	<u>3770</u>	<u>3,770</u>
TAPE #	<u>448</u>	<u>455</u>	<u>8</u>
WATER DEPTH	<u>91.5 m.</u>	<u>1139.3 m.</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 19, 67, 91, 104, 115, 116

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5

COURSE 135° SPEED (KTS) 4.5

SHOT ON (TIME/DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 GE Guns, 45/45 Configuration

NAV SYSTEM INFO DGPS

COMMENTS:

— STREAMER STILL AT 3 SM.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 52
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe
BASIN

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>J.D. 025/25 JAN.</u>	<u>J.D. 025/25 Jan, 2000</u>	
TIME(Z)	<u>0055Z</u>	<u>0611Z</u>	
LATITUDE	<u>44° 57.795'S</u>	<u>44° 39.858'S</u>	
LONGITUDE	<u>172° 12.138'E</u>	<u>171° 46.286'E</u>	<u>Line length 47,500 m</u>
SHOTPOINT	<u>38,660</u>	<u>42,460</u>	<u>3801</u>
FILE #	<u>1</u>	<u>3798</u>	<u>3798</u>
TAPE #	<u>456</u>	<u>463</u>	<u>8</u>
WATER DEPTH	<u>1164.3 m</u>	<u>85.0</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 91, 31, 7
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 316° SPEED (KTS) 4.9 kts.
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI GUNS — 45/45 CONFIG.
NAV SYSTEM INFO DGPS

COMMENTS:

Birds at 3.5m ~~thru~~ for entire line

CANTERBURY BASIN 2D SEISMIC SURVEY R/V MAURICE EWING OF LDEO, JANUARY 2000

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 56
PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe
BASIN

	START	END	TOTAL
DATE(JD/DATE)	<u>J.D. 025 / 25 JAN.</u>	<u>J.D. 025 / 25 JAN.</u>	
TIME(Z)	<u>0703z</u>	<u>1206z</u>	<u>5:03</u>
LATITUDE	<u>44° 41.966' S</u>	<u>44° 59.352' S</u>	<u>Line length</u>
LONGITUDE	<u>171° 45.198' E</u>	<u>172° 10.311' E</u>	<u>45,400 m</u>
SHOTPOINT	<u>43080</u>	<u>46,712</u>	<u>3633</u>
FILE #	<u>1</u>	<u>3634</u>	<u>3634</u>
TAPE #	<u>464</u>	<u>471</u>	<u>8</u>
WATER DEPTH	<u>88.1 m</u>	<u>1172.3 m</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 9, 109, 115
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 134° SPEED (KTS) 4.9 kts
SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI Guns - 45/45 Configuration
NAV SYSTEM INFO DGPS

COMMENTS:

- Birds Set back to 2.5m From 3.5m before Start of recording For this line.
- Low ~~frequency~~ Frequency noise at start, died down substantially in first 15 minutes, probably due to short lead in.
- Persistent low-frequency noise. Streamer not towing well. Will probably drop to 3.5 m @ end of line (10502, comment made)

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 19A
 PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe
BASIN

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>025/25 JAN. 2000</u>	<u>025/25 JAN 2000.</u>	
TIME(Z)	<u>1435Z</u>	<u>1916Z</u>	<u>4:41</u>
LATITUDE	<u>44° 49.795'S</u>	<u>45° 04.320</u>	<u>LINE LENGTH</u>
LONGITUDE	<u>172° 10.879'E</u>	<u>171° 48.368</u>	<u>42 212.5 m</u>
SHOTPOINT	<u>48500</u>	<u>51877.</u>	<u>3378</u>
FILE #	<u>1</u>	<u>3377</u>	<u>3379</u>
TAPE #	<u>472</u>	<u>478</u>	<u>47</u>
WATER DEPTH	<u>214.6 m.</u>	<u>481.5</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
 SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 31, 49, 91, 103
115
 NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
 COURSE 227° SPEED (KTS) 4.7
 SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —
 SOURCE INFO 2 GI GUNS — 45/45 CONFIGURATION
 NAV SYSTEM INFO DGPS

COMMENTS:

— BIRDS @ 3.5 M FOR THIS LINE.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 33

PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe
BASIN.

