



DIGICON

OBSERVER'S LOG

LINE: 87-06
 CLIENT: G.S.C.
 PROJECT/AREA: Van I. Maxwell
 DATE: 2/10/89

JOB NUMBER: 5378
 VESSEL/PARTY: WV Geotide
 OBSERVERS: Zambert, T
 TYPE OF LINE: 2.1

DSS-240 DIGITAL RECORDING PARAMETERS

Sample Interval (msecs) 1 2 4
 Record Length (secs) 4 6 8 10 Other 14 Secs
 Number of Seismic Channels 96 120 240 Other 144
 Compass Readings Recorded Yes No
 Demultiplexed 6250 bpi Tape Format SEGY Other _____
 Low Cut Filter _____
 3 Hz at 6db/Octave
 8 Hz at 12db/Octave
 12 Hz at 12db/Octave
 High Cut Filter _____
 80 Hz at 72db/Octave
 160 Hz at 72db/Octave
 320 Hz at 72db/Octave

NAVIGATION PARAMETERS

Direction of Shooting (degrees) 52
 Shotpoint Interval (meters)
 12.5 25.0 50 Other _____
 First SP 100 Last SP 2376
 Navlog Tape ID # 203 Trace # 141
 Primary Nav System STAR ELK
 Secondary Nav System SAT NAV

SEISMIC SOURCE PARAMETERS

Specified Array Depth (ft) 355 ± 5 ft
 Specified Array Volume (cu.ins) 1820
 Specified Array Pressure (psi) 100

COMMENTS

Add 2 Ft. to gun depths.
 Add 8 Ft. to water depths.
 #3 gun D.I. inaccurate.
 Cable D.I. AT Section #4 inaccurate
 2 second delay on single trace
 AT SOL
 LINE COMPLETE? YES NO

| FILES | SHOTPOINTS | REEL # | TE | REM # | BAD FILE |
|-------|------------|--------|----|-----------|----------|
| 001 | | | | | |
| 002 | | 55 | | | |
| 006 | 100 | | | | |
| 064 | 158 | | 1 | | |
| 066 | 160 | | | | |
| 093 | 187 | | 2 | Auto File | |
| 097 | 191 | | 3 | Auto File | |
| 100 | 194 | | 4 | | |
| 106 | 200 | | | | |
| 113 | 207 | 055 | | | |
| 114 | 208 | 056 | | | |
| 155 | 249 | | 5 | Auto File | |
| 207 | 301 | | 6 | | |

COMMENTS

72415 spinning TR# 25 E/F
 BAD TRS @ SOL: 45, 46, 104, 111, 112, 113 LOCAL TIME: GMT TIME: 1904
 MEAN RMS CABLE NOISE @ SOL: 2.98 mbs SEA STATE: 3 calm
 Acoustic Noise Test
 Noise Files
 Sol cable = 33'-37' wd = 2600 meters yoke = 27'-32'
 FA = +2.70° Source = 7820/1950
 MSDL Printer malfunction MSDL Printer OFF line.
 Cade = 33'-39' yoke = 27'-33' Source 7820/1950
 Gun # 19 Auto File 1 SP
 Deactivated gun # 19 Source 7740/1950
 Activated gun # 10 Source 7820/1950
 Cade = 33'-37' wd = 2592 meters yoke = 27'-32'
 Bot
 Sol FA = +2.03° wd = 2585 meters Source 7820/1950
 Gun # 40 Auto File 1 SP
 Gun # 31 Auto File 1 SP

AF: AUTOFIRE
 BE: BUFFER ERROR
 BS: BROADSIDE TO CABLE
 CAD: CABLE DEPTH
 EOL: END OF LINE
 EOT: END OF TAPE
 FA: FEATHER ANGLE
 FF: FIRST FILE
 FSP: FIRST SHOTPOINT
 GUD: GUN DEPTH
 HIT: HEAD TO TAIL OF CABLE
 IF: INCOMPLETE FILE
 LF: LAST FILE
 LSP: LAST SHOTPOINT
 MON: CAMERA MONITOR
 NAV: NAVIGATION
 SR: SHORT RECORD
 SOL: START OF LINE
 SOT: START OF TAPE
 SHIP HEADING
 T/H: TAIL TO HEAD OF CABLE
 TE: TAPE ERROR
 TR: TRACE
 WD: WATER DEPTH



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CLIENT: G.S.S.

