|                      |   |           |  |                  |                  |                              |                  | _                |                   |
|----------------------|---|-----------|--|------------------|------------------|------------------------------|------------------|------------------|-------------------|
|                      |   |           | *                                      |                  |                  |                              |                  |                  |                   |
|                      |   | `         | 55                                     |                  |                  |                              |                  |                  |                   |
| 9                    | 2   |           |  |                  |                  | 181                          |                  | 7                |                   |
|                      | コーア   |           |  |                  |                  |                              |                  | 0                | 0.1               |
|                      | 72  |           |  |                  |                  |                              |                  | <u>_ `\</u>      | 3                 |
|                      | 25<br>26  |           |  |                  |                  |                              |                  | <u>.</u>         | 20                |
|                      | 24  |           |  |                  |                  |                              |                  | 2                | 30                |
|                      | 2   |           |  |                  |                  |                              |                  | 7                | 24                |
|                      | 26 V  |           |  |                  |                  |                              |                  | 5                | 20                |
|                      | 77  |           |  |                  |                  |                              | _                | <u> </u>         | 60                |
|                      | 28 V  |           |  |                  |                  | .*                           |                  | <u> </u>         | 4                 |
| L. HPLC Other        | NUTR, CHL   | SAL.      | SALINITY                               | SALINITY         | SEC, TEMP        | PRI. TEMP.                   | PRESSURE         | 뭐                |                   |
| SAMPLE BOTTLE NUMBER | MPLE BOT  | Ş         | SAMPLE<br>BOTTLE DATA                  | G.               | IONITOR VALUE    | CTD CONVERTED MONITOR VALUES | S                | <u> I</u>        | POS TRIP<br>DEPTH |
|                      | valve   | bleed     |  | XTRANSMISSOMETER | ChIAM            | XFLUOR                       | X<br>PA          |                  | TEMP SN           |
| 3                    | MAX. DEPTH =  | MAX.      |  |                  |                  | CE                           | 01 AT SURFACE    | € C501           | COND SN           |
|                      |   |           |  |                  |                  |                              | t1390 AT DEPTH   | #:               | TEMP SN           |
|                      |   |           |  |                  |                  | NAC                          | P5040 START DOWN |                  | PRESS SN          |
| -                    |   |           | File Name/Header                       |                  | Tape/Diskette ID |                              | DATA ON          | TYPE & SN SB911+ | PE & SN           |
| USS SPEACH           | REMARKS   | REM,      | NO.                                    | DATA LOCATION    | · · ·            | JD/TIME                      | TIMES            |                  | CTD               |
| 53G6                 | 14  |           |  |                  | Y 9 8 0 J 1 1    | - ZOWO ZMA                   | 11 1491 NZ       | 755152           | 755               |
|                      | (m)   |           | (de                                    | (°C) (mb         | 判                |                              | p<br>D           | MIN              | 찚                 |
| STA. NAME/ID         | N. D. WIN CLOUD (a) CLOUD (a) CLOUD (b) CLOUD (b) CLOUD (c) CLOUD | CLOUD (a) | SEA STAT<br>VISIBILITY<br>DIRN. D. W.I | DRY WET SO       | TIME             | TUDE DATE JD=                | LONGITUDE        | LATITUDE         | # SC<br>SC<br>-   |
| BE6                  | 386   | nt)       |  |                  | 909              | HX209                        |                  | *                | Alpha Helix       |
|                      | STATION DESIGNATION   |           | <u></u>                                |                  | THOUSEC & LEG    |                              | -                |                  | T                 |

PG 5 OF

| _   | _        | _    | ,.  |   | 1        |                | 1.                 | Τ          | i. | Γ- | Г          | <del></del> |               | ַס                           | <u> </u>         | _            |                | -                |                  |               | <del>                                     </del> |              |                                       | 12        |                 |
|-----|----------|------|-----|---|----------|----------------|--------------------|------------|----|----|------------|-------------|---------------|------------------------------|------------------|--------------|----------------|------------------|------------------|---------------|--|--------------|---------------------------------------|-----------|-----------------|
| 12  | <b>=</b> | ō    | 9   | 8 | 7        | 6              | 5                  | 4          | သ  | 2  | _          |             |               | SOd                          | TEMP SN          | COND SN      | TEMP SN        | PES              | ГҮРЕ             | C             | <b>∞</b>   | #            | CAST                                  | Albita    | VESSEL          |
|     |          |      | 100 |   | 0        | 100            | <del>ب</del><br>را | <b>~</b> 0 | のな | 2  | 82         |             | DEPTH         | TRIP                         | SN               | SN           | NS             | PRESS SN         | TYPE & SN SB911+ | CTD           | 3 5 6  | ?            |                                       | дрна пенх |                 |
|     | ,        |      |     | , |          | \              |                    |            |    | \  | ţ          | PRES        |               |                              |                  | d c501       | t1390          | 9504<br>9504     | B911+            |               | 92 S   | LATITUDE     |                                       |           |                 |
|     |          |      |     |   |          |                |                    |            |    |    |            | PRESSURE    |               | 1                            | i XPAR           | AT SURFACE   | 11390 AT DEPTH | P50406START DOWN | DATA ON          | TIMES         | N DEG  | 5 5          |                                       | 1         |                 |
|     |          |      |     |   |          |                |                    |            |    |    |            | PRI.        |               | CTD CO                       |                  | RFACE        | PTH.           | NWOD             | 2                |               | MIN DAY MO                                       | LONGITUDE    |                                       |           |                 |
|     | ,        |      |     |   | 50       | i              |                    |            |    |    |            | PRI. TEMP.  |               | NVERTE                       | XFLUOR           |              |                |                  | -                | JD/TIME       | E CW   | 1_           |                                       |           |                 |
|     |          |      | A.: |   |          |                |                    |            |    |    |            | SEC.        |               | D MONIT                      | _<br><u>C</u>    |              | İ              |                  | -                |               | 9 7  | <b>⊣</b> "   |                                       | FOZVIL    | ו ווסטבטו מ רבט |
|     |          |      |     |   |          |                |                    |            |    |    |            | SEC. TEMP   |               | CTD CONVERTED MONITOR VALUES | ChIAM            |              |                |                  | Tape/D           | new see an    | 80 H   |              | TIME                                  |           | ָר<br>ר         |
|     |          |      |     | 1 |          |                |                    |            |    |    |            | SA          |               | ES                           | XTRANSMISSOMETER |              |                |                  | Tape/Diskette ID | ō             |  |              | DRY                                   | 1         |                 |
|     |          |      |     |   |          |                |                    |            |    |    |            | SALINITY    | <u>.</u>      |                              | MISSOME          |              | <br>           | <br>             |                  | DATA LOCATION | . 0  |              | ≨<br>m<br>ESSURE                      |           |                 |
|     |          |      |     |   | <u> </u> |                |                    |            |    |    | U          | s,          | <br>  평       | <u>.</u>                     | Ц                |              |                |                  | File Name/Header | ATION         | (mb)   | SE<br>VIS    | A STATE                               |           |                 |
|     |          | in i |     |   |          | , v            |                    |            |    |    |            | SALINITY    | BOTTLE DATA   | SAMPLE                       | Cleaned          |              |                |                  | Header           |               | (aeg)  | DIRN.        | WIND<br>D V                           |           |                 |
|     |          | r+ C |     |   |          |                |                    |            |    |    | 0°0<br>0°0 | SAL         | _ <u>&gt;</u> | Ş                            | air bleed valve  | MAX.         |                |                  |                  | REM           |  | CL<br>TY     | ບ<br>ຜູ້ຊື່<br>OUD (an<br>PE<br>ATHER | nt)       | V 0 1           |
|     |          |      |     |   | 56       | <b>بر</b><br>ن | 31                 | 4          | 33 | 34 | 25         | NUTR.       |               | MPLE B                       | valve            | MAX. DEPTH = |                |                  |                  | REMARKS       | <b>6</b> 3                                       | T            | M DEPT                                |           |                 |
| 100 | 7        |      |     |   | \        |                | \                  |            | 1  |    | 2          | 유           |               | OTTLE                        |                  | li           | -              |                  |                  |               | 64 2   | ┪            | <u> </u>                              |           | 70              |
|     | -        |      |     |   | 1        |                |                    | 127        |    |    |            | HPLC Other  |               | SAMPLE BOTTLE NUMBER         |                  | ]<br>₃       |                |                  |                  | <del>-</del>  | <u>m</u>   | STA. NAME/ID |                                       |           | 1               |
|     |          |      | L   |   | L        |                |                    | ,          |    |    |            | her         | <u></u>       | ىد                           |                  |              | 3              | es of            | Ž,               | 20            | 1  | ð            |                                       |           |                 |
|     |          |      |     |   |          |                |                    |            |    |    |            |             |               |                              |                  |              | U              | W                | <b>Ο</b>         |               | Dro on   |              |                                       |           |                 |
|     |          |      |     |   |          |                |                    |            |    |    |            |             |               |                              |                  |              |                |                  |                  | K             | Ž.   |              |                                       |           |                 |

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| Ճ            | <u>=</u> | 10  | 9  | 8      | 7  | 6   | 5  | 4        | ω  | 2        | 1             |            | SOG                          | TEN              | 8            | TEN            | PA               | 7                |               |          |                   | CON<br>SC<br>CAST                 | <u></u>               |
|--------------|----------|-----|--|--------|----|-----|----|----------|----|----------|---------------|------------|------------------------------|------------------|--------------|----------------|------------------|------------------|---------------|----------|-------------------|-----------------------------------|-----------------------|
|              |          |     |  |        | O  | b   | Ō  | သူ       | 9  | 0.1      | 450           |            | DEPTH                        | 1 📬              | COND SN      | TEMP SN        | PRESS SN         | TYPE & SN SB911+ | CTD           | 955      | DEG               | * ST C N                          | VESSEL<br>Alpha Helix |
| -            |          |     |  |        |    | _   |    |          |    |          |               |            | _ ₹ ७                        | 1                | a.           |                | Z                | N SB9            |               | 202      | G MIN             | LATITUDE                          | , <b>X</b>            |
|              |          |     |  |        |    |     |    | :        |    |          |               | PRESSURE   |                              | t1391            | c501         | t1390          | \$5040<br>p5040  | 11+              |               | 3 7 N    | z                 | UDE                               |                       |
|              | ;        |     |  |        |    |     |    | -        |    |          |               | SURE       |                              | XPAR             | AT SU        | AT DEPTH       | STAR             | DATA ON          | TIMES         |          | DEG               | 5                                 |                       |
|              |          |     | -  | _      |    |     | -  |          | _  |          | _             |            | CTD                          | ÅR               | AT SURFACE   | PTH            | 55040 START DOWN | Q.               | S             | 6407     | MIN               | LONGITUDE                         |                       |
|              | -        |     |  |        |    |     |    |          |    |          |               | PRI. TEMP. | CON                          | X<br>F           | <b>]</b>     |                | ,≨<br>           |                  | JD/           | <u>0</u> | ž                 | JDE .                             |                       |
|              | ÷.       |     |  |        |    |     |    |          |    |          |               | MP.        | /ERTE                        | FLUOR            |              |                |                  |                  | JD/TIME       | 3WZZMAY  | DAY               | DATE                              |                       |
|              |          |     | (8)  | See.   | 2  |     |    |          |    |          |               | SE         | CTD CONVERTED MONITOR VALUES |                  |              |                |                  |                  |               | AY       | MO                | DATE JD=                          | PROJECT & LEG         |
|              |          |     |  | -      |    | 8   |    |          |    |          |               | SEC. TEMP  | IT OR                        | ChIAM            | _            | Τ              | γ_               | T <sub>e</sub>   |               | 8<br>0   | YR H              | 3                                 | CT &                  |
| _            |          |     | Sheet.                                       |        |    |     |    |          |    |          |               | Ð          | VALUE                        | X                |              |                |                  | pe/Dis           |               | 0206     | HR MIN            | TIME<br>(GMT)                     | EG                    |
|              |          |     |  |        |    |     | •  | <u> </u> |    |          |               | ဟ          | (X                           | XTRANSMISSOMETER |              |                |                  | Tape/Diskette ID | _             | -        | (၁ <sub>၁</sub> ) | DRY<br>BULB                       |                       |
|              |          |     |  |        | ٠. |     |    |          | -  |          |               | SALINITY   |                              | SSIME            | 4            |                |                  | ō                | DATA LOCATION |          | (°C)              | WET                               | N.                    |
|              |          |     |  |        | ·  |     |    |          |    |          |               | ~          |                              | METE             |              |                |                  | File             | OCAT          |          | ) (mb)            | PRESSUR                           | E                     |
|              |          | -   |  |        |    | - " |    |          |    |          |               | ပ          | 80T                          |                  |              |                |                  | File Name/Header | <u>S</u>      |          |                   | SEA STAT<br>VISIBILITY            |                       |
|              |          | 225 |  |        |    |     |    |          |    |          |               | SALINITY   | SAMPLE<br>BOTTLE DATA        | Cleaned          |              |                | ,                | Heade            |               |          | (deg)             | WIND<br>DIRN.                     |                       |
| 4            |          |     |  |        |    | -   |    |          |    |          | 275           |            | ATA                          |                  | _            | <del>,</del> . | ,                | <u> </u>         |               |          | (s/m)             | DIRN. D. CLOUD (ar TYPE WEATHER H | SIA!                  |
|              |          |     |  |        |    | _   |    |          | -  |          |               | SAL        | SAN                          | air bleed valve  | MAX. DEPTH = |                |                  |                  | REMARKS       |          | •                 | CLOUD (ar<br>TYPE<br>WEATHER      | STATION DESIGNATION   |
|              |          |     |  | $\vee$ |    | 26  | 37 | &<br>W   | 39 | 60       | 41            | NUTR.      | BE E                         | alve             | )EPTH        |                |                  |                  | RKS           | 54       | (m)               | BOTT<br>M DE                      | SIGN                  |
|              |          |     |  | 7      |    |     |    | 7        |    |          | 1             | CHL.       | ОПЫ                          |                  | 11           |                |                  |                  |               | 4        | _                 | ्र<br>इ                           | ALION                 |
|              |          |     |  | 7      |    | :   |    |          |    |          |               | HPLC Other | SAMPLE BOTTLE NUMBER         | 4                |              |                |                  |                  |               | BEH      |                   | STA. NAME/ID                      |                       |
|              |          |     |  |        | *  |     |    |          |    |          |               | Other      | BER                          | -                | 3            |                | <del></del>      | <u> </u>         | ···········   | 1.       |                   | ME/ID                             |                       |
| <del>1</del> | •        | •   | <u>'                                    </u> |        |    |     |    |          |    | <u> </u> | Po            |            | <u> </u>                     | J                |              |                |                  |                  |               | られて      |                   |                                   |                       |
|              |          |     |  |        |    |     |    |          |    |          | Day or or col | 3          |                              |                  |              |                |                  |                  |               | 2        |                   |                                   |                       |
|              |          |     |  |        |    |     |    |          |    |          | 200           | 2          |                              |                  |              |                |                  |                  |               |          |                   | \$200<br>\$400                    |                       |
|              |          |     |  |        |    |     |    |          |    |          | 8             |            |                              |                  |              |                |                  |                  |               |          |                   |                                   |                       |

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| 12 | 11 | 10   | 9   | 8 | 7 | 6        | G            | 4         | ω<br>0 )     | 2  | ے<br>س   |                | POS T                        | TEMP SN          | COND SN      | TEMP SN  | PRESS SN        | TYPE & SN SB911+ | CID           | 0               | * 2               | S S      | Alpha Helix |
|----|----|------|---|---|---|----------|--------------|-----------|--------------|----|----------|----------------|------------------------------|------------------|--------------|----------|-----------------|------------------|---------------|-----------------|-------------------|----------|-------------|
|    |    |      | _   |   |   | _        | 0            | ō         | 9            | 30 | رن<br>%  |                | TRIP<br>DEPTH                | ž                | Š            | ž        | NS              | SN SE            | 0             | <u>V</u>        | LAT               |          | telix       |
|    |    |      |   |   |   |          |              |           |              |    | 10       | PRE            |                              |                  | A C501       | t1390    | 9504            | 3911+            |               | 49              | LATITUDE          |          |             |
|    |    |      |   |   |   |          |              |           |              |    |          | PRESSURE       |                              | _                |              | AT DEPTH | p50406TART DOWN | DATA ON          | TIMES         | Z               | 5 6               | ·        |             |
|    |    |      |   | _ |   |          |              | -         | -            |    |          | -<br>          | CTD                          | XPAR             | AT SURFACE   | EPTH     | NOO TE          | ON<br>ON         | Ś             | 0               | LONGITUDE         |          | !           |
|    |    |      |   |   |   |          |              |           |              |    |          | PRI. TEMP.     | CONV                         | XFLUOR           | ] m          |          | )<br> <br>      |                  | JD/TIME       | 6 2 W           |                   |          |             |
|    |    |      | ,   |   |   | _        |              | <u> </u>  |              |    |          | . <del>§</del> | ERTED                        | UOR              |              |          |                 |                  | Ĭ             | ر<br>الا<br>الا | DATE JD=          |          | ਜ਼          |
|    |    |      |   |   |   |          |              |           |              |    |          | SEC.           | MONIT                        | ChIAM            |              | Ī        | 1               | ı                |               |                 | JD=               |          | HX209       |
|    |    |      |   |   |   |          |              |           |              |    |          | SEC. TEMP      | CTD CONVERTED MONITOR VALUES | AM               | _            |          |                 | Tape             | ,             | 1               | (GMT)             |          | HX209       |
|    |    |      | <del> -</del>                                 |   |   |          | $\dagger$    | $\dagger$ | -            |    |          | <u></u>        | UES                          | XTRΑ             | ]            |          |                 | Tape/Diskette ID |               |                 | _                 | ·        |             |
|    |    |      |   |   |   |          |              |           |              |    |          | SALINITY       | -                            | XTRANSMISSOMETER |              |          |                 | te ID            | DAT/          |                 |                   |          | -           |
|    |    |      |   |   |   |          |              |           |              |    |          | ΥTII           |                              | SOME             |              |          |                 | File             | DATA LOCATION |                 | BULB PRE          | SSURE    | -           |
|    |    |      | <u>                                      </u> |   |   |          | <del> </del> | <u> </u>  | <del> </del> |    |          | (0             | ВО                           | ÷                |              |          |                 | Name             | NOIT          |                 | SEA               | STATE    |             |
|    |    |      |   |   |   |          |              |           |              |    |          | SALINITY       | SAMPLE<br>BOTTLE DATA        | Cleaned          |              |          |                 | File Name/Header |               |                 | DIRN.             | <u> </u> | -           |
|    |    | i.e. |   |   |   |          |              |           |              |    |          |                | JATA                         |                  | L            | ·        |                 | žή.              |               |                 | ) D               | S N      |             |
|    |    |      |   | _ | _ | <u> </u> | _            |           | ,            | _  | <u>0</u> | SAL.           | SAN                          | air bleed valve  | MAX. D       |          |                 |                  | REMARKS       |                 | CLC<br>TYP<br>WE/ | Q ≦<br>Q | 5/36        |
|    | •  |      |   |   |   |          | 4            | 43        | 44           | 54 | 46       | NUTR           | 19 E B                       | alve             | MAX. DEPTH = |          |                 |                  | RKS           | <u>-</u>        | Œ,                | вотто    |             |
|    |    |      |   |   |   |          | 7            |           | 7            |    | 1        | CHL.           |                              |                  | "            |          |                 |                  |               |                 |                   | 40       | 5136        |
|    |    |      |   |   |   |          | _            |           |              |    |          | HPLC           | SAMPLE BOTTLE NUMBER         |                  |              |          |                 |                  |               | 869             | STA. NAME/ID      |          | نر          |
|    |    |      |   |   |   |          |              |           |              |    |          | Other          | 3ER                          |                  | _3           |          |                 |                  |               |                 | VIE/ID            |          |             |