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>025/25 JAN</u>	<u>026/26 Jan, 2000</u>	
TIME(Z)	<u>20:38Z</u>	<u>03:14Z</u>	<u>6:36</u>
LATITUDE	<u>45° 04.228' S</u>	<u>44° 43.784' S</u>	
LONGITUDE	<u>171° 50.935' E</u>	<u>172° 26.214' E</u>	<u>Line Length</u> <u>59,450m</u>
SHOTPOINT	<u>52858</u>	<u>57614</u>	<u>4757</u>
FILE #	<u>1</u>	<u>4755</u>	<u>4755</u>
TAPE #	<u>479</u>	<u>488</u>	<u>10</u>
WATER DEPTH	<u>800.4 m.</u>	<u>378.2</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
 SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 91, 104, 115
 NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
 COURSE 46.7 SPEED (KTS) 4.9
 SHOT ON (TIME) (DIST) REP RATE (S) 5 (M) —
 SOURCE INFO 2 G1 GUNS 45/45 CONFIGURATION
 NAV SYSTEM INFO DGPS

COMMENTS:

— STREAMER TOWED AT 2.5 m

— SWELL NOISE TENDS TO BE CONCENTRATED AROUND MIDSTREAMER.*
 traces THIS ^{MAY} BE RELATED TO BIRDS 7-9 BEING CONSISTENTLY HIGH,
68-80 WHICH CORRESPONDS TO CHANNELS 55 TO 79. THE NOISE IS LOWER
 AMPLITUDE BUT STILL PRESENT EVEN IF THESE BIRDS ARE TOWING WELL.

* bird #7 - tr. 55, bird #8 - tr. 67, bird #9 - tr. 79.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 25

PROJECT Canterbury Basin AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>026/26 January, 2000</u>	<u>026/26 JAN 2000</u>	
TIME(Z)	<u>0539Z</u>	<u>1403Z</u>	<u>8:24</u>
LATITUDE	<u>44°46.659'S</u>	<u>44°07.826'S</u>	<u>Line length</u>
LONGITUDE	<u>172°23.072'E</u>	<u>172°39.578'E</u>	<u>75,525 m</u>
SHOTPOINT	<u>59354</u>	<u>65,396</u>	<u>6,043</u>
FILE #	<u>1</u>	<u>6044</u>	<u>6,044</u>
TAPE #	<u>489</u>	<u>501</u>	<u>13</u>
WATER DEPTH	<u>454.5 m.</u>	<u>64.0 m.</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 91, 104, 115

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5m.

COURSE 016° SPEED (KTS) 4.9 kts.

SHOT ON (TIME) (DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 GI Guns, 45/45 Configuration

NAV SYSTEM INFO DGPS

COMMENTS:

NEAR START OF LINE (0645Z) - STILL ~~HIGH~~ ^{Low} FREQUENCY NOISE MOSTLY
IN THE MID-SECTION OF STREAMER. BETTER TOWARDS THE
END OF THE LINE — SUPERB TOWING CONDITIONS.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 3PROJECT CANTERBURY AREA Canterbury Basin P.I. C. Fulthorpe
Basin

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>026/26 JAN 2000</u>	<u>027/27 JAN 2000</u>	
TIME(Z)	<u>1507Z</u>	<u>0409Z</u>	<u>13:02</u>
LATITUDE	<u>44°10.111'S</u>	<u>44°53.977'S</u>	
LONGITUDE	<u>172°39.940'E</u>	<u>171°34.920'E</u>	<u>Line Length</u> <u>117,412.5 m</u>
SHOTPOINT	<u>66168</u>	<u>75561</u>	<u>9394</u>
FILE #	<u>1</u>	<u>9394</u>	<u>9394</u>
TAPE #	<u>502</u>	<u>521</u>	<u>20</u>
WATER DEPTH	<u>68.8</u>	<u>82.6</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 91, 115NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5COURSE 227° SPEED (KTS) 4.9SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —SOURCE INFO 2 GI GUNS — 45/45 CONFIGURATIONNAV SYSTEM INFO DGPSCOMMENTS:

