BRAZOS RIVER AUTHORITY OF TEXAS

Report
on

Lakes Belton and Stillhouse Hollow

WATER QUALITY EVALUATION

APPENDIX

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CIVIL/ENVIRONMENTAL ENGINEERS - ARLINGTON, TEXAS

KLOTZ/ASSOCIATES, INC.
Consulting Engineers - Houston, Texas

December, 1989

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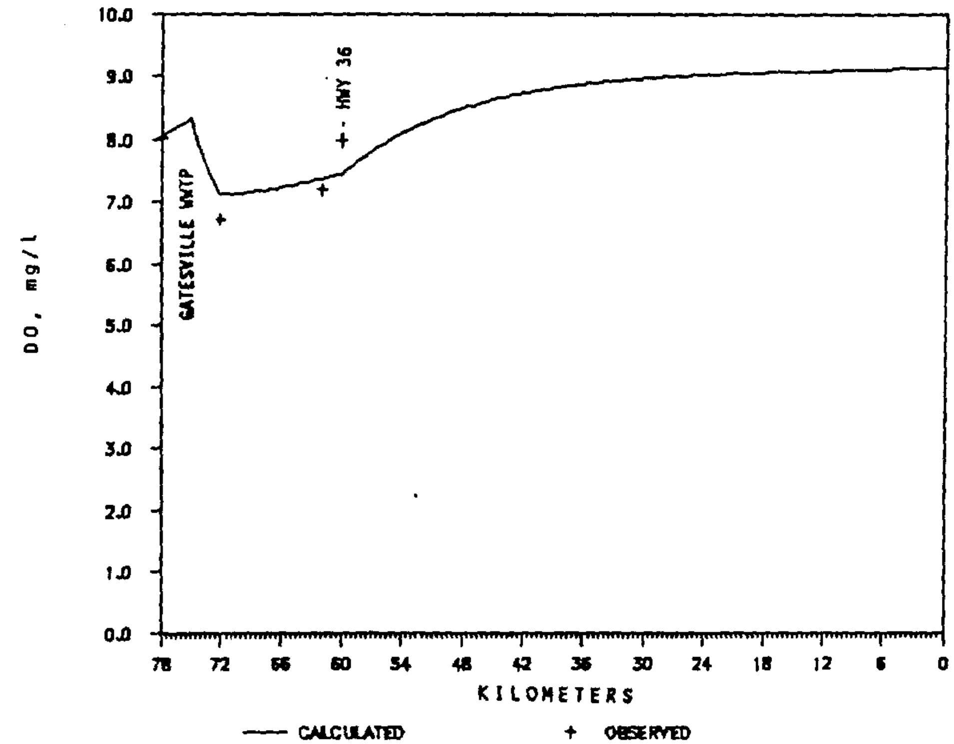


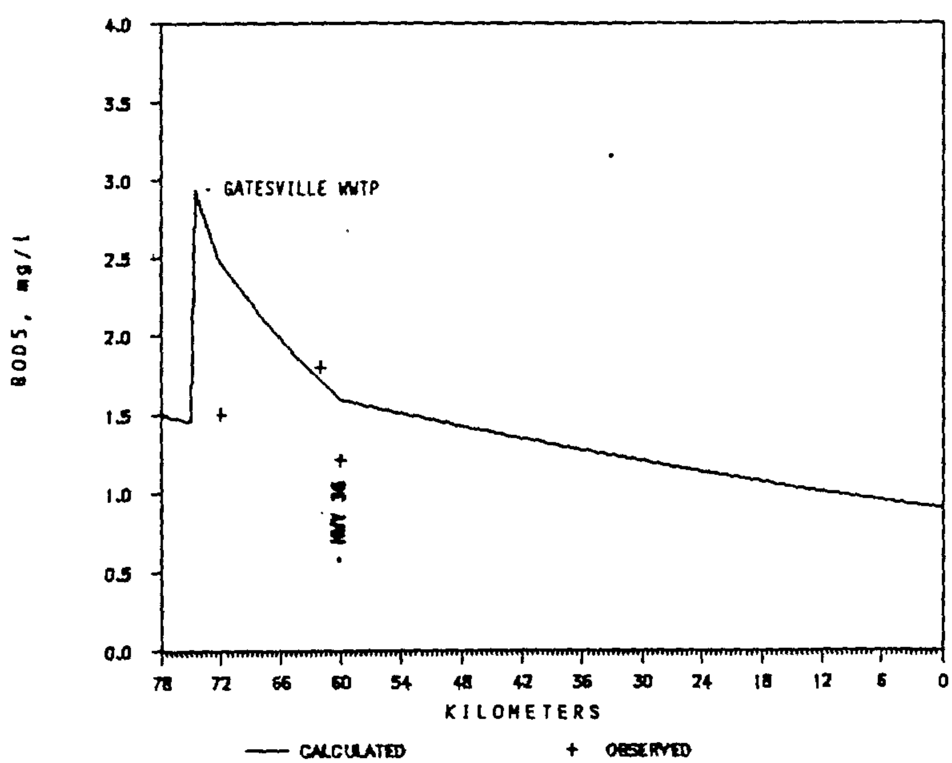


FIGURE A-1

CALIBRATION MODEL RESULTS AND OBSERVED VALUES
FROM THE OCTOBER 13, 1987 SAMPLING OF THE
LEON RIVER ABOVE LAKE BELTON

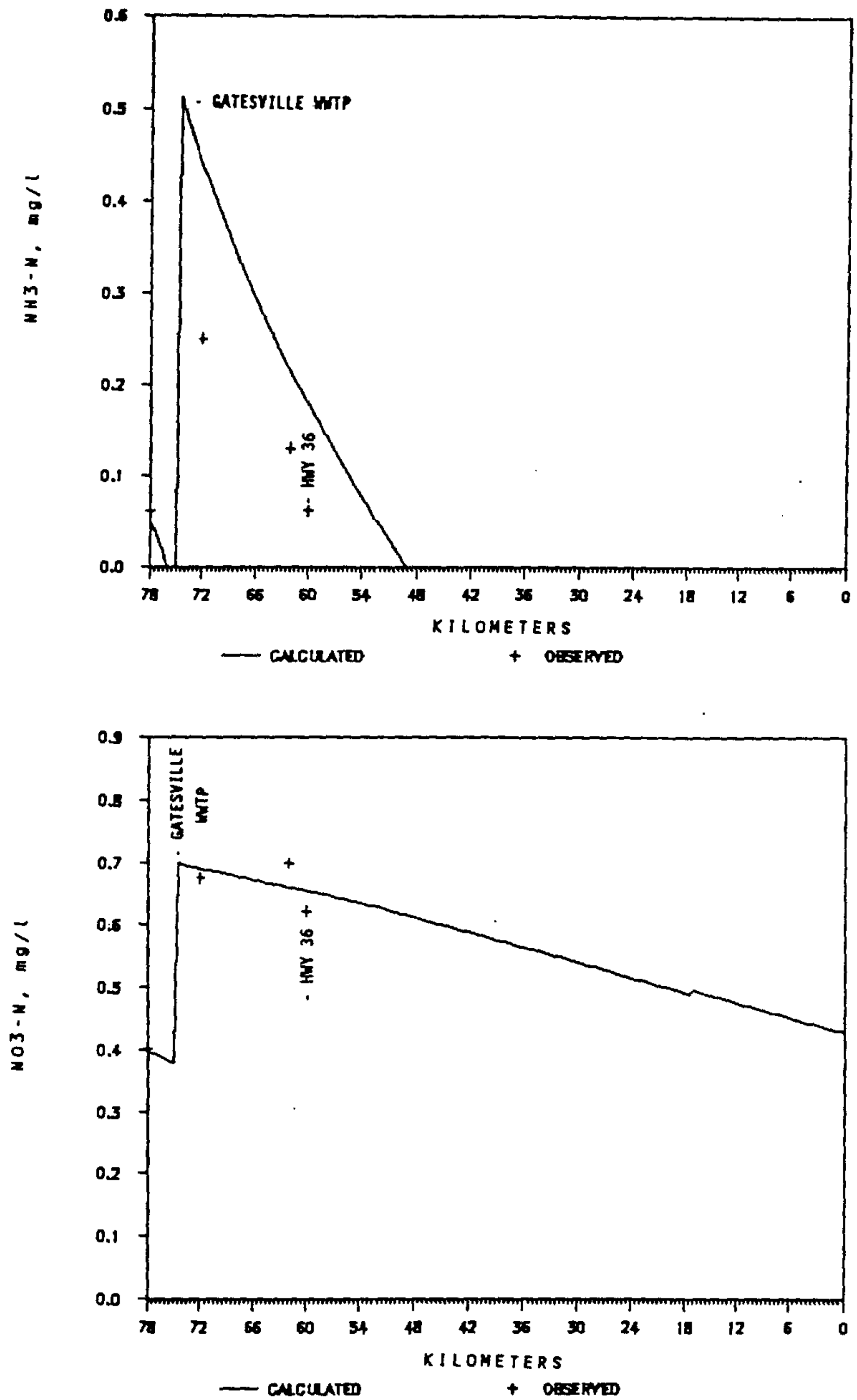


FIGURE A-1

CALIBRATION MODEL RESULTS AND OBSERVED VALUES FROM THE OCTOBER 13, 1987 SAMPLING OF THE LEON RIVER ABOVE LAKE BELTON (continued)

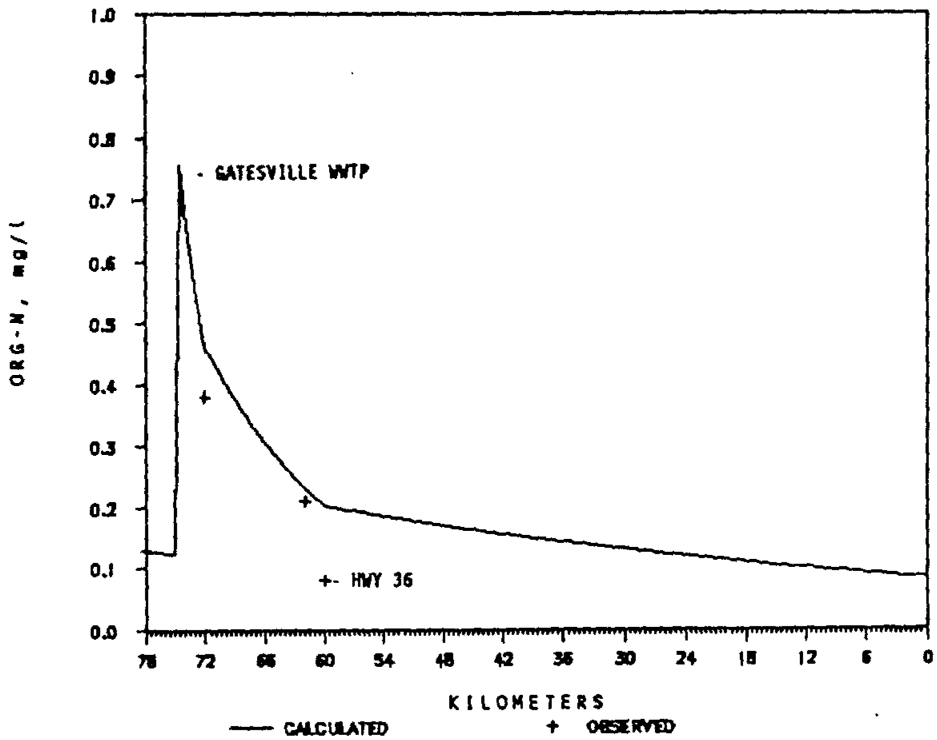


FIGURE A-1

CALIBRATION MODEL RESULTS AND OBSERVED VALUES FROM THE OCTOBER 13, 1987 SAMPLING OF THE LEON RIVER ABOVE LAKE BELTON
(continued)

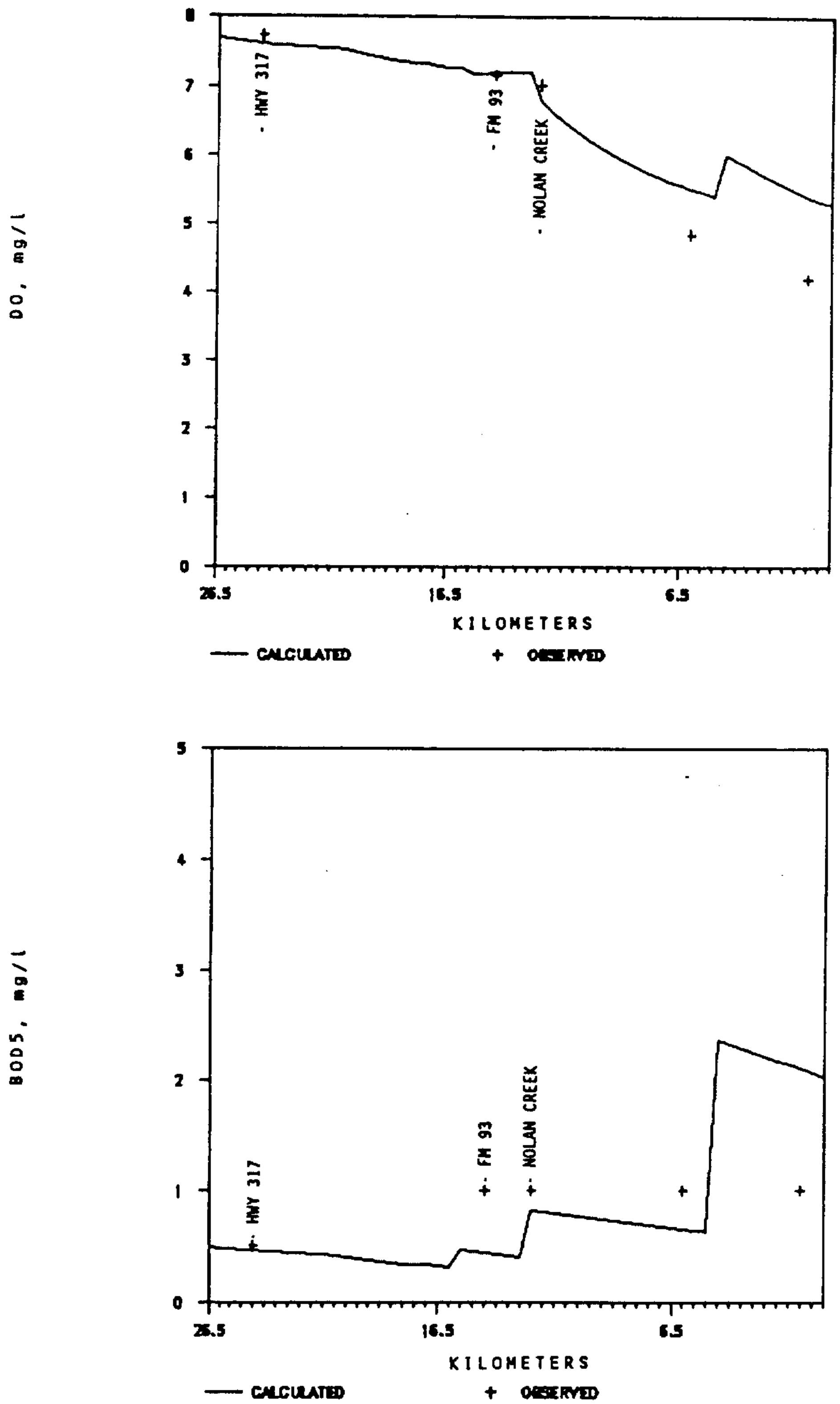


FIGURE A-2

CALIBRATION MODEL RESULTS AND OBSERVED VALUES
FROM THE MAY 19-20, 1987 SAMPLING OF THE
LEON RIVER BELOW LAKE BELTON

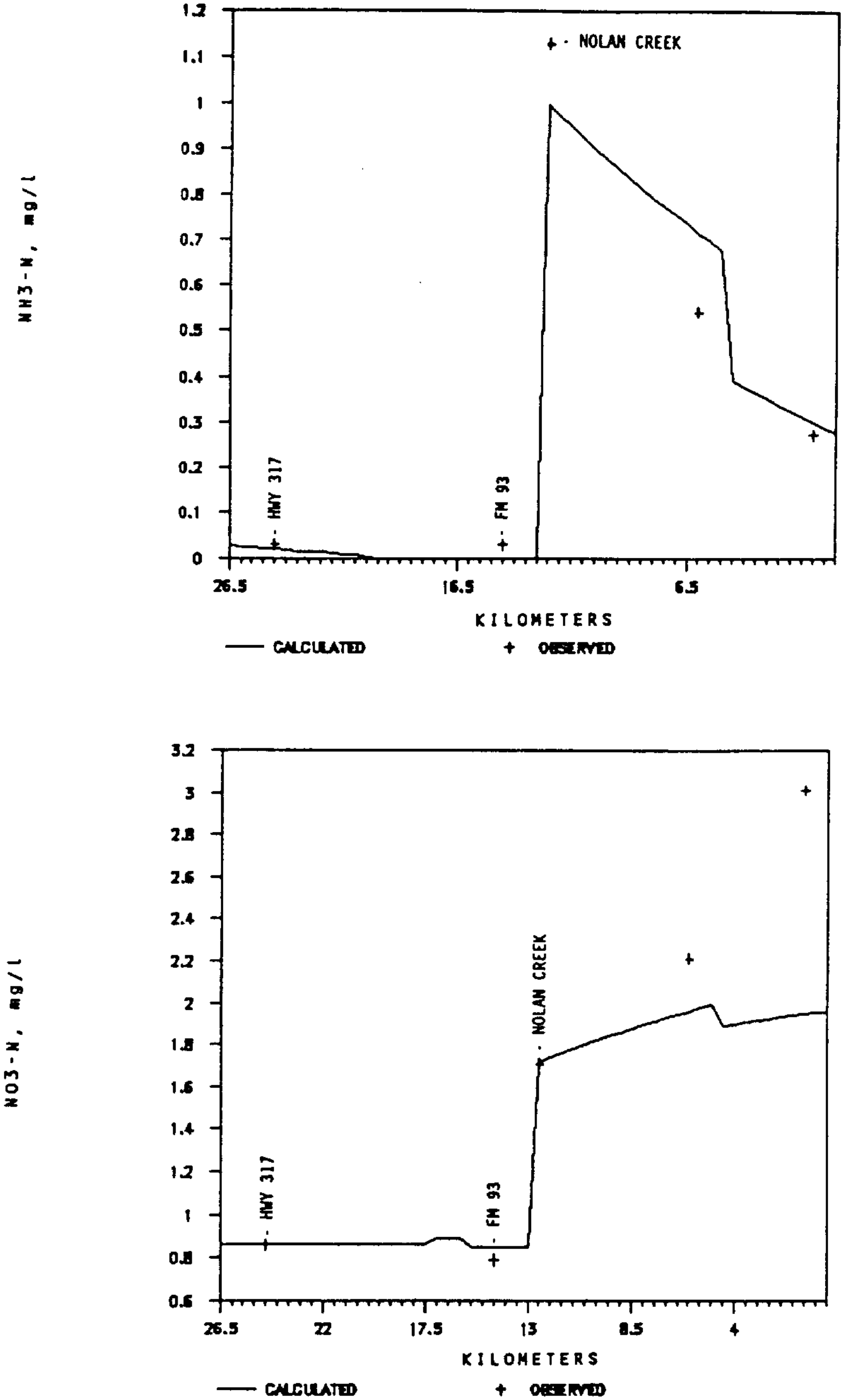


FIGURE A-2

CALIBRATION MODEL RESULTS AND OBSERVED VALUES FROM THE MAY 19-20, 1987 SAMPLING OF THE LEON RIVER BELOW LAKE BELTON (continued)

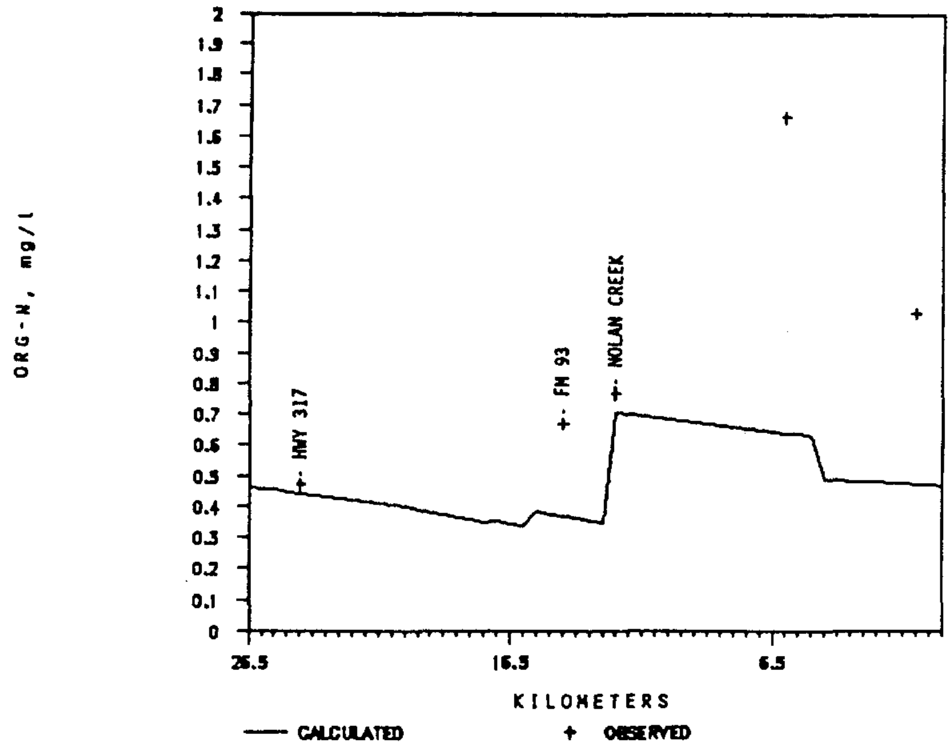
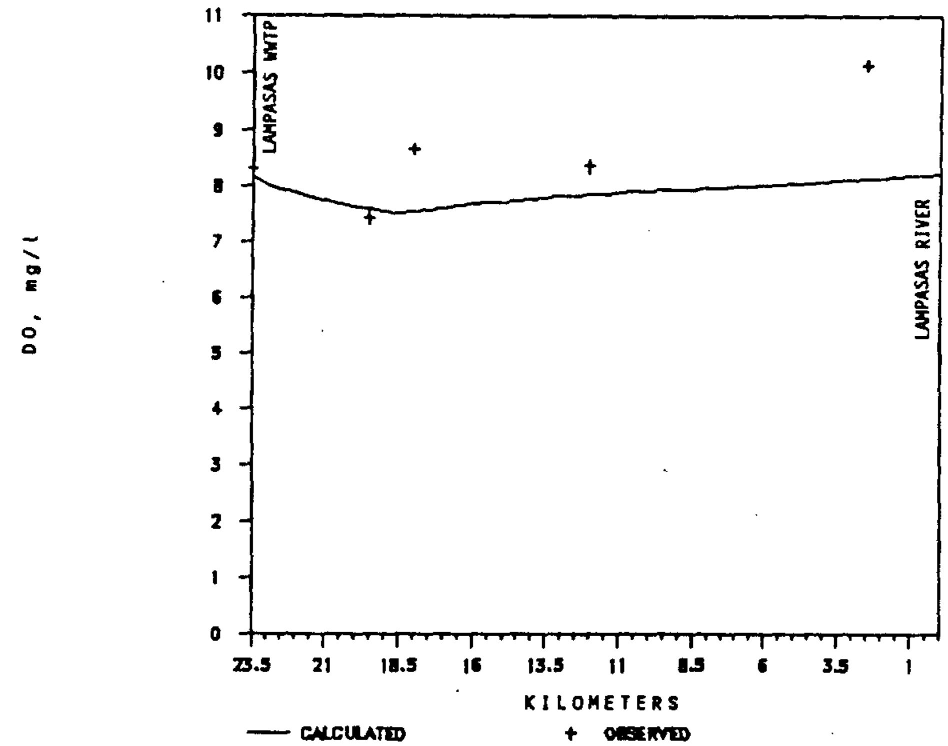


FIGURE A-2

CALIBRATION MODEL RESULTS AND OBSERVED VALUES
FROM THE MAY 19-20, 1987 SAMPLING OF THE
LEON RIVER BELOW LAKE BELTON
(continued)



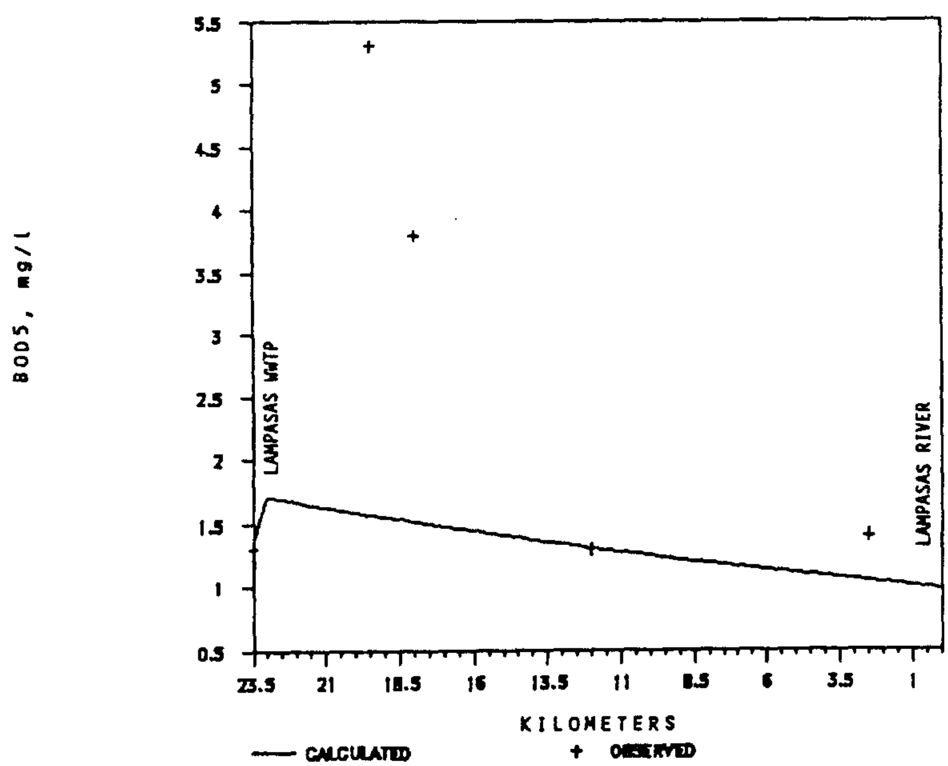
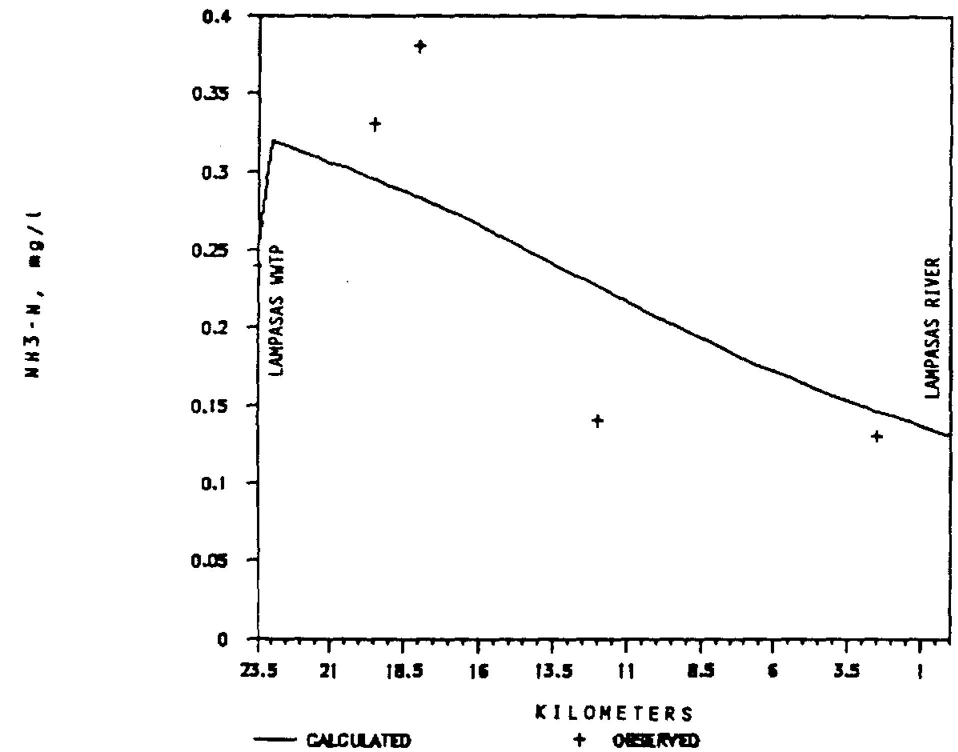


FIGURE A-3

CALIBRATION MODEL RESULTS AND OBSERVED VALUES FROM THE OCTOBER 20, 1987 SAMPLING OF SULPHUR CREEK



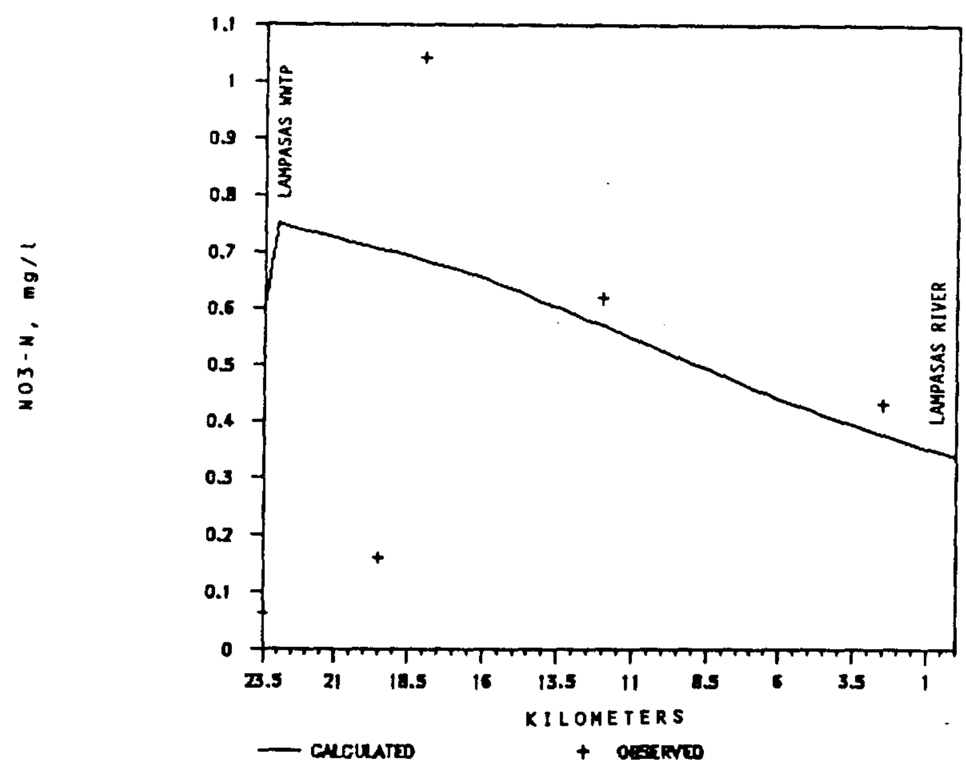


FIGURE A-3

CALIBRATION MODEL RESULTS AND OBSERVED VALUES FROM THE OCTOBER 20, 1987 SAMPLING OF SULPHUR CREEK (continued)

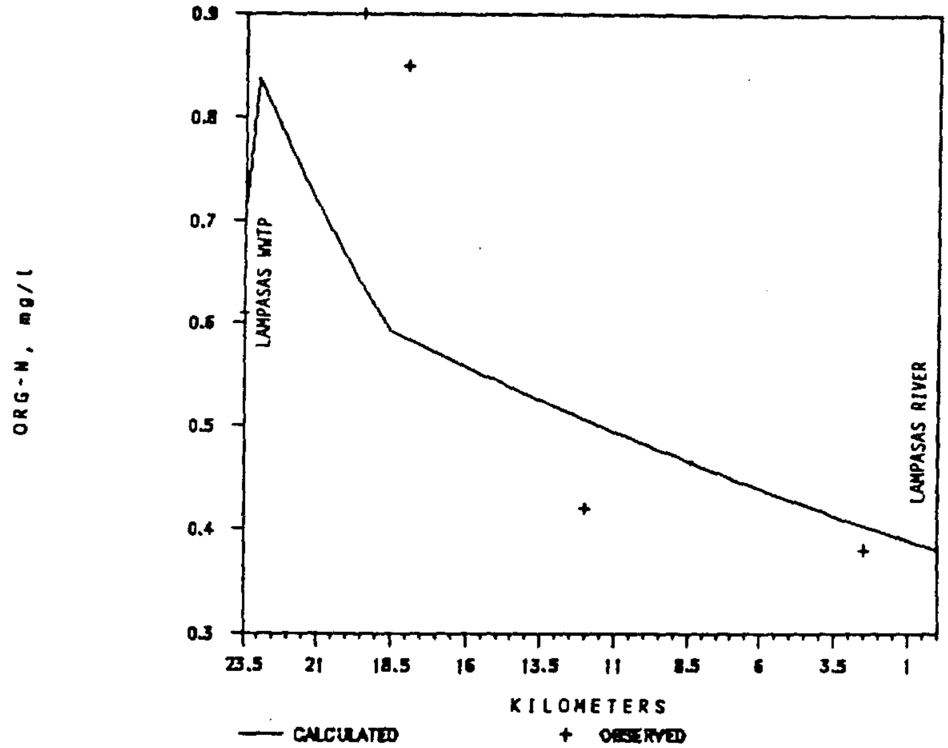


FIGURE A-3

CALIBRATION MODEL RESULTS AND OBSERVED VALUES
FROM THE OCTOBER 20, 1987 SAMPLING OF
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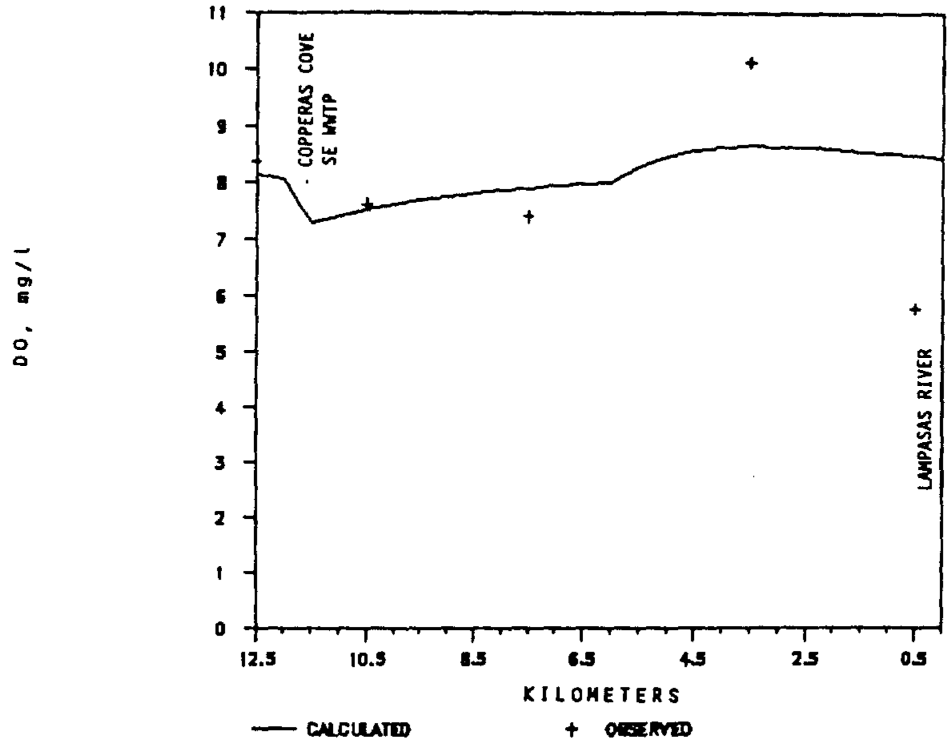


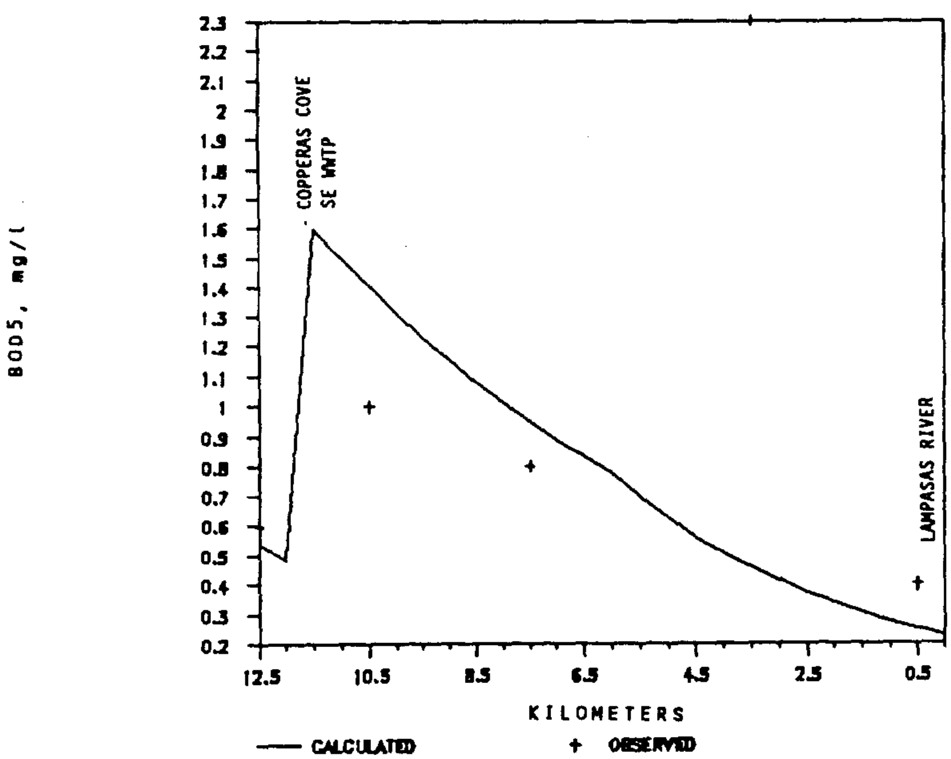
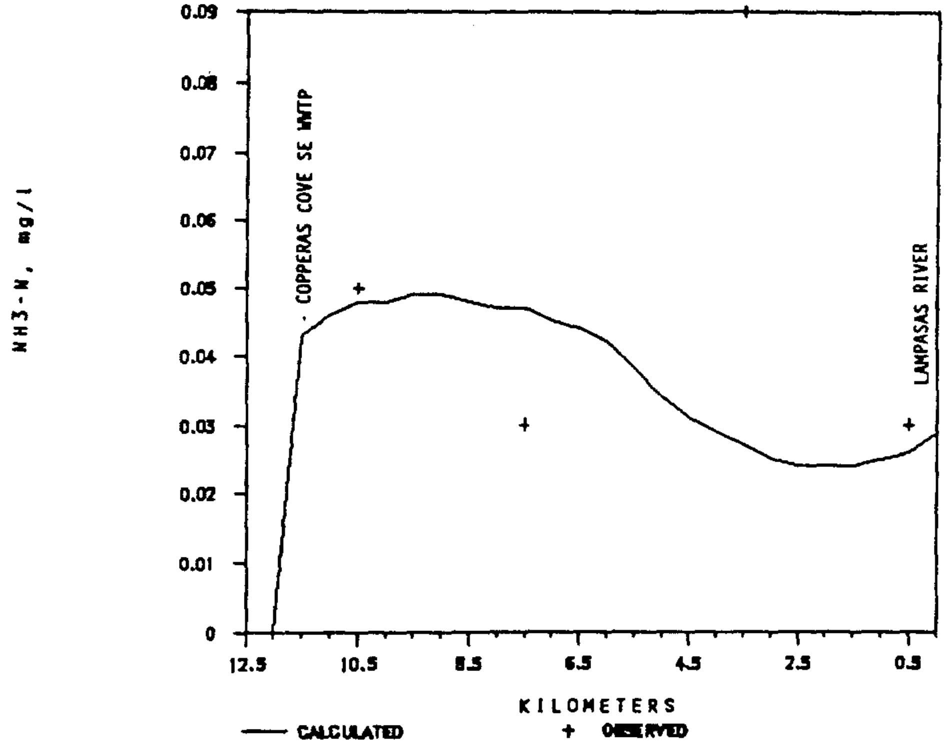


FIGURE A-4

CALIBRATION MODEL RESULTS AND OBSERVED VALUES FROM THE SEPTEMBER 10-11, 1987 SAMPLING OF CLEAR CREEK



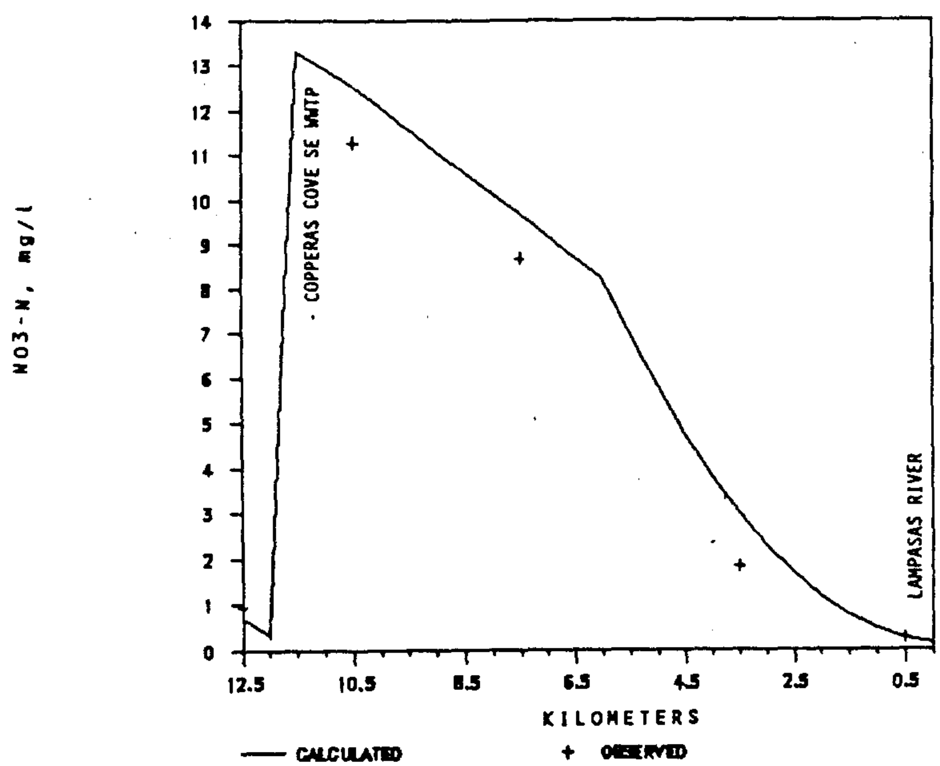


FIGURE A-4

CALIBRATION MODEL RESULTS AND OBSERVED VALUES FROM THE SEPTEMBER 10-11, 1987 SAMPLING OF CLEAR CREEK (continued)

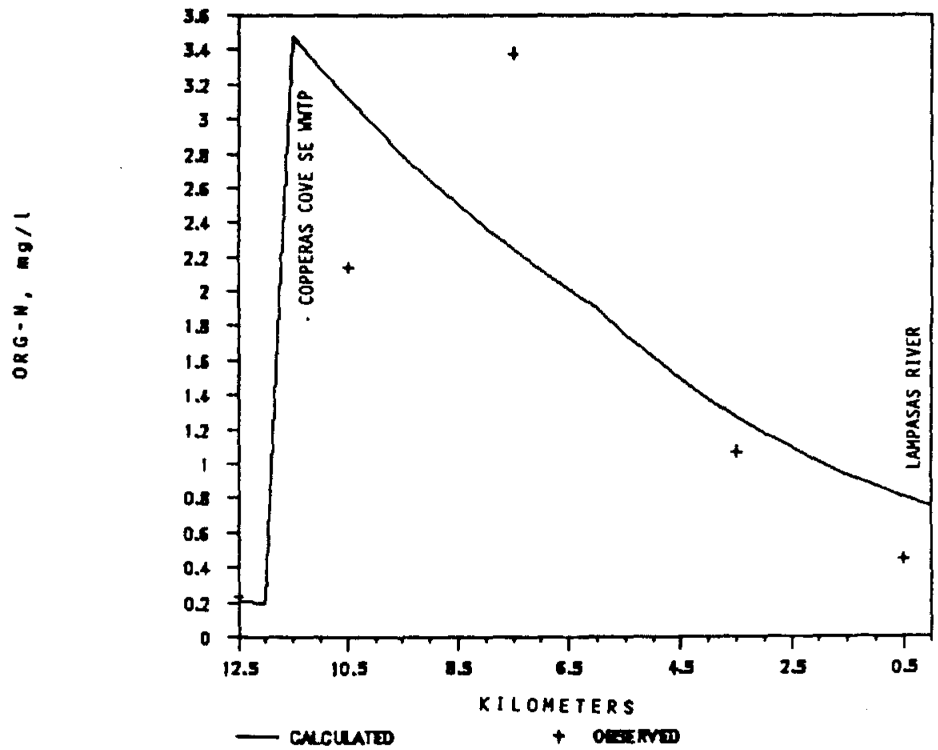
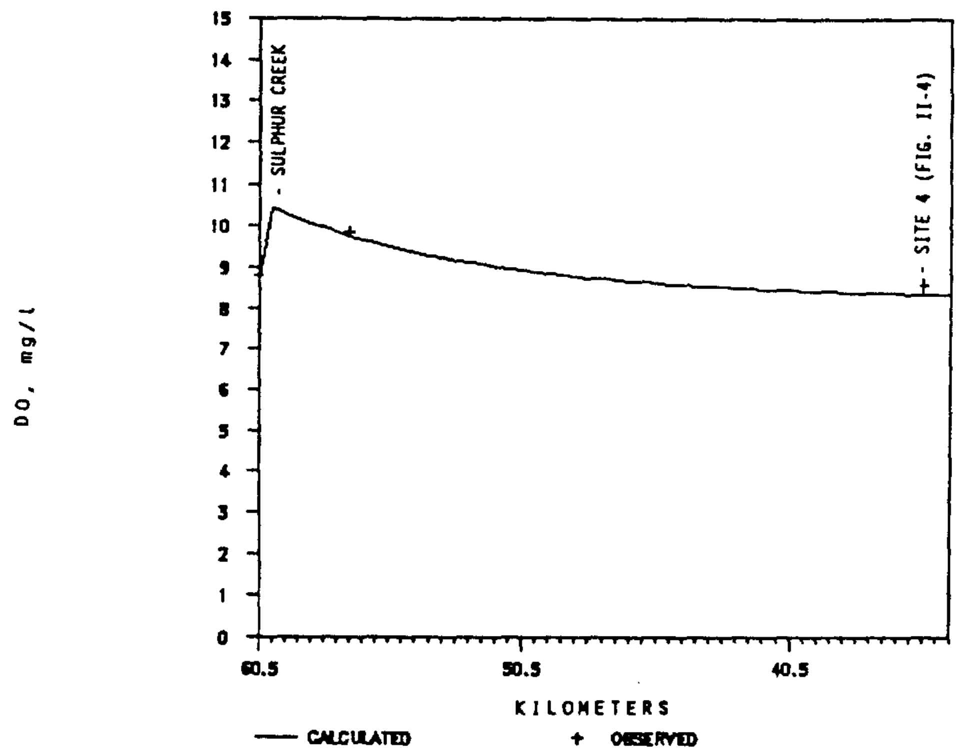


FIGURE A-4

CALIBRATION MODEL RESULTS AND OBSERVED VALUES
FROM THE SEPTEMBER 10-11, 1987 SAMPLING OF
CLEAR CREEK
(continued)



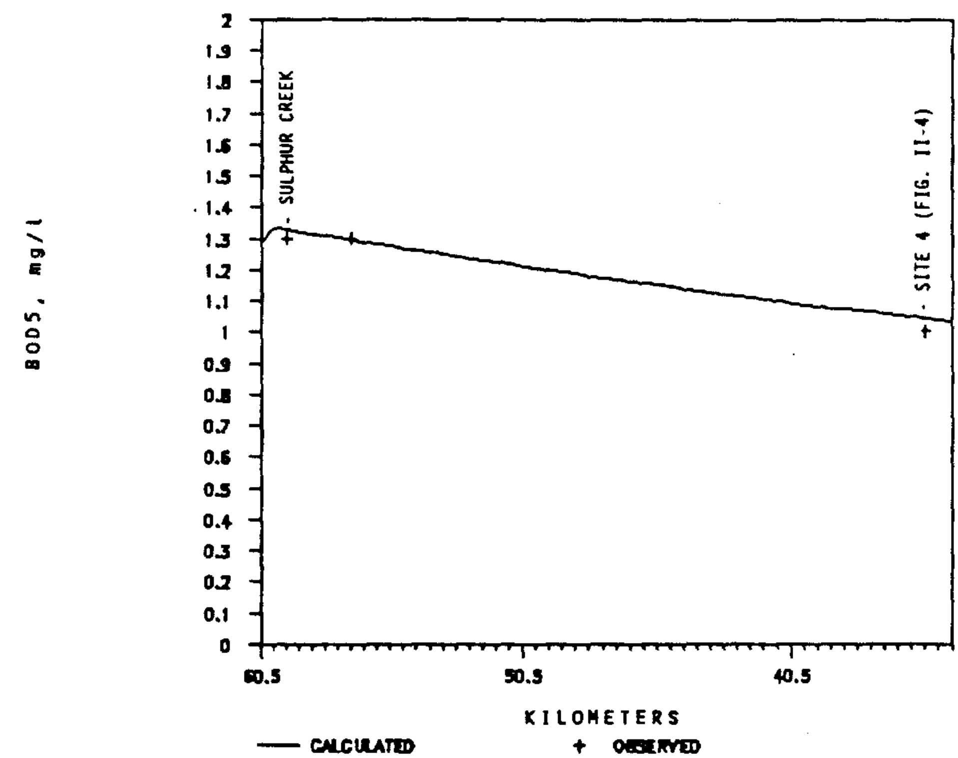
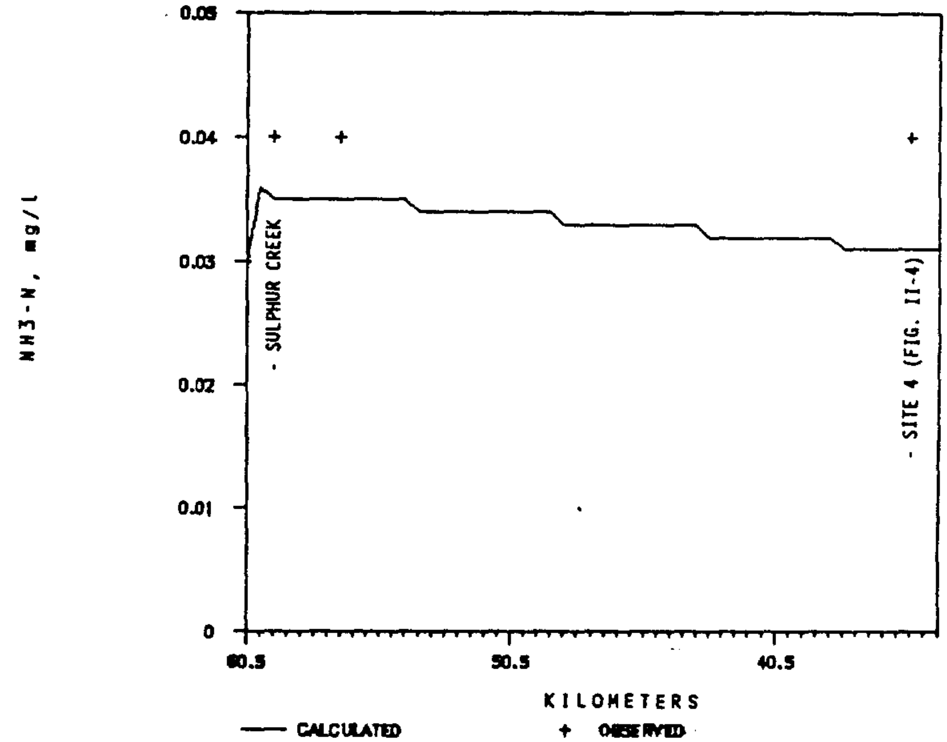


FIGURE A-5

CALIBRATION MODEL RESULTS AND OBSERVED VALUES FROM THE OCTOBER 16, 1987 SAMPLING OF THE LAMPASAS RIVER ABOVE LAKE STILLHOUSE HOLLOW



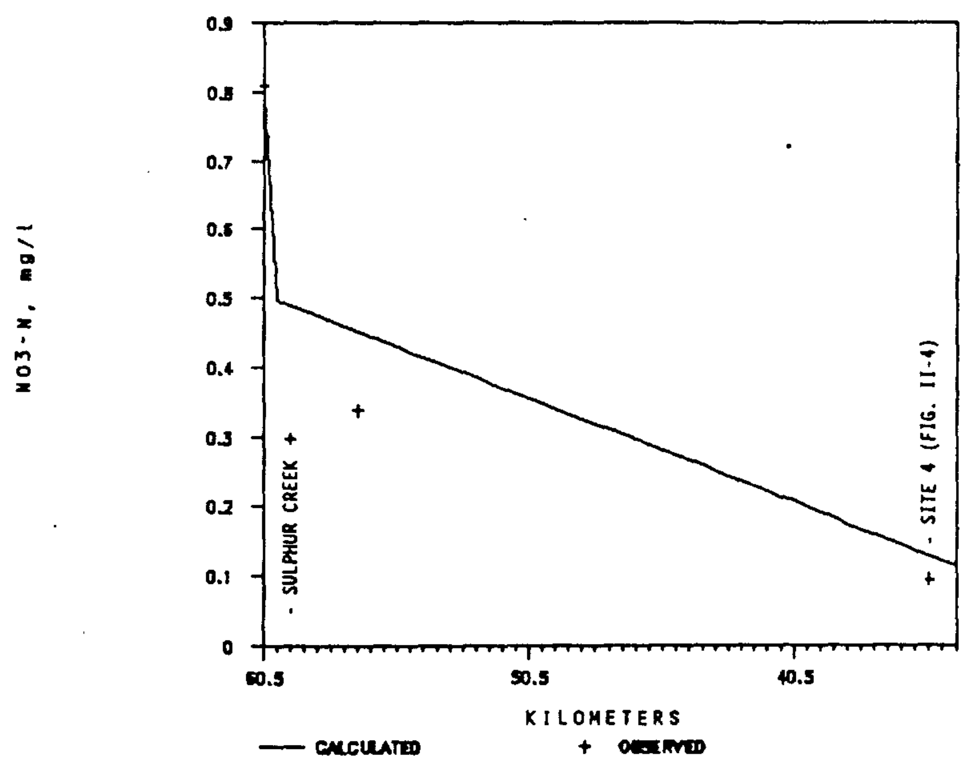


FIGURE A-5

CALIBRATION MODEL RESULTS AND OBSERVED VALUES
FROM THE OCTOBER 16, 1987 SAMPLING OF
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(continued)

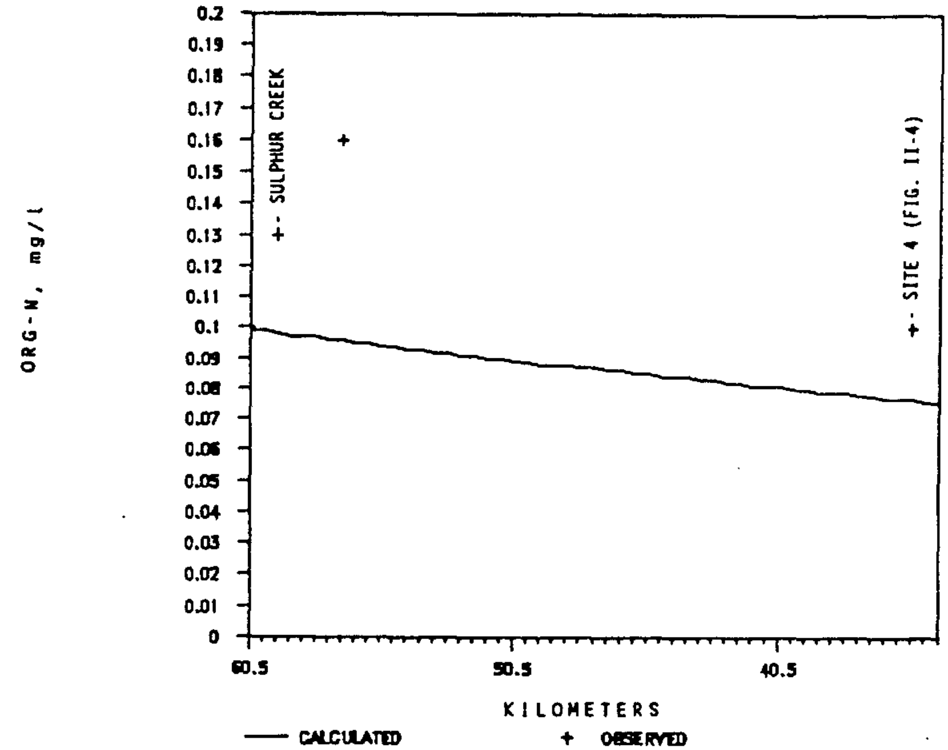


FIGURE A-5

CALIBRATION MODEL RESULTS AND OBSERVED VALUES FROM THE OCTOBER 16, 1987 SAMPLING OF THE LAMPASAS RIVER ABOVE LAKE STILLHOUSE HOLLOW (continued)

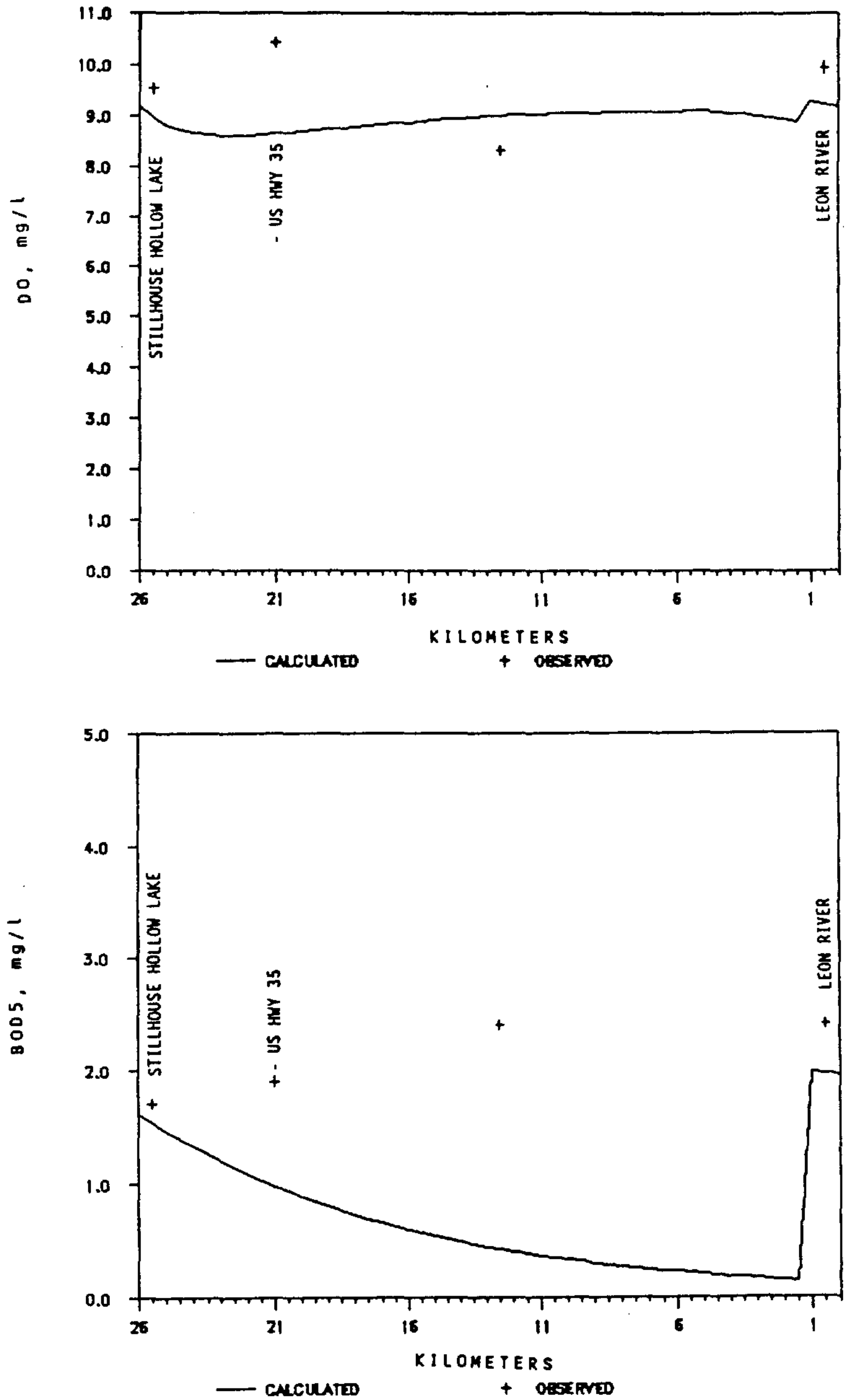
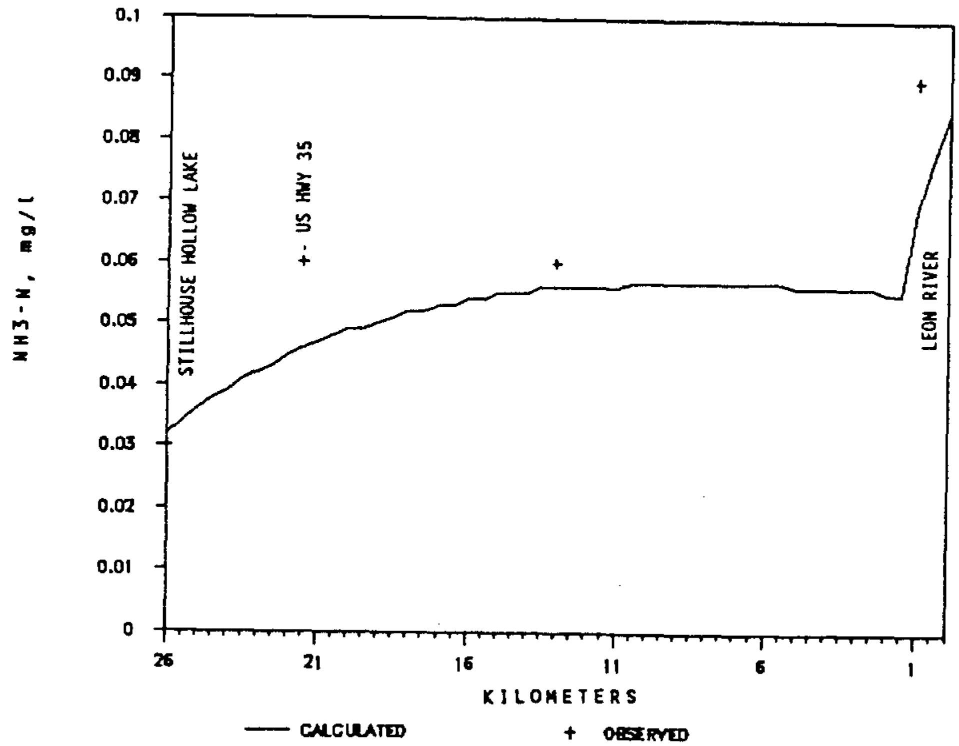


FIGURE A-6

CALIBRATION MODEL RESULTS AND OBSERVED VALUES
FROM THE OCTOBER 14, 1987 SAMPLING OF
THE LAMPASAS RIVER BELOW LAKE STILLHOUSE HOLLOW



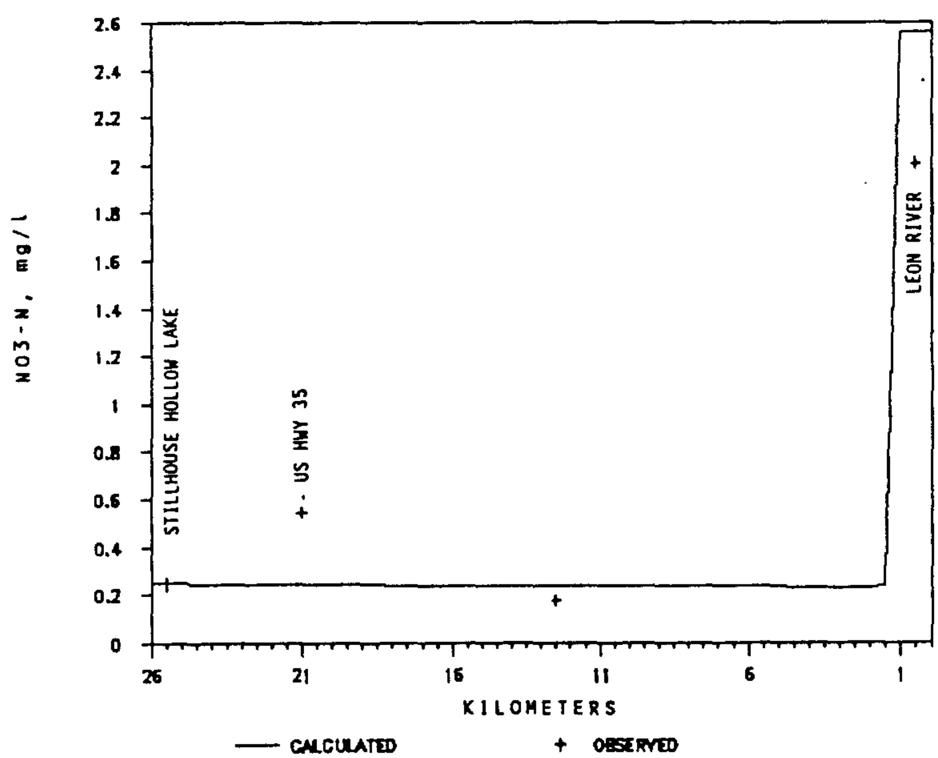


FIGURE A-6

CALIBRATION MODEL RESULTS AND OBSERVED VALUES FROM THE OCTOBER 14, 1987 SAMPLING OF THE LAMPASAS RIVER BELOW LAKE STILLHOUSE HOLLOW (continued)

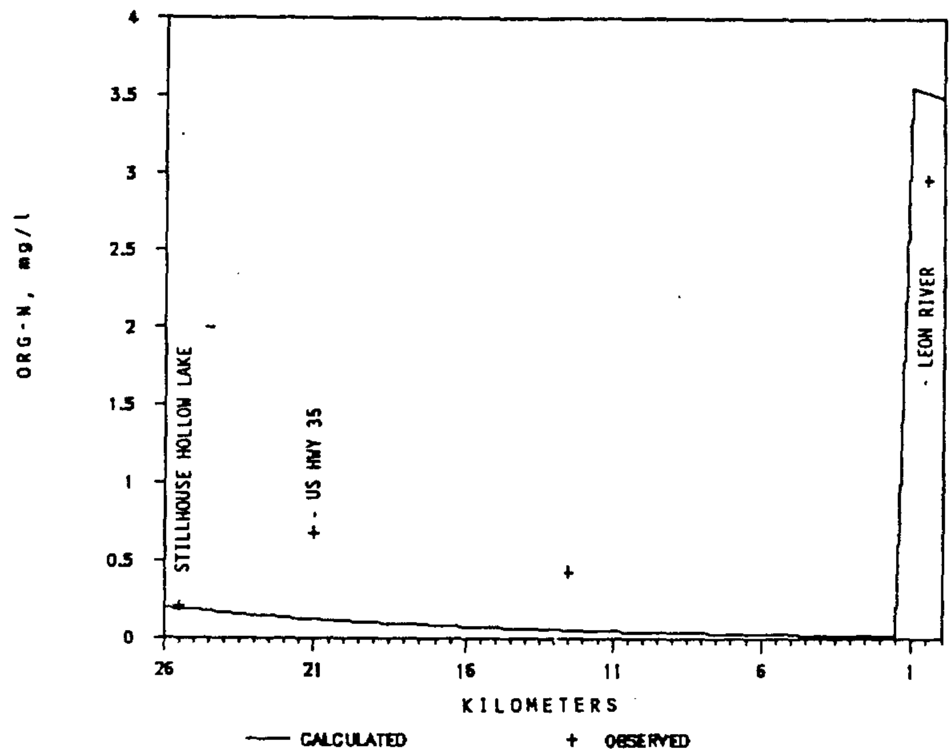


FIGURE A-6

CALIBRATION MODEL RESULTS AND OBSERVED VALUES
FROM THE OCTOBER 14, 1987 SAMPLING OF
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(continued)

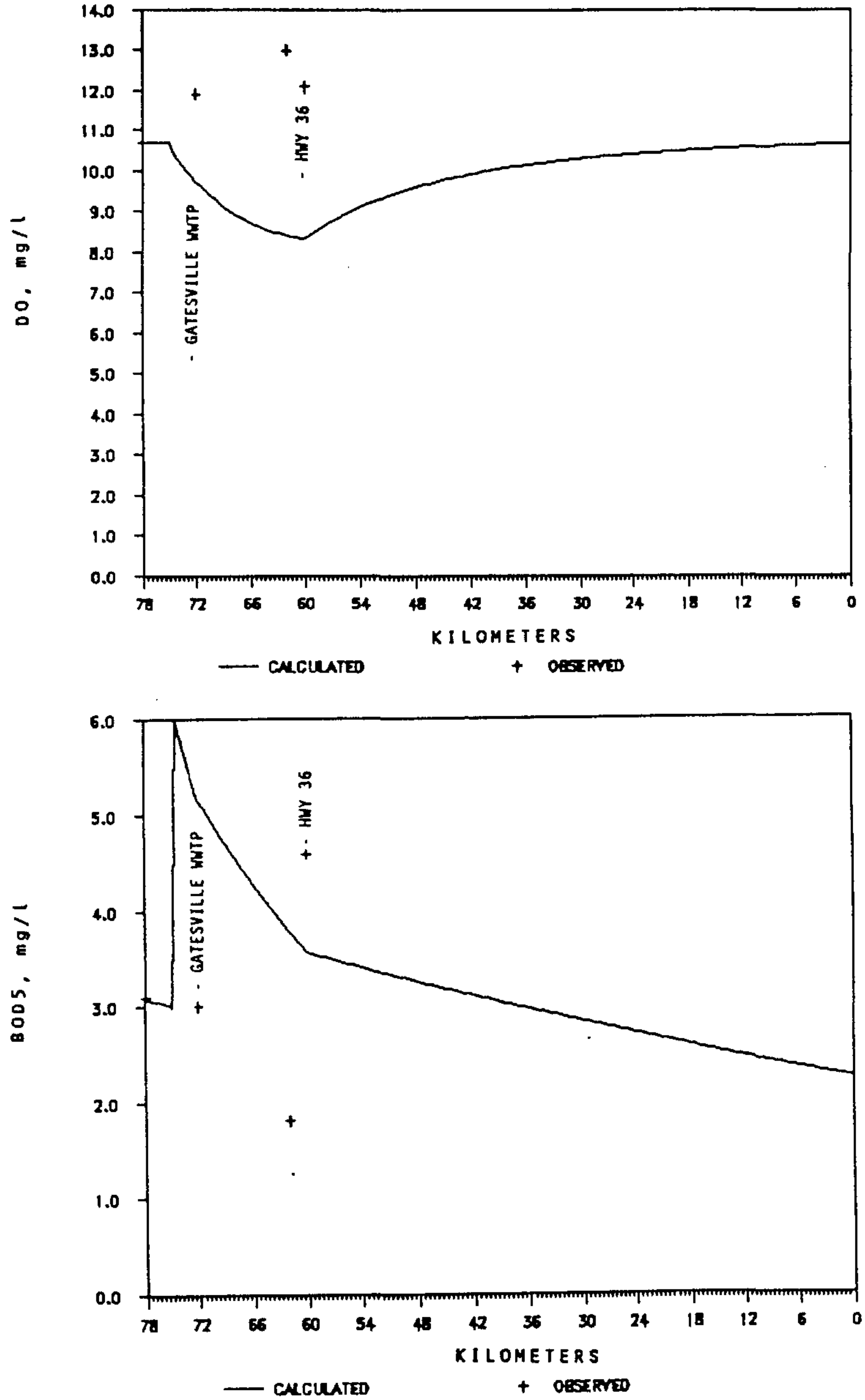
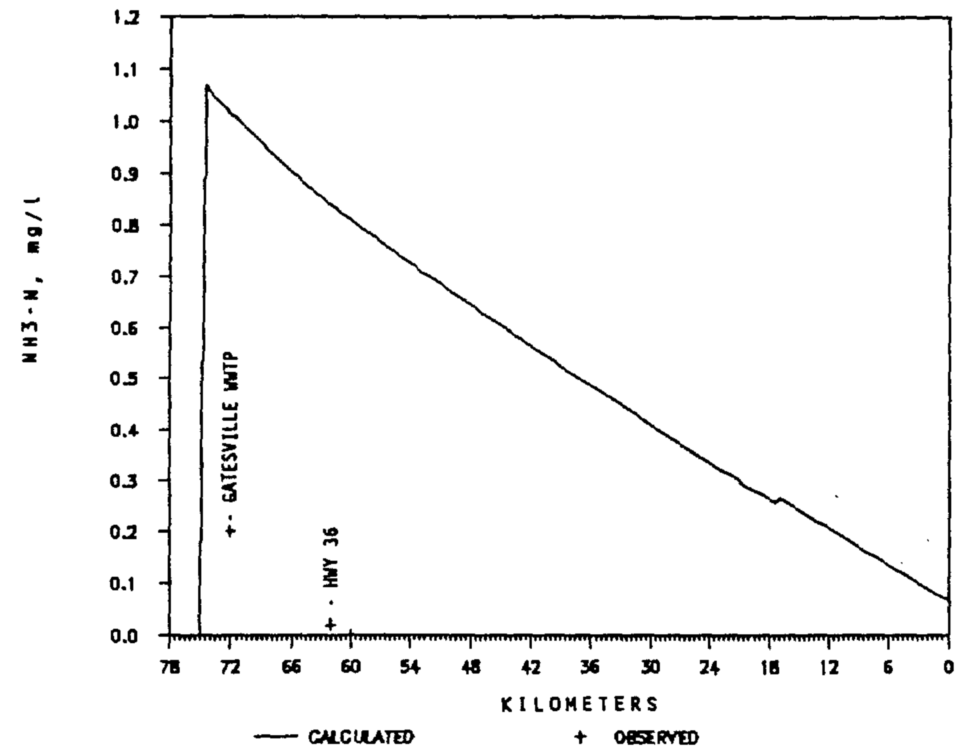


FIGURE A-7

VERIFICATION MODEL RESULTS AND OBSERVED VALUES FROM THE FEBRUARY 16, 1988 SAMPLING OF THE LEON RIVER ABOVE LAKE BELTON



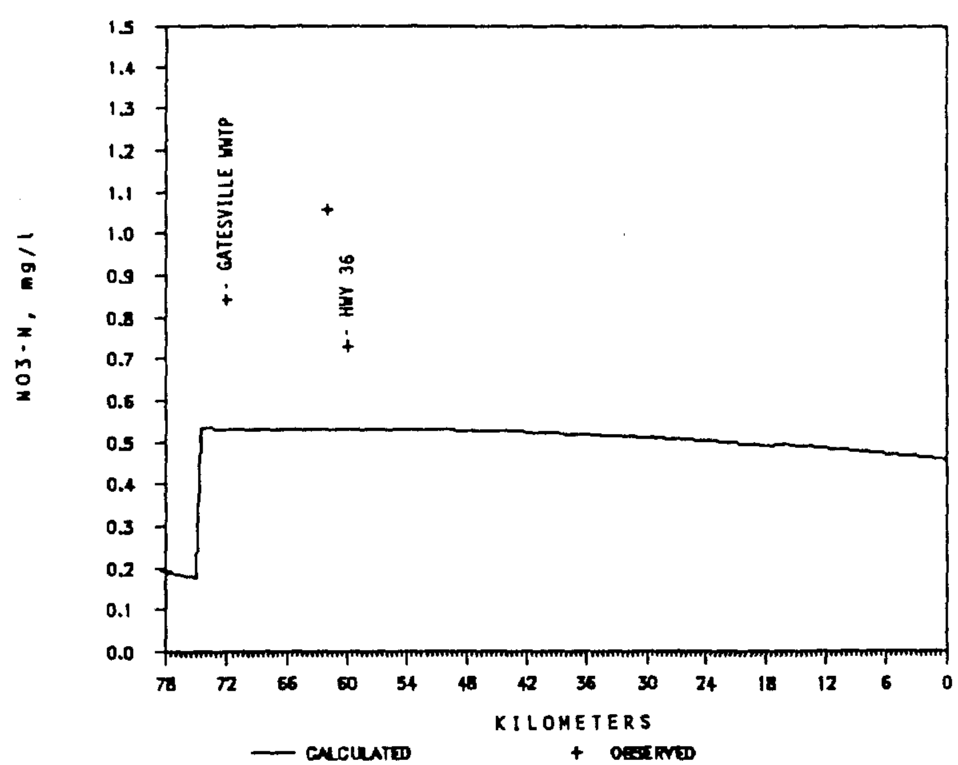


FIGURE A-7

VERIFICATION MODEL RESULTS AND OBSERVED VALUES FROM THE FEBRUARY 16, 1988 SAMPLING OF THE LEON RIVER ABOVE LAKE BELTON (continued)

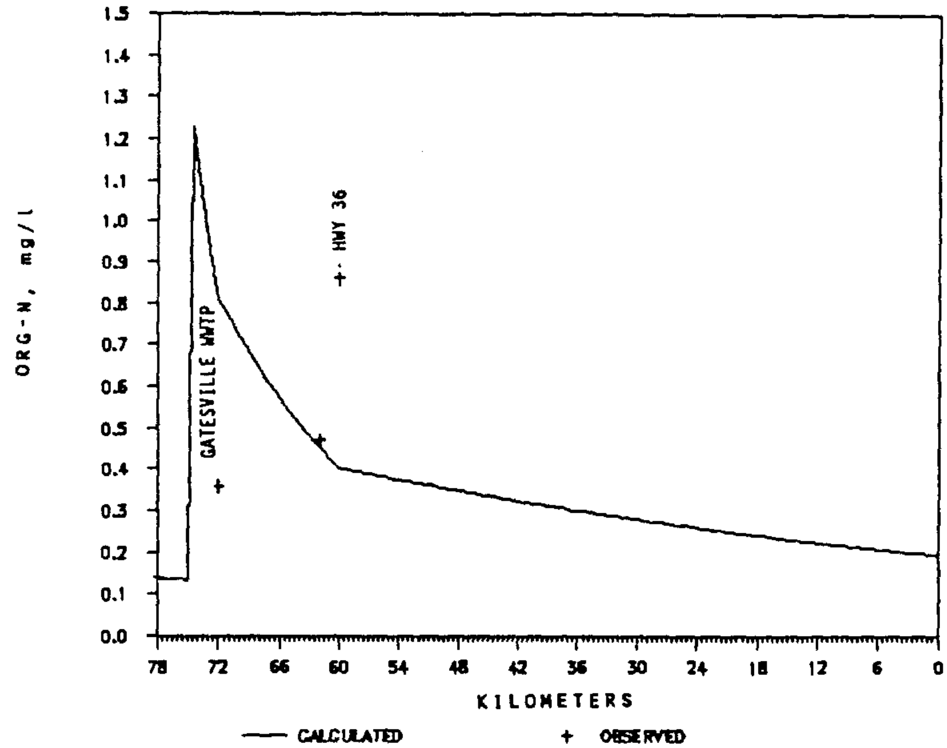


FIGURE A-7

VERIFICATION MODEL RESULTS AND OBSERVED VALUES
FROM THE FEBRUARY 16, 1988 SAMPLING OF
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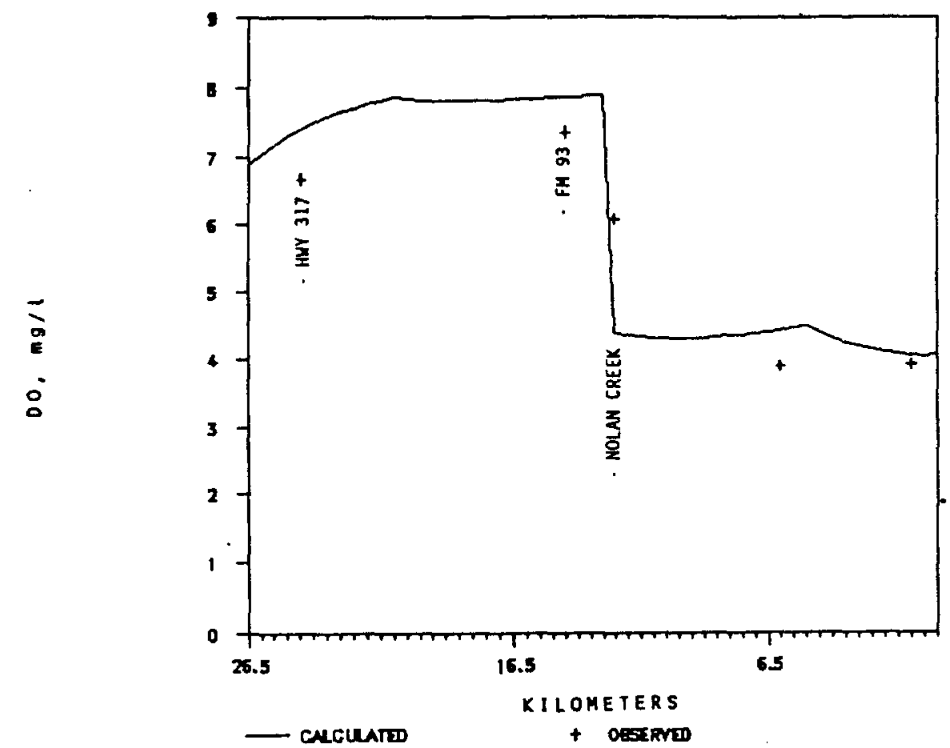
(continued)



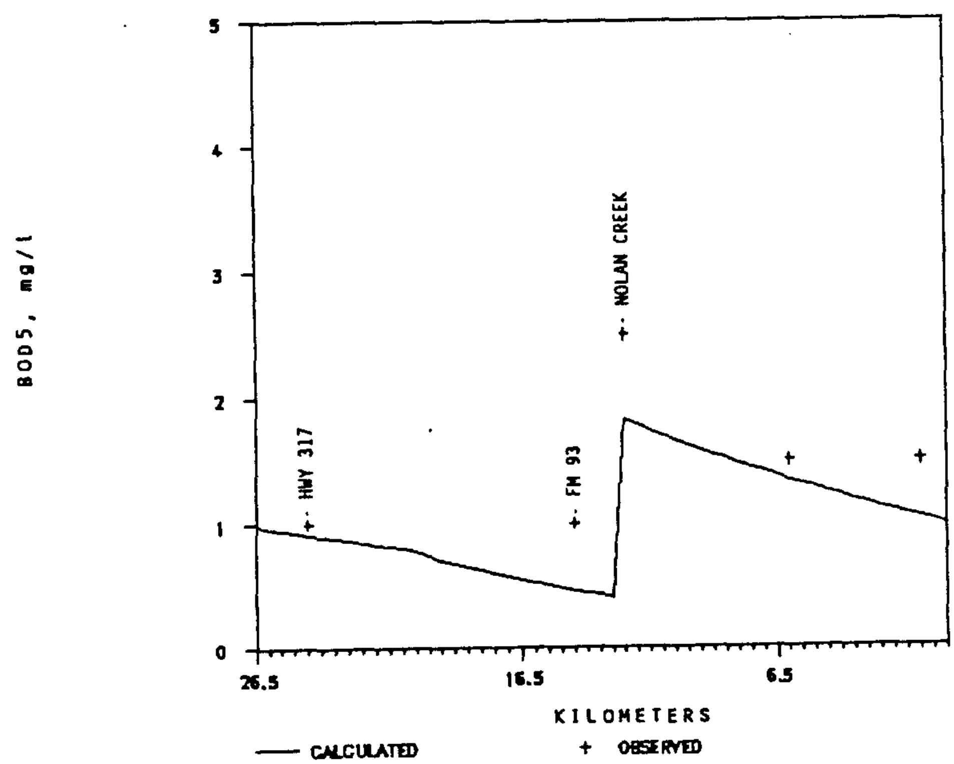


FIGURE A-8

VERIFICATION MODEL RESULTS AND OBSERVED VALUES FROM THE NOVEMBER 3-4, 1987 SAMPLING OF THE LEON RIVER BELOW LAKE BELTON

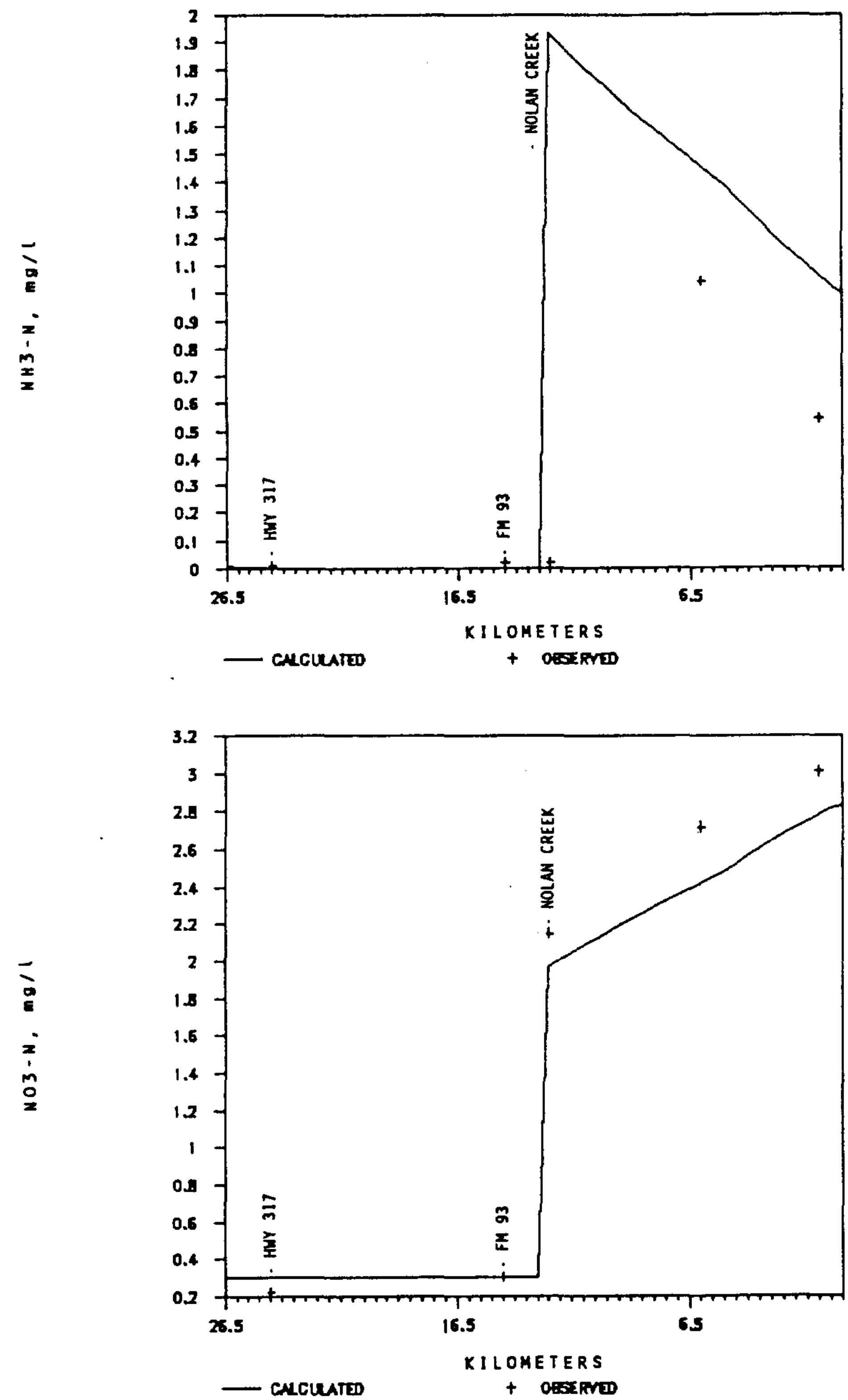


FIGURE A-8

VERIFICATION MODEL RESULTS AND OBSERVED VALUES FROM THE NOVEMBER 3-4, 1987 SAMPLING OF THE LEON RIVER BELOW LAKE BELTON (continued)

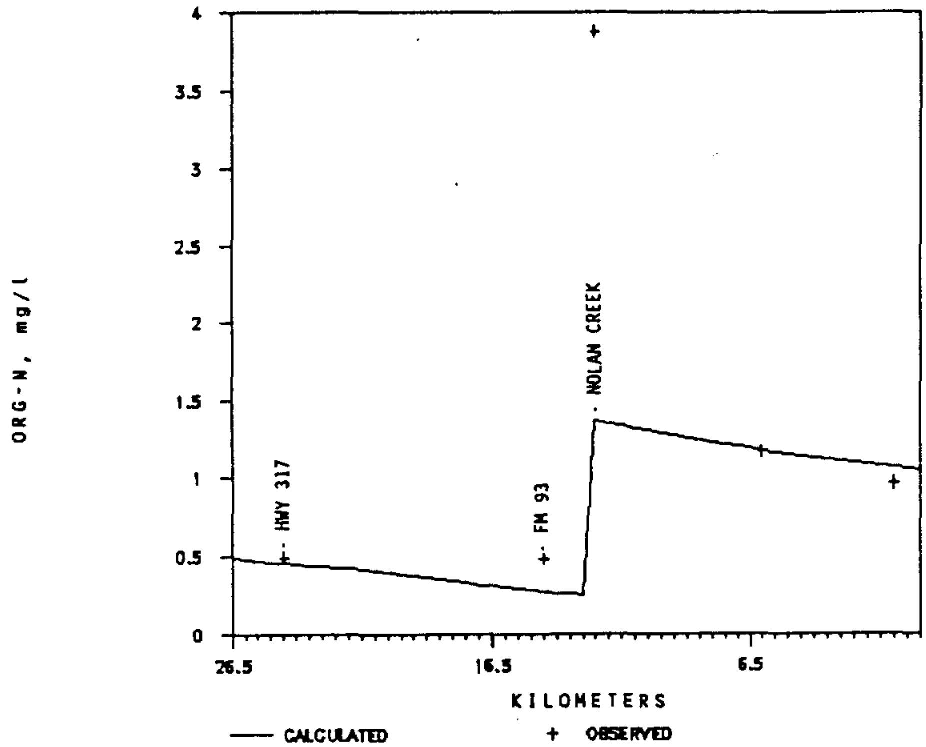


FIGURE A-8

VERIFICATION MODEL RESULTS AND OBSERVED VALUES
FROM THE NOVEMBER 3-4, 1987 SAMPLING OF THE
LEON RIVER BELOW LAKE BELTON
(continued)

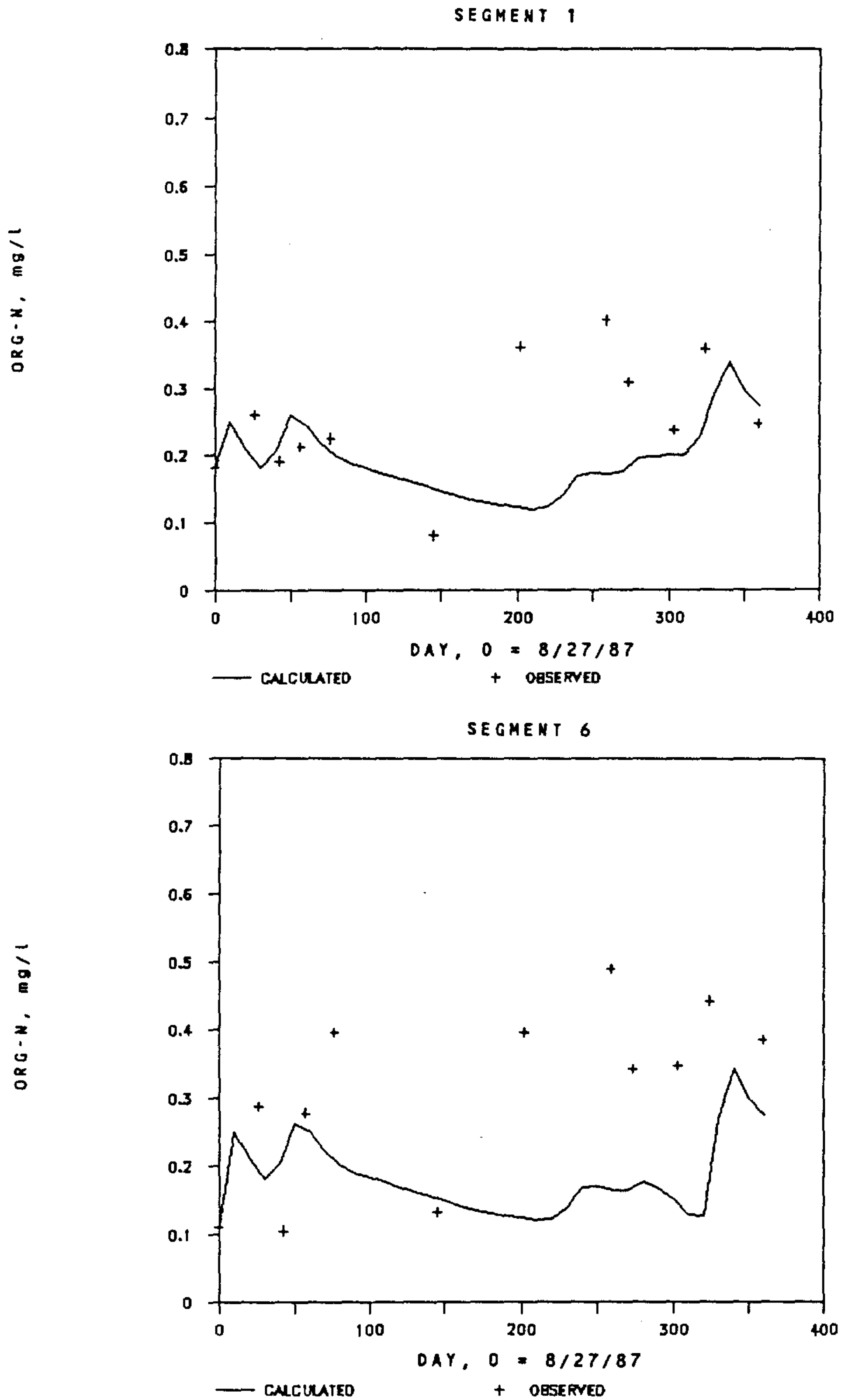
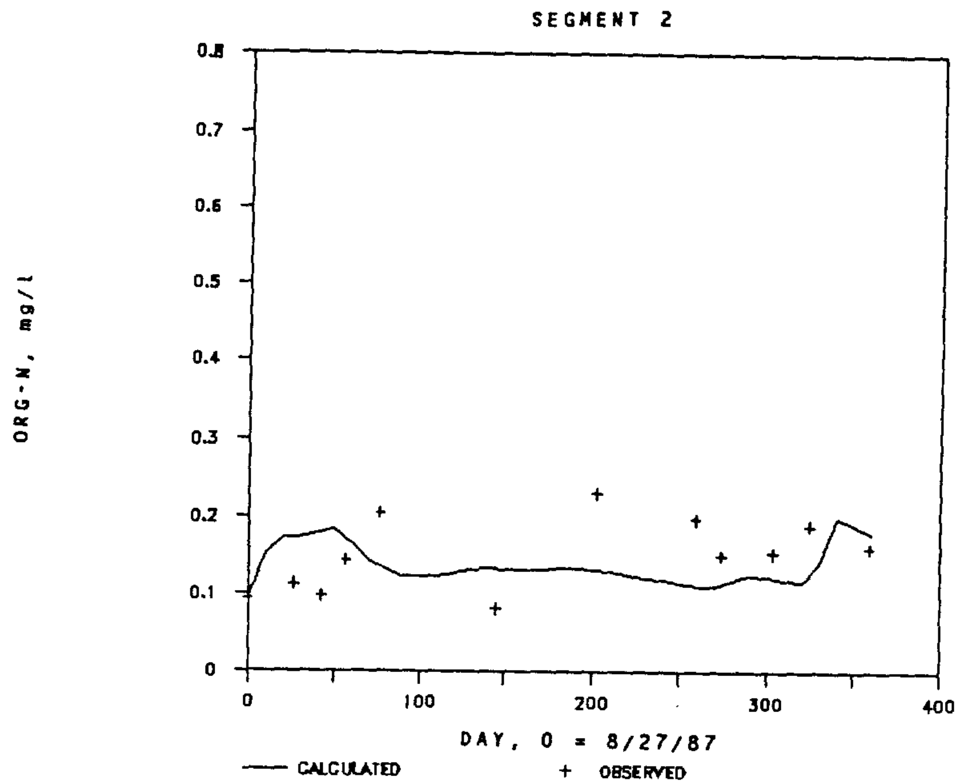


FIGURE A-9

Calibration Results and Observed Values for Organic Nitrogen in Lake Belton



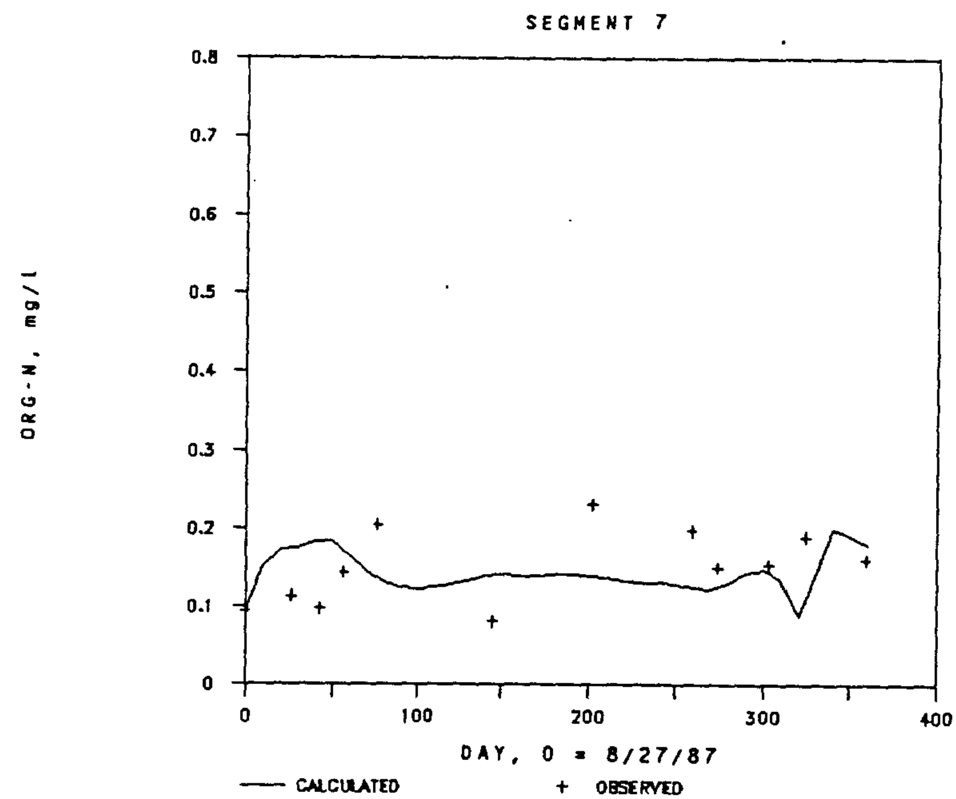


FIGURE A-9

Calibration Results and Observed Values for Organic Nitrogen in Lake Belton (continued)

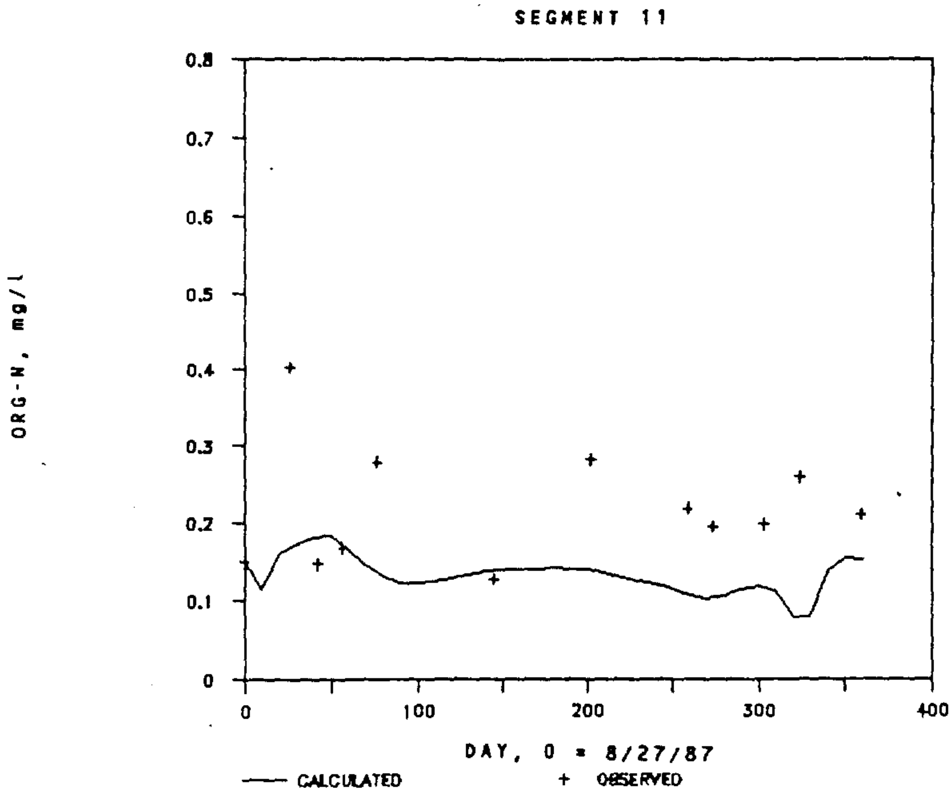


FIGURE A-9

Calibration Results and Observed Values for
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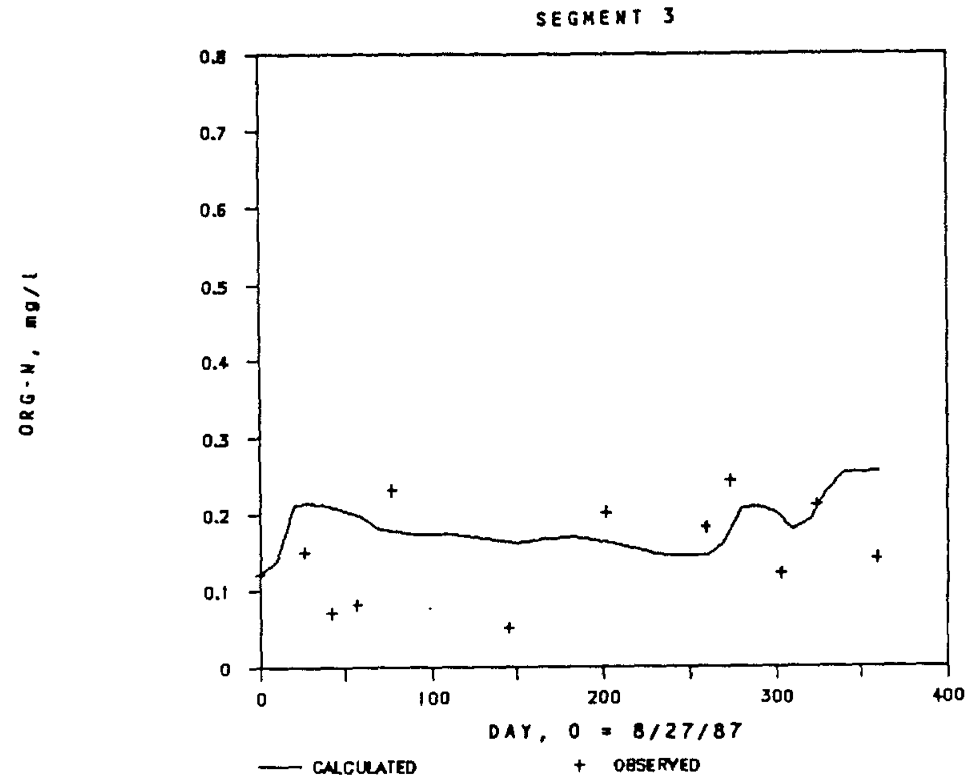
(continued)



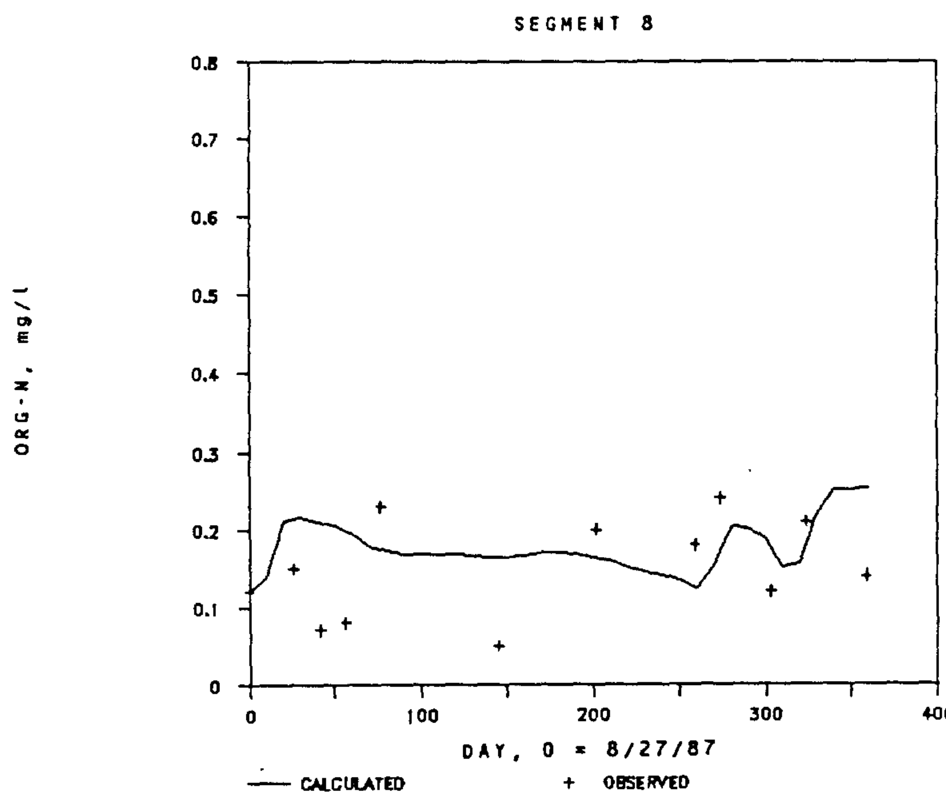


FIGURE A-9

Calibration Results and Observed Values for Organic Nitrogen in Lake Belton (continued)

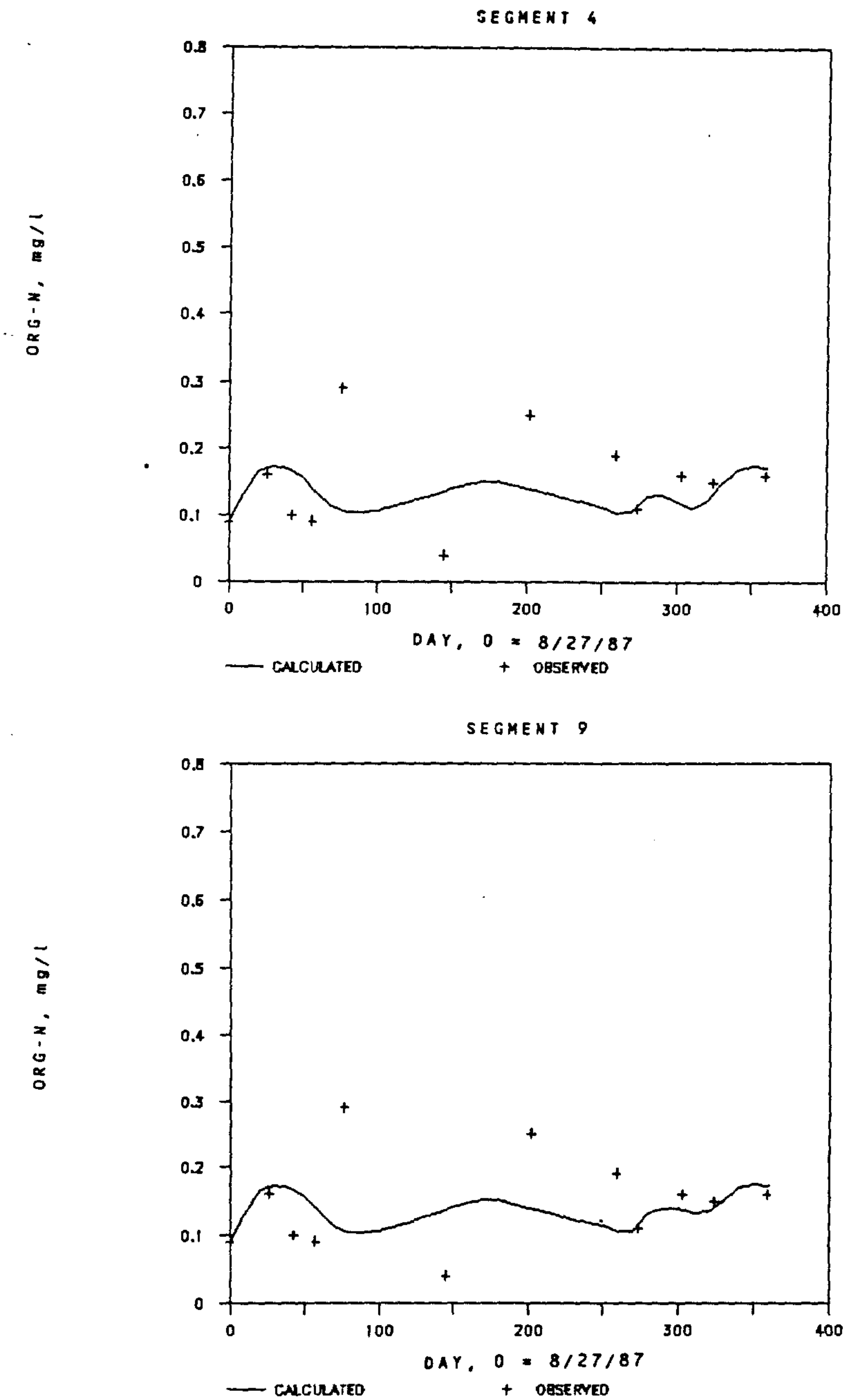


FIGURE A-9

Calibration Results and Observed Values for Organic Nitrogen in Lake Belton (continued)

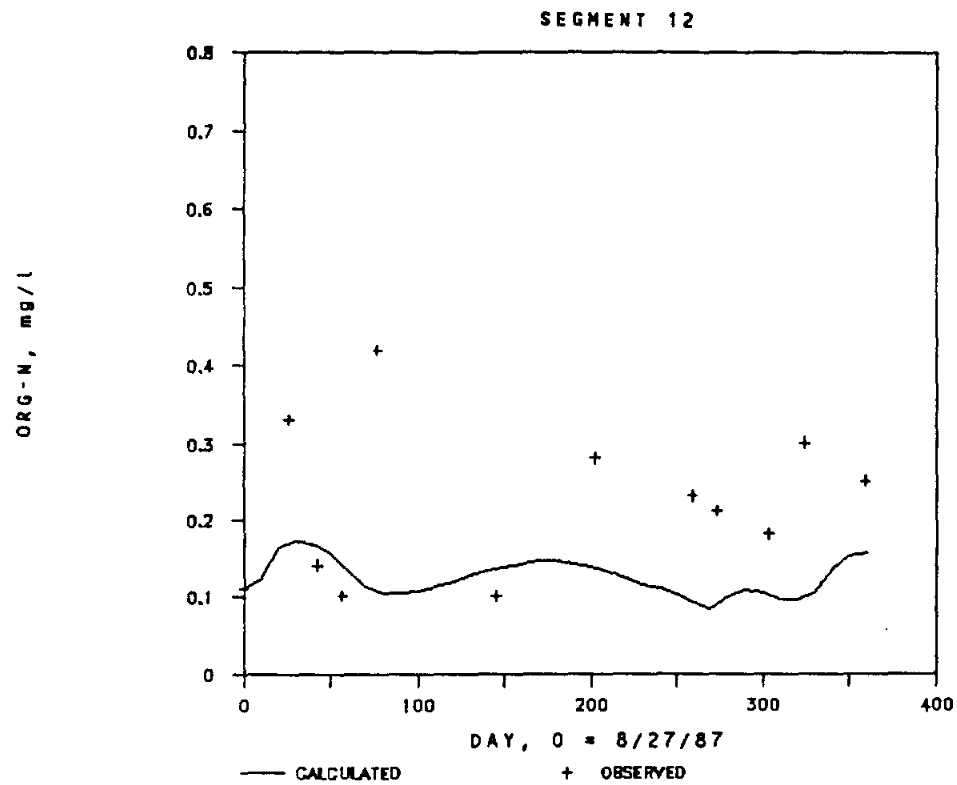
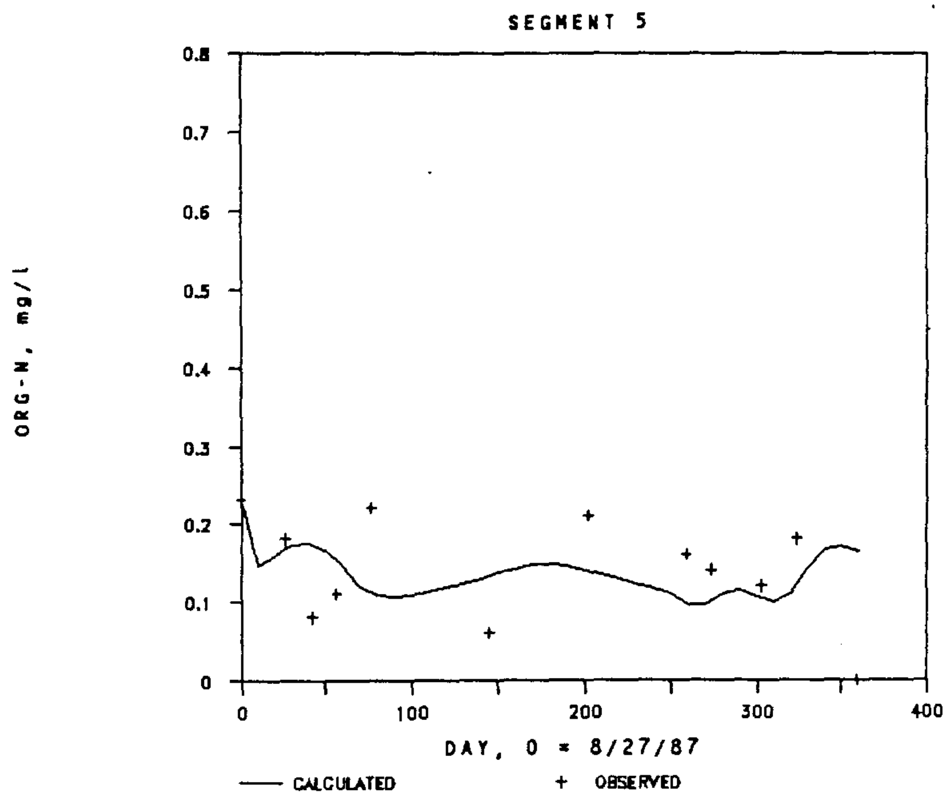


FIGURE A-9

Calibration Results and Observed Values for Organic Nitrogen in Lake Belton (continued)



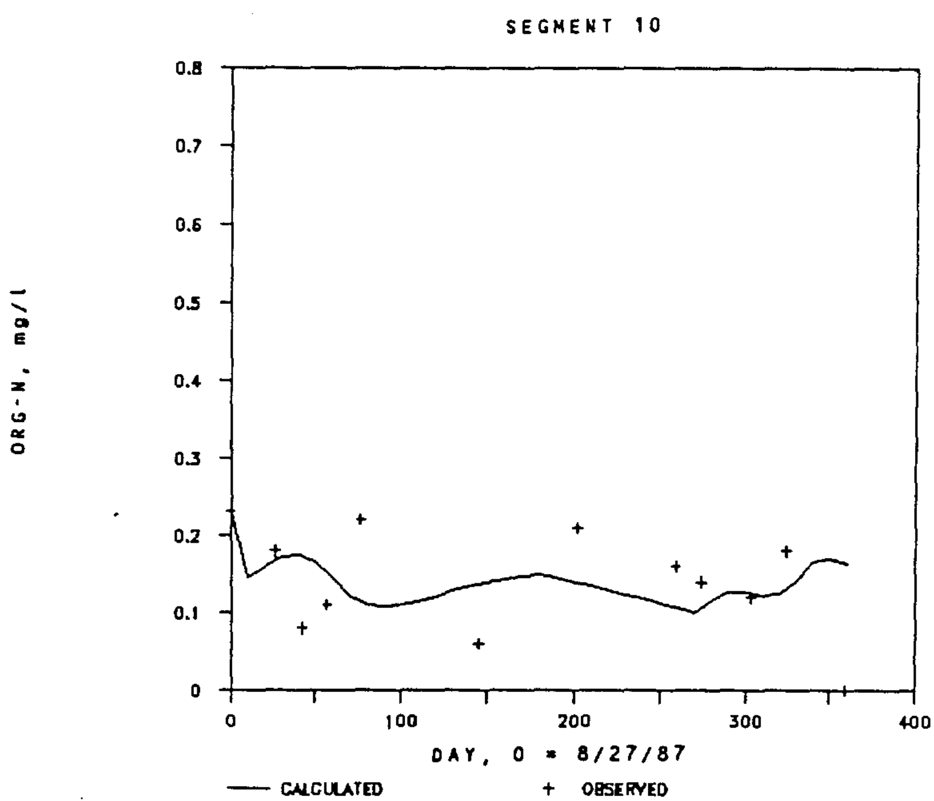


FIGURE A-9

Calibration Results and Observed Values for Organic Nitrogen in Lake Belton (continued)

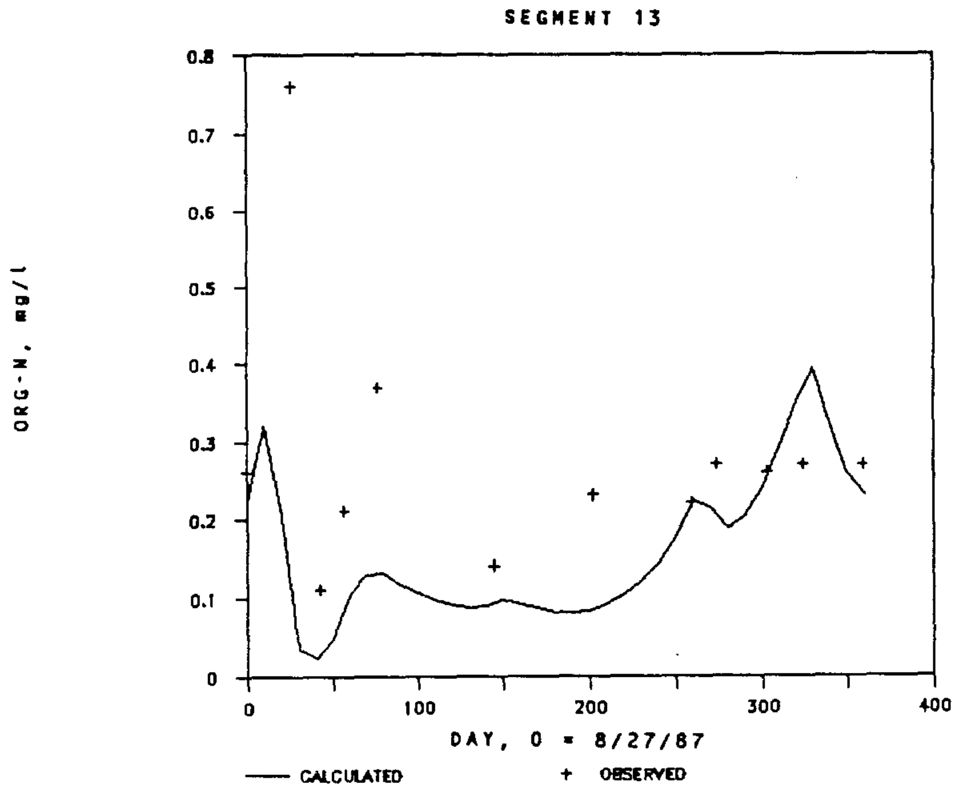
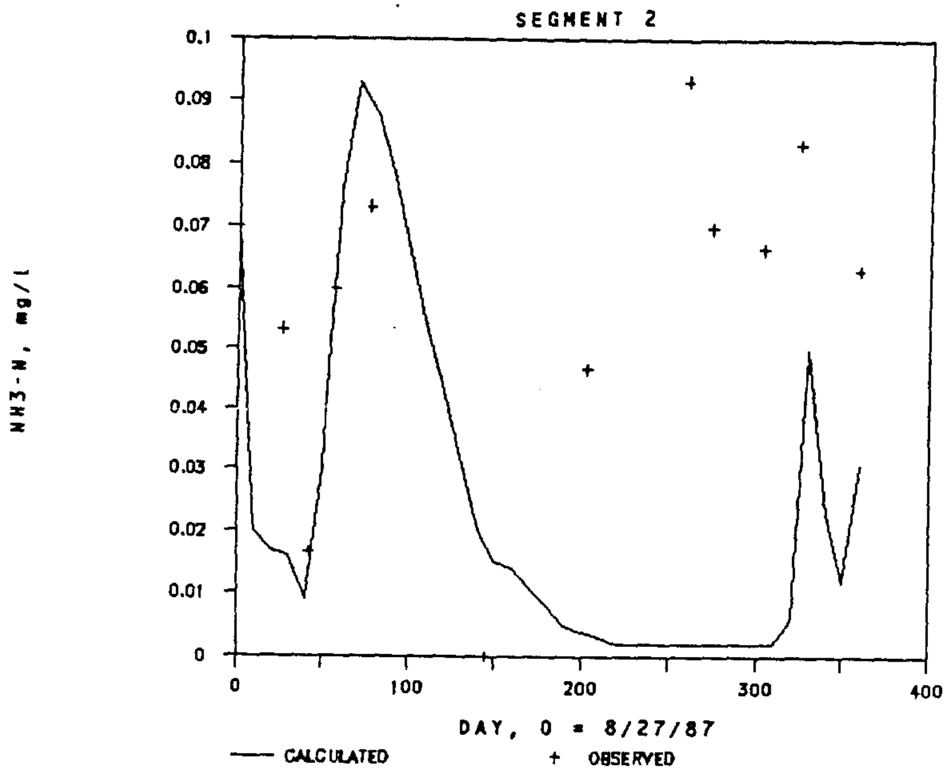


FIGURE A-9

Calibration Results and Observed Values for Organic Nitrogen in Lake Belton (continued)



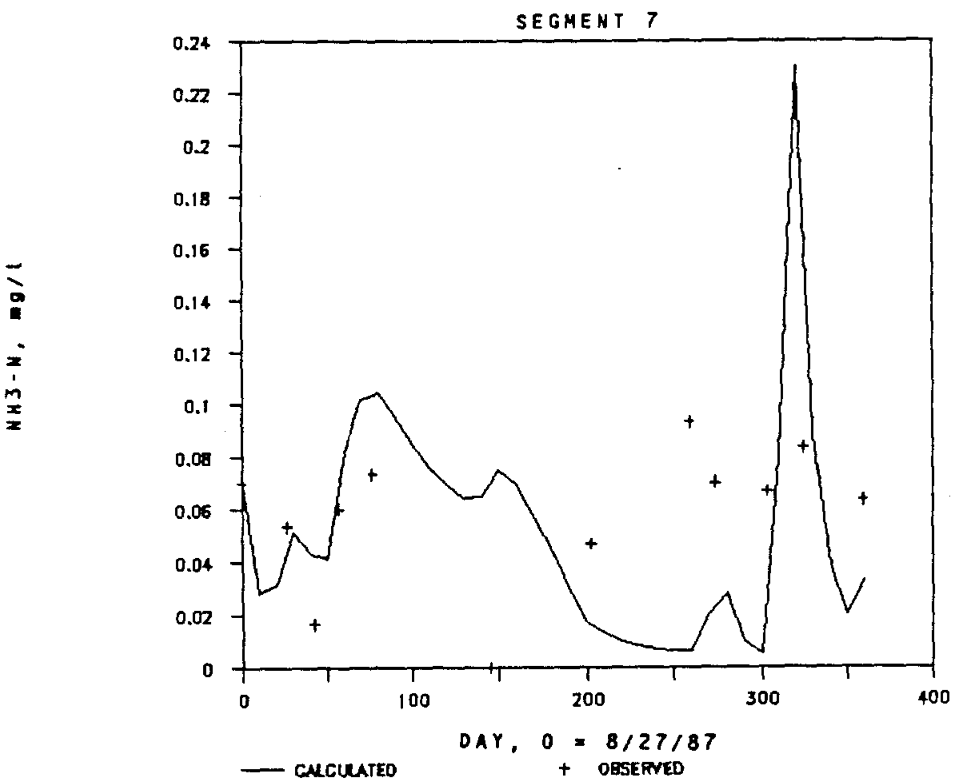


FIGURE A-10

Calibration Results and Observed Values for Ammonia Nitrogen in Lake Belton (continued)

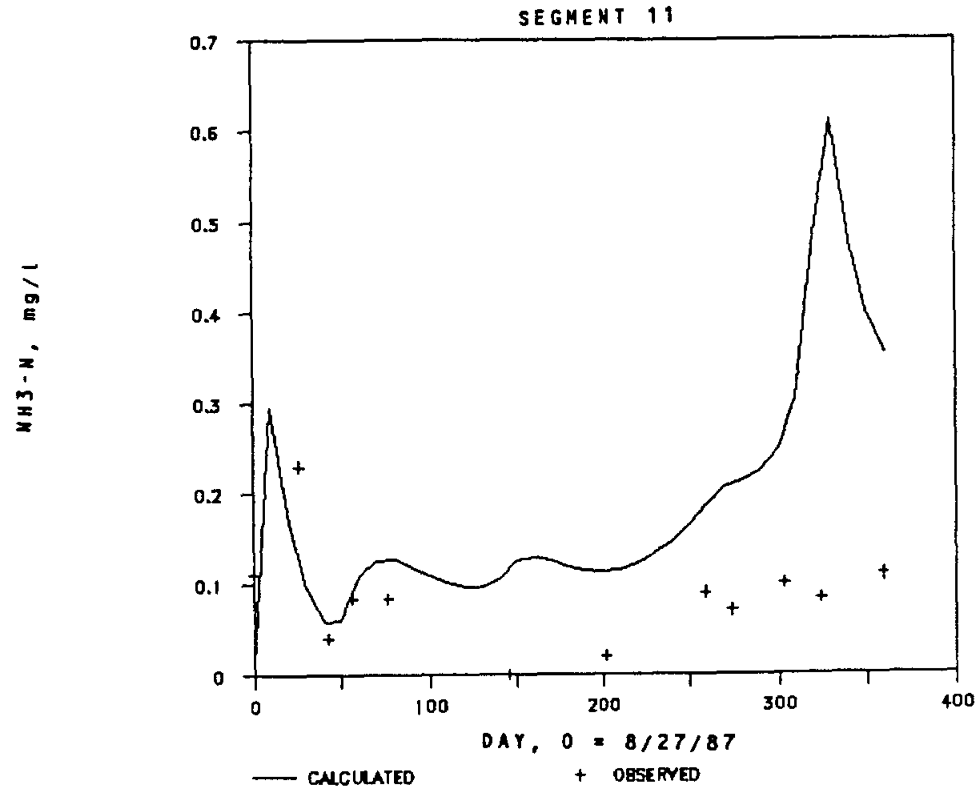
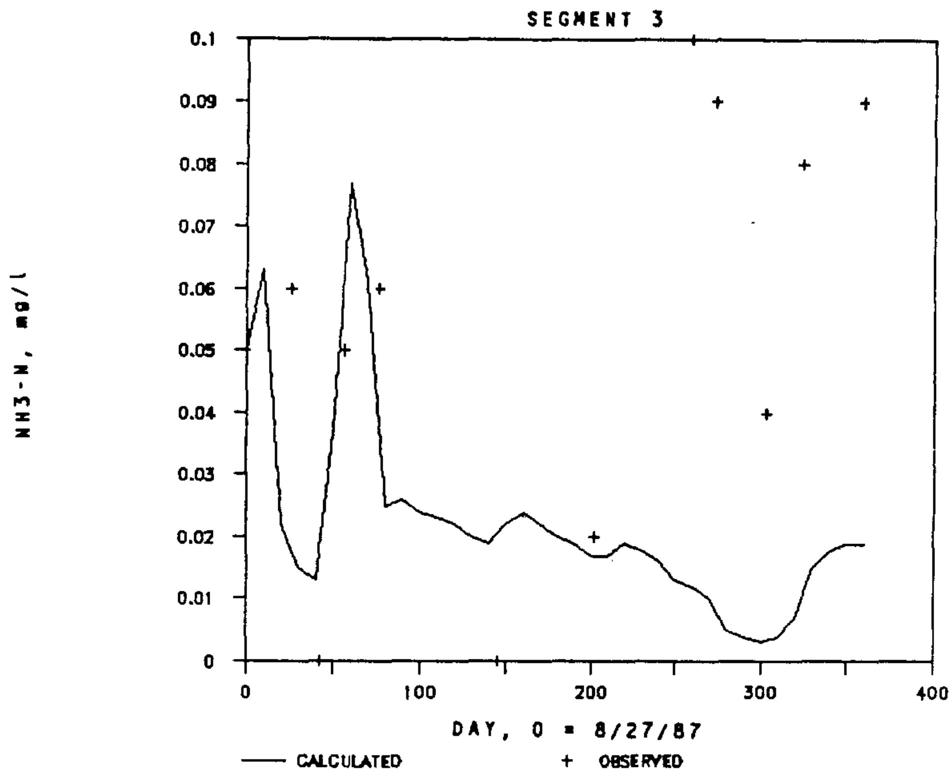


FIGURE A-10

Calibration Results and Observed Values for
Ammonia Nitrogen in Lake Belton
(continued)



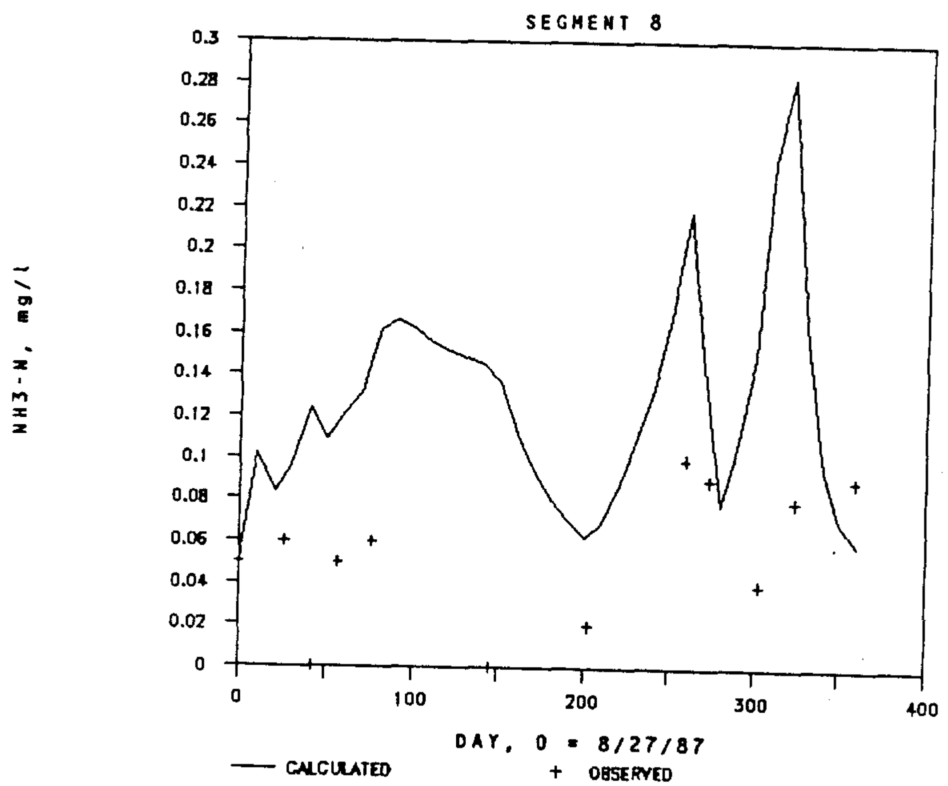
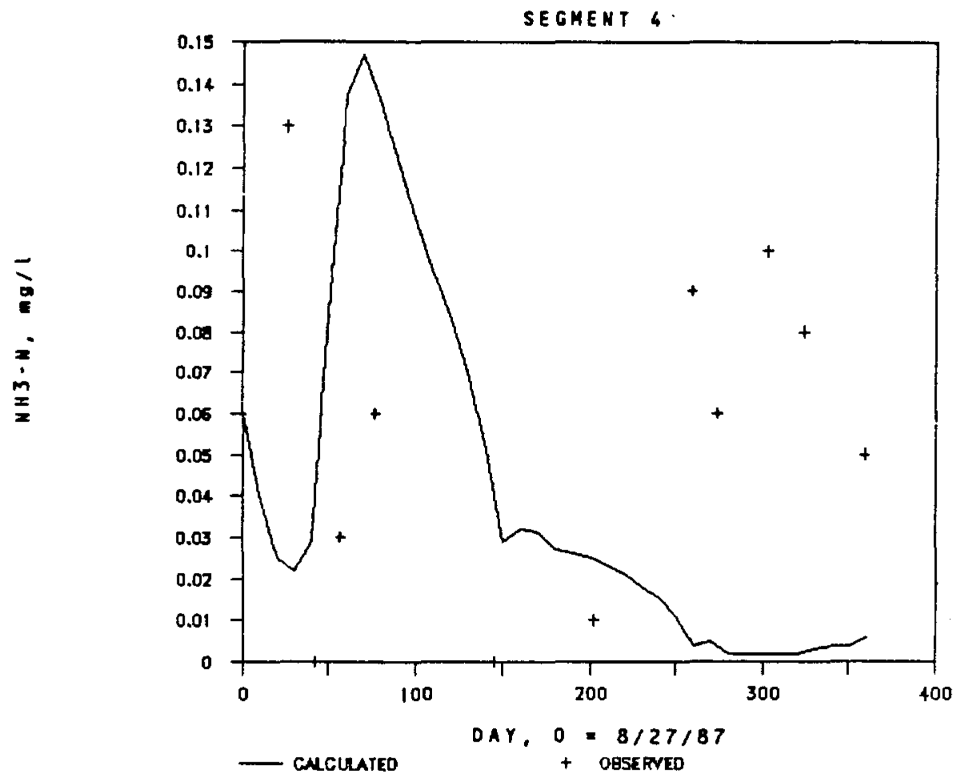


FIGURE A-10

Calibration Results and Observed Values for Ammonia Nitrogen in Lake Belton (continued)



