

**Welland and Witham Estuaries - Ecological Study
Appendices to Final Report**

Appendices to Part 2 - Water Quality Report

April 1993

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OL/501/8/A - Appendices



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WELLAND & WITHAM ESTUARIES

ECOLOGICAL STUDY

Appendices to PART II

April 1993

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A P P E N D I X 1

**WATER QUALITY IN NON-TIDAL WELAND AT LOWEST
HARMONISED MONITORING POINT: CROWLAND BRIDGE.**

Statistical summaries for 1989, 1990, 1991 and 1992

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 31/12/90

NO. OF SAMPLES - 60

SAMPLE POINT - ROSOFWELL420C
SAMPLE TYPE - BF

R.WELLAND CROWLAND BR.
RIVER/STREAM WATER

GRID REF - TF 225C0 10700

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
COLOUR FIL	0072 HAZEN	23 0	10.8046	8.0839	25.9048 (LCG NORMAL)	2.0	35.0	9.14
TURBIDITY	0068 FTU	47 1>	12.0489	>20.3333	41.4571 (LOG NORMAL)	1.73	130.0	6.63
PH	0061 PH UNITS	46 0	8.416	0.3138	9.0342 - 7.7979	7.94	9.62	8.345
COND 25 C	0077 USIE/CM	42 0	863.5047	104.9722	1046.1732 (LOG NORMAL)	329.2	1103.0	865.6
SS 105 C	0135 PG/L	24 0	34.2291	52.9296	114.4587 (LCG NORMAL)	5.0	255.0	19.25
TEMP C	0076 CEL	46 0	13.1478	5.6525	23.7805 (LOG NORMAL)	2.8	23.5	12.7
D.O.	0082 MG/L O	47 0	11.3436	3.2434	6.8774 (5%ILE)	6.6	23.5	10.7
D.O. (XSAT)	0081 X SAT	46 0	107.8673	36.4233	59.5257 (5%ILE)	66.2	257.0	96.65
900+ATU Y	0085 MG/L C	47 1>	3.8326	>3.0129	9.4302 (LCG NORMAL)	1.35	14.03	2.65
TDC	0099 MG/L C	2 0	7.2	1.1313	8.7 (MAX VALUE)	6.4	9.0	7.2
C ORG DISS	0301 MG/L C	17 0	8.7	7.4342	22.3972 (LCG NORMAL)	5.0	37.0	6.58
AMMONIA N	0111 PG/L A	46 7<	0.1473	>0.1061	0.3495 (LOG NORMAL)	<0.04	0.4617	0.1162
NITRITE N	0112 MG/L N	19 0	0.1015	0.0309	0.1585 (LOG NORMAL)	0.044	0.1573	0.0999
TOR AS N	0115 PG/L A	45 0	5.6263	3.695	12.5933 (LCG NORMAL)	1.102	13.9	4.12
ALK CACO3	0162 PG/L CACO3	22 0	211.3181	21.6935	242.7735 (LOG NORMAL)	154.0	255.0	216.0
HARD TOTAL	0158 PG/L CACC3	22 0	391.7727	71.2313	518.5644 (LOG NORMAL)	348.0	656.0	372.0
CALCIUM	0241 PG/L CA	9 0	135.4444	18.8747	178.0 (MAX VALUE)	107.5	178.0	132.0
MAGNESIUM	0237 PG/L MG	9 0	11.2125	2.5025	16.8 (MAX VALUE)	8.8	16.8	10.58
SODIUM	0207 PG/L NA	11 0	40.23	11.0024	60.3577 (LOG NORMAL)	18.8	53.3	42.1
POTASSIUM	0211 PG/L K	11 0	6.6345	1.3536	9.062 (LCG NORMAL)	4.82	8.91	6.52
SETS ANION	0461 PG/L P.O.T	23 19<	0.01	>0.0045	0.0357 (LOG NORMAL)	<0.05	0.07	<0.05
P TOTAL	9038 MG/L P	9 0	0.7038	0.2954	1.11 (MAX VALUE)	0.24	1.11	0.78
P ORTH P	0120 PG/L P	42 2<	0.7202	>0.344	1.3758 (LOG NORMAL)	<0.2	1.295	0.6347
BORON	0283 MG/L B	2 1<	0.2	>0.2616	0.4 (MAX VALUE)	<0.03	0.4	<0.215
FLUORIDE	0177 MG/L F	3 0	0.2256	0.0248	0.241 (MAX VALUE)	0.197	0.241	0.239
CHLORIDE	0172 PG/L CL	45 0	65.0451	11.8531	86.1467 (LCG NORMAL)	36.29	96.9	64.47
SULPHATE	0183 G/L	16 0	173.975	76.7578	318.5222 (LOG NORMAL)	69.7	417.0	152.6
SILICA	0182 MG/L SiO2	23 3<	3.2033	>1.7137	8.2114 (LOG NORMAL)	0.08	8.2	3.15
IRON TOTAL	0421 MG/L FE	11 2<	0.5752	>0.0768	2.0609 (LOG NORMAL)	<0.05	2.76	0.22
FE 0.45UM	0419 MG/L FE	3 3<	0.0	>0.0	<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
MN TOTAL	0403 PG/L MN	8 4<	0.0206	>0.0277	0.1 (MAX VALUE)	0.005	0.1	<0.03
MN 0.45UM	0401 MG/L MN	2 1<	0.095	>0.1131	0.19 (MAX VALUE)	<0.03	0.19	<0.11
CD TOTAL	9265 UG/L CD	13 12<	0.013	>0.0194	0.0951 (LOG NORMAL)	<0.1	0.17	<0.1
CD 0.45UM	9264 UG/L CD	2 2<	0.0	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
HG TOTAL	9269 UG/L HG	9 6<	0.0162	>0.0143	0.07 (MAX VALUE)	0.016	0.07	<0.05
HG 0.45UM	9268 UG/L HG	1 0	0.023	0.0	0.023 (ONLY VALUE)	0.023	0.023	0.023

*** STATISTICS CONTINUED FROM PREVIOUS PAGE ***

GRID REF - TF 225C0 10700

R. VELLAND CROWLAND BR.
RIVER/STREAM WATER

SAMPLE POINT - ROSBFVELL420C
SAMPLE TYPE - BF

DETERMIND	UNITS	NC. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
AS TOTAL	9261 UG/L AS	3 0	1.8933	C.50C1	2.4 (MAX VALUE)	1.4	2.4	1.88
AS 0.45 UP	9260 UG/L AS	3 1<	1.4833	>0.9987	2.3 (MAX VALUE)	<0.5	2.3	2.15
CK TOTAL	0175 UG/L CM	3 3<	0.0	C.03	<0.03 (MAX VALUE)	<0.03	<0.03	<0.03
PHENOL PMA	0749 UG/L	2 2<	0.0	>C.0007	<C.006 (MAX VALUE)	<C.005	<C.006	<0.0055
SILVER TOT	9198 UG/L	3 3<	0.0	>C.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
ANTH TOT	9200 UG/L	3 2<	0.9	>0.9815	2.7 (MAX VALUE)	<1.0	2.7	<1.0
MCM ALPHA	9203 UG/L	7 7<	0.0	>C.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
MCM GAMMA	9204 UG/L	7 0	10.3862	6.03C9	20.0 (MAX VALUE)	4.3	20.0	9.2
DIELDRIN	9205 UG/L	6 3<	0.5233	>0.2833	1.4 (MAX VALUE)	<0.7	1.4	<0.72
ELDRIN	9208 UG/L	7 7<	0.0	>0.1825	<1.0 (MAX VALUE)	<0.5	<1.0	<0.5
ALDRIN	9209 UG/L	7 7<	0.0	>0.1889	<1.0 (MAX VALUE)	<0.5	<1.0	<0.5
DDT (PP')	9206 UG/L	6 6<	0.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
ODE (PP')	9207 UG/L	7 7<	0.0	>C.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
HEPTACHLOR	9210 UG/L	7 7<	0.0	>C.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
CHLOROPHYL	0729 UG/L	22 0	55.5215	73.5274	175.181 (LOG NORMAL)	1.36	283.73	30.25
COLI P	9153 AC/100ML	8 1>	397.2837	>596.4525	>180C.0 (MAX VALUE)	19.0	>180C.0	450.0
AS 0.45 UP	0217 UG/L AG	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
AS 0.45UM	0235 UG/L PG	2 0	13.6	5.0911	17.2 (MAX VALUE)	10.0	17.2	13.6
CA 0.45UP	0239 UG/L CA	2 0	161.0	31.1127	183.0 (MAX VALUE)	139.0	183.0	161.0
BGHIPE	0714 UG/L	4 1<	0.0044	>0.004	C.01D9 (MAX VALUE)	<0.002	C.01C9	0.0034
BAP	0718 UG/L	4 1<	0.0032	>0.0025	C.0074 (MAX VALUE)	<0.002	C.0074	0.0028
BKF	0731 UG/L	4 1<	0.0039	>0.0034	C.0092 (MAX VALUE)	<0.002	C.0092	0.0033
BKF	0733 UG/L	4 2<	0.0017	>0.0011	0.0044 (MAX VALUE)	<0.002	C.0044	<0.0022
FLU	0736 UG/L	4 1<	0.0084	>0.0066	0.0175 (MAX VALUE)	<0.002	C.0175	0.0081
PAM-SUM 6	0742 UG/L	4 1<	0.0247	>0.0207	0.0561 (MAX VALUE)	<0.012	C.0561	0.0314
I123COP	0746 UG/L	4 2<	0.0029	>C.0023	C.0067 (MAX VALUE)	<0.002	C.0067	<0.0035
S FACE P	2346 MD/100ML	3 0	20.6666	28.9367	54.0 (MAX VALUE)	2.0	54.0	6.0
E-COLI P	2349 NC/100ML	8 0	214.75	559.7618	1600.0 (MAX VALUE)	6.0	1600.0	21.0
ISODRIN	7071 UG/L	6 6<	0.0	>C.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
CHLORCTOL	7072 UG/L	1 1<	0.1	0.0	<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
ISCPROT	7073 UG/L	1 0	0.2	C.0	0.2 (ONLY VALUE)	0.2	C.2	0.2
ALDICARB	7075 UG/L	1 1<	0.1	C.0	<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
HC9	7076 UG/L	4 4<	0.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
TRIEAZINE	7077 UG/L	4 4<	0.0	>C.0	<0.025 (MAX VALUE)	<C.025	<C.025	<0.025
PROPYZ.	7079 UG/L	1 1<	0.1	C.0	<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
SELENIUM	7325 UG/L SE	3 3<	0.0	>0.0	<0.6 (MAX VALUE)	<0.6	<0.6	<0.6

*** STATISTICS FOR THIS SAMPLE POINT CONTINUE ON NEXT PAGE ***

*** STATISTICS CONTINUED FROM

SAMPLE POINT - KOSBFWELL420C
SAMPLE TYPE - EF

R.WELLAND CROWLAND BR.
RIVER/STREAP WATER

DETERMIAAND	UNITS	NO. OF VALUES	MEAN VALLE(COR RANGE)	STD.DEV.
VARADIUM V 7326	UG/L V	3 0	3.088	1.3341
PACPAZIME 7360	G/L	4 4<	0.0 -	C.025 >C.0
CARBETAMI. 7361	UG/L	1 1<	0.1	C.0
MONUROY 7362	UG/L	1 1<	0.1	C.0
METHABENZ. 7363	UG/L	1 1<	0.1	C.0
DIURON 7364	UG/L	1 1<	0.1	C.0
METHIOCARB 7365	UG/L	1 1<	0.1	C.0
TECHAZINE 7366	NG/L	6 5<	0.2 -	1.0333 >C.0816
TRIFLURAL. 7367	NG/L	6 5<	1.55 -	2.3533 >3.3824
CHLORTHAL. 7368	NG/L	4 4<	0.0 -	1.0 >C.0
FLUOROTYP. 7369	NG/L	4 4<	0.0 -	1.0 >C.0
PCB - C28 7370	G/L	6 6<	0.0 -	5.0 >C.0
PCB - C32 7371	G/L	6 6<	0.0 -	5.0 >C.0
PCB - C101 7372	G/L	6 6<	0.0 -	5.0 >C.0
PCB - C113 7373	G/L	6 6<	0.0 -	5.0 >C.0
PCB - C138 7374	G/L	6 6<	0.0 -	5.0 >C.0
PCB - C153 7375	G/L	6 6<	0.0 -	5.0 >C.0
PCB - C180 7376	G/L	6 6<	0.0 -	5.0 >C.0
MAN 0.45UM 7382	UG/L	1 0	21.0	C.0
MA TCTAL 7403	UG/L PM	3 0	32.4186	33.7608
ENDOSUL-A 7406	NG/L	7 7<	0.0 -	0.5714 >0.1829
ENDOSUL-B 7407	NG/L	4 4<	0.0 -	0.525 >C.05
MCBD 7412	G/L	3 3<	0.0 -	1.0 >C.0
135C6H3CL3 7418	G/L	3 3<	0.0 -	1.0 >C.0
CHLOROFORM 9067	UG/L	1 1<	0.1	C.0
CHBR2CL 9069	UG/L	1 1<	0.1	C.0
BROMOFORM 9070	UG/L	1 1<	0.1	C.0
CARBON TET 9115	UG/L	1 1<	0.1	C.0
C2CL4 9121	UG/L	1 1<	0.1	C.0
HEPT EPOX 9223	NG/L	7 7<	0.0 -	1.0 >C.0
DDT (OP') 9225	NG/L	7 7<	0.0 -	1.0 >C.0
TDE (PP') 9226	UG/L	7 7<	0.0 -	1.0 >C.0
IOXYNIL 9252	UG/L	1 1<	0.05	C.0
BROMOXYNIL 9258	UG/L	1 1<	0.05	C.0
LINURON 9713	UG/L	1 1<	0.1	C.0
SELENIUM 9725	UG/L SE	3 3<	0.0 -	0.6 >C.0

GRID REF - TF 229CO 10700

95XILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
4.464 (MAX VALUE)	1.8	4.464	3.0
<0.025 (MAX VALUE)	<0.025	<0.025	<0.025
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
1.2 (MAX VALUE)	<1.0	1.2	<1.0
9.3 (MAX VALUE)	<1.0	9.3	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
21.0 (ONLY VALUE)	21.0	21.0	21.0
89.0 (MAX VALUE)	0.093	89.0	26.0
<1.0 (MAX VALUE)	<0.5	<1.0	<0.5
<0.6 (MAX VALUE)	<0.5	<0.6	<0.5
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<0.05 (ONLY VALUE)	<0.05	<0.05	<0.05
<0.05 (ONLY VALUE)	<0.05	<0.05	<0.05
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.6 (MAX VALUE)	<0.6	<0.6	<0.6

*** STATISTICS CONTINUED FROM PREVIOUS PAGE ***

SAMPLE POINT - ROSEFWELL420C
SAMPLE TYPE - RF

R.WELLAND CROWLAND BR.
RIVER/STREAM WATER

GRID REF - TF 225CO 107CO

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
111C2H3CL3	9734 UG/L	1 0	0.27	0.0	0.27 (ONLY VALUE)	0.27	0.27	0.27
C6CL6	9741 NG/L	7 7<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
PCP	9769 UG/L	2 2<	0.0 - 0.01	>0.0	<0.01 (MAX VALUE)	<0.01	<0.01	<0.01
TDE OP'	9820 NG/L	7 7<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
ATRAZINE	9864 UG/L	4 0	0.2587	0.0701	0.325 (MAX VALUE)	0.173	0.325	0.2685
SIMAZINE	9865 G/L	5 0	0.1596	0.0637	0.229 (MAX VALUE)	0.105	0.229	0.124
CR TOT UG	9887 UG/L CR	13 4<	1.5049- 1.8126	>1.17	3.8553 (LOG NORMAL)	<1.0	4.7	1.364
CR 0.45UM	9888 US/L CR	2 0	1.7	0.5656	2.1 (MAX VALUE)	1.3	2.1	1.7
CU TOT UG	9889 UG/L CU	13 0	3.1122	1.7186	6.3653 (LOG NORMAL)	1.3	7.4	2.3
COP 0.45UM	9890 UG/L CU	2 1<	2.25 - 2.75	>2.4748	4.5 (MAX VALUE)	<1.0	4.5	<2.75
PB TOT UG	9891 UG/L PB	13 7<	29.0106- 29.5491	>98.4325	113.0588 (LOG NORMAL)	<1.0	357.0	<1.0
PB 0.45UM	9892 UG/L PB	2 2<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
NI TOT UG	9893 UG/L NI	13 0	5.9877	6.7953	17.6783 (LOG NORMAL)	1.3	27.0	3.7
NI 0.45UM	9894 UG/L NI	2 0	2.35	1.3435	3.3 (MAX VALUE)	1.4	3.3	2.35
ZN TOT UG	9895 UG/L ZN	13 0	5.6204	5.7457	15.8 (LOG NORMAL)	1.0	22.0	3.1
ZN 0.45UM	9896 UG/L ZN	2 0	4.65	1.7677	5.9 (MAX VALUE)	3.4	5.9	4.65
CARBARYL	9911 UG/L	1 1<	0.1	0.0	<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
HCH DELTA	9945 NG/L	4 4<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
DDE OP'	9946 NG/L	7 7<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

*** STATISTICS CONTINUED FROM PREVIOUS PAGE ***

SAMPLE POINT - R058FWELL420C
SAMPLE TYPE - BF

RIVER WELLAND CROWLAND BRIDGE
RIVER/STREAM WATER

GRID REF - TF 22900 10700

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
BAP	0718 UG/L	1 1<	0.002	0.0	<0.002 (ONLY VALUE)	<0.002	<0.002	<0.002
CHLDRDPHYL	0729 UG/L	14 0	21.2825	23.2309	61.7188(LOG NORMAL)	0.0	74.0	8.99
BBF	0731 UG/L	1 1<	0.002	0.0	<0.002 (ONLY VALUE)	<0.002	<0.002	<0.002
BKF	0733 UG/L	1 1<	0.002	0.0	<0.002 (ONLY VALUE)	<0.002	<0.002	<0.002
FLU	0736 UG/L	1 1<	0.002	0.0	<0.002 (ONLY VALUE)	<0.002	<0.002	<0.002
PAH-SUM 6	0742 UG/L	1 1<	0.012	0.0	<0.012 (ONLY VALUE)	<0.012	<0.012	<0.012
I123CDP	0746 UG/L	1 1<	0.002	0.0	<0.002 (ONLY VALUE)	<0.002	<0.002	<0.002
PHENDL MON	0749 MG/L	3 3<	0.0 - 0.0056	>0.0005	<0.006 (MAX VALUE)	<0.005	<0.006	<0.006
ISODRIN	7071 MG/L	2 2<	0.0 - 3.5	>2.1213	<5.0 (MAX VALUE)	<2.0	<5.0	<3.5
HC8	7076 UG/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
TIN TOTAL	7324 UG/L SN	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
SELENIUM	7325 UG/L SE	1 1<	0.6	0.0	<0.6 (ONLY VALUE)	<0.6	<0.6	<0.6
VANADIUM V	7326 UG/L V	1 0	2.5	0.0	2.5 (ONLY VALUE)	2.5	2.5	2.5
V 0.45 UM	7327 UG/L V	1 0	2.1	0.0	2.1 (ONLY VALUE)	2.1	2.1	2.1
ANT 0.45UM	7328 UG/L SG	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
BA 0.45UM	7329 UG/L BA	1 0	20.0	0.0	20.0 (ONLY VALUE)	20.0	20.0	20.0
BERO.45 UM	7330 UG/L BE	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
COB 0.45UM	7331 UG/L CO	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
TE 0.45 UM	7335 UG/L TE	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
TH 0.45 UM	7337 UG/L TH	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
TIN 0.45UM	7338 UG/L SN	1 0	1.4	0.0	1.4 (ONLY VALUE)	1.4	1.4	1.4
UR 0.45 UM	7342 UG/L U	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
MN TOTAL	7403 UG/L MN	8 0	14.5125	10.0529	34.0 (MAX VALUE)	1.8	34.0	13.5
COBALT TOT	7425 UG/L CO	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
P TOTAL	9038 MG/L P	3 0	0.7163	0.1943	0.94 (MAX VALUE)	0.589	0.94	0.62
CHLOROFORM	9067 UG/L	2 2<	0.0 - 0.5	>0.0	<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
CHBRCL2	9068 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
CHBR2CL	9069 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
BROMOFORM	9070 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
CARBON TET	9115 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
C2HCL3	9119 UG/L	2 0	0.12	0.0141	0.13 (MAX VALUE)	0.11	0.13	0.12
C2CL4	9121 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
SILVER TOT	9198 UG/L	3 2<	0.3333- 1.0	>0.0	1.0 (MAX VALUE)	<1.0	1.0	<1.0
BERYL TOT	9199 UG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
ANTIM TOT	9200 UG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
BARIUM TOT	9201 UG/L	1 0	22.0	0.0	22.0 (ONLY VALUE)	22.0	22.0	22.0

REPORT COVERS PERIOD(S) FROM 01/01/89 TO 31/12/89

NO. OF SAMPLES - 54

SAMPLE POINT - R05BFWELL420C
SAMPLE TYPE - BFRIVER WELLAND CROWLAND BRIDGE
RIVER/STREAM WATER

GRID REF - TF 22900 10700

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TEMP C	0076 CEL	52 0	12.4711	5.8468	23.5066(LOG NORMAL)	1.5	23.3	11.6
PH	0061 PH UNITS	52 0	8.383	0.3992	9.1695- 7.5965	7.2	9.29	8.355
SS 105 C	0135 MG/L	25 0	7.9028	5.1442	17.6063(LOG NORMAL)	1.5	18.0	7.0
BOD TOTAL	0088 MG/L O	7 0	2.7071	1.1174	4.2 (MAX VALUE)	1.55	4.2	3.0
BOD+ATU T	0085 MG/L O	52 1<	2.9355- 2.9548	>2.3687	7.3342(LOG NORMAL)	0.65	11.6	2.15
C ORG DISS	0301 MG/L C	7 0	5.1271	1.2251	6.57 (MAX VALUE)	3.3	6.57	4.7
O.O.(XSAT)	0081 X SATN	50 0	109.834	34.5798	63.1824(5XILE)	9.4	191.0	105.4
D.O	0082 MG/L O	50 0	11.939	2.735	8.0223(5XILE)	7.2	17.6	11.35
AMMONIA N	0111 MG/L N	52 10<	0.1202- 0.1272	>0.1049	0.3168(LOG NORMAL)	0.015	0.477	0.11
NITRITE N	0118 MG/L N	12 0	0.1803	0.1141	0.3958(LOG NORMAL)	0.045	0.39	0.173
T.O.N AS N	0116	52 0	6.5361	3.2035	12.5903(LOG NORMAL)	2.35	21.0	6.57
CHLORIDE	0172 MG/L CL	51 0	59.0862	8.4895	73.989 (LOG NORMAL)	31.1	77.8	59.2
SULPHATE	0183 MG/L SO4	16 0	150.125	21.5464	187.9456(LOG NORMAL)	107.0	185.0	142.0
CN TOTAL	0175 MG/L CN	2 2<	0.0	>0.0	<0.03 (MAX VALUE)	<0.03	<0.03	<0.03
ALK CAC03	0162 MG/L CAC03	17 0	213.8823	21.9598	251.7978(LOG NORMAL)	140.0	233.0	219.0
BORON	0283 MG/L B	1 1<	0.03	0.0	<0.03 (ONLY VALUE)	<0.03	<0.03	<0.03
DETS ANION	0461 MG/L M.OT	16 11<	0.0219- 0.0563	>0.0211	0.0791(LOG NORMAL)	<0.05	0.135	<0.05
TURBIDITY	0068 FTU	51 0	5.6813	5.6542	15.7642(LOG NORMAL)	1.2	27.0	3.5
COLOUR FIL	0072 HAZEN	18 0	9.6194	3.3856	15.919 (LOG NORMAL)	2.8	18.53	8.605
COND 25 C	0077 USIE/CM	28 0	2570.1428	9001.8316	9935.6016(LOG NORMAL)	686.0	48500.0	855.5
HARD TOTAL	0158 MG/L CAC03	17 0	375.4117	23.4282	415.1472(LOG NORMAL)	332.0	416.0	380.0
FLUORIDE	0177 MG/L F	3 0	0.2726	0.0364	0.312 (MAX VALUE)	0.24	0.312	0.266
P ORTH P	0180 MG/L P	51 0	0.7642	0.3157	1.3589(LOG NORMAL)	0.22	1.34	0.77
SILICA	0182 MG/L SiO2	17 0	4.6738	8.0136	16.1596(LOG NORMAL)	0.02	33.7	2.14
P ORTH DIS	0191 MG/L P	1 0	0.33	0.0	0.33 (ONLY VALUE)	0.33	0.33	0.33
SODIUM	0207 MG/L NA	11 0	44.1727	13.8386	69.7281(LOG NORMAL)	29.7	82.0	42.4
POTASSIUM	0211 MG/L K	11 0	7.53	1.5373	10.2869(LOG NORMAL)	5.9	10.5	7.41
MG 0.45UM	0235 MG/L MG	4 0	10.6475	0.9134	12.0 (MAX VALUE)	9.99	12.0	10.3
MAGNESIUM	0237 MG/L MG	4 0	11.1725	2.5079	14.8 (MAX VALUE)	9.09	14.8	10.4
CA 0.45UM	0239 MG/L CA	4 0	134.75	8.5391	147.0 (MAX VALUE)	128.0	147.0	132.0
CALCIUM	0241 MG/L CA	4 0	132.0	9.8319	144.0 (MAX VALUE)	121.0	144.0	131.5
MN 0.45UM	0401 MG/L MN	4 3<	0.0017- 0.0242	>0.0114	<0.03 (MAX VALUE)	0.0071	<0.03	<0.03
MN TOTAL	0403 MG/L MN	1 1<	0.01	0.0	<0.01 (ONLY VALUE)	<0.01	<0.01	<0.01
FE 0.45UM	0419 MG/L FE	5 4<	0.018 - 0.068	>0.0249	<0.1 (MAX VALUE)	<0.05	<0.1	<0.05
IRON TOTAL	0421 MG/L FE	9 2<	0.1 - 0.1166	>0.065	0.22 (MAX VALUE)	<0.05	0.22	<0.1
BGHIPE	0714 UG/L	1 1<	0.002	0.0	<0.002 (ONLY VALUE)	<0.002	<0.002	<0.002

REPORT COVERS PERIOD(S) FROM 01/01/91 TO 31/12/91

NO. OF SAMPLES - 71

SAMPLE POINT - ROSEBFWELL420C
SAMPLE TYPE - BFR.WELLAND CROWLAND BR.
RIVER/STREAM WATER

GRID REF - TF 22900 10700

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
COLOUR FIL	0072 HAZEN	23 0	10.5613	4.5624	19.1571(LOG NORMAL)	2.97	25.0	10.257
TURBIDITY	0068 FTU	47 5>	7.1902*	>8.4466	>5.3146	1.05	>19.0	7.41
PH	0061 PH UNITS	47 0	8.5719	0.349	9.1876- 7.8161	7.97	9.26	8.58
COND 25 C	0077 USIE/CM	47 0	910.6638	69.7428	1029.7174(LOG NORMAL)	767.4	1113.0	893.3
SS 105 C	0135 MG/L	26 3<	16.3396-	15.7165	>12.8424	3.0	49.0	10.5
TEMP C	0076 CEL	46 0	10.75	5.4544	22.9574(LOG NORMAL)	0.1	21.2	10.45
D.O	0082 MG/L O	45 0	11.7788	2.594	8.0417(SXILE)	6.9	20.8	12.0
D.C.(LSAT)	0031 X SATH	44 0	106.0363	29.769	64.6741(SXILE)	62.3	219.0	131.0
BOD+ATU T	0035 MG/L O	47 1<	2.938 -	2.9593	>1.9126	<1.0	8.46	2.12
TDC	0099 MG/L C	2 0	5.445	1.1394	6.23 (MAX VALUE)	4.64	6.23	5.445
C ORG DISS	0301 MG/L C	23 0	6.1247	1.5644	8.7735(LOG NORMAL)	4.07	10.93	5.79
AMMONIA N	0111 MG/L N	47 12<	0.0931-	0.099	>0.1177	<0.023	0.76	0.057
NITRITE N	0112 MG/L N	23 0	0.0986	0.0595	0.2098(LOG NORMAL)	0.0358	0.273	0.0895
TGN AS N	0116 MG/L N	47 1<	6.6244-	5.4352	>4.3085	<0.5	17.591	5.47
ALK CAC03	0162 MG/L CAC03	23 0	191.7695	22.118	230.1606(LOG NORMAL)	120.0	225.0	195.8
HARD TOTAL	0158 MG/L CAC03	23 0	373.6521	34.865	433.6442(LOG NORMAL)	336.0	500.0	368.0
CALCIUM	0241 MG/L CA	11 0	127.9636	9.2349	144.7543(LOG NORMAL)	109.8	149.0	127.0
MAGNESIUM	0237 MG/L MG	11 0	10.2427	0.8379	11.7652(LOG NORMAL)	8.79	11.87	10.0
SODIUM	0207 MG/L NA	11 0	45.9545	9.5553	63.7442(LOG NORMAL)	27.0	63.5	48.0
POTASSIUM	0211 MG/L K	11 0	7.6309	1.7305	10.5529(LOG NORMAL)	5.12	10.3	7.42
DETS ANION	0461 MG/L N.O.T	23 14<	0.0364-	0.0656	>0.0525	<0.04	0.245	<0.05
P TOTAL	0038 MG/L P	9 0	0.6663	0.1777	0.938 (MAX VALUE)	0.294	0.938	0.656
P ORTH P	0120 MG/L P	47 0	0.7704	0.379	1.4869(LOG NORMAL)	0.301	2.347	0.719
BORON	0283 MG/L B	4 0	0.3445	0.1117	0.433 (MAX VALUE)	0.19	0.433	0.3775
FLUORIDE	0177 MG/L F	4 0	0.235	0.0351	0.27 (MAX VALUE)	0.2	0.27	0.235
CHLORIDE	0172 MG/L CL	47 0	73.6198	10.9725	92.9205(LOG NORMAL)	56.99	123.75	70.723
SULPHATE	0193 MG/L	23 0	152.3056	30.799	207.8366(LOG NORMAL)	32.4	186.0	158.41
SILICA	0192 MG/L SiO2	22 2<	2.7223-	2.7405	>2.3221	<0.2	7.34	1.7455
IRON TOTAL	0421 MG/L FE	11 0	0.2234	0.1477	0.5019(LOG NORMAL)	0.013	0.58	0.22
FE J.45UM	0419 MG/L FE	3 2<	0.02 -	0.04	>0.0264	<0.01	0.06	<0.05
MN TOTAL	0403 MG/L MN	11 4<	0.013 -	0.0203	>0.0096	<0.01	0.04	0.02
MN J.45UM	0401 MG/L MN	3 1<	0.008 -	0.013	>0.0105	<0.01	<0.03	0.01-
CD TOTAL	0265 UG/L CD	10 8<	0.037 -	0.117	>0.0471	<0.1	0.25	<0.1
CD 0.45UM	0264 UG/L CD	5 3<	0.098 -	0.153	>0.1037	<0.1	0.35	<0.1
HG TOTAL	0269 UG/L HG	10 8<	0.0069-	0.0449	>0.0078	0.019	0.05	<0.05
HG 0.45UM	0268 UG/L HG	5 5<	0.0 -	0.05	>0.0	<0.05	<0.05	<0.05

SAMPLE POINT - R05BFWELL420C
SAMPLE TYPE - BF

RIVER WELLAND
RIVER/STREAM

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)
HCH ALPHA 9203	NG/L	6 6<	0.0 - 4.5
HCH GAMMA 9204	NG/L	6 2<	8.55 - 10.2166
DIELDRIN 9205	NG/L	6 6<	0.0 - 4.5
DDT (PP') 9206	NG/L	6 6<	0.0 - 5.3333
DDE (PP') 9207	NG/L	6 6<	0.0 - 4.5
ENDRIN 9208	NG/L	6 6<	0.0 - 4.5
ALDRIN 9209	NG/L	6 6<	0.0 - 4.5
HEPTACHLOR 9210	NG/L	2 2<	0.0 - 3.5
HEPT EPDX 9223	NG/L	2 2<	0.0 - 3.5
ENDOSULPH 9224	NG/L	1 1<	2.0
DDT (OP') 9225	NG/L	6 6<	0.0 - 5.3333
TDE (PP') 9226	NG/L	2 2<	0.0 - 3.5
AS 0.45 UM 9260	UG/L AS	1 0	1.5
AS TOTAL 9261	UG/L AS	1 0	1.9
CD 0.45UM 9264	UG/L CD	1 1<	0.1
CD TOTAL 9265	UG/L CD	8 6<	0.0375- 0.1125
HG TOTAL 9269	UG/L HG	3 1<	0.1366- 0.1533
SELENIUM 9725	UG/L SE	1 1<	0.6
111C2H3CL3 9734	UG/L	2 0	0.12
C6CL6 9741	NG/L	2 2<	0.0 - 3.5
PCP 9769	UG/L	1 1<	0.1
HCH BETA 9819	NG/L	3 3<	0.0 - 5.0
TDE OP' 9820	NG/L	2 2<	0.0 - 3.5
CR TOT UG 9887	UG/L CR	8 4<	1.2125- 1.7125
CR 0.45UM 9888	UG/L CR	1 0	1.4
CU TOT UG 9889	UG/L CU	8 5<	2.0 - 2.625
COP 0.45UM 9890	UG/L CU	1 0	1.1
PB TOT UG 9891	UG/L PB	8 5<	1.0875- 1.7125
PB 0.45UM 9892	UG/L PB	1 1<	1.0
NI TOT UG 9893	UG/L NI	8 1<	2.5 - 2.625
NI 0.45UM 9894	UG/L NI	1 0	1.8
ZN TOT UG 9895	UG/L ZN	8 0	5.2
ZN 0.45UM 9896	UG/L ZN	1 0	2.5
HCH DELTA 9945	NG/L	4 4<	0.0 - 5.0
DDE OP' 9946	NG/L	4 6<	0.0 - 4.5

CROWLAND BRIDGE
IATER

GRID REF - TF 22900 10700

STD.DEV.	95XILE(DR RANGE)		MINIMUM	MAXIMUM	MEDIAN
>1.2247	<5.0	(MAX VALUE)	<2.0	<5.0	<5.0
>5.8632	20.8	(MAX VALUE)	<5.0	20.8	9.25
>1.2247	<5.0	(MAX VALUE)	<2.0	<5.0	<5.0
>2.5819	<10.0	(MAX VALUE)	<2.0	<10.0	<5.0
>1.2247	<5.0	(MAX VALUE)	<2.0	<5.0	<5.0
>1.2247	<5.0	(MAX VALUE)	<2.0	<5.0	<5.0
>1.2247	<5.0	(MAX VALUE)	<2.0	<5.0	<5.0
>2.1213	<5.0	(MAX VALUE)	<2.0	<5.0	<3.5
>2.1213	<5.0	(MAX VALUE)	<2.0	<5.0	<3.5
0.0	<2.0	(ONLY VALUE)	<2.0	<2.0	<2.0
>2.5819	<10.0	(MAX VALUE)	<2.0	<10.0	<5.0
>2.1213	<5.0	(MAX VALUE)	<2.0	<5.0	<3.5
0.0	1.5	(ONLY VALUE)	1.5	1.5	1.5
0.0	1.9	(ONLY VALUE)	1.9	1.9	1.9
0.0	<0.1	(ONLY VALUE)	<0.1	<0.1	<0.1
>0.0353	0.2	(MAX VALUE)	<0.1	0.2	<0.1
>0.1537	0.33	(MAX VALUE)	<0.05	0.33	0.08
0.0	<0.6	(ONLY VALUE)	<0.6	<0.6	<0.6
0.0141	0.13	(MAX VALUE)	0.11	0.13	0.12
>2.1213	<5.0	(MAX VALUE)	<2.0	<5.0	<3.5
0.0	<0.1	(ONLY VALUE)	<0.1	<0.1	<0.1
>0.0	<5.0	(MAX VALUE)	<5.0	<5.0	<5.0
>2.1213	<5.0	(MAX VALUE)	<2.0	<5.0	<3.5
>0.7989	2.9	(MAX VALUE)	<1.0	2.9	<1.5
0.0	1.4	(ONLY VALUE)	1.4	1.4	1.4
>2.287	6.3	(MAX VALUE)	<1.0	6.3	<1.0
0.0	1.1	(ONLY VALUE)	1.1	1.1	1.1
>1.383	5.0	(MAX VALUE)	<1.0	5.0	<1.0
0.0	<1.0	(ONLY VALUE)	<1.0	<1.0	<1.0
>1.082	4.3	(MAX VALUE)	<1.0	4.3	2.55
0.0	1.8	(ONLY VALUE)	1.8	1.8	1.8
>2.6022	8.1	(MAX VALUE)	2.1	8.1	5.8
0.0	2.5	(ONLY VALUE)	2.5	2.5	2.5
>0.0	<5.0	(MAX VALUE)	<5.0	<5.0	<5.0
>1.2247	<5.0	(MAX VALUE)	<2.0	<5.0	<5.0

SAMPLE POINT - R05DFWELL420C
SAMPLE TYPE - BF

P.WELLAND CIRCLELAND BP.
RIVER/STREAM WATER

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.
AS TOTAL	9261 UG/L AS	12 0	2.52	1.0333
AS 0.45 UM	9260 UG/L AS	2 1<	1.063 -	>1.0315
CN FREE	0174 MG/L CN	1 1<	0.03	0.0
CN TOTAL	0175 MG/L CN	4 4<	0.0 -	>0.0
PHENOL POL	0749 PS/L	4 4<	0.0 -	>0.0
SILVER TOT	9198 UG/L	4 4<	0.0 -	>0.2936
BERYL TOT	9199 UG/L	1 1<	1.0	0.0
ALTIM TOT	9200 UG/L	2 2<	0.0 -	>0.0
BARIUM TOT	9201 UG/L	1 0	12.0	0.0
2,3,6 -YBA	9095 UG/L	2 2<	0.0 -	>0.0
HCH ALPHA	9203 MG/L	12 12<	0.0 -	>0.0
HCH GAMMA	9204 MG/L	12 1<	10.8433-	>9.2658
DIELDRIN	9205 MG/L	12 9<	0.2475-	>0.1351
ENDRIN	9209 MG/L	12 12<	0.0 -	>0.0577
ALDRIN	9209 MG/L	12 12<	0.0 -	>0.0
DDT (PP')	9206 MG/L	12 12<	0.0 -	>0.0
DDE (PP')	9207 MG/L	12 12<	0.0 -	>0.0
HEPTACHLOR	9210 MG/L	12 12<	0.0 -	>0.0
CHLOROPHYL	0729 UG/L	22 0	33.3557	47.5704
COLI P	9193 NO/100ML	10 0	2511.11	4250.2465
AG 0.45 UM	0217 UG/L AG	5 5<	0.0 -	>0.2733
2,4,5-T	0561 UG/L	2 2<	0.0 -	>0.0
BGHIPE	0714 UG/L	3 1<	0.0089-	>0.0066
BAP	0718 UG/L	3 1<	0.0076-	>0.0056
BUF	0731 UG/L	3 1<	0.0081-	>0.0059
BKF	0733 UG/L	3 1<	0.0039-	>0.0022
FLU	0736 UG/L	3 0	0.0172	0.0117
PAH-SUM 6	0742 UG/L	3 0	0.0512	0.0414
1123CBP	0746 UG/L	3 1<	0.0053-	>0.0041
S FAEC P	2346 NO/100ML	4 0	18.25	18.7149
E COLI P	2549 NO/100ML	10 0	699.6	1413.2235
TOT O-TIN	7069 NG/L	1 1<	4.0	0.0
ISODRIN	7071 NG/L	12 12<	0.0 -	>0.0
CHLOROTOL.	7072 UG/L	2 1<	0.17 -	>0.1697
ISOPROT.	7073 UG/L	2 0	0.62	0.0849
ALDICARB	7075 UG/L	2 2<	0.0 -	>0.0353