CANTERBURY BASIN 2D SEISMIC SURVEY R/V MAURICE EWING OF LDEO, JANUARY 2000

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 35

PROJECT Canterbury Basin AREA Canterbury Basin P.I. C. Fulthorpe

	START	END	TOTAL
DATE(JD/DATE)	<u>027/27 Jan 2000</u>	<u>027/27 JAN 2000.</u>	
TIME(Z)	<u>0500Z</u>	<u>10:16Z</u>	<u>5.16</u>
LATITUDE	<u>44° 55.099'S</u>	<u>44° 37.685'S</u>	
LONGITUDE	<u>171° 38.254'E</u>	<u>172° 05.270'E.</u>	<u>length 47.450m.</u>
SHOTPOINT	<u>76163</u>	<u>79959</u>	<u>3797</u>
FILE #	<u>1</u>	<u>3795</u>	<u>3795.</u>
TAPE #	<u>522</u>	<u>529.</u>	<u>8</u>
WATER DEPTH	<u>96.1</u>	<u>105.7.</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 91, 104, 115

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5

COURSE 48 SPEED (KTS) 4.9

SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 GI Guns - 45/45 Configuration

NAV SYSTEM INFO DGPS

COMMENTS:

0848Z FISHING Boat of starboard beam ~1 mile, moving slowly and will pass end of streamer in about 1 hour. May produce noise.

This line was stopped right on the waypoint. There is no 1nm lead out before turn.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 40A

PROJECT Canterbury Basin AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>027/27 JANUARY 2000</u>	<u>027/27 January, 2000</u>	
TIME(Z)	<u>1110Z</u>	<u>1504Z</u>	<u>3:54</u>
LATITUDE	<u>44° 38.260'S</u>	<u>44° 52.330'S</u>	
LONGITUDE	<u>172° 03.216'E</u>	<u>172° 21.280'E</u>	<u>Line length 35,225 m</u>
SHOTPOINT	<u>80,601</u>	<u>83,419</u>	<u>2819</u>
FILE #	<u>1</u>	<u>2,818</u>	<u>2818</u>
TAPE #	<u>530</u>	<u>535</u>	<u>6</u>
WATER DEPTH	<u>102.6m</u>	<u>947.4</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 91, 115, 116

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5

COURSE 138° SPEED (KTS) 4.9 kts.

SHOT ON (TIME) DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 GI GUNS 45/45 configuration

NAV SYSTEM INFO DGPS

COMMENTS:

Overlaps with short segment of line 40 shot previously.

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 19B

PROJECT Canterbury Basin AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>027/27 January, 2000</u>	<u>027/27 JANUARY 2000</u>	
TIME(Z)	<u>1744Z</u>	<u>2325Z</u>	<u>5:41</u>
LATITUDE	<u>44° 51.395' S</u>	<u>44° 32.608' S</u>	<u>Line length</u>
LONGITUDE	<u>172° 08.354' E</u>	<u>172° 37.253' E</u>	<u>50,512.5 m</u>
SHOTPOINT	<u>85331</u>	<u>89,372</u>	<u>4042</u>
FILE #	<u>1</u>	<u>4041 4041</u>	<u>4041 4042</u>
TAPE #	<u>536</u>	<u>544</u>	<u>9</u>
WATER DEPTH	<u>219.2 m.</u>	<u>138.7m.</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5

COURSE 47° SPEED (KTS) 4.9

SHOT ON (TIME/DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 GI GUNS, 45/45 Configuration

NAV SYSTEM INFO DGPS

COMMENTS:

GUNS STOPPED SHOOTING & SYSTEM STOPPED FOR 3 MINUTES

(JD 027 - ~~21:31.2Z~~ # SHOT 88059, 44° 38.7988' S, 172° 27.7294

JD 027 - 21:34Z # SHOT 88053*, 44° 38.6097' S, 172° 28.0197
*(RESET TO THIS NUMBER)

WHEN GUNS RESTARTED THEY BACK-TRACKED 6 SHOTS SO THERE IS A 3 MINUTE DATA GAP AND 6 REPEATED SHOT NUMBERS ON TAPE 541.