JOB NO.: 5378

LINE: 59-06

| FILES | SHOTPOINTS | REEL# | TE | REM # | BAD FILE | COMMENTS |
|-------|------------|-------|----|-------|-----------|---------------------------------------------------------|
| 335 | 319 | 056 | ✓ | 7 | | End TE001 JF014 |
| 336 | 330 | 057 | | 8 | | Set FA=0.91° wd: 256 meters Source 7830/1950 |
| 389 | 383 | | | 9 | | Picking up screw noise on tail of cable 3 to 5 mbs. |
| 310 | 404 | | | 10 | | Picking up speed due to ship heading for tail buoy |
| 336 | 430 | | | 11 | | Screw noise slow 8 to 10 mbs T/H |
| 335 | 439 | | | | | Ship 1/4 mile astern of tail buoy |
| 336 | 430 | 057 | | | | End |
| 337 | 431 | 058 | | | | Set FA=0.63° Source 7820/1950 |
| 338 | 432 | | | 12 | | Fishing boat starboard side heading for cable. |
| 369 | 463 | | | 13 | | Screw noise decreased to 3 to 5 mbs T/H. |
| 388 | 483 | | | 14 | | Fishing boat crossed over cable approx. 1/2 mile astern |
| 447 | 541 | 058 | | | | End |
| 448 | 542 | 059 | | | | Set FA=2.36° wd: 1700 meters Source 7820/1950 |
| 541 | 635 | | | 15 | | Changed start time on single trace to C.O. sec's. |
| 557 | 651 | | | 16 | Auto Fire | Gun # 31 Auto Fired 1sp. |
| 558 | 652 | 059 | | | | End |
| 559 | 653 | 060 | | | | Set FA=4.95° wd: 1470 meters Source 7830/1950 |
| 576 | 670 | | | 17 | | Changed start time on single trace to 1.0 sec's. |
| 586 | 690 | | ✓ | 18 | | TE002 |
| 669 | 763 | 060 | | | | End |
| 670 | 764 | 061 | | | | Set FA=4.68° wd: 1600m Source 7830/1950 |
| 735 | 829 | | | 19 | Auto Fire | Gun # 31 1sp. |
| 780 | 879 | 061 | | | | End |
| 781 | 875 | 062 | | | | Set FA=3.33° wd: 1498 meters Source 7820/1950 |
| 511 | 965 | 062 | | | | TC1 |
| 512 | 986 | 063 | | | | Set FA=5.86° wd: 1277 meters Source 7820/1950 |
| 1046 | 1046 | | | | | Gun # 31 A.F. |



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| FILES | SHOTPOINTS | REEL# | TE | REM # | BAD FILE | COMMENTS |
|-------|------------|-------|----|-------|-----------|----------------------------------------------------------|
| 1002 | 1096 | 063 | | | | Eot |
| 1003 | 1097 | 064 | | | | Sot FA=+9.78° wd=1022meters Source 7820/1950 |
| 1013 | 1107 | | | 21 | Auto File | Gun # 31 13P |
| 1022 | 1116 | | | 22 | Auto File | Deactivated gun # 31 Activated gun # 1 |
| 1024 | 1118 | | | 23 | Erratic | Gun # 1 Erratic 4SPS |
| 1085 | 1179 | | ✓ | 34 | | TECOR |
| 1093 | 1187 | | ✓ | 35 | | TECOR |
| 1103 | 1197 | | ✓ | 36 | | TECOR |
| 1105 | 1198 | 064 | ✓ | 37 | | ALTMAS due to Tape Errors |
| 1106 | 1200 | 065 | | | | Sot FA=+15.39° wd=980 meters. Source 7820/1950 |
| 1140 | 1334 | | | 28 | | changed start time on single trace to G.O.S.E.S. |
| 1189 | 1383 | | | 29 | | Fathometer back on line wd=624 meters. |
| 1192 | 1386 | | | 30 | Erratic | Gun # 14 Erratic 2sp's 1.6m/s |
| 1316 | 1310 | 065 | | | | Eot |
| 1317 | 1311 | 066 | | | | Sot FA=+3.71° wd=589 meters Source 7820/1950 |
| 1339 | 1333 | | | 31 | Erratic | Gun # 14 Erratic 1sp. 1.6m/s |
| 1337 | 1421 | 066 | | | | Eot |
| 1338 | 1422 | 067 | | | | Sot FA=-6.07° wd=187 meters Source 7820/1950 |
| 1348 | 1443 | | | 32 | | Deactivated gun # 14 Activated gun # 4 Source 7820/1950 |
| 1350 | 1444 | | | 33 | | Sona busy deployed |
| 1368 | 1462 | | | 34 | | Sona busy Release did not Release Sona busy back on line |
| 1382 | 1476 | | | 35 | | Sona busy Deployed again |
| 1438 | 1532 | 067 | | | | Eot |
| 1439 | 1533 | 068 | | 31 | | Bot 1.0.10 wd 140 mms Source 7820/1950 |
| 1549 | 1643 | 068 | | | | Eot |
| 1550 | 1644 | 069 | | | | Sot FA=-2.31° wd=132m Source 7820/1950 |
| 1563 | 1657 | | | 38 | | offsetting line 300 meters stbd to avoid anchored ship. |