GRID REF - TF 22900 10700

95XILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
4.4758(LOG NORMAL)	0.63	4.0	2.425
2.13 (MAX VALUE)	<0.6	2.13	<1.365
<0.03 (ONLY VALUE)	<0.03	<0.03	<0.03
<0.03 (MAX VALUE)	<0.03	<0.03	<0.03
<0.006 (MAX VALUE)	<0.006	<0.006	<0.006
<1.0 (MAX VALUE)	<0.5	<1.0	<0.75
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
18.0 (ONLY VALUE)	18.0	18.0	15.0
<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
27.9903(LOG NORMAL)	<0.5	30.2	2.11
0.7586(LOG NORMAL)	<0.7	1.07	<0.7
0.3625(LOG NORMAL)	<0.5	<0.7	<0.5
0.25 (LOG NORMAL)	<0.5	<0.5	<0.5
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
102.6498(LOG NORMAL)	1.362	197.66	14.934
2647.9589(LOG NORMAL)	1.1	14000.0	900.0
<1.0 (MAX VALUE)	<0.5	<1.0	<1.0
<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
0.0143(MAX VALUE)	<0.002	0.0143	0.0125
0.0118(MAX VALUE)	<0.002	0.0118	0.011
0.0132(MAX VALUE)	<0.002	0.0132	0.0113
0.0361(MAX VALUE)	<0.002	0.0061	0.0358
0.0244(MAX VALUE)	0.0037	0.0244	0.0235
0.0797(MAX VALUE)	0.0037	0.0797	0.0703
0.0102(MAX VALUE)	<0.002	0.0102	0.0059
46.0 (MAX VALUE)	7.0	46.0	10.0
2527.3203(LOG NORMAL)	3.0	4600.0	54.5
<4.0 (ONLY VALUE)	<4.0	<4.0	<4.0
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
0.34 (MAX VALUE)	<0.1	0.34	<0.22
0.68 (MAX VALUE)	0.56	0.68	0.62
<0.1 (MAX VALUE)	<0.05	<0.1	<0.075

SAMPLE POINT - ROSBFWELL420C
SAMPLE TYPE - GF

R.WELLAND CROWLAND BR.
RIVER/STREAM WATER

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.
TRIETAZINE 7077	UG/L	11 11<	0.0 - 0.024	>0.002
PROPYL. 7079	UG/L	2 2<	0.0 - 0.1	>0.0
SELENIUM 7325	UG/L SE	4 4<	0.0 - 0.6	>0.0
VANADIUM V 7326	UG/L V	2 0	4.2	1.1313
V C.45 UM 7327	UG/L V	1 0	2.8	0.0
AHT 0.45UM 7328	UG/L SB	1 1<	1.0	0.0
BA 0.45UM 7329	UG/L BA	1 0	16.0	0.0
BERG.45 UM 7330	UG/L BE	1 1<	1.0	0.0
COB 0.45UM 7331	UG/L CO	1 1<	1.0	0.0
MO 0.45 UM 7333	UG/L MO	1 1<	1.0	0.0
TE 0.45 UM 7335	UG/L TE	1 1<	1.0	0.0
TH 0.45 UM 7337	UG/L TH	1 1<	1.0	0.0
TIN 0.45UM 7338	UG/L SH	1 1<	1.0	0.0
TI 0.45 UM 7340	UG/L TI	1 0	9.0	0.0
UR 0.45 UM 7342	UG/L U	1 0	1.1	0.0
PROPAGAZINE 7360	UG/L	12 12<	0.0 - 0.1862	>0.3301
CARBETAZI. 7361	UG/L	2 2<	0.0 - 0.1	>0.0
MONUROI 7362	UG/L	2 2<	0.0 - 0.1	>0.0
METHABENZ. 7363	UG/L	2 2<	0.0 - 0.1	>0.0
DIURON 7364	UG/L	2 2<	0.0 - 0.1	>0.0
METHIOCARB 7365	UG/L	2 2<	0.0 - 0.1	>0.0
TECHAZINE 7366	HG/L	12 12<	0.0 - 1.0	>0.0
TRIFLURAL. 7367	HG/L	12 9<	1.8208 - 2.5709	>2.7243
CHLORTHAL. 7368	HG/L	9 9<	0.0 - 1.0	>0.0
FLUOROXYP. 7369	HG/L	12 12<	0.0 - 1.0	>0.0
PCB - C28 7370	HG/L	12 12<	0.0 - 5.0	>0.0
PCB - C52 7371	HG/L	12 12<	0.0 - 5.0	>0.0
PCB - C101 7372	HG/L	12 12<	0.0 - 5.0	>0.0
PCB - C116 7373	HG/L	12 12<	0.0 - 5.0	>0.0
PCB - C138 7374	HG/L	12 12<	0.0 - 5.0	>0.0
PCB - C153 7375	HG/L	12 12<	0.0 - 5.0	>0.0
PCB - C180 7376	HG/L	12 12<	0.0 - 5.0	>0.0
ENDOSUL-A 7406	HG/L	11 11<	0.0 - 0.5	>0.0
ENDOSUL-B 7407	HG/L	12 12<	0.0 - 0.8666	>1.2701
HC90 7412	HG/L	12 12<	0.0 - 1.0	>0.0
ALK 0.45UM 7413	HG/L	1 1<	5.0	0.0

GRID REF - TF 22900 10700

95XILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
0.0156 (LOG NORMAL)	<0.02	<0.025	<0.025
<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
<0.6 (MAX VALUE)	<0.6	<0.6	<0.6
5.0 (MAX VALUE)	3.4	5.0	4.2
2.2 (ONLY VALUE)	2.8	2.8	2.8
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
16.0 (ONLY VALUE)	16.0	16.0	16.0
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
9.0 (ONLY VALUE)	9.0	9.0	9.0
1.1 (ONLY VALUE)	1.1	1.1	1.1
0.3597 (LOG NORMAL)	<0.02	<1.0	<0.025
<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
6.9442 (LOG NORMAL)	<1.0	9.14	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
0.25 (LOG NORMAL)	<0.5	<0.5	<0.5
1.6596 (LOG NORMAL)	<0.5	<4.9	<0.5
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0

SAMPLE POINT - R059FWELL420C
SAMPLE TYPE - BF

P. WELAND CROWLAND SP.
RIVER/STREAM WATER

GRID REF - TF 22900 10700

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95XILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
135C6H3CL3	7412 NG/L	11 11<	0.0 - 3.5454	>2.0191	5.2412 (LOG NORMAL)	<1.0	<5.0	<5.0
COBALT TOT	7425 UG/L CO	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
TOT G-TIN	7431 UG/L SN	1 1<	0.004	0.0	<0.004 (ONLY VALUE)	<0.004	<0.004	<0.004
OXAHYL	7478 UG/L	1 1<	0.05	0.0	<0.05 (ONLY VALUE)	<0.05	<0.05	<0.05
METHOXYL	7479 UG/L	1 1<	0.05	0.0	<0.05 (ONLY VALUE)	<0.05	<0.05	<0.05
CARBOFURAN	7480 UG/L	1 1<	0.05	0.0	<0.05 (ONLY VALUE)	<0.05	<0.05	<0.05
PROPOXUR	7491 UG/L	1 1<	0.05	0.0	<0.05 (ONLY VALUE)	<0.05	<0.05	<0.05
ETHIOFENC	7482 UG/L	1 1<	0.05	0.0	<0.05 (ONLY VALUE)	<0.05	<0.05	<0.05
123C6H3CL3	7486 NG/L	8 8<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
124C6H3CL3	7497 NG/L	8 8<	3.0 - 5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
CHLCPDFORM	9067 UG/L	12 0	0.0334	0.0152	0.0622 (LOG NORMAL)	0.014	0.074	0.032
CARBON TET	9115 UG/L	12 10<	0.0109 - 0.0153	>0.0321	0.0491 (LOG NORMAL)	<0.005	0.117	<0.005
C2HCL2	9119 UG/L	12 5<	0.01 - 0.0111	>0.0073	0.0243 (LOG NORMAL)	<0.004	0.024	0.009
C2CL4	9121 UG/L	12 7<	0.0076 - 0.0105	>0.0123	0.029 (LOG NORMAL)	<0.005	0.047	<0.005
HEPT EPOX	9223 NG/L	12 12<	0.0 - 1.0083	>0.0289	0.553 (LOG NORMAL)	<1.0	<1.1	<1.0
DDT (GP')	9225 NG/L	12 12<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
TDE (PP')	9226 NG/L	12 12<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
2,4-D	9246 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
MECOPROP	9248 UG/L	2 0	0.414	0.3874	0.688 (MAX VALUE)	0.14	0.688	0.414
MCPB	9249 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
MCPA	9250 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
IOXYNIL	9252 UG/L	2 2<	0.0 - 0.05	>0.0	<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
BROMOXYNIL	9258 UG/L	2 2<	0.0 - 0.05	>0.0	<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
LINURON	9713 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
SELENIUM	9725 UG/L SE	4 4<	0.0 - 0.6	>0.0	<0.6 (MAX VALUE)	<0.6	<0.6	<0.6
12 C2H4CL2	9733 UG/L	12 5<	0.0089 - 0.0122	>0.0116	0.0304 (LOG NORMAL)	0.004	0.048	<0.01
111C2H3CL3	9734 UG/L	12 1<	0.1728 - 0.1736	>0.4999	0.5626 (LOG NORMAL)	<0.01	1.76	0.0275
C6CL6	9741 NG/L	12 12<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
DICHLOROPROP	9744 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
DICAMBA	9745 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
PHENOL	9752 UG/L	2 2<	0.0 - 0.05	>0.0	<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
2-CRESOL	9753 UG/L	2 2<	0.0 - 0.05	>0.0	<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
3-CRESOL	9754 UG/L	2 2<	0.0 - 0.05	>0.0	<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
4-CRESOL	9755 UG/L	2 2<	0.0 - 0.05	>0.0	<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
23 XYLENOL	9756 UG/L	2 2<	0.0 - 0.05	>0.0	<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
24 XYLENOL	9757 UG/L	2 2<	0.0 - 0.05	>0.0	<0.05 (MAX VALUE)	<0.05	<0.05	<0.05

*** STATISTICS FOR THIS SAMPLE POINT CONTINUE ON NEXT PAGE ***

SAMPLE POINT - R059FWELL420C
 SAMPLE TYPE - BF

R.WELLAND CROWLAND BR.
 RIVER/STREAM WATER

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.
25 XYLENOL 9758	UG/L	2 2<	0.0 - 0.05	>0.0
26 XYLENOL 9759	UG/L	2 2<	0.0 - 0.05	>0.0
34 XYLENOL 9760	UG/L	2 2<	0.0 - 0.05	>0.0
35 XYLENOL 9761	UG/L	2 2<	0.0 - 0.05	>0.0
2 CLPHENOL 9762	UG/L	2 2<	0.0 - 0.05	>0.0
3 CLPHENOL 9763	UG/L	2 2<	0.0 - 0.05	>0.0
4 CLPHENOL 9764	UG/L	2 2<	0.0 - 0.05	>0.0
24 DCP 9765	UG/L	1 1<	0.05	0.0
26 DCP 9766	UG/L	2 2<	0.0 - 0.05	>0.0
246 TCP 9767	UG/L	2 2<	0.0 - 0.05	>0.0
245 TCP 9768	UG/L	2 2<	0.0 - 0.05	>0.0
PCP 9769	UG/L	11 4<	0.0333- 0.0442	>0.0603
HCH BETA 9819	NG/L	5 5<	0.0 - 1.0	>0.0
TDE OP' 9820	NG/L	12 12<	0.0 - 1.0	>0.0
ATRAZINE 9864	UG/L	11 1<	0.1885- 0.1903	>0.134
SINAZINE 9865	UG/L	11 0	0.1588	0.1427
CR TOT UG 9837	UG/L CR	11 1<	2.4272- 2.5191	>1.4675
CR 0.45UM 9888	UG/L CR	4 1<	5.1 - 5.35	>7.1229
CU TOT UG 9827	UG/L CU	11 3<	6.009 - 6.2818	>5.1538
COP 0.45UM 9890	UG/L CU	5 0	1.93	0.7931
PB TOT UG 9891	UG/L PB	11 6<	0.8 - 1.3454	>0.4719
PB 0.45UM 9892	UG/L PB	5 4<	0.34 - 1.14	>0.313
NI TOT UG 9893	UG/L NI	11 0	3.2363	1.0022
NI 0.45UM 9894	UG/L NI	5 1<	2.1 - 2.3	>0.8426
ZN TOT UG 9895	UG/L ZN	11 1<	7.1727- 7.2636	>5.0513
ZN 0.45UM 9896	UG/L ZN	5 0	6.08	6.047
CARBARYL 9911	UG/L	2 2<	0.0 - 0.1	>0.0
HCH DELTA 9945	NG/L	12 12<	0.0 - 1.0	>0.0
DDE OP' 9946	NG/L	12 12<	0.0 - 1.0	>0.0

GRID REF

IF 22900 10700

95XILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
<0.05 (ONLY VALUE)	<0.05	<0.05	<0.05
<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
0.1303 (LOG NORMAL)	<0.01	0.22	0.019
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
0.4413 (LOG NORMAL)	<0.025	0.507	0.144
0.4187 (LOG NORMAL)	0.042	0.546	0.104
5.2439 (LOG NORMAL)	<1.0	5.9	2.2
16.0 (MAX VALUE)	<1.0	16.0	2.2
19.4349 (LOG NORMAL)	<1.0	16.0	2.5
2.9 (MAX VALUE)	1.3	2.9	1.5
1.9513 (LOG NORMAL)	<1.0	1.2	<1.0
1.7 (MAX VALUE)	<1.0	1.7	<1.0
5.0857 (LOG NORMAL)	1.7	5.0	3.1
3.2 (MAX VALUE)	<1.0	5.2	2.6
16.7366 (LOG NORMAL)	<1.0	16.0	7.6
16.0 (MAX VALUE)	1.1	16.0	5.2
<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
2.5 (LOG NORMAL)	<1.0	<1.0	<1.0
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0

STATISTICAL SUMMARY (AW712) for location R.WELLAND CROWLAND BR.
01/01/92 TO 30/08/92

(ROSBFWELL420C)

DET	NAME	UNITS	-N-	-MEAN-	-SD-	-MIN-	-MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	33	8.6472	0.4309	7.9500	9.4400	9.5611
00683	TURBIDITY	FTU	33	11.243	9.3372	1.1600	38.000	37.956
00721	COLOUR FIL	HAZEN	16	11.325	2.8797	6.8380	17.600	18.710
00761	TEMP C	CEL	33	12.418	6.3319	2.0000	23.000	29.526
00771	COND 25 C	USIE/CM	1	968.00	0.0000	968.00	968.00	
00772	COND 25 C	USIE/CM	32	865.09	78.896	731.60	1031.0	1037.4
00812	D.O.(ZSAT)	Z SATN	33	116.90	39.177	65.900	246.00	215.79
00822	D.O	MG/L O	33	12.427	3.4783	6.4000	21.200	20.967
00851	BOD+ATU T	MG/L O	33	4.5266	4.6181	1.0000	23.000	17.778
01113	AMMONIA N	MG/L N	33	0.0713	0.0749	0.0115	0.3380	0.2861
01165	T.D.N AS N	MG/L N	33	7.1527	4.0297	2.0910	18.048	18.206
01184	NITRITE N	MG/L N	15	0.0970	0.0457	0.0370	0.2010	0.2296
01351	SS 105 C	MG/L	17	18.970	11.115	9.5000	46.000	51.780
01581	HARD TOTAL	MG/L CACO3	16	364.62	36.760	296.00	408.00	449.48
01621	ALK CACO3	MG/L CACO3	1	129.60	0.0000	129.60	129.60	
01622	ALK CACO3	MG/L CACO3	15	182.46	16.258	148.70	203.90	219.93
01724	CHLORIDE	MG/L CL	33	69.577	10.529	48.152	97.716	93.539
01751	CN TOTAL	MG/L CN	2	0.0150	0.0000	0.0150	0.0150	
01771	FLUORIDE	MG/L F	2	0.2550	0.0050	0.2500	0.2600	
01801	P SOL.REACT	MG/L P	1	0.7160	0.0000	0.7160	0.7160	
01806	P SOL.REACT	MG/L P	32	0.4007	0.1304	0.1690	0.6970	0.7285
01823	SILICA	MG/L SiO2	16	2.7736	2.5103	0.2360	8.3450	10.690
01833	SULFATE	MG/L SO4	2	136.00	4.0000	132.00	140.00	
01835	SULFATE	MG/L	14	152.00	24.743	121.90	228.50	212.75
02073	SODIUM	MG/L NA	8	39.387	8.2327	26.100	52.000	
02113	POTASSIUM	MG/L K	8	7.1375	1.3386	4.6800	8.7000	
02173	AG 0.45 UM	UG/L AG	2	0.2500	0.0000	0.2500	0.2500	
02374	MAGNESIUM	MG/L MG	8	10.193	0.8000	8.4000	11.000	
02414	CALCIUM	MG/L CA	8	125.62	8.5137	110.00	141.00	
02830	BORON	MG/L B	2	0.3321	0.0069	0.3252	0.3390	
03012	C ORG DISS	MG/L C	11	6.9600	1.4105	4.6700	9.2900	10.666
04015	MN 0.45UM	MG/L MN	2	0.0100	0.0000	0.0100	0.0100	
04035	MN TOTAL	MG/L MN	8	0.0147	0.0059	0.0100	0.0300	
04197	FE 0.45UM	MG/L FE	2	0.0050	0.0000	0.0050	0.0050	
04217	IRON TOTAL	MG/L FE	8	0.1761	0.0950	0.0050	0.3160	
04611	DETS ANION	MG/L M.OT	16	0.0369	0.0312	0.0200	0.1390	0.1351
04632	DET NO-ION	MG/L L.NX	0					
07142	BGHIPE	UG/L	3	0.0070	0.0020	0.0046	0.0096	
07182	BAP	US/L	3	0.0049	0.0019	0.0032	0.0077	
07291	CHLOROPHYL	UG/L	16	48.228	49.644	2.9190	172.03	205.62
07312	BBF	UG/L	3	0.0058	0.0018	0.0038	0.0082	
07332	BKF	UG/L	3	0.0023	0.0011	0.0010	0.0038	
07362	FLU	UG/L	3	0.0111	0.0047	0.0072	0.0179	
07421	PAH-SUM 6	UG/L	3	0.0354	0.0124	0.0226	0.0523	
07462	I123CDP	UG/L	3	0.0043	0.0012	0.0026	0.0053	
07494	PHENOL MON	MG/L	2	0.0030	0.0000	0.0030	0.0030	
23460	S FAEC P	ND/100ML	4	34.750	27.625	5.0000	80.000	
25490	E.COLI P	ND/100ML	7	238.57	322.55	0.0000	930.00	
70711	ISODRIN	MG/L	3	0.5000	0.0000	0.5000	0.5000	
70771	TRIFIAZINE	UG/L	1	0.0125	0.0000	0.0125	0.0125	
70772	TRIFIAZINE	UG/L	2	0.0125	0.0000	0.0125	0.0125	
73244	TIN TOTAL	UG/L SN	1	0.5000	0.0000	0.5000	0.5000	
73251	SE 0.45 UM	UG/L	1	0.3000	0.0000	0.3000	0.3000	
73261	V TOTAL	UG/L	1	4.3000	0.0000	4.3000	4.3000	

73271	V 0.45 UM	UG/L	1	4.3000	0.0000	4.3000	4.3000
73282	SB 0.45 UM	UG/L SB	1	0.5000	0.0000	0.5000	0.5000
73291	BA 0.45 UM	UG/L	1	19.000	0.0000	19.000	19.000
73301	BE 0.45 UM	UG/L	1	0.5000	0.0000	0.5000	0.5000
73311	CO 0.45 UM	UG/L	1	0.5000	0.0000	0.5000	0.5000
73331	MO 0.45 UM	UG/L	1	0.5000	0.0000	0.5000	0.5000
73351	TE 0.45 UM	UG/L	1	0.5000	0.0000	0.5000	0.5000
73371	TL 0.45 UM	UG/L	1	0.5000	0.0000	0.5000	0.5000
73381	SN 0.45 UM	UG/L	1	0.5000	0.0000	0.5000	0.5000
73401	TI 0.45 UM	UG/L	1	5.4000	0.0000	5.4000	5.4000
73421	U 0.45 UM	UG/L	1	0.5000	0.0000	0.5000	0.5000
73441	DDT TOT 41	NG/L	1	2.0000	0.0000	2.0000	2.0000
73601	PROPAZINE	UG/L	2	0.0125	0.0000	0.0125	0.0125
73602	PROPAZINE	UG/L	1	0.0125	0.0000	0.0125	0.0125
73661	TECNAZINE	NG/L	3	0.6666	0.2357	0.5000	1.0000
73671	TRIFLURAL.	NG/L	3	0.7333	0.3299	0.5000	1.2000
73681	CHLORTHAL.	NG/L	3	0.5000	0.0000	0.5000	0.5000
73691	FLUDROXYPYR	NG/L	3	0.5000	0.0000	0.5000	0.5000
73701	PCB - C28	NG/L	3	2.5000	0.0000	2.5000	2.5000
73711	PCB - C52	NG/L	3	2.5000	0.0000	2.5000	2.5000
73721	PCB - C101	NG/L	3	2.5000	0.0000	2.5000	2.5000
73731	PCB - C116	NG/L	3	2.5666	0.0942	2.5000	2.7000
73741	PCB - C138	NG/L	3	2.5000	0.0000	2.5000	2.5000
73751	PCB - C153	NG/L	3	2.5000	0.0000	2.5000	2.5000
73761	PCB - C180	NG/L	3	2.5000	0.0000	2.5000	2.5000
74061	ENDOSULF-A	NG/L	3	0.4000	0.1779	0.2500	0.6500
74071	ENDOSULF-B	NG/L	3	0.2500	0.0000	0.2500	0.2500
74121	HCBD	NG/L	3	0.5000	0.0000	0.5000	0.5000
74181	135C6H3CL3	NG/L	3	2.5000	0.0000	2.5000	2.5000
74252	COBALT TOT	UG/L CO	1	1.0000	0.0000	1.0000	1.0000
74311	TOT 0-TIN	UG/L SN	1	0.0020	0.0000	0.0020	0.0020
74861	123C6H3CL3	NG/L	3	0.5000	0.0000	0.5000	0.5000
74871	124C6H3CL3	NG/L	3	2.5000	0.0000	2.5000	2.5000
75051	DESMETRYN	UG/L	1	0.0125	0.0000	0.0125	0.0125
75061	PROMETRYN	UG/L	1	0.0125	0.0000	0.0125	0.0125
90381	P TOTAL	NG/L P	2	0.6870	0.0770	0.6100	0.7640
90675	CHLOROFORM	UG/L	8	0.0360	0.0144	0.0160	0.0680
91155	CARBON TET	UG/L	8	0.0105	0.0198	0.0030	0.0630
91195	C2HCL3	UG/L	8	0.0228	0.0284	0.0020	0.0810
91215	C2CL4	UG/L	8	0.0035	0.0020	0.0020	0.0080
91930	TOT.COLI P	NO/100ML	7	1727.2	2296.9	41.000	7100.0
91983	SILVER TOT	UG/L	2	0.2500	0.0000	0.2500	0.2500
91992	BERYL TOT	UG/L	1	0.5000	0.0000	0.5000	0.5000
92004	ANTIM TOTAL	UG/L SB	1	0.5000	0.0000	0.5000	0.5000
92017	BARIUM TOT	UG/L	1	21.000	0.0000	21.000	21.000
92031	HCH ALPHA	NG/L	3	0.5000	0.0000	0.5000	0.5000
92041	HCH GAMMA	NG/L	3	8.4033	1.5910	6.2000	9.9000
92051	DIELDRIN	NG/L	3	0.3666	0.0235	0.3500	0.4000
92061	DDT (PP')	NG/L	3	0.8666	0.5185	0.5000	1.6000
92071	DDE (PP')	NG/L	3	0.5000	0.0000	0.5000	0.5000
92081	ENDRIN	NG/L	3	0.2500	0.0000	0.2500	0.2500
92091	ALDRIN	NG/L	3	0.3333	0.1178	0.2500	0.5000
92101	HEPTACHLOR	NG/L	3	0.5000	0.0000	0.5000	0.5000
92231	HEPT EPOX	NG/L	3	0.7666	0.3771	0.5000	1.3000
92241	ENDOSULFAN	NG/L	0				
92251	DDT (OP')	NG/L	3	0.5000	0.0000	0.5000	0.5000
92261	DDE (PP')	NG/L	3	0.5000	0.0000	0.5000	0.5000
92601	AS 0.45 UM	UG/L AS	1	0.7750	0.0000	0.7750	0.7750
92611	AS TOTAL	UG/L AS	8	1.3881	0.4971	0.9000	2.3500
92645	CD 0.45UM	UG/L CD	2	0.0500	0.0000	0.0500	0.0500

92655	CD TOTAL	UG/L CD	8	0.0987	0.1289	0.0500	0.4400
92682	HG 0.45UM	UG/L HG	2	0.0250	0.0000	0.0250	0.0250
92692	HG TOTAL	UG/L HG	2	0.0250	0.0000	0.0250	0.0250
97031	TERBUTRYN	UG/L	1	0.0125	0.0000	0.0125	0.0125
97251	SELENIUM	UG/L SE	2	0.3000	0.0000	0.3000	0.3000
97271	HC DIS+EM	UG/L	1	5.0000	0.0000	5.0000	5.0000
97336	12 C2H4CL2	UG/L	8	0.0058	0.0045	0.0015	0.0150
97345	111C2H3CL3	UG/L	8	0.0303	0.0320	0.0100	0.1070
97411	C6CL6	NG/L	3	0.5000	0.0000	0.5000	0.5000
97692	PCP	UG/L	3	0.0293	0.0228	0.0050	0.0600
98191	HCH BETA	NG/L	3	0.5000	0.0000	0.5000	0.5000
98201	TDE (DP')	NG/L	3	0.5000	0.0000	0.5000	0.5000
98641	ATRAZINE	UG/L	1	0.4390	0.0000	0.4390	0.4390
98642	ATRAZINE	UG/L	2	0.0955	0.0225	0.0730	0.1180
98651	SIMAZINE	UG/L	1	0.2950	0.0000	0.2950	0.2950
98652	SIMAZINE	UG/L	2	0.1360	0.0190	0.1170	0.1550
98800	SALM 1/OC	LITRE	2	0.0000	0.0000	0.0000	0.0000
98874	CR TOTAL	UG/L CR	8	1.3500	0.8587	0.5000	3.1000
98884	CR 0.45UM	UG/L CR	2	0.5000	0.0000	0.5000	0.5000
98894	CU TOTAL	UG/L CU	8	2.1500	0.6041	1.3000	3.3000
98904	CU 0.45UM	UG/L CU	2	1.4000	0.3000	1.1000	1.7000
98914	PB TOTAL	UG/L PB	8	1.0125	0.5577	0.5000	2.0000
98925	PB 0.45UM	UG/L PB	2	0.7500	0.2500	0.5000	1.0000
98934	NI TOTAL	UG/L NI	8	4.5500	1.1958	3.3000	6.2000
98944	NI 0.45UM	UG/L NI	2	2.6500	0.2500	2.4000	2.9000
98954	ZN TOTAL	UG/L ZN	8	23.025	32.889	4.1000	106.00
98964	ZN 0.45UM	UG/L ZN	2	3.7000	1.2000	2.5000	4.9000
99451	HCH DELTA	NG/L	3	0.5000	0.0000	0.5000	0.5000
99461	DDE (DP')	NG/L	3	0.5000	0.0000	0.5000	0.5000

END OF EXTRACT FOR SAMPLE POINT

END OF REPORT

A P P E N D I X 2

**WATER QUALITY IN NON-TIDAL WELAND AT LOWEST
HARMONISED MONITORING POINT: LANGRICK BRIDGE.**

Statistical summaries for 1989, 1990, 1991 and 1992

REPORT COVERS PERIOD(S) FROM 01/01/89 TO 31/12/89

NO. OF SAMPLES - 20

SAMPLE POINT - R03BFWITHMT
SAMPLE TYPE - BFRIVER WITHAM LANGRICK BRIDGE
RIVER/STREAM WATER

GRID REF - TF 26580 47530

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEIDIAN
TEMP C	0076 CEL	17 0	12.6352	6.3983	24.7358(LOG NORMAL)	4.3	23.8	12.2
PH	0061 PH UNITS	20 0	8.6245	0.5919	9.7905- 7.4584	7.87	9.51	8.44
SS 105 C	0135 MG/L	7 0	17.0857	11.2616	32.0 (MAX VALUE)	1.2	32.0	21.0
BOD+ATU T	0085 MG/L O	20 0	5.175	3.0179	10.8856(LOG NORMAL)	2.1	11.9	4.5
C ORG DTSS	0301 MG/L C	4 0	9.425	2.2066	12.2 (MAX VALUE)	6.9	12.2	9.3
D.O.(%SAT)	0081 % SATN	18 0	120.8833	49.8225	58.2554(5%ILE)	35.2	231.0	100.5
D.O	0082 MG/L O	19 0	12.5563	3.7625	7.4252(5%ILE)	8.3	21.2	11.9
AMMONIA N	0111 MG/L N	20 4<	0.2325- 0.2405	>0.2678	0.6975(LOG NORMAL)	0.03	0.85	0.095
NITRITE N	0118 MG/L N	10 0	0.1014	0.0679	0.2295(LOG NORMAL)	0.0128	0.2	0.093
T.O.N AS N	0116	20 4<	7.0735- 7.151	>5.8296	17.8868(LOG NORMAL)	<0.05	23.0	9.085
CHLORIDE	0172 MG/L CL	20 0	198.225	176.6526	520.4802(LOG NORMAL)	64.6	542.0	95.85
SULPHATE	0183 MG/L SO4	9 0	181.6666	22.9346	230.0 (MAX VALUE)	156.0	230.0	178.0
CN TOTAL	0175 MG/L CN	2 2<	0.0 - 0.03	>0.0	<0.03 (MAX VALUE)	<0.03	<0.03	<0.03
ALK CAC03	0162 MG/L CAC03	11 0	197.6363	32.4816	255.0967(LOG NORMAL)	144.0	234.0	205.0
BORON	0283 MG/L B	1 0	0.6	0.0	0.6 (ONLY VALUE)	0.6	0.6	0.6
DETS ANION	0461 MG/L H.OT	7 6<	0.0084- 0.0512	>0.0034	0.059 (MAX VALUE)	<0.05	0.059	<0.05
TURBIDITY	0068 FTU	18 0	6.8333	2.9444	12.3725(LOG NORMAL)	3.0	14.0	6.5
COLOUR FIL	0072 HAZEN	8 0	15.9125	1.5697	18.0 (MAX VALUE)	13.6	18.0	16.45
COND 25 C	0077 USIE/CM	10 0	1217.7	470.7363	2098.4514(LOG NORMAL)	839.0	2110.0	1055.0
HARD TOTAL	0158 MG/L CAC03	10 0	407.2	50.2721	494.7486(LOG NORMAL)	288.0	452.0	422.0
FLUORIDE	0177 MG/L F	5 0	0.5146	0.2012	0.867 (MAX VALUE)	0.375	0.867	0.421
P ORTH P	0180 MG/L P	18 0	0.7384	0.4487	1.5868(LOG NORMAL)	0.22	1.65	0.59
SILICA	0182 MG/L SI02	8 1<	4.3662- 4.3912	>3.4857	9.12 (MAX VALUE)	0.11	9.12	3.51
SODIUM	0207 MG/L NA	6 0	96.0666	73.4488	245.0 (MAX VALUE)	54.2	245.0	67.75
POTASSIUM	0211 MG/L K	6 0	14.8	4.1002	22.9 (MAX VALUE)	12.0	22.9	13.25
MAGNESIUM	0237 MG/L MG	1 0	42.0	0.0	42.0 (ONLY VALUE)	42.0	42.0	42.0
CALCIUM	0241 MG/L CA	1 0	126.0	0.0	126.0 (ONLY VALUE)	126.0	126.0	126.0
MN TOTAL	0403 MG/L MN	1 0	0.041	0.0	0.041 (ONLY VALUE)	0.041	0.041	0.041
IRON TOTAL	0421 MG/L FE	15 1<	0.3693- 0.376	>0.4949	1.1771(LOG NORMAL)	0.05	1.75	0.18
BGMPE	0714 UG/L	2 0	0.0046	0.001	0.0054(MAX VALUE)	0.0039	0.0054	0.0046
BAP	0718 UG/L	2 0	0.0035	0.0	0.0036(MAX VALUE)	0.0035	0.0036	0.0035
CHLOROPHYL	0729 UG/L	9 0	115.3944	100.4047	237.0 (MAX VALUE)	5.25	287.0	144.82
B8F	0731 UG/L	2 0	0.0037	0.0007	0.0043(MAX VALUE)	0.0032	0.0043	0.0037
BKF	0733 UG/L	2 1<	0.001 - 0.002	>0.0	0.0021(MAX VALUE)	<0.002	0.0021	<0.002
FLU	0736 UG/L	2 0	0.0083	0.0012	0.0092(MAX VALUE)	0.0074	0.0092	0.0083
PAH-SUM 6	0742 UG/L	2 0	0.0241	0.0046	0.0274(MAX VALUE)	0.0208	0.0274	0.0241

*** STATISTICS CONTINUED FROM PREVIOUS PAGE ***

SAMPLE POINT - R03BFWITHMT
SAMPLE TYPE - BF

RIVER WITHAN LANGRICK BRIDGE
RIVER/STREAM WATER

GRID REF - TF 26580 47530

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
I123CDP	0746 UG/L	2 0	0.0028	0.0001	0.0029(MAX VALUE)	0.0027	0.0029	0.0028
PHENOL MON	0749 NG/L	2 2<	0.0	0.0055	>0.0007	<0.005	<0.006	<0.0055
ISODRIN	7071 NG/L	2 2<	0.0	3.5	>2.1213	<5.0	<5.0	<3.5
HCB	7076 UG/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
MN TOTAL	7403 UG/L MN	14 0	68.6428	42.7724	149.4599(LOG NORMAL)	13.0	170.0	58.5
P TOTAL	9038 MG/L P	2 0	1.31	0.3818	1.58 (MAX VALUE)	1.04	1.58	1.31
SILVER TOT	9198 UG/L	2 1<	1.3	1.8	>1.1313	<1.0	2.6	<1.8
HCH ALPHA	9203 NG/L	3 3<	0.0	4.0	>1.732	<5.0	<5.0	<5.0
HCH GAMMA	9204 NG/L	6 0	17.75	9.9959	31.4 (MAX VALUE)	5.1	31.4	20.0
DIELDRIN	9205 NG/L	4 4<	0.0	5.0	>2.4494	<8.0	<8.0	<5.0
DDT (PP')	9206 NG/L	4 4<	0.0	13.0	>18.0554	<40.0	<40.0	<5.0
DDE (PP')	9207 NG/L	3 3<	0.0	4.0	>1.732	<5.0	<5.0	<5.0
ENDRIN	9208 NG/L	4 4<	0.0	8.0	>8.124	<20.0	<20.0	<5.0
ALDRIN	9209 NG/L	4 4<	0.0	4.0	>1.4142	<5.0	<5.0	<4.5
HEPTACHLOR	9210 NG/L	2 2<	0.0	3.0	>2.8284	<5.0	<5.0	<3.0
HEPT EPOX	9223 NG/L	2 2<	0.0	3.5	>2.1213	<5.0	<5.0	<3.5
DDT (OP')	9225 NG/L	3 3<	0.0	4.0	>1.732	<5.0	<5.0	<5.0
DDE (PP')	9226 NG/L	2 2<	0.0	3.5	>2.1213	<5.0	<5.0	<3.5
AS TOTAL	9261 UG/L AS	2 0	3.2	2.5455	5.0 (MAX VALUE)	1.4	5.0	3.2
CD TOTAL	9265 UG/L CD	15 9<	0.1153-	0.302	>0.4919	<0.1	<2.0	<0.1
HG TOTAL	9269 UG/L HG	12 10<	0.0144-	0.056	>0.0144	<0.05	0.093	<0.05
SELENIUM	9725 UG/L SE	2 1<	0.25	0.55	>0.0707	<0.6	<0.6	<0.55
C6CL6	9741 NG/L	2 2<	0.0	3.5	>2.1213	<5.0	<5.0	<3.5
PCP	9769 UG/L	2 2<	0.0	0.1	>0.0	<0.1	<0.1	<0.1
HCH BETA	9819 NG/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
DDE OP'	9820 NG/L	2 2<	0.0	3.5	>2.1213	<5.0	<5.0	<3.5
CR TOT UG	9887 UG/L CR	15 8<	1.02	1.82	>1.2661	<1.0	<5.0	1.2
CU TOT UG	9889 UG/L CU	14 3<	17.9285-	18.1428	>41.8769	<1.0	160.0	3.3
PB TOT UG	9891 UG/L PB	15 6<	15.0466-	16.0466	>28.4474	<1.0	91.0	2.0
NI TOT UG	9893 UG/L NI	15 2<	7.4733-	7.8733	>9.3604	<1.0	40.0	<5.0
ZN TOT UG	9895 UG/L ZN	15 0	41.54	102.8889	156.0149(LOG NORMAL)	1.8	409.0	11.0
P TOT WET	9899 MG/KG P	1 0	1.9	0.0	1.9 (ONLY VALUE)	1.9	1.9	1.9
HCH DELTA	9945 NG/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
DDE OP'	9946 NG/L	2 2<	0.0	3.5	>2.1213	<5.0	<5.0	<3.5

REPORT COVERS PERIOD(S) FROM 01/01/91 TO 31/12/91

NO. OF SAMPLES - 41

SAMPLE POINT - R03RFWITHMT
SAMPLE TYPE - BFP.WITHAM LANGRICK BRIDGE
RIVER/STREAM WATER

GRID REF - TF 26580 47530

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
COLOUR FIL	0072 HAZEN	22 0	13.4222	4.42	21.6116 (LOG NORMAL)	5.17	27.0	13.1
TURBIDITY	0068 FTU	22 0	8.5109	2.928	13.9512 (LOG NORMAL)	3.38	14.33	8.94
PH	0061 PH UNITS	22 0	8.4995	0.5709	9.6242 - 7.3748	7.75	9.36	8.41
COND 25 C	0077 USIE/CM	22 0	1384.7772	668.583	2647.7884 (LOG NORMAL)	931.9	3198.0	1121.5
SS 105 C	0135 MG/L	22 2<	14.159 - 14.8409	>6.5399	26.8266 (LOG NORMAL)	<5.0	31.0	13.5
TEMP C	0076 CEL	22 0	11.2636	6.4985	23.562 (LOG NORMAL)	1.0	22.1	10.25
D.O	0082 MG/L O	22 0	11.15	2.5697	7.4734 (5%ILE)	7.4	17.2	10.95
D.O. (XSAT)	0081 % SATN	22 0	123.1409	33.4736	59.2935 (5%ILE)	60.2	198.0	89.7
BOD+ATU Y	0085 MG/L C	22 1<	3.5686 - 3.9595	>2.6485	8.8999 (LOG NORMAL)	1.34	11.48	3.015
C ORG DISS	0301 MG/L C	22 0	7.5531	1.5054	10.2487 (LOG NORMAL)	5.45	11.3	7.44
AMMONIA N	0111 MG/L N	22 4<	0.2268 - 0.231	>0.348	0.761 (LOG NORMAL)	<0.023	1.515	0.07
NITRITE N	0118 MG/L N	22 2<	0.0977 - 0.0953	>0.0639	0.2186 (LOG NORMAL)	<0.007	0.253	0.0675
TON AS N	0116 MG/L N	22 3<	10.0673 - 10.0945	>8.0543	25.0656 (LOG NORMAL)	<0.2	26.38	7.5805
ALK CAC03	0162 MG/L CAC03	22 0	178.3772	16.1164	206.0566 (LOG NORMAL)	140.0	209.8	180.0
HARD TOTAL	0158 MG/L CAC03	22 0	428.6363	56.1507	526.7178 (LOG NORMAL)	344.0	540.0	420.0
CALCIUM	0241 MG/L CA	11 0	130.0	22.9246	170.728 (LOG NORMAL)	99.3	169.0	125.0
MAGNESIUM	0237 MG/L MG	11 0	22.1736	15.26	50.8704 (LOG NORMAL)	12.0	56.0	15.11
SODIUM	0207 MG/L NA	11 0	129.1909	156.8961	393.0925 (LOG NORMAL)	35.8	494.0	63.5
POTASSIUM	0211 MG/L K	11 0	15.0936	7.9145	30.0698 (LOG NORMAL)	7.5	30.0	12.2
SETS ANION	0461 MG/L M.O.T	22 12<	0.027 - 0.0534	>0.0118	0.062 (LOG NORMAL)	<0.04	0.0868	<0.05
P TOTAL	0022 MG/L P	3 0	0.5953	0.068	0.665 (MAX VALUE)	0.529	0.665	0.592
P ORTH P	0120 MG/L P	22 0	0.8489	0.6743	2.1003 (LOG NORMAL)	0.292	2.527	0.5089
BORON	0233 MG/L B	4 0	0.4605	0.2293	0.751 (MAX VALUE)	0.19	0.751	0.4506
FLUORIDE	0177 MG/L F	4 0	0.3337	0.1079	0.48 (MAX VALUE)	0.22	0.48	0.3175
CHLORIDE	0172 MG/L CL	22 0	205.4283	212.2458	580.4462 (LOG NORMAL)	79.941	796.89	107.97
SULPHATE	0183 MG/L	22 0	184.2268	31.6345	240.3408 (LOG NORMAL)	114.2	246.4	185.53
SILICA	0182 MG/L SiO2	22 2<	3.6045 - 3.6209	>3.6124	10.0475 (LOG NORMAL)	<0.16	10.949	2.867
IRON TOTAL	0421 MG/L FE	11 0	0.2387	0.1942	0.5981 (LOG NORMAL)	0.05	0.68	0.17
FE 0.45UM	0419 MG/L FE	4 1<	0.05 - 0.0625	>0.1123	0.25 (MAX VALUE)	<0.01	0.25	0.025
MN TOTAL	0402 MG/L MN	11 0	0.0718	0.063	0.1871 (LOG NORMAL)	0.01	0.21	0.05
MN 0.45UM	0401 MG/L MN	4 1<	0.037 - 0.0395	>0.0356	0.09 (MAX VALUE)	<0.01	0.09	0.029
CD TOTAL	9265 US/L CD	11 7<	0.0636 - 0.1272	>0.0545	0.2024 (LOG NORMAL)	<0.1	0.26	<0.1
CD 0.45UM	9264 US/L CD	4 4<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
HG TOTAL	9269 US/L HG	11 7<	0.0383 - 0.0701	>0.0459	0.1387 (LOG NORMAL)	0.026	0.186	<0.05
HG 0.45UM	9268 US/L HG	4 4<	0.0 - 0.05	>0.0	<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
AS TOTAL	9261 US/L AS	13 0	3.2	2.0294	7.0323 (LOG NORMAL)	1.31	8.5	2.75