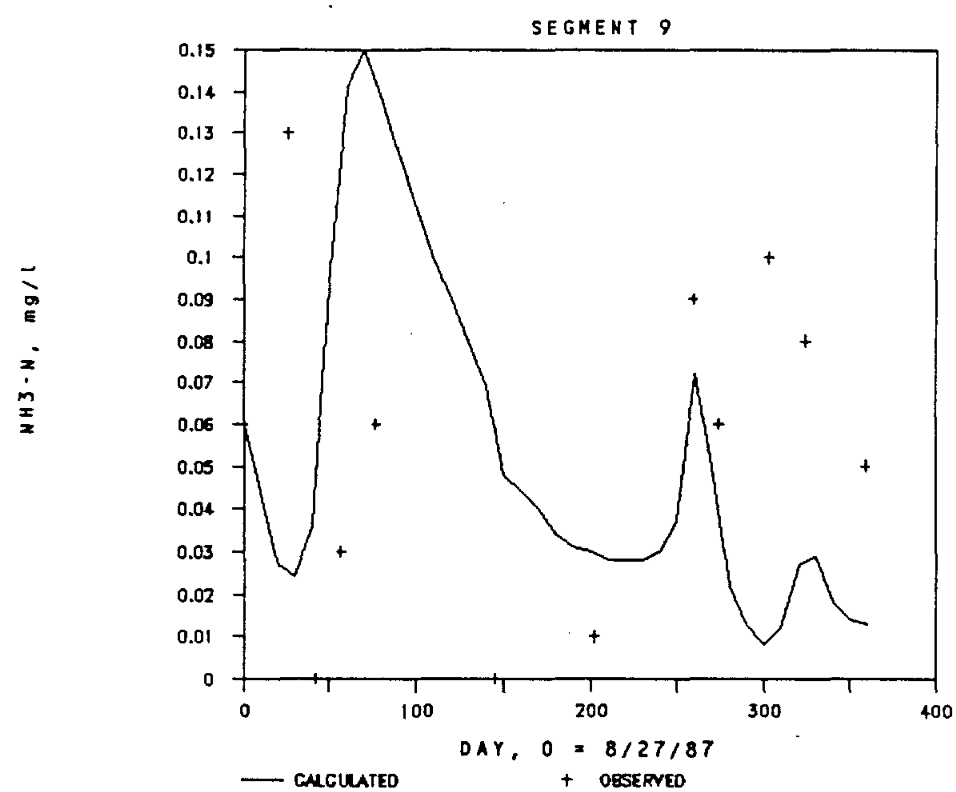


FIGURE A-10

Calibration Results and Observed Values for Ammonia Nitrogen in Lake Belton (continued)

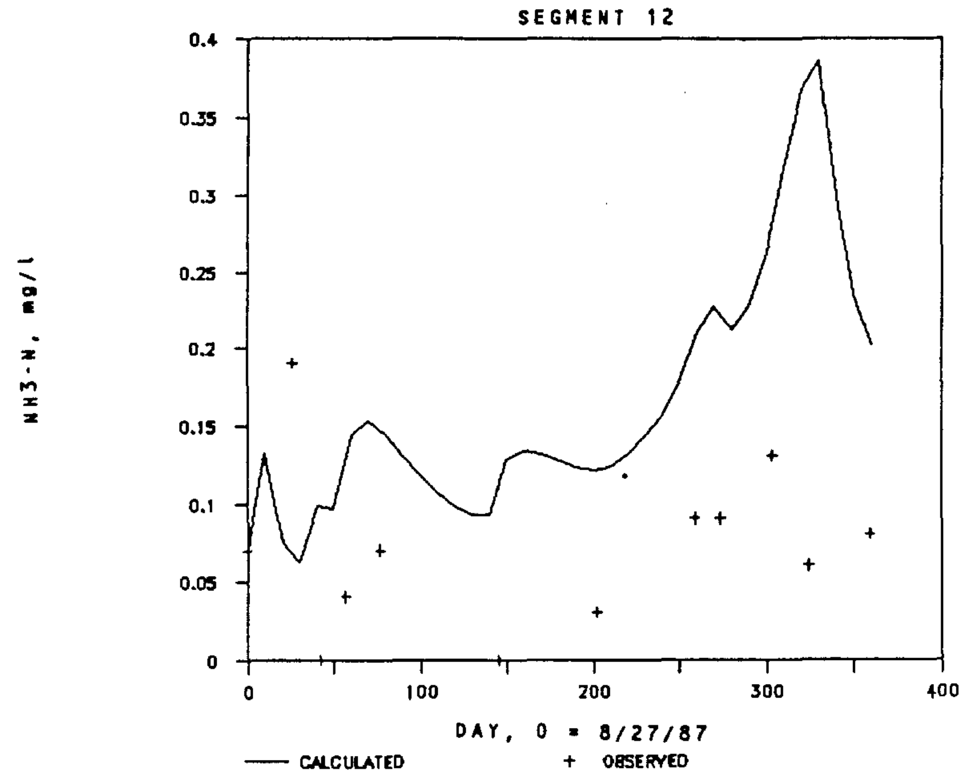
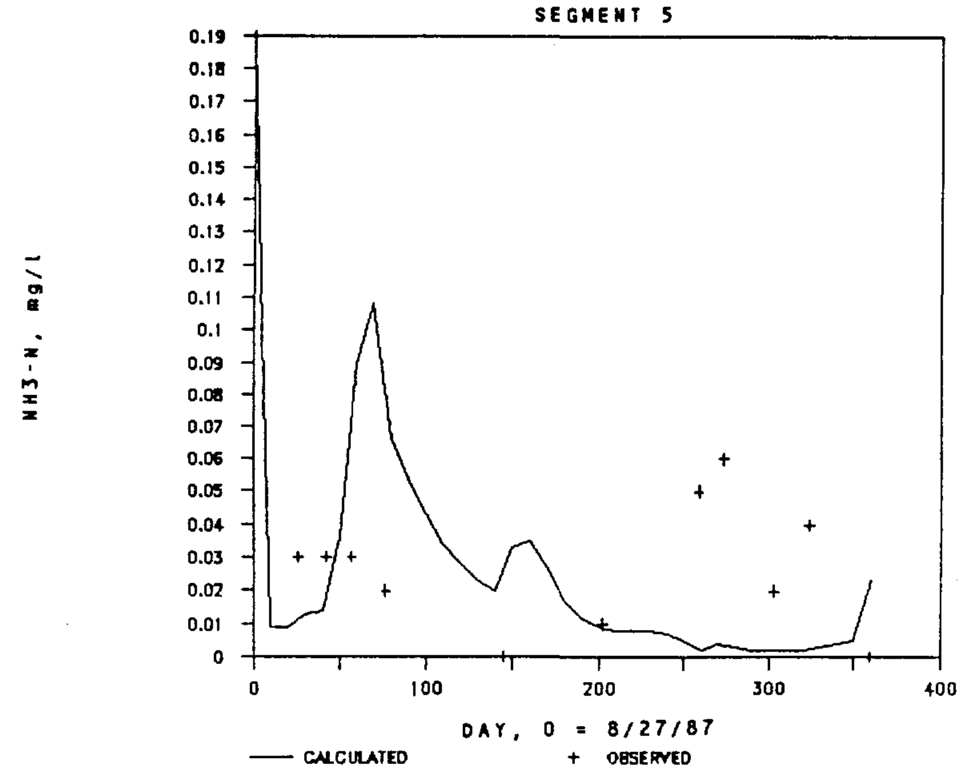


FIGURE A-10

Calibration Results and Observed Values for
Ammonia Nitrogen in Lake Belton
(continued)



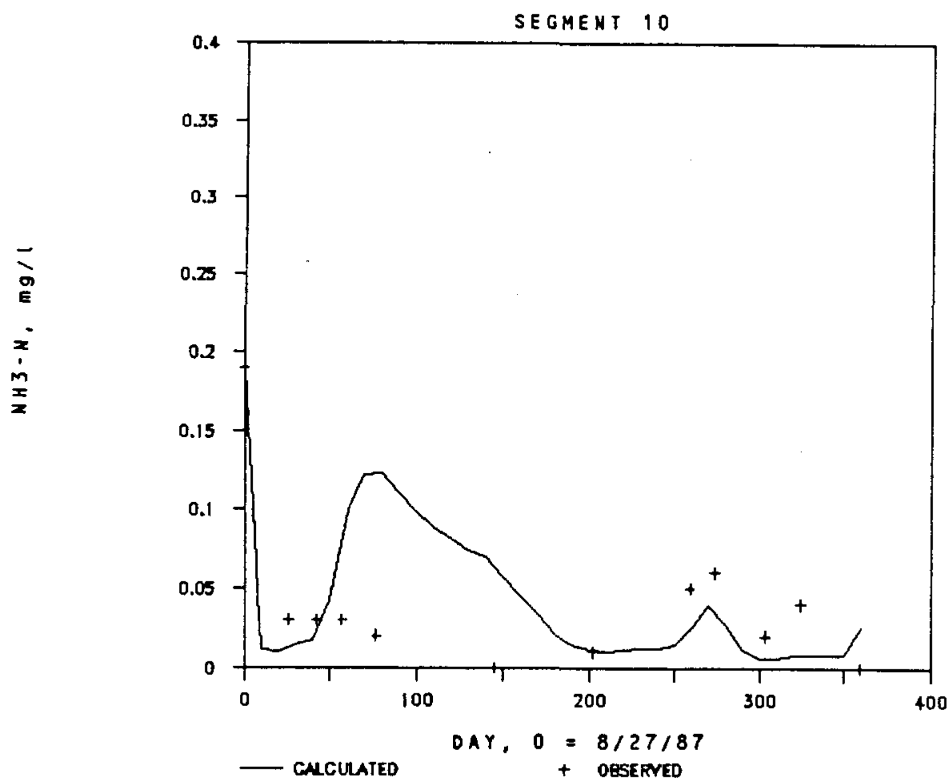


FIGURE A-10

Calibration Results and Observed Values for Ammonia Nitrogen in Lake Belton (continued)

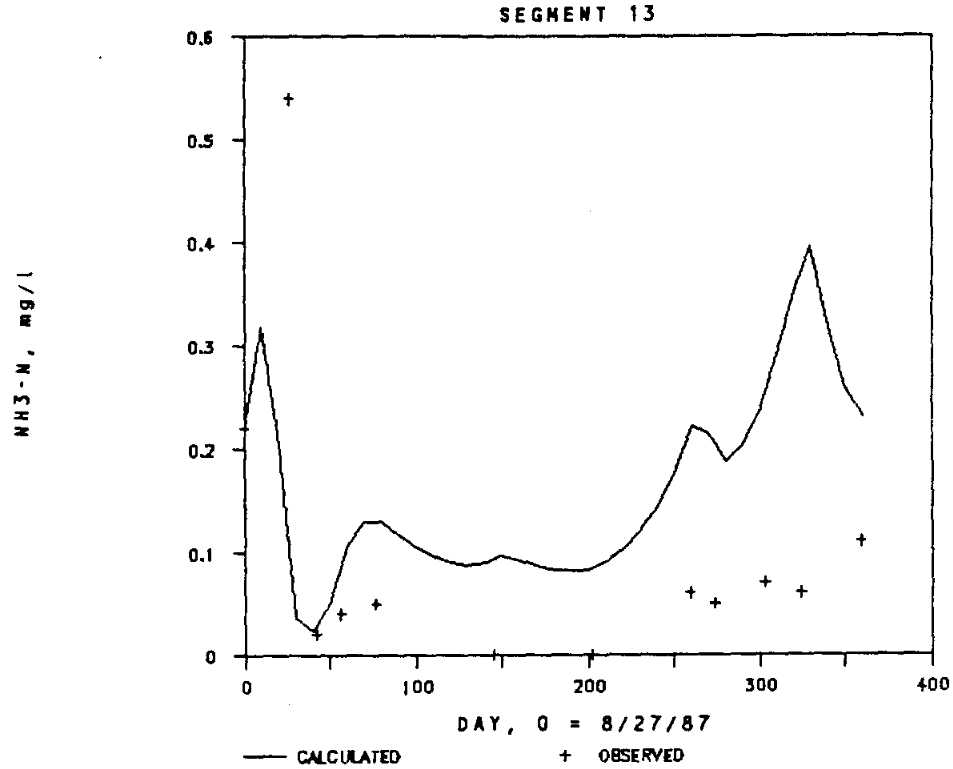


FIGURE A-10

Calibration Results and Observed Values for Ammonia Nitrogen in Lake Belton (continued)

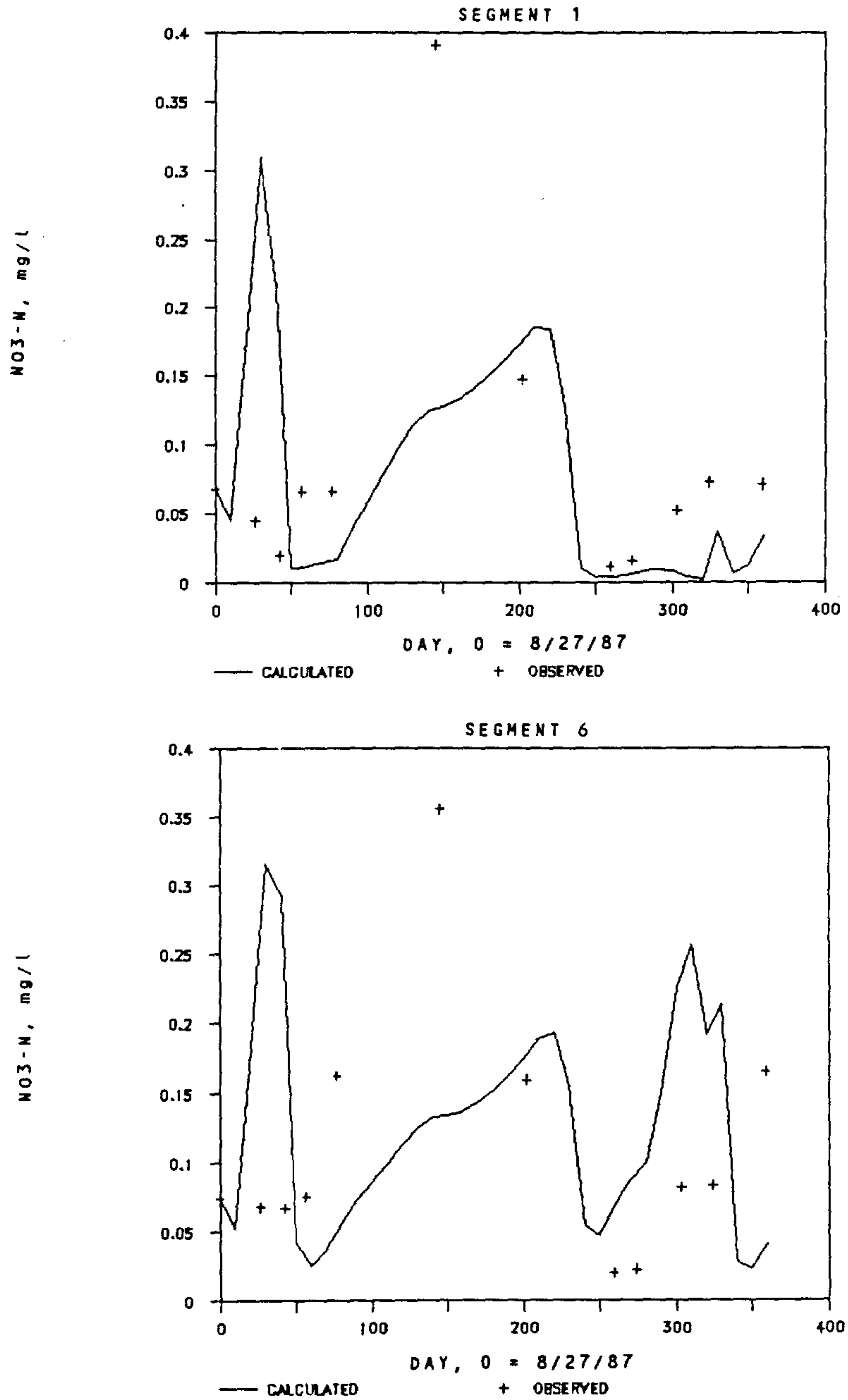
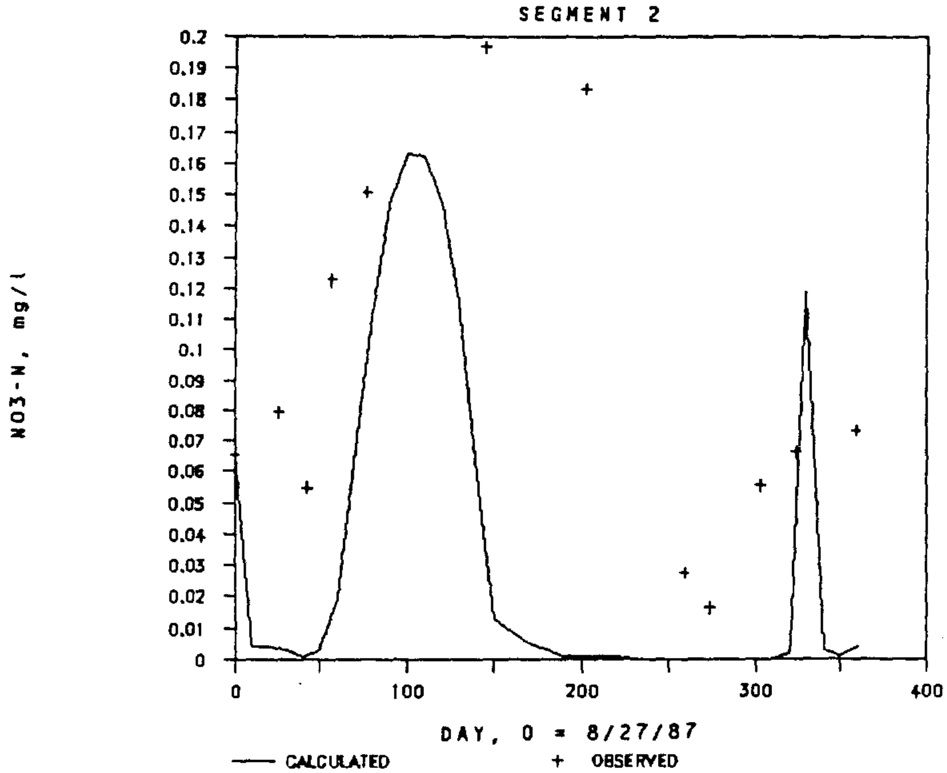


FIGURE A-11

Calibration Results and Observed Values for Nitrate Nitrogen in Lake Belton



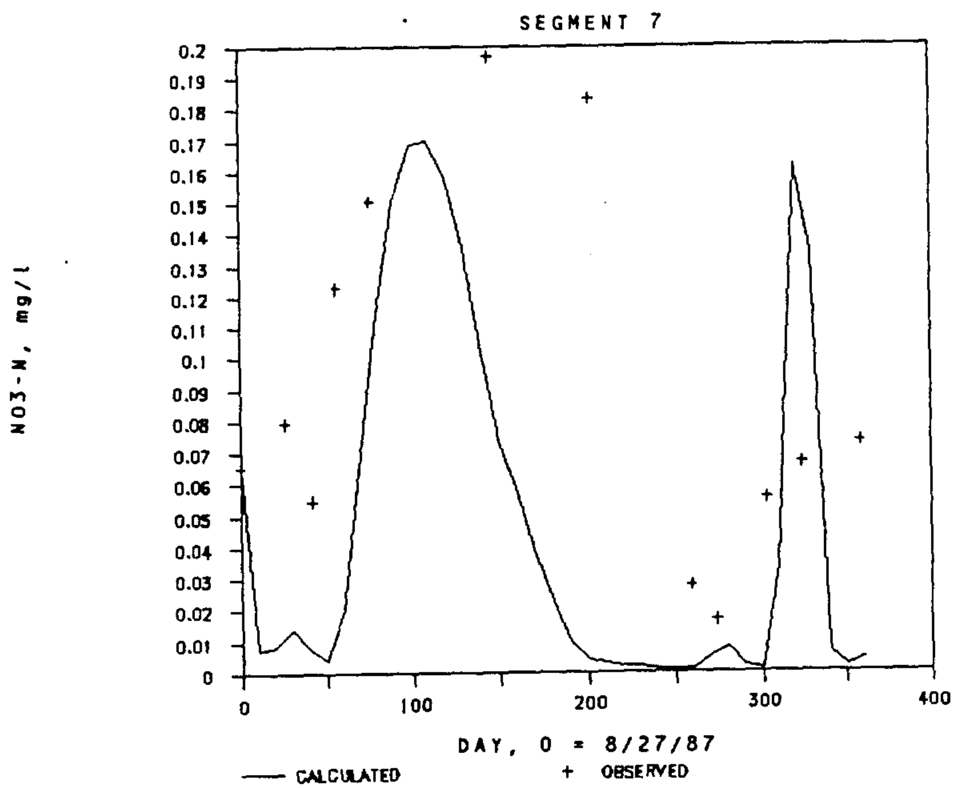


FIGURE A-11

Calibration Results and Observed Values for Nitrate Nitrogen in Lake Belton (continued)

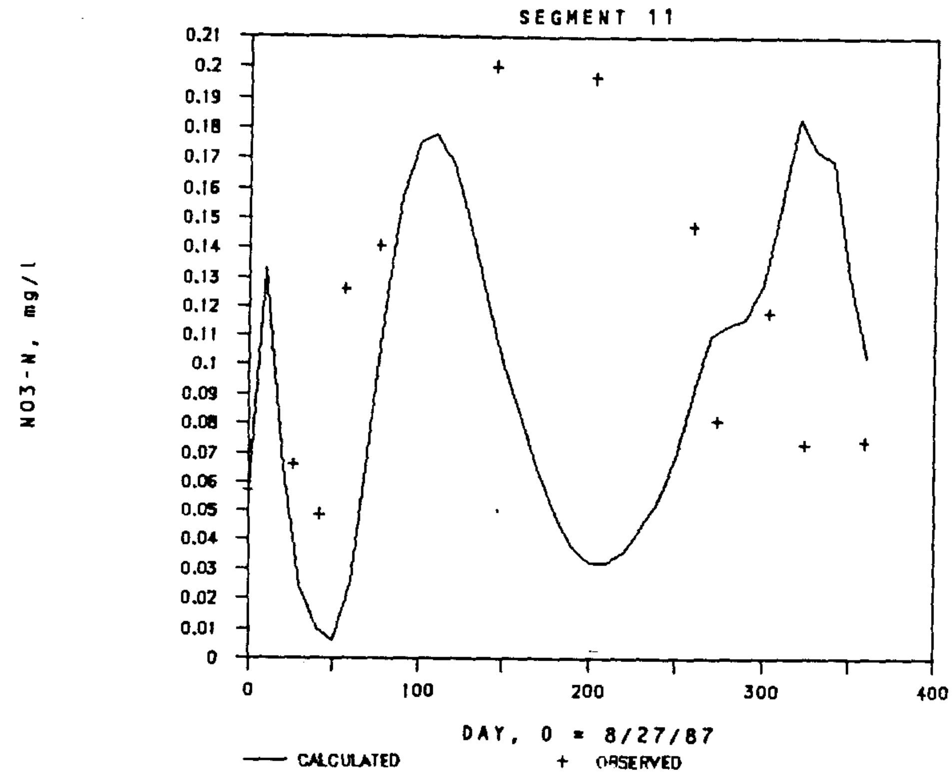
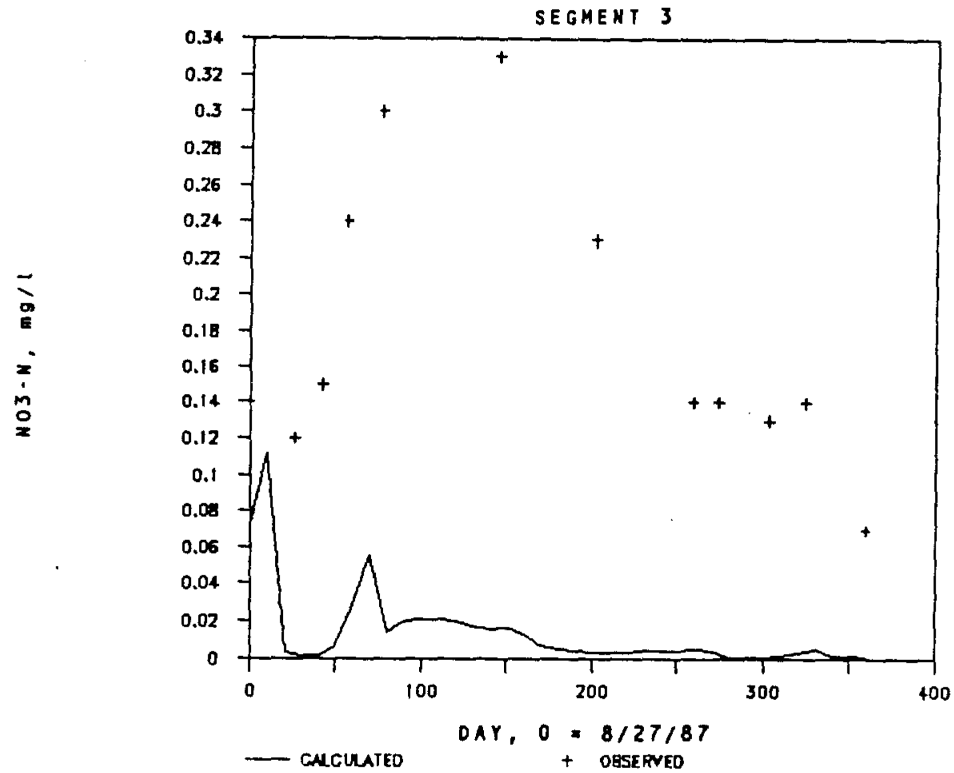


FIGURE A-11

Calibration Results and Observed Values for Nitrate Nitrogen in Lake Belton (continued)



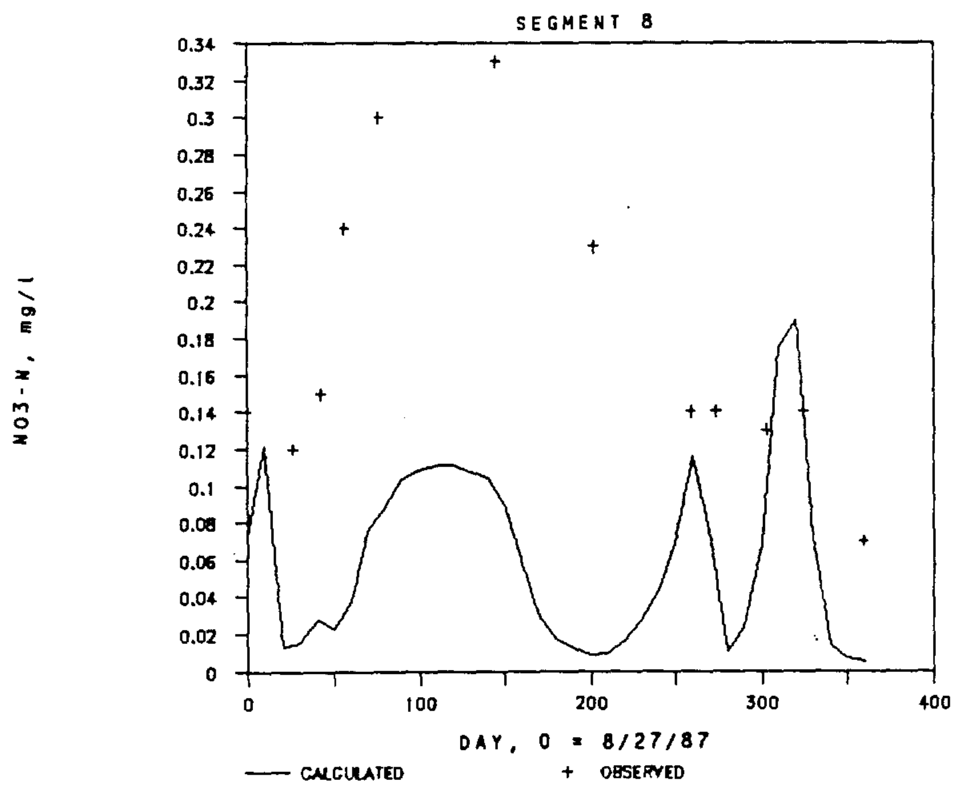
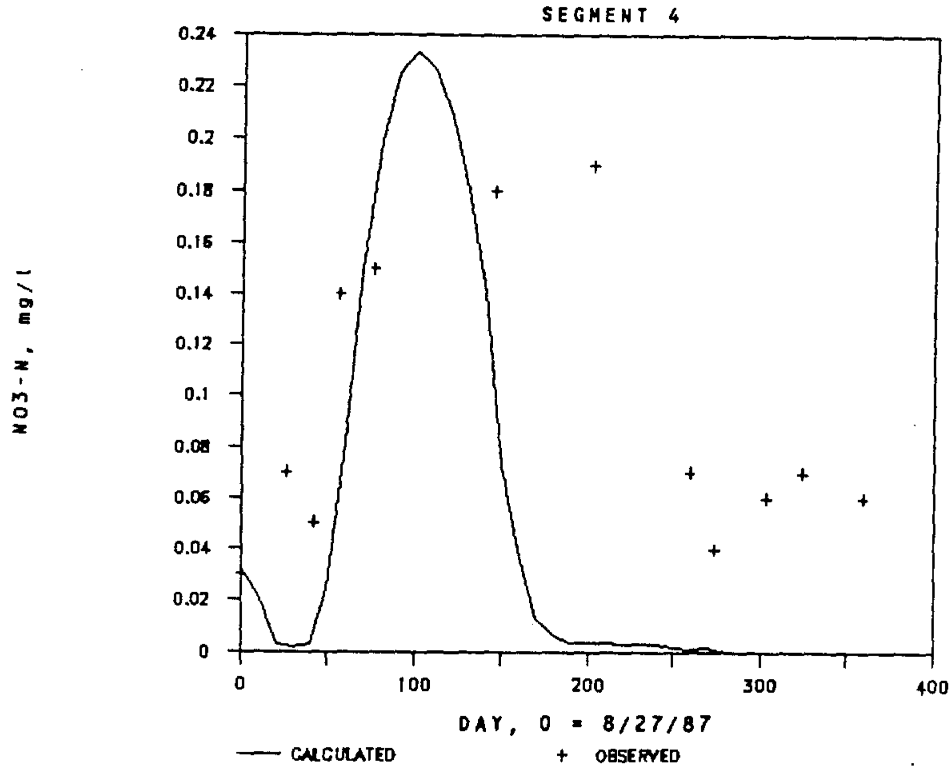


FIGURE A-11

Calibration Results and Observed Values for Nitrate Nitrogen in Lake Belton (continued)



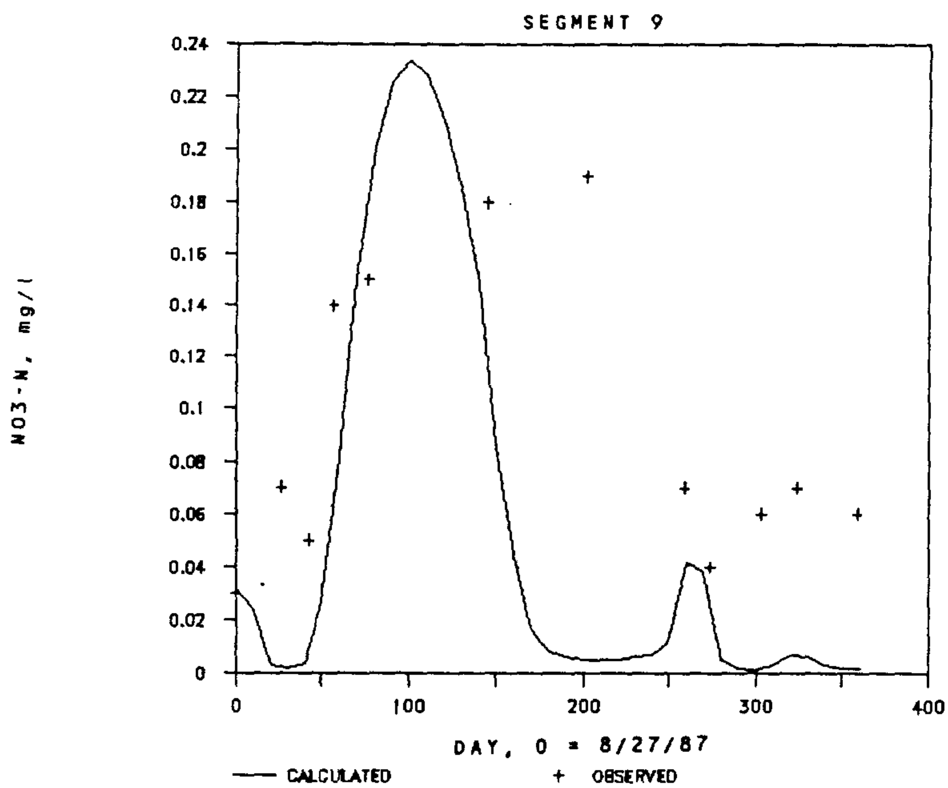


FIGURE A-11

Calibration Results and Observed Values for Nitrate Nitrogen in Lake Belton (continued)

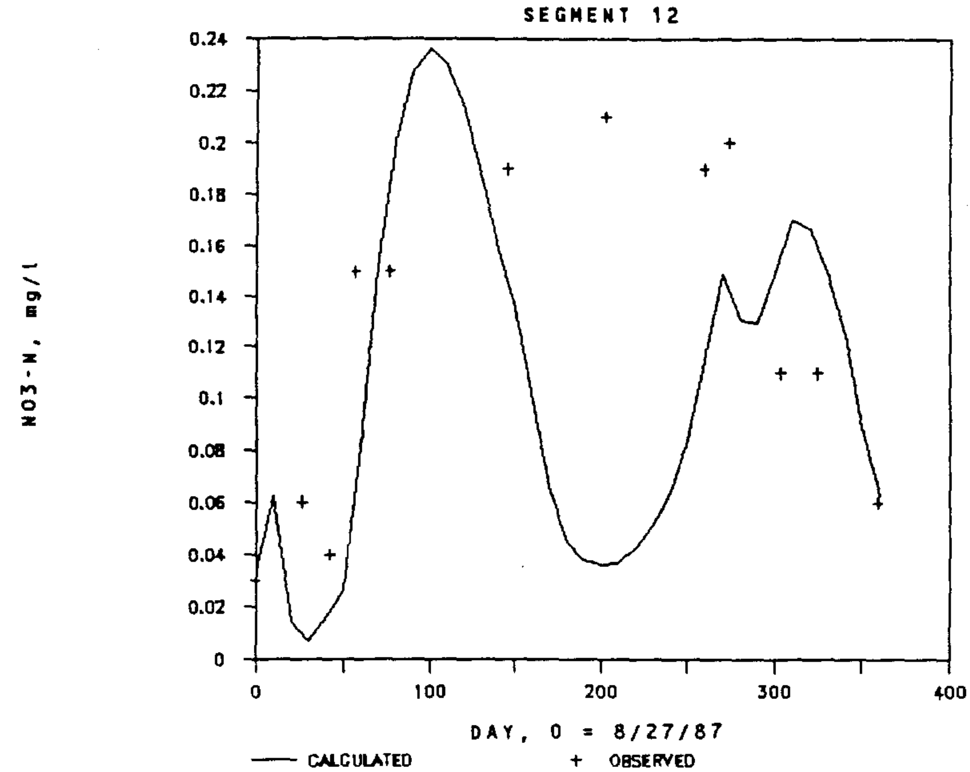
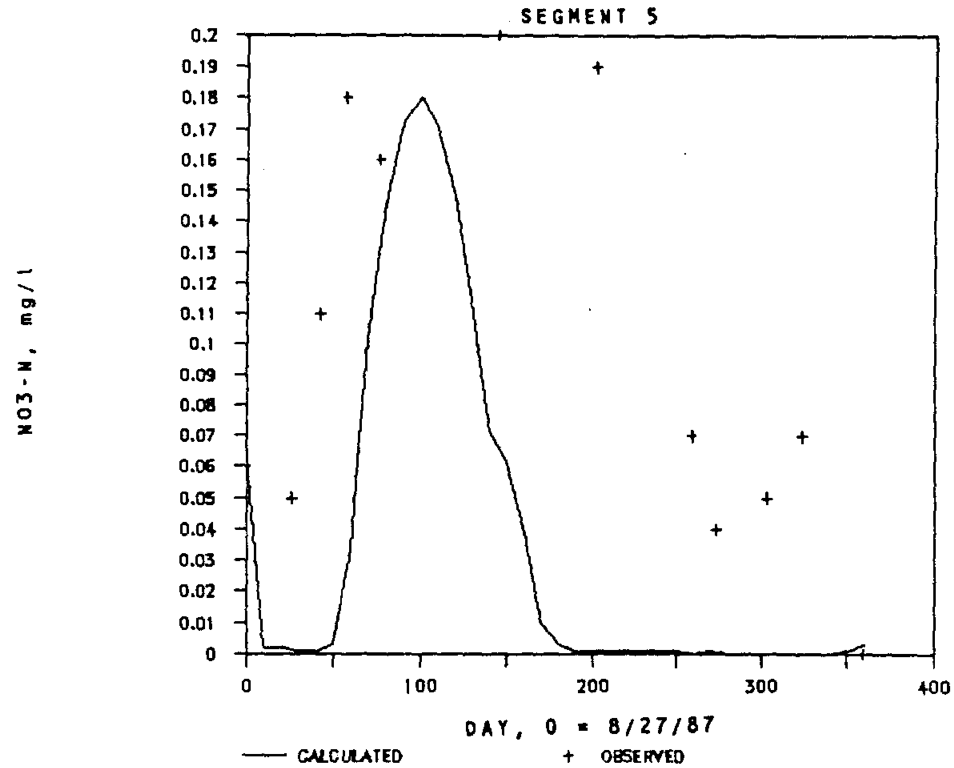


FIGURE A-11

Calibration Results and Observed Values for Nitrate Nitrogen in Lake Belton (continued)



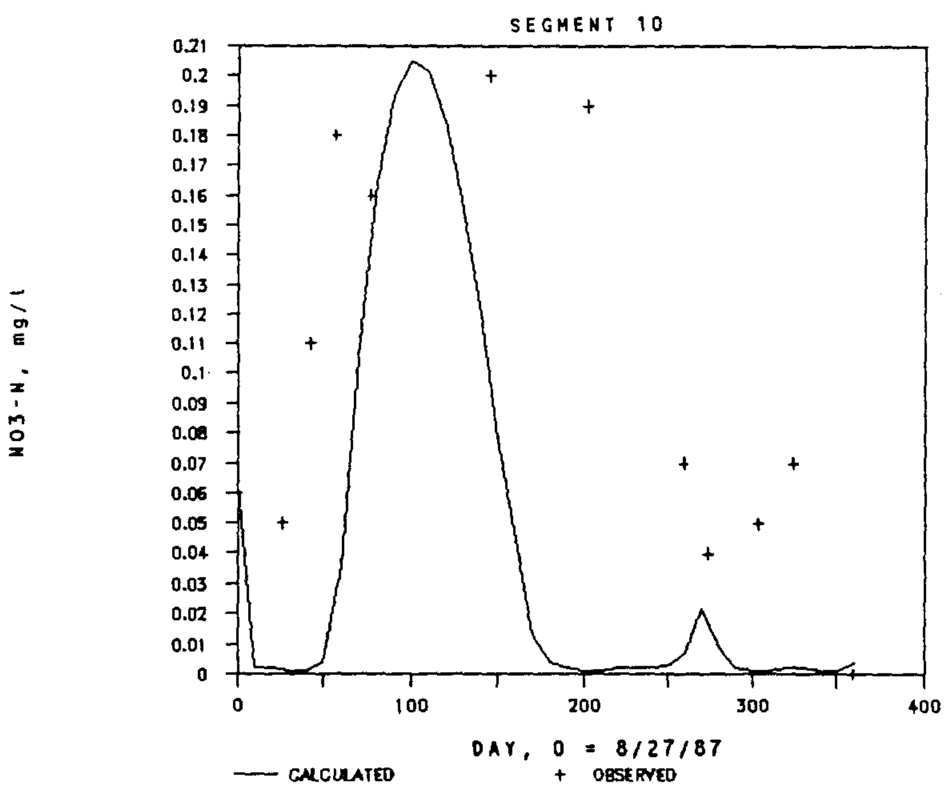


FIGURE A-11

Calibration Results and Observed Values for Nitrate Nitrogen in Lake Belton (continued)

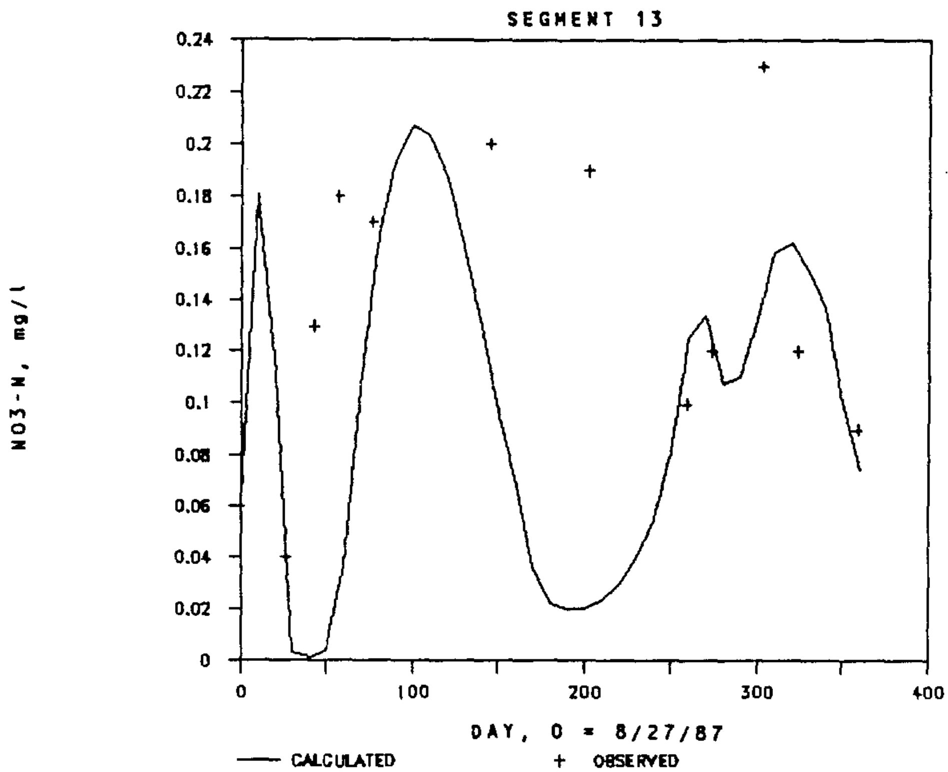
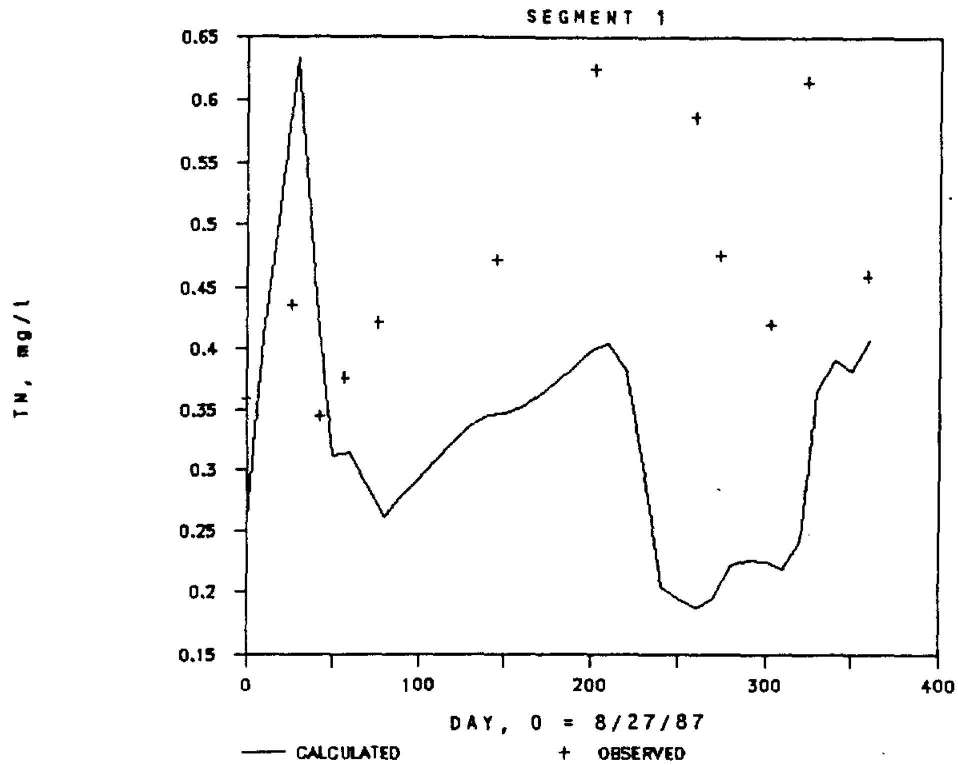


FIGURE A-11

Calibration Results and Observed Values for Nitrate Nitrogen in Lake Belton (continued)



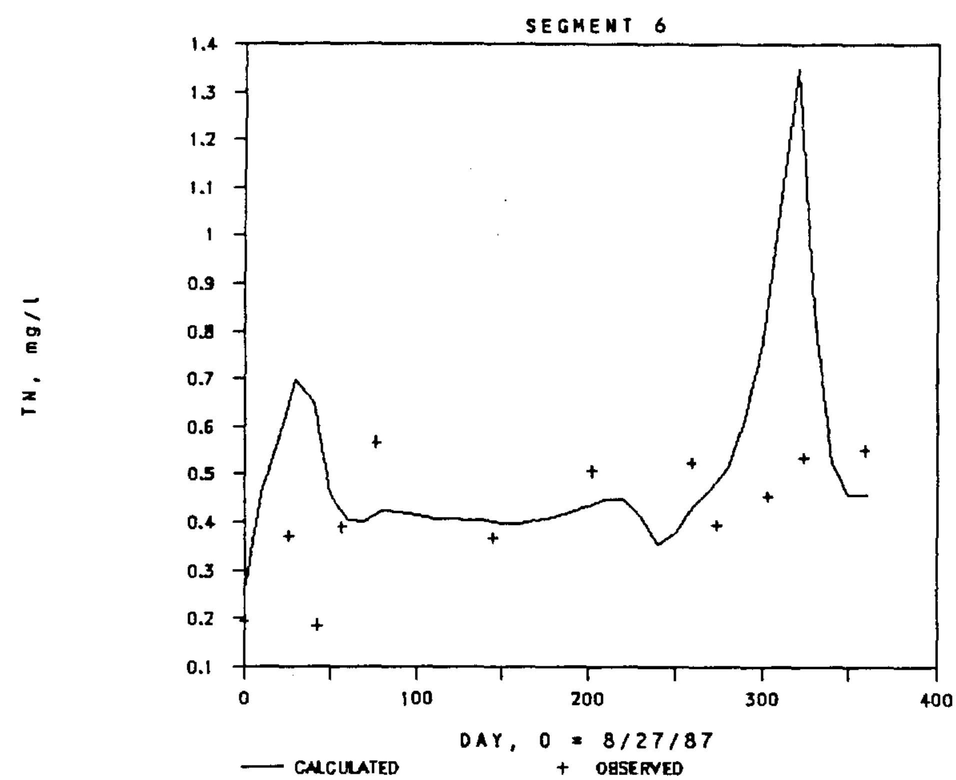
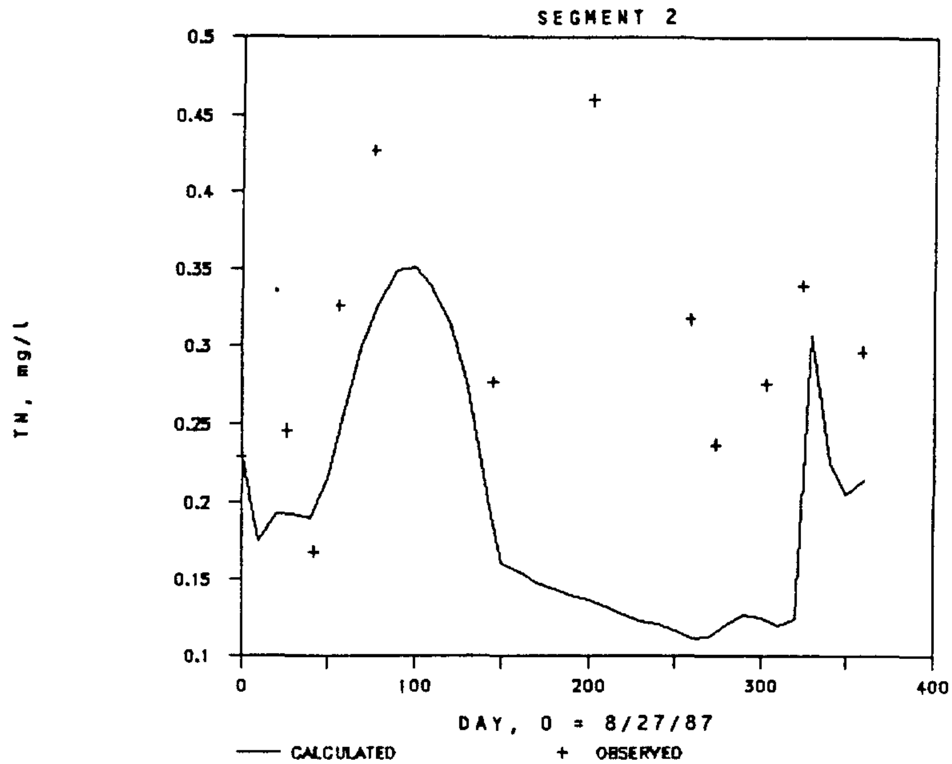


FIGURE A-12

Calibration Results and Observed Values for Total Nitrogen in Lake Belton



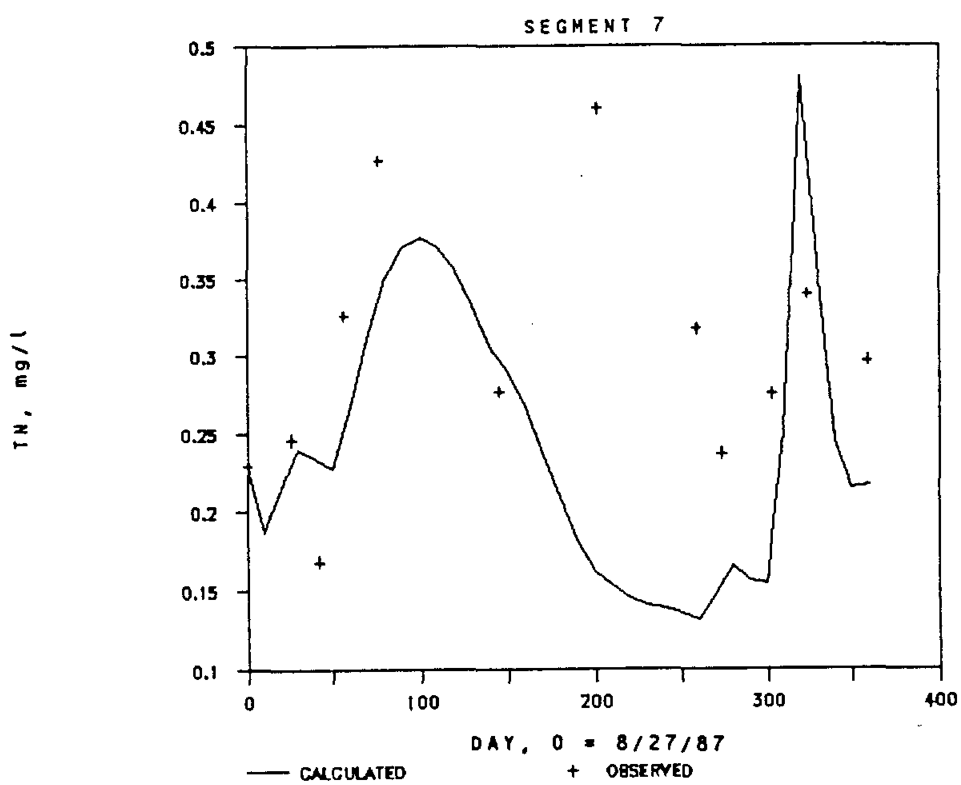


FIGURE A-12

Calibration Results and Observed Values for Total Nitrogen in Lake Belton (continued)

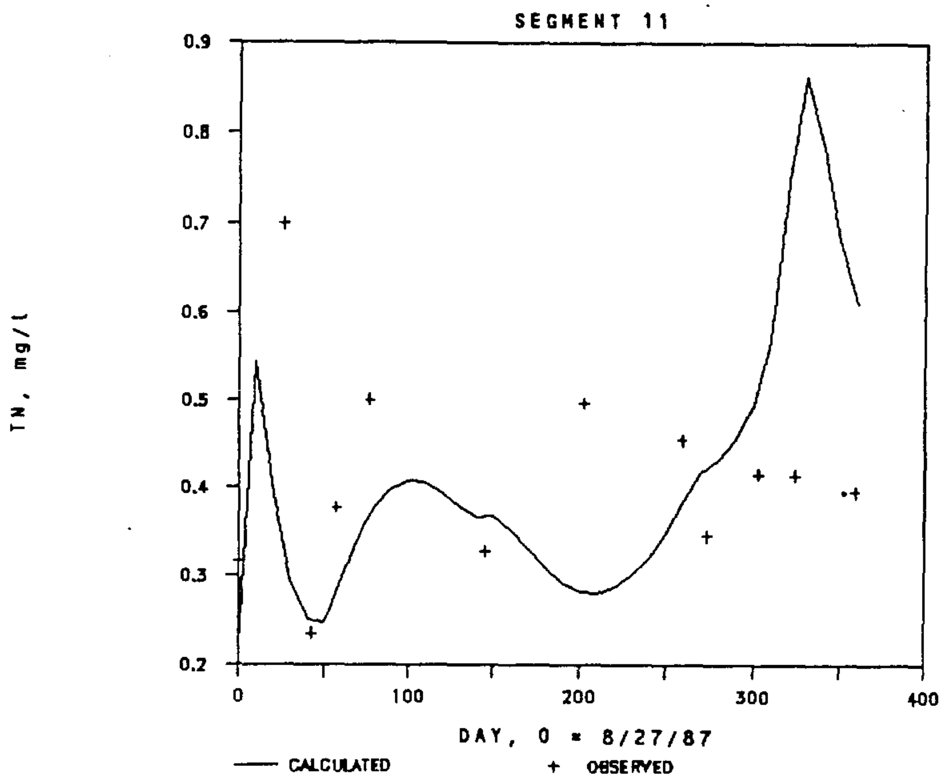
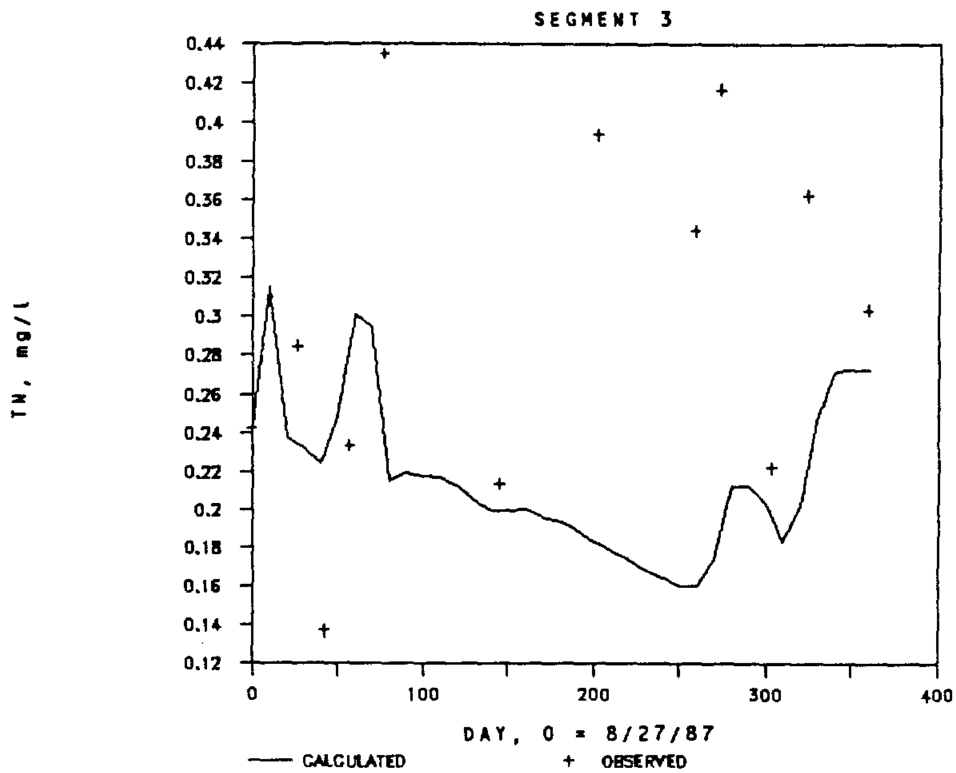


FIGURE A-12

Calibration Results and Observed Values for
Total Nitrogen in Lake Belton
(continued)



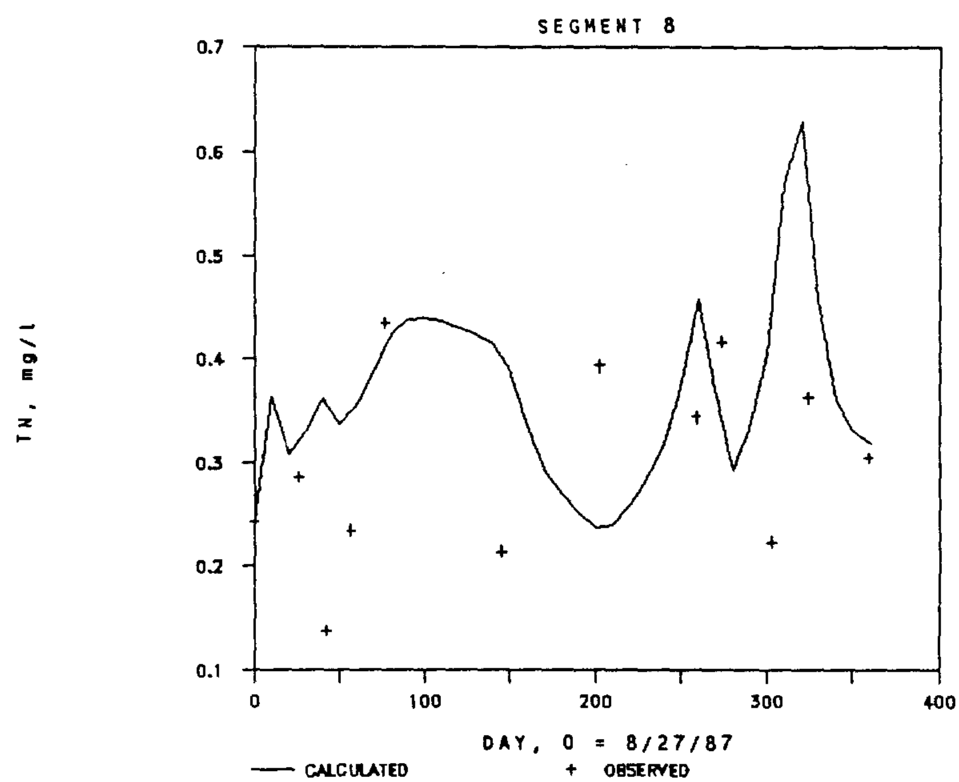
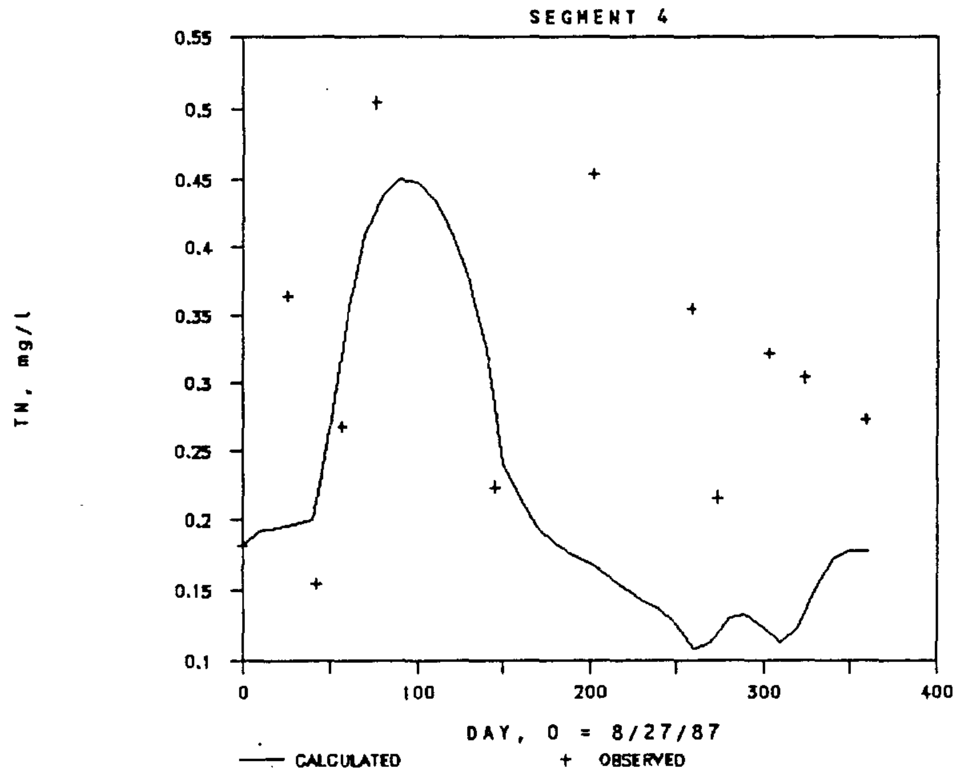


FIGURE A-12

Calibration Results and Observed Values for Total Nitrogen in Lake Belton (continued)



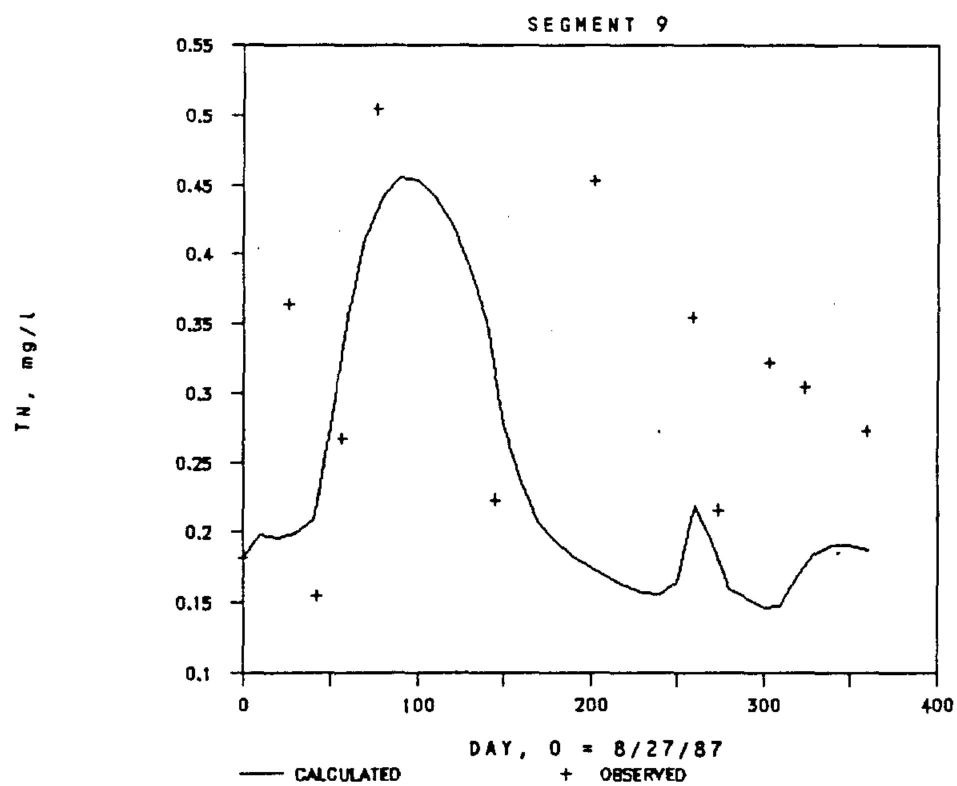


FIGURE A-12

Calibration Results and Observed Values for
Total Nitrogen in Lake Belton
(continued)

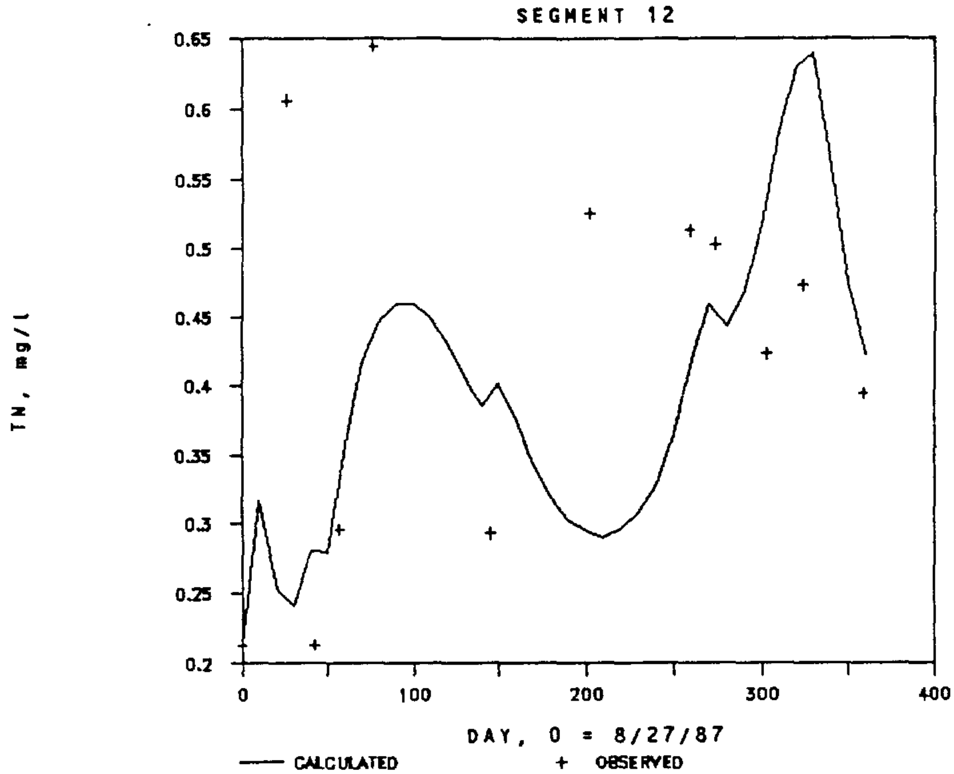
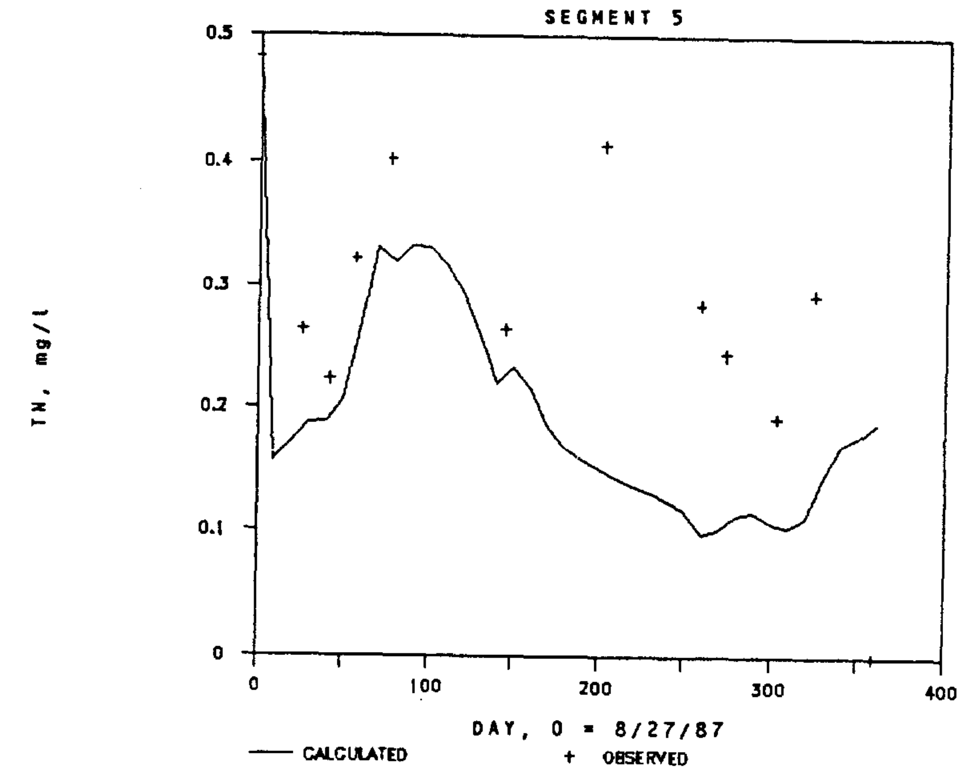


FIGURE A-12

Calibration Results and Observed Values for
Total Nitrogen in Lake Belton
(continued)



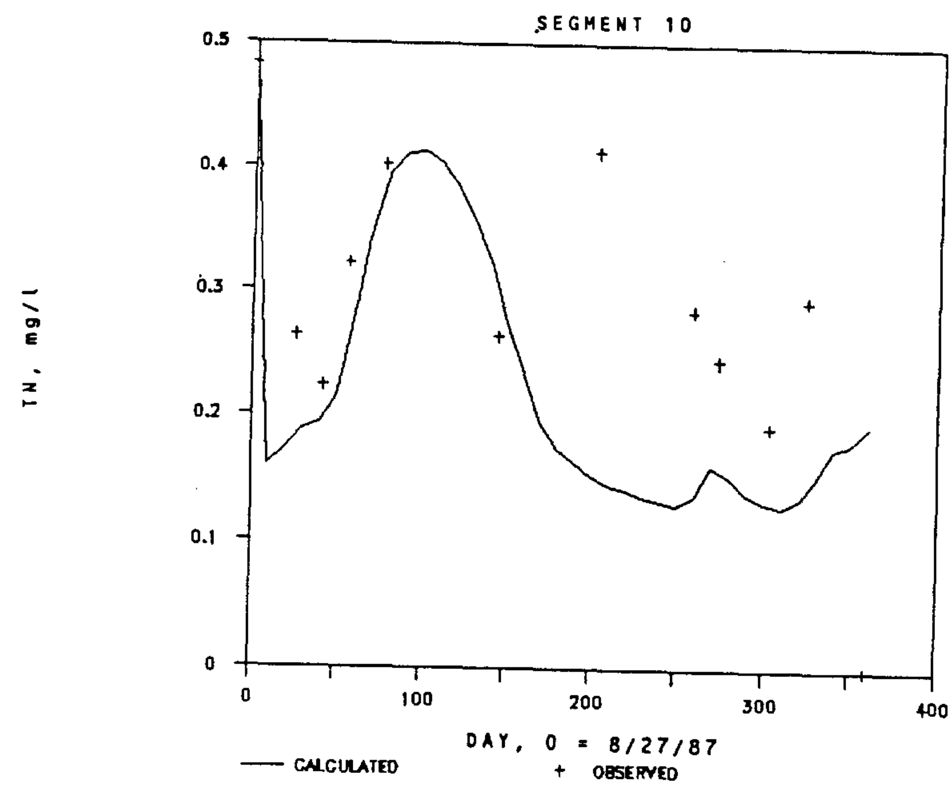


FIGURE A-12

Calibration Results and Observed Values for Total Nitrogen in Lake Belton (continued)

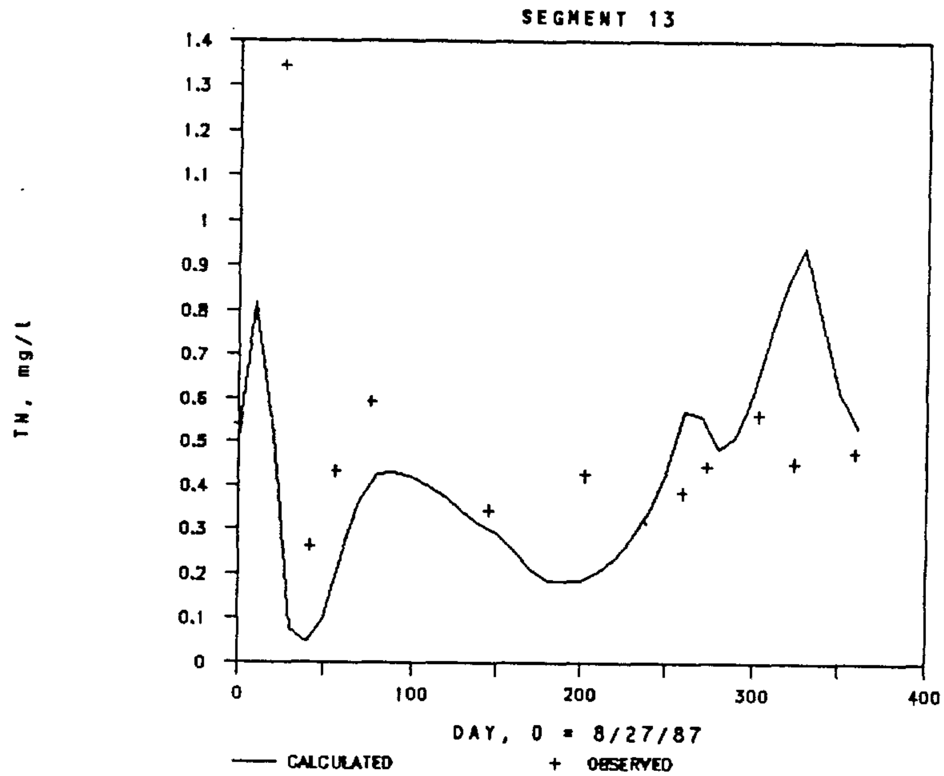


FIGURE A-12

Calibration Results and Observed Values for Total Nitrogen in Lake Belton (continued)

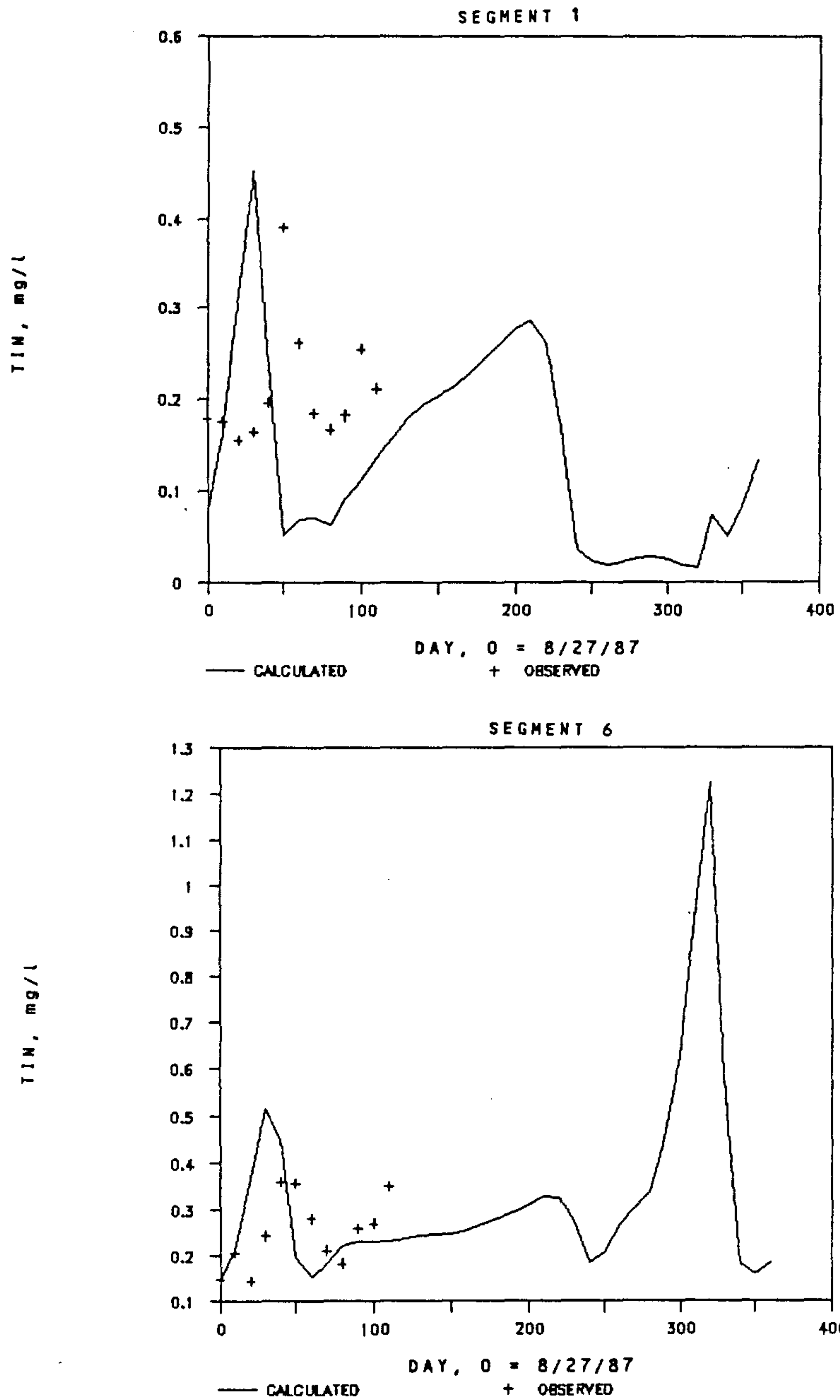
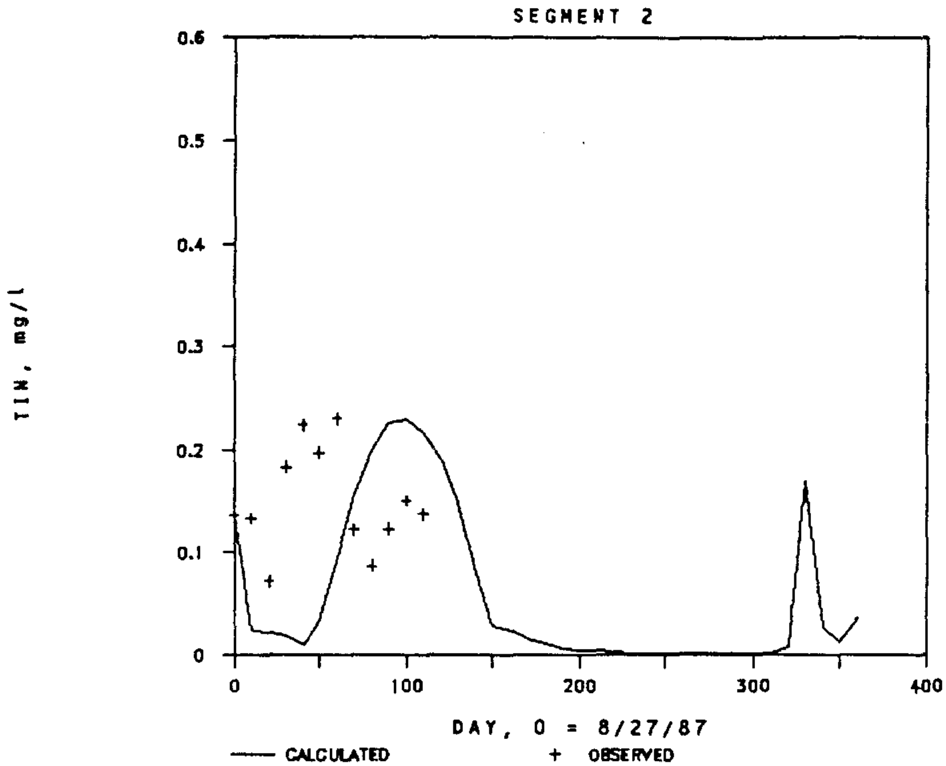


FIGURE A-13

Calibration Results and Observed Values for Total Inorganic Nitrogen in Lake Belton



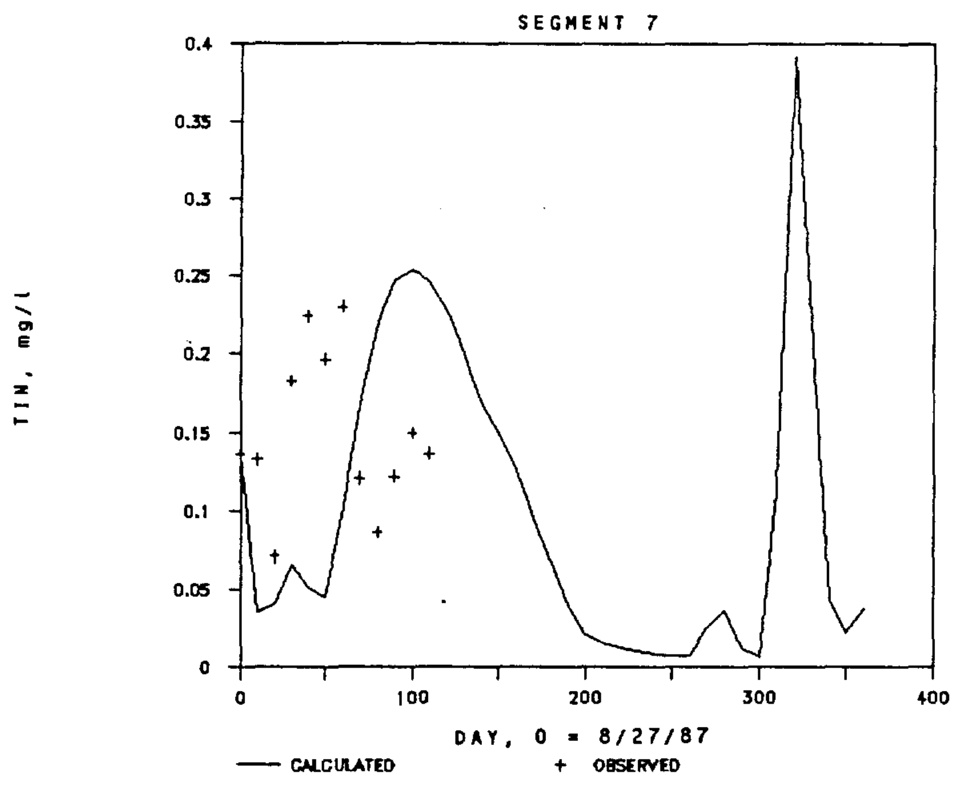


FIGURE A-13

Calibration Results and Observed Values for Total Inorganic Nitrogen in Lake Belton (continued)

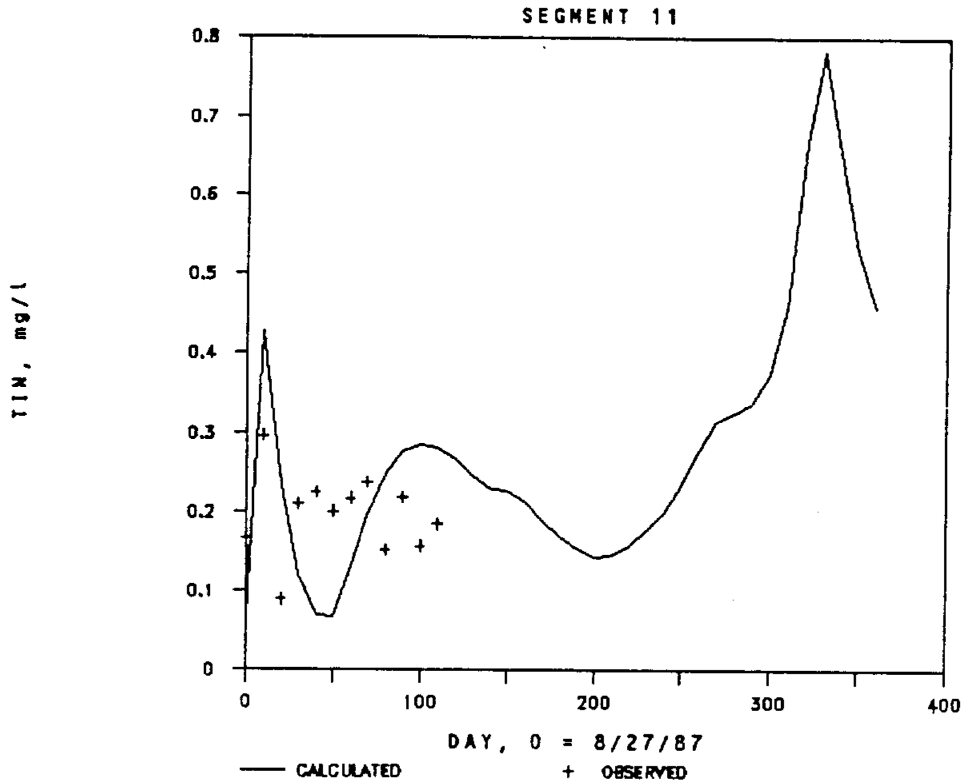
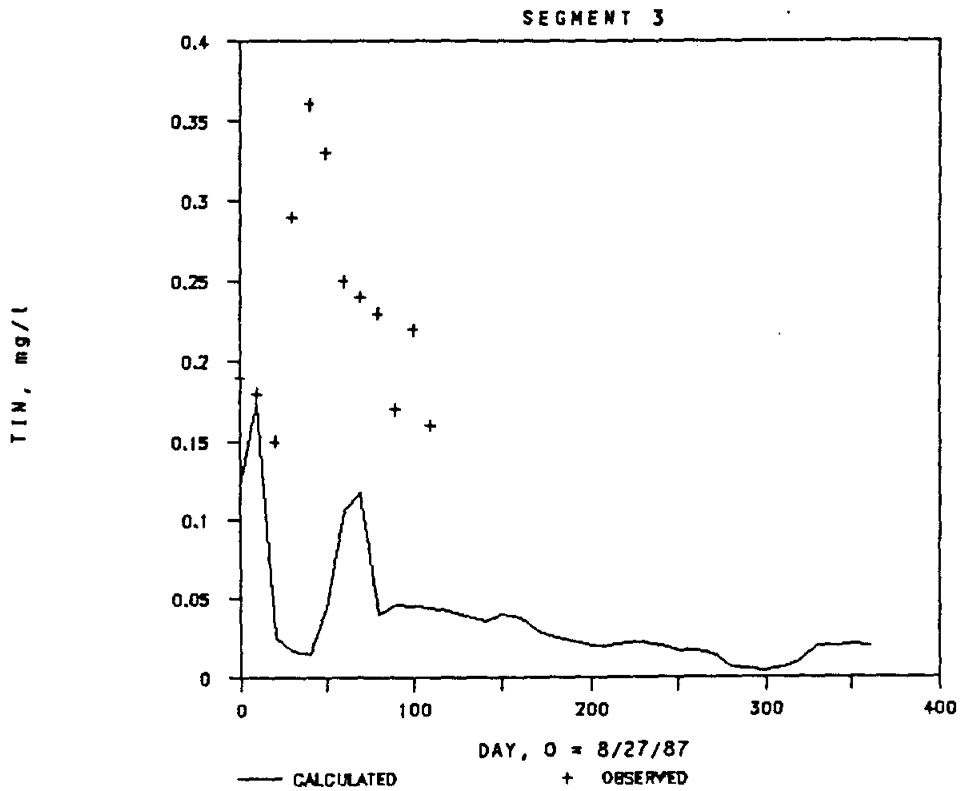


FIGURE A-13

Calibration Results and Observed Values for Total Inorganic Nitrogen in Lake Belton (continued)



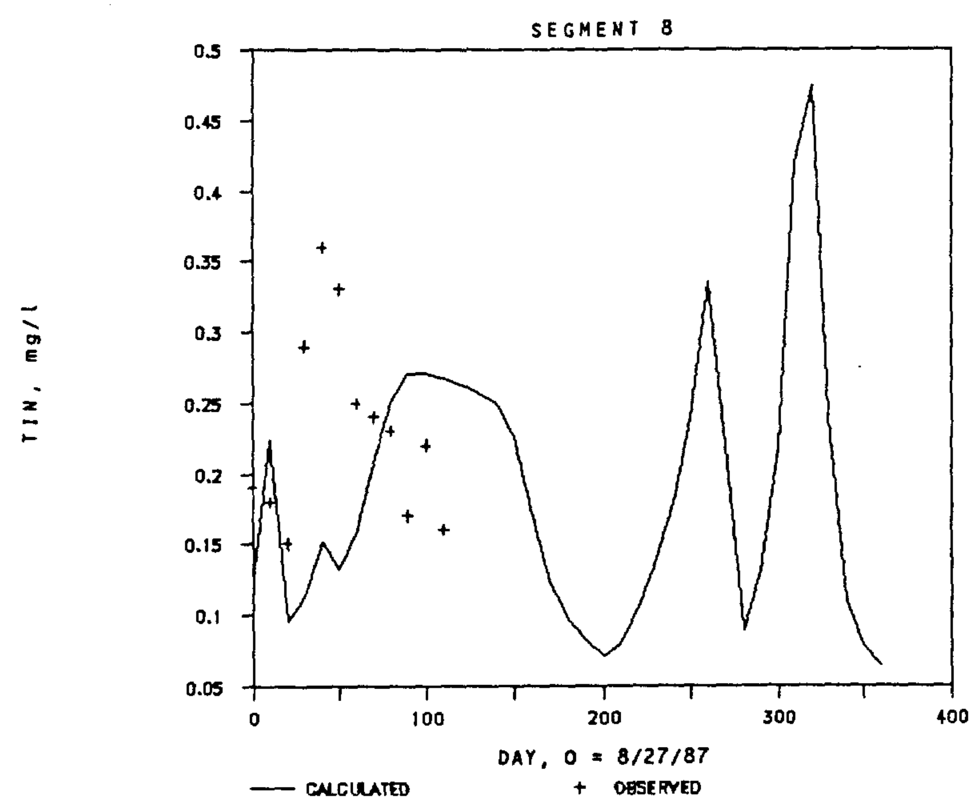
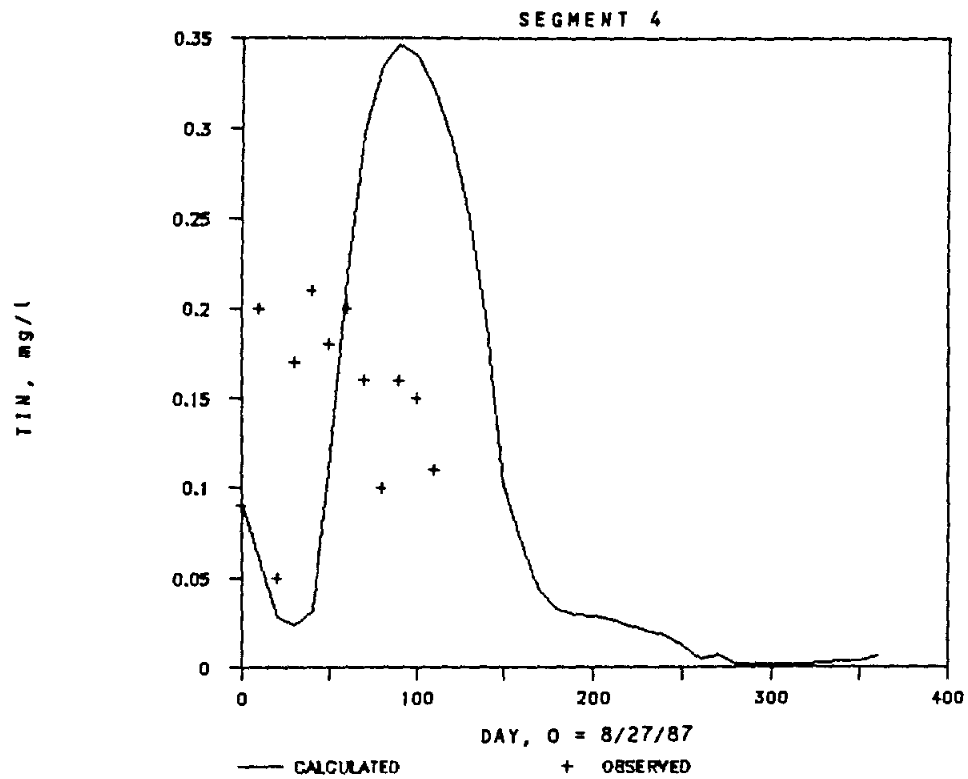


FIGURE A-13

Calibration Results and Observed Values for Total Inorganic Nitrogen in Lake Belton (continued)



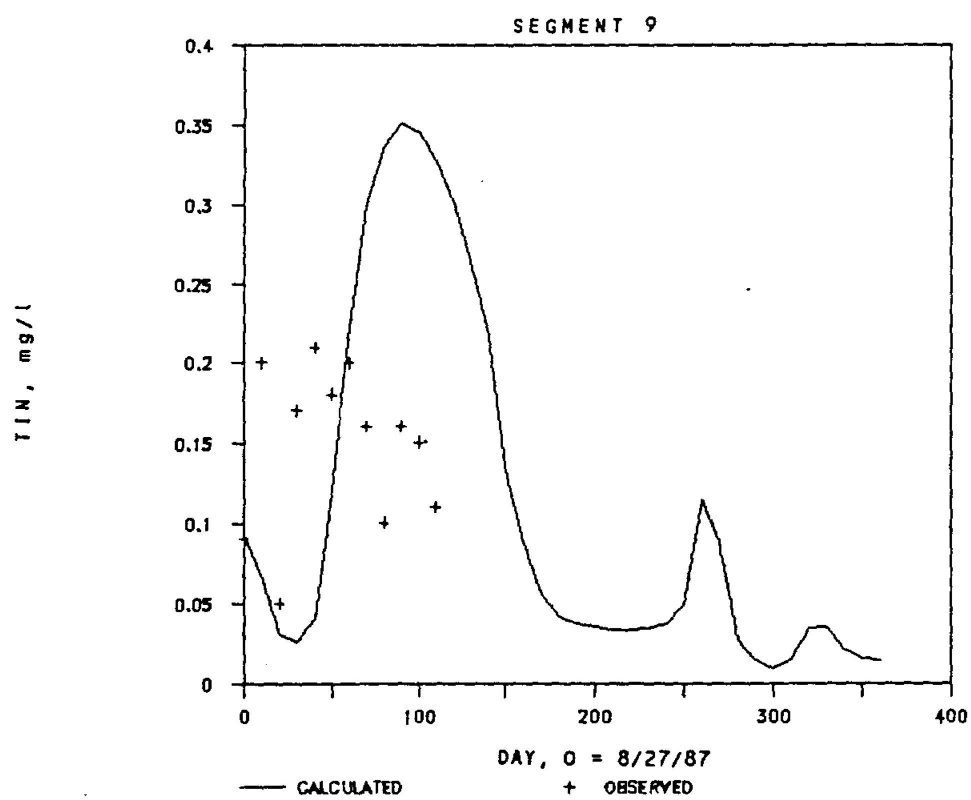


FIGURE A-13

Calibration Results and Observed Values for Total Inorganic Nitrogen in Lake Belton (continued)

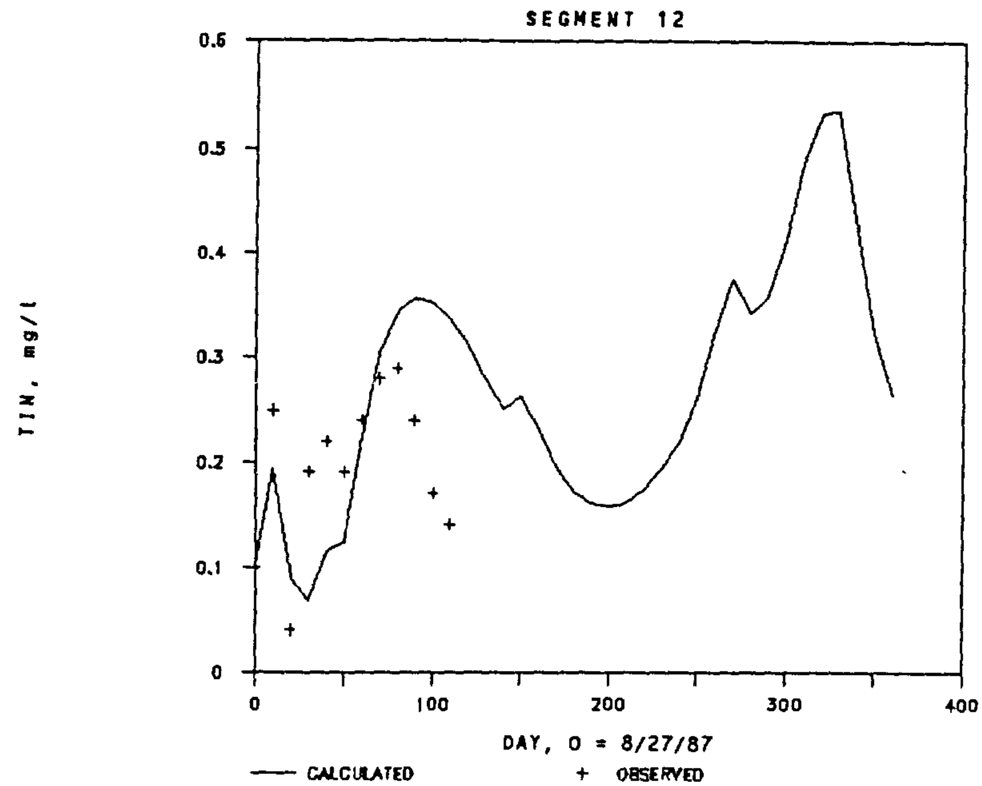
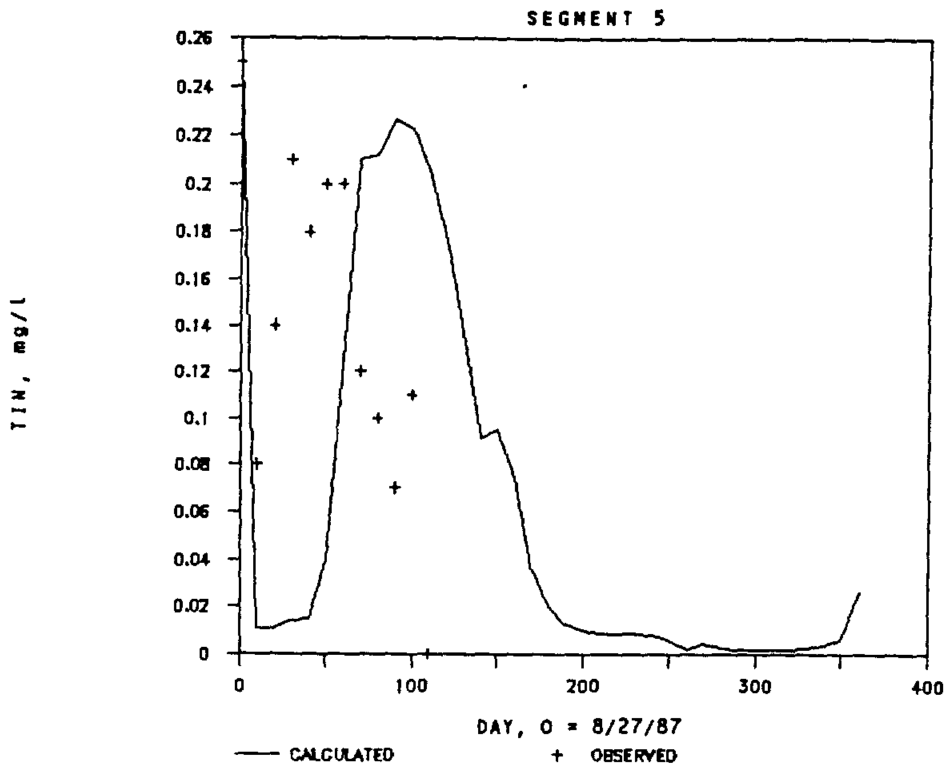


FIGURE A-13

Calibration Results and Observed Values for Total Inorganic Nitrogen in Lake Belton (continued)



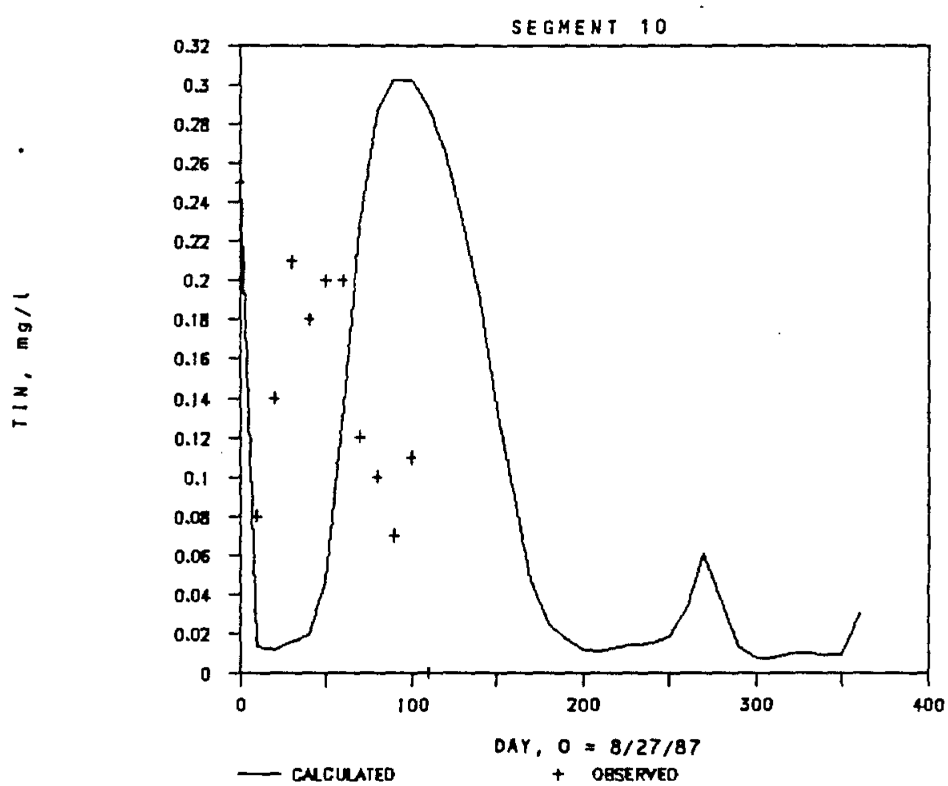


FIGURE A-13

Calibration Results and Observed Values for Total Inorganic Nitrogen in Lake Belton (continued)

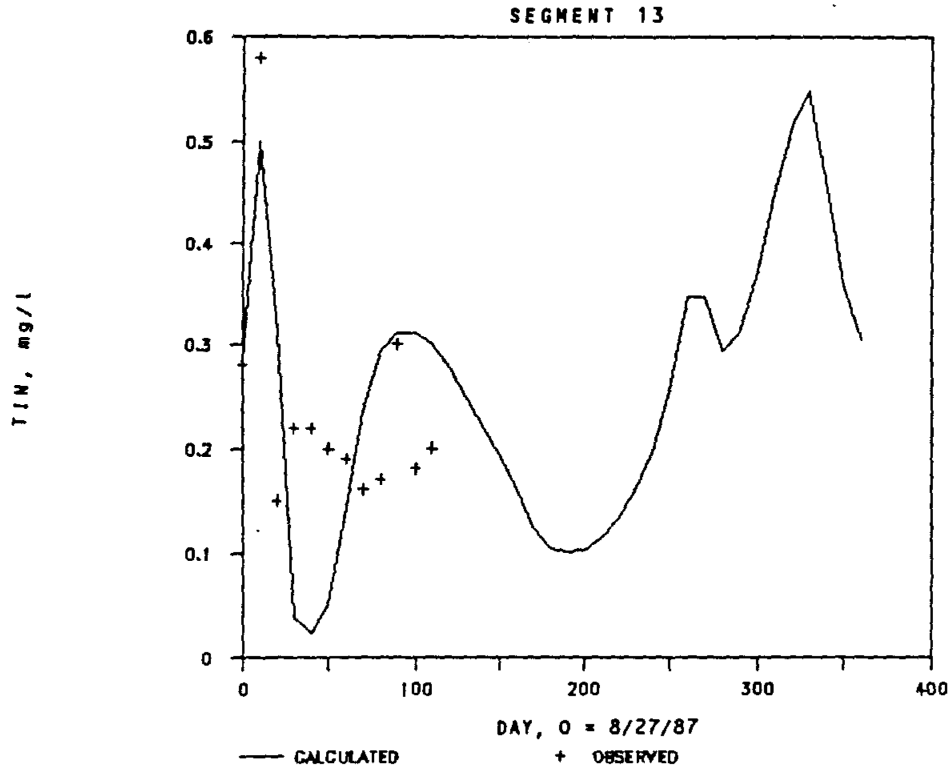
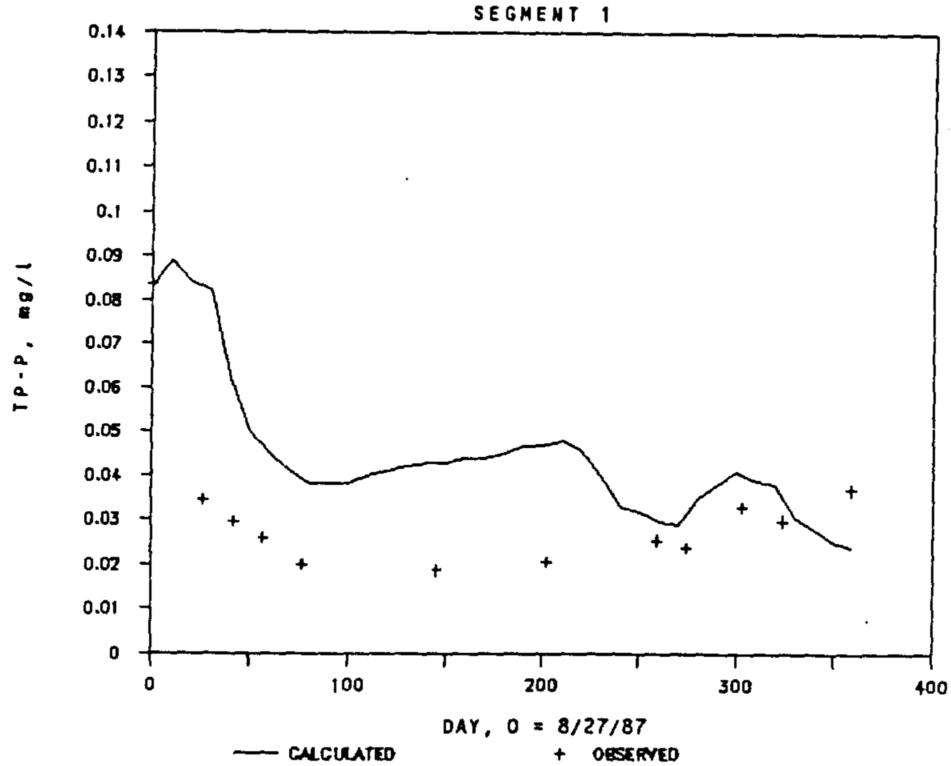


FIGURE A-13

Calibration Results and Observed Values for Total Inorganic Nitrogen in Lake Belton (continued)



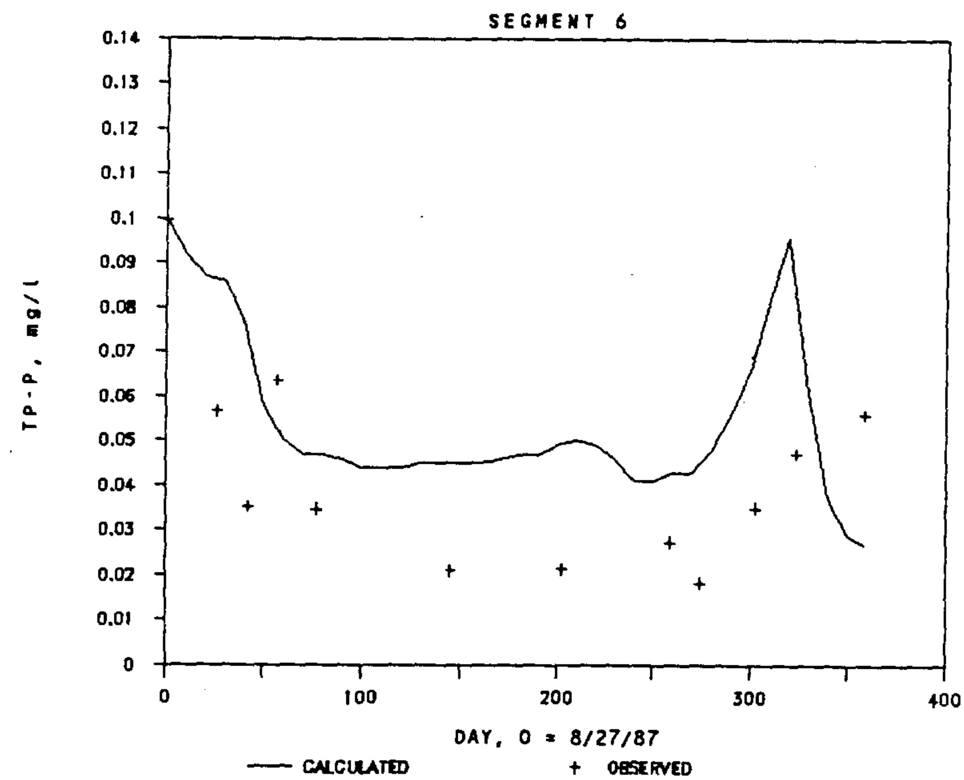


FIGURE A-14

Calibration Results and Observed Values for Total Phosphorous in Lake Belton

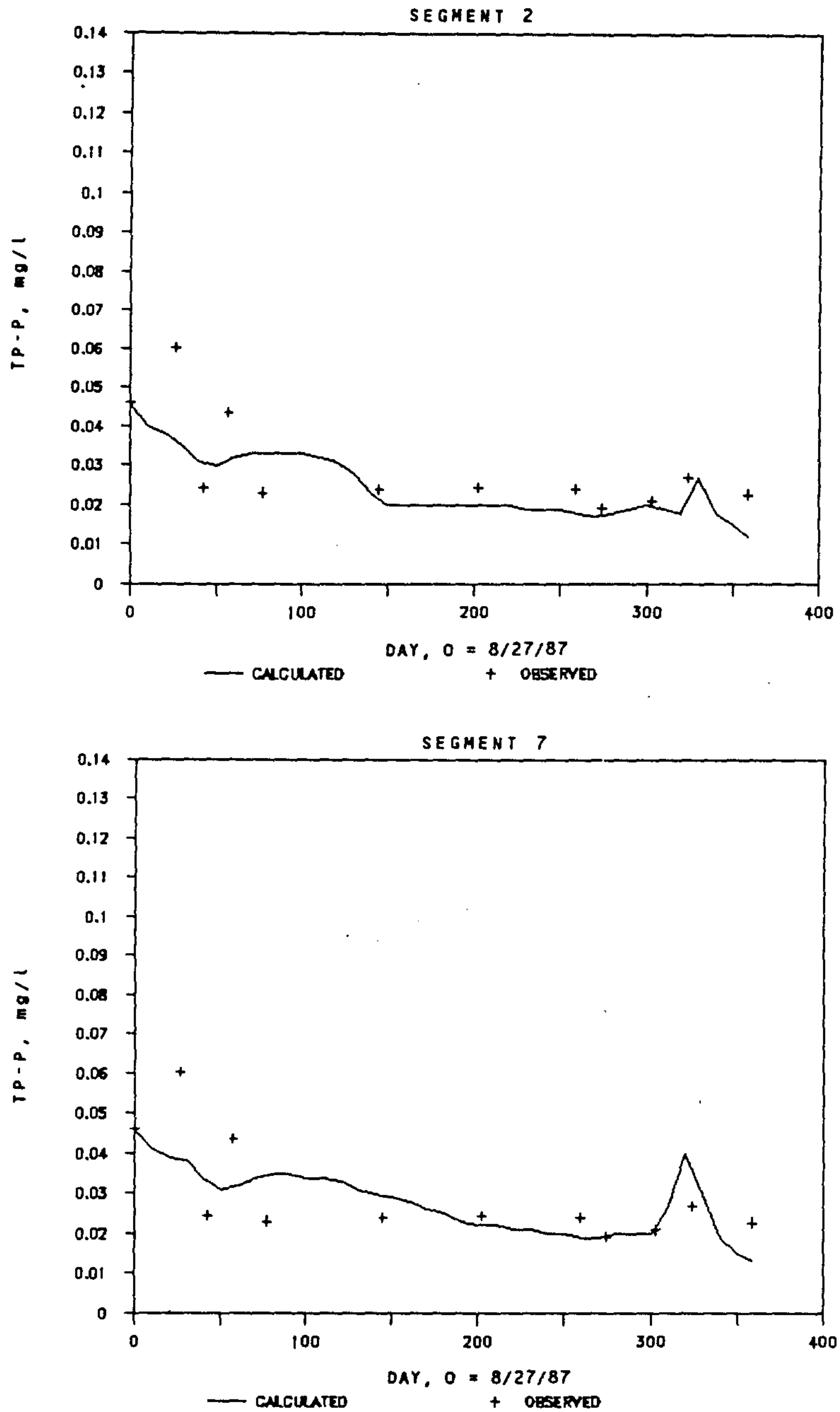


FIGURE A-14

Calibration Results and Observed Values for Total Phosphorous in Lake Belton (continued)

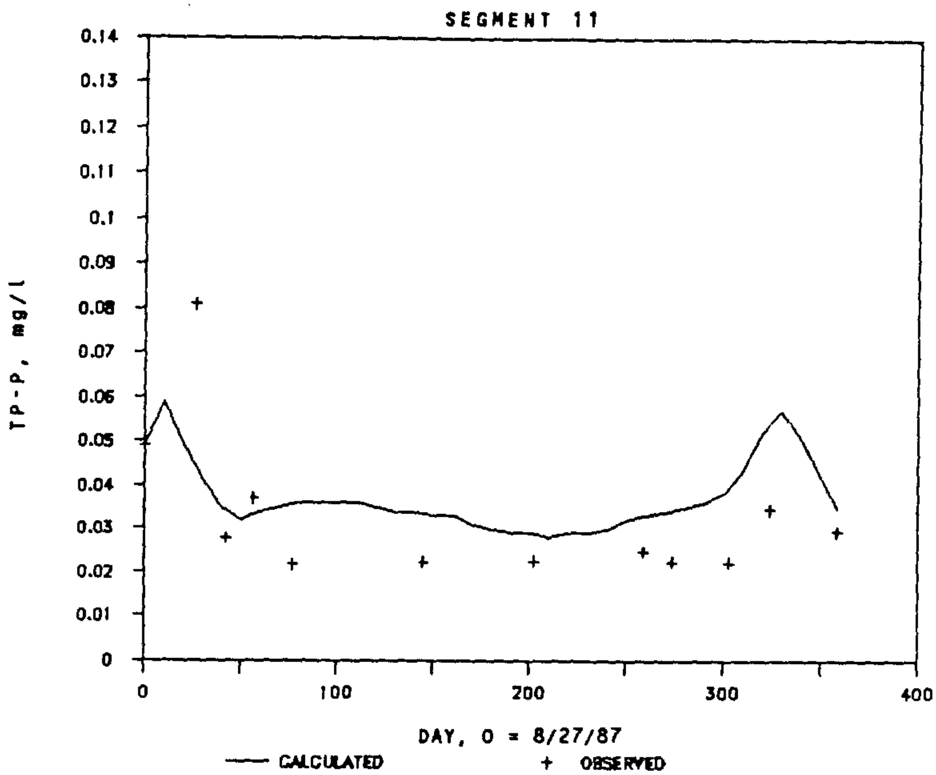
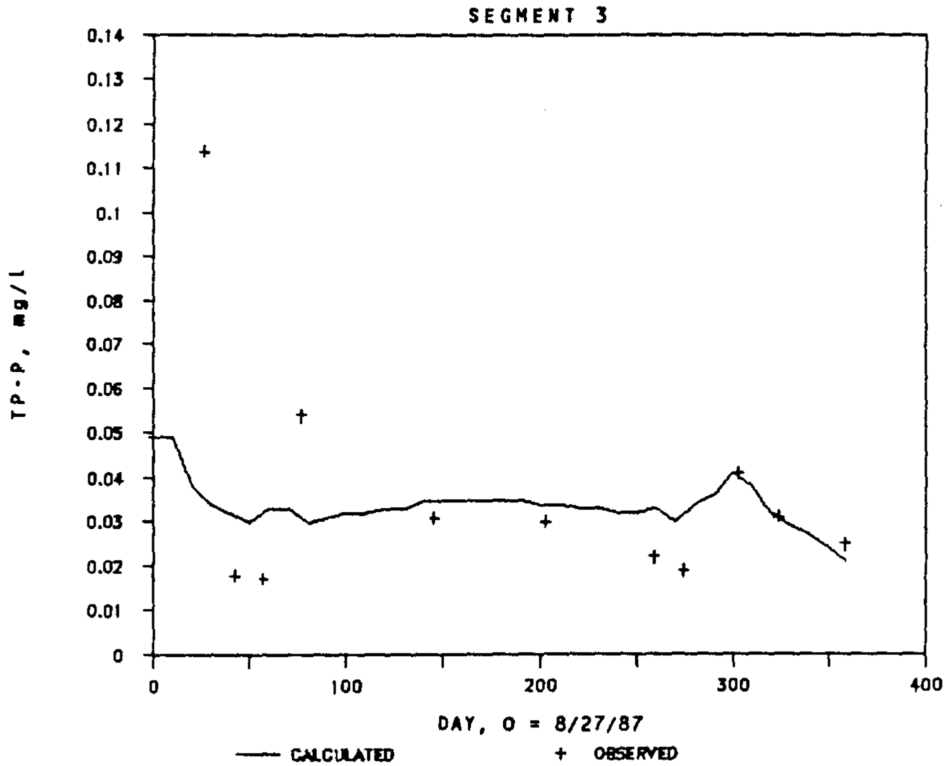


FIGURE A-14

Calibration Results and Observed Values for
Total Phosphorous in Lake Belton
(continued)



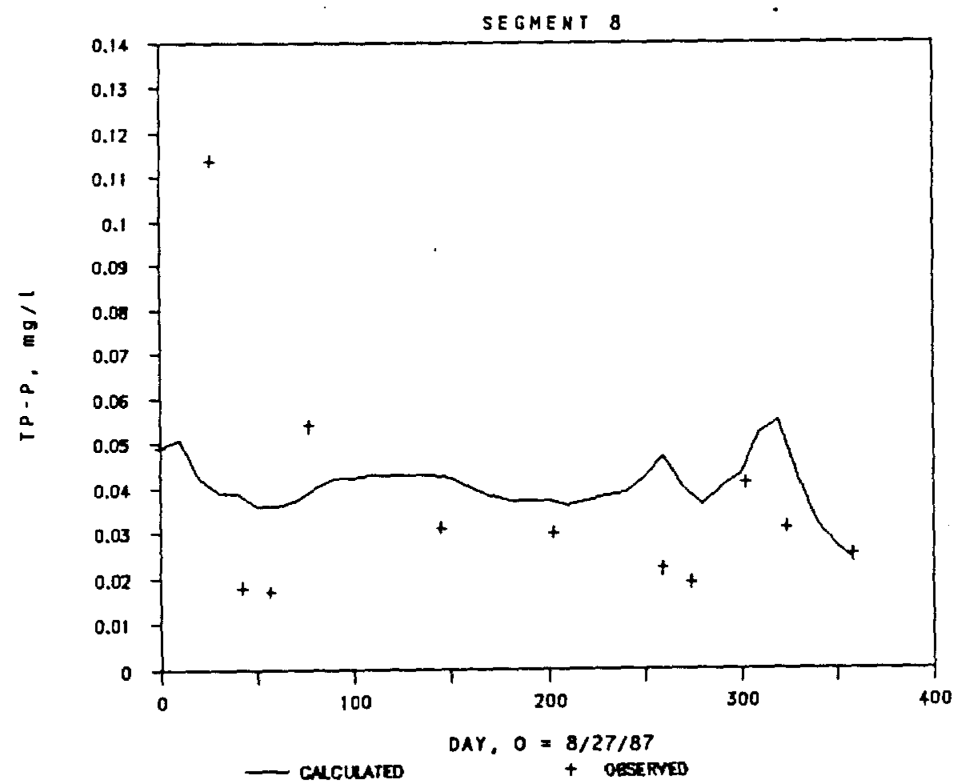
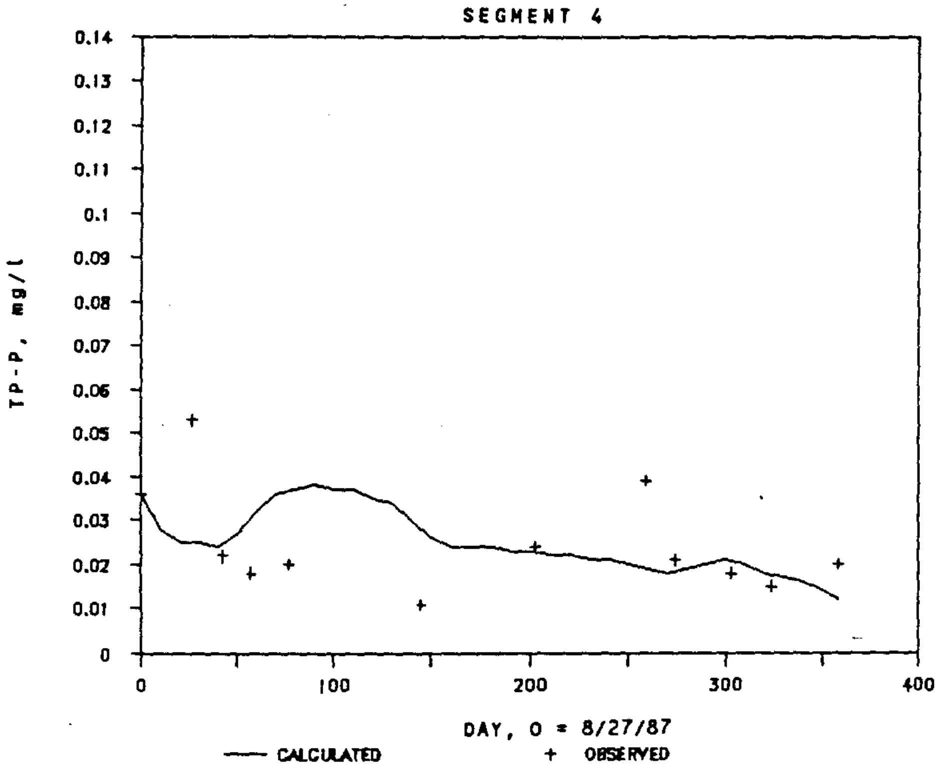


FIGURE A-14

Calibration Results and Observed Values for Total Phosphorous in Lake Belton (continued)



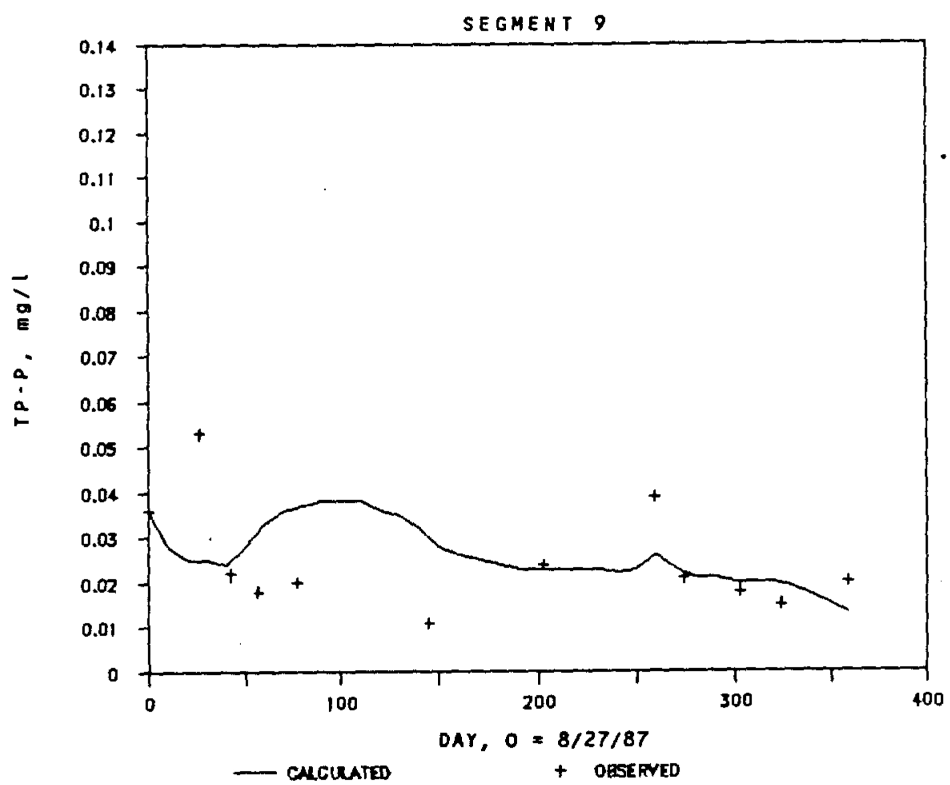


FIGURE A-14

Calibration Results and Observed Values for Total Phosphorous in Lake Belton (continued)

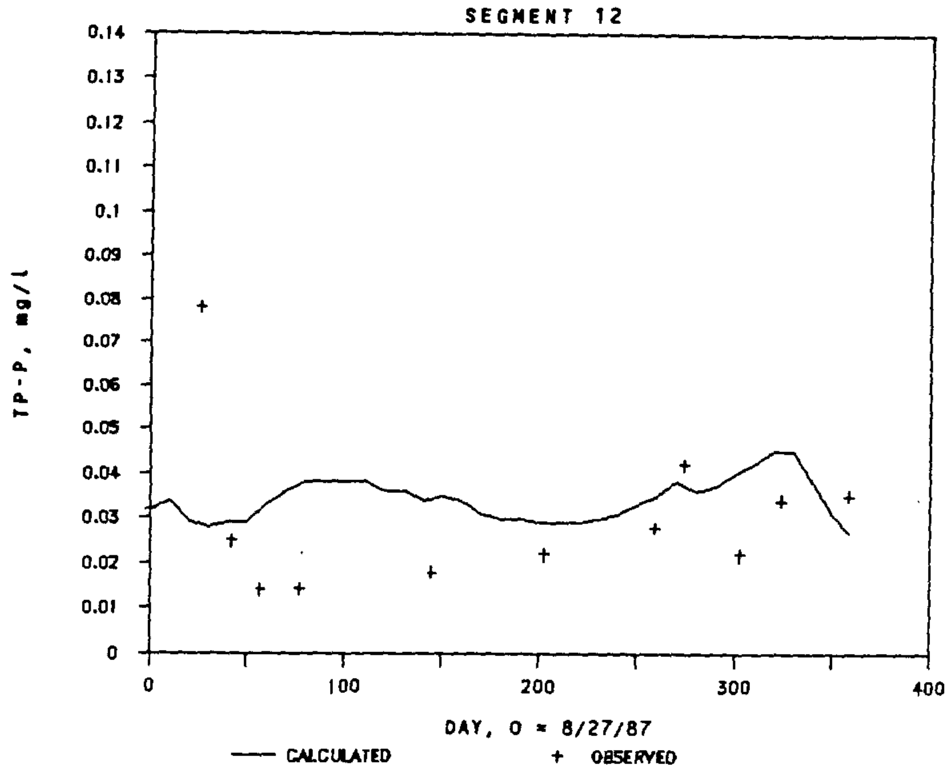
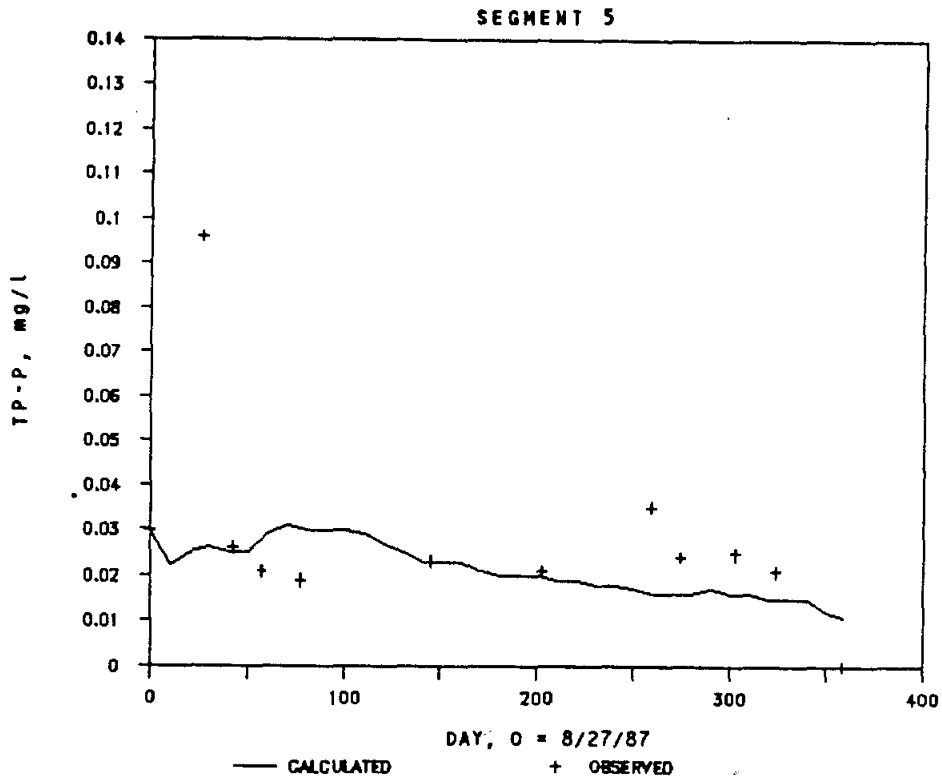


FIGURE A-14

Calibration Results and Observed Values for
Total Phosphorous in Lake Belton
(continued)



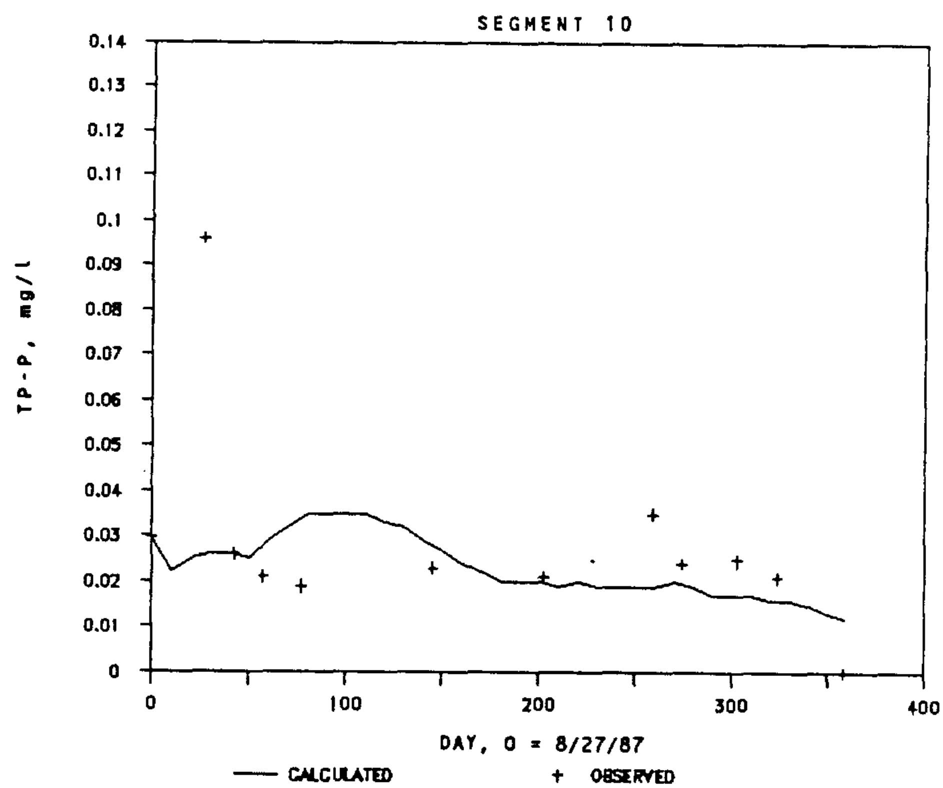


FIGURE A-14

Calibration Results and Observed Values for Total Phosphorous in Lake Belton (continued)

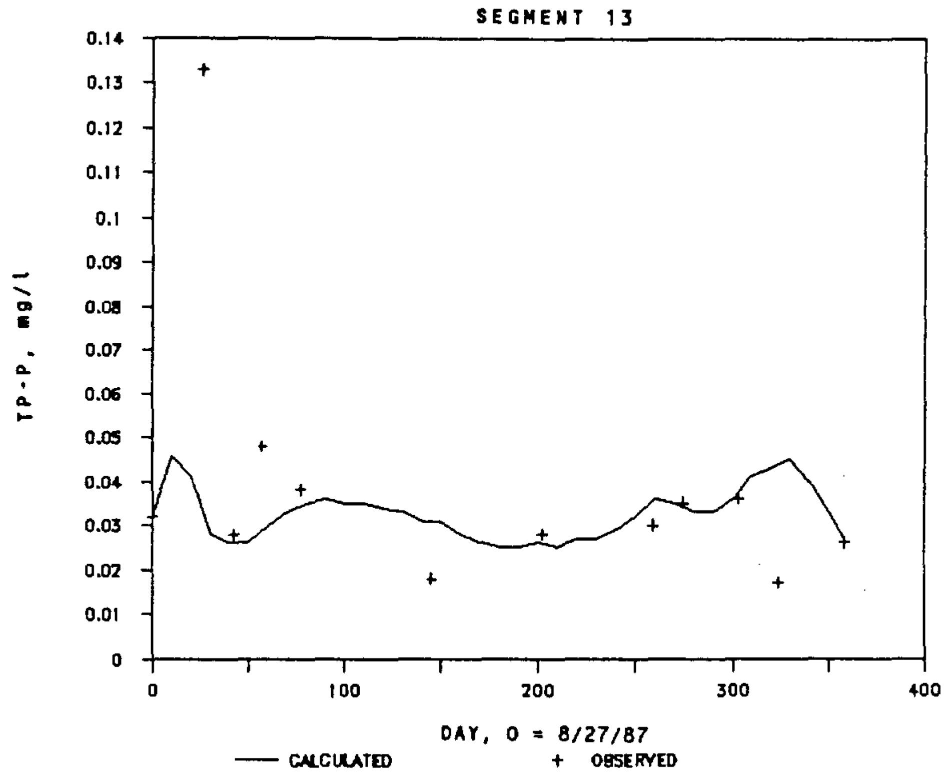
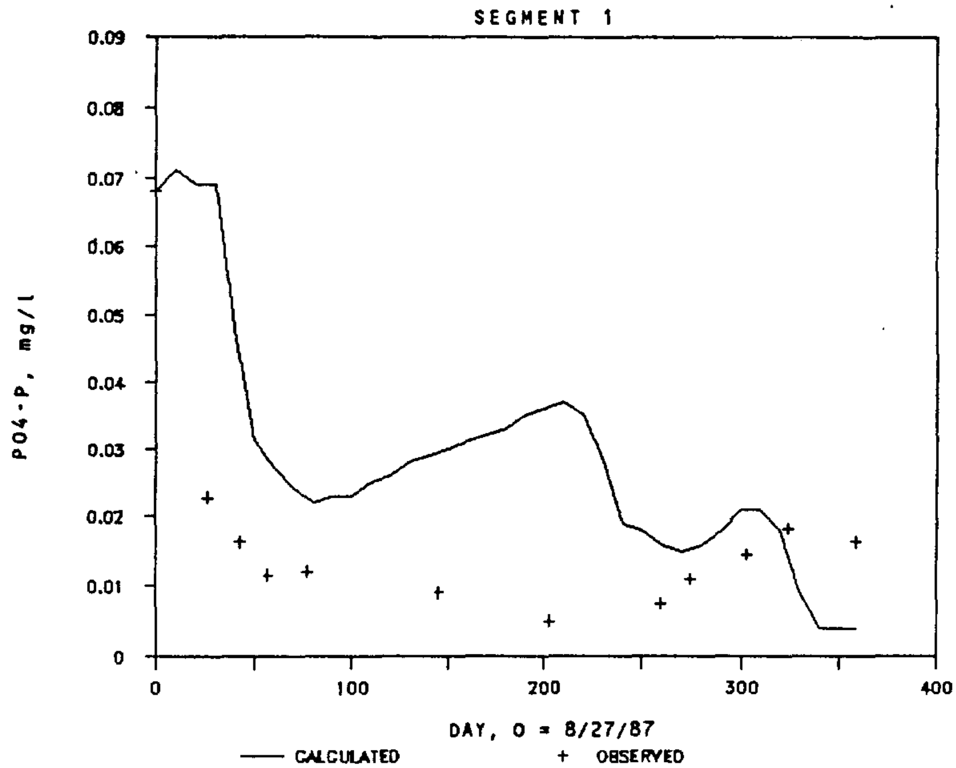


FIGURE A-14

Calibration Results and Observed Values for Total Phosphorous in Lake Belton (continued)



