EUTROPHICATION IN CONTROLLED WATERS IN THE WARWICKSHIRE AVON CATCHMENT

(Final Report)

Volume 2

March 1998

ENVIRONMENT AGENCY

COVENTRY UNIVERSITY

ENVIRONMENT AGENCY

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EUTROPHICATION IN CONTROLLED WATERS IN THE WARWICKSHIRE AVON CATCHMENT
(Final Report)

A Research Report Commissioned by the Environment Agency

Volume 2 (Appendices)

Time series graphs for sampling stations on the five major sub-catchments of the river Avon upstream of Evesham.

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March 1998

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Appendix 1a

The Upper Avon and River Swift

Figure 1 Site Location Map for the upper Avon and Swift

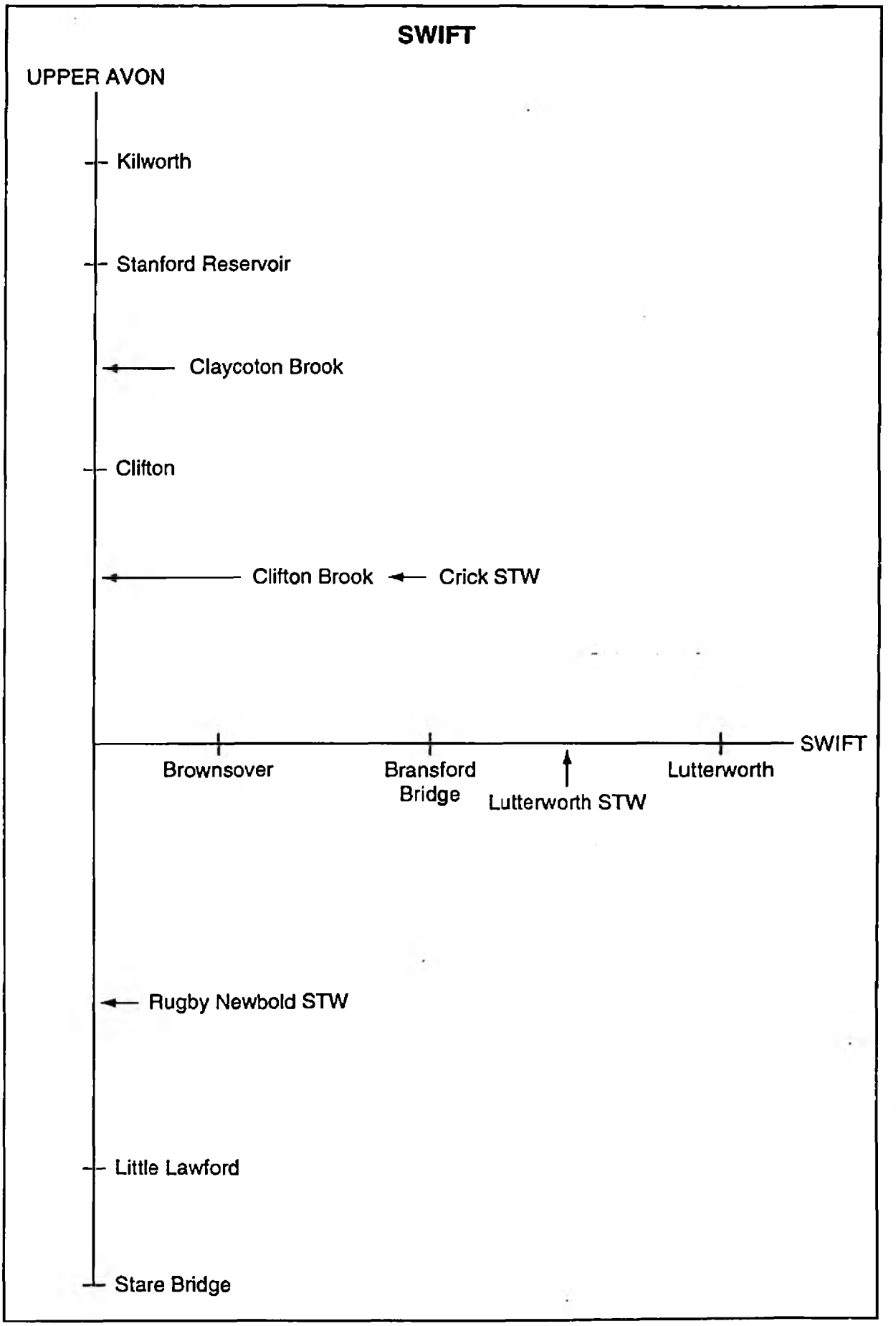
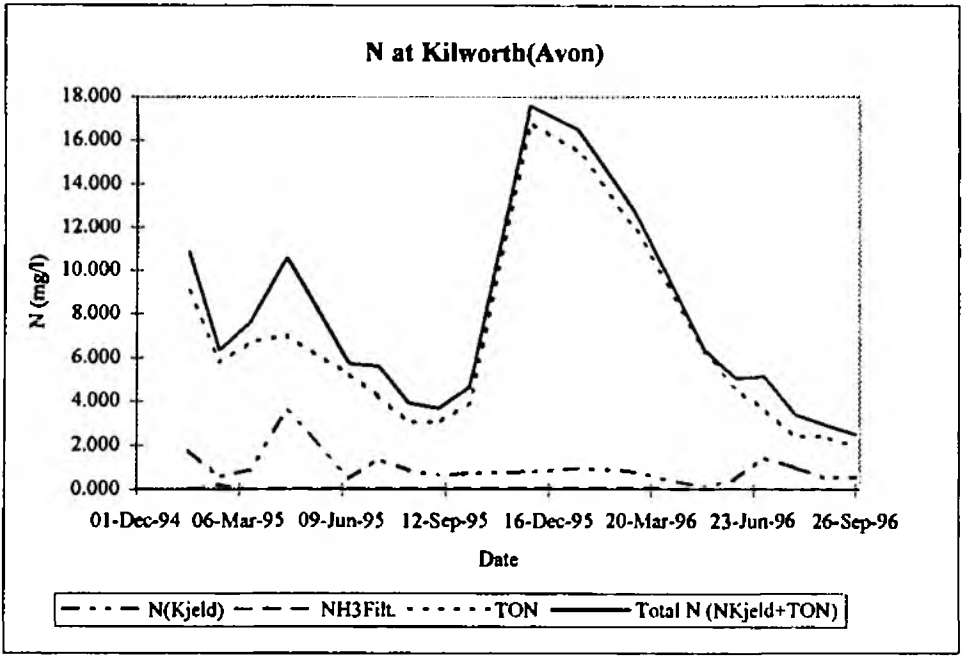
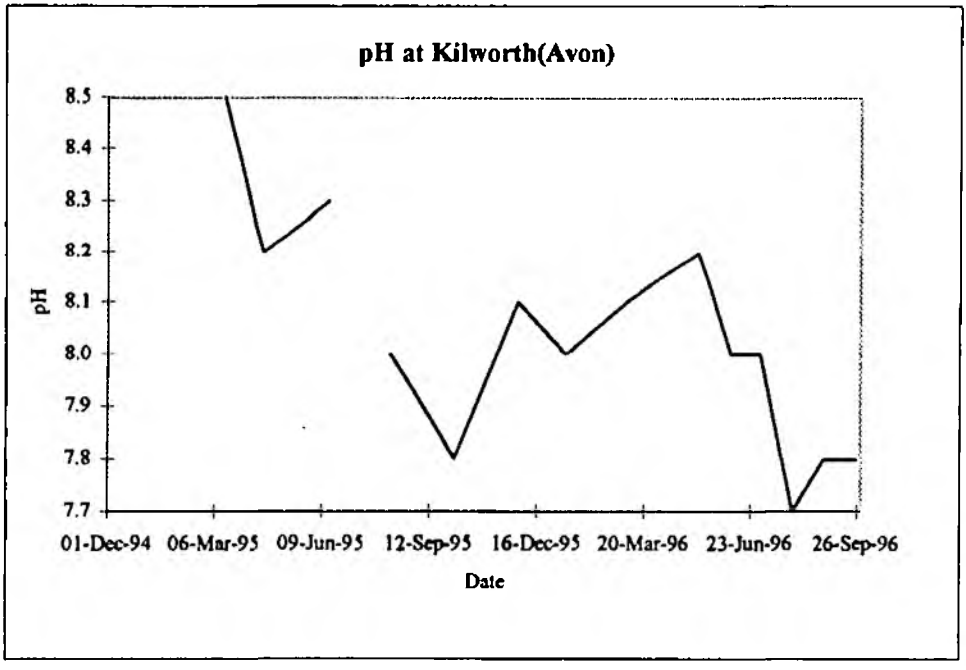
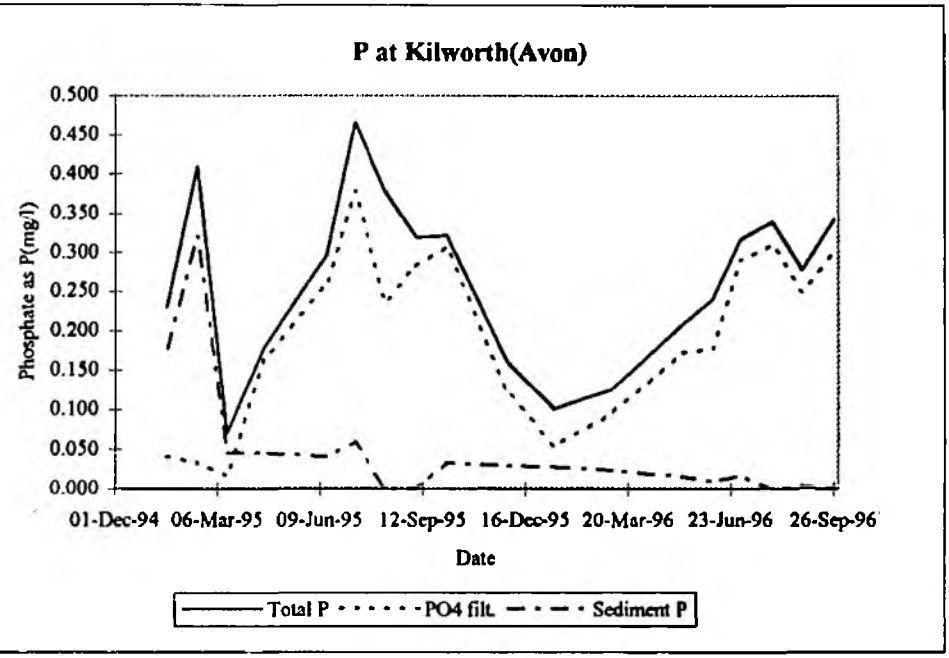
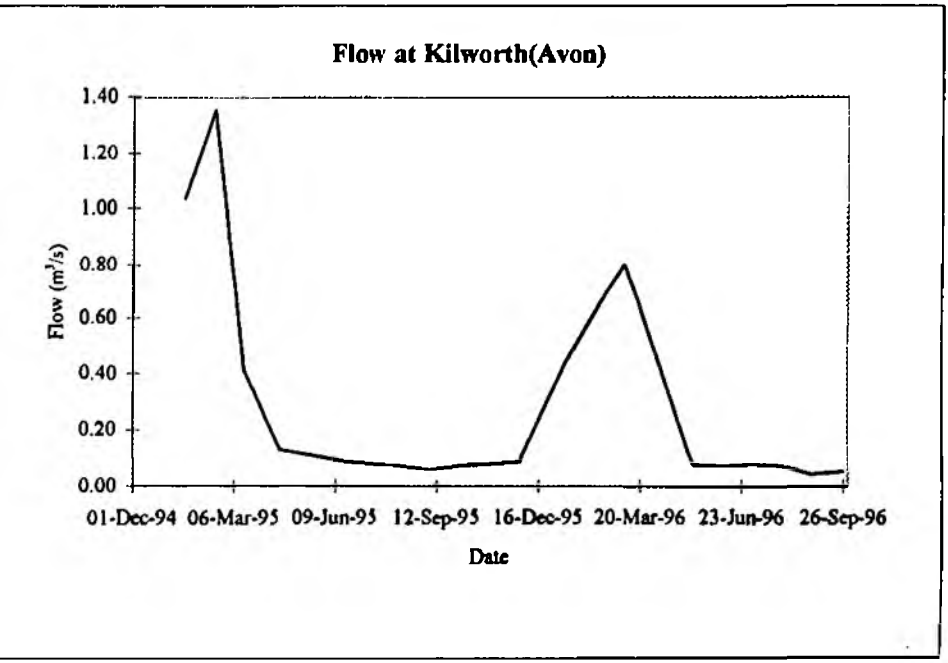


Figure 2 Kilworth (Avon)


N at Kilworth(Avon)
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

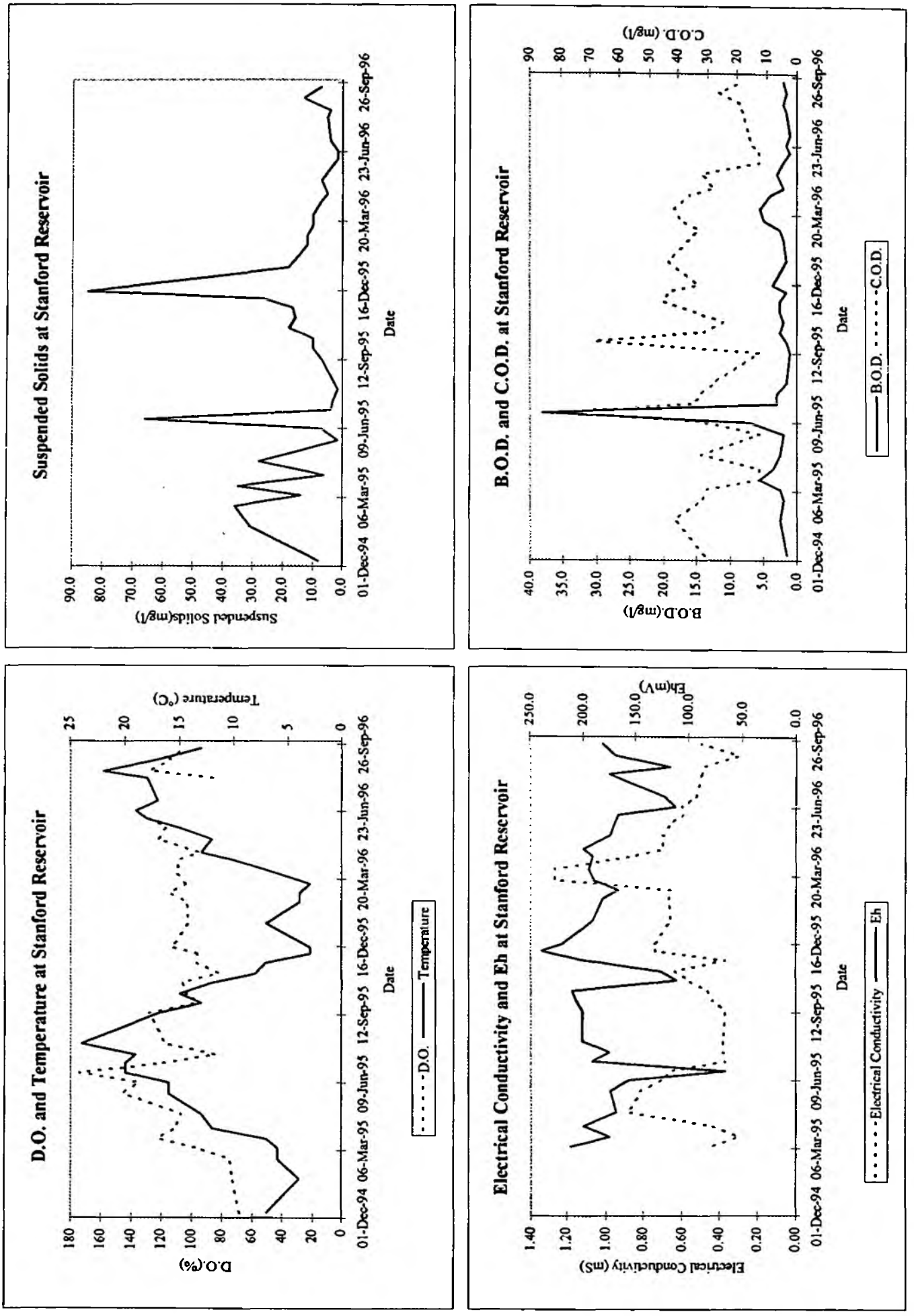

pH at Kilworth(Avon)
8.5
8.4
8.3
8.2
8.1
8.0
7.9
7.8
7.7
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

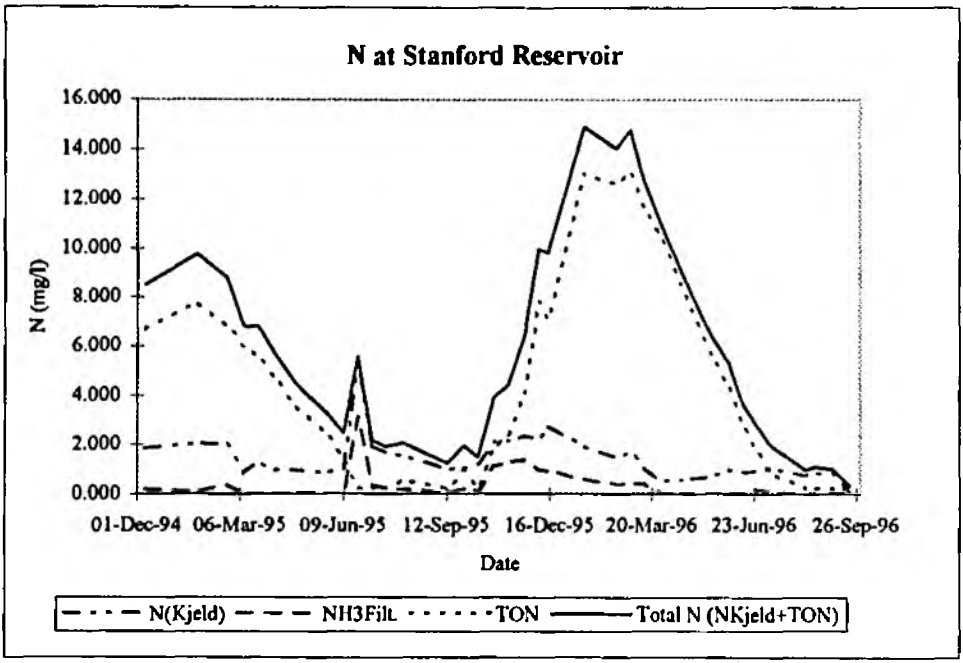


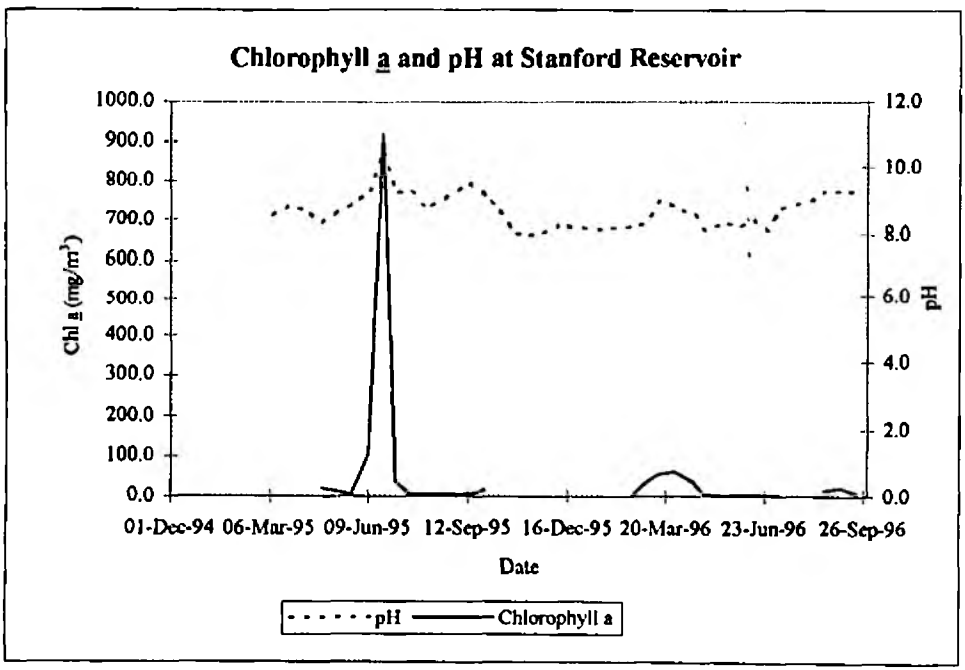


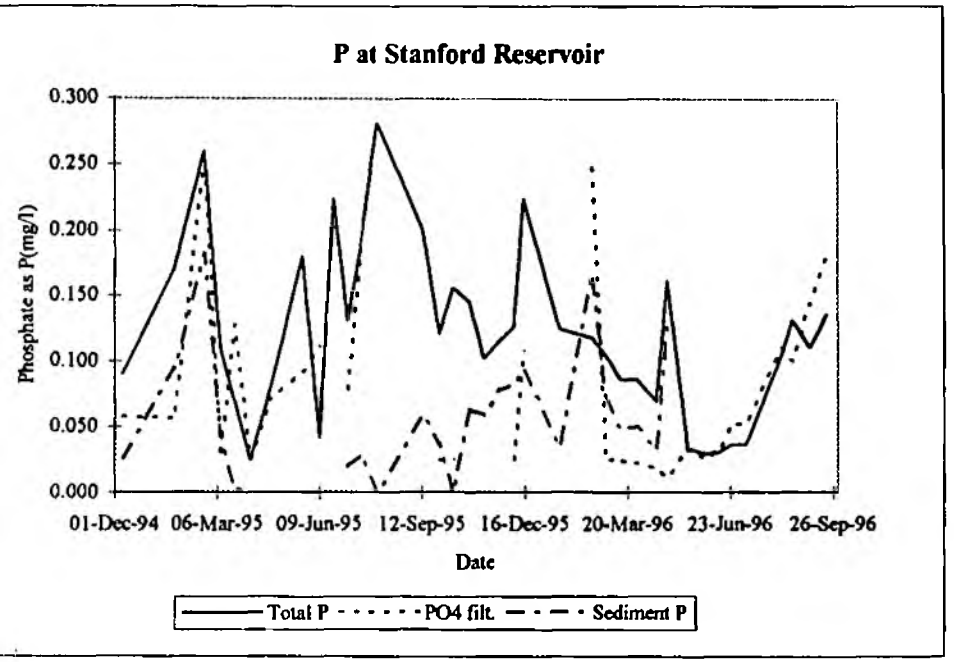
(Figure 2 cont.)

Figure 3 Stanford Reservoir



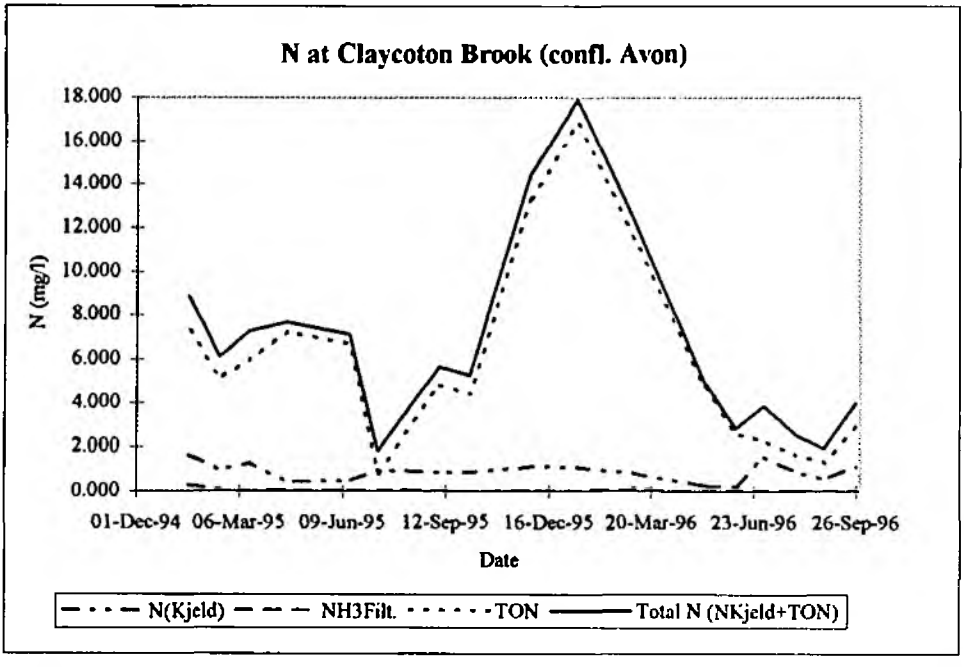

N at Stanford Reservoir
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt
TON
Total N (NKjeld+TON)

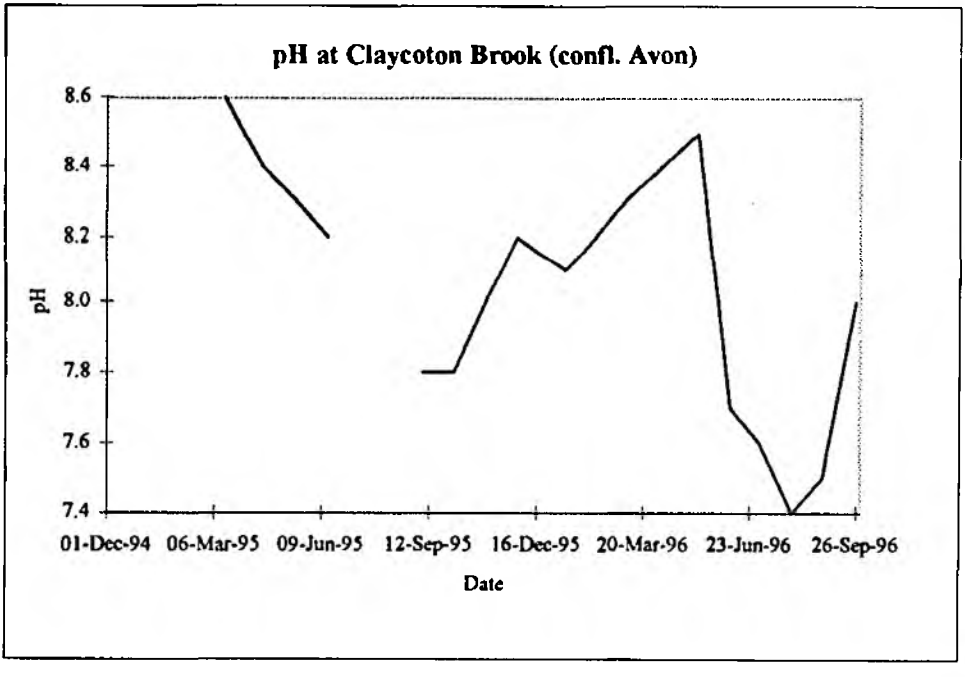

Chlorophyll a and pH at Stanford Reservoir
1000.0
900.0
800.0
700.0
600.0
500.0
400.0
300.0
200.0
100.0
0.0
Chl a (mg/m³)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
pH
Chlorophyll a

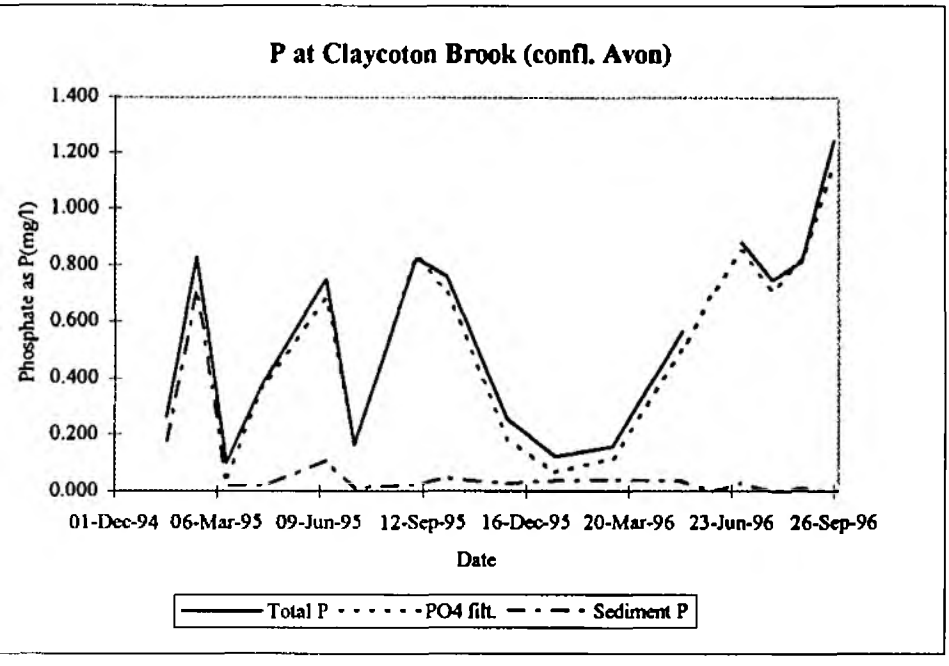


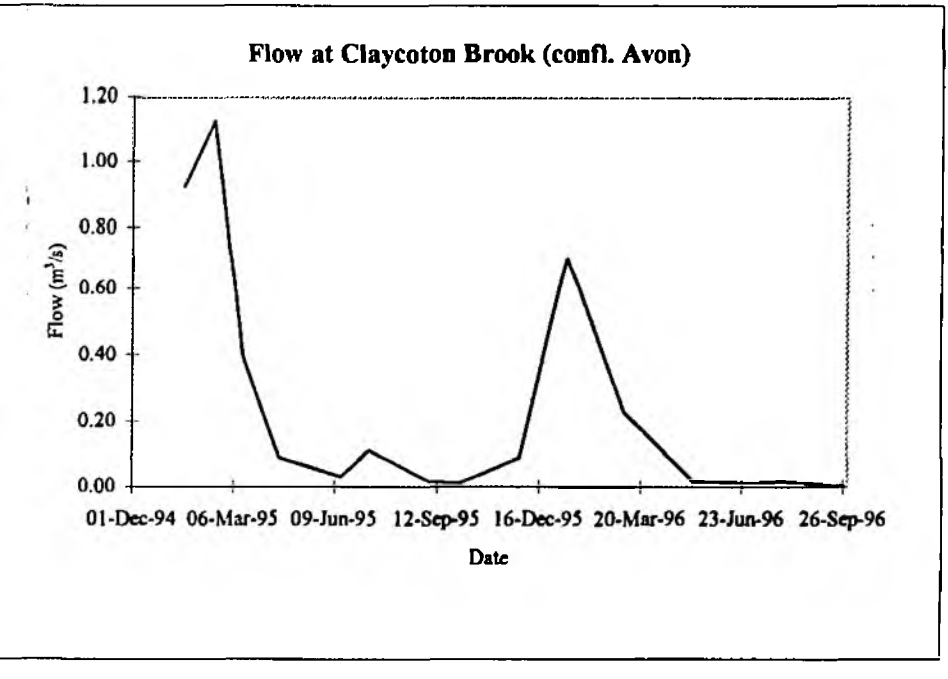
(Figure 3 cont.)

Figure 4 Claycoton Brook (confl. Avon)

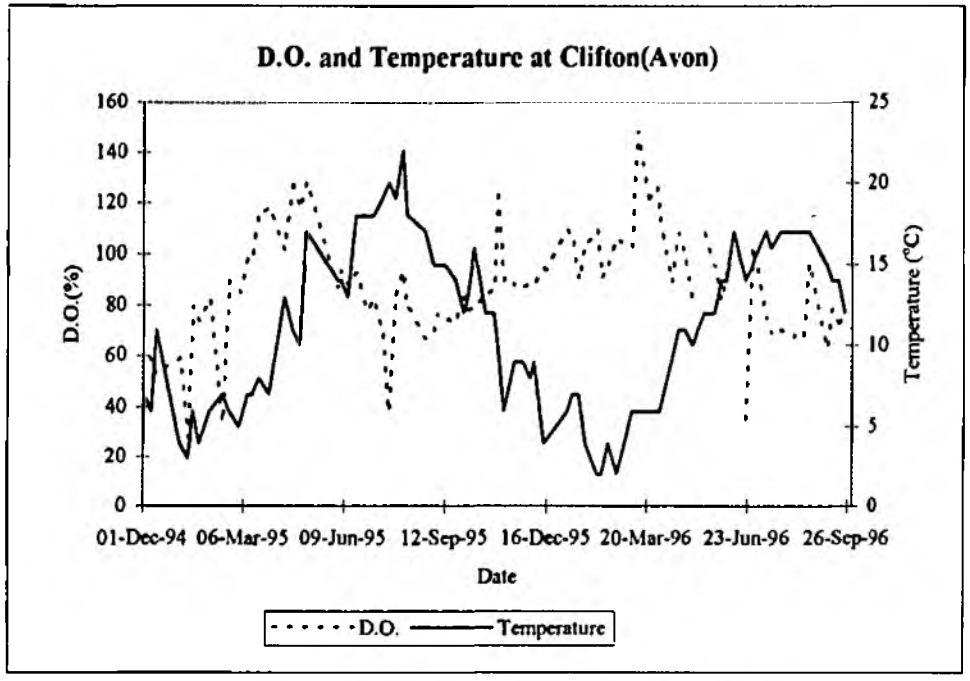

N at Claycoton Brook (confl. Avon)
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

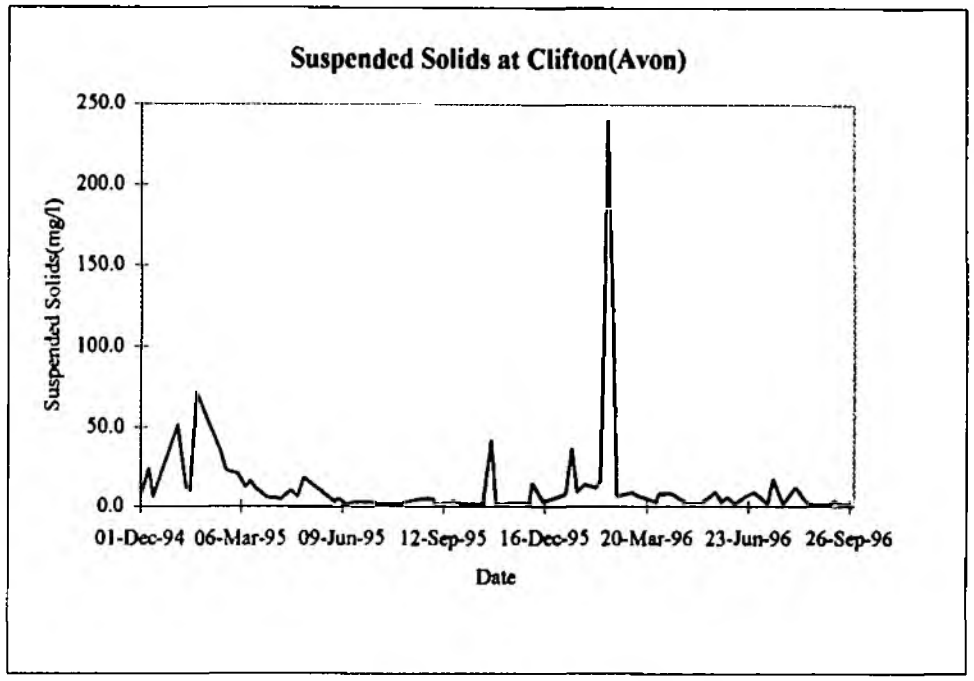

pH at Claycoton Brook (confl. Avon)
8.6
8.4
8.2
8.0
7.8
7.6
7.4
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

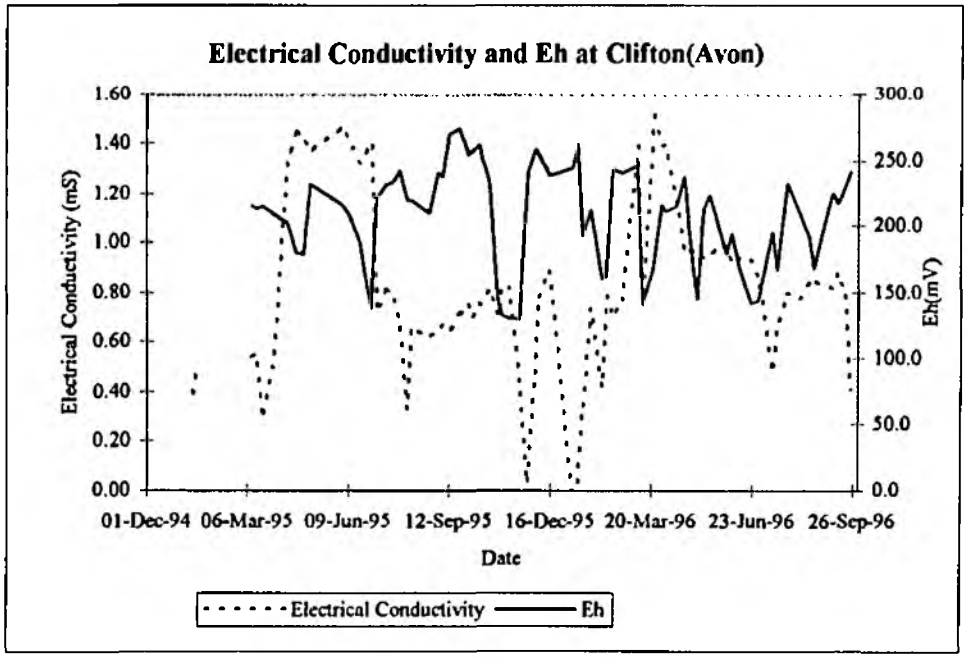




(Figure 4 cont.)