PG POF\_\_\_

| 12 | 1 | 10 | φ | 8 | 7 | o | σ<br>(γ) | 4 10 | ω<br> | N 0      | -<br>v | PRESSURE PRI. TEMP. SI      | DEPTH | POS TRIP TO CONVERTED MONITOR VALUES | CSUT AL SUHPACE | 1080 | +1390 | PRESS SN p50408TART DOWN | TYPE & SN SB911+ DATA ON          | CTD TIMES JD/TIME | DEG MIN DEG MIN DAY MO               | SC CAST LATITUDE LONGITUDE DATE JD=  |
|----|---|----|---|---|---|---|----------|------|-------|----------|--------|-----------------------------|-------|--------------------------------------|-----------------|------|-------|--------------------------|-----------------------------------|-------------------|--------------------------------------|--|
|    |   | d  |   |   |   |   |          |      |       |          |        | SEC. TEMP SALINITY SALINITY | BC    | RANSMISSOMETER                       |                 |      |       | Ti Ci                    | Tape/Diskette ID File Name/Header | DATA LOCATION     | YR HR MIN (°C) (°C) (mb) (deg) (m/s) | TIME DRY WET SO TAIL WIND DO   |
|    |   |    |   |   |   | 1 | 99       | 29   | 55)   | <b>9</b> | 7      | SAL NUTR, CHL. HPLC Other   |       | air bleed valve                      | MAX. DEFIN = m  |      |       |                          |                                   | REMARKS           | /s) · · · · (m)                      | WIN (a) WIN (A) WIN (B) WIN (B |

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| 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4                                       | з  | N  | _       |            | POS                          | ŢĘ,             | 8            | TEN            | PRE              | ΤΥF              |               |           |           | CON<br>SC<br>CAST  | A i         |
|----|----|----|---|---|---|---|---|---|----|----|---------|------------|------------------------------|-----------------|--------------|----------------|------------------|------------------|---------------|-----------|-----------|--|-------------|
|    | ,  | ,  |   |   |   |   |   | 0                                       | 0  | 00 | 20      |            | DEPTH                        | 7 = 6           | COND SN      | TEMP SN        | PRESS SN         | TYPE & SN SB911+ | CTD           | 35508.2   | DEG MIN   | _  | Alpha Helix |
|    |    |    |   |   |   |   |   |   |    |    |         | PRESSURE   |                              | L               | 6501 AT SI   | t1390 AT DEPTH | p50406START DOWN | 3911+ DATA ON    | TIMES         | 9 1 N S   | DI.       | LATITUDE LO  |             |
| 1  | 2  | 2. |   |   |   |   |   |   |    |    |         | PRI. TEMP  | CTD CONVER                   | XPAR XFLUOR     | AT SURFACE   | EPTH           | T DOWN           | <u>§</u>         | S JD/TIME     | 353.37 Wa | MIN       | LONGITUDE D  |             |
|    |    |    |   | : |   |   |   |   |    |    |         | SEC. TEMP  | CTD CONVERTED MONITOR VALUES | OR ChIAM        |              |                | <br>             | <br>             | m<br>         | W FMAY980 | ΥR        | DATE JD=   | HX209       |
|    |    |    |   |   |   |   |   |   |    |    |         |            | VALUES                       | XTRANSA         |              |                |                  | Tape/Diskette ID | DA            | 0529      | (°C)      | TIME DRY<br>(GMT) BULB   |             |
|    |    |    |   | ! |   |   |   |   |    |    |         | SALINITY   | 89                           | TRANSMISSOMETER |              |                |                  |                  | DATA LOCATION | -         | (mb)      | BUET<br>PRESSURE<br>SEA STATE  |             |
|    |    |    |   |   |   |   |   |   |    |    |         | SALINITY   | SAMPLE<br>BOTTLE DATA        | ∞.              | 1            |                |                  | File Name/Header |               |           | (de       | VISIBILITY WIND D SP DIRN. D.  |             |
|    |    |    |   |   |   |   |   | 59                                      | 60 | 61 | 99<br>0 | SAL. NUTR. | SAMPLE B                     | r bleed valve   | MAX. DEPTH = |                |                  |                  | REMARKS       | 32        | * * * (m) | N. D. WIN CLOUD (amt TYPE WEATHER WEATHER TYPE WEATHER WEATHER TYPE WEATHER W | 5130        |
|    |    |    |   |   |   |   |   | < < > < < < < < < < < < < < < < < < < < |    |    | Y All   | снг. нрго  | SAMPLE BOTTLE NUMBER         |                 |              |                |                  |                  |               | 3 5802    |           | O<br>STA. NAME/ID  | 53C2        |
|    |    |    |   |   |   |   |   | (                                       | 7  |    | (       | Other      | SER.                         |                 | 3            |                |                  |                  |               |           | Y         | /E/ID  |             |

PG <u>1</u>0F\_\_\_

| 72 | 11 | 10  | 9 | 89 | 7 | တ | 5 (  | 4    | ۵<br>پ | 2 3  | 1 3 |                   | DE T                        | 7 ₹             | COND SN      | TEMP SN    | PRESS SN         | TYPE &           | CID           | # DEG         | CAST                                       | Alpha Helix |
|----|----|-----|---|----|---|---|------|------|--------|------|-----|-------------------|-----------------------------|-----------------|--------------|------------|------------------|------------------|---------------|---------------|--|-------------|
|    |    |     |   |    |   |   |      | To   | 707    | 301  | 394 | PRE               | DEPTH                       |                 | N c501       | v t1390    |                  | TYPE & SN SB911+ |               | DEG MIN       |  | elix        |
| _  |    |     |   |    |   |   | -    |      |        |      |     | PRESSURE          | <u>c</u>                    | X PA            | AT SURFACE   | O AT DEPTH | 950400START DOWN | DATA ON          | TIMES         | DEG MIN       |  |             |
|    |    |     |   |    |   |   |      |      |        |      |     | PRI. TEMP.        | CONVER                      | XFLUOR          | ĆĒ           |            | NW               |                  | JD/TIME       | ¥ I           |  |             |
| •  |    |     |   |    |   |   |      |      |        | -    |     | SEC. TEMP         | CID CONVERTED MONTOR VALUES | )R ChIAM        |              |            | <br>             |                  | m             | MO YR         | j  | HX209       |
| _  |    |     | , |    |   |   |      | _    |        | 11/1 |     | EMP               | H VALUES                    | V XTR           | 1            |            | ***              | Tape/Diskette ID |               | HR MIN        |  |             |
|    |    |     |   |    |   |   |      |      | :      |      |     | SALINITY          |                             | TRANSMISSOMETER |              |            |                  |                  | DATA LOCATION | (°C) (°C) (mb | WET RESSURE                                |             |
|    |    | 188 |   |    |   |   | ,    |      |        |      |     | SALINITY          | BOTTLE DATA                 | Cleaned         |              |            |                  | File Name/Header | NOI           | (deg)         | EA STATE ISIBILITY VIN                     | -           |
|    |    |     |   |    |   |   | 2    |      | ┢      | 200  | 1   | SAL. N            |                             | air bleed valve | MAX. D       |            |                  |                  | REMARKS       | s) · C        | Ο ≦<br>Υ Ξ<br>LOUD (amt)<br>YPE<br>/EATHER |             |
|    |    |     | 9 |    |   |   | 63 1 | 49   | 65     | 6    | 1   | NUTR, CHL. H      | OAMITE BOTTE NOMBER         | live            | MAX. DEPTH = |            |                  |                  | 3KS           | E (B)         | BOTTO<br>M DEPT                            | 5803        |
| _  |    |     |   |    |   |   |      | . 1) |        |      | (   | DUC<br>HPLC Other | מ מחת                       |                 | 3            |            |                  |                  |               | SIA. NAME/ID  |  |             |

| 10 | 9 | 8 | 7 | 6    | 5 10 | 4 701 | 3 501 | 2 401 |      | PRESSURE PRI. TEMP.     | POS TRIP CTD CONVI           | TEMP SN t1391 X PAR X FL        | COND SN c501 AT SURFACE | TEMP SN t1390 AT DEPTH | PRESS SN p5040 START DOWN | TYPE & SN SB911+ DATA ON | CTD TIMES JD/TIME | DEG MIN DEG MIN DAY N           | NGITUDE  | VESSEL<br>Alpha Helix  |  |
|----|---|---|---|------|------|-------|-------|-------|------|-------------------------|------------------------------|---------------------------------|-------------------------|------------------------|---------------------------|--------------------------|-------------------|---------------------------------|--|------------------------|--|
|    |   |   |   |      | 1.5  |       |       |       |      | MP. SEC. TEMP SALINITY  | CTD CONVERTED MONITOR VALUES | X FLUOR ChIAM X TRANSMISSOMETER |                         |                        |                           | Tape/Diskette ID File I  | IME DATA LOCATION | DAY MO YE HE MIN (°C) (°C) (mb) | TIME DRY WET WE DATE JD= (GMT) BULB E          | PROJECT & LEG<br>HX209 |  |
|    |   |   |   |      |      | 13    |       |       |      | SALINITY                | SAMPLE<br>BOTTLE DATA        |                                 |                         |                        | r,                        | File Name/Header         | ION               | b) (deg) (m/s)                  | SEA STATE VISIBILITY DIR.U DIR.U D. WIN D. WIN | STA                    |  |
|    |   |   |   | 7 12 | 54   | 76    | 77    | 7.2   | 79 7 | SAL NUTR CHL HPLC Other | SAMPLE BOTTLE NUMBER         | bleed valve                     | MAX. DEPTH = m          |                        |                           | F                        | REMARKS           | (m)<br>59 58c5                  | TYPE   | FATION DESIGNATION     |  |

| ] | = | 10 | ဖ | ω | 7  | 6  | 5  | 4                   | ω        | 2        | <u>-</u> |            | Ç                                      | ij               | 8            | Ū,             | PA  | 7                |               |            | SC<br>CAST          | CON      | Alp VE                     |
|---|---|----|---|---|----|----|----|---------------------|----------|----------|----------|------------|--|------------------|--------------|----------------|---|------------------|---------------|------------|---------------------|----------|----------------------------|
|   | ŧ |    |   |   | 0  | 10 | 30 | 30,                 | 49 40    | 50       | 14       |            | DEPTH                                  | 1 <del>=</del> = | COND SN      | TEMP SN        | PRESS SN                                      | TYPE & SN SB911+ | CTD           | 35 DEG     |                     | Z        | VESSEL<br>Alpha Helix      |
|   |   |    |   |   |    |    |    |                     |          |          | L        | PRESSURE   |  | t1391            | c501 AT      | t1390 AT DEPTH | p5040 START DOWN                              |                  | <u> </u>      | 7 MIN AU D | LATITUDE            |          |                            |
|   |   |    |   |   |    |    |    |                     |          |          |          | ¥0.        | CIL                                    | XPAR             | AT SURFACE   | DEPTH          | ART DO  | DATA ON          | TIMES         | DEG M      | LONGITUDE           |          |                            |
|   |   |    |   |   |    |    |    |                     |          |          |          | PRI. TEMP. | CID CONVEHIED MONITOR VALUES           | XFLUOR           | Ä            |                | \ <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u> |                  | JD/TIME       | MIN DAY MO |                     | <u> </u> |                            |
|   |   |    |   |   |    |    |    |                     | <u> </u> |          |          |            | JED MONI                               | H Cr             |              |                |   |                  | m             | 9 4        | DATE JD=            |          | PROJECT & LEG<br>HX209     |
|   |   |    |   |   |    |    |    |                     |          |          |          | SEC. TEMP  | OH VALUE                               | ChIAM            |              |                |   | Tape/Di          |               | B HR MIN   | TIME<br>(GMT)       |          | T & LEG                    |
|   |   | ٠  |   |   | -  |    |    |                     |          |          |          | SALINITY   | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | XTRANSMISSOMETER |              |                |   | Tape/Diskette ID | DAT           | . (°)      | DRY V               |          |                            |
|   |   |    |   |   |    |    |    |                     |          |          |          | VITY       |  | SSOMETE          | ,            |                |   | File Na          | DATA LOCATION | (°C)       | BULB<br>PRESSI      |          |                            |
|   |   |    |   |   |    |    |    |                     |          |          |          | SALINITY   | BOTTLE DATA                            |                  |              |                |   | File Name/Header | N             | (deg)      | VISIBILI<br>DIRN.   | TY       |                            |
|   |   |    |   |   |    |    |    |                     |          |          | 207      |            |  | air ble          | MA           | l<br>I         |   | T                | 교             | (m/s):     | D SP<br>D.          | (amt)    | SIAIIO                     |
|   |   |    |   |   | 80 | %  | 30 | ک <sup>ا</sup><br>س | ×y.      | ત્ય<br>જ | 186      | L. NUTR.   | SAMPLE BOTTLE NUMBER                   | air bleed valve  | MAX. DEPTH = |                | 4   | 5. 1831 con      | REMARKS       | (E)        | WEATH<br>BOTTO<br>H | ER       | STATION DESIGNATION<br>ろみこ |
|   |   |    |   |   | 7  | 7  |    | \                   | _        |          | (        | CHL.       | מטוונה א                               |                  | 11           |                | · [ ,   | ) w/             |               | 3 58       | 1                   |          | 7306                       |
| _ |   |    |   |   |    | 6  |    |                     |          |          |          | DOC<br>DOC | OMBER                                  |                  | 3            |                |   |                  |               | 7          | STA. NAME/ID        |          |                            |
|   |   |    |   |   |    | 7  |    |                     |          |          | 1        |            | •                                      | _                |              |                |   |                  |               |            |                     |          |                            |

| 12    | 11  | 10 | ဖ  | 8     | 7  | 6              | თ        | 4   | ω  | Ŋ  | _     |               | C                            | NE N             | S          | TEN        | PRE              | TYP              |               | milit :     | CON<br>SC<br>CAST                               | Alp!        |
|-------|-----|----|----|-------|----|----------------|----------|-----|----|----|-------|---------------|------------------------------|------------------|------------|------------|------------------|------------------|---------------|-------------|---|-------------|
|       |     |    |    |       | Ò  | 0              | g        | 30. | 40 | 50 | 29    |               | DEPTH                        | TEMP SN          | COND SN    | TEMP SN    | PRESS SN         | TYPE & SN SB911+ | CTD           | DEG         |   | Alpha Helix |
| M. T. | 1   |    |    |       |    |                |          |     |    |    |       | PRESSURE      |                              | t1391 X          | c501 AT    | t1390 AT I | p5040 STA        |                  | TIMES         | NIN DEG     | LATITUDE  |             |
| **    | , , |    |    |       |    |                |          |     |    |    |       | E PRI. TEMP.  |                              | XPAR X           | AT SURFACE | AT DEPTH   | p5040 START DOWN | DATA ON          |               | DEG MIN     | LONGITUDE                                       |             |
|       |     |    | ₽′ | !<br> | -  |                | <u> </u> |     |    |    |       |               | CID CONVEHIED MONITOR VALUES | X FLUOR          |            | ļ          |                  |                  | JD/TIME       | DAY MO      | DATE JD=  | HX209       |
|       |     |    | ,  |       | i  |                |          |     |    |    |       | SEC. TEMP     | NI ON WALO                   | ChIAM            |            |            |                  | Tape/Di          |               | 9 8 0 8 4 0 |   | HX209       |
|       |     | :  |    |       |    |                |          |     |    |    |       | SALINITY      | Ü                            | XTRANSMISSOMETER |            | 46.        |                  | Tape/Diskette ID | DATA L        | (°C) (°C)   | DRY WET   |             |
|       |     |    |    |       |    |                |          |     |    |    |       |               | ВОТ                          |                  |            |            |                  | File Name/Header | DATA LOCATION | (mb)        | PRESSURE<br>SEA STATE<br>VISIBILITY             |             |
| 2.5   |     | ٥  |    |       |    |                |          |     |    |    |       | SALINITY      | BOTTLE DATA                  |                  | 2          |            |                  | leader           |               | (deg) (m/s) | WIND WIND D SPUD (amt                           |             |
|       |     | -  |    |       | 48 | 88             | 83       | 9   | و  | 49 | 01 93 | NUTR.         | OAWIF LE D                   | eir bleed valve  | MAX. DEPTH |            |                  | -                | REMARKS       | (m)         | CLOUD (amt<br>TYPE<br>WEATHER<br>M BO<br>T FPTO | 5BC7        |
|       | -   |    |    |       | 1  | ٠.٠٠           | 1        |     |    |    |       | CHL. HPLO     | OAMITE BOLLE NOMBER          |                  | 11         |            |                  |                  |               | 4 5/2/07    | O<br>STA. NAME/ID                               | 307         |
|       |     |    |    |       |    | t <sub>a</sub> | Þ        |     |    |    |       | f)oc<br>Other | סכת                          | 2                | 3          |            |                  |                  |               | , , ,       | ME/ID   |             |

| 12 | 11 | 10 | 9 | 8 | t |   | 6 205 | 5 301 | 4 401 | 3 50, | 2 750 | 1 <b>9</b> 0 v | PRESSURE                   | DEPTH                       | IP SN t1391            | COND SN c501 AT S | TEMP SN 11390 AT DEPTH | PRESS SN p5040 START DOWN | TYPE & SN SB911+ DAT  | CTD TIMES     | 1955 22-82 NIN DEG      | CON<br>SC<br>CAST<br># LATITUDE L               | Alpha Helix |
|----|----|----|---|---|---|---|-------|-------|-------|-------|-------|----------------|----------------------------|-----------------------------|------------------------|-------------------|------------------------|---------------------------|-----------------------|---------------|-------------------------|---|-------------|
|    |    |    |   |   |   |   |       |       |       |       |       |                | PRI. TEMP.                 | CID CONVENTED MONTON VALUES | XPAR XFLUOR C          | AT SURFACE        | DEPTH                  | RT DOWN                   | DATA ON               | ES JD/TIME    | ON KAD NIW              | m   | חאבטס       |
|    |    |    |   |   |   |   |       |       |       | -     |       |                | SEC. TEMP SALINITY         | II On VALUES                | ChIAM XTRANSMISSOMETER |                   |                        |                           | Tape/Diskette ID File | DATA LOCATION | YR HR MIN (°C) (°C) (mb | TIME DRY WET SO                                 |             |
|    |    |    |   |   |   |   |       |       |       |       |       |                | SALINITY                   | BOTTLE DATA                 | Cleaned                | ]                 | E.V                    |                           | File Name/Header      | TION          | (deg)                   | SEA STATE<br>VISIBILITY<br>DIRN. D WIN<br>D. SP |             |
|    |    |    |   | 7 | 7 | 7 | 36    | 97    | GD    | 56    | 100   | 101            | SAL. NUTR, CHL. HPLC Other | SAWIT LE BOTT LE NOMBEN     | air bleed valve        | MAX. DEPTH = m    |                        |                           |                       | REMARKS       | (m)                     | CLOUD (amt                                      | 750         |

| 12 | 10 | 9 | 0    | 7 101  | 6 304 | 5 30  | 4 404 | 3 50 | 2 75.     | 1 94 | PRESSURE PRI. TEMP. SEC. TEMP SALINITY SALI | DEPTH CID CONVERTED MONITOR VALUES BOTTLE | IP SN t1391 X PAR X FLUOR CHIAM X TRANSMISSOMETER | COND SN c501 AT SURFACE | TEMP SN t1390 AT DEPTH                   | PRESS SN p5040 START DOWN | TYPE & SN SB911+ DATA ON Tape/Diskette ID File Name/Hea | CTD TIMES JD/TIME DATA LOCATION | 205 35.33N 64 07.4 0W2 7MAY 98 1007 . (C) | LATITUDE LONGITUDE DATE JD= (GMT) BULB BULB TO SEE | ŦΑ                   |
|----|----|---|------|--------|-------|-------|-------|------|-----------|------|---|---|---|-------------------------|--|---------------------------|---|---------------------------------|---|--|----------------------|
|    | ,  |   |      |        |       | 2     |       |      |           |      | SALINITY                                    | BOTTLE DATA                               | Cleaned   |                         | 18 A A A A A A A A A A A A A A A A A A A |                           | File Name/Header  | CATION                          | (III) (Geg) (III)                         | SEA S<br>VISIB<br>VIND<br>DIAN.                    | LIT                  |
|    |    |   | 1000 | ر<br>ا | 104   | 105 2 | 106   | 401  | ر<br>الإن | 0000 | SAL. NUTR. CHL. HPLC Other                  | OAMITE DO HEE NOMBER                      | air bleed valve                                   | MAX. DEPTH = m          | (mcour)                                  | count cell                | Got fally na  | REMARKS                         |   | · CLOU<br>· TYPE<br>· WEAT                         | D (a<br>HEF<br>BOTTO |