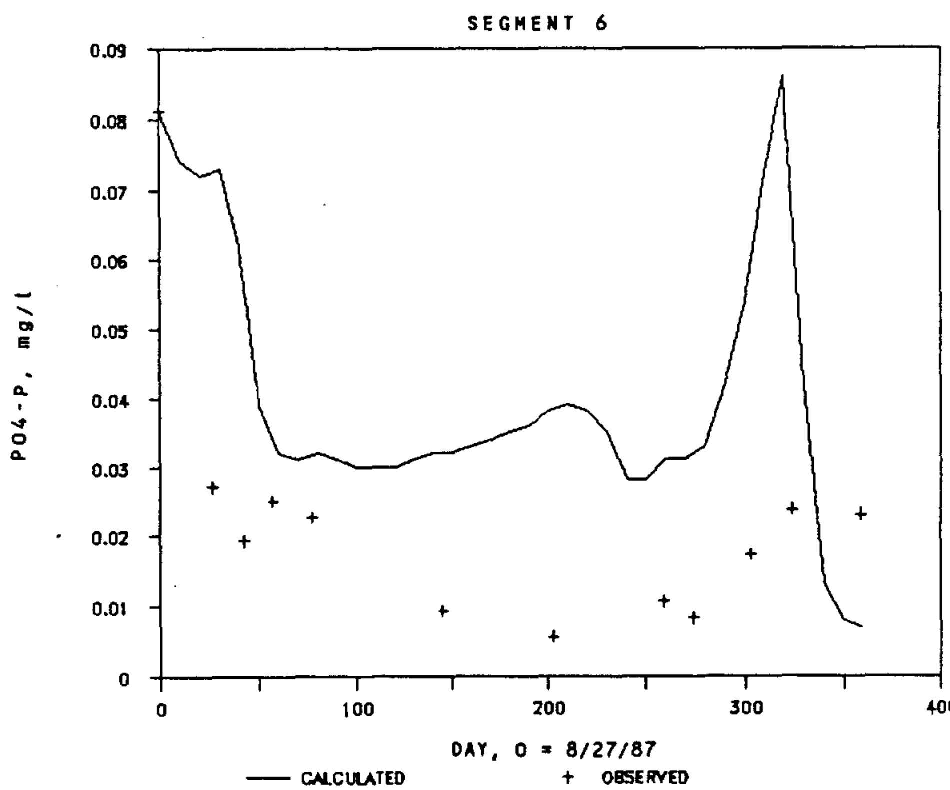
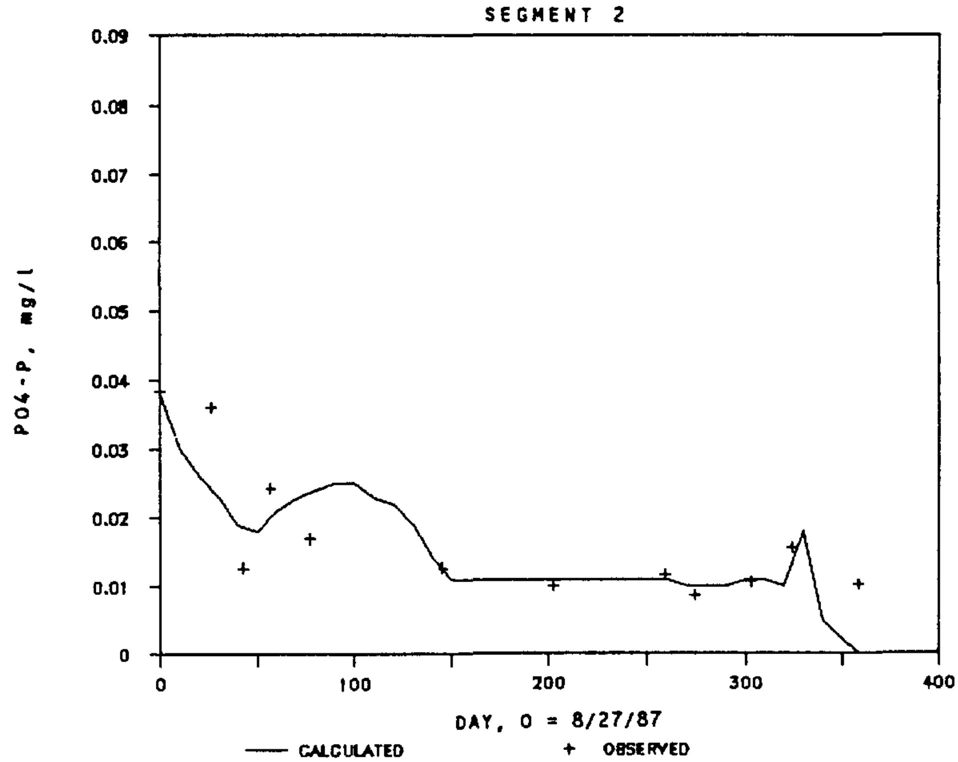


FIGURE A-15

Calibration Results and Observed Values for OrthoPhosphorous in Lake Belton



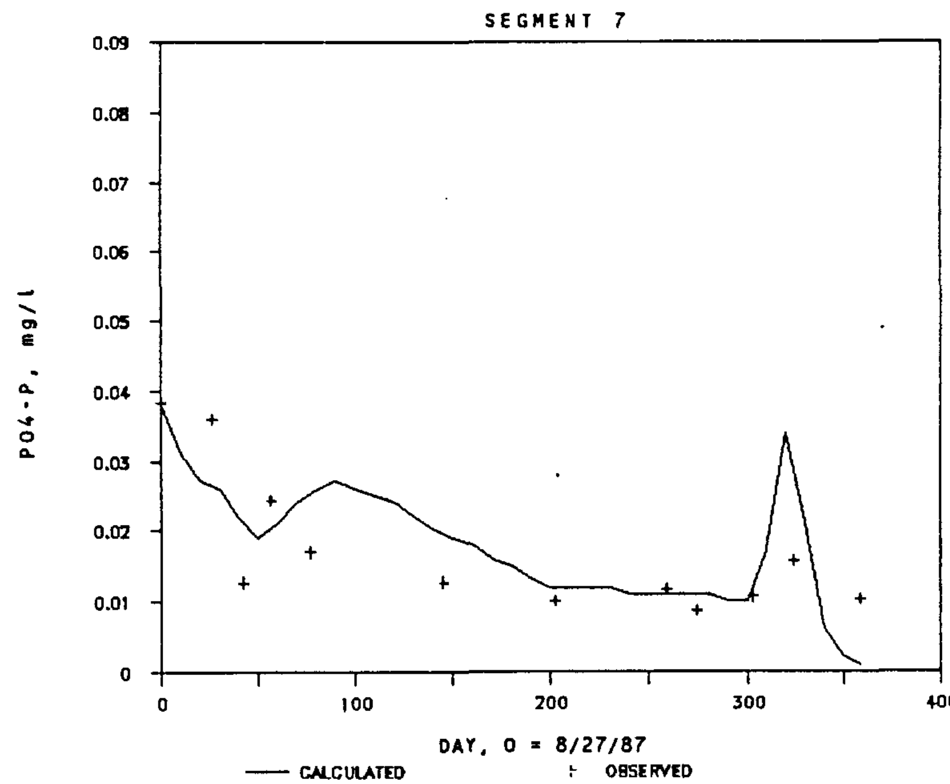


FIGURE A-15

Calibration Results and Observed Values for OrthoPhosphorous in Lake Belton (continued)

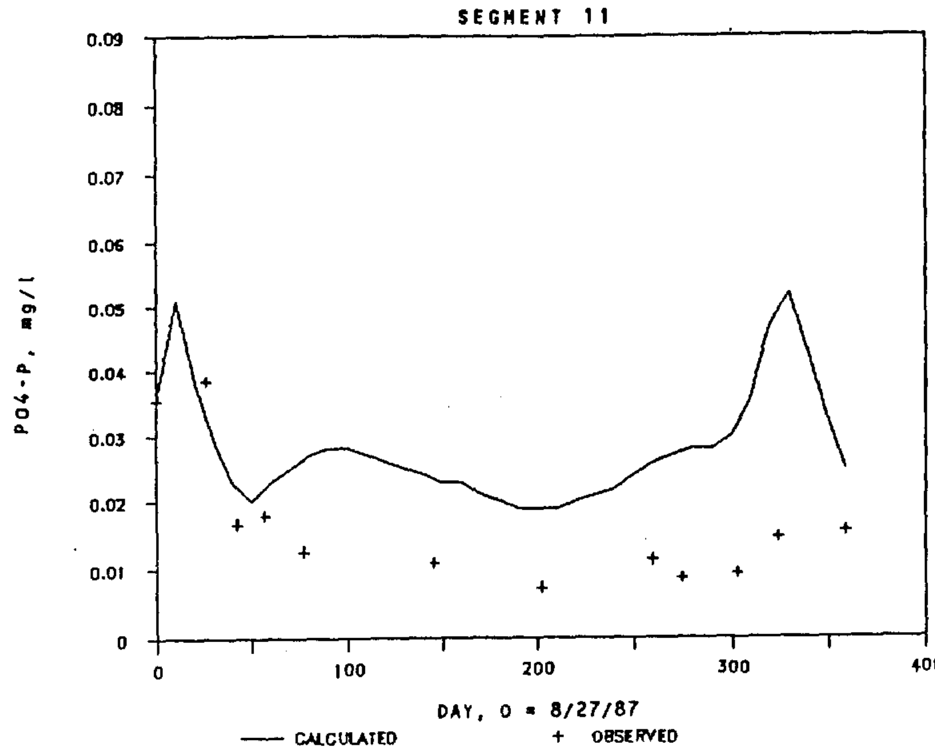
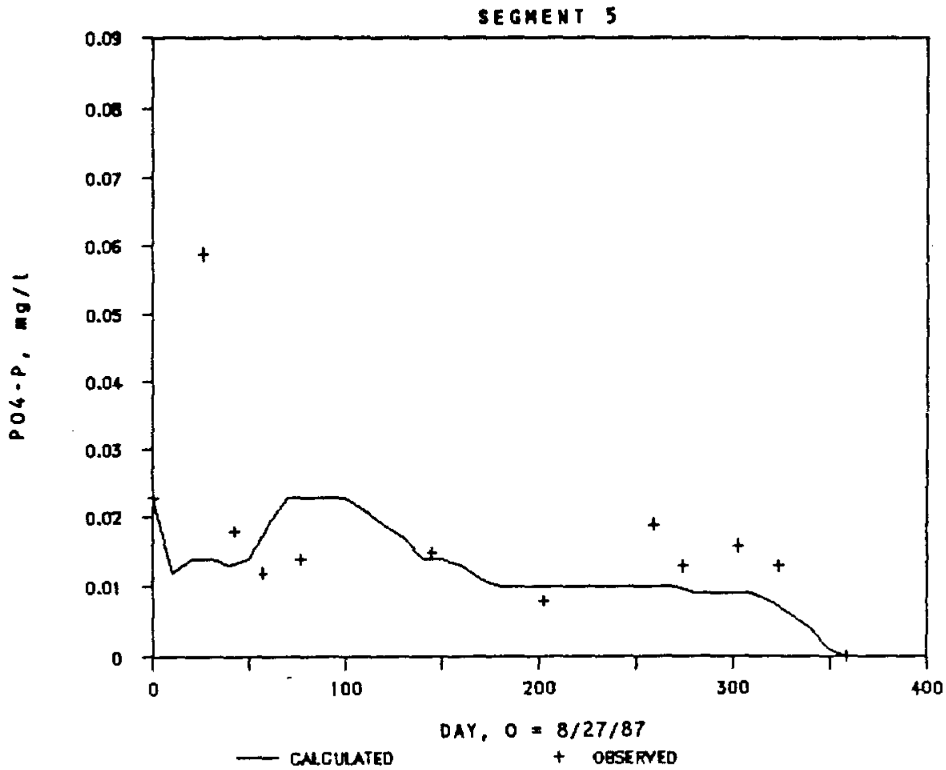


FIGURE A-15

Calibration Results and Observed Values for
OrthoPhosphorous in Lake Belton
(continued)



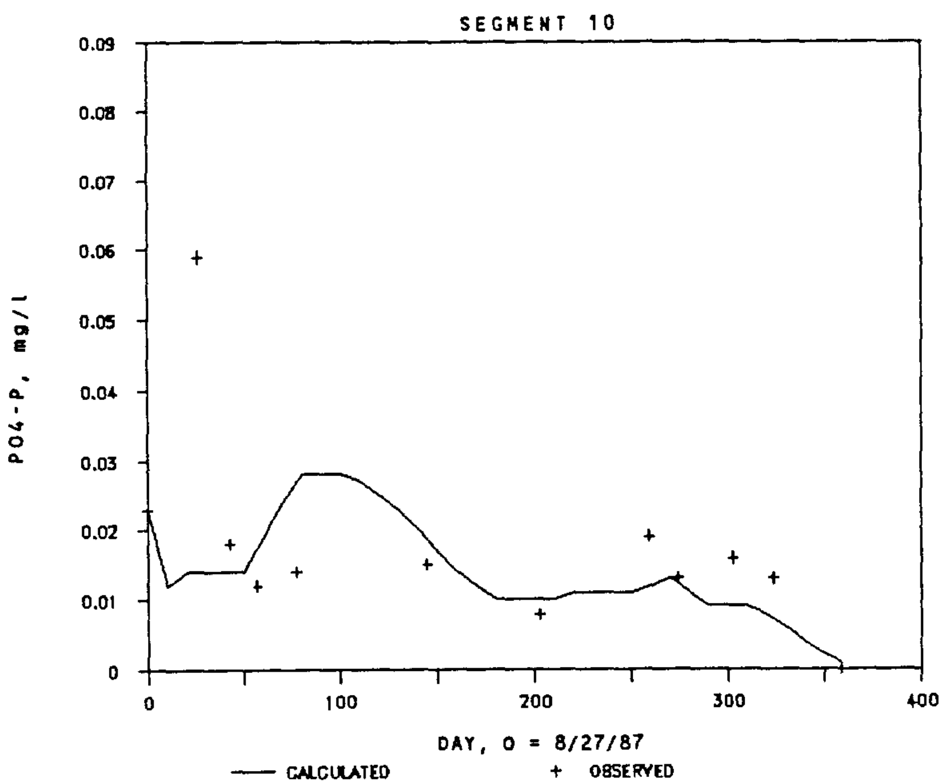


FIGURE A-15

Calibration Results and Observed Values for OrthoPhosphorous in Lake Belton (continued)

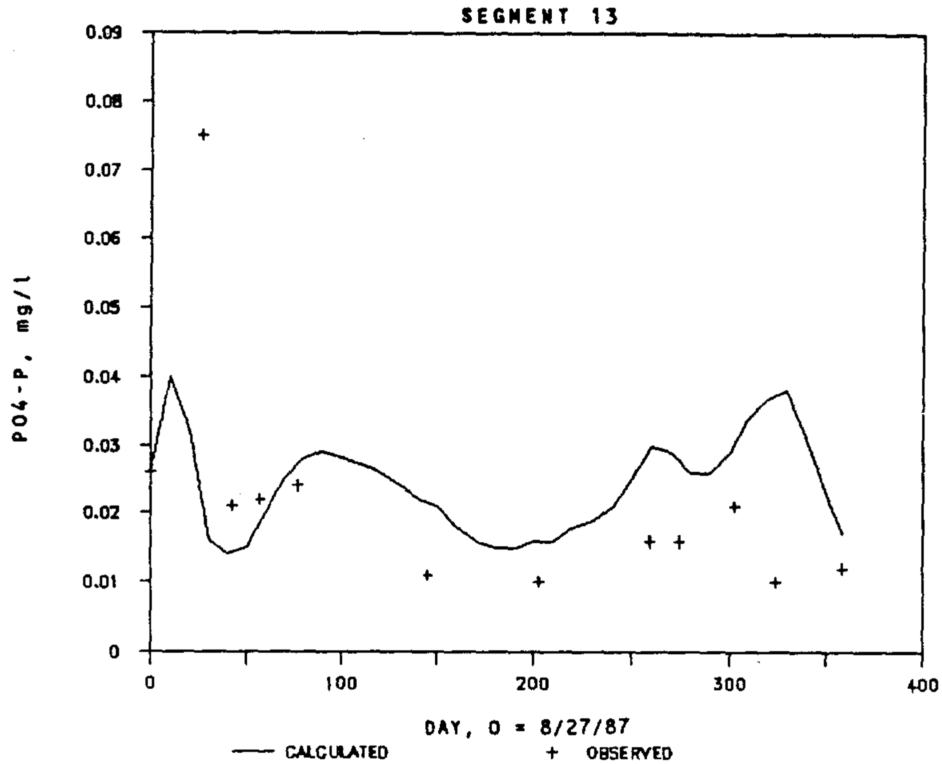
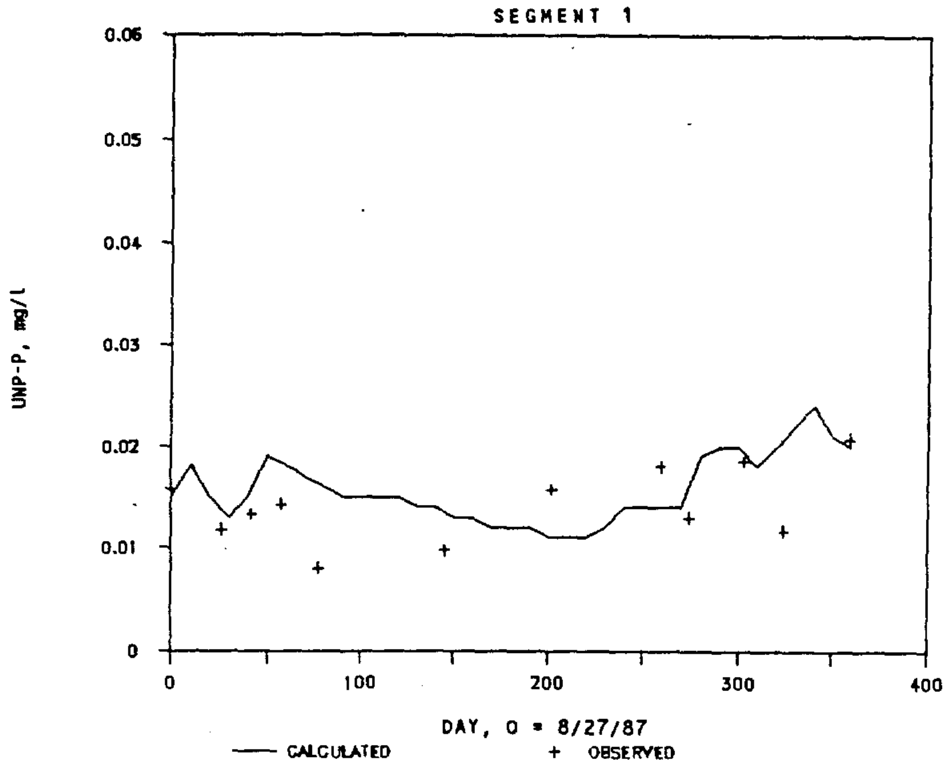


FIGURE A-15

Calibration Results and Observed Values for OrthoPhosphorous in Lake Belton (continued)



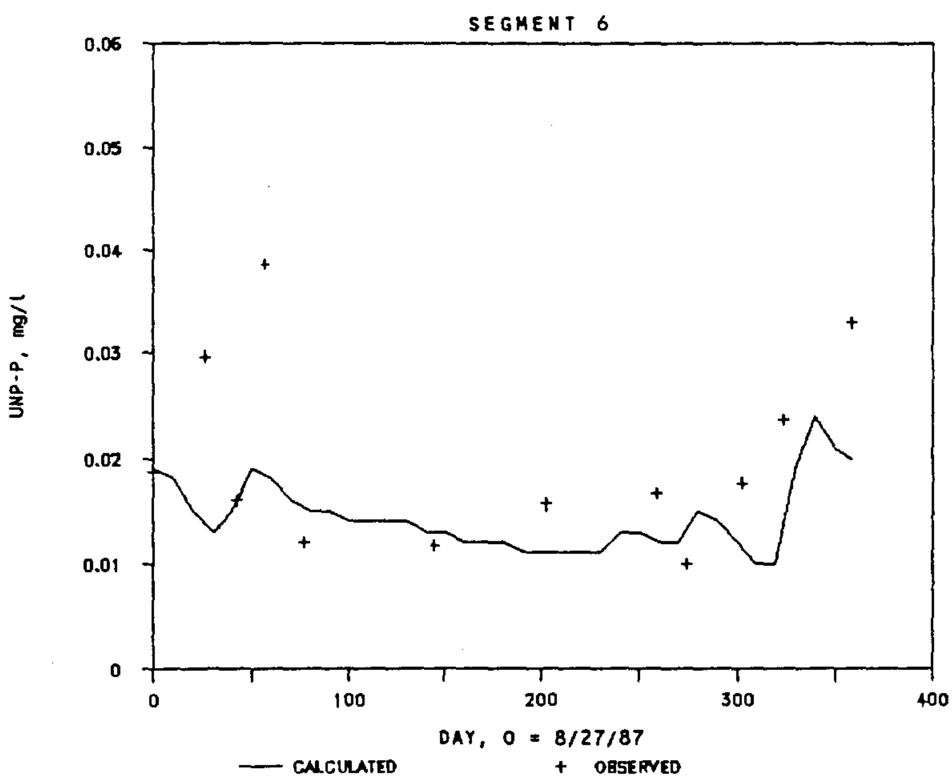
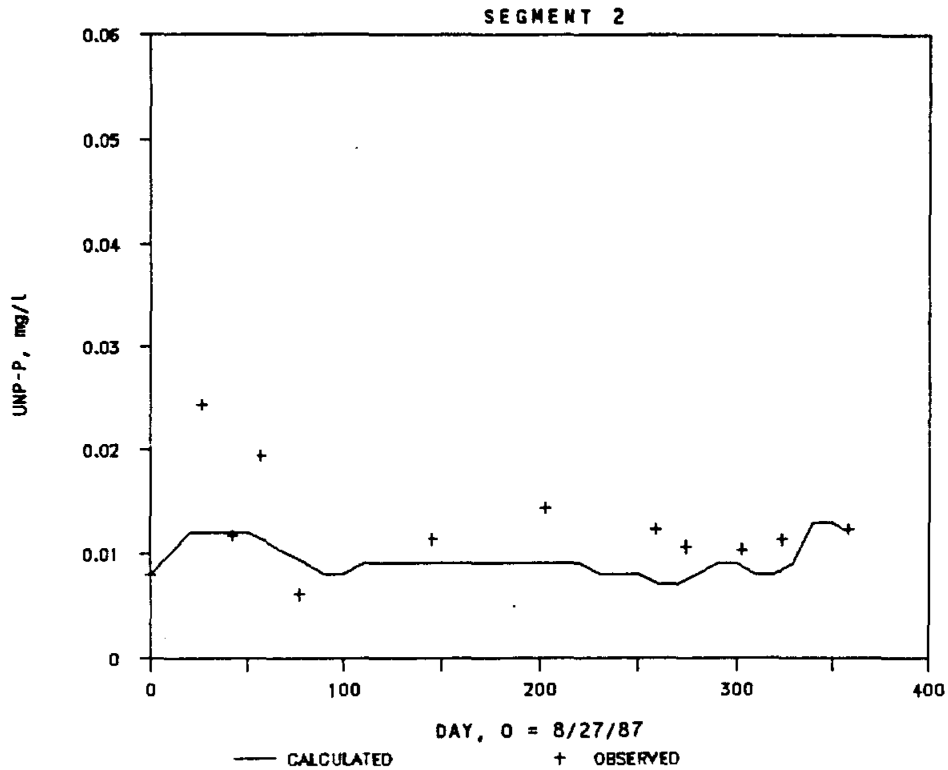


FIGURE A-16

Calibration Results and Observed Values for Unavailable Phosphorous in Lake Belton



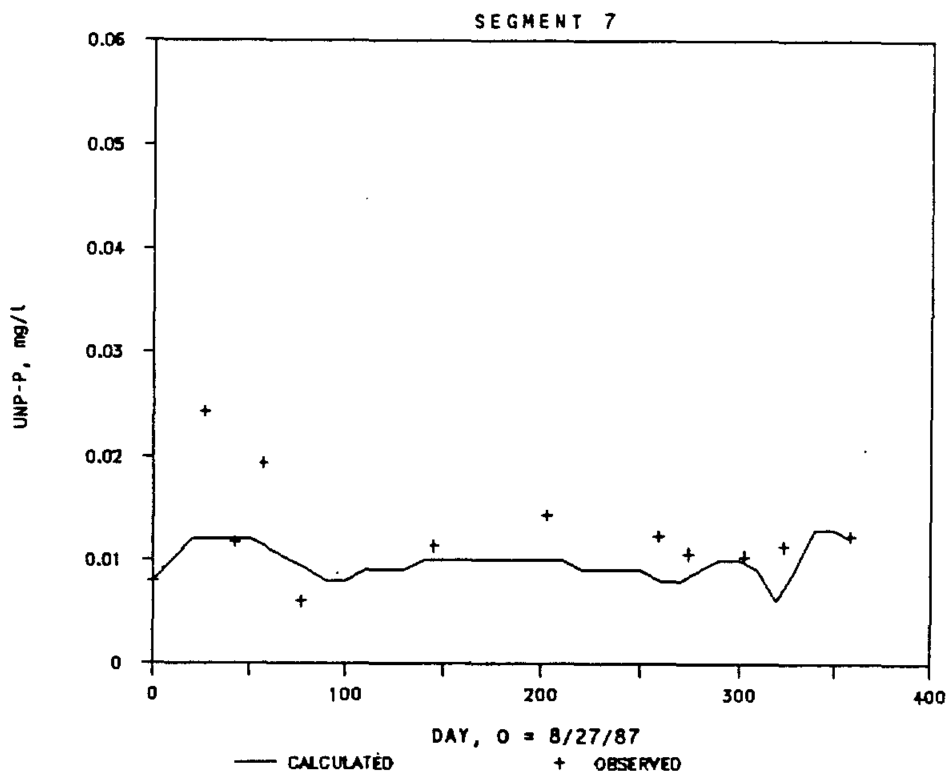


FIGURE A-16

Calibration Results and Observed Values for Unavailable Phosphorous in Lake Belton (continued)

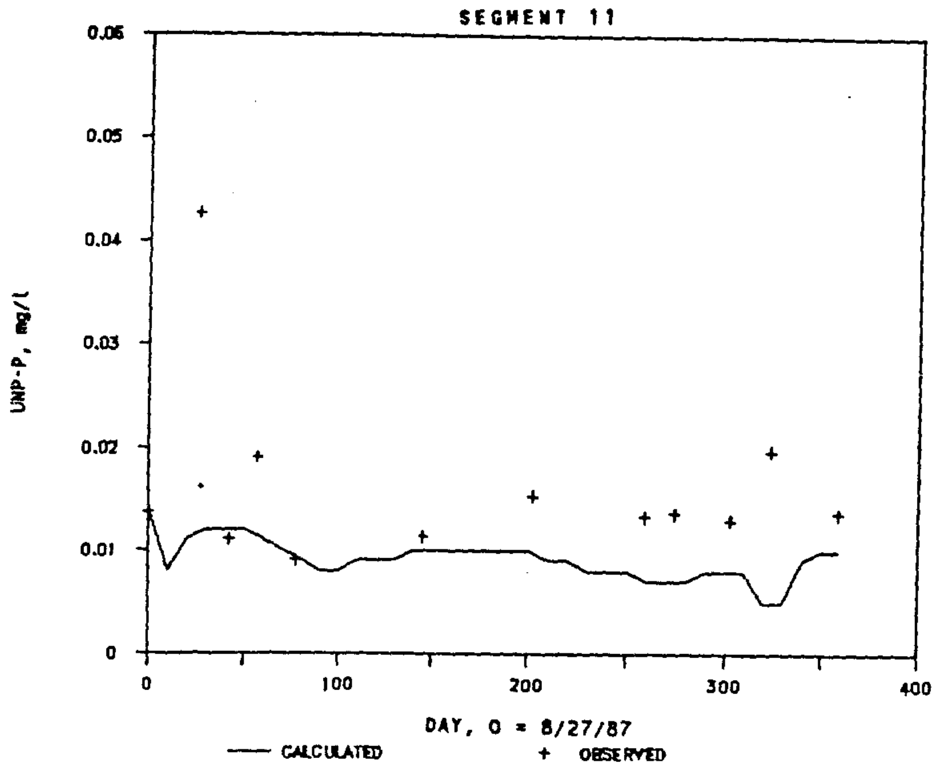
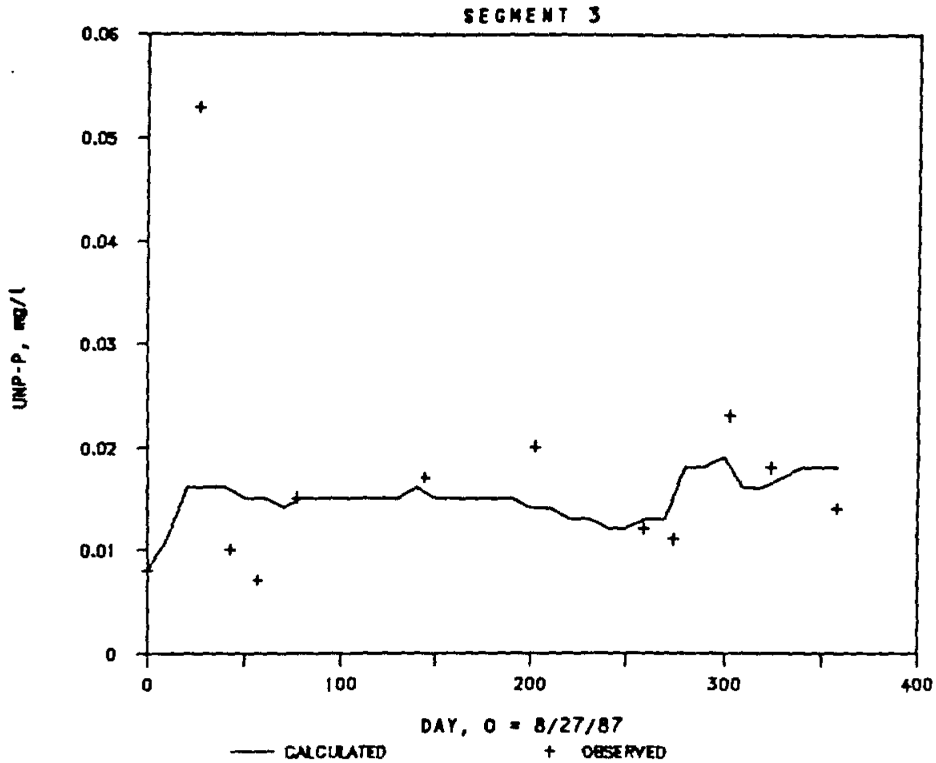


FIGURE A-16

Calibration Results and Observed Values for Unavailable Phosphorous in Lake Belton (continued)



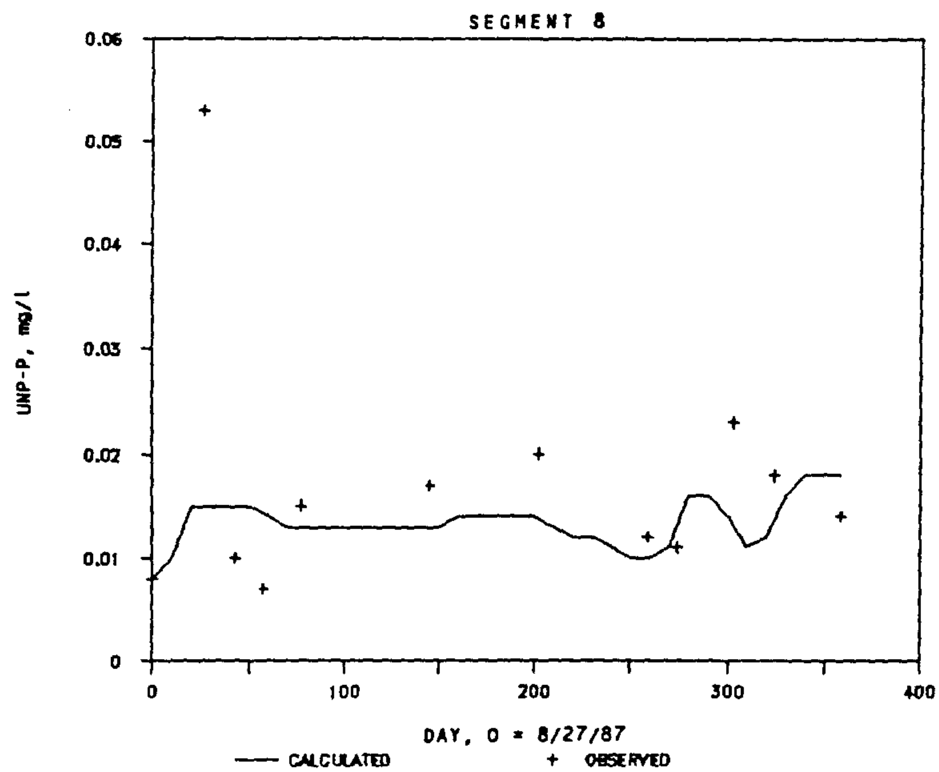


FIGURE A-16

Calibration Results and Observed Values for Unavailable Phosphorous in Lake Belton (continued)

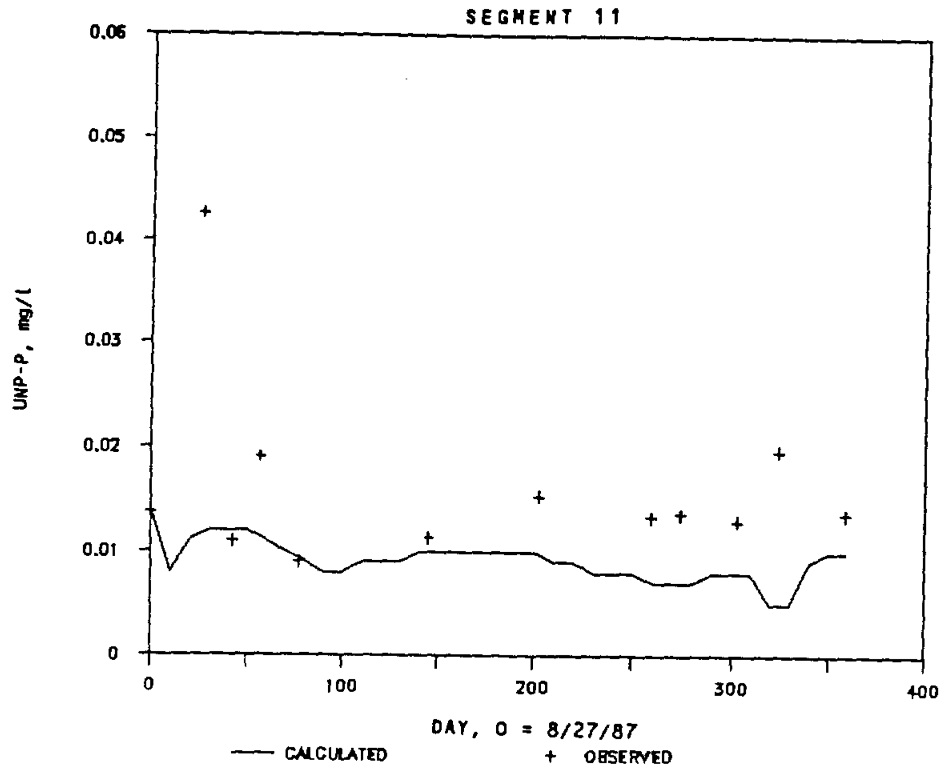
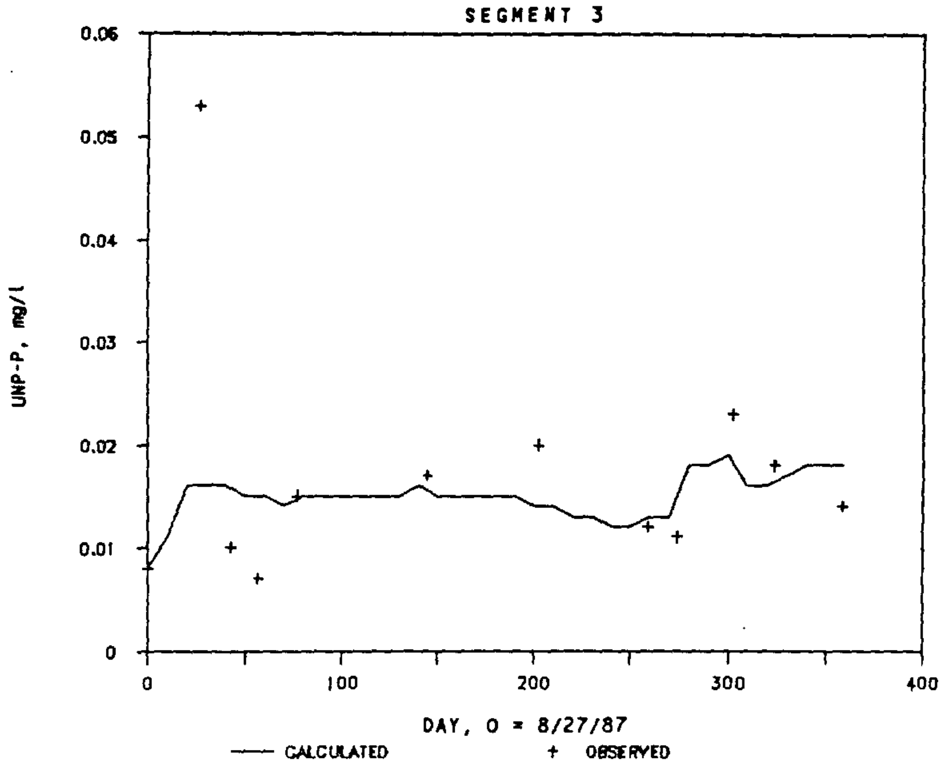


FIGURE A-16

Calibration Results and Observed Values for Unavailable Phosphorous in Lake Belton (continued)



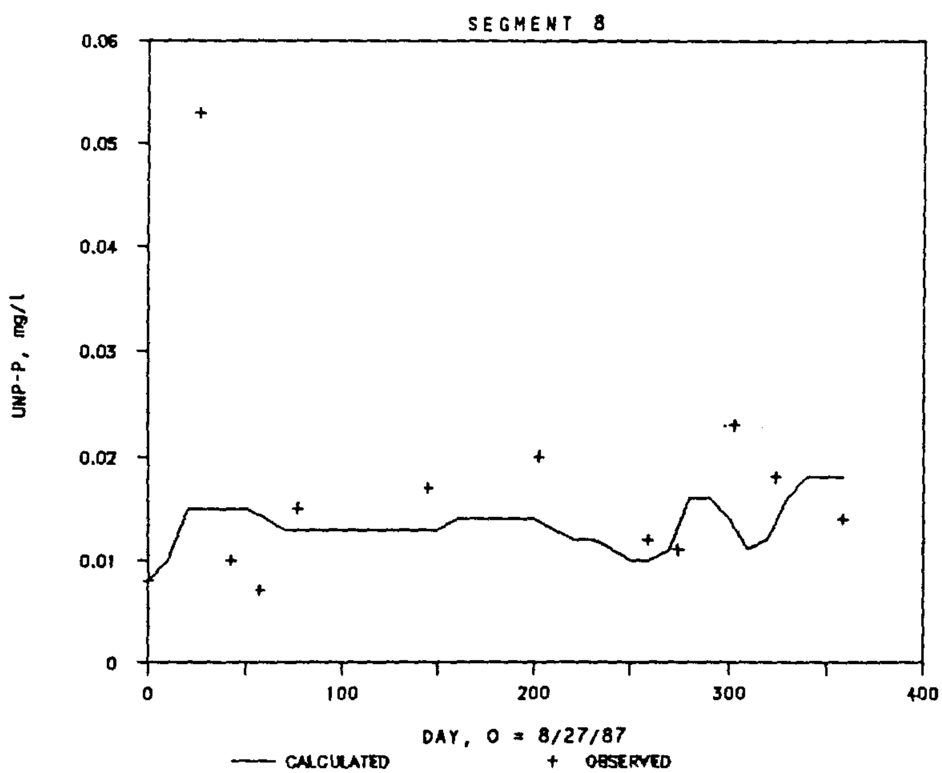
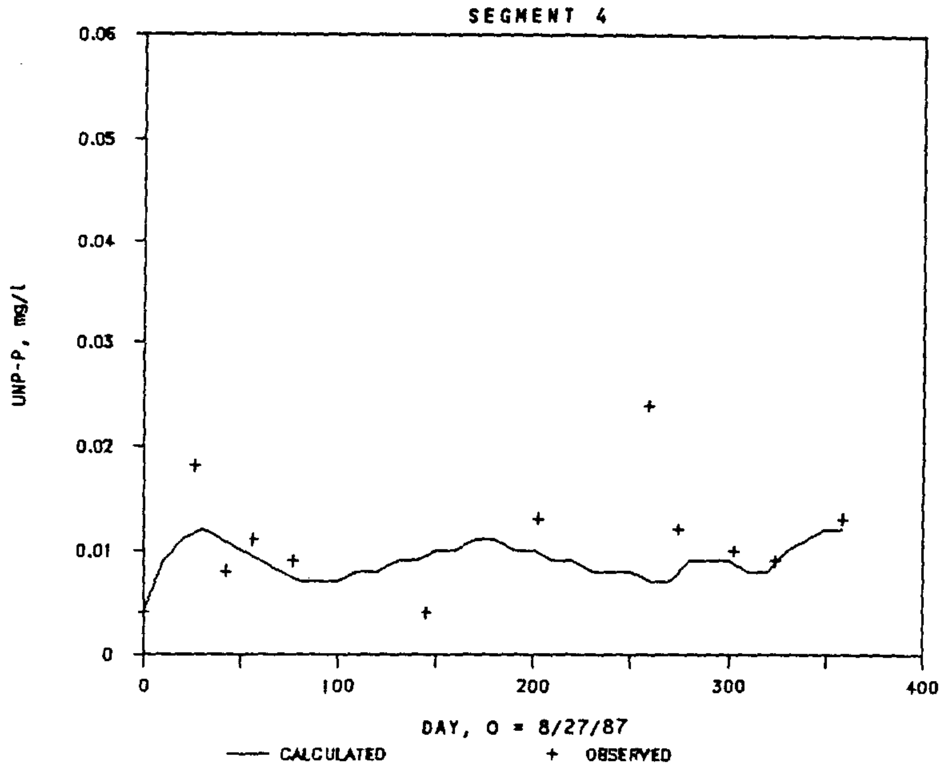


FIGURE A-16

Calibration Results and Observed Values for Unavailable Phosphorous in Lake Belton (continued)



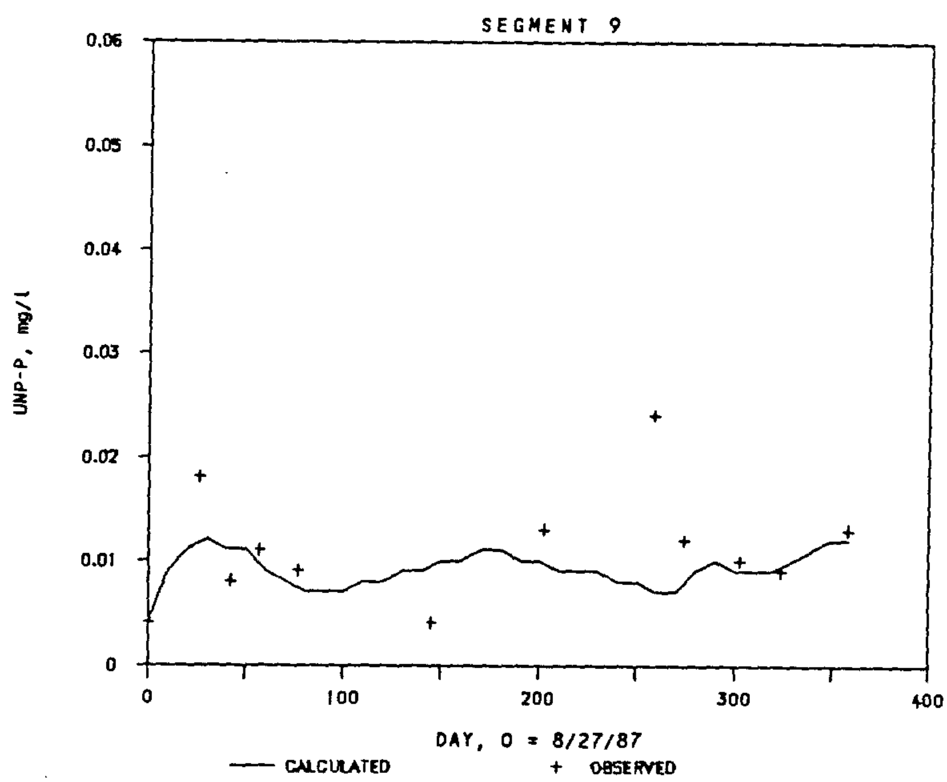


FIGURE A-16

Calibration Results and Observed Values for Unavailable Phosphorous in Lake Belton (continued)

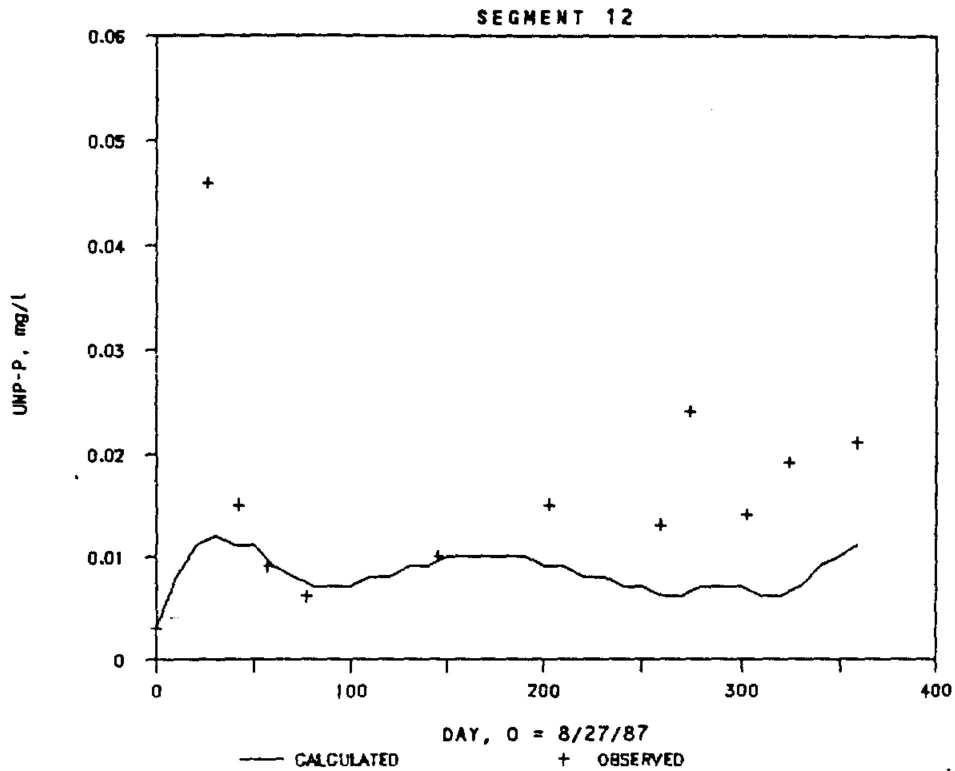
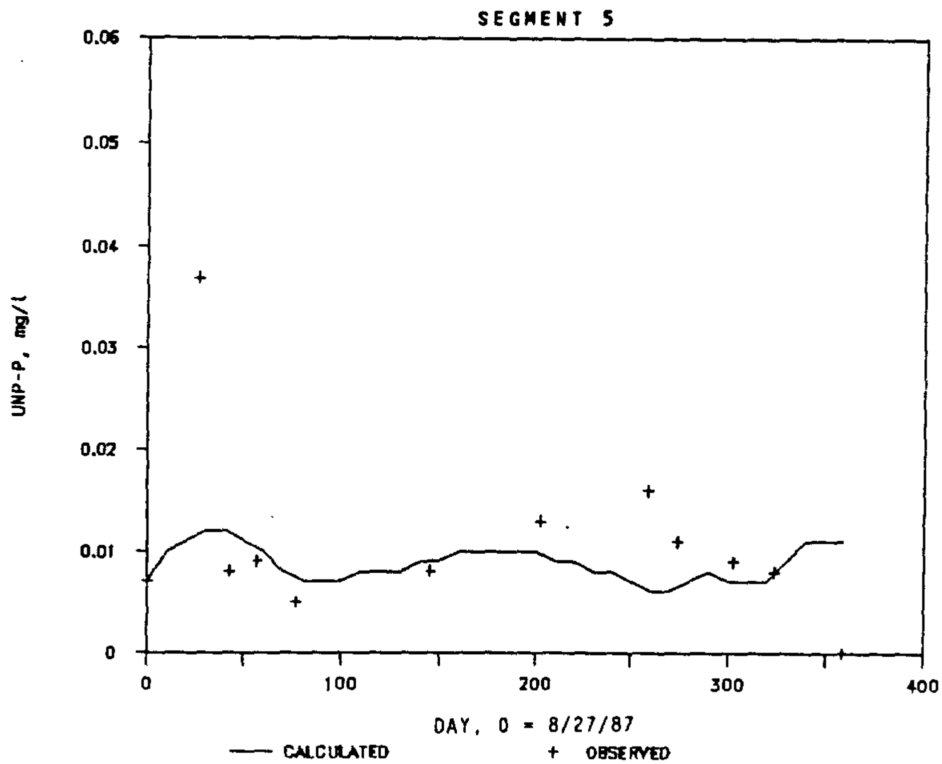


FIGURE A-16

Calibration Results and Observed Values for Unavailable Phosphorous in Lake Belton (continued)



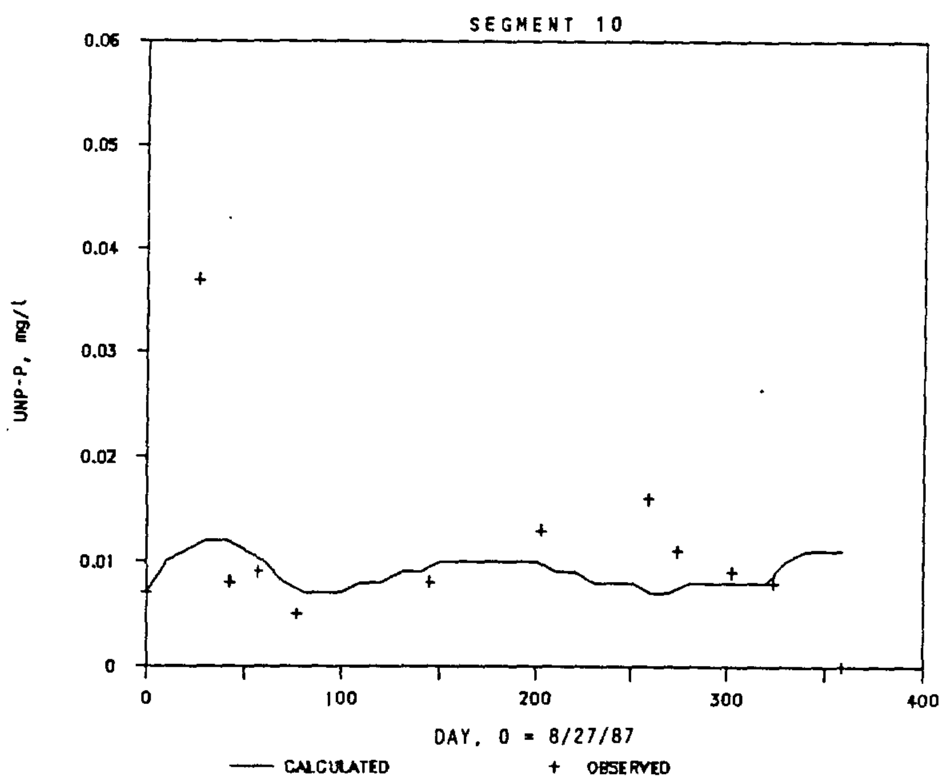


FIGURE A-16

Calibration Results and Observed Values for Unavailable Phosphorous in Lake Belton (continued)

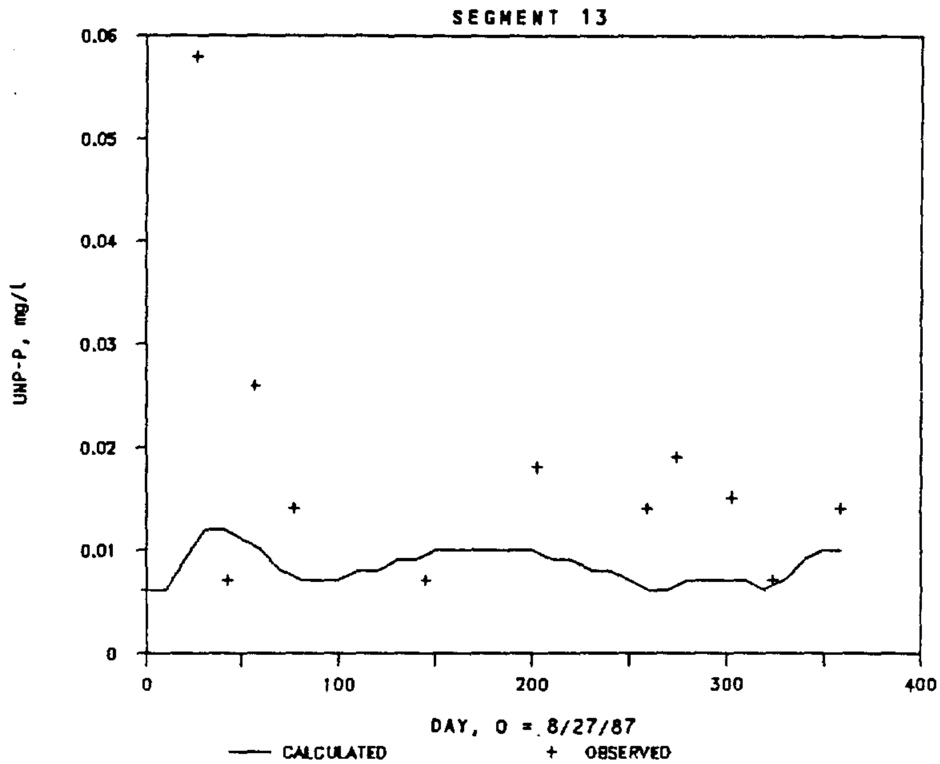
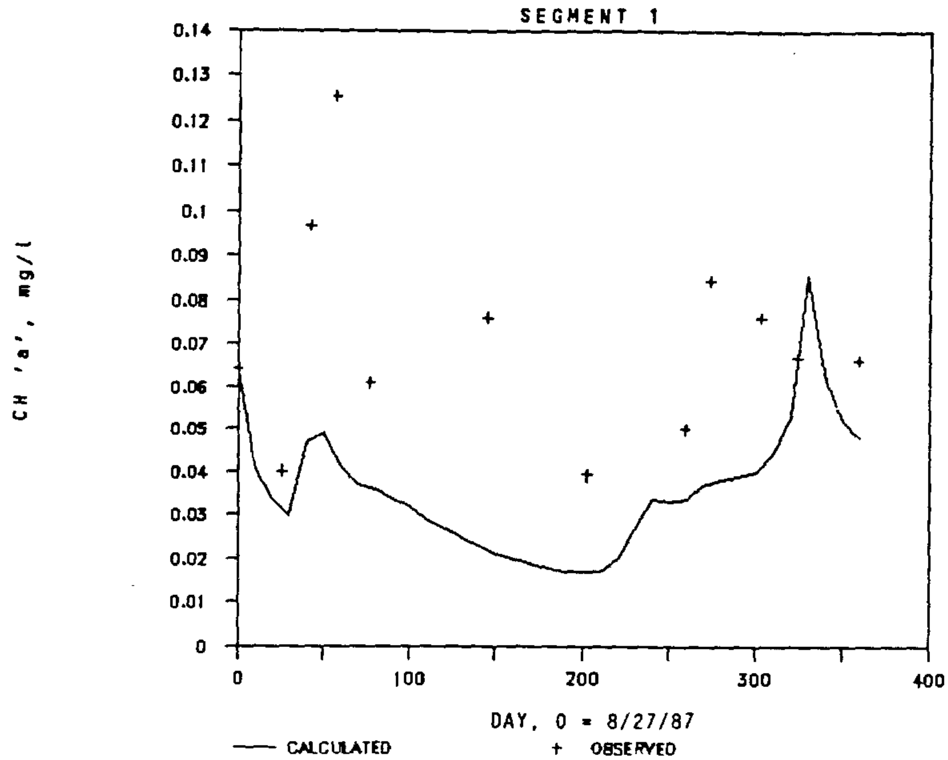


FIGURE A-16

Calibration Results and Observed Values for Unavailable Phosphorous in Lake Belton (continued)



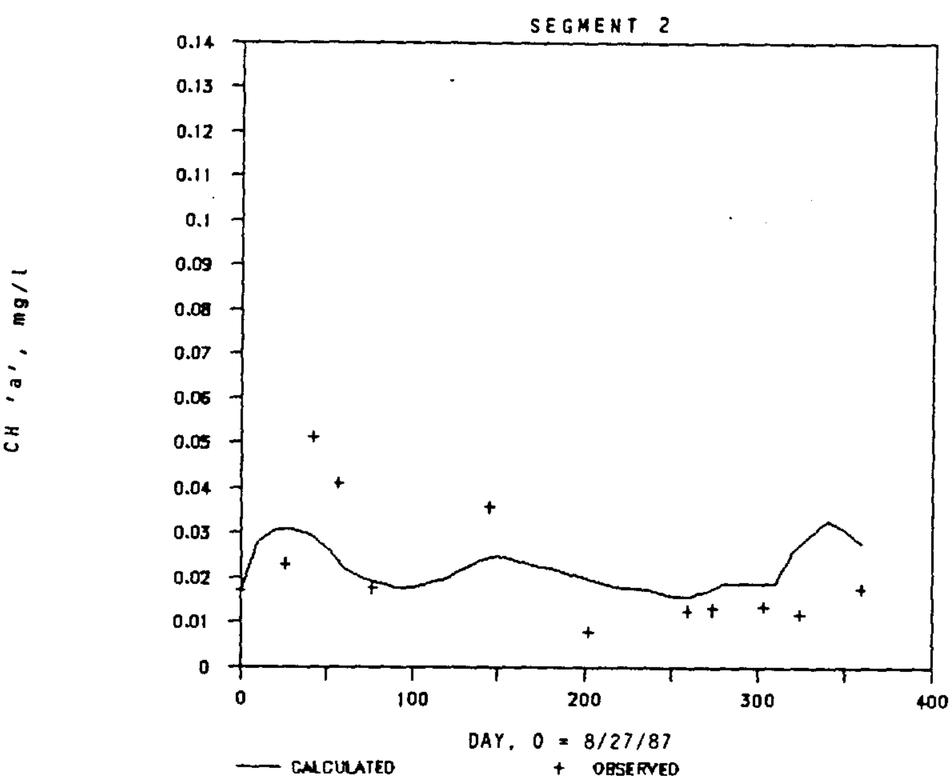
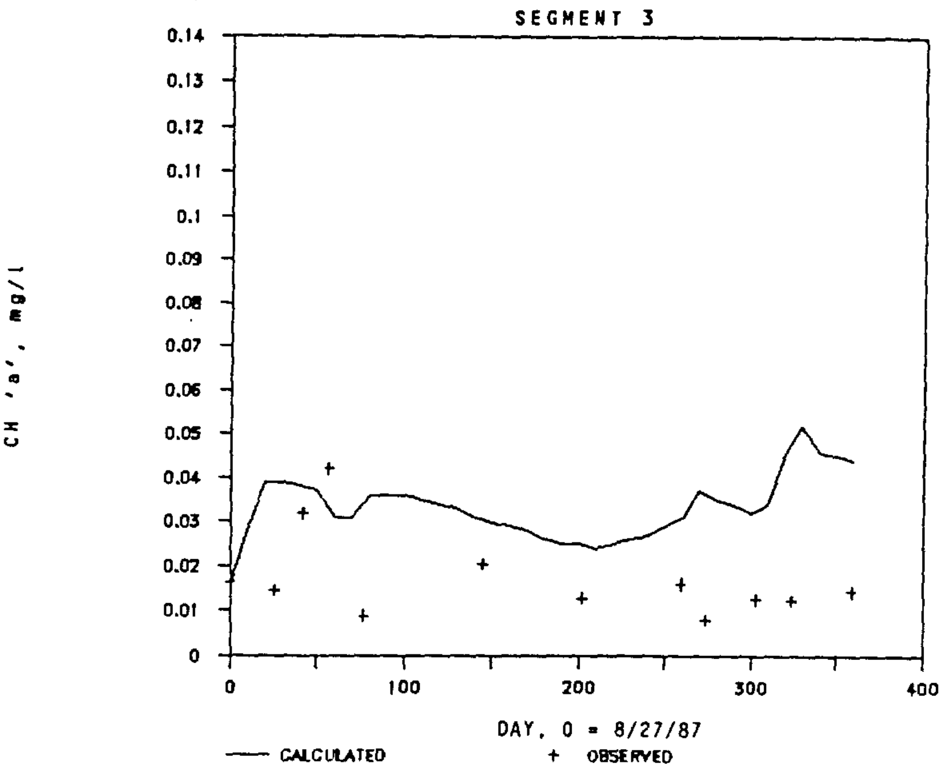


FIGURE A-17

Calibration Results and Observed Values for Chlorophyll 'a' in Lake Belton



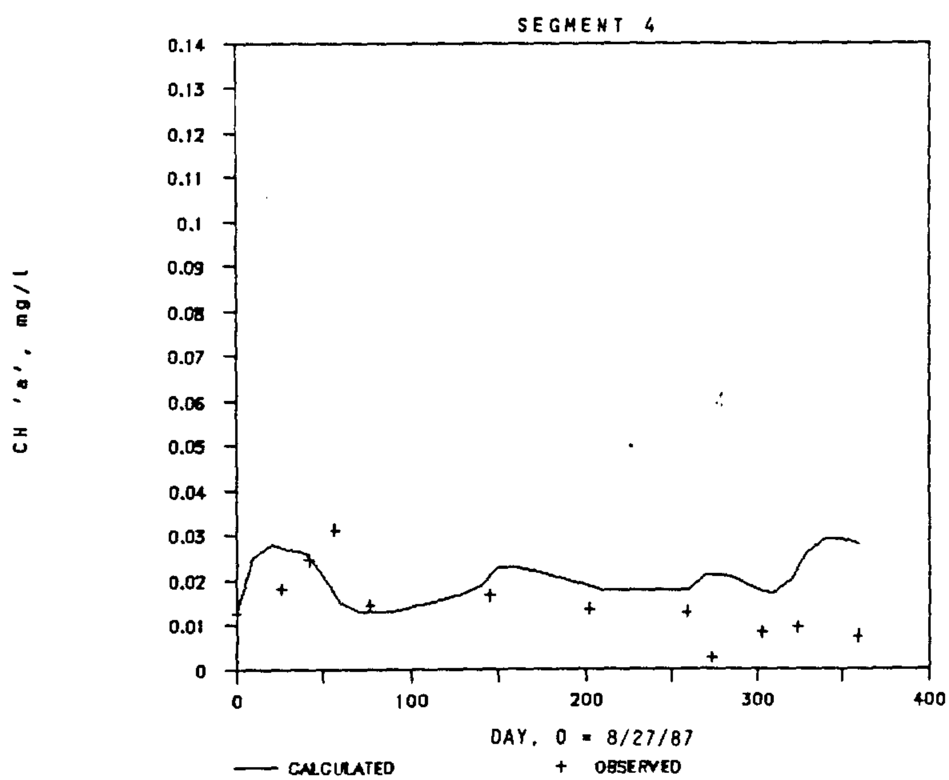


FIGURE A-17

Calibration Results and Observed Values for Chlorophyll 'a' in Lake Belton (continued)

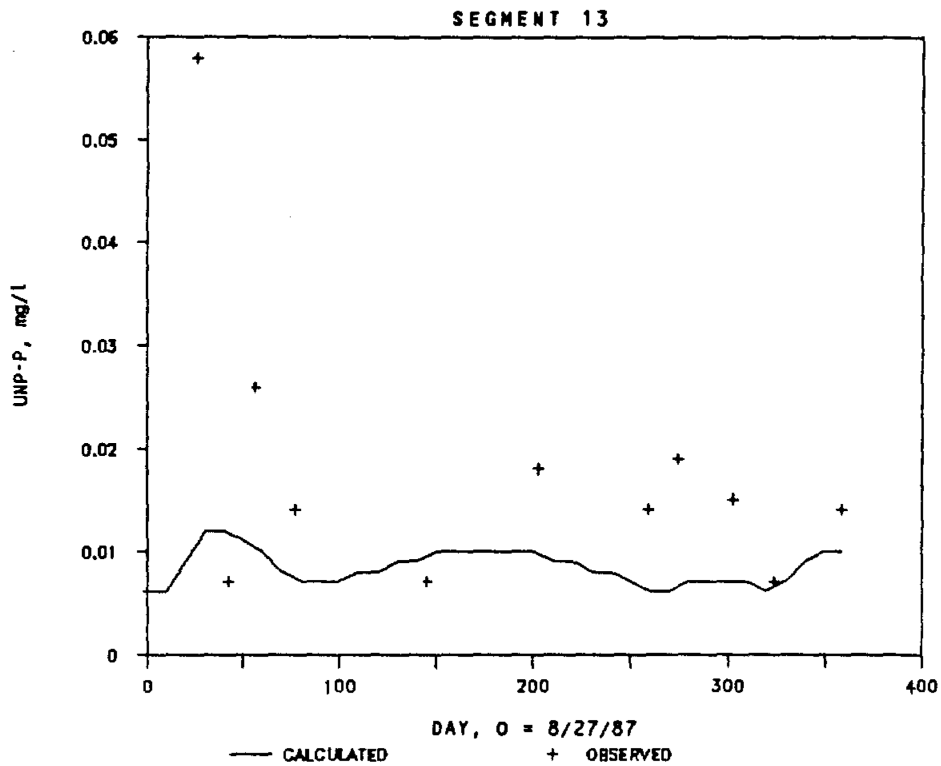


FIGURE A-16

Calibration Results and Observed Values for Unavailable Phosphorous in Lake Belton (continued)

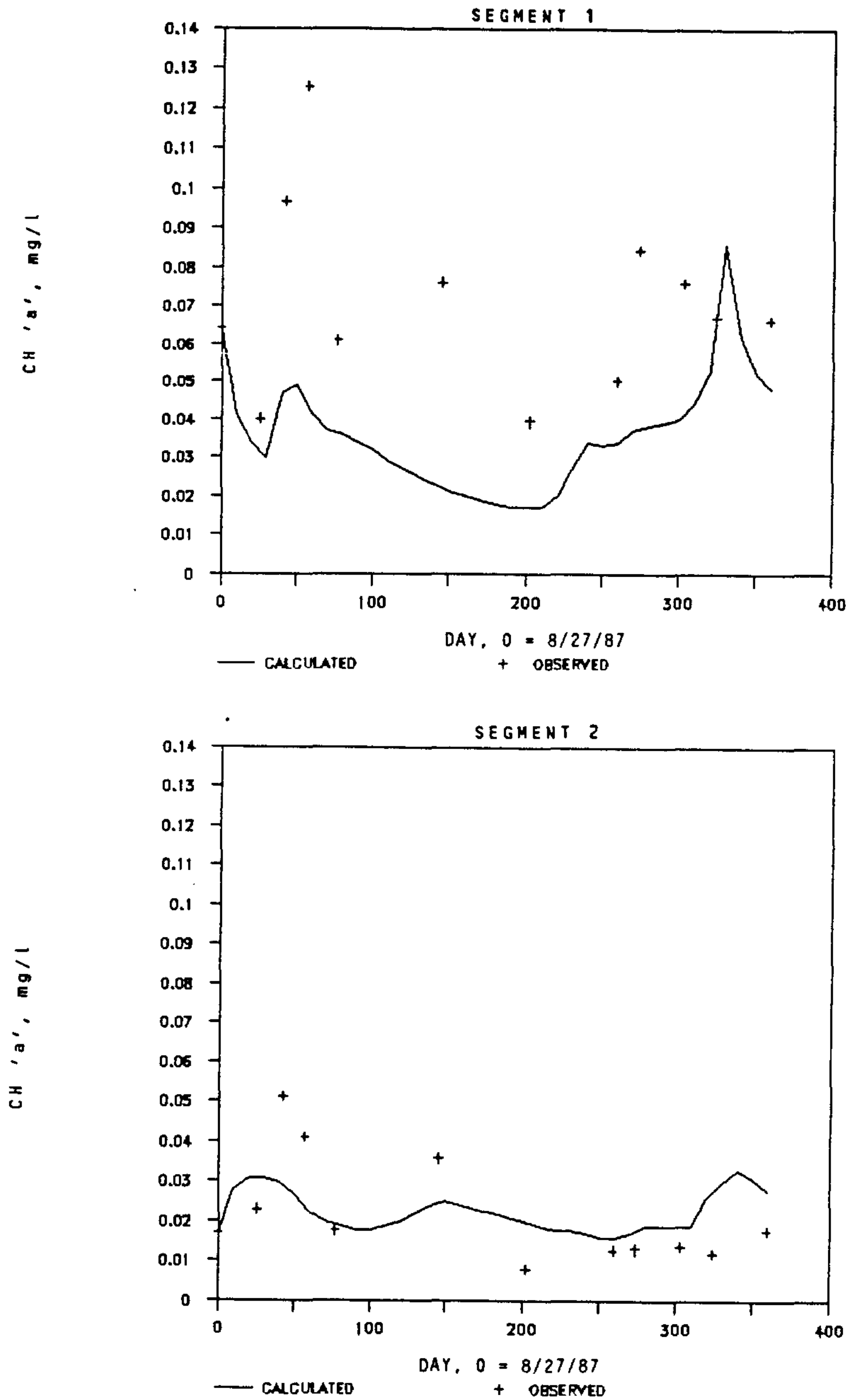
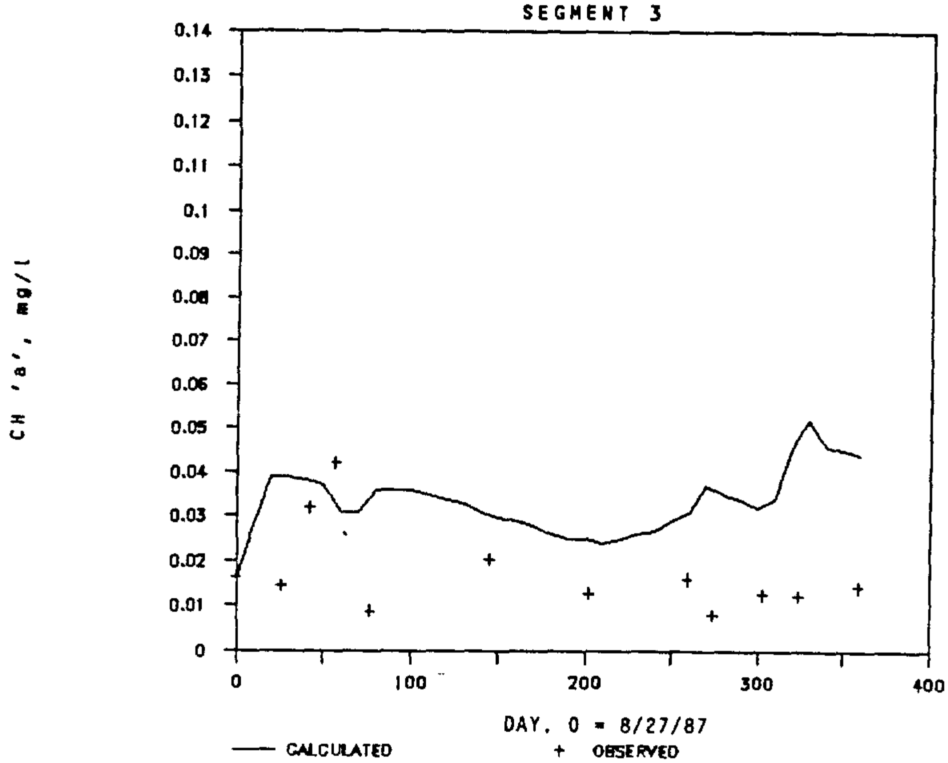


FIGURE A-17

Calibration Results and Observed Values for Chlorophyll 'a' in Lake Belton



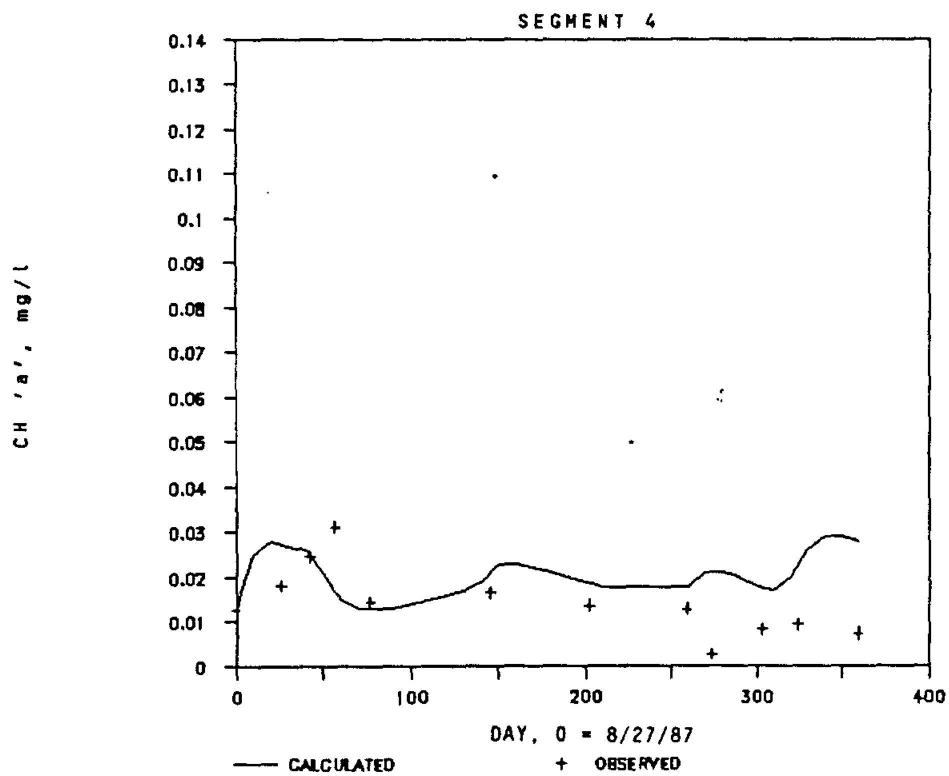


FIGURE A-17

Calibration Results and Observed Values for Chlorophyll 'a' in Lake Belton (continued)

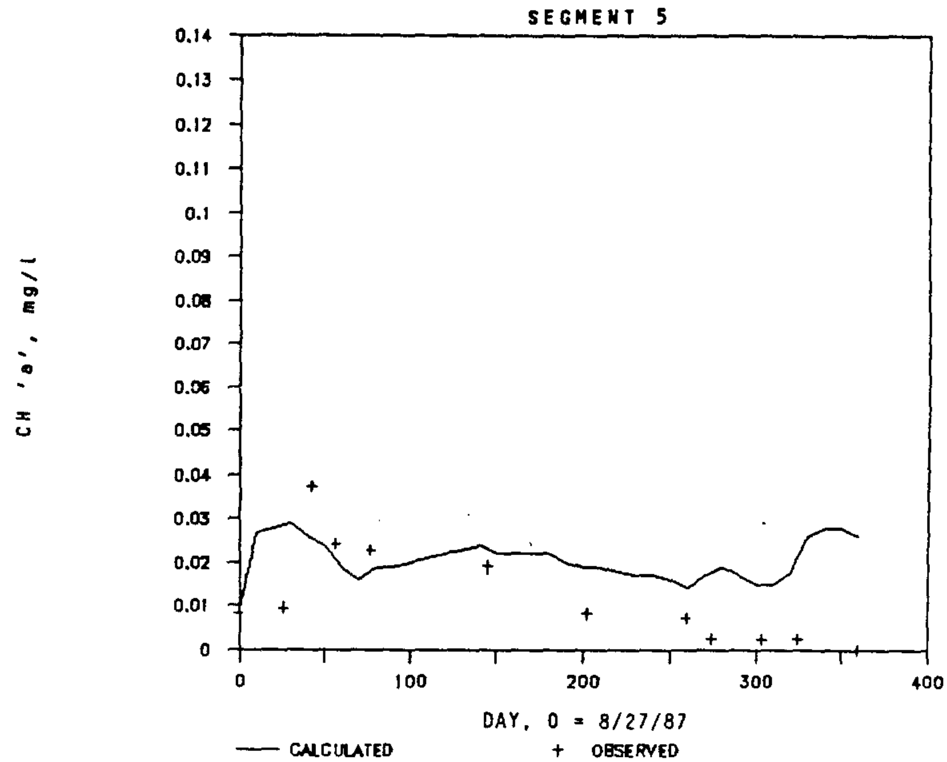


FIGURE A-17

Calibration Results and Observed Values for Chlorophyll 'a' in Lake Belton (continued)

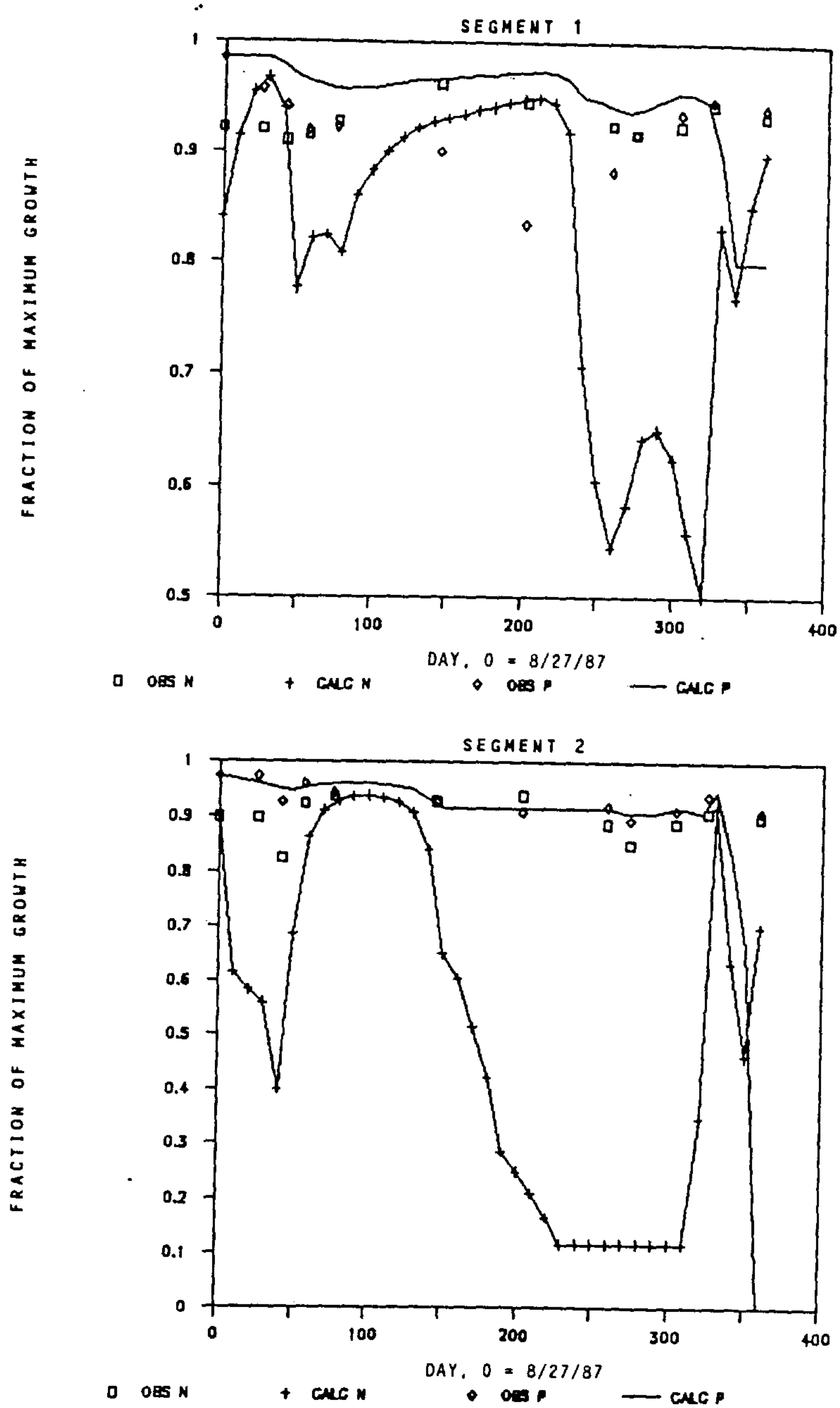
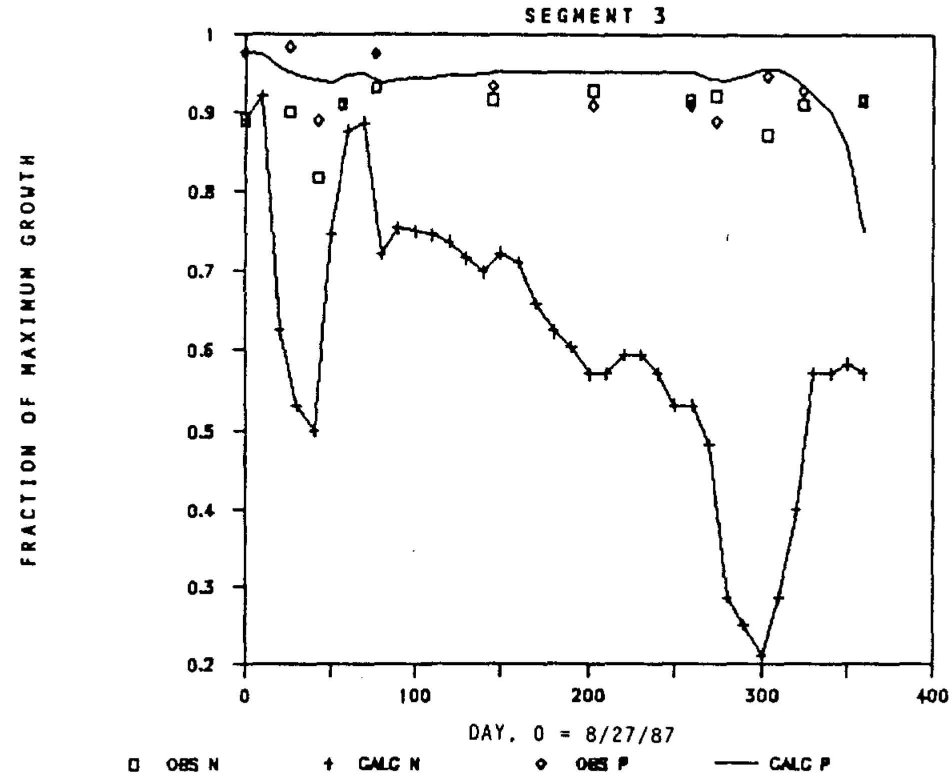


FIGURE A-18

Calibration and Observed Growth Limitations for Available Nutrients in Lake Belton



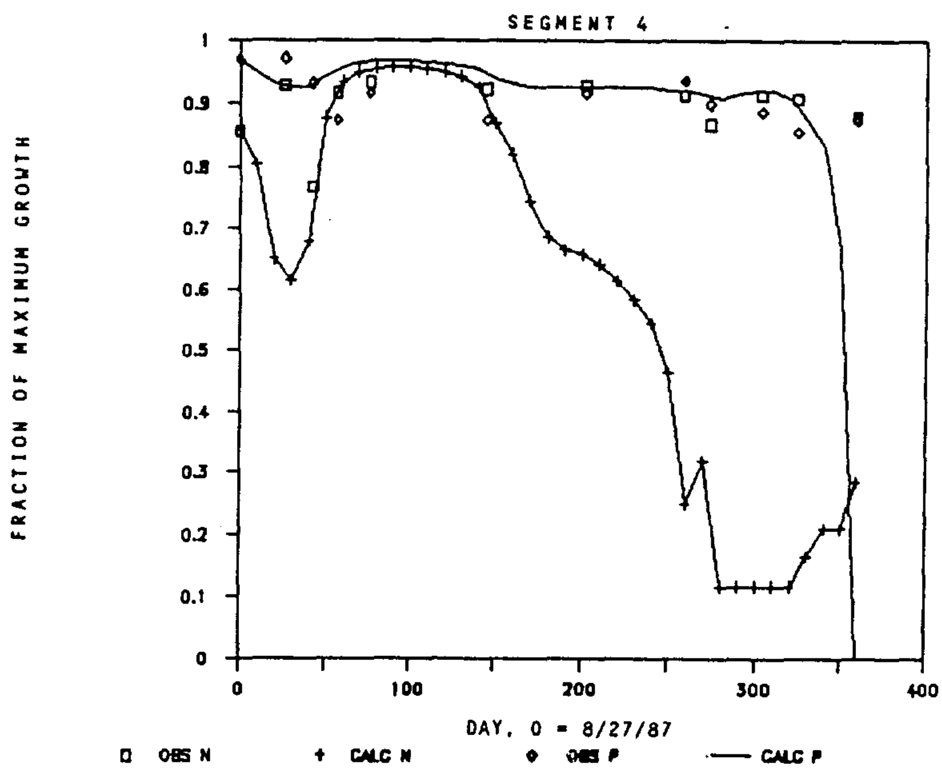


FIGURE A-18

Calibration and Observed Growth Limitations for Available Nutrients in Lake Belton (continued)

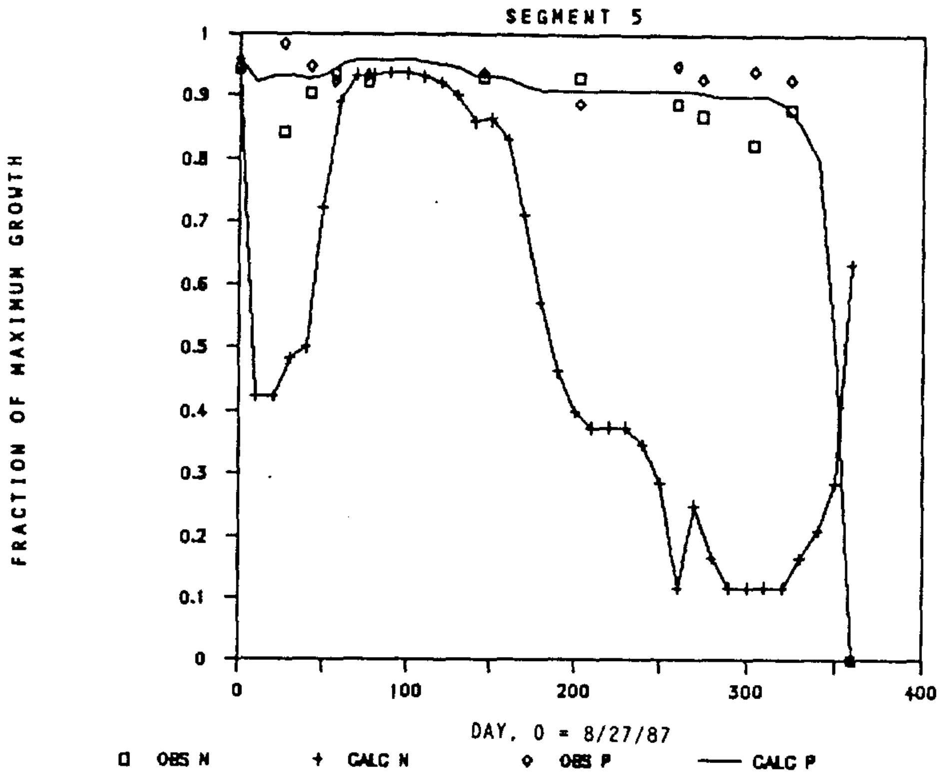
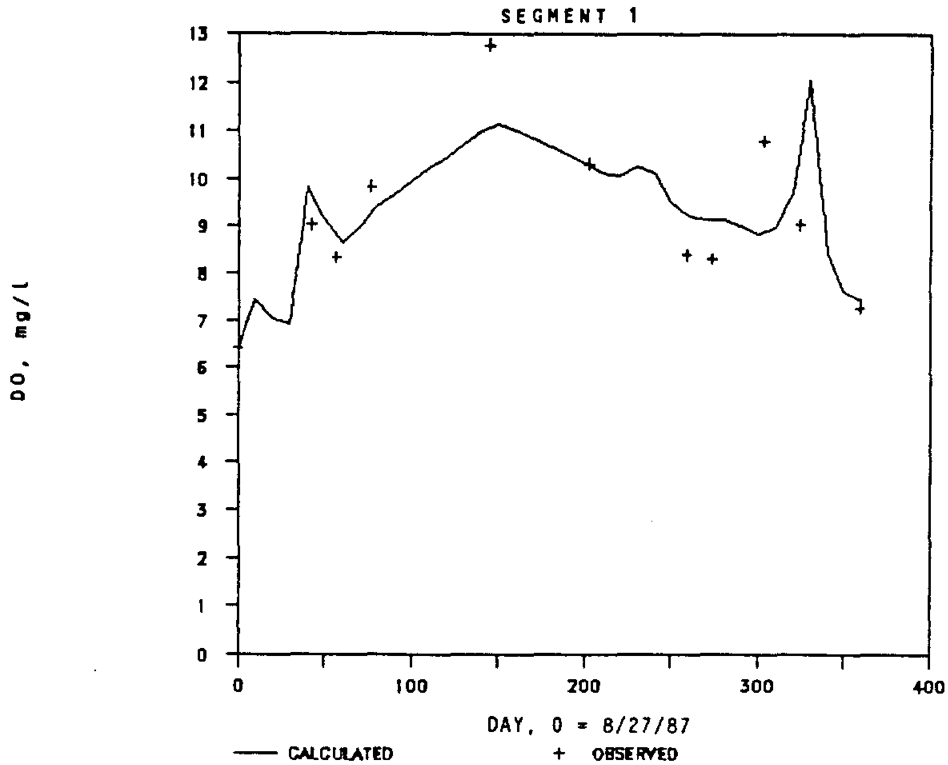


FIGURE A-18

Calibration and Observed Growth Limitations for Available Nutrients in Lake Belton (continued)



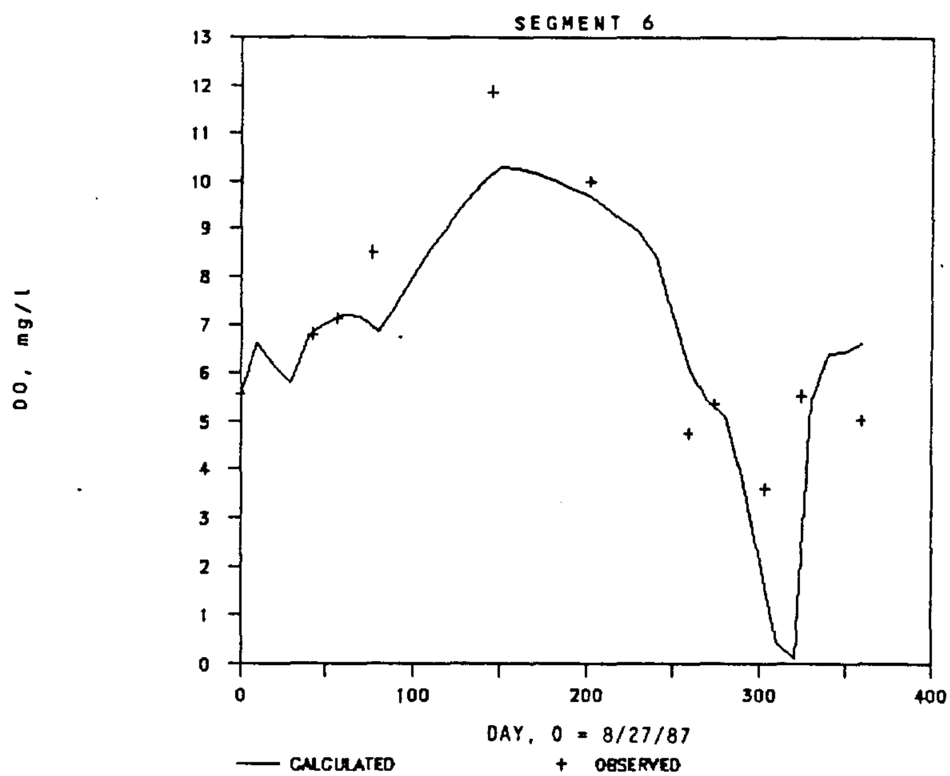


FIGURE A-19

Calibration Results and Observed Values for Dissolved Oxygen in Lake Belton

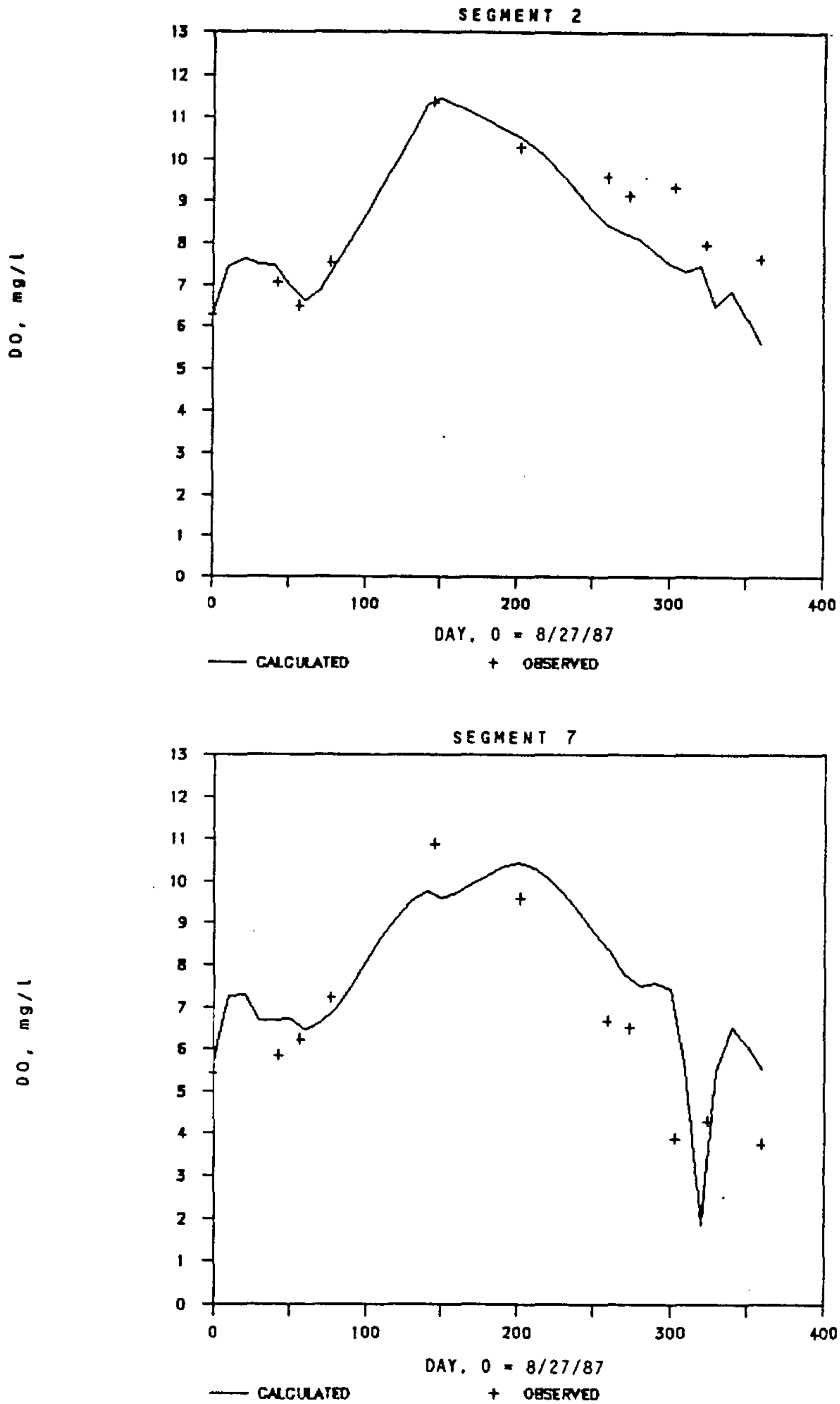


FIGURE A-19

Calibration Results and Observed Values for Dissolved Oxygen in Lake Belton (continued)

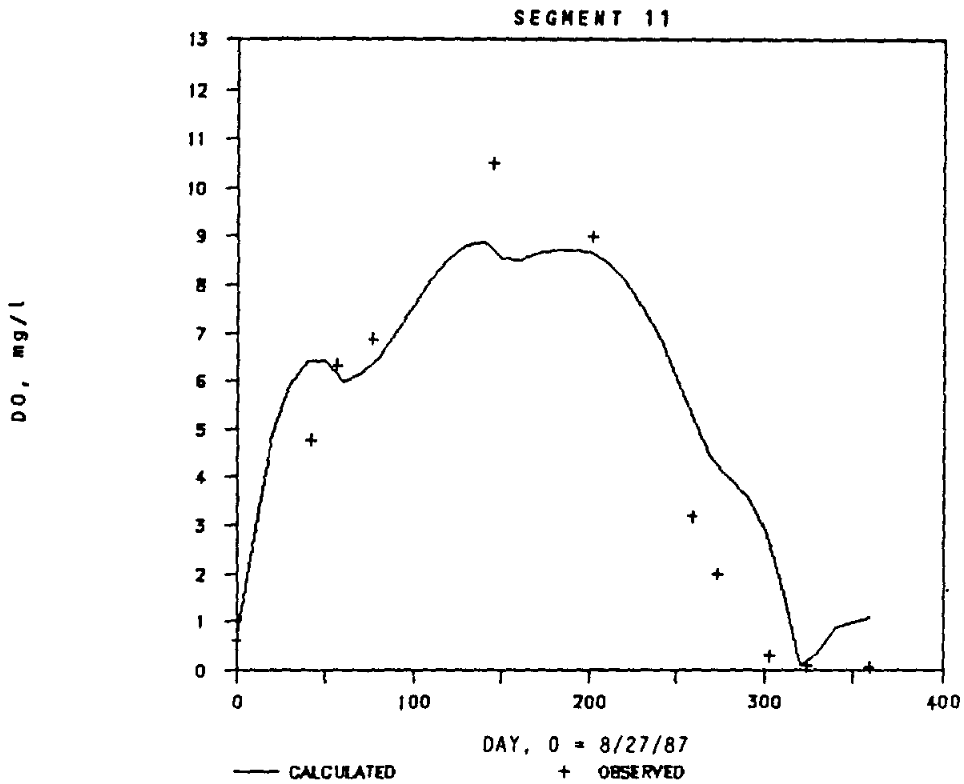
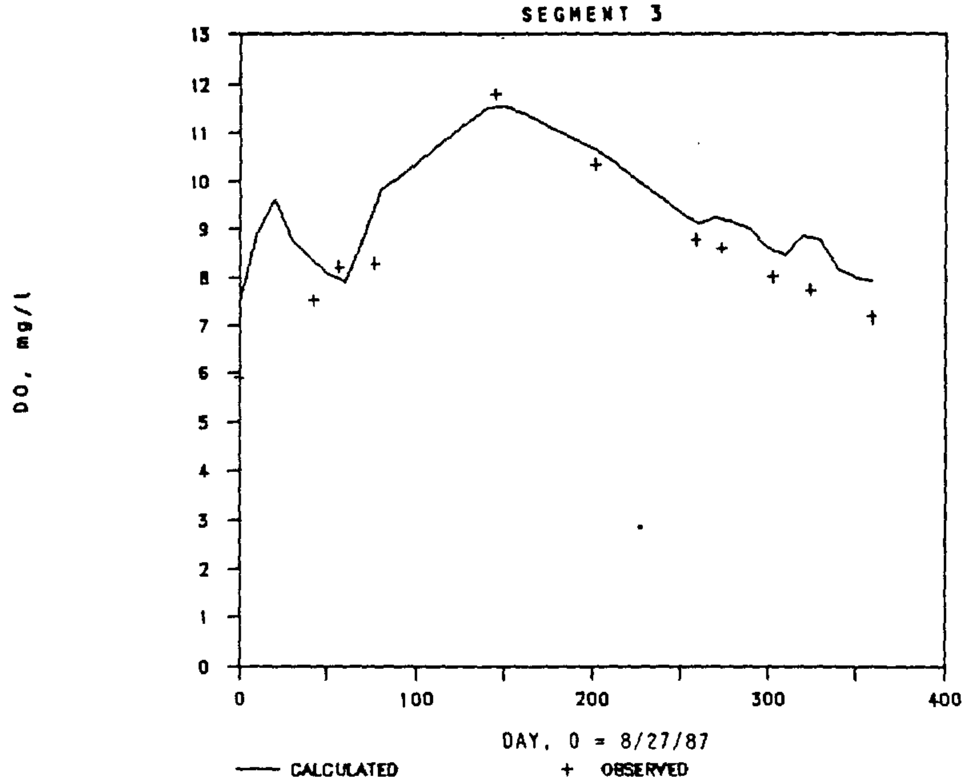


FIGURE A-19

Calibration Results and Observed Values for
Dissolved Oxygen in Lake Belton
(continued)



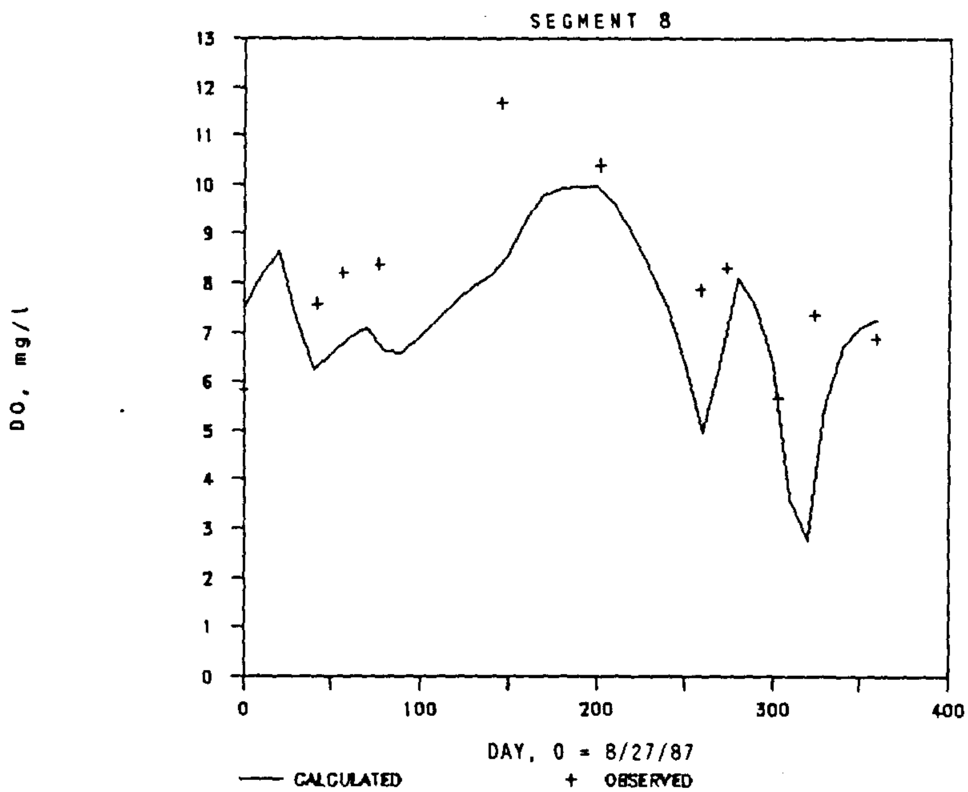
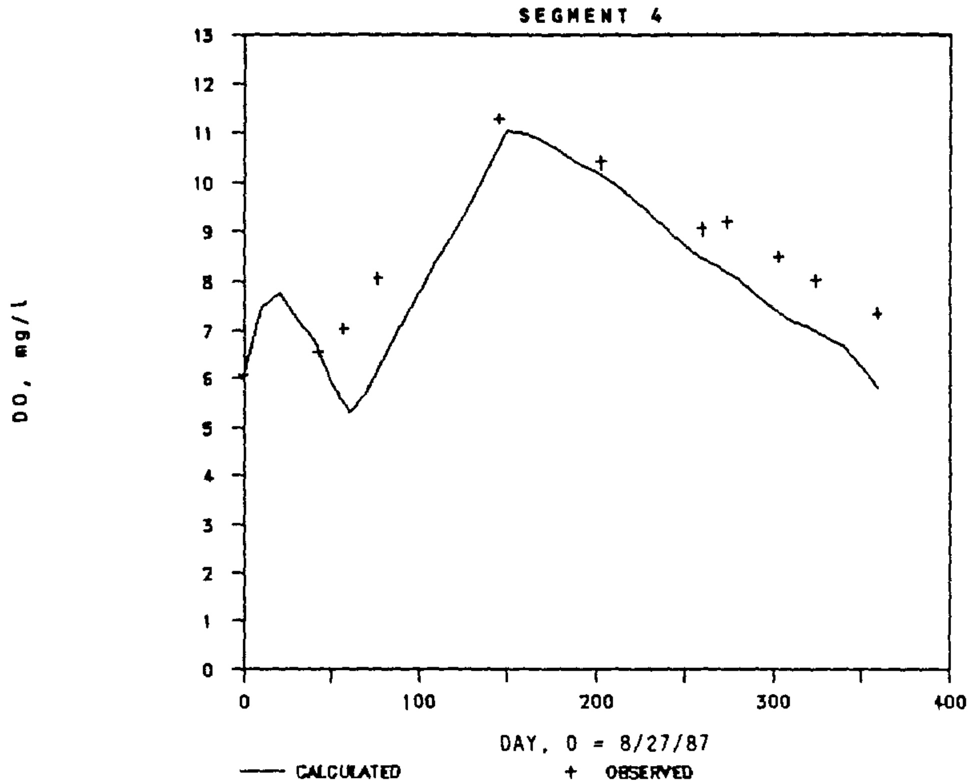


FIGURE A-19

Calibration Results and Observed Values for Dissolved Oxygen in Lake Belton (continued)



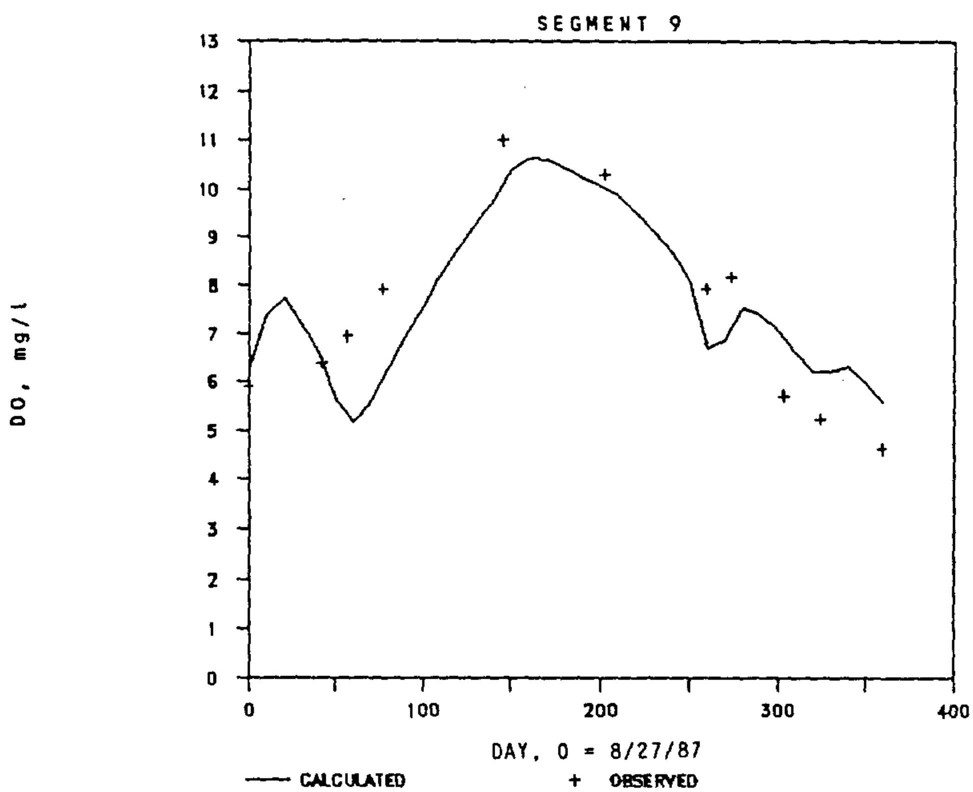


FIGURE A-19

Calibration Results and Observed Values for Dissolved Oxygen in Lake Belton (continued)

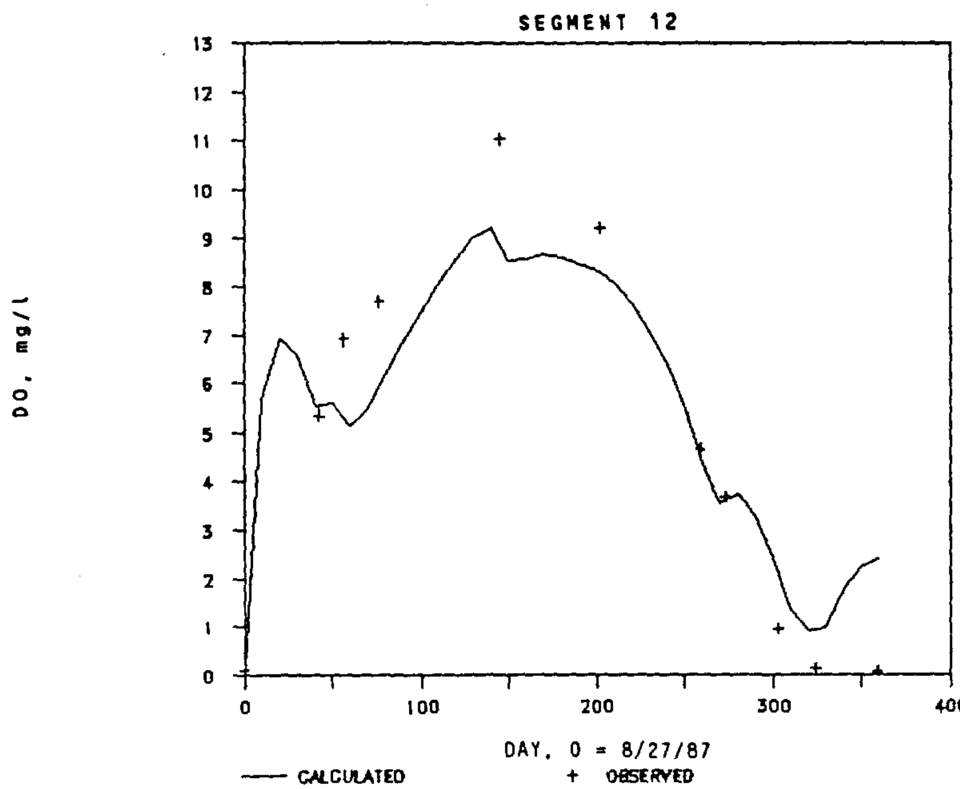


FIGURE A-19

Calibration Results and Observed Values for Dissolved Oxygen in Lake Belton (continued)

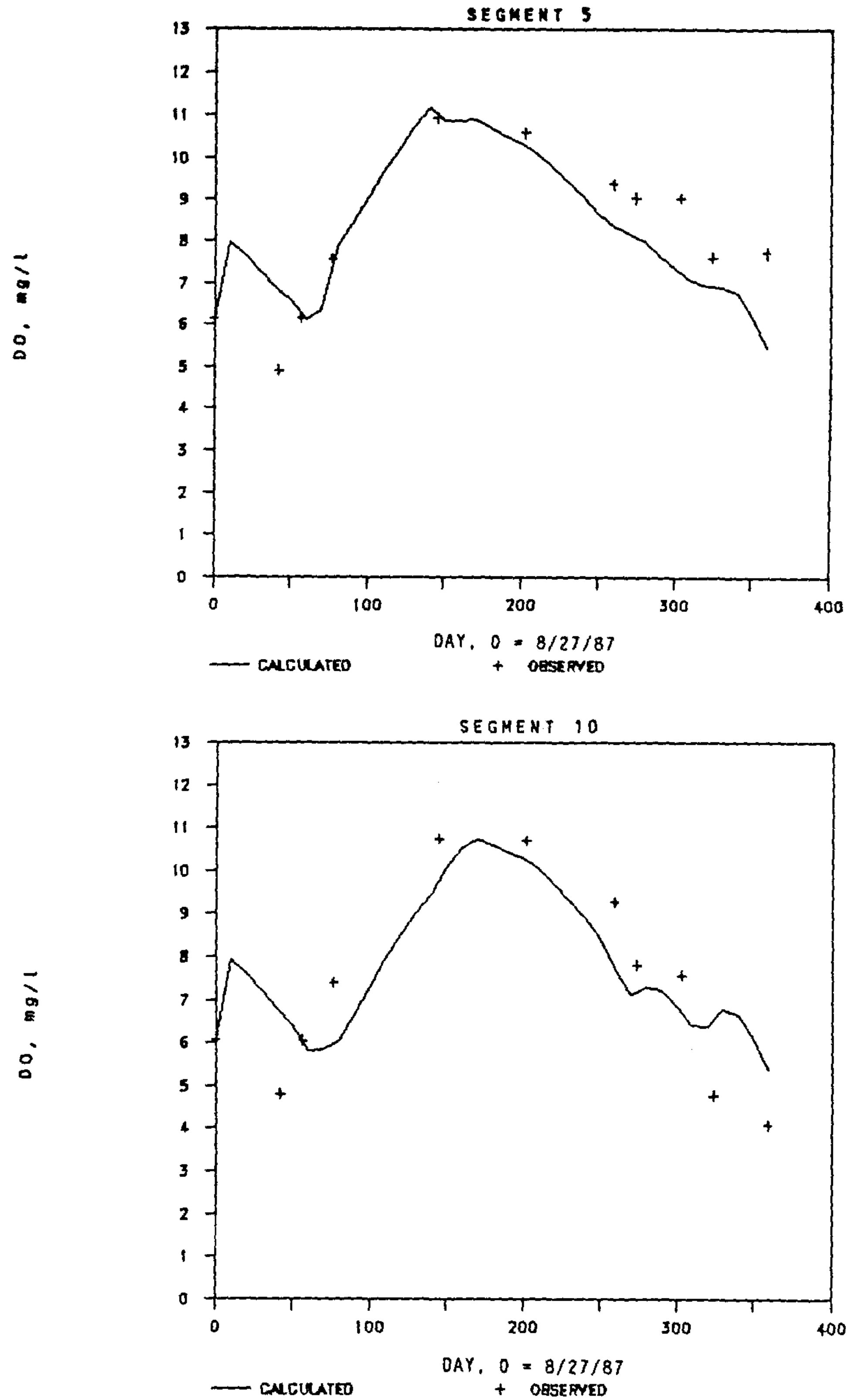


FIGURE A-19

Calibration Results and Observed Values for Dissolved Oxygen in Lake Belton (continued)

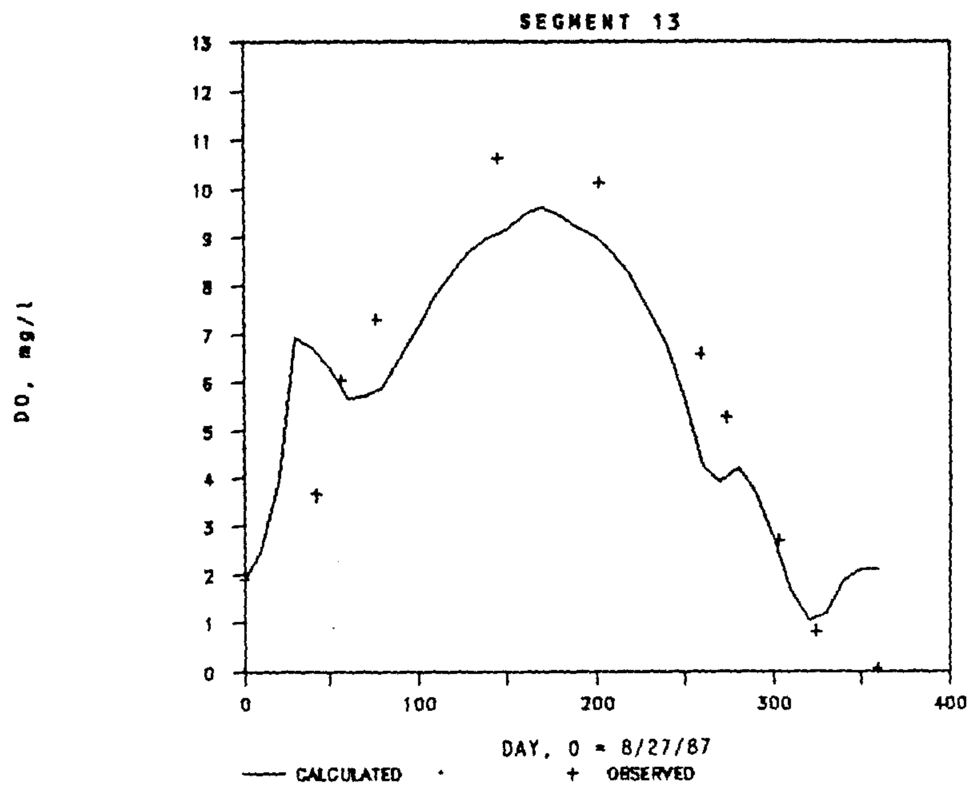


FIGURE A-19

Calibration Results and Observed Values for Dissolved Oxygen in Lake Belton (continued)

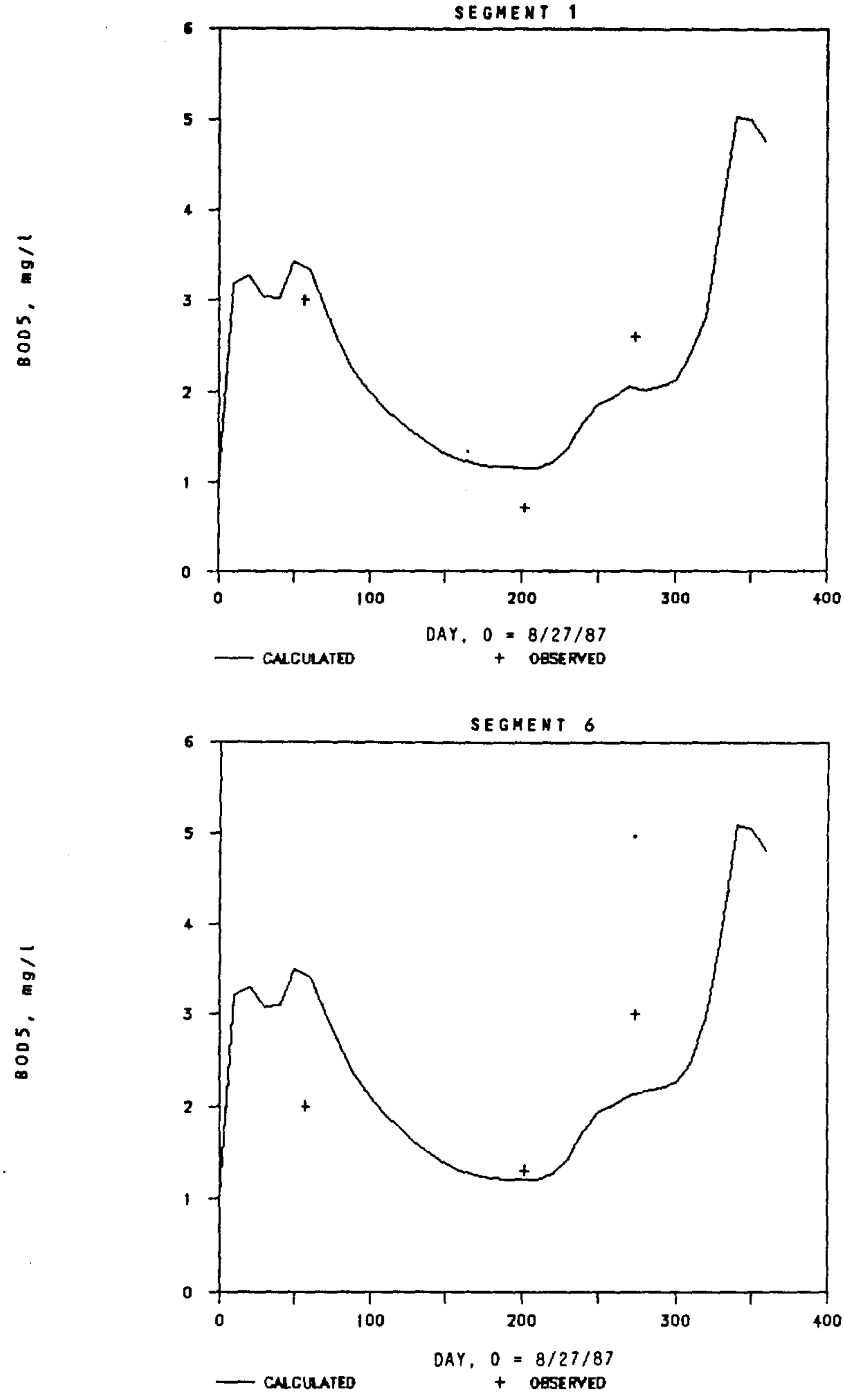
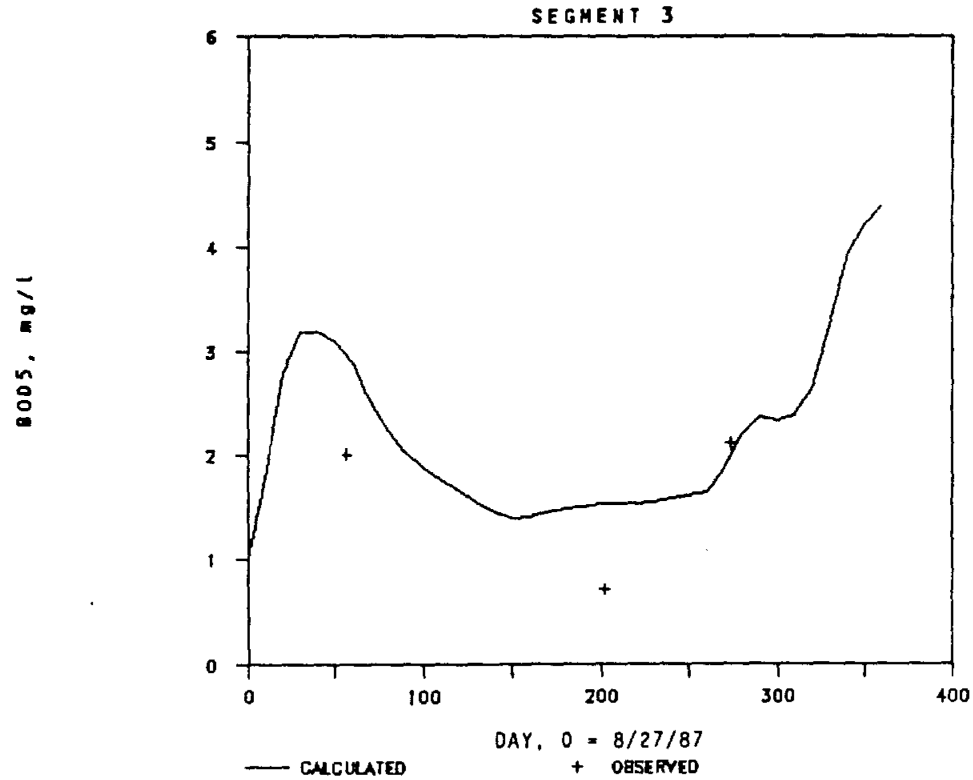


FIGURE A-20

Calibration Results and Observed Values for Biochemical Oxygen Demand in Lake Belton



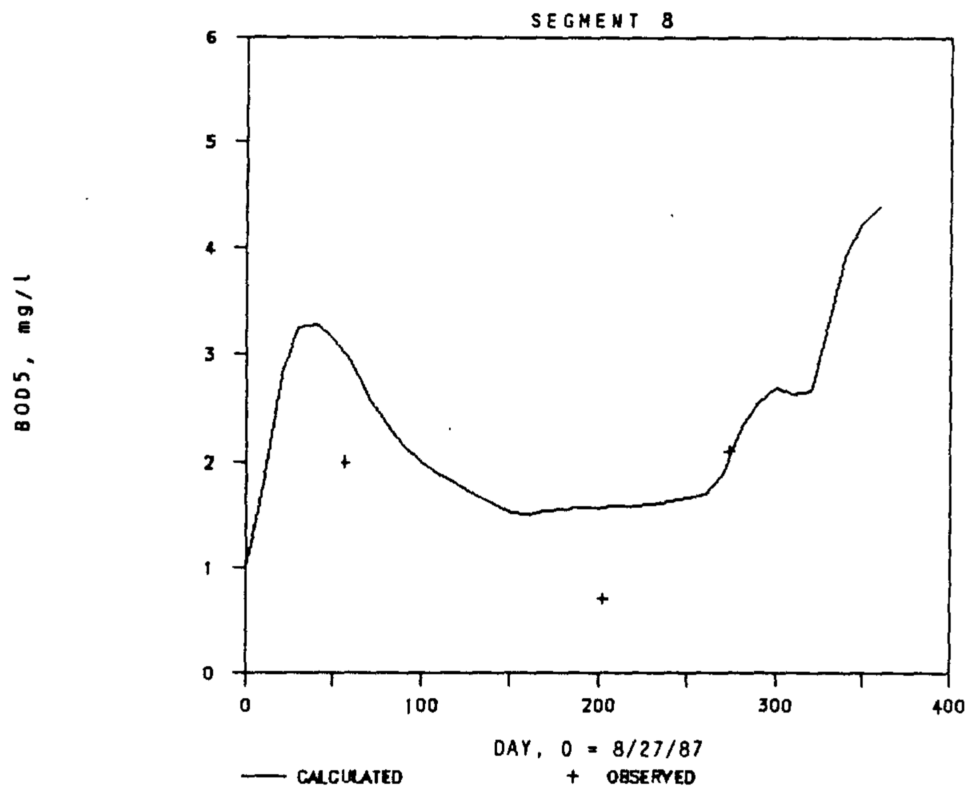
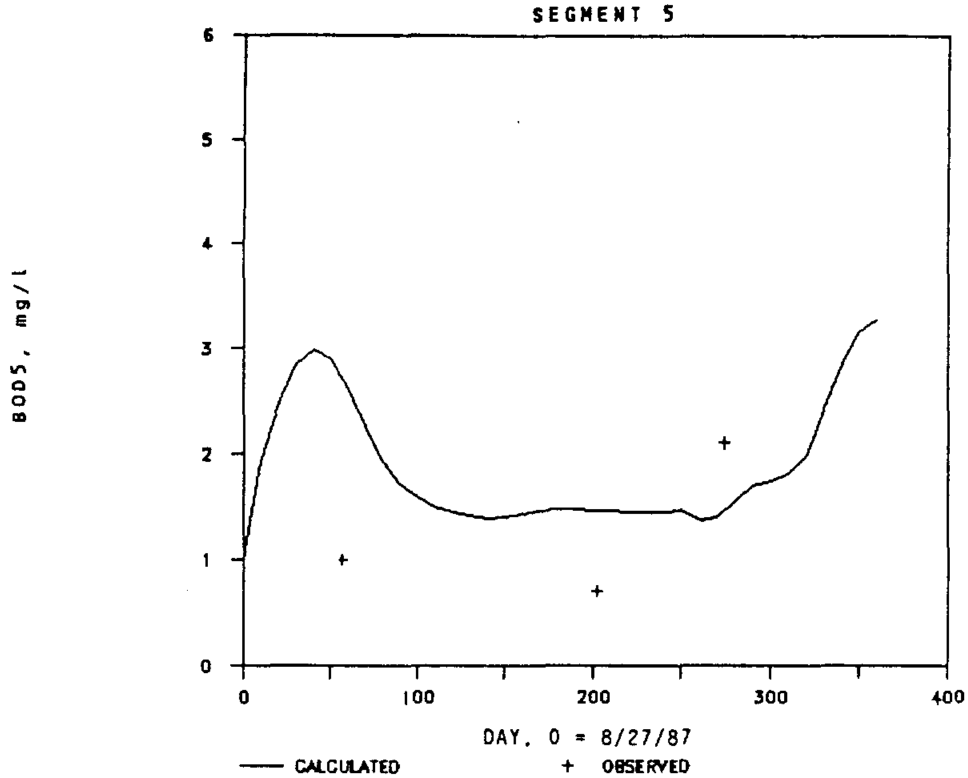


FIGURE A-20

Calibration Results and Observed Values for Biochemical Oxygen Demand in Lake Belton (continued)



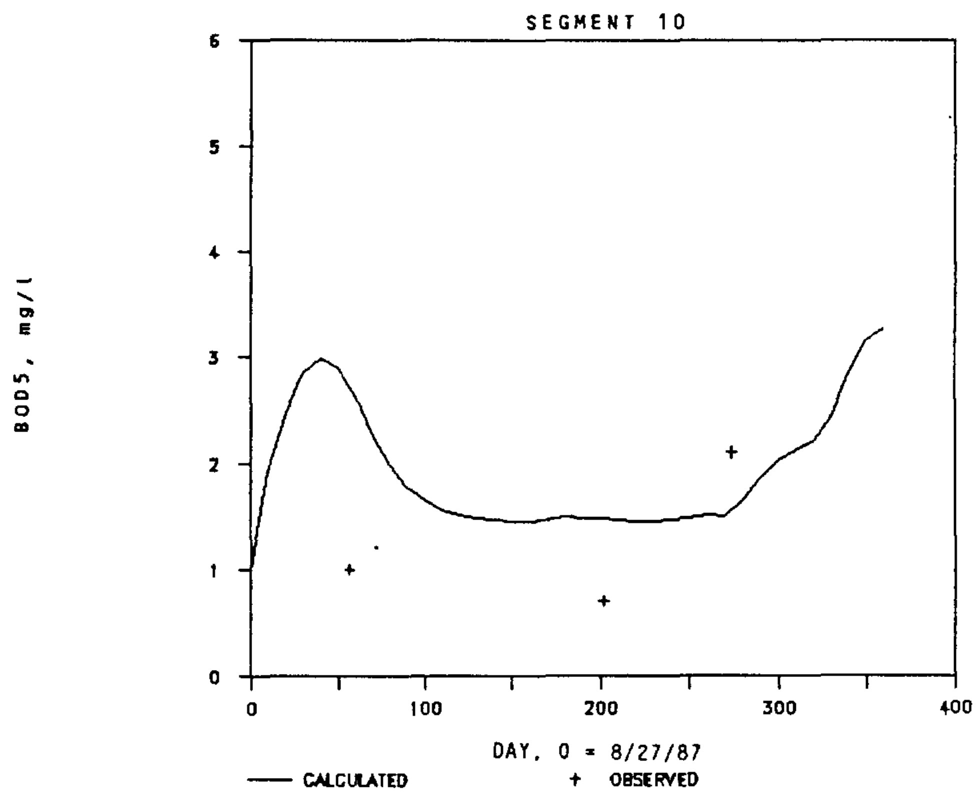


FIGURE A-20

Calibration Results and Observed Values for Biochemical Oxygen Demand in Lake Belton (continued)

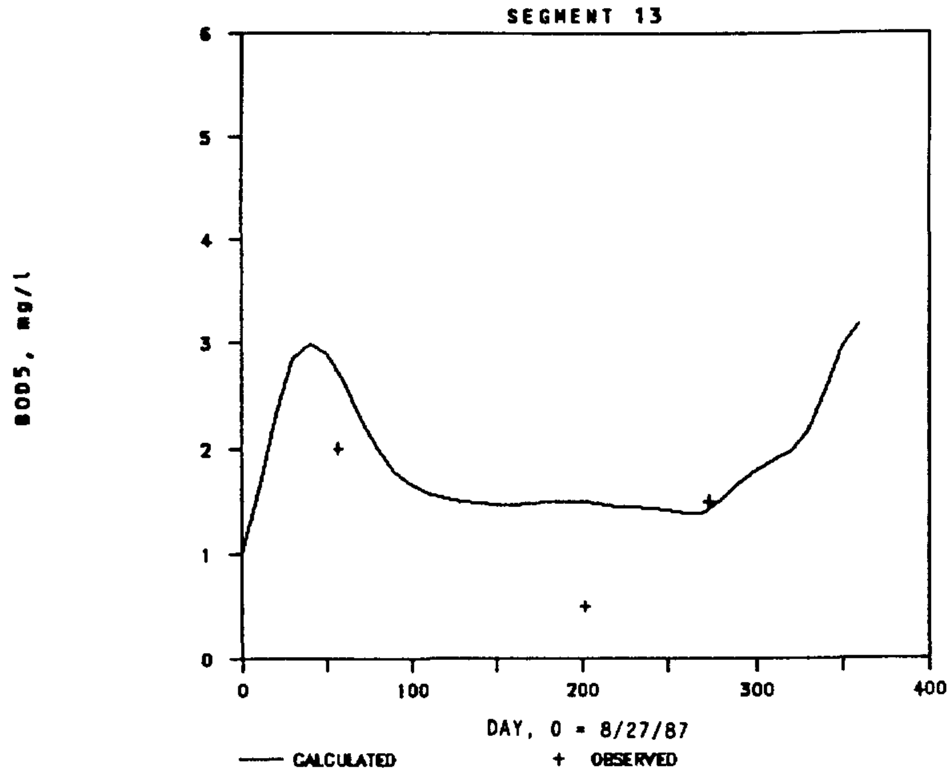


FIGURE A-20

Calibration Results and Observed Values for Biochemical Oxygen Demand in Lake Belton (continued)

