APPENDIX O

Printout of Verification Model Output

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1
        TEXAS WATER COMMISSION WATER QUALITY STREAM MODEL                                   01/23/04
        QUAL-TX     VERSION 3.3     UPDATED DECEMBER 3, 1990                                11:37:03


        $$$ DATA TYPE 1 (TITLES AND CONTROL CARDS) $$$

        CARD TYPE       CONTROL TITLES

        CNTROL01        QUAL-TX simulation for Upper Bayou Des Allemands, LA
        CNTROL02        verification run
        CNTROL03  YES   ECHO
        CNTROL04   NO   CAPS
        CNTROL05  YES   INTE
        CNTROL06  YES   FINA
        CNTROL07  YES   LOAD
        CNTROL08  YES   METR
        CNTROL09  YES   OXYG
        CNTROL10  YES   OVER
        ENDATA01


        $$$ DATA TYPE 2 (MODEL OPTIONS) $$$

        CARD TYPE       MODEL OPTION

        MODOPT01   NO   TEMP
        MODOPT02   NO   SALI
        MODOPT04  YES   CONSERVATIVE MATERIAL I  = cond                    IN umhos
        MODOPT04   NO   CONS
        MODOPT05  YES   DISS
        MODOPT06  YES   BIOC
        MODOPT07  YES   NITR
        MODOPT08  YES   PHOS
        MODOPT09  YES   CHLO
        MODOPT10   NO   MACR
        MODOPT11   NO   COLI
        MODOPT12   NO   NONC
        ENDATA02


        $$$ DATA TYPE 3 (PROGRAM CONSTANTS) $$$

        CARD TYPE       DESCRIPTION OF CONSTANT                       VALUE

        PROGRAM         MAXIMUM ITERATION LIMIT            =     1500.00000
        PROGRAM         KL MININUM                         =        0.99000
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PROGRAM        TOTAL DAILY RADIATION            =       416.00000
ENDATA03


$$$ DATA TYPE 4 (TEMPERATURE CORRECTION CONSTANTS FOR RATE COEFFICIENTS) $$$

CARD TYPE     RATE CODE     THETA VALUE

BSOD         BENTHAL        1.06500
THETA        NH3 DECA       1.07000
ENDATA04


$$$ CONSTANTS TYPE 5 (TEMPERATURE DATA) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                      VALUE

ENDATA05


$$$ DATA TYPE 6 (ALGAE CONSTANTS) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                      VALUE

LIGHT           LIGHT SATURATION CONSTANT         =        10.00000
ENDATA06


$$$ DATA TYPE 7 (MACROPHYTE CONSTANTS) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                      VALUE

ENDATA07


$$$ DATA TYPE 8 (REACH IDENTIFICATION DATA) $$$
                                                   BEGIN        END     ELEM    REACH    ELEMS   BEGIN    END
CARD TYPE  REACH  ID  NAME                         REACH       REACH   LENGTH   LENGTH   PER RCH  ELEM    ELEM
                                                      KM          KM       KM       KM             NUM     NUM

REACH ID      1   DA  Bayou Des Allemands          33.00  TO   31.75   0.1250     1.25      10       1      10
REACH ID      2   DA  Bayou Des Allemands          31.75  TO   31.25   0.1000     0.50       5      11      15
REACH ID      3   DA  Bayou Des Allemands          31.25  TO   28.75   0.1000     2.50      25      16      40
REACH ID      4   DA  Bayou Des Allemands          28.75  TO   28.25   0.1000     0.50       5      41      45
REACH ID      5   DA  Bayou Des Allemands          28.25  TO   27.25   0.1000     1.00      10      46      55
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REACH ID	6	DA	Bayou Des Allemands	27.25	TO	26.25	0.1000	1.00	10	56	65
REACH ID	7	DA	Bayou Des Allemands	26.25	TO	25.25	0.1000	1.00	10	66	75
REACH ID	8	DA	Bayou Des Allemands	25.25	TO	24.25	0.1000	1.00	10	76	85
REACH ID	9	DA	Bayou Des Allemands	24.25	TO	23.25	0.1000	1.00	10	86	95
REACH ID	10	DA	Bayou Des Allemands	23.25	TO	22.25	0.1000	1.00	10	96	105
REACH ID	11	DA	Bayou Des Allemands	22.25	TO	21.55	0.1000	0.70	7	106	112

ENDATA08

$$$ DATA TYPE 9 (ADVECTIVE HYDRAULIC COEFFICIENTS) $$$

CARD TYPE	REACH	ID	VELOCITY "A"	VELOCITY "B"	DEPTH "C"	DEPTH "D"	DEPTH "E"	MANNINGS "N"
HYDR-1	1	DA	0.00045500	1.000	1.520	0.000	0.000	0.000
HYDR-1	2	DA	0.00055300	1.000	1.520	0.000	0.000	0.000
HYDR-1	3	DA	0.00065000	1.000	1.840	0.000	0.000	0.000
HYDR-1	4	DA	0.00098500	1.000	2.160	0.000	0.000	0.000
HYDR-1	5	DA	0.00178000	1.000	2.160	0.000	0.000	0.000
HYDR-1	6	DA	0.00147000	1.000	2.620	0.000	0.000	0.000
HYDR-1	7	DA	0.00125000	1.000	3.080	0.000	0.000	0.000
HYDR-1	8	DA	0.00125000	1.000	3.080	0.000	0.000	0.000
HYDR-1	9	DA	0.00138000	1.000	2.790	0.000	0.000	0.000
HYDR-1	10	DA	0.00154000	1.000	2.500	0.000	0.000	0.000
HYDR-1	11	DA	0.00368000	1.000	2.500	0.000	0.000	0.000

ENDATA09

$$$ DATA TYPE 10 (DISPERSIVE HYDRAULIC COEFFICIENTS) $$$

CARD TYPE	REACH	ID	TIDAL RANGE	DISPERSION "A"	DISPERSION "B"	DISPERSION "C"	DISPERSION "D"
HYDR-2	1	DA	0.00	4.500	0.000	0.000	0.000
HYDR-2	2	DA	0.00	4.500	0.000	0.000	0.000
HYDR-2	3	DA	0.00	4.500	0.000	0.000	0.000
HYDR-2	4	DA	0.00	4.500	0.000	0.000	0.000
HYDR-2	5	DA	0.00	4.500	0.000	0.000	0.000
HYDR-2	6	DA	0.00	4.500	0.000	0.000	0.000
HYDR-2	7	DA	0.00	4.500	0.000	0.000	0.000
HYDR-2	8	DA	0.00	4.500	0.000	0.000	0.000
HYDR-2	9	DA	0.00	4.500	0.000	0.000	0.000
HYDR-2	10	DA	0.00	4.500	0.000	0.000	0.000
HYDR-2	11	DA	0.00	4.500	0.000	0.000	0.000

ENDATA10

$$$ DATA TYPE 11 (INITIAL CONDITIONS) $$$

CARD TYPE	REACH	ID	TEMP	SALIN	DO	NH3	NO3+2	PHOS	CHL A	MACRO
INITIAL	1	DA	27.70	0.11	6.66	0.19	0.05	0.06	44.00	0.00
INITIAL	2	DA	27.70	0.11	6.66	0.19	0.05	0.06	44.00	0.00
INITIAL	3	DA	28.60	0.12	7.57	0.19	0.05	0.06	44.00	0.00
INITIAL	4	DA	29.50	0.13	8.47	0.19	0.05	0.06	44.00	0.00
INITIAL	5	DA	28.90	0.12	7.41	0.19	0.05	0.06	44.00	0.00
INITIAL	6	DA	28.30	0.11	6.34	0.17	0.05	0.07	43.50	0.00
INITIAL	7	DA	29.60	0.12	6.74	0.16	0.05	0.07	43.00	0.00
INITIAL	8	DA	29.10	0.12	6.39	0.21	0.05	0.08	41.50	0.00
INITIAL	9	DA	28.50	0.11	6.04	0.25	0.05	0.09	40.00	0.00
INITIAL	10	DA	28.50	0.11	6.04	0.25	0.05	0.09	40.00	0.00
INITIAL	11	DA	28.90	0.11	5.89	0.25	0.05	0.09	40.00	0.00

ENDATA11

$$$ DATA TYPE 12 (REAERATION, SEDIMENT OXYGEN DEMAND, BOD COEFFICIENTS) $$$

CARD TYPE	REACH	ID	K2 OPT	K2 "A"	K2 "B"	K2 "C"	BKGRND SOD	AEROB BOD DECAY	BOD SETT	BOD CONV TO SOD	ANAER BOD DECAY
COEF-1	1	DA	3.	0.000	0.000	0.000	0.875	0.090	0.000	0.000	0.000
COEF-1	2	DA	3.	0.000	0.000	0.000	1.000	0.090	0.000	0.000	0.000
COEF-1	3	DA	3.	0.000	0.000	0.000	1.000	0.090	0.000	0.000	0.000
COEF-1	4	DA	3.	0.000	0.000	0.000	1.000	0.090	0.000	0.000	0.000
COEF-1	5	DA	3.	0.000	0.000	0.000	1.000	0.090	0.000	0.000	0.000
COEF-1	6	DA	3.	0.000	0.000	0.000	1.000	0.090	0.000	0.000	0.000
COEF-1	7	DA	3.	0.000	0.000	0.000	1.000	0.090	0.000	0.000	0.000
COEF-1	8	DA	3.	0.000	0.000	0.000	1.110	0.090	0.000	0.000	0.000
COEF-1	9	DA	3.	0.000	0.000	0.000	1.000	0.090	0.000	0.000	0.000
COEF-1	10	DA	3.	0.000	0.000	0.000	0.875	0.090	0.000	0.000	0.000
COEF-1	11	DA	3.	0.000	0.000	0.000	0.750	0.090	0.000	0.000	0.000

ENDATA12

$$$ DATA TYPE 13 (NITROGEN AND PHOSPHORUS COEFFICIENTS) $$$

CARD TYPE	REACH	ID	ORG-N DECA	ORG-N SETT	ORGN CONV TO NH3 SRCE	NH3 DECA	NH3 SRCE	PHOS SRCE	DENIT RATE
COEF-2	1	DA	0.02	0.00	1.00	0.10	0.04	0.04	0.00
COEF-2	2	DA	0.02	0.00	1.00	0.10	0.04	0.04	0.00
COEF-2	3	DA	0.02	0.00	1.00	0.10	0.08	0.03	0.00
COEF-2	4	DA	0.02	0.00	1.00	0.10	0.12	0.02	0.00
COEF-2	5	DA	0.02	0.00	1.00	0.10	0.18	0.02	0.00
COEF-2	6	DA	0.02	0.00	1.00	0.10	0.20	0.02	0.00

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COEF-2          7   DA      0.02      0.00      1.00      0.10      0.20      0.02      0.00
COEF-2          8   DA      0.02      0.00      1.00      0.10      0.20      0.01      0.00
COEF-2          9   DA      0.02      0.00      1.00      0.10      0.22      0.00      0.00
COEF-2         10   DA      0.02      0.00      1.00      0.10      0.24      0.00      0.00
COEF-2         11   DA      0.02      0.00      1.00      0.10      0.26      0.00      0.00
ENDATA13


$$$ DATA TYPE 14 (ALGAE AND MACROPHYTE COEFFICIENTS) $$$

CARD TYPE      REACH  ID      SECCHI    ALGAE:    ALGAE    ALG CONV    ALGAE     ALGAE     MACRO     MACRO
                              DEPTH     CHL A     SETT     TO SOD      GROW      RESP      GROW      RESP

COEF-3          1   DA      1.00      0.060     0.50      0.08        0.81      0.10      0.00      0.00
COEF-3          2   DA      1.00      0.060     0.50      0.08        0.81      0.10      0.00      0.00
COEF-3          3   DA      1.00      0.060     0.50      0.08        0.81      0.10      0.00      0.00
COEF-3          4   DA      1.00      0.060     0.50      0.08        0.81      0.10      0.00      0.00
COEF-3          5   DA      1.00      0.060     0.50      0.08        0.81      0.10      0.00      0.00
COEF-3          6   DA      1.00      0.060     0.50      0.08        0.81      0.10      0.00      0.00
COEF-3          7   DA      1.00      0.060     0.50      0.08        0.81      0.10      0.00      0.00
COEF-3          8   DA      1.00      0.060     0.50      0.08        0.81      0.10      0.00      0.00
COEF-3          9   DA      1.00      0.060     0.50      0.08        0.81      0.10      0.00      0.00
COEF-3         10   DA      1.00      0.060     0.50      0.08        0.81      0.10      0.00      0.00
COEF-3         11   DA      1.00      0.060     0.50      0.08        0.81      0.10      0.00      0.00
ENDATA14


$$$ DATA TYPE 15 (COLIFORM AND NONCONSERVATIVE COEFFICIENTS) $$$

CARD TYPE      REACH  ID    COLIFORM      NCM       NCM    NCM CONV
                            DIE-OFF     DECAY      SETT     TO SOD

ENDATA15


$$$ DATA TYPE 16 (INCREMENTAL DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) $$$

CARD TYPE      REACH  ID          OUTFLOW         INFLOW      TEMP     SALIN      CM-I     CM-II    INFLOW/DIST

ENDATA16


$$$ DATA TYPE 17 (INCREMENTAL DATA FOR DO, BOD, AND NITROGEN) $$$

CARD TYPE      REACH  ID          DO       BOD     ORG-N       NH3     NO3+2
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ENDATA17

$$$ DATA TYPE 18 (INCREMENTAL DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) $$$

CARD TYPE	REACH	ID	PHOS	CHL A	COLI	NCM

ENDATA18

$$$ DATA TYPE 19 (NONPOINT SOURCE DATA) $$$

CARD TYPE	REACH	ID	BOD	ORG-N	COLI	NCM	DO
NONPOINT	1	DA	3840.00	0.00	0.00	0.00	0.00
NONPOINT	2	DA	2880.00	0.00	0.00	0.00	0.00
NONPOINT	3	DA	1920.00	0.00	0.00	0.00	0.00
NONPOINT	4	DA	480.00	0.00	0.00	0.00	0.00
NONPOINT	5	DA	96.00	0.00	0.00	0.00	0.00
NONPOINT	6	DA	96.00	0.00	0.00	0.00	0.00
NONPOINT	7	DA	96.00	0.00	0.00	0.00	0.00
NONPOINT	8	DA	240.00	0.00	0.00	0.00	0.00
NONPOINT	9	DA	240.00	0.00	0.00	0.00	0.00
NONPOINT	10	DA	240.00	0.00	0.00	0.00	0.00
NONPOINT	11	DA	96.00	0.00	0.00	0.00	0.00

ENDATA19

$$$ DATA TYPE 20 (HEADWATER FOR FLOW, TEMPERATURE, SALINITY AND CONSERVATIVES) $$$

CARD TYPE	ELEMENT	NAME	UNIT	FLOW	TEMP	SALIN	CM-I	CM-II
HDWTR-1	1	Lake Des Allemands	0	96.96000	29.100	0.000	200.000	0.000

ENDATA20

$$$ DATA TYPE 21 (HEADWATER DATA FOR DO, BOD, AND NITROGEN) $$$

CARD TYPE	ELEMENT	NAME	DO	BOD	ORG-N	NH3	NO3+2
HDWTR-2	1	Lake Des Allemands	9.94	5.30	1.24	0.16	0.05

ENDATA21

$$$ DATA TYPE 22 (HEADWATER DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) $$$

CARD TYPE	ELEMENT	NAME	PHOS	CHL A	COLI	NCM
HDWTR-3	1	Lake Des Allemands	0.07	49.00	0.00	0.00

ENDATA22

$$$ DATA TYPE 23 (JUNCTION DATA) $$$

CARD TYPE	JUNCTION ELEMENT	UPSTRM ELEMENT	NAME

ENDATA23

$$$ DATA TYPE 24 (WASTELOAD DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) $$$

CARD TYPE	ELEMENT	NAME	FLOW	TEMP	SAL	CM-I	CM-II
WSTLD-1	8	Providence Canal	9.96000	26.300	0.000	256.000	0.000
WSTLD-1	112	Collier Fisheries	0.00044	30.800	0.000	503.000	0.000

ENDATA24

$$$ DATA TYPE 25 (WASTELOAD DATA FOR DO, BOD, AND NITROGEN) $$$

CARD TYPE	ELEMENT	NAME	DO	BOD	% BOD RMVL	ORG-N	NH3	% NITRIF	NO3+2
WSTLD-2	8	Providence Canal	0.24	5.30	0.00	1.24	0.16	0.00	0.05
WSTLD-2	112	Collier Fisheries	2.00	60.00	0.00	5.00	10.00	0.00	10.00

ENDATA25

$$$ DATA TYPE 26 (WASTELOAD DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) $$$

CARD TYPE	ELEMENT	NAME	PHOS	CHL A	COLI	NCM
WSTLD-3	8	Providence Canal	0.07	49.00	0.00	0.00
WSTLD-3	112	Collier Fisheries	5.00	0.00	0.00	0.00

ENDATA26

$$$ DATA TYPE 27 (LOWER BOUNDARY CONDITIONS) $$$

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CARD TYPE          CONSTITUENT                        CONCENTRATION

LOWER BC     TEMPERATURE                        =     29.400 DEG C
LOWER BC     SALINITY                           =      0.111 PPT
LOWER BC     CONSERVATIVE MATERIAL I            =    200.000 umhos
LOWER BC     CONSERVATIVE MATERIAL II           =      0.000
LOWER BC     DISSOLVED OXYGEN                   =      5.890 MG/L
LOWER BC     BIOCHEMICAL OXYGEN DEMAND          =      3.690 MG/L
LOWER BC     ORGANIC NITROGEN                   =      1.250 MG/L
LOWER BC     AMMONIA NITROGEN                   =      0.250 MG/L
LOWER BC     NITRATE + NITRITE                  =      0.050 MG/L
LOWER BC     PHOSPHOROUS                        =      0.089 MG/L
LOWER BC     CHLOROPYHLL A                      =     40.000 UG/L
LOWER BC     COLIFORM                           =      0.000 #/100 ML
LOWER BC     NONCONSERVATIVE MATERIAL           =      0.000
ENDATA27


$$$ DATA TYPE 28 (FLOW AUGMENTATION DATA) $$$

CARD TYPE        REACH       AVAIL HDWS       TARGET            ORDER OF AVAIL SOURCES

ENDATA28


$$$ DATA TYPE 29 (SENSITIVITY ANALYSIS DATA) $$$

CARD TYPE       PARAMETER     COL 1     COL 2     COL 3     COL 4     COL 5     COL 6     COL 7     COL 8

SENSITIV         NH3 SRCE     -50.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
SENSITIV         PO4 SRCE     -50.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0
ENDATA29


$$$ DATA TYPE 30 (PLOT CONTROL CARDS) $$$


ENDATA30


1

.....NO ERRORS DETECTED IN INPUT DATA

.....HYDRAULIC CALCULATIONS COMPLETED
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     .....TRIDIAGONAL MATRIX TERMS INITIALIZED