| 3 | ##       | 10 | 9  | 8   | 7        | 6   | 5   | 4        | ω        | N   |          | <u> </u>     |             | P<br>OS                      | Ţ                | Ω          | 7              | ₽                | Ŧ                |               |                  | 0                           |                   | Α.          |
|---|----------|----|--|-----|----------|-----|-----|----------|----------|-----|----------|--------------|-------------|------------------------------|------------------|------------|----------------|------------------|------------------|---------------|------------------|-----------------------------|-------------------|-------------|
|   | <u> </u> | 10 | Ë  | Ť   | +        |     | H   | ╁        | -        |     |          | <u> </u>     |             |                              | TEMP SN          | COND SN    | TEMP SN        | PRESS SN         | YPE (            | CTD           | ñ                |                             | 8 8               | Alpha Helix |
|   |          |    |  | 0   | 0,       | 200 | 300 | Ó        | 50       | 750 | ノでむ      | į<br>        | DEPTH       | TRIP                         | NS               | NS         | NS             | NS 8             | TYPE & SN SB911+ | ö             | 5 5              | )                           |                   | Helix       |
|   |          |    |  |     |          |     |     |          |          |     | Ì        |              |             |                              | -                | _          | _              | _                | SB91             |               | <u>ما</u>        | LATITUDE                    |                   |             |
|   |          |    |  |     |          |     |     |          |          |     |          | PES          |             |                              | t1391            | c501       | 1390           | 5040             | <del>+</del>     |               | 90<br>Z          |                             |                   |             |
|   |          |    |  |     |          |     |     |          |          |     |          | PRESSURE     |             |                              | ×                | AT S       | AT D           | STA              | DAT              | TIMES         |                  | DEG CO                      |                   |             |
|   |          |    | _  | _   | <u> </u> | _   | -   |          | _        |     | _        |              |             | Ω                            | XPAR             | AT SURFACE | t1390 AT DEPTH | p5040 START DOWN | DATA ON          | ିଓ            | 0                | " ONG!                      |                   |             |
|   |          |    |  |     |          |     |     |          |          |     |          | PRI.         |             | CTD CONVERTED MONITOR VALUES | ×                | <br> <br>  | , <del>-</del> | , Š              |                  | ے             | 16409.44 WA 7MAY | LONGITUDE                   |                   |             |
|   |          |    |  |     |          |     |     |          |          |     |          | PRI. TEMP.   |             | Ň                            | XFLUOR           | Ï          |                |                  |                  | JD/TIME       | W                |                             |                   | -           |
|   |          | _  | <u>.                                    </u> | L   | <u> </u> |     | _   |          | -        |     | ļ        | ļ. <b>°</b>  |             | ₹TED                         | SH.              |            |                |                  |                  | m             | M K              | 100                         |                   | Ê           |
|   |          |    |  |     |          |     |     |          |          |     |          | SEC          |             | Š                            | ПС               |            | •              | <u>.</u>         | 1                |               | <b>ω</b> .       |                             |                   | HX209       |
|   |          |    |  |     |          |     |     |          |          | ļ   |          | SEC. TEMP    |             | HOT                          | ChIAM            |            | Τ              | T                | -a               |               | 8                | ¥ 6 ]                       |                   | +           |
|   |          |    |  |     |          |     |     |          |          |     |          | 7            |             | Σ<br>E                       | ×                |            |                |                  | pe/D             |               | 4-50             | TIME<br>(GMT)               |                   |             |
|   |          |    |  | ,   |          |     |     |          |          |     |          |              |             | ES                           | XTRANSMISSOMETER |            |                |                  | Tape/Diskette ID |               |                  | BULB                        |                   | L           |
|   |          |    |  |     |          |     |     |          |          |     |          | SALINITY     |             |                              | NSMIS            | ٠          |                |                  | e<br>D           | DAT,          |                  |                             | <u> </u>          | 1           |
|   |          |    | -  |     |          |     |     |          |          |     |          | Į,           |             |                              | SOM              | а.         | i              |                  | <u></u>          | A LOC         |                  | WET<br>BULB                 |                   |             |
|   |          |    |  |     | <u> </u> |     |     |          | <u> </u> |     | <u> </u> |              |             |                              | ETEF             | -          |                | 1                | File Name/Header | DATA LOCATION |                  | PHES:                       |                   |             |
|   |          |    |  |     |          |     |     |          | ***      |     |          | SA           | 801         | S                            |                  | ļ          |                |                  | me/t             | ž             |                  | VISIBI                      | LITY              | 1           |
|   |          |    | ]  |     |          |     |     |          |          |     |          | SALINITY     | BOTTLE DATA | SAMPLE                       | Cleaned          |            |                |                  | leade            |               |                  | WIND<br>DIRN.               |                   |             |
|   |          |    |  |     |          |     |     |          |          |     | -        | <b>~</b>     | ATA         | т                            |                  | iè         |                |                  | <b>~</b>         |               |                  | D SP<br>D.                  | ≨<br>Z<br>D (amt) |             |
|   |          |    |  |     |          |     |     |          |          | 160 |          | SAL.         |             | /S                           | air bleed valve  | MAX.       | -              |                  | 6                | REM           |                  | • CLOU!<br>• TYPE<br>• WEAT | D (amt)           | 5.8C        |
|   |          |    |  | 110 | 111      | 511 | 113 | 114      | Ę        | = 5 | 117      | NUTR.        |             | MPLI                         | valve            | MAX. DEPTH |                | Ì                | 5                | REMARKS       |                  | - WEAT                      | HER<br>B          | 1           |
| - |          | -  | -  | 7   | _        |     |     | $\vdash$ | ~\       | 0_  | 71-2     |              |             | BOT                          |                  | 로=         |                | Į                | 12               |               | 80               | M DEPT                      | ВОПО              | 7           |
|   |          | _  |  |     | 7        | -   | -   | L        | _        |     | _        | 무            |             | TLE                          |                  |            |                | *                | 3                |               | \$13C            | ST/                         |                   | 1/2         |
|   |          |    | _  |     |          | L   |     |          |          |     |          | НРСС         |             | SAMPLE BOTTLE NUMBER         |                  |            |                |                  | avvo             | _             | 0                | STA. NAME/ID                |                   | 0           |
|   |          |    |  |     |          |     |     |          |          |     |          | DoC<br>Other |             | 3ER                          |                  | 3          |                |                  | 9                | )             |                  | NE/IC                       |                   |             |

| 12 | 11 | 10 | 9 | 8 | 7     | 6  | σı  | 4    | ω      | 2        |        |            | SOS                          | TEM                     | δŠ           | TEM            | PRE              | TYP              |               | 95 #         | CON<br>SC<br>CAST                                | Alph                   |
|----|----|----|---|---|-------|----|-----|------|--------|----------|--------|------------|------------------------------|-------------------------|--------------|----------------|------------------|------------------|---------------|--------------|--|------------------------|
| ·  |    |    |   | C | AOI   | ઝૂ | 8   | 5    | 5<br>2 | 75       | Ž<br>Ĉ |            | DEPTH                        | TEMP SN                 | COND SN      | TEMP SN        | PRESS SN         | TYPE & SN SB911+ | CTD           | # LATITUE    | <u>~~~~</u>                                      | VESSEL<br>Alpha Helix  |
|    |    |    |   |   |       |    |     |      |        | `        | `      | PRESSURE   |                              | 11391                   | c501         | 11390          | p5040            | B911+            |               | G MIN        |  | ,                      |
|    |    |    |   |   |       |    |     |      |        |          |        | SURE       |                              | X PAR                   | AT SURFACE   | t1390 AT DEPTH | p5040 START DOWN | DATA ON          | TIMES         |              |  |                        |
|    |    |    |   |   |       |    |     |      |        |          |        | PRI. TEMP. | CTD CON                      | Z<br>Z                  | Ä<br>E       | <br>           | N<br>N           | <br>             | ,<br>JD       | G MIN        | ~  |                        |
|    |    |    |   |   |       |    |     |      |        |          |        | EMP.       | VERTED                       | XFLUOR                  |              | 38             |                  |                  | JD/TIME       | DAY MO       |  | ¥ %                    |
|    |    |    |   |   |       |    |     |      |        |          |        | SEC. TEMP  | CTD CONVERTED MONITOR VALUES | ChIAM                   | j)<br>       | ,              | i<br>:           | !<br>            |               | УR<br>9 8    |  | PROJECT & LEG<br>HX209 |
|    |    |    | , |   |       |    |     |      |        |          |        | E P        | A VALUE                      | ×<br>×                  |              |                |                  | Tape/Diskette ID |               | HR MIN       | TIME   | LEG                    |
|    |    |    |   |   | -     |    |     |      | :      |          |        | SALINITY   |                              | XTRANSMISSOMETER        |              | and and        |                  | kette ID         | DAT           | (°C) BULB    | DRY  |                        |
|    |    |    |   |   |       | -  |     |      |        |          | _      | YTIN       | ,                            | SSOMET                  |              |                | , ·<br> -        | File             | DATA LOCATION | (°C) (mb)    | ESSURE   |                        |
|    |    |    |   |   |       |    |     |      |        |          |        | SAL        | ВОТП                         |                         |              |                |                  | File Name/Header | ION           | 55           | A STATE<br>SIBILITY                              |                        |
|    |    |    |   |   |       |    |     |      |        |          | : -    | SALINITY   | SAMPLE<br>BOTTLE DATA        | Cleaned air bleed valve |              |                |                  | eader            |               | deg) (m/s    | WIND  ONE OUD (amt)  PE EATHER  DO ONE OUD (amt) | 418                    |
|    |    |    |   |   |       |    |     |      |        |          |        | SAL.       | SAN                          | bleed v                 | MAX. [       |                |                  |                  | REMARKS       | CL           | OUD (amt)<br>PE<br>EATHER                        | A LON D                |
|    |    |    |   | 2 | 119 6 | 20 | 161 | 6-61 | (دو)   | 129      | 125    | NUTR. C    | SAMPLE BOTTLE NUMBER         | alve                    | MAX. DEPTH = |                | *                |                  | RKS           | I E a        | BOTTO<br>M DEPT                                  | FATION DESIGNATION     |
|    |    |    |   | J | 1     | _  | -   |      |        |          |        | CHL. HP    | I LE NC                      |                         |              |                |                  |                  |               |              |  | CON                    |
|    |    |    |   |   |       |    |     | -    | -      | <u> </u> |        | PLC Other  | MBEH                         | -                       | )<br>3       |                |                  |                  | <del></del>   | STA. NAME/ID |  |                        |

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| TIMES JOTIME DATA ON TRANSMISSOMETER CHAPTER DEPTH  DESTINATION TO DESTART DOWN  PSN 11390 AT DEPTH  DESTINATION START DOWN  PSN 11390 AT SURFACE  DEPTH  DESTINATION SEC. TEMP SALINITY SALINIT | 5 =          |   | <del>-</del> | 9      | 8 | 7            | 6        | 5  | 4              | ω        | 2    |     |            |             | POS         | <u> </u>      | δ.      | =          | <u></u>   | - <u>-</u> - |           |               |        | 0                  |              | 75   | <del>-</del> -   |
|--|--------------|---|--------------|--------|---|--------------|----------|----|----------------|----------|------|-----|------------|-------------|-------------|---------------|---------|------------|-----------|--------------|-----------|---------------|--------|--------------------|--------------|------|------------------|
| CHORDING   CONGITUDE   DATE D=   TIME   DRY   WET   DES   WIND DATE   DATE   DATA   DAT   | <u> </u>     | ╅ | _            | $\sim$ | × |              |          | ┼- | -              | -        | 1.5_ | -   |            |             |             | EMP:          | OND     | EMP.       | RESS      | YPE          | S         | دو<br>دا      |        | AST<br>#           | လ <u>လို</u> | ء ال | /ESSI            |
| TIME DAY WET TO SEC. TEMP  SALINITY  |              | _ | <u>_</u>     | <      | < | <            | 1        | 7  | 9 1            | 1        | 5    | 2   |            | EPTH        | 픩           | SN            | SN      | SS         | SN        | NS %         | ∂         | U             | DEG    | LA                 | . 10         | الم  | ₹<br>₩<br>₩      |
| ONGITUDE DATE JD=   CHL   DRY   WET   DRY   WIND D SPOND   HE BOTTO   HE MIND D SPOND   HE BOTTO   HE MAN DEPTH   HE MIND D SPOND   HE BOTTO   HE MAN DEPTH   HE MIND D SPOND   HE BOTTO   HE MAN DEPTH   HE MIND D SPOND   HE BOTTO   HE MAN DEPTH   HE MIND D SPOND   HE BOTTO   HE MAN DEPTH   HE MAN DEPTH   HE SAMPLE                 |   |              |        |   |              |          |    |                |          |      | - 2 | PRESSURI   |             |             |               |         | t1390 AT I | p5040 STA |              | TIM       | 40<br>20<br>2 |        |                    |              |      |                  |
| DRY WET DO AT TO STAIL MIND DO SPONDER HE LEAD TO DO SPONDER HE STA. NAN (°C) (°C) (mb) (deg) (ms) · · · (m)  DATA LOCATION  PANISMISSOMETER Cleaned air bleed valve  SALINITY   |              |   |              |        |   |              | ,        |    |                |          |      |     | <u> </u>   |             | CTD CON     | PAR X         | SURFACE | DEPTH      | AT DOWN   | TA ON        |           | -E-           | Г      | LONGITUDE          |              |      |                  |
| DRY WET DO AT TO WIND DO SPOND HE BOTTO STAND DO SPOND HE BOTTO DE COMBON DE C |              |   | _            | ,10),  |   |              |          |    | <u> </u><br> - |          |      |     |            |             | VERTED MOI  | FLUOR         |         |            |           |              | TIME      | MANAMA        | DAY MO | DATE JD=           |              |      | HX209            |
| DRY WET DO AT TO WIND DO SPOND HE BOTTO STAND DO SPOND HE BOTTO DE COMBON DE C |              |   |              |        |   |              |          |    |                |          | ,    |     | EC. TEMP   |             | NITOR VALUE | ChIAM         |         |            |           | Tape/Di      |           | -             |        | TIME<br>(GMT)      |              |      | )<br>ברו מּרבּטּ |
| WIND D SPORMAN M DEPT (deg) (m/s) · · · (m)  N  REMARKS  NAX. DEPTH =  Cleaned air bleed valve  SAMPLE SAMPLE BOTTLE NUMB  SALINITY  SAL. NUTR, CH HPLC  | 2            |   |              |        |   |              |          |    |                |          |      |     | SALINITY   | · 😨         | S           | TRANSMISSOMET |         |            |           |              | DATA LOCA |               | (°C)   | BULB               | SUR          | Е.   |                  |
| HPLO RENUMB  |              |   |              |        |   |              |          |    |                |          |      |     | SALINITY   | BOTTLE DATA | SAMPLE      | Cleaned       |         |            |           | Name/Header  | NOIT      |               | (dec   | VISIB<br>OIR WIN   | ILITY        |      | (                |
| HPLO STA. NAN  | _            |   |              |        |   |              |          |    |                |          |      |     |            |             | SAME        | bleed va      | MAX. DE |            |           | P            | REMAR     | E             |        | CLO<br>TYPE<br>WEA | JD (a        | mt)  | 10,10            |
| HP ION NUMB  | +            |   |              | -      |   |              |          | +  |                | +        |      | _   | JTR. CHL   | _           | LE BOTT     | Ve            | PTH =   |            | 1         | cle Pa       | ିତ        |               | 3      |                    | ОПО          |      | 58               |
|  | <del>-</del> |   |              |        |   | <del> </del> | <u> </u> |    |                | _        | +-   |     | HPLO       | 1           | LE NUMBI    |               |         |            | İ         | Do           |           | 513C 2        |        | STA. NAM           |              |      |                  |
|  |              |   |              |        |   |              |          |    |                | <u> </u> |      | [:  | Other Prod | <u> </u>    | Ξ̈́         |               | 3       |            |           |              |           |               |        | E/ID               |              |      |                  |

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| 12 | 11 | 10  | 9 | 8 | 7 |   | מ | 5 | 0   | 3       | 2 10 | - 3 | , p              | POS TRIP<br>DEPTH            | TEMP SN 1:       | COND SN c       | TEMP SN t      | PRESS SN p                                       | TYPE & SN SB911+      | CTD           | CON SC CAST LATITUDE  # DEG MIN  DEG MIN   | VESSEL<br>Alpha Helix |
|----|----|-----|---|---|---|---|---|---|-----|---------|------|-----|------------------|------------------------------|------------------|-----------------|----------------|--|-----------------------|---------------|--|-----------------------|
|    |    |     |   | , |   |   |   |   |     |         |      |     | PRESSUR <b>E</b> | CI                           | 11391 X PAR      | c501 AT SURFACE | 11390 AT DEPTH | P5040 START FOWN                                 | + DATA ON             | TIMES         | LONG<br>DEG  |                       |
|    |    |     |   |   |   |   |   |   |     |         |      |     | PRI. TEMP.       | TD CONVERTED                 | XFLUOR           | CE              |                | NWC  |                       | JD/TIME       | E DAT  | r                     |
|    |    |     |   |   |   |   |   |   |     |         |      |     | SEC. TEMP        | CTD CONVERTED MONITOR VALUES | ChIAM            |                 | T              | <br>   | _ Tape/               |               | JD= TIME A Y9 8 1 9 2 2  | HX209                 |
| Ż  |    |     |   |   |   |   |   |   | 351 | <u></u> |      |     | SALINITY         | UES                          | XTRANSMISSOMETER |                 |                |  | Tape/Diskette ID File | DATA LOCATION | DRY WET DO THE DRY WET DRY WET DO THE DRY WET DRY WET DO THE DRY WET DR |                       |
|    |    | = - |   |   |   |   |   |   |     |         |      |     | SALINITY         | SAMPLE<br>BOTTLE DATA        | Cleaned          |                 |                |  | File Name/Header      | TION          | SEA STATE VISIBILITY  (deg) (m/s)  CLOUD (amt)   |                       |
|    |    |     |   |   |   |   |   |   |     |         |      |     | SAL.             | SA                           | air bleed valve  | MAX.            |                |  | >                     | REMARKS       | CLOUD (amt) TYPE WEATHER   |                       |
|    | -  |     | - | - | - | - |   | _ |     |         | -    |     | NUTR. C          | MPTE BO                      | /alve            | MAX. DEPTH =    |                |  | Sidn                  | RKS           | TYPE  WEATHER  M DEPT  |                       |
|    |    |     |   |   | + |   |   |   |     |         |      | -   | CHL HPLC         | SAMPLE BOTTLE NOMBER         |                  |                 |                | - Part - 1 A B B A B B B B B B B B B B B B B B B | pende                 |               | STA. NAME/10   |                       |
|    |    |     |   |   |   |   | • |   |     |         | +-   | 1   | Other            |                              |                  | 3               | <u></u>        |  | 30                    |               | G(/ <b>3k</b>  |                       |

| MAX. DEPTH  COOL TEMP  LONGITUDE  | 12  | 11 | 10 | 9  | 8 | 7 /    | 6           | ნ<br>ყა | 4 | ယ<br>() | 2<br>2 | <u>-</u> |           | DE :         | ╗                         | COND SN      | TEMP SN  | PRESS SN   | TYPE &           | СТО        | 95<br>(2,   |                | CAST<br>OSC               | CON   | VESSEL<br>Alpha Helix |
|--|-----|----|----|----|---|--------|-------------|---------|---|---------|--------|----------|-----------|--------------|---------------------------|--------------|----------|--|------------------|------------|-------------|----------------|---------------------------|-------|-----------------------|
| TINDE DATE JD= TIME DRY WET DO TO THE BOTTO THE BULB BULB TO STATE TO CONVERTED WONTOR VALUES  TAPE/DISKette ID FILE Name/H-sader  SALINITY SALI NUTR CHILE SAMPLE BOTT.  SALINITY SALI NUTR CHILE SAMPLE BOTT.  SALINITY SALI NUTR CHILE SAMPLE BOTT.   | ••• |    |    | 01 |   |        |             |         | = | -       | !      | =        | PRESS     | DEPTH.       |                           | c501         |          |  | TYPE & SN SB911+ | 0          | 5790 7 7 N  | LATITUDE       |                           |       | lelix                 |
| TIME DRY WET DE WIND DSPOWER MODEPT HE DATA LOCATION    DAY MO YR HR MIN (°C) (°C) (mb ) (199) (m/s) · · · (m)   DAY MALY 9 8   333  |     |    |    |    |   | =-<br> | • 6332<br>— | 7       |   |         |        |          |           |              | X PAF                     | AT SUR ACE   | AT DEPTH | START DOW  | DATA CH          | TIMES      | 635         | LONGITU        |                           | Ä.    |                       |
| DRY WET DE THE SALL NUTR CH  |     |    |    | -  |   |        |             |         |   |         |        |          | RI. TEMP. |              | XFLUOR                    |              |          | Z  |                  | JD/TIME    |             |                | · · ·                     |       | HX F                  |
| DRY WET DE THE SALL NUTR CH  |     |    |    |    |   |        |             |         |   |         |        |          | SEC. TEMP |              | ChIAM                     |              |          | F  | _ Tape           | <u></u>    | Y 9 8 1 3 2 | ¥ "            | TM                        |       | 209                   |
| WIN D SPOUM M DEPT (Lieg) (m/s) O SPOUM M DEPT (Lieg) (m/s) O SPOUM M DEPT H BOTTO O SAMPLE BOTT E DATA  SAMPLE SAMPLE BOTT CHILDREN  SAMPLE BOTT CHILDREN  SAL NUTR CHILDREN  CHILDREN  SAL NUTR CHILDREN  SAL NUTR CHILDREN  CHILDREN  CHILDREN  SAL NUTR CHILDREN  CHIL |     |    |    |    |   |        |             |         |   |         |        |          | SALINITY  |              | XTRANSMISSOMETE           |              | 1        |  |                  | DATA LOCAT | •           | BULB BULB      | DRY WET                   | URE   |                       |
| SAL NUTR CHL.  SAL NUTR CHL.   |     |    |    |    |   | Ø2     | W           |         |   |         | }      |          | SACINITY  | BOTT, E DATA |                           |              |          | 71   | ame/Header       | Ĉ          |             | SE             | A ST<br>BILL<br>VIND D SF | ATE   |                       |
|  | -   |    |    |    |   |        |             |         |   |         |        |          | NUTR      |              | bleed valve SAMPLE BOTTLE | MAX. DEPTH = |          | The state of the s | Thek Peou        | REMARKS    | 1           | H STA. NAME/ID | PE ATI                    | (amt) | \$BA6                 |