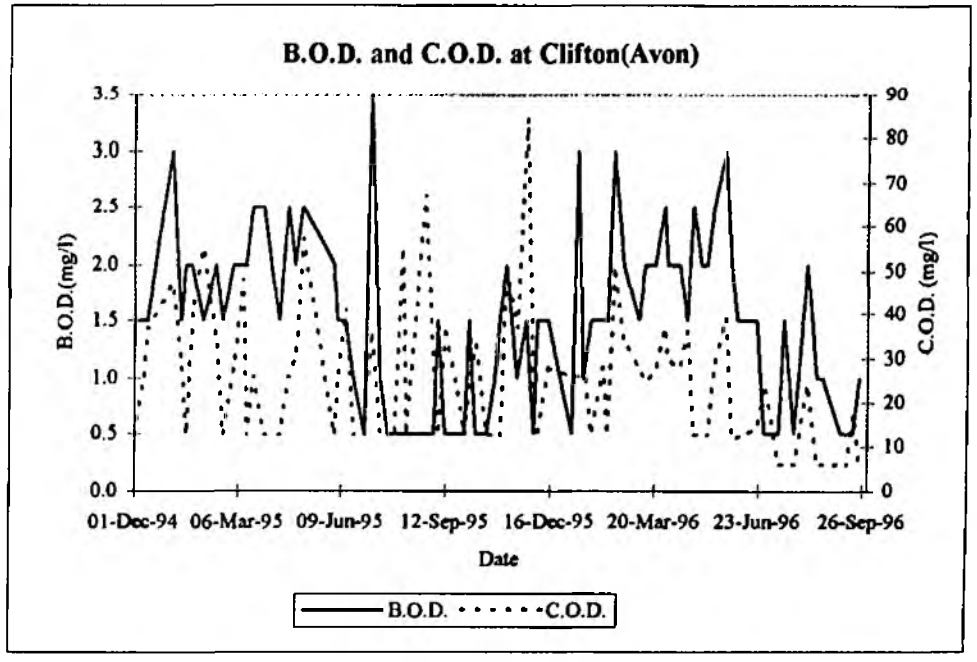
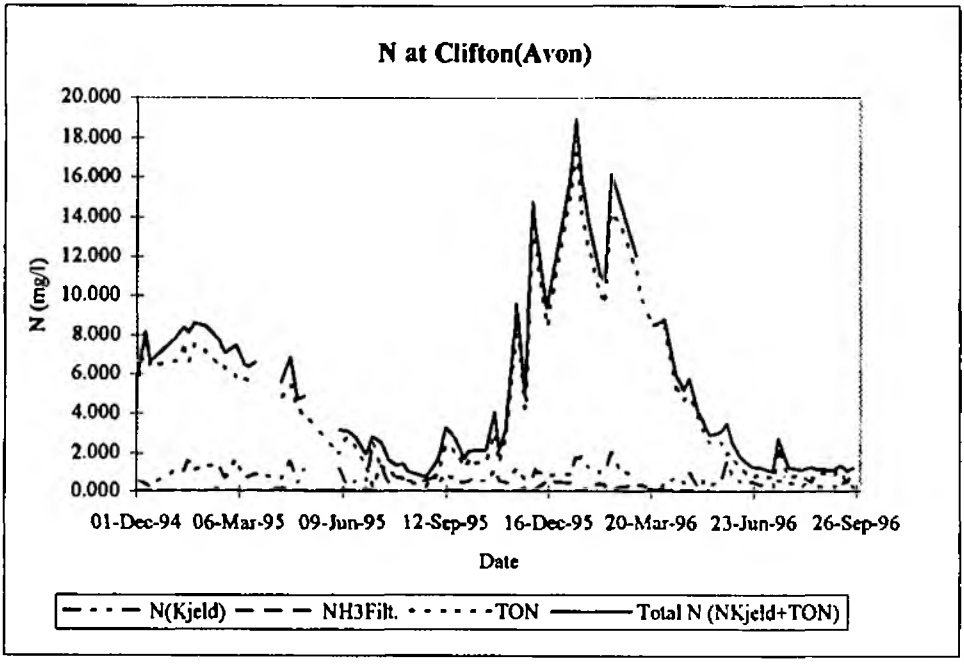
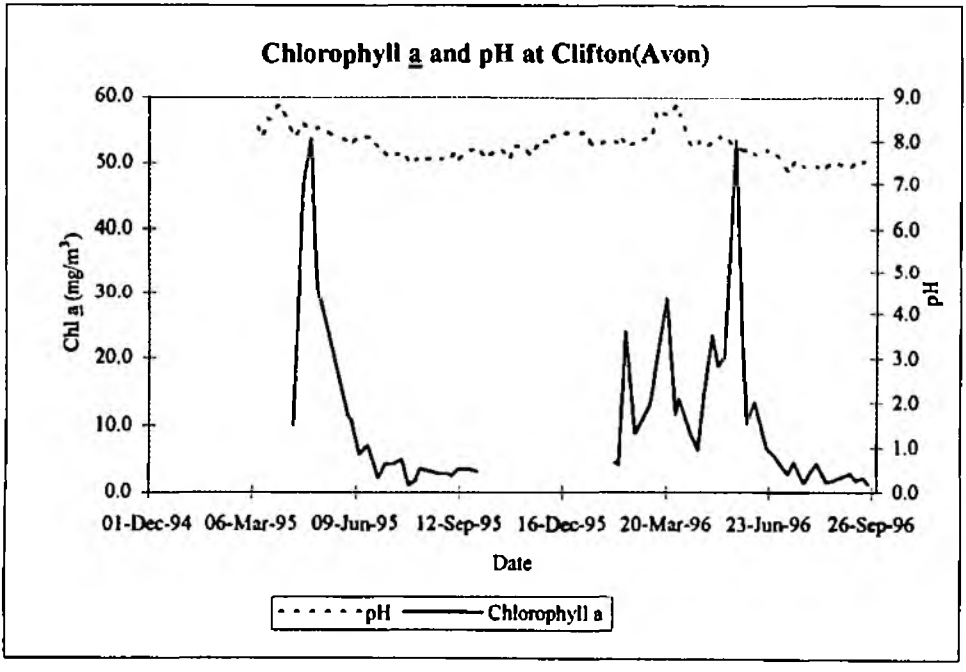
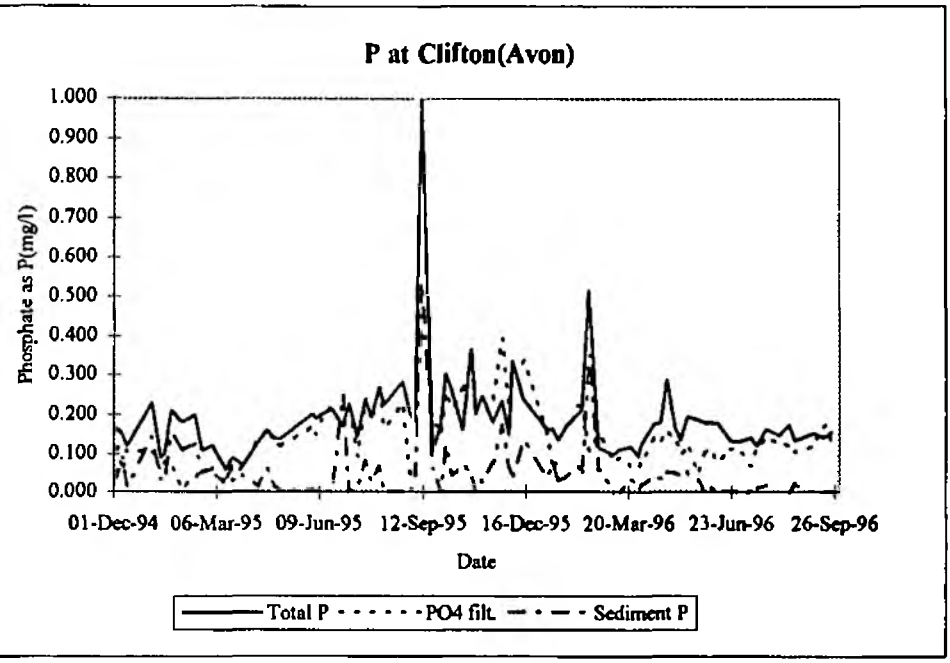
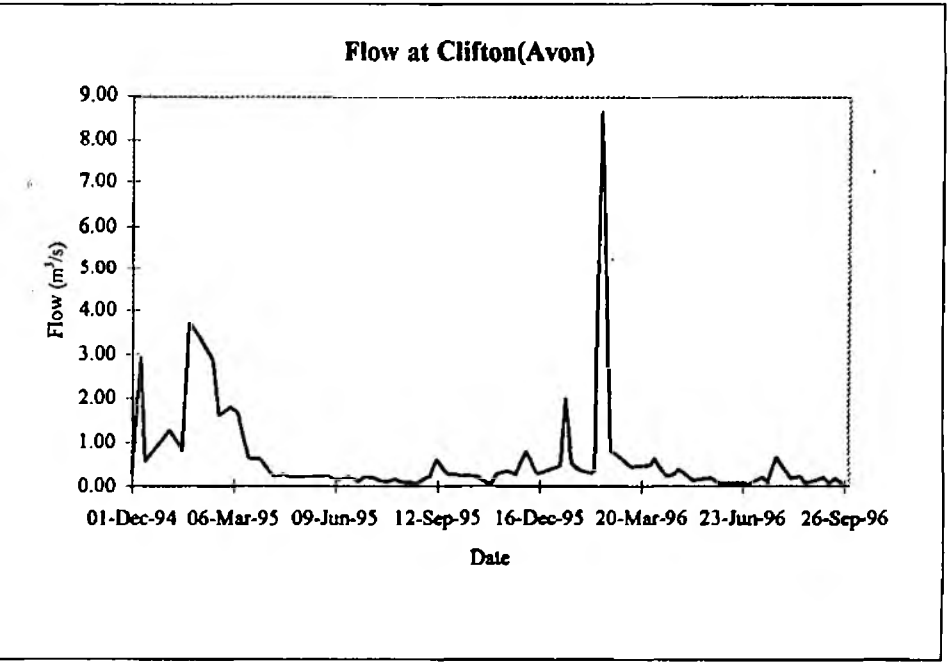


Figure 5 Clifton (Avon)

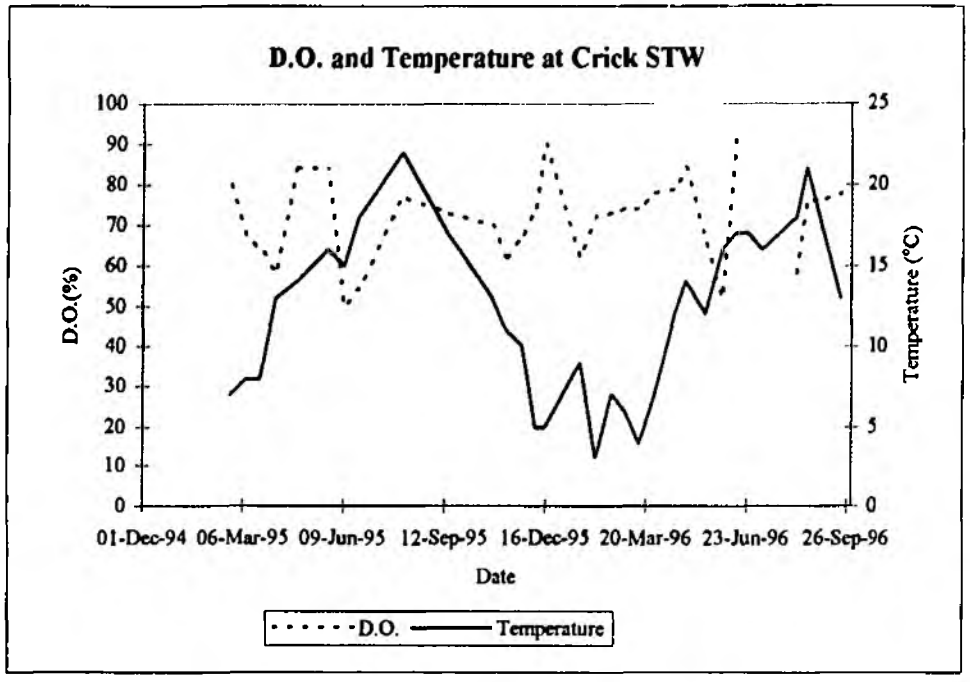

N at Clifton(Avon)
20.000
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
N(Kjeld) NH3Filt. TON Total N (NKjeld+TON)

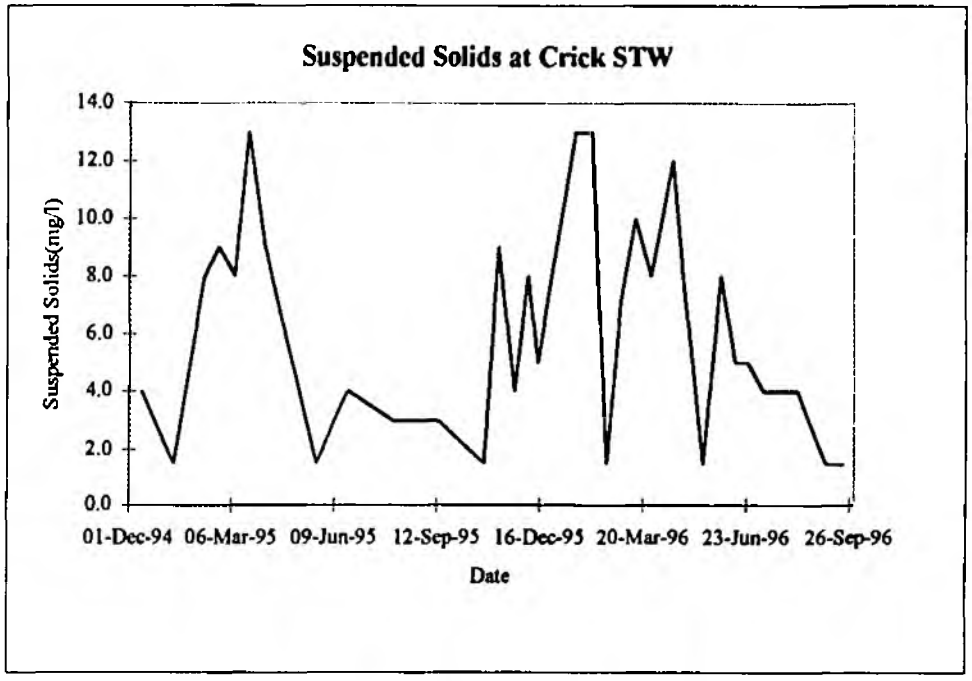

Chlorophyll a and pH at Clifton(Avon)
60.0
50.0
40.0
30.0
20.0
10.0
0.0
Chl a (mg/m³)
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
pH
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
pH Chlorophyll a

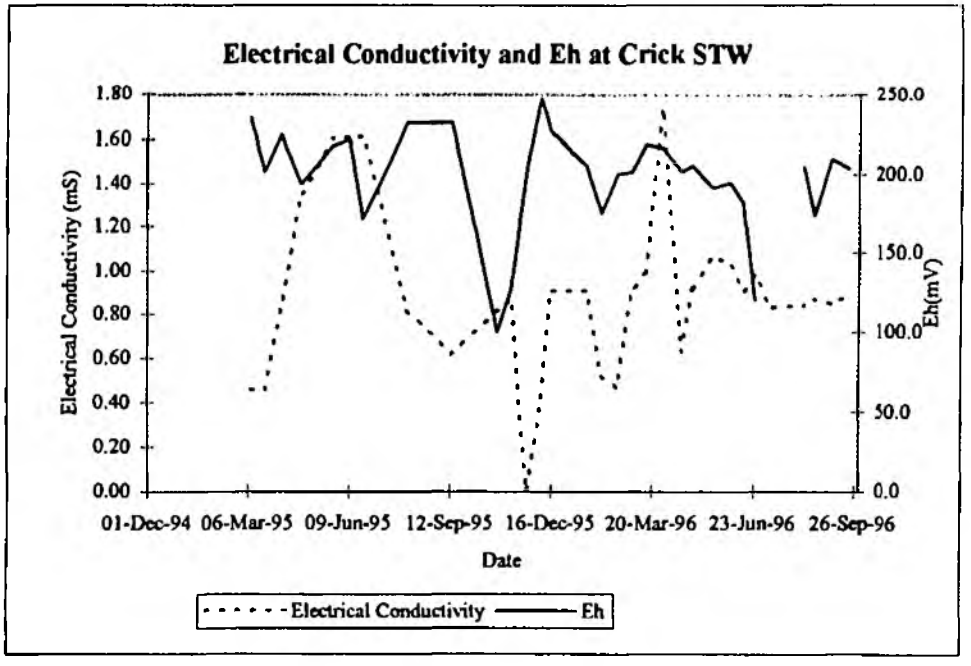




(Figure 5 cont.)







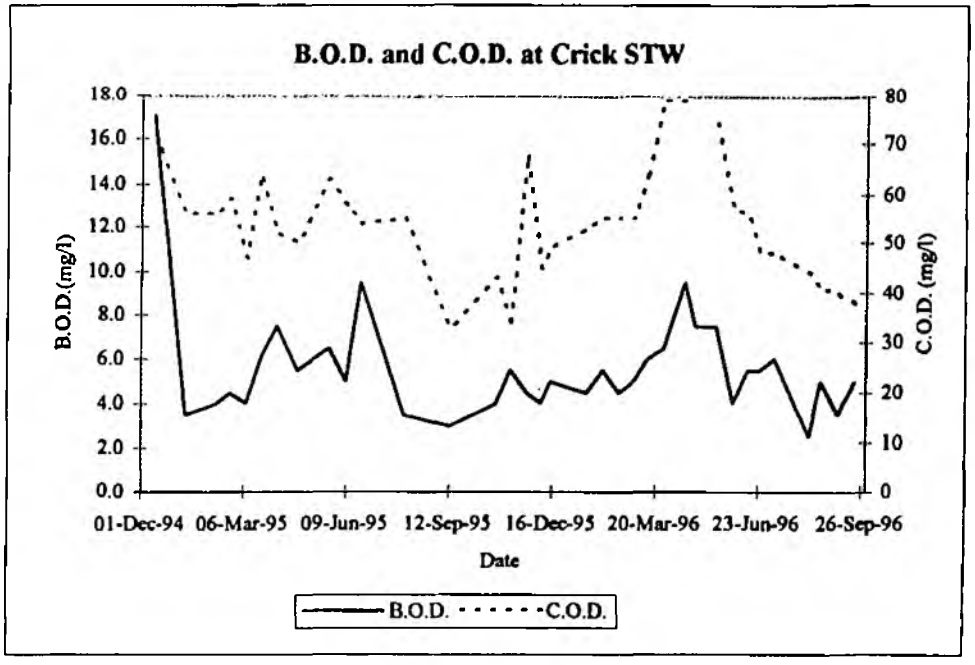
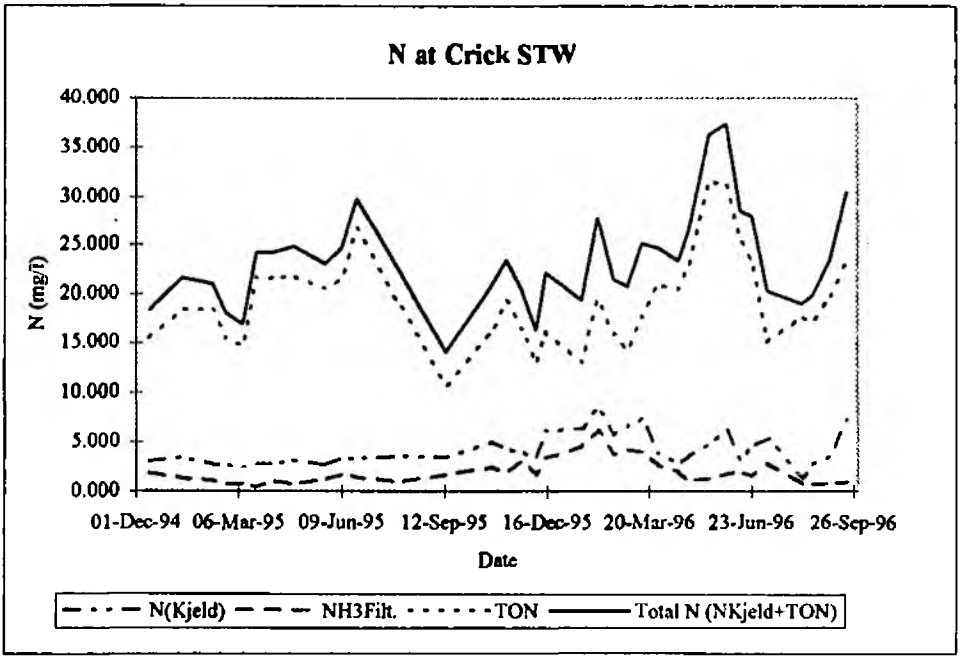
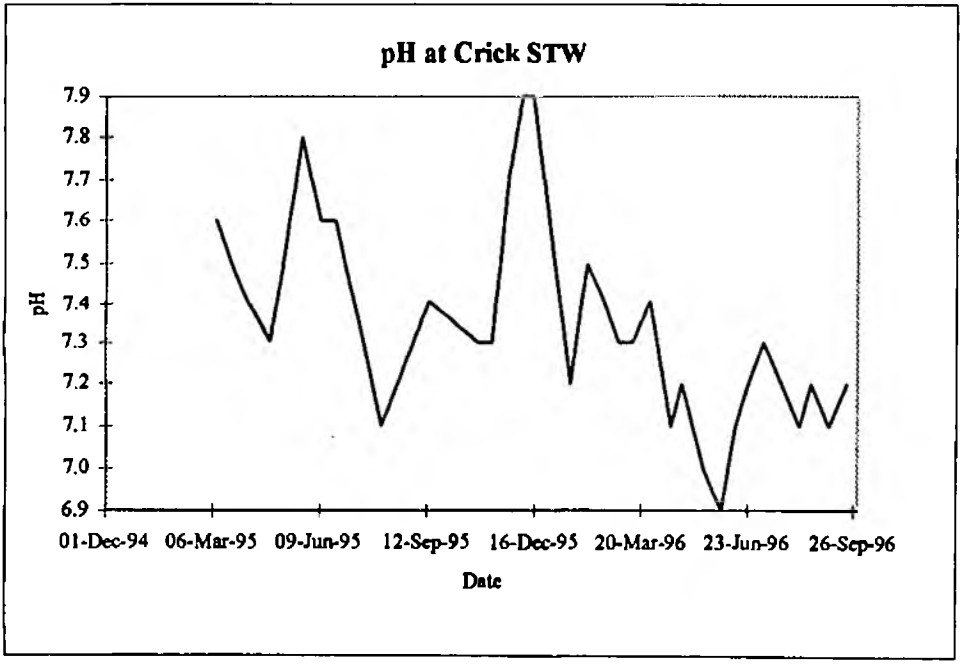


Figure 6 Crick STW


N at Crick STW
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)


pH at Crick STW
7.9
7.8
7.7
7.6
7.5
7.4
7.3
7.2
7.1
7.0
6.9
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

(Figure 6 cont.)

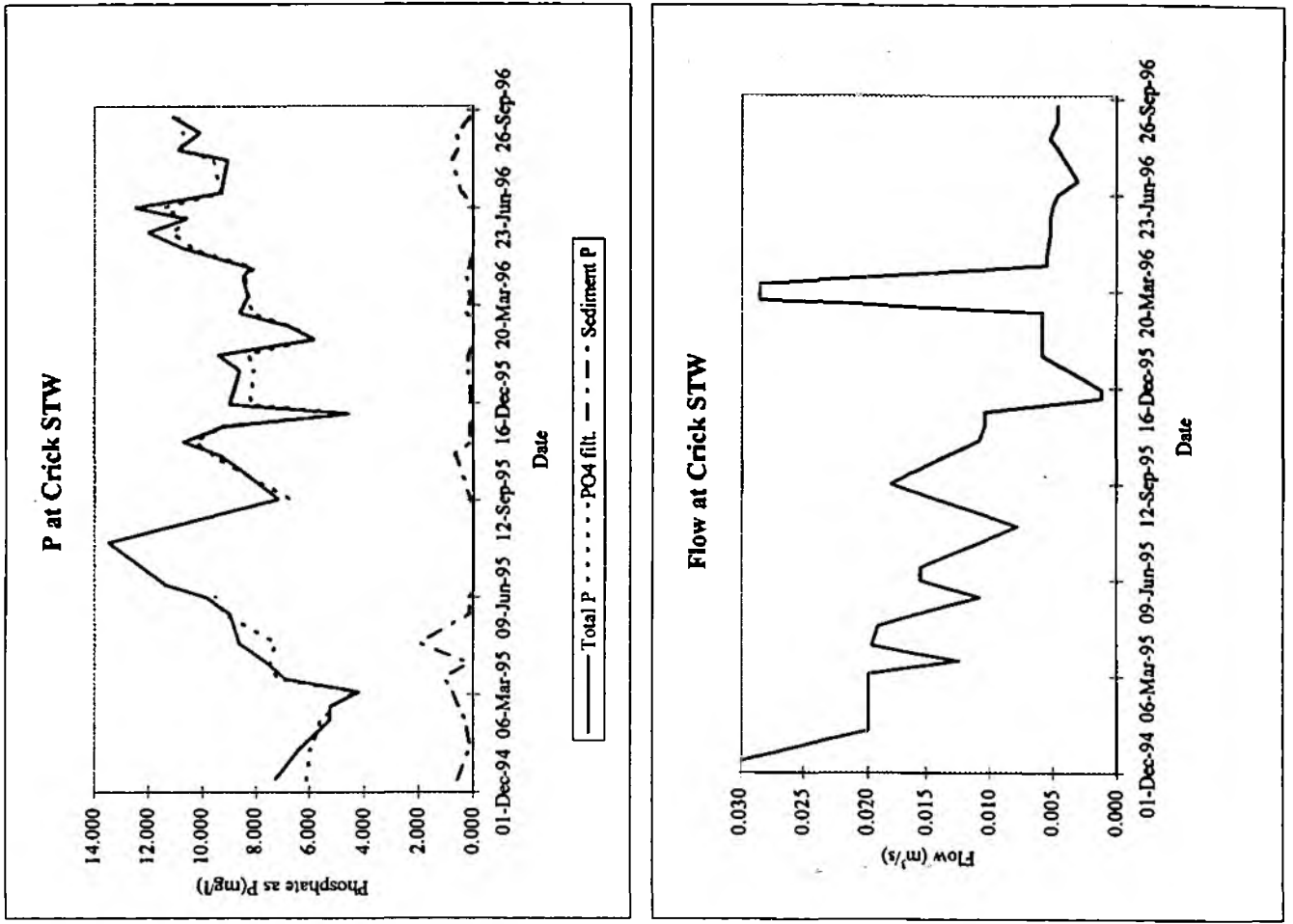
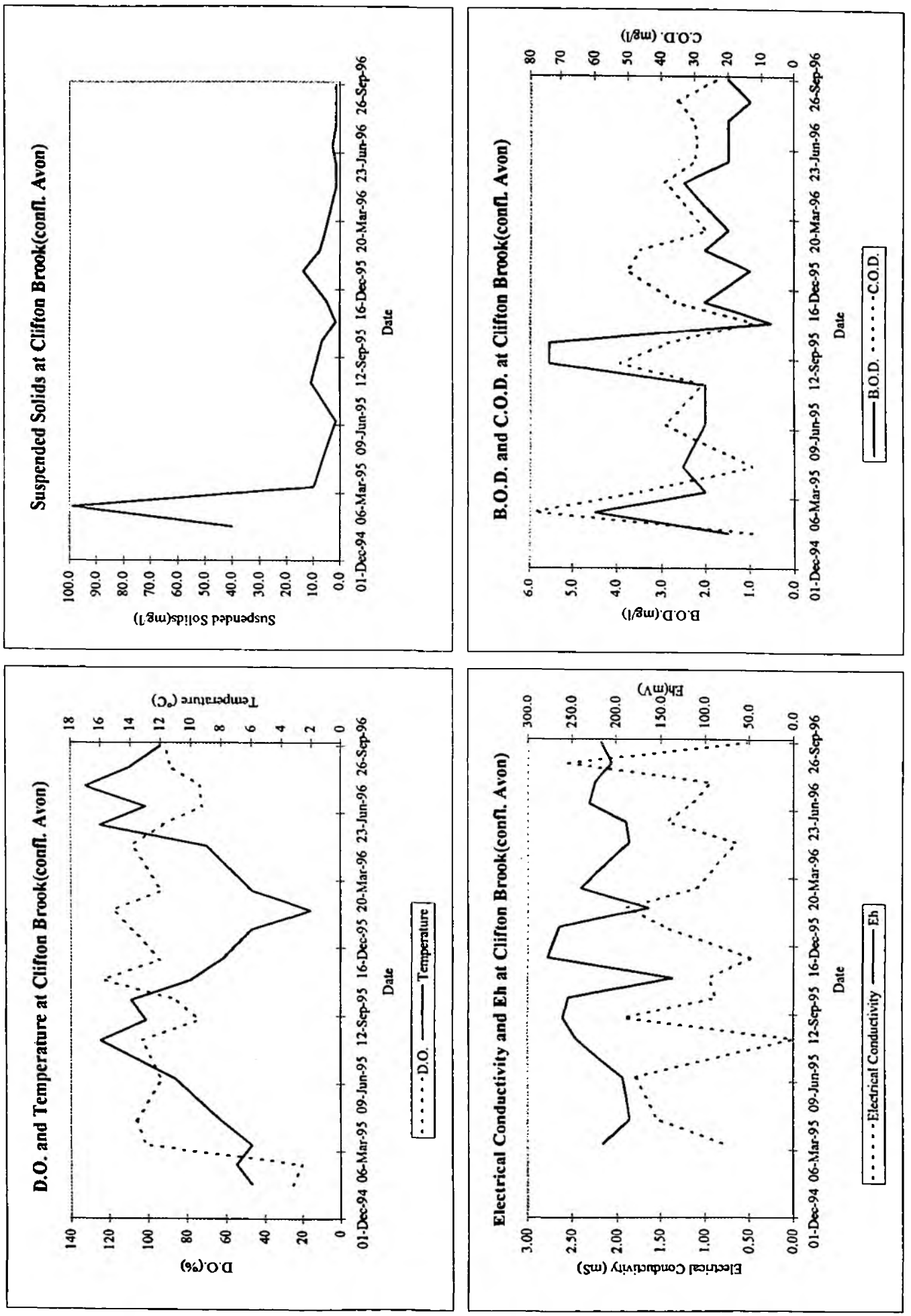
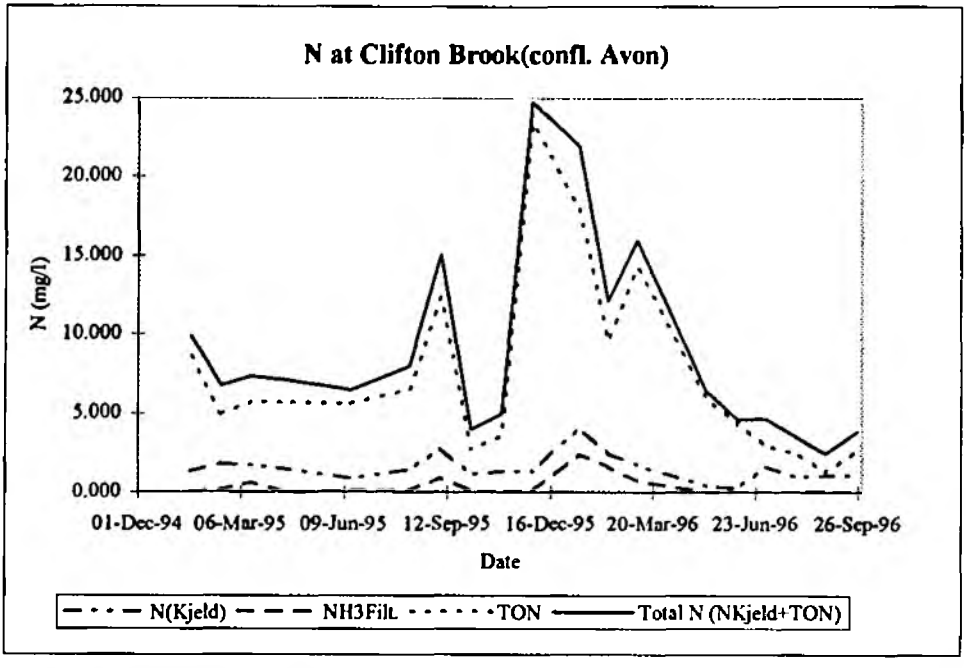
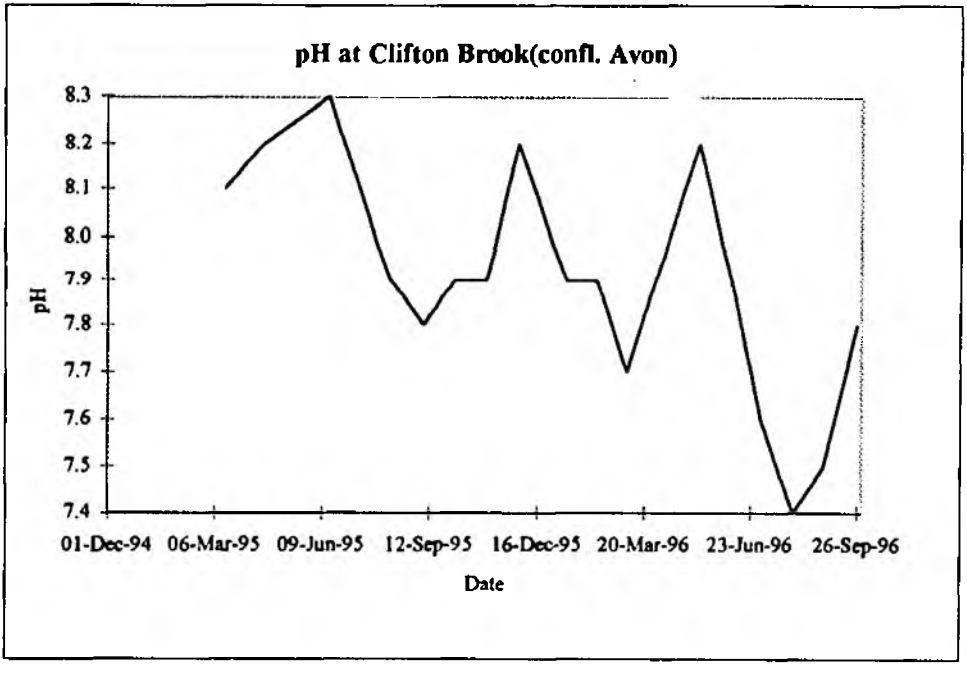
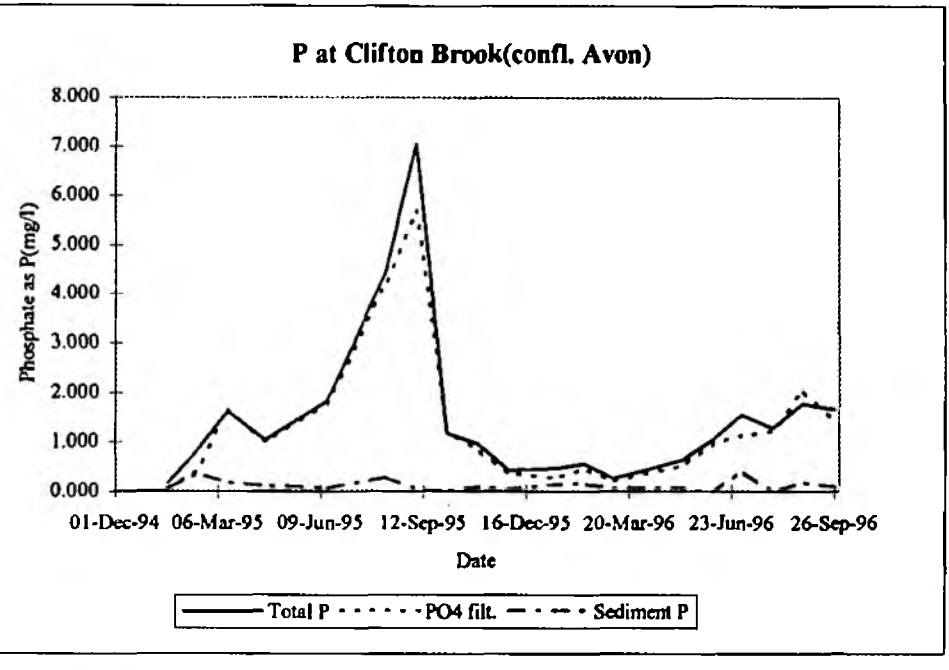


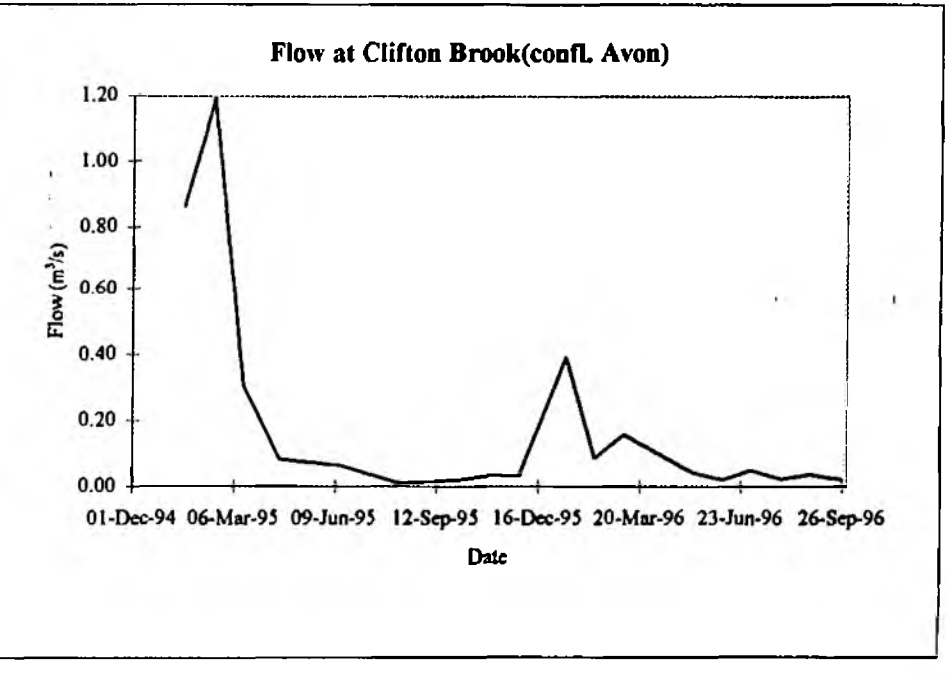
Figure 7 Clifton Brook (confl. Avon)



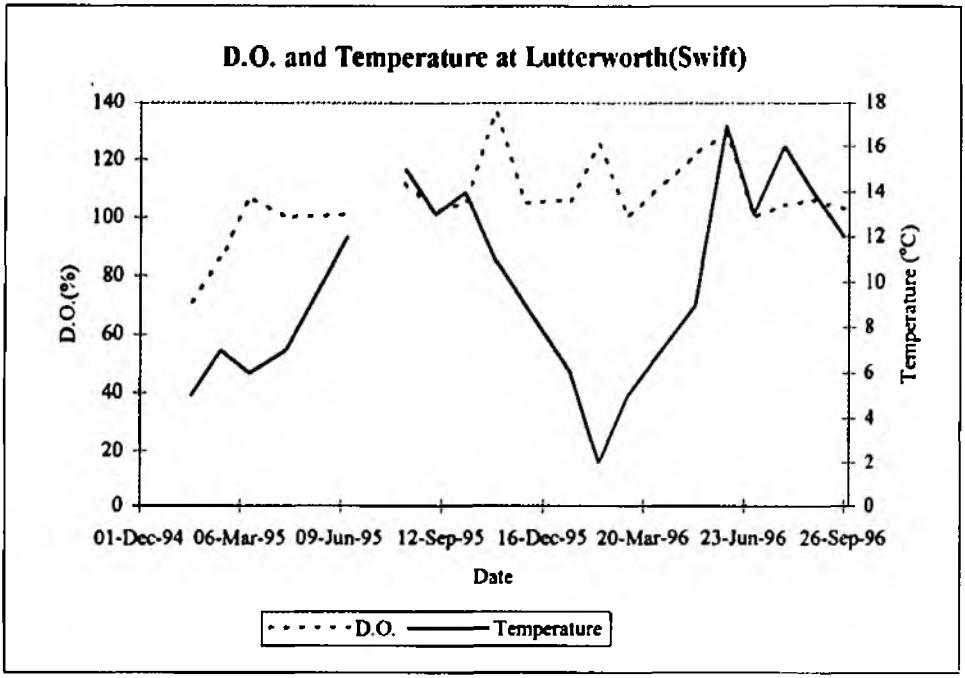

N at Clifton Brook(confl. Avon)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt
TON
Total N (NKjeld+TON)


pH at Clifton Brook(confl. Avon)
8.3
8.2
8.1
8.0
7.9
7.8
7.7
7.6
7.5
7.4
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date





(Figure 7 cont.)