     .....PHOTOSYNTHETIC RATES CONVERGENT IN   6 ITERATIONS

     .....OXYGEN DEPENDENT RATES CONVERGENT IN   1 ITERATIONS

     .....CONSTITUENT CALCULATIONS COMPLETED
1INTERMEDIATE REPORT
 DISSOLVED OXYGEN                                        QUAL-TX simulation for Upper Bayou Des Allemands, LA
 MG/L                                                    verification run
```

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
DA	1	1	9.67	9.52	9.37	9.22	9.06	8.85	8.54	8.00	7.91	7.83
DA	2	11	7.77	7.71	7.65	7.59	7.53					
DA	3	16	7.49	7.44	7.39	7.35	7.30	7.26	7.21	7.17	7.12	7.08
DA	3	26	7.04	7.00	6.95	6.91	6.87	6.83	6.79	6.75	6.71	6.67
DA	3	36	6.63	6.60	6.56	6.52	6.49					
DA	4	41	6.47	6.45	6.43	6.41	6.39					
DA	5	46	6.38	6.37	6.36	6.35	6.34	6.33	6.32	6.31	6.30	6.28
DA	6	56	6.27	6.26	6.25	6.23	6.22	6.21	6.19	6.18	6.16	6.15
DA	7	66	6.13	6.12	6.10	6.09	6.07	6.06	6.04	6.03	6.01	6.00
DA	8	76	5.98	5.97	5.96	5.94	5.93	5.91	5.90	5.88	5.87	5.86
DA	9	86	5.85	5.83	5.82	5.81	5.80	5.79	5.78	5.77	5.75	5.74
DA	10	96	5.73	5.73	5.72	5.71	5.70	5.69	5.68	5.67	5.66	5.65
DA	11	106	5.65	5.65	5.65	5.64	5.64	5.64	5.68			

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1INTERMEDIATE REPORT
 BIOCHEMICAL OXYGEN DEMAND                               QUAL-TX simulation for Upper Bayou Des Allemands, LA
 MG/L                                                    verification run
```

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
DA	1	1	5.3	5.4	5.4	5.4	5.4	5.5	5.5	5.5	5.5	5.5
DA	2	11	5.6	5.6	5.7	5.7	5.7					
DA	3	16	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
DA	3	26	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
DA	3	36	5.6	5.6	5.6	5.6	5.6					
DA	4	41	5.6	5.6	5.6	5.6	5.6					
DA	5	46	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
DA	6	56	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
DA	7	66	5.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
DA	8	76	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
DA	9	86	5.5	5.5	5.5	5.5	5.5	5.4	5.4	5.4	5.4	5.4
DA	10	96	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
DA	11	106	5.4	5.4	5.4	5.4	5.4	5.4	5.1			