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|   |          | <u> </u> | <u>.                                    </u> | ·<br>T             | T        | 7 |          | _   | _        | · · · ·  | r  |                   |            | · · · · · · · · · · · · · · · · · · · | · · · · · ·                  |                         |              |              |                  |                  |                     |                   | ::       |                        |            |             |                       | _                   |
|---|----------|----------|--|--------------------|----------|---|----------|-----|----------|----------|----|-------------------|------------|---------------------------------------|------------------------------|-------------------------|--------------|--------------|------------------|------------------|---------------------|-------------------|----------|------------------------|------------|-------------|-----------------------|---------------------|
| 2 | 11       | 0        | 9  | 8                  | 7        | - | <u> </u> | 5   | 4        | 3        | 2  | -                 |            |                                       | SOd                          | TEMP SN                 | COND SN      | TEMP SN      | PRESS SN         | 34AL             | Ç                   | 26                | *        | CAST                   | SC         | 0<br>0<br>N | VESSEL<br>Alpha Helix |                     |
| - |          |          |  |                    | <u> </u> |   | <br> -   |     | (\$\)_1  | T        | 0  | 0                 | 6181<br>   | DEP1'H                                | Tallo<br>Tallo               | NS.                     | NS           | S            | NSS              | % SP 8           | СТО                 | 5 %               | DEG S    |                        |            |             | Felix E               | !                   |
|   |          |          |  |                    |          |   |          |     |          |          |    |                   | l PA       |                                       |                              | 11391                   | c501         | #            | <b>p</b> 5       | TYPE & SN SB911+ |                     | N7.5-11 & 3 15.9% | G MIN    |                        |            |             |                       |                     |
|   |          |          |  |                    |          |   |          |     |          |          |    |                   | PRESSURE   |                                       |                              |                         |              | 11390 A      | 040 S            |                  | ⅎ                   |                   |          | 1                      |            |             | _                     | -                   |
|   |          |          |  |                    |          |   |          |     |          |          |    |                   | <b>R</b>   |                                       | ا                            | XPAR                    | AT SURFACE   | AT DEPTH     | p5040 START DOWN | DATA ON          | TIMES               | 3°0               | DEG      |                        |            |             |                       |                     |
|   |          |          |  |                    |          |   |          |     |          |          | 08 |                   | PRI        |                                       | CTD CONVERTED MONITOR VALUES |                         | ACE          | ∃            | MANOC            | . Z              |                     | 5955.64 W25MAY    | G MIN    | )<br><del>-</del><br>- |            |             |                       |                     |
|   |          |          |  |                    |          |   |          | , . |          |          |    |                   | PRI. TEMP. |                                       | ONVER                        | XFLUOR                  | <u>]]</u>    |              | -                |                  | JD/T{ME             | 0 × 4             |          |                        |            | <u>.</u>    |                       |                     |
|   | _        | _        | -  | _                  | +        | + |          |     |          | <u> </u> | -  | _                 | -          |                                       | I GBTF                       | OR                      |              |              |                  | ~                | Ē                   | N                 | DAY MO   | 1                      |            |             | Ŧ ?                   | 8                   |
|   |          |          |  |                    |          |   |          |     |          |          |    | 1                 | SEC.       |                                       | TINON                        | ChIAM                   |              | •            | •                | '                |                     | N 9 8             | MO YR    | 5                      |            |             | HX209                 | ر<br>بر<br>ا        |
|   |          |          |  |                    |          |   |          |     |          |          |    |                   | SEC. TEMP  |                                       | OR VA                        | AM:                     |              |              |                  | Таре             |                     | delso             | HR MIN   | TIME                   |            |             | HX209                 | ם<br>-<br>ח         |
|   |          | -        | $\vdash$                                     | ╁                  | +        | + |          |     | -        | -        | -  | ├                 | ļ          | -                                     | LUES                         | X                       | 1            |              |                  | Tape/Diske te ID |                     | 1                 |          |                        |            |             | ٠ ا                   | .)                  |
|   |          |          |  |                    | İ        |   |          |     |          |          |    |                   | SAL<br>SAL |                                       |                              | XTRANSMISSOMETER        |              | -2           |                  | erte ID          | DA                  |                   | (0)      |                        |            |             | -                     | _                   |
| / |          |          |  |                    |          |   |          |     |          |          | ĺ  |                   | SALINITY   |                                       |                              | NOSSII                  |              | !<br> -      | !<br>            |                  | DATA LOCATION       |                   | (°C)     | WET                    |            |             |                       |                     |
|   |          | _        |  | <u> </u>           | _        | _ |          |     |          |          |    | <u> </u>          |            |                                       |                              | <b>NETER</b>            |              |              |                  | File Name/Heade  | CATIC               |                   | (mb)     | HE                     | SSU        |             |                       |                     |
|   |          |          |  |                    |          |   |          |     |          |          |    |                   | SAL        | ВОТТ                                  | SA                           |                         |              |              |                  | me/H             | ž                   |                   |          | ISIE                   |            | IY          |                       | 100                 |
|   |          | #8       |  |                    |          |   |          |     |          |          |    |                   | SALINITY   | BOTTLE DATA                           | SAMPLE                       | eaned                   |              |              |                  | eader            |                     |                   | (deg) (  | N N N                  | 1          | <del></del> |                       | · · ·               |
|   |          |          | <u> </u>                                     | +                  | +        | 1 |          |     |          | <u> </u> |    | ວິນ<br>ວິນ<br>- 6 |            | TA                                    |                              | Cleaned air bleed valve | ¥.           |              | 7                | -                |                     |                   | n√s) . C |                        | } <u>\</u> | (amt)       |                       | STATION DESIGNATION |
|   | $\vdash$ | ├        | ╂  | +                  | ╁        | + |          | _   | $\vdash$ | <u> </u> |    | +                 | 1          |                                       | SAMP                         | ed val                  | X. DE        | 6            | कृत              | 00               | REMARKS             |                   | • V      | YPI<br>VEA             | THE        | ER          |                       | ž<br>DE             |
| _ |          | -        | -  | +                  | +        | + |          |     |          | 751      | 77 | 20                | NUTR, CHL  |                                       | JE BC                        | ve                      | MAX. DEPTH = | NO.          | 5                | C 15             | Ŝ                   |                   | 3        | # DEP                  | 30110      |             | \<br>\<br>\           | NANA<br>ANA         |
|   |          | -        | -  | -                  | _        | _ | _        | L   | _        | 7        | t  | 1                 |            |                                       | JILE                         |                         | "            | * Chlor, Max | Dolf on          | oc is at         |                     | 2                 | ٩        | <br>:1                 | 1 ~        | -           | MC1                   | 7<br>2              |
|   |          | _        |  | $oldsymbol{\perp}$ | 1        | _ |          | _   |          | _        | _  |                   | HPLC Other |                                       | SAMPLE BOTTLE NUMBER         |                         |              | * <u> </u>   |                  |                  |                     | PMC               |          | STA NAME/ID            |            |             |                       |                     |
|   |          |          |  |                    |          |   |          |     |          | 1        | 1  | 7                 | Supp.      |                                       | E S                          |                         | 7            | 3 - 5        |                  |                  |                     | -                 | 1        | AF/IT)                 |            | 9,          |                       |                     |
|   |          |          |  |                    |          |   |          |     |          |          |    |                   | •          |                                       |                              | -                       |              |              |                  |                  | 0                   | 7,50              | 00000    |                        |            | 800         |                       |                     |
|   |          |          |  |                    |          |   |          |     |          |          |    |                   |            |                                       |                              |                         |              |              |                  |                  | 25                  | 92 8              | ;<br>    |                        |            | 3           |                       |                     |
|   |          |          |  |                    |          |   |          |     |          |          |    |                   |            |                                       |                              |                         |              |              |                  |                  | 0 V blocked         | 0                 |          |                        | <          | CON: 90 tro |                       |                     |
|   |          |          |  |                    |          |   |          |     |          |          |    |                   |            |                                       |                              |                         |              |              |                  |                  | estim <sub>en</sub> | 7                 |          |                        |            | 0,02        |                       |                     |
|   |          |          |  |                    |          |   |          | _   |          |          |    |                   |            |                                       |                              |                         |              |              |                  |                  |                     |                   |          |                        | ß          | ŭ           |                       |                     |

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| 2           | 11 | 10       | 9 | 8        | 7 | 6   | ű   | ,  | 4   | ω      | 2        | -   |            | Ç           | 퓉                | Š            | TEλ        | PRE              | Ϋ́T              |               | Su l       | CON<br>SC<br>CAST         | Αφ                    |
|-------------|----|----------|---|----------|---|-----|-----|----|-----|--------|----------|-----|------------|-------------|------------------|--------------|------------|------------------|------------------|---------------|------------|---------------------------|-----------------------|
|             |    |          |   | - T      |   | S   | - 3 | ١  | S   | 3      | 3        | 2   | 22 T       | DEPTH       | 7 등              | COND SN      | TEMP SN    | PRESS SN         | TYPE & SN SB911+ | CTD           | 275633.56  |                           | VESSEL<br>Alpha Helix |
|             |    |          |   | 30       |   |     |     |    |     |        |          | η.  | PRESSURE   |             | 11391            | c501         | t1390      | p5040            | 3B911+           |               | 32 M       | LATITUDE                  |                       |
|             |    |          |   |          |   |     |     |    |     |        |          |     | SURE       |             | XPAR             | AT SURFACE   | AT DEPTH   | P5040 START DCWN | DATA ON          | TIMES         |            | LON                       |                       |
|             |    |          |   |          |   |     |     |    |     |        |          |     | PRI. TEMP. |             |                  | FACE         | _<br>∃<br> | DCWN             | Ž<br>            | JD/           | MIN DAY MO | LONGITUDE                 |                       |
| _           |    |          |   |          |   | ж   | _   |    |     |        | <u> </u> |     | MP         | רו          | XFLUOR           |              |            |                  |                  | JD/TIME       | V GMIA     | DATE JD=                  | ¥ ¥                   |
|             |    |          |   |          |   |     |     |    |     |        |          | :   | SEC. TEMP  | Č           | ChIAM            | ]<br>        | ·<br>-     | ,<br>T           | <u>'</u>         |               | 9 7        | 5                         | HX209                 |
| _           | _  | -        |   |          | + |     | -   |    |     | _      |          |     | MP<br>P    | i           |                  |              |            |                  | Tape/Dis-ette ID |               | 0          | <del></del>               | [                     |
| 7           |    |          |   |          |   |     |     | :  |     | 1      | Đĩ       |     | SALINITY   |             | SIMSNA           |              |            |                  | ette ID          | DATA          | . 9        | 8 3                       | -                     |
|             |    |          |   |          |   |     |     |    |     |        |          |     | ΠY         | m           | X TANSMISSOMETER |              |            |                  | File N           | DATA LOCATION |            | PRESSURE                  |                       |
|             |    |          |   |          |   |     | N S |    |     | ļ<br>ļ |          |     | SALINITY   | BOTTLE DATA | R Cleaned        |              |            |                  | Fite Name/Header | S<br>S        | (logy)     | VISIBILITY                |                       |
| <del></del> |    | )<br>(5) |   | <u> </u> | 1 |     |     |    |     |        |          |     |            | DATA        |                  | -            | <br>       | #2               | der              |               |            | DIRN. D. WIND CLOUD (amt) | . 2                   |
|             | -  | -        |   | _        | + | 179 |     | 2/ | 131 | 1-3    | /3       | 134 | SAL. NUTR. | ]<br>-      | air bleed valve  | MAX. DEPTH = |            |                  |                  | REMARKS       | <b>—</b>   | WEATHER                   |                       |
| -           |    |          |   |          | + | 7   |     | Ĭ. | -   | 22     | 33       | 1   | TR. CHL.   |             | FROTTI           | <br> <br>  H |            | 1                |                  | S             | 0          | 목 공 -                     | PMC D                 |
|             | i  |          |   |          |   | 8 8 |     |    | -   | =      |          |     | HPLC       | . 20        | ed valve         |              |            |                  |                  |               | PMCa       | STA. NA ME/ID             | 7                     |
|             |    |          |   |          |   |     |     |    |     |        |          | 1   | Other      |             | ä                | 3            |            |                  |                  |               |            | IE/ID                     |                       |

|   |                   |  |                        |                    |                  |                       | 12                |
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|   |                   | and a  |                        |                    |                  |                       | ∞                 |
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| 135 <b>\</b>  |                   | , E  |                        |                    |                  | 0                     | σı                |
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| 139 1   |                   |  |                        |                    |                  | 29                    |                   |
| SAL. NUTR. CHL. HPLO Other  | SALINITY          | SALINITY   | SEC. TEMP              | PRI. TEMP.         | PRESSURE         | _                     | 1.                |
|   | BOTTLE DATA       |  |                        |                    |                  | DEPTH                 |                   |
| air bleed valve  SAMPLE BOTTLE NUMBER                                       | Cleaned<br>SAMPLE | X TRANSMISSOMETER  | ChIAM                  | R XELUOR CHIAM XTF | 11391 XPAR       | TEMP SN               | Mal               |
| MAX. DEPTH = m  |                   |  |                        | FACE               | c501 AT SURFACE  | COND SN               | Š                 |
|   |                   |  |                        | ₹                  | t1390 AT DEPTH   | TEMP SN               | Mat               |
|   |                   |  |                        | NWOC               | p5040 START DOWN | PRESS SN              | PAE               |
| Tesspence   | File Name/Header  | Tape/Diskette ID File N  | Tape/                  |                    | 911+ DATA ON     | TYPE & SN SB911+      | ¥                 |
| REMARKS   | ÖN                | DATA LOCATION  |                        | JD/TIME            | TIMES            | CTD                   |                   |
|   | (100)             |  | A Y 9 8                | w bemer            | 5.64 N1 6005     | 285435-64             | ಖ                 |
| * CLOUD (amt<br>* TYPE<br>* WEATHER<br>* WEATHER<br>H BOTTO<br>STA. NAME/ID | VISIBILITY        | T) BULB BULB PE  | TIME (GMT)             | DAT                |                  | F LA                  | CON<br>SC<br>CAST |
| TION DESIGNATION  DMC3  | STA               |  | PROJECT & LEG<br>HX209 | T O                | 1                | VESSEL<br>Alpha Helix | VES               |
| STATION DESIGNATION   | STAI              | in the state of th | PROJECT & LEG          | . 0                |                  |                       | Ω̈́               |

