TMDL FOR DISSOLVED OXYGEN FOR BAYOU TORO, LOUISIANA (SUBSEGMENT 110401)

MARCH 21, 2008

TMDL FOR DISSOLVED OXYGEN
FOR BAYOU TORO, LOUISIANA
(SUBSEGMENT 110401)

Prepared for

USEPA Region 6
Water Quality Protection Division
Oversight and TMDL Team
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Contract No. 68-C-02-108
Task Order 95

Prepared by

FTN Associates, Ltd.
3 Innwood Circle, Suite 220
Little Rock, AR 72211

FTN No. 2110-616

March 21, 2008

EXECUTIVE SUMMARY

Section 303(d) of the Federal Clean Water Act requires states to identify waterbodies that are not meeting water quality standards and to develop total maximum daily loads (TMDLs) for those waterbodies. A TMDL is the amount of pollutant that a waterbody can assimilate without exceeding the established water quality standard for that pollutant. Through a TMDL, pollutant loads can be distributed or allocated to point sources and nonpoint sources discharging to the waterbody. This report presents a TMDL that has been developed for dissolved oxygen (DO) for Bayou Toro (Subsegment 110401) in the Sabine River basin in west central Louisiana.

Bayou Toro Subsegment 110401 extends approximately 70 kilometers from its headwaters near Florien, Louisiana in a southwesterly direction to Louisiana Highway 473. Tributaries to Bayou Toro are included in Subsegment 110401. Subsegment 110401 covers 147 square miles, most of which consists of rolling hills.

Subsegment 110401 was included on the final 2004 303(d) list for Louisiana as not fully supporting the designated use of propagation of fish and wildlife and was ranked as priority No.7 for DO TMDL development. The DO criterion specified in the Louisiana water quality standards for this subsegment is 5 mg/L year-round.

A water quality model (LA-QUAL) was set up to simulate DO, carbonaceous biochemical oxygen demand (CBOD), ammonia nitrogen, and organic nitrogen in Bayou Toro. The model was calibrated to conditions observed during a field survey performed by FTN Associated, Ltd. (FTN) between August 31, and September 1, 2005. Depths and widths in the model were based on cross-sections collected during the field survey. Reareation was simulated in the model using the Louisiana Equation. Decay rates for CBOD and ammonia nitrogen were set to averages of values observed during the FTN field survey. Headwater flow rates were based on flows observed during the FTN field survey. Headwater concentrations were based on field data collected by FTN. Model inputs for nonpoint source loads of CBOD and organic nitrogen, benthic loads of ammonia, and sediment oxygen demand were treated as calibration parameters; their values were adjusted until the model output was similar to the calibration target values.

The summer and winter projection simulations were run at critical flows and temperatures to address seasonality as required by the Clean Water Act. Reductions of existing nonpoint source loads were required for the projection simulations to show the DO criterion of 5 mg/L being maintained in the bayou. In general, the modeling in this study was consistent with guidance in the Louisiana TMDL Technical Procedures Manual.

A TMDL for oxygen-demanding substances (CBOD, ammonia nitrogen, organic nitrogen, and sediment oxygen demand) was calculated for summer and winter using the results of the projection simulations. The TMDL calculations included an implicit margin of safety (MOS) as well as an explicit MOS (10% of the TMDL) and an explicit allocation for future growth (FG) (also 10% of the TMDL). The wasteload allocation (WLA) for point sources and load allocation (LA) for nonpoint sources were calculated from the loading simulated in the model. Nonpoint source load reductions of 51% in the summer and 44% in the winter were needed for the projection simulations to show the DO criterion of 5.0 mg/L being maintained in the bayou. The results of the TMDL calculations for summer and winter are summarized in Tables ES.1 and ES.2.

Table ES.1. Summer DO TMDL for Subsegment 110401.

	Oxygen Demand (kg/day) from:					**Oxygen Demand (lbs/day) from:**					**Percent Reduction Needed**
	SOD	**CBODu**	**Organic Nitrogen**	**Ammonia Nitrogen**	**Total**	**SOD**	**CBODu**	**Organic Nitrogen**	**Ammonia Nitrogen**	**Total**	
Point Sources											
WLA	NA	628	42	22.4	692	NA	1,382	92	49	1523	0%
MOS	NA	79	5.2	2.8	87	NA	174	11	6	191	NA
FG	NA	79	5.2	2.8	87	NA	174	11	6	191	NA
Nonpoint Sources											
LA	582	33	54	5.3	674	1,280	72	119	12	1,483	51%
MOS	73	4	6.8	0.7	85	161	9	15	2	186	NA
FG	73	4	6.8	0.7	85	161	9	15	2	186	NA
TMDL	728	41	68	7	843	1,602	90	149	15	1,855	NA

Table ES.2. Winter DO TMDL for Subsegment 110401.

	Oxygen Demand (kg/day) from:					Oxygen Demand (lbs/day) from:					Percent Reduction Needed
	SOD	**CBODu**	**Organic Nitrogen**	**Ammonia Nitrogen**	**Total**	**SOD**	**CBODu**	**Organic Nitrogen**	**Ammonia Nitrogen**	**Total**	
Point Sources											
WLA	NA	628	42	22.4	692	NA	1,382	92	49	1523	0%
MOS	NA	79	5.2	2.8	87	NA	174	11	6	191	NA
FG	NA	79	5.2	2.8	87	NA	174	11	6	191	NA
Nonpoint Sources											
LA	368	40	104	11.4	524	810	89	229	25	1,152	44%
MOS	46	5	13	1.4	66	101	11	29	3	144	NA
FG	46	5	13	1.4	66	101	11	29	3	144	NA
TMDL	460	51	130	14	655	1,012	111	286	31	1,441	NA

TABLE OF CONTENTS

EXECUTIVE SUMMARY i
1.0 INTRODUCTION 1-1
2.0 BACKGROUND INFORMATION 2-1
2.1 General Information 2-1
2.2 Land Use 2-1
2.3 Water Quality Standards 2-2
2.4 Point Sources 2-2
2.5 Nonpoint Sources 2-4
2.6 Historical Water Quality Data Summary 2-4
2.7 Previous Studies 2-5
3.0 FTN FIELD DATA 3-1
4.0 CALIBRATION OF WATER QUALITY MODEL 4-1
4.1 Model Setup 4-1
4.2 Calibration Period and Calibration Targets 4-1
4.3 Temperature Correction of Kinetics (Data Type 4) 4-2
4.4 Hydraulics (Data Type 9) 4-2
4.5 Initial Conditions (Data Type 11) 4-3
4.6 Water Quality Kinetics (Data Types 12 and 13) 4-3
4.7 Nonpoint Source Loads (Data Types 12, 13, and 19) 4-4
4.8 Headwater and Incremental Flow Rates (Data Types 16, 17, and 20) 4-4
4.9 Headwater Quality (Data Type 21) 4-5
4.10 Model Results for Calibration 4-5
5.0 WATER QUALITY MODEL PROJECTIONS 5-1
5.1 Critical Conditions and Seasonality 5-1
5.2 Temperature Inputs 5-2
5.3 Headwater Inputs 5-3
5.4 Nonpoint Source Loads 5-4

TABLE OF CONTENTS (CONTINUED)

5.5 Point Source Loads 5-4
5.6 Other Inputs 5-4
5.7 Model Results for Projections 5-6
6.0 TMDL CALCULATIONS 6-1
6.1 DO TMDL 6-1
6.2 MOS and FG 6-2
6.3 Ammonia Toxicity Calculations 6-2
7.0 SENSITIVITY ANALYSES 7-1
8.0 OTHER RELEVANT INFORMATION 8-1
9.0 PUBLIC PARTICIPATION 9-1
10.0 REFERENCES 10-1

LIST OF APPENDICES

APPENDIX A: Maps of the Study Area
APPENDIX B: LDEQ Water Quality Data
APPENDIX C: FTN Field Survey Data
APPENDIX D: LA-QUAL Vector Diagram
APPENDIX E: Hydraulics Data
APPENDIX F: Literature Values for Mineralization Rates
APPENDIX G: Plots of Predicted and Observed Water Quality
APPENDIX H: Printout of Model Output for Calibration
APPENDIX I: 90th Percentile Temperature Calculations
APPENDIX J: Headwater DO Calculations for Projections
APPENDIX K: Model Output for Projection Simulations
APPENDIX L: Input and Output for TMDL Calculation Program
APPENDIX M: Source Code for TMDL Calculation Program
APPENDIX N: Ammonia Toxicity Calculations

LIST OF TABLES

Table ES.1 Summer DO TMDL for Subsegment 110401 ii
Table ES.2 Winter DO TMDL for Subsegment 110401 iii

Table 1.1 Summary of 303(d) listing for Subsegment 110401 1-1

Table 2.1 Land use percentages for Subsegment 110401 2-1
Table 2.2 Point sources for Subsegment 110401 2-3
Table 2.3 Summary of LDEQ routine monitoring DO data for Station 1160 2-5

Table 4.1 Model calibration input values for length, width, and depth 4-2
Table 4.2 Nonpoint source loads for model calibration 4-4

Table 5.1 Headwater concentrations used in each simulation 5-3
Table 5.2 Nonpoint source loads for each simulation 5-5

Table 6.1 Summer DO TMDL for Subsegment 110401 6-1
Table 6.2 Winter DO TMDL for Subsegment 110401 6-1

Table 7.1 Summary of results of sensitivity analyses 7-2

1.0 INTRODUCTION

This report presents a total maximum daily load (TMDL) for dissolved oxygen (DO) for Subsegment 110401 (Bayou Toro from the headwaters to Louisiana Highway 473). This subsegment was cited as being impaired on the final 2004 303(d) list for Louisiana (Louisiana Department of Environmental Quality (LDEQ) 2005a). The priority ranking and the suspected sources and suspected causes for impairment from the 303(d) list are presented in Table 1.1. The impairments for other pollutants in this subsegment are being addressed by either LDEQ or the United States Environmental Protection Agency (USEPA) in other documents. The DO TMDL in this report was developed in accordance with Section 303(d) of the Federal Clean Water Act and USEPA regulations at Title 40 Code of Federal Regulations (CFR) Part 130.7.

The purpose of a TMDL is to determine the pollutant loading that a waterbody can assimilate without exceeding the water quality standard for that pollutant and to establish the load reduction that is necessary to meet the standard in a waterbody. The TMDL is the sum of the wasteload allocation (WLA), the load allocation (LA), future growth (FG), and a margin of safety (MOS). The WLA is the load allocated to point sources of the pollutant of concern. The LA is the load allocated to nonpoint sources, including natural background. The FG is reserved for future increases in loads to the waterbody. The MOS is a percentage of the TMDL that accounts for any lack of knowledge concerning the relationships between pollutant loading and water quality, including uncertainty associated with model assumptions and data inadequacies.

Table 1.1. Summary of 303(d) listing for Subsegment 110401.

Subsegment Number	Waterbody Description	Suspected Sources	Suspected Causes	Priority Ranking (1 = highest)
110401	Bayou Toro (Headwaters to Hwy 473)	Unknown	Organic enrichment / low DO	7*
		Managed pasture grazing	Total fecal coliform	1

*Priority ranking is No. 7 because this waterbody-impairment combination was not included on the April 2002 consent decree between USEPA and plaintiffs of the Louisiana TMDL lawsuit.

2.0 BACKGROUND INFORMATION

2.1 General Information

Bayou Toro (Subsegment 110401) is located in western Louisiana in the Sabine River basin (see Figure A.1 in Appendix A). Within this subsegment, Bayou Toro extends approximately 70 kilometers from its headwaters near Florien, Louisiana, in a southwesterly direction to Louisiana Highway 473. Midkiff Creek is a significant tributary to Bayou Toro within Subsegment 110401. Downstream of Louisiana Highway 473, Bayou Toro flows through a different subsegment and then into the Sabine River just downstream of Toledo Bend Dam. Subsegment 110401 covers 147 square miles, most of which consists of rolling hills. Bayou Toro is located in the South Central Plains ecoregion.

2.2 Land Use

Land use characteristics for Subsegment 110401 were compiled from the United States Geological Survey (USGS) National Land Cover Database (USGS 2006a). These data are the most recent land use data that are currently available for this area. The spatial distribution of these land uses is shown on Figure A.2 (located in Appendix A), and land use percentages are shown in Table 2.1. These data indicate that the primary land uses in this subsegment are forest and grassland/pasture/hay.

Table 2.1. Land use percentages for Subsegment 110401.

Land Use Type	Percent of Total Area
Water	0.3%
Urban/Transportation	4.7%
Barren	0.1%
Forest	54.0%
Grassland/Pasture/Hay	28.1%
Cultivated Crops	0.0%
Wetlands	12.8%
TOTAL	100.0%

2.3 Water Quality Standards

Water quality standards for Louisiana are included in the Title 33 Environmental Regulatory Code (LDEQ 2006a). The designated uses for Subsegment 110401 are primary contact recreation, secondary contact recreation, and propagation of fish and wildlife. The primary numeric criteria for the TMDL presented in this report are the DO criterion of 5 mg/L (year-round) and the temperature criterion of 32°C.

The Louisiana water quality standards also include an anti-degradation policy (LAC 33:IX.1109.A). This policy states that waters exhibiting high water quality should be maintained at that high level of water quality. If this is not possible, water quality of a level that supports designated uses of the waterbody should be maintained. Changing the designated uses of a waterbody to allow a lower level of water quality can only be achieved through a use attainability study.

2.4 Point Sources

A list of point sources in selected portions of the Red and Sabine River basins was developed using data from LDEQ's internal point source databases with additional information obtained from LDEQ's Electronic Document Management System. Using this information, three point sources were identified within Subsegment 110401. Approximate locations of these point sources are shown on Figure A.1 (in Appendix A). Table 2.2 is a summary of the permit information for these point sources, including limits for carbonaceous biochemical oxygen demand (CBOD), ammonia nitrogen (NH_3-N), and chemical oxygen demand (COD). The two point sources that discharge into Midkiff Creek (Boise Building Solutions and Village of Florien) are located far enough upstream of the confluence of Midkiff Creek and Bayou Toro that DO concentrations in Bayou Toro are not influenced by these discharges (LDEQ 1989; see Section 2.7). Therefore, neither of these two point source discharges were included in the water quality model of Bayou Toro, but both of them were included in the TMDL calculations. The third point source (Emerald Hills Golf Resort) is a small discharge with little impact on Bayou Toro, but it was included in the model because the discharge occurs very close to Bayou Toro.

Table 2.2. Point sources for Subsegment 110401.

Permit Number and AI Number	Company and Facility Name	Type of Discharge	Receiving Stream	Outfall	Flow (gpd)	Permit Limits		Included in model?	Included in TMDL?
						Concentration and Parameter	Type		
LA0046558 (AI=1647)	Boise Building Solutions Manufacturing, LLC (formerly Boise Cascade) – Florien Plywood Mill	Storm runoff, log spray pond overflow, cooling water, etc.	Midkiff Creek	001	770,000	200 mg/L COD	Daily max.	No	Yes
				002	17,000 [(a)]	200 mg/L COD	Daily max.	No	Yes
				003	10,000 [(a)]	250 mg/L COD	Daily max. [(b)]	No	Yes
				004	10,000 [(a)]	250 mg/L COD	Daily max. [(b)]	No	Yes
LA0093939 (AI=41543)	Village of Florien – Fisher / Florien Wastewater Treatment Plant (WWTP)	Municipal wastewater	Midkiff Creek	001	125,000 design	10 mg/L $CBOD_5$ (year-round) 5 mg/L NH_3-N (April – Oct.) 10 mg/L NH_3-N (Nov. – March)	Monthly average	No	Yes
LAG540395 (AI=77357)	Emerald Hills Golf Resort	Sanitary wastewater from motel and restaurant	Unnamed tributary to Bayou Toro	001	10,210 expected	30 mg/L BOD_5	Monthly average	Yes	Yes

Notes: [a] Intermittent flow.
[b] Not a permit limit, but "will be used as an action level requiring further response" (according to permit).

2.5 Nonpoint Sources

The 303(d) list did not cite any specific nonpoint sources as suspected sources of the DO impairment for Subsegment 110401 (Table 1.1). However, based on land use data and other information, it is likely that forestry and agriculture activities contribute some oxygen-demanding pollutants to Bayou Toro.

Sabine Parish (where Subsegment 110401 is located) ranked 2nd among all parishes in Louisiana for the amount of timber and pulpwood harvested in 2004 (almost 77 million board feet; LDAF 2005). A 2005 statewide survey of 145 forestry sites indicated that 95% of the sites had an "adequate level" of best management practice (BMP) implementation (LDEQ 2005b; page 27). Based on this survey, it is likely that BMPs are already being implemented to some degree on forestry sites within the Bayou Toro watershed.

Sabine Parish also ranked 2nd among all parishes in Louisiana for the number of broilers produced in 2002 (over 37 million; NASS 2004). Much of the litter from poultry operations is likely spread on nearby pastures. Sabine Parish also has over 17,000 head of cattle and calves (NASS 2004). Managed pasture grazing was specified in the 303(d) list as a suspected source of impairment for fecal coliforms in Subsegment 110401 and for low DO in nearby Subsegment 110501; therefore, it is likely a source of impairment for low DO in Subsegment 110401.

The magnitude of individual nonpoint sources is not computed here because this TMDL focuses on total nonpoint source loading. Individual sources should be quantified by state or local agencies if they develop an implementation plan.

2.6 Historical Water Quality Data Summary

Station 1160 (Bayou Toro northeast of Toro, Louisiana) is the only LDEQ routine monitoring station in this subsegment. Its location is shown on Figure A.1 in Appendix A. Station 1160 has a period of record from January 2002 to December 2002. The DO data for Station 1160 are summarized in Table 2.3 and the individual data are listed in Table B.1 in Appendix B (LDEQ 2007). The percentage of DO values below the water quality standard of 5 mg/L was 25% (3 out of 13 values were below 5 mg/L). This percentage exceeds the allowable

percentage of DO violations (10%) in USEPA's guidance for assessment procedures (USEPA 2002).

Table 2.3. Summary of LDEQ routine monitoring DO data for Station 1160.

Station	Description	Period	Total Number of Values	Min. (mg/L)	Average (mg/L)	Median (mg/L)	Max. (mg/L)	Number of Values Below Criterion	Percent of Values Below Criterion
1160	Bayou Toro northeast of Toro, LA	1/28/02 – 12/17/02	12	3.8	8.1	7.0	20.2*	3	25%

*The LDEQ database lists the measured DO as 20.18 mg/L on 1/28/02. Although this value is considered by FTN to be erroneous, it was not deleted because these data are presented here for information only (they were not used to develop the TMDL in this report).

2.7 Previous Studies

A WLA for Midkiff Creek was developed based on proposed changes to the Town of Florien's sewage treatment system (LDEQ 1989). The WLA included point source discharges from the Town of Florien and the Boise Building Solutions Manufacturing, LLC (formerly Boise Cascade) – Florien Plywood Mill. The WLA study included field data collection and water quality modeling using the LIMNOSS model. The study established water quality-based permit limits for the Town of Florien's point source discharge. The study also showed that the effluent from the point sources is assimilated in Midkiff Creek prior to its confluence with Bayou Toro.

3.0 FTN FIELD DATA

FTN collected field data in the Red River and Sabine River basins between August 31 and September 9, 2005. During this time, the streams in these basins were at low flow conditions due to an ongoing drought in the area (field data collection was completed prior to the landfall of Hurricane Rita). The data that were collected included continuous in situ monitoring, grab samples and instantaneous in situ measurements, cross-sections or width measurements, and flow measurements. The data collection sites are listed in Table C.1 and their locations are shown on Figure A.1 (Appendix A). Table C.2 summarizes the in situ measurements, and Table C.3 summarizes the laboratory analyses of the samples. The water quality samples were analyzed for 20-day CBOD time series, total Kjeldahl nitrogen (TKN), ammonia nitrogen (NH_3-N), nitrate+nitrite nitrogen, total phosphorus, chlorophyll *a*, total organic carbon (TOC), and total suspended solids (TSS). The calculations of CBOD decay rates and ultimate CBOD (CBODu) concentrations from the time series data are shown in Table C.4.

4.0 CALIBRATION OF WATER QUALITY MODEL

4.1 Model Setup

In order to evaluate the relationship between pollutant sources and water quality, a computer simulation model was used. The model used for these TMDLs was LA-QUAL, version 8.0 (Wiland and LeBlanc 2005), which was selected because it includes the relevant physical, chemical, and biological processes and because it has been used successfully in the past for other TMDLs in Louisiana. The LA-QUAL model was set up to simulate organic nitrogen, ammonia nitrogen, CBODu, and DO as state variables.

Figure D.1 in Appendix D shows the model reach/element design and the location of the modeled inflows. Bayou Toro was divided into four reaches to represent varying depths and widths along the stream. The four reaches were divided into smaller elements to allow variations in simulated water quality along their length.

4.2 Calibration Period and Calibration Targets

Routine water quality monitoring data has been collected at short-term LDEQ Sampling Station 1160, Bayou Toro northeast of Toro (2002). An intensive survey of this subsegment was performed by FTN on August 31 through September 1, 2005. The water quality data collected by LDEQ and the FTN intensive surveys are compiled in Appendices B and C.

On the two conditions that typically characterize critical periods for DO are high temperatures and low flow. High temperatures decrease DO saturation values and increase rates for oxygen-demanding processes (BOD decay, nitrification, and sediment oxygen demand (SOD)). In most systems, low flow causes reareation rates to be lower. The purpose of selecting a critical period for calibration is so that the model will be calibrated as accurately as possible for making projection simulations for critical conditions.

The model was calibrated to the FTN intensive survey. This period represented the most critical period for DO. The calibration target (i.e., the concentration to which the model was calibrated) for each parameter was set equal to the concentrations measured during the survey with the exception of DO, which was set equal to estimated daily minimum DO plus 1 mg/L. For

stations without continuous data, the minimum daily DO was estimated by calculating the ratio of the minimum DO to the instantaneous DO at a continuous monitoring station and dividing the instantaneous DO measured at another in situ station by this ratio. These calculations are shown in Table C.5 in Appendix C. Organic nitrogen was estimated as TKN minus the ammonia nitrogen value.

4.3 Temperature Correction of Kinetics (Data Type 4)

The temperature correction factors used in the model were consistent with the Louisiana Technical Procedures Manual (LTP; LDEQ 2006b). These correction factors were:

1. Correction for BOD decay: 1.047 (value in LTP is same as model default).
2. Correction for SOD: 1.065 (value in LTP is same as model default).
3. Correction for ammonia N decay: 1.070 (specified in Data Group 4).
4. Correction for organic N decay: 1.020 (not specified in LTP; model default used).
5. Correction for reaeration: automatically calculated by the model.

4.4 Hydraulics (Data Type 9)

The typical width and depth of the reaches of the Bayou Toro model were based on cross section data collected by FTN during its field survey. The widths and depths specified in the LA-QUAL model for Reaches 1 and 4 were set equal to the widths and depths observed during the FTN field survey at FTN Station 110401-A and LDEQ Station 1160, respectively (Appendix E). The widths and depths for Reaches 2 and 3 were equally proportioned based on the differences in widths and depths between Reaches 1 and 4. The typical width and depth of each reach are shown in Table 4.1.

Table 4.1. Model calibration input values for length, width, and depth.

Reach	Length (km)	Width (m)	Depth (m)
1	6.0	7.92	0.31
2	6.0	10.87	0.41
3	6.0	13.82	0.50
4	6.0	16.76	0.58

4.5 Initial Conditions (Data Type 11)

Because temperature is not being simulated in the model, the water temperature for each reach was specified in the initial conditions for LA-QUAL. The temperature for the upper reach was set to 21.8°C, which was the measured water temperature at FTN Station 110401-A during the field survey. The temperature for the lower reach was set to 24.4°C, which was the measured temperature at LDEQ Station 1160 during the field survey. The temperatures for the two middle reaches were proportioned according to the temperature difference between the upper and lower reaches. The same method was used to determine the initial DO concentrations.

For constituents not being simulated, the initial concentrations were set to zero. Otherwise the model would have assumed a fixed concentration of those constituents and the model would have included effects of the unmodeled constituents on the modeled constituents.

4.6 Water Quality Kinetics (Data Types 12 and 13)

Kinetic rates used in LA-QUAL include reaeration rates, CBOD decay rates, nitrification rates, and mineralization rates (organic nitrogen decay).

For reaeration, the Louisiana Equation (option 15) was specified in the model because it was developed specifically for streams in Louisiana and has been used successfully in the past for other TMDLs in Louisiana.

The CBOD decay rates were based on averaging the two values of laboratory decay rates for FTN Station 110401-A and LDEQ Station 1160 from the FTN field study. The nitrification rate was based on analyzing NBOD decay rates measured by LDEQ for forested subsegments in the Ouachita and Calcesiu River Basins.

The mineralization rates (organic nitrogen decay) in the model were set to 0.02/day for all reaches. This value was similar to the values shown in Table 5.3 of the “Rates, Constants, and Kinetics” publication (USEPA 1985) for dissolved organic nitrogen being transformed to ammonia nitrogen. The literature values for mineralization rates are shown in Appendix F.

4.7 Nonpoint Source Loads (Data Types 12, 13, and 19)

The nonpoint source loads that are specified in the model can be most easily understood as re-suspended loads from the bottom sediments and are modeled as SOD, benthic ammonia source rates, CBOD loads, and organic nitrogen loads. The SOD (specified in Data Type 12), the benthic ammonia source rates (specified in Data Type 13), and the mass loads of organic nitrogen and CBODu (specified in Data Type 19) were all treated as calibration parameters; their values were adjusted until the model output was similar to the calibration target values.

Typically, these four calibration parameters were adjusted in a specific order based on the interactions between state variables in the model. First, the organic nitrogen loads were adjusted until the predicted organic nitrogen concentrations were similar to the observed concentrations. Organic nitrogen was calibrated first because none of the other state variables will affect the organic nitrogen concentrations. Next, the benthic ammonia source rates were adjusted until the predicted ammonia nitrogen concentrations were similar to the observed concentrations. Then the CBODu loads were adjusted until the predicted CBODu concentrations were similar to the observed concentrations. Finally, the SOD rates were adjusted until the predicted DO concentrations were similar to the observed concentrations. The SOD rate was not adjusted below 0.5 $g/m^2/day$. The DO was calibrated last because all of the other state variables affect DO. The nonpoint source loads used for model calibration are shown in Table 4.2.

Table 4.2. Nonpoint source loads for model calibration.

Reach	SOD ($g/m^2/day$)	Benthic Ammonia Source ($g/m^2/day$)	CBODu (kg/day)	Organic Nitrogen (kg/day)
1	2.0	0	6	1.3
2	2.0	0	8	1.8
3	2.0	0	10	2.3
4	2.0	0	14	2.8

4.8 Headwater and Incremental Flow Rates (Data Types 16, 17, and 20)

Headwater inflow for Bayou Toro was set to 0.01 centimeters based on flow measured at Station 110401-A during the intensive survey. A flow of 0.036 centimeters (1.3 cubic feet per

second) was used for Midkiff Creek based on a previous LDEQ LIMNOSS model (LDEQ 1989). The total incremental flow was determined by subtracting the headwater flow and Midkiff Creek flow from the flow measured at Station 1160 during the intensive survey. The total incremental flow was divided equally among the four model reaches.

4.9 Headwater Quality (Data Type 21)

Concentrations of DO, CBODu, organic nitrogen, and ammonia nitrogen were specified in the model for the headwater, tributary, and incremental flows. Water quality for the Bayou Toro headwater was set to the concentrations measured at Station 110401-A, with the exception of DO. Instead of using the measured value, an estimated daily minimum DO plus 1 mg/L was used. Water quality parameters for the incremental flows and the Midkiff Creek headwater were assumed equal to the Bayou Toro headwater.

4.10 Model Results for Calibration

Plots of predicted and observed water quality for the calibration are presented in Appendix G, and a printout of the LA-QUAL output file is included as Appendix H. The calibration was considered to be acceptable based on the amount of data that were available.

5.0 WATER QUALITY MODEL PROJECTIONS

USEPA's regulations at 40 CFR 130.7 require the determination of TMDLs to take into account critical conditions for stream flow, loading, and water quality parameters. Therefore, the calibrated model was used to project water quality for critical conditions. The identification of critical conditions and the model input data used for critical conditions are discussed below.

5.1 Critical Conditions and Seasonality

Section 303(d) of the Federal Clean Water Act and USEPA's regulations at 40 CFR 130.7 both require the consideration of seasonal variation of conditions affecting the constituent of concern and the inclusion of an MOS in the development of a TMDL. For the TMDL in this report, analyses of LDEQ long-term ambient data were used to determine critical seasonal conditions. Both an implicit MOS and an explicit MOS were used in developing the projection model.

Critical conditions for DO have been determined for Louisiana waterbodies in previous TMDL studies. The analyses concluded that the critical conditions for stream DO concentrations occur during periods with negligible nonpoint runoff, low stream flow, and high water temperature.

When the rainfall runoff (and nonpoint loading) and stream flow are high, turbulence is higher due to the higher flow, and the stream temperature is lowered by the cooler precipitation and runoff. In addition, runoff coefficients are higher in cooler weather due to reduced evaporation and evapotranspiration, so that the high flow periods of the year tend to be the cooler periods. DO saturation values are much higher when water temperatures are cooler, but BOD decay rates are much lower. For these reasons, periods of high loading are periods of higher reaeration and higher DO concentrations, but not necessarily periods of high BOD decay.

LDEQ interprets this phenomenon in its TMDL modeling by assuming that the annual nonpoint loading, rather than loading for any particular day, is responsible for the accumulated benthic blanket of the stream, which is, in turn, expressed as SOD and/or re-suspended BOD in

the model. This accumulated loading has its greatest impact on the stream during periods of higher temperature and lower flow.

According to the LTP, critical summer conditions in DO TMDL projection modeling are simulated by using the annual 7Q10 flow or 0.1 cubic feet per second (cfs) (whichever is higher) for all headwaters, and 90th percentile temperature for the summer season. Model loading is from perennial tributaries, point sources, SOD, and re-suspension of sediments.

In reality, the highest temperatures occur in July and August and the lowest stream flows occur in October and November. The combination of these conditions and the impact of other conservative assumptions regarding rates and loadings yields an implicit MOS that is not quantified. Over and above this implicit MOS, an explicit MOS of 10% for nonpoint sources and an explicit MOS of 20% for point sources were incorporated into the TMDLs in this report to account for model uncertainty.

5.2 Temperature Inputs

The LTP (LDEQ 2006b) specifies that the critical temperatures should be determined by calculating the 90th percentile seasonal temperatures for the waterbody being modeled. Water temperature data were collected in Bayou Toro (Station 1160) for only one year, which is not enough to calculate 90th percentile temperatures. Therefore, data from a similar stream (Kepler Creek) were used to estimate 90th percentile temperatures for Bayou Toro. Long-term water temperature data were collected by LDEQ at one station in Kepler Creek (Station 283). These data are summarized in Table I.1 in Appendix I. Calculations for 90th percentile temperatures were developed for each season (summer and winter). These calculations are shown in Table I.2. These calculations resulted in 90th percentile temperatures of 27.1°C for summer and 19.5°C for winter (see Table I.1). These temperatures were adjusted based on differences between seasonal average temperatures taken at Bayou Toro (Station 1160) and Kepler Creek (Station 283) during their overlapping period of record. The 90th percentile temperatures used as model inputs for the Bayou Toro projection simulations were 27.3°C for summer and 22.6°C for winter (Table I.2).

5.3 Headwater Inputs

The headwater flow rates for the projection simulation were based on guidance in the LTP (LDEQ 2006b), which states that headwater flows should be set equal to either the 7Q10 flow or 0.1 cfs for summer and 1.0 cfs for winter, whichever is greater. Based on data collected at USGS Station 08025500 (Bayou Toro near Toro, Louisiana), USGS has published a lowest average annual 7Q10 flow for Bayou Toro of 0.034 m^3/s (1.2 cfs) (USGS 2003). Headwater flow for Bayou Toro was set equal to this published 7Q10 value for the summer projections. For winter projections, the headwater flow for Bayou Toro was set to 0.21 m^3/s (7.4 cfs) which is the published 7Q10 flow for Bayou Toro for December through February. There are no published 7Q10 flows for Midkiff Creek. The headwater flows for Midkiff Creek were assumed to be 0.1 cfs for summer and 1.0 cfs for winter per guidance in the LTP.

It was assumed that the headwater quality would improve with reductions of nonpoint sources in the watershed. For the projection simulations, the headwater concentrations of CBODu, organic nitrogen, and ammonia nitrogen were reduced from the calibration simulation by the same percentages as the reductions of nonpoint source loads (see Section 5.4 for reductions applied to nonpoint source loads). The values used as model inputs for headwater concentrations are summarized in Table 5.1. The headwater DO concentrations for the projection simulations were estimated assuming that 0% reduction of nonpoint sources in the watershed would correspond to the same DO percent saturation as in the calibration, and 100% reduction of nonpoint sources in the watershed would correspond to 100% DO saturation in the headwater. The calculations for headwater DO for the projection simulations are shown in Appendix J.

Table 5.1. Headwater concentrations used in each simulation.

	CBODu (mg/L)	**Organic Nitrogen (mg/L)**	**Ammonia Nitrogen (mg/L)**	**DO (mg/L)**
Calibration	2.8	1.24	0.16	2.2
Summer projection (51% reduction)	1.37	0.61	0.08	5.01 (see Appendix J)
Winter projection (44% reduction)	1.57	0.69	0.09	5.02 (see Appendix J)

5.4 Nonpoint Source Loads

An initial projection simulation was run with no reductions of nonpoint source loads and no improvements in headwater quality, but this simulation predicted DO values in Bayou Toro below the 5.0 mg/L criterion in the water quality standards. Therefore, nonpoint source loadings were reduced until all of the predicted DO values were equal to or greater than 5.0 mg/L. The nonpoint source loads used in the calibration (SOD and mass loads of CBODu and organic nitrogen) were reduced by a uniform percentage within each projection simulation. Nonpoint source loads for all reaches in the summer simulation were reduced by 51% and nonpoint source loads for all reaches in the winter simulation were reduced by 44%. The values used as model input for nonpoint source loads are shown in Table 5.2. The benthic ammonia source loads are not shown in Table 5.2 because they were set to zero in the calibration and the projections.

5.5 Point Source Loads

The only point source considered in the model was the Emerald Hills Golf Resort. The minimum DO in the projection model occurred upstream of this point source and no reductions in point source loads were necessary to meet the water quality criteria of 5 mg/L in Bayou Toro. The sensitivity analysis (see Section 7.0) showed that minimum DO in Bayou Toro is not sensitive to changes in point source loads.

5.6 Other Inputs

The only model inputs that were changed from the calibration to the projection simulations were the inputs discussed above in Sections 5.2 through 5.4. Other model inputs (e.g., hydraulic coefficients, decay rates, reaeration equations, etc.) were unchanged from the calibration simulation.

Table 5.2. Nonpoint source loads for each simulation.

Reach	SOD ($g/m^2/day$)			CBODu (kg/day)			Organic Nitrogen (kg/day)		
	Calibration	Summer Projection	Winter Projection	Calibration	Summer Projection	Winter Projection	Calibration	Summer Projection	Winter Projection
1	2.0	0.98	1.12	6	2.94	3.36	1.3	0.64	0.73
2	2.0	0.98	1.12	8	3.92	4.48	1.8	0.88	1.01
3	2.0	0.98	1.12	10	4.9	5.6	2.3	1.13	1.09
4	2.0	0.98	1.12	14	6.86	7.84	2.8	1.37	1.57

5.7 Model Results for Projections

Printouts of the LA-QUAL graphs and tabular output files for the summer and winter projection simulations are included in Appendix K. The predicted minimum DO values in the lake were 5.01 mg/L for summer and 5.02 mg/L for winter. Nonpoint source load reductions of 51% for summer and 44% for winter were required to obtain these predicted minimum DO values. These percentage reductions for nonpoint source loads represent percentages of the entire nonpoint source loading, not percentages of the manmade nonpoint source loading. The nonpoint source loads in this model were not divided between natural and manmade because it would be difficult to accurately estimate natural nonpoint source loads for the study area.

6.0 TMDL CALCULATIONS

6.1 DO TMDL

A TMDL for DO was calculated for the Bayou Toro subsegment using the results of the summer and winter projection simulations. The DO TMDL is presented as oxygen demand from CBODu, organic nitrogen, ammonia nitrogen, and SOD. Summaries of the TMDL for Bayou Toro are presented in Tables 6.1 and 6.2.

Table 6.1. Summer DO TMDL for Subsegment 110401.

	Oxygen Demand (kg/day) from:					Oxygen Demand (lbs/day) from:					Percent Reduction Needed
	SOD	CBODu	Organic Nitrogen	Ammonia Nitrogen	Total	SOD	CBODu	Organic Nitrogen	Ammonia Nitrogen	Total	
Point Sources											
WLA	NA	628	42	22.4	692	NA	1,382	92	49	1523	0%
MOS	NA	79	5.2	2.8	87	NA	174	11	6	191	NA
FG	NA	79	5.2	2.8	87	NA	174	11	6	191	NA
Nonpoint Sources											
LA	582	33	54	5.3	674	1,280	72	119	12	1,483	51%
MOS	73	4	6.8	0.7	85	161	9	15	2	186	NA
FG	73	4	6.8	0.7	85	161	9	15	2	186	NA
TMDL	728	41	68	7	843	1,602	90	149	15	1,855	NA

Table 6.2. Winter DO TMDL for Subsegment 110401.

	Oxygen Demand (kg/day) from:					Oxygen Demand (lbs/day) from:					Percent Reduction Needed
	SOD	CBODu	Organic Nitrogen	Ammonia Nitrogen	Total	SOD	CBODu	Organic Nitrogen	Ammonia Nitrogen	Total	
Point Sources											
WLA	NA	628	42	22.4	692	NA	1,382	92	49	1523	0%
MOS	NA	79	5.2	2.8	87	NA	174	11	6	191	NA
FG	NA	79	5.2	2.8	87	NA	174	11	6	191	NA
Nonpoint Sources											
LA	368	40	104	11.4	524	810	89	229	25	1,152	44%
MOS	46	5	13	1.4	66	101	11	29	3	144	NA
FG	46	5	13	1.4	66	101	11	29	3	144	NA
TMDL	460	51	130	14	655	1,012	111	286	31	1,441	NA

A one-page summary of the methodology for the TMDL calculations is shown in Appendix L. The TMDL calculations were performed using a FORTRAN program that was written by FTN personnel. This program reads two files; one is the LA-QUAL output file from the projection simulation and the other is a small input file with miscellaneous information needed for the TMDL calculations (shown in Appendix L). The output files from the program are also shown in Appendix L for the summer and winter projections. The source code for the program is shown in Appendix M.

6.2 MOS and FG

The MOS accounts for any lack of knowledge or uncertainty concerning the relationship between pollutant loading and water quality. This TMDL includes an implicit MOS based on the conservative calibration target for DO. The calibration target for DO was the average of the two lowest DO values that have been recorded in the top 5 ft of the lake. Other data collected by LDEQ, USGS, and FTN all show higher DO values than the calibration target. Calibrating to a lower DO value results in higher SOD being specified in the calibration simulation, which makes the model more conservative for the projections. Additionally, the model projections were run with the 90th percentile seasonal water temperatures (conservative values). These modeling procedures yield an implicit MOS, which is not quantified. In addition to the implicit MOS, the TMDL in this report includes an explicit MOS equal to 10% of the TMDL and an explicit allowance for FG that is also equal to 10% of the TMDL.

6.3 Ammonia Toxicity Calculations

Although Subsegment 110401 is not on a 303(d) list for ammonia, the ammonia concentrations predicted in the projection simulations were checked to make sure that they did not exceed USEPA criteria for ammonia toxicity (USEPA 1999). The USEPA criteria are dependent on temperature and pH. The water temperatures used to calculate the ammonia toxicity criteria for summer and winter for Bayou Toro were the same as the critical temperatures used in the projection simulations (27.3°C for summer and 22.6°C for winter). For pH, an average of the values measured at LDEQ Station 1160 during the calibration period was used

(6.3 su). The resulting criteria for ammonia nitrogen were 3.0 mg/L for summer and 4.0 mg/L for winter. The ammonia nitrogen concentrations predicted by the LA-QUAL model were well below these criteria. This indicates that the ammonia nitrogen loadings that will maintain the DO standard are low enough that the USEPA ammonia toxicity criteria will not be exceeded under critical conditions. The ammonia toxicity calculations are shown in Appendix N.

7.0 SENSITIVITY ANALYSES

All modeling studies necessarily involve uncertainty and some degree of approximation. Therefore, it is of value to consider the sensitivity of the model output to changes in model coefficients, and in the hypothesized relationships among the parameters of the model. The sensitivity analyses were performed by allowing the LA-QUAL model to vary one input parameter at a time while holding all other parameters to their original value. The calibration simulation was used as the baseline for the sensitivity analysis. The percent change of the model's minimum DO projections to each parameter is presented in Table 7.1. Each parameter was varied by ±30%, except for temperature, which was varied ±2ºC.

Values reported in Table 7.1 are sorted by percentage variation of minimum DO from largest percentage variation to smallest. The model output was most sensitive to reaeration, headwater DO, benthal demand, headwater flow, depth, and initial temperature.

Table 7.1. Summary of results of sensitivity analyses.

Parameter	Change in Parameter	Min DO (mg/L)	Change in DO
Baseline	--	3.54	N/A
Waterbody Reaeration	-30	2.85	-19.5%
Waterbody Reaeration	30	4.09	15.5%
Headwater DO	-30%	3.17	-10.5%
Headwater DO	30	3.91	10.5%
Benthal Demand	-30	3.89	9.9%
Benthal Demand	30	3.19	-9.9%
Headwater Flow	-30	3.76	6.2%
Initial Temperature	2 deg C	3.33	-5.9%
Initial Temperature	-2 deg C	3.74	5.6%
Headwater Flow	30	3.39	-4.2%
Waterbody Depth	-30	3.63	2.5%
Waterbody Depth	30	3.48	-1.7%
CBOD Aerobic Decay Rate	-30	3.56	0.6%
CBOD Aerobic Decay Rate	30	3.52	-0.6%
Headwater CBOD	30	3.53	-0.3%
Headwater CBOD	-30	3.55	0.3%
Ammonia Decay Rate	-30	3.54	0.0%
Organic Nitrogen Decay Rate	-30	3.54	0.0%
Headwater Ammonia	-30	3.54	0.0%
Headwater Organic Nitrogen	-30	3.54	0.0%
Nonpoint Source CBOD	-30	3.54	0.0%
Nonpoint Source Organic N	-30	3.54	0.0%
Wasteload Flow	-30	3.54	0.0%
DO	-30	3.54	0.0%
CBOD	-30	3.54	0.0%
Ammonia	-30	3.54	0.0%
Organic Nitrogen	-30	3.54	0.0%
Ammonia Decay Rate	30	3.54	0.0%
Organic Nitrogen Decay Rate	30	3.54	0.0%
Headwater Ammonia	30	3.54	0.0%
Headwater Organic Nitrogen	30	3.54	0.0%
Nonpoint Source CBOD	30	3.54	0.0%
Nonpoint Source Organic N	30	3.54	0.0%
Wasteload Flow	30	3.54	0.0%
Wasteload DO	30	3.54	0.0%
Wasteload CBOD	30	3.54	0.0%
Wasteload Ammonia	30	3.54	0.0%
Wasteload Organic Nitrogen	30	3.54	0.0%

8.0 OTHER RELEVANT INFORMATION

This TMDL has been developed to be consistent with the state antidegradation policy (LAC 33:IX.1109.A).

This TMDL report does not include an implementation plan. Implementation plans are not required for TMDLs under current federal regulations. Implementation plans can be developed most effectively and efficiently on the state and local level.

LDEQ will work with other agencies such as local Soil Conservation Districts to implement nonpoint source BMPs in the watershed through the Section 319 programs. LDEQ will also continue to monitor the waters to determine whether standards are being attained.

In accordance with Section 106 of the Federal Clean Water Act, and under the authority of the Louisiana Environmental Quality Act, LDEQ has established a comprehensive program for monitoring the quality of the State's surface waters. The LDEQ Surveillance Section collects surface water samples at various locations, utilizing appropriate sampling methods and procedures for ensuring the quality of the data collected. The objectives of the surface water monitoring program are to determine the quality of the state's surface waters, to develop a long-term data base for water quality trend analysis, and to monitor the effectiveness of pollution controls. The data obtained through the surface water monitoring program are used to develop the state's biennial 305(b) report (Water Quality Inventory) and the 303(d) list of impaired waters. This information is also utilized in establishing priorities for the LDEQ nonpoint source program.

LDEQ has implemented a watershed approach to surface water quality monitoring. Through this approach, the entire state is sampled over a 4-year cycle. Long-term trend monitoring sites at various locations on the larger rivers and Lake Pontchartrain are sampled throughout the 4-year cycle. Sampling is conducted on a monthly basis to yield approximately 12 samples per site each year the site is monitored. Sampling sites are located where they are considered to be representative of the waterbody. Under the current monitoring schedule, approximately one half of the state's waters are newly assessed for each 305(b) and 303(d) listing biennial cycle, with sampling occurring statewide each year. The 4-year cycle follows an

initial 5-year rotation that covered all basins in the state according to the TMDL priorities. This will allow the LDEQ to determine whether there has been any improvement in water quality following implementation of the TMDLs. As the monitoring results are evaluated at the end of each year, waterbodies may be added to or removed from the 303(d) list.

9.0 PUBLIC PARTICIPATION

Federal regulations require USEPA to notify the public and seek comment concerning TMDLs it prepares. The TMDL in this report was developed under contract to USEPA, and USEPA held a public review period seeking comments, information, and data from the public and any other interested parties. The notice for the public review period was published in the Federal Register on October 25, 2007, and the review period closed on November 26, 2007.

Comments were received from LDEQ. These comments were used to revise this TMDL report. The comments and responses to these TMDLs are included in a separate document that includes comments on similar TMDLs with the same public review period.

USEPA will submit the final version of these TMDLs to LDEQ for implementation and incorporation into LDEQ's current water quality management plan.

10.0 REFERENCES

LDAF. 2005. Louisiana Timber and Pulpwood Production Report, 2004. Prepared by Louisiana Department of Agriculture and Forestry. Downloaded in Excel format from LDAF web site (www.ldaf.state.la.us/divisions/forestry/reports/timberpulpwood/default.asp).

LDEQ. 2005a. Louisiana 2004 303(d) List of Impaired Water Bodies: Including EPA's Additions. Downloaded from Louisiana Department of Environmental Quality web site (www.deq.louisiana.gov/portal/Portals/0/planning/04 IR1-FINAL-Appendix H-Cat 5 303d List with EPA - August 17 2005.xls)

LDEQ. 2005b. Louisiana's Nonpoint Source Annual Report, 2005. Prepared by Louisiana Department of Environmental Quality. Downloaded from LDEQ web site (http://nonpoint.deq.louisiana.gov/wqa/links/AnnualReports/2005%20NPS%20Annual%20Report.pdf).

LDEQ. 2005c. Water quality data from intensive field surveys. Obtained via e-mail from Water Quality Assessment Division, Louisiana Department of Environmental Quality.

LDEQ. 2006a. Title 33 Environmental Quality, Part IX Water Quality, Subpart 1 Water Pollution Control, Chapter 11 Surface Water Quality Standards. Including amendments through 10/20/06. Downloaded from Louisiana Department of Environmental Quality web site (www.deq.louisiana.gov/portal/Portals/0/planning/regs/title33/33v09.pdf)

LDEQ. 2006b. Louisiana Total Maximum Daily Load Technical Procedures. Revision 10. Prepared by Office of Environmental Assessment, Louisiana Department of Environmental Quality. Dated August 10, 2006. Downloaded from LDEQ web site (www.deq.louisiana.gov/portal/Portals/0/planning/LTP_sop_1727_r10-081006.pdf).

LDEQ. 2007. Routine water quality monitoring data for various stations. Obtained via e-mail from Water Quality Assessment Division, Louisiana Department of Environmental Quality.

NASS. 2004. 2002 Census of Agriculture, Volume 1 Chapter 2: Louisiana Parish Level Data. Issued June 2004. Downloaded from National Agricultural Statistics Service web site (www.nass.usda.gov/census/census02/volume1/la/index2.htm).

NCDC. 2007a. Daily wind speed data for Alexandria, LA (Esler Airport) and Jackson, MS. Downloaded from National Climatic Data Center web site (http://cdo.ncdc.noaa.gov/pls/plclimprod/poemain.accessrouter?datasetabbv=SOD).

NCDC. 2007b. Daily precipitation data for Vidalia #2, LA. Downloaded from National Climatic Data Center web site (http://www7.ncdc.noaa.gov/IPS/getcoopstates.html)

Thomann, R.V. and J.A. Mueller. 1987. Principles of Surface Water Quality Modeling and Control. Harper Collins Publishers, New York, NY.

USEPA. 1985. Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (Second Edition). Written by G.L. Bowie et. al. EPA/600/3-85/040. U.S. Environmental Protection Agency, Environmental Research Laboratory, Athens, GA.

USEPA. 1999. 1999 Update of Ambient Water Quality Criteria for Ammonia. EPA-822-R-99-014. U.S. Environmental Protection Agency, Office of Water. December, 1999.

USEPA. 2002. Consolidated Assessment and Listing Methodology – Toward a Compendium of Best Practices. Prepared by U.S. Environmental Protection Agency, Office of Wetlands, Oceans, and Watersheds. July 2002. Downloaded from EPA web site (www.epa.gov/owow/monitoring/calm.html)

USGS. 1986. Louisiana Hydrologic Atlas Map No. 1: Mean Annual Runoff in Louisiana. Water Resources Investigation Report 86-4149. Prepared by H.C. McWreath, III and A.S. Lowe, U.S. Geological Survey, Baton Rouge, LA.

USGS. 2003. Low-Flow Characteristics of Louisiana Streams. Water Resources Technical Report No. 70. Prepared by P.A. Ensminger and L.S. Wright. U.S. Geological Survey, Baton Rouge, LA.

USGS. 2006a. National Land Cover Database 2001 (NLCD 2001). Downloaded from United States Geological Survey web site (www.mrlc.gov/mrlc2k_nlcd.asp).

USGS. 2006b. Daily flow data for various gages. Downloaded from United States Geological Survey web site (http://waterdata.usgs.gov/usa/nwis/sw).

Wiland, B.L., and K. LeBlanc. 2005. LA-QUAL for Windows User's Manual, Manual Revision L. Prepared by Wiland Consulting, Inc. with revisions by K. LeBlanc, Louisiana Department of Environmental Quality. August 4, 2005.

APPENDIX A

Maps of the Study Area

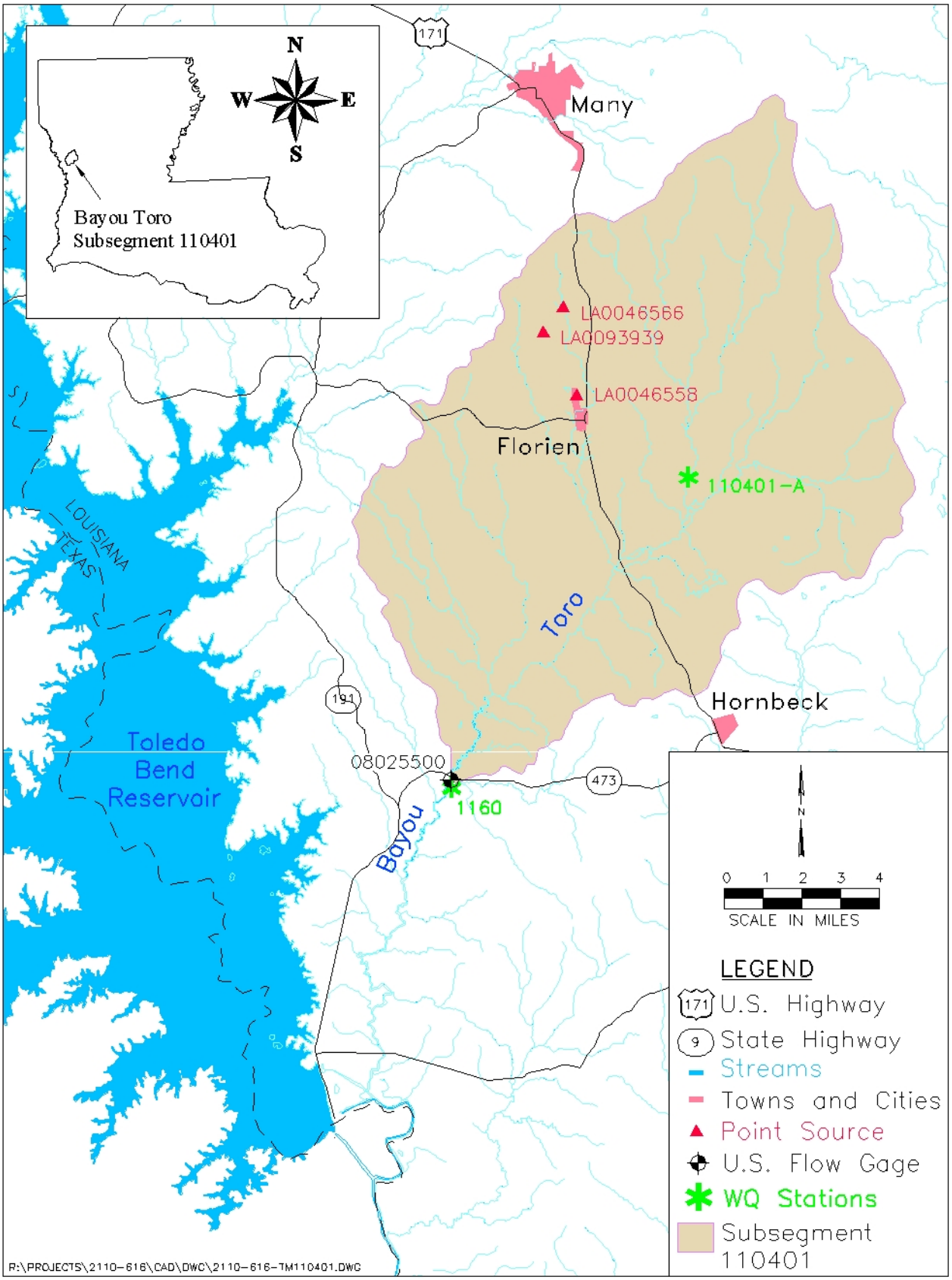


Figure A.1. Subsegment 110401.

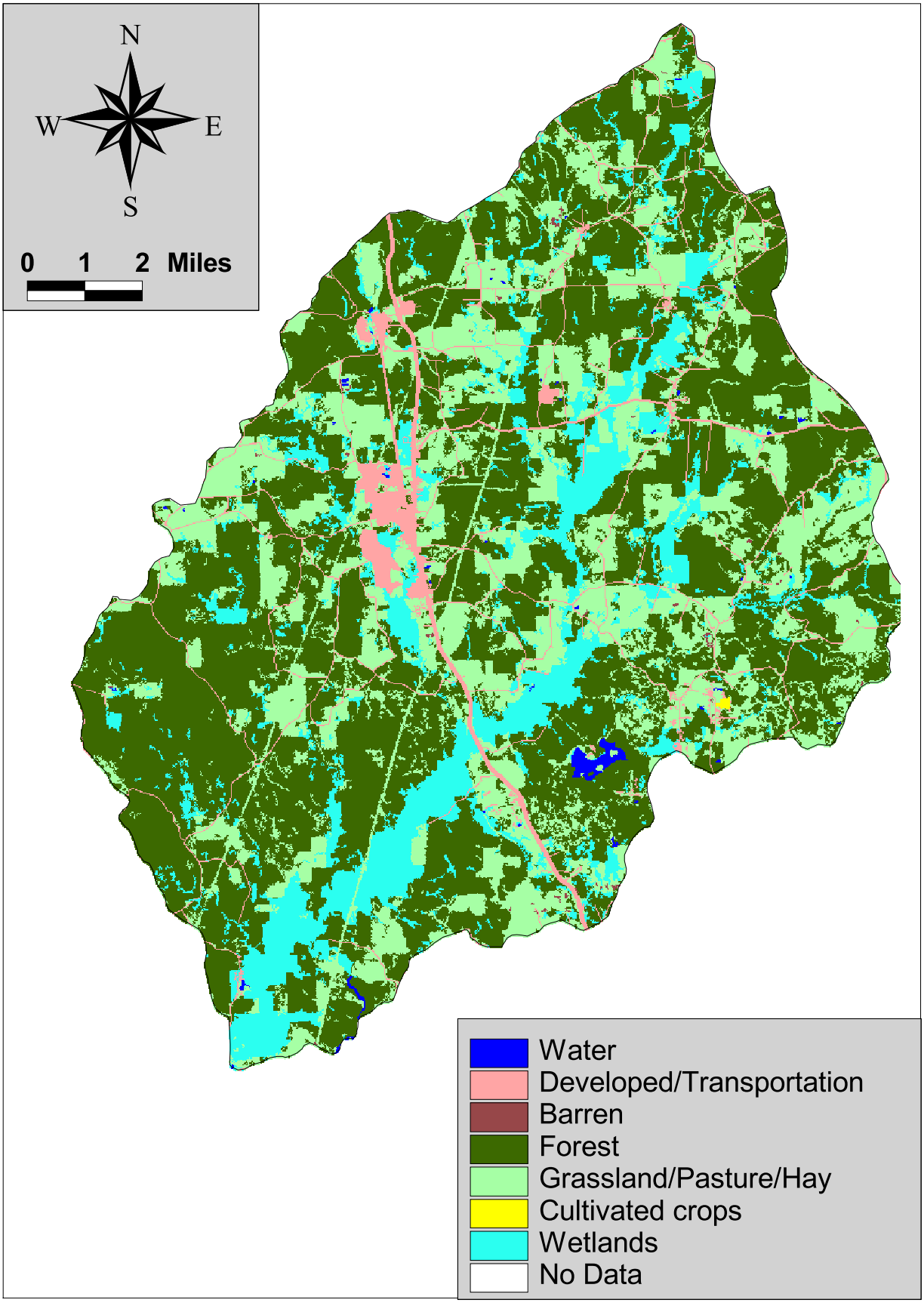


Figure A.2. Land use for subsegment 110401.

APPENDIX B

LDEQ Water Quality Data

Table B.1. LDEQ historical water quality data for Bayou Toro northeast of Toro, Louisiana (LDEQ Station 1160)

Date	Time	Sample Depth (m)	DO (mg/L)
28-Jan-02	08:40	1	20.2
25-Feb-02	09:35	1	9.9
26-Mar-02	09:45	1	8.3
16-Apr-02	08:20	1	7.0
16-Apr-02	08:25	1	7.0
21-May-02	10:00	1	6.2
18-Jun-02	09:05	1	4.5
23-Jul-02	08:35	1	3.8
20-Aug-02	10:25	1	4.8
23-Sep-02	09:50	1	6.0
21-Oct-02	09:50	1	7.8
19-Nov-02	09:50	1	9.3
17-Dec-02	09:45	1	10.0

FILE: R:\WP_FILES\2110-616\BAYOU TORO\WORD FILES\APPENDICES\APPENDIX B\LDEQ STATION 1160 ANALYSIS.XLS

APPENDIX C

FTN Field Survey Data

Table C.1. Field data collection sites for FTN Field survey for Red and Sabine basins.

SUBSEG. NUMBER	SITE NO.	SITE NAME	DIRECTIONS	TYPE OF DATA COLLECTED
Red River basin				
100404	100404-A	Cypress Bayou Reservoir at upper end	At LA Hwy 162 bridge east of Benton	In situ
100404	1181	Cypress Bayou Reservoir southeast of Benton, LA	At spillway on Parks Road, 3.1 miles southeast of Benton, 3.5 miles southwest of Bellevue, 9.1 miles north of Bossier	In situ, sample
100405	100405-A	Black Bayou near Benton, LA	At LA Hwy 162 on east edge of Benton	In situ, sample
100405	1182	Black Bayou Reservoir at Linton Road, southeast of Benton, LA	4.4 miles southeast of Benton, 3.2 miles northeast of Dukedale, 4.3 miles southwest of Linton	In situ, sample
100406	363	Flat River Drainage Canal north of Bossier City, LA	At Airline Drive bridge, 4.0 miles south-southeast of Benton, LA	In situ, sample, flow, width
100406	389	Flat River Drainage Canal northeast of Bossier City, LA	At Swan Lake Road bridge 7.5 miles north-northeast of City Hall in Bossier City, LA	In situ, width, flow
100406	390	Flat River Drainage Canal NE of Shreveport	At Deer Point Road bridge 5.75 miles southeast of Benton, LA	In situ, width
100406	272	Flat River east of Taylortown, LA	At State Highway 527 bridge, 13 miles southeast of Shreveport, LA	In situ, flow, width, contin.
100406	100406-A	Flat River east of Poole, LA	At Poole Rd, 3 miles southeast of intersection of Poole Rd and US Hwy 71	In situ, flow, width
100501	100501-A	Bayou Dorcheat south of AR state line	At LA Hwy 157 several miles south of AR state line, east of Springhill, LA	In situ, sample, flow, width
100501	100501-B	Bayou Dorcheat NE of Cotton Valley	At LA Hwy 160 about 4-5 miles northeast of Cotton Valley, LA	In situ, sample, flow, width
100501	61	Bayou Dorcheat west of Minden, LA	At bridge on US Hwy 80, 3.0 miles west of Minden	In situ, flow, width
100501	274	Bayou Dorcheat west of Sibley, LA	At State Highway 164 bridge, 2.0 miles west of Sibley, LA, 6.0 miles southwest of Minden, LA	In situ, flow, width,
100601	100601-A	Wallace Bayou upstream of Bayou Pierre	At White Springs Rd, about 4 miles southwest of Gayles, LA, about 2 miles downstream of Wallace Lake	In situ, sample, flow, width
100601	278	Bayou Pierre near Shreveport, LA	At State Highway 526 bridge, 0.75 mile northeast of Forbing, LA, 8.0 miles south of Shreveport, LA	In situ, sample, flow, width
100601	1183	Bayou Pierre at Ellerbee Road, S of Gayles	3.2 miles south of Gayles, 2.4 miles southwest of Cecile, 5 miles northeast of Frierson	In situ, sample, flow, width
100601	100601-B	Bayou Pierre southwest of Williams, LA	At highway 509, about 4 miles southwest of Williams, LA, about 9 miles south of Caddo/Red River Parish line	In situ, flow, width
100602	100602-A	Boggy Bayou SE of Hicks Crossing, LA	At LA Hwy 169, about 2-3 miles southeast of Hicks Crossing	In situ, sample, flow, width
100602	1207	Boggy Bayou southwest of Shreveport, LA	6.4 miles southwest of Shreveport, 3.1 miles north of Keithville, 2.9 miles southeast of Reservoir	In situ, sample, flow, width
100702	100702-A	Black Lake Bayou west of Mt. Lebanon	At LA Hwy 793 about 5-6 miles west of Mt. Lebanon (in 100701)	In situ, flow, width
100702	100702-B	Leatherman Creek west of Mt. Lebanon	At LA Hwy 793 about 4 miles west of Mt. Lebanon	In situ, sample, flow, width

SUBSEG. NUMBER	SITE NO.	SITE NAME	DIRECTIONS	TYPE OF DATA COLLECTED
100702	282	Black Lake Bayou west of Castor, LA	At LA Highway 4, 2.5 miles west of Castor, LA, 18.5 miles northeast of Coushatta, LA	In situ, sample, flow, width
100702	1187	Black Lake Bayou at Hwy 155, E of Martin	At bridge on State Hwy 155, 3.5 miles east of Martin, 6.2 miles west of Skidder, 5 miles SW of Ashland	In situ, sample, flow, width
100703	100703-A	Black Lake northeast of Campti, LA	On LA Hwy 9 bridge about 6 miles northeast of Campti, LA	In situ, sample
100703	100703-B	Clear Lake outlet northeast of Clarence, LA	At LA Hwy 1226, just downstream of Chivery Dam at outlet of Clear Lake, about 5 miles northeast of Clarence	In situ, sample, flow, width
100803	100803-A	Saline Bayou northeast of Clarence, LA	Access point at end of LA Hwy 1227 at Allen Dam, about 5.5 miles NE of Clarence	In situ, sample, flow, width
100803	1214	Saline Bayou southeast of Clarence, LA	At US Hwy 71, 7 miles east of Natchitoches, 5.1 miles southeast of Clarence, 3.4 miles south of Trichell	In situ, sample, flow, width, contin.
101301	556	Cress Creek west of Oak Grove, LA	At bridge on LA Hwy 8, 2.8 miles W of Oak Grove, 4 miles S of Fairfield, 3.7 miles N of Bagdad	In situ, sample
101301	101301-A	Rigolette Bayou WNW of Bagdad, LA	At LA Hwy 492, about 1 mile WNW of Bagdad, about 7 miles southeast of Colfax	In situ, sample, flow, width
101301	1220	Rigolette Bayou northwest of Pineville, LA	Bridge on Rigolette Rd., 4.8 miles NW of Pineville, 1.6 miles NE of Barrett, 3.9 miles SW of Tio	In situ, sample, flow, width, contin.
101302	101302-A	Iatt Creek near upstream end of Iatt Lake	At LA Hwy 122 about 10 miles east of Montgomery, LA	In situ, sample
101302	570	Beaver Creek south of Faircloth, LA	0.35 miles west of Faircloth, 2 miles northwest of Fairfield, 4.5 miles southwest of Wilhana	In situ, sample
101302	1221	Iatt Lake southwest of Fairfield, LA	Public boat launch near spillway, 4.4 miles southwest Fairfield, 7.1 miles northwest of Oak Grove, 3.7 miles northeast	In situ, sample
101503	371	Saline Bayou east of Alexandria, LA	9.0 miles east of Buckeye, LA, 1.5 mile northeast of Saline Lake, 0.5 mile south of entrance to Bushyhead Bayou	In situ
101503	101503-A	Saline Bayou southeast of Saline Lake	At local road about 1-2 miles southeast of east end of Saline Lake	In situ, sample
101604	1231	Lake Concordia at Ferriday, LA	Sportsman's Marina, 1.7 miles NW of Ridgecrest, 6.8 miles S of Clayton, 16 miles E of Jonesville	In situ, sample
101604	101604-A	Bayou Cocodrie at Ferriday, LA	At US Hwy 65 bridge, about 0.5 miles SW of Lake Concordia	In situ, width, xcs
Sabine River basin				
110401	110401-A	Toro Creek southeast of Florien, LA	At Plainview Road, about 3-4 miles southeast of Florien, LA	In situ, sample, flow, width
110401	1160	Bayou Toro northeast of Toro, LA	At LA Hwy 473, about 2 miles northeast of Toro, LA	In situ, sample, flow, width

Note: “contin.” = continuous in situ monitoring

R:\projects\2110-616\tech\Field_QAPP\Table 3p1 Red and Sabine Sites_actual.doc

Table C.2. In situ data for FTN field survey in Red River and Sabine River basins.

Subsegment Number	Site No.	Site Name	Date	Time	Water Temp. (C)	DO (mg/L)	Conductivity (umhos/cm)	pH (su)
100404	1181	Cypress Bayou Reservoir southeast of Benton	09/01/05	10:44	30.8	7.3	54	7.3
	100404-A	Cypress Bayou Reservoir @ Hwy 162	09/01/05	11:20	30.4	6.1	51	7.0
100405	1182	Black Bayou Reservoir @ Linton Rd	09/01/05	10:20	29.8	5.5	75	7.2
	100405-A	Black Bayou @ Hwy 162	09/01/05	11:45	24.9	1.0	440	6.9
100406	272	Flat River @ Hwy 527	09/02/05	08:15	25.5	2.9	811	7.1
	363	Flat River Airline Dr. bridge	09/01/05	09:30	29.3	5.2	90	7.1
	389	Flat River Dr. Canal Swan L. Rd.	09/01/05	07:54	26.9	1.4	336	7.6
	390	Flat River @ Deer Pt. Road	09/01/05	08:40	27.1	0.4	179	7.2
	100406-A	Flat River @ Swan Lake Bridge	08/31/05	19:00	30.6	5.3	888	7.3
100501	61	Bayou Dorcheat @ Hwy 80	09/01/05	18:45	32.6	7.1	127	6.7
	274	Bayou Dorcheat @ Hwy 164	09/02/05	09:40	29.1	6.2	193	7.6
	100501-A	Bayou Dorcheat	09/01/05	14:35	27.1	3.2	418	7.1
	100501-B	Bayou Dorcheat @ Hwy 160	09/01/05	15:55	31.8	5.9	76	7.2
100601	278	Bayou Pierre nr Shreveport	08/31/05	12:20	31.0	6.8	498	7.0
	1183	Bayou Pierre @ Ellerbee Rd	08/31/05	10:10	25.0	3.7	476	7.2
	100601-A	Wallace Bayou	08/31/05	11:10	29.5	5.9	214	7.6
	100601-B	Bayou Pierre	08/31/05	08:45	26.6	4.9	338	7.4
100602	1207	Boggy Bayou Hwy 171	08/31/05	14:40	31.5	5.2	156	7.1
	100602-A	Boggy Bayou @ Hwy 169	08/31/05	13:45	27.2	4.4	208	7.1
100702	282	Black Lake Bayou Hwy 4	09/07/05	09:20	24.7	5.3	35	6.1
	1187	Black Lake Bayou Hwy 155	09/07/05	10:25	24.9	5.3	40	6.3
	100702-A	Black Lake Bayou Hwy 793	09/07/05	07:20	23.4	2.9	167	6.3
	100702-B	Leatherman Creek	09/07/05	08:05	23.3	3.4	54	6.3
100703	100703-A	Black Lake @ Hwy 9	09/07/05	11:20	27.6	5.3	71	6.4
	100703-B	Clear Lake outlet	09/07/05	12:40	29.8	6.9	96	6.9
100803	1214	Saline Bayou @ Hwy 71	09/07/05	14:40	30.2	5.4	105	6.8
	100803-A	Saline Bayou @ Allen Dam	09/07/05	13:40	30.6	8.3	82	7.8
101301	556	Cress Creek @ Hwy 8	09/08/05	11:30	21.7	7.5	22	6.5
	1220	Rigolette Bayou @ Rig. Road	09/08/05	09:35	27.4	4.3	108	6.8
	101301-A	Rigolette Bayou @ hwy 492	09/08/05	10:20	24.2	5.0	54	6.6
101302	570	Beaver Creek	09/08/05	12:30	20.3	8.3	29	6.5
	1221	Iatt Lake	09/08/05	11:05	26.5	3.2	6	6.3
	101302-A	Iatt Creek @ Hwy 122	09/08/05	12:05	24.2	1.2	129	6.4
101503	101503-A	Saline Bayou on Farm Rd.	09/09/05	07:05	24.0	3.3	179	6.9
101504	371	Saline Bayou @ WMA boatramp	09/08/05	15:30	30.6	8.3	47	8.0
101604	1231	Lake Concordia @ Sportmans Lodge	09/09/05	08:45	28.9	7.5	251	8.3
	101604-A	Bayou Cocodrie @ Hwy 65	09/09/05	08:30	27.2	2.2	282	6.9
110401	1160	Bayou Toro @ Hwy 473	09/08/05	07:30	24.4	4.8	99	6.4
	110401-A	Toro Creek @ Plainview Rd.	09/08/05	06:40	21.8	1.3	81	6.3

FILE: R:\WP_FILES\2110-616\BAYOU TORO\WORD FILES\APPENDICES\APPENDIX C\IN-SITU DATA RED-SABINE.XLS

Table C.3 Analytical laboratory results from samples collected in FTN field survey for Red River and Sabine River basins.

Subsegment Number	Site Number	Site Name	Sampling Date	TSS (mg/L)	TKN (mg/L)	Total Phos. (mg/L)	TOC (mg/L)	Chlorophyll a (mg/L)	Ammonia as N (mg/L)	NO_3+NO_2 -N (mg/L)
100404	1181	Cypress Bayou Reservoir nr Benton	09/01/05	7.7	1.8	0.045	9.1	0.035	0.24	<0.05
100405	1182	Black Bayou Reservoir nr Linden Rd	09/01/05	8	1.9	0.061	10	0.051	0.14	<0.05
	100405-A	Black Bayou nr Benton	09/01/05	8.4	2.4	0.082	12	<0.02	0.56	<0.05
100406	363-1	Flat River Dr. Canal nr Bossier City	09/01/05	26	2.5	0.093	10	0.027	0.39	<0.05
	363-2	Flat River Dr. Canal nr Bossier City	09/01/05	26	2.2	0.074	11	0.03	0.36	<0.05
100501	100501-A	Bayou Dorcheat nr AR line	09/01/05	11	1.6	0.15	5.7	<0.02	0.2	0.26
	100501-B	Bayou Dorcheat NE Cotton Valley	09/01/05	4.4	1.7	0.048	8.3	0.021	0.18	<0.05
100601	278	Bayou Pierre nr Shreveport	08/31/05	9.8	1.4	0.25	7.6	<0.02	0.13	<0.05
	1183	Bayou Pierre at Ellerbee Rd.	08/31/05	16	2.3	0.22	2.6	<0.02	0.22	0.39
	100601-A-1	Wallace Bayou u/s B. Pierre	08/31/05	19	1.6	0.085	6.8	<0.02	<0.1	<0.05
	100601-A-2	Wallace Bayou u/s B. Pierre	08/31/05	18	1.8	0.085	6.7	<0.02	<0.1	0.06
100602	1207	Boggy Bayou SW of Shreveport	08/31/05	19	1.5	0.14	6.1	<0.02	<0.1	<0.05
	100602-A	Boggy Bayou SE of Hicks Crossing	08/31/05	78	1.8	0.15	8.1	<0.02	<0.1	<0.05
100702	100702-B	Leatherman Creek	09/07/05	18	2.4	0.11	7.5	0.076	0.32	<0.05
	282	Black Lake Bayou w of Castor	09/07/05	4.8	1.6	0.048	5.9	<0.02	0.22	0.064
	1187	Black Lake Bayou @ Hwy 155	09/07/05	5.2	1.7	0.064	6	<0.02	0.17	0.096
100703	100703-A-1	Black Lake NE Campti	09/07/05	73	1.7	0.048	7.7	<0.02	0.17	<0.05
	100703-A-2	Black Lake NE Campti	09/07/05	4.4	1.9	0.05	7.8	<0.02	0.17	<0.05
	100703-B	Clear Lake outlet	09/07/05	16	1.9	0.12	9.2	0.1	0.25	<0.05
100803	1214	Saline Bayou SE of Clarence	09/07/05	22	1.9	0.08	8.6	0.034	0.23	<0.05
	100803-A	Saline Bayou NE of Clarence	09/07/05	16	3	0.098	8.7	0.05	0.21	<0.05
101301	556	Cress Creek	09/08/05	<4	<1	<0.02	3.1	<0.02	0.16	<0.05
	1220	Rigolette Bayou NE of Pineville	09/08/05	13	1.1	0.082	4.9	<0.02	0.12	<0.05
	570	Beaver Creek	09/08/05	6.2	<1	<0.02	1.5	<0.02	<0.1	0.1
	101301-A	Rigolette Bayou WNW of Bagdad	09/08/05	41	1.3	0.08	3.2	<0.02	0.19	<0.05
101302	1221	Iatt Lake	09/08/05	<4	<1	<0.02	9	<0.02	0.19	<0.05
	101302-A-1	Iatt Creek	09/08/05	5.4	1.4	0.048	11	<0.02	0.22	0.059
	101302-A-2	Iatt Creek	09/08/05	5.2	<1	0.048	11	<0.02	0.14	<0.05
101503	101503-A	Saline Bayou SE of Saline L.	09/09/05	280	2.2	0.15	6.8	0.026	0.58	0.068
101604	1231	Lake Concordia	09/09/05	12	1.9	0.15	7.9	0.049	0.23	<0.05
110401	1160	Bayou Toro NE of Toro	09/08/05	16	1.7	0.1	6.4	<0.02	0.14	<0.05
	110401-A	Toro Creek	09/08/05	6.8	1.4	0.11	7.3	<0.02	0.16	<0.05

FILE: R:\WP_FILES\2110-616\BAYOU TORO\WORD FILES\APPENDICES\APPENDIX C\LAB DATA SUMMARY RED-SABINE.XLS

Table C.4. Summary of CBOD time series data from FTN field survey of Red River and Sabine River basins.

Subsegment Number	Sample No.	CBOD 1, 2-day	CBOD 2, 5-day	CBOD 3, 9-day	CBOD 4, 14-Day	CBOD 5, 20-day	k rate (1/day)	CBODu (mg/L)
100404	1181	<2	3.3	5	5.3	5.2	0.22	5.49
100405	1182	2.9	4.8	6.7	8.1	12	0.06	15.61
	100405-A	<2	<2	3.3	5.1	6.9	0.05	12.47
100406	363-1	<2	<2	4.3	5.7	6.6	0.12	7.50
	363-2	<2	<2	4.2	5.8	6.8	0.12	7.69
100501	100501-A	2.4	3.2	3.9	4.2	4.8	0.30	4.43
	100501-B	5.2	6.5	7.6	7.9	12	0.21	10.13
100601	278	<2	<2	2.3	4.6	6.8	0.04	13.85
	1183	<2	<2	<2	5.1	3.9	0.60	4.50
	100601-A-1	<2	<2	<2	2.8	4.4	0.16	5.38
	100601-A-2	<2	2.1	2.3	4.1	5.4	0.04	9.83
100602	1207	<2	<2	2.1	3.4	6	0.04	13.05
	100602-A	2.7	3.9	5	7.8	9.4	0.07	11.99
100702	282	<2	<2	<2	<2	2.2	--	--
	1187	<2	<2	<2	<2	<2	--	--
	100702-B	<2	2.1	3.7	4.6	6.2	0.05	9.62
100703	100703-A-1	<2	<2	<2	2.5	4	0.05	8.69
	100703-A-2	<2	<2	<2	2.3	3.1	0.05	5.60
	100703-B	2.4	5.9	8.9	9.6	14	0.08	16.99
100803	1214	<2	2.7	7.1	7.3	8.9	0.31	8.42
	100803-A	<2	<2	3.9	4.8	6.6	0.05	10.75
101301	556	<2	<2	<2	<2	<2	--	--
	1220	<2	<2	<2	3.1	3.9	0.15	4.43
	101301-A	<2	<2	<2	<2	<2	--	--
101302	570	<2	<2	<2	<2	<2	--	--
	1221	<2	<2	<2	<2	2.2	--	--
	101302-A-1	<2	<2	2.7	3.6	4.3	0.10	5.04
	101302-A-2	<2	<2	<2	2.5	3.4	0.05	5.75
101503	101503-A	<2	<2	3.6	6.2	6.9	0.22	7.29
101604	1231	<2	3.6	7.3	9.9	12	0.06	18.50
110401	1160	<2	<2	<2	<2	2	--	--
	110401-A	<2	<2	<2	<2	2.3	--	--

FILE: R:\WP_FILES\2110-616\BAYOU TORO\WORD FILES\APPENDICES\APPENDIX C\RED AND SABINE SUMMARY GSBOD TABLE.XLS

Table C.5 Continuous DO data Collected at 1214.

Date and time	DO mg/L	Ratio of instantaneous DO to daily mean DO For 9/07	Ratio of instantaneous DO to daily mean DO For 9/08	Ratio of instantaneous DO to daily min DO For 9/07	Ratio of instantaneous DO to daily min DO For 9/08	Estimation of daily mean DO values at other stations: Station	Date	Time	DO at time of measurement (mg/L)	Estimated daily mean DO (mg/L)	Estimated daily min DO (mg/L)	Estimated daily min DO + 1 (mg/L)
9/06/05 19:50	7.0											
9/06/05 20:05	6.4											
9/06/05 20:20	6.3											
9/06/05 20:35	6.2											
9/06/05 20:50	6.1											
9/06/05 21:05	5.9											
9/06/05 21:20	5.7											
9/06/05 21:35	5.5											
9/06/05 21:50	5.3											
9/06/05 22:05	5.3											
9/06/05 22:20	5.1											
9/06/05 22:35	5.1											
9/06/05 22:50	5.0											
9/06/05 23:05	4.7											
9/06/05 23:20	4.7											
9/06/05 23:35	4.7											
9/06/05 23:50	4.5	1.030133		2.368421								
9/07/05 00:05	4.3	0.984349		2.263158								
9/07/05 00:20	4.4	1.007241		2.315789								
9/07/05 00:35	4.3	0.984349		2.263158								
9/07/05 00:50	4.2	0.961458		2.210526								
9/07/05 01:05	4.0	0.915674		2.105263								
9/07/05 01:20	3.9	0.892782		2.052632								
9/07/05 01:35	4.0	0.915674		2.105263								
9/07/05 01:50	4.0	0.915674		2.105263								
9/07/05 02:05	4.1	0.938566		2.157895								
9/07/05 02:20	3.9	0.892782		2.052632								
9/07/05 02:35	3.7	0.846998		1.947368								
9/07/05 02:50	3.8	0.86989		2								
9/07/05 03:05	3.7	0.846998		1.947368								
9/07/05 03:20	3.6	0.824107		1.894737								
9/07/05 03:35	3.1	0.709647		1.631579								
9/07/05 03:50	2.9	0.663864		1.526316								
9/07/05 04:05	2.9	0.663864		1.526316								
9/07/05 04:20	2.9	0.663864		1.526316								

Estimation of daily mean DO values at other stations

Date and time	DO mg/L	Ratio of instantaneous DO to daily mean DO For 9/07	Ratio of instantaneous DO to daily mean DO For 9/08	Ratio of instantaneous DO to daily min DO For 9/07	Ratio of instantaneous DO to daily min DO For 9/08	Station	Date	Time	DO at time of measurement (mg/L)	Estimated daily mean DO (mg/L)	Estimated daily min DO (mg/L)	Estimated daily min DO + 1 (mg/L)
9/07/05 04:35	2.7	0.61808		1.421053								
9/07/05 04:50	2.7	0.61808		1.421053								
9/07/05 05:05	2.5	0.572296		1.315789								
9/07/05 05:20	2.5	0.572296		1.315789								
9/07/05 05:35	2.4	0.549404		1.263158								
9/07/05 05:50	2.3	0.526512		1.210526								
9/07/05 06:05	2.2	0.503621		1.157895								
9/07/05 06:20	2.0	0.457837		1.052632								
9/07/05 06:35	1.9	0.434945		1								
9/07/05 06:50	2.2	0.503621		1.157895								
9/07/05 07:05	2.1	0.480729		1.105263								
9/07/05 07:20	2.1	0.480729		1.105263								
9/07/05 07:35	2.0	0.457837		1.052632								
9/07/05 07:50	2.0	0.457837		1.052632								
9/07/05 08:05	2.0	0.457837		1.052632								
9/07/05 08:20	2.0	0.457837		1.052632								
9/07/05 08:35	2.2	0.503621		1.157895								
9/07/05 08:50	2.1	0.480729		1.105263								
9/07/05 09:05	2.1	0.480729		1.105263								
9/07/05 09:20	2.1	0.480729		1.105263								
9/07/05 09:35	2.2	0.503621		1.157895								
9/07/05 09:50	2.4	0.549404		1.263158								
9/07/05 10:05	2.4	0.549404		1.263158								
9/07/05 10:20	2.5	0.572296		1.315789								
9/07/05 10:35	2.7	0.61808		1.421053								
9/07/05 10:50	2.8	0.640972		1.473684								
9/07/05 11:05	2.9	0.663864		1.526316								
9/07/05 11:20	3.2	0.732539		1.684211								
9/07/05 11:35	3.4	0.778323		1.789474								
9/07/05 11:50	3.3	0.755431		1.736842								
9/07/05 12:05	3.8	0.86989		2								
9/07/05 12:20	3.9	0.892782		2.052632								
9/07/05 12:35	3.5	0.801215		1.842105								
9/07/05 12:50	4.2	0.961458		2.210526								
9/07/05 13:05	4.6	1.053025		2.421053								
9/07/05 13:20	4.5	1.030133		2.368421								
9/07/05 13:35	4.7	1.075917		2.473684								

Table C.5
Continuous DO data collected at 1214

Estimation of daily mean DO values at other stations

Date and time	DO mg/L	Ratio of instantaneous DO to daily mean DO For 9/07	Ratio of instantaneous DO to daily mean DO For 9/08	Ratio of instantaneous DO to daily min DO For 9/07	Ratio of instantaneous DO to daily min DO For 9/08	Station	Date	Time	DO at time of measurement (mg/L)	Estimated daily mean DO (mg/L)	Estimated daily min DO (mg/L)	Estimated daily min DO + 1 (mg/L)
9/07/05 13:50	5.3	1.213268		2.789474								
9/07/05 14:05	4.9	1.121701		2.578947								
9/07/05 14:20	5.2	1.190376		2.736842								
9/07/05 14:35	5.0	1.144592		2.631579								
9/07/05 14:50	5.5	1.259052		2.894737								
9/07/05 15:05	5.4	1.23616		2.842105								
9/07/05 15:20	5.4	1.23616		2.842105								
9/07/05 15:35	6.1	1.396403		3.210526								
9/07/05 15:50	6.3	1.442186		3.315789								
9/07/05 16:05	6.1	1.396403		3.210526								
9/07/05 16:20	6.0	1.373511		3.157895								
9/07/05 16:35	6.5	1.48797		3.421053								
9/07/05 16:50	6.4	1.465078		3.368421								
9/07/05 17:05	6.8	1.556646		3.578947								
9/07/05 17:20	6.8	1.556646		3.578947								
9/07/05 17:35	6.7	1.533754		3.526316								
9/07/05 17:50	6.4	1.465078		3.368421								
9/07/05 18:05	7.3	1.671105		3.842105								
9/07/05 18:20	6.5	1.48797		3.421053								
9/07/05 18:35	6.9	1.579537		3.631579								
9/07/05 18:50	6.8	1.556646		3.578947								
9/07/05 19:05	6.9	1.579537		3.631579								
9/07/05 19:20	6.7	1.533754		3.526316								
9/07/05 19:35	6.6	1.510862		3.473684								
9/07/05 19:50	6.7	1.533754		3.526316								
9/07/05 20:05	6.5	1.48797		3.421053								
9/07/05 20:20	6.3	1.442186		3.315789								
9/07/05 20:35	6.4	1.465078		3.368421								
9/07/05 20:50	6.4	1.465078		3.368421								
9/07/05 21:05	6.2	1.419295		3.263158								
9/07/05 21:20	6.1	1.396403		3.210526								
9/07/05 21:35	6.0	1.373511		3.157895								
9/07/05 21:50	5.8	1.327727		3.052632								
9/07/05 22:05	5.7	1.304835		3								
9/07/05 22:20	5.9	1.350619		3.105263								
9/07/05 22:35	5.8	1.327727		3.052632								
9/07/05 22:50	5.6	1.281943		2.947368								

Table C.5
Continuous DO data collected at 1214

Estimation of daily mean DO values at other stations

Date and time	DO mg/L	Ratio of instantaneous DO to daily mean DO For 9/07	Ratio of instantaneous DO to daily mean DO For 9/08	Ratio of instantaneous DO to daily min DO For 9/07	Ratio of instantaneous DO to daily min DO For 9/08	Station	Date	Time	DO at time of measurement (mg/L)	Estimated daily mean DO (mg/L)	Estimated daily min DO (mg/L)	Estimated daily min DO + 1 (mg/L)
9/07/05 23:05	5.5	1.259052		2.894737								
9/07/05 23:20	5.5	1.259052		2.894737								
9/07/05 23:35	5.4	1.23616		2.842105								
9/07/05 23:50	5.3	1.213268		2.789474								
9/08/05 00:05	5.2	1.190376		2.736842								
9/08/05 00:20	5.1		1.014769		2.42857							
9/08/05 00:35	5.1		1.014769		2.42857							
9/08/05 00:50	5.0		0.994872		2.38095							
9/08/05 01:05	4.9		0.974974		2.33333							
9/08/05 01:20	5.0		0.994872		2.38095							
9/08/05 01:35	4.9		0.974974		2.33333							
9/08/05 01:50	4.5		0.895385		2.14286							
9/08/05 02:05	4.4		0.875487		2.09524							
9/08/05 02:20	4.4		0.875487		2.09524							
9/08/05 02:35	4.5		0.895385		2.14286							
9/08/05 02:50	4.5		0.895385		2.14286							
9/08/05 03:05	4.2		0.835692		2							
9/08/05 03:20	4.1		0.815795		1.95238							
9/08/05 03:35	3.8		0.756103		1.80952							
9/08/05 03:50	3.9		0.776		1.85714							
9/08/05 04:05	3.7		0.736205		1.7619							
9/08/05 04:20	3.3		0.656615		1.57143							
9/08/05 04:35	3.2		0.636718		1.52381							
9/08/05 04:50	2.8		0.557128		1.33333							
9/08/05 05:05	2.8		0.557128		1.33333							
9/08/05 05:20	2.6		0.517333		1.2381							
9/08/05 05:35	2.8		0.557128		1.33333							
9/08/05 05:50	2.7		0.537231		1.28571							
9/08/05 06:05	2.5		0.497436		1.19048							
9/08/05 06:20	2.2		0.437744		1.04762							
9/08/05 06:35	2.3		0.457641		1.09524	110401-A	9/8/2005	6:40	1.32	2.88	1.21	2.21
9/08/05 06:50	2.3		0.457641		1.09524							
9/08/05 07:05	2.1		0.417846		1							
9/08/05 07:20	2.3		0.457641		1.09524							
9/08/05 07:35	2.2		0.437744		1.04762	1160	9/8/2005	7:30	4.79	10.94	4.57	5.57
9/08/05 07:50	2.1		0.417846		1							
9/08/05 08:05	2.1		0.417846		1							

Table C.5

Continuous DO data collected at 1214

Estimation of daily mean DO values at other stations

Date and time	DO mg/L	Ratio of instantaneous DO to daily mean DO For 9/07	Ratio of instantaneous DO to daily mean DO For 9/08	Ratio of instantaneous DO to daily min DO For 9/07	Ratio of instantaneous DO to daily min DO For 9/08	Station	Date	Time	DO at time of measurement (mg/L)	Estimated daily mean DO (mg/L)	Estimated daily min DO (mg/L)	Estimated daily min DO + 1 (mg/L)
9/08/05 08:20	2.2		0.437744		1.04762							
9/08/05 08:35	2.2		0.437744		1.04762							
9/08/05 08:50	2.2		0.437744		1.04762							
9/08/05 09:05	2.1		0.417846		1							
9/08/05 09:20	2.1		0.417846		1							
9/08/05 09:35	2.2		0.437744		1.04762							
9/08/05 09:50	2.3		0.457641		1.09524							
9/08/05 10:05	2.5		0.497436		1.19048							
9/08/05 10:20	2.6		0.517333		1.2381							
9/08/05 10:35	2.9		0.577026		1.38095							
9/08/05 10:50	3.0		0.596923		1.42857							
9/08/05 11:05	3.3		0.656615		1.57143							
9/08/05 11:20	3.5		0.69641		1.66667							
9/08/05 11:35	3.7		0.736205		1.7619							
9/08/05 11:50	3.0		0.596923		1.42857							
9/08/05 12:05	3.9		0.776		1.85714							
9/08/05 12:20	4.3		0.85559		2.04762							
9/08/05 12:35	4.3		0.85559		2.04762							
9/08/05 12:50	4.5		0.895385		2.14286							
9/08/05 13:05	4.5		0.895385		2.14286							
9/08/05 13:20	4.6		0.915282		2.19048							
9/08/05 13:35	4.8		0.955077		2.28571							
9/08/05 13:50	4.8		0.955077		2.28571							
9/08/05 14:05	5.6		1.114256		2.66667							
9/08/05 14:20	5.1		1.014769		2.42857							
9/08/05 14:35	6.2		1.233641		2.95238							
9/08/05 14:50	5.9		1.173949		2.80952							
9/08/05 15:05	6.8		1.353026		3.2381							
9/08/05 15:20	6.9		1.372923		3.28571							
9/08/05 15:35	6.5		1.293333		3.09524							
9/08/05 15:50	7.1		1.412718		3.38095							
9/08/05 16:05	7.4		1.47241		3.52381							
9/08/05 16:20	7.1		1.412718		3.38095							
9/08/05 16:35	7.2		1.432615		3.42857							
9/08/05 16:50	7.4		1.47241		3.52381							
9/08/05 17:05	7.3		1.452513		3.47619							
9/08/05 17:20	7.7		1.532103		3.66667							

Table C.5

Continuous DO data collected at 1214

Estimation of daily mean DO values at other stations

Date and time	DO mg/L	Ratio of instantaneous DO to daily mean DO For 9/07	Ratio of instantaneous DO to daily mean DO For 9/08	Ratio of instantaneous DO to daily min DO For 9/07	Ratio of instantaneous DO to daily min DO For 9/08	Station	Date	Time	DO at time of measurement (mg/L)	Estimated daily mean DO (mg/L)	Estimated daily min DO (mg/L)	Estimated daily min DO + 1 (mg/L)
9/08/05 17:35	7.8		1.552		3.71429							
9/08/05 17:50	7.7		1.532103		3.66667							
9/08/05 18:05	7.7		1.532103		3.66667							
9/08/05 18:20	7.8		1.552		3.71429							
9/08/05 18:35	8.0		1.591795		3.80952							
9/08/05 18:50	7.8		1.552		3.71429							
9/08/05 19:05	7.9		1.571897		3.7619							
9/08/05 19:20	8.0		1.591795		3.80952							
9/08/05 19:35	8.1		1.611692		3.85714							
9/08/05 19:50	8.1		1.611692		3.85714							
9/08/05 20:05	7.9		1.571897		3.7619							
9/08/05 20:20	7.8		1.552		3.71429							
9/08/05 20:35	7.6		1.512205		3.61905							
9/08/05 20:50	7.6		1.512205		3.61905							
9/08/05 21:05	7.5		1.492308		3.57143							
9/08/05 21:20	7.4		1.47241		3.52381							
9/08/05 21:35	7.4		1.47241		3.52381							
9/08/05 21:50	7.2		1.432615		3.42857							
9/08/05 22:05	7.1		1.412718		3.38095							
9/08/05 22:20	7.0		1.392821		3.33333							
9/08/05 22:35	6.9		1.372923		3.28571							
9/08/05 22:50	6.6		1.313231		3.14286							
9/08/05 23:05	6.7		1.333128		3.19048							
9/08/05 23:20	6.6		1.313231		3.14286							
9/08/05 23:35	6.4		1.273436		3.04762							
9/08/05 23:50	6.4		1.273436		3.04762							
9/09/05 00:05	6.2		1.233641		2.95238							
9/09/05 00:20	6.3		1.253538		3							
9/09/05 00:35	5.9											
9/09/05 00:50	6.0											
9/09/05 01:05	6.0											
9/09/05 01:20	5.8											
9/09/05 01:35	5.6											
9/09/05 01:50	5.5											
9/09/05 02:05	5.5											
9/09/05 02:20	5.4											
9/09/05 02:35	5.2											

Table C.5

Continuous DO data collected at 1214

Date and time	DO mg/L
9/09/05 02:50	5.1
9/09/05 03:05	4.9
9/09/05 03:20	4.8
9/09/05 03:35	4.9
9/09/05 03:50	4.7
9/09/05 04:05	4.5
9/09/05 04:20	4.3
9/09/05 04:35	4.5
9/09/05 04:50	3.8
9/09/05 05:05	3.6
9/09/05 05:20	3.2
9/09/05 05:35	3.2
9/09/05 05:50	3.1
9/09/05 06:05	2.6
9/09/05 06:20	2.5
9/09/05 06:35	2.7
9/09/05 06:50	2.5
9/09/05 07:05	2.4
9/09/05 07:20	2.3
9/09/05 07:35	2.2
9/09/05 07:50	2.1
9/09/05 08:05	2.1
9/09/05 08:20	2.1
9/09/05 08:35	2.1
9/09/05 08:50	2.1
9/09/05 09:05	2.2
9/09/05 09:20	2.3
9/09/05 09:35	2.5
9/09/05 09:50	2.6
9/09/05 10:05	2.7
9/09/05 10:20	2.8
9/09/05 10:35	3.2
9/09/05 10:50	2.7
9/09/05 11:05	3.9
9/09/05 11:20	4.1
9/09/05 11:35	7.5
9/09/05 11:50	7.5

Estimation of daily mean DO values at other stations

Ratio of instantaneous DO to daily mean DO		Ratio of instantaneous DO to daily min DO		Station	Date	Time	DO at time of measurement (mg/L)	Estimated daily mean DO (mg/L)	Estimated daily min DO (mg/L)	Estimated daily min DO + 1 (mg/L)
For 9/07	For 9/08	For 9/07	For 9/08							

Table C.5

Continuous DO data collected at 1214

Estimation of daily mean DO values at other stations

Date and time	DO mg/L	Ratio of instantaneous DO to daily mean DO For 9/07	Ratio of instantaneous DO to daily mean DO For 9/08	Ratio of instantaneous DO to daily min DO For 9/07	Ratio of instantaneous DO to daily min DO For 9/08	Station	Date	Time	DO at time of measurement (mg/L)	Estimated daily mean DO (mg/L)	Estimated daily min DO (mg/L)	Estimated daily min DO + 1 (mg/L)
9/09/05 12:05	7.3											
9/09/05 12:20	7.2											
9/09/05 12:35	7.1											
9/09/05 12:50	7.4											
9/09/05 13:05	7.3											
9/09/05 13:20	7.1											
9/09/05 13:35	7.3											
9/09/05 13:50	7.1											
9/09/05 14:05	7.1											
9/09/05 14:20	7.0											
9/09/05 14:35	7.0											
9/09/05 14:50	7.0											
9/09/05 15:05	6.9											
9/09/05 15:20	6.9											
9/09/05 15:35	6.9											
9/09/05 15:50	6.8											
9/09/05 16:05	6.8											
9/09/05 16:20	6.8											
9/09/05 16:35	6.8											
9/09/05 16:50	6.8											
9/09/05 17:05	6.7											
9/09/05 17:20	6.6											
9/09/05 17:35	6.4											
9/09/05 17:50	6.4											
9/09/05 18:05	6.5											
9/09/05 18:20	6.5											
9/09/05 18:35	6.6											
9/09/05 18:50	6.8											
9/09/05 19:05	6.7											
9/09/05 19:20	6.7											
9/09/05 19:35	6.7											
9/09/05 19:50	6.8											

FILE: R:\PROJECTS\2110-616\TECH\FIELD_STUDIES\CONTINUOUS IN SITU\RED_SABINE\EST MIN DO CONTIN_MONITOR_1214-TORO.XLS

Table C.5

Continuous DO data collected at 1214

FIELD SHEETS ARE AVAILABLE FROM EPA UPON REQUEST.

APPENDIX D

LA-QUAL Vector Diagram

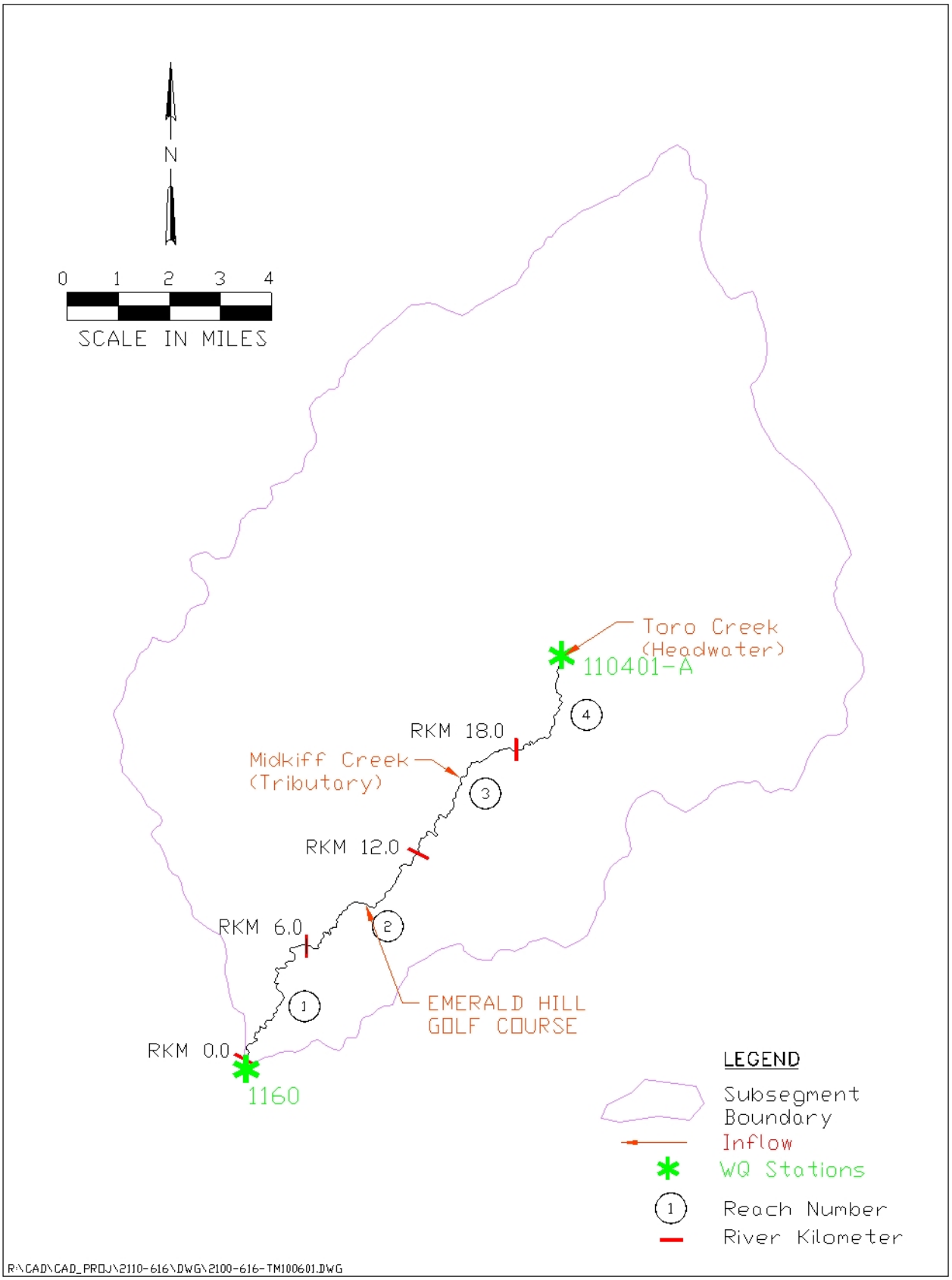


Figure D.1. Map of LA-QUAL model.

APPENDIX E

Hydraulics Data

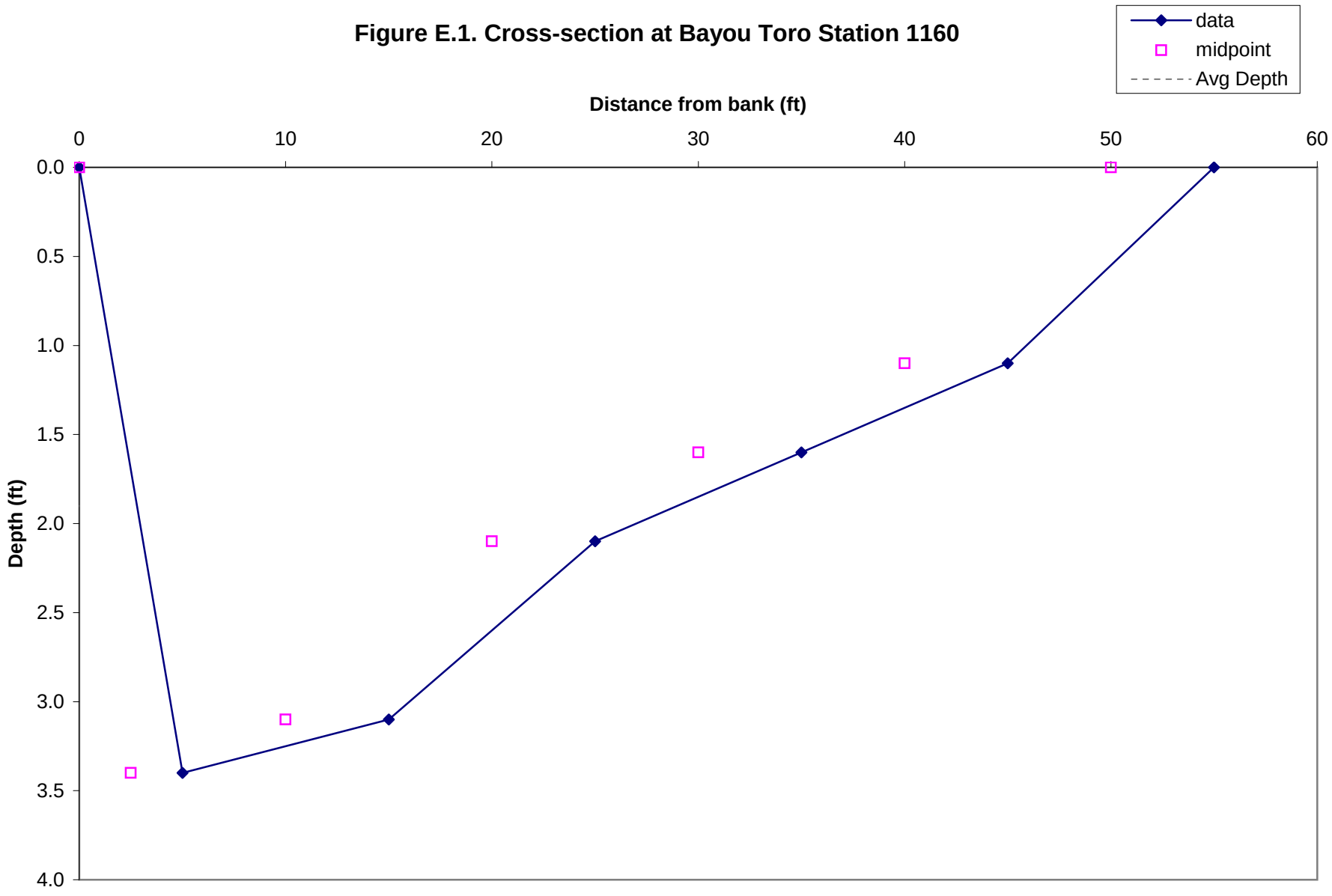


Figure E.1. Cross-section at Bayou Toro Station 1160
data
midpoint
Avg Depth
Distance from bank (ft)
0
10
20
30
40
50
60
Depth (ft)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0

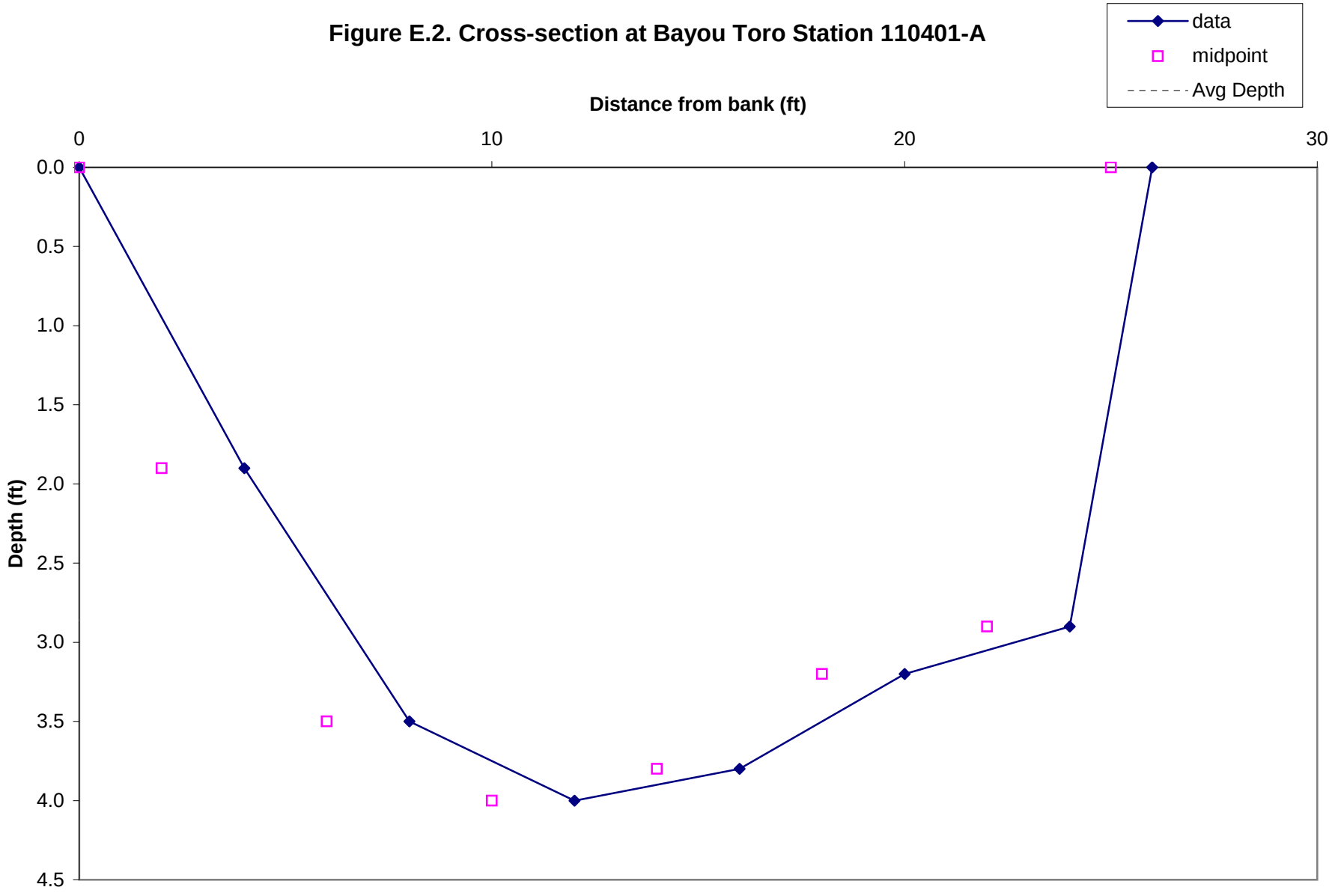


Figure E.2. Cross-section at Bayou Toro Station 110401-A
data
midpoint
Avg Depth
Distance from bank (ft)
0
10
20
30
Depth (ft)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5

APPENDIX F

Literature Values for Mineralization Rates

TABLE 5-3. RATE COEFFICIENTS FOR NITROGEN TRANSFORMATIONS

PON → DON		DON → NH_3		PON → NH_3		NH_3 → NO_2		NH_3 → NO_3		NO_2 → NO_3		SEDM → NH_3		References
K	θ	K	θ	K	θ	K	θ	K	θ	K	θ	K	θ	
								Calibration Values						
				0.035	(linear)			0.04	(linear)					Thomann et al. (1975)
				0.03**	1.08									Thomann et al. (1979)
				0.03***	1.08			0.12***	1.08			0.0025	1.08	Di Toro & Connolly (1980)
				0.03***	1.08			0.20	1.08					Di Toro & Matystik (1980)
				0.075	1.08			0.09-0.13***	1.08			0.0004	1.08	Thomann & Fitzpatrick (1982)
								0.025***	1.08					O'Connor et al. (1981)
				0.14	(linear)									Salas & Thomann (1978)
				0.001	1.02	0.003-0.03	1.02			0.09	1.02	0.001	1.02	Chen & Orlob (1972, 1975)
0.020	(linear)	0.020	(linear)					0.060	(linear)					Scavia et al. (1976)
0.020	(linear)	0.020	(linear)					0.1	(linear)					Scavia (1980)
0.02	1.020	0.02	1.020					0.1	1.020					Bowie et al. (1980)
0.02	(linear)	0.024	(linear)					0.16	(linear)					Canale et al. (1976)
				0.003	1.020	0.02	1.047			0.25	1.047	0.0015	1.047	Tetra Tech (1980)
				0.1	1.047	0.02	1.047			0.25	1.047	0.0015	1.047	Porcella et al. (1983)
				0.01**	NI							0.95-1.8***	1.14	Nyholm (1978)
				0.005**	1.08									Bierman et al. (1980)
				0.1**	1.02									Jorgensen (1976)
				0.2**	1.072									Jorgensen et al. (1978)

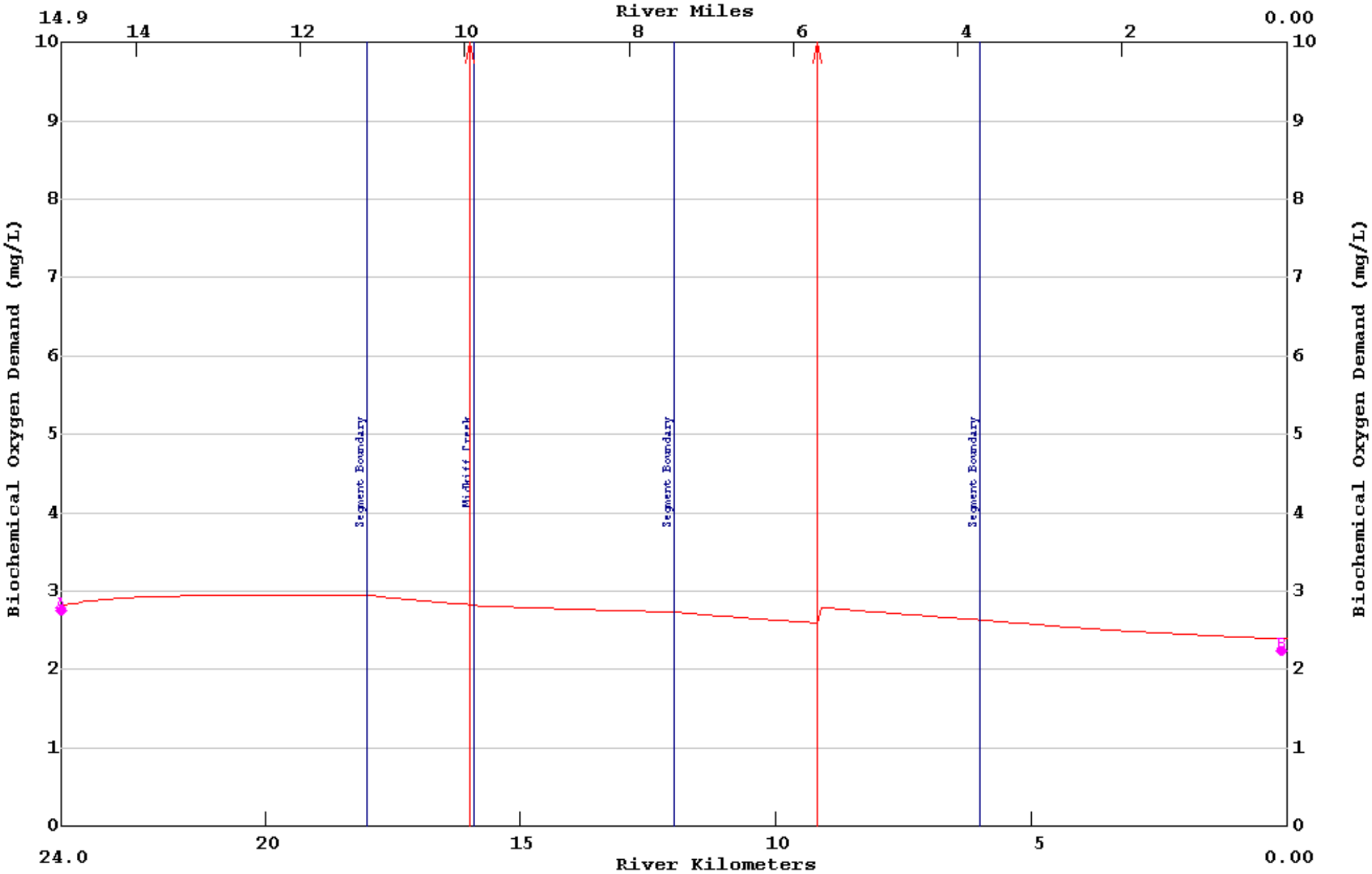
(continued)

APPENDIX G

Plots of Predicted and Observed Water Quality

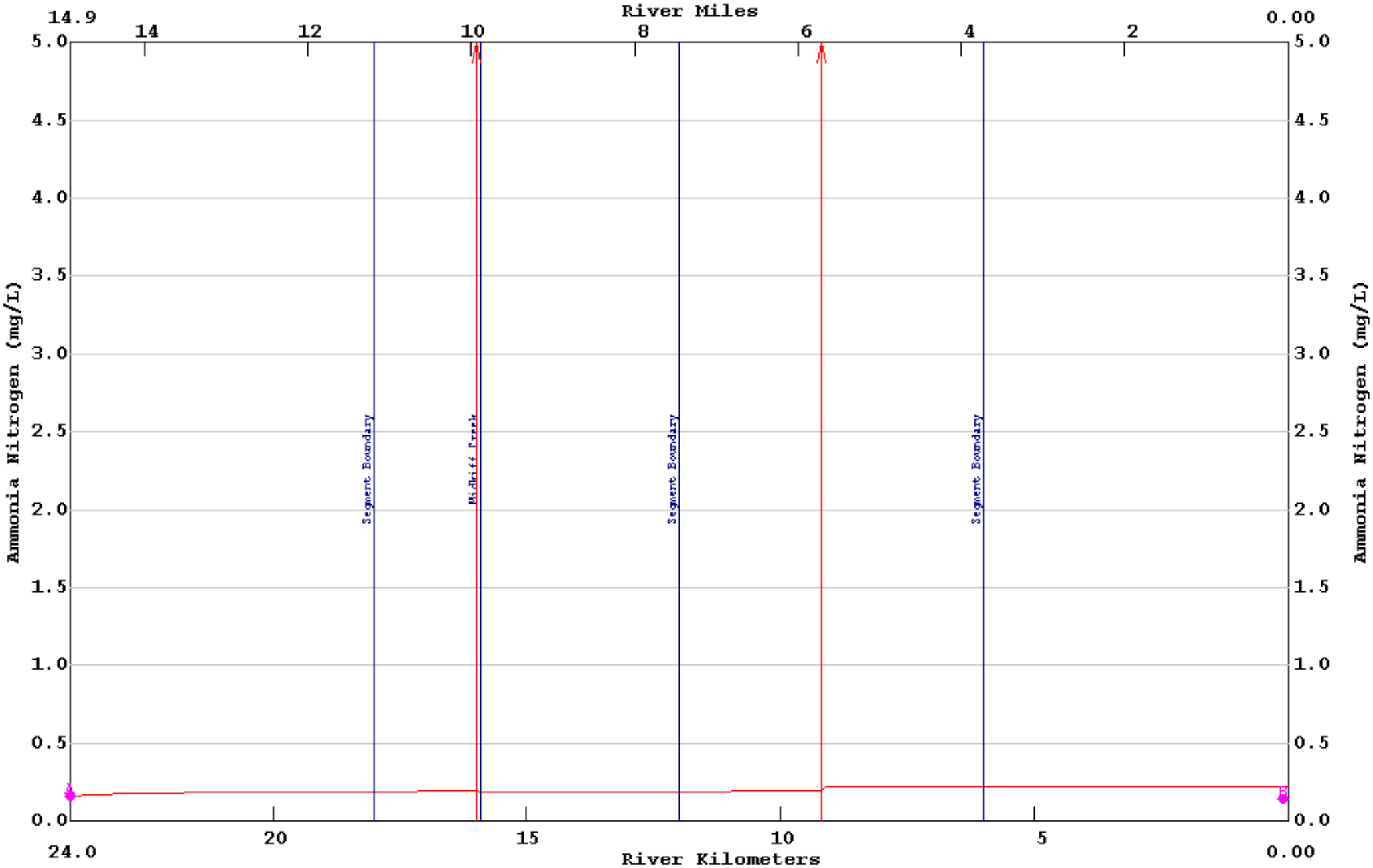
LA-QUAL Version 8.11 Run at 14:54 on 09/21/2007 File D:\comp_models\LA-QUAL_8p11\Bayou Toro calibration.txt

Bayou Toro



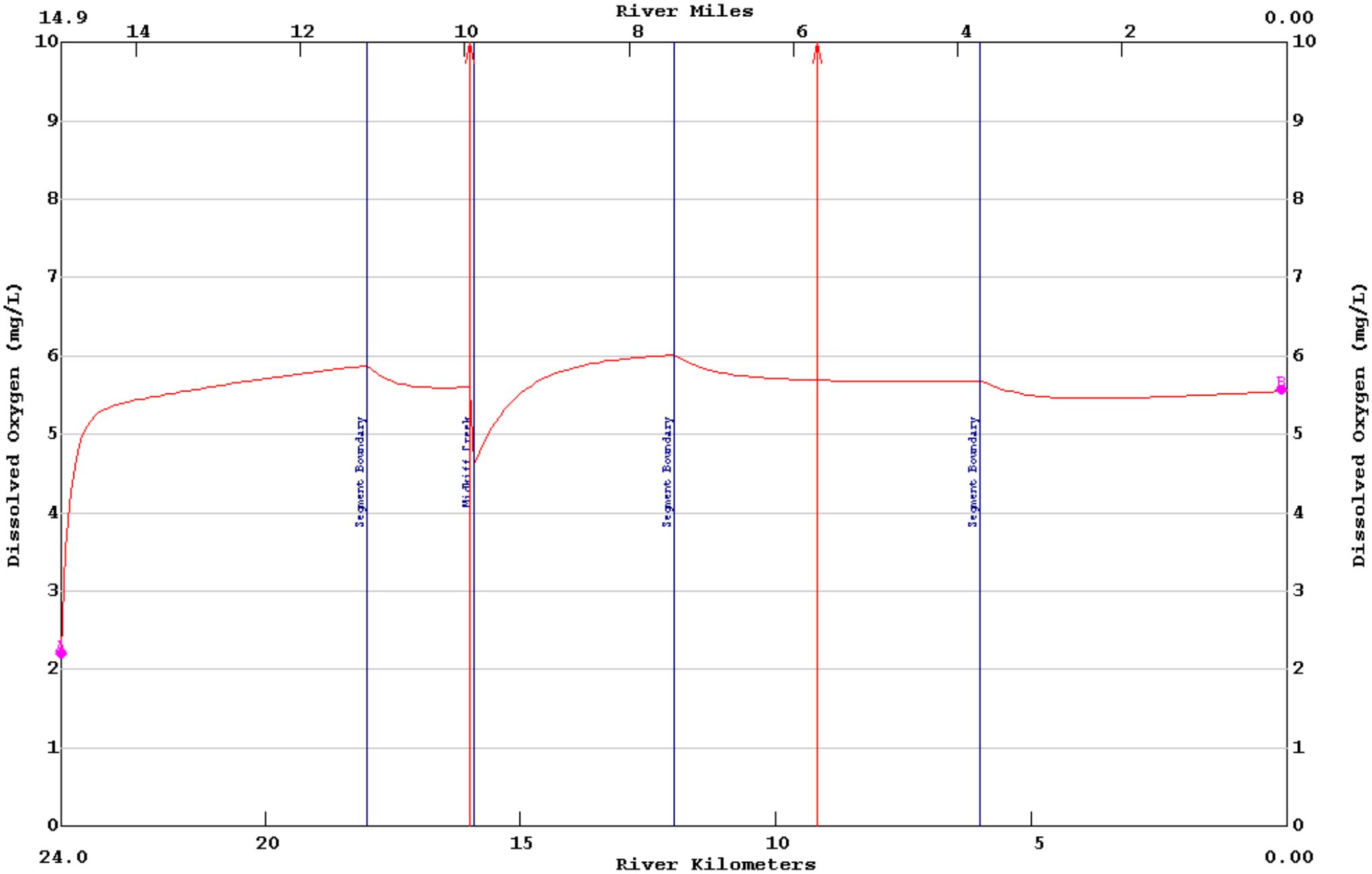
LA-QUAL Version 8.11 Run at 14:54 on 09/21/2007 File D:\comp_models\LA-QUAL_8p11\Bayou Toro calibration.txt

Bayou Toro



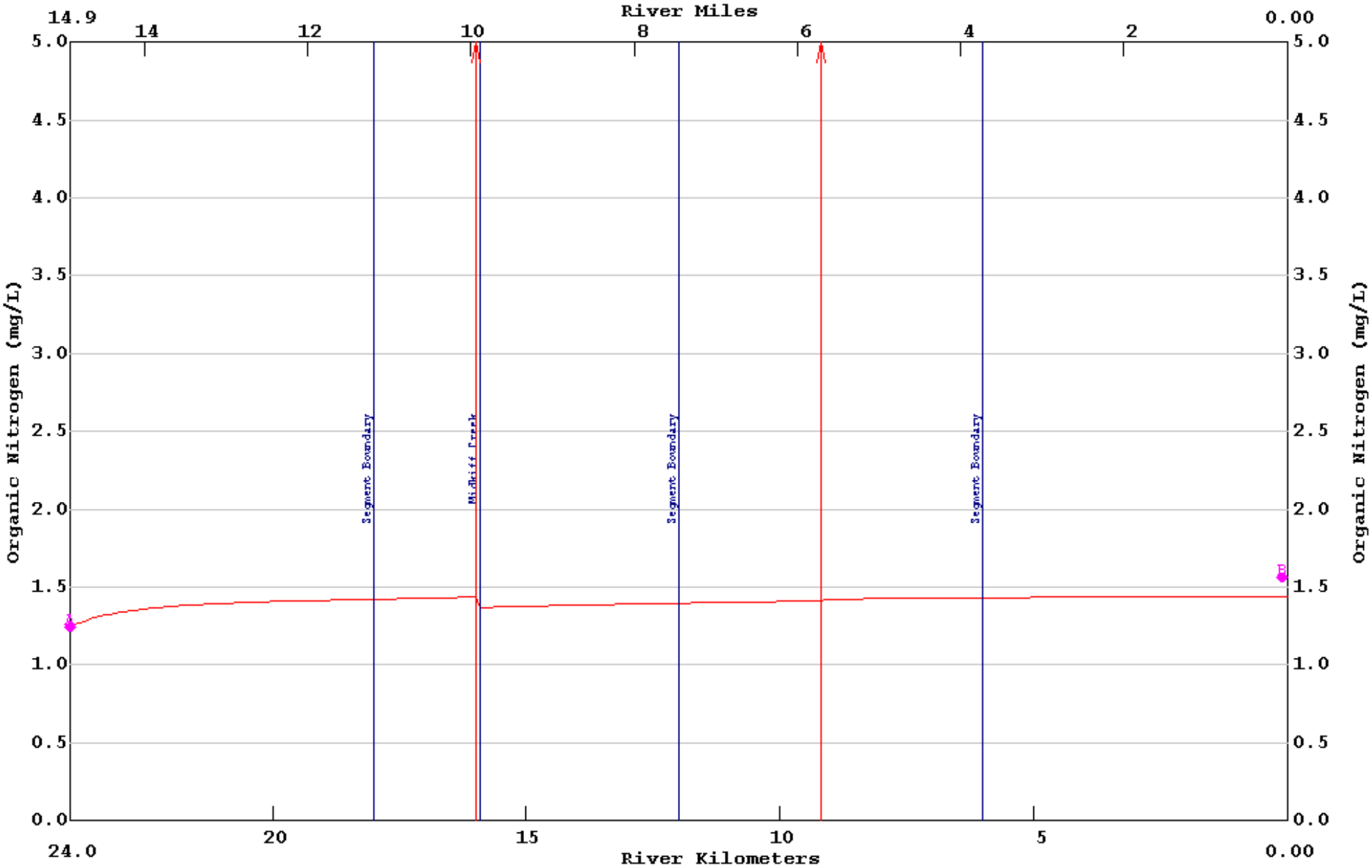
LA-QUAL Version 8.11 Run at 14:54 on 09/21/2007 File D:\comp_models\LA-QUAL_8p11\Bayou Toro calibration.txt

Bayou Toro



LA-QUAL Version 8.11 Run at 14:54 on 09/21/2007 File D:\comp_models\LA-QUAL_8p11\Bayou Toro calibration.txt

Bayou Toro



APPENDIX H

Printout of Model Output for Calibration

```
LA-QUAL Version 8.11
Louisiana Department of Environmental Quality

Input file is D:\Bayou Toro calibration.txt
Output produced at 19:56 on 09/20/2007

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

CARD TYPE       CONTROL TITLES

TITLE01         LA-QUAL Calibration for Bayou Toro
TITLE02
CNTROL03   NO   SEQU                        <Warning: legacy control - line ignored>
CNTROL04  YES   METR
CNTROL05  YES   OXYG                        <Warning: legacy control - line ignored>
ENDATA01

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

CARD TYPE       MODEL OPTION

MODOPT01   NO   TEMP
MODOPT02   NO   SALI
MODOPT03   NO   CONSERVATIVE MATERIAL
MODOPT04   NO   CONSERVATIVE MATERIAL II
MODOPT05  YES   DISS
MODOPT06  YES   BIOC
MODOPT07  YES   NITR
MODOPT08   NO   PHOS
MODOPT09   NO   CHLO
MODOPT10   NO   MACR
MODOPT11   NO   COLI
MODOPT12   NO   NONC
ENDATA02

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

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

PROGRAM         HYDRAULIC CALCULATION METHOD       =         2.00000 (widths and depths)
PROGRAM         MAXIMUM ITERATION LIMIT            =       500.00000
PROGRAM         ALGAE OXYGEN PROD                  =         0.02600 mg O/ug chl a/day
ENDATA03

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

 CARD TYPE     RATE CODE     THETA VALUE

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

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   B1  Bayou Toro                      24.00  TO   18.00   0.1000     6.00      60        1     60
REACH ID      2   B2  Bayou Toro                      18.00  TO   12.00   0.1000     6.00      60       61    120
REACH ID      3   B3  Bayou Toro                      12.00  TO    6.00   0.1000     6.00      60      121    180
REACH ID      4   B4  Bayou Toro                       6.00  TO    0.00   0.1000     6.00      60      181    240
ENDATA08

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

CARD TYPE  REACH  ID       WIDTH       WIDTH       WIDTH       DEPTH       DEPTH       DEPTH      SLOPE    MANNINGS
                            "A"         "B"         "C"         "D"         "E"         "F"                  "N"

HYDR-1        1   B1       0.000       0.000       7.920       0.000       0.000       0.310     0.00000   0.000
HYDR-1        2   B2       0.000       0.000      10.870       0.000       0.000       0.410     0.00000   0.000
HYDR-1        3   B3       0.000       0.000      13.820       0.000       0.000       0.500     0.00000   0.000
HYDR-1        4   B4       0.000       0.000      16.760       0.000       0.000       0.580     0.00000   0.000
ENDATA09

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

CARD TYPE  REACH  ID     TIDAL     DISPERSION     DISPERSION     DISPERSION     DISPERSION
                         RANGE        "A"            "B"            "C"            "D"

ENDATA10

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

CARD TYPE      REACH  ID        TEMP     SALIN        DO       NH3     NO3+2      PHOS     CHL A     MACRO

INITIAL          1   B1       21.80      0.00      2.21      0.16      0.00      0.00      0.00      0.00
INITIAL          2   B2       22.70      0.00      3.34      0.15      0.00      0.00      0.00      0.00
```

```
INITIAL           3   B3       23.50      0.00      4.47      0.15      0.00      0.00      0.00      0.00
INITIAL           4   B4       24.40      0.00      5.60      0.14      0.00      0.00      0.00      0.00
ENDATA11

$$$ DATA TYPE 12 (REAERATION, SEDIMENT OXYGEN DEMAND, BOD COEFFICIENTS) $$$
                                                                                                  BOD     ANAER                          BOD2     ANAER
CARD     RCH  RCH  K2                    K2        K2        K2    BKGRND       BOD       BOD      CONV      BOD2      BOD2      BOD2      CONV      BOD2
TYPE     NUM   ID  OPT                  "A"       "B"       "C"       SOD     DECAY      SETT    TO SOD     DECAY     DECAY      SETT    TO SOD     DECAY
                                                                   g/m²/d   per day       m/d             per day   per day       m/d             per day

COEFF-1    1   B1  15 LOUISIANA       0.000     0.000     0.000     2.000     0.110     0.000     0.000     0.000     0.000     0.000     0.000     0.000
COEFF-1    2   B2  15 LOUISIANA       0.000     0.000     0.000     2.000     0.110     0.000     0.000     0.000     0.000     0.000     0.000     0.000
COEFF-1    3   B3  15 LOUISIANA       0.000     0.000     0.000     2.000     0.110     0.000     0.000     0.000     0.000     0.000     0.000     0.000
COEFF-1    4   B4  15 LOUISIANA       0.000     0.000     0.000     2.000     0.110     0.000     0.000     0.000     0.000     0.000     0.000     0.000
ENDATA12

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

CARD TYPE      REACH  ID       ORG-N     ORG-N   ORGN CONV       NH3       NH3      PHOS     DENIT
                                DECA      SETT  TO NH3 SRCE     DECA      SRCE      SRCE      RATE

COEFF-2          1   B1       0.020     0.000     1.000       0.100     0.000     0.000     0.000
COEFF-2          2   B2       0.020     0.000     1.000       0.100     0.000     0.000     0.000
COEFF-2          3   B3       0.020     0.000     1.000       0.100     0.000     0.000     0.000
COEFF-2          4   B4       0.020     0.000     1.000       0.100     0.000     0.000     0.000
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   SHADING

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   IN/DIST  OUT/DIST

INCR-1           1   B1       0.00000     0.04600     21.80      0.00      0.00      0.00   0.00767   0.00000
INCR-1           2   B2       0.00000     0.04600     21.80      0.00      0.00      0.00   0.00767   0.00000
INCR-1           3   B3       0.00000     0.04600     21.80      0.00      0.00      0.00   0.00767   0.00000
INCR-1           4   B4       0.00000     0.04600     21.80      0.00      0.00      0.00   0.00767   0.00000
ENDATA16

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