TAPE = # 88058 — 21:31.16Z } DATA GAP.
88053 — 21:34.52Z }

TAPE
541

**CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000**

LINE INFORMATION LOG

CRUISE Ewing 00-01 SHIP R/V Ewing LINE # 84

PROJECT CANTERBURY BASIN AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>028/28 JANUARY</u>	<u>028/28 January, 2000</u>	
TIME(Z)	<u>0230Z</u>	<u>0423Z</u>	<u>1:53</u>
LATITUDE	<u>44° 45. ³²⁴ 'S</u>	<u>44° 39.540 'S</u>	<u>Line length</u>
LONGITUDE	<u>172° 33.430 'E</u>	<u>172° 24.365 'E</u>	<u>17,000 m</u>
SHOTPOINT	<u>91,593</u>	<u>92,953</u>	<u>1361</u>
FILE #	<u>1</u>	<u>1359</u>	<u>1359</u>
TAPE #	<u>545</u>	<u>547</u>	<u>3</u>
WATER DEPTH	<u>817.4 m.</u>	<u>146.3</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120

SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 31, 114, 115

NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5

COURSE 317° SPEED (KTS) 4.8 kts.

SHOT ON (TIME / DIST) REP RATE (S) 5 (M) —

SOURCE INFO 2 GI GUNS — 45/45 CONFIGURATION

NAV SYSTEM INFO DGPS

COMMENTS:

— At SOL, tail of streamer birds [#]1/2[#] fluctuating rapidly in depth (or appearing to). No obvious change in noise on the streamer gathers.

CANTERBURY BASIN 2D SEISMIC SURVEY
R/V MAURICE EWING OF LDEO, JANUARY 2000LINE INFORMATION LOGCRUISE Ewing 00-01 SHIP R/V Ewing LINE # 22A
PROJECT Canterbury Basin AREA Canterbury Basin P.I. C. Fulthorpe

	<u>START</u>	<u>END</u>	<u>TOTAL</u>
DATE(JD/DATE)	<u>028/28 January, 2000</u>	<u>028/28 January, 2000</u>	
TIME(Z)	<u>0503Z</u>	<u>0615Z</u>	<u>1:12</u>
LATITUDE	<u>44°39.616'S</u>	<u>44°35.302'S</u>	
LONGITUDE	<u>172°21.271'E</u>	<u>172°15.518'E</u>	<u>Line length 10,887.5m</u>
SHOTPOINT	<u>93,436</u>	<u>94,307</u>	<u>872</u>
FILE #	<u>1</u>	<u>870</u>	<u>870</u>
TAPE #	<u>548</u>	<u>549</u>	<u>2</u>
WATER DEPTH	<u>141.9</u>	<u>112.6</u>	

REC LENGTH (S) 3 SAMP INT (MSEC) 1 # CHANNELS 120
SEIS CHANS 120 AUX CHANS — PROBLEM CHANS 1, 19, 104, 115, 116
NEAR OFFSET (M) 26.25 FAR OFFSET (M) 1513.75 CHAN SEP (M) 12.5
COURSE 317° SPEED (KTS) 4.9
SHOT ON (TIME/DIST) REP RATE (S) 5 (M) —
SOURCE INFO 2 GI Guns - 45/45 Configuration
NAV SYSTEM INFO DGPSCOMMENTS:Line shot to fill in data gap in line 22.