|    |          | ,  |   | _            | <del></del> |              | ,    | <del>, _</del> | _   |          | <del>,</del> |  |             | _                            | 1.5              |              |          |                  |                  |               |                  |            |               |                        |             |
|----|----------|----|---|--------------|-------------|--------------|------|----------------|-----|----------|--------------|--|-------------|------------------------------|------------------|--------------|----------|------------------|------------------|---------------|------------------|------------|---------------|------------------------|-------------|
| 12 | 11       | 10 | 9 | 8            | 1           | 6            | 5    | 4              | ω   | N        | _            |  |             | SOd                          | TEMP SN          | COND SN      | TEMP SN  | PRES             | 347T             | _             | Ř                |            | CAST          | SC<br>NO<br>NO         | Alpha He    |
|    | ,        |    |   |              |             | b            | 0    | S              | 2   | Z        | エル           |  | DEPTH       | TRIP                         | NS o             | DSN          | NS       | PRESS SN         | TYPE & SN SB911+ | CTD           | 2015-627-73N     | DEG        | _             |                        | Alpha Helix |
|    |          |    |   |              | T           | +            | T    |                |     | 7        | -, -         |  | <del></del> |                              |                  |              | _        |                  | SB91             | •             | 7                | DEG MIN    | LATITUDE      |                        |             |
|    |          |    |   |              |             |              | ļ    |                |     |          |              | PRESSURE   |             | :                            | 11391            | c501         | t1390    | p5040            | <del>-</del>     |               | 7 3 <sub>N</sub> | 1          | DE            |                        |             |
|    |          |    |   |              |             |              |      |                |     |          |              | SURE   |             |                              | X                | AT S         | AT DEPTH | STAF             | DATA ON          | TIMES         | 16               | DEG        | ונ            |                        |             |
|    |          |    |   | $\vdash$     | ╀           | <del> </del> | ╀    | _              | ╀   | ļ        | _            | <u> </u>   |             | ဌ                            | XPAR             | AT SURFACE   | EPTH     | p5040 START DOWN | NO<br>N          | Ś             | 009.08W29 MAY    |            | LONGITUDE     |                        |             |
|    |          |    |   |              |             |              |      |                |     |          |              | PRI.   | v           | 00                           | ×                | [유<br>]      |          | Ž                | ı                | ۲             | 90               | MIN        | 3du.          |                        |             |
|    |          |    |   |              |             |              |      |                |     |          |              | PRI. TEMP.   |             | WER1                         | FLUOR            |              | 1 ,      |                  |                  | JD/T/ME       | W 29             | DAY        | DA:           |                        | $\dashv$    |
|    |          |    |   | ┢            | ╁           | +            | +    | ╁              | ╁   | ╀        | ┢            | <u> </u>   |             | CTD CONVERTED MONITOR VALUES | B                |              |          |                  |                  | •••           | Z<br>>           | MO         | DATE JD=      |                        | HX209       |
|    |          |    |   |              |             |              |      |                |     |          |              | SEC.   |             | ONIT                         | ChIAM            |              |          |                  |                  |               | Y 9 8            | ΥR         |               |                        | 99          |
|    |          |    |   |              |             |              |      |                |     |          |              | SEC. TEMP  |             | OR VA                        | Ž                |              |          |                  | Таре             | -             | 0653             | HR MIN     | TIME<br>(GMT) |                        | HX209       |
|    | -        |    | - | ┞            | ╀           | ╀            | +    | ╁              | ╁   |          | -            |  |             | LUES                         | X                |              |          |                  | Tape/Diskette ID |               | 2                | Ž          | -             | -                      | ╣,          |
|    | . '      |    |   |              |             |              |      |                |     |          |              | SA   |             |                              | XTRANSMISSOMETER |              | è        |                  | ette iC          | D.            |                  | ී          | BJLB<br>BVR   |                        |             |
|    |          |    |   |              |             |              | ,    |                |     |          | ¥.           | SALINITY   | !           |                              | NSSO             |              | 1 .      |                  |                  | DATA LOCATION | -                | ြိ         | WET<br>BULB   |                        |             |
|    |          |    |   |              |             |              |      |                |     |          |              |  |             |                              | METE             |              |          |                  | File Name/Header | CAT           |                  | (mb        |               | SURE                   | $\dashv$    |
|    |          |    |   |              |             |              |      |                |     |          |              | S  | ВОТ         | (O                           |                  |              | 4        |                  | ame/             | <u>Q</u>      |                  |            | VISIB         | STATE                  |             |
|    |          |    |   |              |             |              |      |                |     |          |              | SALINITY   | BOTTLE DATA | SAMPLE                       | Cleaned          |              |          |                  | Heade            |               |                  | (deg)      | DIRN.         |                        |             |
|    |          |    |   | _            |             |              |      |                |     |          |              | 7  | ÄTA         | m                            |                  |              | •        | •                | 74               |               |                  | (m/s)      | D SP          | ¥<br>Z                 | 2           |
|    |          |    |   |              |             |              |      | ,              |     |          |              | SAL.   |             | SA                           | air bleed valve  | MAX          |          | Shi              | LJ.              | REM.          |                  | :          | CLOU          | Will<br>JD (am<br>THER | how d       |
|    |          |    |   |              |             | QHI          | 14 % | 12             | 140 |          | <b>5</b> h1  | NUTR.  |             | MPLE                         | valve            | MAX. DEPTH = |          | ball out         | xmx prom         | REMARKS       |                  | 3          | M DEPT        | вотто                  |             |
| _  |          |    |   | $\vdash$     | ╆           | Ť            | 75-  |                | f   |          | 7            | RCHL   |             | BOT                          |                  | ゴ            |          | 101              | M                | • •           | 44               | ( <u>m</u> | <u> </u>      | <u>0</u>               | <u> </u>    |
|    | -        |    | - | ┢            | +           | +            | +    | +              | ╁   | ╁        |              |  |             | SAMPLE BOTTLE NUMBER         |                  |              |          | ио               | 10%              |               | 73               |            | STA.          |                        | 2           |
|    | 150      |    |   | <del> </del> | ╀           | ╀            | -    | ╀              | +   | +        | +            | 00   | -           | JMBE                         | -                | ]<br>₃       |          | F                |                  |               | 2                | _          | STA. NAME/ID  |                        | <u></u>     |
|    | <u> </u> |    | , |              |             |              |      |                |     | <u> </u> |              | Other  |             |                              |                  | _            |          |                  |                  |               |                  |            | )ID           |                        |             |
|    |          |    |   |              |             |              |      |                |     |          | 1/8          | <i>)</i><br>}  |             |                              |                  |              |          |                  |                  |               |                  |            |               |                        |             |
|    |          |    |   |              |             |              |      |                |     |          |              | 5  |             |                              |                  |              |          |                  |                  |               |                  |            |               |                        |             |
|    |          |    |   |              |             |              |      |                |     |          | 1            | The state of the s |             |                              |                  |              |          |                  |                  |               |                  |            |               |                        |             |
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|                           | 2.8                   | v                       |                              |                    |                  |                       | 12    |
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| Chi                       |                       |                         |                              |                    |                  | ટ                     | ω     |
| 146                       |                       |                         |                              |                    |                  | 30                    | Ŋ     |
| 30 150 /                  |                       | ١                       |                              |                    |                  | 94                    | _     |
| SAL NUTR, CHL. HPLC Other | SALINITY              | SALINITY                | SEC. TEMP                    | PRI. TEMP.         | PRESSURE         |                       |       |
| SAMPLE BOTTLE NUMBER      | SAMPLE<br>BOTTLE DATA | ES                      | CTD CONVERTED MONITOR VALUES | ONVERTED           | •                | DEPTH                 | POS   |
| air bleed valve           | Cleaned               | XTRANSMISSOMETER        | ChIAM                        | XFLUOR             | t1391 X PAR      | TEMP SN               | TEN   |
| MAX. DEPTH = m            |                       |                         |                              | ACE                | c501 AT SURFACE  | COND SN               | 8     |
|                           |                       |                         |                              | <b>ヹ</b>           | t1390 AT DEPTH   | TEMP SN               | (3.1  |
|                           |                       |                         |                              | NWOC               | p5040 START DOWN | PRESS SN              | PR    |
|                           | File Name/Header      | Tape/Diskette ID File N | _ Tape/Di                    |                    | B911+ DATA ON    | TYPE & SN SB911+      | IVI   |
| REMARKS                   |                       | DATA LOCATION           |                              | JD/TIME            | TIMES            | CTD                   |       |
| SG PMCS                   |                       | •                       | A Y 9 8                      | WEEMED             | Ů<br>Z           | <u> </u>              |       |
| CTYPE) W H STA. NAME/ID   | (deg)                 | BULB BULB E             | JD= (GMT)                    | LONGITUDE DATE JD= | LATITUDE LONG    | <u> </u>              | #     |
| WE ATHER                  | STATE<br>BILITY<br>WE | SSURE                   | <del>-</del>                 |                    |                  | ) n <u>z</u>          | SC ON |
| STATION DESIGNATION  PMC5 | STAT                  |                         | PROJECT & LEG<br>HX209       | H P                |                  | VESSEL<br>Alpha Helix | ₽ĕ    |
|                           |                       |                         |                              |                    |                  |                       |       |

| 12  | =        | 10    | 9        | 8        | 7 | o    | 51   | 4  | <b>ω</b> | 22          | 1   |             | POS 1                        | TEMP SN          | COND SN         | TEMP SN        | PRESS SN         | TYPE.            | 2             | w             |                | CON<br>SC<br>**         | - 444 | VESSEL<br>Alpha Helix  |            |    |  |
|-----|----------|-------|----------|----------|---|------|------|----|----------|-------------|-----|-------------|------------------------------|------------------|-----------------|----------------|------------------|------------------|---------------|---------------|----------------|-------------------------|-------|------------------------|------------|----|--|
|     |          |       |          |          |   | 0    | 0    | 0  | Ö        | CO          | 36  |             | TRIP<br>DEPTH                | NS               | NS              | NS             | NS               | TYPE & SN SB911+ | CTD           | 31524         | DEG            |                         |       | Helix                  |            | 10 |  |
|     |          |       |          |          |   |      |      |    |          |             | I   | PRESSURE    | 0                            | 11391 X PAR      | c501 AT SURFACE | t1390 AT DEPTH | p5040 START DOWN | B911+ DATA ON    | TIMES         | . 85N 11601   | MIN DEG        | LATITUDE LONG           |       |                        |            |    |  |
|     |          |       | 10       | <u>.</u> |   |      |      |    |          |             |     | PRI. TEMP.  | CTD CONVERTED MONITOR VALUES | XFLUOR           | ACE             | <b>=</b>       | NWOC             |                  | JD/TIME       | 57            | MIN DAY M      | LONGITUDE DATE JD=      |       | PF                     |            |    |  |
|     | <u> </u> |       |          | Œ        |   |      |      |    |          | <br> <br> - |     | SEC. TEMP   | MONITOR VALUE                | ChiAM X          |                 |                |                  | Tabe/Diskette ID |               | 0080861VW6CM& | MO YR HE MIN   |                         | . 3:0 | PROJECT & LEG<br>HX209 |            |    |  |
|     |          |       |          |          |   |      |      |    | ia<br>T  |             |     | SALINITY    | Ø                            | XTRANSMISSOMETER | 3 0             | 3 3            |                  |                  | DATA LOCATION | •             | (°C) (°C) (mb) | BULB BULB PHE           | ļ     |                        |            |    |  |
| - 1 |          | F-125 |          |          |   | ) ja |      | 3  |          | (4)         | ē . | SALINITY    | SAMPLE<br>BOTTLE DATA        | Cleaned          |                 |                |                  | File Name/Header | ON.           |               | -              | VISIBILITY<br>DIRN<br>O |       | STA                    |            |    |  |
|     |          |       |          |          |   | 15/1 | 15-a | 13 | 154      | 153         | 156 | SAL NUTR CH | SAMPLE BOTTLI: NUMBER        | air bleed valve  | MAX. DEPTH =    |                | (10.00)          |                  | REMARKS       | 6             | (E)            | BOTTO<br>M DEPT<br>H    | nt)   | STATION DESIGNATION    |            |    |  |
|     | W.       | 1155  | <b>创</b> |          |   | ii!  |      |    |          |             | )2º | HPLC Other  | LI: NOMBEH                   |                  | ₃               | *              |                  |                  |               | P MOG         |                | STA. NAME/ID            |       | (° Ž                   | ָּדָּ<br>נ | }  |  |
|     |          |       |          |          |   | (9   |      |    |          |             |     | ě           |                              |                  | 38.<br>Fig      | H .            | Ti II            |                  |               |               |                |                         |       | 8                      | 9          | )  |  |

| 10 | 11 | 10 | 9 | æ | 7            | 6 | 5  | 4        | ω            | r.s | _    |              | SO                           | 131             | 8            | Ē              | PR               | 7                |               |   | δ            | ωΩ                                      |             |
|----|----|----|---|---|--------------|---|----|----------|--------------|-----|------|--------------|------------------------------|-----------------|--------------|----------------|------------------|------------------|---------------|---|--------------|---|-------------|
|    |    |    |   |   |              | þ | 10 | 20       | 30           | 40  | スペ   |              | DEPTH                        | TEMP SN         | COND SN      | TEMP SN        | PRESS SN         | TYPE & SN SB911+ | CTD           | 325643.9                                      | CAST<br># L/ | S S                                     | Alpha Helix |
|    |    |    |   |   |              |   |    |          |              |     |      | PRESSURE     |                              | t1391           | c501 A       | 11390 AT DEPTH | p5040 S          |                  | =             | Z   | <u> </u>     |   |             |
|    |    |    |   |   |              |   |    |          | -            |     |      |              | CTD C                        | XPAR            | AT SURFACE   | DEPTH          | p5040 START DOWN | DATA ON          | TIMES         | L CO NO. MIN                                  | ୍ମିଟ 🍦       |   |             |
|    |    |    |   |   |              |   |    |          |              |     |      | PRI. TEMP.   | ONVERTED                     | XFLUOR          | ]]<br> <br>  |                |                  |                  | JD/TIME       | M S C M                                       | DATE         | <u> </u>                                | ₩.          |
|    |    |    |   |   |              |   |    |          |              |     |      | SEC TEMP     | CTD CONVERTED MCNITOR VALUES | ChIAM           |              | <u> </u>       | \<br>            | Tap              |               | N Y 9 8 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 5            | <u> </u>                                | HX209       |
|    |    |    |   |   | -            |   |    |          |              |     |      |              | ALUES                        | XTRANS          |              |                |                  | Tape/Diskette ID | <b>5</b>      | 236 ·   | m -          |   | _           |
| •  |    |    |   |   |              | : |    |          |              |     |      | SALINITY     |                              | TRANSMISSOMETER |              | 1              |                  |                  | DATA LOCATION |   | BULB         | SSURE                                   |             |
|    |    |    |   |   |              |   |    |          |              |     | Εı   | SALINITY     | SAMPLE<br>BOTTLE DATA        |                 |              |                |                  | File Name/Header | NON           | locy  | SEA<br>VISI  | STATE                                   |             |
| -  |    |    |   |   | <u> </u><br> | T |    | <u> </u> | <u> </u><br> |     | 300  |              |                              | air ble         | MAX          | 111            |                  | - eq             | REM           |   | CLC          | S Z S Z S Z S Z S Z S Z S Z S Z S Z S Z | Σ           |
|    |    |    |   |   | <br> -       | 7 | \$ | 153      | Co           | 161 | 62 0 | NUTR, CH     | SAMPLE BOTTLE NOMBER         | valve           | MAX. DEPTH = |                |                  |                  | REMARKS       | 2   | WE           | M DEPT                                  | _           |
|    |    | -  |   |   | +            | + | 1  |          | +            |     |      | НРСС         | I.E NOMBE                    |                 |              |                |                  |                  |               | #C#   | STA. NAME/ID | -                                       | mot         |
|    |    |    |   |   |              |   |    |          |              |     |      | DDC<br>Other |                              | ;               | 3            |                |                  |                  |               |   | 6/10         |   |             |

|    |   |    |               |              |                     |          |     |        |     |     |   | iii        |   | 8                       |              |                |                  |                  |               |   |                    |
|----|---|----|---------------|--------------|---------------------|----------|-----|--------|-----|-----|---|------------|---|-------------------------|--------------|----------------|------------------|------------------|---------------|---|--------------------|
| 12 | = | 70 | ဖ             | <sub>∞</sub> | 7                   | <b>о</b> | 5   | 4      | ω   | 2   |   |            | C.                                      | ·<br>[금                 | <u></u>      |                | P                | <u> </u>         |               |   | > <                |
|    |   |    |               |              |                     | 0        | 10  | O<br>N | 27  | 20  | 2 |            | DEPTH                                   | 775                     | COND SN      | TEMP SN        | PRESS SN         | TYPE & SN SB911+ | CTD           | CON SC CAST DEG                           | VESSEL             |
|    |   |    |               |              |                     |          |     |        |     |     |   | PRESSURE   |   | t1391 X                 | c501 AT      | t1390 AT DEPTH | £5040 ST/        |                  | TIM           | MIN DE                                    | -                  |
|    |   |    |               |              |                     |          |     |        |     |     |   |            | CIDC                                    | XPAR                    | AT SURFACE   | DEPTH .        | C5040 START DOWN | DATA ON          | TIMES         | DEG MIN DEG NIN                           |                    |
|    |   |    | S             |              |                     |          |     |        |     |     |   | PRI. TEMP. | ONVEHIED                                | XFLUOR                  |              |                |                  |                  | JD/TIME       | N D D A T A A A A A A A A A A A A A A A A | Į,                 |
|    |   |    | **            |              |                     |          | İ   |        |     |     |   | SEC. TEMP  | CID CONVEHIED MONITCH VALUES            | ChIAM                   |              | <u> </u>       | '<br>T-          | Tape             | ·.            | TIME MO YR HR MIN MO YR HR MIN            | אאסטפרו א רבים     |
|    |   |    |               |              |                     |          |     |        |     |     |   | SALINITY   | LUES                                    | XTRANSMISSOMETER        |              |                |                  | Tape/Diskette ID | DAT           | DAY                                       |                    |
|    |   |    |               |              |                     |          |     |        |     |     |   | TY .       | В                                       | SOMETER                 |              |                |                  | File Nam         | DATA LOCATION | (°C) BUEN WEIL                            |                    |
|    |   |    |               |              |                     |          |     |        |     |     |   | SALINITY   | OTTLE DATA                              | Cleaned a               |              |                |                  | File Name/Header |               | WIND D SP DIRN. D. (deg) (m/s)            |                    |
|    |   |    |               |              |                     | 163      | 164 | 165    | 16  | 1/4 |   | SAL. NU    | 10.77                                   | Cleaned air bleed valve | MAX. DEPTH = |                |                  | ¥                | REMARKS       | · CLOUD (amt)<br>· TYPE<br>· WEATHER      | מולא לירט          |
|    |   |    | <del> -</del> | -            | <del> -</del><br> - | 2        | 7   | 3      | 166 | 167 | 1 | NUTR. CHL. | SAMITE DOT TE NOMBER                    | 0                       | PTH=         |                |                  |                  | Ś             | BOTTO M DEPT (m) ST.                      | SIXION DESIGNATION |
|    |   |    |               |              |                     |          |     |        |     |     |   | HPLC Other | מים מים מים מים מים מים מים מים מים מים |                         | ]<br>₃       |                |                  |                  | <del></del> . | STA. NAME/ID                              |                    |

| 3 | 11 | 10           | 9 | 8   | [-       | 1 | တ     | 5    | 4   | 3        | 2   | 1     |              |             | ပ္တိ                         | TEN             | 8            | TEN .    | PR               | 7                |               | ( )        |           | * }             | SC               | CQ<br>Q         | À           | <u> </u> |
|---|----|--------------|---|-----|----------|---|-------|------|-----|----------|-----|-------|--------------|-------------|------------------------------|-----------------|--------------|----------|------------------|------------------|---------------|------------|-----------|-----------------|------------------|-----------------|-------------|----------|
|   |    |              |   |     |          |   | 0     | 10   | 20  | 20       | 40  | 64    |              |             | TRIP                         | TEMP SN         | COND SN      | TEMP SN  | PRESS SN         | TYPE & SN SB911+ | CTD           | 3456       | DEG       |                 | SC               | ¥               | Alpha Helix | VESSEL   |
|   |    |              |   |     |          |   |       |      |     |          |     |       | PRESSURE     |             |                              | 11391           | c501 A       | 11390 A  | p5040 S          |                  |               | 5647.05N   | Z Z       | LATITUDE        |                  | -               |             |          |
|   |    |              |   |     | <u> </u> |   |       |      |     |          |     | _     | Æ            | :           | CI                           | ХРАЯ            | AT SURFACE   | AT DEPTH | P5040 START DOWN | DATA ON          | TIMES         | 6024.6     | DEG       | LONGITUDE       |                  |                 |             |          |
|   |    |              |   |     |          | ŀ |       |      |     | l        |     |       | PRI. TEMP    |             | CTD CONVERTED MONITOR VALUES | X               | CE           |          | ¥                |                  | JD/           |            | MIN       | TUDE            |                  |                 |             |          |
|   |    |              |   |     | -        |   |       |      | 3   | <u> </u> |     |       | MP           |             | ERTED                        | XFLUOR          |              |          |                  |                  | JD/TIME       | BELVW BCAL | DAY MO    | DATE JD=        |                  | ,               | Enzyth      | ξ :      |
|   |    |              |   |     |          |   |       |      |     |          |     |       | SEC. TEMP    |             | <b>JCTINOV</b>               | ChIAM           | ]<br>[<br>   | <u> </u> | ,<br>T           |                  |               | Y 9 8 O    | ¥         | D <sub>I</sub>  |                  |                 | -           | 1V000    |
|   | _  |              | _ |     | +        |   |       | L    |     |          |     |       | MP           |             | <b>VALUE</b>                 | X<br>X          |              |          |                  | Tape/Diskette ID |               | 944        | HRMIN     | (GMT)           | TIME             |                 |             |          |
|   |    |              |   |     |          |   |       |      |     |          |     |       | SALI         |             | S                            | RANSM           |              |          |                  | kette ID         | DAI           | -          | (ို       | -               | DRY              |                 | _           |          |
|   |    |              |   |     |          |   |       |      |     | * .      |     |       | SALINITY     | :           |                              | TRANSMISSOMETER |              |          |                  | File             | DATA LOCATION |            | (°C)      |                 | ¥<br>ESS         | UHE             |             |          |
|   |    |              |   |     |          |   |       |      |     |          |     |       | SAL          | ВОТТ        | SA                           |                 |              |          |                  | File Name/Header | NOI           |            |           | 11710           | 1 <b>2</b> 11    | ATE<br>ITY      | _           |          |
|   |    | ļ            |   |     |          |   |       |      |     | i<br>!   |     |       | SALINITY     | BOTTLE DATA | SAMPLE                       |                 |              | 1        |                  | eader            |               |            | teg) (m/s | R.D.            | IND DS           | Will (am        |             | _        |
|   |    |              |   |     |          |   |       |      |     |          |     | 750   |              |             | SAM                          | air bleed va:ve | MAX. D       |          |                  |                  | REMARKS       |            | Ĕ         | CL(<br>TY<br>WE | OUI<br>PE<br>ATI | 2<br>(am<br>IER | <u>o</u>    |          |
| _ |    | <del> </del> |   |     | +        | _ | 169 6 | 8    | 17/ | P6.      | 173 | 174 1 | NUTR         | -           | PLE BO                       | a:ve            | MAX. DEPTH = |          |                  |                  | SXS           | 69         | (m)       | I               | M DEPT           | BOTTO           | ŀ           |          |
|   |    | _            |   | -   | +        |   |       | -    |     |          |     |       | CHL HPLC     |             | SAMPLE BOTTLE NUMBER         |                 |              |          |                  |                  |               | MA         |           | STA.            |                  |                 |             | 5        |
|   |    |              |   |     |          |   |       |      |     |          |     |       | Othe<br>Othe |             | MBER                         |                 | ]            |          | F.               | -                |               | o          | 1_        | STA. NAME/ID    |                  |                 | L           |          |
|   |    |              |   | 0.0 |          |   |       | 1901 |     |          |     | D-10  | 7,13/max)    | •           |                              |                 |              |          |                  |                  |               |            |           |                 |                  |                 |             |          |
|   |    |              |   |     |          |   |       |      |     |          |     |       | Max)         |             |                              |                 |              |          | f. =             |                  |               |            |           |                 |                  |                 |             |          |