```
CARD TYPE      REACH  ID          DO       BOD     ORG-N     NH3-N     NO3-N     BOD#2

INCR-2           1   B1        2.20      2.80      1.24      0.16      0.00      0.00
INCR-2           2   B2        2.20      2.80      1.24      0.16      0.00      0.00
INCR-2           3   B3        2.20      2.80      1.24      0.16      0.00      0.00
INCR-2           4   B4        2.20      2.80      1.24      0.16      0.00      0.00
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#1     ORG-N      COLI       NCM        DO     BOD#2

NONPOINT         1   B1        6.00      1.30      0.00      0.00      0.00      0.00
NONPOINT         2   B2        8.00      1.80      0.00      0.00      0.00      0.00
NONPOINT         3   B3       10.00      2.30      0.00      0.00      0.00      0.00
NONPOINT         4   B4       14.00      2.80      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     FLOW    TEMP    SALIN      CM-I     CM-II
                                                        m³/s      cfs   deg C      ppt

HDWTR-1          1     Bayou Toro @ 110401A    0   0.01000    0.353   21.80     0.00     0.000     0.000   0.00
ENDATA20

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

CARD TYPE     ELEMENT   NAME                        DO     BOD#1     ORG-N     NH3-N     NO3-N     BOD#2
                                                  mg/L      mg/L      mg/L      mg/L      mg/L      mg/L

HDWTR-2          1     Bayou Toro @ 110401A       2.20      2.80      1.24      0.16      0.00      0.00
ENDATA21

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

CARD TYPE     ELEMENT   NAME                       PHOS     CHL A      COLI       NCM
                                                   mg/L      mg/L      mg/L      mg/L

ENDATA22

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

CARD TYPE   JUNCTION   UPSTRM     RIVER     NAME
             ELEMENT  ELEMENT     KILOM
```

```
ENDATA23

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

CARD TYPE  ELEMENT    RKILO  NAME                      FLOW       FLOW     FLOW    TEMP    SALIN      CM-I     CM-II
                                                       m³/s        cfs      MGD   deg C      ppt

WSTLD-1       81      16.00  Midkiff Creek          0.03700    1.30650    0.845   21.80     0.00     0.000     0.000
WSTLD-1      149       9.20  Emerald Hills Golf     0.00050    0.01766    0.011   21.80     0.00     0.000     0.000
ENDATA24

$$$ DATA TYPE 25 (WASTELOAD DATA FOR DO, BOD, AND NITROGEN) $$$
                                                                          % BOD                            %
CARD TYPE     ELEMENT   NAME                          DO       BOD      RMVL     ORG-N     NH3-N    NITRIF     NO3-N     BOD#2
                                                     mg/L      mg/L                mg/L      mg/L                mg/L      mg/L

WSTLD-2          81     Midkiff Creek               2.20      2.80      0.00      1.24      0.16      0.00      0.00      0.00
WSTLD-2         149     Emerald Hills Golf          5.00     69.00      0.00      5.00     10.00      0.00      0.00      0.00
ENDATA25

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

CARD TYPE     ELEMENT   NAME                         PHOS     CHL A      COLI       NCM
                                                     mg/L      mg/L      mg/L      mg/L

ENDATA26

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

CARD TYPE    CONSTITUENT                    CONCENTRATION

ENDATA27

$$$ DATA TYPE 28 (DAM DATA) $$$

CARD TYPE     ELEMENT   NAME                  EQN      "A"       "B"       "H"

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

ENDATA29

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


NUMBER OF PLOTS =  1
NUMBER OF REACHES IN PLOT 1 =   4
PLOT RCH  1  2  3  4
```

ENDATA30

$$$ DATA TYPE 31 (OVERLAY PLOT DATA) $$$

OVERLAY 1 TORO.OVL :Bayou Toro
ENDATA31

.....NO ERRORS DETECTED IN INPUT DATA
.....HYDRAULIC CALCULATIONS COMPLETED
.....TRIDIAGONAL MATRIX TERMS INITIALIZED
.....OXYGEN DEPENDENT RATES CONVERGENT IN 5 ITERATIONS
.....CONSTITUENT CALCULATIONS COMPLETED
.....GRAPHICS DATA FOR PLOT 1 WRITTEN TO UNIT 11

INTERMEDIATE REPORT
Dissolved Oxygen LA-QUAL Calibration for Bayou Toro
mg/L

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	3.54	4.28	4.69	4.94	5.09	5.19	5.25	5.30	5.33	5.36
B1	1	11	5.38	5.40	5.41	5.43	5.44	5.45	5.47	5.48	5.49	5.50
B1	1	21	5.51	5.53	5.54	5.55	5.56	5.57	5.58	5.59	5.60	5.61
B1	1	31	5.62	5.63	5.64	5.65	5.66	5.67	5.68	5.69	5.70	5.71
B1	1	41	5.72	5.73	5.74	5.75	5.76	5.76	5.77	5.78	5.79	5.80
B1	1	51	5.81	5.82	5.82	5.83	5.84	5.85	5.86	5.86	5.87	5.88
B2	2	61	5.82	5.77	5.73	5.70	5.67	5.65	5.63	5.62	5.61	5.61
B2	2	71	5.60	5.60	5.60	5.60	5.60	5.60	5.60	5.60	5.60	5.60
B2	2	81	4.62	4.77	4.91	5.03	5.14	5.23	5.32	5.39	5.46	5.51
B2	2	91	5.57	5.61	5.65	5.69	5.72	5.75	5.78	5.80	5.82	5.84
B2	2	101	5.86	5.88	5.89	5.90	5.92	5.93	5.94	5.94	5.95	5.96
B2	2	111	5.97	5.97	5.98	5.98	5.99	5.99	6.00	6.00	6.01	6.01
B3	3	121	5.97	5.94	5.91	5.88	5.86	5.84	5.82	5.81	5.79	5.78
B3	3	131	5.77	5.76	5.75	5.74	5.73	5.73	5.72	5.72	5.71	5.71
B3	3	141	5.71	5.70	5.70	5.70	5.70	5.70	5.70	5.69	5.69	5.69
B3	3	151	5.69	5.68	5.68	5.68	5.68	5.68	5.68	5.68	5.68	5.68
B3	3	161	5.68	5.68	5.68	5.68	5.68	5.68	5.68	5.68	5.68	5.68
B3	3	171	5.68	5.68	5.68	5.68	5.68	5.68	5.68	5.68	5.68	5.68
B4	4	181	5.65	5.62	5.60	5.58	5.56	5.54	5.53	5.52	5.51	5.50
B4	4	191	5.49	5.48	5.48	5.47	5.47	5.46	5.46	5.46	5.46	5.46
B4	4	201	5.46	5.46	5.46	5.46	5.46	5.46	5.46	5.46	5.46	5.47
B4	4	211	5.47	5.47	5.47	5.47	5.48	5.48	5.48	5.48	5.49	5.49
B4	4	221	5.49	5.50	5.50	5.50	5.51	5.51	5.51	5.51	5.52	5.52
B4	4	231	5.52	5.53	5.53	5.53	5.54	5.54	5.54	5.55	5.55	5.55

INTERMEDIATE REPORT

Effective BOD
mg/L

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	2.82	2.83	2.85	2.86	2.87	2.88	2.88	2.89	2.90	2.90
B1	1	11	2.91	2.91	2.91	2.92	2.92	2.92	2.93	2.93	2.93	2.93
B1	1	21	2.93	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94
B1	1	31	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95
B1	1	41	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95
B1	1	51	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95
B2	2	61	2.94	2.94	2.93	2.92	2.91	2.91	2.90	2.89	2.89	2.88
B2	2	71	2.88	2.87	2.86	2.86	2.85	2.85	2.84	2.84	2.83	2.83
B2	2	81	2.82	2.81	2.81	2.81	2.81	2.80	2.80	2.80	2.80	2.79
B2	2	91	2.79	2.79	2.79	2.78	2.78	2.78	2.78	2.78	2.77	2.77
B2	2	101	2.77	2.77	2.76	2.76	2.76	2.76	2.76	2.76	2.75	2.75
B2	2	111	2.75	2.75	2.75	2.74	2.74	2.74	2.74	2.74	2.74	2.73
B3	3	121	2.73	2.72	2.72	2.71	2.70	2.70	2.69	2.69	2.68	2.68
B3	3	131	2.67	2.67	2.66	2.66	2.65	2.65	2.64	2.64	2.63	2.63
B3	3	141	2.63	2.62	2.62	2.61	2.61	2.60	2.60	2.60	2.80	2.79
B3	3	151	2.78	2.78	2.77	2.77	2.76	2.75	2.75	2.74	2.74	2.73
B3	3	161	2.73	2.72	2.72	2.71	2.71	2.70	2.70	2.69	2.69	2.68
B3	3	171	2.68	2.67	2.67	2.66	2.66	2.65	2.65	2.64	2.64	2.64
B4	4	181	2.63	2.62	2.62	2.61	2.61	2.60	2.59	2.59	2.58	2.58
B4	4	191	2.57	2.57	2.56	2.56	2.55	2.55	2.54	2.54	2.53	2.53
B4	4	201	2.52	2.52	2.52	2.51	2.51	2.50	2.50	2.49	2.49	2.49
B4	4	211	2.48	2.48	2.47	2.47	2.47	2.46	2.46	2.46	2.45	2.45
B4	4	221	2.45	2.44	2.44	2.44	2.43	2.43	2.43	2.42	2.42	2.42
B4	4	231	2.41	2.41	2.41	2.41	2.40	2.40	2.40	2.40	2.39	2.39

INTERMEDIATE REPORT
Biochemical Oxygen Demand
mg/L

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	2.82	2.83	2.85	2.86	2.87	2.88	2.88	2.89	2.90	2.90
B1	1	11	2.91	2.91	2.91	2.92	2.92	2.92	2.93	2.93	2.93	2.93
B1	1	21	2.93	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94
B1	1	31	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95
B1	1	41	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95
B1	1	51	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95
B2	2	61	2.94	2.94	2.93	2.92	2.91	2.91	2.90	2.89	2.89	2.88
B2	2	71	2.88	2.87	2.86	2.86	2.85	2.85	2.84	2.84	2.83	2.83
B2	2	81	2.82	2.81	2.81	2.81	2.81	2.80	2.80	2.80	2.80	2.79
B2	2	91	2.79	2.79	2.79	2.78	2.78	2.78	2.78	2.78	2.77	2.77
B2	2	101	2.77	2.77	2.76	2.76	2.76	2.76	2.76	2.76	2.75	2.75
B2	2	111	2.75	2.75	2.75	2.74	2.74	2.74	2.74	2.74	2.74	2.73
B3	3	121	2.73	2.72	2.72	2.71	2.70	2.70	2.69	2.69	2.68	2.68

B3	3	131	2.67	2.67	2.66	2.66	2.65	2.65	2.64	2.64	2.63	2.63
B3	3	141	2.63	2.62	2.62	2.61	2.61	2.60	2.60	2.60	2.80	2.79
B3	3	151	2.78	2.78	2.77	2.77	2.76	2.75	2.75	2.74	2.74	2.73
B3	3	161	2.73	2.72	2.72	2.71	2.71	2.70	2.70	2.69	2.69	2.68
B3	3	171	2.68	2.67	2.67	2.66	2.66	2.65	2.65	2.64	2.64	2.64
B4	4	181	2.63	2.62	2.62	2.61	2.61	2.60	2.59	2.59	2.58	2.58
B4	4	191	2.57	2.57	2.56	2.56	2.55	2.55	2.54	2.54	2.53	2.53
B4	4	201	2.52	2.52	2.52	2.51	2.51	2.50	2.50	2.49	2.49	2.49
B4	4	211	2.48	2.48	2.47	2.47	2.47	2.46	2.46	2.46	2.45	2.45
B4	4	221	2.45	2.44	2.44	2.44	2.43	2.43	2.43	2.42	2.42	2.42
B4	4	231	2.41	2.41	2.41	2.41	2.40	2.40	2.40	2.40	2.39	2.39

INTERMEDIATE REPORT
Organic Nitrogen
mg/L

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.33	1.34
B1	1	11	1.34	1.35	1.35	1.36	1.36	1.36	1.37	1.37	1.37	1.38
B1	1	21	1.38	1.38	1.38	1.38	1.39	1.39	1.39	1.39	1.39	1.40
B1	1	31	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.41	1.41	1.41
B1	1	41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.42
B1	1	51	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42
B2	2	61	1.42	1.42	1.42	1.42	1.43	1.43	1.43	1.43	1.43	1.43
B2	2	71	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.44
B2	2	81	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.38	1.38	1.38
B2	2	91	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38
B2	2	101	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
B2	2	111	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.40	1.40	1.40
B3	3	121	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
B3	3	131	1.40	1.40	1.40	1.40	1.40	1.41	1.41	1.41	1.41	1.41
B3	3	141	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.42	1.42
B3	3	151	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.43	1.43	1.43
B3	3	161	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
B3	3	171	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
B4	4	181	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
B4	4	191	1.43	1.43	1.43	1.43	1.43	1.43	1.44	1.44	1.44	1.44
B4	4	201	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44
B4	4	211	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44
B4	4	221	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44
B4	4	231	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44

INTERMEDIATE REPORT
Ammonia Nitrogen
mg/L

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9

B1	1	1	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.18	0.18
B1	1	11	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
B1	1	21	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.19	0.19
B1	1	31	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
B1	1	41	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
B1	1	51	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
B2	2	61	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
B2	2	71	0.19	0.19	0.19	0.19	0.19	0.19	0.20	0.20	0.20	0.20
B2	2	81	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.19
B2	2	91	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
B2	2	101	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
B2	2	111	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
B3	3	121	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
B3	3	131	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
B3	3	141	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.20	0.23	0.23
B3	3	151	0.23	0.23	0.23	0.23	0.23	0.23	0.22	0.22	0.22	0.22
B3	3	161	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
B3	3	171	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
B4	4	181	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
B4	4	191	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
B4	4	201	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
B4	4	211	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
B4	4	221	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
B4	4	231	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22

INTERMEDIATE REPORT
Nitrate+Nitrite Nitrogen
mg/L

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.03
B1	1	11	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04
B1	1	21	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05
B1	1	31	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
B1	1	41	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06
B1	1	51	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
B2	2	61	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07
B2	2	71	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08
B2	2	81	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06
B2	2	91	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
B2	2	101	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07
B2	2	111	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
B3	3	121	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08
B3	3	131	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09
B3	3	141	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10
B3	3	151	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
B3	3	161	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B3	3	171	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12

B4	4	181	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.13
B4	4	191	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.14
B4	4	201	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B4	4	211	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B4	4	221	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17
B4	4	231	0.17	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.18

INTERMEDIATE REPORT
Total Nitrogen
mg/L

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	1.42	1.44	1.46	1.48	1.49	1.50	1.51	1.52	1.53	1.54
B1	1	11	1.55	1.56	1.56	1.57	1.57	1.58	1.59	1.59	1.59	1.60
B1	1	21	1.60	1.61	1.61	1.61	1.61	1.62	1.62	1.62	1.63	1.63
B1	1	31	1.63	1.63	1.63	1.64	1.64	1.64	1.64	1.64	1.65	1.65
B1	1	41	1.65	1.65	1.65	1.65	1.65	1.65	1.66	1.66	1.66	1.66
B1	1	51	1.66	1.66	1.66	1.66	1.66	1.67	1.67	1.67	1.67	1.67
B2	2	61	1.67	1.67	1.68	1.68	1.68	1.68	1.68	1.69	1.69	1.69
B2	2	71	1.69	1.69	1.70	1.70	1.70	1.70	1.70	1.71	1.71	1.71
B2	2	81	1.60	1.61	1.61	1.61	1.61	1.61	1.61	1.62	1.62	1.62
B2	2	91	1.62	1.62	1.62	1.63	1.63	1.63	1.63	1.63	1.63	1.63
B2	2	101	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.65	1.65
B2	2	111	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.66	1.66	1.66
B3	3	121	1.66	1.66	1.66	1.67	1.67	1.67	1.67	1.67	1.67	1.67
B3	3	131	1.68	1.68	1.68	1.68	1.68	1.68	1.69	1.69	1.69	1.69
B3	3	141	1.69	1.69	1.69	1.70	1.70	1.70	1.70	1.70	1.74	1.74
B3	3	151	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.76
B3	3	161	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76
B3	3	171	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77
B4	4	181	1.77	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.79	1.79
B4	4	191	1.79	1.79	1.79	1.79	1.79	1.79	1.80	1.80	1.80	1.80
B4	4	201	1.80	1.80	1.80	1.80	1.80	1.81	1.81	1.81	1.81	1.81
B4	4	211	1.81	1.81	1.81	1.81	1.82	1.82	1.82	1.82	1.82	1.82
B4	4	221	1.82	1.82	1.82	1.82	1.83	1.83	1.83	1.83	1.83	1.83
B4	4	231	1.83	1.83	1.83	1.83	1.83	1.84	1.84	1.84	1.84	1.84

INTERMEDIATE REPORT
Temperature
deg C

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	21.81	21.83	21.84	21.86	21.88	21.89	21.90	21.92	21.93	21.95
B1	1	11	21.97	21.98	21.99	22.01	22.02	22.04	22.06	22.07	22.08	22.10
B1	1	21	22.11	22.13	22.15	22.16	22.17	22.19	22.20	22.22	22.24	22.25
B1	1	31	22.26	22.28	22.30	22.31	22.33	22.34	22.35	22.37	22.39	22.40

B1	1	41	22.42	22.43	22.44	22.46	22.48	22.49	22.51	22.52	22.53	22.55
B1	1	51	22.57	22.58	22.60	22.61	22.62	22.64	22.66	22.67	22.69	22.70
B2	2	61	22.71	22.73	22.74	22.75	22.77	22.78	22.79	22.81	22.82	22.83
B2	2	71	22.85	22.86	22.87	22.89	22.90	22.91	22.93	22.94	22.95	22.97
B2	2	81	22.98	22.99	23.01	23.02	23.03	23.05	23.06	23.07	23.09	23.10
B2	2	91	23.11	23.13	23.14	23.15	23.17	23.18	23.19	23.21	23.22	23.23
B2	2	101	23.25	23.26	23.27	23.29	23.30	23.31	23.33	23.34	23.35	23.37
B2	2	111	23.38	23.39	23.41	23.42	23.43	23.45	23.46	23.47	23.49	23.50
B3	3	121	23.51	23.53	23.55	23.56	23.58	23.59	23.60	23.62	23.64	23.65
B3	3	131	23.66	23.68	23.69	23.71	23.73	23.74	23.75	23.77	23.78	23.80
B3	3	141	23.82	23.83	23.84	23.86	23.88	23.89	23.91	23.92	23.93	23.95
B3	3	151	23.97	23.98	23.99	24.01	24.02	24.04	24.06	24.07	24.08	24.10
B3	3	161	24.11	24.13	24.15	24.16	24.17	24.19	24.20	24.22	24.24	24.25
B3	3	171	24.26	24.28	24.30	24.31	24.32	24.34	24.35	24.37	24.39	24.40
B4	4	181	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40
B4	4	191	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40
B4	4	201	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40
B4	4	211	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40
B4	4	221	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40
B4	4	231	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40

INTERMEDIATE REPORT
Salinity
ppt

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	111	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	121	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	131	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	141	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	151	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	161	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	171	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	181	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	191	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	201	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	211	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	221	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

B4	4	231	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

INTERMEDIATE REPORT
River Distance
km

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	24.	24.	24.	24.	23.	23.	23.	23.	23.	23.
B1	1	11	23.	23.	23.	23.	22.	22.	22.	22.	22.	22.
B1	1	21	22.	22.	22.	22.	21.	21.	21.	21.	21.	21.
B1	1	31	21.	21.	21.	21.	20.	20.	20.	20.	20.	20.
B1	1	41	20.	20.	20.	20.	19.	19.	19.	19.	19.	19.
B1	1	51	19.	19.	19.	19.	18.	18.	18.	18.	18.	18.
B2	2	61	18.	18.	18.	18.	17.	17.	17.	17.	17.	17.
B2	2	71	17.	17.	17.	17.	16.	16.	16.	16.	16.	16.
B2	2	81	16.	16.	16.	16.	15.	15.	15.	15.	15.	15.
B2	2	91	15.	15.	15.	15.	14.	14.	14.	14.	14.	14.
B2	2	101	14.	14.	14.	14.	13.	13.	13.	13.	13.	13.
B2	2	111	13.	13.	13.	13.	12.	12.	12.	12.	12.	12.
B3	3	121	12.	12.	12.	12.	11.	11.	11.	11.	11.	11.
B3	3	131	11.	11.	11.	11.	10.	10.	10.	10.	10.	10.
B3	3	141	10.	10.	10.	10.	9.	9.	9.	9.	9.	9.
B3	3	151	9.	9.	9.	9.	8.	8.	8.	8.	8.	8.
B3	3	161	8.	8.	8.	8.	7.	7.	7.	7.	7.	7.
B3	3	171	7.	7.	7.	7.	6.	6.	6.	6.	6.	6.
B4	4	181	6.	6.	6.	6.	6.	5.	5.	5.	5.	5.
B4	4	191	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.
B4	4	201	4.	4.	4.	4.	4.	3.	3.	3.	3.	3.
B4	4	211	3.	3.	3.	3.	3.	2.	2.	2.	2.	2.
B4	4	221	2.	2.	2.	2.	2.	1.	1.	1.	1.	1.
B4	4	231	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.

INTERMEDIATE REPORT
Flow
m^3/s

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	51	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	61	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	71	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	81	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

B2	2	91	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	101	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	111	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B3	3	121	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B3	3	131	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
B3	3	141	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B3	3	151	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B3	3	161	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B3	3	171	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B4	4	181	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B4	4	191	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B4	4	201	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B4	4	211	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B4	4	221	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B4	4	231	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

INTERMEDIATE REPORT
Dispersion
m^2/s

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	151	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	161	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	171	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	181	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	191	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	211	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	221	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	231	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

INTERMEDIATE REPORT
Advective Velocity

LA-QUAL Calibration for Bayou Toro

m/s

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	151	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	161	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	171	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	181	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	191	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	211	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	221	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	231	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

INTERMEDIATE REPORT
Depth LA-QUAL Calibration for Bayou Toro
m

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	11	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	21	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	31	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	41	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	51	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B2	2	61	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	71	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	81	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	91	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	101	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	111	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B3	3	121	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B3	3	131	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

B3	3	141	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B3	3	151	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B3	3	161	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B3	3	171	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B4	4	181	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	191	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	201	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	211	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	221	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	231	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

INTERMEDIATE REPORT
Width LA-QUAL Calibration for Bayou Toro
m

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	11	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	21	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	31	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	41	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	51	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B2	2	61	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	71	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	81	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	91	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	101	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	111	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B3	3	121	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	131	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	141	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	151	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	161	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	171	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B4	4	181	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	191	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	201	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	211	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	221	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	231	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8

INTERMEDIATE REPORT
Cross-Sectional Area LA-QUAL Calibration for Bayou Toro
m^2

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9

B1	1	1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	11	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	21	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	31	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	41	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	51	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B2	2	61	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	71	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	81	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	91	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	101	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	111	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B3	3	121	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	131	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	141	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	151	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	161	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	171	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B4	4	181	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	191	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	201	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	211	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	221	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	231	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7

INTERMEDIATE REPORT
Reaeration Rate
per day

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	2.429	2.444	2.460	2.476	2.491	2.507	2.523	2.538	2.554	2.570
B1	1	11	2.585	2.601	2.617	2.633	2.648	2.664	2.680	2.696	2.711	2.727
B1	1	21	2.743	2.759	2.774	2.790	2.806	2.822	2.838	2.854	2.870	2.885
B1	1	31	2.901	2.917	2.933	2.949	2.965	2.981	2.997	3.013	3.029	3.044
B1	1	41	3.061	3.076	3.092	3.108	3.124	3.140	3.156	3.172	3.188	3.205
B1	1	51	3.221	3.237	3.253	3.269	3.285	3.301	3.317	3.333	3.349	3.365
B2	2	61	2.175	2.182	2.189	2.196	2.203	2.210	2.216	2.223	2.230	2.237
B2	2	71	2.244	2.251	2.258	2.265	2.272	2.279	2.286	2.292	2.299	2.306
B2	2	81	2.620	2.627	2.634	2.641	2.648	2.655	2.662	2.669	2.676	2.683
B2	2	91	2.690	2.697	2.704	2.711	2.718	2.726	2.733	2.740	2.747	2.754
B2	2	101	2.761	2.768	2.775	2.782	2.789	2.796	2.803	2.810	2.818	2.825
B2	2	111	2.832	2.839	2.846	2.853	2.860	2.867	2.875	2.882	2.889	2.896
B3	3	121	2.040	2.044	2.048	2.052	2.056	2.060	2.064	2.068	2.072	2.076
B3	3	131	2.080	2.084	2.088	2.092	2.096	2.100	2.104	2.108	2.112	2.116
B3	3	141	2.120	2.124	2.128	2.132	2.136	2.140	2.144	2.148	2.154	2.158
B3	3	151	2.162	2.166	2.170	2.174	2.178	2.182	2.186	2.190	2.195	2.199
B3	3	161	2.203	2.207	2.211	2.215	2.219	2.223	2.227	2.231	2.235	2.239
B3	3	171	2.243	2.247	2.251	2.255	2.260	2.264	2.268	2.272	2.276	2.280
B4	4	181	1.759	1.762	1.764	1.766	1.768	1.770	1.772	1.774	1.776	1.778

B4	4	191	1.781	1.783	1.785	1.787	1.789	1.791	1.793	1.795	1.798	1.800
B4	4	201	1.802	1.804	1.806	1.808	1.810	1.812	1.814	1.817	1.819	1.821
B4	4	211	1.823	1.825	1.827	1.829	1.831	1.833	1.836	1.838	1.840	1.842
B4	4	221	1.844	1.846	1.848	1.850	1.852	1.855	1.857	1.859	1.861	1.863
B4	4	231	1.865	1.867	1.869	1.872	1.874	1.876	1.878	1.880	1.882	1.884

INTERMEDIATE REPORT
BOD Decay Rate
per day

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B1	1	11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B1	1	21	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B1	1	31	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B1	1	41	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B1	1	51	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	61	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13
B2	2	71	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B2	2	81	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B2	2	91	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B2	2	101	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B2	2	111	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B3	3	121	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B3	3	131	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B3	3	141	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B3	3	151	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B3	3	161	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B3	3	171	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B4	4	181	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B4	4	191	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B4	4	201	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B4	4	211	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B4	4	221	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B4	4	231	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13

INTERMEDIATE REPORT
BOD Settling Rate
per day

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

B1	1	51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	111	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	121	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	131	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	141	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	151	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	161	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	171	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	181	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	191	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	201	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	211	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	221	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	231	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

INTERMEDIATE REPORT
Ammonia Decay Rate
per day

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
B1	1	11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
B1	1	21	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B1	1	31	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B1	1	41	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B1	1	51	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B2	2	61	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B2	2	71	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B2	2	81	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B2	2	91	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	101	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	111	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	121	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	131	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	141	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	151	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	161	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13
B3	3	171	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B4	4	181	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B4	4	191	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B4	4	201	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B4	4	211	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B4	4	221	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
B4	4	231	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13

INTERMEDIATE REPORT
Sediment Oxygen Demand
g/m²/d

LA-QUAL Calibration for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	2.24	2.24	2.25	2.25	2.25	2.25	2.25	2.26	2.26	2.26
B1	1	11	2.26	2.27	2.27	2.27	2.27	2.27	2.28	2.28	2.28	2.28
B1	1	21	2.28	2.29	2.29	2.29	2.29	2.30	2.30	2.30	2.30	2.30
B1	1	31	2.31	2.31	2.31	2.31	2.32	2.32	2.32	2.32	2.32	2.33
B1	1	41	2.33	2.33	2.33	2.34	2.34	2.34	2.34	2.34	2.35	2.35
B1	1	51	2.35	2.35	2.36	2.36	2.36	2.36	2.36	2.37	2.37	2.37
B2	2	61	2.37	2.37	2.38	2.38	2.38	2.38	2.38	2.39	2.39	2.39
B2	2	71	2.39	2.39	2.40	2.40	2.40	2.40	2.40	2.41	2.41	2.41
B2	2	81	2.41	2.41	2.42	2.42	2.42	2.42	2.43	2.43	2.43	2.43
B2	2	91	2.43	2.44	2.44	2.44	2.44	2.44	2.45	2.45	2.45	2.45
B2	2	101	2.45	2.46	2.46	2.46	2.46	2.46	2.47	2.47	2.47	2.47
B2	2	111	2.47	2.48	2.48	2.48	2.48	2.48	2.49	2.49	2.49	2.49
B3	3	121	2.50	2.50	2.50	2.50	2.50	2.51	2.51	2.51	2.51	2.52
B3	3	131	2.52	2.52	2.52	2.53	2.53	2.53	2.53	2.54	2.54	2.54
B3	3	141	2.54	2.55	2.55	2.55	2.55	2.56	2.56	2.56	2.56	2.56
B3	3	151	2.57	2.57	2.57	2.57	2.58	2.58	2.58	2.58	2.59	2.59
B3	3	161	2.59	2.59	2.60	2.60	2.60	2.60	2.61	2.61	2.61	2.61
B3	3	171	2.62	2.62	2.62	2.62	2.63	2.63	2.63	2.63	2.64	2.64
B4	4	181	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64
B4	4	191	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64
B4	4	201	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64
B4	4	211	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64
B4	4	221	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64
B4	4	231	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64	2.64

CONDENSED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORGN mg/L	NH3 µg/L	CHLA 1/da	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
HDWTR	0.01000	21.80	0.00	2.20	2.80	0.00	1.24	0.16	0.00							
23.90	0.01077	21.81	0.00	3.54	2.82	0.00	1.26	0.16	0.00	2.43	0.12	0.00	0.00	0.00	0.09	2.24
23.80	0.01153	21.83	0.00	4.28	2.83	0.00	1.27	0.17	0.00	2.44	0.12	0.00	0.00	0.00	0.10	2.24
23.70	0.01230	21.84	0.00	4.69	2.85	0.00	1.28	0.17	0.00	2.46	0.12	0.00	0.00	0.00	0.10	2.25
23.60	0.01307	21.86	0.00	4.94	2.86	0.00	1.29	0.17	0.00	2.48	0.12	0.00	0.00	0.00	0.10	2.25
23.50	0.01383	21.88	0.00	5.09	2.87	0.00	1.30	0.17	0.00	2.49	0.12	0.00	0.00	0.00	0.10	2.25
23.40	0.01460	21.89	0.00	5.19	2.88	0.00	1.31	0.17	0.00	2.51	0.12	0.00	0.00	0.00	0.10	2.25
23.30	0.01537	21.90	0.00	5.25	2.88	0.00	1.32	0.17	0.00	2.52	0.12	0.00	0.00	0.00	0.10	2.25
23.20	0.01613	21.92	0.00	5.30	2.89	0.00	1.33	0.17	0.00	2.54	0.12	0.00	0.00	0.00	0.10	2.26
23.10	0.01690	21.93	0.00	5.33	2.90	0.00	1.33	0.18	0.00	2.55	0.12	0.00	0.00	0.00	0.10	2.26
23.00	0.01767	21.95	0.00	5.36	2.90	0.00	1.34	0.18	0.00	2.57	0.12	0.00	0.00	0.00	0.10	2.26

22.90	0.01843	21.97	0.00	5.38	2.91	0.00	1.34	0.18	0.00	2.59	0.12	0.00	0.00	0.00	0.10	2.26
22.80	0.01920	21.98	0.00	5.40	2.91	0.00	1.35	0.18	0.00	2.60	0.12	0.00	0.00	0.00	0.10	2.27
22.70	0.01997	21.99	0.00	5.41	2.91	0.00	1.35	0.18	0.00	2.62	0.12	0.00	0.00	0.00	0.10	2.27
22.60	0.02073	22.01	0.00	5.43	2.92	0.00	1.36	0.18	0.00	2.63	0.12	0.00	0.00	0.00	0.10	2.27
22.50	0.02150	22.02	0.00	5.44	2.92	0.00	1.36	0.18	0.00	2.65	0.12	0.00	0.00	0.00	0.10	2.27
22.40	0.02227	22.04	0.00	5.45	2.92	0.00	1.36	0.18	0.00	2.66	0.12	0.00	0.00	0.00	0.10	2.27
22.30	0.02303	22.06	0.00	5.47	2.93	0.00	1.37	0.18	0.00	2.68	0.12	0.00	0.00	0.00	0.10	2.28
22.20	0.02380	22.07	0.00	5.48	2.93	0.00	1.37	0.18	0.00	2.70	0.12	0.00	0.00	0.00	0.10	2.28
22.10	0.02457	22.08	0.00	5.49	2.93	0.00	1.37	0.18	0.00	2.71	0.12	0.00	0.00	0.00	0.10	2.28
22.00	0.02533	22.10	0.00	5.50	2.93	0.00	1.38	0.18	0.00	2.73	0.12	0.00	0.00	0.00	0.10	2.28
21.90	0.02610	22.11	0.00	5.51	2.93	0.00	1.38	0.18	0.00	2.74	0.12	0.00	0.00	0.00	0.10	2.28
21.80	0.02687	22.13	0.00	5.53	2.94	0.00	1.38	0.18	0.00	2.76	0.12	0.00	0.00	0.00	0.10	2.29
21.70	0.02763	22.15	0.00	5.54	2.94	0.00	1.38	0.18	0.00	2.77	0.12	0.00	0.00	0.00	0.10	2.29
21.60	0.02840	22.16	0.00	5.55	2.94	0.00	1.38	0.18	0.00	2.79	0.12	0.00	0.00	0.00	0.11	2.29
21.50	0.02917	22.17	0.00	5.56	2.94	0.00	1.39	0.18	0.00	2.81	0.12	0.00	0.00	0.00	0.11	2.29
21.40	0.02993	22.19	0.00	5.57	2.94	0.00	1.39	0.18	0.00	2.82	0.12	0.00	0.00	0.00	0.11	2.30
21.30	0.03070	22.20	0.00	5.58	2.94	0.00	1.39	0.18	0.00	2.84	0.12	0.00	0.00	0.00	0.11	2.30
21.20	0.03147	22.22	0.00	5.59	2.94	0.00	1.39	0.19	0.00	2.85	0.12	0.00	0.00	0.00	0.11	2.30
21.10	0.03223	22.24	0.00	5.60	2.94	0.00	1.39	0.19	0.00	2.87	0.12	0.00	0.00	0.00	0.11	2.30
21.00	0.03300	22.25	0.00	5.61	2.94	0.00	1.40	0.19	0.00	2.89	0.12	0.00	0.00	0.00	0.11	2.30
20.90	0.03377	22.26	0.00	5.62	2.95	0.00	1.40	0.19	0.00	2.90	0.12	0.00	0.00	0.00	0.11	2.31
20.80	0.03453	22.28	0.00	5.63	2.95	0.00	1.40	0.19	0.00	2.92	0.12	0.00	0.00	0.00	0.11	2.31
20.70	0.03530	22.30	0.00	5.64	2.95	0.00	1.40	0.19	0.00	2.93	0.12	0.00	0.00	0.00	0.11	2.31
20.60	0.03607	22.31	0.00	5.65	2.95	0.00	1.40	0.19	0.00	2.95	0.12	0.00	0.00	0.00	0.11	2.31
20.50	0.03683	22.33	0.00	5.66	2.95	0.00	1.40	0.19	0.00	2.96	0.12	0.00	0.00	0.00	0.11	2.32
20.40	0.03760	22.34	0.00	5.67	2.95	0.00	1.40	0.19	0.00	2.98	0.12	0.00	0.00	0.00	0.11	2.32
20.30	0.03837	22.35	0.00	5.68	2.95	0.00	1.40	0.19	0.00	3.00	0.12	0.00	0.00	0.00	0.11	2.32
20.20	0.03913	22.37	0.00	5.69	2.95	0.00	1.41	0.19	0.00	3.01	0.12	0.00	0.00	0.00	0.11	2.32
20.10	0.03990	22.39	0.00	5.70	2.95	0.00	1.41	0.19	0.00	3.03	0.12	0.00	0.00	0.00	0.11	2.32
20.00	0.04067	22.40	0.00	5.71	2.95	0.00	1.41	0.19	0.00	3.04	0.12	0.00	0.00	0.00	0.11	2.33
19.90	0.04143	22.42	0.00	5.72	2.95	0.00	1.41	0.19	0.00	3.06	0.12	0.00	0.00	0.00	0.11	2.33
19.80	0.04220	22.43	0.00	5.73	2.95	0.00	1.41	0.19	0.00	3.08	0.12	0.00	0.00	0.00	0.11	2.33
19.70	0.04297	22.44	0.00	5.74	2.95	0.00	1.41	0.19	0.00	3.09	0.12	0.00	0.00	0.00	0.11	2.33
19.60	0.04373	22.46	0.00	5.75	2.95	0.00	1.41	0.19	0.00	3.11	0.12	0.00	0.00	0.00	0.11	2.34
19.50	0.04450	22.48	0.00	5.76	2.95	0.00	1.41	0.19	0.00	3.12	0.12	0.00	0.00	0.00	0.11	2.34
19.40	0.04527	22.49	0.00	5.76	2.95	0.00	1.41	0.19	0.00	3.14	0.12	0.00	0.00	0.00	0.11	2.34
19.30	0.04603	22.51	0.00	5.77	2.95	0.00	1.41	0.19	0.00	3.16	0.12	0.00	0.00	0.00	0.11	2.34
19.20	0.04680	22.52	0.00	5.78	2.95	0.00	1.41	0.19	0.00	3.17	0.12	0.00	0.00	0.00	0.11	2.34
19.10	0.04757	22.53	0.00	5.79	2.95	0.00	1.41	0.19	0.00	3.19	0.12	0.00	0.00	0.00	0.11	2.35
19.00	0.04833	22.55	0.00	5.80	2.95	0.00	1.42	0.19	0.00	3.20	0.12	0.00	0.00	0.00	0.11	2.35
18.90	0.04910	22.57	0.00	5.81	2.95	0.00	1.42	0.19	0.00	3.22	0.12	0.00	0.00	0.00	0.11	2.35
18.80	0.04987	22.58	0.00	5.82	2.95	0.00	1.42	0.19	0.00	3.24	0.12	0.00	0.00	0.00	0.11	2.35
18.70	0.05063	22.60	0.00	5.82	2.95	0.00	1.42	0.19	0.00	3.25	0.12	0.00	0.00	0.00	0.11	2.36
18.60	0.05140	22.61	0.00	5.83	2.95	0.00	1.42	0.19	0.00	3.27	0.12	0.00	0.00	0.00	0.11	2.36
18.50	0.05217	22.62	0.00	5.84	2.95	0.00	1.42	0.19	0.00	3.28	0.12	0.00	0.00	0.00	0.11	2.36
18.40	0.05293	22.64	0.00	5.85	2.95	0.00	1.42	0.19	0.00	3.30	0.12	0.00	0.00	0.00	0.11	2.36
18.30	0.05370	22.66	0.00	5.86	2.95	0.00	1.42	0.19	0.00	3.32	0.12	0.00	0.00	0.00	0.11	2.36
18.20	0.05447	22.67	0.00	5.86	2.95	0.00	1.42	0.19	0.00	3.33	0.12	0.00	0.00	0.00	0.11	2.37
18.10	0.05523	22.69	0.00	5.87	2.95	0.00	1.42	0.19	0.00	3.35	0.12	0.00	0.00	0.00	0.11	2.37
18.00	0.05600	22.70	0.00	5.88	2.95	0.00	1.42	0.19	0.00	3.37	0.12	0.00	0.00	0.00	0.11	2.37
17.90	0.05677	22.71	0.00	5.82	2.94	0.00	1.42	0.19	0.00	2.18	0.12	0.00	0.00	0.00	0.11	2.37
17.80	0.05753	22.73	0.00	5.77	2.94	0.00	1.42	0.19	0.00	2.18	0.12	0.00	0.00	0.00	0.11	2.37

17.70	0.05830	22.74	0.00	5.73	2.93	0.00	1.42	0.19	0.00	2.19	0.12	0.00	0.00	0.00	0.11	2.38
17.60	0.05907	22.75	0.00	5.70	2.92	0.00	1.42	0.19	0.00	2.20	0.12	0.00	0.00	0.00	0.11	2.38
17.50	0.05983	22.77	0.00	5.67	2.91	0.00	1.43	0.19	0.00	2.20	0.12	0.00	0.00	0.00	0.11	2.38
17.40	0.06060	22.78	0.00	5.65	2.91	0.00	1.43	0.19	0.00	2.21	0.12	0.00	0.00	0.00	0.11	2.38
17.30	0.06137	22.79	0.00	5.63	2.90	0.00	1.43	0.19	0.00	2.22	0.13	0.00	0.00	0.00	0.11	2.38
17.20	0.06213	22.81	0.00	5.62	2.89	0.00	1.43	0.19	0.00	2.22	0.13	0.00	0.00	0.00	0.11	2.39
17.10	0.06290	22.82	0.00	5.61	2.89	0.00	1.43	0.19	0.00	2.23	0.13	0.00	0.00	0.00	0.11	2.39
17.00	0.06367	22.83	0.00	5.61	2.88	0.00	1.43	0.19	0.00	2.24	0.13	0.00	0.00	0.00	0.11	2.39
16.90	0.06443	22.85	0.00	5.60	2.88	0.00	1.43	0.19	0.00	2.24	0.13	0.00	0.00	0.00	0.11	2.39
16.80	0.06520	22.86	0.00	5.60	2.87	0.00	1.43	0.19	0.00	2.25	0.13	0.00	0.00	0.00	0.11	2.39
16.70	0.06597	22.87	0.00	5.60	2.86	0.00	1.43	0.19	0.00	2.26	0.13	0.00	0.00	0.00	0.11	2.40
16.60	0.06673	22.89	0.00	5.60	2.86	0.00	1.43	0.19	0.00	2.26	0.13	0.00	0.00	0.00	0.11	2.40
16.50	0.06750	22.90	0.00	5.60	2.85	0.00	1.43	0.19	0.00	2.27	0.13	0.00	0.00	0.00	0.11	2.40
16.40	0.06827	22.91	0.00	5.60	2.85	0.00	1.43	0.19	0.00	2.28	0.13	0.00	0.00	0.00	0.11	2.40
16.30	0.06903	22.93	0.00	5.60	2.84	0.00	1.43	0.20	0.00	2.29	0.13	0.00	0.00	0.00	0.11	2.40
16.20	0.06980	22.94	0.00	5.60	2.84	0.00	1.43	0.20	0.00	2.29	0.13	0.00	0.00	0.00	0.11	2.41
16.10	0.07057	22.95	0.00	5.60	2.83	0.00	1.43	0.20	0.00	2.30	0.13	0.00	0.00	0.00	0.11	2.41
16.00	0.07133	22.97	0.00	5.60	2.83	0.00	1.44	0.20	0.00	2.31	0.13	0.00	0.00	0.00	0.11	2.41
15.90	0.10910	22.98	0.00	4.62	2.82	0.00	1.37	0.18	0.00	2.62	0.13	0.00	0.00	0.00	0.11	2.41
15.80	0.10987	22.99	0.00	4.77	2.81	0.00	1.37	0.18	0.00	2.63	0.13	0.00	0.00	0.00	0.11	2.41
15.70	0.11063	23.01	0.00	4.91	2.81	0.00	1.37	0.18	0.00	2.63	0.13	0.00	0.00	0.00	0.11	2.42
15.60	0.11140	23.02	0.00	5.03	2.81	0.00	1.37	0.18	0.00	2.64	0.13	0.00	0.00	0.00	0.11	2.42
15.50	0.11217	23.03	0.00	5.14	2.81	0.00	1.37	0.18	0.00	2.65	0.13	0.00	0.00	0.00	0.11	2.42
15.40	0.11293	23.05	0.00	5.23	2.80	0.00	1.37	0.18	0.00	2.65	0.13	0.00	0.00	0.00	0.11	2.42
15.30	0.11370	23.06	0.00	5.32	2.80	0.00	1.37	0.19	0.00	2.66	0.13	0.00	0.00	0.00	0.11	2.43
15.20	0.11447	23.07	0.00	5.39	2.80	0.00	1.38	0.19	0.00	2.67	0.13	0.00	0.00	0.00	0.11	2.43
15.10	0.11523	23.09	0.00	5.46	2.80	0.00	1.38	0.19	0.00	2.68	0.13	0.00	0.00	0.00	0.11	2.43
15.00	0.11600	23.10	0.00	5.51	2.79	0.00	1.38	0.19	0.00	2.68	0.13	0.00	0.00	0.00	0.11	2.43
14.90	0.11677	23.11	0.00	5.57	2.79	0.00	1.38	0.19	0.00	2.69	0.13	0.00	0.00	0.00	0.11	2.43
14.80	0.11753	23.13	0.00	5.61	2.79	0.00	1.38	0.19	0.00	2.70	0.13	0.00	0.00	0.00	0.11	2.44
14.70	0.11830	23.14	0.00	5.65	2.79	0.00	1.38	0.19	0.00	2.70	0.13	0.00	0.00	0.00	0.11	2.44
14.60	0.11907	23.15	0.00	5.69	2.78	0.00	1.38	0.19	0.00	2.71	0.13	0.00	0.00	0.00	0.12	2.44
14.50	0.11983	23.17	0.00	5.72	2.78	0.00	1.38	0.19	0.00	2.72	0.13	0.00	0.00	0.00	0.12	2.44
14.40	0.12060	23.18	0.00	5.75	2.78	0.00	1.38	0.19	0.00	2.73	0.13	0.00	0.00	0.00	0.12	2.44
14.30	0.12137	23.19	0.00	5.78	2.78	0.00	1.38	0.19	0.00	2.73	0.13	0.00	0.00	0.00	0.12	2.45
14.20	0.12213	23.21	0.00	5.80	2.78	0.00	1.38	0.19	0.00	2.74	0.13	0.00	0.00	0.00	0.12	2.45
14.10	0.12290	23.22	0.00	5.82	2.77	0.00	1.38	0.19	0.00	2.75	0.13	0.00	0.00	0.00	0.12	2.45
14.00	0.12367	23.23	0.00	5.84	2.77	0.00	1.38	0.19	0.00	2.75	0.13	0.00	0.00	0.00	0.12	2.45
13.90	0.12443	23.25	0.00	5.86	2.77	0.00	1.39	0.19	0.00	2.76	0.13	0.00	0.00	0.00	0.12	2.45
13.80	0.12520	23.26	0.00	5.88	2.77	0.00	1.39	0.19	0.00	2.77	0.13	0.00	0.00	0.00	0.12	2.46
13.70	0.12597	23.27	0.00	5.89	2.76	0.00	1.39	0.19	0.00	2.78	0.13	0.00	0.00	0.00	0.12	2.46
13.60	0.12673	23.29	0.00	5.90	2.76	0.00	1.39	0.19	0.00	2.78	0.13	0.00	0.00	0.00	0.12	2.46
13.50	0.12750	23.30	0.00	5.92	2.76	0.00	1.39	0.19	0.00	2.79	0.13	0.00	0.00	0.00	0.12	2.46
13.40	0.12827	23.31	0.00	5.93	2.76	0.00	1.39	0.19	0.00	2.80	0.13	0.00	0.00	0.00	0.12	2.46
13.30	0.12903	23.33	0.00	5.94	2.76	0.00	1.39	0.19	0.00	2.80	0.13	0.00	0.00	0.00	0.12	2.47
13.20	0.12980	23.34	0.00	5.94	2.76	0.00	1.39	0.19	0.00	2.81	0.13	0.00	0.00	0.00	0.12	2.47
13.10	0.13057	23.35	0.00	5.95	2.75	0.00	1.39	0.19	0.00	2.82	0.13	0.00	0.00	0.00	0.12	2.47
13.00	0.13133	23.37	0.00	5.96	2.75	0.00	1.39	0.19	0.00	2.82	0.13	0.00	0.00	0.00	0.12	2.47
12.90	0.13210	23.38	0.00	5.97	2.75	0.00	1.39	0.19	0.00	2.83	0.13	0.00	0.00	0.00	0.12	2.47
12.80	0.13287	23.39	0.00	5.97	2.75	0.00	1.39	0.19	0.00	2.84	0.13	0.00	0.00	0.00	0.12	2.48
12.70	0.13363	23.41	0.00	5.98	2.75	0.00	1.39	0.19	0.00	2.85	0.13	0.00	0.00	0.00	0.12	2.48
12.60	0.13440	23.42	0.00	5.98	2.74	0.00	1.39	0.19	0.00	2.85	0.13	0.00	0.00	0.00	0.12	2.48

12.50	0.13517	23.43	0.00	5.99	2.74	0.00	1.39	0.19	0.00	2.86	0.13	0.00	0.00	0.00	0.12	2.48
12.40	0.13593	23.45	0.00	5.99	2.74	0.00	1.39	0.19	0.00	2.87	0.13	0.00	0.00	0.00	0.12	2.48
12.30	0.13670	23.46	0.00	6.00	2.74	0.00	1.39	0.19	0.00	2.87	0.13	0.00	0.00	0.00	0.12	2.49
12.20	0.13747	23.47	0.00	6.00	2.74	0.00	1.40	0.19	0.00	2.88	0.13	0.00	0.00	0.00	0.12	2.49
12.10	0.13823	23.49	0.00	6.01	2.74	0.00	1.40	0.19	0.00	2.89	0.13	0.00	0.00	0.00	0.12	2.49
12.00	0.13900	23.50	0.00	6.01	2.73	0.00	1.40	0.19	0.00	2.90	0.13	0.00	0.00	0.00	0.12	2.49
11.90	0.13977	23.51	0.00	5.97	2.73	0.00	1.40	0.19	0.00	2.04	0.13	0.00	0.00	0.00	0.12	2.50
11.80	0.14053	23.53	0.00	5.94	2.72	0.00	1.40	0.19	0.00	2.04	0.13	0.00	0.00	0.00	0.12	2.50
11.70	0.14130	23.55	0.00	5.91	2.72	0.00	1.40	0.19	0.00	2.05	0.13	0.00	0.00	0.00	0.12	2.50
11.60	0.14207	23.56	0.00	5.88	2.71	0.00	1.40	0.19	0.00	2.05	0.13	0.00	0.00	0.00	0.12	2.50
11.50	0.14283	23.58	0.00	5.86	2.70	0.00	1.40	0.19	0.00	2.06	0.13	0.00	0.00	0.00	0.12	2.50
11.40	0.14360	23.59	0.00	5.84	2.70	0.00	1.40	0.19	0.00	2.06	0.13	0.00	0.00	0.00	0.12	2.51
11.30	0.14437	23.60	0.00	5.82	2.69	0.00	1.40	0.19	0.00	2.06	0.13	0.00	0.00	0.00	0.12	2.51
11.20	0.14513	23.62	0.00	5.81	2.69	0.00	1.40	0.19	0.00	2.07	0.13	0.00	0.00	0.00	0.12	2.51
11.10	0.14590	23.64	0.00	5.79	2.68	0.00	1.40	0.19	0.00	2.07	0.13	0.00	0.00	0.00	0.12	2.51
11.00	0.14667	23.65	0.00	5.78	2.68	0.00	1.40	0.19	0.00	2.08	0.13	0.00	0.00	0.00	0.12	2.52
10.90	0.14743	23.66	0.00	5.77	2.67	0.00	1.40	0.19	0.00	2.08	0.13	0.00	0.00	0.00	0.12	2.52
10.80	0.14820	23.68	0.00	5.76	2.67	0.00	1.40	0.19	0.00	2.08	0.13	0.00	0.00	0.00	0.12	2.52
10.70	0.14897	23.69	0.00	5.75	2.66	0.00	1.40	0.19	0.00	2.09	0.13	0.00	0.00	0.00	0.12	2.52
10.60	0.14973	23.71	0.00	5.74	2.66	0.00	1.40	0.19	0.00	2.09	0.13	0.00	0.00	0.00	0.12	2.53
10.50	0.15050	23.73	0.00	5.73	2.65	0.00	1.40	0.19	0.00	2.10	0.13	0.00	0.00	0.00	0.12	2.53
10.40	0.15127	23.74	0.00	5.73	2.65	0.00	1.41	0.19	0.00	2.10	0.13	0.00	0.00	0.00	0.12	2.53
10.30	0.15203	23.75	0.00	5.72	2.64	0.00	1.41	0.19	0.00	2.10	0.13	0.00	0.00	0.00	0.12	2.53
10.20	0.15280	23.77	0.00	5.72	2.64	0.00	1.41	0.19	0.00	2.11	0.13	0.00	0.00	0.00	0.12	2.54
10.10	0.15357	23.78	0.00	5.71	2.63	0.00	1.41	0.19	0.00	2.11	0.13	0.00	0.00	0.00	0.12	2.54
10.00	0.15433	23.80	0.00	5.71	2.63	0.00	1.41	0.19	0.00	2.12	0.13	0.00	0.00	0.00	0.12	2.54
9.90	0.15510	23.82	0.00	5.71	2.63	0.00	1.41	0.19	0.00	2.12	0.13	0.00	0.00	0.00	0.12	2.54
9.80	0.15587	23.83	0.00	5.70	2.62	0.00	1.41	0.19	0.00	2.12	0.13	0.00	0.00	0.00	0.12	2.55
9.70	0.15663	23.84	0.00	5.70	2.62	0.00	1.41	0.19	0.00	2.13	0.13	0.00	0.00	0.00	0.12	2.55
9.60	0.15740	23.86	0.00	5.70	2.61	0.00	1.41	0.20	0.00	2.13	0.13	0.00	0.00	0.00	0.12	2.55
9.50	0.15817	23.88	0.00	5.70	2.61	0.00	1.41	0.20	0.00	2.14	0.13	0.00	0.00	0.00	0.12	2.55
9.40	0.15893	23.89	0.00	5.70	2.60	0.00	1.41	0.20	0.00	2.14	0.13	0.00	0.00	0.00	0.12	2.56
9.30	0.15970	23.91	0.00	5.70	2.60	0.00	1.41	0.20	0.00	2.14	0.13	0.00	0.00	0.00	0.12	2.56
9.20	0.16047	23.92	0.00	5.69	2.60	0.00	1.41	0.20	0.00	2.15	0.13	0.00	0.00	0.00	0.12	2.56
9.10	0.16173	23.93	0.00	5.69	2.80	0.00	1.42	0.23	0.00	2.15	0.13	0.00	0.00	0.00	0.12	2.56
9.00	0.16250	23.95	0.00	5.69	2.79	0.00	1.42	0.23	0.00	2.16	0.13	0.00	0.00	0.00	0.12	2.56
8.90	0.16327	23.97	0.00	5.69	2.78	0.00	1.42	0.23	0.00	2.16	0.13	0.00	0.00	0.00	0.12	2.57
8.80	0.16403	23.98	0.00	5.68	2.78	0.00	1.42	0.23	0.00	2.17	0.13	0.00	0.00	0.00	0.12	2.57
8.70	0.16480	23.99	0.00	5.68	2.77	0.00	1.42	0.23	0.00	2.17	0.13	0.00	0.00	0.00	0.12	2.57
8.60	0.16557	24.01	0.00	5.68	2.77	0.00	1.42	0.23	0.00	2.17	0.13	0.00	0.00	0.00	0.12	2.57
8.50	0.16633	24.02	0.00	5.68	2.76	0.00	1.42	0.23	0.00	2.18	0.13	0.00	0.00	0.00	0.12	2.58
8.40	0.16710	24.04	0.00	5.68	2.75	0.00	1.42	0.23	0.00	2.18	0.13	0.00	0.00	0.00	0.12	2.58
8.30	0.16787	24.06	0.00	5.68	2.75	0.00	1.42	0.22	0.00	2.19	0.13	0.00	0.00	0.00	0.12	2.58
8.20	0.16863	24.07	0.00	5.68	2.74	0.00	1.43	0.22	0.00	2.19	0.13	0.00	0.00	0.00	0.12	2.58
8.10	0.16940	24.08	0.00	5.68	2.74	0.00	1.43	0.22	0.00	2.19	0.13	0.00	0.00	0.00	0.12	2.59
8.00	0.17017	24.10	0.00	5.68	2.73	0.00	1.43	0.22	0.00	2.20	0.13	0.00	0.00	0.00	0.12	2.59
7.90	0.17093	24.11	0.00	5.68	2.73	0.00	1.43	0.22	0.00	2.20	0.13	0.00	0.00	0.00	0.12	2.59
7.80	0.17170	24.13	0.00	5.68	2.72	0.00	1.43	0.22	0.00	2.21	0.13	0.00	0.00	0.00	0.12	2.59
7.70	0.17247	24.15	0.00	5.68	2.72	0.00	1.43	0.22	0.00	2.21	0.13	0.00	0.00	0.00	0.12	2.60
7.60	0.17323	24.16	0.00	5.68	2.71	0.00	1.43	0.22	0.00	2.21	0.13	0.00	0.00	0.00	0.12	2.60
7.50	0.17400	24.17	0.00	5.68	2.71	0.00	1.43	0.22	0.00	2.22	0.13	0.00	0.00	0.00	0.12	2.60
7.40	0.17477	24.19	0.00	5.68	2.70	0.00	1.43	0.22	0.00	2.22	0.13	0.00	0.00	0.00	0.12	2.60

7.30	0.17553	24.20	0.00	5.68	2.70	0.00	1.43	0.22	0.00	2.23	0.13	0.00	0.00	0.00	0.12	2.61
7.20	0.17630	24.22	0.00	5.68	2.69	0.00	1.43	0.22	0.00	2.23	0.13	0.00	0.00	0.00	0.13	2.61
7.10	0.17707	24.24	0.00	5.68	2.69	0.00	1.43	0.22	0.00	2.24	0.13	0.00	0.00	0.00	0.13	2.61
7.00	0.17783	24.25	0.00	5.68	2.68	0.00	1.43	0.22	0.00	2.24	0.13	0.00	0.00	0.00	0.13	2.61
6.90	0.17860	24.26	0.00	5.68	2.68	0.00	1.43	0.22	0.00	2.24	0.13	0.00	0.00	0.00	0.13	2.62
6.80	0.17937	24.28	0.00	5.68	2.67	0.00	1.43	0.22	0.00	2.25	0.13	0.00	0.00	0.00	0.13	2.62
6.70	0.18013	24.30	0.00	5.68	2.67	0.00	1.43	0.22	0.00	2.25	0.13	0.00	0.00	0.00	0.13	2.62
6.60	0.18090	24.31	0.00	5.68	2.66	0.00	1.43	0.22	0.00	2.26	0.13	0.00	0.00	0.00	0.13	2.62
6.50	0.18167	24.32	0.00	5.68	2.66	0.00	1.43	0.22	0.00	2.26	0.13	0.00	0.00	0.00	0.13	2.63
6.40	0.18243	24.34	0.00	5.68	2.65	0.00	1.43	0.22	0.00	2.26	0.13	0.00	0.00	0.00	0.13	2.63
6.30	0.18320	24.35	0.00	5.68	2.65	0.00	1.43	0.22	0.00	2.27	0.13	0.00	0.00	0.00	0.13	2.63
6.20	0.18397	24.37	0.00	5.68	2.64	0.00	1.43	0.22	0.00	2.27	0.13	0.00	0.00	0.00	0.13	2.63
6.10	0.18473	24.39	0.00	5.68	2.64	0.00	1.43	0.22	0.00	2.28	0.13	0.00	0.00	0.00	0.13	2.64
6.00	0.18550	24.40	0.00	5.68	2.64	0.00	1.43	0.22	0.00	2.28	0.13	0.00	0.00	0.00	0.13	2.64
5.90	0.18627	24.40	0.00	5.65	2.63	0.00	1.43	0.22	0.00	1.76	0.13	0.00	0.00	0.00	0.13	2.64
5.80	0.18703	24.40	0.00	5.62	2.62	0.00	1.43	0.22	0.00	1.76	0.13	0.00	0.00	0.00	0.13	2.64
5.70	0.18780	24.40	0.00	5.60	2.62	0.00	1.43	0.22	0.00	1.76	0.13	0.00	0.00	0.00	0.13	2.64
5.60	0.18857	24.40	0.00	5.58	2.61	0.00	1.43	0.22	0.00	1.77	0.13	0.00	0.00	0.00	0.13	2.64
5.50	0.18933	24.40	0.00	5.56	2.61	0.00	1.43	0.22	0.00	1.77	0.13	0.00	0.00	0.00	0.13	2.64
5.40	0.19010	24.40	0.00	5.54	2.60	0.00	1.43	0.22	0.00	1.77	0.13	0.00	0.00	0.00	0.13	2.64
5.30	0.19087	24.40	0.00	5.53	2.59	0.00	1.43	0.22	0.00	1.77	0.13	0.00	0.00	0.00	0.13	2.64
5.20	0.19163	24.40	0.00	5.52	2.59	0.00	1.43	0.22	0.00	1.77	0.13	0.00	0.00	0.00	0.13	2.64
5.10	0.19240	24.40	0.00	5.51	2.58	0.00	1.43	0.22	0.00	1.78	0.13	0.00	0.00	0.00	0.13	2.64
5.00	0.19317	24.40	0.00	5.50	2.58	0.00	1.43	0.22	0.00	1.78	0.13	0.00	0.00	0.00	0.13	2.64
4.90	0.19393	24.40	0.00	5.49	2.57	0.00	1.43	0.22	0.00	1.78	0.13	0.00	0.00	0.00	0.13	2.64
4.80	0.19470	24.40	0.00	5.48	2.57	0.00	1.43	0.22	0.00	1.78	0.13	0.00	0.00	0.00	0.13	2.64
4.70	0.19547	24.40	0.00	5.48	2.56	0.00	1.43	0.22	0.00	1.78	0.13	0.00	0.00	0.00	0.13	2.64
4.60	0.19623	24.40	0.00	5.47	2.56	0.00	1.43	0.22	0.00	1.79	0.13	0.00	0.00	0.00	0.13	2.64
4.50	0.19700	24.40	0.00	5.47	2.55	0.00	1.43	0.22	0.00	1.79	0.13	0.00	0.00	0.00	0.13	2.64
4.40	0.19777	24.40	0.00	5.46	2.55	0.00	1.43	0.22	0.00	1.79	0.13	0.00	0.00	0.00	0.13	2.64
4.30	0.19853	24.40	0.00	5.46	2.54	0.00	1.44	0.22	0.00	1.79	0.13	0.00	0.00	0.00	0.13	2.64
4.20	0.19930	24.40	0.00	5.46	2.54	0.00	1.44	0.22	0.00	1.80	0.13	0.00	0.00	0.00	0.13	2.64
4.10	0.20007	24.40	0.00	5.46	2.53	0.00	1.44	0.22	0.00	1.80	0.13	0.00	0.00	0.00	0.13	2.64
4.00	0.20083	24.40	0.00	5.46	2.53	0.00	1.44	0.22	0.00	1.80	0.13	0.00	0.00	0.00	0.13	2.64
3.90	0.20160	24.40	0.00	5.46	2.52	0.00	1.44	0.22	0.00	1.80	0.13	0.00	0.00	0.00	0.13	2.64
3.80	0.20237	24.40	0.00	5.46	2.52	0.00	1.44	0.22	0.00	1.80	0.13	0.00	0.00	0.00	0.13	2.64
3.70	0.20313	24.40	0.00	5.46	2.52	0.00	1.44	0.22	0.00	1.81	0.13	0.00	0.00	0.00	0.13	2.64
3.60	0.20390	24.40	0.00	5.46	2.51	0.00	1.44	0.22	0.00	1.81	0.13	0.00	0.00	0.00	0.13	2.64
3.50	0.20467	24.40	0.00	5.46	2.51	0.00	1.44	0.22	0.00	1.81	0.13	0.00	0.00	0.00	0.13	2.64
3.40	0.20543	24.40	0.00	5.46	2.50	0.00	1.44	0.22	0.00	1.81	0.13	0.00	0.00	0.00	0.13	2.64
3.30	0.20620	24.40	0.00	5.46	2.50	0.00	1.44	0.22	0.00	1.81	0.13	0.00	0.00	0.00	0.13	2.64
3.20	0.20697	24.40	0.00	5.46	2.49	0.00	1.44	0.22	0.00	1.82	0.13	0.00	0.00	0.00	0.13	2.64
3.10	0.20773	24.40	0.00	5.46	2.49	0.00	1.44	0.22	0.00	1.82	0.13	0.00	0.00	0.00	0.13	2.64
3.00	0.20850	24.40	0.00	5.47	2.49	0.00	1.44	0.22	0.00	1.82	0.13	0.00	0.00	0.00	0.13	2.64
2.90	0.20927	24.40	0.00	5.47	2.48	0.00	1.44	0.22	0.00	1.82	0.13	0.00	0.00	0.00	0.13	2.64
2.80	0.21003	24.40	0.00	5.47	2.48	0.00	1.44	0.22	0.00	1.82	0.13	0.00	0.00	0.00	0.13	2.64
2.70	0.21080	24.40	0.00	5.47	2.47	0.00	1.44	0.22	0.00	1.83	0.13	0.00	0.00	0.00	0.13	2.64
2.60	0.21157	24.40	0.00	5.47	2.47	0.00	1.44	0.22	0.00	1.83	0.13	0.00	0.00	0.00	0.13	2.64
2.50	0.21233	24.40	0.00	5.48	2.47	0.00	1.44	0.22	0.00	1.83	0.13	0.00	0.00	0.00	0.13	2.64
2.40	0.21310	24.40	0.00	5.48	2.46	0.00	1.44	0.22	0.00	1.83	0.13	0.00	0.00	0.00	0.13	2.64
2.30	0.21387	24.40	0.00	5.48	2.46	0.00	1.44	0.22	0.00	1.84	0.13	0.00	0.00	0.00	0.13	2.64
2.20	0.21463	24.40	0.00	5.48	2.46	0.00	1.44	0.22	0.00	1.84	0.13	0.00	0.00	0.00	0.13	2.64

2.10	0.21540	24.40	0.00	5.49	2.45	0.00	1.44	0.22	0.00	1.84	0.13	0.00	0.00	0.00	0.13	2.64
2.00	0.21617	24.40	0.00	5.49	2.45	0.00	1.44	0.22	0.00	1.84	0.13	0.00	0.00	0.00	0.13	2.64
1.90	0.21693	24.40	0.00	5.49	2.45	0.00	1.44	0.22	0.00	1.84	0.13	0.00	0.00	0.00	0.13	2.64
1.80	0.21770	24.40	0.00	5.50	2.44	0.00	1.44	0.22	0.00	1.85	0.13	0.00	0.00	0.00	0.13	2.64
1.70	0.21847	24.40	0.00	5.50	2.44	0.00	1.44	0.22	0.00	1.85	0.13	0.00	0.00	0.00	0.13	2.64
1.60	0.21923	24.40	0.00	5.50	2.44	0.00	1.44	0.22	0.00	1.85	0.13	0.00	0.00	0.00	0.13	2.64
1.50	0.22000	24.40	0.00	5.51	2.43	0.00	1.44	0.22	0.00	1.85	0.13	0.00	0.00	0.00	0.13	2.64
1.40	0.22077	24.40	0.00	5.51	2.43	0.00	1.44	0.22	0.00	1.85	0.13	0.00	0.00	0.00	0.13	2.64
1.30	0.22153	24.40	0.00	5.51	2.43	0.00	1.44	0.22	0.00	1.86	0.13	0.00	0.00	0.00	0.13	2.64
1.20	0.22230	24.40	0.00	5.51	2.42	0.00	1.44	0.22	0.00	1.86	0.13	0.00	0.00	0.00	0.13	2.64
1.10	0.22307	24.40	0.00	5.52	2.42	0.00	1.44	0.22	0.00	1.86	0.13	0.00	0.00	0.00	0.13	2.64
1.00	0.22383	24.40	0.00	5.52	2.42	0.00	1.44	0.22	0.00	1.86	0.13	0.00	0.00	0.00	0.13	2.64
0.90	0.22460	24.40	0.00	5.52	2.41	0.00	1.44	0.22	0.00	1.87	0.13	0.00	0.00	0.00	0.13	2.64
0.80	0.22537	24.40	0.00	5.53	2.41	0.00	1.44	0.22	0.00	1.87	0.13	0.00	0.00	0.00	0.13	2.64
0.70	0.22613	24.40	0.00	5.53	2.41	0.00	1.44	0.22	0.00	1.87	0.13	0.00	0.00	0.00	0.13	2.64
0.60	0.22690	24.40	0.00	5.53	2.41	0.00	1.44	0.22	0.00	1.87	0.13	0.00	0.00	0.00	0.13	2.64
0.50	0.22767	24.40	0.00	5.54	2.40	0.00	1.44	0.22	0.00	1.87	0.13	0.00	0.00	0.00	0.13	2.64
0.40	0.22843	24.40	0.00	5.54	2.40	0.00	1.44	0.22	0.00	1.88	0.13	0.00	0.00	0.00	0.13	2.64
0.30	0.22920	24.40	0.00	5.54	2.40	0.00	1.44	0.22	0.00	1.88	0.13	0.00	0.00	0.00	0.13	2.64
0.20	0.22997	24.40	0.00	5.55	2.40	0.00	1.44	0.22	0.00	1.88	0.13	0.00	0.00	0.00	0.13	2.64
0.10	0.23073	24.40	0.00	5.55	2.39	0.00	1.44	0.22	0.00	1.88	0.13	0.00	0.00	0.00	0.13	2.64
0.00	0.23150	24.40	0.00	5.55	2.39	0.00	1.44	0.22	0.00	1.88	0.13	0.00	0.00	0.00	0.13	2.64

EXPANDED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

IOR	REACH		DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3 mg/L	CHLA µg/L	DISP m²/s	DEPTH m	WIDTH m	ADVEC VELO m/s	MEAN VELO m/s	DO SAT mg/L	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
			HDWTR	0.010	21.8	0.0	2.2	2.8	0.0	1.2	0.2	0.0													
1	B1	1	23.90	0.011	21.8	0.0	3.5	2.8	0.0	1.3	0.2	0.0	0.0	0.31	7.9	0.004	0.004	8.8	2.429	0.12	0.00	0.00	0.00	0.09	2.24
2	B1	1	23.80	0.012	21.8	0.0	4.3	2.8	0.0	1.3	0.2	0.0	0.0	0.31	7.9	0.005	0.005	8.8	2.444	0.12	0.00	0.00	0.00	0.10	2.24
3	B1	1	23.70	0.012	21.8	0.0	4.7	2.8	0.0	1.3	0.2	0.0	0.0	0.31	7.9	0.005	0.005	8.8	2.460	0.12	0.00	0.00	0.00	0.10	2.25
4	B1	1	23.60	0.013	21.9	0.0	4.9	2.9	0.0	1.3	0.2	0.0	0.0	0.31	7.9	0.005	0.005	8.8	2.476	0.12	0.00	0.00	0.00	0.10	2.25
5	B1	1	23.50	0.014	21.9	0.0	5.1	2.9	0.0	1.3	0.2	0.0	0.0	0.31	7.9	0.006	0.006	8.8	2.491	0.12	0.00	0.00	0.00	0.10	2.25
6	B1	1	23.40	0.015	21.9	0.0	5.2	2.9	0.0	1.3	0.2	0.0	0.0	0.31	7.9	0.006	0.006	8.8	2.507	0.12	0.00	0.00	0.00	0.10	2.25
7	B1	1	23.30	0.015	21.9	0.0	5.3	2.9	0.0	1.3	0.2	0.0	0.0	0.31	7.9	0.006	0.006	8.8	2.523	0.12	0.00	0.00	0.00	0.10	2.25
8	B1	1	23.20	0.016	21.9	0.0	5.3	2.9	0.0	1.3	0.2	0.0	0.0	0.31	7.9	0.007	0.007	8.8	2.538	0.12	0.00	0.00	0.00	0.10	2.26
9	B1	1	23.10	0.017	21.9	0.0	5.3	2.9	0.0	1.3	0.2	0.0	0.0	0.31	7.9	0.007	0.007	8.8	2.554	0.12	0.00	0.00	0.00	0.10	2.26
10	B1	1	23.00	0.018	21.9	0.0	5.4	2.9	0.0	1.3	0.2	0.0	0.0	0.31	7.9	0.007	0.007	8.8	2.570	0.12	0.00	0.00	0.00	0.10	2.26
11	B1	1	22.90	0.018	22.0	0.0	5.4	2.9	0.0	1.3	0.2	0.0	0.0	0.31	7.9	0.008	0.008	8.7	2.585	0.12	0.00	0.00	0.00	0.10	2.26
12	B1	1	22.80	0.019	22.0	0.0	5.4	2.9	0.0	1.3	0.2	0.0	0.0	0.31	7.9	0.008	0.008	8.7	2.601	0.12	0.00	0.00	0.00	0.10	2.27
13	B1	1	22.70	0.020	22.0	0.0	5.4	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.008	0.008	8.7	2.617	0.12	0.00	0.00	0.00	0.10	2.27
14	B1	1	22.60	0.021	22.0	0.0	5.4	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.008	0.008	8.7	2.633	0.12	0.00	0.00	0.00	0.10	2.27
15	B1	1	22.50	0.021	22.0	0.0	5.4	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.009	0.009	8.7	2.648	0.12	0.00	0.00	0.00	0.10	2.27
16	B1	1	22.40	0.022	22.0	0.0	5.5	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.009	0.009	8.7	2.664	0.12	0.00	0.00	0.00	0.10	2.27
17	B1	1	22.30	0.023	22.1	0.0	5.5	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.009	0.009	8.7	2.680	0.12	0.00	0.00	0.00	0.10	2.28
18	B1	1	22.20	0.024	22.1	0.0	5.5	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.010	0.010	8.7	2.696	0.12	0.00	0.00	0.00	0.10	2.28
19	B1	1	22.10	0.025	22.1	0.0	5.5	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.010	0.010	8.7	2.711	0.12	0.00	0.00	0.00	0.10	2.28
20	B1	1	22.00	0.025	22.1	0.0	5.5	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.010	0.010	8.7	2.727	0.12	0.00	0.00	0.00	0.10	2.28
21	B1	1	21.90	0.026	22.1	0.0	5.5	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.011	0.011	8.7	2.743	0.12	0.00	0.00	0.00	0.10	2.28
22	B1	1	21.80	0.027	22.1	0.0	5.5	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.011	0.011	8.7	2.759	0.12	0.00	0.00	0.00	0.10	2.29
23	B1	1	21.70	0.028	22.1	0.0	5.5	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.011	0.011	8.7	2.774	0.12	0.00	0.00	0.00	0.10	2.29
24	B1	1	21.60	0.028	22.2	0.0	5.5	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.012	0.012	8.7	2.790	0.12	0.00	0.00	0.00	0.11	2.29
25	B1	1	21.50	0.029	22.2	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.012	0.012	8.7	2.806	0.12	0.00	0.00	0.00	0.11	2.29
26	B1	1	21.40	0.030	22.2	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.012	0.012	8.7	2.822	0.12	0.00	0.00	0.00	0.11	2.30
27	B1	1	21.30	0.031	22.2	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.013	0.013	8.7	2.838	0.12	0.00	0.00	0.00	0.11	2.30
28	B1	1	21.20	0.031	22.2	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.013	0.013	8.7	2.854	0.12	0.00	0.00	0.00	0.11	2.30
29	B1	1	21.10	0.032	22.2	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.013	0.013	8.7	2.870	0.12	0.00	0.00	0.00	0.11	2.30
30	B1	1	21.00	0.033	22.2	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.013	0.013	8.7	2.885	0.12	0.00	0.00	0.00	0.11	2.30
31	B1	1	20.90	0.034	22.3	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.014	0.014	8.7	2.901	0.12	0.00	0.00	0.00	0.11	2.31
32	B1	1	20.80	0.035	22.3	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.014	0.014	8.7	2.917	0.12	0.00	0.00	0.00	0.11	2.31
33	B1	1	20.70	0.035	22.3	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.014	0.014	8.7	2.933	0.12	0.00	0.00	0.00	0.11	2.31
34	B1	1	20.60	0.036	22.3	0.0	5.7	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.015	0.015	8.7	2.949	0.12	0.00	0.00	0.00	0.11	2.31
35	B1	1	20.50	0.037	22.3	0.0	5.7	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.015	0.015	8.7	2.965	0.12	0.00	0.00	0.00	0.11	2.32
36	B1	1	20.40	0.038	22.3	0.0	5.7	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.015	0.015	8.7	2.981	0.12	0.00	0.00	0.00	0.11	2.32
37	B1	1	20.30	0.038	22.4	0.0	5.7	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.016	0.016	8.7	2.997	0.12	0.00	0.00	0.00	0.11	2.32
38	B1	1	20.20	0.039	22.4	0.0	5.7	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.016	0.016	8.7	3.013	0.12	0.00	0.00	0.00	0.11	2.32
39	B1	1	20.10	0.040	22.4	0.0	5.7	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.016	0.016	8.7	3.029	0.12	0.00	0.00	0.00	0.11	2.32
40	B1	1	20.00	0.041	22.4	0.0	5.7	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.017	0.017	8.7	3.044	0.12	0.00	0.00	0.00	0.11	2.33
41	B1	1	19.90	0.041	22.4	0.0	5.7	2.9	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.017	0.017	8.7	3.061	0.12	0.00	0.00	0.00	0.11	2.33
42	B1	1	19.80	0.042	22.4	0.0	5.7	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.017	0.017	8.7	3.076	0.12	0.00	0.00	0.00	0.11	2.33
43	B1	1	19.70	0.043	22.4	0.0	5.7	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.018	0.018	8.7	3.092	0.12	0.00	0.00	0.00	0.11	2.33
44	B1	1	19.60	0.044	22.5	0.0	5.7	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.018	0.018	8.7	3.108	0.12	0.00	0.00	0.00	0.11	2.34
45	B1	1	19.50	0.045	22.5	0.0	5.8	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.018	0.018	8.7	3.124	0.12	0.00	0.00	0.00	0.11	2.34

46	B1	1	19.40	0.045	22.5	0.0	5.8	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.018	0.018	8.7	3.140	0.12	0.00	0.00	0.00	0.11	2.34
47	B1	1	19.30	0.046	22.5	0.0	5.8	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.019	0.019	8.7	3.156	0.12	0.00	0.00	0.00	0.11	2.34
48	B1	1	19.20	0.047	22.5	0.0	5.8	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.019	0.019	8.7	3.172	0.12	0.00	0.00	0.00	0.11	2.34
49	B1	1	19.10	0.048	22.5	0.0	5.8	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.019	0.019	8.7	3.188	0.12	0.00	0.00	0.00	0.11	2.35
50	B1	1	19.00	0.048	22.6	0.0	5.8	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.020	0.020	8.7	3.205	0.12	0.00	0.00	0.00	0.11	2.35
51	B1	1	18.90	0.049	22.6	0.0	5.8	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.020	0.020	8.6	3.221	0.12	0.00	0.00	0.00	0.11	2.35
52	B1	1	18.80	0.050	22.6	0.0	5.8	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.020	0.020	8.6	3.237	0.12	0.00	0.00	0.00	0.11	2.35
53	B1	1	18.70	0.051	22.6	0.0	5.8	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.021	0.021	8.6	3.253	0.12	0.00	0.00	0.00	0.11	2.36
54	B1	1	18.60	0.051	22.6	0.0	5.8	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.021	0.021	8.6	3.269	0.12	0.00	0.00	0.00	0.11	2.36
55	B1	1	18.50	0.052	22.6	0.0	5.8	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.021	0.021	8.6	3.285	0.12	0.00	0.00	0.00	0.11	2.36
56	B1	1	18.40	0.053	22.6	0.0	5.8	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.022	0.022	8.6	3.301	0.12	0.00	0.00	0.00	0.11	2.36
57	B1	1	18.30	0.054	22.7	0.0	5.9	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.022	0.022	8.6	3.317	0.12	0.00	0.00	0.00	0.11	2.36
58	B1	1	18.20	0.054	22.7	0.0	5.9	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.022	0.022	8.6	3.333	0.12	0.00	0.00	0.00	0.11	2.37
59	B1	1	18.10	0.055	22.7	0.0	5.9	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.022	0.022	8.6	3.349	0.12	0.00	0.00	0.00	0.11	2.37
60	B1	1	18.00	0.056	22.7	0.0	5.9	3.0	0.0	1.4	0.2	0.0	0.0	0.31	7.9	0.023	0.023	8.6	3.365	0.12	0.00	0.00	0.00	0.11	2.37
61	B2	2	17.90	0.057	22.7	0.0	5.8	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.013	0.013	8.6	2.175	0.12	0.00	0.00	0.00	0.11	2.37
62	B2	2	17.80	0.058	22.7	0.0	5.8	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.013	0.013	8.6	2.182	0.12	0.00	0.00	0.00	0.11	2.37
63	B2	2	17.70	0.058	22.7	0.0	5.7	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.013	0.013	8.6	2.189	0.12	0.00	0.00	0.00	0.11	2.38
64	B2	2	17.60	0.059	22.8	0.0	5.7	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.013	0.013	8.6	2.196	0.12	0.00	0.00	0.00	0.11	2.38
65	B2	2	17.50	0.060	22.8	0.0	5.7	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.013	0.013	8.6	2.203	0.12	0.00	0.00	0.00	0.11	2.38
66	B2	2	17.40	0.061	22.8	0.0	5.7	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.014	0.014	8.6	2.210	0.12	0.00	0.00	0.00	0.11	2.38
67	B2	2	17.30	0.061	22.8	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.014	0.014	8.6	2.216	0.13	0.00	0.00	0.00	0.11	2.38
68	B2	2	17.20	0.062	22.8	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.014	0.014	8.6	2.223	0.13	0.00	0.00	0.00	0.11	2.39
69	B2	2	17.10	0.063	22.8	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.014	0.014	8.6	2.230	0.13	0.00	0.00	0.00	0.11	2.39
70	B2	2	17.00	0.064	22.8	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.014	0.014	8.6	2.237	0.13	0.00	0.00	0.00	0.11	2.39
71	B2	2	16.90	0.064	22.8	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.014	0.014	8.6	2.244	0.13	0.00	0.00	0.00	0.11	2.39
72	B2	2	16.80	0.065	22.9	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.015	0.015	8.6	2.251	0.13	0.00	0.00	0.00	0.11	2.39
73	B2	2	16.70	0.066	22.9	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.015	0.015	8.6	2.258	0.13	0.00	0.00	0.00	0.11	2.40

EXPANDED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

IOR	REACH		DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3 mg/L	CHLA µg/L	DISP m²/s	DEPTH m	WIDTH m	ADVEC VELO m/s	MEAN VELO m/s	DO SAT mg/L	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
74	B2	2	16.60	0.067	22.9	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.015	0.015	8.6	2.265	0.13	0.00	0.00	0.00	0.11	2.40
75	B2	2	16.50	0.068	22.9	0.0	5.6	2.9	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.015	0.015	8.6	2.272	0.13	0.00	0.00	0.00	0.11	2.40
76	B2	2	16.40	0.068	22.9	0.0	5.6	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.015	0.015	8.6	2.279	0.13	0.00	0.00	0.00	0.11	2.40
77	B2	2	16.30	0.069	22.9	0.0	5.6	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.015	0.015	8.6	2.286	0.13	0.00	0.00	0.00	0.11	2.40
78	B2	2	16.20	0.070	22.9	0.0	5.6	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.016	0.016	8.6	2.292	0.13	0.00	0.00	0.00	0.11	2.41
79	B2	2	16.10	0.071	23.0	0.0	5.6	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.016	0.016	8.6	2.299	0.13	0.00	0.00	0.00	0.11	2.41
80	B2	2	16.00	0.071	23.0	0.0	5.6	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.016	0.016	8.6	2.306	0.13	0.00	0.00	0.00	0.11	2.41
	WASTELOAD # 081 (Midkiff Creek) ENTERS HERE																								
81	B2	2	15.90	0.109	23.0	0.0	4.6	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.024	0.024	8.6	2.620	0.13	0.00	0.00	0.00	0.11	2.41
82	B2	2	15.80	0.110	23.0	0.0	4.8	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.025	0.025	8.6	2.627	0.13	0.00	0.00	0.00	0.11	2.41
83	B2	2	15.70	0.111	23.0	0.0	4.9	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.025	0.025	8.6	2.634	0.13	0.00	0.00	0.00	0.11	2.42
84	B2	2	15.60	0.111	23.0	0.0	5.0	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.025	0.025	8.6	2.641	0.13	0.00	0.00	0.00	0.11	2.42
85	B2	2	15.50	0.112	23.0	0.0	5.1	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.025	0.025	8.6	2.648	0.13	0.00	0.00	0.00	0.11	2.42
86	B2	2	15.40	0.113	23.0	0.0	5.2	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.025	0.025	8.6	2.655	0.13	0.00	0.00	0.00	0.11	2.42
87	B2	2	15.30	0.114	23.1	0.0	5.3	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.026	0.026	8.6	2.662	0.13	0.00	0.00	0.00	0.11	2.43
88	B2	2	15.20	0.114	23.1	0.0	5.4	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.026	0.026	8.6	2.669	0.13	0.00	0.00	0.00	0.11	2.43
89	B2	2	15.10	0.115	23.1	0.0	5.5	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.026	0.026	8.6	2.676	0.13	0.00	0.00	0.00	0.11	2.43
90	B2	2	15.00	0.116	23.1	0.0	5.5	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.026	0.026	8.6	2.683	0.13	0.00	0.00	0.00	0.11	2.43
91	B2	2	14.90	0.117	23.1	0.0	5.6	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.026	0.026	8.6	2.690	0.13	0.00	0.00	0.00	0.11	2.43
92	B2	2	14.80	0.118	23.1	0.0	5.6	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.026	0.026	8.6	2.697	0.13	0.00	0.00	0.00	0.11	2.44
93	B2	2	14.70	0.118	23.1	0.0	5.7	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.027	0.027	8.6	2.704	0.13	0.00	0.00	0.00	0.11	2.44
94	B2	2	14.60	0.119	23.2	0.0	5.7	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.027	0.027	8.6	2.711	0.13	0.00	0.00	0.00	0.12	2.44
95	B2	2	14.50	0.120	23.2	0.0	5.7	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.027	0.027	8.6	2.718	0.13	0.00	0.00	0.00	0.12	2.44
96	B2	2	14.40	0.121	23.2	0.0	5.8	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.027	0.027	8.5	2.726	0.13	0.00	0.00	0.00	0.12	2.44
97	B2	2	14.30	0.121	23.2	0.0	5.8	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.027	0.027	8.5	2.733	0.13	0.00	0.00	0.00	0.12	2.45
98	B2	2	14.20	0.122	23.2	0.0	5.8	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.027	0.027	8.5	2.740	0.13	0.00	0.00	0.00	0.12	2.45
99	B2	2	14.10	0.123	23.2	0.0	5.8	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.028	0.028	8.5	2.747	0.13	0.00	0.00	0.00	0.12	2.45
100	B2	2	14.00	0.124	23.2	0.0	5.8	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.028	0.028	8.5	2.754	0.13	0.00	0.00	0.00	0.12	2.45
101	B2	2	13.90	0.124	23.2	0.0	5.9	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.028	0.028	8.5	2.761	0.13	0.00	0.00	0.00	0.12	2.45
102	B2	2	13.80	0.125	23.3	0.0	5.9	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.028	0.028	8.5	2.768	0.13	0.00	0.00	0.00	0.12	2.46
103	B2	2	13.70	0.126	23.3	0.0	5.9	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.028	0.028	8.5	2.775	0.13	0.00	0.00	0.00	0.12	2.46
104	B2	2	13.60	0.127	23.3	0.0	5.9	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.028	0.028	8.5	2.782	0.13	0.00	0.00	0.00	0.12	2.46
105	B2	2	13.50	0.128	23.3	0.0	5.9	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.029	0.029	8.5	2.789	0.13	0.00	0.00	0.00	0.12	2.46
106	B2	2	13.40	0.128	23.3	0.0	5.9	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.029	0.029	8.5	2.796	0.13	0.00	0.00	0.00	0.12	2.46
107	B2	2	13.30	0.129	23.3	0.0	5.9	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.029	0.029	8.5	2.803	0.13	0.00	0.00	0.00	0.12	2.47
108	B2	2	13.20	0.130	23.3	0.0	5.9	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.029	0.029	8.5	2.810	0.13	0.00	0.00	0.00	0.12	2.47
109	B2	2	13.10	0.131	23.4	0.0	6.0	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.029	0.029	8.5	2.818	0.13	0.00	0.00	0.00	0.12	2.47
110	B2	2	13.00	0.131	23.4	0.0	6.0	2.8	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.029	0.029	8.5	2.825	0.13	0.00	0.00	0.00	0.12	2.47
111	B2	2	12.90	0.132	23.4	0.0	6.0	2.7	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.030	0.030	8.5	2.832	0.13	0.00	0.00	0.00	0.12	2.47
112	B2	2	12.80	0.133	23.4	0.0	6.0	2.7	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.030	0.030	8.5	2.839	0.13	0.00	0.00	0.00	0.12	2.48
113	B2	2	12.70	0.134	23.4	0.0	6.0	2.7	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.030	0.030	8.5	2.846	0.13	0.00	0.00	0.00	0.12	2.48
114	B2	2	12.60	0.134	23.4	0.0	6.0	2.7	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.030	0.030	8.5	2.853	0.13	0.00	0.00	0.00	0.12	2.48
115	B2	2	12.50	0.135	23.4	0.0	6.0	2.7	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.030	0.030	8.5	2.860	0.13	0.00	0.00	0.00	0.12	2.48
116	B2	2	12.40	0.136	23.4	0.0	6.0	2.7	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.031	0.031	8.5	2.867	0.13	0.00	0.00	0.00	0.12	2.48
117	B2	2	12.30	0.137	23.5	0.0	6.0	2.7	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.031	0.031	8.5	2.875	0.13	0.00	0.00	0.00	0.12	2.49
118	B2	2	12.20	0.137	23.5	0.0	6.0	2.7	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.031	0.031	8.5	2.882	0.13	0.00	0.00	0.00	0.12	2.49

119	B2	2	12.10	0.138	23.5	0.0	6.0	2.7	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.031	0.031	8.5	2.889	0.13	0.00	0.00	0.00	0.12	2.49
120	B2	2	12.00	0.139	23.5	0.0	6.0	2.7	0.0	1.4	0.2	0.0	0.0	0.41	10.9	0.031	0.031	8.5	2.896	0.13	0.00	0.00	0.00	0.12	2.49
121	B3	3	11.90	0.140	23.5	0.0	6.0	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.020	0.020	8.5	2.040	0.13	0.00	0.00	0.00	0.12	2.50
122	B3	3	11.80	0.141	23.5	0.0	5.9	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.020	0.020	8.5	2.044	0.13	0.00	0.00	0.00	0.12	2.50
123	B3	3	11.70	0.141	23.5	0.0	5.9	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.020	0.020	8.5	2.048	0.13	0.00	0.00	0.00	0.12	2.50
124	B3	3	11.60	0.142	23.6	0.0	5.9	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.021	0.021	8.5	2.052	0.13	0.00	0.00	0.00	0.12	2.50
125	B3	3	11.50	0.143	23.6	0.0	5.9	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.021	0.021	8.5	2.056	0.13	0.00	0.00	0.00	0.12	2.50
126	B3	3	11.40	0.144	23.6	0.0	5.8	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.021	0.021	8.5	2.060	0.13	0.00	0.00	0.00	0.12	2.51
127	B3	3	11.30	0.144	23.6	0.0	5.8	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.021	0.021	8.5	2.064	0.13	0.00	0.00	0.00	0.12	2.51
128	B3	3	11.20	0.145	23.6	0.0	5.8	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.021	0.021	8.5	2.068	0.13	0.00	0.00	0.00	0.12	2.51
129	B3	3	11.10	0.146	23.6	0.0	5.8	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.021	0.021	8.5	2.072	0.13	0.00	0.00	0.00	0.12	2.51
130	B3	3	11.00	0.147	23.6	0.0	5.8	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.021	0.021	8.5	2.076	0.13	0.00	0.00	0.00	0.12	2.52
131	B3	3	10.90	0.147	23.7	0.0	5.8	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.021	0.021	8.5	2.080	0.13	0.00	0.00	0.00	0.12	2.52
132	B3	3	10.80	0.148	23.7	0.0	5.8	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.021	0.021	8.5	2.084	0.13	0.00	0.00	0.00	0.12	2.52
133	B3	3	10.70	0.149	23.7	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.022	0.022	8.5	2.088	0.13	0.00	0.00	0.00	0.12	2.52
134	B3	3	10.60	0.150	23.7	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.022	0.022	8.5	2.092	0.13	0.00	0.00	0.00	0.12	2.53
135	B3	3	10.50	0.150	23.7	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.022	0.022	8.5	2.096	0.13	0.00	0.00	0.00	0.12	2.53
136	B3	3	10.40	0.151	23.7	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.022	0.022	8.5	2.100	0.13	0.00	0.00	0.00	0.12	2.53
137	B3	3	10.30	0.152	23.8	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.022	0.022	8.5	2.104	0.13	0.00	0.00	0.00	0.12	2.53
138	B3	3	10.20	0.153	23.8	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.022	0.022	8.5	2.108	0.13	0.00	0.00	0.00	0.12	2.54
139	B3	3	10.10	0.154	23.8	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.022	0.022	8.5	2.112	0.13	0.00	0.00	0.00	0.12	2.54
140	B3	3	10.00	0.154	23.8	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.022	0.022	8.4	2.116	0.13	0.00	0.00	0.00	0.12	2.54
141	B3	3	9.90	0.155	23.8	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.022	0.022	8.4	2.120	0.13	0.00	0.00	0.00	0.12	2.54
142	B3	3	9.80	0.156	23.8	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.023	0.023	8.4	2.124	0.13	0.00	0.00	0.00	0.12	2.55
143	B3	3	9.70	0.157	23.8	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.023	0.023	8.4	2.128	0.13	0.00	0.00	0.00	0.12	2.55
144	B3	3	9.60	0.157	23.9	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.023	0.023	8.4	2.132	0.13	0.00	0.00	0.00	0.12	2.55
145	B3	3	9.50	0.158	23.9	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.023	0.023	8.4	2.136	0.13	0.00	0.00	0.00	0.12	2.55
146	B3	3	9.40	0.159	23.9	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.023	0.023	8.4	2.140	0.13	0.00	0.00	0.00	0.12	2.56

EXPANDED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

IOR	REACH		DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3 mg/L	CHLA µg/L	DISP m²/s	DEPTH m	WIDTH m	ADVEC VELO m/s	MEAN VELO m/s	DO SAT mg/L	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
147	B3	3	9.30	0.160	23.9	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.023	0.023	8.4	2.144	0.13	0.00	0.00	0.00	0.12	2.56
148	B3	3	9.20	0.160	23.9	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.023	0.023	8.4	2.148	0.13	0.00	0.00	0.00	0.12	2.56
	WASTELOAD # 149 (Emerald Hills Golf) ENTERS HERE																								
149	B3	3	9.10	0.162	23.9	0.0	5.7	2.8	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.023	0.023	8.4	2.154	0.13	0.00	0.00	0.00	0.12	2.56
150	B3	3	9.00	0.162	24.0	0.0	5.7	2.8	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.024	0.024	8.4	2.158	0.13	0.00	0.00	0.00	0.12	2.56
151	B3	3	8.90	0.163	24.0	0.0	5.7	2.8	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.024	0.024	8.4	2.162	0.13	0.00	0.00	0.00	0.12	2.57
152	B3	3	8.80	0.164	24.0	0.0	5.7	2.8	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.024	0.024	8.4	2.166	0.13	0.00	0.00	0.00	0.12	2.57
153	B3	3	8.70	0.165	24.0	0.0	5.7	2.8	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.024	0.024	8.4	2.170	0.13	0.00	0.00	0.00	0.12	2.57
154	B3	3	8.60	0.166	24.0	0.0	5.7	2.8	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.024	0.024	8.4	2.174	0.13	0.00	0.00	0.00	0.12	2.57
155	B3	3	8.50	0.166	24.0	0.0	5.7	2.8	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.024	0.024	8.4	2.178	0.13	0.00	0.00	0.00	0.12	2.58
156	B3	3	8.40	0.167	24.0	0.0	5.7	2.8	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.024	0.024	8.4	2.182	0.13	0.00	0.00	0.00	0.12	2.58
157	B3	3	8.30	0.168	24.1	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.024	0.024	8.4	2.186	0.13	0.00	0.00	0.00	0.12	2.58
158	B3	3	8.20	0.169	24.1	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.024	0.024	8.4	2.190	0.13	0.00	0.00	0.00	0.12	2.58
159	B3	3	8.10	0.169	24.1	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.025	0.025	8.4	2.195	0.13	0.00	0.00	0.00	0.12	2.59
160	B3	3	8.00	0.170	24.1	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.025	0.025	8.4	2.199	0.13	0.00	0.00	0.00	0.12	2.59
161	B3	3	7.90	0.171	24.1	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.025	0.025	8.4	2.203	0.13	0.00	0.00	0.00	0.12	2.59
162	B3	3	7.80	0.172	24.1	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.025	0.025	8.4	2.207	0.13	0.00	0.00	0.00	0.12	2.59
163	B3	3	7.70	0.172	24.1	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.025	0.025	8.4	2.211	0.13	0.00	0.00	0.00	0.12	2.60
164	B3	3	7.60	0.173	24.2	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.025	0.025	8.4	2.215	0.13	0.00	0.00	0.00	0.12	2.60
165	B3	3	7.50	0.174	24.2	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.025	0.025	8.4	2.219	0.13	0.00	0.00	0.00	0.12	2.60
166	B3	3	7.40	0.175	24.2	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.025	0.025	8.4	2.223	0.13	0.00	0.00	0.00	0.12	2.60
167	B3	3	7.30	0.176	24.2	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.025	0.025	8.4	2.227	0.13	0.00	0.00	0.00	0.12	2.61
168	B3	3	7.20	0.176	24.2	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.026	0.026	8.4	2.231	0.13	0.00	0.00	0.00	0.13	2.61
169	B3	3	7.10	0.177	24.2	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.026	0.026	8.4	2.235	0.13	0.00	0.00	0.00	0.13	2.61
170	B3	3	7.00	0.178	24.2	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.026	0.026	8.4	2.239	0.13	0.00	0.00	0.00	0.13	2.61
171	B3	3	6.90	0.179	24.3	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.026	0.026	8.4	2.243	0.13	0.00	0.00	0.00	0.13	2.62
172	B3	3	6.80	0.179	24.3	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.026	0.026	8.4	2.247	0.13	0.00	0.00	0.00	0.13	2.62
173	B3	3	6.70	0.180	24.3	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.026	0.026	8.4	2.251	0.13	0.00	0.00	0.00	0.13	2.62
174	B3	3	6.60	0.181	24.3	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.026	0.026	8.4	2.255	0.13	0.00	0.00	0.00	0.13	2.62
175	B3	3	6.50	0.182	24.3	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.026	0.026	8.4	2.260	0.13	0.00	0.00	0.00	0.13	2.63
176	B3	3	6.40	0.182	24.3	0.0	5.7	2.7	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.026	0.026	8.4	2.264	0.13	0.00	0.00	0.00	0.13	2.63
177	B3	3	6.30	0.183	24.4	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.027	0.027	8.4	2.268	0.13	0.00	0.00	0.00	0.13	2.63
178	B3	3	6.20	0.184	24.4	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.027	0.027	8.4	2.272	0.13	0.00	0.00	0.00	0.13	2.63
179	B3	3	6.10	0.185	24.4	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.027	0.027	8.4	2.276	0.13	0.00	0.00	0.00	0.13	2.64
180	B3	3	6.00	0.185	24.4	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.50	13.8	0.027	0.027	8.4	2.280	0.13	0.00	0.00	0.00	0.13	2.64
181	B4	4	5.90	0.186	24.4	0.0	5.7	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.019	0.019	8.4	1.759	0.13	0.00	0.00	0.00	0.13	2.64
182	B4	4	5.80	0.187	24.4	0.0	5.6	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.019	0.019	8.4	1.762	0.13	0.00	0.00	0.00	0.13	2.64
183	B4	4	5.70	0.188	24.4	0.0	5.6	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.019	0.019	8.4	1.764	0.13	0.00	0.00	0.00	0.13	2.64
184	B4	4	5.60	0.189	24.4	0.0	5.6	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.019	0.019	8.4	1.766	0.13	0.00	0.00	0.00	0.13	2.64
185	B4	4	5.50	0.189	24.4	0.0	5.6	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.019	0.019	8.4	1.768	0.13	0.00	0.00	0.00	0.13	2.64
186	B4	4	5.40	0.190	24.4	0.0	5.5	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.020	0.020	8.4	1.770	0.13	0.00	0.00	0.00	0.13	2.64
187	B4	4	5.30	0.191	24.4	0.0	5.5	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.020	0.020	8.4	1.772	0.13	0.00	0.00	0.00	0.13	2.64
188	B4	4	5.20	0.192	24.4	0.0	5.5	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.020	0.020	8.4	1.774	0.13	0.00	0.00	0.00	0.13	2.64
189	B4	4	5.10	0.192	24.4	0.0	5.5	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.020	0.020	8.4	1.776	0.13	0.00	0.00	0.00	0.13	2.64
190	B4	4	5.00	0.193	24.4	0.0	5.5	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.020	0.020	8.4	1.778	0.13	0.00	0.00	0.00	0.13	2.64
191	B4	4	4.90	0.194	24.4	0.0	5.5	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.020	0.020	8.4	1.781	0.13	0.00	0.00	0.00	0.13	2.64

192	B4	4	4.80	0.195	24.4	0.0	5.5	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.020	0.020	8.4	1.783	0.13	0.00	0.00	0.00	0.13	2.64
193	B4	4	4.70	0.195	24.4	0.0	5.5	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.020	0.020	8.4	1.785	0.13	0.00	0.00	0.00	0.13	2.64
194	B4	4	4.60	0.196	24.4	0.0	5.5	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.020	0.020	8.4	1.787	0.13	0.00	0.00	0.00	0.13	2.64
195	B4	4	4.50	0.197	24.4	0.0	5.5	2.6	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.020	0.020	8.4	1.789	0.13	0.00	0.00	0.00	0.13	2.64
196	B4	4	4.40	0.198	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.020	0.020	8.4	1.791	0.13	0.00	0.00	0.00	0.13	2.64
197	B4	4	4.30	0.199	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.020	0.020	8.4	1.793	0.13	0.00	0.00	0.00	0.13	2.64
198	B4	4	4.20	0.199	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.021	0.021	8.4	1.795	0.13	0.00	0.00	0.00	0.13	2.64
199	B4	4	4.10	0.200	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.021	0.021	8.4	1.798	0.13	0.00	0.00	0.00	0.13	2.64
200	B4	4	4.00	0.201	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.021	0.021	8.4	1.800	0.13	0.00	0.00	0.00	0.13	2.64
201	B4	4	3.90	0.202	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.021	0.021	8.4	1.802	0.13	0.00	0.00	0.00	0.13	2.64
202	B4	4	3.80	0.202	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.021	0.021	8.4	1.804	0.13	0.00	0.00	0.00	0.13	2.64
203	B4	4	3.70	0.203	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.021	0.021	8.4	1.806	0.13	0.00	0.00	0.00	0.13	2.64
204	B4	4	3.60	0.204	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.021	0.021	8.4	1.808	0.13	0.00	0.00	0.00	0.13	2.64
205	B4	4	3.50	0.205	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.021	0.021	8.4	1.810	0.13	0.00	0.00	0.00	0.13	2.64
206	B4	4	3.40	0.205	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.021	0.021	8.4	1.812	0.13	0.00	0.00	0.00	0.13	2.64
207	B4	4	3.30	0.206	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.021	0.021	8.4	1.814	0.13	0.00	0.00	0.00	0.13	2.64
208	B4	4	3.20	0.207	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.021	0.021	8.4	1.817	0.13	0.00	0.00	0.00	0.13	2.64
209	B4	4	3.10	0.208	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.021	0.021	8.4	1.819	0.13	0.00	0.00	0.00	0.13	2.64
210	B4	4	3.00	0.208	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.021	0.021	8.4	1.821	0.13	0.00	0.00	0.00	0.13	2.64
211	B4	4	2.90	0.209	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.022	0.022	8.4	1.823	0.13	0.00	0.00	0.00	0.13	2.64
212	B4	4	2.80	0.210	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.022	0.022	8.4	1.825	0.13	0.00	0.00	0.00	0.13	2.64
213	B4	4	2.70	0.211	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.022	0.022	8.4	1.827	0.13	0.00	0.00	0.00	0.13	2.64
214	B4	4	2.60	0.212	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.022	0.022	8.4	1.829	0.13	0.00	0.00	0.00	0.13	2.64
215	B4	4	2.50	0.212	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.022	0.022	8.4	1.831	0.13	0.00	0.00	0.00	0.13	2.64
216	B4	4	2.40	0.213	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.022	0.022	8.4	1.833	0.13	0.00	0.00	0.00	0.13	2.64
217	B4	4	2.30	0.214	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.022	0.022	8.4	1.836	0.13	0.00	0.00	0.00	0.13	2.64
218	B4	4	2.20	0.215	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.022	0.022	8.4	1.838	0.13	0.00	0.00	0.00	0.13	2.64
219	B4	4	2.10	0.215	24.4	0.0	5.5	2.5	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.022	0.022	8.4	1.840	0.13	0.00	0.00	0.00	0.13	2.64

EXPANDED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

IOR	REACH		DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3 mg/L	CHLA µg/L	DISP m²/s	DEPTH m	WIDTH m	ADVEC VELO m/s	MEAN VELO m/s	DO SAT mg/L	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
220	B4	4	2.00	0.216	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.022	0.022	8.4	1.842	0.13	0.00	0.00	0.00	0.13	2.64
221	B4	4	1.90	0.217	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.022	0.022	8.4	1.844	0.13	0.00	0.00	0.00	0.13	2.64
222	B4	4	1.80	0.218	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.022	0.022	8.4	1.846	0.13	0.00	0.00	0.00	0.13	2.64
223	B4	4	1.70	0.218	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.022	0.022	8.4	1.848	0.13	0.00	0.00	0.00	0.13	2.64
224	B4	4	1.60	0.219	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.023	0.023	8.4	1.850	0.13	0.00	0.00	0.00	0.13	2.64
225	B4	4	1.50	0.220	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.023	0.023	8.4	1.852	0.13	0.00	0.00	0.00	0.13	2.64
226	B4	4	1.40	0.221	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.023	0.023	8.4	1.855	0.13	0.00	0.00	0.00	0.13	2.64
227	B4	4	1.30	0.222	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.023	0.023	8.4	1.857	0.13	0.00	0.00	0.00	0.13	2.64
228	B4	4	1.20	0.222	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.023	0.023	8.4	1.859	0.13	0.00	0.00	0.00	0.13	2.64
229	B4	4	1.10	0.223	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.023	0.023	8.4	1.861	0.13	0.00	0.00	0.00	0.13	2.64
230	B4	4	1.00	0.224	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.023	0.023	8.4	1.863	0.13	0.00	0.00	0.00	0.13	2.64
231	B4	4	0.90	0.225	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.023	0.023	8.4	1.865	0.13	0.00	0.00	0.00	0.13	2.64
232	B4	4	0.80	0.225	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.023	0.023	8.4	1.867	0.13	0.00	0.00	0.00	0.13	2.64
233	B4	4	0.70	0.226	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.023	0.023	8.4	1.869	0.13	0.00	0.00	0.00	0.13	2.64
234	B4	4	0.60	0.227	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.023	0.023	8.4	1.872	0.13	0.00	0.00	0.00	0.13	2.64
235	B4	4	0.50	0.228	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.023	0.023	8.4	1.874	0.13	0.00	0.00	0.00	0.13	2.64
236	B4	4	0.40	0.228	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.023	0.023	8.4	1.876	0.13	0.00	0.00	0.00	0.13	2.64
237	B4	4	0.30	0.229	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.024	0.024	8.4	1.878	0.13	0.00	0.00	0.00	0.13	2.64
238	B4	4	0.20	0.230	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.024	0.024	8.4	1.880	0.13	0.00	0.00	0.00	0.13	2.64
239	B4	4	0.10	0.231	24.4	0.0	5.5	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.024	0.024	8.4	1.882	0.13	0.00	0.00	0.00	0.13	2.64
240	B4	4	0.00	0.231	24.4	0.0	5.6	2.4	0.0	1.4	0.2	0.0	0.0	0.58	16.8	0.024	0.024	8.4	1.884	0.13	0.00	0.00	0.00	0.13	2.64

SPECIAL REPORT: Bayou Toro @ 110401A
WATER QUALITY CONSTITUENT VALUES

ELEM NO.	ENDING km	TEMP deg C	SALN ppt	CM-I *	CM-II *	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1	23.900	21.81	0.0	0.0	0.0	3.54	2.82	0.00	2.82	0.00	1.26	0.16	0.00	1.42	0.00	0.0	0.0	0.	0.00
2	23.800	21.83	0.0	0.0	0.0	4.28	2.83	0.00	2.83	0.00	1.27	0.17	0.01	1.44	0.00	0.0	0.0	0.	0.00
3	23.700	21.84	0.0	0.0	0.0	4.69	2.85	0.00	2.85	0.00	1.28	0.17	0.01	1.46	0.00	0.0	0.0	0.	0.00
4	23.600	21.86	0.0	0.0	0.0	4.94	2.86	0.00	2.86	0.00	1.29	0.17	0.01	1.48	0.00	0.0	0.0	0.	0.00
5	23.500	21.88	0.0	0.0	0.0	5.09	2.87	0.00	2.87	0.00	1.30	0.17	0.02	1.49	0.00	0.0	0.0	0.	0.00
6	23.400	21.89	0.0	0.0	0.0	5.19	2.88	0.00	2.88	0.00	1.31	0.17	0.02	1.50	0.00	0.0	0.0	0.	0.00
7	23.300	21.90	0.0	0.0	0.0	5.25	2.88	0.00	2.88	0.00	1.32	0.17	0.02	1.51	0.00	0.0	0.0	0.	0.00
8	23.200	21.92	0.0	0.0	0.0	5.30	2.89	0.00	2.89	0.00	1.33	0.17	0.02	1.52	0.00	0.0	0.0	0.	0.00
9	23.100	21.93	0.0	0.0	0.0	5.33	2.90	0.00	2.90	0.00	1.33	0.18	0.03	1.53	0.00	0.0	0.0	0.	0.00
10	23.000	21.95	0.0	0.0	0.0	5.36	2.90	0.00	2.90	0.00	1.34	0.18	0.03	1.54	0.00	0.0	0.0	0.	0.00
11	22.900	21.97	0.0	0.0	0.0	5.38	2.91	0.00	2.91	0.00	1.34	0.18	0.03	1.55	0.00	0.0	0.0	0.	0.00
12	22.800	21.98	0.0	0.0	0.0	5.40	2.91	0.00	2.91	0.00	1.35	0.18	0.03	1.56	0.00	0.0	0.0	0.	0.00
13	22.700	21.99	0.0	0.0	0.0	5.41	2.91	0.00	2.91	0.00	1.35	0.18	0.03	1.56	0.00	0.0	0.0	0.	0.00
14	22.600	22.01	0.0	0.0	0.0	5.43	2.92	0.00	2.92	0.00	1.36	0.18	0.03	1.57	0.00	0.0	0.0	0.	0.00
15	22.500	22.02	0.0	0.0	0.0	5.44	2.92	0.00	2.92	0.00	1.36	0.18	0.03	1.57	0.00	0.0	0.0	0.	0.00
16	22.400	22.04	0.0	0.0	0.0	5.45	2.92	0.00	2.92	0.00	1.36	0.18	0.04	1.58	0.00	0.0	0.0	0.	0.00
17	22.300	22.06	0.0	0.0	0.0	5.47	2.93	0.00	2.93	0.00	1.37	0.18	0.04	1.59	0.00	0.0	0.0	0.	0.00

18	22.200	22.07	0.0	0.0	0.0	5.48	2.93	0.00	2.93	0.00	1.37	0.18	0.04	1.59	0.00	0.0	0.0	0.	0.00
19	22.100	22.08	0.0	0.0	0.0	5.49	2.93	0.00	2.93	0.00	1.37	0.18	0.04	1.59	0.00	0.0	0.0	0.	0.00
20	22.000	22.10	0.0	0.0	0.0	5.50	2.93	0.00	2.93	0.00	1.38	0.18	0.04	1.60	0.00	0.0	0.0	0.	0.00
21	21.900	22.11	0.0	0.0	0.0	5.51	2.93	0.00	2.93	0.00	1.38	0.18	0.04	1.60	0.00	0.0	0.0	0.	0.00
22	21.800	22.13	0.0	0.0	0.0	5.53	2.94	0.00	2.94	0.00	1.38	0.18	0.04	1.61	0.00	0.0	0.0	0.	0.00
23	21.700	22.15	0.0	0.0	0.0	5.54	2.94	0.00	2.94	0.00	1.38	0.18	0.04	1.61	0.00	0.0	0.0	0.	0.00
24	21.600	22.16	0.0	0.0	0.0	5.55	2.94	0.00	2.94	0.00	1.38	0.18	0.04	1.61	0.00	0.0	0.0	0.	0.00
25	21.500	22.17	0.0	0.0	0.0	5.56	2.94	0.00	2.94	0.00	1.39	0.18	0.04	1.61	0.00	0.0	0.0	0.	0.00
26	21.400	22.19	0.0	0.0	0.0	5.57	2.94	0.00	2.94	0.00	1.39	0.18	0.04	1.62	0.00	0.0	0.0	0.	0.00
27	21.300	22.20	0.0	0.0	0.0	5.58	2.94	0.00	2.94	0.00	1.39	0.18	0.05	1.62	0.00	0.0	0.0	0.	0.00
28	21.200	22.22	0.0	0.0	0.0	5.59	2.94	0.00	2.94	0.00	1.39	0.19	0.05	1.62	0.00	0.0	0.0	0.	0.00
29	21.100	22.24	0.0	0.0	0.0	5.60	2.94	0.00	2.94	0.00	1.39	0.19	0.05	1.63	0.00	0.0	0.0	0.	0.00
30	21.000	22.25	0.0	0.0	0.0	5.61	2.94	0.00	2.94	0.00	1.40	0.19	0.05	1.63	0.00	0.0	0.0	0.	0.00
31	20.900	22.26	0.0	0.0	0.0	5.62	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.63	0.00	0.0	0.0	0.	0.00
32	20.800	22.28	0.0	0.0	0.0	5.63	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.63	0.00	0.0	0.0	0.	0.00
33	20.700	22.30	0.0	0.0	0.0	5.64	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.63	0.00	0.0	0.0	0.	0.00
34	20.600	22.31	0.0	0.0	0.0	5.65	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.64	0.00	0.0	0.0	0.	0.00
35	20.500	22.33	0.0	0.0	0.0	5.66	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.64	0.00	0.0	0.0	0.	0.00
36	20.400	22.34	0.0	0.0	0.0	5.67	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.64	0.00	0.0	0.0	0.	0.00
37	20.300	22.35	0.0	0.0	0.0	5.68	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.64	0.00	0.0	0.0	0.	0.00
38	20.200	22.37	0.0	0.0	0.0	5.69	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.64	0.00	0.0	0.0	0.	0.00
39	20.100	22.39	0.0	0.0	0.0	5.70	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.0	0.0	0.	0.00
40	20.000	22.40	0.0	0.0	0.0	5.71	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.0	0.0	0.	0.00
41	19.900	22.42	0.0	0.0	0.0	5.72	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.0	0.0	0.	0.00
42	19.800	22.43	0.0	0.0	0.0	5.73	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.0	0.0	0.	0.00
43	19.700	22.44	0.0	0.0	0.0	5.74	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.0	0.0	0.	0.00
44	19.600	22.46	0.0	0.0	0.0	5.75	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.0	0.0	0.	0.00
45	19.500	22.48	0.0	0.0	0.0	5.76	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.0	0.0	0.	0.00
46	19.400	22.49	0.0	0.0	0.0	5.76	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.0	0.0	0.	0.00
47	19.300	22.51	0.0	0.0	0.0	5.77	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.66	0.00	0.0	0.0	0.	0.00
48	19.200	22.52	0.0	0.0	0.0	5.78	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.66	0.00	0.0	0.0	0.	0.00
49	19.100	22.53	0.0	0.0	0.0	5.79	2.95	0.00	2.95	0.00	1.41	0.19	0.06	1.66	0.00	0.0	0.0	0.	0.00
50	19.000	22.55	0.0	0.0	0.0	5.80	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.66	0.00	0.0	0.0	0.	0.00
51	18.900	22.57	0.0	0.0	0.0	5.81	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.66	0.00	0.0	0.0	0.	0.00
52	18.800	22.58	0.0	0.0	0.0	5.82	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.66	0.00	0.0	0.0	0.	0.00
53	18.700	22.60	0.0	0.0	0.0	5.82	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.66	0.00	0.0	0.0	0.	0.00
54	18.600	22.61	0.0	0.0	0.0	5.83	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.66	0.00	0.0	0.0	0.	0.00
55	18.500	22.62	0.0	0.0	0.0	5.84	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.66	0.00	0.0	0.0	0.	0.00
56	18.400	22.64	0.0	0.0	0.0	5.85	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.67	0.00	0.0	0.0	0.	0.00
57	18.300	22.66	0.0	0.0	0.0	5.86	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.67	0.00	0.0	0.0	0.	0.00
58	18.200	22.67	0.0	0.0	0.0	5.86	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.67	0.00	0.0	0.0	0.	0.00
59	18.100	22.69	0.0	0.0	0.0	5.87	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.67	0.00	0.0	0.0	0.	0.00
60	18.000	22.70	0.0	0.0	0.0	5.88	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.67	0.00	0.0	0.0	0.	0.00
61	17.900	22.71	0.0	0.0	0.0	5.82	2.94	0.00	2.94	0.00	1.42	0.19	0.06	1.67	0.00	0.0	0.0	0.	0.00
62	17.800	22.73	0.0	0.0	0.0	5.77	2.94	0.00	2.94	0.00	1.42	0.19	0.06	1.67	0.00	0.0	0.0	0.	0.00
63	17.700	22.74	0.0	0.0	0.0	5.73	2.93	0.00	2.93	0.00	1.42	0.19	0.06	1.68	0.00	0.0	0.0	0.	0.00
64	17.600	22.75	0.0	0.0	0.0	5.70	2.92	0.00	2.92	0.00	1.42	0.19	0.06	1.68	0.00	0.0	0.0	0.	0.00
65	17.500	22.77	0.0	0.0	0.0	5.67	2.91	0.00	2.91	0.00	1.43	0.19	0.06	1.68	0.00	0.0	0.0	0.	0.00
66	17.400	22.78	0.0	0.0	0.0	5.65	2.91	0.00	2.91	0.00	1.43	0.19	0.06	1.68	0.00	0.0	0.0	0.	0.00
67	17.300	22.79	0.0	0.0	0.0	5.63	2.90	0.00	2.90	0.00	1.43	0.19	0.07	1.68	0.00	0.0	0.0	0.	0.00
68	17.200	22.81	0.0	0.0	0.0	5.62	2.89	0.00	2.89	0.00	1.43	0.19	0.07	1.69	0.00	0.0	0.0	0.	0.00
69	17.100	22.82	0.0	0.0	0.0	5.61	2.89	0.00	2.89	0.00	1.43	0.19	0.07	1.69	0.00	0.0	0.0	0.	0.00

70	17.000	22.83	0.0	0.0	0.0	5.61	2.88	0.00	2.88	0.00	1.43	0.19	0.07	1.69	0.00	0.0	0.0	0.	0.00
71	16.900	22.85	0.0	0.0	0.0	5.60	2.88	0.00	2.88	0.00	1.43	0.19	0.07	1.69	0.00	0.0	0.0	0.	0.00
72	16.800	22.86	0.0	0.0	0.0	5.60	2.87	0.00	2.87	0.00	1.43	0.19	0.07	1.69	0.00	0.0	0.0	0.	0.00
73	16.700	22.87	0.0	0.0	0.0	5.60	2.86	0.00	2.86	0.00	1.43	0.19	0.07	1.70	0.00	0.0	0.0	0.	0.00
74	16.600	22.89	0.0	0.0	0.0	5.60	2.86	0.00	2.86	0.00	1.43	0.19	0.07	1.70	0.00	0.0	0.0	0.	0.00
75	16.500	22.90	0.0	0.0	0.0	5.60	2.85	0.00	2.85	0.00	1.43	0.19	0.07	1.70	0.00	0.0	0.0	0.	0.00
76	16.400	22.91	0.0	0.0	0.0	5.60	2.85	0.00	2.85	0.00	1.43	0.19	0.07	1.70	0.00	0.0	0.0	0.	0.00
77	16.300	22.93	0.0	0.0	0.0	5.60	2.84	0.00	2.84	0.00	1.43	0.20	0.07	1.70	0.00	0.0	0.0	0.	0.00
78	16.200	22.94	0.0	0.0	0.0	5.60	2.84	0.00	2.84	0.00	1.43	0.20	0.08	1.71	0.00	0.0	0.0	0.	0.00
79	16.100	22.95	0.0	0.0	0.0	5.60	2.83	0.00	2.83	0.00	1.43	0.20	0.08	1.71	0.00	0.0	0.0	0.	0.00
80	16.000	22.97	0.0	0.0	0.0	5.60	2.83	0.00	2.83	0.00	1.44	0.20	0.08	1.71	0.00	0.0	0.0	0.	0.00
81	15.900	22.98	0.0	0.0	0.0	4.62	2.82	0.00	2.82	0.00	1.37	0.18	0.05	1.60	0.00	0.0	0.0	0.	0.00
82	15.800	22.99	0.0	0.0	0.0	4.77	2.81	0.00	2.81	0.00	1.37	0.18	0.05	1.61	0.00	0.0	0.0	0.	0.00
83	15.700	23.01	0.0	0.0	0.0	4.91	2.81	0.00	2.81	0.00	1.37	0.18	0.05	1.61	0.00	0.0	0.0	0.	0.00
84	15.600	23.02	0.0	0.0	0.0	5.03	2.81	0.00	2.81	0.00	1.37	0.18	0.05	1.61	0.00	0.0	0.0	0.	0.00
85	15.500	23.03	0.0	0.0	0.0	5.14	2.81	0.00	2.81	0.00	1.37	0.18	0.05	1.61	0.00	0.0	0.0	0.	0.00
86	15.400	23.05	0.0	0.0	0.0	5.23	2.80	0.00	2.80	0.00	1.37	0.18	0.05	1.61	0.00	0.0	0.0	0.	0.00
87	15.300	23.06	0.0	0.0	0.0	5.32	2.80	0.00	2.80	0.00	1.37	0.19	0.05	1.61	0.00	0.0	0.0	0.	0.00
88	15.200	23.07	0.0	0.0	0.0	5.39	2.80	0.00	2.80	0.00	1.38	0.19	0.06	1.62	0.00	0.0	0.0	0.	0.00
89	15.100	23.09	0.0	0.0	0.0	5.46	2.80	0.00	2.80	0.00	1.38	0.19	0.06	1.62	0.00	0.0	0.0	0.	0.00
90	15.000	23.10	0.0	0.0	0.0	5.51	2.79	0.00	2.79	0.00	1.38	0.19	0.06	1.62	0.00	0.0	0.0	0.	0.00
91	14.900	23.11	0.0	0.0	0.0	5.57	2.79	0.00	2.79	0.00	1.38	0.19	0.06	1.62	0.00	0.0	0.0	0.	0.00
92	14.800	23.13	0.0	0.0	0.0	5.61	2.79	0.00	2.79	0.00	1.38	0.19	0.06	1.62	0.00	0.0	0.0	0.	0.00
93	14.700	23.14	0.0	0.0	0.0	5.65	2.79	0.00	2.79	0.00	1.38	0.19	0.06	1.62	0.00	0.0	0.0	0.	0.00
94	14.600	23.15	0.0	0.0	0.0	5.69	2.78	0.00	2.78	0.00	1.38	0.19	0.06	1.63	0.00	0.0	0.0	0.	0.00
95	14.500	23.17	0.0	0.0	0.0	5.72	2.78	0.00	2.78	0.00	1.38	0.19	0.06	1.63	0.00	0.0	0.0	0.	0.00
96	14.400	23.18	0.0	0.0	0.0	5.75	2.78	0.00	2.78	0.00	1.38	0.19	0.06	1.63	0.00	0.0	0.0	0.	0.00
97	14.300	23.19	0.0	0.0	0.0	5.78	2.78	0.00	2.78	0.00	1.38	0.19	0.06	1.63	0.00	0.0	0.0	0.	0.00
98	14.200	23.21	0.0	0.0	0.0	5.80	2.78	0.00	2.78	0.00	1.38	0.19	0.06	1.63	0.00	0.0	0.0	0.	0.00
99	14.100	23.22	0.0	0.0	0.0	5.82	2.77	0.00	2.77	0.00	1.38	0.19	0.06	1.63	0.00	0.0	0.0	0.	0.00
100	14.000	23.23	0.0	0.0	0.0	5.84	2.77	0.00	2.77	0.00	1.38	0.19	0.06	1.63	0.00	0.0	0.0	0.	0.00
101	13.900	23.25	0.0	0.0	0.0	5.86	2.77	0.00	2.77	0.00	1.39	0.19	0.06	1.64	0.00	0.0	0.0	0.	0.00
102	13.800	23.26	0.0	0.0	0.0	5.88	2.77	0.00	2.77	0.00	1.39	0.19	0.06	1.64	0.00	0.0	0.0	0.	0.00
103	13.700	23.27	0.0	0.0	0.0	5.89	2.76	0.00	2.76	0.00	1.39	0.19	0.06	1.64	0.00	0.0	0.0	0.	0.00
104	13.600	23.29	0.0	0.0	0.0	5.90	2.76	0.00	2.76	0.00	1.39	0.19	0.06	1.64	0.00	0.0	0.0	0.	0.00
105	13.500	23.30	0.0	0.0	0.0	5.92	2.76	0.00	2.76	0.00	1.39	0.19	0.06	1.64	0.00	0.0	0.0	0.	0.00
106	13.400	23.31	0.0	0.0	0.0	5.93	2.76	0.00	2.76	0.00	1.39	0.19	0.07	1.64	0.00	0.0	0.0	0.	0.00
107	13.300	23.33	0.0	0.0	0.0	5.94	2.76	0.00	2.76	0.00	1.39	0.19	0.07	1.64	0.00	0.0	0.0	0.	0.00
108	13.200	23.34	0.0	0.0	0.0	5.94	2.76	0.00	2.76	0.00	1.39	0.19	0.07	1.64	0.00	0.0	0.0	0.	0.00
109	13.100	23.35	0.0	0.0	0.0	5.95	2.75	0.00	2.75	0.00	1.39	0.19	0.07	1.65	0.00	0.0	0.0	0.	0.00
110	13.000	23.37	0.0	0.0	0.0	5.96	2.75	0.00	2.75	0.00	1.39	0.19	0.07	1.65	0.00	0.0	0.0	0.	0.00
111	12.900	23.38	0.0	0.0	0.0	5.97	2.75	0.00	2.75	0.00	1.39	0.19	0.07	1.65	0.00	0.0	0.0	0.	0.00
112	12.800	23.39	0.0	0.0	0.0	5.97	2.75	0.00	2.75	0.00	1.39	0.19	0.07	1.65	0.00	0.0	0.0	0.	0.00
113	12.700	23.41	0.0	0.0	0.0	5.98	2.75	0.00	2.75	0.00	1.39	0.19	0.07	1.65	0.00	0.0	0.0	0.	0.00
114	12.600	23.42	0.0	0.0	0.0	5.98	2.74	0.00	2.74	0.00	1.39	0.19	0.07	1.65	0.00	0.0	0.0	0.	0.00
115	12.500	23.43	0.0	0.0	0.0	5.99	2.74	0.00	2.74	0.00	1.39	0.19	0.07	1.65	0.00	0.0	0.0	0.	0.00
116	12.400	23.45	0.0	0.0	0.0	5.99	2.74	0.00	2.74	0.00	1.39	0.19	0.07	1.65	0.00	0.0	0.0	0.	0.00
117	12.300	23.46	0.0	0.0	0.0	6.00	2.74	0.00	2.74	0.00	1.39	0.19	0.07	1.65	0.00	0.0	0.0	0.	0.00
118	12.200	23.47	0.0	0.0	0.0	6.00	2.74	0.00	2.74	0.00	1.40	0.19	0.07	1.66	0.00	0.0	0.0	0.	0.00
119	12.100	23.49	0.0	0.0	0.0	6.01	2.74	0.00	2.74	0.00	1.40	0.19	0.07	1.66	0.00	0.0	0.0	0.	0.00
120	12.000	23.50	0.0	0.0	0.0	6.01	2.73	0.00	2.73	0.00	1.40	0.19	0.07	1.66	0.00	0.0	0.0	0.	0.00
121	11.900	23.51	0.0	0.0	0.0	5.97	2.73	0.00	2.73	0.00	1.40	0.19	0.07	1.66	0.00	0.0	0.0	0.	0.00

122	11.800	23.53	0.0	0.0	0.0	5.94	2.72	0.00	2.72	0.00	1.40	0.19	0.07	1.66	0.00	0.0	0.0	0.	0.00
123	11.700	23.55	0.0	0.0	0.0	5.91	2.72	0.00	2.72	0.00	1.40	0.19	0.07	1.66	0.00	0.0	0.0	0.	0.00
124	11.600	23.56	0.0	0.0	0.0	5.88	2.71	0.00	2.71	0.00	1.40	0.19	0.08	1.67	0.00	0.0	0.0	0.	0.00
125	11.500	23.58	0.0	0.0	0.0	5.86	2.70	0.00	2.70	0.00	1.40	0.19	0.08	1.67	0.00	0.0	0.0	0.	0.00
126	11.400	23.59	0.0	0.0	0.0	5.84	2.70	0.00	2.70	0.00	1.40	0.19	0.08	1.67	0.00	0.0	0.0	0.	0.00
127	11.300	23.60	0.0	0.0	0.0	5.82	2.69	0.00	2.69	0.00	1.40	0.19	0.08	1.67	0.00	0.0	0.0	0.	0.00
128	11.200	23.62	0.0	0.0	0.0	5.81	2.69	0.00	2.69	0.00	1.40	0.19	0.08	1.67	0.00	0.0	0.0	0.	0.00
129	11.100	23.64	0.0	0.0	0.0	5.79	2.68	0.00	2.68	0.00	1.40	0.19	0.08	1.67	0.00	0.0	0.0	0.	0.00
130	11.000	23.65	0.0	0.0	0.0	5.78	2.68	0.00	2.68	0.00	1.40	0.19	0.08	1.67	0.00	0.0	0.0	0.	0.00
131	10.900	23.66	0.0	0.0	0.0	5.77	2.67	0.00	2.67	0.00	1.40	0.19	0.08	1.68	0.00	0.0	0.0	0.	0.00
132	10.800	23.68	0.0	0.0	0.0	5.76	2.67	0.00	2.67	0.00	1.40	0.19	0.08	1.68	0.00	0.0	0.0	0.	0.00
133	10.700	23.69	0.0	0.0	0.0	5.75	2.66	0.00	2.66	0.00	1.40	0.19	0.08	1.68	0.00	0.0	0.0	0.	0.00
134	10.600	23.71	0.0	0.0	0.0	5.74	2.66	0.00	2.66	0.00	1.40	0.19	0.08	1.68	0.00	0.0	0.0	0.	0.00
135	10.500	23.73	0.0	0.0	0.0	5.73	2.65	0.00	2.65	0.00	1.40	0.19	0.08	1.68	0.00	0.0	0.0	0.	0.00
136	10.400	23.74	0.0	0.0	0.0	5.73	2.65	0.00	2.65	0.00	1.41	0.19	0.09	1.68	0.00	0.0	0.0	0.	0.00
137	10.300	23.75	0.0	0.0	0.0	5.72	2.64	0.00	2.64	0.00	1.41	0.19	0.09	1.69	0.00	0.0	0.0	0.	0.00
138	10.200	23.77	0.0	0.0	0.0	5.72	2.64	0.00	2.64	0.00	1.41	0.19	0.09	1.69	0.00	0.0	0.0	0.	0.00
139	10.100	23.78	0.0	0.0	0.0	5.71	2.63	0.00	2.63	0.00	1.41	0.19	0.09	1.69	0.00	0.0	0.0	0.	0.00
140	10.000	23.80	0.0	0.0	0.0	5.71	2.63	0.00	2.63	0.00	1.41	0.19	0.09	1.69	0.00	0.0	0.0	0.	0.00
141	9.900	23.82	0.0	0.0	0.0	5.71	2.63	0.00	2.63	0.00	1.41	0.19	0.09	1.69	0.00	0.0	0.0	0.	0.00
142	9.800	23.83	0.0	0.0	0.0	5.70	2.62	0.00	2.62	0.00	1.41	0.19	0.09	1.69	0.00	0.0	0.0	0.	0.00
143	9.700	23.84	0.0	0.0	0.0	5.70	2.62	0.00	2.62	0.00	1.41	0.19	0.09	1.69	0.00	0.0	0.0	0.	0.00
144	9.600	23.86	0.0	0.0	0.0	5.70	2.61	0.00	2.61	0.00	1.41	0.20	0.09	1.70	0.00	0.0	0.0	0.	0.00
145	9.500	23.88	0.0	0.0	0.0	5.70	2.61	0.00	2.61	0.00	1.41	0.20	0.09	1.70	0.00	0.0	0.0	0.	0.00
146	9.400	23.89	0.0	0.0	0.0	5.70	2.60	0.00	2.60	0.00	1.41	0.20	0.09	1.70	0.00	0.0	0.0	0.	0.00
147	9.300	23.91	0.0	0.0	0.0	5.70	2.60	0.00	2.60	0.00	1.41	0.20	0.09	1.70	0.00	0.0	0.0	0.	0.00
148	9.200	23.92	0.0	0.0	0.0	5.69	2.60	0.00	2.60	0.00	1.41	0.20	0.09	1.70	0.00	0.0	0.0	0.	0.00
149	9.100	23.93	0.0	0.0	0.0	5.69	2.80	0.00	2.80	0.00	1.42	0.23	0.10	1.74	0.00	0.0	0.0	0.	0.00
150	9.000	23.95	0.0	0.0	0.0	5.69	2.79	0.00	2.79	0.00	1.42	0.23	0.10	1.74	0.00	0.0	0.0	0.	0.00
151	8.900	23.97	0.0	0.0	0.0	5.69	2.78	0.00	2.78	0.00	1.42	0.23	0.10	1.75	0.00	0.0	0.0	0.	0.00
152	8.800	23.98	0.0	0.0	0.0	5.68	2.78	0.00	2.78	0.00	1.42	0.23	0.10	1.75	0.00	0.0	0.0	0.	0.00
153	8.700	23.99	0.0	0.0	0.0	5.68	2.77	0.00	2.77	0.00	1.42	0.23	0.10	1.75	0.00	0.0	0.0	0.	0.00
154	8.600	24.01	0.0	0.0	0.0	5.68	2.77	0.00	2.77	0.00	1.42	0.23	0.10	1.75	0.00	0.0	0.0	0.	0.00
155	8.500	24.02	0.0	0.0	0.0	5.68	2.76	0.00	2.76	0.00	1.42	0.23	0.10	1.75	0.00	0.0	0.0	0.	0.00
156	8.400	24.04	0.0	0.0	0.0	5.68	2.75	0.00	2.75	0.00	1.42	0.23	0.10	1.75	0.00	0.0	0.0	0.	0.00
157	8.300	24.06	0.0	0.0	0.0	5.68	2.75	0.00	2.75	0.00	1.42	0.22	0.10	1.75	0.00	0.0	0.0	0.	0.00
158	8.200	24.07	0.0	0.0	0.0	5.68	2.74	0.00	2.74	0.00	1.43	0.22	0.10	1.75	0.00	0.0	0.0	0.	0.00
159	8.100	24.08	0.0	0.0	0.0	5.68	2.74	0.00	2.74	0.00	1.43	0.22	0.10	1.75	0.00	0.0	0.0	0.	0.00
160	8.000	24.10	0.0	0.0	0.0	5.68	2.73	0.00	2.73	0.00	1.43	0.22	0.10	1.76	0.00	0.0	0.0	0.	0.00
161	7.900	24.11	0.0	0.0	0.0	5.68	2.73	0.00	2.73	0.00	1.43	0.22	0.11	1.76	0.00	0.0	0.0	0.	0.00
162	7.800	24.13	0.0	0.0	0.0	5.68	2.72	0.00	2.72	0.00	1.43	0.22	0.11	1.76	0.00	0.0	0.0	0.	0.00
163	7.700	24.15	0.0	0.0	0.0	5.68	2.72	0.00	2.72	0.00	1.43	0.22	0.11	1.76	0.00	0.0	0.0	0.	0.00
164	7.600	24.16	0.0	0.0	0.0	5.68	2.71	0.00	2.71	0.00	1.43	0.22	0.11	1.76	0.00	0.0	0.0	0.	0.00
165	7.500	24.17	0.0	0.0	0.0	5.68	2.71	0.00	2.71	0.00	1.43	0.22	0.11	1.76	0.00	0.0	0.0	0.	0.00
166	7.400	24.19	0.0	0.0	0.0	5.68	2.70	0.00	2.70	0.00	1.43	0.22	0.11	1.76	0.00	0.0	0.0	0.	0.00
167	7.300	24.20	0.0	0.0	0.0	5.68	2.70	0.00	2.70	0.00	1.43	0.22	0.11	1.76	0.00	0.0	0.0	0.	0.00
168	7.200	24.22	0.0	0.0	0.0	5.68	2.69	0.00	2.69	0.00	1.43	0.22	0.11	1.76	0.00	0.0	0.0	0.	0.00
169	7.100	24.24	0.0	0.0	0.0	5.68	2.69	0.00	2.69	0.00	1.43	0.22	0.11	1.76	0.00	0.0	0.0	0.	0.00
170	7.000	24.25	0.0	0.0	0.0	5.68	2.68	0.00	2.68	0.00	1.43	0.22	0.11	1.76	0.00	0.0	0.0	0.	0.00
171	6.900	24.26	0.0	0.0	0.0	5.68	2.68	0.00	2.68	0.00	1.43	0.22	0.11	1.77	0.00	0.0	0.0	0.	0.00
172	6.800	24.28	0.0	0.0	0.0	5.68	2.67	0.00	2.67	0.00	1.43	0.22	0.11	1.77	0.00	0.0	0.0	0.	0.00
173	6.700	24.30	0.0	0.0	0.0	5.68	2.67	0.00	2.67	0.00	1.43	0.22	0.12	1.77	0.00	0.0	0.0	0.	0.00

174	6.600	24.31	0.0	0.0	0.0	5.68	2.66	0.00	2.66	0.00	1.43	0.22	0.12	1.77	0.00	0.0	0.0	0.	0.00
175	6.500	24.32	0.0	0.0	0.0	5.68	2.66	0.00	2.66	0.00	1.43	0.22	0.12	1.77	0.00	0.0	0.0	0.	0.00
176	6.400	24.34	0.0	0.0	0.0	5.68	2.65	0.00	2.65	0.00	1.43	0.22	0.12	1.77	0.00	0.0	0.0	0.	0.00
177	6.300	24.35	0.0	0.0	0.0	5.68	2.65	0.00	2.65	0.00	1.43	0.22	0.12	1.77	0.00	0.0	0.0	0.	0.00
178	6.200	24.37	0.0	0.0	0.0	5.68	2.64	0.00	2.64	0.00	1.43	0.22	0.12	1.77	0.00	0.0	0.0	0.	0.00
179	6.100	24.39	0.0	0.0	0.0	5.68	2.64	0.00	2.64	0.00	1.43	0.22	0.12	1.77	0.00	0.0	0.0	0.	0.00
180	6.000	24.40	0.0	0.0	0.0	5.68	2.64	0.00	2.64	0.00	1.43	0.22	0.12	1.77	0.00	0.0	0.0	0.	0.00
181	5.900	24.40	0.0	0.0	0.0	5.65	2.63	0.00	2.63	0.00	1.43	0.22	0.12	1.77	0.00	0.0	0.0	0.	0.00
182	5.800	24.40	0.0	0.0	0.0	5.62	2.62	0.00	2.62	0.00	1.43	0.22	0.12	1.78	0.00	0.0	0.0	0.	0.00
183	5.700	24.40	0.0	0.0	0.0	5.60	2.62	0.00	2.62	0.00	1.43	0.22	0.12	1.78	0.00	0.0	0.0	0.	0.00
184	5.600	24.40	0.0	0.0	0.0	5.58	2.61	0.00	2.61	0.00	1.43	0.22	0.12	1.78	0.00	0.0	0.0	0.	0.00
185	5.500	24.40	0.0	0.0	0.0	5.56	2.61	0.00	2.61	0.00	1.43	0.22	0.13	1.78	0.00	0.0	0.0	0.	0.00
186	5.400	24.40	0.0	0.0	0.0	5.54	2.60	0.00	2.60	0.00	1.43	0.22	0.13	1.78	0.00	0.0	0.0	0.	0.00
187	5.300	24.40	0.0	0.0	0.0	5.53	2.59	0.00	2.59	0.00	1.43	0.22	0.13	1.78	0.00	0.0	0.0	0.	0.00
188	5.200	24.40	0.0	0.0	0.0	5.52	2.59	0.00	2.59	0.00	1.43	0.22	0.13	1.78	0.00	0.0	0.0	0.	0.00
189	5.100	24.40	0.0	0.0	0.0	5.51	2.58	0.00	2.58	0.00	1.43	0.22	0.13	1.79	0.00	0.0	0.0	0.	0.00
190	5.000	24.40	0.0	0.0	0.0	5.50	2.58	0.00	2.58	0.00	1.43	0.22	0.13	1.79	0.00	0.0	0.0	0.	0.00
191	4.900	24.40	0.0	0.0	0.0	5.49	2.57	0.00	2.57	0.00	1.43	0.22	0.13	1.79	0.00	0.0	0.0	0.	0.00
192	4.800	24.40	0.0	0.0	0.0	5.48	2.57	0.00	2.57	0.00	1.43	0.22	0.13	1.79	0.00	0.0	0.0	0.	0.00
193	4.700	24.40	0.0	0.0	0.0	5.48	2.56	0.00	2.56	0.00	1.43	0.22	0.13	1.79	0.00	0.0	0.0	0.	0.00
194	4.600	24.40	0.0	0.0	0.0	5.47	2.56	0.00	2.56	0.00	1.43	0.22	0.14	1.79	0.00	0.0	0.0	0.	0.00
195	4.500	24.40	0.0	0.0	0.0	5.47	2.55	0.00	2.55	0.00	1.43	0.22	0.14	1.79	0.00	0.0	0.0	0.	0.00
196	4.400	24.40	0.0	0.0	0.0	5.46	2.55	0.00	2.55	0.00	1.43	0.22	0.14	1.79	0.00	0.0	0.0	0.	0.00
197	4.300	24.40	0.0	0.0	0.0	5.46	2.54	0.00	2.54	0.00	1.44	0.22	0.14	1.80	0.00	0.0	0.0	0.	0.00
198	4.200	24.40	0.0	0.0	0.0	5.46	2.54	0.00	2.54	0.00	1.44	0.22	0.14	1.80	0.00	0.0	0.0	0.	0.00
199	4.100	24.40	0.0	0.0	0.0	5.46	2.53	0.00	2.53	0.00	1.44	0.22	0.14	1.80	0.00	0.0	0.0	0.	0.00
200	4.000	24.40	0.0	0.0	0.0	5.46	2.53	0.00	2.53	0.00	1.44	0.22	0.14	1.80	0.00	0.0	0.0	0.	0.00
201	3.900	24.40	0.0	0.0	0.0	5.46	2.52	0.00	2.52	0.00	1.44	0.22	0.14	1.80	0.00	0.0	0.0	0.	0.00
202	3.800	24.40	0.0	0.0	0.0	5.46	2.52	0.00	2.52	0.00	1.44	0.22	0.14	1.80	0.00	0.0	0.0	0.	0.00
203	3.700	24.40	0.0	0.0	0.0	5.46	2.52	0.00	2.52	0.00	1.44	0.22	0.15	1.80	0.00	0.0	0.0	0.	0.00
204	3.600	24.40	0.0	0.0	0.0	5.46	2.51	0.00	2.51	0.00	1.44	0.22	0.15	1.80	0.00	0.0	0.0	0.	0.00
205	3.500	24.40	0.0	0.0	0.0	5.46	2.51	0.00	2.51	0.00	1.44	0.22	0.15	1.80	0.00	0.0	0.0	0.	0.00
206	3.400	24.40	0.0	0.0	0.0	5.46	2.50	0.00	2.50	0.00	1.44	0.22	0.15	1.81	0.00	0.0	0.0	0.	0.00
207	3.300	24.40	0.0	0.0	0.0	5.46	2.50	0.00	2.50	0.00	1.44	0.22	0.15	1.81	0.00	0.0	0.0	0.	0.00
208	3.200	24.40	0.0	0.0	0.0	5.46	2.49	0.00	2.49	0.00	1.44	0.22	0.15	1.81	0.00	0.0	0.0	0.	0.00
209	3.100	24.40	0.0	0.0	0.0	5.46	2.49	0.00	2.49	0.00	1.44	0.22	0.15	1.81	0.00	0.0	0.0	0.	0.00
210	3.000	24.40	0.0	0.0	0.0	5.47	2.49	0.00	2.49	0.00	1.44	0.22	0.15	1.81	0.00	0.0	0.0	0.	0.00
211	2.900	24.40	0.0	0.0	0.0	5.47	2.48	0.00	2.48	0.00	1.44	0.22	0.15	1.81	0.00	0.0	0.0	0.	0.00
212	2.800	24.40	0.0	0.0	0.0	5.47	2.48	0.00	2.48	0.00	1.44	0.22	0.15	1.81	0.00	0.0	0.0	0.	0.00
213	2.700	24.40	0.0	0.0	0.0	5.47	2.47	0.00	2.47	0.00	1.44	0.22	0.15	1.81	0.00	0.0	0.0	0.	0.00
214	2.600	24.40	0.0	0.0	0.0	5.47	2.47	0.00	2.47	0.00	1.44	0.22	0.16	1.81	0.00	0.0	0.0	0.	0.00
215	2.500	24.40	0.0	0.0	0.0	5.48	2.47	0.00	2.47	0.00	1.44	0.22	0.16	1.82	0.00	0.0	0.0	0.	0.00
216	2.400	24.40	0.0	0.0	0.0	5.48	2.46	0.00	2.46	0.00	1.44	0.22	0.16	1.82	0.00	0.0	0.0	0.	0.00
217	2.300	24.40	0.0	0.0	0.0	5.48	2.46	0.00	2.46	0.00	1.44	0.22	0.16	1.82	0.00	0.0	0.0	0.	0.00
218	2.200	24.40	0.0	0.0	0.0	5.48	2.46	0.00	2.46	0.00	1.44	0.22	0.16	1.82	0.00	0.0	0.0	0.	0.00
219	2.100	24.40	0.0	0.0	0.0	5.49	2.45	0.00	2.45	0.00	1.44	0.22	0.16	1.82	0.00	0.0	0.0	0.	0.00
220	2.000	24.40	0.0	0.0	0.0	5.49	2.45	0.00	2.45	0.00	1.44	0.22	0.16	1.82	0.00	0.0	0.0	0.	0.00
221	1.900	24.40	0.0	0.0	0.0	5.49	2.45	0.00	2.45	0.00	1.44	0.22	0.16	1.82	0.00	0.0	0.0	0.	0.00
222	1.800	24.40	0.0	0.0	0.0	5.50	2.44	0.00	2.44	0.00	1.44	0.22	0.16	1.82	0.00	0.0	0.0	0.	0.00
223	1.700	24.40	0.0	0.0	0.0	5.50	2.44	0.00	2.44	0.00	1.44	0.22	0.16	1.82	0.00	0.0	0.0	0.	0.00
224	1.600	24.40	0.0	0.0	0.0	5.50	2.44	0.00	2.44	0.00	1.44	0.22	0.16	1.82	0.00	0.0	0.0	0.	0.00
225	1.500	24.40	0.0	0.0	0.0	5.51	2.43	0.00	2.43	0.00	1.44	0.22	0.17	1.83	0.00	0.0	0.0	0.	0.00

226	1.400	24.40	0.0	0.0	0.0	5.51	2.43	0.00	2.43	0.00	1.44	0.22	0.17	1.83	0.00	0.0	0.0	0.	0.00
227	1.300	24.40	0.0	0.0	0.0	5.51	2.43	0.00	2.43	0.00	1.44	0.22	0.17	1.83	0.00	0.0	0.0	0.	0.00
228	1.200	24.40	0.0	0.0	0.0	5.51	2.42	0.00	2.42	0.00	1.44	0.22	0.17	1.83	0.00	0.0	0.0	0.	0.00
229	1.100	24.40	0.0	0.0	0.0	5.52	2.42	0.00	2.42	0.00	1.44	0.22	0.17	1.83	0.00	0.0	0.0	0.	0.00
230	1.000	24.40	0.0	0.0	0.0	5.52	2.42	0.00	2.42	0.00	1.44	0.22	0.17	1.83	0.00	0.0	0.0	0.	0.00
231	0.900	24.40	0.0	0.0	0.0	5.52	2.41	0.00	2.41	0.00	1.44	0.22	0.17	1.83	0.00	0.0	0.0	0.	0.00
232	0.800	24.40	0.0	0.0	0.0	5.53	2.41	0.00	2.41	0.00	1.44	0.22	0.17	1.83	0.00	0.0	0.0	0.	0.00
233	0.700	24.40	0.0	0.0	0.0	5.53	2.41	0.00	2.41	0.00	1.44	0.22	0.17	1.83	0.00	0.0	0.0	0.	0.00
234	0.600	24.40	0.0	0.0	0.0	5.53	2.41	0.00	2.41	0.00	1.44	0.22	0.17	1.83	0.00	0.0	0.0	0.	0.00
235	0.500	24.40	0.0	0.0	0.0	5.54	2.40	0.00	2.40	0.00	1.44	0.22	0.17	1.83	0.00	0.0	0.0	0.	0.00
236	0.400	24.40	0.0	0.0	0.0	5.54	2.40	0.00	2.40	0.00	1.44	0.22	0.17	1.84	0.00	0.0	0.0	0.	0.00
237	0.300	24.40	0.0	0.0	0.0	5.54	2.40	0.00	2.40	0.00	1.44	0.22	0.18	1.84	0.00	0.0	0.0	0.	0.00
238	0.200	24.40	0.0	0.0	0.0	5.55	2.40	0.00	2.40	0.00	1.44	0.22	0.18	1.84	0.00	0.0	0.0	0.	0.00
239	0.100	24.40	0.0	0.0	0.0	5.55	2.39	0.00	2.39	0.00	1.44	0.22	0.18	1.84	0.00	0.0	0.0	0.	0.00
240	0.000	24.40	0.0	0.0	0.0	5.55	2.39	0.00	2.39	0.00	1.44	0.22	0.18	1.84	0.00	0.0	0.0	0.	0.00

SPECIAL REPORT: Bayou Toro @ 110401A
BIOLOGICAL AND PHYSICAL COEFFICIENTS

ELEM NO.	ENDING DIST km	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#1 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	FULL SOD *	CORR SOD *	ORG-N DECAY 1/da	ORG-N 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	23.900	8.77	2.43	0.12	0.00	0.00	0.00	0.00	0.00	2.24	2.24	0.02	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	23.800	8.77	2.44	0.12	0.00	0.00	0.00	0.00	0.00	2.24	2.24	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	23.700	8.77	2.46	0.12	0.00	0.00	0.00	0.00	0.00	2.25	2.25	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	23.600	8.77	2.48	0.12	0.00	0.00	0.00	0.00	0.00	2.25	2.25	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	23.500	8.76	2.49	0.12	0.00	0.00	0.00	0.00	0.00	2.25	2.25	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	23.400	8.76	2.51	0.12	0.00	0.00	0.00	0.00	0.00	2.25	2.25	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	23.300	8.76	2.52	0.12	0.00	0.00	0.00	0.00	0.00	2.25	2.25	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	23.200	8.76	2.54	0.12	0.00	0.00	0.00	0.00	0.00	2.26	2.26	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	23.100	8.75	2.55	0.12	0.00	0.00	0.00	0.00	0.00	2.26	2.26	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	23.000	8.75	2.57	0.12	0.00	0.00	0.00	0.00	0.00	2.26	2.26	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	22.900	8.75	2.59	0.12	0.00	0.00	0.00	0.00	0.00	2.26	2.26	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	22.800	8.75	2.60	0.12	0.00	0.00	0.00	0.00	0.00	2.27	2.27	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	22.700	8.74	2.62	0.12	0.00	0.00	0.00	0.00	0.00	2.27	2.27	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	22.600	8.74	2.63	0.12	0.00	0.00	0.00	0.00	0.00	2.27	2.27	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	22.500	8.74	2.65	0.12	0.00	0.00	0.00	0.00	0.00	2.27	2.27	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	22.400	8.74	2.66	0.12	0.00	0.00	0.00	0.00	0.00	2.27	2.27	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	22.300	8.73	2.68	0.12	0.00	0.00	0.00	0.00	0.00	2.28	2.28	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	22.200	8.73	2.70	0.12	0.00	0.00	0.00	0.00	0.00	2.28	2.28	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	22.100	8.73	2.71	0.12	0.00	0.00	0.00	0.00	0.00	2.28	2.28	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	22.000	8.73	2.73	0.12	0.00	0.00	0.00	0.00	0.00	2.28	2.28	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	21.900	8.72	2.74	0.12	0.00	0.00	0.00	0.00	0.00	2.28	2.28	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	21.800	8.72	2.76	0.12	0.00	0.00	0.00	0.00	0.00	2.29	2.29	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	21.700	8.72	2.77	0.12	0.00	0.00	0.00	0.00	0.00	2.29	2.29	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	21.600	8.72	2.79	0.12	0.00	0.00	0.00	0.00	0.00	2.29	2.29	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	21.500	8.71	2.81	0.12	0.00	0.00	0.00	0.00	0.00	2.29	2.29	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	21.400	8.71	2.82	0.12	0.00	0.00	0.00	0.00	0.00	2.30	2.30	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	21.300	8.71	2.84	0.12	0.00	0.00	0.00	0.00	0.00	2.30	2.30	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	21.200	8.71	2.85	0.12	0.00	0.00	0.00	0.00	0.00	2.30	2.30	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

29	21.100	8.70	2.87	0.12	0.00	0.00	0.00	0.00	0.00	2.30	2.30	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	21.000	8.70	2.89	0.12	0.00	0.00	0.00	0.00	0.00	2.30	2.30	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	20.900	8.70	2.90	0.12	0.00	0.00	0.00	0.00	0.00	2.31	2.31	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32	20.800	8.70	2.92	0.12	0.00	0.00	0.00	0.00	0.00	2.31	2.31	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33	20.700	8.69	2.93	0.12	0.00	0.00	0.00	0.00	0.00	2.31	2.31	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34	20.600	8.69	2.95	0.12	0.00	0.00	0.00	0.00	0.00	2.31	2.31	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	20.500	8.69	2.96	0.12	0.00	0.00	0.00	0.00	0.00	2.32	2.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36	20.400	8.69	2.98	0.12	0.00	0.00	0.00	0.00	0.00	2.32	2.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37	20.300	8.68	3.00	0.12	0.00	0.00	0.00	0.00	0.00	2.32	2.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	20.200	8.68	3.01	0.12	0.00	0.00	0.00	0.00	0.00	2.32	2.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39	20.100	8.68	3.03	0.12	0.00	0.00	0.00	0.00	0.00	2.32	2.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	20.000	8.68	3.04	0.12	0.00	0.00	0.00	0.00	0.00	2.33	2.33	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	19.900	8.67	3.06	0.12	0.00	0.00	0.00	0.00	0.00	2.33	2.33	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	19.800	8.67	3.08	0.12	0.00	0.00	0.00	0.00	0.00	2.33	2.33	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	19.700	8.67	3.09	0.12	0.00	0.00	0.00	0.00	0.00	2.33	2.33	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	19.600	8.67	3.11	0.12	0.00	0.00	0.00	0.00	0.00	2.34	2.34	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	19.500	8.66	3.12	0.12	0.00	0.00	0.00	0.00	0.00	2.34	2.34	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	19.400	8.66	3.14	0.12	0.00	0.00	0.00	0.00	0.00	2.34	2.34	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	19.300	8.66	3.16	0.12	0.00	0.00	0.00	0.00	0.00	2.34	2.34	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	19.200	8.66	3.17	0.12	0.00	0.00	0.00	0.00	0.00	2.34	2.34	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	19.100	8.65	3.19	0.12	0.00	0.00	0.00	0.00	0.00	2.35	2.35	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	19.000	8.65	3.20	0.12	0.00	0.00	0.00	0.00	0.00	2.35	2.35	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	18.900	8.65	3.22	0.12	0.00	0.00	0.00	0.00	0.00	2.35	2.35	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	18.800	8.65	3.24	0.12	0.00	0.00	0.00	0.00	0.00	2.35	2.35	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	18.700	8.64	3.25	0.12	0.00	0.00	0.00	0.00	0.00	2.36	2.36	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	18.600	8.64	3.27	0.12	0.00	0.00	0.00	0.00	0.00	2.36	2.36	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	18.500	8.64	3.28	0.12	0.00	0.00	0.00	0.00	0.00	2.36	2.36	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	18.400	8.64	3.30	0.12	0.00	0.00	0.00	0.00	0.00	2.36	2.36	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	18.300	8.63	3.32	0.12	0.00	0.00	0.00	0.00	0.00	2.36	2.36	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	18.200	8.63	3.33	0.12	0.00	0.00	0.00	0.00	0.00	2.37	2.37	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	18.100	8.63	3.35	0.12	0.00	0.00	0.00	0.00	0.00	2.37	2.37	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	18.000	8.63	3.37	0.12	0.00	0.00	0.00	0.00	0.00	2.37	2.37	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
61	17.900	8.62	2.18	0.12	0.00	0.00	0.00	0.00	0.00	2.37	2.37	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	17.800	8.62	2.18	0.12	0.00	0.00	0.00	0.00	0.00	2.37	2.37	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
63	17.700	8.62	2.19	0.12	0.00	0.00	0.00	0.00	0.00	2.38	2.38	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	17.600	8.62	2.20	0.12	0.00	0.00	0.00	0.00	0.00	2.38	2.38	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	17.500	8.62	2.20	0.12	0.00	0.00	0.00	0.00	0.00	2.38	2.38	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	17.400	8.61	2.21	0.12	0.00	0.00	0.00	0.00	0.00	2.38	2.38	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	17.300	8.61	2.22	0.13	0.00	0.00	0.00	0.00	0.00	2.38	2.38	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	17.200	8.61	2.22	0.13	0.00	0.00	0.00	0.00	0.00	2.39	2.39	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	17.100	8.61	2.23	0.13	0.00	0.00	0.00	0.00	0.00	2.39	2.39	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	17.000	8.61	2.24	0.13	0.00	0.00	0.00	0.00	0.00	2.39	2.39	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
71	16.900	8.60	2.24	0.13	0.00	0.00	0.00	0.00	0.00	2.39	2.39	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	16.800	8.60	2.25	0.13	0.00	0.00	0.00	0.00	0.00	2.39	2.39	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73	16.700	8.60	2.26	0.13	0.00	0.00	0.00	0.00	0.00	2.40	2.40	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	16.600	8.60	2.26	0.13	0.00	0.00	0.00	0.00	0.00	2.40	2.40	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	16.500	8.59	2.27	0.13	0.00	0.00	0.00	0.00	0.00	2.40	2.40	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76	16.400	8.59	2.28	0.13	0.00	0.00	0.00	0.00	0.00	2.40	2.40	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77	16.300	8.59	2.29	0.13	0.00	0.00	0.00	0.00	0.00	2.40	2.40	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	16.200	8.59	2.29	0.13	0.00	0.00	0.00	0.00	0.00	2.41	2.41	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79	16.100	8.59	2.30	0.13	0.00	0.00	0.00	0.00	0.00	2.41	2.41	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	16.000	8.58	2.31	0.13	0.00	0.00	0.00	0.00	0.00	2.41	2.41	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

81	15.900	8.58	2.62	0.13	0.00	0.00	0.00	0.00	0.00	2.41	2.41	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	15.800	8.58	2.63	0.13	0.00	0.00	0.00	0.00	0.00	2.41	2.41	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
83	15.700	8.58	2.63	0.13	0.00	0.00	0.00	0.00	0.00	2.42	2.42	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	15.600	8.57	2.64	0.13	0.00	0.00	0.00	0.00	0.00	2.42	2.42	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	15.500	8.57	2.65	0.13	0.00	0.00	0.00	0.00	0.00	2.42	2.42	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	15.400	8.57	2.65	0.13	0.00	0.00	0.00	0.00	0.00	2.42	2.42	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87	15.300	8.57	2.66	0.13	0.00	0.00	0.00	0.00	0.00	2.43	2.43	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88	15.200	8.57	2.67	0.13	0.00	0.00	0.00	0.00	0.00	2.43	2.43	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89	15.100	8.56	2.68	0.13	0.00	0.00	0.00	0.00	0.00	2.43	2.43	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	15.000	8.56	2.68	0.13	0.00	0.00	0.00	0.00	0.00	2.43	2.43	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91	14.900	8.56	2.69	0.13	0.00	0.00	0.00	0.00	0.00	2.43	2.43	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92	14.800	8.56	2.70	0.13	0.00	0.00	0.00	0.00	0.00	2.44	2.44	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
93	14.700	8.56	2.70	0.13	0.00	0.00	0.00	0.00	0.00	2.44	2.44	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
94	14.600	8.55	2.71	0.13	0.00	0.00	0.00	0.00	0.00	2.44	2.44	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	14.500	8.55	2.72	0.13	0.00	0.00	0.00	0.00	0.00	2.44	2.44	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
96	14.400	8.55	2.73	0.13	0.00	0.00	0.00	0.00	0.00	2.44	2.44	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97	14.300	8.55	2.73	0.13	0.00	0.00	0.00	0.00	0.00	2.45	2.45	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
98	14.200	8.54	2.74	0.13	0.00	0.00	0.00	0.00	0.00	2.45	2.45	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
99	14.100	8.54	2.75	0.13	0.00	0.00	0.00	0.00	0.00	2.45	2.45	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	14.000	8.54	2.75	0.13	0.00	0.00	0.00	0.00	0.00	2.45	2.45	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
101	13.900	8.54	2.76	0.13	0.00	0.00	0.00	0.00	0.00	2.45	2.45	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102	13.800	8.54	2.77	0.13	0.00	0.00	0.00	0.00	0.00	2.46	2.46	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103	13.700	8.53	2.78	0.13	0.00	0.00	0.00	0.00	0.00	2.46	2.46	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
104	13.600	8.53	2.78	0.13	0.00	0.00	0.00	0.00	0.00	2.46	2.46	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	13.500	8.53	2.79	0.13	0.00	0.00	0.00	0.00	0.00	2.46	2.46	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106	13.400	8.53	2.80	0.13	0.00	0.00	0.00	0.00	0.00	2.46	2.46	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107	13.300	8.52	2.80	0.13	0.00	0.00	0.00	0.00	0.00	2.47	2.47	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
108	13.200	8.52	2.81	0.13	0.00	0.00	0.00	0.00	0.00	2.47	2.47	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
109	13.100	8.52	2.82	0.13	0.00	0.00	0.00	0.00	0.00	2.47	2.47	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	13.000	8.52	2.82	0.13	0.00	0.00	0.00	0.00	0.00	2.47	2.47	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
111	12.900	8.52	2.83	0.13	0.00	0.00	0.00	0.00	0.00	2.47	2.47	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112	12.800	8.51	2.84	0.13	0.00	0.00	0.00	0.00	0.00	2.48	2.48	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113	12.700	8.51	2.85	0.13	0.00	0.00	0.00	0.00	0.00	2.48	2.48	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
114	12.600	8.51	2.85	0.13	0.00	0.00	0.00	0.00	0.00	2.48	2.48	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	12.500	8.51	2.86	0.13	0.00	0.00	0.00	0.00	0.00	2.48	2.48	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
116	12.400	8.51	2.87	0.13	0.00	0.00	0.00	0.00	0.00	2.48	2.48	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117	12.300	8.50	2.87	0.13	0.00	0.00	0.00	0.00	0.00	2.49	2.49	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
118	12.200	8.50	2.88	0.13	0.00	0.00	0.00	0.00	0.00	2.49	2.49	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
119	12.100	8.50	2.89	0.13	0.00	0.00	0.00	0.00	0.00	2.49	2.49	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	12.000	8.50	2.90	0.13	0.00	0.00	0.00	0.00	0.00	2.49	2.49	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
121	11.900	8.49	2.04	0.13	0.00	0.00	0.00	0.00	0.00	2.50	2.50	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122	11.800	8.49	2.04	0.13	0.00	0.00	0.00	0.00	0.00	2.50	2.50	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
123	11.700	8.49	2.05	0.13	0.00	0.00	0.00	0.00	0.00	2.50	2.50	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
124	11.600	8.49	2.05	0.13	0.00	0.00	0.00	0.00	0.00	2.50	2.50	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	11.500	8.49	2.06	0.13	0.00	0.00	0.00	0.00	0.00	2.50	2.50	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126	11.400	8.48	2.06	0.13	0.00	0.00	0.00	0.00	0.00	2.51	2.51	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127	11.300	8.48	2.06	0.13	0.00	0.00	0.00	0.00	0.00	2.51	2.51	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
128	11.200	8.48	2.07	0.13	0.00	0.00	0.00	0.00	0.00	2.51	2.51	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
129	11.100	8.48	2.07	0.13	0.00	0.00	0.00	0.00	0.00	2.51	2.51	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	11.000	8.47	2.08	0.13	0.00	0.00	0.00	0.00	0.00	2.52	2.52	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
131	10.900	8.47	2.08	0.13	0.00	0.00	0.00	0.00	0.00	2.52	2.52	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132	10.800	8.47	2.08	0.13	0.00	0.00	0.00	0.00	0.00	2.52	2.52	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

133	10.700	8.47	2.09	0.13	0.00	0.00	0.00	0.00	0.00	2.52	2.52	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
134	10.600	8.46	2.09	0.13	0.00	0.00	0.00	0.00	0.00	2.53	2.53	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	10.500	8.46	2.10	0.13	0.00	0.00	0.00	0.00	0.00	2.53	2.53	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
136	10.400	8.46	2.10	0.13	0.00	0.00	0.00	0.00	0.00	2.53	2.53	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137	10.300	8.46	2.10	0.13	0.00	0.00	0.00	0.00	0.00	2.53	2.53	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
138	10.200	8.45	2.11	0.13	0.00	0.00	0.00	0.00	0.00	2.54	2.54	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
139	10.100	8.45	2.11	0.13	0.00	0.00	0.00	0.00	0.00	2.54	2.54	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	10.000	8.45	2.12	0.13	0.00	0.00	0.00	0.00	0.00	2.54	2.54	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
141	9.900	8.45	2.12	0.13	0.00	0.00	0.00	0.00	0.00	2.54	2.54	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142	9.800	8.44	2.12	0.13	0.00	0.00	0.00	0.00	0.00	2.55	2.55	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
143	9.700	8.44	2.13	0.13	0.00	0.00	0.00	0.00	0.00	2.55	2.55	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
144	9.600	8.44	2.13	0.13	0.00	0.00	0.00	0.00	0.00	2.55	2.55	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	9.500	8.44	2.14	0.13	0.00	0.00	0.00	0.00	0.00	2.55	2.55	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146	9.400	8.44	2.14	0.13	0.00	0.00	0.00	0.00	0.00	2.56	2.56	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147	9.300	8.43	2.14	0.13	0.00	0.00	0.00	0.00	0.00	2.56	2.56	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
148	9.200	8.43	2.15	0.13	0.00	0.00	0.00	0.00	0.00	2.56	2.56	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
149	9.100	8.43	2.15	0.13	0.00	0.00	0.00	0.00	0.00	2.56	2.56	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	9.000	8.43	2.16	0.13	0.00	0.00	0.00	0.00	0.00	2.56	2.56	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
151	8.900	8.42	2.16	0.13	0.00	0.00	0.00	0.00	0.00	2.57	2.57	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152	8.800	8.42	2.17	0.13	0.00	0.00	0.00	0.00	0.00	2.57	2.57	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153	8.700	8.42	2.17	0.13	0.00	0.00	0.00	0.00	0.00	2.57	2.57	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
154	8.600	8.42	2.17	0.13	0.00	0.00	0.00	0.00	0.00	2.57	2.57	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	8.500	8.41	2.18	0.13	0.00	0.00	0.00	0.00	0.00	2.58	2.58	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
156	8.400	8.41	2.18	0.13	0.00	0.00	0.00	0.00	0.00	2.58	2.58	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157	8.300	8.41	2.19	0.13	0.00	0.00	0.00	0.00	0.00	2.58	2.58	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
158	8.200	8.41	2.19	0.13	0.00	0.00	0.00	0.00	0.00	2.58	2.58	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
159	8.100	8.40	2.19	0.13	0.00	0.00	0.00	0.00	0.00	2.59	2.59	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	8.000	8.40	2.20	0.13	0.00	0.00	0.00	0.00	0.00	2.59	2.59	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161	7.900	8.40	2.20	0.13	0.00	0.00	0.00	0.00	0.00	2.59	2.59	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162	7.800	8.40	2.21	0.13	0.00	0.00	0.00	0.00	0.00	2.59	2.59	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
163	7.700	8.40	2.21	0.13	0.00	0.00	0.00	0.00	0.00	2.60	2.60	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
164	7.600	8.39	2.21	0.13	0.00	0.00	0.00	0.00	0.00	2.60	2.60	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	7.500	8.39	2.22	0.13	0.00	0.00	0.00	0.00	0.00	2.60	2.60	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166	7.400	8.39	2.22	0.13	0.00	0.00	0.00	0.00	0.00	2.60	2.60	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167	7.300	8.39	2.23	0.13	0.00	0.00	0.00	0.00	0.00	2.61	2.61	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
168	7.200	8.38	2.23	0.13	0.00	0.00	0.00	0.00	0.00	2.61	2.61	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
169	7.100	8.38	2.24	0.13	0.00	0.00	0.00	0.00	0.00	2.61	2.61	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	7.000	8.38	2.24	0.13	0.00	0.00	0.00	0.00	0.00	2.61	2.61	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
171	6.900	8.38	2.24	0.13	0.00	0.00	0.00	0.00	0.00	2.62	2.62	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172	6.800	8.37	2.25	0.13	0.00	0.00	0.00	0.00	0.00	2.62	2.62	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
173	6.700	8.37	2.25	0.13	0.00	0.00	0.00	0.00	0.00	2.62	2.62	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
174	6.600	8.37	2.26	0.13	0.00	0.00	0.00	0.00	0.00	2.62	2.62	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	6.500	8.37	2.26	0.13	0.00	0.00	0.00	0.00	0.00	2.63	2.63	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
176	6.400	8.36	2.26	0.13	0.00	0.00	0.00	0.00	0.00	2.63	2.63	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177	6.300	8.36	2.27	0.13	0.00	0.00	0.00	0.00	0.00	2.63	2.63	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
178	6.200	8.36	2.27	0.13	0.00	0.00	0.00	0.00	0.00	2.63	2.63	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
179	6.100	8.36	2.28	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	6.000	8.36	2.28	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
181	5.900	8.36	1.76	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
182	5.800	8.36	1.76	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
183	5.700	8.36	1.76	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
184	5.600	8.36	1.77	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

185	5.500	8.36	1.77	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
186	5.400	8.36	1.77	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
187	5.300	8.36	1.77	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
188	5.200	8.36	1.77	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
189	5.100	8.36	1.78	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190	5.000	8.36	1.78	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
191	4.900	8.36	1.78	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
192	4.800	8.36	1.78	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
193	4.700	8.36	1.78	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
194	4.600	8.36	1.79	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
195	4.500	8.36	1.79	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
196	4.400	8.36	1.79	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197	4.300	8.36	1.79	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	4.200	8.36	1.80	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
199	4.100	8.36	1.80	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200	4.000	8.36	1.80	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
201	3.900	8.36	1.80	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	3.800	8.36	1.80	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	3.700	8.36	1.81	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	3.600	8.36	1.81	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	3.500	8.36	1.81	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	3.400	8.36	1.81	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
207	3.300	8.36	1.81	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
208	3.200	8.36	1.82	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
209	3.100	8.36	1.82	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	3.000	8.36	1.82	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
211	2.900	8.36	1.82	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
212	2.800	8.36	1.82	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
213	2.700	8.36	1.83	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
214	2.600	8.36	1.83	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
215	2.500	8.36	1.83	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
216	2.400	8.36	1.83	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
217	2.300	8.36	1.84	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
218	2.200	8.36	1.84	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
219	2.100	8.36	1.84	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	2.000	8.36	1.84	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
221	1.900	8.36	1.84	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
222	1.800	8.36	1.85	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
223	1.700	8.36	1.85	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
224	1.600	8.36	1.85	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	1.500	8.36	1.85	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	1.400	8.36	1.85	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	1.300	8.36	1.86	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	1.200	8.36	1.86	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
229	1.100	8.36	1.86	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	1.000	8.36	1.86	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
231	0.900	8.36	1.87	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
232	0.800	8.36	1.87	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
233	0.700	8.36	1.87	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
234	0.600	8.36	1.87	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
235	0.500	8.36	1.87	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
236	0.400	8.36	1.88	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

237	0.300	8.36	1.88	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
238	0.200	8.36	1.88	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
239	0.100	8.36	1.88	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
240	0.000	8.36	1.88	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

SPECIAL REPORT: Bayou Toro @ 110401A
HYDRAULIC PARAMETER VALUES

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	ADVCTV VELO m/s	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
1	24.00	23.90	0.0108	0.004	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.004
2	23.90	23.80	0.0115	0.005	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.005
3	23.80	23.70	0.0123	0.005	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.005
4	23.70	23.60	0.0131	0.005	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.005
5	23.60	23.50	0.0138	0.006	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.006
6	23.50	23.40	0.0146	0.006	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.006
7	23.40	23.30	0.0154	0.006	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.006
8	23.30	23.20	0.0161	0.007	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.007
9	23.20	23.10	0.0169	0.007	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.007
10	23.10	23.00	0.0177	0.007	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.007
11	23.00	22.90	0.0184	0.008	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.008
12	22.90	22.80	0.0192	0.008	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.008
13	22.80	22.70	0.0200	0.008	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.008
14	22.70	22.60	0.0207	0.008	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.008
15	22.60	22.50	0.0215	0.009	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.009
16	22.50	22.40	0.0223	0.009	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.009
17	22.40	22.30	0.0230	0.009	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.009
18	22.30	22.20	0.0238	0.010	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.010
19	22.20	22.10	0.0246	0.010	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.010
20	22.10	22.00	0.0253	0.010	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.010
21	22.00	21.90	0.0261	0.011	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.011
22	21.90	21.80	0.0269	0.011	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.011
23	21.80	21.70	0.0276	0.011	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.011
24	21.70	21.60	0.0284	0.012	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.012
25	21.60	21.50	0.0292	0.012	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.012
26	21.50	21.40	0.0299	0.012	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.012
27	21.40	21.30	0.0307	0.013	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.013
28	21.30	21.20	0.0315	0.013	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.013
29	21.20	21.10	0.0322	0.013	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.013
30	21.10	21.00	0.0330	0.013	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.013
31	21.00	20.90	0.0338	0.014	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.014
32	20.90	20.80	0.0345	0.014	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.014
33	20.80	20.70	0.0353	0.014	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.014
34	20.70	20.60	0.0361	0.015	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.015
35	20.60	20.50	0.0368	0.015	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.015
36	20.50	20.40	0.0376	0.015	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.015
37	20.40	20.30	0.0384	0.016	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.016
38	20.30	20.20	0.0391	0.016	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.016
39	20.20	20.10	0.0399	0.016	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.016

40	20.10	20.00	0.0407	0.017	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.017
41	20.00	19.90	0.0414	0.017	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.017
42	19.90	19.80	0.0422	0.017	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.017
43	19.80	19.70	0.0430	0.018	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.018
44	19.70	19.60	0.0437	0.018	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.018
45	19.60	19.50	0.0445	0.018	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.018
46	19.50	19.40	0.0453	0.018	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.018
47	19.40	19.30	0.0460	0.019	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.019
48	19.30	19.20	0.0468	0.019	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.019
49	19.20	19.10	0.0476	0.019	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.019
50	19.10	19.00	0.0483	0.020	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.020
51	19.00	18.90	0.0491	0.020	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.020
52	18.90	18.80	0.0499	0.020	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.020
53	18.80	18.70	0.0506	0.021	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.021
54	18.70	18.60	0.0514	0.021	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.021
55	18.60	18.50	0.0522	0.021	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.021
56	18.50	18.40	0.0529	0.022	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.022
57	18.40	18.30	0.0537	0.022	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.022
58	18.30	18.20	0.0545	0.022	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.022
59	18.20	18.10	0.0552	0.022	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.022
60	18.10	18.00	0.0560	0.023	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.023
61	18.00	17.90	0.0568	0.013	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.013
62	17.90	17.80	0.0575	0.013	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.013
63	17.80	17.70	0.0583	0.013	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.013
64	17.70	17.60	0.0591	0.013	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.013
65	17.60	17.50	0.0598	0.013	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.013
66	17.50	17.40	0.0606	0.014	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.014
67	17.40	17.30	0.0614	0.014	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.014
68	17.30	17.20	0.0621	0.014	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.014
69	17.20	17.10	0.0629	0.014	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.014
70	17.10	17.00	0.0637	0.014	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.014
71	17.00	16.90	0.0644	0.014	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.014
72	16.90	16.80	0.0652	0.015	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.015
73	16.80	16.70	0.0660	0.015	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.015
74	16.70	16.60	0.0667	0.015	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.015
75	16.60	16.50	0.0675	0.015	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.015
76	16.50	16.40	0.0683	0.015	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.015
77	16.40	16.30	0.0690	0.015	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.015
78	16.30	16.20	0.0698	0.016	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.016
79	16.20	16.10	0.0706	0.016	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.016
80	16.10	16.00	0.0713	0.016	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.016
81	16.00	15.90	0.1091	0.024	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.024
82	15.90	15.80	0.1099	0.025	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.025
83	15.80	15.70	0.1106	0.025	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.025
84	15.70	15.60	0.1114	0.025	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.025
85	15.60	15.50	0.1122	0.025	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.025
86	15.50	15.40	0.1129	0.025	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.025
87	15.40	15.30	0.1137	0.026	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.026
88	15.30	15.20	0.1145	0.026	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.026
89	15.20	15.10	0.1152	0.026	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.026
90	15.10	15.00	0.1160	0.026	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.026
91	15.00	14.90	0.1168	0.026	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.026

92	14.90	14.80	0.1175	0.026	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.026
93	14.80	14.70	0.1183	0.027	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.027
94	14.70	14.60	0.1191	0.027	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.027
95	14.60	14.50	0.1198	0.027	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.027
96	14.50	14.40	0.1206	0.027	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.027
97	14.40	14.30	0.1214	0.027	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.027
98	14.30	14.20	0.1221	0.027	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.027
99	14.20	14.10	0.1229	0.028	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.028
100	14.10	14.00	0.1237	0.028	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.028
101	14.00	13.90	0.1244	0.028	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.028
102	13.90	13.80	0.1252	0.028	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.028
103	13.80	13.70	0.1260	0.028	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.028
104	13.70	13.60	0.1267	0.028	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.028
105	13.60	13.50	0.1275	0.029	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.029
106	13.50	13.40	0.1283	0.029	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.029
107	13.40	13.30	0.1290	0.029	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.029
108	13.30	13.20	0.1298	0.029	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.029
109	13.20	13.10	0.1306	0.029	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.029
110	13.10	13.00	0.1313	0.029	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.029
111	13.00	12.90	0.1321	0.030	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.030
112	12.90	12.80	0.1329	0.030	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.030
113	12.80	12.70	0.1336	0.030	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.030
114	12.70	12.60	0.1344	0.030	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.030
115	12.60	12.50	0.1352	0.030	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.030
116	12.50	12.40	0.1359	0.031	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.031
117	12.40	12.30	0.1367	0.031	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.031
118	12.30	12.20	0.1375	0.031	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.031
119	12.20	12.10	0.1382	0.031	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.031
120	12.10	12.00	0.1390	0.031	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.031
121	12.00	11.90	0.1398	0.020	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.020
122	11.90	11.80	0.1405	0.020	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.020
123	11.80	11.70	0.1413	0.020	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.020
124	11.70	11.60	0.1421	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
125	11.60	11.50	0.1428	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
126	11.50	11.40	0.1436	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
127	11.40	11.30	0.1444	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
128	11.30	11.20	0.1451	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
129	11.20	11.10	0.1459	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
130	11.10	11.00	0.1467	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
131	11.00	10.90	0.1474	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
132	10.90	10.80	0.1482	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
133	10.80	10.70	0.1490	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
134	10.70	10.60	0.1497	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
135	10.60	10.50	0.1505	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
136	10.50	10.40	0.1513	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
137	10.40	10.30	0.1520	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
138	10.30	10.20	0.1528	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
139	10.20	10.10	0.1536	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
140	10.10	10.00	0.1543	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
141	10.00	9.90	0.1551	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
142	9.90	9.80	0.1559	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
143	9.80	9.70	0.1566	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023

144	9.70	9.60	0.1574	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
145	9.60	9.50	0.1582	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
146	9.50	9.40	0.1589	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
147	9.40	9.30	0.1597	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
148	9.30	9.20	0.1605	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
149	9.20	9.10	0.1617	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
150	9.10	9.00	0.1625	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
151	9.00	8.90	0.1633	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
152	8.90	8.80	0.1640	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
153	8.80	8.70	0.1648	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
154	8.70	8.60	0.1656	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
155	8.60	8.50	0.1663	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
156	8.50	8.40	0.1671	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
157	8.40	8.30	0.1679	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
158	8.30	8.20	0.1686	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
159	8.20	8.10	0.1694	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
160	8.10	8.00	0.1702	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
161	8.00	7.90	0.1709	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
162	7.90	7.80	0.1717	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
163	7.80	7.70	0.1725	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
164	7.70	7.60	0.1732	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
165	7.60	7.50	0.1740	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
166	7.50	7.40	0.1748	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
167	7.40	7.30	0.1755	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
168	7.30	7.20	0.1763	0.026	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.026
169	7.20	7.10	0.1771	0.026	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.026
170	7.10	7.00	0.1778	0.026	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.026
171	7.00	6.90	0.1786	0.026	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.026
172	6.90	6.80	0.1794	0.026	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.026
173	6.80	6.70	0.1801	0.026	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.026
174	6.70	6.60	0.1809	0.026	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.026
175	6.60	6.50	0.1817	0.026	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.026
176	6.50	6.40	0.1824	0.026	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.026
177	6.40	6.30	0.1832	0.027	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.027
178	6.30	6.20	0.1840	0.027	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.027
179	6.20	6.10	0.1847	0.027	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.027
180	6.10	6.00	0.1855	0.027	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.027
181	6.00	5.90	0.1863	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
182	5.90	5.80	0.1870	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
183	5.80	5.70	0.1878	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
184	5.70	5.60	0.1886	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
185	5.60	5.50	0.1893	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
186	5.50	5.40	0.1901	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
187	5.40	5.30	0.1909	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
188	5.30	5.20	0.1916	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
189	5.20	5.10	0.1924	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
190	5.10	5.00	0.1932	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
191	5.00	4.90	0.1939	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
192	4.90	4.80	0.1947	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
193	4.80	4.70	0.1955	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
194	4.70	4.60	0.1962	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
195	4.60	4.50	0.1970	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020

196	4.50	4.40	0.1978	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
197	4.40	4.30	0.1985	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
198	4.30	4.20	0.1993	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
199	4.20	4.10	0.2001	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
200	4.10	4.00	0.2008	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
201	4.00	3.90	0.2016	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
202	3.90	3.80	0.2024	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
203	3.80	3.70	0.2031	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
204	3.70	3.60	0.2039	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
205	3.60	3.50	0.2047	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
206	3.50	3.40	0.2054	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
207	3.40	3.30	0.2062	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
208	3.30	3.20	0.2070	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
209	3.20	3.10	0.2077	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
210	3.10	3.00	0.2085	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
211	3.00	2.90	0.2093	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
212	2.90	2.80	0.2100	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
213	2.80	2.70	0.2108	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
214	2.70	2.60	0.2116	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
215	2.60	2.50	0.2123	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
216	2.50	2.40	0.2131	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
217	2.40	2.30	0.2139	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
218	2.30	2.20	0.2146	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
219	2.20	2.10	0.2154	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
220	2.10	2.00	0.2162	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
221	2.00	1.90	0.2169	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
222	1.90	1.80	0.2177	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
223	1.80	1.70	0.2185	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
224	1.70	1.60	0.2192	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
225	1.60	1.50	0.2200	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
226	1.50	1.40	0.2208	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
227	1.40	1.30	0.2215	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
228	1.30	1.20	0.2223	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
229	1.20	1.10	0.2231	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
230	1.10	1.00	0.2238	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
231	1.00	0.90	0.2246	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
232	0.90	0.80	0.2254	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
233	0.80	0.70	0.2261	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
234	0.70	0.60	0.2269	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
235	0.60	0.50	0.2277	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
236	0.50	0.40	0.2284	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
237	0.40	0.30	0.2292	0.024	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.024
238	0.30	0.20	0.2300	0.024	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.024
239	0.20	0.10	0.2307	0.024	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.024
240	0.10	0.00	0.2315	0.024	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.024