D.O. and Temperature at Lutterworth(Swift)
D.O.(%)
Temperature (°C)
140
120
100
80
60
40
20
0
18
16
14
12
10
8
6
4
2
0
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
D.O.
Temperature

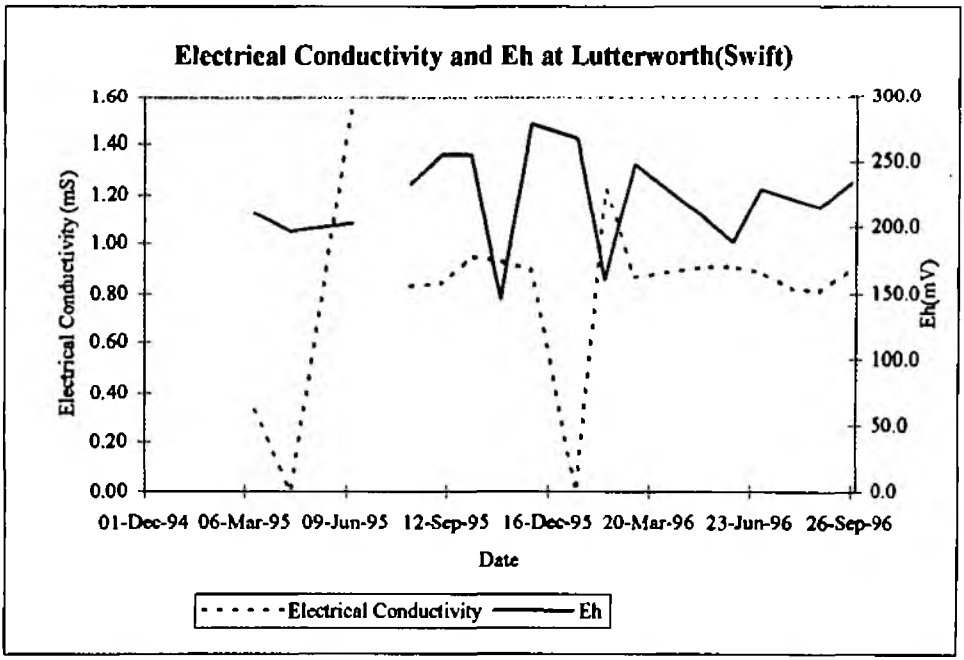
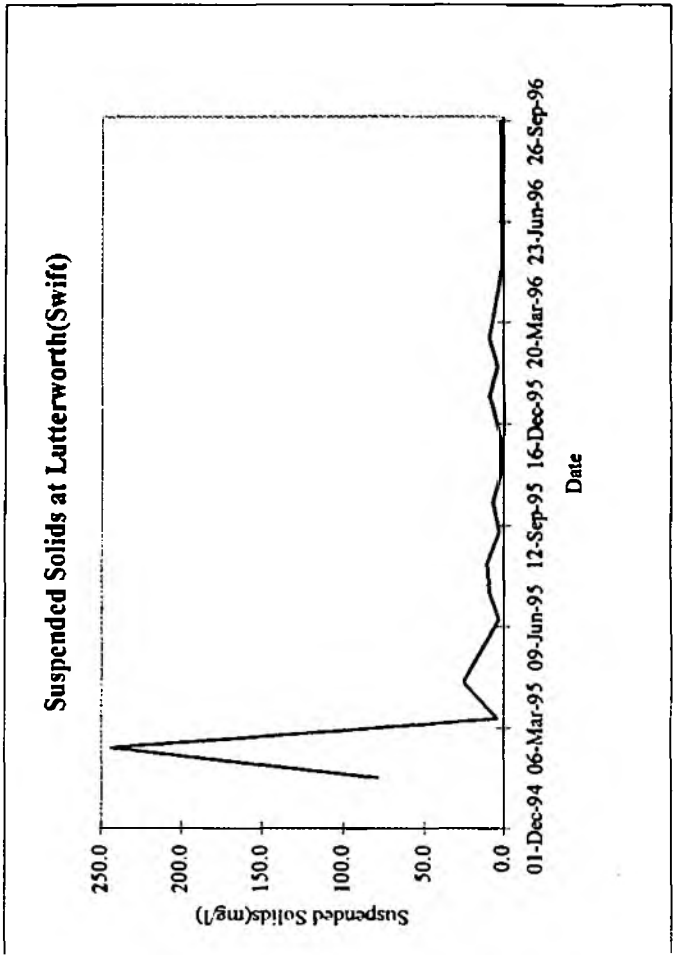
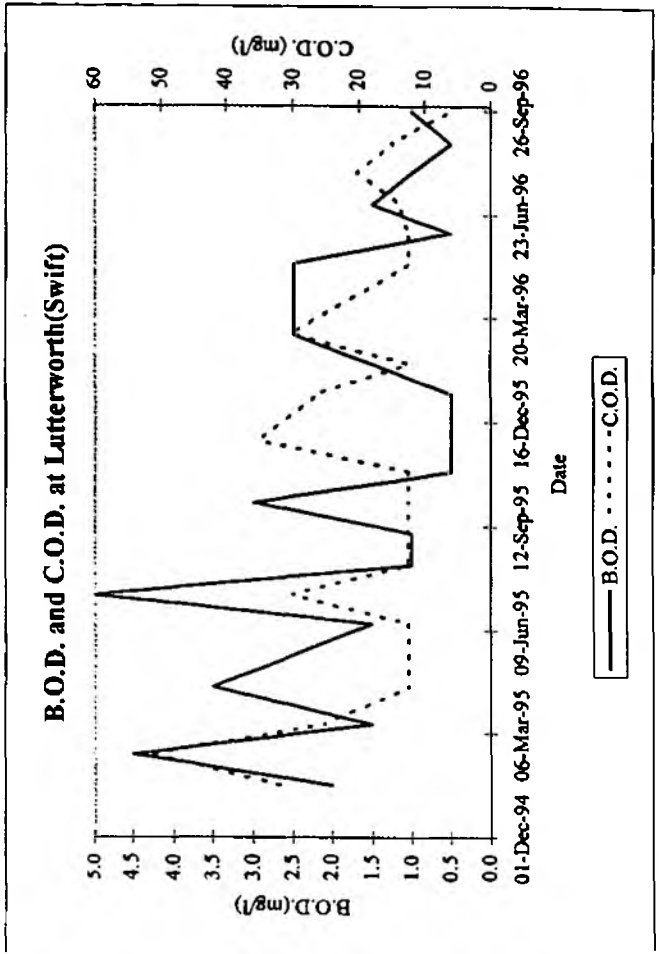
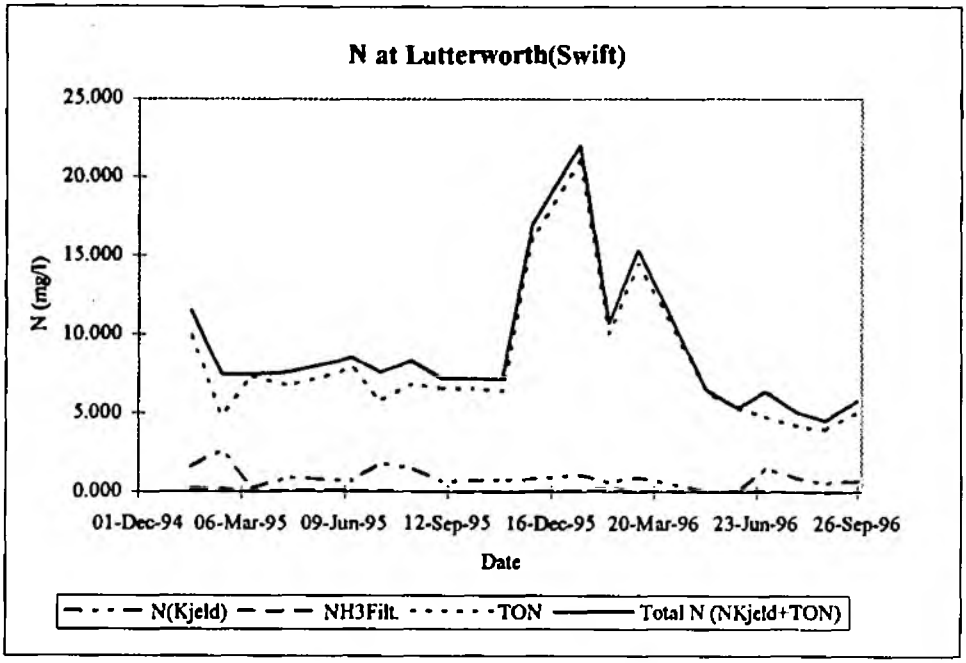
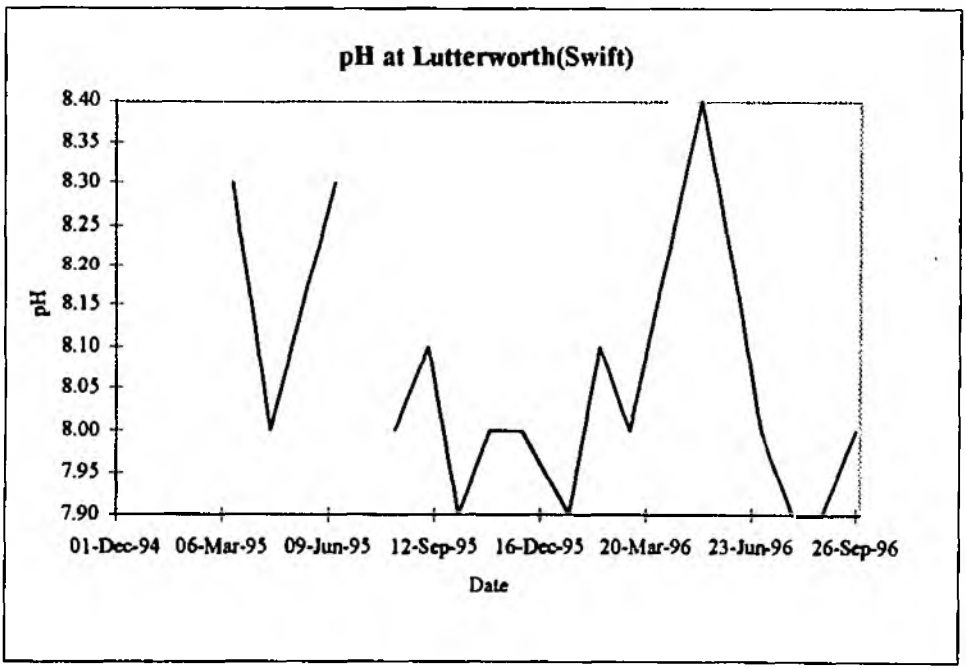

Electrical Conductivity and Eh at Lutterworth(Swift)
Electrical Conductivity (mS)
Eh(mV)
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
300.0
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
Electrical Conductivity
Eh

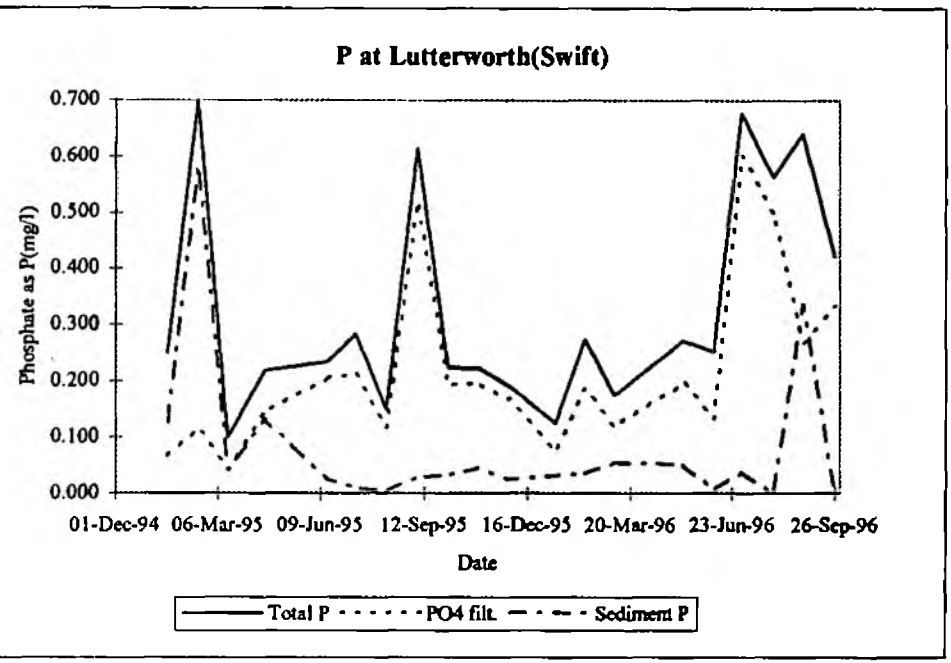
Figure 8 Lutterworth (Swift)

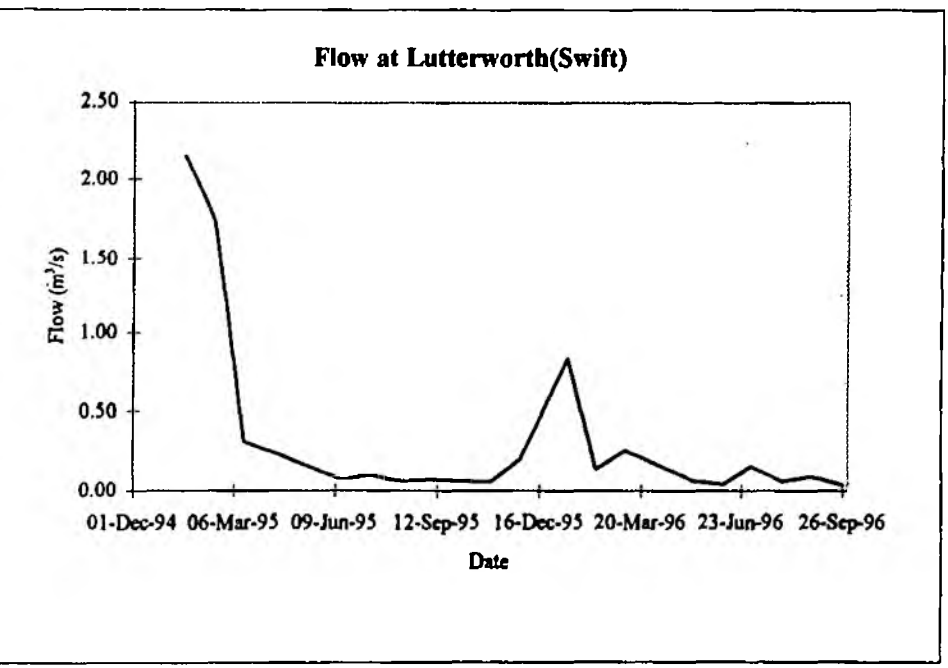




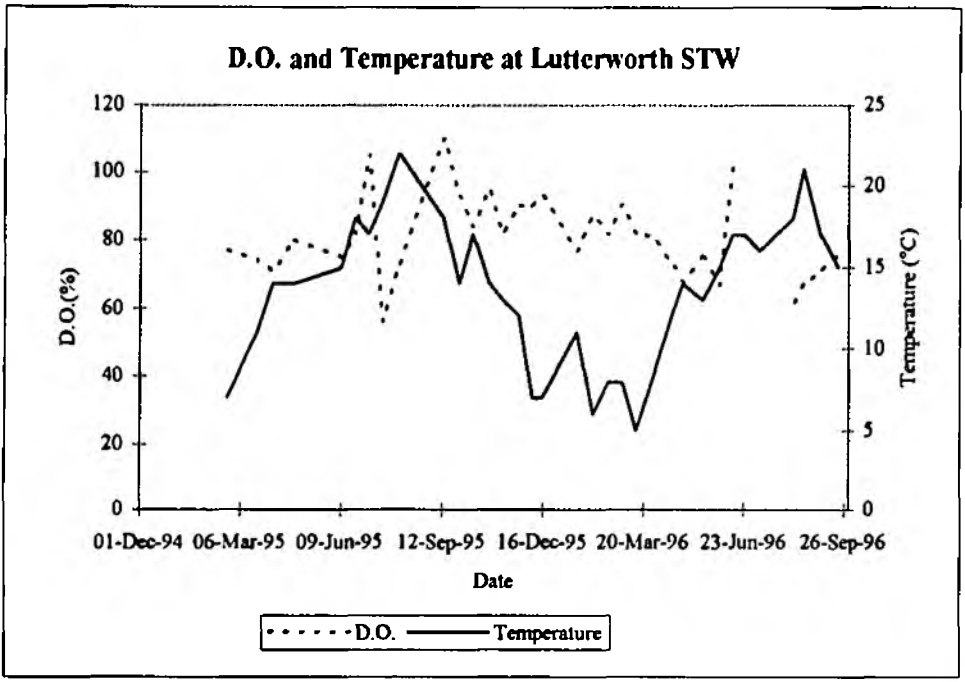

N at Lutterworth(Swift)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)


pH at Lutterworth(Swift)
8.40
8.35
8.30
8.25
8.20
8.15
8.10
8.05
8.00
7.95
7.90
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date





(Figure 8 cont.)


D.O. and Temperature at Lutterworth STW
D.O.(%)
Temperature (°C)
120
100
80
60
40
20
0
25
20
15
10
5
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature

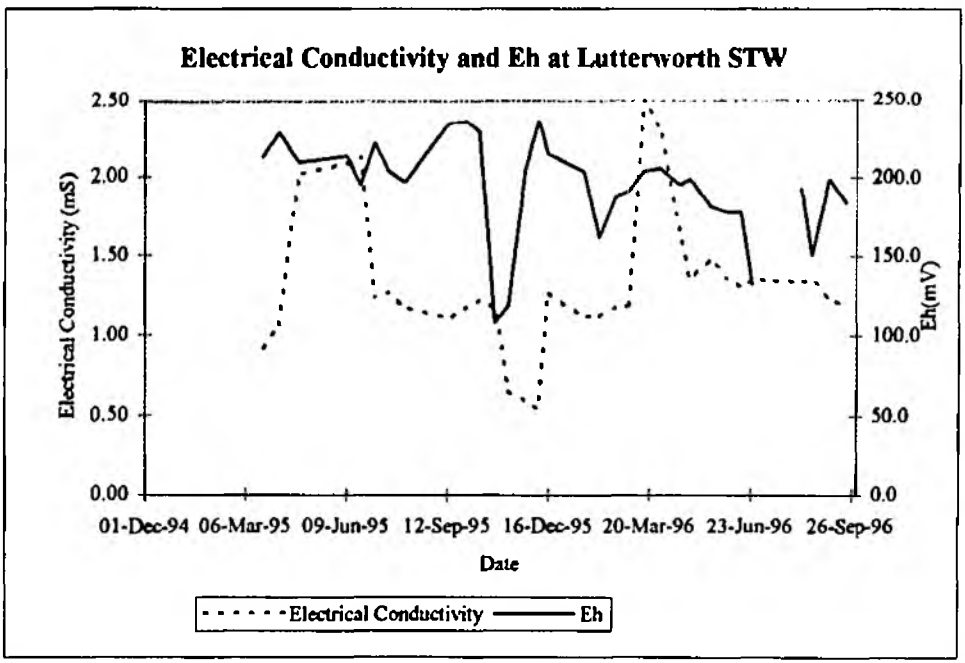
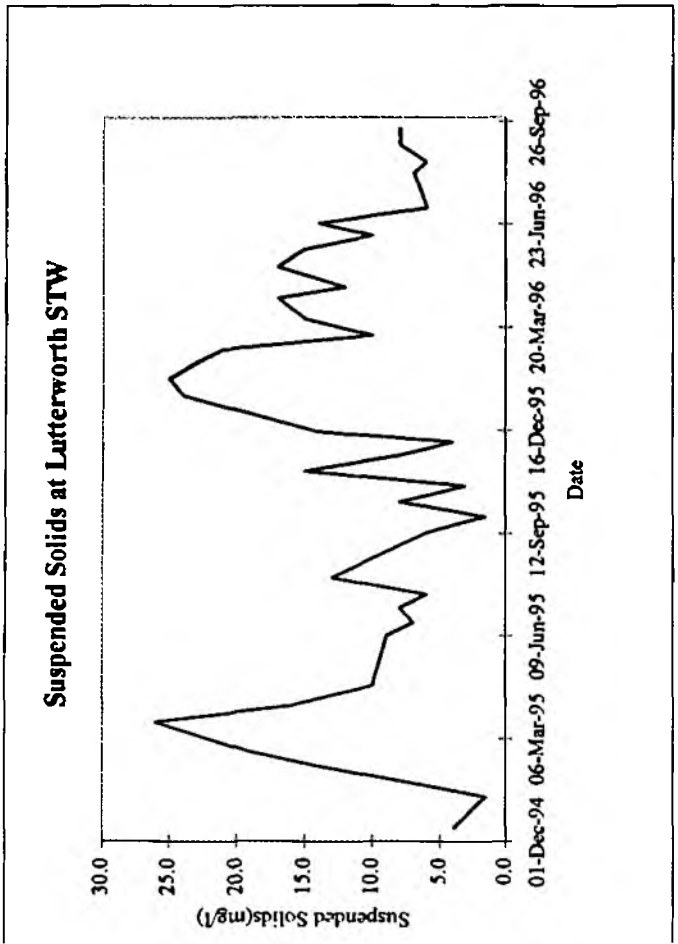
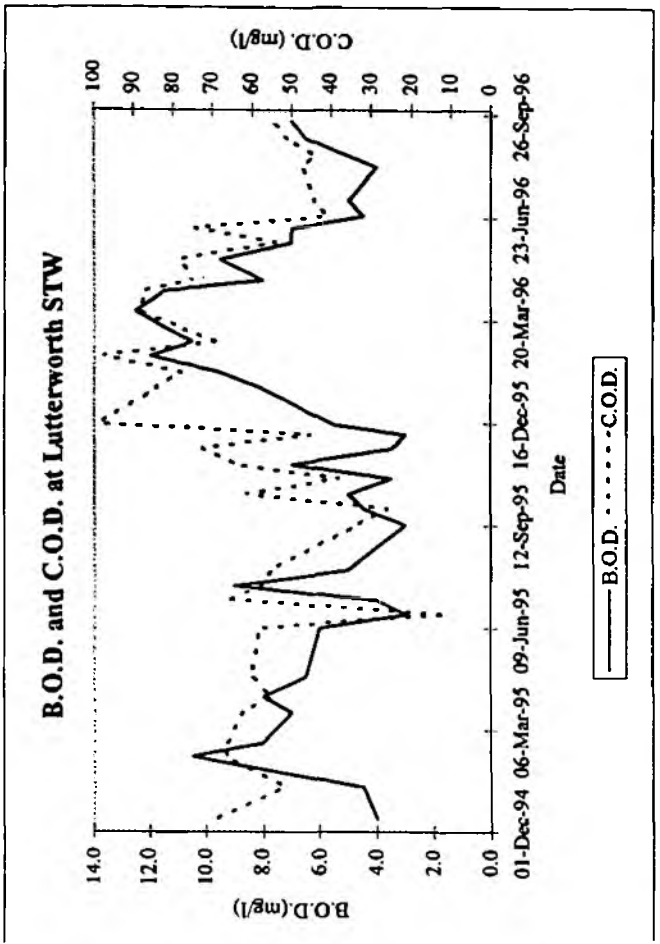
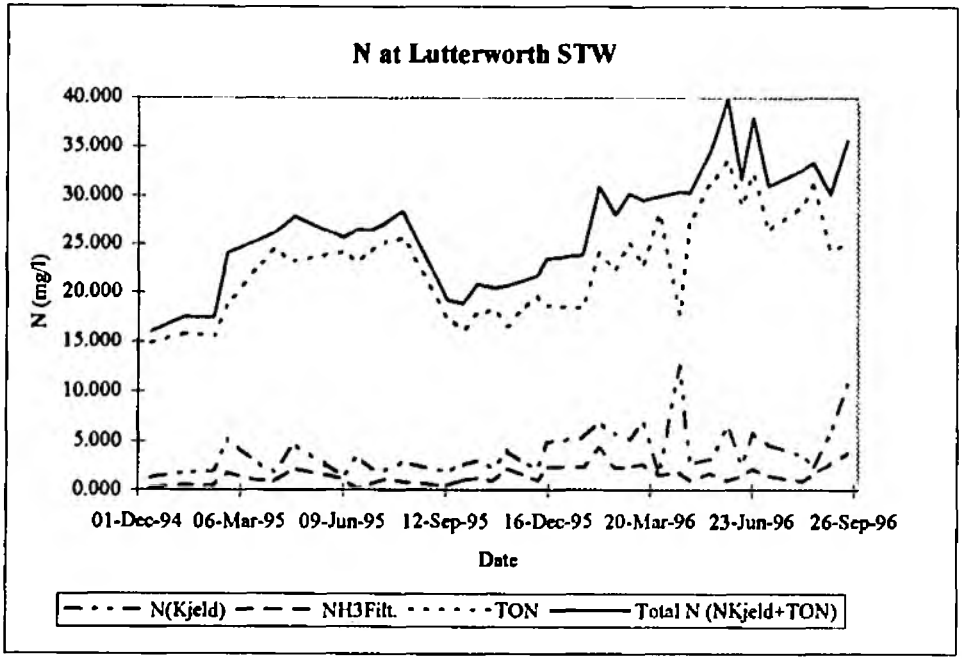
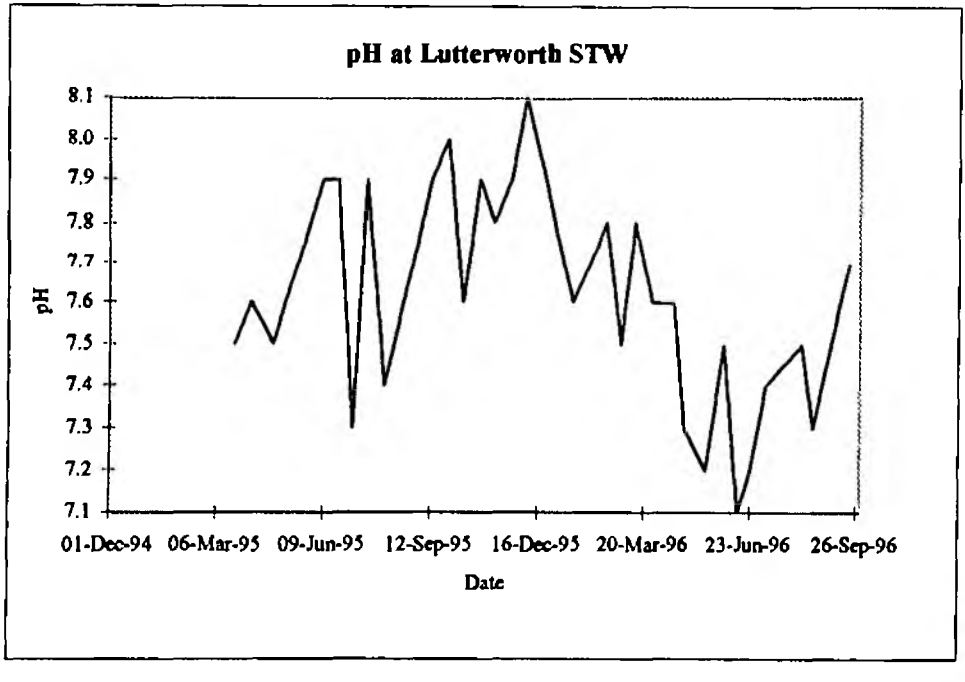

Electrical Conductivity and Eh at Lutterworth STW
Electrical Conductivity (mS)
Eh(mV)
2.50
2.00
1.50
1.00
0.50
0.00
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh

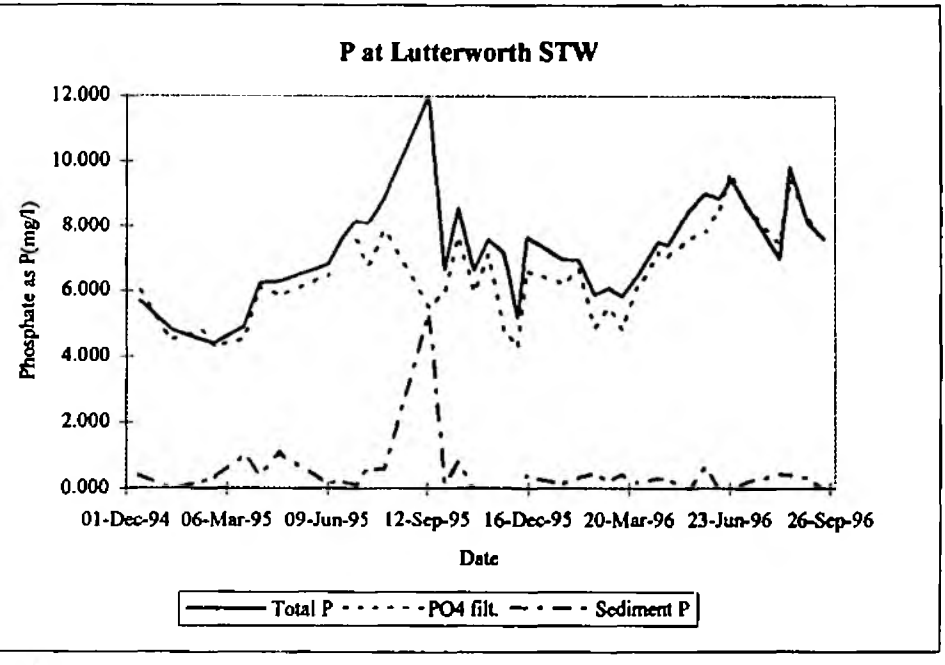
Figure 9 Lutterworth STW

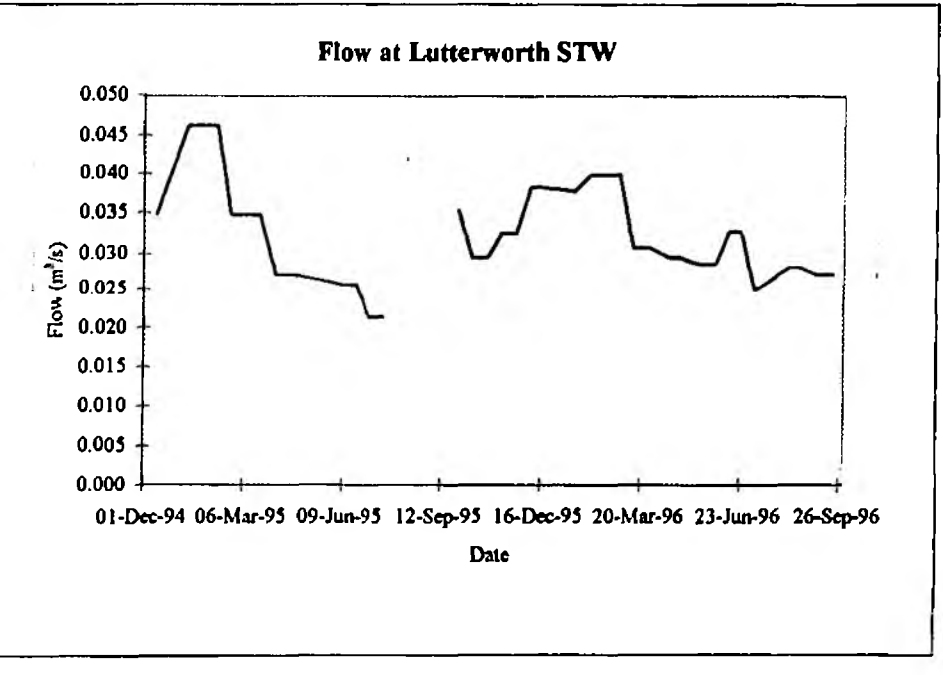





N at Lutterworth STW
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

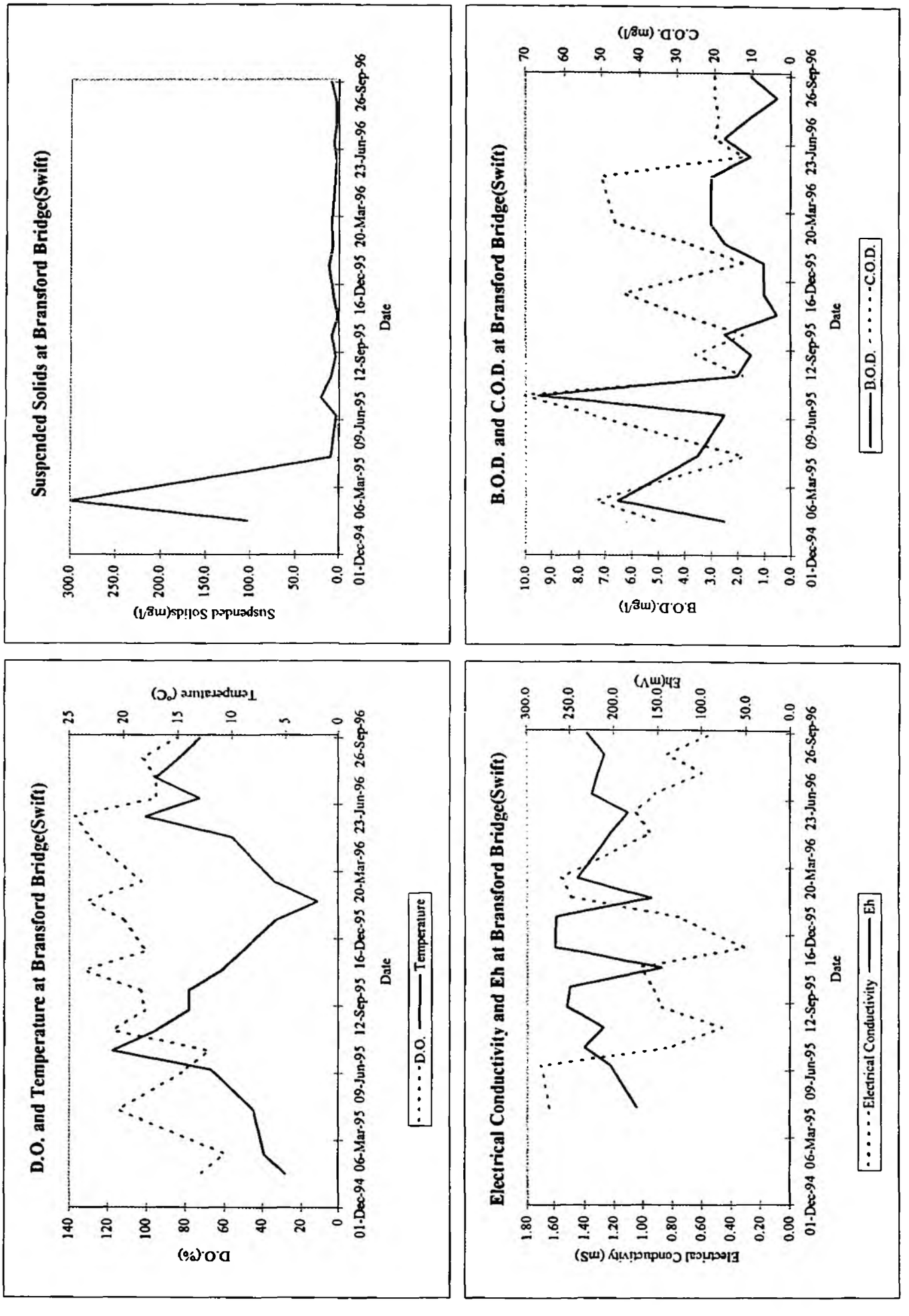

pH at Lutterworth STW
8.1
8.0
7.9
7.8
7.7
7.6
7.5
7.4
7.3
7.2
7.1
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

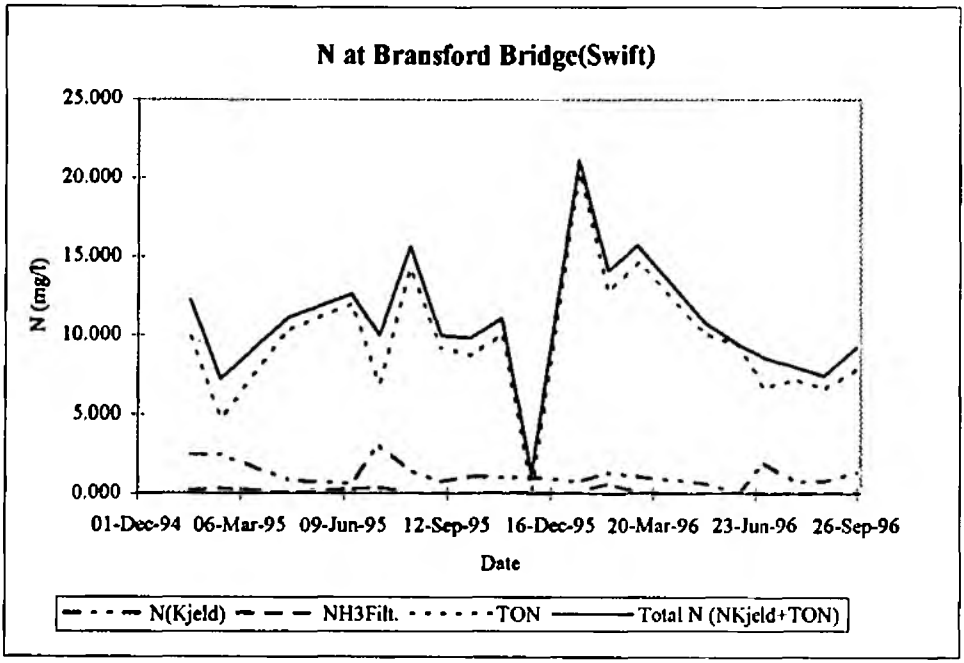


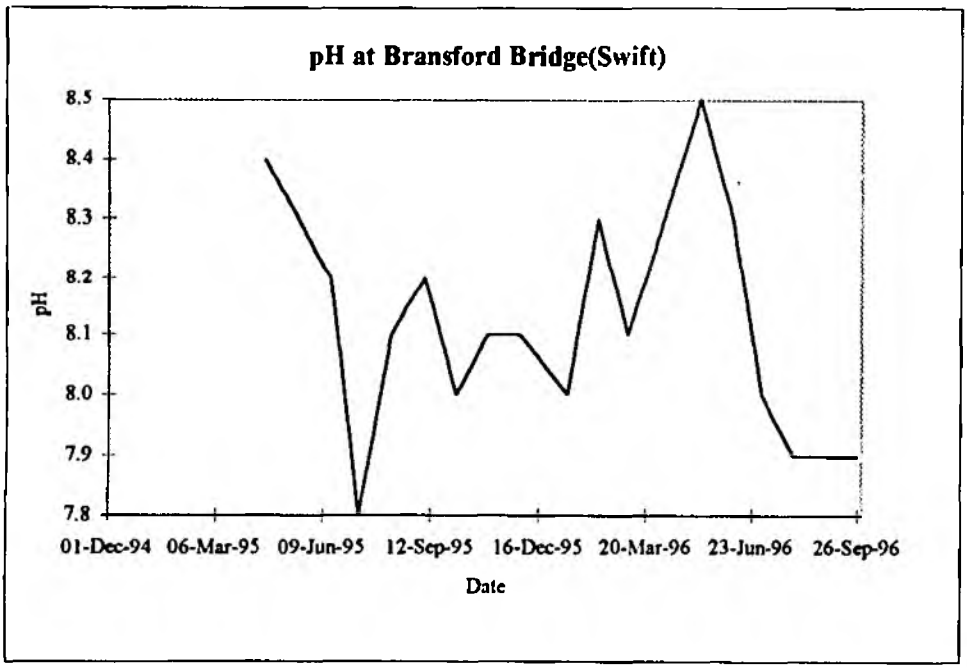


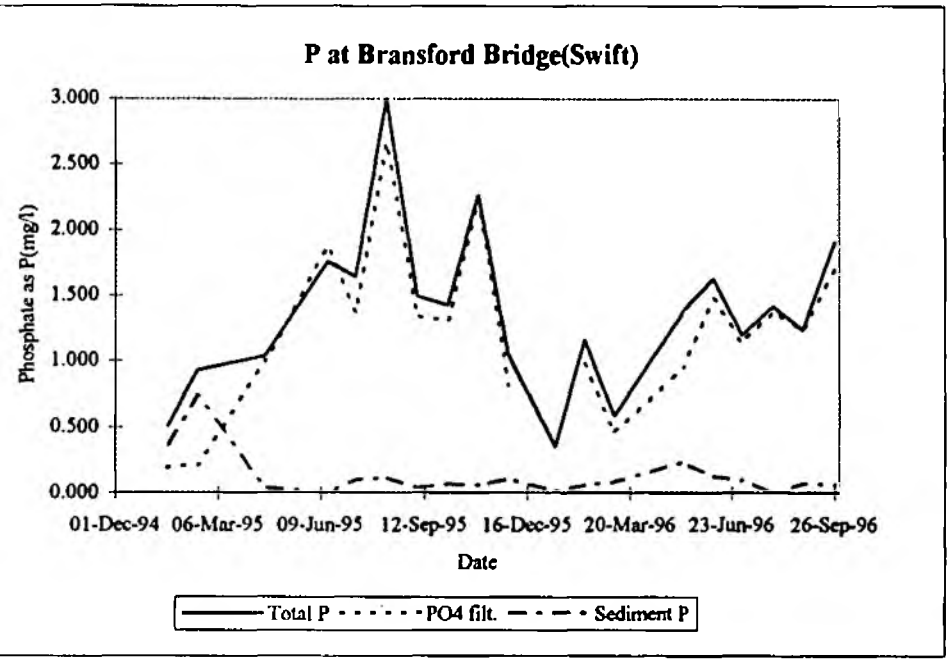
(Figure 9 cont.)

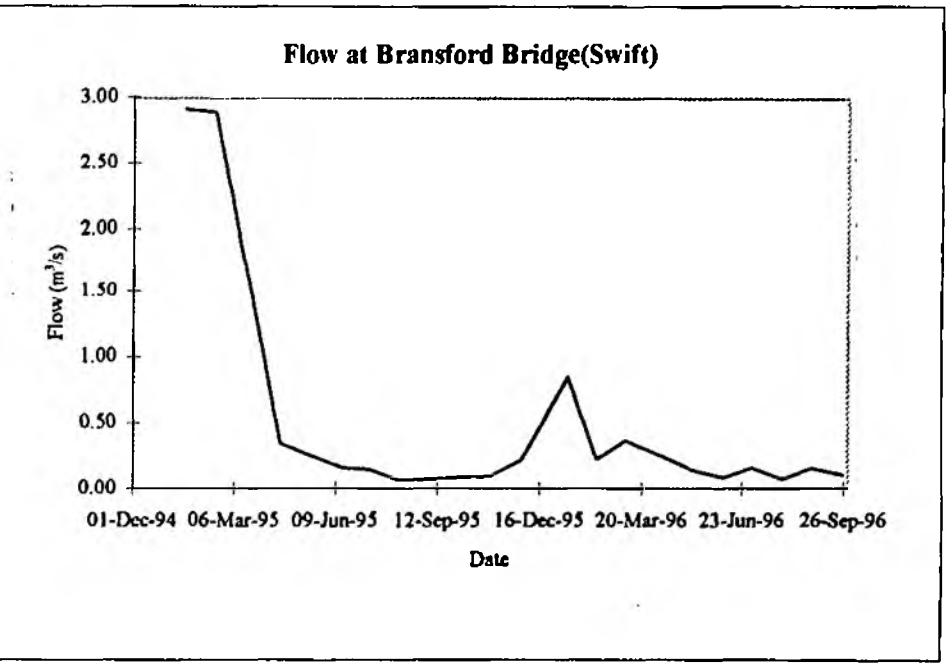
Figure 10 Bransford Bridge (Swift)




N at Bransford Bridge(Swift)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

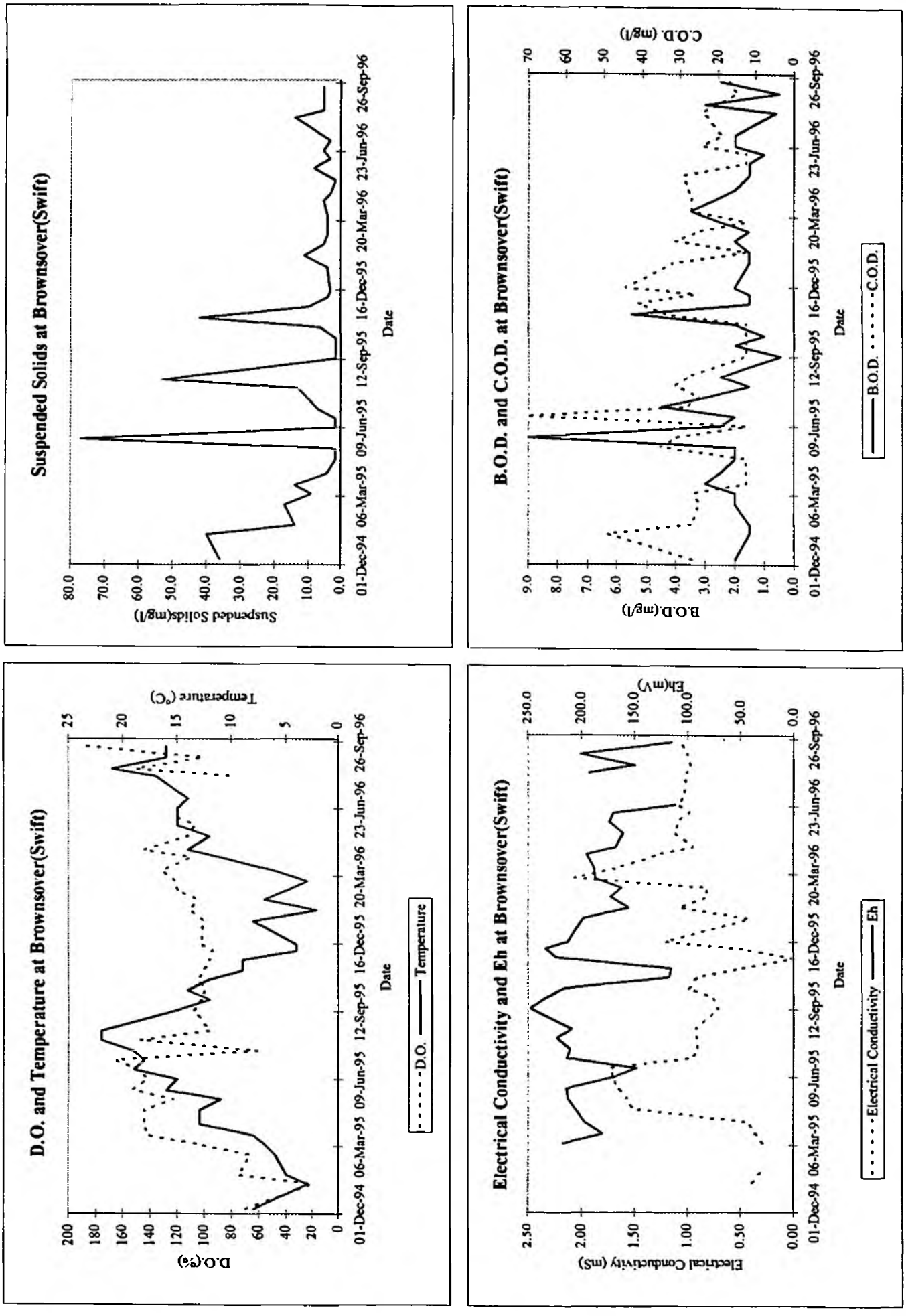

pH at Bransford Bridge(Swift)
8.5
8.4
8.3
8.2
8.1
8.0
7.9
7.8
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date



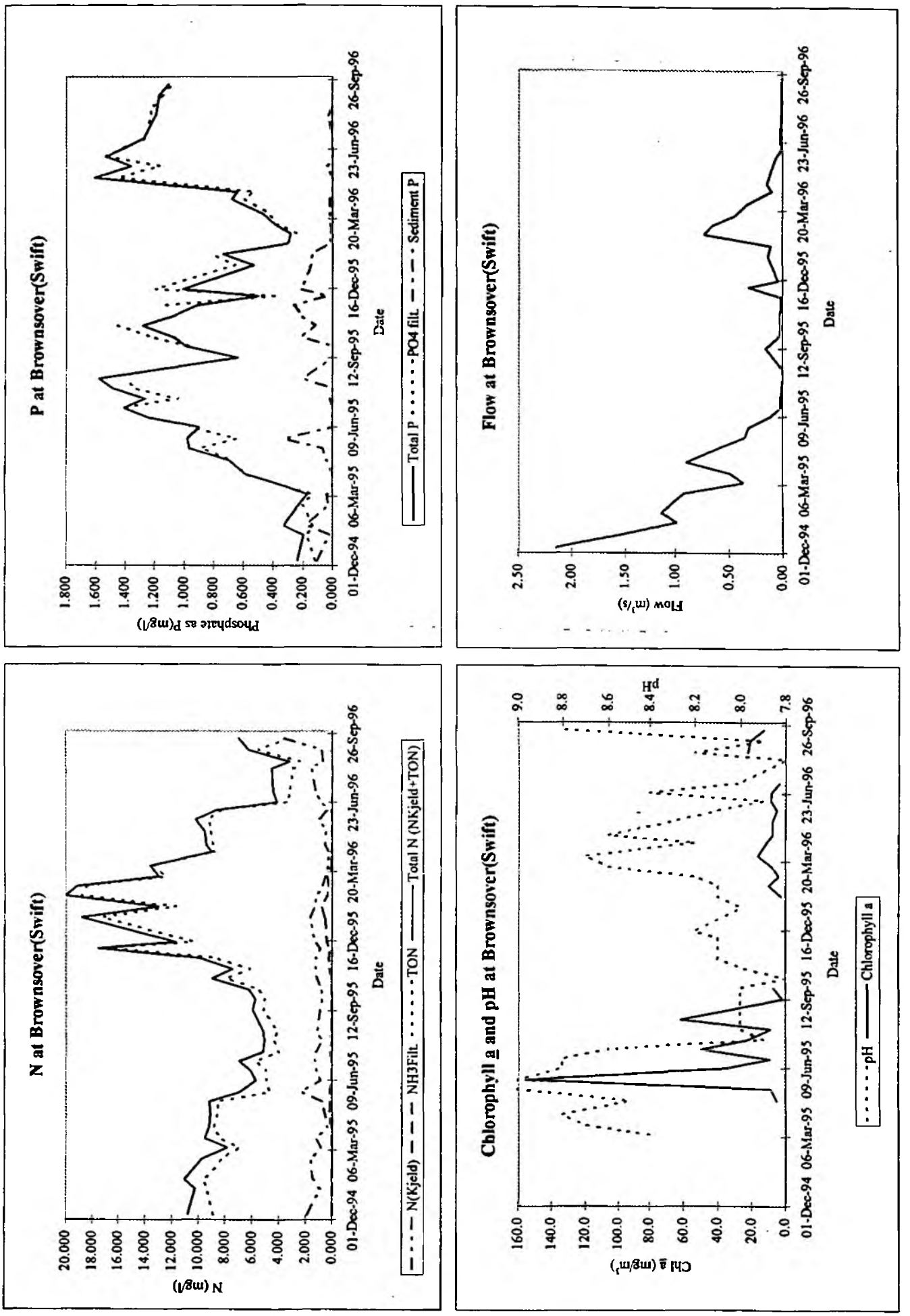


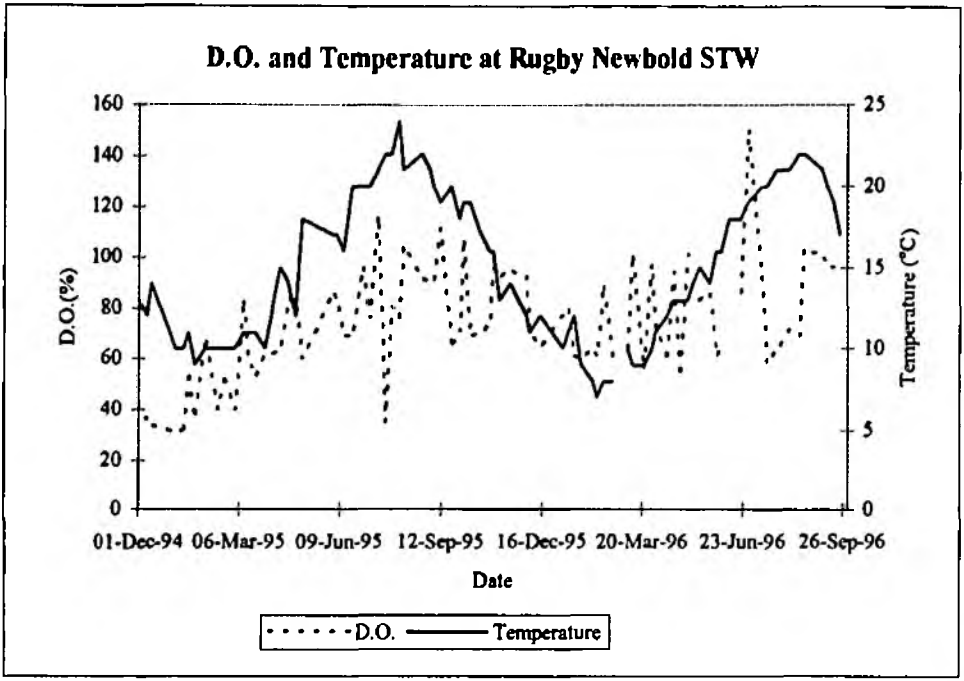
(Figure 10 cont.)