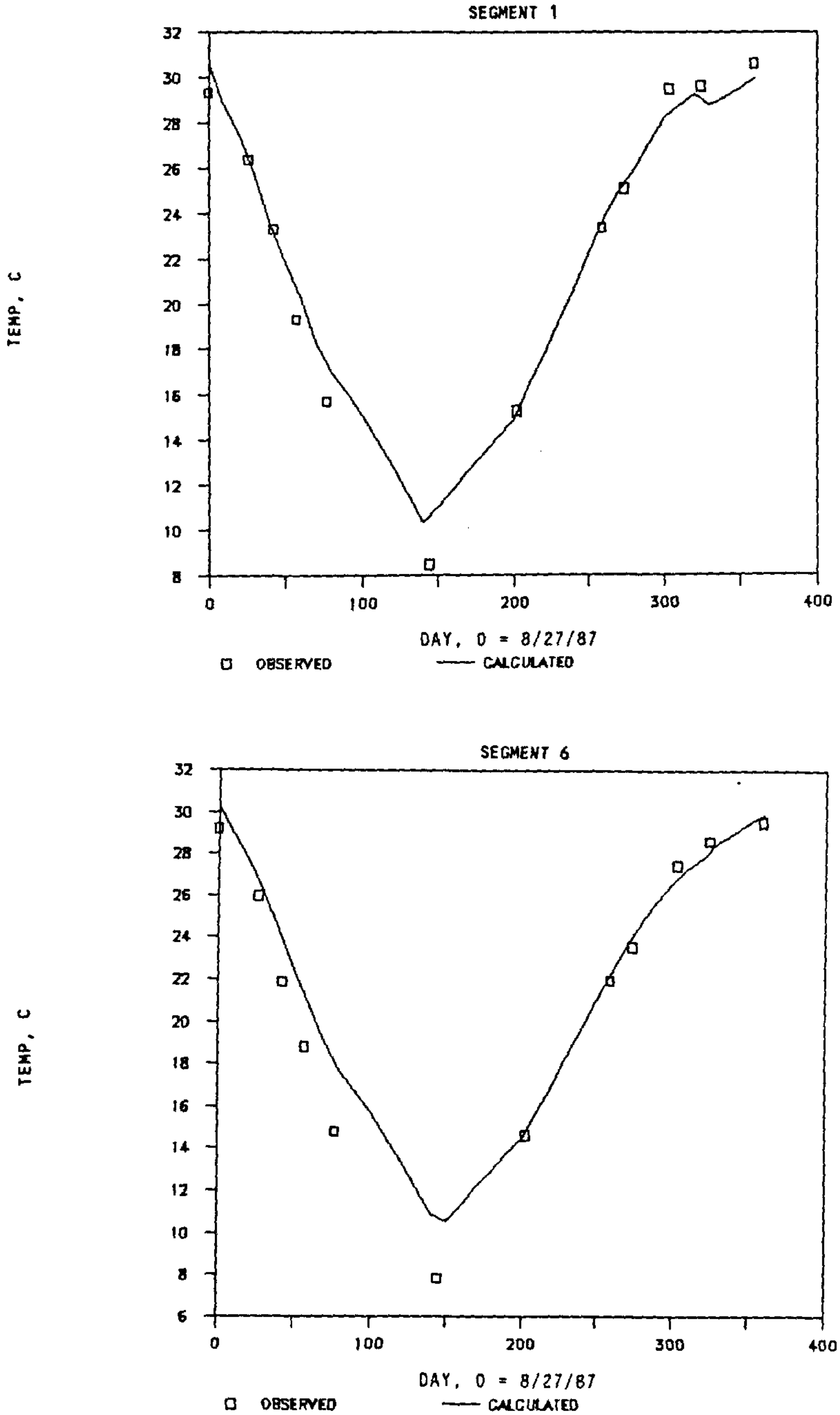
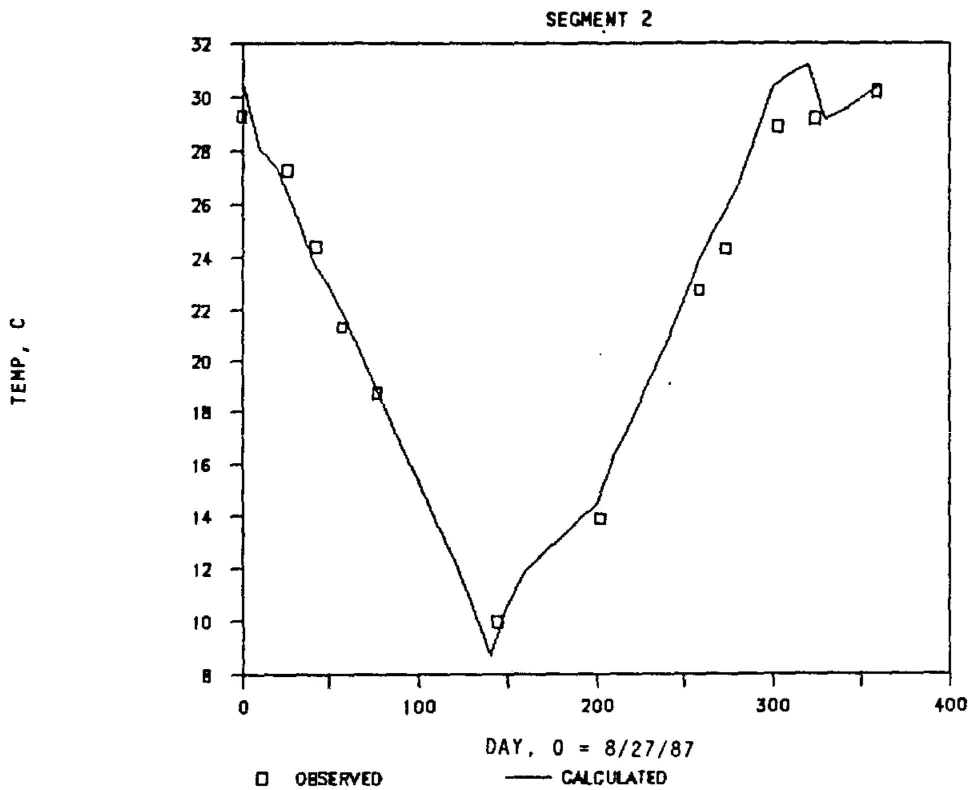


FIGURE A-21

Calibration Results and Observed Values for Temperature in Lake Belton



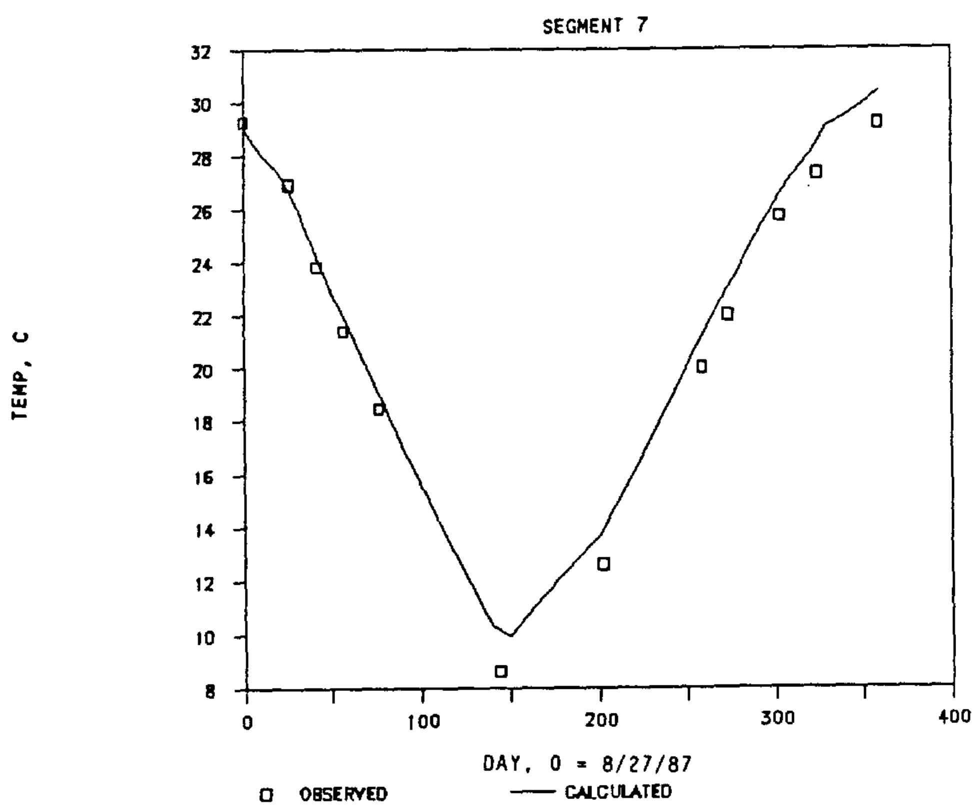


FIGURE A-21

Calibration Results and Observed Values for
Temperature in Lake Belton
(continued)

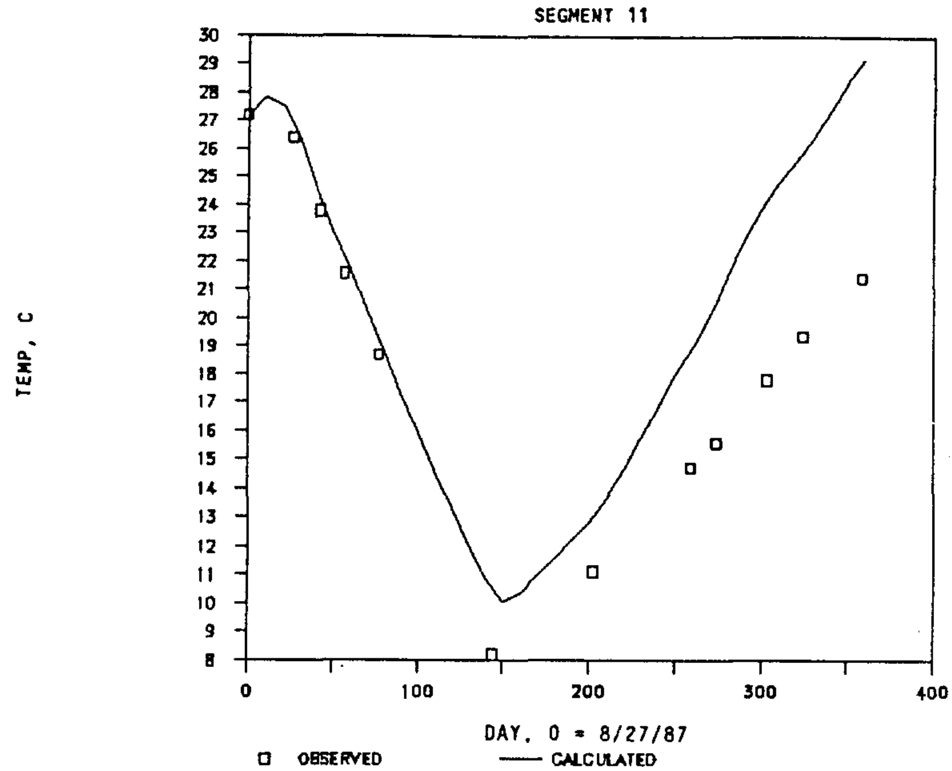
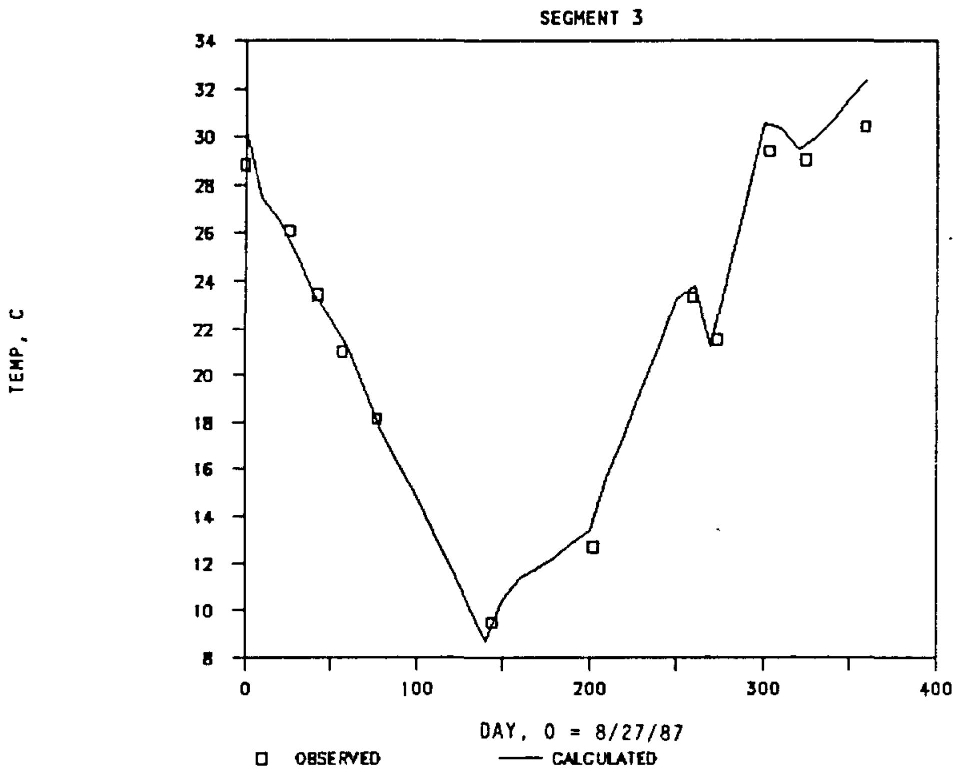


FIGURE A-21

Calibration Results and Observed Values for
Temperature in Lake Belton
(continued)



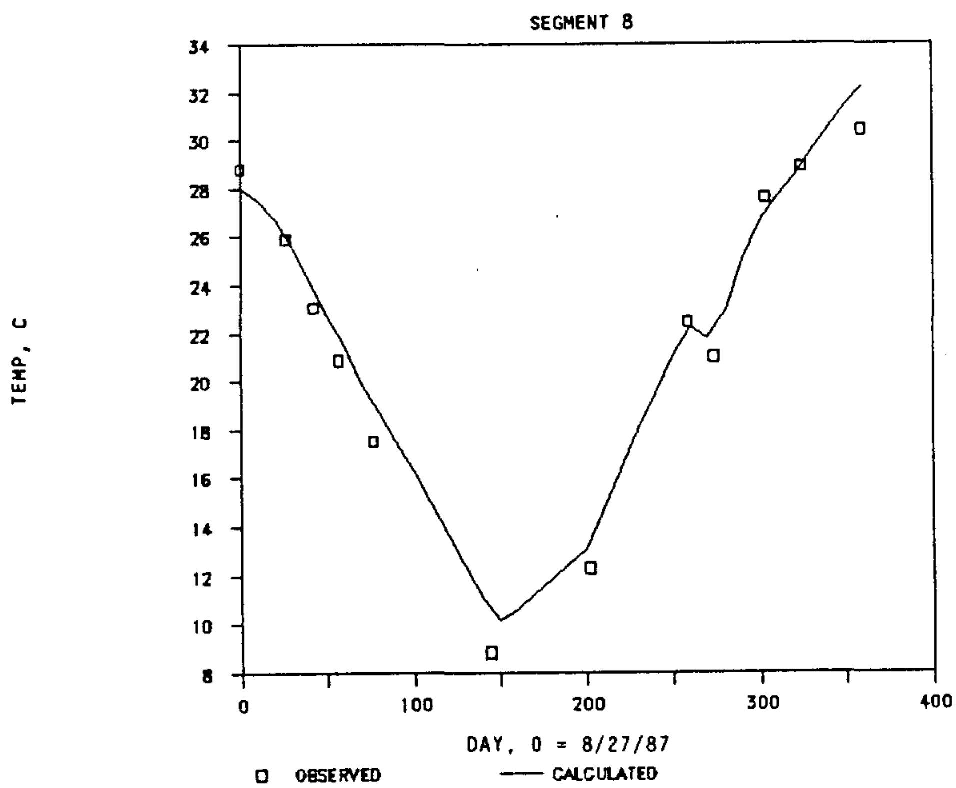
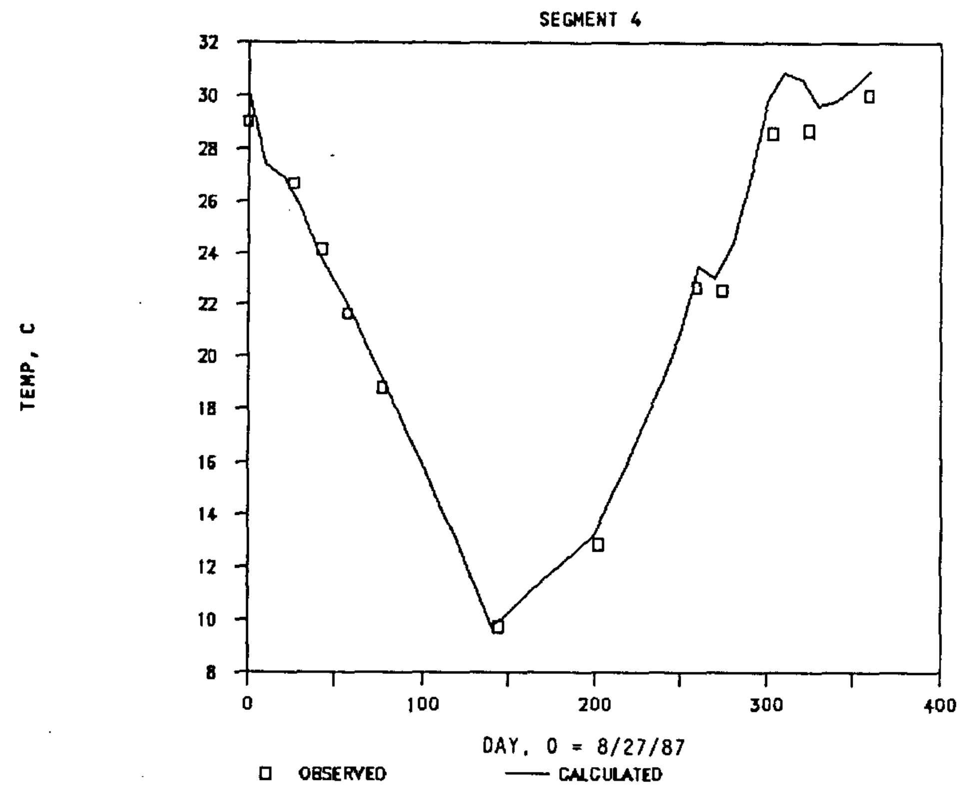


FIGURE A-21

Calibration Results and Observed Values for Temperature in Lake Belton (continued)



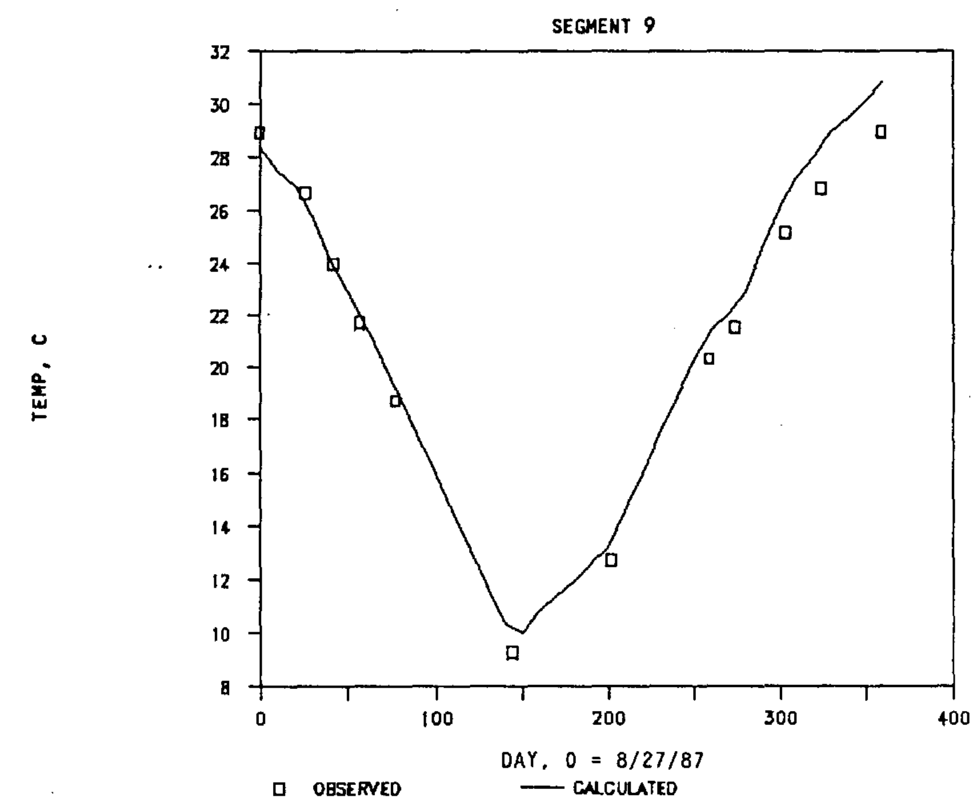


FIGURE A-21

Calibration Results and Observed Values for Temperature in Lake Belton (continued)

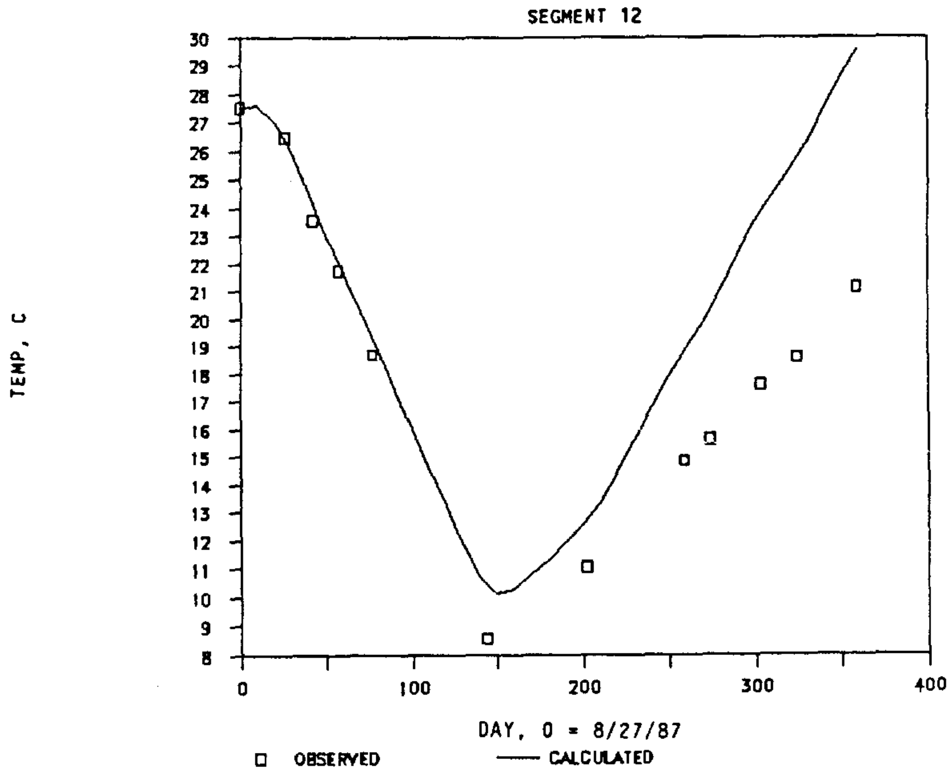
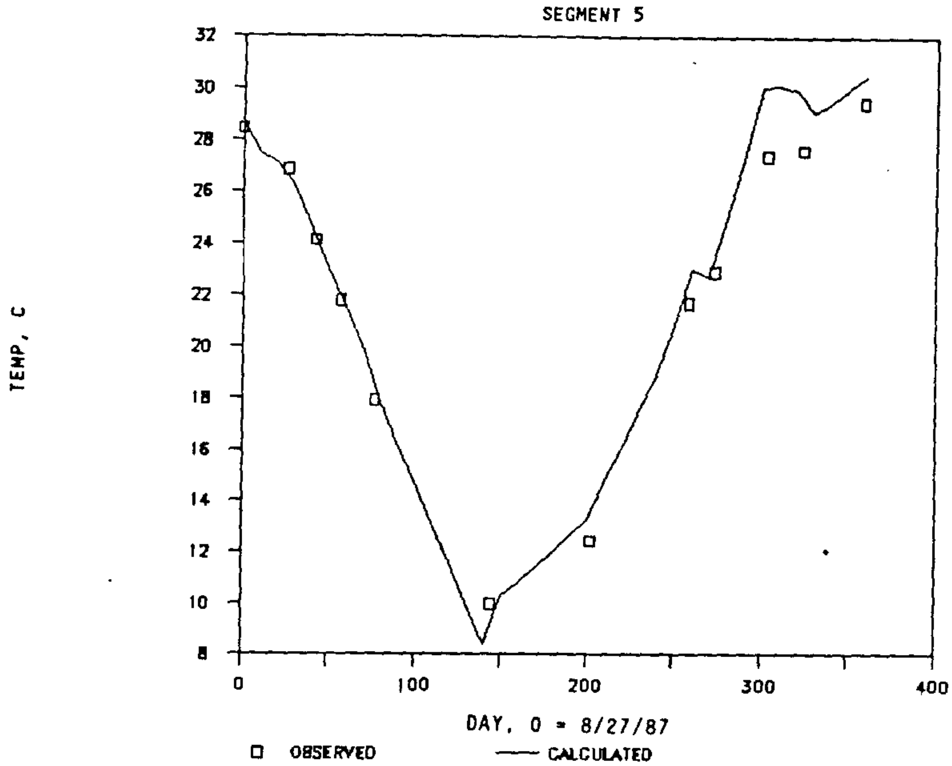


FIGURE A-21

Calibration Results and Observed Values for Temperature in Lake Belton (continued)



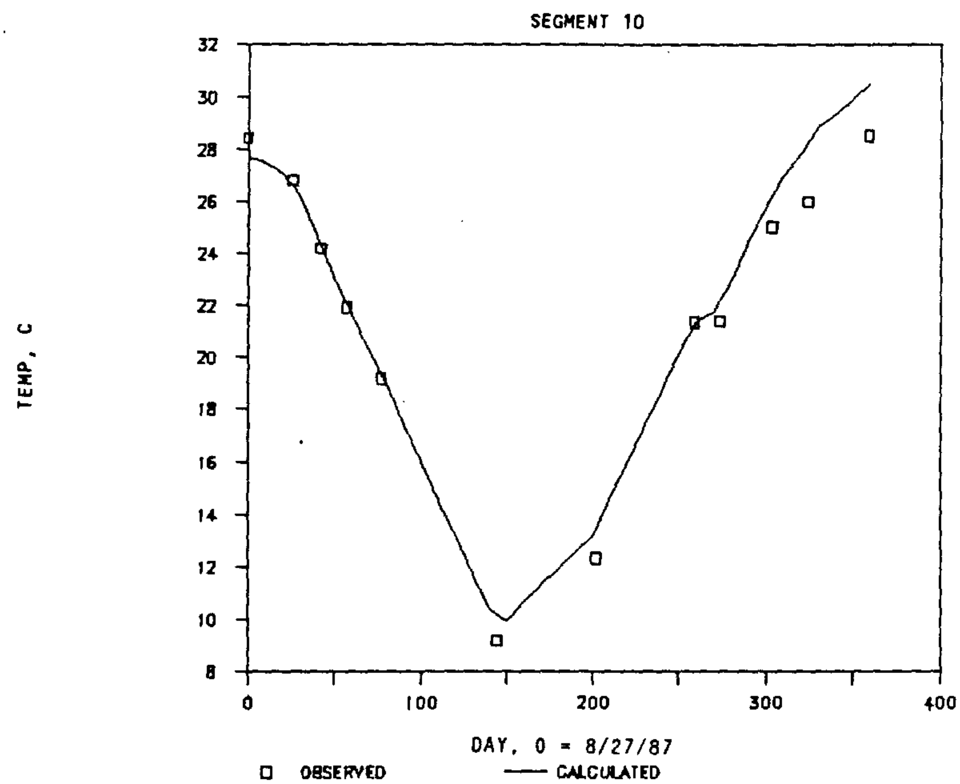


FIGURE A-21

Calibration Results and Observed Values for Temperature in Lake Belton (continued)

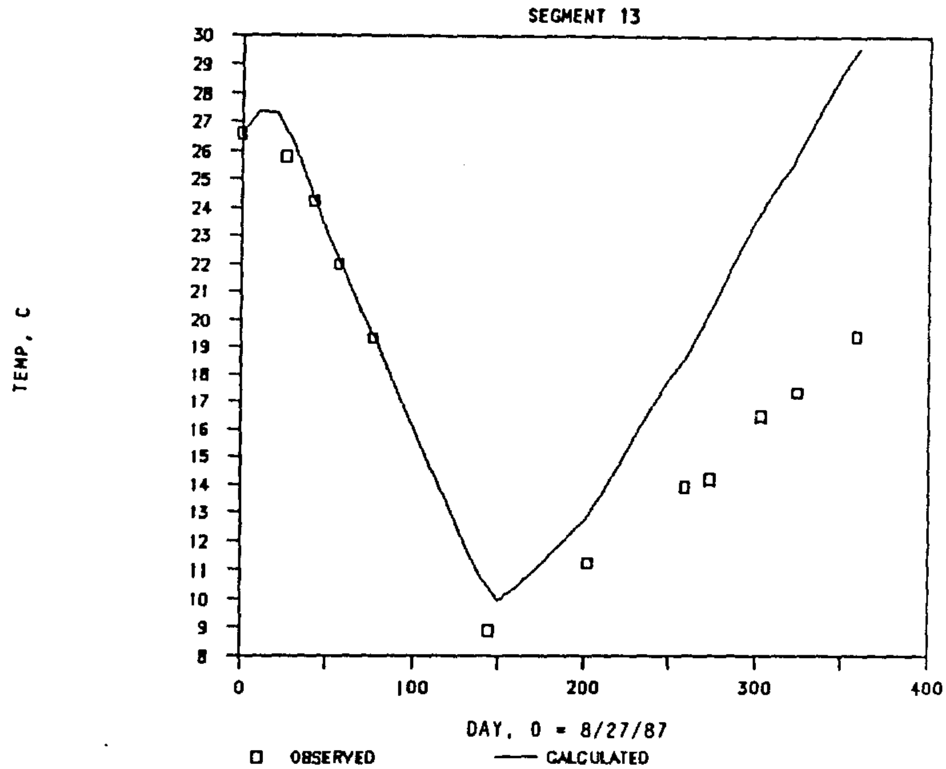


FIGURE A-21

Calibration Results and Observed Values for
Temperature in Lake Belton
(continued)

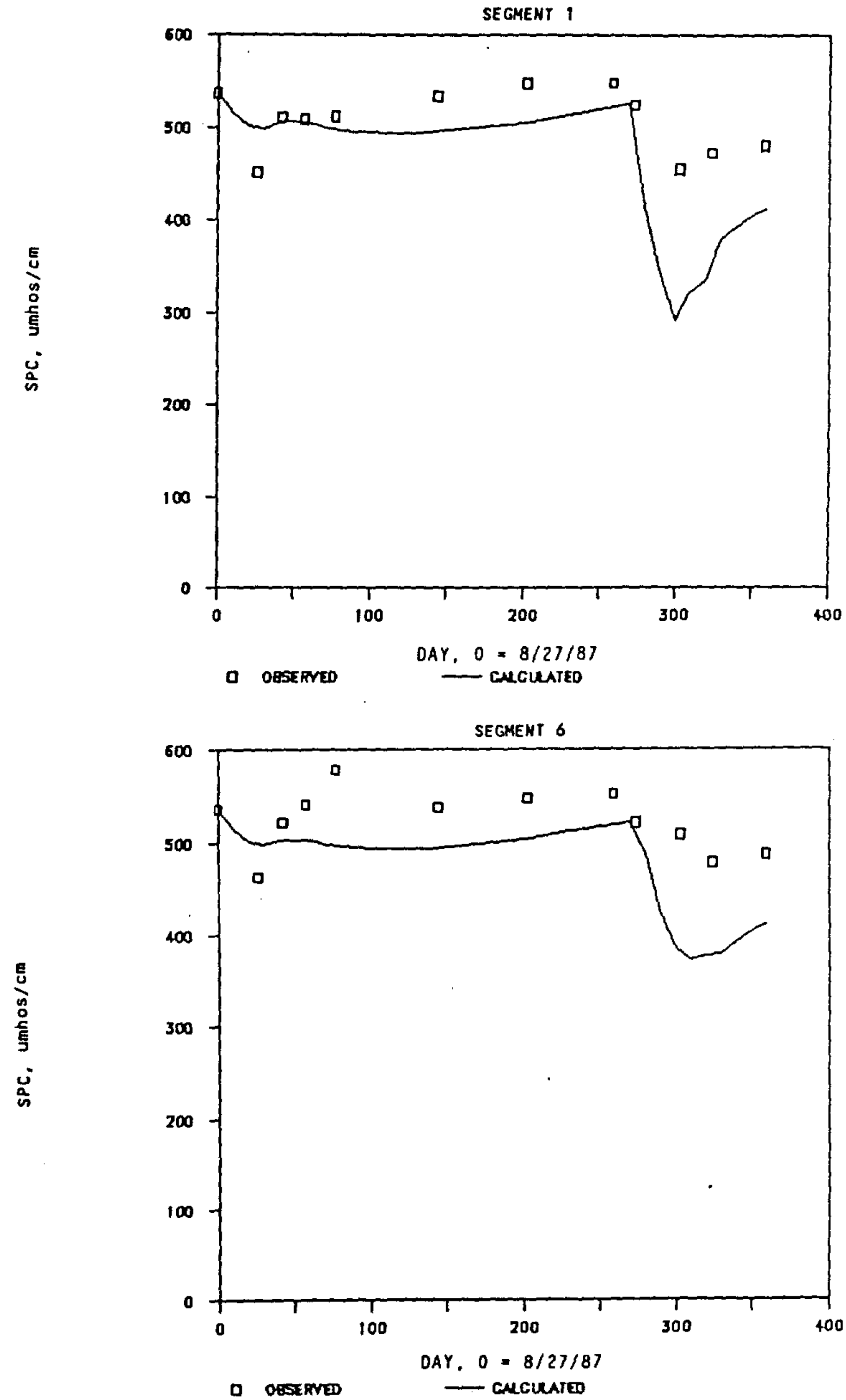
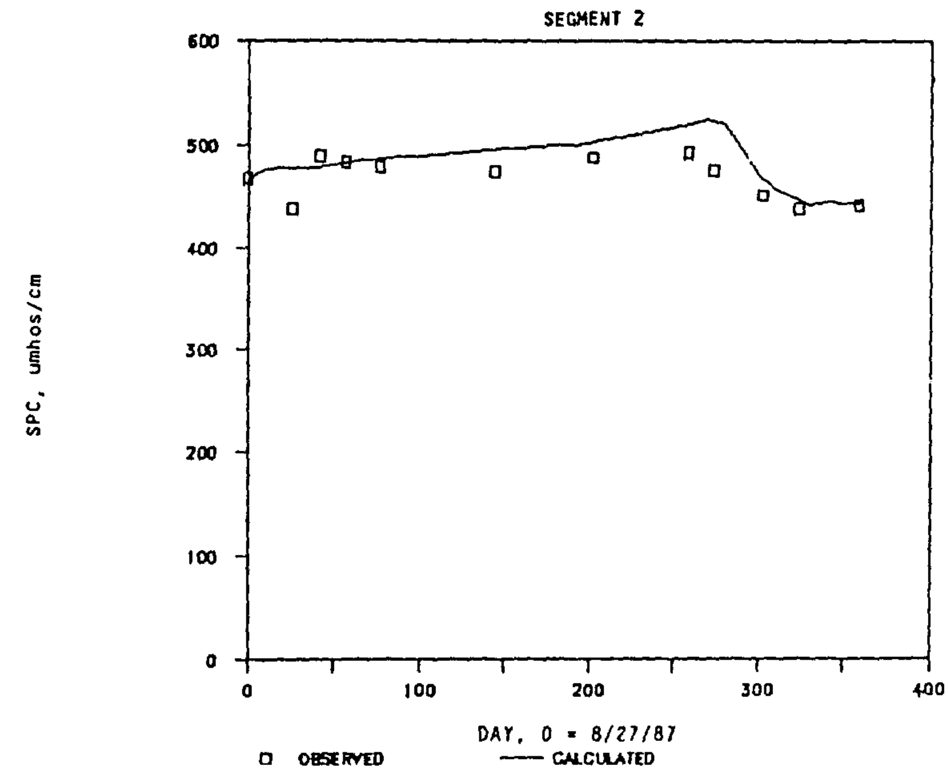


FIGURE A-22

Calibration Results and Observed Values for Specific Conductance in Lake Belton



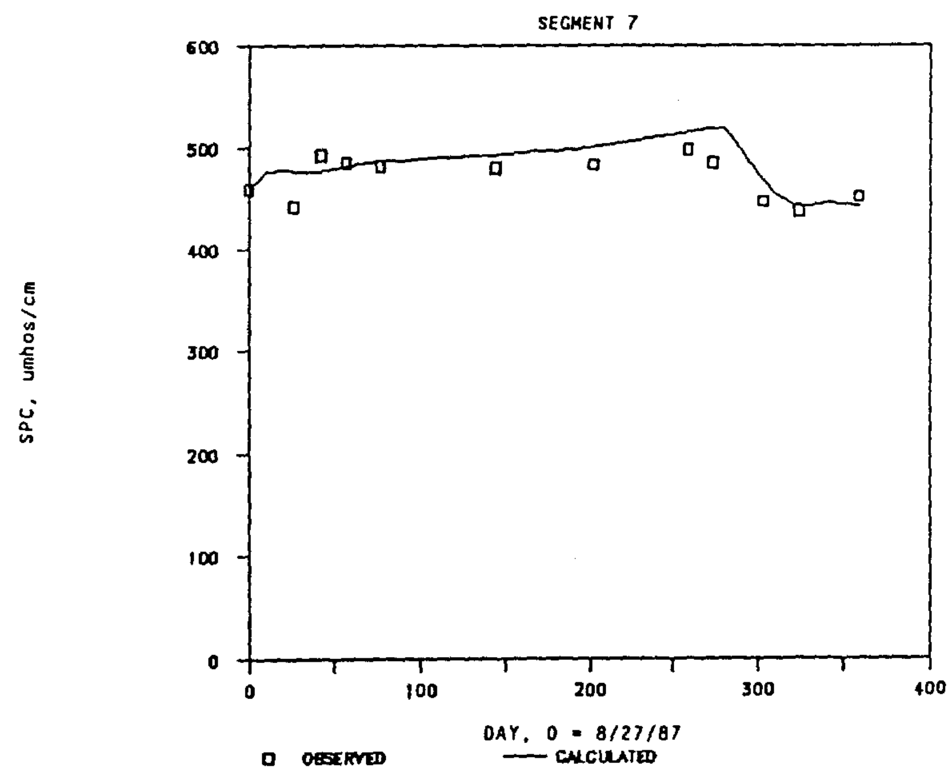


FIGURE A-22

Calibration Results and Observed Values for
Specific Conductance in Lake Belton
(continued)

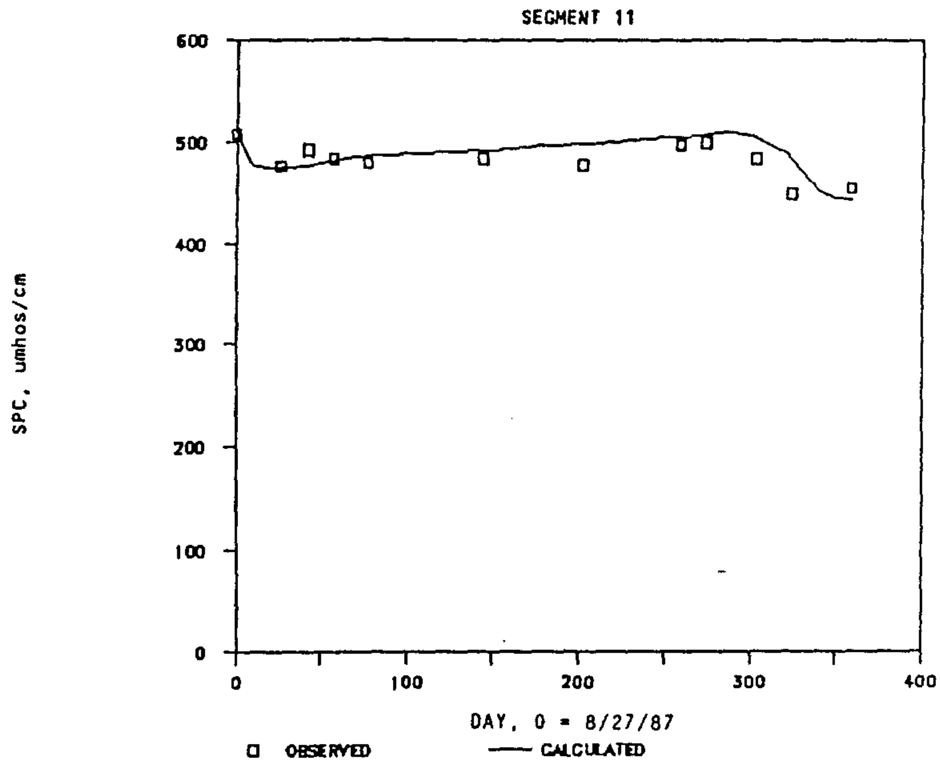
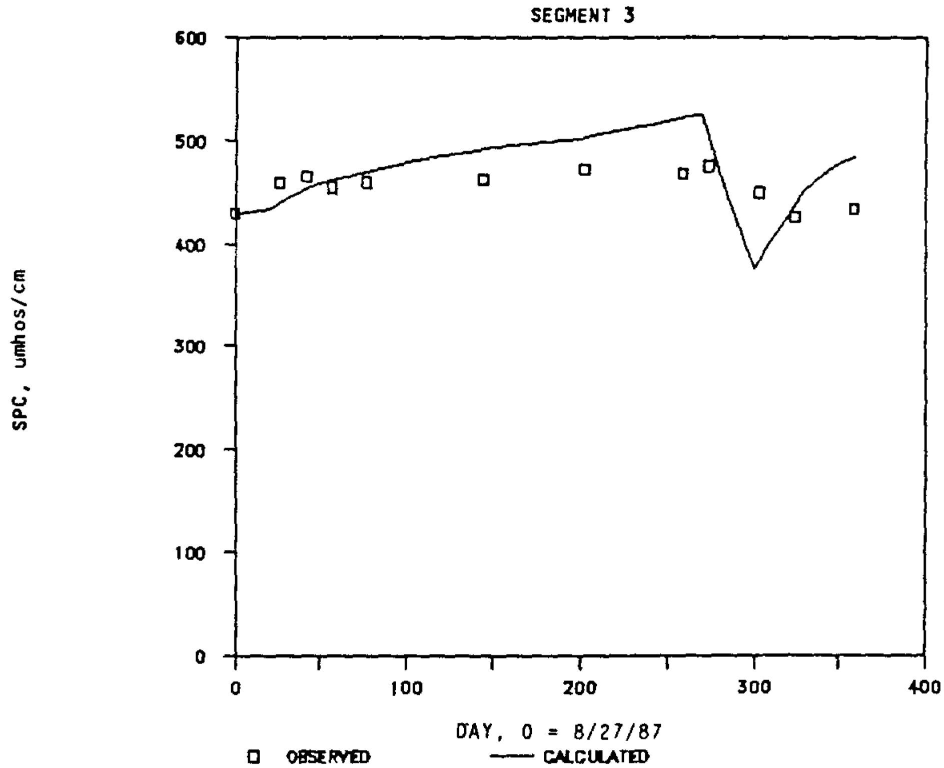


FIGURE A-22

Calibration Results and Observed Values for
Specific Conductance in Lake Belton
(continued)



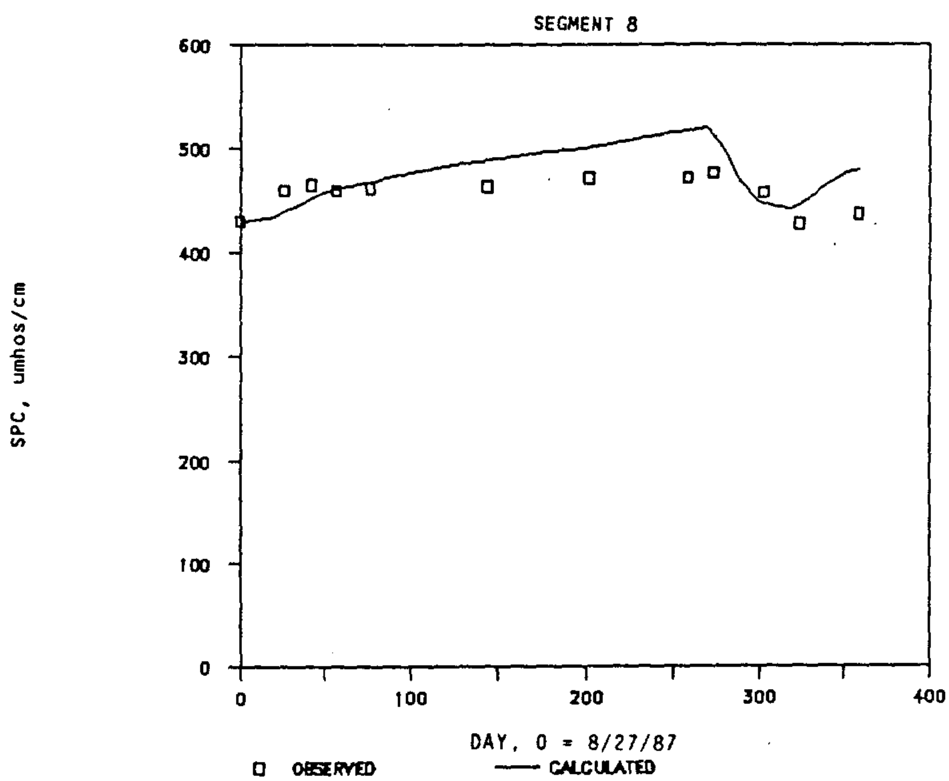
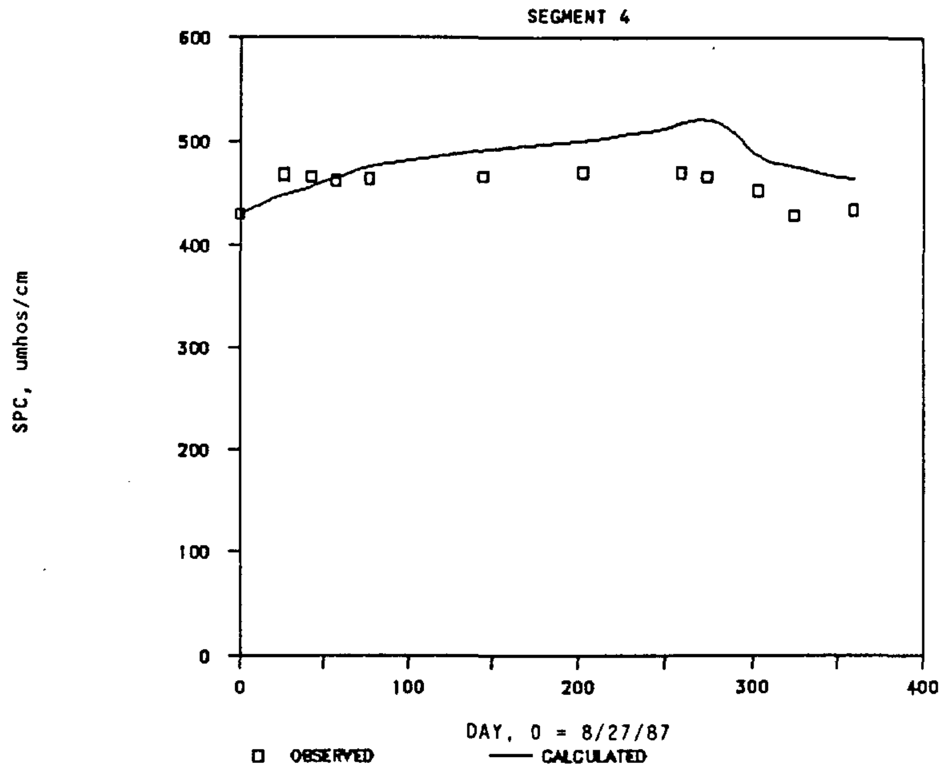


FIGURE A-22

Calibration Results and Observed Values for Specific Conductance in Lake Belton (continued)



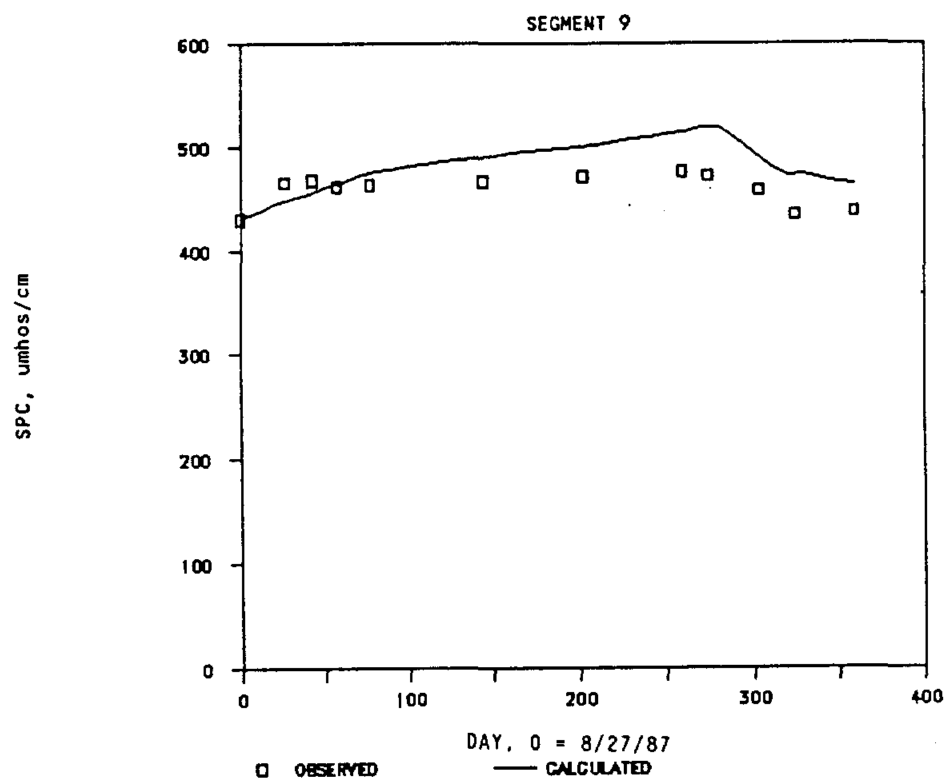


FIGURE A-22

Calibration Results and Observed Values for Specific Conductance in Lake Belton (continued)

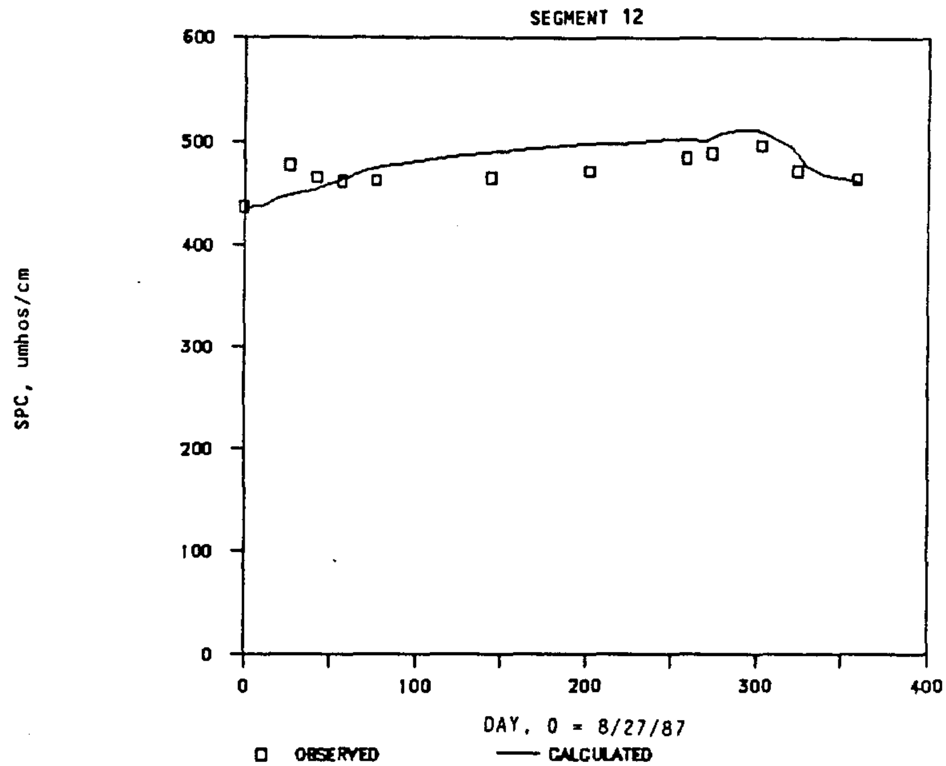
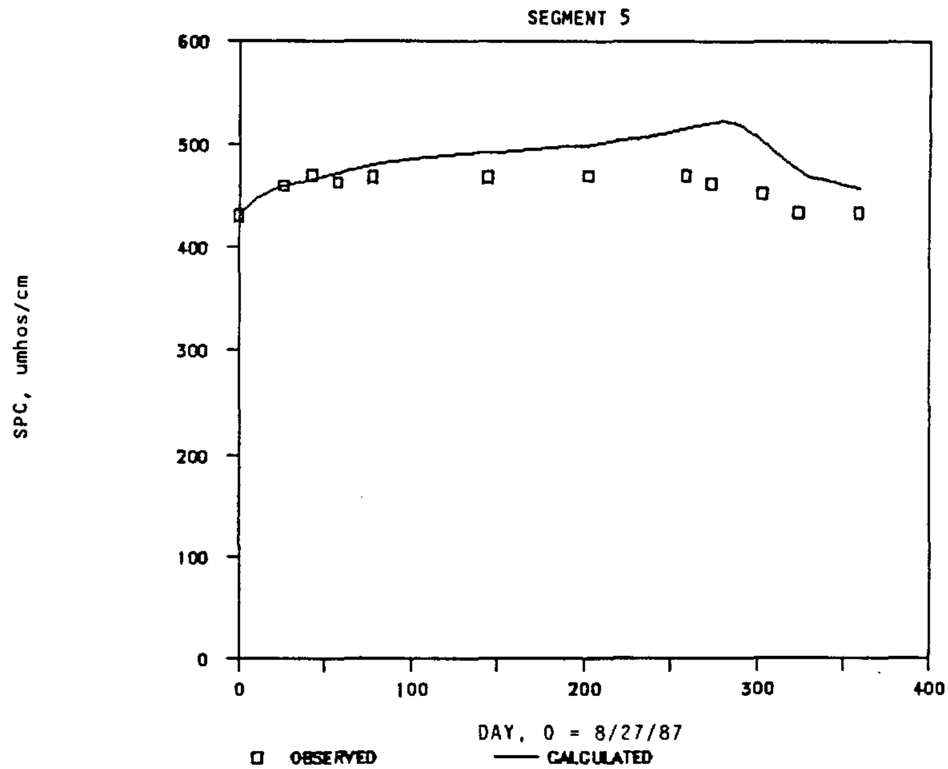


FIGURE A-22

Calibration Results and Observed Values for Specific Conductance in Lake Belton (continued)



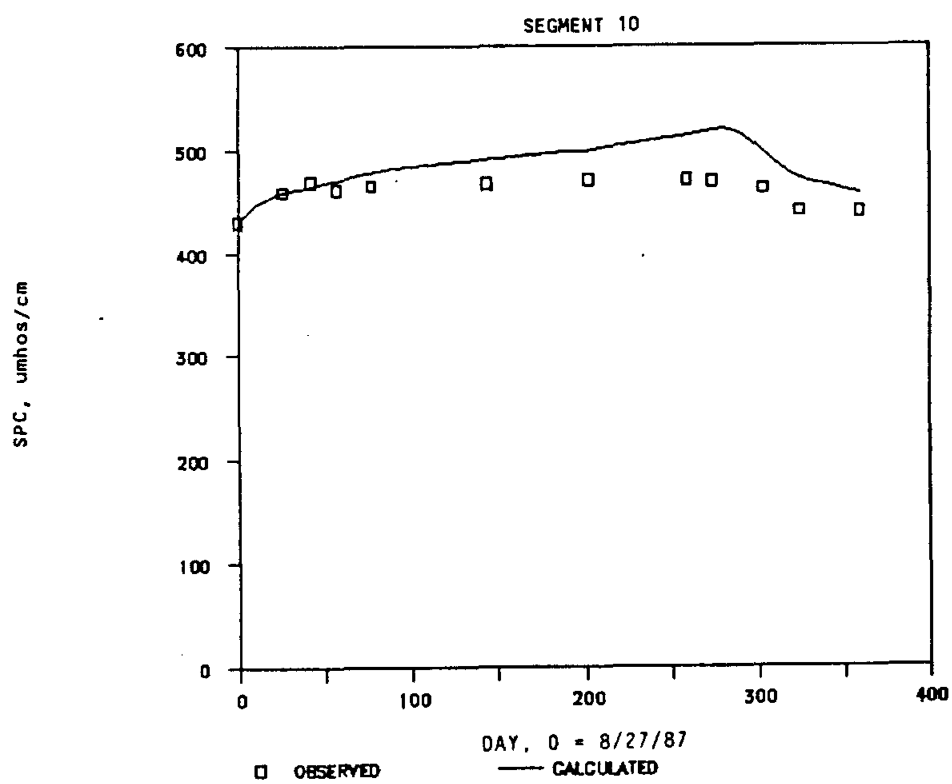


FIGURE A-22

Calibration Results and Observed Values for Specific Conductance in Lake Belton (continued)

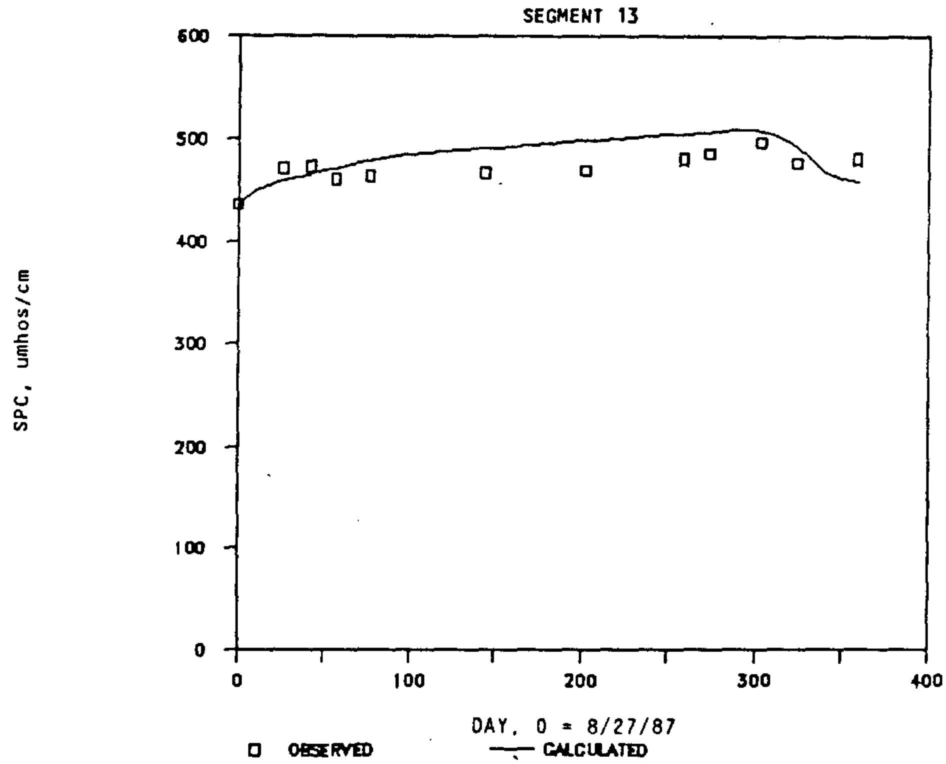


FIGURE A-22

Calibration Results and Observed Values for Specific Conductance in Lake Belton (continued)

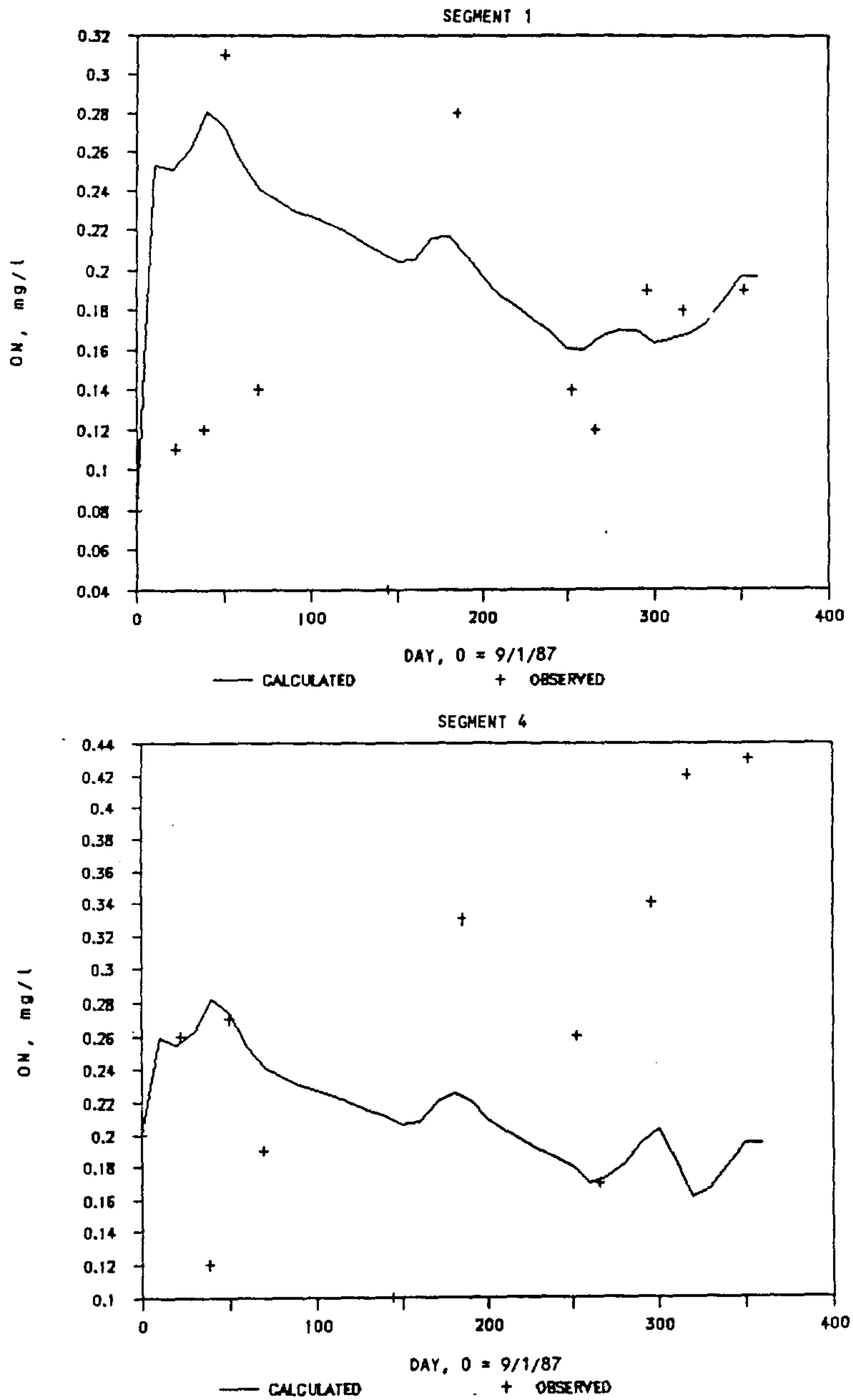
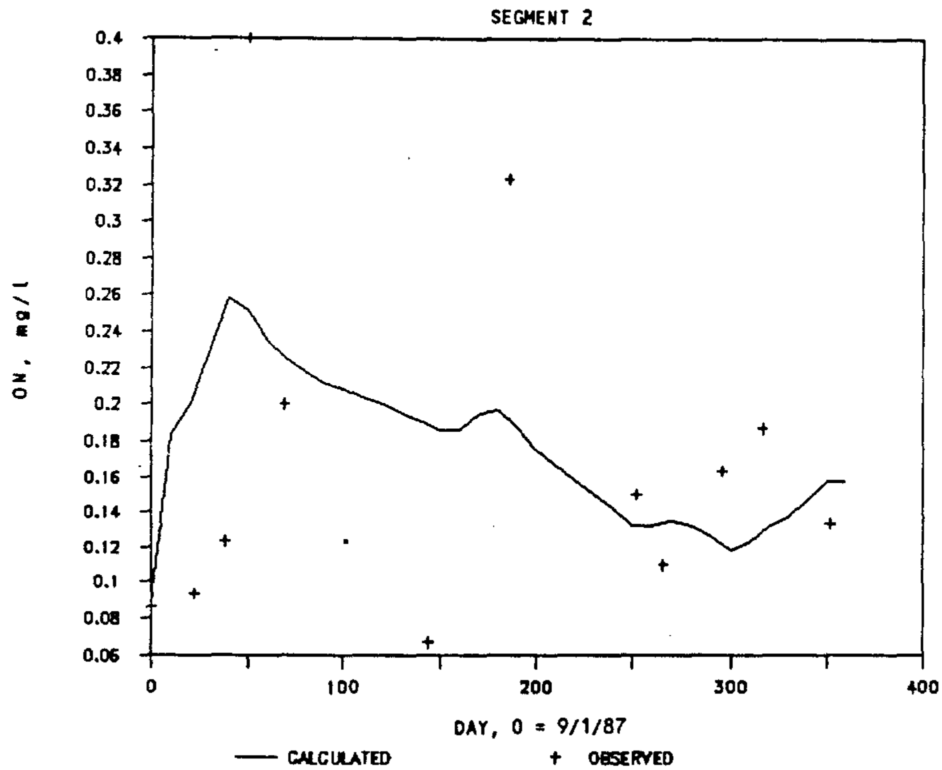


FIGURE A-23

Calibration Model Results and Observed Values for Organic Nitrogen in Lake Stillhouse Hollow



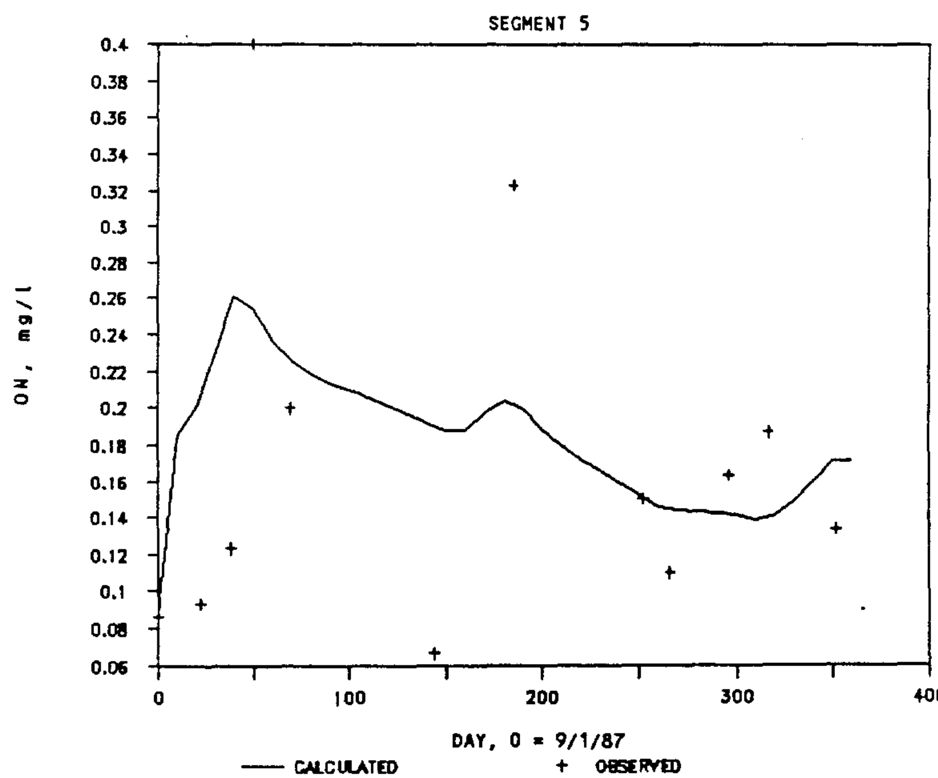


FIGURE A-23

Calibration Model Results and Observed Values for Organic Nitrogen in Lake Stillhouse Hollow (continued)

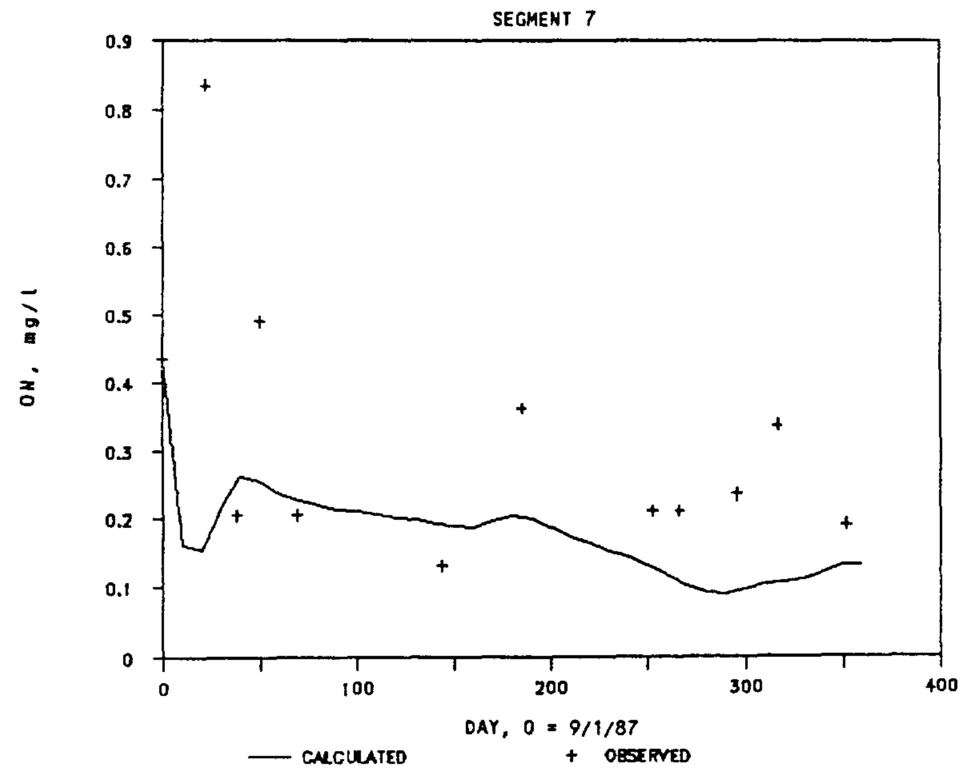


FIGURE A-23

Calibration Model Results and Observed Values for Organic Nitrogen in Lake Stillhouse Hollow (continued)

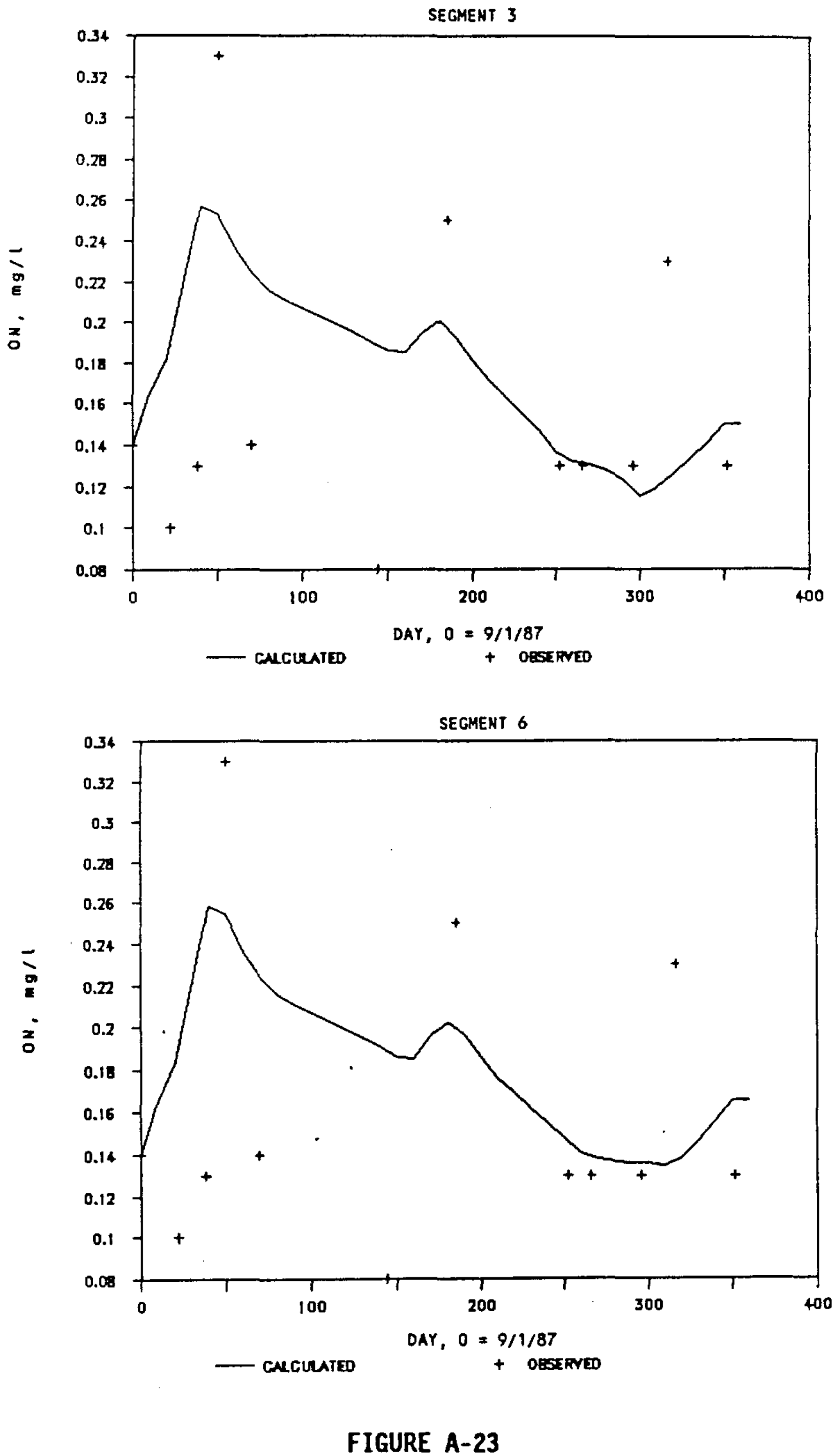


FIGURE A-23

Calibration Model Results and Observed Values for Organic Nitrogen in Lake Stillhouse Hollow (continued)

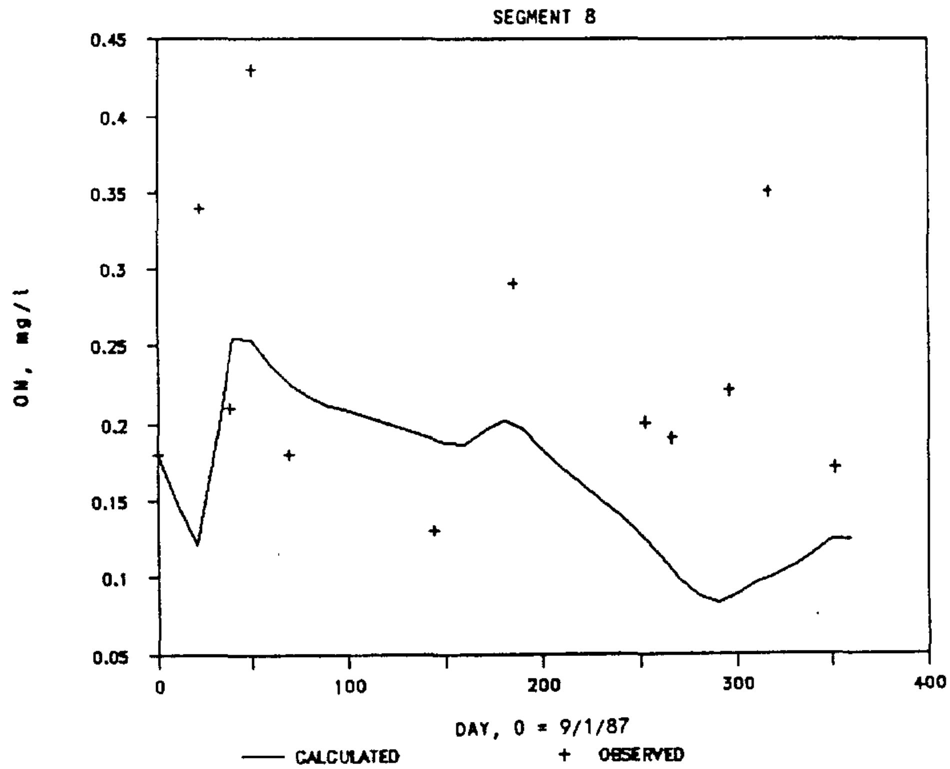
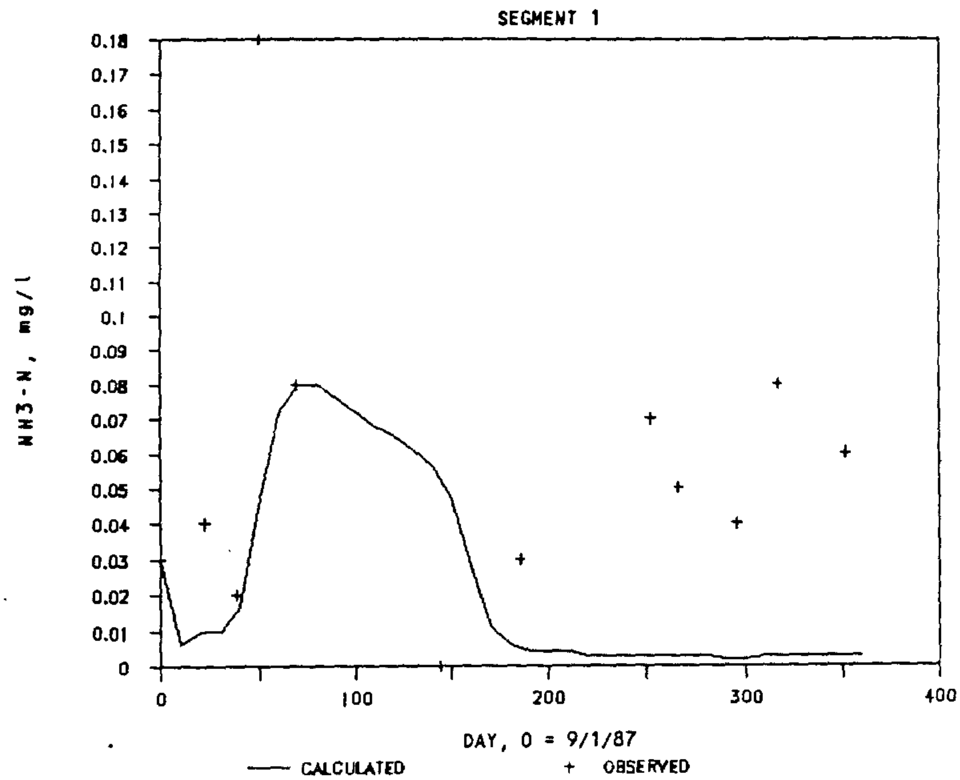


FIGURE A-23

Calibration Model Results and Observed Values for Organic Nitrogen in Lake Stillhouse Hollow (continued)



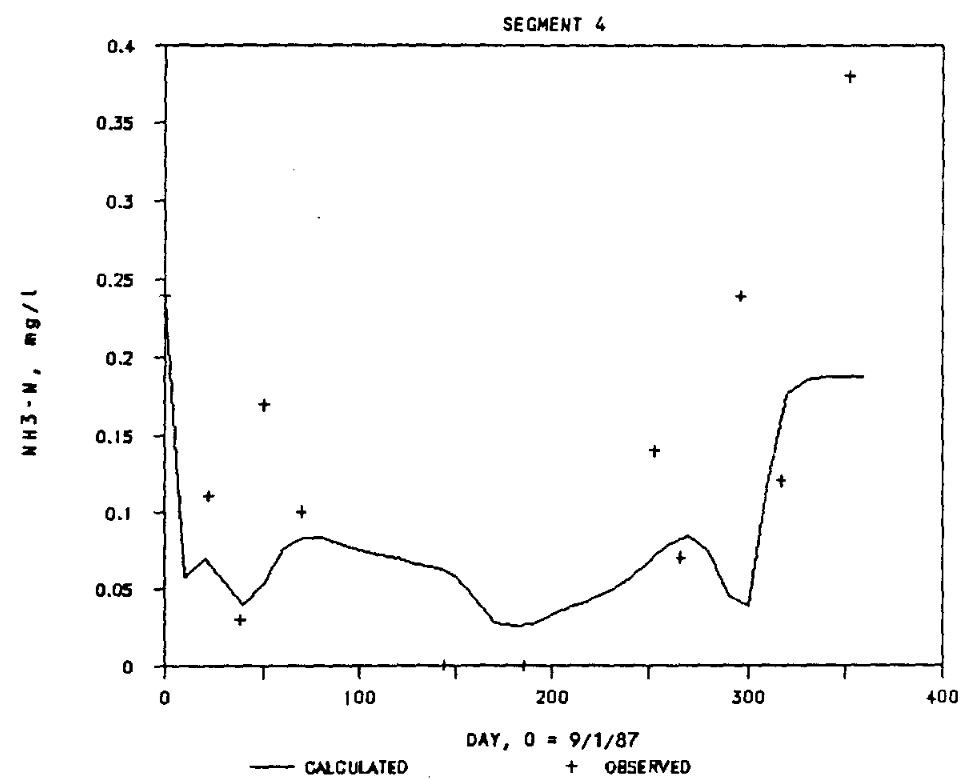
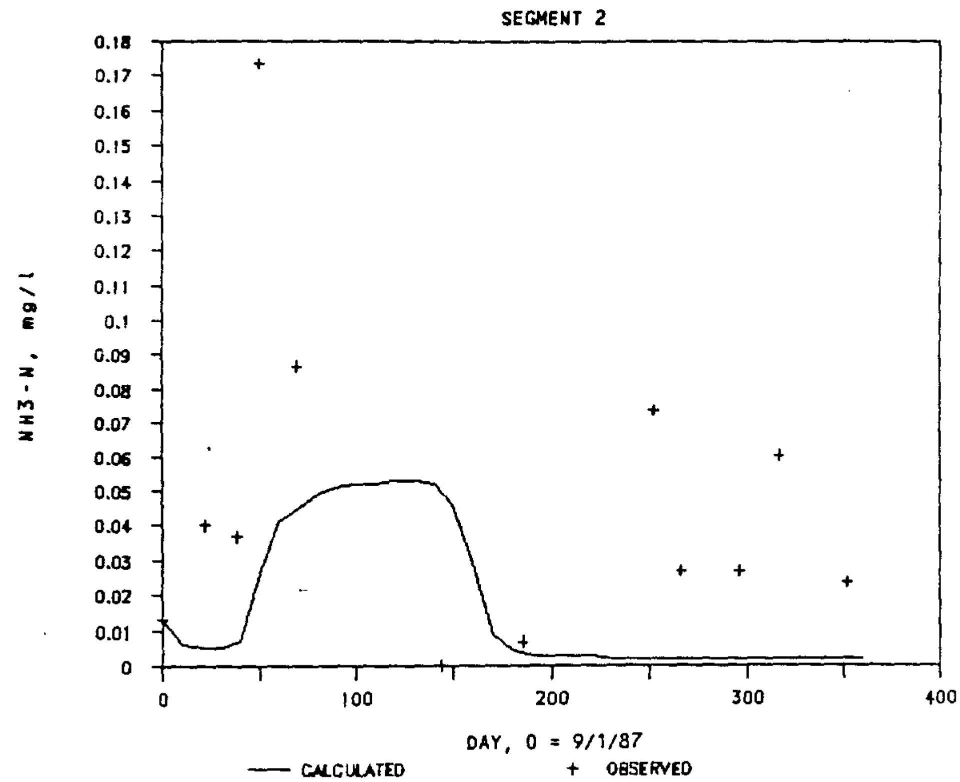


FIGURE A-24

Calibration Model Results and Observed Values for Ammonia Nitrogen in Lake Stillhouse Hollow



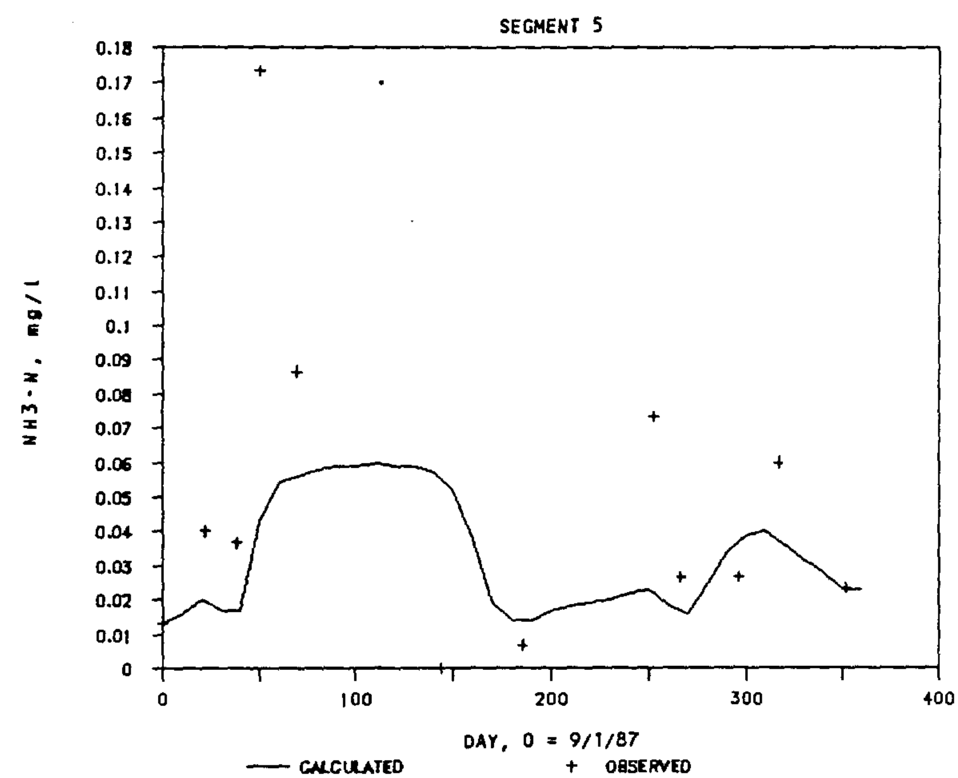


FIGURE A-24

Calibration Model Results and Observed Values for Ammonia Nitrogen in Lake Stillhouse Hollow (continued)

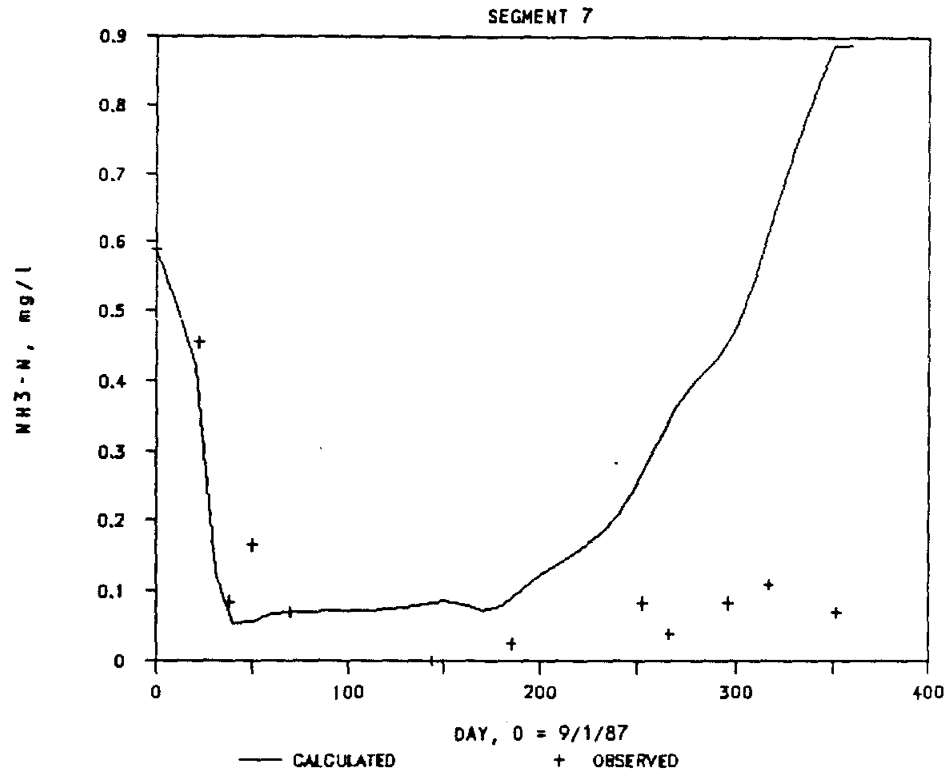


FIGURE A-24

Calibration Model Results and Observed Values for Ammonia Nitrogen in Lake Stillhouse Hollow (continued)

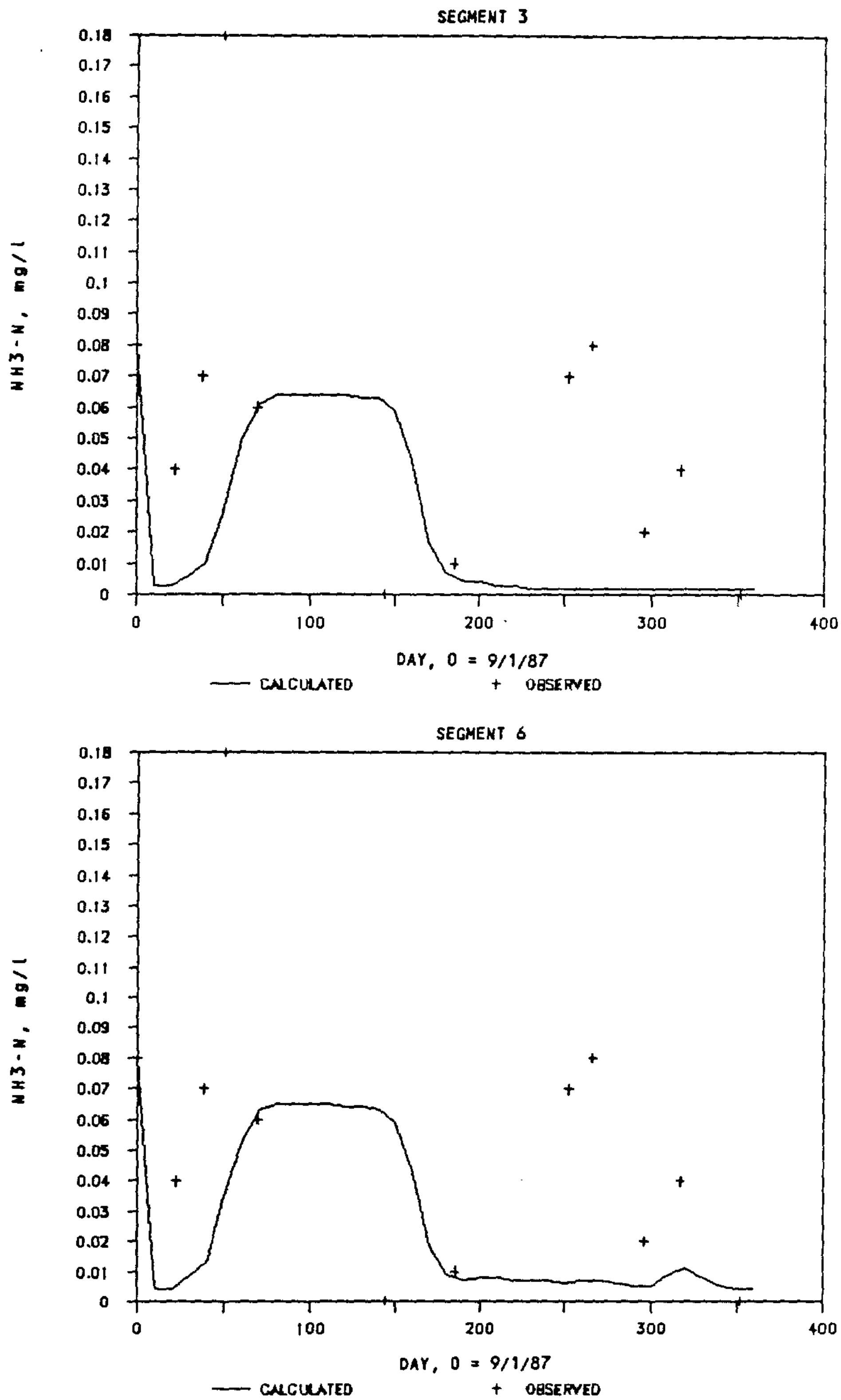


FIGURE A-24

Calibration Model Results and Observed Values for Ammonia Nitrogen in Lake Stillhouse Hollow (continued)

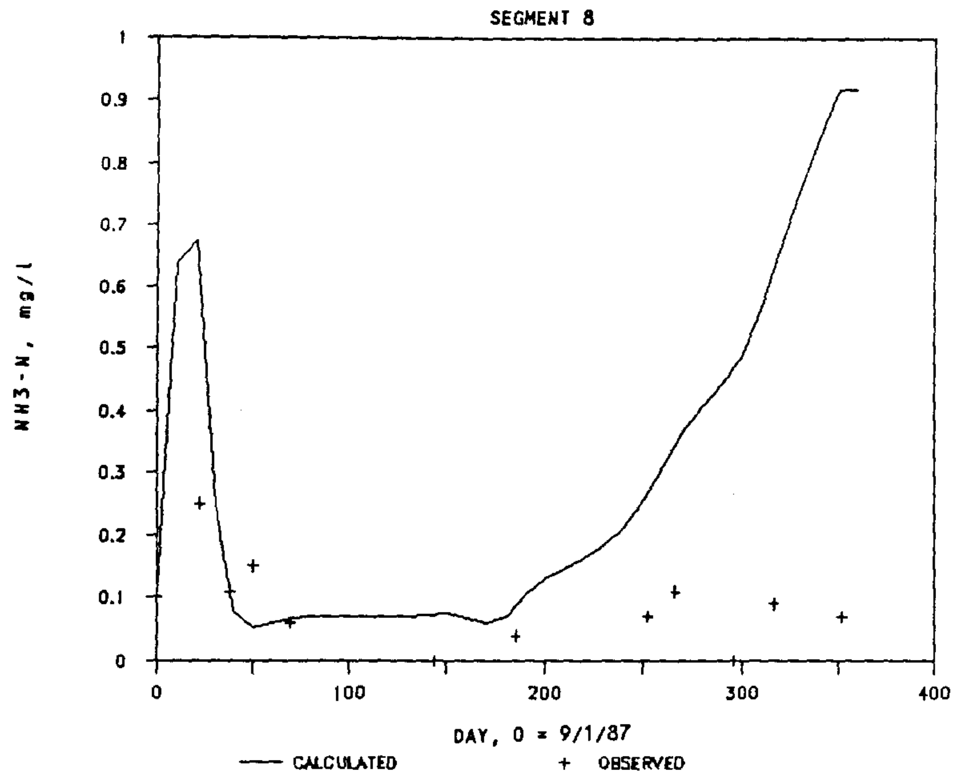
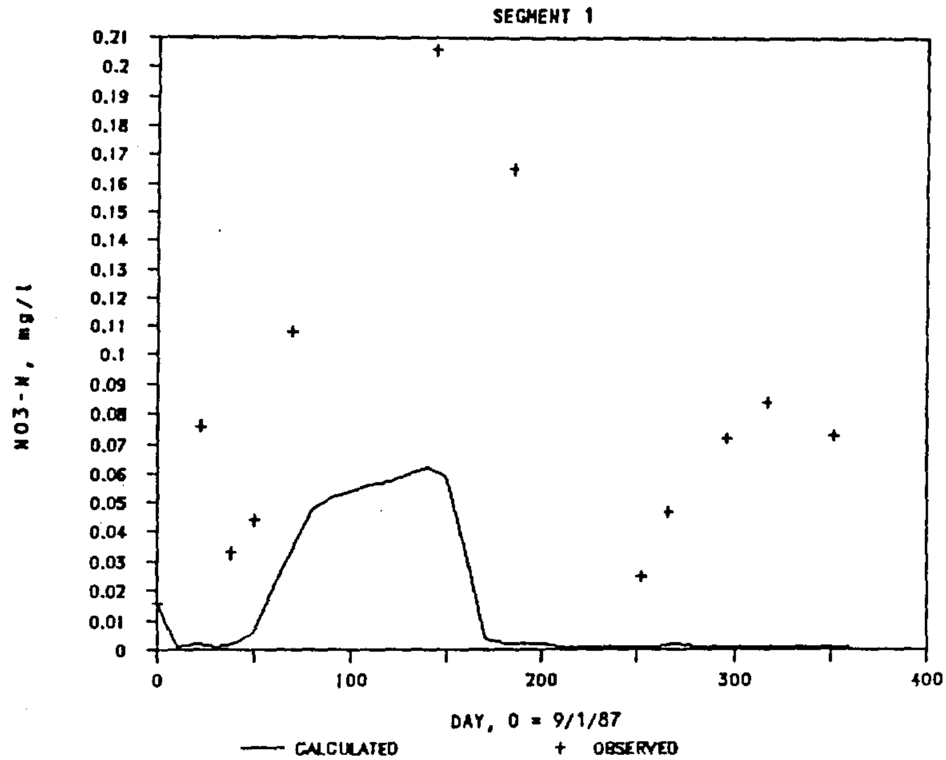


FIGURE A-24

Calibration Model Results and Observed Values for Ammonia Nitrogen in Lake Stillhouse Hollow (continued)



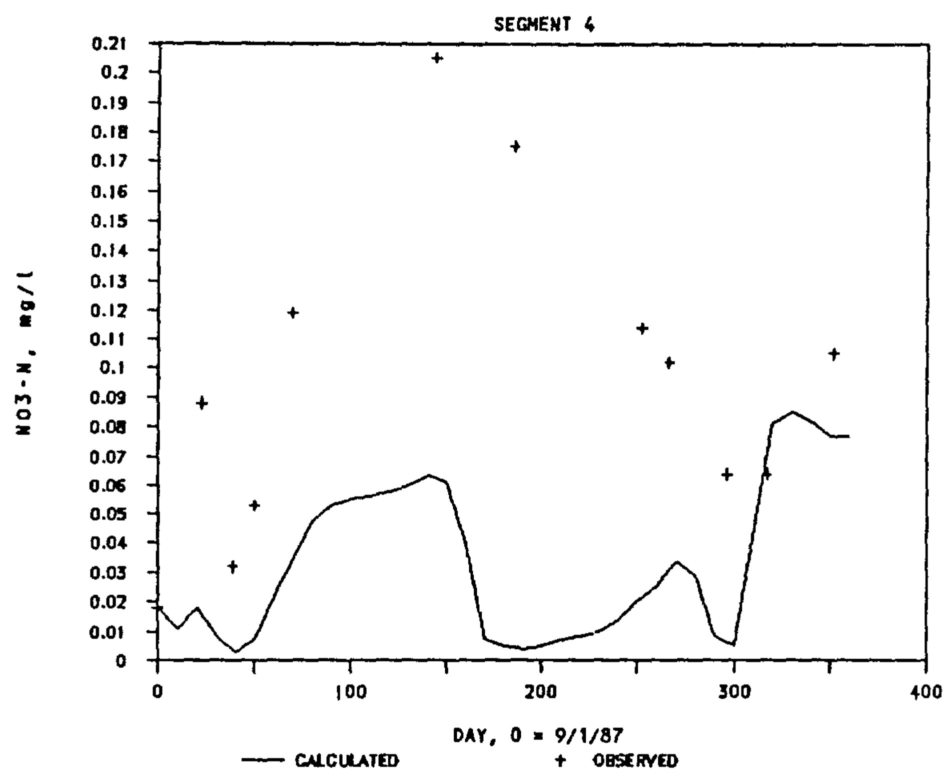
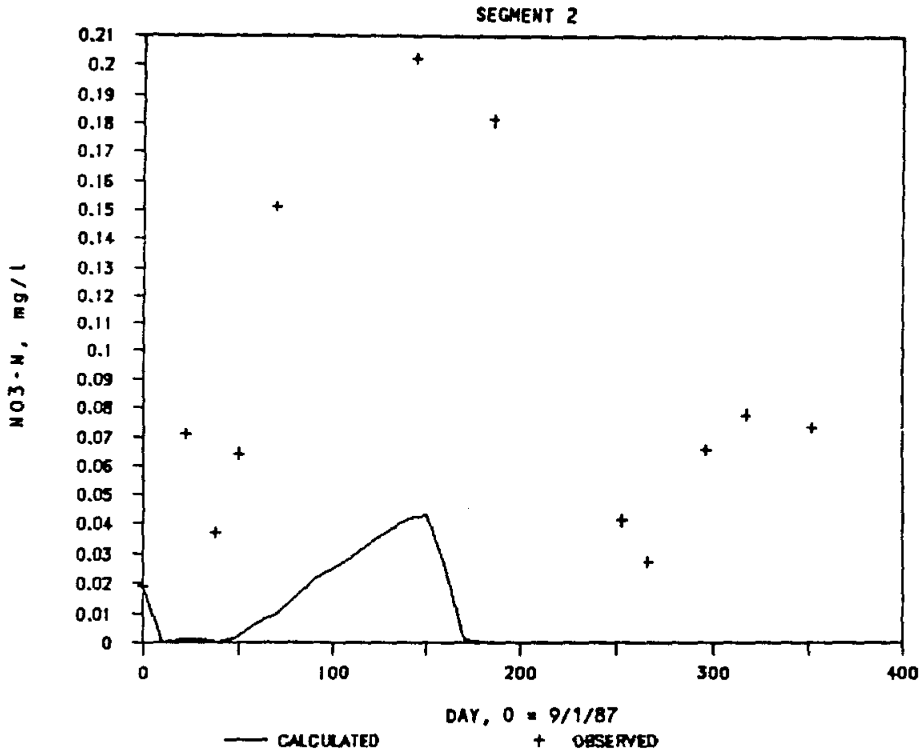


FIGURE A-25

Calibration Model Results and Observed Values for Nitrate Nitrogen in Lake Stillhouse Hollow



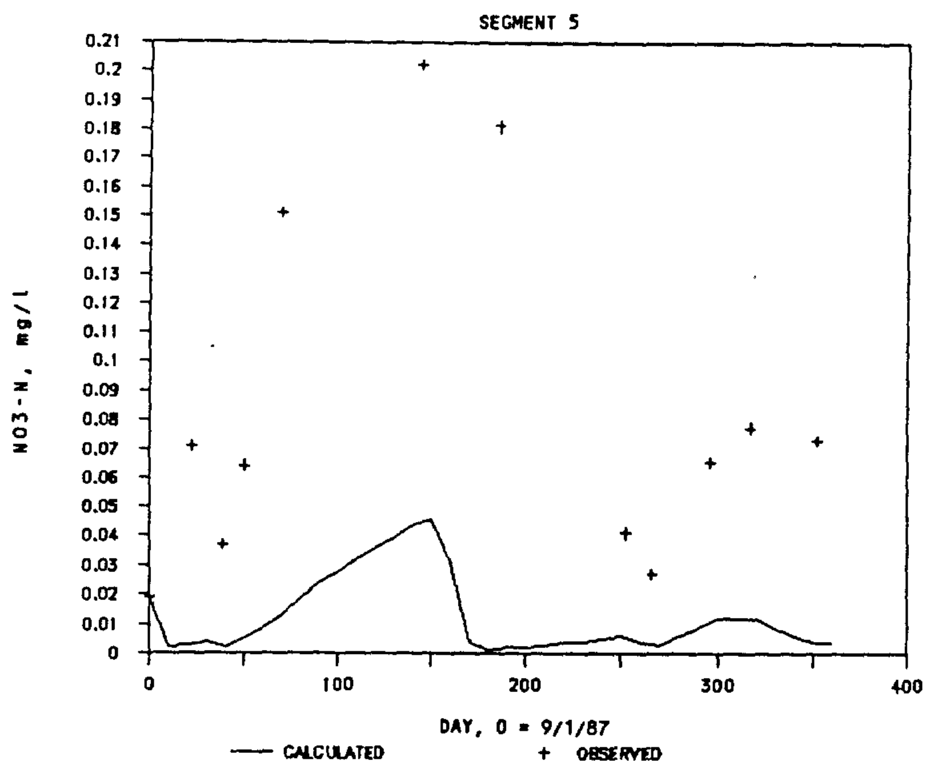


FIGURE A-25

Calibration Model Results and Observed Values for
Nitrate Nitrogen in Lake Stillhouse Hollow
(continued)

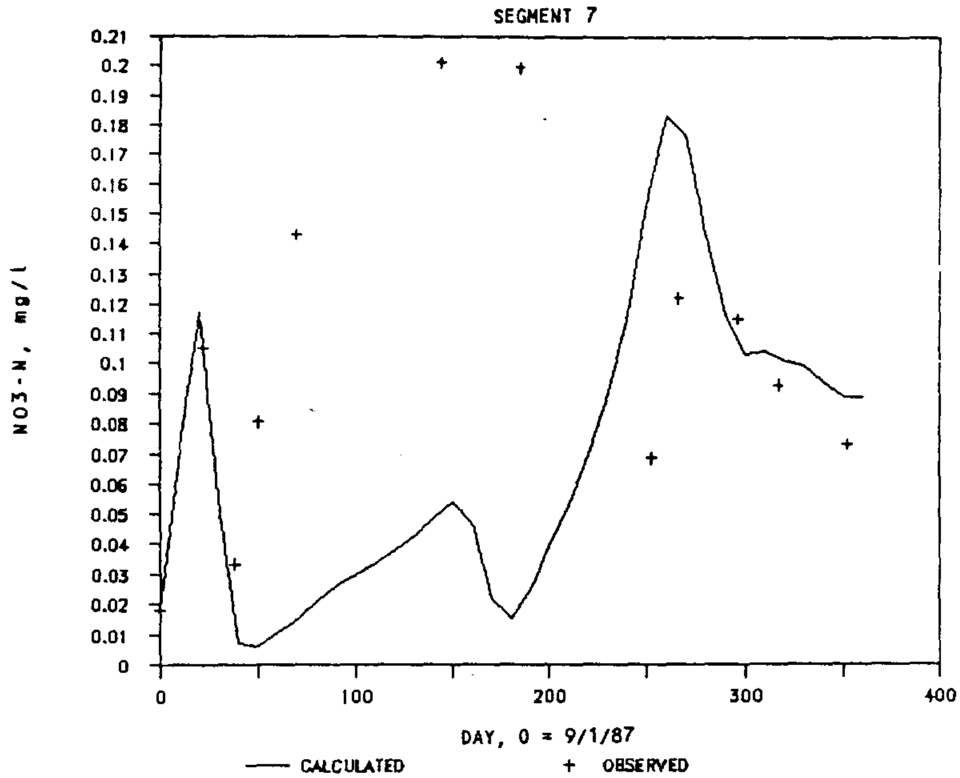
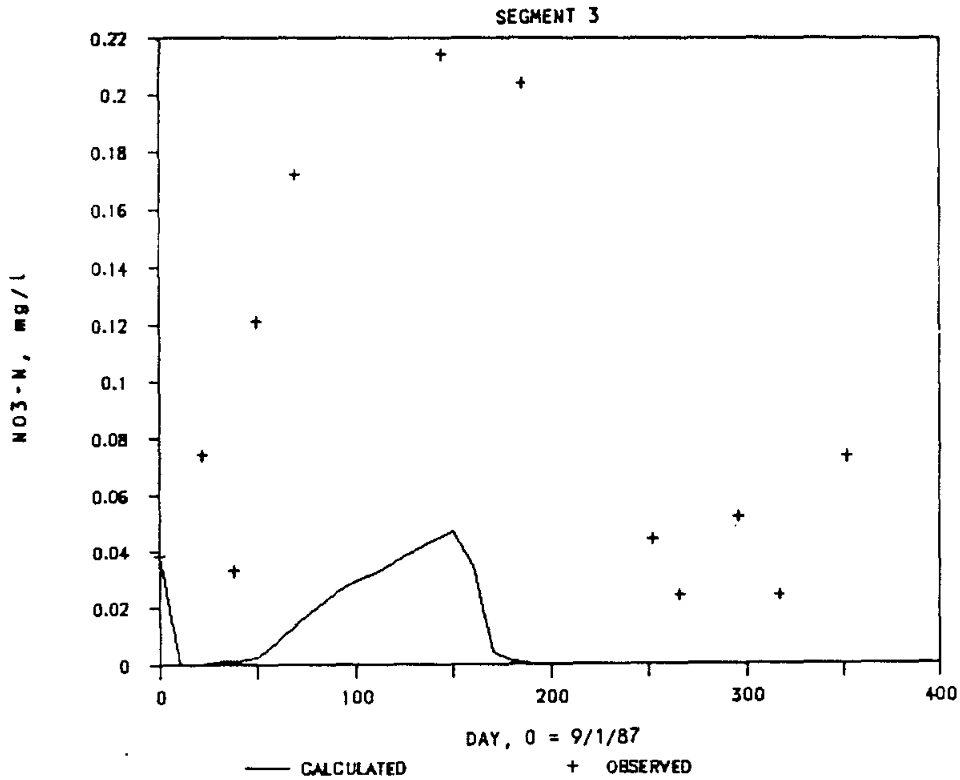


FIGURE A-25

Calibration Model Results and Observed Values for Nitrate Nitrogen in Lake Stillhouse Hollow (continued)



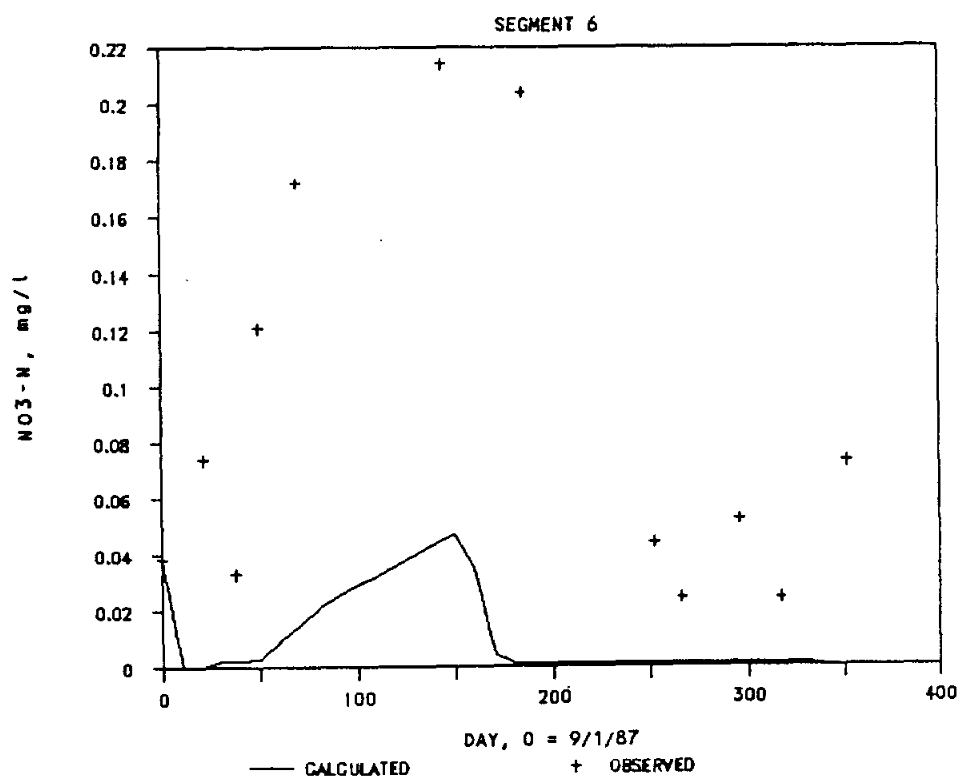


FIGURE A-25

Calibration Model Results and Observed Values for Nitrate Nitrogen in Lake Stillhouse Hollow (continued)

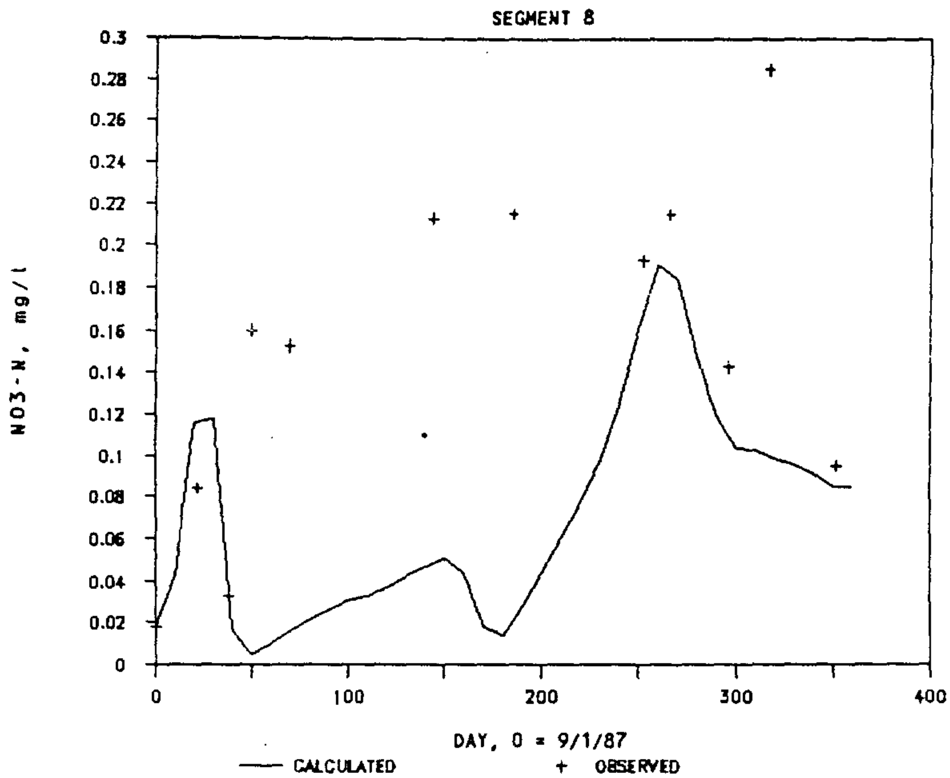


FIGURE A-25

Calibration Model Results and Observed Values for Nitrate Nitrogen in Lake Stillhouse Hollow (continued)

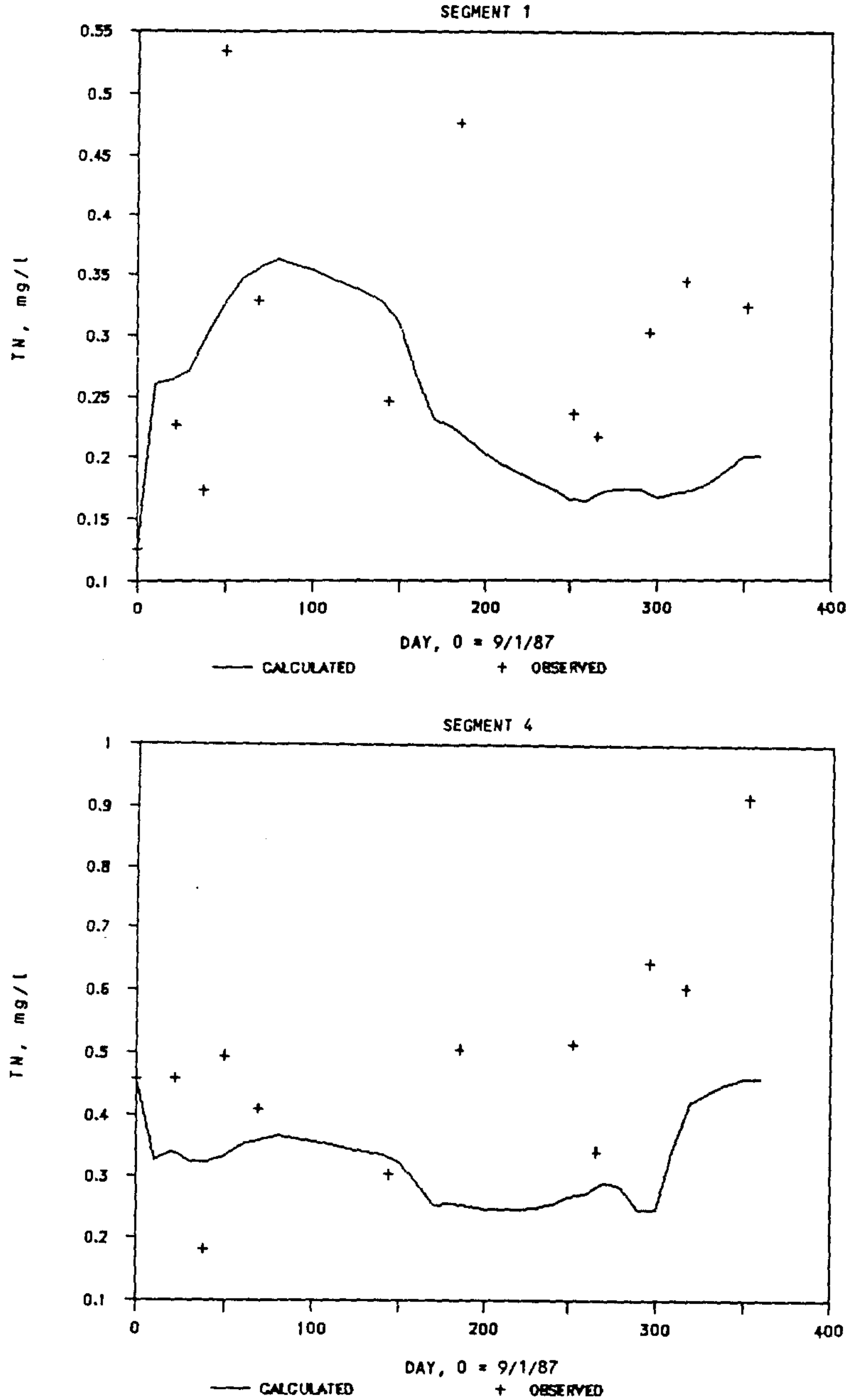
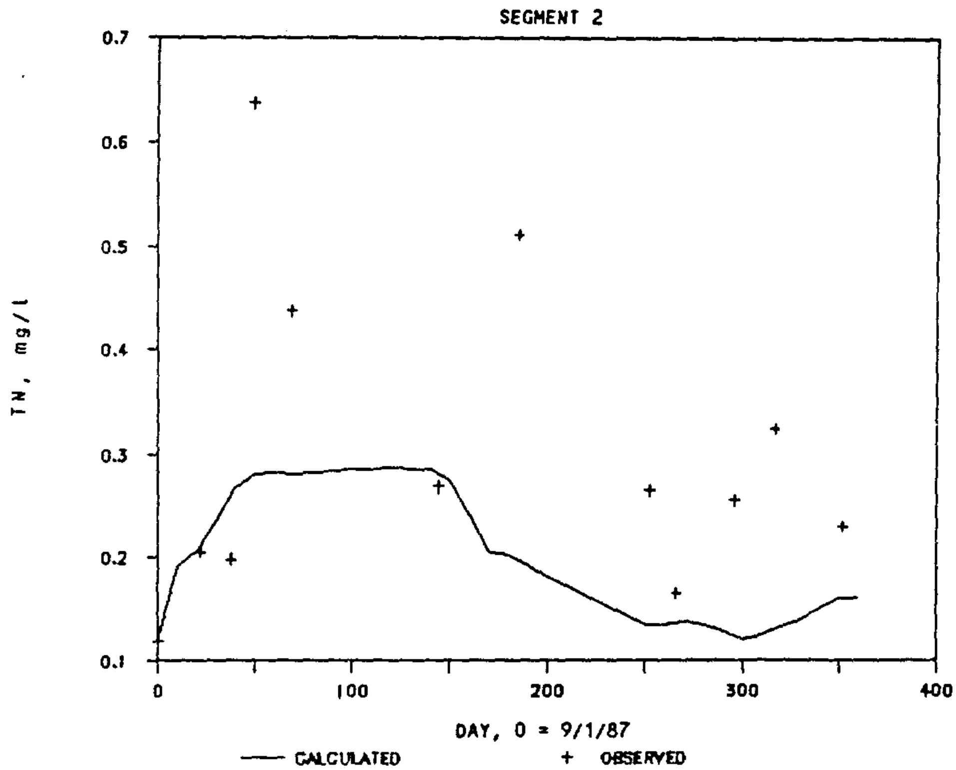


FIGURE A-26

Calibration Model Results and Observed Values for Total Nitrogen in Lake Stillhouse Hollow



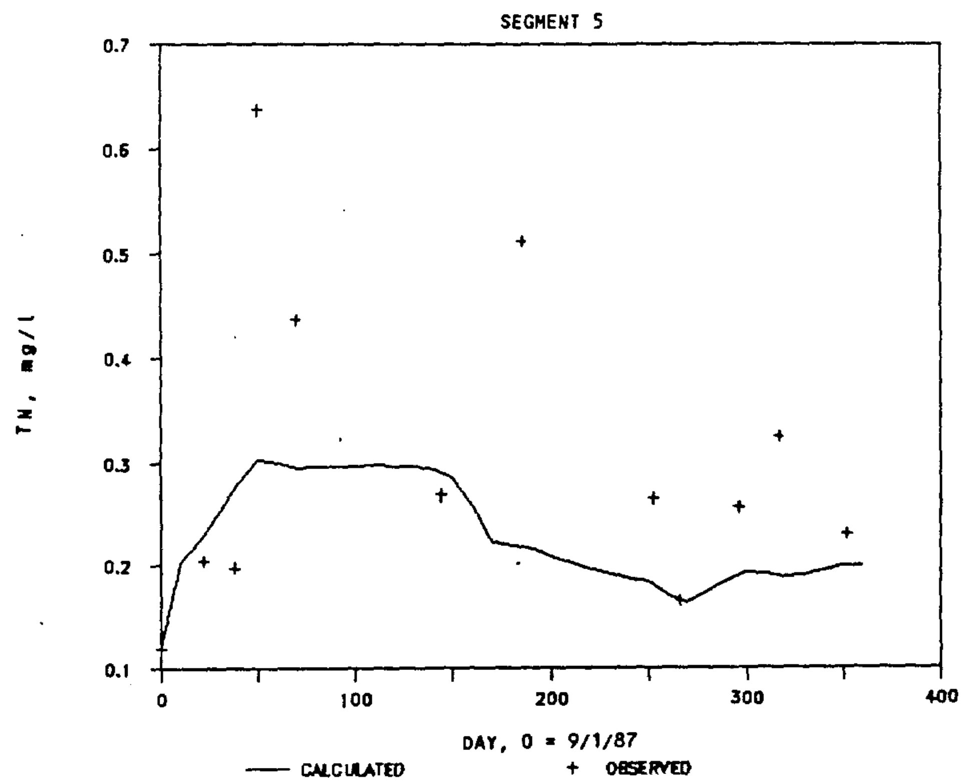


FIGURE A-26

Calibration Model Results and Observed Values for Total Nitrogen in Lake Stillhouse Hollow (continued)

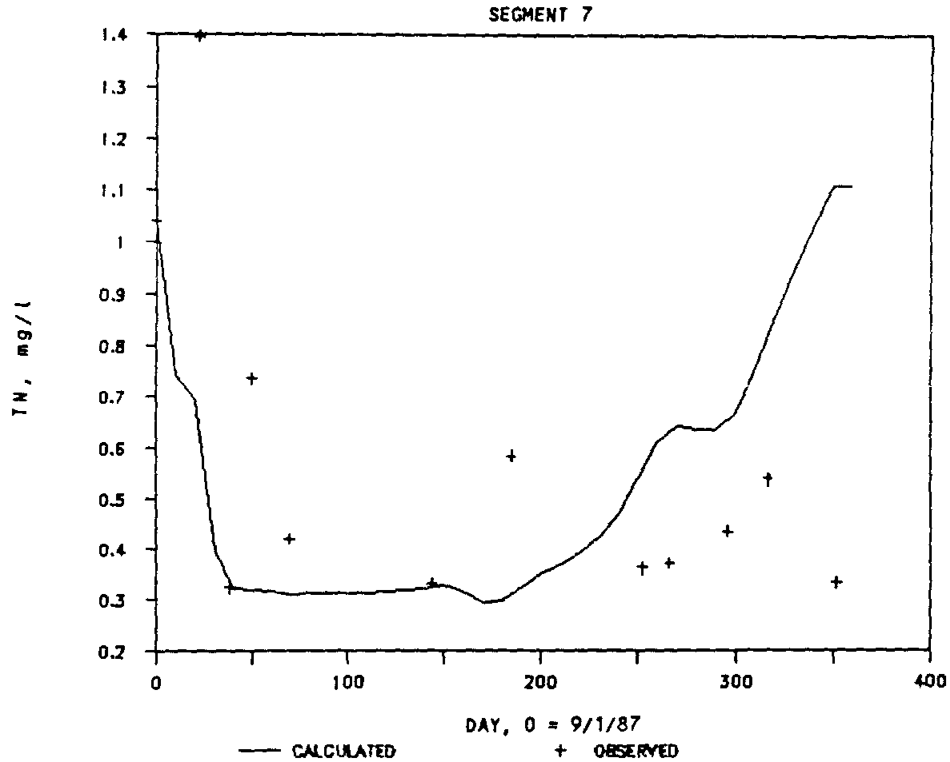
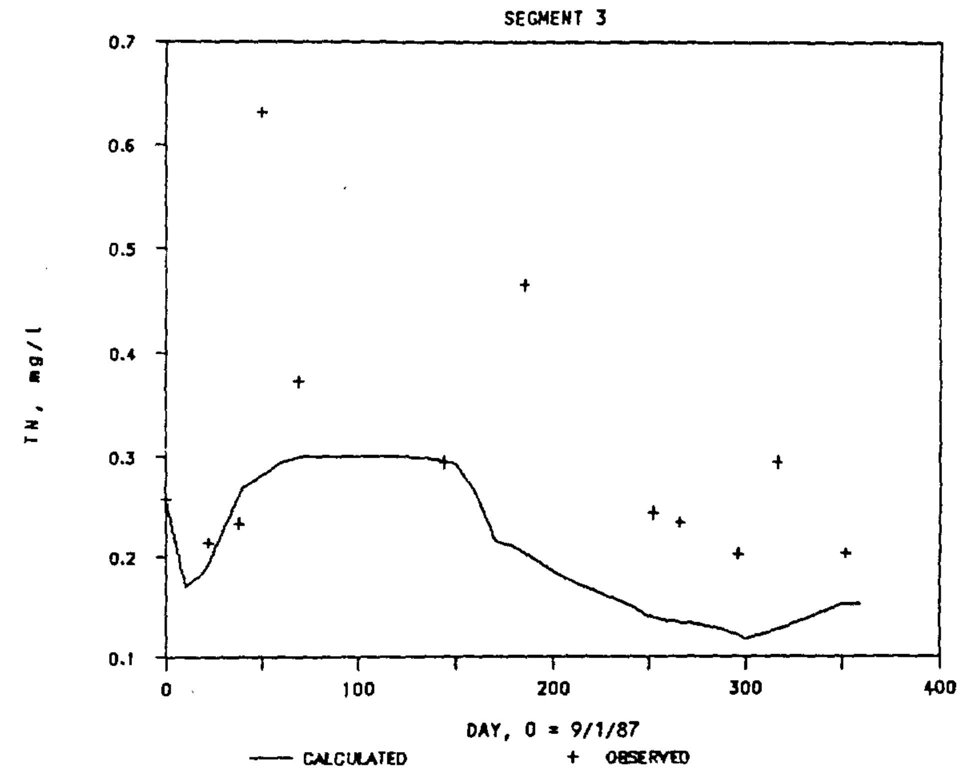


FIGURE A-26

Calibration Model Results and Observed Values for Total Nitrogen in Lake Stillhouse Hollow (continued)



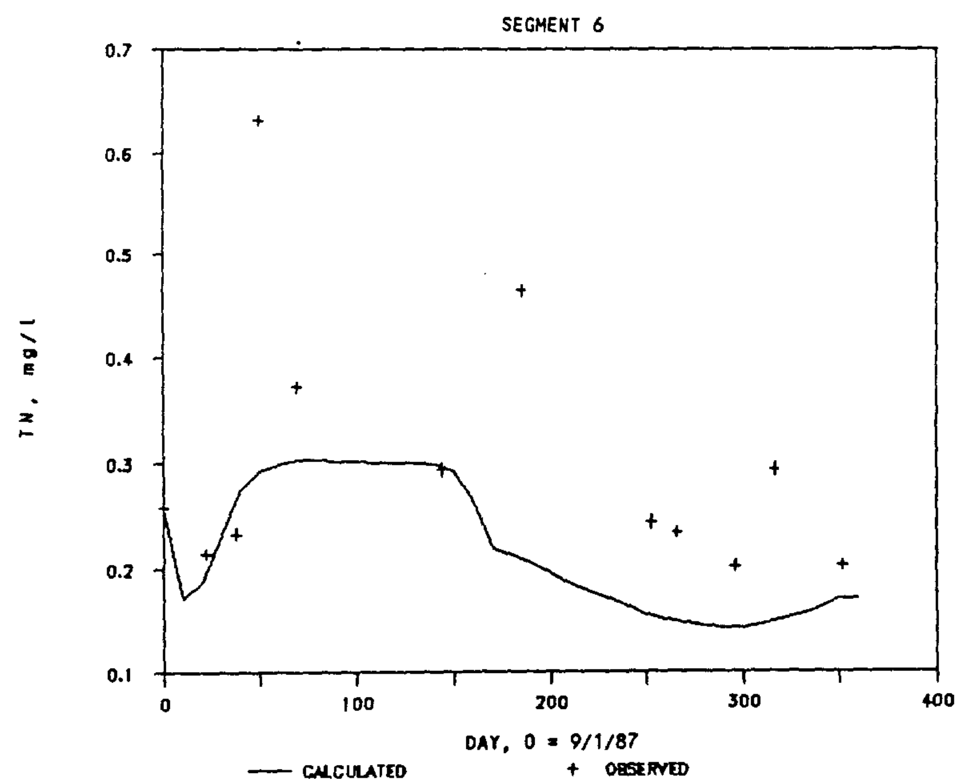


FIGURE A-26

Calibration Model Results and Observed Values for
Total Nitrogen in Lake Stillhouse Hollow
(continued)

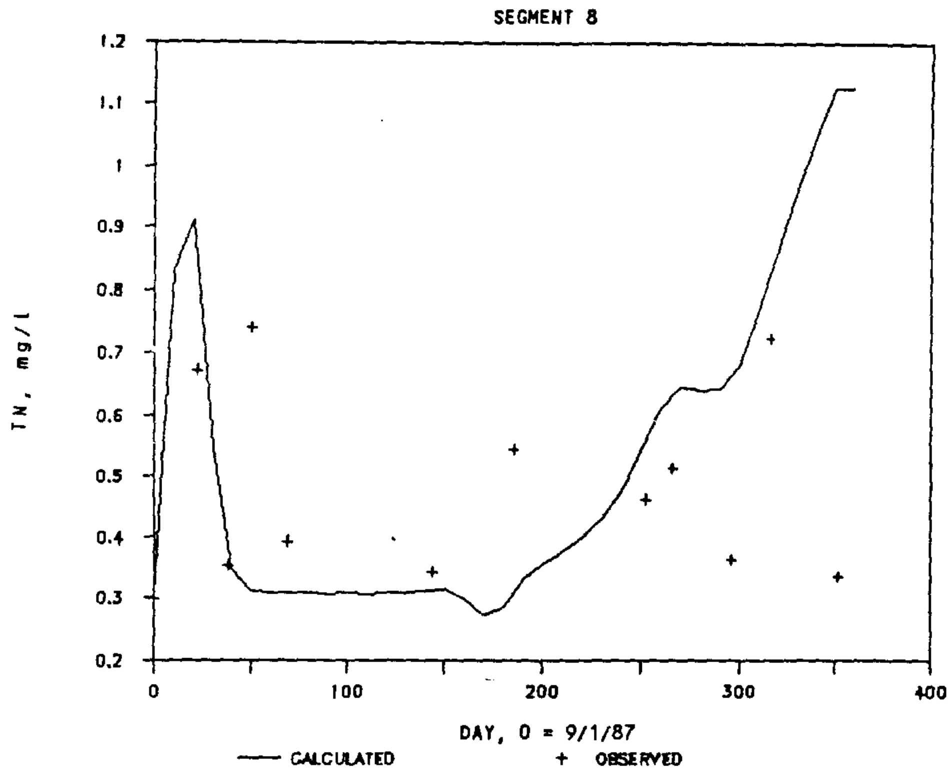


FIGURE A-26

Calibration Model Results and Observed Values for
Total Nitrogen in Lake Stillhouse Hollow
(continued)

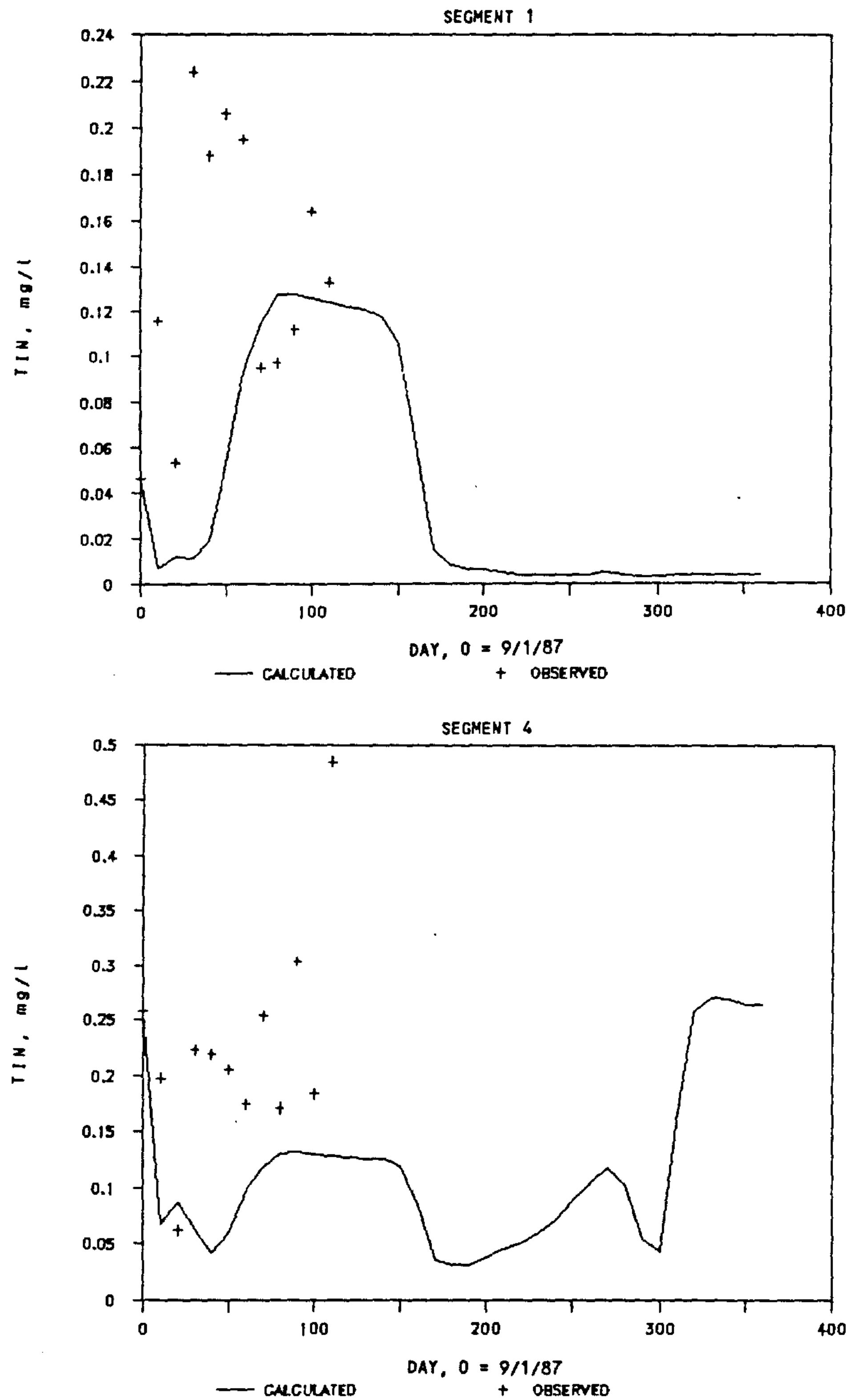
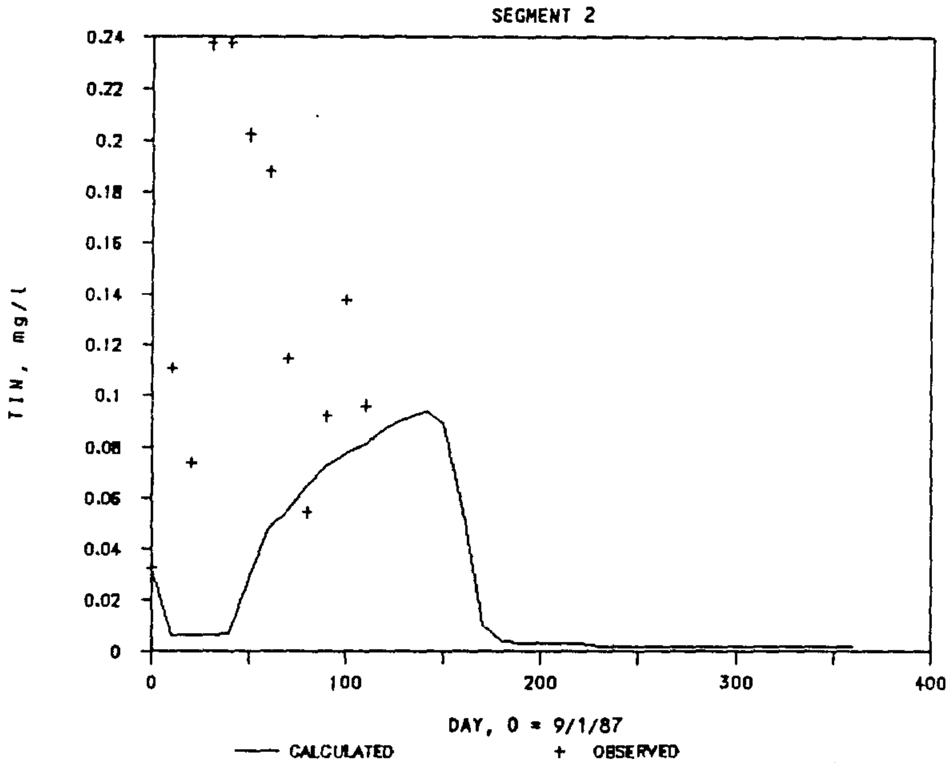


