

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
CHESAPEAKE BAY ECOSYSTEM PROJECT
EAST MAHANTANGO CREEK WATERSHED**

REMARKS.--The following table contains water-quality data from wells sampled as part of the Chesapeake Bay Ecosystem Project. The wells in this study were sampled as part of an ongoing assessment of ground-water residence time in the Chesapeake Bay Basin. Shallow wells in an area where ground water was discharging to a stream were selected for sampling. The first site listed is for the sample collected from the stream. In addition to the analyses listed below, age dating analyses such as chloroflourocarbon (CFC) analyses were conducted for each site. The results of the CFC analyses are not yet available.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| STATION NUMBER | DATE | TIME | AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028) | AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STANDARD UNITS) (00400) | SPECIFIC CONDUCTANCE (µS/CM) (00095) | TEMPERATURE WATER (DEG C) (00010) |
|-----------------|----------|------|---|--|-----------------------------------|---|--------------------------------------|-----------------------------------|
| 01555370 | 05-09-00 | 1130 | 80020 | 1028 | 9.4 | 7.2 | 116 | 21.0 |
| 404258076373401 | 05-08-00 | 1400 | 80020 | 1028 | 8.1 | 5.3 | 249 | 11.7 |
| | 05-08-00 | 1500 | 80020 | 1028 | 6.4 | 6.1 | 306 | 11.4 |
| 404258076373303 | 05-08-00 | 1300 | 80020 | 1028 | 8.1 | 6.2 | 299 | 12.6 |
| | 05-08-00 | 1130 | 80020 | 1028 | 6.4 | 6.1 | 331 | 13.2 |
| 404234076353101 | 05-09-00 | 1600 | 80020 | 1028 | .2 | 8.2 | 211 | 11.4 |
| 404233076353210 | 05-09-00 | 1500 | 80020 | 1028 | .1 | 8.1 | 200 | 11.8 |
| 404233076353205 | 05-09-00 | 0930 | 80020 | 1028 | 6.7 | 6.1 | 151 | 12.4 |
| 404233076353206 | 05-09-00 | 1000 | 80020 | 1028 | 7.5 | 6.1 | 151 | 11.9 |
| 404233076353208 | 05-09-00 | 1100 | 80020 | 1028 | 3.9 | 6.8 | 158 | 12.9 |
| 404233076353209 | 05-09-00 | 1300 | 80020 | 1028 | 6.3 | 6.3 | 151 | 11.9 |
| 404233076353202 | 05-09-00 | 1330 | 80020 | 1028 | 6.2 | 5.8 | 162 | 12.9 |
| 404232076353301 | 05-09-00 | 1400 | 80020 | 1028 | 9.4 | 5.9 | 169 | 11.9 |
| 404235076354202 | 05-10-00 | 0900 | 80020 | 1028 | 1.3 | 6.4 | 92 | 11.5 |
| 404235076354203 | 05-10-00 | 1100 | 80020 | 1028 | .3 | 6.5 | 111 | 13.2 |
| 404235076354204 | 05-10-00 | 1200 | 80020 | 1028 | .5 | 7.0 | 181 | 14.4 |
| 404234076354206 | 05-10-00 | 1300 | 80020 | 1028 | 5.1 | 6.4 | 133 | 11.4 |
| 404234076354207 | 05-10-00 | 1330 | 80020 | 1028 | 3.1 | 6.6 | 167 | 12.2 |
| 404233076354101 | 05-10-00 | 1500 | 80020 | 1028 | 8.2 | 5.8 | 152 | 9.9 |
| 404340076353401 | 05-17-00 | 1330 | 80020 | 1028 | 7.3 | 4.9 | 13 | 10.6 |
| 404319076361201 | 05-17-00 | 1530 | 80020 | 1028 | 6.8 | 6.6 | 82 | 12.3 |

| DATE | NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | PHOSPHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671) | DEPTH OF WELL, TOTAL (FEET) (72008) | ELEV. OF LAND SURFACE DATUM ABOVE NGVD) (72000) |
|----------|--|--|--|--|---|--|-------------------------------------|---|
| 05-09-00 | .48 | .048 | 4.73 | .012 | .017 | <.010 | -- | 720 |
| 05-08-00 | .12 | <.020 | 21.1 | <.010 | E.003 | <.010 | 82.00 | 874 |
| 05-08-00 | .10 | .022 | 19.0 | <.010 | <.006 | <.010 | 82.00 | 874 |
| 05-08-00 | .13 | .026 | 21.0 | <.010 | <.006 | <.010 | 86.00 | 876 |
| 05-08-00 | .16 | .020 | 21.4 | <.010 | <.006 | <.010 | 86.00 | 876 |
| 05-09-00 | .15 | .052 | <.050 | <.010 | .104 | .088 | 10.00 | 735 |
| 05-09-00 | <.10 | .034 | <.050 | <.010 | .105 | .084 | 13.95 | 727 |
| 05-09-00 | .14 | .049 | 9.87 | .012 | .012 | <.010 | 18.11 | 724 |
| 05-09-00 | <.10 | <.020 | 9.80 | <.010 | .009 | <.010 | 24.40 | 723 |
| 05-09-00 | .20 | .179 | 7.43 | <.010 | E.003 | <.010 | 45.21 | 724 |
| 05-09-00 | .10 | .071 | 7.03 | <.010 | .016 | .011 | 65.11 | 724 |
| 05-09-00 | .10 | <.020 | 11.2 | <.010 | E.003 | <.010 | 10.00 | 727 |
| 05-09-00 | E.10 | <.020 | 12.3 | <.010 | .010 | <.010 | 35.00 | 735 |
| 05-10-00 | E.10 | .050 | .798 | <.010 | .081 | .076 | 20.00 | 753 |
| 05-10-00 | .25 | .111 | .481 | <.010 | .148 | .115 | 30.00 | 753 |
| 05-10-00 | 4.2 | 3.69 | .479 | .015 | .439 | .334 | 40.00 | 753 |
| 05-10-00 | <.10 | <.020 | 8.43 | <.010 | .021 | .013 | 30.00 | 749 |
| 05-10-00 | .14 | .022 | 7.93 | <.010 | .034 | .019 | 40.00 | 749 |
| 05-10-00 | E.10 | <.020 | 11.5 | <.010 | .006 | <.010 | 10.00 | 756 |
| 05-17-00 | <.10 | <.020 | .243 | <.010 | <.006 | <.010 | 150.00 | 980 |
| 05-17-00 | <.10 | <.020 | 5.24 | <.010 | .122 | .115 | 153.00 | 887 |