Figure 11 Brownsover (Swift)



(Figure 11 cont.)




D.O. and Temperature at Rugby Newbold STW
D.O.(%)
Temperature (°C)
160
140
120
100
80
60
40
20
0
25
20
15
10
5
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature

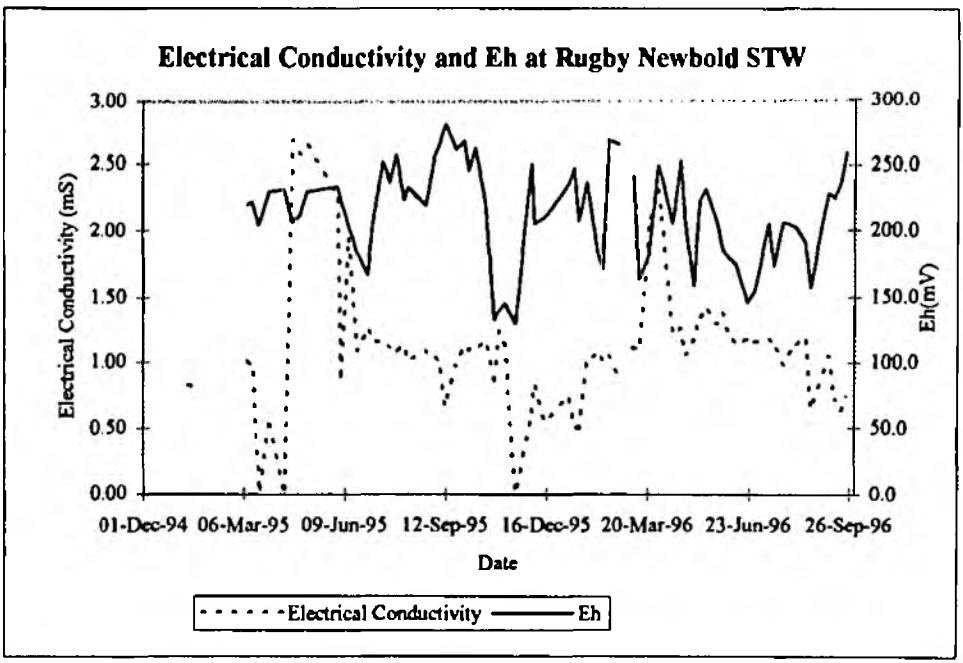
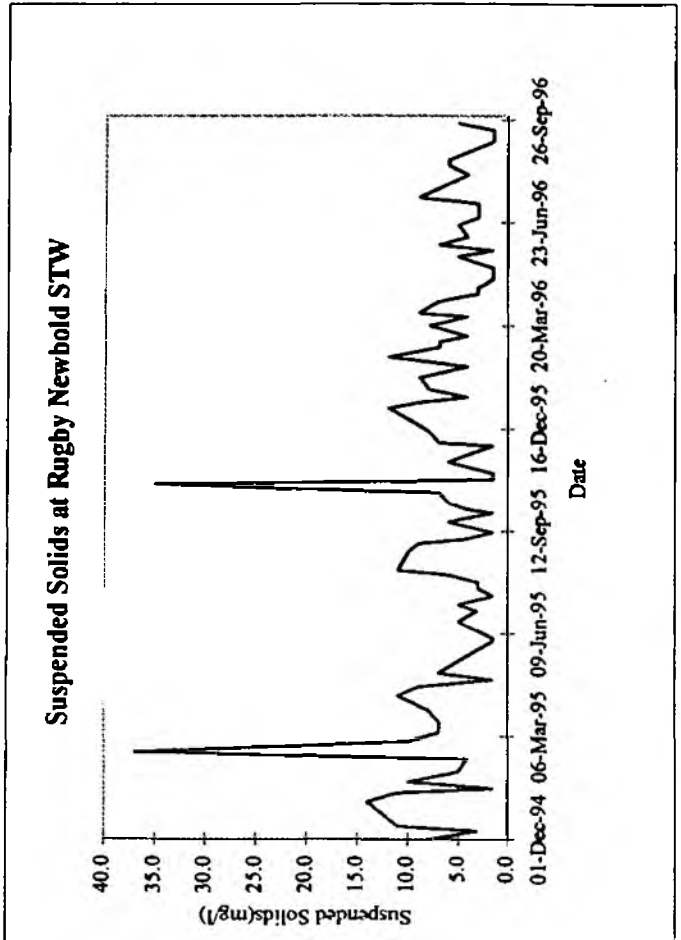
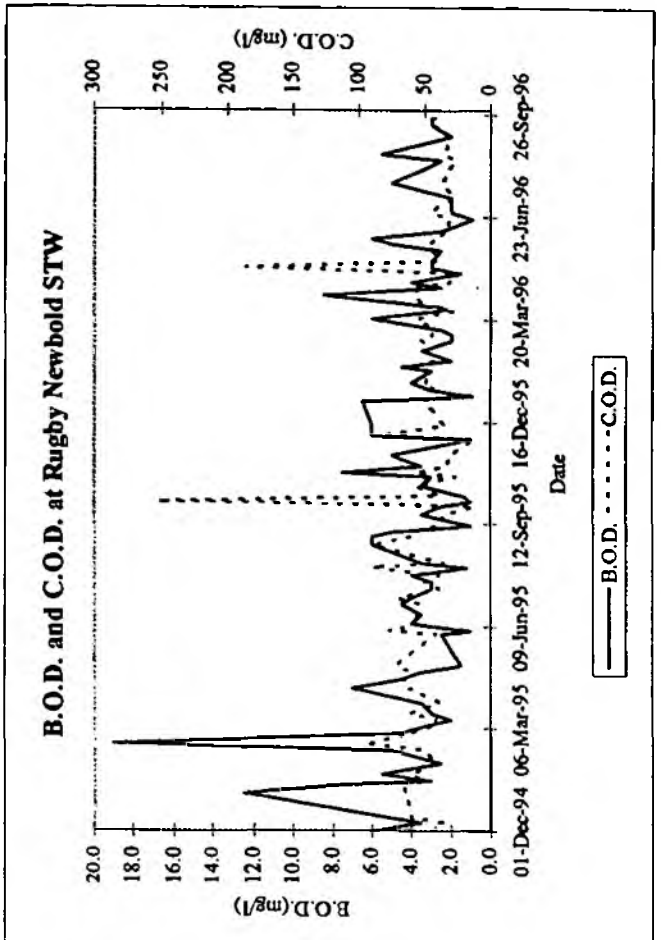
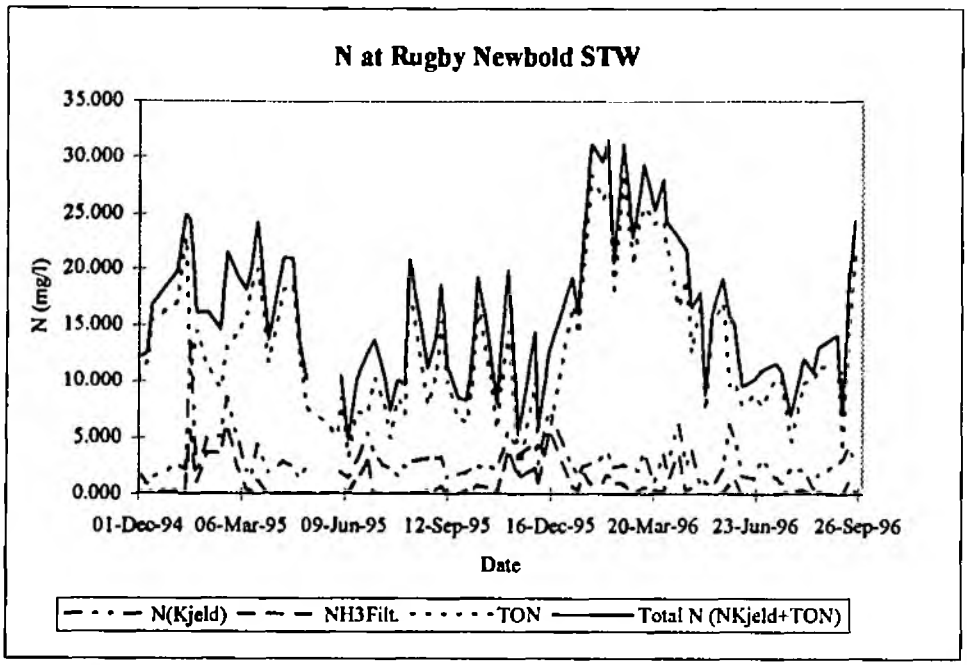
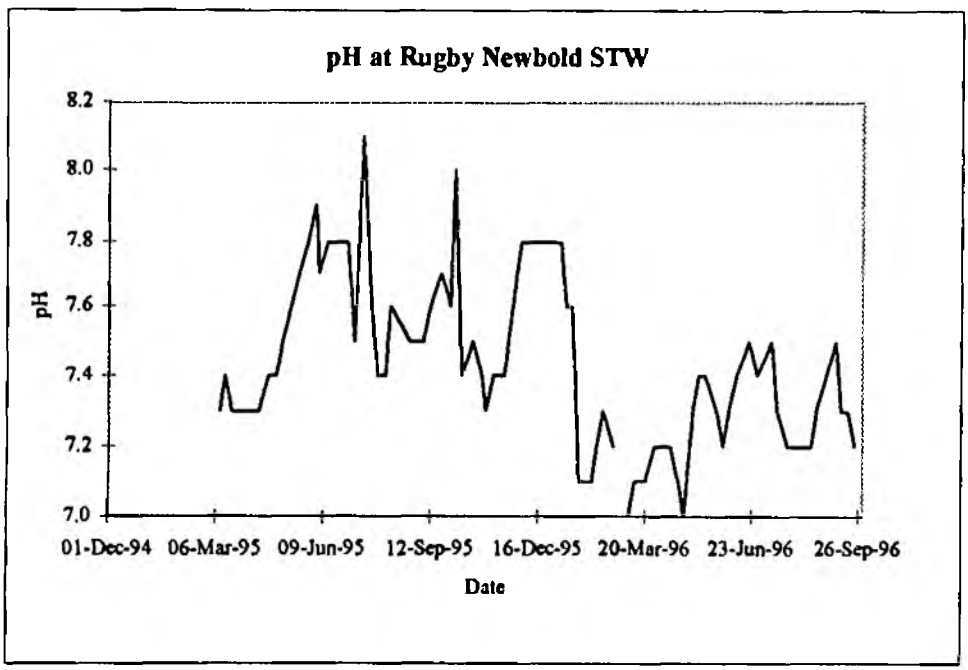

Electrical Conductivity and Eh at Rugby Newbold STW
Electrical Conductivity (mS)
Eh(mV)
3.00
2.50
2.00
1.50
1.00
0.50
0.00
300.0
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh

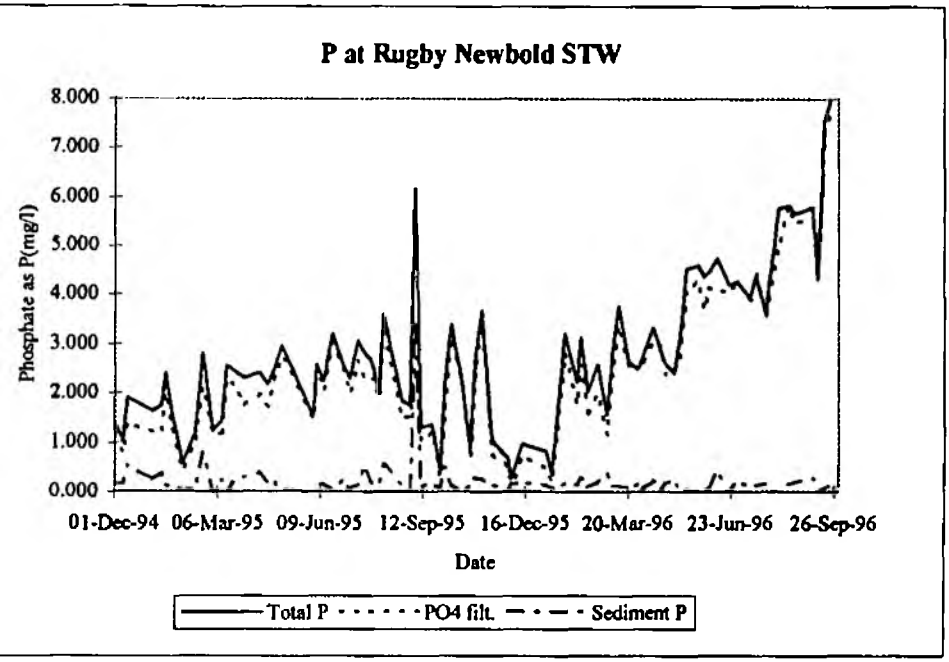
Figure 12 Rugby Newbold STW

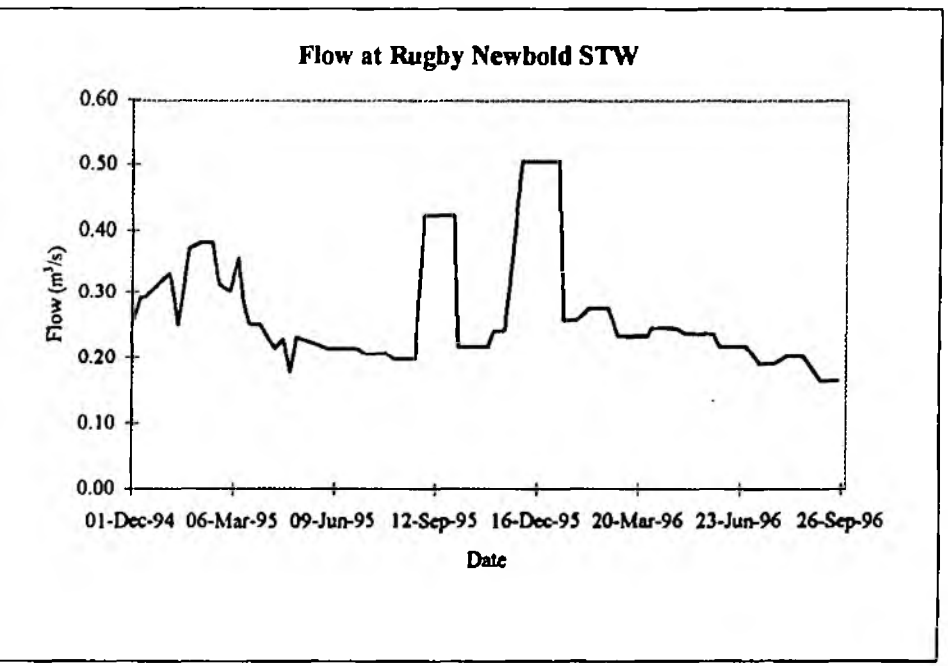




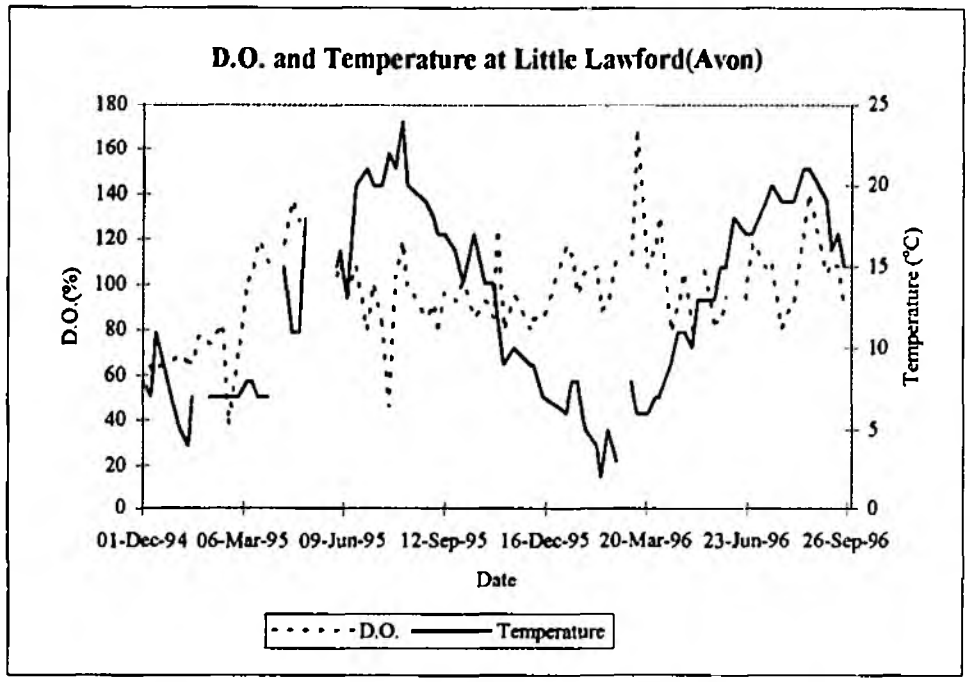

N at Rugby Newbold STW
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

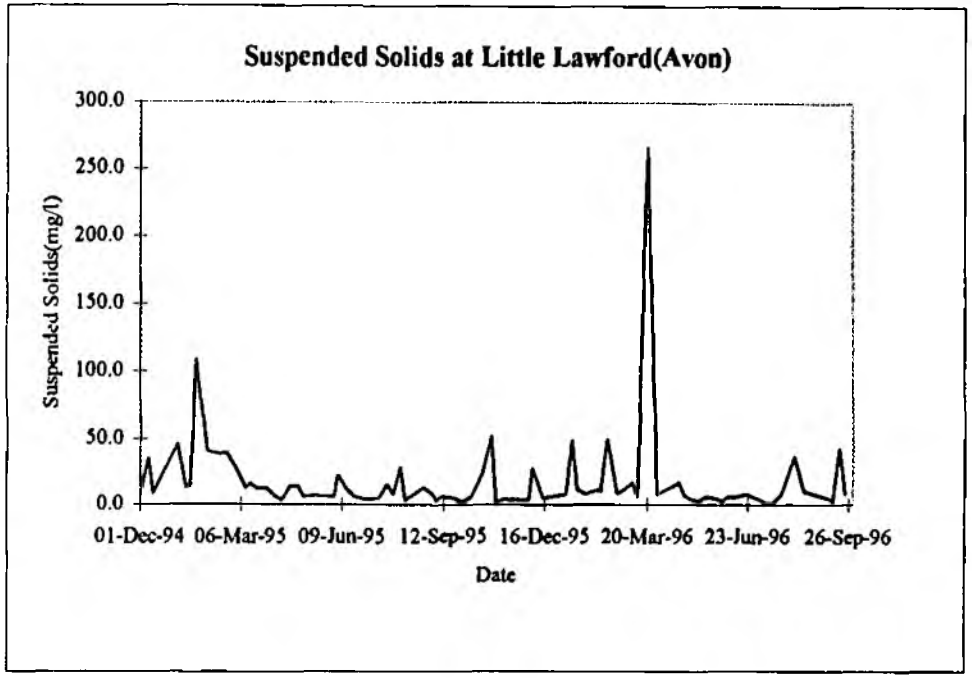

pH at Rugby Newbold STW
8.2
8.0
7.8
7.6
7.4
7.2
7.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

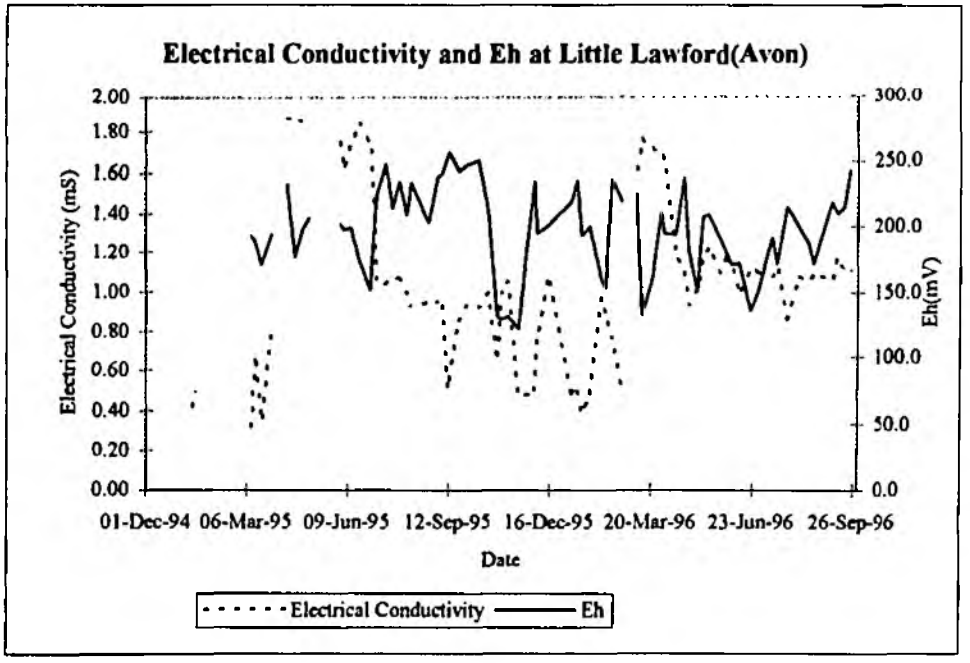




(Figure 12 cont.)







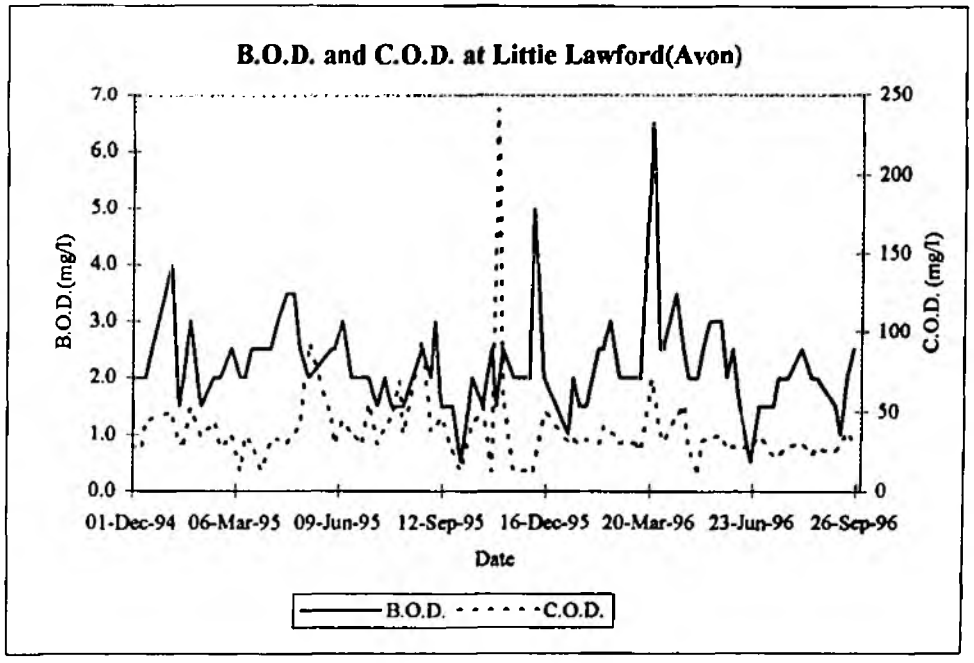
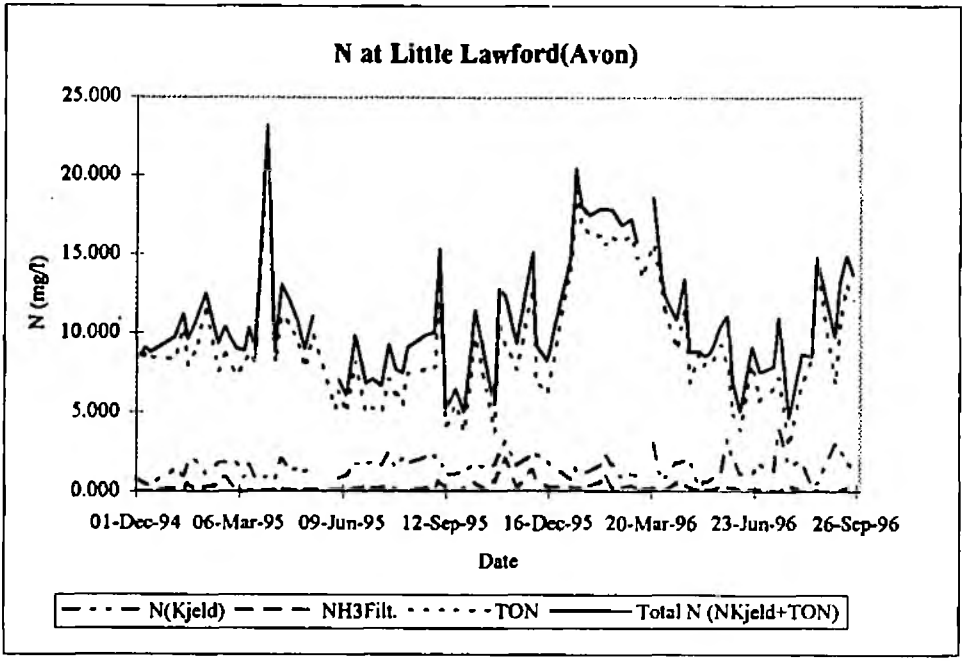
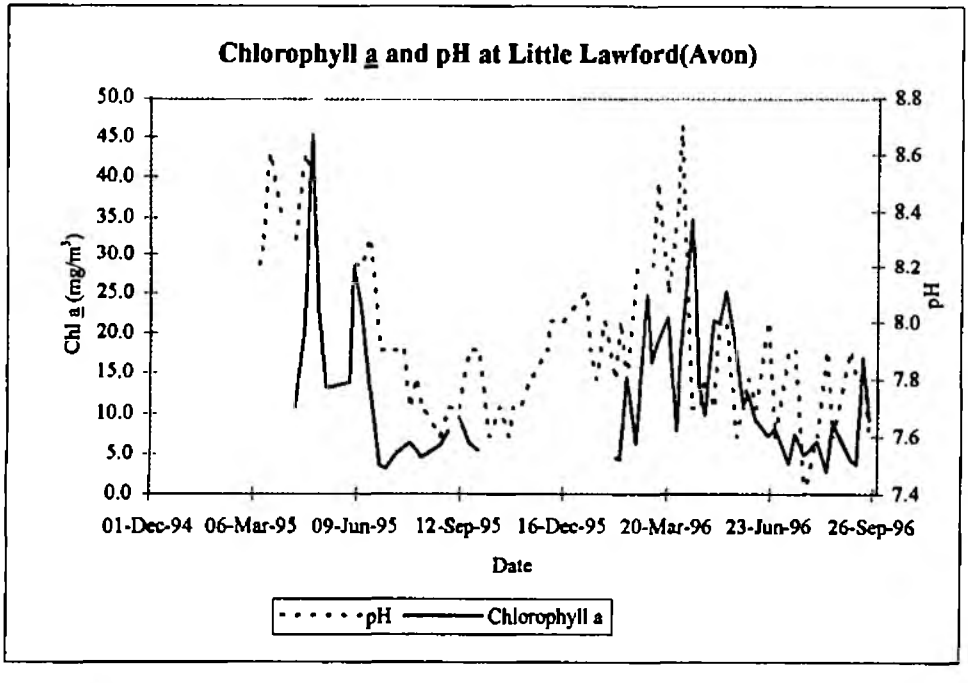
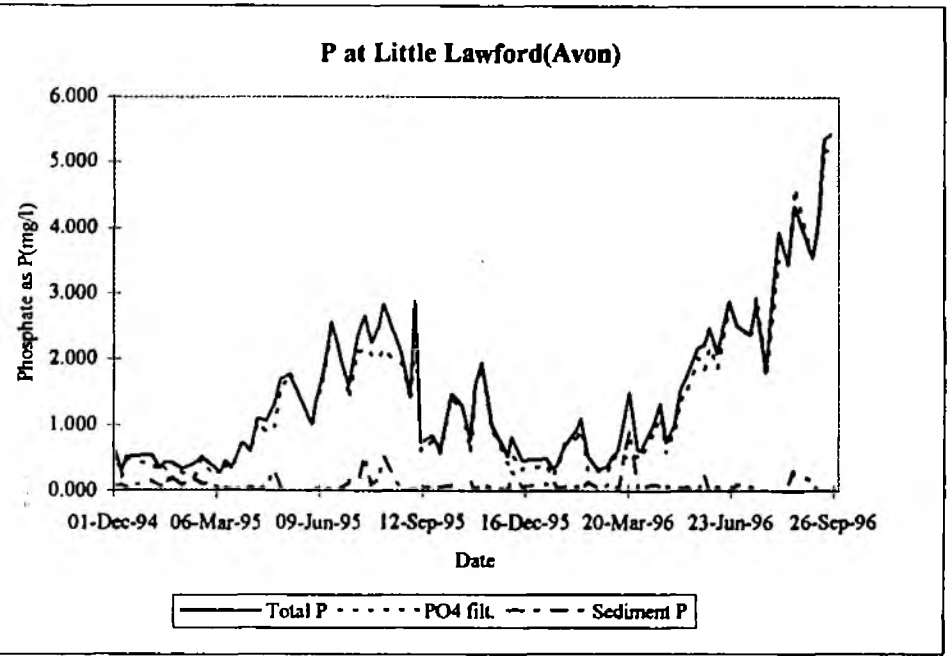
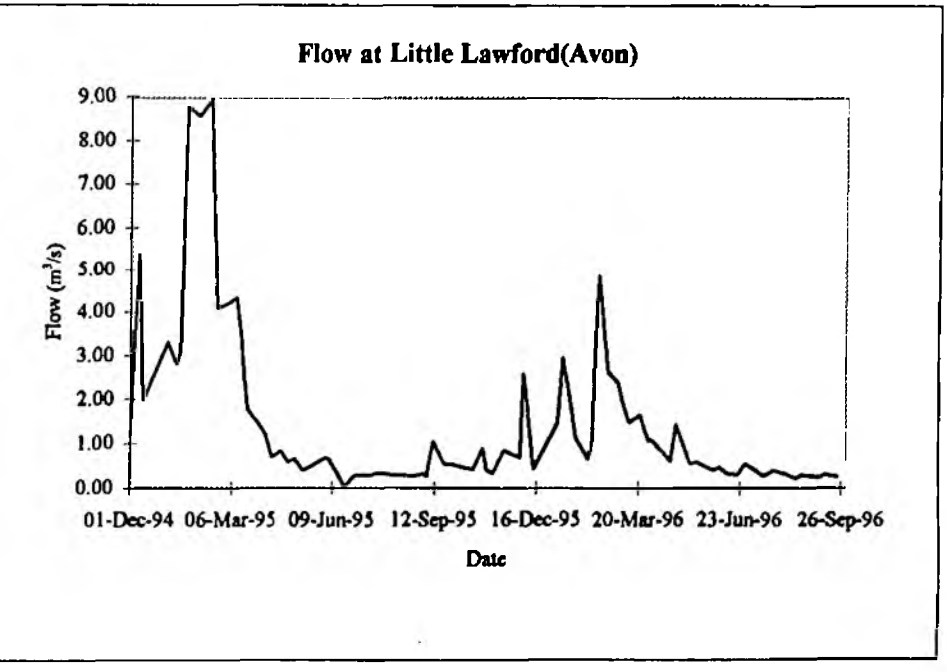


Figure 13 Little Lawford (Avon)


N at Little Lawford(Avon)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

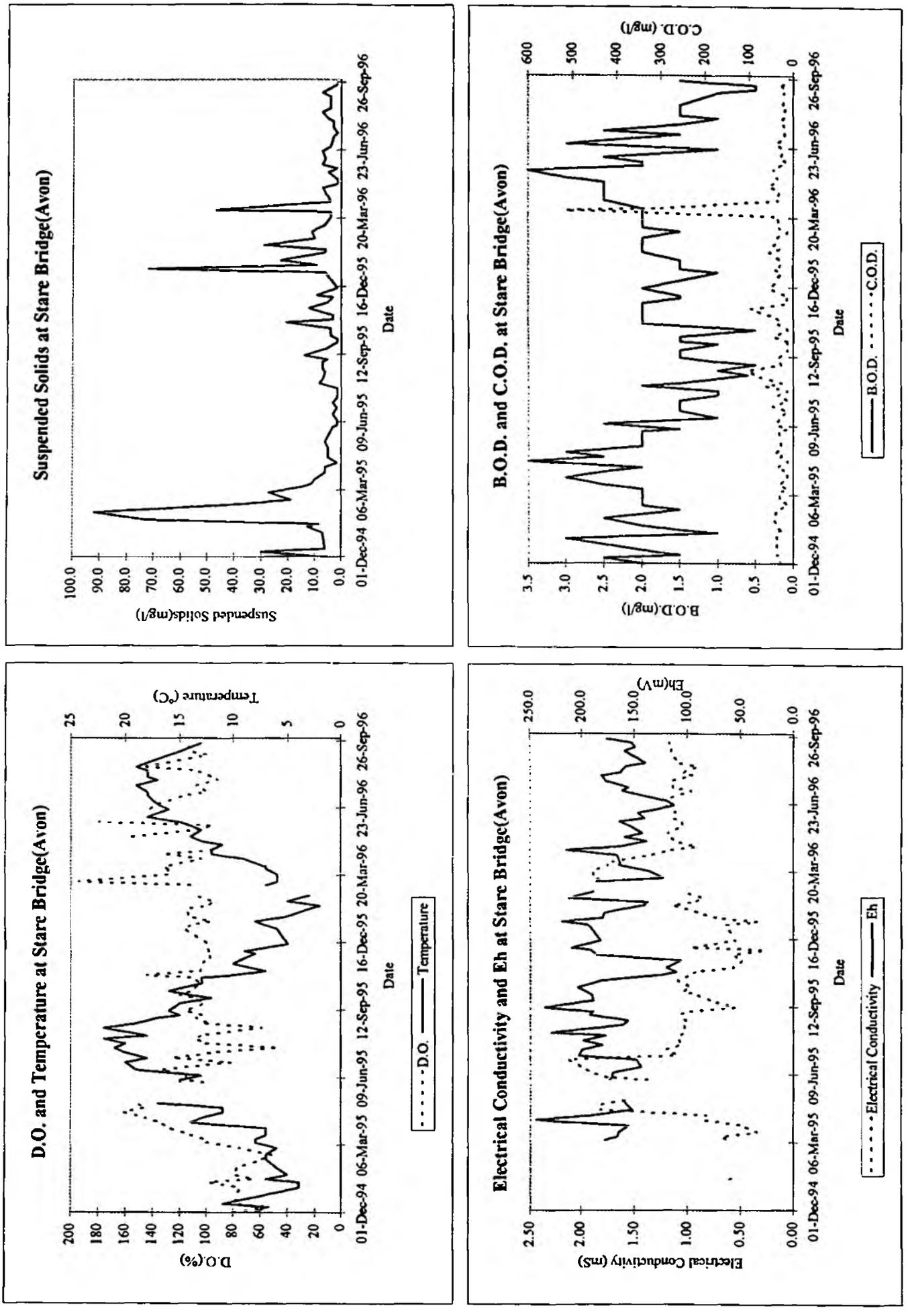

Chlorophyll a and pH at Little Lawford(Avon)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Chl a (mg/m³)
8.8
8.6
8.4
8.2
8.0
7.8
7.6
7.4
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
pH
Chlorophyll a

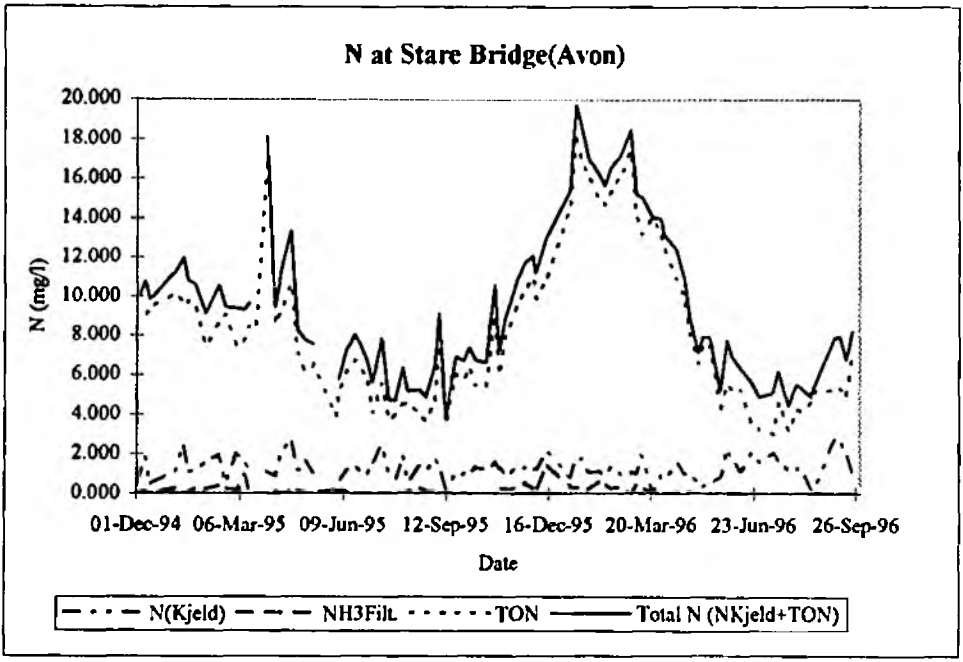


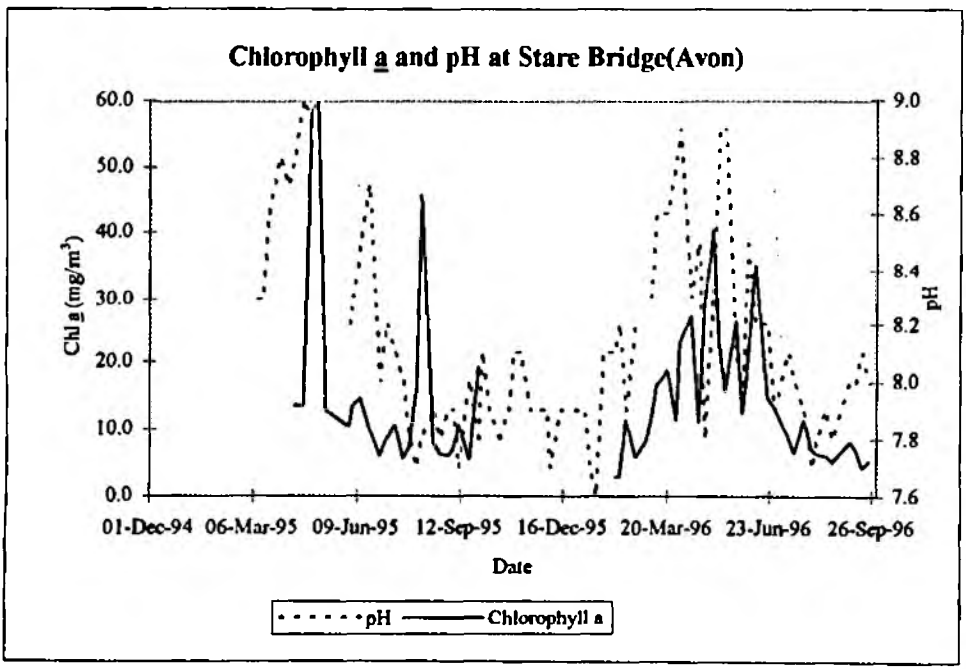


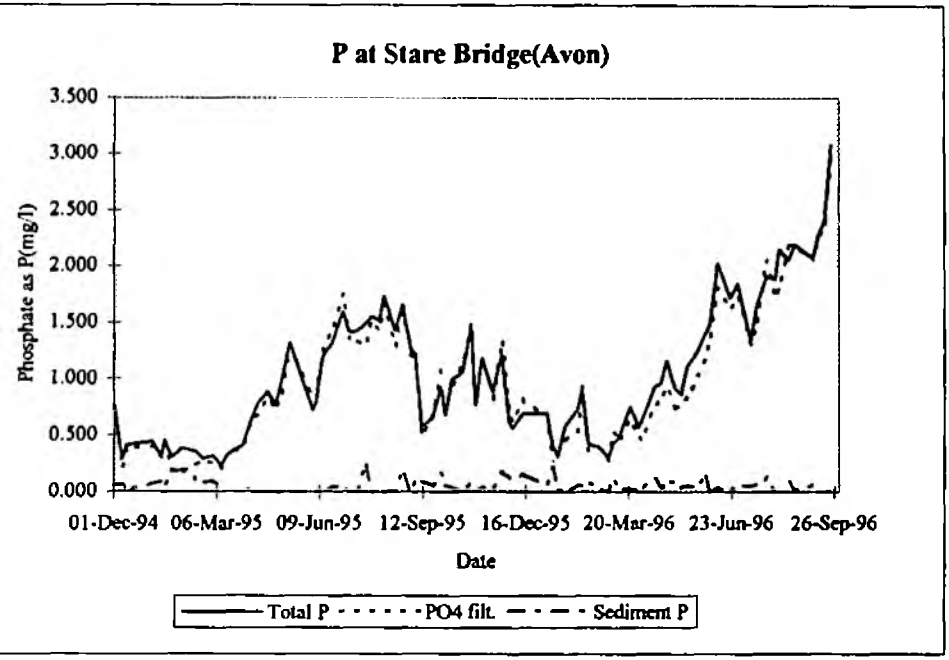
(Figure 13 cont.)