*** STATISTICS FOR THIS SAMPLE POINT CONTINUE ON NEXT PAGE ***

SAMPLE POINT - R039F WITHMT
SAMPLE TYPE - 3F

R. WITMAN LANGRICK BRIDGE
RIVER/STREAM WATER

GRID REF - TF 26580 47530

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
AS 0.45 UM 9240	UG/L AS	4 0	3.615	3.1167	9.2 (MAX VALUE)	1.4	8.2	2.43
CN TOTAL 0175	MG/L CN	4 4<	0.0 - 0.03	>0.0	<0.03 (MAX VALUE)	<0.03	<0.03	<0.03
PHENOL MON 0749	MG/L	4 4<	0.0 - 0.006	>0.0	<0.006 (MAX VALUE)	<0.006	<0.006	<0.006
SILVER TOT 9198	UG/L	4 4<	0.0 - 0.75	>0.2886	<1.0 (MAX VALUE)	<0.5	<1.0	<0.75
BERYL TOT 9199	UG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
ANTIM TOT 9200	UG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
BARUM TOT 9201	UG/L	1 0	20.0	0.0	20.0 (ONLY VALUE)	20.0	20.0	20.0
HCH ALPHA 9203	NG/L	10 10<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
HCH GAMMA 9204	NG/L	10 0	13.689	9.4485	31.4537 (LOG NORMAL)	1.4	29.1	13.0
DIELDRIN 9205	NG/L	10 9<	0.095 - 0.83	>0.2463	0.9286 (LOG NORMAL)	<0.7	<1.45	<0.7
ENDRIN 9208	NG/L	10 10<	0.0 - 0.71	>0.464	1.2531 (LOG NORMAL)	<0.5	<2.6	<0.5
ALDRIN 9209	NS/L	10 10<	0.0 - 0.5	>0.0	0.25 (LOG NORMAL)	<0.5	<0.5	<0.5
DDT (PP') 9206	NG/L	10 10<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
DDE (PP') 9207	NG/L	10 10<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
HEPTACHLOR 9210	NG/L	10 10<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
CHLOROPHYL 0729	UG/L	22 0	52.7907	56.8027	152.0676 (LOG NORMAL)	2.724	195.88	30.3465
COLI P 9193	NO/100ML	11 0	1177.5454	2171.0322	4156.9338 (LOG NORMAL)	14.0	7200.0	300.0
AS 0.45 UM 0217	UG/L AS	4 4<	0.0 - 0.75	>0.2386	<1.0 (MAX VALUE)	<0.5	<1.0	<0.75
OIL + G 0666	MG/L	1 1<	0.1	0.0	<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
BGHIPE 0714	UG/L	4 0	0.00114	0.0059	0.0203 (MAX VALUE)	0.0075	0.0203	0.005
BAP 0718	UG/L	4 0	0.0095	0.0075	0.0209 (MAX VALUE)	0.0043	0.0209	0.0065
BBF 0731	UG/L	4 0	0.0098	0.0076	0.0213 (MAX VALUE)	0.0056	0.0213	0.0063
BKF 0733	UG/L	4 0	0.0052	0.0037	0.0109 (MAX VALUE)	0.0031	0.0109	0.0035
FLU 0735	UG/L	4 0	0.0202	0.0146	0.0418 (MAX VALUE)	0.0105	0.0418	0.0143
PAH-SUM 6 0742	UG/L	4 0	0.0635	0.0449	0.1307 (MAX VALUE)	0.036	0.1307	0.0437
I123COP 0746	UG/L	4 0	0.0071	0.0054	0.0155 (MAX VALUE)	0.0037	0.0155	0.0066
S FAEC P 2345	NO/100ML	4 0	6.25	6.3495	15.0 (MAX VALUE)	1.0	16.0	4.0
E COLI P 2549	NO/100ML	11 0	90.7272	129.6619	294.8931 (LOG NORMAL)	5.0	400.0	42.0
TOT O-TIN 7069	NG/L	1 1<	4.0	0.0	<4.0 (ONLY VALUE)	<4.0	<4.0	<4.0
ISODRIN 7071	NG/L	10 10<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
TRIETAZINE 7077	UG/L	9 8<	0.0038 - 0.0255	>0.0039	0.035 (MAX VALUE)	<0.02	0.035	<0.025
TIN TOTAL 7324	UG/L SN	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
SELENIUM 7325	UG/L SE	4 4<	0.0 - 0.6	>0.0	<0.6 (MAX VALUE)	<0.6	<0.6	<0.6
VANADIUM V 7326	UG/L V	1 0	3.8	0.0	3.8 (ONLY VALUE)	3.8	3.8	3.8
V 0.45 UM 7327	UG/L V	1 0	3.8	0.0	3.8 (ONLY VALUE)	3.8	3.8	3.8
ANT 0.45UM 7328	UG/L SB	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0

*** STATISTICS FOR THIS SAMPLE POINT CONTINUE ON NEXT PAGE ***

SAMPLE POINT - R03BF WITHMT
 SAMPLE TYPE - BF

P. WITHAM LANGRICK BRIDGE
 RIVER/STREAK WATER

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.
BA C.45UM 7329	UG/L BA	1 0	19.0	0.0
BERC.45 UM 7330	UG/L BE	1 1<	1.0	0.0
COB C.45UM 7331	UG/L CO	1 0	1.1	0.0
MO C.45 UM 7333	UG/L MO	1 0	2.0	0.0
TE C.45 UM 7335	UG/L TE	1 1<	1.0	0.0
TH C.45 UM 7337	UG/L TH	1 1<	1.0	0.0
TIN C.45UM 7338	UG/L SN	1 1<	1.0	0.0
TI C.45 UM 7340	UG/L TI	1 0	5.8	0.0
UR C.45 UM 7342	UG/L U	1 0	1.6	0.0
PROPAZINE 7360	UG/L	9 9<	0.0 - 0.3494	>0.4879
TECHAZINE 7365	NG/L	10 10<	0.0 - 1.0	>0.0
TRIFLURAL. 7367	NG/L	10 8<	3.69 - 4.49	>9.2995
CHLORTHAL. 7368	NG/L	7 7<	0.0 - 1.7	>0.0
FLUOROXYP. 7369	NG/L	10 10<	0.0 - 1.0	>0.0
PCB - C28 7370	NG/L	10 10<	0.0 - 5.0	>0.0
PCB - C52 7371	NG/L	10 10<	0.0 - 5.0	>0.0
PCB - C101 7372	NG/L	10 10<	0.0 - 5.0	>0.0
PCB - C118 7373	NG/L	10 10<	0.0 - 5.0	>0.0
PCB - C138 7374	NG/L	10 10<	0.0 - 5.0	>0.0
PCB - C153 7375	NG/L	10 10<	0.0 - 5.0	>0.0
PCB - C180 7376	NG/L	10 10<	0.0 - 5.0	>0.0
ENDOSUL-A 7406	NG/L	9 9<	0.0 - 0.5	>0.0
ENDOSUL-B 7407	NG/L	9 9<	0.0 - 0.51	>0.03
HCB 7412	NG/L	10 10<	0.0 - 1.0	>0.0
ALK C.45UM 7413	NG/L	2 2<	0.0 - 5.0	>0.0
135C6H3CL3 7418	NG/L	8 8<	0.0 - 3.5	>2.0702
COBALT TOT 7425	UG/L CO	1 0	1.1	0.0
TOT D-TIN 7431	UG/L SN	1 1<	0.004	0.0
123C6H3CL3 7486	NG/L	7 7<	0.0 - 0.9285	>0.1889
124C6H3CL3 7487	NG/L	7 7<	0.0 - 5.0	>0.0
TOLUENE 7490	MG/KG	1 0	66.0	0.0
12 C6H4CL2 7491	MG/KG	1 0	107.0	0.0
13 C6H4CL2 7492	MG/KG	1 0	3.0	0.0
14 C6H4CL2 7493	MG/KG	1 0	3.0	0.0
CHLOROFORM 9067	UG/L	13 3<	0.028 - 0.0302	>0.0459
CARBON TET 9115	UG/L	13 8<	0.0055 - 0.0086	>0.0073

GRID REF - TF 26580 47530

95XILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIA
19.0 (ONLY VALUE)	19.0	19.0	19.0
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
1.1 (ONLY VALUE)	1.1	1.1	1.1
2.0 (ONLY VALUE)	2.0	2.0	2.0
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
5.8 (ONLY VALUE)	5.8	5.8	5.8
1.6 (ONLY VALUE)	1.6	1.6	1.6
<1.0 (MAX VALUE)	<0.02	<1.0	<0.025
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
15.3367 (LOG NORMAL)	<1.0	32.5	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
<0.59 (MAX VALUE)	<0.5	<0.59	<0.5
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<1.0	<5.0	<5.0
1.1 (ONLY VALUE)	1.1	1.1	1.1
<0.004 (ONLY VALUE)	<0.004	<0.004	<0.004
<1.0 (MAX VALUE)	<0.5	<1.0	<1.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
66.0 (ONLY VALUE)	66.0	66.0	66.0
307.0 (ONLY VALUE)	307.0	307.0	307.0
3.0 (ONLY VALUE)	3.0	3.0	3.0
3.0 (ONLY VALUE)	3.0	3.0	3.0
0.0981 (LOG NORMAL)	<0.003	0.181	0.016
0.02 (LOG NORMAL)	<0.005	0.03	<0.005

SAMPLE POINT - R038FWITHMT
SAMPLE TYPE - BF

R. WITMAN LANGRICK BRIDGE
RIVER/STREAM WATER

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	
C2HCL3	9119 UG/L	13 7<	0.0154-	0.013	>0.037
C2CL4	9121 UG/L	13 8<	0.0093-	0.0123	>0.0263
HEPT EPOX	9223 NG/L	10 10<	0.0 -	1.0	>0.0
DDT (OP')	9225 NG/L	10 13<	0.0 -	1.0	>0.0
DDE (PP')	9226 NG/L	10 13<	0.0 -	1.0	>0.0
SELENIUM	9725 UG/L SE	4 4<	0.0 -	0.6	>0.0
12 C2H4CL2	9733 UG/L	13 6<	0.0054-	0.01	>0.0024
111C2H3CL3	9734 UG/L	13 2<	0.1046-	0.1061	>0.2533
C6CL6	9741 NG/L	10 13<	0.0 -	1.0	>0.0
PCP	9759 UG/L	10 4<	0.0482-	0.0522	>0.1022
HCH BETA	9819 NG/L	5 5<	0.0 -	1.0	>0.0
DDE OP'	9820 NG/L	10 13<	0.0 -	1.0	>0.0
ATRAZINE	9864 UG/L	9 0	0.351		0.2662
SIMAZINE	9865 UG/L	9 1<	0.0884-	0.0912	>0.0431
CR TOT UG	9887 UG/L CR	11 1<	3.9272-	4.0181	>4.8244
CR 0.45UM	9888 UG/L CR	4 3<	0.55 -	1.3	>0.6
CU TOT UG	9839 UG/L CU	11 1<	4.8 -	4.8909	>3.7275
CU 0.45UM	9890 UG/L CU	4 0	5.2		3.2994
PB TOT UG	9891 UG/L PB	11 3<	1.2727-	1.5454	>0.9564
PB 0.45UM	9892 UG/L PB	4 3<	0.35 -	1.1	>0.2
NI TOT UG	9893 UG/L NI	11 0	13.809		24.3996
NI 0.45UM	9894 UG/L NI	4 0	18.15		27.2589
ZN TOT UG	9895 UG/L ZN	11 0	11.9272		14.1643
ZN 0.45UM	9896 UG/L ZN	4 0	8.15		7.6221
HCH DELTA	9945 NG/L	10 10<	0.0 -	1.0	>0.0
DDE OP'	9946 NG/L	10 10<	0.0 -	1.0	>0.0

*** STATISTICS FOR ANOTHER SAMPLE P

GRID REF - TF 26580 47530

95XILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
0.0616 (LOG NORMAL)	<0.004	0.14	<0.005
0.0405 (LOG NORMAL)	<0.005	0.1	<0.005
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
<0.6 (MAX VALUE)	<0.6	<0.6	<0.6
0.0122 (LOG NORMAL)	0.006	0.014	<0.01
0.394 (LOG NORMAL)	<0.01	0.942	0.02
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
0.1917 (LOG NORMAL)	<0.01	0.34	0.014
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
0.715 (MAX VALUE)	0.094	0.715	0.194
0.162 (MAX VALUE)	<0.025	0.162	0.072
12.0876 (LOG NORMAL)	<1.0	15.0	1.7
2.2 (MAX VALUE)	<1.0	2.2	<1.0
11.7385 (LOG NORMAL)	<1.0	13.0	3.5
10.0 (MAX VALUE)	2.8	10.0	4.0
3.2091 (LOG NORMAL)	<1.0	4.3	1.3
1.4 (MAX VALUE)	<1.0	1.4	<1.0
43.1705 (LOG NORMAL)	2.8	87.0	6.5
59.0 (MAX VALUE)	3.6	59.0	5.0
35.9392 (LOG NORMAL)	1.6	52.0	7.5
17.0 (MAX VALUE)	1.3	17.0	7.15
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
0.5 (LOG NORMAL)	<1.0	<1.0	<1.0

POINT ON NEXT PAGE ***

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 31/12/90

NO. OF SAMPLES - 37

SAMPLE POINT - R038FWITHMT
SAMPLE TYPE - BFR. WITHAM LANGRICK EPIDEE
RIVER/STREAM WATER

GRID REF - TF 26580 47530

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
COLOR FIL 0072 HAZEN		21 0	12.759	4.5472	21.3254 (LOG NORMAL)	4.59	24.0	11.5
TURBIDITY 0068 FTU		22 0	10.2568	5.1187	26.8954 (LOG NORMAL)	3.21	45.0	8.03
PH 0061 PH UNITS		22 0	8.6063	0.4385	9.4700 - 7.7424	7.92	9.21	8.735
COND 25 C 0077 USIE/CM		20 0	174.723	1051.5575	3736.7134 (LOG NORMAL)	214.6	4446.0	1300.0
SS 105 C 0135 MG/L		24 0	24.2345	26.7885	70.7703 (LOG NORMAL)	6.0	119.0	15.0
TEMP C 0076 CEL		24 0	12.6	5.2223	22.4067 (LOG NORMAL)	4.5	24.5	13.5
D.O. 0082 MG/L O		23 0	11.2695	1.8991	8.4388 (5%ILE)	8.35	15.9	10.7
D.O. (%SAT) 0081 % SATN		23 0	106.213	22.1678	74.0301 (5%ILE)	79.5	154.0	101.0
BOD+ATU T 0085 MG/L O		23 0	4.4134	2.2046	8.5816 (LOG NORMAL)	1.35	8.05	5.0
ICC 0099 MG/L C		1 0	5.0	0.0	5.0 (ONLY VALUE)	5.0	5.0	5.0
C ORG DISS 0301 MG/L C		12 0	9.5094	7.0849	20.749 (LOG NORMAL)	5.2	36.9	7.75
AMMONIA N 0111 MG/L N		24 2<	0.1858 - 0.1873	>0.1857	0.5179 (LOG NORMAL)	<0.02	0.59	0.1172
NITRITE N 0118 MG/L N		20 0	0.0864	0.0602	0.1996 (LOG NORMAL)	0.01	0.2166	0.0797
TOTAL AS N 0116 MG/L N		26 5<	7.045 - 7.1442	>6.9666	19.5585 (LOG NORMAL)	<0.5	19.5	3.493
ALK CACCO3 0162 ME/L CACCO3		23 U	151.9565	29.0393	233.7344 (LOG NORMAL)	121.0	225.0	194.0
HARD TOTAL 0158 ME/L CACCO3		23 0	433.826	92.524	600.2357 (LOG NORMAL)	308.0	640.0	420.0
CALCIUM 0241 MG/L CA		9 0	119.8865	31.6825	170.0 (MAX VALUE)	77.6	170.0	113.0
MAGNESIUM 0237 MG/L MG		9 0	34.5166	28.3399	101.0 (MAX VALUE)	10.7	101.0	26.97
SODIUM 0207 MG/L NA		10 0	206.478	227.4718	601.3571 (LOG NORMAL)	36.0	737.7	122.02
POTASSIUM 0211 MG/L K		10 0	16.441	10.9853	37.1549 (LOG NORMAL)	6.71	39.2	13.235
DETS ANION 0461 MG/L P.OT		24 14<	0.0283 - 0.0575	>0.0174	0.0755 (LOG NORMAL)	<0.05	0.125	<0.05
P TOTAL 9038 MG/L P		2 0	0.5075	0.2651	0.695 (MAX VALUE)	0.32	0.495	0.5075
P ORTH P 0180 MG/L P		26 1<	0.656 - 0.6675	>0.54	1.6604 (LOG NORMAL)	0.19	2.527	0.545
BORON 0283 MG/L B		2 0	0.445	0.2757	0.64 (MAX VALUE)	0.25	0.64	0.445
FLUORIDE 0177 MG/L F		1 0	0.755	0.0	0.755 (ONLY VALUE)	0.755	0.755	0.755
CHLORIDE 0172 MG/L CL		25 1>	304.3754 - >300.2004	>331.7421	882.0449 (LOG NORMAL)	77.2	1272.0	149.0
SULPHATE 0183 G/L		20 1>	214.1594 - >213.45	>53.4346	311.3311 (LOG NORMAL)	149.0	380.0	>202.5
SILICA 0182 MG/L SiO2		20 2<	3.3961 - 3.4161	>3.0754	9.0033 (LOG NORMAL)	0.192	8.97	2.2755
IRON TOTAL 0421 MG/L FE		5 3<	0.2318 - 0.3485	>0.5774	1.84 (MAX VALUE)	<0.05	1.84	0.14
FE 0.45UM 0419 MG/L FE		1 0	0.069	0.0	0.069 (ONLY VALUE)	0.069	0.069	0.069
MN TOTAL 0403 MG/L MN		8 3<	0.0666 - 0.0803	>0.0554	0.18 (MAX VALUE)	<0.03	0.18	0.0615
MN 0.45UM 0401 MG/L MN		1 0	0.06	0.0	0.06 (ONLY VALUE)	0.06	0.06	0.06
CD TOTAL 9265 UG/L CD		5 5<	0.0	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
HG TOTAL 9269 UG/L HG		8 4<	0.0258 - 0.0483	>0.0141	0.07 (MAX VALUE)	0.027	0.07	<0.05
AS TOTAL 9261 UG/L AS		3 1<	2.7933 - 2.96	>2.7825	5.98 (MAX VALUE)	<0.5	5.98	2.4
AS 0.45 UM 9260 UG/L AS		2 0	4.215	2.8456	6.23 (MAX VALUE)	2.2	6.23	4.215

*** STATISTICS FOR THIS SAMPLE POINT CONTINUE ON NEXT PAGE ***

SAMPLE POINT - R032FWITHMT
 SAMPLE TYPE - EF

R. WITHAM LANGRISH
 RIVER/STREAM #57

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)
CN TOTAL	0175 MG/L CN	2 2<	0.0 - 0.03
PHENOL MON	0749 MG/L	2 1<	0.0085 - 0.0115
SILVER TOT	9198 UG/L	2 2<	0.0 - 1.0
HCH ALPHA	9203 NG/L	9 8<	0.1222 - 1.0111
HCH GAMMA	9204 NG/L	9 9	19.8341
DIELDRIN	9205 NG/L	9 3<	0.5823 - 0.8223
ENDRIN	9208 NG/L	9 9<	0.0 - 0.6222
ALDRIN	9209 NG/L	8 8<	0.0 - 1.125
DDT (PP')	9206 NG/L	8 8<	0.0 - 1.0
DDE (PP')	9207 NG/L	9 9<	0.0 - 1.0
HEPTACHLOR	9210 NG/L	9 9<	0.0 - 1.0
CHLOROPHYL	0729 UG/L	23 0	74.9405
COLI P	9193 NG/100ML	8 0	183.0
AG 0.45 U*	0217 UG/L AG	1 1<	1.0
BGHIDE	0714 UG/L	3 0	0.0054
BAP	0713 UG/L	3 0	0.0052
BEP	0731 UG/L	3 0	0.0051
BKF	0733 UG/L	3 0	0.0024
FLU	0736 UG/L	3 0	0.0136
PAH-SUM 6	0742 UG/L	3 0	0.037
I123CDP	0746 UG/L	3 0	0.0052
S FAEC P	2346 NG/100ML	2 0	13.0
E COLI P	2549 NG/100ML	8 0	57.625
ISODRIN	7071 NG/L	9 9<	0.0 - 1.0
HCB	7076 UG/L	3 3<	0.0 - 2.3333
TRIFLAZINE	7077 UG/L	5 5<	0.0 - 0.025
SELENIUM	7325 UG/L SE	1 1<	0.6
PROPAZINE	7360 G/L	5 5<	0.0 - 0.025
TECNAZINE	7366 NG/L	9 8<	0.3777 - 1.2666
TRIFLURAL.	7367 NG/L	7 5<	1.7857 - 2.5
CHLORTHAL.	7369 NG/L	6 6<	0.0 - 1.0
FLUCROXYP.	7369 NG/L	6 6<	0.0 - 1.0
PCB - C28	7370 G/L	7 7<	0.0 - 5.0
PCB - C52	7371 G/L	7 7<	0.0 - 5.0
PCB - C101	7372 G/L	7 7<	0.0 - 5.0
PCB - C118	7373 G/L	7 7<	0.0 - 5.0

STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
>0.0	<0.03 (MAX VALUE)	<0.03	<0.03	<0.03
>0.0077	0.017 (MAX VALUE)	<0.006	0.017	<0.0115
>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
>0.0333	1.1 (MAX VALUE)	<1.0	1.1	<1.0
14.3726	46.2 (MAX VALUE)	6.1	46.2	14.3
>0.1957	1.2 (MAX VALUE)	0.4	1.2	0.9
>0.2166	<1.0 (MAX VALUE)	<0.5	<1.0	<0.5
>0.2314	<1.0 (MAX VALUE)	<0.5	<1.0	<0.5
>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
0.00075	136.6951 (LOG NORMAL)	3.11	211.62	88.733
188.9731	400.0 (MAX VALUE)	22.0	600.0	100.0
0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
0.0004	0.0032 (MAX VALUE)	0.0051	0.0059	0.0053
0.0013	0.0061 (MAX VALUE)	0.0037	0.0061	0.0058
0.0002	0.0054 (MAX VALUE)	0.0049	0.0054	0.0051
0.0002	0.0026 (MAX VALUE)	0.0021	0.0026	0.0026
0.0076	0.0214 (MAX VALUE)	0.0042	0.0214	0.0134
0.0079	0.0447 (MAX VALUE)	0.0283	0.0447	0.0377
0.0014	0.0068 (MAX VALUE)	0.0043	0.0068	0.0046
16.9705	25.0 (MAX VALUE)	1.0	25.0	13.0
63.774	200.0 (MAX VALUE)	8.0	200.0	26.5
>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
>1.1547	<3.0 (MAX VALUE)	<1.0	<3.0	<3.0
>0.0	<0.025 (MAX VALUE)	<0.025	<0.025	<0.025
0.0	<0.6 (ONLY VALUE)	<0.6	<0.6	<0.6
>0.0	<0.025 (MAX VALUE)	<0.025	<0.025	<0.025
>0.0	3.4 (MAX VALUE)	<1.0	3.4	<1.0
>2.560	6.9 (MAX VALUE)	<1.0	6.9	<1.0
>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0

SAMPLE POINT - R030FWITHYT
 SAMPLE TYPE - BF

R. WITMAN LANGRICK BRIDGE
 RIVER/STREAM WATER

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.
PCB - C138	7374 G/L	7 7<	0.0 - 5.0	>0.0
PCB - C153	7375 G/L	7 7<	0.0 - 5.7142	>1.5855
PCB - C180	7376 G/L	7 7<	0.0 - 5.0	>0.0
HN TOTAL	7403 UG/L HN	1 0	71.0	0.0
ENDOSUL-A	7406 AG/L	5 8<	0.0 - 0.5625	>0.1767
ENDOSUL-B	7407 AG/L	7 7<	0.0 - 0.5857	>0.1866
HCBD	7412 G/L	5 5<	0.0 - 1.0	>0.0
135C6H3CL3	7418 G/L	5 5<	0.0 - 1.0	>0.0
HEPT EPOX	9223 AG/L	9 9<	0.0 - 1.1111	>0.3333
ENDOSULPH	9224 AG/L	1 1<	1.0	0.0
DDT (OP')	9225 AG/L	9 9<	0.0 - 1.0	>0.0
DDE (FP')	9226 AG/L	9 9<	0.0 - 1.0	>0.0
SELENIUM	9725 UG/L SE	2 2<	0.0 - 0.6	>0.0
C6CL6	9741 AG/L	9 9<	0.0 - 1.0	>0.0
PCP	9769 UG/L	2 2<	0.0 - 0.01	>0.0
TDE OP'	9820 AG/L	9 9<	0.0 - 1.0	>0.0
ATRAZINE	9864 UG/L	5 0	0.6926	0.2835
SIMAZINE	9865 G/L	5 0	0.13	0.1085
CR TOT UG	9887 UG/L CR	9 4<	0.8772 - 1.3216	>0.3655
CU TOT UG	9889 UG/L CU	9 3<	2.1807 - 2.5231	>1.7775
PB TOT UG	9891 UG/L PB	6 6<	5.5674 - 6.2341	>15.1468
NI TOT UG	9893 UG/L NI	3 0	3.0947	1.6991
ZN TOT UG	9895 UG/L ZN	9 2<	3.4701 - 3.6923	>2.2809
HCH DELTA	9945 AG/L	6 6<	0.0 - 1.0	>0.0
DCE OP'	9946 AG/L	9 9<	0.0 - 1.0	>0.0

*** STATISTICS FOR ANOTHER SAMPLE PO

GRID REF - TF 26580 47530

95%ILE (OR RANGE)		MINIMUM	MAXIMUM	MEDIAN
<5.0	(MAX VALUE)	<5.0	<5.0	<5.0
<10.0	(MAX VALUE)	<5.0	<10.0	<5.0
<5.0	(MAX VALUE)	<5.0	<5.0	<5.0
71.0	(ONLY VALUE)	71.0	71.0	71.0
<1.0	(MAX VALUE)	<0.5	<1.0	<0.5
<1.0	(MAX VALUE)	<0.5	<1.0	<0.5
<1.0	(MAX VALUE)	<1.0	<1.0	<1.0
<1.0	(MAX VALUE)	<1.0	<1.0	<1.0
<2.0	(MAX VALUE)	<1.0	<2.0	<1.0
<1.0	(ONLY VALUE)	<1.0	<1.0	<1.0
<1.0	(MAX VALUE)	<1.0	<1.0	<1.0
<1.0	(MAX VALUE)	<1.0	<1.0	<1.0
<0.6	(MAX VALUE)	<0.6	<0.6	<0.6
<1.0	(MAX VALUE)	<1.0	<1.0	<1.0
<0.01	(MAX VALUE)	<0.01	<0.01	<0.01
<1.0	(MAX VALUE)	<1.0	<1.0	<1.0
0.992	(MAX VALUE)	0.30	0.992	0.684
0.253	(MAX VALUE)	0.021	0.258	0.089
1.995	(MAX VALUE)	<1.0	1.995	1.2
6.0	(MAX VALUE)	<1.0	6.0	2.2
46.607	(MAX VALUE)	<1.0	46.607	<1.0
6.6	(MAX VALUE)	1.5	6.6	2.75
7.4	(MAX VALUE)	<1.0	7.4	3.931
<1.0	(MAX VALUE)	<1.0	<1.0	<1.0
<1.0	(MAX VALUE)	<1.0	<1.0	<1.0

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DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	16	8.6681	0.5316	7.8200	9.4300	9.8588
00683	TURBIDITY	FTU	16	9.8325	3.4081	5.7000	16.980	19.044
00721	COLOUR FIL	MAZEN	16	13.507	2.1486	9.7310	16.306	18.682
00761	TEMP C	CEL	17	12.811	6.3377	3.3000	20.000	30.963
00772	COND 25 C	USIE/CM	16	1080.5	100.53	934.20	1286.0	1311.2
00812	D.O.(ZSAT)	% SATN	16	117.10	28.231	76.200	181.00	188.91
00822	D.O	MG/L O	16	12.196	1.6415	9.5500	16.400	16.082
00851	BOD+ATU T	MG/L O	16	4.8562	2.1914	1.3400	8.4600	11.078
01113	AMMONIA N	MG/L N	16	0.1914	0.2199	0.0115	0.5740	0.8877
01165	T.O.N AS N	MG/L N	16	11.912	8.3345	1.8550	25.771	37.468
01181	NITRITE N	MG/L N	1	0.0414	0.0000	0.0414	0.0414	
01184	NITRITE N	MG/L N	15	0.0810	0.0316	0.0035	0.1217	0.1692
01351	SS 105 C	MG/L	16	17.187	7.5640	7.5000	36.000	38.563
01581	HARD TOTAL	MG/L CaCO3	16	409.25	63.890	316.00	520.00	562.82
01621	ALK CaCO3	MG/L CaCO3	1	157.30	0.0000	157.30	157.30	
01622	ALK CaCO3	MG/L CaCO3	15	179.49	12.980	137.40	195.50	209.02
01724	CHLORIDE	MG/L CL	16	111.79	29.623	84.953	208.73	188.26
01751	CN TOTAL	MG/L CN	2	0.0150	0.0000	0.0150	0.0150	
01771	FLUORIDE	MG/L F	2	0.4450	0.0350	0.4100	0.4800	
01806	P SOL.REACT	MG/L P	16	0.5652	0.2760	0.1150	1.0360	1.3608
01823	SILICA	MG/L SiO2	16	2.5170	2.9818	0.2520	9.1430	11.943
01833	SULFATE	MG/L SO4	2	144.00	9.0000	135.00	153.00	
01835	SULFATE	MG/L	14	179.50	15.664	155.50	204.60	215.84
02073	SODIUM	MG/L NA	8	57.675	25.886	33.700	120.00	
02113	POTASSIUM	MG/L K	8	11.591	3.6754	7.1000	19.000	
02173	AG 0.45 UM	UG/L AG	2	0.2500	0.0000	0.2500	0.2500	
02374	MAGNESIUM	MG/L MG	8	14.712	3.3791	11.600	23.000	
02414	CALCIUM	MG/L CA	8	138.50	25.144	103.00	164.00	
02830	BORON	MG/L B	2	0.3523	0.0183	0.3340	0.3706	
03012	C ORB D165	MG/L C	9	7.7355	1.1560	5.4000	9.6700	
04015	MN 0.45UM	MG/L MN	2	0.0225	0.0175	0.0050	0.0400	
04035	MN TOTAL	MG/L MN	8	0.0621	0.0328	0.0200	0.1320	
04197	FE 0.45UM	MG/L FE	2	0.0050	0.0000	0.0050	0.0050	
04217	IRON TOTAL	MG/L FE	8	0.2607	0.1984	0.0580	0.7010	
04611	DETS ANION	MG/L M.DT	16	0.0293	0.0154	0.0200	0.0820	0.0744
04632	DET NO-ION	MG/L L.NX	0					
07142	BGHIPE	UG/L	3	0.0126	0.0056	0.0059	0.0198	
07182	BAP	UG/L	3	0.0105	0.0033	0.0072	0.0151	
07291	CHLOROPHYL	UG/L	16	83.312	71.744	4.6700	225.74	308.72
07312	BBF	UG/L	3	0.0098	0.0047	0.0038	0.0155	
07332	BKF	UG/L	3	0.0053	0.0019	0.0030	0.0078	
07362	FLU	UG/L	3	0.0166	0.0061	0.0105	0.0251	
07421	PAH-SUM 6	UG/L	3	0.0629	0.0246	0.0346	0.0946	
07462	I123CDP	UG/L	3	0.0075	0.0029	0.0041	0.0113	
07494	PHENOL MON	MG/L	2	0.0030	0.0000	0.0030	0.0030	
23460	S FAEC P	NO/100ML	3	32.333	33.806	0.0000	79.000	
25490	E.COLI P	NO/100ML	8	73.000	126.03	0.0000	400.00	
70711	ISODRIN	MG/L	3	0.5000	0.0000	0.5000	0.5000	
70771	TRIETAZINE	UG/L	5	0.0197	0.0088	0.0125	0.0310	
70772	TRIETAZINE	UG/L	3	0.0125	0.0000	0.0125	0.0125	
73244	TIN TOTAL	UG/L SN	1	0.5000	0.0000	0.5000	0.5000	
73251	SE 0.45 UM	UG/L	1	0.7300	0.0000	0.7300	0.7300	
73261	V TOTAL	UG/L	1	6.0000	0.0000	6.0000	6.0000	
73271	V 0.45 UM	UG/L	1	6.2000	0.0000	6.2000	6.2000	

73282	SB 0.45 UM	UG/L SB	1	1.2000	0.0000	1.2000	1.2000
73291	BA 0.45 UM	UG/L	1	21.000	0.0000	21.000	21.000
73301	BE 0.45 UM	UG/L	1	0.5000	0.0000	0.5000	0.5000
73311	CO 0.45 UM	UG/L	1	1.8000	0.0000	1.8000	1.8000
73331	MO 0.45 UM	UG/L	1	2.8000	0.0000	2.8000	2.8000
73351	TE 0.45 UM	UG/L	1	0.5000	0.0000	0.5000	0.5000
73371	TL 0.45 UM	UG/L	1	0.5000	0.0000	0.5000	0.5000
73381	SN 0.45 UM	UG/L	1	0.5000	0.0000	0.5000	0.5000
73401	TI 0.45 UM	UG/L	1	2.6000	0.0000	2.6000	2.6000
73421	U 0.45 UM	UG/L	1	1.5000	0.0000	1.5000	1.5000
73441	DDT TOT 41	NG/L	1	2.0000	0.0000	2.0000	2.0000
73601	PROPAZINE	UG/L	3	0.0125	0.0000	0.0125	0.0125
73602	PROPAZINE	UG/L	5	0.0125	0.0000	0.0125	0.0125
73661	TECHAZINE	NG/L	3	0.5000	0.0000	0.5000	0.5000
73671	TRIFLURAL.	NG/L	3	0.5000	0.0000	0.5000	0.5000
73681	CHLORTHAL.	NG/L	3	0.5000	0.0000	0.5000	0.5000
73691	FLUOROXYPYR	NG/L	3	1.1666	0.9428	0.5000	2.5000
73701	PCB - C28	NG/L	3	2.5000	0.0000	2.5000	2.5000
73711	PCB - C52	NG/L	3	2.5000	0.0000	2.5000	2.5000
73721	PCB - C101	NG/L	3	2.5000	0.0000	2.5000	2.5000
73731	PCB - C118	NG/L	3	2.5000	0.0000	2.5000	2.5000
73741	PCB - C138	NG/L	3	2.5000	0.0000	2.5000	2.5000
73751	PCB - C153	NG/L	3	2.5000	0.0000	2.5000	2.5000
73761	PCB - C180	NG/L	3	2.5000	0.0000	2.5000	2.5000
74061	ENDOSULF-A	NG/L	3	0.5000	0.3535	0.2500	1.0000
74071	ENDOSULF-B	NG/L	3	0.2500	0.0000	0.2500	0.2500
74121	HCBD	NG/L	3	0.5000	0.0000	0.5000	0.5000
74181	135C6H3CL3	NG/L	3	2.5000	0.0000	2.5000	2.5000
74252	COBALT TOT	UG/L CD	1	1.8000	0.0000	1.8000	1.8000
74311	TOT 0-TIN	UG/L SN	1	0.0020	0.0000	0.0020	0.0020
74861	123C6H3CL3	NG/L	3	0.5000	0.0000	0.5000	0.5000
74871	124C6H3CL3	NG/L	3	2.5000	0.0000	2.5000	2.5000
75051	DESMETRYN	UG/L	5	0.0125	0.0000	0.0125	0.0125
75061	PROMETRYN	UG/L	5	0.0184	0.0118	0.0125	0.0420
90381	P TOTAL	MG/L P	2	0.8560	0.3560	0.5000	1.2120
90675	CHLOROFORM	UG/L	8	0.1775	0.4092	0.0120	1.2600
91155	CARBON TET	UG/L	8	0.0200	0.0416	0.0030	0.1300
91195	C2HCL3	UG/L	8	0.0288	0.0371	0.0020	0.1130
91215	C2CL4	UG/L	8	0.0056	0.0047	0.0020	0.0170
91930	TOT.COLI P	NO/100ML	8	2398.1	3900.0	19.000	10000.
91983	SILVER TOT	UG/L	2	0.2500	0.0000	0.2500	0.2500
91992	BERYL TOT	UG/L	1	0.5000	0.0000	0.5000	0.5000
92004	ANTIN TOTAL	UG/L SB	1	0.5000	0.0000	0.5000	0.5000
92017	BARIUM TOT	UG/L	1	21.000	0.0000	21.000	21.000
92031	HCH ALPHA	NG/L	3	0.5000	0.0000	0.5000	0.5000
92041	HCH GAMMA	NG/L	3	10.003	3.5518	5.3100	13.900
92051	DIELDRIN	NG/L	3	0.4066	0.0663	0.3500	0.5000
92061	DDT (PP')	NG/L	3	0.5000	0.0000	0.5000	0.5000
92071	DDE (PP')	NG/L	3	0.5000	0.0000	0.5000	0.5000
92081	ENDRIN	NG/L	3	2.3333	2.9462	0.2500	6.5000
92091	ALDRIN	NG/L	3	1.1166	1.2236	0.2500	2.8500
92101	HEPTACHLOR	NG/L	3	0.9333	0.6128	0.5000	1.8000
92231	HEPT EPOX	NG/L	3	0.5000	0.0000	0.5000	0.5000
92241	ENDOSULFAN	NG/L	0				
92251	DDT (OP')	NG/L	3	0.5000	0.0000	0.5000	0.5000
92261	TDE (PP')	NG/L	3	0.5000	0.0000	0.5000	0.5000
92601	AS 0.45 UM	UG/L AS	1	1.4000	0.0000	1.4000	1.4000
92611	AS TOTAL	UG/L AS	8	2.2712	0.7883	0.9750	3.2750
92645	CD 0.45UM	UG/L CD	2	0.0750	0.0250	0.0500	0.1000
92655	CD TOTAL	UG/L CD	8	0.0987	0.1081	0.0500	0.3800