OBSERVER'S LOG

LINE: 89-CG CLIENT: G.S.S. JOB NO.: 5378

| FILES | SHOTPOINTS | REEL# | TE | REM # | BAD FILE | COMMENTS |
|-------|------------|-------|----|-------|----------|------------------------------------------------------------------------------------|
| 1656 | 1750 | | | 38 | | Maximum distance air line 300 meters. Remainder of line will be offset 300 meters. |
| 1660 | 1754 | 069 | | | | Est |
| 1661 | 1755 | 070 | ✓ | 40 | | Sot TEO11 FA: -8.85" w.d.: 96M Source 7820/1920 |
| 1662 | 1756 | | ✓ | 41 | | TE009 |
| 1663 | 1757 | | ✓ | | | TE004 |
| 1667 | 1761 | 070 | | 42 | | ALL MAG due to Tape Errors, bad Tape. |
| 1668 | 1762 | 071 | | | | Sot |
| 1736 | 1830 | | | | | FA: -9.17, w.d.: 83 meters |
| 1776 | 1810 | | | | | FA: -8.95, w.d.: 82 meters |
| 1778 | 1872 | 071 | | | | EOT FA: -8.73, w.d.: 82 meters, 7820 Source, 1920 |
| 1779 | 1873 | 072 | | | | Sot |
| 1816 | 1910 | | | | | FA: -7.537, w.d.: 73 meters |
| 1856 | 1950 | | | | | FA: -6.056, w.d.: 72 meters |
| 1889 | 1983 | 072 | | | | EOT FA: -4.78 W.D.: 67 meters |
| 1880 | 1984 | 073 | | | | S.O.T Source 7820 P.S.I. 1920 |
| 1943 | 2037 | | | | | FA: -3.539 W.D.: 59 meters |
| 1971 | 2065 | | | | | FA: -2.41, w.d.: 57 meters. |
| 2000 | 2094 | 073 | | | | Eot |
| 2001 | 2095 | 074 | | | | Sot FA: -1.71, w.d.: 54 meters |
| 2046 | 2140 | | | | | FA: -1.68, w.d.: 53 meters |
| 2056 | 2180 | | | | | FA: -1.62, w.d.: 54 meters. |
| 2111 | 2205 | 074 | | | | Eot. |
| 2112 | 2206 | 075 | | | | Sot. FA: -2.38, w.d.: 50 meters. |
| 2192 | 2286 | | | | | FA: -3.38, w.d.: 61 meters |
| | 2286 | | | | | FA: -5.11, w.d.: 105 meters |