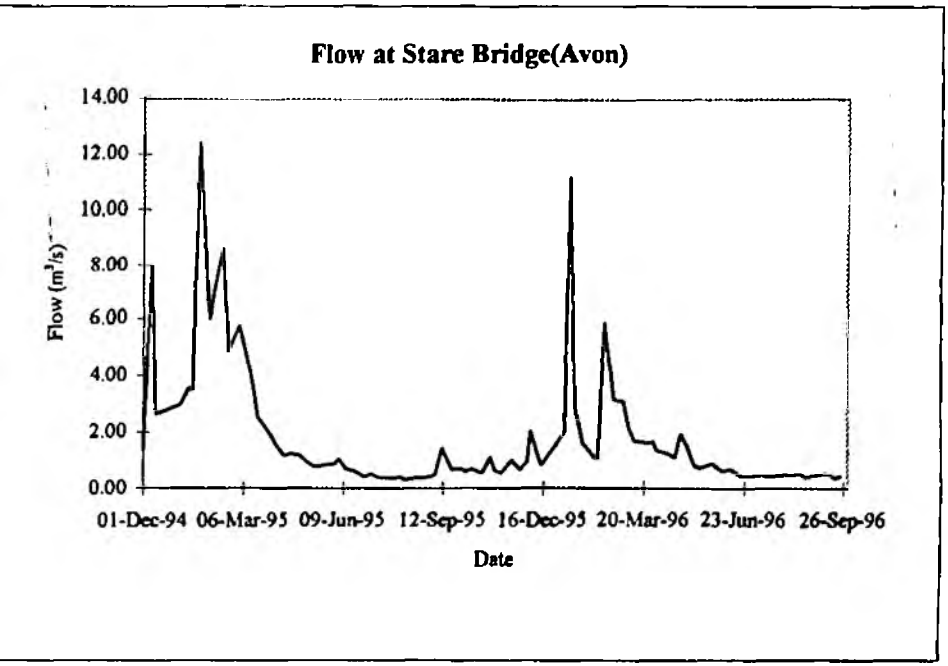
Figure 14 Stare Bridge (Avon)




N at Stare Bridge(Avon)
N (mg/l)
20.000
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt
TON
Total N (NKjeld+TON)


Chlorophyll a and pH at Stare Bridge(Avon)
Chl a (mg/m³)
60.0
50.0
40.0
30.0
20.0
10.0
0.0
pH
9.0
8.8
8.6
8.4
8.2
8.0
7.8
7.6
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
pH
Chlorophyll a



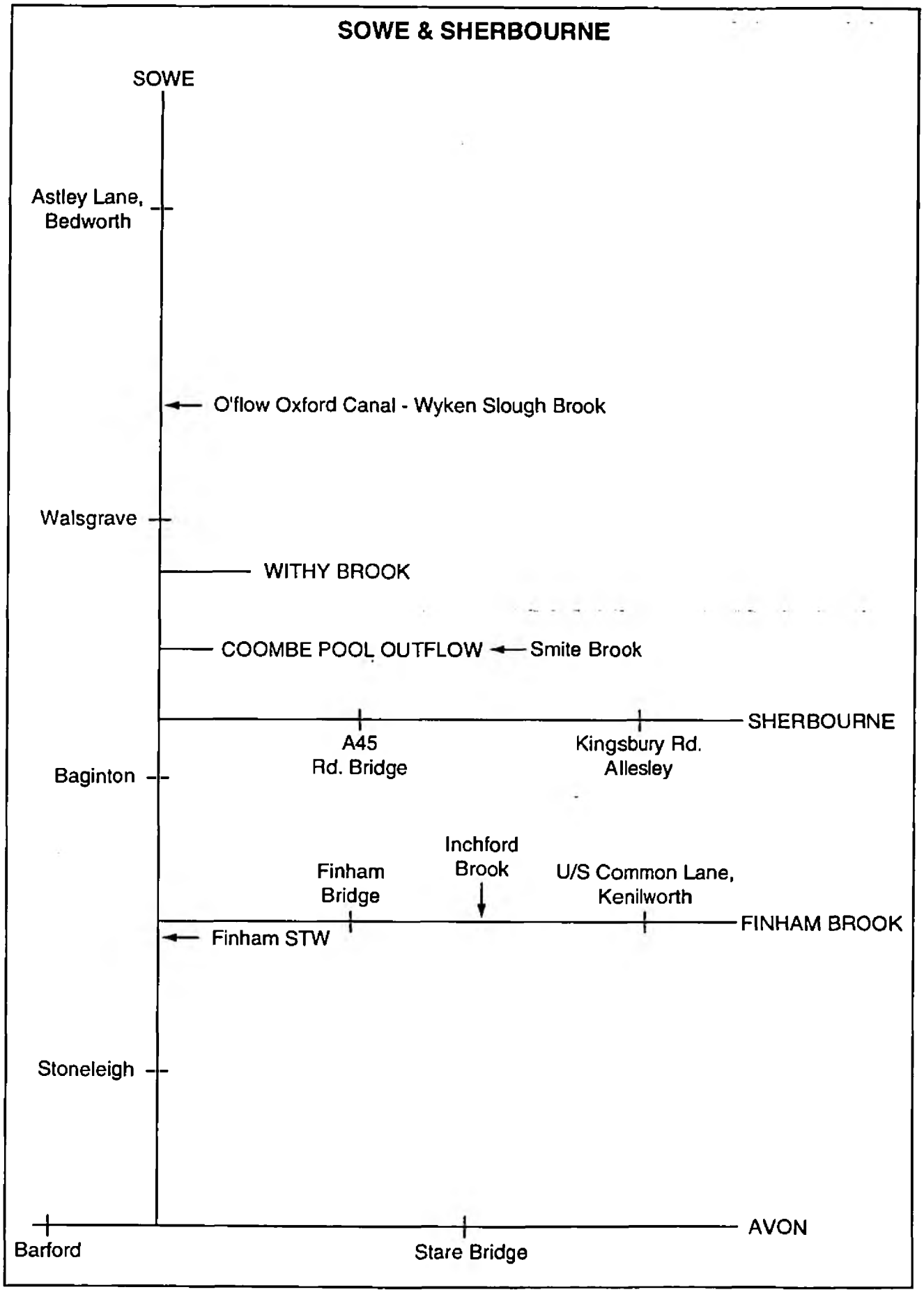


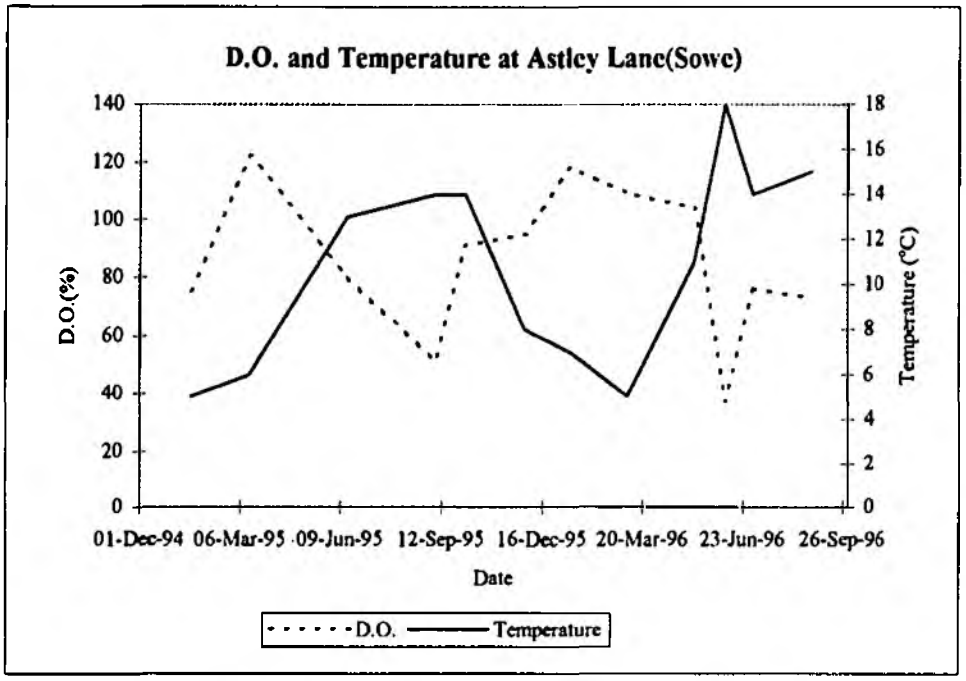
(Figure 14 cont.)

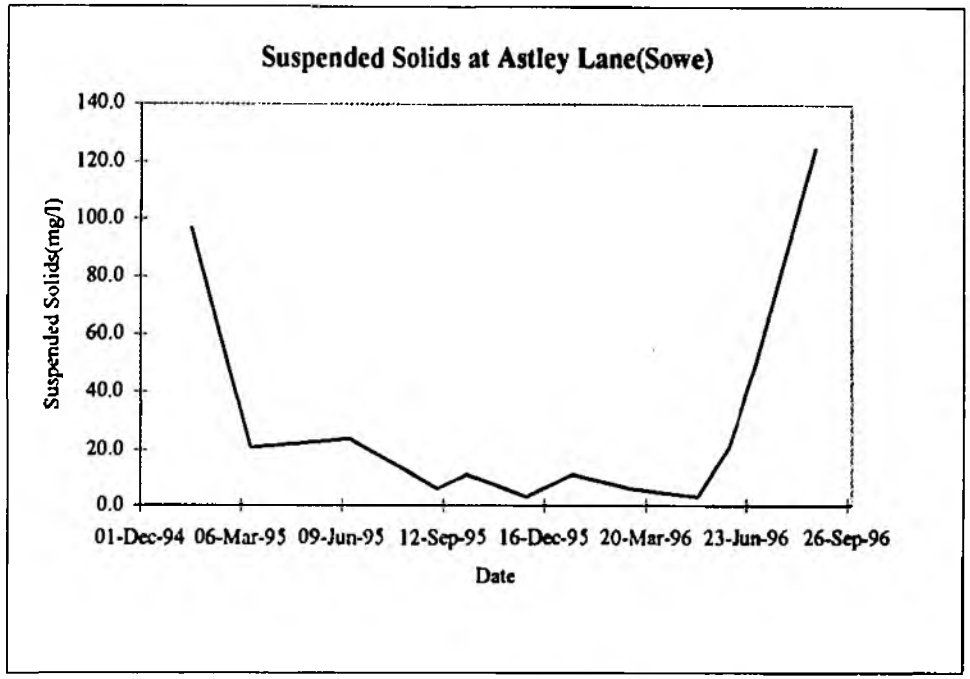
Appendix 1b

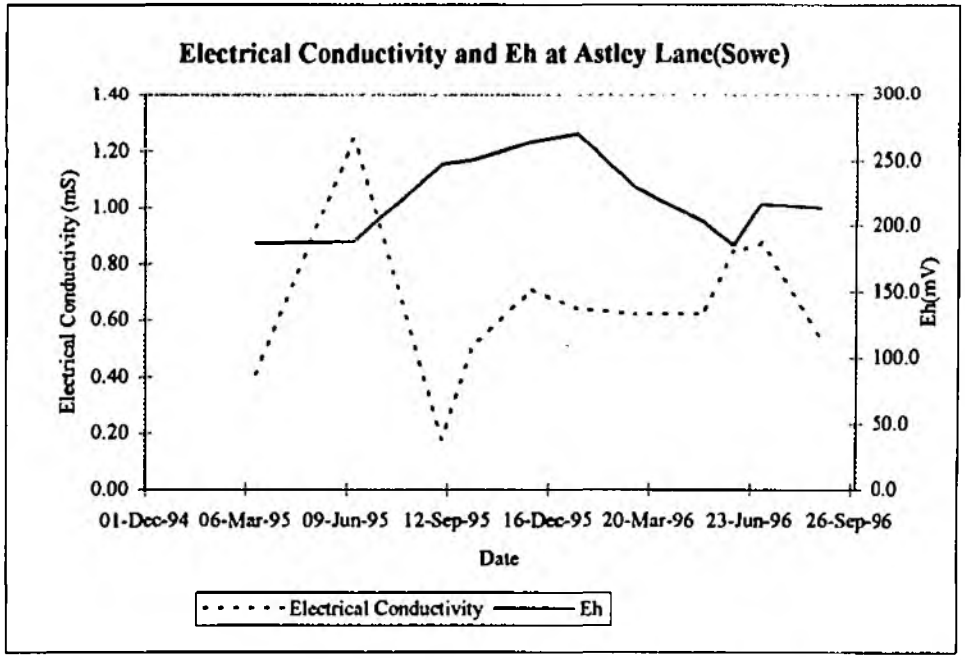
The River Sowe and its sub-catchments

Figure 15 Site Location Map for the river Sowe and its sub-catchments









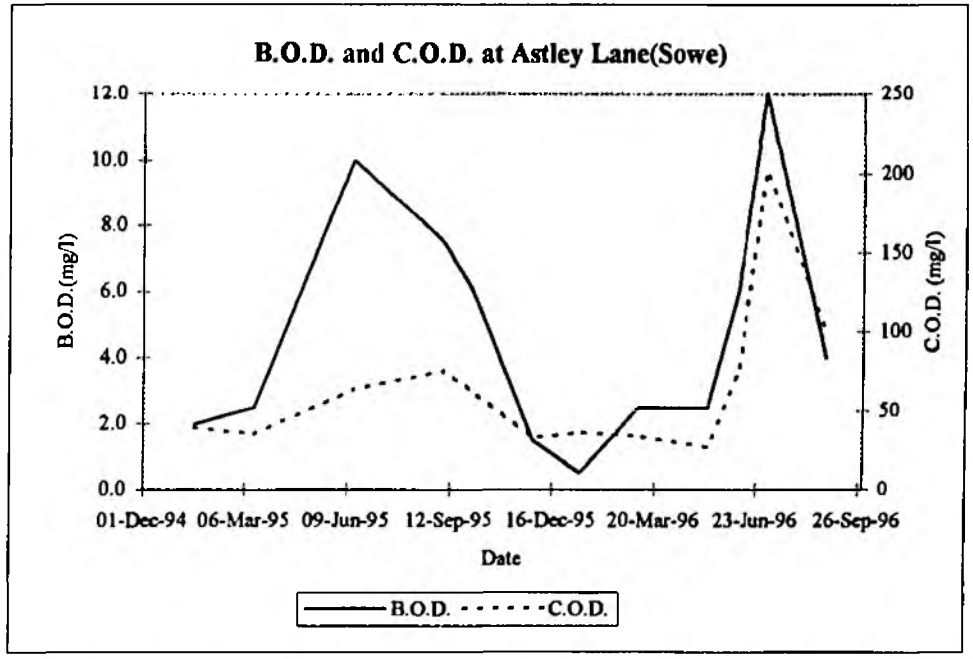
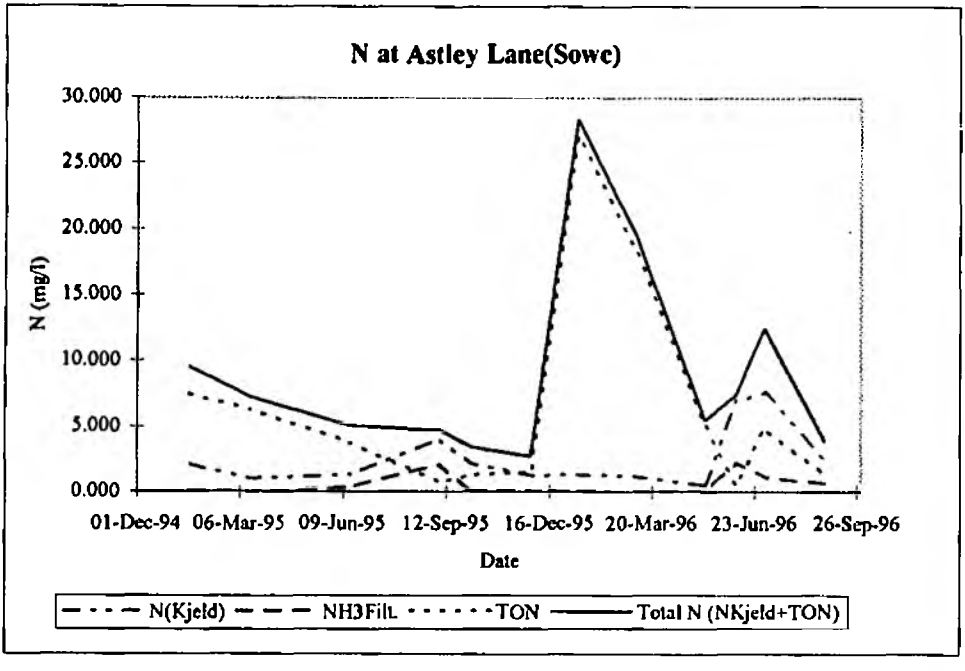
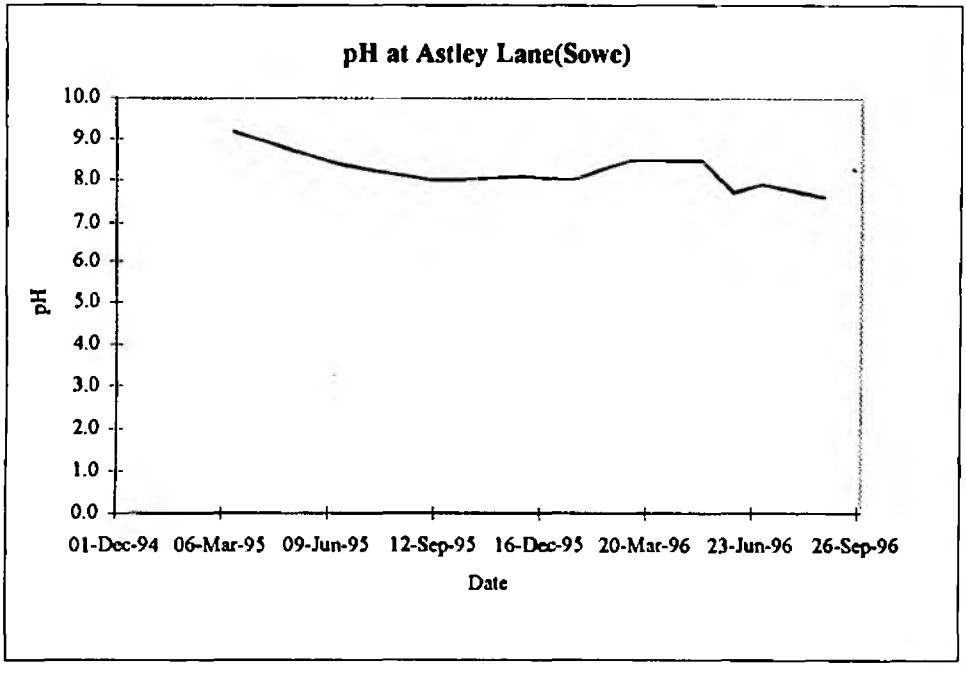
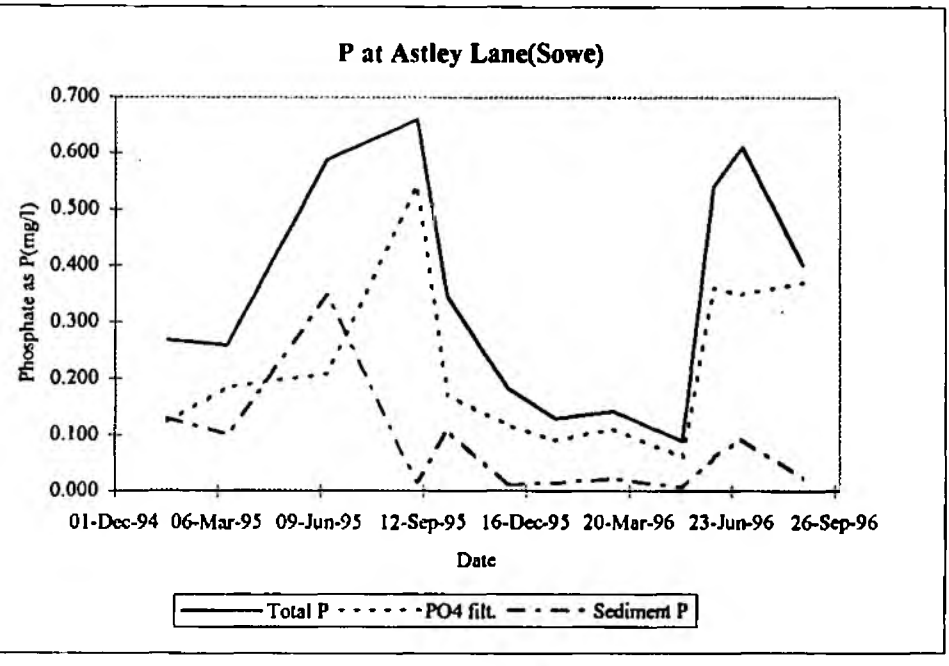
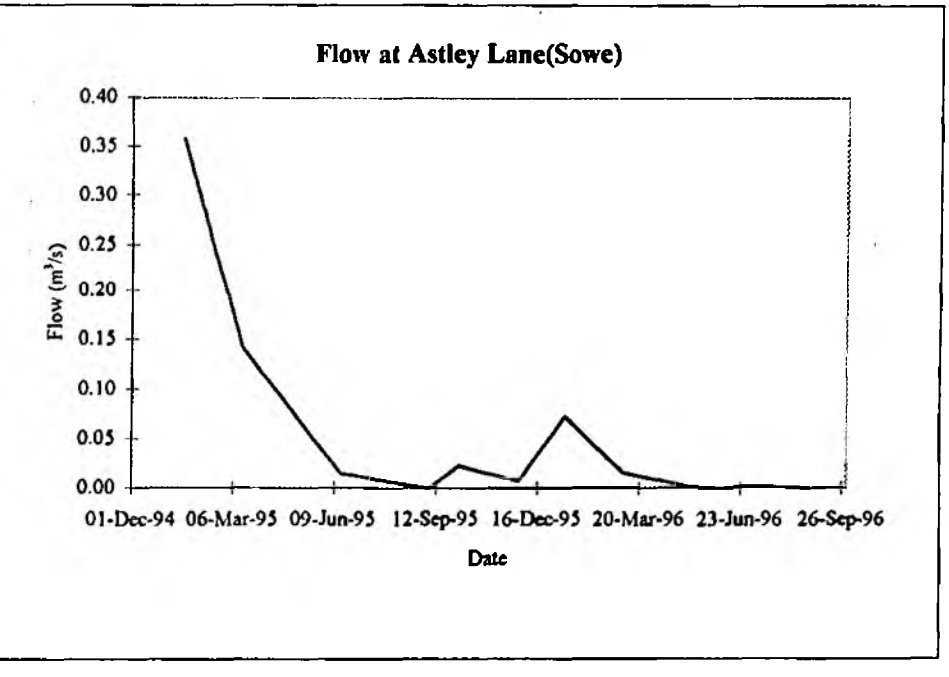


Figure 16 Astley Lane (Sowe)

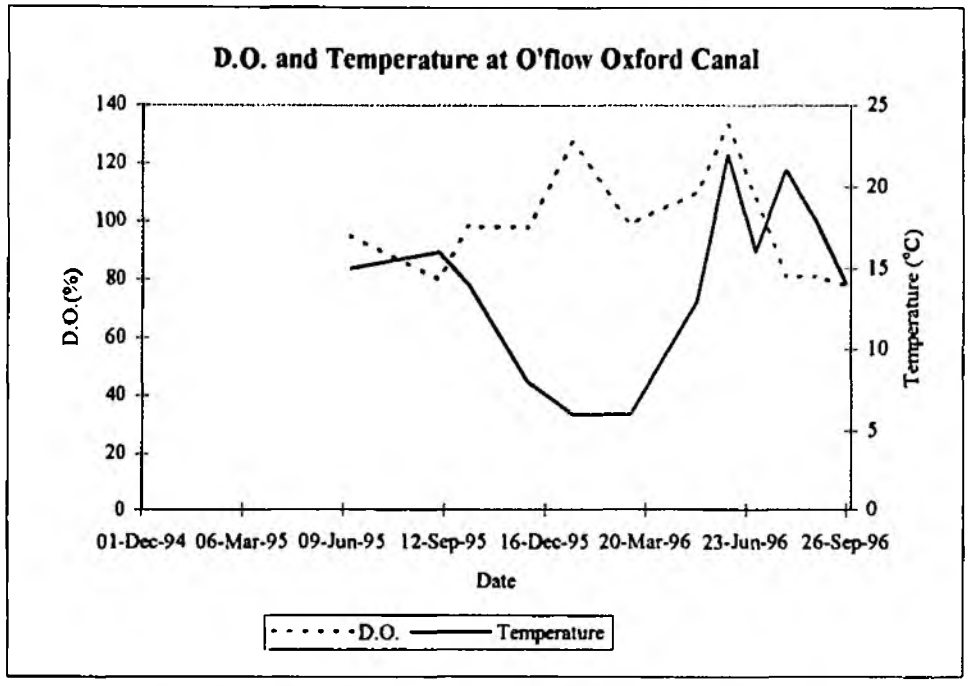

N at Astley Lane(Sowc)
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt
TON
Total N (NKjeld+TON)

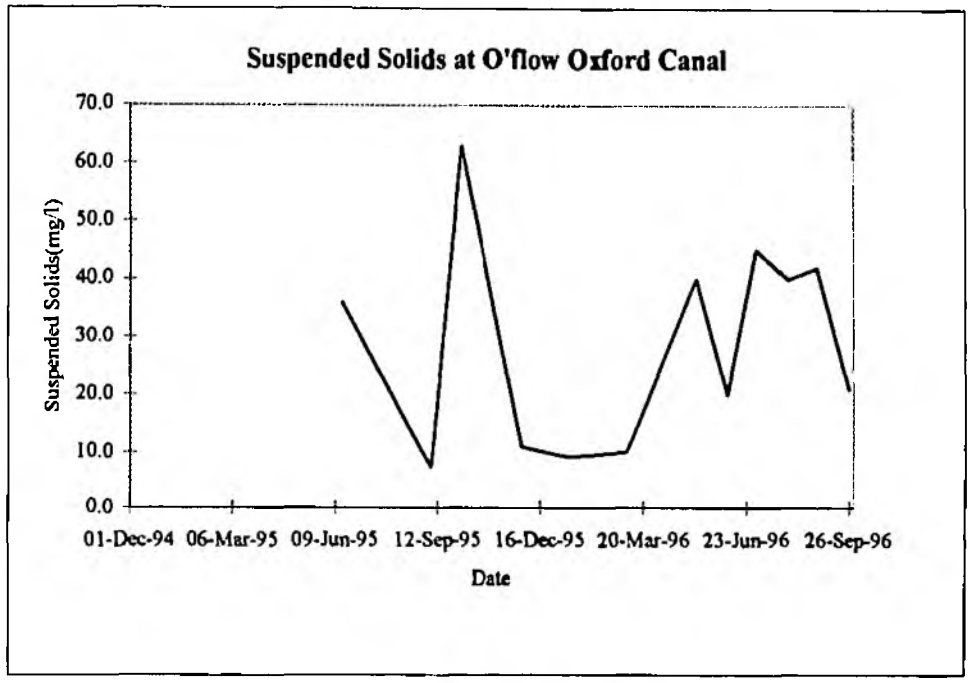

pH at Astley Lane(Sowc)
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

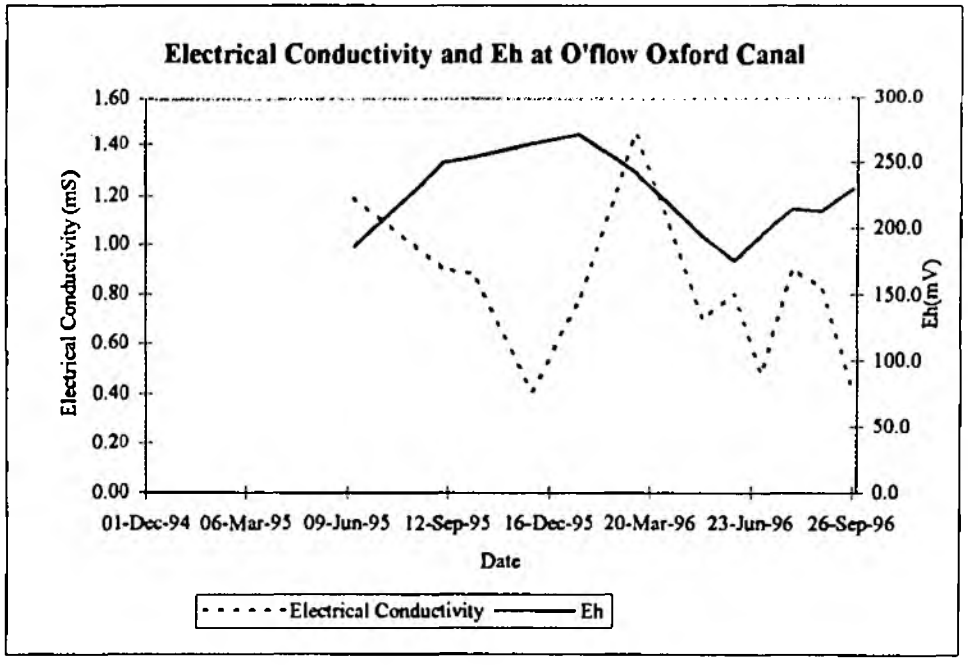




(Figure 16 cont.)







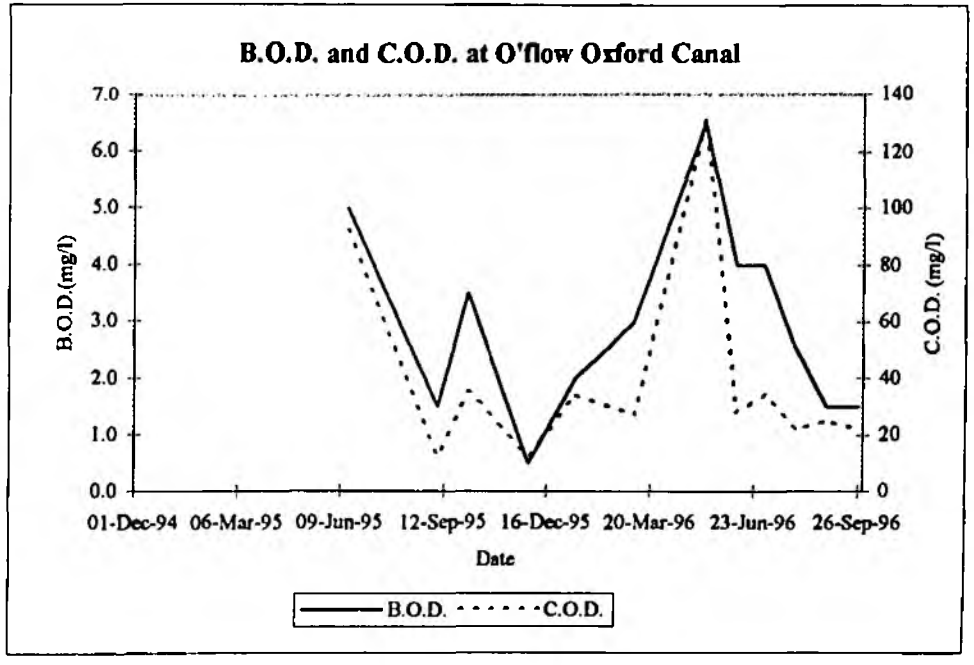
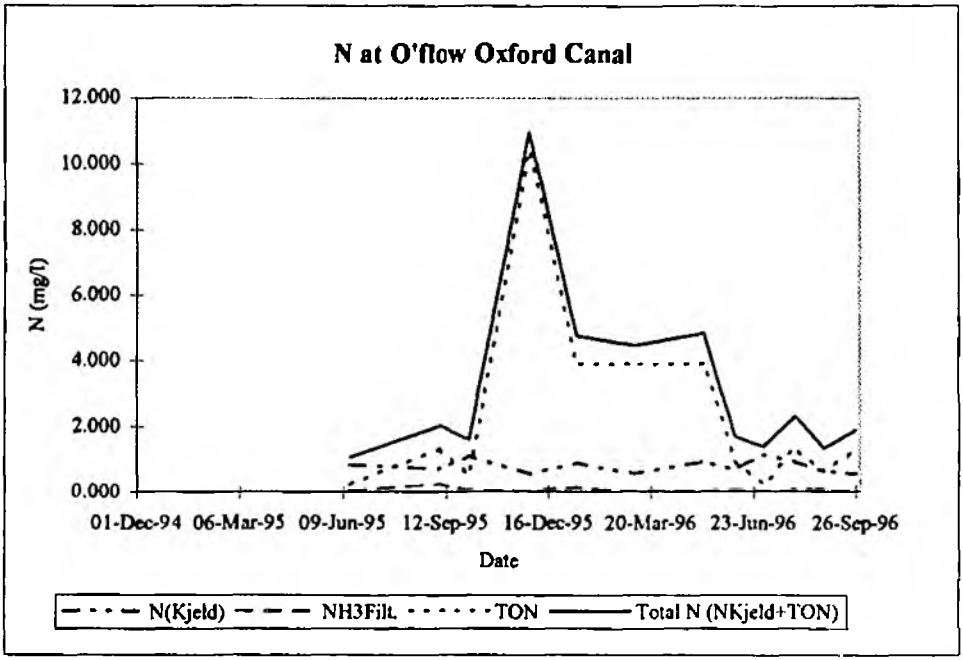
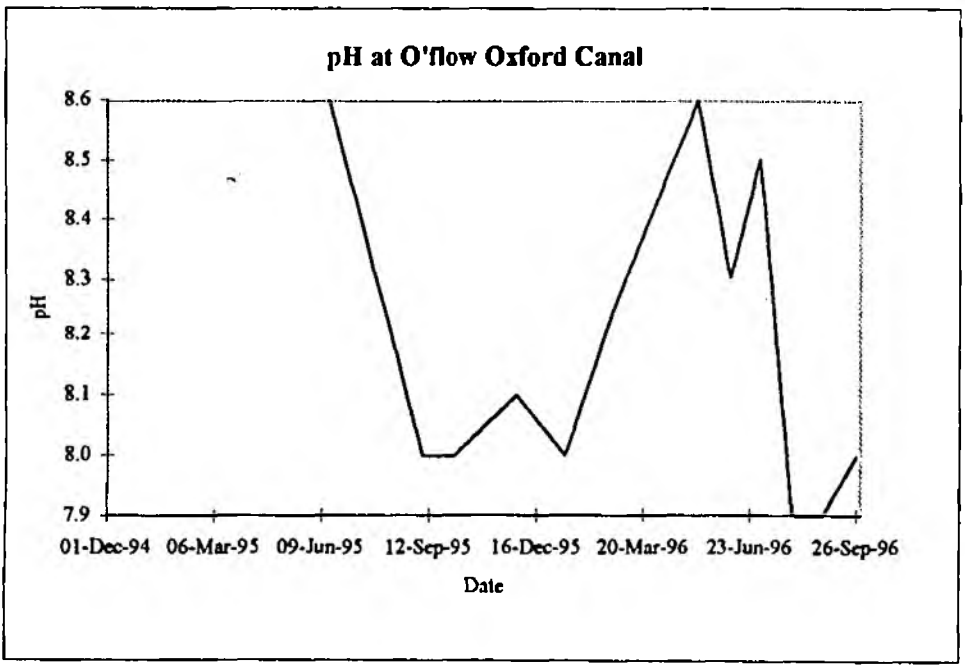
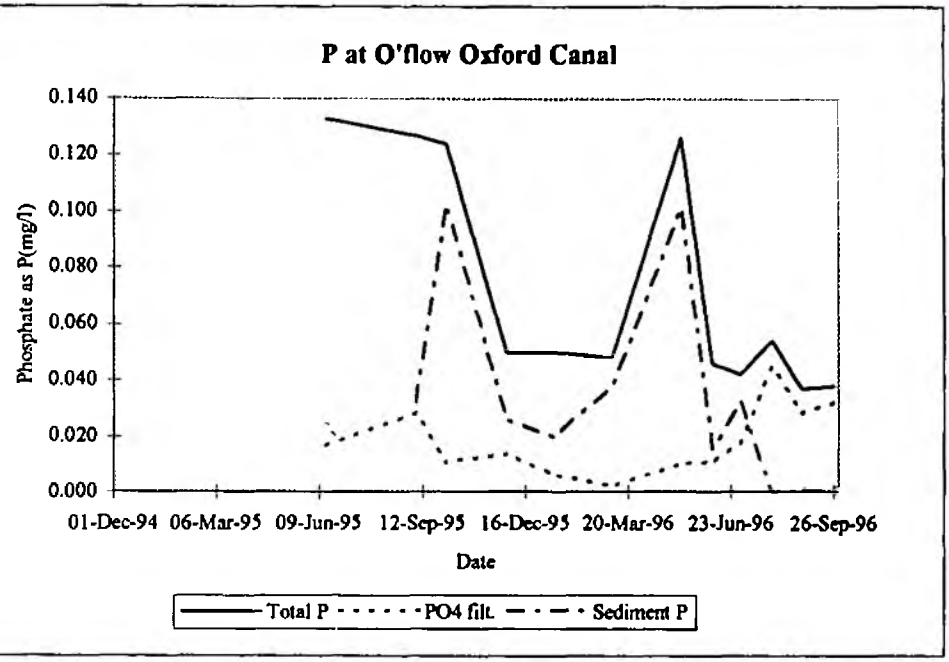


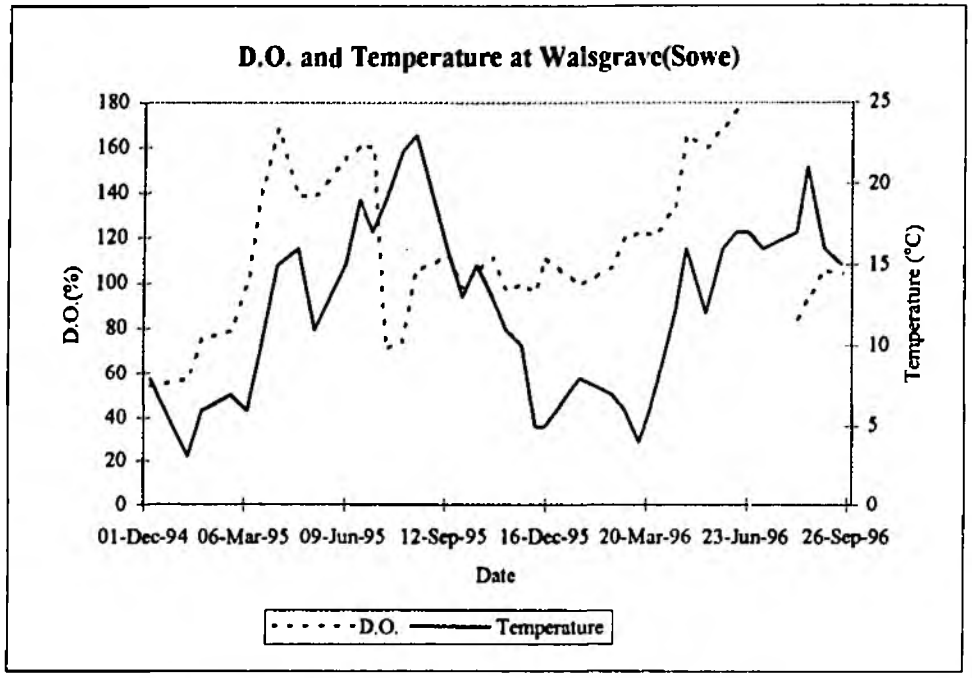
Figure 17 O'flow Oxford Canal

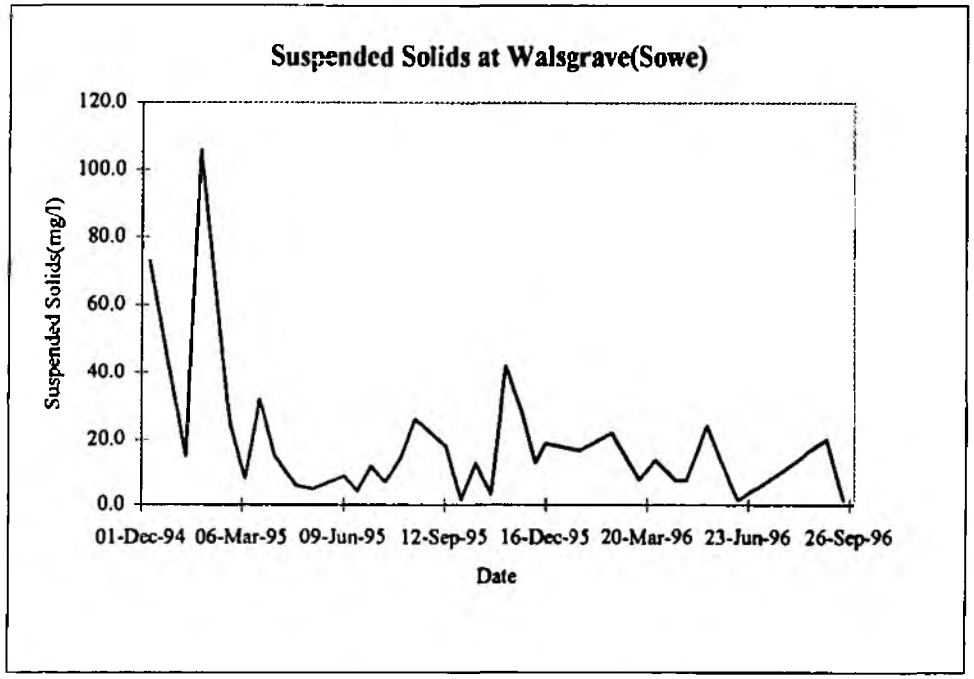

N at O'flow Oxford Canal
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

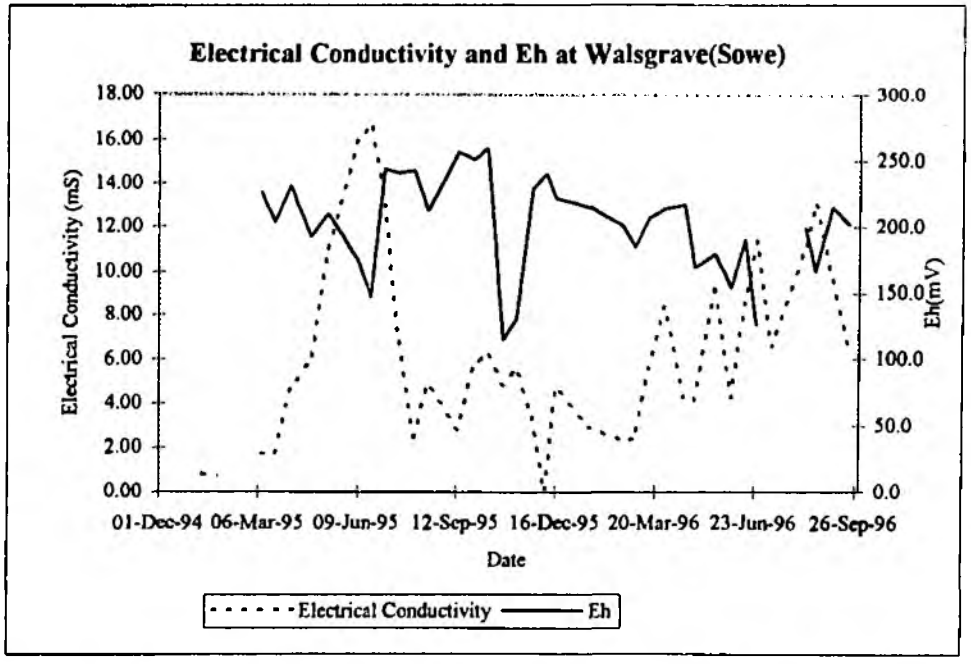

pH at O'flow Oxford Canal
8.6
8.5
8.4
8.3
8.2
8.1
8.0
7.9
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date



(Figure 17 cont.)