FIGURE A-27

Calibration Model Results and Observed Values for Total Inorganic Nitrogen in Lake Stillhouse Hollow



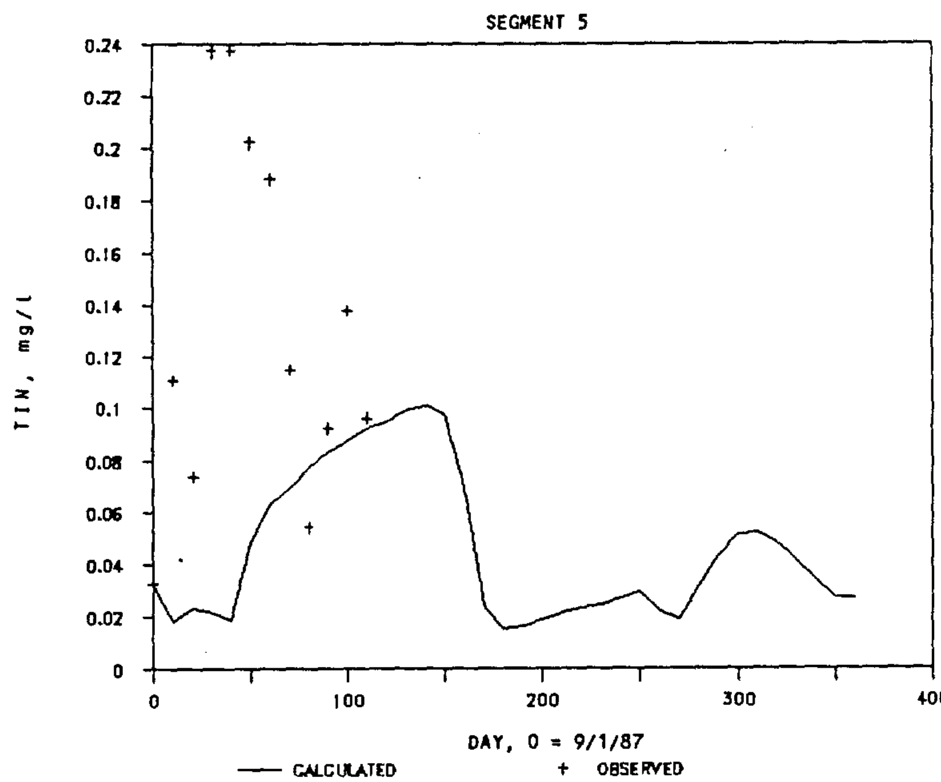


FIGURE A-27

Calibration Model Results and Observed Values for Total Inorganic Nitrogen in Lake Stillhouse Hollow (continued)

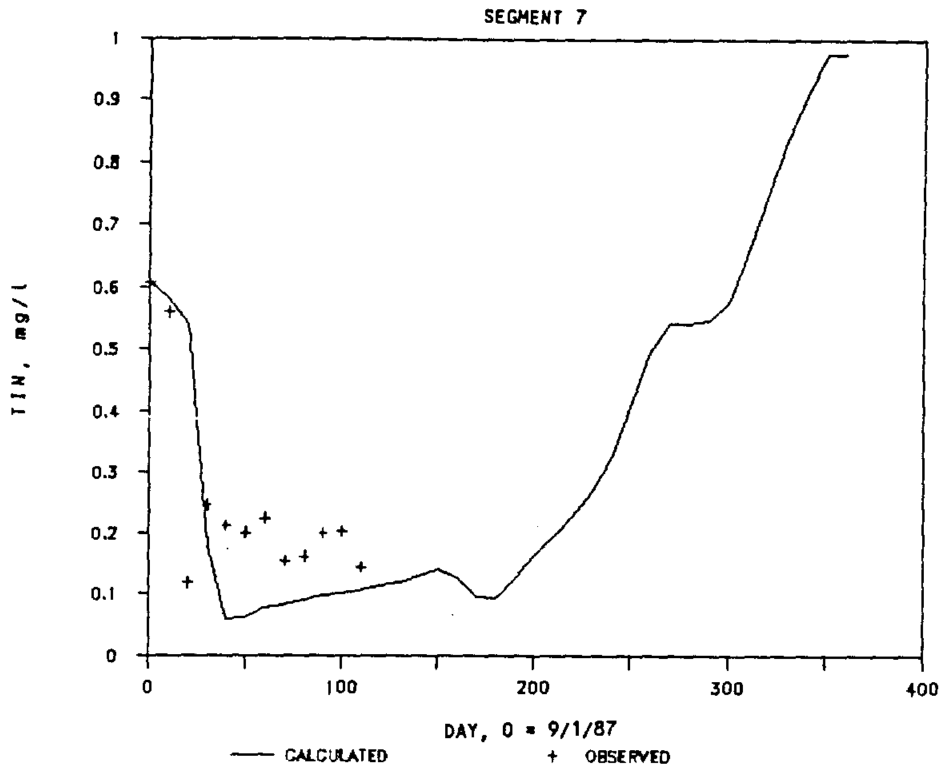


FIGURE A-27

Calibration Model Results and Observed Values for Total Inorganic Nitrogen in Lake Stillhouse Hollow (continued)

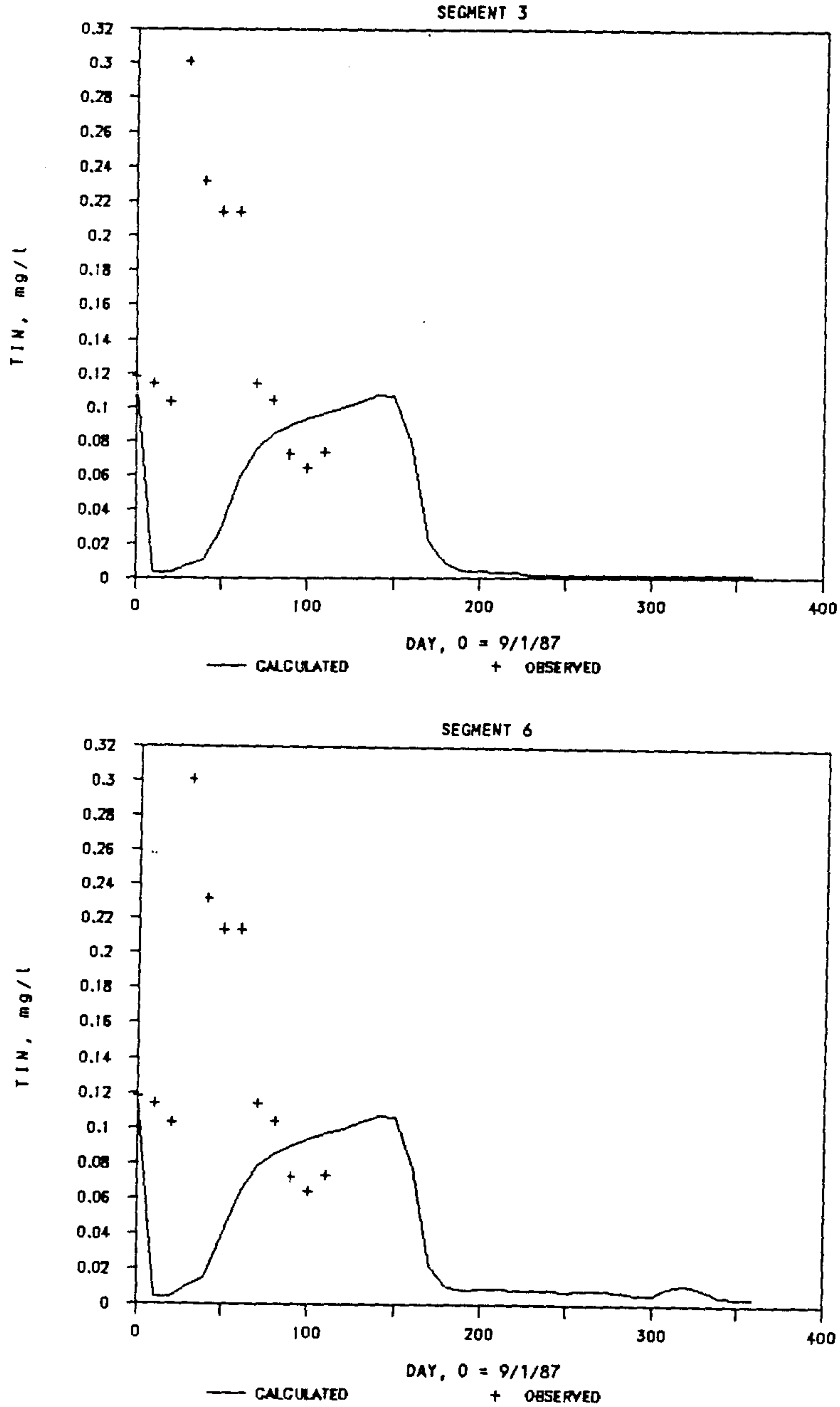


FIGURE A-27

Calibration Model Results and Observed Values for Total Inorganic Nitrogen in Lake Stillhouse Hollow (continued)

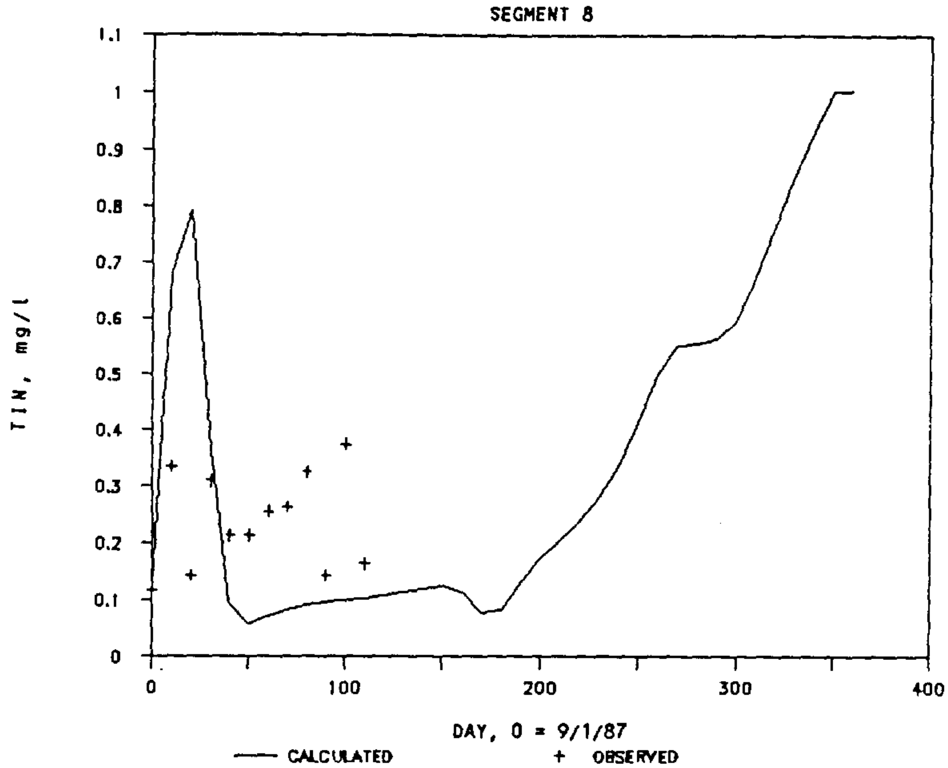
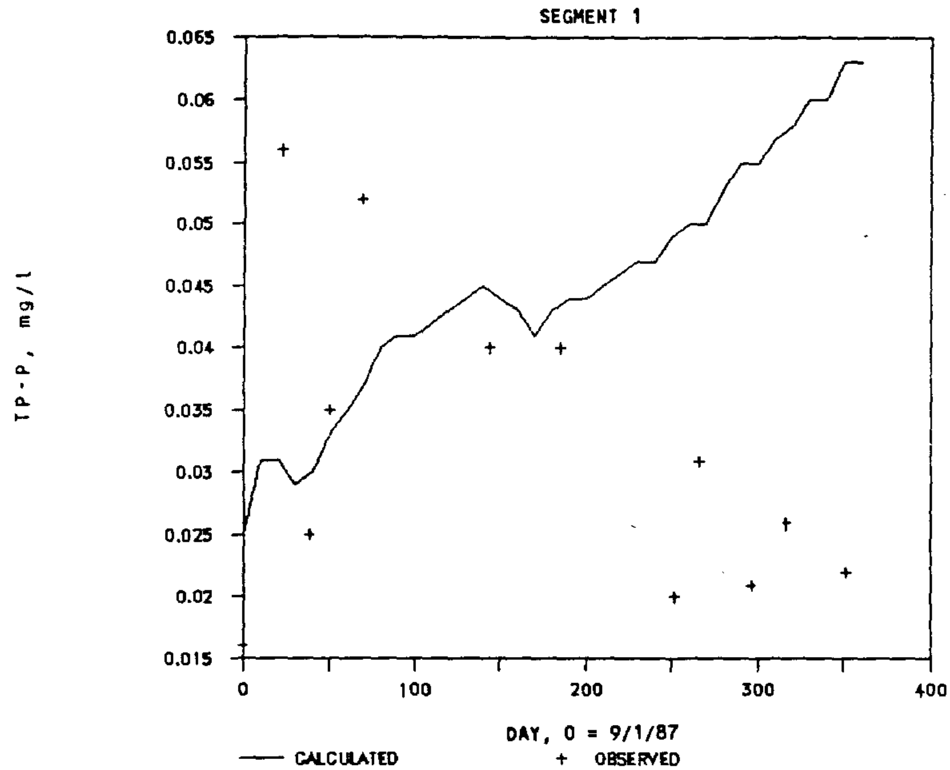


FIGURE A-27

Calibration Model Results and Observed Values for Total Inorganic Nitrogen in Lake Stillhouse Hollow (continued)



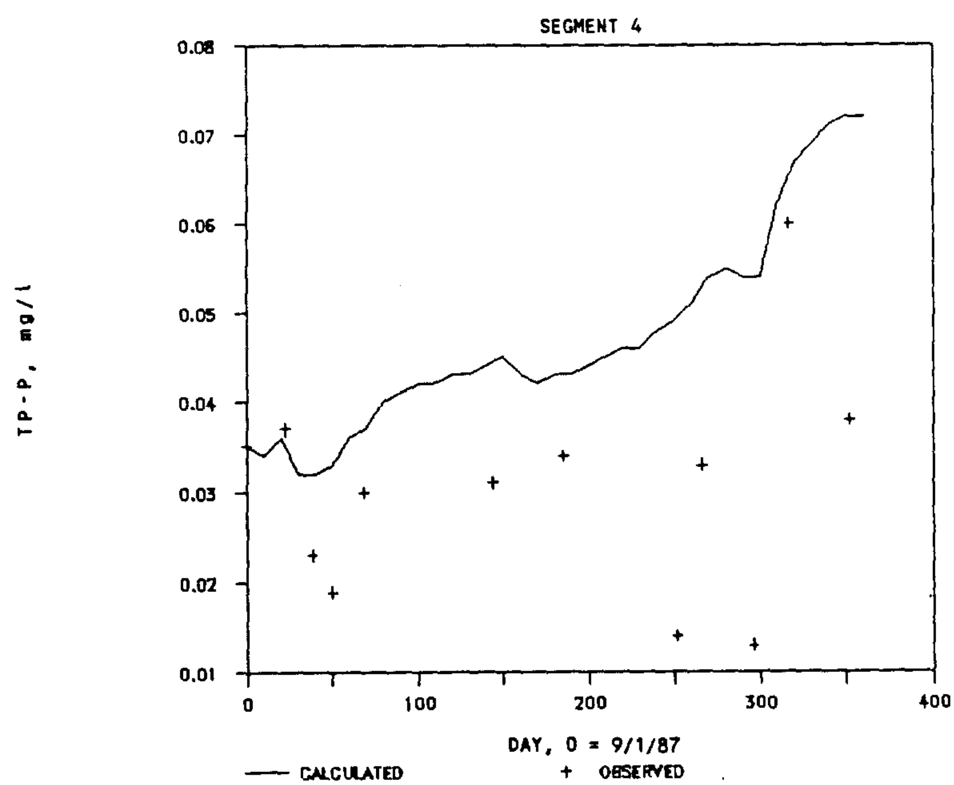
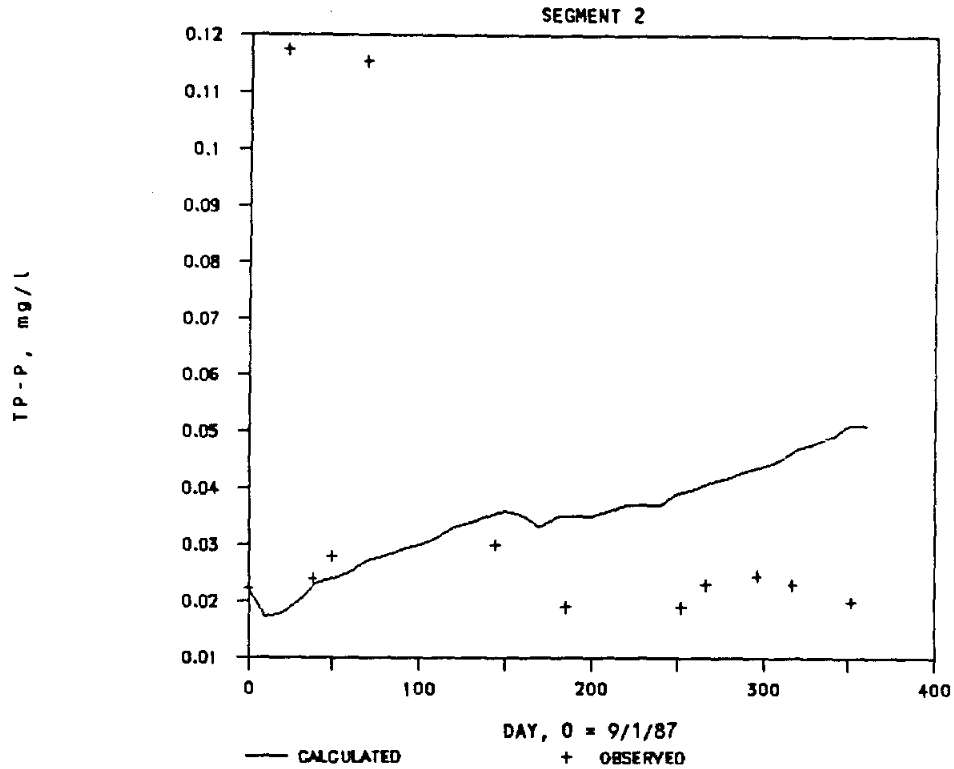


FIGURE A-28

Calibration Model Results and Observed Values for Total Phosphorous in Lake Stillhouse Hollow



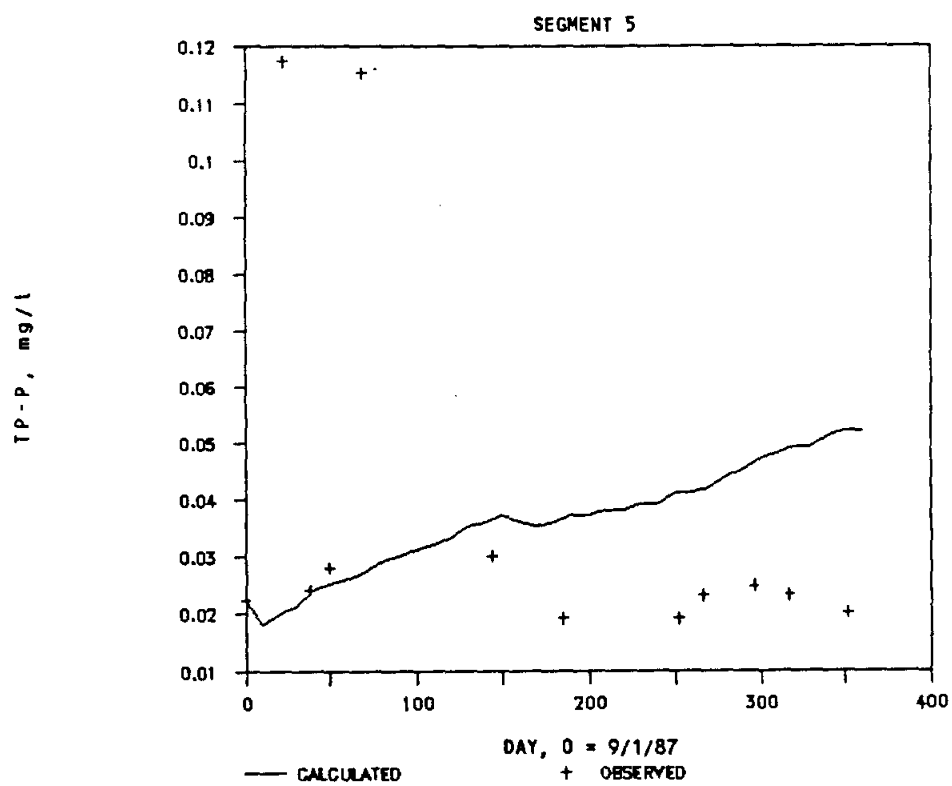


FIGURE A-28

Calibration Model Results and Observed Values for Total Phosphorous in Lake Stillhouse Hollow (continued)

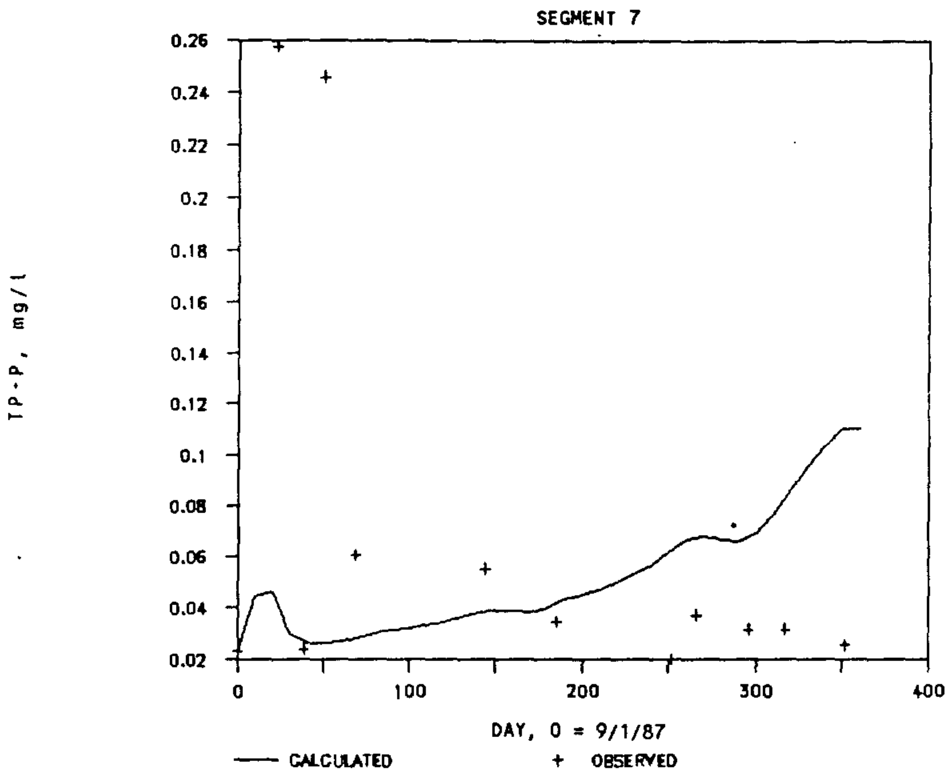
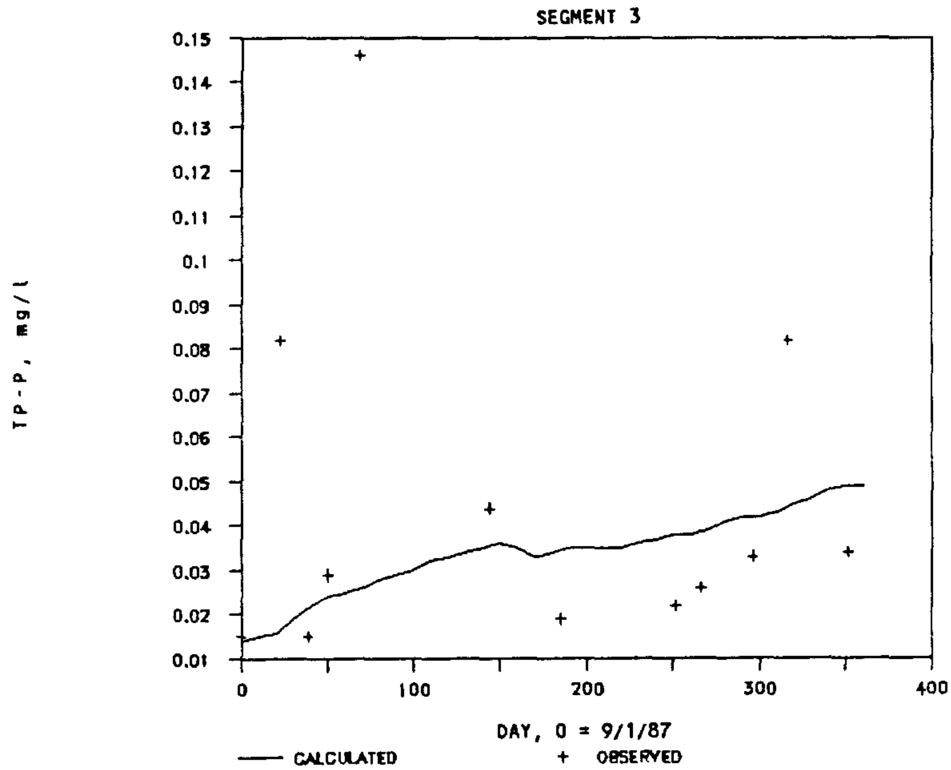


FIGURE A-28

Calibration Model Results and Observed Values for Total Phosphorous in Lake Stillhouse Hollow (continued)



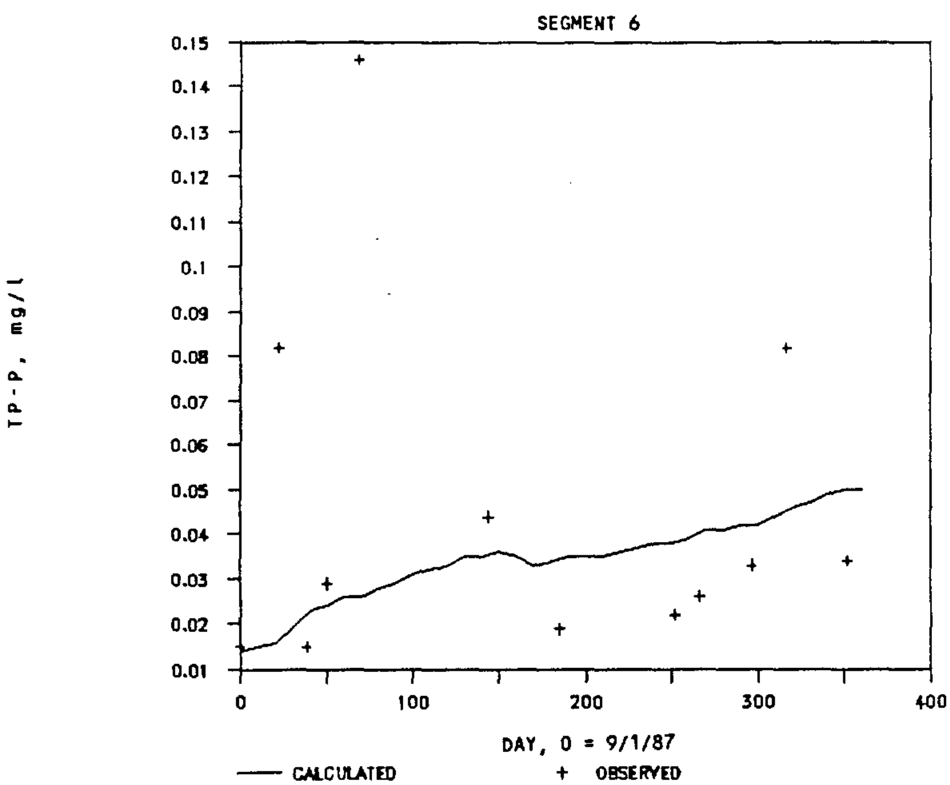


FIGURE A-28

Calibration Model Results and Observed Values for Total Phosphorous in Lake Stillhouse Hollow (continued)

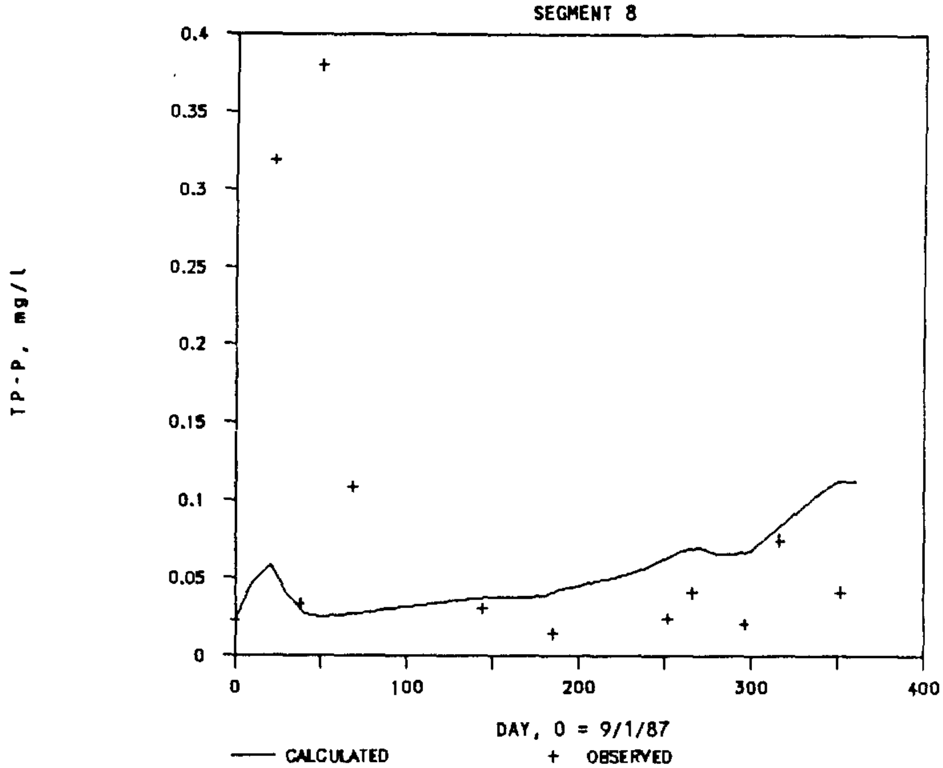
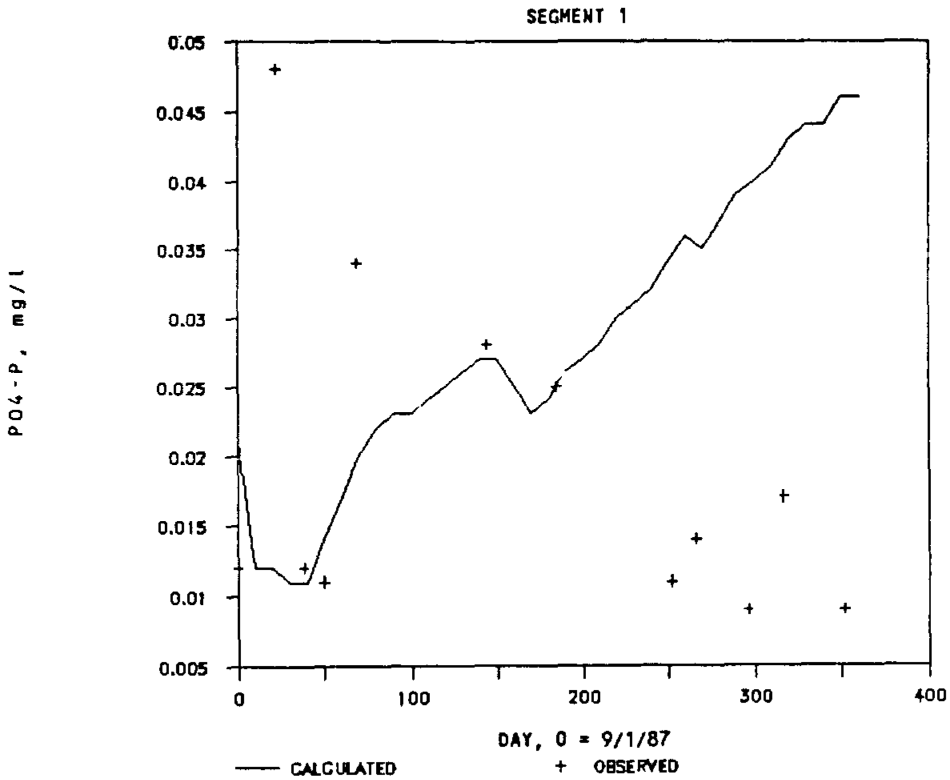


FIGURE A-28

Calibration Model Results and Observed Values for Total Phosphorous in Lake Stillhouse Hollow (continued)



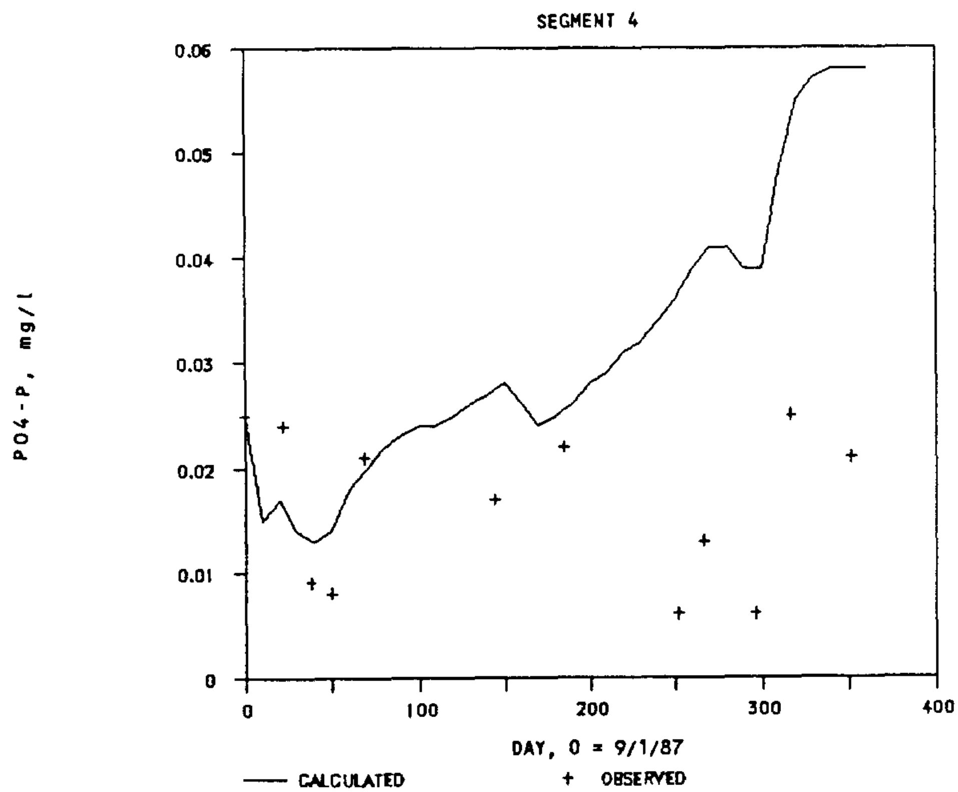
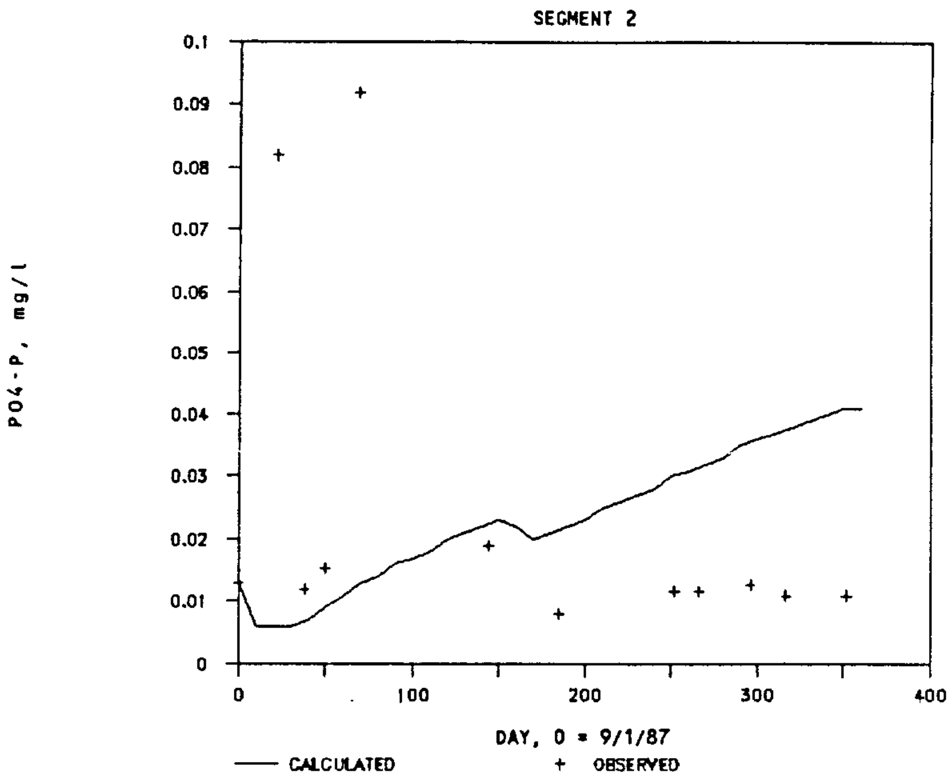


FIGURE A-29

Calibration Model Results and Observed Values for OrthoPhosphorous in Lake Stillhouse Hollow



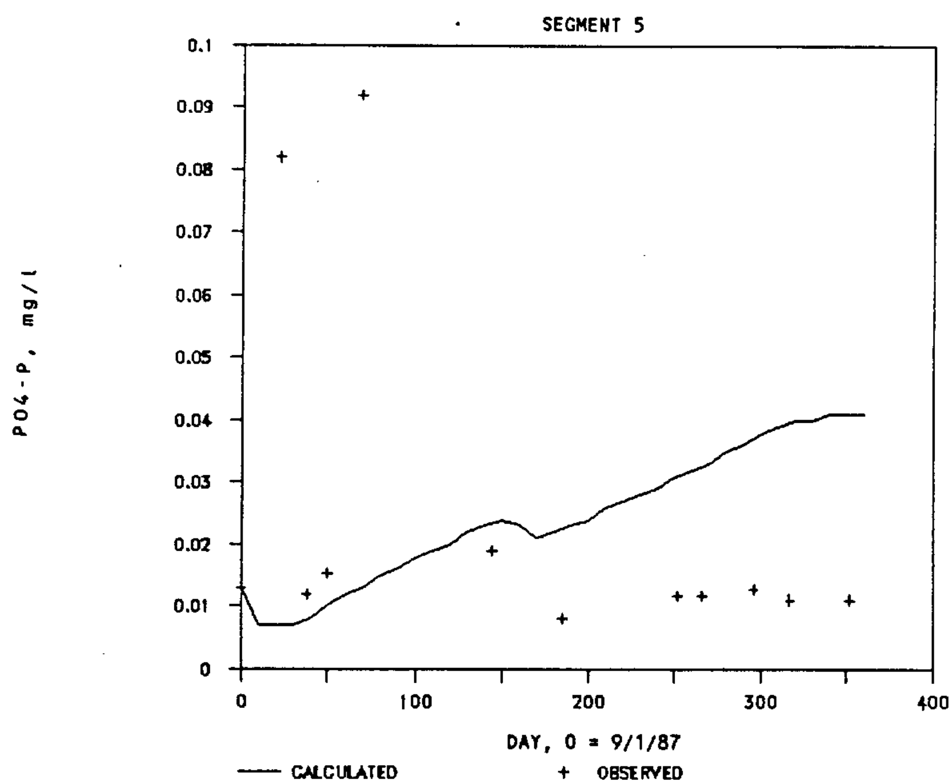


FIGURE A-29

Calibration Model Results and Observed Values for OrthoPhosphorous in Lake Stillhouse Hollow (continued)

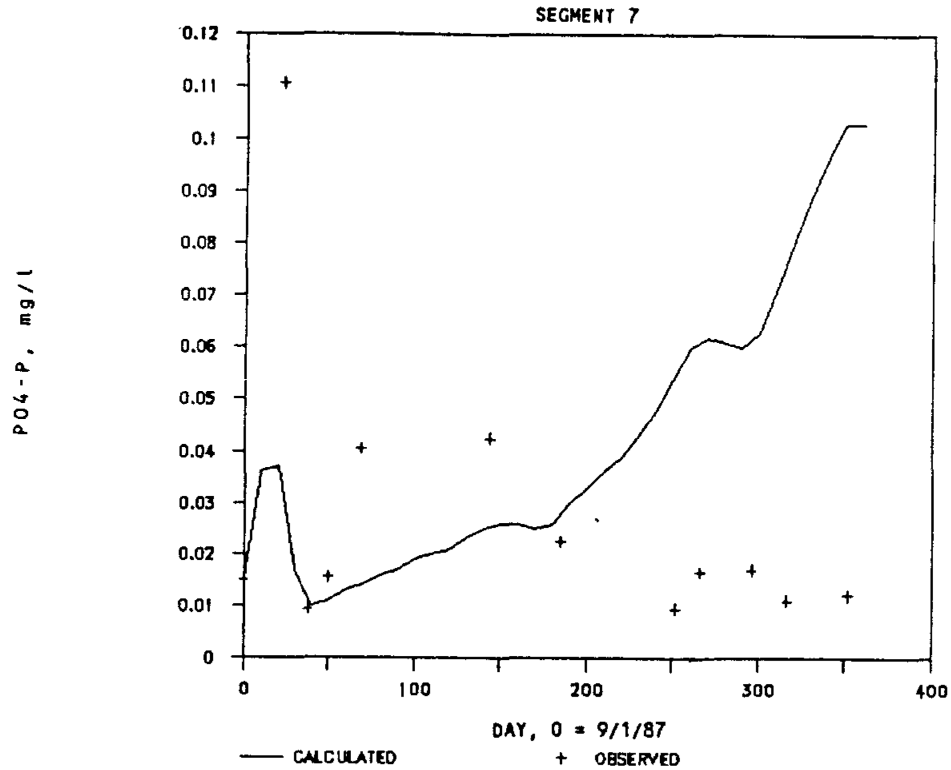
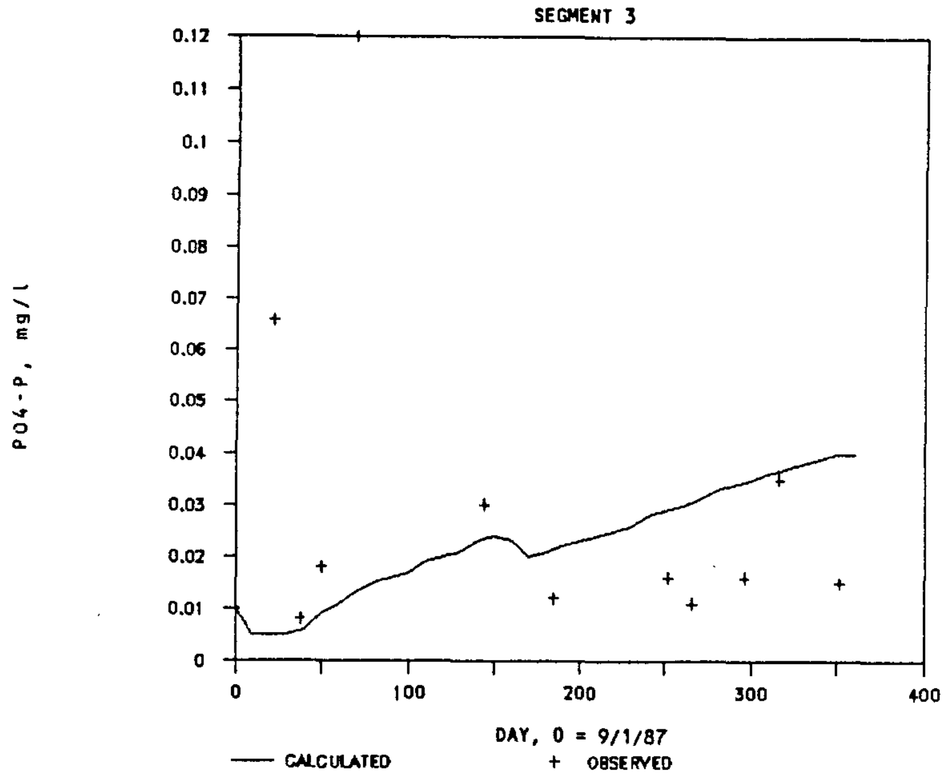


FIGURE A-29

Calibration Model Results and Observed Values for OrthoPhosphorous in Lake Stillhouse Hollow (continued)



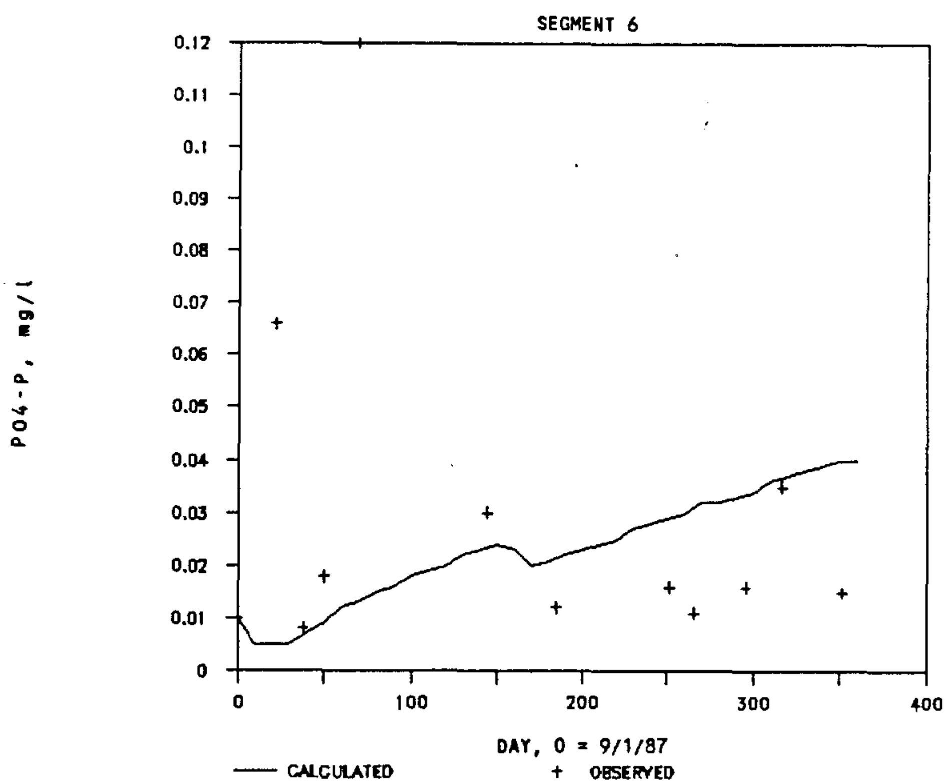


FIGURE A-29

Calibration Model Results and Observed Values for OrthoPhosphorous in Lake Stillhouse Hollow (continued)

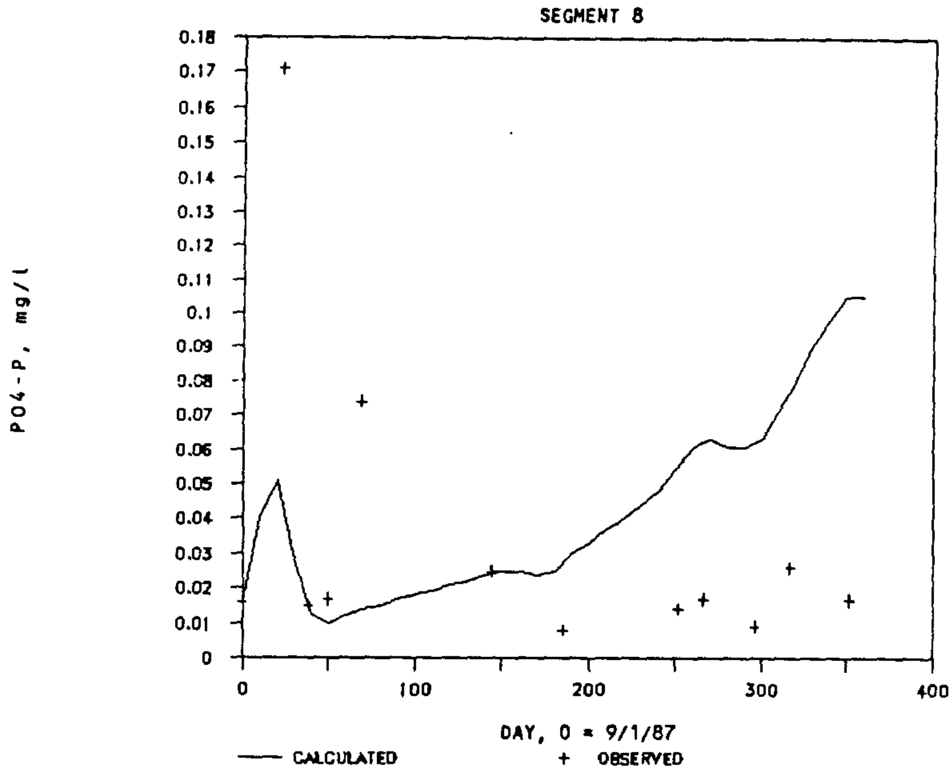


FIGURE A-29

Calibration Model Results and Observed Values for OrthoPhosphorous in Lake Stillhouse Hollow (continued)

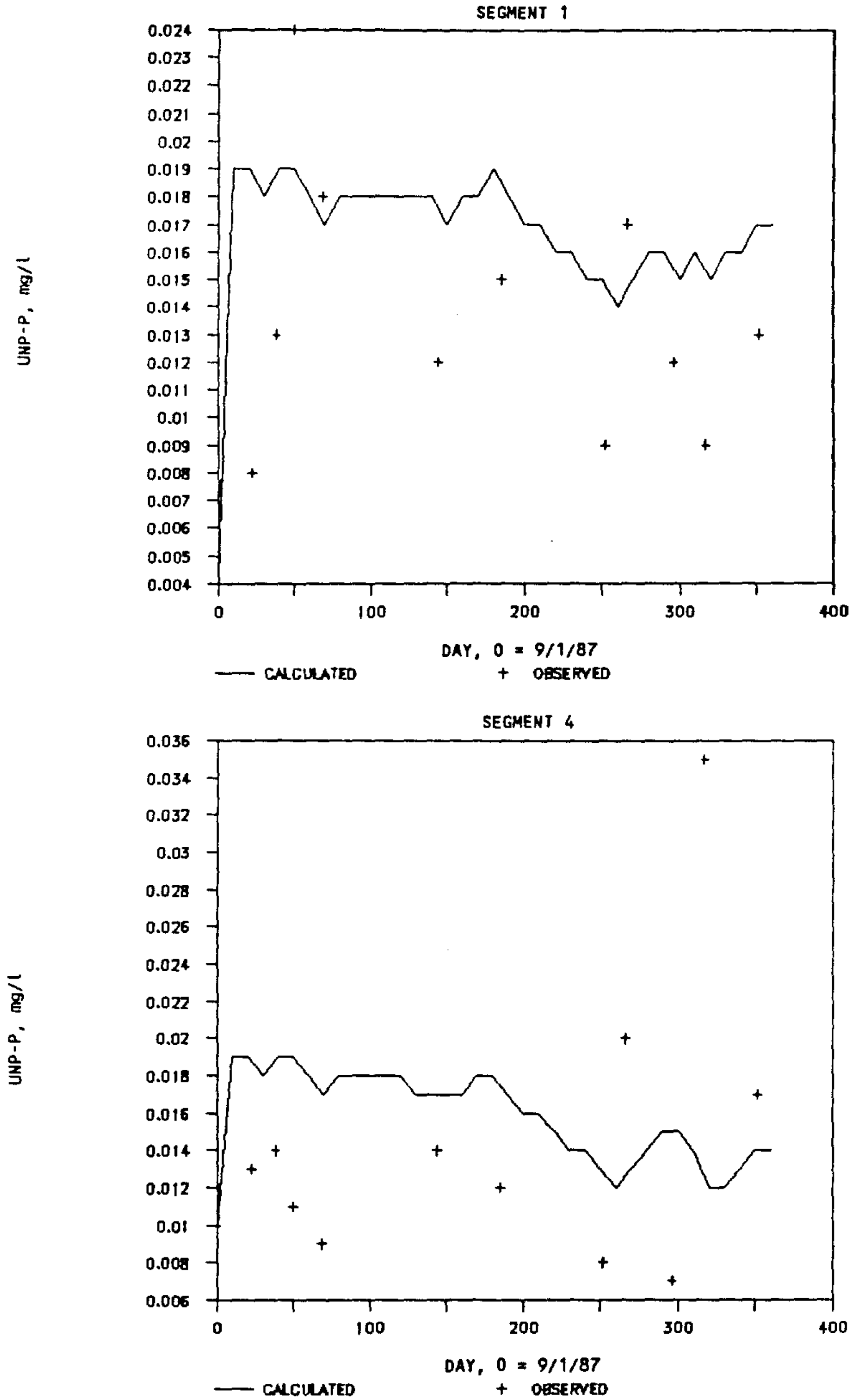
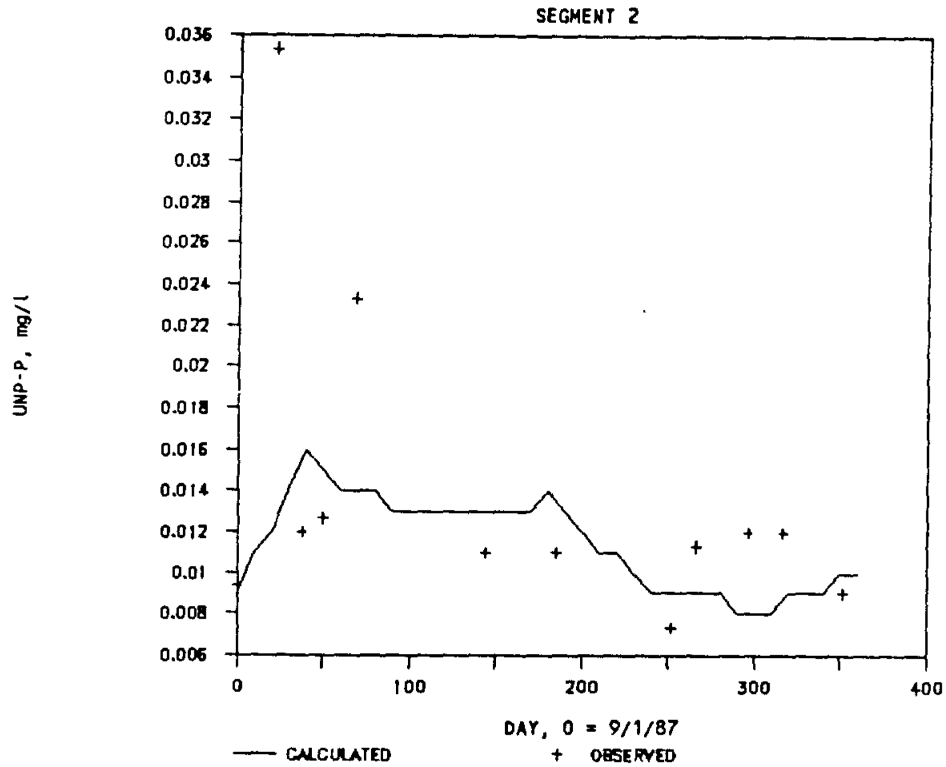


FIGURE A-30

Calibration Model Results and Observed Values for Unavailable Phosphorous in Lake Stillhouse Hollow



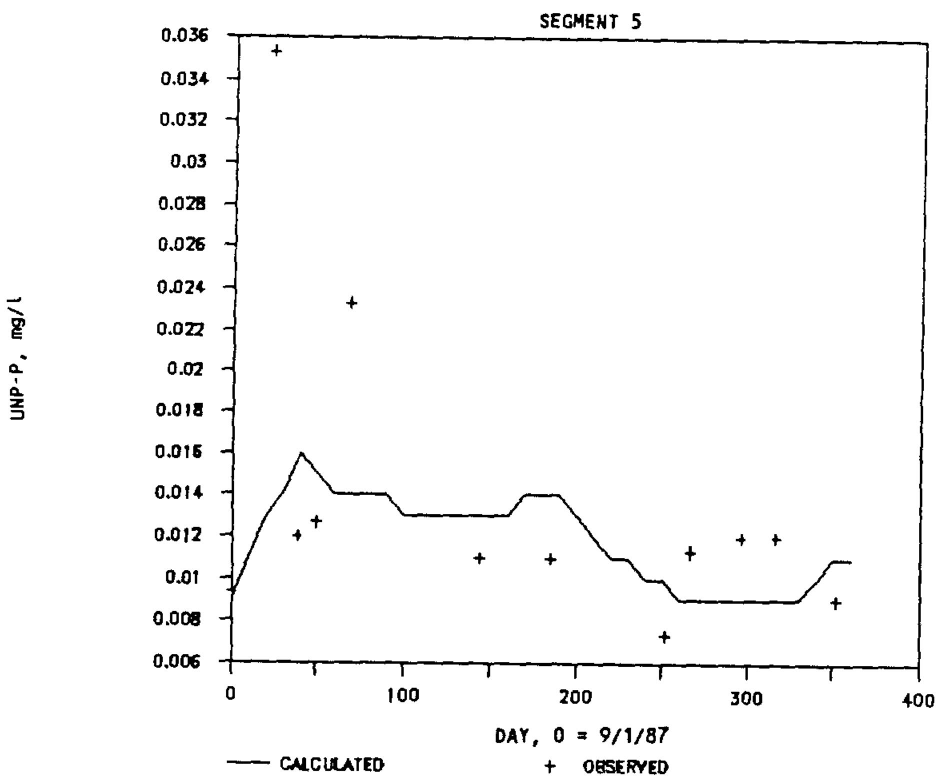


FIGURE A-30

Calibration Model Results and Observed Values for Unavailable Phosphorous in Lake Stillhouse Hollow (continued)

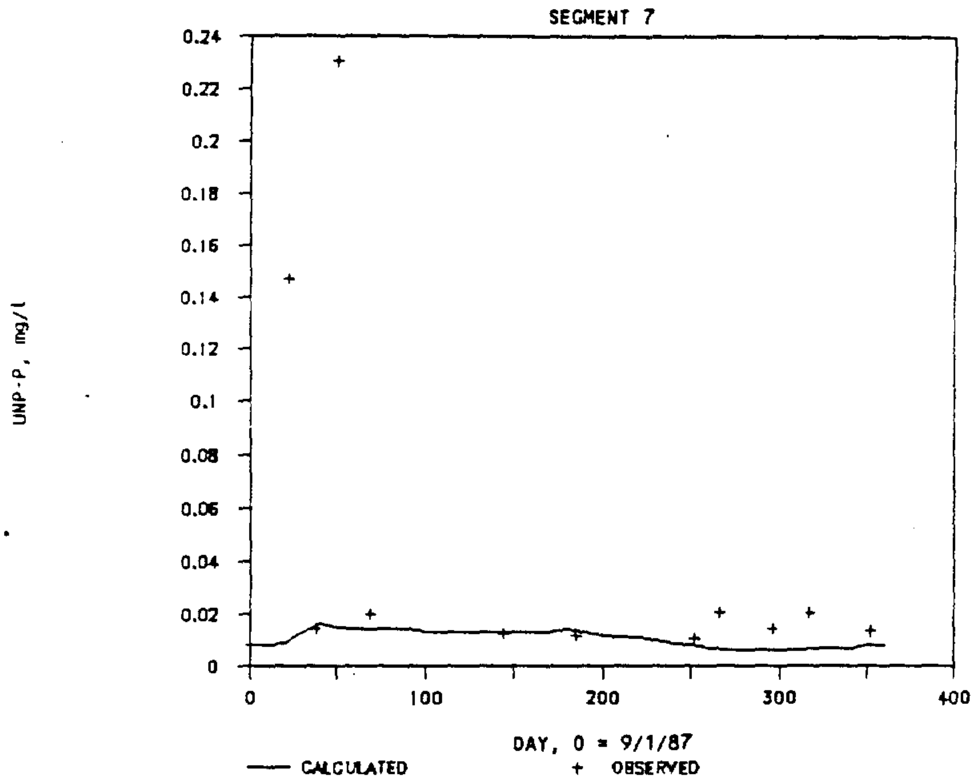
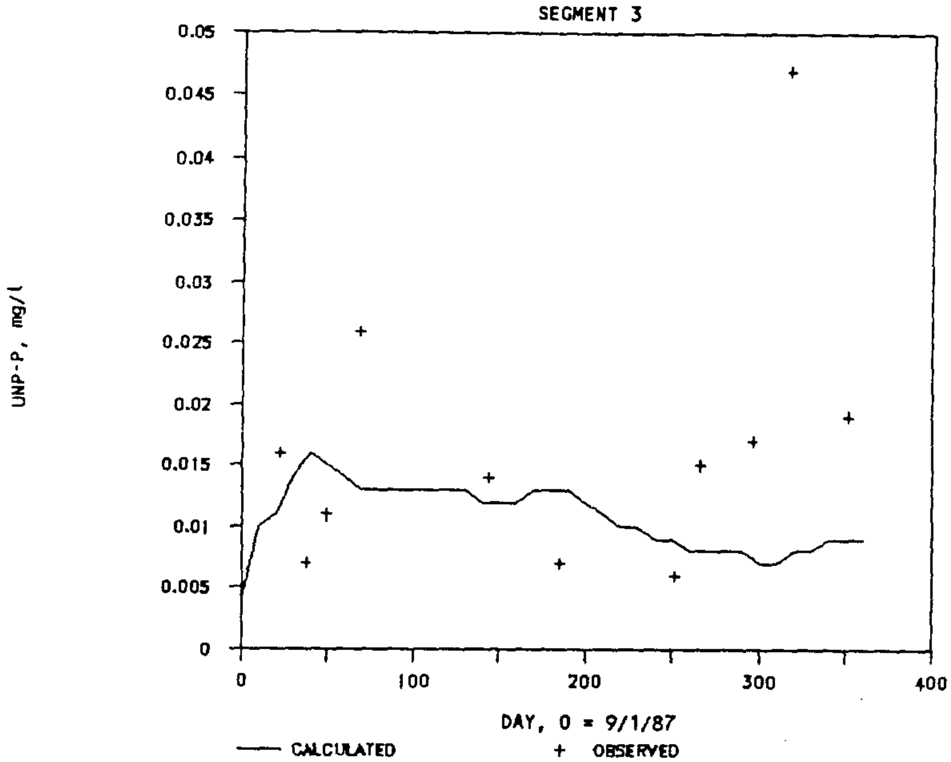


FIGURE A-30

Calibration Model Results and Observed Values for Unavailable Phosphorous in Lake Stillhouse Hollow (continued)



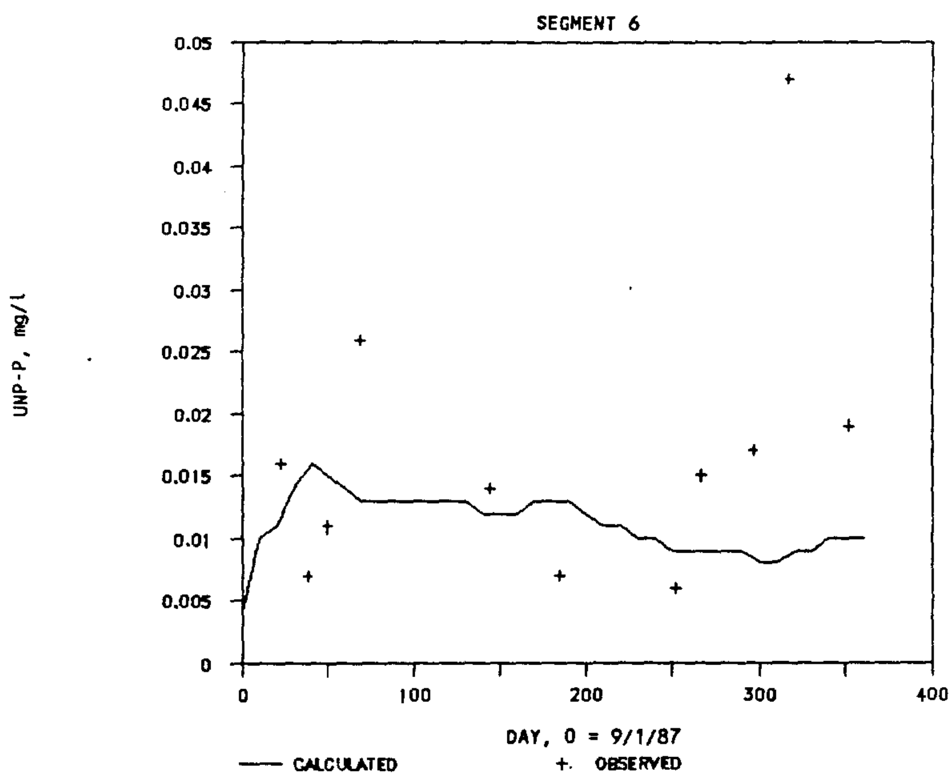


FIGURE A-30

Calibration Model Results and Observed Values for Unavailable Phosphorous in Lake Stillhouse Hollow (continued)

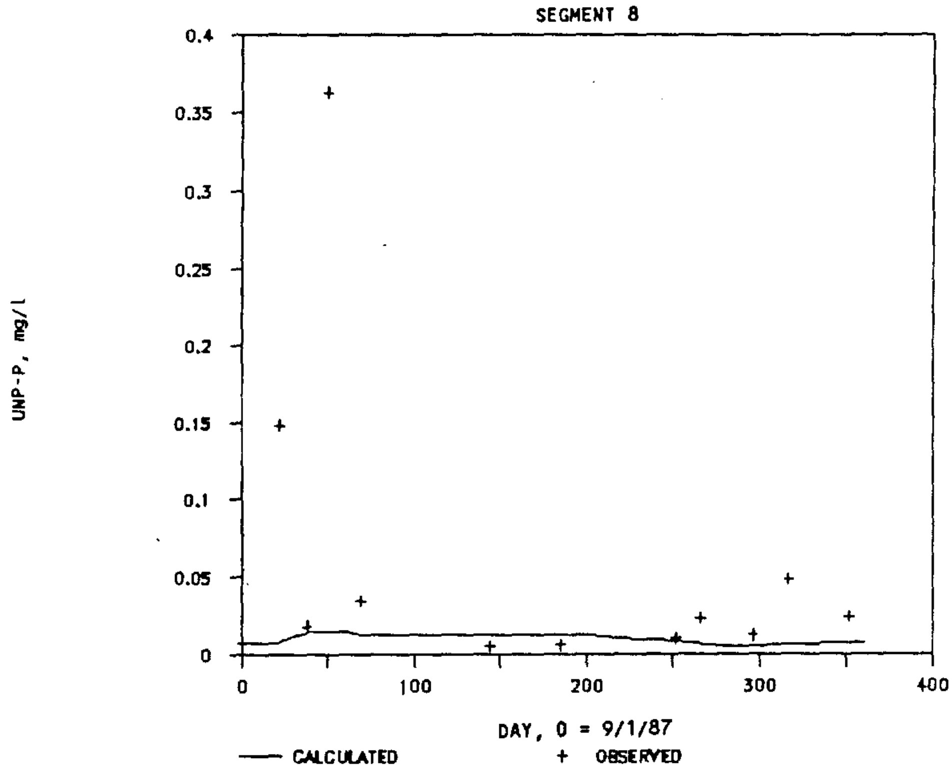


FIGURE A-30

Calibration Model Results and Observed Values for Unavailable Phosphorous in Lake Stillhouse Hollow (continued)

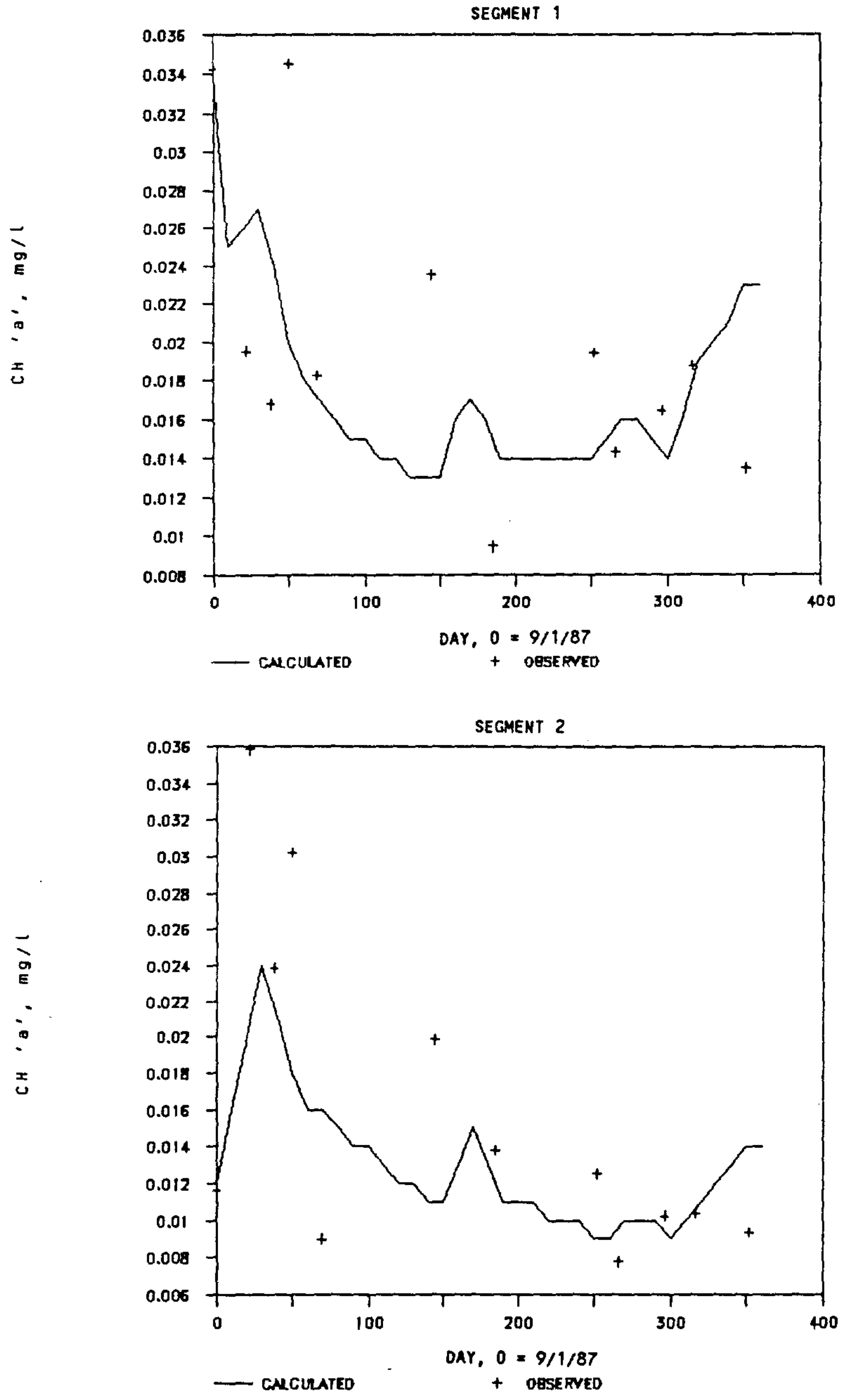


FIGURE A-31

Calibration Model Results and Observed Values for Chlorophyll 'a' in Lake Stillhouse Hollow

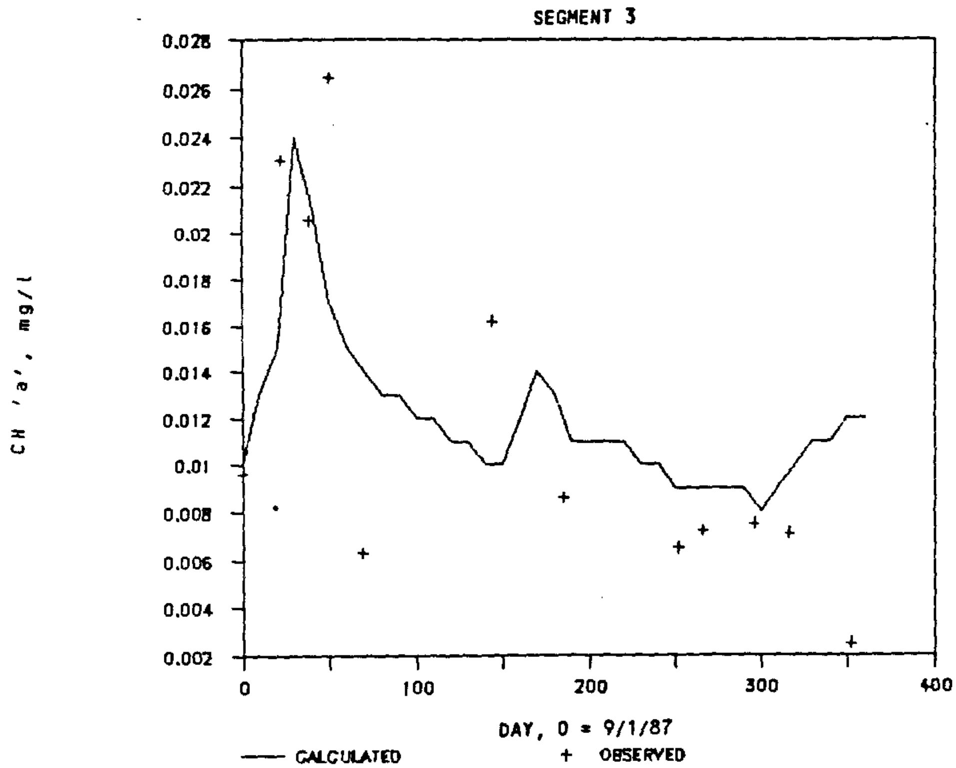


FIGURE A-31

Calibration Model Results and Observed Values for
Chlorophyll 'a' in Lake Stillhouse Hollow
(continued)

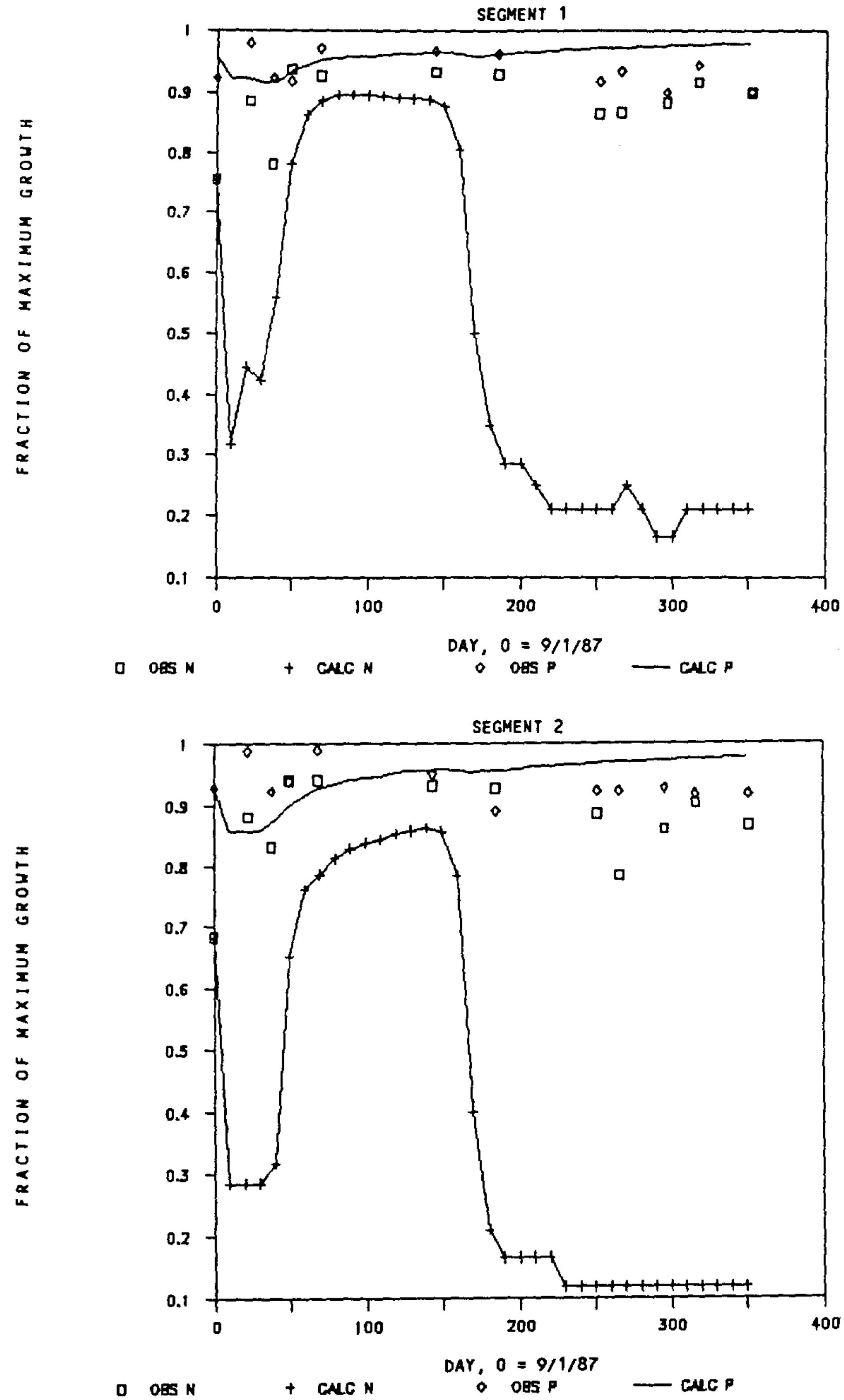


FIGURE A-32

Calibration and Observed Growth Limitations for Available Nutrients in Lake Stillhouse Hollow

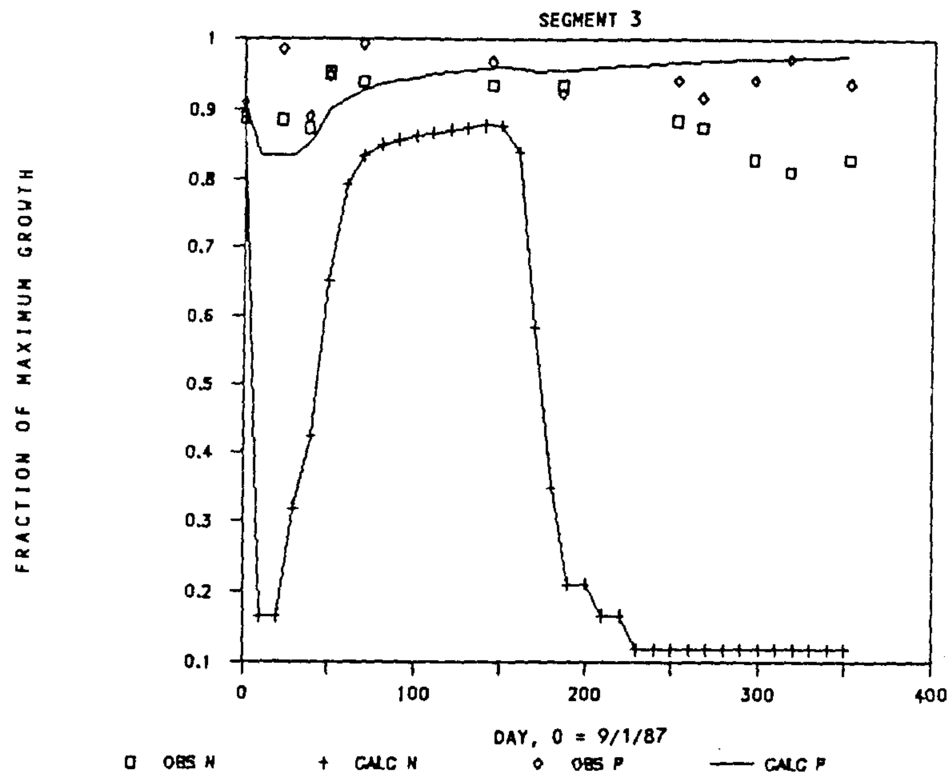


FIGURE A-32

Calibration and Observed Growth Limitations for Available Nutrients in Lake Stillhouse Hollow (continued)

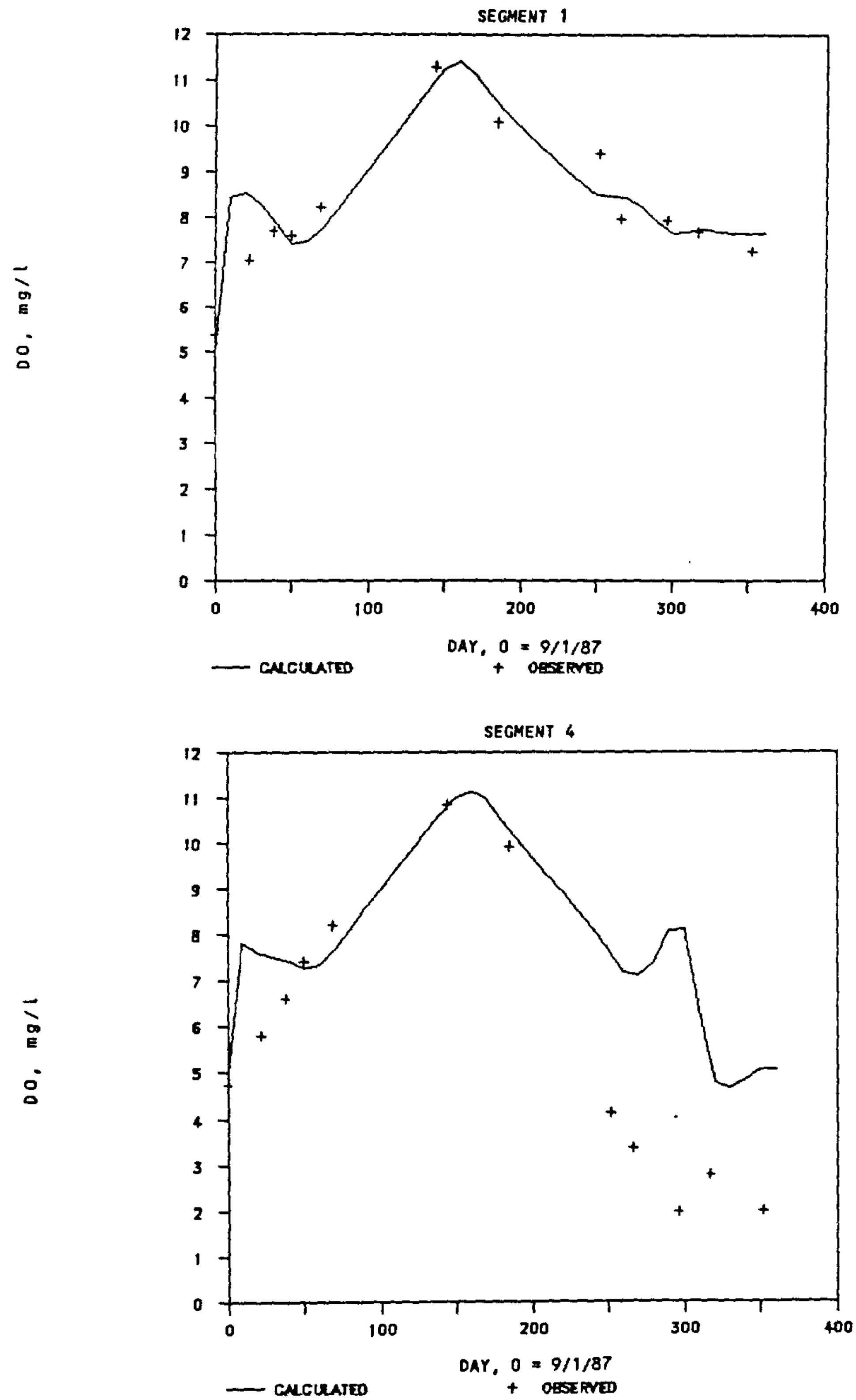
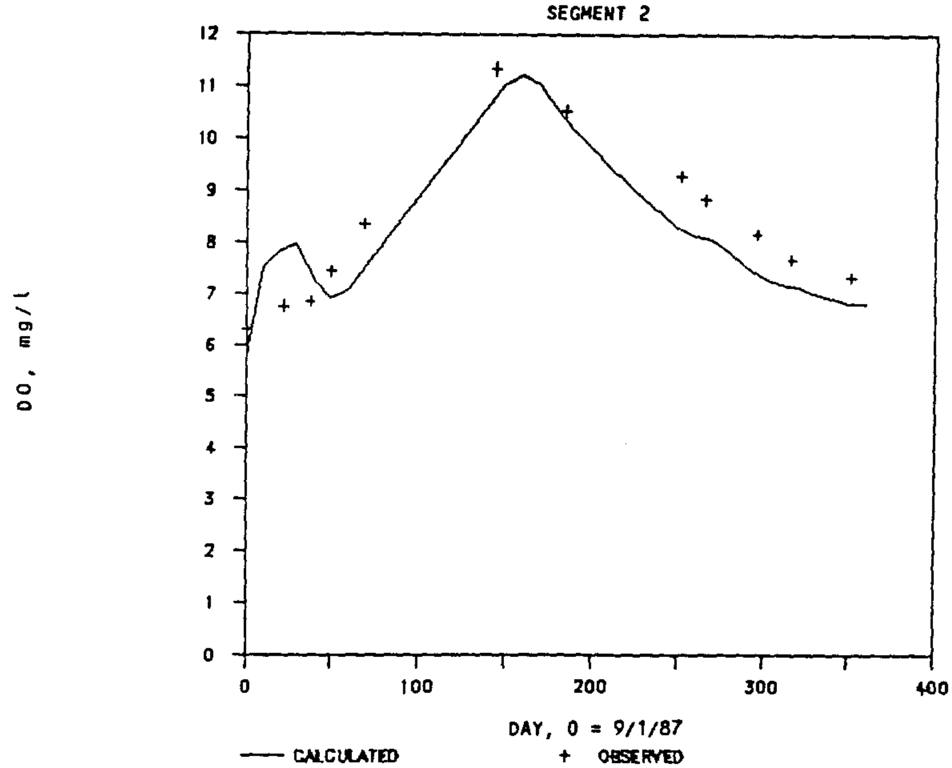


FIGURE A-33

Calibration Model Results and Observed Values for Dissolved Oxygen in Lake Stillhouse Hollow



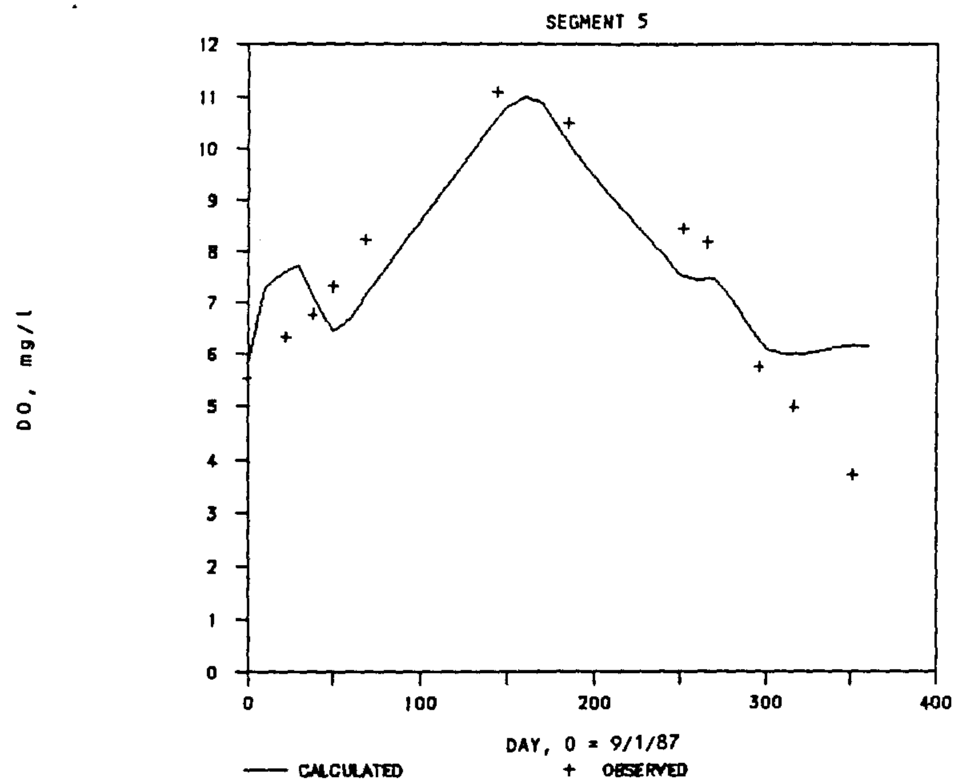


FIGURE A-33

Calibration Model Results and Observed Values for Dissolved Oxygen in Lake Stillhouse Hollow (continued)

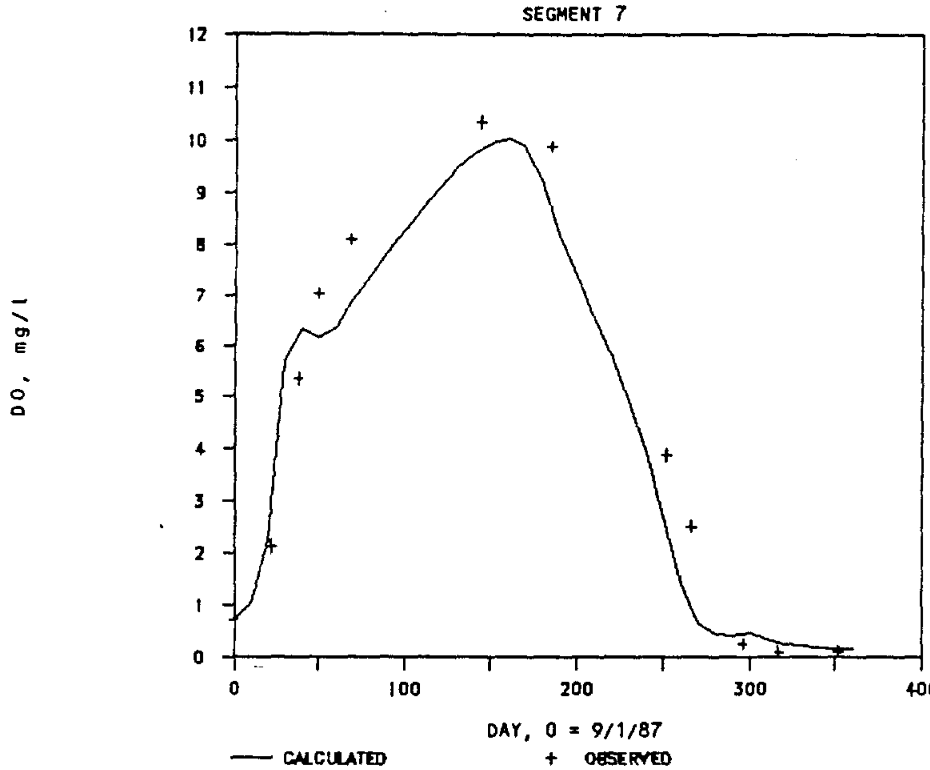
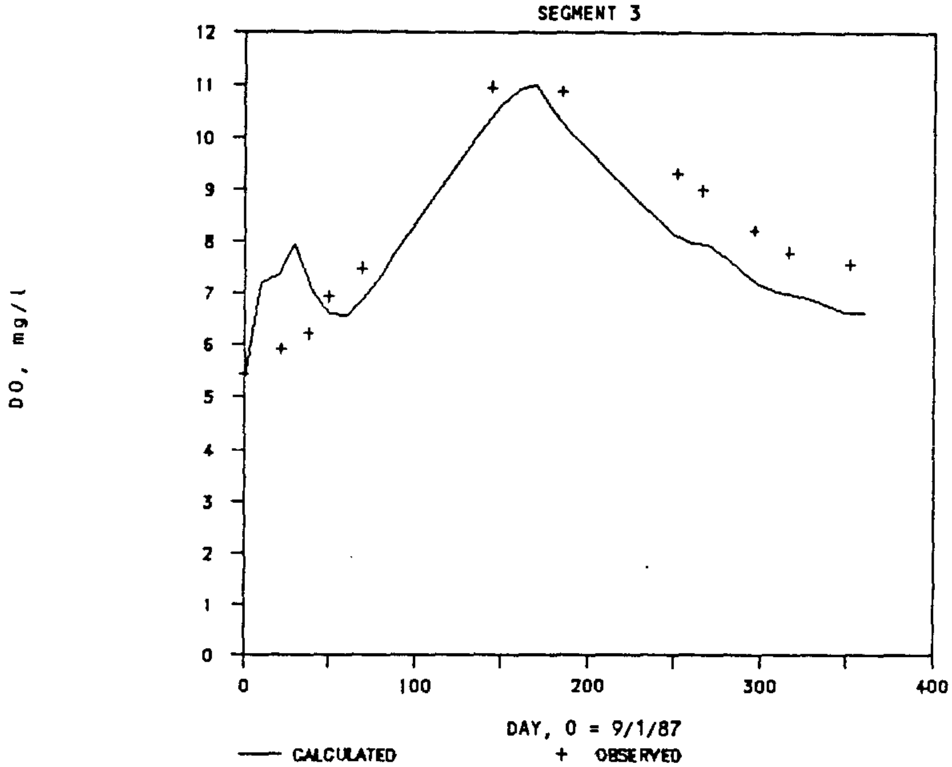


FIGURE A-33

Calibration Model Results and Observed Values for Dissolved Oxygen in Lake Stillhouse Hollow (continued)



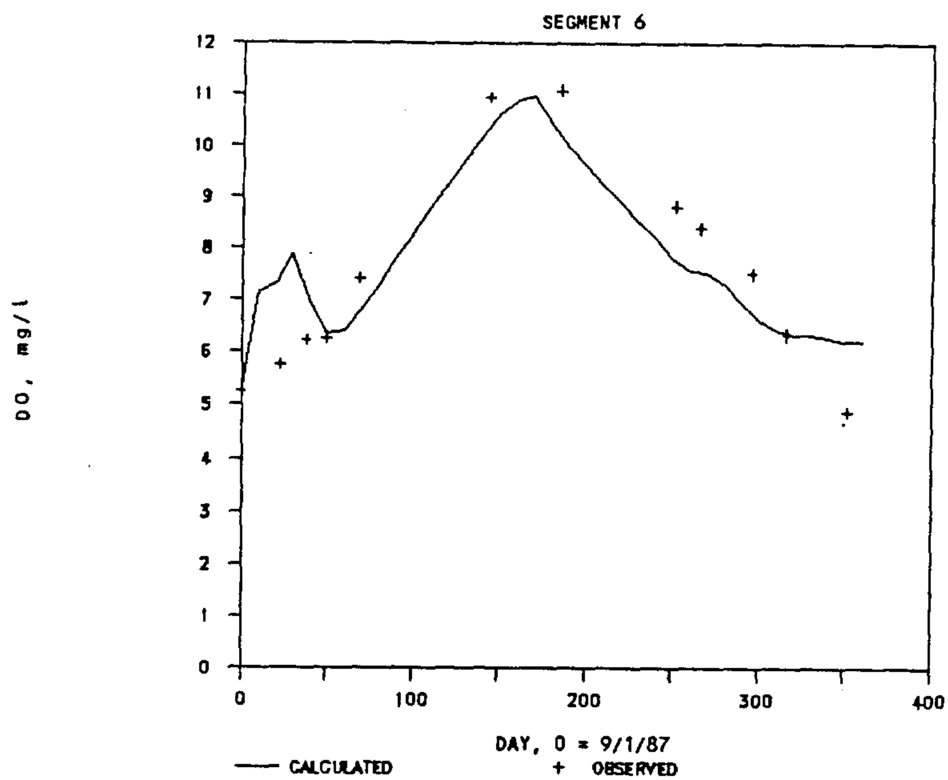


FIGURE A-33

Calibration Model Results and Observed Values for Dissolved Oxygen in Lake Stillhouse Hollow (continued)

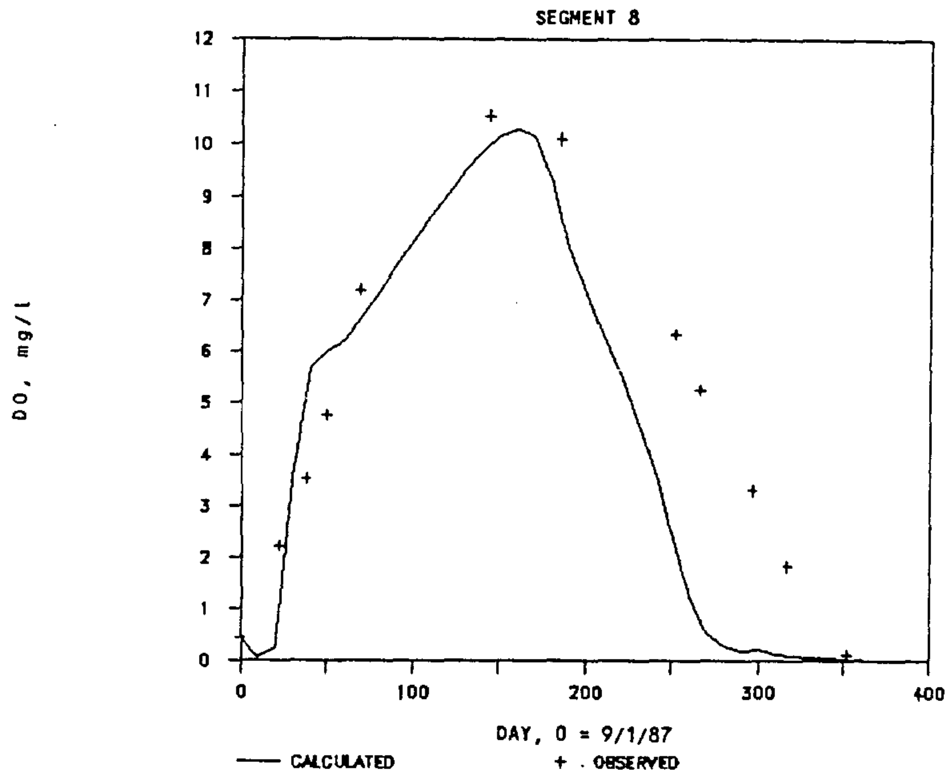
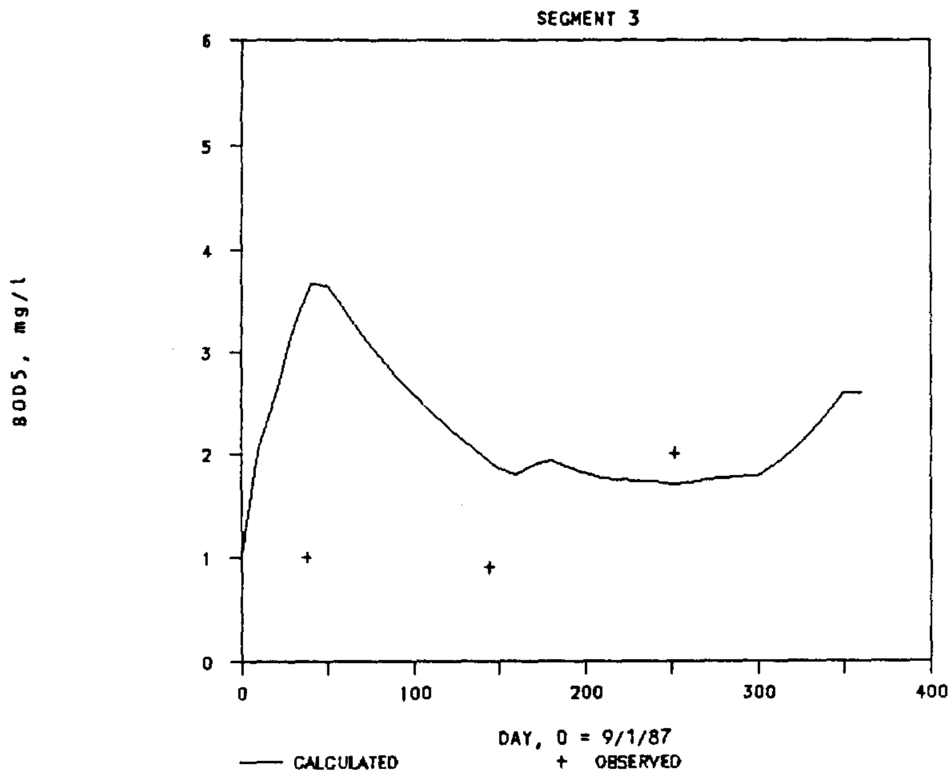


FIGURE A-33

Calibration Model Results and Observed Values for Dissolved Oxygen in Lake Stillhouse Hollow (continued)



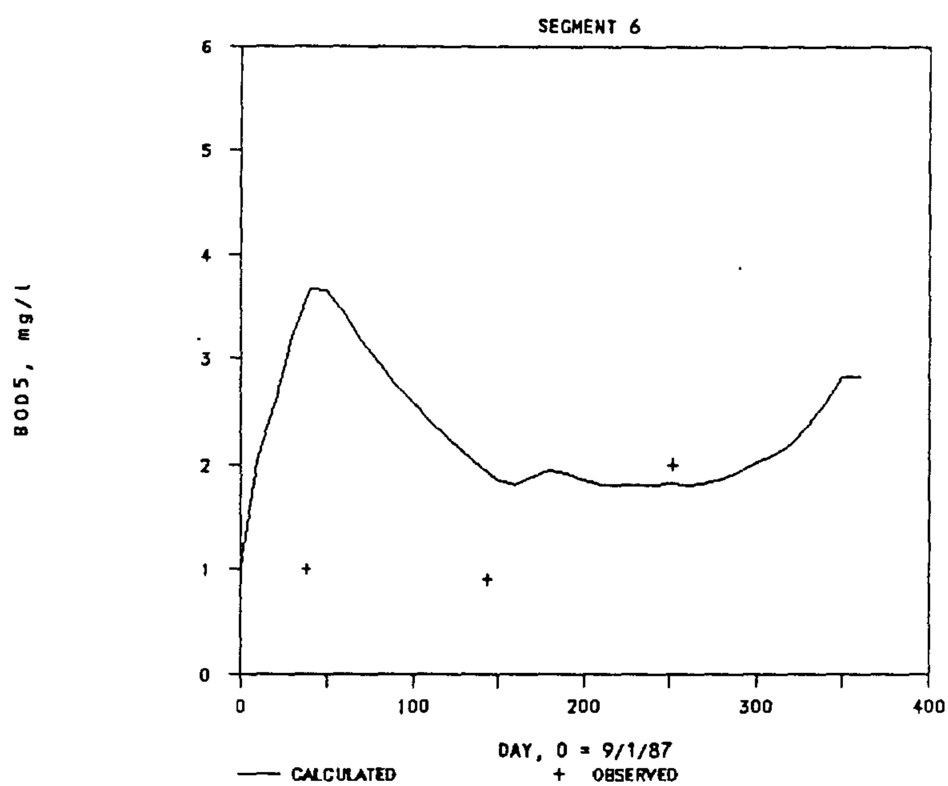
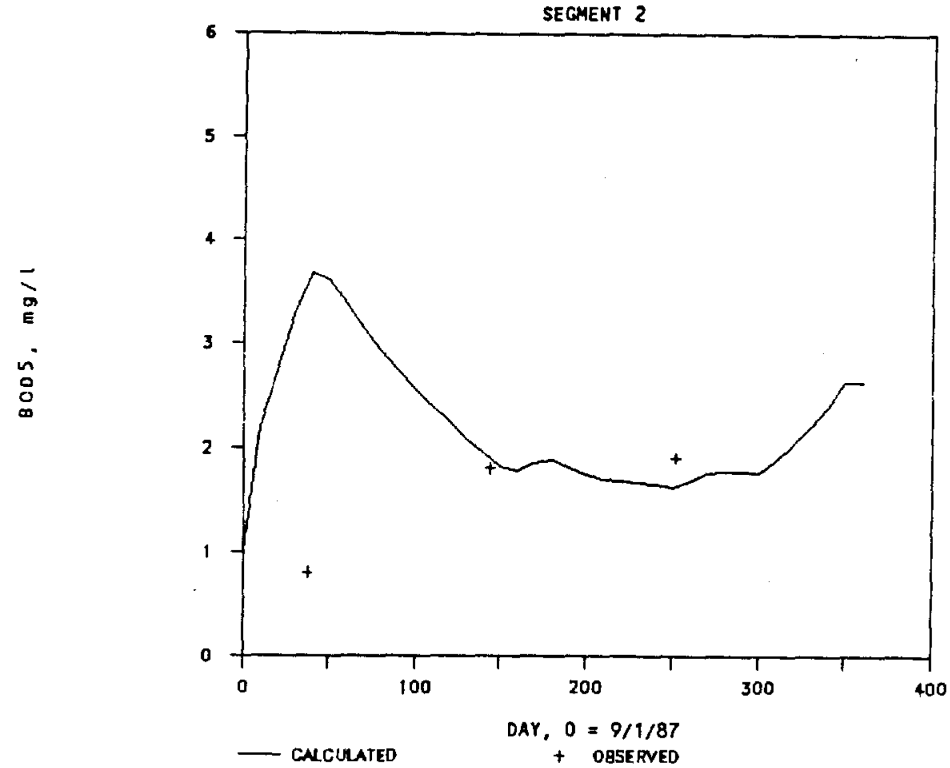


FIGURE A-34

Calibration Model Results and Observed Values for Biochemical Oxygen Demand in Lake Stillhouse Hollow



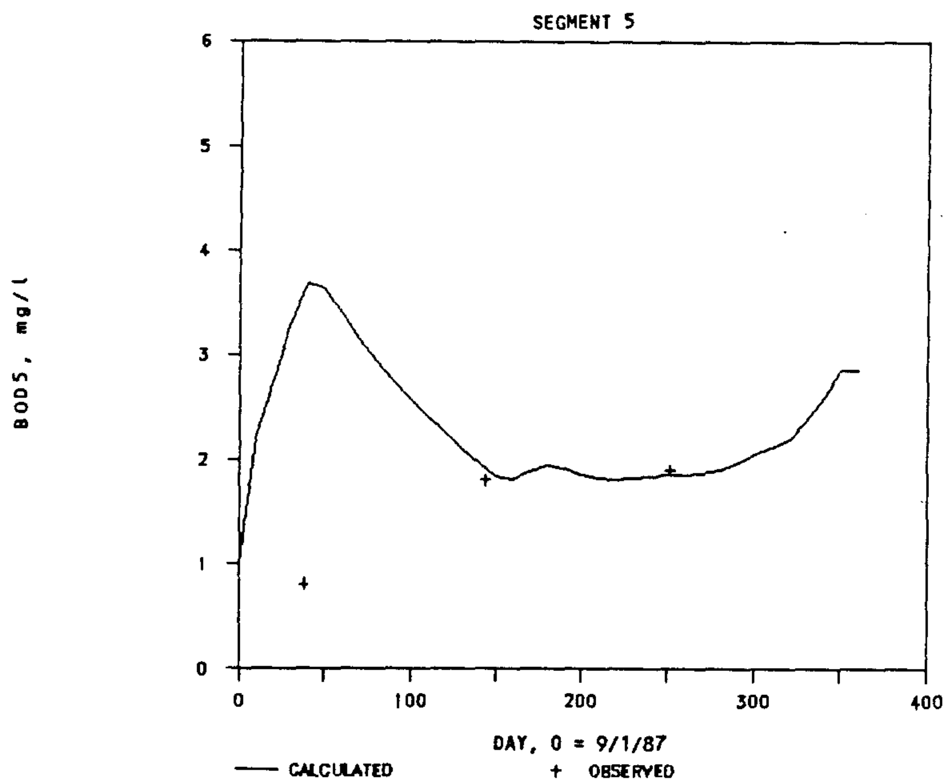


FIGURE A-34

Calibration Model Results and Observed Values for Biochemical Oxygen Demand in Lake Stillhouse Hollow (continued)

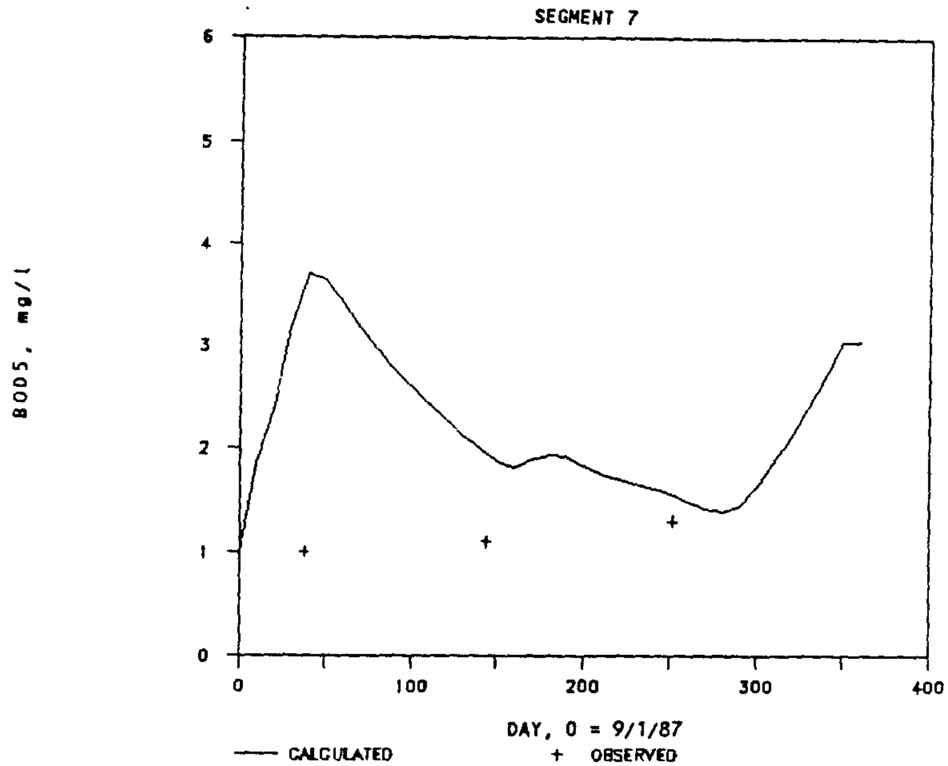


FIGURE A-34

Calibration Model Results and Observed Values for Biochemical Oxygen Demand in Lake Stillhouse Hollow (continued)

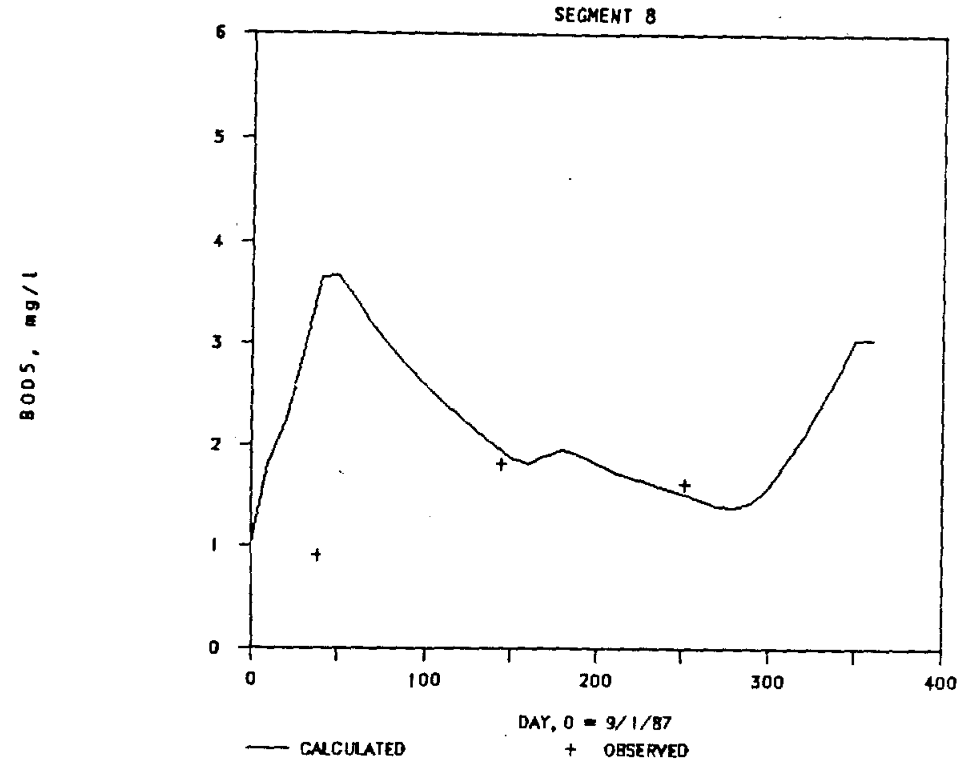
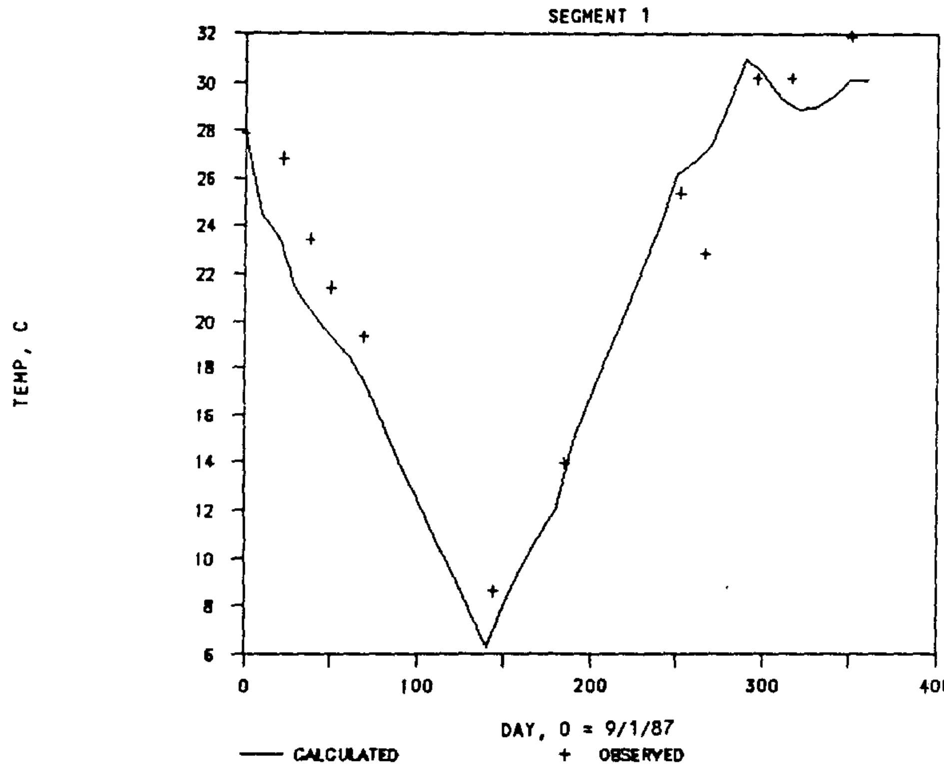


FIGURE A-34

Calibration Model Results and Observed Values for
Biochemical Oxygen Demand in Lake Stillhouse Hollow
(continued)



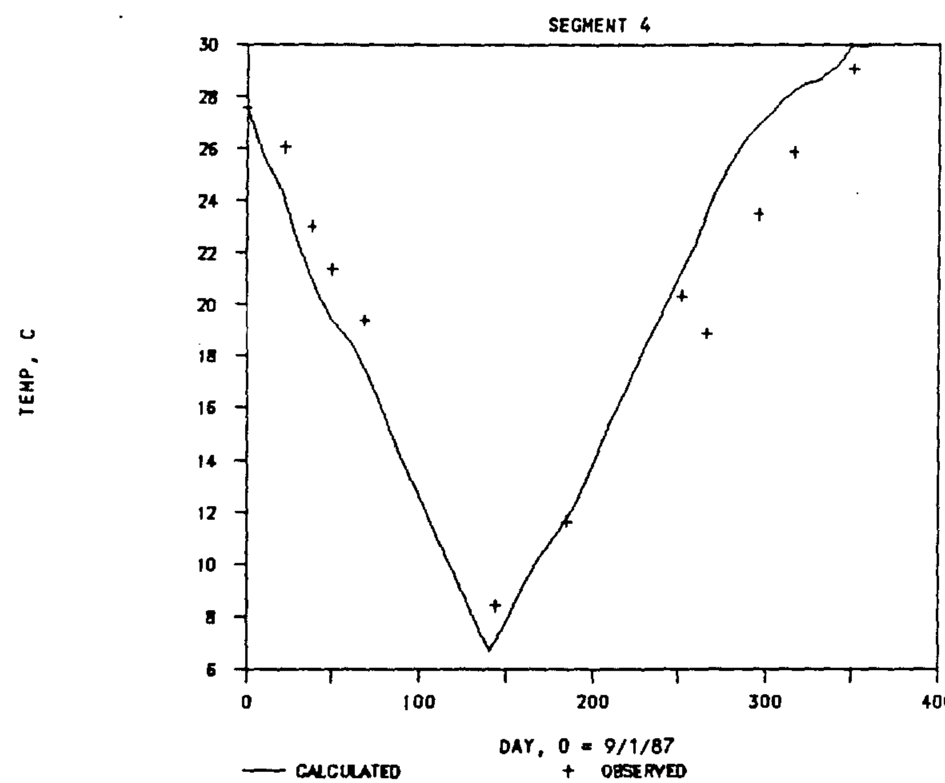
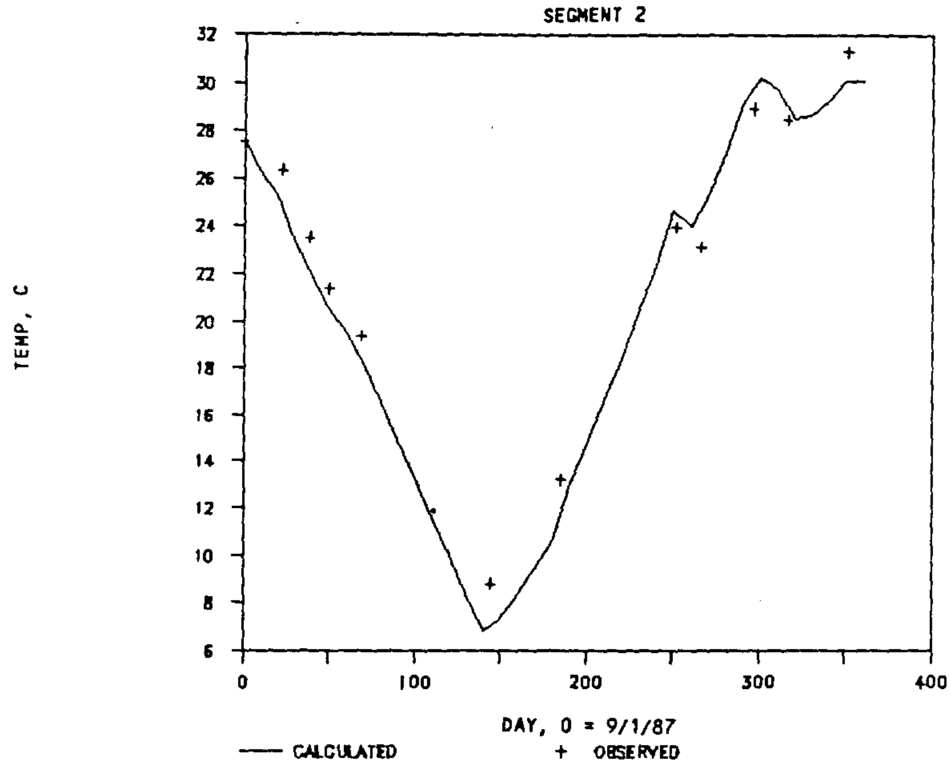


FIGURE A-35

Calibration Model Results and Observed Values for Temperature in Lake Stillhouse Hollow



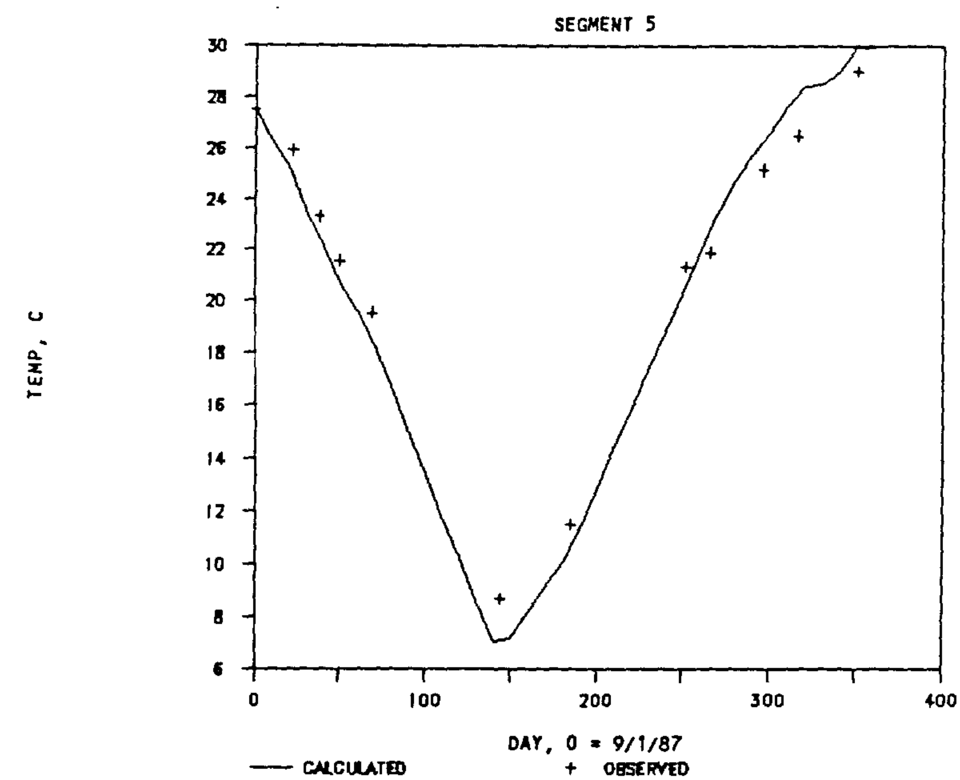


FIGURE A-35

Calibration Model Results and Observed Values for Temperature in Lake Stillhouse Hollow (continued)

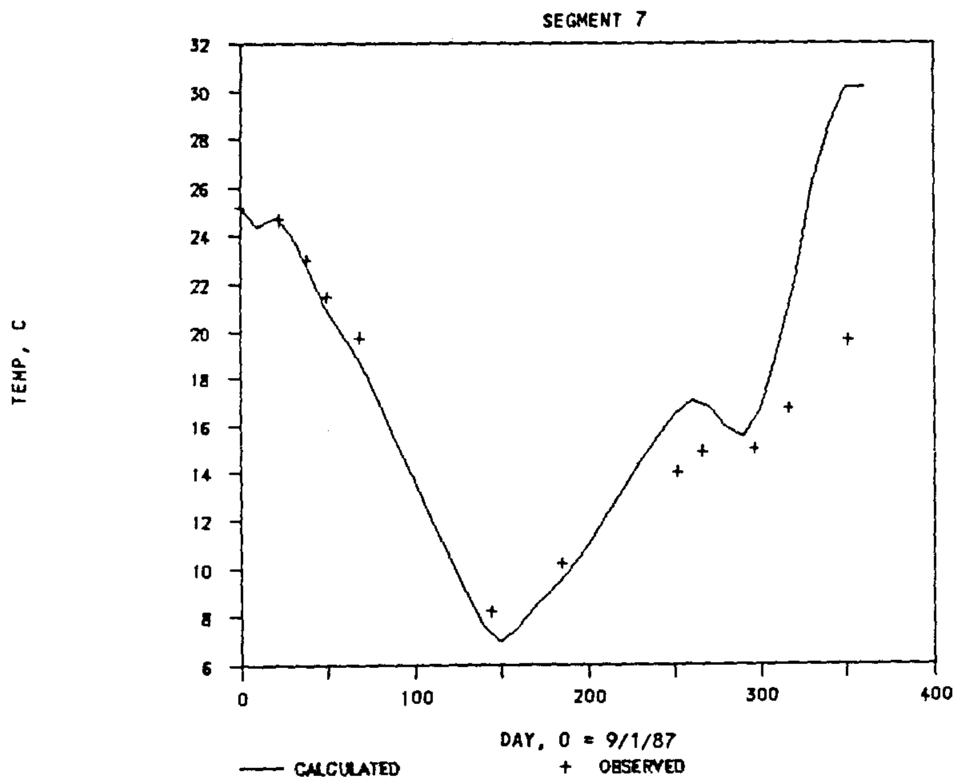
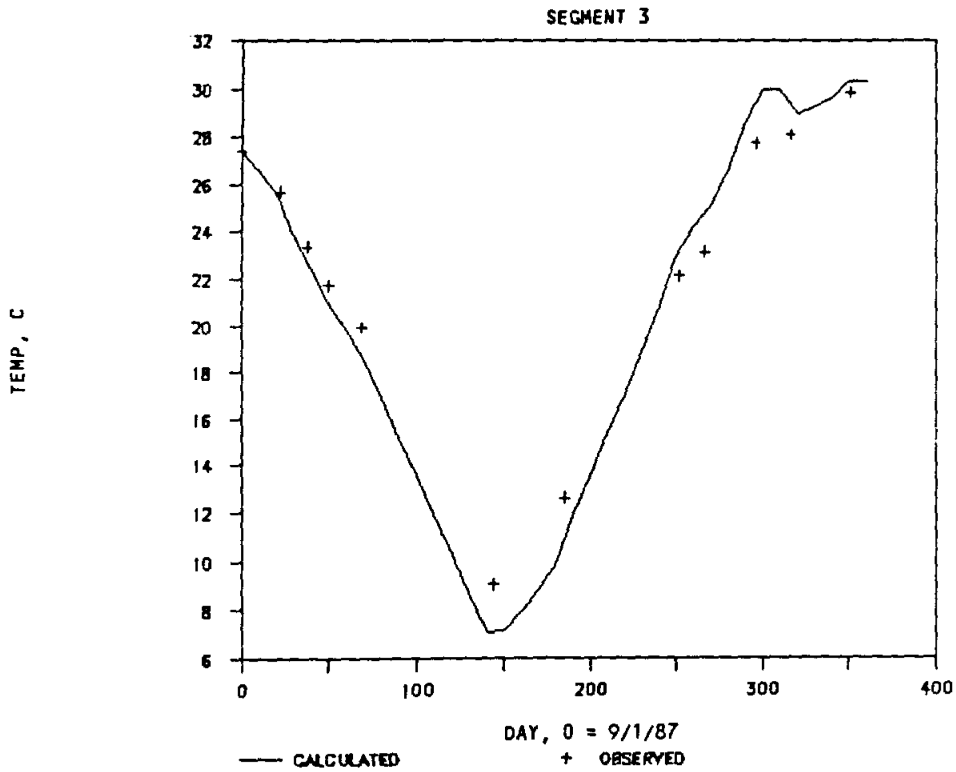


FIGURE A-35

Calibration Model Results and Observed Values for Temperature in Lake Stillhouse Hollow (continued)



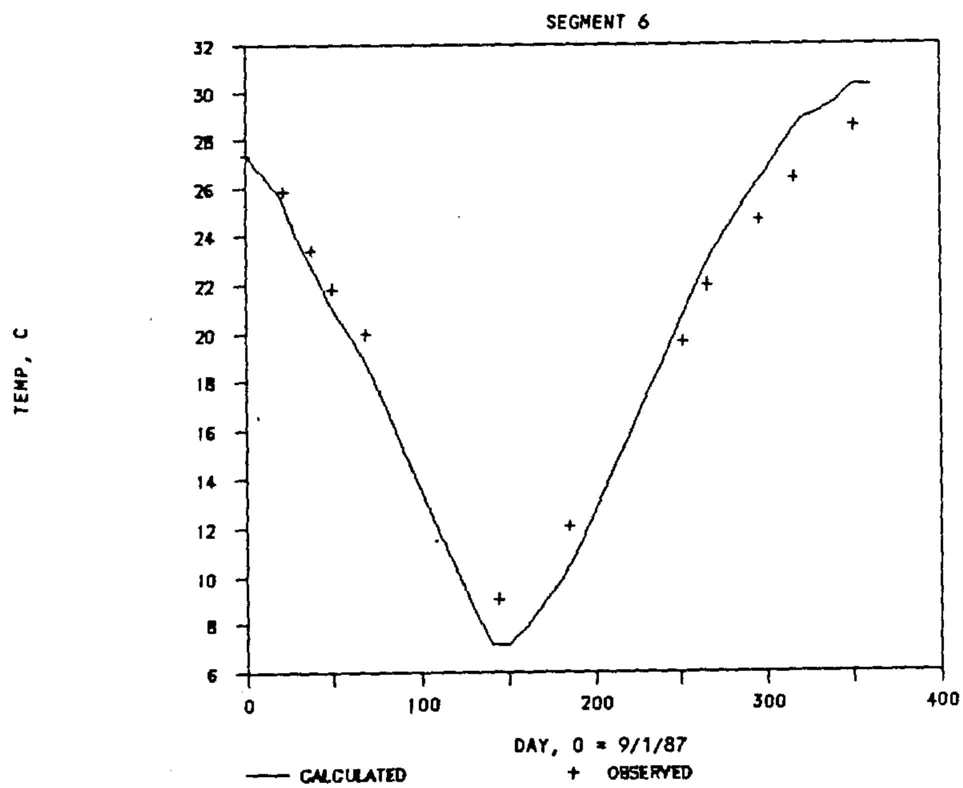


FIGURE A-35

Calibration Model Results and Observed Values for Temperature in Lake Stillhouse Hollow (continued)

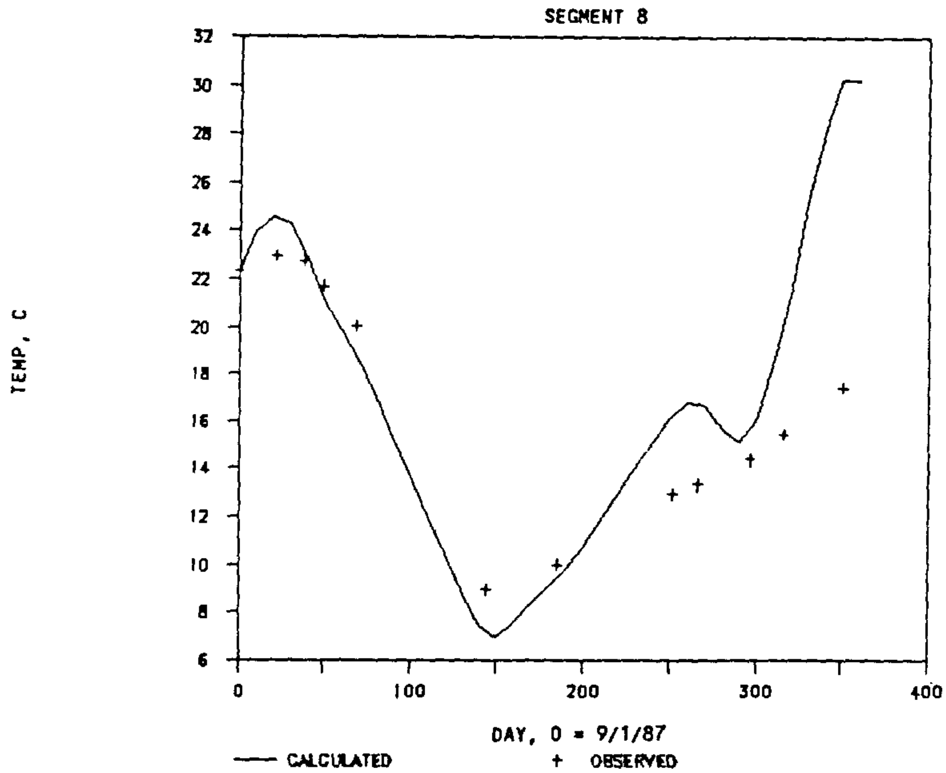
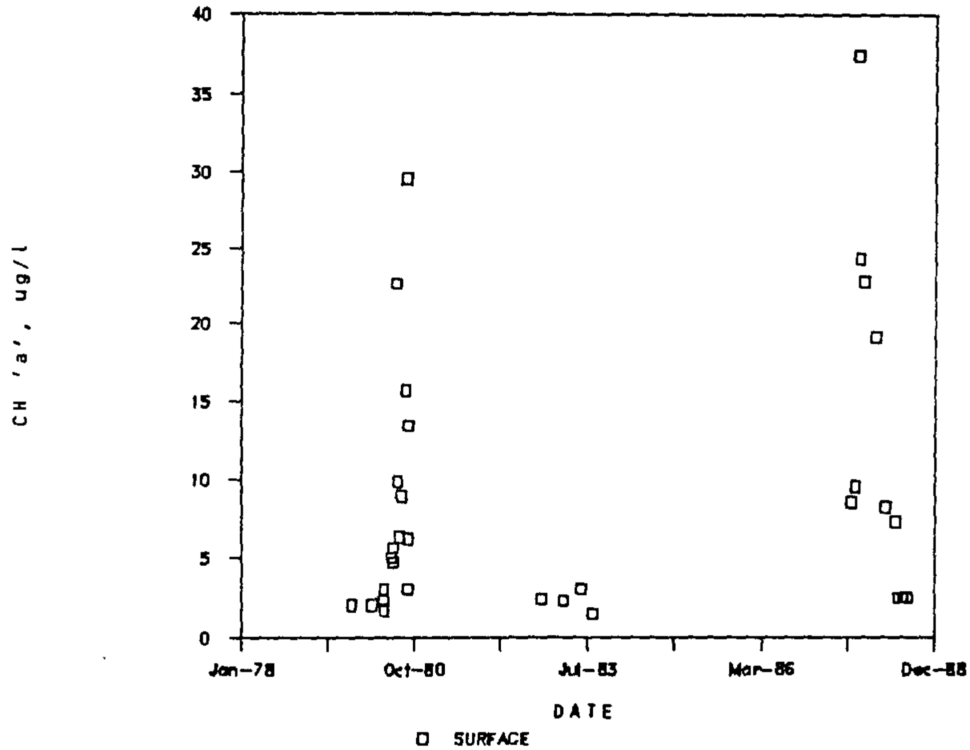


FIGURE A-35

Calibration Model Results and Observed Values for Temperature in Lake Stillhouse Hollow (continued)