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1INTERMEDIATE REPORT
 ORGANIC NITROGEN                                        QUAL-TX simulation for Upper Bayou Des Allemands, LA
```

MG/L verification run

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
DA	1	1	1.24	1.24	1.24	1.23	1.23	1.23	1.23	1.23	1.23	1.23
DA	2	11	1.23	1.23	1.23	1.23	1.23					
DA	3	16	1.23	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
DA	3	26	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.21	1.21	1.21
DA	3	36	1.21	1.21	1.21	1.21	1.21					
DA	4	41	1.21	1.21	1.21	1.21	1.21					
DA	5	46	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21
DA	6	56	1.21	1.21	1.21	1.21	1.21	1.20	1.20	1.20	1.20	1.20
DA	7	66	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
DA	8	76	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
DA	9	86	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.19	1.19
DA	10	96	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
DA	11	106	1.19	1.19	1.19	1.19	1.19	1.19	1.20			

1INTERMEDIATE REPORT
AMMONIA NITROGEN QUAL-TX simulation for Upper Bayou Des Allemands, LA
MG/L verification run

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
DA	1	1	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.18	0.18
DA	2	11	0.18	0.18	0.18	0.18	0.18					
DA	3	16	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.20
DA	3	26	0.20	0.20	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21
DA	3	36	0.21	0.21	0.21	0.22	0.22					
DA	4	41	0.22	0.22	0.22	0.22	0.22					
DA	5	46	0.22	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
DA	6	56	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
DA	7	66	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
DA	8	76	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.27
DA	9	86	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.28	0.28
DA	10	96	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.29
DA	11	106	0.29	0.29	0.29	0.29	0.29	0.29	0.28			

1INTERMEDIATE REPORT
NITRATE+NITRITE NITROGEN QUAL-TX simulation for Upper Bayou Des Allemands, LA
MG/L verification run

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
DA	1	1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06
DA	2	11	0.06	0.06	0.06	0.06	0.06					
DA	3	16	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
DA	3	26	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07
DA	3	36	0.07	0.07	0.07	0.07	0.07					

DA	4	41	0.07	0.07	0.07	0.07	0.07					
DA	5	46	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
DA	6	56	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08
DA	7	66	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DA	8	76	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DA	9	86	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09
DA	10	96	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
DA	11	106	0.09	0.09	0.09	0.09	0.09	0.09	0.08			

1INTERMEDIATE REPORT
TOTAL NITROGEN
MG/L

QUAL-TX simulation for Upper Bayou Des Allemands, LA
verification run

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
DA	1	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
DA	2	11	1.5	1.5	1.5	1.5	1.5					
DA	3	16	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
DA	3	26	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
DA	3	36	1.5	1.5	1.5	1.5	1.5					
DA	4	41	1.5	1.5	1.5	1.5	1.5					
DA	5	46	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
DA	6	56	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
DA	7	66	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
DA	8	76	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
DA	9	86	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6
DA	10	96	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
DA	11	106	1.6	1.6	1.6	1.6	1.6	1.6	1.6			

1INTERMEDIATE REPORT
PHOSPHORUS
MG/L

QUAL-TX simulation for Upper Bayou Des Allemands, LA
verification run

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
DA	1	1	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08
DA	2	11	0.08	0.08	0.08	0.08	0.08					
DA	3	16	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DA	3	26	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
DA	3	36	0.09	0.09	0.09	0.09	0.09					
DA	4	41	0.09	0.09	0.09	0.09	0.09					
DA	5	46	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
DA	6	56	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
DA	7	66	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
DA	8	76	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
DA	9	86	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
DA	10	96	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
DA	11	106	0.09	0.09	0.09	0.09	0.09	0.09	0.09			

1INTERMEDIATE REPORT
CHLOROPHYLL A

QUAL-TX simulation for Upper Bayou Des Allemands, LA

UG/L

verification run

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
DA	1	1	48.0	47.4	46.9	46.4	45.9	45.4	45.0	44.8	44.3	43.9
DA	2	11	43.6	43.3	43.1	42.8	42.5					
DA	3	16	42.3	42.1	41.9	41.7	41.5	41.2	41.0	40.8	40.6	40.4
DA	3	26	40.2	40.0	39.8	39.6	39.4	39.2	39.0	38.8	38.6	38.4
DA	3	36	38.2	38.0	37.9	37.7	37.5					
DA	4	41	37.4	37.3	37.2	37.1	37.0					
DA	5	46	36.9	36.9	36.8	36.8	36.7	36.6	36.6	36.5	36.5	36.4
DA	6	56	36.3	36.3	36.2	36.1	36.1	36.0	35.9	35.9	35.8	35.7
DA	7	66	35.7	35.6	35.5	35.5	35.4	35.3	35.2	35.2	35.1	35.0
DA	8	76	35.0	34.9	34.8	34.8	34.7	34.6	34.6	34.5	34.4	34.4
DA	9	86	34.3	34.2	34.2	34.1	34.0	34.0	33.9	33.9	33.8	33.7
DA	10	96	33.7	33.6	33.6	33.5	33.5	33.4	33.4	33.3	33.2	33.2
DA	11	106	33.2	33.1	33.1	33.1	33.1	33.2	34.3			

1INTERMEDIATE REPORT

TEMPERATURE

DEG C

QUAL-TX simulation for Upper Bayou Des Allemands, LA

verification run

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
DA	1	1	27.70	27.70	27.70	27.70	27.70	27.70	27.70	27.70	27.70	27.70
DA	2	11	27.88	28.06	28.24	28.42	28.60					
DA	3	16	28.64	28.67	28.71	28.74	28.78	28.82	28.85	28.89	28.92	28.96
DA	3	26	29.00	29.03	29.07	29.10	29.14	29.18	29.21	29.25	29.28	29.32
DA	3	36	29.36	29.39	29.43	29.46	29.50					
DA	4	41	29.38	29.26	29.14	29.02	28.90					
DA	5	46	28.84	28.78	28.72	28.66	28.60	28.54	28.48	28.42	28.36	28.30
DA	6	56	28.43	28.56	28.69	28.82	28.95	29.08	29.21	29.34	29.47	29.60
DA	7	66	29.55	29.50	29.45	29.40	29.35	29.30	29.25	29.20	29.15	29.10
DA	8	76	29.04	28.98	28.92	28.86	28.80	28.74	28.68	28.62	28.56	28.50
DA	9	86	28.50	28.50	28.50	28.50	28.50	28.50	28.50	28.50	28.50	28.50
DA	10	96	28.54	28.58	28.62	28.66	28.70	28.74	28.78	28.82	28.86	28.90
DA	11	106	28.97	29.04	29.11	29.19	29.26	29.33	29.40			

1INTERMEDIATE REPORT

SALINITY

PPT

QUAL-TX simulation for Upper Bayou Des Allemands, LA

verification run

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
DA	1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DA	2	11	0.1	0.1	0.1	0.1	0.1					
DA	3	16	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DA	3	26	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DA	3	36	0.1	0.1	0.1	0.1	0.1					

DA	4	41	0.1	0.1	0.1	0.1	0.1					
DA	5	46	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DA	6	56	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DA	7	66	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DA	8	76	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DA	9	86	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DA	10	96	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DA	11	106	0.1	0.1	0.1	0.1	0.1	0.1	0.1			

1INTERMEDIATE REPORT
cond QUAL-TX simulation for Upper Bayou Des Allemands, LA
umhos verification run

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
DA	1	1	200.0	200.0	200.1	200.2	200.5	201.1	202.3	205.2	205.2	205.2
DA	2	11	205.2	205.2	205.2	205.2	205.2					
DA	3	16	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2
DA	3	26	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2
DA	3	36	205.2	205.2	205.2	205.2	205.2					
DA	4	41	205.2	205.2	205.2	205.2	205.2					
DA	5	46	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2
DA	6	56	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2
DA	7	66	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2
DA	8	76	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2
DA	9	86	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2
DA	10	96	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2
DA	11	106	205.2	205.2	205.2	205.2	205.2	205.1	204.2			

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FINAL REPORT Lake Des Allemands QUAL-TX simulation for Upper Bayou Des Allemands, LA
REACH NO. 1 Bayou Des Allemands verification run

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
1	HDWTR	96.9600	29.10	0.00	200.0	0.0	9.94	5.30	5.30	1.24	0.16	0.05	0.07	49.0	0.	0.00
8	WSTLD	9.9600	26.30	0.00	256.0	0.0	0.24	5.30	5.30	1.24	0.16	0.05	0.07	49.0	0.	0.00

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
1	33.00	32.88	96.9600	0.0	0.044	0.03	1.52	1445.9	274725.	180740.3	2197.8	0.	0.000	4.500	0.044
2	32.88	32.75	96.9600	0.0	0.044	0.03	1.52	1445.9	274725.	180740.3	2197.8	0.	0.000	4.500	0.044

3	32.75	32.63	96.9600	0.0	0.044	0.03	1.52	1445.9	274725.	180740.3	2197.8	0.	0.000	4.500	0.044
4	32.63	32.50	96.9600	0.0	0.044	0.03	1.52	1445.9	274725.	180740.3	2197.8	0.	0.000	4.500	0.044
5	32.50	32.38	96.9600	0.0	0.044	0.03	1.52	1445.9	274725.	180740.3	2197.8	0.	0.000	4.500	0.044
6	32.38	32.25	96.9600	0.0	0.044	0.03	1.52	1445.9	274725.	180740.3	2197.8	0.	0.000	4.500	0.044
7	32.25	32.13	96.9600	0.0	0.044	0.03	1.52	1445.9	274725.	180740.3	2197.8	0.	0.000	4.500	0.044
8	32.13	32.00	106.9200	9.3	0.049	0.03	1.52	1445.9	274725.	180740.3	2197.8	0.	0.000	4.500	0.049
9	32.00	31.88	106.9200	9.3	0.049	0.03	1.52	1445.9	274725.	180740.3	2197.8	0.	0.000	4.500	0.049
10	31.88	31.75	106.9200	9.3	0.049	0.03	1.52	1445.9	274725.	180740.3	2197.8	0.	0.000	4.500	0.049
TOT						0.32			2747253.	1807402.9					
AVG					0.045		1.52	1445.9			2197.8				
CUM						0.32									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 DECAY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA
1	32.875	7.86	0.75	0.13	0.00	0.00	3.72	3.72	0.03	0.00	0.17	0.07	0.00	0.05	-0.01	0.00	0.00	0.00	0.00
2	32.750	7.86	0.75	0.13	0.00	0.00	3.70	3.70	0.03	0.00	0.17	0.07	0.00	0.05	0.00	0.00	0.00	0.00	0.00
3	32.625	7.86	0.75	0.13	0.00	0.00	3.67	3.67	0.03	0.00	0.17	0.07	0.00	0.05	0.01	0.00	0.00	0.00	0.00
4	32.500	7.86	0.75	0.13	0.00	0.00	3.65	3.65	0.03	0.00	0.17	0.07	0.00	0.05	0.01	0.00	0.00	0.00	0.00
5	32.375	7.86	0.75	0.13	0.00	0.00	3.62	3.62	0.03	0.00	0.17	0.07	0.00	0.05	0.02	0.00	0.00	0.00	0.00
6	32.250	7.86	0.75	0.13	0.00	0.00	3.60	3.60	0.03	0.00	0.17	0.07	0.00	0.05	0.02	0.00	0.00	0.00	0.00
7	32.125	7.86	0.75	0.13	0.00	0.00	3.58	3.58	0.03	0.00	0.17	0.07	0.00	0.05	0.03	0.00	0.00	0.00	0.00
8	32.000	7.86	0.75	0.13	0.00	0.00	3.57	3.57	0.03	0.00	0.17	0.07	0.00	0.05	0.03	0.00	0.00	0.00	0.00
9	31.875	7.86	0.75	0.13	0.00	0.00	3.55	3.55	0.03	0.00	0.17	0.07	0.00	0.05	0.03	0.00	0.00	0.00	0.00
10	31.750	7.86	0.75	0.13	0.00	0.00	3.53	3.53	0.03	0.00	0.17	0.07	0.00	0.05	0.04	0.00	0.00	0.00	0.00
20 DEG C RATE				0.09		0.00		0.88	0.02		0.10	0.04	0.00	0.04			0.00	0.00	
AVG 20 DEG C RATE			0.65		0.00					0.00									0.00

* G/SQ M/D ** MG/L/DAY

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