```
FINAL REPORT    Bayou Toro @ 110401A                        LA-QUAL Calibration for Bayou Toro
REACH NO.  1    Bayou Toro

 ******************************************************** REACH INPUTS ********************************************************
```

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM
1	HDWTR	0.01000	21.80	0.00	0.00	0.00	2.20	2.80	0.00	2.80	0.00	1.24	0.16	0.00	0.00	0.00	0.00	0.00
EACH	INCR	0.00077	21.80	0.00	0.00	0.00	2.20	2.80	0.00			1.24	0.16	0.00	0.00	0.00	0.00	

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
1	24.00	23.90	0.01077	0.0	0.00439	0.26	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.004
2	23.90	23.80	0.01153	0.0	0.00470	0.25	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.005
3	23.80	23.70	0.01230	0.0	0.00501	0.23	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.005
4	23.70	23.60	0.01307	0.0	0.00532	0.22	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.005
5	23.60	23.50	0.01383	0.0	0.00563	0.21	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.006
6	23.50	23.40	0.01460	0.0	0.00595	0.19	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.006
7	23.40	23.30	0.01537	0.0	0.00626	0.18	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.006
8	23.30	23.20	0.01613	0.0	0.00657	0.18	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.007
9	23.20	23.10	0.01690	0.0	0.00688	0.17	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.007
10	23.10	23.00	0.01767	0.0	0.00720	0.16	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.007
11	23.00	22.90	0.01843	0.0	0.00751	0.15	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.008
12	22.90	22.80	0.01920	0.0	0.00782	0.15	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.008
13	22.80	22.70	0.01997	0.0	0.00813	0.14	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.008
14	22.70	22.60	0.02073	0.0	0.00844	0.14	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.008
15	22.60	22.50	0.02150	0.0	0.00876	0.13	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.009
16	22.50	22.40	0.02227	0.0	0.00907	0.13	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.009
17	22.40	22.30	0.02303	0.0	0.00938	0.12	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.009
18	22.30	22.20	0.02380	0.0	0.00969	0.12	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.010
19	22.20	22.10	0.02457	0.0	0.01001	0.12	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.010
20	22.10	22.00	0.02533	0.0	0.01032	0.11	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.010
21	22.00	21.90	0.02610	0.0	0.01063	0.11	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.011
22	21.90	21.80	0.02687	0.0	0.01094	0.11	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.011
23	21.80	21.70	0.02763	0.0	0.01126	0.10	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.011
24	21.70	21.60	0.02840	0.0	0.01157	0.10	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.012
25	21.60	21.50	0.02917	0.0	0.01188	0.10	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.012
26	21.50	21.40	0.02993	0.0	0.01219	0.09	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.012
27	21.40	21.30	0.03070	0.0	0.01250	0.09	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.013
28	21.30	21.20	0.03147	0.0	0.01282	0.09	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.013
29	21.20	21.10	0.03223	0.0	0.01313	0.09	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.013
30	21.10	21.00	0.03300	0.0	0.01344	0.09	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.013
31	21.00	20.90	0.03377	0.0	0.01375	0.08	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.014
32	20.90	20.80	0.03453	0.0	0.01407	0.08	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.014
33	20.80	20.70	0.03530	0.0	0.01438	0.08	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.014
34	20.70	20.60	0.03607	0.0	0.01469	0.08	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.015
35	20.60	20.50	0.03683	0.0	0.01500	0.08	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.015
36	20.50	20.40	0.03760	0.0	0.01531	0.08	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.015
37	20.40	20.30	0.03837	0.0	0.01563	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.016
38	20.30	20.20	0.03913	0.0	0.01594	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.016

39	20.20	20.10	0.03990	0.0	0.01625	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.016
40	20.10	20.00	0.04067	0.0	0.01656	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.017
41	20.00	19.90	0.04143	0.0	0.01688	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.017
42	19.90	19.80	0.04220	0.0	0.01719	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.017
43	19.80	19.70	0.04297	0.0	0.01750	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.018
44	19.70	19.60	0.04373	0.0	0.01781	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.018
45	19.60	19.50	0.04450	0.0	0.01812	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.018
46	19.50	19.40	0.04527	0.0	0.01844	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.018
47	19.40	19.30	0.04603	0.0	0.01875	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.019
48	19.30	19.20	0.04680	0.0	0.01906	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.019
49	19.20	19.10	0.04757	0.0	0.01937	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.019
50	19.10	19.00	0.04833	0.0	0.01969	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.020
51	19.00	18.90	0.04910	0.0	0.02000	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.020
52	18.90	18.80	0.04987	0.0	0.02031	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.020
53	18.80	18.70	0.05063	0.0	0.02062	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.021
54	18.70	18.60	0.05140	0.0	0.02094	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.021
55	18.60	18.50	0.05217	0.0	0.02125	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.021
56	18.50	18.40	0.05293	0.0	0.02156	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.022
57	18.40	18.30	0.05370	0.0	0.02187	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.022
58	18.30	18.20	0.05447	0.0	0.02218	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.022
59	18.20	18.10	0.05523	0.0	0.02250	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.022
60	18.10	18.00	0.05600	0.0	0.02281	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.023
TOT						6.27			14731.19	47520.00					
AVG					0.0111		0.31	7.92			2.46				
CUM						6.27									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	BKGD SOD *	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	23.900	8.77	2.43	0.12	0.00	0.00	0.00	0.00	0.00	2.24	2.24	2.24	0.02	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	23.800	8.77	2.44	0.12	0.00	0.00	0.00	0.00	0.00	2.24	2.24	2.24	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	23.700	8.77	2.46	0.12	0.00	0.00	0.00	0.00	0.00	2.25	2.25	2.25	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	23.600	8.77	2.48	0.12	0.00	0.00	0.00	0.00	0.00	2.25	2.25	2.25	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	23.500	8.76	2.49	0.12	0.00	0.00	0.00	0.00	0.00	2.25	2.25	2.25	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	23.400	8.76	2.51	0.12	0.00	0.00	0.00	0.00	0.00	2.25	2.25	2.25	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	23.300	8.76	2.52	0.12	0.00	0.00	0.00	0.00	0.00	2.25	2.25	2.25	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	23.200	8.76	2.54	0.12	0.00	0.00	0.00	0.00	0.00	2.26	2.26	2.26	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	23.100	8.75	2.55	0.12	0.00	0.00	0.00	0.00	0.00	2.26	2.26	2.26	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	23.000	8.75	2.57	0.12	0.00	0.00	0.00	0.00	0.00	2.26	2.26	2.26	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	22.900	8.75	2.59	0.12	0.00	0.00	0.00	0.00	0.00	2.26	2.26	2.26	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	22.800	8.75	2.60	0.12	0.00	0.00	0.00	0.00	0.00	2.27	2.27	2.27	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	22.700	8.74	2.62	0.12	0.00	0.00	0.00	0.00	0.00	2.27	2.27	2.27	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	22.600	8.74	2.63	0.12	0.00	0.00	0.00	0.00	0.00	2.27	2.27	2.27	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	22.500	8.74	2.65	0.12	0.00	0.00	0.00	0.00	0.00	2.27	2.27	2.27	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	22.400	8.74	2.66	0.12	0.00	0.00	0.00	0.00	0.00	2.27	2.27	2.27	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	22.300	8.73	2.68	0.12	0.00	0.00	0.00	0.00	0.00	2.28	2.28	2.28	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	22.200	8.73	2.70	0.12	0.00	0.00	0.00	0.00	0.00	2.28	2.28	2.28	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

19	22.100	8.73	2.71	0.12	0.00	0.00	0.00	0.00	0.00	2.28	2.28	2.28	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	22.000	8.73	2.73	0.12	0.00	0.00	0.00	0.00	0.00	2.28	2.28	2.28	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	21.900	8.72	2.74	0.12	0.00	0.00	0.00	0.00	0.00	2.28	2.28	2.28	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	21.800	8.72	2.76	0.12	0.00	0.00	0.00	0.00	0.00	2.29	2.29	2.29	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	21.700	8.72	2.77	0.12	0.00	0.00	0.00	0.00	0.00	2.29	2.29	2.29	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	21.600	8.72	2.79	0.12	0.00	0.00	0.00	0.00	0.00	2.29	2.29	2.29	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	21.500	8.71	2.81	0.12	0.00	0.00	0.00	0.00	0.00	2.29	2.29	2.29	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	21.400	8.71	2.82	0.12	0.00	0.00	0.00	0.00	0.00	2.30	2.30	2.30	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	21.300	8.71	2.84	0.12	0.00	0.00	0.00	0.00	0.00	2.30	2.30	2.30	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	21.200	8.71	2.85	0.12	0.00	0.00	0.00	0.00	0.00	2.30	2.30	2.30	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	21.100	8.70	2.87	0.12	0.00	0.00	0.00	0.00	0.00	2.30	2.30	2.30	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	21.000	8.70	2.89	0.12	0.00	0.00	0.00	0.00	0.00	2.30	2.30	2.30	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	20.900	8.70	2.90	0.12	0.00	0.00	0.00	0.00	0.00	2.31	2.31	2.31	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32	20.800	8.70	2.92	0.12	0.00	0.00	0.00	0.00	0.00	2.31	2.31	2.31	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33	20.700	8.69	2.93	0.12	0.00	0.00	0.00	0.00	0.00	2.31	2.31	2.31	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34	20.600	8.69	2.95	0.12	0.00	0.00	0.00	0.00	0.00	2.31	2.31	2.31	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	20.500	8.69	2.96	0.12	0.00	0.00	0.00	0.00	0.00	2.32	2.32	2.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36	20.400	8.69	2.98	0.12	0.00	0.00	0.00	0.00	0.00	2.32	2.32	2.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37	20.300	8.68	3.00	0.12	0.00	0.00	0.00	0.00	0.00	2.32	2.32	2.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	20.200	8.68	3.01	0.12	0.00	0.00	0.00	0.00	0.00	2.32	2.32	2.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39	20.100	8.68	3.03	0.12	0.00	0.00	0.00	0.00	0.00	2.32	2.32	2.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	20.000	8.68	3.04	0.12	0.00	0.00	0.00	0.00	0.00	2.33	2.33	2.33	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	19.900	8.67	3.06	0.12	0.00	0.00	0.00	0.00	0.00	2.33	2.33	2.33	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	19.800	8.67	3.08	0.12	0.00	0.00	0.00	0.00	0.00	2.33	2.33	2.33	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	19.700	8.67	3.09	0.12	0.00	0.00	0.00	0.00	0.00	2.33	2.33	2.33	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	19.600	8.67	3.11	0.12	0.00	0.00	0.00	0.00	0.00	2.34	2.34	2.34	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	19.500	8.66	3.12	0.12	0.00	0.00	0.00	0.00	0.00	2.34	2.34	2.34	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	19.400	8.66	3.14	0.12	0.00	0.00	0.00	0.00	0.00	2.34	2.34	2.34	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	19.300	8.66	3.16	0.12	0.00	0.00	0.00	0.00	0.00	2.34	2.34	2.34	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	19.200	8.66	3.17	0.12	0.00	0.00	0.00	0.00	0.00	2.34	2.34	2.34	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	19.100	8.65	3.19	0.12	0.00	0.00	0.00	0.00	0.00	2.35	2.35	2.35	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	19.000	8.65	3.20	0.12	0.00	0.00	0.00	0.00	0.00	2.35	2.35	2.35	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	18.900	8.65	3.22	0.12	0.00	0.00	0.00	0.00	0.00	2.35	2.35	2.35	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	18.800	8.65	3.24	0.12	0.00	0.00	0.00	0.00	0.00	2.35	2.35	2.35	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	18.700	8.64	3.25	0.12	0.00	0.00	0.00	0.00	0.00	2.36	2.36	2.36	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	18.600	8.64	3.27	0.12	0.00	0.00	0.00	0.00	0.00	2.36	2.36	2.36	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	18.500	8.64	3.28	0.12	0.00	0.00	0.00	0.00	0.00	2.36	2.36	2.36	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	18.400	8.64	3.30	0.12	0.00	0.00	0.00	0.00	0.00	2.36	2.36	2.36	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	18.300	8.63	3.32	0.12	0.00	0.00	0.00	0.00	0.00	2.36	2.36	2.36	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	18.200	8.63	3.33	0.12	0.00	0.00	0.00	0.00	0.00	2.37	2.37	2.37	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	18.100	8.63	3.35	0.12	0.00	0.00	0.00	0.00	0.00	2.37	2.37	2.37	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	18.000	8.63	3.37	0.12	0.00	0.00	0.00	0.00	0.00	2.37	2.37	2.37	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.77	0.11	0.00	0.00	0.00	0.00	0.00	2.00			0.02	0.00	0.10	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM

1	23.900	21.81	0.00	0.00	0.00	3.54	2.82	0.00	2.82	0.00	1.26	0.16	0.00	1.42	0.00	0.00	0.00	0.	0.00
2	23.800	21.83	0.00	0.00	0.00	4.28	2.83	0.00	2.83	0.00	1.27	0.17	0.01	1.44	0.00	0.00	0.00	0.	0.00
3	23.700	21.84	0.00	0.00	0.00	4.69	2.85	0.00	2.85	0.00	1.28	0.17	0.01	1.46	0.00	0.00	0.00	0.	0.00
4	23.600	21.86	0.00	0.00	0.00	4.94	2.86	0.00	2.86	0.00	1.29	0.17	0.01	1.48	0.00	0.00	0.00	0.	0.00
5	23.500	21.88	0.00	0.00	0.00	5.09	2.87	0.00	2.87	0.00	1.30	0.17	0.02	1.49	0.00	0.00	0.00	0.	0.00
6	23.400	21.89	0.00	0.00	0.00	5.19	2.88	0.00	2.88	0.00	1.31	0.17	0.02	1.50	0.00	0.00	0.00	0.	0.00
7	23.300	21.90	0.00	0.00	0.00	5.25	2.88	0.00	2.88	0.00	1.32	0.17	0.02	1.51	0.00	0.00	0.00	0.	0.00
8	23.200	21.92	0.00	0.00	0.00	5.30	2.89	0.00	2.89	0.00	1.33	0.17	0.02	1.52	0.00	0.00	0.00	0.	0.00
9	23.100	21.93	0.00	0.00	0.00	5.33	2.90	0.00	2.90	0.00	1.33	0.18	0.03	1.53	0.00	0.00	0.00	0.	0.00
10	23.000	21.95	0.00	0.00	0.00	5.36	2.90	0.00	2.90	0.00	1.34	0.18	0.03	1.54	0.00	0.00	0.00	0.	0.00
11	22.900	21.97	0.00	0.00	0.00	5.38	2.91	0.00	2.91	0.00	1.34	0.18	0.03	1.55	0.00	0.00	0.00	0.	0.00
12	22.800	21.98	0.00	0.00	0.00	5.40	2.91	0.00	2.91	0.00	1.35	0.18	0.03	1.56	0.00	0.00	0.00	0.	0.00
13	22.700	21.99	0.00	0.00	0.00	5.41	2.91	0.00	2.91	0.00	1.35	0.18	0.03	1.56	0.00	0.00	0.00	0.	0.00
14	22.600	22.01	0.00	0.00	0.00	5.43	2.92	0.00	2.92	0.00	1.36	0.18	0.03	1.57	0.00	0.00	0.00	0.	0.00
15	22.500	22.02	0.00	0.00	0.00	5.44	2.92	0.00	2.92	0.00	1.36	0.18	0.03	1.57	0.00	0.00	0.00	0.	0.00
16	22.400	22.04	0.00	0.00	0.00	5.45	2.92	0.00	2.92	0.00	1.36	0.18	0.04	1.58	0.00	0.00	0.00	0.	0.00
17	22.300	22.06	0.00	0.00	0.00	5.47	2.93	0.00	2.93	0.00	1.37	0.18	0.04	1.59	0.00	0.00	0.00	0.	0.00
18	22.200	22.07	0.00	0.00	0.00	5.48	2.93	0.00	2.93	0.00	1.37	0.18	0.04	1.59	0.00	0.00	0.00	0.	0.00
19	22.100	22.08	0.00	0.00	0.00	5.49	2.93	0.00	2.93	0.00	1.37	0.18	0.04	1.59	0.00	0.00	0.00	0.	0.00
20	22.000	22.10	0.00	0.00	0.00	5.50	2.93	0.00	2.93	0.00	1.38	0.18	0.04	1.60	0.00	0.00	0.00	0.	0.00
21	21.900	22.11	0.00	0.00	0.00	5.51	2.93	0.00	2.93	0.00	1.38	0.18	0.04	1.60	0.00	0.00	0.00	0.	0.00
22	21.800	22.13	0.00	0.00	0.00	5.53	2.94	0.00	2.94	0.00	1.38	0.18	0.04	1.61	0.00	0.00	0.00	0.	0.00
23	21.700	22.15	0.00	0.00	0.00	5.54	2.94	0.00	2.94	0.00	1.38	0.18	0.04	1.61	0.00	0.00	0.00	0.	0.00
24	21.600	22.16	0.00	0.00	0.00	5.55	2.94	0.00	2.94	0.00	1.38	0.18	0.04	1.61	0.00	0.00	0.00	0.	0.00
25	21.500	22.17	0.00	0.00	0.00	5.56	2.94	0.00	2.94	0.00	1.39	0.18	0.04	1.61	0.00	0.00	0.00	0.	0.00
26	21.400	22.19	0.00	0.00	0.00	5.57	2.94	0.00	2.94	0.00	1.39	0.18	0.04	1.62	0.00	0.00	0.00	0.	0.00
27	21.300	22.20	0.00	0.00	0.00	5.58	2.94	0.00	2.94	0.00	1.39	0.18	0.05	1.62	0.00	0.00	0.00	0.	0.00
28	21.200	22.22	0.00	0.00	0.00	5.59	2.94	0.00	2.94	0.00	1.39	0.19	0.05	1.62	0.00	0.00	0.00	0.	0.00
29	21.100	22.24	0.00	0.00	0.00	5.60	2.94	0.00	2.94	0.00	1.39	0.19	0.05	1.63	0.00	0.00	0.00	0.	0.00
30	21.000	22.25	0.00	0.00	0.00	5.61	2.94	0.00	2.94	0.00	1.40	0.19	0.05	1.63	0.00	0.00	0.00	0.	0.00
31	20.900	22.26	0.00	0.00	0.00	5.62	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.63	0.00	0.00	0.00	0.	0.00
32	20.800	22.28	0.00	0.00	0.00	5.63	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.63	0.00	0.00	0.00	0.	0.00
33	20.700	22.30	0.00	0.00	0.00	5.64	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.63	0.00	0.00	0.00	0.	0.00
34	20.600	22.31	0.00	0.00	0.00	5.65	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.64	0.00	0.00	0.00	0.	0.00
35	20.500	22.33	0.00	0.00	0.00	5.66	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.64	0.00	0.00	0.00	0.	0.00
36	20.400	22.34	0.00	0.00	0.00	5.67	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.64	0.00	0.00	0.00	0.	0.00
37	20.300	22.35	0.00	0.00	0.00	5.68	2.95	0.00	2.95	0.00	1.40	0.19	0.05	1.64	0.00	0.00	0.00	0.	0.00
38	20.200	22.37	0.00	0.00	0.00	5.69	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.64	0.00	0.00	0.00	0.	0.00
39	20.100	22.39	0.00	0.00	0.00	5.70	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.00	0.00	0.	0.00
40	20.000	22.40	0.00	0.00	0.00	5.71	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.00	0.00	0.	0.00
41	19.900	22.42	0.00	0.00	0.00	5.72	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.00	0.00	0.	0.00
42	19.800	22.43	0.00	0.00	0.00	5.73	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.00	0.00	0.	0.00
43	19.700	22.44	0.00	0.00	0.00	5.74	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.00	0.00	0.	0.00
44	19.600	22.46	0.00	0.00	0.00	5.75	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.00	0.00	0.	0.00
45	19.500	22.48	0.00	0.00	0.00	5.76	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.00	0.00	0.	0.00
46	19.400	22.49	0.00	0.00	0.00	5.76	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.65	0.00	0.00	0.00	0.	0.00
47	19.300	22.51	0.00	0.00	0.00	5.77	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.66	0.00	0.00	0.00	0.	0.00
48	19.200	22.52	0.00	0.00	0.00	5.78	2.95	0.00	2.95	0.00	1.41	0.19	0.05	1.66	0.00	0.00	0.00	0.	0.00
49	19.100	22.53	0.00	0.00	0.00	5.79	2.95	0.00	2.95	0.00	1.41	0.19	0.06	1.66	0.00	0.00	0.00	0.	0.00
50	19.000	22.55	0.00	0.00	0.00	5.80	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.66	0.00	0.00	0.00	0.	0.00
51	18.900	22.57	0.00	0.00	0.00	5.81	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.66	0.00	0.00	0.00	0.	0.00

52	18.800	22.58	0.00	0.00	0.00	5.82	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.66	0.00	0.00	0.00	0.	0.00
53	18.700	22.60	0.00	0.00	0.00	5.82	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.66	0.00	0.00	0.00	0.	0.00
54	18.600	22.61	0.00	0.00	0.00	5.83	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.66	0.00	0.00	0.00	0.	0.00
55	18.500	22.62	0.00	0.00	0.00	5.84	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.66	0.00	0.00	0.00	0.	0.00
56	18.400	22.64	0.00	0.00	0.00	5.85	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.67	0.00	0.00	0.00	0.	0.00
57	18.300	22.66	0.00	0.00	0.00	5.86	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.67	0.00	0.00	0.00	0.	0.00
58	18.200	22.67	0.00	0.00	0.00	5.86	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.67	0.00	0.00	0.00	0.	0.00
59	18.100	22.69	0.00	0.00	0.00	5.87	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.67	0.00	0.00	0.00	0.	0.00
60	18.000	22.70	0.00	0.00	0.00	5.88	2.95	0.00	2.95	0.00	1.42	0.19	0.06	1.67	0.00	0.00	0.00	0.	0.00

FINAL REPORT Bayou Toro @ 110401A LA-QUAL Calibration for Bayou Toro
REACH NO. 2 Bayou Toro

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM
61	UPR RCH	0.05600	22.70	0.00	0.00	0.00	5.88	2.95	0.00	2.95	0.00	1.42	0.19	0.06	0.00	0.00	0.00	0.00
EACH	INCR	0.00077	21.80	0.00	0.00	0.00	2.20	2.80	0.00			1.24	0.16	0.00	0.00	0.00	0.00	
81	WSTLD	0.03700	21.80	0.00	0.00	0.00	2.20	2.80	0.00	2.80	0.00	1.24	0.16	0.00	0.00	0.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
61	18.00	17.90	0.05677	0.0	0.01274	0.09	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.013
62	17.90	17.80	0.05753	0.0	0.01291	0.09	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.013
63	17.80	17.70	0.05830	0.0	0.01308	0.09	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.013
64	17.70	17.60	0.05907	0.0	0.01325	0.09	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.013
65	17.60	17.50	0.05983	0.0	0.01343	0.09	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.013
66	17.50	17.40	0.06060	0.0	0.01360	0.09	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.014
67	17.40	17.30	0.06137	0.0	0.01377	0.08	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.014
68	17.30	17.20	0.06213	0.0	0.01394	0.08	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.014
69	17.20	17.10	0.06290	0.0	0.01411	0.08	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.014
70	17.10	17.00	0.06367	0.0	0.01429	0.08	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.014
71	17.00	16.90	0.06443	0.0	0.01446	0.08	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.014
72	16.90	16.80	0.06520	0.0	0.01463	0.08	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.015
73	16.80	16.70	0.06597	0.0	0.01480	0.08	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.015
74	16.70	16.60	0.06673	0.0	0.01497	0.08	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.015
75	16.60	16.50	0.06750	0.0	0.01515	0.08	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.015
76	16.50	16.40	0.06827	0.0	0.01532	0.08	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.015
77	16.40	16.30	0.06903	0.0	0.01549	0.07	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.015
78	16.30	16.20	0.06980	0.0	0.01566	0.07	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.016
79	16.20	16.10	0.07057	0.0	0.01583	0.07	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.016
80	16.10	16.00	0.07133	0.0	0.01601	0.07	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.016
81	16.00	15.90	0.10910	33.9	0.02448	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.024

82	15.90	15.80	0.10987	33.7	0.02465	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.025
83	15.80	15.70	0.11063	33.4	0.02482	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.025
84	15.70	15.60	0.11140	33.2	0.02500	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.025
85	15.60	15.50	0.11217	33.0	0.02517	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.025
86	15.50	15.40	0.11293	32.8	0.02534	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.025
87	15.40	15.30	0.11370	32.5	0.02551	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.026
88	15.30	15.20	0.11447	32.3	0.02568	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.026
89	15.20	15.10	0.11523	32.1	0.02586	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.026
90	15.10	15.00	0.11600	31.9	0.02603	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.026
91	15.00	14.90	0.11677	31.7	0.02620	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.026
92	14.90	14.80	0.11753	31.5	0.02637	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.026
93	14.80	14.70	0.11830	31.3	0.02654	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.027
94	14.70	14.60	0.11907	31.1	0.02672	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.027
95	14.60	14.50	0.11983	30.9	0.02689	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.027
96	14.50	14.40	0.12060	30.7	0.02706	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.027
97	14.40	14.30	0.12137	30.5	0.02723	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.027
98	14.30	14.20	0.12213	30.3	0.02740	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.027
99	14.20	14.10	0.12290	30.1	0.02758	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.028
100	14.10	14.00	0.12367	29.9	0.02775	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.028
101	14.00	13.90	0.12443	29.7	0.02792	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.028
102	13.90	13.80	0.12520	29.6	0.02809	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.028
103	13.80	13.70	0.12597	29.4	0.02826	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.028
104	13.70	13.60	0.12673	29.2	0.02844	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.028
105	13.60	13.50	0.12750	29.0	0.02861	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.029
106	13.50	13.40	0.12827	28.8	0.02878	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.029
107	13.40	13.30	0.12903	28.7	0.02895	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.029
108	13.30	13.20	0.12980	28.5	0.02912	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.029
109	13.20	13.10	0.13057	28.3	0.02930	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.029
110	13.10	13.00	0.13133	28.2	0.02947	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.029
111	13.00	12.90	0.13210	28.0	0.02964	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.030
112	12.90	12.80	0.13287	27.8	0.02981	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.030
113	12.80	12.70	0.13363	27.7	0.02998	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.030
114	12.70	12.60	0.13440	27.5	0.03016	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.030
115	12.60	12.50	0.13517	27.4	0.03033	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.030
116	12.50	12.40	0.13593	27.2	0.03050	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.031
117	12.40	12.30	0.13670	27.1	0.03067	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.031
118	12.30	12.20	0.13747	26.9	0.03084	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.031
119	12.20	12.10	0.13823	26.8	0.03102	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.031
120	12.10	12.00	0.13900	26.6	0.03119	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.031
TOT						3.29			26740.20	65220.00					
AVG					0.0211		0.41	10.87			4.46				
CUM						9.56									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	BKGD SOD *	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
61	17.900	8.62	2.18	0.12	0.00	0.00	0.00	0.00	0.00	2.37	2.37	2.37	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

62	17.800	8.62	2.18	0.12	0.00	0.00	0.00	0.00	0.00	2.37	2.37	2.37	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
63	17.700	8.62	2.19	0.12	0.00	0.00	0.00	0.00	0.00	2.38	2.38	2.38	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	17.600	8.62	2.20	0.12	0.00	0.00	0.00	0.00	0.00	2.38	2.38	2.38	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	17.500	8.62	2.20	0.12	0.00	0.00	0.00	0.00	0.00	2.38	2.38	2.38	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	17.400	8.61	2.21	0.12	0.00	0.00	0.00	0.00	0.00	2.38	2.38	2.38	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	17.300	8.61	2.22	0.13	0.00	0.00	0.00	0.00	0.00	2.38	2.38	2.38	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	17.200	8.61	2.22	0.13	0.00	0.00	0.00	0.00	0.00	2.39	2.39	2.39	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	17.100	8.61	2.23	0.13	0.00	0.00	0.00	0.00	0.00	2.39	2.39	2.39	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	17.000	8.61	2.24	0.13	0.00	0.00	0.00	0.00	0.00	2.39	2.39	2.39	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
71	16.900	8.60	2.24	0.13	0.00	0.00	0.00	0.00	0.00	2.39	2.39	2.39	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	16.800	8.60	2.25	0.13	0.00	0.00	0.00	0.00	0.00	2.39	2.39	2.39	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73	16.700	8.60	2.26	0.13	0.00	0.00	0.00	0.00	0.00	2.40	2.40	2.40	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	16.600	8.60	2.26	0.13	0.00	0.00	0.00	0.00	0.00	2.40	2.40	2.40	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	16.500	8.59	2.27	0.13	0.00	0.00	0.00	0.00	0.00	2.40	2.40	2.40	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76	16.400	8.59	2.28	0.13	0.00	0.00	0.00	0.00	0.00	2.40	2.40	2.40	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77	16.300	8.59	2.29	0.13	0.00	0.00	0.00	0.00	0.00	2.40	2.40	2.40	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	16.200	8.59	2.29	0.13	0.00	0.00	0.00	0.00	0.00	2.41	2.41	2.41	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79	16.100	8.59	2.30	0.13	0.00	0.00	0.00	0.00	0.00	2.41	2.41	2.41	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	16.000	8.58	2.31	0.13	0.00	0.00	0.00	0.00	0.00	2.41	2.41	2.41	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
81	15.900	8.58	2.62	0.13	0.00	0.00	0.00	0.00	0.00	2.41	2.41	2.41	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	15.800	8.58	2.63	0.13	0.00	0.00	0.00	0.00	0.00	2.41	2.41	2.41	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
83	15.700	8.58	2.63	0.13	0.00	0.00	0.00	0.00	0.00	2.42	2.42	2.42	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	15.600	8.57	2.64	0.13	0.00	0.00	0.00	0.00	0.00	2.42	2.42	2.42	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	15.500	8.57	2.65	0.13	0.00	0.00	0.00	0.00	0.00	2.42	2.42	2.42	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	15.400	8.57	2.65	0.13	0.00	0.00	0.00	0.00	0.00	2.42	2.42	2.42	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87	15.300	8.57	2.66	0.13	0.00	0.00	0.00	0.00	0.00	2.43	2.43	2.43	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88	15.200	8.57	2.67	0.13	0.00	0.00	0.00	0.00	0.00	2.43	2.43	2.43	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89	15.100	8.56	2.68	0.13	0.00	0.00	0.00	0.00	0.00	2.43	2.43	2.43	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	15.000	8.56	2.68	0.13	0.00	0.00	0.00	0.00	0.00	2.43	2.43	2.43	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91	14.900	8.56	2.69	0.13	0.00	0.00	0.00	0.00	0.00	2.43	2.43	2.43	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92	14.800	8.56	2.70	0.13	0.00	0.00	0.00	0.00	0.00	2.44	2.44	2.44	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
93	14.700	8.56	2.70	0.13	0.00	0.00	0.00	0.00	0.00	2.44	2.44	2.44	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
94	14.600	8.55	2.71	0.13	0.00	0.00	0.00	0.00	0.00	2.44	2.44	2.44	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	14.500	8.55	2.72	0.13	0.00	0.00	0.00	0.00	0.00	2.44	2.44	2.44	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
96	14.400	8.55	2.73	0.13	0.00	0.00	0.00	0.00	0.00	2.44	2.44	2.44	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97	14.300	8.55	2.73	0.13	0.00	0.00	0.00	0.00	0.00	2.45	2.45	2.45	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
98	14.200	8.54	2.74	0.13	0.00	0.00	0.00	0.00	0.00	2.45	2.45	2.45	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
99	14.100	8.54	2.75	0.13	0.00	0.00	0.00	0.00	0.00	2.45	2.45	2.45	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	14.000	8.54	2.75	0.13	0.00	0.00	0.00	0.00	0.00	2.45	2.45	2.45	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
101	13.900	8.54	2.76	0.13	0.00	0.00	0.00	0.00	0.00	2.45	2.45	2.45	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102	13.800	8.54	2.77	0.13	0.00	0.00	0.00	0.00	0.00	2.46	2.46	2.46	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103	13.700	8.53	2.78	0.13	0.00	0.00	0.00	0.00	0.00	2.46	2.46	2.46	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
104	13.600	8.53	2.78	0.13	0.00	0.00	0.00	0.00	0.00	2.46	2.46	2.46	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	13.500	8.53	2.79	0.13	0.00	0.00	0.00	0.00	0.00	2.46	2.46	2.46	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106	13.400	8.53	2.80	0.13	0.00	0.00	0.00	0.00	0.00	2.46	2.46	2.46	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107	13.300	8.52	2.80	0.13	0.00	0.00	0.00	0.00	0.00	2.47	2.47	2.47	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
108	13.200	8.52	2.81	0.13	0.00	0.00	0.00	0.00	0.00	2.47	2.47	2.47	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
109	13.100	8.52	2.82	0.13	0.00	0.00	0.00	0.00	0.00	2.47	2.47	2.47	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	13.000	8.52	2.82	0.13	0.00	0.00	0.00	0.00	0.00	2.47	2.47	2.47	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
111	12.900	8.52	2.83	0.13	0.00	0.00	0.00	0.00	0.00	2.47	2.47	2.47	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112	12.800	8.51	2.84	0.13	0.00	0.00	0.00	0.00	0.00	2.48	2.48	2.48	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113	12.700	8.51	2.85	0.13	0.00	0.00	0.00	0.00	0.00	2.48	2.48	2.48	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

114	12.600	8.51	2.85	0.13	0.00	0.00	0.00	0.00	0.00	2.48	2.48	2.48	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	12.500	8.51	2.86	0.13	0.00	0.00	0.00	0.00	0.00	2.48	2.48	2.48	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
116	12.400	8.51	2.87	0.13	0.00	0.00	0.00	0.00	0.00	2.48	2.48	2.48	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117	12.300	8.50	2.87	0.13	0.00	0.00	0.00	0.00	0.00	2.49	2.49	2.49	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
118	12.200	8.50	2.88	0.13	0.00	0.00	0.00	0.00	0.00	2.49	2.49	2.49	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
119	12.100	8.50	2.89	0.13	0.00	0.00	0.00	0.00	0.00	2.49	2.49	2.49	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	12.000	8.50	2.90	0.13	0.00	0.00	0.00	0.00	0.00	2.49	2.49	2.49	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.43	0.11	0.00	0.00	0.00	0.00	0.00	2.00			0.02	0.00	0.10	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
61	17.900	22.71	0.00	0.00	0.00	5.82	2.94	0.00	2.94	0.00	1.42	0.19	0.06	1.67	0.00	0.00	0.00	0.	0.00
62	17.800	22.73	0.00	0.00	0.00	5.77	2.94	0.00	2.94	0.00	1.42	0.19	0.06	1.67	0.00	0.00	0.00	0.	0.00
63	17.700	22.74	0.00	0.00	0.00	5.73	2.93	0.00	2.93	0.00	1.42	0.19	0.06	1.68	0.00	0.00	0.00	0.	0.00
64	17.600	22.75	0.00	0.00	0.00	5.70	2.92	0.00	2.92	0.00	1.42	0.19	0.06	1.68	0.00	0.00	0.00	0.	0.00
65	17.500	22.77	0.00	0.00	0.00	5.67	2.91	0.00	2.91	0.00	1.43	0.19	0.06	1.68	0.00	0.00	0.00	0.	0.00
66	17.400	22.78	0.00	0.00	0.00	5.65	2.91	0.00	2.91	0.00	1.43	0.19	0.06	1.68	0.00	0.00	0.00	0.	0.00
67	17.300	22.79	0.00	0.00	0.00	5.63	2.90	0.00	2.90	0.00	1.43	0.19	0.07	1.68	0.00	0.00	0.00	0.	0.00
68	17.200	22.81	0.00	0.00	0.00	5.62	2.89	0.00	2.89	0.00	1.43	0.19	0.07	1.69	0.00	0.00	0.00	0.	0.00
69	17.100	22.82	0.00	0.00	0.00	5.61	2.89	0.00	2.89	0.00	1.43	0.19	0.07	1.69	0.00	0.00	0.00	0.	0.00
70	17.000	22.83	0.00	0.00	0.00	5.61	2.88	0.00	2.88	0.00	1.43	0.19	0.07	1.69	0.00	0.00	0.00	0.	0.00
71	16.900	22.85	0.00	0.00	0.00	5.60	2.88	0.00	2.88	0.00	1.43	0.19	0.07	1.69	0.00	0.00	0.00	0.	0.00
72	16.800	22.86	0.00	0.00	0.00	5.60	2.87	0.00	2.87	0.00	1.43	0.19	0.07	1.69	0.00	0.00	0.00	0.	0.00
73	16.700	22.87	0.00	0.00	0.00	5.60	2.86	0.00	2.86	0.00	1.43	0.19	0.07	1.70	0.00	0.00	0.00	0.	0.00
74	16.600	22.89	0.00	0.00	0.00	5.60	2.86	0.00	2.86	0.00	1.43	0.19	0.07	1.70	0.00	0.00	0.00	0.	0.00
75	16.500	22.90	0.00	0.00	0.00	5.60	2.85	0.00	2.85	0.00	1.43	0.19	0.07	1.70	0.00	0.00	0.00	0.	0.00
76	16.400	22.91	0.00	0.00	0.00	5.60	2.85	0.00	2.85	0.00	1.43	0.19	0.07	1.70	0.00	0.00	0.00	0.	0.00
77	16.300	22.93	0.00	0.00	0.00	5.60	2.84	0.00	2.84	0.00	1.43	0.20	0.07	1.70	0.00	0.00	0.00	0.	0.00
78	16.200	22.94	0.00	0.00	0.00	5.60	2.84	0.00	2.84	0.00	1.43	0.20	0.08	1.71	0.00	0.00	0.00	0.	0.00
79	16.100	22.95	0.00	0.00	0.00	5.60	2.83	0.00	2.83	0.00	1.43	0.20	0.08	1.71	0.00	0.00	0.00	0.	0.00
80	16.000	22.97	0.00	0.00	0.00	5.60	2.83	0.00	2.83	0.00	1.44	0.20	0.08	1.71	0.00	0.00	0.00	0.	0.00
81	15.900	22.98	0.00	0.00	0.00	4.62	2.82	0.00	2.82	0.00	1.37	0.18	0.05	1.60	0.00	0.00	0.00	0.	0.00
82	15.800	22.99	0.00	0.00	0.00	4.77	2.81	0.00	2.81	0.00	1.37	0.18	0.05	1.61	0.00	0.00	0.00	0.	0.00
83	15.700	23.01	0.00	0.00	0.00	4.91	2.81	0.00	2.81	0.00	1.37	0.18	0.05	1.61	0.00	0.00	0.00	0.	0.00
84	15.600	23.02	0.00	0.00	0.00	5.03	2.81	0.00	2.81	0.00	1.37	0.18	0.05	1.61	0.00	0.00	0.00	0.	0.00
85	15.500	23.03	0.00	0.00	0.00	5.14	2.81	0.00	2.81	0.00	1.37	0.18	0.05	1.61	0.00	0.00	0.00	0.	0.00
86	15.400	23.05	0.00	0.00	0.00	5.23	2.80	0.00	2.80	0.00	1.37	0.18	0.05	1.61	0.00	0.00	0.00	0.	0.00
87	15.300	23.06	0.00	0.00	0.00	5.32	2.80	0.00	2.80	0.00	1.37	0.19	0.05	1.61	0.00	0.00	0.00	0.	0.00
88	15.200	23.07	0.00	0.00	0.00	5.39	2.80	0.00	2.80	0.00	1.38	0.19	0.06	1.62	0.00	0.00	0.00	0.	0.00
89	15.100	23.09	0.00	0.00	0.00	5.46	2.80	0.00	2.80	0.00	1.38	0.19	0.06	1.62	0.00	0.00	0.00	0.	0.00
90	15.000	23.10	0.00	0.00	0.00	5.51	2.79	0.00	2.79	0.00	1.38	0.19	0.06	1.62	0.00	0.00	0.00	0.	0.00
91	14.900	23.11	0.00	0.00	0.00	5.57	2.79	0.00	2.79	0.00	1.38	0.19	0.06	1.62	0.00	0.00	0.00	0.	0.00
92	14.800	23.13	0.00	0.00	0.00	5.61	2.79	0.00	2.79	0.00	1.38	0.19	0.06	1.62	0.00	0.00	0.00	0.	0.00
93	14.700	23.14	0.00	0.00	0.00	5.65	2.79	0.00	2.79	0.00	1.38	0.19	0.06	1.62	0.00	0.00	0.00	0.	0.00
94	14.600	23.15	0.00	0.00	0.00	5.69	2.78	0.00	2.78	0.00	1.38	0.19	0.06	1.63	0.00	0.00	0.00	0.	0.00

95	14.500	23.17	0.00	0.00	0.00	5.72	2.78	0.00	2.78	0.00	1.38	0.19	0.06	1.63	0.00	0.00	0.00	0.	0.00
96	14.400	23.18	0.00	0.00	0.00	5.75	2.78	0.00	2.78	0.00	1.38	0.19	0.06	1.63	0.00	0.00	0.00	0.	0.00
97	14.300	23.19	0.00	0.00	0.00	5.78	2.78	0.00	2.78	0.00	1.38	0.19	0.06	1.63	0.00	0.00	0.00	0.	0.00
98	14.200	23.21	0.00	0.00	0.00	5.80	2.78	0.00	2.78	0.00	1.38	0.19	0.06	1.63	0.00	0.00	0.00	0.	0.00
99	14.100	23.22	0.00	0.00	0.00	5.82	2.77	0.00	2.77	0.00	1.38	0.19	0.06	1.63	0.00	0.00	0.00	0.	0.00
100	14.000	23.23	0.00	0.00	0.00	5.84	2.77	0.00	2.77	0.00	1.38	0.19	0.06	1.63	0.00	0.00	0.00	0.	0.00
101	13.900	23.25	0.00	0.00	0.00	5.86	2.77	0.00	2.77	0.00	1.39	0.19	0.06	1.64	0.00	0.00	0.00	0.	0.00
102	13.800	23.26	0.00	0.00	0.00	5.88	2.77	0.00	2.77	0.00	1.39	0.19	0.06	1.64	0.00	0.00	0.00	0.	0.00
103	13.700	23.27	0.00	0.00	0.00	5.89	2.76	0.00	2.76	0.00	1.39	0.19	0.06	1.64	0.00	0.00	0.00	0.	0.00
104	13.600	23.29	0.00	0.00	0.00	5.90	2.76	0.00	2.76	0.00	1.39	0.19	0.06	1.64	0.00	0.00	0.00	0.	0.00
105	13.500	23.30	0.00	0.00	0.00	5.92	2.76	0.00	2.76	0.00	1.39	0.19	0.06	1.64	0.00	0.00	0.00	0.	0.00
106	13.400	23.31	0.00	0.00	0.00	5.93	2.76	0.00	2.76	0.00	1.39	0.19	0.07	1.64	0.00	0.00	0.00	0.	0.00
107	13.300	23.33	0.00	0.00	0.00	5.94	2.76	0.00	2.76	0.00	1.39	0.19	0.07	1.64	0.00	0.00	0.00	0.	0.00
108	13.200	23.34	0.00	0.00	0.00	5.94	2.76	0.00	2.76	0.00	1.39	0.19	0.07	1.64	0.00	0.00	0.00	0.	0.00
109	13.100	23.35	0.00	0.00	0.00	5.95	2.75	0.00	2.75	0.00	1.39	0.19	0.07	1.65	0.00	0.00	0.00	0.	0.00
110	13.000	23.37	0.00	0.00	0.00	5.96	2.75	0.00	2.75	0.00	1.39	0.19	0.07	1.65	0.00	0.00	0.00	0.	0.00
111	12.900	23.38	0.00	0.00	0.00	5.97	2.75	0.00	2.75	0.00	1.39	0.19	0.07	1.65	0.00	0.00	0.00	0.	0.00
112	12.800	23.39	0.00	0.00	0.00	5.97	2.75	0.00	2.75	0.00	1.39	0.19	0.07	1.65	0.00	0.00	0.00	0.	0.00
113	12.700	23.41	0.00	0.00	0.00	5.98	2.75	0.00	2.75	0.00	1.39	0.19	0.07	1.65	0.00	0.00	0.00	0.	0.00
114	12.600	23.42	0.00	0.00	0.00	5.98	2.74	0.00	2.74	0.00	1.39	0.19	0.07	1.65	0.00	0.00	0.00	0.	0.00
115	12.500	23.43	0.00	0.00	0.00	5.99	2.74	0.00	2.74	0.00	1.39	0.19	0.07	1.65	0.00	0.00	0.00	0.	0.00
116	12.400	23.45	0.00	0.00	0.00	5.99	2.74	0.00	2.74	0.00	1.39	0.19	0.07	1.65	0.00	0.00	0.00	0.	0.00
117	12.300	23.46	0.00	0.00	0.00	6.00	2.74	0.00	2.74	0.00	1.39	0.19	0.07	1.65	0.00	0.00	0.00	0.	0.00
118	12.200	23.47	0.00	0.00	0.00	6.00	2.74	0.00	2.74	0.00	1.40	0.19	0.07	1.66	0.00	0.00	0.00	0.	0.00
119	12.100	23.49	0.00	0.00	0.00	6.01	2.74	0.00	2.74	0.00	1.40	0.19	0.07	1.66	0.00	0.00	0.00	0.	0.00
120	12.000	23.50	0.00	0.00	0.00	6.01	2.73	0.00	2.73	0.00	1.40	0.19	0.07	1.66	0.00	0.00	0.00	0.	0.00

FINAL REPORT Bayou Toro @ 110401A LA-QUAL Calibration for Bayou Toro
REACH NO. 3 Bayou Toro

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM
121	UPR RCH	0.13900	23.50	0.00	0.00	0.00	6.01	2.73	0.00	2.73	0.00	1.40	0.19	0.07	0.00	0.00	0.00	0.00
EACH	INCR	0.00077	21.80	0.00	0.00	0.00	2.20	2.80	0.00			1.24	0.16	0.00	0.00	0.00	0.00	
149	WSTLD	0.00050	21.80	0.00	0.00	0.00	5.00	69.00	0.00	69.00	0.00	5.00	10.00	0.00	0.00	0.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
121	12.00	11.90	0.13977	26.5	0.02023	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.020
122	11.90	11.80	0.14053	26.3	0.02034	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.020
123	11.80	11.70	0.14130	26.2	0.02045	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.020
124	11.70	11.60	0.14207	26.0	0.02056	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021

125	11.60	11.50	0.14283	25.9	0.02067	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
126	11.50	11.40	0.14360	25.8	0.02078	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
127	11.40	11.30	0.14437	25.6	0.02089	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
128	11.30	11.20	0.14513	25.5	0.02100	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
129	11.20	11.10	0.14590	25.4	0.02111	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
130	11.10	11.00	0.14667	25.2	0.02123	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
131	11.00	10.90	0.14743	25.1	0.02134	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
132	10.90	10.80	0.14820	25.0	0.02145	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
133	10.80	10.70	0.14897	24.8	0.02156	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
134	10.70	10.60	0.14973	24.7	0.02167	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
135	10.60	10.50	0.15050	24.6	0.02178	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
136	10.50	10.40	0.15127	24.5	0.02189	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
137	10.40	10.30	0.15203	24.3	0.02200	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
138	10.30	10.20	0.15280	24.2	0.02211	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
139	10.20	10.10	0.15357	24.1	0.02222	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
140	10.10	10.00	0.15433	24.0	0.02233	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
141	10.00	9.90	0.15510	23.9	0.02245	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
142	9.90	9.80	0.15587	23.7	0.02256	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
143	9.80	9.70	0.15663	23.6	0.02267	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
144	9.70	9.60	0.15740	23.5	0.02278	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
145	9.60	9.50	0.15817	23.4	0.02289	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
146	9.50	9.40	0.15893	23.3	0.02300	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
147	9.40	9.30	0.15970	23.2	0.02311	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
148	9.30	9.20	0.16047	23.1	0.02322	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
149	9.20	9.10	0.16173	23.2	0.02341	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
150	9.10	9.00	0.16250	23.1	0.02352	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
151	9.00	8.90	0.16327	23.0	0.02363	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
152	8.90	8.80	0.16403	22.9	0.02374	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
153	8.80	8.70	0.16480	22.8	0.02385	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
154	8.70	8.60	0.16557	22.6	0.02396	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
155	8.60	8.50	0.16633	22.5	0.02407	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
156	8.50	8.40	0.16710	22.4	0.02418	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
157	8.40	8.30	0.16787	22.3	0.02429	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
158	8.30	8.20	0.16863	22.2	0.02440	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
159	8.20	8.10	0.16940	22.1	0.02452	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
160	8.10	8.00	0.17017	22.0	0.02463	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
161	8.00	7.90	0.17093	21.9	0.02474	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
162	7.90	7.80	0.17170	21.8	0.02485	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
163	7.80	7.70	0.17247	21.7	0.02496	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
164	7.70	7.60	0.17323	21.6	0.02507	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
165	7.60	7.50	0.17400	21.6	0.02518	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
166	7.50	7.40	0.17477	21.5	0.02529	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
167	7.40	7.30	0.17553	21.4	0.02540	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
168	7.30	7.20	0.17630	21.3	0.02551	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.026
169	7.20	7.10	0.17707	21.2	0.02562	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.026
170	7.10	7.00	0.17783	21.1	0.02574	0.04	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.026
171	7.00	6.90	0.17860	21.0	0.02585	0.04	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.026
172	6.90	6.80	0.17937	20.9	0.02596	0.04	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.026
173	6.80	6.70	0.18013	20.8	0.02607	0.04	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.026
174	6.70	6.60	0.18090	20.7	0.02618	0.04	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.026
175	6.60	6.50	0.18167	20.6	0.02629	0.04	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.026
176	6.50	6.40	0.18243	20.6	0.02640	0.04	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.026

177	6.40	6.30	0.18320	20.5	0.02651	0.04	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.027
178	6.30	6.20	0.18397	20.4	0.02662	0.04	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.027
179	6.20	6.10	0.18473	20.3	0.02673	0.04	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.027
180	6.10	6.00	0.18550	20.2	0.02685	0.04	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.027
TOT						2.97			41460.00	82920.00					
AVG					0.0234		0.50	13.82			6.91				
CUM						12.53									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	BKGD SOD *	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
121	11.900	8.49	2.04	0.13	0.00	0.00	0.00	0.00	0.00	2.50	2.50	2.50	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122	11.800	8.49	2.04	0.13	0.00	0.00	0.00	0.00	0.00	2.50	2.50	2.50	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
123	11.700	8.49	2.05	0.13	0.00	0.00	0.00	0.00	0.00	2.50	2.50	2.50	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
124	11.600	8.49	2.05	0.13	0.00	0.00	0.00	0.00	0.00	2.50	2.50	2.50	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	11.500	8.49	2.06	0.13	0.00	0.00	0.00	0.00	0.00	2.50	2.50	2.50	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126	11.400	8.48	2.06	0.13	0.00	0.00	0.00	0.00	0.00	2.51	2.51	2.51	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127	11.300	8.48	2.06	0.13	0.00	0.00	0.00	0.00	0.00	2.51	2.51	2.51	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
128	11.200	8.48	2.07	0.13	0.00	0.00	0.00	0.00	0.00	2.51	2.51	2.51	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
129	11.100	8.48	2.07	0.13	0.00	0.00	0.00	0.00	0.00	2.51	2.51	2.51	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	11.000	8.47	2.08	0.13	0.00	0.00	0.00	0.00	0.00	2.52	2.52	2.52	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
131	10.900	8.47	2.08	0.13	0.00	0.00	0.00	0.00	0.00	2.52	2.52	2.52	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132	10.800	8.47	2.08	0.13	0.00	0.00	0.00	0.00	0.00	2.52	2.52	2.52	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
133	10.700	8.47	2.09	0.13	0.00	0.00	0.00	0.00	0.00	2.52	2.52	2.52	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
134	10.600	8.46	2.09	0.13	0.00	0.00	0.00	0.00	0.00	2.53	2.53	2.53	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	10.500	8.46	2.10	0.13	0.00	0.00	0.00	0.00	0.00	2.53	2.53	2.53	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
136	10.400	8.46	2.10	0.13	0.00	0.00	0.00	0.00	0.00	2.53	2.53	2.53	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137	10.300	8.46	2.10	0.13	0.00	0.00	0.00	0.00	0.00	2.53	2.53	2.53	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
138	10.200	8.45	2.11	0.13	0.00	0.00	0.00	0.00	0.00	2.54	2.54	2.54	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
139	10.100	8.45	2.11	0.13	0.00	0.00	0.00	0.00	0.00	2.54	2.54	2.54	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	10.000	8.45	2.12	0.13	0.00	0.00	0.00	0.00	0.00	2.54	2.54	2.54	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
141	9.900	8.45	2.12	0.13	0.00	0.00	0.00	0.00	0.00	2.54	2.54	2.54	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142	9.800	8.44	2.12	0.13	0.00	0.00	0.00	0.00	0.00	2.55	2.55	2.55	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
143	9.700	8.44	2.13	0.13	0.00	0.00	0.00	0.00	0.00	2.55	2.55	2.55	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
144	9.600	8.44	2.13	0.13	0.00	0.00	0.00	0.00	0.00	2.55	2.55	2.55	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	9.500	8.44	2.14	0.13	0.00	0.00	0.00	0.00	0.00	2.55	2.55	2.55	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146	9.400	8.44	2.14	0.13	0.00	0.00	0.00	0.00	0.00	2.56	2.56	2.56	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147	9.300	8.43	2.14	0.13	0.00	0.00	0.00	0.00	0.00	2.56	2.56	2.56	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
148	9.200	8.43	2.15	0.13	0.00	0.00	0.00	0.00	0.00	2.56	2.56	2.56	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
149	9.100	8.43	2.15	0.13	0.00	0.00	0.00	0.00	0.00	2.56	2.56	2.56	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	9.000	8.43	2.16	0.13	0.00	0.00	0.00	0.00	0.00	2.56	2.56	2.56	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
151	8.900	8.42	2.16	0.13	0.00	0.00	0.00	0.00	0.00	2.57	2.57	2.57	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152	8.800	8.42	2.17	0.13	0.00	0.00	0.00	0.00	0.00	2.57	2.57	2.57	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153	8.700	8.42	2.17	0.13	0.00	0.00	0.00	0.00	0.00	2.57	2.57	2.57	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
154	8.600	8.42	2.17	0.13	0.00	0.00	0.00	0.00	0.00	2.57	2.57	2.57	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	8.500	8.41	2.18	0.13	0.00	0.00	0.00	0.00	0.00	2.58	2.58	2.58	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
156	8.400	8.41	2.18	0.13	0.00	0.00	0.00	0.00	0.00	2.58	2.58	2.58	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

157	8.300	8.41	2.19	0.13	0.00	0.00	0.00	0.00	0.00	2.58	2.58	2.58	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
158	8.200	8.41	2.19	0.13	0.00	0.00	0.00	0.00	0.00	2.58	2.58	2.58	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
159	8.100	8.40	2.19	0.13	0.00	0.00	0.00	0.00	0.00	2.59	2.59	2.59	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	8.000	8.40	2.20	0.13	0.00	0.00	0.00	0.00	0.00	2.59	2.59	2.59	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161	7.900	8.40	2.20	0.13	0.00	0.00	0.00	0.00	0.00	2.59	2.59	2.59	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162	7.800	8.40	2.21	0.13	0.00	0.00	0.00	0.00	0.00	2.59	2.59	2.59	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
163	7.700	8.40	2.21	0.13	0.00	0.00	0.00	0.00	0.00	2.60	2.60	2.60	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
164	7.600	8.39	2.21	0.13	0.00	0.00	0.00	0.00	0.00	2.60	2.60	2.60	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	7.500	8.39	2.22	0.13	0.00	0.00	0.00	0.00	0.00	2.60	2.60	2.60	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166	7.400	8.39	2.22	0.13	0.00	0.00	0.00	0.00	0.00	2.60	2.60	2.60	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167	7.300	8.39	2.23	0.13	0.00	0.00	0.00	0.00	0.00	2.61	2.61	2.61	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
168	7.200	8.38	2.23	0.13	0.00	0.00	0.00	0.00	0.00	2.61	2.61	2.61	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
169	7.100	8.38	2.24	0.13	0.00	0.00	0.00	0.00	0.00	2.61	2.61	2.61	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	7.000	8.38	2.24	0.13	0.00	0.00	0.00	0.00	0.00	2.61	2.61	2.61	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
171	6.900	8.38	2.24	0.13	0.00	0.00	0.00	0.00	0.00	2.62	2.62	2.62	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172	6.800	8.37	2.25	0.13	0.00	0.00	0.00	0.00	0.00	2.62	2.62	2.62	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
173	6.700	8.37	2.25	0.13	0.00	0.00	0.00	0.00	0.00	2.62	2.62	2.62	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
174	6.600	8.37	2.26	0.13	0.00	0.00	0.00	0.00	0.00	2.62	2.62	2.62	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	6.500	8.37	2.26	0.13	0.00	0.00	0.00	0.00	0.00	2.63	2.63	2.63	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
176	6.400	8.36	2.26	0.13	0.00	0.00	0.00	0.00	0.00	2.63	2.63	2.63	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177	6.300	8.36	2.27	0.13	0.00	0.00	0.00	0.00	0.00	2.63	2.63	2.63	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
178	6.200	8.36	2.27	0.13	0.00	0.00	0.00	0.00	0.00	2.63	2.63	2.63	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
179	6.100	8.36	2.28	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	6.000	8.36	2.28	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.00	0.11	0.00	0.00	0.00	0.00	0.00	2.00			0.02	0.00	0.10	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
121	11.900	23.51	0.00	0.00	0.00	5.97	2.73	0.00	2.73	0.00	1.40	0.19	0.07	1.66	0.00	0.00	0.00	0.	0.00
122	11.800	23.53	0.00	0.00	0.00	5.94	2.72	0.00	2.72	0.00	1.40	0.19	0.07	1.66	0.00	0.00	0.00	0.	0.00
123	11.700	23.55	0.00	0.00	0.00	5.91	2.72	0.00	2.72	0.00	1.40	0.19	0.07	1.66	0.00	0.00	0.00	0.	0.00
124	11.600	23.56	0.00	0.00	0.00	5.88	2.71	0.00	2.71	0.00	1.40	0.19	0.08	1.67	0.00	0.00	0.00	0.	0.00
125	11.500	23.58	0.00	0.00	0.00	5.86	2.70	0.00	2.70	0.00	1.40	0.19	0.08	1.67	0.00	0.00	0.00	0.	0.00
126	11.400	23.59	0.00	0.00	0.00	5.84	2.70	0.00	2.70	0.00	1.40	0.19	0.08	1.67	0.00	0.00	0.00	0.	0.00
127	11.300	23.60	0.00	0.00	0.00	5.82	2.69	0.00	2.69	0.00	1.40	0.19	0.08	1.67	0.00	0.00	0.00	0.	0.00
128	11.200	23.62	0.00	0.00	0.00	5.81	2.69	0.00	2.69	0.00	1.40	0.19	0.08	1.67	0.00	0.00	0.00	0.	0.00
129	11.100	23.64	0.00	0.00	0.00	5.79	2.68	0.00	2.68	0.00	1.40	0.19	0.08	1.67	0.00	0.00	0.00	0.	0.00
130	11.000	23.65	0.00	0.00	0.00	5.78	2.68	0.00	2.68	0.00	1.40	0.19	0.08	1.67	0.00	0.00	0.00	0.	0.00
131	10.900	23.66	0.00	0.00	0.00	5.77	2.67	0.00	2.67	0.00	1.40	0.19	0.08	1.68	0.00	0.00	0.00	0.	0.00
132	10.800	23.68	0.00	0.00	0.00	5.76	2.67	0.00	2.67	0.00	1.40	0.19	0.08	1.68	0.00	0.00	0.00	0.	0.00
133	10.700	23.69	0.00	0.00	0.00	5.75	2.66	0.00	2.66	0.00	1.40	0.19	0.08	1.68	0.00	0.00	0.00	0.	0.00
134	10.600	23.71	0.00	0.00	0.00	5.74	2.66	0.00	2.66	0.00	1.40	0.19	0.08	1.68	0.00	0.00	0.00	0.	0.00
135	10.500	23.73	0.00	0.00	0.00	5.73	2.65	0.00	2.65	0.00	1.40	0.19	0.08	1.68	0.00	0.00	0.00	0.	0.00
136	10.400	23.74	0.00	0.00	0.00	5.73	2.65	0.00	2.65	0.00	1.41	0.19	0.09	1.68	0.00	0.00	0.00	0.	0.00
137	10.300	23.75	0.00	0.00	0.00	5.72	2.64	0.00	2.64	0.00	1.41	0.19	0.09	1.69	0.00	0.00	0.00	0.	0.00

138	10.200	23.77	0.00	0.00	0.00	5.72	2.64	0.00	2.64	0.00	1.41	0.19	0.09	1.69	0.00	0.00	0.00	0.	0.00
139	10.100	23.78	0.00	0.00	0.00	5.71	2.63	0.00	2.63	0.00	1.41	0.19	0.09	1.69	0.00	0.00	0.00	0.	0.00
140	10.000	23.80	0.00	0.00	0.00	5.71	2.63	0.00	2.63	0.00	1.41	0.19	0.09	1.69	0.00	0.00	0.00	0.	0.00
141	9.900	23.82	0.00	0.00	0.00	5.71	2.63	0.00	2.63	0.00	1.41	0.19	0.09	1.69	0.00	0.00	0.00	0.	0.00
142	9.800	23.83	0.00	0.00	0.00	5.70	2.62	0.00	2.62	0.00	1.41	0.19	0.09	1.69	0.00	0.00	0.00	0.	0.00
143	9.700	23.84	0.00	0.00	0.00	5.70	2.62	0.00	2.62	0.00	1.41	0.19	0.09	1.69	0.00	0.00	0.00	0.	0.00
144	9.600	23.86	0.00	0.00	0.00	5.70	2.61	0.00	2.61	0.00	1.41	0.20	0.09	1.70	0.00	0.00	0.00	0.	0.00
145	9.500	23.88	0.00	0.00	0.00	5.70	2.61	0.00	2.61	0.00	1.41	0.20	0.09	1.70	0.00	0.00	0.00	0.	0.00
146	9.400	23.89	0.00	0.00	0.00	5.70	2.60	0.00	2.60	0.00	1.41	0.20	0.09	1.70	0.00	0.00	0.00	0.	0.00
147	9.300	23.91	0.00	0.00	0.00	5.70	2.60	0.00	2.60	0.00	1.41	0.20	0.09	1.70	0.00	0.00	0.00	0.	0.00
148	9.200	23.92	0.00	0.00	0.00	5.69	2.60	0.00	2.60	0.00	1.41	0.20	0.09	1.70	0.00	0.00	0.00	0.	0.00
149	9.100	23.93	0.00	0.00	0.00	5.69	2.80	0.00	2.80	0.00	1.42	0.23	0.10	1.74	0.00	0.00	0.00	0.	0.00
150	9.000	23.95	0.00	0.00	0.00	5.69	2.79	0.00	2.79	0.00	1.42	0.23	0.10	1.74	0.00	0.00	0.00	0.	0.00
151	8.900	23.97	0.00	0.00	0.00	5.69	2.78	0.00	2.78	0.00	1.42	0.23	0.10	1.75	0.00	0.00	0.00	0.	0.00
152	8.800	23.98	0.00	0.00	0.00	5.68	2.78	0.00	2.78	0.00	1.42	0.23	0.10	1.75	0.00	0.00	0.00	0.	0.00
153	8.700	23.99	0.00	0.00	0.00	5.68	2.77	0.00	2.77	0.00	1.42	0.23	0.10	1.75	0.00	0.00	0.00	0.	0.00
154	8.600	24.01	0.00	0.00	0.00	5.68	2.77	0.00	2.77	0.00	1.42	0.23	0.10	1.75	0.00	0.00	0.00	0.	0.00
155	8.500	24.02	0.00	0.00	0.00	5.68	2.76	0.00	2.76	0.00	1.42	0.23	0.10	1.75	0.00	0.00	0.00	0.	0.00
156	8.400	24.04	0.00	0.00	0.00	5.68	2.75	0.00	2.75	0.00	1.42	0.23	0.10	1.75	0.00	0.00	0.00	0.	0.00
157	8.300	24.06	0.00	0.00	0.00	5.68	2.75	0.00	2.75	0.00	1.42	0.22	0.10	1.75	0.00	0.00	0.00	0.	0.00
158	8.200	24.07	0.00	0.00	0.00	5.68	2.74	0.00	2.74	0.00	1.43	0.22	0.10	1.75	0.00	0.00	0.00	0.	0.00
159	8.100	24.08	0.00	0.00	0.00	5.68	2.74	0.00	2.74	0.00	1.43	0.22	0.10	1.75	0.00	0.00	0.00	0.	0.00
160	8.000	24.10	0.00	0.00	0.00	5.68	2.73	0.00	2.73	0.00	1.43	0.22	0.10	1.76	0.00	0.00	0.00	0.	0.00
161	7.900	24.11	0.00	0.00	0.00	5.68	2.73	0.00	2.73	0.00	1.43	0.22	0.11	1.76	0.00	0.00	0.00	0.	0.00
162	7.800	24.13	0.00	0.00	0.00	5.68	2.72	0.00	2.72	0.00	1.43	0.22	0.11	1.76	0.00	0.00	0.00	0.	0.00
163	7.700	24.15	0.00	0.00	0.00	5.68	2.72	0.00	2.72	0.00	1.43	0.22	0.11	1.76	0.00	0.00	0.00	0.	0.00
164	7.600	24.16	0.00	0.00	0.00	5.68	2.71	0.00	2.71	0.00	1.43	0.22	0.11	1.76	0.00	0.00	0.00	0.	0.00
165	7.500	24.17	0.00	0.00	0.00	5.68	2.71	0.00	2.71	0.00	1.43	0.22	0.11	1.76	0.00	0.00	0.00	0.	0.00
166	7.400	24.19	0.00	0.00	0.00	5.68	2.70	0.00	2.70	0.00	1.43	0.22	0.11	1.76	0.00	0.00	0.00	0.	0.00
167	7.300	24.20	0.00	0.00	0.00	5.68	2.70	0.00	2.70	0.00	1.43	0.22	0.11	1.76	0.00	0.00	0.00	0.	0.00
168	7.200	24.22	0.00	0.00	0.00	5.68	2.69	0.00	2.69	0.00	1.43	0.22	0.11	1.76	0.00	0.00	0.00	0.	0.00
169	7.100	24.24	0.00	0.00	0.00	5.68	2.69	0.00	2.69	0.00	1.43	0.22	0.11	1.76	0.00	0.00	0.00	0.	0.00
170	7.000	24.25	0.00	0.00	0.00	5.68	2.68	0.00	2.68	0.00	1.43	0.22	0.11	1.76	0.00	0.00	0.00	0.	0.00
171	6.900	24.26	0.00	0.00	0.00	5.68	2.68	0.00	2.68	0.00	1.43	0.22	0.11	1.77	0.00	0.00	0.00	0.	0.00
172	6.800	24.28	0.00	0.00	0.00	5.68	2.67	0.00	2.67	0.00	1.43	0.22	0.11	1.77	0.00	0.00	0.00	0.	0.00
173	6.700	24.30	0.00	0.00	0.00	5.68	2.67	0.00	2.67	0.00	1.43	0.22	0.12	1.77	0.00	0.00	0.00	0.	0.00
174	6.600	24.31	0.00	0.00	0.00	5.68	2.66	0.00	2.66	0.00	1.43	0.22	0.12	1.77	0.00	0.00	0.00	0.	0.00
175	6.500	24.32	0.00	0.00	0.00	5.68	2.66	0.00	2.66	0.00	1.43	0.22	0.12	1.77	0.00	0.00	0.00	0.	0.00
176	6.400	24.34	0.00	0.00	0.00	5.68	2.65	0.00	2.65	0.00	1.43	0.22	0.12	1.77	0.00	0.00	0.00	0.	0.00
177	6.300	24.35	0.00	0.00	0.00	5.68	2.65	0.00	2.65	0.00	1.43	0.22	0.12	1.77	0.00	0.00	0.00	0.	0.00
178	6.200	24.37	0.00	0.00	0.00	5.68	2.64	0.00	2.64	0.00	1.43	0.22	0.12	1.77	0.00	0.00	0.00	0.	0.00
179	6.100	24.39	0.00	0.00	0.00	5.68	2.64	0.00	2.64	0.00	1.43	0.22	0.12	1.77	0.00	0.00	0.00	0.	0.00
180	6.000	24.40	0.00	0.00	0.00	5.68	2.64	0.00	2.64	0.00	1.43	0.22	0.12	1.77	0.00	0.00	0.00	0.	0.00

FINAL REPORT Bayou Toro @ 110401A LA-QUAL Calibration for Bayou Toro
REACH NO. 4 Bayou Toro

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

ELEM	TYPE	FLOW	TEMP	SALN	CM-I	CM-II	DO	BOD#1	BOD#2	EBOD#1	EBOD#2	ORGN	NH3	NO3+2	PHOS	CHL A	COLI	NCM

NO.			deg C	ppt			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	#/100mL	
181	UPR RCH	0.18550	24.40	0.00	0.00	0.00	5.68	2.64	0.00	2.64	0.00	1.43	0.22	0.12	0.00	0.00	0.00	0.00
EACH	INCR	0.00077	21.80	0.00	0.00	0.00	2.20	2.80	0.00			1.24	0.16	0.00	0.00	0.00	0.00	

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
181	6.00	5.90	0.18627	20.1	0.01916	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
182	5.90	5.80	0.18703	20.0	0.01924	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
183	5.80	5.70	0.18780	20.0	0.01932	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
184	5.70	5.60	0.18857	19.9	0.01940	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
185	5.60	5.50	0.18933	19.8	0.01948	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
186	5.50	5.40	0.19010	19.7	0.01956	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
187	5.40	5.30	0.19087	19.6	0.01963	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
188	5.30	5.20	0.19163	19.6	0.01971	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
189	5.20	5.10	0.19240	19.5	0.01979	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
190	5.10	5.00	0.19317	19.4	0.01987	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
191	5.00	4.90	0.19393	19.3	0.01995	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
192	4.90	4.80	0.19470	19.3	0.02003	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
193	4.80	4.70	0.19547	19.2	0.02011	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
194	4.70	4.60	0.19623	19.1	0.02019	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
195	4.60	4.50	0.19700	19.0	0.02027	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
196	4.50	4.40	0.19777	19.0	0.02034	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
197	4.40	4.30	0.19853	18.9	0.02042	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
198	4.30	4.20	0.19930	18.8	0.02050	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
199	4.20	4.10	0.20007	18.7	0.02058	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
200	4.10	4.00	0.20083	18.7	0.02066	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
201	4.00	3.90	0.20160	18.6	0.02074	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
202	3.90	3.80	0.20237	18.5	0.02082	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
203	3.80	3.70	0.20313	18.5	0.02090	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
204	3.70	3.60	0.20390	18.4	0.02098	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
205	3.60	3.50	0.20467	18.3	0.02105	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
206	3.50	3.40	0.20543	18.3	0.02113	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
207	3.40	3.30	0.20620	18.2	0.02121	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
208	3.30	3.20	0.20697	18.1	0.02129	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
209	3.20	3.10	0.20773	18.1	0.02137	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
210	3.10	3.00	0.20850	18.0	0.02145	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
211	3.00	2.90	0.20927	17.9	0.02153	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
212	2.90	2.80	0.21003	17.9	0.02161	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
213	2.80	2.70	0.21080	17.8	0.02169	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
214	2.70	2.60	0.21157	17.7	0.02176	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
215	2.60	2.50	0.21233	17.7	0.02184	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
216	2.50	2.40	0.21310	17.6	0.02192	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
217	2.40	2.30	0.21387	17.5	0.02200	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
218	2.30	2.20	0.21463	17.5	0.02208	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
219	2.20	2.10	0.21540	17.4	0.02216	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
220	2.10	2.00	0.21617	17.3	0.02224	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022

221	2.00	1.90	0.21693	17.3	0.02232	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
222	1.90	1.80	0.21770	17.2	0.02240	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
223	1.80	1.70	0.21847	17.2	0.02247	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
224	1.70	1.60	0.21923	17.1	0.02255	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
225	1.60	1.50	0.22000	17.0	0.02263	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
226	1.50	1.40	0.22077	17.0	0.02271	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
227	1.40	1.30	0.22153	16.9	0.02279	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
228	1.30	1.20	0.22230	16.9	0.02287	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
229	1.20	1.10	0.22307	16.8	0.02295	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
230	1.10	1.00	0.22383	16.8	0.02303	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
231	1.00	0.90	0.22460	16.7	0.02311	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
232	0.90	0.80	0.22537	16.6	0.02318	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
233	0.80	0.70	0.22613	16.6	0.02326	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
234	0.70	0.60	0.22690	16.5	0.02334	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
235	0.60	0.50	0.22767	16.5	0.02342	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
236	0.50	0.40	0.22843	16.4	0.02350	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
237	0.40	0.30	0.22920	16.4	0.02358	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.024
238	0.30	0.20	0.22997	16.3	0.02366	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.024
239	0.20	0.10	0.23073	16.3	0.02374	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.024
240	0.10	0.00	0.23150	16.2	0.02381	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.024
TOT						3.24			58324.75	100560.00					
AVG					0.0214		0.58	16.76			9.72				
CUM						15.78									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	BKGD SOD *	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
181	5.900	8.36	1.76	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
182	5.800	8.36	1.76	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
183	5.700	8.36	1.76	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
184	5.600	8.36	1.77	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
185	5.500	8.36	1.77	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
186	5.400	8.36	1.77	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
187	5.300	8.36	1.77	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
188	5.200	8.36	1.77	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
189	5.100	8.36	1.78	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190	5.000	8.36	1.78	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
191	4.900	8.36	1.78	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
192	4.800	8.36	1.78	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
193	4.700	8.36	1.78	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
194	4.600	8.36	1.79	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
195	4.500	8.36	1.79	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
196	4.400	8.36	1.79	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197	4.300	8.36	1.79	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	4.200	8.36	1.80	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
199	4.100	8.36	1.80	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200	4.000	8.36	1.80	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

201	3.900	8.36	1.80	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	3.800	8.36	1.80	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	3.700	8.36	1.81	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	3.600	8.36	1.81	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	3.500	8.36	1.81	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	3.400	8.36	1.81	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
207	3.300	8.36	1.81	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
208	3.200	8.36	1.82	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
209	3.100	8.36	1.82	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	3.000	8.36	1.82	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
211	2.900	8.36	1.82	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
212	2.800	8.36	1.82	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
213	2.700	8.36	1.83	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
214	2.600	8.36	1.83	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
215	2.500	8.36	1.83	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
216	2.400	8.36	1.83	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
217	2.300	8.36	1.84	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
218	2.200	8.36	1.84	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
219	2.100	8.36	1.84	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	2.000	8.36	1.84	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
221	1.900	8.36	1.84	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
222	1.800	8.36	1.85	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
223	1.700	8.36	1.85	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
224	1.600	8.36	1.85	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	1.500	8.36	1.85	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	1.400	8.36	1.85	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	1.300	8.36	1.86	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	1.200	8.36	1.86	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
229	1.100	8.36	1.86	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	1.000	8.36	1.86	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
231	0.900	8.36	1.87	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
232	0.800	8.36	1.87	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
233	0.700	8.36	1.87	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
234	0.600	8.36	1.87	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
235	0.500	8.36	1.87	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
236	0.400	8.36	1.88	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
237	0.300	8.36	1.88	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
238	0.200	8.36	1.88	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
239	0.100	8.36	1.88	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
240	0.000	8.36	1.88	0.13	0.00	0.00	0.00	0.00	0.00	2.64	2.64	2.64	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			1.67	0.11	0.00	0.00	0.00	0.00	0.00	2.00			0.02	0.00	0.10	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
181	5.900	24.40	0.00	0.00	0.00	5.65	2.63	0.00	2.63	0.00	1.43	0.22	0.12	1.77	0.00	0.00	0.00	0.	0.00

182	5.800	24.40	0.00	0.00	0.00	5.62	2.62	0.00	2.62	0.00	1.43	0.22	0.12	1.78	0.00	0.00	0.00	0.	0.00
183	5.700	24.40	0.00	0.00	0.00	5.60	2.62	0.00	2.62	0.00	1.43	0.22	0.12	1.78	0.00	0.00	0.00	0.	0.00
184	5.600	24.40	0.00	0.00	0.00	5.58	2.61	0.00	2.61	0.00	1.43	0.22	0.12	1.78	0.00	0.00	0.00	0.	0.00
185	5.500	24.40	0.00	0.00	0.00	5.56	2.61	0.00	2.61	0.00	1.43	0.22	0.13	1.78	0.00	0.00	0.00	0.	0.00
186	5.400	24.40	0.00	0.00	0.00	5.54	2.60	0.00	2.60	0.00	1.43	0.22	0.13	1.78	0.00	0.00	0.00	0.	0.00
187	5.300	24.40	0.00	0.00	0.00	5.53	2.59	0.00	2.59	0.00	1.43	0.22	0.13	1.78	0.00	0.00	0.00	0.	0.00
188	5.200	24.40	0.00	0.00	0.00	5.52	2.59	0.00	2.59	0.00	1.43	0.22	0.13	1.78	0.00	0.00	0.00	0.	0.00
189	5.100	24.40	0.00	0.00	0.00	5.51	2.58	0.00	2.58	0.00	1.43	0.22	0.13	1.79	0.00	0.00	0.00	0.	0.00
190	5.000	24.40	0.00	0.00	0.00	5.50	2.58	0.00	2.58	0.00	1.43	0.22	0.13	1.79	0.00	0.00	0.00	0.	0.00
191	4.900	24.40	0.00	0.00	0.00	5.49	2.57	0.00	2.57	0.00	1.43	0.22	0.13	1.79	0.00	0.00	0.00	0.	0.00
192	4.800	24.40	0.00	0.00	0.00	5.48	2.57	0.00	2.57	0.00	1.43	0.22	0.13	1.79	0.00	0.00	0.00	0.	0.00
193	4.700	24.40	0.00	0.00	0.00	5.48	2.56	0.00	2.56	0.00	1.43	0.22	0.13	1.79	0.00	0.00	0.00	0.	0.00
194	4.600	24.40	0.00	0.00	0.00	5.47	2.56	0.00	2.56	0.00	1.43	0.22	0.14	1.79	0.00	0.00	0.00	0.	0.00
195	4.500	24.40	0.00	0.00	0.00	5.47	2.55	0.00	2.55	0.00	1.43	0.22	0.14	1.79	0.00	0.00	0.00	0.	0.00
196	4.400	24.40	0.00	0.00	0.00	5.46	2.55	0.00	2.55	0.00	1.43	0.22	0.14	1.79	0.00	0.00	0.00	0.	0.00
197	4.300	24.40	0.00	0.00	0.00	5.46	2.54	0.00	2.54	0.00	1.44	0.22	0.14	1.80	0.00	0.00	0.00	0.	0.00
198	4.200	24.40	0.00	0.00	0.00	5.46	2.54	0.00	2.54	0.00	1.44	0.22	0.14	1.80	0.00	0.00	0.00	0.	0.00
199	4.100	24.40	0.00	0.00	0.00	5.46	2.53	0.00	2.53	0.00	1.44	0.22	0.14	1.80	0.00	0.00	0.00	0.	0.00
200	4.000	24.40	0.00	0.00	0.00	5.46	2.53	0.00	2.53	0.00	1.44	0.22	0.14	1.80	0.00	0.00	0.00	0.	0.00
201	3.900	24.40	0.00	0.00	0.00	5.46	2.52	0.00	2.52	0.00	1.44	0.22	0.14	1.80	0.00	0.00	0.00	0.	0.00
202	3.800	24.40	0.00	0.00	0.00	5.46	2.52	0.00	2.52	0.00	1.44	0.22	0.14	1.80	0.00	0.00	0.00	0.	0.00
203	3.700	24.40	0.00	0.00	0.00	5.46	2.52	0.00	2.52	0.00	1.44	0.22	0.15	1.80	0.00	0.00	0.00	0.	0.00
204	3.600	24.40	0.00	0.00	0.00	5.46	2.51	0.00	2.51	0.00	1.44	0.22	0.15	1.80	0.00	0.00	0.00	0.	0.00
205	3.500	24.40	0.00	0.00	0.00	5.46	2.51	0.00	2.51	0.00	1.44	0.22	0.15	1.80	0.00	0.00	0.00	0.	0.00
206	3.400	24.40	0.00	0.00	0.00	5.46	2.50	0.00	2.50	0.00	1.44	0.22	0.15	1.81	0.00	0.00	0.00	0.	0.00
207	3.300	24.40	0.00	0.00	0.00	5.46	2.50	0.00	2.50	0.00	1.44	0.22	0.15	1.81	0.00	0.00	0.00	0.	0.00
208	3.200	24.40	0.00	0.00	0.00	5.46	2.49	0.00	2.49	0.00	1.44	0.22	0.15	1.81	0.00	0.00	0.00	0.	0.00
209	3.100	24.40	0.00	0.00	0.00	5.46	2.49	0.00	2.49	0.00	1.44	0.22	0.15	1.81	0.00	0.00	0.00	0.	0.00
210	3.000	24.40	0.00	0.00	0.00	5.47	2.49	0.00	2.49	0.00	1.44	0.22	0.15	1.81	0.00	0.00	0.00	0.	0.00
211	2.900	24.40	0.00	0.00	0.00	5.47	2.48	0.00	2.48	0.00	1.44	0.22	0.15	1.81	0.00	0.00	0.00	0.	0.00
212	2.800	24.40	0.00	0.00	0.00	5.47	2.48	0.00	2.48	0.00	1.44	0.22	0.15	1.81	0.00	0.00	0.00	0.	0.00
213	2.700	24.40	0.00	0.00	0.00	5.47	2.47	0.00	2.47	0.00	1.44	0.22	0.15	1.81	0.00	0.00	0.00	0.	0.00
214	2.600	24.40	0.00	0.00	0.00	5.47	2.47	0.00	2.47	0.00	1.44	0.22	0.16	1.81	0.00	0.00	0.00	0.	0.00
215	2.500	24.40	0.00	0.00	0.00	5.48	2.47	0.00	2.47	0.00	1.44	0.22	0.16	1.82	0.00	0.00	0.00	0.	0.00
216	2.400	24.40	0.00	0.00	0.00	5.48	2.46	0.00	2.46	0.00	1.44	0.22	0.16	1.82	0.00	0.00	0.00	0.	0.00
217	2.300	24.40	0.00	0.00	0.00	5.48	2.46	0.00	2.46	0.00	1.44	0.22	0.16	1.82	0.00	0.00	0.00	0.	0.00
218	2.200	24.40	0.00	0.00	0.00	5.48	2.46	0.00	2.46	0.00	1.44	0.22	0.16	1.82	0.00	0.00	0.00	0.	0.00
219	2.100	24.40	0.00	0.00	0.00	5.49	2.45	0.00	2.45	0.00	1.44	0.22	0.16	1.82	0.00	0.00	0.00	0.	0.00
220	2.000	24.40	0.00	0.00	0.00	5.49	2.45	0.00	2.45	0.00	1.44	0.22	0.16	1.82	0.00	0.00	0.00	0.	0.00
221	1.900	24.40	0.00	0.00	0.00	5.49	2.45	0.00	2.45	0.00	1.44	0.22	0.16	1.82	0.00	0.00	0.00	0.	0.00
222	1.800	24.40	0.00	0.00	0.00	5.50	2.44	0.00	2.44	0.00	1.44	0.22	0.16	1.82	0.00	0.00	0.00	0.	0.00
223	1.700	24.40	0.00	0.00	0.00	5.50	2.44	0.00	2.44	0.00	1.44	0.22	0.16	1.82	0.00	0.00	0.00	0.	0.00
224	1.600	24.40	0.00	0.00	0.00	5.50	2.44	0.00	2.44	0.00	1.44	0.22	0.16	1.82	0.00	0.00	0.00	0.	0.00
225	1.500	24.40	0.00	0.00	0.00	5.51	2.43	0.00	2.43	0.00	1.44	0.22	0.17	1.83	0.00	0.00	0.00	0.	0.00
226	1.400	24.40	0.00	0.00	0.00	5.51	2.43	0.00	2.43	0.00	1.44	0.22	0.17	1.83	0.00	0.00	0.00	0.	0.00
227	1.300	24.40	0.00	0.00	0.00	5.51	2.43	0.00	2.43	0.00	1.44	0.22	0.17	1.83	0.00	0.00	0.00	0.	0.00
228	1.200	24.40	0.00	0.00	0.00	5.51	2.42	0.00	2.42	0.00	1.44	0.22	0.17	1.83	0.00	0.00	0.00	0.	0.00
229	1.100	24.40	0.00	0.00	0.00	5.52	2.42	0.00	2.42	0.00	1.44	0.22	0.17	1.83	0.00	0.00	0.00	0.	0.00
230	1.000	24.40	0.00	0.00	0.00	5.52	2.42	0.00	2.42	0.00	1.44	0.22	0.17	1.83	0.00	0.00	0.00	0.	0.00
231	0.900	24.40	0.00	0.00	0.00	5.52	2.41	0.00	2.41	0.00	1.44	0.22	0.17	1.83	0.00	0.00	0.00	0.	0.00
232	0.800	24.40	0.00	0.00	0.00	5.53	2.41	0.00	2.41	0.00	1.44	0.22	0.17	1.83	0.00	0.00	0.00	0.	0.00
233	0.700	24.40	0.00	0.00	0.00	5.53	2.41	0.00	2.41	0.00	1.44	0.22	0.17	1.83	0.00	0.00	0.00	0.	0.00

234	0.600	24.40	0.00	0.00	0.00	5.53	2.41	0.00	2.41	0.00	1.44	0.22	0.17	1.83	0.00	0.00	0.00	0.	0.00
235	0.500	24.40	0.00	0.00	0.00	5.54	2.40	0.00	2.40	0.00	1.44	0.22	0.17	1.83	0.00	0.00	0.00	0.	0.00
236	0.400	24.40	0.00	0.00	0.00	5.54	2.40	0.00	2.40	0.00	1.44	0.22	0.17	1.84	0.00	0.00	0.00	0.	0.00
237	0.300	24.40	0.00	0.00	0.00	5.54	2.40	0.00	2.40	0.00	1.44	0.22	0.18	1.84	0.00	0.00	0.00	0.	0.00
238	0.200	24.40	0.00	0.00	0.00	5.55	2.40	0.00	2.40	0.00	1.44	0.22	0.18	1.84	0.00	0.00	0.00	0.	0.00
239	0.100	24.40	0.00	0.00	0.00	5.55	2.39	0.00	2.39	0.00	1.44	0.22	0.18	1.84	0.00	0.00	0.00	0.	0.00
240	0.000	24.40	0.00	0.00	0.00	5.55	2.39	0.00	2.39	0.00	1.44	0.22	0.18	1.84	0.00	0.00	0.00	0.	0.00

STREAM SUMMARY LA-QUAL Calibration for Bayou Toro
Bayou Toro @ 110401A

TRAVEL TIME	=	15.78	DAYS		
MAXIMUM EFFLUENT	=	33.91	PERCENT		
FLOW	=	0.01077	TO	0.23150	m^3/s
DISPERSION	=	0.0000	TO	0.0000	m^2/s
VELOCITY	=	0.00439	TO	0.03119	m/s
DEPTH	=	0.31	TO	0.58	m
WIDTH	=	7.92	TO	16.76	m
BOD DECAY	=	0.12	TO	0.13	per day
NH3 DECAY	=	0.09	TO	0.13	per day
SOD	=	2.24	TO	2.64	$g/m^2/d$
NH3 SOURCE	=	0.00	TO	0.00	$g/m^2/d$
REAERATION	=	1.76	TO	3.37	per day
BOD SETTLING	=	0.00	TO	0.00	per day
ORG-N DECAY	=	0.02	TO	0.02	per day
ORG-N SETTLING	=	0.00	TO	0.00	per day
TEMPERATURE	=	21.81	TO	24.40	deg C
DISSOLVED OXYGEN	=	3.54	TO	6.01	mg/L

LA-QUAL Calibration for Bayou Toro

REACH SUMMARY REPORT FOR Bayou Toro @ 110401A

RCH NO.	REACH NAME	BEGIN DIST km	ENDING DIST km	REACH LENGTH km	TRAVEL TIME days	FLOW AT EOR m3/s	AVERAGE VELO m/s	AVG DEPTH m	AVG WIDTH m	FLOW AT EOR cfs	AVERAGE VELO fps	AVG DEPTH ft	AVG WIDTH ft
1	Bayou Toro	24.00	18.00	6.00	6.27	0.05600	0.01107	0.310	7.92	1.977	0.036	1.017	25.99
2	Bayou Toro	18.00	12.00	6.00	3.29	0.13900	0.02111	0.410	10.87	4.908	0.069	1.345	35.66
3	Bayou Toro	12.00	6.00	6.00	2.97	0.18550	0.02338	0.500	13.82	6.550	0.077	1.640	45.34
4	Bayou Toro	6.00	0.00	6.00	3.24	0.23150	0.02140	0.580	16.76	8.174	0.070	1.903	54.99

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
1	2.	0.	-3.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-5.2	5.2
2	3.	0.	-4.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-6.1	6.1
3	4.	0.	-5.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-6.9	6.9
4	5.	0.	-6.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-7.5	7.5
5	6.	0.	-6.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-8.0	8.0
6	6.	0.	-7.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-8.4	8.4
7	7.	0.	-7.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-8.9	8.9
8	7.	0.	-7.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-9.3	9.3
9	7.	0.	-8.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-9.7	9.7
10	8.	0.	-8.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-10.1	10.1
11	8.	0.	-9.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-10.5	10.5
12	9.	0.	-9.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-10.9	10.8
13	9.	0.	-9.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-11.2	11.2
14	9.	0.	-10.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-11.6	11.6
15	10.	0.	-10.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-12.0	12.0
16	10.	0.	-10.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-12.4	12.4
17	10.	0.	-11.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-12.8	12.8
18	11.	0.	-11.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-13.2	13.2
19	11.	0.	-12.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-13.6	13.6
20	12.	0.	-12.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-14.0	14.0
21	12.	0.	-12.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-14.4	14.4
22	12.	0.	-13.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-14.7	14.7

23	13.	0.	-13.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-15.1	15.1
0.00																									
24	13.	0.	-14.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-15.5	15.5
0.00																									
25	14.	0.	-14.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-15.9	15.9
0.00																									
26	14.	0.	-14.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-16.3	16.3
0.00																									
27	14.	0.	-15.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-16.7	16.7
0.00																									
28	15.	0.	-15.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-17.1	17.1
0.00																									
29	15.	0.	-16.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-17.5	17.5
0.00																									
30	16.	0.	-16.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-17.9	17.9
0.00																									
31	16.	0.	-16.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-18.3	18.3
0.00																									
32	16.	0.	-17.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-18.7	18.7
0.00																									
33	17.	0.	-17.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-19.1	19.1
0.00																									
34	17.	0.	-18.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-19.6	19.6
0.00																									
35	18.	0.	-18.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-20.0	20.0
0.00																									
36	18.	0.	-18.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-20.4	20.4
0.00																									
37	18.	0.	-19.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-20.8	20.8
0.00																									
38	19.	0.	-19.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-21.2	21.2
0.00																									
39	19.	0.	-20.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-21.6	21.6
0.00																									
40	20.	0.	-20.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-22.0	22.0
0.00																									
41	20.	0.	-20.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-22.4	22.4
0.00																									
42	20.	0.	-21.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-22.8	22.8
0.00																									
43	21.	0.	-21.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-23.3	23.3
0.00																									
44	21.	0.	-22.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-23.7	23.7
0.00																									
45	22.	0.	-22.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-24.1	24.1
0.00																									
46	22.	0.	-23.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-24.5	24.5
0.00																									
47	23.	0.	-23.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-24.9	24.9
0.00																									
48	23.	0.	-23.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-25.3	25.3
0.00																									

49	23.	0.	-24.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-25.8	25.8	0.00
50	24.	0.	-24.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-26.2	26.2	0.00
51	24.	0.	-25.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-26.6	26.6	0.00
52	25.	0.	-25.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-27.0	27.0	0.00
53	25.	0.	-25.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-27.5	27.5	0.00
54	25.	0.	-26.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-27.9	27.9	0.00
55	26.	0.	-26.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-28.3	28.3	0.00
56	26.	0.	-27.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-28.7	28.7	0.00
57	27.	0.	-27.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-29.2	29.2	0.00
58	27.	0.	-28.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-29.6	29.6	0.00
59	28.	0.	-28.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-30.0	30.0	0.00

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
60	28.	0.	-28.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-30.4	30.4
61	28.	0.	-29.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-31.3	31.3
62	29.	0.	-29.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-31.5	31.5
63	29.	0.	-29.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-31.6	31.6
64	29.	0.	-29.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-31.9	31.9
65	29.	0.	-29.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-32.1	32.1
66	29.	0.	-30.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-32.4	32.4
67	30.	0.	-30.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-32.7	32.7
68	30.	0.	-30.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-33.0	33.0
69	30.	0.	-31.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-33.3	33.3
70	31.	0.	-31.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-33.6	33.6
71	31.	0.	-31.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-34.0	34.0
72	31.	0.	-32.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-34.3	34.3
73	32.	0.	-32.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-34.7	34.7
74	32.	0.	-32.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-35.1	35.1
75	32.	0.	-33.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-35.4	35.4
76	33.	0.	-33.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-35.8	35.8
77	33.	0.	-33.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-36.2	36.2
78	33.	0.	-34.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-36.6	36.6
79	34.	0.	-34.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-37.0	37.0
80	34.	0.	-35.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-37.4	37.4
81	35.	0.	-44.	0.	0.	0.	0.	0.	0.	7.	0.	5.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-46.3	46.3

82	44.	0.	-45.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-48.1	48.1
0.00																									
83	45.	0.	-47.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-49.8	49.8
0.00																									
84	47.	0.	-48.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-51.2	51.2
0.00																									
85	48.	0.	-50.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-52.6	52.6
0.00																									
86	50.	0.	-51.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-53.9	53.9
0.00																									
87	51.	0.	-52.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-55.1	55.1
0.00																									
88	52.	0.	-53.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-56.1	56.1
0.00																									
89	53.	0.	-54.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-57.2	57.2
0.00																									
90	54.	0.	-55.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-58.1	58.1
0.00																									
91	55.	0.	-56.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-59.0	59.0
0.00																									
92	56.	0.	-57.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-59.8	59.8
0.00																									
93	57.	0.	-58.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-60.6	60.6
0.00																									
94	58.	0.	-59.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-61.4	61.4
0.00																									
95	59.	0.	-59.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-62.1	62.1
0.00																									
96	59.	0.	-60.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-62.8	62.8
0.00																									
97	60.	0.	-61.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-63.5	63.5
0.00																									
98	61.	0.	-61.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-64.1	64.1
0.00																									
99	61.	0.	-62.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-64.7	64.7
0.00																									
100	62.	0.	-62.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-65.3	65.3
0.00																									
101	62.	0.	-63.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-65.9	65.9
0.00																									
102	63.	0.	-64.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-66.4	66.4
0.00																									
103	64.	0.	-64.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-67.0	67.0
0.00																									
104	64.	0.	-65.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-67.5	67.5
0.00																									
105	65.	0.	-65.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-68.0	68.0
0.00																									
106	65.	0.	-66.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-68.6	68.5
0.00																									
107	66.	0.	-66.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-69.1	69.1
0.00																									

108	66.	0.	-67.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-69.5	69.5	0.00
109	67.	0.	-67.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-70.0	70.0	0.00
110	67.	0.	-68.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-70.5	70.5	0.00
111	68.	0.	-68.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-71.0	71.0	0.00
112	68.	0.	-69.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-71.5	71.5	0.00
113	69.	0.	-69.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-71.9	71.9	0.00
114	69.	0.	-69.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-72.4	72.4	0.00
115	69.	0.	-70.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-72.9	72.9	0.00
116	70.	0.	-70.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-73.3	73.3	0.00
117	70.	0.	-71.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-73.8	73.8	0.00
118	71.	0.	-71.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-74.2	74.2	0.00

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
119	71.	0.	-72.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-74.7	74.7
120	72.	0.	-72.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-75.1	75.1
121	72.	0.	-72.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-75.9	75.9
122	72.	0.	-72.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-75.9	75.9
123	72.	0.	-72.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-75.9	75.9
124	72.	0.	-72.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-76.0	76.0
125	72.	0.	-72.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-76.1	76.1
126	72.	0.	-72.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-76.2	76.2
127	72.	0.	-73.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-76.4	76.4
128	73.	0.	-73.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-76.6	76.6
129	73.	0.	-73.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-76.8	76.8
130	73.	0.	-73.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-77.0	77.0
131	73.	0.	-73.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-77.3	77.3
132	73.	0.	-74.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-77.5	77.5
133	74.	0.	-74.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-77.8	77.8
134	74.	0.	-74.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-78.1	78.1
135	74.	0.	-75.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-78.4	78.4
136	75.	0.	-75.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-78.7	78.7
137	75.	0.	-75.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-79.0	79.0
138	75.	0.	-75.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-79.3	79.3
139	75.	0.	-76.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-79.6	79.6
140	76.	0.	-76.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-80.0	80.0

141	76.	0.	-76.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-80.3	80.3
0.00																									
142	76.	0.	-77.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-80.6	80.6
0.00																									
143	77.	0.	-77.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-81.0	81.0
0.00																									
144	77.	0.	-78.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-81.3	81.3
0.00																									
145	78.	0.	-78.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-81.7	81.7
0.00																									
146	78.	0.	-78.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-82.1	82.1
0.00																									
147	78.	0.	-79.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-82.4	82.4
0.00																									
148	79.	0.	-79.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-82.8	82.8
0.00																									
149	79.	0.	-80.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-83.4	83.4
0.00																									
150	80.	0.	-80.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-83.7	83.7
0.00																									
151	80.	0.	-80.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-84.1	84.1
0.00																									
152	80.	0.	-81.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-84.4	84.4
0.00																									
153	81.	0.	-81.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-84.8	84.8
0.00																									
154	81.	0.	-81.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-85.2	85.2
0.00																									
155	81.	0.	-82.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-85.5	85.5
0.00																									
156	82.	0.	-82.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-85.9	85.9
0.00																									
157	82.	0.	-82.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-86.3	86.3
0.00																									
158	82.	0.	-83.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-86.6	86.6
0.00																									
159	83.	0.	-83.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-87.0	87.0
0.00																									
160	83.	0.	-83.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-87.4	87.4
0.00																									
161	83.	0.	-84.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-87.8	87.8
0.00																									
162	84.	0.	-84.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-88.2	88.2
0.00																									
163	84.	0.	-85.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-88.5	88.5
0.00																									
164	85.	0.	-85.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-88.9	88.9
0.00																									
165	85.	0.	-85.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-89.3	89.3
0.00																									
166	85.	0.	-86.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-89.7	89.7
0.00																									

167	86.	0.	-86.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-90.1	90.1
0.00																									
168	86.	0.	-86.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-90.4	90.4
0.00																									
169	86.	0.	-87.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-90.8	90.8
0.00																									
170	87.	0.	-87.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-91.2	91.2
0.00																									
171	87.	0.	-88.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-91.6	91.6
0.00																									
172	88.	0.	-88.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-92.0	92.0
0.00																									
173	88.	0.	-88.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-92.3	92.3
0.00																									
174	88.	0.	-89.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-92.7	92.7
0.00																									
175	89.	0.	-89.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-93.1	93.1
0.00																									
176	89.	0.	-90.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-93.5	93.5
0.00																									
177	90.	0.	-90.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-93.9	93.9
0.00																									

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
178	90.	0.	-90.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-94.3	94.3
179	90.	0.	-91.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-94.7	94.7
180	91.	0.	-91.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-95.0	95.0
181	91.	0.	-91.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-95.8	95.8
182	91.	0.	-91.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-95.8	95.8
183	91.	0.	-91.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-95.8	95.8
184	91.	0.	-91.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-95.8	95.8
185	91.	0.	-91.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-95.9	95.9
186	91.	0.	-91.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-96.0	96.0
187	91.	0.	-91.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-96.1	96.1
188	91.	0.	-91.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-96.2	96.2
189	91.	0.	-92.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-96.4	96.4
190	92.	0.	-92.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-96.6	96.6
191	92.	0.	-92.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-96.9	96.9
192	92.	0.	-92.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-97.1	97.1
193	92.	0.	-93.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-97.4	97.4
194	93.	0.	-93.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-97.7	97.7
195	93.	0.	-93.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-97.9	97.9
196	93.	0.	-93.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-98.3	98.3
197	93.	0.	-94.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-98.6	98.6
198	94.	0.	-94.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-98.9	98.9
199	94.	0.	-94.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-99.2	99.2

200	94.	0.	-95.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-99.6	99.6
0.00																									
201	95.	0.	-95.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-99.9	99.9
0.00																									
202	95.	0.	-95.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-100.3	100.3
0.00																									
203	95.	0.	-96.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-100.6	100.6
0.00																									
204	96.	0.	-96.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-101.0	101.0
0.00																									
205	96.	0.	-97.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-101.4	101.4
0.00																									
206	97.	0.	-97.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-101.8	101.8
0.00																									
207	97.	0.	-97.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-102.2	102.2
0.00																									
208	97.	0.	-98.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-102.5	102.5
0.00																									
209	98.	0.	-98.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-102.9	102.9
0.00																									
210	98.	0.	-98.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-103.3	103.3
0.00																									
211	98.	0.	-99.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-103.7	103.7
0.00																									
212	99.	0.	-99.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-104.1	104.1
0.00																									
213	99.	0.	-100.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-104.5	104.5
0.00																									
214	100.	0.	-100.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-104.9	104.9
0.00																									
215	100.	0.	-100.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-105.3	105.3
0.00																									
216	100.	0.	-101.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-105.8	105.8
0.00																									
217	101.	0.	-101.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-106.2	106.2
0.00																									
218	101.	0.	-102.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-106.6	106.6
0.00																									
219	102.	0.	-102.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-107.0	107.0
0.00																									
220	102.	0.	-103.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-107.4	107.4
0.00																									
221	103.	0.	-103.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-107.8	107.8
0.00																									
222	103.	0.	-103.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-108.2	108.2
0.00																									
223	103.	0.	-104.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-108.7	108.7
0.00																									
224	104.	0.	-104.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-109.1	109.1
0.00																									
225	104.	0.	-105.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-109.5	109.5
0.00																									

226	105.	0.	-105.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-109.9
109.9	0.00																							
227	105.	0.	-105.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-110.3
110.3	0.00																							
228	105.	0.	-106.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-110.8
110.8	0.00																							
229	106.	0.	-106.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-111.2
111.2	0.00																							
230	106.	0.	-107.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-111.6
111.6	0.00																							
231	107.	0.	-107.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-112.0
112.0	0.00																							
232	107.	0.	-108.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-112.5
112.5	0.00																							
233	108.	0.	-108.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-112.9
112.9	0.00																							
234	108.	0.	-108.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-113.3
113.3	0.00																							
235	108.	0.	-109.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-113.7
113.7	0.00																							
236	109.	0.	-109.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-114.2
114.2	0.00																							

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN	UPTR	LOWR	UPMN	UPTR	LOWR	INCR	INCR	NONP	WSLD	WITH	REAE	BOD1	NH3-N	ORG-N	NCM	SOD	SOD	SOD	SOD	ALG	ALG	MAC	TOT	TOT
	ADV	ADV	ADV	DISP	DISP	DISP	IN	OUT	IN	IN	OUT	IN	DECA	DECA	DECA	DECA	BKGD	BOD1	ALG	NCM	PHOT	RESP	PHOT	OUT	IN
237	109.	0.	-110.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-114.6	114.6
238	110.	0.	-110.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-115.0	115.0
239	110.	0.	-111.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-115.5	115.5
240	111.	0.	-111.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.	0.	-115.9	115.9

LA-QUAL Calibration for Bayou Toro

INPUT/OUTPUT LOADING SUMMARY

	FLOW m^3/s	DO kg/d	BOD#1 kg/d	BOD#2 kg/d	ORG-N kg/d	NH3-N kg/d	NO3-N kg/d	PHOS kg/d	CHL A	NCM
HEADWATER FLOW	0.010	1.9	2.4	0.0	1.1	0.1	0.0	0.0	0.0	0.0
INCREMENTAL INFLOW	0.184	35.0	44.5	0.0	19.7	2.5	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	0.0
WASTELOADS	0.038	7.2	11.9	0.0	4.2	0.9	0.0	0.0	0.0	0.0
WITHDRAWLS	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FLOW THRU LOWER BNDRY	-0.231	-111.0	-47.8	0.0	-28.8	-4.4	-3.5	0.0	0.0	0.0
DISPERSION THRU LOWER BNDRY		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DISPERSION THRU HDWTR BNDRY		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NON-POINT INPUT		0.0	38.0	0.0	8.2					0.0
NATURAL REAERATION		877.7								
DAM REAERATION		0.0								
BACKGROUND SOD		-746.4								
BOD#1 DECAY		-49.1	-49.1							
BOD#1 SETTLING		0.0	0.0							
ANAEROBIC BOD#1 DECAY			0.0							
BOD#2 DECAY		0.0		0.0						
BOD#2 SETTLING		0.0		0.0						
ANAEROBIC BOD#2 DECAY				0.0						
ORG-N DECAY		0.0			-4.3	4.3				
ORG-N SETTLING					0.0	0.0				
NH3 DECAY		-15.4				-3.6	3.6			
BACKGROUND NH3 SOURCE						0.0				
OTHER DENITRIFICATION							0.0			
PHOSPHORUS SOURCE								0.0		
ALGAE PHOTOSYNTHESIS		0.0				0.0	0.0	0.0	0.0	
ALGAE RESPIRATION		0.0				0.0		0.0	0.0	
ALGAE SETTLING		0.0							0.0	
MACRO PHOTOSYNTHESIS		0.0				0.0	0.0	0.0		
NCM DECAY		0.0								0.0
NCM SETTLING		0.0								0.0
TOTAL INPUTS	0.231	921.8	96.9	0.0	33.2	7.9	3.6	0.0	0.0	0.0
TOTAL OUTPUTS	-0.231	-921.8	-96.9	0.0	-33.2	-8.0	-3.5	0.0	0.0	0.0
NET CONVERGENCE ERROR	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

.....EXECUTION COMPLETED

APPENDIX I

90th Percentile Temperature Calculations

Table I.1. Calculations for 90th percentile temperatures for Kepler Creek west of Bienville, Louisiana (LDEQ 283).

Summer 90th Percentile Temperature = 27.1 C, interpolated
Winter 90th Percentile Temperature = 19.45 C, interpolated

Date	Season	Water Temp (C)	Percentile
10/15/96	summer	16.41	1.67
10/14/02	summer	16.50	5.00
10/9/95	summer	17.00	8.33
10/12/92	summer	17.80	11.67
10/10/94	summer	17.94	15.00
10/15/90	summer	18.30	18.33
10/14/91	summer	19.10	21.67
10/13/97	summer	19.83	25.00
10/11/93	summer	21.70	28.33
6/11/96	summer	22.43	31.67
6/9/97	summer	23.32	35.00
5/13/02	summer	23.50	38.33
6/10/91	summer	23.60	41.67
6/12/95	summer	23.85	45.00
7/15/02	summer	24.00	48.33
9/16/02	summer	24.20	51.67
8/12/96	summer	24.28	55.00
6/10/02	summer	24.40	58.33
6/15/92	summer	24.90	61.67
8/8/94	summer	25.60	65.00
8/12/02	summer	25.80	68.33
8/14/95	summer	25.93	71.67
8/12/91	summer	26.30	75.00
6/14/93	summer	26.40	78.33
8/11/97	summer	26.53	81.67
6/13/94	summer	26.80	85.00
8/13/90	summer	27.00	88.33
6/11/90	summer	27.20	91.67
8/10/93	summer	27.80	95.00
8/10/92	summer	29.00	98.33

Date	Season	Water Temp (C)	Percentile
12/12/95	winter	6.94	1.61
2/14/95	winter	7.09	4.84
12/8/97	winter	7.89	8.06
1/14/02	winter	8.18	11.29
12/10/90	winter	8.80	14.52
2/10/92	winter	8.80	17.74
2/18/02	winter	8.89	20.97
12/13/94	winter	9.85	24.19
2/9/98	winter	10.43	27.42
2/12/96	winter	10.81	30.65
12/10/96	winter	10.91	33.87
2/4/91	winter	11.60	37.10
2/9/93	winter	12.20	40.32
12/14/92	winter	12.30	43.55
2/17/97	winter	13.11	46.77
12/13/93	winter	13.50	50.00
2/7/94	winter	14.40	53.23
4/14/97	winter	14.46	56.45
4/9/96	winter	14.88	59.68
2/13/90	winter	15.10	62.90
4/6/92	winter	15.20	66.13
4/8/02	winter	15.59	69.35
11/12/02	winter	15.75	72.58
4/9/90	winter	16.10	75.81
12/9/91	winter	16.70	79.03
3/18/02	winter	16.73	82.26
4/4/95	winter	17.53	85.48
4/13/98	winter	18.21	88.71
4/12/93	winter	21.30	91.94
4/11/94	winter	21.80	95.16
4/16/91	winter	22.10	98.39

FILE: R:\WP_FILES\2110-616\BAYOU TORO\WORD FILES\APPENDICES\APPENDIX I\STN 1160-90TH PERC TEMP, BAYOU TORO.XLS

Table I.2. Calculations for 90th percentile temperatures for Bayou Toro northeast of Toro, Louisiana (LDEQ 1160)

Bayou Toro (LDEQ 1169) Water Date	Temp (C)	Season	Kepler Creek (LDEQ 283) Water Date	Temp (C)	Season
1/28/02	21.56	winter	1/14/02	8.18	winter
2/25/02	12.11	winter	2/18/02	8.89	winter
3/26/02	15.05	winter	3/18/02	16.73	winter
4/16/02	19.62	winter	4/8/02	15.59	winter
5/21/02	18.53	summer	5/13/02	23.5	summer
6/18/02	24.79	summer	6/10/02	24.4	summer
7/23/02	28.15	summer	7/15/02	24	summer
8/20/02	26.67	summer	8/12/02	25.8	summer
9/23/02	23.29	summer	9/16/02	24.2	summer
10/21/02	17.90	summer	10/14/02	16.5	summer
11/19/02	12.36	winter	11/12/02	15.75	winter
12/17/02	10.77	winter			

SUMMER

Averages for May through October (LTP definition of summer)

23.22 C 23.07 C

Difference between stations = 0.16 C

From previous page, 90th percentile summer temp Kepler Creek = 27.10 C

Adjusted 90th percentile temp for Bayou Toro = 27.10 + 0.16 = 27.26 C

WINTER

Averages for Jan-April and Nov-Dec (LTP definition of winter)

16.14 C 13.03 C

It should be noted that the last value of 10.77 was not included in the average because it would distort the average, since 10.77 was out of the range (from ~ 12 - 21) of the rest of the values.

Difference between stations = 3.11 C

From previous page, 90th percentile winter temp for Kepler Creek = 19.45 C

Adjusted 90th percentile temp for Bayou Toro = 19.45 + 3.11 = 22.56 C

FILE: R:\WP_FILES\2110-616\BAYOU TORO\WORD FILES\APPENDICES\APPENDIX I\STN 1160-90TH PERC TEMP, BAYOU TORO.XLS

APPENDIX J

Headwater DO Calculations for Projections

TABLE J.1. INFLOW DO CALCULATIONS FOR BAYOU TORO PROJECTIONS

ASSUMPTIONS: % saturation from calibration represents no reduction of NPS loads
100% saturation represents complete reduction of NPS loads

METHODOLOGY: First determine % saturation for calibration conditions, then calculate % saturation for projection conditions based on the assumptions above and the percent reductions specified for that projection. Then convert each % saturation to mg/L based on the projection temperature.

NPS REDUCTIONS: 51% for summer
44% for winter

Calibration:	Calib. Temp (C)	Calib. DO (mg/L)	DO at 100% sat. (mg/L)	% sat for calib.
Headwater inflow	21.8	2.20	8.78	25.1%

Summer projection:	% sat for proj.	Proj. temp (C)	DO at 100% sat. (mg/L)	**Proj. input DO (mg/L)**
Headwater inflow	63.3%	27.3	7.92	**5.01**

Winter projection:	% sat for proj.	Proj. temp (C)	DO at 100% sat. (mg/L)	**Proj. input DO (mg/L)**
Headwater inflow	58.0%	22.6	8.64	**5.02**

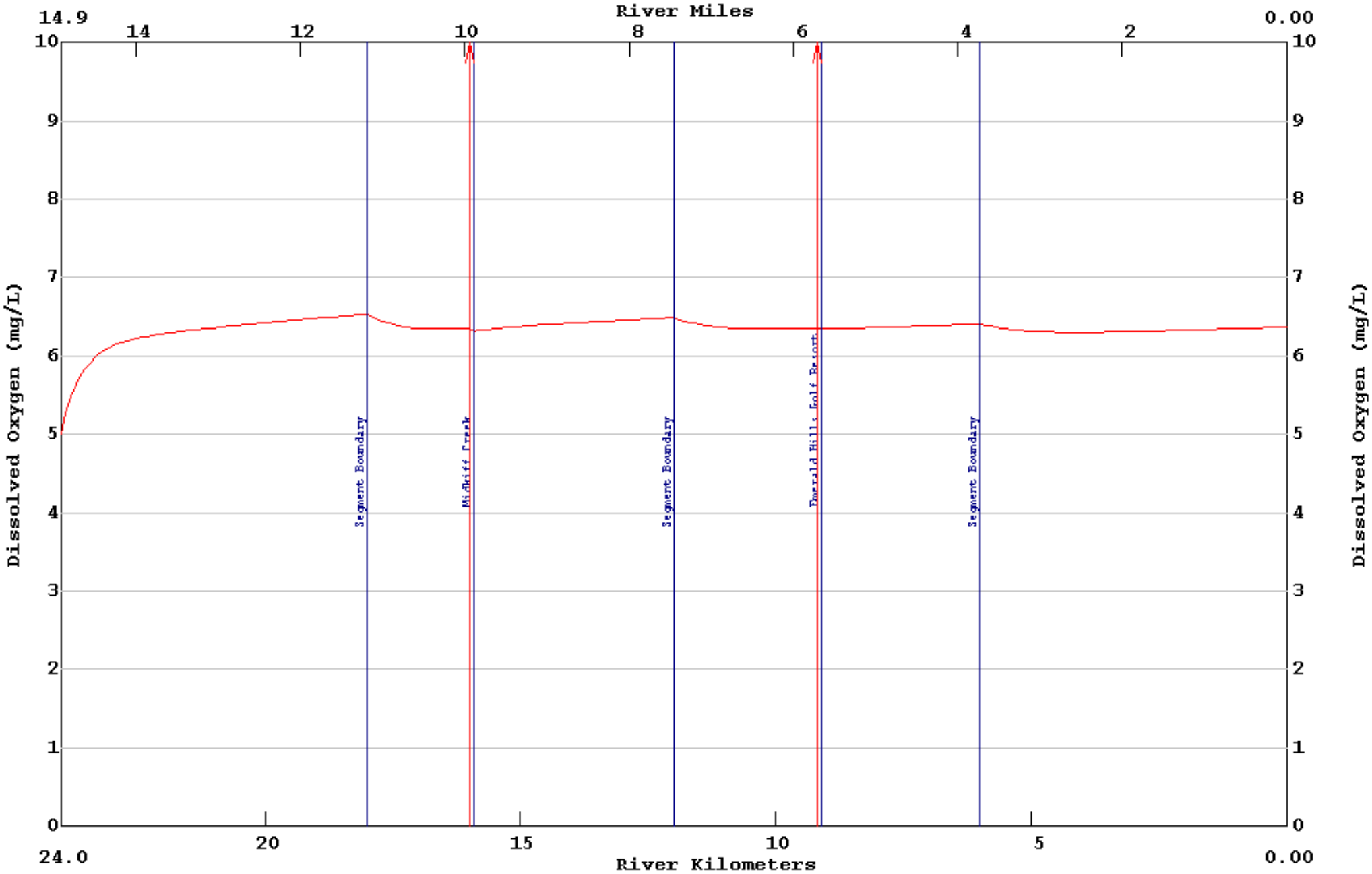
FILE: R:\PROJECTS\2110-616\TECH\LA-QUAL\BAYOU TORO\PROJECTION INPUT CALCS.XLS

APPENDIX K

Model Output for Projection Simulations

LA-QUAL Version 8.11 Run at 14:57 on 09/21/2007 File D:\comp_models\LA-QUAL_8p11\toro_sum.txt

Bayou Toro