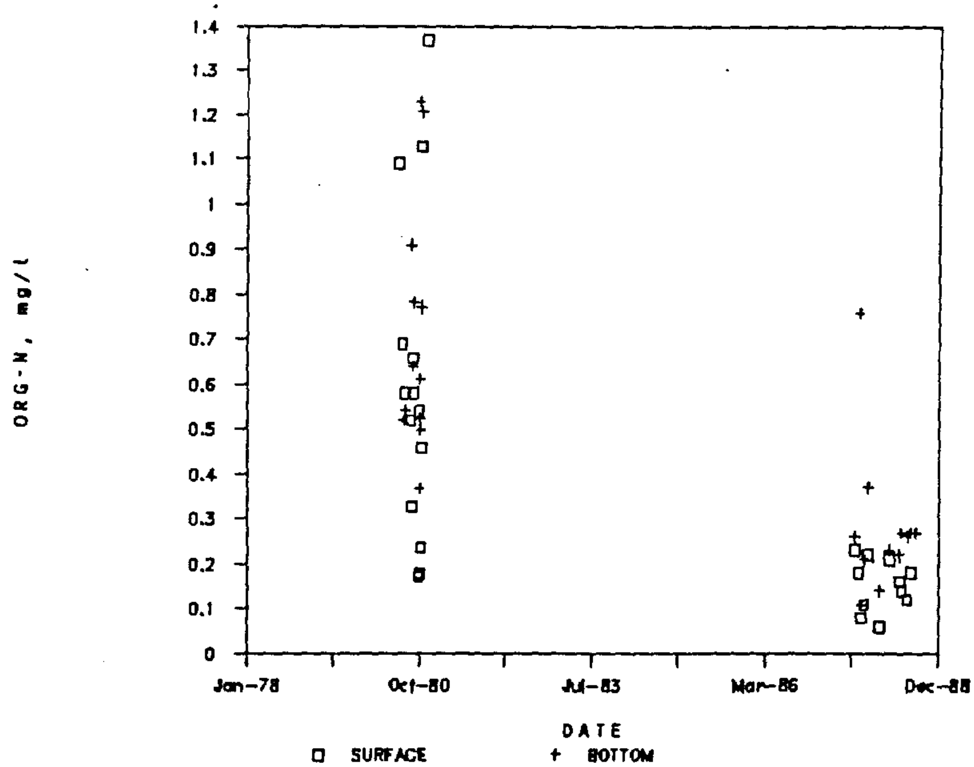
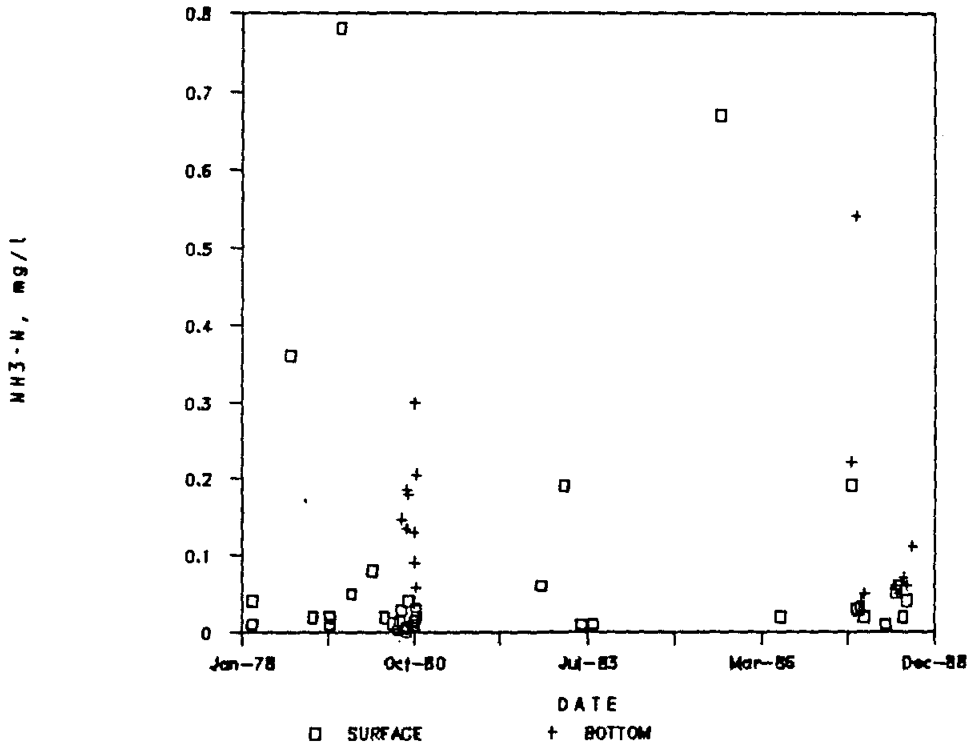


FIGURE A-36

Plot of Historical Water Quality Data in
Lake Belton Near Dam



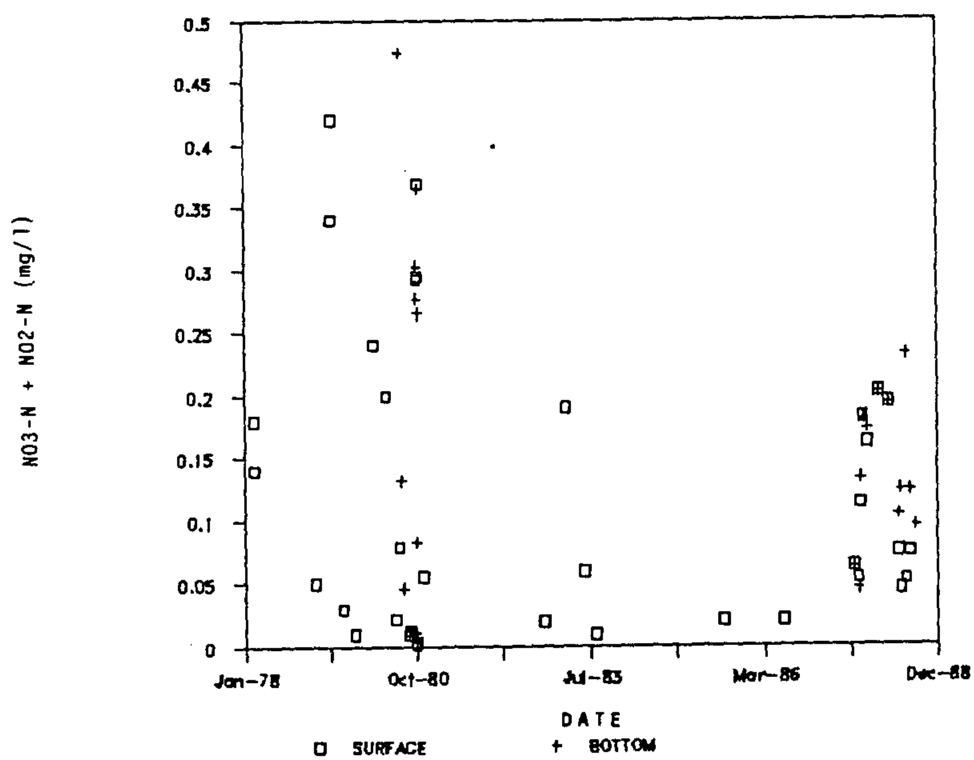
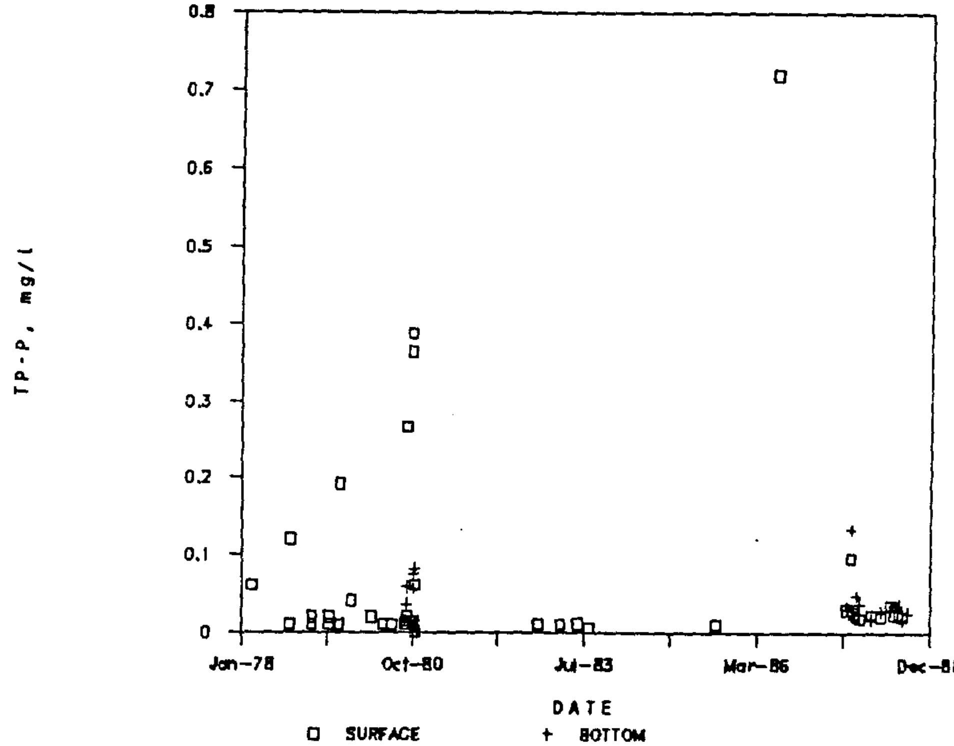


FIGURE A-36

Plot of Historical Water Quality Data in Lake Belton Near Dam (continued)



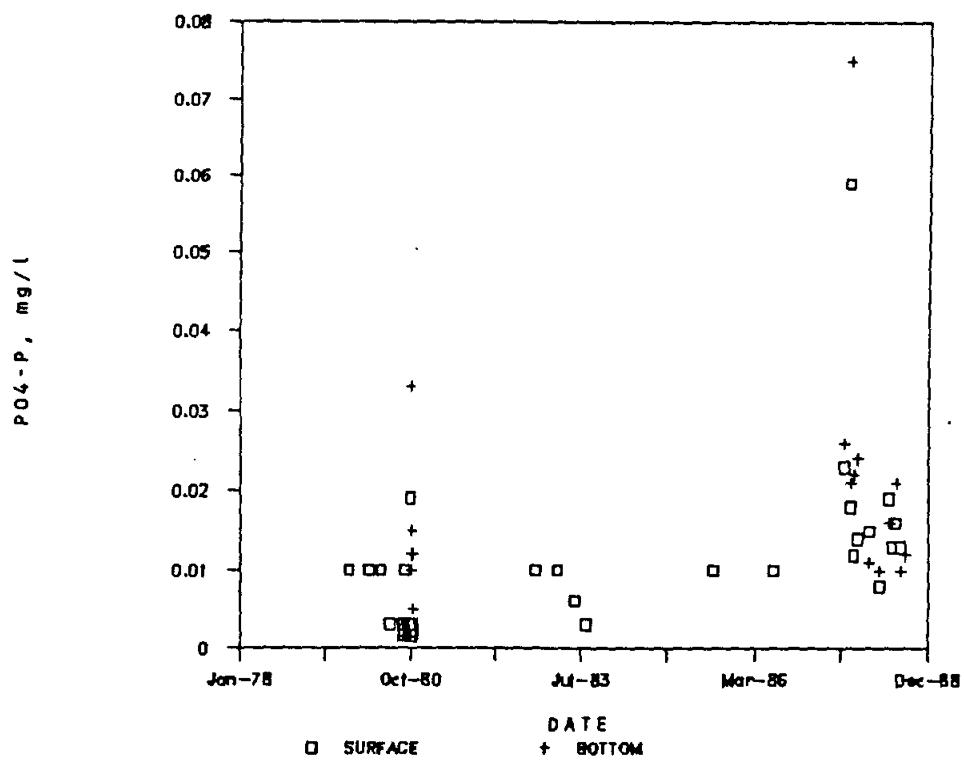
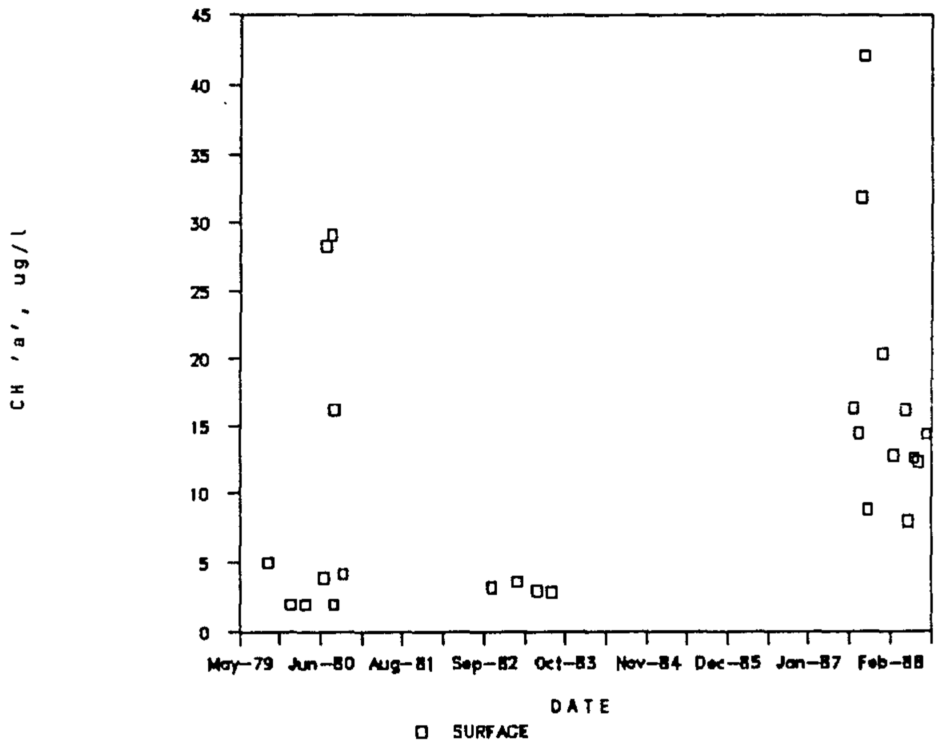


FIGURE A-36

Plot of Historical Water Quality Data in Lake Belton Near Dam (continued)



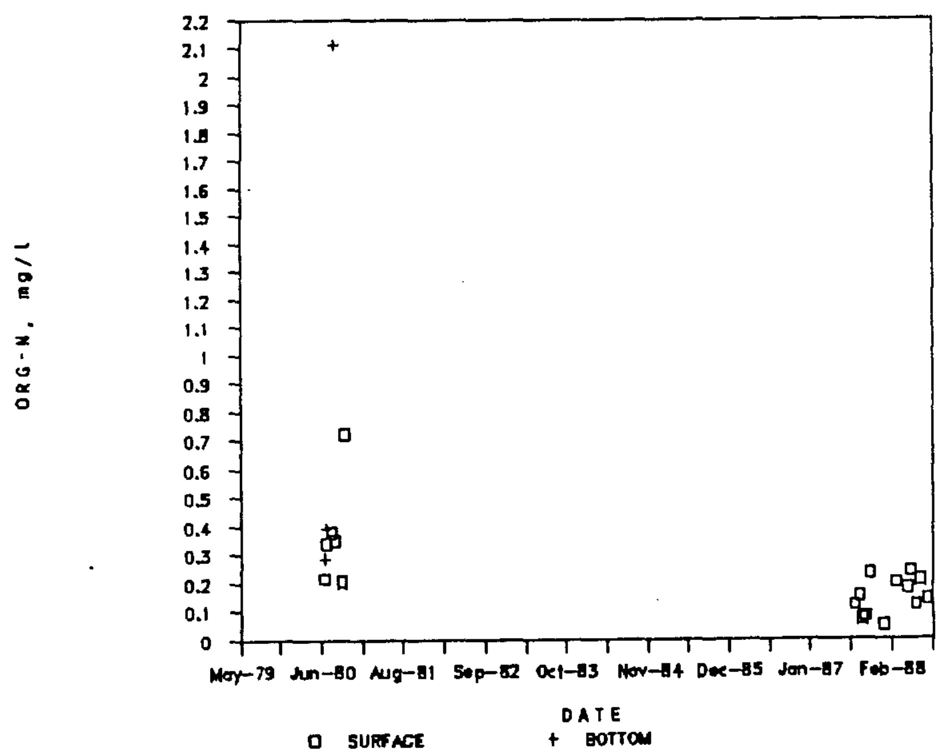
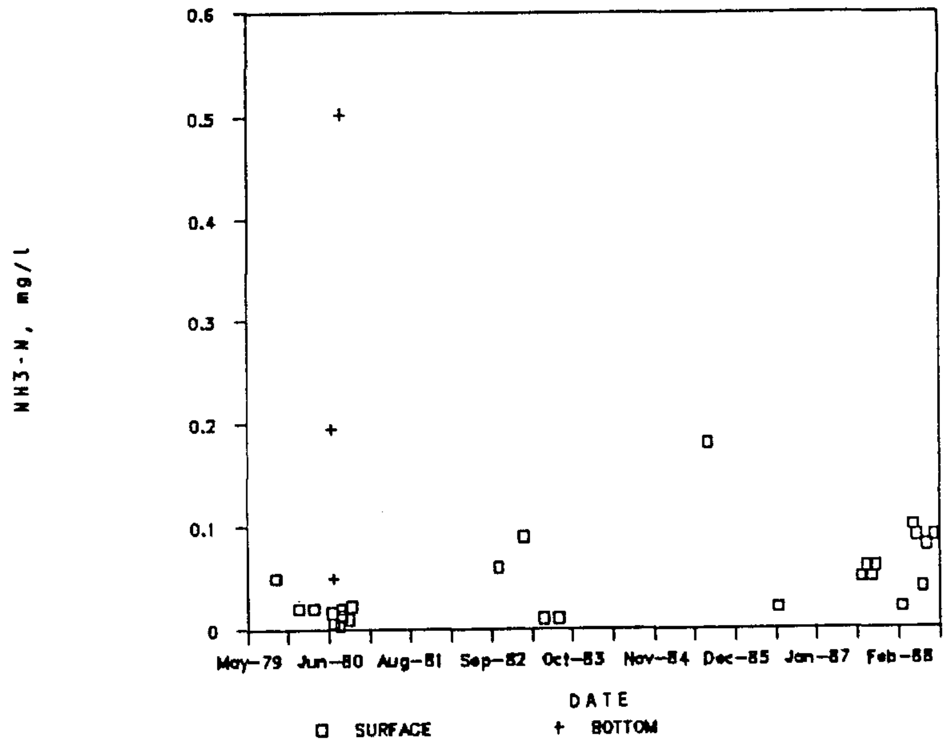


FIGURE A-37

Plot of Historical Water Quality Data in
Leon River Arm of Lake Belton



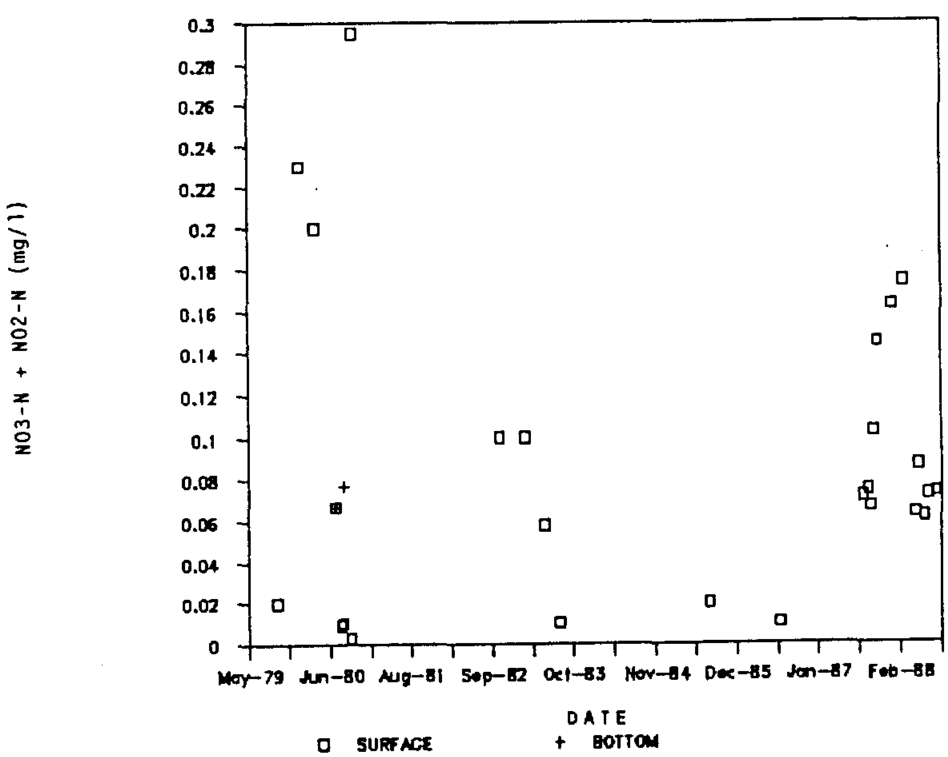
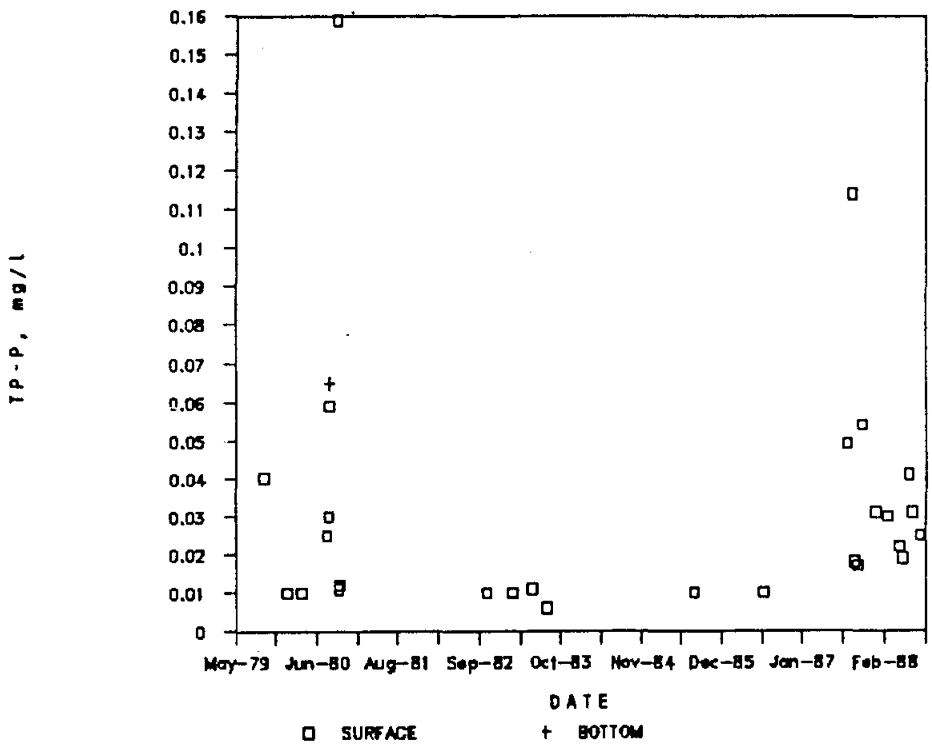


FIGURE A-37

Plot of Historical Water Quality Data in Leon River Arm of Lake Belton (continued)



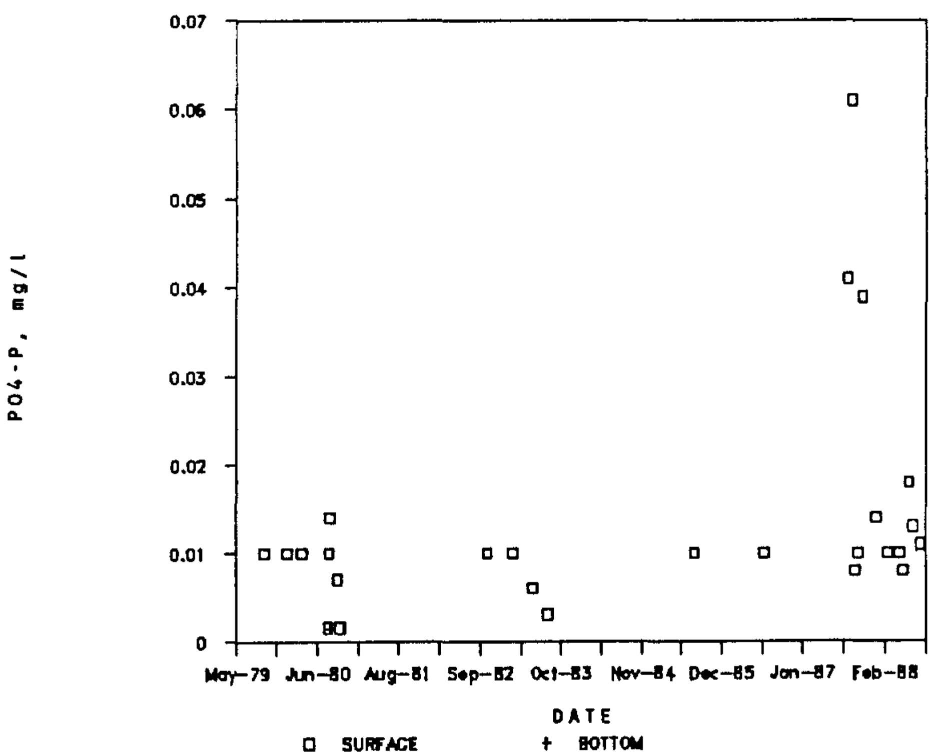


FIGURE A-37

Plot of Historical Water Quality Data in Leon River Arm of Lake Belton (continued)

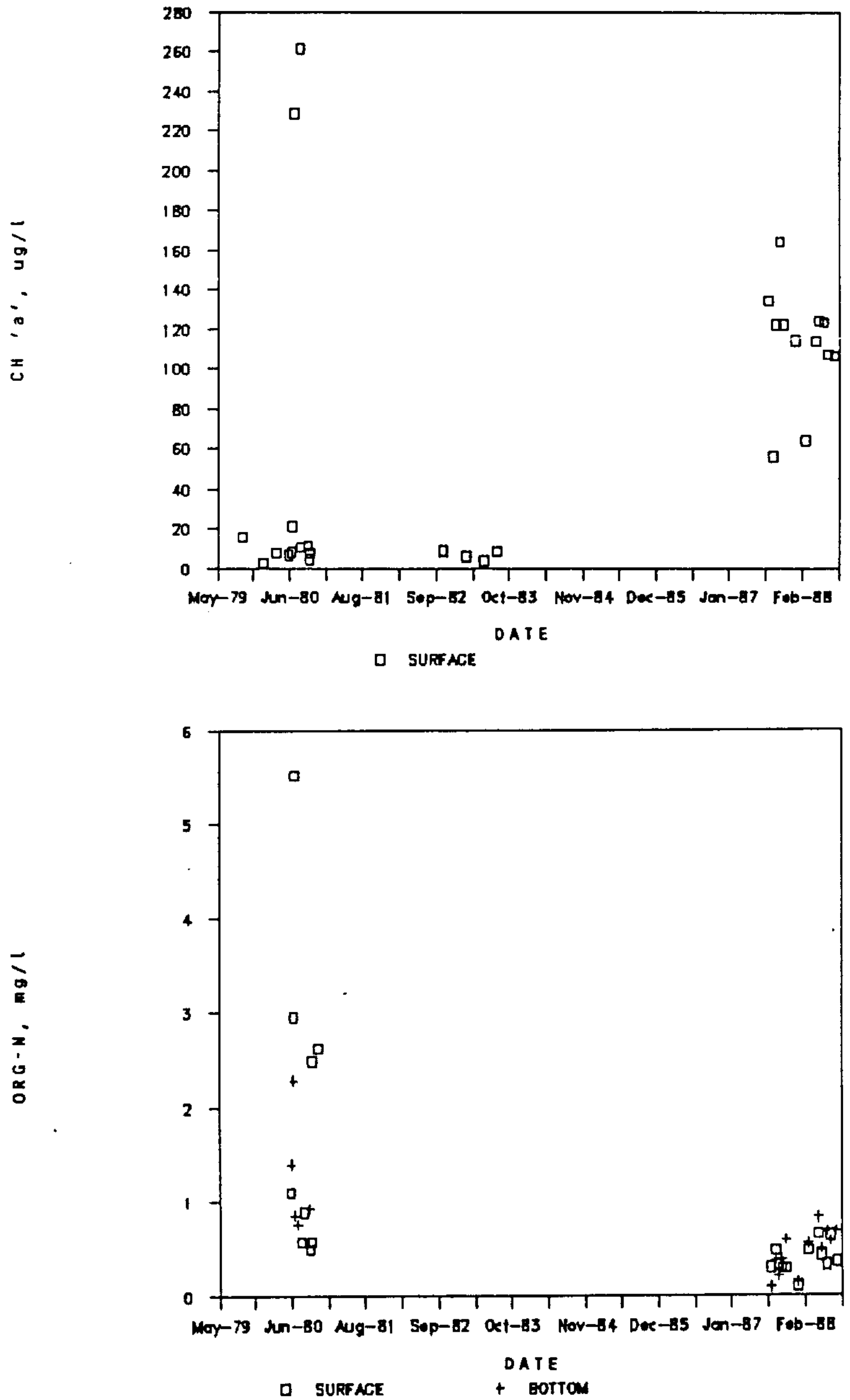
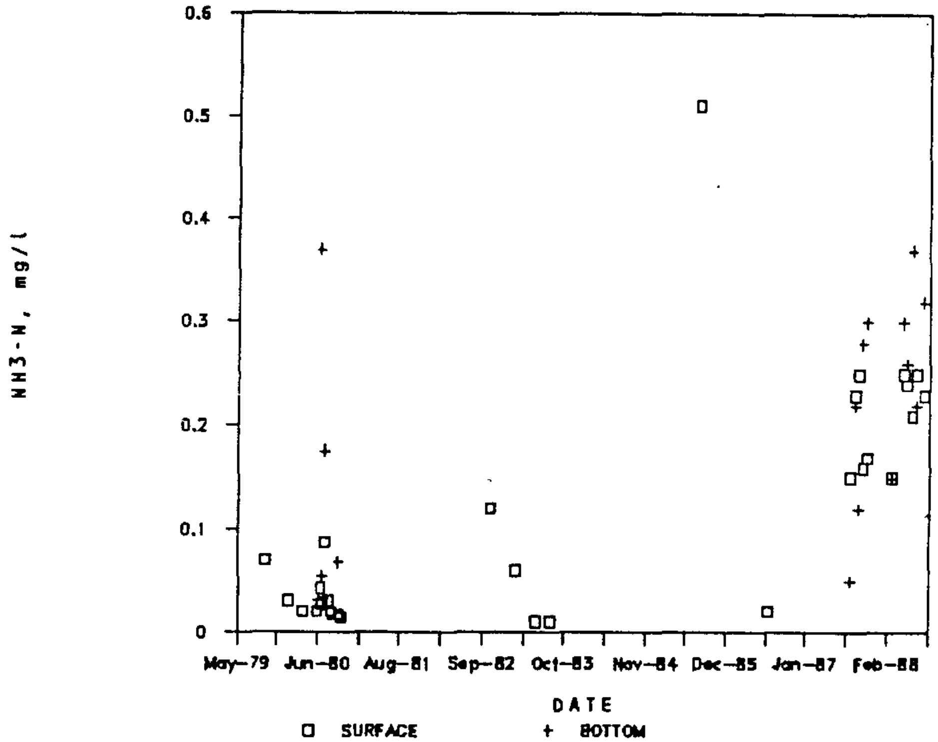


FIGURE A-38

Plot of Historical Water Quality Data in the Cowhouse Creek Arm of Lake Belton



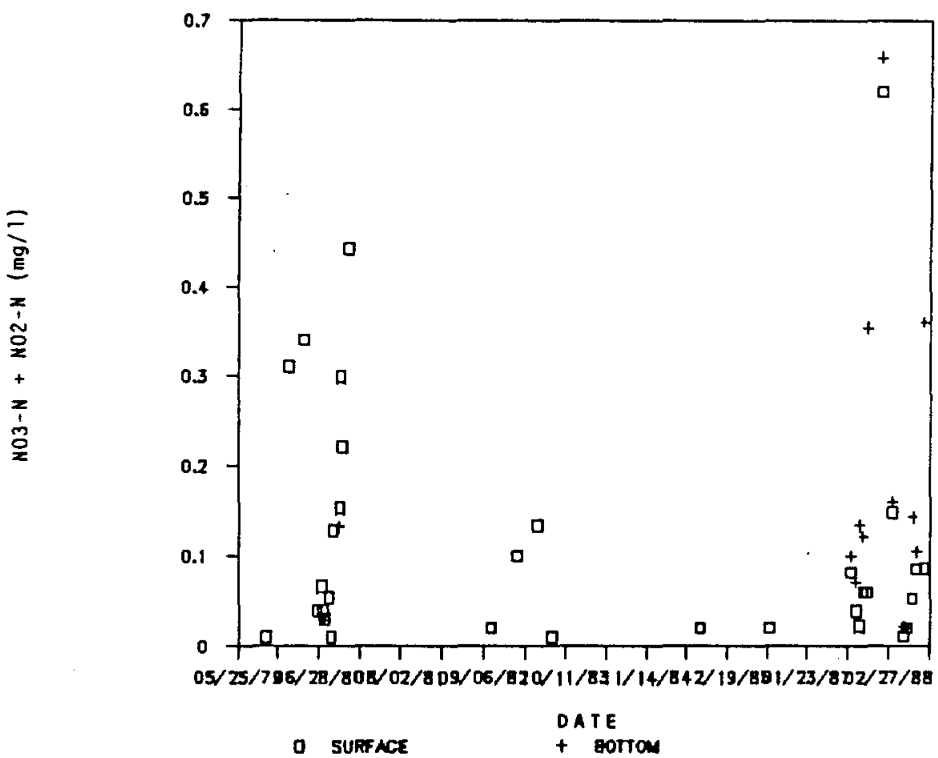
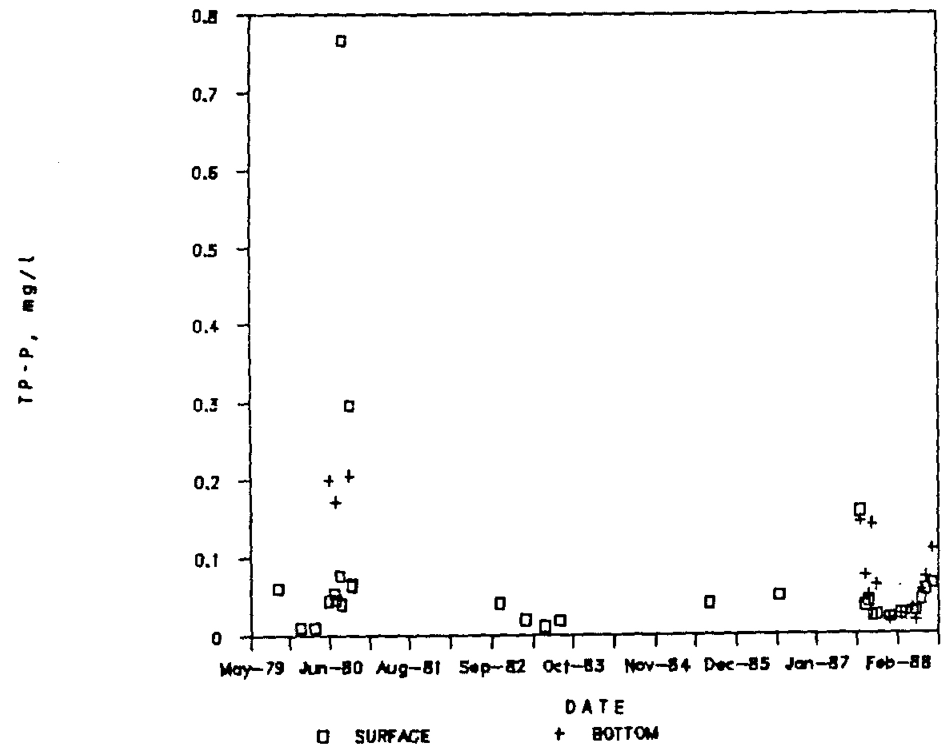


FIGURE A-38

Plot of Historical Water Quality Data in the Cowhouse Creek Arm of Lake Belton (continued)



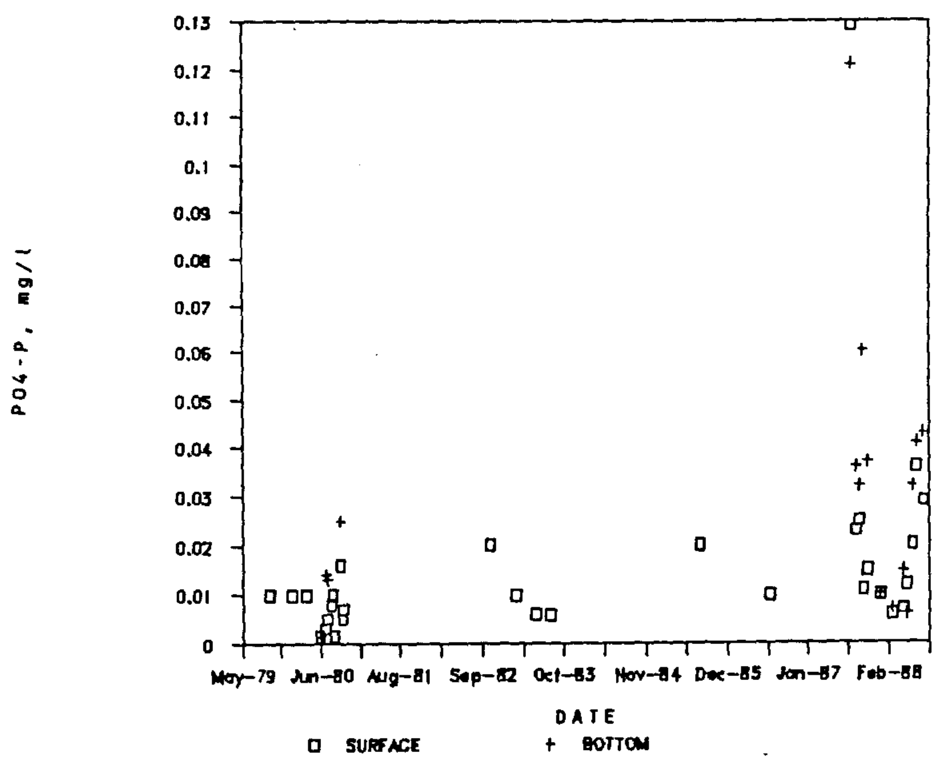


FIGURE A-38

Plot of Historical Water Quality Data in the Cowhouse Creek Arm of Lake Belton (continued)

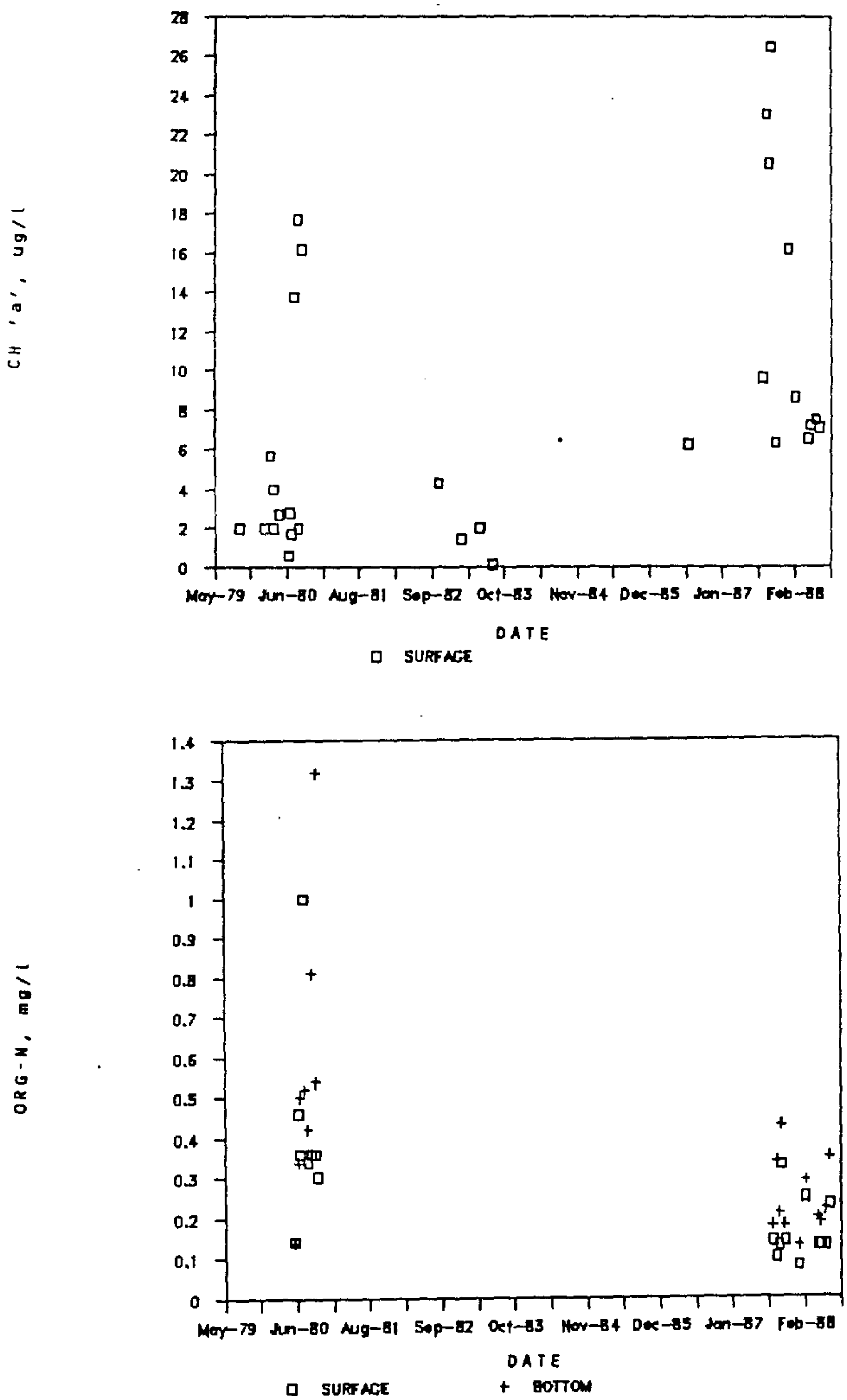
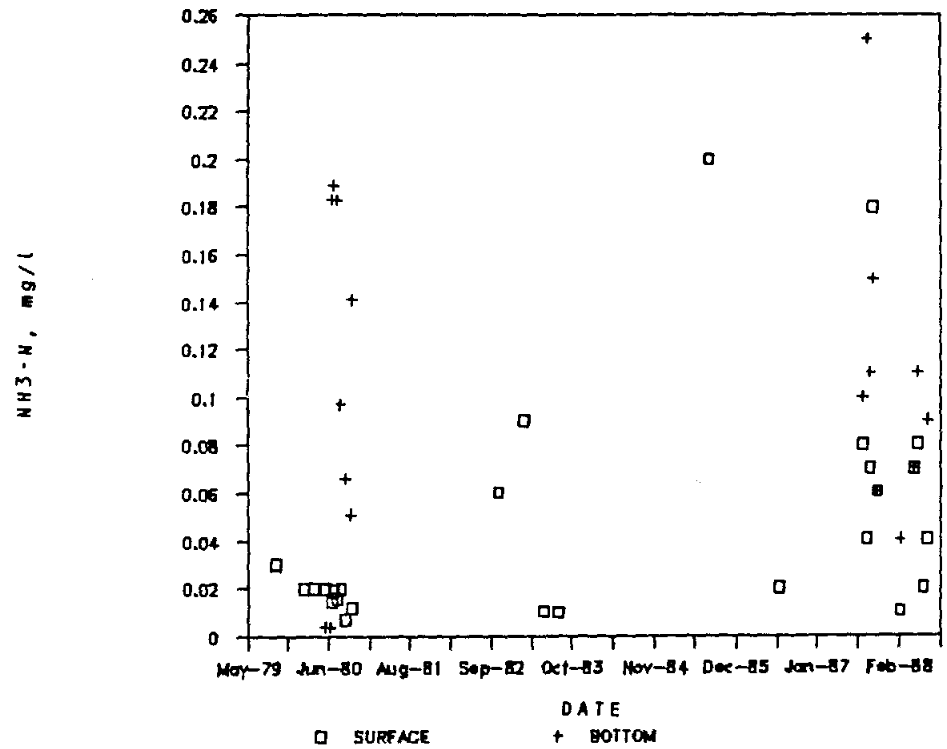


FIGURE A-39

Plot of Historical Water Quality Data in
Lake Stillhouse Hollow near Dam



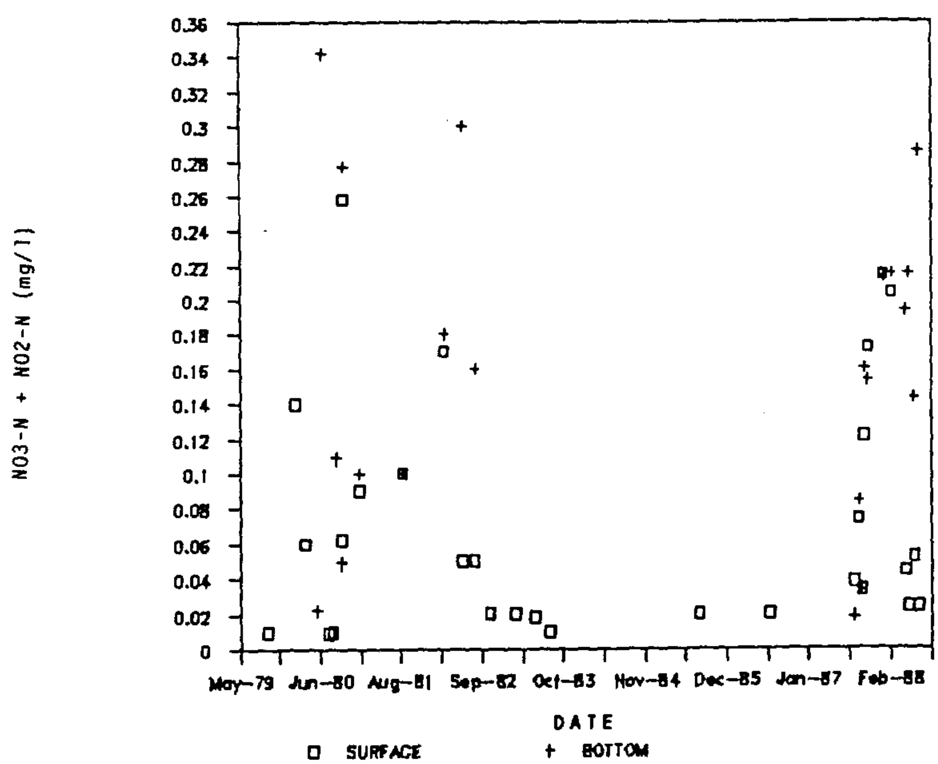
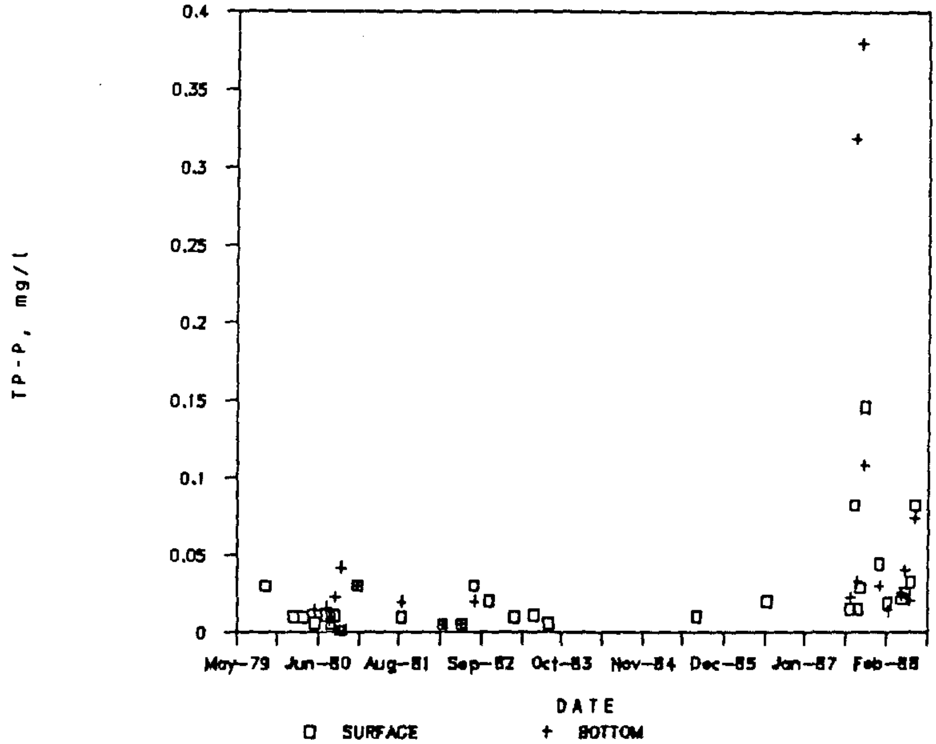


FIGURE A-39

Plot of Historical Water Quality Data in Lake Stillhouse Hollow near Dam (continued)



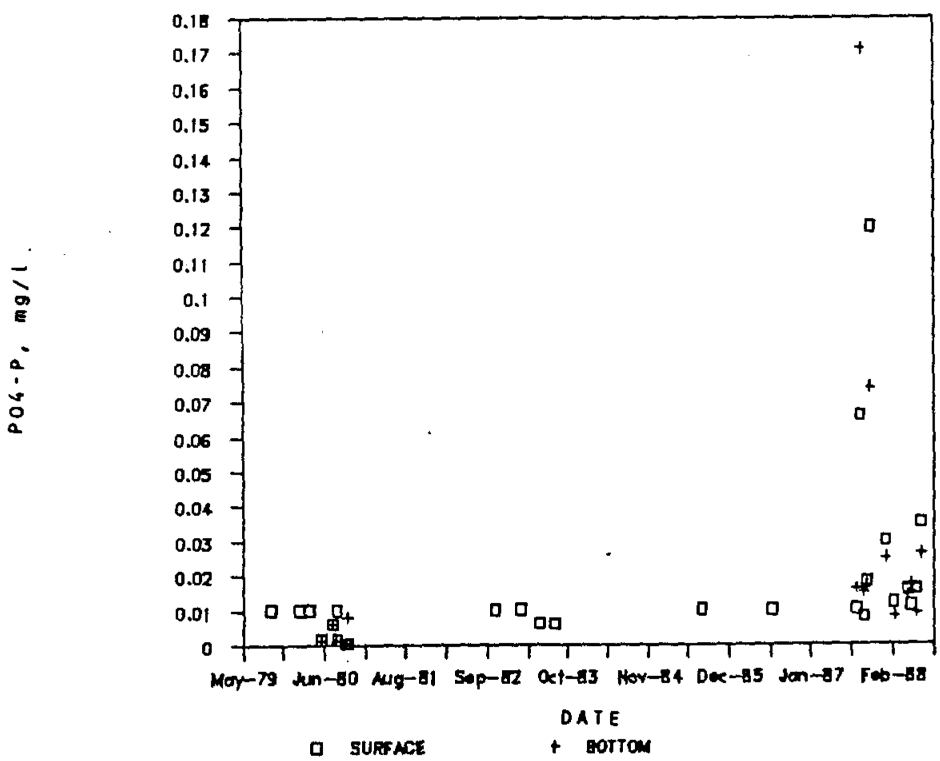


FIGURE A-39

Plot of Historical Water Quality Data in Lake Stillhouse Hollow near Dam (continued)

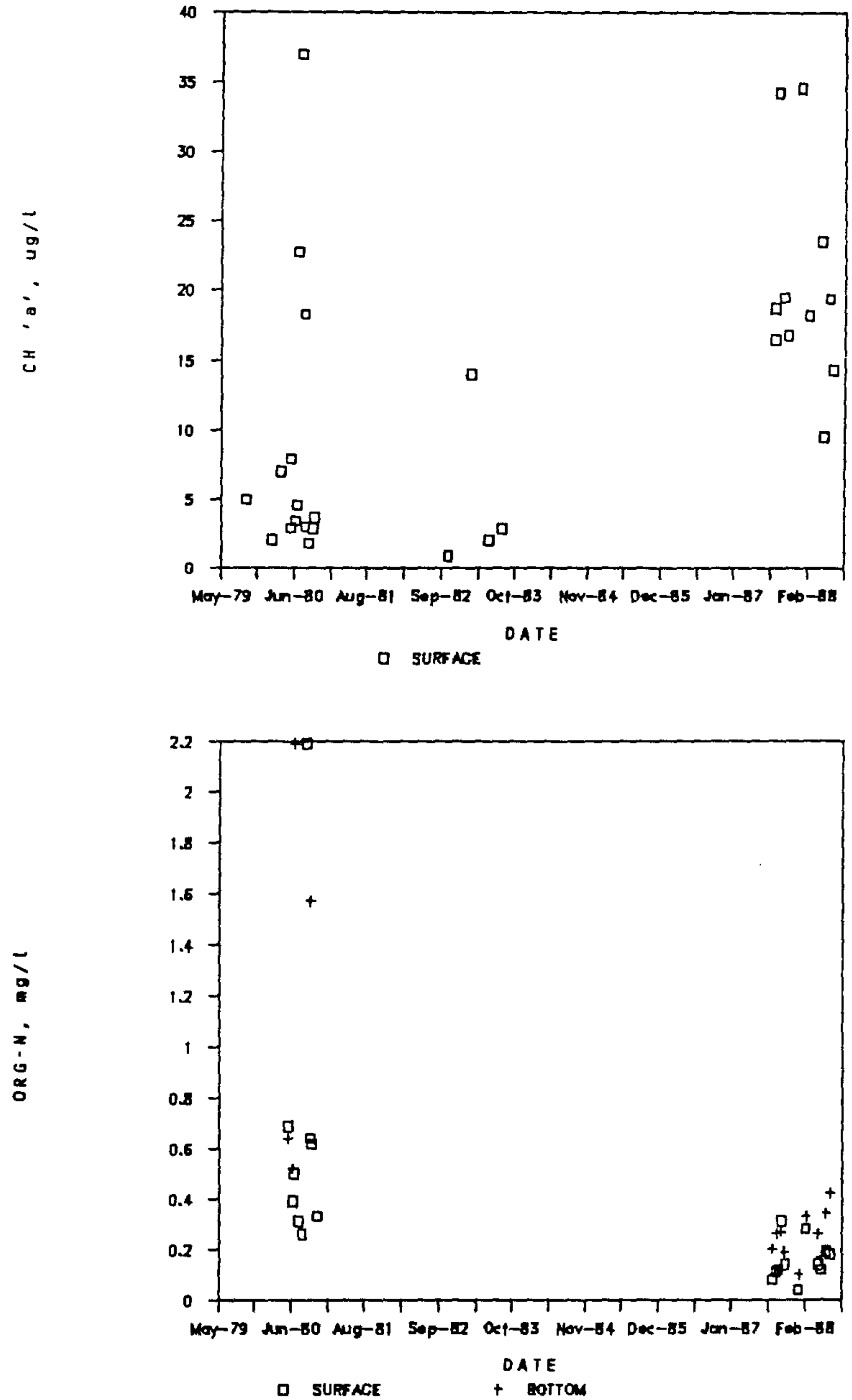
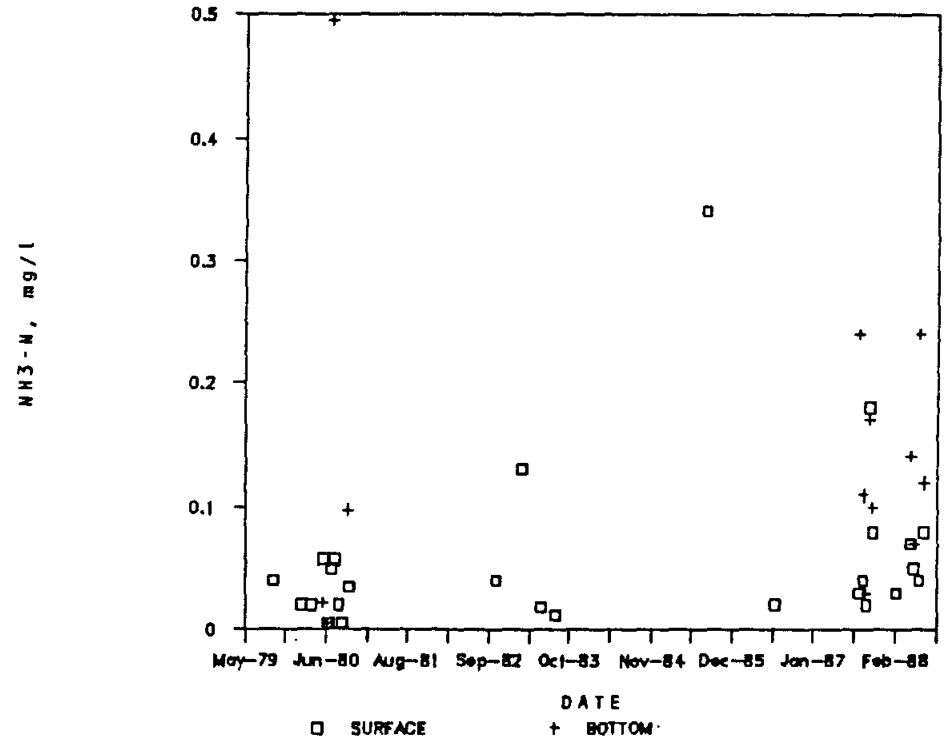


FIGURE A-40

Plot of Historical Water Quality Data Near the Headwater of the Lake Stillhouse Hollow



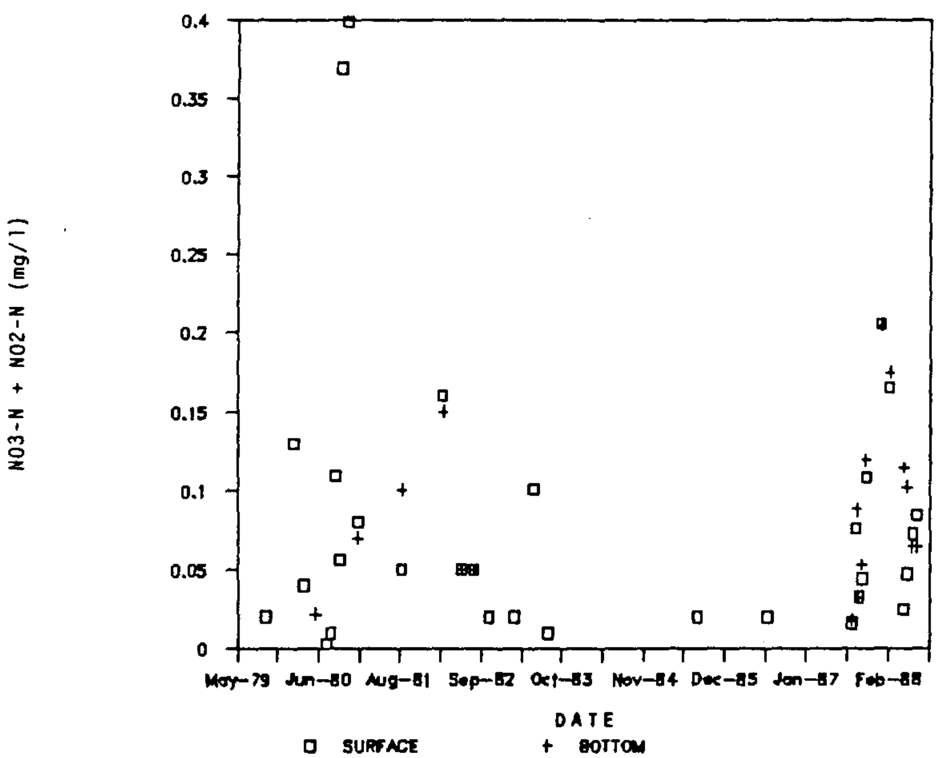
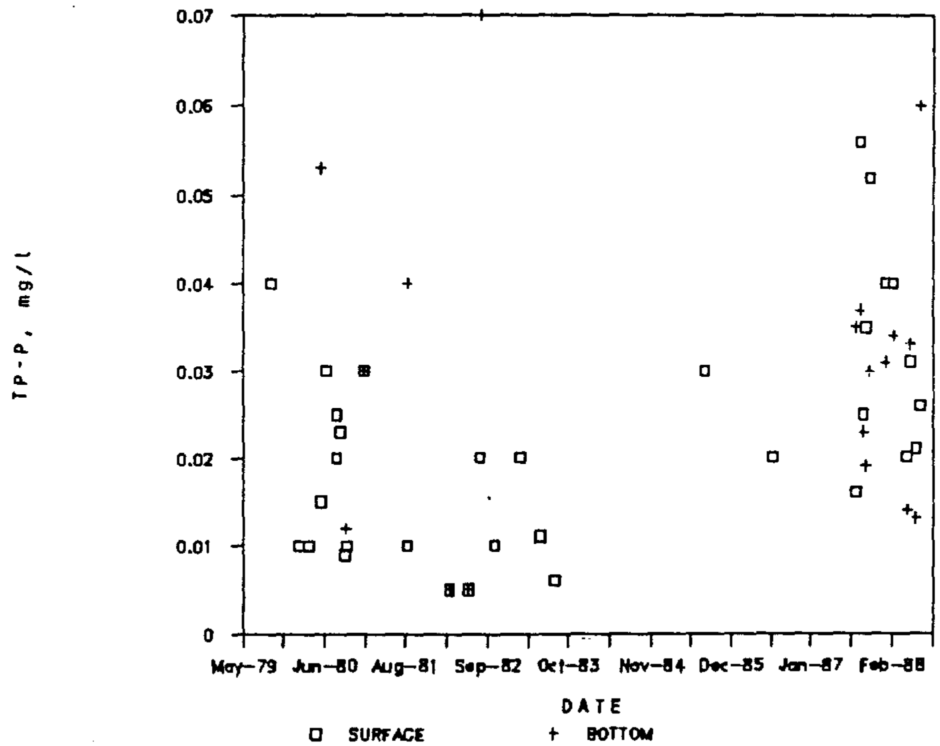


FIGURE A-40

Plot of Historical Water Quality Data Near the Headwater of the Lake Stillhouse Hollow (continued)



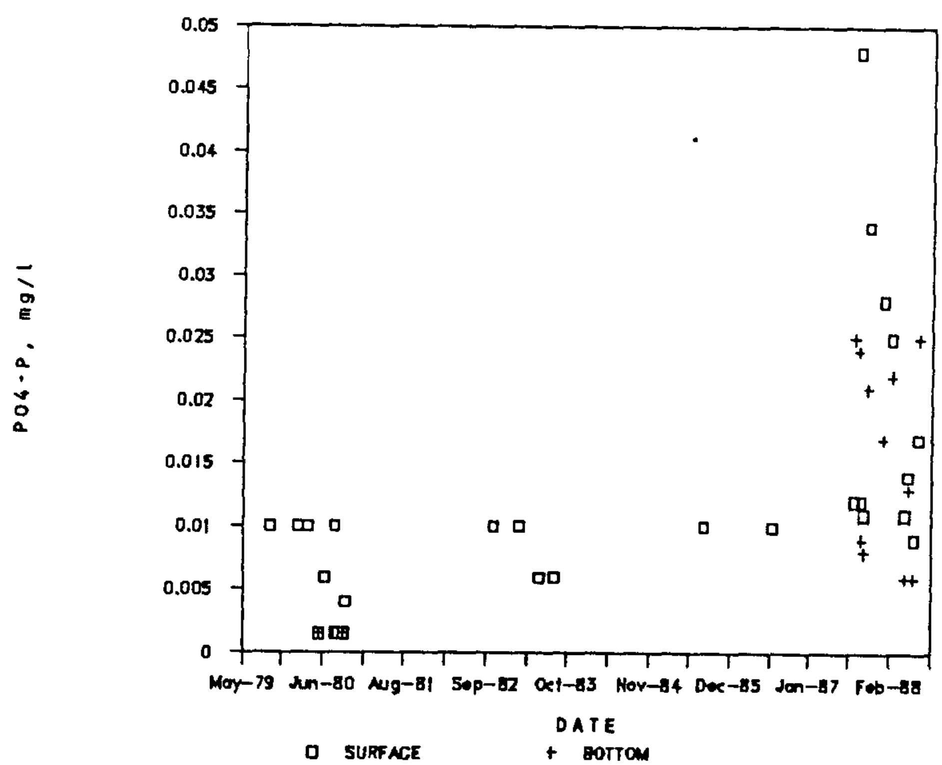
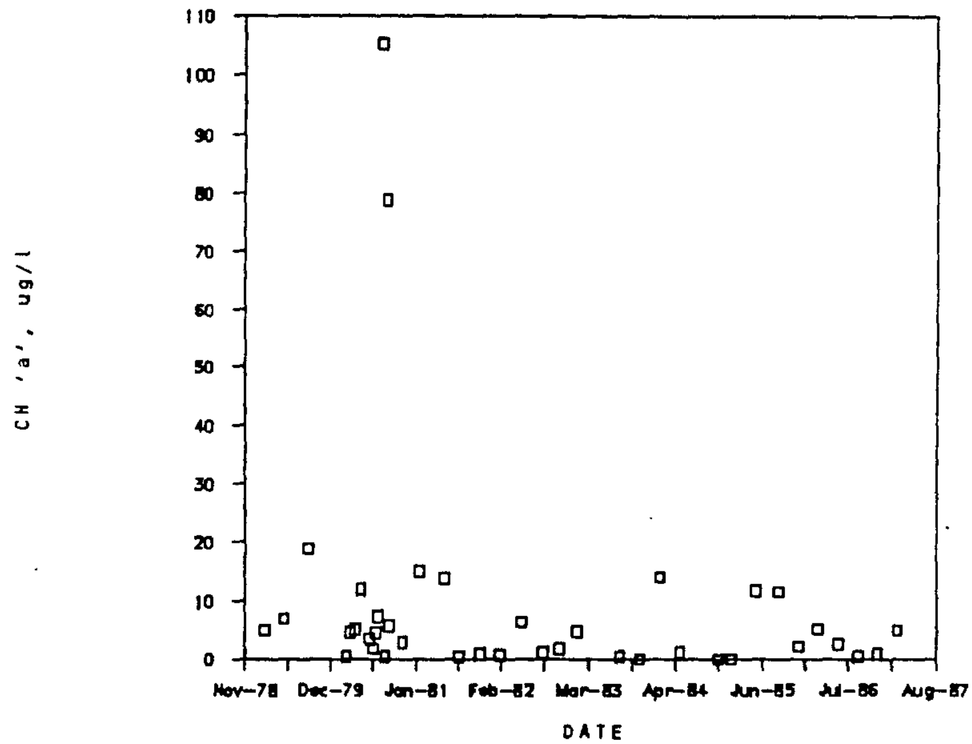


FIGURE A-40

Plot of Historical Water Quality Data Near the Headwater of the Lake Stillhouse Hollow (continued)



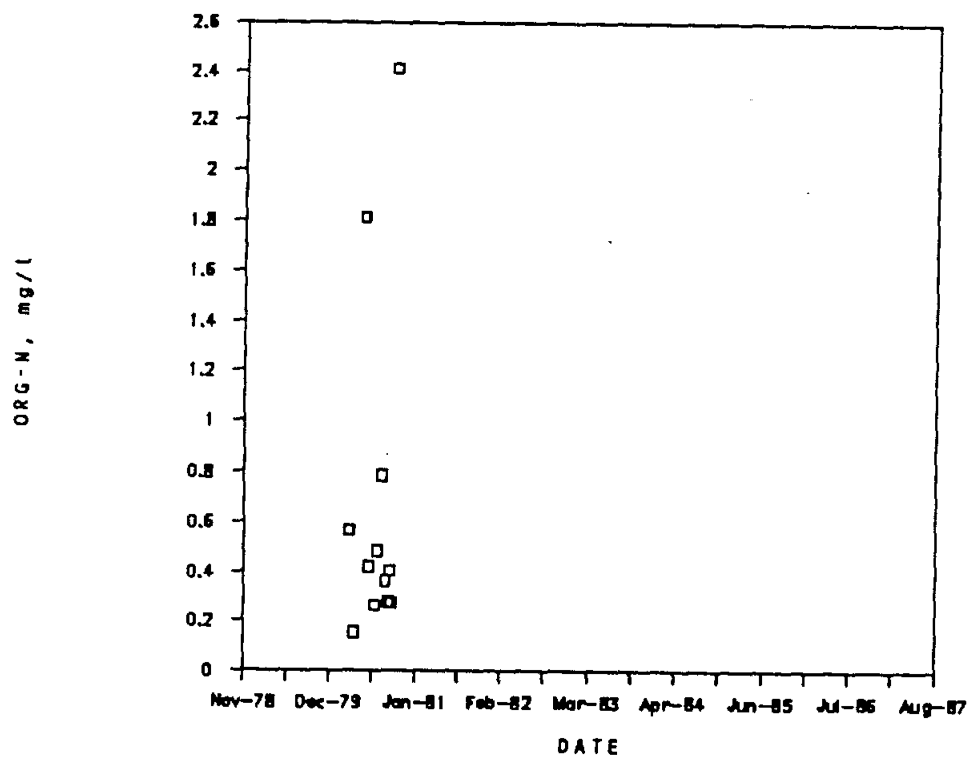
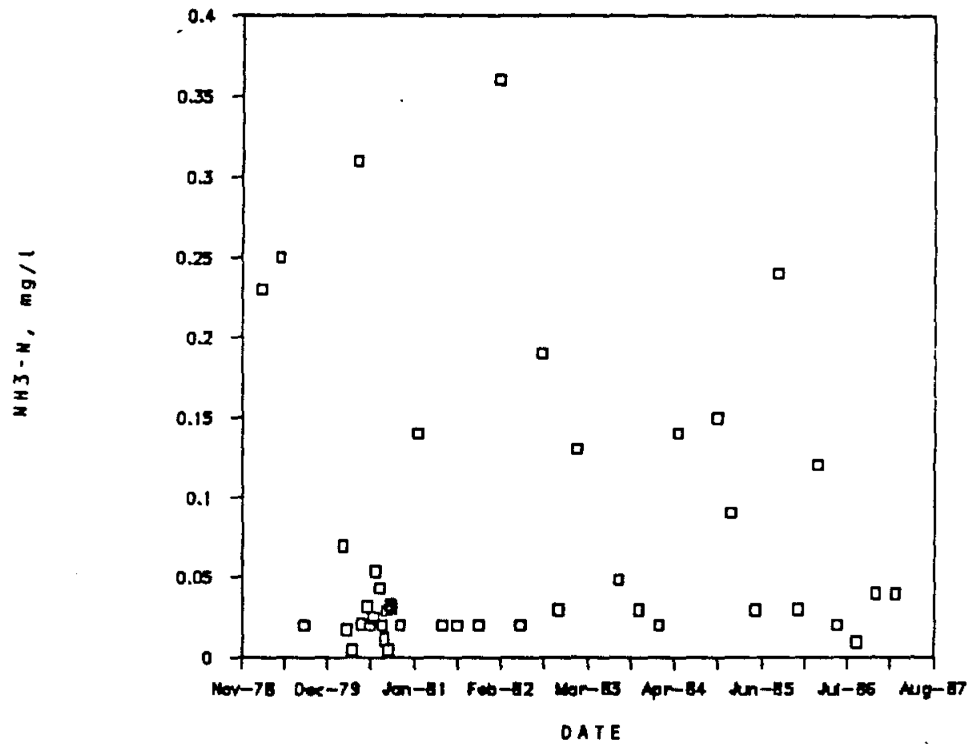


FIGURE A-41

Plot of Historical Water Quality Data Near the Headwater of Lake Belton in the Leon River



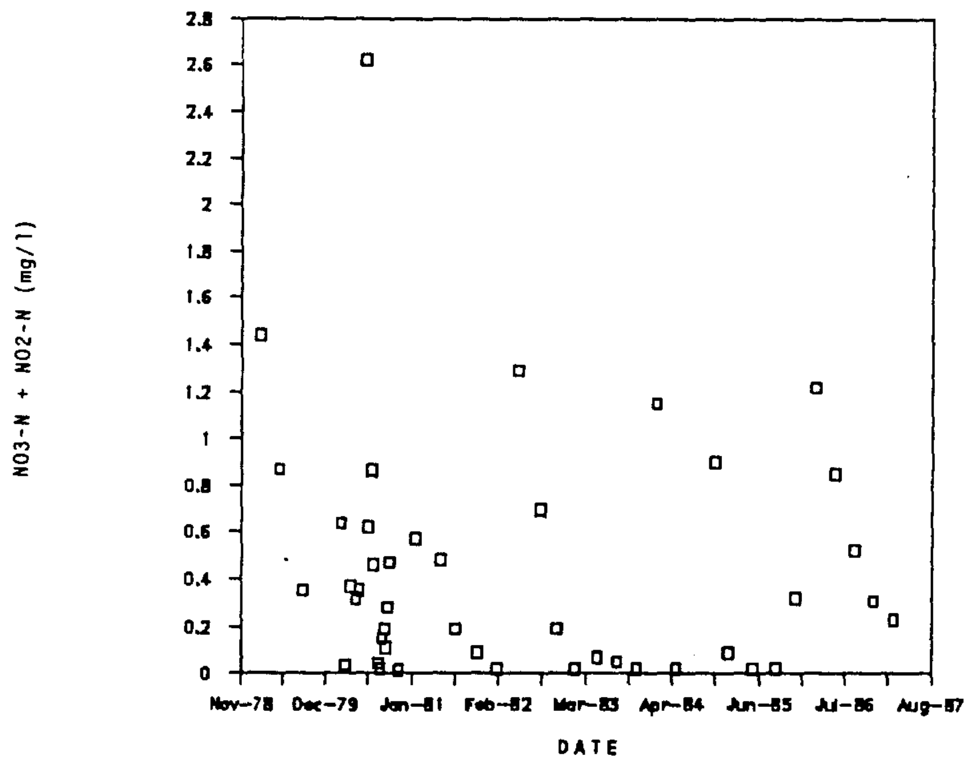
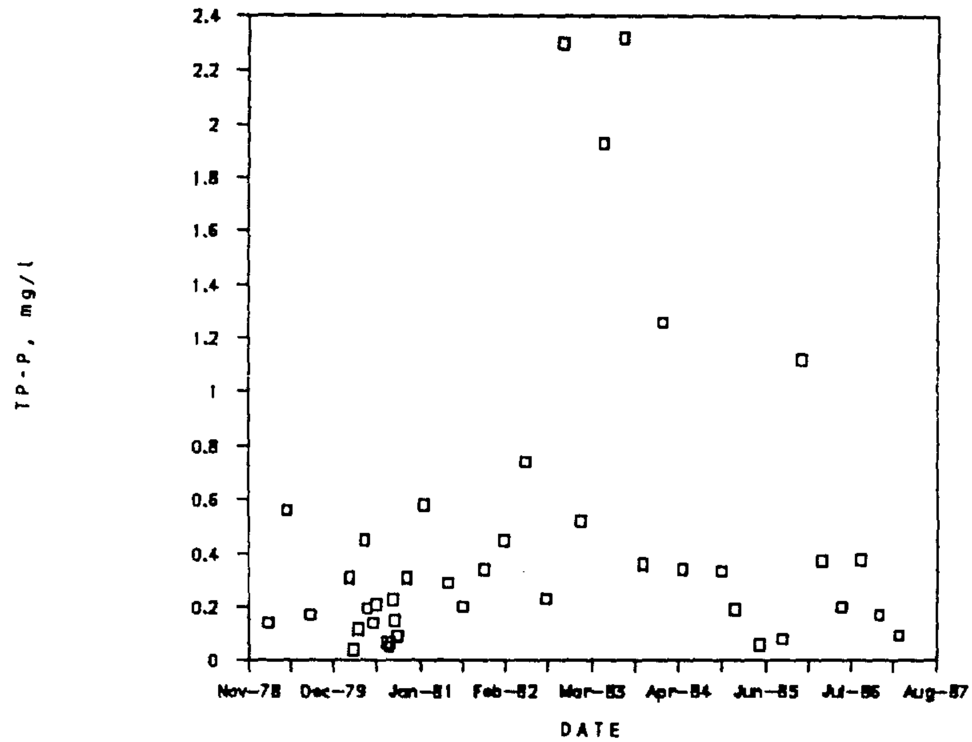


FIGURE A-41

Plot of Historical Water Quality Data Near the Headwater of Lake Belton in the Leon River (continued)



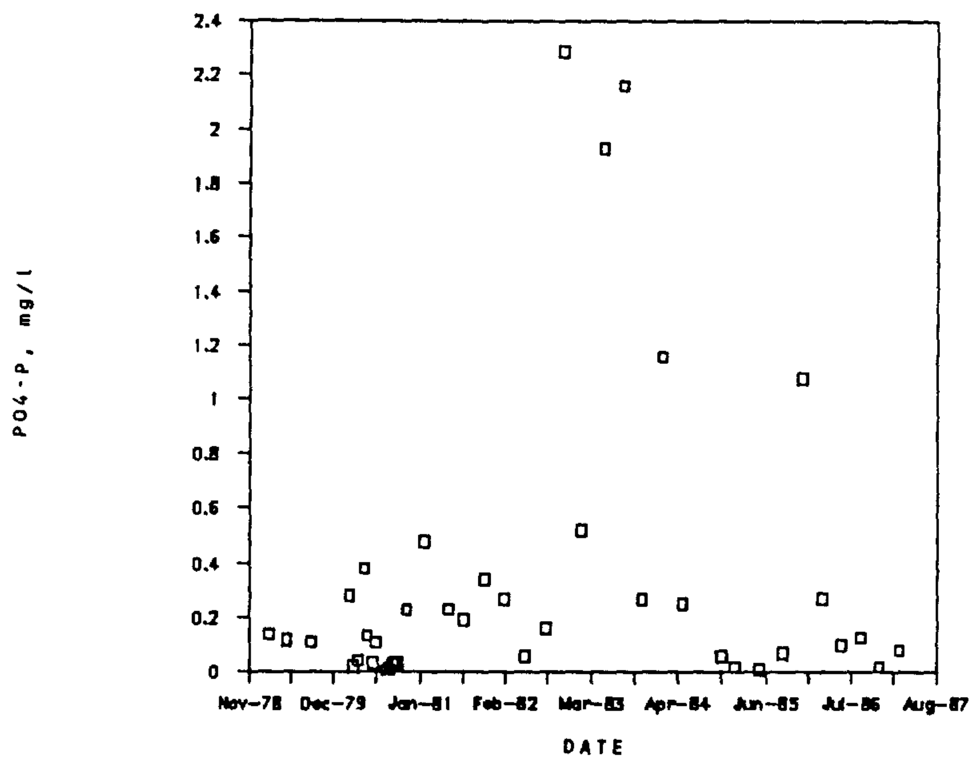
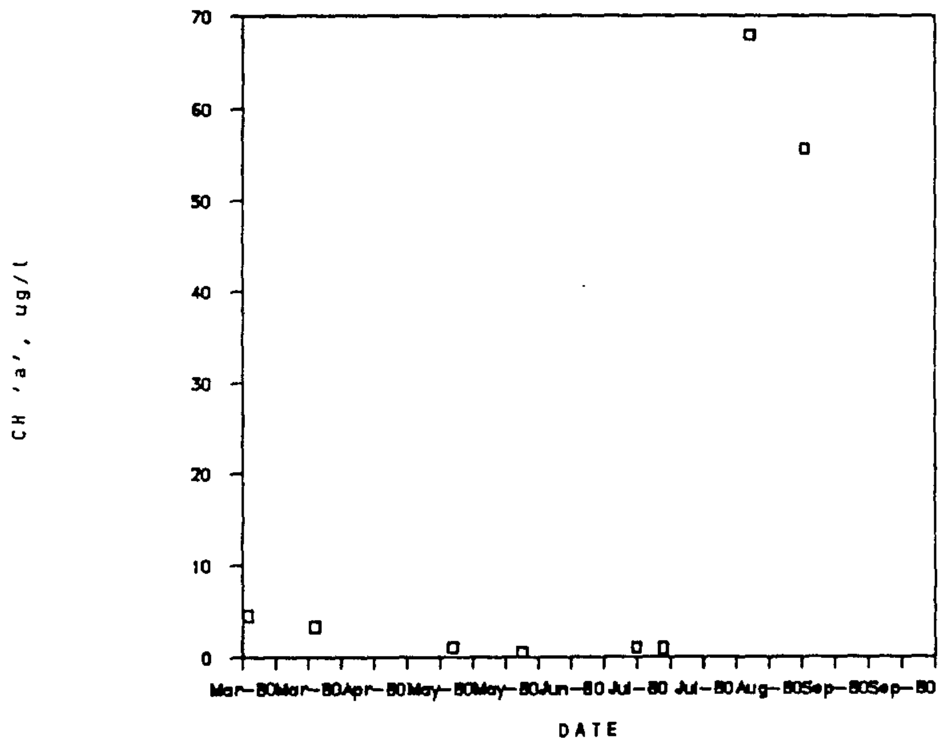


FIGURE A-41

Plot of Historical Water Quality Data Near the Headwater of Lake Belton in the Leon River (continued)



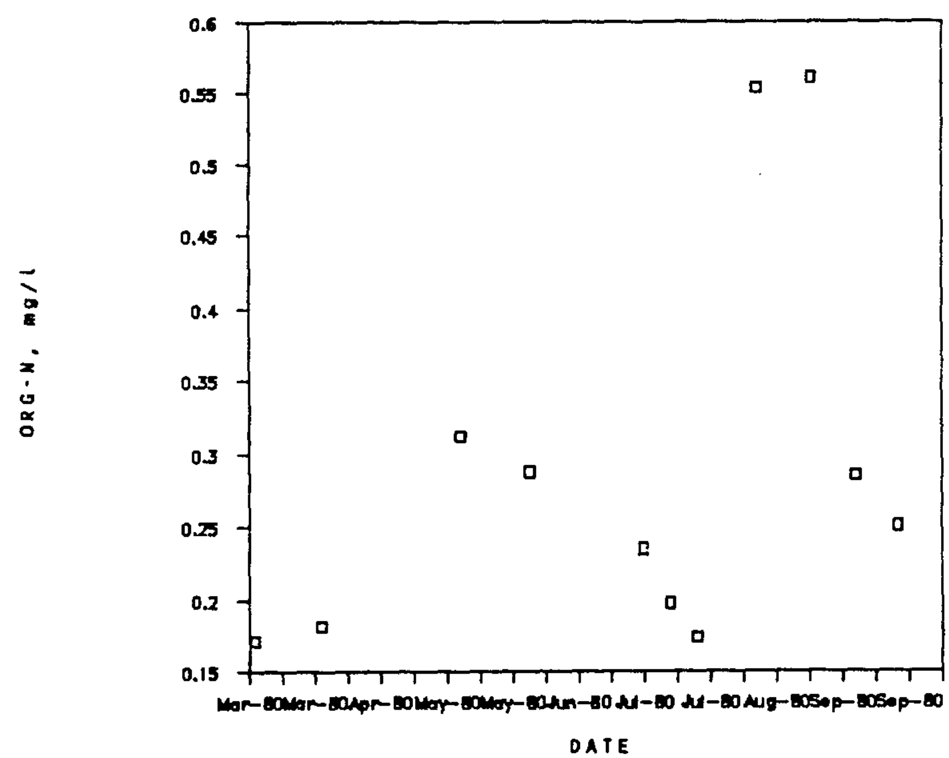
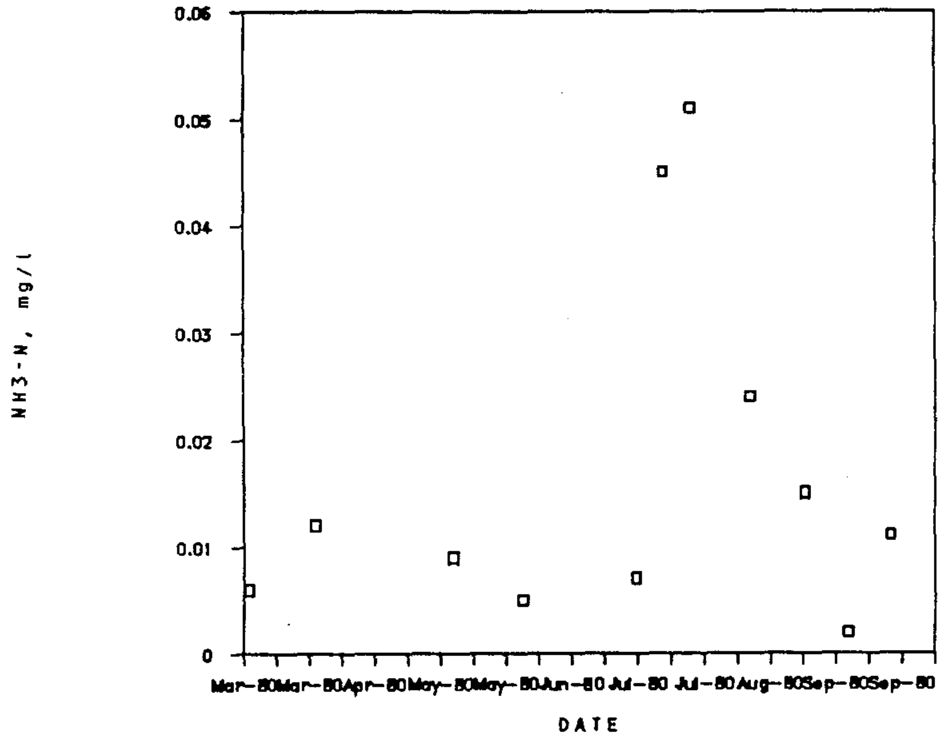


FIGURE A-42

Plot of Historical Water Quality Data
Below Lake Belton Dam in the Leon River



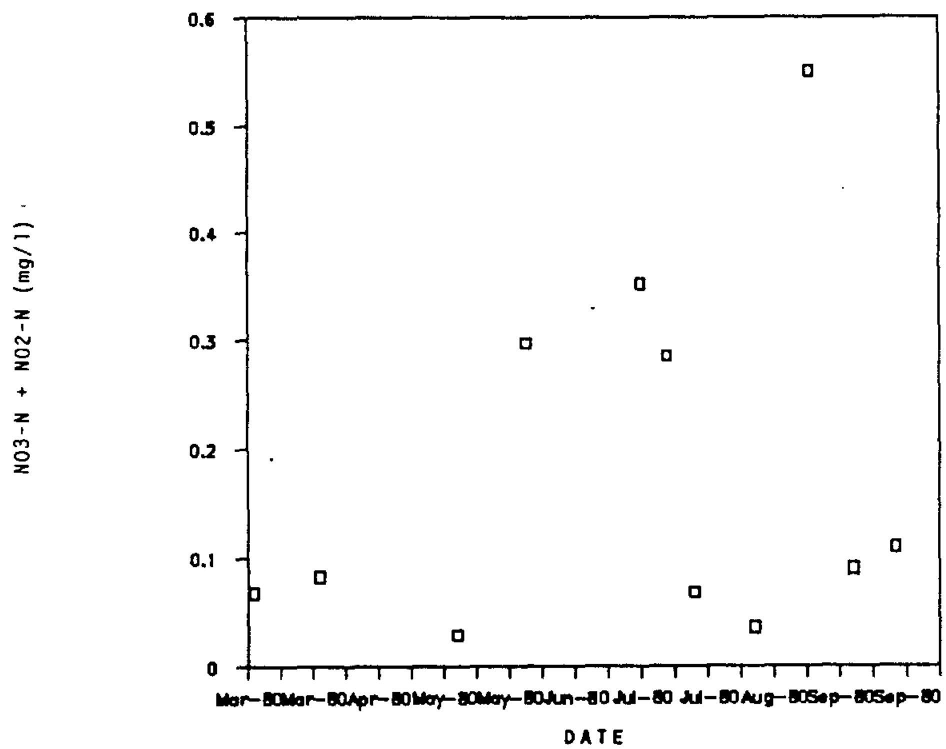
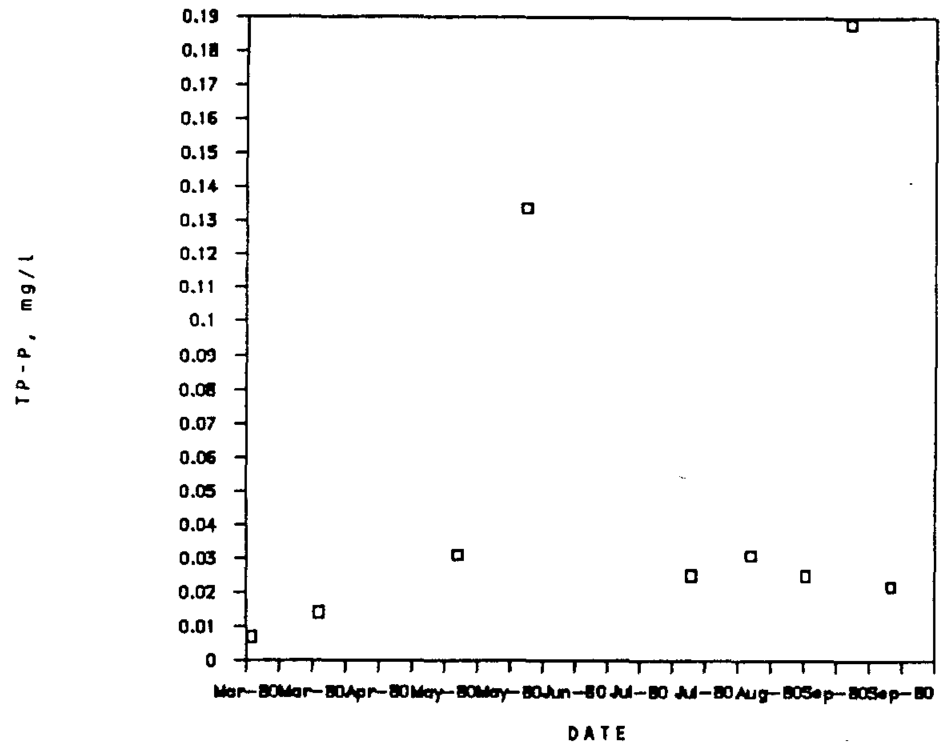


FIGURE A-42

Plot of Historical Water Quality Data
Below Lake Belton Dam in the Leon River
(continued)



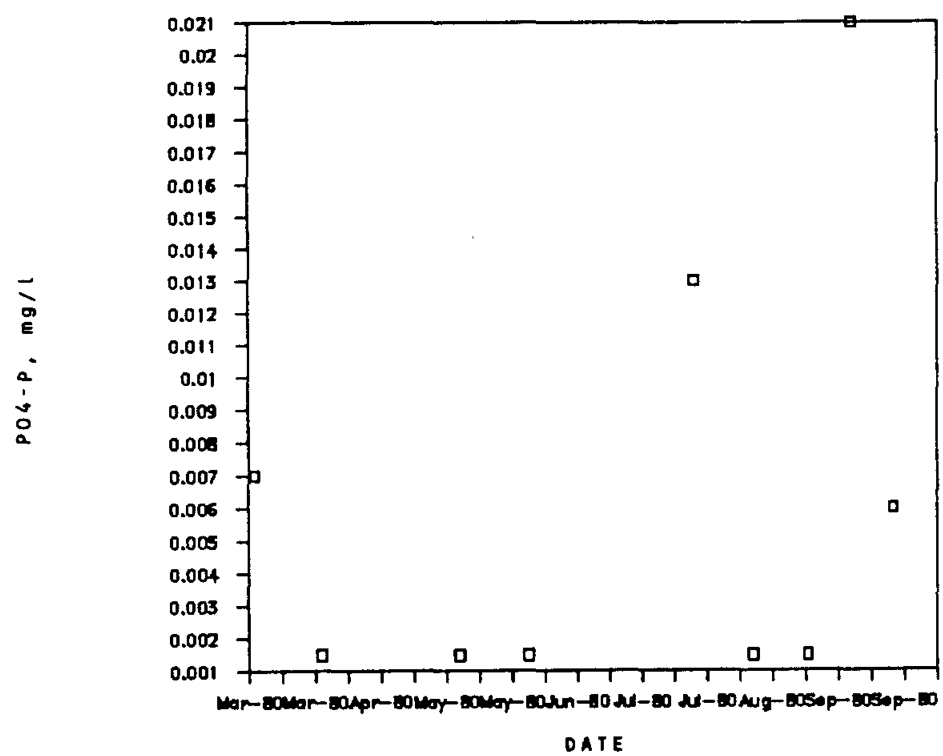
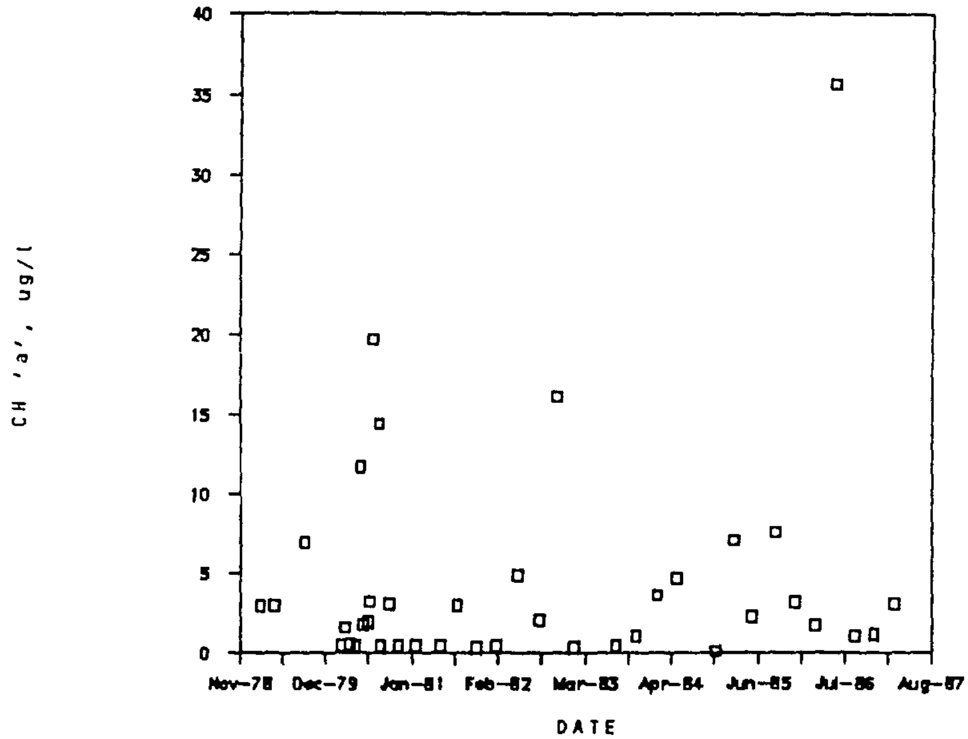


FIGURE A-42

Plot of Historical Water Quality Data
Below Lake Belton Dam in the Leon River
(continued)



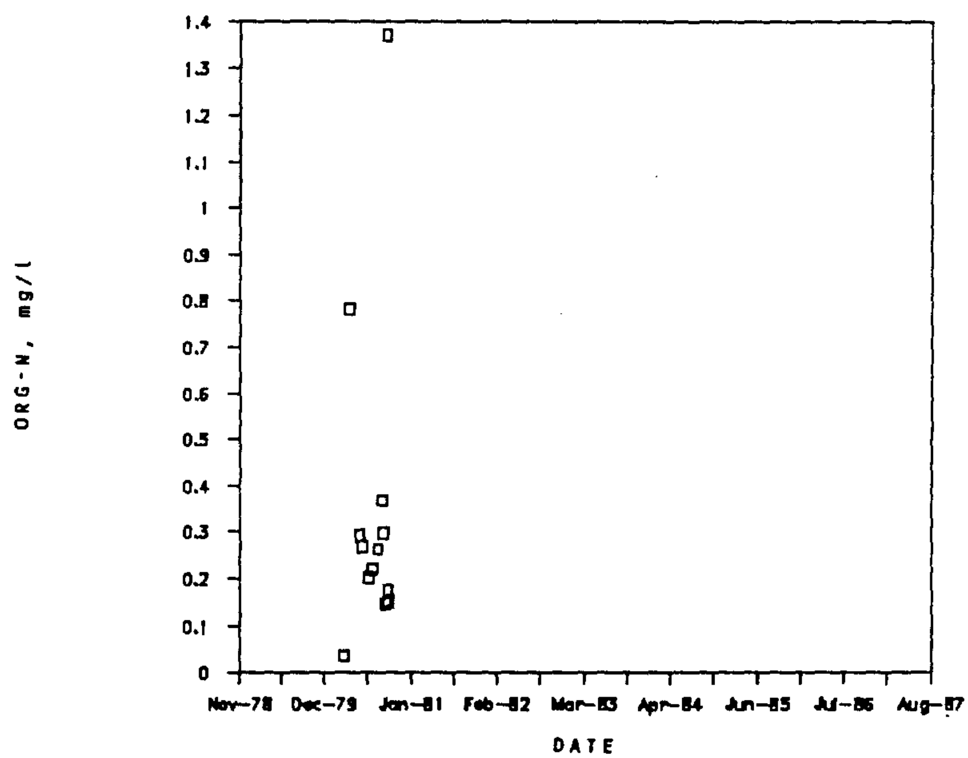
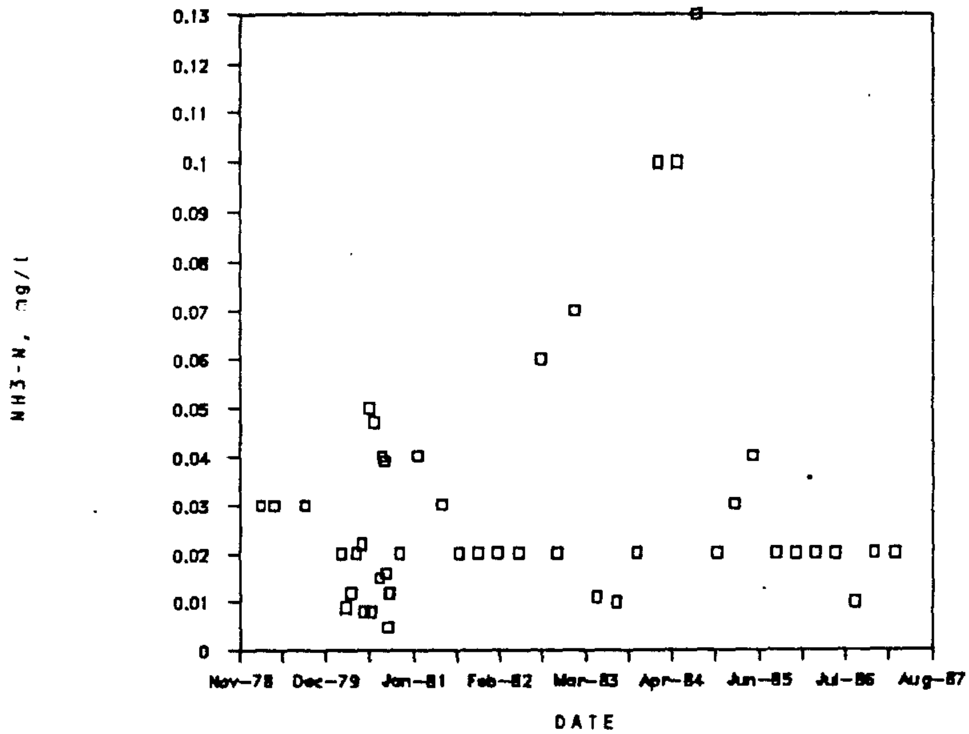


FIGURE A-43

Plot of Historical Water Quality Data
Near the Headwater of Lake Stillhouse in the Lampasas River



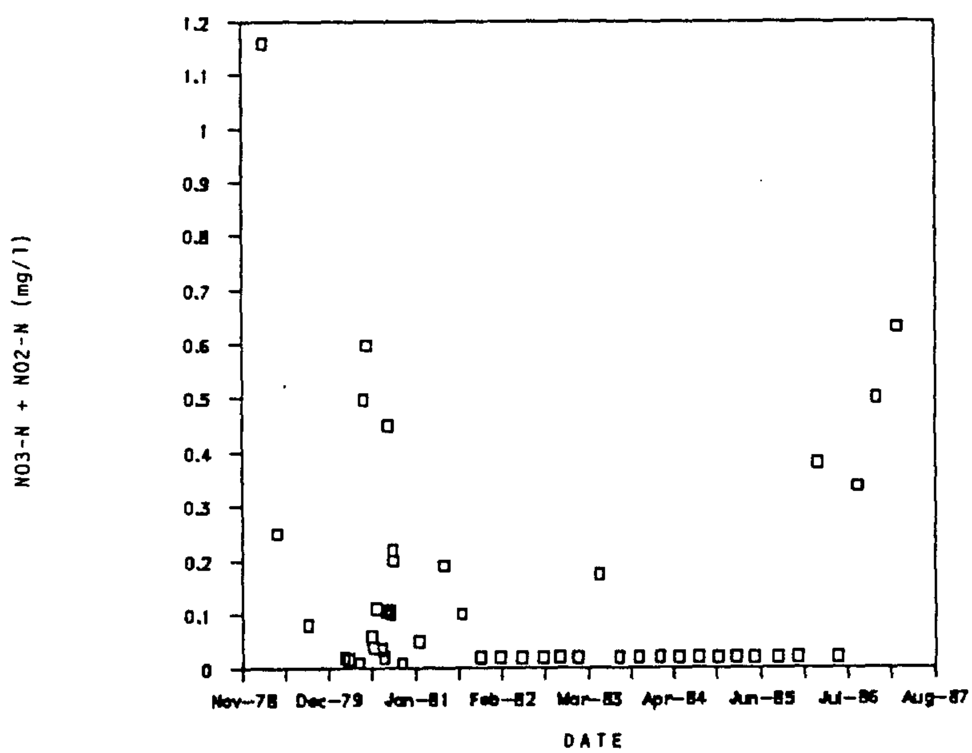
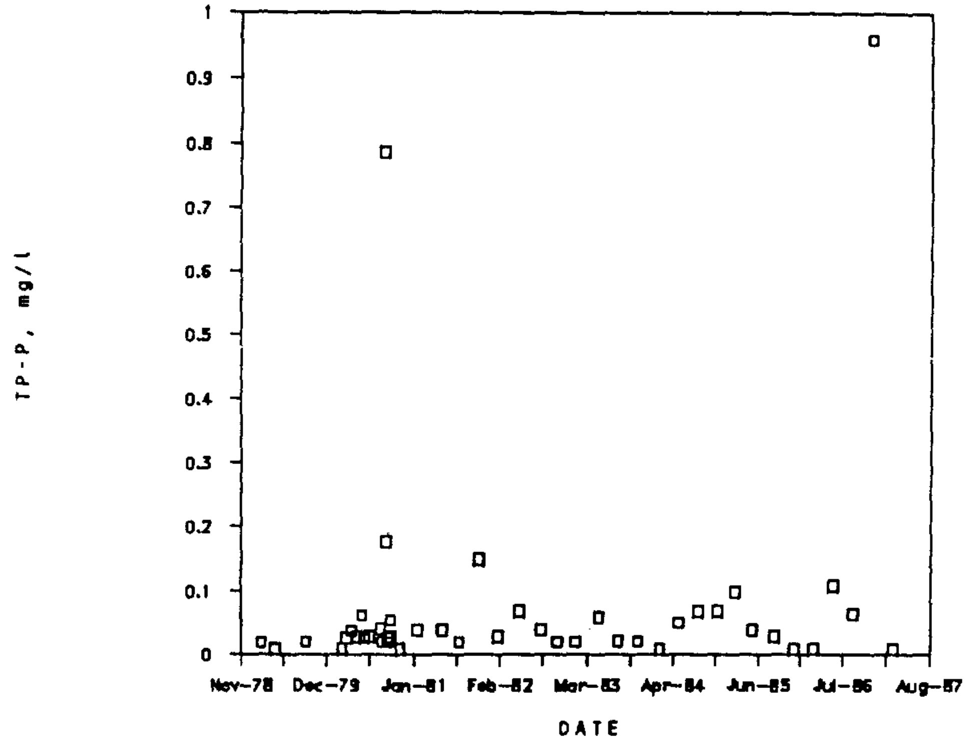


FIGURE A-43

Plot of Historical Water Quality Data
Near the Headwater of Lake Stillhouse in the Lampasas River
(continued)



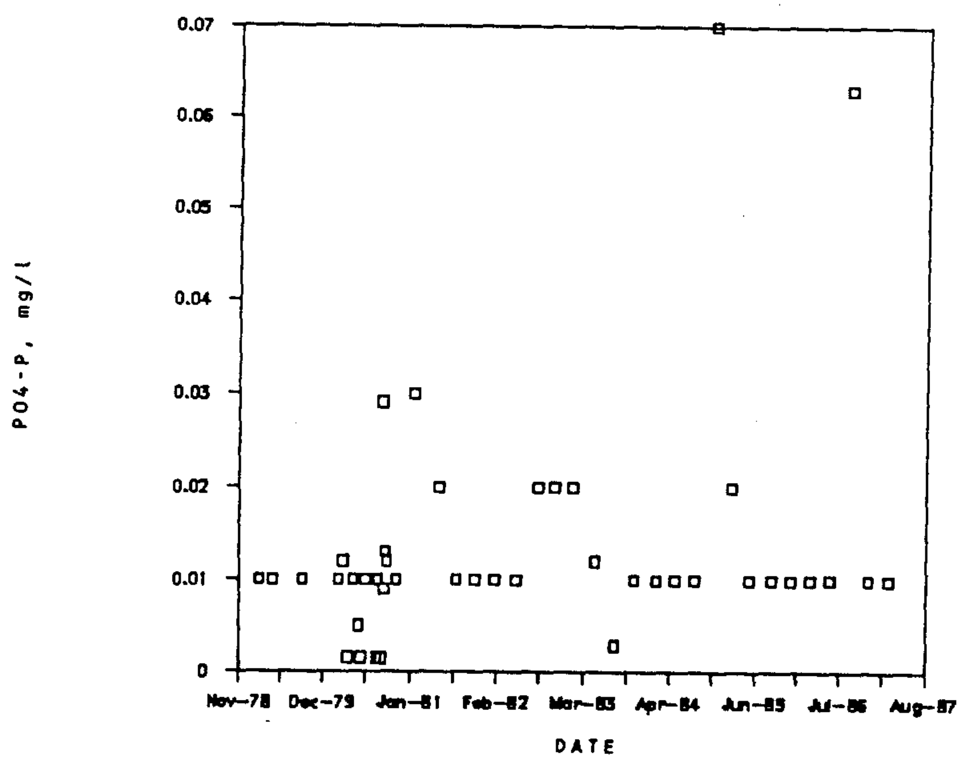


FIGURE A-43

Plot of Historical Water Quality Data
Near the Headwater of Lake Stillhouse in the Lampasas River
(continued)

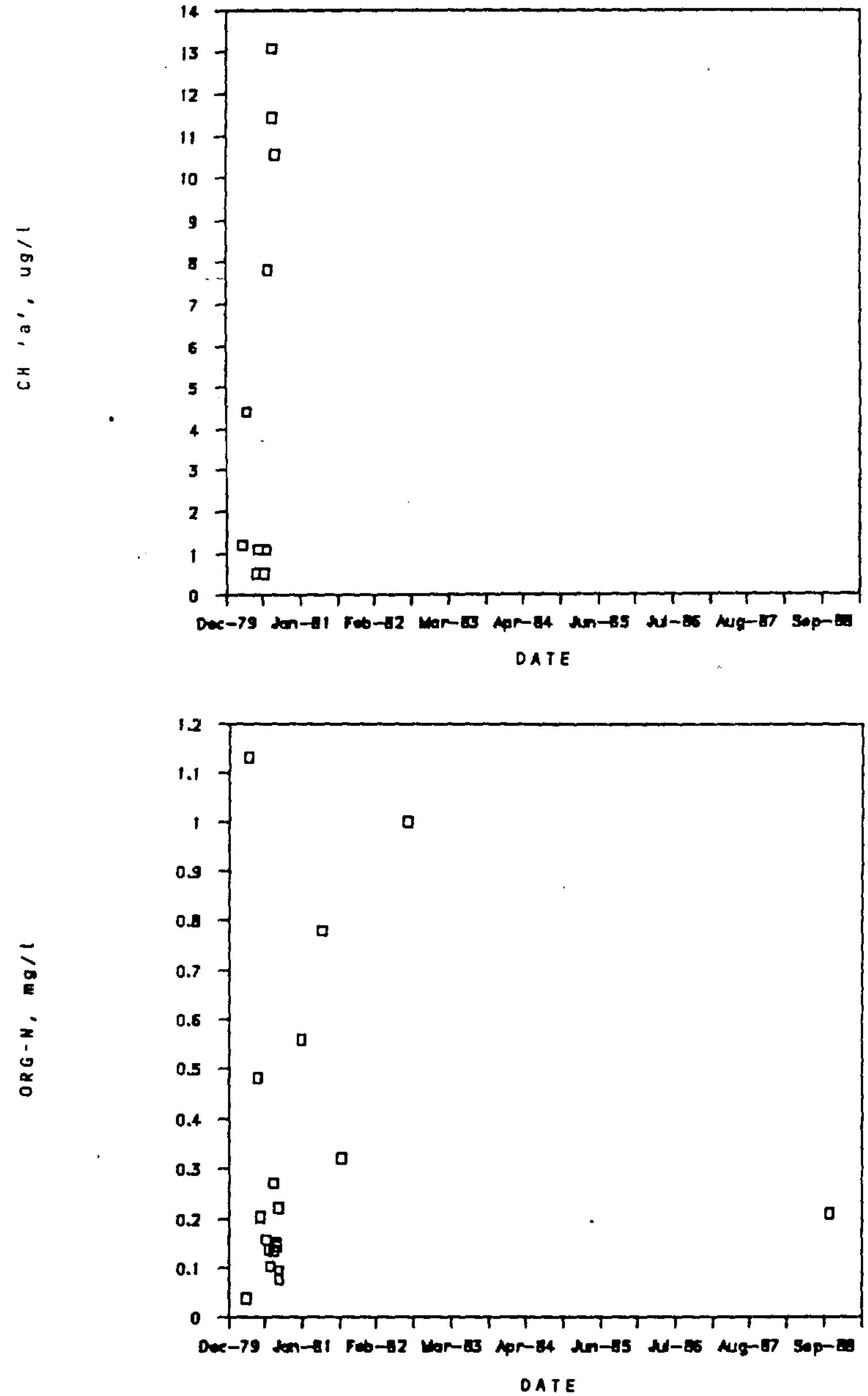


FIGURE A-44

Plot of Historical Water Quality Data
Below the Lake Stillhouse Hollow Dam in the Lampasas River

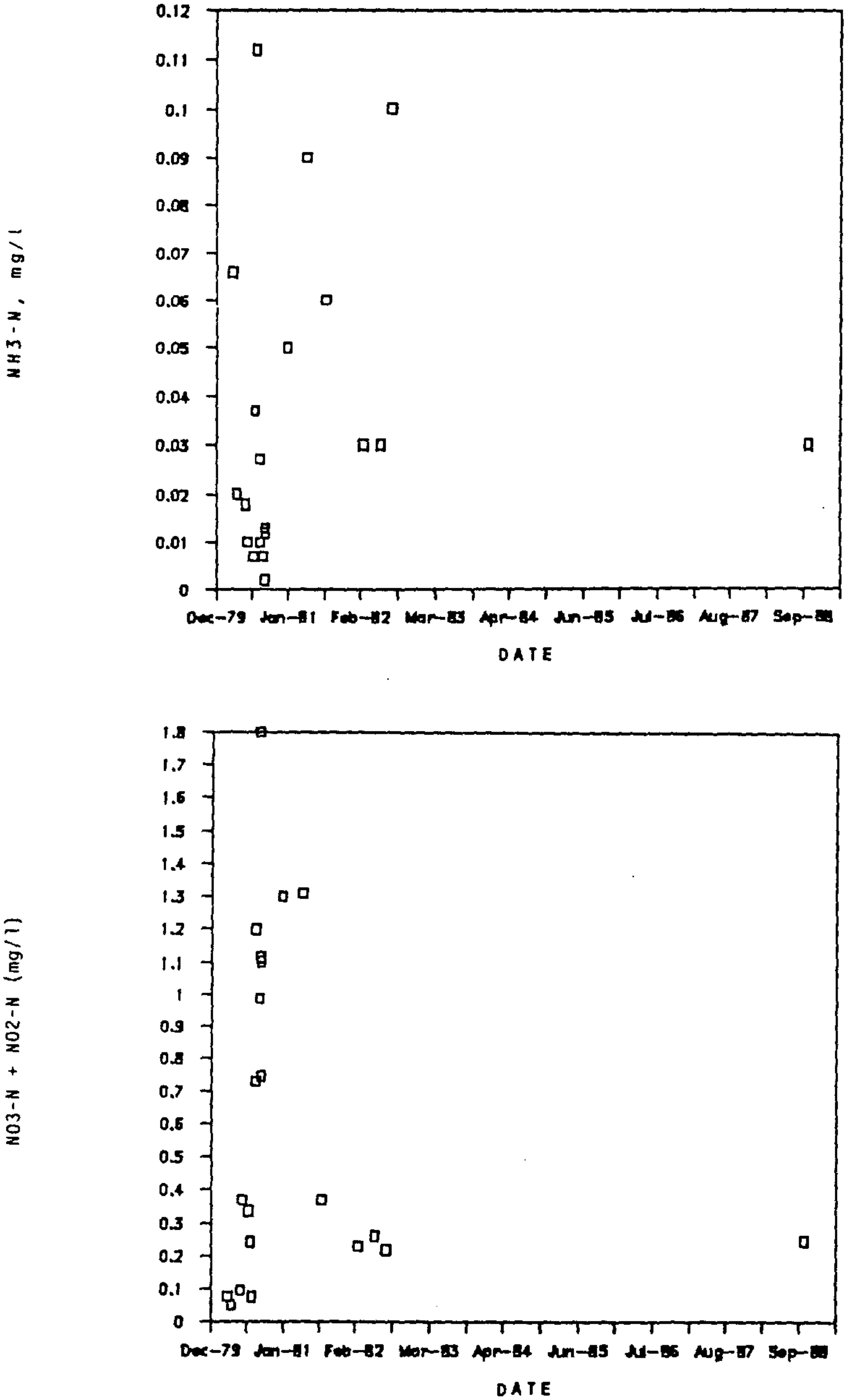
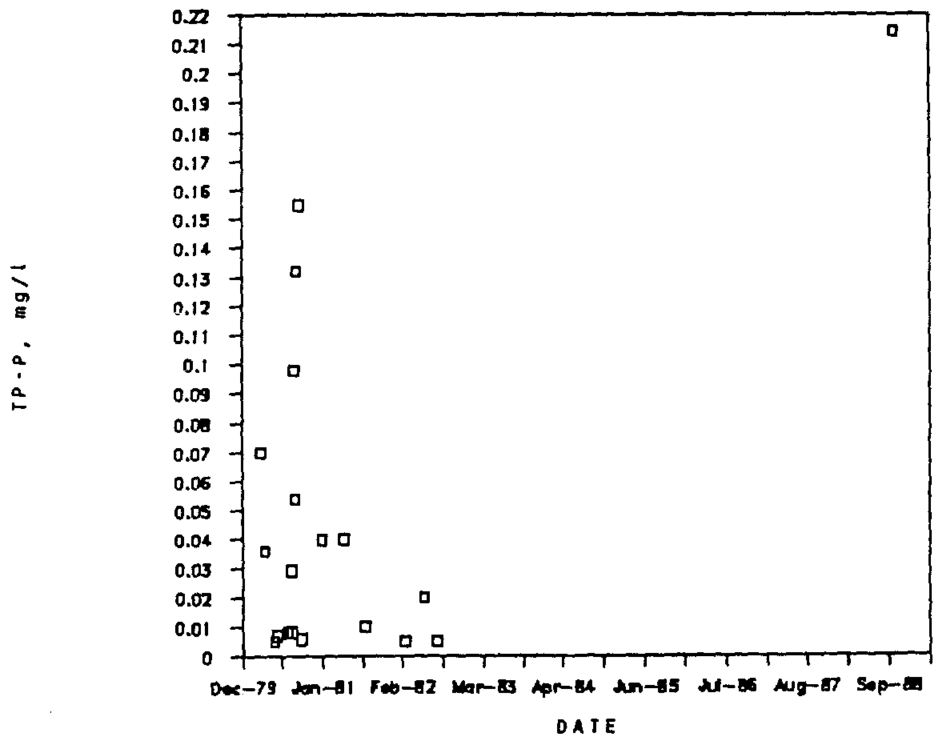


FIGURE A-44

Plot of Historical Water Quality Data
Below the Lake Stillhouse Hollow Dam in the Lampasas River
(continued)



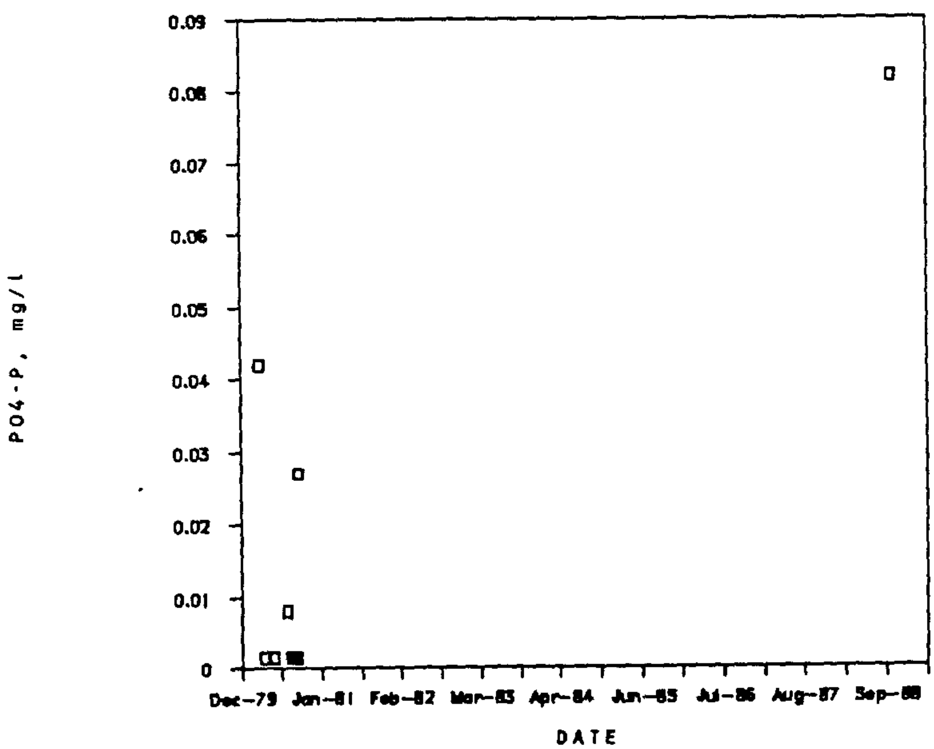


FIGURE A-44

Plot of Historical Water Quality Data
Below the Lake Stillhouse Hollow Dam in the Lampasas River
(continued)

```
CNTROL01      LEON RIVER FROM GATESVILLE TO BELTON RESERVOIR
CNTROL02      CALIBRATION DATA SET
CNTROL03 YES ECHO DATA INPUT
CNTROL04  NO INTERMEDIATE SUMMARY
CNTROL05  NO CAPSULE SUMMARY
CNTROL06 YES FINAL REPORT
CNTROL07  NO LOADING SUMMARY
CNTROL08  NO SPECIAL REPORT
CNTROL09  NO LINE PRINTER PLOTS
CNTROL10  NO GRAPHICS CAPABILITY
CNTROL11  NO SEQUENCING OUTPUT
CNTROL12 YES METRIC UNITS
CNTROL13 YES OXYGEN DEPENDENT RATES
CNTROL14  NO SENSITIVITY ANALYSIS
CNTROL15  NO FLOW AUGMENTATION
ENDATA01
MODOPT01  NO TEMPERATURE
MODOPT02  NO SALINITY
MODOPT03  NO CONSERVATIVE MATERIAL  I =
MODOPT04  NO CONSERVATIVE MATERIAL II =
MODOPT05 YES DISSOLVED OXYGEN
MODOPT06 YES BIOCHEMICAL OXYGEN DEMAND
MODOPT07 YES NITROGEN
MODOPT08  NO PHOSPHORUS
MODOPT09  NO CHLOROPHYLL A
MODOPT10  NO MACROPHYTES
MODOPT11  NO COLIFORM
MODOPT12  NO NONCONSERVATIVE MATERIAL =
ENDATA02
PROGRAM  BOD OXYGEN UPTAKE RATE                  =  2.33
PROGRAM  N PREFERENCE                            =  .20
PROGRAM  N ALGAE UPTAKE                          =  .04
PROGRAM  N MACROPHYTE UPTAKE                     =  .04
ENDATA03
ENDATA04
ENDATA05
ENDATA06
ENDATA07
REACH ID     1  LR U.S. 84 TO GATESVILLE WWTP       78.5      75.0      0.5
REACH ID     2  LR WWTP TO +3 MILES                 75.0      72.0      0.5
REACH ID     3  LR +3 MILES TO U.S 36               72.0      60.0      0.5
REACH ID     4  LR U.S. 36 TO COUNTY ROAD           60.0      46.0      0.5
REACH ID     5  LR COUNTY ROAD TO NE LEON JUNCTION  46.0      24.5      0.5
REACH ID     6  LR NE LEON JUNCTION TO COUNTY ROAD  24.5      17.5      0.5
REACH ID     7  PB OGLESBY TO LEON RIVER            8.0       0.0       0.5
REACH ID     8  LR COUNTY ROAD TO HWY 236           17.5      0.0       0.5
ENDATA08
HYDR-1       1  0.496     0.400     0.472     0.500     0.0       0.035
HYDR-1       2  0.496     0.400     0.472     0.500     0.0       0.035
HYDR-1       3  0.496     0.400     0.472     0.500     0.0       0.035
HYDR-1       4  0.496     0.400     0.472     0.500     0.0       0.035
HYDR-1       5  0.496     0.400     0.472     0.500     0.0       0.035
HYDR-1       6  0.496     0.400     0.472     0.500     0.0       0.035
HYDR-1       7  0.496     0.400     0.472     0.500     0.0       0.035
HYDR-1       8  0.496     0.400     0.472     0.500     0.0       0.035
ENDATA09
ENDATA10
INITIAL      1  18.0     0.0     8.03     0.06     0.4     0.0     10.0     10.0
INITIAL      2  18.0     0.0     7.0      0.3      0.1     0.0     10.0     30.0
INITIAL      3  18.0     0.0     7.0      0.3      0.1     0.0     10.0     20.0
```

FIGURE A-45

CALIBRATION MODEL DATA SET FOR THE
LEON RIVER ABOVE LAKE BELTON

```
INITIAL     4  18.0     0.0      7.0      0.3      0.1      0.0       10.0     10.0
INITIAL     5  18.0     0.0      7.0      0.3      0.1      0.0       10.0     10.0
INITIAL     6  18.0     0.0      7.0      0.3      0.1      0.0       10.0     10.0
INITIAL     7  18.0     0.0      7.0      0.3      0.1      0.0       10.0     10.0
INITIAL     8  18.0     0.0      7.0      0.3      0.1      0.0       10.0     10.0
ENDATA11
COEF-1      1  11.0 0.0    0.0    0.0    0.5     0.10    0.1     1.0     0.1
COEF-1      2  11.0 0.0    0.0    0.0    2.0     0.10    1.0     1.0     0.1
COEF-1      3  11.0 0.0    0.0    0.0    0.5     0.10    0.5     1.0     0.1
COEF-1      4  11.0 0.0    0.0    0.0    0.5     0.10    0.1     1.0     0.1
COEF-1      5  11.0 0.0    0.0    0.0    0.5     0.10    0.1     1.0     0.1
COEF-1      6  11.0 0.0    0.0    0.0    0.5     0.10    0.1     1.0     0.1
COEF-1      7  11.0 0.0    0.0    0.0    0.5     0.10    0.1     1.0     0.1
COEF-1      8  11.0 0.0    0.0    0.0    0.5     0.10    0.1     1.0     0.1
ENDATA12
COEF-2      1  0.03    0.2     0.0     0.30    0.0     0.0     0.1
COEF-2      2  0.05    3.0     0.0     0.30    0.0     0.0     0.1
COEF-2      3  0.03    1.0     0.0     0.30    0.0     0.0     0.1
COEF-2      4  0.03    0.2     0.0     0.30    0.0     0.0     0.1
COEF-2      5  0.03    0.2     0.0     0.30    0.0     0.0     0.1
COEF-2      6  0.03    0.2     0.0     0.30    0.0     0.0     0.1
COEF-2      7  0.03    0.2     0.0     0.30    0.0     0.0     0.1
COEF-2      8  0.03    0.2     0.0     0.30    0.0     0.0     0.1
ENDATA13
ENDATA14
ENDATA15
ENDATA16
ENDATA17
ENDATA18
ENDATA19
HDWTR-1     1  LEON RIVER                 0.607    18.0     0.0      0.0      0.0
HDWTR-1   123  PEW BRANCH                 0.00283  18.0     0.0      0.0      0.0
ENDATA20
HDWTR-2     1  8.0       1.5       0.13      0.06      0.40
HDWTR-2   123  8.0       1.0       0.2       0.01      0.1
ENDATA21
ENDATA22
JUNCTION  139  122  PEW BRANCH
ENDATA23
WSTLD-1     8  GATESVILLE            0.0482   24.57    0.0      0.0      0.0
WSTLD-1   124  OGLESBY               0.0011   24.5     0.0      0.0      0.0
ENDATA24
WSTLD-2     8  6.92      23.2         9.78      7.60           4.77
WSTLD-2   124  2.0       20.0         2.0       15.0           3.0
ENDATA25
ENDATA26
ENDATA27
ENDATA28
ENDATA29
ENDATA30
```

FIGURE A-45

CALIBRATION MODEL DATA SET FOR THE
LEON RIVER ABOVE LAKE BELTON
(CONTINUED)

```
CNTROL01      LEON RIVER BELOW LAKE BELTON
CNTROL02      CALIBRATION SET DATA  5/20/87
CNTROL03 YES ECHO DATA INPUT
CNTROL04  NO INTERMEDIATE SUMMARY
CNTROL05  NO CAPSULE SUMMARY
CNTROL06 YES FINAL REPORT
CNTROL07  NO LOADING SUMMARY
CNTROL08 YES SPECIAL REPORT
CNTROL09  NO LINE PRINTER PLOTS
CNTROL10  NO GRAPHICS CAPABILITY
CNTROL11  NO SEQUENCING OUTPUT
CNTROL12 YES METRIC UNITS
CNTROL13 YES OXYGEN DEPENDENT RATES
CNTROL14  NO SENSITIVITY ANALYSIS
CNTROL15  NO FLOW AUGMENTATION
ENDATA01
MODOPT01  NO TEMPERATURE
MODOPT02  NO SALINITY
MODOPT03  NO CONSERVATIVE MATERIAL  I =                          IN
MODOPT04  NO CONSERVATIVE MATERIAL II =                          IN
MODOPT05 YES DISSOLVED OXYGEN
MODOPT06 YES BIOCHEMICAL OXYGEN DEMAND
MODOPT07 YES NITROGEN
MODOPT08  NO PHOSPHORUS
MODOPT09  NO CHLOROPHYLL A
MODOPT10  NO MACROPHYTES
MODOPT11  NO COLIFORM
MODOPT12  NO NONCONSERVATIVE MATERIAL =                          IN
ENDATA02
PROGRAM  BOD OXYGEN UPTAKE RATE (MG O/MG)    =   2.3
PROGRAM  N MACROPHYTE UPTAKE                 =   0.02
PROGRAM  N PREFERENCE                        =   0.0
ENDATA03
ENDATA04
ENDATA05
ENDATA06
ENDATA07
REACH ID    1  LR BELTON LAKE DAM TO HWY 817      27.0      21.0      0.5
REACH ID    2  LR H817 TO PEPPER CREEK            21.0      17.5      0.5
REACH ID    3  PC PEPPER CREEK                     0.1       0.0      0.1
REACH ID    4  LR PEPPER CREEK TO BIRD CREEK      17.5      16.0      0.5
REACH ID    5  BC BIRD CREEK                       0.1       0.0      0.1
REACH ID    6  LR BIRD CREEK TO NOLAN CREEK       16.0      13.0      0.5
REACH ID    7  NC NOLAN CREEK                      0.1       0.0      0.1
REACH ID    8  LR NOLAN CREEK TO FRYERS CREEK     13.0      5.0       0.5
REACH ID    9  FC FRYERS CREEK                    0.1       0.0       0.1
REACH ID   10  LR FRYERS CREEK TO LITTLE RIVER    5.0       0.0       0.5
ENDATA08
HYDR-1      1  .3583     0.214     0.2397    0.401     0.0       .035
HYDR-1      2  .1167     0.4       0.517     0.5       0.0       .035
HYDR-1      3  .1167     0.4       0.517     0.5       0.0       .035
HYDR-1      4  .1167     0.4       0.517     0.5       0.0       .035
HYDR-1      5  .1167     0.4       0.517     0.5       0.0       .035
HYDR-1      6  .1167     0.4       0.517     0.5       0.0       .035
HYDR-1      7  .1167     0.4       0.5172    0.5       0.0       .035
HYDR-1      8  .1167     0.4       0.5172    0.5       0.0       .035
HYDR-1      9  .1167     0.4       0.5172    0.5       0.0       .035
HYDR-1     10  .0772     0.4       1.4407    0.5       0.0       .035
ENDATA09
ENDATA10
```

FIGURE A-46

CALIBRATION MODEL DATA SET FOR THE
LEON RIVER BELOW LAKE BELTON

```
INITIAL     1  23.1    0.0     7.2     0.3     0.1     0.0     2.0     5.0
INITIAL     2  23.1    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL     3  23.1    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL     4  23.1    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL     5  23.1    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL     6  23.1    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL     7  23.1    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL     8  23.1    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL     9  23.1    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL    10  23.1    0.0     7.0     0.3     0.1     0.0     2.0     5.0
ENDATA11
COEF-1      1  11.0 0.0   0.0    0.0    1.0    0.2    0.1    1.0    0.1
COEF-1      2  11.0 0.0   0.0    0.0    1.0    0.2    0.1    1.0    0.1
COEF-1      3  11.0 0.0   0.0    0.0    1.0    0.2    0.1    1.0    0.1
COEF-1      4  11.0 0.0   0.0    0.0    1.0    0.2    0.1    1.0    0.1
COEF-1      5  11.0 0.0   0.0    0.0    1.0    0.2    0.1    1.0    0.1
COEF-1      6  11.0 0.0   0.0    0.0    1.0    0.2    0.1    1.0    0.1
COEF-1      7  11.0 0.0   0.0    0.0    1.5    0.3    0.1    1.0    0.1
COEF-1      8  11.0 0.0   0.0    0.0    2.5    0.3    0.1    1.0    0.1
COEF-1      9  11.0 0.0   0.0    0.0    2.0    0.3    0.1    1.0    0.1
COEF-1     10  11.0 0.0   0.0    0.0    2.0    0.3    0.1    1.0    0.1
ENDATA12
COEF-2      1  0.05   0.1    0.02   0.3    0.0    0.0    0.1
COEF-2      2  0.05   0.1    0.02   0.3    0.0    0.0    0.1
COEF-2      3  0.05   0.1    0.02   0.3    0.0    0.0    0.1
COEF-2      4  0.05   0.1    0.02   0.3    0.0    0.0    0.1
COEF-2      5  0.05   0.1    0.02   0.3    0.0    0.0    0.1
COEF-2      6  0.05   0.1    0.02   0.3    0.0    0.0    0.1
COEF-2      7  0.05   0.1    0.02   0.5    0.0    0.0    0.1
COEF-2      8  0.05   0.1    0.02   0.5    0.0    0.0    0.1
COEF-2      9  0.05   0.1    0.02   0.5    0.0    0.0    0.1
COEF-2     10  0.05   0.1    0.02   0.5    0.0    0.0    0.1
ENDATA13
ENDATA14
ENDATA15
ENDATA16
ENDATA17
ENDATA18
ENDATA19
HDWTR-1     1  LEON RIVER          0.0 0.515   22.2    0.0     0.0     0.0
HDWTR-1    20  PEPPER CREEK        0.0 0.014   21.6    0.0     0.0     0.0
HDWTR-1    24  BIRD CREEK          0.0 0.062   20.7    0.0     0.0     0.0
HDWTR-1    31  NOLAN CREEK         0.0 1.541   21.9    0.0     0.0     0.0
HDWTR-1    48  FRYERS CREEK        0.0 1.478   20.6    0.0     0.0     0.0
ENDATA20
HDWTR-2     1  7.725    0.50    0.47    0.030   0.86
HDWTR-2    20  6.2      1.0     0.79    0.21    1.87
HDWTR-2    24  6.6      2.0     0.89    0.01    0.52
HDWTR-2    31  6.9      1.0     0.85    1.45    2.01
HDWTR-2    48  7.2      5.0     0.29    0.01    1.71
ENDATA21
ENDATA22
JUNCTION  21   19  SALT AND PEPPER CREEK
JUNCTION  25   23  BIRD IS A WORD CREEK
JUNCTION  32   30  NOLAN DON'T DRINK THE WATER CREEK
JUNCTION  49   47  FRYERS AND LAYERS CREEK
ENDATA23
ENDATA24
ENDATA25
ENDATA26
ENDATA27
ENDATA28
ENDATA29
ENDATA30
```

FIGURE A-46

CALIBRATION MODEL DATA SET FOR THE
LEON RIVER BELOW LAKE BELTON
(CONTINUED)

```
CNTROL01     LAMPASAS RIVER ABOVE STILLHOUSE HOLLOW RESERVOIR
CNTROL02     CALIBRATION SET DATA - SULPHUR CREEK
CNTROL03 YES ECHO DATA INPUT
CNTROL04  NO INTERMEDIATE SUMMARY
CNTROL05  NO CAPSULE SUMMARY
CNTROL06 YES FINAL REPORT
CNTROL07  NO LOADING SUMMARY
CNTROL08 YES SPECIAL REPORT
CNTROL09  NO LINE PRINTER PLOTS
CNTROL10  NO GRAPHICS CAPABILITY
CNTROL11  NO SEQUENCING OUTPUT
CNTROL12 YES METRIC UNITS
CNTROL13 YES OXYGEN DEPENDENT RATES
CNTROL14  NO SENSITIVITY ANALYSIS
CNTROL15  NO FLOW AUGMENTATION
ENDATA01
MODOPT01  NO TEMPERATURE
MODOPT02  NO SALINITY
MODOPT03  NO CONSERVATIVE MATERIAL  I =                                 IN
MODOPT04  NO CONSERVATIVE MATERIAL II =                                 IN
MODOPT05 YES DISSOLVED OXYGEN
MODOPT06 YES BIOCHEMICAL OXYGEN DEMAND
MODOPT07 YES NITROGEN
MODOPT08  NO PHOSPHORUS
MODOPT09  NO CHLOROPHYLL A
MODOPT10  NO MACROPHYTES
MODOPT11  NO COLIFORM
MODOPT12  NO NONCONSERVATIVE MATERIAL =                                 IN
ENDATA02
PROGRAM  BOD OXYGEN UPTAKE RATE (MG O/MG)    =   2.3
PROGRAM  N PREFERENCE                        =   .75
PROGRAM  N MACROPHYTES                       =   0.08
ENDATA03
ENDATA04
ENDATA05
ENDATA06
ENDATA07
REACH ID    1  LR ABOVE SULPHUR CR TO SULPHUR CR  61.0       60.5       0.5
REACH ID    2  SC 257 BRIDGE TO SPARKS XING       24.0       18.5       0.5
REACH ID    3  SC SPARKS TO BLUE CUT FORD         18.5       14.5       0.5
REACH ID    4  SC BLUE CUT TO DEADMAN'S CUT       14.5       8.5        0.5
REACH ID    5  SC DEADMAN'S TO MOUTH              8.5        0.0        0.5
REACH ID    6  LR SULPHUR TO BURNETT CO. LINE     60.5       50.5       0.5
REACH ID    7  LR BURNETT CO. LINE TO ROCKY CREEK 50.5       39.0       0.5
REACH ID    8  RC ROCKY CREEK                     0.5        0.0        0.5
REACH ID    9  LR ROCKY CREEK TO CLEAR CREEK      39.0       31.5       0.5
REACH ID   10  CC FM 3046 TO BELL CO.             13.0       10.0       0.5
REACH ID   11  CC BELL CO. TO BOYS RANCH ROAD     10.0       6.0        0.5
REACH ID   12  CC BOYS RANCH ROAD TO MOUTH        6.0        0.0        0.5
REACH ID   13  LR CLEAR CREEK TO DING DONG        31.5       14.5       0.5
REACH ID   14  LR DING DONG TO STILLHOUSE RES.    14.5       0.0        0.5
ENDATA08
HYDR-1      1  0.492      0.307      0.201      0.425      0.1        0.035
HYDR-1      2  0.281      0.500      0.292      0.401      0.1        0.035
HYDR-1      3  0.281      0.500      0.292      0.401      0.1        0.035
HYDR-1      4  0.281      0.500      0.292      0.401      0.1        0.035
HYDR-1      5  0.281      0.500      0.292      0.401      0.1        0.035
HYDR-1      6  0.492      0.307      0.201      0.425      0.1        0.035
HYDR-1      7  0.492      0.307      0.201      0.425      0.1        0.035
HYDR-1      8  0.311      0.4        0.132      0.6        0.1        0.035
```