HG 0.45UM	UG/L HG	2	0.0250	0.0000	0.0250	0.0250
H5 TOTAL	UG/L HG	2	0.0250	0.0000	0.0250	0.0250
TERBUTRYN	UG/L	5	0.5896	0.9198	0.0580	2.4200
SELENIUM	UG/L SE	2	0.6250	0.3250	0.3000	0.9500
HC DIS+EM	UG/L	1	21.000	0.0000	21.000	21.000
12 C2H4CL2	UG/L	8	0.0092	0.0095	0.0015	0.0310
111C2H3CL3	UG/L	8	0.1561	0.3273	0.0110	1.0200
C6CL6	NG/L	3	0.5000	0.0000	0.5000	0.5000
PCP	UG/L	3	0.0096	0.0066	0.0050	0.0190
HCH BETA	NG/L	3	1.5000	1.4142	0.5000	3.5000
TDE (OP')	NG/L	3	0.5000	0.0000	0.5000	0.5000
ATRAZINE	UG/L	5	0.6658	0.4660	0.0840	1.3700
ATRAZINE	UG/L	3	0.1440	0.0644	0.0700	0.2270
SIMAZINE	UG/L	5	0.1298	0.0707	0.0650	0.2500
SIMAZINE	UG/L	3	0.0830	0.0427	0.0420	0.1420
CR TOTAL	UG/L CR	8	1.6000	0.8674	0.5000	3.1000
CR 0.45UM	UG/L CR	2	0.8500	0.3500	0.5000	1.2000
CU TOTAL	UG/L CU	8	3.9125	2.3170	1.5000	8.2000
CU 0.45UM	UG/L CU	2	3.5500	0.8500	2.7000	4.4000
PB TOTAL	UG/L PB	8	1.0125	0.3407	0.5000	1.5000
PB 0.45UM	UG/L PB	2	0.5000	0.0000	0.5000	0.5000
NI TOTAL	UG/L NI	8	6.2625	1.0792	4.6000	7.7000
NI 0.45UM	UG/L NI	2	5.6000	0.4000	5.2000	6.0000
ZN TOTAL	UG/L ZN	8	7.4000	2.9368	3.4000	13.000
ZN 0.45UM	UG/L ZN	1	3.6000	0.0000	3.6000	3.6000
HCH DELTA	NG/L	3	0.5000	0.0000	0.5000	0.5000
DDE (OP')	NG/L	3	0.5000	0.0000	0.5000	0.5000

EXTRACT FOR SAMPLE POINT

REPORT

A P P E N D I X 3

EFFLUENT QUALITY FOR SPALDING STW DURING THE STUDY PERIOD

Statistical summaries for 1989, 1990, 1991 and 1992

REPORT COVERS PERIOD(S) FROM 01/01/85 TO 31/12/85

NO. OF SAMPLES - 51

SAMPLE POINT - EC7SFALCAGDP
SAMPLE TYPE - CFSPALDING FINAL SED TANK EFFLUENT
FINAL SEDIMENTATION TANK EFFLUENT

GRID REF - TF 26100 25200

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMLP	MAXIMLP	MEDIAN
PH	OC61 PH UNITS	8 0	7.7	C.2927	7.3 - 8.1	7.3	8.1	7.7
SS 105 G	0135 MG/L	47 0	46.0212	25.4988	94.2876 (LCG NCRMAL)	14.C	128.0	37.0
BOD+ATU T	OC25 MG/L C	48 2X	28.6446-	>28.9639	83.2586 (LEG NCRMAL)	12.C	<158.C	23.0
CCC	OC92 PE/L C	3 C	102.6666	27.C616	133.0 (MAX VALUE)	81.0	133.0	94.0
AMPHONIA A	C111 PE/L A	47 0	13.588	5.911	32.1444 (LCG NCRMAL)	1.2	61.C	11.4
NITRITE A	C118 PE/L A	5 0	0.766	C.3739	1.41 (MAX VALUE)	C.48	1.41	0.64
TGN AS N	0116 ME/L A	46 3<	10.2756-	>7.2C5	23.8111 (LCG NCRMAL)	<C.1	26.1	8.775
P SOL. REAC	C120 PE/L AS F	4 0	6.4075	2.2412	8.35 (MAX VALUE)	4.C5	8.35	6.315
CHLORIDE	0172 PE/L CL	31 0	211.4516	35.0664	273.518 (LCG NCRMAL)	145.C	295.0	207.0
HCH GAMMA	92C4 NG/L	3 0	48.8266	22.97C3	73.44 (MAX VALUE)	27.96	73.44	45.08
DIELDRIN	92C5 NE/L	3 C	3.6833	C.5253	4.29 (MAX VALUE)	3.38	4.29	3.38
ENDRIK	92C8 NE/L	3 0	5.C	C.0	5.0 (MAX VALUE)	5.C	5.C	5.0
ALDRIN	92C9 NG/L	2 1<	2.C	>1.6263	<6.3 (MAX VALUE)	4.C	<6.3	<5.15
DCT (PP*)	92C6 NE/L	2 C	4.C	C.0	4.0 (MAX VALUE)	4.C	4.C	4.0
INST FLOW	OC46 M3/D	4 C	3370.C	1756.6264	562C.0 (MAX VALUE)	138C.0	562C.C	3240.0
MALATHION	0535 UE/L	3 C	0.C13	C.0	0.013 (MAX VALUE)	C.013	C.013	0.013
TRIFLLRAL	7367 NE/L	3 C	4.64	4.7138	1C.08 (MAX VALUE)	1.76	1C.08	2.08
PCB - C28	7370 NE/L	3 0	7.C	C.0	7.0 (MAX VALUE)	7.C	7.C	7.0
PCB - C52	7371 NE/L	3 0	7.C	C.0	7.0 (MAX VALUE)	7.0	7.0	7.0
PCB - C101	7372 NE/L	3 0	7.C	C.0	7.0 (MAX VALUE)	7.0	7.C	7.0
PCB - C118	7373 NE/L	3 0	7.C	C.0	7.0 (MAX VALUE)	7.0	7.0	7.0
PCB - C138	7374 NE/L	3 0	4.C	C.0	4.0 (MAX VALUE)	4.0	4.0	4.0
PCB - C153	7375 NG/L	3 0	5.C	C.0	5.0 (MAX VALUE)	5.0	5.C	5.0
PCB - C12C	7376 NE/L	3 0	3.C	C.0	3.C (MAX VALUE)	3.C	3.C	3.0
ENDOSUL-A	74C6 NG/L	3 C	4.C	C.0	4.0 (MAX VALUE)	4.C	4.C	4.0
HCED	7412 NG/L	3 C	2.C	C.0	2.0 (MAX VALUE)	2.C	2.C	2.0
INST FLOW	9C72 L/S	14 0	41.7857	9.4395	58.8253 (LCG NCRMAL)	28.0	57.0	41.0
CECL6	9741 NE/L	3 C	0.4666	C.2138	C.7 (MAX VALUE)	C.28	C.7	0.42
FENITROTHI	9750 UE/L	2 C	0.C19	C.0	C.019 (MAX VALUE)	C.C19	C.019	0.019
PCF	9769 UE/L	2 C	C.21	C.1C6	C.285 (MAX VALUE)	0.125	C.285	0.21
ATRAZINE	9864 UG/L	2 C	0.1036	C.0772	C.1582 (MAX VALUE)	C.C45	C.1582	0.1036
SIPAZINE	9865 UG/L	2 C	0.C65	C.0	C.065 (MAX VALUE)	C.C45	C.C65	0.065

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 31/12/90

NO. OF SAMPLES - 49

SAMPLE POINT - S07SPALNGDP
SAMPLE TYPE - DP

SPALDING FINAL SED TANK EFFLUENT
FINAL SEDIMENTATION TANK EFFLUENT

GRID REF - TF 26100 25200

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
PH	0061 PH UNITS	14 0	7.7435	0.1235	7.987 - 7.5001	7.53	7.99	7.755
SS 105 C	0135 MG/L	49 0	34.3302	15.8832	64.295 (LOG NORMAL)	3.0	78.67	34.67
BOD+ATU T	0085 MG/L C	49 1<	24.7446-	24.9487	>17.0333	6.0	93.25	20.0
COB	0092 MG/L O	8 0	105.625	23.2067	144.0 (MAX VALUE)	80.0	144.0	97.0
AMMONIA N	0111 MG/L N	48 0	12.4582	6.3417	24.453 (LOG NORMAL)	0.9834	26.068	13.0
TOTAL AS N	0116 MG/L N	26 1<	9.5305-	9.5536	>5.6698	<0.6	21.7	9.135
FORTH P	0180 MG/L P	7 0	6.4618	1.475	9.069 (MAX VALUE)	4.6325	9.069	6.05
ORTH PIS	0191 MG/L P	9 0	5.5571	1.2982	7.28 (MAX VALUE)	3.7172	7.28	5.67
CHLORIDE	0172 MG/L CL	38 0	253.8239	44.8865	333.5837 (LOG NORMAL)	168.74	345.84	255.725
HS TOTAL	9269 UG/L HS	12 1<	0.3437-	0.3479	>0.3271	0.032	0.951	0.195
DICHLORVCS	0507 UG/L	3 3<	0.0 -	0.02	>0.0	<0.02	<0.02	<0.02
VALATHION	0535 UG/L	3 3<	0.0 -	0.02	>0.0	<0.02	<0.02	<0.02
NET FLOW	9072 L/S	38 0	38.9736	7.9065	53.1468 (LOG NORMAL)	22.0	57.0	37.5
PERITECTH	9750 UG/L	3 3<	0.0 -	0.02	>0.0	<0.02	<0.02	<0.02
PERITECTH	9751 UG/L	3 1<	0.041 -	0.0476	>0.0239	<0.02	0.062	0.061

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

REPORT COVERS PERIOD(S) FROM 01/01/91 TO 31/12/91

NO. OF SAMPLES - 48

SAMPLE POINT - S07SPALONGDP
SAMPLE TYPE - DPSPALDING FINAL SED TANK EFFLUENT
FINAL SEDIMENTATION TANK EFFLUENT

GRID REF - TF 26100 25200

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
PH	0041 PH UNITS	12 0	7.3033	0.0896	7.93 - 7.6266	7.63	7.92	7.315
SS 105 C	0135 MG/L	49 0	33.5541	16.7523	65.0322 (LOG NORMAL)	9.5	90.0	23.5
BOD+ATU T	0025 MG/L O	48 9X	25.2725-	29.9639	>22.0734	<10.0	111.86	23.933
AMMONIA N	0111 MG/L N	48 0	14.0606	6.8907	27.0329 (LOG NORMAL)	1.3128	31.184	12.9965
TDA AS N	0116 MG/L N	13 2<	9.5226-	9.6149	>7.3483	<0.6	23.9	9.3
P ORTH DIS	0171 MG/L P	12 0	3.83	1.3365	6.3153 (LOG NORMAL)	1.336	5.9943	3.7537
CHLORIDE	0172 MG/L CL	48 0	243.1854	32.5394	311.2153 (LOG NORMAL)	174.64	339.74	231.155
HG TOTAL	9269 UG/L HG	12 1<	0.1146-	0.1122	>0.1224	<0.05	0.47	0.072
DICHLORVOS	0507 UG/L	10 10<	0.0 -	0.0205	>0.0169	<0.005	<0.05	<0.01
MALATHION	0535 UG/L	10 10<	0.0 -	0.017	>0.0133	<0.005	<0.04	<0.01
PARATHION	0543 UG/L	10 10<	0.0 -	0.025	>0.0195	<0.005	<0.055	<0.0175
AZINPH-ETH	7440 UG/L	10 10<	0.0 -	0.0205	>0.0169	<0.005	<0.05	<0.01
FENTHION	7441 UG/L	10 10<	0.0 -	0.039	>0.0572	<0.005	<0.195	<0.0175
PARATH-MET	7442 UG/L	10 10<	0.0 -	0.017	>0.0133	<0.005	<0.04	<0.01
INST FLOW	9072 L/S	40 0	75.6427	32.31	137.3845 (LOG NORMAL)	31.0	143.94	72.413
FENITROTHI	9750 UG/L	10 10<	0.0 -	0.023	>0.0163	<0.005	<0.05	<0.02
AZINPHOS-H	9751 UG/L	10 10<	0.0 -	0.021	>0.0166	<0.005	<0.05	<0.0125
PCP	9759 UG/L	1 0	0.17	0.0	0.17 (ONLY VALUE)	0.17	0.17	0.17

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

STATISTICAL SUMMARY (AW712) for location SPALDING FINAL SED TANK EFFLUENT
01/01/92 TO 30/08/92

(S07SPALDNGDP)

DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	26	7.8034	0.1214	7.4800	8.0600	8.0566
00822	D.O	MG/L O	1	8.6000	0.0000	8.6000	8.6000	
00851	BOD+ATU T	MG/L O	36	25.405	18.199	7.5000	103.13	76.866
01119	AMMONIA N	MG/L N	36	13.487	5.0325	3.5926	23.701	26.412
01162	T.O.N AS N	MG/L N	25	10.479	4.8009	2.0188	25.426	23.454
01351	SS 105 C	MG/L	36	34.166	18.425	13.500	117.00	84.382
01721	CHLORIDE	MG/L CL	36	201.73	39.543	112.67	302.90	294.29
01912	P SOL.REACT	MG/L P	26	3.2862	0.9868	0.9999	4.7537	5.7654
05072	DICHLORVOS	UG/L	9	0.0297	0.0134	0.0125	0.0500	
05352	MALATHION	UG/L	9	0.0297	0.0134	0.0125	0.0500	
05432	PARATHION	UG/L	9	0.0302	0.0128	0.0150	0.0500	
74401	AZINPH-ETH	UG/L	9	0.0311	0.0121	0.0150	0.0500	
74411	FENTHION	UG/L	9	0.0297	0.0134	0.0125	0.0500	
74421	PARATH-METH	UG/L	9	0.0297	0.0134	0.0125	0.0500	
90720	I FLOW L/S	L/S	32	76.315	34.242	14.500	147.60	166.95
92692	HG TOTAL	UG/L HG	3	0.0473	0.0172	0.0250	0.0670	
97502	FENITROTHI	UG/L	9	0.0297	0.0134	0.0125	0.0500	
97512	AZINPHOS-M	UG/L	9	0.0241	0.0137	0.0075	0.0500	
99351	NO FLO/SAM		1	0.0000	0.0000	0.0000	0.0000	

END OF EXTRACT FOR SAMPLE POINT

END OF REPORT

STATISTICAL SUMMARY (AW712) for location SPALDING FINAL SED TANK EFFLUENT
01/01/92 TO 31/12/92

(507SPALDNGDP)

DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	41	7.8295	0.1304	7.4800	8.1200	8.0963
00822	D.O	MG/L O	1	8.6000	0.0000	8.6000	8.6000	
00851	BOD+ATU T	MG/L O	51	24.377	18.562	6.0500	103.13	76.073
01119	AMMONIA N	MG/L N	51	12.362	4.9847	3.5926	23.701	25.122
01162	T.O.N AS N	MG/L N	40	10.766	5.0602	2.0188	25.426	24.262
01351	SS 105 C	MG/L	51	32.794	18.856	10.000	117.00	83.726
01721	CHLORIDE	MG/L CL	51	192.25	37.653	112.67	302.90	279.25
01912	P SOL.REACT	MG/L P	41	2.9843	1.0770	0.9716	4.7537	5.6936
05072	DICHLORVDS	UG/L	11	0.0265	0.0138	0.0125	0.0500	0.0703
05352	MALATHION	UG/L	11	0.0265	0.0138	0.0125	0.0500	0.0703
05432	PARATHION	UG/L	11	0.0279	0.0126	0.0150	0.0500	0.0664
74102	124C6H3CL3	UG/L	1	0.0500	0.0000	0.0500	0.0500	
74112	123C6H3CL3	UG/L	1	0.0500	0.0000	0.0500	0.0500	
74401	AZINPH-ETH	UG/L	11	0.0300	0.0112	0.0150	0.0500	0.0631
74411	FENTHION	UG/L	11	0.0265	0.0138	0.0125	0.0500	0.0703
74421	PARATH-METH	UG/L	11	0.0265	0.0138	0.0125	0.0500	0.0703
90720	I FLOW L/S	L/S	45	80.843	35.086	14.500	150.06	171.70
91192	C2HCL3	UG/L	1	0.0500	0.0000	0.0500	0.0500	
91212	C2CL4	UG/L	1	0.0500	0.0000	0.0500	0.0500	
92692	H6 TOTAL	UG/L H6	4	0.0480	0.0149	0.0250	0.0670	
97335	12 C2H4CL2	UG/L	1	1.0000	0.0000	1.0000	1.0000	
97392	135C6H3CL3	UG/L	1	0.0500	0.0000	0.0500	0.0500	
97502	FENITROTHI	UG/L	11	0.0265	0.0138	0.0125	0.0500	0.0703
97512	AZINPHOS-M	UG/L	11	0.0220	0.0132	0.0075	0.0500	0.0651
99351	NO FLO/SAM		1	0.0000	0.0000	0.0000	0.0000	

END OF EXTRACT FOR SAMPLE POINT

END OF REPORT

A P P E N D I X 4

**EFFLUENT QUALITY FOR BOSTON STW
DURING THE STUDY PERIOD**

Statistical summaries for 1989, 1990, 1991 and 1992

DATE PRODUCED
31/03/93

N.R.A. ANGLIAN REGION - CHEMICAL DATA PROCESSING SYSTEM

PAGE NO. 1

OUTPUT FROM GENERAL DATA ABSTRACTION FACILITY

REPORT TYPE 712 - PART 3 - STATISTICAL SUMMARY REPORT

REPORT COVERS PERIOD(S) FROM 01/01/89 TO 31/12/89

NO. OF SAMPLES - 60

SAMPLE POINT - 804BOSTON DP
SAMPLE TYPE - DP

BOSTON HUMUS TANK EFFLUENT
FINAL SEDIMENTATION TANK EFFLUENT

GRID REF - TF 35600 40900

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
INST FLOW	0037 M3/S	5 0	0.133	0.073	0.215 (MAX VALUE)	0.0413	0.215	0.1489
PH	0061 PH UNITS	35 0	7.8057	0.2195	8.2382- 7.3731	7.2	8.1	7.8
SS 105 C	0135 MG/L	56 0	31.7267	13.5004	61.0176 (LOG NORMAL)	8.8	105.0	30.0
BOD TOTAL	0088 MG/L O	40 0	14.2425	5.641	24.8108 (LOG NORMAL)	3.5	28.0	13.5
BOD+ATU T	0085 MG/L O	18 0	22.3388	9.2119	39.6332 (LOG NORMAL)	10.0	43.0	20.5
AMMONIA N	0111 MG/L N	56 4<	2.0389- 2.0662	>2.0272	5.6741 (LOG NORMAL)	<0.03	10.1	1.505
NITRITE N	0118 MG/L N	40 0	0.2312	0.1096	0.4382 (LOG NORMAL)	0.05	0.45	0.25
TOM AS N	0116 MG/L N	40 0	13.6857	4.1966	21.4243 (LOG NORMAL)	7.54	25.3	12.95
DETS ANION	0461 MG/L M.OY	1 0	1.84	0.0	1.84 (ONLY VALUE)	1.84	1.84	1.84
CHLORIDE	0172 MG/L CL	55 0	543.2418	272.1421	1057.8077 (LOG NORMAL)	26.7	1350.0	540.0
HCH GAMMA	9204 MG/L	3 0	47.28	20.5991	66.36 (MAX VALUE)	25.44	66.36	50.04
DIELDRIN	9205 MG/L	3 0	5.0266	1.1795	6.11 (MAX VALUE)	3.77	6.11	5.2
ENDRIN	9208 MG/L	3 0	5.0	0.0	5.0 (MAX VALUE)	5.0	5.0	5.0
ALDRIN	9209 MG/L	2 0	4.0	0.0	4.0 (MAX VALUE)	4.0	4.0	4.0
DDT (PP')	9206 MG/L	2 0	4.0	0.0	4.0 (MAX VALUE)	4.0	4.0	4.0
INST FLOW	0046 M3/D	1 0	8000.0	0.0	8000.0 (ONLY VALUE)	8000.0	8000.0	8000.0
ZN(DRY WT)	0246 MG/KG ZN	1 0	372.0	0.0	372.0 (ONLY VALUE)	372.0	372.0	372.0
MALATHION	0535 UG/L	2 0	0.013	0.0	0.013 (MAX VALUE)	0.013	0.013	0.013
TRIFLURAL.	7367 MG/L	3 0	6.3466	1.6026	8.0 (MAX VALUE)	4.8	8.0	6.24
PCB - C28	7370 MG/L	2 0	7.0	0.0	7.0 (MAX VALUE)	7.0	7.0	7.0
PCB - C52	7371 MG/L	2 0	7.0	0.0	7.0 (MAX VALUE)	7.0	7.0	7.0
PCB - C101	7372 MG/L	2 0	7.0	0.0	7.0 (MAX VALUE)	7.0	7.0	7.0
PCB - C118	7373 MG/L	2 0	7.0	0.0	7.0 (MAX VALUE)	7.0	7.0	7.0
PCB - C138	7374 MG/L	2 0	4.0	0.0	4.0 (MAX VALUE)	4.0	4.0	4.0
PCB - C153	7375 MG/L	2 0	5.0	0.0	5.0 (MAX VALUE)	5.0	5.0	5.0
PCB - C180	7376 MG/L	2 0	3.0	0.0	3.0 (MAX VALUE)	3.0	3.0	3.0
ENDOSUL-A	7406 MG/L	3 0	4.0	0.0	4.0 (MAX VALUE)	4.0	4.0	4.0
HCB	7412 MG/L	2 0	2.0	0.0	2.0 (MAX VALUE)	2.0	2.0	2.0
C6CL6	9741 MG/L	2 0	2.49	2.1354	4.0 (MAX VALUE)	0.98	4.0	2.49
FENITROTHI	9750 UG/L	2 0	0.019	0.0	0.019 (MAX VALUE)	0.019	0.019	0.019
PCP	9769 UG/L	2 0	0.328	0.0367	0.354 (MAX VALUE)	0.302	0.354	0.328
ATRAZINE	9864 UG/L	1 0	87.0	0.0	87.0 (ONLY VALUE)	87.0	87.0	87.0
SIMAZINE	9865 UG/L	2 0	0.1553	0.148	0.26 (MAX VALUE)	0.0507	0.26	0.1553

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 31/12/90

NO. OF SAMPLES - 50

SAMPLE POINT - SC4BOSTON DP
 SAMPLE TYPE - DP
 BOSTON MUMUS TANK EFFLUENT
 FINAL SEDIMENTATION TANK EFFLUENT

GRID REF -

DETERMINT	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95ZILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
INST FLOW	0037 P3/S	11 0	0.1711	C.0482	0.2595(LOG NORMAL)	0.0496	0.221	0.1785
PH	0061 PH UNITS	13 0	7.1792	C.1361	7.5473-7.4111	7.46	7.96	7.65
SS 105 C	0135 P/L	43 0	35.1256	14.384	65.0012(LOG NORMAL)	11.5	72.0	35.0
SDO TCAL	0028 P/L C	1 0	21.2	C.0	21.2 (ONLY VALUE)	21.2	21.2	21.2
SDOATU T	0085 P/L O	49 0	18.2753	6.4966	30.3709(LOG NORMAL)	7.3	37.6	17.1
AMONIA N	0111 P/L M	42 4<	1.8891-	>1.7545	5.0756(LOG NORMAL)	<0.2	7.1648	1.2803
TON AS N	0116 P/L M	17 0	19.8508	7.7853	34.4365(LOG NORMAL)	11.026	37.8	17.244
P ORTH P	0120 P/L P	7 0	10.1447	C.4954	11.2 (MAX VALUE)	9.309	11.2	10.297
P GRTH B18	0191 P/L F	10 0	2.7858	1.3668	11.196 (LOG NORMAL)	6.2528	10.862	8.4323
CHLORIDE	0172 P/L CL	44 1>	670.1298+	>338.6425	1310.6071(LOG NORMAL)	87.604	1830.0	644.85
PV SEC	9784 P/L O	1 0	0.563	0.0	0.563 (ONLY VALUE)	0.563	0.563	0.563
NO FLO/SAM	5935	1 0	0.0	0.0	C.G (ONLY VALUE)	0.0	0.0	0.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

REPORT COVERS PERIOD(S) FROM 01/01/91 TO 31/12/91

NO. OF SAMPLES - 41

SAMPLE POINT - 50430STON DP
SAMPLE TYPE - DP

BOSTON HUNGS TANK EFFLUENT
FINAL SEDIMENTATION TANK EFFLUENT

GRID REF - TF 35600 40900

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
PH	0001 PH UNITS	13 0	7.3215	0.033	7.9851- 7.6579	7.65	7.97	7.3
SS 105 C	0135 %S/L	40 0	28.15	11.9476	50.6111 (LOG NORMAL)	9.5	66.0	27.0
BOD+ATU T	0085 %S/L O	39 5<	14.1074- 15.133	>6.6463	27.151 (LOG NORMAL)	<7.5	30.53	14.00
AMMONIA N	0111 %G/L N	40 0	3.5007	1.9538	7.2555 (LOG NORMAL)	0.6047	9.3278	3.1643
TGN 43 N	0116 %G/L N	13 0	28.2442	7.1144	41.1565 (LOG NORMAL)	16.531	40.608	29.009
P ORTH DIS	0191 %G/L P	13 0	7.1971	0.9526	8.862 (LOG NORMAL)	4.8999	8.4533	7.4109
CHLORIDE	0172 %S/L CL	40 0	602.116	236.8935	1046.4451 (LOG NORMAL)	153.5	1132.5	555.33
INST FLOW	9072 L/S	10 0	140.0235	101.519	330.1949 (LOG NORMAL)	3.527	301.5	153.7
NO FLC/SAM 9935		1 0	0.0	0.0	0.0 (ONLY VALUE)	0.0	0.0	0.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

NRA (ANGLIAN REGION) LIMS - REPORTING PACKAGE

STATISTICAL SUMMARY (AW712) for location BOSTON HUMUS TANK EFFLUENT
01/01/92 TO 30/08/92

(S04BOSTON DP)

DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 ZIL
00613	PH	PH UNITS	23	8.0147	0.1252	7.8400	8.2900	8.2778
00851	BOD+ATU T	MG/L O	29	8.3396	4.0946	3.7500	17.510	19.390
01119	AMMONIA N	MG/L N	29	1.4687	1.2934	0.2213	5.8674	5.2025
01162	T.O.N AS N	MG/L N	22	29.833	9.2216	10.444	46.934	53.427
01351	SS 105 C	MG/L	29	22.465	13.804	2.5000	66.000	61.002
01721	CHLORIDE	MG/L CL	27	641.65	319.28	129.35	1307.1	1510.9
01912	P SOL.REACT	MG/L P	23	5.2827	0.8170	3.8789	7.8268	7.1814
70712	ISODRIN	MG/L	9	2.5000	0.0000	2.5000	2.5000	
73672	TRIFLURALIN	MG/L	9	10.222	14.770	5.0000	52.000	
73702	PCB - C28	MG/L	9	5.0000	0.0000	5.0000	5.0000	
73712	PCB - C52	MG/L	9	5.0000	0.0000	5.0000	5.0000	
73722	PCB - C101	MG/L	9	5.0000	0.0000	5.0000	5.0000	
73732	PCB - C118	MG/L	9	5.0000	0.0000	5.0000	5.0000	
73742	PCB - C138	MG/L	9	5.0000	0.0000	5.0000	5.0000	
73752	PCB - C153	MG/L	9	5.0000	0.0000	5.0000	5.0000	
73762	PCB - C180	MG/L	9	5.0000	0.0000	5.0000	5.0000	
74062	ENDOSULF-A	MG/L	9	5.0000	0.0000	5.0000	5.0000	
74072	ENDOSULF-B	MG/L	0					
74122	MCBD	MG/L	9	5.5555	1.5713	5.0000	10.000	
74182	135C6H3CL3	MG/L	9	10.000	0.0000	10.000	10.000	
74862	123C6H3CL3	MG/L	9	10.000	0.0000	10.000	10.000	
74872	124C6H3CL3	MG/L	9	10.000	0.0000	10.000	10.000	
90720	I FLOW L/S	L/S	17	124.02	92.025	1.1750	301.50	405.53
92032	HCH ALPHA	MG/L	9	5.0000	0.0000	5.0000	5.0000	
92042	HCH GAMMA	MG/L	9	38.700	32.751	5.0000	76.000	
92052	DIELDRIN	MG/L	9	6.8444	4.1007	5.0000	18.000	
92062	DDT (PP')	MG/L	9	20.000	0.0000	20.000	20.000	
92082	ENDRIN	MG/L	9	10.000	0.0000	10.000	10.000	
92092	ALDRIN	MG/L	9	2.5000	0.0000	2.5000	2.5000	
92655	CD TOTAL	UG/L CD	2	0.0750	0.0250	0.0500	0.1000	
97412	CaCL6	MG/L	9	2.5000	0.0000	2.5000	2.5000	
98192	HCH BETA	MG/L	9	5.0000	0.0000	5.0000	5.0000	
98874	CR TOTAL	UG/L CR	2	2.3500	1.3500	1.0000	3.7000	
98894	CU TOTAL	UG/L CU	2	5.0000	1.4000	3.6000	6.4000	
98914	PB TOTAL	UG/L PB	2	2.4500	1.4500	1.0000	3.9000	
98934	NI TOTAL	UG/L NI	2	4.2000	0.9000	3.3000	5.1000	
98954	ZN TOTAL	UG/L ZN	2	13.800	4.2000	9.6000	18.000	
99452	HCH DELTA	MG/L	0					

END OF EXTRACT FOR SAMPLE POINT

END OF REPORT

STATISTICAL SUMMARY (AW712) for location BOSTON HUMUS TANK EFFLUENT
01/01/92 TO 31/12/92

(S04BOSTON DP)

DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 XTL
00613	PH	PH UNITS	35	8.0228	0.1108	7.8400	8.2900	8.251
00851	BOD+ATU T	MG/L O	41	8.5007	3.9664	3.7500	17.510	18.88
01119	AMMONIA N	MG/L N	41	1.2783	1.1466	0.2213	5.8674	4.4961
01162	T.O.N AS N	MG/L N	34	27.650	8.9326	10.444	46.934	50.06
01351	SS 105 C	MG/L	41	23.402	12.862	2.5000	66.000	57.92
01721	CHLORIDE	MG/L CL	39	606.72	277.52	129.35	1307.1	1343.6
01912	P SOL.REACT	MG/L P	35	5.0275	0.8778	3.1849	7.8268	7.0553
70712	ISODRIN	MG/L	10	2.5000	0.0000	2.5000	2.5000	2.5000
73672	TRIFLURALIN	MG/L	10	9.7000	14.100	5.0000	52.000	61.240
73702	PCB - C28	MG/L	10	5.0000	0.0000	5.0000	5.0000	5.0000
73712	PCB - C52	MG/L	10	5.0000	0.0000	5.0000	5.0000	5.0000
73722	PCB - C101	MG/L	10	5.0000	0.0000	5.0000	5.0000	5.0000
73732	PCB - C118	MG/L	10	5.0000	0.0000	5.0000	5.0000	5.0000
73742	PCB - C138	MG/L	10	5.0000	0.0000	5.0000	5.0000	5.0000
73752	PCB - C153	MG/L	10	5.0000	0.0000	5.0000	5.0000	5.0000
73762	PCB - C180	MG/L	10	5.0000	0.0000	5.0000	5.0000	5.0000
74062	ENDOSULF-A	MG/L	10	5.0000	0.0000	5.0000	5.0000	5.0000
74072	ENDOSULF-B	MG/L	0					
74102	124C6H3CL3	UG/L	1	0.0500	0.0000	0.0500	0.0500	
74112	123C6H3CL3	UG/L	1	0.0500	0.0000	0.0500	0.0500	
74122	HCB	MG/L	10	5.5000	1.5000	5.0000	10.000	9.7255
74182	135C6H3CL3	MG/L	10	10.000	0.0000	10.000	10.000	10.000
74862	123C6H3CL3	MG/L	10	10.000	0.0000	10.000	10.000	10.000
74872	124C6H3CL3	MG/L	10	10.000	0.0000	10.000	10.000	10.000
90720	I FLOW L/S	L/S	24	134.83	96.695	1.1750	301.50	415.44
91192	C2HCL3	UG/L	1	0.0500	0.0000	0.0500	0.0500	
91212	C2CL4	UG/L	1	0.0500	0.0000	0.0500	0.0500	
92032	HCH ALPHA	MG/L	10	5.0000	0.0000	5.0000	5.0000	5.0000
92042	HCH GAMMA	MG/L	10	35.330	32.673	5.0000	76.000	153.54
92052	DIELDRIN	MG/L	10	6.6600	3.9294	5.0000	18.000	19.747
92062	DDT (PP')	MG/L	10	20.000	0.0000	20.000	20.000	20.000
92082	ENDRIN	MG/L	10	9.5000	1.5000	5.0000	10.000	13.382
92092	ALDRIN	MG/L	10	2.5000	0.0000	2.5000	2.5000	2.5000
92655	CD TOTAL	UG/L CD	4	0.0625	0.0216	0.0500	0.1000	
97335	12 C2H4CL2	UG/L	1	1.0000	0.0000	1.0000	1.0000	
97392	135C6H3CL3	UG/L	1	0.0500	0.0000	0.0500	0.0500	
97412	C6CL6	MG/L	10	2.5000	0.0000	2.5000	2.5000	2.5000
98192	HCH BETA	MG/L	10	5.0000	0.0000	5.0000	5.0000	5.0000
98874	CR TOTAL	UG/L CR	4	1.8500	1.2338	0.5000	3.7000	
98894	CU TOTAL	UG/L CU	4	5.6750	2.4055	3.4000	9.3000	
98914	PB TOTAL	UG/L PB	4	4.3500	4.6035	0.5000	12.000	
98934	NI TOTAL	UG/L NI	4	3.7750	1.0662	2.3000	5.1000	
98954	ZN TOTAL	UG/L ZN	4	16.150	7.7115	9.0000	28.000	
99452	HCH DELTA	MG/L	0					

END OF EXTRACT FOR SAMPLE POINT

END OF REPORT

A P P E N D I X 5

**A) WATER QUALITY IN THE UPPER WELAND ESTUARY AT
 PINCHBECK MARSH (HIGH WATER)**

Statistical summaries for 1989, 1990, 1991 and 1992

NRA (ANGLIAN REGION) LIMS - REPORTING PACKAGE

DATE 27/01/

STATISTICAL SUMMARY (AW712) for location R.WELLAND PINCHBECK MARSH - HIGH SLACK (R05BIWELL580H)
01/01/92 TO 30/08/92

DET	NAME	UNITS	-N-	-MEAN-	-SD--	--MIN-	--MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	7	8.2757	0.2903	7.9500	8.8700	
00683	TURBIDITY	FTU	7	38.000	0.0000	38.000	38.000	
00761	TEMP C	CEL	7	13.214	4.3570	8.0000	21.000	
00772	COND 25 C	USIE/CM	7	5769.3	4672.6	998.40	13960.	
00812	D.O.(ZSAT)	% SATN	7	87.885	15.406	69.900	113.00	
00822	D.O	MG/L O	7	9.1500	1.6593	7.3500	11.600	
00851	BOD+ATU T	MG/L O	7	6.9885	4.8636	2.5400	17.750	
01112	AMMONIA N	MG/L AS N	1	0.0260	0.0000	0.0260	0.0260	
01113	AMMONIA N	MG/L N	6	1.3628	1.8385	0.2910	5.4310	
01165	T.O.N AS N	MG/L N	6	6.1548	3.3399	1.4680	11.250	
01166	TON AS N	MG/L AS N	1	0.1350	0.0000	0.1350	0.1350	
01351	SS 105 C	MG/L	1	133.00	0.0000	133.00	133.00	
01352	SS 105 C	MG/L	6	85.583	35.949	46.000	142.00	
01724	CHLORIDE	MG/L CL	3	513.59	344.46	115.35	955.68	
01728	CHLORIDE	CL MG/L	4	2505.4	1560.8	50.000	4388.2	
01806	P SOL.REACT	MG/L P	6	0.3820	0.3623	0.1190	1.1230	
01808	P SOL.REACT	MG/L AS P	1	0.1290	0.0000	0.1290	0.1290	
74201	SALN FIELD	G/L	2	1.7500	0.7500	1.0000	2.5000	
74361	NO RESULTS		1	1.0000	0.0000	1.0000	1.0000	
90942	SALIN PPT	G/L	3	2.2540	1.9237	0.5000	4.9320	

END OF EXTRACT FOR SAMPLE POINT

REPORT COVERS PERIOD(S) FROM 01/01/91 TO 31/12/91

NO. OF SAMPLES - 3

SAMPLE POINT - ROSEWELLS30H
SAMPLE TYPE - BI

POWELLAND PINCHBECK MARSH - HIGH BLACK
ESTUARINE WATER

GRID REF - TF 27000 26500

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN		
TURBIDITY	0058 FTU	7 6>	9.81	>17.6871	>3.4734	>19.0	(MAX VALUE)	9.81	>19.0	<19.0
PH	0061 PH UNITS	9 0	8.0437	0.2134	7.72	8.39	7.72	8.39	8.02	
COND 25 C	0077 USIE/CM	9 0	8759.75	10410.5493	32520.0	(MAX VALUE)	1390.0	32520.0	6200.0	
SALIN PPT	9094 G/L	4 2<	2.73	3.23	>2.6377	5.76	(MAX VALUE)	<1.0	5.76	<1.15
SS 105 C	0135 MG/L	7 0	102.5	95.683	313.0	(MAX VALUE)	43.0	313.0	71.0	
TEMP C	0076 CEL	9 0	10.1	6.6573	21.0	(MAX VALUE)	2.0	21.0	6.5	
D.O.	0082 MG/L O	8 0	9.2437	1.2879	7.6	(5%ILE)	7.6	10.65	9.625	
D.O. (%SAT)	0081 % SATN	8 0	84.2375	13.494	65.8	(5%ILE)	65.8	110.0	84.3	
BOD+ATU T	0085 MG/L O	8 4X	5.302	10.935	>3.5239	>25.0	(MAX VALUE)	1.6	>25.0	>9.9
AMMONIA N	0111 MG/L N	8 0	3.7254	5.6559	14.834	(MAX VALUE)	0.1387	14.834	0.9116	
TON AS N	0116 MG/L N	8 0	3.0194	2.3981	8.098	(MAX VALUE)	0.414	3.093	1.4336	
P CRTM P	0160 MG/L P	8 2X	0.8062	0.953	>1.3355	4.026	(MAX VALUE)	<0.021	4.026	0.339
CHLORIDE	0172 MG/L CL	8 0	2707.755	3765.693	11412.0	(MAX VALUE)	125.79	11412.0	1649.05	

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 31/12/90

NO. OF SAMPLES - 5

SAMPLE POINT - ROSBIMELLSBOM
SAMPLE TYPE - EI

R.WELLAND PINCHBECK MARSH - HIGH SLACK
ESTUARINE WATER

GRID REF - TF 27000 26600

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TURBIDITY	0068 FTU	4 1>	20.3333+ >20.0	>8.2865	32.0 (MAX VALUE)	14.0	32.0	>17.0
PH	0061 PH UNITS	5 0	8.298	0.4058	7.64 - 8.72	7.64	8.72	8.42
COND 25 C	0077 USIE/CM	5 0	6995.2	10580.2927	25790.0 (MAX VALUE)	981.0	25790.0	2540.0
SS 105 C	0135 MG/L	1 0	94.0	0.0	94.0 (ONLY VALUE)	94.0	94.0	94.0
TEMP C	0076 CEL	5 0	14.24	5.1002	21.2 (MAX VALUE)	9.5	21.2	12.0
D.O	0082 MG/L C	5 0	11.14	2.3017	7.3 (5%ILE)	7.3	13.2	11.4
D.O. (%SAT)	0081 % SATN	5 0	108.62	19.195	90.9 (5%ILE)	60.9	139.8	101.0
BOD+ATU T	0085 MG/L C	4 0	4.8325	2.9443	8.69 (MAX VALUE)	1.8	8.68	4.425
AMMONIA N	0111 MG/L N	5 0	0.4141	0.3545	0.98 (MAX VALUE)	0.1207	0.98	0.24
TOR AS N	0116 MG/L N	5 1<	4.7213- 4.8213	>4.3925	10.7 (MAX VALUE)	<0.5	10.7	5.12
P ORTH P	0180 MG/L P	5 0	0.2839	0.0201	0.3777 (MAX VALUE)	0.152	0.3777	0.27
CHLORIDE	0172 MG/L CL	5 0	2290.02	3941.6426	5295.9 (MAX VALUE)	98.2	5295.9	583.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