1	32.875	27.70	0.1	200.0	0.0	9.67	5.34	5.34	1.24	0.16	0.05	1.45	0.07	48.0	0.0	0.	0.00
2	32.750	27.70	0.1	200.0	0.0	9.52	5.37	5.37	1.24	0.17	0.05	1.45	0.07	47.4	0.0	0.	0.00
3	32.625	27.70	0.1	200.1	0.0	9.37	5.39	5.39	1.24	0.17	0.05	1.45	0.07	46.9	0.0	0.	0.00
4	32.500	27.70	0.1	200.2	0.0	9.22	5.41	5.41	1.23	0.17	0.05	1.46	0.07	46.4	0.0	0.	0.00
5	32.375	27.70	0.1	200.5	0.0	9.06	5.43	5.43	1.23	0.17	0.05	1.46	0.07	45.9	0.0	0.	0.00
6	32.250	27.70	0.1	201.1	0.0	8.85	5.45	5.45	1.23	0.17	0.05	1.46	0.08	45.4	0.0	0.	0.00
7	32.125	27.70	0.1	202.3	0.0	8.54	5.47	5.47	1.23	0.17	0.05	1.46	0.08	45.0	0.0	0.	0.00
8	32.000	27.70	0.1	205.2	0.0	8.00	5.49	5.49	1.23	0.17	0.05	1.46	0.08	44.8	0.0	0.	0.00

9	31.875	27.70	0.1	205.2	0.0	7.91	5.51	5.51	1.23	0.18	0.06	1.46	0.08	44.3	0.0	0.	0.00
10	31.750	27.70	0.1	205.2	0.0	7.83	5.54	5.54	1.23	0.18	0.06	1.46	0.08	43.9	0.0	0.	0.00

* CM-I = cond umhos CM-II = NCM =
** G/CU M

********** ALGAE AND MACROPHYTE DATA **********

ELEM NO.	ENDING DIST	SECCHI DEPTH M	NITR PREF	ALG SETT 1/DA	ALG LIT LIM	ALG N LIM	ALG P LIM	ALG N&P LIM	ALG TOT LIM	ALG GROW 1/DA	ALG RESP 1/DA	A P/R RATIO	MAC LIT LIM	MAC N LIM	MAC P LIM	MAC N&P LIM	MAC TOT LIM	MAC GROW 1/DA	MAC RESP 1/DA	M P/R RATIO
1	32.875	0.60	0.24	0.39	.30	.42	.64	.50	.15	0.18	0.14	0.99	.00	.00	.00	.00	.00	0.00	0.00	0.00
2	32.750	0.60	0.24	0.39	.30	.42	.64	.51	.15	0.18	0.14	1.00	.00	.00	.00	.00	.00	0.00	0.00	0.00
3	32.625	0.60	0.24	0.39	.30	.42	.65	.51	.16	0.18	0.14	1.01	.00	.00	.00	.00	.00	0.00	0.00	0.00
4	32.500	0.61	0.24	0.39	.31	.42	.65	.51	.16	0.18	0.14	1.02	.00	.00	.00	.00	.00	0.00	0.00	0.00
5	32.375	0.61	0.24	0.39	.31	.43	.65	.52	.16	0.18	0.14	1.02	.00	.00	.00	.00	.00	0.00	0.00	0.00
6	32.250	0.61	0.24	0.39	.31	.43	.65	.52	.16	0.18	0.14	1.03	.00	.00	.00	.00	.00	0.00	0.00	0.00
7	32.125	0.61	0.24	0.39	.31	.43	.66	.52	.16	0.18	0.14	1.04	.00	.00	.00	.00	.00	0.00	0.00	0.00
8	32.000	0.61	0.24	0.39	.31	.43	.66	.52	.16	0.19	0.14	1.04	.00	.00	.00	.00	.00	0.00	0.00	0.00
9	31.875	0.61	0.24	0.39	.31	.43	.66	.52	.16	0.19	0.14	1.05	.00	.00	.00	.00	.00	0.00	0.00	0.00
10	31.750	0.62	0.24	0.39	.31	.44	.66	.53	.16	0.19	0.14	1.05	.00	.00	.00	.00	.00	0.00	0.00	0.00
20 DEG C RATE				0.50						0.81	0.10							0.00	0.00	

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

1

FINAL REPORT Lake Des Allemands QUAL-TX simulation for Upper Bayou Des Allemands, LA
REACH NO. 2 Bayou Des Allemands verification run

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
11	UPR RCH	106.9200	27.70	0.11	205.2	0.0	7.83	5.54	5.54	1.23	0.18	0.06	0.08	43.9	0.	0.00

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
11	31.75	31.65	106.9200	9.3	0.059	0.02	1.52	1189.7	180832.	118968.3	1808.3	0.	0.000	4.500	0.059
12	31.65	31.55	106.9200	9.3	0.059	0.02	1.52	1189.7	180832.	118968.3	1808.3	0.	0.000	4.500	0.059
13	31.55	31.45	106.9200	9.3	0.059	0.02	1.52	1189.7	180832.	118968.3	1808.3	0.	0.000	4.500	0.059

14	31.45	31.35	106.9200	9.3	0.059	0.02	1.52	1189.7	180832.	118968.3	1808.3	0.	0.000	4.500	0.059
15	31.35	31.25	106.9200	9.3	0.059	0.02	1.52	1189.7	180832.	118968.3	1808.3	0.	0.000	4.500	0.059
TOT						0.10			904159.	594841.6					
AVG					0.059		1.52	1189.7			1808.3				
CUM						0.42									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 DECAY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA
11	31.650	7.84	0.75	0.13	0.00	0.00	3.75	3.75	0.03	0.00	0.17	0.07	0.00	0.04	0.04	0.00	0.00	0.00	0.00
12	31.550	7.81	0.76	0.13	0.00	0.00	3.76	3.76	0.03	0.00	0.17	0.07	0.00	0.04	0.04	0.00	0.00	0.00	0.00
13	31.450	7.79	0.76	0.13	0.00	0.00	3.77	3.77	0.03	0.00	0.17	0.07	0.00	0.04	0.05	0.00	0.00	0.00	0.00
14	31.350	7.76	0.76	0.13	0.00	0.00	3.79	3.79	0.03	0.00	0.18	0.07	0.00	0.04	0.05	0.00	0.00	0.00	0.00
15	31.250	7.74	0.76	0.13	0.00	0.00	3.80	3.80	0.03	0.00	0.18	0.07	0.00	0.04	0.05	0.00	0.00	0.00	0.00
20 DEG C RATE				0.09		0.00		1.00	0.02		0.10	0.04	0.00	0.04			0.00	0.00	
AVG 20 DEG C RATE			0.65		0.00					0.00									0.00

* G/SQ M/D ** MG/L/DAY

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
11	31.650	27.88	0.1	205.2	0.0	7.77	5.59	5.59	1.23	0.18	0.06	1.46	0.08	43.6	0.0	0.	0.00
12	31.550	28.06	0.1	205.2	0.0	7.71	5.64	5.64	1.23	0.18	0.06	1.46	0.08	43.3	0.0	0.	0.00
13	31.450	28.24	0.1	205.2	0.0	7.65	5.68	5.68	1.23	0.18	0.06	1.46	0.08	43.1	0.0	0.	0.00
14	31.350	28.42	0.1	205.2	0.0	7.59	5.72	5.72	1.23	0.18	0.06	1.46	0.08	42.8	0.0	0.	0.00
15	31.250	28.60	0.1	205.2	0.0	7.53	5.74	5.74	1.23	0.18	0.06	1.47	0.08	42.5	0.0	0.	0.00

* CM-I = cond umhos CM-II = NCM =
** G/CU M

********** ALGAE AND MACROPHYTE DATA **********

ELEM NO.	ENDING DIST	SECCHI DEPTH M	NITR PREF	ALG SETT 1/DA	ALG LIT LIM	ALG N LIM	ALG P LIM	ALG N&P LIM	ALG TOT LIM	ALG GROW 1/DA	ALG RESP 1/DA	A P/R RATIO	MAC LIT LIM	MAC N LIM	MAC P LIM	MAC N&P LIM	MAC TOT LIM	MAC GROW 1/DA	MAC RESP 1/DA	M P/R RATIO
11	31.650	0.62	0.24	0.40	.31	.44	.66	.53	.16	0.19	0.14	1.06	.00	.00	.00	.00	.00	0.00	0.00	0.00
12	31.550	0.62	0.24	0.40	.31	.44	.67	.53	.16	0.19	0.14	1.06	.00	.00	.00	.00	.00	0.00	0.00	0.00

13	31.450	0.62	0.24	0.40	.31	.44	.67	.53	.16	0.19	0.15	1.06	.00	.00	.00	.00	.00	0.00	0.00	0.00
14	31.350	0.62	0.24	0.40	.31	.44	.67	.53	.17	0.20	0.15	1.07	.00	.00	.00	.00	.00	0.00	0.00	0.00
15	31.250	0.62	0.24	0.40	.31	.44	.67	.53	.17	0.20	0.15	1.07	.00	.00	.00	.00	.00	0.00	0.00	0.00

20 DEG C RATE 0.50 0.81 0.10 0.00 0.00

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

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FINAL REPORT Lake Des Allemands QUAL-TX simulation for Upper Bayou Des Allemands, LA
REACH NO. 3 Bayou Des Allemands verification run

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
16	UPR RCH	106.9200	28.60	0.12	205.2	0.0	7.53	5.74	5.74	1.23	0.18	0.06	0.08	42.5	0.	0.00

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
16	31.25	31.15	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
17	31.15	31.05	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
18	31.05	30.95	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
19	30.95	30.85	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
20	30.85	30.75	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
21	30.75	30.65	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
22	30.65	30.55	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
23	30.55	30.45	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
24	30.45	30.35	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
25	30.35	30.25	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
26	30.25	30.15	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
27	30.15	30.05	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
28	30.05	29.95	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
29	29.95	29.85	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
30	29.85	29.75	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
31	29.75	29.65	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
32	29.65	29.55	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
33	29.55	29.45	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
34	29.45	29.35	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
35	29.35	29.25	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
36	29.25	29.15	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
37	29.15	29.05	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
38	29.05	28.95	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
39	28.95	28.85	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069

40	28.85	28.75	106.9200	9.3	0.069	0.02	1.84	836.1	153846.	83612.0	1538.5	0.	0.000	4.500	0.069
TOT						0.42			3846155.	2090300.6					
AVG					0.069		1.84	836.1			1538.5				
CUM						0.83									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 DECAY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA
16	31.150	7.74	0.63	0.13	0.00	0.00	3.80	3.80	0.03	0.00	0.18	0.15	0.00	0.04	-0.06	0.00	0.00	0.00	0.00
17	31.050	7.73	0.63	0.13	0.00	0.00	3.80	3.80	0.03	0.00	0.18	0.15	0.00	0.04	-0.06	0.00	0.00	0.00	0.00
18	30.950	7.73	0.63	0.13	0.00	0.00	3.79	3.79	0.03	0.00	0.18	0.15	0.00	0.04	-0.06	0.00	0.00	0.00	0.00
19	30.850	7.72	0.63	0.13	0.00	0.00	3.79	3.79	0.03	0.00	0.18	0.15	0.00	0.04	-0.05	0.00	0.00	0.00	0.00
20	30.750	7.72	0.63	0.13	0.00	0.00	3.78	3.78	0.03	0.00	0.18	0.15	0.00	0.04	-0.05	0.00	0.00	0.00	0.00
21	30.650	7.71	0.63	0.13	0.00	0.00	3.78	3.78	0.03	0.00	0.18	0.15	0.00	0.04	-0.05	0.00	0.00	0.00	0.00
22	30.550	7.71	0.63	0.14	0.00	0.00	3.77	3.77	0.03	0.00	0.18	0.15	0.00	0.04	-0.04	0.00	0.00	0.00	0.00
23	30.450	7.70	0.63	0.14	0.00	0.00	3.77	3.77	0.03	0.00	0.18	0.15	0.00	0.04	-0.04	0.00	0.00	0.00	0.00
24	30.350	7.70	0.64	0.14	0.00	0.00	3.76	3.76	0.03	0.00	0.18	0.15	0.00	0.04	-0.04	0.00	0.00	0.00	0.00
25	30.250	7.69	0.64	0.14	0.00	0.00	3.76	3.76	0.03	0.00	0.18	0.15	0.00	0.04	-0.04	0.00	0.00	0.00	0.00
26	30.150	7.69	0.64	0.14	0.00	0.00	3.75	3.75	0.03	0.00	0.18	0.15	0.00	0.04	-0.03	0.00	0.00	0.00	0.00
27	30.050	7.68	0.64	0.14	0.00	0.00	3.75	3.75	0.03	0.00	0.18	0.15	0.00	0.04	-0.03	0.00	0.00	0.00	0.00
28	29.950	7.68	0.64	0.14	0.00	0.00	3.74	3.74	0.03	0.00	0.18	0.15	0.00	0.04	-0.03	0.00	0.00	0.00	0.00
29	29.850	7.67	0.64	0.14	0.00	0.00	3.74	3.74	0.03	0.00	0.18	0.15	0.00	0.04	-0.03	0.00	0.00	0.00	0.00
30	29.750	7.67	0.64	0.14	0.00	0.00	3.74	3.74	0.03	0.00	0.18	0.15	0.00	0.04	-0.02	0.00	0.00	0.00	0.00
31	29.650	7.66	0.64	0.14	0.00	0.00	3.73	3.73	0.03	0.00	0.18	0.15	0.00	0.04	-0.02	0.00	0.00	0.00	0.00
32	29.550	7.66	0.64	0.14	0.00	0.00	3.73	3.73	0.03	0.00	0.18	0.15	0.00	0.04	-0.02	0.00	0.00	0.00	0.00
33	29.450	7.65	0.64	0.14	0.00	0.00	3.72	3.72	0.03	0.00	0.18	0.15	0.00	0.04	-0.02	0.00	0.00	0.00	0.00
34	29.350	7.65	0.64	0.14	0.00	0.00	3.72	3.72	0.03	0.00	0.18	0.16	0.00	0.04	-0.01	0.00	0.00	0.00	0.00
35	29.250	7.64	0.64	0.14	0.00	0.00	3.72	3.72	0.03	0.00	0.18	0.16	0.00	0.04	-0.01	0.00	0.00	0.00	0.00
36	29.150	7.64	0.64	0.14	0.00	0.00	3.71	3.71	0.03	0.00	0.18	0.16	0.00	0.04	-0.01	0.00	0.00	0.00	0.00
37	29.050	7.63	0.64	0.14	0.00	0.00	3.71	3.71	0.03	0.00	0.18	0.16	0.00	0.04	-0.01	0.00	0.00	0.00	0.00
38	28.950	7.63	0.64	0.14	0.00	0.00	3.70	3.70	0.03	0.00	0.18	0.16	0.00	0.04	0.00	0.00	0.00	0.00	0.00
39	28.850	7.62	0.64	0.14	0.00	0.00	3.70	3.70	0.03	0.00	0.18	0.16	0.00	0.04	0.00	0.00	0.00	0.00	0.00
40	28.750	7.62	0.64	0.14	0.00	0.00	3.70	3.70	0.03	0.00	0.18	0.16	0.00	0.04	0.00	0.00	0.00	0.00	0.00
20 DEG C RATE				0.09		0.00		1.00	0.02		0.10	0.08	0.00	0.03			0.00	0.00	
AVG 20 DEG C RATE			0.54		0.00					0.00									0.00

* G/SQ M/D ** MG/L/DAY

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *

16	31.150	28.64	0.1	205.2	0.0	7.49	5.74	5.74	1.23	0.18	0.06	1.47	0.08	42.3	0.0	0.	0.00
17	31.050	28.67	0.1	205.2	0.0	7.44	5.74	5.74	1.22	0.18	0.06	1.47	0.08	42.1	0.0	0.	0.00
18	30.950	28.71	0.1	205.2	0.0	7.39	5.73	5.73	1.22	0.19	0.06	1.47	0.08	41.9	0.0	0.	0.00
19	30.850	28.74	0.1	205.2	0.0	7.35	5.73	5.73	1.22	0.19	0.06	1.47	0.08	41.7	0.0	0.	0.00
20	30.750	28.78	0.1	205.2	0.0	7.30	5.72	5.72	1.22	0.19	0.06	1.47	0.08	41.5	0.0	0.	0.00
21	30.650	28.82	0.1	205.2	0.0	7.26	5.72	5.72	1.22	0.19	0.06	1.47	0.08	41.2	0.0	0.	0.00