| ٠, |          |      |          |   |   | 28       |     |     | F-16  | ٠,       |     |            |             | 1,2                  |   |               |          |                  |                  | 33         |             |              |           |                          |                       |
|----|----------|------|----------|---|---|----------|-----|-----|-------|----------|-----|------------|-------------|----------------------|---|---------------|----------|------------------|------------------|------------|-------------|--------------|-----------|--------------------------|-----------------------|
|    |          |      |          |   |   |          |     |     | ** ** | • •      |     |            |             |                      |   |               |          |                  |                  |            |             |              |           |                          |                       |
| 12 | =        | 10   | 9        | œ | 7 | 6        | თ   | 4   | 3     | N        | _   |            |             | Mal                  |   | 8             | TEM      | PRE              | Түр              |            | ເນ          | # 2          | CAST      | CON                      | Alpt                  |
|    |          |      |          |   |   | 0        | 10  | Ş.  | 30    | 40       | 637 |            | DEPTH       | TEMP SN              |   | COND SN       | TEMP SN  | PRESS SN         | TYPE & SN SB911+ | CTD        | 355650.13N  |              | <u> </u>  | Ž                        | VESSEL<br>Alpha Helix |
|    |          |      |          |   |   |          |     |     |       | `        | 1   | P          |             | = =                  |   | S             | =        | ,<br>D           | SB911-           |            | 0 3         | 1-           |           |                          |                       |
|    |          |      |          |   |   |          |     |     |       |          |     | PRESSURE   |             | 11391                | _ | c501 A1       | t1390 A1 | 5045 ST          |                  |            |             | 1_           |           |                          |                       |
|    |          |      |          |   |   |          |     |     |       | ļ        |     | Æ          | . (         | XIPAR                |   | AT SURFACE    | AT DEPTH | p5040 START DOWN | DATA ON          | TIMES      |             | TONG         |           |                          |                       |
|    |          |      |          |   |   |          |     |     |       |          |     | PRI.       | (           |                      |   | ACE           | I<br>I   | NWO.             | ے<br>ا           | ے          | DEG MIN     | LONGITUDE    |           |                          |                       |
| ļ  |          |      |          |   |   |          |     |     |       |          |     | PRI. TEMP. |             | XIFLUOR<br>ONVERTE   |   |               |          |                  |                  | JD/TIME    |             | DA1          |           | <del></del>              |                       |
|    |          |      |          |   |   |          |     | -   |       | <br>     |     | SE         |             | Ξ<br> <br> } □       |   |               |          |                  | }                |            | W 9 MAY 9 8 |              |           |                          | PROJE<br>HX209        |
|    |          |      |          |   |   |          |     |     |       |          |     | SEC. TEMP  |             | CHAM                 |   |               | Τ        | Τ-               | Ta               |            |             |              |           |                          | PROJECT & LEG         |
| -  |          | _    | _        |   | _ | <u> </u> |     | _   |       |          | _   | ₹          |             |                      |   |               |          |                  | pe/Dis           |            | 9           | 4-           | TIME      |                          | _E6                   |
|    |          |      |          |   |   |          |     |     |       |          |     | SA         |             | HANS                 |   |               |          |                  | Tape/Diskette ID | D,         | . (3        | BULB         | DRY       |                          |                       |
|    |          |      |          |   |   |          |     | ,   |       |          |     | SALINITY   |             | I HANSMISSOME I EH   |   |               | 1.       | '\<br> -<br>     |                  | DATA LOCAT |             | BULB         | WET       |                          |                       |
| -  | <u> </u> | T    | <u> </u> | 1 | 1 |          | _   |     |       | <u> </u> |     |            |             |                      |   |               |          |                  | File Name/Header | CATION     |             | F PA         |           | TATE                     |                       |
|    |          |      |          |   |   |          |     |     | ,     |          |     | SALINITY   | 077116      | SAMPLE               |   |               |          |                  | ne/Hea           | Ę.         |             | VIS          | WIND      | -ITY                     | 1                     |
|    |          | 8.00 |          |   |   |          |     |     |       |          |     | YTT        | BOTTLE DATA | PLE all              |   |               | e e      |                  | lder             |            |             | N. D.        | Salar     | <br>≦                    | 118                   |
|    |          |      |          |   |   |          |     |     |       |          |     | SAL.       |             | SAMPLE SAMPLE        | , | MAX.          |          |                  |                  | REMARKS    |             | · CL         | OUI<br>PE | ₹<br>Z<br>O (amt)<br>HER | STATION DESIGNATION   |
|    |          |      |          |   |   | 75       | 941 | 177 | 2-41  | 179      | 150 | NUTR.      |             | MPLE                 |   | MAX. DEPTH := | ľ        |                  | 1                | ARKS       | 2           | ) I          | MDEPT     | BOTTO                    | DESIGN                |
|    |          |      |          |   |   | <        | -   |     |       |          | 7   | CHL.       |             |                      |   | 11            |          |                  |                  |            | <b>B</b>    | +-           | <u> </u>  | 3                        | MCION                 |
|    |          |      |          |   |   |          |     |     |       |          |     | НРС        |             | SAMPLE BOTTLE NUMBER |   |               |          |                  |                  |            | MC IO       | STA. NAME/ID |           |                          | ō                     |
|    |          |      |          |   |   |          |     |     |       |          |     | Other      |             | Ĕ                    |   | 3             |          | 1                |                  |            | <u></u>     | ME/iD        |           |                          | <b></b>               |
|    |          |      |          |   |   |          |     |     |       |          |     |            |             |                      |   |               |          |                  |                  |            |             |              |           |                          |                       |
|    |          |      |          |   |   |          |     |     |       |          |     |            |             |                      |   |               |          | ļ                |                  |            |             |              |           |                          |                       |

| 12 | 11 | 10   | 9 | 8 | 7 | 6   | 5  | 4  | 3  | 2  |         |            | SO                           | TEM              | S<br>S          | Mal            | PRE              | TYP                   |               | w l                                   | CAST                 | sc S                    | A VE        |
|----|----|------|---|---|---|-----|----|----|----|----|---------|------------|------------------------------|------------------|-----------------|----------------|------------------|-----------------------|---------------|---------------------------------------|----------------------|-------------------------|-------------|
|    |    |      |   | _ | 9 | 0   | 0  | 20 | 20 | 40 | 64/1    |            | TRIP<br>DEPTH                | TEMP SN          | COND SN         | TEMP SN        | PRESS SN         | TYPE & SN SB911+      | CTD           | DEG MIN                               |                      | <u>'' Z</u>             | Alpha Helix |
|    |    |      |   |   |   |     |    |    |    |    |         | PRESSURE   |                              | t1391 X PAR      | c501 AT SURFACE | 11390 AT DEPTH | p5040 START DOWN | B911+ DATA ON         | TIMES         | N N N N N N N N N N N N N N N N N N N | <u> </u>             | ·                       |             |
|    |    |      |   |   |   |     |    |    |    |    |         | PRI. TEMP. | CTD CONVERTE                 | A XFLUOR         | FACE            | HTP            | NWOD             | 2                     | JD/TIME       | S A WILL CAM CO. IL                   | - m                  |                         |             |
|    |    |      |   |   |   |     |    |    |    |    |         | SEC. TEMP  | CTD CONVERTED MONITOR VALUES | ChiAM X          |                 | <br>           | T                | Tape/C                | <del></del>   | AAY98 OSE                             | <u>"</u>             |                         | HX209       |
|    |    |      |   |   |   |     |    |    | 2  |    |         | SALINITY   | IES                          | TRANSMISSOMETER  |                 |                |                  | Tape/Diskette ID File | DATA LOCATION |                                       | BULB BULB            |                         |             |
|    | 2  | 1921 |   |   |   |     |    |    |    |    |         | SALINITY   | SAMPLE<br>BOTTLE DATA        | Cleaned          |                 | *              |                  | File Name/Header      | ATION         | (009)                                 | SEA<br>VISII<br>DIRN | STATE                   |             |
|    |    |      |   |   |   | 200 | 80 | 23 | 90 | 18 | 030 120 | NUTR, CHL  | SAMPLE BOTTLE NUMBER         | air bleed :/alve | MAX. DEPTH =    |                |                  |                       | REMARKS       | 16 SAMC                               | ) H CC               | WIND (amt) E VIHER OTTO | PMCII       |
|    |    |      |   |   |   |     |    |    |    |    |         | HPLC Other | OMBEH                        |                  | 3               |                |                  | 1                     |               | 2                                     | STA. NAME/ID         |                         |             |

|   | = | 10   | 9 | 8 | 7       | 6   | 5        | <u>\</u> | 4  | ω   | N   | 1   |                 | SOG                          | TEM             | S            | TEN      | PRE              | 4AL              |               | ,s             |             | SC<br>CAST                   | 3 7       | ¥ ĭĭ                  |
|---|---|------|---|---|---------|-----|----------|----------|----|-----|-----|-----|-----------------|------------------------------|-----------------|--------------|----------|------------------|------------------|---------------|----------------|-------------|------------------------------|-----------|-----------------------|
|   |   |      |   |   |         | C   | > 3      | 3        | 8  | 30  | 5   | 624 |                 | TRIP<br>DEPTH                | TEMP SN         | COND SN      | TEMP SN  | PRESS SN         | TYPE & SN SB911+ | CTD           | 756            | 밁           |                              | 2         | VESSEL<br>Alpha Helix |
|   |   |      |   |   |         |     |          |          |    |     |     |     | PRESSURE        |                              | t1391           | c501         | t1390    | p5040            |                  |               | 275648.03N     | M N         | ATITUDE                      |           |                       |
|   |   |      |   |   |         |     |          |          |    |     |     |     | SURE            |                              | XPAR            | AT SURFACE   | AT DEPTH | ps040 START DOWN | DATA ON          | TIMES         | 100            | DEG         | ON CONTRACT                  |           |                       |
|   |   |      |   |   |         |     |          |          |    |     |     |     | PRI. TEMP.      | CTD CONVERTED MONITOR VALUES | ×               | ACE          | 로<br>    | NAO              | z<br>            | Ď             | 6029.93W29WAY9 | <u>₹</u>    | LONGITUDE                    |           |                       |
|   |   | <br> |   |   | -       |     |          |          |    | _   | -   |     | MP.             | VERTEDI                      | XFLUOP          |              |          |                  |                  | JD/TIME       | /w.6en         | DAY MO      | DATE JD=                     |           | Ŧ                     |
|   |   |      |   |   |         |     |          |          |    |     |     |     | SEC. TEMP       | MONITOR                      | ChIAM           | )<br>        | '<br>    | <u>'</u>         | '<br>            |               | 8 6 A t        | ΥR          | Ď<br>"<br>─                  |           | HX209                 |
|   |   | _    |   | _ |         | _   |          |          |    |     |     |     | MP              | * VALUES                     | N<br>N<br>T     |              |          |                  | Tape/Diskette ID |               | 200            | Z           | TIME (GMT)                   |           |                       |
|   |   |      |   |   |         |     |          |          |    |     |     |     | SALINITY        | 0,                           | TRANSMISSOMETER | ļ            |          | \$ <sup>\$</sup> | cette ID         | DAT,          |                | -           | DRY V                        |           | -                     |
|   |   |      |   |   |         |     |          |          | 2  |     |     |     | YTIN            |                              | SOMETI          |              | ,        |                  | File             | DATA LOCATION |                | (°C) (mb    | BUESSU<br>PRESSU             | RE        |                       |
|   |   |      |   |   |         |     |          |          |    |     |     |     | SAL             | BOTTLE DAT                   |                 | ]<br>]<br>   |          | ,                | File Name/Header | N<br>N        |                |             | SEA STA<br>VISIBILIT         | TE        |                       |
|   |   | +:   |   |   |         |     |          |          |    |     |     |     | SALINITY        | TTLE DATA                    |                 |              | l e      | ļ.               | äder             |               |                | (deg) (m/s) | WIND D SF                    |           |                       |
| _ |   |      |   |   |         | 丄   | , Tree's |          |    |     |     | 36/ | P               | SAN                          | air bleed valve | MAX.         |          |                  |                  | REMARKS       |                | ±           | D SO WIND CLOUD (TYPE WEATHE | amt)<br>R |                       |
| _ |   | -    |   |   | _       | Idy | 70       | <b>0</b> | 12 | 100 | 181 | 192 | +               | 1 P                          | alve            | MAX. DEPTH = |          |                  |                  | RKS           | 6              | (m)         | BOTTO<br>M DEPT              |           | PMEII                 |
|   | _ | _    | - |   | +       |     | 4        |          |    | _   | _   |     |                 |                              |                 | "            |          |                  |                  |               | MON            | -           |                              |           | CII                   |
|   | - | -    |   |   | +       | +   | $\dashv$ |          |    | _   | -   | -   | н <u>Р</u> LС О | SAMPLE BOTTLE NOMBER         |                 | J₃           |          |                  | A                |               | 11             |             | STA. NAME/ID                 |           |                       |
|   |   | L    |   |   | $\perp$ |     |          |          | L  |     |     |     | Other           |                              | ]               | _            |          |                  |                  |               |                |             | 9                            |           |                       |

|    |                      |                     |       |                    |            | ļ                     |                 |                    |               |                  |            |                  |            |                  | 12          |
|----|----------------------|---------------------|-------|--------------------|------------|-----------------------|-----------------|--------------------|---------------|------------------|------------|------------------|------------|------------------|-------------|
|    |                      |                     |       |                    | _          |                       |                 |                    |               |                  | 1          |                  |            |                  | Ŀ           |
|    |                      |                     |       |                    |            |                       |                 |                    |               | ()               |            |                  |            | _                |             |
|    |                      |                     |       | <u> </u>           |            | •                     |                 |                    |               |                  |            |                  |            |                  | <del></del> |
|    |                      |                     |       |                    |            |                       |                 |                    |               |                  |            |                  |            |                  | 9           |
|    |                      |                     |       |                    | <u> </u>   |                       |                 |                    |               |                  |            |                  |            |                  | 8           |
|    |                      |                     |       | <br>               | <u> </u>   |                       |                 |                    |               |                  |            |                  |            |                  | 7           |
|    |                      | 9                   | 193   |                    |            |                       |                 |                    |               |                  |            |                  |            | 0                | 6           |
|    |                      |                     | 154   |                    |            |                       |                 |                    |               |                  |            |                  |            | 10               | 5           |
|    |                      |                     | 15    |                    |            |                       |                 | _                  |               |                  | -          |                  | -          | 20               | 4           |
| 13 |                      |                     | 196   |                    |            |                       |                 |                    |               |                  |            |                  |            | 30               | ω           |
|    |                      |                     | 197   | <br> -             |            |                       |                 |                    |               |                  |            |                  |            | 40               | 2           |
|    |                      | 1                   | 199   |                    |            |                       |                 |                    |               |                  |            |                  |            | 05               | 1           |
|    | HPLC Other           | 윉                   | NUTR  | SAi_               |            | SALINITY              | SALINITY        | EMP                | SEC: TEMP     | PRI. TEMP.       | PRI.       | PRESSURE         | PRES       |                  |             |
|    | SAMPLE BOTTLE NOMBER |                     | %<br> | S. A               | ATA        | SAMPLE<br>BOTTLE DATA |                 | R VALUES           | OTINOM        | ONVERTE          | CTD CC     |                  |            | HIA30<br>dibi    | SO          |
|    |                      |                     | alve  | air bleed valve    |            |                       | TRANSMISSOMETER | R XFLUCR CHIAM XTR | ChiAi         | FLUCR            | Á          | 1 XPAR           | 11391      | TEMP SN          | TEM         |
|    |                      |                     | DEPTH | MAX. DEPTH =       |            |                       |                 |                    |               | 1                | AT SURFACE |                  | c501       | COND SN          | Š           |
|    |                      |                     |       |                    | •          |                       |                 |                    | <br>          |                  | PTH -      | O AT DEPTH       | 11390      | TEMP SN          | TEN         |
|    |                      |                     |       |                    | <u>'</u> . |                       |                 |                    | !             |                  | NWOD       | p5045 START DOWN | p504       | PRESS SN         | PRE         |
|    |                      |                     |       |                    | 4          | File Name/Header      |                 | Tape/Diskette ID   |               |                  | 2          | DATA ON          | SB911+     | TYPE & SN SB911+ | 굮           |
|    | <del></del>          |                     | RKS   | REMARKS            |            | ž                     | DATA LOCATION   |                    |               | JD/TIME          |            | TIMES            |            | CTD              |             |
|    | ME9                  | 2                   | 6     |                    |            |                       |                 | 1845               | 1 A Y 9 8     | 16033.79W29MAY98 | 33.7       | _                | 385693.95N | 800              | W           |
|    |                      |                     | - (3) | -                  | (m/s)      | (deg)                 | (°C) (°C) (mb)  | HR MIN             |               | DAY MO           | NIM        | DEG              | <u>₹</u>   | DEG              |             |
|    | STA. NAME/ID         | S                   | I F   | CLO<br>TYPI<br>WEA | D. St      | TO IS IS              | 1               | (GMT) B            | JD=           | DATE JD=         | LONGITUDE  | 101              | LATITUDE   |                  | CAST        |
|    |                      | 7                   | вот   | UD (amt            | ¥<br>Z     | WE CAME               | SURE            |                    | <u> </u>      | ,                |            |                  |            | ÖŽ               | နှင့်<br>လူ |
|    | -                    | K-3We               |       | )<br>              |            |                       |                 |                    | HX209         | -                |            | -                |            | Alpha Helix      | <u>≽</u>    |
|    | 5                    | STATION DESIGNATION | ESIGN | TON D              | STAI       |                       |                 | & LEG              | PROJECT & LEG |                  |            | -                |            | VESSEL           | Ϋ́          |
| 9  | 3                    |                     |       |                    |            |                       |                 |                    |               |                  |            |                  |            |                  |             |
|    | 3                    |                     |       |                    |            |                       |                 |                    |               |                  |            |                  |            | 2                |             |
|    |                      |                     |       |                    |            |                       |                 |                    |               |                  |            |                  |            |                  |             |
|    |                      | -                   |       |                    |            |                       |                 |                    |               |                  |            |                  |            |                  |             |

| 12  | 11 | 10 | 9 | œ        | 7        | 6      | 5       | 4   | ω        | 2   | _          |            | လွ                           | Ξ                | 8            | JE.      | PR               | 7                |               | HI               | င္ တ ပ  | ≱ ⊱         |
|-----|----|----|---|----------|----------|--------|---------|-----|----------|-----|------------|------------|------------------------------|------------------|--------------|----------|------------------|------------------|---------------|------------------|---|-------------|
|     | ,  |    |   |          |          | 2      | lov     | 200 | 30       | 40, | 591        |            | S TRIP<br>DEPTH              | TEMP SN          | COND SN      | TEMP SN  | PRESS SN         | TYPE & SN SB911+ | CTD           | 39 DEG           | <u> ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~</u> | Alpha Helix |
|     |    |    |   |          |          |        |         |     |          |     | 7          | PRESSURE   |                              | t1391            | c501         | t1390    | p5040            |                  |               | DEG MIN          |   |             |
|     |    |    |   |          |          |        |         |     |          |     |            | ÜRE        | C                            | XPAR             | AT SURFACE   | AT DEPTH | p5040 START DOWN | DATA ON          | TIMES         | DEG DEG          | - 0   |             |
|     |    | ÷  |   |          |          |        |         |     |          |     |            | PRI. TEMP. | CTD CONVERTED MONITOR VALUES | X<br>T           | AÇE<br>P     | Ξ<br>    | 0¥<br>           |                  | JD/           | MIN O            |   |             |
|     |    |    |   |          | <u> </u> |        |         |     |          |     |            | MP.        | 'ERTED N                     | XFLUOR           |              |          |                  |                  | JD/TIME       | OM VAD           | DATE ID-                                      | HX209       |
|     |    |    |   |          |          |        |         |     |          |     |            | SEC. TEMP  | NONITOR                      | ChIAM            |              | Τ        | 1                | ਜ਼               |               | 8 X              |   | HX209       |
|     |    |    |   |          |          |        |         |     |          | _   |            | F          | VALUES                       | X<br>T           |              |          |                  | Tape/Diskette ID |               |                  | TIME  |             |
|     |    |    |   | ,        | · ·      |        |         |     |          |     |            | SALINITY   |                              | XTRANSMISSOMETER |              | i        | -                | ette iD          | DATA          | <del>    -</del> | DRY W   | -           |
| , . |    |    |   |          | ,,       |        |         |     |          |     | ,          | 7          |                              | SOMETER          |              | 1        |                  | File Na          | DATA LOCATION | - (g)            | PRESSURE                                      |             |
|     |    |    | 1 |          |          | ).<br> |         |     |          |     |            | SALINITY   | SAMPLE<br>BOTTLE DATA        |                  |              | 3        |                  | File Name/Header | ž             |                  | DEA STATE                                     |             |
|     |    | š. |   | <u> </u> |          |        |         |     |          |     | . 0        |            | DATA                         |                  | 2            | 1 55     | ·  <br>·<br>·    | der              |               | ाना              | ου<br>Συγ<br>CLOUD (amt)                      |             |
|     |    | -  |   |          | -        | -      | a)      | 0   | ফ        | υ   | 539<br>239 | <u>'</u>   | SAMF                         | air bleed valve  | MAX. DEPTH = | -        | 4 1              |                  | REMARKS       |                  | YPE<br>VEATHER                                |             |
| :   |    |    | - | -        | +        | 22     | SAR     | 106 | 202      | 30° | 204 6      | NUTR, CI   | YE BOT                       | Ve               | PTH =        |          |                  |                  | ΧS            | (E)              | BOTTO<br>M DEPT                               | WC          |
|     | 7  |    | , |          |          |        | b 100 . |     | -        |     |            | CHL. HPLC  | SAMPLE BOTTLE NUMBER         |                  |              |          |                  |                  |               | PMC              | STAN  | MEZ         |
| _   |    |    |   | t        | +-       |        |         | _   | $\vdash$ | -   |            | C Other    | MBER                         |                  | 3            |          |                  |                  | 8             | <b>-4</b>        | STA. NAME/ID                                  |             |