```
LA-QUAL Version 8.11
Louisiana Department of Environmental Quality

Input file is D:\toro_sum.txt
Output produced at 13:15 on 09/21/2007

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

CARD TYPE       CONTROL TITLES

TITLE01         LA-QUAL Summer Projection for Bayou Toro
TITLE02
CNTROL03   NO   SEQU                        <Warning: legacy control - line ignored>
CNTROL04  YES   METR
CNTROL05  YES   OXYG                        <Warning: legacy control - line ignored>
ENDATA01

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

CARD TYPE       MODEL OPTION

MODOPT01   NO   TEMP
MODOPT02   NO   SALI
MODOPT03   NO   CONSERVATIVE MATERIAL
MODOPT04   NO   CONSERVATIVE MATERIAL II
MODOPT05  YES   DISS
MODOPT06  YES   BIOC
MODOPT07  YES   NITR
MODOPT08   NO   PHOS
MODOPT09   NO   CHLO
MODOPT10   NO   MACR
MODOPT11   NO   COLI
MODOPT12   NO   NONC
ENDATA02

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

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

PROGRAM         HYDRAULIC CALCULATION METHOD       =         2.00000 (widths and depths)
PROGRAM         MAXIMUM ITERATION LIMIT            =       500.00000
PROGRAM         ALGAE OXYGEN PROD                  =         0.02600 mg O/ug chl a/day
ENDATA03

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

 CARD TYPE     RATE CODE     THETA VALUE

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

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   B1  Bayou Toro                      24.00  TO   18.00   0.1000     6.00      60        1     60
REACH ID      2   B2  Bayou Toro                      18.00  TO   12.00   0.1000     6.00      60       61    120
REACH ID      3   B3  Bayou Toro                      12.00  TO    6.00   0.1000     6.00      60      121    180
REACH ID      4   B4  Bayou Toro                       6.00  TO    0.00   0.1000     6.00      60      181    240
ENDATA08

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

CARD TYPE  REACH  ID       WIDTH       WIDTH       WIDTH       DEPTH       DEPTH       DEPTH      SLOPE    MANNINGS
                            "A"         "B"         "C"         "D"         "E"         "F"                  "N"

HYDR-1        1   B1       0.000       0.000       7.920       0.000       0.000       0.310     0.00000   0.000
HYDR-1        2   B2       0.000       0.000      10.870       0.000       0.000       0.410     0.00000   0.000
HYDR-1        3   B3       0.000       0.000      13.820       0.000       0.000       0.500     0.00000   0.000
HYDR-1        4   B4       0.000       0.000      16.760       0.000       0.000       0.580     0.00000   0.000
ENDATA09

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

CARD TYPE  REACH  ID     TIDAL     DISPERSION     DISPERSION     DISPERSION     DISPERSION
                         RANGE        "A"            "B"            "C"            "D"

ENDATA10

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

CARD TYPE      REACH  ID        TEMP     SALIN        DO       NH3     NO3+2      PHOS     CHL A     MACRO

INITIAL          1   B1       27.30      0.00      2.21      0.16      0.00      0.00      0.00      0.00
INITIAL          2   B2       27.30      0.00      3.34      0.15      0.00      0.00      0.00      0.00
```

```
INITIAL           3   B3       27.30      0.00      4.47      0.15      0.00      0.00      0.00      0.00
INITIAL           4   B4       27.30      0.00      5.60      0.14      0.00      0.00      0.00      0.00
ENDATA11

$$$ DATA TYPE 12 (REAERATION, SEDIMENT OXYGEN DEMAND, BOD COEFFICIENTS) $$$
                                                                                                  BOD     ANAER                          BOD2     ANAER
CARD     RCH  RCH  K2                    K2        K2        K2    BKGRND       BOD       BOD      CONV      BOD2      BOD2      BOD2      CONV      BOD2
TYPE     NUM   ID  OPT                   "A"       "B"       "C"       SOD     DECAY      SETT    TO SOD     DECAY     DECAY      SETT    TO SOD     DECAY
                                                                   g/m²/d   per day       m/d             per day   per day       m/d             per day

COEFF-1    1   B1  15 LOUISIANA        0.000     0.000     0.000     0.980     0.110     0.000     0.000     0.000     0.000     0.000     0.000     0.000
COEFF-1    2   B2  15 LOUISIANA        0.000     0.000     0.000     0.980     0.110     0.000     0.000     0.000     0.000     0.000     0.000     0.000
COEFF-1    3   B3  15 LOUISIANA        0.000     0.000     0.000     0.980     0.110     0.000     0.000     0.000     0.000     0.000     0.000     0.000
COEFF-1    4   B4  15 LOUISIANA        0.000     0.000     0.000     0.980     0.110     0.000     0.000     0.000     0.000     0.000     0.000     0.000
ENDATA12

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

CARD TYPE      REACH  ID       ORG-N     ORG-N   ORGN CONV       NH3       NH3      PHOS     DENIT
                                DECA      SETT  TO NH3 SRCE     DECA      SRCE      SRCE      RATE

COEFF-2          1   B1       0.020     0.000     1.000       0.100     0.000     0.000     0.000
COEFF-2          2   B2       0.020     0.000     1.000       0.100     0.000     0.000     0.000
COEFF-2          3   B3       0.020     0.000     1.000       0.100     0.000     0.000     0.000
COEFF-2          4   B4       0.020     0.000     1.000       0.100     0.000     0.000     0.000
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   SHADING

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   IN/DIST  OUT/DIST

INCR-1           1   B1       0.00000     0.04600     27.30      0.00      0.00      0.00   0.00767   0.00000
INCR-1           2   B2       0.00000     0.04600     27.30      0.00      0.00      0.00   0.00767   0.00000
INCR-1           3   B3       0.00000     0.04600     27.30      0.00      0.00      0.00   0.00767   0.00000
INCR-1           4   B4       0.00000     0.04600     27.30      0.00      0.00      0.00   0.00767   0.00000
ENDATA16

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

```
CARD TYPE      REACH  ID          DO       BOD     ORG-N     NH3-N     NO3-N     BOD#2

INCR-2           1   B1        5.01      1.37      0.61      0.08      0.00      0.00
INCR-2           2   B2        5.01      1.37      0.61      0.08      0.00      0.00
INCR-2           3   B3        5.01      1.37      0.61      0.08      0.00      0.00
INCR-2           4   B4        5.01      1.37      0.61      0.08      0.00      0.00
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#1     ORG-N      COLI       NCM        DO     BOD#2

NONPOINT         1   B1        2.94      0.64      0.00      0.00      0.00      0.00
NONPOINT         2   B2        3.92      0.88      0.00      0.00      0.00      0.00
NONPOINT         3   B3        4.90      1.13      0.00      0.00      0.00      0.00
NONPOINT         4   B4        6.86      1.37      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     FLOW    TEMP    SALIN      CM-I     CM-II
                                                      m³/s      cfs   deg C      ppt

HDWTR-1          1     Bayou Toro @ 110401A    0   0.03400    1.201   27.30     0.00     0.000     0.000   0.00
ENDATA20

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

CARD TYPE     ELEMENT   NAME                        DO     BOD#1     ORG-N     NH3-N     NO3-N     BOD#2
                                                  mg/L      mg/L      mg/L      mg/L      mg/L      mg/L

HDWTR-2          1     Bayou Toro @ 110401A       5.01      1.37      0.61      0.08      0.00      0.00
ENDATA21

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

CARD TYPE     ELEMENT   NAME                       PHOS     CHL A      COLI       NCM
                                                   mg/L      mg/L      mg/L      mg/L

ENDATA22

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

CARD TYPE   JUNCTION   UPSTRM     RIVER     NAME
             ELEMENT  ELEMENT     KILOM
```

```
ENDATA23

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

CARD TYPE  ELEMENT    RKILO  NAME                      FLOW       FLOW     FLOW    TEMP    SALIN      CM-I     CM-II
                                                       m³/s        cfs      MGD   deg C      ppt

WSTLD-1       81      16.00  NPS Midkiff Creek      0.00300    0.10593    0.068   27.30     0.00     0.000     0.000
WSTLD-1      149       9.20  Emerald Hills Golf     0.00060    0.02119    0.014   27.30     0.00     0.000     0.000
ENDATA24

$$$ DATA TYPE 25 (WASTELOAD DATA FOR DO, BOD, AND NITROGEN) $$$
                                                                          % BOD                            %
CARD TYPE     ELEMENT   NAME                          DO       BOD      RMVL     ORG-N     NH3-N    NITRIF     NO3-N     BOD#2
                                                     mg/L      mg/L                mg/L      mg/L                mg/L      mg/L

WSTLD-2          81     NPS Midkiff Creek           5.01      1.40      0.00      0.61      0.08      0.00      0.00      0.00
WSTLD-2         149     Emerald Hills Golf          5.00     69.00      0.00      5.00     10.00      0.00      0.00      0.00
ENDATA25

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

CARD TYPE     ELEMENT   NAME                          PHOS     CHL A      COLI       NCM
                                                     mg/L      mg/L      mg/L      mg/L

ENDATA26

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

CARD TYPE    CONSTITUENT                    CONCENTRATION

ENDATA27

$$$ DATA TYPE 28 (DAM DATA) $$$

CARD TYPE     ELEMENT   NAME                  EQN      "A"       "B"       "H"

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

ENDATA29

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


NUMBER OF PLOTS =  1
NUMBER OF REACHES IN PLOT 1 =   4
PLOT RCH  1  2  3  4
```

ENDATA30

$$$ DATA TYPE 31 (OVERLAY PLOT DATA) $$$

OVERLAY 1 TORO_SUM.OVL :Bayou Toro
ENDATA31

.....NO ERRORS DETECTED IN INPUT DATA
.....HYDRAULIC CALCULATIONS COMPLETED
.....TRIDIAGONAL MATRIX TERMS INITIALIZED
.....OXYGEN DEPENDENT RATES CONVERGENT IN 7 ITERATIONS
.....CONSTITUENT CALCULATIONS COMPLETED
.....GRAPHICS DATA FOR PLOT 1 WRITTEN TO UNIT 11

INTERMEDIATE REPORT
Dissolved Oxygen LA-QUAL Summer Projection for Bayou Toro
mg/L

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	5.27	5.48	5.64	5.76	5.86	5.93	6.00	6.05	6.09	6.12
B1	1	11	6.15	6.17	6.19	6.21	6.23	6.24	6.25	6.26	6.27	6.28
B1	1	21	6.29	6.30	6.31	6.32	6.32	6.33	6.34	6.35	6.35	6.36
B1	1	31	6.37	6.37	6.38	6.39	6.39	6.40	6.40	6.41	6.42	6.42
B1	1	41	6.43	6.43	6.44	6.45	6.45	6.46	6.46	6.47	6.47	6.48
B1	1	51	6.48	6.49	6.50	6.50	6.51	6.51	6.52	6.52	6.53	6.53
B2	2	61	6.49	6.46	6.44	6.42	6.40	6.39	6.38	6.37	6.36	6.35
B2	2	71	6.35	6.35	6.35	6.34	6.34	6.34	6.35	6.35	6.35	6.35
B2	2	81	6.32	6.33	6.33	6.34	6.35	6.36	6.36	6.37	6.37	6.38
B2	2	91	6.38	6.39	6.39	6.40	6.40	6.40	6.41	6.41	6.42	6.42
B2	2	101	6.42	6.43	6.43	6.43	6.44	6.44	6.45	6.45	6.45	6.46
B2	2	111	6.46	6.46	6.47	6.47	6.47	6.48	6.48	6.48	6.48	6.49
B3	3	121	6.47	6.45	6.43	6.41	6.40	6.39	6.38	6.37	6.37	6.36
B3	3	131	6.36	6.36	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
B3	3	141	6.35	6.35	6.35	6.35	6.35	6.36	6.36	6.36	6.35	6.35
B3	3	151	6.35	6.35	6.35	6.36	6.36	6.36	6.36	6.36	6.36	6.36
B3	3	161	6.37	6.37	6.37	6.37	6.37	6.38	6.38	6.38	6.38	6.39
B3	3	171	6.39	6.39	6.39	6.40	6.40	6.40	6.40	6.41	6.41	6.41
B4	4	181	6.39	6.38	6.37	6.36	6.35	6.34	6.33	6.33	6.32	6.32
B4	4	191	6.31	6.31	6.31	6.31	6.31	6.31	6.30	6.30	6.30	6.30
B4	4	201	6.30	6.31	6.31	6.31	6.31	6.31	6.31	6.31	6.31	6.31
B4	4	211	6.32	6.32	6.32	6.32	6.32	6.32	6.33	6.33	6.33	6.33
B4	4	221	6.33	6.33	6.34	6.34	6.34	6.34	6.34	6.35	6.35	6.35
B4	4	231	6.35	6.35	6.36	6.36	6.36	6.36	6.36	6.36	6.37	6.37

INTERMEDIATE REPORT

Effective BOD
mg/L

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	1.37	1.37	1.37	1.37	1.37	1.37	1.36	1.36	1.36	1.36
B1	1	11	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
B1	1	21	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
B1	1	31	1.36	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
B1	1	41	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
B1	1	51	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
B2	2	61	1.35	1.34	1.34	1.34	1.33	1.33	1.33	1.32	1.32	1.32
B2	2	71	1.32	1.31	1.31	1.31	1.30	1.30	1.30	1.30	1.30	1.29
B2	2	81	1.29	1.29	1.29	1.29	1.29	1.28	1.28	1.28	1.28	1.28
B2	2	91	1.28	1.27	1.27	1.27	1.27	1.27	1.27	1.26	1.26	1.26
B2	2	101	1.26	1.26	1.26	1.26	1.25	1.25	1.25	1.25	1.25	1.25
B2	2	111	1.25	1.25	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24
B3	3	121	1.23	1.23	1.23	1.22	1.22	1.22	1.21	1.21	1.21	1.20
B3	3	131	1.20	1.20	1.20	1.19	1.19	1.19	1.19	1.18	1.18	1.18
B3	3	141	1.18	1.17	1.17	1.17	1.17	1.16	1.16	1.16	1.42	1.42
B3	3	151	1.41	1.41	1.40	1.40	1.39	1.39	1.38	1.38	1.37	1.37
B3	3	161	1.36	1.36	1.35	1.35	1.35	1.34	1.34	1.33	1.33	1.33
B3	3	171	1.32	1.32	1.31	1.31	1.31	1.30	1.30	1.30	1.29	1.29
B4	4	181	1.29	1.28	1.28	1.27	1.27	1.26	1.26	1.25	1.25	1.25
B4	4	191	1.24	1.24	1.23	1.23	1.23	1.22	1.22	1.22	1.21	1.21
B4	4	201	1.21	1.20	1.20	1.20	1.19	1.19	1.19	1.18	1.18	1.18
B4	4	211	1.18	1.17	1.17	1.17	1.16	1.16	1.16	1.16	1.15	1.15
B4	4	221	1.15	1.15	1.14	1.14	1.14	1.14	1.14	1.13	1.13	1.13
B4	4	231	1.13	1.13	1.12	1.12	1.12	1.12	1.12	1.11	1.11	1.11

INTERMEDIATE REPORT
Biochemical Oxygen Demand
mg/L

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	1.37	1.37	1.37	1.37	1.37	1.37	1.36	1.36	1.36	1.36
B1	1	11	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
B1	1	21	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
B1	1	31	1.36	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
B1	1	41	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
B1	1	51	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
B2	2	61	1.35	1.34	1.34	1.34	1.33	1.33	1.33	1.32	1.32	1.32
B2	2	71	1.32	1.31	1.31	1.31	1.30	1.30	1.30	1.30	1.30	1.29
B2	2	81	1.29	1.29	1.29	1.29	1.29	1.28	1.28	1.28	1.28	1.28
B2	2	91	1.28	1.27	1.27	1.27	1.27	1.27	1.27	1.26	1.26	1.26
B2	2	101	1.26	1.26	1.26	1.26	1.25	1.25	1.25	1.25	1.25	1.25
B2	2	111	1.25	1.25	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24
B3	3	121	1.23	1.23	1.23	1.22	1.22	1.22	1.21	1.21	1.21	1.20

B3	3	131	1.20	1.20	1.20	1.19	1.19	1.19	1.19	1.18	1.18	1.18
B3	3	141	1.18	1.17	1.17	1.17	1.17	1.16	1.16	1.16	1.42	1.42
B3	3	151	1.41	1.41	1.40	1.40	1.39	1.39	1.38	1.38	1.37	1.37
B3	3	161	1.36	1.36	1.35	1.35	1.35	1.34	1.34	1.33	1.33	1.33
B3	3	171	1.32	1.32	1.31	1.31	1.31	1.30	1.30	1.30	1.29	1.29
B4	4	181	1.29	1.28	1.28	1.27	1.27	1.26	1.26	1.25	1.25	1.25
B4	4	191	1.24	1.24	1.23	1.23	1.23	1.22	1.22	1.22	1.21	1.21
B4	4	201	1.21	1.20	1.20	1.20	1.19	1.19	1.19	1.18	1.18	1.18
B4	4	211	1.18	1.17	1.17	1.17	1.16	1.16	1.16	1.16	1.15	1.15
B4	4	221	1.15	1.15	1.14	1.14	1.14	1.14	1.14	1.13	1.13	1.13
B4	4	231	1.13	1.13	1.12	1.12	1.12	1.12	1.12	1.11	1.11	1.11

INTERMEDIATE REPORT
Organic Nitrogen
mg/L

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.61	0.61	0.62	0.62	0.62	0.62	0.62	0.63	0.63	0.63
B1	1	11	0.63	0.63	0.63	0.64	0.64	0.64	0.64	0.64	0.64	0.64
B1	1	21	0.64	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
B1	1	31	0.65	0.65	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
B1	1	41	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.67	0.67
B1	1	51	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
B2	2	61	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.68	0.68
B2	2	71	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
B2	2	81	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
B2	2	91	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
B2	2	101	0.68	0.68	0.68	0.69	0.69	0.69	0.69	0.69	0.69	0.69
B2	2	111	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
B3	3	121	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
B3	3	131	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
B3	3	141	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.71	0.71
B3	3	151	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
B3	3	161	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
B3	3	171	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
B4	4	181	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
B4	4	191	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
B4	4	201	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
B4	4	211	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
B4	4	221	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
B4	4	231	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71

INTERMEDIATE REPORT
Ammonia Nitrogen
mg/L

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9

B1	1	1	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
B1	1	11	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
B1	1	21	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
B1	1	31	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
B1	1	41	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
B1	1	51	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
B2	2	61	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B2	2	71	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B2	2	81	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B2	2	91	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B2	2	101	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B2	2	111	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B3	3	121	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B3	3	131	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B3	3	141	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.13	0.13
B3	3	151	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.12
B3	3	161	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	171	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	181	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	191	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B4	4	201	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B4	4	211	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B4	4	221	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B4	4	231	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11

INTERMEDIATE REPORT
Nitrate+Nitrite Nitrogen
mg/L

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
B1	1	11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B1	1	21	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
B1	1	31	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
B1	1	41	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
B1	1	51	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
B2	2	61	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
B2	2	71	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04
B2	2	81	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
B2	2	91	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
B2	2	101	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05
B2	2	111	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
B3	3	121	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
B3	3	131	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
B3	3	141	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
B3	3	151	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
B3	3	161	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08
B3	3	171	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08

B4	4	181	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B4	4	191	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10
B4	4	201	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
B4	4	211	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B4	4	221	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B4	4	231	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12

INTERMEDIATE REPORT
Total Nitrogen
mg/L

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.69	0.70	0.70	0.70	0.71	0.71	0.71	0.71	0.72	0.72
B1	1	11	0.72	0.72	0.73	0.73	0.73	0.73	0.73	0.74	0.74	0.74
B1	1	21	0.74	0.74	0.74	0.75	0.75	0.75	0.75	0.75	0.75	0.75
B1	1	31	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.77	0.77
B1	1	41	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.78
B1	1	51	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
B2	2	61	0.78	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
B2	2	71	0.79	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
B2	2	81	0.80	0.80	0.80	0.80	0.80	0.80	0.81	0.81	0.81	0.81
B2	2	91	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
B2	2	101	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
B2	2	111	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.83	0.83	0.83
B3	3	121	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
B3	3	131	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
B3	3	141	0.84	0.84	0.84	0.84	0.85	0.85	0.85	0.85	0.90	0.90
B3	3	151	0.90	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
B3	3	161	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
B3	3	171	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
B4	4	181	0.91	0.91	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
B4	4	191	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
B4	4	201	0.92	0.92	0.92	0.93	0.93	0.93	0.93	0.93	0.93	0.93
B4	4	211	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
B4	4	221	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.94
B4	4	231	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94

INTERMEDIATE REPORT
Temperature
deg C

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B1	1	11	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B1	1	21	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B1	1	31	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30

B1	1	41	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B1	1	51	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B2	2	61	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B2	2	71	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B2	2	81	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B2	2	91	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B2	2	101	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B2	2	111	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B3	3	121	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B3	3	131	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B3	3	141	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B3	3	151	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B3	3	161	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B3	3	171	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B4	4	181	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B4	4	191	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B4	4	201	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B4	4	211	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B4	4	221	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30
B4	4	231	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30

INTERMEDIATE REPORT
Salinity
ppt

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	111	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	121	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	131	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	141	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	151	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	161	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	171	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	181	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	191	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	201	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	211	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	221	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

B4	4	231	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

INTERMEDIATE REPORT
River Distance
km

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	24.	24.	24.	24.	23.	23.	23.	23.	23.	23.
B1	1	11	23.	23.	23.	23.	22.	22.	22.	22.	22.	22.
B1	1	21	22.	22.	22.	22.	21.	21.	21.	21.	21.	21.
B1	1	31	21.	21.	21.	21.	20.	20.	20.	20.	20.	20.
B1	1	41	20.	20.	20.	20.	19.	19.	19.	19.	19.	19.
B1	1	51	19.	19.	19.	19.	18.	18.	18.	18.	18.	18.
B2	2	61	18.	18.	18.	18.	17.	17.	17.	17.	17.	17.
B2	2	71	17.	17.	17.	17.	16.	16.	16.	16.	16.	16.
B2	2	81	16.	16.	16.	16.	15.	15.	15.	15.	15.	15.
B2	2	91	15.	15.	15.	15.	14.	14.	14.	14.	14.	14.
B2	2	101	14.	14.	14.	14.	13.	13.	13.	13.	13.	13.
B2	2	111	13.	13.	13.	13.	12.	12.	12.	12.	12.	12.
B3	3	121	12.	12.	12.	12.	11.	11.	11.	11.	11.	11.
B3	3	131	11.	11.	11.	11.	10.	10.	10.	10.	10.	10.
B3	3	141	10.	10.	10.	10.	9.	9.	9.	9.	9.	9.
B3	3	151	9.	9.	9.	9.	8.	8.	8.	8.	8.	8.
B3	3	161	8.	8.	8.	8.	7.	7.	7.	7.	7.	7.
B3	3	171	7.	7.	7.	7.	6.	6.	6.	6.	6.	6.
B4	4	181	6.	6.	6.	6.	6.	5.	5.	5.	5.	5.
B4	4	191	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.
B4	4	201	4.	4.	4.	4.	4.	3.	3.	3.	3.	3.
B4	4	211	3.	3.	3.	3.	3.	2.	2.	2.	2.	2.
B4	4	221	2.	2.	2.	2.	2.	1.	1.	1.	1.	1.
B4	4	231	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.

INTERMEDIATE REPORT
Flow
m^3/s

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	21	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B1	1	31	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B1	1	41	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B1	1	51	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	61	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	71	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	81	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

B2	2	91	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	101	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	111	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B3	3	121	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B3	3	131	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B3	3	141	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
B3	3	151	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B3	3	161	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B3	3	171	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B4	4	181	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B4	4	191	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B4	4	201	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B4	4	211	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B4	4	221	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B4	4	231	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

INTERMEDIATE REPORT
Dispersion
m^2/s

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	151	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	161	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	171	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	181	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	191	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	211	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	221	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	231	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

INTERMEDIATE REPORT
Advective Velocity

LA-QUAL Summer Projection for Bayou Toro

m/s

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	151	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	161	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	171	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	181	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	191	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	211	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	221	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	231	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

INTERMEDIATE REPORT
Depth LA-QUAL Summer Projection for Bayou Toro
m

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	11	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	21	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	31	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	41	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	51	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B2	2	61	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	71	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	81	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	91	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	101	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	111	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B3	3	121	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B3	3	131	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

B3	3	141	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B3	3	151	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B3	3	161	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B3	3	171	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B4	4	181	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	191	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	201	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	211	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	221	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	231	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

INTERMEDIATE REPORT
Width LA-QUAL Summer Projection for Bayou Toro
m

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	11	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	21	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	31	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	41	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	51	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B2	2	61	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	71	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	81	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	91	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	101	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	111	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B3	3	121	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	131	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	141	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	151	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	161	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	171	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B4	4	181	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	191	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	201	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	211	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	221	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	231	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8

INTERMEDIATE REPORT
Cross-Sectional Area LA-QUAL Summer Projection for Bayou Toro
m^2

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9

B1	1	1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	11	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	21	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	31	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	41	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	51	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B2	2	61	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	71	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	81	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	91	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	101	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	111	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B3	3	121	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	131	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	141	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	151	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	161	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	171	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B4	4	181	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	191	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	201	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	211	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	221	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	231	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7

INTERMEDIATE REPORT
Reaeration Rate
per day

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	3.206	3.223	3.239	3.256	3.272	3.289	3.305	3.322	3.338	3.355
B1	1	11	3.371	3.388	3.404	3.421	3.437	3.454	3.470	3.487	3.503	3.520
B1	1	21	3.536	3.553	3.569	3.586	3.602	3.619	3.635	3.652	3.668	3.685
B1	1	31	3.701	3.718	3.734	3.751	3.767	3.784	3.800	3.817	3.833	3.850
B1	1	41	3.866	3.883	3.900	3.916	3.933	3.949	3.966	3.982	3.999	4.015
B1	1	51	4.032	4.048	4.065	4.081	4.098	4.114	4.131	4.147	4.164	4.180
B2	2	61	2.582	2.589	2.596	2.603	2.610	2.617	2.624	2.631	2.637	2.644
B2	2	71	2.651	2.658	2.665	2.672	2.679	2.686	2.693	2.699	2.706	2.713
B2	2	81	2.747	2.754	2.761	2.768	2.774	2.781	2.788	2.795	2.802	2.809
B2	2	91	2.816	2.823	2.829	2.836	2.843	2.850	2.857	2.864	2.871	2.878
B2	2	101	2.884	2.891	2.898	2.905	2.912	2.919	2.926	2.933	2.940	2.946
B2	2	111	2.953	2.960	2.967	2.974	2.981	2.988	2.995	3.001	3.008	3.015
B3	3	121	2.139	2.143	2.146	2.150	2.154	2.157	2.161	2.165	2.168	2.172
B3	3	131	2.176	2.179	2.183	2.186	2.190	2.194	2.197	2.201	2.205	2.208
B3	3	141	2.212	2.216	2.219	2.223	2.226	2.230	2.234	2.237	2.244	2.247
B3	3	151	2.251	2.255	2.258	2.262	2.266	2.269	2.273	2.277	2.280	2.284
B3	3	161	2.288	2.291	2.295	2.298	2.302	2.306	2.309	2.313	2.317	2.320
B3	3	171	2.324	2.328	2.331	2.335	2.338	2.342	2.346	2.349	2.353	2.357
B4	4	181	1.826	1.828	1.831	1.833	1.835	1.837	1.839	1.842	1.844	1.846

B4	4	191	1.848	1.851	1.853	1.855	1.857	1.860	1.862	1.864	1.866	1.868
B4	4	201	1.871	1.873	1.875	1.877	1.880	1.882	1.884	1.886	1.889	1.891
B4	4	211	1.893	1.895	1.897	1.900	1.902	1.904	1.906	1.909	1.911	1.913
B4	4	221	1.915	1.918	1.920	1.922	1.924	1.926	1.929	1.931	1.933	1.935
B4	4	231	1.938	1.940	1.942	1.944	1.946	1.949	1.951	1.953	1.955	1.958

INTERMEDIATE REPORT
BOD Decay Rate
per day

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B1	1	11	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B1	1	21	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B1	1	31	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B1	1	41	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B1	1	51	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B2	2	61	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B2	2	71	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B2	2	81	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B2	2	91	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B2	2	101	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B2	2	111	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B3	3	121	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B3	3	131	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B3	3	141	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B3	3	151	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B3	3	161	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B3	3	171	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B4	4	181	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B4	4	191	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B4	4	201	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B4	4	211	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B4	4	221	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B4	4	231	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15

INTERMEDIATE REPORT
BOD Settling Rate
per day

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

B1	1	51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	111	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	121	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	131	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	141	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	151	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	161	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	171	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	181	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	191	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	201	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	211	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	221	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	231	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

INTERMEDIATE REPORT
Ammonia Decay Rate
per day

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B1	1	11	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
B1	1	21	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.16
B1	1	31	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B1	1	41	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B1	1	51	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B2	2	61	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B2	2	71	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B2	2	81	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B2	2	91	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B2	2	101	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B2	2	111	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B3	3	121	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B3	3	131	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B3	3	141	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B3	3	151	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B3	3	161	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B3	3	171	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B4	4	181	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B4	4	191	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B4	4	201	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B4	4	211	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B4	4	221	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
B4	4	231	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16

INTERMEDIATE REPORT
Sediment Oxygen Demand
g/m²/d

LA-QUAL Summer Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B1	1	11	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B1	1	21	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B1	1	31	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B1	1	41	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B1	1	51	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B2	2	61	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B2	2	71	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B2	2	81	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B2	2	91	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B2	2	101	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B2	2	111	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B3	3	121	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B3	3	131	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B3	3	141	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B3	3	151	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B3	3	161	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B3	3	171	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B4	4	181	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B4	4	191	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B4	4	201	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B4	4	211	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B4	4	221	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
B4	4	231	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55

CONDENSED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORGN mg/L	NH3 µg/L	CHLA 1/da	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
HDWTR	0.03400	27.30	0.00	5.01	1.37	0.00	0.61	0.08	0.00							
23.90	0.03477	27.30	0.00	5.27	1.37	0.00	0.61	0.08	0.00	3.21	0.15	0.00	0.00	0.00	0.15	1.55
23.80	0.03553	27.30	0.00	5.48	1.37	0.00	0.61	0.08	0.00	3.22	0.15	0.00	0.00	0.00	0.15	1.55
23.70	0.03630	27.30	0.00	5.64	1.37	0.00	0.62	0.08	0.00	3.24	0.15	0.00	0.00	0.00	0.15	1.55
23.60	0.03707	27.30	0.00	5.76	1.37	0.00	0.62	0.08	0.00	3.26	0.15	0.00	0.00	0.00	0.15	1.55
23.50	0.03783	27.30	0.00	5.86	1.37	0.00	0.62	0.08	0.00	3.27	0.15	0.00	0.00	0.00	0.15	1.55
23.40	0.03860	27.30	0.00	5.93	1.37	0.00	0.62	0.08	0.00	3.29	0.15	0.00	0.00	0.00	0.15	1.55
23.30	0.03937	27.30	0.00	6.00	1.36	0.00	0.62	0.08	0.00	3.31	0.15	0.00	0.00	0.00	0.15	1.55
23.20	0.04013	27.30	0.00	6.05	1.36	0.00	0.63	0.08	0.00	3.32	0.15	0.00	0.00	0.00	0.15	1.55
23.10	0.04090	27.30	0.00	6.09	1.36	0.00	0.63	0.08	0.00	3.34	0.15	0.00	0.00	0.00	0.15	1.55
23.00	0.04167	27.30	0.00	6.12	1.36	0.00	0.63	0.08	0.00	3.35	0.15	0.00	0.00	0.00	0.15	1.55

22.90	0.04243	27.30	0.00	6.15	1.36	0.00	0.63	0.08	0.00	3.37	0.15	0.00	0.00	0.00	0.15	1.55
22.80	0.04320	27.30	0.00	6.17	1.36	0.00	0.63	0.08	0.00	3.39	0.15	0.00	0.00	0.00	0.15	1.55
22.70	0.04397	27.30	0.00	6.19	1.36	0.00	0.63	0.08	0.00	3.40	0.15	0.00	0.00	0.00	0.15	1.55
22.60	0.04473	27.30	0.00	6.21	1.36	0.00	0.64	0.08	0.00	3.42	0.15	0.00	0.00	0.00	0.15	1.55
22.50	0.04550	27.30	0.00	6.23	1.36	0.00	0.64	0.08	0.00	3.44	0.15	0.00	0.00	0.00	0.15	1.55
22.40	0.04627	27.30	0.00	6.24	1.36	0.00	0.64	0.08	0.00	3.45	0.15	0.00	0.00	0.00	0.15	1.55
22.30	0.04703	27.30	0.00	6.25	1.36	0.00	0.64	0.08	0.00	3.47	0.15	0.00	0.00	0.00	0.15	1.55
22.20	0.04780	27.30	0.00	6.26	1.36	0.00	0.64	0.08	0.00	3.49	0.15	0.00	0.00	0.00	0.15	1.55
22.10	0.04857	27.30	0.00	6.27	1.36	0.00	0.64	0.08	0.00	3.50	0.15	0.00	0.00	0.00	0.15	1.55
22.00	0.04933	27.30	0.00	6.28	1.36	0.00	0.64	0.08	0.00	3.52	0.15	0.00	0.00	0.00	0.15	1.55
21.90	0.05010	27.30	0.00	6.29	1.36	0.00	0.64	0.08	0.00	3.54	0.15	0.00	0.00	0.00	0.15	1.55
21.80	0.05087	27.30	0.00	6.30	1.36	0.00	0.65	0.08	0.00	3.55	0.15	0.00	0.00	0.00	0.15	1.55
21.70	0.05163	27.30	0.00	6.31	1.36	0.00	0.65	0.08	0.00	3.57	0.15	0.00	0.00	0.00	0.15	1.55
21.60	0.05240	27.30	0.00	6.32	1.36	0.00	0.65	0.08	0.00	3.59	0.15	0.00	0.00	0.00	0.15	1.55
21.50	0.05317	27.30	0.00	6.32	1.36	0.00	0.65	0.08	0.00	3.60	0.15	0.00	0.00	0.00	0.15	1.55
21.40	0.05393	27.30	0.00	6.33	1.36	0.00	0.65	0.08	0.00	3.62	0.15	0.00	0.00	0.00	0.15	1.55
21.30	0.05470	27.30	0.00	6.34	1.36	0.00	0.65	0.08	0.00	3.64	0.15	0.00	0.00	0.00	0.15	1.55
21.20	0.05547	27.30	0.00	6.35	1.36	0.00	0.65	0.08	0.00	3.65	0.15	0.00	0.00	0.00	0.15	1.55
21.10	0.05623	27.30	0.00	6.35	1.36	0.00	0.65	0.08	0.00	3.67	0.15	0.00	0.00	0.00	0.16	1.55
21.00	0.05700	27.30	0.00	6.36	1.36	0.00	0.65	0.08	0.00	3.68	0.15	0.00	0.00	0.00	0.16	1.55
20.90	0.05777	27.30	0.00	6.37	1.36	0.00	0.65	0.08	0.00	3.70	0.15	0.00	0.00	0.00	0.16	1.55
20.80	0.05853	27.30	0.00	6.37	1.35	0.00	0.65	0.08	0.00	3.72	0.15	0.00	0.00	0.00	0.16	1.55
20.70	0.05930	27.30	0.00	6.38	1.35	0.00	0.66	0.08	0.00	3.73	0.15	0.00	0.00	0.00	0.16	1.55
20.60	0.06007	27.30	0.00	6.39	1.35	0.00	0.66	0.08	0.00	3.75	0.15	0.00	0.00	0.00	0.16	1.55
20.50	0.06083	27.30	0.00	6.39	1.35	0.00	0.66	0.08	0.00	3.77	0.15	0.00	0.00	0.00	0.16	1.55
20.40	0.06160	27.30	0.00	6.40	1.35	0.00	0.66	0.08	0.00	3.78	0.15	0.00	0.00	0.00	0.16	1.55
20.30	0.06237	27.30	0.00	6.40	1.35	0.00	0.66	0.08	0.00	3.80	0.15	0.00	0.00	0.00	0.16	1.55
20.20	0.06313	27.30	0.00	6.41	1.35	0.00	0.66	0.08	0.00	3.82	0.15	0.00	0.00	0.00	0.16	1.55
20.10	0.06390	27.30	0.00	6.42	1.35	0.00	0.66	0.08	0.00	3.83	0.15	0.00	0.00	0.00	0.16	1.55
20.00	0.06467	27.30	0.00	6.42	1.35	0.00	0.66	0.08	0.00	3.85	0.15	0.00	0.00	0.00	0.16	1.55
19.90	0.06543	27.30	0.00	6.43	1.35	0.00	0.66	0.08	0.00	3.87	0.15	0.00	0.00	0.00	0.16	1.55
19.80	0.06620	27.30	0.00	6.43	1.35	0.00	0.66	0.08	0.00	3.88	0.15	0.00	0.00	0.00	0.16	1.55
19.70	0.06697	27.30	0.00	6.44	1.35	0.00	0.66	0.08	0.00	3.90	0.15	0.00	0.00	0.00	0.16	1.55
19.60	0.06773	27.30	0.00	6.45	1.35	0.00	0.66	0.08	0.00	3.92	0.15	0.00	0.00	0.00	0.16	1.55
19.50	0.06850	27.30	0.00	6.45	1.35	0.00	0.66	0.08	0.00	3.93	0.15	0.00	0.00	0.00	0.16	1.55
19.40	0.06927	27.30	0.00	6.46	1.35	0.00	0.66	0.08	0.00	3.95	0.15	0.00	0.00	0.00	0.16	1.55
19.30	0.07003	27.30	0.00	6.46	1.35	0.00	0.66	0.08	0.00	3.97	0.15	0.00	0.00	0.00	0.16	1.55
19.20	0.07080	27.30	0.00	6.47	1.35	0.00	0.66	0.08	0.00	3.98	0.15	0.00	0.00	0.00	0.16	1.55
19.10	0.07157	27.30	0.00	6.47	1.35	0.00	0.67	0.08	0.00	4.00	0.15	0.00	0.00	0.00	0.16	1.55
19.00	0.07233	27.30	0.00	6.48	1.35	0.00	0.67	0.08	0.00	4.02	0.15	0.00	0.00	0.00	0.16	1.55
18.90	0.07310	27.30	0.00	6.48	1.35	0.00	0.67	0.08	0.00	4.03	0.15	0.00	0.00	0.00	0.16	1.55
18.80	0.07387	27.30	0.00	6.49	1.35	0.00	0.67	0.08	0.00	4.05	0.15	0.00	0.00	0.00	0.16	1.55
18.70	0.07463	27.30	0.00	6.50	1.35	0.00	0.67	0.08	0.00	4.06	0.15	0.00	0.00	0.00	0.16	1.55
18.60	0.07540	27.30	0.00	6.50	1.35	0.00	0.67	0.08	0.00	4.08	0.15	0.00	0.00	0.00	0.16	1.55
18.50	0.07617	27.30	0.00	6.51	1.35	0.00	0.67	0.08	0.00	4.10	0.15	0.00	0.00	0.00	0.16	1.55
18.40	0.07693	27.30	0.00	6.51	1.35	0.00	0.67	0.08	0.00	4.11	0.15	0.00	0.00	0.00	0.16	1.55
18.30	0.07770	27.30	0.00	6.52	1.35	0.00	0.67	0.08	0.00	4.13	0.15	0.00	0.00	0.00	0.16	1.55
18.20	0.07847	27.30	0.00	6.52	1.35	0.00	0.67	0.08	0.00	4.15	0.15	0.00	0.00	0.00	0.16	1.55
18.10	0.07923	27.30	0.00	6.53	1.35	0.00	0.67	0.08	0.00	4.16	0.15	0.00	0.00	0.00	0.16	1.55
18.00	0.08000	27.30	0.00	6.53	1.35	0.00	0.67	0.08	0.00	4.18	0.15	0.00	0.00	0.00	0.16	1.55
17.90	0.08077	27.30	0.00	6.49	1.35	0.00	0.67	0.08	0.00	2.58	0.15	0.00	0.00	0.00	0.16	1.55
17.80	0.08153	27.30	0.00	6.46	1.34	0.00	0.67	0.08	0.00	2.59	0.15	0.00	0.00	0.00	0.16	1.55

17.70	0.08230	27.30	0.00	6.44	1.34	0.00	0.67	0.09	0.00	2.60	0.15	0.00	0.00	0.00	0.16	1.55
17.60	0.08307	27.30	0.00	6.42	1.34	0.00	0.67	0.09	0.00	2.60	0.15	0.00	0.00	0.00	0.16	1.55
17.50	0.08383	27.30	0.00	6.40	1.33	0.00	0.67	0.09	0.00	2.61	0.15	0.00	0.00	0.00	0.16	1.55
17.40	0.08460	27.30	0.00	6.39	1.33	0.00	0.67	0.09	0.00	2.62	0.15	0.00	0.00	0.00	0.16	1.55
17.30	0.08537	27.30	0.00	6.38	1.33	0.00	0.67	0.09	0.00	2.62	0.15	0.00	0.00	0.00	0.16	1.55
17.20	0.08613	27.30	0.00	6.37	1.32	0.00	0.67	0.09	0.00	2.63	0.15	0.00	0.00	0.00	0.16	1.55
17.10	0.08690	27.30	0.00	6.36	1.32	0.00	0.68	0.09	0.00	2.64	0.15	0.00	0.00	0.00	0.16	1.55
17.00	0.08767	27.30	0.00	6.35	1.32	0.00	0.68	0.09	0.00	2.64	0.15	0.00	0.00	0.00	0.16	1.55
16.90	0.08843	27.30	0.00	6.35	1.32	0.00	0.68	0.09	0.00	2.65	0.15	0.00	0.00	0.00	0.16	1.55
16.80	0.08920	27.30	0.00	6.35	1.31	0.00	0.68	0.09	0.00	2.66	0.15	0.00	0.00	0.00	0.16	1.55
16.70	0.08997	27.30	0.00	6.35	1.31	0.00	0.68	0.09	0.00	2.66	0.15	0.00	0.00	0.00	0.16	1.55
16.60	0.09073	27.30	0.00	6.34	1.31	0.00	0.68	0.09	0.00	2.67	0.15	0.00	0.00	0.00	0.16	1.55
16.50	0.09150	27.30	0.00	6.34	1.30	0.00	0.68	0.09	0.00	2.68	0.15	0.00	0.00	0.00	0.16	1.55
16.40	0.09227	27.30	0.00	6.34	1.30	0.00	0.68	0.09	0.00	2.69	0.15	0.00	0.00	0.00	0.16	1.55
16.30	0.09303	27.30	0.00	6.35	1.30	0.00	0.68	0.09	0.00	2.69	0.15	0.00	0.00	0.00	0.16	1.55
16.20	0.09380	27.30	0.00	6.35	1.30	0.00	0.68	0.09	0.00	2.70	0.15	0.00	0.00	0.00	0.16	1.55
16.10	0.09457	27.30	0.00	6.35	1.30	0.00	0.68	0.09	0.00	2.71	0.15	0.00	0.00	0.00	0.16	1.55
16.00	0.09533	27.30	0.00	6.35	1.29	0.00	0.68	0.09	0.00	2.71	0.15	0.00	0.00	0.00	0.16	1.55
15.90	0.09910	27.30	0.00	6.32	1.29	0.00	0.68	0.09	0.00	2.75	0.15	0.00	0.00	0.00	0.16	1.55
15.80	0.09987	27.30	0.00	6.33	1.29	0.00	0.68	0.09	0.00	2.75	0.15	0.00	0.00	0.00	0.16	1.55
15.70	0.10063	27.30	0.00	6.33	1.29	0.00	0.68	0.09	0.00	2.76	0.15	0.00	0.00	0.00	0.16	1.55
15.60	0.10140	27.30	0.00	6.34	1.29	0.00	0.68	0.09	0.00	2.77	0.15	0.00	0.00	0.00	0.16	1.55
15.50	0.10217	27.30	0.00	6.35	1.29	0.00	0.68	0.09	0.00	2.77	0.15	0.00	0.00	0.00	0.16	1.55
15.40	0.10293	27.30	0.00	6.36	1.28	0.00	0.68	0.09	0.00	2.78	0.15	0.00	0.00	0.00	0.16	1.55
15.30	0.10370	27.30	0.00	6.36	1.28	0.00	0.68	0.09	0.00	2.79	0.15	0.00	0.00	0.00	0.16	1.55
15.20	0.10447	27.30	0.00	6.37	1.28	0.00	0.68	0.09	0.00	2.80	0.15	0.00	0.00	0.00	0.16	1.55
15.10	0.10523	27.30	0.00	6.37	1.28	0.00	0.68	0.09	0.00	2.80	0.15	0.00	0.00	0.00	0.16	1.55
15.00	0.10600	27.30	0.00	6.38	1.28	0.00	0.68	0.09	0.00	2.81	0.15	0.00	0.00	0.00	0.16	1.55
14.90	0.10677	27.30	0.00	6.38	1.28	0.00	0.68	0.09	0.00	2.82	0.15	0.00	0.00	0.00	0.16	1.55
14.80	0.10753	27.30	0.00	6.39	1.27	0.00	0.68	0.09	0.00	2.82	0.15	0.00	0.00	0.00	0.16	1.55
14.70	0.10830	27.30	0.00	6.39	1.27	0.00	0.68	0.09	0.00	2.83	0.15	0.00	0.00	0.00	0.16	1.55
14.60	0.10907	27.30	0.00	6.40	1.27	0.00	0.68	0.09	0.00	2.84	0.15	0.00	0.00	0.00	0.16	1.55
14.50	0.10983	27.30	0.00	6.40	1.27	0.00	0.68	0.09	0.00	2.84	0.15	0.00	0.00	0.00	0.16	1.55
14.40	0.11060	27.30	0.00	6.40	1.27	0.00	0.68	0.09	0.00	2.85	0.15	0.00	0.00	0.00	0.16	1.55
14.30	0.11137	27.30	0.00	6.41	1.27	0.00	0.68	0.09	0.00	2.86	0.15	0.00	0.00	0.00	0.16	1.55
14.20	0.11213	27.30	0.00	6.41	1.26	0.00	0.68	0.09	0.00	2.86	0.15	0.00	0.00	0.00	0.16	1.55
14.10	0.11290	27.30	0.00	6.42	1.26	0.00	0.68	0.09	0.00	2.87	0.15	0.00	0.00	0.00	0.16	1.55
14.00	0.11367	27.30	0.00	6.42	1.26	0.00	0.68	0.09	0.00	2.88	0.15	0.00	0.00	0.00	0.16	1.55
13.90	0.11443	27.30	0.00	6.42	1.26	0.00	0.68	0.09	0.00	2.88	0.15	0.00	0.00	0.00	0.16	1.55
13.80	0.11520	27.30	0.00	6.43	1.26	0.00	0.68	0.09	0.00	2.89	0.15	0.00	0.00	0.00	0.16	1.55
13.70	0.11597	27.30	0.00	6.43	1.26	0.00	0.68	0.09	0.00	2.90	0.15	0.00	0.00	0.00	0.16	1.55
13.60	0.11673	27.30	0.00	6.43	1.26	0.00	0.69	0.09	0.00	2.91	0.15	0.00	0.00	0.00	0.16	1.55
13.50	0.11750	27.30	0.00	6.44	1.25	0.00	0.69	0.09	0.00	2.91	0.15	0.00	0.00	0.00	0.16	1.55
13.40	0.11827	27.30	0.00	6.44	1.25	0.00	0.69	0.09	0.00	2.92	0.15	0.00	0.00	0.00	0.16	1.55
13.30	0.11903	27.30	0.00	6.45	1.25	0.00	0.69	0.09	0.00	2.93	0.15	0.00	0.00	0.00	0.16	1.55
13.20	0.11980	27.30	0.00	6.45	1.25	0.00	0.69	0.09	0.00	2.93	0.15	0.00	0.00	0.00	0.16	1.55
13.10	0.12057	27.30	0.00	6.45	1.25	0.00	0.69	0.09	0.00	2.94	0.15	0.00	0.00	0.00	0.16	1.55
13.00	0.12133	27.30	0.00	6.46	1.25	0.00	0.69	0.09	0.00	2.95	0.15	0.00	0.00	0.00	0.16	1.55
12.90	0.12210	27.30	0.00	6.46	1.25	0.00	0.69	0.09	0.00	2.95	0.15	0.00	0.00	0.00	0.16	1.55
12.80	0.12287	27.30	0.00	6.46	1.25	0.00	0.69	0.09	0.00	2.96	0.15	0.00	0.00	0.00	0.16	1.55
12.70	0.12363	27.30	0.00	6.47	1.24	0.00	0.69	0.09	0.00	2.97	0.15	0.00	0.00	0.00	0.16	1.55
12.60	0.12440	27.30	0.00	6.47	1.24	0.00	0.69	0.09	0.00	2.97	0.15	0.00	0.00	0.00	0.16	1.55

12.50	0.12517	27.30	0.00	6.47	1.24	0.00	0.69	0.09	0.00	2.98	0.15	0.00	0.00	0.00	0.16	1.55
12.40	0.12593	27.30	0.00	6.48	1.24	0.00	0.69	0.09	0.00	2.99	0.15	0.00	0.00	0.00	0.16	1.55
12.30	0.12670	27.30	0.00	6.48	1.24	0.00	0.69	0.09	0.00	2.99	0.15	0.00	0.00	0.00	0.16	1.55
12.20	0.12747	27.30	0.00	6.48	1.24	0.00	0.69	0.09	0.00	3.00	0.15	0.00	0.00	0.00	0.16	1.55
12.10	0.12823	27.30	0.00	6.48	1.24	0.00	0.69	0.09	0.00	3.01	0.15	0.00	0.00	0.00	0.16	1.55
12.00	0.12900	27.30	0.00	6.49	1.24	0.00	0.69	0.09	0.00	3.02	0.15	0.00	0.00	0.00	0.16	1.55
11.90	0.12977	27.30	0.00	6.47	1.23	0.00	0.69	0.09	0.00	2.14	0.15	0.00	0.00	0.00	0.16	1.55
11.80	0.13053	27.30	0.00	6.45	1.23	0.00	0.69	0.09	0.00	2.14	0.15	0.00	0.00	0.00	0.16	1.55
11.70	0.13130	27.30	0.00	6.43	1.23	0.00	0.69	0.09	0.00	2.15	0.15	0.00	0.00	0.00	0.16	1.55
11.60	0.13207	27.30	0.00	6.41	1.22	0.00	0.69	0.09	0.00	2.15	0.15	0.00	0.00	0.00	0.16	1.55
11.50	0.13283	27.30	0.00	6.40	1.22	0.00	0.69	0.09	0.00	2.15	0.15	0.00	0.00	0.00	0.16	1.55
11.40	0.13360	27.30	0.00	6.39	1.22	0.00	0.69	0.09	0.00	2.16	0.15	0.00	0.00	0.00	0.16	1.55
11.30	0.13437	27.30	0.00	6.38	1.21	0.00	0.69	0.09	0.00	2.16	0.15	0.00	0.00	0.00	0.16	1.55
11.20	0.13513	27.30	0.00	6.37	1.21	0.00	0.69	0.09	0.00	2.16	0.15	0.00	0.00	0.00	0.16	1.55
11.10	0.13590	27.30	0.00	6.37	1.21	0.00	0.69	0.09	0.00	2.17	0.15	0.00	0.00	0.00	0.16	1.55
11.00	0.13667	27.30	0.00	6.36	1.20	0.00	0.69	0.09	0.00	2.17	0.15	0.00	0.00	0.00	0.16	1.55
10.90	0.13743	27.30	0.00	6.36	1.20	0.00	0.69	0.09	0.00	2.18	0.15	0.00	0.00	0.00	0.16	1.55
10.80	0.13820	27.30	0.00	6.36	1.20	0.00	0.69	0.09	0.00	2.18	0.15	0.00	0.00	0.00	0.16	1.55
10.70	0.13897	27.30	0.00	6.35	1.20	0.00	0.69	0.09	0.00	2.18	0.15	0.00	0.00	0.00	0.16	1.55
10.60	0.13973	27.30	0.00	6.35	1.19	0.00	0.69	0.09	0.00	2.19	0.15	0.00	0.00	0.00	0.16	1.55
10.50	0.14050	27.30	0.00	6.35	1.19	0.00	0.69	0.09	0.00	2.19	0.15	0.00	0.00	0.00	0.16	1.55
10.40	0.14127	27.30	0.00	6.35	1.19	0.00	0.69	0.09	0.00	2.19	0.15	0.00	0.00	0.00	0.16	1.55
10.30	0.14203	27.30	0.00	6.35	1.19	0.00	0.69	0.09	0.00	2.20	0.15	0.00	0.00	0.00	0.16	1.55
10.20	0.14280	27.30	0.00	6.35	1.18	0.00	0.69	0.09	0.00	2.20	0.15	0.00	0.00	0.00	0.16	1.55
10.10	0.14357	27.30	0.00	6.35	1.18	0.00	0.69	0.09	0.00	2.20	0.15	0.00	0.00	0.00	0.16	1.55
10.00	0.14433	27.30	0.00	6.35	1.18	0.00	0.69	0.09	0.00	2.21	0.15	0.00	0.00	0.00	0.16	1.55
9.90	0.14510	27.30	0.00	6.35	1.18	0.00	0.69	0.09	0.00	2.21	0.15	0.00	0.00	0.00	0.16	1.55
9.80	0.14587	27.30	0.00	6.35	1.17	0.00	0.69	0.09	0.00	2.22	0.15	0.00	0.00	0.00	0.16	1.55
9.70	0.14663	27.30	0.00	6.35	1.17	0.00	0.69	0.09	0.00	2.22	0.15	0.00	0.00	0.00	0.16	1.55
9.60	0.14740	27.30	0.00	6.35	1.17	0.00	0.69	0.09	0.00	2.22	0.15	0.00	0.00	0.00	0.16	1.55
9.50	0.14817	27.30	0.00	6.35	1.17	0.00	0.69	0.09	0.00	2.23	0.15	0.00	0.00	0.00	0.16	1.55
9.40	0.14893	27.30	0.00	6.36	1.16	0.00	0.69	0.09	0.00	2.23	0.15	0.00	0.00	0.00	0.16	1.55
9.30	0.14970	27.30	0.00	6.36	1.16	0.00	0.69	0.09	0.00	2.23	0.15	0.00	0.00	0.00	0.16	1.55
9.20	0.15047	27.30	0.00	6.36	1.16	0.00	0.69	0.09	0.00	2.24	0.15	0.00	0.00	0.00	0.16	1.55
9.10	0.15183	27.30	0.00	6.35	1.42	0.00	0.71	0.13	0.00	2.24	0.15	0.00	0.00	0.00	0.16	1.55
9.00	0.15260	27.30	0.00	6.35	1.42	0.00	0.71	0.13	0.00	2.25	0.15	0.00	0.00	0.00	0.16	1.55
8.90	0.15337	27.30	0.00	6.35	1.41	0.00	0.71	0.13	0.00	2.25	0.15	0.00	0.00	0.00	0.16	1.55
8.80	0.15413	27.30	0.00	6.35	1.41	0.00	0.71	0.13	0.00	2.25	0.15	0.00	0.00	0.00	0.16	1.55
8.70	0.15490	27.30	0.00	6.35	1.40	0.00	0.71	0.13	0.00	2.26	0.15	0.00	0.00	0.00	0.16	1.55
8.60	0.15567	27.30	0.00	6.36	1.40	0.00	0.71	0.13	0.00	2.26	0.15	0.00	0.00	0.00	0.16	1.55
8.50	0.15643	27.30	0.00	6.36	1.39	0.00	0.71	0.13	0.00	2.27	0.15	0.00	0.00	0.00	0.16	1.55
8.40	0.15720	27.30	0.00	6.36	1.39	0.00	0.71	0.13	0.00	2.27	0.15	0.00	0.00	0.00	0.16	1.55
8.30	0.15797	27.30	0.00	6.36	1.38	0.00	0.71	0.13	0.00	2.27	0.15	0.00	0.00	0.00	0.16	1.55
8.20	0.15873	27.30	0.00	6.36	1.38	0.00	0.71	0.13	0.00	2.28	0.15	0.00	0.00	0.00	0.16	1.55
8.10	0.15950	27.30	0.00	6.36	1.37	0.00	0.71	0.12	0.00	2.28	0.15	0.00	0.00	0.00	0.16	1.55
8.00	0.16027	27.30	0.00	6.36	1.37	0.00	0.71	0.12	0.00	2.28	0.15	0.00	0.00	0.00	0.16	1.55
7.90	0.16103	27.30	0.00	6.37	1.36	0.00	0.71	0.12	0.00	2.29	0.15	0.00	0.00	0.00	0.16	1.55
7.80	0.16180	27.30	0.00	6.37	1.36	0.00	0.71	0.12	0.00	2.29	0.15	0.00	0.00	0.00	0.16	1.55
7.70	0.16257	27.30	0.00	6.37	1.35	0.00	0.71	0.12	0.00	2.29	0.15	0.00	0.00	0.00	0.16	1.55
7.60	0.16333	27.30	0.00	6.37	1.35	0.00	0.71	0.12	0.00	2.30	0.15	0.00	0.00	0.00	0.16	1.55
7.50	0.16410	27.30	0.00	6.37	1.35	0.00	0.71	0.12	0.00	2.30	0.15	0.00	0.00	0.00	0.16	1.55
7.40	0.16487	27.30	0.00	6.38	1.34	0.00	0.71	0.12	0.00	2.31	0.15	0.00	0.00	0.00	0.16	1.55

7.30	0.16563	27.30	0.00	6.38	1.34	0.00	0.71	0.12	0.00	2.31	0.15	0.00	0.00	0.00	0.16	1.55
7.20	0.16640	27.30	0.00	6.38	1.33	0.00	0.71	0.12	0.00	2.31	0.15	0.00	0.00	0.00	0.16	1.55
7.10	0.16717	27.30	0.00	6.38	1.33	0.00	0.71	0.12	0.00	2.32	0.15	0.00	0.00	0.00	0.16	1.55
7.00	0.16793	27.30	0.00	6.39	1.33	0.00	0.71	0.12	0.00	2.32	0.15	0.00	0.00	0.00	0.16	1.55
6.90	0.16870	27.30	0.00	6.39	1.32	0.00	0.71	0.12	0.00	2.32	0.15	0.00	0.00	0.00	0.16	1.55
6.80	0.16947	27.30	0.00	6.39	1.32	0.00	0.71	0.12	0.00	2.33	0.15	0.00	0.00	0.00	0.16	1.55
6.70	0.17023	27.30	0.00	6.39	1.31	0.00	0.71	0.12	0.00	2.33	0.15	0.00	0.00	0.00	0.16	1.55
6.60	0.17100	27.30	0.00	6.40	1.31	0.00	0.71	0.12	0.00	2.33	0.15	0.00	0.00	0.00	0.16	1.55
6.50	0.17177	27.30	0.00	6.40	1.31	0.00	0.71	0.12	0.00	2.34	0.15	0.00	0.00	0.00	0.16	1.55
6.40	0.17253	27.30	0.00	6.40	1.30	0.00	0.71	0.12	0.00	2.34	0.15	0.00	0.00	0.00	0.16	1.55
6.30	0.17330	27.30	0.00	6.40	1.30	0.00	0.71	0.12	0.00	2.35	0.15	0.00	0.00	0.00	0.16	1.55
6.20	0.17407	27.30	0.00	6.41	1.30	0.00	0.71	0.12	0.00	2.35	0.15	0.00	0.00	0.00	0.16	1.55
6.10	0.17483	27.30	0.00	6.41	1.29	0.00	0.71	0.12	0.00	2.35	0.15	0.00	0.00	0.00	0.16	1.55
6.00	0.17560	27.30	0.00	6.41	1.29	0.00	0.71	0.12	0.00	2.36	0.15	0.00	0.00	0.00	0.16	1.55
5.90	0.17637	27.30	0.00	6.39	1.29	0.00	0.71	0.12	0.00	1.83	0.15	0.00	0.00	0.00	0.16	1.55
5.80	0.17713	27.30	0.00	6.38	1.28	0.00	0.71	0.12	0.00	1.83	0.15	0.00	0.00	0.00	0.16	1.55
5.70	0.17790	27.30	0.00	6.37	1.28	0.00	0.71	0.12	0.00	1.83	0.15	0.00	0.00	0.00	0.16	1.55
5.60	0.17867	27.30	0.00	6.36	1.27	0.00	0.71	0.12	0.00	1.83	0.15	0.00	0.00	0.00	0.16	1.55
5.50	0.17943	27.30	0.00	6.35	1.27	0.00	0.71	0.12	0.00	1.84	0.15	0.00	0.00	0.00	0.16	1.55
5.40	0.18020	27.30	0.00	6.34	1.26	0.00	0.71	0.12	0.00	1.84	0.15	0.00	0.00	0.00	0.16	1.55
5.30	0.18097	27.30	0.00	6.33	1.26	0.00	0.71	0.12	0.00	1.84	0.15	0.00	0.00	0.00	0.16	1.55
5.20	0.18173	27.30	0.00	6.33	1.25	0.00	0.71	0.12	0.00	1.84	0.15	0.00	0.00	0.00	0.16	1.55
5.10	0.18250	27.30	0.00	6.32	1.25	0.00	0.71	0.12	0.00	1.84	0.15	0.00	0.00	0.00	0.16	1.55
5.00	0.18327	27.30	0.00	6.32	1.25	0.00	0.71	0.12	0.00	1.85	0.15	0.00	0.00	0.00	0.16	1.55
4.90	0.18403	27.30	0.00	6.31	1.24	0.00	0.71	0.12	0.00	1.85	0.15	0.00	0.00	0.00	0.16	1.55
4.80	0.18480	27.30	0.00	6.31	1.24	0.00	0.71	0.11	0.00	1.85	0.15	0.00	0.00	0.00	0.16	1.55
4.70	0.18557	27.30	0.00	6.31	1.23	0.00	0.71	0.11	0.00	1.85	0.15	0.00	0.00	0.00	0.16	1.55
4.60	0.18633	27.30	0.00	6.31	1.23	0.00	0.71	0.11	0.00	1.86	0.15	0.00	0.00	0.00	0.16	1.55
4.50	0.18710	27.30	0.00	6.31	1.23	0.00	0.71	0.11	0.00	1.86	0.15	0.00	0.00	0.00	0.16	1.55
4.40	0.18787	27.30	0.00	6.31	1.22	0.00	0.71	0.11	0.00	1.86	0.15	0.00	0.00	0.00	0.16	1.55
4.30	0.18863	27.30	0.00	6.30	1.22	0.00	0.71	0.11	0.00	1.86	0.15	0.00	0.00	0.00	0.16	1.55
4.20	0.18940	27.30	0.00	6.30	1.22	0.00	0.71	0.11	0.00	1.86	0.15	0.00	0.00	0.00	0.16	1.55
4.10	0.19017	27.30	0.00	6.30	1.21	0.00	0.71	0.11	0.00	1.87	0.15	0.00	0.00	0.00	0.16	1.55
4.00	0.19093	27.30	0.00	6.30	1.21	0.00	0.71	0.11	0.00	1.87	0.15	0.00	0.00	0.00	0.16	1.55
3.90	0.19170	27.30	0.00	6.30	1.21	0.00	0.71	0.11	0.00	1.87	0.15	0.00	0.00	0.00	0.16	1.55
3.80	0.19247	27.30	0.00	6.31	1.20	0.00	0.71	0.11	0.00	1.87	0.15	0.00	0.00	0.00	0.16	1.55
3.70	0.19323	27.30	0.00	6.31	1.20	0.00	0.71	0.11	0.00	1.88	0.15	0.00	0.00	0.00	0.16	1.55
3.60	0.19400	27.30	0.00	6.31	1.20	0.00	0.71	0.11	0.00	1.88	0.15	0.00	0.00	0.00	0.16	1.55
3.50	0.19477	27.30	0.00	6.31	1.19	0.00	0.71	0.11	0.00	1.88	0.15	0.00	0.00	0.00	0.16	1.55
3.40	0.19553	27.30	0.00	6.31	1.19	0.00	0.71	0.11	0.00	1.88	0.15	0.00	0.00	0.00	0.16	1.55
3.30	0.19630	27.30	0.00	6.31	1.19	0.00	0.71	0.11	0.00	1.88	0.15	0.00	0.00	0.00	0.16	1.55
3.20	0.19707	27.30	0.00	6.31	1.18	0.00	0.71	0.11	0.00	1.89	0.15	0.00	0.00	0.00	0.16	1.55
3.10	0.19783	27.30	0.00	6.31	1.18	0.00	0.71	0.11	0.00	1.89	0.15	0.00	0.00	0.00	0.16	1.55
3.00	0.19860	27.30	0.00	6.31	1.18	0.00	0.71	0.11	0.00	1.89	0.15	0.00	0.00	0.00	0.16	1.55
2.90	0.19937	27.30	0.00	6.32	1.18	0.00	0.71	0.11	0.00	1.89	0.15	0.00	0.00	0.00	0.16	1.55
2.80	0.20013	27.30	0.00	6.32	1.17	0.00	0.71	0.11	0.00	1.90	0.15	0.00	0.00	0.00	0.16	1.55
2.70	0.20090	27.30	0.00	6.32	1.17	0.00	0.71	0.11	0.00	1.90	0.15	0.00	0.00	0.00	0.16	1.55
2.60	0.20167	27.30	0.00	6.32	1.17	0.00	0.71	0.11	0.00	1.90	0.15	0.00	0.00	0.00	0.16	1.55
2.50	0.20243	27.30	0.00	6.32	1.16	0.00	0.71	0.11	0.00	1.90	0.15	0.00	0.00	0.00	0.16	1.55
2.40	0.20320	27.30	0.00	6.32	1.16	0.00	0.71	0.11	0.00	1.90	0.15	0.00	0.00	0.00	0.16	1.55
2.30	0.20397	27.30	0.00	6.33	1.16	0.00	0.71	0.11	0.00	1.91	0.15	0.00	0.00	0.00	0.16	1.55
2.20	0.20473	27.30	0.00	6.33	1.16	0.00	0.71	0.11	0.00	1.91	0.15	0.00	0.00	0.00	0.16	1.55

2.10	0.20550	27.30	0.00	6.33	1.15	0.00	0.71	0.11	0.00	1.91	0.15	0.00	0.00	0.00	0.16	1.55
2.00	0.20627	27.30	0.00	6.33	1.15	0.00	0.71	0.11	0.00	1.91	0.15	0.00	0.00	0.00	0.16	1.55
1.90	0.20703	27.30	0.00	6.33	1.15	0.00	0.71	0.11	0.00	1.92	0.15	0.00	0.00	0.00	0.16	1.55
1.80	0.20780	27.30	0.00	6.33	1.15	0.00	0.71	0.11	0.00	1.92	0.15	0.00	0.00	0.00	0.16	1.55
1.70	0.20857	27.30	0.00	6.34	1.14	0.00	0.71	0.11	0.00	1.92	0.15	0.00	0.00	0.00	0.16	1.55
1.60	0.20933	27.30	0.00	6.34	1.14	0.00	0.71	0.11	0.00	1.92	0.15	0.00	0.00	0.00	0.16	1.55
1.50	0.21010	27.30	0.00	6.34	1.14	0.00	0.71	0.11	0.00	1.92	0.15	0.00	0.00	0.00	0.16	1.55
1.40	0.21087	27.30	0.00	6.34	1.14	0.00	0.71	0.11	0.00	1.93	0.15	0.00	0.00	0.00	0.16	1.55
1.30	0.21163	27.30	0.00	6.34	1.14	0.00	0.71	0.11	0.00	1.93	0.15	0.00	0.00	0.00	0.16	1.55
1.20	0.21240	27.30	0.00	6.35	1.13	0.00	0.71	0.11	0.00	1.93	0.15	0.00	0.00	0.00	0.16	1.55
1.10	0.21317	27.30	0.00	6.35	1.13	0.00	0.71	0.11	0.00	1.93	0.15	0.00	0.00	0.00	0.16	1.55
1.00	0.21393	27.30	0.00	6.35	1.13	0.00	0.71	0.11	0.00	1.94	0.15	0.00	0.00	0.00	0.16	1.55
0.90	0.21470	27.30	0.00	6.35	1.13	0.00	0.71	0.11	0.00	1.94	0.15	0.00	0.00	0.00	0.16	1.55
0.80	0.21547	27.30	0.00	6.35	1.13	0.00	0.71	0.11	0.00	1.94	0.15	0.00	0.00	0.00	0.16	1.55
0.70	0.21623	27.30	0.00	6.36	1.12	0.00	0.71	0.11	0.00	1.94	0.15	0.00	0.00	0.00	0.16	1.55
0.60	0.21700	27.30	0.00	6.36	1.12	0.00	0.71	0.11	0.00	1.94	0.15	0.00	0.00	0.00	0.16	1.55
0.50	0.21777	27.30	0.00	6.36	1.12	0.00	0.71	0.11	0.00	1.95	0.15	0.00	0.00	0.00	0.16	1.55
0.40	0.21853	27.30	0.00	6.36	1.12	0.00	0.71	0.11	0.00	1.95	0.15	0.00	0.00	0.00	0.16	1.55
0.30	0.21930	27.30	0.00	6.36	1.12	0.00	0.71	0.11	0.00	1.95	0.15	0.00	0.00	0.00	0.16	1.55
0.20	0.22007	27.30	0.00	6.36	1.11	0.00	0.71	0.11	0.00	1.95	0.15	0.00	0.00	0.00	0.16	1.55
0.10	0.22083	27.30	0.00	6.37	1.11	0.00	0.71	0.11	0.00	1.96	0.15	0.00	0.00	0.00	0.16	1.55
0.00	0.22160	27.30	0.00	6.37	1.11	0.00	0.71	0.11	0.00	1.96	0.15	0.00	0.00	0.00	0.16	1.55

EXPANDED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

IOR	REACH		DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3 mg/L	CHLA µg/L	DISP m²/s	DEPTH m	WIDTH m	ADVEC VELO m/s	MEAN VELO m/s	DO SAT mg/L	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
			HDWTR	0.034	27.3	0.0	5.0	1.4	0.0	0.6	0.1	0.0													
1	B1	1	23.90	0.035	27.3	0.0	5.3	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.014	0.014	7.9	3.206	0.15	0.00	0.00	0.00	0.15	1.55
2	B1	1	23.80	0.036	27.3	0.0	5.5	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.014	0.014	7.9	3.223	0.15	0.00	0.00	0.00	0.15	1.55
3	B1	1	23.70	0.036	27.3	0.0	5.6	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.015	0.015	7.9	3.239	0.15	0.00	0.00	0.00	0.15	1.55
4	B1	1	23.60	0.037	27.3	0.0	5.8	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.015	0.015	7.9	3.256	0.15	0.00	0.00	0.00	0.15	1.55
5	B1	1	23.50	0.038	27.3	0.0	5.9	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.015	0.015	7.9	3.272	0.15	0.00	0.00	0.00	0.15	1.55
6	B1	1	23.40	0.039	27.3	0.0	5.9	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.016	0.016	7.9	3.289	0.15	0.00	0.00	0.00	0.15	1.55
7	B1	1	23.30	0.039	27.3	0.0	6.0	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.016	0.016	7.9	3.305	0.15	0.00	0.00	0.00	0.15	1.55
8	B1	1	23.20	0.040	27.3	0.0	6.0	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.016	0.016	7.9	3.322	0.15	0.00	0.00	0.00	0.15	1.55
9	B1	1	23.10	0.041	27.3	0.0	6.1	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.017	0.017	7.9	3.338	0.15	0.00	0.00	0.00	0.15	1.55
10	B1	1	23.00	0.042	27.3	0.0	6.1	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.017	0.017	7.9	3.355	0.15	0.00	0.00	0.00	0.15	1.55
11	B1	1	22.90	0.042	27.3	0.0	6.1	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.017	0.017	7.9	3.371	0.15	0.00	0.00	0.00	0.15	1.55
12	B1	1	22.80	0.043	27.3	0.0	6.2	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.018	0.018	7.9	3.388	0.15	0.00	0.00	0.00	0.15	1.55
13	B1	1	22.70	0.044	27.3	0.0	6.2	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.018	0.018	7.9	3.404	0.15	0.00	0.00	0.00	0.15	1.55
14	B1	1	22.60	0.045	27.3	0.0	6.2	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.018	0.018	7.9	3.421	0.15	0.00	0.00	0.00	0.15	1.55
15	B1	1	22.50	0.046	27.3	0.0	6.2	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.019	0.019	7.9	3.437	0.15	0.00	0.00	0.00	0.15	1.55
16	B1	1	22.40	0.046	27.3	0.0	6.2	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.019	0.019	7.9	3.454	0.15	0.00	0.00	0.00	0.15	1.55
17	B1	1	22.30	0.047	27.3	0.0	6.3	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.019	0.019	7.9	3.470	0.15	0.00	0.00	0.00	0.15	1.55
18	B1	1	22.20	0.048	27.3	0.0	6.3	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.019	0.019	7.9	3.487	0.15	0.00	0.00	0.00	0.15	1.55
19	B1	1	22.10	0.049	27.3	0.0	6.3	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.020	0.020	7.9	3.503	0.15	0.00	0.00	0.00	0.15	1.55
20	B1	1	22.00	0.049	27.3	0.0	6.3	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.020	0.020	7.9	3.520	0.15	0.00	0.00	0.00	0.15	1.55
21	B1	1	21.90	0.050	27.3	0.0	6.3	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.020	0.020	7.9	3.536	0.15	0.00	0.00	0.00	0.15	1.55
22	B1	1	21.80	0.051	27.3	0.0	6.3	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.021	0.021	7.9	3.553	0.15	0.00	0.00	0.00	0.15	1.55
23	B1	1	21.70	0.052	27.3	0.0	6.3	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.021	0.021	7.9	3.569	0.15	0.00	0.00	0.00	0.15	1.55
24	B1	1	21.60	0.052	27.3	0.0	6.3	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.021	0.021	7.9	3.586	0.15	0.00	0.00	0.00	0.15	1.55
25	B1	1	21.50	0.053	27.3	0.0	6.3	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.022	0.022	7.9	3.602	0.15	0.00	0.00	0.00	0.15	1.55
26	B1	1	21.40	0.054	27.3	0.0	6.3	1.4	0.0	0.6	0.1	0.0	0.0	0.31	7.9	0.022	0.022	7.9	3.619	0.15	0.00	0.00	0.00	0.15	1.55
27	B1	1	21.30	0.055	27.3	0.0	6.3	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.022	0.022	7.9	3.635	0.15	0.00	0.00	0.00	0.15	1.55
28	B1	1	21.20	0.055	27.3	0.0	6.3	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.023	0.023	7.9	3.652	0.15	0.00	0.00	0.00	0.15	1.55
29	B1	1	21.10	0.056	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.023	0.023	7.9	3.668	0.15	0.00	0.00	0.00	0.16	1.55
30	B1	1	21.00	0.057	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.023	0.023	7.9	3.685	0.15	0.00	0.00	0.00	0.16	1.55
31	B1	1	20.90	0.058	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.024	0.024	7.9	3.701	0.15	0.00	0.00	0.00	0.16	1.55
32	B1	1	20.80	0.059	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.024	0.024	7.9	3.718	0.15	0.00	0.00	0.00	0.16	1.55
33	B1	1	20.70	0.059	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.024	0.024	7.9	3.734	0.15	0.00	0.00	0.00	0.16	1.55
34	B1	1	20.60	0.060	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.024	0.024	7.9	3.751	0.15	0.00	0.00	0.00	0.16	1.55
35	B1	1	20.50	0.061	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.025	0.025	7.9	3.767	0.15	0.00	0.00	0.00	0.16	1.55
36	B1	1	20.40	0.062	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.025	0.025	7.9	3.784	0.15	0.00	0.00	0.00	0.16	1.55
37	B1	1	20.30	0.062	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.025	0.025	7.9	3.800	0.15	0.00	0.00	0.00	0.16	1.55
38	B1	1	20.20	0.063	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.026	0.026	7.9	3.817	0.15	0.00	0.00	0.00	0.16	1.55
39	B1	1	20.10	0.064	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.026	0.026	7.9	3.833	0.15	0.00	0.00	0.00	0.16	1.55
40	B1	1	20.00	0.065	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.026	0.026	7.9	3.850	0.15	0.00	0.00	0.00	0.16	1.55
41	B1	1	19.90	0.065	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.027	0.027	7.9	3.866	0.15	0.00	0.00	0.00	0.16	1.55
42	B1	1	19.80	0.066	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.027	0.027	7.9	3.883	0.15	0.00	0.00	0.00	0.16	1.55
43	B1	1	19.70	0.067	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.027	0.027	7.9	3.900	0.15	0.00	0.00	0.00	0.16	1.55
44	B1	1	19.60	0.068	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.028	0.028	7.9	3.916	0.15	0.00	0.00	0.00	0.16	1.55
45	B1	1	19.50	0.069	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.028	0.028	7.9	3.933	0.15	0.00	0.00	0.00	0.16	1.55

46	B1	1	19.40	0.069	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.028	0.028	7.9	3.949	0.15	0.00	0.00	0.00	0.16	1.55
47	B1	1	19.30	0.070	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.029	0.029	7.9	3.966	0.15	0.00	0.00	0.00	0.16	1.55
48	B1	1	19.20	0.071	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.029	0.029	7.9	3.982	0.15	0.00	0.00	0.00	0.16	1.55
49	B1	1	19.10	0.072	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.029	0.029	7.9	3.999	0.15	0.00	0.00	0.00	0.16	1.55
50	B1	1	19.00	0.072	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.029	0.029	7.9	4.015	0.15	0.00	0.00	0.00	0.16	1.55
51	B1	1	18.90	0.073	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.030	0.030	7.9	4.032	0.15	0.00	0.00	0.00	0.16	1.55
52	B1	1	18.80	0.074	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.030	0.030	7.9	4.048	0.15	0.00	0.00	0.00	0.16	1.55
53	B1	1	18.70	0.075	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.030	0.030	7.9	4.065	0.15	0.00	0.00	0.00	0.16	1.55
54	B1	1	18.60	0.075	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.031	0.031	7.9	4.081	0.15	0.00	0.00	0.00	0.16	1.55
55	B1	1	18.50	0.076	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.031	0.031	7.9	4.098	0.15	0.00	0.00	0.00	0.16	1.55
56	B1	1	18.40	0.077	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.031	0.031	7.9	4.114	0.15	0.00	0.00	0.00	0.16	1.55
57	B1	1	18.30	0.078	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.032	0.032	7.9	4.131	0.15	0.00	0.00	0.00	0.16	1.55
58	B1	1	18.20	0.078	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.032	0.032	7.9	4.147	0.15	0.00	0.00	0.00	0.16	1.55
59	B1	1	18.10	0.079	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.032	0.032	7.9	4.164	0.15	0.00	0.00	0.00	0.16	1.55
60	B1	1	18.00	0.080	27.3	0.0	6.5	1.4	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.033	0.033	7.9	4.180	0.15	0.00	0.00	0.00	0.16	1.55
61	B2	2	17.90	0.081	27.3	0.0	6.5	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.018	0.018	7.9	2.582	0.15	0.00	0.00	0.00	0.16	1.55
62	B2	2	17.80	0.082	27.3	0.0	6.5	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.018	0.018	7.9	2.589	0.15	0.00	0.00	0.00	0.16	1.55
63	B2	2	17.70	0.082	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.018	0.018	7.9	2.596	0.15	0.00	0.00	0.00	0.16	1.55
64	B2	2	17.60	0.083	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.019	0.019	7.9	2.603	0.15	0.00	0.00	0.00	0.16	1.55
65	B2	2	17.50	0.084	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.019	0.019	7.9	2.610	0.15	0.00	0.00	0.00	0.16	1.55
66	B2	2	17.40	0.085	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.019	0.019	7.9	2.617	0.15	0.00	0.00	0.00	0.16	1.55
67	B2	2	17.30	0.085	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.019	0.019	7.9	2.624	0.15	0.00	0.00	0.00	0.16	1.55
68	B2	2	17.20	0.086	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.019	0.019	7.9	2.631	0.15	0.00	0.00	0.00	0.16	1.55
69	B2	2	17.10	0.087	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.019	0.019	7.9	2.637	0.15	0.00	0.00	0.00	0.16	1.55
70	B2	2	17.00	0.088	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.020	0.020	7.9	2.644	0.15	0.00	0.00	0.00	0.16	1.55
71	B2	2	16.90	0.088	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.020	0.020	7.9	2.651	0.15	0.00	0.00	0.00	0.16	1.55
72	B2	2	16.80	0.089	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.020	0.020	7.9	2.658	0.15	0.00	0.00	0.00	0.16	1.55
73	B2	2	16.70	0.090	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.020	0.020	7.9	2.665	0.15	0.00	0.00	0.00	0.16	1.55

EXPANDED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

IOR	REACH		DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3 mg/L	CHLA µg/L	DISP m²/s	DEPTH m	WIDTH m	ADVEC VELO m/s	MEAN VELO m/s	DO SAT mg/L	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
74	B2	2	16.60	0.091	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.020	0.020	7.9	2.672	0.15	0.00	0.00	0.00	0.16	1.55
75	B2	2	16.50	0.091	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.021	0.021	7.9	2.679	0.15	0.00	0.00	0.00	0.16	1.55
76	B2	2	16.40	0.092	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.021	0.021	7.9	2.686	0.15	0.00	0.00	0.00	0.16	1.55
77	B2	2	16.30	0.093	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.021	0.021	7.9	2.693	0.15	0.00	0.00	0.00	0.16	1.55
78	B2	2	16.20	0.094	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.021	0.021	7.9	2.699	0.15	0.00	0.00	0.00	0.16	1.55
79	B2	2	16.10	0.095	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.021	0.021	7.9	2.706	0.15	0.00	0.00	0.00	0.16	1.55
80	B2	2	16.00	0.095	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.021	0.021	7.9	2.713	0.15	0.00	0.00	0.00	0.16	1.55
	WASTELOAD # 081 (NPS Midkiff Creek) ENTERS HERE																								
81	B2	2	15.90	0.099	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.022	0.022	7.9	2.747	0.15	0.00	0.00	0.00	0.16	1.55
82	B2	2	15.80	0.100	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.022	0.022	7.9	2.754	0.15	0.00	0.00	0.00	0.16	1.55
83	B2	2	15.70	0.101	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.023	0.023	7.9	2.761	0.15	0.00	0.00	0.00	0.16	1.55
84	B2	2	15.60	0.101	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.023	0.023	7.9	2.768	0.15	0.00	0.00	0.00	0.16	1.55
85	B2	2	15.50	0.102	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.023	0.023	7.9	2.774	0.15	0.00	0.00	0.00	0.16	1.55
86	B2	2	15.40	0.103	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.023	0.023	7.9	2.781	0.15	0.00	0.00	0.00	0.16	1.55
87	B2	2	15.30	0.104	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.023	0.023	7.9	2.788	0.15	0.00	0.00	0.00	0.16	1.55
88	B2	2	15.20	0.104	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.023	0.023	7.9	2.795	0.15	0.00	0.00	0.00	0.16	1.55
89	B2	2	15.10	0.105	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.024	0.024	7.9	2.802	0.15	0.00	0.00	0.00	0.16	1.55
90	B2	2	15.00	0.106	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.024	0.024	7.9	2.809	0.15	0.00	0.00	0.00	0.16	1.55
91	B2	2	14.90	0.107	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.024	0.024	7.9	2.816	0.15	0.00	0.00	0.00	0.16	1.55
92	B2	2	14.80	0.108	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.024	0.024	7.9	2.823	0.15	0.00	0.00	0.00	0.16	1.55
93	B2	2	14.70	0.108	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.024	0.024	7.9	2.829	0.15	0.00	0.00	0.00	0.16	1.55
94	B2	2	14.60	0.109	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.024	0.024	7.9	2.836	0.15	0.00	0.00	0.00	0.16	1.55
95	B2	2	14.50	0.110	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.025	0.025	7.9	2.843	0.15	0.00	0.00	0.00	0.16	1.55
96	B2	2	14.40	0.111	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.025	0.025	7.9	2.850	0.15	0.00	0.00	0.00	0.16	1.55
97	B2	2	14.30	0.111	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.025	0.025	7.9	2.857	0.15	0.00	0.00	0.00	0.16	1.55
98	B2	2	14.20	0.112	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.025	0.025	7.9	2.864	0.15	0.00	0.00	0.00	0.16	1.55
99	B2	2	14.10	0.113	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.025	0.025	7.9	2.871	0.15	0.00	0.00	0.00	0.16	1.55
100	B2	2	14.00	0.114	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.026	0.026	7.9	2.878	0.15	0.00	0.00	0.00	0.16	1.55
101	B2	2	13.90	0.114	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.026	0.026	7.9	2.884	0.15	0.00	0.00	0.00	0.16	1.55
102	B2	2	13.80	0.115	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.026	0.026	7.9	2.891	0.15	0.00	0.00	0.00	0.16	1.55
103	B2	2	13.70	0.116	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.026	0.026	7.9	2.898	0.15	0.00	0.00	0.00	0.16	1.55
104	B2	2	13.60	0.117	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.026	0.026	7.9	2.905	0.15	0.00	0.00	0.00	0.16	1.55
105	B2	2	13.50	0.117	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.026	0.026	7.9	2.912	0.15	0.00	0.00	0.00	0.16	1.55
106	B2	2	13.40	0.118	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.027	0.027	7.9	2.919	0.15	0.00	0.00	0.00	0.16	1.55
107	B2	2	13.30	0.119	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.027	0.027	7.9	2.926	0.15	0.00	0.00	0.00	0.16	1.55
108	B2	2	13.20	0.120	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.027	0.027	7.9	2.933	0.15	0.00	0.00	0.00	0.16	1.55
109	B2	2	13.10	0.121	27.3	0.0	6.5	1.2	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.027	0.027	7.9	2.940	0.15	0.00	0.00	0.00	0.16	1.55
110	B2	2	13.00	0.121	27.3	0.0	6.5	1.2	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.027	0.027	7.9	2.946	0.15	0.00	0.00	0.00	0.16	1.55
111	B2	2	12.90	0.122	27.3	0.0	6.5	1.2	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.027	0.027	7.9	2.953	0.15	0.00	0.00	0.00	0.16	1.55
112	B2	2	12.80	0.123	27.3	0.0	6.5	1.2	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.028	0.028	7.9	2.960	0.15	0.00	0.00	0.00	0.16	1.55
113	B2	2	12.70	0.124	27.3	0.0	6.5	1.2	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.028	0.028	7.9	2.967	0.15	0.00	0.00	0.00	0.16	1.55
114	B2	2	12.60	0.124	27.3	0.0	6.5	1.2	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.028	0.028	7.9	2.974	0.15	0.00	0.00	0.00	0.16	1.55
115	B2	2	12.50	0.125	27.3	0.0	6.5	1.2	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.028	0.028	7.9	2.981	0.15	0.00	0.00	0.00	0.16	1.55
116	B2	2	12.40	0.126	27.3	0.0	6.5	1.2	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.028	0.028	7.9	2.988	0.15	0.00	0.00	0.00	0.16	1.55
117	B2	2	12.30	0.127	27.3	0.0	6.5	1.2	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.028	0.028	7.9	2.995	0.15	0.00	0.00	0.00	0.16	1.55
118	B2	2	12.20	0.127	27.3	0.0	6.5	1.2	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.029	0.029	7.9	3.001	0.15	0.00	0.00	0.00	0.16	1.55