REPORT COVERS PERIOD(S) FROM 01/01/89 TO 31/12/89

NO. OF SAMPLES - 1

SAMPLE POINT - R05BIWELL580H
SAMPLE TYPE - BI

R.WELLAND PINCHBECK MARSH-HIGH SLACK
ESTUARINE WATER

GRID REF - TF 27000 26600

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TEMP C	0076 CEL	1 0	5.4	0.0	5.4 (ONLY VALUE)	5.4	5.4	5.4
PH	0061 PP UNITS	1 0	7.99	0.0	7.99 (ONLY VALUE)	7.99	7.99	7.99
BOD+ATU T	0085 MG/L O	1 0	2.55	0.0	2.55 (ONLY VALUE)	2.55	2.55	2.55
D.O.(%SAT)	0081 % SATN	1 0	76.0	0.0	76.0 (ONLY VALUE)	76.0	76.0	76.0
D.O	0082 MG/L O	1 0	9.6	0.0	9.6 (ONLY VALUE)	9.6	9.6	9.6
AMMONIA N	0111 MG/L N	1 0	1.1	0.0	1.1 (ONLY VALUE)	1.1	1.1	1.1
T.O.N AS N	0116	1 0	8.92	0.0	8.92 (ONLY VALUE)	8.92	8.92	8.92
CHLORIDE	0172 MG/L CL	1 0	378.0	0.0	378.0 (ONLY VALUE)	378.0	378.0	378.0
TURBIDITY	0068 FTU	1 0	22.0	0.0	22.0 (ONLY VALUE)	22.0	22.0	22.0
COND 25 C	0077 USIE/CM	1 0	1881.0	0.0	1881.0 (ONLY VALUE)	1881.0	1881.0	1881.0
P ORTH P	0180 MG/L P	1 0	0.46	0.0	0.46 (ONLY VALUE)	0.46	0.46	0.46

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

A P P E N D I X 5

**B) WATER QUALITY IN THE UPPER WELAND ESTUARY AT
 PINCHBECK MARSH (LOW WATER)**

Statistical summaries for 1989, 1990, 1991 and 1992

REPORT COVERS PERIOD(S) FROM 01/01/91 TO 31/12/91

NO. OF SAMPLES - 3

SAMPLE POINT - ROSBIWELL50L
SAMPLE TYPE - 31

R.WELLAND PINCHBECK MARSH - LOW SLACK
ESTUARINE WATER

GRID REF - TF 27000 266

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TURBIDITY	0068 FTU	7 7>	0.0 >19.0	>0.0	>19.0 (MAX VALUE)	>19.0	>19.0	<19.0
PH	0041 PH UNITS	6 0	8.0337	0.2049	7.79 - 8.48	7.79	8.48	7.90
COND 25 C	0077 USIE/CM	8 0	1609.775	1030.2775	3983.0 (MAX VALUE)	584.2	3982.0	1167.5
SALIN PPT	9094 G/L	3 3<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
SS 105 C	0135 MG/L	8 0	205.4375	145.3515	455.0 (MAX VALUE)	34.0	455.0	194.0
TEMP C	0078 CEL	8 0	11.25	7.7503	22.7 (MAX VALUE)	2.5	22.7	9.0
D.O	0082 MG/L O	8 0	9.6625	0.9512	8.5 (5%ILE)	8.5	11.1	9.57
D.O. (SAT)	0081 % SATN	8 0	88.1125	14.2972	68.3 (5%ILE)	68.6	114.0	84.4
BOD 20 C	0085 MG/L O	8 0	2.8275	4.5789	17.98 (MAX VALUE)	3.36	17.98	8.95
AMMONIA N	0111 MG/L N	8 0	1.9304	1.4901	4.494 (MAX VALUE)	0.385	4.494	1.55
TOTAL N	0116 MG/L N	8 1<	6.0273- 6.0523	>5.3666	16.594 (MAX VALUE)	<0.2	16.594	5.37
P-ORTH P	0160 MG/L P	8 0	0.6322	0.2838	0.8494 (MAX VALUE)	0.054	0.8494	0.73
CHLORIDE	0172 MG/L CL	8 0	270.8568	283.7125	927.61 (MAX VALUE)	76.965	927.61	159.21

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 31/12/90

NO. OF SAMPLES - 7

SAMPLE POINT - R05BIWELL590L
SAMPLE TYPE - EI

R. WELAND FINCHBECK MARSH - LOW SLACK
ESTUARINE WATER

GRID REF - TF 27000 26500

DETERMIND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN		
TURBIDITY	0068 FTU	7 1>	27.1416	>25.9785	>13.793	47.0	(MAX VALUE)	11.66	47.0	<19.0
PH	0061 PH UNITS	7 0	8.1614	0.2697	7.73	-	8.55	7.73	8.55	8.22
COND 25 C	0077 USIE/CM	7 0	2463.9143	3666.3056	10770.0	(MAX VALUE)	869.4	10770.0	1150.0	
TEMP C	0076 CEL	7 0	14.5571	6.0942	24.0	(MAX VALUE)	8.9	24.0	12.0	
D.O.	0082 MG/L O	7 0	9.8735	1.1372	8.15	(5%ILE)	8.15	11.1	10.6	
D.O. (XSAT)	0031 X SATN	7 0	96.4428	10.0193	79.8	(5%ILE)	79.8	111.1	95.0	
BOD+ATU T	0085 MG/L O	7 0	7.0285	4.5084	13.95	(MAX VALUE)	1.9	13.95	4.1	
AMMONIA N	0111 MG/L N	7 1>	1.1849	>1.3012	>0.6599	2.26	(MAX VALUE)	0.5	2.26	1.06
TOTAL N	0116 MG/L N	7 1<	5.2717	5.3433	>4.3931	10.5	(MAX VALUE)	<0.5	10.5	4.32
ORTHOPH P	0180 MG/L P	7 0	0.7403	0.3669	1.5	(MAX VALUE)	0.32	1.5	0.6501	
CHLORIDE	0172 MG/L CL	7 0	595.1828	1290.6542	3521.3	(MAX VALUE)	64.7	3521.3	99.53	

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

NRA (ANGLIAN REGION) LIMS - REPORTING PACKAGE

DATE 27/01/93

STATISTICAL SUMMARY (AW712) for location R.WELLAND PINCHBECK MARSH - LOW SLACK (R05BIWELL580L)
01/01/92 TO 30/08/92

DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	7	8.4385	0.1331	8.2900	8.6700	
00683	TURBIDITY	FTU	7	38.000	0.0000	38.000	38.000	
00761	TEMP C	CEL	7	14.700	5.5931	7.2000	21.600	
00772	COND 25 C	USIE/CM	7	1120.1	226.76	972.20	1659.0	
00812	D.O.(XSAT)	% SATN	6	115.00	13.952	100.00	140.00	
00822	D.O	MG/L O	6	11.766	2.4376	8.8000	16.500	
00851	BOD+ATU T	MG/L O	7	11.627	8.1588	4.9800	30.680	
01113	AMMONIA N	MG/L N	7	1.9722	0.6355	1.2940	3.0670	
01165	T.O.N AS N	MG/L N	7	6.1834	3.0341	2.1920	10.749	
01351	SS 105 C	MG/L	7	137.78	128.52	26.500	436.00	
01724	CHLORIDE	MG/L CL	6	146.58	66.087	84.249	273.98	
01728	CHLORIDE	CL MG/L	1	109.17	0.0000	109.17	109.17	
01806	P SOL.REACT	MG/L P	7	0.6127	0.1390	0.4340	0.8460	
74201	SALN FIELD	G/L	2	0.0500	0.0500	0.0000	0.1000	
90942	SALIN PPT	G/L	3	0.5000	0.0000	0.5000	0.5000	

END OF EXTRACT FOR SAMPLE POINT

A P P E N D I X 6

**A) WATER QUALITY IN THE MIDDLE WELLAND ESTUARY AT
 FOSDYKE BRIDGE (HIGH WATER)**

Statistical summaries for 1989, 1990, 1991 and 1992

REPORT COVERS PERIOD(S) FROM 01/01/89 TO 31/12/89

NO. OF SAMPLES - 1

SAMPLE POINT - R05BIWELL580L
SAMPLE TYPE - B1

R.WELLAND PINCHBECK MARSH-LOW SLACK
ESTUARINE WATER

GRID REF - TF 27000 26600

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TEMP C	0076 CEL	1 0	5.9	0.0	5.9 (ONLY VALUE)	5.9	5.9	5.9
PH	0061 PH UNITS	1 0	7.97	0.0	7.97 (ONLY VALUE)	7.97	7.97	7.97
BOD+ATU T	0085 MG/L O	1 0	7.1	0.0	7.1 (ONLY VALUE)	7.1	7.1	7.1
D.O.(%SAT)	0081 % SATN	1 0	75.0	0.0	75.0 (ONLY VALUE)	75.0	75.0	75.0
D.O	0082 MG/L O	1 0	9.3	0.0	9.3 (ONLY VALUE)	9.3	9.3	9.3
AMMONIA N	0111 MG/L N	1 0	2.8	0.0	2.8 (ONLY VALUE)	2.8	2.8	2.8
T.O.N AS N	0116	1 0	10.6	0.0	10.6 (ONLY VALUE)	10.6	10.6	10.6
CHLORIDE	0172 MG/L CL	1 0	112.0	0.0	112.0 (ONLY VALUE)	112.0	112.0	112.0
TURBIDITY	0068 FTU	1 0	50.0	0.0	50.0 (ONLY VALUE)	50.0	50.0	50.0
COND 25 C	0077 USIE/CM	1 0	1024.0	0.0	1024.0 (ONLY VALUE)	1024.0	1024.0	1024.0
P ORTH P	0180 MG/L P	1 0	1.45	0.0	1.45 (ONLY VALUE)	1.45	1.45	1.45

REPORT COVERS PERIOD(S) FROM 01/01/91 TO 31/12/91

NO. OF SAMPLES - 8

SAMPLE POINT - ROSSWELL 40CH
SAMPLE TYPE - BI

P. WELLAND FOSSDYKE BRIDGE - HIGH SLACK
ESTUARINE WATER

GRID REF - TF 31800 32300

DETERMIND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN		
TURBIDITY	0062 FTU	7 6>	11.43 *	>17.9185	>2.8611	>19.0	(MAX VALUE)	11.43	>19.0	<19.0
PH	0051 PH UNITS	8 0	7.93	0.1369	7.85	-	8.27	7.85	8.27	7.855
COND 25 C	0077 USIE/CM	8 0	38113.25	14641.701	48470.0	(MAX VALUE)	5336.0	48470.0	43345.0	
SALIN PPT	9094 G/L	4 0	23.3825	6.962	33.73	(MAX VALUE)	18.99	33.73	30.425	
SS 105 C	0125 MG/L	7 0	103.6428	103.1301	323.0	(MAX VALUE)	41.5	323.0	55.5	
TEMP C	0076 CEL	8 0	9.9125	6.5632	20.0	(MAX VALUE)	2.5	20.0	8.0	
D.O	0082 MG/L O	8 0	7.575	1.5094	5.4	(5%ILE)	5.4	9.95	7.675	
D.O. (XSAT)	0031 % SATN	8 0	74.4125	12.1061	59.3	(5%ILE)	59.3	95.2	76.7	
BOD+ATJ T	0035 MG/L O	3 1<	1.545 -	1.77	>2.5095	2.5	(MAX VALUE)	<1.0	2.5	1.515
AMMONIA N	0111 MG/L N	8 0	0.3969	0.3116	0.938	(MAX VALUE)	0.1576	0.935	0.2347	
TOTAL AS N	0116 MG/L N	8 3<	2.4567-	2.5817	>4.7654	14.07	(MAX VALUE)	<0.2	14.07	<0.454
P ORTH P	0120 MG/L P	8 2<	0.0943-	0.123	>0.0535	0.2	(MAX VALUE)	<0.03	0.2	0.1228
CHLORIDE	0172 MG/L CL	3 0	14052.7375	5652.3963	18669.0	(MAX VALUE)	1616.9	18669.0	15391.5	

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 31/12/90

NO. OF SAMPLES - 6

SAMPLE POINT - R05BIWELL600H
SAMPLE TYPE - 91

R.WELLAND FCSSEYKE BRIDGE - HIGH SLACK
ESTUARINE WATER

GRID REF - TF 31800 32300

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
URBIDITY	0068 FTU	6 0	28.0966	29.3927	83.0 (MAX VALUE)	6.75	83.0	14.5
H	0061 PH UNITS	6 0	8.0016	0.2116	7.6 - 8.19	7.6	8.19	8.065
OND 25 C	0077 USIE/CM	6 0	28055.0	14083.1131	47460.0 (MAX VALUE)	4620.0	47460.0	27900.0
EXP C	0076 CEL	6 0	13.0166	5.5897	21.9 (MAX VALUE)	7.8	21.8	10.5
.C	0082 MG/L C	5 0	8.62	1.6798	6.6 (5%ILE)	6.6	10.4	9.2
.O.(XSAT)	0081 % SATN	5 0	92.28	5.649	86.0 (5%ILE)	86.0	98.8	91.2
OD+ATU T	0085 MG/L G	6 0	2.6633	0.8979	4.02 (MAX VALUE)	1.67	4.02	2.325
AKRONIA N	0111 MG/L A	6 0	0.3281	0.2822	0.849 (MAX VALUE)	0.12	0.849	0.235
ON AS N	0116 MG/L N	5 4<	1.346 - 1.746	>2.7861	6.73 (MAX VALUE)	<0.5	6.73	<0.5
ORTH P	0180 MG/L P	6 1<	0.1651- C.1984	>C.056	0.27 (MAX VALUE)	0.1157	C.27	<0.205
HLORIDE	0172 MG/L CL	6 1>	9701.0 * >8417.5	>6416.8214	18765.0 (MAX VALUE)	1190.0	18765.0	8975.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

SAMPLE POINT - R05BIWELL600H
SAMPLE TYPE - BI

R.WELLAND FOSSDOYKE BR-HIGH SLACK
ESTUARINE WATER

GRID REF - TF 31800 32300

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD.DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TEMP C	0076 CEL	2 0	5.3	0.7071	5.8 (MAX VALUE)	4.8	5.8	5.3
PH	0061 PH UNITS	2 0	7.87	0.0282	7.85 - 7.89	7.85	7.89	7.87
BOD+ATU T	0085 MG/L O	2 0	1.7	0.4242	2.0 (MAX VALUE)	1.4	2.0	1.7
D.O. (%SAT)	0081 % SATN	2 0	60.05	15.4856	49.1 (5%ILE)	49.1	71.0	60.05
D.O.	0082 MG/L O	2 0	7.6	1.8384	6.3 (5%ILE)	6.3	8.9	7.6
AMMONIA N	0111 MG/L N	1 0	0.53	0.0	0.53 (ONLY VALUE)	0.53	0.53	0.53
T.O.N AS N	0116	2 2<	0.0	>0.0	<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
CHLORIDE	0172 MG/L CL	1 0	14737.0	0.0	14737.0 (ONLY VALUE)	14737.0	14737.0	14737.0
TURBIDITY	0068 FTU	2 0	18.5	12.0208	27.0 (MAX VALUE)	10.0	27.0	18.5
COND 25 C	0077 USIE/CM	2 0	29250.0	7424.6206	34500.0 (MAX VALUE)	24000.0	34500.0	29250.0
P ORTH P	0180 MG/L P	2 0	0.235	0.0919	0.3 (MAX VALUE)	0.17	0.3	0.235

STATISTICAL SUMMARY (AW712) for location R.WELLAND FOSSDYKE BRIDGE - HIGH SLACK (R05BIWELL600H)
01/01/92 TO 30/08/92

DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	7	8.0085	0.0931	7.8900	8.1600	
00683	TURBIDITY	FTU	7	38.000	0.0000	38.000	38.000	
00761	TEMP C	CEL	7	12.185	4.5536	7.5000	20.500	
00772	COND 25 C	USIE/CM	7	35493.	15070.	3661.0	47870.	
00812	D.O.(%SAT)	% SATN	7	86.414	10.012	68.000	98.600	
00822	D.O	MG/L O	7	8.3928	1.7981	6.5000	11.700	
00851	BOD+ATU T	MG/L O	7	2.4314	1.3395	1.1700	5.4200	
01112	AMMONIA N	MG/L AS N	6	0.1170	0.0837	0.0260	0.2840	
01113	AMMONIA N	MG/L N	1	0.6460	0.0000	0.6460	0.6460	
01165	T.O.N AS N	MG/L N	2	4.0305	2.8615	1.1690	6.8920	
01166	TON AS N	MG/L AS N	5	1.9938	1.9042	0.1990	4.6690	
01352	SS 105 C	MG/L	7	74.214	42.273	22.000	147.00	
01724	CHLORIDE	MG/L CL	1	804.03	0.0000	804.03	804.03	
01728	CHLORIDE	CL MG/L	6	15105.	3441.5	8041.7	17746.	
01806	P SOL.REACT	MG/L P	2	0.1567	0.1462	0.0105	0.3030	
01808	P SOL.REACT	MG/L AS P	5	0.0975	0.0865	0.0215	0.2650	
74201	SALN FIELD	G/L	2	17.500	9.5000	8.0000	27.000	
74361	NO RESULTS		1	1.0000	0.0000	1.0000	1.0000	
90942	SALIN PPT	G/L	4	25.252	6.7475	14.500	31.070	

END OF EXTRACT FOR SAMPLE POINT

A P P E N D I X 6

**B) WATER QUALITY IN THE MIDDLE WELLAND ESTUARY AT
 FOSDYKE BRIDGE (LOW WATER)**

Statistical summaries for 1989, 1990, 1991 and 1992

REPORT COVERS PERIOD(S) FROM 01/01/91 TO 31/12/91

NO. OF SAMPLES - 2

SAMPLE POINT - ROSSWELL600L
SAMPLE TYPE - BI

R.WELLAND FOSSDYKE BRIDGE - LOW SLACK
ESTUARINE WATER

GRID REF - TF 31900 32300

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TURBIDITY	0068 FTU	7 >	13.75 * >13.25	>1.9343	>19.0 (MAX VALUE)	13.75	>19.0	<19.0
P _H	0061 PH UNITS	8 0	8.125	0.2566	7.9 - 8.54	7.9	8.54	8.035
COND 25 C	0077 USIE/CM	8 0	6017.125	4720.0816	13860.0 (MAX VALUE)	1060.0	13860.0	4454.5
SALIN PPT	0094 G/L	3 1<	2.2733- 2.6066	>2.7052	5.73 (MAX VALUE)	<1.0	5.73	1.09
SS 105 C	0135 MG/L	7 0	401.5242	296.3072	846.67 (MAX VALUE)	102.0	846.67	300.0
TEMP C	0076 CEL	8 0	10.5	7.1272	22.2 (MAX VALUE)	3.0	22.2	3.25
D.O.	0032 PG/L O	8 0	10.3375	1.764	7.7 (5%ILE)	7.7	12.75	10.675
D.O. (%SAT)	0081 % SATN	8 0	95.9375	30.4672	70.8 (5%ILE)	70.8	151.0	82.65
BOD+ATU T	0035 HG/L O	8 1>	8.0971* >8.9712	>7.8194	26.08 (MAX VALUE)	2.8	26.08	5.625
AMMONIA N	0111 MG/L N	8 0	0.6445	0.3595	1.279 (MAX VALUE)	0.2285	1.279	0.635
TON AS N	0116 MG/L N	8 0	4.5972	4.7898	14.458 (MAX VALUE)	0.24	14.458	3.591
P ORTH P	0180 MG/L P	8 0	0.2333	0.1707	0.474 (MAX VALUE)	0.0163	0.474	0.2061
CHLORIDE	0172 MG/L CL	8 0	1665.91	1579.2093	4511.3 (MAX VALUE)	125.66	4511.3	1059.45

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 31/12/90

NO. OF SAMPLES - 7

SAMPLE POINT - ROSBIWELL600L
SAMPLE TYPE - EI

R.WELLAND FOSSDYKE BRIDGE - LOW SLACK
ESTUARINE WATER

GRID REF - TF 31000 32300

DETERMIND	UNITS	NO. OF VALUES	PEAK VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TURBIDITY	0068 FTU	6 0	29.7166	23.8574	76.0 (MAX VALUE)	10.29	76.0	22.51
PH	0061 PH UNITS	7 0	8.2523	0.3357	7.74 - 8.62	7.74	8.62	8.29
COND 25 C	0077 USIE/CM	7 0	10858.1428	15864.4497	42220.0 (MAX VALUE)	1414.0	42220.0	1680.0
SS 105 C	0135 MG/L	1 0	91.0	0.0	91.0 (ONLY VALUE)	91.0	91.0	91.0
TEMP C	0076 CEL	7 0	13.7	5.3131	20.5 (MAX VALUE)	8.5	20.5	11.5
D.O.	0032 MG/L O	7 0	10.3428	2.0799	7.6 (5%ILE)	7.6	13.7	10.6
D.O. (%SAT)	0081 X SATN	7 0	100.7285	21.212	71.9 (5%ILE)	71.9	142.1	99.0
BOD+ATU T	0085 MG/L C	6 0	3.7483	1.8822	6.25 (MAX VALUE)	1.76	6.25	3.29
AMMONIA N	0111 MG/L N	7 0	0.3274	0.2652	0.75 (MAX VALUE)	0.07	0.75	0.29
TOTAL AS N	0116 MG/L N	7 3<	4.2985-	4.5128	>3.8392 (MAX VALUE)	<0.5	8.57	5.9
ORTH P	0180 MG/L P	7 0	0.2639	0.0619	0.33 (MAX VALUE)	0.1813	0.33	0.27
CHLORIDE	0172 MG/L CL	7 0	1705.7571	2854.991	8037.3 (MAX VALUE)	152.0	8037.3	310.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

REPORT COVERS PERIOD(S) FROM 01/01/89 TO 31/12/89

NO. OF SAMPLES - 1

SAMPLE POINT - ROSSBIWELL600L
SAMPLE TYPE - BI

R.WELLAND FOSSDYKE BR-LOW SLACK
ESTUARINE WATER

GRID REF - TF 31800 32300

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TEMP C	0076 CEL	1 0	6.3	0.0	6.3 (ONLY VALUE)	6.3	6.3	6.3
PH	0061 PH UNITS	1 0	8.01	0.0	8.01 (ONLY VALUE)	8.01	8.01	8.01
BOD+ATU T	0085 MG/L O	1 0	2.9	0.0	2.9 (ONLY VALUE)	2.9	2.9	2.9
D.O.(%SAT)	0081 % SATN	1 0	75.0	0.0	75.0 (ONLY VALUE)	75.0	75.0	75.0
D.O	0082 MG/L O	1 0	9.2	0.0	9.2 (ONLY VALUE)	9.2	9.2	9.2
AMMONIA N	0111 MG/L N	1 0	1.15	0.0	1.15 (ONLY VALUE)	1.15	1.15	1.15
T.O.N AS N	0116	1 0	9.22	0.0	9.22 (ONLY VALUE)	9.22	9.22	9.22
CHLORIDE	0172 MG/L CL	1 0	289.0	0.0	289.0 (ONLY VALUE)	289.0	289.0	289.0
TURBIDITY	0068 FTU	1 0	20.0	0.0	20.0 (ONLY VALUE)	20.0	20.0	20.0
CDNO 25 C	0077 USIE/CM	1 0	1677.0	0.0	1677.0 (ONLY VALUE)	1677.0	1677.0	1677.0
P ORTH P	0180 MG/L P	1 0	0.5	0.0	0.5 (ONLY VALUE)	0.5	0.5	0.5

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

STATISTICAL SUMMARY (AW712) for location R.WELLAND FOSSDYKE BRIDGE - LOW SLACK (R05BIWELL600L)
01/01/92 TO 30/08/92

DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	7	8.3042	0.2729	7.9600	8.7500	
00683	TURBIDITY	FTU	7	38.000	0.0000	38.000	38.000	
00761	TEMP C	CEL	7	14.042	5.0327	7.1000	20.000	
00772	COND 25 C	USIE/CM	7	5103.4	3604.7	1211.0	10490.	
00812	D.O.(ZSAT)	Z SATN	7	96.114	25.037	59.200	144.00	
00822	D.O	MG/L O	7	9.7500	2.1707	6.2000	12.700	
00851	BOD+ATU T	MG/L O	7	9.3271	5.5699	3.5700	22.140	
01113	AMMONIA N	MG/L N	7	0.6385	0.5128	0.1160	1.3760	
01165	T.O.N AS N	MG/L N	7	5.2554	3.5927	0.3110	11.210	
01351	SS 105 C	MG/L	3	420.00	237.72	84.000	598.00	
01352	SS 105 C	MG/L	4	423.87	215.12	282.00	796.00	
01724	CHLORIDE	MG/L CL	3	1209.8	1211.0	299.84	2921.4	
01728	CHLORIDE	CL MG/L	4	1481.3	1050.4	154.07	2643.0	
01806	P SOL.REACT	MG/L P	7	0.2364	0.1577	0.0480	0.5130	
74201	SALN FIELD	G/L	2	1.7500	1.2500	0.5000	3.0000	
90942	SALIN PPT	G/L	3	2.2163	1.8404	0.5000	4.7690	

END OF EXTRACT FOR SAMPLE POINT



A P P E N D I X 6

**C) WATER QUALITY IN THE MIDDLE WELLAND ESTUARY AT
 POSDYKE BRIDGE (ROUTINE SAMPLING)**

Statistical summaries for 1989, 1990, 1991 and 1992

REPORT COVERS PERIOD(S) FROM 01/01/89 TO 31/12/89

NO. OF SAMPLES - 13

SAMPLE POINT - R05BIWELL600F
SAMPLE TYPE - BI

RIVER WELLAND FOSDYKE BRIDGE
ESTUARINE WATER

GRID REF - TF 31800 32300

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TEMP C	0076 CEL	13 0	12.6384	6.4563	24.8506(LOG NORMAL)	4.3	23.7	12.6
PH	0061 PH UNITS	13 0	8.2407	0.3201	8.8715- 7.61	7.94	8.92	8.11
BOD+ATU T	0085 MG/L O	13 0	6.2923	4.6284	14.9517(LOG NORMAL)	1.05	15.6	3.7
D.O.(%SAT)	0081 % SATN	12 0	90.4833	24.7485	56.1079(5%ILE)	61.0	150.0	82.2
D.O	0082 MG/L O	13 0	9.6861	1.6757	7.1956(5%ILE)	6.45	13.4	9.5
AMMONIA N	0111 MG/L N	13 1<	0.6286- 0.6316	>0.6238	1.744 (LOG NORMAL)	<0.04	2.09	0.33
T.O.N AS N	0116	13 2<	2.9907- 3.0676	>2.4261	7.527 (LOG NORMAL)	<0.5	8.24	2.19
CHLORIDE	0172 MG/L CL	12 0	1384.6666	904.2708	3090.124 (LOG NORMAL)	111.0	2900.0	1072.0
TURBIDITY	0068 FTU	13 0	51.0384	36.6131	119.6839(LOG NORMAL)	17.0	150.0	32.0
CGND 25 C	0077 USIE/CM	9 0	9538.0	14560.7675	47700.0 (MAX VALUE)	902.0	47700.0	4660.0
P ORTH P	0180 MG/L P	12 0	0.5145	0.3821	1.2288(LOG NORMAL)	0.179	1.55	0.44
MN 0.45UM	0401 MG/L MN	4 0	0.0462	0.0267	0.073 (MAX VALUE)	0.019	0.073	0.0465
FE 0.45UM	0419 MG/L FE	4 4<	0.0 - 0.05	>0.0	<0.05 (MAX VALUE)	<0.05	<0.05	<0.05
CO 0.45UM	9264 UG/L CD	4 4<	0.0 - 0.1375	>0.075	<0.25 (MAX VALUE)	<0.1	<0.25	<0.1
HG TOTAL	9269 UG/L HG	1 1<	0.05	0.0	<0.05 (ONLY VALUE)	<0.05	<0.05	<0.05
CR 0.45UM	9888 UG/L CR	4 1<	3.275 - 3.65	>1.9433	6.2 (MAX VALUE)	<1.5	6.2	3.45
COP 0.45UM	9890 UG/L CU	4 1<	5.75 - 5.9675	>4.2502	11.0 (MAX VALUE)	<0.87	11.0	6.0
PB 0.45UM	9892 UG/L PB	4 3<	0.275 - 1.4	>0.7348	<2.5 (MAX VALUE)	<1.0	<2.5	<1.05
NI 0.45UM	9894 UG/L NI	4 1<	3.25 - 4.0	>1.3391	5.3 (MAX VALUE)	2.7	5.3	<4.0
ZN 0.45UM	9896 UG/L ZN	4 0	13.175	4.2413	17.0 (MAX VALUE)	7.7	17.0	14.0

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 31/12/90

NO. OF SAMPLES - 11

SAMPLE POINT - ROSSWELL60GF
SAMPLE TYPE - EIR.WELLAND FOSSDYKE BRIDGE
ESTUARINE WATER

GRID REF - TF 31800 32300

DETERMINAND	UNITS	NO. OF VALUES	PEAK VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TURBIDITY	0068 FTU	11 5>	36.43 * >28.5072	>22.1401	78.2925 (LOG NORMAL)	5.95	77.0	<19.0
PH	0061 PH UNITS	11 0	7.93	0.3442	8.6081- 7.2518	7.52	8.74	7.9
COND 25 C	0077 US/E/CM	10 0	23600.6999	16411.6347	54441.8344 (LOG NORMAL)	1687.0	46240.0	19285.0
SALIN PPT	9094 G/L	9 0	19.0111	11.5074	33.22 (MAX VALUE)	0.57	33.22	23.1
SS 105 C	0135 MG/L	4 0	94.125	89.43	223.0 (MAX VALUE)	24.0	223.0	64.1
TEMP C	0076 CEL	10 0	13.85	5.0636	23.2936 (LOG NORMAL)	6.8	20.7	13.1
D.O.	0082 MG/L O	11 0	6.8954	1.3553	2.9046 (5%ILE)	3.2	11.7	6.85
D.O. (%SAT)	0081 % SATN	10 0	65.57	27.3428	31.3223 (5%ILE)	33.4	102.9	62.15
BOD+ATU T	0085 MG/L O	11 0	4.189	2.3084	8.5587 (LOG NORMAL)	1.4	8.95	3.5
AMMONIA N	0111 MG/L N	11 0	0.5538	0.3966	1.2975 (LOG NORMAL)	0.05	1.273	0.46
TOR AS N	0116 MG/L N	11 7<	1.9015- 2.2197	>2.8172	6.5847 (LOG NORMAL)	<0.5	7.83	<0.5
P ORTH P	0180 MG/L P	11 2<	0.2252- 0.2361	>0.1198	0.4573 (LOG NORMAL)	<0.06	0.3971	0.23
CHLORIDE	0172 MG/L CL	11 0	8722.3364	6964.6754	21638.7291 (LOG NORMAL)	242.0	18390.0	6474.0
FE 0.45UM	0419 MG/L FE	1 1<	0.04	0.0	<0.04 (ONLY VALUE)	<0.04	<0.04	<0.04
CD 0.45UM	9264 US/L CD	9 6<	0.16 - 0.2933	>0.1691	0.63 (MAX VALUE)	<0.1	0.63	<0.25
MS TOTAL	9269 US/L MS	2 1<	0.04 - 0.065	>0.0212	0.08 (MAX VALUE)	<0.05	0.08	<0.065
MG 0.45UM	9268 US/L MG	2 1<	0.04 - 0.065	>0.0212	0.08 (MAX VALUE)	<0.05	0.08	<0.065
HEX ALPHA	9203 MG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
HEX GAMMA	9204 MG/L	1 0	18.6	0.0	18.6 (ONLY VALUE)	18.6	18.6	18.6
DIELDRIN	9205 MG/L	1 0	1.1	0.0	1.1 (ONLY VALUE)	1.1	1.1	1.1
ENDRIN	9208 MG/L	1 1<	0.5	0.0	<0.5 (ONLY VALUE)	<0.5	<0.5	<0.5
ALDRIN	9209 MG/L	1 1<	0.5	0.0	<0.5 (ONLY VALUE)	<0.5	<0.5	<0.5
DDT (PP')	9206 MG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
DDE (PP')	9207 MG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
HEPTACHLOR	9210 MG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
ISODRIN	7071 MG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
TECHAZINE	7366 MG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
CHLORTHAL	7368 MG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
FLUOROCYF.	7369 MG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
PCB - C29	7370 G/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
PCB - C52	7371 G/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
PCB - C101	7372 G/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
PCB - C118	7373 G/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
PCB - C138	7374 G/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
PCB - C153	7375 G/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
PCB - C180	7376 G/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0

*** STATISTICS FOR THIS SAMPLE POINT CONTINUE ON NEXT PAGE ***

*** STATISTICS CONTINUED FROM PREVIOUS PAGE ***

SAMPLE POINT - R05BIWELL60CF
SAMPLE TYPE - EI

R. WELAND FCSBOYKE BRIDGE
ESTUARINE WATER

GRID REF - TF 31ECO 32300

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
MA 0.45UM	7382 UG/L	2 0	38.5	37.4766	55.0 (MAX VALUE)	12.0	65.0	38.5
ENDOSUL-A	7406 NG/L	1 1<	0.5	0.0	<0.5 (ONLY VALUE)	<0.5	<0.5	<0.5
ENDOSUL-B	7407 NG/L	1 1<	0.5	0.0	<0.5 (ONLY VALUE)	<0.5	<0.5	<0.5
HC39	7412 G/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
135C6H3CL3	7418 G/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
HEPT EPOX	9223 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
DOT (OP')	9225 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
TDE (PP')	9226 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
C6CL6	9741 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
TDE OP'	9827 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
CR 0.45UM	9888 UG/L CR	9 3<	2.9899- 3.4288	>2.0787	7.2 (MAX VALUE)	<1.5	7.2	3.6
CCP 0.45UM	9890 UG/L CU	9 2<	2.96 - 3.1377	>2.3334	6.5 (MAX VALUE)	<0.5	6.5	2.5
PB 0.45UM	9892 UG/L PB	9 9<	0.0 - 1.7166	>0.9013	<2.5 (MAX VALUE)	<0.25	<2.5	<2.5
NI 0.45UM	9894 UG/L NI	9 5<	2.4333- 4.1	>1.9137	8.7 (MAX VALUE)	<3.0	8.7	<3.0
ZN 0.45UM	9895 UG/L ZN	9 3<	5.5888- 6.9222	>3.7804	16.0 (MAX VALUE)	<4.0	16.0	6.7
HCH DELTA	9945 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
DDE OP'	9946 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

SAMPLE POINT - ROSBELL600F
SAMPLE TYPE - SI

9. WELAND FOSDYKE BRIDGE
ESTUARINE WATER

GRID REF - 1F 31300 32300

DETERMEND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD. DEV.	SEMILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TURBIDITY	0068 FTU	12 10	12.685	>2.4711	17.1331(LOG NORMAL)	12.39	>19.0	>19.0
PA	0061 PH UNITS	12 0	2.0875	0.2633	3.5141-	7.74	8.55	8.015
COND 25 C	0077 USIE/CM	12 0	14531.3333	14576.3117	40334.8545(LOG NORMAL)	13332.0	45320.0	13267.0
SALIN PPT	0074 G/L	12 0	9.5225	11.1334	22.5513(LOG NORMAL)	0.53	32.98	5.46
SS 105 C	0135 MG/L	17 0	102.33	120.7763	222.7391(LOG NORMAL)	26.3	354.0	63.75
TEMP C	0076 CEL	12 0	10.4333	5.7111	21.2435(LOG NORMAL)	2.5	23.2	8.3
D.O.	0032 MG/L O	11 0	7.759	2.1317	6.5643(SMILE)	7.4	14.5	9.55
D.O. (XSAT)	0031 X SAT	11 0	75.3363	24.2524	57.8362(SMILE)	70.3	150.0	84.1
BOD+ATU T	0035 MG/L O	12 1	4.7215	>2.7055	11.6132(LOG NORMAL)	1.33	14.53	3.233
ARMONIA M	0111 MG/L N	12 0	0.5362	0.3353	1.2213(LOG NORMAL)	0.373	1.166	0.5325
TGN AS N	0116 MG/L N	12 0	3.7095	3.3075	7.7627(LOG NORMAL)	0.38	9.489	2.4935
P ORTH P	0130 MG/L P	12 0	0.2372	0.2565	0.7592(LOG NORMAL)	0.067	1.366	0.211
CHLORIDE	0172 MG/L CL	12 0	5270.7532	6139.4754	15302.4509(LOG NORMAL)	153.4	12254.0	3021.6
CO 0.4504	7264 US/L CO	11 7	0.4136	>1.1233	1.7772(LOG NORMAL)	<0.1	3.9	0.2
HS TOTAL	7269 US/L HS	6 1	3.1205	>0.1192	0.235 (MAX VALUE)	<0.05	0.235	0.0755
HCH ALPHA	7203 NG/L	2 2	0.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
HCH GAMMA	7204 NG/L	2 1	6.25	>2.4252	12.5 (MAX VALUE)	<0.5	12.5	<0.5
DIELDRIN	7205 NG/L	2 2	0.0	>0.0212	<0.73 (MAX VALUE)	<0.7	<0.73	<0.715
ENDRIN	7208 NG/L	2 2	0.0	>0.0	<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
ALDRIN	7209 NG/L	2 2	0.0	>0.0	<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
DDE (PP')	7206 NG/L	2 2	0.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
DDE (PP')	7207 NG/L	2 2	0.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
HEPTACHLOR	7210 NG/L	2 2	0.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
ISODRIN	7071 NG/L	2 2	0.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
PROPACINE	7360 US/L	1 1	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
CARBETARI.	7361 US/L	1 1	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
TECNIAZINE	7366 NG/L	2 2	0.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
TRIFLURAL.	7367 NG/L	2 1	8.75	>11.6572	17.3 (MAX VALUE)	<1.0	17.5	<9.25
CHLORTHAL.	7368 NG/L	1 1	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
FLUOROXYP.	7369 NG/L	2 2	0.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
PCB - C28	7370 NG/L	2 2	0.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
PCB - C52	7371 NG/L	2 2	0.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
PCB - C101	7372 NG/L	2 2	0.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
PCB - C113	7373 NG/L	2 2	0.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
PCB - C136	7374 NG/L	2 2	0.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
PCB - C153	7375 NG/L	2 2	0.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0

SAMPLE POINT - ROSSIELL600F
SAMPLE TYPE - 31

R. WELLAND FOSSDYKE BRIDGE
ESTUARINE WATER

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.
PCB - C180	7376 NG/L	1 1<	5.0	0.0
ENDOSUL-A	7415 NG/L	2 2<	0.0 - 0.5	>0.0
ENDOSUL-B	7437 NG/L	2 2<	0.0 - 0.5	>0.0
MCBD	7412 NG/L	2 2<	0.0 - 1.0	>0.0
135C6H3CL3	7412 NG/L	2 2<	0.0 - 5.0	>0.0
123C6H3CL3	7436 NG/L	2 2<	0.0 - 1.0	>0.0
124C6H3CL3	7437 NG/L	2 2<	0.0 - 5.0	>0.0
HEPT EPOX	9223 NG/L	2 2<	0.0 - 1.0	>0.0
DDT (OP')	9225 NG/L	2 2<	0.0 - 1.0	>0.0
TDE (PP')	9226 NG/L	2 2<	0.0 - 1.0	>0.0
C6CL6	9741 NG/L	2 2<	0.0 - 1.0	>0.0
HCH BETA	9819 NG/L	1 1<	1.0	0.0
TDE OP'	9820 NG/L	2 2<	0.0 - 1.0	>0.0
CR 0.45UM	9838 UG/L CR	11 1<	6.5918 - 6.7181	>2.0633
COP 0.45UM	9890 UG/L CU	11 2<	6.8727 - 7.3963	>2.2947
PB 0.45UM	9892 UG/L PB	11 9<	6.5545 - 8.1454	>2.3333
NI 0.45UM	9894 UG/L NI	11 3<	3.9272 - 4.9272	>2.9275
ZN 0.45UM	9896 UG/L ZN	11 1<	18.6727 - 19.0363	>25.4223
HCH DELTA	9945 NG/L	2 2<	0.0 - 1.0	>0.0
DDE OP'	9946 NG/L	2 2<	0.0 - 1.0	>0.0

PREVIOUS PAGE ***

GRID REF - TF 31900 32300

95MILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
20.2226 (LOG NORMAL)	<1.5	29.0	3.5
21.295 (LOG NORMAL)	<0.75	29.0	4.4
25.0715 (LOG NORMAL)	<1.0	71.0	1.1
10.0324 (LOG NORMAL)	2.4	13.0	4.3
55.9256 (LOG NORMAL)	2.5	71.0	9.3
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0