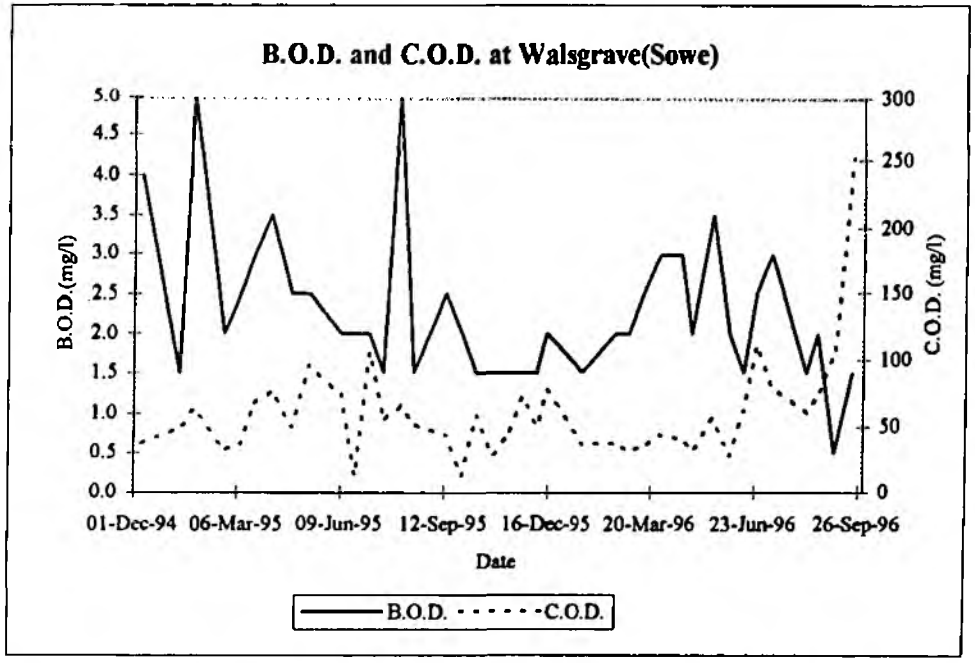
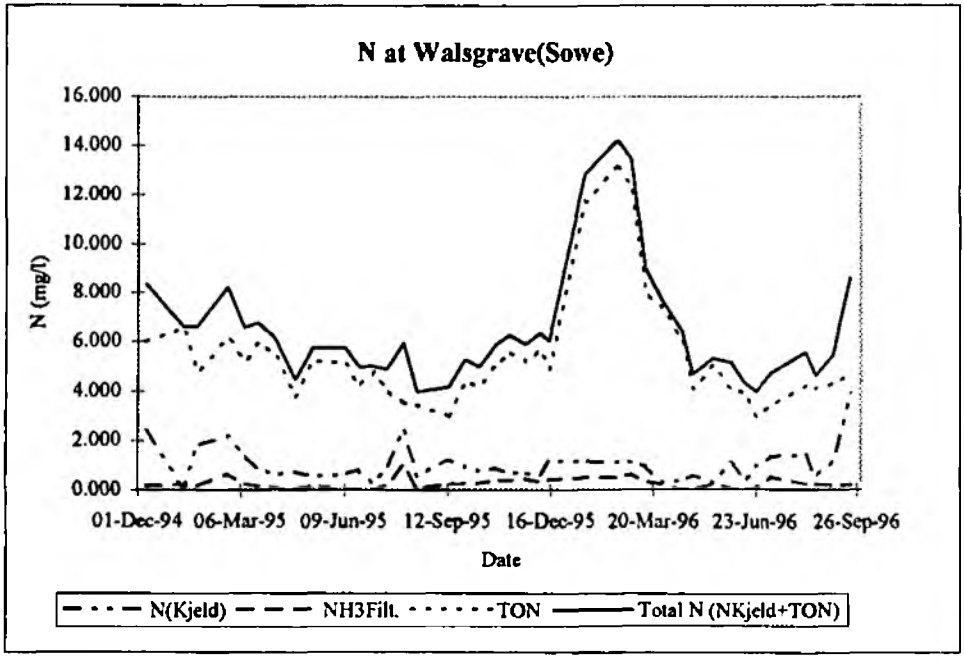
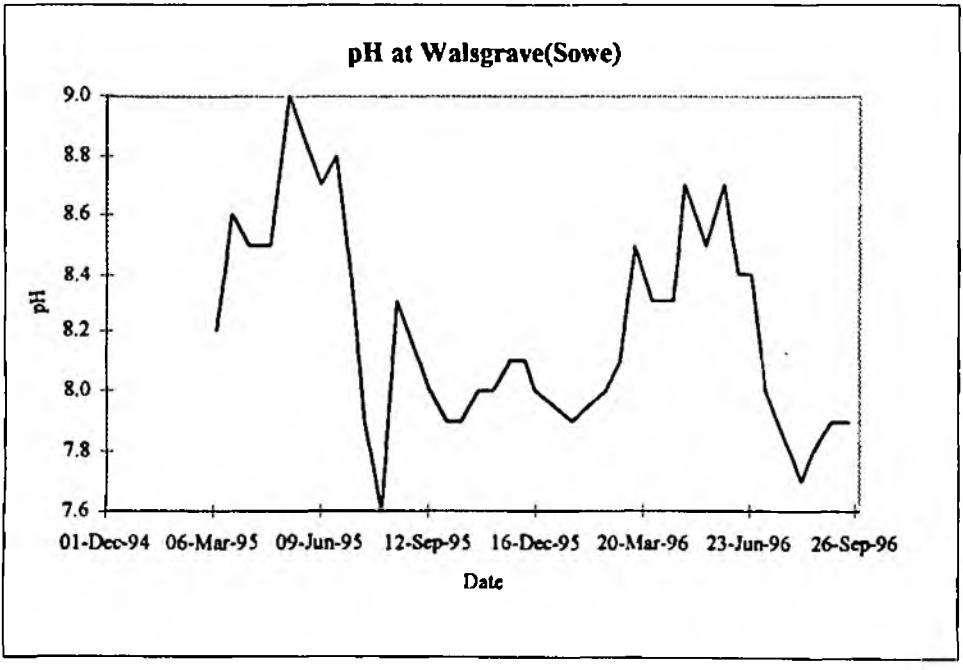
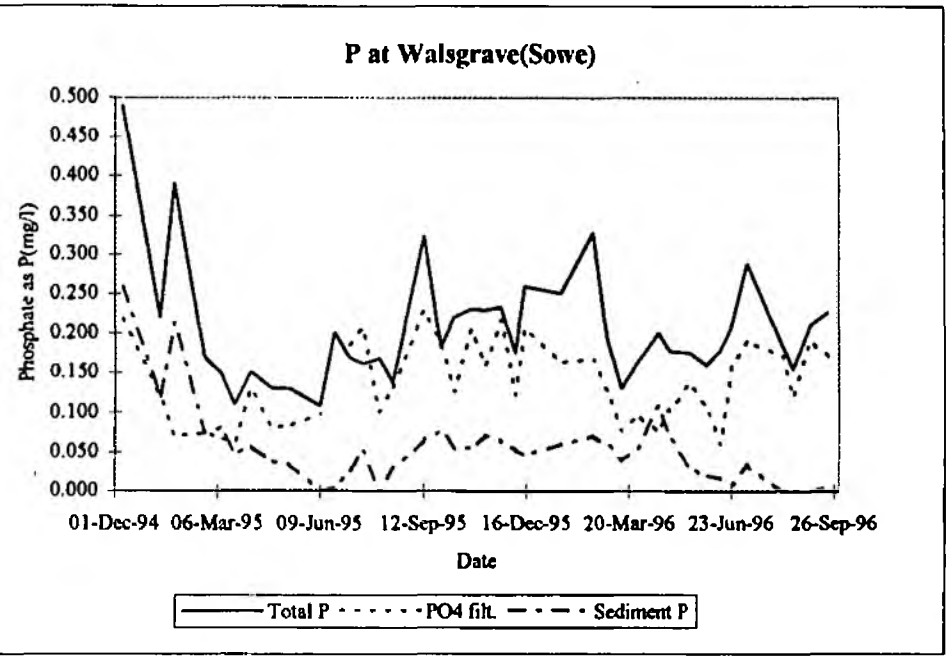


Figure 18 Walsgrave (Sowe)


N at Walsgrave(Sowe)
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)


pH at Walsgrave(Sowe)
9.0
8.8
8.6
8.4
8.2
8.0
7.8
7.6
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date



(Figure 18 cont.)

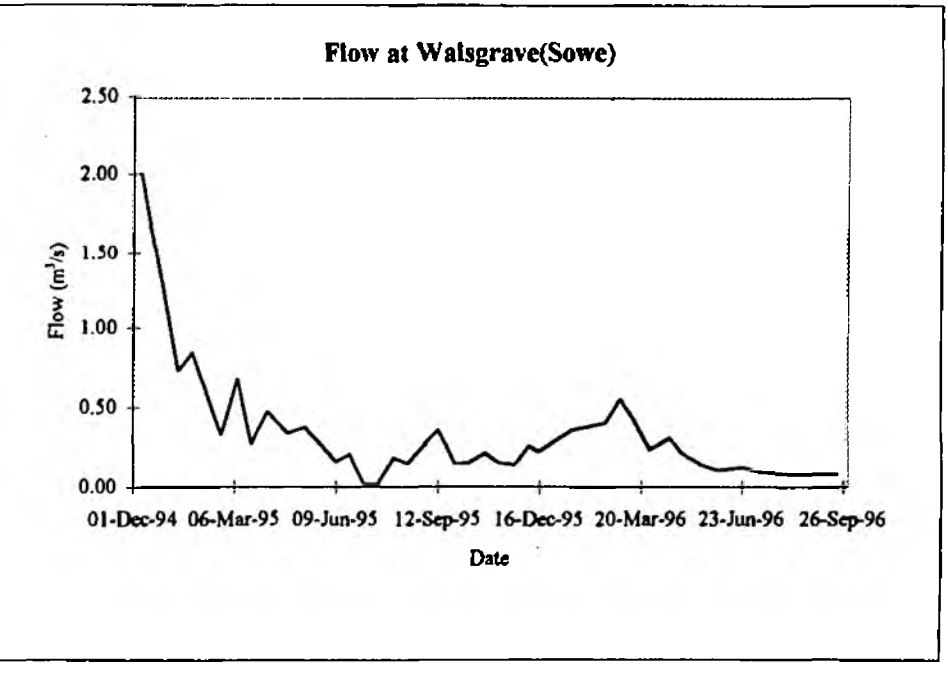
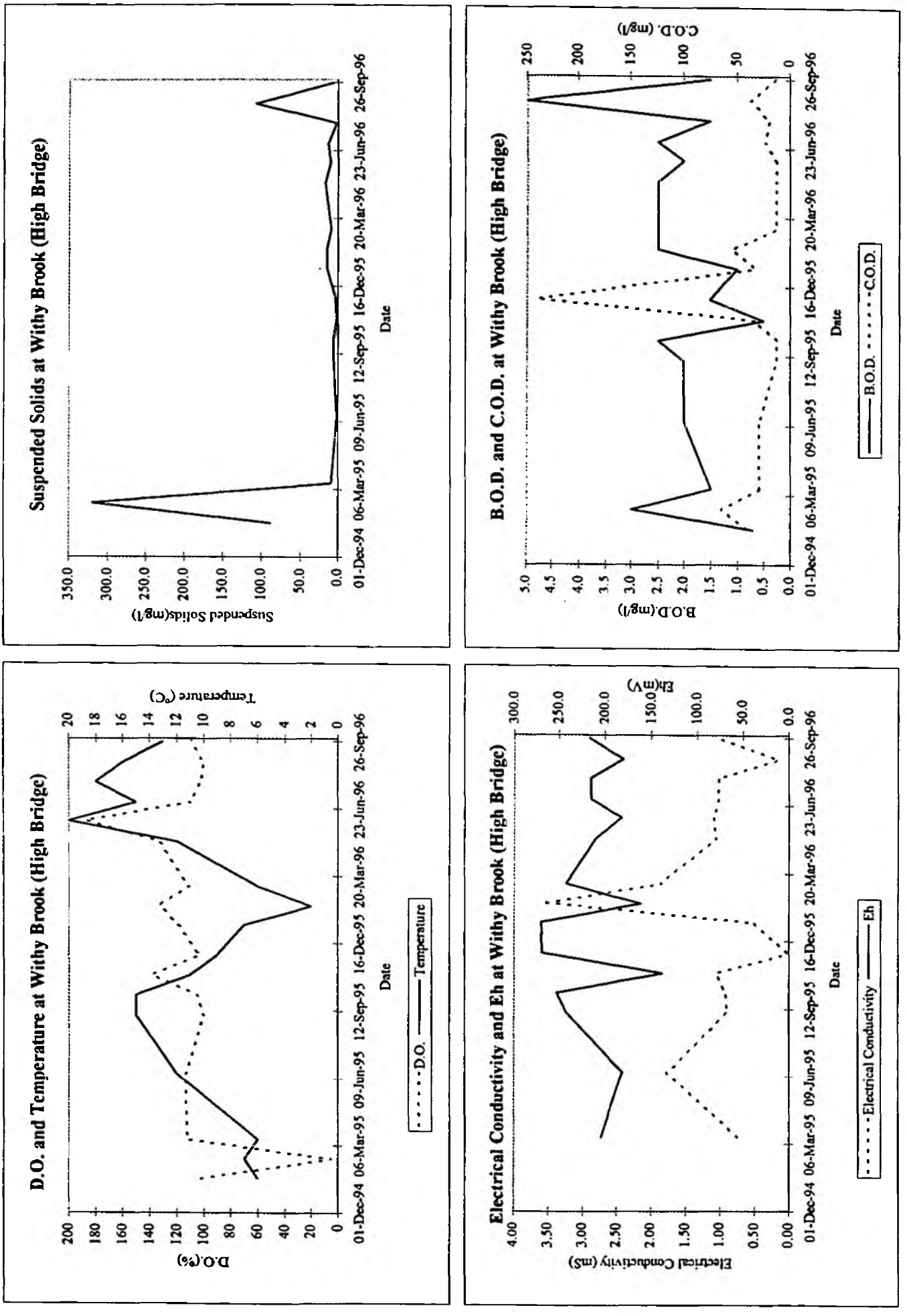
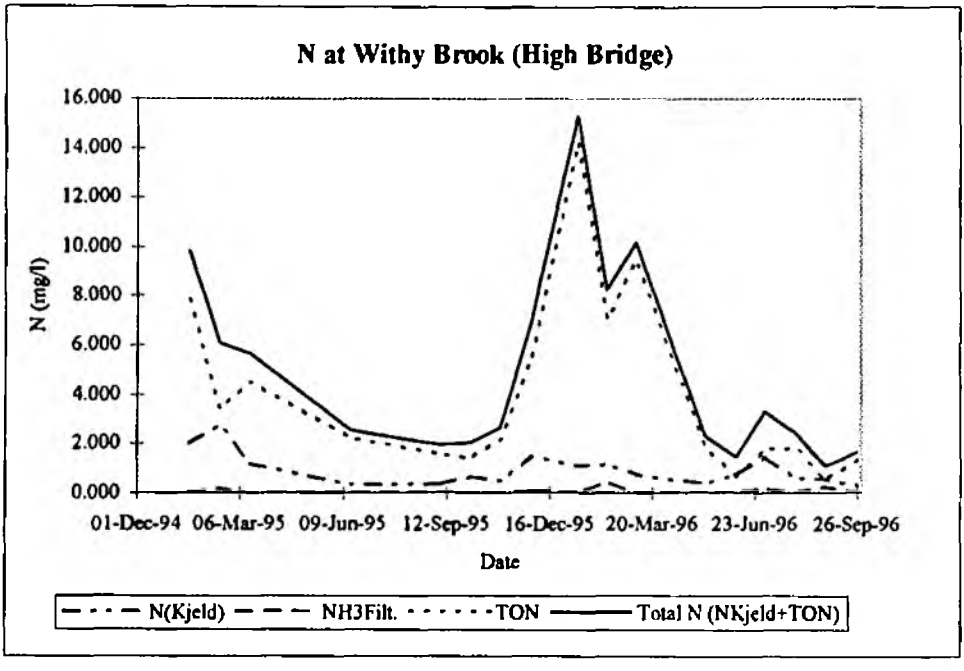
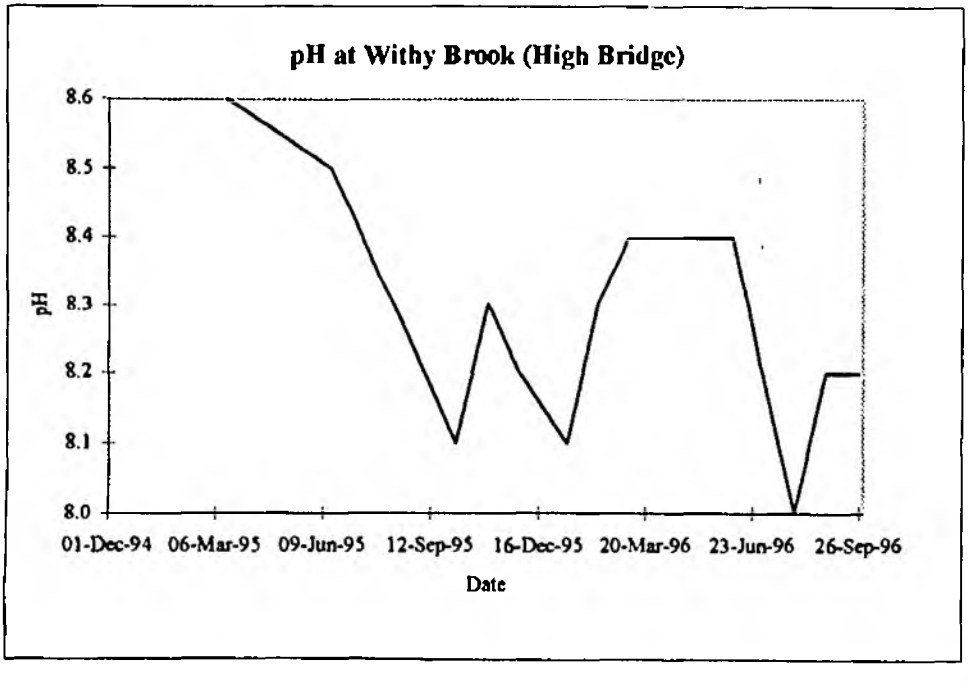
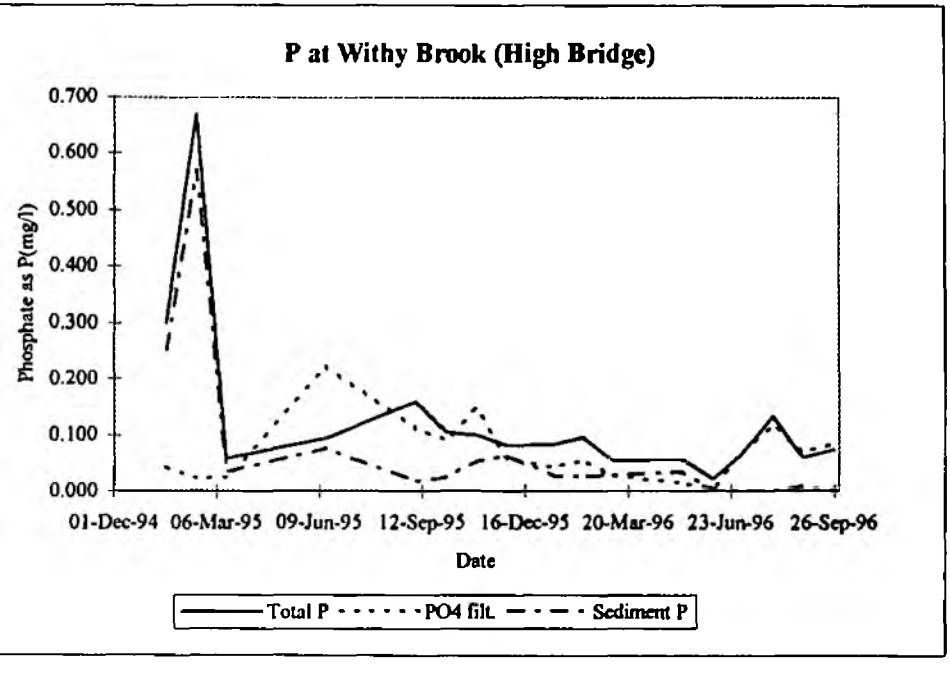


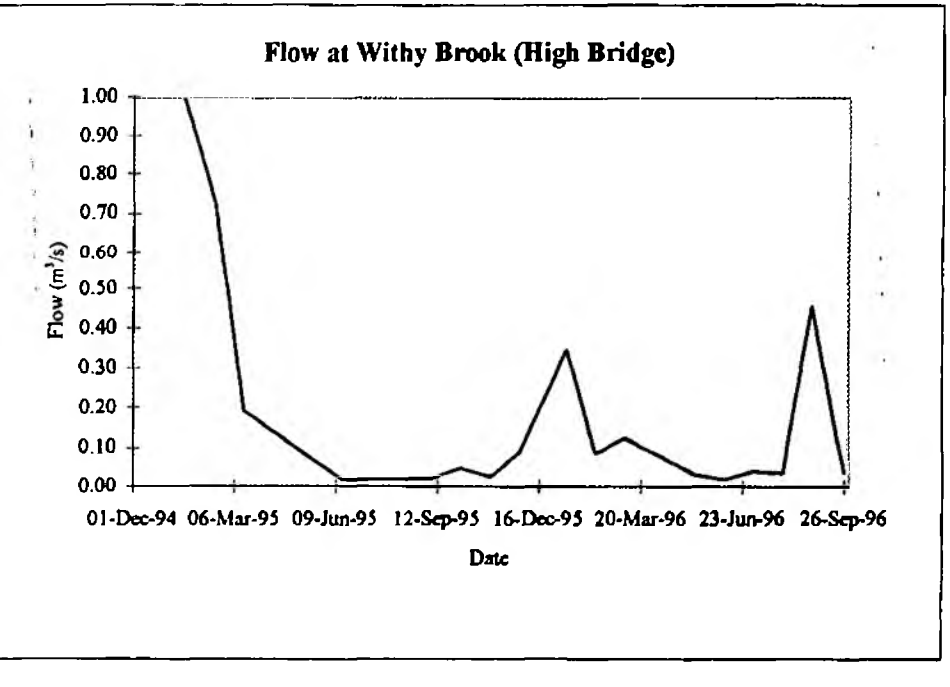
Figure 19 Withy Brook (High Bridge)



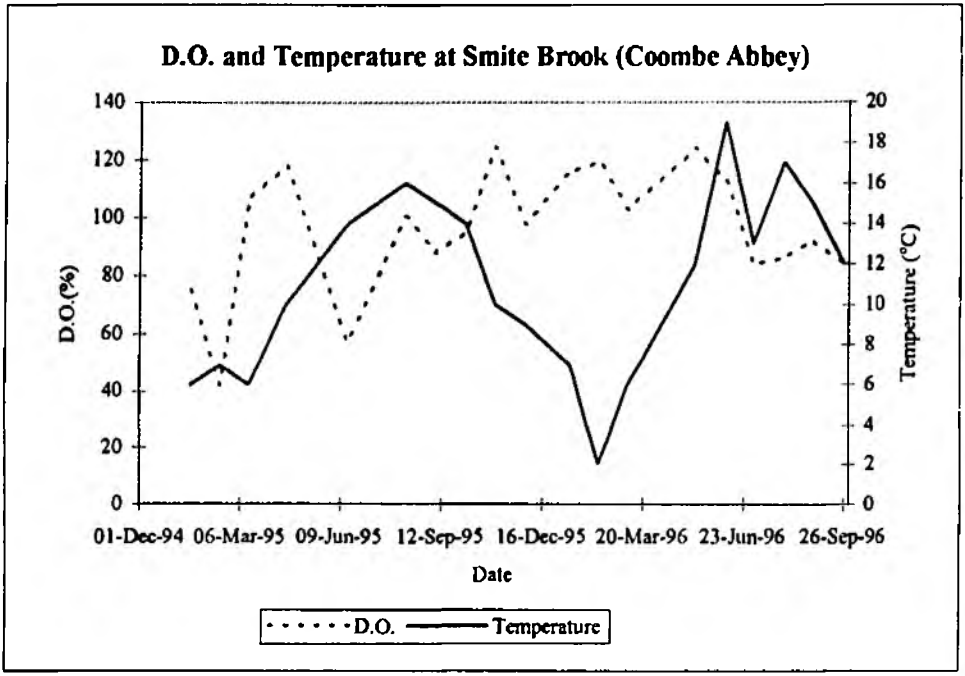

N at Withy Brook (High Bridge)
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)


pH at Withy Brook (High Bridge)
8.6
8.5
8.4
8.3
8.2
8.1
8.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date





(Figure 19 cont.)


D.O. and Temperature at Smite Brook (Coombe Abbey)
D.O.(%)
Temperature (°C)
140
120
100
80
60
40
20
0
20
18
16
14
12
10
8
6
4
2
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature

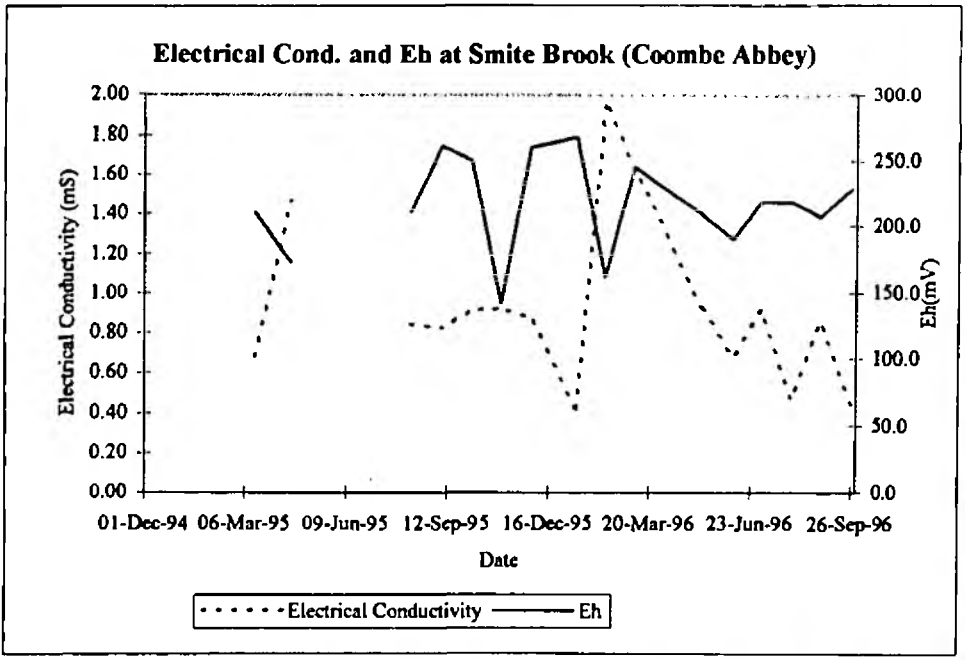
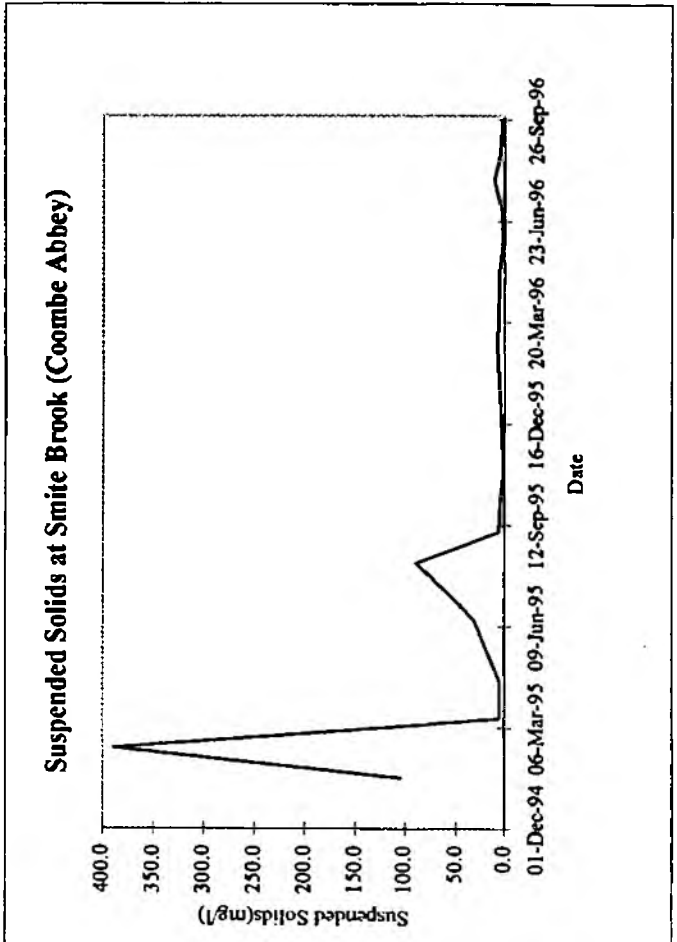
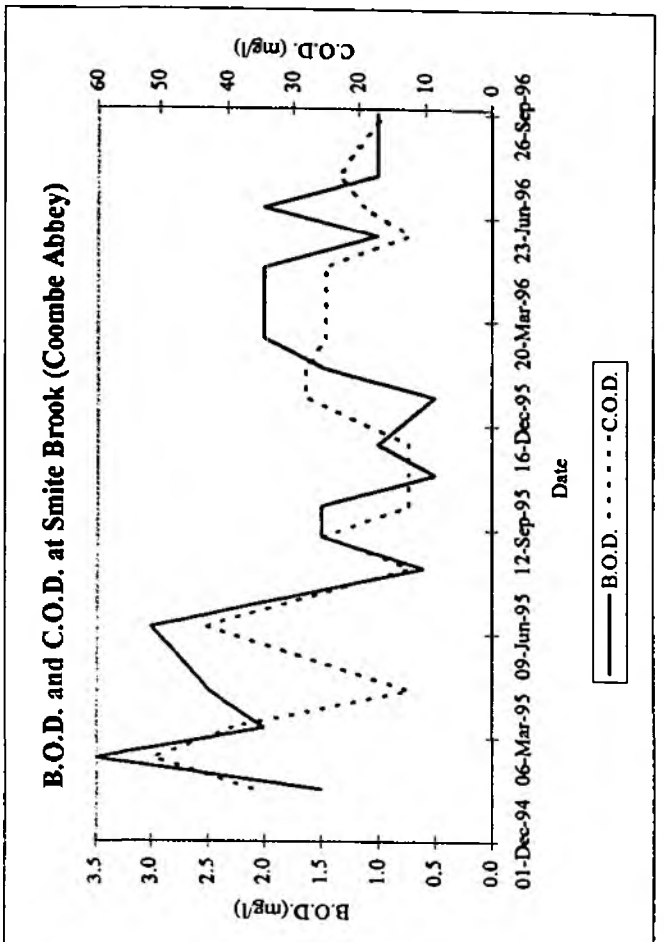
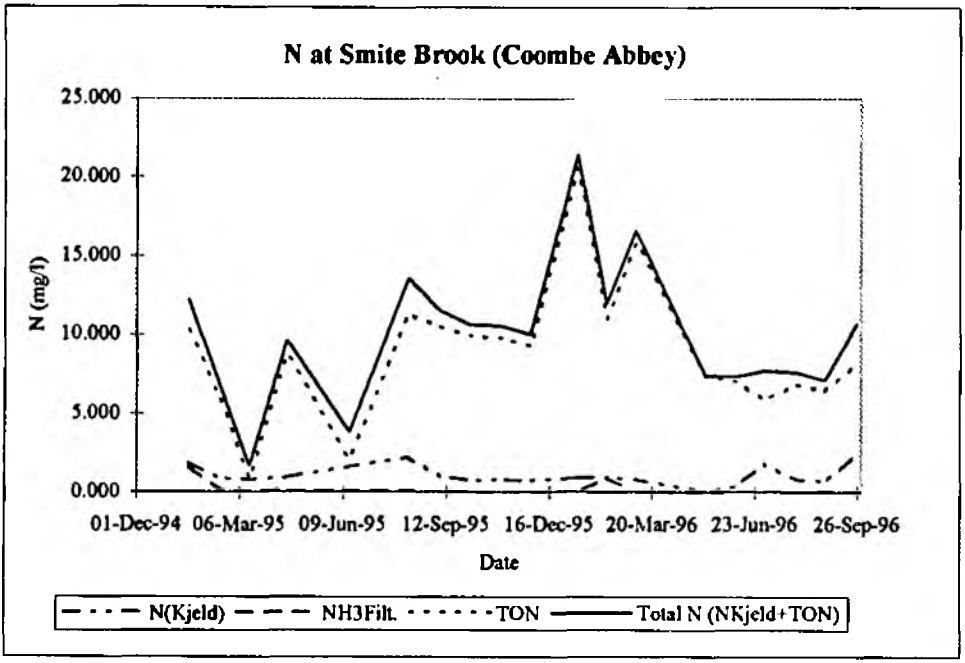
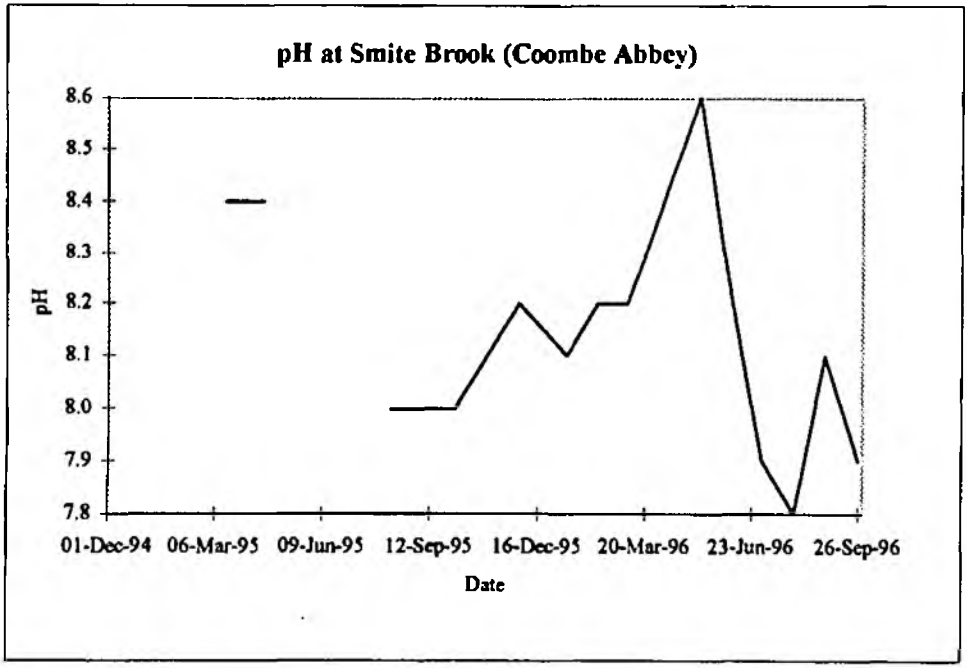

Electrical Cond. and Eh at Smite Brook (Coombe Abbey)
Electrical Conductivity (mS)
Eh(mV)
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
300.0
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh

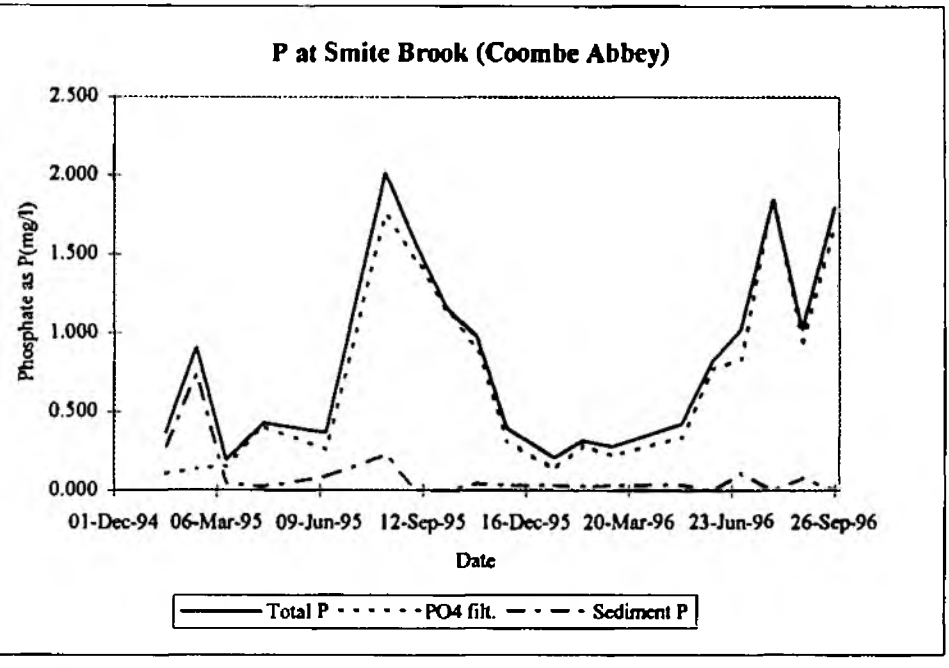
Figure 20 Smite Brook (Coombe Abbey)

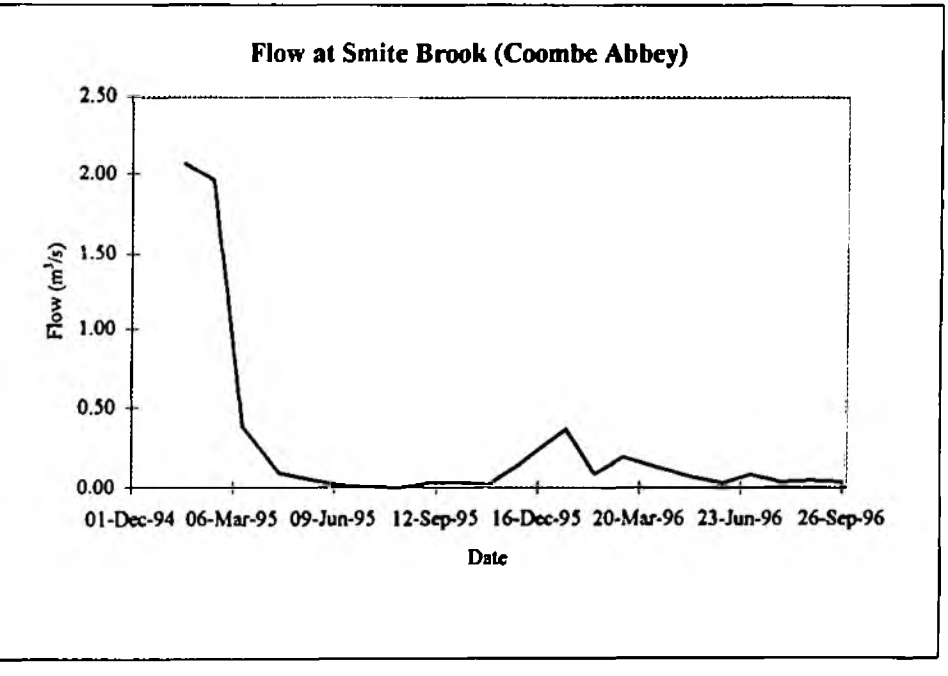




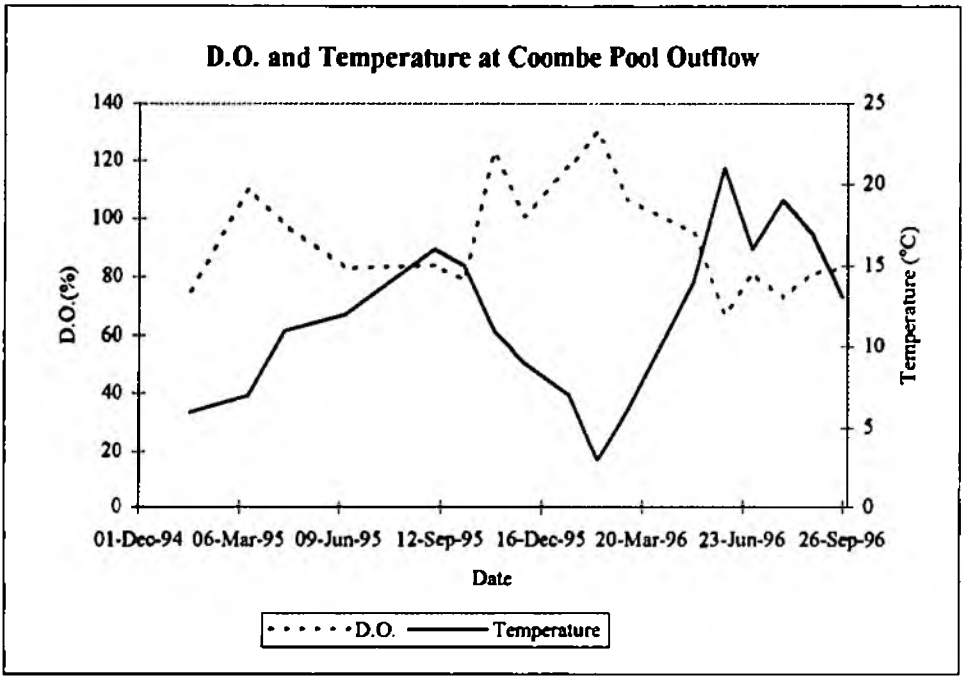

N at Smite Brook (Coombe Abbey)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)


pH at Smite Brook (Coombe Abbey)
8.6
8.5
8.4
8.3
8.2
8.1
8.0
7.9
7.8
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date





(Figure 20 cont.)