119	B2	2	12.10	0.128	27.3	0.0	6.5	1.2	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.029	0.029	7.9	3.008	0.15	0.00	0.00	0.00	0.16	1.55
120	B2	2	12.00	0.129	27.3	0.0	6.5	1.2	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.029	0.029	7.9	3.015	0.15	0.00	0.00	0.00	0.16	1.55
121	B3	3	11.90	0.130	27.3	0.0	6.5	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.019	0.019	7.9	2.139	0.15	0.00	0.00	0.00	0.16	1.55
122	B3	3	11.80	0.131	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.019	0.019	7.9	2.143	0.15	0.00	0.00	0.00	0.16	1.55
123	B3	3	11.70	0.131	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.019	0.019	7.9	2.146	0.15	0.00	0.00	0.00	0.16	1.55
124	B3	3	11.60	0.132	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.019	0.019	7.9	2.150	0.15	0.00	0.00	0.00	0.16	1.55
125	B3	3	11.50	0.133	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.019	0.019	7.9	2.154	0.15	0.00	0.00	0.00	0.16	1.55
126	B3	3	11.40	0.134	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.019	0.019	7.9	2.157	0.15	0.00	0.00	0.00	0.16	1.55
127	B3	3	11.30	0.134	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.019	0.019	7.9	2.161	0.15	0.00	0.00	0.00	0.16	1.55
128	B3	3	11.20	0.135	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.020	0.020	7.9	2.165	0.15	0.00	0.00	0.00	0.16	1.55
129	B3	3	11.10	0.136	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.020	0.020	7.9	2.168	0.15	0.00	0.00	0.00	0.16	1.55
130	B3	3	11.00	0.137	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.020	0.020	7.9	2.172	0.15	0.00	0.00	0.00	0.16	1.55
131	B3	3	10.90	0.137	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.020	0.020	7.9	2.176	0.15	0.00	0.00	0.00	0.16	1.55
132	B3	3	10.80	0.138	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.020	0.020	7.9	2.179	0.15	0.00	0.00	0.00	0.16	1.55
133	B3	3	10.70	0.139	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.020	0.020	7.9	2.183	0.15	0.00	0.00	0.00	0.16	1.55
134	B3	3	10.60	0.140	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.020	0.020	7.9	2.186	0.15	0.00	0.00	0.00	0.16	1.55
135	B3	3	10.50	0.140	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.020	0.020	7.9	2.190	0.15	0.00	0.00	0.00	0.16	1.55
136	B3	3	10.40	0.141	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.020	0.020	7.9	2.194	0.15	0.00	0.00	0.00	0.16	1.55
137	B3	3	10.30	0.142	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.021	0.021	7.9	2.197	0.15	0.00	0.00	0.00	0.16	1.55
138	B3	3	10.20	0.143	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.021	0.021	7.9	2.201	0.15	0.00	0.00	0.00	0.16	1.55
139	B3	3	10.10	0.144	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.021	0.021	7.9	2.205	0.15	0.00	0.00	0.00	0.16	1.55
140	B3	3	10.00	0.144	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.021	0.021	7.9	2.208	0.15	0.00	0.00	0.00	0.16	1.55
141	B3	3	9.90	0.145	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.021	0.021	7.9	2.212	0.15	0.00	0.00	0.00	0.16	1.55
142	B3	3	9.80	0.146	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.021	0.021	7.9	2.216	0.15	0.00	0.00	0.00	0.16	1.55
143	B3	3	9.70	0.147	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.021	0.021	7.9	2.219	0.15	0.00	0.00	0.00	0.16	1.55
144	B3	3	9.60	0.147	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.021	0.021	7.9	2.223	0.15	0.00	0.00	0.00	0.16	1.55
145	B3	3	9.50	0.148	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.021	0.021	7.9	2.226	0.15	0.00	0.00	0.00	0.16	1.55
146	B3	3	9.40	0.149	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.022	0.022	7.9	2.230	0.15	0.00	0.00	0.00	0.16	1.55

EXPANDED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

IOR	REACH		DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3 mg/L	CHLA µg/L	DISP m²/s	DEPTH m	WIDTH m	ADVEC VELO m/s	MEAN VELO m/s	DO SAT mg/L	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
147	B3	3	9.30	0.150	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.022	0.022	7.9	2.234	0.15	0.00	0.00	0.00	0.16	1.55
148	B3	3	9.20	0.150	27.3	0.0	6.4	1.2	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.022	0.022	7.9	2.237	0.15	0.00	0.00	0.00	0.16	1.55
		WASTELOAD # 149 (Emerald Hills Golf) ENTERS HERE																							
149	B3	3	9.10	0.152	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.022	0.022	7.9	2.244	0.15	0.00	0.00	0.00	0.16	1.55
150	B3	3	9.00	0.153	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.022	0.022	7.9	2.247	0.15	0.00	0.00	0.00	0.16	1.55
151	B3	3	8.90	0.153	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.022	0.022	7.9	2.251	0.15	0.00	0.00	0.00	0.16	1.55
152	B3	3	8.80	0.154	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.022	0.022	7.9	2.255	0.15	0.00	0.00	0.00	0.16	1.55
153	B3	3	8.70	0.155	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.022	0.022	7.9	2.258	0.15	0.00	0.00	0.00	0.16	1.55
154	B3	3	8.60	0.156	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.023	0.023	7.9	2.262	0.15	0.00	0.00	0.00	0.16	1.55
155	B3	3	8.50	0.156	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.023	0.023	7.9	2.266	0.15	0.00	0.00	0.00	0.16	1.55
156	B3	3	8.40	0.157	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.023	0.023	7.9	2.269	0.15	0.00	0.00	0.00	0.16	1.55
157	B3	3	8.30	0.158	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.023	0.023	7.9	2.273	0.15	0.00	0.00	0.00	0.16	1.55
158	B3	3	8.20	0.159	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.023	0.023	7.9	2.277	0.15	0.00	0.00	0.00	0.16	1.55
159	B3	3	8.10	0.159	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.023	0.023	7.9	2.280	0.15	0.00	0.00	0.00	0.16	1.55
160	B3	3	8.00	0.160	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.023	0.023	7.9	2.284	0.15	0.00	0.00	0.00	0.16	1.55
161	B3	3	7.90	0.161	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.023	0.023	7.9	2.288	0.15	0.00	0.00	0.00	0.16	1.55
162	B3	3	7.80	0.162	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.023	0.023	7.9	2.291	0.15	0.00	0.00	0.00	0.16	1.55
163	B3	3	7.70	0.163	27.3	0.0	6.4	1.4	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.024	0.024	7.9	2.295	0.15	0.00	0.00	0.00	0.16	1.55
164	B3	3	7.60	0.163	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.024	0.024	7.9	2.298	0.15	0.00	0.00	0.00	0.16	1.55
165	B3	3	7.50	0.164	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.024	0.024	7.9	2.302	0.15	0.00	0.00	0.00	0.16	1.55
166	B3	3	7.40	0.165	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.024	0.024	7.9	2.306	0.15	0.00	0.00	0.00	0.16	1.55
167	B3	3	7.30	0.166	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.024	0.024	7.9	2.309	0.15	0.00	0.00	0.00	0.16	1.55
168	B3	3	7.20	0.166	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.024	0.024	7.9	2.313	0.15	0.00	0.00	0.00	0.16	1.55
169	B3	3	7.10	0.167	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.024	0.024	7.9	2.317	0.15	0.00	0.00	0.00	0.16	1.55
170	B3	3	7.00	0.168	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.024	0.024	7.9	2.320	0.15	0.00	0.00	0.00	0.16	1.55
171	B3	3	6.90	0.169	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.024	0.024	7.9	2.324	0.15	0.00	0.00	0.00	0.16	1.55
172	B3	3	6.80	0.169	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.025	0.025	7.9	2.328	0.15	0.00	0.00	0.00	0.16	1.55
173	B3	3	6.70	0.170	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.025	0.025	7.9	2.331	0.15	0.00	0.00	0.00	0.16	1.55
174	B3	3	6.60	0.171	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.025	0.025	7.9	2.335	0.15	0.00	0.00	0.00	0.16	1.55
175	B3	3	6.50	0.172	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.025	0.025	7.9	2.338	0.15	0.00	0.00	0.00	0.16	1.55
176	B3	3	6.40	0.173	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.025	0.025	7.9	2.342	0.15	0.00	0.00	0.00	0.16	1.55
177	B3	3	6.30	0.173	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.025	0.025	7.9	2.346	0.15	0.00	0.00	0.00	0.16	1.55
178	B3	3	6.20	0.174	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.025	0.025	7.9	2.349	0.15	0.00	0.00	0.00	0.16	1.55
179	B3	3	6.10	0.175	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.025	0.025	7.9	2.353	0.15	0.00	0.00	0.00	0.16	1.55
180	B3	3	6.00	0.176	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.025	0.025	7.9	2.357	0.15	0.00	0.00	0.00	0.16	1.55
181	B4	4	5.90	0.176	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.018	0.018	7.9	1.826	0.15	0.00	0.00	0.00	0.16	1.55
182	B4	4	5.80	0.177	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.018	0.018	7.9	1.828	0.15	0.00	0.00	0.00	0.16	1.55
183	B4	4	5.70	0.178	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.018	0.018	7.9	1.831	0.15	0.00	0.00	0.00	0.16	1.55
184	B4	4	5.60	0.179	27.3	0.0	6.4	1.3	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.018	0.018	7.9	1.833	0.15	0.00	0.00	0.00	0.16	1.55
185	B4	4	5.50	0.179	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.018	0.018	7.9	1.835	0.15	0.00	0.00	0.00	0.16	1.55
186	B4	4	5.40	0.180	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.019	0.019	7.9	1.837	0.15	0.00	0.00	0.00	0.16	1.55
187	B4	4	5.30	0.181	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.019	0.019	7.9	1.839	0.15	0.00	0.00	0.00	0.16	1.55
188	B4	4	5.20	0.182	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.019	0.019	7.9	1.842	0.15	0.00	0.00	0.00	0.16	1.55
189	B4	4	5.10	0.182	27.3	0.0	6.3	1.3	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.019	0.019	7.9	1.844	0.15	0.00	0.00	0.00	0.16	1.55
190	B4	4	5.00	0.183	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.019	0.019	7.9	1.846	0.15	0.00	0.00	0.00	0.16	1.55
191	B4	4	4.90	0.184	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.019	0.019	7.9	1.848	0.15	0.00	0.00	0.00	0.16	1.55

192	B4	4	4.80	0.185	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.019	0.019	7.9	1.851	0.15	0.00	0.00	0.00	0.16	1.55
193	B4	4	4.70	0.186	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.019	0.019	7.9	1.853	0.15	0.00	0.00	0.00	0.16	1.55
194	B4	4	4.60	0.186	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.019	0.019	7.9	1.855	0.15	0.00	0.00	0.00	0.16	1.55
195	B4	4	4.50	0.187	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.019	0.019	7.9	1.857	0.15	0.00	0.00	0.00	0.16	1.55
196	B4	4	4.40	0.188	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.019	0.019	7.9	1.860	0.15	0.00	0.00	0.00	0.16	1.55
197	B4	4	4.30	0.189	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.019	0.019	7.9	1.862	0.15	0.00	0.00	0.00	0.16	1.55
198	B4	4	4.20	0.189	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.019	0.019	7.9	1.864	0.15	0.00	0.00	0.00	0.16	1.55
199	B4	4	4.10	0.190	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.020	0.020	7.9	1.866	0.15	0.00	0.00	0.00	0.16	1.55
200	B4	4	4.00	0.191	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.020	0.020	7.9	1.868	0.15	0.00	0.00	0.00	0.16	1.55
201	B4	4	3.90	0.192	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.020	0.020	7.9	1.871	0.15	0.00	0.00	0.00	0.16	1.55
202	B4	4	3.80	0.192	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.020	0.020	7.9	1.873	0.15	0.00	0.00	0.00	0.16	1.55
203	B4	4	3.70	0.193	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.020	0.020	7.9	1.875	0.15	0.00	0.00	0.00	0.16	1.55
204	B4	4	3.60	0.194	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.020	0.020	7.9	1.877	0.15	0.00	0.00	0.00	0.16	1.55
205	B4	4	3.50	0.195	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.020	0.020	7.9	1.880	0.15	0.00	0.00	0.00	0.16	1.55
206	B4	4	3.40	0.196	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.020	0.020	7.9	1.882	0.15	0.00	0.00	0.00	0.16	1.55
207	B4	4	3.30	0.196	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.020	0.020	7.9	1.884	0.15	0.00	0.00	0.00	0.16	1.55
208	B4	4	3.20	0.197	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.020	0.020	7.9	1.886	0.15	0.00	0.00	0.00	0.16	1.55
209	B4	4	3.10	0.198	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.020	0.020	7.9	1.889	0.15	0.00	0.00	0.00	0.16	1.55
210	B4	4	3.00	0.199	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.020	0.020	7.9	1.891	0.15	0.00	0.00	0.00	0.16	1.55
211	B4	4	2.90	0.199	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.021	0.021	7.9	1.893	0.15	0.00	0.00	0.00	0.16	1.55
212	B4	4	2.80	0.200	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.021	0.021	7.9	1.895	0.15	0.00	0.00	0.00	0.16	1.55
213	B4	4	2.70	0.201	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.021	0.021	7.9	1.897	0.15	0.00	0.00	0.00	0.16	1.55
214	B4	4	2.60	0.202	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.021	0.021	7.9	1.900	0.15	0.00	0.00	0.00	0.16	1.55
215	B4	4	2.50	0.202	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.021	0.021	7.9	1.902	0.15	0.00	0.00	0.00	0.16	1.55
216	B4	4	2.40	0.203	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.021	0.021	7.9	1.904	0.15	0.00	0.00	0.00	0.16	1.55
217	B4	4	2.30	0.204	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.021	0.021	7.9	1.906	0.15	0.00	0.00	0.00	0.16	1.55
218	B4	4	2.20	0.205	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.021	0.021	7.9	1.909	0.15	0.00	0.00	0.00	0.16	1.55
219	B4	4	2.10	0.205	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.021	0.021	7.9	1.911	0.15	0.00	0.00	0.00	0.16	1.55

EXPANDED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

IOR	REACH		DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3 mg/L	CHLA µg/L	DISP m²/s	DEPTH m	WIDTH m	ADVEC VELO m/s	MEAN VELO m/s	DO SAT mg/L	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
220	B4	4	2.00	0.206	27.3	0.0	6.3	1.2	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.021	0.021	7.9	1.913	0.15	0.00	0.00	0.00	0.16	1.55
221	B4	4	1.90	0.207	27.3	0.0	6.3	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.021	0.021	7.9	1.915	0.15	0.00	0.00	0.00	0.16	1.55
222	B4	4	1.80	0.208	27.3	0.0	6.3	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.021	0.021	7.9	1.918	0.15	0.00	0.00	0.00	0.16	1.55
223	B4	4	1.70	0.209	27.3	0.0	6.3	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.021	0.021	7.9	1.920	0.15	0.00	0.00	0.00	0.16	1.55
224	B4	4	1.60	0.209	27.3	0.0	6.3	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.022	0.022	7.9	1.922	0.15	0.00	0.00	0.00	0.16	1.55
225	B4	4	1.50	0.210	27.3	0.0	6.3	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.022	0.022	7.9	1.924	0.15	0.00	0.00	0.00	0.16	1.55
226	B4	4	1.40	0.211	27.3	0.0	6.3	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.022	0.022	7.9	1.926	0.15	0.00	0.00	0.00	0.16	1.55
227	B4	4	1.30	0.212	27.3	0.0	6.3	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.022	0.022	7.9	1.929	0.15	0.00	0.00	0.00	0.16	1.55
228	B4	4	1.20	0.212	27.3	0.0	6.3	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.022	0.022	7.9	1.931	0.15	0.00	0.00	0.00	0.16	1.55
229	B4	4	1.10	0.213	27.3	0.0	6.3	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.022	0.022	7.9	1.933	0.15	0.00	0.00	0.00	0.16	1.55
230	B4	4	1.00	0.214	27.3	0.0	6.3	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.022	0.022	7.9	1.935	0.15	0.00	0.00	0.00	0.16	1.55
231	B4	4	0.90	0.215	27.3	0.0	6.4	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.022	0.022	7.9	1.938	0.15	0.00	0.00	0.00	0.16	1.55
232	B4	4	0.80	0.215	27.3	0.0	6.4	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.022	0.022	7.9	1.940	0.15	0.00	0.00	0.00	0.16	1.55
233	B4	4	0.70	0.216	27.3	0.0	6.4	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.022	0.022	7.9	1.942	0.15	0.00	0.00	0.00	0.16	1.55
234	B4	4	0.60	0.217	27.3	0.0	6.4	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.022	0.022	7.9	1.944	0.15	0.00	0.00	0.00	0.16	1.55
235	B4	4	0.50	0.218	27.3	0.0	6.4	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.022	0.022	7.9	1.946	0.15	0.00	0.00	0.00	0.16	1.55
236	B4	4	0.40	0.219	27.3	0.0	6.4	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.022	0.022	7.9	1.949	0.15	0.00	0.00	0.00	0.16	1.55
237	B4	4	0.30	0.219	27.3	0.0	6.4	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.023	0.023	7.9	1.951	0.15	0.00	0.00	0.00	0.16	1.55
238	B4	4	0.20	0.220	27.3	0.0	6.4	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.023	0.023	7.9	1.953	0.15	0.00	0.00	0.00	0.16	1.55
239	B4	4	0.10	0.221	27.3	0.0	6.4	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.023	0.023	7.9	1.955	0.15	0.00	0.00	0.00	0.16	1.55
240	B4	4	0.00	0.222	27.3	0.0	6.4	1.1	0.0	0.7	0.1	0.0	0.0	0.58	16.8	0.023	0.023	7.9	1.958	0.15	0.00	0.00	0.00	0.16	1.55

SPECIAL REPORT: Bayou Toro @ 110401A
WATER QUALITY CONSTITUENT VALUES

ELEM NO.	ENDING km	TEMP deg C	SALN ppt	CM-I *	CM-II *	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1	23.900	27.30	0.0	0.0	0.0	5.27	1.37	0.00	1.37	0.00	0.61	0.08	0.00	0.69	0.00	0.0	0.0	0.	0.00
2	23.800	27.30	0.0	0.0	0.0	5.48	1.37	0.00	1.37	0.00	0.61	0.08	0.00	0.70	0.00	0.0	0.0	0.	0.00
3	23.700	27.30	0.0	0.0	0.0	5.64	1.37	0.00	1.37	0.00	0.62	0.08	0.00	0.70	0.00	0.0	0.0	0.	0.00
4	23.600	27.30	0.0	0.0	0.0	5.76	1.37	0.00	1.37	0.00	0.62	0.08	0.00	0.70	0.00	0.0	0.0	0.	0.00
5	23.500	27.30	0.0	0.0	0.0	5.86	1.37	0.00	1.37	0.00	0.62	0.08	0.00	0.71	0.00	0.0	0.0	0.	0.00
6	23.400	27.30	0.0	0.0	0.0	5.93	1.37	0.00	1.37	0.00	0.62	0.08	0.01	0.71	0.00	0.0	0.0	0.	0.00
7	23.300	27.30	0.0	0.0	0.0	6.00	1.36	0.00	1.36	0.00	0.62	0.08	0.01	0.71	0.00	0.0	0.0	0.	0.00
8	23.200	27.30	0.0	0.0	0.0	6.05	1.36	0.00	1.36	0.00	0.63	0.08	0.01	0.71	0.00	0.0	0.0	0.	0.00
9	23.100	27.30	0.0	0.0	0.0	6.09	1.36	0.00	1.36	0.00	0.63	0.08	0.01	0.72	0.00	0.0	0.0	0.	0.00
10	23.000	27.30	0.0	0.0	0.0	6.12	1.36	0.00	1.36	0.00	0.63	0.08	0.01	0.72	0.00	0.0	0.0	0.	0.00
11	22.900	27.30	0.0	0.0	0.0	6.15	1.36	0.00	1.36	0.00	0.63	0.08	0.01	0.72	0.00	0.0	0.0	0.	0.00
12	22.800	27.30	0.0	0.0	0.0	6.17	1.36	0.00	1.36	0.00	0.63	0.08	0.01	0.72	0.00	0.0	0.0	0.	0.00
13	22.700	27.30	0.0	0.0	0.0	6.19	1.36	0.00	1.36	0.00	0.63	0.08	0.01	0.73	0.00	0.0	0.0	0.	0.00
14	22.600	27.30	0.0	0.0	0.0	6.21	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.73	0.00	0.0	0.0	0.	0.00
15	22.500	27.30	0.0	0.0	0.0	6.23	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.73	0.00	0.0	0.0	0.	0.00
16	22.400	27.30	0.0	0.0	0.0	6.24	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.73	0.00	0.0	0.0	0.	0.00
17	22.300	27.30	0.0	0.0	0.0	6.25	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.73	0.00	0.0	0.0	0.	0.00

18	22.200	27.30	0.0	0.0	0.0	6.26	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.74	0.00	0.0	0.0	0.	0.00
19	22.100	27.30	0.0	0.0	0.0	6.27	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.74	0.00	0.0	0.0	0.	0.00
20	22.000	27.30	0.0	0.0	0.0	6.28	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.74	0.00	0.0	0.0	0.	0.00
21	21.900	27.30	0.0	0.0	0.0	6.29	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.74	0.00	0.0	0.0	0.	0.00
22	21.800	27.30	0.0	0.0	0.0	6.30	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.74	0.00	0.0	0.0	0.	0.00
23	21.700	27.30	0.0	0.0	0.0	6.31	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.74	0.00	0.0	0.0	0.	0.00
24	21.600	27.30	0.0	0.0	0.0	6.32	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.0	0.0	0.	0.00
25	21.500	27.30	0.0	0.0	0.0	6.32	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.0	0.0	0.	0.00
26	21.400	27.30	0.0	0.0	0.0	6.33	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.0	0.0	0.	0.00
27	21.300	27.30	0.0	0.0	0.0	6.34	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.0	0.0	0.	0.00
28	21.200	27.30	0.0	0.0	0.0	6.35	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.0	0.0	0.	0.00
29	21.100	27.30	0.0	0.0	0.0	6.35	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.0	0.0	0.	0.00
30	21.000	27.30	0.0	0.0	0.0	6.36	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.0	0.0	0.	0.00
31	20.900	27.30	0.0	0.0	0.0	6.37	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.76	0.00	0.0	0.0	0.	0.00
32	20.800	27.30	0.0	0.0	0.0	6.37	1.35	0.00	1.35	0.00	0.65	0.08	0.02	0.76	0.00	0.0	0.0	0.	0.00
33	20.700	27.30	0.0	0.0	0.0	6.38	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.76	0.00	0.0	0.0	0.	0.00
34	20.600	27.30	0.0	0.0	0.0	6.39	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.76	0.00	0.0	0.0	0.	0.00
35	20.500	27.30	0.0	0.0	0.0	6.39	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.76	0.00	0.0	0.0	0.	0.00
36	20.400	27.30	0.0	0.0	0.0	6.40	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.76	0.00	0.0	0.0	0.	0.00
37	20.300	27.30	0.0	0.0	0.0	6.40	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.76	0.00	0.0	0.0	0.	0.00
38	20.200	27.30	0.0	0.0	0.0	6.41	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.76	0.00	0.0	0.0	0.	0.00
39	20.100	27.30	0.0	0.0	0.0	6.42	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.0	0.0	0.	0.00
40	20.000	27.30	0.0	0.0	0.0	6.42	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.0	0.0	0.	0.00
41	19.900	27.30	0.0	0.0	0.0	6.43	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.0	0.0	0.	0.00
42	19.800	27.30	0.0	0.0	0.0	6.43	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.0	0.0	0.	0.00
43	19.700	27.30	0.0	0.0	0.0	6.44	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.0	0.0	0.	0.00
44	19.600	27.30	0.0	0.0	0.0	6.45	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.0	0.0	0.	0.00
45	19.500	27.30	0.0	0.0	0.0	6.45	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.0	0.0	0.	0.00
46	19.400	27.30	0.0	0.0	0.0	6.46	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.0	0.0	0.	0.00
47	19.300	27.30	0.0	0.0	0.0	6.46	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.0	0.0	0.	0.00
48	19.200	27.30	0.0	0.0	0.0	6.47	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.0	0.0	0.	0.00
49	19.100	27.30	0.0	0.0	0.0	6.47	1.35	0.00	1.35	0.00	0.67	0.08	0.02	0.77	0.00	0.0	0.0	0.	0.00
50	19.000	27.30	0.0	0.0	0.0	6.48	1.35	0.00	1.35	0.00	0.67	0.08	0.02	0.78	0.00	0.0	0.0	0.	0.00
51	18.900	27.30	0.0	0.0	0.0	6.48	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.0	0.0	0.	0.00
52	18.800	27.30	0.0	0.0	0.0	6.49	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.0	0.0	0.	0.00
53	18.700	27.30	0.0	0.0	0.0	6.50	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.0	0.0	0.	0.00
54	18.600	27.30	0.0	0.0	0.0	6.50	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.0	0.0	0.	0.00
55	18.500	27.30	0.0	0.0	0.0	6.51	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.0	0.0	0.	0.00
56	18.400	27.30	0.0	0.0	0.0	6.51	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.0	0.0	0.	0.00
57	18.300	27.30	0.0	0.0	0.0	6.52	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.0	0.0	0.	0.00
58	18.200	27.30	0.0	0.0	0.0	6.52	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.0	0.0	0.	0.00
59	18.100	27.30	0.0	0.0	0.0	6.53	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.0	0.0	0.	0.00
60	18.000	27.30	0.0	0.0	0.0	6.53	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.0	0.0	0.	0.00
61	17.900	27.30	0.0	0.0	0.0	6.49	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.0	0.0	0.	0.00
62	17.800	27.30	0.0	0.0	0.0	6.46	1.34	0.00	1.34	0.00	0.67	0.08	0.03	0.79	0.00	0.0	0.0	0.	0.00
63	17.700	27.30	0.0	0.0	0.0	6.44	1.34	0.00	1.34	0.00	0.67	0.09	0.03	0.79	0.00	0.0	0.0	0.	0.00
64	17.600	27.30	0.0	0.0	0.0	6.42	1.34	0.00	1.34	0.00	0.67	0.09	0.03	0.79	0.00	0.0	0.0	0.	0.00
65	17.500	27.30	0.0	0.0	0.0	6.40	1.33	0.00	1.33	0.00	0.67	0.09	0.03	0.79	0.00	0.0	0.0	0.	0.00
66	17.400	27.30	0.0	0.0	0.0	6.39	1.33	0.00	1.33	0.00	0.67	0.09	0.03	0.79	0.00	0.0	0.0	0.	0.00
67	17.300	27.30	0.0	0.0	0.0	6.38	1.33	0.00	1.33	0.00	0.67	0.09	0.03	0.79	0.00	0.0	0.0	0.	0.00
68	17.200	27.30	0.0	0.0	0.0	6.37	1.32	0.00	1.32	0.00	0.67	0.09	0.03	0.79	0.00	0.0	0.0	0.	0.00
69	17.100	27.30	0.0	0.0	0.0	6.36	1.32	0.00	1.32	0.00	0.68	0.09	0.03	0.79	0.00	0.0	0.0	0.	0.00

70	17.000	27.30	0.0	0.0	0.0	6.35	1.32	0.00	1.32	0.00	0.68	0.09	0.03	0.79	0.00	0.0	0.0	0.	0.00
71	16.900	27.30	0.0	0.0	0.0	6.35	1.32	0.00	1.32	0.00	0.68	0.09	0.03	0.79	0.00	0.0	0.0	0.	0.00
72	16.800	27.30	0.0	0.0	0.0	6.35	1.31	0.00	1.31	0.00	0.68	0.09	0.03	0.80	0.00	0.0	0.0	0.	0.00
73	16.700	27.30	0.0	0.0	0.0	6.35	1.31	0.00	1.31	0.00	0.68	0.09	0.03	0.80	0.00	0.0	0.0	0.	0.00
74	16.600	27.30	0.0	0.0	0.0	6.34	1.31	0.00	1.31	0.00	0.68	0.09	0.03	0.80	0.00	0.0	0.0	0.	0.00
75	16.500	27.30	0.0	0.0	0.0	6.34	1.30	0.00	1.30	0.00	0.68	0.09	0.04	0.80	0.00	0.0	0.0	0.	0.00
76	16.400	27.30	0.0	0.0	0.0	6.34	1.30	0.00	1.30	0.00	0.68	0.09	0.04	0.80	0.00	0.0	0.0	0.	0.00
77	16.300	27.30	0.0	0.0	0.0	6.35	1.30	0.00	1.30	0.00	0.68	0.09	0.04	0.80	0.00	0.0	0.0	0.	0.00
78	16.200	27.30	0.0	0.0	0.0	6.35	1.30	0.00	1.30	0.00	0.68	0.09	0.04	0.80	0.00	0.0	0.0	0.	0.00
79	16.100	27.30	0.0	0.0	0.0	6.35	1.30	0.00	1.30	0.00	0.68	0.09	0.04	0.80	0.00	0.0	0.0	0.	0.00
80	16.000	27.30	0.0	0.0	0.0	6.35	1.29	0.00	1.29	0.00	0.68	0.09	0.04	0.80	0.00	0.0	0.0	0.	0.00
81	15.900	27.30	0.0	0.0	0.0	6.32	1.29	0.00	1.29	0.00	0.68	0.09	0.04	0.80	0.00	0.0	0.0	0.	0.00
82	15.800	27.30	0.0	0.0	0.0	6.33	1.29	0.00	1.29	0.00	0.68	0.09	0.04	0.80	0.00	0.0	0.0	0.	0.00
83	15.700	27.30	0.0	0.0	0.0	6.33	1.29	0.00	1.29	0.00	0.68	0.09	0.04	0.80	0.00	0.0	0.0	0.	0.00
84	15.600	27.30	0.0	0.0	0.0	6.34	1.29	0.00	1.29	0.00	0.68	0.09	0.04	0.80	0.00	0.0	0.0	0.	0.00
85	15.500	27.30	0.0	0.0	0.0	6.35	1.29	0.00	1.29	0.00	0.68	0.09	0.04	0.80	0.00	0.0	0.0	0.	0.00
86	15.400	27.30	0.0	0.0	0.0	6.36	1.28	0.00	1.28	0.00	0.68	0.09	0.04	0.80	0.00	0.0	0.0	0.	0.00
87	15.300	27.30	0.0	0.0	0.0	6.36	1.28	0.00	1.28	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
88	15.200	27.30	0.0	0.0	0.0	6.37	1.28	0.00	1.28	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
89	15.100	27.30	0.0	0.0	0.0	6.37	1.28	0.00	1.28	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
90	15.000	27.30	0.0	0.0	0.0	6.38	1.28	0.00	1.28	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
91	14.900	27.30	0.0	0.0	0.0	6.38	1.28	0.00	1.28	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
92	14.800	27.30	0.0	0.0	0.0	6.39	1.27	0.00	1.27	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
93	14.700	27.30	0.0	0.0	0.0	6.39	1.27	0.00	1.27	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
94	14.600	27.30	0.0	0.0	0.0	6.40	1.27	0.00	1.27	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
95	14.500	27.30	0.0	0.0	0.0	6.40	1.27	0.00	1.27	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
96	14.400	27.30	0.0	0.0	0.0	6.40	1.27	0.00	1.27	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
97	14.300	27.30	0.0	0.0	0.0	6.41	1.27	0.00	1.27	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
98	14.200	27.30	0.0	0.0	0.0	6.41	1.26	0.00	1.26	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
99	14.100	27.30	0.0	0.0	0.0	6.42	1.26	0.00	1.26	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
100	14.000	27.30	0.0	0.0	0.0	6.42	1.26	0.00	1.26	0.00	0.68	0.09	0.04	0.81	0.00	0.0	0.0	0.	0.00
101	13.900	27.30	0.0	0.0	0.0	6.42	1.26	0.00	1.26	0.00	0.68	0.09	0.04	0.82	0.00	0.0	0.0	0.	0.00
102	13.800	27.30	0.0	0.0	0.0	6.43	1.26	0.00	1.26	0.00	0.68	0.09	0.04	0.82	0.00	0.0	0.0	0.	0.00
103	13.700	27.30	0.0	0.0	0.0	6.43	1.26	0.00	1.26	0.00	0.68	0.09	0.04	0.82	0.00	0.0	0.0	0.	0.00
104	13.600	27.30	0.0	0.0	0.0	6.43	1.26	0.00	1.26	0.00	0.69	0.09	0.04	0.82	0.00	0.0	0.0	0.	0.00
105	13.500	27.30	0.0	0.0	0.0	6.44	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.0	0.0	0.	0.00
106	13.400	27.30	0.0	0.0	0.0	6.44	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.0	0.0	0.	0.00
107	13.300	27.30	0.0	0.0	0.0	6.45	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.0	0.0	0.	0.00
108	13.200	27.30	0.0	0.0	0.0	6.45	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.0	0.0	0.	0.00
109	13.100	27.30	0.0	0.0	0.0	6.45	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.0	0.0	0.	0.00
110	13.000	27.30	0.0	0.0	0.0	6.46	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.0	0.0	0.	0.00
111	12.900	27.30	0.0	0.0	0.0	6.46	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.0	0.0	0.	0.00
112	12.800	27.30	0.0	0.0	0.0	6.46	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.0	0.0	0.	0.00
113	12.700	27.30	0.0	0.0	0.0	6.47	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.82	0.00	0.0	0.0	0.	0.00
114	12.600	27.30	0.0	0.0	0.0	6.47	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.82	0.00	0.0	0.0	0.	0.00
115	12.500	27.30	0.0	0.0	0.0	6.47	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.82	0.00	0.0	0.0	0.	0.00
116	12.400	27.30	0.0	0.0	0.0	6.48	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.82	0.00	0.0	0.0	0.	0.00
117	12.300	27.30	0.0	0.0	0.0	6.48	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.82	0.00	0.0	0.0	0.	0.00
118	12.200	27.30	0.0	0.0	0.0	6.48	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.83	0.00	0.0	0.0	0.	0.00
119	12.100	27.30	0.0	0.0	0.0	6.48	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.83	0.00	0.0	0.0	0.	0.00
120	12.000	27.30	0.0	0.0	0.0	6.49	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.83	0.00	0.0	0.0	0.	0.00
121	11.900	27.30	0.0	0.0	0.0	6.47	1.23	0.00	1.23	0.00	0.69	0.09	0.05	0.83	0.00	0.0	0.0	0.	0.00

122	11.800	27.30	0.0	0.0	0.0	6.45	1.23	0.00	1.23	0.00	0.69	0.09	0.05	0.83	0.00	0.0	0.0	0.	0.00
123	11.700	27.30	0.0	0.0	0.0	6.43	1.23	0.00	1.23	0.00	0.69	0.09	0.05	0.83	0.00	0.0	0.0	0.	0.00
124	11.600	27.30	0.0	0.0	0.0	6.41	1.22	0.00	1.22	0.00	0.69	0.09	0.05	0.83	0.00	0.0	0.0	0.	0.00
125	11.500	27.30	0.0	0.0	0.0	6.40	1.22	0.00	1.22	0.00	0.69	0.09	0.05	0.83	0.00	0.0	0.0	0.	0.00
126	11.400	27.30	0.0	0.0	0.0	6.39	1.22	0.00	1.22	0.00	0.69	0.09	0.05	0.83	0.00	0.0	0.0	0.	0.00
127	11.300	27.30	0.0	0.0	0.0	6.38	1.21	0.00	1.21	0.00	0.69	0.09	0.05	0.83	0.00	0.0	0.0	0.	0.00
128	11.200	27.30	0.0	0.0	0.0	6.37	1.21	0.00	1.21	0.00	0.69	0.09	0.05	0.83	0.00	0.0	0.0	0.	0.00
129	11.100	27.30	0.0	0.0	0.0	6.37	1.21	0.00	1.21	0.00	0.69	0.09	0.05	0.83	0.00	0.0	0.0	0.	0.00
130	11.000	27.30	0.0	0.0	0.0	6.36	1.20	0.00	1.20	0.00	0.69	0.09	0.05	0.83	0.00	0.0	0.0	0.	0.00
131	10.900	27.30	0.0	0.0	0.0	6.36	1.20	0.00	1.20	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
132	10.800	27.30	0.0	0.0	0.0	6.36	1.20	0.00	1.20	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
133	10.700	27.30	0.0	0.0	0.0	6.35	1.20	0.00	1.20	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
134	10.600	27.30	0.0	0.0	0.0	6.35	1.19	0.00	1.19	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
135	10.500	27.30	0.0	0.0	0.0	6.35	1.19	0.00	1.19	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
136	10.400	27.30	0.0	0.0	0.0	6.35	1.19	0.00	1.19	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
137	10.300	27.30	0.0	0.0	0.0	6.35	1.19	0.00	1.19	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
138	10.200	27.30	0.0	0.0	0.0	6.35	1.18	0.00	1.18	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
139	10.100	27.30	0.0	0.0	0.0	6.35	1.18	0.00	1.18	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
140	10.000	27.30	0.0	0.0	0.0	6.35	1.18	0.00	1.18	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
141	9.900	27.30	0.0	0.0	0.0	6.35	1.18	0.00	1.18	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
142	9.800	27.30	0.0	0.0	0.0	6.35	1.17	0.00	1.17	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
143	9.700	27.30	0.0	0.0	0.0	6.35	1.17	0.00	1.17	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
144	9.600	27.30	0.0	0.0	0.0	6.35	1.17	0.00	1.17	0.00	0.69	0.09	0.06	0.84	0.00	0.0	0.0	0.	0.00
145	9.500	27.30	0.0	0.0	0.0	6.35	1.17	0.00	1.17	0.00	0.69	0.09	0.06	0.85	0.00	0.0	0.0	0.	0.00
146	9.400	27.30	0.0	0.0	0.0	6.36	1.16	0.00	1.16	0.00	0.69	0.09	0.06	0.85	0.00	0.0	0.0	0.	0.00
147	9.300	27.30	0.0	0.0	0.0	6.36	1.16	0.00	1.16	0.00	0.69	0.09	0.06	0.85	0.00	0.0	0.0	0.	0.00
148	9.200	27.30	0.0	0.0	0.0	6.36	1.16	0.00	1.16	0.00	0.69	0.09	0.06	0.85	0.00	0.0	0.0	0.	0.00
149	9.100	27.30	0.0	0.0	0.0	6.35	1.42	0.00	1.42	0.00	0.71	0.13	0.06	0.90	0.00	0.0	0.0	0.	0.00
150	9.000	27.30	0.0	0.0	0.0	6.35	1.42	0.00	1.42	0.00	0.71	0.13	0.06	0.90	0.00	0.0	0.0	0.	0.00
151	8.900	27.30	0.0	0.0	0.0	6.35	1.41	0.00	1.41	0.00	0.71	0.13	0.07	0.90	0.00	0.0	0.0	0.	0.00
152	8.800	27.30	0.0	0.0	0.0	6.35	1.41	0.00	1.41	0.00	0.71	0.13	0.07	0.91	0.00	0.0	0.0	0.	0.00
153	8.700	27.30	0.0	0.0	0.0	6.35	1.40	0.00	1.40	0.00	0.71	0.13	0.07	0.91	0.00	0.0	0.0	0.	0.00
154	8.600	27.30	0.0	0.0	0.0	6.36	1.40	0.00	1.40	0.00	0.71	0.13	0.07	0.91	0.00	0.0	0.0	0.	0.00
155	8.500	27.30	0.0	0.0	0.0	6.36	1.39	0.00	1.39	0.00	0.71	0.13	0.07	0.91	0.00	0.0	0.0	0.	0.00
156	8.400	27.30	0.0	0.0	0.0	6.36	1.39	0.00	1.39	0.00	0.71	0.13	0.07	0.91	0.00	0.0	0.0	0.	0.00
157	8.300	27.30	0.0	0.0	0.0	6.36	1.38	0.00	1.38	0.00	0.71	0.13	0.07	0.91	0.00	0.0	0.0	0.	0.00
158	8.200	27.30	0.0	0.0	0.0	6.36	1.38	0.00	1.38	0.00	0.71	0.13	0.07	0.91	0.00	0.0	0.0	0.	0.00
159	8.100	27.30	0.0	0.0	0.0	6.36	1.37	0.00	1.37	0.00	0.71	0.12	0.07	0.91	0.00	0.0	0.0	0.	0.00
160	8.000	27.30	0.0	0.0	0.0	6.36	1.37	0.00	1.37	0.00	0.71	0.12	0.07	0.91	0.00	0.0	0.0	0.	0.00
161	7.900	27.30	0.0	0.0	0.0	6.37	1.36	0.00	1.36	0.00	0.71	0.12	0.07	0.91	0.00	0.0	0.0	0.	0.00
162	7.800	27.30	0.0	0.0	0.0	6.37	1.36	0.00	1.36	0.00	0.71	0.12	0.07	0.91	0.00	0.0	0.0	0.	0.00
163	7.700	27.30	0.0	0.0	0.0	6.37	1.35	0.00	1.35	0.00	0.71	0.12	0.07	0.91	0.00	0.0	0.0	0.	0.00
164	7.600	27.30	0.0	0.0	0.0	6.37	1.35	0.00	1.35	0.00	0.71	0.12	0.07	0.91	0.00	0.0	0.0	0.	0.00
165	7.500	27.30	0.0	0.0	0.0	6.37	1.35	0.00	1.35	0.00	0.71	0.12	0.07	0.91	0.00	0.0	0.0	0.	0.00
166	7.400	27.30	0.0	0.0	0.0	6.38	1.34	0.00	1.34	0.00	0.71	0.12	0.07	0.91	0.00	0.0	0.0	0.	0.00
167	7.300	27.30	0.0	0.0	0.0	6.38	1.34	0.00	1.34	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
168	7.200	27.30	0.0	0.0	0.0	6.38	1.33	0.00	1.33	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
169	7.100	27.30	0.0	0.0	0.0	6.38	1.33	0.00	1.33	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
170	7.000	27.30	0.0	0.0	0.0	6.39	1.33	0.00	1.33	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
171	6.900	27.30	0.0	0.0	0.0	6.39	1.32	0.00	1.32	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
172	6.800	27.30	0.0	0.0	0.0	6.39	1.32	0.00	1.32	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
173	6.700	27.30	0.0	0.0	0.0	6.39	1.31	0.00	1.31	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00

174	6.600	27.30	0.0	0.0	0.0	6.40	1.31	0.00	1.31	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
175	6.500	27.30	0.0	0.0	0.0	6.40	1.31	0.00	1.31	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
176	6.400	27.30	0.0	0.0	0.0	6.40	1.30	0.00	1.30	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
177	6.300	27.30	0.0	0.0	0.0	6.40	1.30	0.00	1.30	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
178	6.200	27.30	0.0	0.0	0.0	6.41	1.30	0.00	1.30	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
179	6.100	27.30	0.0	0.0	0.0	6.41	1.29	0.00	1.29	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
180	6.000	27.30	0.0	0.0	0.0	6.41	1.29	0.00	1.29	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
181	5.900	27.30	0.0	0.0	0.0	6.39	1.29	0.00	1.29	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
182	5.800	27.30	0.0	0.0	0.0	6.38	1.28	0.00	1.28	0.00	0.71	0.12	0.08	0.91	0.00	0.0	0.0	0.	0.00
183	5.700	27.30	0.0	0.0	0.0	6.37	1.28	0.00	1.28	0.00	0.71	0.12	0.08	0.92	0.00	0.0	0.0	0.	0.00
184	5.600	27.30	0.0	0.0	0.0	6.36	1.27	0.00	1.27	0.00	0.71	0.12	0.09	0.92	0.00	0.0	0.0	0.	0.00
185	5.500	27.30	0.0	0.0	0.0	6.35	1.27	0.00	1.27	0.00	0.71	0.12	0.09	0.92	0.00	0.0	0.0	0.	0.00
186	5.400	27.30	0.0	0.0	0.0	6.34	1.26	0.00	1.26	0.00	0.71	0.12	0.09	0.92	0.00	0.0	0.0	0.	0.00
187	5.300	27.30	0.0	0.0	0.0	6.33	1.26	0.00	1.26	0.00	0.71	0.12	0.09	0.92	0.00	0.0	0.0	0.	0.00
188	5.200	27.30	0.0	0.0	0.0	6.33	1.25	0.00	1.25	0.00	0.71	0.12	0.09	0.92	0.00	0.0	0.0	0.	0.00
189	5.100	27.30	0.0	0.0	0.0	6.32	1.25	0.00	1.25	0.00	0.71	0.12	0.09	0.92	0.00	0.0	0.0	0.	0.00
190	5.000	27.30	0.0	0.0	0.0	6.32	1.25	0.00	1.25	0.00	0.71	0.12	0.09	0.92	0.00	0.0	0.0	0.	0.00
191	4.900	27.30	0.0	0.0	0.0	6.31	1.24	0.00	1.24	0.00	0.71	0.12	0.09	0.92	0.00	0.0	0.0	0.	0.00
192	4.800	27.30	0.0	0.0	0.0	6.31	1.24	0.00	1.24	0.00	0.71	0.11	0.09	0.92	0.00	0.0	0.0	0.	0.00
193	4.700	27.30	0.0	0.0	0.0	6.31	1.23	0.00	1.23	0.00	0.71	0.11	0.09	0.92	0.00	0.0	0.0	0.	0.00
194	4.600	27.30	0.0	0.0	0.0	6.31	1.23	0.00	1.23	0.00	0.71	0.11	0.09	0.92	0.00	0.0	0.0	0.	0.00
195	4.500	27.30	0.0	0.0	0.0	6.31	1.23	0.00	1.23	0.00	0.71	0.11	0.09	0.92	0.00	0.0	0.0	0.	0.00
196	4.400	27.30	0.0	0.0	0.0	6.31	1.22	0.00	1.22	0.00	0.71	0.11	0.09	0.92	0.00	0.0	0.0	0.	0.00
197	4.300	27.30	0.0	0.0	0.0	6.30	1.22	0.00	1.22	0.00	0.71	0.11	0.10	0.92	0.00	0.0	0.0	0.	0.00
198	4.200	27.30	0.0	0.0	0.0	6.30	1.22	0.00	1.22	0.00	0.71	0.11	0.10	0.92	0.00	0.0	0.0	0.	0.00
199	4.100	27.30	0.0	0.0	0.0	6.30	1.21	0.00	1.21	0.00	0.71	0.11	0.10	0.92	0.00	0.0	0.0	0.	0.00
200	4.000	27.30	0.0	0.0	0.0	6.30	1.21	0.00	1.21	0.00	0.71	0.11	0.10	0.92	0.00	0.0	0.0	0.	0.00
201	3.900	27.30	0.0	0.0	0.0	6.30	1.21	0.00	1.21	0.00	0.71	0.11	0.10	0.92	0.00	0.0	0.0	0.	0.00
202	3.800	27.30	0.0	0.0	0.0	6.31	1.20	0.00	1.20	0.00	0.71	0.11	0.10	0.92	0.00	0.0	0.0	0.	0.00
203	3.700	27.30	0.0	0.0	0.0	6.31	1.20	0.00	1.20	0.00	0.71	0.11	0.10	0.92	0.00	0.0	0.0	0.	0.00
204	3.600	27.30	0.0	0.0	0.0	6.31	1.20	0.00	1.20	0.00	0.71	0.11	0.10	0.93	0.00	0.0	0.0	0.	0.00
205	3.500	27.30	0.0	0.0	0.0	6.31	1.19	0.00	1.19	0.00	0.71	0.11	0.10	0.93	0.00	0.0	0.0	0.	0.00
206	3.400	27.30	0.0	0.0	0.0	6.31	1.19	0.00	1.19	0.00	0.71	0.11	0.10	0.93	0.00	0.0	0.0	0.	0.00
207	3.300	27.30	0.0	0.0	0.0	6.31	1.19	0.00	1.19	0.00	0.71	0.11	0.10	0.93	0.00	0.0	0.0	0.	0.00
208	3.200	27.30	0.0	0.0	0.0	6.31	1.18	0.00	1.18	0.00	0.71	0.11	0.10	0.93	0.00	0.0	0.0	0.	0.00
209	3.100	27.30	0.0	0.0	0.0	6.31	1.18	0.00	1.18	0.00	0.71	0.11	0.10	0.93	0.00	0.0	0.0	0.	0.00
210	3.000	27.30	0.0	0.0	0.0	6.31	1.18	0.00	1.18	0.00	0.71	0.11	0.10	0.93	0.00	0.0	0.0	0.	0.00
211	2.900	27.30	0.0	0.0	0.0	6.32	1.18	0.00	1.18	0.00	0.71	0.11	0.10	0.93	0.00	0.0	0.0	0.	0.00
212	2.800	27.30	0.0	0.0	0.0	6.32	1.17	0.00	1.17	0.00	0.71	0.11	0.10	0.93	0.00	0.0	0.0	0.	0.00
213	2.700	27.30	0.0	0.0	0.0	6.32	1.17	0.00	1.17	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
214	2.600	27.30	0.0	0.0	0.0	6.32	1.17	0.00	1.17	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
215	2.500	27.30	0.0	0.0	0.0	6.32	1.16	0.00	1.16	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
216	2.400	27.30	0.0	0.0	0.0	6.32	1.16	0.00	1.16	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
217	2.300	27.30	0.0	0.0	0.0	6.33	1.16	0.00	1.16	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
218	2.200	27.30	0.0	0.0	0.0	6.33	1.16	0.00	1.16	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
219	2.100	27.30	0.0	0.0	0.0	6.33	1.15	0.00	1.15	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
220	2.000	27.30	0.0	0.0	0.0	6.33	1.15	0.00	1.15	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
221	1.900	27.30	0.0	0.0	0.0	6.33	1.15	0.00	1.15	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
222	1.800	27.30	0.0	0.0	0.0	6.33	1.15	0.00	1.15	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
223	1.700	27.30	0.0	0.0	0.0	6.34	1.14	0.00	1.14	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
224	1.600	27.30	0.0	0.0	0.0	6.34	1.14	0.00	1.14	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
225	1.500	27.30	0.0	0.0	0.0	6.34	1.14	0.00	1.14	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00

226	1.400	27.30	0.0	0.0	0.0	6.34	1.14	0.00	1.14	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
227	1.300	27.30	0.0	0.0	0.0	6.34	1.14	0.00	1.14	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
228	1.200	27.30	0.0	0.0	0.0	6.35	1.13	0.00	1.13	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
229	1.100	27.30	0.0	0.0	0.0	6.35	1.13	0.00	1.13	0.00	0.71	0.11	0.11	0.93	0.00	0.0	0.0	0.	0.00
230	1.000	27.30	0.0	0.0	0.0	6.35	1.13	0.00	1.13	0.00	0.71	0.11	0.11	0.94	0.00	0.0	0.0	0.	0.00
231	0.900	27.30	0.0	0.0	0.0	6.35	1.13	0.00	1.13	0.00	0.71	0.11	0.11	0.94	0.00	0.0	0.0	0.	0.00
232	0.800	27.30	0.0	0.0	0.0	6.35	1.13	0.00	1.13	0.00	0.71	0.11	0.12	0.94	0.00	0.0	0.0	0.	0.00
233	0.700	27.30	0.0	0.0	0.0	6.36	1.12	0.00	1.12	0.00	0.71	0.11	0.12	0.94	0.00	0.0	0.0	0.	0.00
234	0.600	27.30	0.0	0.0	0.0	6.36	1.12	0.00	1.12	0.00	0.71	0.11	0.12	0.94	0.00	0.0	0.0	0.	0.00
235	0.500	27.30	0.0	0.0	0.0	6.36	1.12	0.00	1.12	0.00	0.71	0.11	0.12	0.94	0.00	0.0	0.0	0.	0.00
236	0.400	27.30	0.0	0.0	0.0	6.36	1.12	0.00	1.12	0.00	0.71	0.11	0.12	0.94	0.00	0.0	0.0	0.	0.00
237	0.300	27.30	0.0	0.0	0.0	6.36	1.12	0.00	1.12	0.00	0.71	0.11	0.12	0.94	0.00	0.0	0.0	0.	0.00
238	0.200	27.30	0.0	0.0	0.0	6.36	1.11	0.00	1.11	0.00	0.71	0.11	0.12	0.94	0.00	0.0	0.0	0.	0.00
239	0.100	27.30	0.0	0.0	0.0	6.37	1.11	0.00	1.11	0.00	0.71	0.11	0.12	0.94	0.00	0.0	0.0	0.	0.00
240	0.000	27.30	0.0	0.0	0.0	6.37	1.11	0.00	1.11	0.00	0.71	0.11	0.12	0.94	0.00	0.0	0.0	0.	0.00

SPECIAL REPORT: Bayou Toro @ 110401A
BIOLOGICAL AND PHYSICAL COEFFICIENTS

ELEM NO.	ENDING DIST km	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#1 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	FULL SOD *	CORR SOD *	ORG-N DECAY 1/da	ORG-N 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	23.900	7.93	3.21	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	23.800	7.93	3.22	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	23.700	7.93	3.24	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	23.600	7.93	3.26	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	23.500	7.93	3.27	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	23.400	7.93	3.29	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	23.300	7.93	3.31	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	23.200	7.93	3.32	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	23.100	7.93	3.34	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	23.000	7.93	3.35	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	22.900	7.93	3.37	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	22.800	7.93	3.39	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	22.700	7.93	3.40	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	22.600	7.93	3.42	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	22.500	7.93	3.44	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	22.400	7.93	3.45	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	22.300	7.93	3.47	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	22.200	7.93	3.49	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	22.100	7.93	3.50	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	22.000	7.93	3.52	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	21.900	7.93	3.54	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	21.800	7.93	3.55	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	21.700	7.93	3.57	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	21.600	7.93	3.59	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	21.500	7.93	3.60	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	21.400	7.93	3.62	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	21.300	7.93	3.64	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	21.200	7.93	3.65	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

29	21.100	7.93	3.67	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	21.000	7.93	3.68	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	20.900	7.93	3.70	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32	20.800	7.93	3.72	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33	20.700	7.93	3.73	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34	20.600	7.93	3.75	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	20.500	7.93	3.77	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36	20.400	7.93	3.78	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37	20.300	7.93	3.80	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	20.200	7.93	3.82	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39	20.100	7.93	3.83	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	20.000	7.93	3.85	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	19.900	7.93	3.87	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	19.800	7.93	3.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	19.700	7.93	3.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	19.600	7.93	3.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	19.500	7.93	3.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	19.400	7.93	3.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	19.300	7.93	3.97	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	19.200	7.93	3.98	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	19.100	7.93	4.00	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	19.000	7.93	4.02	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	18.900	7.93	4.03	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	18.800	7.93	4.05	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	18.700	7.93	4.06	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	18.600	7.93	4.08	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	18.500	7.93	4.10	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	18.400	7.93	4.11	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	18.300	7.93	4.13	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	18.200	7.93	4.15	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	18.100	7.93	4.16	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	18.000	7.93	4.18	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
61	17.900	7.93	2.58	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	17.800	7.93	2.59	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
63	17.700	7.93	2.60	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	17.600	7.93	2.60	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	17.500	7.93	2.61	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	17.400	7.93	2.62	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	17.300	7.93	2.62	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	17.200	7.93	2.63	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	17.100	7.93	2.64	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	17.000	7.93	2.64	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
71	16.900	7.93	2.65	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	16.800	7.93	2.66	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73	16.700	7.93	2.66	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	16.600	7.93	2.67	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	16.500	7.93	2.68	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76	16.400	7.93	2.69	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77	16.300	7.93	2.69	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	16.200	7.93	2.70	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79	16.100	7.93	2.71	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	16.000	7.93	2.71	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

81	15.900	7.93	2.75	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	15.800	7.93	2.75	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
83	15.700	7.93	2.76	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	15.600	7.93	2.77	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	15.500	7.93	2.77	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	15.400	7.93	2.78	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87	15.300	7.93	2.79	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88	15.200	7.93	2.80	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89	15.100	7.93	2.80	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	15.000	7.93	2.81	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91	14.900	7.93	2.82	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92	14.800	7.93	2.82	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
93	14.700	7.93	2.83	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
94	14.600	7.93	2.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	14.500	7.93	2.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
96	14.400	7.93	2.85	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97	14.300	7.93	2.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
98	14.200	7.93	2.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
99	14.100	7.93	2.87	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	14.000	7.93	2.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
101	13.900	7.93	2.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102	13.800	7.93	2.89	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103	13.700	7.93	2.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
104	13.600	7.93	2.91	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	13.500	7.93	2.91	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106	13.400	7.93	2.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107	13.300	7.93	2.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
108	13.200	7.93	2.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
109	13.100	7.93	2.94	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	13.000	7.93	2.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
111	12.900	7.93	2.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112	12.800	7.93	2.96	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113	12.700	7.93	2.97	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
114	12.600	7.93	2.97	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	12.500	7.93	2.98	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
116	12.400	7.93	2.99	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117	12.300	7.93	2.99	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
118	12.200	7.93	3.00	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
119	12.100	7.93	3.01	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	12.000	7.93	3.02	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
121	11.900	7.93	2.14	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122	11.800	7.93	2.14	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
123	11.700	7.93	2.15	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
124	11.600	7.93	2.15	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	11.500	7.93	2.15	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126	11.400	7.93	2.16	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127	11.300	7.93	2.16	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
128	11.200	7.93	2.16	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
129	11.100	7.93	2.17	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	11.000	7.93	2.17	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
131	10.900	7.93	2.18	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132	10.800	7.93	2.18	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

133	10.700	7.93	2.18	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
134	10.600	7.93	2.19	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	10.500	7.93	2.19	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
136	10.400	7.93	2.19	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137	10.300	7.93	2.20	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
138	10.200	7.93	2.20	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
139	10.100	7.93	2.20	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	10.000	7.93	2.21	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
141	9.900	7.93	2.21	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142	9.800	7.93	2.22	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
143	9.700	7.93	2.22	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
144	9.600	7.93	2.22	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	9.500	7.93	2.23	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146	9.400	7.93	2.23	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147	9.300	7.93	2.23	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
148	9.200	7.93	2.24	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
149	9.100	7.93	2.24	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	9.000	7.93	2.25	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
151	8.900	7.93	2.25	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152	8.800	7.93	2.25	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153	8.700	7.93	2.26	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
154	8.600	7.93	2.26	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	8.500	7.93	2.27	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
156	8.400	7.93	2.27	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157	8.300	7.93	2.27	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
158	8.200	7.93	2.28	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
159	8.100	7.93	2.28	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	8.000	7.93	2.28	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161	7.900	7.93	2.29	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162	7.800	7.93	2.29	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
163	7.700	7.93	2.29	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
164	7.600	7.93	2.30	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	7.500	7.93	2.30	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166	7.400	7.93	2.31	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167	7.300	7.93	2.31	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
168	7.200	7.93	2.31	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
169	7.100	7.93	2.32	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	7.000	7.93	2.32	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
171	6.900	7.93	2.32	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172	6.800	7.93	2.33	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
173	6.700	7.93	2.33	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
174	6.600	7.93	2.33	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	6.500	7.93	2.34	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
176	6.400	7.93	2.34	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177	6.300	7.93	2.35	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
178	6.200	7.93	2.35	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
179	6.100	7.93	2.35	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	6.000	7.93	2.36	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
181	5.900	7.93	1.83	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
182	5.800	7.93	1.83	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
183	5.700	7.93	1.83	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
184	5.600	7.93	1.83	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

185	5.500	7.93	1.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
186	5.400	7.93	1.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
187	5.300	7.93	1.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
188	5.200	7.93	1.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
189	5.100	7.93	1.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190	5.000	7.93	1.85	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
191	4.900	7.93	1.85	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
192	4.800	7.93	1.85	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
193	4.700	7.93	1.85	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
194	4.600	7.93	1.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
195	4.500	7.93	1.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
196	4.400	7.93	1.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197	4.300	7.93	1.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	4.200	7.93	1.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
199	4.100	7.93	1.87	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200	4.000	7.93	1.87	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
201	3.900	7.93	1.87	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	3.800	7.93	1.87	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	3.700	7.93	1.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	3.600	7.93	1.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	3.500	7.93	1.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	3.400	7.93	1.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
207	3.300	7.93	1.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
208	3.200	7.93	1.89	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
209	3.100	7.93	1.89	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	3.000	7.93	1.89	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
211	2.900	7.93	1.89	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
212	2.800	7.93	1.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
213	2.700	7.93	1.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
214	2.600	7.93	1.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
215	2.500	7.93	1.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
216	2.400	7.93	1.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
217	2.300	7.93	1.91	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
218	2.200	7.93	1.91	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
219	2.100	7.93	1.91	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	2.000	7.93	1.91	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
221	1.900	7.93	1.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
222	1.800	7.93	1.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
223	1.700	7.93	1.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
224	1.600	7.93	1.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	1.500	7.93	1.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	1.400	7.93	1.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	1.300	7.93	1.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	1.200	7.93	1.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
229	1.100	7.93	1.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	1.000	7.93	1.94	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
231	0.900	7.93	1.94	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
232	0.800	7.93	1.94	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
233	0.700	7.93	1.94	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
234	0.600	7.93	1.94	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
235	0.500	7.93	1.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
236	0.400	7.93	1.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

237	0.300	7.93	1.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
238	0.200	7.93	1.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
239	0.100	7.93	1.96	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
240	0.000	7.93	1.96	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

SPECIAL REPORT: Bayou Toro @ 110401A
HYDRAULIC PARAMETER VALUES

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	ADVCTV VELO m/s	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
1	24.00	23.90	0.0348	0.014	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.014
2	23.90	23.80	0.0355	0.014	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.014
3	23.80	23.70	0.0363	0.015	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.015
4	23.70	23.60	0.0371	0.015	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.015
5	23.60	23.50	0.0378	0.015	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.015
6	23.50	23.40	0.0386	0.016	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.016
7	23.40	23.30	0.0394	0.016	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.016
8	23.30	23.20	0.0401	0.016	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.016
9	23.20	23.10	0.0409	0.017	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.017
10	23.10	23.00	0.0417	0.017	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.017
11	23.00	22.90	0.0424	0.017	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.017
12	22.90	22.80	0.0432	0.018	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.018
13	22.80	22.70	0.0440	0.018	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.018
14	22.70	22.60	0.0447	0.018	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.018
15	22.60	22.50	0.0455	0.019	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.019
16	22.50	22.40	0.0463	0.019	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.019
17	22.40	22.30	0.0470	0.019	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.019
18	22.30	22.20	0.0478	0.019	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.019
19	22.20	22.10	0.0486	0.020	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.020
20	22.10	22.00	0.0493	0.020	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.020
21	22.00	21.90	0.0501	0.020	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.020
22	21.90	21.80	0.0509	0.021	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.021
23	21.80	21.70	0.0516	0.021	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.021
24	21.70	21.60	0.0524	0.021	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.021
25	21.60	21.50	0.0532	0.022	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.022
26	21.50	21.40	0.0539	0.022	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.022
27	21.40	21.30	0.0547	0.022	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.022
28	21.30	21.20	0.0555	0.023	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.023
29	21.20	21.10	0.0562	0.023	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.023
30	21.10	21.00	0.0570	0.023	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.023
31	21.00	20.90	0.0578	0.024	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.024
32	20.90	20.80	0.0585	0.024	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.024
33	20.80	20.70	0.0593	0.024	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.024
34	20.70	20.60	0.0601	0.024	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.024
35	20.60	20.50	0.0608	0.025	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.025
36	20.50	20.40	0.0616	0.025	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.025
37	20.40	20.30	0.0624	0.025	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.025
38	20.30	20.20	0.0631	0.026	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.026
39	20.20	20.10	0.0639	0.026	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.026

40	20.10	20.00	0.0647	0.026	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.026
41	20.00	19.90	0.0654	0.027	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.027
42	19.90	19.80	0.0662	0.027	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.027
43	19.80	19.70	0.0670	0.027	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.027
44	19.70	19.60	0.0677	0.028	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.028
45	19.60	19.50	0.0685	0.028	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.028
46	19.50	19.40	0.0693	0.028	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.028
47	19.40	19.30	0.0700	0.029	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.029
48	19.30	19.20	0.0708	0.029	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.029
49	19.20	19.10	0.0716	0.029	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.029
50	19.10	19.00	0.0723	0.029	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.029
51	19.00	18.90	0.0731	0.030	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.030
52	18.90	18.80	0.0739	0.030	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.030
53	18.80	18.70	0.0746	0.030	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.030
54	18.70	18.60	0.0754	0.031	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.031
55	18.60	18.50	0.0762	0.031	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.031
56	18.50	18.40	0.0769	0.031	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.031
57	18.40	18.30	0.0777	0.032	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.032
58	18.30	18.20	0.0785	0.032	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.032
59	18.20	18.10	0.0792	0.032	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.032
60	18.10	18.00	0.0800	0.033	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.033
61	18.00	17.90	0.0808	0.018	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.018
62	17.90	17.80	0.0815	0.018	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.018
63	17.80	17.70	0.0823	0.018	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.018
64	17.70	17.60	0.0831	0.019	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.019
65	17.60	17.50	0.0838	0.019	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.019
66	17.50	17.40	0.0846	0.019	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.019
67	17.40	17.30	0.0854	0.019	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.019
68	17.30	17.20	0.0861	0.019	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.019
69	17.20	17.10	0.0869	0.019	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.019
70	17.10	17.00	0.0877	0.020	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.020
71	17.00	16.90	0.0884	0.020	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.020
72	16.90	16.80	0.0892	0.020	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.020
73	16.80	16.70	0.0900	0.020	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.020
74	16.70	16.60	0.0907	0.020	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.020
75	16.60	16.50	0.0915	0.021	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.021
76	16.50	16.40	0.0923	0.021	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.021
77	16.40	16.30	0.0930	0.021	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.021
78	16.30	16.20	0.0938	0.021	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.021
79	16.20	16.10	0.0946	0.021	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.021
80	16.10	16.00	0.0953	0.021	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.021
81	16.00	15.90	0.0991	0.022	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.022
82	15.90	15.80	0.0999	0.022	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.022
83	15.80	15.70	0.1006	0.023	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.023
84	15.70	15.60	0.1014	0.023	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.023
85	15.60	15.50	0.1022	0.023	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.023
86	15.50	15.40	0.1029	0.023	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.023
87	15.40	15.30	0.1037	0.023	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.023
88	15.30	15.20	0.1045	0.023	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.023
89	15.20	15.10	0.1052	0.024	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.024
90	15.10	15.00	0.1060	0.024	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.024
91	15.00	14.90	0.1068	0.024	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.024

92	14.90	14.80	0.1075	0.024	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.024
93	14.80	14.70	0.1083	0.024	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.024
94	14.70	14.60	0.1091	0.024	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.024
95	14.60	14.50	0.1098	0.025	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.025
96	14.50	14.40	0.1106	0.025	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.025
97	14.40	14.30	0.1114	0.025	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.025
98	14.30	14.20	0.1121	0.025	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.025
99	14.20	14.10	0.1129	0.025	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.025
100	14.10	14.00	0.1137	0.026	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.026
101	14.00	13.90	0.1144	0.026	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.026
102	13.90	13.80	0.1152	0.026	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.026
103	13.80	13.70	0.1160	0.026	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.026
104	13.70	13.60	0.1167	0.026	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.026
105	13.60	13.50	0.1175	0.026	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.026
106	13.50	13.40	0.1183	0.027	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.027
107	13.40	13.30	0.1190	0.027	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.027
108	13.30	13.20	0.1198	0.027	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.027
109	13.20	13.10	0.1206	0.027	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.027
110	13.10	13.00	0.1213	0.027	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.027
111	13.00	12.90	0.1221	0.027	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.027
112	12.90	12.80	0.1229	0.028	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.028
113	12.80	12.70	0.1236	0.028	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.028
114	12.70	12.60	0.1244	0.028	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.028
115	12.60	12.50	0.1252	0.028	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.028
116	12.50	12.40	0.1259	0.028	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.028
117	12.40	12.30	0.1267	0.028	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.028
118	12.30	12.20	0.1275	0.029	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.029
119	12.20	12.10	0.1282	0.029	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.029
120	12.10	12.00	0.1290	0.029	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.029
121	12.00	11.90	0.1298	0.019	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.019
122	11.90	11.80	0.1305	0.019	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.019
123	11.80	11.70	0.1313	0.019	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.019
124	11.70	11.60	0.1321	0.019	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.019
125	11.60	11.50	0.1328	0.019	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.019
126	11.50	11.40	0.1336	0.019	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.019
127	11.40	11.30	0.1344	0.019	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.019
128	11.30	11.20	0.1351	0.020	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.020
129	11.20	11.10	0.1359	0.020	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.020
130	11.10	11.00	0.1367	0.020	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.020
131	11.00	10.90	0.1374	0.020	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.020
132	10.90	10.80	0.1382	0.020	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.020
133	10.80	10.70	0.1390	0.020	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.020
134	10.70	10.60	0.1397	0.020	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.020
135	10.60	10.50	0.1405	0.020	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.020
136	10.50	10.40	0.1413	0.020	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.020
137	10.40	10.30	0.1420	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
138	10.30	10.20	0.1428	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
139	10.20	10.10	0.1436	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
140	10.10	10.00	0.1443	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
141	10.00	9.90	0.1451	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
142	9.90	9.80	0.1459	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
143	9.80	9.70	0.1466	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021

144	9.70	9.60	0.1474	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
145	9.60	9.50	0.1482	0.021	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.021
146	9.50	9.40	0.1489	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
147	9.40	9.30	0.1497	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
148	9.30	9.20	0.1505	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
149	9.20	9.10	0.1518	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
150	9.10	9.00	0.1526	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
151	9.00	8.90	0.1534	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
152	8.90	8.80	0.1541	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
153	8.80	8.70	0.1549	0.022	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.022
154	8.70	8.60	0.1557	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
155	8.60	8.50	0.1564	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
156	8.50	8.40	0.1572	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
157	8.40	8.30	0.1580	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
158	8.30	8.20	0.1587	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
159	8.20	8.10	0.1595	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
160	8.10	8.00	0.1603	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
161	8.00	7.90	0.1610	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
162	7.90	7.80	0.1618	0.023	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.023
163	7.80	7.70	0.1626	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
164	7.70	7.60	0.1633	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
165	7.60	7.50	0.1641	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
166	7.50	7.40	0.1649	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
167	7.40	7.30	0.1656	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
168	7.30	7.20	0.1664	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
169	7.20	7.10	0.1672	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
170	7.10	7.00	0.1679	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
171	7.00	6.90	0.1687	0.024	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.024
172	6.90	6.80	0.1695	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
173	6.80	6.70	0.1702	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
174	6.70	6.60	0.1710	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
175	6.60	6.50	0.1718	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
176	6.50	6.40	0.1725	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
177	6.40	6.30	0.1733	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
178	6.30	6.20	0.1741	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
179	6.20	6.10	0.1748	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
180	6.10	6.00	0.1756	0.025	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.025
181	6.00	5.90	0.1764	0.018	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.018
182	5.90	5.80	0.1771	0.018	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.018
183	5.80	5.70	0.1779	0.018	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.018
184	5.70	5.60	0.1787	0.018	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.018
185	5.60	5.50	0.1794	0.018	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.018
186	5.50	5.40	0.1802	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
187	5.40	5.30	0.1810	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
188	5.30	5.20	0.1817	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
189	5.20	5.10	0.1825	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
190	5.10	5.00	0.1833	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
191	5.00	4.90	0.1840	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
192	4.90	4.80	0.1848	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
193	4.80	4.70	0.1856	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
194	4.70	4.60	0.1863	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
195	4.60	4.50	0.1871	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019

196	4.50	4.40	0.1879	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
197	4.40	4.30	0.1886	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
198	4.30	4.20	0.1894	0.019	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.019
199	4.20	4.10	0.1902	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
200	4.10	4.00	0.1909	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
201	4.00	3.90	0.1917	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
202	3.90	3.80	0.1925	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
203	3.80	3.70	0.1932	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
204	3.70	3.60	0.1940	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
205	3.60	3.50	0.1948	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
206	3.50	3.40	0.1955	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
207	3.40	3.30	0.1963	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
208	3.30	3.20	0.1971	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
209	3.20	3.10	0.1978	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
210	3.10	3.00	0.1986	0.020	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.020
211	3.00	2.90	0.1994	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
212	2.90	2.80	0.2001	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
213	2.80	2.70	0.2009	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
214	2.70	2.60	0.2017	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
215	2.60	2.50	0.2024	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
216	2.50	2.40	0.2032	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
217	2.40	2.30	0.2040	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
218	2.30	2.20	0.2047	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
219	2.20	2.10	0.2055	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
220	2.10	2.00	0.2063	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
221	2.00	1.90	0.2070	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
222	1.90	1.80	0.2078	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
223	1.80	1.70	0.2086	0.021	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.021
224	1.70	1.60	0.2093	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
225	1.60	1.50	0.2101	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
226	1.50	1.40	0.2109	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
227	1.40	1.30	0.2116	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
228	1.30	1.20	0.2124	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
229	1.20	1.10	0.2132	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
230	1.10	1.00	0.2139	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
231	1.00	0.90	0.2147	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
232	0.90	0.80	0.2155	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
233	0.80	0.70	0.2162	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
234	0.70	0.60	0.2170	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
235	0.60	0.50	0.2178	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
236	0.50	0.40	0.2185	0.022	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.022
237	0.40	0.30	0.2193	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
238	0.30	0.20	0.2201	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
239	0.20	0.10	0.2208	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023
240	0.10	0.00	0.2216	0.023	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.023

FINAL REPORT Bayou Toro @ 110401A LA-QUAL Summer Projection for Bayou Toro
REACH NO. 1 Bayou Toro

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM
1	HDWTR	0.03400	27.30	0.00	0.00	0.00	5.01	1.37	0.00	1.37	0.00	0.61	0.08	0.00	0.00	0.00	0.00	0.00
EACH	INCR	0.00077	27.30	0.00	0.00	0.00	5.01	1.37	0.00			0.61	0.08	0.00	0.00	0.00	0.00	

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
1	24.00	23.90	0.03477	0.0	0.01416	0.08	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.014
2	23.90	23.80	0.03553	0.0	0.01447	0.08	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.014
3	23.80	23.70	0.03630	0.0	0.01478	0.08	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.015
4	23.70	23.60	0.03707	0.0	0.01510	0.08	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.015
5	23.60	23.50	0.03783	0.0	0.01541	0.08	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.015
6	23.50	23.40	0.03860	0.0	0.01572	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.016
7	23.40	23.30	0.03937	0.0	0.01603	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.016
8	23.30	23.20	0.04013	0.0	0.01635	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.016
9	23.20	23.10	0.04090	0.0	0.01666	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.017
10	23.10	23.00	0.04167	0.0	0.01697	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.017
11	23.00	22.90	0.04243	0.0	0.01728	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.017
12	22.90	22.80	0.04320	0.0	0.01760	0.07	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.018
13	22.80	22.70	0.04397	0.0	0.01791	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.018
14	22.70	22.60	0.04473	0.0	0.01822	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.018
15	22.60	22.50	0.04550	0.0	0.01853	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.019
16	22.50	22.40	0.04627	0.0	0.01884	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.019
17	22.40	22.30	0.04703	0.0	0.01916	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.019
18	22.30	22.20	0.04780	0.0	0.01947	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.019
19	22.20	22.10	0.04857	0.0	0.01978	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.020
20	22.10	22.00	0.04933	0.0	0.02009	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.020
21	22.00	21.90	0.05010	0.0	0.02041	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.020
22	21.90	21.80	0.05087	0.0	0.02072	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.021
23	21.80	21.70	0.05163	0.0	0.02103	0.06	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.021
24	21.70	21.60	0.05240	0.0	0.02134	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.021
25	21.60	21.50	0.05317	0.0	0.02165	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.022
26	21.50	21.40	0.05393	0.0	0.02197	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.022
27	21.40	21.30	0.05470	0.0	0.02228	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.022
28	21.30	21.20	0.05547	0.0	0.02259	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.023
29	21.20	21.10	0.05623	0.0	0.02290	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.023
30	21.10	21.00	0.05700	0.0	0.02322	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.023
31	21.00	20.90	0.05777	0.0	0.02353	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.024
32	20.90	20.80	0.05853	0.0	0.02384	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.024
33	20.80	20.70	0.05930	0.0	0.02415	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.024
34	20.70	20.60	0.06007	0.0	0.02447	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.024
35	20.60	20.50	0.06083	0.0	0.02478	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.025
36	20.50	20.40	0.06160	0.0	0.02509	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.025
37	20.40	20.30	0.06237	0.0	0.02540	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.025
38	20.30	20.20	0.06313	0.0	0.02571	0.05	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.026

39	20.20	20.10	0.06390	0.0	0.02603	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.026
40	20.10	20.00	0.06467	0.0	0.02634	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.026
41	20.00	19.90	0.06543	0.0	0.02665	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.027
42	19.90	19.80	0.06620	0.0	0.02696	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.027
43	19.80	19.70	0.06697	0.0	0.02728	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.027
44	19.70	19.60	0.06773	0.0	0.02759	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.028
45	19.60	19.50	0.06850	0.0	0.02790	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.028
46	19.50	19.40	0.06927	0.0	0.02821	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.028
47	19.40	19.30	0.07003	0.0	0.02852	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.029
48	19.30	19.20	0.07080	0.0	0.02884	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.029
49	19.20	19.10	0.07157	0.0	0.02915	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.029
50	19.10	19.00	0.07233	0.0	0.02946	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.029
51	19.00	18.90	0.07310	0.0	0.02977	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.030
52	18.90	18.80	0.07387	0.0	0.03009	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.030
53	18.80	18.70	0.07463	0.0	0.03040	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.030
54	18.70	18.60	0.07540	0.0	0.03071	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.031
55	18.60	18.50	0.07617	0.0	0.03102	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.031
56	18.50	18.40	0.07693	0.0	0.03133	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.031
57	18.40	18.30	0.07770	0.0	0.03165	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.032
58	18.30	18.20	0.07847	0.0	0.03196	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.032
59	18.20	18.10	0.07923	0.0	0.03227	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.032
60	18.10	18.00	0.08000	0.0	0.03258	0.04	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.033
TOT						3.15			14731.19	47520.00					
AVG					0.0221		0.31	7.92			2.46				
CUM						3.15									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	BKGD SOD *	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	23.900	7.93	3.21	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	23.800	7.93	3.22	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	23.700	7.93	3.24	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	23.600	7.93	3.26	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	23.500	7.93	3.27	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	23.400	7.93	3.29	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	23.300	7.93	3.31	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	23.200	7.93	3.32	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	23.100	7.93	3.34	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	23.000	7.93	3.35	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	22.900	7.93	3.37	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	22.800	7.93	3.39	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	22.700	7.93	3.40	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	22.600	7.93	3.42	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	22.500	7.93	3.44	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	22.400	7.93	3.45	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	22.300	7.93	3.47	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	22.200	7.93	3.49	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

19	22.100	7.93	3.50	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	22.000	7.93	3.52	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	21.900	7.93	3.54	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	21.800	7.93	3.55	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	21.700	7.93	3.57	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	21.600	7.93	3.59	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	21.500	7.93	3.60	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	21.400	7.93	3.62	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	21.300	7.93	3.64	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	21.200	7.93	3.65	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	21.100	7.93	3.67	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	21.000	7.93	3.68	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	20.900	7.93	3.70	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32	20.800	7.93	3.72	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33	20.700	7.93	3.73	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34	20.600	7.93	3.75	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	20.500	7.93	3.77	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36	20.400	7.93	3.78	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37	20.300	7.93	3.80	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	20.200	7.93	3.82	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39	20.100	7.93	3.83	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	20.000	7.93	3.85	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	19.900	7.93	3.87	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	19.800	7.93	3.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	19.700	7.93	3.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	19.600	7.93	3.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	19.500	7.93	3.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	19.400	7.93	3.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	19.300	7.93	3.97	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	19.200	7.93	3.98	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	19.100	7.93	4.00	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	19.000	7.93	4.02	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	18.900	7.93	4.03	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	18.800	7.93	4.05	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	18.700	7.93	4.06	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	18.600	7.93	4.08	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	18.500	7.93	4.10	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	18.400	7.93	4.11	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	18.300	7.93	4.13	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	18.200	7.93	4.15	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	18.100	7.93	4.16	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	18.000	7.93	4.18	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			3.22	0.11	0.00	0.00	0.00	0.00	0.00	0.98			0.02	0.00	0.10	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM

1	23.900	27.30	0.00	0.00	0.00	5.27	1.37	0.00	1.37	0.00	0.61	0.08	0.00	0.69	0.00	0.00	0.00	0.	0.00
2	23.800	27.30	0.00	0.00	0.00	5.48	1.37	0.00	1.37	0.00	0.61	0.08	0.00	0.70	0.00	0.00	0.00	0.	0.00
3	23.700	27.30	0.00	0.00	0.00	5.64	1.37	0.00	1.37	0.00	0.62	0.08	0.00	0.70	0.00	0.00	0.00	0.	0.00
4	23.600	27.30	0.00	0.00	0.00	5.76	1.37	0.00	1.37	0.00	0.62	0.08	0.00	0.70	0.00	0.00	0.00	0.	0.00
5	23.500	27.30	0.00	0.00	0.00	5.86	1.37	0.00	1.37	0.00	0.62	0.08	0.00	0.71	0.00	0.00	0.00	0.	0.00
6	23.400	27.30	0.00	0.00	0.00	5.93	1.37	0.00	1.37	0.00	0.62	0.08	0.01	0.71	0.00	0.00	0.00	0.	0.00
7	23.300	27.30	0.00	0.00	0.00	6.00	1.36	0.00	1.36	0.00	0.62	0.08	0.01	0.71	0.00	0.00	0.00	0.	0.00
8	23.200	27.30	0.00	0.00	0.00	6.05	1.36	0.00	1.36	0.00	0.63	0.08	0.01	0.71	0.00	0.00	0.00	0.	0.00
9	23.100	27.30	0.00	0.00	0.00	6.09	1.36	0.00	1.36	0.00	0.63	0.08	0.01	0.72	0.00	0.00	0.00	0.	0.00
10	23.000	27.30	0.00	0.00	0.00	6.12	1.36	0.00	1.36	0.00	0.63	0.08	0.01	0.72	0.00	0.00	0.00	0.	0.00
11	22.900	27.30	0.00	0.00	0.00	6.15	1.36	0.00	1.36	0.00	0.63	0.08	0.01	0.72	0.00	0.00	0.00	0.	0.00
12	22.800	27.30	0.00	0.00	0.00	6.17	1.36	0.00	1.36	0.00	0.63	0.08	0.01	0.72	0.00	0.00	0.00	0.	0.00
13	22.700	27.30	0.00	0.00	0.00	6.19	1.36	0.00	1.36	0.00	0.63	0.08	0.01	0.73	0.00	0.00	0.00	0.	0.00
14	22.600	27.30	0.00	0.00	0.00	6.21	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.73	0.00	0.00	0.00	0.	0.00
15	22.500	27.30	0.00	0.00	0.00	6.23	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.73	0.00	0.00	0.00	0.	0.00
16	22.400	27.30	0.00	0.00	0.00	6.24	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.73	0.00	0.00	0.00	0.	0.00
17	22.300	27.30	0.00	0.00	0.00	6.25	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.73	0.00	0.00	0.00	0.	0.00
18	22.200	27.30	0.00	0.00	0.00	6.26	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.74	0.00	0.00	0.00	0.	0.00
19	22.100	27.30	0.00	0.00	0.00	6.27	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.74	0.00	0.00	0.00	0.	0.00
20	22.000	27.30	0.00	0.00	0.00	6.28	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.74	0.00	0.00	0.00	0.	0.00
21	21.900	27.30	0.00	0.00	0.00	6.29	1.36	0.00	1.36	0.00	0.64	0.08	0.01	0.74	0.00	0.00	0.00	0.	0.00
22	21.800	27.30	0.00	0.00	0.00	6.30	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.74	0.00	0.00	0.00	0.	0.00
23	21.700	27.30	0.00	0.00	0.00	6.31	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.74	0.00	0.00	0.00	0.	0.00
24	21.600	27.30	0.00	0.00	0.00	6.32	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.00	0.00	0.	0.00
25	21.500	27.30	0.00	0.00	0.00	6.32	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.00	0.00	0.	0.00
26	21.400	27.30	0.00	0.00	0.00	6.33	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.00	0.00	0.	0.00
27	21.300	27.30	0.00	0.00	0.00	6.34	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.00	0.00	0.	0.00
28	21.200	27.30	0.00	0.00	0.00	6.35	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.00	0.00	0.	0.00
29	21.100	27.30	0.00	0.00	0.00	6.35	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.00	0.00	0.	0.00
30	21.000	27.30	0.00	0.00	0.00	6.36	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.75	0.00	0.00	0.00	0.	0.00
31	20.900	27.30	0.00	0.00	0.00	6.37	1.36	0.00	1.36	0.00	0.65	0.08	0.02	0.76	0.00	0.00	0.00	0.	0.00
32	20.800	27.30	0.00	0.00	0.00	6.37	1.35	0.00	1.35	0.00	0.65	0.08	0.02	0.76	0.00	0.00	0.00	0.	0.00
33	20.700	27.30	0.00	0.00	0.00	6.38	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.76	0.00	0.00	0.00	0.	0.00
34	20.600	27.30	0.00	0.00	0.00	6.39	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.76	0.00	0.00	0.00	0.	0.00
35	20.500	27.30	0.00	0.00	0.00	6.39	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.76	0.00	0.00	0.00	0.	0.00
36	20.400	27.30	0.00	0.00	0.00	6.40	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.76	0.00	0.00	0.00	0.	0.00
37	20.300	27.30	0.00	0.00	0.00	6.40	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.76	0.00	0.00	0.00	0.	0.00
38	20.200	27.30	0.00	0.00	0.00	6.41	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.76	0.00	0.00	0.00	0.	0.00
39	20.100	27.30	0.00	0.00	0.00	6.42	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.00	0.00	0.	0.00
40	20.000	27.30	0.00	0.00	0.00	6.42	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.00	0.00	0.	0.00
41	19.900	27.30	0.00	0.00	0.00	6.43	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.00	0.00	0.	0.00
42	19.800	27.30	0.00	0.00	0.00	6.43	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.00	0.00	0.	0.00
43	19.700	27.30	0.00	0.00	0.00	6.44	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.00	0.00	0.	0.00
44	19.600	27.30	0.00	0.00	0.00	6.45	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.00	0.00	0.	0.00
45	19.500	27.30	0.00	0.00	0.00	6.45	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.00	0.00	0.	0.00
46	19.400	27.30	0.00	0.00	0.00	6.46	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.00	0.00	0.	0.00
47	19.300	27.30	0.00	0.00	0.00	6.46	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.00	0.00	0.	0.00
48	19.200	27.30	0.00	0.00	0.00	6.47	1.35	0.00	1.35	0.00	0.66	0.08	0.02	0.77	0.00	0.00	0.00	0.	0.00
49	19.100	27.30	0.00	0.00	0.00	6.47	1.35	0.00	1.35	0.00	0.67	0.08	0.02	0.77	0.00	0.00	0.00	0.	0.00
50	19.000	27.30	0.00	0.00	0.00	6.48	1.35	0.00	1.35	0.00	0.67	0.08	0.02	0.78	0.00	0.00	0.00	0.	0.00
51	18.900	27.30	0.00	0.00	0.00	6.48	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.00	0.00	0.	0.00

52	18.800	27.30	0.00	0.00	0.00	6.49	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.00	0.00	0.	0.00
53	18.700	27.30	0.00	0.00	0.00	6.50	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.00	0.00	0.	0.00
54	18.600	27.30	0.00	0.00	0.00	6.50	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.00	0.00	0.	0.00
55	18.500	27.30	0.00	0.00	0.00	6.51	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.00	0.00	0.	0.00
56	18.400	27.30	0.00	0.00	0.00	6.51	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.00	0.00	0.	0.00
57	18.300	27.30	0.00	0.00	0.00	6.52	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.00	0.00	0.	0.00
58	18.200	27.30	0.00	0.00	0.00	6.52	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.00	0.00	0.	0.00
59	18.100	27.30	0.00	0.00	0.00	6.53	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.00	0.00	0.	0.00
60	18.000	27.30	0.00	0.00	0.00	6.53	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.00	0.00	0.	0.00

FINAL REPORT Bayou Toro @ 110401A LA-QUAL Summer Projection for Bayou Toro
REACH NO. 2 Bayou Toro

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM
61	UPR RCH	0.08000	27.30	0.00	0.00	0.00	6.53	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.00	0.00	0.00	0.00
EACH	INCR	0.00077	27.30	0.00	0.00	0.00	5.01	1.37	0.00			0.61	0.08	0.00	0.00	0.00	0.00	
81	WSTLD	0.00300	27.30	0.00	0.00	0.00	5.01	1.40	0.00	1.40	0.00	0.61	0.08	0.00	0.00	0.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
61	18.00	17.90	0.08077	0.0	0.01812	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.018
62	17.90	17.80	0.08153	0.0	0.01829	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.018
63	17.80	17.70	0.08230	0.0	0.01847	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.018
64	17.70	17.60	0.08307	0.0	0.01864	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.019
65	17.60	17.50	0.08383	0.0	0.01881	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.019
66	17.50	17.40	0.08460	0.0	0.01898	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.019
67	17.40	17.30	0.08537	0.0	0.01915	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.019
68	17.30	17.20	0.08613	0.0	0.01933	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.019
69	17.20	17.10	0.08690	0.0	0.01950	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.019
70	17.10	17.00	0.08767	0.0	0.01967	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.020
71	17.00	16.90	0.08843	0.0	0.01984	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.020
72	16.90	16.80	0.08920	0.0	0.02001	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.020
73	16.80	16.70	0.08997	0.0	0.02019	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.020
74	16.70	16.60	0.09073	0.0	0.02036	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.020
75	16.60	16.50	0.09150	0.0	0.02053	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.021
76	16.50	16.40	0.09227	0.0	0.02070	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.021
77	16.40	16.30	0.09303	0.0	0.02087	0.06	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.021
78	16.30	16.20	0.09380	0.0	0.02105	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.021
79	16.20	16.10	0.09457	0.0	0.02122	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.021
80	16.10	16.00	0.09533	0.0	0.02139	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.021
81	16.00	15.90	0.09910	3.0	0.02224	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.022

82	15.90	15.80	0.09987	3.0	0.02241	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.022
83	15.80	15.70	0.10063	3.0	0.02258	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.023
84	15.70	15.60	0.10140	3.0	0.02275	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.023
85	15.60	15.50	0.10217	2.9	0.02292	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.023
86	15.50	15.40	0.10293	2.9	0.02310	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.023
87	15.40	15.30	0.10370	2.9	0.02327	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.023
88	15.30	15.20	0.10447	2.9	0.02344	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.023
89	15.20	15.10	0.10523	2.9	0.02361	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.024
90	15.10	15.00	0.10600	2.8	0.02378	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.024
91	15.00	14.90	0.10677	2.8	0.02396	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.024
92	14.90	14.80	0.10753	2.8	0.02413	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.024
93	14.80	14.70	0.10830	2.8	0.02430	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.024
94	14.70	14.60	0.10907	2.8	0.02447	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.024
95	14.60	14.50	0.10983	2.7	0.02464	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.025
96	14.50	14.40	0.11060	2.7	0.02482	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.025
97	14.40	14.30	0.11137	2.7	0.02499	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.025
98	14.30	14.20	0.11213	2.7	0.02516	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.025
99	14.20	14.10	0.11290	2.7	0.02533	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.025
100	14.10	14.00	0.11367	2.6	0.02550	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.026
101	14.00	13.90	0.11443	2.6	0.02568	0.05	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.026
102	13.90	13.80	0.11520	2.6	0.02585	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.026
103	13.80	13.70	0.11597	2.6	0.02602	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.026
104	13.70	13.60	0.11673	2.6	0.02619	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.026
105	13.60	13.50	0.11750	2.6	0.02636	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.026
106	13.50	13.40	0.11827	2.5	0.02654	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.027
107	13.40	13.30	0.11903	2.5	0.02671	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.027
108	13.30	13.20	0.11980	2.5	0.02688	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.027
109	13.20	13.10	0.12057	2.5	0.02705	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.027
110	13.10	13.00	0.12133	2.5	0.02722	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.027
111	13.00	12.90	0.12210	2.5	0.02740	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.027
112	12.90	12.80	0.12287	2.4	0.02757	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.028
113	12.80	12.70	0.12363	2.4	0.02774	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.028
114	12.70	12.60	0.12440	2.4	0.02791	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.028
115	12.60	12.50	0.12517	2.4	0.02809	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.028
116	12.50	12.40	0.12593	2.4	0.02826	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.028
117	12.40	12.30	0.12670	2.4	0.02843	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.028
118	12.30	12.20	0.12747	2.4	0.02860	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.029
119	12.20	12.10	0.12823	2.3	0.02877	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.029
120	12.10	12.00	0.12900	2.3	0.02895	0.04	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.029
TOT						2.99			26740.20	65220.00					
AVG					0.0232		0.41	10.87			4.46				
CUM						6.14									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	BKGD SOD *	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
61	17.900	7.93	2.58	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

62	17.800	7.93	2.59	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
63	17.700	7.93	2.60	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	17.600	7.93	2.60	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	17.500	7.93	2.61	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	17.400	7.93	2.62	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	17.300	7.93	2.62	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	17.200	7.93	2.63	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	17.100	7.93	2.64	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	17.000	7.93	2.64	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
71	16.900	7.93	2.65	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	16.800	7.93	2.66	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73	16.700	7.93	2.66	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	16.600	7.93	2.67	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	16.500	7.93	2.68	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76	16.400	7.93	2.69	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77	16.300	7.93	2.69	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	16.200	7.93	2.70	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79	16.100	7.93	2.71	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	16.000	7.93	2.71	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
81	15.900	7.93	2.75	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	15.800	7.93	2.75	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
83	15.700	7.93	2.76	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	15.600	7.93	2.77	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	15.500	7.93	2.77	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	15.400	7.93	2.78	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87	15.300	7.93	2.79	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88	15.200	7.93	2.80	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89	15.100	7.93	2.80	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	15.000	7.93	2.81	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91	14.900	7.93	2.82	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92	14.800	7.93	2.82	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
93	14.700	7.93	2.83	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
94	14.600	7.93	2.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	14.500	7.93	2.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
96	14.400	7.93	2.85	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97	14.300	7.93	2.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
98	14.200	7.93	2.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
99	14.100	7.93	2.87	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	14.000	7.93	2.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
101	13.900	7.93	2.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102	13.800	7.93	2.89	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103	13.700	7.93	2.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
104	13.600	7.93	2.91	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	13.500	7.93	2.91	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106	13.400	7.93	2.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107	13.300	7.93	2.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
108	13.200	7.93	2.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
109	13.100	7.93	2.94	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	13.000	7.93	2.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
111	12.900	7.93	2.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112	12.800	7.93	2.96	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113	12.700	7.93	2.97	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

114	12.600	7.93	2.97	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	12.500	7.93	2.98	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
116	12.400	7.93	2.99	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117	12.300	7.93	2.99	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
118	12.200	7.93	3.00	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
119	12.100	7.93	3.01	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	12.000	7.93	3.02	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.44	0.11	0.00	0.00	0.00	0.00	0.00	0.98			0.02	0.00	0.10	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
61	17.900	27.30	0.00	0.00	0.00	6.49	1.35	0.00	1.35	0.00	0.67	0.08	0.03	0.78	0.00	0.00	0.00	0.	0.00
62	17.800	27.30	0.00	0.00	0.00	6.46	1.34	0.00	1.34	0.00	0.67	0.08	0.03	0.79	0.00	0.00	0.00	0.	0.00
63	17.700	27.30	0.00	0.00	0.00	6.44	1.34	0.00	1.34	0.00	0.67	0.09	0.03	0.79	0.00	0.00	0.00	0.	0.00
64	17.600	27.30	0.00	0.00	0.00	6.42	1.34	0.00	1.34	0.00	0.67	0.09	0.03	0.79	0.00	0.00	0.00	0.	0.00
65	17.500	27.30	0.00	0.00	0.00	6.40	1.33	0.00	1.33	0.00	0.67	0.09	0.03	0.79	0.00	0.00	0.00	0.	0.00
66	17.400	27.30	0.00	0.00	0.00	6.39	1.33	0.00	1.33	0.00	0.67	0.09	0.03	0.79	0.00	0.00	0.00	0.	0.00
67	17.300	27.30	0.00	0.00	0.00	6.38	1.33	0.00	1.33	0.00	0.67	0.09	0.03	0.79	0.00	0.00	0.00	0.	0.00
68	17.200	27.30	0.00	0.00	0.00	6.37	1.32	0.00	1.32	0.00	0.67	0.09	0.03	0.79	0.00	0.00	0.00	0.	0.00
69	17.100	27.30	0.00	0.00	0.00	6.36	1.32	0.00	1.32	0.00	0.68	0.09	0.03	0.79	0.00	0.00	0.00	0.	0.00
70	17.000	27.30	0.00	0.00	0.00	6.35	1.32	0.00	1.32	0.00	0.68	0.09	0.03	0.79	0.00	0.00	0.00	0.	0.00
71	16.900	27.30	0.00	0.00	0.00	6.35	1.32	0.00	1.32	0.00	0.68	0.09	0.03	0.79	0.00	0.00	0.00	0.	0.00
72	16.800	27.30	0.00	0.00	0.00	6.35	1.31	0.00	1.31	0.00	0.68	0.09	0.03	0.80	0.00	0.00	0.00	0.	0.00
73	16.700	27.30	0.00	0.00	0.00	6.35	1.31	0.00	1.31	0.00	0.68	0.09	0.03	0.80	0.00	0.00	0.00	0.	0.00
74	16.600	27.30	0.00	0.00	0.00	6.34	1.31	0.00	1.31	0.00	0.68	0.09	0.03	0.80	0.00	0.00	0.00	0.	0.00
75	16.500	27.30	0.00	0.00	0.00	6.34	1.30	0.00	1.30	0.00	0.68	0.09	0.04	0.80	0.00	0.00	0.00	0.	0.00
76	16.400	27.30	0.00	0.00	0.00	6.34	1.30	0.00	1.30	0.00	0.68	0.09	0.04	0.80	0.00	0.00	0.00	0.	0.00
77	16.300	27.30	0.00	0.00	0.00	6.35	1.30	0.00	1.30	0.00	0.68	0.09	0.04	0.80	0.00	0.00	0.00	0.	0.00
78	16.200	27.30	0.00	0.00	0.00	6.35	1.30	0.00	1.30	0.00	0.68	0.09	0.04	0.80	0.00	0.00	0.00	0.	0.00
79	16.100	27.30	0.00	0.00	0.00	6.35	1.30	0.00	1.30	0.00	0.68	0.09	0.04	0.80	0.00	0.00	0.00	0.	0.00
80	16.000	27.30	0.00	0.00	0.00	6.35	1.29	0.00	1.29	0.00	0.68	0.09	0.04	0.80	0.00	0.00	0.00	0.	0.00
81	15.900	27.30	0.00	0.00	0.00	6.32	1.29	0.00	1.29	0.00	0.68	0.09	0.04	0.80	0.00	0.00	0.00	0.	0.00
82	15.800	27.30	0.00	0.00	0.00	6.33	1.29	0.00	1.29	0.00	0.68	0.09	0.04	0.80	0.00	0.00	0.00	0.	0.00
83	15.700	27.30	0.00	0.00	0.00	6.33	1.29	0.00	1.29	0.00	0.68	0.09	0.04	0.80	0.00	0.00	0.00	0.	0.00
84	15.600	27.30	0.00	0.00	0.00	6.34	1.29	0.00	1.29	0.00	0.68	0.09	0.04	0.80	0.00	0.00	0.00	0.	0.00
85	15.500	27.30	0.00	0.00	0.00	6.35	1.29	0.00	1.29	0.00	0.68	0.09	0.04	0.80	0.00	0.00	0.00	0.	0.00
86	15.400	27.30	0.00	0.00	0.00	6.36	1.28	0.00	1.28	0.00	0.68	0.09	0.04	0.80	0.00	0.00	0.00	0.	0.00
87	15.300	27.30	0.00	0.00	0.00	6.36	1.28	0.00	1.28	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00
88	15.200	27.30	0.00	0.00	0.00	6.37	1.28	0.00	1.28	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00
89	15.100	27.30	0.00	0.00	0.00	6.37	1.28	0.00	1.28	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00
90	15.000	27.30	0.00	0.00	0.00	6.38	1.28	0.00	1.28	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00
91	14.900	27.30	0.00	0.00	0.00	6.38	1.28	0.00	1.28	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00
92	14.800	27.30	0.00	0.00	0.00	6.39	1.27	0.00	1.27	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00
93	14.700	27.30	0.00	0.00	0.00	6.39	1.27	0.00	1.27	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00
94	14.600	27.30	0.00	0.00	0.00	6.40	1.27	0.00	1.27	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00

95	14.500	27.30	0.00	0.00	0.00	6.40	1.27	0.00	1.27	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00
96	14.400	27.30	0.00	0.00	0.00	6.40	1.27	0.00	1.27	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00
97	14.300	27.30	0.00	0.00	0.00	6.41	1.27	0.00	1.27	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00
98	14.200	27.30	0.00	0.00	0.00	6.41	1.26	0.00	1.26	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00
99	14.100	27.30	0.00	0.00	0.00	6.42	1.26	0.00	1.26	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00
100	14.000	27.30	0.00	0.00	0.00	6.42	1.26	0.00	1.26	0.00	0.68	0.09	0.04	0.81	0.00	0.00	0.00	0.	0.00
101	13.900	27.30	0.00	0.00	0.00	6.42	1.26	0.00	1.26	0.00	0.68	0.09	0.04	0.82	0.00	0.00	0.00	0.	0.00
102	13.800	27.30	0.00	0.00	0.00	6.43	1.26	0.00	1.26	0.00	0.68	0.09	0.04	0.82	0.00	0.00	0.00	0.	0.00
103	13.700	27.30	0.00	0.00	0.00	6.43	1.26	0.00	1.26	0.00	0.68	0.09	0.04	0.82	0.00	0.00	0.00	0.	0.00
104	13.600	27.30	0.00	0.00	0.00	6.43	1.26	0.00	1.26	0.00	0.69	0.09	0.04	0.82	0.00	0.00	0.00	0.	0.00
105	13.500	27.30	0.00	0.00	0.00	6.44	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.00	0.00	0.	0.00
106	13.400	27.30	0.00	0.00	0.00	6.44	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.00	0.00	0.	0.00
107	13.300	27.30	0.00	0.00	0.00	6.45	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.00	0.00	0.	0.00
108	13.200	27.30	0.00	0.00	0.00	6.45	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.00	0.00	0.	0.00
109	13.100	27.30	0.00	0.00	0.00	6.45	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.00	0.00	0.	0.00
110	13.000	27.30	0.00	0.00	0.00	6.46	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.00	0.00	0.	0.00
111	12.900	27.30	0.00	0.00	0.00	6.46	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.00	0.00	0.	0.00
112	12.800	27.30	0.00	0.00	0.00	6.46	1.25	0.00	1.25	0.00	0.69	0.09	0.05	0.82	0.00	0.00	0.00	0.	0.00
113	12.700	27.30	0.00	0.00	0.00	6.47	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.82	0.00	0.00	0.00	0.	0.00
114	12.600	27.30	0.00	0.00	0.00	6.47	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.82	0.00	0.00	0.00	0.	0.00
115	12.500	27.30	0.00	0.00	0.00	6.47	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.82	0.00	0.00	0.00	0.	0.00
116	12.400	27.30	0.00	0.00	0.00	6.48	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.82	0.00	0.00	0.00	0.	0.00
117	12.300	27.30	0.00	0.00	0.00	6.48	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.82	0.00	0.00	0.00	0.	0.00
118	12.200	27.30	0.00	0.00	0.00	6.48	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.83	0.00	0.00	0.00	0.	0.00
119	12.100	27.30	0.00	0.00	0.00	6.48	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.83	0.00	0.00	0.00	0.	0.00
120	12.000	27.30	0.00	0.00	0.00	6.49	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.83	0.00	0.00	0.00	0.	0.00

FINAL REPORT Bayou Toro @ 110401A LA-QUAL Summer Projection for Bayou Toro
REACH NO. 3 Bayou Toro

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM
121	UPR RCH	0.12900	27.30	0.00	0.00	0.00	6.49	1.24	0.00	1.24	0.00	0.69	0.09	0.05	0.00	0.00	0.00	0.00
EACH	INCR	0.00077	27.30	0.00	0.00	0.00	5.01	1.37	0.00			0.61	0.08	0.00	0.00	0.00	0.00	
149	WSTLD	0.00060	27.30	0.00	0.00	0.00	5.00	69.00	0.00	69.00	0.00	5.00	10.00	0.00	0.00	0.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
121	12.00	11.90	0.12977	2.3	0.01878	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.019
122	11.90	11.80	0.13053	2.3	0.01889	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.019
123	11.80	11.70	0.13130	2.3	0.01900	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.019
124	11.70	11.60	0.13207	2.3	0.01911	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.019

125	11.60	11.50	0.13283	2.3	0.01922	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.019
126	11.50	11.40	0.13360	2.2	0.01933	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.019
127	11.40	11.30	0.13437	2.2	0.01945	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.019
128	11.30	11.20	0.13513	2.2	0.01956	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.020
129	11.20	11.10	0.13590	2.2	0.01967	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.020
130	11.10	11.00	0.13667	2.2	0.01978	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.020
131	11.00	10.90	0.13743	2.2	0.01989	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.020
132	10.90	10.80	0.13820	2.2	0.02000	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.020
133	10.80	10.70	0.13897	2.2	0.02011	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.020
134	10.70	10.60	0.13973	2.1	0.02022	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.020
135	10.60	10.50	0.14050	2.1	0.02033	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.020
136	10.50	10.40	0.14127	2.1	0.02044	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.020
137	10.40	10.30	0.14203	2.1	0.02055	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
138	10.30	10.20	0.14280	2.1	0.02067	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
139	10.20	10.10	0.14357	2.1	0.02078	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
140	10.10	10.00	0.14433	2.1	0.02089	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
141	10.00	9.90	0.14510	2.1	0.02100	0.06	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
142	9.90	9.80	0.14587	2.1	0.02111	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
143	9.80	9.70	0.14663	2.0	0.02122	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
144	9.70	9.60	0.14740	2.0	0.02133	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
145	9.60	9.50	0.14817	2.0	0.02144	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.021
146	9.50	9.40	0.14893	2.0	0.02155	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
147	9.40	9.30	0.14970	2.0	0.02166	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
148	9.30	9.20	0.15047	2.0	0.02178	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
149	9.20	9.10	0.15183	2.4	0.02197	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
150	9.10	9.00	0.15260	2.4	0.02208	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
151	9.00	8.90	0.15337	2.3	0.02219	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
152	8.90	8.80	0.15413	2.3	0.02231	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
153	8.80	8.70	0.15490	2.3	0.02242	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.022
154	8.70	8.60	0.15567	2.3	0.02253	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
155	8.60	8.50	0.15643	2.3	0.02264	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
156	8.50	8.40	0.15720	2.3	0.02275	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
157	8.40	8.30	0.15797	2.3	0.02286	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
158	8.30	8.20	0.15873	2.3	0.02297	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
159	8.20	8.10	0.15950	2.3	0.02308	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
160	8.10	8.00	0.16027	2.2	0.02319	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
161	8.00	7.90	0.16103	2.2	0.02330	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
162	7.90	7.80	0.16180	2.2	0.02342	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.023
163	7.80	7.70	0.16257	2.2	0.02353	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
164	7.70	7.60	0.16333	2.2	0.02364	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
165	7.60	7.50	0.16410	2.2	0.02375	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
166	7.50	7.40	0.16487	2.2	0.02386	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
167	7.40	7.30	0.16563	2.2	0.02397	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
168	7.30	7.20	0.16640	2.2	0.02408	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
169	7.20	7.10	0.16717	2.2	0.02419	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
170	7.10	7.00	0.16793	2.1	0.02430	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
171	7.00	6.90	0.16870	2.1	0.02441	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.024
172	6.90	6.80	0.16947	2.1	0.02452	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
173	6.80	6.70	0.17023	2.1	0.02464	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
174	6.70	6.60	0.17100	2.1	0.02475	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
175	6.60	6.50	0.17177	2.1	0.02486	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
176	6.50	6.40	0.17253	2.1	0.02497	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025

177	6.40	6.30	0.17330	2.1	0.02508	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
178	6.30	6.20	0.17407	2.1	0.02519	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
179	6.20	6.10	0.17483	2.1	0.02530	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
180	6.10	6.00	0.17560	2.1	0.02541	0.05	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.025
TOT						3.17			41460.00	82920.00					
AVG					0.0219		0.50	13.82			6.91				
CUM						9.31									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	BKGD SOD *	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
121	11.900	7.93	2.14	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122	11.800	7.93	2.14	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
123	11.700	7.93	2.15	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
124	11.600	7.93	2.15	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	11.500	7.93	2.15	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126	11.400	7.93	2.16	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127	11.300	7.93	2.16	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
128	11.200	7.93	2.16	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
129	11.100	7.93	2.17	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	11.000	7.93	2.17	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
131	10.900	7.93	2.18	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132	10.800	7.93	2.18	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
133	10.700	7.93	2.18	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
134	10.600	7.93	2.19	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	10.500	7.93	2.19	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
136	10.400	7.93	2.19	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137	10.300	7.93	2.20	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
138	10.200	7.93	2.20	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
139	10.100	7.93	2.20	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	10.000	7.93	2.21	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
141	9.900	7.93	2.21	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142	9.800	7.93	2.22	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
143	9.700	7.93	2.22	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
144	9.600	7.93	2.22	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	9.500	7.93	2.23	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146	9.400	7.93	2.23	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147	9.300	7.93	2.23	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
148	9.200	7.93	2.24	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
149	9.100	7.93	2.24	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	9.000	7.93	2.25	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
151	8.900	7.93	2.25	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152	8.800	7.93	2.25	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153	8.700	7.93	2.26	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
154	8.600	7.93	2.26	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	8.500	7.93	2.27	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
156	8.400	7.93	2.27	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

157	8.300	7.93	2.27	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
158	8.200	7.93	2.28	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
159	8.100	7.93	2.28	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	8.000	7.93	2.28	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161	7.900	7.93	2.29	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162	7.800	7.93	2.29	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
163	7.700	7.93	2.29	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
164	7.600	7.93	2.30	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	7.500	7.93	2.30	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166	7.400	7.93	2.31	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167	7.300	7.93	2.31	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
168	7.200	7.93	2.31	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
169	7.100	7.93	2.32	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	7.000	7.93	2.32	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
171	6.900	7.93	2.32	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172	6.800	7.93	2.33	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
173	6.700	7.93	2.33	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
174	6.600	7.93	2.33	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	6.500	7.93	2.34	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
176	6.400	7.93	2.34	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177	6.300	7.93	2.35	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
178	6.200	7.93	2.35	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
179	6.100	7.93	2.35	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	6.000	7.93	2.36	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			1.96	0.11	0.00	0.00	0.00	0.00	0.00	0.98			0.02	0.00	0.10	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
121	11.900	27.30	0.00	0.00	0.00	6.47	1.23	0.00	1.23	0.00	0.69	0.09	0.05	0.83	0.00	0.00	0.00	0.	0.00
122	11.800	27.30	0.00	0.00	0.00	6.45	1.23	0.00	1.23	0.00	0.69	0.09	0.05	0.83	0.00	0.00	0.00	0.	0.00
123	11.700	27.30	0.00	0.00	0.00	6.43	1.23	0.00	1.23	0.00	0.69	0.09	0.05	0.83	0.00	0.00	0.00	0.	0.00
124	11.600	27.30	0.00	0.00	0.00	6.41	1.22	0.00	1.22	0.00	0.69	0.09	0.05	0.83	0.00	0.00	0.00	0.	0.00
125	11.500	27.30	0.00	0.00	0.00	6.40	1.22	0.00	1.22	0.00	0.69	0.09	0.05	0.83	0.00	0.00	0.00	0.	0.00
126	11.400	27.30	0.00	0.00	0.00	6.39	1.22	0.00	1.22	0.00	0.69	0.09	0.05	0.83	0.00	0.00	0.00	0.	0.00
127	11.300	27.30	0.00	0.00	0.00	6.38	1.21	0.00	1.21	0.00	0.69	0.09	0.05	0.83	0.00	0.00	0.00	0.	0.00
128	11.200	27.30	0.00	0.00	0.00	6.37	1.21	0.00	1.21	0.00	0.69	0.09	0.05	0.83	0.00	0.00	0.00	0.	0.00
129	11.100	27.30	0.00	0.00	0.00	6.37	1.21	0.00	1.21	0.00	0.69	0.09	0.05	0.83	0.00	0.00	0.00	0.	0.00
130	11.000	27.30	0.00	0.00	0.00	6.36	1.20	0.00	1.20	0.00	0.69	0.09	0.05	0.83	0.00	0.00	0.00	0.	0.00
131	10.900	27.30	0.00	0.00	0.00	6.36	1.20	0.00	1.20	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00
132	10.800	27.30	0.00	0.00	0.00	6.36	1.20	0.00	1.20	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00
133	10.700	27.30	0.00	0.00	0.00	6.35	1.20	0.00	1.20	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00
134	10.600	27.30	0.00	0.00	0.00	6.35	1.19	0.00	1.19	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00
135	10.500	27.30	0.00	0.00	0.00	6.35	1.19	0.00	1.19	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00
136	10.400	27.30	0.00	0.00	0.00	6.35	1.19	0.00	1.19	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00
137	10.300	27.30	0.00	0.00	0.00	6.35	1.19	0.00	1.19	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00

138	10.200	27.30	0.00	0.00	0.00	6.35	1.18	0.00	1.18	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00
139	10.100	27.30	0.00	0.00	0.00	6.35	1.18	0.00	1.18	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00
140	10.000	27.30	0.00	0.00	0.00	6.35	1.18	0.00	1.18	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00
141	9.900	27.30	0.00	0.00	0.00	6.35	1.18	0.00	1.18	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00
142	9.800	27.30	0.00	0.00	0.00	6.35	1.17	0.00	1.17	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00
143	9.700	27.30	0.00	0.00	0.00	6.35	1.17	0.00	1.17	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00
144	9.600	27.30	0.00	0.00	0.00	6.35	1.17	0.00	1.17	0.00	0.69	0.09	0.06	0.84	0.00	0.00	0.00	0.	0.00
145	9.500	27.30	0.00	0.00	0.00	6.35	1.17	0.00	1.17	0.00	0.69	0.09	0.06	0.85	0.00	0.00	0.00	0.	0.00
146	9.400	27.30	0.00	0.00	0.00	6.36	1.16	0.00	1.16	0.00	0.69	0.09	0.06	0.85	0.00	0.00	0.00	0.	0.00
147	9.300	27.30	0.00	0.00	0.00	6.36	1.16	0.00	1.16	0.00	0.69	0.09	0.06	0.85	0.00	0.00	0.00	0.	0.00
148	9.200	27.30	0.00	0.00	0.00	6.36	1.16	0.00	1.16	0.00	0.69	0.09	0.06	0.85	0.00	0.00	0.00	0.	0.00
149	9.100	27.30	0.00	0.00	0.00	6.35	1.42	0.00	1.42	0.00	0.71	0.13	0.06	0.90	0.00	0.00	0.00	0.	0.00
150	9.000	27.30	0.00	0.00	0.00	6.35	1.42	0.00	1.42	0.00	0.71	0.13	0.06	0.90	0.00	0.00	0.00	0.	0.00
151	8.900	27.30	0.00	0.00	0.00	6.35	1.41	0.00	1.41	0.00	0.71	0.13	0.07	0.90	0.00	0.00	0.00	0.	0.00
152	8.800	27.30	0.00	0.00	0.00	6.35	1.41	0.00	1.41	0.00	0.71	0.13	0.07	0.91	0.00	0.00	0.00	0.	0.00
153	8.700	27.30	0.00	0.00	0.00	6.35	1.40	0.00	1.40	0.00	0.71	0.13	0.07	0.91	0.00	0.00	0.00	0.	0.00
154	8.600	27.30	0.00	0.00	0.00	6.36	1.40	0.00	1.40	0.00	0.71	0.13	0.07	0.91	0.00	0.00	0.00	0.	0.00
155	8.500	27.30	0.00	0.00	0.00	6.36	1.39	0.00	1.39	0.00	0.71	0.13	0.07	0.91	0.00	0.00	0.00	0.	0.00
156	8.400	27.30	0.00	0.00	0.00	6.36	1.39	0.00	1.39	0.00	0.71	0.13	0.07	0.91	0.00	0.00	0.00	0.	0.00
157	8.300	27.30	0.00	0.00	0.00	6.36	1.38	0.00	1.38	0.00	0.71	0.13	0.07	0.91	0.00	0.00	0.00	0.	0.00
158	8.200	27.30	0.00	0.00	0.00	6.36	1.38	0.00	1.38	0.00	0.71	0.13	0.07	0.91	0.00	0.00	0.00	0.	0.00
159	8.100	27.30	0.00	0.00	0.00	6.36	1.37	0.00	1.37	0.00	0.71	0.12	0.07	0.91	0.00	0.00	0.00	0.	0.00
160	8.000	27.30	0.00	0.00	0.00	6.36	1.37	0.00	1.37	0.00	0.71	0.12	0.07	0.91	0.00	0.00	0.00	0.	0.00
161	7.900	27.30	0.00	0.00	0.00	6.37	1.36	0.00	1.36	0.00	0.71	0.12	0.07	0.91	0.00	0.00	0.00	0.	0.00
162	7.800	27.30	0.00	0.00	0.00	6.37	1.36	0.00	1.36	0.00	0.71	0.12	0.07	0.91	0.00	0.00	0.00	0.	0.00
163	7.700	27.30	0.00	0.00	0.00	6.37	1.35	0.00	1.35	0.00	0.71	0.12	0.07	0.91	0.00	0.00	0.00	0.	0.00
164	7.600	27.30	0.00	0.00	0.00	6.37	1.35	0.00	1.35	0.00	0.71	0.12	0.07	0.91	0.00	0.00	0.00	0.	0.00
165	7.500	27.30	0.00	0.00	0.00	6.37	1.35	0.00	1.35	0.00	0.71	0.12	0.07	0.91	0.00	0.00	0.00	0.	0.00
166	7.400	27.30	0.00	0.00	0.00	6.38	1.34	0.00	1.34	0.00	0.71	0.12	0.07	0.91	0.00	0.00	0.00	0.	0.00
167	7.300	27.30	0.00	0.00	0.00	6.38	1.34	0.00	1.34	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
168	7.200	27.30	0.00	0.00	0.00	6.38	1.33	0.00	1.33	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
169	7.100	27.30	0.00	0.00	0.00	6.38	1.33	0.00	1.33	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
170	7.000	27.30	0.00	0.00	0.00	6.39	1.33	0.00	1.33	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
171	6.900	27.30	0.00	0.00	0.00	6.39	1.32	0.00	1.32	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
172	6.800	27.30	0.00	0.00	0.00	6.39	1.32	0.00	1.32	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
173	6.700	27.30	0.00	0.00	0.00	6.39	1.31	0.00	1.31	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
174	6.600	27.30	0.00	0.00	0.00	6.40	1.31	0.00	1.31	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
175	6.500	27.30	0.00	0.00	0.00	6.40	1.31	0.00	1.31	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
176	6.400	27.30	0.00	0.00	0.00	6.40	1.30	0.00	1.30	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
177	6.300	27.30	0.00	0.00	0.00	6.40	1.30	0.00	1.30	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
178	6.200	27.30	0.00	0.00	0.00	6.41	1.30	0.00	1.30	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
179	6.100	27.30	0.00	0.00	0.00	6.41	1.29	0.00	1.29	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
180	6.000	27.30	0.00	0.00	0.00	6.41	1.29	0.00	1.29	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00

FINAL REPORT Bayou Toro @ 110401A LA-QUAL Summer Projection for Bayou Toro
REACH NO. 4 Bayou Toro

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

ELEM	TYPE	FLOW	TEMP	SALN	CM-I	CM-II	DO	BOD#1	BOD#2	EBOD#1	EBOD#2	ORGN	NH3	NO3+2	PHOS	CHL A	COLI	NCM

NO.			deg C	ppt			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	#/100mL	
181	UPR RCH	0.17560	27.30	0.00	0.00	0.00	6.41	1.29	0.00	1.29	0.00	0.71	0.12	0.08	0.00	0.00	0.00	0.00
EACH	INCR	0.00077	27.30	0.00	0.00	0.00	5.01	1.37	0.00			0.61	0.08	0.00	0.00	0.00	0.00	

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
181	6.00	5.90	0.17637	2.0	0.01814	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.018
182	5.90	5.80	0.17713	2.0	0.01822	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.018
183	5.80	5.70	0.17790	2.0	0.01830	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.018
184	5.70	5.60	0.17867	2.0	0.01838	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.018
185	5.60	5.50	0.17943	2.0	0.01846	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.018
186	5.50	5.40	0.18020	2.0	0.01854	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
187	5.40	5.30	0.18097	2.0	0.01862	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
188	5.30	5.20	0.18173	2.0	0.01870	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
189	5.20	5.10	0.18250	2.0	0.01877	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
190	5.10	5.00	0.18327	2.0	0.01885	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
191	5.00	4.90	0.18403	2.0	0.01893	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
192	4.90	4.80	0.18480	1.9	0.01901	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
193	4.80	4.70	0.18557	1.9	0.01909	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
194	4.70	4.60	0.18633	1.9	0.01917	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
195	4.60	4.50	0.18710	1.9	0.01925	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
196	4.50	4.40	0.18787	1.9	0.01933	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
197	4.40	4.30	0.18863	1.9	0.01941	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
198	4.30	4.20	0.18940	1.9	0.01948	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.019
199	4.20	4.10	0.19017	1.9	0.01956	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
200	4.10	4.00	0.19093	1.9	0.01964	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
201	4.00	3.90	0.19170	1.9	0.01972	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
202	3.90	3.80	0.19247	1.9	0.01980	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
203	3.80	3.70	0.19323	1.9	0.01988	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
204	3.70	3.60	0.19400	1.9	0.01996	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
205	3.60	3.50	0.19477	1.8	0.02004	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
206	3.50	3.40	0.19553	1.8	0.02011	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
207	3.40	3.30	0.19630	1.8	0.02019	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
208	3.30	3.20	0.19707	1.8	0.02027	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
209	3.20	3.10	0.19783	1.8	0.02035	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
210	3.10	3.00	0.19860	1.8	0.02043	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.020
211	3.00	2.90	0.19937	1.8	0.02051	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
212	2.90	2.80	0.20013	1.8	0.02059	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
213	2.80	2.70	0.20090	1.8	0.02067	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
214	2.70	2.60	0.20167	1.8	0.02075	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
215	2.60	2.50	0.20243	1.8	0.02082	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
216	2.50	2.40	0.20320	1.8	0.02090	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
217	2.40	2.30	0.20397	1.8	0.02098	0.06	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
218	2.30	2.20	0.20473	1.8	0.02106	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
219	2.20	2.10	0.20550	1.8	0.02114	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
220	2.10	2.00	0.20627	1.7	0.02122	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021

221	2.00	1.90	0.20703	1.7	0.02130	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
222	1.90	1.80	0.20780	1.7	0.02138	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
223	1.80	1.70	0.20857	1.7	0.02146	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.021
224	1.70	1.60	0.20933	1.7	0.02153	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
225	1.60	1.50	0.21010	1.7	0.02161	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
226	1.50	1.40	0.21087	1.7	0.02169	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
227	1.40	1.30	0.21163	1.7	0.02177	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
228	1.30	1.20	0.21240	1.7	0.02185	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
229	1.20	1.10	0.21317	1.7	0.02193	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
230	1.10	1.00	0.21393	1.7	0.02201	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
231	1.00	0.90	0.21470	1.7	0.02209	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
232	0.90	0.80	0.21547	1.7	0.02217	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
233	0.80	0.70	0.21623	1.7	0.02224	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
234	0.70	0.60	0.21700	1.7	0.02232	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
235	0.60	0.50	0.21777	1.7	0.02240	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
236	0.50	0.40	0.21853	1.6	0.02248	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.022
237	0.40	0.30	0.21930	1.6	0.02256	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
238	0.30	0.20	0.22007	1.6	0.02264	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
239	0.20	0.10	0.22083	1.6	0.02272	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
240	0.10	0.00	0.22160	1.6	0.02280	0.05	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.023
TOT						3.41			58324.75	100560.00					
AVG					0.0204		0.58	16.76			9.72				
CUM						12.72									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	BKGD SOD *	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
181	5.900	7.93	1.83	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
182	5.800	7.93	1.83	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
183	5.700	7.93	1.83	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
184	5.600	7.93	1.83	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
185	5.500	7.93	1.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
186	5.400	7.93	1.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
187	5.300	7.93	1.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
188	5.200	7.93	1.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
189	5.100	7.93	1.84	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190	5.000	7.93	1.85	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
191	4.900	7.93	1.85	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
192	4.800	7.93	1.85	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
193	4.700	7.93	1.85	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
194	4.600	7.93	1.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
195	4.500	7.93	1.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
196	4.400	7.93	1.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197	4.300	7.93	1.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	4.200	7.93	1.86	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
199	4.100	7.93	1.87	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200	4.000	7.93	1.87	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

201	3.900	7.93	1.87	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	3.800	7.93	1.87	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	3.700	7.93	1.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	3.600	7.93	1.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	3.500	7.93	1.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	3.400	7.93	1.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
207	3.300	7.93	1.88	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
208	3.200	7.93	1.89	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
209	3.100	7.93	1.89	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	3.000	7.93	1.89	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
211	2.900	7.93	1.89	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
212	2.800	7.93	1.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
213	2.700	7.93	1.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
214	2.600	7.93	1.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
215	2.500	7.93	1.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
216	2.400	7.93	1.90	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
217	2.300	7.93	1.91	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
218	2.200	7.93	1.91	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
219	2.100	7.93	1.91	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	2.000	7.93	1.91	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
221	1.900	7.93	1.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
222	1.800	7.93	1.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
223	1.700	7.93	1.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
224	1.600	7.93	1.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	1.500	7.93	1.92	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	1.400	7.93	1.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	1.300	7.93	1.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	1.200	7.93	1.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
229	1.100	7.93	1.93	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	1.000	7.93	1.94	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
231	0.900	7.93	1.94	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
232	0.800	7.93	1.94	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
233	0.700	7.93	1.94	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
234	0.600	7.93	1.94	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
235	0.500	7.93	1.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
236	0.400	7.93	1.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
237	0.300	7.93	1.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
238	0.200	7.93	1.95	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
239	0.100	7.93	1.96	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
240	0.000	7.93	1.96	0.15	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55	0.02	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			1.65	0.11	0.00	0.00	0.00	0.00	0.00	0.98			0.02	0.00	0.10	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
181	5.900	27.30	0.00	0.00	0.00	6.39	1.29	0.00	1.29	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00

182	5.800	27.30	0.00	0.00	0.00	6.38	1.28	0.00	1.28	0.00	0.71	0.12	0.08	0.91	0.00	0.00	0.00	0.	0.00
183	5.700	27.30	0.00	0.00	0.00	6.37	1.28	0.00	1.28	0.00	0.71	0.12	0.08	0.92	0.00	0.00	0.00	0.	0.00
184	5.600	27.30	0.00	0.00	0.00	6.36	1.27	0.00	1.27	0.00	0.71	0.12	0.09	0.92	0.00	0.00	0.00	0.	0.00
185	5.500	27.30	0.00	0.00	0.00	6.35	1.27	0.00	1.27	0.00	0.71	0.12	0.09	0.92	0.00	0.00	0.00	0.	0.00
186	5.400	27.30	0.00	0.00	0.00	6.34	1.26	0.00	1.26	0.00	0.71	0.12	0.09	0.92	0.00	0.00	0.00	0.	0.00
187	5.300	27.30	0.00	0.00	0.00	6.33	1.26	0.00	1.26	0.00	0.71	0.12	0.09	0.92	0.00	0.00	0.00	0.	0.00
188	5.200	27.30	0.00	0.00	0.00	6.33	1.25	0.00	1.25	0.00	0.71	0.12	0.09	0.92	0.00	0.00	0.00	0.	0.00
189	5.100	27.30	0.00	0.00	0.00	6.32	1.25	0.00	1.25	0.00	0.71	0.12	0.09	0.92	0.00	0.00	0.00	0.	0.00
190	5.000	27.30	0.00	0.00	0.00	6.32	1.25	0.00	1.25	0.00	0.71	0.12	0.09	0.92	0.00	0.00	0.00	0.	0.00
191	4.900	27.30	0.00	0.00	0.00	6.31	1.24	0.00	1.24	0.00	0.71	0.12	0.09	0.92	0.00	0.00	0.00	0.	0.00
192	4.800	27.30	0.00	0.00	0.00	6.31	1.24	0.00	1.24	0.00	0.71	0.11	0.09	0.92	0.00	0.00	0.00	0.	0.00
193	4.700	27.30	0.00	0.00	0.00	6.31	1.23	0.00	1.23	0.00	0.71	0.11	0.09	0.92	0.00	0.00	0.00	0.	0.00
194	4.600	27.30	0.00	0.00	0.00	6.31	1.23	0.00	1.23	0.00	0.71	0.11	0.09	0.92	0.00	0.00	0.00	0.	0.00
195	4.500	27.30	0.00	0.00	0.00	6.31	1.23	0.00	1.23	0.00	0.71	0.11	0.09	0.92	0.00	0.00	0.00	0.	0.00
196	4.400	27.30	0.00	0.00	0.00	6.31	1.22	0.00	1.22	0.00	0.71	0.11	0.09	0.92	0.00	0.00	0.00	0.	0.00
197	4.300	27.30	0.00	0.00	0.00	6.30	1.22	0.00	1.22	0.00	0.71	0.11	0.10	0.92	0.00	0.00	0.00	0.	0.00
198	4.200	27.30	0.00	0.00	0.00	6.30	1.22	0.00	1.22	0.00	0.71	0.11	0.10	0.92	0.00	0.00	0.00	0.	0.00
199	4.100	27.30	0.00	0.00	0.00	6.30	1.21	0.00	1.21	0.00	0.71	0.11	0.10	0.92	0.00	0.00	0.00	0.	0.00
200	4.000	27.30	0.00	0.00	0.00	6.30	1.21	0.00	1.21	0.00	0.71	0.11	0.10	0.92	0.00	0.00	0.00	0.	0.00
201	3.900	27.30	0.00	0.00	0.00	6.30	1.21	0.00	1.21	0.00	0.71	0.11	0.10	0.92	0.00	0.00	0.00	0.	0.00
202	3.800	27.30	0.00	0.00	0.00	6.31	1.20	0.00	1.20	0.00	0.71	0.11	0.10	0.92	0.00	0.00	0.00	0.	0.00
203	3.700	27.30	0.00	0.00	0.00	6.31	1.20	0.00	1.20	0.00	0.71	0.11	0.10	0.92	0.00	0.00	0.00	0.	0.00
204	3.600	27.30	0.00	0.00	0.00	6.31	1.20	0.00	1.20	0.00	0.71	0.11	0.10	0.93	0.00	0.00	0.00	0.	0.00
205	3.500	27.30	0.00	0.00	0.00	6.31	1.19	0.00	1.19	0.00	0.71	0.11	0.10	0.93	0.00	0.00	0.00	0.	0.00
206	3.400	27.30	0.00	0.00	0.00	6.31	1.19	0.00	1.19	0.00	0.71	0.11	0.10	0.93	0.00	0.00	0.00	0.	0.00
207	3.300	27.30	0.00	0.00	0.00	6.31	1.19	0.00	1.19	0.00	0.71	0.11	0.10	0.93	0.00	0.00	0.00	0.	0.00
208	3.200	27.30	0.00	0.00	0.00	6.31	1.18	0.00	1.18	0.00	0.71	0.11	0.10	0.93	0.00	0.00	0.00	0.	0.00
209	3.100	27.30	0.00	0.00	0.00	6.31	1.18	0.00	1.18	0.00	0.71	0.11	0.10	0.93	0.00	0.00	0.00	0.	0.00
210	3.000	27.30	0.00	0.00	0.00	6.31	1.18	0.00	1.18	0.00	0.71	0.11	0.10	0.93	0.00	0.00	0.00	0.	0.00
211	2.900	27.30	0.00	0.00	0.00	6.32	1.18	0.00	1.18	0.00	0.71	0.11	0.10	0.93	0.00	0.00	0.00	0.	0.00
212	2.800	27.30	0.00	0.00	0.00	6.32	1.17	0.00	1.17	0.00	0.71	0.11	0.10	0.93	0.00	0.00	0.00	0.	0.00
213	2.700	27.30	0.00	0.00	0.00	6.32	1.17	0.00	1.17	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
214	2.600	27.30	0.00	0.00	0.00	6.32	1.17	0.00	1.17	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
215	2.500	27.30	0.00	0.00	0.00	6.32	1.16	0.00	1.16	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
216	2.400	27.30	0.00	0.00	0.00	6.32	1.16	0.00	1.16	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
217	2.300	27.30	0.00	0.00	0.00	6.33	1.16	0.00	1.16	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
218	2.200	27.30	0.00	0.00	0.00	6.33	1.16	0.00	1.16	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
219	2.100	27.30	0.00	0.00	0.00	6.33	1.15	0.00	1.15	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
220	2.000	27.30	0.00	0.00	0.00	6.33	1.15	0.00	1.15	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
221	1.900	27.30	0.00	0.00	0.00	6.33	1.15	0.00	1.15	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
222	1.800	27.30	0.00	0.00	0.00	6.33	1.15	0.00	1.15	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
223	1.700	27.30	0.00	0.00	0.00	6.34	1.14	0.00	1.14	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
224	1.600	27.30	0.00	0.00	0.00	6.34	1.14	0.00	1.14	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
225	1.500	27.30	0.00	0.00	0.00	6.34	1.14	0.00	1.14	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
226	1.400	27.30	0.00	0.00	0.00	6.34	1.14	0.00	1.14	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
227	1.300	27.30	0.00	0.00	0.00	6.34	1.14	0.00	1.14	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
228	1.200	27.30	0.00	0.00	0.00	6.35	1.13	0.00	1.13	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
229	1.100	27.30	0.00	0.00	0.00	6.35	1.13	0.00	1.13	0.00	0.71	0.11	0.11	0.93	0.00	0.00	0.00	0.	0.00
230	1.000	27.30	0.00	0.00	0.00	6.35	1.13	0.00	1.13	0.00	0.71	0.11	0.11	0.94	0.00	0.00	0.00	0.	0.00
231	0.900	27.30	0.00	0.00	0.00	6.35	1.13	0.00	1.13	0.00	0.71	0.11	0.11	0.94	0.00	0.00	0.00	0.	0.00
232	0.800	27.30	0.00	0.00	0.00	6.35	1.13	0.00	1.13	0.00	0.71	0.11	0.12	0.94	0.00	0.00	0.00	0.	0.00
233	0.700	27.30	0.00	0.00	0.00	6.36	1.12	0.00	1.12	0.00	0.71	0.11	0.12	0.94	0.00	0.00	0.00	0.	0.00