| 6<br>7<br>8<br>8<br>9 | 6<br>7<br>8<br>8 | 9 | 8 | 7 6 | 7 | 5 | C/T | 4 | 3 | 2 No Samols | PRESSURE PRI. TEMP. SEC. TEMP S | DEPTH       | POS TRIP CTD CONVERTED MONITOR VALUES | TEMP SN 11391 X PAR X FLUOR CHIAM X TRAN | COND SN c501 AT SURFACE | TEMP SN t1390 AT DEPTH | PRESS SN p5040 START DOWN | TYPE & SN SB911+ DATA ON Tape/Diskette ID | TIMES JD/TIME   | 405637.70N 6024.35W29MAY98 13567 . | DEG MIN DE      | # LATITUDE LONGITUDE DATE JD= (GMT) BULB |              | CON | Alpha Helix HX209 |                     |
|-----------------------|------------------|---|---|-----|---|---|-----|---|---|-------------|---------------------------------|-------------|---------------------------------------|--|-------------------------|------------------------|---------------------------|---|-----------------|------------------------------------|-----------------|--|--------------|-----|-------------------|---------------------|
|                       |                  |   |   |     |   |   |     |   |   |             | SALINITY SALINITY S             | BOTTLE DATA | SAMPLE                                |  | T A                     | - ##<br>- ##<br>- ##   |                           | ID File Name/Header                       | DATA LOCATION R |                                    | (°C) (mb) (deg) | BULB E S DIRN.                           | ESSI<br>BILI | ATE |                   | MINTE               |
|                       |                  |   |   |     |   |   |     |   |   |             | SAL NUTR CHL HPLC Other         |             | SAMPLE BOTTLE NUMBER                  | air bleed valve                          | MAX. DEPTH = 52 m       |                        |                           |   | REMARKS         | S & MEG                            | (m)             | H STA. NAME/ID                           | ATH BOILD    | ER  | PW66              | STATION DESIGNATION |

| 12 | †1 | 10 | 9 | 8 | 7 | 6 | 5 0 | 4   | 3<br>10 | 2 30 | エジの      |                    | POS TRIP<br>DEPTH            | TEMP SN               | COND SN         | TENP SN        | PRESS SN         | TYPE & SN SB911+ | CTD                     | DEG N           | CON<br>SC<br>CAST<br>LATII              | VESSEL<br>Alpha Helix |
|----|----|----|---|---|---|---|-----|-----|---------|------|----------|--------------------|------------------------------|-----------------------|-----------------|----------------|------------------|------------------|-------------------------|-----------------|---|-----------------------|
|    |    |    |   |   |   |   | 1   |     |         |      |          | PRESSURE P         | СТВ                          | t1391 XPAR            | c501 AT SURFACE | t1390 AT DEPTH | p5040 START DOWN | 911+ DATA ON     | TIMES                   | DEG MIN DEG MIN | LATITUDE LONGITUDE                      |                       |
|    |    |    |   |   |   |   |     |     |         |      | :        | PRI. TEMP. SEC     | CTD CONVERTED MONITOR VALUES | X FLUOR Ch            |                 |                | 2                |                  | JD/TIME                 | 6 A W WE CMS    | 1                                       | HX209                 |
|    | ,  |    |   |   |   |   |     |     |         |      |          | SEC. TEMP SAL      | FOR VALUES                   | CHIAM XTRANSM         |                 |                |                  | Tape/Diskette ID | DAT                     | B HRMIN (°C)    | DAY                                     | , a Fig.              |
|    |    |    |   |   |   |   |     |     |         |      |          | SALINITY SALINITY  | SAN<br>BOTTL                 | X TRANSMISSOMETER CIE |                 | W <sub>2</sub> |                  | File Name/Header | DATA LOCATION           | (°C) (mb) (deg) | WET PHESSONE SEA STATE VISIBILITY DIRN. |                       |
|    |    |    |   |   |   |   | 200 | 306 | 70.7    | ₹nc  | 2001 200 |                    | SAMPLE SAMPLE BOTTLE DATA    | air ble               | MAX. DEPTH =    |                |                  | ader             | REMARKS                 | (m/s) * !* !*   | D S Z<br>CLOUD (amt)<br>TYPE<br>WEATHER | 7 W C                 |
|    |    |    |   |   |   |   | 7   | 6   | -1-1    |      | 5        | R. CHL. HPLC Other | SAMPLE BOTTLE NUMBER         |                       | ∏ = m           |                |                  |                  | Parameters of Parameter | m) 2 AMES       | BOTTO<br>M DEPT<br>H STA. NAME/ID       | PMC5                  |

| 12 | <u> </u> | 10 | 9 | <u></u> | Ţ      |              | , | IJ. | 4 | з        | 2  |         |           | SOd                          | 표                | Ω            | Ħ        | 2                | <u> </u>         |               |            | <u> </u>          | Ω Ω                                  | ≥ <                   |
|----|----------|----|---|---------|--------|--------------|---|-----|---|----------|----|---------|-----------|------------------------------|------------------|--------------|----------|------------------|------------------|---------------|------------|-------------------|--------------------------------------|-----------------------|
| 2  | 1        | 0  |   | -       |        |              | " | 01  | + | <u> </u> | 10 |         |           | DEPTH                        | TEMP SN          | COND SN      | NS dWat  | PRESS SN         | TYPE & SN SB911+ | CTD           | 425%       | # DEG             | CAST                                 | VESSEL<br>Alpha Helix |
|    |          |    |   |         |        |              |   |     |   |          |    |         | PRES      |                              | 11391            | c501         | t1390    | p5040            | SB911+           |               | 6 m % [    | LATITUDE<br>G MIN |                                      |                       |
|    |          |    |   |         |        |              |   |     |   |          |    |         | PRESSURE  | ٥                            | XPAR             | AT SURFACE   | AT DEPTH | p5040 START DOWN | DATA ON          | TIMES         | 100        | DEG               | ·                                    |                       |
|    | 58       |    |   |         |        |              |   | ,   |   |          |    |         | PRI. TEMP | TD CONV                      | XFL              | ACE          | I<br>    | NWO              | -<br>            | JD/TIME       | <b>9</b>   | LONGITUDE<br>MIN  |                                      |                       |
|    |          |    | * |         |        | +            |   |     |   |          |    |         |           | ERTED MO                     | FLUOR            |              |          |                  |                  | Ĭ.            | A W O      | DAY MO            | ,<br> <br>                           | HX209                 |
|    |          |    |   |         |        |              |   |     | 1 |          |    | :       | SEC. TEMP | CTD CONVERTED MONITOR VALUES | ChIAM            | _            |          |                  | Tape/            |               | 9 8        | YR HR MIN         |                                      | HX209                 |
|    |          |    | , |         |        |              |   |     |   |          |    |         | SA        | UES                          | ΧΠRANS           |              |          |                  | Tape/Diskette ID | 5             | <u>.</u>   | (°C)              |                                      | _                     |
|    |          |    |   | 4       |        |              |   | ,   | : |          |    |         | SALINITY  |                              | XTRANSMISSOMETER |              |          |                  |                  | DATA LOCATION |            | (°C) (mb          | ? ¥<br>; m<br>ressure                |                       |
|    |          |    |   |         | Ť      |              |   |     |   |          |    |         | SALINITY  | BOTTLE DATA                  |                  |              |          |                  | File Name/Header | NOI           |            | . S               | EA STATE                             |                       |
|    |          |    |   |         |        | _            |   |     |   | <u></u>  |    |         |           | DATA                         | ned air bl       | 2            | 1        | ;                | der              | <del></del>   |            | a) (m/s)          | WIND WE LOUD (amily PE //EATHER & BO | 7 2                   |
|    |          |    |   |         | +      | _            |   | _   | L | L        | _  |         | SAL. N    | SAME                         | air bleed valve  | MAX. DEPTH = |          |                  |                  | REMARKS       |            | Ť<br>V            | YPE<br>/EATHER                       | 3 WC/                 |
| •  |          |    |   | -       | 1      | $\downarrow$ |   |     |   | _        | _  | igdash  | NUTR. C   | <br>                         | Ve               | PTH=         |          |                  |                  | KS            |            | (E)               |                                      |                       |
|    | L        |    | _ |         | $\bot$ | _            |   |     | L | _        |    | igspace | CHL. F    |                              |                  | 7            |          |                  |                  |               | <i>P</i> ≥ | Ų.                |                                      | 13 WCA                |
|    |          | _  |   |         | 1      | $\downarrow$ |   |     | _ |          |    |         | ныс       | SAMPLE BOTTLE NUMBER         |                  | -            |          |                  |                  |               | 空          | STA. NAME/ID      |                                      | 4                     |
|    |          |    |   |         |        |              |   |     |   |          |    |         | Other     | Ť                            |                  | 3            |          |                  |                  |               |            | Ĉ                 | ā<br>Š                               |                       |

| 2 | 11 | 10 | 9 | 8 | 7 | 6 | 5   | 4   | ယ            | 2 | -        |              | POS                         | 7 📆              | COND SN                                 | NS cM∃1  | PRESS SN         | TYPE &           | СТВ           | #<br>W   | CON<br>SC<br>CAST | VESSEL<br>Alpha Helix |
|---|----|----|---|---|---|---|---|---|--------------|---|----------|--------------|-----------------------------|------------------|---|----------|------------------|------------------|---------------|--|-------------------|-----------------------|
|   |    |    |   |   |   |   |   | <u> </u>                                      | 0            | ŏ | 29,      |              | DEPTH                       | ž                | Š.                                      | ž        | SN               | TYPE & SN SB911+ | •             | DEG MIN  |                   | elix C                |
|   |    | 1  | : |   |   |   |   |   |              |   |          | PRESSURE     | ,                           | 11391            | c501 [/                                 | 11390    | p5040            |                  |               | N N  |                   |                       |
|   |    | _  | _ |   |   |   |   |   |              |   |          | URE          | 6                           | XPAR             | AT SURFACE                              | AT DEPTH | p5040 START DOWN | DATA ON          | TIMES         | DEG LONG   |                   |                       |
|   |    |    |   |   |   |   |   |   |              |   |          | PRI. TEMP    | CTD CONVEHIED MONTOH VALUES | <u> X</u>        | ACE                                     | ≖<br>    | NAOM             |                  | Ď             | OW AVE DALE OF THE OF T |                   |                       |
|   |    |    |   |   |   |   |   |   | _            |   |          | EMP.         | VEHIED                      | XFLUOR           | -                                       |          |                  |                  | JD/TIME       | DAY MO   |                   | <u> </u>              |
|   |    |    |   |   |   |   |   | -   |              |   |          | SEC. TEMP    | MON                         | ChIAM            |   | ı        | I                | <br>             |               | MO YR  |                   | HX209                 |
|   |    |    |   |   |   |   |   |   |              |   |          | TEMP         | H VALO                      | Ž                |   |          |                  | Tape/Di          |               | HR MIN   | TIME              |                       |
|   |    |    |   |   |   |   |   |   |              |   |          | SA           | 7                           | XTRANSMISSOMETER |   | ě        |                  | Tape/Diskette ID | D,            | BULB   | DRY               |                       |
|   |    |    |   |   |   |   |   |   |              |   | :        | SALINITY     |                             | MOSSIV           |   |          | 1                |                  | DATA LOCATION |  | ¥<br>m<br>HESSURE |                       |
|   |    |    |   |   |   |   | <u>                                      </u> | <u>                                      </u> | <u> </u><br> |   | <u> </u> | S            | ВО: "                       |                  |   |          |                  | File Name/Header | ATION         | SE VI  | A STATE           |                       |
|   | (E |    |   |   |   |   | 1   |   |              |   |          | SALINITY     | BOTTLE DATA                 | Cleaned          |   |          |                  | Header           |               | (deg) (  | WIND I            |                       |
|   |    |    |   |   |   |   | <u> </u>                                      | L   |              |   | 243      |              |                             | air bleed valve  | MAX                                     |          |                  | Ţ                | REN           | (m/s) CL   | OUD (amt)         | 7Wd                   |
|   |    |    |   |   |   | 1 |   |   | OR           | J | च भ      | . NUTR, CHL. | WAMPLE BOTTLE NOMBER        | valve            | MAX. DEPTH =                            |          |                  |                  | REMARKS       | <u>                                      </u>  | EATHER<br>BOTTO   | D                     |
|   |    |    |   |   |   |   |   |   | 1            | 7 | 7        |              |                             |                  | 111111111111111111111111111111111111111 |          |                  |                  |               | 2  |                   | ME3                   |
|   |    |    |   |   |   |   |   | _   | +-           |   | igg      | HPLC Other   | NOMB<br>T                   |                  | ]<br>3                                  |          |                  |                  |               | STA. NAME/ID   |                   |                       |
| _ |    |    |   |   |   |   |   |   |              |   |          | )ther        |                             | j                | 3                                       |          |                  |                  |               |  |                   |                       |

| 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5  | 4        | ω.  | 2    | 1        |            | POS T                        | TEMP SN          | COND SN      | TEMP SN    | PRESS SN         | TYPE &           | CTD           | £             | CON<br>SC<br>CAST                     | Alpha Helix |
|----|----|----|---|---|---|---|--|----------|-----|------|----------|------------|------------------------------|------------------|--------------|------------|------------------|------------------|---------------|---------------|---------------------------------------|-------------|
|    |    |    |   |   |   |   |  | <u> </u> | 0   | 0    | Ø        |            | DEPTH                        | ž                | SN           | S          | SN               | TYPE & SN SB911+ | Ö             | HH 56 27.38N  |                                       | elix        |
|    |    |    |   |   |   |   |  | :        |     |      |          | PRESSURE   |                              | t1391            | c501 /       | 11390      | p5040            |                  |               |               |                                       |             |
|    |    |    |   |   |   |   |  |          |     |      |          | URE        | ြ                            | XPAR             | AT SURFACE   | AT DEPTH   | p5040 START DOWN | DATA ON          | TIMES         | 1600<br>PEG   | LONG                                  |             |
|    |    |    |   |   |   |   |  |          |     |      |          | PRI. TEMP. | CTD CONVERTED MONITOR VALUES | X                | A<br>CE      | _<br> <br> | OWN              |                  | JD/           | GOOR GEWARMAY | LONGITUDE                             |             |
|    |    |    |   |   | _ |   |  |          | _   |      |          | MP.        | VERTED                       | XFLUOR           |              |            |                  |                  | JD/TIME       | W6 6A         | lm                                    | ¥           |
|    |    |    |   |   |   |   |  |          | *   |      |          | SEC. TEMP  | MONITO                       | ChIAM            |              | 1          |                  | 1                | ·             | A Y 9 8       |                                       | HX209       |
|    |    |    |   |   |   |   | ,  |          |     |      |          | EMP        | R VALUE                      | s<br>X           | )<br>])      |            |                  | Tape/Dis         |               | 6 N           | TIME<br>(GMT)                         |             |
|    |    |    |   |   |   |   |  |          |     |      | ·        | SAL        | W                            | XTRANSMISSOMETER |              | ×          | ŀ                | Tape/Diskette ID | DA:           | - 3           | B ~                                   | _           |
|    |    |    | , |   |   |   |  | 15       |     |      |          | SALINITY   |                              | ISSOME           | :            |            | ,<br>  ,         | File<br>P        | DATA LOCATION | . 6           | <u>ω</u> ¬                            |             |
|    |    |    |   |   |   |   |  |          |     |      |          | ş          | BOT                          |                  | ]            |            | \                | Name/Header      | NON           |               | VISIBILITY                            |             |
|    |    |    |   |   |   |   |  |          |     |      |          | SALINITY   | SAMPLE<br>BOTTLE DATA        | Cleaned a        |              |            | i                | leader           |               | (neg)         | WIND D                                |             |
|    |    |    |   |   |   |   |  |          |     |      | <u> </u> | SAL.       |                              | air bleed valve  | MAX          | 1 3        |                  |                  | REMARKS       | 8             | S S S S S S S S S S S S S S S S S S S |             |
|    |    |    |   |   |   |   |  |          | 216 | ZIK. | 215      | NUTR.      | SAMPLE BOTTLE NUMBER         | valve            | MAX. DEPTH = |            |                  |                  | \RKS          | 87 E          | CLOUD (amt) TYPE WEATHER  DEPT        | 3WE         |
|    | _  |    |   |   |   | - | _  |          | 1   |      | 1        | CH<br>프    | OTTLEN                       |                  | "            |            |                  |                  |               | 1 20          |                                       | ME          |
|    |    |    | , |   |   | 1 | <u>                                     </u> |          | -   | -    |          | HPLC Other | UMBER                        |                  | ]            |            | <u></u>          |                  |               | 7             | STA. NAME/ID                          | L           |