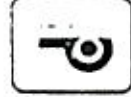


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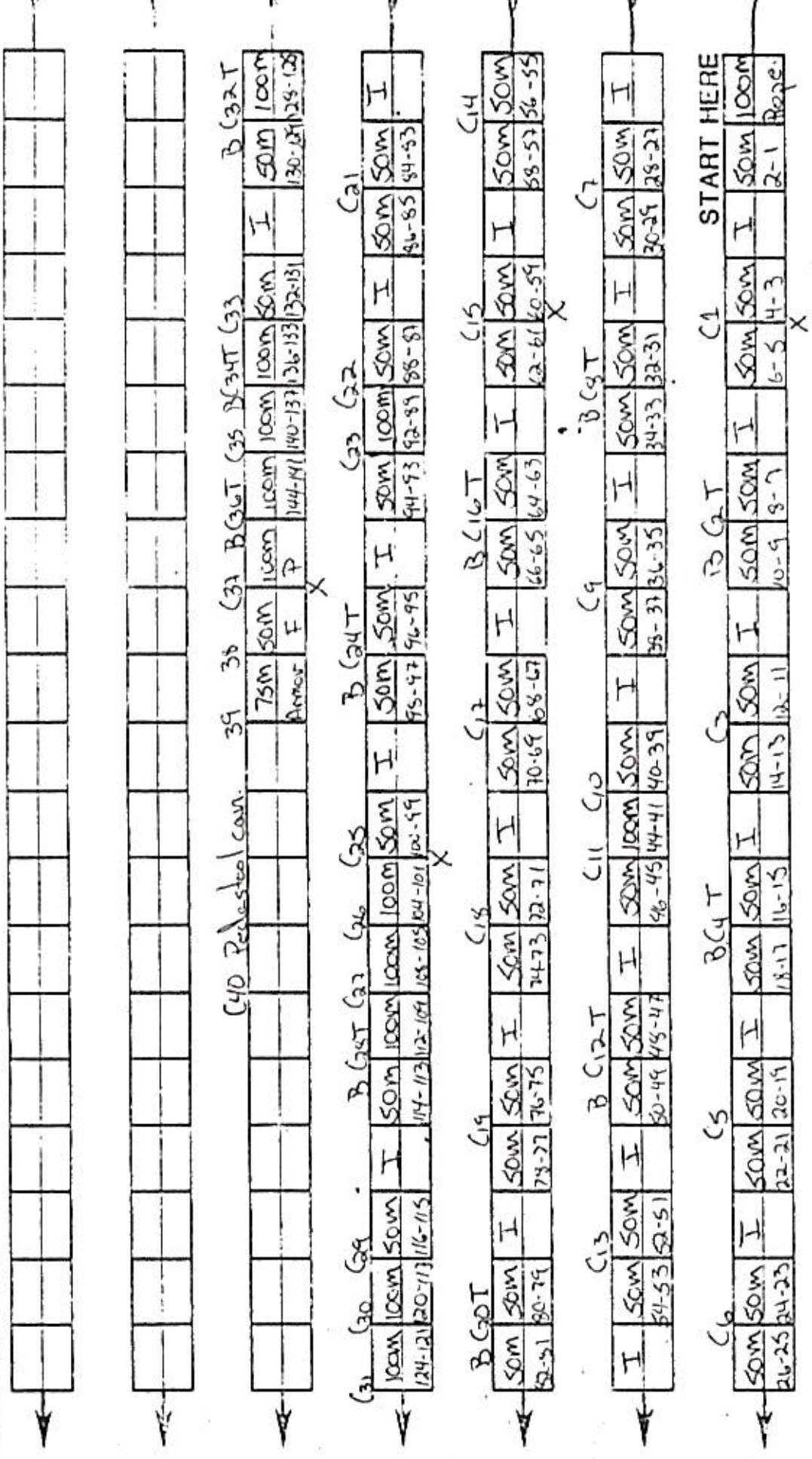
| FILES | SHOTPOINTS | REEL# | TE | REM # | BAD FILE | COMMENTS |
|-------|------------|-------|----|-------|----------|-------------------------------------------------------------|
| 2222 | 2316 | 75 | | | | E.O.L. / ECT |
| 2223 | | 76 | | | | ECT Noise Pulses Noise test. |
| 2227 | | | | | | E.O.L. Cont: 1012 |
| | | | | | | Loop 2316 US 2222 vs 76, 79-566 |
| | | | | | | W.D. 105 meters Source: BDC/Kopsi in Nias 2.64 Complete. |

STREAMER DIAGRAM



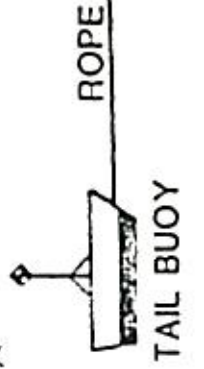
digicon geophysical corp.