234	0.600	27.30	0.00	0.00	0.00	6.36	1.12	0.00	1.12	0.00	0.71	0.11	0.12	0.94	0.00	0.00	0.00	0.	0.00
235	0.500	27.30	0.00	0.00	0.00	6.36	1.12	0.00	1.12	0.00	0.71	0.11	0.12	0.94	0.00	0.00	0.00	0.	0.00
236	0.400	27.30	0.00	0.00	0.00	6.36	1.12	0.00	1.12	0.00	0.71	0.11	0.12	0.94	0.00	0.00	0.00	0.	0.00
237	0.300	27.30	0.00	0.00	0.00	6.36	1.12	0.00	1.12	0.00	0.71	0.11	0.12	0.94	0.00	0.00	0.00	0.	0.00
238	0.200	27.30	0.00	0.00	0.00	6.36	1.11	0.00	1.11	0.00	0.71	0.11	0.12	0.94	0.00	0.00	0.00	0.	0.00
239	0.100	27.30	0.00	0.00	0.00	6.37	1.11	0.00	1.11	0.00	0.71	0.11	0.12	0.94	0.00	0.00	0.00	0.	0.00
240	0.000	27.30	0.00	0.00	0.00	6.37	1.11	0.00	1.11	0.00	0.71	0.11	0.12	0.94	0.00	0.00	0.00	0.	0.00

STREAM SUMMARY LA-QUAL Summer Projection for Bayou Toro
Bayou Toro @ 110401A

TRAVEL TIME = 12.72 DAYS

MAXIMUM EFFLUENT = 3.03 PERCENT

FLOW	=	0.03477	TO	0.22160	m^3/s
DISPERSION	=	0.0000	TO	0.0000	m^2/s
VELOCITY	=	0.01416	TO	0.03258	m/s
DEPTH	=	0.31	TO	0.58	m
WIDTH	=	7.92	TO	16.76	m
BOD DECAY	=	0.15	TO	0.15	per day
NH3 DECAY	=	0.15	TO	0.16	per day
SOD	=	1.55	TO	1.55	$g/m^2/d$
NH3 SOURCE	=	0.00	TO	0.00	$g/m^2/d$
REAERATION	=	1.83	TO	4.18	per day
BOD SETTLING	=	0.00	TO	0.00	per day
ORG-N DECAY	=	0.02	TO	0.02	per day
ORG-N SETTLING	=	0.00	TO	0.00	per day
TEMPERATURE	=	27.30	TO	27.30	deg C
DISSOLVED OXYGEN	=	5.27	TO	6.53	mg/L

LA-QUAL Summer Projection for Bayou Toro

REACH SUMMARY REPORT FOR Bayou Toro @ 110401A

RCH NO.	REACH NAME	BEGIN DIST km	ENDING DIST km	REACH LENGTH km	TRAVEL TIME days	FLOW AT EOR m3/s	AVERAGE VELO m/s	AVG DEPTH m	AVG WIDTH m	FLOW AT EOR cfs	AVERAGE VELO fps	AVG DEPTH ft	AVG WIDTH ft
1	Bayou Toro	24.00	18.00	6.00	3.15	0.08000	0.02206	0.310	7.92	2.825	0.072	1.017	25.99
2	Bayou Toro	18.00	12.00	6.00	2.99	0.12900	0.02319	0.410	10.87	4.555	0.076	1.345	35.66
3	Bayou Toro	12.00	6.00	6.00	3.17	0.17560	0.02192	0.500	13.82	6.200	0.072	1.640	45.34
4	Bayou Toro	6.00	0.00	6.00	3.41	0.22160	0.02038	0.580	16.76	7.825	0.067	1.903	54.99

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
1	15.	0.	-16.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-17.1	17.1
2	16.	0.	-17.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-18.1	18.1
3	17.	0.	-18.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-19.0	19.0
4	18.	0.	-18.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-19.7	19.7
5	18.	0.	-19.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-20.4	20.4
6	19.	0.	-20.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-21.1	21.1
7	20.	0.	-20.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-21.7	21.7
8	20.	0.	-21.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-22.3	22.3
9	21.	0.	-22.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-22.8	22.8
10	22.	0.	-22.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-23.3	23.3
11	22.	0.	-23.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-23.8	23.8
12	23.	0.	-23.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-24.3	24.3
13	23.	0.	-24.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-24.8	24.8
14	24.	0.	-24.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-25.3	25.3
15	24.	0.	-24.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-25.8	25.8
16	24.	0.	-25.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-26.2	26.2
17	25.	0.	-25.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-26.7	26.7
18	25.	0.	-26.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-27.2	27.2
19	26.	0.	-26.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-27.6	27.6
20	26.	0.	-27.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-28.1	28.1
21	27.	0.	-27.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-28.5	28.5
22	27.	0.	-28.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-29.0	29.0

23	28.	0.	-28.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-29.4	29.4
0.00																									
24	28.	0.	-29.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-29.9	29.9
0.00																									
25	29.	0.	-29.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-30.3	30.3
0.00																									
26	29.	0.	-30.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-30.8	30.8
0.00																									
27	30.	0.	-30.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-31.3	31.3
0.00																									
28	30.	0.	-30.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-31.7	31.7
0.00																									
29	30.	0.	-31.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-32.2	32.2
0.00																									
30	31.	0.	-31.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-32.6	32.6
0.00																									
31	31.	0.	-32.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-33.1	33.1
0.00																									
32	32.	0.	-32.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-33.5	33.5
0.00																									
33	32.	0.	-33.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-34.0	34.0
0.00																									
34	33.	0.	-33.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-34.4	34.4
0.00																									
35	33.	0.	-34.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-34.9	34.9
0.00																									
36	34.	0.	-34.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-35.3	35.3
0.00																									
37	34.	0.	-35.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-35.8	35.8
0.00																									
38	35.	0.	-35.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-36.3	36.3
0.00																									
39	35.	0.	-35.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-36.7	36.7
0.00																									
40	35.	0.	-36.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-37.2	37.2
0.00																									
41	36.	0.	-36.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-37.6	37.6
0.00																									
42	36.	0.	-37.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-38.1	38.1
0.00																									
43	37.	0.	-37.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-38.6	38.6
0.00																									
44	37.	0.	-38.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-39.0	39.0
0.00																									
45	38.	0.	-38.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-39.5	39.5
0.00																									
46	38.	0.	-39.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-39.9	39.9
0.00																									
47	39.	0.	-39.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-40.4	40.4
0.00																									
48	39.	0.	-40.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-40.9	40.9
0.00																									

49	40.	0.	-40.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-41.3	41.3
0.00																									
50	40.	0.	-40.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-41.8	41.8
0.00																									
51	40.	0.	-41.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-42.3	42.3
0.00																									
52	41.	0.	-41.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-42.7	42.7
0.00																									
53	41.	0.	-42.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-43.2	43.2
0.00																									
54	42.	0.	-42.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-43.6	43.6
0.00																									
55	42.	0.	-43.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-44.1	44.1
0.00																									
56	43.	0.	-43.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-44.6	44.6
0.00																									
57	43.	0.	-44.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-45.0	45.0
0.00																									
58	44.	0.	-44.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-45.5	45.5
0.00																									
59	44.	0.	-45.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-46.0	46.0
0.00																									

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
60	45.	0.	-45.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-46.4	46.4
61	45.	0.	-45.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-47.1	47.1
62	45.	0.	-46.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-47.3	47.3
63	46.	0.	-46.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-47.6	47.6
64	46.	0.	-46.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-47.9	47.9
65	46.	0.	-46.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-48.2	48.2
66	46.	0.	-47.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-48.5	48.5
67	47.	0.	-47.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-48.8	48.8
68	47.	0.	-47.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-49.2	49.2
69	47.	0.	-48.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-49.6	49.6
70	48.	0.	-48.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-49.9	49.9
71	48.	0.	-49.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-50.3	50.3
72	49.	0.	-49.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-50.7	50.7
73	49.	0.	-49.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-51.1	51.1
74	49.	0.	-50.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-51.5	51.5
75	50.	0.	-50.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-52.0	52.0
76	50.	0.	-51.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-52.4	52.4
77	51.	0.	-51.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-52.8	52.8
78	51.	0.	-51.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-53.2	53.2
79	51.	0.	-52.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-53.7	53.7
80	52.	0.	-52.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-54.1	54.1
81	52.	0.	-54.	0.	0.	0.	0.	0.	0.	1.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-55.9	55.9

82	54.	0.	-55.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-56.4	56.4
0.00																									
83	55.	0.	-55.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-56.9	56.9
0.00																									
84	55.	0.	-56.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-57.4	57.4
0.00																									
85	56.	0.	-56.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-57.8	57.8
0.00																									
86	56.	0.	-57.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-58.3	58.3
0.00																									
87	57.	0.	-57.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-58.8	58.8
0.00																									
88	57.	0.	-57.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-59.3	59.3
0.00																									
89	57.	0.	-58.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-59.7	59.7
0.00																									
90	58.	0.	-58.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-60.2	60.2
0.00																									
91	58.	0.	-59.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-60.7	60.7
0.00																									
92	59.	0.	-59.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-61.1	61.1
0.00																									
93	59.	0.	-60.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-61.6	61.6
0.00																									
94	60.	0.	-60.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-62.1	62.1
0.00																									
95	60.	0.	-61.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-62.5	62.5
0.00																									
96	61.	0.	-61.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-63.0	63.0
0.00																									
97	61.	0.	-62.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-63.5	63.5
0.00																									
98	62.	0.	-62.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-63.9	63.9
0.00																									
99	62.	0.	-63.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-64.4	64.4
0.00																									
100	63.	0.	-63.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-64.9	64.9
0.00																									
101	63.	0.	-64.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-65.3	65.3
0.00																									
102	64.	0.	-64.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-65.8	65.8
0.00																									
103	64.	0.	-64.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-66.2	66.2
0.00																									
104	64.	0.	-65.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-66.7	66.7
0.00																									
105	65.	0.	-65.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-67.2	67.2
0.00																									
106	65.	0.	-66.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-67.6	67.6
0.00																									
107	66.	0.	-66.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-68.1	68.1
0.00																									

108	66.	0.	-67.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-68.5	68.5
0.00																									
109	67.	0.	-67.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-69.0	69.0
0.00																									
110	67.	0.	-68.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-69.5	69.5
0.00																									
111	68.	0.	-68.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-69.9	69.9
0.00																									
112	68.	0.	-69.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-70.4	70.4
0.00																									
113	69.	0.	-69.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-70.9	70.9
0.00																									
114	69.	0.	-70.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-71.3	71.3
0.00																									
115	70.	0.	-70.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-71.8	71.8
0.00																									
116	70.	0.	-70.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-72.3	72.3
0.00																									
117	70.	0.	-71.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-72.7	72.7
0.00																									
118	71.	0.	-71.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-73.2	73.2
0.00																									

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
119	71.	0.	-72.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-73.6	73.6
120	72.	0.	-72.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-74.1	74.1
121	72.	0.	-72.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-74.8	74.8
122	72.	0.	-73.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-75.0	75.0
123	73.	0.	-73.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-75.2	75.2
124	73.	0.	-73.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-75.5	75.5
125	73.	0.	-73.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-75.8	75.8
126	73.	0.	-74.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-76.1	76.1
127	74.	0.	-74.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-76.4	76.4
128	74.	0.	-74.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-76.7	76.7
129	74.	0.	-75.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-77.1	77.1
130	75.	0.	-75.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-77.5	77.5
131	75.	0.	-76.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-77.8	77.8
132	76.	0.	-76.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-78.2	78.2
133	76.	0.	-76.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-78.6	78.6
134	76.	0.	-77.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-79.0	79.0
135	77.	0.	-77.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-79.4	79.4
136	77.	0.	-77.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-79.8	79.8
137	77.	0.	-78.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-80.2	80.2
138	78.	0.	-78.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-80.6	80.6
139	78.	0.	-79.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-81.1	81.1
140	79.	0.	-79.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-81.5	81.5

141	79.	0.	-80.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-81.9	81.9
0.00																									
142	80.	0.	-80.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-82.3	82.3
0.00																									
143	80.	0.	-80.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-82.8	82.8
0.00																									
144	80.	0.	-81.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-83.2	83.2
0.00																									
145	81.	0.	-81.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-83.7	83.7
0.00																									
146	81.	0.	-82.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-84.1	84.1
0.00																									
147	82.	0.	-82.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-84.5	84.5
0.00																									
148	82.	0.	-83.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-85.0	85.0
0.00																									
149	83.	0.	-83.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-85.7	85.7
0.00																									
150	83.	0.	-84.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-86.1	86.1
0.00																									
151	84.	0.	-84.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-86.5	86.5
0.00																									
152	84.	0.	-85.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-87.0	87.0
0.00																									
153	85.	0.	-85.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-87.4	87.4
0.00																									
154	85.	0.	-85.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-87.8	87.8
0.00																									
155	85.	0.	-86.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-88.3	88.3
0.00																									
156	86.	0.	-86.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-88.7	88.7
0.00																									
157	86.	0.	-87.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-89.1	89.1
0.00																									
158	87.	0.	-87.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-89.6	89.6
0.00																									
159	87.	0.	-88.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-90.0	90.0
0.00																									
160	88.	0.	-88.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-90.5	90.5
0.00																									
161	88.	0.	-89.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-90.9	90.9
0.00																									
162	89.	0.	-89.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-91.4	91.4
0.00																									
163	89.	0.	-89.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-91.8	91.8
0.00																									
164	89.	0.	-90.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-92.3	92.3
0.00																									
165	90.	0.	-90.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-92.7	92.7
0.00																									
166	90.	0.	-91.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-93.2	93.2
0.00																									

167	91.	0.	-91.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-93.6	93.6
0.00																									
168	91.	0.	-92.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-94.1	94.1
0.00																									
169	92.	0.	-92.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-94.5	94.5
0.00																									
170	92.	0.	-93.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-95.0	95.0
0.00																									
171	93.	0.	-93.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-95.5	95.5
0.00																									
172	93.	0.	-94.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-95.9	95.9
0.00																									
173	94.	0.	-94.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-96.4	96.4
0.00																									
174	94.	0.	-94.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-96.8	96.8
0.00																									
175	94.	0.	-95.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-97.3	97.3
0.00																									
176	95.	0.	-95.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-97.8	97.8
0.00																									
177	95.	0.	-96.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-98.2	98.2
0.00																									

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
178	96.	0.	-96.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-98.7	98.7
179	96.	0.	-97.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-99.1	99.1
180	97.	0.	-97.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-99.6	99.6
181	97.	0.	-97.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-100.3	100.3
182	97.	0.	-98.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-100.5	100.5
183	98.	0.	-98.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-100.7	100.7
184	98.	0.	-98.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-101.0	101.0
185	98.	0.	-98.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-101.3	101.3
186	98.	0.	-99.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-101.6	101.6
187	99.	0.	-99.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-101.9	101.9
188	99.	0.	-99.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-102.2	102.2
189	99.	0.	-100.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-102.6	102.6
190	100.	0.	-100.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-102.9	102.9
191	100.	0.	-100.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-103.3	103.3
192	100.	0.	-101.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-103.6	103.6
193	101.	0.	-101.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-104.0	104.0
194	101.	0.	-102.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-104.4	104.4
195	102.	0.	-102.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-104.8	104.8
196	102.	0.	-102.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-105.2	105.2
197	102.	0.	-103.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-105.6	105.6
198	103.	0.	-103.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-106.0	106.0
199	103.	0.	-104.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-106.4	106.4

200	104.	0.	-104.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-106.9
106.9	0.00																							
201	104.	0.	-104.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-107.3
107.3	0.00																							
202	104.	0.	-105.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-107.7
107.7	0.00																							
203	105.	0.	-105.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-108.1
108.1	0.00																							
204	105.	0.	-106.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-108.6
108.6	0.00																							
205	106.	0.	-106.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-109.0
109.0	0.00																							
206	106.	0.	-107.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-109.4
109.4	0.00																							
207	107.	0.	-107.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-109.9
109.9	0.00																							
208	107.	0.	-107.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-110.3
110.3	0.00																							
209	107.	0.	-108.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-110.7
110.7	0.00																							
210	108.	0.	-108.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-111.2
111.2	0.00																							
211	108.	0.	-109.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-111.6
111.6	0.00																							
212	109.	0.	-109.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-112.1
112.1	0.00																							
213	109.	0.	-110.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-112.5
112.5	0.00																							
214	110.	0.	-110.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-113.0
113.0	0.00																							
215	110.	0.	-111.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-113.4
113.4	0.00																							
216	111.	0.	-111.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-113.9
113.9	0.00																							
217	111.	0.	-111.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-114.3
114.3	0.00																							
218	111.	0.	-112.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-114.8
114.8	0.00																							
219	112.	0.	-112.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-115.2
115.2	0.00																							
220	112.	0.	-113.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-115.7
115.7	0.00																							
221	113.	0.	-113.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-116.1
116.1	0.00																							
222	113.	0.	-114.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-116.6
116.6	0.00																							
223	114.	0.	-114.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-117.0
117.0	0.00																							
224	114.	0.	-115.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-117.5
117.5	0.00																							
225	115.	0.	-115.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-117.9
117.9	0.00																							

226	115.	0.	-116.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-118.4
118.4	0.00																							
227	116.	0.	-116.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-118.8
118.8	0.00																							
228	116.	0.	-116.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-119.3
119.3	0.00																							
229	116.	0.	-117.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-119.7
119.7	0.00																							
230	117.	0.	-117.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-120.2
120.2	0.00																							
231	117.	0.	-118.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-120.7
120.7	0.00																							
232	118.	0.	-118.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-121.1
121.1	0.00																							
233	118.	0.	-119.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-121.6
121.6	0.00																							
234	119.	0.	-119.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-122.0
122.0	0.00																							
235	119.	0.	-120.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-122.5
122.5	0.00																							
236	120.	0.	-120.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-122.9
122.9	0.00																							

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
237	120.	0.	-121.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-123.4	123.4
238	121.	0.	-121.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-123.8	123.8
239	121.	0.	-121.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-124.3	124.3
240	121.	0.	-122.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.	0.	-124.8	124.8

LA-QUAL Summer Projection for Bayou Toro

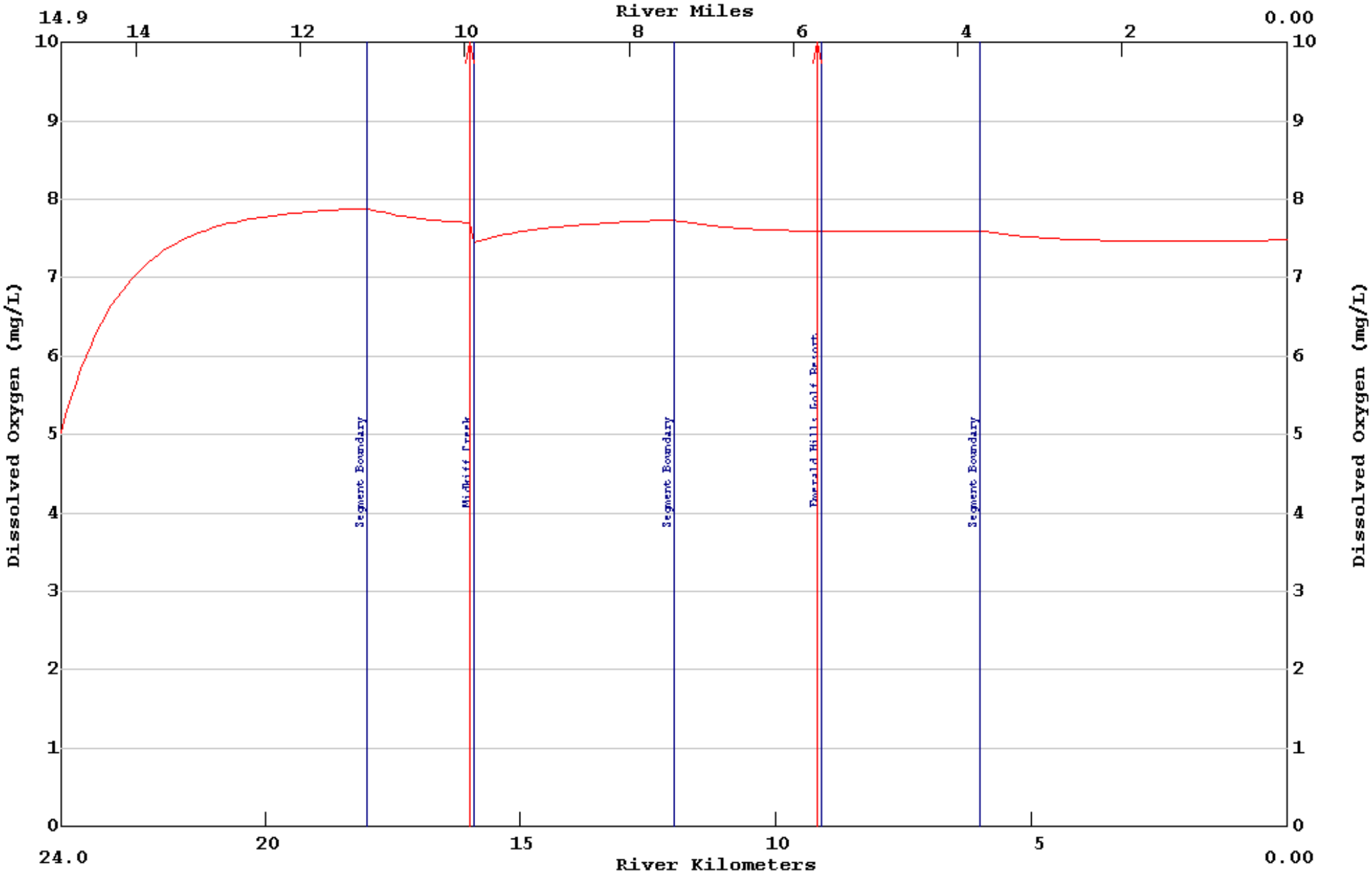
INPUT/OUTPUT LOADING SUMMARY

	FLOW m^3/s	DO kg/d	BOD#1 kg/d	BOD#2 kg/d	ORG-N kg/d	NH3-N kg/d	NO3-N kg/d	PHOS kg/d	CHL A	NCM
HEADWATER FLOW	0.034	14.7	4.0	0.0	1.8	0.2	0.0	0.0	0.0	0.0
INCREMENTAL INFLOW	0.184	79.6	21.8	0.0	9.7	1.3	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	0.0
WASTELOADS	0.004	1.6	3.9	0.0	0.4	0.5	0.0	0.0	0.0	0.0
WITHDRAWLS	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FLOW THRU LOWER BNDRY	-0.222	-121.9	-21.3	0.0	-13.7	-2.0	-2.3	0.0	0.0	0.0
DISPERSION THRU LOWER BNDRY		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DISPERSION THRU HDWTR BNDRY		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NON-POINT INPUT		0.0	18.6	0.0	4.0					0.0
NATURAL REAERATION		522.7								
DAM REAERATION		0.0								
BACKGROUND SOD		-459.7								
BOD#1 DECAY		-27.1	-27.1							
BOD#1 SETTLING		0.0	0.0							
ANAEROBIC BOD#1 DECAY			0.0							
BOD#2 DECAY		0.0		0.0						
BOD#2 SETTLING		0.0		0.0						
ANAEROBIC BOD#2 DECAY				0.0						
ORG-N DECAY		0.0			-2.3	2.3				
ORG-N SETTLING					0.0	0.0				
NH3 DECAY		-9.9				-2.3	2.3			
BACKGROUND NH3 SOURCE						0.0				
OTHER DENITRIFICATION							0.0			
PHOSPHORUS SOURCE								0.0		
ALGAE PHOTOSYNTHESIS		0.0				0.0	0.0	0.0	0.0	
ALGAE RESPIRATION		0.0				0.0		0.0	0.0	
ALGAE SETTLING		0.0							0.0	
MACRO PHOTOSYNTHESIS		0.0				0.0	0.0	0.0		
NCM DECAY		0.0								0.0
NCM SETTLING		0.0								0.0
TOTAL INPUTS	0.222	618.6	48.4	0.0	15.9	4.3	2.3	0.0	0.0	0.0
TOTAL OUTPUTS	-0.222	-618.6	-48.4	0.0	-15.9	-4.3	-2.3	0.0	0.0	0.0
NET CONVERGENCE ERROR	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

.....EXECUTION COMPLETED

LA-QUAL Version 8.11 Run at 14:57 on 09/21/2007 File D:\comp_models\LA-QUAL_8p11\toro_win.txt

Bayou Toro



```
LA-QUAL Version 8.11
Louisiana Department of Environmental Quality

Input file is D:\toro_win.txt
Output produced at 13:15 on 09/21/2007

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

CARD TYPE       CONTROL TITLES

TITLE01         LA-QUAL Winter Projection for Bayou Toro
TITLE02
CNTROL03   NO   SEQU                        <Warning: legacy control - line ignored>
CNTROL04  YES   METR
CNTROL05  YES   OXYG                        <Warning: legacy control - line ignored>
ENDATA01

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

CARD TYPE       MODEL OPTION

MODOPT01   NO   TEMP
MODOPT02   NO   SALI
MODOPT03   NO   CONSERVATIVE MATERIAL
MODOPT04   NO   CONSERVATIVE MATERIAL II
MODOPT05  YES   DISS
MODOPT06  YES   BIOC
MODOPT07  YES   NITR
MODOPT08   NO   PHOS
MODOPT09   NO   CHLO
MODOPT10   NO   MACR
MODOPT11   NO   COLI
MODOPT12   NO   NONC
ENDATA02

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

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

PROGRAM         HYDRAULIC CALCULATION METHOD       =         2.00000 (widths and depths)
PROGRAM         MAXIMUM ITERATION LIMIT            =       500.00000
PROGRAM         ALGAE OXYGEN PROD                  =         0.02600 mg O/ug chl a/day
ENDATA03

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

 CARD TYPE     RATE CODE     THETA VALUE

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

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   B1  Bayou Toro                        24.00  TO   18.00   0.1000     6.00      60        1     60
REACH ID      2   B2  Bayou Toro                        18.00  TO   12.00   0.1000     6.00      60       61    120
REACH ID      3   B3  Bayou Toro                        12.00  TO    6.00   0.1000     6.00      60      121    180
REACH ID      4   B4  Bayou Toro                         6.00  TO    0.00   0.1000     6.00      60      181    240
ENDATA08

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

CARD TYPE  REACH  ID       WIDTH       WIDTH       WIDTH       DEPTH       DEPTH       DEPTH      SLOPE    MANNINGS
                            "A"         "B"         "C"         "D"         "E"         "F"                  "N"

HYDR-1        1   B1       0.000       0.000       7.920       0.000       0.000       0.310     0.00000   0.000
HYDR-1        2   B2       0.000       0.000      10.870       0.000       0.000       0.410     0.00000   0.000
HYDR-1        3   B3       0.000       0.000      13.820       0.000       0.000       0.500     0.00000   0.000
HYDR-1        4   B4       0.000       0.000      16.760       0.000       0.000       0.580     0.00000   0.000
ENDATA09

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

CARD TYPE  REACH  ID     TIDAL     DISPERSION     DISPERSION     DISPERSION     DISPERSION
                        RANGE        "A"            "B"            "C"            "D"

ENDATA10

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

CARD TYPE      REACH  ID        TEMP     SALIN        DO       NH3     NO3+2      PHOS     CHL A     MACRO

INITIAL          1   B1       22.60      0.00      2.21      0.16      0.00      0.00      0.00      0.00
INITIAL          2   B2       22.60      0.00      3.34      0.15      0.00      0.00      0.00      0.00
INITIAL          3   B3       22.60      0.00      4.47      0.15      0.00      0.00      0.00      0.00
INITIAL          4   B4       22.60      0.00      5.60      0.14      0.00      0.00      0.00      0.00
ENDATA11

$$$ DATA TYPE 12 (REAERATION, SEDIMENT OXYGEN DEMAND, BOD COEFFICIENTS) $$$
                                                                                                  BOD     ANAER                          BOD2     ANAER
CARD     RCH  RCH  K2                    K2        K2        K2    BKGRND       BOD       BOD      CONV      BOD2      BOD2      BOD2      CONV      BOD2
TYPE     NUM   ID  OPT                   "A"       "B"       "C"       SOD     DECAY      SETT    TO SOD     DECAY     DECAY      SETT    TO SOD     DECAY
```

```
                                                                  g/m²/d   per day       m/d             per day   per day       m/d             per day

COEFF-1    1   B1  15 LOUISIANA        0.000     0.000     0.000     1.120     0.110     0.000     0.000     0.000     0.000     0.000     0.000     0.000
COEFF-1    2   B2  15 LOUISIANA        0.000     0.000     0.000     1.120     0.110     0.000     0.000     0.000     0.000     0.000     0.000     0.000
COEFF-1    3   B3  15 LOUISIANA        0.000     0.000     0.000     1.120     0.110     0.000     0.000     0.000     0.000     0.000     0.000     0.000
COEFF-1    4   B4  15 LOUISIANA        0.000     0.000     0.000     1.120     0.110     0.000     0.000     0.000     0.000     0.000     0.000     0.000
ENDATA12

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

CARD TYPE      REACH  ID       ORG-N     ORG-N   ORGN CONV       NH3       NH3      PHOS     DENIT
                                DECA      SETT  TO NH3 SRCE     DECA      SRCE      SRCE      RATE

COEFF-2           1   B1       0.020     0.000     1.000       0.100     0.000     0.000     0.000
COEFF-2           2   B2       0.020     0.000     1.000       0.100     0.000     0.000     0.000
COEFF-2           3   B3       0.020     0.000     1.000       0.100     0.000     0.000     0.000
COEFF-2           4   B4       0.020     0.000     1.000       0.100     0.000     0.000     0.000
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   SHADING

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   IN/DIST  OUT/DIST

INCR-1            1   B1       0.00000     0.04600     22.60      0.00      0.00      0.00   0.00767   0.00000
INCR-1            2   B2       0.00000     0.04600     22.60      0.00      0.00      0.00   0.00767   0.00000
INCR-1            3   B3       0.00000     0.04600     22.60      0.00      0.00      0.00   0.00767   0.00000
INCR-1            4   B4       0.00000     0.04600     22.60      0.00      0.00      0.00   0.00767   0.00000
ENDATA16

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

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

INCR-2            1   B1        5.02      1.57      0.69      0.09      0.00      0.00
INCR-2            2   B2        5.02      1.57      0.69      0.09      0.00      0.00
INCR-2            3   B3        5.02      1.57      0.69      0.09      0.00      0.00
INCR-2            4   B4        5.02      1.57      0.69      0.09      0.00      0.00
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#1     ORG-N      COLI       NCM        DO     BOD#2

NONPOINT         1   B1        3.36      0.73      0.00      0.00      0.00      0.00
NONPOINT         2   B2        4.48      1.01      0.00      0.00      0.00      0.00
NONPOINT         3   B3        5.60      1.29      0.00      0.00      0.00      0.00
NONPOINT         4   B4        7.84      1.57      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     FLOW    TEMP    SALIN      CM-I     CM-II
                                                      m³/s      cfs   deg C      ppt

HDWTR-1          1     Bayou Toro @ 110401A    0   0.21000    7.415   22.60     0.00     0.000     0.000   0.00
ENDATA20

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

CARD TYPE     ELEMENT   NAME                        DO     BOD#1     ORG-N     NH3-N     NO3-N     BOD#2
                                                   mg/L      mg/L      mg/L      mg/L      mg/L      mg/L

HDWTR-2          1     Bayou Toro @ 110401A       5.02      1.57      0.69      0.09      0.00      0.00
ENDATA21

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

CARD TYPE     ELEMENT   NAME                       PHOS     CHL A      COLI       NCM
                                                   mg/L      mg/L      mg/L      mg/L

ENDATA22

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

CARD TYPE   JUNCTION   UPSTRM     RIVER     NAME
             ELEMENT  ELEMENT     KILOM

ENDATA23

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

CARD TYPE  ELEMENT    RKILO  NAME                     FLOW       FLOW     FLOW    TEMP    SALIN      CM-I     CM-II
                                                      m³/s        cfs      MGD   deg C      ppt

WSTLD-1       81      16.00  NPS Midkiff Creek      0.03000    1.05932    0.685   22.60     0.00     0.000     0.000
WSTLD-1      149       9.20  Emerald Hills Golf     0.00060    0.02119    0.014   22.60     0.00     0.000     0.000
ENDATA24

$$$ DATA TYPE 25 (WASTELOAD DATA FOR DO, BOD, AND NITROGEN) $$$
                                                                   % BOD                          %
CARD TYPE     ELEMENT   NAME                        DO       BOD      RMVL     ORG-N     NH3-N    NITRIF     NO3-N     BOD#2
                                                   mg/L      mg/L                mg/L      mg/L                mg/L      mg/L
```

```
WSTLD-2          81     NPS Midkiff Creek           5.02      1.60      0.00      0.69      0.09      0.00      0.00      0.00
WSTLD-2         149     Emerald Hills Golf          5.00     69.00      0.00      5.00     10.00      0.00      0.00      0.00
ENDATA25

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

CARD TYPE     ELEMENT   NAME                        PHOS     CHL A      COLI       NCM
                                                    mg/L      mg/L      mg/L      mg/L

ENDATA26

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

CARD TYPE    CONSTITUENT                    CONCENTRATION

ENDATA27

$$$ DATA TYPE 28 (DAM DATA) $$$

CARD TYPE     ELEMENT   NAME                  EQN      "A"       "B"       "H"

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

ENDATA29

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


NUMBER OF PLOTS =  1
NUMBER OF REACHES IN PLOT 1 =   4
PLOT RCH  1  2  3  4
ENDATA30

$$$ DATA TYPE 31 (OVERLAY PLOT DATA) $$$


OVERLAY 1 TORO_WIN.OVL                    :Bayou Toro
ENDATA31



     .....NO ERRORS DETECTED IN INPUT DATA
     .....HYDRAULIC CALCULATIONS COMPLETED
     .....TRIDIAGONAL MATRIX TERMS INITIALIZED
     .....OXYGEN DEPENDENT RATES CONVERGENT IN   6 ITERATIONS
     .....CONSTITUENT CALCULATIONS COMPLETED
     .....GRAPHICS DATA FOR PLOT 1 WRITTEN TO UNIT 11


INTERMEDIATE REPORT
 Dissolved Oxygen                                                LA-QUAL Winter Projection for Bayou Toro
```

mg/L

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	5.25	5.47	5.66	5.84	6.01	6.16	6.29	6.42	6.54	6.64
B1	1	11	6.74	6.83	6.92	6.99	7.06	7.13	7.19	7.24	7.29	7.34
B1	1	21	7.38	7.42	7.45	7.49	7.52	7.55	7.57	7.60	7.62	7.64
B1	1	31	7.66	7.68	7.69	7.71	7.72	7.73	7.75	7.76	7.77	7.78
B1	1	41	7.79	7.80	7.80	7.81	7.82	7.82	7.83	7.84	7.84	7.85
B1	1	51	7.85	7.86	7.86	7.86	7.87	7.87	7.87	7.88	7.88	7.88
B2	2	61	7.87	7.85	7.83	7.82	7.81	7.79	7.78	7.77	7.76	7.76
B2	2	71	7.75	7.74	7.73	7.73	7.72	7.72	7.71	7.71	7.71	7.70
B2	2	81	7.46	7.47	7.49	7.51	7.52	7.54	7.55	7.56	7.57	7.59
B2	2	91	7.60	7.60	7.61	7.62	7.63	7.64	7.65	7.65	7.66	7.66
B2	2	101	7.67	7.68	7.68	7.68	7.69	7.69	7.70	7.70	7.71	7.71
B2	2	111	7.71	7.72	7.72	7.72	7.72	7.73	7.73	7.73	7.74	7.74
B3	3	121	7.72	7.71	7.70	7.69	7.68	7.67	7.67	7.66	7.65	7.65
B3	3	131	7.64	7.63	7.63	7.63	7.62	7.62	7.61	7.61	7.61	7.61
B3	3	141	7.60	7.60	7.60	7.60	7.60	7.60	7.59	7.59	7.59	7.59
B3	3	151	7.59	7.59	7.59	7.59	7.58	7.58	7.58	7.58	7.58	7.58
B3	3	161	7.59	7.59	7.59	7.59	7.59	7.59	7.59	7.59	7.59	7.59
B3	3	171	7.59	7.59	7.59	7.59	7.59	7.59	7.59	7.60	7.60	7.60
B4	4	181	7.59	7.58	7.57	7.56	7.55	7.54	7.54	7.53	7.52	7.52
B4	4	191	7.51	7.51	7.50	7.50	7.50	7.49	7.49	7.49	7.49	7.48
B4	4	201	7.48	7.48	7.48	7.48	7.48	7.47	7.47	7.47	7.47	7.47
B4	4	211	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47
B4	4	221	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47
B4	4	231	7.47	7.47	7.48	7.48	7.48	7.48	7.48	7.48	7.48	7.48

INTERMEDIATE REPORT
Effective BOD
mg/L

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57
B1	1	11	1.57	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
B1	1	21	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
B1	1	31	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.59	1.59
B1	1	41	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59
B1	1	51	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59
B2	2	61	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.58
B2	2	71	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
B2	2	81	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
B2	2	91	1.58	1.58	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57
B2	2	101	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57
B2	2	111	1.57	1.57	1.57	1.57	1.57	1.56	1.56	1.56	1.56	1.56
B3	3	121	1.56	1.56	1.56	1.56	1.56	1.56	1.55	1.55	1.55	1.55
B3	3	131	1.55	1.55	1.55	1.54	1.54	1.54	1.54	1.54	1.54	1.54
B3	3	141	1.54	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.64	1.64
B3	3	151	1.64	1.64	1.63	1.63	1.63	1.63	1.63	1.63	1.62	1.62
B3	3	161	1.62	1.62	1.62	1.62	1.62	1.61	1.61	1.61	1.61	1.61
B3	3	171	1.61	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.59	1.59

B4	4	181	1.59	1.59	1.59	1.59	1.58	1.58	1.58	1.58	1.58	1.58
B4	4	191	1.57	1.57	1.57	1.57	1.57	1.56	1.56	1.56	1.56	1.56
B4	4	201	1.56	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.54	1.54
B4	4	211	1.54	1.54	1.54	1.54	1.53	1.53	1.53	1.53	1.53	1.53
B4	4	221	1.53	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.51	1.51
B4	4	231	1.51	1.51	1.51	1.51	1.51	1.51	1.50	1.50	1.50	1.50

INTERMEDIATE REPORT
Biochemical Oxygen Demand LA-QUAL Winter Projection for Bayou Toro
mg/L

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57
B1	1	11	1.57	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
B1	1	21	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
B1	1	31	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.59	1.59
B1	1	41	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59
B1	1	51	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59
B2	2	61	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.58
B2	2	71	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
B2	2	81	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
B2	2	91	1.58	1.58	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57
B2	2	101	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57
B2	2	111	1.57	1.57	1.57	1.57	1.57	1.56	1.56	1.56	1.56	1.56
B3	3	121	1.56	1.56	1.56	1.56	1.56	1.56	1.55	1.55	1.55	1.55
B3	3	131	1.55	1.55	1.55	1.54	1.54	1.54	1.54	1.54	1.54	1.54
B3	3	141	1.54	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.64	1.64
B3	3	151	1.64	1.64	1.63	1.63	1.63	1.63	1.63	1.63	1.62	1.62
B3	3	161	1.62	1.62	1.62	1.62	1.62	1.61	1.61	1.61	1.61	1.61
B3	3	171	1.61	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.59	1.59
B4	4	181	1.59	1.59	1.59	1.59	1.58	1.58	1.58	1.58	1.58	1.58
B4	4	191	1.57	1.57	1.57	1.57	1.57	1.56	1.56	1.56	1.56	1.56
B4	4	201	1.56	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.54	1.54
B4	4	211	1.54	1.54	1.54	1.54	1.53	1.53	1.53	1.53	1.53	1.53
B4	4	221	1.53	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.51	1.51
B4	4	231	1.51	1.51	1.51	1.51	1.51	1.51	1.50	1.50	1.50	1.50

INTERMEDIATE REPORT
Organic Nitrogen LA-QUAL Winter Projection for Bayou Toro
mg/L

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
B1	1	11	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
B1	1	21	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
B1	1	31	0.70	0.70	0.70	0.70	0.70	0.71	0.71	0.71	0.71	0.71
B1	1	41	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
B1	1	51	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
B2	2	61	0.71	0.71	0.71	0.71	0.72	0.72	0.72	0.72	0.72	0.72
B2	2	71	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72

B2	2	81	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
B2	2	91	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
B2	2	101	0.72	0.72	0.72	0.72	0.72	0.73	0.73	0.73	0.73	0.73
B2	2	111	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
B3	3	121	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
B3	3	131	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
B3	3	141	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
B3	3	151	0.74	0.74	0.74	0.75	0.75	0.75	0.75	0.75	0.75	0.75
B3	3	161	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
B3	3	171	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
B4	4	181	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
B4	4	191	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
B4	4	201	0.75	0.75	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
B4	4	211	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
B4	4	221	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
B4	4	231	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76

INTERMEDIATE REPORT
Ammonia Nitrogen
mg/L

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B1	1	11	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B1	1	21	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B1	1	31	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B1	1	41	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B1	1	51	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B2	2	61	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B2	2	71	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B2	2	81	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B2	2	91	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10
B2	2	101	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
B2	2	111	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
B3	3	121	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
B3	3	131	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
B3	3	141	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.12	0.12
B3	3	151	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	161	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	171	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11
B4	4	181	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	191	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	201	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	211	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	221	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	231	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12

INTERMEDIATE REPORT
Nitrate+Nitrite Nitrogen
mg/L

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	41	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B1	1	51	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B2	2	61	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B2	2	71	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B2	2	81	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B2	2	91	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B2	2	101	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B2	2	111	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
B3	3	121	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
B3	3	131	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
B3	3	141	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
B3	3	151	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
B3	3	161	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
B3	3	171	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
B4	4	181	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
B4	4	191	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04
B4	4	201	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
B4	4	211	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
B4	4	221	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05
B4	4	231	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

INTERMEDIATE REPORT
Total Nitrogen
mg/L

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.79	0.79	0.79
B1	1	11	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
B1	1	21	0.79	0.79	0.79	0.79	0.80	0.80	0.80	0.80	0.80	0.80
B1	1	31	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
B1	1	41	0.80	0.80	0.80	0.81	0.81	0.81	0.81	0.81	0.81	0.81
B1	1	51	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
B2	2	61	0.81	0.81	0.81	0.82	0.82	0.82	0.82	0.82	0.82	0.82
B2	2	71	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.83
B2	2	81	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.83	0.83	0.83
B2	2	91	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
B2	2	101	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.84	0.84	0.84
B2	2	111	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
B3	3	121	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.85	0.85	0.85
B3	3	131	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
B3	3	141	0.85	0.85	0.85	0.85	0.86	0.86	0.86	0.86	0.88	0.88
B3	3	151	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.89	0.89	0.89
B3	3	161	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
B3	3	171	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.90
B4	4	181	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
B4	4	191	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.91	0.91	0.91
B4	4	201	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91

B4	4	211	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.92	0.92	0.92
B4	4	221	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
B4	4	231	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.93	0.93

INTERMEDIATE REPORT
Temperature
deg C

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B1	1	11	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B1	1	21	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B1	1	31	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B1	1	41	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B1	1	51	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B2	2	61	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B2	2	71	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B2	2	81	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B2	2	91	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B2	2	101	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B2	2	111	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B3	3	121	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B3	3	131	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B3	3	141	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B3	3	151	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B3	3	161	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B3	3	171	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B4	4	181	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B4	4	191	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B4	4	201	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B4	4	211	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B4	4	221	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
B4	4	231	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60

INTERMEDIATE REPORT
Salinity
ppt

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

B2	2	111	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	121	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	131	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	141	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	151	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	161	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	171	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	181	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	191	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	201	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	211	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	221	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	231	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

INTERMEDIATE REPORT
River Distance
km

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	24.	24.	24.	24.	23.	23.	23.	23.	23.	23.
B1	1	11	23.	23.	23.	23.	22.	22.	22.	22.	22.	22.
B1	1	21	22.	22.	22.	22.	21.	21.	21.	21.	21.	21.
B1	1	31	21.	21.	21.	21.	20.	20.	20.	20.	20.	20.
B1	1	41	20.	20.	20.	20.	19.	19.	19.	19.	19.	19.
B1	1	51	19.	19.	19.	19.	18.	18.	18.	18.	18.	18.
B2	2	61	18.	18.	18.	18.	17.	17.	17.	17.	17.	17.
B2	2	71	17.	17.	17.	17.	16.	16.	16.	16.	16.	16.
B2	2	81	16.	16.	16.	16.	15.	15.	15.	15.	15.	15.
B2	2	91	15.	15.	15.	15.	14.	14.	14.	14.	14.	14.
B2	2	101	14.	14.	14.	14.	13.	13.	13.	13.	13.	13.
B2	2	111	13.	13.	13.	13.	12.	12.	12.	12.	12.	12.
B3	3	121	12.	12.	12.	12.	11.	11.	11.	11.	11.	11.
B3	3	131	11.	11.	11.	11.	10.	10.	10.	10.	10.	10.
B3	3	141	10.	10.	10.	10.	9.	9.	9.	9.	9.	9.
B3	3	151	9.	9.	9.	9.	8.	8.	8.	8.	8.	8.
B3	3	161	8.	8.	8.	8.	7.	7.	7.	7.	7.	7.
B3	3	171	7.	7.	7.	7.	6.	6.	6.	6.	6.	6.
B4	4	181	6.	6.	6.	6.	6.	5.	5.	5.	5.	5.
B4	4	191	5.	5.	5.	5.	5.	4.	4.	4.	4.	4.
B4	4	201	4.	4.	4.	4.	4.	3.	3.	3.	3.	3.
B4	4	211	3.	3.	3.	3.	3.	2.	2.	2.	2.	2.
B4	4	221	2.	2.	2.	2.	2.	1.	1.	1.	1.	1.
B4	4	231	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.

INTERMEDIATE REPORT
Flow
m^3/s

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

B1	1	11	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B1	1	21	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B1	1	31	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B1	1	41	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
B1	1	51	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B2	2	61	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B2	2	71	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B2	2	81	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B2	2	91	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B2	2	101	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B2	2	111	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B3	3	121	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B3	3	131	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B3	3	141	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B3	3	151	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B3	3	161	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B3	3	171	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B4	4	181	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B4	4	191	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B4	4	201	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B4	4	211	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B4	4	221	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B4	4	231	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

INTERMEDIATE REPORT
Dispersion
m^2/s

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B1	1	51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B2	2	111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	151	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	161	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	171	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	181	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	191	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	211	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	221	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	231	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

INTERMEDIATE REPORT
Advective Velocity
m/s

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B1	1	11	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B1	1	21	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B1	1	31	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B1	1	41	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B1	1	51	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	61	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	71	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	81	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	91	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	101	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B2	2	111	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B3	3	121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B3	3	131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
B3	3	141	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B3	3	151	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B3	3	161	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B3	3	171	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B4	4	181	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	191	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	211	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	221	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4	4	231	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

INTERMEDIATE REPORT
Depth
m

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	11	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	21	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	31	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	41	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B1	1	51	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
B2	2	61	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	71	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	81	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	91	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	101	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B2	2	111	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
B3	3	121	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B3	3	131	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

B3	3	141	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B3	3	151	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B3	3	161	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B3	3	171	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B4	4	181	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	191	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	201	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	211	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	221	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
B4	4	231	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

INTERMEDIATE REPORT
Width
m

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	11	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	21	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	31	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	41	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B1	1	51	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
B2	2	61	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	71	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	81	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	91	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	101	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B2	2	111	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
B3	3	121	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	131	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	141	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	151	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	161	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B3	3	171	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B4	4	181	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	191	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	201	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	211	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	221	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
B4	4	231	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8

INTERMEDIATE REPORT
Cross-Sectional Area
m^2

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	11	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	21	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	31	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

B1	1	41	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B1	1	51	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
B2	2	61	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	71	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	81	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	91	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	101	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B2	2	111	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
B3	3	121	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	131	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	141	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	151	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	161	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B3	3	171	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
B4	4	181	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	191	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	201	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	211	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	221	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
B4	4	231	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7

INTERMEDIATE REPORT
Reaeration Rate
per day

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	6.416	6.431	6.446	6.461	6.476	6.491	6.506	6.521	6.537	6.552
B1	1	11	6.567	6.582	6.597	6.612	6.627	6.643	6.658	6.673	6.688	6.703
B1	1	21	6.718	6.733	6.749	6.764	6.779	6.794	6.809	6.824	6.839	6.855
B1	1	31	6.870	6.885	6.900	6.915	6.930	6.945	6.961	6.976	6.991	7.006
B1	1	41	7.021	7.036	7.051	7.067	7.082	7.097	7.112	7.127	7.142	7.157
B1	1	51	7.173	7.188	7.203	7.218	7.233	7.248	7.263	7.279	7.294	7.309
B2	2	61	3.816	3.822	3.828	3.835	3.841	3.847	3.854	3.860	3.866	3.873
B2	2	71	3.879	3.885	3.891	3.898	3.904	3.910	3.917	3.923	3.929	3.936
B2	2	81	4.189	4.195	4.201	4.208	4.214	4.220	4.227	4.233	4.239	4.245
B2	2	91	4.252	4.258	4.264	4.271	4.277	4.283	4.290	4.296	4.302	4.308
B2	2	101	4.315	4.321	4.327	4.334	4.340	4.346	4.353	4.359	4.365	4.372
B2	2	111	4.378	4.384	4.390	4.397	4.403	4.409	4.416	4.422	4.428	4.435
B3	3	121	2.845	2.848	2.851	2.855	2.858	2.861	2.865	2.868	2.871	2.875
B3	3	131	2.878	2.881	2.885	2.888	2.891	2.895	2.898	2.901	2.905	2.908
B3	3	141	2.911	2.915	2.918	2.921	2.925	2.928	2.931	2.935	2.941	2.944
B3	3	151	2.947	2.951	2.954	2.957	2.961	2.964	2.967	2.971	2.974	2.977
B3	3	161	2.981	2.984	2.987	2.991	2.994	2.997	3.001	3.004	3.007	3.011
B3	3	171	3.014	3.017	3.021	3.024	3.027	3.031	3.034	3.037	3.041	3.044
B4	4	181	2.216	2.218	2.220	2.222	2.224	2.226	2.228	2.230	2.232	2.234
B4	4	191	2.236	2.238	2.240	2.242	2.244	2.246	2.248	2.250	2.252	2.254
B4	4	201	2.257	2.259	2.261	2.263	2.265	2.267	2.269	2.271	2.273	2.275
B4	4	211	2.277	2.279	2.281	2.283	2.285	2.287	2.289	2.291	2.293	2.295
B4	4	221	2.297	2.299	2.301	2.304	2.306	2.308	2.310	2.312	2.314	2.316
B4	4	231	2.318	2.320	2.322	2.324	2.326	2.328	2.330	2.332	2.334	2.336

INTERMEDIATE REPORT

BOD Decay Rate
per day

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B1	1	11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B1	1	21	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B1	1	31	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B1	1	41	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B1	1	51	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	61	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	71	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	81	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	91	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	101	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	111	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	121	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	131	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	141	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	151	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	161	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	171	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	181	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	191	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	201	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	211	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	221	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	231	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12

INTERMEDIATE REPORT
BOD Settling Rate
per day

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	1	51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B2	2	111	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	121	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	131	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	141	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	151	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B3	3	161	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

B3	3	171	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	181	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	191	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	201	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	211	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	221	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	4	231	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

INTERMEDIATE REPORT
Ammonia Decay Rate
per day

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B1	1	11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
B1	1	21	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B1	1	31	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B1	1	41	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B1	1	51	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	61	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	71	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	81	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	91	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	101	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B2	2	111	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	121	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	131	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	141	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	151	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	161	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B3	3	171	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	181	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	191	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	201	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	211	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	221	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
B4	4	231	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12

INTERMEDIATE REPORT
Sediment Oxygen Demand
$g/m^2/d$

LA-QUAL Winter Projection for Bayou Toro

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
B1	1	1	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B1	1	11	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B1	1	21	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B1	1	31	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B1	1	41	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B1	1	51	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B2	2	61	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32

B2	2	71	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B2	2	81	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B2	2	91	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B2	2	101	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B2	2	111	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B3	3	121	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B3	3	131	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B3	3	141	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B3	3	151	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B3	3	161	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B3	3	171	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B4	4	181	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B4	4	191	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B4	4	201	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B4	4	211	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B4	4	221	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
B4	4	231	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32

CONDENSED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

DIST km	FLOW m^3/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORGN mg/L	NH3 µg/L	CHLA 1/da	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD $g/m^2/d$
HDWTR	0.21000	22.60	0.00	5.02	1.57	0.00	0.69	0.09	0.00							
23.90	0.21077	22.60	0.00	5.25	1.57	0.00	0.69	0.09	0.00	6.42	0.12	0.00	0.00	0.00	0.11	1.32
23.80	0.21153	22.60	0.00	5.47	1.57	0.00	0.69	0.09	0.00	6.43	0.12	0.00	0.00	0.00	0.11	1.32
23.70	0.21230	22.60	0.00	5.66	1.57	0.00	0.69	0.09	0.00	6.45	0.12	0.00	0.00	0.00	0.11	1.32
23.60	0.21307	22.60	0.00	5.84	1.57	0.00	0.69	0.09	0.00	6.46	0.12	0.00	0.00	0.00	0.11	1.32
23.50	0.21383	22.60	0.00	6.01	1.57	0.00	0.69	0.09	0.00	6.48	0.12	0.00	0.00	0.00	0.11	1.32
23.40	0.21460	22.60	0.00	6.16	1.57	0.00	0.69	0.09	0.00	6.49	0.12	0.00	0.00	0.00	0.11	1.32
23.30	0.21537	22.60	0.00	6.29	1.57	0.00	0.69	0.09	0.00	6.51	0.12	0.00	0.00	0.00	0.11	1.32
23.20	0.21613	22.60	0.00	6.42	1.57	0.00	0.69	0.09	0.00	6.52	0.12	0.00	0.00	0.00	0.11	1.32
23.10	0.21690	22.60	0.00	6.54	1.57	0.00	0.69	0.09	0.00	6.54	0.12	0.00	0.00	0.00	0.11	1.32
23.00	0.21767	22.60	0.00	6.64	1.57	0.00	0.69	0.09	0.00	6.55	0.12	0.00	0.00	0.00	0.11	1.32
22.90	0.21843	22.60	0.00	6.74	1.57	0.00	0.70	0.09	0.00	6.57	0.12	0.00	0.00	0.00	0.11	1.32
22.80	0.21920	22.60	0.00	6.83	1.58	0.00	0.70	0.09	0.00	6.58	0.12	0.00	0.00	0.00	0.11	1.32
22.70	0.21997	22.60	0.00	6.92	1.58	0.00	0.70	0.09	0.00	6.60	0.12	0.00	0.00	0.00	0.11	1.32
22.60	0.22073	22.60	0.00	6.99	1.58	0.00	0.70	0.09	0.00	6.61	0.12	0.00	0.00	0.00	0.11	1.32
22.50	0.22150	22.60	0.00	7.06	1.58	0.00	0.70	0.09	0.00	6.63	0.12	0.00	0.00	0.00	0.11	1.32
22.40	0.22227	22.60	0.00	7.13	1.58	0.00	0.70	0.09	0.00	6.64	0.12	0.00	0.00	0.00	0.11	1.32
22.30	0.22303	22.60	0.00	7.19	1.58	0.00	0.70	0.09	0.00	6.66	0.12	0.00	0.00	0.00	0.11	1.32
22.20	0.22380	22.60	0.00	7.24	1.58	0.00	0.70	0.09	0.00	6.67	0.12	0.00	0.00	0.00	0.11	1.32
22.10	0.22457	22.60	0.00	7.29	1.58	0.00	0.70	0.09	0.00	6.69	0.12	0.00	0.00	0.00	0.11	1.32
22.00	0.22533	22.60	0.00	7.34	1.58	0.00	0.70	0.09	0.00	6.70	0.12	0.00	0.00	0.00	0.11	1.32
21.90	0.22610	22.60	0.00	7.38	1.58	0.00	0.70	0.09	0.00	6.72	0.12	0.00	0.00	0.00	0.11	1.32
21.80	0.22687	22.60	0.00	7.42	1.58	0.00	0.70	0.09	0.00	6.73	0.12	0.00	0.00	0.00	0.11	1.32
21.70	0.22763	22.60	0.00	7.45	1.58	0.00	0.70	0.09	0.00	6.75	0.12	0.00	0.00	0.00	0.11	1.32
21.60	0.22840	22.60	0.00	7.49	1.58	0.00	0.70	0.09	0.00	6.76	0.12	0.00	0.00	0.00	0.12	1.32
21.50	0.22917	22.60	0.00	7.52	1.58	0.00	0.70	0.09	0.00	6.78	0.12	0.00	0.00	0.00	0.12	1.32
21.40	0.22993	22.60	0.00	7.55	1.58	0.00	0.70	0.09	0.00	6.79	0.12	0.00	0.00	0.00	0.12	1.32
21.30	0.23070	22.60	0.00	7.57	1.58	0.00	0.70	0.09	0.00	6.81	0.12	0.00	0.00	0.00	0.12	1.32
21.20	0.23147	22.60	0.00	7.60	1.58	0.00	0.70	0.09	0.00	6.82	0.12	0.00	0.00	0.00	0.12	1.32
21.10	0.23223	22.60	0.00	7.62	1.58	0.00	0.70	0.09	0.00	6.84	0.12	0.00	0.00	0.00	0.12	1.32
21.00	0.23300	22.60	0.00	7.64	1.58	0.00	0.70	0.09	0.00	6.85	0.12	0.00	0.00	0.00	0.12	1.32

20.90	0.23377	22.60	0.00	7.66	1.58	0.00	0.70	0.09	0.00	6.87	0.12	0.00	0.00	0.00	0.12	1.32
20.80	0.23453	22.60	0.00	7.68	1.58	0.00	0.70	0.09	0.00	6.88	0.12	0.00	0.00	0.00	0.12	1.32
20.70	0.23530	22.60	0.00	7.69	1.58	0.00	0.70	0.09	0.00	6.90	0.12	0.00	0.00	0.00	0.12	1.32
20.60	0.23607	22.60	0.00	7.71	1.58	0.00	0.70	0.09	0.00	6.92	0.12	0.00	0.00	0.00	0.12	1.32
20.50	0.23683	22.60	0.00	7.72	1.58	0.00	0.70	0.09	0.00	6.93	0.12	0.00	0.00	0.00	0.12	1.32
20.40	0.23760	22.60	0.00	7.73	1.58	0.00	0.71	0.09	0.00	6.95	0.12	0.00	0.00	0.00	0.12	1.32
20.30	0.23837	22.60	0.00	7.75	1.58	0.00	0.71	0.09	0.00	6.96	0.12	0.00	0.00	0.00	0.12	1.32
20.20	0.23913	22.60	0.00	7.76	1.58	0.00	0.71	0.09	0.00	6.98	0.12	0.00	0.00	0.00	0.12	1.32
20.10	0.23990	22.60	0.00	7.77	1.59	0.00	0.71	0.09	0.00	6.99	0.12	0.00	0.00	0.00	0.12	1.32
20.00	0.24067	22.60	0.00	7.78	1.59	0.00	0.71	0.09	0.00	7.01	0.12	0.00	0.00	0.00	0.12	1.32
19.90	0.24143	22.60	0.00	7.79	1.59	0.00	0.71	0.09	0.00	7.02	0.12	0.00	0.00	0.00	0.12	1.32
19.80	0.24220	22.60	0.00	7.80	1.59	0.00	0.71	0.09	0.00	7.04	0.12	0.00	0.00	0.00	0.12	1.32
19.70	0.24297	22.60	0.00	7.80	1.59	0.00	0.71	0.09	0.00	7.05	0.12	0.00	0.00	0.00	0.12	1.32
19.60	0.24373	22.60	0.00	7.81	1.59	0.00	0.71	0.09	0.00	7.07	0.12	0.00	0.00	0.00	0.12	1.32
19.50	0.24450	22.60	0.00	7.82	1.59	0.00	0.71	0.09	0.00	7.08	0.12	0.00	0.00	0.00	0.12	1.32
19.40	0.24527	22.60	0.00	7.82	1.59	0.00	0.71	0.09	0.00	7.10	0.12	0.00	0.00	0.00	0.12	1.32
19.30	0.24603	22.60	0.00	7.83	1.59	0.00	0.71	0.09	0.00	7.11	0.12	0.00	0.00	0.00	0.12	1.32
19.20	0.24680	22.60	0.00	7.84	1.59	0.00	0.71	0.09	0.00	7.13	0.12	0.00	0.00	0.00	0.12	1.32
19.10	0.24757	22.60	0.00	7.84	1.59	0.00	0.71	0.09	0.00	7.14	0.12	0.00	0.00	0.00	0.12	1.32
19.00	0.24833	22.60	0.00	7.85	1.59	0.00	0.71	0.09	0.00	7.16	0.12	0.00	0.00	0.00	0.12	1.32
18.90	0.24910	22.60	0.00	7.85	1.59	0.00	0.71	0.09	0.00	7.17	0.12	0.00	0.00	0.00	0.12	1.32
18.80	0.24987	22.60	0.00	7.86	1.59	0.00	0.71	0.09	0.00	7.19	0.12	0.00	0.00	0.00	0.12	1.32
18.70	0.25063	22.60	0.00	7.86	1.59	0.00	0.71	0.09	0.00	7.20	0.12	0.00	0.00	0.00	0.12	1.32
18.60	0.25140	22.60	0.00	7.86	1.59	0.00	0.71	0.09	0.00	7.22	0.12	0.00	0.00	0.00	0.12	1.32
18.50	0.25217	22.60	0.00	7.87	1.59	0.00	0.71	0.09	0.00	7.23	0.12	0.00	0.00	0.00	0.12	1.32
18.40	0.25293	22.60	0.00	7.87	1.59	0.00	0.71	0.09	0.00	7.25	0.12	0.00	0.00	0.00	0.12	1.32
18.30	0.25370	22.60	0.00	7.87	1.59	0.00	0.71	0.09	0.00	7.26	0.12	0.00	0.00	0.00	0.12	1.32
18.20	0.25447	22.60	0.00	7.88	1.59	0.00	0.71	0.09	0.00	7.28	0.12	0.00	0.00	0.00	0.12	1.32
18.10	0.25523	22.60	0.00	7.88	1.59	0.00	0.71	0.09	0.00	7.29	0.12	0.00	0.00	0.00	0.12	1.32
18.00	0.25600	22.60	0.00	7.88	1.59	0.00	0.71	0.09	0.00	7.31	0.12	0.00	0.00	0.00	0.12	1.32
17.90	0.25677	22.60	0.00	7.87	1.59	0.00	0.71	0.09	0.00	3.82	0.12	0.00	0.00	0.00	0.12	1.32
17.80	0.25753	22.60	0.00	7.85	1.59	0.00	0.71	0.09	0.00	3.82	0.12	0.00	0.00	0.00	0.12	1.32
17.70	0.25830	22.60	0.00	7.83	1.59	0.00	0.71	0.09	0.00	3.83	0.12	0.00	0.00	0.00	0.12	1.32
17.60	0.25907	22.60	0.00	7.82	1.59	0.00	0.71	0.09	0.00	3.83	0.12	0.00	0.00	0.00	0.12	1.32
17.50	0.25983	22.60	0.00	7.81	1.59	0.00	0.72	0.09	0.00	3.84	0.12	0.00	0.00	0.00	0.12	1.32
17.40	0.26060	22.60	0.00	7.79	1.59	0.00	0.72	0.09	0.00	3.85	0.12	0.00	0.00	0.00	0.12	1.32
17.30	0.26137	22.60	0.00	7.78	1.59	0.00	0.72	0.09	0.00	3.85	0.12	0.00	0.00	0.00	0.12	1.32
17.20	0.26213	22.60	0.00	7.77	1.59	0.00	0.72	0.09	0.00	3.86	0.12	0.00	0.00	0.00	0.12	1.32
17.10	0.26290	22.60	0.00	7.76	1.59	0.00	0.72	0.09	0.00	3.87	0.12	0.00	0.00	0.00	0.12	1.32
17.00	0.26367	22.60	0.00	7.76	1.58	0.00	0.72	0.09	0.00	3.87	0.12	0.00	0.00	0.00	0.12	1.32
16.90	0.26443	22.60	0.00	7.75	1.58	0.00	0.72	0.09	0.00	3.88	0.12	0.00	0.00	0.00	0.12	1.32
16.80	0.26520	22.60	0.00	7.74	1.58	0.00	0.72	0.09	0.00	3.89	0.12	0.00	0.00	0.00	0.12	1.32
16.70	0.26597	22.60	0.00	7.73	1.58	0.00	0.72	0.09	0.00	3.89	0.12	0.00	0.00	0.00	0.12	1.32
16.60	0.26673	22.60	0.00	7.73	1.58	0.00	0.72	0.09	0.00	3.90	0.12	0.00	0.00	0.00	0.12	1.32
16.50	0.26750	22.60	0.00	7.72	1.58	0.00	0.72	0.09	0.00	3.90	0.12	0.00	0.00	0.00	0.12	1.32
16.40	0.26827	22.60	0.00	7.72	1.58	0.00	0.72	0.09	0.00	3.91	0.12	0.00	0.00	0.00	0.12	1.32
16.30	0.26903	22.60	0.00	7.71	1.58	0.00	0.72	0.09	0.00	3.92	0.12	0.00	0.00	0.00	0.12	1.32
16.20	0.26980	22.60	0.00	7.71	1.58	0.00	0.72	0.09	0.00	3.92	0.12	0.00	0.00	0.00	0.12	1.32
16.10	0.27057	22.60	0.00	7.71	1.58	0.00	0.72	0.09	0.00	3.93	0.12	0.00	0.00	0.00	0.12	1.32
16.00	0.27133	22.60	0.00	7.70	1.58	0.00	0.72	0.09	0.00	3.94	0.12	0.00	0.00	0.00	0.12	1.32
15.90	0.30210	22.60	0.00	7.46	1.58	0.00	0.72	0.09	0.00	4.19	0.12	0.00	0.00	0.00	0.12	1.32
15.80	0.30287	22.60	0.00	7.47	1.58	0.00	0.72	0.09	0.00	4.19	0.12	0.00	0.00	0.00	0.12	1.32
15.70	0.30363	22.60	0.00	7.49	1.58	0.00	0.72	0.09	0.00	4.20	0.12	0.00	0.00	0.00	0.12	1.32
15.60	0.30440	22.60	0.00	7.51	1.58	0.00	0.72	0.09	0.00	4.21	0.12	0.00	0.00	0.00	0.12	1.32
15.50	0.30517	22.60	0.00	7.52	1.58	0.00	0.72	0.09	0.00	4.21	0.12	0.00	0.00	0.00	0.12	1.32
15.40	0.30593	22.60	0.00	7.54	1.58	0.00	0.72	0.09	0.00	4.22	0.12	0.00	0.00	0.00	0.12	1.32

15.30	0.30670	22.60	0.00	7.55	1.58	0.00	0.72	0.09	0.00	4.23	0.12	0.00	0.00	0.00	0.12	1.32
15.20	0.30747	22.60	0.00	7.56	1.58	0.00	0.72	0.09	0.00	4.23	0.12	0.00	0.00	0.00	0.12	1.32
15.10	0.30823	22.60	0.00	7.57	1.58	0.00	0.72	0.09	0.00	4.24	0.12	0.00	0.00	0.00	0.12	1.32
15.00	0.30900	22.60	0.00	7.59	1.58	0.00	0.72	0.09	0.00	4.25	0.12	0.00	0.00	0.00	0.12	1.32
14.90	0.30977	22.60	0.00	7.60	1.58	0.00	0.72	0.09	0.00	4.25	0.12	0.00	0.00	0.00	0.12	1.32
14.80	0.31053	22.60	0.00	7.60	1.58	0.00	0.72	0.09	0.00	4.26	0.12	0.00	0.00	0.00	0.12	1.32
14.70	0.31130	22.60	0.00	7.61	1.57	0.00	0.72	0.09	0.00	4.26	0.12	0.00	0.00	0.00	0.12	1.32
14.60	0.31207	22.60	0.00	7.62	1.57	0.00	0.72	0.09	0.00	4.27	0.12	0.00	0.00	0.00	0.12	1.32
14.50	0.31283	22.60	0.00	7.63	1.57	0.00	0.72	0.09	0.00	4.28	0.12	0.00	0.00	0.00	0.12	1.32
14.40	0.31360	22.60	0.00	7.64	1.57	0.00	0.72	0.09	0.00	4.28	0.12	0.00	0.00	0.00	0.12	1.32
14.30	0.31437	22.60	0.00	7.65	1.57	0.00	0.72	0.09	0.00	4.29	0.12	0.00	0.00	0.00	0.12	1.32
14.20	0.31513	22.60	0.00	7.65	1.57	0.00	0.72	0.09	0.00	4.30	0.12	0.00	0.00	0.00	0.12	1.32
14.10	0.31590	22.60	0.00	7.66	1.57	0.00	0.72	0.10	0.00	4.30	0.12	0.00	0.00	0.00	0.12	1.32
14.00	0.31667	22.60	0.00	7.66	1.57	0.00	0.72	0.10	0.00	4.31	0.12	0.00	0.00	0.00	0.12	1.32
13.90	0.31743	22.60	0.00	7.67	1.57	0.00	0.72	0.10	0.00	4.31	0.12	0.00	0.00	0.00	0.12	1.32
13.80	0.31820	22.60	0.00	7.68	1.57	0.00	0.72	0.10	0.00	4.32	0.12	0.00	0.00	0.00	0.12	1.32
13.70	0.31897	22.60	0.00	7.68	1.57	0.00	0.72	0.10	0.00	4.33	0.12	0.00	0.00	0.00	0.12	1.32
13.60	0.31973	22.60	0.00	7.68	1.57	0.00	0.72	0.10	0.00	4.33	0.12	0.00	0.00	0.00	0.12	1.32
13.50	0.32050	22.60	0.00	7.69	1.57	0.00	0.72	0.10	0.00	4.34	0.12	0.00	0.00	0.00	0.12	1.32
13.40	0.32127	22.60	0.00	7.69	1.57	0.00	0.73	0.10	0.00	4.35	0.12	0.00	0.00	0.00	0.12	1.32
13.30	0.32203	22.60	0.00	7.70	1.57	0.00	0.73	0.10	0.00	4.35	0.12	0.00	0.00	0.00	0.12	1.32
13.20	0.32280	22.60	0.00	7.70	1.57	0.00	0.73	0.10	0.00	4.36	0.12	0.00	0.00	0.00	0.12	1.32
13.10	0.32357	22.60	0.00	7.71	1.57	0.00	0.73	0.10	0.00	4.37	0.12	0.00	0.00	0.00	0.12	1.32
13.00	0.32433	22.60	0.00	7.71	1.57	0.00	0.73	0.10	0.00	4.37	0.12	0.00	0.00	0.00	0.12	1.32
12.90	0.32510	22.60	0.00	7.71	1.57	0.00	0.73	0.10	0.00	4.38	0.12	0.00	0.00	0.00	0.12	1.32
12.80	0.32587	22.60	0.00	7.72	1.57	0.00	0.73	0.10	0.00	4.38	0.12	0.00	0.00	0.00	0.12	1.32
12.70	0.32663	22.60	0.00	7.72	1.57	0.00	0.73	0.10	0.00	4.39	0.12	0.00	0.00	0.00	0.12	1.32
12.60	0.32740	22.60	0.00	7.72	1.57	0.00	0.73	0.10	0.00	4.40	0.12	0.00	0.00	0.00	0.12	1.32
12.50	0.32817	22.60	0.00	7.72	1.57	0.00	0.73	0.10	0.00	4.40	0.12	0.00	0.00	0.00	0.12	1.32
12.40	0.32893	22.60	0.00	7.73	1.56	0.00	0.73	0.10	0.00	4.41	0.12	0.00	0.00	0.00	0.12	1.32
12.30	0.32970	22.60	0.00	7.73	1.56	0.00	0.73	0.10	0.00	4.42	0.12	0.00	0.00	0.00	0.12	1.32
12.20	0.33047	22.60	0.00	7.73	1.56	0.00	0.73	0.10	0.00	4.42	0.12	0.00	0.00	0.00	0.12	1.32
12.10	0.33123	22.60	0.00	7.74	1.56	0.00	0.73	0.10	0.00	4.43	0.12	0.00	0.00	0.00	0.12	1.32
12.00	0.33200	22.60	0.00	7.74	1.56	0.00	0.73	0.10	0.00	4.43	0.12	0.00	0.00	0.00	0.12	1.32
11.90	0.33277	22.60	0.00	7.72	1.56	0.00	0.73	0.10	0.00	2.84	0.12	0.00	0.00	0.00	0.12	1.32
11.80	0.33353	22.60	0.00	7.71	1.56	0.00	0.73	0.10	0.00	2.85	0.12	0.00	0.00	0.00	0.12	1.32
11.70	0.33430	22.60	0.00	7.70	1.56	0.00	0.73	0.10	0.00	2.85	0.12	0.00	0.00	0.00	0.12	1.32
11.60	0.33507	22.60	0.00	7.69	1.56	0.00	0.73	0.10	0.00	2.85	0.12	0.00	0.00	0.00	0.12	1.32
11.50	0.33583	22.60	0.00	7.68	1.56	0.00	0.73	0.10	0.00	2.86	0.12	0.00	0.00	0.00	0.12	1.32
11.40	0.33660	22.60	0.00	7.67	1.56	0.00	0.73	0.10	0.00	2.86	0.12	0.00	0.00	0.00	0.12	1.32
11.30	0.33737	22.60	0.00	7.67	1.55	0.00	0.73	0.10	0.00	2.86	0.12	0.00	0.00	0.00	0.12	1.32
11.20	0.33813	22.60	0.00	7.66	1.55	0.00	0.73	0.10	0.00	2.87	0.12	0.00	0.00	0.00	0.12	1.32
11.10	0.33890	22.60	0.00	7.65	1.55	0.00	0.73	0.10	0.00	2.87	0.12	0.00	0.00	0.00	0.12	1.32
11.00	0.33967	22.60	0.00	7.65	1.55	0.00	0.73	0.10	0.00	2.87	0.12	0.00	0.00	0.00	0.12	1.32
10.90	0.34043	22.60	0.00	7.64	1.55	0.00	0.73	0.10	0.00	2.88	0.12	0.00	0.00	0.00	0.12	1.32
10.80	0.34120	22.60	0.00	7.63	1.55	0.00	0.73	0.10	0.00	2.88	0.12	0.00	0.00	0.00	0.12	1.32
10.70	0.34197	22.60	0.00	7.63	1.55	0.00	0.73	0.10	0.00	2.88	0.12	0.00	0.00	0.00	0.12	1.32
10.60	0.34273	22.60	0.00	7.63	1.54	0.00	0.73	0.10	0.00	2.89	0.12	0.00	0.00	0.00	0.12	1.32
10.50	0.34350	22.60	0.00	7.62	1.54	0.00	0.73	0.10	0.00	2.89	0.12	0.00	0.00	0.00	0.12	1.32
10.40	0.34427	22.60	0.00	7.62	1.54	0.00	0.73	0.10	0.00	2.89	0.12	0.00	0.00	0.00	0.12	1.32
10.30	0.34503	22.60	0.00	7.61	1.54	0.00	0.73	0.10	0.00	2.90	0.12	0.00	0.00	0.00	0.12	1.32
10.20	0.34580	22.60	0.00	7.61	1.54	0.00	0.73	0.10	0.00	2.90	0.12	0.00	0.00	0.00	0.12	1.32
10.10	0.34657	22.60	0.00	7.61	1.54	0.00	0.73	0.10	0.00	2.90	0.12	0.00	0.00	0.00	0.12	1.32
10.00	0.34733	22.60	0.00	7.61	1.54	0.00	0.73	0.10	0.00	2.91	0.12	0.00	0.00	0.00	0.12	1.32
9.90	0.34810	22.60	0.00	7.60	1.54	0.00	0.73	0.10	0.00	2.91	0.12	0.00	0.00	0.00	0.12	1.32
9.80	0.34887	22.60	0.00	7.60	1.53	0.00	0.73	0.10	0.00	2.91	0.12	0.00	0.00	0.00	0.12	1.32

9.70	0.34963	22.60	0.00	7.60	1.53	0.00	0.74	0.10	0.00	2.92	0.12	0.00	0.00	0.00	0.12	1.32
9.60	0.35040	22.60	0.00	7.60	1.53	0.00	0.74	0.10	0.00	2.92	0.12	0.00	0.00	0.00	0.12	1.32
9.50	0.35117	22.60	0.00	7.60	1.53	0.00	0.74	0.10	0.00	2.92	0.12	0.00	0.00	0.00	0.12	1.32
9.40	0.35193	22.60	0.00	7.60	1.53	0.00	0.74	0.10	0.00	2.93	0.12	0.00	0.00	0.00	0.12	1.32
9.30	0.35270	22.60	0.00	7.59	1.53	0.00	0.74	0.10	0.00	2.93	0.12	0.00	0.00	0.00	0.12	1.32
9.20	0.35347	22.60	0.00	7.59	1.53	0.00	0.74	0.10	0.00	2.93	0.12	0.00	0.00	0.00	0.12	1.32
9.10	0.35483	22.60	0.00	7.59	1.64	0.00	0.74	0.12	0.00	2.94	0.12	0.00	0.00	0.00	0.12	1.32
9.00	0.35560	22.60	0.00	7.59	1.64	0.00	0.74	0.12	0.00	2.94	0.12	0.00	0.00	0.00	0.12	1.32
8.90	0.35637	22.60	0.00	7.59	1.64	0.00	0.74	0.12	0.00	2.95	0.12	0.00	0.00	0.00	0.12	1.32
8.80	0.35713	22.60	0.00	7.59	1.64	0.00	0.74	0.12	0.00	2.95	0.12	0.00	0.00	0.00	0.12	1.32
8.70	0.35790	22.60	0.00	7.59	1.63	0.00	0.74	0.12	0.00	2.95	0.12	0.00	0.00	0.00	0.12	1.32
8.60	0.35867	22.60	0.00	7.59	1.63	0.00	0.75	0.12	0.00	2.96	0.12	0.00	0.00	0.00	0.12	1.32
8.50	0.35943	22.60	0.00	7.58	1.63	0.00	0.75	0.12	0.00	2.96	0.12	0.00	0.00	0.00	0.12	1.32
8.40	0.36020	22.60	0.00	7.58	1.63	0.00	0.75	0.12	0.00	2.96	0.12	0.00	0.00	0.00	0.12	1.32
8.30	0.36097	22.60	0.00	7.58	1.63	0.00	0.75	0.12	0.00	2.97	0.12	0.00	0.00	0.00	0.12	1.32
8.20	0.36173	22.60	0.00	7.58	1.63	0.00	0.75	0.12	0.00	2.97	0.12	0.00	0.00	0.00	0.12	1.32
8.10	0.36250	22.60	0.00	7.58	1.62	0.00	0.75	0.12	0.00	2.97	0.12	0.00	0.00	0.00	0.12	1.32
8.00	0.36327	22.60	0.00	7.58	1.62	0.00	0.75	0.12	0.00	2.98	0.12	0.00	0.00	0.00	0.12	1.32
7.90	0.36403	22.60	0.00	7.59	1.62	0.00	0.75	0.12	0.00	2.98	0.12	0.00	0.00	0.00	0.12	1.32
7.80	0.36480	22.60	0.00	7.59	1.62	0.00	0.75	0.12	0.00	2.98	0.12	0.00	0.00	0.00	0.12	1.32
7.70	0.36557	22.60	0.00	7.59	1.62	0.00	0.75	0.12	0.00	2.99	0.12	0.00	0.00	0.00	0.12	1.32
7.60	0.36633	22.60	0.00	7.59	1.62	0.00	0.75	0.12	0.00	2.99	0.12	0.00	0.00	0.00	0.12	1.32
7.50	0.36710	22.60	0.00	7.59	1.62	0.00	0.75	0.12	0.00	2.99	0.12	0.00	0.00	0.00	0.12	1.32
7.40	0.36787	22.60	0.00	7.59	1.61	0.00	0.75	0.12	0.00	3.00	0.12	0.00	0.00	0.00	0.12	1.32
7.30	0.36863	22.60	0.00	7.59	1.61	0.00	0.75	0.12	0.00	3.00	0.12	0.00	0.00	0.00	0.12	1.32
7.20	0.36940	22.60	0.00	7.59	1.61	0.00	0.75	0.12	0.00	3.00	0.12	0.00	0.00	0.00	0.12	1.32
7.10	0.37017	22.60	0.00	7.59	1.61	0.00	0.75	0.12	0.00	3.01	0.12	0.00	0.00	0.00	0.12	1.32
7.00	0.37093	22.60	0.00	7.59	1.61	0.00	0.75	0.12	0.00	3.01	0.12	0.00	0.00	0.00	0.12	1.32
6.90	0.37170	22.60	0.00	7.59	1.61	0.00	0.75	0.12	0.00	3.01	0.12	0.00	0.00	0.00	0.12	1.32
6.80	0.37247	22.60	0.00	7.59	1.60	0.00	0.75	0.12	0.00	3.02	0.12	0.00	0.00	0.00	0.12	1.32
6.70	0.37323	22.60	0.00	7.59	1.60	0.00	0.75	0.12	0.00	3.02	0.12	0.00	0.00	0.00	0.12	1.32
6.60	0.37400	22.60	0.00	7.59	1.60	0.00	0.75	0.12	0.00	3.02	0.12	0.00	0.00	0.00	0.12	1.32
6.50	0.37477	22.60	0.00	7.59	1.60	0.00	0.75	0.12	0.00	3.03	0.12	0.00	0.00	0.00	0.12	1.32
6.40	0.37553	22.60	0.00	7.59	1.60	0.00	0.75	0.12	0.00	3.03	0.12	0.00	0.00	0.00	0.12	1.32
6.30	0.37630	22.60	0.00	7.59	1.60	0.00	0.75	0.12	0.00	3.03	0.12	0.00	0.00	0.00	0.12	1.32
6.20	0.37707	22.60	0.00	7.60	1.60	0.00	0.75	0.12	0.00	3.04	0.12	0.00	0.00	0.00	0.12	1.32
6.10	0.37783	22.60	0.00	7.60	1.59	0.00	0.75	0.12	0.00	3.04	0.12	0.00	0.00	0.00	0.12	1.32
6.00	0.37860	22.60	0.00	7.60	1.59	0.00	0.75	0.11	0.00	3.04	0.12	0.00	0.00	0.00	0.12	1.32
5.90	0.37937	22.60	0.00	7.59	1.59	0.00	0.75	0.12	0.00	2.22	0.12	0.00	0.00	0.00	0.12	1.32
5.80	0.38013	22.60	0.00	7.58	1.59	0.00	0.75	0.12	0.00	2.22	0.12	0.00	0.00	0.00	0.12	1.32
5.70	0.38090	22.60	0.00	7.57	1.59	0.00	0.75	0.12	0.00	2.22	0.12	0.00	0.00	0.00	0.12	1.32
5.60	0.38167	22.60	0.00	7.56	1.59	0.00	0.75	0.12	0.00	2.22	0.12	0.00	0.00	0.00	0.12	1.32
5.50	0.38243	22.60	0.00	7.55	1.58	0.00	0.75	0.12	0.00	2.22	0.12	0.00	0.00	0.00	0.12	1.32
5.40	0.38320	22.60	0.00	7.54	1.58	0.00	0.75	0.12	0.00	2.23	0.12	0.00	0.00	0.00	0.12	1.32
5.30	0.38397	22.60	0.00	7.54	1.58	0.00	0.75	0.12	0.00	2.23	0.12	0.00	0.00	0.00	0.12	1.32
5.20	0.38473	22.60	0.00	7.53	1.58	0.00	0.75	0.12	0.00	2.23	0.12	0.00	0.00	0.00	0.12	1.32
5.10	0.38550	22.60	0.00	7.52	1.58	0.00	0.75	0.12	0.00	2.23	0.12	0.00	0.00	0.00	0.12	1.32
5.00	0.38627	22.60	0.00	7.52	1.58	0.00	0.75	0.12	0.00	2.23	0.12	0.00	0.00	0.00	0.12	1.32
4.90	0.38703	22.60	0.00	7.51	1.57	0.00	0.75	0.12	0.00	2.24	0.12	0.00	0.00	0.00	0.12	1.32
4.80	0.38780	22.60	0.00	7.51	1.57	0.00	0.75	0.12	0.00	2.24	0.12	0.00	0.00	0.00	0.12	1.32
4.70	0.38857	22.60	0.00	7.50	1.57	0.00	0.75	0.12	0.00	2.24	0.12	0.00	0.00	0.00	0.12	1.32
4.60	0.38933	22.60	0.00	7.50	1.57	0.00	0.75	0.12	0.00	2.24	0.12	0.00	0.00	0.00	0.12	1.32
4.50	0.39010	22.60	0.00	7.50	1.57	0.00	0.75	0.12	0.00	2.24	0.12	0.00	0.00	0.00	0.12	1.32
4.40	0.39087	22.60	0.00	7.49	1.56	0.00	0.75	0.12	0.00	2.25	0.12	0.00	0.00	0.00	0.12	1.32
4.30	0.39163	22.60	0.00	7.49	1.56	0.00	0.75	0.12	0.00	2.25	0.12	0.00	0.00	0.00	0.12	1.32
4.20	0.39240	22.60	0.00	7.49	1.56	0.00	0.75	0.12	0.00	2.25	0.12	0.00	0.00	0.00	0.12	1.32

4.10	0.39317	22.60	0.00	7.49	1.56	0.00	0.75	0.12	0.00	2.25	0.12	0.00	0.00	0.00	0.12	1.32
4.00	0.39393	22.60	0.00	7.48	1.56	0.00	0.75	0.12	0.00	2.25	0.12	0.00	0.00	0.00	0.12	1.32
3.90	0.39470	22.60	0.00	7.48	1.56	0.00	0.75	0.12	0.00	2.26	0.12	0.00	0.00	0.00	0.12	1.32
3.80	0.39547	22.60	0.00	7.48	1.55	0.00	0.75	0.12	0.00	2.26	0.12	0.00	0.00	0.00	0.12	1.32
3.70	0.39623	22.60	0.00	7.48	1.55	0.00	0.76	0.12	0.00	2.26	0.12	0.00	0.00	0.00	0.12	1.32
3.60	0.39700	22.60	0.00	7.48	1.55	0.00	0.76	0.12	0.00	2.26	0.12	0.00	0.00	0.00	0.12	1.32
3.50	0.39777	22.60	0.00	7.48	1.55	0.00	0.76	0.12	0.00	2.26	0.12	0.00	0.00	0.00	0.12	1.32
3.40	0.39853	22.60	0.00	7.47	1.55	0.00	0.76	0.12	0.00	2.27	0.12	0.00	0.00	0.00	0.12	1.32
3.30	0.39930	22.60	0.00	7.47	1.55	0.00	0.76	0.12	0.00	2.27	0.12	0.00	0.00	0.00	0.12	1.32
3.20	0.40007	22.60	0.00	7.47	1.55	0.00	0.76	0.12	0.00	2.27	0.12	0.00	0.00	0.00	0.12	1.32
3.10	0.40083	22.60	0.00	7.47	1.54	0.00	0.76	0.12	0.00	2.27	0.12	0.00	0.00	0.00	0.12	1.32
3.00	0.40160	22.60	0.00	7.47	1.54	0.00	0.76	0.12	0.00	2.27	0.12	0.00	0.00	0.00	0.12	1.32
2.90	0.40237	22.60	0.00	7.47	1.54	0.00	0.76	0.12	0.00	2.28	0.12	0.00	0.00	0.00	0.12	1.32
2.80	0.40313	22.60	0.00	7.47	1.54	0.00	0.76	0.12	0.00	2.28	0.12	0.00	0.00	0.00	0.12	1.32
2.70	0.40390	22.60	0.00	7.47	1.54	0.00	0.76	0.12	0.00	2.28	0.12	0.00	0.00	0.00	0.12	1.32
2.60	0.40467	22.60	0.00	7.47	1.54	0.00	0.76	0.12	0.00	2.28	0.12	0.00	0.00	0.00	0.12	1.32
2.50	0.40543	22.60	0.00	7.47	1.53	0.00	0.76	0.12	0.00	2.29	0.12	0.00	0.00	0.00	0.12	1.32
2.40	0.40620	22.60	0.00	7.47	1.53	0.00	0.76	0.12	0.00	2.29	0.12	0.00	0.00	0.00	0.12	1.32
2.30	0.40697	22.60	0.00	7.47	1.53	0.00	0.76	0.12	0.00	2.29	0.12	0.00	0.00	0.00	0.12	1.32
2.20	0.40773	22.60	0.00	7.47	1.53	0.00	0.76	0.12	0.00	2.29	0.12	0.00	0.00	0.00	0.12	1.32
2.10	0.40850	22.60	0.00	7.47	1.53	0.00	0.76	0.12	0.00	2.29	0.12	0.00	0.00	0.00	0.12	1.32
2.00	0.40927	22.60	0.00	7.47	1.53	0.00	0.76	0.12	0.00	2.30	0.12	0.00	0.00	0.00	0.12	1.32
1.90	0.41003	22.60	0.00	7.47	1.53	0.00	0.76	0.12	0.00	2.30	0.12	0.00	0.00	0.00	0.12	1.32
1.80	0.41080	22.60	0.00	7.47	1.52	0.00	0.76	0.12	0.00	2.30	0.12	0.00	0.00	0.00	0.12	1.32
1.70	0.41157	22.60	0.00	7.47	1.52	0.00	0.76	0.12	0.00	2.30	0.12	0.00	0.00	0.00	0.12	1.32
1.60	0.41233	22.60	0.00	7.47	1.52	0.00	0.76	0.12	0.00	2.30	0.12	0.00	0.00	0.00	0.12	1.32
1.50	0.41310	22.60	0.00	7.47	1.52	0.00	0.76	0.12	0.00	2.31	0.12	0.00	0.00	0.00	0.12	1.32
1.40	0.41387	22.60	0.00	7.47	1.52	0.00	0.76	0.12	0.00	2.31	0.12	0.00	0.00	0.00	0.12	1.32
1.30	0.41463	22.60	0.00	7.47	1.52	0.00	0.76	0.12	0.00	2.31	0.12	0.00	0.00	0.00	0.12	1.32
1.20	0.41540	22.60	0.00	7.47	1.52	0.00	0.76	0.12	0.00	2.31	0.12	0.00	0.00	0.00	0.12	1.32
1.10	0.41617	22.60	0.00	7.47	1.51	0.00	0.76	0.12	0.00	2.31	0.12	0.00	0.00	0.00	0.12	1.32
1.00	0.41693	22.60	0.00	7.47	1.51	0.00	0.76	0.12	0.00	2.32	0.12	0.00	0.00	0.00	0.12	1.32
0.90	0.41770	22.60	0.00	7.47	1.51	0.00	0.76	0.12	0.00	2.32	0.12	0.00	0.00	0.00	0.12	1.32
0.80	0.41847	22.60	0.00	7.47	1.51	0.00	0.76	0.12	0.00	2.32	0.12	0.00	0.00	0.00	0.12	1.32
0.70	0.41923	22.60	0.00	7.48	1.51	0.00	0.76	0.12	0.00	2.32	0.12	0.00	0.00	0.00	0.12	1.32
0.60	0.42000	22.60	0.00	7.48	1.51	0.00	0.76	0.12	0.00	2.32	0.12	0.00	0.00	0.00	0.12	1.32
0.50	0.42077	22.60	0.00	7.48	1.51	0.00	0.76	0.12	0.00	2.33	0.12	0.00	0.00	0.00	0.12	1.32
0.40	0.42153	22.60	0.00	7.48	1.51	0.00	0.76	0.12	0.00	2.33	0.12	0.00	0.00	0.00	0.12	1.32
0.30	0.42230	22.60	0.00	7.48	1.50	0.00	0.76	0.12	0.00	2.33	0.12	0.00	0.00	0.00	0.12	1.32
0.20	0.42307	22.60	0.00	7.48	1.50	0.00	0.76	0.12	0.00	2.33	0.12	0.00	0.00	0.00	0.12	1.32
0.10	0.42383	22.60	0.00	7.48	1.50	0.00	0.76	0.12	0.00	2.33	0.12	0.00	0.00	0.00	0.12	1.32
0.00	0.42460	22.60	0.00	7.48	1.50	0.00	0.76	0.12	0.00	2.34	0.12	0.00	0.00	0.00	0.12	1.32

EXPANDED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

IOR	REACH		DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3 mg/L	CHLA µg/L	DISP m²/s	DEPTH m	WIDTH m	ADVEC VELO m/s	MEAN VELO m/s	DO SAT mg/L	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
			HDWTR	0.210	22.6	0.0	5.0	1.6	0.0	0.7	0.1	0.0													
1	B1	1	23.90	0.211	22.6	0.0	5.3	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.086	0.086	8.6	6.416	0.12	0.00	0.00	0.00	0.11	1.32
2	B1	1	23.80	0.212	22.6	0.0	5.5	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.086	0.086	8.6	6.431	0.12	0.00	0.00	0.00	0.11	1.32
3	B1	1	23.70	0.212	22.6	0.0	5.7	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.086	0.086	8.6	6.446	0.12	0.00	0.00	0.00	0.11	1.32
4	B1	1	23.60	0.213	22.6	0.0	5.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.087	0.087	8.6	6.461	0.12	0.00	0.00	0.00	0.11	1.32
5	B1	1	23.50	0.214	22.6	0.0	6.0	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.087	0.087	8.6	6.476	0.12	0.00	0.00	0.00	0.11	1.32
6	B1	1	23.40	0.215	22.6	0.0	6.2	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.087	0.087	8.6	6.491	0.12	0.00	0.00	0.00	0.11	1.32
7	B1	1	23.30	0.215	22.6	0.0	6.3	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.088	0.088	8.6	6.506	0.12	0.00	0.00	0.00	0.11	1.32
8	B1	1	23.20	0.216	22.6	0.0	6.4	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.088	0.088	8.6	6.521	0.12	0.00	0.00	0.00	0.11	1.32
9	B1	1	23.10	0.217	22.6	0.0	6.5	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.088	0.088	8.6	6.537	0.12	0.00	0.00	0.00	0.11	1.32
10	B1	1	23.00	0.218	22.6	0.0	6.6	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.089	0.089	8.6	6.552	0.12	0.00	0.00	0.00	0.11	1.32
11	B1	1	22.90	0.218	22.6	0.0	6.7	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.089	0.089	8.6	6.567	0.12	0.00	0.00	0.00	0.11	1.32
12	B1	1	22.80	0.219	22.6	0.0	6.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.089	0.089	8.6	6.582	0.12	0.00	0.00	0.00	0.11	1.32
13	B1	1	22.70	0.220	22.6	0.0	6.9	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.090	0.090	8.6	6.597	0.12	0.00	0.00	0.00	0.11	1.32
14	B1	1	22.60	0.221	22.6	0.0	7.0	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.090	0.090	8.6	6.612	0.12	0.00	0.00	0.00	0.11	1.32
15	B1	1	22.50	0.221	22.6	0.0	7.1	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.090	0.090	8.6	6.627	0.12	0.00	0.00	0.00	0.11	1.32
16	B1	1	22.40	0.222	22.6	0.0	7.1	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.091	0.091	8.6	6.643	0.12	0.00	0.00	0.00	0.11	1.32
17	B1	1	22.30	0.223	22.6	0.0	7.2	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.091	0.091	8.6	6.658	0.12	0.00	0.00	0.00	0.11	1.32
18	B1	1	22.20	0.224	22.6	0.0	7.2	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.091	0.091	8.6	6.673	0.12	0.00	0.00	0.00	0.11	1.32
19	B1	1	22.10	0.225	22.6	0.0	7.3	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.091	0.091	8.6	6.688	0.12	0.00	0.00	0.00	0.11	1.32
20	B1	1	22.00	0.225	22.6	0.0	7.3	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.092	0.092	8.6	6.703	0.12	0.00	0.00	0.00	0.11	1.32
21	B1	1	21.90	0.226	22.6	0.0	7.4	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.092	0.092	8.6	6.718	0.12	0.00	0.00	0.00	0.11	1.32
22	B1	1	21.80	0.227	22.6	0.0	7.4	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.092	0.092	8.6	6.733	0.12	0.00	0.00	0.00	0.11	1.32
23	B1	1	21.70	0.228	22.6	0.0	7.5	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.093	0.093	8.6	6.749	0.12	0.00	0.00	0.00	0.11	1.32
24	B1	1	21.60	0.228	22.6	0.0	7.5	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.093	0.093	8.6	6.764	0.12	0.00	0.00	0.00	0.12	1.32
25	B1	1	21.50	0.229	22.6	0.0	7.5	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.093	0.093	8.6	6.779	0.12	0.00	0.00	0.00	0.12	1.32
26	B1	1	21.40	0.230	22.6	0.0	7.5	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.094	0.094	8.6	6.794	0.12	0.00	0.00	0.00	0.12	1.32
27	B1	1	21.30	0.231	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.094	0.094	8.6	6.809	0.12	0.00	0.00	0.00	0.12	1.32
28	B1	1	21.20	0.231	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.094	0.094	8.6	6.824	0.12	0.00	0.00	0.00	0.12	1.32
29	B1	1	21.10	0.232	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.095	0.095	8.6	6.839	0.12	0.00	0.00	0.00	0.12	1.32
30	B1	1	21.00	0.233	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.095	0.095	8.6	6.855	0.12	0.00	0.00	0.00	0.12	1.32
31	B1	1	20.90	0.234	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.095	0.095	8.6	6.870	0.12	0.00	0.00	0.00	0.12	1.32
32	B1	1	20.80	0.235	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.096	0.096	8.6	6.885	0.12	0.00	0.00	0.00	0.12	1.32
33	B1	1	20.70	0.235	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.096	0.096	8.6	6.900	0.12	0.00	0.00	0.00	0.12	1.32
34	B1	1	20.60	0.236	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.096	0.096	8.6	6.915	0.12	0.00	0.00	0.00	0.12	1.32
35	B1	1	20.50	0.237	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.096	0.096	8.6	6.930	0.12	0.00	0.00	0.00	0.12	1.32
36	B1	1	20.40	0.238	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.097	0.097	8.6	6.945	0.12	0.00	0.00	0.00	0.12	1.32
37	B1	1	20.30	0.238	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.097	0.097	8.6	6.961	0.12	0.00	0.00	0.00	0.12	1.32
38	B1	1	20.20	0.239	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.097	0.097	8.6	6.976	0.12	0.00	0.00	0.00	0.12	1.32
39	B1	1	20.10	0.240	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.098	0.098	8.6	6.991	0.12	0.00	0.00	0.00	0.12	1.32
40	B1	1	20.00	0.241	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.098	0.098	8.6	7.006	0.12	0.00	0.00	0.00	0.12	1.32
41	B1	1	19.90	0.241	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.098	0.098	8.6	7.021	0.12	0.00	0.00	0.00	0.12	1.32
42	B1	1	19.80	0.242	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.099	0.099	8.6	7.036	0.12	0.00	0.00	0.00	0.12	1.32
43	B1	1	19.70	0.243	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.099	0.099	8.6	7.051	0.12	0.00	0.00	0.00	0.12	1.32
44	B1	1	19.60	0.244	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.099	0.099	8.6	7.067	0.12	0.00	0.00	0.00	0.12	1.32
45	B1	1	19.50	0.244	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.100	0.100	8.6	7.082	0.12	0.00	0.00	0.00	0.12	1.32
46	B1	1	19.40	0.245	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.100	0.100	8.6	7.097	0.12	0.00	0.00	0.00	0.12	1.32
47	B1	1	19.30	0.246	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.100	0.100	8.6	7.112	0.12	0.00	0.00	0.00	0.12	1.32
48	B1	1	19.20	0.247	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.101	0.101	8.6	7.127	0.12	0.00	0.00	0.00	0.12	1.32
49	B1	1	19.10	0.248	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.101	0.101	8.6	7.142	0.12	0.00	0.00	0.00	0.12	1.32

50	B1	1	19.00	0.248	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.101	0.101	8.6	7.157	0.12	0.00	0.00	0.00	0.12	1.32
51	B1	1	18.90	0.249	22.6	0.0	7.9	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.101	0.101	8.6	7.173	0.12	0.00	0.00	0.00	0.12	1.32
52	B1	1	18.80	0.250	22.6	0.0	7.9	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.102	0.102	8.6	7.188	0.12	0.00	0.00	0.00	0.12	1.32
53	B1	1	18.70	0.251	22.6	0.0	7.9	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.102	0.102	8.6	7.203	0.12	0.00	0.00	0.00	0.12	1.32
54	B1	1	18.60	0.251	22.6	0.0	7.9	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.102	0.102	8.6	7.218	0.12	0.00	0.00	0.00	0.12	1.32
55	B1	1	18.50	0.252	22.6	0.0	7.9	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.103	0.103	8.6	7.233	0.12	0.00	0.00	0.00	0.12	1.32
56	B1	1	18.40	0.253	22.6	0.0	7.9	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.103	0.103	8.6	7.248	0.12	0.00	0.00	0.00	0.12	1.32
57	B1	1	18.30	0.254	22.6	0.0	7.9	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.103	0.103	8.6	7.263	0.12	0.00	0.00	0.00	0.12	1.32
58	B1	1	18.20	0.254	22.6	0.0	7.9	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.104	0.104	8.6	7.279	0.12	0.00	0.00	0.00	0.12	1.32
59	B1	1	18.10	0.255	22.6	0.0	7.9	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.104	0.104	8.6	7.294	0.12	0.00	0.00	0.00	0.12	1.32
60	B1	1	18.00	0.256	22.6	0.0	7.9	1.6	0.0	0.7	0.1	0.0	0.0	0.31	7.9	0.104	0.104	8.6	7.309	0.12	0.00	0.00	0.00	0.12	1.32
61	B2	2	17.90	0.257	22.6	0.0	7.9	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.058	0.058	8.6	3.816	0.12	0.00	0.00	0.00	0.12	1.32
62	B2	2	17.80	0.258	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.058	0.058	8.6	3.822	0.12	0.00	0.00	0.00	0.12	1.32
63	B2	2	17.70	0.258	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.058	0.058	8.6	3.828	0.12	0.00	0.00	0.00	0.12	1.32
64	B2	2	17.60	0.259	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.058	0.058	8.6	3.835	0.12	0.00	0.00	0.00	0.12	1.32
65	B2	2	17.50	0.260	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.058	0.058	8.6	3.841	0.12	0.00	0.00	0.00	0.12	1.32
66	B2	2	17.40	0.261	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.058	0.058	8.6	3.847	0.12	0.00	0.00	0.00	0.12	1.32
67	B2	2	17.30	0.261	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.059	0.059	8.6	3.854	0.12	0.00	0.00	0.00	0.12	1.32
68	B2	2	17.20	0.262	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.059	0.059	8.6	3.860	0.12	0.00	0.00	0.00	0.12	1.32
69	B2	2	17.10	0.263	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.059	0.059	8.6	3.866	0.12	0.00	0.00	0.00	0.12	1.32
70	B2	2	17.00	0.264	22.6	0.0	7.8	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.059	0.059	8.6	3.873	0.12	0.00	0.00	0.00	0.12	1.32
71	B2	2	16.90	0.264	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.059	0.059	8.6	3.879	0.12	0.00	0.00	0.00	0.12	1.32
72	B2	2	16.80	0.265	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.060	0.060	8.6	3.885	0.12	0.00	0.00	0.00	0.12	1.32
73	B2	2	16.70	0.266	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.060	0.060	8.6	3.891	0.12	0.00	0.00	0.00	0.12	1.32

EXPANDED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

IOR	REACH		DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3 mg/L	CHLA µg/L	DISP m²/s	DEPTH m	WIDTH m	ADVEC VELO m/s	MEAN VELO m/s	DO SAT mg/L	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
74	B2	2	16.60	0.267	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.060	0.060	8.6	3.898	0.12	0.00	0.00	0.00	0.12	1.32
75	B2	2	16.50	0.267	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.060	0.060	8.6	3.904	0.12	0.00	0.00	0.00	0.12	1.32
76	B2	2	16.40	0.268	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.060	0.060	8.6	3.910	0.12	0.00	0.00	0.00	0.12	1.32
77	B2	2	16.30	0.269	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.060	0.060	8.6	3.917	0.12	0.00	0.00	0.00	0.12	1.32
78	B2	2	16.20	0.270	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.061	0.061	8.6	3.923	0.12	0.00	0.00	0.00	0.12	1.32
79	B2	2	16.10	0.271	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.061	0.061	8.6	3.929	0.12	0.00	0.00	0.00	0.12	1.32
80	B2	2	16.00	0.271	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.061	0.061	8.6	3.936	0.12	0.00	0.00	0.00	0.12	1.32
WASTELOAD # 081 (NPS Midkiff Creek) ENTERS HERE																									
81	B2	2	15.90	0.302	22.6	0.0	7.5	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.068	0.068	8.6	4.189	0.12	0.00	0.00	0.00	0.12	1.32
82	B2	2	15.80	0.303	22.6	0.0	7.5	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.068	0.068	8.6	4.195	0.12	0.00	0.00	0.00	0.12	1.32
83	B2	2	15.70	0.304	22.6	0.0	7.5	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.068	0.068	8.6	4.201	0.12	0.00	0.00	0.00	0.12	1.32
84	B2	2	15.60	0.304	22.6	0.0	7.5	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.068	0.068	8.6	4.208	0.12	0.00	0.00	0.00	0.12	1.32
85	B2	2	15.50	0.305	22.6	0.0	7.5	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.068	0.068	8.6	4.214	0.12	0.00	0.00	0.00	0.12	1.32
86	B2	2	15.40	0.306	22.6	0.0	7.5	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.069	0.069	8.6	4.220	0.12	0.00	0.00	0.00	0.12	1.32
87	B2	2	15.30	0.307	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.069	0.069	8.6	4.227	0.12	0.00	0.00	0.00	0.12	1.32
88	B2	2	15.20	0.307	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.069	0.069	8.6	4.233	0.12	0.00	0.00	0.00	0.12	1.32
89	B2	2	15.10	0.308	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.069	0.069	8.6	4.239	0.12	0.00	0.00	0.00	0.12	1.32
90	B2	2	15.00	0.309	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.069	0.069	8.6	4.245	0.12	0.00	0.00	0.00	0.12	1.32
91	B2	2	14.90	0.310	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.070	0.070	8.6	4.252	0.12	0.00	0.00	0.00	0.12	1.32
92	B2	2	14.80	0.311	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.070	0.070	8.6	4.258	0.12	0.00	0.00	0.00	0.12	1.32
93	B2	2	14.70	0.311	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.070	0.070	8.6	4.264	0.12	0.00	0.00	0.00	0.12	1.32
94	B2	2	14.60	0.312	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.070	0.070	8.6	4.271	0.12	0.00	0.00	0.00	0.12	1.32
95	B2	2	14.50	0.313	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.070	0.070	8.6	4.277	0.12	0.00	0.00	0.00	0.12	1.32
96	B2	2	14.40	0.314	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.070	0.070	8.6	4.283	0.12	0.00	0.00	0.00	0.12	1.32
97	B2	2	14.30	0.314	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.071	0.071	8.6	4.290	0.12	0.00	0.00	0.00	0.12	1.32
98	B2	2	14.20	0.315	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.071	0.071	8.6	4.296	0.12	0.00	0.00	0.00	0.12	1.32
99	B2	2	14.10	0.316	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.071	0.071	8.6	4.302	0.12	0.00	0.00	0.00	0.12	1.32
100	B2	2	14.00	0.317	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.071	0.071	8.6	4.308	0.12	0.00	0.00	0.00	0.12	1.32
101	B2	2	13.90	0.317	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.071	0.071	8.6	4.315	0.12	0.00	0.00	0.00	0.12	1.32
102	B2	2	13.80	0.318	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.071	0.071	8.6	4.321	0.12	0.00	0.00	0.00	0.12	1.32
103	B2	2	13.70	0.319	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.072	0.072	8.6	4.327	0.12	0.00	0.00	0.00	0.12	1.32
104	B2	2	13.60	0.320	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.072	0.072	8.6	4.334	0.12	0.00	0.00	0.00	0.12	1.32
105	B2	2	13.50	0.320	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.072	0.072	8.6	4.340	0.12	0.00	0.00	0.00	0.12	1.32
106	B2	2	13.40	0.321	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.072	0.072	8.6	4.346	0.12	0.00	0.00	0.00	0.12	1.32
107	B2	2	13.30	0.322	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.072	0.072	8.6	4.353	0.12	0.00	0.00	0.00	0.12	1.32
108	B2	2	13.20	0.323	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.072	0.072	8.6	4.359	0.12	0.00	0.00	0.00	0.12	1.32
109	B2	2	13.10	0.324	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.073	0.073	8.6	4.365	0.12	0.00	0.00	0.00	0.12	1.32
110	B2	2	13.00	0.324	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.073	0.073	8.6	4.372	0.12	0.00	0.00	0.00	0.12	1.32
111	B2	2	12.90	0.325	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.073	0.073	8.6	4.378	0.12	0.00	0.00	0.00	0.12	1.32
112	B2	2	12.80	0.326	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.073	0.073	8.6	4.384	0.12	0.00	0.00	0.00	0.12	1.32
113	B2	2	12.70	0.327	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.073	0.073	8.6	4.390	0.12	0.00	0.00	0.00	0.12	1.32
114	B2	2	12.60	0.327	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.073	0.073	8.6	4.397	0.12	0.00	0.00	0.00	0.12	1.32
115	B2	2	12.50	0.328	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.074	0.074	8.6	4.403	0.12	0.00	0.00	0.00	0.12	1.32
116	B2	2	12.40	0.329	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.074	0.074	8.6	4.409	0.12	0.00	0.00	0.00	0.12	1.32
117	B2	2	12.30	0.330	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.074	0.074	8.6	4.416	0.12	0.00	0.00	0.00	0.12	1.32
118	B2	2	12.20	0.330	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.074	0.074	8.6	4.422	0.12	0.00	0.00	0.00	0.12	1.32
119	B2	2	12.10	0.331	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.074	0.074	8.6	4.428	0.12	0.00	0.00	0.00	0.12	1.32
120	B2	2	12.00	0.332	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.41	10.9	0.074	0.074	8.6	4.435	0.12	0.00	0.00	0.00	0.12	1.32
121	B3	3	11.90	0.333	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.048	0.048	8.6	2.845	0.12	0.00	0.00	0.00	0.12	1.32
122	B3	3	11.80	0.334	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.048	0.048	8.6	2.848	0.12	0.00	0.00	0.00	0.12	1.32

123	B3	3	11.70	0.334	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.048	0.048	8.6	2.851	0.12	0.00	0.00	0.00	0.12	1.32
124	B3	3	11.60	0.335	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.048	0.048	8.6	2.855	0.12	0.00	0.00	0.00	0.12	1.32
125	B3	3	11.50	0.336	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.049	0.049	8.6	2.858	0.12	0.00	0.00	0.00	0.12	1.32
126	B3	3	11.40	0.337	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.049	0.049	8.6	2.861	0.12	0.00	0.00	0.00	0.12	1.32
127	B3	3	11.30	0.337	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.049	0.049	8.6	2.865	0.12	0.00	0.00	0.00	0.12	1.32
128	B3	3	11.20	0.338	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.049	0.049	8.6	2.868	0.12	0.00	0.00	0.00	0.12	1.32
129	B3	3	11.10	0.339	22.6	0.0	7.7	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.049	0.049	8.6	2.871	0.12	0.00	0.00	0.00	0.12	1.32
130	B3	3	11.00	0.340	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.049	0.049	8.6	2.875	0.12	0.00	0.00	0.00	0.12	1.32
131	B3	3	10.90	0.340	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.049	0.049	8.6	2.878	0.12	0.00	0.00	0.00	0.12	1.32
132	B3	3	10.80	0.341	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.049	0.049	8.6	2.881	0.12	0.00	0.00	0.00	0.12	1.32
133	B3	3	10.70	0.342	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.049	0.049	8.6	2.885	0.12	0.00	0.00	0.00	0.12	1.32
134	B3	3	10.60	0.343	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.050	0.050	8.6	2.888	0.12	0.00	0.00	0.00	0.12	1.32
135	B3	3	10.50	0.343	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.050	0.050	8.6	2.891	0.12	0.00	0.00	0.00	0.12	1.32
136	B3	3	10.40	0.344	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.050	0.050	8.6	2.895	0.12	0.00	0.00	0.00	0.12	1.32
137	B3	3	10.30	0.345	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.050	0.050	8.6	2.898	0.12	0.00	0.00	0.00	0.12	1.32
138	B3	3	10.20	0.346	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.050	0.050	8.6	2.901	0.12	0.00	0.00	0.00	0.12	1.32
139	B3	3	10.10	0.347	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.050	0.050	8.6	2.905	0.12	0.00	0.00	0.00	0.12	1.32
140	B3	3	10.00	0.347	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.050	0.050	8.6	2.908	0.12	0.00	0.00	0.00	0.12	1.32
141	B3	3	9.90	0.348	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.050	0.050	8.6	2.911	0.12	0.00	0.00	0.00	0.12	1.32
142	B3	3	9.80	0.349	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.050	0.050	8.6	2.915	0.12	0.00	0.00	0.00	0.12	1.32
143	B3	3	9.70	0.350	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.051	0.051	8.6	2.918	0.12	0.00	0.00	0.00	0.12	1.32
144	B3	3	9.60	0.350	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.051	0.051	8.6	2.921	0.12	0.00	0.00	0.00	0.12	1.32
145	B3	3	9.50	0.351	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.051	0.051	8.6	2.925	0.12	0.00	0.00	0.00	0.12	1.32
146	B3	3	9.40	0.352	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.051	0.051	8.6	2.928	0.12	0.00	0.00	0.00	0.12	1.32

EXPANDED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

IOR	REACH		DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3 mg/L	CHLA µg/L	DISP m²/s	DEPTH m	WIDTH m	ADVEC VELO m/s	MEAN VELO m/s	DO SAT mg/L	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
147	B3	3	9.30	0.353	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.051	0.051	8.6	2.931	0.12	0.00	0.00	0.00	0.12	1.32
148	B3	3	9.20	0.353	22.6	0.0	7.6	1.5	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.051	0.051	8.6	2.935	0.12	0.00	0.00	0.00	0.12	1.32
WASTELOAD # 149 (Emerald Hills Golf) ENTERS HERE																									
149	B3	3	9.10	0.355	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.051	0.051	8.6	2.941	0.12	0.00	0.00	0.00	0.12	1.32
150	B3	3	9.00	0.356	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.051	0.051	8.6	2.944	0.12	0.00	0.00	0.00	0.12	1.32
151	B3	3	8.90	0.356	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.052	0.052	8.6	2.947	0.12	0.00	0.00	0.00	0.12	1.32
152	B3	3	8.80	0.357	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.052	0.052	8.6	2.951	0.12	0.00	0.00	0.00	0.12	1.32
153	B3	3	8.70	0.358	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.052	0.052	8.6	2.954	0.12	0.00	0.00	0.00	0.12	1.32
154	B3	3	8.60	0.359	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.052	0.052	8.6	2.957	0.12	0.00	0.00	0.00	0.12	1.32
155	B3	3	8.50	0.359	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.052	0.052	8.6	2.961	0.12	0.00	0.00	0.00	0.12	1.32
156	B3	3	8.40	0.360	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.052	0.052	8.6	2.964	0.12	0.00	0.00	0.00	0.12	1.32
157	B3	3	8.30	0.361	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.052	0.052	8.6	2.967	0.12	0.00	0.00	0.00	0.12	1.32
158	B3	3	8.20	0.362	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.052	0.052	8.6	2.971	0.12	0.00	0.00	0.00	0.12	1.32
159	B3	3	8.10	0.362	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.052	0.052	8.6	2.974	0.12	0.00	0.00	0.00	0.12	1.32
160	B3	3	8.00	0.363	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.053	0.053	8.6	2.977	0.12	0.00	0.00	0.00	0.12	1.32
161	B3	3	7.90	0.364	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.053	0.053	8.6	2.981	0.12	0.00	0.00	0.00	0.12	1.32
162	B3	3	7.80	0.365	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.053	0.053	8.6	2.984	0.12	0.00	0.00	0.00	0.12	1.32
163	B3	3	7.70	0.366	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.053	0.053	8.6	2.987	0.12	0.00	0.00	0.00	0.12	1.32
164	B3	3	7.60	0.366	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.053	0.053	8.6	2.991	0.12	0.00	0.00	0.00	0.12	1.32
165	B3	3	7.50	0.367	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.053	0.053	8.6	2.994	0.12	0.00	0.00	0.00	0.12	1.32
166	B3	3	7.40	0.368	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.053	0.053	8.6	2.997	0.12	0.00	0.00	0.00	0.12	1.32
167	B3	3	7.30	0.369	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.053	0.053	8.6	3.001	0.12	0.00	0.00	0.00	0.12	1.32
168	B3	3	7.20	0.369	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.053	0.053	8.6	3.004	0.12	0.00	0.00	0.00	0.12	1.32
169	B3	3	7.10	0.370	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.054	0.054	8.6	3.007	0.12	0.00	0.00	0.00	0.12	1.32
170	B3	3	7.00	0.371	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.054	0.054	8.6	3.011	0.12	0.00	0.00	0.00	0.12	1.32
171	B3	3	6.90	0.372	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.054	0.054	8.6	3.014	0.12	0.00	0.00	0.00	0.12	1.32
172	B3	3	6.80	0.372	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.054	0.054	8.6	3.017	0.12	0.00	0.00	0.00	0.12	1.32
173	B3	3	6.70	0.373	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.054	0.054	8.6	3.021	0.12	0.00	0.00	0.00	0.12	1.32
174	B3	3	6.60	0.374	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.054	0.054	8.6	3.024	0.12	0.00	0.00	0.00	0.12	1.32
175	B3	3	6.50	0.375	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.054	0.054	8.6	3.027	0.12	0.00	0.00	0.00	0.12	1.32
176	B3	3	6.40	0.376	22.6	0.0	7.6	1.6	0.0	0.7	0.1	0.0	0.0	0.50	13.8	0.054	0.054	8.6	3.031	0.12	0.00	0.00	0.00	0.12	1.32
177	B3	3	6.30	0.376	22.6	0.0	7.6	1.6	0.0	0.8	0.1	0.0	0.0	0.50	13.8	0.054	0.054	8.6	3.034	0.12	0.00	0.00	0.00	0.12	1.32
178	B3	3	6.20	0.377	22.6	0.0	7.6	1.6	0.0	0.8	0.1	0.0	0.0	0.50	13.8	0.055	0.055	8.6	3.037	0.12	0.00	0.00	0.00	0.12	1.32
179	B3	3	6.10	0.378	22.6	0.0	7.6	1.6	0.0	0.8	0.1	0.0	0.0	0.50	13.8	0.055	0.055	8.6	3.041	0.12	0.00	0.00	0.00	0.12	1.32
180	B3	3	6.00	0.379	22.6	0.0	7.6	1.6	0.0	0.8	0.1	0.0	0.0	0.50	13.8	0.055	0.055	8.6	3.044	0.12	0.00	0.00	0.00	0.12	1.32
181	B4	4	5.90	0.379	22.6	0.0	7.6	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.039	0.039	8.6	2.216	0.12	0.00	0.00	0.00	0.12	1.32
182	B4	4	5.80	0.380	22.6	0.0	7.6	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.039	0.039	8.6	2.218	0.12	0.00	0.00	0.00	0.12	1.32
183	B4	4	5.70	0.381	22.6	0.0	7.6	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.039	0.039	8.6	2.220	0.12	0.00	0.00	0.00	0.12	1.32
184	B4	4	5.60	0.382	22.6	0.0	7.6	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.039	0.039	8.6	2.222	0.12	0.00	0.00	0.00	0.12	1.32
185	B4	4	5.50	0.382	22.6	0.0	7.6	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.039	0.039	8.6	2.224	0.12	0.00	0.00	0.00	0.12	1.32
186	B4	4	5.40	0.383	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.039	0.039	8.6	2.226	0.12	0.00	0.00	0.00	0.12	1.32
187	B4	4	5.30	0.384	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.039	0.039	8.6	2.228	0.12	0.00	0.00	0.00	0.12	1.32
188	B4	4	5.20	0.385	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.040	0.040	8.6	2.230	0.12	0.00	0.00	0.00	0.12	1.32
189	B4	4	5.10	0.385	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.040	0.040	8.6	2.232	0.12	0.00	0.00	0.00	0.12	1.32
190	B4	4	5.00	0.386	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.040	0.040	8.6	2.234	0.12	0.00	0.00	0.00	0.12	1.32
191	B4	4	4.90	0.387	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.040	0.040	8.6	2.236	0.12	0.00	0.00	0.00	0.12	1.32
192	B4	4	4.80	0.388	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.040	0.040	8.6	2.238	0.12	0.00	0.00	0.00	0.12	1.32
193	B4	4	4.70	0.389	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.040	0.040	8.6	2.240	0.12	0.00	0.00	0.00	0.12	1.32
194	B4	4	4.60	0.389	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.040	0.040	8.6	2.242	0.12	0.00	0.00	0.00	0.12	1.32
195	B4	4	4.50	0.390	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.040	0.040	8.6	2.244	0.12	0.00	0.00	0.00	0.12	1.32

196	B4	4	4.40	0.391	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.040	0.040	8.6	2.246	0.12	0.00	0.00	0.00	0.12	1.32
197	B4	4	4.30	0.392	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.040	0.040	8.6	2.248	0.12	0.00	0.00	0.00	0.12	1.32
198	B4	4	4.20	0.392	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.040	0.040	8.6	2.250	0.12	0.00	0.00	0.00	0.12	1.32
199	B4	4	4.10	0.393	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.040	0.040	8.6	2.252	0.12	0.00	0.00	0.00	0.12	1.32
200	B4	4	4.00	0.394	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.041	0.041	8.6	2.254	0.12	0.00	0.00	0.00	0.12	1.32
201	B4	4	3.90	0.395	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.041	0.041	8.6	2.257	0.12	0.00	0.00	0.00	0.12	1.32
202	B4	4	3.80	0.395	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.041	0.041	8.6	2.259	0.12	0.00	0.00	0.00	0.12	1.32
203	B4	4	3.70	0.396	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.041	0.041	8.6	2.261	0.12	0.00	0.00	0.00	0.12	1.32
204	B4	4	3.60	0.397	22.6	0.0	7.5	1.6	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.041	0.041	8.6	2.263	0.12	0.00	0.00	0.00	0.12	1.32
205	B4	4	3.50	0.398	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.041	0.041	8.6	2.265	0.12	0.00	0.00	0.00	0.12	1.32
206	B4	4	3.40	0.399	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.041	0.041	8.6	2.267	0.12	0.00	0.00	0.00	0.12	1.32
207	B4	4	3.30	0.399	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.041	0.041	8.6	2.269	0.12	0.00	0.00	0.00	0.12	1.32
208	B4	4	3.20	0.400	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.041	0.041	8.6	2.271	0.12	0.00	0.00	0.00	0.12	1.32
209	B4	4	3.10	0.401	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.041	0.041	8.6	2.273	0.12	0.00	0.00	0.00	0.12	1.32
210	B4	4	3.00	0.402	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.041	0.041	8.6	2.275	0.12	0.00	0.00	0.00	0.12	1.32
211	B4	4	2.90	0.402	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.041	0.041	8.6	2.277	0.12	0.00	0.00	0.00	0.12	1.32
212	B4	4	2.80	0.403	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.041	0.041	8.6	2.279	0.12	0.00	0.00	0.00	0.12	1.32
213	B4	4	2.70	0.404	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.042	0.042	8.6	2.281	0.12	0.00	0.00	0.00	0.12	1.32
214	B4	4	2.60	0.405	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.042	0.042	8.6	2.283	0.12	0.00	0.00	0.00	0.12	1.32
215	B4	4	2.50	0.405	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.042	0.042	8.6	2.285	0.12	0.00	0.00	0.00	0.12	1.32
216	B4	4	2.40	0.406	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.042	0.042	8.6	2.287	0.12	0.00	0.00	0.00	0.12	1.32
217	B4	4	2.30	0.407	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.042	0.042	8.6	2.289	0.12	0.00	0.00	0.00	0.12	1.32
218	B4	4	2.20	0.408	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.042	0.042	8.6	2.291	0.12	0.00	0.00	0.00	0.12	1.32
219	B4	4	2.10	0.408	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.042	0.042	8.6	2.293	0.12	0.00	0.00	0.00	0.12	1.32

EXPANDED CAPSULE SUMMARY FOR Bayou Toro @ 110401A

IOR	REACH	DIST km	FLOW m³/s	TEMP deg C	SALN ppt	DO mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3 mg/L	CHLA µg/L	DISP m²/s	DEPTH m	WIDTH m	ADVEC VELO m/s	MEAN VELO m/s	DO SAT mg/L	REAER RATE 1/da	BOD1 DECA 1/da	BOD1 SETT 1/da	BOD2 DECA 1/da	BOD2 SETT 1/da	NH3 DECA 1/da	SOD g/m²/d
220	B4 4	2.00	0.409	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.042	0.042	8.6	2.295	0.12	0.00	0.00	0.00	0.12	1.32
221	B4 4	1.90	0.410	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.042	0.042	8.6	2.297	0.12	0.00	0.00	0.00	0.12	1.32
222	B4 4	1.80	0.411	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.042	0.042	8.6	2.299	0.12	0.00	0.00	0.00	0.12	1.32
223	B4 4	1.70	0.412	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.042	0.042	8.6	2.301	0.12	0.00	0.00	0.00	0.12	1.32
224	B4 4	1.60	0.412	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.042	0.042	8.6	2.304	0.12	0.00	0.00	0.00	0.12	1.32
225	B4 4	1.50	0.413	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.042	0.042	8.6	2.306	0.12	0.00	0.00	0.00	0.12	1.32
226	B4 4	1.40	0.414	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.043	0.043	8.6	2.308	0.12	0.00	0.00	0.00	0.12	1.32
227	B4 4	1.30	0.415	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.043	0.043	8.6	2.310	0.12	0.00	0.00	0.00	0.12	1.32
228	B4 4	1.20	0.415	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.043	0.043	8.6	2.312	0.12	0.00	0.00	0.00	0.12	1.32
229	B4 4	1.10	0.416	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.043	0.043	8.6	2.314	0.12	0.00	0.00	0.00	0.12	1.32
230	B4 4	1.00	0.417	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.043	0.043	8.6	2.316	0.12	0.00	0.00	0.00	0.12	1.32
231	B4 4	0.90	0.418	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.043	0.043	8.6	2.318	0.12	0.00	0.00	0.00	0.12	1.32
232	B4 4	0.80	0.418	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.043	0.043	8.6	2.320	0.12	0.00	0.00	0.00	0.12	1.32
233	B4 4	0.70	0.419	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.043	0.043	8.6	2.322	0.12	0.00	0.00	0.00	0.12	1.32
234	B4 4	0.60	0.420	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.043	0.043	8.6	2.324	0.12	0.00	0.00	0.00	0.12	1.32
235	B4 4	0.50	0.421	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.043	0.043	8.6	2.326	0.12	0.00	0.00	0.00	0.12	1.32
236	B4 4	0.40	0.422	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.043	0.043	8.6	2.328	0.12	0.00	0.00	0.00	0.12	1.32
237	B4 4	0.30	0.422	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.043	0.043	8.6	2.330	0.12	0.00	0.00	0.00	0.12	1.32
238	B4 4	0.20	0.423	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.044	0.044	8.6	2.332	0.12	0.00	0.00	0.00	0.12	1.32
239	B4 4	0.10	0.424	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.044	0.044	8.6	2.334	0.12	0.00	0.00	0.00	0.12	1.32
240	B4 4	0.00	0.425	22.6	0.0	7.5	1.5	0.0	0.8	0.1	0.0	0.0	0.58	16.8	0.044	0.044	8.6	2.336	0.12	0.00	0.00	0.00	0.12	1.32