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|-----------------|--|--------------------------|------------------------|------------------------------|------------------|-----------------------|-------------------|
|                 |  |                          |                        |                              |                  |                       | =                 |
|                 |  |                          | :                      |                              |                  | 5                     | <del>1</del> 0    |
| <u> </u>        |  |                          |                        |                              |                  | 2                     | 6                 |
| <u> </u>        |  |                          |                        |                              |                  | 2/                    | 8                 |
| <u> </u>        |  |                          |                        |                              |                  | 7                     | 7                 |
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| <u> </u>        |  |                          |                        |                              |                  | 74                    | 5                 |
| <del> </del>    |  | 01                       |                        |                              |                  | 77                    | 4                 |
| <u> </u>        |  |                          |                        |                              |                  | 171                   | ω                 |
| <del> </del>    |  |                          |                        |                              |                  | 171                   | 2                 |
|                 |  |                          |                        |                              |                  | 17                    |                   |
| <u> </u>        | SALINITY   | SALINITY                 | SEC. TEMP              | PRI. TEMP.                   | PRESSURE         |                       | <u></u>           |
|                 | SAMPLE<br>BOTTLE DATA  | .UES                     | D MONITOR VAL          | CTD CONVERTED MONITOR VALUES |                  | TRIP<br>DEPTH         | POS               |
| air bleed valve | Cleaned  | XTRANSMISSOMETER         | ChIAM                  | XFLUOR                       | t1391 X PAR      | TEMP SN               | TEN               |
| MAX. DEPTH =    |  |                          |                        | ACE                          | c501 AT SURFACE  | COND SN               | Š                 |
|                 |  |                          | ]                      | 로<br> <br> <br>              | t1390 AT DEPTH   | TEM> SN               | TEN               |
|                 |  |                          | <br>                   | NWO                          | p5040 START DOWN | PRESS SN              | PRE               |
|                 | File Name/Header   | Tape/Diskette ID File Na | Tape/                  | _                            | 911+ DATA ON     | TYPE & SN SB911+      | TYP               |
|                 | N  | DATA LOCATION            |                        | JD/TIME                      | TIMES            | CTD                   |                   |
|                 |  | •                        | 1A Y 9 8 1 7 3 8       | Y A M & G W 69. 0 5 6 5      | 2535             | 55625.70N             | H                 |
| <u>ا تحا</u>    |  | (°C) (°C) (mb            | ¥<br>F                 |                              | DE               | R R                   | 1                 |
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| _  ≥            | STATION DESIGNA  |                          | PROJECT & LEG<br>HX209 | <b>T</b> Tr                  |                  | VESSEL<br>Alpha Helix | Alpt<br>Alpt      |
|                 |  |                          |                        |                              |                  |                       | İ                 |

|             |    |    | Ι. | 1. | 1 | <u> </u> | Τ | 7        | 1 | Γ.   |     |            | <u> </u>                          | स⊒              | _            |          |                  |  |               |        | _              |                    |                       | TK 7                  |
|-------------|----|----|----|----|---|----------|---|----------|---|------|-----|------------|-----------------------------------|-----------------|--------------|----------|------------------|--|---------------|--------|----------------|--------------------|-----------------------|-----------------------|
| 72          | 11 | 10 | 9  | 8  | 7 | 6        | 5 | 0        | 3 | 2 10 | - A |            | DEPTH                             | ¬ ₩             | COND SN      | TEM⊋ SN  | PRESS SN         | TYPE & SN SB911+                       | CTD           | 41.563 | # DEG          |                    | SC CO                 | VESSEL<br>Alpha Helix |
| <del></del> |    |    |    |    |   | -        |   |          | * |      |     | PRESSURE   | <u> </u>                          | 11391           | c501 A       | t1390 A  |                  |  |               | NOLL   | MiN            |                    |                       |                       |
|             |    |    |    |    |   |          | _ |          | - |      |     | JRE .      | · <u>·</u>                        | ХРАЯ            | AT SURFACE   | AT DEPTH | p5040 START DOWN | DATA ON                                | TIMES         | 35     | DEG MIN        | }                  |                       |                       |
|             |    |    |    |    |   |          |   |          |   |      |     | PRI. TEMP. |                                   | XFLUOR          | ]<br>]       |          | WN               | #31                                    | JD/TIME       | Ø W    | 工              |                    |                       | -                     |
|             |    |    |    |    |   |          |   |          |   | 19   |     | SEC. TEMP  | C TO CONVERT ED MONTON CON VOLUCE | R ChiAM         |              |          |                  |  |               | A<br>Y | DAY MO YR      | ;                  |                       | HX209                 |
|             |    |    |    |    |   |          |   |          |   |      |     | TEMP       |                                   | M<br>X<br>X     |              | 77       |                  | Tape/Diskette ID                       |               | 40e    | HR MIN         |                    |                       | , c                   |
|             |    |    |    |    | , |          |   |          |   |      |     | SALINITY   |                                   | TRANSMISSOMETER |              | 100      | <br> <br>        |  | DATA LOCATION | •      | (°C) (°C) (mb) | WET                | SURE                  | -                     |
|             |    |    |    |    |   |          |   |          |   |      |     | SALINITY   | BOTTLE DATA                       | Cleaned         |              |          |                  | File Name/Header                       | TION          |        | N              | SIB                | ETATE LITY  Z D (amt) |                       |
|             |    |    |    |    |   |          |   |          |   |      |     | SAL.       |                                   | air bleed valve | MAX. C       |          | 1                | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | REMARKS       |        | s) C           | LOU<br>YPE<br>VEAT | Z<br>D (amt)<br>HER   |                       |
|             |    | _  | _  | -  |   |          | - | <u> </u> |   | _    |     | NUTR, CHL. |                                   | ed valve        | MAX. DEPTH = |          |                  | Sike P                                 | RKS           | 2      | (m)            | N DEPT             | вотто                 |                       |
| _           |    |    |    |    |   |          |   |          |   |      |     | HPLO       |                                   | n Ni Ni         |              |          | ,                | ryn                                    |               | PMAI   |                | STA NAME/ID        |                       | 7                     |
|             |    |    |    |    |   |          |   |          |   |      |     | Other      |                                   | B               | 3            |          |                  |  |               |        | į              | ה<br>ב             |                       |                       |

|          | _  |          |   |          | Τ.           | T            | Τ. | Т        |     |      |          | П   | I   | 7                                     | ĪΞ               | <u> </u>     |                | 70               | <del></del>      |               | 1         |             |                       | 15          | _      |
|----------|----|----------|---|----------|--------------|--------------|----|----------|-----|------|----------|-----|---|---------------------------------------|------------------|--------------|----------------|------------------|------------------|---------------|-----------|-------------|-----------------------|-------------|--------|
| <u>5</u> | 11 | 10       | 9 | 8        | 7            | 6            | 5  | <u>'</u> | 4   | 3    | 2        | _   |   | 309                                   | 7 <del>5</del> 5 | COND SN      | TEMP SN        | HES              | YPE              | ဂ             | 4         |             | SC<br>CAST            | lipha       | VESSEE |
|          |    |          |   |          |              |              |    | ŀ        | 0   | 0    | Ò        | 88  |   | DEPTH                                 | SN               | NS (         | S              | PRESS SN         | TYPE & SN SB911+ | CTD           | 475635.70 | DEG         |                       | Alpha Helix | Ļ      |
| -        |    |          |   |          |              | T            | †  | ┪        |     |      |          |     |   |                                       | 1                |              |                |                  | SB9              |               | 35        | MIN         | I ATITLIDE            |             |        |
|          |    |          |   |          |              |              |    |          |     |      |          |     | PRES  |                                       | t1391            | c501         | t1390          | p504             | <b>∓</b>         |               | 0         |             | <del>D</del>          |             |        |
|          |    |          |   |          |              |              |    |          |     |      |          | 1   | PRESSURE                                      |                                       | <u></u>          |              | t1390 AT DEPTH | /TS              | DA:              | TIMES         | N .       | DEG         |                       |             | _      |
| ,        |    |          |   |          |              |              |    |          |     |      |          |     | m   | _                                     | XPAR             | AT SURFACE   | DEPT           | ART (            | DATA ON          | ES            | 595       | G           | D.                    |             |        |
|          |    |          |   |          |              |              |    |          |     |      |          |     | PF  | CTD CONVERTED MONITOR VALUES          |                  | ACE          | Ī              | p5040 START DOWN | ,                |               | 0.60      | N N         | LONGITUDE             |             |        |
|          |    |          |   |          |              |              |    |          |     |      |          |     | PRI. TEMP.                                    | ÖN                                    | X                | ]            |                |                  |                  | JD/TIME       |           | Н           | <b>т</b>              |             |        |
|          |    |          |   |          |              |              | 1  | 1        |     | i    |          |     | <u>₹</u>                                      |                                       | XFLUOR           |              |                |                  |                  | Ĭ             | 20        | DAY         | DATI                  |             | _      |
|          |    |          |   |          |              |              | +  | 1        | -   |      |          |     | <b>(0</b>                                     | ) Ü                                   |                  | 1            | 1              |                  |                  |               | Y AM PCW  | 8           | DATE JD=              | HX209       |        |
|          |    |          |   |          |              |              |    |          |     |      |          |     | ĔĊ.   |                                       | ChIAM            | L            |                |                  |                  |               | 9 8       | Ϋ́          |                       | ٩           |        |
|          |    |          |   |          |              |              |    |          |     |      |          |     | SEC. TEMP                                     | ļ ĭ                                   | Ž                |              |                |                  | Tape             |               | 050       | HR MIN      | TIME                  |             | 1      |
| _        |    | _        | _ | ┝        | <del> </del> | -            | +  | $\dashv$ |     |      | -        | ┝   |   | וַטַּבּי                              | K<br>T           |              |                |                  | /Disk            |               | 0         | -           |                       |             | 3      |
|          |    | •        |   |          |              |              |    | Ì        |     |      |          |     | ပ္င   |                                       | XTRANSMISSOMETER |              |                |                  | Tape/Diskette ID | 0             | -         | င္ပံု       | DRY                   | -           | _      |
|          |    |          |   |          |              |              |    |          |     |      |          |     | SALINITY                                      |                                       | SSIM             |              |                |                  | Ō                | ATA           |           | <del></del> | WET                   |             |        |
|          |    | ,        |   |          |              |              | 1  |          |     |      |          |     | 7   | •                                     | ŎME              |              |                |                  | File             | 100/          | -         | 2           | ₩<br>PRESSUF          | RE          |        |
|          |    | <u> </u> |   | <u> </u> | 1            | ╁            | ┿  | <u> </u> | -   |      | <u> </u> | ╀   | <u>                                      </u> | <u> </u>                              | <u>II</u>        | ]            | 1              |                  | File Name/Header | DATA LOCATION |           | ₽,          | SEA STAT              | E           |        |
|          |    |          |   |          |              |              |    | 4        |     |      |          |     | SAL   | BOTTLE DATA                           | S<br>C           | ]],          |                |                  | Te/He            |               |           |             | <u>VISIBILIT</u><br>□ |             |        |
|          |    | -        |   |          |              |              |    |          |     |      |          |     | SALINITY                                      | SAMPLE<br>OTTLE DAT                   | Cleaned          |              |                |                  | ader             |               |           | (deg)       | WIND<br>FRN.          |             |        |
|          |    |          |   |          | Ļ            | $\downarrow$ | _  |          |     |      |          |     |   | ΑTA                                   | lairb            |              |                | 態                |                  |               |           | (m/s)       | D SP                  |             | :      |
|          |    |          |   |          |              |              |    |          | 440 |      |          |     | SAL   | ý                                     | air bleed valve  | MAX. DEPTH = |                |                  |                  | REMARKS       |           | * (         | CLOUD (a              | imt)        | ر<br>ح |
|          |    |          |   |          |              | Ţ            |    |          |     | 2/16 | 715      | 218 | Š.  | ֓֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓ | valve            | DEP.         |                |                  |                  | ARKS          |           | -           | <u> </u>              | 7           | >      |
|          |    | $\vdash$ | - | 十        | +            | +            | +  | -        |     |      | 7        | 20  | NUTR, CHL.                                    | - ''                                  |                  | 로            |                |                  |                  | ••            |           | 3           | BOTTO<br>M DEPT       | <b>^^</b>   | >      |
| ٠        |    |          | L | -        | -            | -            |    | _        |     |      | 5        | 7   |   | ļ <u>Ē</u>                            | 1                |              |                |                  |                  |               | P         | 1           | ST/                   |             |        |
|          |    |          |   |          |              |              | Ñ  |          | 7   | 1    |          |     | HPLC Other                                    | OAMITE DOT LE NOMBED                  |                  |              |                |                  |                  |               | PMA       | 1           | STA. NAME/ID          |             |        |
|          |    |          |   |          |              |              |    |          |     | ,    |          |     | Q<br><del>≸</del>                             |                                       |                  | 3            |                |                  |                  |               | -         |             | ME/E                  |             | _      |

| 5. | 11 | 10 | 9   | 8 | [ ]      |   | o | ა   | 4   | 3   | 2   |          |            | POS                          | TEM              | CON          | TEM              | PRE              | TYP              |               | 4             | #                    | CAST             | S S      | Alph                  |
|----|----|----|-----|---|----------|---|---|-----|-----|-----|-----|----------|------------|------------------------------|------------------|--------------|------------------|------------------|------------------|---------------|---------------|----------------------|------------------|----------|-----------------------|
|    |    |    |     |   |          |   |   | 0 7 | 101 | 201 | 30  | 43       |            | DEPTH                        | TEMP SN          | COND SN      | TEMP SN          | PRESS SN         | TYPE & SN SB911+ | CTD           |               | ᆔ                    | <u> </u>         | <u> </u> | VESSEL<br>Alpha Helix |
|    |    |    |     |   |          |   |   |     |     |     | i   |          | PRESSURE   | =                            | 11391            | c501         | 11390            | p5040            | B911+            |               | 9.81 N        | LATITUDE<br>G MIN    |                  |          |                       |
|    | -  |    |     |   |          |   |   |     |     |     |     | !        | SURE       | 8                            | XPAR             | AT SURFACE   | AT DEPTH         | p5040 START DOWN | DATA ON          | TIMES         | $\overline{}$ | DEG                  |                  |          |                       |
|    | ,  |    |     |   | !        |   |   |     |     |     |     |          | PRI. TEMP. | CTD CONVERTED MONITOR VALUES | X                | ACE          | <del>로</del><br> | OW<br>           | -<br>            | JD/           |               | LONGITUDE            |                  |          |                       |
|    |    |    | (8) | _ |          | 1 |   |     |     |     |     |          | MP.        | /ERTED I                     | XFLUOR           |              |                  |                  |                  | JD/TIME       | /MDC/         | DATE JD=             |                  |          | ¥3                    |
|    |    |    |     |   |          |   |   |     |     |     |     |          | SEC. TEMP  | VIONITOR                     | ChIAM            |              | <u>'</u>         | '<br>T           | '<br>            | "             | 9 8           | ¥                    |                  | · ·      | HX209                 |
| ,  |    |    |     |   | -        |   | - |     |     |     |     |          | M          | VALUES                       | ×                | ]            |                  |                  | Tape/Diskette ID |               | 2032          | ᆲ                    | TIME<br>TIME     | e.       | - F                   |
|    |    | ,  |     |   |          |   |   |     |     |     |     |          | SALINITY   | ,                            | RANSMIS          |              |                  | W                | cette ID         | DAT,          |               |                      | DRY V            |          | -                     |
|    |    |    |     |   |          |   |   |     |     |     |     |          | YTT        |                              | XTRANSMISSOMETER |              |                  |                  | File             | DATA LOCATION |               | (°C) (mb             | ESS<br>E         | URE      |                       |
|    |    |    |     |   | !        |   |   |     |     |     |     |          | SALI       | BOTTL                        |                  |              |                  |                  | File Name/Header | Ō             |               | SE<br>VIS            | HBIL             |          |                       |
|    |    |    |     |   |          |   |   | i   |     |     |     |          | SALINITY   | SAMPLE<br>BOTTLE DATA        |                  |              |                  | 1                | ader             |               |               | DIRN. D. (deg) (m/s) | ND D SF          | (amt)    | 2                     |
|    |    |    |     |   |          |   |   |     |     |     |     |          | SAL        | SAN                          | air bleed valve  | MAX. [       |                  |                  |                  | REMARKS       |               | CL<br>TY<br>WE       | OŬE<br>PE<br>ATI | (amt)    |                       |
|    | ,  | ,  |     |   | -        | 1 |   | 26  | J   | HC  | 282 | Sec<br>2 | NUTR.      | NPLE BO                      | alve             | MAX. DEPTH = |                  |                  |                  | RKS           | 9             | (E)                  | M DEPT           | BOT I    | -)2                   |
|    |    |    |     | _ | <u> </u> | + |   | 1   |     | 7   | . 7 |          | H<br>H     | SAMPLE BOTTLE NUMBER         |                  |              |                  |                  |                  |               | P // #4       |                      | <u> </u>         |          | M A3                  |
| -  |    | 1  |     |   |          | + |   | -   |     |     |     |          | HPLC Other | UMBER                        |                  | ]<br>∃       |                  | <u> </u>         |                  |               | ເນ            | STA. NAME/ID         |                  |          |                       |

| 5 | 11 | 10       | 9        | 8        | Ţ            | 1 | 6      | 5            | 4  | ω   | 2  |          | ē           | <del></del> - | ပ္တ                          | Ī                | 8            | Ħ        | 꾸                | Ŧ                | _             |                    | Ω0                   | ≥≤                    |
|---|----|----------|----------|----------|--------------|---|--------|--------------|----|-----|--|----------|-------------|---------------|------------------------------|------------------|--------------|----------|------------------|------------------|---------------|--------------------|----------------------|-----------------------|
|   |    |          | i i      |          | T            |   |        | 1 mg 1       |    | - 1 |  | 5.17     | E .         |               | STAIP                        | TEMP SN          | COND SN      | TEMP SN  | PRESS SN         | TYPE & SN SB911+ | CTD           | 4G 5               | CON<br>SC<br>CAST    | VESSEL<br>Alpha Helix |
|   |    |          | (0)      | L        | <u> </u>     | × | ****** | <br>         |    |     | <u> </u>   | 1        | <br>        | <u> </u>      | ਰ <br>~                      |                  | ρ            | _        | Ž                | 3∧ ŚB            |               | DEG N              | <b>L</b>             | ×                     |
|   |    |          |          |          |              |   |        |              |    |     |  |          | 505         |               | Ì                            | 11391            | c501         | 11390    | p50.             | 911+             |               | 7 Z                | LATITUDE             |                       |
|   |    |          | <br>     |          |              |   |        |              |    |     |  |          | PRESSURE    |               | ļ                            |                  |              |          | p5040 START DOWN | D <sub>A</sub>   | T B           | Z D                |                      | -                     |
|   |    |          | L        | _        | $\downarrow$ | _ |        |              | _  | L   | L  |          | m .         |               | <u></u>                      | XPAR             | AT SURFACE   | AT DEPTH | ART D            | DATA ON          | TIMES         | DEG<br>G<br>G<br>G | LONG                 |                       |
|   |    |          |          |          |              | į |        |              |    |     |  |          | PRI         |               | 200                          |                  | ACE          | I<br>I   | NWO              |                  |               |                    | LONGITUDE            |                       |
|   |    |          |          |          |              |   |        |              |    |     |  |          | PRI. TEMP.  |               | NVEF                         | XFLUOR           |              |          | -0               |                  | JD/TIME       | W Ge M S           |                      | -                     |
|   |    |          | 100      | -        | +            |   |        | _            | ┝  | ╀   | $\vdash$   | -        | ļ. <b>°</b> |               | TED I                        | )R               |              |          |                  |                  | ñ             | N WOR              | DATE JD=             | ¥ 3                   |
|   | 1  |          |          |          |              | į |        |              | Ì  |     |  |          | SEC         |               | INON                         | СЪ               | ]            | •        | •                | '                |               | A Y 9 8            | <b>⊣</b> "           | HX209                 |
|   |    |          |          |          |              |   |        |              |    |     |  |          | SEC. TEMP   |               | CTD CONVERTED MONITOR VALUES | ChIAM            |              |          | Τ                | Тар              | Ī             | -                  |                      | HX209                 |
| _ |    | _        |          | $\vdash$ | +            |   |        | 1+1          | ╀  | ©.  | 77   | <u> </u> | 0           | -             | ALUES<br>TOES                | X<br>I           |              |          |                  | e/Dist           |               | N T                |                      | <b>」</b> ;            |
|   |    |          |          |          | ı            |   |        |              |    |     |  | ļ        | ş           |               | •                            | XTRANSMISSOMETER |              |          | 75               | Tape/Diskette ID | D             | - 3                | BULB                 | -                     |
|   |    |          |          |          |              |   | 3      |              | 13 | İ   | î  | ,        | SALINITY    |               | 30                           | SSIM             |              | <b>!</b> | •                | 0                | E.TA L        | - 5                | III                  |                       |
|   |    |          |          |          |              |   |        |              |    |     |  |          |             |               |                              | METE             |              |          |                  | File             | DETA LOCATION |                    |                      | -                     |
|   |    |          |          |          | 1            |   |        |              |    |     |  | Γ        | S           | 8             |                              |                  | ]            |          |                  | File Name/Header | Š             |                    | VISIBILITY           |                       |
|   |    |          |          |          |              |   |        |              |    |     |  |          | SALINITY    | BOTTLE DA     | SAMPLE                       | Cleaned          |              |          | 3                | Head             |               | - Geg              | WINC                 |                       |
| - |    | E        |          |          |              |   |        |              |    |     |  |          | ~           | ÄTA           | m                            |                  |              | •        | 18               | φ                |               |                    |                      | 1                     |
|   | !  |          |          |          |              |   |        |              |    |     |  | 640      | SAL.        |               | SA                           | air bleed valve  | MAX.         |          | Ţ                |                  | REM           |                    | TITE                 |                       |
|   |    |          |          |          |              |   |        |              |    |     |  |          | NUTR        |               | MPLE                         | valve            | MAX. DEPTH = | ķ.       |                  |                  | REMARKS       | 23.103             |                      |                       |
|   |    |          | <u> </u> |          | †            |   |        | <del> </del> |    |     | <del>                                     </del> | +-       | R<br>CHL    | 1             | ВОП                          |                  | ゴニ           |          |                  |                  |               | 7                  | BOTTO<br>M DEPT<br>H | PMAY                  |
|   |    |          | $\vdash$ | ┢        | +            |   |        | +            | +  | t   | +  | +        | J.<br>HPLO  | 1             | SAMPLE BOTTLE NUMBER         |                  |              |          | i                |                  |               | 100                | STA.                 | 44                    |
| _ | 卜  |          | ┼-       | -        | 3            |   | - 2    |              | ┼- | ╁   | ╁  | +        | LC Other    | 1             | <b>JMBEF</b>                 | <u> </u>         | ]<br>]       |          |                  |                  |               |                    | STA. NAME/ID         |                       |
| _ |    | <u> </u> |          | _        |              |   |        |              |    |     | <u> </u>   |          | <u>ब</u>    | <u> </u>      | <i>بد</i><br>                | ]                |              |          |                  |                  |               | 712                | /D                   |                       |

PG \_\_\_ OF \_\_\_