TO DOGHOUSE



| | | | |
|--|-------------------|-----------------|-----------------|
| | LIVE SECTION | - X | COMPASS SECTION |
| | TRACE NUMBER | - B | BIRD POSITION |
| | A - ARMED LEAD-IN | | PIG POSITION |
| | C - CANNISTER | T - TRANSDUCERS | |

* PIG WEIGHT IN LBS.





DIGICON

ACQUISITION CONFIGURATION AND OFFSET DIAGRAM

CLIENT: G.S.C.
 PROJECT/AREA: Vancouver
 DATES: _____

JOB NUMBER: 5374
 VESSEL/PARTY: M/V GeoTide 517
 CHECKED BY: _____

ALL DISTANCES IN METERS
 (3.2808 FEET = 1 METER)

GUN VOLUME AND TYPE
 GUN NUMBER STATUS

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 460 | 460 | 380 | 300 | 260 | 220 | 200 | 160 | 80 | 80 |

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 460 | 460 | 380 | 300 | 260 | 220 | 200 | 160 | 80 | 80 |

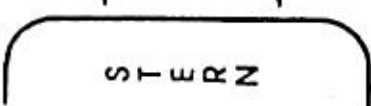
| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 460 | 460 | 380 | 300 | 260 | 220 | 200 | 160 | 80 | 80 |

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 460 | 460 | 380 | 300 | 260 | 230 | 200 | 180 | 80 | 80 |

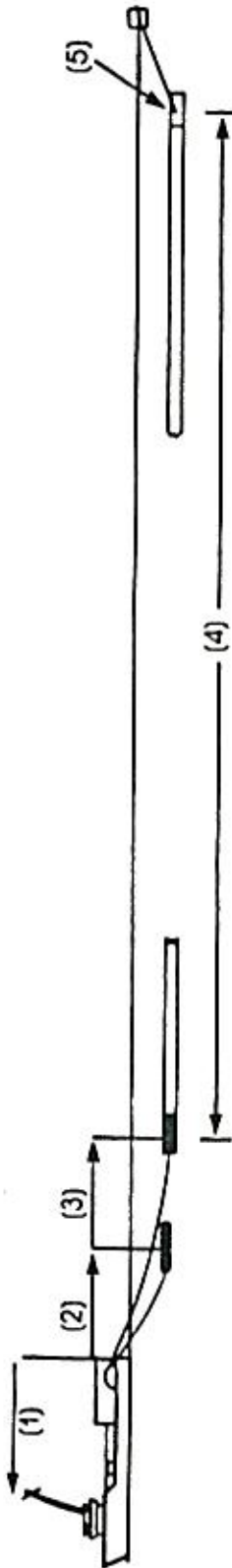
DISTANCE STERN TO NEAREST ACTIVE GUN 22.86 m
 DISTANCE STERN TO FARTHEST ACTIVE GUN _____ m

B=600B AIRGUN
 C=1900C AIRGUN
 A=ACTIVE S=SPARE
 N=NON-OPERATIVE

PREPARED BY: Alex Klunas



(1) DISTANCE PRIMARY ANTENNA TO STERN 28.46 m (2) DISTANCE STERN TO CENTER OF GUN ARRAY 33.53 m
 (3) CENTER OF GUN ARRAY TO CENTER OF NEAR GROUP 197.3 m (4) NEAR TO FAR GROUP CENTERS DISTANCE 3612 m
 (5) DISTANCE TAIL BUOY TO CENTER OF LAST ACTIVE GROUP 338.5 m
 GROUP INTERVAL 6.25 12.50 25.0 OTHER _____ m NUMBER OF NEAREST ACTIVE CAN 36



LEAD IN

TIE-OFF TO STERN DISTANCE 0 m
 TOTAL LENGTH OF PASSIVE SECTIONS 229 m

COMPOSITION OF PASSIVE SECTIONS
 (37) 100m can, compass (38) 50m
 (39) 75m, 2m, 50m

PREPARED BY: Alex Klunas

| | | | | | | | | | | | |
|----|----|----|---|---|---|---|---|----|----|----|---|
| 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| | | | | | | | | 87 | 25 | 15 | 1 |

COMPASS
 DIGITAL CAN

| | | | | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|---|---|---|----|----|----|----|----|----|---|---|---|
| 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | | | |
| | | | | | | | | | | | | 34 | 32 | 24 | 20 | 16 | 12 | 8 | 4 | 2 |

DEPTH TRANSDUCER
 DIGITAL CAN