FIGURE A-47

CALIBRATION MODEL DATA SET FOR SULPHUR CREEK

```
HYDR-1      9  0.492     0.307     0.201     0.425     0.1       0.035
HYDR-1     10  0.211     0.346     0.116     0.040     0.1       0.035
HYDR-1     11  0.211     0.346     0.116     0.040     0.1       0.035
HYDR-1     12  0.211     0.346     0.116     0.040     0.1       0.035
HYDR-1     13  0.230     0.302     0.352     0.389     0.1       0.035
HYDR-1     14  0.230     0.302     0.352     0.389     0.1       0.035
ENDATA09
ENDATA10
INITIAL     1  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL     2  21.3    0.0     8.3     0.24    0.1     0.0     2.0     5.0
INITIAL     3  21.3    0.0     8.7     0.4     1.0     0.0     2.0     5.0
INITIAL     4  21.3    0.0     8.4     0.14    0.62    0.0     2.0     7.0
INITIAL     5  21.3    0.0     10.1    0.13    0.43    0.0     2.0     7.0
INITIAL     6  21.3    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL     7  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL     8  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL     9  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL    10  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL    11  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL    12  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL    13  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL    14  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
ENDATA11
COEF-1      1  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1      2  11.0 0.0   0.0   0.0   1.3    0.1    0.1    1.0    0.1
COEF-1      3  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1      4  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1      5  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1      6  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1      7  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1      8  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1      9  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1     10  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1     11  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1     12  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1     13  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1     14  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
ENDATA12
COEF-2      1  0.5    0.1    1.0    0.1    0.0    0.0    0.1
COEF-2      2  0.1    0.40   .01    0.3    0.0    0.0    0.1
COEF-2      3  0.1    0.10   .01    0.3    0.0    0.0    0.1
COEF-2      4  0.1    0.10   .01    0.3    0.0    0.0    0.1
COEF-2      5  0.1    0.10   .01    0.3    0.0    0.0    0.1
COEF-2      6  0.5    0.1    1.0    0.1    0.0    0.0    0.1
COEF-2      7  0.5    0.1    1.0    0.1    0.0    0.0    0.1
COEF-2      8  0.5    0.1    1.0    0.1    0.0    0.0    0.1
COEF-2      9  0.5    0.1    1.0    0.1    0.0    0.0    0.1
COEF-2     10  0.5    0.1    1.0    0.1    0.0    0.0    0.1
COEF-2     11  0.5    0.1    1.0    0.1    0.0    0.0    0.1
COEF-2     12  0.5    0.1    1.0    0.1    0.0    0.0    0.1
COEF-2     13  0.5    0.1    1.0    0.1    0.0    0.0    0.1
COEF-2     14  0.5    0.1    1.0    0.1    0.0    0.0    0.1
ENDATA13
ENDATA14
ENDATA15
ENDATA16
ENDATA17
ENDATA18
ENDATA19
HDWTR-1     1  LAMPASAS RIVER     0.0 0.357   18.0    0.0     0.0     0.0
```

FIGURE A-47

CALIBRATION MODEL DATA SET FOR SULPHUR CREEK
(CONTINUED)

```
HDWTR-1      2  SULPHUR CREEK            0.0 0.490    20.3     0.0      0.0      0.0
HDWTR-1     93  ROCKY CREEK              0.0 0.01720 18.0      0.0      0.0      0.0
HDWTR-1    109  CLEAR CREEK              0.0 0.00283 18.0      0.0      0.0      0.0
ENDATA20
HDWTR-2      1  8.79      1.3       0.10      0.03      0.808
HDWTR-2      2  8.31      1.3       0.61      0.24      0.064
HDWTR-2     93  8.19      1.4       0.09      0.03      0.05
HDWTR-2    109  8.2       1.0       0.2       0.01      0.1
ENDATA21
ENDATA22
JUNCTION    50    1  SULPHUR CREEK
JUNCTION    94   92  ROCKY CREEK
JUNCTION   135  108  CLEAR CREEK
ENDATA23
WSTLD-1      2  LAMPASAS-HENDERSON   0.0154    23.92     0.0       0.0       0.0
WSTLD-1      3  LAMPASAS-SULPHUR     0.0125    22.78     0.0       0.0       0.0
WSTLD-1    111  COPPERAS COVE-SOUTH  0.0438    24.5      0.0       0.0       0.0
ENDATA24
WSTLD-2      2  7.25      3.9           4.77      0.73           18.019
WSTLD-2      3  6.28      16.6          7.46      3.21           6.892
WSTLD-2    111  2.0       20.0          2.0       15.0           3.0
ENDATA25
ENDATA26
ENDATA27
ENDATA28
ENDATA29
ENDATA30
```

FIGURE A-47

CALIBRATION MODEL DATA SET FOR SULPHUR CREEK
(CONTINUED)

```
CNTROL01     LAMPASAS RIVER ABOVE STILLHOUSE HOLLOW RESERVOIR
CNTROL02     CALIBRATION SET DATA - CLEAR CREEK
CNTROL03 YES ECHO DATA INPUT
CNTROL04  NO INTERMEDIATE SUMMARY
CNTROL05  NO CAPSULE SUMMARY
CNTROL06 YES FINAL REPORT
CNTROL07  NO LOADING SUMMARY
CNTROL08 YES SPECIAL REPORT
CNTROL09  NO LINE PRINTER PLOTS
CNTROL10  NO GRAPHICS CAPABILITY
CNTROL11  NO SEQUENCING OUTPUT
CNTROL12 YES METRIC UNITS
CNTROL13 YES OXYGEN DEPENDENT RATES
CNTROL14  NO SENSITIVITY ANALYSIS
CNTROL15  NO FLOW AUGMENTATION
ENDATA01
MODOPT01  NO TEMPERATURE
MODOPT02  NO SALINITY
MODOPT03  NO CONSERVATIVE MATERIAL  I =                                  IN
MODOPT04  NO CONSERVATIVE MATERIAL II =                                  IN
MODOPT05 YES DISSOLVED OXYGEN
MODOPT06 YES BIOCHEMICAL OXYGEN DEMAND
MODOPT07 YES NITROGEN
MODOPT08  NO PHOSPHORUS
MODOPT09  NO CHLOROPHYLL A
MODOPT10  NO MACROPHYTES
MODOPT11  NO COLIFORM
MODOPT12  NO NONCONSERVATIVE MATERIAL =                                  IN
ENDATA02
PROGRAM  N PREFERENCE                          = 0.99
PROGRAM  BOD OXYGEN UPTAKE RATE (MG O/MG)      = 2.3
PROGRAM  N MACROPHYTE UPTAKE                   = 0.08
ENDATA03
ENDATA04
ENDATA05
ENDATA06
ENDATA07
REACH ID    1  LR ABOVE SULPHUR CR TO SULPHUR CR  61.0      60.5      0.5
REACH ID    2  SC 257 BRIDGE TO SPARKS XING       24.0      18.5      0.5
REACH ID    3  SC SPARKS TO BLUE CUT FORD         18.5      14.5      0.5
REACH ID    4  SC BLUE CUT TO DEADMAN'S CUT       14.5      8.5       0.5
REACH ID    5  SC DEADMAN'S TO MOUTH              8.5       0.0       0.5
REACH ID    6  LR SULPHUR TO BURNETT CO. LINE     60.5      50.5      0.5
REACH ID    7  LR BURNETT CO. LINE TO ROCKY CREEK 50.5      39.0      0.5
REACH ID    8  RC ROCKY CREEK                     0.5       0.0       0.5
REACH ID    9  LR ROCKY CREEK TO CLEAR CREEK      39.0      31.5      0.5
REACH ID   10  CC FM 3046 TO BELL CO.             13.0      10.0      0.5
REACH ID   11  CC BELL CO. TO BOYS RANCH ROAD     10.0      6.0       0.5
REACH ID   12  CC BOYS RANCH ROAD TO MOUTH        6.0       0.0       0.5
REACH ID   13  LR CLEAR CREEK TO DING DONG        31.5      14.5      0.5
REACH ID   14  LR DING DONG TO STILLHOUSE RES.    14.5      0.0       0.5
ENDATA08
HYDR-1      1  0.492     0.307     0.201     0.425     0.1      0.035
HYDR-1      2  0.281     0.500     0.292     0.401     0.1      0.035
HYDR-1      3  0.281     0.500     0.292     0.401     0.1      0.035
HYDR-1      4  0.281     0.500     0.292     0.401     0.1      0.035
HYDR-1      5  0.281     0.500     0.292     0.401     0.1      0.035
HYDR-1      6  0.492     0.307     0.201     0.425     0.1      0.035
HYDR-1      7  0.492     0.307     0.201     0.425     0.1      0.035
HYDR-1      8  0.311     0.4       0.132     0.6       0.1      0.035
```

FIGURE A-48

CALIBRATION MODEL DATA SET FOR CLEAR CREEK

```
HYDR-1       9  0.492      0.307      0.201      0.425      0.1        0.035
HYDR-1      10  0.211      0.346      0.116      0.040      0.1        0.035
HYDR-1      11  0.211      0.346      0.116      0.040      0.1        0.035
HYDR-1      12  0.0878     0.4        2.610      0.500      0.         0.035
HYDR-1      13  0.230      0.302      0.352      0.389      0.1        0.035
HYDR-1      14  0.230      0.302      0.352      0.389      0.1        0.035
ENDATA09
ENDATA10
INITIAL      1  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL      2  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL      3  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL      4  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL      5  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL      6  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL      7  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL      8  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL      9  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL     10  22.4    0.0     8.36    0.0     0.943   0.0     5.0     10.0
INITIAL     11  24.1    0.0     7.0     0.3     0.1     0.0     5.0     50.00
INITIAL     12  24.1    0.0     7.0     0.3     0.1     0.0     5.0     50.00
INITIAL     13  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
INITIAL     14  20.0    0.0     7.0     0.3     0.1     0.0     2.0     5.0
ENDATA11
COEF-1       1  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1       2  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1       3  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1       4  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1       5  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1       6  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1       7  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1       8  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1       9  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1      10  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1      11  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1      12  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1      13  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
COEF-1      14  11.0 0.0   0.0   0.0   0.5    0.1    0.1    1.0    0.1
ENDATA12
COEF-2       1  0.5     0.1     1.0     0.35    0.0     0.0     0.1
COEF-2       2  0.5     0.1     1.0     0.35    0.0     0.0     0.1
COEF-2       3  0.5     0.1     1.0     0.35    0.0     0.0     0.1
COEF-2       4  0.5     0.1     1.0     0.35    0.0     0.0     0.1
COEF-2       5  0.5     0.1     1.0     0.35    0.0     0.0     0.1
COEF-2       6  0.5     0.1     1.0     0.35    0.0     0.0     0.1
COEF-2       7  0.5     0.1     1.0     0.35    0.0     0.0     0.1
COEF-2       8  0.5     0.1     1.0     0.35    0.0     0.0     0.1
COEF-2       9  0.5     0.1     1.0     0.35    0.0     0.0     0.1
COEF-2      10  0.01    0.1     0.020   0.20    0.0     0.0     0.1
COEF-2      11  0.01    0.1     0.020   0.20    0.0     0.0     0.1
COEF-2      12  0.01    0.1     0.040   0.20    0.0     0.0     0.1
COEF-2      13  0.5     0.1     1.0     0.35    0.0     0.0     0.1
COEF-2      14  0.5     0.1     1.0     0.35    0.0     0.0     0.1
ENDATA13
ENDATA14
ENDATA15
ENDATA16
ENDATA17
ENDATA18
ENDATA19
HDWTR-1      1  LAMPASAS RIVER      0.0 0.357   18.0    0.0     0.0     0.0
```

FIGURE A-48

CALIBRATION MODEL DATA SET FOR CLEAR CREEK
(CONTINUED)

```
HDWTR-1     2  SULPHUR CREEK         0.0 0.490   18.0    0.0     0.0     0.0
HDWTR-1    93  ROCKY CREEK           0.0 0.01720 18.0    0.0     0.0     0.0
HDWTR-1   109  CLEAR CREEK           0.0 0.00460 22.4    0.0     0.0     0.0
ENDATA20
HDWTR-2     1  8.79      1.3      0.10      0.03      0.808
HDWTR-2     2  8.31      1.3      0.61      0.24      0.064
HDWTR-2    93  8.19      1.4      0.09      0.03      0.05
HDWTR-2   109  8.36      0.6      0.23      0.00      0.94
ENDATA21
ENDATA22
JUNCTION   50    1  SULPHUR CREEK
JUNCTION   94   92  ROCKY CREEK
JUNCTION  135  108  CLEAR CREEK
ENDATA23
WSTLD-1     2  LAMPASAS-HENDERSON  0.0154   23.92    0.0      0.0      0.0
WSTLD-1     3  LAMPASAS-SULPHUR    0.0125   22.78    0.0      0.0      0.0
WSTLD-1   111  COPPERAS COVE-SOUTH 0.01886  25.97    0.0      0.0      0.0
ENDATA24
WSTLD-2     2  7.25      3.9          4.77      0.73          18.019
WSTLD-2     3  6.28      16.6         7.46      3.21          6.892
WSTLD-2   111  6.95      2.0          4.52      0.05          16.82
ENDATA25
ENDATA26
ENDATA27
ENDATA28
ENDATA29
ENDATA30
```

FIGURE A-48

CALIBRATION MODEL DATA SET FOR CLEAR CREEK
(CONTINUED)

```
CNTROL01      LAMPASAS RIVER ABOVE STILLHOUSE HOLLOW RESERVOIR
CNTROL02      CALIBRATION DATA SET
CNTROL03 YES ECHO DATA INPUT
CNTROL04  NO INTERMEDIATE SUMMARY
CNTROL05  NO CAPSULE SUMMARY
CNTROL06 YES FINAL REPORT
CNTROL07  NO LOADING SUMMARY
CNTROL08 YES SPECIAL REPORT
CNTROL09  NO LINE PRINTER PLOTS
CNTROL10  NO GRAPHICS CAPABILITY
CNTROL11  NO SEQUENCING OUTPUT
CNTROL12 YES METRIC UNITS
CNTROL13 YES OXYGEN DEPENDENT RATES
CNTROL14  NO SENSITIVITY ANALYSIS
CNTROL15  NO FLOW AUGMENTATION
ENDATA01
MODOPT01  NO TEMPERATURE
MODOPT02  NO SALINITY
MODOPT03  NO CONSERVATIVE MATERIAL  I =                            IN
MODOPT04  NO CONSERVATIVE MATERIAL II =                            IN
MODOPT05 YES DISSOLVED OXYGEN
MODOPT06 YES BIOCHEMICAL OXYGEN DEMAND
MODOPT07 YES NITROGEN
MODOPT08  NO PHOSPHORUS
MODOPT09  NO CHLOROPHYLL A
MODOPT10  NO MACROPHYTES
MODOPT11  NO COLIFORM
MODOPT12  NO NONCONSERVATIVE MATERIAL =                            IN
ENDATA02
PROGRAM  N PREFERENCE                          = 0.99
PROGRAM  BOD OXYGEN UPTAKE RATE (MG O/MG)      = 2.3
PROGRAM  N MACROPHYTES                         = 0.08
ENDATA03
ENDATA04
ENDATA05
ENDATA06
ENDATA07
REACH ID    1  LR ABOVE SULPHUR CR TO SULPHUR CR  61.0       60.5       0.5
REACH ID    2  SC DEADMAN'S TO MOUTH              0.5        0.0        0.5
REACH ID    3  LR SULPHUR TO BURNETT CO. LINE     60.5       50.5       0.5
REACH ID    4  LR BURNETT CO. LINE TO ROCKY CREEK 50.5       39.0       0.5
REACH ID    5  RC ROCKY CREEK                     0.5        0.0        0.5
REACH ID    6  LR ROCKY CREEK TO CLEAR CREEK      39.0       31.5       0.5
REACH ID    7  CC BOYS RANCH ROAD TO MOUTH        0.5        0.0        0.5
REACH ID    8  LR CLEAR CREEK TO DING DONG        31.5       14.5       0.5
REACH ID    9  LR DING DONG TO STILLHOUSE RES.    14.5       0.0        0.5
ENDATA08
HYDR-1      1  0.492     0.307     0.201     0.425     0.1       0.035
HYDR-1      2  0.281     0.500     0.292     0.401     0.1       0.035
HYDR-1      3  0.492     0.307     0.201     0.425     0.1       0.035
HYDR-1      4  0.492     0.307     0.201     0.425     0.1       0.035
HYDR-1      5  0.311     0.4       0.132     0.6       0.1       0.035
HYDR-1      6  0.492     0.307     0.201     0.425     0.1       0.035
HYDR-1      7  0.211     0.346     0.116     0.040     0.1       0.035
HYDR-1      8  0.230     0.302     0.352     0.389     0.1       0.035
HYDR-1      9  0.230     0.302     0.352     0.389     0.1       0.035
ENDATA09
ENDATA10
INITIAL     1  21.8    0.0     8.79    0.03    0.808   0.0     2.0     7.0
INITIAL     2  21.3    0.0     10.1    0.13    0.43    0.0     2.0     7.0
```

FIGURE A-49

CALIBRATION MODEL DATA SET FOR THE
LAMPASAS RIVER ABOVE LAKE STILLHOUSE HOLLOW

```
INITIAL      3  21.8     0.0      7.0      0.3      0.1      0.0      2.0      7.0
INITIAL      4  21.8     0.0      7.0      0.3      0.1      0.0      2.0      7.0
INITIAL      5  22.3     0.0      8.19     0.03     0.052    0.0      2.0      7.0
INITIAL      6  21.8     0.0      7.0      0.3      0.1      0.0      2.0      7.0
INITIAL      7  24.1     0.0      7.0      0.3      0.1      0.0      2.0      7.0
INITIAL      8  21.8     0.0      7.0      0.3      0.1      0.0      2.0      7.0
INITIAL      9  21.8     0.0      7.0      0.3      0.1      0.0      2.0      7.0
ENDATA11
COEF-1       1  11.0 0.0    0.0    0.0    0.5     0.05    0.1     1.0     0.1
COEF-1       2  11.0 0.0    0.0    0.0    0.5     0.1     0.1     1.0     0.1
COEF-1       3  11.0 0.0    0.0    0.0    0.5     0.05    0.1     1.0     0.1
COEF-1       4  11.0 0.0    0.0    0.0    0.5     0.05    0.1     1.0     0.1
COEF-1       5  11.0 0.0    0.0    0.0    0.5     0.1     0.1     1.0     0.1
COEF-1       6  11.0 0.0    0.C    0.0    0.5     0.05    0.1     1.0     0.1
COEF-1       7  11.0 0.0    0.0    0.0    0.5     0.1     0.1     1.0     0.1
COEF-1       8  11.0 0.0    0.0    0.0    0.5     0.05    0.1     1.0     0.1
COEF-1       9  11.0 0.0    0.0    0.0    0.5     0.05    0.1     1.0     0.1
ENDATA12
COEF-2       1  0.05    0.1    0.05   0.2    0.0    0.0    0.1
COEF-2       2  0.05    0.1    0.05   0.20   0.0    0.0    0.1
COEF-2       3  0.05    0.1    0.05   0.2    0.0    0.0    0.1
COEF-2       4  0.05    0.1    0.05   0.2    0.0    0.0    0.1
COEF-2       5  0.05    0.1    0.05   0.2    0.0    0.0    0.1
COEF-2       6  0.05    0.1    0.05   0.2    0.0    0.0    0.1
COEF-2       7  0.05    0.1    0.05   0.2    0.0    0.0    0.1
COEF-2       8  0.05    0.1    0.05   0.2    0.0    0.0    0.1
COEF-2       9  0.05    0.1    0.05   0.2    0.0    0.0    0.1
ENDATA13
ENDATA14
ENDATA15
ENDATA16
ENDATA17
ENDATA18
ENDATA19
HDWTR-1      1  LAMPASAS RIVER        0.0 0.359    21.2     0.0      0.0      0.0
HDWTR-1      2  SULPHUR CREEK         0.0 0.490    20.3     0.0      0.0      0.0
HDWTR-1     46  ROCKY CREEK           0.0 0.0172   22.3     0.0      0.0      0.0
HDWTR-1     62  CLEAR CREEK           0.0 0.00460  22.4     0.0      0.0      0.0
ENDATA20
HDWTR-2      1  8.79      1.3      0.10      0.03      0.808
HDWTR-2      2  12.3      1.4      0.10      0.04      0.305
HDWTR-2     46  8.19      1.4      0.09      0.03      0.052
HDWTR-2     62  8.36      0.6      0.23      0.00      0.94
ENDATA21
ENDATA22
JUNCTION     3     1  SULPHUR CREEK
JUNCTION    47    45  ROCKY CREEK
JUNCTION    63    61  CLEAR CREEK
ENDATA23
ENDATA24
ENDATA25
ENDATA26
ENDATA27
ENDATA28
ENDATA29
ENDATA30
```

FIGURE A-49

CALIBRATION MODEL DATA SET FOR THE
LAMPASAS RIVER ABOVE LAKE STILLHOUSE HOLLOW
(CONTINUED)

```
CNTROL01      LAMPASAS RIVER BELOW STILLHOUSE HOLLOW RESERVOIR
CNTROL02      CALIBRATION DATA SET
CNTROL03 YES ECHO DATA INPUT
CNTROL04  NO INTERMEDIATE SUMMARY
CNTROL05  NO CAPSULE SUMMARY
CNTROL06 YES FINAL REPORT
CNTROL07  NO LOADING SUMMARY
CNTROL08 YES SPECIAL REPORT
CNTROL09  NO LINE PRINTER PLOTS
CNTROL10  NO GRAPHICS CAPABILITY
CNTROL11  NO SEQUENCING OUTPUT
CNTROL12 YES METRIC UNITS
CNTROL13 YES OXYGEN DEPENDENT RATES
CNTROL14  NO SENSITIVITY ANALYSIS
CNTROL15  NO FLOW AUGMENTATION
ENDATA01
MODOPT01  NO TEMPERATURE
MODOPT02  NO SALINITY
MODOPT03  NO CONSERVATIVE MATERIAL  I =                          IN
MODOPT04  NO CONSERVATIVE MATERIAL II =                          IN
MODOPT05 YES DISSOLVED OXYGEN
MODOPT06 YES BIOCHEMICAL OXYGEN DEMAND
MODOPT07 YES NITROGEN
MODOPT08  NO PHOSPHORUS
MODOPT09  NO CHLOROPHYLL A
MODOPT10  NO MACROPHYTES
MODOPT11  NO COLIFORM
MODOPT12  NO NONCONSERVATIVE MATERIAL =                          IN
ENDATA02
PROGRAM  BOD OXYGEN UPTAKE RATE (MG O/MG)   = 2.3
ENDATA03
ENDATA04
ENDATA05
ENDATA06
ENDATA07
REACH ID    1  LR DAM TO IH 35                   26.5      21.5      0.5
REACH ID    2  LR IH 35 TO ROAD CROSSING         21.5      13.0      0.5
REACH ID    3  LR ROAD XING TO FM 1123 XING      13.0       8.0      0.5
REACH ID    4  LR FM 1123 TO MITCHELL BRANCH      8.0       5.0      0.5
REACH ID    5  MB MITCHELL BRANCH                 0.1       0.0      0.1
REACH ID    6  LR MITCHELL BRANCH TO SALADO CR    5.0       1.5      0.5
REACH ID    7  SC SALADO CREEK                    0.1       0.0      0.1
REACH ID    8  LR SALADO CREEK TO LITTLE RIVER    1.5       0.0      0.5
ENDATA08
HYDR-1      1  .2262     .3265     .3121     .4445     0.0      0.035
HYDR-1      2  .2262     .3265     .3121     .4445     0.0      0.035
HYDR-1      3  .2262     .3265     .3121     .4445     0.0      0.035
HYDR-1      4  .2262     .3265     .3121     .4445     0.0      0.035
HYDR-1      5  .2262     .3265     .3121     .4445     0.0      0.035
HYDR-1      6  .2262     .3265     .3121     .4445     0.0      0.035
HYDR-1      7  .2262     .3265     .3121     .4445     0.0      0.035
HYDR-1      8  .2262     .3265     .3121     .4445     0.0      0.035
ENDATA09
ENDATA10
INITIAL     1  21.8    0.0    8.79   0.03   0.808   0.0    2.0    5.0
INITIAL     2  21.3    0.0    10.1   0.13   0.43    0.0    2.0    5.0
INITIAL     3  21.8    0.0    7.0    0.3    0.1     0.0    2.0    5.0
INITIAL     4  21.8    0.0    7.0    0.3    0.1     0.0    2.0    5.0
INITIAL     5  22.3    0.0    8.19   0.03   0.052   0.0    2.0    5.0
INITIAL     6  21.8    0.0    7.0    0.3    0.1     0.0    2.0    5.0
```

FIGURE A-50

CALIBRATION MODEL DATA SET FOR THE
LAMPASAS RIVER BELOW LAKE STILLHOUSE HOLLOW

```
INITIAL     7  24.1     0.0      7.0      0.3      0.1      0.0      2.0      5.0
INITIAL     8  21.8     0.0      7.0      0.3      0.1      0.0      2.0      5.0
ENDATA11
COEF-1      1  11.0 0.0    0.0    0.0    0.5    0.10    0.1    1.0    0.1
COEF-1      2  11.0 0.0    0.0    0.0    0.5    0.10    0.1    1.0    0.1
COEF-1      3  11.0 0.0    0.0    0.0    0.5    0.10    0.1    1.0    0.1
COEF-1      4  11.0 0.0    0.0    0.0    0.5    0.10    0.1    1.0    0.1
COEF-1      5  11.0 0.0    0.0    0.0    0.5    0.10    0.1    1.0    0.1
COEF-1      6  11.0 0.0    0.0    0.0    0.5    0.10    0.1    1.0    0.1
COEF-1      7  11.0 0.0    0.0    0.0    0.5    0.10    0.1    1.0    0.1
COEF-1      8  11.0 0.0    0.0    0.0    0.5    0.10    0.1    1.0    0.1
ENDATA12
COEF-2      1  0.05    0.1    0.05   0.2    0.0    0.0    0.1
COEF-2      2  0.05    0.1    0.05   0.20   0.0    0.0    0.1
COEF-2      3  0.05    0.1    0.05   0.2    0.0    0.0    0.1
COEF-2      4  0.05    0.1    0.05   0.2    0.0    0.0    0.1
COEF-2      5  0.05    0.1    0.05   0.2    0.0    0.0    0.1
COEF-2      6  0.05    0.1    0.05   0.2    0.0    0.0    0.1
COEF-2      7  0.05    0.1    0.05   0.2    0.0    0.0    0.1
COEF-2      8  0.05    0.1    0.05   0.2    0.0    0.0    0.1
ENDATA13
ENDATA14
ENDATA15
ENDATA16
ENDATA17
ENDATA18
ENDATA19
HDWTR-1     1  LAMPASAS RIVER         0.0 0.359    21.2     0.0      0.0      0.0
HDWTR-1    44  MITCHELL CREEK         0.0 0.490    20.3     0.0      0.0      0.0
HDWTR-1    52  SALADO CREEK           0.0 0.0172   22.3     0.0      0.0      0.0
ENDATA20
HDWTR-2     1  8.79      1.3      0.10      0.03      0.808
HDWTR-2    44  12.3      1.4      0.10      0.04      0.305
HDWTR-2    52  8.19      1.4      0.09      0.03      0.052
ENDATA21
ENDATA22
JUNCTION   45   43  MITCHELL CREEK
JUNCTION   53   51  SALADO CREEK
ENDATA23
ENDATA24
ENDATA25
ENDATA26
ENDATA27
ENDATA28
ENDATA29
ENDATA30
```

FIGURE A-50

CALIBRATION MODEL DATA SET FOR THE
LAMPASAS RIVER BELOW LAKE STILLHOUSE HOLLOW
(CONTINUED)

LIGHT LIMITATION

Ao=MEAN DAILY LIGHT INTENSITY/OPTIMAL LIGHT INTENSITY/PHOTOPERIOD

A1=Ao/PHOTOPERIOD *EXP(-LIGHT EXTINCTION *DEPTH)

R=e*PHOTOPERIOD /(LIGHT EXTINCTION *DEPTH)*(EXP(-A1)-EXP(Ao))

LIMITING NUTRIENT

TOTAL INORGANIC NITROGEN, TIN=NO3+NH4

MICHAELIS MENTON (MM[N])= TIN/(TIN+KTIN)

ORTHOPHOSPHORUS

MICHAELIS MENTON[(MM[PO4])]=PO4/(PO4+KPO4)

LIMITING NUTRIENT=MINIMUM(MM[N],MM[PO4])

GROWTH = MAXIMUM GROWTH RATE*R*LIMITING NUTRIENT

ALGAE

DEATH=INFECTION+GRAZING+ENDOGENOUS RESPIRATION

SETTLING=SETTLING RATE/THICKNESS

D[ALGAE]/DT = ((GROWTH-DEATH-SETTLING)*(ALGAE CONC)+(SETTLED ALGAE FROM ABOVE)*VOLUME)

SETTLED ALGAE=SETTLING RATE*ALGAE CONC

NITROGEN CYCLE

DETERMINATION OF NITROGEN SPECIES UPTAKE BY ALGAE

ALFA=NO3/(KTIN+NO3)*NH4/(KTIN+NH4)+KTIN/(KTIN+NO3)*NH4/(NH4+NO3)
ALFA=PREFERENCE FOR AMMONIA UPTAKE

FIGURE A-51

Summary of Kinetics Used in WASP Lake Models

AMMONIA NITROGEN
D(NH4)/DT=(-KANH4*[ALGAE GROWTH]-KN[NH4]+KON[ON]*VOLUME+AMMONIA BOTTOM RELEASE*BOTTOM AREA

ORGANIC NITROGEN

SETTLING RATE

KONSETT=ON SETTLING RATE/THICKNESS

D[ON]/DT=-KON[ON]+KALD*[CHA]*ALGON-KONSETT[ON]+(ON SETTLED FROM ABOVE)*VOLUME

SETTLED ORGANIC NITROGEN=KONSETT*[ON]

NITRATE
D[NO3]DT=(KN[NH4]-KANO3*[CHA]-DENIT*NO3)*VOLUME

KN = AMMONIA DECAY
KON = CONVERSION OF ON TO AMMONIA
KALD = ALGAE DEATH RATE (NONPREDITORY)
CHA = CHLOROPHYLL 'A' CONCENTRATION
DENIT = DENITRIFICATION RATE
ALGN = TOTAL N REQUIRED FOR GROWTH, AND RELEASED IN DEATH AND RESPIRATION

<u>PHOSPHORUS CYCLE</u>

NONREACTIVE PHOSPHORUS

KNPSETT=NONSET/THICKNESS

D[NONP]/DT=(KALD*[CHA]*KLP-KNP[NONP]-KNPSETT[NONP]+(P SETTLED FROM ABOVE)*VOLUME

KNP = CONVERSION OF NONREACTIVE P TO REACTIVE P
KLP = FRACTION OF ALGAE CELL WHICH IS P

FIGURE A-51

Summary of Kinetics Used in WASP Lake Models
(continued)

BOD DECAY AND SETTLING

BODSET=BOD SETTLING RATE/THICKNESS
D[BOD]/DT=(-(KD+BODSET)*BOD+(KALD+ALGEAT)*CHA*ALGBOD)*VOLUME + BOD SETTLED FROM ABOVE

KD = BOD DECAY
ALGEAT = ALGEA PREDATION RATE
BODSET = BOD SETTLING RATE CONSTANT
ALGBOD = DEAD ALGAES CONTRIBUTION TO BOD

DISSOLVED OXYGEN

DO SATURATION (Kaj)= 14.652-.41022*TEMP+.007991*TEMP^2-.00007777*TEMP^3

REAERATION RATE
Kaj= .46*WIND SPEED +.136*WIND SPEED *2

D[DO]/DT= Kaj(DO SATURATION-[DO])/DEPTH-DBOD-DNH4+DALGAE-DBOTT

KPT = MAXIMUM GROWTH RATE
ALGRES = ALGAE RESPIRATION
Kaj = REAERATION
ALGDO = DEAD ALGAES CONTRIBUTION TO DO
DBOD = BIOCHEMICAL OXYGEN DEMAND
DNH4 = NITROGENOUS OXYGEN DEMAND
DALGAE = OXYGEN DEMAND DUE TO ALGAE
DBOTT = SEDIMENT OXYGEN DEMAND

FIGURE A-51

Summary of Kinetics Used in WASP Lake Models
(continued)

TABLE A-1

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 1

Date: 9/1/87 Secchi Depth: 11.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	27.43	5.45	7.56	481
1.5	27.43	5.42	7.57	481
3.0	27.40	5.41	7.57	481
4.5	27.37	5.30	7.56	481
6.0	27.37	5.30	7.57	481
7.5	27.36	5.29	7.57	481
9.0	27.34	5.21	7.56	482
10.5	27.33	5.18	7.56	480
12.0	27.31	5.15	7.55	482
13.5	27.10	.08	7.10	492
15.0	26.64	.07	7.09	496
16.5	26.09	.07	7.09	492
18.0	25.39	.07	7.07	491
19.5	24.40	.07	7.03	491
21.0	23.48	.08	7.01	490
22.5	22.68	.06	7.0	485
24.0	22.11	.06	6.98	484
25.5	21.33	.09	6.96	486
27.0	20.48	.09	6.95	486
28.5	18.68	.10	6.92	508
30.0	17.30	.12	6.95	529
31.5	16.33	.12	6.93	540
33.0	15.78	.12	6.89	554

Date: 9/23/87 Secchi Depth: 10.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	25.61	6.0	7.39	516
1.5	25.75	5.83	7.47	516
3.0	25.79	5.84	7.51	516
4.5	25.82	5.80	7.53	516
6.0	25.82	5.76	7.55	515
7.5	25.85	5.74	7.56	515
9.0	25.85	5.74	7.56	515
10.5	25.88	5.72	7.57	515
12.0	25.89	5.69	7.57	515
13.5	25.90	5.69	7.58	515
15.0	25.91	5.66	7.57	515
16.5	25.92	5.56	7.56	513
18.0	25.78	3.36	7.36	516
19.5	24.78	0.10	7.0	516
22.0	23.20	0.08	6.93	508
23.5	22.73	0.07	6.92	506
25.0	22.08	0.06	6.91	508
26.5	21.25	0.06	6.90	508
28.0	20.06	0.06	6.91	516
29.5	18.37	0.08	6.87	536
30.8	16.29	.09	6.79	578

Date: 10/9/87 Secchi Depth: 9.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.33	6.23	7.30	531
1.5	23.40	6.21	7.39	533
3.0	23.41	6.21	7.43	533
4.5	23.42	6.20	7.47	533
6.0	23.43	6.20	7.47	533
7.5	23.43	6.18	7.50	532
9.0	23.43	6.32	7.51	533
10.5	23.43	6.26	7.51	533
12.0	23.42	6.41	7.53	534
13.5	23.42	6.47	7.54	533
15.0	23.42	6.48	7.54	532
16.5	23.41	6.46	7.54	533
18.0	23.27	6.12	7.51	533
19.5	23.27	6.11	7.51	533
21.0	23.25	5.97	7.49	534
22.5	23.21	5.75	7.48	534
24.0	22.98	2.45	7.24	533
25.5	22.18	0.19	6.97	518
27.0	21.80	.06	6.94	511
28.5	19.63	0.07	6.85	524
30.0	18.48	.08	6.83	538
31.5	17.56	.08	6.81	555
33.0	16.72	.05	6.79	570

TABLE A-1

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 1
(continued)

Date: 10/21/87 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	21.67	6.34	7.36	526
1.5	21.75	7.53	7.41	532
3.0	21.78	6.27	7.43	532
4.5	21.79	6.19	7.45	531
6.0	21.82	6.30	7.47	530
7.5	21.82	6.30	7.48	530
9.0	21.85	6.28	7.47	530
10.5	21.85	6.27	7.48	529
12.0	21.86	6.25	7.48	529
13.5	21.86	6.24	7.48	530
15.0	21.89	6.26	7.48	530
16.5	21.89	6.26	7.48	530
18.0	21.90	6.23	7.49	529
19.5	21.90	6.19	7.48	528
21.0	21.89	6.17	7.48	527
22.5	21.88	6.15	7.48	527
24.0	21.88	6.14	7.48	527
25.5	21.86	6.10	7.47	528
27.0	21.58	4.49	7.28	528
28.5	19.85	0.15	6.84	528
30.0	18.13	0.10	6.70	574
31.5	15.79	0.09	6.63	582

Date: 11/9/87 Secchi Depth: 5.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	19.88	7.51	7.99	538
1.5	19.92	7.46	7.81	539
3.0	19.93	7.47	7.77	539
4.5	19.95	7.47	7.75	538
6.0	19.96	7.44	7.74	537
7.5	19.96	7.39	7.74	539
9.0	19.98	7.36	7.73	539
10.5	19.99	7.40	7.73	537
12.0	19.99	7.35	7.73	538
13.5	20.0	7.34	7.72	537
15.0	20.03	7.36	7.72	537
16.5	20.03	7.33	7.72	536
18.0	20.04	7.36	7.72	537
19.5	20.03	7.39	7.73	538
21.0	20.05	7.38	7.72	538
22.5	20.05	7.33	7.72	536
24.0	20.05	7.35	7.71	536
25.5	20.06	7.35	7.71	539
27.0	20.07	7.35	7.71	537
28.5	20.07	7.35	7.71	538
29.9	20.04	5.43	7.69	540

Date: 1/23/88 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	9.07	10.92	7.91	560
1.5	9.07	10.97	7.91	559
3.0	9.05	10.97	7.91	559
4.5	9.07	10.93	7.91	559
6.0	9.05	10.97	7.91	560
7.5	9.07	10.92	7.92	559
9.0	9.07	10.93	7.91	559
10.5	9.05	10.93	7.92	558
12.0	9.05	10.92	7.92	558
13.5	9.06	10.89	7.92	558
15.0	9.05	10.89	7.91	559
16.5	9.02	10.74	7.91	558
18.0	8.93	10.59	7.88	558
19.5	8.89	10.46	7.87	558
21.0	8.90	10.45	7.87	558
22.5	8.88	10.46	7.87	556
24.0	8.89	10.37	7.86	556
25.5	8.91	10.28	7.86	558
26.5	8.99	10.0	7.84	557

TABLE A-1

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 1
(continued)

Date: 3/4/88 Secchi Depth: 11.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	12.91	10.36	7.70	555
1.5	12.39	11.40	7.87	555
3.0	12.24	11.51	7.90	555
4.5	12.20	11.23	7.91	554
6.0	12.17	11.13	7.91	555
7.5	12.13	10.77	7.92	555
9.0	12.08	10.84	7.92	555
10.5	11.64	10.52	7.90	554
12.0	10.98	10.52	7.88	555
13.5	10.67	10.51	7.88	555
15.0	10.41	10.51	7.88	555
16.5	10.18	10.56	7.88	554
18.0	9.94	10.31	7.85	554
19.5	9.85	10.10	7.83	554
21.0	9.81	10.01	7.81	554
22.5	9.78	10.02	7.81	554
24.0	9.74	9.95	7.80	554
25.5	9.72	9.92	7.80	554
27.0	9.70	9.89	7.80	553
28.5	9.68	9.81	7.79	553
30.0	9.71	9.27	7.74	554

Date: 5/10/88 Secchi Depth: 9.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.02	9.16	8.08	589
1.5	21.20	9.47	8.01	592
3.0	21.02	9.46	7.97	590
4.5	20.80	9.34	7.94	593
6.0	20.53	9.30	7.91	593
7.5	20.19	9.07	7.89	595
9.0	18.86	8.32	7.80	601
10.5	16.43	7.50	7.68	605
12.0	15.43	7.55	7.64	601
13.5	14.70	7.28	7.61	599
15.0	14.31	7.28	7.59	599
16.5	13.56	7.22	7.58	598
18.0	12.89	7.26	7.57	600
19.5	12.38	7.24	7.55	598
21.0	12.21	6.85	7.50	597
22.5	12.09	6.60	7.46	597
24.0	11.95	6.16	7.40	598
25.5	11.93	6.07	7.39	598
27.0	11.86	5.71	7.35	597
28.5	11.84	5.60	7.33	597
30.0	11.84	5.52	7.32	596
31.5	11.85	5.26	7.30	594
33.0	11.84	5.17	7.29	595
34.0	11.98	5.06	7.29	596

Date: 5/24/88 Secchi Depth: 8.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.10	9.00	7.89	573
1.5	23.10	8.98	7.89	573
3.0	23.07	8.84	7.89	573
4.5	23.05	8.80	7.89	573
6.0	23.03	8.80	7.89	573
7.5	23.02	8.76	7.89	574
9.0	22.50	8.67	7.87	574
10.5	17.0	6.51	7.56	594
12.0	15.64	5.81	7.48	596
13.5	15.06	5.77	7.48	591
15.0	14.41	5.83	7.48	589
16.5	14.02	5.90	7.49	588
18.0	13.68	5.76	7.47	588
19.5	13.13	5.48	7.43	589
21.0	12.68	5.41	7.40	581
22.5	12.40	5.17	7.36	584
24.0	12.29	4.80	7.33	585
25.5	12.23	4.65	7.33	584
27.0	12.18	4.70	7.32	584
28.5	12.15	4.64	7.30	587
30.0	12.11	4.56	7.30	585

TABLE A-1

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 1
(continued)

Date: 6/23/88 Secchi Depth: 11.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.03	8.06	8.31	569
1.5	27.39	8.38	8.28	569
3.0	27.16	8.35	8.26	568
4.5	26.33	8.86	8.23	566
6.0	25.26	8.60	8.13	569
7.5	24.51	8.39	8.10	569
9.0	23.16	6.50	7.90	581
10.5	21.46	4.50	7.67	596
12.0	18.59	3.59	7.58	596
13.5	16.45	4.08	7.61	594
15.0	15.41	3.80	7.60	590
16.5	14.96	3.67	7.60	588
18.0	14.58	3.97	7.63	589
19.5	14.14	3.72	7.59	584
21.0	13.76	3.66	7.58	584
22.5	13.29	3.36	7.53	582
24.0	13.07	2.85	7.49	584
25.5	13.05	2.69	7.48	583
27.0	12.91	2.58	7.46	584
28.5	12.81	2.42	7.44	583
29.5	12.81	2.33	7.44	584

Date: 7/14/88 Secchi Depth: 7.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.08	7.81	8.35	567
1.5	28.08	7.80	8.34	568
3.0	28.04	7.80	8.34	568
4.5	28.03	7.78	8.34	567
6.0	27.93	7.76	8.33	568
7.5	27.00	6.53	8.12	573
9.0	24.23	4.94	7.84	578
10.5	22.83	3.40	7.68	586
12.0	21.22	2.50	7.60	587
13.5	19.18	2.09	7.55	594
15.0	17.36	2.08	7.55	586
16.5	16.02	2.93	7.61	584
18.0	15.35	2.63	7.58	584
19.5	15.13	2.36	7.55	586
21.0	14.44	1.69	7.51	583
22.5	13.99	1.34	7.48	583
24.0	13.44	1.74	7.50	583
25.5	13.27	1.73	7.49	582
27.0	13.05	1.41	7.45	580
28.5	13.02	1.33	7.44	579
30.0	12.99	1.24	7.44	581
31.5	12.97	1.24	7.44	580
32.2	12.98	1.20	7.43	580

Date: 8/18/88 Secchi Depth: 11.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.89	7.56	8.36	563
1.5	29.78	7.59	8.35	565
3.0	29.70	7.66	8.33	564
4.5	29.66	7.55	8.32	564
6.0	29.65	7.70	8.31	564
7.5	28.76	4.86	8.04	567
9.0	27.66	1.19	7.55	583
10.5	25.73	0.40	7.42	588
12.0	23.50	0.14	7.36	594
13.0	21.78	0.13	7.36	594
15.0	20.32	0.11	7.34	598
16.5	18.76	0.09	7.33	594
18.0	18.05	0.09	7.33	595
19.5	16.60	0.10	7.33	595
21.0	15.55	0.11	7.31	589
22.5	14.87	0.11	7.32	588
24.0	14.12	0.11	7.31	588
25.5	13.94	0.11	7.30	588
22.0	13.94	0.10	7.31	587

TABLE A-2

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 2

Date: 9/1/87 Secchi Depth:

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	27.78	5.57	7.55	492
1.0	27.58	5.35	7.56	493
2.5	27.42	5.39	7.56	494
4.0	27.39	5.06	7.55	494
5.5	27.39	4.88	7.52	495
7.0	27.36	4.93	7.52	494
8.5	27.33	4.99	7.53	492
10.0	27.26	5.18	7.56	490
11.5	27.27	5.27	7.57	488
13.0	27.05	4.40	7.51	490
14.5	26.72	.08	7.07	537
16.0	26.08	.07	7.0	547
17.5	25.52	.07	6.97	550
19.0	24.74	.11	6.93	545
20.5	23.62	.06	6.88	529
22.0	23.13	.08	6.86	514
23.5	22.51	.08	6.84	512
25.0	20.71	.06	6.79	507

Date: 9/23/87 Secchi Depth: 7.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	26.14	6.38	7.59	529
1.5	26.0	6.06	7.57	533
3.0	26.0	6.24	7.63	530
4.5	25.98	6.54	7.68	525
6.0	25.97	6.58	7.68	525
7.5	26.0	5.75	7.60	534
9.0	26.0	5.52	7.57	537
10.5	25.99	5.20	7.54	538
12.0	25.94	4.90	7.50	545
13.5	25.90	4.87	7.50	545
15.0	25.85	4.49	7.47	550
16.5	25.82	4.25	7.42	556
18.0	25.71	0.11	6.99	646
19.5	25.10	0.07	6.9	692
21.0	24.10	0.05	6.81	628
22.5	23.25	0.06	6.80	554
24.0	22.42	0.04	6.77	545
25.5	21.88	0.05	6.76	540
26.3	21.46	0.05	6.75	542

Date: 10/9/87 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.39	7.24	7.59	539
1.5	23.37	7.18	7.61	540
3.0	23.37	7.18	7.64	540
4.5	23.37	7.14	7.65	540
6.0	23.38	7.14	7.65	540
7.5	23.37	7.14	7.66	540
9.0	23.37	7.14	7.66	540
10.5	23.37	7.14	7.67	540
12.0	23.37	7.14	7.67	540
13.5	23.37	7.12	7.67	539
15.0	23.31	7.12	7.66	536
16.5	23.23	7.02	7.65	535
18.0	23.13	6.36	7.61	539
19.5	23.05	6.70	7.63	538
21.0	23.02	6.44	7.61	538
22.5	22.98	5.64	7.54	542
24.0	22.94	4.56	7.45	546
25.5	22.88	3.53	7.36	548
27.0	22.69	.34	7.10	553
27.9	22.27	0.06	6.91	566

TABLE A-2

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 2
(continued)

Date: 10/21/87 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	21.79	6.68	7.56	551
1.5	21.78	6.65	7.56	551
3.0	21.78	6.64	7.56	551
4.5	21.78	6.62	7.55	550
6.0	21.77	6.64	7.55	550
7.5	21.76	6.64	7.55	550
9.0	21.76	6.62	7.54	550
10.5	21.75	6.63	7.54	550
12.0	21.75	6.62	7.53	550
13.5	21.69	6.69	7.53	549
15.0	21.68	6.72	7.54	549
16.5	21.63	6.76	7.54	548
18.0	21.34	6.75	7.54	548
19.5	21.26	6.69	7.54	548
21.0	21.26	6.69	7.54	548
22.5	21.19	6.58	7.52	548
23.9	21.15	6.58	7.53	548

Date: 11/9/87 Secchi Depth: 4.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	19.55	8.38	7.63	540
1.5	19.65	8.30	7.69	542
3.0	19.69	8.30	7.76	542
4.5	19.71	8.29	7.78	542
6.0	19.72	8.26	7.79	542
7.5	19.73	8.25	7.80	542
9.0	19.74	8.25	7.81	542
10.5	19.75	8.24	7.81	542
12.0	19.75	8.21	7.82	542
13.5	19.77	8.21	7.82	541
15.0	19.78	8.21	7.82	541
16.5	19.78	8.20	7.82	541
18.0	19.79	8.18	7.82	541
19.5	19.78	8.15	7.82	541
21.0	19.78	8.18	7.81	542
22.5	19.74	8.14	7.82	541
24.0	19.71	8.05	7.81	540
25.5	19.70	7.96	7.79	539

Date: 1/23/88 Secchi Depth: 5.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	8.85	11.15	7.89	562
1.5	8.81	11.09	7.92	562
3.0	8.78	11.06	7.93	562
4.5	8.76	11.04	7.93	562
6.0	8.74	11.0	7.94	562
7.5	8.67	11.01	7.94	562
9.0	8.65	11.02	7.94	561
10.5	8.63	11.03	7.95	562
12.0	8.59	10.97	7.93	565
13.5	8.58	10.93	7.93	563
15.0	8.58	10.94	7.93	566
16.5	8.40	10.68	7.89	569
18.0	8.26	10.52	7.87	569
19.5	8.04	9.95	7.78	595
19.8	8.07	9.84	7.79	593

TABLE A-2

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 2
(continued)

Date: 3/4/88 Secchi Depth: 8.2'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	13.12	10.54	7.88	576
1.5	12.48	10.53	7.88	574
3.0	12.05	10.55	7.91	573
4.5	11.88	10.53	7.91	570
6.0	11.51	10.54	7.89	559
7.5	11.11	10.57	7.89	556
9.0	10.94	10.54	7.90	557
10.5	10.78	10.46	7.87	557
12.0	10.45	10.27	7.85	557
13.5	10.25	10.18	7.84	557
15.0	10.16	10.13	7.83	557
16.5	10.11	10.0	7.82	558
18.0	10.12	9.95	7.82	558
19.5	10.09	9.92	7.82	558
21.0	9.99	9.68	7.76	558
22.5	9.97	9.25	7.74	559
24.0	9.94	9.27	7.74	559

Date: 5/10/88 Secchi Depth: 7.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.84	9.28	7.87	593
1.5	23.69	9.32	7.91	594
3.0	23.42	9.32	7.91	595
4.5	23.30	9.32	7.92	595
6.0	21.23	9.11	7.86	599
7.5	20.02	8.32	7.78	600
9.0	18.99	7.61	7.70	605
10.5	17.49	6.12	7.53	618
12.0	15.55	5.21	7.42	615
13.5	14.83	5.04	7.39	610
15.0	14.24	4.60	7.35	609
16.5	13.33	4.44	7.33	603
18.0	13.02	4.40	7.31	600
19.5	12.87	4.28	7.29	601
21.0	12.72	4.26	7.29	600

Date: 5/24/88 Secchi Depth: 7.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	22.82	8.80	7.89	578
1.5	22.78	8.95	7.92	580
3.0	22.64	8.87	7.92	580
4.5	22.58	9.13	7.93	581
6.0	22.16	8.51	7.88	587
7.5	21.92	8.33	7.86	589
9.0	21.08	7.90	7.79	588
10.5	17.82	5.33	7.48	599
12.0	16.64	4.01	7.37	604
13.5	15.35	3.08	7.29	606
15.0	14.80	3.05	7.30	601
16.5	14.45	2.97	7.29	601
18.0	14.18	2.90	7.29	598
19.5	14.03	3.00	7.29	595
21.0	13.28	2.88	7.26	596
22.5	13.02	2.72	7.25	595

TABLE A-2

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 2
(continued)

Date: 6/23/88 Secchi Depth: 7.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.09	8.01	8.36	574
1.5	28.60	8.07	8.35	576
3.0	28.35	7.98	8.32	579
4.5	26.85	8.26	8.25	599
6.0	24.80	7.00	8.08	584
7.5	23.98	5.91	7.96	597
9.0	23.30	4.51	7.76	607
10.5	21.45	2.71	7.60	607
12.0	18.19	1.14	7.46	607
13.5	16.35	0.67	7.43	604
15.0	15.43	0.40	7.43	601
16.5	14.90	0.23	7.42	598
18.0	14.56	0.19	7.42	596
19.5	14.22	0.19	7.42	596
21.0	13.66	0.12	7.41	595
22.5	13.32	0.08	7.40	590
24.0	13.22	0.08	7.39	589
24.6	13.27	0.08	7.39	592

Date: 7/14/88 Secchi Depth: 5.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.60	7.69	8.41	571
1.5	28.60	7.65	8.39	574
3.0	28.55	7.63	8.39	573
4.5	28.45	7.53	8.37	572
6.0	28.22	7.22	8.33	573
7.5	28.02	5.50	8.29	574
9.0	24.74	2.60	7.64	599
10.5	22.50	0.28	7.49	614
12.0	21.19	0.13	7.43	612
13.5	19.09	0.09	7.39	615
15.0	16.44	0.10	7.40	596
16.5	15.79	0.07	7.41	595
18.0	15.07	0.07	7.42	591
19.5	14.65	0.07	7.42	592
21.0	14.19	0.07	7.41	589
21.9	14.22	0.08	7.41	589

Date: 8/18/88 Secchi Depth: 7.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	30.96	7.28	8.38	570
1.5	30.62	7.30	8.36	573
3.0	30.45	7.21	8.33	573
4.5	30.14	6.09	8.22	577
6.0	29.41	3.21	7.79	595
7.5	28.43	0.68	7.52	597
9.0	27.16	0.16	7.40	600
10.5	25.42	0.13	7.35	606
12.0	22.69	0.10	7.29	621
13.5	21.01	0.10	7.24	629
15.0	20.09	0.08	7.23	631
16.5	18.99	0.09	7.22	627
18.0	17.89	0.09	7.22	624
19.5	16.85	0.09	7.21	622
21.0	15.77	0.09	7.22	617
22.5	15.06	0.07	7.24	607

TABLE A-3

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 3

Date: 9/1/87 Secchi Depth: 5.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	27.33	6.90	7.71	477
0.5	27.32	6.90	7.71	471
1.0	27.24	6.90	7.72	477
1.5	27.24	6.90	7.71	476
2.0	27.10	6.90	7.69	477
2.5	26.72	7.0	7.65	476

Date: 9/23/87 Secchi Depth: 6.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	26.80	7.09	7.66	507
1.5	25.59	7.77	7.78	509
3.0	24.70	7.70	7.81	514
3.4	24.55	7.59	7.82	513

Date: 10/9/87 Secchi Depth: 4.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.80	6.94	7.56	532
1.0	23.77	6.90	7.56	532
1.5	23.72	6.90	7.60	533
2.0	23.69	6.85	7.61	534
3.0	23.38	6.80	7.62	534
3.5	23.37	6.80	7.62	535

Date: 10/21/87 Secchi Depth: 3.50'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	20.59	7.84	7.60	530
1.5	20.50	7.80	7.62	531
2.5	20.22	8.04	7.67	531
3.5	20.09	8.16	7.71	534

Date: 11/9/87 Secchi Depth: 4.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	19.0	8.52	7.83	543
1.5	18.94	8.63	7.86	542
2.5	18.93	8.63	7.87	542
3.2	18.92	8.60	7.87	542

Date: 1/23/88 Secchi Depth: 4.25'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	8.68	11.83	7.89	558
1.5	8.64	11.56	7.94	560
3.0	8.66	11.51	7.95	562

TABLE A-3

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 3
(continued)

Date: 3/4/88 Secchi Depth: 6.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	13.68	10.45	7.88	561
1.5	12.53	10.96	7.93	573
3.0	12.23	11.14	7.96	573
3.3	12.13	11.21	7.97	573

Date: 5/10/88 Secchi Depth: 7.25'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.94	9.41	8.36	589
1.5	23.87	9.43	8.21	590
3.0	23.77	9.53	8.15	589
3.4	23.52	9.40	8.08	589

Date: 5/24/88 Secchi Depth: 5.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.68	8.99	8.25	580
1.5	23.61	8.99	8.03	585
3.0	23.21	8.98	8.00	589

Date: 6/23/88 Secchi Depth: 4.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.25	8.33	8.33	575
1.5	29.17	8.44	8.34	574
2.0	29.07	8.60	8.34	574
3.0	28.10	8.99	8.35	570

Date: 7/14/88 Secchi Depth: 3.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.64	7.98	8.42	567
1.0	28.59	7.86	8.40	566
1.5	28.14	7.86	8.39	567
2.0	28.02	7.80	8.39	567

Date: 8/18/88 Secchi Depth: 4.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	31.99	7.48	8.39	565
1.5	30.74	7.53	8.37	565
3.0	30.44	7.52	8.36	565
4.0	30.35	7.37	8.34	565

TABLE A-4

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 4

Date: 9/1/87 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	27.98	6.13	7.53	509
1.5	27.94	6.07	7.55	510
3.0	27.90	5.72	7.56	512
4.5	27.88	5.69	7.56	514
6.0	27.81	5.54	7.56	514
7.5	27.75	5.42	7.55	513
9.0	27.74	5.49	7.57	512
10.5	27.72	5.56	7.57	511
12.0	27.52	2.34	7.29	534
13.5	27.00	.08	7.0	577
15.0	26.74	.05	6.94	584
16.5	26.20	.05	6.89	608
18.0	25.57	.05	6.85	612
19.5	24.80	.05	6.84	608
21.0	23.91	.05	6.80	598
21.5	23.40	.04	6.78	590

Date: 9/23/87 Secchi Depth: 5.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	26.95	6.66	7.64	554
1.5	26.57	6.64	7.66	557
3.0	26.38	6.57	7.68	556
4.5	26.30	6.31	7.67	556
6.0	26.28	6.23	7.67	556
7.5	26.27	6.12	7.67	555
9.0	26.25	6.08	7.66	556
10.5	26.20	6.07	7.67	556
12.0	26.13	5.88	7.65	559
13.5	26.05	5.61	7.63	562
15.0	25.90	4.76	7.53	569
16.5	25.05	2.04	7.21	622
18.0	24.94	1.77	7.17	621
19.5	24.83	1.26	7.13	605
21.0	24.66	0.15	7.06	576
22.5	24.10	0.05	6.90	571

Date: 10/9/87 Secchi Depth: 3.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.27	6.45	7.56	567
1.5	23.25	6.43	7.57	567
3.0	23.20	6.42	7.59	567
4.5	23.14	6.41	7.61	567
6.0	23.13	6.44	7.62	569
7.5	23.12	6.51	7.63	570
9.0	23.10	6.43	7.63	570
10.5	23.10	6.22	7.60	570
12.0	23.09	6.27	7.61	570
13.5	23.09	6.20	7.61	570
15.0	23.07	6.08	7.66	573
16.5	23.02	5.41	7.57	580
18.0	22.99	5.30	7.56	581
19.5	22.91	5.30	7.56	576

TABLE A-4

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 4
(continued)

Date: 10/21/87 Secchi Depth: 3.5′

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	21.75	7.83	7.78	548
1.5	21.79	7.81	7.72	549
3.0	21.79	7.79	7.70	550
4.5	21.79	7.74	7.69	549
6.0	21.79	7.74	7.69	549
7.5	21.75	7.71	7.68	548
9.0	21.75	7.71	7.68	549
10.5	21.75	7.69	7.68	549
12.0	21.73	7.68	7.67	548
13.5	21.66	7.67	7.67	547
15.0	21.63	7.51	7.66	550
16.5	21.49	7.41	7.65	551
18.0	21.50	7.37	7.64	552
19.5	21.48	7.30	7.62	559
21.0	21.14	7.34	7.63	549
21.2	21.14	7.29	7.66	550

Date: 11/9/87 Secchi Depth: 3.5′

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	19.55	8.13	7.79	559
1.5	19.58	8.15	7.79	559
3.0	19.58	8.08	7.82	559
4.5	19.59	8.08	7.82	559
6.0	19.61	8.04	7.83	558
7.5	19.63	8.04	7.83	559
9.0	19.64	8.04	7.83	558
10.5	19.65	8.03	7.83	558
12.0	19.65	8.03	7.84	558
13.5	19.65	8.03	7.84	558
15.0	19.66	7.98	7.84	559
16.5	19.66	8.02	7.84	557
18.0	19.66	8.02	7.85	558

Date: 1/23/88 Secchi Depth: 5.0′

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	8.93	11.29	8.52	572
1.5	8.82	11.23	8.17	572
3.0	8.79	11.24	8.11	572
4.5	8.76	11.21	8.06	573
6.0	8.74	11.18	8.03	572
7.5	8.60	11.12	8.0	572
9.0	8.45	11.01	7.98	577
10.5	8.42	10.89	7.95	581
12.0	8.39	10.83	7.94	582
13.5	8.34	10.83	7.94	581
15.0	8.24	10.80	7.92	585
16.5	7.77	9.92	7.75	634
18.0	7.66	9.41	7.66	674
19.2	7.66	9.0	7.63	685

TABLE A-4

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 4
(continued)

Date: 3/4/88 Secchi Depth: 8.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	14.20	10.36	7.87	589
1.5	13.18	10.46	7.91	591
3.0	12.90	10.45	7.94	588
4.5	12.75	10.43	7.94	588
6.0	11.15	10.44	7.88	564
7.5	10.63	10.17	7.85	561
9.0	10.53	10.02	7.84	566
10.5	10.42	9.95	7.83	564
12.0	10.38	9.98	7.83	563
13.5	10.35	9.99	7.84	563
15.0	10.32	10.1	7.84	561
16.5	10.29	10.07	7.84	561
18.0	10.28	9.99	7.84	563
19.5	10.27	9.91	7.83	562
20.3	10.30	9.38	7.78	564

Date: 5/10/88 Secchi Depth: 7.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	24.20	8.99	7.94	611
1.5	24.14	9.29	7.92	611
3.0	23.99	9.43	7.92	611
4.5	23.24	9.05	7.92	613
6.0	21.11	9.01	7.86	603
7.5	20.73	8.50	7.82	604
9.0	20.00	7.92	7.76	604
10.5	17.85	5.61	7.50	620
12.0	16.07	4.02	7.33	612
13.5	15.05	3.70	7.31	614
15.0	14.63	3.34	7.27	614
16.5	13.88	3.02	7.23	609
18.0	13.38	2.90	7.19	608
19.5	13.25	2.66	7.17	604
21.0	12.97	2.45	7.15	604

Date: 5/24/88 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.11	8.66	7.86	603
1.5	22.94	8.63	7.87	601
3.0	22.79	8.67	7.88	596
4.5	22.76	8.57	7.89	597
6.0	22.73	8.30	7.89	599
7.5	22.64	8.63	7.88	602
9.0	22.58	8.55	7.88	602
12.0	18.30	4.82	7.43	605
13.5	16.27	2.45	7.18	610
15.0	15.36	1.85	7.15	606
16.5	14.83	1.34	7.12	605
18.0	14.46	0.90	7.10	601
19.5	14.18	0.88	7.11	605
21.0	14.06	0.66	7.10	603

TABLE A-4

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 4
(continued)

Date: 6/23/88 Secchi Depth: 7.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.06	8.04	8.37	580
1.5	28.70	8.05	8.36	579
3.0	28.48	8.01	8.34	587
4.5	27.95	6.60	8.26	617
6.0	25.00	6.55	8.05	606
7.5	23.56	4.00	7.70	628
9.0	22.34	1.46	7.47	649
10.5	20.04	0.23	7.39	631
12.0	17.44	0.16	7.39	616
13.5	16.81	0.10	7.40	611
15.0	15.53	0.11	7.42	603
16.5	15.18	0.11	7.42	600
18.0	14.54	0.15	7.46	603
19.5	14.13	0.12	7.46	600
21.2	13.98	0.12	7.46	600

Date: 7/14/88 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.41	7.45	8.37	578
1.5	28.43	7.42	8.35	580
3.0	28.36	7.35	8.34	579
4.5	28.27	7.06	8.31	582
6.0	28.03	6.40	8.17	581
7.5	25.65	2.29	7.63	600
9.0	23.80	0.31	7.45	623
10.5	22.19	0.15	7.35	629
12.0	20.38	0.11	7.36	635
13.5	18.12	0.09	7.37	625
15.0	17.09	0.10	7.39	614
16.5	16.25	0.10	7.40	607
18.0	15.56	0.11	7.41	602
18.9	15.31	0.07	7.42	601

Date: 8/18/88 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	32.19	7.13	8.39	574
1.5	31.25	7.30	8.38	575
3.0	30.87	7.35	8.37	576
4.5	30.65	7.24	8.35	576
6.0	30.09	4.40	7.95	587
7.5	28.99	0.36	7.45	617
9.0	28.08	0.15	7.37	623
10.8	25.72	0.13	7.27	629
12.0	23.80	0.11	7.25	628
13.5	22.02	0.11	7.22	635
15.0	20.82	0.11	7.18	646

TABLE A-5

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 5

Date: 9/1/87 Secchi Depth: 3.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.09	5.61	7.43	631
1.5	27.62	5.17	7.46	631
3.0	27.55	5.06	7.47	631
4.5	27.55	4.76	7.47	631
6.0	27.53	4.39	7.43	665

Date: 9/23/87 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	27.36	7.52	7.73	590
1.5	26.29	6.60	7.66	605
3.0	26.20	6.81	7.71	698
4.5	26.17	6.62	7.70	597
6.0	26.12	6.28	7.67	603
7.5	26.10	6.10	7.66	605
9.0	25.96	5.69	7.58	597
10.5	25.86	4.82	7.53	590
12.0	25.88	4.96	7.53	588

Date: 10/9/87 Secchi Depth: 2.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.48	7.69	7.73	594
1.5	23.40	7.68	7.75	593
3.0	23.39	7.65	7.76	593
4.5	23.33	7.62	7.76	593
6.0	23.29	7.54	7.76	593
7.5	23.28	7.54	7.76	593
9.0	23.21	7.57	7.77	593
10.5	22.89	6.97	7.71	595
12.0	22.82	6.61	7.68	602
13.5	22.60	5.20	7.53	607
14.7	22.44	2.76	7.34	630

TABLE A-5

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 5
(continued)

Date: 10/21/87 Secchi Depth: 2.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	21.41	7.59	7.67	584
1.5	21.44	7.60	7.68	583
3.0	21.42	7.58	7.69	583
4.5	21.44	7.57	7.70	581
6.0	21.43	7.53	7.70	581
7.5	21.41	7.49	7.70	580
9.0	21.34	7.35	7.69	580
10.5	21.34	7.36	7.69	580
12.0	21.34	7.29	7.68	580
12.8	21.35	7.19	7.68	579

Date: 11/9/87 Secchi Depth: 2.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	19.34	8.21	7.86	575
1.5	19.38	8.22	7.84	577
3.0	19.36	8.22	7.85	578
4.5	19.37	8.25	7.85	577
6.0	19.38	8.24	7.86	578
7.5	19.41	8.24	7.86	577
9.0	19.42	8.23	7.86	577
10.5	19.42	8.22	7.86	577
12.0	19.42	8.15	7.86	577
13.5	19.44	8.06	7.85	577
14.6	19.45	8.01	7.84	577

Date: 1/23/88 Secchi Depth: 4.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	8.64	11.32	7.76	601
1.5	8.59	11.27	7.83	603
3.0	8.56	11.20	7.87	604
4.5	8.55	11.16	7.88	603
6.0	8.55	11.18	7.89	602
7.5	8.52	11.15	7.89	610
9.0	8.39	11.06	7.87	613
10.5	8.29	10.88	7.87	632
12.0	8.27	10.62	7.78	659
12.5	8.21	9.53	7.60	775

TABLE A-5

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 5
(continued)

Date: 3/4/88 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	14.44	10.10	8.08	686
1.5	13.50	10.08	7.97	696
3.0	13.18	10.06	7.95	675
4.5	11.73	10.06	7.89	600
6.0	11.25	9.95	7.87	588
7.5	11.01	9.77	7.85	586
9.0	10.98	9.74	7.84	589

Date: 5/10/88 Secchi Depth: 5.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	25.98	9.30	7.88	662
1.5	24.80	9.51	7.90	659
3.0	24.60	9.50	7.90	677
4.5	22.36	9.25	7.85	646
6.0	22.00	7.96	7.74	671
7.5	21.40	4.10	7.31	775
9.0	20.52	1.77	7.08	810
10.5	18.82	0.20	6.98	741
12.0	16.91	0.12	6.96	686
13.1	16.28	0.09	6.96	671

Date: 5/24/88 Secchi Depth: 4.25'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.16	8.00	7.71	673
1.5	22.62	7.97	7.74	674
3.0	21.83	7.72	7.72	651
4.5	21.26	7.28	7.67	634
6.0	20.24	5.66	7.48	628
7.5	19.43	3.60	7.30	629
9.0	18.50	1.77	7.15	639
10.5	17.59	0.70	7.09	639
12.0	16.54	0.16	7.03	639
13.5	15.90	0.10	7.02	632

TABLE A-5

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE STILLHOUSE HOLLOW AT SITE 5
(continued)

Date: 6/23/88 Secchi Depth: 6.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	30.20	7.86	8.36	604
1.5	30.12	7.99	8.36	606
3.0	29.06	8.14	8.35	600
4.5	28.54	7.21	8.27	617
6.0	27.37	1.45	7.54	660
7.5	24.89	0.27	7.34	660
9.0	23.42	0.14	7.28	701
10.5	22.41	0.12	7.25	700
12.0	20.07	0.11	7.24	676
13.5	17.87	0.09	7.28	645
13.7	17.87	0.09	7.29	641

Date: 7/14/88 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	30.32	7.72	8.41	604
1.5	30.03	7.66	8.40	603
3.0	29.83	7.61	8.38	605
4.5	29.56	7.22	8.37	607
6.0	28.81	6.53	8.27	597
7.5	27.68	0.43	7.57	608
9.0	25.38	0.15	7.35	621
10.5	23.79	0.09	7.26	629
12.0	21.79	0.09	7.22	640
12.9	19.97	0.08	7.22	655

Date: 8/18/88 Secchi Depth: 4.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.2	32.51	7.29	8.40	591
1.5	31.26	7.25	8.37	595
3.0	30.81	6.81	8.30	594
4.5	30.51	3.78	7.82	635
6.0	30.41	2.87	7.68	664
7.5	29.60	0.26	7.30	708
9.0	27.86	0.11	7.19	711
10.5	26.11	0.08	7.10	706
11.6	28.17	0.06	7.05	705

TABLE A-6

RESULTS OF LABORATORY ANALYSES FOR LAKE STILLHOUSE HOLLOW

The following results based on:

Ammonia-Nitrogen in mg/L as N
Nitrate-Nitrogen in mg/L as N
Nitrite-Nitrogen in mg/L as N
Organic-Nitrogen in mg/L as N
Ortho-Phosphorus in mg/l as P
Total-Phosphorus in mg/l as P

TABLE A-6

RESULTS OF LABORATORY ANALYSES
FOR LAKE STILLHOUSE HOLLOW AT SITE 2
(continued)

Site 2 - Top

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
09/01/87	--	2.3	1.4	5.76	--	0.01	0.007	0.07	0.014	0.019
09/23/87	--	2.8	1.4	28.12	0.05	0.07	0.004	0.09	0.202	0.286
10/09/87	--	4.8	0.8	22.18	0.02	0.04	0.004	0.09	0.012	0.023
10/21/87	--	--	--	18.7	0.18	0.06	0.027	0.44	0.02	0.035
11/09/87	--	--	--	10.65	0.09	0.15	0.007	0.19	0.115	0.155
01/23/88	--	1	0.5	26.46	--	0.2	0.006	0.06	0.031	0.048
03/04/88	--	--	--	12.75	0.02	0.18	0.005	0.32	0.007	0.016
05/10/88	--	3	1.4	8	0.07	0.04	0.004	0.16	0.014	0.02
05/24/88	--	3.4	1.4	2.5	0.01	0.02	0.004	0.1	0.009	0.016
06/23/88	--	3	0.6	7.05	0.02	0.06	0.002	0.12	0.013	0.024
07/14/88	--	--	--	9.35	0.05	0.07	0.004	0.2	0.013	0.02
08/18/88	--	2.4	0.8	7.3	0.02	0.07	0.003	0.11	0.012	0.019

Site 2 - Bottom

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
09/01/87	--	1.9	1	0.46	0.02	0.007	0.21	0.014	0.02
09/23/87	--	4	0.4	0.66	0.07	0.005	1.05	0.17	0.422
10/09/87	--	8.3	1.7	0.07	0.04	0.003	0.19	0.011	0.028
10/21/87	--	--	--	0.16	0.07	0.028	0.51	0.018	0.45
11/09/87	--	--	--	0.06	0.14	0.007	0.21	0.032	0.048
01/23/88	--	5.3	2	--	0.19	0.006	0.11	0.046	0.055
03/04/88	--	--	--	0.03	0.19	0.005	0.38	0.02	0.032
05/10/88	--	5	1	0.07	0.07	0.004	0.19	0.007	0.016
05/24/88	--	4.6	0.8	0.03	0.07	0.006	0.16	0.012	0.027
06/23/88	--	3.8	1.2	0.04	0.09	0.003	0.19	0.019	0.035
07/14/88	--	--	--	0.14	0.11	0.013	0.29	0.01	0.036
	--	2.8	0.9	0.07	0.07	0.004	0.18	0.009	0.017

TABLE A-6

RESULTS OF LABORATORY ANALYSES
FOR LAKE STILLHOUSE HOLLOW AT SITE 3
(continued)

<u>Site 3 - 5 feet</u>

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
09/01/87	--	4.3	2.2	10.44	--	0.02	0.006	0.09	0.015	0.024
09/23/87	--	2.6	1.6	34.43	0.05	0.06	0.004	0.13	0.024	0.038
10/09/87	--	5	2	18.13	0.03	0.03	0.003	0.1	0.01	0.018
10/21/87	--	--	--	42.1	0.18	0.03	0.013	0.39	0.017	0.028
11/09/87	--	--	--	8.7	0.08	0.14	0.007	0.24	0.117	0.132
01/23/88	--	2.3	0.7	18.7	--	0.19	0.005	0.05	0.016	0.02
03/04/88	--	--	--	10.2	--	0.18	0.005	0.29	0.008	0.018
05/10/88	--	3.4	1.6	11.35	0.07	0.04	0.005	0.15	0.01	0.016
05/24/88	--	3.6	0.8	8.6	0.03	0.02	0.003	0.09	0.01	0.018
06/23/88	--	4.8	0.4	10.28	0.03	0.06	0.002	0.17	0.011	0.025
07/14/88	--	--	--	11.6	0.07	0.06	0.004	0.16	0.009	0.016
08/18/88	--	4	0.7	9.1	0.03	0.07	0.003	0.16	0.012	0.019

TABLE A-6

RESULTS OF LABORATORY ANALYSES
FOR LAKE STILLHOUSE HOLLOW AT SITE 4
(continued)

Site 4 - Top

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
09/01/87	--	2.7	1.6	18.63	0.04	0.01	0.004	0.1	0.01	0.024
09/23/87	--	4.4	1.8	44.88	0.02	0.07	0.005	0.06	0.02	0.028
10/09/87	0.8	9.6	3.2	31.35	0.06	0.03	0.004	0.18	0.014	0.031
10/21/87	--	--	--	29.84	0.16	0.05	0.012	0.37	0.009	0.021
11/09/87	--	--	--	7.58	0.09	0.13	0.019	0.17	0.044	0.059
01/23/88	1.8	2	0.8	14.38	--	0.2	0.006	0.09	0.01	0.022
03/04/88	--	--	--	18.43	--	0.17	0.004	0.36	0.009	0.023
05/10/88	1.9	3.2	1.2	18.2	0.08	0.03	0.005	0.14	0.011	0.021
05/24/88	--	3.4	1	12.15	0.04	0.03	0.005	0.14	0.016	0.035
06/23/88	--	4.8	0.3	13.35	0.03	0.07	0.002	0.2	0.014	0.025
07/14/88	--	--	--	10.2	0.06	0.09	0.005	0.2	0.011	0.033
08/18/88	--	3	0.6	11.6	0.02	0.07	0.003	0.13	0.009	0.022

Site 4 - Bottom

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
09/01/87	--	3.1	1.8	0.72	--	0.009	0.66	0.016	0.026
09/23/87	--	17.6	3.6	0.25	0.12	0.015	0.62	0.051	0.093
10/09/87	1	19.3	3.3	0.1	0.02	0.004	0.22	0.008	0.02
10/21/87	--	--	--	0.17	0.05	0.013	0.47	0.013	0.042
11/09/87	--	--	--	0.08	0.12	0.019	0.2	0.049	0.073
01/23/88	1.1	2.5	0.8	--	0.2	0.006	0.15	0.039	0.055
03/04/88	--	--	--	0.02	0.2	0.004	0.34	0.025	0.037
05/10/88	1.3	7.4	1.6	0.1	0.06	0.003	0.23	0.012	0.024
05/24/88	--	11	1.6	0.05	0.16	0.008	0.26	0.021	0.047
06/23/88	--	4.8	0.3	0.13	0.12	0.017	0.28	0.015	0.028
07/14/88	--	--	--	0.08	0.06	0.003	0.38	0.012	0.027
	--	4.8	0.8	0.07	0.07	0.002	0.2	0.015	0.034

TABLE A-6

RESULTS OF LABORATORY ANALYSES
FOR LAKE STILLHOUSE HOLLOW AT SITE 5
(continued)

Site 5 - Top

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
09/01/87	--	7.5	3	34.24	0.03	0.01	0.006	0.08	0.012	0.016
09/23/87	--	7.3	1.5	19.52	0.04	0.07	0.006	0.11	0.048	0.056
10/09/87	--	8.8	2.2	16.78	0.02	0.03	0.003	0.12	0.012	0.025
10/21/87	--	--	--	34.55	0.18	0.04	0.004	0.31	0.011	0.035
11/09/87	--	--	--	18.24	0.08	0.09	0.018	0.14	0.034	0.052
01/23/88	--	3.8	1.1	23.45	--	0.2	0.006	0.04	0.028	0.04
03/04/88	--	--	--	9.5	0.03	0.16	0.005	0.28	0.025	0.04
05/10/88	--	5	1.6	19.4	0.07	0.02	0.005	0.14	0.011	0.02
05/24/88	--	5.4	1.8	14.3	0.05	0.04	0.007	0.12	0.014	0.031
06/23/88	--	3.4	0.2	16.45	0.04	0.07	0.002	0.19	0.009	0.021
07/14/88	--	--	--	18.75	0.08	0.08	0.004	0.18	0.017	0.026
08/18/88	--	4.8	1	13.5	0.06	0.07	0.003	0.19	0.009	0.022

Site 5 - Bottom

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
09/01/87	--	17.1	2.8	0.24	0.01	0.008	0.2	0.025	0.035
09/23/87	--	23.6	3.2	0.11	0.08	0.008	0.26	0.024	0.037
10/09/87	--	19.3	2	0.03	0.03	0.002	0.12	0.009	0.023
10/21/87	--	--	--	0.17	0.05	0.003	0.27	0.008	0.019
11/09/87	--	--	--	0.1	0.1	0.019	0.19	0.021	0.03
01/23/88	--	6.3	1.5	--	0.2	0.005	0.1	0.017	0.031
03/04/88	--	--	--	--	0.17	0.005	0.33	0.022	0.034
05/10/88	--	7.2	1.2	0.14	0.09	0.024	0.26	0.006	0.014
05/24/88	--	7	1.4	0.07	0.09	0.012	0.17	0.013	0.033
06/23/88	--	15	1	0.24	0.06	0.004	0.34	0.006	0.013
07/14/88	--	--	--	0.12	0.06	0.004	0.42	0.025	0.06
08/18/88	--	12.8	2.4	0.38	0.1	0.005	0.43	0.021	0.038

TABLE A-7

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 1

Date: 8/28/87 Secchi Depth: 7.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.44	6.16	7.60	431
1.1	28.46	6.15	7.62	431
2.6	28.46	6.14	7.63	431
4.1	28.49	6.14	7.64	431
5.6	28.44	6.08	7.64	431
7.1	28.44	6.06	7.64	431
8.6	28.43	6.07	7.65	431
10.1	28.41	6.07	7.65	431
11.6	28.41	6.07	7.65	432
13.1	28.40	6.00	7.63	432
14.6	28.36	6.00	7.63	432
15.1	28.35	6.00	7.61	432
16.6	27.37	0.05	6.98	425
18.1	26.98	0.05	6.98	420
19.6	26.60	0.07	6.97	416
20.1	26.40	0.07	6.95	418
21.4	25.91	0.07	6.88	435
22.9	25.35	0.07	6.85	434
24.4	25.10	0.07	6.84	449
25.9	24.78	0.07	6.81	460
30.0	23.12	0.08	6.69	490

Date: 9/22/87 Secchi Depth: 8.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	26.84	6.11	7.42	460
1.5	26.86	6.09	7.42	461
3.0	26.86	6.12	7.43	460
4.5	26.86	6.09	7.43	460
6.0	26.86	6.09	7.43	460
7.5	26.86	6.05	7.44	460
9.0	26.86	6.05	7.44	460
10.5	26.83	5.86	7.44	460
12.0	26.70	5.17	7.37	459
13.5	26.70	5.17	7.37	459
15.0	26.70	5.24	7.39	439
16.5	26.67	5.28	7.39	458
18.0	26.61	4.69	7.33	459
19.5	26.60	3.09	7.25	459
22.0	25.75	0.12	6.87	465
23.5	24.83	0.05	6.80	478
25.0	24.70	0.05	6.79	481
26.5	24.33	0.03	6.71	485
28.0	23.94	0.03	6.71	494

Date: 10/7/87 Secchi Depth: 8.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	24.12	4.94	7.0	469
1.5	24.14	4.89	7.03	471
3.0	24.20	4.86	7.04	471
4.5	24.21	4.86	7.06	470
6.0	24.21	4.82	7.07	471
7.5	24.21	4.80	7.09	471
9.0	24.21	4.78	7.10	470
10.5	24.22	4.74	7.11	470
12.0	24.24	4.75	7.12	470
13.5	24.25	4.75	7.13	470
15.0	24.25	4.77	7.13	470
16.5	24.25	4.75	7.14	470
18.0	24.27	4.75	7.15	468
19.5	24.25	4.71	7.15	469
21.0	24.27	4.63	7.15	469
22.5	24.27	4.61	7.15	469
24.0	24.26	4.51	7.14	469
25.5	24.25	4.51	7.13	469
27.0	24.15	3.76	7.04	471
28.5	24.08	1.46	6.95	476

TABLE A-7

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 1
(continued)

Date: 10/22/87 Secchi Depth: 4.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	21.79	6.15	7.36	464
1.5	21.85	6.16	7.38	463
3.0	21.86	6.07	7.42	463
4.5	21.91	6.09	7.44	463
6.0	21.94	6.06	7.45	462
7.5	21.96	6.05	7.45	462
9.0	21.96	6.05	7.45	462
10.5	21.97	6.05	7.45	462
12.0	21.97	6.04	7.45	462
13.5	21.98	6.04	7.46	462
15.0	21.99	6.04	7.46	462
16.5	21.99	6.04	7.46	462
18.0	22.0	6.03	7.46	462
19.5	22.0	6.03	7.46	462
21.0	22.0	6.01	7.47	461
22.5	22.01	6.01	7.47	461
24.0	22.01	6.06	7.47	461
25.5	22.01	6.08	7.47	461
27.0	22.02	6.07	7.46	461
28.5	22.03	6.08	7.47	460

Date: 11/11/87 Secchi Depth: 4.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.3	16.93	7.59	8.03	468
1.5	18.98	7.53	7.77	468
3.0	19.03	7.49	7.70	467
4.5	19.12	7.43	7.66	467
6.0	19.22	7.40	7.65	465
7.5	19.26	7.38	7.65	465
9.0	19.28	7.35	7.65	465
10.5	19.27	7.33	7.65	465
12.0	19.27	7.32	7.65	465
13.5	19.29	7.31	7.65	465
15.0	19.30	7.31	7.64	464
16.5	19.31	7.31	7.64	464
18.0	19.33	7.30	7.64	464
19.5	19.33	7.30	7.64	464
21.0	19.33	7.30	7.64	463
22.5	19.32	7.28	7.64	464
24.0	19.32	7.28	7.64	464
25.5	19.32	7.28	7.64	463
27.0	19.30	7.27	7.63	463
28.5	19.28	7.24	7.63	463

Date: 1/18/88 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0	10.01	10.93	7.71	468
1.5	9.90	10.94	7.77	469
3.0	9.74	10.87	7.78	468
4.5	9.24	10.76	7.78	468
6.0	9.06	10.67	7.78	468
7.5	9.02	10.70	7.79	468
9.0	9.00	10.72	7.80	469
10.5	8.96	10.69	7.80	468
12.0	8.96	10.69	7.80	467
13.5	8.95	10.70	7.81	468
15.0	8.93	10.71	7.81	467
16.5	8.90	10.73	7.81	468
18.0	8.89	10.75	7.82	468
19.5	8.87	10.72	7.81	468
21.0	8.86	10.63	7.81	466
22.5	8.85	10.59	7.81	468
24.0	8.84	10.54	7.80	468
25.5	8.82	10.52	7.81	467
27.0	8.81	10.52	7.81	466
27.3	8.84	10.52	7.82	467

DENITRIFICATION	$200	$200
CHEMICALS:		
*********		
FLOW RELATED BASE	$1,600	$1,600
BOD/TKN RELATED BASE	$900	$900
FILTRATION	NA	NA
POST AERATION	NA	NA
NITRIFICATION	NA	NA
DENITRIFICATION	$700	$700
SUBTOTAL = O&M	$176,500	$176,500

GRADIENT = $0

YR. 1990 O&M P.W. = 0.5083 X ($176,500 X 7.024) =	$630,000
TOTAL YR. 1990 UNION GROVE STP P.W. (CAPITAL + O&M) =	$995,000

TABLE III-13f

UNION GROVE STP
TREATMENT PLANT PRESENT WORTH COSTS

II. ALTERNATES 2 AND 3: PHASE III, (2010 - 2030)

YR. 2010 Qa = 0.1 MGD, Qm = 0.15 MGD
YR. 2030 Qa = 0.1 MGD, Qm = 0.15 MGD
YR. 2010 CAPITA = 800
YR. 2030 CAPITA = 800

-REQUIRED EFFLUENT = 5 BOD, 2 NH3-N, 6 DO, 15 TSS, 3 NO3-N

-REQUIRED PROCESSES = BASE PLANT, NITRIFICATION, DENITRIFICATION, FILTRATION, POST AERATION

-EXISTING FACILITIES = 0.15 MGD Qm, 800 CAPITA BASE PLANT, WITH NITRIFICATION, DENITRIFICATION, EFFLUENT FILTRATION, AND POST AERATION

-REQUIRED NEW FACILITIES = NONE

1. CAPITAL COSTS $0

2. O&M COSTS

	YR. 2010	YR. 2030
LABOR & MATERIALS:		
******************		
FLOW RELATED BASE	$45,000	$45,000
BOD/TKN RELATED BASE	$72,000	$72,000
FILTRATION	$4,700	$4,700
POST AERATION	$2,000	$2,000
NITRIFICATION	$12,000	$12,000
DENITRIFICATION	$18,000	$18,000
POWER:		
*********		
FLOW RELATED BASE	$700	$700
BOD/TKN RELATED BASE	$14,000	$14,000
FILTRATION	$100	$100
POST AERATION	$100	$100
NITRIFICATION	$4,500	$4,500
DENITRIFICATION	$200	$200

TABLE III-13f

CHEMICALS:
****

FLOW RELATED BASE	$1,600	$1,600
BOD/TKN RELATED BASE	$900	$900
FILTRATION	NA	NA
POST AERATION	NA	NA
NITRIFICATION	NA	NA
DENITRIFICATION	$700	$700
SUBTOTAL = O&M	$176,500	$176,500

GRADIENT = $0

YR. 1990 O&M P.W. = 0.2584($176500 X 10.594) =	$483,000
TOTAL YR. 1990 UNION GROVE STP P.W. (CAPITAL + O&M) =	$483,000

TABLE III-13g

ONION CREEK
TREATMENT PLANT PRESENT WORTH COSTS

I. ALTERNATES 2 AND 3: PHASE III, (2020 - 2030)

YR. 2020 Qa = 0.25 MGD, Qm = 0.35 MGD
YR. 2030 Qa = 0.63 MGD, Qm = 0.90 MGD
YR. 2020 CAPITA = 1760
YR. 2030 CAPITA = 4,520

-REQUIRED EFFLUENT = 5 BOD, 2 NH3-N, 6 DO, 10 TSS, 3 NO3-N

-REQUIRED PROCESSES = BASE PLANT, NITRIFICATION, DENITRIFICATION, FILTRATION, POST AERATION

-EXISTING FACILITIES = NONE

-REQUIRED NEW FACILITIES = 0.9 MGD Qm, 4,520 CAPITA BASE PLANT, YEAR 2020 W/NITRIFICATION, DENITRIFICATION, FILTRATION, AND POST AERATION.

1. CAPITAL COSTS

YR. 2020 - 0.9 MGD - BASE PLANT (FLOW RELATED) =	$1,000,000	
YR. 2020 - 4520 CAPITA - BASE PLANT (BOD/TKN RELATED) =	$750,000	
YR. 2020 - 4520 CAPITA - NITRIFICATION =	$87,000	
YR. 2020 - 4520 CAPITA -DENITRIFICATION =	$460,000	
YR. 2020 - 0.9 MGD - FILTRATION =	$240,000	
YR. 2020 - 0.9 MGD - POST AERATION =	$30,000	
SUBTOTAL - CAPITAL	$2,567,000	
YR.1990 P.W. = $2,567,000 X 0.1314		$337,000

2. O&M COSTS

	YR. 2020	YR. 2030
LABOR & MATERIALS:		
FLOW RELATED BASE	$78,000	$78,000
BOD/TKN RELATED BASE	$106,000	$106,000
FILTRATION	$15,400	$15,400
POST AERATION	$3,500	$3,500
NITRIFICATION	$16,000	$16,000
DENITRIFICATION	$35,000	$35,000
POWER:		
FLOW RELATED BASE	$900	$1,100
BOD/TKN RELATED BASE	$24,000	$42,000
FILTRATION	$100	$200

TABLE III-13g

POST AERATION	$300	$500
NITRIFICATION	$6,000	$12,000
DENITRIFICATION	$8,500	$21,500
CHEMICALS:		
*********		
FLOW RELATED BASE	$3,000	$5,200
BOD/TKN RELATED BASE	$2,500	$4,500
FILTRATION	NA	NA
POST AERATION	NA	NA
NITRIFICATION	NA	NA
DENITRIFICATION	$1,500	$2,400
	------------	------------
SUBTOTAL	$300,700	$343,300

GRADIENT = ($343,300 - $300,700)/10 = $4,260/YR.

YR. 1990 O&M P.W. = 0.1314[($300,700 X 7.024) + ($4,260 X 27.716)] = $293,000

TOTAL YR. 1990 ONION CREEK STP P.W. (CAPITAL AND O&M) = $630,000

TABLE III-13h

BELL CO. WCID #1 MAIN
TREATMENT PLANT PRESENT WORTH COSTS

I. ALTERNATES 1, 2 AND 3: PHASE I, (1990 - 2000)

YR. 1990 Qa = 14.37 MGD, Qm = 19.8 MGD
YR. 2000 Qa = 16.53 MGD, Qm = 23.16 MGD
YR. 1990 CAPITA = 86,300
YR. 2000 CAPITA = 99,600

-REQUIRED EFFLUENT =10 BOD, 2 NH3-N, 6 DO, 15 TSS

-REQUIRED PROCESSES = BASE PLANT, NITRIFICATION, POST AERATION, FILTRATION

-EXISTING FACILITIES = 21 MGD Qm, 90,800 CAPITA PLANT, WITH NITRIFICATION, EFFLUENT FILTRATION NO POST AERATION

-REQUIRED NEW FACILITIES = 6 MGD Qm, 26,000 CAPITA BASE PLANT EXPANSION BY 1993 W/NITRIFICATION, FILTRATION, AND POST AERATION. ADD POST AERATION TO EXIST. PLANT.

-TOTAL PLANT CAPACITY PROVIDED IN 1993 = 27 MGD Qm, 116,700 CAPITA

1. CAPITAL COSTS

(a)	YR. 1990 - 21 MGD POST AERATION		$178,000
(b)	YR. 1993 - 6 MGD - BASE PLANT EXP. (FLOW RELATED) =	$4,300,000	
	YR. 1993 - 26,000 CAP. - BASE PLANT EXP. (BOD/TKN RELATED) =	$2,600,000	
	YR. 1993 - 26,000 CAP. - NITRIFICATION =	$290,000	
	YR. 1993 - 6 MGD - FILTRATION =	$540,000	
	YR. 1993 - 6 MGD - POST AERATION - NEW =	$90,000	
	SUBTOTAL - CAPITAL	$7,820,000	
	YR. 1990 P.W. = $7,820,000 X 0.8163		$6,383,000
	TOTAL		$6,561,000

2. O&M COSTS

	YR. 1990	YR. 2000
LABOR & MATERIALS:		
FLOW RELATED BASE	$530,000	$650,000
BOD/TKN RELATED BASE	$495,000	$580,000
FILTRATION	$70,000	$82,000
POST AERATION	$18,000	$20,000
NITRIFICATION	$58,000	$65,000
DENITRIFICATION	NA	NA

POWER:

TABLE III-13h

*********		
FLOW RELATED BASE	$6,800	$7,600
BOD/TKN RELATED BASE	$450,000	$525,000
FILTRATION	$1,000	$1,100
POST AERATION	$8,000	$9,400
NITRIFICATION	$122,000	$130,000
DENITRIFICATION	NA	NA
CHEMICALS:		
*********		
FLOW RELATED BASE	$96,000	$112,000
BOD/TKN RELATED BASE	$52,000	$60,000
FILTRATION	NA	NA
POST AERATION	NA	NA
NITRIFICATION	NA	NA
DENITRIFICATION	NA	NA
SUBTOTAL = O&M	$1,906,800	$2,242,100

GRADIENT = ($2,242,100 - $1,906,800)/10 = $33,530/YR.

YR. 1990 O&M P.W. = ($1,906,800)(7.024) + $33,530(27.716) = $14,323,000

TOTAL YR. 1990 BELL CO. WCID #1 STP P.W. (CAPITAL + O&M) = $20,884,000

TABLE III-13h

BELL CO. WCID #1 MAIN
TREATMENT PLANT PRESENT WORTH COSTS

II. ALTERNATES 1, 2 AND 3: PHASE II, (2000 - 2010)

YR. 2000 Qa = 16.53 MGD, Qm = 23.16 MGD
YR. 2010 Qa = 19.16 MGD, Qm = 26.98 MGD
YR. 2000 CAPITA = 99,600
YR. 2010 CAPITA = 116,700

-REQUIRED EFFLUENT = 10 BOD, 2 NH3-N, 6 DO, 15 TSS

-REQUIRED PROCESSES = BASE PLANT, NITRIFICATION, POST AERATION, FILTRATION

-EXISTING FACILITIES = 27 MGD Qm, 116,700 CAPITA BASE PLANT, WITH NITRIFICATION, EFFLUENT FILTRATION, AND POST AERATION

-REQUIRED NEW FACILITIES = NONE

1. CAPITAL COSTS $0

2. O&M COSTS

	YR. 2000	YR. 2010
LABOR & MATERIALS:		
*****************		
FLOW RELATED BASE	$650,000	$650,000
BOD/TKN RELATED BASE	$580,000	$580,000
FILTRATION	$82,000	$82,000
POST AERATION	$20,000	$20,000
NITRIFICATION	$65,000	$65,000
DENITRIFICATION	NA	NA
POWER:		
*********		
FLOW RELATED BASE	$7,600	$8,200
BOD/TKN RELATED BASE	$525,000	$610,000
FILTRATION	$1,100	$1,200
POST AERATION	$9,400	$10,800
NITRIFICATION	$130,000	$160,000
DENITRIFICATION	NA	NA
CHEMICALS:		
*********		
FLOW RELATED BASE	$112,000	$128,000
BOD/TKN RELATED BASE	$60,000	$68,000
FILTRATION	NA	NA
POST AERATION	NA	NA
NITRIFICATION	NA	NA
DENITRIFICATION	NA	NA
SUBTOTAL = O&M	$2,242,100	$2,383,200

TABLE III-13h

GRADIENT = ($2,383,200 - $2,242,100)/10 = $14,110/YR.	
YR. 1990 O&M P.W. = 0.5083[($2,242,100 X 7.024) + ($14,110 X 27.716)] =	$8,204,000
TOTAL YR. 1990 BELL CO. WCID #1 MAIN STP P.W. (CAPITAL + O&M) =	$8,204,000

TABLE III-13h

BELL CO. WCID #1 MAIN
TREATMENT PLANT PRESENT WORTH COSTS

III. ALTERNATES 1 AND 2: PHASE III, (2010 - 2030)

YR. 2010 Qa = 17.04 MGD, Qm = 23.98 MGD
YR. 2030 Qa = 19.16 MGD, Qm = 27 MGD
YR. 2010 CAPITA = 103,800
YR. 2030 CAPITA = 116,700

-REQUIRED EFFLUENT = 10 BOD, 2 NH3-N, 6 DO, 15 TSS

-REQUIRED PROCESSES = BASE PLANT, NITRIFICATION, POST AERATION, AND FILTRATION

-EXISTING FACILITIES = 27 MGD Qm, 116,700 CAPITA BASE PLANT, WITH NITRIFICATION, EFFLUENT FILTRATION, AND POST AERATION

-REQUIRED NEW FACILITIES = NONE

1. CAPITAL COSTS $0

2. O&M COSTS

	YR. 2010	YR. 2030
LABOR & MATERIALS:		
******************		
FLOW RELATED BASE	$650,000	$650,000
BOD/TKN RELATED BASE	$580,000	$580,000
FILTRATION	$82,000	$82,000
POST AERATION	$20,000	$20,000
NITRIFICATION	$65,000	$65,000
DENITRIFICATION	NA	NA
POWER:		
*********		
FLOW RELATED BASE	$7,700	$8,200
BOD/TKN RELATED BASE	$550,000	$610,000
FILTRATION	$1,100	$1,200
POST AERATION	$9,800	$10,800
NITRIFICATION	$135,000	$160,000
DENITRIFICATION	NA	NA
CHEMICALS:		
*********		
FLOW RELATED BASE	$115,000	$128,000
BOD/TKN RELATED BASE	$61,000	$68,000
FILTRATION	NA	NA
POST AERATION	NA	NA
NITRIFICATION	NA	NA
DENITRIFICATION	NA	NA
	------------	------------
SUBTOTAL = O&M	$2,276,600	$2,383,200

TABLE III-13h

GRADIENT = ($2,383,200 - $2,276,600)/20 = $5,330/YR.	
YR. 1990 O&M P.W. = 0.2584[($2,276,600 X 10.594) + ($5,330 X 77.509)] =	$6,339,000
TOTAL YR. 1990 BELL CO. WCID #1 MAIN STP P.W. (CAPITAL + O&M) =	$6,339,000

TABLE III-13h

BELL CO. WCID #1 MAIN
TREATMENT PLANT PRESENT WORTH COSTS

IV. ALTERNATE 3: PHASE III, (2010 - 2030)

YR. 2010 Qa = 18.1 MGD, Qm = 25.48 MGD
YR. 2030 Qa = 19.16 MGD, Qm = 27 MGD
YR. 2010 CAPITA = 110,200
YR. 2030 CAPITA = 116,700

-REQUIRED EFFLUENT = 7 BOD, 2 NH3-N, 6 DO, 15 TSS

-REQUIRED PROCESSES = BASE PLANT, NITRIFICATION, POST AERATION, AND FILTRATION

-EXISTING FACILITIES = 27 MGD Qm, 116,700 CAPITA BASE PLANT, WITH NITRIFICATION, EFFLUENT FILTRATION, NO POST AERATION

-REQUIRED NEW FACILITIES = NONE

1. CAPITAL COSTS $0

2. O&M COSTS

	YR. 2010	YR. 2030
LABOR & MATERIALS:		
******************		
FLOW RELATED BASE	$650,000	$650,000
BOD/TKN RELATED BASE	$580,000	$580,000
FILTRATION	$82,000	$82,000
POST AERATION	$20,000	$20,000
NITRIFICATION	$65,000	$65,000
DENITRIFICATION	NA	NA
POWER:		
*********		
FLOW RELATED BASE	$8,000	$8,200
BOD/TKN RELATED BASE	$580,000	$610,000
FILTRATION	$1,100	$1,200
POST AERATION	$10,400	$10,800
NITRIFICATION	$150,000	$160,000
DENITRIFICATION	NA	NA
CHEMICALS:		
*********		
FLOW RELATED BASE	$122,000	$128,000
BOD/TKN RELATED BASE	$65,000	$68,000
FILTRATION	NA	NA
POST AERATION	NA	NA
NITRIFICATION	NA	NA
DENITRIFICATION	NA	NA
SUBTOTAL = O&M	$2,333,500	$2,383,200

TABLE III-13h

GRADIENT = ($2,383,200 - $2,333,500)/20 = $2,475/YR.	
YR. 1990 O&M P.W. = 0.2584[($2,333,500 X 10.594) + ($2,475 X 77.509)] =	$6,438,000
TOTAL YR. 1990 BELL CO. WCID #1 MAIN STP P.W. (CAPITAL + O&M) =	$6,438,000

TABLE III-13i

TRIMMIER CREEK STP
TREATMENT PLANT PRESENT WORTH COSTS

1. ALTERNATE 3: PHASE III, (2010 - 2030)

YR. 2010 Qa = 0.08 MGD, Qm = 0.12 MGD
YR. 2030 Qa = 3.91 MGD, Qm = 5.65 MGD
YR. 2010 CAPITA = 600
YR. 2030 CAPITA = 27,800

-REQUIRED EFFLUENT = 5 BOD, 2 NH3-N, 6 DO, 15 TSS, 3 NO3-N

-REQUIRED PROCESSES = BASE PLANT, NITRIFICATION, DENITRIFICATION, FILTRATION, AND POST AERATION

-EXISTING FACILITIES = NONE

-REQUIRED NEW FACILITIES = BUILD 2.5 MGD Qm, 12,500 CAPITA BASE PLANT BY YR. 2010 W/NITRIFICATION, FILTRATION, AND POST AERATION. EXPAND TO 5.65 MGD IN YEAR 2020.

1. CAPITAL COSTS

(a)	YR. 2010 - 2.5 MGD - BASE PLANT (FLOW RELATED) =	$2,350,000	
	YR. 2010 - 12,500 CAP. - BASE PLANT (BOD/TKN RELATED) =	$1,500,000	
	YR. 2010 - 12,500 CAP. - NITRIFICATION =	$170,000	
	YR. 2010 - 2.5 MGD - FILTRATION =	$350,000	
	YR. 2010 - 2.5 MGD - POST AERATION =	$56,000	
	YR. 2010 - 12,500 CAP. - DENITRIFICATION =	$700,000	
	SUBTOTAL - CAPITAL	$5,126,000	
	YR. 1990 P.W. = $5,126,000 X 0.2584		$1,325,000
(b)	YR. 2020 - 3.15 MGD - BASE PLANT (FLOW RELATED) =	$2,700,000	
	YR. 2020 - 15,300 CAP. - BASE PLANT (BOD/TKN RELATED) =	$1,750,000	
	YR. 2020 - 15,300 CAP. - NITRIFICATION =	$200,000	
	YR. 2020 - 3.15 MGD - FILTRATION =	$390,000	
	YR. 2020 - 3.15 MGD - POST AERATION =	$63,000	
	YR. 2020 - 15,300 CAP. - DENITRIFICATION =	$800,000	
	SUBTOTAL - CAPITAL	$5,903,000	
	YR. 1990 P.W. = $5,903,000 X 0.1314		$776,000

TABLE III-13i

2. O&M COSTS

	YR. 2010	YR. 2030
LABOR & MATERIALS:		
*****************		
FLOW RELATED BASE	$160,000	$245,000
BOD/TKN RELATED BASE	$150,000	$225,000
FILTRATION	$22,000	$32,000
POST AERATION	$4,800	$6,600
NITRIFICATION	$21,000	$30,000
DENITRIFICATION	$56,000	$91,000
POWER:		
*********		
FLOW RELATED BASE	$700	$2,100
BOD/TKN RELATED BASE	$12,000	$180,000
FILTRATION	$100	$400
POST AERATION	$100	$2,400
NITRIFICATION	$4,000	$62,000
DENITRIFICATION	$100	$8,200
CHEMICALS:		
*********		
FLOW RELATED BASE	$1,400	$31,000
BOD/TKN RELATED BASE	$500	$17,500
FILTRATION	NA	NA
POST AERATION	NA	NA
NITRIFICATION	NA	NA
DENITRIFICATION	$500	$10,500
SUBTOTAL = O&M	$433,200	$943,700

GRADIENT = ($943,700 - $433,200)/20 = $25,525/YR.

YR. 1990 O&M P.W. = 0.2584[($433,200 X 10.594) + ($25,525 X 77.509)] = $1,697,000

TOTAL YR. 1990 TRIMMIER CR. STP P.W. (CAPITAL + O&M) = $3,798,000

TABLE III-13j

BELL CO. WCID #1 STP #2 (ROY REYNOLDS)
TREATMENT PLANT PRESENT WORTH COSTS

I. ALTERNATE 1: PHASE III, (2010 - 2030) (CONT'D).

YR. 2010 Qa = 2.12 MGD, Qm = 3.00 MGD
YR. 2030 Qa = 7.68 MGD, Qm = 11.06 MGD
YR. 2010 CAPITA = 12,900
YR. 2030 CAPITA = 51,700

-REQUIRED EFFLUENT = 7 BOD, 2 NH3-N, 6 DO, 15 TSS

-REQUIRED PROCESSES = BASE PLANT, NITRIFICATION, POST AERATION AND FILTRATION

-EXISTING FACILITIES = NONE

-REQUIRED NEW FACILITIES = 5 MGD Qm, 23,400 CAPITA BASE PLANT BY YR. 2010 W/NITRIFICATION, FILTRATION, AND POST AERATION. EXPAND TO 11.06 MGD Qm AND 51,700 CAP. BY YR. 2020 WITH 6.06 MGD Qm AND 28,300 CAP. EXPANSION.

-TOTAL PLANT CAPACITY PROVIDED IN 2020 = 11.06 MGD Qm, 51,700 CAPITA

1. CAPITAL COSTS

(a)	YR. 2010 - 5 MGD - BASE PLANT (FLOW RELATED) =	$3,700,000	
	YR. 2010 - 23,400 CAP. - BASE PLANT (BOD/TKN RELATED) =	$2,400,000	
	YR. 2010 - 23,400 CAP. - NITRIFICATION =	$270,000	
	YR. 2010 - 5 MGD - FILTRATION =	$468,000	
	YR. 2010 - 5 MGD - POST AERATION =	$81,000	
	SUBTOTAL - CAPITAL	$6,919,000	
	YR. 1990 P.W. = $6,919,000 X 0.2584		$1,788,000
(b)	YR. 2020 - 6.06 MGD - BASE PLANT EXP. (FLOW RELATED) =	$4,300,000	
	YR. 2020 - 28,300 CAP. - BASE PLANT EXP. (BOD/TKN RELATED) =	$2,750,000	
	YR. 2020 - 28,300 CAP. - NITRIFICATION =	$305,000	
	YR. 2020 - 6.06 MGD - FILTRATION =	$550,000	
	YR. 2020 - 6.06 MGD - POST AERATION =	$90,000	
	SUBTOTAL - CAPITAL	$7,995,000	
	YR. 1990 P.W. = $7,995,000 X 0.1314		$1,051,000
	TOTAL		$2,839,000

TABLE III-13j

2. O&M COSTS

	YR. 2010	YR. 2030
LABOR & MATERIALS:		
*****************		
FLOW RELATED BASE	$230,000	$355,000
BOD/TKN RELATED BASE	$210,000	$345,000
FILTRATION	$30,000	$47,000
POST AERATION	$6,100	$12,200
NITRIFICATION	$28,000	$42,000
DENITRIFICATION	NA	NA
POWER:		
*********		
FLOW RELATED BASE	$1,600	$3,800
BOD/TKN RELATED BASE	$100,000	$285,000
FILTRATION	$300	$600
POST AERATION	$1,500	$4,200
NITRIFICATION	$35,000	$91,000
DENITRIFICATION	NA	NA
CHEMICALS:		
*********		
FLOW RELATED BASE	$18,500	$51,500
BOD/TKN RELATED BASE	$9,000	$32,000
FILTRATION	NA	NA
POST AERATION	NA	NA
NITRIFICATION	NA	NA
DENITRIFICATION	NA	NA
SUBTOTAL = O&M	$670,000	$1,269,300

GRADIENT = ($1,269,300 - $670,000)/20 = $29,965/YR.

YR. 1990 O&M P.W. = 0.2584[($670,000 X 10.594) + ($29,965 X 77.509)] =	$2,434,000
TOTAL YR. 1990 BELL CO. WCID #1, STP #2 P.W. (CAPITAL + O&M) =	$5,273,000

TABLE III-13j

BELL CO. WCID #1 STP #2 (ROY REYNOLDS)
TREATMENT PLANT PRESENT WORTH COSTS

II. ALTERNATE 2: PHASE III, (2010 - 2030) (CONT'D).

YR. 2010 Qa = 2.12 MGD, Qm = 3.00 MGD
YR. 2030 Qa = 7.11 MGD, Qm = 10.16 MGD
YR. 2010 CAPITA = 12,900
YR. 2030 CAPITA = 47,180

-REQUIRED EFFLUENT = 7 BOD, 2 NH3-N, 6 DO, 15 TSS

-REQUIRED PROCESSES = BASE PLANT, NITRIFICATION, POST AERATION AND FILTRATION

-EXISTING FACILITIES = NONE

-REQUIRED NEW FACILITIES = 5 MGD Qm, 23,400 CAPITA BASE PLANT BY YR. 2010 W/NITRIFICATION, FILTRATION, AND POST AERATION. EXPAND TO 10.16 MGD Qm AND 47,180 CAP. BY YR. 2020 WITH 5.16 MGD Qm AND 23,780 CAP. EXPANSION.

-TOTAL PLANT CAPACITY PROVIDED IN 2020 = 10.16 MGD Qm, 47,180 CAPITA

1. CAPITAL COSTS

(a)	YR. 2010 - 5 MGD - BASE PLANT EXP. (FLOW RELATED) =	$3,700,000	
	YR. 2010 - 23,400 CAP. - BASE PLANT EXP. (BOD/TKN RELATED) =	$2,400,000	
	YR. 2010 - 23,400 CAP. - NITRIFICATION =	$270,000	
	YR. 2010 - 5 MGD - FILTRATION =	$468,000	
	YR. 2010 - 5 MGD - POST AERATION =	$81,000	
	SUBTOTAL - CAPITAL	$6,919,000	
	YR. 1990 P.W. = $6,919,000 X 0.2584		$1,788,000
(b)	YR. 2020 - 5.16 MGD - BASE PLANT EXP. (FLOW RELATED) =	$3,800,000	
	YR. 2020 - 23,780 CAP. - BASE PLANT EXP. (BOD/TKN RELATED) =	$2,400,000	
	YR. 2020 - 23,780 CAP. - NITRIFICATION =	$270,000	
	YR. 2020 - 5.16 MGD - FILTRATION =	$480,000	
	YR. 2020 - 5.16 MGD - POST AERATION - NEW =	$82,000	
	SUBTOTAL - CAPITAL	$7,032,000	
	YR. 1990 P.W. = $7,032,000 X 0.1314		$924,000
	TOTAL		$2,712,000

TABLE III-13j

2. O&M COSTS

	YR. 2010	YR. 2030
LABOR & MATERIALS:		
******************		
FLOW RELATED BASE	$230,000	$335,000
BOD/TKN RELATED BASE	$210,000	$325,000
FILTRATION	$30,000	$45,000
POST AERATION	$6,100	$11,100
NITRIFICATION	$28,000	$40,000
DENITRIFICATION	NA	NA
POWER:		
*********		
FLOW RELATED BASE	$1,600	$3,500
BOD/TKN RELATED BASE	$100,000	$265,000
FILTRATION	$300	$500
POST AERATION	$1,500	$3,900
NITRIFICATION	$35,000	$86,000
DENITRIFICATION	NA	NA
CHEMICALS:		
*********		
FLOW RELATED BASE	$18,500	$48,000
BOD/TKN RELATED BASE	$9,000	$29,500
FILTRATION	NA	NA
POST AERATION	NA	NA
NITRIFICATION	NA	NA
DENITRIFICATION	NA	NA
SUBTOTAL = O&M	$670,000	$1,192,500

GRADIENT = ($1,192,500 - $670,000)/20 = $26,125/YR.

YR. 1990 O&M P.W. = 0.2584[($670,000 X 10.594) + ($26,125 X 77.509)] = $2,357,000

TOTAL YR. 1990 BELL CO. WCID #1, STP #2 P.W. (CAPITAL + O&M) = $5,069,000

TABLE III-13j

BELL CO. WCID #1 STP #2 (ROY REYNOLDS)
TREATMENT PLANT PRESENT WORTH COSTS

III. ALTERNATE 3: PHASE III, (2010 - 2030) (CONT'D).

YR. 2010 Qa = 1.06 MGD, Qm = 1.50 MGD
YR. 2030 Qa = 4.16 MGD, Qm = 6.01 MGD
YR. 2010 CAPITA = 6,450
YR. 2030 CAPITA = 26,480

-REQUIRED EFFLUENT = 7 BOD, 2 NH3-N, 6 DO, 15 TSS

-REQUIRED PROCESSES = BASE PLANT, NITRIFICATION, POST AERATION AND FILTRATION

-EXISTING FACILITIES = NONE

-REQUIRED NEW FACILITIES = 3.2 MGD Qm, 14,100 CAPITA BASE PLANT BY YR. 2010 W/NITRIFICATION, FILTRATION, AND POST AERATION. EXPAND TO 6.01 MGD Qm 26,480 CAP. BY YR. 2020 WITH 2.8 MGD Qm AND 12,380 CAP. EXPANSION.

-TOTAL PLANT CAPACITY PROVIDED IN 2020 = 6.01 MGD Qm, 26,480 CAPITA

1. CAPITAL COSTS

(a)	YR. 2010 - 3.2 MGD - BASE PLANT (FLOW RELATED) =	$2,750,000	
	YR. 2010 - 14,100 CAP. - BASE PLANT (BOD/TKN RELATED) =	$1,650,000	
	YR. 2010 - 14,100 CAP. - NITRIFICATION =	$190,000	
	YR. 2010 - 3.2 MGD - FILTRATION =	$390,000	
	YR. 2010 - 3.2 MGD - POST AERATION =	$64,000	
	SUBTOTAL - CAPITAL	$5,044,000	
	YR. 1990 P.W. = $5,044,000 X 0.2584		$1,303,000
(b)	YR. 2020 - 2.8 MGD - BASE PLANT (FLOW RELATED) =	$2,500,000	
	YR. 2020 - 12,380 CAP. - BASE PLANT (BOD/TKN RELATED) =	$1,450,000	
	YR. 2020 - 12,380 CAP. - NITRIFICATION =	$170,000	
	YR. 2020 - 2.8 MGD - FILTRATION =	$370,000	
	YR. 2020 - 2.8 MGD - POST AERATION - NEW =	$60,000	
	SUBTOTAL - CAPITAL	$4,550,000	
	YR. 1990 P.W. = $4,550,000 X 0.1314		$598,000
	TOTAL		$1,901,000

TABLE III-13j

2. O&M COSTS

	YR. 2010	YR. 2030
LABOR & MATERIALS:		
******************		
FLOW RELATED BASE	$180,000	$250,000
BOD/TKN RELATED BASE	$155,000	$220,000
FILTRATION	$24,000	$33,000
POST AERATION	$5,200	$6,900
NITRIFICATION	$22,000	$29,000
DENITRIFICATION	NA	NA
POWER:		
*********		
FLOW RELATED BASE	$1,100	$2,300
BOD/TKN RELATED BASE	$54,000	$170,000
FILTRATION	$200	$400
POST AERATION	$900	$2,500
NITRIFICATION	$17,000	$60,000
DENITRIFICATION	NA	NA
CHEMICALS:		
*********		
FLOW RELATED BASE	$7,000	$32,000
BOD/TKN RELATED BASE	$5,200	$17,000
FILTRATION	NA	NA
POST AERATION	NA	NA
NITRIFICATION	NA	NA
DENITRIFICATION	NA	NA
SUBTOTAL = O&M	$471,600	$823,100

GRADIENT = ($823,100 - $471,600)/20 = $17,575/YR.

YR. 1990 O&M P.W. = 0.2584[($471,600 X 10.594) + ($17,575 X 77.509)] = $1,643,000

TOTAL YR. 1990 BELL CO. WCID #1, STP #2 P.W. (CAPITAL + O&M) = $3,544,000

TABLE III-13k
MATKIN

TREATMENT PLANT PRESENT WORTH COSTS

I. ALTERNATE 1: PHASE I, (1990 - 2000)

YR. 1990 Qa = 0.08 MGD, Qm = 0.12 MGD

YR. 1990 CAPITA = 500

-REQUIRED EFFLUENT = 10 BOD, 15 TSS

-REQUIRED PROCESSES = BASE PLANT

-EXISTING FACILITIES =

-REQUIRED NEW FACILITIES = NONE

1. CAPITAL COSTS

YR. 1990 - 0.03 MGD - BASE PLANT (FLOW RELATED) =	$0	
YR. 1990 - 100 CAP. - BASE PLANT (BOD RELATED) =	$0	
YR. 1990 - 100 CAP. - NITRIFICATION =	NA	
YR. 1990 - 0.03 MGD - FILTRATION =	NA	
YR. 1990 - 0.03 MGD - POST AERATION =	NA	
YR. 1990 - 100 CAP. - DENITRIFICATION =	NA	
SUBTOTAL - CAPITAL	$0	
YR. 1990 P.W. = CAPITAL		$0

2. O&M COSTS

	YR. 1990
LABOR & MATERIALS:	
FLOW RELATED BASE	$36,000
BOD RELATED BASE	$57,600
FILTRATION	NA
POST AERATION	NA
NITRIFICATION	NA
DENITRIFICATION	NA
POWER:	
FLOW RELATED BASE	$800
BOD RELATED BASE	$11,200
FILTRATION	NA
POST AERATION	NA
NITRIFICATION	NA

TABLE III-13k
CONT'D.

DENITRIFICATION	NA	
CHEMICALS:		
*********		
FLOW RELATED BASE	$1,300	
BOD RELATED BASE	$800	
FILTRATION	NA	
POST AERATION	NA	
NITRIFICATION	NA	
DENITRIFICATION	NA	

SUBTOTAL = O&M	$107,700	
GRADIENT = $0		
YR. 1990 O&M P.W. = CAPITAL		$107,700

TOTAL YR. 1990 MATKIN STP P.W. (CAPITAL + O&M) =		$107,700

TABLE III-131

COMANCHEE HILLS UTILITY DISTRICT
TREATMENT PLANT PRESENT WORTH COSTS

I. ALTERNATE 1: PHASE I, (1990 - 2000)

YR. 1990 Qa = 0.02 MGD, Qm = 0.03 MGD

YR. 1990 CAPITA = 100

-REQUIRED EFFLUENT = 10 BOD, 15 TSS

-REQUIRED PROCESSES = BASE PLANT

-EXISTING FACILITIES =

-REQUIRED NEW FACILITIES = NONE

1. CAPITAL COSTS

YR. 1990 - 0.03 MGD - BASE PLANT (FLOW RELATED) =	$0	
YR. 1990 - 100 CAP. - BASE PLANT (BOD/TKN RELATED) =	$0	
YR. 1990 - 100 CAP. - NITRIFICATION =	NA	
YR. 1990 - 0.03 MGD - FILTRATION =	NA	
YR. 1990 - 0.03 MGD - POST AERATION =	NA	
YR. 1990 - 100 CAP. - DENITRIFICATION =	NA	
SUBTOTAL - CAPITAL	$0	
YR. 1990 P.W. = CAPITAL		$0

2. O&M COSTS

	YR. 1990
LABOR & MATERIALS:	
******************	
FLOW RELATED BASE	$9,000
BOD RELATED BASE	$14,400
FILTRATION	NA
POST AERATION	NA
NITRIFICATION	NA
DENITRIFICATION	NA
POWER:	
*********	
FLOW RELATED BASE	$200
BOD RELATED BASE	$2,800
FILTRATION	NA
POST AERATION	NA
NITRIFICATION	NA

TABLE III-131

DENITRIFICATION	NA
CHEMICALS:	
*********	
FLOW RELATED BASE	$320
BOD/TKN RELATED BASE	$180
FILTRATION	NA
POST AERATION	NA
NITRIFICATION	NA
DENITRIFICATION	NA
SUBTOTAL = O&M	$26,900

GRADIENT = $0

YR. 1990 O&M P.W. = CAPITAL	$26,900
TOTAL YR. 1990 COMANCHEE HILLS U.D. STP P.W. (CAPITAL + O&M) =	$26,900

TABLE III-14

SUMMARY OF PRESENT WORTH
COST FOR EACH ALTERNATIVE

I. ALTERNATE 1

A. PHASE I (1990-2000)

1. CAPITAL COSTS

a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$3,647,000	
HARKER HEIGHTS SERVICE AREA		$866,000	
NOLANVILLE SERVICE AREA		$0	
b. TREATMENT FACILITIES			
WCID #1, MAIN STP		$6,561,000	
HARKER HEIGHTS STP		$0	
NOLANVILLE STP		$320,000	
MATKIN STP		$0	
COMANCHEE HILLS U.D.		$0	
	SUBTOTAL CAPITAL COSTS	$11,394,000	

2. O&M COSTS

a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$518,000	
HARKER HEIGHTS SERVICE AREA		$137,000	
NOLANVILLE SERVICE AREA		0	
b. TREATMENT FACILITIES			
WCID #1, MAIN STP		$14,323,000	
HARKER HEIGHTS STP		$3,858,000	
NOLANVILLE STP		$1,250,000	
MATKIN STP		$108,000	
COMANCHEE HILLS U.D.		$27,000	
	SUBTOTAL O&M COSTS	$20,221,000	
	SUBTOTAL PHASE I		$31,615,000

TABLE III-14

SUMMARY OF PRESENT WORTH
COST FOR EACH ALTERNATIVE

I. ALTERNATE 1 (CONT'D.)

B. PHASE II (2000-2010)

1. CAPITAL COSTS			
a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$143,000	
HARKER HEIGHTS SERVICE AREA		$1,257,000	
MISC. LAKE		$1,107,000	
NOLANVILLE SERVICE AREA		$49,000	
b. TREATMENT FACILITIES			
WCID #1, MAIN STP		$0	
HARKER HEIGHTS STP		$1,197,000	
NOLANVILLE STP		$163,000	
LAKE DAM STP		$971,000	
	SUBTOTAL CAPITAL COSTS	$4,887,000	
2. O&M COSTS			
a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$298,000	
HARKER HEIGHTS SERVICE AREA		$254,000	
MISC. LAKE		$168,000	
NOLANVILLE SERVICE AREA		$17,000	
b. TREATMENT FACILITIES			
WCID #1, MAIN STP		$8,204,000	
HARKER HEIGHTS STP		$2,286,000	
NOLANVILLE STP		$689,000	
LAKE DAM STP		$890,000	
	SUBTOTAL O&M COSTS	$12,806,000	
	SUBTOTAL PHASE II		$17,693,000

TABLE III-14

SUMMARY OF PRESENT WORTH
COST FOR EACH ALTERNATIVE

I. ALTERNATE 1 (CONT'D.)

C. PHASE III (2010-2030)

1. CAPITAL COSTS

a. TRANSPORT FACILITIES		
KILLEEN SERVICE AREA	$1,411,000	
HARKER HEIGHTS SERVICE AREA	$0	
MISC. LAKE	$0	
NOLANVILLE SERVICE AREA	$28,000	
b. TREATMENT FACILITIES		
WCID #1, STP #2	$2,839,000	
WCID #1, MAIN STP	$0	
HARKER HEIGHTS STP	$0	
NOLANVILLE STP	$249,000	
LAKE DAM STP	$0	
SUBTOTAL CAPITAL COSTS	$4,527,000	

2. O&M COSTS

a. TRANSPORT FACILITIES		
KILLEEN SERVICE AREA	$757,000	
HARKER HEIGHTS SERVICE AREA	$230,000	
MISC. LAKE	$129,000	
NOLANVILLE SERVICE AREA	$23,000	
b. TREATMENT FACILITIES		
WCID #1, STP #2	$2,434,000	
WCID #1, MAIN STP	$6,339,000	
HARKER HEIGHTS STP	$1,905,000	
NOLANVILLE STP	$617,000	
LAKE DAM STP	$682,000	
SUBTOTAL O&M COSTS	$13,116,000	
SUBTOTAL PHASE III		$17,643,000
GRAND TOTAL ALTERNATE 1		$66,951,000

TABLE III-14

SUMMARY OF PRESENT WORTH
COST FOR EACH ALTERNATIVE

II. ALTERNATE 2:

A. PHASE I (1990-2000)

1. CAPITAL COSTS

a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$3,647,000	
HARKER HEIGHTS SERVICE AREA		$866,000	
NOLANVILLE SERVICE AREA		$0	
b. TREATMENT FACILITIES			
WCID #1, MAIN STP		$6,561,000	
HARKER HEIGHTS STP		$0	
NOLANVILLE STP		$320,000	
	SUBTOTAL CAPITAL COSTS	$11,394,000	

2. O&M COSTS

a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$518,000	
HARKER HEIGHTS SERVICE AREA		$137,000	
NOLANVILLE SERVICE AREA		$0	
b. TREATMENT FACILITIES			
WCID #1, MAIN STP		$14,323,000	
HARKER HEIGHTS STP		$3,858,000	
NOLANVILLE STP		$1,250,000	
MATKIN STP		$108,000	
COMANCHE HILLS U.D.		$27,000	
	SUBTOTAL O&M COSTS	$20,221,000	
	SUBTOTAL PHASE I		$31,615,000

TABLE III-14

SUMMARY OF PRESENT WORTH
COST FOR EACH ALTERNATIVE

II. ALTERNATE 2 (CONT'D.)

B. PHASE II (2000-2010)

1. CAPITAL COSTS

a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$143,000	
HARKER HEIGHTS SERVICE AREA		$1,257,000	
NOLANVILLE SERVICE AREA		$49,000	
b. TREATMENT FACILITIES			
WCID #1, MAIN STP		$0	
NORTHSIDE STP		$840,000	
UNION GROVE STP		$365,000	
SOUTHSIDE STP		$840,000	
HARKER HEIGHTS STP		$1,197,000	
NOLANVILLE STP		$163,000	
	SUBTOTAL CAPITAL COSTS	$4,854,000	

2. O&M COSTS

a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$298,000	
HARKER HEIGHTS SERVICE AREA		$254,000	
NOLANVILLE SERVICE AREA		$17,000	
b. TREATMENT FACILITIES			
WCID #1, MAIN STP		$8,204,000	
NORTHSIDE STP		$883,000	
UNION GROVE STP		$630,000	
SOUTHSIDE STP		$883,000	
HARKER HEIGHTS STP		$2,286,000	
NOLANVILLE STP		$689,000	
	SUBTOTAL O&M COSTS	$14,144,000	
	SUBTOTAL PHASE II		$18,998,000

TABLE III-14

SUMMARY OF PRESENT WORTH
COST FOR EACH ALTERNATIVE

II. ALTERNATE 2 (CONT'D.)

C. PHASE III (2010-2030)

1. CAPITAL COSTS

a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$1,259,000	
HARKER HEIGHTS SERVICE AREA		$0	
NOLANVILLE SERVICE AREA		$28,000	
b. TREATMENT FACILITIES			
WCID #1, STP #2		$2,712,000	
WCID #1, MAIN STP		$0	
NORTHSIDE STP		$0	
UNION GROVE STP		$0	
SOUTHSIDE STP		$0	
HARKER HEIGHTS STP		$0	
NOLANVILLE STP		$249,000	
ONION CREEK STP		$337,000	
	SUBTOTAL CAPITAL COSTS	$4,585,000	

2. O&M COSTS

a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$721,000	
HARKER HEIGHTS SERVICE AREA		$230,000	
NOLANVILLE SERVICE AREA		$23,000	
b. TREATMENT FACILITIES			
WCID #1, STP #2		$2,357,000	
WCID #1, MAIN STP		$6,339,000	
NORTHSIDE STP		$677,000	
UNION GROVE STP		$483,000	
SOUTHSIDE STP		$677,000	
HARKER HEIGHTS STP		$1,905,000	
NOLANVILLE STP		$617,000	
ONION CREEK STP		$293,000	
	SUBTOTAL O&M COSTS	$14,322,000	
	SUBTOTAL PHASE III		$18,907,000
	GRAND TOTAL ALTERNATE 2		$69,520,000

TABLE III-14

SUMMARY OF PRESENT WORTH
COST FOR EACH ALTERNATIVE

III. ALTERNATE 3

A. PHASE I (1990-2000)

1. CAPITAL COSTS

a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$3,021,000	
HARKER HEIGHTS SERVICE AREA		$376,000	
NOLANVILLE SERVICE AREA		$0	
b. TREATMENT FACILITIES			
WCID #1, MAIN STP		$6,561,000	
HARKER HEIGHTS STP		$0	
NOLANVILLE STP		$320,000	

	SUBTOTAL CAPITAL COSTS	$10,278,000	

2. O&M COSTS

a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$432,000	
HARKER HEIGHTS SERVICE AREA		$50,000	
NOLANVILLE SERVICE AREA		$0	
b. TREATMENT FACILITIES			
WCID #1, MAIN STP		$14,323,000	
HARKER HEIGHTS STP		$3,858,000	
NOLANVILLE STP		$1,250,000	
MATKIN STP		$108,000	
COMANCHE HILLS U.D.		$27,000	

	SUBTOTAL O&M COSTS	$20,048,000	
	SUBTOTAL PHASE I		$30,326,000

TABLE III-14

SUMMARY OF PRESENT WORTH
COST FOR EACH ALTERNATIVE

III. ALTERNATE 3 (CONT'D.)

B. PHASE II (2001-2010)

1. CAPITAL COSTS			
a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$116,000	
HARKER HEIGHTS SERVICE AREA		$1,146,000	
NOLANVILLE SERVICE AREA		$49,000	
b. TREATMENT FACILITIES			
WCID #1, MAIN STP		$0	
NORTHSIDE STP		$840,000	
UNION GROVE STP		$365,000	
SOUTHSIDE STP		$840,000	
HARKER HEIGHTS STP		$523,000	
NOLANVILLE STP		$163,000	
	SUBTOTAL CAPITAL COSTS	$4,042,000	
2. O&M COSTS			
a. TRANSPORT FACILITIES			
KILLEEN SERVICE AREA		$235,000	
HARKER HEIGHTS SERVICE AREA		$200,000	
NOLANVILLE SERVICE AREA		$17,000	
b. TREATMENT FACILITIES			
WCID #1, MAIN STP		$8,204,000	
NORTHSIDE STP		$883,000	
UNION GROVE STP		$630,000	
SOUTHSIDE STP		$883,000	
HARKER HEIGHTS STP		$2,162,000	
NOLANVILLE STP		$689,000	
	SUBTOTAL O&M COSTS	$13,903,000	
	SUBTOTAL PHASE II		$17,945,000

TABLE III-14

SUMMARY OF PRESENT WORTH
COST FOR EACH ALTERNATIVE

III. ALTERNATE 3 (CONT'D.)

C. PHASE III (2010-2030)

1. CAPITAL COSTS		
a. TRANSPORT FACILITIES		
KILLEEN SERVICE AREA	$950,000	
HARKER HEIGHTS SERVICE AREA	$89,000	
NOLANVILLE SERVICE AREA	$28,000	
b. TREATMENT FACILITIES		
WCID #1, STP #2	$1,901,000	
WCID #1, MAIN STP	$0	
NORTHSIDE STP	$0	
UNION GROVE STP	$0	
SOUTHSIDE STP	$0	
HARKER HEIGHTS STP	$0	
NOLANVILLE STP	$249,000	
ONION CREEK STP	$337,000	
TRIMMIER CREEK STP (KILLEEN SHARE 2010)	$882,000	
TRIMMIER CREEK STP (KILLEEN SHARE 2020)	$569,000	
TRIMMIER CREEK STP (HARKER HGHTS SHARE 2010)	$443,000	
TRIMMIER CREEK STP (HARKER HGHTS SHARE 2020)	$207,000	
SUBTOTAL CAPITAL COSTS	$5,655,000	
2. O&M COSTS		
a. TRANSPORT FACILITIES		
KILLEEN SERVICE AREA	$522,000	
HARKER HEIGHTS SERVICE AREA	$194,000	
NOLANVILLE SERVICE AREA	$23,000	
b. TREATMENT FACILITIES		
WCID #1, STP #2	$1,643,000	
WCID #1, MAIN STP	$6,438,000	
NORTHSIDE STP	$677,000	
UNION GROVE STP	$483,000	
SOUTHSIDE STP	$677,000	
HARKER HEIGHTS STP	$1,708,000	
NOLANVILLE STP	$617,000	
ONION CREEK STP	$293,000	
TRIMMIER CREEK STP (KILLEEN SHARE 2010)	$645,000	
TRIMMIER CREEK STP (KILLEEN SHARE 2020)	$535,000	
TRIMMIER CREEK STP (HARKER HGHTS SHARE 2010)	$324,000	
TRIMMIER CREEK STP (HARKER HGHTS SHARE 2020)	$193,000	
SUBTOTAL O&M COSTS	$14,972,000	
SUBTOTAL PHASE III		$20,627,000
GRAND TOTAL ALTERNATE 3		$68,898,000

TABLE III-14

SUMMARY OF PRESENT WORTH
COST FOR EACH ALTERNATIVE

SUMMARY

ALTERNATE NO. 1	$66,951,000
ALTERNATE NO. 2	$69,520,000
ALTERNATE NO. 3	$68,898,000

TABLE IV-1
SUMMARY OF ALTERNATIVE CAPITAL AND
O&M COSTS PER PHASE

		PHASE I	PHASE II	PHASE III	
ALTERNATIVE I	TRANS				
	CAP	$4,513,000	$2,556,000	$1,439,000	$8,508,000
	O&M	$655,000	$737,000	$1,139,000	$2,531,000
	TREAT				
	CAP	$6,881,000	$2,331,000	$3,088,000	$12,300,000
	O&M	$19,566,000	$12,069,000	$11,977,000	$43,612,000
					$66,951,000
ALTERNATIVE II	TRANS				
	CAP	$4,513,000	$1,449,000	$1,287,000	$7,249,000
	O&M	$655,000	$569,000	$974,000	$2,198,000
	TREAT				
	CAP	$6,881,000	$3,405,000	$3,298,000	$13,584,000
	O&M	$19,566,000	$13,575,000	$13,348,000	$46,489,000
					$69,520,000
ALTERNATIVE III	TRANS				
	CAP	$3,397,000	$1,311,000	$1,067,000	$5,775,000
	O&M	$482,000	$452,000	$739,000	$1,673,000
	TREAT				
	CAP	$6,881,000	$2,731,000	$4,588,000	$14,200,000
	O&M	$19,566,000	$13,451,000	$14,233,000	$47,250,000
					$68,898,000

TABLE IV-2a

SUMMARY OF ALTERNATIVE COSTS FOR THE CITY OF KILLEEN
(Costs Shown are Present Worth 1990)

	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
Phase I (Built by 1990):			
CAPITAL COSTS			
Treatment Plant	$6,561,000	$6,561,000	$6,561,000
Transport Facilities	$3,647,000	$3,647,000	$3,021,000
O&M COSTS			
Treatment Plant	$14,323,000	$14,323,000	$14,323,000
Transport Facilities	$518,000	$518,000	$432,000
Phase II (Built by 2000):			
CAPITAL COSTS			
Treatment Plant	$0	$0	$0
Transport Facilities	$143,000	$143,000	$116,000
O&M COSTS			
Treatment Plant	$8,204,000	$8,204,000	$8,204,000
Transport Facilities	$298,000	$298,000	$235,000
Phase III (Built by 2010):			
CAPITAL COSTS			
Treatment Plant	$2,839,000	$2,712,000	(1) $2,783,000
Transport Facilities	$1,411,000	$1,259,000	(2) $950,000
O&M COSTS			
Treatment Plant	$8,773,000	$8,696,000	(3) $8,726,000
Transport Facilities	$757,000	$721,000	(4) $522,000
(Built by 2020):			
CAPITAL COSTS			
Treatment Plant	N/A	N/A	(5) $569,000
Transport Facilities	N/A	N/A	$0
O&M COSTS			
Treatment Plant	N/A	N/A	(6) $535,000
Transport Facilities	N/A	N/A	$0
TOTAL	$47,474,000	$47,082,000	$46,977,000

TABLE IV-2a

Summary of Alternative Costs for the City of Killeen Cont'd.