NT ON NEXT PAGE ***

NRA (ANGLIAN REGION) LIMS - REPORTING PACKAGE

STATISTICAL SUMMARY (AW712) for location R.WELLAND FOSSDYKE BRIDGE
01/01/92 TO 30/08/92

(R05BIWELL600F)

DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	8	8.0725	0.2713	7.7700	8.7100	
00683	TURBIDITY	FTU	8	30.515	13.018	5.6800	38.000	
00761	TEMP C	CEL	8	11.437	6.4511	0.0000	17.900	
00772	COND 25 C	USIE/CM	8	13319.	13148.	1324.0	36850.	
00812	D.O. (ZSAT)	% SATN	8	80.850	6.3235	69.800	90.300	
00822	D.O	MG/L O	8	8.7375	1.9963	6.3000	12.550	
00851	BOD+ATU T	MG/L O	8	6.9100	10.753	1.0000	35.080	
01112	AMMONIA N	MG/L AS N	4	0.3272	0.1077	0.2100	0.4450	
01113	AMMONIA N	MG/L N	4	0.5875	0.3051	0.1960	1.0490	
01165	T.O.N AS N	MG/L N	4	6.7820	3.7909	1.8030	12.334	
01166	TDN AS N	MG/L AS N	4	1.0322	0.7067	0.2860	2.0520	
01352	SS 105 C	MG/L	6	167.50	112.12	47.500	326.00	
01724	CHLORIDE	MG/L CL	3	637.62	417.27	165.99	1180.6	
01728	CHLORIDE	CL MG/L	5	6786.7	4874.9	813.92	13411.	
01806	P SOL.REACT	MG/L P	4	0.2340	0.1527	0.0420	0.4630	
01808	P SOL.REACT	MG/L AS P	4	0.1157	0.0544	0.0460	0.1970	
70711	ISODRIN	MG/L	1	0.5000	0.0000	0.5000	0.5000	
73441	DDT TOT 41	MG/L	0					
73661	TECNAZINE	MG/L	1	0.5000	0.0000	0.5000	0.5000	
73671	TRIFLURAL.	MG/L	1	0.5000	0.0000	0.5000	0.5000	
73681	CHLORTHAL.	MG/L	1	0.5000	0.0000	0.5000	0.5000	
73691	FLUOROXYPYR	MG/L	1	1.5000	0.0000	1.5000	1.5000	
73701	PCB - C28	MG/L	1	2.5000	0.0000	2.5000	2.5000	
73711	PCB - C52	MG/L	1	2.5000	0.0000	2.5000	2.5000	
73721	PCB - C101	MG/L	1	2.5000	0.0000	2.5000	2.5000	
73731	PCB - C118	MG/L	1	2.5000	0.0000	2.5000	2.5000	
73741	PCB - C138	MG/L	1	2.5000	0.0000	2.5000	2.5000	
73751	PCB - C153	MG/L	1	2.5000	0.0000	2.5000	2.5000	
73761	PCB - C180	MG/L	1	2.5000	0.0000	2.5000	2.5000	
74061	ENDOSULF-A	MG/L	1	0.2500	0.0000	0.2500	0.2500	
74071	ENDOSULF-B	MG/L	1	0.2500	0.0000	0.2500	0.2500	
74121	HCB	MG/L	1	0.5000	0.0000	0.5000	0.5000	
74181	135C6H3CL3	MG/L	1	2.5000	0.0000	2.5000	2.5000	
74661	123C6H3CL3	MG/L	1	0.5000	0.0000	0.5000	0.5000	
74871	124C6H3CL3	MG/L	1	2.5000	0.0000	2.5000	2.5000	
90942	SALIN PPT	G/L	8	8.1197	8.7883	0.5000	24.227	
92031	HCH ALPHA	MG/L	1	0.5000	0.0000	0.5000	0.5000	
92041	HCH GAMMA	MG/L	1	6.6000	0.0000	6.6000	6.6000	
92051	DIELDRIN	MG/L	1	0.3500	0.0000	0.3500	0.3500	
92061	DDT (PP')	MG/L	1	0.8000	0.0000	0.8000	0.8000	
92071	DDE (PP')	MG/L	1	0.5000	0.0000	0.5000	0.5000	
92081	ENDRIN	MG/L	1	0.2500	0.0000	0.2500	0.2500	
92091	ALDRIN	MG/L	1	0.2500	0.0000	0.2500	0.2500	
92101	HEPTACHLOR	MG/L	1	0.5000	0.0000	0.5000	0.5000	
92231	HEFT EPOX	MG/L	1	0.5000	0.0000	0.5000	0.5000	
92241	ENDOSULFAN	MG/L	0					
92251	DDT (OP')	MG/L	1	0.5000	0.0000	0.5000	0.5000	
92261	DDE (FP')	MG/L	1	0.5000	0.0000	0.5000	0.5000	
92645	CD 0.45UM	US/L CD	5	0.1950	0.1435	0.0500	0.4500	
92655	CD TOTAL	US/L CD	1	0.0500	0.0000	0.0500	0.0500	
92692	H6 TOTAL	US/L H6	2	0.0475	0.0225	0.0250	0.0700	
97411	C6CL6	MG/L	1	0.5000	0.0000	0.5000	0.5000	
98191	HCH BETA	MG/L	1	0.2500	0.0000	0.2500	0.2500	
98201	DDE (OP')	MG/L	1	0.5000	0.0000	0.5000	0.5000	

98874	CR TOTAL	UG/L CR	1	10.000	0.0000	10.000	10.000
98884	CR 0.45UM	UG/L CR	5	1.7200	0.7652	1.0000	3.2000
98894	CU TOTAL	UG/L CU	1	6.6000	0.0000	6.6000	6.6000
98904	CU 0.45UM	UG/L CU	5	7.1200	5.8001	1.8000	16.000
98914	PB TOTAL	UG/L PB	1	18.000	0.0000	18.000	18.000
98925	PB 0.45UM	UG/L PB	5	0.9300	0.5653	0.5000	1.9000
98934	NI TOTAL	UG/L NI	1	37.000	0.0000	37.000	37.000
98944	NI 0.45UM	UG/L NI	5	3.0200	1.5118	0.5000	5.1000
98954	ZN TOTAL	UG/L ZN	1	26.000	0.0000	26.000	26.000
98964	ZN 0.45UM	UG/L ZN	5	8.3600	3.7887	3.4000	14.000
99451	HCH DELTA	NG/L	1	0.5000	0.0000	0.5000	0.5000
99461	DDE (DP')	NG/L	1	0.5000	0.0000	0.5000	0.5000

END OF EXTRACT FOR SAMPLE POINT

A P P E N D I X 7

**A) WATER QUALITY IN THE LOWER WELAND ESTUARY AT
 MOULTON MARSH (HIGH WATER)**

Statistical summaries for 1989, 1990, 1991 and 1992

REPORT COVERS PERIOD(S) FROM 01/01/89 TO 31/12/89

NO. OF SAMPLES - 2

SAMPLE POINT - R05BIWELL620H
SAMPLE TYPE - BI

R.WELLAND MOULTON MARSH-HIGH SLACK
ESTUARINE WATER

GRID REF - TF 34400 33800

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TEMP C	0076 CEL	2 0	5.6	1.1313	6.4 (MAX VALUE)	4.8	6.4	5.6
PH	0061 PH UNITS	2 0	8.205	0.4879	7.86 - 8.55	7.86	8.55	8.205
BOD+ATU T	0085 MG/L O	2 0	1.675	0.4596	2.0 (MAX VALUE)	1.35	2.0	1.675
D.O.(%SAT)	0081 % SATN	2 0	66.25	10.9601	58.5 (5%ILE)	58.5	74.0	66.25
D.O.	0082 MG/L O	2 0	8.3	1.1313	7.5 (5%ILE)	7.5	9.1	8.3
AMMONIA N	0111 MG/L N	1 0	0.34	0.0	0.34 (ONLY VALUE)	0.34	0.34	0.34
T.O.N AS N	0116	2 2<	0.0 - 0.5	>0.0	<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
CHLORIDE	0172 MG/L CL	1 0	16660.0	0.0	16660.0 (ONLY VALUE)	16660.0	16660.0	16660.0
TURBIDITY	0068 FTU	2 0	22.5	17.6776	35.0 (MAX VALUE)	10.0	35.0	22.5
COND 25 C	0077 USIE/CM	2 0	37500.0	1131.3708	38300.0 (MAX VALUE)	36700.0	38300.0	37500.0
P ORTH P	0180 MG/L P	2 0	0.185	0.0919	0.25 (MAX VALUE)	0.12	0.25	0.185

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 31/12/90

NO. OF SAMPLES - 6

SAMPLE POINT - MCSPIWELL620H
SAMPLE TYPE - B1

P.WELLAND MCULTON MARSH - HIGH SLACK
ESTUARINE WATER

GRID REF - TF 344C0 33800

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TURBIDITY	0068 FTU	6 0	23.4933	25.0835	74.0 (MAX VALUE)	8.81	74.0	13.075
PH	0061 PH UNITS	6 0	8.0066	0.2527	7.58 - 8.3	7.58	8.3	7.995
COND 25 C	0077 US/E/CM	6 0	37520.0	8130.8877	48290.0 (MAX VALUE)	24100.0	48290.0	37050.0
TEMP C	0076 CEL	6 0	12.25	4.9802	20.2 (MAX VALUE)	8.9	20.2	10.5
D.O.	0082 MG/L C	6 0	8.7833	0.9847	7.8 (5%ILE)	7.8	10.2	8.9
D.O. (2SAT)	0081 % SATN	6 0	87.3166	10.5478	73.7 (5%ILE)	73.7	106.0	86.4
BOD+ATU T	0085 MG/L O	6 1<	1.9183	>0.4566	<3.0 (MAX VALUE)	1.94	<3.0	2.325
AMMONIA N	0111 MG/L N	6 0	0.2751	0.3317	0.931 (MAX VALUE)	0.05	0.931	0.17
TOTAL AS N	0116 MG/L N	6 6<	0.0	>0.0	<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
ORTHOPH P	0180 MG/L P	6 1<	0.1199	>0.0369	<0.2 (MAX VALUE)	0.1073	<0.2	0.15
CHLORIDE	0172 MG/L CL	6 0	14059.2333	3593.7351	18977.0 (MAX VALUE)	8250.0	18977.0	13650.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

REPORT COVERS PERIOD(S) FROM 01/01/91 TO 31/12/91

NO. OF SAMPLES - 3

SAMPLE POINT - ROSSIELLEZCH
SAMPLE TYPE - BI

P. WELLAND MOULTON MARSH - HIGH SLACK
ESTUARINE WATER

GRID REF - TF 34400 33200

DETERMIND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TURBIDITY	0069 FTU	7 6>	9.04 - >17.5771	>3.7643	>19.0 (MAX VALUE)	9.04	>19.0	<19.0
PH	0061 PH UNITS	8 C	7.94	0.0824	7.33 - 8.35	7.33	8.05	7.925
COND 23 C	0077 USIE/CM	8 D	37739.875	13001.8273	47830.0 (MAX VALUE)	1509.0	49330.0	46695.0
SALIN PPT	0094 g/L	3 D	31.3456	2.799	34.22 (MAX VALUE)	23.76	34.22	32.56
SS 103 C	0135 MG/L	7 D	116.0714	125.7515	393.0 (MAX VALUE)	36.0	393.0	73.5
TEMP C	0076 CEL	8 D	10.1875	6.5298	20.0 (MAX VALUE)	2.5	20.0	8.0
D.O	0032 MG/L O	8 D	8.3937	1.5419	6.55 (5%ILE)	6.55	10.65	9.0
D.O. (XSAT)	0081 % SATN	8 D	87.2375	9.0477	76.9 (5%ILE)	76.9	101.0	86.95
ROD+ATU T	0085 MG/L O	8 3<	1.7642- 2.9162	>2.2467	>7.93 (MAX VALUE)	<1.0	>7.99	<2.365
AMMONIA N	0111 MG/L N	8 1<	0.6608- 0.6633	>1.3091	3.841 (MAX VALUE)	<0.02	3.841	0.1197
TON AS N	0115 MG/L N	3 4<	2.462 - 2.412	>4.1229	11.806 (MAX VALUE)	<0.2	11.306	<0.5735
P ORTH P	0180 MG/L P	8 1<	0.1945- 0.1942	>0.3122	0.965 (MAX VALUE)	<0.03	0.965	0.09
CHLORIDE	0172 MG/L CL	8 D	14118.3427	7222.5611	19034.0 (MAX VALUE)	199.39	19034.0	17316.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

NRA (ANGLIAN REGION) LIMS - REPORTING PACKAGE

STATISTICAL SUMMARY (AW712) for location R.WELLAND MOULTON MARSH - HIGH SLACK
01/01/92 TO 30/08/92

(R05BIWELL620H)

DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	7	8.0042	0.0983	7.9100	8.1900	
00683	TURBIDITY	FTU	7	38.000	0.0000	38.000	38.000	
00761	TEMP C	CEL	7	12.214	4.8096	7.5000	21.000	
00772	COND 25 C	USIE/CM	7	42658.	9159.6	21080.	49260.	
00812	D.O. (ZSAT)	% SATN	7	88.142	11.142	72.000	107.00	
00822	D.O	MG/L O	7	8.2428	1.4763	5.8000	10.100	
00851	BOD+ATU T	MG/L O	7	2.3071	1.3512	1.0600	5.0800	
01112	AMMONIA N	MG/L AS N	7	0.1021	0.1121	0.0260	0.3570	
01165	T.O.N AS N	MG/L N	1	0.8770	0.0000	0.8770	0.8770	
01166	TON AS N	MG/L AS N	6	1.8340	1.7856	0.0650	5.2030	
01352	SS 105 C	MG/L	7	55.500	19.222	30.000	84.000	
01728	CHLORIDE	CL MG/L	7	16058.	3757.9	7241.6	18762.	
01806	P SOL.REACT	MG/L P	1	0.0105	0.0000	0.0105	0.0105	
01808	P SOL.REACT	MG/L AS P	6	0.0980	0.0730	0.0215	0.2390	
74201	SALN FIELD	G/L	2	24.500	5.5000	19.000	30.000	
90942	SALIN PPT	G/L	4	31.027	2.3570	27.600	33.890	

END OF EXTRACT FOR SAMPLE POINT

A P P E N D I X 7

**B) WATER QUALITY IN THE LOWER WELAND ESTUARY AT
 MOULTON MARSH (LOW WATER)**

Statistical summaries for 1989, 1990, 1991 and 1992

REPORT COVERS PERIOD(S) FROM 01/01/89 TO 31/12/89

NO. OF SAMPLES - 1

SAMPLE POINT - R05BIWELL620L
SAMPLE TYPE - BI

R.WELLAND MOULTON MARSH-LOW SLACK
ESTUARINE WATER

GRID REF - TF 34400 33800

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TEMP C	0076 CEL	1 0	6.8	0.0	6.8 (ONLY VALUE)	6.8	6.8	6.8
PH	0061 PH UNITS	1 0	7.91	0.0	7.91 (ONLY VALUE)	7.91	7.91	7.91
BOD+ATU T	0085 MG/L D	1 0	4.65	0.0	4.65 (ONLY VALUE)	4.65	4.65	4.65
D.O.(%SAT)	0081 % SATN	1 0	84.0	0.0	84.0 (ONLY VALUE)	84.0	84.0	84.0
D.O	0082 MG/L O	1 0	10.2	0.0	10.2 (ONLY VALUE)	10.2	10.2	10.2
AMMONIA N	0111 MG/L N	1 0	1.03	0.0	1.03 (ONLY VALUE)	1.03	1.03	1.03
T.O.N AS N	0116	1 0	8.36	0.0	8.36 (ONLY VALUE)	8.36	8.36	8.36
CHLORIDE	0172 MG/L CL	1 0	626.0	0.0	626.0 (ONLY VALUE)	626.0	626.0	626.0
TURBIDITY	0068 FTU	1 0	19.0	0.0	19.0 (ONLY VALUE)	19.0	19.0	19.0
COND 25 C	0077 USIE/CM	1 0	2630.0	0.0	2630.0 (ONLY VALUE)	2630.0	2630.0	2630.0
P ORTH P	0180 MG/L P	1 0	0.49	0.0	0.49 (ONLY VALUE)	0.49	0.49	0.49

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 31/12/90

NO. OF SAMPLES - 7

SAMPLE POINT - R05BIWELL62GL
SAMPLE TYPE - EI

R.WELLAND MCULTON MARSH - LCM SLACK
ESTUARINE WATER

GRID REF - TF 34400 33800

DETERMIND	UNITS	NO. OF VALUES	PEAK VALLE(OR RANGE)	STD.DEV.	95XILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TURBIDITY	0069 FTU	6 0	27.5166	30.7634	90.0 (MAX VALUE)	9.44	90.0	16.13
PH	0061 PH UNITS	7 0	8.2071	0.4072	7.6 - 8.76	7.6	8.76	8.2
COND 25 C	0077 US/E/CM	7 0	13239.8571	17292.4763	44390.0 (MAX VALUE)	1803.0	44390.0	3220.0
SS 105 C	0135 MG/L	1 0	81.0	0.0	81.0 (ONLY VALUE)	81.0	81.0	81.0
TEMP C	0076 CEL	7 0	13.7429	5.4524	21.0 (MAX VALUE)	8.5	21.0	11.5
D.O	0082 MG/L O	7 0	9.9142	2.9333	4.1 (5XILE)	4.1	13.4	10.6
D.O.(SAT)	0091 % SAT	7 0	94.6571	25.2151	52.0 (5XILE)	52.0	135.0	94.0
BOD+ATU T	0085 MG/L O	6 0	3.6266	1.9098	5.85 (MAX VALUE)	1.45	5.85	3.58
AMMONIA N	0111 MG/L N	7 1<	0.3235- 0.3292	>0.2065	0.585 (MAX VALUE)	<0.04	0.585	0.29
TOTAL N	0116 MG/L N	7 3<	4.18 - 4.3962	>3.801	9.59 (MAX VALUE)	<0.5	9.59	6.28
P ORTH P	0180 MG/L P	7 0	0.2217	0.0704	0.35 (MAX VALUE)	0.1176	0.35	0.225
CHLORIDE	0172 MG/L CL	7 0	4226.8571	7077.5105	18100.0 (MAX VALUE)	291.0	18100.0	795.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

REPORT COVERS PERIOD(S) FROM 0

SAMPLE POINT - ROSEBELL620L
SAMPLE TYPE - BI

R. WELLAND MOULTON MARSH -
ESTUARINE WATER

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.
TURBIDITY	CD05 FTU	7 7>	0.0 - >19.0	>0.0
PH	CD01 PH UNITS	5 0	8.0537	0.2412
COND 25 C	CD37 USIE/CM	5 0	9035.625	7365.8007
SALIN PPT	909.0 g/L	3 0	4.8466	5.0546
SS 125 C	0135 g/L	8 0	261.9375	252.5601
TEMP C	0075 CEL	8 0	10.1375	7.0152
D.O	0082 mg/L O	8 0	10.0625	2.1513
D.O. (SAT)	0081 % SATN	8 0	93.4875	31.7275
BOD+ATU T	0085 mg/L O	8 0	5.6662	3.2422
AMMONIA N	0111 mg/L N	5 0	0.4542	0.287
TOTAL AS N	0116 mg/L N	5 0	4.0601	4.555
P ORTH P	0160 mg/L P	8 1<	0.2056-	0.2052
CHLORIDE	0172 mg/L CL	8 0	2763.44	2562.975

*** STATISTICS FOR ANOTHER SAMPLE =

1/01/91 TO 31/12/91

NO. OF SAMPLES - 2

LOW SLACK

GRID REF - TF 34400 33800

SSXILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
>19.0 (MAX VALUE)	>19.0	>19.0	<19.0
7.78 - 8.46	7.78	8.46	7.98
19820.0 (MAX VALUE)	1310.0	19820.0	5236.5
10.62 (MAX VALUE)	1.76	10.68	2.1
782.0 (MAX VALUE)	35.5	782.0	197.5
21.2 (MAX VALUE)	2.5	21.2	8.25
6.1 (SSXILE)	6.1	13.0	10.5
57.9 (SSXILE)	57.9	151.0	81.3
11.61 (MAX VALUE)	2.72	11.61	4.34
0.9477 (MAX VALUE)	0.0542	0.9477	0.42
13.881 (MAX VALUE)	0.291	13.881	2.5035
0.382 (MAX VALUE)	<0.021	0.382	0.21
5743.1 (MAX VALUE)	202.02	5743.1	1371.0

POINT ON NEXT PAGE ***

NRA (ANGLIAN REGION) LIMS - REPORTING PACKAGE

STATISTICAL SUMMARY (AW712) for location R.WELLAND MOULTON MARSH - LOW SLACK (R05BIWELL620L)
01/01/92 TO 30/08/92

DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	7	8.0814	0.1294	7.9400	8.2700	
00683	TURBIDITY	FTU	7	38.000	0.0000	38.000	38.000	
00761	TEMP C	CEL	7	13.514	5.0175	6.5000	19.500	
00772	COND 25 C	USIE/CM	7	8313.1	5035.5	2475.0	14840.	
00812	D.O.(ZSAT)	% SATN	7	88.300	9.6271	70.800	98.300	
00822	D.O	MG/L O	7	9.1071	1.5298	7.4000	11.950	
00851	BOD+ATU T	MG/L O	7	4.6942	1.7546	2.3200	7.7700	
01112	AMMONIA N	MG/L AS N	1	0.1370	0.0000	0.1370	0.1370	
01113	AMMONIA N	MG/L N	6	0.5353	0.3064	0.1380	1.0980	
01165	T.O.N AS N	MG/L N	6	5.0313	3.3284	0.2690	9.4420	
01166	TON AS N	MG/L AS N	1	2.9750	0.0000	2.9750	2.9750	
01352	SS 105 C	MG/L	7	218.64	114.28	24.000	370.00	
01724	CHLORIDE	MG/L CL	2	859.13	347.66	511.47	1206.8	
01728	CHLORIDE	CL MG/L	5	3091.5	1636.2	628.27	4662.9	
01806	P SOL.REACT	MG/L P	6	0.1913	0.1153	0.0820	0.4170	
01808	P SOL.REACT	MG/L AS P	1	0.1030	0.0000	0.1030	0.1030	
74201	SALN FIELD	G/L	2	2.5000	1.5000	1.0000	4.0000	
90942	SALIN PPT	G/L	3	3.9620	2.8063	1.1300	7.7860	

END OF EXTRACT FOR SAMPLE POINT

END OF REPORT

A P P E N D I X 8

**A) WATER QUALITY IN THE UPPER WITMAN ESTUARY AT
 BOSTON SWING BRIDGE (HIGH WATER)**

Statistical summaries for 1989, 1990, 1991 and 1992

REPORT COVERS PERIOD(S) FROM 01/01/89 TO 31/12/89

NO. OF SAMPLES - 12

SAMPLE POINT - R03BIHSBH1T
SAMPLE TYPE - BIWITHAM HAVEN SWING BRIDGE HIGH SLACK
ESTUARINE WATER

GRID REF - TF 32680 43070

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TEMP C	0076 CEL	12 0	12.5583	6.4701	24.7984(LOG NORMAL)	5.0	21.5	11.75
PH	0061 PH UNITS	12 0	8.3816	0.4502	9.2687- 7.4946	7.74	8.94	8.415
SS 105 C	0135 MG/L	3 0	21.0	7.5498	29.0 (MAX VALUE)	14.0	29.0	20.0
BOD+ATU T	0085 MG/L O	12 0	4.2833	3.4028	10.598 (LOG NORMAL)	0.85	13.05	3.75
COD	0092 MG/L O	1 0	67.0	0.0	67.0 (ONLY VALUE)	67.0	67.0	67.0
D.O.(XSAT)	0081 % SATN	11 0	94.5727	19.7754	65.8704(5%ILE)	71.3	130.0	91.0
D.O	0082 MG/L O	11 0	10.0	1.2625	8.0673(5%ILE)	8.2	11.6	10.2
AMMONIA N	0111 MG/L N	12 1<	0.2685-	0.2718	>0.23 0.693 (LOG NORMAL)	<0.04	0.69	0.24
NITRITE N	0118 MG/L N	2 0	0.0455	0.036	0.071 (MAX VALUE)	0.02	0.071	0.0455
T.O.N AS N	0116	12 6<	3.9233-	4.1733	>4.5479 11.8972(LOG NORMAL)	<0.5	13.3	<1.6
CHLORIDE	0172 MG/L CL	12 0	5374.5583	4832.5295	14176.1519(LDG NORMAL)	70.7	12850.0	4125.0
SULPHATE	0183 MG/L SO4	1 0	219.0	0.0	219.0 (ONLY VALUE)	219.0	219.0	219.0
ALK CAC03	0162 MG/L CAC03	2 0	238.5	10.6066	246.0 (MAX VALUE)	231.0	246.0	238.5
TURBIDITY	0068 FTU	9 0	13.1	9.1851	27.0 (MAX VALUE)	5.5	27.0	8.0
COLOUR FIL	0072 HAZEN	1 0	14.28	0.0	14.28 (ONLY VALUE)	14.28	14.28	14.28
COND 25 C	0077 USIE/CM	7 0	11546.0	12146.3051	29700.0 (MAX VALUE)	1025.0	29700.0	5970.0
HARD TOTAL	0158 MG/L CAC03	1 0	640.0	0.0	640.0 (ONLY VALUE)	640.0	640.0	640.0
P ORTH P	0180 MG/L P	10 0	0.4758	0.205	0.8615(LOG NORMAL)	0.269	0.79	0.46
SILICA	0182 MG/L SiO2	1 0	4.06	0.0	4.06 (ONLY VALUE)	4.06	4.06	4.06
IRON TOTAL	0421 MG/L FE	8 0	0.1912	0.1082	0.36 (MAX VALUE)	0.07	0.36	0.17
ASH 500 C	1173 MG/L	2 0	13.5	3.5355	16.0 (MAX VALUE)	11.0	16.0	13.5
MN TOTAL	7403 UG/L MN	8 0	307.25	375.5094	1200.0 (MAX VALUE)	39.0	1200.0	185.0
HCH GAMMA	9204 NG/L	2 0	38.5	41.7193	68.0 (MAX VALUE)	9.0	68.0	38.5
DIELDIN	9205 NG/L	2 2<	0.0 -	8.0	>0.0 <8.0 (MAX VALUE)	<8.0	<8.0	<8.0
DDT (PP')	9206 NG/L	2 2<	0.0 -	40.0	>0.0 <40.0 (MAX VALUE)	<40.0	<40.0	<40.0
ENDRIN	9208 NG/L	2 2<	0.0 -	20.0	>0.0 <20.0 (MAX VALUE)	<20.0	<20.0	<20.0
ALDRIN	9209 NG/L	2 2<	0.0 -	4.0	>0.0 <4.0 (MAX VALUE)	<4.0	<4.0	<4.0
AS TOTAL	9261 UG/L AS	4 0	5.5625	1.9189	7.75 (MAX VALUE)	3.5	7.75	5.5
CD TOTAL	9265 UG/L CD	8 7<	0.02 -	0.1637	>0.0742 <0.25 (MAX VALUE)	<0.1	<0.25	<0.13
HG TOTAL	9269 UG/L HG	9 4<	0.1355-	0.1577	>0.1771 0.6 (MAX VALUE)	<0.05	0.6	0.09
CR TOT UG	9887 UG/L CR	8 1<	7.1875-	7.375	>3.828 14.0 (MAX VALUE)	<1.5	14.0	7.6
CU TOT UG	9889 UG/L CU	8 2<	19.875 -	20.125	>15.9054 45.0 (MAX VALUE)	<1.0	45.0	19.5
PB TOT UG	9891 UG/L PB	8 4<	1.4125-	2.1	>1.0155 3.8 (MAX VALUE)	<1.0	3.8	<2.4
NI TOT UG	9893 UG/L NI	8 1<	7.775 -	8.15	>6.9586 24.0 (MAX VALUE)	2.2	24.0	6.2
ZN TOT UG	9895 UG/L ZN	8 0	20.35	16.2289	58.0 (MAX VALUE)	5.8	58.0	17.0

REPORT COVERS PERIOD(S) FROM 01

SAMPLE POINT - 903EINSE-1T
SAMPLE TYPE - EI

WITHIN PAVEN S.ING BRICKS
ESTUARINE WATER

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.
TURBIDITY	0068 FTU	12 2>	10.936 4	>12.28
PL	0061 PH UNITS	12 0	8.1291	0.4853
COND 25 C	0077 USIE/CM	12 0	20246.0	14491.8677
SALIN PPT	0094 G/L	10 0	15.4674	9.3445
SS 105 C	0135 MG/L	2 0	42.5	4.9497
TEMP C	0076 CEL	12 0	12.6553	5.2963
D.O	0082 MG/L C	11 0	9.2363	2.1323
D.O. (XSAT)	0081 % SAT	11 0	91.5633	12.6575
BOD+ATU T	0085 MG/L C	12 1<	3.6241-	3.7908
AMMONIA N	0111 MG/L N	11 1<	0.3771-	0.3807
TOM AS N	0116 MG/L N	12 8<	4.3259-	4.6591
P ORTH P	0180 MG/L P	12 1<	0.3503-	0.3667
CHLORIDE	0172 MG/L CL	12 0	5177.8	5482.9426
IRON TOTAL	0421 MG/L FE	3 0	0.5246	0.1623
FE 0.45UM	0419 MG/L FE	3 3<	0.0513-	0.0318
CO TOTAL	9265 UG/L CO	4 2<	0.0725-	0.1225
CO 0.45UM	9264 UG/L CO	6 6<	0.0	0.25
HG TOTAL	9259 UG/L HG	3 2<	0.04 -	0.0733
HG 0.45UM	9268 UG/L HG	1 2<	0.0741-	0.0866
AS TOTAL	9261 UG/L AS	3 0	3.296	3.2503
AS 0.45 UM	9260 UG/L AS	6 0	2.3433	0.7136
MN TOTAL	7403 UG/L MN	4 0	117.0	98.7724
CR TOT UG	9887 UG/L CR	4 0	2.5	1.1372
CR 0.45UM	9889 UG/L CR	6 3<	1.5166-	2.2666
CU TOT UG	9889 UG/L CU	4 0	33.675	33.4206
COP 0.45UM	9890 UG/L CU	6 0	4.03	3.5053
PB TOT UG	9891 UG/L PB	4 0	1.65	0.6557
PB 0.45UM	9892 UG/L PB	6 6<	0.0 -	2.5
NI TOT UG	9893 UG/L NI	4 0	7.6	4.5401
NI 0.45UM	9894 UG/L NI	6 5<	0.85 -	3.25
ZN TOT UG	9895 UG/L ZN	4 0	11.55	9.3134
ZN 0.45UM	9896 UG/L ZN	6 1<	12.3333-	13.0

1/51/90 TO 31/12/90

NO. OF SAMPLES - 12

HIGH SLACK

GRID REF - TQ 32420 43370

PSYCLE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
17.0222 (LOG NORMAL)	5.85	>17.0	12.855
9.0862- 7.172	7.06	8.9	8.115
47421.4005 (LOG NORMAL)	1162.0	41040.0	22505.0
32.7071 (LOG NORMAL)	1.14	23.0	16.1
46.0 (MAX VALUE)	39.0	46.0	42.5
22.409 (LOG NORMAL)	3.8	21.5	12.0
6.1623 (PSYCLE)	6.9	13.7	8.1
63.1398 (PSYCLE)	67.2	127.0	89.6
9.1014 (LOG NORMAL)	0.6	8.3	3.47
0.3337 (LOG NORMAL)	<0.34	0.9148	0.34
14.7451 (LOG NORMAL)	<0.5	18.9	<0.5
0.6579 (LOG NORMAL)	<0.2	0.72	0.3025
17398.1249 (LOG NORMAL)	109.0	15460.0	7816.8
0.757 (MAX VALUE)	0.106	0.757	0.711
0.22 (MAX VALUE)	0.032	0.22	<0.05
0.15 (MAX VALUE)	<0.1	0.15	<0.12
<0.25 (MAX VALUE)	<0.25	<0.25	<0.25
0.12 (MAX VALUE)	<0.05	0.12	<0.05
0.17 (MAX VALUE)	<0.05	0.17	0.0915
9.0 (MAX VALUE)	1.13	9.0	2.4
3.15 (MAX VALUE)	1.23	3.15	2.55
240.0 (MAX VALUE)	12.0	240.0	105.0
4.2 (MAX VALUE)	1.3	4.2	2.0
4.4 (MAX VALUE)	<1.5	4.4	<1.5
36.0 (MAX VALUE)	4.4	36.0	22.15
9.0 (MAX VALUE)	0.83	9.9	3.45
2.6 (MAX VALUE)	1.1	2.6	1.45
<2.5 (MAX VALUE)	<2.5	<2.5	<2.5
12.0 (MAX VALUE)	3.2	12.0	7.6
5.1 (MAX VALUE)	<3.0	5.1	<3.0
30.0 (MAX VALUE)	6.2	30.0	15.0
32.0 (MAX VALUE)	<4.0	32.0	9.05

REPORT COVERS PERIOD(S) FROM 01/01/91 TO 31/12/91

NO. OF SAMPLES - 12

SAMPLE POINT - R039INSBH1T
SAMPLE TYPE - BIWITHAM HAVEN SWING BRIDGE HIGH SLACK
ESTUARINE WATER

GRID REF - TF 32680 43070

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95XILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TURBIDITY	0068 FTU	12 8>	12.68 >16.8933	>3.6144	19.3117(LOG NORMAL)	9.79	>19.0	>19.0
PH	0061 PH UNITS	12 0	8.2516	0.3904	9.0209- 7.4824	7.8	8.87	8.205
COND 25 C	0077 USIE/CM	12 0	15626.4166	14714.1568	42187.6394(LOG NORMAL)	1823.0	42050.0	7106.5
SALIN PPT	9094 G/L	12 0	9.8376	10.2624	27.9329(LOG NORMAL)	0.61	27.1	3.9235
SS 105 C	0135 MG/L	8 0	53.8125	29.2647	104.0 (MAX VALUE)	23.5	104.0	42.0
TEMP C	0076 CEL	12 0	10.7916	5.9107	21.9799(LOG NORMAL)	2.0	20.0	9.2
D.O.	0082 MG/L O	12 0	9.1958	1.9598	6.3588(5XILE)	6.2	11.4	9.85
D.O.(XSAT)	0081 X SATN	12 0	56.1833	9.8192	71.0324(5XILE)	67.6	102.0	85.0
BOD+ATU T	0085 MG/L O	12 0	3.3366	1.375	5.9131(LOG NORMAL)	2.0	6.1	2.92
AMMONIA N	0111 MG/L N	12 0	0.3973	0.2291	0.829 (LOG NORMAL)	0.0383	0.7881	0.3995
TOH AS N	0116 MG/L N	12 1<	6.1951- 6.2301	>6.6367	17.9353(LOG NORMAL)	<0.42	21.57	4.725
P ORTH P	0120 MG/L P	12 0	0.3578	0.3017	0.9133(LOG NORMAL)	0.071	0.981	0.2435
CHLORIDE	0172 MG/L CL	12 0	5445.9125	5685.9653	15465.1339(LOG NORMAL)	337.24	15035.0	2172.15
FE 0.45UM	0619 MG/L FE	11 6<	0.0408- 0.068	>0.0305	0.1122(LOG NORMAL)	<0.05	0.132	<0.05
CO 0.45UM	9264 UG/L CO	12 10<	0.0608- 0.2025	>0.1315	0.366 (LOG NORMAL)	<0.1	0.56	<0.135
HG 0.45UM	9268 UG/L HG	12 5<	0.042 - 0.0628	>0.0204	0.0907(LOG NORMAL)	<0.05	0.121	0.0545
AS 0.45 UM	9260 UG/L AS	12 1<	2.8708- 2.9541	>1.2962	5.3544(LOG NORMAL)	<1.0	5.3	3.09
HCH ALPHA	9203 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
HCH GAMMA	9204 NG/L	1 0	6.77	0.0	6.77 (ONLY VALUE)	6.77	6.77	6.77
DIELDRIN	9205 NG/L	1 0	0.95	0.0	0.95 (ONLY VALUE)	0.95	0.95	0.95
ENDRIN	9208 NG/L	1 1<	0.5	0.0	<0.5 (ONLY VALUE)	<0.5	<0.5	<0.5
ALDRIN	9209 NG/L	1 1<	0.5	0.0	<0.5 (ONLY VALUE)	<0.5	<0.5	<0.5
DOT (PP')	9206 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
DDE (PP')	9207 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
HEPTACHLOR	9210 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
ISODRIN	7071 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
TECNAZINE	7366 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
TRIFLURAL.	7367 NG/L	1 0	4.26	0.0	4.26 (ONLY VALUE)	4.26	4.26	4.26
CHLORTHAL.	7368 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
FLUOROXYP.	7369 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
PCB - C28	7370 NG/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
PCB - C32	7371 NG/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
PCB - C101	7372 NG/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
PCB - C118	7373 NG/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
PCB - C138	7374 NG/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
PCB - C153	7375 NG/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0

*** STATISTICS FOR THIS SAMPLE POINT CONTINUE ON NEXT PAGE ***

*** STATISTICS CONTINUED FROM PREVIOUS PAGE ***

SAMPLE POINT - R03BIH59H1T
SAMPLE TYPE - BI

WITHAM HAVEN SWING BRIDGE HIGH SLACK
ESTUARINE WATER

GRID REF - TF 32680 43070

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
PCB - C180	7376 NG/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
ENDOSUL-A	7406 NG/L	1 1<	0.5	0.0	<0.5 (ONLY VALUE)	<0.5	<0.5	<0.5
ENDOSUL-B	7407 NG/L	1 1<	0.5	0.0	<0.5 (ONLY VALUE)	<0.5	<0.5	<0.5
HCB	7412 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
135C6H3CL3	7418 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
HEPT EPOX	9223 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
DDT (OP')	9225 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
TDE (PP')	9226 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
C6CL6	9741 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
TDE OP'	9820 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
CR 0.45UM	9888 UG/L CR	12 3<	3.2666- 3.5553	>2.741	8.4922 (LOG NORMAL)	<1.0	8.9	2.3
COP 0.45UM	9890 UG/L CU	12 2<	4.6666- 4.8333	>2.3657	9.2226 (LOG NORMAL)	<1.0	7.5	5.25
PB 0.45UM	9892 UG/L PB	12 11<	0.0833- 1.625	>0.7723	2.2594 (LOG NORMAL)	<1.0	<2.5	<1.0
NI 0.45UM	9894 UG/L NI	12 3<	3.1583- 3.9083	>1.7427	6.8273 (LOG NORMAL)	1.5	7.2	<3.1
ZN 0.45UM	9896 UG/L ZN	12 2<	7.7666- 8.2666	>5.0769	17.604 (LOG NORMAL)	1.8	18.0	8.9
HCH DELTA	9945 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
DDE OP'	9946 NG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

STATISTICAL SUMMARY (AW712) for location WITHAM HAVEN SWING BRIDGE HIGH SLACK
01/01/92 TO 30/08/92

(R03B1HSBH1T)

DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	8	8.3925	0.2923	7.9600	8.8900	
00683	TURBIDITY	FTU	8	30.663	12.731	7.0800	38.000	
00761	TEMP C	CEL	8	13.237	6.6646	1.7000	20.900	
00772	COND 25 C	USIE/CM	8	13046.	8334.4	2106.0	25650.	
00812	D.O.(%SAT)	% SATN	8	95.487	17.155	74.900	125.00	
00822	D.O	MG/L O	8	9.7625	1.9187	6.3000	12.100	
00851	BOD+ATU T	MG/L O	8	4.8400	2.0389	2.6600	9.7200	
01112	AMMONIA N	MG/L AS N	5	0.3866	0.1040	0.2300	0.5130	
01113	AMMONIA N	MG/L N	3	0.4293	0.2293	0.1050	0.5940	
01165	T.O.N AS N	MG/L N	3	16.674	2.6789	13.383	19.945	
01166	TON AS N	MG/L AS N	5	3.8468	3.9018	0.8000	10.828	
01352	SS 105 C	MG/L	6	56.583	23.288	35.000	107.00	
01724	CHLORIDE	MG/L CL	2	606.66	230.51	376.15	837.17	
01728	CHLORIDE	CL MG/L	6	5415.4	2515.8	1323.5	8807.4	
01806	P SOL.REACT	MG/L P	3	0.4850	0.0393	0.4300	0.5200	
01808	P SOL.REACT	MG/L AS P	5	0.3206	0.2180	0.1060	0.7260	
04196	FE 0.45UM	MG/L FE	6	0.0408	0.0310	0.0050	0.0880	
04216	IRON TOTAL	MG/L FE	2	0.1950	0.0950	0.1000	0.2900	
90942	SALIN PPT	G/L	8	7.5911	5.4799	0.5000	15.920	
92601	AS 0.45 UM	UG/L AS	6	2.6779	1.5513	1.0500	5.1750	
92611	AS TOTAL	UG/L AS	2	3.5500	0.5250	3.0250	4.0750	
92645	CD 0.45UM	UG/L CD	2	0.3650	0.2050	0.1600	0.5700	
92646	CD 0.45UM	UG/L CD	0					
92655	CD TOTAL	UG/L CD	2	0.0875	0.0375	0.0500	0.1250	
92682	H6 0.45UM	UG/L H6	6	0.0300	0.0111	0.0250	0.0550	
92692	H6 TOTAL	UG/L H6	2	0.0250	0.0000	0.0250	0.0250	
98874	CR TOTAL	UG/L CR	2	0.9250	0.1750	0.7500	1.1000	
98884	CR 0.45UM	UG/L CR	2	0.9500	0.4500	0.5000	1.4000	
98885	CR 0.45UM	UG/L CR	0					
98894	CU TOTAL	UG/L CU	2	5.5000	0.7000	4.8000	6.2000	
98904	CU 0.45UM	UG/L CU	2	5.1500	0.6500	4.5000	5.8000	
98905	CU 0.45UM	UG/L CU	0					
98914	PB TOTAL	UG/L PB	2	1.4250	0.1750	1.2500	1.6000	
98925	PB 0.45UM	UG/L PB	2	0.5000	0.0000	0.5000	0.5000	
98926	PB 0.45UM	UG/L PB	0					
98934	NI TOTAL	UG/L NI	2	5.6500	0.5500	5.1000	6.2000	
98944	NI 0.45UM	UG/L NI	2	10.750	4.2500	6.5000	15.000	
98945	NI 0.45UM	UG/L NI	0					
98954	ZN TOTAL	UG/L ZN	2	8.5500	1.4500	7.1000	10.000	
98964	ZN 0.45UM	UG/L ZN	2	10.900	2.1000	8.8000	13.000	
98965	ZN 0.45UM	UG/L ZN	0					

END OF EXTRACT FOR SAMPLE POINT

A P P E N D I X 8

**B) WATER QUALITY IN THE UPPER WITHAM ESTUARY AT
 BOSTON SWING BRIDGE (LOW WATER)**

Statistical summaries for 1989, 1990, 1991 and 1992

REPORT COVERS PERIOD(S) FROM 01/01/89 TO 31/12/89

NO. OF SAMPLES - 12

SAMPLE POINT - R03BIHSBL17
SAMPLE TYPE - BIWITHAM HAVEN SWING BRIDGE LOW SLACK
ESTUARINE WATER

GRID REF - TF 32680 43070

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN	
TEMP C	0076 CEL	12 0	12.0083	6.0621	23.4724(LOG NORMAL)	4.5	20.5	10.8	
PH	0061 PH UNITS	12 0	8.25	0.4156	9.0688- 7.4311	7.63	8.96	8.215	
SS 105 C	0135 MG/L	3 0	39.0	42.5411	88.0 (MAX VALUE)	11.5	88.0	17.5	
BOD+ATU T	0085 MG/L O	12 0	3.6583	1.785	7.0313(LOG NORMAL)	1.45	7.6	3.55	
D.O.(XSAT)	0081 X SATN	12 0	85.3916	14.0688	64.3709(5%ILE)	66.6	120.0	84.4	
D.O	0082 MG/L O	12 0	9.325	1.6723	6.8497(5%ILE)	7.0	12.0	9.15	
AMMONIA N	0111 MG/L N	12 0	0.4348	0.223	0.8567(LOG NORMAL)	0.05	0.8	0.3925	
NITRITE N	0118 MG/L N	2 0	0.054	0.048	0.088 (MAX VALUE)	0.02	0.086	0.054	
T.O.N AS N	0116	12 5<	4.5925-	4.8008	>5.1273	13.621 (LOG NORMAL)	0.39	13.7	<1.6
CHLORIDE	0172 MG/L CL	11 0	4561.9455	4528.7515	12642.6494(LOG NORMAL)	65.5	12250.0	6333.0	
SULPHATE	0183 MG/L SO4	1 0	195.0	0.0	195.0 (ONLY VALUE)	195.0	195.0	195.0	
ALK CaCO3	0162 MG/L CaCO3	2 0	230.0	2.8284	232.0 (MAX VALUE)	228.0	232.0	230.0	
TURBIDITY	0068 FTU	9 0	17.5833	11.4191	35.0 (MAX VALUE)	6.05	35.0	13.0	
COLOUR FIL	0072 HAZEN	1 0	14.0	0.0	14.0 (ONLY VALUE)	14.0	14.0	14.0	
COND 25 C	0077 USIE/CM	7 0	7720.7142	11031.6081	24600.0 (MAX VALUE)	971.0	24600.0	1256.0	
HARD TOTAL	0158 MG/L CaCO3	1 0	480.0	0.0	480.0 (ONLY VALUE)	480.0	480.0	480.0	
P ORTH P	0180 MG/L P	10 0	0.5875	0.2628	1.0827(LOG NORMAL)	0.25	0.95	0.59	
SILICA	0182 MG/L SiO2	1 0	4.32	0.0	4.32 (ONLY VALUE)	4.32	4.32	4.32	
IRON TOTAL	0421 MG/L FE	8 0	0.305	0.1625	0.6 (MAX VALUE)	0.11	0.6	0.295	
ASH 500 C	1173 MG/L	2 0	46.5	44.5477	78.0 (MAX VALUE)	15.0	78.0	46.5	
MN TOTAL	7403 UG/L MN	8 0	140.15	84.42	290.0 (MAX VALUE)	1.2	290.0	144.5	
HCH GAMMA	9204 NG/L	2 1<	16.5 -	18.5	>20.5061	33.0 (MAX VALUE)	<4.0	33.0	<18.5
DIELDRIN	9205 NG/L	2 2<	0.0 -	8.0	>0.0	<8.0 (MAX VALUE)	<8.0	<8.0	<8.0
DDT (PP')	9206 NG/L	2 2<	0.0 -	40.0	>0.0	<40.0 (MAX VALUE)	<40.0	<40.0	<40.0
ENDRIN	9208 NG/L	2 2<	0.0 -	20.0	>0.0	<20.0 (MAX VALUE)	<20.0	<20.0	<20.0
ALDRIN	9209 NG/L	2 2<	0.0 -	4.0	>0.0	<4.0 (MAX VALUE)	<4.0	<4.0	<4.0
AS TOTAL	9261 UG/L AS	4 0	5.645	1.8811	7.4 (MAX VALUE)	3.4	7.4	5.89	
CD TOTAL	9265 UG/L CD	8 8<	0.0 -	0.1937	>0.0776	<0.25 (MAX VALUE)	<0.1	<0.25	<0.25
HG TOTAL	9269 UG/L HG	10 3<	0.068 -	0.083	>0.0365	0.1445(LOG NORMAL)	<0.05	0.16	0.075
CR TOT UG	9887 UG/L CR	8 4<	3.1375-	3.8875	>2.6275	7.1 (MAX VALUE)	<1.5	7.1	<3.45
CU TOT UG	9889 UG/L CU	8 3<	9.25 -	9.485	>10.8122	29.0 (MAX VALUE)	<0.5	29.0	6.65
PB TOT UG	9891 UG/L PB	8 4<	2.075 -	3.1375	>1.8577	7.0 (MAX VALUE)	<1.0	7.0	<2.5
NI TOT UG	9893 UG/L NI	8 3<	6.5625-	7.6875	>7.0072	23.0 (MAX VALUE)	2.2	23.0	<5.1
ZN TOT UG	9895 UG/L ZN	8 2<	13.4875-	14.4875	>13.7593	44.0 (MAX VALUE)	<4.0	44.0	8.85

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 31/12/90

NO. OF SAMPLES - 12

SAMPLE POINT - RC3BIMS9L1T
SAMPLE TYPE - EIWITHAM HAVEN SWING BRIDGE LOW SLACK
ESTUARINE WATER

GRID REF - TF 32690 43070

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN	
TURBIDITY	0068 FTU	12 >>	15.8742	>17.1766	>6.6253	33.3209 (LOG NORMAL)	6.8	33.0	>19.0
PH	0061 PH UNITS	12 0	8.1741	0.3209	8.8063-7.5419	7.82	8.95	8.1	
COND 25 C	0077 USIE/CM	11 0	15225.509	10625.8713	35190.4514 (LOG NORMAL)	1114.0	29340.0	15640.0	
SALIN PPT	9094 G/L	10 0	11.5655	5.9616	23.2365 (LOG NORMAL)	0.19	15.925	14.55	
SS 105 C	0135 MG/L	5 0	376.8	361.4764	978.0 (MAX VALUE)	98.0	978.0	390.0	
TEMP C	0076 CEL	12 0	12.7016	5.2867	22.718 (LOG NORMAL)	4.5	20.7	12.75	
D.O	0082 MG/L C	12 0	8.8337	1.7197	6.3133 (SSILE)	6.55	11.3	9.35	
D.O. (SAT)	0081 X SATN	12 0	85.475	14.7396	63.9606 (SSILE)	63.1	108.0	89.65	
BOD+ATU T	0085 MG/L C	12 3<	3.2557	4.4224	>2.5264	8.6022 (LOG NORMAL)	0.399	8.7	4.57
AMMONIA N	0111 MG/L N	12 1<	0.3595	0.3018	>0.2688	0.5957 (LOG NORMAL)	<0.04	1.003	0.3509
ION AS N	0116 MG/L N	12 8<	4.0584	4.3817	>7.0525	14.5072 (LOG NORMAL)	<0.5	19.7	<0.5
P ORTH P	0180 MG/L P	12 1<	0.3401	0.3567	>0.1463	0.6234 (LOG NORMAL)	<0.2	0.63	0.3386
CHLORIDE	0172 MG/L CL	12 0	5536.0667	3921.1965	12895.1388 (LOG NORMAL)	51.9	11030.0	6499.7	
IRON TOTAL	0421 MG/L FE	4 0	0.8957	0.5264	1.24 (MAX VALUE)	0.114	1.24	1.1205	
FE 0.45UM	0419 MG/L FE	4 1<	0.2662	0.2737	>0.4083	0.89 (MAX VALUE)	<0.05	0.89	0.0875
CD TOTAL	9265 UG/L CD	4 3<	0.0475	0.16	>0.0734	<0.25 (MAX VALUE)	<0.1	<0.25	<0.145
CD 0.45UM	9264 UG/L CD	6 6<	0.0	0.2914	>0.102	<0.5 (MAX VALUE)	<0.25	<0.5	<0.25
HG TOTAL	9269 UG/L HG	5 2<	0.0546	0.0746	>0.0235	0.1 (MAX VALUE)	<0.05	0.1	0.08
HG 0.45UM	9268 UG/L HG	7 1<	0.1632	0.1704	>0.1047	0.525 (MAX VALUE)	<0.05	0.525	0.06
AS TOTAL	9261 UG/L AS	5 0	3.322	2.1072	7.15 (MAX VALUE)	1.38	7.15	2.2	
AS 0.45 UM	9260 UG/L AS	4 0	2.9783	0.6221	3.35 (MAX VALUE)	2.13	3.95	2.85	
MN TOTAL	7403 UG/L MN	4 0	166.0	129.5922	350.0 (MAX VALUE)	56.0	350.0	129.0	
CR TOT LG	9887 UG/L CR	4 0	3.65	2.2985	6.0 (MAX VALUE)	1.3	6.0	3.65	
CR 0.45UM	9888 UG/L CR	6 3<	2.7833	4.1165	>2.3156	10.0 (MAX VALUE)	<1.5	10.0	3.35
CU TOT UG	9889 UG/L CU	4 0	23.025	16.0021	42.0 (MAX VALUE)	4.1	42.0	23.0	
COP 0.45UM	9890 UG/L CU	4 0	14.8532	15.5918	40.0 (MAX VALUE)	1.9	40.0	7.9	
PB TOT UG	9891 UG/L PB	4 0	3.55	3.0005	8.0 (MAX VALUE)	1.5	8.0	2.35	
PB 0.45UM	9892 UG/L PB	6 4<	1.95	3.0333	>2.3517	5.3 (MAX VALUE)	<2.5	5.3	<2.65
NI TOT UG	9893 UG/L NI	4 0	12.625	9.8286	26.0 (MAX VALUE)	4.9	26.0	9.8	
NI 0.45UM	9894 UG/L NI	6 4<	2.3164	4.65	>2.7277	10.0 (MAX VALUE)	<3.0	10.0	<3.45
ZN TOT UG	9895 UG/L ZN	4 0	25.0	12.3827	42.0 (MAX VALUE)	14.0	42.0	22.0	
ZN 0.45UM	9896 UG/L ZN	6 0	23.95	24.0864	68.0 (MAX VALUE)	5.3	68.0	14.3	

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

REPORT COVERS PERIOD(S) FROM 01/01/91 TO 31/12/91

NO. OF SAMPLES - 12

SAMPLE POINT - R03BIMS2L1T
SAMPLE TYPE - BIWITHAM HAVEN SWING BRIDGE LOW SLACK
ESTUARINE WATER

GRID REF - TF 32680 43070

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TURBIDITY	0068 FTU	12 10>	17.965 + >18.8275	>1.1176	19.8604 (LOG NORMAL)	15.52	20.41	>19.0
PH	0061 PH UNITS	12 0	8.285	0.3859	9.0453- 7.5246	7.86	8.88	8.215
COND 25 C	0077 US/E/CM	12 0	10262.25	12755.9297	31533.6348 (LOG NORMAL)	1109.0	36760.0	5156.5
SALIN PPT	9094 G/L	12 2<	6.1445- 6.3112	>8.6697	20.0414 (LOG NORMAL)	0.17	25.29	<2.951
SS 105 C	0135 MG/L	11 0	786.3181	1061.6116	2500.2301 (LOG NORMAL)	33.0	3484.0	349.0
TEMP C	0076 CEL	12 0	10.9666	5.7893	21.9224 (LOG NORMAL)	2.0	19.6	10.0
D.O.	0082 MG/L O	12 0	9.0666	2.3785	5.7371 (5%ILE)	5.3	11.9	10.075
D.O. (2SAT)	0081 X SATN	11 0	82.2363	16.1149	58.6423 (5%ILE)	49.5	103.0	86.3
BOD+ATU T	0085 MG/L O	12 0	5.1825	3.2752	11.3733 (LOG NORMAL)	2.3	14.18	3.88
AMMONIA N	0111 MG/L N	12 1<	0.3874- 0.3891	>0.2331	0.9184 (LOG NORMAL)	<0.02	0.9703	0.3377
TOTAL AS N	0116 MG/L N	12 2<	6.7225- 6.7891	>7.1324	19.2867 (LOG NORMAL)	<0.3	21.808	4.642
P ORTH P	0180 MG/L P	12 0	0.5333	0.4599	1.3769 (LOG NORMAL)	0.1316	1.533	0.4105
CHLORIDE	0172 MG/L CL	12 0	3426.06	4836.5887	11084.2777 (LOG NORMAL)	95.11	13999.0	1481.305
IRON TOTAL	0421 MG/L FE	1 0	0.38	0.0	0.38 (ONLY VALUE)	0.38	0.38	0.38
FE 0.45UM	0419 MG/L FE	10 3<	0.2064- 0.2214	>0.248	0.6376 (LOG NORMAL)	<0.05	0.702	0.078
CD TOTAL	9265 UG/L CD	2 2<	0.0 - 0.25	>0.0	<0.25 (MAX VALUE)	<0.25	<0.25	<0.25
CD 0.45UM	9264 UG/L CD	11 10<	0.01 - 0.1872	>0.124	0.3046 (LOG NORMAL)	<0.1	<0.5	0.11
HG 0.45UM	9268 UG/L HG	12 5<	0.04 - 0.0608	>0.0212	0.0903 (LOG NORMAL)	0.037	0.115	<0.05
AS TOTAL	9261 UG/L AS	2 0	6.775	7.3892	12.0 (MAX VALUE)	1.55	12.0	6.775
AS 0.45 UM	9260 UG/L AS	10 1<	3.141 - 3.241	>1.9867	6.7604 (LOG NORMAL)	0.8	6.38	3.165
HCH ALPHA	9203 NG/L	5 5<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
HCH GAMMA	9204 NG/L	5 0	25.14	20.9831	59.5 (MAX VALUE)	5.9	59.5	17.4
DIELDRIN	9205 NG/L	5 4<	0.268 - 1.466	>0.4893	<2.0 (MAX VALUE)	<0.7	<2.0	<1.59
ENDRIN	9208 NG/L	5 5<	0.0 - 0.5	>0.0	<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
ALDRIN	9209 NG/L	5 5<	0.0 - 0.5	>0.0	<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
DDT (PP')	9206 NG/L	5 5<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
DDE (PP')	9207 NG/L	5 5<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
HEPTACHLOR	9210 NG/L	5 5<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
ISODRIN	7071 NG/L	3 3<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
TECNAZINE	7366 NG/L	5 5<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
TRIFLURAL	7367 NG/L	5 1<	4.672 - 4.872	>2.6159	8.3 (MAX VALUE)	<1.0	8.3	4.9
CHLORTHAL	7369 NG/L	5 5<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
FLUOROXYP	7369 NG/L	5 5<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
PCB - C28	7370 NG/L	5 5<	0.0 - 5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
PCB - C52	7371 NG/L	5 5<	0.0 - 5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
PCB - C101	7372 NG/L	5 5<	0.0 - 5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0

*** STATISTICS CONTINUED FROM

SAMPLE POINT - R03B1HSBL17
SAMPLE TYPE - BI

WITHAM HAVEN SWING BRIDGE
ESTUARINE WATER

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.
PCB - C118	7373 NG/L	4 4<	0.0 - 5.0	>0.0
PCB - C133	7374 NG/L	5 5<	0.0 - 5.0	>0.0
PCB - C153	7375 NG/L	5 5<	0.0 - 5.0	>0.0
PCB - C180	7376 NG/L	5 5<	0.0 - 5.0	>0.0
ENDOSUL-A	7406 NG/L	5 5<	0.0 - 0.5	>0.0
ENDOSUL-B	7407 NG/L	5 5<	0.0 - 0.5	>0.0
HCBD	7412 NG/L	5 5<	0.0 - 1.0	>0.0
135C6H3CL3	7413 NG/L	5 5<	0.0 - 5.0	>0.0
123C6H3CL3	7486 NG/L	5 5<	0.0 - 1.0	>0.0
124C6H3CL3	7487 NG/L	5 5<	0.0 - 5.0	>0.0
HEPT EPOX	9223 NG/L	5 5<	0.0 - 1.0	>0.0
DDT (OP')	9225 NG/L	5 5<	0.0 - 1.0	>0.0
TDE (PP')	9226 NG/L	5 5<	0.0 - 1.0	>0.0
C6CL6	9741 NG/L	5 5<	0.0 - 1.0	>0.0
TDE CP'	9820 NG/L	5 5<	0.0 - 1.0	>0.0
CR TOT UG	9887 UG/L CR	2 0	4.6	1.2727
CR 0.45UM	9888 UG/L CR	11 4<	3.2545-	3.709
CU TOT UG	9889 UG/L CU	2 0	3.65	3.1819
COP C.45UM	9890 UG/L CU	11 1<	7.4818-	7.5272
PB TOT UG	9891 UG/L PB	2 2<	0.0 - 2.5	>0.0
PB 0.45UM	9892 UG/L PB	11 7<	1.7454-	2.8818
NI TOT UG	9893 UG/L NI	2 1<	3.4 - 4.9	>2.687
NI C.45UM	9894 UG/L NI	11 1<	5.6 - 5.8727	>2.9179
ZN TOT UG	9895 UG/L ZN	2 0	10.4	5.0911
ZN 0.45UM	9896 UG/L ZN	11 3<	10.5909-	11.2272
HCH DELTA	9945 NG/L	5 5<	0.0 - 1.0	>0.0
DDE OP'	9946 NG/L	5 5<	0.0 - 1.0	>0.0

PREVIOUS PAGE ***

LOW SLACK

GRID REF - TF 32680 43070

95XILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
5.5 (MAX VALUE)	3.7	5.5	4.6
2.6271 (LOG NORMAL)	<1.0	7.9	2.1
5.9 (MAX VALUE)	1.4	5.9	3.65
14.106 (LOG NORMAL)	<0.5	13.0	3.3
<2.5 (MAX VALUE)	<2.5	<2.5	<2.5
7.8522 (LOG NORMAL)	<1.0	14.0	2.0
6.8 (MAX VALUE)	<3.0	6.8	<4.9
11.2552 (LOG NORMAL)	2.5	11.0	5.7
14.0 (MAX VALUE)	6.8	14.0	10.4
23.1642 (LOG NORMAL)	<1.0	19.0	13.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0

STATISTICAL SUMMARY (AW712) for location WITHAM HAVEN GWING BRIDGE LOW SLACK
01/01/92 TO 30/08/92

(R03BIH5BL1T)

DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	8	8.4537	0.4839	7.7600	9.1200	
00683	TURBIDITY	FTU	8	25.215	12.854	10.280	38.000	
00761	TEMP C	CEL	8	13.337	7.0457	1.2000	20.900	
00772	COND 25 C	USIE/CM	8	12484.	10225.	1167.0	28520.	
00812	D.O.(ZSAT)	% SATN	8	105.26	22.539	74.200	146.00	
00822	D.O	MG/L O	8	10.525	1.6552	7.7500	12.500	
00851	BOD+ATU T	MG/L O	8	12.100	11.476	2.6400	33.220	
01112	AMMONIA N	MG/L AS N	4	0.2745	0.1963	0.0260	0.4890	
01113	AMMONIA N	MG/L N	4	0.3480	0.2369	0.0350	0.5950	
01165	T.O.N AS N	MG/L N	4	12.830	7.3664	0.6720	20.477	
01166	TON AS N	MG/L AS N	4	2.8715	2.1328	0.4980	6.0080	
01351	SS 105 C	MG/L	1	112.50	0.0000	112.50	112.50	
01352	SS 105 C	MG/L	3	414.00	226.07	117.00	665.00	
01724	CHLORIDE	MG/L CL	4	661.68	647.95	114.08	1712.0	
01728	CHLORIDE	CL MG/L	4	7561.6	1808.5	5260.7	10086.	
01806	P SOL.REACT	MG/L P	4	0.4770	0.1087	0.3230	0.5900	
01808	P SOL.REACT	MG/L AS P	4	0.2576	0.2204	0.0215	0.5820	
04196	FE 0.45UM	MG/L FE	6	0.0683	0.0574	0.0130	0.1780	
04216	IRON TOTAL	MG/L FE	2	0.1315	0.0175	0.1140	0.1490	
90942	SALIN PPT	G/L	8	7.4626	6.6563	0.2470	18.220	
92601	AS 0.45 UM	UG/L AS	6	3.1945	1.6626	1.3250	5.1500	
92611	AS TOTAL	UG/L AS	2	2.7500	0.0750	2.6750	2.8250	
92645	CD 0.45UM	UG/L CD	2	0.1100	0.0100	0.1000	0.1200	
92646	CD 0.45UM	UG/L CD	0					
92655	CD TOTAL	UG/L CD	2	0.0875	0.0375	0.0500	0.1250	
92682	H6 0.45UM	UG/L H6	6	0.0456	0.0155	0.0250	0.0660	
92692	H6 TOTAL	UG/L H6	2	0.0250	0.0000	0.0250	0.0250	
98874	CR TOTAL	UG/L CR	2	0.6250	0.1250	0.5000	0.7500	
98884	CR 0.45UM	UG/L CR	2	1.1500	0.1500	1.0000	1.3000	
98885	CR 0.45UM	UG/L CR	0					
98894	CU TOTAL	UG/L CU	2	8.5000	1.1000	7.4000	9.6000	
98904	CU 0.45UM	UG/L CU	2	3.3000	1.0000	2.3000	4.3000	
98905	CU 0.45UM	UG/L CU	0					
98914	PB TOTAL	UG/L PB	2	0.8750	0.3750	0.5000	1.2500	
98925	PB 0.45UM	UG/L PB	2	0.7500	0.2500	0.5000	1.0000	
98926	PB 0.45UM	UG/L PB	0					
98934	NI TOTAL	UG/L NI	2	5.9000	0.3000	5.6000	6.2000	
98944	NI 0.45UM	UG/L NI	2	9.3500	3.6500	5.7000	13.000	
98945	NI 0.45UM	UG/L NI	0					
98954	ZN TOTAL	UG/L ZN	2	8.1000	1.3000	6.8000	9.4000	
98964	ZN 0.45UM	UG/L ZN	2	9.7500	1.2500	8.5000	11.000	
98965	ZN 0.45UM	UG/L ZN	0					

END OF EXTRACT FOR SAMPLE POINT

END OF REPORT

A P P E N D I X 9

**A) WATER QUALITY IN THE LOWER WITHAM ESTUARY AT
 CUT END (HIGH WATER)**

Statistical summaries for 1989, 1990, 1991 and 1992

REPORT COVERS PERIOD(S) FROM 01/01/89 TO 31/12/89

NO. OF SAMPLES - 12

SAMPLE POINT - RO3BIHCENIT
SAMPLE TYPE - BIWITHAM HAVEN CUT END HIGH SLACK
ESTUARINE WATER

GRID REF - TF 38040 39040

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TEMP C	0076 CEL	12 0	11.825	5.669	22.5322(LOG NORMAL)	5.5	20.3	11.25
PH	0061 PH UNITS	12 0	8.0583	0.2876	8.6249- 7.4917	7.5	8.5	8.03
SS 105 C	0135 MG/L	3 0	79.8333	18.4142	99.5 (MAX VALUE)	63.0	99.5	77.0
BOD+ATU T	0085 NG/L O	12 2<	1.8833-	2.05	>1.3983	0.7	4.95	1.575
D.O.(%SAT)	0081 % SATN	12 0	88.5666	11.8971	70.4456(5%ILE)	75.0	109.0	86.05
D.O	0082 MG/L O	12 0	9.5833	0.9123	8.1601(5%ILE)	8.2	11.3	9.6
AMMONIA N	0111 MG/L N	11 4<	0.1288-	0.1415	>0.1118	<0.03	0.34	0.17
NITRITE N	0118 MG/L N	2 1<	0.0075-	0.0125	>0.0035	<0.01	0.015	<0.0125
T.O.N AS N	0116	12 9<	1.1183-	1.46	>2.8587	<0.1	10.4	<0.5
CHLORIDE	0172 MG/L CL	12 0	15987.1666	4911.465	25045.0727(LOG NORMAL)	750.0	18896.0	17050.0
ALK CAC03	0162 MG/L CAC03	2 0	152.5	2.1213	154.0 (MAX VALUE)	151.0	154.0	152.5
TURBIDITY	0066 FTU	9 0	13.4555	10.4819	34.0 (MAX VALUE)	2.5	34.0	9.6
COLOUR FIL	0072 HAZEN	1 0	4.76	0.0	4.76 (ONLY VALUE)	4.76	4.76	4.76
COND 25 C	0077 USIE/CM	7 0	36685.7143	15137.5283	47800.0 (MAX VALUE)	3400.0	47800.0	41100.0
HARD TOTAL	0158 MG/L CAC03	1 0	5600.0	0.0	5600.0 (ONLY VALUE)	5600.0	5600.0	5600.0
P ORTH P	0180 MG/L P	10 3<	0.098 -	0.116	>0.119	0.03	0.42	<0.06
SILICA	0182 MG/L S102	1 0	2.1	0.0	2.1 (ONLY VALUE)	2.1	2.1	2.1
IRON TOTAL	0421 MG/L FE	8 0	0.17	0.144	0.38 (MAX VALUE)	0.03	0.38	0.095
ASH 500 C	1173 MG/L	2 0	70.25	24.3951	87.5 (MAX VALUE)	53.0	87.5	70.25
MN TOTAL	7403 UG/L MN	8 0	54.6125	26.7747	88.0 (MAX VALUE)	2.9	88.0	59.0
HCH GAMMA	9204 NG/L	2 2<	0.0 -	4.0	>0.0	<4.0	<4.0	<4.0
DIELDIN	9205 NG/L	2 2<	0.0 -	8.0	>0.0	<8.0	<8.0	<8.0
DDT (PP')	9206 NG/L	2 2<	0.0 -	40.0	>0.0	<40.0	<40.0	<40.0
ENDRIN	9208 NG/L	2 2<	0.0 -	20.0	>0.0	<20.0	<20.0	<20.0
ALDRIN	9209 NG/L	2 2<	0.0 -	4.0	>0.0	<4.0	<4.0	<4.0
AS TOTAL	9261 UG/L AS	4 0	3.325	1.0045	4.2 (MAX VALUE)	2.0	4.2	3.55
CD TOTAL	9265 UG/L CD	8 7<	0.0975-	0.3162	>0.1873	<0.25	0.73	<0.25
HG TOTAL	9269 UG/L HG	10 5<	0.058 -	0.083	>0.0525	<0.05	0.21	<0.05
CR TOT UG	9887 UG/L CR	8 5<	3.95 -	6.1375	>6.0102	<1.5	16.0	<2.55
CU TOT UG	9889 UG/L CU	8 7<	0.25 -	1.3087	>1.0565	<0.5	<3.0	<0.685
PB TOT UG	9891 UG/L PB	8 7<	0.8625-	3.05	>1.5556	<2.5	6.9	<2.5
NI TOT UG	9893 UG/L NI	8 4<	6.1 -	7.6	>6.1755	<3.0	18.0	<3.9
ZN TOT UG	9895 UG/L ZN	8 5<	2.925 -	5.425	>3.1738	<4.0	13.0	<4.0

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 11/12/90

NO. OF SAMPLES - 12

SAMPLE POINT - 403BIHCEH1T
SAMPLE TYPE - EIWITHAM LAVERA CUT END HIGH SLACK
ESTUARINE WATER

GRID REF - TF 33040 39040

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TURBIDITY	0048 FTU	12 2>	19.245	>19.3703	>10.9742	3.16	40.0	15.095
PH	0061 PH UNITS	12 0	8.0533	0.235	8.6355- 7.47	7.74	8.71	7.99
COND 25 C	0077 USIE/CM	12 0	41777.5	9575.4113	59083.6615 (LOG NORMAL)	14120.3	49340.0	44075.0
SALIN PPT	9094 G/L	9 0	31.4012	2.8715	34.4 (MAX VALUE)	27.2	34.4	31.85
SS 105 C	0135 MG/L	1 1<	5.0	0.0	<5.0 (ONLY VALUE)	<5.0	<5.0	<5.0
TEMP C	0076 CEL	12 0	12.0533	4.992	21.4321 (LOG NORMAL)	4.0	20.5	10.5
D.O.	0032 MG/L O	12 0	9.1791	1.1923	7.3573 (5%ILE)	7.1	11.2	9.125
D.O. (%SAT)	0081 % SATN	12 0	90.4533	3.0068	77.7193 (5%ILE)	72.7	102.0	90.95
BOD+ATU T	0085 MG/L C	12 1<	2.369	2.5357	>2.3675	0.449	9.35	1.855
AMMONIA N	0111 MG/L N	12 2<	0.3747-	0.3114	>0.4974	<0.04	1.68	0.097
TCN AS N	0116 MG/L N	12 11<	0.1916-	0.65	>0.5195	<0.5	2.3	<0.5
P ORTH P	0180 MG/L P	12 2<	0.1557-	0.1567	>0.1163	<0.06	0.46	0.1492
CHLORIDE	0172 MG/L CL	12 0	14533.9165	5893.1164	25569.4053 (LOG NORMAL)	1306.0	19068.0	16486.0
IRON TOTAL	0421 MG/L FE	3 0	0.487	0.2641	0.775 (MAX VALUE)	0.256	0.775	0.43
FE 0.45UM	0417 MG/L FE	3 3<	0.0246-	0.0546	>0.0279	0.023	0.1	<0.05
CD TOTAL	9265 UG/L CD	2 2<	0.0	0.225	>0.0353	<0.25	<0.25	<0.225
CD 0.45UM	9264 UG/L CD	6 6<	0.0	0.25	>0.0	<0.25	<0.25	<0.25
HG TOTAL	9269 UG/L HG	4 1<	0.055	0.0675	>0.015	0.08	0.09	0.07
HG 0.45UM	9268 UG/L HG	7 2<	0.0792-	0.0933	>0.0572	<0.05	0.21	0.07
AS TOTAL	9261 UG/L AS	6 0	2.9566	1.122	4.79 (MAX VALUE)	1.55	4.39	2.905
AS 0.45 UM	9260 UG/L AS	6 1<	1.2965-	1.3966	>0.7492	<0.6	2.8	1.2
MN TOTAL	7403 UG/L MN	2 0	110.5	41.7193	140.0 (MAX VALUE)	51.0	140.0	110.5
CR TOT UG	9287 UG/L CR	2 0	6.95	0.2121	7.1 (MAX VALUE)	6.2	7.1	6.95
CR 0.45UM	9288 UG/L CR	6 5<	0.6833-	1.5333	>1.0614	<1.5	4.1	<1.5
CU TOT UG	9289 UG/L CU	2 0	3.7	2.8294	5.7 (MAX VALUE)	1.7	5.7	3.7
COP 0.45UM	9890 UG/L CU	6 2<	3.4933-	3.7033	>3.1414	<0.5	2.6	3.4
PB TOT UG	9891 UG/L PB	2 1<	3.75	5.0	>3.5355	<2.5	7.5	<5.0
PS 0.45UM	9892 UG/L PS	6 6<	0.0	2.5	>0.0	<2.5	<2.5	<2.5
NI TOT UG	9893 UG/L NI	2 0	15.5	6.3639	20.7 (MAX VALUE)	11.0	20.0	15.5
NI 0.45UM	9894 UG/L NI	6 6<	1.9	3.6	>1.7227	<3.0	7.3	<3.0
ZN TOT UG	9895 UG/L ZN	2 0	12.6	6.2225	17.0 (MAX VALUE)	8.2	17.0	12.6
ZN 0.45UM	9896 UG/L ZN	6 1<	9.9333-	10.6	>7.3484	<4.0	20.0	8.0

REPORT COVERS PERIOD(S) FROM 01/01/91 TO 31/12/91

NO. OF SAMPLES - 12

SAMPLE POINT - R039IMCEN1T
SAMPLE TYPE - BIWITMAN HAVEN CUT END HIGH SLACK
ESTUARINE WATER

GRID REF - TF 38040 39040

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN	
TURBIDITY	0068 FTU	12 9>	15.5633*	>18.1408	>2.9125	20.5677 (LOG NORMAL)	9.59	20.41	>19.0
PH	0061 PH UNITS	12 0	8.3041	0.0969	8.1952- 7.8131	7.86	8.2	8.0	
COND 25 C	0077 USIE/CM	12 0	46994.1665	3611.2299	53159.381 (LOG NORMAL)	37160.0	50540.0	47435.0	
SALIN PPT	9294 G/L	12 0	32.6705	2.649	37.2016 (LOG NORMAL)	25.3	36.0	33.425	
SS 105 C	0135 MG/L	10 0	41.2	39.8498	112.7257 (LOG NORMAL)	15.0	150.0	26.75	
TEMP C	0076 CEL	12 0	10.2533	5.4809	20.6316 (LOG NORMAL)	2.5	19.6	8.55	
D.O.	0092 MG/L O	12 0	8.8125	1.5853	6.4468 (5%ILE)	6.1	10.8	9.45	
D.O. (XSAT)	0031 % SATN	12 0	94.0833	15.2395	71.2727 (5%ILE)	73.7	128.0	95.9	
BOD+ATU T	0085 MG/L O	12 1<	1.9958-	2.0791	>0.7734	3.4771 (LOG NORMAL)	<1.0	3.35	2.04
AMMONIA N	0111 MG/L N	12 1<	0.0867-	0.0884	>0.0692	0.2162 (LOG NORMAL)	<0.02	0.2296	0.073
TON AS N	0116 MG/L N	12 4<	0.8102-	0.9186	>1.4743	2.984 (LOG NORMAL)	<0.2	5.494	0.4345
P ORTH P	0180 MG/L P	12 5<	0.0365-	0.0519	>0.0362	0.1111 (LOG NORMAL)	0.0244	0.15	0.0395
CHLORIDE	0172 MG/L CL	12 0	18081.0832	1465.1136	20587.0572 (LOG NORMAL)	14004.0	19929.0	13500.0	
FE 0.45UM	9419 MG/L FE	11 9<	0.014 -	0.0512	>0.0266	0.0818 (LOG NORMAL)	<0.01	0.122	<0.05
CD 0.45UM	9264 UG/L CD	12 11<	0.0291-	0.2583	>0.0293	0.1954 (LOG NORMAL)	<0.25	0.35	<0.25
HG 0.45UM	9268 UG/L HG	12 4<	0.0512-	0.0679	>0.0286	0.1136 (LOG NORMAL)	0.039	0.147	0.06
AS 0.45 UM	9260 UG/L AS	12 0	1.9966	0.6362	3.1633 (LOG NORMAL)	0.73	2.93	1.93	
HCH ALPHA	9203 NG/L	9 9<	0.0 -	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
HCH GAMMA	9204 NG/L	9 1<	4.2111-	4.2666	>3.3555	10.4 (MAX VALUE)	<0.5	10.4	2.6
DIELDRIN	9205 NG/L	9 8<	0.1555-	0.3444	>0.2877	1.4 (MAX VALUE)	<0.7	1.4	<0.7
ENDRIN	9208 NG/L	9 9<	0.0 -	0.5792	>0.5365	<2.11 (MAX VALUE)	<0.5	<2.11	<0.5
ALDRIN	9209 NG/L	9 9<	0.0 -	0.5	>0.0	<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
DDE (PP')	9206 NG/L	9 9<	0.0 -	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
DDE (PP')	9207 NG/L	9 9<	0.0 -	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
HEPTACHLOR	9213 NG/L	9 9<	0.0 -	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
ISODRIN	7071 NG/L	9 9<	0.0 -	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
PROPAZINE	7360 UG/L	1 1<	1.0	0.0	<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0	<1.0
TECHAZINE	7366 NG/L	9 9<	0.0 -	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
TRIFLURAL.	7367 NG/L	9 7<	1.4555-	2.2333	>3.5163	11.6 (MAX VALUE)	<1.0	11.6	<1.0
CHLORTHAL.	7368 NG/L	8 8<	0.0 -	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
FLUOROXYP.	7369 NG/L	9 9<	0.0 -	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
PCB - C28	7370 NG/L	9 9<	0.0 -	5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
PCB - C52	7371 NG/L	9 9<	0.0 -	5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
PCB - C101	7372 NG/L	9 9<	0.0 -	5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
PCB - C118	7373 NG/L	9 9<	0.0 -	5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
PCB - C138	7374 NG/L	9 9<	0.0 -	5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0

*** STATISTICS FOR THIS SAMPLE POINT CONTINUE ON NEXT PAGE ***

*** STATISTICS CONTINUED FROM PREVIOUS PAGE ***

SAMPLE POINT - R03BINCEH1T
SAMPLE TYPE - B1

WITHAM HAVEN CUT END HIGH SLACK
ESTUARINE WATER

GRID REF - TF 38040 39040

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
PCB - C153	7375 NG/L	9 9<	0.0 - 5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
PCB - C180	7376 NG/L	9 9<	0.0 - 5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
ENDOSUL-A	7406 NG/L	9 9<	0.0 - 0.5	>0.0	<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
ENDOSUL-B	7407 NG/L	9 9<	0.0 - 0.5	>0.0	<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
HCB	7412 NG/L	9 9<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
135C6H3CL3	7418 NG/L	8 8<	0.0 - 3.5	>2.0702	<5.0 (MAX VALUE)	<1.0	<5.0	<5.0
123C6H3CL3	7486 NG/L	6 6<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
124C6H3CL3	7487 NG/L	6 6<	0.0 - 5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
HEPT EPOX	9223 NG/L	9 9<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
DDT (GP')	9225 NG/L	9 9<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
TDE (PP')	9226 NG/L	9 9<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
C6CL6	9741 NG/L	9 9<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
HCH BETA	9819 NG/L	5 5<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
TDE OP'	9820 NG/L	9 9<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
CR 0.45UM	9888 UG/L CR	12 5<	3.175 - 3.8	>3.7397	10.0298 (LOG NORMAL)	<1.5	14.0	2.0
COP 0.45UM	9890 UG/L CU	12 0	6.3666	5.0305	15.708 (LOG NORMAL)	1.0	18.0	4.05
PB 0.45UM	9892 UG/L PB	12 12<	0.0 - 2.5	>0.0	1.25 (LOG NORMAL)	<2.5	<2.5	<2.5
NI 0.45UM	9894 UG/L NI	12 7<	4.8333 - 6.5833	>6.2391	16.5642 (LOG NORMAL)	<3.0	22.0	<3.0
ZN 0.45UM	9896 UG/L ZN	12 0	12.8	11.3398	33.5079 (LOG NORMAL)	4.5	44.0	8.3
HCH DELTA	9945 NG/L	9 9<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
DDE GP'	9946 NG/L	9 9<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