SPECIAL REPORT: Bayou Toro @ 110401A
WATER QUALITY CONSTITUENT VALUES

ELEM NO.	ENDING km	TEMP deg C	SALN ppt	CM-I *	CM-II *	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1	23.900	22.60	0.0	0.0	0.0	5.25	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.0	0.0	0.	0.00
2	23.800	22.60	0.0	0.0	0.0	5.47	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.0	0.0	0.	0.00
3	23.700	22.60	0.0	0.0	0.0	5.66	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.0	0.0	0.	0.00
4	23.600	22.60	0.0	0.0	0.0	5.84	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.0	0.0	0.	0.00
5	23.500	22.60	0.0	0.0	0.0	6.01	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.0	0.0	0.	0.00
6	23.400	22.60	0.0	0.0	0.0	6.16	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.0	0.0	0.	0.00
7	23.300	22.60	0.0	0.0	0.0	6.29	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.0	0.0	0.	0.00
8	23.200	22.60	0.0	0.0	0.0	6.42	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
9	23.100	22.60	0.0	0.0	0.0	6.54	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
10	23.000	22.60	0.0	0.0	0.0	6.64	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
11	22.900	22.60	0.0	0.0	0.0	6.74	1.57	0.00	1.57	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
12	22.800	22.60	0.0	0.0	0.0	6.83	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
13	22.700	22.60	0.0	0.0	0.0	6.92	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
14	22.600	22.60	0.0	0.0	0.0	6.99	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
15	22.500	22.60	0.0	0.0	0.0	7.06	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
16	22.400	22.60	0.0	0.0	0.0	7.13	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
17	22.300	22.60	0.0	0.0	0.0	7.19	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
18	22.200	22.60	0.0	0.0	0.0	7.24	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
19	22.100	22.60	0.0	0.0	0.0	7.29	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
20	22.000	22.60	0.0	0.0	0.0	7.34	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
21	21.900	22.60	0.0	0.0	0.0	7.38	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00

22	21.800	22.60	0.0	0.0	0.0	7.42	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
23	21.700	22.60	0.0	0.0	0.0	7.45	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
24	21.600	22.60	0.0	0.0	0.0	7.49	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.0	0.0	0.	0.00
25	21.500	22.60	0.0	0.0	0.0	7.52	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
26	21.400	22.60	0.0	0.0	0.0	7.55	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
27	21.300	22.60	0.0	0.0	0.0	7.57	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
28	21.200	22.60	0.0	0.0	0.0	7.60	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
29	21.100	22.60	0.0	0.0	0.0	7.62	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
30	21.000	22.60	0.0	0.0	0.0	7.64	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
31	20.900	22.60	0.0	0.0	0.0	7.66	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
32	20.800	22.60	0.0	0.0	0.0	7.68	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
33	20.700	22.60	0.0	0.0	0.0	7.69	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
34	20.600	22.60	0.0	0.0	0.0	7.71	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
35	20.500	22.60	0.0	0.0	0.0	7.72	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
36	20.400	22.60	0.0	0.0	0.0	7.73	1.58	0.00	1.58	0.00	0.71	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
37	20.300	22.60	0.0	0.0	0.0	7.75	1.58	0.00	1.58	0.00	0.71	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
38	20.200	22.60	0.0	0.0	0.0	7.76	1.58	0.00	1.58	0.00	0.71	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
39	20.100	22.60	0.0	0.0	0.0	7.77	1.59	0.00	1.59	0.00	0.71	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
40	20.000	22.60	0.0	0.0	0.0	7.78	1.59	0.00	1.59	0.00	0.71	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
41	19.900	22.60	0.0	0.0	0.0	7.79	1.59	0.00	1.59	0.00	0.71	0.09	0.00	0.80	0.00	0.0	0.0	0.	0.00
42	19.800	22.60	0.0	0.0	0.0	7.80	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.80	0.00	0.0	0.0	0.	0.00
43	19.700	22.60	0.0	0.0	0.0	7.80	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.80	0.00	0.0	0.0	0.	0.00
44	19.600	22.60	0.0	0.0	0.0	7.81	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
45	19.500	22.60	0.0	0.0	0.0	7.82	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
46	19.400	22.60	0.0	0.0	0.0	7.82	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
47	19.300	22.60	0.0	0.0	0.0	7.83	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
48	19.200	22.60	0.0	0.0	0.0	7.84	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
49	19.100	22.60	0.0	0.0	0.0	7.84	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
50	19.000	22.60	0.0	0.0	0.0	7.85	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
51	18.900	22.60	0.0	0.0	0.0	7.85	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
52	18.800	22.60	0.0	0.0	0.0	7.86	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
53	18.700	22.60	0.0	0.0	0.0	7.86	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
54	18.600	22.60	0.0	0.0	0.0	7.86	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
55	18.500	22.60	0.0	0.0	0.0	7.87	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
56	18.400	22.60	0.0	0.0	0.0	7.87	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
57	18.300	22.60	0.0	0.0	0.0	7.87	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
58	18.200	22.60	0.0	0.0	0.0	7.88	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
59	18.100	22.60	0.0	0.0	0.0	7.88	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
60	18.000	22.60	0.0	0.0	0.0	7.88	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
61	17.900	22.60	0.0	0.0	0.0	7.87	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
62	17.800	22.60	0.0	0.0	0.0	7.85	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
63	17.700	22.60	0.0	0.0	0.0	7.83	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.0	0.0	0.	0.00
64	17.600	22.60	0.0	0.0	0.0	7.82	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
65	17.500	22.60	0.0	0.0	0.0	7.81	1.59	0.00	1.59	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
66	17.400	22.60	0.0	0.0	0.0	7.79	1.59	0.00	1.59	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
67	17.300	22.60	0.0	0.0	0.0	7.78	1.59	0.00	1.59	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
68	17.200	22.60	0.0	0.0	0.0	7.77	1.59	0.00	1.59	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
69	17.100	22.60	0.0	0.0	0.0	7.76	1.59	0.00	1.59	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
70	17.000	22.60	0.0	0.0	0.0	7.76	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
71	16.900	22.60	0.0	0.0	0.0	7.75	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
72	16.800	22.60	0.0	0.0	0.0	7.74	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
73	16.700	22.60	0.0	0.0	0.0	7.73	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
74	16.600	22.60	0.0	0.0	0.0	7.73	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
75	16.500	22.60	0.0	0.0	0.0	7.72	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
76	16.400	22.60	0.0	0.0	0.0	7.72	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
77	16.300	22.60	0.0	0.0	0.0	7.71	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00

78	16.200	22.60	0.0	0.0	0.0	7.71	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
79	16.100	22.60	0.0	0.0	0.0	7.71	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
80	16.000	22.60	0.0	0.0	0.0	7.70	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.83	0.00	0.0	0.0	0.	0.00
81	15.900	22.60	0.0	0.0	0.0	7.46	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
82	15.800	22.60	0.0	0.0	0.0	7.47	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
83	15.700	22.60	0.0	0.0	0.0	7.49	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
84	15.600	22.60	0.0	0.0	0.0	7.51	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
85	15.500	22.60	0.0	0.0	0.0	7.52	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
86	15.400	22.60	0.0	0.0	0.0	7.54	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
87	15.300	22.60	0.0	0.0	0.0	7.55	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.0	0.0	0.	0.00
88	15.200	22.60	0.0	0.0	0.0	7.56	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.83	0.00	0.0	0.0	0.	0.00
89	15.100	22.60	0.0	0.0	0.0	7.57	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.83	0.00	0.0	0.0	0.	0.00
90	15.000	22.60	0.0	0.0	0.0	7.59	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.83	0.00	0.0	0.0	0.	0.00
91	14.900	22.60	0.0	0.0	0.0	7.60	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.83	0.00	0.0	0.0	0.	0.00
92	14.800	22.60	0.0	0.0	0.0	7.60	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.83	0.00	0.0	0.0	0.	0.00
93	14.700	22.60	0.0	0.0	0.0	7.61	1.57	0.00	1.57	0.00	0.72	0.09	0.01	0.83	0.00	0.0	0.0	0.	0.00
94	14.600	22.60	0.0	0.0	0.0	7.62	1.57	0.00	1.57	0.00	0.72	0.09	0.01	0.83	0.00	0.0	0.0	0.	0.00
95	14.500	22.60	0.0	0.0	0.0	7.63	1.57	0.00	1.57	0.00	0.72	0.09	0.01	0.83	0.00	0.0	0.0	0.	0.00
96	14.400	22.60	0.0	0.0	0.0	7.64	1.57	0.00	1.57	0.00	0.72	0.09	0.01	0.83	0.00	0.0	0.0	0.	0.00
97	14.300	22.60	0.0	0.0	0.0	7.65	1.57	0.00	1.57	0.00	0.72	0.09	0.01	0.83	0.00	0.0	0.0	0.	0.00
98	14.200	22.60	0.0	0.0	0.0	7.65	1.57	0.00	1.57	0.00	0.72	0.09	0.01	0.83	0.00	0.0	0.0	0.	0.00
99	14.100	22.60	0.0	0.0	0.0	7.66	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.0	0.0	0.	0.00
100	14.000	22.60	0.0	0.0	0.0	7.66	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.0	0.0	0.	0.00
101	13.900	22.60	0.0	0.0	0.0	7.67	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.0	0.0	0.	0.00
102	13.800	22.60	0.0	0.0	0.0	7.68	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.0	0.0	0.	0.00
103	13.700	22.60	0.0	0.0	0.0	7.68	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.0	0.0	0.	0.00
104	13.600	22.60	0.0	0.0	0.0	7.68	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.0	0.0	0.	0.00
105	13.500	22.60	0.0	0.0	0.0	7.69	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.0	0.0	0.	0.00
106	13.400	22.60	0.0	0.0	0.0	7.69	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.83	0.00	0.0	0.0	0.	0.00
107	13.300	22.60	0.0	0.0	0.0	7.70	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.83	0.00	0.0	0.0	0.	0.00
108	13.200	22.60	0.0	0.0	0.0	7.70	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.0	0.0	0.	0.00
109	13.100	22.60	0.0	0.0	0.0	7.71	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.0	0.0	0.	0.00
110	13.000	22.60	0.0	0.0	0.0	7.71	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.0	0.0	0.	0.00
111	12.900	22.60	0.0	0.0	0.0	7.71	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.0	0.0	0.	0.00
112	12.800	22.60	0.0	0.0	0.0	7.72	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.0	0.0	0.	0.00
113	12.700	22.60	0.0	0.0	0.0	7.72	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.0	0.0	0.	0.00
114	12.600	22.60	0.0	0.0	0.0	7.72	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.0	0.0	0.	0.00
115	12.500	22.60	0.0	0.0	0.0	7.72	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.0	0.0	0.	0.00
116	12.400	22.60	0.0	0.0	0.0	7.73	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.0	0.0	0.	0.00
117	12.300	22.60	0.0	0.0	0.0	7.73	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.0	0.0	0.	0.00
118	12.200	22.60	0.0	0.0	0.0	7.73	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.0	0.0	0.	0.00
119	12.100	22.60	0.0	0.0	0.0	7.74	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.0	0.0	0.	0.00
120	12.000	22.60	0.0	0.0	0.0	7.74	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.0	0.0	0.	0.00
121	11.900	22.60	0.0	0.0	0.0	7.72	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.0	0.0	0.	0.00
122	11.800	22.60	0.0	0.0	0.0	7.71	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.0	0.0	0.	0.00
123	11.700	22.60	0.0	0.0	0.0	7.70	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.0	0.0	0.	0.00
124	11.600	22.60	0.0	0.0	0.0	7.69	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.0	0.0	0.	0.00
125	11.500	22.60	0.0	0.0	0.0	7.68	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.0	0.0	0.	0.00
126	11.400	22.60	0.0	0.0	0.0	7.67	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.0	0.0	0.	0.00
127	11.300	22.60	0.0	0.0	0.0	7.67	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.84	0.00	0.0	0.0	0.	0.00
128	11.200	22.60	0.0	0.0	0.0	7.66	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
129	11.100	22.60	0.0	0.0	0.0	7.65	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
130	11.000	22.60	0.0	0.0	0.0	7.65	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
131	10.900	22.60	0.0	0.0	0.0	7.64	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
132	10.800	22.60	0.0	0.0	0.0	7.63	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
133	10.700	22.60	0.0	0.0	0.0	7.63	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00

134	10.600	22.60	0.0	0.0	0.0	7.63	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
135	10.500	22.60	0.0	0.0	0.0	7.62	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
136	10.400	22.60	0.0	0.0	0.0	7.62	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
137	10.300	22.60	0.0	0.0	0.0	7.61	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
138	10.200	22.60	0.0	0.0	0.0	7.61	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
139	10.100	22.60	0.0	0.0	0.0	7.61	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
140	10.000	22.60	0.0	0.0	0.0	7.61	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
141	9.900	22.60	0.0	0.0	0.0	7.60	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
142	9.800	22.60	0.0	0.0	0.0	7.60	1.53	0.00	1.53	0.00	0.73	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
143	9.700	22.60	0.0	0.0	0.0	7.60	1.53	0.00	1.53	0.00	0.74	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
144	9.600	22.60	0.0	0.0	0.0	7.60	1.53	0.00	1.53	0.00	0.74	0.10	0.02	0.85	0.00	0.0	0.0	0.	0.00
145	9.500	22.60	0.0	0.0	0.0	7.60	1.53	0.00	1.53	0.00	0.74	0.10	0.02	0.86	0.00	0.0	0.0	0.	0.00
146	9.400	22.60	0.0	0.0	0.0	7.60	1.53	0.00	1.53	0.00	0.74	0.10	0.02	0.86	0.00	0.0	0.0	0.	0.00
147	9.300	22.60	0.0	0.0	0.0	7.59	1.53	0.00	1.53	0.00	0.74	0.10	0.02	0.86	0.00	0.0	0.0	0.	0.00
148	9.200	22.60	0.0	0.0	0.0	7.59	1.53	0.00	1.53	0.00	0.74	0.10	0.02	0.86	0.00	0.0	0.0	0.	0.00
149	9.100	22.60	0.0	0.0	0.0	7.59	1.64	0.00	1.64	0.00	0.74	0.12	0.02	0.88	0.00	0.0	0.0	0.	0.00
150	9.000	22.60	0.0	0.0	0.0	7.59	1.64	0.00	1.64	0.00	0.74	0.12	0.02	0.88	0.00	0.0	0.0	0.	0.00
151	8.900	22.60	0.0	0.0	0.0	7.59	1.64	0.00	1.64	0.00	0.74	0.12	0.02	0.88	0.00	0.0	0.0	0.	0.00
152	8.800	22.60	0.0	0.0	0.0	7.59	1.64	0.00	1.64	0.00	0.74	0.12	0.02	0.88	0.00	0.0	0.0	0.	0.00
153	8.700	22.60	0.0	0.0	0.0	7.59	1.63	0.00	1.63	0.00	0.74	0.12	0.02	0.88	0.00	0.0	0.0	0.	0.00
154	8.600	22.60	0.0	0.0	0.0	7.59	1.63	0.00	1.63	0.00	0.75	0.12	0.02	0.88	0.00	0.0	0.0	0.	0.00
155	8.500	22.60	0.0	0.0	0.0	7.58	1.63	0.00	1.63	0.00	0.75	0.12	0.02	0.88	0.00	0.0	0.0	0.	0.00
156	8.400	22.60	0.0	0.0	0.0	7.58	1.63	0.00	1.63	0.00	0.75	0.12	0.02	0.88	0.00	0.0	0.0	0.	0.00
157	8.300	22.60	0.0	0.0	0.0	7.58	1.63	0.00	1.63	0.00	0.75	0.12	0.02	0.88	0.00	0.0	0.0	0.	0.00
158	8.200	22.60	0.0	0.0	0.0	7.58	1.63	0.00	1.63	0.00	0.75	0.12	0.02	0.89	0.00	0.0	0.0	0.	0.00
159	8.100	22.60	0.0	0.0	0.0	7.58	1.62	0.00	1.62	0.00	0.75	0.12	0.02	0.89	0.00	0.0	0.0	0.	0.00
160	8.000	22.60	0.0	0.0	0.0	7.58	1.62	0.00	1.62	0.00	0.75	0.12	0.02	0.89	0.00	0.0	0.0	0.	0.00
161	7.900	22.60	0.0	0.0	0.0	7.59	1.62	0.00	1.62	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
162	7.800	22.60	0.0	0.0	0.0	7.59	1.62	0.00	1.62	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
163	7.700	22.60	0.0	0.0	0.0	7.59	1.62	0.00	1.62	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
164	7.600	22.60	0.0	0.0	0.0	7.59	1.62	0.00	1.62	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
165	7.500	22.60	0.0	0.0	0.0	7.59	1.62	0.00	1.62	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
166	7.400	22.60	0.0	0.0	0.0	7.59	1.61	0.00	1.61	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
167	7.300	22.60	0.0	0.0	0.0	7.59	1.61	0.00	1.61	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
168	7.200	22.60	0.0	0.0	0.0	7.59	1.61	0.00	1.61	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
169	7.100	22.60	0.0	0.0	0.0	7.59	1.61	0.00	1.61	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
170	7.000	22.60	0.0	0.0	0.0	7.59	1.61	0.00	1.61	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
171	6.900	22.60	0.0	0.0	0.0	7.59	1.61	0.00	1.61	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
172	6.800	22.60	0.0	0.0	0.0	7.59	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
173	6.700	22.60	0.0	0.0	0.0	7.59	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
174	6.600	22.60	0.0	0.0	0.0	7.59	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
175	6.500	22.60	0.0	0.0	0.0	7.59	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
176	6.400	22.60	0.0	0.0	0.0	7.59	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
177	6.300	22.60	0.0	0.0	0.0	7.59	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
178	6.200	22.60	0.0	0.0	0.0	7.60	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
179	6.100	22.60	0.0	0.0	0.0	7.60	1.59	0.00	1.59	0.00	0.75	0.12	0.03	0.89	0.00	0.0	0.0	0.	0.00
180	6.000	22.60	0.0	0.0	0.0	7.60	1.59	0.00	1.59	0.00	0.75	0.11	0.03	0.90	0.00	0.0	0.0	0.	0.00
181	5.900	22.60	0.0	0.0	0.0	7.59	1.59	0.00	1.59	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
182	5.800	22.60	0.0	0.0	0.0	7.58	1.59	0.00	1.59	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
183	5.700	22.60	0.0	0.0	0.0	7.57	1.59	0.00	1.59	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
184	5.600	22.60	0.0	0.0	0.0	7.56	1.59	0.00	1.59	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
185	5.500	22.60	0.0	0.0	0.0	7.55	1.58	0.00	1.58	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
186	5.400	22.60	0.0	0.0	0.0	7.54	1.58	0.00	1.58	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
187	5.300	22.60	0.0	0.0	0.0	7.54	1.58	0.00	1.58	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
188	5.200	22.60	0.0	0.0	0.0	7.53	1.58	0.00	1.58	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
189	5.100	22.60	0.0	0.0	0.0	7.52	1.58	0.00	1.58	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00

190	5.000	22.60	0.0	0.0	0.0	7.52	1.58	0.00	1.58	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
191	4.900	22.60	0.0	0.0	0.0	7.51	1.57	0.00	1.57	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
192	4.800	22.60	0.0	0.0	0.0	7.51	1.57	0.00	1.57	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
193	4.700	22.60	0.0	0.0	0.0	7.50	1.57	0.00	1.57	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
194	4.600	22.60	0.0	0.0	0.0	7.50	1.57	0.00	1.57	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
195	4.500	22.60	0.0	0.0	0.0	7.50	1.57	0.00	1.57	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
196	4.400	22.60	0.0	0.0	0.0	7.49	1.56	0.00	1.56	0.00	0.75	0.12	0.03	0.90	0.00	0.0	0.0	0.	0.00
197	4.300	22.60	0.0	0.0	0.0	7.49	1.56	0.00	1.56	0.00	0.75	0.12	0.04	0.90	0.00	0.0	0.0	0.	0.00
198	4.200	22.60	0.0	0.0	0.0	7.49	1.56	0.00	1.56	0.00	0.75	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
199	4.100	22.60	0.0	0.0	0.0	7.49	1.56	0.00	1.56	0.00	0.75	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
200	4.000	22.60	0.0	0.0	0.0	7.48	1.56	0.00	1.56	0.00	0.75	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
201	3.900	22.60	0.0	0.0	0.0	7.48	1.56	0.00	1.56	0.00	0.75	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
202	3.800	22.60	0.0	0.0	0.0	7.48	1.55	0.00	1.55	0.00	0.75	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
203	3.700	22.60	0.0	0.0	0.0	7.48	1.55	0.00	1.55	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
204	3.600	22.60	0.0	0.0	0.0	7.48	1.55	0.00	1.55	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
205	3.500	22.60	0.0	0.0	0.0	7.48	1.55	0.00	1.55	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
206	3.400	22.60	0.0	0.0	0.0	7.47	1.55	0.00	1.55	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
207	3.300	22.60	0.0	0.0	0.0	7.47	1.55	0.00	1.55	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
208	3.200	22.60	0.0	0.0	0.0	7.47	1.55	0.00	1.55	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
209	3.100	22.60	0.0	0.0	0.0	7.47	1.54	0.00	1.54	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
210	3.000	22.60	0.0	0.0	0.0	7.47	1.54	0.00	1.54	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
211	2.900	22.60	0.0	0.0	0.0	7.47	1.54	0.00	1.54	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
212	2.800	22.60	0.0	0.0	0.0	7.47	1.54	0.00	1.54	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
213	2.700	22.60	0.0	0.0	0.0	7.47	1.54	0.00	1.54	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
214	2.600	22.60	0.0	0.0	0.0	7.47	1.54	0.00	1.54	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
215	2.500	22.60	0.0	0.0	0.0	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
216	2.400	22.60	0.0	0.0	0.0	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
217	2.300	22.60	0.0	0.0	0.0	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.91	0.00	0.0	0.0	0.	0.00
218	2.200	22.60	0.0	0.0	0.0	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.92	0.00	0.0	0.0	0.	0.00
219	2.100	22.60	0.0	0.0	0.0	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.92	0.00	0.0	0.0	0.	0.00
220	2.000	22.60	0.0	0.0	0.0	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.92	0.00	0.0	0.0	0.	0.00
221	1.900	22.60	0.0	0.0	0.0	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.92	0.00	0.0	0.0	0.	0.00
222	1.800	22.60	0.0	0.0	0.0	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.0	0.0	0.	0.00
223	1.700	22.60	0.0	0.0	0.0	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.0	0.0	0.	0.00
224	1.600	22.60	0.0	0.0	0.0	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.0	0.0	0.	0.00
225	1.500	22.60	0.0	0.0	0.0	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.0	0.0	0.	0.00
226	1.400	22.60	0.0	0.0	0.0	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.0	0.0	0.	0.00
227	1.300	22.60	0.0	0.0	0.0	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.0	0.0	0.	0.00
228	1.200	22.60	0.0	0.0	0.0	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.0	0.0	0.	0.00
229	1.100	22.60	0.0	0.0	0.0	7.47	1.51	0.00	1.51	0.00	0.76	0.12	0.04	0.92	0.00	0.0	0.0	0.	0.00
230	1.000	22.60	0.0	0.0	0.0	7.47	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.0	0.0	0.	0.00
231	0.900	22.60	0.0	0.0	0.0	7.47	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.0	0.0	0.	0.00
232	0.800	22.60	0.0	0.0	0.0	7.47	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.0	0.0	0.	0.00
233	0.700	22.60	0.0	0.0	0.0	7.48	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.0	0.0	0.	0.00
234	0.600	22.60	0.0	0.0	0.0	7.48	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.0	0.0	0.	0.00
235	0.500	22.60	0.0	0.0	0.0	7.48	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.0	0.0	0.	0.00
236	0.400	22.60	0.0	0.0	0.0	7.48	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.0	0.0	0.	0.00
237	0.300	22.60	0.0	0.0	0.0	7.48	1.50	0.00	1.50	0.00	0.76	0.12	0.05	0.92	0.00	0.0	0.0	0.	0.00
238	0.200	22.60	0.0	0.0	0.0	7.48	1.50	0.00	1.50	0.00	0.76	0.12	0.05	0.92	0.00	0.0	0.0	0.	0.00
239	0.100	22.60	0.0	0.0	0.0	7.48	1.50	0.00	1.50	0.00	0.76	0.12	0.05	0.93	0.00	0.0	0.0	0.	0.00
240	0.000	22.60	0.0	0.0	0.0	7.48	1.50	0.00	1.50	0.00	0.76	0.12	0.05	0.93	0.00	0.0	0.0	0.	0.00

SPECIAL REPORT: Bayou Toro @ 110401A
BIOLOGICAL AND PHYSICAL COEFFICIENTS

ELEM NO.	ENDING DIST km	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#1 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	FULL SOD *	CORR SOD *	ORG-N DECAY 1/da	ORG-N 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	23.900	8.64	6.42	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	23.800	8.64	6.43	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	23.700	8.64	6.45	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	23.600	8.64	6.46	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	23.500	8.64	6.48	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	23.400	8.64	6.49	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	23.300	8.64	6.51	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	23.200	8.64	6.52	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	23.100	8.64	6.54	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	23.000	8.64	6.55	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	22.900	8.64	6.57	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	22.800	8.64	6.58	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	22.700	8.64	6.60	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	22.600	8.64	6.61	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	22.500	8.64	6.63	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	22.400	8.64	6.64	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	22.300	8.64	6.66	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	22.200	8.64	6.67	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	22.100	8.64	6.69	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	22.000	8.64	6.70	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	21.900	8.64	6.72	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	21.800	8.64	6.73	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	21.700	8.64	6.75	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	21.600	8.64	6.76	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	21.500	8.64	6.78	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	21.400	8.64	6.79	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	21.300	8.64	6.81	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	21.200	8.64	6.82	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	21.100	8.64	6.84	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	21.000	8.64	6.85	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	20.900	8.64	6.87	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32	20.800	8.64	6.88	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33	20.700	8.64	6.90	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34	20.600	8.64	6.92	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	20.500	8.64	6.93	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36	20.400	8.64	6.95	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37	20.300	8.64	6.96	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	20.200	8.64	6.98	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39	20.100	8.64	6.99	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	20.000	8.64	7.01	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	19.900	8.64	7.02	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	19.800	8.64	7.04	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	19.700	8.64	7.05	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	19.600	8.64	7.07	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	19.500	8.64	7.08	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	19.400	8.64	7.10	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	19.300	8.64	7.11	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	19.200	8.64	7.13	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	19.100	8.64	7.14	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	19.000	8.64	7.16	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	18.900	8.64	7.17	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	18.800	8.64	7.19	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

53	18.700	8.64	7.20	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	18.600	8.64	7.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	18.500	8.64	7.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	18.400	8.64	7.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	18.300	8.64	7.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	18.200	8.64	7.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	18.100	8.64	7.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	18.000	8.64	7.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
61	17.900	8.64	3.82	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	17.800	8.64	3.82	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
63	17.700	8.64	3.83	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	17.600	8.64	3.83	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	17.500	8.64	3.84	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	17.400	8.64	3.85	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	17.300	8.64	3.85	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	17.200	8.64	3.86	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	17.100	8.64	3.87	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	17.000	8.64	3.87	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
71	16.900	8.64	3.88	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	16.800	8.64	3.89	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73	16.700	8.64	3.89	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	16.600	8.64	3.90	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	16.500	8.64	3.90	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76	16.400	8.64	3.91	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77	16.300	8.64	3.92	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	16.200	8.64	3.92	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79	16.100	8.64	3.93	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	16.000	8.64	3.94	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
81	15.900	8.64	4.19	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	15.800	8.64	4.19	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
83	15.700	8.64	4.20	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	15.600	8.64	4.21	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	15.500	8.64	4.21	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	15.400	8.64	4.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87	15.300	8.64	4.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88	15.200	8.64	4.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89	15.100	8.64	4.24	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	15.000	8.64	4.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91	14.900	8.64	4.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92	14.800	8.64	4.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
93	14.700	8.64	4.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
94	14.600	8.64	4.27	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	14.500	8.64	4.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
96	14.400	8.64	4.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97	14.300	8.64	4.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
98	14.200	8.64	4.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
99	14.100	8.64	4.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	14.000	8.64	4.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
101	13.900	8.64	4.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102	13.800	8.64	4.32	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103	13.700	8.64	4.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
104	13.600	8.64	4.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	13.500	8.64	4.34	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106	13.400	8.64	4.35	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107	13.300	8.64	4.35	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
108	13.200	8.64	4.36	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

109	13.100	8.64	4.37	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	13.000	8.64	4.37	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
111	12.900	8.64	4.38	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112	12.800	8.64	4.38	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113	12.700	8.64	4.39	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
114	12.600	8.64	4.40	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	12.500	8.64	4.40	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
116	12.400	8.64	4.41	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117	12.300	8.64	4.42	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
118	12.200	8.64	4.42	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
119	12.100	8.64	4.43	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	12.000	8.64	4.43	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
121	11.900	8.64	2.84	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122	11.800	8.64	2.85	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
123	11.700	8.64	2.85	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
124	11.600	8.64	2.85	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	11.500	8.64	2.86	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126	11.400	8.64	2.86	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127	11.300	8.64	2.86	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
128	11.200	8.64	2.87	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
129	11.100	8.64	2.87	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	11.000	8.64	2.87	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
131	10.900	8.64	2.88	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132	10.800	8.64	2.88	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
133	10.700	8.64	2.88	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
134	10.600	8.64	2.89	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	10.500	8.64	2.89	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
136	10.400	8.64	2.89	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137	10.300	8.64	2.90	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
138	10.200	8.64	2.90	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
139	10.100	8.64	2.90	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	10.000	8.64	2.91	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
141	9.900	8.64	2.91	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142	9.800	8.64	2.91	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
143	9.700	8.64	2.92	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
144	9.600	8.64	2.92	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	9.500	8.64	2.92	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146	9.400	8.64	2.93	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147	9.300	8.64	2.93	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
148	9.200	8.64	2.93	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
149	9.100	8.64	2.94	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	9.000	8.64	2.94	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
151	8.900	8.64	2.95	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152	8.800	8.64	2.95	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153	8.700	8.64	2.95	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
154	8.600	8.64	2.96	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	8.500	8.64	2.96	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
156	8.400	8.64	2.96	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157	8.300	8.64	2.97	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
158	8.200	8.64	2.97	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
159	8.100	8.64	2.97	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	8.000	8.64	2.98	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161	7.900	8.64	2.98	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162	7.800	8.64	2.98	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
163	7.700	8.64	2.99	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
164	7.600	8.64	2.99	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

165	7.500	8.64	2.99	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166	7.400	8.64	3.00	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167	7.300	8.64	3.00	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
168	7.200	8.64	3.00	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
169	7.100	8.64	3.01	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	7.000	8.64	3.01	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
171	6.900	8.64	3.01	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172	6.800	8.64	3.02	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
173	6.700	8.64	3.02	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
174	6.600	8.64	3.02	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	6.500	8.64	3.03	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
176	6.400	8.64	3.03	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177	6.300	8.64	3.03	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
178	6.200	8.64	3.04	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
179	6.100	8.64	3.04	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	6.000	8.64	3.04	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
181	5.900	8.64	2.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
182	5.800	8.64	2.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
183	5.700	8.64	2.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
184	5.600	8.64	2.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
185	5.500	8.64	2.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
186	5.400	8.64	2.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
187	5.300	8.64	2.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
188	5.200	8.64	2.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
189	5.100	8.64	2.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190	5.000	8.64	2.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
191	4.900	8.64	2.24	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
192	4.800	8.64	2.24	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
193	4.700	8.64	2.24	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
194	4.600	8.64	2.24	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
195	4.500	8.64	2.24	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
196	4.400	8.64	2.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197	4.300	8.64	2.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	4.200	8.64	2.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
199	4.100	8.64	2.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200	4.000	8.64	2.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
201	3.900	8.64	2.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	3.800	8.64	2.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	3.700	8.64	2.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	3.600	8.64	2.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	3.500	8.64	2.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	3.400	8.64	2.27	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
207	3.300	8.64	2.27	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
208	3.200	8.64	2.27	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
209	3.100	8.64	2.27	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	3.000	8.64	2.27	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
211	2.900	8.64	2.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
212	2.800	8.64	2.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
213	2.700	8.64	2.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
214	2.600	8.64	2.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
215	2.500	8.64	2.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
216	2.400	8.64	2.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
217	2.300	8.64	2.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
218	2.200	8.64	2.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
219	2.100	8.64	2.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	2.000	8.64	2.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

221	1.900	8.64	2.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
222	1.800	8.64	2.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
223	1.700	8.64	2.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
224	1.600	8.64	2.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	1.500	8.64	2.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	1.400	8.64	2.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	1.300	8.64	2.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	1.200	8.64	2.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
229	1.100	8.64	2.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	1.000	8.64	2.32	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
231	0.900	8.64	2.32	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
232	0.800	8.64	2.32	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
233	0.700	8.64	2.32	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
234	0.600	8.64	2.32	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
235	0.500	8.64	2.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
236	0.400	8.64	2.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
237	0.300	8.64	2.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
238	0.200	8.64	2.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
239	0.100	8.64	2.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
240	0.000	8.64	2.34	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

SPECIAL REPORT: Bayou Toro @ 110401A
HYDRAULIC PARAMETER VALUES

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	ADVCTV VELO m/s	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
1	24.00	23.90	0.2108	0.086	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.086
2	23.90	23.80	0.2115	0.086	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.086
3	23.80	23.70	0.2123	0.086	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.086
4	23.70	23.60	0.2131	0.087	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.087
5	23.60	23.50	0.2138	0.087	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.087
6	23.50	23.40	0.2146	0.087	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.087
7	23.40	23.30	0.2154	0.088	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.088
8	23.30	23.20	0.2161	0.088	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.088
9	23.20	23.10	0.2169	0.088	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.088
10	23.10	23.00	0.2177	0.089	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.089
11	23.00	22.90	0.2184	0.089	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.089
12	22.90	22.80	0.2192	0.089	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.089
13	22.80	22.70	0.2200	0.090	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.090
14	22.70	22.60	0.2207	0.090	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.090
15	22.60	22.50	0.2215	0.090	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.090
16	22.50	22.40	0.2223	0.091	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.091
17	22.40	22.30	0.2230	0.091	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.091
18	22.30	22.20	0.2238	0.091	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.091
19	22.20	22.10	0.2246	0.091	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.091
20	22.10	22.00	0.2253	0.092	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.092
21	22.00	21.90	0.2261	0.092	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.092
22	21.90	21.80	0.2269	0.092	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.092
23	21.80	21.70	0.2276	0.093	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.093
24	21.70	21.60	0.2284	0.093	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.093
25	21.60	21.50	0.2292	0.093	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.093
26	21.50	21.40	0.2299	0.094	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.094
27	21.40	21.30	0.2307	0.094	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.094

28	21.30	21.20	0.2315	0.094	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.094
29	21.20	21.10	0.2322	0.095	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.095
30	21.10	21.00	0.2330	0.095	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.095
31	21.00	20.90	0.2338	0.095	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.095
32	20.90	20.80	0.2345	0.096	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.096
33	20.80	20.70	0.2353	0.096	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.096
34	20.70	20.60	0.2361	0.096	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.096
35	20.60	20.50	0.2368	0.096	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.096
36	20.50	20.40	0.2376	0.097	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.097
37	20.40	20.30	0.2384	0.097	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.097
38	20.30	20.20	0.2391	0.097	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.097
39	20.20	20.10	0.2399	0.098	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.098
40	20.10	20.00	0.2407	0.098	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.098
41	20.00	19.90	0.2414	0.098	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.098
42	19.90	19.80	0.2422	0.099	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.099
43	19.80	19.70	0.2430	0.099	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.099
44	19.70	19.60	0.2437	0.099	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.099
45	19.60	19.50	0.2445	0.100	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.100
46	19.50	19.40	0.2453	0.100	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.100
47	19.40	19.30	0.2460	0.100	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.100
48	19.30	19.20	0.2468	0.101	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.101
49	19.20	19.10	0.2476	0.101	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.101
50	19.10	19.00	0.2483	0.101	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.101
51	19.00	18.90	0.2491	0.101	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.101
52	18.90	18.80	0.2499	0.102	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.102
53	18.80	18.70	0.2506	0.102	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.102
54	18.70	18.60	0.2514	0.102	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.102
55	18.60	18.50	0.2522	0.103	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.103
56	18.50	18.40	0.2529	0.103	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.103
57	18.40	18.30	0.2537	0.103	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.103
58	18.30	18.20	0.2545	0.104	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.104
59	18.20	18.10	0.2552	0.104	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.104
60	18.10	18.00	0.2560	0.104	0.31	7.9	246.	792.0	2.5	0.	0.000	0.000	0.104
61	18.00	17.90	0.2568	0.058	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.058
62	17.90	17.80	0.2575	0.058	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.058
63	17.80	17.70	0.2583	0.058	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.058
64	17.70	17.60	0.2591	0.058	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.058
65	17.60	17.50	0.2598	0.058	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.058
66	17.50	17.40	0.2606	0.058	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.058
67	17.40	17.30	0.2614	0.059	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.059
68	17.30	17.20	0.2621	0.059	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.059
69	17.20	17.10	0.2629	0.059	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.059
70	17.10	17.00	0.2637	0.059	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.059
71	17.00	16.90	0.2644	0.059	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.059
72	16.90	16.80	0.2652	0.060	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.060
73	16.80	16.70	0.2660	0.060	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.060
74	16.70	16.60	0.2667	0.060	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.060
75	16.60	16.50	0.2675	0.060	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.060
76	16.50	16.40	0.2683	0.060	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.060
77	16.40	16.30	0.2690	0.060	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.060
78	16.30	16.20	0.2698	0.061	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.061
79	16.20	16.10	0.2706	0.061	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.061
80	16.10	16.00	0.2713	0.061	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.061
81	16.00	15.90	0.3021	0.068	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.068
82	15.90	15.80	0.3029	0.068	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.068
83	15.80	15.70	0.3036	0.068	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.068

84	15.70	15.60	0.3044	0.068	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.068
85	15.60	15.50	0.3052	0.068	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.068
86	15.50	15.40	0.3059	0.069	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.069
87	15.40	15.30	0.3067	0.069	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.069
88	15.30	15.20	0.3075	0.069	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.069
89	15.20	15.10	0.3082	0.069	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.069
90	15.10	15.00	0.3090	0.069	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.069
91	15.00	14.90	0.3098	0.070	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.070
92	14.90	14.80	0.3105	0.070	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.070
93	14.80	14.70	0.3113	0.070	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.070
94	14.70	14.60	0.3121	0.070	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.070
95	14.60	14.50	0.3128	0.070	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.070
96	14.50	14.40	0.3136	0.070	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.070
97	14.40	14.30	0.3144	0.071	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.071
98	14.30	14.20	0.3151	0.071	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.071
99	14.20	14.10	0.3159	0.071	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.071
100	14.10	14.00	0.3167	0.071	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.071
101	14.00	13.90	0.3174	0.071	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.071
102	13.90	13.80	0.3182	0.071	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.071
103	13.80	13.70	0.3190	0.072	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.072
104	13.70	13.60	0.3197	0.072	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.072
105	13.60	13.50	0.3205	0.072	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.072
106	13.50	13.40	0.3213	0.072	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.072
107	13.40	13.30	0.3220	0.072	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.072
108	13.30	13.20	0.3228	0.072	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.072
109	13.20	13.10	0.3236	0.073	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.073
110	13.10	13.00	0.3243	0.073	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.073
111	13.00	12.90	0.3251	0.073	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.073
112	12.90	12.80	0.3259	0.073	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.073
113	12.80	12.70	0.3266	0.073	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.073
114	12.70	12.60	0.3274	0.073	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.073
115	12.60	12.50	0.3282	0.074	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.074
116	12.50	12.40	0.3289	0.074	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.074
117	12.40	12.30	0.3297	0.074	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.074
118	12.30	12.20	0.3305	0.074	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.074
119	12.20	12.10	0.3312	0.074	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.074
120	12.10	12.00	0.3320	0.074	0.41	10.9	446.	1087.0	4.5	0.	0.000	0.000	0.074
121	12.00	11.90	0.3328	0.048	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.048
122	11.90	11.80	0.3335	0.048	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.048
123	11.80	11.70	0.3343	0.048	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.048
124	11.70	11.60	0.3351	0.048	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.048
125	11.60	11.50	0.3358	0.049	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.049
126	11.50	11.40	0.3366	0.049	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.049
127	11.40	11.30	0.3374	0.049	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.049
128	11.30	11.20	0.3381	0.049	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.049
129	11.20	11.10	0.3389	0.049	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.049
130	11.10	11.00	0.3397	0.049	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.049
131	11.00	10.90	0.3404	0.049	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.049
132	10.90	10.80	0.3412	0.049	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.049
133	10.80	10.70	0.3420	0.049	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.049
134	10.70	10.60	0.3427	0.050	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.050
135	10.60	10.50	0.3435	0.050	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.050
136	10.50	10.40	0.3443	0.050	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.050
137	10.40	10.30	0.3450	0.050	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.050
138	10.30	10.20	0.3458	0.050	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.050
139	10.20	10.10	0.3466	0.050	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.050

140	10.10	10.00	0.3473	0.050	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.050
141	10.00	9.90	0.3481	0.050	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.050
142	9.90	9.80	0.3489	0.050	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.050
143	9.80	9.70	0.3496	0.051	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.051
144	9.70	9.60	0.3504	0.051	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.051
145	9.60	9.50	0.3512	0.051	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.051
146	9.50	9.40	0.3519	0.051	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.051
147	9.40	9.30	0.3527	0.051	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.051
148	9.30	9.20	0.3535	0.051	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.051
149	9.20	9.10	0.3548	0.051	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.051
150	9.10	9.00	0.3556	0.051	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.051
151	9.00	8.90	0.3564	0.052	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.052
152	8.90	8.80	0.3571	0.052	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.052
153	8.80	8.70	0.3579	0.052	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.052
154	8.70	8.60	0.3587	0.052	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.052
155	8.60	8.50	0.3594	0.052	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.052
156	8.50	8.40	0.3602	0.052	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.052
157	8.40	8.30	0.3610	0.052	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.052
158	8.30	8.20	0.3617	0.052	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.052
159	8.20	8.10	0.3625	0.052	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.052
160	8.10	8.00	0.3633	0.053	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.053
161	8.00	7.90	0.3640	0.053	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.053
162	7.90	7.80	0.3648	0.053	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.053
163	7.80	7.70	0.3656	0.053	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.053
164	7.70	7.60	0.3663	0.053	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.053
165	7.60	7.50	0.3671	0.053	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.053
166	7.50	7.40	0.3679	0.053	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.053
167	7.40	7.30	0.3686	0.053	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.053
168	7.30	7.20	0.3694	0.053	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.053
169	7.20	7.10	0.3702	0.054	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.054
170	7.10	7.00	0.3709	0.054	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.054
171	7.00	6.90	0.3717	0.054	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.054
172	6.90	6.80	0.3725	0.054	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.054
173	6.80	6.70	0.3732	0.054	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.054
174	6.70	6.60	0.3740	0.054	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.054
175	6.60	6.50	0.3748	0.054	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.054
176	6.50	6.40	0.3755	0.054	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.054
177	6.40	6.30	0.3763	0.054	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.054
178	6.30	6.20	0.3771	0.055	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.055
179	6.20	6.10	0.3778	0.055	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.055
180	6.10	6.00	0.3786	0.055	0.50	13.8	691.	1382.0	6.9	0.	0.000	0.000	0.055
181	6.00	5.90	0.3794	0.039	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.039
182	5.90	5.80	0.3801	0.039	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.039
183	5.80	5.70	0.3809	0.039	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.039
184	5.70	5.60	0.3817	0.039	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.039
185	5.60	5.50	0.3824	0.039	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.039
186	5.50	5.40	0.3832	0.039	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.039
187	5.40	5.30	0.3840	0.039	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.039
188	5.30	5.20	0.3847	0.040	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.040
189	5.20	5.10	0.3855	0.040	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.040
190	5.10	5.00	0.3863	0.040	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.040
191	5.00	4.90	0.3870	0.040	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.040
192	4.90	4.80	0.3878	0.040	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.040
193	4.80	4.70	0.3886	0.040	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.040
194	4.70	4.60	0.3893	0.040	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.040
195	4.60	4.50	0.3901	0.040	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.040

196	4.50	4.40	0.3909	0.040	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.040
197	4.40	4.30	0.3916	0.040	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.040
198	4.30	4.20	0.3924	0.040	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.040
199	4.20	4.10	0.3932	0.040	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.040
200	4.10	4.00	0.3939	0.041	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.041
201	4.00	3.90	0.3947	0.041	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.041
202	3.90	3.80	0.3955	0.041	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.041
203	3.80	3.70	0.3962	0.041	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.041
204	3.70	3.60	0.3970	0.041	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.041
205	3.60	3.50	0.3978	0.041	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.041
206	3.50	3.40	0.3985	0.041	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.041
207	3.40	3.30	0.3993	0.041	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.041
208	3.30	3.20	0.4001	0.041	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.041
209	3.20	3.10	0.4008	0.041	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.041
210	3.10	3.00	0.4016	0.041	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.041
211	3.00	2.90	0.4024	0.041	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.041
212	2.90	2.80	0.4031	0.041	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.041
213	2.80	2.70	0.4039	0.042	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.042
214	2.70	2.60	0.4047	0.042	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.042
215	2.60	2.50	0.4054	0.042	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.042
216	2.50	2.40	0.4062	0.042	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.042
217	2.40	2.30	0.4070	0.042	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.042
218	2.30	2.20	0.4077	0.042	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.042
219	2.20	2.10	0.4085	0.042	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.042
220	2.10	2.00	0.4093	0.042	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.042
221	2.00	1.90	0.4100	0.042	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.042
222	1.90	1.80	0.4108	0.042	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.042
223	1.80	1.70	0.4116	0.042	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.042
224	1.70	1.60	0.4123	0.042	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.042
225	1.60	1.50	0.4131	0.042	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.042
226	1.50	1.40	0.4139	0.043	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.043
227	1.40	1.30	0.4146	0.043	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.043
228	1.30	1.20	0.4154	0.043	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.043
229	1.20	1.10	0.4162	0.043	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.043
230	1.10	1.00	0.4169	0.043	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.043
231	1.00	0.90	0.4177	0.043	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.043
232	0.90	0.80	0.4185	0.043	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.043
233	0.80	0.70	0.4192	0.043	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.043
234	0.70	0.60	0.4200	0.043	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.043
235	0.60	0.50	0.4208	0.043	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.043
236	0.50	0.40	0.4215	0.043	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.043
237	0.40	0.30	0.4223	0.043	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.043
238	0.30	0.20	0.4231	0.044	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.044
239	0.20	0.10	0.4238	0.044	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.044
240	0.10	0.00	0.4246	0.044	0.58	16.8	972.	1676.0	9.7	0.	0.000	0.000	0.044

FINAL REPORT Bayou Toro @ 110401A LA-QUAL Winter Projection for Bayou Toro
REACH NO. 1 Bayou Toro

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM

1	HDWTR	0.21000	22.60	0.00	0.00	0.00	5.02	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.00	0.00	0.00	0.00
EACH	INCR	0.00077	22.60	0.00	0.00	0.00	5.02	1.57	0.00			0.69	0.09	0.00	0.00	0.00	0.00	

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
1	24.00	23.90	0.21077	0.0	0.08585	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.086
2	23.90	23.80	0.21153	0.0	0.08616	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.086
3	23.80	23.70	0.21230	0.0	0.08647	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.086
4	23.70	23.60	0.21307	0.0	0.08678	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.087
5	23.60	23.50	0.21383	0.0	0.08709	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.087
6	23.50	23.40	0.21460	0.0	0.08741	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.087
7	23.40	23.30	0.21537	0.0	0.08772	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.088
8	23.30	23.20	0.21613	0.0	0.08803	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.088
9	23.20	23.10	0.21690	0.0	0.08834	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.088
10	23.10	23.00	0.21767	0.0	0.08866	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.089
11	23.00	22.90	0.21843	0.0	0.08897	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.089
12	22.90	22.80	0.21920	0.0	0.08928	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.089
13	22.80	22.70	0.21997	0.0	0.08959	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.090
14	22.70	22.60	0.22073	0.0	0.08990	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.090
15	22.60	22.50	0.22150	0.0	0.09022	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.090
16	22.50	22.40	0.22227	0.0	0.09053	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.091
17	22.40	22.30	0.22303	0.0	0.09084	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.091
18	22.30	22.20	0.22380	0.0	0.09115	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.091
19	22.20	22.10	0.22457	0.0	0.09147	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.091
20	22.10	22.00	0.22533	0.0	0.09178	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.092
21	22.00	21.90	0.22610	0.0	0.09209	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.092
22	21.90	21.80	0.22687	0.0	0.09240	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.092
23	21.80	21.70	0.22763	0.0	0.09271	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.093
24	21.70	21.60	0.22840	0.0	0.09303	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.093
25	21.60	21.50	0.22917	0.0	0.09334	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.093
26	21.50	21.40	0.22993	0.0	0.09365	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.094
27	21.40	21.30	0.23070	0.0	0.09396	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.094
28	21.30	21.20	0.23147	0.0	0.09428	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.094
29	21.20	21.10	0.23223	0.0	0.09459	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.095
30	21.10	21.00	0.23300	0.0	0.09490	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.095
31	21.00	20.90	0.23377	0.0	0.09521	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.095
32	20.90	20.80	0.23453	0.0	0.09553	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.096
33	20.80	20.70	0.23530	0.0	0.09584	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.096
34	20.70	20.60	0.23607	0.0	0.09615	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.096
35	20.60	20.50	0.23683	0.0	0.09646	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.096
36	20.50	20.40	0.23760	0.0	0.09677	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.097
37	20.40	20.30	0.23837	0.0	0.09709	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.097
38	20.30	20.20	0.23913	0.0	0.09740	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.097
39	20.20	20.10	0.23990	0.0	0.09771	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.098
40	20.10	20.00	0.24067	0.0	0.09802	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.098
41	20.00	19.90	0.24143	0.0	0.09834	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.098
42	19.90	19.80	0.24220	0.0	0.09865	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.099
43	19.80	19.70	0.24297	0.0	0.09896	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.099
44	19.70	19.60	0.24373	0.0	0.09927	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.099
45	19.60	19.50	0.24450	0.0	0.09958	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.100
46	19.50	19.40	0.24527	0.0	0.09990	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.100

47	19.40	19.30	0.24603	0.0	0.10021	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.100
48	19.30	19.20	0.24680	0.0	0.10052	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.101
49	19.20	19.10	0.24757	0.0	0.10083	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.101
50	19.10	19.00	0.24833	0.0	0.10115	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.101
51	19.00	18.90	0.24910	0.0	0.10146	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.101
52	18.90	18.80	0.24987	0.0	0.10177	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.102
53	18.80	18.70	0.25063	0.0	0.10208	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.102
54	18.70	18.60	0.25140	0.0	0.10239	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.102
55	18.60	18.50	0.25217	0.0	0.10271	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.103
56	18.50	18.40	0.25293	0.0	0.10302	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.103
57	18.40	18.30	0.25370	0.0	0.10333	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.103
58	18.30	18.20	0.25447	0.0	0.10364	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.104
59	18.20	18.10	0.25523	0.0	0.10396	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.104
60	18.10	18.00	0.25600	0.0	0.10427	0.01	0.31	7.92	245.52	792.00	2.46	0.00	0.000	0.000	0.104
TOT						0.73			14731.19	47520.00					
AVG					0.0947		0.31	7.92			2.46				
CUM						0.73									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	BKGD SOD *	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	23.900	8.64	6.42	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	23.800	8.64	6.43	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	23.700	8.64	6.45	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	23.600	8.64	6.46	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	23.500	8.64	6.48	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	23.400	8.64	6.49	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	23.300	8.64	6.51	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	23.200	8.64	6.52	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	23.100	8.64	6.54	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	23.000	8.64	6.55	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	22.900	8.64	6.57	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	22.800	8.64	6.58	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	22.700	8.64	6.60	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	22.600	8.64	6.61	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	22.500	8.64	6.63	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	22.400	8.64	6.64	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	22.300	8.64	6.66	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	22.200	8.64	6.67	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	22.100	8.64	6.69	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	22.000	8.64	6.70	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	21.900	8.64	6.72	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	21.800	8.64	6.73	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	21.700	8.64	6.75	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	21.600	8.64	6.76	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	21.500	8.64	6.78	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	21.400	8.64	6.79	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	21.300	8.64	6.81	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	21.200	8.64	6.82	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	21.100	8.64	6.84	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	21.000	8.64	6.85	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

31	20.900	8.64	6.87	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32	20.800	8.64	6.88	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33	20.700	8.64	6.90	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34	20.600	8.64	6.92	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	20.500	8.64	6.93	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36	20.400	8.64	6.95	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37	20.300	8.64	6.96	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	20.200	8.64	6.98	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39	20.100	8.64	6.99	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	20.000	8.64	7.01	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	19.900	8.64	7.02	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	19.800	8.64	7.04	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	19.700	8.64	7.05	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	19.600	8.64	7.07	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	19.500	8.64	7.08	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	19.400	8.64	7.10	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	19.300	8.64	7.11	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	19.200	8.64	7.13	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	19.100	8.64	7.14	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	19.000	8.64	7.16	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	18.900	8.64	7.17	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	18.800	8.64	7.19	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	18.700	8.64	7.20	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	18.600	8.64	7.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	18.500	8.64	7.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	18.400	8.64	7.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	18.300	8.64	7.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	18.200	8.64	7.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	18.100	8.64	7.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	18.000	8.64	7.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			6.52	0.11	0.00	0.00	0.00	0.00	0.00	1.12			0.02	0.00	0.10	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
1	23.900	22.60	0.00	0.00	0.00	5.25	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.00	0.00	0.	0.00
2	23.800	22.60	0.00	0.00	0.00	5.47	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.00	0.00	0.	0.00
3	23.700	22.60	0.00	0.00	0.00	5.66	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.00	0.00	0.	0.00
4	23.600	22.60	0.00	0.00	0.00	5.84	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.00	0.00	0.	0.00
5	23.500	22.60	0.00	0.00	0.00	6.01	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.00	0.00	0.	0.00
6	23.400	22.60	0.00	0.00	0.00	6.16	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.00	0.00	0.	0.00
7	23.300	22.60	0.00	0.00	0.00	6.29	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.78	0.00	0.00	0.00	0.	0.00
8	23.200	22.60	0.00	0.00	0.00	6.42	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
9	23.100	22.60	0.00	0.00	0.00	6.54	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
10	23.000	22.60	0.00	0.00	0.00	6.64	1.57	0.00	1.57	0.00	0.69	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
11	22.900	22.60	0.00	0.00	0.00	6.74	1.57	0.00	1.57	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
12	22.800	22.60	0.00	0.00	0.00	6.83	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
13	22.700	22.60	0.00	0.00	0.00	6.92	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
14	22.600	22.60	0.00	0.00	0.00	6.99	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
15	22.500	22.60	0.00	0.00	0.00	7.06	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00

16	22.400	22.60	0.00	0.00	0.00	7.13	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
17	22.300	22.60	0.00	0.00	0.00	7.19	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
18	22.200	22.60	0.00	0.00	0.00	7.24	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
19	22.100	22.60	0.00	0.00	0.00	7.29	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
20	22.000	22.60	0.00	0.00	0.00	7.34	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
21	21.900	22.60	0.00	0.00	0.00	7.38	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
22	21.800	22.60	0.00	0.00	0.00	7.42	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
23	21.700	22.60	0.00	0.00	0.00	7.45	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
24	21.600	22.60	0.00	0.00	0.00	7.49	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.79	0.00	0.00	0.00	0.	0.00
25	21.500	22.60	0.00	0.00	0.00	7.52	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
26	21.400	22.60	0.00	0.00	0.00	7.55	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
27	21.300	22.60	0.00	0.00	0.00	7.57	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
28	21.200	22.60	0.00	0.00	0.00	7.60	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
29	21.100	22.60	0.00	0.00	0.00	7.62	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
30	21.000	22.60	0.00	0.00	0.00	7.64	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
31	20.900	22.60	0.00	0.00	0.00	7.66	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
32	20.800	22.60	0.00	0.00	0.00	7.68	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
33	20.700	22.60	0.00	0.00	0.00	7.69	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
34	20.600	22.60	0.00	0.00	0.00	7.71	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
35	20.500	22.60	0.00	0.00	0.00	7.72	1.58	0.00	1.58	0.00	0.70	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
36	20.400	22.60	0.00	0.00	0.00	7.73	1.58	0.00	1.58	0.00	0.71	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
37	20.300	22.60	0.00	0.00	0.00	7.75	1.58	0.00	1.58	0.00	0.71	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
38	20.200	22.60	0.00	0.00	0.00	7.76	1.58	0.00	1.58	0.00	0.71	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
39	20.100	22.60	0.00	0.00	0.00	7.77	1.59	0.00	1.59	0.00	0.71	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
40	20.000	22.60	0.00	0.00	0.00	7.78	1.59	0.00	1.59	0.00	0.71	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
41	19.900	22.60	0.00	0.00	0.00	7.79	1.59	0.00	1.59	0.00	0.71	0.09	0.00	0.80	0.00	0.00	0.00	0.	0.00
42	19.800	22.60	0.00	0.00	0.00	7.80	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.80	0.00	0.00	0.00	0.	0.00
43	19.700	22.60	0.00	0.00	0.00	7.80	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.80	0.00	0.00	0.00	0.	0.00
44	19.600	22.60	0.00	0.00	0.00	7.81	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
45	19.500	22.60	0.00	0.00	0.00	7.82	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
46	19.400	22.60	0.00	0.00	0.00	7.82	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
47	19.300	22.60	0.00	0.00	0.00	7.83	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
48	19.200	22.60	0.00	0.00	0.00	7.84	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
49	19.100	22.60	0.00	0.00	0.00	7.84	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
50	19.000	22.60	0.00	0.00	0.00	7.85	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
51	18.900	22.60	0.00	0.00	0.00	7.85	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
52	18.800	22.60	0.00	0.00	0.00	7.86	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
53	18.700	22.60	0.00	0.00	0.00	7.86	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
54	18.600	22.60	0.00	0.00	0.00	7.86	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
55	18.500	22.60	0.00	0.00	0.00	7.87	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
56	18.400	22.60	0.00	0.00	0.00	7.87	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
57	18.300	22.60	0.00	0.00	0.00	7.87	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
58	18.200	22.60	0.00	0.00	0.00	7.88	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
59	18.100	22.60	0.00	0.00	0.00	7.88	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
60	18.000	22.60	0.00	0.00	0.00	7.88	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00

FINAL REPORT Bayou Toro @ 110401A LA-QUAL Winter Projection for Bayou Toro
REACH NO. 2 Bayou Toro

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM

61	UPR RCH	0.25600	22.60	0.00	0.00	0.00	7.88	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.00	0.00	0.00	0.00
EACH	INCR	0.00077	22.60	0.00	0.00	0.00	5.02	1.57	0.00			0.69	0.09	0.00	0.00	0.00	0.00	
81	WSTLD	0.03000	22.60	0.00	0.00	0.00	5.02	1.60	0.00	1.60	0.00	0.69	0.09	0.00	0.00	0.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
61	18.00	17.90	0.25677	0.0	0.05761	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.058
62	17.90	17.80	0.25753	0.0	0.05779	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.058
63	17.80	17.70	0.25830	0.0	0.05796	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.058
64	17.70	17.60	0.25907	0.0	0.05813	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.058
65	17.60	17.50	0.25983	0.0	0.05830	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.058
66	17.50	17.40	0.26060	0.0	0.05847	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.058
67	17.40	17.30	0.26137	0.0	0.05865	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.059
68	17.30	17.20	0.26213	0.0	0.05882	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.059
69	17.20	17.10	0.26290	0.0	0.05899	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.059
70	17.10	17.00	0.26367	0.0	0.05916	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.059
71	17.00	16.90	0.26443	0.0	0.05933	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.059
72	16.90	16.80	0.26520	0.0	0.05951	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.060
73	16.80	16.70	0.26597	0.0	0.05968	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.060
74	16.70	16.60	0.26673	0.0	0.05985	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.060
75	16.60	16.50	0.26750	0.0	0.06002	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.060
76	16.50	16.40	0.26827	0.0	0.06019	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.060
77	16.40	16.30	0.26903	0.0	0.06037	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.060
78	16.30	16.20	0.26980	0.0	0.06054	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.061
79	16.20	16.10	0.27057	0.0	0.06071	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.061
80	16.10	16.00	0.27133	0.0	0.06088	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.061
81	16.00	15.90	0.30210	9.9	0.06779	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.068
82	15.90	15.80	0.30287	9.9	0.06796	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.068
83	15.80	15.70	0.30363	9.9	0.06813	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.068
84	15.70	15.60	0.30440	9.9	0.06830	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.068
85	15.60	15.50	0.30517	9.8	0.06847	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.068
86	15.50	15.40	0.30593	9.8	0.06865	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.069
87	15.40	15.30	0.30670	9.8	0.06882	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.069
88	15.30	15.20	0.30747	9.8	0.06899	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.069
89	15.20	15.10	0.30823	9.7	0.06916	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.069
90	15.10	15.00	0.30900	9.7	0.06933	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.069
91	15.00	14.90	0.30977	9.7	0.06951	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.070
92	14.90	14.80	0.31053	9.7	0.06968	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.070
93	14.80	14.70	0.31130	9.6	0.06985	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.070
94	14.70	14.60	0.31207	9.6	0.07002	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.070
95	14.60	14.50	0.31283	9.6	0.07019	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.070
96	14.50	14.40	0.31360	9.6	0.07037	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.070
97	14.40	14.30	0.31437	9.5	0.07054	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.071
98	14.30	14.20	0.31513	9.5	0.07071	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.071
99	14.20	14.10	0.31590	9.5	0.07088	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.071
100	14.10	14.00	0.31667	9.5	0.07105	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.071
101	14.00	13.90	0.31743	9.5	0.07123	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.071
102	13.90	13.80	0.31820	9.4	0.07140	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.071
103	13.80	13.70	0.31897	9.4	0.07157	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.072
104	13.70	13.60	0.31973	9.4	0.07174	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.072
105	13.60	13.50	0.32050	9.4	0.07191	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.072

106	13.50	13.40	0.32127	9.3	0.07209	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.072
107	13.40	13.30	0.32203	9.3	0.07226	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.072
108	13.30	13.20	0.32280	9.3	0.07243	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.072
109	13.20	13.10	0.32357	9.3	0.07260	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.073
110	13.10	13.00	0.32433	9.2	0.07277	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.073
111	13.00	12.90	0.32510	9.2	0.07295	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.073
112	12.90	12.80	0.32587	9.2	0.07312	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.073
113	12.80	12.70	0.32663	9.2	0.07329	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.073
114	12.70	12.60	0.32740	9.2	0.07346	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.073
115	12.60	12.50	0.32817	9.1	0.07363	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.074
116	12.50	12.40	0.32893	9.1	0.07381	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.074
117	12.40	12.30	0.32970	9.1	0.07398	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.074
118	12.30	12.20	0.33047	9.1	0.07415	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.074
119	12.20	12.10	0.33123	9.1	0.07432	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.074
120	12.10	12.00	0.33200	9.0	0.07449	0.02	0.41	10.87	445.67	1087.00	4.46	0.00	0.000	0.000	0.074
TOT						1.04			26740.20	65220.00					
AVG					0.0666		0.41	10.87			4.46				
CUM						1.78									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	BKGD SOD *	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
61	17.900	8.64	3.82	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	17.800	8.64	3.82	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
63	17.700	8.64	3.83	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	17.600	8.64	3.83	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	17.500	8.64	3.84	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	17.400	8.64	3.85	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	17.300	8.64	3.85	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	17.200	8.64	3.86	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	17.100	8.64	3.87	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	17.000	8.64	3.87	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
71	16.900	8.64	3.88	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	16.800	8.64	3.89	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73	16.700	8.64	3.89	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	16.600	8.64	3.90	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	16.500	8.64	3.90	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76	16.400	8.64	3.91	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77	16.300	8.64	3.92	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	16.200	8.64	3.92	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79	16.100	8.64	3.93	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	16.000	8.64	3.94	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
81	15.900	8.64	4.19	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	15.800	8.64	4.19	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
83	15.700	8.64	4.20	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	15.600	8.64	4.21	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	15.500	8.64	4.21	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	15.400	8.64	4.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87	15.300	8.64	4.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88	15.200	8.64	4.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89	15.100	8.64	4.24	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

90	15.000	8.64	4.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91	14.900	8.64	4.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92	14.800	8.64	4.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
93	14.700	8.64	4.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
94	14.600	8.64	4.27	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	14.500	8.64	4.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
96	14.400	8.64	4.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97	14.300	8.64	4.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
98	14.200	8.64	4.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
99	14.100	8.64	4.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	14.000	8.64	4.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
101	13.900	8.64	4.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102	13.800	8.64	4.32	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103	13.700	8.64	4.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
104	13.600	8.64	4.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	13.500	8.64	4.34	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106	13.400	8.64	4.35	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107	13.300	8.64	4.35	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
108	13.200	8.64	4.36	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
109	13.100	8.64	4.37	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	13.000	8.64	4.37	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
111	12.900	8.64	4.38	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112	12.800	8.64	4.38	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113	12.700	8.64	4.39	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
114	12.600	8.64	4.40	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	12.500	8.64	4.40	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
116	12.400	8.64	4.41	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117	12.300	8.64	4.42	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
118	12.200	8.64	4.42	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
119	12.100	8.64	4.43	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	12.000	8.64	4.43	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			3.96	0.11	0.00	0.00	0.00	0.00	0.00	1.12			0.02	0.00	0.10	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
61	17.900	22.60	0.00	0.00	0.00	7.87	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
62	17.800	22.60	0.00	0.00	0.00	7.85	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
63	17.700	22.60	0.00	0.00	0.00	7.83	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.81	0.00	0.00	0.00	0.	0.00
64	17.600	22.60	0.00	0.00	0.00	7.82	1.59	0.00	1.59	0.00	0.71	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
65	17.500	22.60	0.00	0.00	0.00	7.81	1.59	0.00	1.59	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
66	17.400	22.60	0.00	0.00	0.00	7.79	1.59	0.00	1.59	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
67	17.300	22.60	0.00	0.00	0.00	7.78	1.59	0.00	1.59	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
68	17.200	22.60	0.00	0.00	0.00	7.77	1.59	0.00	1.59	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
69	17.100	22.60	0.00	0.00	0.00	7.76	1.59	0.00	1.59	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
70	17.000	22.60	0.00	0.00	0.00	7.76	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
71	16.900	22.60	0.00	0.00	0.00	7.75	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
72	16.800	22.60	0.00	0.00	0.00	7.74	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
73	16.700	22.60	0.00	0.00	0.00	7.73	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
74	16.600	22.60	0.00	0.00	0.00	7.73	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00

75	16.500	22.60	0.00	0.00	0.00	7.72	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
76	16.400	22.60	0.00	0.00	0.00	7.72	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
77	16.300	22.60	0.00	0.00	0.00	7.71	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
78	16.200	22.60	0.00	0.00	0.00	7.71	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
79	16.100	22.60	0.00	0.00	0.00	7.71	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
80	16.000	22.60	0.00	0.00	0.00	7.70	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.83	0.00	0.00	0.00	0.	0.00
81	15.900	22.60	0.00	0.00	0.00	7.46	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
82	15.800	22.60	0.00	0.00	0.00	7.47	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
83	15.700	22.60	0.00	0.00	0.00	7.49	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
84	15.600	22.60	0.00	0.00	0.00	7.51	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
85	15.500	22.60	0.00	0.00	0.00	7.52	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
86	15.400	22.60	0.00	0.00	0.00	7.54	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
87	15.300	22.60	0.00	0.00	0.00	7.55	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.82	0.00	0.00	0.00	0.	0.00
88	15.200	22.60	0.00	0.00	0.00	7.56	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.83	0.00	0.00	0.00	0.	0.00
89	15.100	22.60	0.00	0.00	0.00	7.57	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.83	0.00	0.00	0.00	0.	0.00
90	15.000	22.60	0.00	0.00	0.00	7.59	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.83	0.00	0.00	0.00	0.	0.00
91	14.900	22.60	0.00	0.00	0.00	7.60	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.83	0.00	0.00	0.00	0.	0.00
92	14.800	22.60	0.00	0.00	0.00	7.60	1.58	0.00	1.58	0.00	0.72	0.09	0.01	0.83	0.00	0.00	0.00	0.	0.00
93	14.700	22.60	0.00	0.00	0.00	7.61	1.57	0.00	1.57	0.00	0.72	0.09	0.01	0.83	0.00	0.00	0.00	0.	0.00
94	14.600	22.60	0.00	0.00	0.00	7.62	1.57	0.00	1.57	0.00	0.72	0.09	0.01	0.83	0.00	0.00	0.00	0.	0.00
95	14.500	22.60	0.00	0.00	0.00	7.63	1.57	0.00	1.57	0.00	0.72	0.09	0.01	0.83	0.00	0.00	0.00	0.	0.00
96	14.400	22.60	0.00	0.00	0.00	7.64	1.57	0.00	1.57	0.00	0.72	0.09	0.01	0.83	0.00	0.00	0.00	0.	0.00
97	14.300	22.60	0.00	0.00	0.00	7.65	1.57	0.00	1.57	0.00	0.72	0.09	0.01	0.83	0.00	0.00	0.00	0.	0.00
98	14.200	22.60	0.00	0.00	0.00	7.65	1.57	0.00	1.57	0.00	0.72	0.09	0.01	0.83	0.00	0.00	0.00	0.	0.00
99	14.100	22.60	0.00	0.00	0.00	7.66	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.00	0.00	0.	0.00
100	14.000	22.60	0.00	0.00	0.00	7.66	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.00	0.00	0.	0.00
101	13.900	22.60	0.00	0.00	0.00	7.67	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.00	0.00	0.	0.00
102	13.800	22.60	0.00	0.00	0.00	7.68	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.00	0.00	0.	0.00
103	13.700	22.60	0.00	0.00	0.00	7.68	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.00	0.00	0.	0.00
104	13.600	22.60	0.00	0.00	0.00	7.68	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.00	0.00	0.	0.00
105	13.500	22.60	0.00	0.00	0.00	7.69	1.57	0.00	1.57	0.00	0.72	0.10	0.01	0.83	0.00	0.00	0.00	0.	0.00
106	13.400	22.60	0.00	0.00	0.00	7.69	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.83	0.00	0.00	0.00	0.	0.00
107	13.300	22.60	0.00	0.00	0.00	7.70	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.83	0.00	0.00	0.00	0.	0.00
108	13.200	22.60	0.00	0.00	0.00	7.70	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.00	0.00	0.	0.00
109	13.100	22.60	0.00	0.00	0.00	7.71	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.00	0.00	0.	0.00
110	13.000	22.60	0.00	0.00	0.00	7.71	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.00	0.00	0.	0.00
111	12.900	22.60	0.00	0.00	0.00	7.71	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.00	0.00	0.	0.00
112	12.800	22.60	0.00	0.00	0.00	7.72	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.00	0.00	0.	0.00
113	12.700	22.60	0.00	0.00	0.00	7.72	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.00	0.00	0.	0.00
114	12.600	22.60	0.00	0.00	0.00	7.72	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.00	0.00	0.	0.00
115	12.500	22.60	0.00	0.00	0.00	7.72	1.57	0.00	1.57	0.00	0.73	0.10	0.01	0.84	0.00	0.00	0.00	0.	0.00
116	12.400	22.60	0.00	0.00	0.00	7.73	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.00	0.00	0.	0.00
117	12.300	22.60	0.00	0.00	0.00	7.73	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.00	0.00	0.	0.00
118	12.200	22.60	0.00	0.00	0.00	7.73	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.00	0.00	0.	0.00
119	12.100	22.60	0.00	0.00	0.00	7.74	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.00	0.00	0.	0.00
120	12.000	22.60	0.00	0.00	0.00	7.74	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.00	0.00	0.	0.00

FINAL REPORT Bayou Toro @ 110401A LA-QUAL Winter Projection for Bayou Toro
REACH NO. 3 Bayou Toro

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM

121	UPR RCH	0.33200	22.60	0.00	0.00	0.00	7.74	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.00	0.00	0.00	0.00
EACH	INCR	0.00077	22.60	0.00	0.00	0.00	5.02	1.57	0.00			0.69	0.09	0.00	0.00	0.00	0.00	
149	WSTLD	0.00060	22.60	0.00	0.00	0.00	5.00	69.00	0.00	69.00	0.00	5.00	10.00	0.00	0.00	0.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
121	12.00	11.90	0.33277	9.0	0.04816	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.048
122	11.90	11.80	0.33353	9.0	0.04827	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.048
123	11.80	11.70	0.33430	9.0	0.04838	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.048
124	11.70	11.60	0.33507	9.0	0.04849	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.048
125	11.60	11.50	0.33583	8.9	0.04860	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.049
126	11.50	11.40	0.33660	8.9	0.04871	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.049
127	11.40	11.30	0.33737	8.9	0.04882	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.049
128	11.30	11.20	0.33813	8.9	0.04893	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.049
129	11.20	11.10	0.33890	8.9	0.04904	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.049
130	11.10	11.00	0.33967	8.8	0.04916	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.049
131	11.00	10.90	0.34043	8.8	0.04927	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.049
132	10.90	10.80	0.34120	8.8	0.04938	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.049
133	10.80	10.70	0.34197	8.8	0.04949	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.049
134	10.70	10.60	0.34273	8.8	0.04960	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.050
135	10.60	10.50	0.34350	8.7	0.04971	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.050
136	10.50	10.40	0.34427	8.7	0.04982	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.050
137	10.40	10.30	0.34503	8.7	0.04993	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.050
138	10.30	10.20	0.34580	8.7	0.05004	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.050
139	10.20	10.10	0.34657	8.7	0.05015	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.050
140	10.10	10.00	0.34733	8.6	0.05027	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.050
141	10.00	9.90	0.34810	8.6	0.05038	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.050
142	9.90	9.80	0.34887	8.6	0.05049	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.050
143	9.80	9.70	0.34963	8.6	0.05060	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.051
144	9.70	9.60	0.35040	8.6	0.05071	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.051
145	9.60	9.50	0.35117	8.5	0.05082	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.051
146	9.50	9.40	0.35193	8.5	0.05093	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.051
147	9.40	9.30	0.35270	8.5	0.05104	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.051
148	9.30	9.20	0.35347	8.5	0.05115	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.051
149	9.20	9.10	0.35483	8.6	0.05135	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.051
150	9.10	9.00	0.35560	8.6	0.05146	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.051
151	9.00	8.90	0.35637	8.6	0.05157	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.052
152	8.90	8.80	0.35713	8.6	0.05168	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.052
153	8.80	8.70	0.35790	8.5	0.05179	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.052
154	8.70	8.60	0.35867	8.5	0.05191	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.052
155	8.60	8.50	0.35943	8.5	0.05202	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.052
156	8.50	8.40	0.36020	8.5	0.05213	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.052
157	8.40	8.30	0.36097	8.5	0.05224	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.052
158	8.30	8.20	0.36173	8.5	0.05235	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.052
159	8.20	8.10	0.36250	8.4	0.05246	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.052
160	8.10	8.00	0.36327	8.4	0.05257	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.053
161	8.00	7.90	0.36403	8.4	0.05268	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.053
162	7.90	7.80	0.36480	8.4	0.05279	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.053
163	7.80	7.70	0.36557	8.4	0.05290	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.053
164	7.70	7.60	0.36633	8.4	0.05301	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.053

165	7.60	7.50	0.36710	8.3	0.05313	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.053
166	7.50	7.40	0.36787	8.3	0.05324	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.053
167	7.40	7.30	0.36863	8.3	0.05335	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.053
168	7.30	7.20	0.36940	8.3	0.05346	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.053
169	7.20	7.10	0.37017	8.3	0.05357	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.054
170	7.10	7.00	0.37093	8.2	0.05368	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.054
171	7.00	6.90	0.37170	8.2	0.05379	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.054
172	6.90	6.80	0.37247	8.2	0.05390	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.054
173	6.80	6.70	0.37323	8.2	0.05401	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.054
174	6.70	6.60	0.37400	8.2	0.05412	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.054
175	6.60	6.50	0.37477	8.2	0.05424	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.054
176	6.50	6.40	0.37553	8.1	0.05435	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.054
177	6.40	6.30	0.37630	8.1	0.05446	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.054
178	6.30	6.20	0.37707	8.1	0.05457	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.055
179	6.20	6.10	0.37783	8.1	0.05468	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.055
180	6.10	6.00	0.37860	8.1	0.05479	0.02	0.50	13.82	691.00	1382.00	6.91	0.00	0.000	0.000	0.055
TOT						1.35			41460.00	82920.00					
AVG					0.0514		0.50	13.82			6.91				
CUM						3.13									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	BKGD SOD *	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
121	11.900	8.64	2.84	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122	11.800	8.64	2.85	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
123	11.700	8.64	2.85	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
124	11.600	8.64	2.85	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	11.500	8.64	2.86	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126	11.400	8.64	2.86	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127	11.300	8.64	2.86	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
128	11.200	8.64	2.87	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
129	11.100	8.64	2.87	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	11.000	8.64	2.87	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
131	10.900	8.64	2.88	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132	10.800	8.64	2.88	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
133	10.700	8.64	2.88	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
134	10.600	8.64	2.89	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	10.500	8.64	2.89	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
136	10.400	8.64	2.89	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137	10.300	8.64	2.90	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
138	10.200	8.64	2.90	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
139	10.100	8.64	2.90	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	10.000	8.64	2.91	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
141	9.900	8.64	2.91	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142	9.800	8.64	2.91	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
143	9.700	8.64	2.92	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
144	9.600	8.64	2.92	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	9.500	8.64	2.92	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146	9.400	8.64	2.93	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147	9.300	8.64	2.93	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
148	9.200	8.64	2.93	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

149	9.100	8.64	2.94	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	9.000	8.64	2.94	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
151	8.900	8.64	2.95	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152	8.800	8.64	2.95	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153	8.700	8.64	2.95	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
154	8.600	8.64	2.96	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	8.500	8.64	2.96	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
156	8.400	8.64	2.96	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157	8.300	8.64	2.97	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
158	8.200	8.64	2.97	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
159	8.100	8.64	2.97	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	8.000	8.64	2.98	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161	7.900	8.64	2.98	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162	7.800	8.64	2.98	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
163	7.700	8.64	2.99	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
164	7.600	8.64	2.99	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	7.500	8.64	2.99	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166	7.400	8.64	3.00	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167	7.300	8.64	3.00	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
168	7.200	8.64	3.00	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
169	7.100	8.64	3.01	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	7.000	8.64	3.01	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
171	6.900	8.64	3.01	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172	6.800	8.64	3.02	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
173	6.700	8.64	3.02	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
174	6.600	8.64	3.02	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	6.500	8.64	3.03	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
176	6.400	8.64	3.03	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177	6.300	8.64	3.03	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
178	6.200	8.64	3.04	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
179	6.100	8.64	3.04	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	6.000	8.64	3.04	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.80	0.11	0.00	0.00	0.00	0.00	0.00	1.12			0.02	0.00	0.10	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
121	11.900	22.60	0.00	0.00	0.00	7.72	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.00	0.00	0.	0.00
122	11.800	22.60	0.00	0.00	0.00	7.71	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.00	0.00	0.	0.00
123	11.700	22.60	0.00	0.00	0.00	7.70	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.00	0.00	0.	0.00
124	11.600	22.60	0.00	0.00	0.00	7.69	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.00	0.00	0.	0.00
125	11.500	22.60	0.00	0.00	0.00	7.68	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.00	0.00	0.	0.00
126	11.400	22.60	0.00	0.00	0.00	7.67	1.56	0.00	1.56	0.00	0.73	0.10	0.02	0.84	0.00	0.00	0.00	0.	0.00
127	11.300	22.60	0.00	0.00	0.00	7.67	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.84	0.00	0.00	0.00	0.	0.00
128	11.200	22.60	0.00	0.00	0.00	7.66	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
129	11.100	22.60	0.00	0.00	0.00	7.65	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
130	11.000	22.60	0.00	0.00	0.00	7.65	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
131	10.900	22.60	0.00	0.00	0.00	7.64	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
132	10.800	22.60	0.00	0.00	0.00	7.63	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
133	10.700	22.60	0.00	0.00	0.00	7.63	1.55	0.00	1.55	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00

134	10.600	22.60	0.00	0.00	0.00	7.63	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
135	10.500	22.60	0.00	0.00	0.00	7.62	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
136	10.400	22.60	0.00	0.00	0.00	7.62	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
137	10.300	22.60	0.00	0.00	0.00	7.61	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
138	10.200	22.60	0.00	0.00	0.00	7.61	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
139	10.100	22.60	0.00	0.00	0.00	7.61	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
140	10.000	22.60	0.00	0.00	0.00	7.61	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
141	9.900	22.60	0.00	0.00	0.00	7.60	1.54	0.00	1.54	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
142	9.800	22.60	0.00	0.00	0.00	7.60	1.53	0.00	1.53	0.00	0.73	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
143	9.700	22.60	0.00	0.00	0.00	7.60	1.53	0.00	1.53	0.00	0.74	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
144	9.600	22.60	0.00	0.00	0.00	7.60	1.53	0.00	1.53	0.00	0.74	0.10	0.02	0.85	0.00	0.00	0.00	0.	0.00
145	9.500	22.60	0.00	0.00	0.00	7.60	1.53	0.00	1.53	0.00	0.74	0.10	0.02	0.86	0.00	0.00	0.00	0.	0.00
146	9.400	22.60	0.00	0.00	0.00	7.60	1.53	0.00	1.53	0.00	0.74	0.10	0.02	0.86	0.00	0.00	0.00	0.	0.00
147	9.300	22.60	0.00	0.00	0.00	7.59	1.53	0.00	1.53	0.00	0.74	0.10	0.02	0.86	0.00	0.00	0.00	0.	0.00
148	9.200	22.60	0.00	0.00	0.00	7.59	1.53	0.00	1.53	0.00	0.74	0.10	0.02	0.86	0.00	0.00	0.00	0.	0.00
149	9.100	22.60	0.00	0.00	0.00	7.59	1.64	0.00	1.64	0.00	0.74	0.12	0.02	0.88	0.00	0.00	0.00	0.	0.00
150	9.000	22.60	0.00	0.00	0.00	7.59	1.64	0.00	1.64	0.00	0.74	0.12	0.02	0.88	0.00	0.00	0.00	0.	0.00
151	8.900	22.60	0.00	0.00	0.00	7.59	1.64	0.00	1.64	0.00	0.74	0.12	0.02	0.88	0.00	0.00	0.00	0.	0.00
152	8.800	22.60	0.00	0.00	0.00	7.59	1.64	0.00	1.64	0.00	0.74	0.12	0.02	0.88	0.00	0.00	0.00	0.	0.00
153	8.700	22.60	0.00	0.00	0.00	7.59	1.63	0.00	1.63	0.00	0.74	0.12	0.02	0.88	0.00	0.00	0.00	0.	0.00
154	8.600	22.60	0.00	0.00	0.00	7.59	1.63	0.00	1.63	0.00	0.75	0.12	0.02	0.88	0.00	0.00	0.00	0.	0.00
155	8.500	22.60	0.00	0.00	0.00	7.58	1.63	0.00	1.63	0.00	0.75	0.12	0.02	0.88	0.00	0.00	0.00	0.	0.00
156	8.400	22.60	0.00	0.00	0.00	7.58	1.63	0.00	1.63	0.00	0.75	0.12	0.02	0.88	0.00	0.00	0.00	0.	0.00
157	8.300	22.60	0.00	0.00	0.00	7.58	1.63	0.00	1.63	0.00	0.75	0.12	0.02	0.88	0.00	0.00	0.00	0.	0.00
158	8.200	22.60	0.00	0.00	0.00	7.58	1.63	0.00	1.63	0.00	0.75	0.12	0.02	0.89	0.00	0.00	0.00	0.	0.00
159	8.100	22.60	0.00	0.00	0.00	7.58	1.62	0.00	1.62	0.00	0.75	0.12	0.02	0.89	0.00	0.00	0.00	0.	0.00
160	8.000	22.60	0.00	0.00	0.00	7.58	1.62	0.00	1.62	0.00	0.75	0.12	0.02	0.89	0.00	0.00	0.00	0.	0.00
161	7.900	22.60	0.00	0.00	0.00	7.59	1.62	0.00	1.62	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
162	7.800	22.60	0.00	0.00	0.00	7.59	1.62	0.00	1.62	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
163	7.700	22.60	0.00	0.00	0.00	7.59	1.62	0.00	1.62	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
164	7.600	22.60	0.00	0.00	0.00	7.59	1.62	0.00	1.62	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
165	7.500	22.60	0.00	0.00	0.00	7.59	1.62	0.00	1.62	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
166	7.400	22.60	0.00	0.00	0.00	7.59	1.61	0.00	1.61	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
167	7.300	22.60	0.00	0.00	0.00	7.59	1.61	0.00	1.61	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
168	7.200	22.60	0.00	0.00	0.00	7.59	1.61	0.00	1.61	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
169	7.100	22.60	0.00	0.00	0.00	7.59	1.61	0.00	1.61	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
170	7.000	22.60	0.00	0.00	0.00	7.59	1.61	0.00	1.61	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
171	6.900	22.60	0.00	0.00	0.00	7.59	1.61	0.00	1.61	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
172	6.800	22.60	0.00	0.00	0.00	7.59	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
173	6.700	22.60	0.00	0.00	0.00	7.59	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
174	6.600	22.60	0.00	0.00	0.00	7.59	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
175	6.500	22.60	0.00	0.00	0.00	7.59	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
176	6.400	22.60	0.00	0.00	0.00	7.59	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
177	6.300	22.60	0.00	0.00	0.00	7.59	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
178	6.200	22.60	0.00	0.00	0.00	7.60	1.60	0.00	1.60	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
179	6.100	22.60	0.00	0.00	0.00	7.60	1.59	0.00	1.59	0.00	0.75	0.12	0.03	0.89	0.00	0.00	0.00	0.	0.00
180	6.000	22.60	0.00	0.00	0.00	7.60	1.59	0.00	1.59	0.00	0.75	0.11	0.03	0.90	0.00	0.00	0.00	0.	0.00

FINAL REPORT Bayou Toro @ 110401A LA-QUAL Winter Projection for Bayou Toro
REACH NO. 4 Bayou Toro

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

ELEM	TYPE	FLOW	TEMP	SALN	CM-I	CM-II	DO	BOD#1	BOD#2	EBOD#1	EBOD#2	ORGN	NH3	NO3+2	PHOS	CHL A	COLI	NCM

NO.			deg C	ppt			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	#/100mL		
181	UPR RCH	0.37860	22.60	0.00	0.00	0.00	7.60	1.59	0.00	1.59	0.00	0.75	0.11	0.03	0.00	0.00	0.00	0.00	
EACH	INCR	0.00077	22.60	0.00	0.00	0.00	5.02	1.57	0.00			0.69	0.09	0.00	0.00	0.00	0.00		

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
181	6.00	5.90	0.37937	8.1	0.03903	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.039
182	5.90	5.80	0.38013	8.0	0.03911	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.039
183	5.80	5.70	0.38090	8.0	0.03918	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.039
184	5.70	5.60	0.38167	8.0	0.03926	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.039
185	5.60	5.50	0.38243	8.0	0.03934	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.039
186	5.50	5.40	0.38320	8.0	0.03942	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.039
187	5.40	5.30	0.38397	8.0	0.03950	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.039
188	5.30	5.20	0.38473	8.0	0.03958	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.040
189	5.20	5.10	0.38550	7.9	0.03966	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.040
190	5.10	5.00	0.38627	7.9	0.03974	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.040
191	5.00	4.90	0.38703	7.9	0.03981	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.040
192	4.90	4.80	0.38780	7.9	0.03989	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.040
193	4.80	4.70	0.38857	7.9	0.03997	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.040
194	4.70	4.60	0.38933	7.9	0.04005	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.040
195	4.60	4.50	0.39010	7.8	0.04013	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.040
196	4.50	4.40	0.39087	7.8	0.04021	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.040
197	4.40	4.30	0.39163	7.8	0.04029	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.040
198	4.30	4.20	0.39240	7.8	0.04037	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.040
199	4.20	4.10	0.39317	7.8	0.04045	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.040
200	4.10	4.00	0.39393	7.8	0.04052	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.041
201	4.00	3.90	0.39470	7.8	0.04060	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.041
202	3.90	3.80	0.39547	7.7	0.04068	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.041
203	3.80	3.70	0.39623	7.7	0.04076	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.041
204	3.70	3.60	0.39700	7.7	0.04084	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.041
205	3.60	3.50	0.39777	7.7	0.04092	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.041
206	3.50	3.40	0.39853	7.7	0.04100	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.041
207	3.40	3.30	0.39930	7.7	0.04108	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.041
208	3.30	3.20	0.40007	7.6	0.04116	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.041
209	3.20	3.10	0.40083	7.6	0.04123	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.041
210	3.10	3.00	0.40160	7.6	0.04131	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.041
211	3.00	2.90	0.40237	7.6	0.04139	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.041
212	2.90	2.80	0.40313	7.6	0.04147	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.041
213	2.80	2.70	0.40390	7.6	0.04155	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.042
214	2.70	2.60	0.40467	7.6	0.04163	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.042
215	2.60	2.50	0.40543	7.5	0.04171	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.042
216	2.50	2.40	0.40620	7.5	0.04179	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.042
217	2.40	2.30	0.40697	7.5	0.04187	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.042
218	2.30	2.20	0.40773	7.5	0.04194	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.042
219	2.20	2.10	0.40850	7.5	0.04202	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.042
220	2.10	2.00	0.40927	7.5	0.04210	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.042
221	2.00	1.90	0.41003	7.5	0.04218	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.042
222	1.90	1.80	0.41080	7.4	0.04226	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.042
223	1.80	1.70	0.41157	7.4	0.04234	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.042
224	1.70	1.60	0.41233	7.4	0.04242	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.042

225	1.60	1.50	0.41310	7.4	0.04250	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.042
226	1.50	1.40	0.41387	7.4	0.04258	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.043
227	1.40	1.30	0.41463	7.4	0.04265	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.043
228	1.30	1.20	0.41540	7.4	0.04273	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.043
229	1.20	1.10	0.41617	7.4	0.04281	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.043
230	1.10	1.00	0.41693	7.3	0.04289	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.043
231	1.00	0.90	0.41770	7.3	0.04297	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.043
232	0.90	0.80	0.41847	7.3	0.04305	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.043
233	0.80	0.70	0.41923	7.3	0.04313	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.043
234	0.70	0.60	0.42000	7.3	0.04321	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.043
235	0.60	0.50	0.42077	7.3	0.04329	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.043
236	0.50	0.40	0.42153	7.3	0.04336	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.043
237	0.40	0.30	0.42230	7.2	0.04344	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.043
238	0.30	0.20	0.42307	7.2	0.04352	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.044
239	0.20	0.10	0.42383	7.2	0.04360	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.044
240	0.10	0.00	0.42460	7.2	0.04368	0.03	0.58	16.76	972.08	1676.00	9.72	0.00	0.000	0.000	0.044
TOT						1.68			58324.75	100560.00					
AVG					0.0413		0.58	16.76			9.72				
CUM						4.81									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 DECAY 1/da	BKGD SOD *	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
181	5.900	8.64	2.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
182	5.800	8.64	2.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
183	5.700	8.64	2.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
184	5.600	8.64	2.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
185	5.500	8.64	2.22	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
186	5.400	8.64	2.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
187	5.300	8.64	2.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
188	5.200	8.64	2.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
189	5.100	8.64	2.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190	5.000	8.64	2.23	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
191	4.900	8.64	2.24	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
192	4.800	8.64	2.24	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
193	4.700	8.64	2.24	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
194	4.600	8.64	2.24	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
195	4.500	8.64	2.24	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
196	4.400	8.64	2.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197	4.300	8.64	2.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	4.200	8.64	2.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
199	4.100	8.64	2.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200	4.000	8.64	2.25	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
201	3.900	8.64	2.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	3.800	8.64	2.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	3.700	8.64	2.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	3.600	8.64	2.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	3.500	8.64	2.26	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	3.400	8.64	2.27	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
207	3.300	8.64	2.27	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
208	3.200	8.64	2.27	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

209	3.100	8.64	2.27	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	3.000	8.64	2.27	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
211	2.900	8.64	2.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
212	2.800	8.64	2.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
213	2.700	8.64	2.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
214	2.600	8.64	2.28	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
215	2.500	8.64	2.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
216	2.400	8.64	2.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
217	2.300	8.64	2.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
218	2.200	8.64	2.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
219	2.100	8.64	2.29	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	2.000	8.64	2.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
221	1.900	8.64	2.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
222	1.800	8.64	2.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
223	1.700	8.64	2.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
224	1.600	8.64	2.30	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	1.500	8.64	2.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	1.400	8.64	2.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	1.300	8.64	2.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	1.200	8.64	2.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
229	1.100	8.64	2.31	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	1.000	8.64	2.32	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
231	0.900	8.64	2.32	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
232	0.800	8.64	2.32	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
233	0.700	8.64	2.32	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
234	0.600	8.64	2.32	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
235	0.500	8.64	2.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
236	0.400	8.64	2.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
237	0.300	8.64	2.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
238	0.200	8.64	2.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
239	0.100	8.64	2.33	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
240	0.000	8.64	2.34	0.12	0.00	0.00	0.00	0.00	0.00	1.32	1.32	1.32	0.02	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.16	0.11	0.00	0.00	0.00	0.00	0.00	1.12			0.02	0.00	0.10	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
181	5.900	22.60	0.00	0.00	0.00	7.59	1.59	0.00	1.59	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
182	5.800	22.60	0.00	0.00	0.00	7.58	1.59	0.00	1.59	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
183	5.700	22.60	0.00	0.00	0.00	7.57	1.59	0.00	1.59	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
184	5.600	22.60	0.00	0.00	0.00	7.56	1.59	0.00	1.59	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
185	5.500	22.60	0.00	0.00	0.00	7.55	1.58	0.00	1.58	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
186	5.400	22.60	0.00	0.00	0.00	7.54	1.58	0.00	1.58	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
187	5.300	22.60	0.00	0.00	0.00	7.54	1.58	0.00	1.58	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
188	5.200	22.60	0.00	0.00	0.00	7.53	1.58	0.00	1.58	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
189	5.100	22.60	0.00	0.00	0.00	7.52	1.58	0.00	1.58	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
190	5.000	22.60	0.00	0.00	0.00	7.52	1.58	0.00	1.58	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
191	4.900	22.60	0.00	0.00	0.00	7.51	1.57	0.00	1.57	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
192	4.800	22.60	0.00	0.00	0.00	7.51	1.57	0.00	1.57	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
193	4.700	22.60	0.00	0.00	0.00	7.50	1.57	0.00	1.57	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00

194	4.600	22.60	0.00	0.00	0.00	7.50	1.57	0.00	1.57	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
195	4.500	22.60	0.00	0.00	0.00	7.50	1.57	0.00	1.57	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
196	4.400	22.60	0.00	0.00	0.00	7.49	1.56	0.00	1.56	0.00	0.75	0.12	0.03	0.90	0.00	0.00	0.00	0.	0.00
197	4.300	22.60	0.00	0.00	0.00	7.49	1.56	0.00	1.56	0.00	0.75	0.12	0.04	0.90	0.00	0.00	0.00	0.	0.00
198	4.200	22.60	0.00	0.00	0.00	7.49	1.56	0.00	1.56	0.00	0.75	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
199	4.100	22.60	0.00	0.00	0.00	7.49	1.56	0.00	1.56	0.00	0.75	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
200	4.000	22.60	0.00	0.00	0.00	7.48	1.56	0.00	1.56	0.00	0.75	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
201	3.900	22.60	0.00	0.00	0.00	7.48	1.56	0.00	1.56	0.00	0.75	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
202	3.800	22.60	0.00	0.00	0.00	7.48	1.55	0.00	1.55	0.00	0.75	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
203	3.700	22.60	0.00	0.00	0.00	7.48	1.55	0.00	1.55	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
204	3.600	22.60	0.00	0.00	0.00	7.48	1.55	0.00	1.55	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
205	3.500	22.60	0.00	0.00	0.00	7.48	1.55	0.00	1.55	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
206	3.400	22.60	0.00	0.00	0.00	7.47	1.55	0.00	1.55	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
207	3.300	22.60	0.00	0.00	0.00	7.47	1.55	0.00	1.55	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
208	3.200	22.60	0.00	0.00	0.00	7.47	1.55	0.00	1.55	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
209	3.100	22.60	0.00	0.00	0.00	7.47	1.54	0.00	1.54	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
210	3.000	22.60	0.00	0.00	0.00	7.47	1.54	0.00	1.54	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
211	2.900	22.60	0.00	0.00	0.00	7.47	1.54	0.00	1.54	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
212	2.800	22.60	0.00	0.00	0.00	7.47	1.54	0.00	1.54	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
213	2.700	22.60	0.00	0.00	0.00	7.47	1.54	0.00	1.54	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
214	2.600	22.60	0.00	0.00	0.00	7.47	1.54	0.00	1.54	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
215	2.500	22.60	0.00	0.00	0.00	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
216	2.400	22.60	0.00	0.00	0.00	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
217	2.300	22.60	0.00	0.00	0.00	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.91	0.00	0.00	0.00	0.	0.00
218	2.200	22.60	0.00	0.00	0.00	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.92	0.00	0.00	0.00	0.	0.00
219	2.100	22.60	0.00	0.00	0.00	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.92	0.00	0.00	0.00	0.	0.00
220	2.000	22.60	0.00	0.00	0.00	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.92	0.00	0.00	0.00	0.	0.00
221	1.900	22.60	0.00	0.00	0.00	7.47	1.53	0.00	1.53	0.00	0.76	0.12	0.04	0.92	0.00	0.00	0.00	0.	0.00
222	1.800	22.60	0.00	0.00	0.00	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.00	0.00	0.	0.00
223	1.700	22.60	0.00	0.00	0.00	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.00	0.00	0.	0.00
224	1.600	22.60	0.00	0.00	0.00	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.00	0.00	0.	0.00
225	1.500	22.60	0.00	0.00	0.00	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.00	0.00	0.	0.00
226	1.400	22.60	0.00	0.00	0.00	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.00	0.00	0.	0.00
227	1.300	22.60	0.00	0.00	0.00	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.00	0.00	0.	0.00
228	1.200	22.60	0.00	0.00	0.00	7.47	1.52	0.00	1.52	0.00	0.76	0.12	0.04	0.92	0.00	0.00	0.00	0.	0.00
229	1.100	22.60	0.00	0.00	0.00	7.47	1.51	0.00	1.51	0.00	0.76	0.12	0.04	0.92	0.00	0.00	0.00	0.	0.00
230	1.000	22.60	0.00	0.00	0.00	7.47	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.00	0.00	0.	0.00
231	0.900	22.60	0.00	0.00	0.00	7.47	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.00	0.00	0.	0.00
232	0.800	22.60	0.00	0.00	0.00	7.47	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.00	0.00	0.	0.00
233	0.700	22.60	0.00	0.00	0.00	7.48	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.00	0.00	0.	0.00
234	0.600	22.60	0.00	0.00	0.00	7.48	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.00	0.00	0.	0.00
235	0.500	22.60	0.00	0.00	0.00	7.48	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.00	0.00	0.	0.00
236	0.400	22.60	0.00	0.00	0.00	7.48	1.51	0.00	1.51	0.00	0.76	0.12	0.05	0.92	0.00	0.00	0.00	0.	0.00
237	0.300	22.60	0.00	0.00	0.00	7.48	1.50	0.00	1.50	0.00	0.76	0.12	0.05	0.92	0.00	0.00	0.00	0.	0.00
238	0.200	22.60	0.00	0.00	0.00	7.48	1.50	0.00	1.50	0.00	0.76	0.12	0.05	0.92	0.00	0.00	0.00	0.	0.00
239	0.100	22.60	0.00	0.00	0.00	7.48	1.50	0.00	1.50	0.00	0.76	0.12	0.05	0.93	0.00	0.00	0.00	0.	0.00
240	0.000	22.60	0.00	0.00	0.00	7.48	1.50	0.00	1.50	0.00	0.76	0.12	0.05	0.93	0.00	0.00	0.00	0.	0.00

STREAM SUMMARY LA-QUAL Winter Projection for Bayou Toro
Bayou Toro @ 110401A

TRAVEL TIME = 4.81 DAYS

MAXIMUM EFFLUENT = 9.93 PERCENT

FLOW	=	0.21077	TO	0.42460	m^3/s
DISPERSION	=	0.0000	TO	0.0000	m^2/s
VELOCITY	=	0.03903	TO	0.10427	m/s
DEPTH	=	0.31	TO	0.58	m
WIDTH	=	7.92	TO	16.76	m
BOD DECAY	=	0.12	TO	0.12	per day
NH3 DECAY	=	0.11	TO	0.12	per day
SOD	=	1.32	TO	1.32	$g/m^2/d$
NH3 SOURCE	=	0.00	TO	0.00	$g/m^2/d$
REAERATION	=	2.22	TO	7.31	per day
BOD SETTLING	=	0.00	TO	0.00	per day
ORG-N DECAY	=	0.02	TO	0.02	per day
ORG-N SETTLING	=	0.00	TO	0.00	per day
TEMPERATURE	=	22.60	TO	22.60	deg C
DISSOLVED OXYGEN	=	5.25	TO	7.88	mg/L

LA-QUAL Winter Projection for Bayou Toro

REACH SUMMARY REPORT FOR Bayou Toro @ 110401A

RCH NO.	REACH NAME	BEGIN DIST km	ENDING DIST km	REACH LENGTH km	TRAVEL TIME days	FLOW AT EOR m3/s	AVERAGE VELO m/s	AVG DEPTH m	AVG WIDTH m	FLOW AT EOR cfs	AVERAGE VELO fps	AVG DEPTH ft	AVG WIDTH ft
1	Bayou Toro	24.00	18.00	6.00	0.73	0.25600	0.09475	0.310	7.92	9.039	0.311	1.017	25.99
2	Bayou Toro	18.00	12.00	6.00	1.04	0.33200	0.06664	0.410	10.87	11.723	0.219	1.345	35.66
3	Bayou Toro	12.00	6.00	6.00	1.35	0.37860	0.05140	0.500	13.82	13.368	0.169	1.640	45.34
4	Bayou Toro	6.00	0.00	6.00	1.68	0.42460	0.04131	0.580	16.76	14.993	0.136	1.903	54.99

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
1	91.	0.	-96.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-96.8	96.8
2	96.	0.	-100.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-101.0	101.0
3	100.	0.	-104.	0.	0.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-105.0	105.0
4	104.	0.	-108.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-108.6	108.6
5	108.	0.	-111.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-112.0	112.0
6	111.	0.	-114.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-115.2	115.2
7	114.	0.	-117.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-118.2	118.2
8	117.	0.	-120.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-121.0	121.0
9	120.	0.	-123.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-123.6	123.6
10	123.	0.	-125.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-126.1	126.1
11	125.	0.	-127.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-128.4	128.4
12	127.	0.	-129.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-130.5	130.5
13	129.	0.	-131.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-132.5	132.5
14	131.	0.	-133.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-134.4	134.4
15	133.	0.	-135.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-136.3	136.3
16	135.	0.	-137.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-138.0	138.0
17	137.	0.	-138.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-139.6	139.6
18	138.	0.	-140.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-141.1	141.1
19	140.	0.	-141.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-142.5	142.5
20	141.	0.	-143.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-143.9	143.9
21	143.	0.	-144.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-145.2	145.2
22	144.	0.	-145.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-146.5	146.5
23	145.	0.	-147.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-147.7	147.7
24	147.	0.	-148.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-148.8	148.8

25	148.	0.	-149.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-149.9	149.9
0.00																									
26	149.	0.	-150.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-151.0	151.0
0.00																									
27	150.	0.	-151.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-152.0	152.0
0.00																									
28	151.	0.	-152.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-153.0	153.0
0.00																									
29	152.	0.	-153.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-154.0	154.0
0.00																									
30	153.	0.	-154.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-154.9	154.9
0.00																									
31	154.	0.	-155.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-155.8	155.8
0.00																									
32	155.	0.	-156.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-156.6	156.6
0.00																									
33	156.	0.	-156.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-157.5	157.5
0.00																									
34	156.	0.	-157.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-158.3	158.3
0.00																									
35	157.	0.	-158.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-159.1	159.1
0.00																									
36	158.	0.	-159.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-159.9	159.9
0.00																									
37	159.	0.	-160.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-160.6	160.6
0.00																									
38	160.	0.	-160.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-161.4	161.4
0.00																									
39	160.	0.	-161.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-162.1	162.1
0.00																									
40	161.	0.	-162.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-162.8	162.8
0.00																									
41	162.	0.	-162.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-163.5	163.5
0.00																									
42	162.	0.	-163.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-164.2	164.2
0.00																									
43	163.	0.	-164.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-164.9	164.9
0.00																									
44	164.	0.	-164.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-165.6	165.6
0.00																									
45	164.	0.	-165.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-166.2	166.2
0.00																									
46	165.	0.	-166.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-166.9	166.9
0.00																									
47	166.	0.	-166.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-167.5	167.5
0.00																									
48	166.	0.	-167.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-168.2	168.2
0.00																									
49	167.	0.	-168.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-168.8	168.8
0.00																									
50	168.	0.	-168.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-169.5	169.5
0.00																									
51	168.	0.	-169.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-170.1	170.1
0.00																									
52	169.	0.	-170.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-170.7	170.7
0.00																									

53	170.	0.	-170.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-171.3	171.3
0.00																									
54	170.	0.	-171.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-171.9	171.9
0.00																									
55	171.	0.	-171.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-172.5	172.5
0.00																									
56	171.	0.	-172.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-173.1	173.1
0.00																									
57	172.	0.	-173.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-173.7	173.7
0.00																									
58	173.	0.	-173.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-174.3	174.3
0.00																									
59	173.	0.	-174.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-174.9	174.9
0.00																									

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
60	174.	0.	-174.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-175.5	175.5
61	174.	0.	-175.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-176.0	176.0
62	175.	0.	-175.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-176.2	176.2
63	175.	0.	-175.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-176.4	176.4
64	175.	0.	-175.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-176.6	176.6
65	175.	0.	-175.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-176.8	176.8
66	175.	0.	-175.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-177.0	177.0
67	175.	0.	-176.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-177.3	177.3
68	176.	0.	-176.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-177.6	177.6
69	176.	0.	-176.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-177.9	177.9
70	176.	0.	-177.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-178.2	178.2
71	177.	0.	-177.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-178.6	178.6
72	177.	0.	-177.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-178.9	178.9
73	177.	0.	-178.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-179.3	179.3
74	178.	0.	-178.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-179.7	179.7
75	178.	0.	-178.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-180.0	180.0
76	178.	0.	-179.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-180.4	180.4
77	179.	0.	-179.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-180.9	180.9
78	179.	0.	-180.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-181.3	181.3
79	180.	0.	-180.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-181.7	181.7
80	180.	0.	-181.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-182.1	182.1
81	181.	0.	-195.	0.	0.	0.	0.	0.	0.	13.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-196.2	196.2
82	195.	0.	-196.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-197.1	197.1
83	196.	0.	-197.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-198.1	198.1

84	197.	0.	-197.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-199.0	199.0
85	197.	0.	-198.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-199.9	199.9
86	198.	0.	-199.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-200.8	200.8
87	199.	0.	-200.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-201.6	201.6
88	200.	0.	-201.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-202.4	202.4
89	201.	0.	-202.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-203.3	203.3
90	202.	0.	-203.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-204.0	204.0
91	203.	0.	-203.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-204.8	204.8
92	203.	0.	-204.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-205.6	205.6
93	204.	0.	-205.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-206.3	206.3
94	205.	0.	-206.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-207.1	207.1
95	206.	0.	-206.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-207.8	207.8
96	206.	0.	-207.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-208.5	208.5
97	207.	0.	-208.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-209.2	209.2
98	208.	0.	-208.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-209.9	209.9
99	208.	0.	-209.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-210.6	210.6
100	209.	0.	-210.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-211.2	211.2
101	210.	0.	-210.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-211.9	211.9
102	210.	0.	-211.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-212.5	212.5
103	211.	0.	-212.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-213.2	213.2
104	212.	0.	-212.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-213.8	213.8
105	212.	0.	-213.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-214.5	214.5
106	213.	0.	-214.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-215.1	215.1
107	214.	0.	-214.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-215.7	215.7
108	214.	0.	-215.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-216.3	216.3
109	215.	0.	-215.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-217.0	217.0
110	215.	0.	-216.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-217.6	217.6
111	216.	0.	-217.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-218.2	218.2

112	217.	0.	-217.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-218.8
218.8	0.00																							
113	217.	0.	-218.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-219.4
219.4	0.00																							
114	218.	0.	-218.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-220.0
220.0	0.00																							
115	218.	0.	-219.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-220.6
220.6	0.00																							
116	219.	0.	-220.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-221.2
221.2	0.00																							
117	220.	0.	-220.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-221.7
221.7	0.00																							
118	220.	0.	-221.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-222.3
222.3	0.00																							

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
119	221.	0.	-221.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-222.9	222.9
120	221.	0.	-222.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.	0.	-223.5	223.5
121	222.	0.	-222.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-224.1	224.1
122	222.	0.	-222.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-224.3	224.3
123	222.	0.	-222.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-224.5	224.5
124	222.	0.	-223.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-224.7	224.7
125	223.	0.	-223.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-224.9	224.9
126	223.	0.	-223.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-225.2	225.2
127	223.	0.	-223.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-225.4	225.4
128	223.	0.	-224.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-225.7	225.7
129	224.	0.	-224.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-226.1	226.1
130	224.	0.	-224.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-226.4	226.4
131	224.	0.	-225.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-226.7	226.7
132	225.	0.	-225.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-227.1	227.1
133	225.	0.	-225.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-227.4	227.4
134	225.	0.	-226.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-227.8	227.8
135	226.	0.	-226.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-228.2	228.2
136	226.	0.	-227.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-228.6	228.6
137	227.	0.	-227.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-229.0	229.0
138	227.	0.	-227.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-229.4	229.4
139	227.	0.	-228.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-229.8	229.8
140	228.	0.	-228.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-230.2	230.2
141	228.	0.	-229.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-230.7	230.7
142	229.	0.	-229.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-231.1	231.1

143	229.	0.	-230.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-231.6	231.6	0.00
144	230.	0.	-230.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-232.0	232.0	0.00
145	230.	0.	-230.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-232.5	232.5	0.00
146	230.	0.	-231.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-232.9	232.9	0.00
147	231.	0.	-231.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-233.4	233.4	0.00
148	231.	0.	-232.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-233.9	233.9	0.00
149	232.	0.	-233.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-234.6	234.6	0.00
150	233.	0.	-233.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-235.1	235.1	0.00
151	233.	0.	-234.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-235.6	235.6	0.00
152	234.	0.	-234.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-236.1	236.1	0.00
153	234.	0.	-235.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-236.6	236.6	0.00
154	235.	0.	-235.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-237.1	237.1	0.00
155	235.	0.	-236.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-237.5	237.5	0.00
156	236.	0.	-236.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-238.0	238.0	0.00
157	236.	0.	-237.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-238.5	238.5	0.00
158	237.	0.	-237.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-239.0	239.0	0.00
159	237.	0.	-238.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-239.6	239.6	0.00
160	238.	0.	-238.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-240.1	240.1	0.00
161	238.	0.	-239.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-240.6	240.6	0.00
162	239.	0.	-239.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-241.1	241.1	0.00
163	239.	0.	-240.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-241.6	241.6	0.00
164	240.	0.	-240.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-242.1	242.1	0.00
165	240.	0.	-241.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-242.6	242.6	0.00
166	241.	0.	-241.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-243.1	243.1	0.00
167	241.	0.	-242.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-243.7	243.7	0.00
168	242.	0.	-242.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-244.2	244.2	0.00
169	242.	0.	-243.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-244.7	244.7	0.00
170	243.	0.	-243.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-245.2	245.2	0.00

171	243.	0.	-244.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-245.8
245.8	0.00																							
172	244.	0.	-244.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-246.3
246.3	0.00																							
173	244.	0.	-245.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-246.8
246.8	0.00																							
174	245.	0.	-245.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-247.3
247.3	0.00																							
175	245.	0.	-246.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-247.9
247.9	0.00																							
176	246.	0.	-246.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-248.4
248.4	0.00																							
177	246.	0.	-247.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-248.9
248.9	0.00																							

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
178	247.	0.	-247.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-249.5	249.5
179	247.	0.	-248.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-250.0	250.0
180	248.	0.	-249.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-250.5	250.5
181	249.	0.	-249.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-251.1	251.1
182	249.	0.	-249.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-251.3	251.3
183	249.	0.	-249.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-251.5	251.5
184	249.	0.	-249.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-251.7	251.7
185	249.	0.	-249.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-251.9	251.9
186	249.	0.	-250.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-252.2	252.2
187	250.	0.	-250.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-252.5	252.5
188	250.	0.	-250.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-252.8	252.8
189	250.	0.	-251.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-253.1	253.1
190	251.	0.	-251.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-253.4	253.4
191	251.	0.	-251.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-253.7	253.7
192	251.	0.	-252.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-254.1	254.1
193	252.	0.	-252.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-254.4	254.4
194	252.	0.	-252.	0.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-254.8	254.8
195	252.	0.	-253.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-255.1	255.1
196	253.	0.	-253.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-255.5	255.5
197	253.	0.	-253.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-255.9	255.9
198	253.	0.	-254.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-256.3	256.3
199	254.	0.	-254.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-256.7	256.7
200	254.	0.	-255.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-257.2	257.2
201	255.	0.	-255.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-257.6	257.6

202	255.	0.	-256.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-258.0	258.0
0.00																									
203	256.	0.	-256.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-258.5	258.5
0.00																									
204	256.	0.	-256.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-258.9	258.9
0.00																									
205	256.	0.	-257.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-259.3	259.3
0.00																									
206	257.	0.	-257.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-259.8	259.8
0.00																									
207	257.	0.	-258.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-260.3	260.3
0.00																									
208	258.	0.	-258.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-260.7	260.7
0.00																									
209	258.	0.	-259.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-261.2	261.2
0.00																									
210	259.	0.	-259.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-261.7	261.7
0.00																									
211	259.	0.	-260.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-262.1	262.1
0.00																									
212	260.	0.	-260.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-262.6	262.6
0.00																									
213	260.	0.	-261.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-263.1	263.1
0.00																									
214	261.	0.	-261.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-263.6	263.6
0.00																									
215	261.	0.	-262.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-264.1	264.1
0.00																									
216	262.	0.	-262.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-264.6	264.6
0.00																									
217	262.	0.	-263.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-265.1	265.1
0.00																									
218	263.	0.	-263.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-265.6	265.6
0.00																									
219	263.	0.	-264.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-266.1	266.1
0.00																									
220	264.	0.	-264.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-266.6	266.6
0.00																									
221	264.	0.	-265.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-267.1	267.1
0.00																									
222	265.	0.	-265.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-267.6	267.6
0.00																									
223	265.	0.	-266.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-268.1	268.1
0.00																									
224	266.	0.	-266.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-268.6	268.6
0.00																									
225	266.	0.	-267.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-269.1	269.1
0.00																									
226	267.	0.	-267.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-269.6	269.6
0.00																									
227	267.	0.	-268.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-270.1	270.1
0.00																									
228	268.	0.	-268.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-270.6	270.6
0.00																									
229	268.	0.	-269.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-271.1	271.1
0.00																									

230	269.	0.	-269.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-271.7
271.7	0.00																							
231	269.	0.	-270.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-272.2
272.2	0.00																							
232	270.	0.	-270.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-272.7
272.7	0.00																							
233	270.	0.	-271.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-273.2
273.2	0.00																							
234	271.	0.	-271.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-273.7
273.7	0.00																							
235	271.	0.	-272.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-274.3
274.2	0.00																							
236	272.	0.	-272.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-274.8
274.8	0.00																							

DISSOLVED OXYGEN LOADING FOR REACH 1: Bayou Toro @ 110401A

IOR	UPMN ADV	UPTR ADV	LOWR ADV	UPMN DISP	UPTR DISP	LOWR DISP	INCR IN	INCR OUT	NONP IN	WSLD IN	WITH OUT	REAE IN	BOD1 DECA	NH3-N DECA	ORG-N DECA	NCM DECA	SOD BKGD	SOD BOD1	SOD ALG	SOD NCM	ALG PHOT	ALG RESP	MAC PHOT	TOT OUT	TOT IN
237	272.	0.	-273.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-275.3	275.3
238	273.	0.	-273.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-275.8	275.8
239	273.	0.	-274.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-276.3	276.3
240	274.	0.	-274.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.	0.	-276.9	276.9

0.00
0.00
0.00
0.00

LA-QUAL Winter Projection for Bayou Toro

INPUT/OUTPUT LOADING SUMMARY

	FLOW m^3/s	DO kg/d	BOD#1 kg/d	BOD#2 kg/d	ORG-N kg/d	NH3-N kg/d	NO3-N kg/d	PHOS kg/d	CHL A	NCM
HEADWATER FLOW	0.210	91.1	28.5	0.0	12.5	1.6	0.0	0.0	0.0	0.0
INCREMENTAL INFLOW	0.184	79.8	25.0	0.0	11.0	1.4	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	0.0
WASTELOADS	0.031	13.3	7.7	0.0	2.0	0.8	0.0	0.0	0.0	0.0
WITHDRAWLS	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FLOW THRU LOWER BNDRY	-0.425	-274.4	-55.0	0.0	-27.9	-4.3	-1.8	0.0	0.0	0.0
DISPERSION THRU LOWER BNDRY		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DISPERSION THRU HDWTR BNDRY		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NON-POINT INPUT		0.0	21.3	0.0	4.6					0.0
NATURAL REAERATION		516.1								
DAM REAERATION		0.0								
BACKGROUND SOD		-390.8								
BOD#1 DECAY		-27.4	-27.4							
BOD#1 SETTLING		0.0	0.0							
ANAEROBIC BOD#1 DECAY			0.0							
BOD#2 DECAY		0.0		0.0						
BOD#2 SETTLING		0.0		0.0						
ANAEROBIC BOD#2 DECAY				0.0						
ORG-N DECAY		0.0			-2.2	2.2				
ORG-N SETTLING					0.0	0.0				
NH3 DECAY		-7.6				-1.8	1.8			
BACKGROUND NH3 SOURCE						0.0				
OTHER DENITRIFICATION							0.0			
PHOSPHORUS SOURCE								0.0		
ALGAE PHOTOSYNTHESIS		0.0				0.0	0.0	0.0	0.0	
ALGAE RESPIRATION		0.0				0.0		0.0	0.0	
ALGAE SETTLING		0.0							0.0	
MACRO PHOTOSYNTHESIS		0.0				0.0	0.0	0.0		
NCM DECAY		0.0								0.0
NCM SETTLING		0.0								0.0
TOTAL INPUTS	0.425	700.2	82.4	0.0	30.1	6.0	1.8	0.0	0.0	0.0
TOTAL OUTPUTS	-0.425	-700.2	-82.4	0.0	-30.1	-6.0	-1.8	0.0	0.0	0.0
NET CONVERGENCE ERROR	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

.....EXECUTION COMPLETED

APPENDIX L

Input and Output for TMDL Calculation Program

```
110401                  Subsegment number for this TMDL
"Bayou Toro"            Subsegment name (max 50 chars)
"toro_sum.out"           Name of LA-QUAL output file
4                       Total number of reaches in the model
110401                  Subsegment that reach 1 is in
110401                  Subsegment that reach 2 is in
110401                  Subsegment that reach 3 is in
110401                  Subsegment that reach 4 is in
10                      point source margin of safety (%)
10                      point source Future Gorwth (%)
10                      NPS margin of safety (%)
10                      NPS Future Growth (%)
4.33                    Ratio of oxygen demand to nitrogen
5                       Number of minor point sources
                        MINOR POINT SOURCE DISCHARGE #1:
"LA0046558"                NPDES permit number (9 chars)
"001"                      Outfall number (3 chars)
0.770                      Flow (MGD)
"Boise Building Sol."      Comment for flow (max 40 chars)
0                          CBOD5 or BOD5 permit limit
200                        COD permit limit
0                          Ammonia N permit limit
""                         Comment for conc. limits (max 40 chars)
                        MINOR POINT SOURCE DISCHARGE #2:
"LA0046558"                NPDES permit number (9 chars)
"002"                      Outfall number (3 chars)
0.017                      Flow (MGD)
"Boise Building Sol."      Comment for flow (max 40 chars)
0                          CBOD5 or BOD5 permit limit
200                        COD permit limit
0                          Ammonia N permit limit
""                         Comment for conc. limits (max 40 chars)

                        MINOR POINT SOURCE DISCHARGE #3:
"LA0046558"                NPDES permit number (9 chars)
"003"                      Outfall number (3 chars)
0.010                      Flow (MGD)
"Boise Building Sol."      Comment for flow (max 40 chars)
0                          CBOD5 or BOD5 permit limit
250                        COD permit limit
0                          Ammonia N permit limit
""                         Comment for conc. limits (max 40 chars)
                        MINOR POINT SOURCE DISCHARGE #4:
"LA0046558"                NPDES permit number (9 chars)
"004"                      Outfall number (3 chars)
0.010                      Flow (MGD)
"Boise Building Sol."      Comment for flow (max 40 chars)
0                          CBOD5 or BOD5 permit limit
250                        COD permit limit
0                          Ammonia N permit limit
""                         Comment for conc. limits (max 40 chars)
                        MINOR POINT SOURCE DISCHARGE #5:
"LA0093939"                NPDES permit number (9 chars)
"001"                      Outfall number (3 chars)
0.125                      Flow (MGD)
"Florien STP"              Comment for flow (max 40 chars)
10                         CBOD5 or BOD5 permit limit
0                          COD permit limit
10                         Ammonia N permit limit
""                         Comment for conc. limits (max 40 chars)
No                      Nutrient TMDL needed?
1.0                     Natural ratio of total N to total P
```

TMDL CALCULATIONS FOR SUBSEGMENT: 110401 Bayou Toro
FTN ASSOCIATES, LTD.
Program:Pr20m6d

INFO FOR INPUT FILE WITH USER SPECIFIED DATA AND OPTIONS:
File name:tmdltors.inp

INFO FOR LA-QUAL OUTPUT FILE:
File name:toro_sum.out
Date/Time:Output produced at 13:15 on 09/21/2007
LA-QUAL Version 8.11

LIST OF ALL REACHES IN LA-QUAL OUTPUT FILE:
Reach 1 (Elements 1 - 60) is in subsegment 110401 Bayou Toro
Reach 2 (Elements 61 - 120) is in subsegment 110401 Bayou Toro
Reach 3 (Elements 121 - 180) is in subsegment 110401 Bayou Toro
Reach 4 (Elements 181 - 240) is in subsegment 110401 Bayou Toro

==========

CALCULATIONS FOR LOADS FROM NPS INFLOWS (HEADWATERS, TRIBUTARIES, AND INCREMENTAL INFLOW):

Equation used: (Load, kg/day) = (Inflow rate, m3/sec) * (Conc., mg/L) * 1.0E-6 kg/mg * 1.0E3 L/m3 * 86400 sec/day

Values from LA-QUAL output:

Reach or Element number	Inflow rate (m3/sec)	CBODu conc. (mg/L)	Organic N conc. (mg/L)	Ammonia N conc. (mg/L)	NO2+NO3 N conc. (mg/L)	Name of inflow
1	0.03400	1.37	0.61	0.08	0.00	Bayou Toro @ 110401A
81	0.00300	1.40	0.61	0.08	0.00	NPS Midkiff Creek
1	0.04600	1.37	0.61	0.08	0.00	Incremental Reach flow
2	0.04600	1.37	0.61	0.08	0.00	Incremental Reach flow
3	0.04600	1.37	0.61	0.08	0.00	Incremental Reach flow
4	0.04600	1.37	0.61	0.08	0.00	Incremental Reach flow

Calculated values:

Element number	CBODu load (kg/day)	Organic N load (kg/day)	Ammonia N load (kg/day)	NO2+NO3 N load (kg/day)
1	4.02	1.79	0.24	0.00
81	0.36	0.16	0.02	0.00
1	5.44	2.42	0.32	0.00
2	5.44	2.42	0.32	0.00
3	5.44	2.42	0.32	0.00
4	5.44	2.42	0.32	0.00
Subsegment totals:	22.18	11.65	1.53	0.00

==========

CALCULATIONS FOR NONPOINT SOURCE MASS LOADS IN DATA TYPE 19:

Values from LA-QUAL output:

Reach number	CBODu mass load (kg/day)	Organic N mass load (kg/day)
1	2.94	0.64
2	3.92	0.88
3	4.90	1.13
4	6.86	1.37
Subsegment totals	18.62	4.02

==========

CALCULATIONS FOR LOADS FROM SOD AND BENTHIC AMMONIA:

SOD temperature correction factor used in LA-QUAL model: 1.065 (default)

Equations used: SOD temp. corrected = (SOD at 20 C) * 1.065^(Water temp - 20 C)
SOD load = (SOD temp. corrected, g/m2/day) * (Surface area, m2) * 1.0E-3 kg/g
Benthic NH3-N load = (Benthic ammonia N, g/m2/day) * (Surface area, m2) * 1.0E-3 kg/g

		Values from LA-QUAL output:				Calculated values:		
Reach number	Element number	Water temp. (deg C)	Surface area (m2)	SOD at 20 C (g/m2/day)	Benthic ammonia N (g/m2/day)	SOD temp. corrected (g/m2/day)	SOD load (kg/day)	Benthic NH3-N load (kg/day)
1	1	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	2	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	3	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	4	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	5	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	6	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	7	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	8	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	9	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	10	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	11	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	12	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	13	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	14	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	15	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	16	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	17	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	18	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	19	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	20	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	21	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	22	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	23	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	24	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	25	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	26	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	27	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	28	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	29	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	30	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	31	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	32	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	33	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	34	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	35	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	36	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	37	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	38	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	39	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	40	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	41	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	42	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	43	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	44	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	45	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	46	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	47	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	48	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	49	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	50	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	51	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	52	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	53	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	54	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	55	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	56	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	57	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	58	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	59	27.30	792.0	1.550	0.00	2.455	1.94	0.00
1	60	27.30	792.0	1.550	0.00	2.455	1.94	0.00

2	61	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	62	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	63	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	64	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	65	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	66	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	67	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	68	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	69	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	70	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	71	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	72	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	73	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	74	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	75	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	76	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	77	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	78	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	79	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	80	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	81	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	82	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	83	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	84	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	85	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	86	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	87	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	88	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	89	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	90	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	91	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	92	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	93	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	94	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	95	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	96	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	97	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	98	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	99	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	100	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	101	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	102	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	103	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	104	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	105	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	106	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	107	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	108	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	109	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	110	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	111	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	112	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	113	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	114	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	115	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	116	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	117	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	118	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	119	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
2	120	27.30	1087.0	1.550	0.00	2.455	2.67	0.00
3	121	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	122	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	123	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	124	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	125	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	126	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	127	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	128	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	129	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	130	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	131	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	132	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	133	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	134	27.30	1382.0	1.550	0.00	2.455	3.39	0.00

3	135	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	136	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	137	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	138	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	139	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	140	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	141	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	142	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	143	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	144	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	145	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	146	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	147	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	148	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	149	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	150	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	151	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	152	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	153	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	154	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	155	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	156	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	157	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	158	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	159	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	160	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	161	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	162	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	163	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	164	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	165	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	166	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	167	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	168	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	169	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	170	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	171	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	172	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	173	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	174	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	175	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	176	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	177	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	178	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	179	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
3	180	27.30	1382.0	1.550	0.00	2.455	3.39	0.00
4	181	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	182	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	183	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	184	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	185	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	186	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	187	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	188	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	189	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	190	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	191	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	192	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	193	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	194	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	195	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	196	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	197	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	198	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	199	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	200	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	201	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	202	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	203	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	204	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	205	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	206	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	207	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	208	27.30	1676.0	1.550	0.00	2.455	4.11	0.00

4	209	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	210	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	211	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	212	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	213	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	214	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	215	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	216	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	217	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	218	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	219	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	220	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	221	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	222	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	223	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	224	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	225	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	226	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	227	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	228	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	229	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	230	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	231	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	232	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	233	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	234	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	235	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	236	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	237	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	238	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	239	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
4	240	27.30	1676.0	1.550	0.00	2.455	4.11	0.00
							---	---
						Subsegment totals:	727.11	0.00

==========

CALCULATIONS FOR LOADS FROM POINT SOURCE DISCHARGES EXPLICITLY MODELED:

Equation used: (Load, kg/day) = (Inflow rate, m3/sec) * (Conc., mg/L) * 1.0E-6 kg/mg * 1.0E3 L/m3 * 86400 sec/day

Values from LA-QUAL output:

Element number	Inflow rate (m3/sec)	CBODu conc. (mg/L)	Organic N conc. (mg/L)	Ammonia N conc. (mg/L)	NO2+NO3 N conc. (mg/L)	Name of discharge
149	0.00060	69.000	5.000	10.000	0.000	Emerald Hills Golf

Calculated values:

Element number	CBODu load (kg/day)	Organic N load (kg/day)	Ammonia N load (kg/day)	NO2+NO3 N load (kg/day)
149	3.58	0.26	0.52	0.00
Subsegment total	3.58	0.26	0.52	0.00

==========

CALCULATIONS FOR LOADS FROM POINT SOURCE DISCHARGES NOT EXPLICITLY MODELED:

Equations used: Flow rate from TMDL calcs = Permit flow rate * 1.250 (to incorporate MOS and FG)
(Load, kg/day) = (Flow rate, MGD) * (Conc., mg/L) * 3.785 L/gal * 1.0E6 gal/MG * 1.0E-6 kg/mg

Assumptions: Ratio of CBODu to CBOD5 for point source dissharges = 2.3 (guidance from LTP).