22	30.550	28.85	0.1	205.2	0.0	7.21	5.71	5.71	1.22	0.19	0.06	1.47	0.08	41.0	0.0	0.	0.00
23	30.450	28.89	0.1	205.2	0.0	7.17	5.71	5.71	1.22	0.19	0.06	1.48	0.08	40.8	0.0	0.	0.00
24	30.350	28.92	0.1	205.2	0.0	7.12	5.70	5.70	1.22	0.19	0.06	1.48	0.08	40.6	0.0	0.	0.00
25	30.250	28.96	0.1	205.2	0.0	7.08	5.70	5.70	1.22	0.20	0.06	1.48	0.08	40.4	0.0	0.	0.00
26	30.150	29.00	0.1	205.2	0.0	7.04	5.69	5.69	1.22	0.20	0.06	1.48	0.08	40.2	0.0	0.	0.00
27	30.050	29.03	0.1	205.2	0.0	7.00	5.69	5.69	1.22	0.20	0.06	1.48	0.08	40.0	0.0	0.	0.00
28	29.950	29.07	0.1	205.2	0.0	6.95	5.68	5.68	1.22	0.20	0.06	1.48	0.09	39.8	0.0	0.	0.00
29	29.850	29.10	0.1	205.2	0.0	6.91	5.68	5.68	1.22	0.20	0.06	1.48	0.09	39.6	0.0	0.	0.00
30	29.750	29.14	0.1	205.2	0.0	6.87	5.68	5.68	1.22	0.20	0.06	1.48	0.09	39.4	0.0	0.	0.00
31	29.650	29.18	0.1	205.2	0.0	6.83	5.67	5.67	1.22	0.20	0.06	1.49	0.09	39.2	0.0	0.	0.00
32	29.550	29.21	0.1	205.2	0.0	6.79	5.67	5.67	1.22	0.21	0.07	1.49	0.09	39.0	0.0	0.	0.00
33	29.450	29.25	0.1	205.2	0.0	6.75	5.66	5.66	1.21	0.21	0.07	1.49	0.09	38.8	0.0	0.	0.00
34	29.350	29.28	0.1	205.2	0.0	6.71	5.66	5.66	1.21	0.21	0.07	1.49	0.09	38.6	0.0	0.	0.00
35	29.250	29.32	0.1	205.2	0.0	6.67	5.65	5.65	1.21	0.21	0.07	1.49	0.09	38.4	0.0	0.	0.00
36	29.150	29.36	0.1	205.2	0.0	6.63	5.65	5.65	1.21	0.21	0.07	1.49	0.09	38.2	0.0	0.	0.00
37	29.050	29.39	0.1	205.2	0.0	6.60	5.64	5.64	1.21	0.21	0.07	1.49	0.09	38.0	0.0	0.	0.00
38	28.950	29.43	0.1	205.2	0.0	6.56	5.64	5.64	1.21	0.21	0.07	1.49	0.09	37.9	0.0	0.	0.00
39	28.850	29.46	0.1	205.2	0.0	6.52	5.64	5.64	1.21	0.22	0.07	1.50	0.09	37.7	0.0	0.	0.00
40	28.750	29.50	0.1	205.2	0.0	6.49	5.63	5.63	1.21	0.22	0.07	1.50	0.09	37.5	0.0	0.	0.00

* CM-I = cond umhos CM-II = NCM =

** G/CU M

********** ALGAE AND MACROPHYTE DATA **********

ELEM NO.	ENDING DIST	SECCHI DEPTH M	NITR PREF	ALG SETT 1/DA	ALG LIT LIM	ALG N LIM	ALG P LIM	ALG N&P LIM	ALG TOT LIM	ALG GROW 1/DA	ALG RESP 1/DA	A P/R RATIO	MAC LIT LIM	MAC N LIM	MAC P LIM	MAC N&P LIM	MAC TOT LIM	MAC GROW 1/DA	MAC RESP 1/DA	M P/R RATIO
16	31.150	0.62	0.24	0.33	.27	.45	.67	.54	.14	0.17	0.15	0.92	.00	.00	.00	.00	.00	0.00	0.00	0.00
17	31.050	0.62	0.24	0.33	.27	.45	.67	.54	.14	0.17	0.15	0.92	.00	.00	.00	.00	.00	0.00	0.00	0.00
18	30.950	0.62	0.24	0.33	.27	.45	.67	.54	.14	0.17	0.15	0.92	.00	.00	.00	.00	.00	0.00	0.00	0.00
19	30.850	0.63	0.24	0.33	.27	.45	.67	.54	.14	0.17	0.15	0.93	.00	.00	.00	.00	.00	0.00	0.00	0.00
20	30.750	0.63	0.24	0.33	.27	.45	.67	.54	.14	0.17	0.15	0.93	.00	.00	.00	.00	.00	0.00	0.00	0.00
21	30.650	0.63	0.24	0.33	.27	.46	.67	.54	.15	0.18	0.15	0.94	.00	.00	.00	.00	.00	0.00	0.00	0.00
22	30.550	0.63	0.24	0.34	.27	.46	.68	.55	.15	0.18	0.15	0.94	.00	.00	.00	.00	.00	0.00	0.00	0.00
23	30.450	0.63	0.24	0.34	.27	.46	.68	.55	.15	0.18	0.15	0.94	.00	.00	.00	.00	.00	0.00	0.00	0.00
24	30.350	0.63	0.24	0.34	.27	.46	.68	.55	.15	0.18	0.15	0.95	.00	.00	.00	.00	.00	0.00	0.00	0.00
25	30.250	0.63	0.24	0.34	.27	.46	.68	.55	.15	0.18	0.15	0.95	.00	.00	.00	.00	.00	0.00	0.00	0.00
26	30.150	0.63	0.24	0.34	.27	.46	.68	.55	.15	0.18	0.15	0.95	.00	.00	.00	.00	.00	0.00	0.00	0.00
27	30.050	0.63	0.24	0.34	.27	.47	.68	.55	.15	0.18	0.15	0.96	.00	.00	.00	.00	.00	0.00	0.00	0.00
28	29.950	0.63	0.24	0.34	.27	.47	.68	.55	.15	0.18	0.15	0.96	.00	.00	.00	.00	.00	0.00	0.00	0.00

29	29.850	0.64	0.24	0.34	.27	.47	.68	.56	.15	0.18	0.15	0.96	.00	.00	.00	.00	.00	0.00	0.00	0.00
30	29.750	0.64	0.24	0.34	.27	.47	.68	.56	.15	0.18	0.15	0.97	.00	.00	.00	.00	.00	0.00	0.00	0.00
31	29.650	0.64	0.24	0.34	.27	.47	.68	.56	.15	0.18	0.15	0.97	.00	.00	.00	.00	.00	0.00	0.00	0.00
32	29.550	0.64	0.24	0.34	.27	.48	.68	.56	.15	0.19	0.15	0.97	.00	.00	.00	.00	.00	0.00	0.00	0.00
33	29.450	0.64	0.24	0.34	.27	.48	.69	.56	.15	0.19	0.15	0.98	.00	.00	.00	.00	.00	0.00	0.00	0.00
34	29.350	0.64	0.24	0.34	.27	.48	.69	.56	.15	0.19	0.15	0.98	.00	.00	.00	.00	.00	0.00	0.00	0.00
35	29.250	0.64	0.24	0.34	.27	.48	.69	.57	.15	0.19	0.15	0.98	.00	.00	.00	.00	.00	0.00	0.00	0.00
36	29.150	0.64	0.24	0.34	.27	.48	.69	.57	.15	0.19	0.15	0.99	.00	.00	.00	.00	.00	0.00	0.00	0.00
37	29.050	0.64	0.24	0.34	.27	.48	.69	.57	.16	0.19	0.15	0.99	.00	.00	.00	.00	.00	0.00	0.00	0.00
38	28.950	0.64	0.24	0.34	.27	.49	.69	.57	.16	0.19	0.15	0.99	.00	.00	.00	.00	.00	0.00	0.00	0.00
39	28.850	0.64	0.24	0.34	.27	.49	.69	.57	.16	0.19	0.15	1.00	.00	.00	.00	.00	.00	0.00	0.00	0.00
40	28.750	0.64	0.24	0.34	.27	.49	.69	.57	.16	0.19	0.15	1.00	.00	.00	.00	.00	.00	0.00	0.00	0.00
20 DEG C RATE				0.50						0.81	0.10							0.00	0.00	

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

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FINAL REPORT Lake Des Allemands QUAL-TX simulation for Upper Bayou Des Allemands, LA
REACH NO. 4 Bayou Des Allemands verification run

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
41	UPR RCH	106.9200	29.50	0.13	205.2	0.0	6.49	5.63	5.63	1.21	0.22	0.07	0.09	37.5	0.	0.00

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
41	28.75	28.65	106.9200	9.3	0.105	0.01	2.16	470.0	101523.	47001.3	1015.2	0.	0.000	4.500	0.105
42	28.65	28.55	106.9200	9.3	0.105	0.01	2.16	470.0	101523.	47001.3	1015.2	0.	0.000	4.500	0.105
43	28.55	28.45	106.9200	9.3	0.105	0.01	2.16	470.0	101523.	47001.3	1015.2	0.	0.000	4.500	0.105
44	28.45	28.35	106.9200	9.3	0.105	0.01	2.16	470.0	101523.	47001.3	1015.2	0.	0.000	4.500	0.105
45	28.35	28.25	106.9200	9.3	0.105	0.01	2.16	470.0	101523.	47001.3	1015.2	0.	0.000	4.500	0.105
TOT						0.05			507614.	235006.5					
AVG					0.105		2.16	470.0			1015.2				
CUM						0.89									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O.	REAER RATE	CBOD DECAY	CBOD SETT	ANBOD DECAY	FULL SOD	CORR SOD	ORGN DECAY	ORGN SETT	NH3 DECAY	NH3 SRCE	DENIT RATE	PO4 SRCE	ALG PROD	MAC PROD	COLI DECAY	NCM DECAY	NCM SETT

		MG/L	1/DA	1/DA	1/DA	1/DA	*	*	1/DA	1/DA	1/DA	*	1/DA	*	**	**	1/DA	1/DA	1/DA
41	28.650	7.63	0.55	0.14	0.00	0.00	3.68	3.68	0.03	0.00	0.18	0.23	0.00	0.02	-0.09	0.00	0.00	0.00	0.00
42	28.550	7.65	0.54	0.14	0.00	0.00	3.65	3.65	0.03	0.00	0.18	0.23	0.00	0.02	-0.09	0.00	0.00	0.00	0.00
43	28.450	7.67	0.54	0.14	0.00	0.00	3.63	3.63	0.03	0.00	0.18	0.23	0.00	0.02	-0.09	0.00	0.00	0.00	0.00
44	28.350	7.68	0.54	0.14	0.00	0.00	3.60	3.60	0.03	0.00	0.18	0.23	0.00	0.02	-0.09	0.00	0.00	0.00	0.00
45	28.250	7.70	0.54	0.14	0.00	0.00	3.58	3.58	0.03	0.00	0.18	0.23	0.00	0.02	-0.08	0.00	0.00	0.00	0.00
20 DEG C RATE				0.09		0.00		1.00	0.02		0.10	0.12	0.00	0.02			0.00	0.00	
AVG 20 DEG C RATE			0.46		0.00					0.00									0.00

* G/SQ M/D ** MG/L/DAY

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
41	28.650	29.38	0.1	205.2	0.0	6.47	5.63	5.63	1.21	0.22	0.07	1.50	0.09	37.4	0.0	0.	0.00
42	28.550	29.26	0.1	205.2	0.0	6.45	5.64	5.64	1.21	0.22	0.07	1.50	0.09	37.3	0.0	0.	0.00
43	28.450	29.14	0.1	205.2	0.0	6.43	5.64	5.64	1.21	0.22	0.07	1.50	0.09	37.2	0.0	0.	0.00
44	28.350	29.02	0.1	205.2	0.0	6.41	5.64	5.64	1.21	0.22	0.07	1.50	0.09	37.1	0.0	0.	0.00
45	28.250	28.90	0.1	205.2	0.0	6.39	5.64	5.64	1.21	0.22	0.07	1.50	0.09	37.0	0.0	0.	0.00

* CM-I = cond umhos CM-II = NCM =
** G/CU M

********** ALGAE AND MACROPHYTE DATA **********

ELEM NO.	ENDING DIST	SECCHI DEPTH M	NITR PREF	ALG SETT 1/DA	ALG LIT LIM	ALG N LIM	ALG P LIM	ALG N&P LIM	ALG TOT LIM	ALG GROW 1/DA	ALG RESP 1/DA	A P/R RATIO	MAC LIT LIM	MAC N LIM	MAC P LIM	MAC N&P LIM	MAC TOT LIM	MAC GROW 1/DA	MAC RESP 1/DA	M P/R RATIO
41	28.650	0.65	0.24	0.29	.24	.49	.69	.57	.14	0.17	0.15	0.87	.00	.00	.00	.00	.00	0.00	0.00	0.00
42	28.550	0.65	0.24	0.29	.24	.49	.69	.57	.14	0.17	0.15	0.87	.00	.00	.00	.00	.00	0.00	0.00	0.00
43	28.450	0.65	0.24	0.29	.24	.49	.69	.58	.14	0.17	0.15	0.87	.00	.00	.00	.00	.00	0.00	0.00	0.00
44	28.350	0.65	0.24	0.29	.24	.49	.69	.58	.14	0.17	0.15	0.87	.00	.00	.00	.00	.00	0.00	0.00	0.00
45	28.250	0.65	0.24	0.29	.24	.49	.69	.58	.14	0.16	0.15	0.87	.00	.00	.00	.00	.00	0.00	0.00	0.00
20 DEG C RATE				0.50						0.81	0.10							0.00	0.00	

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

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FINAL REPORT Lake Des Allemands QUAL-TX simulation for Upper Bayou Des Allemands, LA
REACH NO. 5 Bayou Des Allemands verification run

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
46	UPR RCH	106.9200	28.90	0.12	205.2	0.0	6.39	5.64	5.64	1.21	0.22	0.07	0.09	37.0	0.	0.00

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
46	28.25	28.15	106.9200	9.3	0.190	0.01	2.16	260.1	56180.	26009.2	561.8	0.	0.000	4.500	0.190
47	28.15	28.05	106.9200	9.3	0.190	0.01	2.16	260.1	56180.	26009.2	561.8	0.	0.000	4.500	0.190
48	28.05	27.95	106.9200	9.3	0.190	0.01	2.16	260.1	56180.	26009.2	561.8	0.	0.000	4.500	0.190
49	27.95	27.85	106.9200	9.3	0.190	0.01	2.16	260.1	56180.	26009.2	561.8	0.	0.000	4.500	0.190
50	27.85	27.75	106.9200	9.3	0.190	0.01	2.16	260.1	56180.	26009.2	561.8	0.	0.000	4.500	0.190
51	27.75	27.65	106.9200	9.3	0.190	0.01	2.16	260.1	56180.	26009.2	561.8	0.	0.000	4.500	0.190
52	27.65	27.55	106.9200	9.3	0.190	0.01	2.16	260.1	56180.	26009.2	561.8	0.	0.000	4.500	0.190
53	27.55	27.45	106.9200	9.3	0.190	0.01	2.16	260.1	56180.	26009.2	561.8	0.	0.000	4.500	0.190
54	27.45	27.35	106.9200	9.3	0.190	0.01	2.16	260.1	56180.	26009.2	561.8	0.	0.000	4.500	0.190
55	27.35	27.25	106.9200	9.3	0.190	0.01	2.16	260.1	56180.	26009.2	561.8	0.	0.000	4.500	0.190
TOT						0.06			561798.	260091.5					
AVG					0.190		2.16	260.1			561.8				
CUM						0.95									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 DECAY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA
46	28.150	7.71	0.64	0.14	0.00	0.00	3.57	3.57	0.03	0.00	0.18	0.34	0.00	0.02	-0.08	0.00	0.00	0.00	0.00
47	28.050	7.72	0.64	0.13	0.00	0.00	3.56	3.56	0.03	0.00	0.17	0.34	0.00	0.02	-0.08	0.00	0.00	0.00	0.00
48	27.950	7.72	0.64	0.13	0.00	0.00	3.54	3.54	0.03	0.00	0.17	0.34	0.00	0.02	-0.08	0.00	0.00	0.00	0.00
49	27.850	7.73	0.64	0.13	0.00	0.00	3.53	3.53	0.03	0.00	0.17	0.33	0.00	0.02	-0.08	0.00	0.00	0.00	0.00
50	27.750	7.74	0.64	0.13	0.00	0.00	3.52	3.52	0.03	0.00	0.17	0.33	0.00	0.02	-0.08	0.00	0.00	0.00	0.00
51	27.650	7.75	0.64	0.13	0.00	0.00	3.51	3.51	0.03	0.00	0.17	0.33	0.00	0.02	-0.08	0.00	0.00	0.00	0.00
52	27.550	7.76	0.64	0.13	0.00	0.00	3.50	3.50	0.03	0.00	0.17	0.33	0.00	0.02	-0.08	0.00	0.00	0.00	0.00
53	27.450	7.76	0.64	0.13	0.00	0.00	3.48	3.48	0.03	0.00	0.17	0.33	0.00	0.02	-0.07	0.00	0.00	0.00	0.00
54	27.350	7.77	0.63	0.13	0.00	0.00	3.47	3.47	0.03	0.00	0.17	0.33	0.00	0.02	-0.07	0.00	0.00	0.00	0.00
55	27.250	7.78	0.63	0.13	0.00	0.00	3.46	3.46	0.03	0.00	0.17	0.33	0.00	0.02	-0.07	0.00	0.00	0.00	0.00
20 DEG C RATE				0.09		0.00		1.00	0.02		0.10	0.18	0.00	0.02			0.00	0.00	
AVG 20 DEG C RATE			0.54		0.00					0.00									0.00

* G/SQ M/D ** MG/L/DAY

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
46	28.150	28.84	0.1	205.2	0.0	6.38	5.64	5.64	1.21	0.22	0.07	1.50	0.09	36.9	0.0	0.	0.00
47	28.050	28.78	0.1	205.2	0.0	6.37	5.63	5.63	1.21	0.22	0.07	1.50	0.09	36.9	0.0	0.	0.00
48	27.950	28.72	0.1	205.2	0.0	6.36	5.63	5.63	1.21	0.23	0.07	1.51	0.09	36.8	0.0	0.	0.00
49	27.850	28.66	0.1	205.2	0.0	6.35	5.63	5.63	1.21	0.23	0.07	1.51	0.09	36.8	0.0	0.	0.00
50	27.750	28.60	0.1	205.2	0.0	6.34	5.62	5.62	1.21	0.23	0.07	1.51	0.09	36.7	0.0	0.	0.00