STATISTICAL SUMMARY (AW712) for location WITHAM HAVEN CUT END HIGH SLACK
01/01/92 TO 30/08/92

(R03BIHCEN1T)

DET	NAME	UNITS	-N-	-MEAN-	--SD--	--MIN-	--MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	8	8.0587	0.1244	7.8400	8.2800	
00683	TURBIDITY	FTU	8	31.675	11.260	7.4900	38.000	
00761	TEMP C	CEL	8	12.737	6.0774	2.6000	19.500	
00772	COND 25 C	USIE/CM	8	44723.	7135.3	27450.	50210.	
00812	D.O.(ZSAT)	% SATN	8	103.18	17.632	74.600	139.00	
00822	D.O	MG/L O	8	9.2812	1.2942	7.4000	10.900	
00851	BOD+ATU T	MG/L O	8	3.4262	1.6766	1.0000	6.6800	
01112	AMMONIA N	MG/L AS N	8	0.0933	0.1054	0.0260	0.3190	
01166	TON AS N	MG/L AS N	8	1.9788	2.7833	0.0650	8.4600	
01352	SS 105 C	MG/L	6	84.500	64.074	21.000	222.00	
01728	CHLORIDE	CL MG/L	8	17048.	2966.4	9743.8	19111.	
01808	P SOL.REACT	MG/L AS P	8	0.0740	0.0949	0.0215	0.3150	
04196	FE 0.45UM	MG/L FE	8	0.0351	0.0525	0.0050	0.1700	
70711	ISODRIN	NG/L	8	0.5000	0.0000	0.5000	0.5000	
73441	DDT TOT 41	NG/L	2	2.0000	0.0000	2.0000	2.0000	
73661	TECNAZINE	NG/L	8	0.5000	0.0000	0.5000	0.5000	
73671	TRIFLURAL.	NG/L	8	1.6175	1.8051	0.5000	5.9300	
73681	CHLORTHAL.	NG/L	8	0.5000	0.0000	0.5000	0.5000	
73691	FLUOROXYPYR	NG/L	8	0.5500	0.1000	0.5000	0.8000	
73701	PCB - C28	NG/L	8	2.5000	0.0000	2.5000	2.5000	
73711	PCB - C52	NG/L	8	2.5000	0.0000	2.5000	2.5000	
73721	PCB - C101	NG/L	8	2.5000	0.0000	2.5000	2.5000	
73731	PCB - C118	NG/L	8	2.5000	0.0000	2.5000	2.5000	
73741	PCB - C138	NG/L	8	2.5000	0.0000	2.5000	2.5000	
73751	PCB - C153	NG/L	8	2.5000	0.0000	2.5000	2.5000	
73761	PCB - C180	NG/L	8	2.5000	0.0000	2.5000	2.5000	
74061	ENDOSULF-A	NG/L	8	0.2500	0.0000	0.2500	0.2500	
74071	ENDOSULF-B	NG/L	8	0.2500	0.0000	0.2500	0.2500	
74121	HCB	NG/L	8	0.5000	0.0000	0.5000	0.5000	
74181	135C6H3CL3	NG/L	8	2.5000	0.0000	2.5000	2.5000	
74861	123C6H3CL3	NG/L	8	0.5000	0.0000	0.5000	0.5000	
74871	124C6H3CL3	NG/L	8	2.5000	0.0000	2.5000	2.5000	
90942	SALIN PPT	G/L	8	30.773	5.3568	17.597	34.500	
92031	HCH ALPHA	NG/L	8	0.5000	0.0000	0.5000	0.5000	
92041	HCH GAMMA	NG/L	8	4.2112	2.3397	0.9500	8.3000	
92051	DIELDRIN	NG/L	8	0.3918	0.1107	0.3500	0.6850	
92061	DDT (PP')	NG/L	8	0.7687	0.7110	0.5000	2.6500	
92071	DDE (PP')	NG/L	8	0.5000	0.0000	0.5000	0.5000	
92081	ENDRIN	NG/L	7	0.4000	0.3674	0.2500	1.3000	
92091	ALDRIN	NG/L	8	0.3875	0.2394	0.2500	0.8500	
92101	HEPTACHLOR	NG/L	8	0.5000	0.0000	0.5000	0.5000	
92231	HEPT EPOX	NG/L	8	0.5250	0.0661	0.5000	0.7000	
92241	ENDOSULFAN	NG/L	0					
92251	DDT (DP')	NG/L	8	0.5000	0.0000	0.5000	0.5000	
92261	TDE (PP')	NG/L	8	0.5125	0.0330	0.5000	0.6000	
92601	AS 0.45 UM	US/L AS	8	1.7559	0.5694	1.0750	2.8500	
92645	CD 0.45UM	US/L CD	1	0.6300	0.0000	0.6300	0.6300	
92646	CD 0.45UM	US/L CD	3	0.1250	0.0000	0.1250	0.1250	
92682	HG 0.45UM	US/L HG	8	0.0421	0.0243	0.0250	0.0940	
97411	C6CL6	NG/L	8	0.5000	0.0000	0.5000	0.5000	
98191	HCH BETA	NG/L	8	0.4687	0.0826	0.2500	0.5000	
98201	TDE (DP')	NG/L	8	0.5000	0.0000	0.5000	0.5000	
98884	CR 0.45UM	US/L CR	1	5.1000	0.0000	5.1000	5.1000	
98885	CR 0.45UM	US/L CR	3	1.9500	0.8495	0.7500	2.6000	

Cu 6.7 (10)

Zn 11.0 (15)

Mn 4.2 (8.3)

98904	CU 0.45UM	UG/L CU	1	1.2000	0.0000	1.2000	1.2000
98905	CU 0.45UM	UG/L CU	3	6.7000	2.5806	3.7000	10.000
98925	PB 0.45UM	UG/L PB	1	1.2500	0.0000	1.2500	1.2500
98926	PB 0.45UM	UG/L PB	3	1.2500	0.0000	1.2500	1.2500
98944	NI 0.45UM	UG/L NI	1	3.7000	0.0000	3.7000	3.7000
98945	NI 0.45UM	UG/L NI	3	4.8000	1.4352	3.5000	6.8000
98964	ZN 0.45UM	UG/L ZN	1	2.0000	0.0000	2.0000	2.0000
98965	ZN 0.45UM	UG/L ZN	3	11.033	2.9101	8.1000	15.000
99451	HCH DELTA	NG/L	8	0.5000	0.0000	0.5000	0.5000
99461	DDE (DP')	NG/L	8	0.5000	0.0000	0.5000	0.5000

END OF EXTRACT FOR SAMPLE POINT

END OF REPORT

A P P E N D I X 9

**B) WATER QUALITY IN THE LOWER WITHAM ESTUARY AT
 CUT END (LOW WATER)**

Statistical summaries for 1989, 1990, 1991 and 1992

REPORT COVERS PERIOD(S) FROM 01/01/89 TO 31/12/89

NO. OF SAMPLES - 14

SAMPLE POINT - R03BIHCEL1T
SAMPLE TYPE - B1WITHAM HAVEN CUT END LOW SLACK
ESTUARINE WATER

GRID REF - TF 38040 39040

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN	
TEMP C	0076 CEL	12 0	11.3833	5.8423	22.4349(LOG NORMAL)	4.9	19.5	10.05	
PH	0061 PH UNITS	12 0	8.0925	0.2364	8.5582- 7.6267	7.66	8.4	8.08	
SS 105 C	0135 MG/L	3 0	34.3333	19.8578	56.0 (MAX VALUE)	17.0	56.0	30.0	
BDD+ATU T	0085 MG/L O	12 0	2.3625	1.0444	4.3296(LOG NORMAL)	0.8	4.4	2.25	
D.O.(XSAT)	0081 % SATN	12 0	83.1416	9.3583	68.6955(5%ILE)	70.0	104.0	82.7	
D.O	0082 MG/L O	12 0	9.1583	1.1317	7.423 (5%ILE)	7.2	10.6	9.0	
AMMONIA N	0111 MG/L N	11 1<	0.298 -	0.3017	>0.1502	0.5839(LOG NORMAL)	<0.04	0.58	0.269
NITRITE N	0118 MG/L N	2 0	0.036	0.0212	0.051 (MAX VALUE)	0.021	0.051	0.036	
T.O.N AS N	0116	12 9<	1.6225-	1.9641	>3.3039	6.3295(LOG NORMAL)	<0.1	11.0	<0.5
CHLORIDE	0172 MG/L CL	12 0	10384.9166	4485.7582	18824.6699(LOG NORMAL)	575.0	15800.0	11650.0	
SULPHATE	0183 MG/L S04	1 0	903.0	0.0	903.0 (ONLY VALUE)	903.0	903.0	903.0	
ALK CAC03	0162 MG/L CAC03	2 0	208.5	12.0208	217.0 (MAX VALUE)	200.0	217.0	208.5	
TURBIDITY	0068 FTU	9 0	16.6722	11.464	42.0 (MAX VALUE)	5.85	42.0	14.0	
COLOUR FIL	0072 HAZEN	1 0	11.2	0.0	11.2 (ONLY VALUE)	11.2	11.2	11.2	
COND 25 C	0077 USIE/CM	7 0	23800.0	11643.1671	36700.0 (MAX VALUE)	2900.0	36700.0	27600.0	
HARD TOTAL	0158 MG/L CAC03	1 0	2280.0	0.0	2280.0 (ONLY VALUE)	2280.0	2280.0	2280.0	
P ORTH P	0180 MG/L P	10 0	0.3386	0.136	0.5936(LOG NORMAL)	0.17	0.54	0.32	
SILICA	0182 MG/L S102	1 0	3.4	0.0	3.4 (ONLY VALUE)	3.4	3.4	3.4	
IRON TOTAL	0421 MG/L FE	8 0	0.385	0.3157	1.0 (MAX VALUE)	0.09	1.0	0.255	
ASH 500 C	1173 MG/L	2 0	28.75	19.4454	42.5 (MAX VALUE)	15.0	42.5	28.75	
MN TOTAL	7403 UG/L MN	8 0	163.375	139.5727	450.0 (MAX VALUE)	62.0	450.0	99.0	
CHLOROFORM	9067 UG/L	1 1<	0.5	0.0	<0.5 (ONLY VALUE)	<0.5	<0.5	<0.5	
CHBRCL2	9068 UG/L	2 2<	0.0 -	0.1	>0.0	<0.1	<0.1	<0.1	
CHBR2CL	9069 UG/L	2 2<	0.0 -	0.1	>0.0	<0.1	<0.1	<0.1	
BROMOFORM	9070 UG/L	2 2<	0.0 -	0.1	>0.0	<0.1	<0.1	<0.1	
CARBON TET	9115 UG/L	2 2<	0.0 -	0.1	>0.0	<0.1	<0.1	<0.1	
C2HCL3	9119 UG/L	2 2<	0.0 -	0.1	>0.0	<0.1	<0.1	<0.1	
C2CL4	9121 UG/L	2 2<	0.0 -	0.1	>0.0	<0.1	<0.1	<0.1	
HCH GAMMA	9204 NG/L	3 0	16.5	13.4443	32.0 (MAX VALUE)	8.0	32.0	9.5	
DIELDIN	9205 NG/L	2 2<	0.0 -	8.0	>0.0	<8.0	<8.0	<8.0	
DDT (PP')	9206 NG/L	2 2<	0.0 -	40.0	>0.0	<40.0	<40.0	<40.0	
ENDRIN	9208 NG/L	2 2<	0.0 -	20.0	>0.0	<20.0	<20.0	<20.0	
ALDRIN	9209 NG/L	2 2<	0.0 -	4.0	>0.0	<4.0	<4.0	<4.0	
AS TOTAL	9261 UG/L AS	4 0	4.5875	2.911	8.95 (MAX VALUE)	3.0	8.95	3.2	
CD TOTAL	9265 UG/L CD	8 8<	0.0 -	0.25	>0.0	<0.25	<0.25	<0.25	
HG TOTAL	9269 UG/L HG	9 5<	0.0511-	0.0788	>0.0728	0.27	0.27	<0.05	

*** STATISTICS CONTINUED FROM PREVIOUS PAGE ***

SAMPLE POINT - R03BINCEL1T
SAMPLE TYPE - BI

WITHAM HAVEN CUT END LOW SLACK
ESTUARINE WATER

GRID REF - TF 38040 39040

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE(OR RANGE)	STD.DEV.	95%ILE(OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
111C2H3CL3	9734 UG/L	2 0	0.27	0.1979	0.41 (MAX VALUE)	0.13	0.41	0.27
PCP	9769 UG/L	2 2<	0.0 -	0.1	>0.0	<0.1	<0.1	<0.1
CR TOT UG	9887 UG/L CR	8 5<	5.4125-	6.35	>10.6497	32.0	32.0	<1.5
CU TOT UG	9889 UG/L CU	8 7<	0.3 -	1.1125	>0.718	2.4	2.4	<1.0
PB TOT UG	9891 UG/L PB	8 6<	4.2 -	6.075	>7.9391	25.0	25.0	<2.5
NI TOT UG	9893 UG/L NI	8 3<	8.4625-	9.5875	>11.5168	36.0	36.0	4.9
ZN TOT UG	9895 UG/L ZN	8 3<	7.375 -	8.875	>9.5179	29.0	29.0	<4.15

REPORT COVERS PERIOD(S) FROM 01/01/90 TO 31/12/90

NO. OF SAMPLES - 16

SAMPLE POINT - RC39INCEL17
SAMPLE TYPE - EIWITHAM HAVEN CUT END LOW SLACK
ESTUARINE WATER

GRID REF - TF 38040 39040

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN	
TURBIDITY	0068 FTU	12 3>	14.39224	>15.9191	>5.5365	25.3251 (LOG NORMAL)	7.22	27.0	17.0
PH	0061 PH UNITS	12 0	7.3509	0.308	8.5575	7.344	7.49	8.7	7.9
COND 25 C	0077 USIE/CM	12 0	32846.6665	13402.3546	58042.6493 (LOG NORMAL)	5990.0	49380.0	35520.0	
SALIN PPT	9094 G/L	10 0	25.6405	6.114	36.7295 (LOG NORMAL)	13.5	34.6	26.59	
SS 105 C	0135 MG/L	2 0	101.165	101.50	173.0 (MAX VALUE)	29.33	173.0	101.165	
TEMP C	0076 CEL	12 0	12.1666	5.1899	21.9257 (LOG NORMAL)	4.5	19.5	12.0	
D.O	0082 PG/L C	12 0	9.1541	1.1785	7.3523 (5%ILE)	7.5	11.2	9.075	
D.O. (%SAT)	0081 % SAT	12 0	70.3833	9.7955	75.2197 (5%ILE)	72.3	106.0	91.85	
BOD 5 ATU T	0085 MG/L C	12 4<	1.7074-	2.624	>1.8093	5.5259 (LOG NORMAL)	0.349	6.9	<1.955
AMMONIA N	0111 MG/L N	12 1<	0.3014-	0.3047	>0.215	0.7066 (LOG NORMAL)	<0.04	0.8844	0.28
TON AS N	0116 MG/L N	12 10<	1.1775-	1.5941	>3.5665	0.2331 (LOG NORMAL)	<0.5	12.9	<0.5
P ORTH P	0180 MG/L P	12 1<	0.2375-	0.2425	>0.1099	0.4473 (LOG NORMAL)	<0.06	0.49	0.2391
CHLORIDE	0172 MG/L CL	12 0	12252.0533	5445.3075	22540.4769 (LOG NORMAL)	1690.0	19144.0	13453.5	
IRON TOTAL	0421 PG/L FE	3 0	0.3873	0.1593	0.521 (MAX VALUE)	0.211	0.521	0.43	
FE 0.45LM	0419 MG/L FE	5 2<	0.1734-	0.1936	>0.2068	0.5 (MAX VALUE)	<0.05	0.5	0.05
CD TOTAL	9265 UG/L CD	2 2<	0.0	0.15	>0.0707	<0.2 (MAX VALUE)	<0.1	<0.2	<0.15
CD 0.45UM	9264 UG/L CD	6 6<	0.0	0.25	>0.0	<0.25 (MAX VALUE)	<0.25	<0.25	<0.25
HG TOTAL	9269 UG/L HG	5 2<	0.0344-	0.0546	>0.0087	0.07 (MAX VALUE)	<0.05	0.07	0.05
HG 0.45UM	9268 UG/L HG	7 0	0.068	0.0154	0.091 (MAX VALUE)	0.05	0.091	0.07	
AS TOTAL	9261 UG/L AS	5 0	3.0833	1.4348	5.6 (MAX VALUE)	1.55	5.6	3.025	
AS 0.45 UM	9260 UG/L AS	5 1<	1.3353-	1.4353	>0.5653	2.0 (MAX VALUE)	<0.6	2.0	1.615
HCH ALPHA	9203 NG/L	4 4<	0.0	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
HCH GAMMA	9204 NG/L	4 0	8.825	4.1379	12.0 (MAX VALUE)	3.3	12.0	10.0	
DIELDRIN	9205 NG/L	4 1<	1.0	1.175	>0.6376	2.1 (MAX VALUE)	<0.7	2.1	0.95
ENDRIN	9208 NG/L	4 4<	0.0	0.025	>0.25	<1.0 (MAX VALUE)	<0.5	<1.0	<0.5
ALDRIN	9209 NG/L	3 3<	0.0	0.6666	>0.2886	<1.0 (MAX VALUE)	<0.5	<1.0	<0.5
DDT (PP')	9206 NG/L	3 3<	0.0	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
DDE (PP')	9207 NG/L	4 4<	0.0	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
HEPTACHLOR	9210 NG/L	4 4<	0.0	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
TOT C-TIN	7069 NG/L	4 3<	20.975	23.975	>39.25	33.9 (MAX VALUE)	<4.0	33.9	<4.0
ISODRIN	7071 NG/L	4 4<	0.0	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
PCB	7075 UG/L	1 1<	2.0	0.0	>0.0	<2.0 (ONLY VALUE)	<2.0	<2.0	<2.0
TECHAZINE	7365 NG/L	4 3<	0.0	1.55	>1.1	3.2 (MAX VALUE)	<1.0	3.2	<1.0
TRIFLURAL.	7367 NG/L	3 3<	0.0	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
CHLORTHAL.	7368 NG/L	3 3<	0.0	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
FLUDROXYP.	7369 NG/L	3 3<	0.0	1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0

SAMPLE POINT - ROBINCELEIT
SAMPLE TYPE - B1

WITHIN HAVEN CUT END LOW
ESTUARINE WATER

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.
PCB - C29	7370 G/L	3 3<	0.0 - 5.0	>0.0
PCB - C52	7371 G/L	3 3<	0.0 - 5.0	>0.0
PCB - C101	7372 G/L	3 3<	0.0 - 5.0	>0.0
PCB - C118	7373 G/L	2 2<	0.0 - 5.0	>0.0
PCB - C138	7374 G/L	3 3<	0.0 - 5.0	>0.0
PCB - C153	7375 G/L	2 2<	0.0 - 5.0	>0.0
PCB - C180	7376 G/L	3 3<	0.0 - 5.0	>0.0
MN TOTAL	7403 UG/L MN	2 0	119.5	57.2756
ENDOSUL-A	7406 NG/L	3 3<	0.0 - 0.5	>0.0
ENDOSUL-B	7407 NG/L	4 4<	0.0 - 0.55	>0.238
HC39	7412 G/L	2 2<	0.0 - 1.0	>0.0
135C6H3CL3	7418 G/L	2 2<	0.0 - 1.0	>0.0
CHLOROFORM	9067 UG/L	1 1<	0.1	0.0
CHBRCL2	9068 UG/L	1 1<	0.1	0.0
CH32CL	9069 UG/L	1 1<	0.1	0.0
BROMOFORM	9070 UG/L	1 1<	0.1	0.0
CARBON TET	9115 UG/L	1 1<	0.1	0.0
C24CL3	9119 UG/L	1 1<	0.1	0.0
C2CL4	9121 UG/L	1 1<	0.1	0.0
HEPT EPOX	9223 NG/L	4 4<	0.0 - 1.0	>0.0
ENDOSULPH	9224 NG/L	1 1<	1.0	0.0
DOT (OP')	9225 NG/L	4 4<	0.0 - 1.0	>0.0
TDE (PP')	9226 NG/L	4 4<	0.0 - 1.0	>0.0
111C2H3CL3	9734 UG/L	1 0	0.57	0.0
C6CL6	9741 NG/L	4 4<	0.0 - 1.0	>0.0
PCP	9769 UG/L	6 4<	0.0125- 0.0193	>0.0145
TDE OP'	9820 NG/L	4 4<	0.0 - 1.0	>0.0
CR TOT UG	9887 UG/L CR	2 0	7.55	6.2732
CR 0.45UM	9888 UG/L CR	6 4<	1.4833-	2.2184
CU TOT UG	9839 UG/L CU	2 0	5.4	3.5123
CU 0.45UM	9890 UG/L CU	6 1<	3.6833-	2.7459
FB TOT UG	9891 UG/L FB	2 0	3.35	1.202
FB 0.45UM	9892 UG/L FB	6 5<	0.4156-	>0.0
NI TOT UG	9893 UG/L NI	2 0	13.05	5.5861
NI 0.45UM	9894 UG/L NI	6 4<	1.9333-	1.7293
ZN TOT UG	9895 UG/L ZN	2 0	10.35	5.1618

PREVIOUS PAGE ***

SLACK

GRID REF - TF 33040 39040

95XILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
150.0 (MAX VALUE)	79.0	160.0	119.5
<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
<1.0 (MAX VALUE)	<0.5	<1.0	<0.55
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<0.1 (ONLY VALUE)	<0.1	<0.1	<0.1
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (ONLY VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
0.57 (ONLY VALUE)	0.57	0.57	0.57
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
0.04 (MAX VALUE)	<0.01	<0.04	<0.01
<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
12.0 (MAX VALUE)	3.1	12.0	7.55
7.0 (MAX VALUE)	<1.5	7.0	<1.5
8.1 (MAX VALUE)	2.7	8.1	5.4
7.5 (MAX VALUE)	1.1	7.5	3.15
4.2 (MAX VALUE)	2.5	4.2	3.35
2.5 (MAX VALUE)	<2.5	2.5	<2.5
17.0 (MAX VALUE)	9.1	17.0	13.05
7.3 (MAX VALUE)	<3.0	7.3	<3.0
14.0 (MAX VALUE)	6.7	14.0	10.35

*** STATISTICS CONTINUED FROM PREVIOUS PAGE ***

SAMPLE POINT - RC39INCELIT
SAMPLE TYPE - EI

WITMAN HAVEN CUT END LOW SLACK
ESTUARINE WATER

GRID REF - TF 38C40 39040

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95%ILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
ZN D.45UM	9896 UG/L ZN	6 1<	13.3333- 14.0	>10.4726	32.0 (MAX VALUE)	<4.0	32.0	10.85
HCH DELTA	9945 NG/L	3 3<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
DDE DP'	9946 NG/L	4 4<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

SAMPLE POINT - ROBBINCELI
SAMPLE TYPE - BI

WITHAM HAVEN CUT END LOW SLACK
ESTUARINE WATER

SPID REF - IF 38040 39040

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	SSXILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
TURBIDITY	0069 FTU	11 8>	15.21	>2.8495	20.29 (LOG NORMAL)	10.46	20.41	<19.0
PH	0061 PH UNITS	11 0	7.9972	0.1253	8.2441-7.7504	7.82	8.19	7.97
COND 25 C	0077 USIE/CM	11 0	34399.0908	8370.6951	49580.5688 (LOG NORMAL)	21910.0	45230.0	33090.0
SALIN PPT	9094 G/L	11 0	23.008	6.4368	34.8032 (LOG NORMAL)	13.85	31.43	21.248
SS 105 C	0135 MG/L	9 0	63.6111	87.3737	294.0 (MAX VALUE)	8.0	294.0	42.0
TEMP C	0075 CEL	11 0	13.8818	5.758	21.7786 (LOG NORMAL)	2.5	18.8	9.8
D.O.	0082 MG/L O	11 0	8.4909	2.0105	5.6256 (XILE)	5.25	11.1	3.0
O.O. (XSAT)	0081 X SATN	11 0	85.5636	12.0806	70.0523 (XILE)	62.4	100.0	87.3
BOD+ATU T	0085 MG/L O	11 0	3.2009	1.2806	5.6014 (LOG NORMAL)	1.94	5.49	2.67
AMMONIA N	0111 MG/L N	11 0	0.3578	0.1176	0.5737 (LOG NORMAL)	0.181	0.5579	0.3449
TUN AS N	0116 MG/L N	11 1<	3.1206-	>3.931-	9.6857 (LOG NORMAL)	0.42	12.711	0.987
P ORTH P	0180 MG/L P	11 0	0.2145	0.1173	0.4375 (LOG NORMAL)	0.098	0.479	0.201
CHLORIDE	0172 MG/L CL	11 0	12737.2182	3564.4069	19259.9179 (LOG NORMAL)	7568.9	17435.0	11762.0
FE 0.45UM	0419 MG/L FE	10 8<	0.0132-	>0.3262	0.077 (LOG NORMAL)	<0.01	0.103	<0.05
CD 0.45UM	9264 UG/L CD	11 9<	0.0736-	>0.113	0.4126 (LOG NORMAL)	<0.25	<0.5	<0.25
HG 0.45UM	9258 UG/L HG	10 5<	0.0626-	>0.0322	0.2181 (LOG NORMAL)	0.0107	0.283	<0.05
AS 0.45 UM	9250 UG/L AS	11 0	2.629	0.7909	4.0357 (LOG NORMAL)	1.03	3.65	2.93
HCH ALPHA	9233 NG/L	10 10<	0.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
HCH GAMMA	9204 NG/L	10 0	10.114	7.052	23.3639 (LOG NORMAL)	1.6	23.1	8.865
DIELDRIN	9205 NG/L	10 7<	0.278	>0.2543	1.051 (LOG NORMAL)	<0.7	<1.52	<0.775
ENDRIN	9208 NG/L	10 10<	0.0	>0.0	0.25 (LOG NORMAL)	<0.5	<0.5	<0.5
ALDRIN	9209 NG/L	10 10<	0.0	>0.0	0.25 (LOG NORMAL)	<0.5	<0.5	<0.5
DDT (PP')	9206 NG/L	10 10<	0.0	>1.9827	3.0478 (LOG NORMAL)	<1.0	<7.27	<1.0
DDE (PP')	9207 NG/L	10 10<	0.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
HEPTACHLOR	9210 NG/L	10 10<	0.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
TOX O-TIN	7369 NG/L	10 4<	0.0	>0.0	<4.0 (MAX VALUE)	<1.0	<1.0	<1.0
ISODRIN	7071 NG/L	10 10<	0.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
PROPAZINE	7360 UG/L	3 3<	0.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
TECHAZINE	7366 NG/L	10 10<	0.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
TRIFLURAL.	7367 NG/L	10 10<	0.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
CHLORTHAL.	7363 NG/L	10 7<	4.117	>9.7826	16.4213 (LOG NORMAL)	<1.0	32.0	<1.0
FLUOROXYP.	7369 NG/L	7 7<	0.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
PCB - C28	7370 NG/L	10 10<	0.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
PCB - C52	7371 NG/L	10 10<	0.0	>0.0	2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
PCB - C101	7372 NG/L	10 10<	0.0	>0.0	2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
PCB - C118	7373 NG/L	10 10<	0.0	>0.0	2.5 (LOG NORMAL)	<5.0	<5.0	<5.0

*** STATISTICS FOR THIS SAMPLE POINT CONTINUE ON NEXT PAGE ***

*** STATISTICS CONTINUED FROM PREVIOUS PAGE ***

SAMPLE POINT - R0331NCEL17
SAMPLE TYPE - BI

WITMAN HAVEN CUT END LOW SLACK
ESTUARINE WATER

GRID REF - TF 38040 39040

DETERMINAND	UNITS	NO. OF VALUES	MEAN VALUE (OR RANGE)	STD. DEV.	95XILE (OR RANGE)	MINIMUM	MAXIMUM	MEDIAN
PCB - C132	7374 NG/L	10 10<	0.0 - 5.0	>0.0	2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
PCB - C153	7375 NG/L	10 10<	0.0 - 5.0	>0.0	2.5 (LOG NORMAL)	<5.0	<5.0	<5.0
PCB - C190	7376 NG/L	9 9<	0.0 - 5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
ENDOSUL-A	7406 NG/L	10 10<	0.0 - 0.5	>0.0	0.25 (LOG NORMAL)	<0.5	<0.5	<0.5
ENDOSUL-B	7407 NG/L	10 10<	0.0 - 0.5	>0.0	0.25 (LOG NORMAL)	<0.5	<0.5	<0.5
HC90	7412 NG/L	10 10<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
135C6H3CL3	7419 NG/L	9 9<	0.0 - 3.5666	>2.0	<5.0 (MAX VALUE)	<1.0	<5.0	<5.0
TOT D-TIN	7431 US/L SM	5 5<	0.0 - 0.004	>0.0	<0.004 (MAX VALUE)	<0.004	<0.004	<0.004
123C6H3CL3	7486 NG/L	7 7<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
124C6H3CL3	7487 NG/L	7 7<	0.0 - 5.0	>0.0	<5.0 (MAX VALUE)	<5.0	<5.0	<5.0
CHLOROFORM	9067 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
CHBRCL2	9068 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
CHBR2CL	9069 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
BROMOFORM	9070 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
CARBON TET	9115 US/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
C2HCL3	9119 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
C2CL4	9121 UG/L	2 2<	0.0 - 0.1	>0.0	<0.1 (MAX VALUE)	<0.1	<0.1	<0.1
HEPT EPOX	9223 NG/L	10 10<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
DDT (OP')	9225 NG/L	10 10<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
TDE (PP')	9226 NG/L	10 10<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
111C2H3CL3	9734 US/L	2 2<	0.0 - 0.5	>0.0	<0.5 (MAX VALUE)	<0.5	<0.5	<0.5
C6CL6	9741 NG/L	10 10<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
PCP	9769 UG/L	10 4<	0.0211- 0.0251	>0.0172	0.0553 (LOG NORMAL)	<0.01	0.061	0.0205
HCH BETA	9819 NG/L	5 5<	0.0 - 1.0	>0.0	<1.0 (MAX VALUE)	<1.0	<1.0	<1.0
TDE OP'	9820 NG/L	10 10<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
CR 0.45UM	9838 US/L CR	11 3<	7.7181- 8.1272	>7.0543	20.7935 (LOG NORMAL)	<1.5	20.0	7.3
COP 0.45UM	9890 UG/L CU	11 2<	11.609 - 11.7318	>18.2828	39.2031 (LOG NORMAL)	<0.59	65.0	7.4
PB 0.45UM	9892 US/L PB	11 10<	0.2545- 2.7545	>0.7501	2.9227 (LOG NORMAL)	<2.5	<5.0	<2.5
NI 0.45UM	9894 US/L NI	11 5<	7.5318- 9.1272	>11.0997	26.3945 (LOG NORMAL)	<3.0	39.0	4.3
ZN 0.45UM	9896 US/L ZN	11 1<	19.4727- 19.8363	>14.5895	45.9273 (LOG NORMAL)	<4.0	53.0	22.0
HCH DELTA	9945 NG/L	10 10<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0
DDE OP'	9946 NG/L	10 10<	0.0 - 1.0	>0.0	0.5 (LOG NORMAL)	<1.0	<1.0	<1.0

*** STATISTICS FOR ANOTHER SAMPLE POINT ON NEXT PAGE ***

STATISTICAL SUMMARY (AW712) for location WITHAM HAVEN CUT END LOW SLACK
01/01/92 TO 30/08/92

(R03BINCELIT)

DET	NAME	UNITS	-N-	-MEAN-	-SD-	-MIN-	-MAX-	LOG.NORM.95 ZILE
00613	PH	PH UNITS	8	8.1050	0.1541	7.8100	8.3600	
00683	TURBIDITY	FTU	8	28.837	11.976	9.6800	38.000	
00761	TEMP C	CEL	8	12.562	6.5193	1.6000	19.600	
00772	COND 25 C	USIE/CM	8	28086.	10352.	8002.0	41330.	
00812	D.O.(ZSAT)	% SATN	8	93.525	16.068	74.600	131.00	
00822	D.O	MG/L O	8	9.1875	1.9962	5.9500	12.350	
00851	BOD+ATU T	MG/L O	8	4.0300	1.2835	2.4900	6.3200	
01112	AMMONIA N	MG/L AS N	7	0.2540	0.1599	0.0260	0.5280	
01113	AMMONIA N	MG/L N	1	0.5160	0.0000	0.5160	0.5160	
01165	T.O.N AS N	MG/L N	1	15.192	0.0000	15.192	15.192	
01166	TON AS N	MG/L AS N	7	4.7810	4.6895	0.7840	14.447	
01352	SS 105 C	MG/L	5	103.00	84.320	20.000	263.00	
01724	CHLORIDE	MG/L CL	1	2278.1	0.0000	2278.1	2278.1	
01728	CHLORIDE	CL MG/L	7	11058.	3032.1	6694.1	15214.	
01806	P SOL.REACT	MG/L P	1	0.5490	0.0000	0.5490	0.5490	
01808	P SOL.REACT	MG/L AS P	7	0.2062	0.1041	0.0460	0.3360	
04196	FE 0.45UM	MG/L FE	7	0.0211	0.0096	0.0050	0.0350	
04216	IRON TOTAL	MG/L FE	1	1.2050	0.0000	1.2050	1.2050	
70711	ISODRIN	MG/L	8	0.5000	0.0000	0.5000	0.5000	
73441	DDT TOT 41	MG/L	2	2.0000	0.0000	2.0000	2.0000	
73661	TECNAZINE	MG/L	8	0.5625	0.1653	0.5000	1.0000	
73671	TRIFLURAL.	MG/L	8	2.1675	1.7049	0.5000	4.6000	
73681	CHLORTHAL.	MG/L	8	0.5000	0.0000	0.5000	0.5000	
73691	FLUDROXYPYR	MG/L	8	0.5375	0.0992	0.5000	0.8000	
73701	PCB - C28	MG/L	8	2.5000	0.0000	2.5000	2.5000	
73711	PCB - C52	MG/L	8	2.5000	0.0000	2.5000	2.5000	
73721	PCB - C101	MG/L	8	2.5000	0.0000	2.5000	2.5000	
73731	PCB - C118	MG/L	8	2.5000	0.0000	2.5000	2.5000	
73741	PCB - C138	MG/L	8	2.5000	0.0000	2.5000	2.5000	
73751	PCB - C153	MG/L	8	2.5000	0.0000	2.5000	2.5000	
73761	PCB - C180	MG/L	8	2.5000	0.0000	2.5000	2.5000	
74061	ENDOSULF-A	MG/L	8	0.3062	0.1309	0.2500	0.6500	
74071	ENDOSULF-B	MG/L	8	0.2500	0.0000	0.2500	0.2500	
74121	HCB	MG/L	8	0.5000	0.0000	0.5000	0.5000	
74181	135C6H3CL3	MG/L	8	2.5000	0.0000	2.5000	2.5000	
74311	TOT O-TIN	UG/L SN	8	0.0026	0.0016	0.0020	0.0070	
74861	123C6H3CL3	MG/L	8	0.5000	0.0000	0.5000	0.5000	
74871	124C6H3CL3	MG/L	8	2.5000	0.0000	2.5000	2.5000	
90672	CHLOROFORM	UG/L	2	0.0500	0.0000	0.0500	0.0500	
90682	CHBRCL2	UG/L	2	0.0500	0.0000	0.0500	0.0500	
90692	CHBR2CL	UG/L	2	0.0500	0.0000	0.0500	0.0500	
90702	BROMOFORM	US/L	2	0.0500	0.0000	0.0500	0.0500	
90942	SALIN PPT	G/L	8	17.989	7.3271	4.1142	27.460	
91152	CARBON TET	UG/L	2	0.0500	0.0000	0.0500	0.0500	
91192	C2HCL3	UG/L	2	0.0500	0.0000	0.0500	0.0500	
91212	C2CL4	UG/L	2	0.0500	0.0000	0.0500	0.0500	
92031	HCH ALPHA	MG/L	8	0.5000	0.0000	0.5000	0.5000	
92041	HCH GAMMA	MG/L	8	6.9562	2.2410	4.3000	11.000	
92051	DIELDRIN	MG/L	8	0.5456	0.1882	0.3500	0.9000	
92061	DDT (PP')	MG/L	8	0.7500	0.6614	0.5000	2.5000	
92071	DDE (PP')	MG/L	8	0.5000	0.0000	0.5000	0.5000	
92081	ENDRIN	MG/L	7	0.2500	0.0000	0.2500	0.2500	
92091	ALDRIN	MG/L	8	0.3375	0.1690	0.2500	0.7500	
92101	HEPTACHLOR	MG/L	8	0.5000	0.0000	0.5000	0.5000	

92231	HEPT EPOX	NG/L	8	1.0500	1.4551	0.5000	4.9000
92241	ENDOSULFAN	NG/L	0				
92251	DDT (OP')	NG/L	8	0.6250	0.3307	0.5000	1.5000
92261	TDE (PP')	NG/L	8	0.5000	0.0000	0.5000	0.5000
92601	AS 0.45 UM	UG/L AS	7	2.3310	1.1055	1.0800	4.1000
92611	AS TOTAL	UG/L AS	1	3.6750	0.0000	3.6750	3.6750
92645	CD 0.45UM	UG/L CD	2	0.2500	0.0000	0.2500	0.2500
92646	CD 0.45UM	UG/L CD	1	0.1250	0.0000	0.1250	0.1250
92655	CD TOTAL	UG/L CD	1	0.1250	0.0000	0.1250	0.1250
92682	HG 0.45UM	UG/L HG	7	0.0410	0.0197	0.0250	0.0770
92692	HG TOTAL	UG/L HG	1	0.0250	0.0000	0.0250	0.0250
97342	111C2H3CL3	UG/L	2	0.1250	0.0750	0.0500	0.2000
97411	C6CL6	NG/L	8	0.5000	0.0000	0.5000	0.5000
97692	PCP	UG/L	8	0.1017	0.2224	0.0050	0.6900
98191	HCH BETA	NG/L	8	0.4687	0.0826	0.2500	0.5000
98201	TDE (OP')	NG/L	8	0.5000	0.0000	0.5000	0.5000
98874	CR TOTAL	UG/L CR	1	3.6000	0.0000	3.6000	3.6000
98884	CR 0.45UM	UG/L CR	2	7.7500	5.2500	2.5000	13.000
98885	CR 0.45UM	UG/L CR	1	0.7500	0.0000	0.7500	0.7500
98894	CU TOTAL	UG/L CU	1	6.6000	0.0000	6.6000	6.6000
98904	CU 0.45UM	UG/L CU	2	2.5000	0.0000	2.5000	2.5000
98905	CU 0.45UM	UG/L CU	1	5.7000	0.0000	5.7000	5.7000
98914	PB TOTAL	UG/L PB	1	4.1000	0.0000	4.1000	4.1000
98925	PB 0.45UM	UG/L PB	2	2.5000	0.0000	2.5000	2.5000
98926	PB 0.45UM	UG/L PB	1	1.2500	0.0000	1.2500	1.2500
98934	NI TOTAL	UG/L NI	1	15.000	0.0000	15.000	15.000
98944	NI 0.45UM	UG/L NI	2	5.2500	2.7500	2.5000	8.0000
98945	NI 0.45UM	UG/L NI	1	3.3000	0.0000	3.3000	3.3000
98954	ZN TOTAL	UG/L ZN	1	12.000	0.0000	12.000	12.000
98964	ZN 0.45UM	UG/L ZN	2	11.200	5.8000	5.4000	17.000
98965	ZN 0.45UM	UG/L ZN	1	7.2000	0.0000	7.2000	7.2000
99451	HCH DELTA	NG/L	8	0.5000	0.0000	0.5000	0.5000
99461	DDE (OP')	NG/L	8	0.5000	0.0000	0.5000	0.5000

END OF EXTRACT FOR SAMPLE POINT

END OF REPORT