D.O. and Temperature at Coombe Pool Outflow
D.O.(%)
Temperature (°C)
140
120
100
80
60
40
20
0
25
20
15
10
5
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature

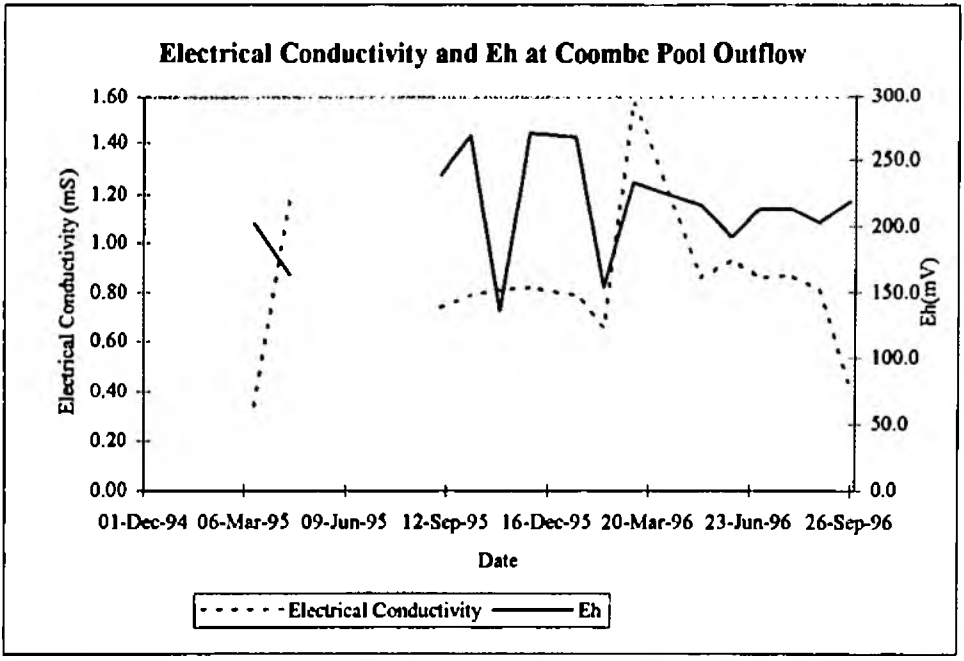
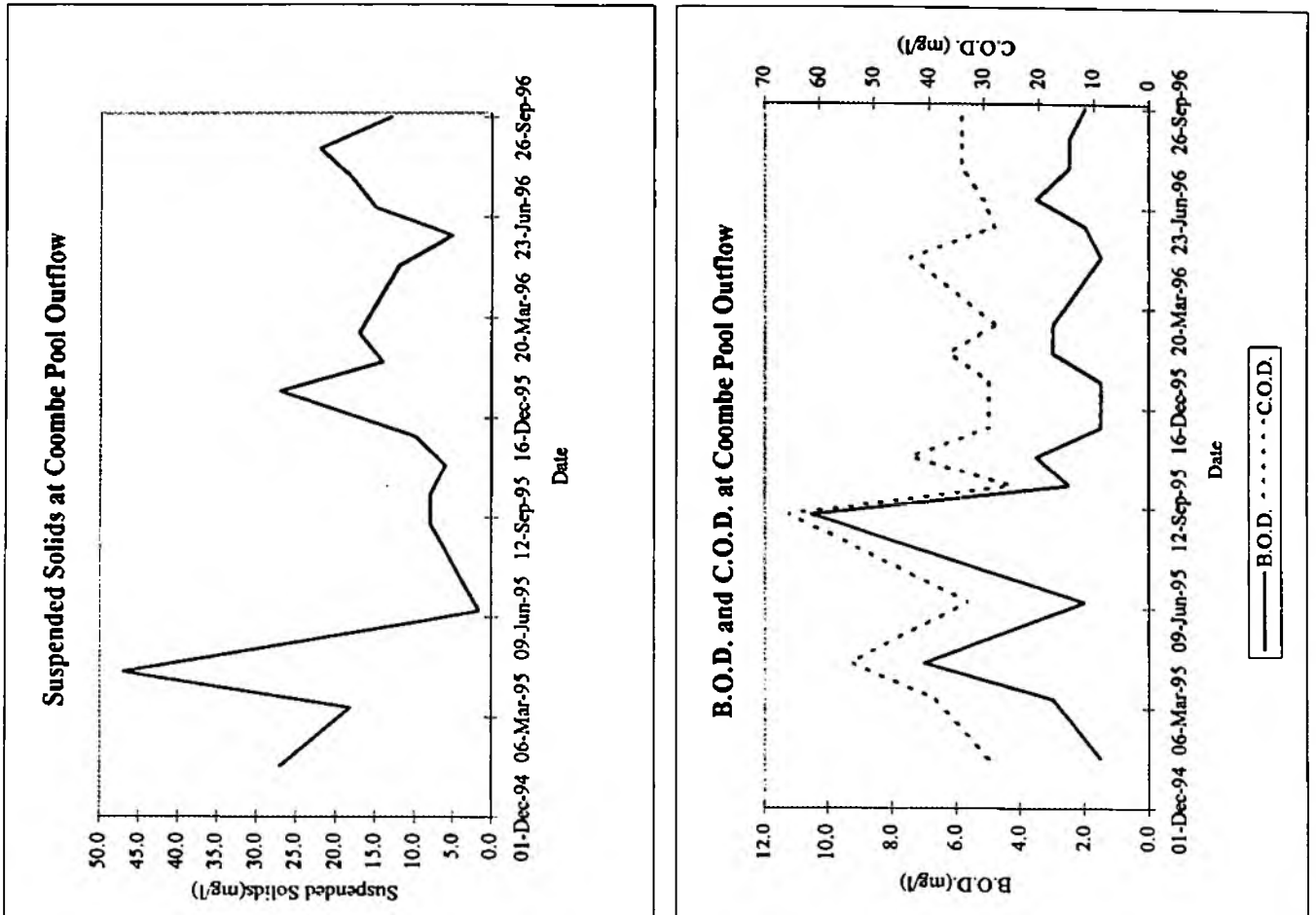
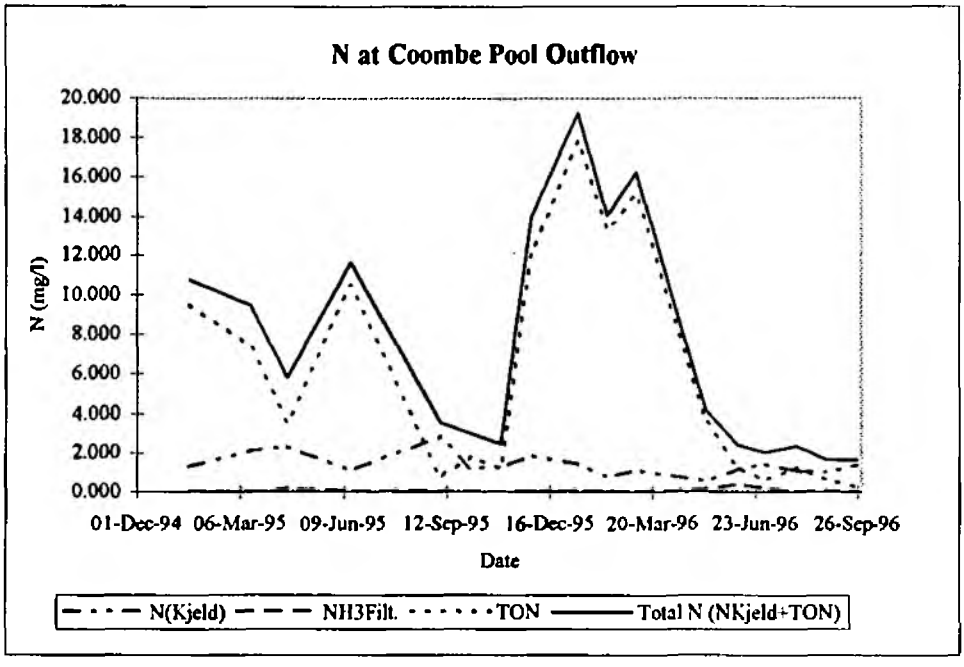
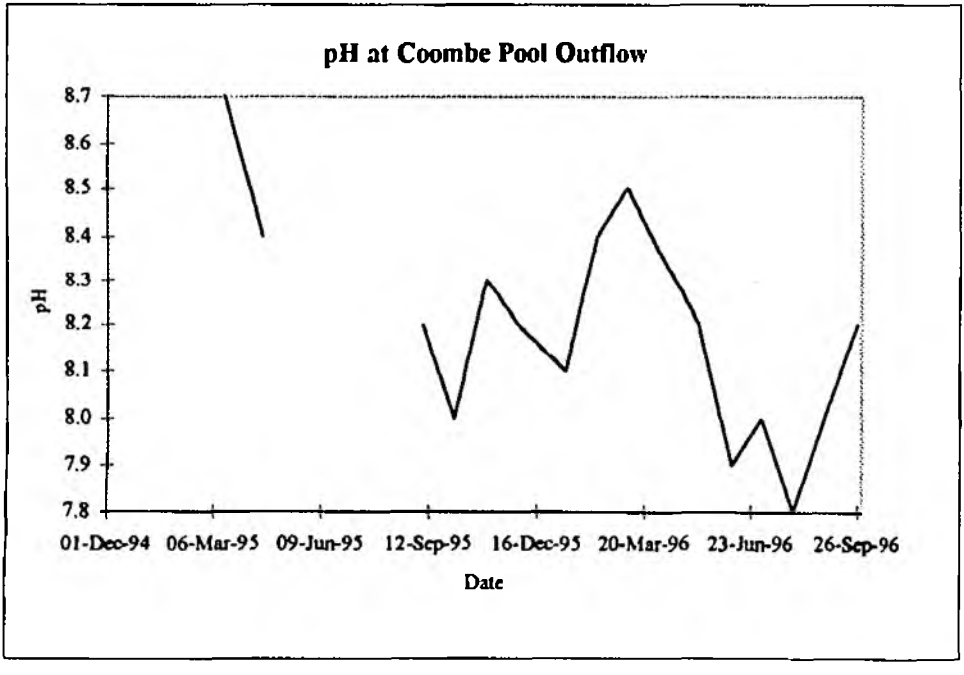
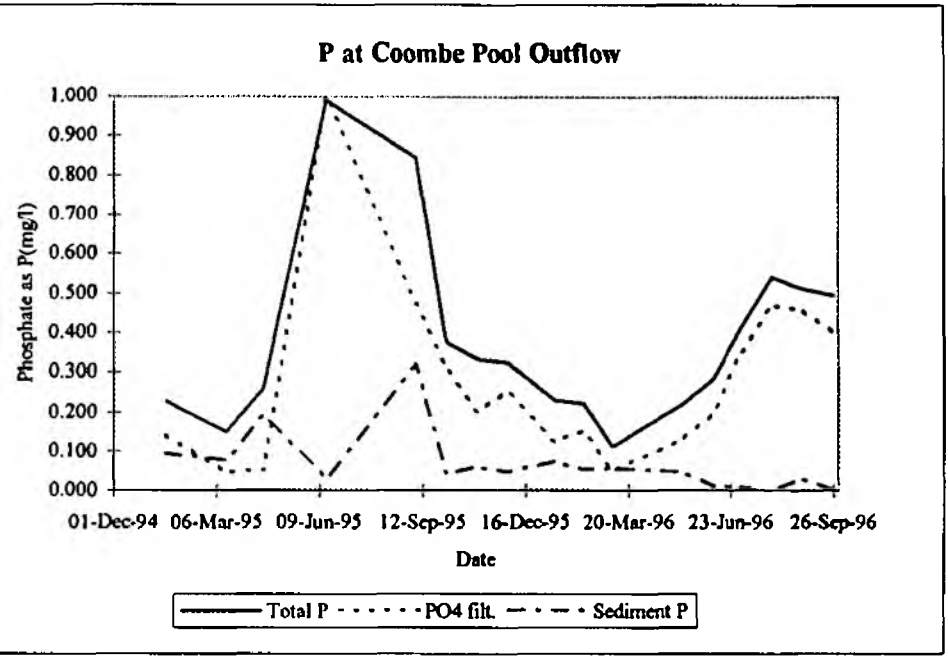

Electrical Conductivity and Eh at Coombe Pool Outflow
Electrical Conductivity (mS)
Eh(mV)
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
300.0
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh

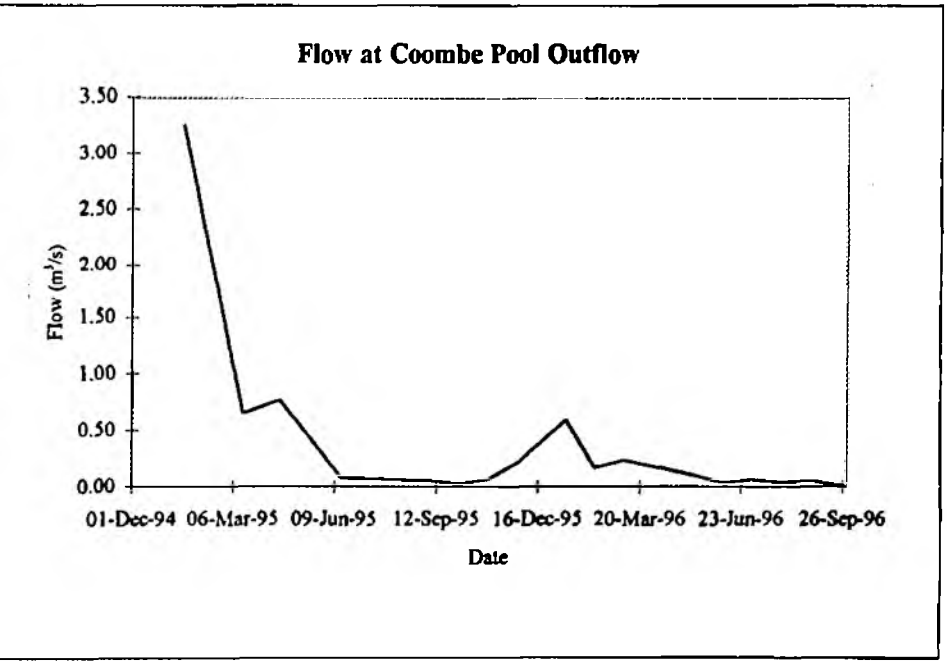
Figure 21 Coombe Pool Outflow




N at Coombe Pool Outflow
20.000
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

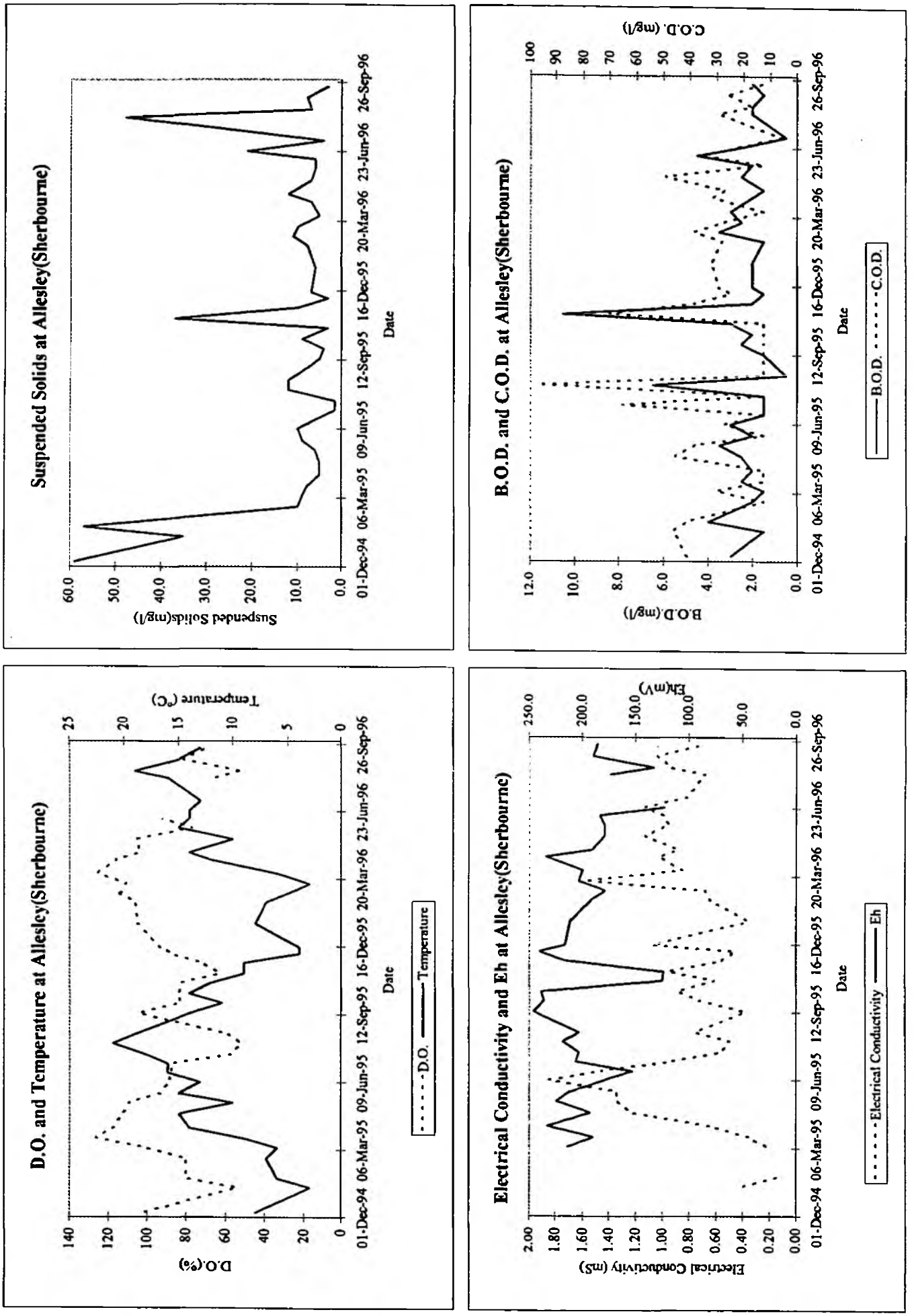

pH at Coombe Pool Outflow
8.7
8.6
8.5
8.4
8.3
8.2
8.1
8.0
7.9
7.8
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

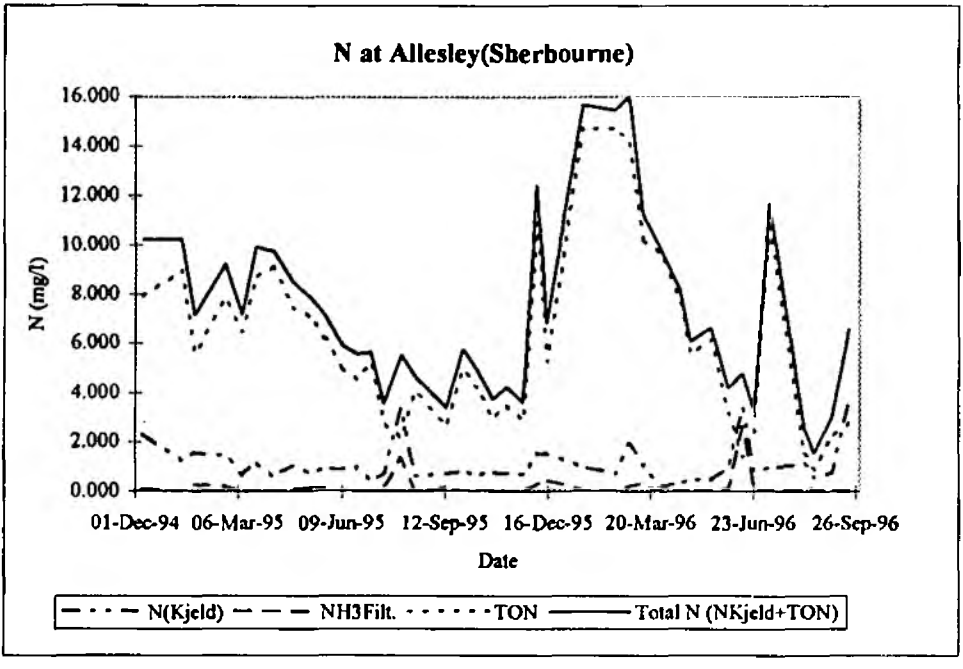


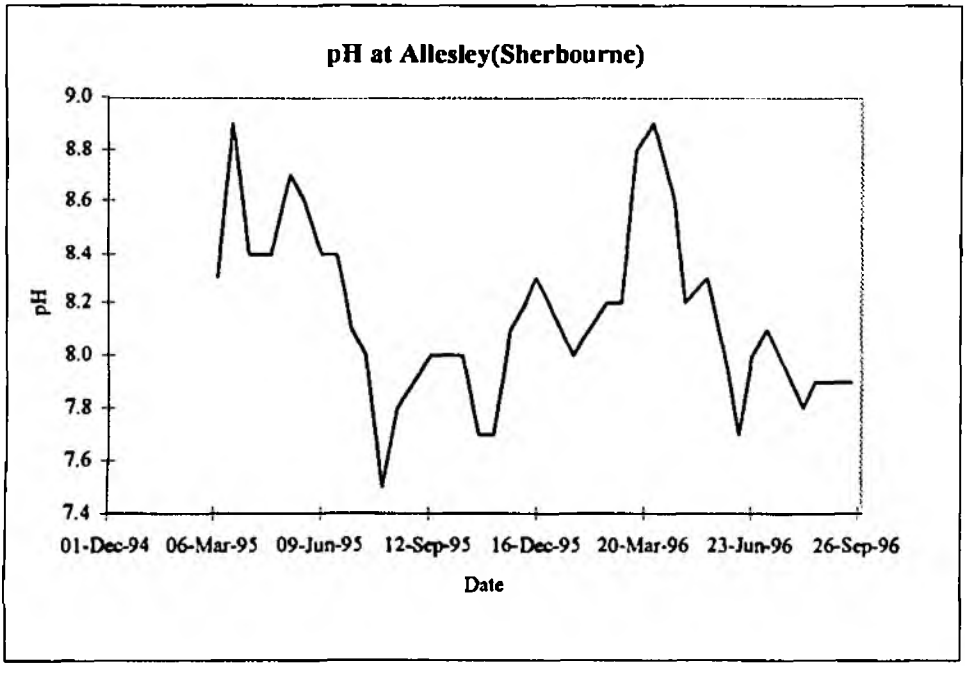


(Figure 21 cont.)

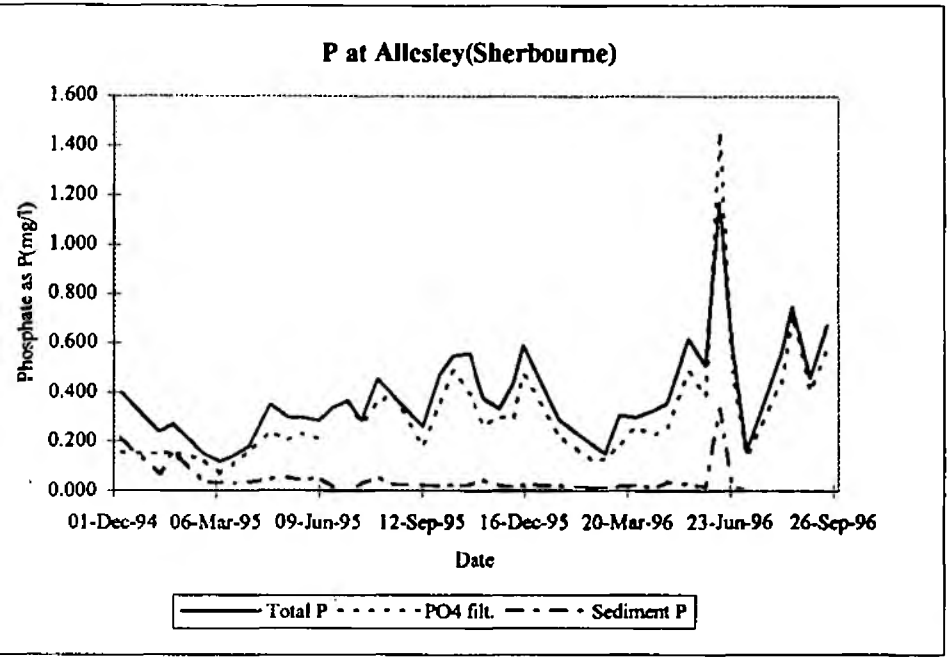
Figure 22 Allesley (Sherbourne)

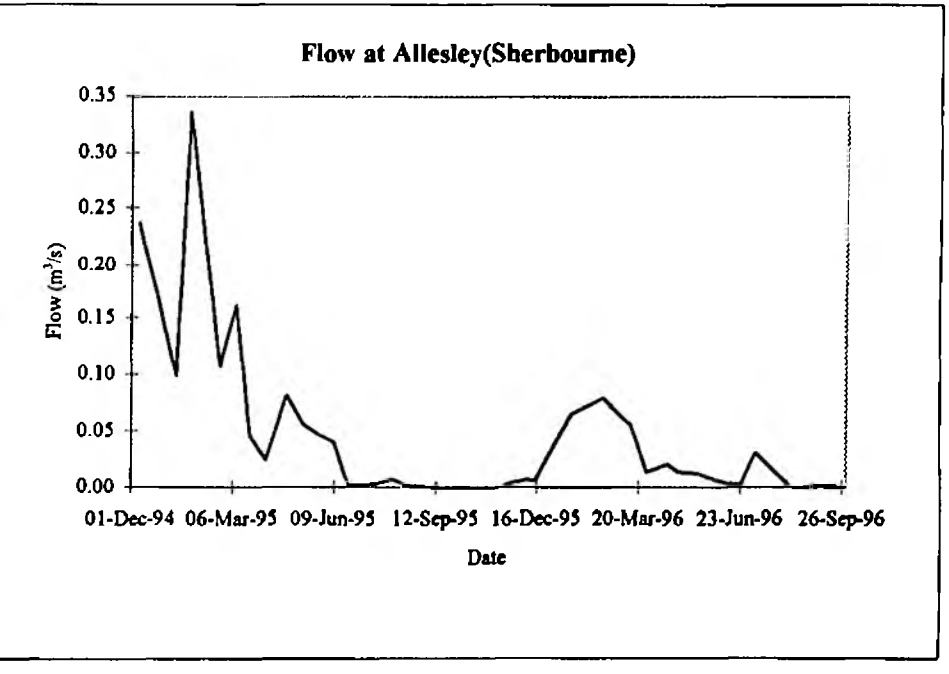


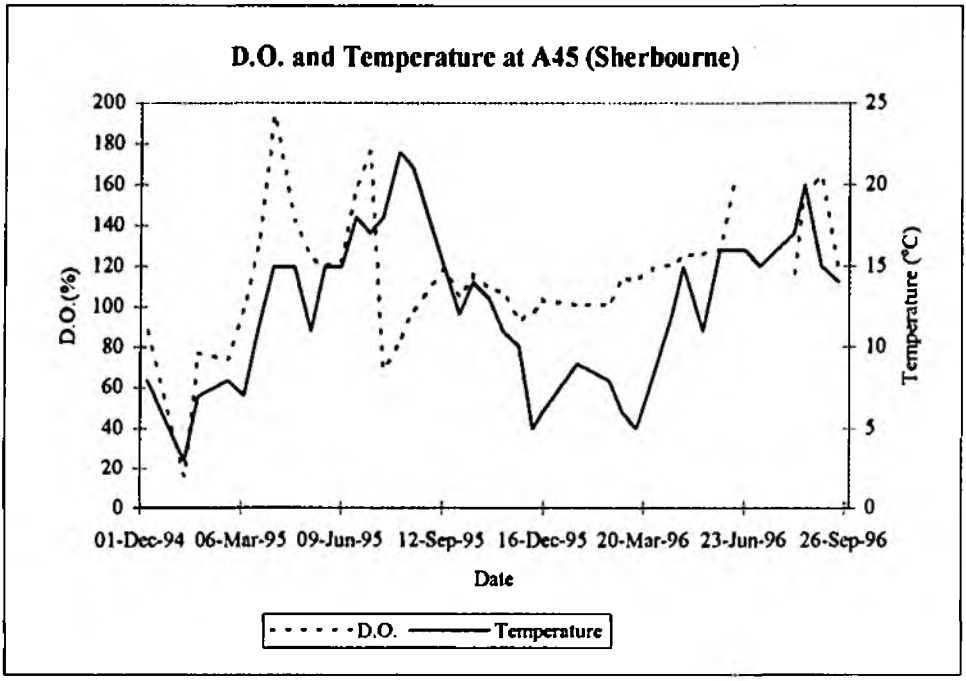

N at Allesley(Sherbourne)
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

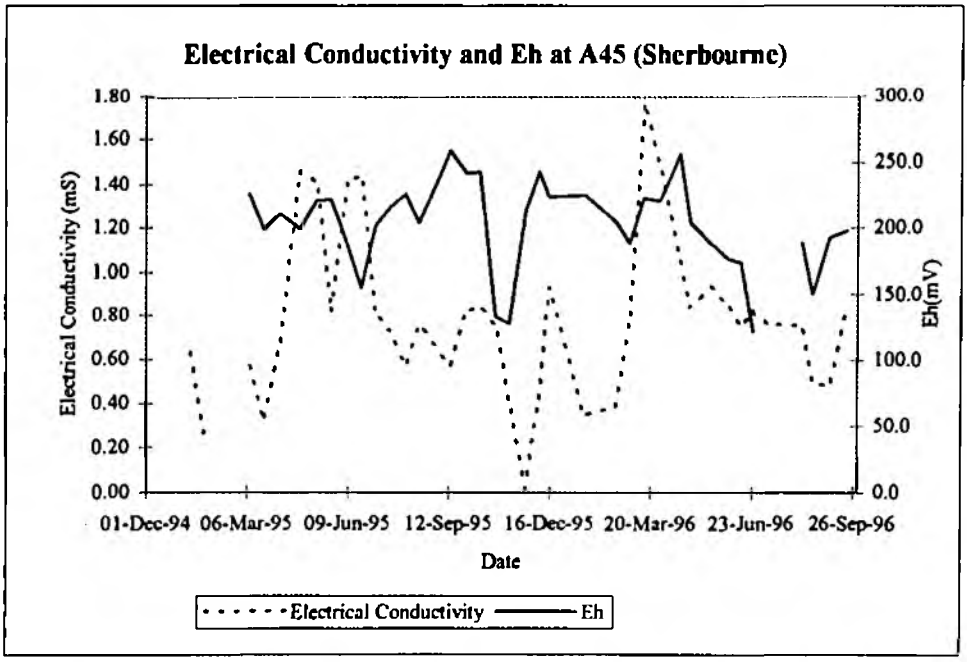

pH at Allesley(Sherbourne)
9.0
8.8
8.6
8.4
8.2
8.0
7.8
7.6
7.4
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

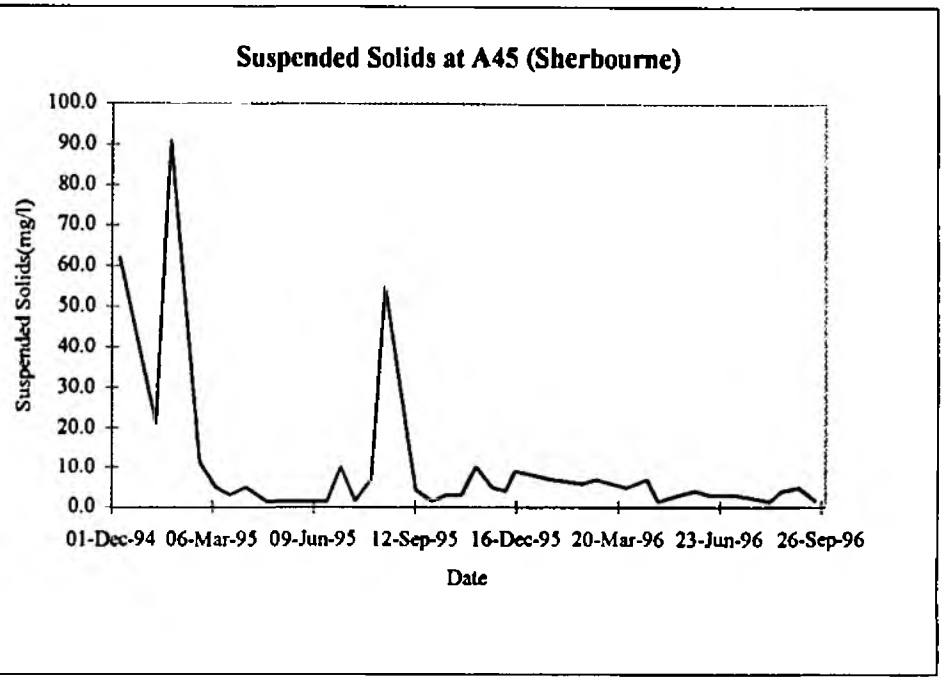
(Figure 22 cont.)