51	27.650	28.54	0.1	205.2	0.0	6.33	5.62	5.62	1.21	0.23	0.07	1.51	0.09	36.6	0.0	0.	0.00
52	27.550	28.48	0.1	205.2	0.0	6.32	5.62	5.62	1.21	0.23	0.07	1.51	0.09	36.6	0.0	0.	0.00
53	27.450	28.42	0.1	205.2	0.0	6.31	5.61	5.61	1.21	0.23	0.07	1.51	0.09	36.5	0.0	0.	0.00
54	27.350	28.36	0.1	205.2	0.0	6.30	5.61	5.61	1.21	0.23	0.07	1.51	0.09	36.5	0.0	0.	0.00
55	27.250	28.30	0.1	205.2	0.0	6.28	5.60	5.60	1.21	0.23	0.07	1.51	0.09	36.4	0.0	0.	0.00

* CM-I = cond umhos CM-II = NCM =
** G/CU M

********** ALGAE AND MACROPHYTE DATA **********

ELEM NO.	ENDING DIST	SECCHI DEPTH M	NITR PREF	ALG SETT 1/DA	ALG LIT LIM	ALG N LIM	ALG P LIM	ALG N&P LIM	ALG TOT LIM	ALG GROW 1/DA	ALG RESP 1/DA	A P/R RATIO	MAC LIT LIM	MAC N LIM	MAC P LIM	MAC N&P LIM	MAC TOT LIM	MAC GROW 1/DA	MAC RESP 1/DA	M P/R RATIO
46	28.150	0.65	0.24	0.29	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
47	28.050	0.65	0.24	0.29	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
48	27.950	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
49	27.850	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
50	27.750	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
51	27.650	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
52	27.550	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
53	27.450	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
54	27.350	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.89	.00	.00	.00	.00	.00	0.00	0.00	0.00
55	27.250	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.89	.00	.00	.00	.00	.00	0.00	0.00	0.00
20 DEG C RATE				0.50						0.81	0.10							0.00	0.00	

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

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FINAL REPORT Lake Des Allemands QUAL-TX simulation for Upper Bayou Des Allemands, LA
REACH NO. 6 Bayou Des Allemands verification run

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
56	UPR RCH	106.9200	28.30	0.11	205.2	0.0	6.28	5.60	5.60	1.21	0.23	0.07	0.09	36.4	0.	0.00

********** HYDRAULIC PARAMETER VALUES **********

ELEM BEGIN ENDING FLOW PCT ADVCTV TRAVEL DEPTH WIDTH VOLUME SURFACE X-SECT TIDAL TIDAL DISPRSN MEAN

* G/SQ M/D ** MG/L/DAY

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
46	28.150	28.84	0.1	205.2	0.0	6.38	5.64	5.64	1.21	0.22	0.07	1.50	0.09	36.9	0.0	0.	0.00
47	28.050	28.78	0.1	205.2	0.0	6.37	5.63	5.63	1.21	0.22	0.07	1.50	0.09	36.9	0.0	0.	0.00
48	27.950	28.72	0.1	205.2	0.0	6.36	5.63	5.63	1.21	0.23	0.07	1.51	0.09	36.8	0.0	0.	0.00
49	27.850	28.66	0.1	205.2	0.0	6.35	5.63	5.63	1.21	0.23	0.07	1.51	0.09	36.8	0.0	0.	0.00
50	27.750	28.60	0.1	205.2	0.0	6.34	5.62	5.62	1.21	0.23	0.07	1.51	0.09	36.7	0.0	0.	0.00
51	27.650	28.54	0.1	205.2	0.0	6.33	5.62	5.62	1.21	0.23	0.07	1.51	0.09	36.6	0.0	0.	0.00
52	27.550	28.48	0.1	205.2	0.0	6.32	5.62	5.62	1.21	0.23	0.07	1.51	0.09	36.6	0.0	0.	0.00
53	27.450	28.42	0.1	205.2	0.0	6.31	5.61	5.61	1.21	0.23	0.07	1.51	0.09	36.5	0.0	0.	0.00
54	27.350	28.36	0.1	205.2	0.0	6.30	5.61	5.61	1.21	0.23	0.07	1.51	0.09	36.5	0.0	0.	0.00
55	27.250	28.30	0.1	205.2	0.0	6.28	5.60	5.60	1.21	0.23	0.07	1.51	0.09	36.4	0.0	0.	0.00

* CM-I = cond umhos CM-II = NCM =
** G/CU M

********** ALGAE AND MACROPHYTE DATA **********

ELEM NO.	ENDING DIST	SECCHI DEPTH M	NITR PREF	ALG SETT 1/DA	ALG LIT LIM	ALG N LIM	ALG P LIM	ALG N&P LIM	ALG TOT LIM	ALG GROW 1/DA	ALG RESP 1/DA	A P/R RATIO	MAC LIT LIM	MAC N LIM	MAC P LIM	MAC N&P LIM	MAC TOT LIM	MAC GROW 1/DA	MAC RESP 1/DA	M P/R RATIO
46	28.150	0.65	0.24	0.29	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
47	28.050	0.65	0.24	0.29	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
48	27.950	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
49	27.850	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
50	27.750	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
51	27.650	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
52	27.550	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
53	27.450	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.88	.00	.00	.00	.00	.00	0.00	0.00	0.00
54	27.350	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.89	.00	.00	.00	.00	.00	0.00	0.00	0.00
55	27.250	0.65	0.24	0.28	.24	.50	.69	.58	.14	0.16	0.15	0.89	.00	.00	.00	.00	.00	0.00	0.00	0.00

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
56	27.150	28.43	0.1	205.2	0.0	6.27	5.60	5.60	1.21	0.23	0.07	1.51	0.09	36.3	0.0	0.	0.00
57	27.050	28.56	0.1	205.2	0.0	6.26	5.60	5.60	1.21	0.23	0.07	1.51	0.09	36.3	0.0	0.	0.00
58	26.950	28.69	0.1	205.2	0.0	6.25	5.59	5.59	1.21	0.24	0.07	1.51	0.09	36.2	0.0	0.	0.00
59	26.850	28.82	0.1	205.2	0.0	6.23	5.59	5.59	1.21	0.24	0.07	1.52	0.09	36.1	0.0	0.	0.00
60	26.750	28.95	0.1	205.2	0.0	6.22	5.58	5.58	1.21	0.24	0.07	1.52	0.09	36.1	0.0	0.	0.00
61	26.650	29.08	0.1	205.2	0.0	6.21	5.58	5.58	1.20	0.24	0.07	1.52	0.09	36.0	0.0	0.	0.00
62	26.550	29.21	0.1	205.2	0.0	6.19	5.57	5.57	1.20	0.24	0.07	1.52	0.09	35.9	0.0	0.	0.00
63	26.450	29.34	0.1	205.2	0.0	6.18	5.57	5.57	1.20	0.24	0.07	1.52	0.09	35.9	0.0	0.	0.00
64	26.350	29.47	0.1	205.2	0.0	6.16	5.56	5.56	1.20	0.24	0.08	1.52	0.09	35.8	0.0	0.	0.00
65	26.250	29.60	0.1	205.2	0.0	6.15	5.56	5.56	1.20	0.24	0.08	1.52	0.09	35.7	0.0	0.	0.00

* CM-I = cond umhos CM-II = NCM =
** G/CU M

********** ALGAE AND MACROPHYTE DATA **********

ELEM NO.	ENDING DIST	SECCHI DEPTH M	NITR PREF	ALG SETT 1/DA	ALG LIT LIM	ALG N LIM	ALG P LIM	ALG N&P LIM	ALG TOT LIM	ALG GROW 1/DA	ALG RESP 1/DA	A P/R RATIO	MAC LIT LIM	MAC N LIM	MAC P LIM	MAC N&P LIM	MAC TOT LIM	MAC GROW 1/DA	MAC RESP 1/DA	M P/R RATIO
56	27.150	0.65	0.24	0.23	.20	.51	.69	.58	.12	0.14	0.15	0.74	.00	.00	.00	.00	.00	0.00	0.00	0.00
57	27.050	0.65	0.24	0.23	.20	.51	.69	.59	.12	0.14	0.15	0.74	.00	.00	.00	.00	.00	0.00	0.00	0.00
58	26.950	0.65	0.24	0.23	.20	.51	.69	.59	.12	0.14	0.15	0.74	.00	.00	.00	.00	.00	0.00	0.00	0.00
59	26.850	0.65	0.24	0.24	.20	.51	.69	.59	.12	0.14	0.15	0.74	.00	.00	.00	.00	.00	0.00	0.00	0.00
60	26.750	0.65	0.24	0.24	.20	.51	.69	.59	.12	0.14	0.15	0.74	.00	.00	.00	.00	.00	0.00	0.00	0.00
61	26.650	0.65	0.24	0.24	.20	.51	.69	.59	.12	0.14	0.15	0.74	.00	.00	.00	.00	.00	0.00	0.00	0.00
62	26.550	0.65	0.24	0.24	.20	.51	.69	.59	.12	0.14	0.15	0.75	.00	.00	.00	.00	.00	0.00	0.00	0.00
63	26.450	0.65	0.24	0.24	.20	.51	.69	.59	.12	0.14	0.15	0.75	.00	.00	.00	.00	.00	0.00	0.00	0.00
64	26.350	0.65	0.24	0.24	.20	.51	.69	.59	.12	0.14	0.15	0.75	.00	.00	.00	.00	.00	0.00	0.00	0.00
65	26.250	0.65	0.24	0.24	.20	.52	.69	.59	.12	0.15	0.16	0.75	.00	.00	.00	.00	.00	0.00	0.00	0.00
20 DEG C RATE				0.50						0.81	0.10							0.00	0.00	

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

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FINAL REPORT Lake Des Allemands QUAL-TX simulation for Upper Bayou Des Allemands, LA
REACH NO. 7 Bayou Des Allemands verification run

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
66	UPR RCH	106.9200	29.60	0.12	205.2	0.0	6.15	5.56	5.56	1.20	0.24	0.08	0.09	35.7	0.	0.00

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
66	26.25	26.15	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
67	26.15	26.05	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
68	26.05	25.95	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
69	25.95	25.85	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
70	25.85	25.75	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
71	25.75	25.65	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
72	25.65	25.55	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
73	25.55	25.45	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
74	25.45	25.35	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
75	25.35	25.25	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
TOT						0.09			800000.	259740.3					
AVG					0.134		3.08	259.7			800.0				
CUM						1.11									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 DECAY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA
66	26.150	7.61	0.38	0.14	0.00	0.00	3.61	3.61	0.03	0.00	0.18	0.40	0.00	0.02	-0.24	0.00	0.00	0.00	0.00
67	26.050	7.62	0.38	0.14	0.00	0.00	3.60	3.60	0.03	0.00	0.18	0.39	0.00	0.02	-0.24	0.00	0.00	0.00	0.00
68	25.950	7.63	0.38	0.14	0.00	0.00	3.59	3.59	0.03	0.00	0.18	0.39	0.00	0.02	-0.23	0.00	0.00	0.00	0.00
69	25.850	7.63	0.38	0.14	0.00	0.00	3.58	3.58	0.03	0.00	0.18	0.39	0.00	0.02	-0.23	0.00	0.00	0.00	0.00
70	25.750	7.64	0.38	0.14	0.00	0.00	3.57	3.57	0.03	0.00	0.18	0.39	0.00	0.02	-0.23	0.00	0.00	0.00	0.00
71	25.650	7.65	0.38	0.14	0.00	0.00	3.56	3.56	0.03	0.00	0.18	0.39	0.00	0.02	-0.23	0.00	0.00	0.00	0.00
72	25.550	7.65	0.38	0.14	0.00	0.00	3.55	3.55	0.03	0.00	0.18	0.39	0.00	0.02	-0.23	0.00	0.00	0.00	0.00
73	25.450	7.66	0.38	0.14	0.00	0.00	3.53	3.53	0.03	0.00	0.18	0.39	0.00	0.02	-0.22	0.00	0.00	0.00	0.00
74	25.350	7.67	0.38	0.14	0.00	0.00	3.52	3.52	0.03	0.00	0.18	0.38	0.00	0.02	-0.22	0.00	0.00	0.00	0.00
75	25.250	7.67	0.38	0.14	0.00	0.00	3.51	3.51	0.03	0.00	0.18	0.38	0.00	0.02	-0.22	0.00	0.00	0.00	0.00
20 DEG C RATE				0.09		0.00		1.00	0.02		0.10	0.20	0.00	0.02			0.00	0.00	
AVG 20 DEG C RATE			0.32		0.00					0.00									0.00

* G/SQ M/D ** MG/L/DAY

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
66	26.150	29.55	0.1	205.2	0.0	6.13	5.55	5.55	1.20	0.24	0.08	1.52	0.09	35.7	0.0	0.	0.00
67	26.050	29.50	0.1	205.2	0.0	6.12	5.55	5.55	1.20	0.25	0.08	1.52	0.09	35.6	0.0	0.	0.00
68	25.950	29.45	0.1	205.2	0.0	6.10	5.54	5.54	1.20	0.25	0.08	1.53	0.09	35.5	0.0	0.	0.00
69	25.850	29.40	0.1	205.2	0.0	6.09	5.54	5.54	1.20	0.25	0.08	1.53	0.09	35.5	0.0	0.	0.00
70	25.750	29.35	0.1	205.2	0.0	6.07	5.53	5.53	1.20	0.25	0.08	1.53	0.09	35.4	0.0	0.	0.00
71	25.650	29.30	0.1	205.2	0.0	6.06	5.52	5.52	1.20	0.25	0.08	1.53	0.09	35.3	0.0	0.	0.00
72	25.550	29.25	0.1	205.2	0.0	6.04	5.52	5.52	1.20	0.25	0.08	1.53	0.09	35.2	0.0	0.	0.00
73	25.450	29.20	0.1	205.2	0.0	6.03	5.51	5.51	1.20	0.25	0.08	1.53	0.09	35.2	0.0	0.	0.00
74	25.350	29.15	0.1	205.2	0.0	6.01	5.51	5.51	1.20	0.25	0.08	1.53	0.09	35.1	0.0	0.	0.00
75	25.250	29.10	0.1	205.2	0.0	6.00	5.50	5.50	1.20	0.25	0.08	1.53	0.09	35.0	0.0	0.	0.00

* CM-I = cond umhos CM-II = NCM =

** G/CU M

********** ALGAE AND MACROPHYTE DATA **********

ELEM NO.	ENDING DIST	SECCHI DEPTH M	NITR PREF	ALG SETT 1/DA	ALG LIT LIM	ALG N LIM	ALG P LIM	ALG N&P LIM	ALG TOT LIM	ALG GROW 1/DA	ALG RESP 1/DA	A P/R RATIO	MAC LIT LIM	MAC N LIM	MAC P LIM	MAC N&P LIM	MAC TOT LIM	MAC GROW 1/DA	MAC RESP 1/DA	M P/R RATIO
66	26.150	0.65	0.24	0.20	.17	.52	.69	.59	.10	0.12	0.16	0.64	.00	.00	.00	.00	.00	0.00	0.00	0.00
67	26.050	0.65	0.24	0.20	.17	.52	.69	.59	.10	0.12	0.15	0.64	.00	.00	.00	.00	.00	0.00	0.00	0.00
68	25.950	0.65	0.24	0.20	.17	.52	.70	.59	.10	0.12	0.15	0.64	.00	.00	.00	.00	.00	0.00	0.00	0.00
69	25.850	0.66	0.24	0.20	.17	.52	.70	.59	.10	0.12	0.15	0.65	.00	.00	.00	.00	.00	0.00	0.00	0.00
70	25.750	0.66	0.24	0.20	.17	.52	.70	.60	.10	0.12	0.15	0.65	.00	.00	.00	.00	.00	0.00	0.00	0.00
71	25.650	0.66	0.24	0.20	.17	.52	.70	.60	.10	0.12	0.15	0.65	.00	.00	.00	.00	.00	0.00	0.00	0.00
72	25.550	0.66	0.24	0.20	.17	.52	.70	.60	.10	0.12	0.15	0.65	.00	.00	.00	.00	.00	0.00	0.00	0.00
73	25.450	0.66	0.24	0.20	.17	.52	.70	.60	.10	0.12	0.15	0.65	.00	.00	.00	.00	.00	0.00	0.00	0.00