NOTE: Costs include: Engineering/Contingencies (20%)
Easement/Right-of-Way

(1) Cost Associated with construction of Killeen's share (66.53%) of the Triamier STP
(2) Cost Associated with Killeen's service area capital costs, Triamier Creek STP/LS,
(3) Cost Associated with Killeen's STP O&M and 66.53% share of the Triamier STP O&M
(4) Cost Associated with Killeen's service area O&M costs and 66.53% of the Triamier STP/LS
(5) Cost Associated with construction of Killeen's share (73.45%) of the Triamier STP expansion
(6) Cost Associated with Killeen's share (73.45%) of the Triamier STP O&M

TABLE IV-2b

SUMMARY OF ALTERNATIVE COSTS FOR THE CITY OF HARKER HEIGHTS
(Costs Shown are Present Worth 1990)

	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
Phase I (Built by 1990):			
CAPITAL COSTS			
Treatment Plant	$0	$0	$0
Transport Facilities	$866,000	$866,000	$376,000
O&M COSTS			
Treatment Plant	$3,993,000	$3,993,000	$3,993,000
Transport Facilities	$137,000	$137,000	$50,000
Phase II (Built by 2000):			
CAPITAL COSTS			
Treatment Plant	$1,197,000	$1,197,000	$523,000
Transport Facilities	$1,257,000	$1,257,000	$1,146,000
O&M COSTS			
Treatment Plant	$2,286,000	$2,286,000	$2,162,000
Transport Facilities	$254,000	$254,000	$200,000
Phase III (Built by 2010):			
CAPITAL COSTS			
Treatment Plant	$0	$0	(1) $443,000
Transport Facilities	$0	$0	(2) $89,000
O&M COSTS			
Treatment Plant	$1,905,000	$1,905,000	(3) $2,032,000
Transport Facilities	$230,000	$230,000	(4) $183,000
(Built by 2020):			
CAPITAL COSTS			
Treatment Plant	N/A	N/A	(5) $207,000
Transport Facilities	N/A	N/A	$0
O&M COSTS			
Treatment Plant	N/A	N/A	(6) $193,000
Transport Facilities	N/A	N/A	(7) $11,000
TOTAL	$12,125,000	$12,125,000	$11,608,000

TABLE IV-2b

Summary of Alternative Costs for the City of Harker Heights Cont'd.

NOTE: Costs include: Engineering/Contingencies (20%)
Easement/Right-of-Way

(1) Cost Associated with construction of Harker Heights share (33.47%) of the Trimmier STP
(2) Cost Associated with Harker Heights service area capital costs, Trimmier Creek STP/LS,
(3) Cost Associated with Harker Heights STP O&M and 33.47% share of the Trimmier STP O&M
(4) Cost Associated with Harker Heights service area O&M costs and 33.47% of the Trimmier STP/LS
(5) Cost Associated with construction of Harker Heights share (26.55%) of the Trimmier STP expansion
(6) Cost Associated with Harker Heights share (26.55%) of the Trimmier STP O&M
(7) Cost Associated with Harker Heights share (26.55%) of the Trimmier STP/LS O&M

TABLE IV-2c

SUMMARY OF ALTERNATIVE COSTS FOR THE CITY OF NOLANVILLE
(Costs Shown are Present Worth 1990)

	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
Phase I (Built by 1990):			
CAPITAL COSTS			
Treatment Plant	$320,000	$320,000	$320,000
Transport Facilities	$0	$0	$0
O&M COSTS			
Treatment Plant	$1,250,000	$1,250,000	$1,250,000
Transport Facilities	$0	$0	$0
Phase II (Built by 2000):			
CAPITAL COSTS			
Treatment Plant	$163,000	$163,000	$163,000
Transport Facilities	$49,000	$49,000	$49,000
O&M COSTS			
Treatment Plant	$689,000	$689,000	$689,000
Transport Facilities	$17,000	$17,000	$17,000
Phase III (Built by 2010):			
CAPITAL COSTS			
Treatment Plant	$249,000	$249,000	$249,000
Transport Facilities	$28,000	$28,000	$28,000
O&M COSTS			
Treatment Plant	$617,000	$617,000	$617,000
Transport Facilities	$23,000	$23,000	$23,000
TOTAL	$3,405,000	$3,405,000	$3,405,000

NOTE: Costs include: Engineering/Contingencies (20%)
Easement/Right-of-Way

TABLE IV-2d

MISCELLANEOUS LAKESIDE DEVELOPMENTS

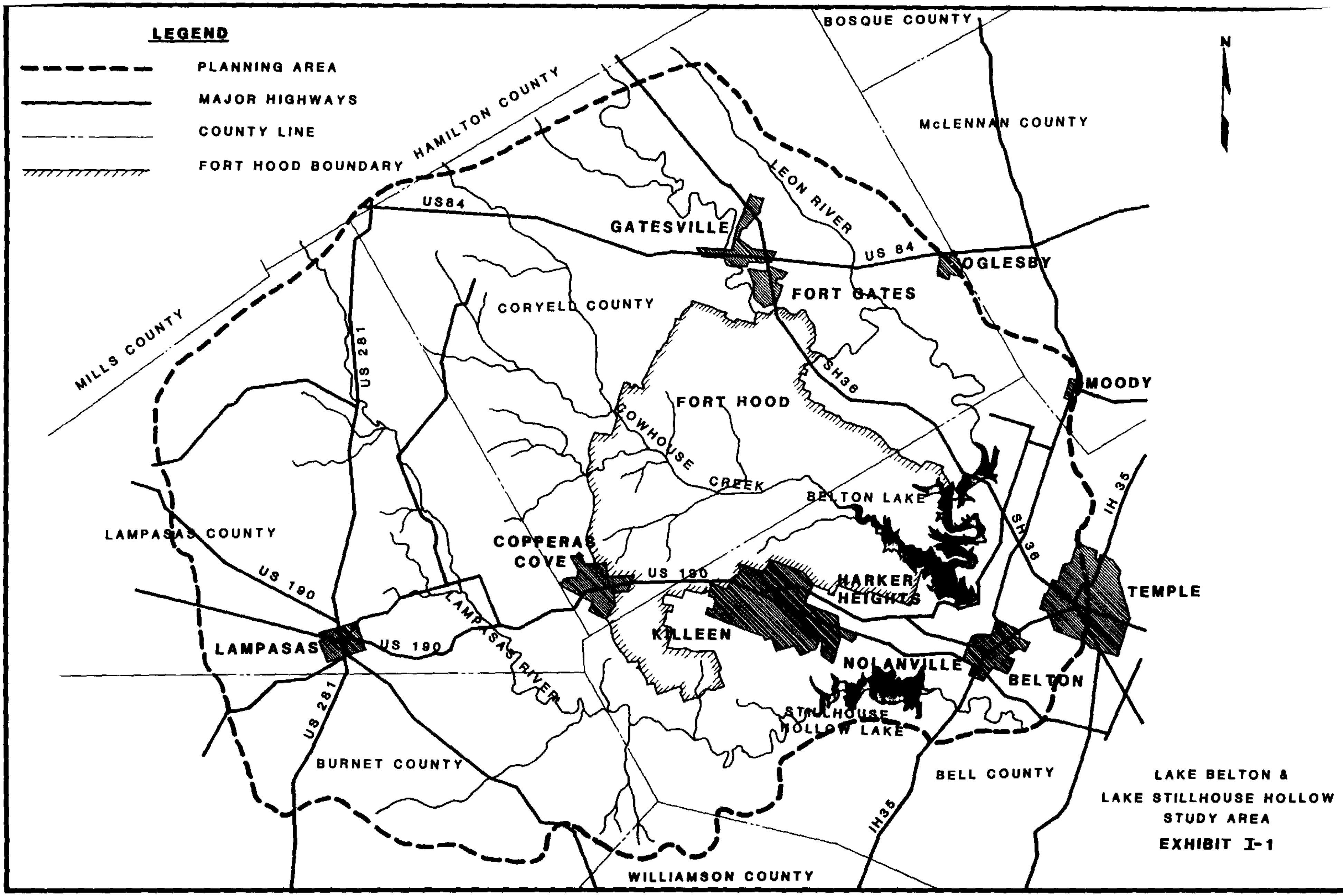
SUMMARY OF ALTERNATIVE COSTS FOR THE LAKESIDE DEVELOPMENTS
(Costs Shown are Present Worth 1990)

	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
Phase I (Built by 1990):			
CAPITAL COSTS			
Treatment Plant	$0	$0	$0
Transport Facilities	$0	$0	$0
O&M COSTS			
Treatment Plant	$0	$0	$0
Transport Facilities	$0	$0	$0
Phase II (Built by 2000):			
CAPITAL COSTS			
Treatment Plant	$971,000	$2,045,000	$2,045,000
Transport Facilities	$1,107,000	$0	$0
O&M COSTS			
Treatment Plant	$890,000	$2,396,000	$2,396,000
Transport Facilities	$168,000	$0	$0
Phase III (Built by 2010):			
CAPITAL COSTS			
Treatment Plant	$0	$337,000	$337,000
Transport Facilities	$0	$0	$0
O&M COSTS			
Treatment Plant	$682,000	$2,130,000	$2,130,000
Transport Facilities	$129,000	$0	$0
TOTAL	$3,947,000	$6,908,000	$6,908,000

NOTE: Costs include: Engineering/Contingencies (20%)
Easement/Right-of-Way

TABLE IV-3
ALTERNATIVE COSTS PER PARTICIPANT

	ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
KILLEEN	$47,474,000	$47,082,000	$46,977,000
HARKER HEIGHTS	$12,125,000	$12,125,000	$11,608,000
NOLANVILLE	$3,405,000	$3,405,000	$3,405,000
MISC. LAKE DEVELOPMENTS	$3,947,000	$6,908,000	$6,908,000
	$66,951,000	$69,520,000	$68,898,000

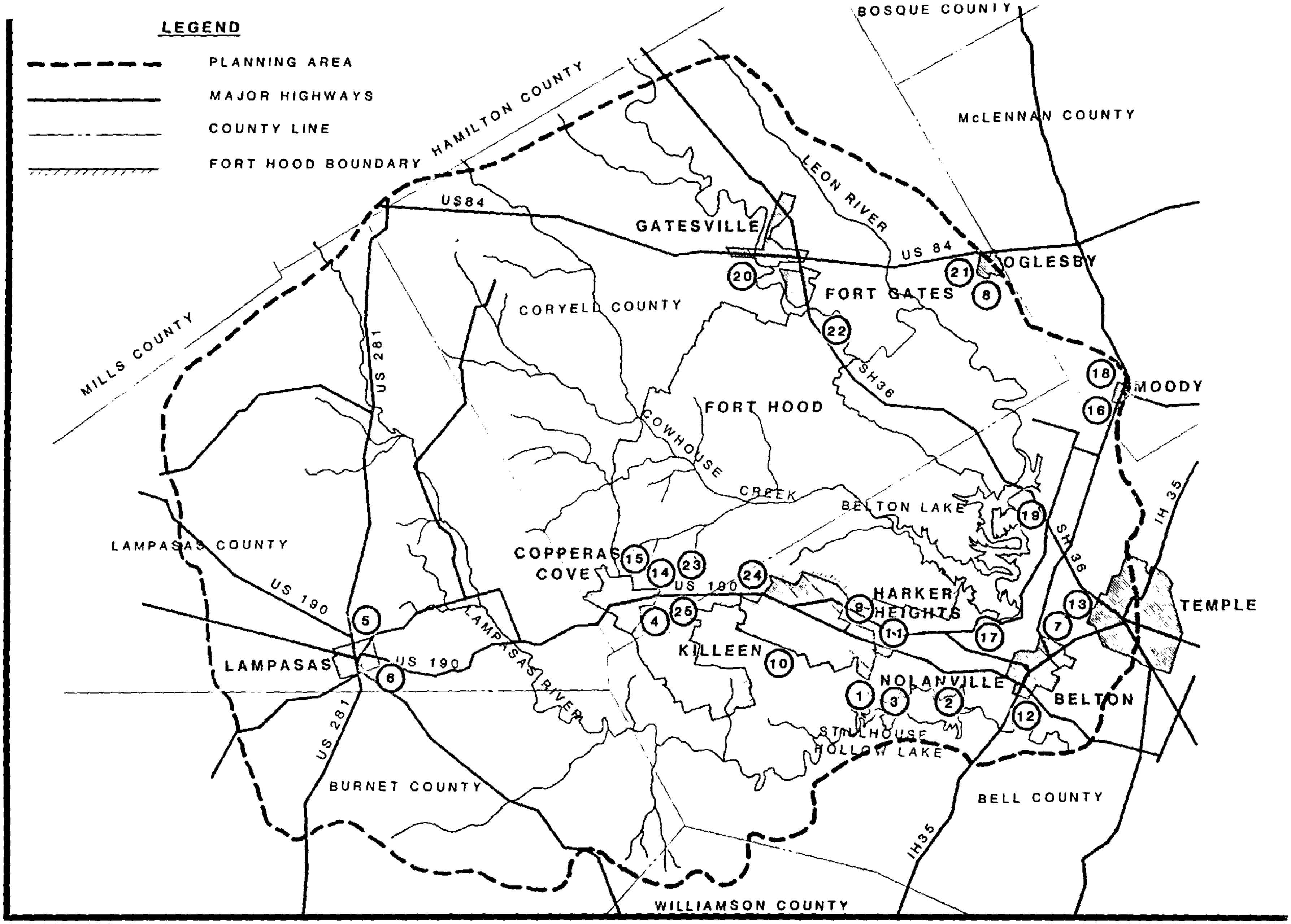

LEGEND
PLANNING AREA
MAJOR HIGHWAYS
COUNTY LINE
FORT HOOD BOUNDARY
N
BOSQUE COUNTY
HAMILTON COUNTY
McLENNAN COUNTY
MILLS COUNTY
CORYELL COUNTY
LAMPASAS COUNTY
BURNET COUNTY
WILLIAMSON COUNTY
BELL COUNTY
GATESVILLE
FORT GATES
OGLESBY
MOODY
FORT HOOD
COPPERAS COVE
KILLEEN
HARKER HEIGHTS
NOLANVILLE
BELTON
TEMPLE
LAMPASAS
LEON RIVER
COWHOUSE CREEK
BELTON LAKE
STILLHOUSE HOLLOW LAKE
LAMPASAS RIVER
US84
US 84
US 281
US 190
SH36
SH 36
IH 35
IH35
LAKE BELTON &
LAKE STILLHOUSE HOLLOW
STUDY AREA
EXHIBIT I-1

N

1. COMANCHE UD-STP
2. US CORPS OF ENGINEERS-STILLHOUSE PARK STP
3. US CORPS OF ENGINEERS-DANA PEAK PARK
4. CITY OF COPPERAS COVE-SOUTH STP
5. CITY OF LAMPASAS-SULPHER STP
6. CITY OF LAMPASAS-HENDERSON STP
7. US CORPS OF ENGINEERS-BELTON LAKEVIEW PARK
8. US NAVY-HERCULES STP
9. BELL CO. WCID 4-HARKER HEIGHTS
10. BELL CO. WCID 1-KILLEEN
11. BELL CO. WCID 3-NOLANVILLE
12. BRA-TEMPLE-BELTON STP
13. RALPH WILSON PLASTICS CO.
14. CITY OF COPPERAS COVE-NEW N.E. PLANT
15. CITY OF COPPERAS COVE-OTFL 005 NEW N.W. PLANT
16. CITY OF MOODY-STP
17. BELL CO. WCID 1-STP
18. GREENBRIER GOLF COURSE-STP
19. CITY OF MORGAN'S POINT RESORT-STP
20. CITY OF GATESVILLE-STP
21. CITY OF OGLESBY-STP
22. US ARMY-OTFL 001 & OTFL 003 N. FORT HOOD
23. US ARMY-OTFL 006 AND OTFL 007 FORT HOOD CORYELL CO.
24. US ARMY-OTFL 001, OTFL 002, OTFL 010, OTFL 004, OTFL 005, FORT HOOD-BELL CO.
25. US ARMY-WEST FORT HOOD

EXISTING
WASTEWATER TREATMENT
PLANT LOCATIONS WITHIN
THE STUDY AREA

EXHIBIT II-1



LEGEND
PLANNING AREA
MAJOR HIGHWAYS
COUNTY LINE
FORT HOOD BOUNDARY
BOSQUE COUNTY
HAMILTON COUNTY
McLENNAN COUNTY
MILLS COUNTY
CORYELL COUNTY
LAMPASAS COUNTY
BURNET COUNTY
BELL COUNTY
WILLIAMSON COUNTY
GATESVILLE
FORT GATES
OGLESBY
MOODY
FORT HOOD
COPPERAS COVE
KILLEEN
HARKER HEIGHTS
NOLANVILLE
BELTON
TEMPLE
LAMPASAS
LEON RIVER
COWHOUSE CREEK
BELTON LAKE
LAMPASAS RIVER
STILLHOUSE HOLLOW LAKE
US84
US 84
US 281
US 190
SH36
SH 36
IH 35
IH35
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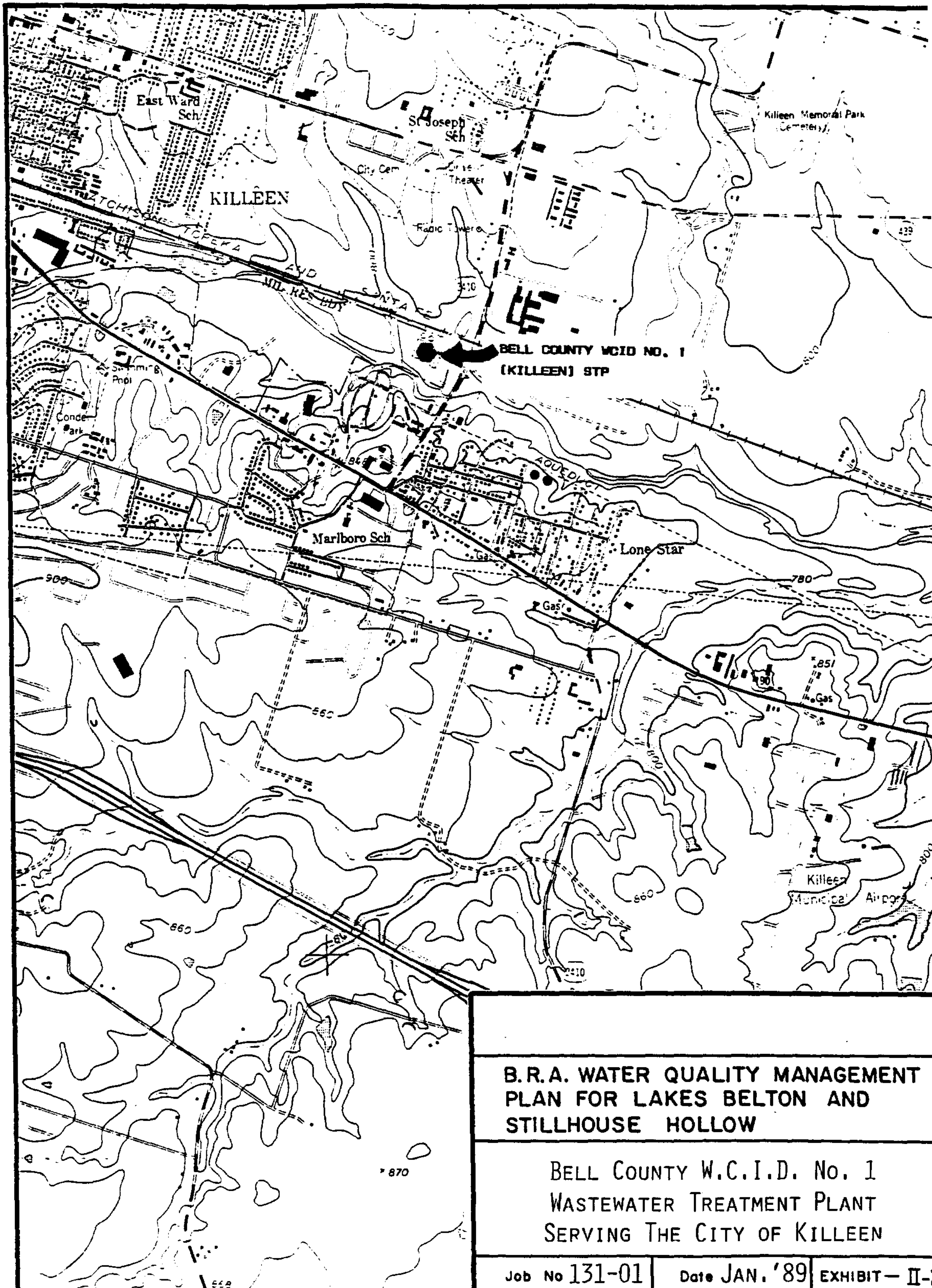
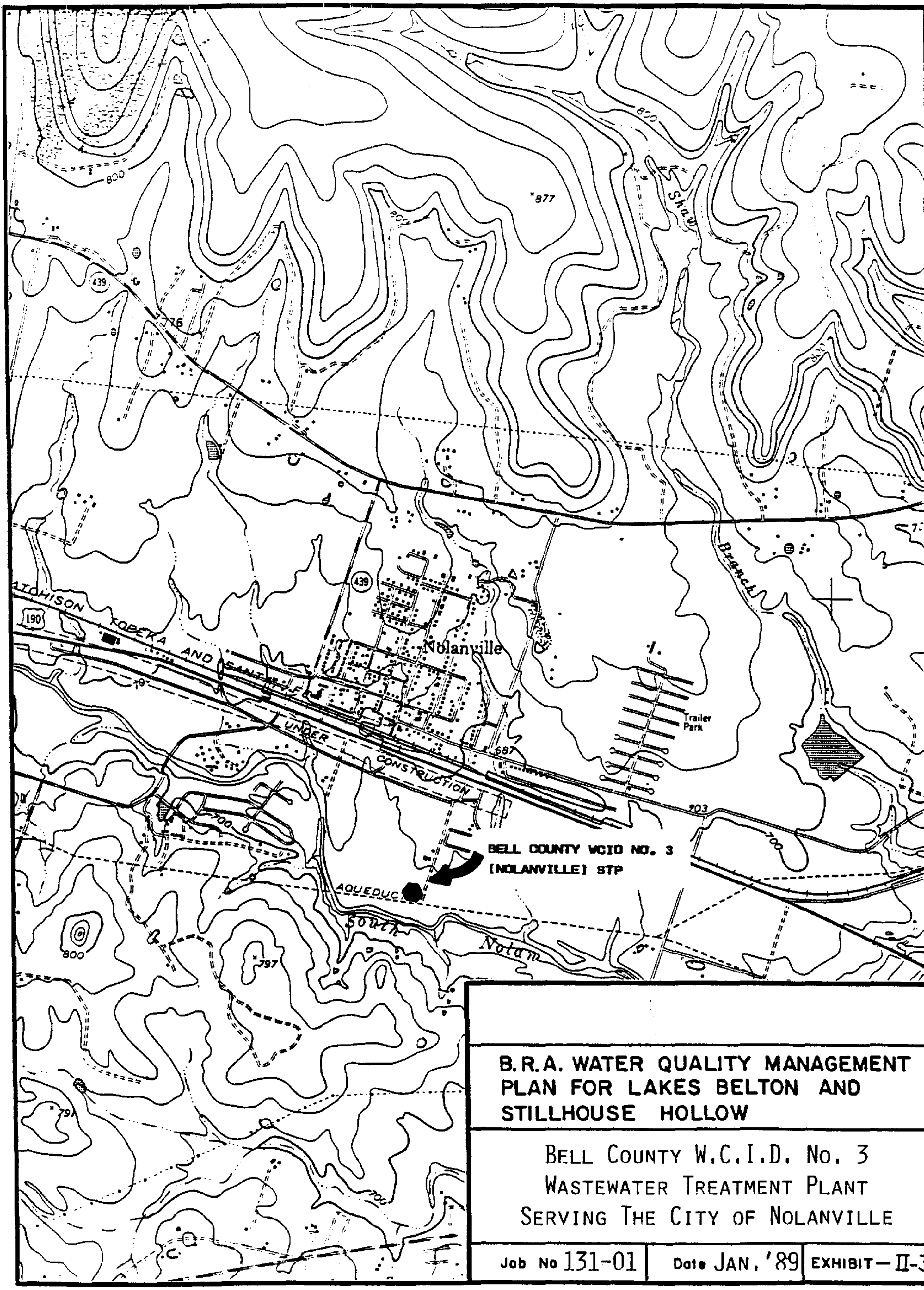


B.R.A. WATER QUALITY MANAGEMENT PLAN FOR LAKES BELTON AND STILLHOUSE HOLLOW

BELL COUNTY W.C.I.D. No. 1
WASTEWATER TREATMENT PLANT
SERVING THE CITY OF KILLEEN

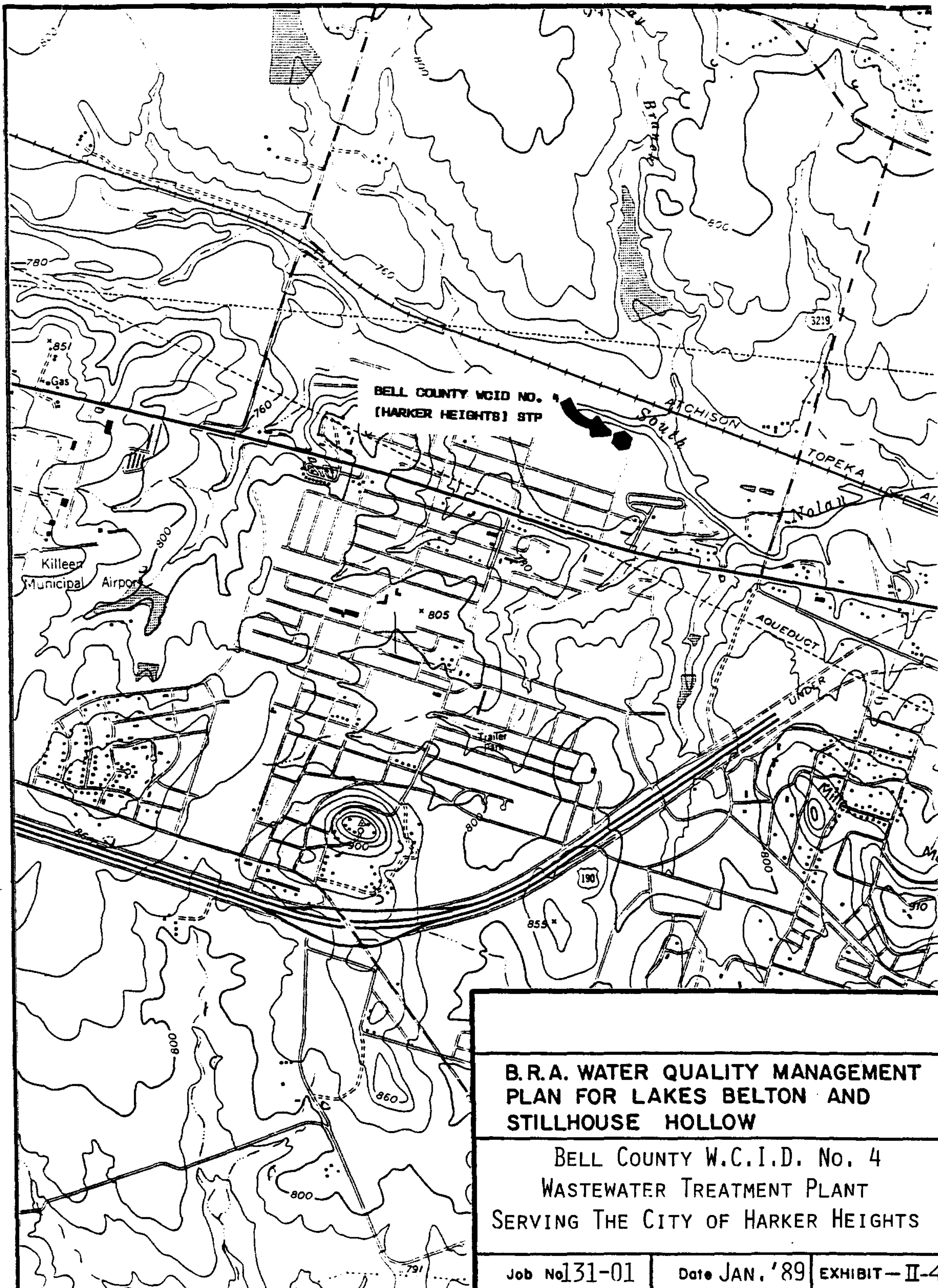
Job No 131-01	Date JAN. '89	EXHIBIT— II-2



B.R.A. WATER QUALITY MANAGEMENT PLAN FOR LAKES BELTON AND STILLHOUSE HOLLOW

BELL COUNTY W.C.I.D. NO. 3
WASTEWATER TREATMENT PLANT
SERVING THE CITY OF NOLANVILLE

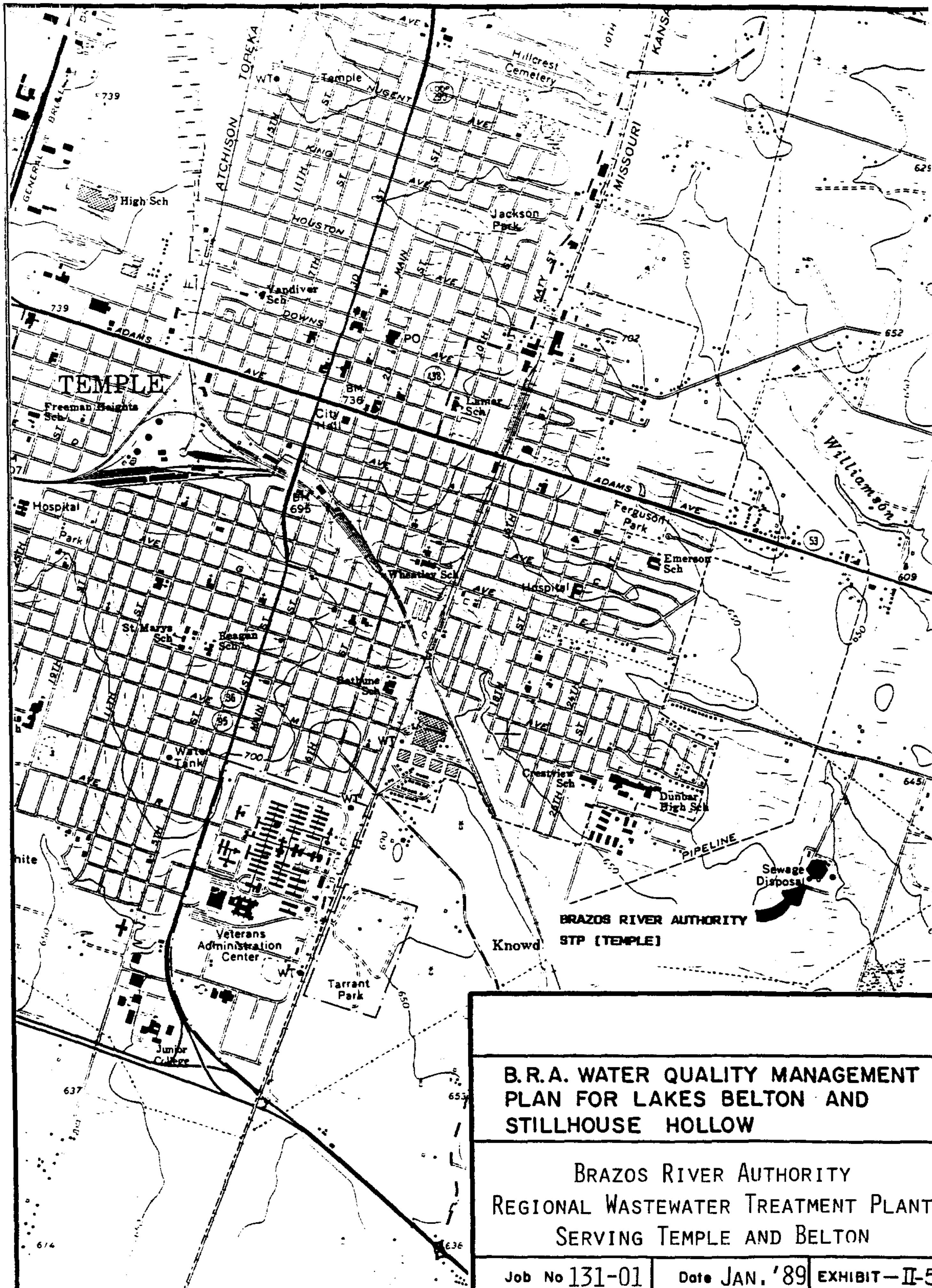
Job No 131-01	Date JAN. '89	EXHIBIT—II-3



B.R.A. WATER QUALITY MANAGEMENT PLAN FOR LAKES BELTON AND STILLHOUSE HOLLOW

BELL COUNTY W.C.I.D. NO. 4
WASTEWATER TREATMENT PLANT
SERVING THE CITY OF HARKER HEIGHTS

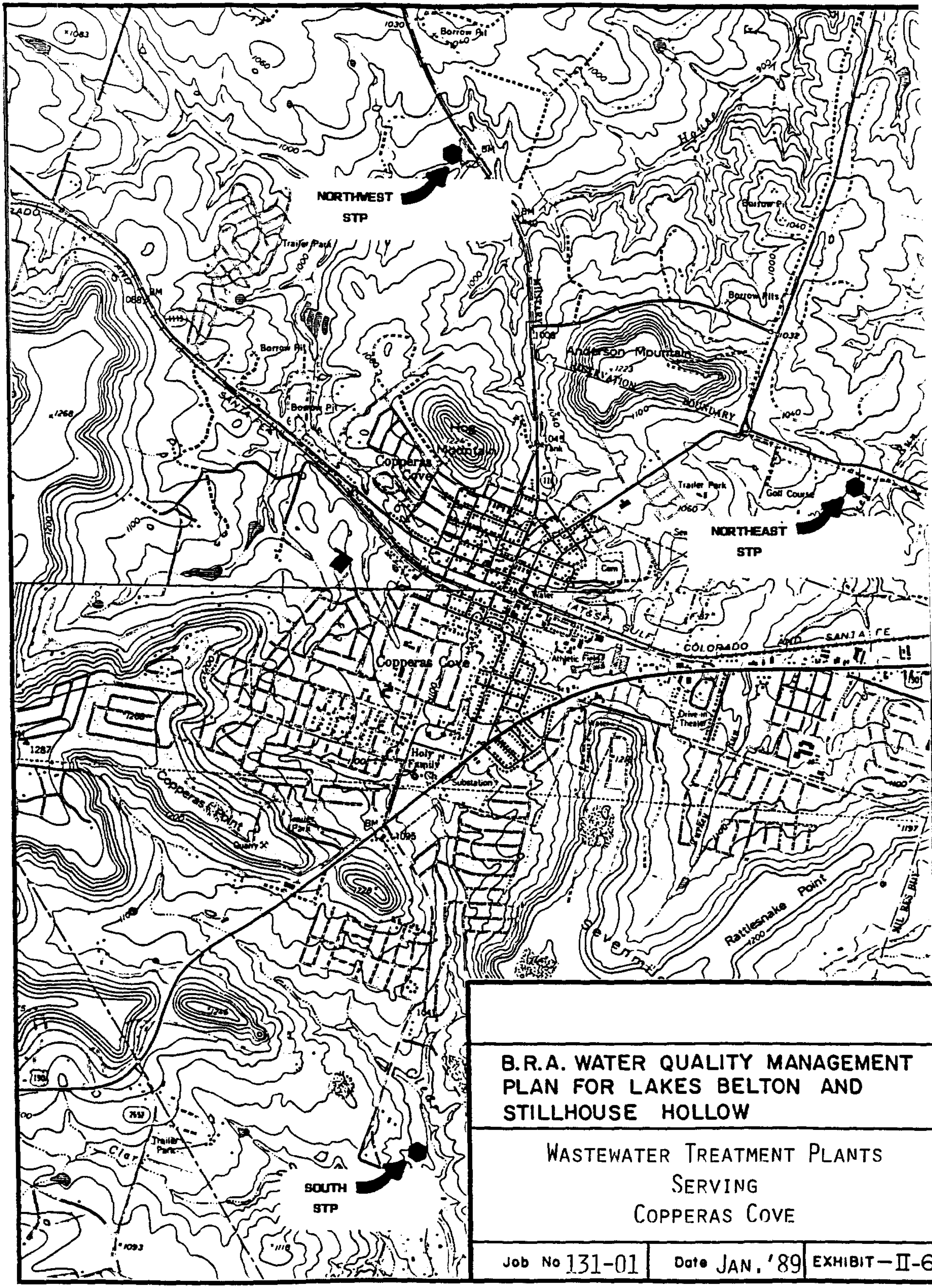
Job No 131-01	Date JAN. '89	EXHIBIT — II-4



B.R.A. WATER QUALITY MANAGEMENT PLAN FOR LAKES BELTON AND STILLHOUSE HOLLOW

BRAZOS RIVER AUTHORITY
REGIONAL WASTEWATER TREATMENT PLANT
SERVING TEMPLE AND BELTON

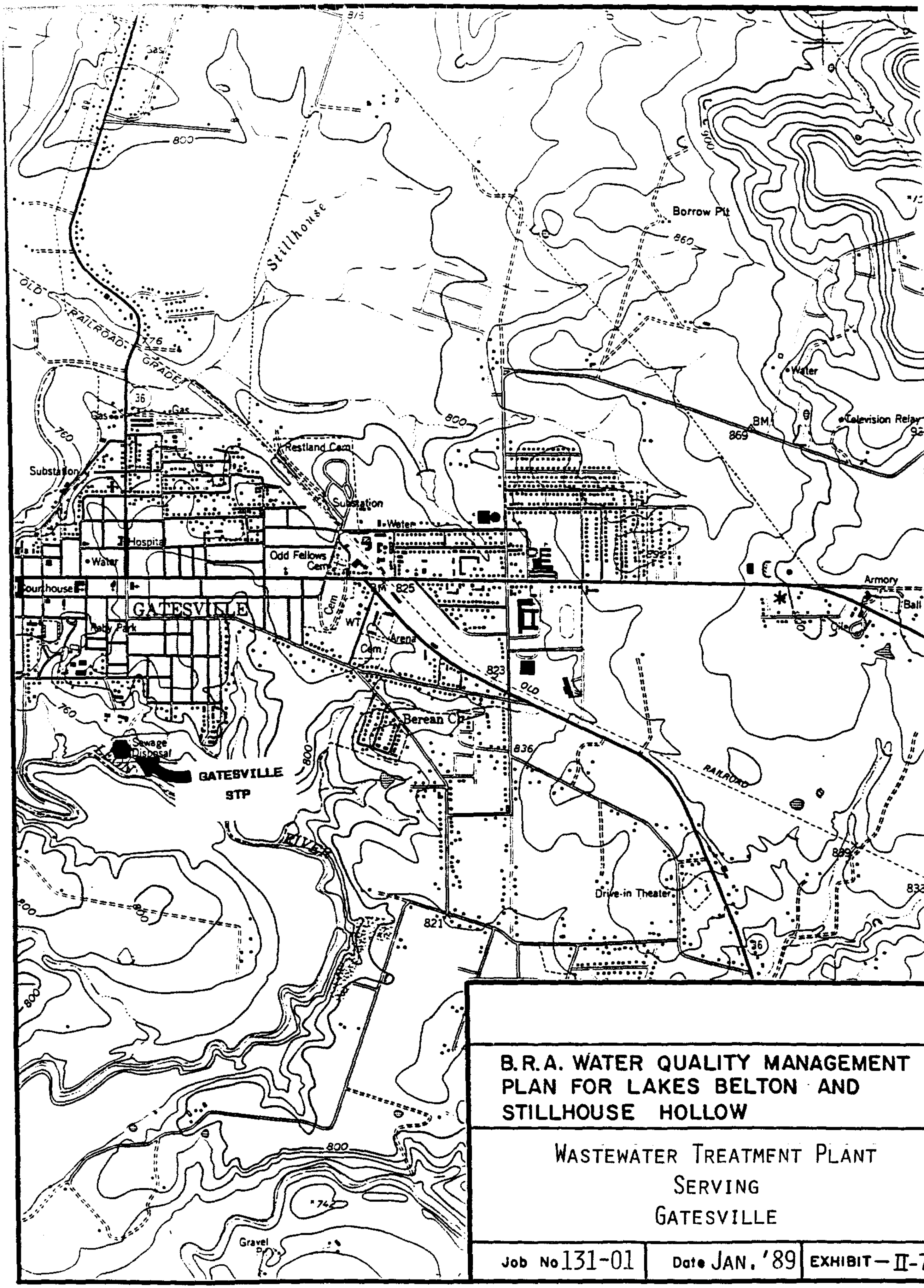
Job No 131-01	Date JAN. '89	EXHIBIT—II-5



B.R.A. WATER QUALITY MANAGEMENT PLAN FOR LAKES BELTON AND STILLHOUSE HOLLOW

WASTEWATER TREATMENT PLANTS SERVING COPPERAS COVE

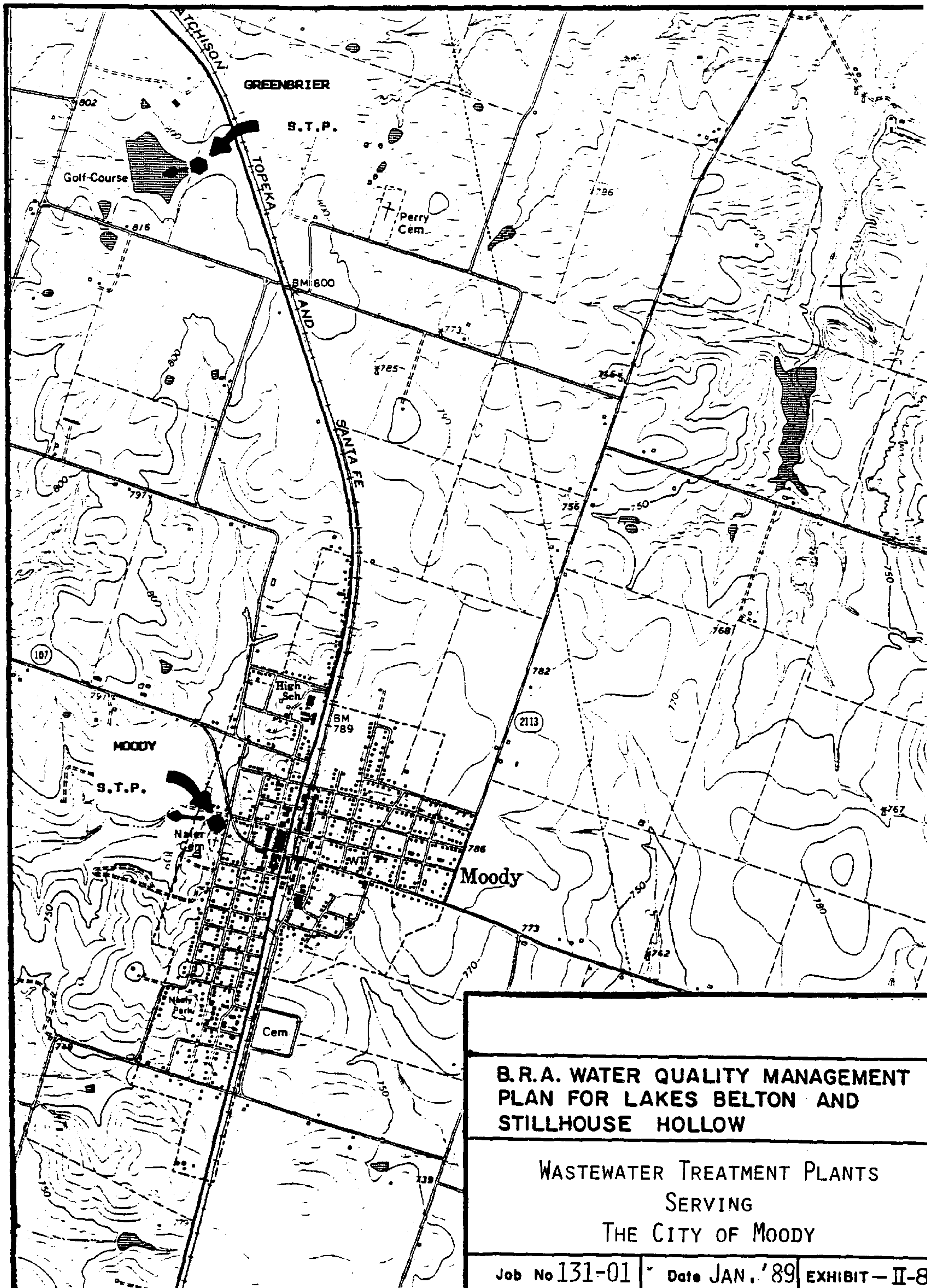
Job No 131-01	Date JAN. '89	EXHIBIT—II-6



B.R.A. WATER QUALITY MANAGEMENT PLAN FOR LAKES BELTON AND STILLHOUSE HOLLOW

WASTEWATER TREATMENT PLANT SERVING GATESVILLE

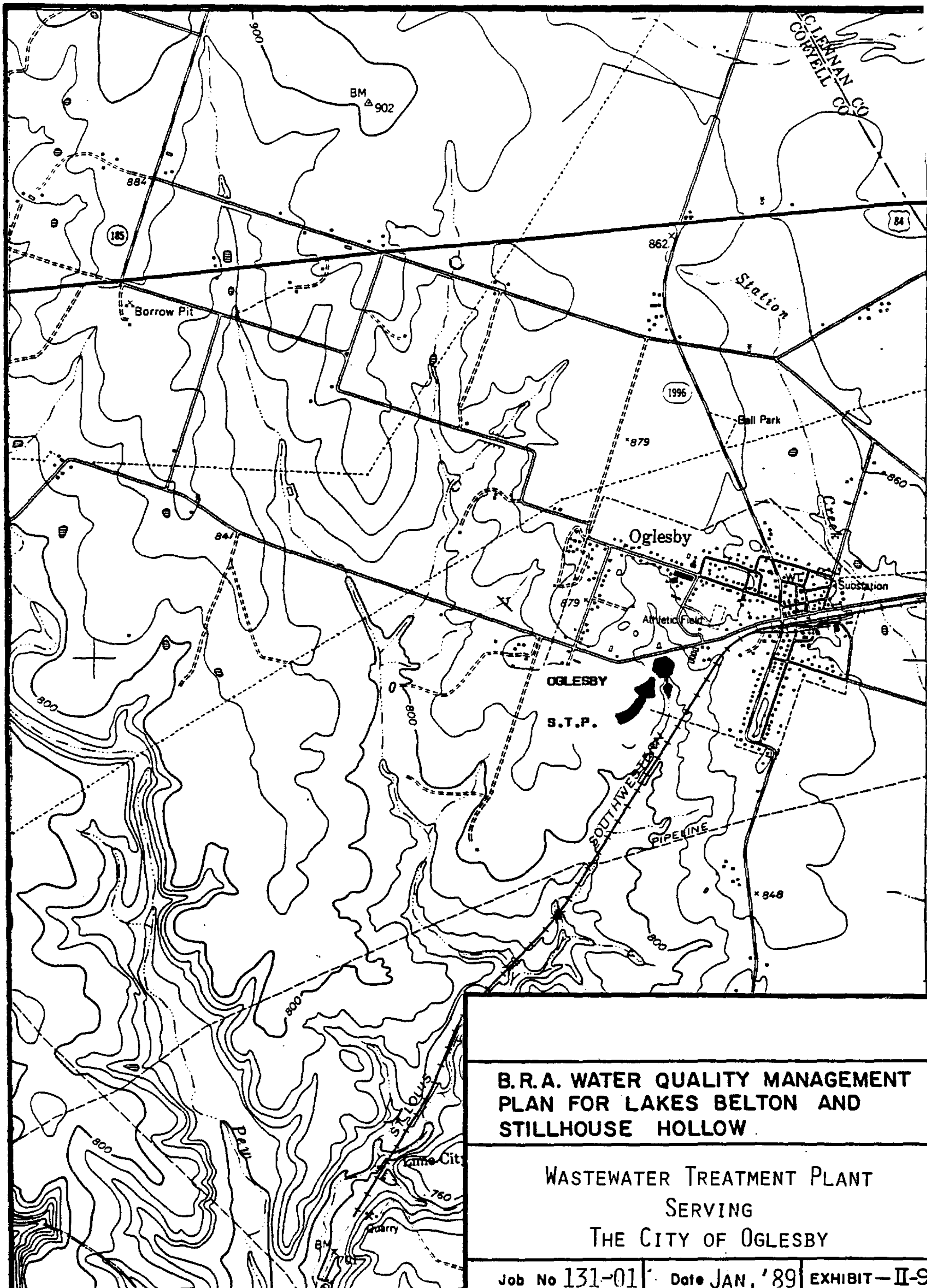
Job No 131-01	Date JAN. '89	EXHIBIT — II-7



B.R.A. WATER QUALITY MANAGEMENT PLAN FOR LAKES BELTON AND STILLHOUSE HOLLOW

WASTEWATER TREATMENT PLANTS
SERVING
THE CITY OF MOODY

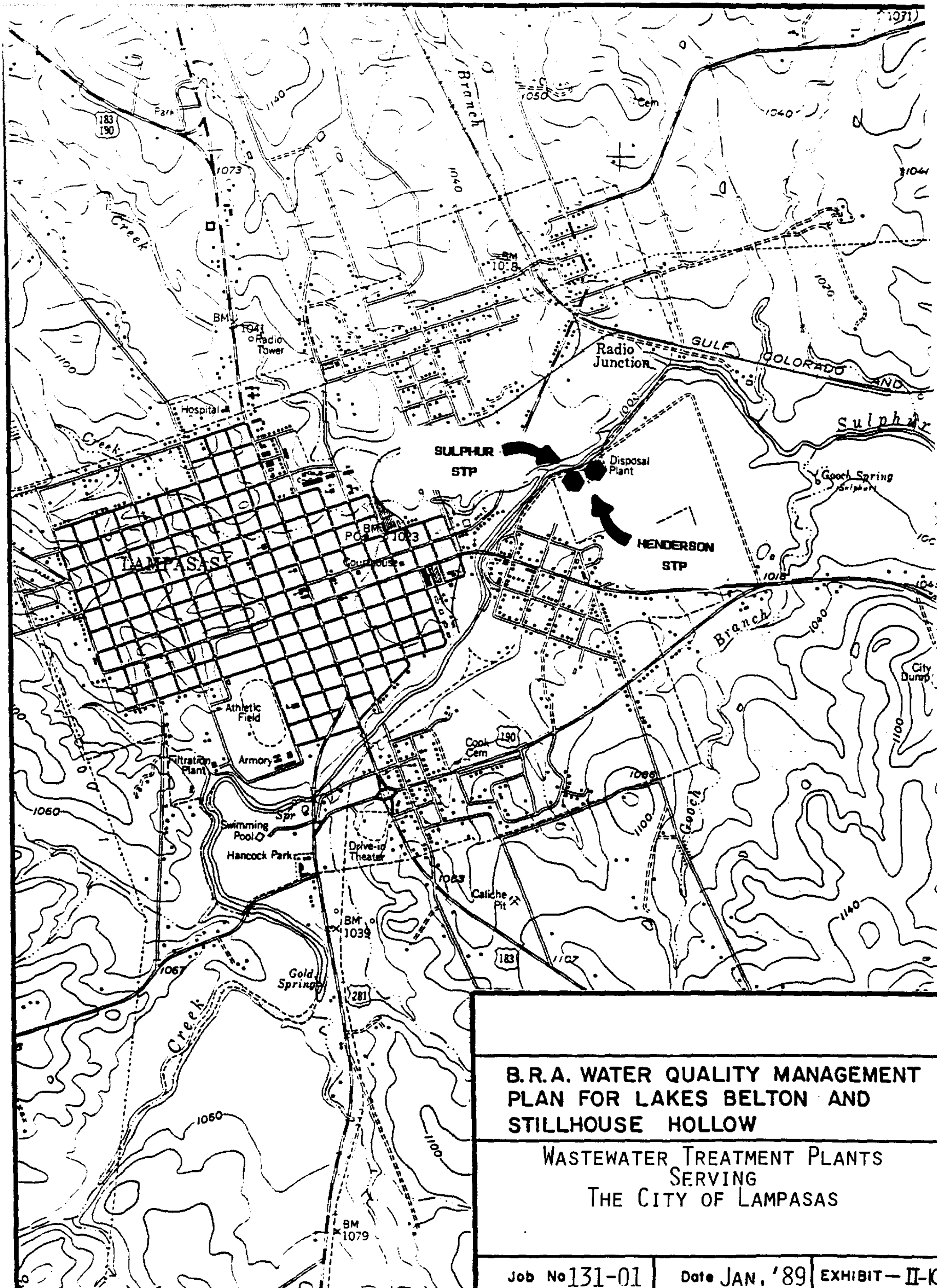
Job No 131-01 | Date JAN. '89 | EXHIBIT — II-8



B.R.A. WATER QUALITY MANAGEMENT PLAN FOR LAKES BELTON AND STILLHOUSE HOLLOW

WASTEWATER TREATMENT PLANT SERVING THE CITY OF OGLESBY

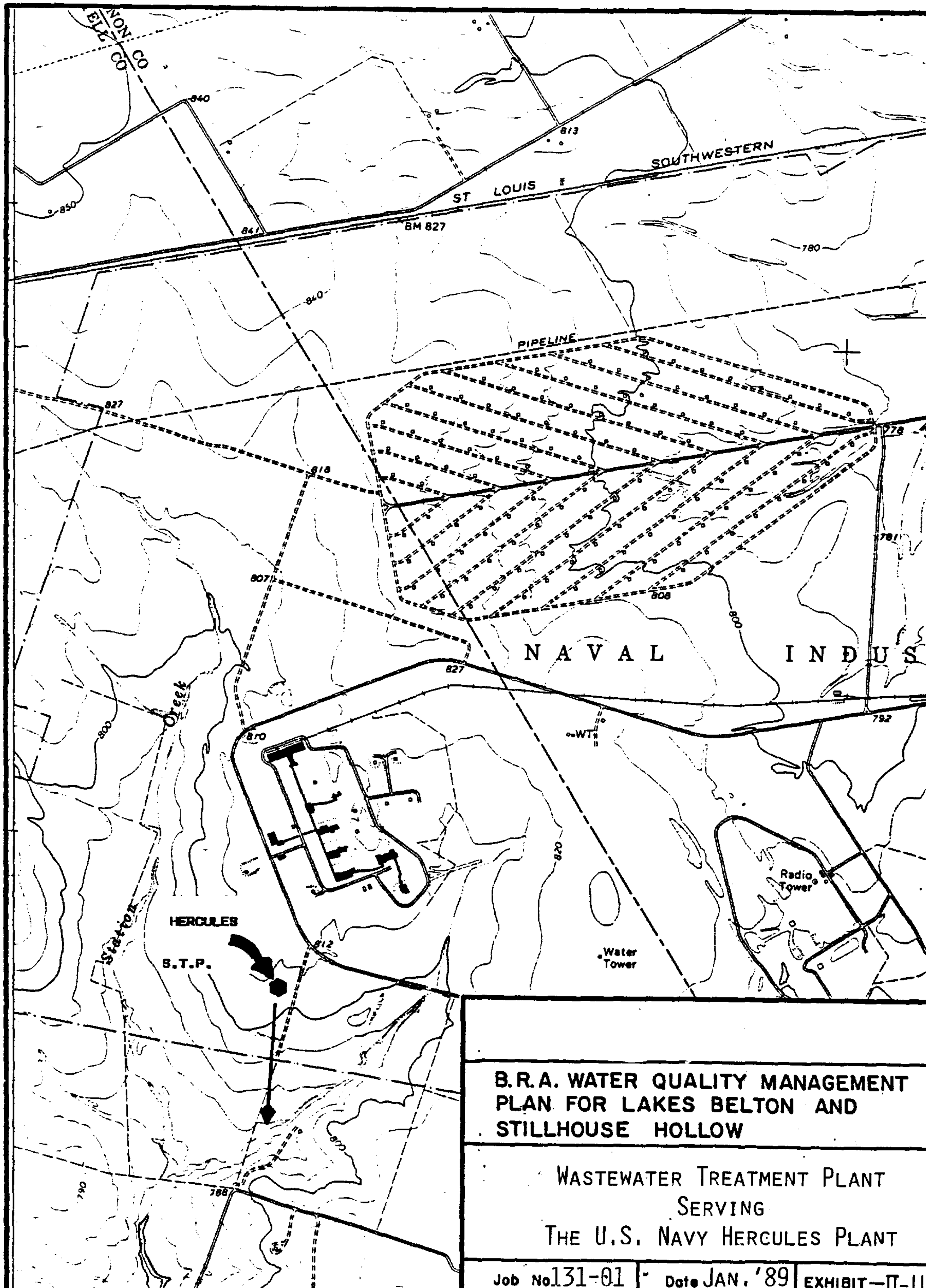
Job No 131-01 | Date JAN. '89 | EXHIBIT — II-9



B.R.A. WATER QUALITY MANAGEMENT PLAN FOR LAKES BELTON AND STILLHOUSE HOLLOW

WASTEWATER TREATMENT PLANTS SERVING THE CITY OF LAMPASAS

Job No 131-01	Date JAN. '89	EXHIBIT — II-1C



B.R.A. WATER QUALITY MANAGEMENT PLAN FOR LAKES BELTON AND STILLHOUSE HOLLOW

WASTEWATER TREATMENT PLANT
SERVING
THE U.S. NAVY HERCULES PLANT

Job No. 131-01	Date JAN. '89	EXHIBIT—II-11

BRAZOS RIVER AUTHORITY
OF TEXAS

CONTRACT NO.8-483-508

THE FOLLOWING MAPS ARE NOT ATTACHED TO THIS REPORT. THEY ARE LOCATED IN THE OFFICIAL FILE AND MAY BE COPIED UPON REQUEST.

MAP NO.1 EXHIBIT 3-1
MAP NO.2 EXHIBIT 3-2
MAP NO.3 EXHIBIT 3-3

Please contact Research and Planning Fund Grants Management Division at (512) 463-7926 for copies.

TABLE A-7

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 1
(continued)

Date: 3/15/88 Secchi Depth: 10.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	12.41	10.54	7.77	468
1.5	12.42	10.64	7.82	470
3.0	12.40	11.0	7.82	472
4.5	12.39	11.0	7.82	471
6.0	12.37	10.90	7.82	471
7.5	12.35	10.44	7.82	471
9.0	12.26	10.47	7.82	470
10.5	12.24	10.45	7.82	470
12.0	12.24	10.52	7.82	470
13.5	12.21	10.42	7.83	470
15.0	12.16	10.45	7.83	470
16.5	11.98	10.41	7.82	469
18.0	11.66	10.32	7.80	469
19.5	11.48	10.27	7.79	470
21.0	10.95	10.17	7.77	467
22.5	10.60	10.03	7.74	468
24.0	10.48	9.98	7.73	467
25.5	10.47	9.95	7.73	470
27.0	10.35	9.59	7.68	469
27.5	10.37	9.50	7.67	468

Date: 5/11/88 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	21.75	9.40	7.87	470
1.5	21.75	9.35	7.91	470
3.0	21.73	9.34	7.92	470
4.5	21.51	9.34	7.92	470
6.0	21.35	9.32	7.92	472
7.5	21.35	9.29	7.93	472
9.0	21.21	9.25	7.92	471
10.5	21.02	9.22	7.92	471
12.0	18.60	7.34	7.75	478
13.5	15.04	7.02	7.54	485
15.0	14.47	7.10	7.55	482
16.5	14.32	7.13	7.54	481
18.0	14.06	7.14	7.54	480
19.5	13.77	7.30	7.54	482
21.0	13.18	6.99	7.50	480
22.5	12.90	6.55	7.45	481
24.0	12.80	6.09	7.40	480
25.5	12.71	6.04	7.38	480
27.0	12.64	5.82	7.35	481
28.5	12.59	5.52	7.32	480
30.0	12.58	5.48	7.32	481

Date: 5/25/88 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	22.94	9.06	7.78	461
1.5	22.93	9.06	7.79	463
3.0	22.84	8.99	7.79	464
4.5	22.67	8.59	7.76	464
6.0	22.59	8.55	7.76	464
7.5	22.35	8.50	7.74	466
9.0	19.76	6.46	7.47	479
10.5	18.16	5.79	7.37	483
12.0	16.77	5.57	7.33	489
13.5	16.09	5.57	7.33	486
15.0	15.51	5.82	7.36	486
16.5	14.75	6.20	7.35	485
18.0	14.41	5.92	7.34	486
19.5	13.95	6.06	7.35	486
21.0	13.54	6.11	7.34	485
22.5	13.28	5.66	7.30	486
24.0	13.09	5.14	7.27	486
25.5	12.99	4.98	7.23	486
27.0	12.94	4.80	7.22	486
28.5	12.93	4.26	7.19	485
30.0	12.89	3.95	7.16	487
30.5	12.89	3.60	7.14	487

TABLE A-7

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 1
(continued)

Date: 6/24/88   Secchi Depth: 10.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	27.43	9.05	8.37	453
1.5	27.40	9.06	8.35	454
3.0	27.40	9.07	8.34	453
4.5	27.14	9.00	8.37	455
6.0	26.84	8.98	8.35	457
7.5	24.05	7.76	8.11	465
9.0	22.76	5.88	7.85	470
10.5	22.01	4.79	7.73	478
12.0	21.16	3.87	7.62	486
13.5	20.12	3.29	7.56	498
15.0	18.32	2.93	7.52	496
16.5	17.62	3.04	7.52	496
18.0	16.61	3.03	7.52	496
19.5	15.84	3.55	7.55	496
21.0	15.33	3.96	7.58	496
22.5	15.07	3.39	7.56	496
24.0	14.76	2.34	7.49	499
25.5	14.60	1.99	7.48	499
27.0	14.30	1.57	7.47	499
28.5	14.03	1.22	7.46	500
30.1	13.92	0.94	7.44	500

Date: 7/15/88   Secchi Depth: 9.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	27.64	7.71	8.15	434
1.5	27.62	7.51	8.11	435
3.0	27.61	7.45	8.10	435
4.5	27.38	6.35	7.95	436
6.0	27.12	5.76	7.83	439
7.5	26.42	3.75	7.56	441
9.0	24.40	3.03	7.43	446
10.5	23.11	2.26	7.39	451
12.0	21.80	1.28	7.33	460
13.5	20.93	1.13	7.33	466
15.0	19.55	1.13	7.33	473
16.5	18.40	1.23	7.34	474
18.0	17.51	1.39	7.35	476
19.5	16.94	1.61	7.37	479
21.0	16.37	1.48	7.36	479
22.5	15.79	0.78	7.32	481
24.0	15.49	0.19	7.29	483
25.5	15.24	0.15	7.28	480
27.0	15.04	0.11	7.28	484
28.5	14.94	0.11	7.28	484
29.1	14.85	0.07	7.28	485

Date: 8/19/88   Secchi Depth: 7.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.44	7.75	8.24	433
1.5	29.52	7.70	8.22	435
3.0	29.57	7.66	8.20	434
4.5	29.59	7.64	8.19	434
6.0	29.55	7.36	8.15	434
7.5	28.10	1.52	7.39	444
9.0	27.61	0.12	7.26	446
10.5	26.87	0.10	7.24	449
12.0	24.06	0.09	7.20	460
13.5	22.32	0.07	7.21	464
15.0	21.38	0.08	7.20	466
16.5	20.55	0.08	7.20	474
18.0	19.96	0.08	7.20	478
19.5	19.19	0.08	7.19	481
21.0	18.71	0.06	7.19	482
22.5	18.34	0.09	7.17	483
24.0	17.90	0.06	7.13	485
25.5	17.35	0.06	7.12	491
27.0	16.80	0.06	7.10	494
28.5	16.28	0.07	7.08	498
30.0	15.99	0.07	7.08	497
30.1	15.95	0.07	7.08	498

TABLE A-8

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 2

Date: 8/28/87 Secchi Depth: 4.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.97	6.09	7.62	430
1.3	28.98	6.06	7.62	430
2.8	28.90	5.80	7.61	430
4.3	28.90	5.78	7.61	431
6.8	28.87	5.97	7.64	432
8.3	28.83	6.04	7.64	431
10.8	28.16	0.28	6.98	439
12.3	27.71	0.05	6.94	439
13.8	27.34	0.05	6.91	437
15.3	27.08	0.05	6.89	436
16.8	26.98	0.06	6.87	436

Date: 9/22/87 Secchi Depth: 6.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	26.66	3.22	7.08	469
1.5	26.72	3.05	7.08	468
3.0	26.69	2.57	7.04	468
4.5	26.69	3.22	7.10	466
6.0	26.68	3.64	7.15	465
7.5	26.68	3.44	7.14	466
9.0	26.68	3.36	7.14	466
10.5	26.68	2.99	7.12	467
12.0	26.68	2.20	7.07	468
13.5	26.68	0.94	6.99	469
15.0	26.67	0.07	6.94	475
16.5	26.61	0.05	6.93	479
18.0	26.45	0.05	6.91	480
19.5	26.28	0.05	6.86	488
20.1	26.21	0.05	6.84	488

Date: 10/7/87 Secchi Depth: 5.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	24.24	6.61	7.33	465
1.5	24.08	6.52	7.33	467
3.0	24.01	6.40	7.33	468
4.5	24.0	6.38	7.33	468
6.0	24.0	6.36	7.35	468
7.5	24.0	6.36	7.36	468
9.0	24.0	6.39	7.37	468
10.5	23.99	6.37	7.39	466
12.0	23.99	6.35	7.39	467
13.5	23.99	6.28	7.39	467
15.0	23.91	5.90	7.38	467
16.5	23.61	5.45	7.36	467
18.0	23.41	4.92	7.36	467
19.5	23.16	4.60	7.33	465
21.0	23.02	3.94	7.24	464

TABLE A-8

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 2
(continued)

Date: 10/22/87 Secchi Depth: 3.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	21.63	7.05	7.52	462
1.5	21.69	6.99	7.52	463
3.0	21.69	6.98	7.53	463
4.5	21.70	6.97	7.55	462
6.0	21.75	6.94	7.55	462
7.5	21.75	6.93	7.56	462
9.0	21.75	6.91	7.56	463
10.5	21.78	6.91	7.56	462
12.0	21.78	6.91	7.56	462
13.5	21.78	6.90	7.56	462
15.0	21.78	6.90	7.57	462
16.5	21.78	6.90	7.57	461
18.0	21.70	6.93	7.57	461
19.5	21.70	6.96	7.58	462
21.0	21.67	6.90	7.57	462

Date: 11/11/87 Secchi Depth: 4.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	18.83	8.10	7.70	464
1.5	18.79	8.03	7.72	464
3.0	18.75	7.95	7.73	464
4.5	18.71	7.93	7.73	464
6.0	18.72	7.89	7.73	464
7.5	18.71	7.88	7.74	464
9.0	18.75	7.88	7.74	463
10.5	18.73	7.85	7.74	463
12.0	18.75	7.85	7.75	463
13.5	18.70	7.84	7.74	463
15.0	18.67	7.69	7.73	463
16.5	18.66	7.70	7.73	463
18.0	18.64	7.68	7.73	463
19.5	18.67	7.56	7.70	463
19.8	18.67	7.54	7.71	463

Date: 1/18/88 Secchi Depth: 5.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	9.74	11.29	7.81	467
1.5	9.68	11.26	7.83	466
3.0	9.56	11.18	7.84	467
4.5	9.38	11.07	7.84	468
6.0	9.31	10.95	7.82	468
7.5	9.26	10.94	7.83	468
9.0	9.14	10.94	7.83	467
10.5	9.01	10.92	7.83	466
12.0	8.85	10.90	7.83	466
13.5	8.65	10.94	7.84	465
15.0	8.53	10.98	7.85	464
16.5	8.47	11.06	7.86	464
18.0	8.46	11.09	7.88	464
19.5	8.40	11.20	7.83	465

TABLE A-8

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 2
(continued)

Date: 3/15/88 Secchi Depth: 5.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	12.84	10.46	7.91	470
1.5	12.78	10.38	7.87	471
3.0	12.77	10.38	7.85	471
4.5	12.78	10.38	7.84	471
6.0	12.77	10.35	7.83	471
7.5	12.73	10.29	7.83	472
9.0	12.64	10.27	7.83	471
10.5	12.54	10.13	7.80	472
12.0	11.68	9.85	7.73	471
13.5	11.25	9.63	7.69	472
15.0	11.02	9.38	7.65	471
16.5	10.95	9.30	7.64	471
18.0	10.87	9.13	7.62	472
19.5	10.79	8.70	7.58	473
19.6	10.81	8.49	7.55	475

Date: 5/11/88 Secchi Depth: 4.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.3	22.67	9.08	7.91	470
1.5	22.67	9.07	7.91	471
3.0	22.64	9.01	7.90	471
4.5	22.25	8.75	7.87	470
6.0	21.83	8.58	7.85	473
7.5	19.52	7.64	7.72	475
9.0	18.68	7.10	7.63	480
10.5	17.21	6.52	7.52	485
12.0	16.28	6.26	7.49	482
13.5	15.49	5.75	7.42	483
15.0	15.19	5.01	7.37	486
16.5	14.57	4.40	7.30	486
18.0	14.32	4.11	7.26	488
19.5	14.08	3.81	7.23	486
21.0	14.00	3.32	7.19	486

Date: 5/25/88 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	22.61	9.21	7.83	466
1.5	22.52	9.19	7.83	467
3.0	22.41	9.14	7.82	467
4.5	22.34	9.08	7.82	468
6.0	22.27	9.02	7.81	468
7.5	21.51	8.04	7.68	472
9.0	20.77	7.25	7.56	476
10.5	20.06	6.54	7.48	480
12.0	18.43	5.28	7.33	487
13.5	16.84	4.67	7.27	488
15.0	15.39	3.53	7.18	491
16.5	15.06	3.22	7.16	493
18.0	14.85	3.29	7.16	491
19.5	14.45	2.96	7.14	491
20.5	14.44	2.79	7.13	492

TABLE A-8

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 2
(continued)

Date: 6/24/88   Secchi Depth: 9.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.70	8.50	8.37	453
1.5	28.53	8.50	8.35	454
3.0	28.44	8.50	8.34	454
4.5	26.76	6.77	8.02	458
6.0	26.01	5.39	7.79	459
7.5	24.19	5.75	7.83	461
9.0	23.23	4.57	7.71	458
10.5	22.41	3.36	7.59	458
12.0	21.29	2.91	7.54	478
13.5	20.05	2.37	7.50	491
15.0	19.01	1.75	7.47	494
16.5	17.14	0.17	7.37	504
18.0	16.38	0.10	7.38	502
19.5	15.80	0.07	7.38	500
21.0	15.45	0.07	7.37	503
21.1	15.47	0.07	7.37	505

Date: 7/15/88   Secchi Depth: 7.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.76	8.02	8.36	430
1.5	28.71	8.02	8.35	429
3.0	28.65	7.95	8.32	430
4.5	28.53	7.85	8.29	430
6.0	28.26	7.42	8.23	431
7.5	27.84	6.88	8.18	432
9.0	24.90	0.88	7.41	443
10.5	23.02	0.48	7.33	444
12.0	21.78	0.30	7.32	452
13.5	20.52	0.10	7.30	462
15.0	19.21	0.10	7.27	472
16.5	18.14	0.10	7.27	476
18.0	17.09	0.10	7.26	483
19.5	16.89	0.10	7.27	482
21.0	16.36	0.10	7.26	486

Date: 8/19/88   Secchi Depth: 7.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	30.01	7.34	8.24	433
1.5	30.05	7.35	8.22	435
3.0	30.06	7.36	8.20	434
4.5	30.07	7.34	8.19	434
6.0	30.03	7.09	8.15	435
7.5	29.08	4.52	7.75	441
9.0	28.41	1.20	7.41	441
10.5	26.30	0.16	7.27	443
12.0	23.52	0.09	7.23	447
13.5	22.26	0.07	7.22	456
15.0	21.66	0.08	7.20	460
16.5	20.86	0.08	7.18	466
18.0	20.28	0.08	7.15	473
19.5	19.54	0.06	7.12	476
20.1	19.55	0.06	7.12	477

TABLE A-9

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 3

Date: 8/28/87 Secchi Depth: 2.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.85	6.09	7.47	430
1.5	28.78	5.80	7.50	431
2.6	28.78	5.86	7.54	430

Date: 9/22/87 Secchi Depth: 4.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	26.09	6.80	7.40	460
1.5	26.0	6.87	7.43	460
2.3	25.86	6.85	7.45	460
3.0	25.83	6.84	7.47	460
3.3	25.86	6.83	7.47	460

Date: 10/7/87 Secchi Depth: 4.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.46	7.50	7.39	465
1.0	23.43	7.51	7.44	466
1.5	23.42	7.56	7.46	466
2.0	23.25	7.62	7.46	465
3.0	23.21	7.62	7.58	465
4.0	22.71	7.51	7.52	464

Date: 10/22/87 Secchi Depth: 3.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	21.03	8.23	7.74	456
1.5	20.99	8.21	7.74	457
3.0	21.01	8.21	7.76	460
4.5	20.89	8.21	7.77	460
5.2	20.74	8.19	7.78	460

Date: 11/11/87 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	18.26	8.31	7.72	460
1	17.97	8.26	7.75	462
2	17.85	8.30	7.77	463
2.5	17.82	8.30	7.78	462
3.0	17.69	8.31	7.80	462
4.4	16.77	8.61	7.83	462

Date: 1/18/88 Secchi Depth: 4.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	9.60	11.69	7.87	462
1.5	9.36	11.90	7.92	464
3.0	9.17	12.0	7.94	463
4.5	8.70	11.61	7.90	463
4.8	8.61	11.39	7.89	465

TABLE A-9

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 3
(continued)

Date: 3/15/88 Secchi Depth: 4.75'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	12.71	10.39	7.77	472
1.5	12.66	10.30	7.79	472
3.0	12.53	10.41	7.81	472
4.3	12.07	10.41	7.80	470

Date: 5/11/88 Secchi Depth: 2.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.33	8.82	8.17	469
1.5	23.33	8.77	8.00	469
3.0	23.15	8.54	7.91	469
4.2	21.75	7.17	7.72	476

Date: 5/25/88 Secchi Depth: 5.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	21.67	8.59	7.67	476
1.5	21.39	8.64	7.71	477
3.0	21.12	8.38	7.69	476
4.5	20.83	8.22	7.68	478

Date: 6/24/88 Secchi Depth: 5.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.58	7.94	8.36	450
1.5	29.23	8.10	8.35	452
3.0	29.08	7.50	8.30	453
4.5	27.91	6.44	8.08	458
6.0	25.71	3.03		462

Date: 7/15/88 Secchi Depth: 3.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.06	7.76	8.24	427
1.5	29.03	7.74	8.24	427
3.0	28.99	7.69	8.24	428
4.5	28.87	7.47	8.22	428
5.1	28.72	7.02	8.11	429

Date: 8/19/88 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	30.41	7.20	8.21	434
1.5	30.41	7.17	8.18	437
3.0	30.38	6.97	8.16	437
4.2	30.41	6.81	8.15	438

TABLE A-10

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 4

Date: 8/28/87 Secchi Depth: 6.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.88	5.44	7.51	450
1.5	28.86	5.42	7.53	451
3.0	28.82	5.42	7.54	450
4.5	28.82	5.41	7.54	450
6.0	28.81	5.41	7.54	450
7.5	28.80	5.38	7.54	450
9.0	28.76	5.20	7.53	449
10.5	28.55	4.05	7.37	441
12.0	28.36	3.37	7.26	437
13.5	28.16	1.60	7.12	442
15.0	27.55	0.04	6.97	461
16.5	27.36	0.05	6.95	461
18.0	26.70	0.05	6.91	492
19.5	26.25	0.05	6.80	522
21.0	26.07	0.05	6.79	522
22.5	25.64	0.05	6.73	534
24.0	25.38	0.05	6.69	536
25.5	24.75	0.07	6.62	547

Date: 9/22/87 Secchi Depth: 8.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	26.83	5.35	7.22	475
1.5	26.83	5.40	7.33	473
3.0	26.83	5.36	7.33	476
4.5	26.84	5.36	7.34	476
6.0	26.84	5.30	7.34	477
7.5	26.85	5.28	7.34	476
9.0	26.86	5.32	7.36	476
10.5	26.85	5.26	7.37	476
12.0	26.84	5.23	7.37	476
13.5	26.80	5.14	7.38	476
15.0	26.77	4.63	7.32	478
16.5	26.70	3.80	7.24	479
18.0	26.42	0.10	6.92	510
19.5	26.14	0.07	6.80	533
21.0	25.60	0.05	6.75	539
22.5	25.31	0.05	6.71	543
23.6	25.13	0.05	6.69	549

Date: 10/7/87 Secchi Depth: 5.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.89	4.85	6.83	486
1.5	24.08	4.76	6.93	487
3.0	24.06	4.77	6.97	488
4.5	24.15	4.76	6.98	488
6.0	24.16	4.73	7.0	487
7.5	24.20	4.76	7.01	487
9.0	24.20	4.76	7.03	486
10.5	24.24	4.76	7.04	486
12.0	24.25	4.75	7.06	486
13.5	24.25	4.73	7.07	486
15.0	24.27	4.73	7.08	486
16.5	24.30	4.72	7.09	486
18.0	24.31	4.72	7.11	486
19.5	24.25	4.70	7.12	486
21.0	24.30	4.70	7.07	484
22.5	24.30	4.70	7.08	484

TABLE A-10

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 4
(continued)

Date: 10/22/87 Secchi Depth: 4.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	21.64	5.51	7.38	479
1.5	21.64	5.48	7.39	479
3.0	21.71	5.44	7.40	480
4.5	21.72	5.44	7.41	480
6.0	21.75	5.41	7.41	480
7.5	21.77	5.39	7.41	480
9.0	21.77	5.38	7.42	480
10.5	21.79	5.37	7.42	480
12.0	21.80	5.37	7.42	480
13.5	21.79	5.37	7.42	480
15.0	21.82	5.35	7.42	480
16.5	21.82	5.34	7.42	479
18.0	21.83	5.21	7.40	480
19.5	21.83	5.22	7.40	479
21.0	21.85	4.88	7.38	480
22.5	21.85	4.52	7.35	481
23.7	21.85	3.11	7.25	487

Date: 11/11/87 Secchi Depth: 4.25'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	19.43	7.31	7.57	473
1.5	19.23	7.06	7.57	476
3.0	19.12	6.89	7.58	477
4.5	19.10	6.83	7.58	477
6.0	19.12	6.80	7.58	477
7.5	19.16	6.76	7.58	477
9.0	19.13	6.74	7.58	477
10.5	19.12	6.74	7.58	476
12.0	19.12	6.74	7.58	477
13.5	19.14	6.73	7.58	477
15.0	19.15	6.74	7.58	477
16.5	19.14	6.68	7.58	477
18.0	19.14	6.68	7.58	475
19.5	19.14	6.68	7.58	476
21.0	19.14	6.66	7.58	476

Date: 1/18/88 Secchi Depth: 5.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	9.97	11.23	7.81	467
1.5	9.87	11.22	7.83	467
3.0	9.85	11.11	7.83	469
4.5	9.59	10.84	7.81	469
6.0	9.11	10.39	7.75	475
7.5	9.01	10.48	7.67	476
9.0	9.00	10.37	7.69	477
10.5	8.89	10.37	7.70	479
12.0	8.93	10.81	7.91	478
13.5	8.81	10.45	7.78	480
15.0	8.76	10.27	7.76	480
16.5	8.70	10.23	7.75	480
18.0	8.64	10.22	7.74	479
19.5	8.62	10.19	7.74	481
21.0	8.62	10.19	7.74	481
22.5	8.61	10.15	7.74	481
23.7	8.64	10.15	7.75	481

TABLE A-10

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 4
(continued)

Date: 3/15/88   Secchi Depth: 10.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	13.54	10.32	7.71	472
1.5	13.40	10.30	7.77	473
3.0	13.13	10.27	7.79	473
4.5	12.95	10.25	7.79	472
6.0	12.61	10.11	7.78	470
7.5	12.42	10.16	7.78	469
9.0	12.20	10.16	7.78	469
10.5	12.05	10.11	7.77	469
12.0	11.77	9.98	7.74	469
13.5	11.52	9.83	7.71	469
15.0	11.35	9.74	7.70	470
16.5	10.93	9.26	7.61	473
18.0	10.78	8.96	7.57	476
19.5	10.75	8.95	7.57	476
21.0	10.70	8.92	7.57	477
22.5	10.69	8.92	7.57	478
24.0	10.66	8.91	7.56	478
24.2	10.67	8.86	7.56	479

Date: 5/11/88   Secchi Depth: 5.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	22.72	9.30	7.93	473
1.5	22.73	9.68	7.95	474
3.0	22.56	9.33	7.93	474
4.5	22.20	9.26	7.94	473
6.0	21.36	9.03	7.90	476
7.5	19.35	8.03	7.75	477
9.0	17.37	6.78	7.55	484
10.5	16.55	6.26	7.48	486
12.0	15.80	5.90	7.44	487
13.5	15.58	5.59	7.40	489
15.0	15.20	5.54	7.38	488
16.5	14.51	4.89	7.31	489
18.0	13.94	4.02	7.22	489
19.5	13.82	3.60	7.19	489
21.0	13.72	3.55	7.18	489
22.5	13.66	3.27	7.16	490
24.0	13.52	3.17	7.15	489
25.4	13.47	2.82	7.13	490

Date: 5/25/88   Secchi Depth: 5.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.80	9.52	7.85	462
1.5	23.46	9.53	7.87	466
3.0	23.17	9.08	7.82	471
4.5	22.80	9.04	7.80	468
6.0	22.50	8.84	7.78	467
7.5	22.17	8.43	7.74	466
9.0	20.87	6.60	7.48	479
10.5	18.61	4.23	7.22	493
12.0	16.80	3.69	7.18	498
13.5	15.65	3.70	7.17	496
15.0	15.18	3.57	7.16	493
16.5	14.76	3.49	7.19	492
18.0	14.36	2.80	7.11	495
19.5	14.16	2.51	7.09	495
21.0	14.12	2.33	7.08	494
22.5	14.04	2.34	7.08	493
24.0	13.96	2.25	7.07	493
25.0	13.85	1.70	7.04	495

TABLE A-10

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 4
(continued)

Date: 6/24/88   Secchi Depth: 7.25'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.94	9.36	8.39	450
1.5	28.31	9.56	8.39	453
3.0	28.12	9.54	8.38	454
4.5	27.73	8.93	8.28	454
6.0	26.23	3.00	7.56	463
7.5	25.27	1.10	7.40	457
9.0	23.33	2.87	7.51	458
10.5	22.58	1.18	7.39	446
12.0	21.23	1.34	7.39	481
13.5	19.74	1.37	7.39	499
15.0	18.12	0.87	7.36	505
16.5	17.06	0.24	7.32	511
18.0	16.23	0.07	7.31	511
19.5	15.90	0.07	7.31	512
21.0	15.26	0.07	7.31	511
22.5	14.98	0.07	7.32	508
24.0	14.75	0.07	7.32	508
25.5	14.53	0.07	7.33	506
26.3	14.54	0.07	7.33	505

Date: 7/15/88   Secchi Depth: 8.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.58	7.79	8.25	433
1.5	28.53	7.70	8.23	435
3.0	28.49	7.62	8.23	436
4.5	28.38	7.61	8.23	435
6.0	28.35	7.26	8.27	435
7.5	28.00	4.80	7.82	442
9.0	23.89	0.38	7.32	423
10.5	22.72	0.12	7.31	415
12.0	21.83	0.10	7.30	443
13.5	20.33	0.08	7.26	469
15.0	19.25	0.09	7.27	481
16.5	18.30	0.09	7.27	484
18.0	17.08	0.06	7.26	489
19.5	16.56	0.07	7.25	490
21.0	16.25	0.07	7.25	490
22.5	16.22	0.07	7.25	492

Date: 8/19/88   Secchi Depth: 7.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.96	7.79	8.37	434
1.5	29.95	7.82	8.32	436
3.0	29.88	7.79	8.28	435
4.5	29.85	7.73	8.27	435
6.0	29.79	7.68	8.26	435
7.5	29.74	6.98	8.16	438
9.0	28.40	1.0	7.37	451
10.5	27.44	0.14	7.27	450
12.0	24.37	0.09	7.22	448
13.5	22.64	0.07	7.23	440
15.0	21.79	0.05	7.21	438
16.5	20.75	0.05	7.17	435
18.0	20.10	0.05	7.16	448
19.5	19.48	0.06	7.11	450
21.0	18.54	0.06	7.08	465
22.5	18.0	0.06	7.06	477
24.0	17.62	0.06	7.05	490
24.6	17.25	0.06	7.05	493

TABLE A-11

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 5

Date: 8/27/87 Secchi Depth: 5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.51	6.56	7.73	473
1.0	29.51	6.47	7.74	474
2.0	29.50	16.43	7.73	474
3.0	29.48	6.24	7.72	473
4.0	29.49	6.23	7.72	473
5.0	29.48	6.21	7.72	474
6.0	29.48	6.21	7.71	474
7.0	29.47	6.17	7.71	474
8.0	29.47	6.11	7.69	474
9.0	29.47	6.11	7.69	474
10.0	29.42	5.90	7.62	475
11.0	29.08	1.21	7.06	487
12.2	29.00	0.55	7.01	498
13.1	28.34	0.04	6.85	500
14.2	28.53	0.06	6.89	501

Date: 9/21/87 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	27.53	5.4	7.30	423
1.5	27.42	5.2	7.28	423
3.0	27.11	4.8	7.27	423
4.5	27.08	4.4	7.21	425
6.0	27.05	4.1	7.19	425
7.5	27.03	4.0	7.18	425
9.0	27.01	4.1	7.20	425
10.5	27.00	3.8	7.17	425
12.0	26.95	3.1	7.08	428
13.5	26.76	3.4	7.18	427
14.0	26.76	3.4	7.20	427

Date: 10/7/87 Secchi Depth: 4.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	24.76	7.55	7.46	491
1.5	24.32	7.42	7.48	492
3.0	24.15	26.90	7.42	492
4.5	24.10	6.68	7.40	493
6.0	24.08	6.72	7.42	493
7.5	24.07	6.40	7.41	493
9.0	23.97	5.00	7.32	497
10.5	23.67	3.98	7.24	501
12.0	23.40	4.10	7.27	503
13.5	23.33	3.82	7.25	504
14.2	23.34	3.48	7.22	504

TABLE A-11

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 5
(continued)

Date: 10/22/87 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	21.43	6.54	7.57	486
1.5	21.48	6.48	7.58	488
3.0	21.51	6.45	7.58	487
4.5	21.51	6.31	7.59	487
6.0	21.52	6.33	7.59	487
7.5	21.52	6.21	7.59	488
9.0	21.53	6.09	7.58	488
10.5	21.52	6.14	7.58	487
12.0	21.50	5.50	7.51	490
13.5	21.53	4.0	7.42	492
14.0	21.54	3.92	7.42	495

Date: 11/11/87 Secchi Depth: 3.75'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	19.53	7.58	7.69	478
1.5	18.85	7.44	7.69	481
3.0	18.79	7.44	7.70	480
4.5	18.64	7.25	7.68	482
6.0	18.54	7.01	7.67	484
7.5	18.54	6.95	7.67	484
9.0	18.52	6.88	7.67	484
10.5	18.47	6.85	7.67	484
12.0	18.33	6.69	7.66	484
13.6	18.05	6.46	7.64	486

Date: 1/18/88 Secchi Depth: 5.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	10.17	11.30	7.76	478
1.5	10.00	11.25	7.81	478
3.0	9.82	11.18	7.82	478
4.5	9.21	11.18	7.82	478
6.0	8.68	10.91	7.79	483
7.5	8.31	10.74	7.77	481
9.0	7.92	10.45	7.74	482
10.5	7.43	10.53	7.76	489
12.0	7.37	10.62	7.77	491
13.0	7.43	10.55	7.77	490

TABLE A-11

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 5
(continued)

Date: 3/15/88 Secchi Depth: 7.5′

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	13.95	10.35	7.75	487
1.5	13.87	10.21	7.77	487
3.0	13.66	9.98	7.75	487
4.5	13.24	9.71	7.73	485
6.0	12.89	9.47	7.68	486
7.5	12.09	8.69	7.56	488
9.0	11.73	8.88	7.65	485
10.5	11.36	8.95	7.60	481
12.0	11.19	8.75	7.55	484
12.4	11.22	8.67	7.56	484

Date: 5/11/88 Secchi Depth: 4.0′

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	22.48	9.77	7.88	487
1.5	22.51	9.72	7.92	488
3.0	22.20	9.20	7.86	493
4.5	21.78	8.46	7.79	493
6.0	20.71	7.43	7.65	496
7.5	20.22	6.40	7.53	493
9.0	19.17	4.78	7.30	498
10.5	15.68	1.92	7.08	505
12.0	15.08	1.99	7.08	499
13.2	14.97	2.00	7.08	499

Date: 5/25/88 Secchi Depth: 5.25′

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	24.52	9.08	7.81	472
1.5	24.20	9.06	7.83	472
3.0	23.84	8.53	7.73	476
4.5	23.16	8.10	7.68	480
6.0	22.85	7.83	7.64	482
7.5	22.70	7.60	7.61	483
9.0	20.79	4.62	7.25	496
10.5	18.50	1.71	7.03	505
12.0	17.22	0.67	6.97	506
12.3	17.05	0.46	6.96	506

TABLE A-11

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 5
(continued)

Date: 6/24/88 Secchi Depth: 7.25'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.20	9.18	8.57	457
1.5	28.66	9.46	8.49	459
3.0	28.38	9.48	8.45	457
4.5	27.39	6.97	8.03	465
6.0	26.41	4.50	7.68	469
7.5	25.29	0.92	7.40	482
9.0	24.07	0.21	7.38	462
10.5	22.50	0.15	7.41	423
12.0	21.28	0.10	7.35	446
13.5	19.20	0.09	7.29	502
14.5	18.50	0.09	7.28	512

Date: 7/15/88 Secchi Depth: 7.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.35	8.13	8.34	442
1.5	29.22	8.06	8.30	442
3.0	28.77	7.47	8.22	441
4.5	28.54	6.58	8.13	444
6.0	28.37	5.38	7.90	444
7.5	28.06	3.87	7.65	446
9.0	26.73	0.23	7.30	455
10.5	23.54	0.10	7.28	425
12.0	21.92	0.08	7.24	408
13.3	20.48	0.08	7.20	420

Date: 8/19/88 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	30.14	7.58	8.30	446
1.5	30.16	7.52	8.29	446
3.0	30.10	7.14	8.22	446
4.5	29.83	6.0	8.03	451
6.0	29.79	5.58	7.99	456
7.5	29.59	1.32	7.40	460
9.0	28.11	0.13	7.21	466
10.5	26.69	.08	7.19	455
12.0	25.50	.06	7.15	451
12.2	24.97	.06	7.13	447

TABLE A-12

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 6

Date: 8/27/87 Secchi Depth: 4.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.44	6.82	7.79	481
1.0	29.44	6.82	7.80	480
2.0	29.42	6.82	7.81	480
3.0	29.43	6.82	7.81	480
4.0	29.43	6.76	7.81	480
5.0	29.43	6.73	7.81	481
6.0	29.41	6.60	7.79	482
6.5	29.39	6.10	7.72	483
7.0	29.35	5.63	7.64	487
7.5	29.33	5.35	7.68	496
8.0	29.28	5.11	7.56	493
8.5	29.23	4.88	7.52	495
9.0	29.20	4.87	7.50	496
9.5	29.19	4.57	7.47	498
10.0	29.17	4.16	7.41	498
10.5	29.16	4.11	7.40	498
11.0	29.15	4.08	7.39	498
11.5	29.05	2.84	7.24	502
12.0	28.93	1.49	7.10	510
12.5	28.88	0.28	7.05	512
13.0	28.75	0.04	7.00	518
13.5	28.47	0.04	6.95	524
14.0	28.25	0.04	6.89	531
14.6	28.10	0.04	6.87	529
15.1	27.19	0.06	6.71	555

Date: 9/21/87 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	27.55	10.58	7.45	420
1.5	27.40	10.75	7.48	423
3.0	27.06	10.04	7.45	423
4.5	27.0	9.87	7.44	424
6.0	26.98	9.76	7.44	424
7.5	26.85	9.13	7.40	426
9.0	26.82	8.95	7.38	428
10.5	26.74	8.41	7.35	429
12.0	26.71	8.01	7.32	430
13.5	26.71	7.93	7.32	430
14.0	26.68	6.80	7.25	430

Date: 10/7/87 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	25.07	8.78	7.60	493
1.5	24.43	9.02	7.64	492
3.0	23.66	7.08	7.41	493
4.5	23.56	7.01	7.43	495
6.0	23.46	6.98	7.45	496
7.5	23.26	6.77	7.47	498
9.0	23.20	6.69	7.47	499
10.5	23.16	6.57	7.44	499
12.0	23.15	6.13	7.41	500
13.5	23.14	5.79	7.38	500
15.0	23.10	5.23	7.36	502
15.3	23.10	5.23	7.38	502

TABLE A-12

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 6
(continued)

Date: 10/23/87   Secchi Depth: 4.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	20.94	7.67	7.71	484
1.5	20.94	7.28	7.69	487
3.0	20.93	7.26	7.71	488
4.5	20.93	7.11	7.71	487
6.0	20.96	6.93	7.70	488
7.5	20.94	7.03	7.71	488
9.0	20.95	7.09	7.72	487
10.5	20.96	6.74	7.69	488
12.0	20.92	6.80	7.70	488
13.5	20.88	6.40	7.68	487
14.8	20.92	6.10	7.63	489

Date: 11/12/87   Secchi Depth: 4.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	17.71	7.87	7.48	480
1.5	17.72	7.96	7.56	488
3.0	17.75	7.85	7.60	488
4.5	17.75	7.74	7.63	487
6.0	17.78	7.73	7.65	487
7.5	17.75	7.74	7.66	487
9.0	17.64	7.84	7.68	489
10.5	17.61	7.80	7.68	488
12.0	17.62	7.77	7.68	489
13.5	17.63	7.73	7.67	488

Date: 1/18/88   Secchi Depth: 4.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	10.30	11.66	7.81	483
1.5	9.55	11.49	7.86	480
3.0	9.24	11.29	7.84	481
4.5	9.02	11.12	7.82	481
6.0	8.18	11.21	7.83	487
7.5	7.48	11.39	7.85	487
9.0	7.39	11.36	7.85	493
10.5	7.29	11.16	7.84	493
12.0	7.23	11.14	7.83	493
13.5	7.25	11.05	7.82	495
13.9	7.30	10.88	7.82	495

TABLE A-12

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 6
(continued)

Date: 3/15/88 Secchi Depth: 9.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	14.66	10.03	7.79	506
1.5	13.75	10.50	7.83	506
3.0	13.48	10.07	7.79	502
4.5	13.32	9.90	7.77	500
6.0	12.90	9.68	7.72	493
7.5	12.59	9.30	7.68	491
9.0	12.05	8.73	7.58	490
10.5	11.87	8.45	7.53	490
12.0	11.66	8.04	7.47	491
13.5	11.63	7.98	7.48	492

Date: 5/12/88 Secchi Depth: 4.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.17	9.46	8.08	517
1.5	23.07	9.57	7.90	517
3.0	22.85	8.95	7.80	513
4.5	21.64	7.73	7.70	517
6.0	20.57	6.14	7.49	524
7.5	19.73	5.25	7.40	519
9.0	18.41	3.58	7.25	519
10.5	16.94	1.40	7.08	524
12.0	16.41	0.98	7.05	524
13.5	15.76	0.30	7.03	524
14.4	15.65	0.23	7.02	523

Date: 5/25/88 Secchi Depth: 7.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	25.16	8.76	7.79	492
1.5	24.92	8.87	7.81	493
3.0	24.09	8.70	7.76	496
4.5	23.97	8.21	7.71	496
6.0	23.64	7.69	7.65	498
7.5	22.87	6.36	7.48	494
9.0	20.30	1.04	6.97	509
10.5	19.34	0.32	6.91	510
12.0	18.16	0.14	6.90	508
13.0	17.97	0.12	6.90	510
14.1	16.69	0.12	6.90	509

TABLE A-12

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 6
(continued)

Date: 6/24/88 Secchi Depth: 6.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.58	8.89	8.45	446
1.5	28.84	9.74	8.48	447
3.0	28.55	9.72	8.46	447
4.5	28.16	8.63	8.31	449
6.0	27.42	2.31	7.58	474
7.5	25.71	0.26	7.33	474
9.0	23.23	0.14	7.44	380
10.5	22.25	0.13	7.44	336
12.0	21.11	0.11	7.32	364
13.5	20.28	0.11	7.28	409
14.0	20.09	0.08	7.28	431

Date: 7/15/88 Secchi Depth: 5.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	30.09	8.12	8.38	442
1.5	29.59	8.03	8.35	440
3.0	29.09	6.95	8.20	440
4.5	28.82	6.03	8.02	442
6.0	28.66	5.34	7.93	443
7.5	28.55	4.85	7.85	444
9.0	28.08	2.71	7.60	443
10.5	24.17	0.14	7.21	421
12.0	22.32	0.10	7.21	390
13.5	21.00	0.10	7.21	389
15.0	19.88	0.09	7.18	421
15.6	19.56	0.09	7.16	432

Date: 8/19/88 Secchi Depth: 5.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	30.57	7.59	8.37	446
1.5	30.46	7.55	8.34	447
3.0	30.11	7.10	8.25	448
4.5	30.0	6.90	8.22	449
6.0	29.80	2.08	7.49	460
7.5	29.71	0.19	7.31	464
9.0	28.84	0.09	7.24	471
10.5	27.05	0.08	7.11	474
12.0	25.08	0.06	7.03	460
13.5	22.98	0.05	6.97	445
14.6	22.38	0.05	6.96	441

TABLE A-13

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 7

Date: 8/27/87 Secchi Depth: 2.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.36	6.56	7.71	495
0.6	29.36	6.53	7.72	495
1.6	29.36	6.57	7.73	495
2.6	29.38	6.48	7.72	495
3.6	29.37	6.50	7.71	495
4.6	29.36	6.38	7.69	495
5.6	29.36	6.25	7.67	495
6.6	29.33	4.56	7.34	500

Date: 9.21/87 Secchi Depth: 2.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	26.92	13.57	7.67	425
1.5	26.87	12.89	7.66	431
3.0	26.74	12.25	7.61	432
4.5	26.64	11.53	7.56	433
6.0	26.12	6.04	7.26	437

Date: 10/7/87 Secchi Depth: 2.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	24.19	8.56	7.62	494
1.5	23.07	8.50	7.65	497
3.0	22.83	8.15	7.62	497
4.5	22.20	7.53	7.58	497
6.0	21.83	6.91	7.53	498
6.4	21.82	6.72	7.54	499

Date: 10/23/87 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	20.12	8.36	7.83	488
1.5	20.11	8.33	7.85	488
3.0	20.07	8.27	7.86	490
4.5	19.80	8.11	7.87	490
6.0	19.09	7.79	7.85	494
6.8	18.93	7.69	7.85	492

Date: 11/12/87 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	16.46	8.82	7.72	484
1.5	16.34	8.66	7.76	489
3.0	16.25	8.82	7.82	488
4.5	16.17	8.90	7.83	488
6.0	16.06	8.67	7.82	489

Date: 1/18/88 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	8.29	11.92	7.86	493
1.5	8.10	11.99	7.89	493
3.0	7.88	11.74	7.89	493
4.5	7.45	11.20	7.82	499
5.0	7.23	10.80	7.81	503

TABLE A-13

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 7
(continued)

Date: 3/23/88 Secchi Depth: 3.25'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	15.95	10.45	7.83	517
1.5	15.11	10.54	7.87	517
3.0	14.73	10.19	7.85	518
4.5	14.60	10.12	7.85	519
6.0	14.42	9.91	7.81	520
6.1	14.50	9.75	7.82	520

Date: 5/12/88 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.38	8.82	7.81	525
1.5	23.11	8.97	7.81	526
3.0	22.92	9.25	7.82	527
4.5	22.27	7.12	7.51	534
6.0	21.16	4.06	7.23	545
6.9	20.69	2.21	7.12	544

Date: 5/25/88 Secchi Depth: 3.25'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	24.92	8.86	7.80	506
1.5	24.81	8.80	7.81	507
3.0	23.49	8.20	7.69	510
4.5	23.18	6.86	7.53	511
5.8	22.89	5.49	7.39	512

Date: 6/24/88 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	30.50	10.06	8.62	441
1.5	29.67	10.23	8.61	444
3.0	28.69	7.23	8.08	456
4.5	27.97	5.78	7.85	466
6.0	27.09	0.44	7.29	477
6.2	26.90	0.18	7.25	481

Date: 7/15/88 Secchi Depth: 2.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.49	7.74	8.34	442
1.5	29.46	7.65	8.32	444
3.0	29.42	7.57	8.30	444
4.5	29.15	6.97	8.21	443
6.0	28.95	6.24	8.11	444
7.0	28.84	5.85	8.01	446

Date: 8/19/88 Secchi Depth: 2.75'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	31.53	7.01	8.31	460
1.5	30.31	6.98	8.28	457
3.0	30.29	6.74	8.22	452
4.5	30.18	6.32	8.15	458
5.5	30.15	5.90	8.07	458

TABLE A-14

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 8

Date: 8/27/87 Secchi Depth: 1.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.42	6.05	7.58	517
0.8	29.43	5.99	7.58	517
1.8	29.43	5.98	7.58	517
2.8	29.44	5.97	7.58	517
3.8	29.44	5.89	7.56	517
4.8	29.44	5.87	7.55	517
5.8	29.44	5.62	7.53	517
6.8	29.42	5.18	7.43	518
7.8	29.41	3.79	7.29	519

Date: 9/21/87 Secchi Depth: 1.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	26.71	12.28	7.52	443
1.5	26.39	10.97	7.50	444
3.0	26.32	9.62	7.39	445
4.5	26.29	9.39	7.38	446
6.0	26.29	9.13	7.37	446
7.5	26.29	8.83	7.34	447
8.0	26.29	7.97	7.28	447

Date: 10/7/87 Secchi Depth: 2.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	24.50	9.17	7.74	502
1.5	23.55	9.24	7.75	502
3.0	22.47	7.20	7.52	507
4.5	22.42	7.12	7.52	507
6.0	22.30	6.94	7.52	509
7.5	22.28	6.93	7.52	508
8.4	22.23	6.68	7.51	508

Date: 10/23/87 Secchi Depth: 3.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	19.85	8.27	7.82	498
1.5	19.84	7.95	7.84	500
3.0	19.73	7.68	7.83	501
4.5	19.57	7.33	7.81	505
6.0	19.37	7.06	7.79	512
7.5	19.36	6.93	7.79	511

Date: 11/12/87 Secchi Depth: 2.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	16.53	9.15	7.81	498
1.5	16.14	9.10	7.82	499
3.0	15.99	8.33	7.74	499
4.5	15.76	8.34	7.73	502
5.9	15.65	7.69	7.63	505

Date: 1/18/88 Secchi Depth: 3.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	8.16	12.59	7.93	507
1.5	7.93	12.78	7.97	507
3.0	7.84	12.76	7.99	511
4.5	7.59	12.49	7.97	515
6.0	7.11	11.05	7.83	522
6.9	7.04	10.84	7.80	523

TABLE A-14

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 8
(continued)

Date: 3/23/88 Secchi Depth: 1.75'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	14.66	10.32	7.85	543
1.5	14.46	10.26	7.85	544
3.0	14.37	10.11	7.85	544
4.5	14.26	10.11	7.81	542
6.0	14.21	10.06	7.81	544
7.5	14.18	10.04	7.79	544
7.6	14.13	9.81	7.79	544

Date: 5/12/88 Secchi Depth: 3.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.17	9.06	7.70	541
1.5	23.10	9.28	7.56	541
3.0	22.63	8.43	7.71	542
4.5	22.57	8.27	7.71	543
6.0	21.51	3.56	7.19	549
7.5	21.41	3.38	7.16	549
7.8	21.41	3.33	7.16	549

Date: 5/25/88 Secchi Depth: 2.50'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	25.43	9.02	7.92	517
1.5	24.76	8.80	7.87	517
3.0	23.90	7.64	7.68	515
4.5	23.27	5.50	7.34	511
6.0	23.19	5.12	7.30	511
7.5	23.22	4.12	7.20	512
7.8	23.22	3.76	7.18	512

Date: 6/24/88 Secchi Depth: 3.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	30.13	13.08	8.84	440
1.5	29.83	12.71	8.80	437
3.0	28.47	8.08	8.22	455
4.5	27.68	1.94	7.48	503
6.0	27.02	0.16	7.32	551
7.5	26.08	0.14	7.28	575
7.9	26.03	0.12	7.27	579

Date: 7/15/88 Secchi Depth: 2.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.55	8.29	8.41	461
1.5	29.53	8.29	8.37	462
3.0	29.27	7.84	8.30	461
4.5	28.90	6.64	8.11	467
6.0	28.77	5.54	7.99	479
7.5	28.42	1.10	7.44	481
7.8	28.37	0.50	7.38	494

Date: 8/19/88 Secchi Depth: 2.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	30.33	6.59	8.14	469
1.5	30.32	6.38	8.03	470
3.0	29.88	5.14	7.86	474
4.5	29.64	4.78	7.77	478
6.0	29.61	4.70	7.76	478
7.3	29.58	4.23	7.68	478

TABLE A-15

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 9

Date: 8/27/87   Secchi Depth: 1.25'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.61	6.93	7.61	539
0.8	29.41	5.89	7.48	540
1.8	29.39	5.85	7.47	541
2.8	29.33	5.70	7.41	541
3.8	29.34	4.60	7.24	542

Date: 9/21/87   Secchi Depth: 1.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	25.98	10.58	7.39	442
1.5	25.85	9.36	7.34	446
3.0	25.60	9.83	7.41	447
3.9	25.44	5.82	7.17	449

Date: 10/7/87   Secchi Depth: 1.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.30	9.08	7.82	507
1.5	23.05	9.39	7.81	505
2.0	23.05	9.43	7.80	505
2.5	22.15	8.04	7.67	506
3.0	20.85	7.10	7.61	505
4.0	20.67	6.78	7.58	506

Date: 10/23/87   Secchi Depth: 2.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	19.09	8.31	7.77	504
1.5	19.08	8.31	7.80	505
3.0	18.69	7.35	7.80	506
3.1	18.70	7.27	7.83	506

Date: 11/12/87   Secchi Depth: 2.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	15.92	10.09	7.87	496
1.5	15.22	10.30	7.94	501
3.0	14.52	9.42	7.88	503
3.5	14.01	9.25	7.87	504

Date: 1/18/88   Secchi Depth: 2.3'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	8.81	12.65	7.97	538
1.5	8.70	13.06	8.00	531
3.0	8.64	13.03	8.02	531

TABLE A-15

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 9
(continued)

Date: 3/23/88 Secchi Depth: 1.75'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	15.51	10.15	7.84	555
1.5	15.36	10.14	7.85	555
3.0	14.84	10.01	7.84	557

Date: 5/12/88 Secchi Depth: 2.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.51	8.23	7.54	545
1.5	22.59	7.97	7.72	547
3.0	22.00	6.79	7.60	553
4.0	21.78	5.87	7.51	555

Date: 5/25/88 Secchi Depth: 1.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	25.11	7.68	7.76	521
1.5	24.55	6.75	7.62	521
3.0	23.86	5.14	7.38	520
3.4	23.84	4.62	7.32	520

Date: 6/24/88 Secchi Depth: 2.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	28.68	9.72	8.50	450
1.5	28.62	8.61	8.30	454
2.5	28.40	6.48	7.93	459
3.0	28.17	5.51	7.73	459
4.0	28.11	1.69	7.46	468

Date: 7/15/88 Secchi Depth: 1.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.84	9.04	8.53	474
1.5	29.63	8.54	8.43	476
3.0	28.95	5.84	8.11	477
3.5	28.90	5.70	8.07	478

Date: 8/19/88 Secchi Depth: 1.25'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	30.58	7.88	8.33	478
1.5	30.36	7.83	8.32	479
3.0	28.81	4.74	7.77	484

TABLE A-16

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 10

Date: 8/27/87 Secchi Depth: 1.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.13	7.47	7.80	587
0.6	29.13	7.30	7.76	586
1.6	28.82	5.94	7.59	612
2.6	28.78	5.81	7.59	616
3.6	28.78	5.92	7.56	615
4.6	28.76	5.60	7.54	620
5.7	28.79	4.71	7.34	619

Date: 9/21/87 Secchi Depth: 1.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	26.22	16.55	7.59	490
1.5	26.16	15.99	7.62	491
3.0	25.66	5.43	7.1	509
4.5	25.0	4.28	7.02	541
5.7	24.92	3.85	7.0	546

Date: 10/7/87 Secchi Depth: 1.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	23.81	10.55	7.83	526
1.5	21.18	7.82	7.48	557
3.0	20.97	6.26	7.26	571
4.5	20.92	4.04	7.03	608
5.2	20.91	3.06	6.97	618

Date: 10/23/87 Secchi Depth: 1.50'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	18.36	8.62	7.79	542
1.5	18.32	8.57	7.82	547
3.0	17.95	8.20	7.74	586
4.5	17.31	7.53	7.54	660
5.5	17.31	7.35	7.54	662
5.8	17.31	7.35	7.56	659

Date: 11/12/87 Secchi Depth: 2.3'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	14.99	11.78	8.08	544
1.5	13.87	10.80	7.97	583
3.0	13.09	8.96	7.82	668
4.5	12.62	7.74	7.60	854
5.6	12.61	7.57	7.59	863

Date: 1/18/88 Secchi Depth: 2.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	8.89	13.59	8.01	602
1.5	8.89	13.59	8.01	604
3.0	8.87	13.18	8.0	609
4.5	8.21	11.75	7.81	608
5.7	8.12	11.59	7.77	609

TABLE A-16

RESULTS OF FIELD SURVEY MEASUREMENTS
FOR LAKE BELTON AT SITE 10
(continued)

Date: 3/23/88 Secchi Depth: 1.50'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	15.54	10.35	7.85	574
1.5	15.43	10.28	7.85	581
3.0	15.39	10.14	7.85	582
4.5	15.27	9.89	7.81	587
4.6	15.25	9.88	7.82	588

Date: 5/12/88 Secchi Depth: 1.5'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	25.12	9.94	7.96	575
1.5	23.32	6.43	7.52	592
3.0	22.41	2.00	7.14	583
4.5	22.19	1.80	7.12	576
6.0	22.12	0.60	7.03	578

Date: 5/25/88 Secchi Depth: 1.25'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	25.88	9.0	8.11	555
1.5	25.46	7.57	7.94	555
3.0	23.99	5.53	7.56	553
4.5	23.82	4.30	7.37	544
5.3	23.74	3.51	7.27	543

Date: 6/24/88 Secchi Depth: 1.75'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.98	13.61	8.92	463
1.5	28.28	8.36	8.27	520
3.0	27.20	5.89	7.82	564
4.5	26.96	5.31	7.74	569
5.6	26.84	5.11	7.71	571

Date: 7/15/88 Secchi Depth: 1.0'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	29.84	11.53	8.76	509
1.5	29.65	11.22	8.66	508
3.0	28.18	6.54	8.13	527
4.5	27.78	5.71	7.93	529
5.6	27.65	5.63	7.91	529

Date: 8/19/88 Secchi Depth: 1.25'

Depth (meters)	Temp (°C)	DO (mg/l)	pH (s.u.)	Specific Conductance (umhos/cm)
0.1	31.66	9.96	8.51	506
1.5	29.62	5.42	7.79	528
3.0	28.76	4.12	7.56	547
4.3	28.56	3.79	7.53	554

TABLE A-17

RESULTS OF LABORATORY ANALYSES FOR LAKE BELTON

The following results based on:

Ammonia-Nitrogen in mg/L as N
Nitrate-Nitrogen in mg/L as N
Nitrite-Nitrogen in mg/L as N
Organic-Nitrogen in mg/L as N
Ortho-Phosphorus in mg/l as P
Total-Phosphorus in mg/l as P

TABLE A-17

RESULTS OF LABORATORY ANALYSES
FOR LAKE BELTON AT SITE 1

Site 1 - Top

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	1	0.4	8.54	0.19	0.06	0.003	0.23	0.023	0.03
09/22/87	--	2.1	2	9.64	0.03	0.05	0.003	0.18	0.059	0.096
10/07/87	1	2.8	1.5	37.45	0.03	0.11	0.003	0.08	0.018	0.026
10/22/87	--	--	--	24.38	0.03	0.18	0.002	0.11	0.012	0.021
11/11/87	--	--	--	22.8	0.02	0.16	0.002	0.22	0.014	0.019
01/18/88	0.7	2.6	2.3	19.16	--	0.2	0.003	0.06	0.015	0.023
03/15/88	--	4.2	1.4	8.25	0.01	0.19	0.004	0.21	0.008	0.021
05/11/88	2.1	2.8	1.4	7.35	0.05	0.07	0.005	0.16	0.019	0.035
05/25/88	--	4.2	1.4	2.5	0.06	0.04	0.005	0.14	0.013	0.024
06/24/88	--	2.6	0.2	2.5	0.02	0.05	0.002	0.12	0.016	0.025
07/15/88	--	2.5	1.5	2.5	0.04	0.07	0.004	0.18	0.013	0.021
08/19/88	--	2.6	0.8	6.8	0.05	0.07	0.003	0.20	0.010	0.210

Site 1 - Bottom

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	0.8	0.06	0.22	0.06	0.002	0.26	0.026	0.032
09/22/87	--	1.2	0.8	0.54	0.04	0.005	0.76	0.075	0.133
10/07/87	2	4	1.8	0.02	0.13	0.003	0.11	0.021	0.028
10/22/87	--	--	--	0.04	0.18	0.001	0.21	0.022	0.048
11/11/87	--	--	--	0.05	0.17	0.003	0.37	0.024	0.038
01/18/88	0.5	2.8	2.6	--	0.2	0.003	0.14	0.011	0.018
03/15/88	--	3.4	1.2	--	0.19	0.004	0.23	0.01	0.028
05/11/88	1.5	2.2	1	0.06	0.1	0.004	0.22	0.016	0.03
05/25/88	--	2.8	0.8	0.05	0.12	0.004	0.27	0.016	0.035
06/24/88	--	2.2	--	0.07	0.23	0.002	0.26	0.021	0.036
07/15/88	--	1.4	0.4	0.06	0.12	0.003	0.27	0.01	0.017
08/19/88	--	1.8	0.5	0.11	0.09	0.005	0.27	0.012	0.026

TABLE A-17

RESULTS OF LABORATORY ANALYSES
FOR LAKE BELTON AT SITE 2
(continued)

Site 2 - Top

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	2.4	1.5	12.81	0.06	0.03	0.002	0.09	0.032	0.036
09/22/87	--	--	--	18.14	0.13	0.07	0.004	0.16	0.035	0.053
10/07/87	--	4.2	1.4	24.6	--	0.05	0.005	0.1	0.014	0.022
10/22/87	--	--	--	31.45	0.03	0.14	0.007	0.09	0.007	0.018
11/11/87	--	--	--	14.48	0.06	0.15	0.004	0.29	0.011	0.020
01/18/88	--	2.6	2	16.58	--	0.18	0.003	0.04	0.007	0.011
03/15/88	--	5	1.4	13.6	0.01	0.19	0.003	0.25	0.011	0.024
05/11/88	--	5	1.2	12.8	0.09	0.07	0.005	0.19	0.015	0.039
05/25/88	--	4.2	1.4	2.5	0.06	0.04	0.006	0.11	0.009	0.021
06/24/88	--	3	0.6	8.25	0.1	0.06	0.002	0.16	0.008	0.018
07/15/88	--	3.5	1	9.28	0.08	0.07	0.004	0.15	0.006	0.015
08/19/88	--	2.5	0.8	7.4	0.05	0.06	0.003	0.16	0.007	0.02

Site 2 - Bottom

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	2.6	.12	0.07	0.03	0.003	0.11	0.029	0.032
09/22/87	--	--	--	0.19	0.06	0.026	0.33	0.032	0.078
10/07/87	--	14.3	2.8	--	0.04	0.033	0.14	0.01	0.025
10/22/87	--	--	--	0.04	0.15	0.006	0.1	0.005	0.014
11/11/87	--	--	--	0.07	0.15	0.004	0.42	0.008	0.014
01/18/88	--	2	1.3	--	0.19	0.003	0.1	0.008	0.018
03/15/88	--	6.2	1.6	0.03	0.21	0.005	0.28	0.007	0.022
05/11/88	--	10.6	1.4	0.09	0.19	0.003	0.23	0.015	0.028
05/25/88	--	6.5	1.3	0.09	0.2	0.003	0.21	0.018	0.042
06/24/88	--	4.8	0.5	0.13	0.11	0.003	0.18	0.008	0.022
07/15/88	--	3.7	0.3	0.06	0.11	0.003	0.3	0.015	0.034
08/19/88	--	3.7	0.6	0.08	0.06	0.004	0.25	0.014	0.035

TABLE A-17

RESULTS OF LABORATORY ANALYSES
FOR LAKE BELTON AT SITE 3
(continued

Site 3 - 7 Feet

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	6.8	2.1	16.28	0.05	0.07	0.002	0.12	0.041	0.049
09/22/87	--	5.6	2	14.44	0.06	0.07	0.005	0.15	0.061	0.114
10/07/87	2	7.2	1	31.86	--	0.05	0.017	0.07	0.008	0.018
10/22/87	--	--	--	42.06	0.05	0.1	0.003	0.08	0.01	0.017
11/11/87	--	--	--	8.85	0.06	0.14	0.005	0.23	0.039	0.054
01/18/88	0.7	4.3	3.5	20.4	--	0.16	0.003	0.05	0.014	0.031
03/15/88	--	6.4	1.2	12.8	0.02	0.17	0.004	0.2	0.01	0.03
05/11/88	2.1	10	1.6	16.15	0.1	0.06	0.004	0.18	0.01	0.022
05/25/88	--	4.8	1	8	0.09	0.08	0.007	0.24	0.008	0.019
06/24/88	--	6.8	0.8	12.6	0.04	0.06	0.002	0.12	0.018	0.041
07/15/88	--	8.7	2	12.35	0.08	0.07	0.003	0.21	0.013	0.031
08/19/88	--	7.5	1.5	14.4	0.09	0.07	0.004	0.14	0.011	0.025

TABLE A-17

RESULTS OF LABORATORY ANALYSES
FOR LAKE BELTON AT SITE 4
(continued)

Site 4 - Top

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	1.2	1	17.35	0.04	0.06	0.015	0.08	0.017	0.024
09/22/87	--	3.2	2.4	12.92	0.06	0.09	0.004	0.11	0.043	0.081
10/07/87	--	4.8	1.4	18.25	0.01	0.09	0.002	0.16	0.011	0.023
10/22/87	--	--	--	58.26	0.05	0.16	0.023	0.13	0.011	0.025
11/11/87	--	--	--	11.63	0.07	0.18	0.002	0.19	0.011	0.017
01/18/88	--	1.8	1.2	27.88	--	0.2	0.003	0.09	0.011	0.024
03/15/88	--	3.4	1.2	2.5	0.04	0.16	0.004	0.2	0.012	0.036
05/11/88	--	4.8	1	17.26	0.09	0.04	0.005	0.24	0.017	0.034
05/25/88	--	4	1.2	11.6	0.07	0.01	0.003	0.15	0.012	0.028
06/24/88	--	3	0.8	10.85	0.08	0.06	0.002	0.15	0.012	0.02
07/15/88	--	1.6	1.2	2.5	0.07	0.06	0.004	0.2	0.014	0.024
08/19/88	--	3.3	1.5	14.8	0.03	0.08	0.003	0.16	0.004	0.01

Site 4 - Bottom

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	0.6	0.4	0.15	0.05	0.004	0.21	0.046	0.055
09/22/87	--	3.6	2	0.55	0.05	0.012	0.82	0.077	0.162
10/07/87	--	4.2	1.2	--	0.1	0.003	0.12	0.022	0.034
10/22/87	--	--	--	0.06	0.16	0.021	0.12	0.018	0.032
11/11/87	--	--	--	0.07	0.19	0.003	0.31	0.011	0.022
01/18/88	--	4	3.8	--	0.2	0.003	0.16	0.012	0.03
03/15/88	--	4	1	0.04	0.18	0.004	0.26	0.006	0.017
05/11/88	--	5	1	0.09	0.21	0.003	0.28	0.008	0.019
05/25/88	--	7.3	1	0.08	0.11	0.003	0.26	0.005	0.014
06/24/88	--	3.1	0.2	0.07	0.14	0.009	0.2	0.012	0.026
07/15/88	--	1.3	0.8	0.08	0.08	0.004	0.27	0.015	0.036
08/19/88	--	2.9	1.1	0.09	0.06	0.004	0.19	0.013	0.022

TABLE A-17

RESULTS OF LABORATORY ANALYSES
FOR LAKE BELTON AT SITE 5
(continued)

Site 5 - Top

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	2.6	1.7	19.22	0.09	0.06	0.001	0.11	0.072	0.088
09/22/87	--	4	3	24.18	0.04	0.07	0.006	0.08	0.033	0.052
10/07/87	--	5.1	1.8	82.58	0.01	0.03	0.013	0.05	0.017	0.024
10/22/87	--	--	--	47.35	0.08	0.09	0.011	0.18	0.046	0.078
11/11/87	--	--	--	24.78	0.04	0.14	0.012	0.23	0.026	0.033
01/18/88	--	2.3	1.9	31.24	--	0.2	0.003	0.07	0.012	0.022
03/15/88	--	3.2	1	2.5	0.03	0.17	0.004	0.22	0.007	0.026
05/11/88	--	6.4	2	11.73	0.1	0.02	0.005	0.2	0.009	0.02
05/25/88	--	5.5	2.3	15.3	0.08	0.01	0.003	0.18	0.008	0.02
06/24/88	--	2.9	0.7	11.35	0.12	0.05	0.002	0.18	0.007	0.016
07/15/88	--	2.8	1.8	14.6	0.08	0.07	0.003	0.15	0.016	0.029
08/19/88	--	2.8	1.3	17.1	0.08	0.07	0.004	0.15	0.012	0.024

Site 5 - Bottom

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	2.8	2.5	0.04	0.05	0.002	0.06	0.02	0.03
09/22/87	--	4.3	2.3	0.05	0.06	0.015	0.13	0.015	0.027
10/07/87	--	12.7	3.3	0.08	0.02	0.009	0.15	0.017	0.029
10/22/87	--	--	--	0.1	0.1	0.012	0.23	0.025	0.062
11/11/87	--	--	--	0.02	0.14	0.005	0.28	0.011	0.02
01/18/88	--	3.1	0.09	--	0.21	0.004	0.12	0.011	0.02
03/15/88	--	5.6	1.8	0.02	0.21	0.012	0.28	0.01	0.033
05/11/88	--	5.4	1	0.07	0.06	0.005	0.17	0.015	0.031
05/25/88	--	4.3	1.1	0.04	0.02	0.003	0.09	0.007	0.02
06/24/88	--	2.9	0.7	0.16	0.14	0.004	0.23	0.005	0.016
07/15/88	--	5.5	2.3	0.07	0.06	0.003	0.19	0.014	0.031
08/19/88	--	5.4	2.9	0.16	0.08	0.004	0.26	0.021	0.03

TABLE A-17

RESULTS OF LABORATORY ANALYSES
FOR LAKE BELTON AT SITE 6
(continued)

Site 6 - Top

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	2.8	2.4	14.15	0.08	0.06	0.001	0.09	0.026	0.027
09/22/87	--	7	2.7	23.16	0.06	0.06	0.008	0.15	0.032	0.048
10/07/87	--	5.3	2.5	53.1	0.03	0.02	0.009	0.08	0.01	0.026
10/22/87	--	--	--	17.58	0.05	0.08	0.005	0.12	0.016	0.028
11/11/87	--	--	--	16.45	0.11	0.11	0.008	0.19	0.014	0.019
01/18/88	--	2.5	1.4	48.4	--	0.18	0.004	0.08	0.015	0.026
03/15/88	--	5	1.4	18.78	0.07	0.2	0.012	0.27	0.011	0.011
05/11/88	--	6.8	2.5	9.42	0.09	0.01	0.003	0.15	0.009	0.018
05/25/88	--	3.1	1.1	13.23	0.06	0.02	0.003	0.12	0.006	0.01
06/24/88	--	3.2	1.6	19.4	--	0.05	0.002	0.13	0.013	0.027
07/15/88	--	3.3	2	18.88	0.1	0.06	0.002	0.22	0.017	0.028
08/19/88	--	4.3	2.8	21.3	0.08	0.06	0.003	0.17	0.015	0.034

Site 6 - Bottom

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	7.2	2.3	0.14	0.06	0.005	0.18	0.04	0.062
09/22/87	--	11.6	2.4	0.09	0.04	0.021	0.26	0.023	0.054
10/07/87	--	18	4.3	0.04	0.01	0.004	0.17	0.011	0.02
10/22/87	--	--	--	0.09	0.08	0.005	0.15	0.011	0.017
11/11/87	--	--	--	0.16	0.08	0.004	0.24	0.016	0.023
01/18/88	--	2.5	1.4	--	0.18	0.004	0.1	0.01	0.017
03/15/88	--	5.5	1.9	--	0.18	0.004	0.3	0.006	0.018
05/11/88	--	11.5	2	0.11	0.16	0.003	0.2	0.011	0.024
05/25/88	--	10.6	1.7	0.09	0.1	0.008	0.23	0.014	0.033
06/24/88	--	6.5	2.3	0.07	0.06	0.002	0.16	0.011	0.025
07/15/88	--	9	3.3	0.1	0.07	0.002	0.31	0.015	0.036
08/19/88	--	6.7	3.3	0.08	0.07	0.004	0.18	0.013	0.036

TABLE A-17

RESULTS OF LABORATORY ANALYSES
FOR LAKE BELTON AT SITE 7
(continued)

Site 7 - Top

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	11	2.6	16.02	0.12	0.05	0.005	0.15	0.016	0.022
09/22/87	--	11.2	5.2	23.6	0.02	0.04	0.006	0.1	0.017	0.025
10/07/87	--	12.3	5	68.73	0.1	0.02	0.002	0.13	0.009	0.022
10/22/87	--	--	--	92.45	0.07	0.07	0.003	0.2	0.009	0.016
11/11/87	--	--	--	18.1	0.1	0.07	0.003	0.28	0.007	0.014
01/18/88	--	4.8	1.3	41.26	--	0.15	0.004	0.08	0.007	0.016
03/15/88	--	8.3	1.3	21.33	0.06	0.14	0.004	0.29	0.003	0.016
05/11/88	--	8.9	1.4	20.75	0.11	0.01	0.003	0.26	0.007	0.025
05/25/88	--	7	1.7	33.86	0.07	0.01	0.002	0.16	0.007	0.013
06/24/88	--	7.1	2.6	44.7	0.08	0.05	0.002	0.17	0.007	0.018
07/15/88	--	12.7	4	34.15	0.13	0.07	0.002	0.26	0.013	0.022
08/19/88	--	12.7	4	37.8	0.07	0.06	0.003	0.15	0.012	0.028

Site 7 - Bottom

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	14.6	4.3	0.07	0.05	0.005	0.08	0.02	0.027
09/22/87	--	11.2	3.6	0.04	0.05	0.007	0.18	0.021	0.052
10/07/87	--	21.2	4.4	0.06	0.02	0.002	0.1	0.014	0.031
10/22/87	--	--	--	0.08	0.05	0.002	0.14	0.009	0.032
11/11/87	--	--	--	0.11	0.07	0.001	0.31	0.016	0.022
01/18/88	--	4.9	2.3	--	0.16	0.004	0.15	0.012	0.03
03/15/88	--	7.3	0.8	0.06	0.15	0.004	0.33	0.003	0.014
05/11/88	--	11.7	2.3	0.13	0.02	0.005	0.33	0.007	0.021
05/25/88	--	8.3	1.3	0.09	0.02	0.003	0.21	0.009	0.016
06/24/88	--	8	2.8	0.07	0.05	0.002	0.15	0.012	0.029
07/15/88	--	22	4.5	0.16	0.07	0.002	0.36	0.017	0.04
08/19/88	--	12	4.7	0.09	0.06	0.004	0.2	0.009	0.022

TABLE A-17

RESULTS OF LABORATORY ANALYSES
FOR LAKE BELTON AT SITE 8
(continued)

Site 8 - Top

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	15.2	5.6	48.06	0.12	0.07	0.004	0.17	0.082	0.104
09/22/87	--	23.8	9.9	47.35	0.14	0.04	0.009	0.26	0.025	0.034
10/07/87	3	10.8	4.4	88.44	0.08	0.02	0.002	0.13	0.016	0.02
10/22/87	--	--	--	112.76	0.07	0.07	0.002	0.18	0.015	0.037
11/11/87	--	--	--	26.8	0.12	0.07	--	0.18	0.016	0.025
01/18/88	0.7	5.1	1.7	54.3	--	0.18	0.005	0.06	0.008	0.013
03/15/88	--	12.9	2	29.65	0.14	0.15	0.003	0.28	0.006	0.02
05/11/88	2.6	9.7	2.8	31.6	0.15	0.01	0.003	0.29	0.009	0.029
05/25/88	--	13.7	3	83.06	0.13	0.02	0.002	0.29	0.018	0.041
06/24/88	--	9.2	3.2	62.15	0.11	0.05	0.002	0.2	0.018	0.04
07/15/88	--	17.4	5.4	52.6	0.16	0.07	0.002	0.23	0.01	0.016
08/19/88	--	17	5	48.1	0.12	0.06	0.004	0.23	0.011	0.027

Site 8 - Bottom

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	16.2	5.9	0.1	0.06	0.006	0.16	0.102	0.129
09/22/87	--	26.8	6.8	0.16	0.05	0.024	0.33	0.024	0.043
10/07/87	2	30.7	4.6	0.05	0.03	0.013	0.014	0.012	0.026
10/22/87	--	--	--	0.14	0.05	0.001	0.32	0.006	0.019
11/11/87	--	--	--	0.18	0.06	0.002	0.3	0.015	0.02
01/18/88	1.3	8.6	1.7	--	0.24	0.005	0.11	0.006	0.015
03/15/88	--	32	3.2	0.15	0.16	0.004	0.32	0.007	0.024
05/11/88	3	9.7	3	0.14	0.01	0.003	0.32	0.01	0.028
05/25/88	--	20	3.7	0.13	0.02	0.003	0.34	0.01	0.022
06/24/88	--	13	2.5	0.09	0.05	0.002	0.22	0.008	0.02
07/15/88	--	18	4	0.18	0.07	0.002	0.41	0.013	0.029
08/19/88	--	25	6	0.14	0.07	0.002	0.29	0.017	0.038

TABLE A-17

RESULTS OF LABORATORY ANALYSES
FOR LAKE BELTON AT SITE 9
(continued)

Site 9

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	25.2	6.8	58.74	0.05	0.06	0.003	0.11	0.045	0.052
09/22/87	--	22.7	8.7	32.74	0.13	0.04	0.009	0.21	0.026	0.042
10/07/87	--	18	6	107.28	0.11	0.01	0.002	0.18	0.015	0.034
10/22/87	--	--	--	132.15	0.09	0.06	0.001	0.19	0.011	0.027
11/11/87	--	--	--	76.33	0.13	0.06	0.001	0.16	0.01	0.017
01/18/88	--	12.6	3.2	94.6	--	0.6	0.01	0.08	0.011	0.025
03/15/88	--	17.2	2.4	42.85	0.11	0.14	0.004	0.41	0.005	0.021
05/11/88	--	15.6	3.2	33.55	0.18	0.01	0.002	0.42	0.007	0.019
05/25/88	--	18	3.2	96.5	0.16	0.01	0.001	0.38	0.007	0.013
06/24/88	--	13.5	4	73.2	0.12	0.05	0.002	0.26	0.013	0.03
07/15/88	--	27	8	73.43	0.19	0.06	0.002	0.32	0.014	0.025
08/19/88	--	27	8	71.7	0.14	0.07	0.004	0.26	0.013	0.029

TABLE A-17

RESULTS OF LABORATORY ANALYSES
FOR LAKE BELTON AT SITE 10
(continued)

Site 10 - Top

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Chlorophyll 'a' (ug/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	22.8	13.4	134.56	0.15	0.08	0.002	0.29	0.129	0.157
09/22/87	--	25.3	11.3	56.52	0.23	0.03	0.009	0.47	0.023	0.037
10/07/87	--	22	7	122.4	0.25	0.02	0.003	0.32	0.025	0.042
10/22/87	--	--	--	164.28	0.16	0.06	--	0.28	0.011	0.023
11/11/87	--	--	--	122.6	0.17	0.06	--	0.28	0.015	0.024
01/18/88	--	18.8	4.4	114.32	--	0.61	0.01	0.1	0.01	0.021
03/15/88	--	28	3.4	64.23	0.15	0.14	0.008	0.47	0.006	0.026
05/11/88	--	31	6.5	114.26	0.25	0.01	0.001	0.64	0.007	0.029
05/25/88	--	29	4.5	124.23	0.24	0.02	--	0.41	0.012	0.029
06/24/88	--	23.5	9.5	123.75	0.21	0.05	0.003	0.32	0.02	0.044
07/15/88	--	39	12	107.6	0.25	0.08	0.005	0.63	0.036	0.057
08/19/88	--	82	16	106.9	0.23	0.08	0.006	0.35	0.029	0.064

Site 10 - Bottom

Date	BOD-5 (mg/l)	TSS (mg/l)	VSS (mg/l)	Ammonia Nitrogen (mg/l)	Nitrate Nitrogen (mg/l)	Nitrite Nitrogen (mg/l)	Organic Nitrogen (mg/l)	Ortho Phosphorous (mg/l)	Total Phosphorous (mg/l)
08/28/87	--	42.4	12.1	0.05	0.09	0.01	0.09	0.121	0.143
09/22/87	--	33	10	0.22	0.06	0.011	0.35	0.036	0.075
10/07/87	--	61.8	10.4	0.12	0.1	0.034	0.2	0.032	0.049
10/22/87	--	--	--	0.28	0.12	0.002	0.37	0.06	0.14
11/11/87	--	--	--	0.3	0.34	0.013	0.58	0.037	0.062
01/18/88	--	25.3	1.7	--	0.65	0.009	0.14	0.01	0.018
03/15/88	--	36.7	4	0.15	0.15	0.01	0.54	0.007	0.026
05/11/88	--	49	6	0.3	0.02	0.001	0.82	0.015	0.033
05/25/88	--	49	7	0.26	0.02	--	0.48	0.006	0.017
06/24/88	--	64	1.5	0.37	0.14	0.003	0.67	0.032	0.056
07/15/88	--	51	8	0.22	0.1	0.005	0.56	0.041	0.073
08/19/88	--	58	16	0.32	0.34	0.02	0.67	0.043	0.108

TABLE A-18

BAROMETRIC PRESSURE READINGS FOR LAKES BELTON AND STILLHOUSE HOLLOW SAMPLING DATES

Sampling Date	Lake Belton		Lake Stillhouse Hollow	
	Barometric Pressure (in. of Hg)	Sites	Barometric Pressure (in. of Hg)	Sites
8/27/87	30.21	(1-5)		
8/28/87	30.21	(6-10)		
9/1/87			30.19	(1-5)
9/21/87	30.09	(5-10)		
9/22/87	30.26	(1-4)		
9/23/87			30.27	(1-5)
10/7/87	30.18	(1-10)		
10/9/87			30.10	(1-5)
10/21/87			30.44	(1-5)
10/22/87	30.28	(1-5)		
10/23/87	30.18	(6-10)		
11/9/87			30.07	(1-5)
11/11/87	30.52	(1-5)		
11/12/87	30.36	(6-10)		
1/18/88	29.82	(1-10)		
1/23/88			30.14	(1-5)
3/4/88			29.92	(1-5)
3/15/88	29.92	(1-6)		
3/23/88	30.02	(7-10)		
5/10/88			29.92	(1-5)
5/11/88	30.14	(1-5)		
5/12/88	30.22	(6-10)		
5/24/88			29.94	(1-5)
5/25/88	30.08	(1-10)		
6/23/88			29.98	(1-5)
6/24/88	29.98	(1-10)		
7/14/88			29.92	(1-5)
7/15/88	29.98	(1-10)		
8/18/88			29.96	(1-5)
8/19/88	29.98	(1-10)		