For permits with BOD or ammonia limits, NO2+NO3 = 10 mg/L (drinking water criteria).
For permits with COD limits, assume that CBODu is about the same magnitude as COD and
that discharges of nitrogen (organic, ammonia, and NO2+NO3) are negligible.

NPDES permit number	Outfall number	Permit flow rate (MGD)	Factor to incorporate MOS and FG into flow	Flow rate for TMDL calcs (MGD	Comments
LA0046558	001	0.770	1.250	0.962	Boise Building Sol.
LA0046558	002	0.017	1.250	0.021	Boise Building Sol.
LA0046558	003	0.010	1.250	0.012	Boise Building Sol.
LA0046558	004	0.010	1.250	0.012	Boise Building Sol.
LA0093939	001	0.125	1.250	0.156	Florien STP

User specified permit limits:

NPDES permit number	Outfall number	CBOD5 (mg/L)	COD (mg/L)	Ammonia (mg/L)	Comments
LA0046558	001	0.0	200.0	0.0	
LA0046558	002	0.0	200.0	0.0	
LA0046558	003	0.0	250.0	0.0	
LA0046558	004	0.0	250.0	0.0	
LA0093939	001	10.0	0.0	10.0	

Values for TMDL calculations:

NPDES permit number	Outfall number	CBODu (mg/L)	Organic N (mg/L)	Ammonia N (mg/L)	NO2+NO3 N (mg/L)	Comments
LA0046558	001	200.00	0.00	0.00	0.00	
LA0046558	002	200.00	0.00	0.00	0.00	
LA0046558	003	250.00	0.00	0.00	0.00	
LA0046558	004	250.00	0.00	0.00	0.00	
LA0093939	001	23.00	20.00	10.00	10.00	

Calculated loads:

NPDES permit number	Outfall number	CBODu (kg/day)	Organic N (kg/day)	AmmoniaN (kg.day)	NO2+NO3 N (kg.day)	Comments
LA0046558	001	728.61	0.00	0.00	0.00	
LA0046558	002	16.09	0.00	0.00	0.00	
LA0046558	003	11.83	0.00	0.00	0.00	
LA0046558	004	11.83	0.00	0.00	0.00	
LA0093939	001	13.60	11.83	5.91	5.91	
Subsegment total		781.96	11.83	5.91	5.91	

==========

SUMMARY OF NONPOINT SOURCE OXYGEN DEMAND FOR THIS SUBSEGEMENT:

Equations used: Organic N oxygen demand, kg/day = 4.3300 * Organic N load, kg/day of N
Ammonia N oxygen demand, kg/day = 4.3300 * Ammonia N load, kg/day of N
Margin of safety = 10.0% * nonpoint source load
Future Growth = 10.0% * nonpoint source load
Load Allocation = 80.0% * nonpoint source load

Values from calculations above

	SOD (kg/day)	CBODu (kg/day)	Nitrogen loads (kg/day of N): Organic (kg/day)	Ammonia (kg/day)	NO2+NO3 N (kg/day)

NPS inflows	N/A	22.18	11.65	1.53	0.00
Mass LOads (data type 19)	N/A	18.62	4.02	N/A	N/A
SOD and Benthic	727.11	N/A	N/A	0.00	N/A

Calculated loads of oxygen demand:

	SOD (kg/day)	CBODu (kg/day)	Oygen demand loads: Organic (kg/day)	Oygen demand loads: Ammonia (kg/day)	Total Oxygen demand (kg/day)
NPS inflows	N/A	22.18	50.43	6.63	79.25
Mass LOads (data type 19)	N/A	18.62	17.41	N/A	36.03
SOD and Benthic	727.11	N/A	N/A	0.00	727.11
Total for all NPS loads	727.11	40.80	67.84	6.63	842.38
NPS future growth (10.0%)	72.71	4.08	6.78	0.66	84.24
NPS margin of safety (10.0%)	72.71	4.08	6.78	0.66	84.24
NPS load allocation (80.0%)	581.69	32.64	54.28	5.31	673.90

==========

SUMMARY OF POINT SOURCE OXYGEN DEMAND FOR THIS SUBSEGEMENT

Equations used: Organic N oxygen demand, kg/day = 4.3300 * Organic N load, kg/day of N
Ammonia N oxygen demand, kg/day = 4.3300 * Ammonia N load, kg/day of N
Margin of Safety = 10.0% * point source load
Future Growth = 10.0% * nonpoint source load
Wasteload Allocation (WLA) for modeled point source = 80.0% * modeled load
Wasteload Allocation (WLA) for minor point sources = 80.0% * calculated load

Values from calculations above

	CBODu (kg/day)	Nitrogen loads (kg/day of N): Organic N (kg/day)	Nitrogen loads (kg/day of N): Ammonia N (kg/day)	Nitrogen loads (kg/day of N): NO3+NO2 (kg/day)
Modeled load for: Emerald Hills Golf	3.58	0.26	0.52	0.00
Calculated load for minor point source	781.96	11.83	5.91	5.91

Calculated loads of oxygen demand

	CBODu (kg/day)	Oygen demand loads: Organic N (kg/day)	Oygen demand loads: Ammonia N (kg/day)	Total Oxygen demand (kg/day)
Modeled load for: Emerald Hills Golf	3.58	1.12	2.24	6.94
Calculated load for minor point source	781.96	51.22	25.61	858.78
Total for all point source loads	785.53	52.34	27.85	865.72
MOS for all point Sources (10.0%)	78.55	5.23	2.79	86.57
FG for all point Sources (10.0%)	78.55	5.23	2.79	86.57
WLA for: Emerald Hills Golf (80.0%)	2.86	0.90	1.80	5.56
WLA for minor point sources (80.0%)	625.57	40.97	20.49	687.02

```
110401                  Subsegment number for this TMDL
"Bayou Toro"            Subsegment name (max 50 chars)
"toro_win.out"           Name of LA-QUAL output file
4                       Total number of reaches in the model
110401                  Subsegment that reach 1 is in
110401                  Subsegment that reach 2 is in
110401                  Subsegment that reach 3 is in
110401                  Subsegment that reach 4 is in
10                      point source margin of safety (%)
10                      point source Future Gorwth (%)
10                      NPS margin of safety (%)
10                      NPS Future Growth (%)
4.33                    Ratio of oxygen demand to nitrogen
5                       Number of minor point sources
                        MINOR POINT SOURCE DISCHARGE #1:
"LA0046558"                NPDES permit number (9 chars)
"001"                      Outfall number (3 chars)
0.770                      Flow (MGD)
"Boise Building Sol."      Comment for flow (max 40 chars)
0                          CBOD5 or BOD5 permit limit
200                        COD permit limit
0                          Ammonia N permit limit
""                         Comment for conc. limits (max 40 chars)
                        MINOR POINT SOURCE DISCHARGE #2:
"LA0046558"                NPDES permit number (9 chars)
"002"                      Outfall number (3 chars)
0.017                      Flow (MGD)
"Boise Building Sol."      Comment for flow (max 40 chars)
0                          CBOD5 or BOD5 permit limit
200                        COD permit limit
0                          Ammonia N permit limit
""                         Comment for conc. limits (max 40 chars)

                        MINOR POINT SOURCE DISCHARGE #3:
"LA0046558"                NPDES permit number (9 chars)
"003"                      Outfall number (3 chars)
0.010                      Flow (MGD)
"Boise Building Sol."      Comment for flow (max 40 chars)
0                          CBOD5 or BOD5 permit limit
250                        COD permit limit
0                          Ammonia N permit limit
""                         Comment for conc. limits (max 40 chars)
                        MINOR POINT SOURCE DISCHARGE #4:
"LA0046558"                NPDES permit number (9 chars)
"004"                      Outfall number (3 chars)
0.010                      Flow (MGD)
"Boise Building Sol."      Comment for flow (max 40 chars)
0                          CBOD5 or BOD5 permit limit
250                        COD permit limit
0                          Ammonia N permit limit
""                         Comment for conc. limits (max 40 chars)
                        MINOR POINT SOURCE DISCHARGE #5:
"LA0093939"                NPDES permit number (9 chars)
"001"                      Outfall number (3 chars)
0.125                      Flow (MGD)
"Florien STP"              Comment for flow (max 40 chars)
10                         CBOD5 or BOD5 permit limit
0                          COD permit limit
10                         Ammonia N permit limit
""                         Comment for conc. limits (max 40 chars)
No                      Nutrient TMDL needed?
1.0                     Natural ratio of total N to total P
```

TMDL CALCULATIONS FOR SUBSEGMENT: 110401 Bayou Toro
FTN ASSOCIATES, LTD.
Program:Pr20m6d

INFO FOR INPUT FILE WITH USER SPECIFIED DATA AND OPTIONS:
File name:tmdltorw.inp

INFO FOR LA-QUAL OUTPUT FILE:
File name:toro_win.out
Date/Time:Output produced at 13:15 on 09/21/2007
LA-QUAL Version 8.11

LIST OF ALL REACHES IN LA-QUAL OUTPUT FILE:
Reach 1 (Elements 1 - 60) is in subsegment 110401 Bayou Toro
Reach 2 (Elements 61 - 120) is in subsegment 110401 Bayou Toro
Reach 3 (Elements 121 - 180) is in subsegment 110401 Bayou Toro
Reach 4 (Elements 181 - 240) is in subsegment 110401 Bayou Toro

==========

CALCULATIONS FOR LOADS FROM NPS INFLOWS (HEADWATERS, TRIBUTARIES, AND INCREMENTAL INFLOW):

Equation used: (Load, kg/day) = (Inflow rate, m3/sec) * (Conc., mg/L) * 1.0E-6 kg/mg * 1.0E3 L/m3 * 86400 sec/day

Values from LA-QUAL output:

Reach or Element number	Inflow rate (m3/sec)	CBODu conc. (mg/L)	Organic N conc. (mg/L)	Ammonia N conc. (mg/L)	NO2+NO3 N conc. (mg/L)	Name of inflow
1	0.21000	1.57	0.69	0.09	0.00	Bayou Toro @ 110401A
81	0.03000	1.60	0.69	0.09	0.00	NPS Midkiff Creek
1	0.04600	1.57	0.69	0.09	0.00	Incremental Reach flow
2	0.04600	1.57	0.69	0.09	0.00	Incremental Reach flow
3	0.04600	1.57	0.69	0.09	0.00	Incremental Reach flow
4	0.04600	1.57	0.69	0.09	0.00	Incremental Reach flow

Calculated values:

Element number	CBODu load (kg/day)	Organic N load (kg/day)	Ammonia N load (kg/day)	NO2+NO3 N load (kg/day)
1	28.49	12.52	1.63	0.00
81	4.15	1.79	0.23	0.00
1	6.24	2.74	0.36	0.00
2	6.24	2.74	0.36	0.00
3	6.24	2.74	0.36	0.00
4	6.24	2.74	0.36	0.00
Subsegment totals:	29.19	25.28	3.29	0.00

==========

CALCULATIONS FOR NONPOINT SOURCE MASS LOADS IN DATA TYPE 19:

Values from LA-QUAL output:

Reach number	CBODu mass load (kg/day)	Organic N mass load (kg/day)
1	3.36	0.73
2	4.48	1.01
3	5.60	1.29
4	7.84	1.57
Subsegment totals	21.28	4.60

==========

CALCULATIONS FOR LOADS FROM SOD AND BENTHIC AMMONIA:

SOD temperature correction factor used in LA-QUAL model: 1.065 (default)

Equations used: SOD temp. corrected = (SOD at 20 C) * 1.065^(Water temp - 20 C)
SOD load = (SOD temp. corrected, g/m2/day) * (Surface area, m2) * 1.0E-3 kg/g
Benthic NH3-N load = (Benthic ammonia N, g/m2/day) * (Surface area, m2) * 1.0E-3 kg/g

		Values from LA-QUAL output:				Calculated values:		
Reach number	Element number	Water temp. (deg C)	Surface area (m2)	SOD at 20 C (g/m2/day)	Benthic ammonia N (g/m2/day)	SOD temp. corrected (g/m2/day)	SOD load (kg/day)	Benthic NH3-N load (kg/day)
1	1	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	2	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	3	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	4	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	5	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	6	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	7	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	8	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	9	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	10	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	11	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	12	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	13	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	14	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	15	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	16	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	17	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	18	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	19	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	20	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	21	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	22	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	23	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	24	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	25	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	26	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	27	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	28	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	29	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	30	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	31	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	32	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	33	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	34	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	35	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	36	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	37	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	38	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	39	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	40	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	41	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	42	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	43	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	44	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	45	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	46	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	47	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	48	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	49	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	50	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	51	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	52	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	53	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	54	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	55	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	56	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	57	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	58	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	59	22.60	792.0	1.320	0.00	1.555	1.23	0.00
1	60	22.60	792.0	1.320	0.00	1.555	1.23	0.00

2	61	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	62	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	63	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	64	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	65	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	66	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	67	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	68	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	69	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	70	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	71	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	72	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	73	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	74	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	75	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	76	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	77	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	78	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	79	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	80	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	81	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	82	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	83	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	84	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	85	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	86	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	87	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	88	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	89	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	90	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	91	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	92	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	93	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	94	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	95	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	96	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	97	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	98	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	99	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	100	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	101	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	102	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	103	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	104	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	105	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	106	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	107	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	108	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	109	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	110	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	111	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	112	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	113	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	114	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	115	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	116	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	117	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	118	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	119	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
2	120	22.60	1087.0	1.320	0.00	1.555	1.69	0.00
3	121	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	122	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	123	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	124	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	125	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	126	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	127	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	128	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	129	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	130	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	131	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	132	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	133	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	134	22.60	1382.0	1.320	0.00	1.555	2.15	0.00

3	135	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	136	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	137	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	138	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	139	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	140	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	141	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	142	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	143	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	144	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	145	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	146	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	147	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	148	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	149	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	150	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	151	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	152	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	153	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	154	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	155	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	156	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	157	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	158	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	159	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	160	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	161	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	162	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	163	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	164	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	165	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	166	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	167	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	168	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	169	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	170	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	171	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	172	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	173	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	174	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	175	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	176	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	177	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	178	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	179	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
3	180	22.60	1382.0	1.320	0.00	1.555	2.15	0.00
4	181	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	182	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	183	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	184	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	185	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	186	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	187	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	188	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	189	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	190	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	191	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	192	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	193	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	194	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	195	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	196	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	197	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	198	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	199	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	200	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	201	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	202	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	203	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	204	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	205	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	206	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	207	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	208	22.60	1676.0	1.320	0.00	1.555	2.61	0.00

4	209	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	210	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	211	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	212	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	213	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	214	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	215	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	216	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	217	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	218	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	219	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	220	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	221	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	222	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	223	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	224	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	225	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	226	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	227	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	228	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	229	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	230	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	231	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	232	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	233	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	234	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	235	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	236	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	237	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	238	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	239	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
4	240	22.60	1676.0	1.320	0.00	1.555	2.61	0.00
							---	---
						Subsegment totals:	460.57	0.00

==========

CALCULATIONS FOR LOADS FROM POINT SOURCE DISCHARGES EXPLICITLY MODELED:

Equation used: (Load, kg/day) = (Inflow rate, m3/sec) * (Conc., mg/L) * 1.0E-6 kg/mg * 1.0E3 L/m3 * 86400 sec/day

Values from LA-QUAL output:

Element number	Inflow rate (m3/sec)	CBODu conc. (mg/L)	Organic N conc. (mg/L)	Ammonia N conc. (mg/L)	NO2+NO3 N conc. (mg/L)	Name of discharge
149	0.00060	69.000	5.000	10.000	0.000	Emerald Hills Golf

Calculated values:

Element number	CBODu load (kg/day)	Organic N load (kg/day)	Ammonia N load (kg/day)	NO2+NO3 N load (kg/day)
149	3.58	0.26	0.52	0.00
Subsegment total	3.58	0.26	0.52	0.00

==========

CALCULATIONS FOR LOADS FROM POINT SOURCE DISCHARGES NOT EXPLICITLY MODELED:

Equations used: Flow rate from TMDL calcs = Permit flow rate * 1.250 (to incorporate MOS and FG)
(Load, kg/day) = (Flow rate, MGD) * (Conc., mg/L) * 3.785 L/gal * 1.0E6 gal/MG * 1.0E-6 kg/mg

Assumptions: Ratio of CBODu to CBOD5 for point source dissharges = 2.3 (guidance from LTP).

For permits with BOD or ammonia limits, NO2+NO3 = 10 mg/L (drinking water criteria).
For permits with COD limits, assume that CBODu is about the same magnitude as COD and
that discharges of nitrogen (organic, ammonia, and NO2+NO3) are negligible.

NPDES permit number	Outfall number	Permit flow rate (MGD)	Factor to incorporate MOS and FG into flow	Flow rate for TMDL calcs (MGD	Comments
LA0046558	001	0.770	1.250	0.962	Boise Building Sol.
LA0046558	002	0.017	1.250	0.021	Boise Building Sol.
LA0046558	003	0.010	1.250	0.012	Boise Building Sol.
LA0046558	004	0.010	1.250	0.012	Boise Building Sol.
LA0093939	001	0.125	1.250	0.156	Florien STP

User specified permit limits:

NPDES permit number	Outfall number	CBOD5 (mg/L)	COD (mg/L)	Ammonia (mg/L)	Comments
LA0046558	001	0.0	200.0	0.0	
LA0046558	002	0.0	200.0	0.0	
LA0046558	003	0.0	250.0	0.0	
LA0046558	004	0.0	250.0	0.0	
LA0093939	001	10.0	0.0	10.0	

Values for TMDL calculations:

NPDES permit number	Outfall number	CBODu (mg/L)	Organic N (mg/L)	Ammonia N (mg/L)	NO2+NO3 N (mg/L)	Comments
LA0046558	001	200.00	0.00	0.00	0.00	
LA0046558	002	200.00	0.00	0.00	0.00	
LA0046558	003	250.00	0.00	0.00	0.00	
LA0046558	004	250.00	0.00	0.00	0.00	
LA0093939	001	23.00	20.00	10.00	10.00	

Calculated loads:

NPDES permit number	Outfall number	CBODu (kg/day)	Organic N (kg/day)	AmmoniaN (kg.day)	NO2+NO3 N (kg.day)	Comments
LA0046558	001	728.61	0.00	0.00	0.00	
LA0046558	002	16.09	0.00	0.00	0.00	
LA0046558	003	11.83	0.00	0.00	0.00	
LA0046558	004	11.83	0.00	0.00	0.00	
LA0093939	001	13.60	11.83	5.91	5.91	
Subsegment total		781.96	11.83	5.91	5.91	

==========

SUMMARY OF NONPOINT SOURCE OXYGEN DEMAND FOR THIS SUBSEGEMENT:

Equations used: Organic N oxygen demand, kg/day = 4.3300 * Organic N load, kg/day of N
Ammonia N oxygen demand, kg/day = 4.3300 * Ammonia N load, kg/day of N
Margin of safety = 10.0% * nonpoint source load
Future Growth = 10.0% * nonpoint source load
Load Allocation = 80.0% * nonpoint source load

Values from calculations above

	SOD (kg/day)	CBODu (kg/day)	Nitrogen loads (kg/day of N): Organic (kg/day)	Ammonia (kg/day)	NO2+NO3 N (kg/day)

NPS inflows	N/A	29.19	25.28	3.29	0.00
Mass LOads (data type 19)	N/A	21.28	4.60	N/A	N/A
SOD and Benthic	460.57	N/A	N/A	0.00	N/A

Calculated loads of oxygen demand:

	SOD (kg/day)	CBODu (kg/day)	Oygen demand loads: Organic (kg/day)	Oygen demand loads: Ammonia (kg/day)	Total Oxygen demand (kg/day)
NPS inflows	N/A	29.19	109.46	14.25	152.90
Mass LOads (data type 19)	N/A	21.28	19.92	N/A	41.20
SOD and Benthic	460.57	N/A	N/A	0.00	460.57
Total for all NPS loads	460.57	50.47	129.38	14.25	654.66
NPS future growth (10.0%)	46.06	5.05	12.94	1.42	65.47
NPS margin of safety (10.0%)	46.06	5.05	12.94	1.42	65.47
NPS load allocation (80.0%)	368.45	40.37	103.50	11.41	523.72

==========

SUMMARY OF POINT SOURCE OXYGEN DEMAND FOR THIS SUBSEGEMENT

Equations used: Organic N oxygen demand, kg/day = 4.3300 * Organic N load, kg/day of N
Ammonia N oxygen demand, kg/day = 4.3300 * Ammonia N load, kg/day of N
Margin of Safety = 10.0% * point source load
Future Growth = 10.0% * nonpoint source load
Wasteload Allocation (WLA) for modeled point source = 80.0% * modeled load
Wasteload Allocation (WLA) for minor point sources = 80.0% * calculated load

Values from calculations above

	CBODu (kg/day)	Nitrogen loads (kg/day of N): Organic N (kg/day)	Nitrogen loads (kg/day of N): Ammonia N (kg/day)	Nitrogen loads (kg/day of N): NO3+NO2 (kg/day)
Modeled load for: Emerald Hills Golf	3.58	0.26	0.52	0.00
Calculated load for minor point source	781.96	11.83	5.91	5.91

Calculated loads of oxygen demand

	CBODu (kg/day)	Oygen demand loads: Organic N (kg/day)	Oygen demand loads: Ammonia N (kg/day)	Total Oxygen demand (kg/day)
Modeled load for: Emerald Hills Golf	3.58	1.12	2.24	6.94
Calculated load for minor point source	781.96	51.22	25.61	858.78
Total for all point source loads	785.53	52.34	27.85	865.72
MOS for all point Sources (10.0%)	78.55	5.23	2.79	86.57
FG for all point Sources (10.0%)	78.55	5.23	2.79	86.57
WLA for: Emerald Hills Golf (80.0%)	2.86	0.90	1.80	5.56
WLA for minor point sources (80.0%)	625.57	40.97	20.49	687.02

APPENDIX M

Source Code for TMDL Calculation Program

SUMMARY OF TMDL CALCULATIONS FOR DO TMDLs IN RED AND SABINE BASINS

Total maximum daily load (TMDL) is sum of these six components:

- Wasteload allocations (WLA) for point sources
- Margin of safety (MOS) for point sources
- Future growth (FG) for point sources
- Load allocations (LA) for nonpoint sources
- Margin of safety (MOS) for nonpoint sources
- Future growth (FG) for nonpoint sources

Point sources:

- For this analysis, all effluent flows are set to 125% of design or expected flow (for both simulated point sources and minor point sources)

- Each load calculated as: Load, kg/day = (Flow, m^3/sec) × (Concentration, mg/L) × 86.4

- Oxygen demand from ammonia and organic nitrogen = nitrogen load × 4.33

- Total point source load = sum of point source loads simulated in model + sum of minor point source loads calculated in spreadsheet

- MOS for all point sources = 10% × total point source load
- FG for all point sources = 10% × total point source load

- WLA for each simulated point source = 80% × simulated load for that point source
- WLA for all minor point sources = 80% × total load for minor point sources

Nonpoint sources:

- This includes headwaters, tributaries, incremental inflow, sediment oxygen demand, benthic ammonia loads, mass loads of CBODu, and mass loads of organic nitrogen.

- Each load for headwaters, tributaries, and incremental inflow is calculated as:
  Load, kg/day = (Flow, m^3/sec) × (Concentration, mg/L) × 86.4

- For this analysis, the sediment oxygen demand (SOD) is corrected for temperature by multiplying the model input values times 1.065^(Temperature, °C − 20)

- Loads from SOD and benthic ammonia are calculated as:
  Load, kg/day = (rate per unit area, g/m^2/day)× (stream bottom area, m^2) × 0.001

- Oxygen demand from ammonia and organic nitrogen = nitrogen load × 4.33

- MOS for nonpoint sources = 10% × sum of all nonpoint source loads
- FG for nonpoint sources = 10% × sum of all nonpoint source loads

- LA for nonpoint sources = 80% × sum of all nonpoint source loads

```
        program pr20m6d
C**** For this prograqm to work the echo of the input and final report must be turned on:
C     1) The echo of the input provides MAJORITY of the ionformation for the calcuations,
C     2) The Hydralic data (needed for surface area for the SOD) is found in the final report
C     reach summary.

C     Printing:
C     This is printed in MSWord or VSlick by setting the left and right margins to 0.3 and 0.38
C     and setting the font to Courier New 9 pt normal text.


C***********************************Search program (part 1)****************************************
C This whole program is written by Richard R. Bennett on 9/20/07 for LA-QUAL version 8.0
C Every variable is used in this program except

       INTEGER imp,i,a,c,d,e,f,g,h,j,k,l,m,n,o,q,k1
       Character*132 line,stream_id
       Character*8 target
       character*21 target2
       character*15 target3
       character*16 target3b,target5b,target5c,target6,t
     &arget7,target8,target9,target10
       character*40 target4


C**********All arrays are entered in the order in which they occurr in the program
C**************Input REAL arrays

      integer total elem
      integer incr reach(1:999)
       REAL C1B_SOD(1:999),C2_NH3SR(1:999),
     &incr2_CBODu_con(1:999),incr2_Org_N_con(1:999), incr2_Amm_N_con(1:
     &999),incr2_Nitrate_con(1:999), NP_BOD(1:999),NP_ORG(1:999),
     & HDWT1_Flow(1:999),incr_flow(1:999)
       INTEGER HDWT1_elem(1:999)
       REAL WSTLD Flow(1:999),Elem end(1:999),Elem begin(1:999)
       character NPS wstld name(1:999)*25,PS Wstld name(1:999)*20
       REAL WSTLD2 BOD(1:999),WSTLD2_ORG(1:999),WSTLD2
     &_NH3(1:999), WSTLD2_NO3(1:999)
       REAL nps_WSTLD_Flow(1:999),nps_elem_wstld(1:999)
       REAL NPS_WSTLD2_BOD(1:999),NPS_WSTLD2_ORG(1:999),NPS_WSTLD2
     &_NH3(1:999),NPS_WSTLD2_NO3(1:999)
       REAL PS_WSTLD_Flow(1:999),ps_elem_wstld(1:999)
       REAL ps_WSTLD2_BOD(1:999),ps_WSTLD2_ORG(1:999),ps_WSTLD2
     & NH3(1:999),ps WSTLD2 NO3(1:999)
       Integer NP reach(1:999),elem wstld(1:999),num,num_pt_sour
       real ps_mos,ps_mos_per,nps_mos,nps_mos_per
       real ps_FG,ps_FG_per,nps_FG,nps_FG_per
       Real Temp(1:999),S_area_int(1:1000)
       integer elem_col_int
       character source_type(1:999)*3,reach_name(1:999)*15,wstld_name(1:
     &100)*20, hdwt1_name(1:999)*25,reach_subseg_num(1:999)*20,
     &permit number(1:999)*20,outfall num(1:999)*20,comment(1:999)*40,
     &comment con(1:999)*40,nut tmdl need*4
       Real perm flow(1:999),CBOD5_Perm(1:999), cod_perm(1:999),ammon_pe
     &rm(1:999),nat_rat,ammoxy_rat
       real HDWT2_BOD_con(1:999),HDWT2_ORG_con(1:999), HDWT2_NH3_con(1:1
     &00), HDWT2_NO3_con(1:999)
       real incr_outflow(1:999),incr_inflow(1:999)

C****************Character Search Strings
      target = 'CNTROL04'
      target2= 'THETA        BENTHAL'
      target3= '$$$ DATA TYPE 8'  ! Reach ID data
      target3b='$$$ DATA TYPE 11' ! Reach Initial conditions (need temps)
      target4= 'BIOLOGICAL AND PHYSICAL COEFFICIENTS' ! SOD and NH3Sr rates
      target5b= '$$$ DATA TYPE 16'  ! Incrmental flows
      target5c= '$$$ DATA TYPE 17'  ! Incrmental WQ
      target6= '$$$ DATA TYPE 19'   ! Mass laods
      target7= '$$$ DATA TYPE 20'   ! Headwater flows
      Target8= '$$$ DATA TYPE 21'   ! Headwater WQ
      Target9= '$$$ DATA TYPE 24'   ! Wasteload flows
      target10= '$$$ DATA TYPE 25'  ! Wastelaod WQ
```

```
C****************Array counterrs
      num=0
      num incr=0
      num hdwt=0
      num_wstld=0
      nps_num_wstld=0
      ps_num_wstld=0
      a=0
      cir=0
      c=0
      d=0
      e=0
      f=0
      g=0
      h=0
      j=0
      k=0
      k1=0
      l=0
      m=0
      nps=1
      ps=1
      n=0
      o=0
      q=0


      Character*70 userFilename,Laqualfilename,subsegname,subsegnumber,
     &pertime,LAQUAL_version,laqualfileoutput

      print*,'Enter user input filename: ' ! this is the TMDL program input file
      read*,userfilename                   ! it is NOT hte LA-QUAL file!!!!

      imp=1000000


C*Read input file
      OPEN(UNIT=12, FILE=userfilename, STATUS='OLD') ! input file
      Open (unit=11, FILE='tmdl-res.txt', Status='UNKNOWN')  ! output file
c      OPEN (UNIT=13, FILE='inter-res.txt', Status='UNKNOWN') ! debugging file
      REad(12,*)subsegnumber  ! subsegment number
      REad(12,*)subsegname    ! subsegment name
      read(12,*)laqualfileoutput ! LA-QUAL output file
      read(12,*)usernum          ! number of reaches in output file
      do 10 I=1,usernum          ! read subsegment number for each reach loop
10       read(12,*)reach_subseg_num(I)
      read(12,*)ps_mos_per  ! point source MOS in percent
      read(12,*)ps_FG_per   ! point source FG in percent
      read(12,*)nps_mos_per  ! nonpoint source MOS in percent
      read(12,*)nps_FG_per   ! nonpoint source FG in percent
      READ(12,*)ammoxy_rat   ! ammonia oxidation rate
      read(12,*)num pt sour  ! number of point sources in input file
      do 20 I=1,num_pt_sour  ! read point source data loop
         read(12,*)
         read(12,*)permit_number(I) ! permit number
         read(12,*)outfall_num(I)   ! outfall number
         read(12,*)perm_flow(I)     ! permit flow (MGD)
         read(12,*)comment(I)       ! comment (usually facility name)
         read(12,*)cbod5_perm(I)    ! CBOD5 or BOD5 permit conc in mg/L
         read(12,*)COD perm(I)      ! COD permit conc in mg/L
         read(12,*)ammon perm(I)    ! ammonia permit conc in mg/L
         read(12,*)comment_con(I)   ! comment for concentration
20    continue
      read(12,*)nut_tmdl_need       ! is a nutrietn TMDL needed?
      read(12,*) nat_rat            ! ratio of natural nitrogen to phosphorus

      ps_mos=ps_mos_per/100.000
      ps_FG=ps_FG_per/100.000
      nps mos=nps mos per/100.000
      nps_FG=nps_FG_per/100.000

      laqualfilename=laqualfileoutput
```

```
      OPEN(UNIT=10, FILE=Laqualfilename, STATUS='OLD') ! this is teh LA-QUAL output file

1030  FORMAT(A35,3X,A25)
      DO 100 i=1,imp
      READ(10,'(A132)') line

C**********Are we at the end of the file?
      if(line(11:29).EQ.'EXECUTION COMPLETED')GO TO 900


C************ read LA-QUAL version
      if (i .EQ. 1) then
          read (line(1:32),'(A32)') LAQUAL_version
      end if

C**********when was the LA-QUAL file made and metric units
      if (line (1:6) .EQ. 'Output') then
         read(line(1:38),'(A38)') pertime
      else IF (line(1:8).EQ. target) then
1020     FORMAT (A35,3X,A10,3X,A10)

C**********Look for theta Benthal
         else IF (line(1:21).EQ. target2) then
1040        Format (A36,5X,A40)

C**********Data T8,Count number of reaches
         else IF (line (1:15) .EQ. target3) then
            Read (10,*)
            Read (10,*)
            Read (10,*)
            Read (10,*)
105         Read (10, '(A132)') stream_id
            if (stream_id(1:8).EQ. 'REACH ID')then
              num=num+1
              read(stream_ID(23:48),'(A15)')reach_name(num)
              read(stream_ID(109:111),)elem_begin(num)
              read(stream_ID(116:118),)elem_end(num)
              total_elem=elem_end(num)
              go to 105
            end if

C**********Data T11, read temp
      else IF (line (1:16).EQ. target3b) then
            READ (10,*)
            READ (10,*)
            READ (10,*)
107         READ (10,'(A132)') stream_id
            if (stream_id(1:7) .EQ. 'INITIAL') then
               q=q+1
               READ(stream_id(32:36),'(F5.0)') temp(q)
               go to 107
               end if

C**********Data T12,(read COEF-1 Bckgrd SOD and NH3SR)
      else IF (line (2:37) .EQ. target4) then
            Read (10,*)
            Read (10,*)
            Read (10,*)
            Read (10,*)
            Read (10,*)
110         Read (10, '(A132)') stream_id
            if (stream_id(1:7).NE. ' ') then
               a=a+1
               READ(Stream_id(1:4),'(I4)')elem
               READ(stream_id(72:77),'(F6.0)') C1B_SOD(elem)
               READ(Stream_id(98:103),'(F6.0)') C2_NH3SR(elem)
c               write(13,*)elem,C1B_Sod(elem),c2_nh3Sr(elem)
c               elem is used to put them in numerical order, NOT
c               in the order they are read from the LA_QUAL file!
c               (this only comes into play for branched models)
1060        FORMAT (A35,5X,A10,5X,A10)
            GO TO 110
            end if
```

```
C***********Data Type (incremenatal flow data part1)
       else if (line(1:16) .EQ. target5b) then
            read(10,*)
            read(10,*)
            read(10,*)
117         read(10,'(A132)')stream_id
            if (stream_id(1:6) .EQ. 'INCR-1') then
                num_incr=num_incr+1
                read(stream_id(17:19),'(I3)') incr_reach(num_incr)
                read(stream_id(32:38),'(F7.0)') incr_outflow(num_incr)
                read(stream_id(44:50),'(F7.0)') incr_inflow(num_incr)
                incr_flow(num_incr) = abs(incr_inflow(num_incr))-abs(inc
     &r_outflow(num_incr))
            go to 117
            end if

C**********Data Tyoe (incremental flow part 2)
       else if (line(1:16) .EQ. target5c) then
            num_incr=0
            read(10,*)
            read(10,*)
            read(10,*)
118          read(10,'(A132)')stream_id
            if (stream_id(1:6) .EQ. 'INCR-2') then
            num_incr=num_incr+1
            read(stream_id(37:46),'(F10.0)') incr2_CBODu_con(num_incr)
            read(stream_id(47:56),'(F10.0)') incr2_Org_N_con(num_incr)
            read(stream_id(57:66),'(F10.0)') incr2_Amm_N_con(num_incr)
            read(stream_id(67:76),'(F10.0)') incr2_Nitrate_con(num_incr)
            go to 118
            end if

C***********Data T19(reads BOD and ORG-N)
       else IF (line (1:16) .EQ. target6) then
            Read (10,*)
            Read (10,*)
            READ (10,*)
120         Read (10, '(A132)') stream_id
            if (stream_id(1:8).EQ. 'NONPOINT') then
               c=c+1
               d=d+1
               read(stream_ID(17:19),'(I3)')NP_reach(c)
               READ(stream_id(28:36),'(F9.0)')NP_BOD(c)
               READ(stream_id(38:46),'(F9.0)')NP_ORG(d)
1080        Format (A35,5X,A10,2X,A10,2X,A10)
            GO TO 120
            end if

C**********DATA T20(reads flow for HDWTR-1)
         else IF (line (1:16) .EQ. target7) then
            Read (10,*)
            READ (10,*)
            Read (10,*)
            REad (10,*)
125         Read (10, '(A132)') stream_id
            if (stream_id(1:7).EQ. 'HDWTR-1') then
               num_hdwt=num_HDwt+1
               e=e+1
               Read(stream_id(17:19),'(I3)')HDWT1_elem(e)
               read(stream_id(25:44),'(A20)')hdwt1_name(e)
               READ(stream_id(53:59),'(F7.0)') HDWT1_Flow(e)
               GO TO 125
            end if

C**********DATA T21(read BOD,ORG-N,NH3,NO3+2 for HDWTR-2)
         else IF (line (1:16) .EQ. target8) then
            Read (10,*)
            Read (10,*)
            READ (10,*)
            Read (10,*)
130         Read (10, '(A132)') stream_id
            if (stream_id(1:7).EQ. 'HDWTR-2') then
```

```
            f=f+1
            g=g+1
            h=h+1
            j=j+1
            READ(stream_id(58:66),'(F9.0)') HDWT2_BOD_con(f)
            READ(stream_id(68:76),'(F9.0)') HDWT2_ORG_con(g)
            READ(stream_id(78:86),'(F9.0)') HDWT2_NH3_con(h)
            READ(stream_id(88:96),'(F9.0)') HDWT2_NO3_con(j)
1090        Format (A35,5X,A5,5X,A5,5X,A5,5X,A5)
            GO TO 130
            end if

C**********DATA T24(flow for WSTLD-1)
          ps=1
          nps=1
          else IF (line (1:16) .EQ. target9) then
            Read (10,*)
            Read (10,*)
            Read (10,*)
            READ (10,*)
135         Read (10, '(A132)') stream_id
            if (stream_id(1:7).EQ. 'WSTLD-1') then
               num_wstld=num_wstld+1
               k=k+1
               READ(stream_id(52:59),'(F8.0)')WSTLD_Flow(k)
               read(stream_id(13:16),'(I4)')elem_wstld(k)
               read(stream_id(30:47),'(A18)')wstld_name(k)
               if (stream_id(30:32).EQ.'NPS') then !
                  nps_num_wstld=nps_num_wstld+1
                  NPS_wstld_name(nps) = wstld_name(K)
                  NPS_elem_wstld(nps) = elem_wstld(K)
                  NPS_wstld_flow(nps) = wstld_flow(K)
                  nps=nps+1
               else
                    ps_num_wstld=ps_num_wstld+1
                    PS_wstld_name(ps) = wstld_name(K)
                    PS_elem_wstld(ps) = elem_wstld(K)
                    PS_wstld_flow(ps) = wstld_flow(K)
                    ps=ps+1
c                   this loop and if statement is used to separate
c                   point and nonpoint wastelaods
               end if
            GO TO 135
            end if

C**********DATA T25(BOD,ORG-N,NH3,NO3+2) for WSTLD-2
      ps=1
      nps=1
         else IF (line (1:16) .EQ. target10) then
            Read (10,*)
            Read (10,*)
            READ (10,*)
            READ (10,*)
140         Read (10, '(A132)') stream_id
            if (stream_id(1:7).EQ. 'WSTLD-2') then
            l=l+1
            m=m+1
            n=n+1
            o=o+1
            k1=k1+1
            READ(stream_id(25:27),'(A3)')source_type(k1)
            READ(stream_id(57:66),'(F10.0)')WSTLD2_BOD(l)
            READ(stream_id(77:86),'(F10.0)')WSTLD2_ORG(m)
            READ(stream_id(87:96),'(F10.0)')WSTLD2_NH3(n)
            READ(stream_id(107:116),'(F10.0)')WSTLD2_NO3(o)
            if (source_type(K1).EQ.'NPS') then
                  nps_wstld2_bod(nps) = wstld2_bod(l)
                  nps_wstld2_org(nps) = wstld2_org(m)
                  nps_wstld2_nh3(nps) = WSTLD2_NH3(N)
                  nps_wstld2_no3(nps) = wstld2_no3(o)
                  nps=nps+1
               else
                  ps_wstld2_bod(ps) = wstld2_bod(l)
```

```
                  ps_wstld2_org(ps) = wstld2_org(m)
                  ps_wstld2_nh3(ps) = WSTLD2_NH3(N)
                  ps_wstld2_no3(ps) = wstld2_no3(o)
                  ps=ps+1
                 end if
c must have blank space after else or the else will only apply to the first statement and NOT
c to all of them

1095        Format (A35,6X,A5,2X,A5,2X,A5,2X,A5,2X,A5)
            GO TO 140
            end if

C*************SPECIAL REPORT, hydrualic parameter
        else IF (line (1:62) .EQ. ' ************************************
     &*************** HYDRAULIC') then
             Read (10,*)
             READ (10,*)
             READ (10,*)
             READ (10,*)
             READ (10,*)
145          Read (10, '(A132)') stream_id
             if (stream_id(3:5).NE. '   ') then
c               p=p+1
C* these numbers are NOT in numerical order, they are in Branch (ie model layout) order
               read(stream_id(3:5),'(I3)')elem_col_int
               READ(stream_id(84:92),'(F10.0)')S_Area_int(elem_col_int)
               GO TO 145
            end if
1200  FORMAT (A35,5X,I4)
      END IF
100   Continue
900   CONTINUE
      Print*,'Program has finished reading the inputs!!!'


C****************************PART 2************************************
C************************Calculations

C*variables mostly in order of use
      real con3,con4,nps_FG_summary_org
      real mldt19_tot_cbodu, mldt19_tot_org
      real incr_CBODu(1:999), incr_Org_N(1:999), incr_Amm_N(1:999),
     &incr_NItrate(1:999)
      real incr_CBODu_tot, incr_Org_N_tot, incr_Amm_N_tot,incr_NItrate_t
     &ot
      real WSTLD2_BOD_con(1:999),WSTLD2_ORG_con(1:999),WSTLD2_NH3_con
     &(1:999),WSTLD2_NO3_con(1:999)
      real WSTLD2_BOD_cal(1:999),WSTLD2_Org_cal(1:999),WSTLD2_NH3_cal
     &(1:999),WSTLD2_NO3_cal(1:999)
      real WSTLD2_BOD_cal_tot,WSTLD2_Org_cal_tot,WSTLD2_NH3_cal_tot,
     &WSTLD2_NO3_cal_tot
      real ps_WSTLD2_BOD_con(1:999),ps_WSTLD2_ORG_con(1:999),ps_WSTLD2_N
     &H3_con(1:999),ps_WSTLD2_NO3_con(1:999)
      real ps_WSTLD2_BOD_cal(1:999),ps_WSTLD2_Org_cal(1:999),ps_WSTLD2_N
     &H3_cal(1:999),ps_WSTLD2_NO3_cal(1:999)
      real ps_WSTLD2_BOD_cal_tot, ps_WSTLD2_Org_cal_tot, ps_WSTLD2_NH3_c
     &al_tot,ps_WSTLD2_NO3_cal_tot
      real nps_WSTLD2_BOD_con(1:999),nps_WSTLD2_ORG_con(1:999),nps_WSTLD
     &2_NH3_con(1:999),nps_WSTLD2_NO3_con(1:999)
      real nps_WSTLD2_BOD_cal(1:999),nps_WSTLD2_Org_cal(1:999),nps_WSTLD
     &2_NH3_cal(1:999),nps_WSTLD2_NO3_cal(1:999)
      real nps_WSTLD2_BOD_cal_tot,nps_WSTLD2_Org_cal_tot, nps_WSTLD2_NH3
     & cal_tot,nps_WSTLD2_NO3_cal_tot
      real nps_BOD_tot,nps_Org_N_tot,nps_NH3_N_tot,nps_NO3_tot
      real HDWT_BOD_cal(1:999), HDWT_Org_cal(1:999), HDWT_NH3_cal(1:999)
     &, HDWT_NO3_cal(1:999)
      real HDWT_BOD_cal_tot, HDWT_Org_cal_tot, HDWT_NH3_cal_tot,
     &HDWT_NO3_cal_tot
      real elem_benthis(1:1000), elem_sod(1:1000), elem_temp(1:1000),sod
     & temp_cor(1:1000),sod_load(1:1000), benthic(1:1000)
      real nps_sod_load_tot, nps_benthic_tot,fac_mos_FG
      reaL tmdl_cal_flow(1:999)
      real cbodu_tmdl_val(1:999), org_N_tmdl_val(1:999),ammon_tmdl_val(1
```

```
&:100),no3_tmdl_val(1:999)
 real  cbodu_tmdl_cal(1:999),org_N_tmdl_cal(1:999), ammon_tmdl_cal(
&1:100), no3_tmdl_cal(1:999)
 real  cbodu_tmdl_tot,org_N_tmdl_tot,ammon_tmdl_tot,no3_tmdl_tot
 real nps_summary_cbodu,nps_summary_org,nps_summary_ammon
 real oxy_dem_nps_org_N_tot, oxy_dem_nps_nh3_tot
 real nps_mos_sod_load_tot,nps_mos_summary_cbodu,nps_mos_summary_or
&g,nps_mos_summary_ammon,nps_mos_nps_NO3_tot
 real nps_FG_sod_load_tot,nps_FG_summary_cbodu
&,nps_FG_summary_ammon,nps_FG_nps_NO3_tot
 real nps_LA_sod_load_tot,nps_LA_summary_cbodu,nps_LA_summary_org,n
&ps_LA_summary_ammon,nps_LA_nps_NO3_tot
 real ps_summary_cbodu,ps_summary_org,ps_summary_nh3_n
 real mos_ps_summary_cbodu,mos_ps_summary_org,mos_ps_summary_nh3_n
 real FG_ps_summary_cbodu,FG_ps_summary_org,FG_ps_summary_nh3_n
 real wla_ps_cbodu_tmdl_tot,wla_ps_org_N_tmdl_tot, wla_ps_ammon_tmd
&l_tot
 real wla_ps_WSTLD2_BOD_cal(1:999),wla_ps_WSTLD2_ORG_cal(1:999),wla
&_ps_WSTLD2_NH3_cal(1:999)
 real oxy_dem_mldt19_tot_org,nps_inflows_tot_oxy_demand,
&mldt19_tot_oxy_dem,tot_oxy_dem_sod_ben
 real oxy_dem_ps_WSTLD2_Bod_cal(1:999),oxy_dem_ps_WSTLD2_ORG_cal(1:
&100),oxy_dem_ps_WSTLD2_Nh3_cal(1:999),tot_oxy_dem_nps,
&wla_min_ps_summary_tot
 real oxy_dem_ps_WSTLD2_Org_cal_tot,oxy_dem_ps_WSTLD2_NH3_cal_tot
 real nps_mos_tot_oxy_dem,nps_FG_tot_oxy_dem,nps_LA_tot_oxy_dem
 real oxy_dem_org_N_tmdl,oxy_dem_ammon_tmdl,min_ps_summary_tot,
&mod_tot_oxy_dem_ps(1:999),mos_tot_oxy_dem_summary,wla_mod_tot_oxy_
&dem_ps(1:999)
 real nut_tmdl_nps_org_N_tot,nps_tot_nitrogen_load,nps_total_P
 real ps_nut_tmdl_summary_org_N_tot,ps_nut_tmdl_summary_nh3_N_tot,
&ps_nut_tmdl_summary_no3_N_tot,ps_tot_nitrogen_final_load,ps_tot_P_
&final,ps_tot_sum_total_nitrogen_load,ps_tot_sum_total_P
 real mos_ps_nut_tmdl_sum_org_N_tot,
&mos_ps_nut_tmdl_sum_nh3_N_tot,
&mos_ps_nut_tmdl_sum_no3_N_tot,
&mos_ps_tot_nitrogen_final_load,
&mos_ps_tot_P_final
 real FG_ps_nut_tmdl_sum_org_N_tot,
&FG_ps_nut_tmdl_sum_nh3_N_tot,
&FG_ps_nut_tmdl_sum_no3_N_tot,
&FG_ps_tot_nitrogen_final_load,
&FG_ps_tot_P_final
 real wla_min_ps_nut_tmdl_sum_org,
&wla_min_ps_nut_tmdl_sum_nh3,
&wla_min_ps_nut_tmdl_sum_no3,
&wla_min_ps_nitrogen_final_load,
&wla_min_ps_P_final
 real wla_ps_WSTLD2_org_cal_sum(1:999),wla_ps_WSTLD2_NH3_cal_sum(1:
&100),wla_ps_WSTLD2_NO3_cal_sum(1:999)
 real wla_ps_total_nitrogen_load(1:999), wla_ps_total_P(1:999)
 real nps_mos_nut_tmdl_nps_Org_N_tot,nps_mos_nps_nh3_n_tot,
&nps_mos_tot_nitrogen_load,nps_mos_total_p
 real nps_FG_nut_tmdl_nps_Org_N_tot,nps_FG_nps_nh3_n_tot,
&nps_FG_tot_nitrogen_load,nps_FG_total_p
 real nps_la_nut_tmdl_nps_Org_N_tot,nps_la_nps_nh3_n_tot,
&nps_la_tot_nitrogen_load,nps_la_total_p
 real min_ps_total_nitrogen_load,min_ps_total_P
 real ps_total_nitrogen_load(1:999),ps_total_P(1:999)

 if (usernum.NE.num) then
   print*,'Usernum does not equal num, there has been a read failur
&e!',num,usernum
   Write(11,*)'This output is NOT correct!'
   end if

 mldt19_tot_cbodu=0
 mldt19_tot_org=0

 incr_CBODu_tot=0
 incr_Org_N_tot=0
 incr_Amm_N_tot=0
 incr_Nitrate_tot=0
```

```
      ps_WSTLD2_BOD_cal_tot=0
      ps_WSTLD2_Org_cal_tot=0
      ps_WSTLD2_NH3_cal_tot=0

      nps_WSTLD2_BOD_cal_tot=0
      nps_WSTLD2_Org_cal_tot=0
      nps_WSTLD2_NH3_cal_tot=0

      WSTLD2_BOD_cal_tot=0
      WSTLD2_Org_cal_tot=0
      WSTLD2_NH3_cal_tot=0

      HDWT_BOD_cal_tot=0
      HDWT_Org_cal_tot=0
      HDWT_NH3_cal_tot=0
      HDWT_NO3_cal_tot=0

      nps_sod_load_tot=0
      nps_benthic_tot=0

      cbodu_tmdl_tot=0
      org_N_tmdl_tot=0
      ammon_tmdl_tot=0
      no3_tmdl_tot=0

      fac_mos_FG=1/(1-(ps_mos+ps_FG))
      con3 = 1.00/1000000.00*1000.00*86400.00
      con4 = 3.7850000000 ! MGD * mg/L * con4,
c     con4 = 3.785 L/gal * 1.0E6 gal/MG * 1.0E-6 kg/mg

      do 180 I=1,num
      mldt19_tot_cbodu=mldt19_tot_cbodu+NP_bod(I)
      mldt19_tot_org= mldt19_tot_org+NP_org(I)
180   continue

C* Here I will arrange the elemntal surface areas into the numerical order to match the order the SOD
C* and NH3 data are in.
c          elem_col(1) = elem_col_int(1)
c          S_Area(1) = S_Area_int(1)
c      DO 185 I=2,total_elem   !need to start at 2 for comaprisons
c          elem_col(I)=I
c          if (elem_col_int(I).EQ.I) then
c             S_Area(I) = S_Area_int(I)
c          else
c
c             DO 184 R=1,total_elem  !go through the list until we get a match
c             if (Elem_col_int(R).EQ.Elem_col(I)) then
c                S_Area(I) = S_Area_int(I)
c             end if
c184          continue
c          end if

c185   continue

      cir=num_incr
      DO 190 cirr=1,cir

      incr_CBODu(cirr)=incr_flow(cirr)*incr2_CBODu_con(cirr)*con3
      incr_Org_N(cirr)=incr_flow(cirr)*incr2_Org_N_con(cirr)*con3
      incr_Amm_N(cirr)=incr_flow(cirr)*incr2_Amm_N_con(cirr)*con3
      incr_NItrate(cirr)=incr_flow(cirr)*incr2_Nitrate_con(cirr)*con3

      incr_CBODu_tot=incr_CBODu_tot+incr_CBODu(cirr)
      incr_Org_N_tot=incr_Org_N_tot+incr_Org_N(cirr)
      incr_Amm_N_tot=incr_Amm_N_tot+incr_Amm_N(cirr)
      incr_Nitrate_tot=incr_Nitrate_tot+incr_Nitrate(cirr)
190   continue

C*********** calcualtions for point soucers EXPLICITLY modeled
      cir=ps_num_wstld
      DO 194 cirr=1,cir
      ps_WSTLD2_BOD_con(cirr)=ps_wstld2_bod(cirr)
```

```
      ps_WSTLD2_ORG_con(cirr)=ps_wstld2_org(cirr)
      ps_WSTLD2_NH3_con(cirr)=ps_wstld2_nh3(cirr)
      ps_WSTLD2_NO3_con(cirr)=ps_wstld2_no3(cirr)

      ps_WSTLD2_BOD_cal(cirr)=ps_WSTLD_Flow(cirr)*ps_WSTLD2_BOD_con(cirr
     &)*con3
      ps_WSTLD2_Org_cal(cirr)=ps_WSTLD_FLow(cirr)*ps_WSTLD2_Org_con(cirr
     &)*con3
      ps_WSTLD2_NH3_cal(cirr)=ps_WSTLD_FLow(cirr)*ps_WSTLD2_NH3_con(cirr
     &)*con3
      ps_WSTLD2_NO3_cal(cirr)=ps_WSTLD_Flow(cirr)*ps_WSTLD2_NO3_con(cirr
     &)*con3

      wla_ps_WSTLD2_org_cal_sum(cirr)=ps_WSTLD2_org_cal(cirr)*(1-ps_mos-
     &ps_FG)
      wla_ps_WSTLD2_NH3_cal_sum(cirr)=ps_WSTLD2_NH3_cal(cirr)*(1-ps_mos-
     &ps_FG)
      wla_ps_WSTLD2_NO3_cal_sum(cirr)=ps_WSTLD2_NO3_cal(cirr)*(1-ps_mos-
     &ps_FG)

      ps_WSTLD2_BOD_cal_tot=ps_WSTLD2_BOD_cal_tot+ps_WSTLD2_BOD_cal(cirr
     &)
      ps_WSTLD2_Org_cal_tot=ps_WSTLD2_Org_cal_tot+ps_WSTLD2_Org_cal(cirr
     &)
      ps_WSTLD2_NH3_cal_tot=ps_WSTLD2_NH3_cal_tot+ps_WSTLD2_NH3_cal(cirr
     &)
      ps_WSTLD2_NO3_cal_tot=ps_WSTLD2_NO3_cal_tot+ps_WSTLD2_NO3_cal(cirr
     &)

       oxy_dem_ps_wstld2_bod_cal(cirr)=1*ps_WSTLD2_BOD_cal(cirr
     &)
       oxy_dem_ps_wstld2_org_cal(cirr)=ammoxy_rat*ps_wstld2_org_cal(cirr
     &)
       oxy_dem_ps_wstld2_nh3_cal(cirr)=ammoxy_rat*ps_wstld2_nh3_cal(cirr
     &)
       mod tot oxy dem ps(cirr)=oxy dem ps wstld2 bod cal(cirr)+oxy_dem_
     &ps_wstld2_org_cal(cirr)+ oxy_dem_ps_wstld2_nh3_cal(cirr)

       wla_ps_wstld2_bod_cal(cirr)=ps_wstld2_bod_cal(cirr)*(1-ps_mos-ps_
     &FG)
       wla_ps_WSTLD2_ORG_cal(cirr)=oxy_dem_ps_WSTLD2_Org_cal(cirr)*(1-ps
     &_mos-ps_FG)
       wla_ps_wstld2_nh3_cal(cirr)=oxy_dem_ps_WSTLD2_NH3_cal(cirr)*(1-ps
     &_mos-ps_FG)
       wla mod_tot_oxy_dem_ps(cirr)=mod_tot_oxy_dem_ps(cirr)*(1-ps_mos-p
     &s_FG)

C     rounding functions (uisng the anint function)

       wla_ps_wstld2_bod_cal(cirr)=wla_ps_wstld2_bod_cal(cirr)*100
       wla_ps_wstld2_bod_cal(cirr)=anint(wla_ps_wstld2_bod_cal(cirr))
       wla_ps_wstld2_bod_cal(cirr)=wla_ps_wstld2_bod_cal(cirr)/100

       wla ps wstld2 org cal(cirr)=wla ps wstld2 org cal(cirr)*100
       wla ps wstld2 org cal(cirr)=anint(wla ps wstld2 org cal(cirr))
       wla_ps_wstld2_org_cal(cirr)=wla_ps_wstld2_org_cal(cirr)/100

       wla_ps_wstld2_nh3_cal(cirr)=wla_ps_wstld2_nh3_cal(cirr)*100
       wla_ps_wstld2_nh3_cal(cirr)=anint(wla_ps_wstld2_nh3_cal(cirr))
       wla_ps_wstld2_nh3_cal(cirr)=wla_ps_wstld2_nh3_cal(cirr)/100

       wla mod tot oxy dem ps(cirr)=wla mod tot oxy dem ps(cirr)*100
       wla mod tot oxy dem ps(cirr)=anint(wla mod tot oxy dem ps(cirr))
       wla_mod_tot_oxy_dem_ps(cirr)=wla_mod_tot_oxy_dem_ps(cirr)/100

C**************** nps wasteload calculations
194   continue
      do 196 cirr=1,nps_num_wstld
      nps_WSTLD2_BOD_con(cirr)=nps_wstld2_bod(cirr)
      nps WSTLD2 ORG con(cirr)=nps wstld2 org(cirr)
      nps WSTLD2 NH3 con(cirr)=nps wstld2 nh3(cirr)
      nps_WSTLD2_NO3_con(cirr)=nps_wstld2_no3(cirr)
```

```
      nps_WSTLD2_BOD_cal(cirr)=nps_WSTLD_Flow(cirr)*nps_WSTLD2_BOD_con(c
     &irr)*con3
      nps_WSTLD2_Org_cal(cirr)=nps_WSTLD_FLow(cirr)*nps_WSTLD2_Org_con(c
     &irr)*con3
      nps_WSTLD2_NH3_cal(cirr)=nps_WSTLD_FLow(cirr)*nps_WSTLD2_NH3_con(c
     &irr)*con3
      nps_WSTLD2_NO3_cal(cirr)=nps_WSTLD_Flow(cirr)*nps_WSTLD2_NO3_con(c
     &irr)*con3

      nps_WSTLD2_BOD_cal_tot=nps_WSTLD2_BOD_cal_tot+nps_WSTLD2_BOD_cal(c
     &irr)
      nps_WSTLD2_Org_cal_tot=nps_WSTLD2_Org_cal_tot+nps_WSTLD2_Org_cal(c
     &irr)
      nps_WSTLD2_NH3_cal_tot=nps_WSTLD2_NH3_cal_tot+nps_WSTLD2_NH3_cal(c
     &irr)
      nps_WSTLD2_NO3_cal_tot=nps_WSTLD2_NO3_cal_tot+nps_WSTLD2_NO3_cal(c
     &irr)

      nps_WSTLD2_BOD_cal_tot=nps_WSTLD2_BOD_cal_tot*100
      nps_WSTLD2_BOD_cal_tot=anint(nps_WSTLD2_BOD_cal_tot)
      nps_WSTLD2_BOD_cal_tot=nps_WSTLD2_BOD_cal_tot/100

      nps_WSTLD2_Org_cal_tot=nps_WSTLD2_Org_cal_tot*100
      nps_WSTLD2_Org_cal_tot=anint(nps_WSTLD2_Org_cal_tot)
      nps_WSTLD2_Org_cal_tot=nps_WSTLD2_Org_cal_tot/100

      nps_WSTLD2_NH3_cal_tot=nps_WSTLD2_NH3_cal_tot*100
      nps_WSTLD2_NH3_cal_tot=anint(nps_WSTLD2_NH3_cal_tot)
      nps_WSTLD2_NH3_cal_tot=nps_WSTLD2_NH3_cal_tot/100

      nps_WSTLD2_NO3_cal_tot=nps_WSTLD2_NO3_cal_tot*100
      nps_WSTLD2_NO3_cal_tot=anint(nps_WSTLD2_NO3_cal_tot)
      nps_WSTLD2_NO3_cal_tot=nps_WSTLD2_NO3_cal_tot/100


c**********only wasteloads can be divided into point source and non point sources
196   continue

      do 198 cirr= 1, num_wstld
      WSTLD2_BOD_con(cirr)=WSTLD2_BOD(cirr)
      WSTLD2_ORG_con(cirr)=WSTLD2_Org(cirr)
      WSTLD2_NH3_con(cirr)=WSTLD2_NH3(cirr)
      WSTLD2_NO3_con(cirr)=WSTLD2_NO3(cirr)

      WSTLD2_BOD_cal(cirr)=WSTLD_Flow(cirr)*WSTLD2_BOD_con(cirr)*con3
      WSTLD2_Org_cal(cirr)=WSTLD_FLow(cirr)*WSTLD2_Org_con(cirr)*con3
      WSTLD2_NH3_cal(cirr)=WSTLD_FLow(cirr)*WSTLD2_NH3_con(cirr)*con3
      WSTLD2_NO3_cal(cirr)=WSTLD_Flow(cirr)*WSTLD2_NO3_con(cirr)*con3

      WSTLD2_BOD_cal_tot=WSTLD2_BOD_cal_tot+WSTLD2_BOD_cal(cirr)
      WSTLD2_Org_cal_tot=WSTLD2_Org_cal_tot+WSTLD2_Org_cal(cirr)
      WSTLD2_NH3_cal_tot=WSTLD2_NH3_cal_tot+WSTLD2_NH3_cal(cirr)
      WSTLD2_NO3_cal_tot=WSTLD2_NO3_cal_tot+WSTLD2_NO3_cal(cirr)

      wstld2_bod_cal_tot=wstld2_bod_cal_tot*100
      wstld2_bod_cal_tot=anint(wstld2_bod_cal_tot)
      wstld2_bod_cal_tot=wstld2_bod_cal_tot/100

      wstld2_org_cal_tot=wstld2_org_cal_tot*100
      wstld2_org_cal_tot=anint(wstld2_org_cal_tot)
      wstld2_org_cal_tot=wstld2_org_cal_tot/100

      wstld2_NH3_cal_tot=wstld2_NH3_cal_tot*100
      wstld2_NH3_cal_tot=anint(wstld2_NH3_cal_tot)
      wstld2_NH3_cal_tot=wstld2_NH3_cal_tot/100

      wstld2_NO3_cal_tot=wstld2_NO3_cal_tot*100
      wstld2_NO3_cal_tot=anint(wstld2_NO3_cal_tot)
      wstld2_NO3_cal_tot=wstld2_NO3_cal_tot/100
198   continue

      cir=num_hdwt
```

```
      DO 199 cirr=1,cir

      HDWT_BOD_cal(cirr)=HDWT1_Flow(cirr)*HDWT2_BOD_con(cirr)*con3
      HDWT_Org_cal(cirr)=HDWT1_FLow(cirr)*HDWT2_Org_con(cirr)*con3
      HDWT_NH3_cal(cirr)=HDWT1_FLow(cirr)*HDWT2_NH3_con(cirr)*con3
      HDWT_NO3_cal(cirr)=HDWT1_Flow(cirr)*HDWT2_NO3_con(cirr)*con3

      HDWT_BOD_cal_tot=HDWT_BOD_cal_tot+HDWT_BOD_cal(cirr)
      HDWT_Org_cal_tot=HDWT_Org_cal_tot+HDWT_Org_cal(cirr)
      HDWT_NH3_cal_tot=HDWT_NH3_cal_tot+HDWT_NH3_cal(cirr)
      HDWT_NO3_cal_tot=HDWT_NO3_cal_tot+HDWT_NO3_cal(cirr)

      HDWT_bod_cal_tot=HDWT_bod_cal_tot*100
      HDWT_bod_cal_tot=anint(HDWT_bod_cal_tot)
      HDWT_bod_cal_tot=wstld2_bod_cal_tot/100

      HDWT_org_cal_tot=HDWT_org_cal_tot*100
      HDWT_org_cal_tot=anint(HDWT_org_cal_tot)
      HDWT_org_cal_tot=HDWT_org_cal_tot/100

      HDWT_NH3_cal_tot=HDWT_NH3_cal_tot*100
      HDWT_NH3_cal_tot=anint(HDWT_NH3_cal_tot)
      HDWT_NH3_cal_tot=HDWT_NH3_cal_tot/100

      HDWT_NO3_cal_tot=HDWT_NO3_cal_tot*100
      HDWT_NO3_cal_tot=anint(HDWT_NO3_cal_tot)
      HDWT_NO3_cal_tot=HDWT_NO3_cal_tot/100



199   Continue


C*************** total up NPS values from incremetnal flow, tribs and headwaters
      nps_BOD_tot=incr_CBODu_tot+nps_WSTLD2_BOD_cal_tot+
     &HDWT_BOD_cal_tot
      nps_Org_N_tot=incr_Org_N_tot+nps_WSTLD2_Org_cal_tot+
     &HDWT_Org_cal_tot
      nps_NH3_N_tot=incr_Amm_N_tot+nps_WSTLD2_NH3_cal_tot+HDWT_NH3
     &_cal_tot
      nps_NO3_tot=incr_Nitrate_tot+nps_WSTLD2_NO3_cal_tot+HDWT_NO3_cal_t
     &ot

C************* total up oxygen demand for NPS
      oxy_dem_nps_org_N_tot=ammoxy_rat*nps_org_N_tot
      oxy_dem_nps_nh3_tot=ammoxy_rat*nps_nh3_N_tot
      oxy_dem_mldt19_tot_org=ammoxy_rat*mldt19_tot_org


C************* create the element and reach column, as well as other columns for
C************* for SOD and benthic ammonia
      DO 201 I=1,num
          DO 200 J=elem_begin(I), elem_end(I)
               elem_benthis(J)= C2_NH3SR (I)
               elem_sod(J)=C1B_SOD(I)
               elem_temp(J)=temp(I)
C               write(13,*)I,j,elem_sod(j)
200            continue
201   continue



      do 202 I=1,total_elem
               sod_temp_cor(I)=elem_sod(I)*1.065**(elem_temp(I)-20)
               sod_load(I)=sod_temp_cor(I)*s_area_int(I)*1.00/1000.00
               benthic(I)=elem_benthis(I)*s_area_int(I)*1.00/1000.00
               nps_sod_load_tot=nps_sod_load_tot+sod_load(I)
               nps_benthic_tot=nps_benthic_tot+benthic(I)
202   continue


C*****************calculate values for PS and NPS summary sections
```

```
 oxy_dem_nps_benthic_tot=ammoxy_rat*nps_benthic_tot

 nps inflows tot_oxy_demand=nps_BOD_tot+oxy_dem_nps_org_N_tot+oxy_d
&em nps nh3 tot
 mldt19 tot oxy dem=mldt19 tot cbodu+oxy dem mldt19 tot org
 tot_oxy_dem_sod_ben=nps_sod_load_tot+oxy_dem_nps_benthic_tot

 tot_oxy_dem_nps=nps_inflows_tot_oxy_demand+mldt19_tot_oxy_dem+tot_
&oxy_dem_sod_ben

 oxy_dem_ps_WSTLD2_Org_cal_tot=ps_WSTLD2_Org_cal_tot*ammoxy_rat
 oxy_dem_ps_WSTLD2_NH3_cal_tot=ps_WSTLD2_NH3_cal_tot*ammoxy_rat

 nps_summary_cbodu=nps_bod_tot+mldt19_tot_cbodu
 nps_summary_org=oxy_dem_nps_org_N_tot+oxy_dem_mldt19_tot_org
 nps_summary_ammon=oxy_dem_nps_nh3_tot+oxy_dem_nps_benthic_tot

 nps_mos_sod_load_tot=nps_sod_load_tot*nps_mos
 nps_mos_sod_load_tot=nps_mos_sod_load_tot*100
 nps_mos_sod_load_tot=anint(nps_mos_sod_load_tot)/100

 nps_mos_summary_cbodu=nps_summary_cbodu*nps_mos
 nps_mos_summary_cbodu=nps_mos_summary_cbodu*100
 nps_mos_summary_cbodu=anint(nps_mos_summary_cbodu)/100

 nps_mos_summary_org=nps_summary_org*nps_mos
 nps_mos_summary_org=nps_mos_summary_org*100
 nps_mos_summary_org=anint(nps_mos_summary_org)/100

 nps mos summary ammon=nps summary ammon*nps mos
 nps_mos_summary_ammon=nps_mos_summary_ammon*100
 nps_mos_summary_ammon=anint(nps_mos_summary_ammon)/100

 nps_FG_sod_load_tot=nps_sod_load_tot*nps_FG
 nps_FG_sod_load_tot=nps_FG_sod_load_tot*100
 nps_FG_sod_load_tot=anint(nps_FG_sod_load_tot)/100


 nps_FG_summary_cbodu=nps_summary_cbodu*nps_FG
 nps_FG_summary_cbodu=nps_FG_summary_cbodu*100
 nps_FG_summary_cbodu=anint(nps_FG_summary_cbodu)/100

 nps_FG_summary_org=nps_summary_org*nps_FG
 nps_FG_summary_org=nps_FG_summary_org*100
 nps_FG_summary_org=anint(nps_FG_summary_org)/100

 nps_FG_summary_ammon=nps_summary_ammon*nps_FG
 nps_FG_summary_ammon=nps_FG_summary_ammon*100
 nps_FG_summary_ammon=anint(nps_FG_summary_ammon)/100


 nps_mos_tot_oxy_dem=tot_oxy_dem_nps*nps_mos
 nps mos tot oxy dem=nps mos tot oxy dem*100
 nps_mos_tot_oxy_dem=anint(nps_mos_tot_oxy_dem)/100


 nps_FG_tot_oxy_dem=tot_oxy_dem_nps*nps_FG
 nps_FG_tot_oxy_dem=nps_FG_tot_oxy_dem*100
 nps_FG_tot_oxy_dem=anint(nps_FG_tot_oxy_dem)/100


 nps mos nps NO3 tot=nps NO3 tot*nps mos
 nps mos nps NO3 tot=nps mos nps NO3 tot*100
 nps_mos_nps_NO3_tot=anint(nps_mos_nps_NO3_tot)/100


 nps_FG_nps_NO3_tot=nps_NO3_tot*nps_FG
 nps_FG_nps_NO3_tot=nps_FG_nps_NO3_tot*100
 nps_FG_nps_NO3_tot=anint(nps_FG_nps_NO3_tot)/100


 nps_LA_sod_load_tot=nps_sod_load_tot-nps_MOS_sod_load_tot-nps_FG_s
&od_load_tot
```

```
      nps_LA_summary_cbodu=nps_summary_cbodu-nps_MOS_summary_cbodu-nps_F
     &G_summary_cbodu
      nps_LA_summary_org=nps_summary_org-nps_MOS_summary_org-nps_FG_summ
     &ary_org
      nps_LA_summary_ammon=nps_summary_ammon-nps_MOS_summary_ammon-nps_F
     &G_summary_ammon
      nps_LA_nps_NO3_tot=nps_NO3_tot-nps_MOS_nps_NO3_tot-nps_FG_nps_NO3_
     &tot

      nps_LA_tot_oxy_dem=tot_oxy_dem_nps-nps_mos_tot_oxy_dem-nps_fg_tot_
     &oxy_dem

c these values are from reading data from La_qual output (and thus ARE NOT minor point sources)
      ps_BOD_tot=ps_WSTLD2_BOD_cal_tot
      ps_Org_N_tot=ps_WSTLD2_Org_cal_tot
      ps_NH3_N_tot=ps_WSTLD2_NH3_cal_tot
      ps_NO3_tot=ps_WSTLD2_NO3_cal_tot

c this produces the "values for tmdl calculations table"
      do 204 I =1, num_pt_sour
               cbodu_tmdl_val(I)=2.30*cbod5_perm(I)
               if (CBOD5_perm(I).EQ.0.OR.CBOD5_perm(I).EQ.-999)then
                  cbodu_tmdl_val(I)=1.00*cod_perm(I)
                  if (cod_perm(I).EQ.0.OR.Cod_perm(I).EQ.-999)then
                  cbodu_tmdl_val(I)=0
               end if
               end if

               ammon_tmdl_val(I)=ammon_perm(I)
               if (ammon_perm(I) .EQ.-999) then
                  ammon_tmdl_val(I)=2*cbod5_perm(I)
                  if (cbod5_perm(I).EQ.-999) then
                     ammon_tmdl_val(I)=0
               end if
               end if

               no3_tmdl_val(I) = 10

               org_N_tmdl_val(I)=ammon_tmdl_val(I)*2.00

               if (cbod5_perm(I).EQ.0.AND.ammon_perm(I).EQ.0) then
               org_N_tmdl_val(I)=0
               ammon_tmdl_val(I)=0
               no3_tmdl_val(I) = 0
               end if

204   continue

C *** caluculate tmdl vlues for tmdl load chart
      do 206 I=1,num_pt_sour
         tmdl_cal_flow(I)=perm_flow(I)*fac_mos_FG
         cbodu_tmdl_cal(I) = tmdl_cal_flow(I)*cbodu_tmdl_val(I)*con4
         org_N_tmdl_cal(I) = tmdl_cal_flow(I)*org_N_tmdl_val(I)*con4
         ammon_tmdl_cal(I) = tmdl_cal_flow(I)*ammon_tmdl_val(I)*con4
         no3_tmdl_cal(I) = tmdl_cal_flow(I)*no3_tmdl_val(I) *con4

         cbodu_tmdl_tot=cbodu_tmdl_tot+cbodu_tmdl_cal(I)
         org_N_tmdl_tot=org_N_tmdl_tot+org_N_tmdl_cal(I)
         ammon_tmdl_tot=ammon_tmdl_tot+ammon_tmdl_cal(I)
         no3_tmdl_tot=no3_tmdl_tot+no3_tmdl_cal(I)

         oxy_dem_org_N_tmdl= org_N_tmdl_tot*ammoxy_rat
         oxy_dem_ammon_tmdl= ammon_tmdl_tot*ammoxy_rat


206   continue
c*********calculate tmdl values for summary chart (using ammox multiplier



c first term is read in from La-qual second is from User supplied data
c more summary calculations
      ps_summary_cbodu=ps_bod_tot+cbodu_tmdl_tot
```

```
      ps_summary_org= oxy_dem_ps_wstld2_org_cal_tot+ oxy_dem_org_N_tmdl

      ps_summary_nh3_n=oxy_dem_ps_WSTLD2_NH3_cal_tot+oxy_dem_ammon_tmdl

      tot_oxy_dem_summary=ps_summary_cbodu+ps_summary_org+ps_summary_nh3
     &_n

      mos_ps_summary_cbodu=ps_summary_cbodu*ps_mos
      mos_ps_summary_org=ps_summary_org*ps_mos
      mos_ps_summary_nh3_n= ps_summary_nh3_n*ps_mos

      FG_ps_summary_cbodu=ps_summary_cbodu*ps_FG
      FG_ps_summary_org=ps_summary_org*ps_FG
      FG_ps_summary_nh3_n= ps_summary_nh3_n*ps_FG


      min_ps_summary_tot=cbodu_tmdl_tot+oxy_dem_org_N_tmdl+oxy_dem_ammon
     &_tmdl

      mos_tot_oxy_dem_summary=tot_oxy_dem_summary*ps_mos
      FG_tot_oxy_dem_summary=tot_oxy_dem_summary*ps_FG

c WLA for minor point sources
      wla_ps_cbodu_tmdl_tot=cbodu_tmdl_tot*(1-ps_mos-ps_FG)
      wla_ps_org_N_tmdl_tot=oxy_dem_org_N_tmdl*(1-ps_mos-ps_FG)
      wla_ps_ammon_tmdl_tot=oxy_dem_ammon_tmdl*(1-ps_mos-ps_FG)
      wla_min_ps_summary_tot=min_ps_summary_tot*(1-ps_mos-ps_FG)


C*********** Nutrient TMDL calucaltions (a lot of the NPS calcualatiosn are done above
C********* in lines 677-684
C just need to take nps_org_N_tot from
C the first equtaion (which has org_N from heads, tribs and increments)
C and add mass loads data type 19
C (seen in last term),


C******** the loop below should be with the section "calcualtions for point sources explicitly modeled
C*since the loop below is all PS stuff but oh well I do not want to risk moving it

      if (ps_num_wstld .EQ.0) then
      go to 207
      end if



      do 208 cir=1,ps_num_wstld
             ps_total_nitrogen_load(cir)=ps_WSTLD2_ORG_cal(cir)+ps_WSTLD
     &2_Nh3_cal(cir)+ps_WSTLd2_NO3_cal(cir)
             ps_total_P(cir)=ps_total_nitrogen_load(cir)/nat_rat

             ps_tot_sum_total_nitrogen_load=ps_tot_sum_total_nitrogen_lo
     &ad+ps_total_nitrogen_load(cir)
             ps_tot_sum_total_P=ps_tot_sum_total_P+ps_total_P(cir)

             wla_ps_total_nitrogen_load(cir)=ps_total_nitrogen_load(cir)
     &*(1-ps_mos-ps_FG)
             wla_ps_total_P(cir)=ps_total_P(cir)*(1-ps_mos-ps_FG)

208   continue




207   nut_tmdl_nps_Org_N_tot=nps_org_N_tot+mldt19_tot_org
      nps_tot_nitrogen_load= nut_tmdl_nps_org_N_tot+nps_nh3_n_tot+
     &nps_NO3_tot

      nps_total_P=nps_tot_nitrogen_load/nat_rat

      nps_mos_nut_tmdl_nps_Org_N_tot=nut_tmdl_nps_Org_N_tot*nps_mos
      nps_mos_nps_nh3_n_tot=nps_nh3_n_tot*nps_mos
      nps_mos_nps_NO3_tot=nps_NO3_tot*nps_mos
```

```
      nps_mos_tot_nitrogen_load=nps_tot_nitrogen_load*nps_mos
      nps_mos_total_p=NPS_total_p*nps_mos

      nps FG nut tmdl nps Org N tot=nut tmdl nps_Org_N_tot*nps_FG
      nps FG nps nh3 n tot=nps nh3 n tot*nps_FG
      nps_FG_nps_NO3_tot=nps_NO3_tot*nps_FG
      nps_FG_tot_nitrogen_load=nps_tot_nitrogen_load*nps_FG
      nps_FG_total_p=NPS_total_p*nps_FG

      nps_la_nut_tmdl_nps_Org_N_tot=nut_tmdl_nps_Org_N_tot*(1-nps_mos-np
     &s_FG)
      nps la nps nh3 n tot=nps nh3 n tot*(1-nps mos)
      nps la nps NO3 tot=nps NO3 tot*(1-nps mos)
      nps_la_tot_nitrogen_load=nps_tot_nitrogen_load*(1-nps_mos)
      nps_la_total_p=npS_total_p*(1-nps_mos)

      min_ps_total_nitrogen_load=org_N_tmdl_tot+ammon_tmdl_tot+no3_tmdl_
     &tot
      min_ps_total_P=min_ps_total_nitrogen_load/nat_rat

      ps nut tmdl summary org N tot=ps WSTLD2 Org cal tot+org N tmdl tot
      ps_nut_tmdl_summary_nh3_N_tot=ps_WSTLD2_NH3_cal_tot+ammon_tmdl_tot
      ps_nut_tmdl_summary_no3_N_tot=ps_WSTLD2_NO3_cal_tot+no3_tmdl_tot

      ps_tot_nitrogen_final_load=min_ps_total_nitrogen_load+ps_tot_sum_t
     &otal_nitrogen_load
      ps_tot_P_final=min_ps_total_P+ps_tot_sum_total_P

      mos ps nut tmdl sum org N tot=ps nut tmdl summary org N tot*ps mos
      mos ps nut tmdl sum nh3 N tot=ps nut tmdl summary nh3 N tot*ps mos
      mos_ps_nut_tmdl_sum_no3_N_tot=ps_nut_tmdl_summary_no3_N_tot*ps_mos

      FG_ps_nut_tmdl_sum_org_N_tot=ps_nut_tmdl_summary_org_N_tot*ps_FG
      FG_ps_nut_tmdl_sum_nh3_N_tot=ps_nut_tmdl_summary_nh3_N_tot*ps_FG
      FG_ps_nut_tmdl_sum_no3_N_tot=ps_nut_tmdl_summary_no3_N_tot*ps_FG

      mos ps tot nitrogen final load=ps tot nitrogen_final_load*ps_mos
      mos_ps_tot_P_final=ps_tot_P_final*ps_mos

      FG_ps_tot_nitrogen_final_load=ps_tot_nitrogen_final_load*ps_FG
      FG_ps_tot_P_final=ps_tot_P_final*ps_FG

      wla_min_ps_nut_tmdl_sum_org=org_N_tmdl_tot*(1-ps_mos-ps_FG)
      wla_min_ps_nut_tmdl_sum_nh3=ammon_tmdl_tot*(1-ps_mos-ps_FG)
      wla_min_ps_nut_tmdl_sum_no3=no3_tmdl_tot*(1-ps_mos-ps_FG)

      wla_min_ps_nitrogen_final_load=min_ps_total_nitrogen_load*(1-p
     &s_mos-ps_FG)
      wla_min_ps_P_final=min_ps_total_P*(1-ps_mos-ps_FG)

c590   write(11,6090)'Calculated load for minor point sources   ',org_N_t
c     &mdl_tot,ammon_tmdl_tot,no3_tmdl_tot,min_ps_total_nitrogen_load,min
c     &_ps_total_P



c      write(11,6090)'Total for all point source loads             ',ps_n
c     &ut_tmdl_summary_org_N_tot,ps_nut_tmdl_summary_nh3_N_tot,ps_nut_tmd
c     &l_summary_no3_N_tot,ps_tot_nitrogen_final_load,ps_tot_P_final




C***********Output File Write Statements

C*****SECTION: "TMDL CALCULATIONS FOR SUBSEGMENT:"

990   format(A33,2x,A10,2x,A20)
      Write (11,990)'TMDL CALCULATIONS FOR SUBSEGMENT:',subsegnumber,sub
     &segname
      Write(11,*)'FTN ASSOCIATES, LTD.'
```

```
      Write(11,*)'Program:Pr20m6d'
      Write(11,*)' '
      Write(11,*)'INFO FOR INPUT FILE WITH USER SPECIFIED DATA AND OPTIO
     &NS:'
      Write(11,*)'File name:',userfilename
      write(11,*)' '
      write(11,*)'INFO FOR LA-QUAL OUTPUT FILE:'
      Write(11,*)'File name:',laqualfilename
      Write(11,*)'Date/Time:',pertime
      write(11,*)LAQUAL_version
      write(11,*)'  '
      Write(11,*)'LIST OF ALL REACHES IN LA-QUAL OUTPUT FILE:'
      DO 209 numm=1, num
1000      Format(A7,1x,I3,1x,A10,1x,I3,1x,A1,1x,I3,A18,2x,A6,1x,A15)
209       WRITE(11,1000)'Reach',np_Reach(numm),'(Elements',Elem_begin(nu
     &mm),'-',elem_end(numm),') is in subsegment',reach_subseg_num(numm)
     &,reach_name(numm)
      write(11,*)' '


C***** SECTION:"CALCULATIONS FOR LOADS FROM NPS INFLOWS (HEADWATERS, TRIBUTARIES, AND INCREMENTAL INFLOW):"

      Write(11,3030)
      write(11,*)' '
3030  FORmat(102('='))
      Write(11,*)'CALCULATIONS FOR LOADS FROM NPS INFLOWS (HEADWATERS, T
     &RIBUTARIES, AND INCREMENTAL INFLOW):'
      Write(11,*)' '
      write(11,*)'Equation used: (Load, kg/day) = (Inflow rate, m3/sec)
     &* (Conc., mg/L) * 1.0E-6 kg/mg * 1.0E3 L/m3 *'
      write(11,*)'
     &                              86400 sec/day'
      write(11,*)' '
      Write(11,*)'Values from LA-QUAL output:'
      write(11,*)' '
      Write(11,*)'Reach or   Inflow      CBODu     Organic N   Ammonia N
     &        NO2+NO3 N'
      write(11,*)'Element     rate        conc.       conc.       conc.
     &          conc.'
      write(11,*)'number    (m3/sec)     (mg/L)      (mg/L)      (mg/L)
     &          (mg/L)     Name of inflow'
      write(11,*)'------    --------    --------    --------    --------
     &        --------     --------------------'
3050  Format(I3,5x,f10.5,4x,f8.2,4x,f8.2,4x,f8.2,8x,f8.2,5x,A25)
      do 210 cir=1,num hdwt
210      write(11,3050) HDWT1 elem(cir), HDWT1 Flow(cir), HDWT2 BOD con(
     &cir),HDWT2_ORG_con(cir),HDWT2_NH3_con(cir), HDWT2_NO3_con(cir),
     &hdwt1_name(cir)
      do 220 cir=1,nps_num_wstld
220   write(11,3050)nps_elem_wstld(cir),nps_WSTLD_Flow(cir), nps_WSTL
     &D2_BOD_con(cir),nps_WSTLD2_ORG_con(cir), nps_WSTLD2_NH3_con(cir),
     &nps_WSTLD2_NO3_con(cir),NPS_wstld_name(cir)
      do 222 cir=1,num incr
222   write(11,3050)incr reach(cir),incr inFlow(cir), incr2 CBODu con(ci
     &r),incr2 ORG N con(cir),incr2 Amm N_con(cir),incr2_Nitrate_con(cir
     &),'Incremental Reach flow   '
      write(11,*)'  '
c      write(11,*)'------    --------    --------    --------    --------
c     &        --------     --------------------'
      write(11,*)'  '
      write(11,*)'Calculated values:'
      write(11,*)' '
      write(11,*)'                        CBODu     Organic N   Ammonia
     &N   NO2+NO3 N'
      write(11,*)'             Element     load        load        load
     &     load'
      write(11,*)'             number    (kg/day)    (kg/day)    (kg/day
     &)    (kg/day)'
      write(11,*)'             ------    --------    --------    --------
     &    --------'
3060  Format(13x,I3,5x,f10.2,2x,f10.2,1x,f10.2,2x,f10.2)
      cir=num_hdwt
      do 224 cirr=1,cir
```

```
224      write(11,3060) HDWT1_elem(cirr), HDWT_BOD_cal(cirr),
     &HDWT_ORG_cal(cirr),HDWT_NH3_cal(cirr), HDWT_NO3_
     &cal(cirr)
      cir=nps num wstld
      do 226 cirr=1,cir
226      write(11,3060)nps_elem_wstld(cirr),nps_WSTLD2_BOD_cal(cirr)
     &, nps_WSTLD2_ORG_cal(cirr), nps_WSTLD2_NH3_cal(cirr), nps_WSTLD2_N
     &O3_cal(cirr)
      do 228 cirr=1,num_incr
228      write(11,3060)incr_reach(cirr),incr_CBODu(cirr)
     &, incr_Org_N(cirr), incr_Amm_N(cirr),incr_NITrate(cirr)
      write(11,*)'             ------    --------    --------    --------
     &    --------'
3070  Format(A19,f12.2,2x,f10.2,1x,f10.2,2x,f10.2)
      write(11,3070)'Subsegment totals:',nps_BOD_tot,nps_Org_N_tot,nps_
     &NH3_N_tot,nps_NO3_tot
      write(11,*)' '


C***** SECTION:"CALCULATIONS FOR NONPOINT SOURCE MASS LOADS IN DATA TYPE 19:"

      Write(11,3030)
      write(11,*)' '
      write(11,*)'CALCULATIONS FOR NONPOINT SOURCE MASS LOADS IN DATA TY
     &PE 19:'
      write(11,*)' '
      write(11,*)'Values from LA-QUAL output:'
      write(11,*)' '
      write(11,*)'                                      CBODu       Orga
     &nic N'
      write(11,*)'                        Reach      mass load     mass
     & load'
      write(11,*)'                        number      (kg/day)      (kg
     &/day)'
      write(11,*)'                        ------      --------    -----
     &------'
      DO 230 numm=1,num
3080  Format(26X,I3,6x,F10.2,5x,F10.2)
230      Write(11,3080)NP_reach(numm),NP_BOD(numm), NP_Org(numm)
      write(11,*)'                        ------      --------    -----
     &------'
3090  format(A33,F12.2,3x,F12.2)
      write(11,3090)'Subsegment totals                ',MLDT19_tot_CBODu
     &,MLDT19_tot_org
      write(11,*)' '


C***** SECTION:"CALCULATIONS FOR LOADS FROM SOD AND BENTHIC AMMONIA:"

      ctr=1
      write(11,3030)
      write(11,*)'  '
      write(11,*)'CALCULATIONS FOR LOADS FROM SOD AND BENTHIC AMMONIA:'
      write(11,*)'  '
      write(11,*)'SOD temperature correction factor used in LA-QUAL mode
     &l: 1.065 (default)'
      write(11,*)' '
      write(11,*)'Equations used: SOD temp. corrected = (SOD at 20 C) *
     &1.065^(Water temp - 20 C)'
      write(11,*)'                SOD load = (SOD temp. corrected, g/m2/
     &day) * (Surface area, m2) * 1.0E-3 kg/g'
      write(11,*)'                Benthic NH3-N load = (Benthic ammonia
     &N, g/m2/day) * (Surface area, m2) * 1.0E-3 kg/g'
      write(11,*)' '
      write(11,*)' '
      write(11,*)'                            Values from LA-QUAL output
     &:                  Calculated values:'
      write(11,*)'                    -----------------------------------
     &---------    --------------------------------'
      write(11,*)'                     Water     Surface      SOD at
     &Benthic      SOD temp.     SOD       Benthic'
      write(11,*)'Reach    Element     temp.       area        20 C
     &ammonia N    corrected     load     NH3-N load'
```

```
      write(11,*)'number   number     (deg C)      (m2)     (g/m2/day)
     &(g/m2/day)  (g/m2/day)   (kg/day)    (kg/day)'
      write(11,*)'------   ------    --------    --------    --------
     &--------     --------    --------    ---------'
      DO 300 cir=1, total elem
4000  format(I3,7x,I3,4x,f10.2,1x,f10,3x,f10.3,1x,f10.2,5x,f6.3,3x,f10.2
     &,6x,f6.2)
4001  if (cir.LT.elem_begin(ctr)) then

      ctr=ctr-1
      go to 4001
      end if

4002  if (cir.GT.elem_end(ctr)) then
      ctr=ctr+1
      go to 4002
      end if

4009  FORMAT(I3,2x,I3,2x,I3,2x,F6.2,2x,I3,2x,I3,2x,F8.4)
C      write(13,4009)cir,elem begin(ctr),elem_end(ctr),elem_col(cir),ctr,
C     &np_reach(ctr),elem_sod(cir)

      write (11,4000)np_reach(ctr),cir,elem_temp(cir),
     &s_area_int(cir),elem_sod(cir), elem_benthis(cir),sod_temp_cor(cir)
     &,sod_load(cir),benthic(cir)

300   continue
      write(11,*)'
     &                        --------    ---------'
4010  format(A60,16x,F10.2,2x,f10.2)
      write(11,4010)'Subsegment totals:',nps_sod_load_tot,nps_benthic_to
     &t
      write(11,*)' '


C***** SECTION:"CALCULATIONS FOR LOADS FROM POINT SOURCE DISCHARGES EXPLICITLY MODELED:"

      write(11,3030)
      write(11,*)' '
      write(11,*)'CALCULATIONS FOR LOADS FROM POINT SOURCE DISCHARGES EX
     &PLICITLY MODELED:'
      write(11,*)' '
      if (ps_num_wstld.EQ.0) then
      WRITE(11,*)'For this subsegment, there are no point source dischar
     &ges explicitly modeled.'
      go to 335
      end if
      write(11,*)'Equation used: (Load, kg/day) = (Inflow rate, m3/sec)
     &* (Conc., mg/L) * 1.0E-6 kg/mg * 1.0E3 L/m3 *'
      write(11,*)'
     &                              86400 sec/day'
      write(11,*)'  '
      write(11,*)'Values from LA-QUAL output:'
      write(11,*)'  '
      write(11,*)'          Inflow      CBODu     Organic N   Ammonia N
     &   NO2+NO3 N'
      write(11,*)'Element     rate        conc.       conc.       conc.
     &     conc.'
      write(11,*)'number    (m3/sec)     (mg/L)      (mg/L)      (mg/L)
     &      (mg/L)     Name of discharge'
      write(11,*)'------    --------    --------    --------    --------
     &    --------    --------------------'
      DO 330 cir=1,ps num wstld
4020  Format(I3,5x,f10.5,5x,f7.3,5x,f7.3,5x,f7.3,5x,f7.3,6x,A20)
        write(11,4020)ps_elem_wstld(cir),ps_WSTLD_Flow(cir), ps_WSTL
     &D2_BOD_con(cir),ps_WSTLD2_ORG_con(cir), ps_WSTLD2_NH3_con(cir),
     &ps_WSTLD2_NO3_con(cir),PS_wstld_name(cir)
330   continue
      write(11,*)'  '
      write(11,*)'  '
      write(11,*)'  '
      write(11,*)'Calculated values:'
      write(11,*)' '
```

```
      write(11,*)'  '
      write(11,*)'                      CBODu     Organic N   Ammonia N
     & NO2+NO3 N'
      write(11,*)'            Element     load        load        load
     &       load'
      write(11,*)'            number    (kg/day)    (kg/day)    (kg/day)
     &    (kg/day)'
      write(11,*)'            ------    --------    --------    --------
     &    --------'
      cir=ps_num_wstld
      if (ps_num_wstld .EQ.0) then
      write(11,*)'             NONE         0.00        0.00        0.00
     &        0.00'
      go to 342
      end if
      do 340 cirr=1,cir
4030  Format(13x,I3,4x,f10.2,4x,f8.2,4x,f8.2,4x,f8.2)
340      write(11,4030)ps_elem_wstld(cirr),ps_WSTLD2_BOD_cal(cirr)
     &, ps_WSTLD2_ORG_cal(cirr), ps_WSTLD2_NH3_cal(cirr), ps_WSTLD2_N
     &O3 cal(cirr)
342   write(11,*)'            ------    --------    --------    --------
     &    --------'
4040  Format(A16,4x,f10.2,2x,f10.2,2x,f10.2,2x, f10.2)
      write(11,4040)'Subsegment totals:',ps_BOD_tot,ps_Org_N_tot,ps_
     &NH3_N_tot,ps_NO3_tot
      write(11,*)'  '
      write(11,*)'  '


C*****SECTION:"CALCULATIONS FOR LOADS FROM POINT SOURCE DISCHARGES NOT EXPLICITLY MODELED:"

335   write(11,3030)
      write(11,*)'  '
      write(11,*)'  '
      write(11,*)'CALCULATIONS FOR LOADS FROM POINT SOURCE DISCHARGES NO
     &T EXPLICITLY MODELED:'
      write(11,*)'  '
      if (num pt sour.EQ.0) THEN
         WRITE(11,*)'For this subsegment, there are no point source disc
     &harges not explicitly modeled.'
         write(11,*)' '
         GO TO 431
         END IF
4045  format (A62,f6.3,A33)
      write(11,4045)'Equations used: Flow rate from TMDL calcs = Permit
     &flow rate * ',fac mos FG,' (to incorporate MOS and FG) '
      write(11,*)'                (Load, kg/day) = (Flow rate, MGD) * (C
     &onc., mg/L) * 3.785 L/gal * 1.0E6 gal/MG * 1.0E-6 kg/mg'
      write(11,*)'  '
      write(11,*)'  '
      write(11,*)'Assumptions: Ratio of CBODu to CBOD5 for point source
     & dissharges = 2.3 (guidance from LTP).'
      write(11,*)'             For permits with BOD or ammonia limits, N
     &O2+NO3 = 10 mg/L (drinking water criteria).'
      write(11,*)'             For permits with COD limits, assume that
     &CBODu is about the same magnitude as COD and'
      write(11,*)'                        that discharges of nitrogen (o
     &rganic, ammonia, and NO2+NO3) are negligible.'
      write(11,*)' '
      write(11,*)'  '
      write(11,*)'                         Permit    Factor to      Flow
     &'
      write(11,*)'NPDES                    flow    incorporate   rate fo
     &r'
      write(11,*)'permit      Outfall      rate     MOS and FG   TMDL ca
     &lcs             '
      write(11,*)'number      number       (MGD)     into flow       (MG)
     &D      Comments'
      write(11,*)'--------    --------    --------    --------    ------
     &--    ----------------------------------------'
      do 400 I= 1,num pt sour
         tmdl_cal_flow(I)=perm_flow(I)*fac_mos_FG
4050     Format(A10,4x,A3,5x,F10.3,3x,F6.3,4x,f10.3,5x,A40)
```

```
         write (11,4050)permit_number(I), outfall_num(I),perm_flow(I),fa
     &c_mos_FG,tmdl_cal_flow(I), comment(I)
400    continue
      write(11,*)'  '
      write(11,*)'  '
      write(11,*)'  '
      write(11,*)'                          User specified permit limits
     &:'
      write(11,*)' NPDES                  -------------------------------
     &-'
      write(11,*)' permit      Outfall     CBOD5        COD       Ammoni
     &a'
      write(11,*)' number      number      (mg/L)      (mg/L)      (mg/L
     &)     Comments'
      write(11,*)'--------    --------    --------    --------    ------
     &--    ---------------------------------------'
      do 410 I= 1,num_pt_sour
4060     Format(A10,4x,A3,5x,F10.1,2x,F10.1,2x,F10.1,4x,A40)
410      write (11,4060)permit_number(I), outfall_num(I),CBOD5_perm(I),
     &COD perm(I), ammon_perm(I),comment_con(I)
      write(11,*)'  '
      write(11,*)'  '
      write(11,*)'  '
      write(11,*)'                                 Values for TMDL calcul
     &ations:'
      write(11,*)' NPDES                  -------------------------------
     &--------------'
      write(11,*)' permit      Outfall     CBODu     Organic N   Ammonia
     & N   NO2+NO3 N'
      write(11,*)'  number      number      (mg/L)      (mg/L)      (mg/
     &L)      (mg/L)     Comments'
      write(11,*)'--------    --------    --------    --------    ------
     &--    --------    ----------------------------'
      do 420 I= 1,num_pt_sour
         tmdl_cal_flow(I)=perm_flow(I)*fac_MOS_fg
4070     Format(A10,4x,A3,5x,F10.2,2x,F10.2,2x,F10.2,2x,F10.2)
420      write (11,4070)permit number(I), outfall num(I),CBODu_tmdl_val(
     &I),org N tmdl val(I),ammon_tmdl_val(I), no3_tmdl_val(I)
      write(11,*)'  '
      write(11,*)'  '
      write(11,*)'  '
      write(11,*)'                                       Calculated loads
     &:'
      write(11,*)' NPDES                  -------------------------------
     &--------------'
      write(11,*)' permit      Outfall     CBODu     Organic N   Ammonia
     &N   NO2+NO3 N'
      write(11,*)' number      number     (kg/day)    (kg/day)    (kg.da
     &y)   (kg.day)     Comments'
      write(11,*)'--------    --------    --------    --------    ------
     &--    --------    ----------------------------'
      DO 430 I= 1,num_pt_sour
4080     Format(A10,4x,A3,5x,F10.2,2x,F10.2,2x,F10.2,2x,F10.2)
         write(11,4080)permit number(I), outfall num(I),cbodu_tmdl_cal(I
     &), org n_tmdl_cal(I),ammon_tmdl_cal(I),no3_tmdl_cal(I)
430   continue
      write(11,*)'                        --------    --------    ------
     &--    --------'
4090  format(A20,2x,f10.2,2x,f10.2,2x,f10.2,2x, f10.2)
      write(11,4090)'Subsegment total',cbodu_tmdl_tot,org_N_tmdl_tot,amm
     &on_tmdl_tot,no3_tmdl_tot


C*****SECTION:"SUMMARY OF NONPOINT SOURCE OXYGEN DEMAND FOR THIS SUBSEGEMENT:"

431   write(11,3030)
      write(11,*)' '
      write(11,*)'SUMMARY OF NONPOINT SOURCE OXYGEN DEMAND FOR THIS SUBS
     &EGEMENT:'
      write(11,*)' '
      write(11,*)' '
4093  format(A52,f6.4,A30)
      write(11,4093)'Equations used:  Organic N oxygen demand, kg/day =
```

```
     &',ammoxy_rat,' * Organic N load, kg/day of N'
4094  format(A52,F6.4,A30)
      write(11,4094)'                 Ammonia N oxygen demand, kg/day =
     &',ammoxy rat,' * Ammonia N load, kg/day of N'
4095  format(A37,f4.1,A24)
      write(11,4095)'                 Margin of safety = ',nps_mos_per,'
     &% * nonpoint source load'
4097  format(A34,f4.1,A24)
      write(11,4097)'                 Future Growth = ',nps_FG_per,'% *
     &nonpoint source load'
4099  format(A36,f4.1,A24)
      write(11,4099)'                 Load Allocation = ',100-nps_mos_pe
     &r-ps FG per,'% * nonpoint source load'
      write(11,*)' '
      write(11,*)'Values from calculations above'
      write(11,*)' '
      write(11,*)'
     &    Nitrogen loads (kg/day of N):'
      write(11,*)'
     &----------------------------------'
      write(11,*)'                                   SOD       CBODu
     &Organic      Ammonia     NO2+NO3 N'
      write(11,*)'                              (kg/day)    (kg/day)   (
     &kg/day)     (kg/day)     (kg/day)'
      write(11,*)'                              --------    --------   -
     &-------     --------     ---------'
5000  format(A36,4x,f10.2,1x,f10.2,3x,f10.2,4x,f10.2)
      write(11,5000)'NPS inflows                     N/A ',nps_bod_tot,n
     &ps org N tot,nps nh3 n tot,nps NO3 tot
5010  format(A36,4x,f10.2,1x,f10.2,4x,A20)
      write(11,5010)'Mass LOads (data type 19)       N/A ',mldt19_tot_cb
     &odu,mldt19_tot_org,'N/A          N/A'
5020  format(A15,13x,f10.2,1x,A20,5x,f10.2,7x,A4)
      write(11,5020)'SOD and Benthic ammonia',nps_sod_load_tot,'N/A
     &   N/A',nps_benthic_tot,'N/A'
c      write(11,*)'                              --------    --------   -
c     &-------     --------     ---------'
      write(11,*)'  '
      write(11,*)'Calculated loads of oxygen demand:'
      write(11,*)'
     & Oygen demand loads:     Total'
      write(11,*)'
     & -------------------     Oxygen'
      write(11,*)'                                   SOD       CBODu
     &Organic      Ammonia     demand'
      write(11,*)'                              (kg/day)    (kg/day)   (
     &kg/day)     (kg/day)     (kg/day)'
      write(11,*)'                              --------    --------   -
     &-------     --------     ---------'
c5000  format(A36,4x,f10.5,2x,f10.5,2x,f10.5,3x,f10.5)

      write(11,5000)'NPS inflows                     N/A ',nps_bod_tot,
     &oxy_dem_nps_org_N_tot,oxy_dem_nps_nh3_tot,nps_inflows_tot_oxy_dema
     &nd
5011  format(A36,4x,f10.2,1x,f10.2,8x,A3,6x,f10.2)
      write(11,5011)'Mass LOads (data type 19)       N/A ',mldt19_tot_cb
     &odu,oxy_dem_mldt19_tot_org,'N/A',mldt19_tot_oxy_dem
5021  format(A15,13x,f10.2,1x,A20,5x,f10.2,4x,f10.2)
      write(11,5021)'SOD and Benthic ammonia',nps_sod_load_tot,'N/A
     &   N/A',oxy_dem_nps_benthic_tot,tot_oxy_dem_sod_ben
      write(11,*)' '
5030  format(A23,5x,f10.2,2x,f10.2,1x,f10.2,3x,f10.2,4x,f10.2)
      write(11,5030)'Total for all NPS loads',nps sod load tot,nps_summa
     &ry_cbodu,nps_summary_org,nps_summary_ammon, tot_oxy_dem_nps
      write(11,*)' '
5035  format(A22,f4.1,A2,f10.2,2x,f10.2,1x,f10.2,3x,f10.2,4x,f10.2)
      write(11,5035)'NPS future growth    (',nps_FG_per,'%)    ',nps_FG_
     &sod_load_tot,nps_FG_summary_cbodu,nps_FG_summary_org,nps_FG_s
     &ummary_ammon,nps_FG_tot_oxy_dem
5040  format(A22,f4.1,A2,f10.2,2x,f10.2,1x,f10.2,3x,f10.2,4x,f10.2)
      write(11,5040)'NPS margin of safety (',nps mos per,'%)    ',nps mo
     &s_sod_load_tot,nps_mos_summary_cbodu,nps_mos_summary_org,nps_mos_s
     &ummary_ammon,nps_mos_tot_oxy_dem
```

```
5050  format(A22,f4.1,A2,f10.2,2x,f10.2,1x,f10.2,3x,f10.2,4x,f10.2)
      write(11,5050)'NPS load allocation  (',100-nps_MOS_PER-nps_FG_PER
     &,'%)    ',npS LA sod load tot,nps LA  summary_cbodu,nps_LA_summary
     & org,nps La summary_ammon,nps_LA_tot_oxy_dem
      write(11,*)' '
      write(11,*)'  '


C*****SECTION:"SUMMARY OF POINT SOURCE OXYGEN DEMAND FOR THIS SUBSEGEMENT"

      write(11,3030)
      write(11,*)' '
      Write(11,*)'SUMMARY OF POINT SOURCE OXYGEN DEMAND FOR THIS SUBSEGE
     &MENT'
      write(11,*)' '
      if (num_pt_sour+ps_num_wstld.EQ.0) THEN
         WRITE(11,*)'For this subsegment, there are no point source disc
     &harges either modeled or unmodeled in this subsegment.'
         write(11,*)' '
         GO TO 561
         end if
      write(11,*)'  '
      write(11,4093)' Equations used: Organic N oxygen demand, kg/day =
     & ',ammoxy_rat,' * Organic N load, kg/day of N'
      write(11,4093)'                 Ammonia N oxygen demand, kg/day =
     & ',ammoxy_rat,' * Ammonia N load, kg/day of N'
5052  format(A36,f4.1,A21)
      write(11,5052)'                 Margin of Safety = ',ps_mos_per,'%
     & * point source load'
5053  format(A33,F4.1,A24)
      write(11,5053)'                 Future Growth = ',nps_FG_per,'% *
     &nonpoint source load'
5054  format(A71,f4.1,A16)
      write(11,5054)'                 Wasteload Allocation (WLA) for mod
     &eled point source = ',100-ps_mos_per-ps_FG_per,'% * modeled load'
5056  format(A70,f4.1,A19)
      write(11,5056)'                 Wasteload Allocation (WLA) for min
     &or point sources = ',100-ps_mos_per-ps_FG_per,'% * calculated load
     &'
      write(11,*)' '
      write(11,*)'Values from calculations above'
      write(11,*)'
     & Nitrogen loads (kg/day of N):'
      write(11,*)'                                                      -
     &---------------------------------'
      write(11,*)'                                            CBODu    O
     &rganic N   Ammonia N    NO3+NO2'
      write(11,*)'                                           (kg/day)
     &(kg/day)    (kg/day)    (kg/day)'
      write(11,*)'                                           -------   -
     &--------    --------    --------'
      if (ps_num_wstld .EQ.0) then
      go to 470
      end if
      DO 450 cir=1,ps num wstld
5060  Format(A17,1x,A20,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
      write(11,5060)'Modeled load for:' ,ps_wstld_name(cir),
     &ps_WSTLD2_Bod_cal(cir),ps_WSTLD2_ORG_cal(cir), ps_WSTLD2_N
     &h3_cal(cir),ps_WSTLd2_NO3_cal(cir)
450   continue
5080  format(A38,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
470   write(11,5080)'Calculated load for minor point sources   ',cbodu_t
     &mdl tot,org N tmdl_tot,ammon_tmdl_tot,no3_tmdl_tot
      write(11,*)'  '
      write(11,*)'  '
      write(11,*)'Calculated loads of oxygen demand'
      write(11,*)' '
      write(11,*)'
     & Oygen demand loads:     Total'
      write(11,*)'
     & -------------------     Oxygen'
      write(11,*)'                                            CBODu    O
     &rganic N   Ammonia N     demand'
```

```
      write(11,*)'                                            (kg/day)
     &(kg/day)    (kg/day)    (kg/day)'
      write(11,*)'                                            -------   -
     &--------    --------    --------'
      if (ps num_wstld .EQ.0) then
      go to 540
      end if
      DO 490 cir=1,ps_num_wstld
      write(11,5060)'Modeled load for:',ps_wstld_name(cir),
     &oxy_dem_ps_WSTLD2_Bod_cal(cir),oxy_dem_ps_WSTLD2_ORG_cal(cir),oxy_
     &dem_ps_WSTLD2_Nh3_cal(cir),mod_tot_oxy_dem_ps(cir)
490   continue
540   write(11,5080)'Calculated load for minor point sources   ',cbodu t
     &mdl_tot,oxy_dem_org_N_tmdl, oxy_dem_ammon_tmdl,min_ps_summary_tot
      write(11,5080)'Total for all point source loads            ',ps_s
     &ummary_cbodu, ps_summary_org,ps_summary_nh3_n,tot_oxy_dem_summary
      write(11,*)' '
5090  Format(A31,f4.1,A3,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
      write(11,5090)'MOS for all point Sources     (',ps_mos_per,'%)  ',
     &mos ps summary cbodu, mos_ps_summary_org,mos_ps_summary_nh3_n,mos_
     &tot oxy dem summary
5092  Format(A31,f4.1,A3,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
      write(11,5092)'FG for all point Sources      (',ps_FG_per,'%)  ',
     &FG_ps_summary_cbodu,FG_ps_summary_org,FG_ps_summary_nh3_n,FG_
     &tot_oxy_dem_summary

      if (ps_num_wstld .EQ.0) then
      go to 560
      end if
      DO 550 cir=1,ps num wstld
5095  Format(A8,1x,A21,A1,f4.1,A2,3x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
      write(11,5095)'WLA for:',ps_wstld_name(cir),'(',100-ps_mos_per-ps_
     &FG_per,'%)',wla_ps_WSTLD2_BOD_cal(cir),wla_ps_WSTLD2_ORG_cal(cir),
     &wla_ps_WSTLd2_nH3_cal(cir),wla_mod_tot_oxy_dem_ps(cir)
550   continue
6000  format(A31,f4.1,A2,3x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
560   write(11,6000)'WLA for minor point sources   (',100-ps mos per-ps
     &FG per,'%)   ',wla ps cbodu tmdl tot,wla_ps_org_N_tmdl_tot, wla_ps
     &_ammon_tmdl_tot,wla_min_ps_summary_tot


      if (nut_tmdl_need .EQ. 'YES') then
         goto 561
      else
         go to 605
      end if


C*****SECTION:"NUTRIENT TMDL CALCULATIONS:"

561   write(11,3030)
      write(11,*)' '
      write(11,*)' '
      write(11,*)'NUTRIENT TMDL CALCULATIONS:'
      write(11,*)'  '
      if(nut_tmdl_need.EQ.'NO') then
      write(11,*)'No nutrient TMDL is needed for this subsegment'
      go to 605
      end if
      write(11,*)'Assumptions: Naturally occurring ratio of total N to t
     &otal P = ',nat_rat
      write(11,*)' '
      write(11,*)'Equations used: Total N = (Organic N) + (Ammonia N) +
     &(NO2+NO3 N)'
      write(11,*)'                Total P = (Total N) / (Naturally occur
     &ring ratio of total N to total P)'
6010  format(A39,f4.1,A24)
      write(11,6010)'              NPS margin of safety = ',nps_mos_per,
     &'% * nonpoint source load'
6015  format(A36,f4.1,A24)
      write(11,6015)'              NPS Future Growth = ',nps_FG_per,
     &'% * nonpoint source load'
6020  format(A38,f4.1,A24)
```

```
      write(11,6020)'                NPS load allocation = ',100-nps_mos
     &_per-nps_FG_per,'% * nonpoint source load'
6030  format(A57,f4.1,A27)
      write(11,6030)'                Margin of safety for all point sour
     &ces = ',ps mos per,'% * total point source load'
6035  format(A53,F4.1,A24)
      write(11,6035)'                Future Growth for all point soures
     &= ',nps_FG_per,'% * nonpoint source load'
6040  format(A70,f4.1,A16)
      write(11,6040)'                Wasteload allocation (WLA) for mode
     &led point source = ',100-ps_mos_per-ps_FG_per,'% * modeled load'
6050  format(A69,f4.1,A19)
      write(11,6050)'                Wasteload allocation (WLA) for mino
     &r point sources = ',100-ps_mos_per-ps_FG_per,'% * calculated load'
      write(11,*)'  '
      write(11,*)' '
      write(11,*)'Nonpoint sources:'
      write(11,*)'                                          Organic N
     &Ammonia N   NO2+NO3 N    Total N     Total P'
      write(11,*)'                                           (kg/day)
     & (kg/day)    (kg/day)    (kg/day)    (kg/day)'
      write(11,*)'                                           --------
     & --------    --------    --------    --------'
6060  format(A25,16x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
      write(11,6060)'Total for all NPS loads                    ',nut_tm
     &dl_nps_org_N_tot,nps_nh3_n_tot,nps_NO3_tot,nps_tot_nitrogen_load,n
     &ps_total_P
      write(11,*)'  '
6070  format(A22,f4.1,A2,13x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
      write(11,6070)'NPS margin of safety (',nps mos per,'%)    ',nps mo
     &s_nut_tmdl_nps_Org_N_tot,nps_mos_nps_nh3_n_tot,nps_mos_nps_NO3_tot
     &,nps_mos_tot_nitrogen_load,nps_mos_total_p
6075  format(A22,f4.1,A2,13x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
      write(11,6075)'NPS Future Growth    (',nps_mos_per,'%)    ',nps_FG
     &_nut_tmdl_nps_Org_N_tot,nps_FG_nps_nh3_n_tot,nps_FG_nps_NO3_tot
     &,nps FG tot nitrogen load,nps FG total p
6080  format(A22,f4.1,A2,13x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
      write(11,6080)'NPS load allocation  (',100-nps mos per-nps FG per,
     &'%)    ',nps_la_nut_tmdl_nps_Org_N_tot,nps_la_nps_nh3_n_tot,nps_la
     &_nps_NO3_tot,nps_la_tot_nitrogen_load,nps_la_total_p
      write(11,*)' '
      write(11,*)'  '
      write(11,*)'Point sources:'
      write(11,*)' '
      write(11,*)'                                          Organic N
     &Ammonia N   NO2+NO3 N    Total N     Total P'
      write(11,*)'                                           (kg/day)
     & (kg/day)    (kg/day)    (kg/day)    (kg/day)'
      write(11,*)'                                           --------
     & --------    --------    --------    --------'
      if (ps_num_wstld .EQ.0) then
      go to 590
      end if
      DO 585 cir=1,ps num wstld
6085  Format(A17,1x,A14,8x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
        write(11,6085)'Modeled load for:',ps_wstld_name(cir),
     &ps_WSTLD2_ORG_cal(cir),ps_WSTLD2_Nh3_cal(cir),ps_WSTLd2_NO3_cal(c
     &ir),ps_total_nitrogen_load(cir),ps_total_P(cir)

585   continue
c5080  format(A38,2x,f10.5,2x,f10.5,2x,f10.5,2x,f10.5)
6090  format(A38,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
590   write(11,6090)'Calculated load for minor point sources   ',org N t
     &mdl_tot,ammon_tmdl_tot,no3_tmdl_tot,min_ps_total_nitrogen_load,min
     &_ps_total_P
      write(11,*)'                                           --------
     & --------    --------    --------    --------'
      write(11,6090)'Total for all point source loads             ',ps_n
     &ut_tmdl_summary_org_N_tot,ps_nut_tmdl_summary_nh3_N_tot,ps_nut_tmd
     &l summary no3 N_tot,ps_tot_nitrogen_final_load,ps_tot_P_final
      write(11,*)' '
7000  Format(A31,f4.1,A2,3x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
      write(11,7000)'MOS for all point Sources     (',ps_mos_per,'%)',
```

```
     &mos_ps_nut_tmdl_sum_org_N_tot,mos_ps_nut_tmdl_sum_nh3_N_tot,
     &mos_ps_nut_tmdl_sum_no3_N_tot,mos_ps_tot_nitrogen_final_load,
     &mos_ps_tot_P_final
7005  Format(A31,f4.1,A2,3x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)
      write(11,7005)'FG for all point Sources      (',ps_mos_p
     &er,'%)',FG_ps_nut_tmdl_sum_org_N_tot,FG_ps_nut_tmdl_sum_nh3_N_to
     &t,FG_ps_nut_tmdl_sum_no3_N_tot,FG_ps_tot_nitrogen_final_load,
     &FG_ps_tot_P_final
      if (ps_num_wstld .EQ.0) then
      go to 610
      end if
      DO 600 cir=1,ps_num_wstld
7010  Format(A9,1x,A20,A1,f4.1,A2,3x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2,2
     &x,f10.2)
600   write(11,7010)'WLA for: ',ps_wstld_name(cir),'(',100-ps_mos_per-ps
     &_FG_per,'%)',wla_ps_WSTLD2_ORG_cal_sum(cir),wla_ps_WSTLd2_nH3_cal_
     &sum(cir),wla_ps_wstLD2_NO3_cal_sum(cir),wla_ps_total_nitrogen_load
     &(cir),wla_ps_total_P(cir)
610   continue
7020  format(A31,f4.1,A2,3x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2,2x,f10.2)

      write(11,7020)'WLA for minor point sources   (',100-ps_mos_per-ps_
     &FG_per,'%)   ',wla_min_ps_nut_tmdl_sum_org,wla_min_ps_nut_tmdl_sum
     &_nh3,wla_min_ps_nut_tmdl_sum_no3,wla_min_ps_nitrogen_final_load
     &,wla_min_ps_P_final

605   Print*,'Program has made the output file!!!'

606   STOP
      END
```

APPENDIX N

Ammonia Toxicity Calculations

Table N.1. AMMONIA TOXICITY CALCULATIONS FOR BAYOU TORO (SUBSEGMENT 110401)

Equations from 1999 Update of Ambient Water Quality Criteria for Ammonia, EPA-822-R-99-014, Dec. 1999.

Use chronic criterion when fish early life stages are present (as mentioned on page 88, this is the same as CCC for early life stages absent when temp > 15°C)

CCC, in mg N/L = $[0.0577/(1+10^{7.688-pH}) + 2.487/(1+10^{pH-7.688})] * MIN [2.85, 1.45*10^{0.028*(25-T)}]$

Note: CCC is the Chronic Criterion Concentration

pH values below are the average of the measurements on Bayou Toro from the FTN intensive survey.
Temperature values below are the critical temperature used in the projection simulation.

Model Element	Average pH during calibration period	Temperature in projection run (^{o}C)	Calculated CCC (mg N/L)	Predicted NH3-N conc. in projection (mg N/L)	Toxic ?
1	6.3	27.3	3.0	0.08	No
2	6.3	27.3	3.0	0.08	No
3	6.3	27.3	3.0	0.08	No
4	6.3	27.3	3.0	0.08	No
5	6.3	27.3	3.0	0.08	No
6	6.3	27.3	3.0	0.08	No
7	6.3	27.3	3.0	0.08	No
8	6.3	27.3	3.0	0.08	No
9	6.3	27.3	3.0	0.08	No
10	6.3	27.3	3.0	0.08	No
11	6.3	27.3	3.0	0.08	No
12	6.3	27.3	3.0	0.08	No
13	6.3	27.3	3.0	0.08	No
14	6.3	27.3	3.0	0.08	No
15	6.3	27.3	3.0	0.08	No
16	6.3	27.3	3.0	0.08	No
17	6.3	27.3	3.0	0.08	No
18	6.3	27.3	3.0	0.08	No
19	6.3	27.3	3.0	0.08	No
20	6.3	27.3	3.0	0.08	No
21	6.3	27.3	3.0	0.08	No
22	6.3	27.3	3.0	0.08	No
23	6.3	27.3	3.0	0.08	No
24	6.3	27.3	3.0	0.08	No
25	6.3	27.3	3.0	0.08	No
26	6.3	27.3	3.0	0.08	No
27	6.3	27.3	3.0	0.08	No
28	6.3	27.3	3.0	0.08	No
29	6.3	27.3	3.0	0.08	No
30	6.3	27.3	3.0	0.08	No
31	6.3	27.3	3.0	0.08	No
32	6.3	27.3	3.0	0.08	No
33	6.3	27.3	3.0	0.08	No
34	6.3	27.3	3.0	0.08	No
35	6.3	27.3	3.0	0.08	No
36	6.3	27.3	3.0	0.08	No
37	6.3	27.3	3.0	0.08	No
38	6.3	27.3	3.0	0.08	No
39	6.3	27.3	3.0	0.08	No
40	6.3	27.3	3.0	0.08	No
41	6.3	27.3	3.0	0.08	No
42	6.3	27.3	3.0	0.08	No
43	6.3	27.3	3.0	0.08	No
44	6.3	27.3	3.0	0.08	No

Model Element	Average pH during calibration period	Temperature in projection run (^oC)	Calculated CCC (mg N/L)	Predicted NH3-N conc. in projection (mg N/L)	Toxic ?
45	6.3	27.3	3.0	0.08	No
46	6.3	27.3	3.0	0.08	No
47	6.3	27.3	3.0	0.08	No
48	6.3	27.3	3.0	0.08	No
49	6.3	27.3	3.0	0.08	No
50	6.3	27.3	3.0	0.08	No
51	6.3	27.3	3.0	0.08	No
52	6.3	27.3	3.0	0.08	No
53	6.3	27.3	3.0	0.08	No
54	6.3	27.3	3.0	0.08	No
55	6.3	27.3	3.0	0.08	No
56	6.3	27.3	3.0	0.08	No
57	6.3	27.3	3.0	0.08	No
58	6.3	27.3	3.0	0.08	No
59	6.3	27.3	3.0	0.08	No
60	6.3	27.3	3.0	0.08	No
61	6.3	27.3	3.0	0.08	No
62	6.3	27.3	3.0	0.08	No
63	6.3	27.3	3.0	0.09	No
64	6.3	27.3	3.0	0.09	No
65	6.3	27.3	3.0	0.09	No
66	6.3	27.3	3.0	0.09	No
67	6.3	27.3	3.0	0.09	No
68	6.3	27.3	3.0	0.09	No
69	6.3	27.3	3.0	0.09	No
70	6.3	27.3	3.0	0.09	No
71	6.3	27.3	3.0	0.09	No
72	6.3	27.3	3.0	0.09	No
73	6.3	27.3	3.0	0.09	No
74	6.3	27.3	3.0	0.09	No
75	6.3	27.3	3.0	0.09	No
76	6.3	27.3	3.0	0.09	No
77	6.3	27.3	3.0	0.09	No
78	6.3	27.3	3.0	0.09	No
79	6.3	27.3	3.0	0.09	No
80	6.3	27.3	3.0	0.09	No
81	6.3	27.3	3.0	0.09	No
82	6.3	27.3	3.0	0.09	No
83	6.3	27.3	3.0	0.09	No
84	6.3	27.3	3.0	0.09	No
85	6.3	27.3	3.0	0.09	No
86	6.3	27.3	3.0	0.09	No
87	6.3	27.3	3.0	0.09	No
88	6.3	27.3	3.0	0.09	No
89	6.3	27.3	3.0	0.09	No
90	6.3	27.3	3.0	0.09	No
91	6.3	27.3	3.0	0.09	No
92	6.3	27.3	3.0	0.09	No
93	6.3	27.3	3.0	0.09	No
94	6.3	27.3	3.0	0.09	No
95	6.3	27.3	3.0	0.09	No
96	6.3	27.3	3.0	0.09	No
97	6.3	27.3	3.0	0.09	No
98	6.3	27.3	3.0	0.09	No
99	6.3	27.3	3.0	0.09	No
100	6.3	27.3	3.0	0.09	No
101	6.3	27.3	3.0	0.09	No
102	6.3	27.3	3.0	0.09	No
103	6.3	27.3	3.0	0.09	No
104	6.3	27.3	3.0	0.09	No

Model Element	Average pH during calibration period	Temperature in projection run (^oC)	Calculated CCC (mg N/L)	Predicted NH3-N conc. in projection (mg N/L)	Toxic ?
105	6.3	27.3	3.0	0.09	No
106	6.3	27.3	3.0	0.09	No
107	6.3	27.3	3.0	0.09	No
108	6.3	27.3	3.0	0.09	No
109	6.3	27.3	3.0	0.09	No
110	6.3	27.3	3.0	0.09	No
111	6.3	27.3	3.0	0.09	No
112	6.3	27.3	3.0	0.09	No
113	6.3	27.3	3.0	0.09	No
114	6.3	27.3	3.0	0.09	No
115	6.3	27.3	3.0	0.09	No
116	6.3	27.3	3.0	0.09	No
117	6.3	27.3	3.0	0.09	No
118	6.3	27.3	3.0	0.09	No
119	6.3	27.3	3.0	0.09	No
120	6.3	27.3	3.0	0.09	No
121	6.3	27.3	3.0	0.09	No
122	6.3	27.3	3.0	0.09	No
123	6.3	27.3	3.0	0.09	No
124	6.3	27.3	3.0	0.09	No
125	6.3	27.3	3.0	0.09	No
126	6.3	27.3	3.0	0.09	No
127	6.3	27.3	3.0	0.09	No
128	6.3	27.3	3.0	0.09	No
129	6.3	27.3	3.0	0.09	No
130	6.3	27.3	3.0	0.09	No
131	6.3	27.3	3.0	0.09	No
132	6.3	27.3	3.0	0.09	No
133	6.3	27.3	3.0	0.09	No
134	6.3	27.3	3.0	0.09	No
135	6.3	27.3	3.0	0.09	No
136	6.3	27.3	3.0	0.09	No
137	6.3	27.3	3.0	0.09	No
138	6.3	27.3	3.0	0.09	No
139	6.3	27.3	3.0	0.09	No
140	6.3	27.3	3.0	0.09	No
141	6.3	27.3	3.0	0.09	No
142	6.3	27.3	3.0	0.09	No
143	6.3	27.3	3.0	0.09	No
144	6.3	27.3	3.0	0.09	No
145	6.3	27.3	3.0	0.09	No
146	6.3	27.3	3.0	0.09	No
147	6.3	27.3	3.0	0.09	No
148	6.3	27.3	3.0	0.09	No
149	6.3	27.3	3.0	0.13	No
150	6.3	27.3	3.0	0.13	No
151	6.3	27.3	3.0	0.13	No
152	6.3	27.3	3.0	0.13	No
153	6.3	27.3	3.0	0.13	No
154	6.3	27.3	3.0	0.13	No
155	6.3	27.3	3.0	0.13	No
156	6.3	27.3	3.0	0.13	No
157	6.3	27.3	3.0	0.13	No
158	6.3	27.3	3.0	0.13	No
159	6.3	27.3	3.0	0.12	No
160	6.3	27.3	3.0	0.12	No
161	6.3	27.3	3.0	0.12	No
162	6.3	27.3	3.0	0.12	No
163	6.3	27.3	3.0	0.12	No
164	6.3	27.3	3.0	0.12	No

Model Element	Average pH during calibration period	Temperature in projection run (^oC)	Calculated CCC (mg N/L)	Predicted NH3-N conc. in projection (mg N/L)	Toxic ?
165	6.3	27.3	3.0	0.12	No
166	6.3	27.3	3.0	0.12	No
167	6.3	27.3	3.0	0.12	No
168	6.3	27.3	3.0	0.12	No
169	6.3	27.3	3.0	0.12	No
170	6.3	27.3	3.0	0.12	No
171	6.3	27.3	3.0	0.12	No
172	6.3	27.3	3.0	0.12	No
173	6.3	27.3	3.0	0.12	No
174	6.3	27.3	3.0	0.12	No
175	6.3	27.3	3.0	0.12	No
176	6.3	27.3	3.0	0.12	No
177	6.3	27.3	3.0	0.12	No
178	6.3	27.3	3.0	0.12	No
179	6.3	27.3	3.0	0.12	No
180	6.3	27.3	3.0	0.12	No
181	6.3	27.3	3.0	0.12	No
182	6.3	27.3	3.0	0.12	No
183	6.3	27.3	3.0	0.12	No
184	6.3	27.3	3.0	0.12	No
185	6.3	27.3	3.0	0.12	No
186	6.3	27.3	3.0	0.12	No
187	6.3	27.3	3.0	0.12	No
188	6.3	27.3	3.0	0.12	No
189	6.3	27.3	3.0	0.12	No
190	6.3	27.3	3.0	0.12	No
191	6.3	27.3	3.0	0.12	No
192	6.3	27.3	3.0	0.11	No
193	6.3	27.3	3.0	0.11	No
194	6.3	27.3	3.0	0.11	No
195	6.3	27.3	3.0	0.11	No
196	6.3	27.3	3.0	0.11	No
197	6.3	27.3	3.0	0.11	No
198	6.3	27.3	3.0	0.11	No
199	6.3	27.3	3.0	0.11	No
200	6.3	27.3	3.0	0.11	No
201	6.3	27.3	3.0	0.11	No
202	6.3	27.3	3.0	0.11	No
203	6.3	27.3	3.0	0.11	No
204	6.3	27.3	3.0	0.11	No
205	6.3	27.3	3.0	0.11	No
206	6.3	27.3	3.0	0.11	No
207	6.3	27.3	3.0	0.11	No
208	6.3	27.3	3.0	0.11	No
209	6.3	27.3	3.0	0.11	No
210	6.3	27.3	3.0	0.11	No
211	6.3	27.3	3.0	0.11	No
212	6.3	27.3	3.0	0.11	No
213	6.3	27.3	3.0	0.11	No
214	6.3	27.3	3.0	0.11	No
215	6.3	27.3	3.0	0.11	No
216	6.3	27.3	3.0	0.11	No
217	6.3	27.3	3.0	0.11	No
218	6.3	27.3	3.0	0.11	No
219	6.3	27.3	3.0	0.11	No
220	6.3	27.3	3.0	0.11	No
221	6.3	27.3	3.0	0.11	No
222	6.3	27.3	3.0	0.11	No
223	6.3	27.3	3.0	0.11	No
224	6.3	27.3	3.0	0.11	No

Model Element	Average pH during calibration period	Temperature in projection run (^{o}C)	Calculated CCC (mg N/L)	Predicted NH3-N conc. in projection (mg N/L)	Toxic ?
225	6.3	27.3	3.0	0.11	No
226	6.3	27.3	3.0	0.11	No
227	6.3	27.3	3.0	0.11	No
228	6.3	27.3	3.0	0.11	No
229	6.3	27.3	3.0	0.11	No
230	6.3	27.3	3.0	0.11	No
231	6.3	27.3	3.0	0.11	No
232	6.3	27.3	3.0	0.11	No
233	6.3	27.3	3.0	0.11	No
234	6.3	27.3	3.0	0.11	No
235	6.3	27.3	3.0	0.11	No
236	6.3	27.3	3.0	0.11	No
237	6.3	27.3	3.0	0.11	No
238	6.3	27.3	3.0	0.11	No
239	6.3	27.3	3.0	0.11	No
240	6.3	27.3	3.0	0.11	No

FILE: R:\PROJECTS\2110-616\TECH\LA-QUAL\BAYOU TORO\NH3_TOXICITY_TORO.XLS