74	25.350	0.66	0.24	0.20	.17	.53	.70	.60	.10	0.12	0.15	0.65	.00	.00	.00	.00	.00	0.00	0.00	0.00
75	25.250	0.66	0.24	0.20	.17	.53	.70	.60	.10	0.12	0.15	0.66	.00	.00	.00	.00	.00	0.00	0.00	0.00
20 DEG C RATE				0.50						0.81	0.10							0.00	0.00	

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

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FINAL REPORT Lake Des Allemands QUAL-TX simulation for Upper Bayou Des Allemands, LA
REACH NO. 8 Bayou Des Allemands verification run

********** REACH INPUTS **********

ELEM	TYPE	FLOW	TEMP	SALN	CM-I	CM-II	DO	BOD	EBOD	ORGN	NH3	NO3+2	PHOS	CHL A	COLI	NCM

NO.		CMS	DEG C	PPT	*	*	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	#/100ML	*
76	UPR RCH	106.9200	29.10	0.12	205.2	0.0	6.00	5.50	5.50	1.20	0.25	0.08	0.09	35.0	0.	0.00

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
76	25.25	25.15	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
77	25.15	25.05	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
78	25.05	24.95	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
79	24.95	24.85	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
80	24.85	24.75	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
81	24.75	24.65	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
82	24.65	24.55	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
83	24.55	24.45	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
84	24.45	24.35	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
85	24.35	24.25	106.9200	9.3	0.134	0.01	3.08	259.7	80000.	25974.0	800.0	0.	0.000	4.500	0.134
TOT						0.09			800000.	259740.3					
AVG					0.134		3.08	259.7			800.0				
CUM						1.20									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 DECAY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA
76	25.150	7.68	0.38	0.14	0.00	0.00	3.69	3.69	0.03	0.00	0.18	0.38	0.00	0.01	-0.22	0.00	0.00	0.00	0.00
77	25.050	7.69	0.38	0.14	0.00	0.00	3.68	3.68	0.03	0.00	0.17	0.38	0.00	0.01	-0.22	0.00	0.00	0.00	0.00
78	24.950	7.70	0.38	0.14	0.00	0.00	3.67	3.67	0.03	0.00	0.17	0.38	0.00	0.01	-0.21	0.00	0.00	0.00	0.00
79	24.850	7.70	0.38	0.14	0.00	0.00	3.65	3.65	0.03	0.00	0.17	0.38	0.00	0.01	-0.21	0.00	0.00	0.00	0.00
80	24.750	7.71	0.38	0.13	0.00	0.00	3.64	3.64	0.03	0.00	0.17	0.37	0.00	0.01	-0.21	0.00	0.00	0.00	0.00
81	24.650	7.72	0.38	0.13	0.00	0.00	3.63	3.63	0.03	0.00	0.17	0.37	0.00	0.01	-0.21	0.00	0.00	0.00	0.00
82	24.550	7.73	0.38	0.13	0.00	0.00	3.62	3.62	0.03	0.00	0.17	0.37	0.00	0.01	-0.21	0.00	0.00	0.00	0.00
83	24.450	7.74	0.38	0.13	0.00	0.00	3.60	3.60	0.03	0.00	0.17	0.37	0.00	0.01	-0.20	0.00	0.00	0.00	0.00
84	24.350	7.75	0.38	0.13	0.00	0.00	3.59	3.59	0.03	0.00	0.17	0.37	0.00	0.01	-0.20	0.00	0.00	0.00	0.00
85	24.250	7.75	0.38	0.13	0.00	0.00	3.58	3.58	0.03	0.00	0.17	0.37	0.00	0.01	-0.20	0.00	0.00	0.00	0.00
20 DEG C RATE				0.09		0.00		1.11	0.02		0.10	0.20	0.00	0.01			0.00	0.00	
AVG 20 DEG C RATE			0.32		0.00					0.00									0.00

* G/SQ M/D ** MG/L/DAY

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
76	25.150	29.04	0.1	205.2	0.0	5.98	5.50	5.50	1.20	0.26	0.08	1.54	0.09	35.0	0.0	0.	0.00
77	25.050	28.98	0.1	205.2	0.0	5.97	5.50	5.50	1.20	0.26	0.08	1.54	0.09	34.9	0.0	0.	0.00
78	24.950	28.92	0.1	205.2	0.0	5.96	5.49	5.49	1.20	0.26	0.08	1.54	0.09	34.8	0.0	0.	0.00
79	24.850	28.86	0.1	205.2	0.0	5.94	5.49	5.49	1.20	0.26	0.08	1.54	0.09	34.8	0.0	0.	0.00
80	24.750	28.80	0.1	205.2	0.0	5.93	5.48	5.48	1.20	0.26	0.08	1.54	0.09	34.7	0.0	0.	0.00
81	24.650	28.74	0.1	205.2	0.0	5.91	5.48	5.48	1.20	0.26	0.08	1.54	0.09	34.6	0.0	0.	0.00
82	24.550	28.68	0.1	205.2	0.0	5.90	5.48	5.48	1.20	0.26	0.08	1.54	0.09	34.6	0.0	0.	0.00
83	24.450	28.62	0.1	205.2	0.0	5.88	5.47	5.47	1.20	0.26	0.08	1.54	0.09	34.5	0.0	0.	0.00
84	24.350	28.56	0.1	205.2	0.0	5.87	5.47	5.47	1.20	0.26	0.08	1.54	0.09	34.4	0.0	0.	0.00
85	24.250	28.50	0.1	205.2	0.0	5.86	5.47	5.47	1.20	0.27	0.08	1.54	0.09	34.4	0.0	0.	0.00

* CM-I = cond umhos CM-II = NCM =

** G/CU M

********** ALGAE AND MACROPHYTE DATA **********

ELEM NO.	ENDING DIST	SECCHI DEPTH M	NITR PREF	ALG SETT 1/DA	ALG LIT LIM	ALG N LIM	ALG P LIM	ALG N&P LIM	ALG TOT LIM	ALG GROW 1/DA	ALG RESP 1/DA	A P/R RATIO	MAC LIT LIM	MAC N LIM	MAC P LIM	MAC N&P LIM	MAC TOT LIM	MAC GROW 1/DA	MAC RESP 1/DA	M P/R RATIO
76	25.150	0.66	0.24	0.20	.17	.53	.70	.60	.10	0.12	0.15	0.66	.00	.00	.00	.00	.00	0.00	0.00	0.00
77	25.050	0.66	0.24	0.20	.17	.53	.70	.60	.10	0.12	0.15	0.66	.00	.00	.00	.00	.00	0.00	0.00	0.00
78	24.950	0.66	0.24	0.20	.17	.53	.70	.60	.10	0.12	0.15	0.66	.00	.00	.00	.00	.00	0.00	0.00	0.00
79	24.850	0.66	0.24	0.20	.17	.53	.70	.60	.10	0.12	0.15	0.66	.00	.00	.00	.00	.00	0.00	0.00	0.00
80	24.750	0.66	0.24	0.20	.17	.53	.70	.60	.10	0.12	0.15	0.66	.00	.00	.00	.00	.00	0.00	0.00	0.00
81	24.650	0.66	0.24	0.20	.17	.53	.70	.60	.10	0.12	0.15	0.66	.00	.00	.00	.00	.00	0.00	0.00	0.00
82	24.550	0.66	0.24	0.20	.17	.53	.70	.60	.10	0.12	0.15	0.67	.00	.00	.00	.00	.00	0.00	0.00	0.00
83	24.450	0.66	0.24	0.20	.17	.53	.70	.61	.10	0.12	0.15	0.67	.00	.00	.00	.00	.00	0.00	0.00	0.00
84	24.350	0.66	0.24	0.20	.17	.54	.70	.61	.10	0.12	0.15	0.67	.00	.00	.00	.00	.00	0.00	0.00	0.00
85	24.250	0.66	0.24	0.20	.17	.54	.70	.61	.10	0.12	0.15	0.67	.00	.00	.00	.00	.00	0.00	0.00	0.00
20 DEG C RATE				0.50						0.81	0.10							0.00	0.00	

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

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FINAL REPORT Lake Des Allemands QUAL-TX simulation for Upper Bayou Des Allemands, LA
REACH NO. 9 Bayou Des Allemands verification run

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *

86	UPR RCH	106.9200	28.50	0.11	205.2	0.0	5.86	5.47	5.47	1.20	0.27	0.08	0.09	34.4	0.	0.00

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
86	24.25	24.15	106.9200	9.3	0.148	0.01	2.79	259.7	72464.	25972.7	724.6	0.	0.000	4.500	0.148
87	24.15	24.05	106.9200	9.3	0.148	0.01	2.79	259.7	72464.	25972.7	724.6	0.	0.000	4.500	0.148
88	24.05	23.95	106.9200	9.3	0.148	0.01	2.79	259.7	72464.	25972.7	724.6	0.	0.000	4.500	0.148
89	23.95	23.85	106.9200	9.3	0.148	0.01	2.79	259.7	72464.	25972.7	724.6	0.	0.000	4.500	0.148
90	23.85	23.75	106.9200	9.3	0.148	0.01	2.79	259.7	72464.	25972.7	724.6	0.	0.000	4.500	0.148
91	23.75	23.65	106.9200	9.3	0.148	0.01	2.79	259.7	72464.	25972.7	724.6	0.	0.000	4.500	0.148
92	23.65	23.55	106.9200	9.3	0.148	0.01	2.79	259.7	72464.	25972.7	724.6	0.	0.000	4.500	0.148
93	23.55	23.45	106.9200	9.3	0.148	0.01	2.79	259.7	72464.	25972.7	724.6	0.	0.000	4.500	0.148
94	23.45	23.35	106.9200	9.3	0.148	0.01	2.79	259.7	72464.	25972.7	724.6	0.	0.000	4.500	0.148
95	23.35	23.25	106.9200	9.3	0.148	0.01	2.79	259.7	72464.	25972.7	724.6	0.	0.000	4.500	0.148
TOT						0.08			724638.	259726.8					
AVG					0.148		2.79	259.7			724.6				
CUM						1.27									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 DECAY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA
86	24.150	7.75	0.42	0.13	0.00	0.00	3.39	3.39	0.03	0.00	0.17	0.40	0.00	0.00	-0.16	0.00	0.00	0.00	0.00
87	24.050	7.75	0.42	0.13	0.00	0.00	3.38	3.38	0.03	0.00	0.17	0.40	0.00	0.00	-0.16	0.00	0.00	0.00	0.00
88	23.950	7.75	0.42	0.13	0.00	0.00	3.38	3.38	0.03	0.00	0.17	0.40	0.00	0.00	-0.16	0.00	0.00	0.00	0.00
89	23.850	7.75	0.42	0.13	0.00	0.00	3.38	3.38	0.03	0.00	0.17	0.40	0.00	0.00	-0.16	0.00	0.00	0.00	0.00
90	23.750	7.75	0.42	0.13	0.00	0.00	3.37	3.37	0.03	0.00	0.17	0.40	0.00	0.00	-0.15	0.00	0.00	0.00	0.00
91	23.650	7.75	0.42	0.13	0.00	0.00	3.37	3.37	0.03	0.00	0.17	0.40	0.00	0.00	-0.15	0.00	0.00	0.00	0.00
92	23.550	7.75	0.42	0.13	0.00	0.00	3.37	3.37	0.03	0.00	0.17	0.40	0.00	0.00	-0.15	0.00	0.00	0.00	0.00
93	23.450	7.75	0.42	0.13	0.00	0.00	3.37	3.37	0.03	0.00	0.17	0.40	0.00	0.00	-0.15	0.00	0.00	0.00	0.00
94	23.350	7.75	0.42	0.13	0.00	0.00	3.36	3.36	0.03	0.00	0.17	0.40	0.00	0.00	-0.15	0.00	0.00	0.00	0.00
95	23.250	7.75	0.42	0.13	0.00	0.00	3.36	3.36	0.03	0.00	0.17	0.40	0.00	0.00	-0.15	0.00	0.00	0.00	0.00
20 DEG C RATE				0.09		0.00		1.00	0.02		0.10	0.22	0.00	0.00			0.00	0.00	
AVG 20 DEG C RATE			0.35		0.00					0.00									0.00

* G/SQ M/D ** MG/L/DAY

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
86	24.150	28.50	0.1	205.2	0.0	5.85	5.46	5.46	1.20	0.27	0.08	1.55	0.09	34.3	0.0	0.	0.00
87	24.050	28.50	0.1	205.2	0.0	5.83	5.46	5.46	1.20	0.27	0.08	1.55	0.09	34.2	0.0	0.	0.00
88	23.950	28.50	0.1	205.2	0.0	5.82	5.46	5.46	1.20	0.27	0.08	1.55	0.09	34.2	0.0	0.	0.00
89	23.850	28.50	0.1	205.2	0.0	5.81	5.45	5.45	1.20	0.27	0.08	1.55	0.09	34.1	0.0	0.	0.00
90	23.750	28.50	0.1	205.2	0.0	5.80	5.45	5.45	1.20	0.27	0.08	1.55	0.09	34.0	0.0	0.	0.00
91	23.650	28.50	0.1	205.2	0.0	5.79	5.45	5.45	1.20	0.27	0.08	1.55	0.09	34.0	0.0	0.	0.00
92	23.550	28.50	0.1	205.2	0.0	5.78	5.44	5.44	1.20	0.27	0.08	1.55	0.09	33.9	0.0	0.	0.00
93	23.450	28.50	0.1	205.2	0.0	5.77	5.44	5.44	1.20	0.27	0.08	1.55	0.09	33.9	0.0	0.	0.00
94	23.350	28.50	0.1	205.2	0.0	5.75	5.44	5.44	1.19	0.28	0.09	1.56	0.09	33.8	0.0	0.	0.00
95	23.250	28.50	0.1	205.2	0.0	5.74	5.44	5.44	1.19	0.28	0.09	1.56	0.09	33.7	0.0	0.	0.00

* CM-I = cond umhos CM-II = NCM =

** G/CU M

********** ALGAE AND MACROPHYTE DATA **********

ELEM NO.	ENDING DIST	SECCHI DEPTH M	NITR PREF	ALG SETT 1/DA	ALG LIT LIM	ALG N LIM	ALG P LIM	ALG N&P LIM	ALG TOT LIM	ALG GROW 1/DA	ALG RESP 1/DA	A P/R RATIO	MAC LIT LIM	MAC N LIM	MAC P LIM	MAC N&P LIM	MAC TOT LIM	MAC GROW 1/DA	MAC RESP 1/DA	M P/R RATIO
86	24.150	0.66	0.24	0.22	.19	.54	.70	.61	.12	0.14	0.15	0.74	.00	.00	.00	.00	.00	0.00	0.00	0.00
87	24.050	0.66	0.24	0.22	.19	.54	.70	.61	.12	0.14	0.15	0.74	.00	.00	.00	.00	.00	0.00	0.00	0.00
88	23.950	0.66	0.24	0.22	.19	.54	.70	.61	.12	0.14	0.15	0.74	.00	.00	.00	.00	.00	0.00	0.00	0.00
89	23.850	0.66	0.24	0.22	.19	.54	.70	.61	.12	0.14	0.15	0.74	.00	.00	.00	.00	.00	0.00	0.00	0.00
90	23.750	0.66	0.24	0.22	.19	.54	.70	.61	.12	0.14	0.15	0.74	.00	.00	.00	.00	.00	0.00	0.00	0.00
91	23.650	0.66	0.24	0.22	.19	.54	.70	.61	.12	0.14	0.15	0.75	.00	.00	.00	.00	.00	0.00	0.00	0.00
92	23.550	0.66	0.24	0.22	.19	.54	.70	.61	.12	0.14	0.15	0.75	.00	.00	.00	.00	.00	0.00	0.00	0.00
93	23.450	0.66	0.24	0.22	.19	.54	.70	.61	.12	0.14	0.15	0.75	.00	.00	.00	.00	.00	0.00	0.00	0.00
94	23.350	0.66	0.24	0.22	.19	.55	.70	.61	.12	0.14	0.15	0.75	.00	.00	.00	.00	.00	0.00	0.00	0.00
95	23.250	0.66	0.24	0.22	.19	.55	.70	.61	.12	0.14	0.15	0.75	.00	.00	.00	.00	.00	0.00	0.00	0.00
20 DEG C RATE				0.50						0.81	0.10							0.00	0.00	

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

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FINAL REPORT Lake Des Allemands QUAL-TX simulation for Upper Bayou Des Allemands, LA
REACH NO. 10 Bayou Des Allemands verification run

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *

96	UPR RCH	106.9200	28.50	0.11	205.2	0.0	5.74	5.44	5.44	1.19	0.28	0.09	0.09	33.7	0.	0.00

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
96	23.25	23.15	106.9200	9.3	0.165	0.01	2.50	259.7	64935.	25974.0	649.4	0.	0.000	4.500	0.165
97	23.15	23.05	106.9200	9.3	0.165	0.01	2.50	259.7	64935.	25974.0	649.4	0.	0.000	4.500	0.165
98	23.05	22.95	106.9200	9.3	0.165	0.01	2.50	259.7	64935.	25974.0	649.4	0.	0.000	4.500	0.165
99	22.95	22.85	106.9200	9.3	0.165	0.01	2.50	259.7	64935.	25974.0	649.4	0.	0.000	4.500	0.165
100	22.85	22.75	106.9200	9.3	0.165	0.01	2.50	259.7	64935.	25974.0	649.4	0.	0.000	4.500	0.165
101	22.75	22.65	106.9200	9.3	0.165	0.01	2.50	259.7	64935.	25974.0	649.4	0.	0.000	4.500	0.165
102	22.65	22.55	106.9200	9.3	0.165	0.01	2.50	259.7	64935.	25974.0	649.4	0.	0.000	4.500	0.165
103	22.55	22.45	106.9200	9.3	0.165	0.01	2.50	259.7	64935.	25974.0	649.4	0.	0.000	4.500	0.165
104	22.45	22.35	106.9200	9.3	0.165	0.01	2.50	259.7	64935.	25974.0	649.4	0.	0.000	4.500	0.165
105	22.35	22.25	106.9200	9.3	0.165	0.01	2.50	259.7	64935.	25974.0	649.4	0.	0.000	4.500	0.165
TOT						0.07			649351.	259740.3					
AVG					0.165		2.50	259.7			649.4				
CUM						1.34									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 DECAY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA
96	23.150	7.75	0.48	0.13	0.00	0.00	3.15	3.15	0.03	0.00	0.17	0.44	0.00	0.00	-0.10	0.00	0.00	0.00	0.00
97	23.050	7.74	0.48	0.13	0.00	0.00	3.15	3.15	0.03	0.00	0.17	0.44	0.00	0.00	-0.10	0.00	0.00	0.00	0.00
98	22.950	7.74	0.48	0.13	0.00	0.00	3.15	3.15	0.03	0.00	0.17	0.44	0.00	0.00	-0.10	0.00	0.00	0.00	0.00
99	22.850	7.73	0.48	0.13	0.00	0.00	3.16	3.16	0.03	0.00	0.17	0.45	0.00	0.00	-0.10	0.00	0.00	0.00	0.00
100	22.750	7.73	0.48	0.13	0.00	0.00	3.16	3.16	0.03	0.00	0.17	0.45	0.00	0.00	-0.10	0.00	0.00	0.00	0.00
101	22.650	7.72	0.48	0.13	0.00	0.00	3.16	3.16	0.03	0.00	0.17	0.45	0.00	0.00	-0.10	0.00	0.00	0.00	0.00
102	22.550	7.72	0.48	0.13	0.00	0.00	3.16	3.16	0.03	0.00	0.17	0.45	0.00	0.00	-0.10	0.00	0.00	0.00	0.00
103	22.450	7.71	0.48	0.13	0.00	0.00	3.17	3.17	0.03	0.00	0.17	0.45	0.00	0.00	-0.09	0.00	0.00	0.00	0.00
104	22.350	7.71	0.48	0.14	0.00	0.00	3.17	3.17	0.03	0.00	0.17	0.45	0.00	0.00	-0.09	0.00	0.00	0.00	0.00
105	22.250	7.70	0.48	0.14	0.00	0.00	3.17	3.17	0.03	0.00	0.17	0.45	0.00	0.00	-0.09	0.00	0.00	0.00	0.00
20 DEG C RATE				0.09		0.00		0.88	0.02		0.10	0.24	0.00	0.00			0.00	0.00	
AVG 20 DEG C RATE			0.41		0.00					0.00									0.00

* G/SQ M/D ** MG/L/DAY

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
96	23.150	28.54	0.1	205.2	0.0	5.73	5.43	5.43	1.19	0.28	0.09	1.56	0.09	33.7	0.0	0.	0.00
97	23.050	28.58	0.1	205.2	0.0	5.73	5.43	5.43	1.19	0.28	0.09	1.56	0.09	33.6	0.0	0.	0.00
98	22.950	28.62	0.1	205.2	0.0	5.72	5.43	5.43	1.19	0.28	0.09	1.56	0.09	33.6	0.0	0.	0.00
99	22.850	28.66	0.1	205.2	0.0	5.71	5.43	5.43	1.19	0.28	0.09	1.56	0.09	33.5	0.0	0.	0.00
100	22.750	28.70	0.1	205.2	0.0	5.70	5.42	5.42	1.19	0.28	0.09	1.56	0.09	33.5	0.0	0.	0.00
101	22.650	28.74	0.1	205.2	0.0	5.69	5.42	5.42	1.19	0.28	0.09	1.56	0.09	33.4	0.0	0.	0.00
102	22.550	28.78	0.1	205.2	0.0	5.68	5.42	5.42	1.19	0.28	0.09	1.57	0.09	33.4	0.0	0.	0.00
103	22.450	28.82	0.1	205.2	0.0	5.67	5.42	5.42	1.19	0.29	0.09	1.57	0.09	33.3	0.0	0.	0.00
104	22.350	28.86	0.1	205.2	0.0	5.66	5.41	5.41	1.19	0.29	0.09	1.57	0.09	33.2	0.0	0.	0.00
105	22.250	28.90	0.1	205.2	0.0	5.65	5.41	5.41	1.19	0.29	0.09	1.57	0.09	33.2	0.0	0.	0.00

* CM-I = cond umhos CM-II = NCM =
** G/CU M

********** ALGAE AND MACROPHYTE DATA **********

ELEM NO.	ENDING DIST	SECCHI DEPTH M	NITR PREF	ALG SETT 1/DA	ALG LIT LIM	ALG N LIM	ALG P LIM	ALG N&P LIM	ALG TOT LIM	ALG GROW 1/DA	ALG RESP 1/DA	A P/R RATIO	MAC LIT LIM	MAC N LIM	MAC P LIM	MAC N&P LIM	MAC TOT LIM	MAC GROW 1/DA	MAC RESP 1/DA	M P/R RATIO
96	23.150	0.66	0.24	0.24	.21	.55	.70	.61	.13	0.15	0.15	0.83	.00	.00	.00	.00	.00	0.00	0.00	0.00
97	23.050	0.66	0.24	0.25	.21	.55	.70	.61	.13	0.15	0.15	0.84	.00	.00	.00	.00	.00	0.00	0.00	0.00
98	22.950	0.66	0.24	0.25	.21	.55	.70	.61	.13	0.16	0.15	0.84	.00	.00	.00	.00	.00	0.00	0.00	0.00
99	22.850	0.66	0.24	0.25	.21	.55	.70	.62	.13	0.16	0.15	0.84	.00	.00	.00	.00	.00	0.00	0.00	0.00
100	22.750	0.67	0.24	0.25	.21	.55	.70	.62	.13	0.16	0.15	0.84	.00	.00	.00	.00	.00	0.00	0.00	0.00
101	22.650	0.67	0.24	0.25	.21	.55	.70	.62	.13	0.16	0.15	0.84	.00	.00	.00	.00	.00	0.00	0.00	0.00
102	22.550	0.67	0.23	0.25	.21	.55	.70	.62	.13	0.16	0.15	0.84	.00	.00	.00	.00	.00	0.00	0.00	0.00
103	22.450	0.67	0.23	0.25	.21	.55	.70	.62	.13	0.16	0.15	0.84	.00	.00	.00	.00	.00	0.00	0.00	0.00
104	22.350	0.67	0.23	0.25	.21	.56	.70	.62	.13	0.16	0.15	0.84	.00	.00	.00	.00	.00	0.00	0.00	0.00
105	22.250	0.67	0.23	0.25	.21	.56	.70	.62	.13	0.16	0.15	0.84	.00	.00	.00	.00	.00	0.00	0.00	0.00
20 DEG C RATE				0.50						0.81	0.10							0.00	0.00	

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

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FINAL REPORT Lake Des Allemands QUAL-TX simulation for Upper Bayou Des Allemands, LA
REACH NO. 11 Bayou Des Allemands verification run

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
106	UPR RCH	106.9200	28.90	0.11	205.2	0.0	5.65	5.41	5.41	1.19	0.29	0.09	0.09	33.2	0.	0.00

112	WSTLD	0.0004	30.80	0.00	503.0	0.0	2.00	60.00	60.00	5.00	10.00	10.00	5.00	0.0	0.	0.00

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
106	22.25	22.15	106.9200	9.3	0.393	0.00	2.50	108.7	27174.	10869.6	271.7	0.	0.000	4.500	0.393
107	22.15	22.05	106.9200	9.3	0.393	0.00	2.50	108.7	27174.	10869.6	271.7	0.	0.000	4.500	0.393
108	22.05	21.95	106.9200	9.3	0.393	0.00	2.50	108.7	27174.	10869.6	271.7	0.	0.000	4.500	0.393
109	21.95	21.85	106.9200	9.3	0.393	0.00	2.50	108.7	27174.	10869.6	271.7	0.	0.000	4.500	0.393
110	21.85	21.75	106.9200	9.3	0.393	0.00	2.50	108.7	27174.	10869.6	271.7	0.	0.000	4.500	0.393
111	21.75	21.65	106.9200	9.3	0.393	0.00	2.50	108.7	27174.	10869.6	271.7	0.	0.000	4.500	0.393
112	21.65	21.55	106.9204	9.3	0.393	0.00	2.50	108.7	27174.	10869.6	271.7	0.	0.000	4.500	0.393
TOT						0.02			190217.	76087.0					
AVG					0.393		2.50	108.7			271.7				
CUM						1.36									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 DECAY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA
106	22.150	7.69	0.74	0.14	0.00	0.00	2.96	2.96	0.03	0.00	0.17	0.49	0.00	0.00	-0.09	0.00	0.00	0.00	0.00
107	22.050	7.68	0.74	0.14	0.00	0.00	2.97	2.97	0.03	0.00	0.17	0.50	0.00	0.00	-0.09	0.00	0.00	0.00	0.00
108	21.950	7.67	0.74	0.14	0.00	0.00	2.98	2.98	0.03	0.00	0.17	0.50	0.00	0.00	-0.09	0.00	0.00	0.00	0.00
109	21.850	7.66	0.74	0.14	0.00	0.00	2.98	2.98	0.03	0.00	0.18	0.50	0.00	0.00	-0.09	0.00	0.00	0.00	0.00
110	21.750	7.65	0.74	0.14	0.00	0.00	2.99	2.99	0.03	0.00	0.18	0.50	0.00	0.00	-0.09	0.00	0.00	0.00	0.00
111	21.650	7.64	0.75	0.14	0.00	0.00	3.01	3.01	0.03	0.00	0.18	0.51	0.00	0.00	-0.09	0.00	0.00	0.00	0.00
112	21.550	7.63	0.75	0.14	0.00	0.00	3.07	3.07	0.03	0.00	0.18	0.51	0.00	0.00	-0.11	0.00	0.00	0.00	0.00
20 DEG C RATE				0.09		0.00		0.75	0.02		0.10	0.26	0.00	0.00			0.00	0.00	
AVG 20 DEG C RATE			0.63		0.00					0.00									0.00

* G/SQ M/D ** MG/L/DAY

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
106	22.150	28.97	0.1	205.2	0.0	5.65	5.41	5.41	1.19	0.29	0.09	1.57	0.09	33.2	0.0	0.	0.00
107	22.050	29.04	0.1	205.2	0.0	5.65	5.41	5.41	1.19	0.29	0.09	1.57	0.09	33.1	0.0	0.	0.00
108	21.950	29.11	0.1	205.2	0.0	5.65	5.41	5.41	1.19	0.29	0.09	1.57	0.09	33.1	0.0	0.	0.00

109	21.850	29.19	0.1	205.2	0.0	5.64	5.41	5.41	1.19	0.29	0.09	1.57	0.09	33.1	0.0	0.	0.00
110	21.750	29.26	0.1	205.2	0.0	5.64	5.40	5.40	1.19	0.29	0.09	1.57	0.09	33.1	0.0	0.	0.00
111	21.650	29.33	0.1	205.1	0.0	5.64	5.37	5.37	1.19	0.29	0.09	1.57	0.09	33.2	0.0	0.	0.00
112	21.550	29.40	0.1	204.2	0.0	5.68	5.09	5.09	1.20	0.28	0.08	1.57	0.09	34.3	0.0	0.	0.00

* CM-I = cond umhos CM-II = NCM =
** G/CU M

********** ALGAE AND MACROPHYTE DATA **********

ELEM NO.	ENDING DIST	SECCHI DEPTH M	NITR PREF	ALG SETT 1/DA	ALG LIT LIM	ALG N LIM	ALG P LIM	ALG N&P LIM	ALG TOT LIM	ALG GROW 1/DA	ALG RESP 1/DA	A P/R RATIO	MAC LIT LIM	MAC N LIM	MAC P LIM	MAC N&P LIM	MAC TOT LIM	MAC GROW 1/DA	MAC RESP 1/DA	M P/R RATIO
106	22.150	0.67	0.23	0.25	.21	.56	.70	.62	.13	0.16	0.15	0.84	.00	.00	.00	.00	.00	0.00	0.00	0.00
107	22.050	0.67	0.23	0.25	.21	.56	.70	.62	.13	0.16	0.15	0.85	.00	.00	.00	.00	.00	0.00	0.00	0.00
108	21.950	0.67	0.23	0.25	.21	.56	.70	.62	.13	0.16	0.15	0.85	.00	.00	.00	.00	.00	0.00	0.00	0.00
109	21.850	0.67	0.23	0.25	.21	.56	.70	.62	.13	0.16	0.15	0.85	.00	.00	.00	.00	.00	0.00	0.00	0.00
110	21.750	0.67	0.23	0.25	.21	.56	.70	.62	.13	0.16	0.15	0.85	.00	.00	.00	.00	.00	0.00	0.00	0.00
111	21.650	0.67	0.23	0.25	.21	.56	.70	.62	.13	0.16	0.15	0.85	.00	.00	.00	.00	.00	0.00	0.00	0.00
112	21.550	0.66	0.22	0.25	.21	.55	.70	.61	.13	0.16	0.15	0.83	.00	.00	.00	.00	.00	0.00	0.00	0.00
20 DEG C RATE				0.50						0.81	0.10							0.00	0.00	

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

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QUAL-TX simulation for Upper Bayou Des Allemands, LA
verification run

INPUT/OUTPUT LOADING SUMMARY

	FLOW CMS	DO KG/D	BOD KG/D	ORG-N KG/D	NH3-N KG/D	NO3-N KG/D	PHOS KG/D	CHL A KG/D	NCM
HEADWATER INFLOW	96.960	83270.8	44399.9	10387.9	1340.4	418.9	578.0	410489.8	0.0
INCREMENTAL INFLOW	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCREMENTAL OUTFLOW	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NON-POINT INPUT		0.0	10224.0	0.0					0.0
WASTELOADS	9.960	206.6	4563.2	1067.3	138.1	43.4	59.6	42166.7	0.0
WITHDRAWLS	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OUTFLOW THRU LOWER BNDRY	-106.920	-52512.1	-46991.3	-11107.4	-2625.7	-756.9	-847.7	-317138.1	0.0
DISPERSION THRU LOWER BNDRY		434.4	-2951.5	100.7	-72.3	-67.5	-5.8	11980.9	0.0
REAERATION		3734.7							
BACKGROUND BENTHAL		-10498.0							
AEROBIC BOD DECAY		-9244.2	-9244.2						
BOD SETTLING		0.0	0.0						
ANAEROBIC BOD DECAY			0.0						

ORGANIC N HYDROLYSIS		0.0		-448.4	448.4				
ORGANIC N SETTLING				0.0	0.0				
NH3 DECAY		-2005.4			-463.1	463.1			
BACKGROUND NH3 SOURCE					1184.4				
DENITRIFICATION			0.0			0.0			
PHOSPHORUS SOURCE							223.8		
ALGAE PHOTOSYNTHESIS		7974.6			-322.3	-101.3	-64.8	83068.3	
ALGAE RESPIRATION		-8737.3			371.3		56.8	-72810.7	
ALGAE SETTLING		-12602.5						-157531.1	
MACRO PHOTOSYNTHESIS		0.0			0.0	0.0	0.0		
NCM DECAY		0.0							0.0
NCM SETTLING		0.0							0.0
TOTAL INPUTS	106.920	95621.1	59187.1	11555.8	3482.6	925.4	918.2	547705.7	0.0
TOTAL OUTPUTS	-106.920	-95599.5	-59187.0	-11555.8	-3483.5	-925.7	-918.4	-547479.9	0.0
NET CONVERGENCE ERROR	0.000	21.6	0.1	0.0	-0.9	-0.3	-0.2	225.8	0.0

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.....EXECUTION COMPLETED

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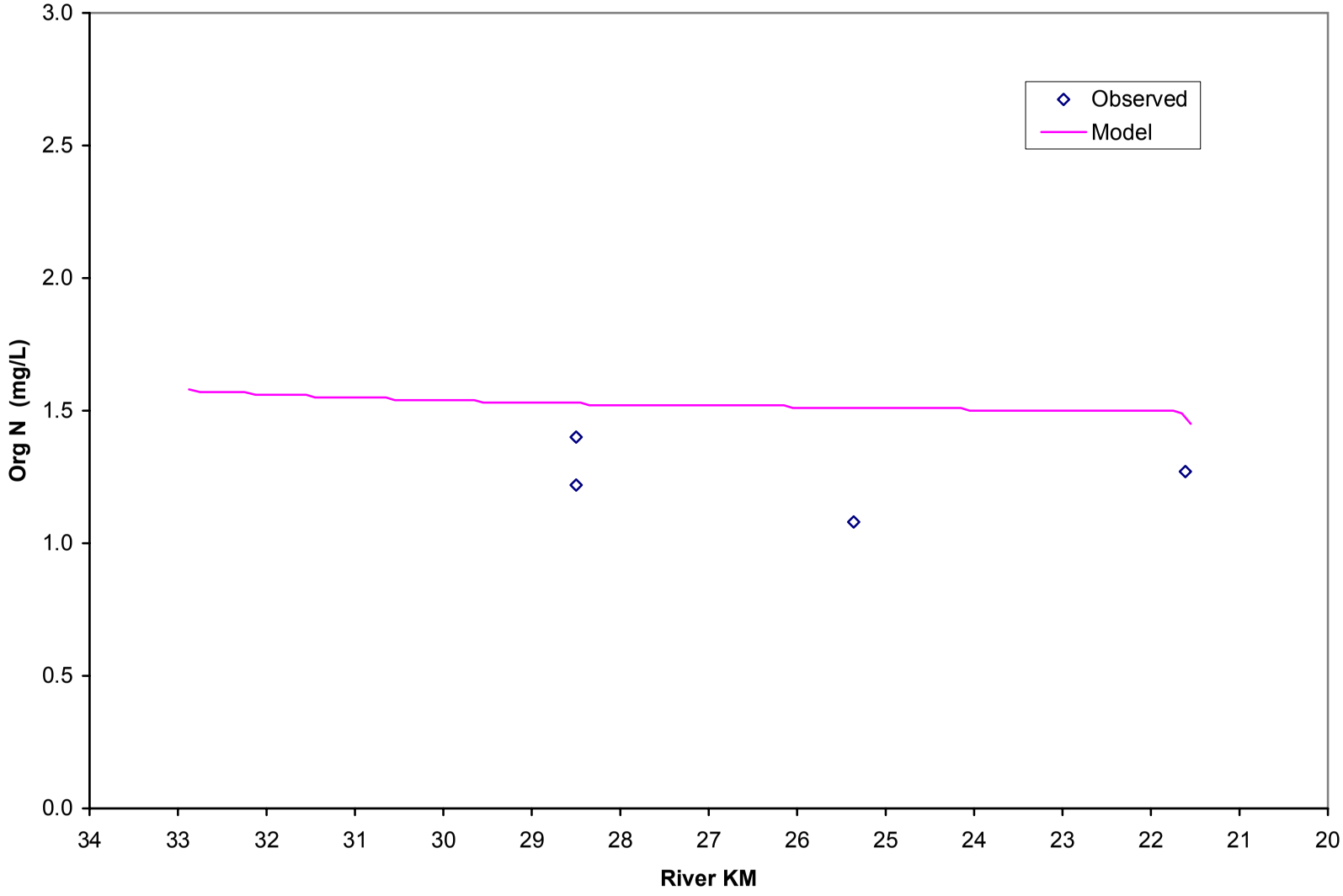
APPENDIX P

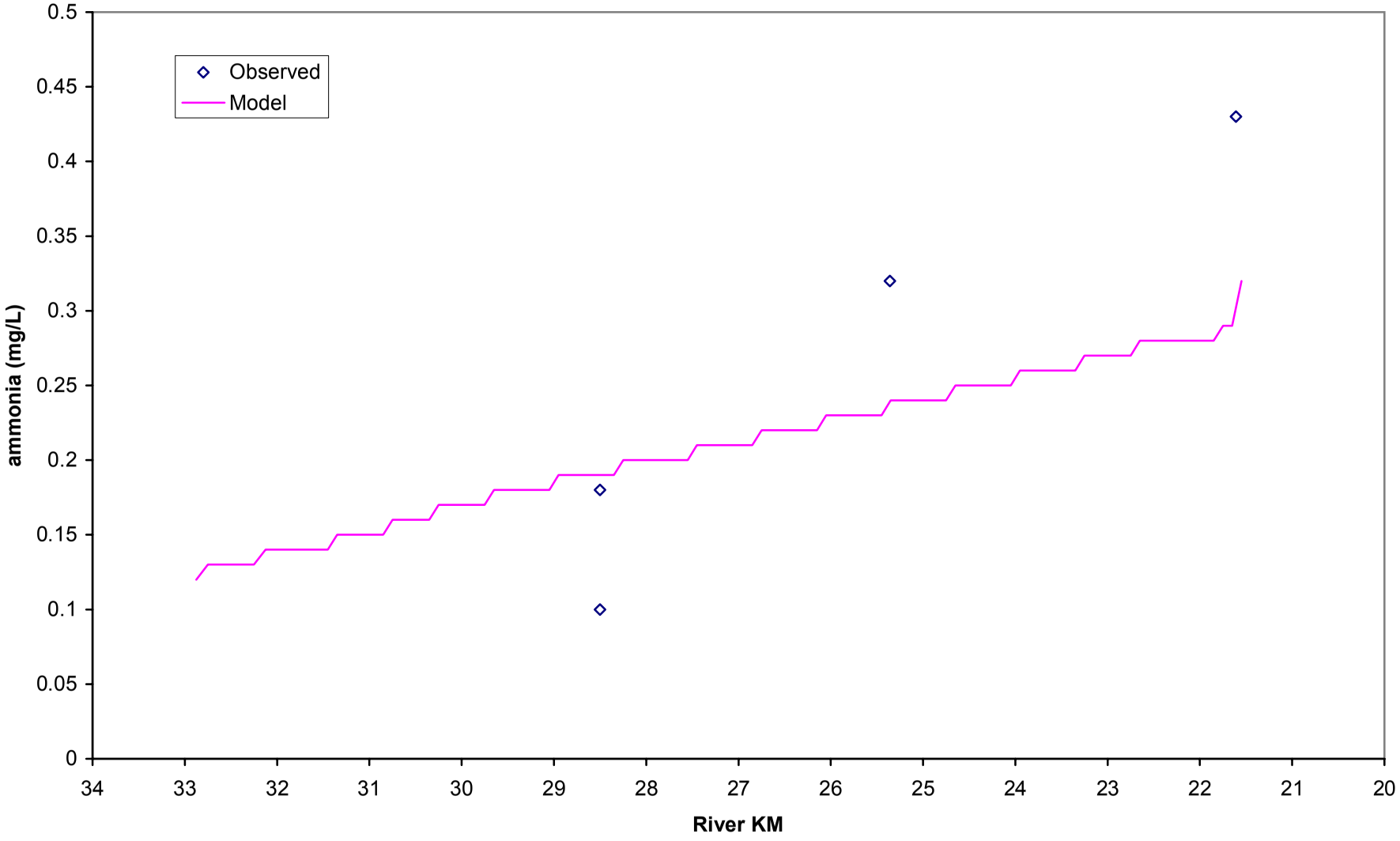
Adjusted Calibration Output Plots

Figure P-1. Adjusted Organic Nitrogen calibration for Upper Bayou Des Allemands



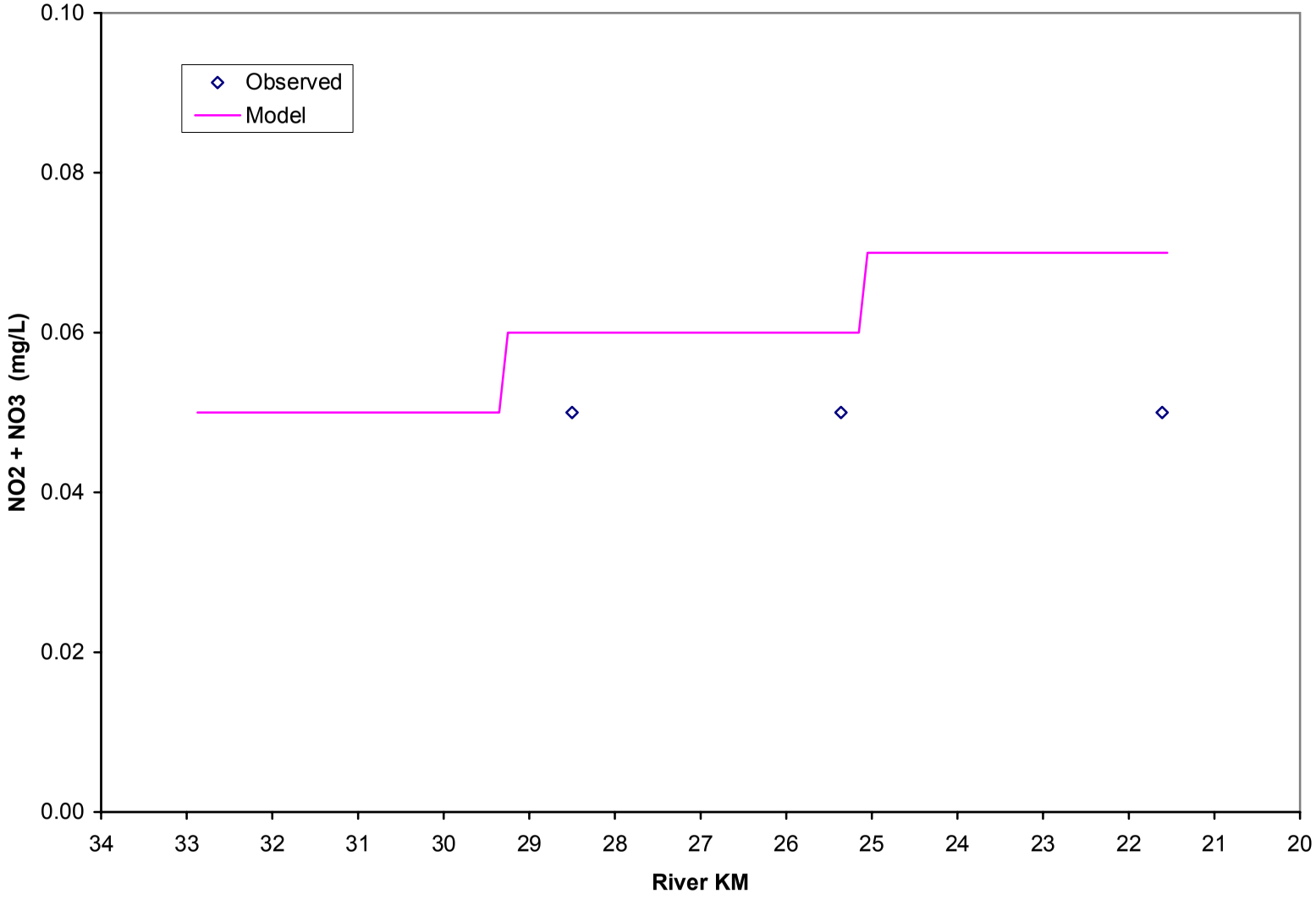
Run6

Figure P-2. Adjusted Ammonia Calibration for Upper Bayou Des Allemands



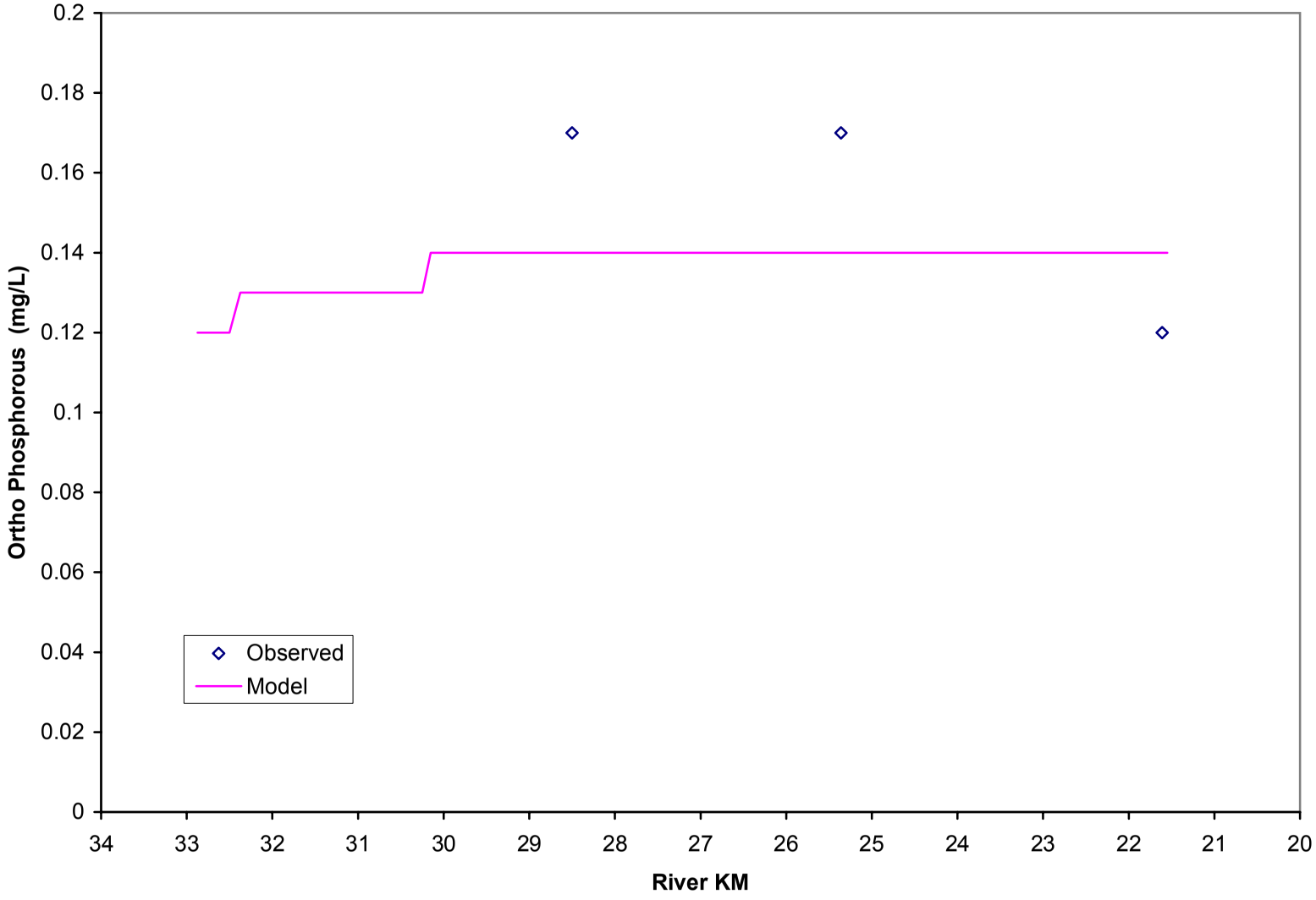
Run6

Figure P-3. Adjusted NO2+NO3 calibration for Upper Bayou Des Allemands



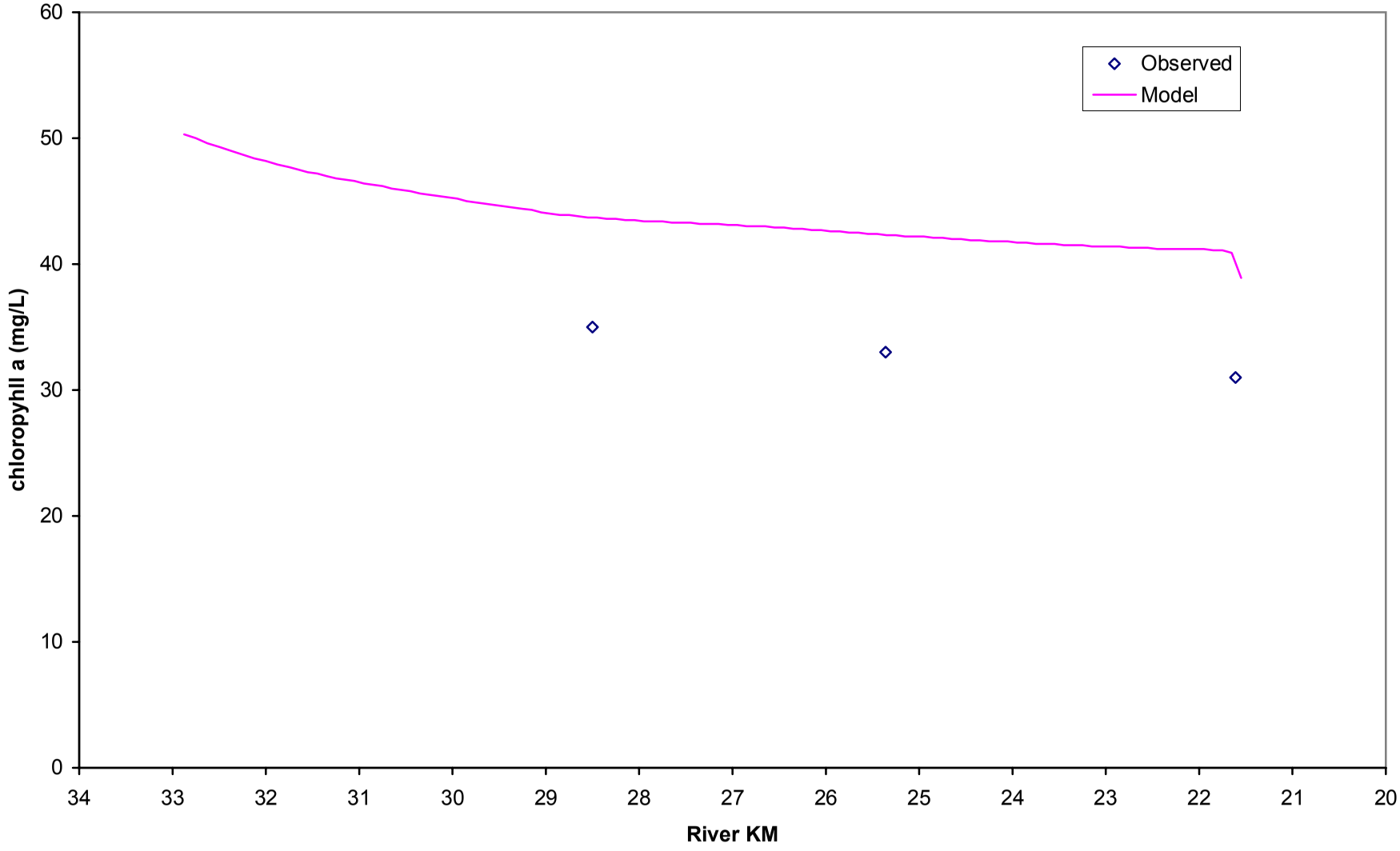
Run6

Figure P-4. Adjusted Phosphorus calibration for Upper Bayou Des Allemands



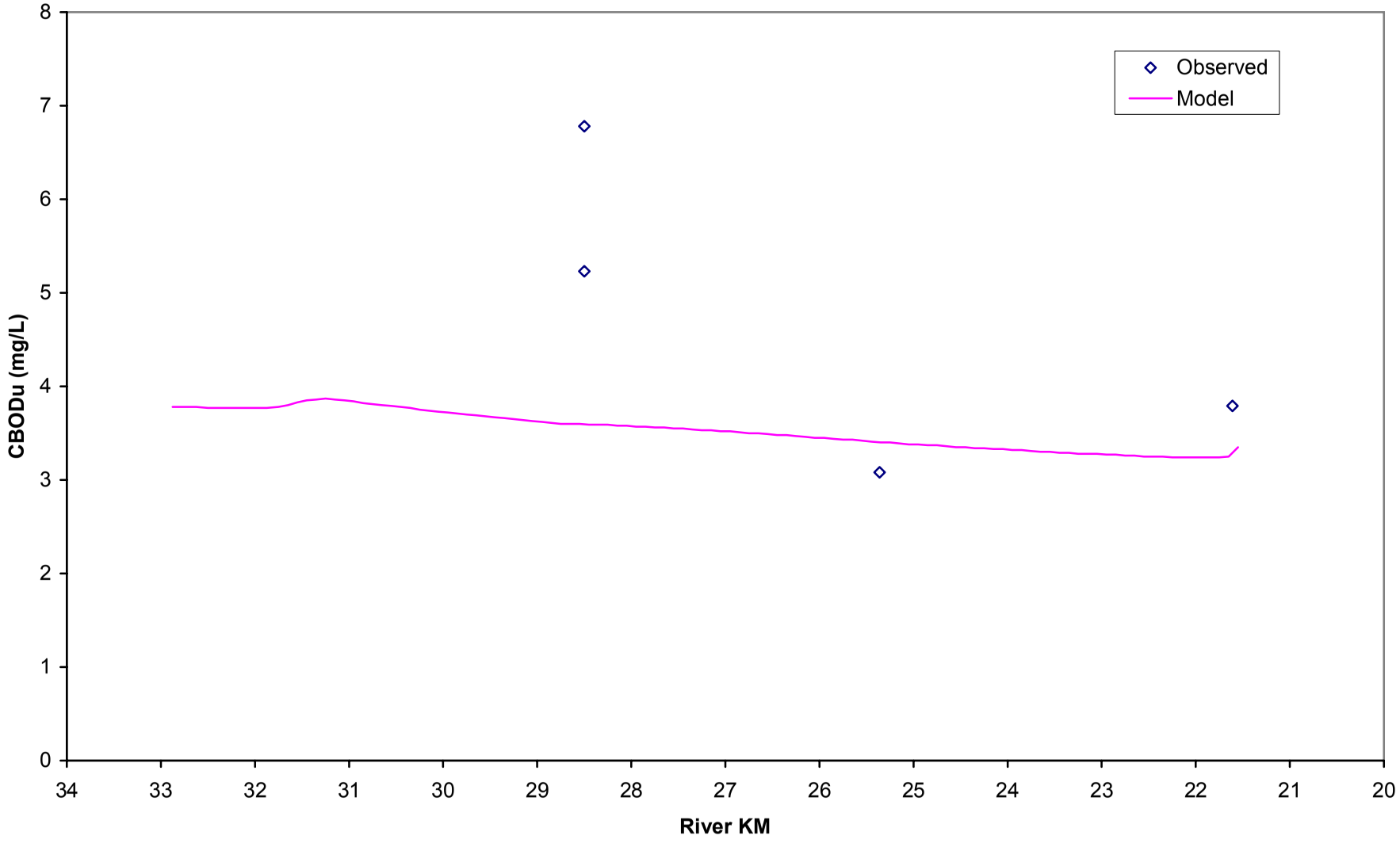
Run6

Figure P-5. Adjusted chlorophyll calibration for Upper Bayou Des Allemands



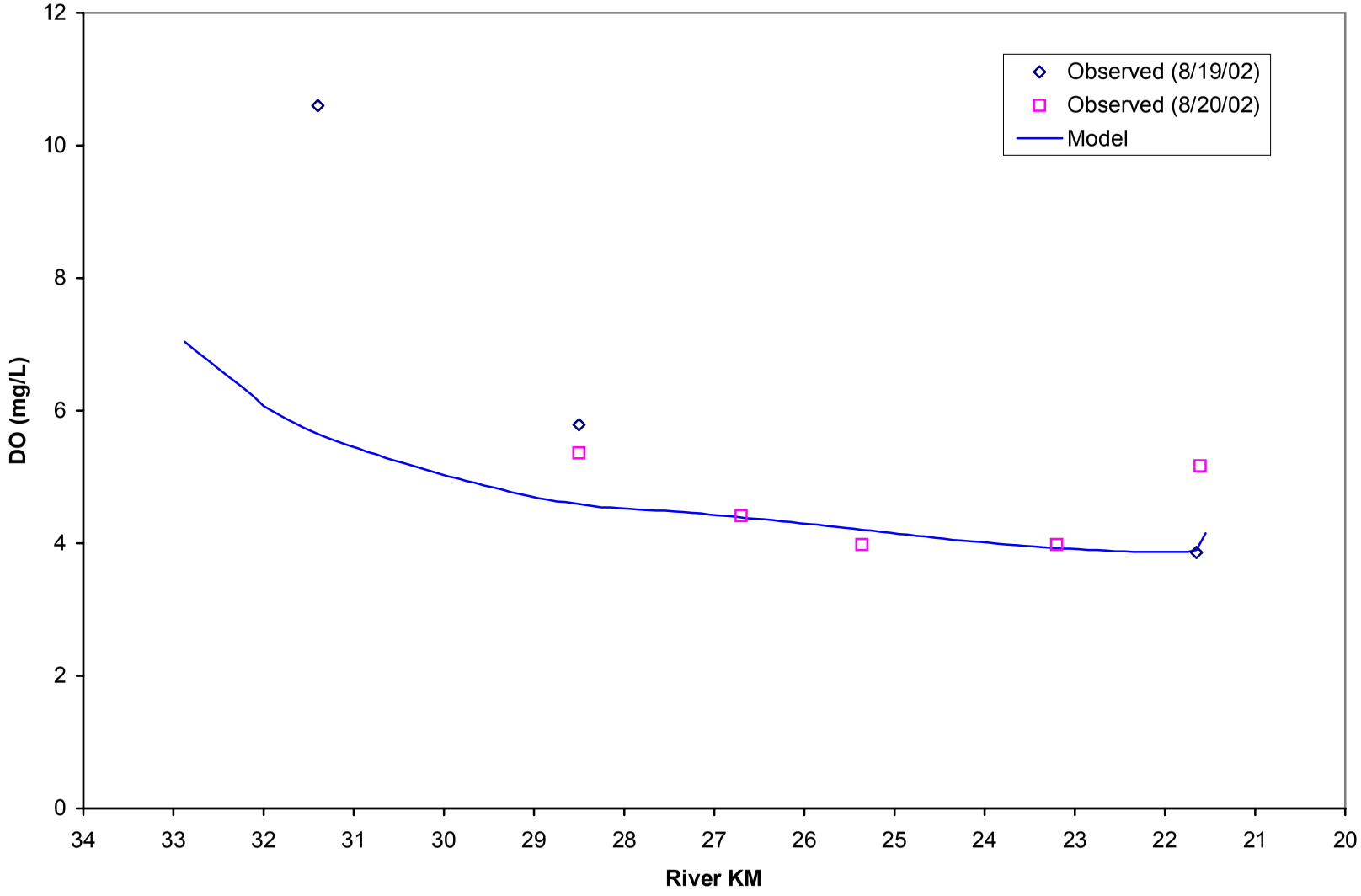
Run6

Figure P-6. Adjusted CBODu calibration for Upper Bayou Des Allemands



Run6

Figure P-7. Adjusted DO calibration for Upper Bayou Des Allemands



Run6