D.O. and Temperature at A45 (Sherbourne)
D.O.(%)
Temperature (°C)
200
180
160
140
120
100
80
60
40
20
0
25
20
15
10
5
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature


Electrical Conductivity and Eh at A45 (Sherbourne)
Electrical Conductivity (mS)
Eh(mV)
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
300.0
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh



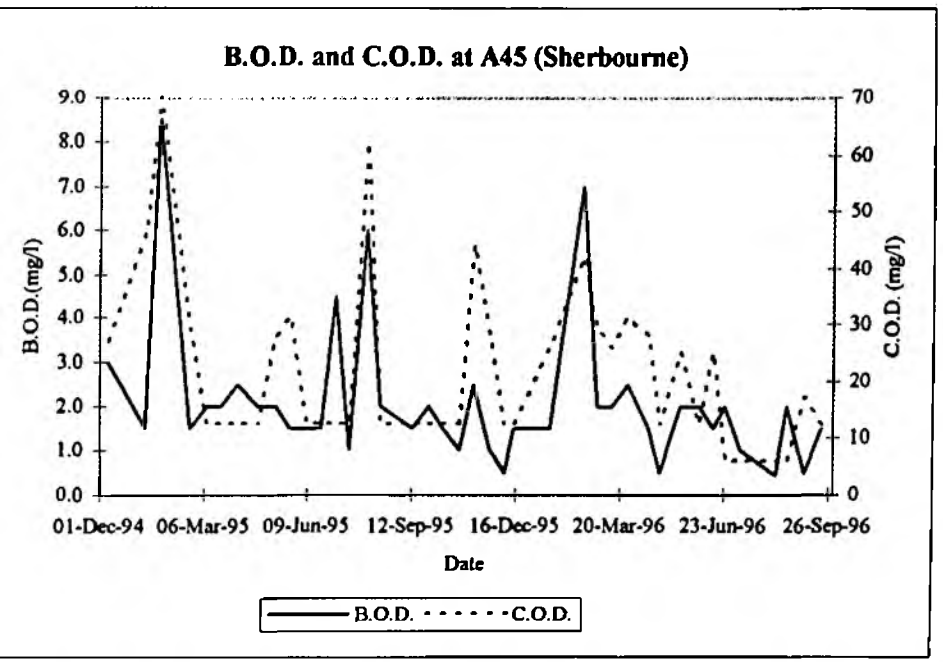
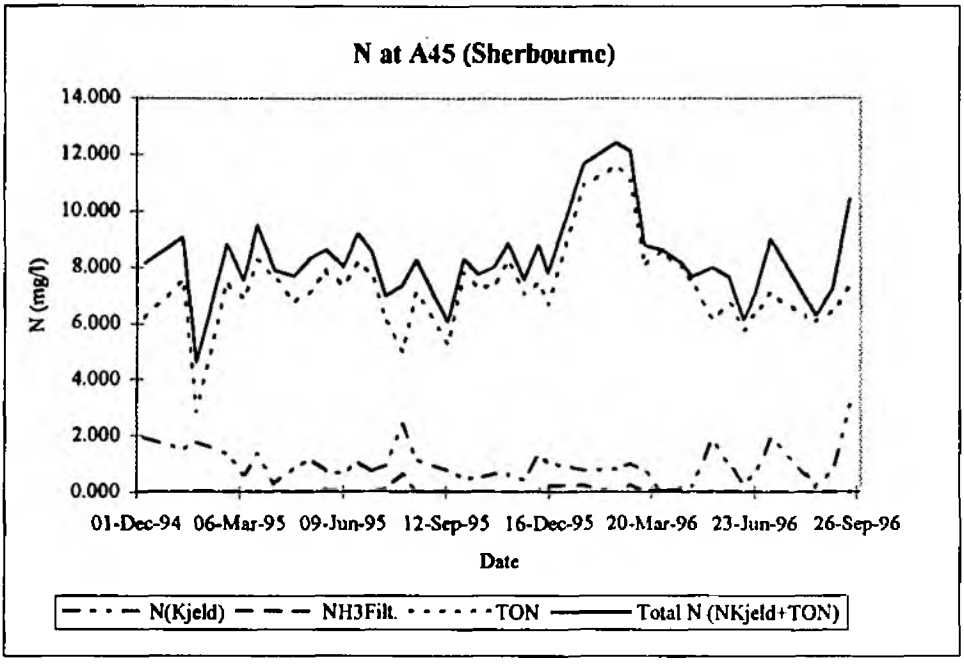
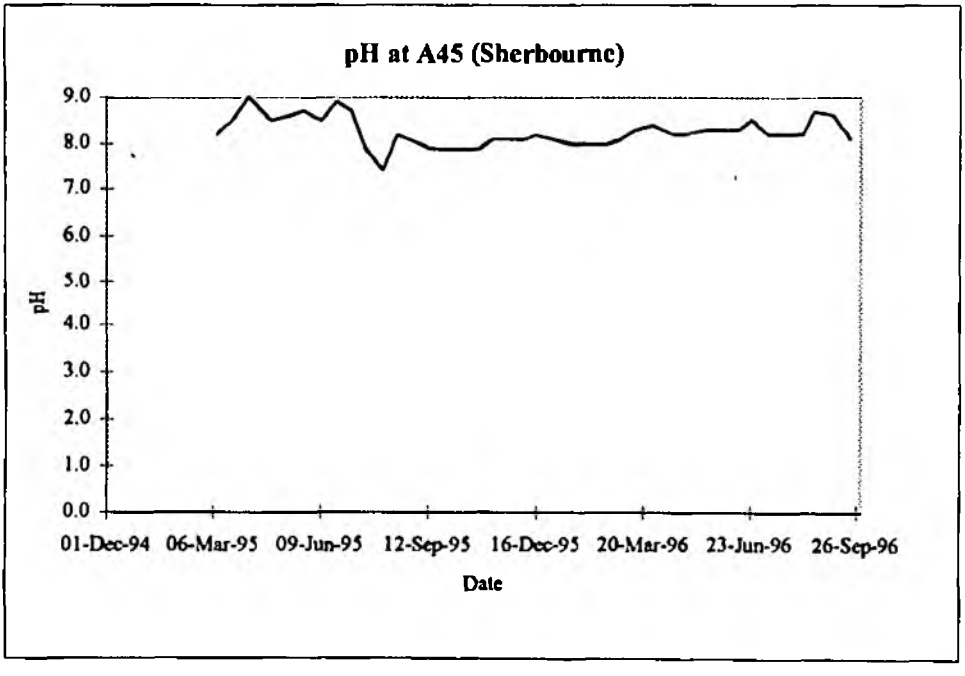
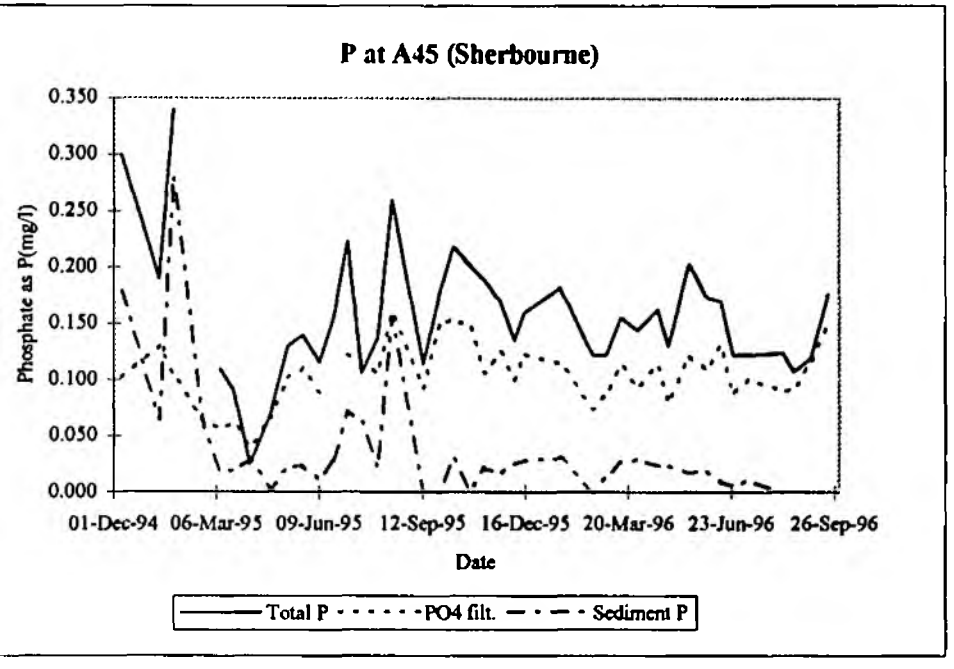
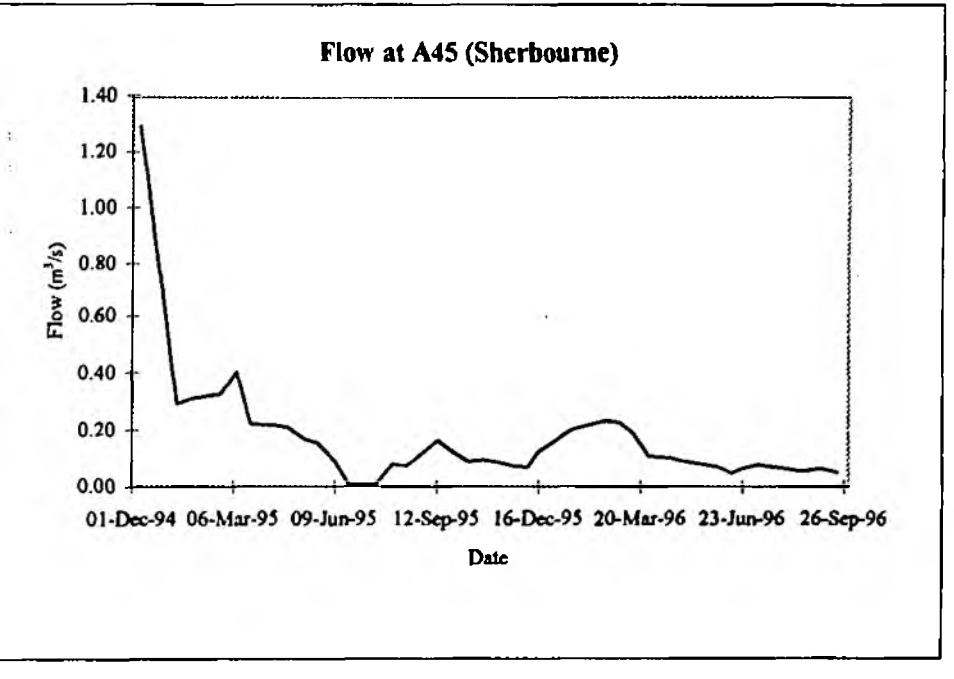


Figure 23 A45 (Sherbourne)


N at A45 (Sherbourne)
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

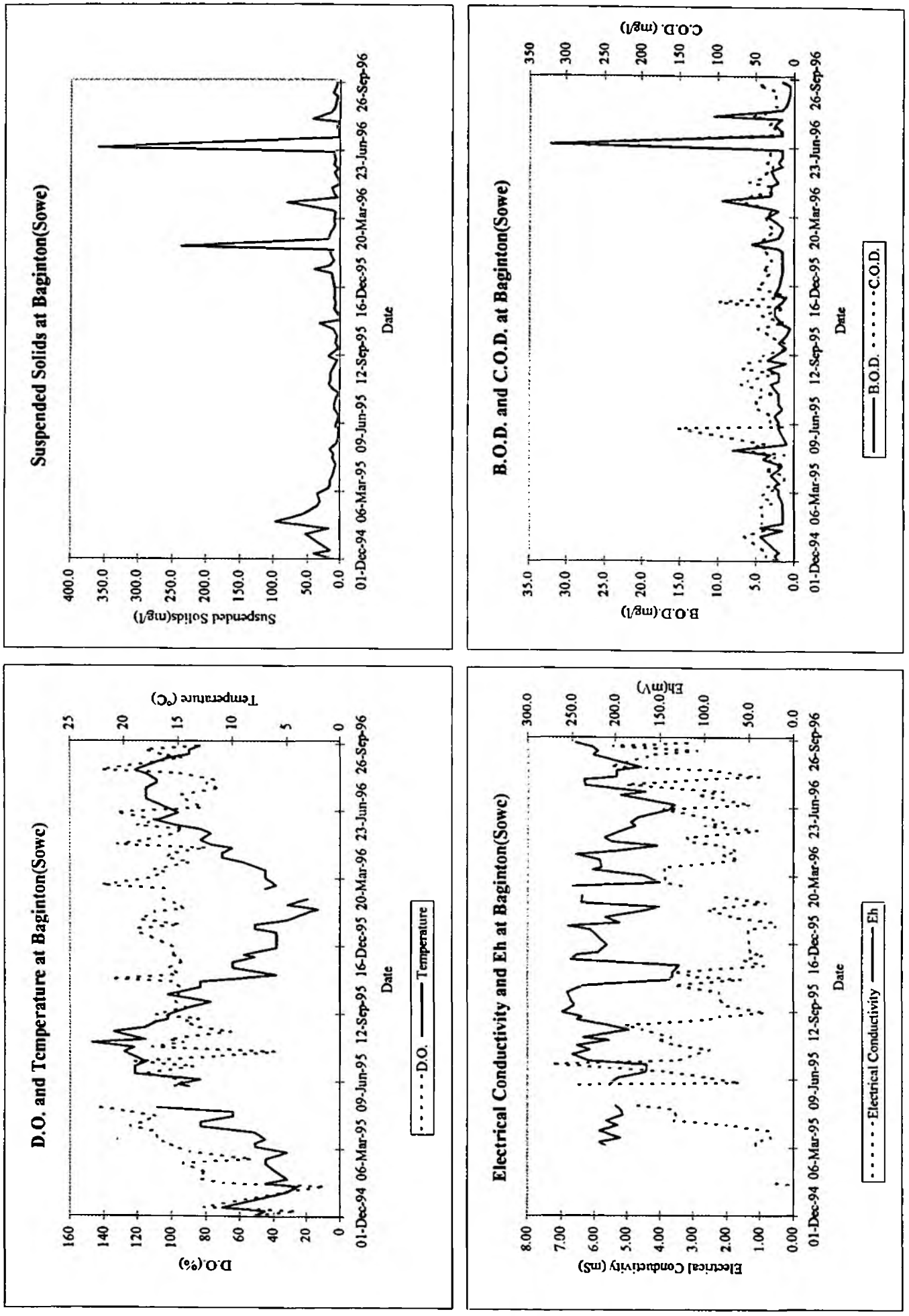

pH at A45 (Sherbourne)
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

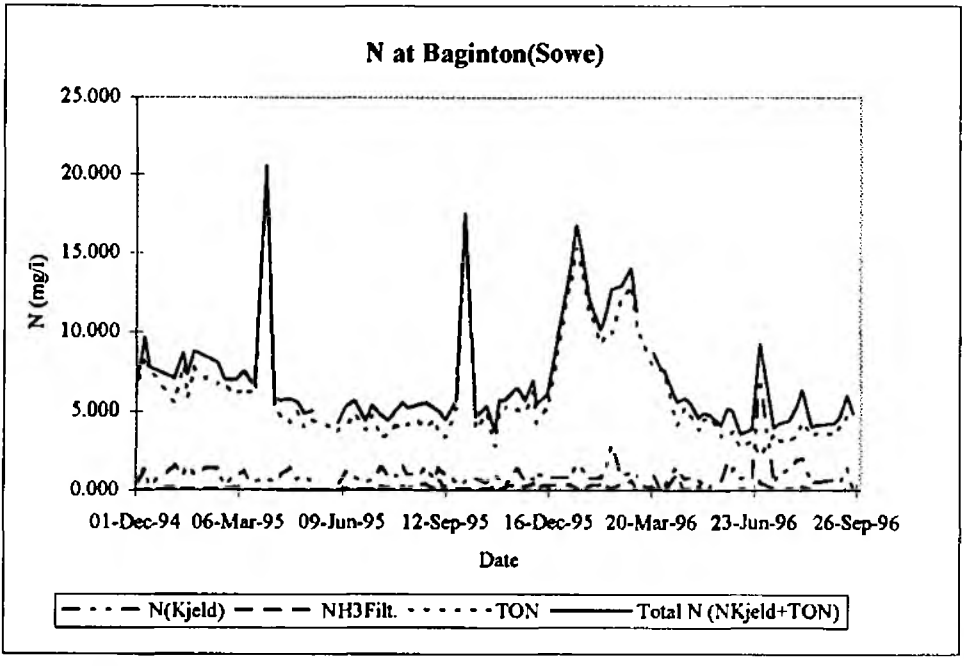


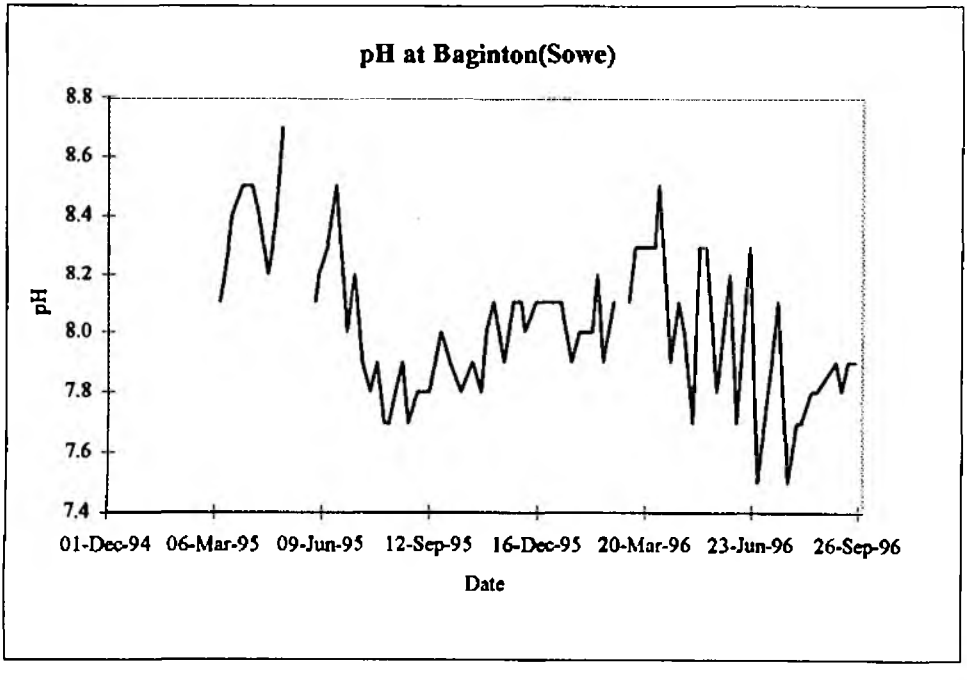


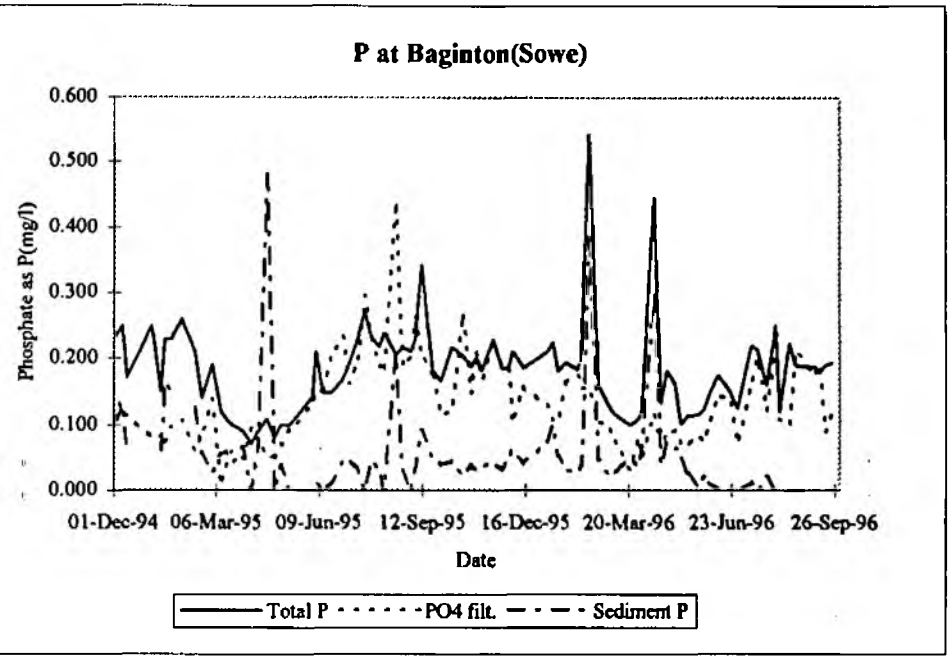
(Figure 23 cont.)

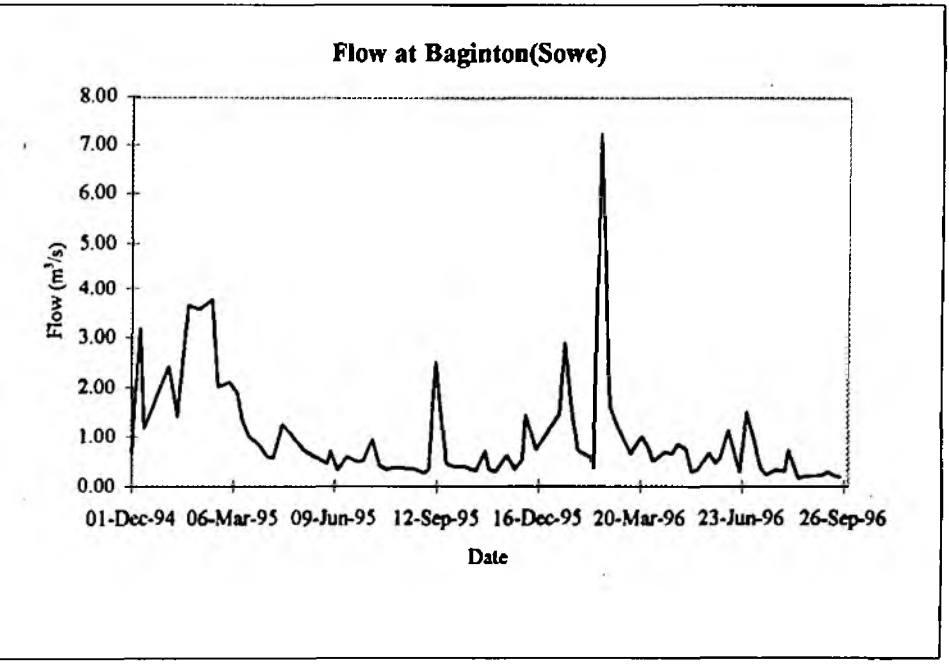
Figure 24 Baginton (Sowe)




N at Baginton(Sowe)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

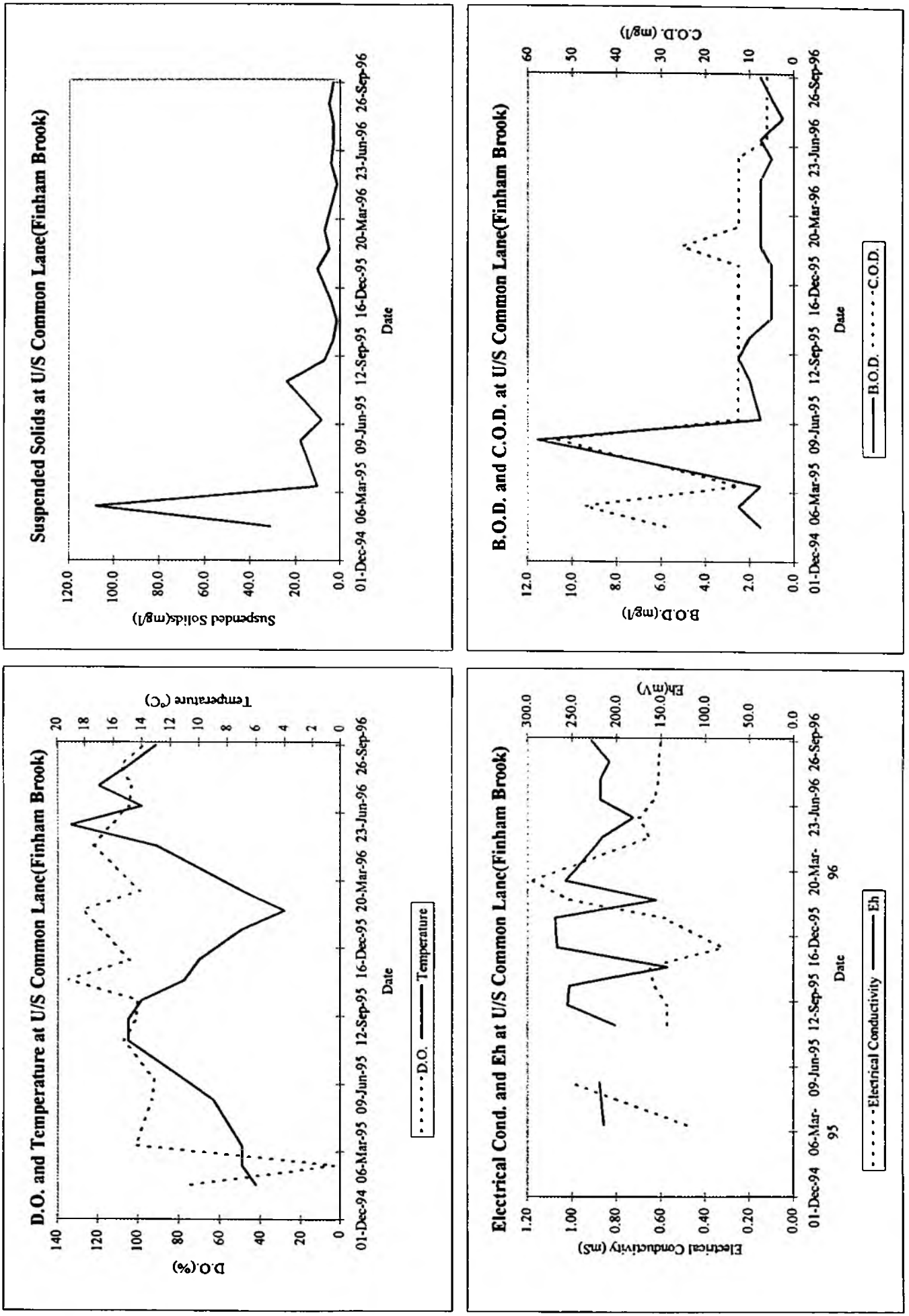

pH at Baginton(Sowe)
8.8
8.6
8.4
8.2
8.0
7.8
7.6
7.4
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

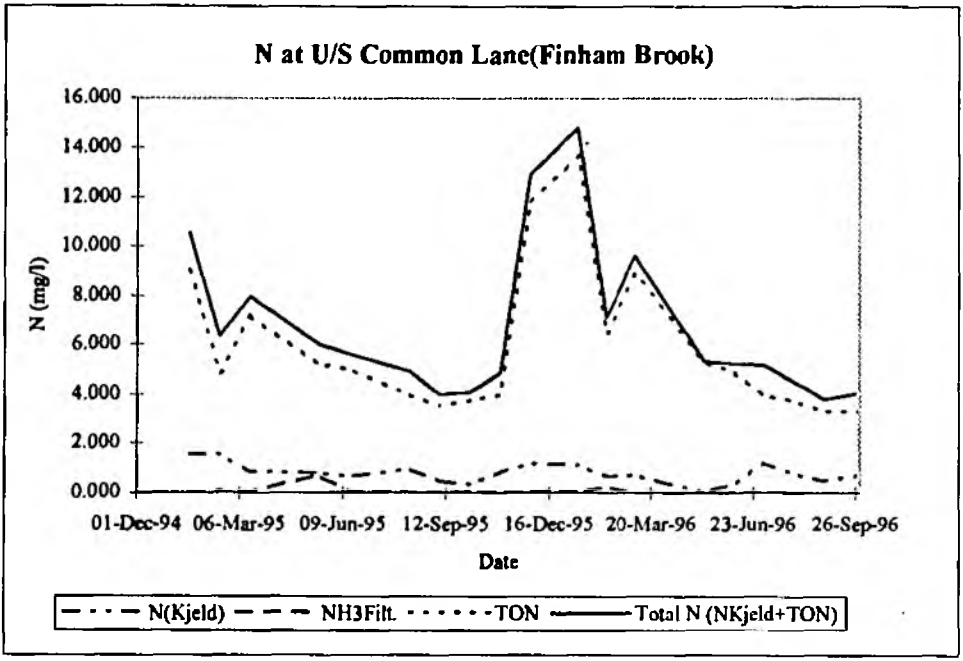


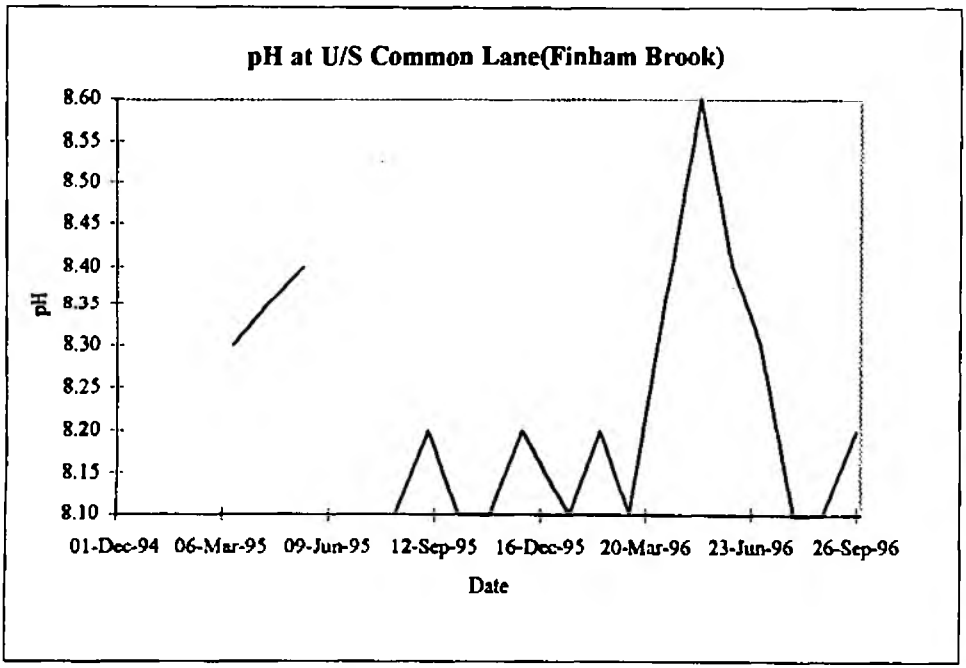


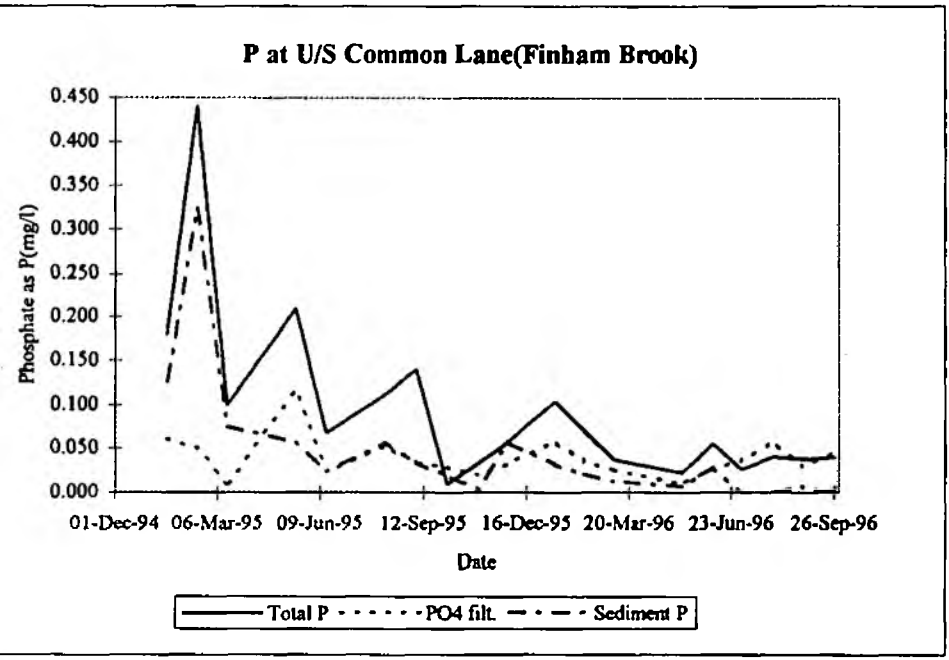
(Figure 24 cont.)

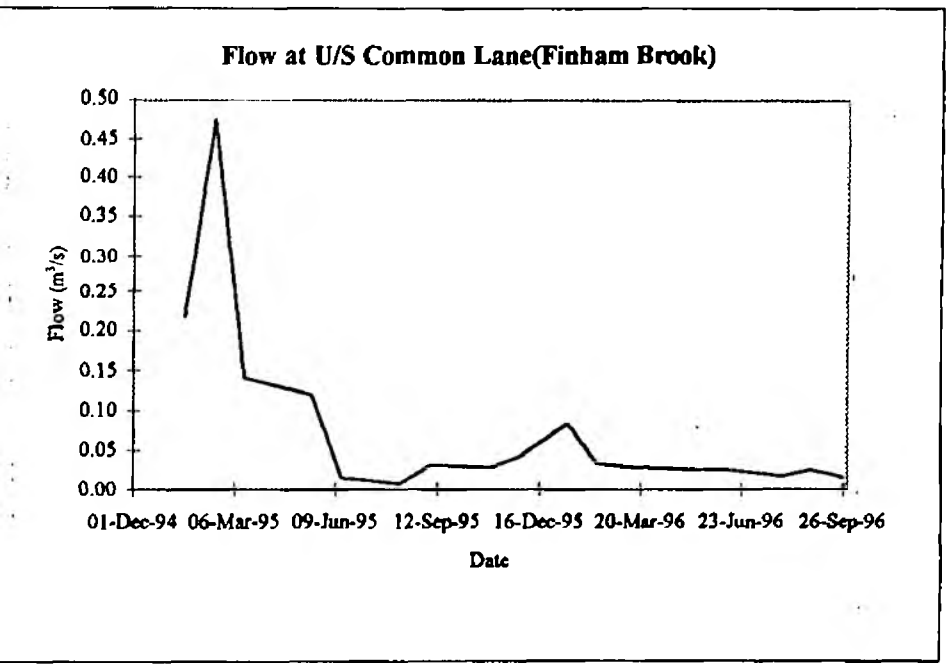
Figure 25 U/S Common Lane (Finham Brook)




N at U/S Common Lane(Finham Brook)
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

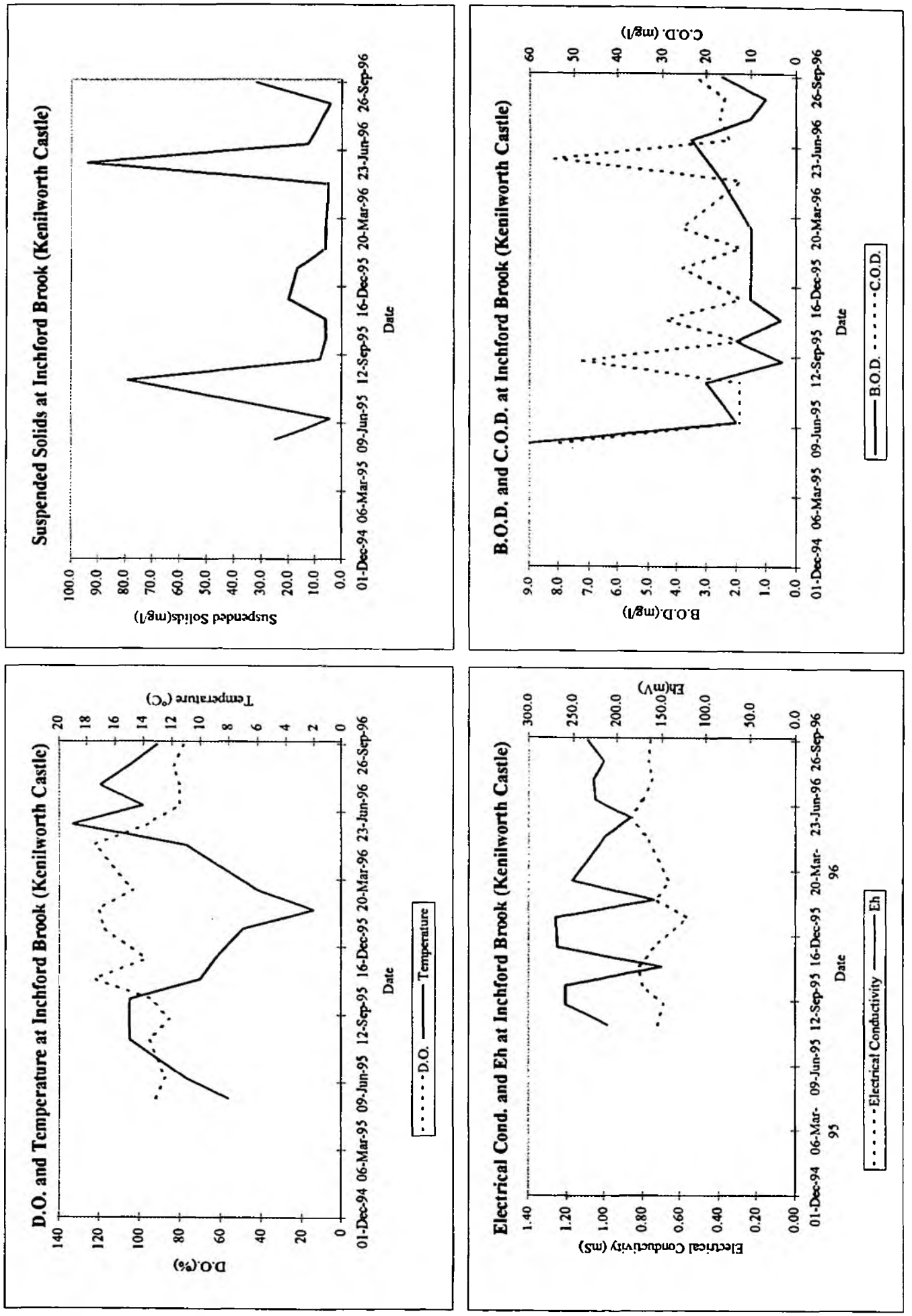

pH at U/S Common Lane(Finham Brook)
8.60
8.55
8.50
8.45
8.40
8.35
8.30
8.25
8.20
8.15
8.10
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

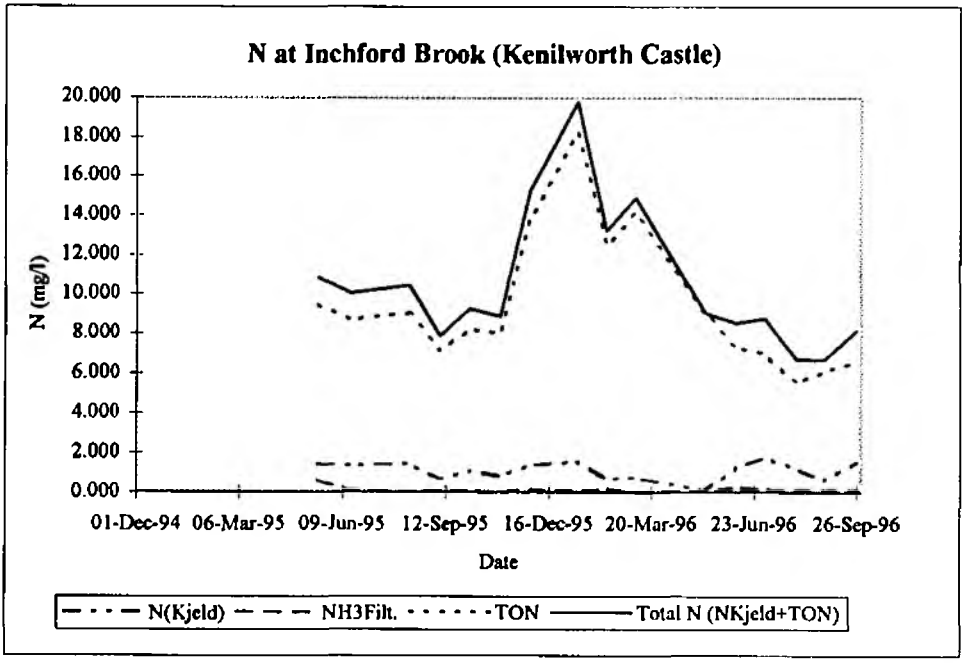


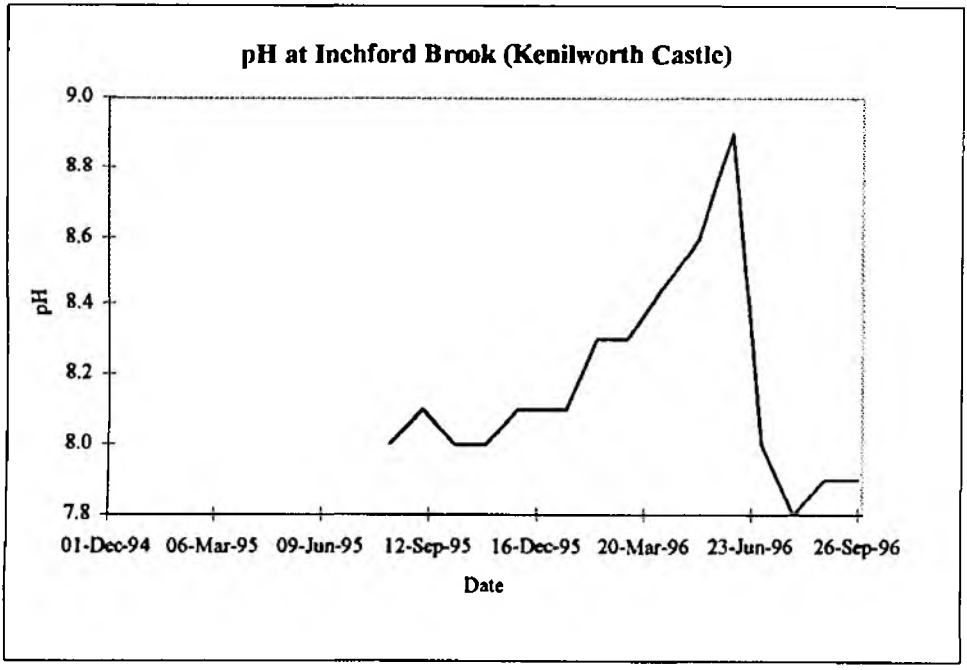


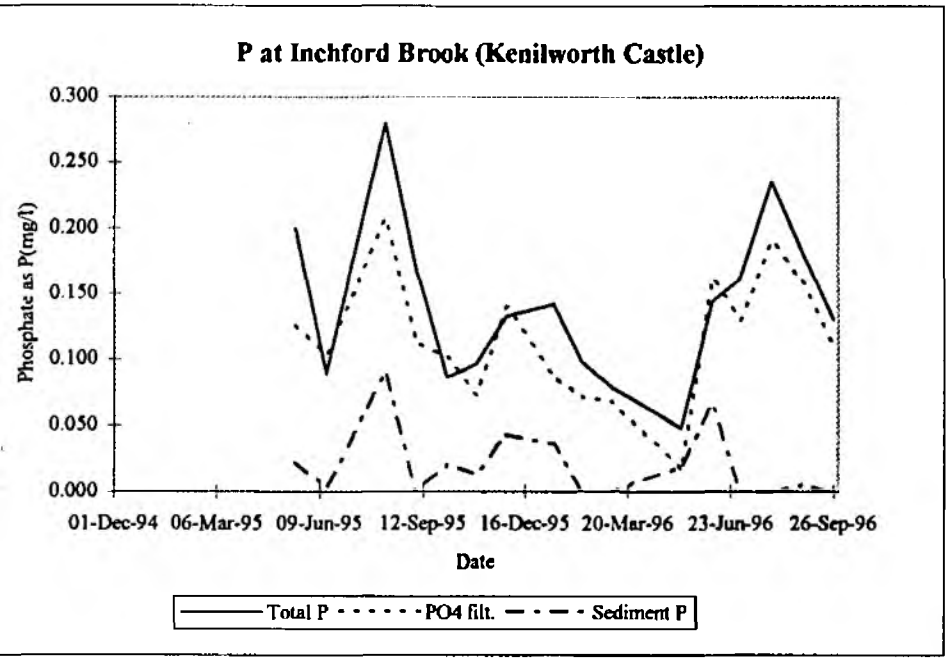
(Figure 25 cont.)

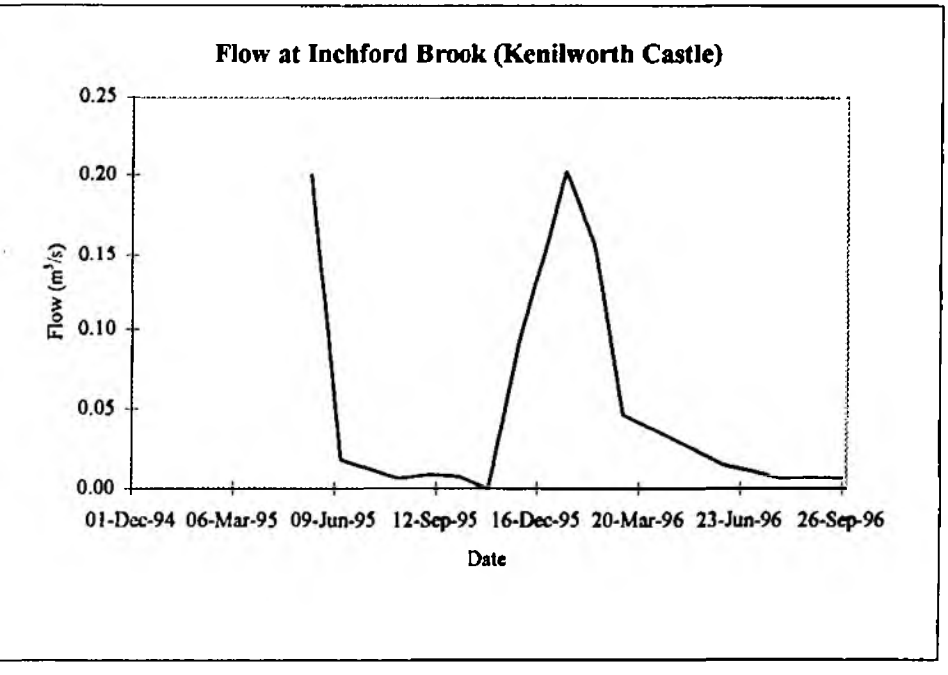
Figure 26 Inchford Brook (Kenilworth Castle)




N at Inchford Brook (Kenilworth Castle)
20.000
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

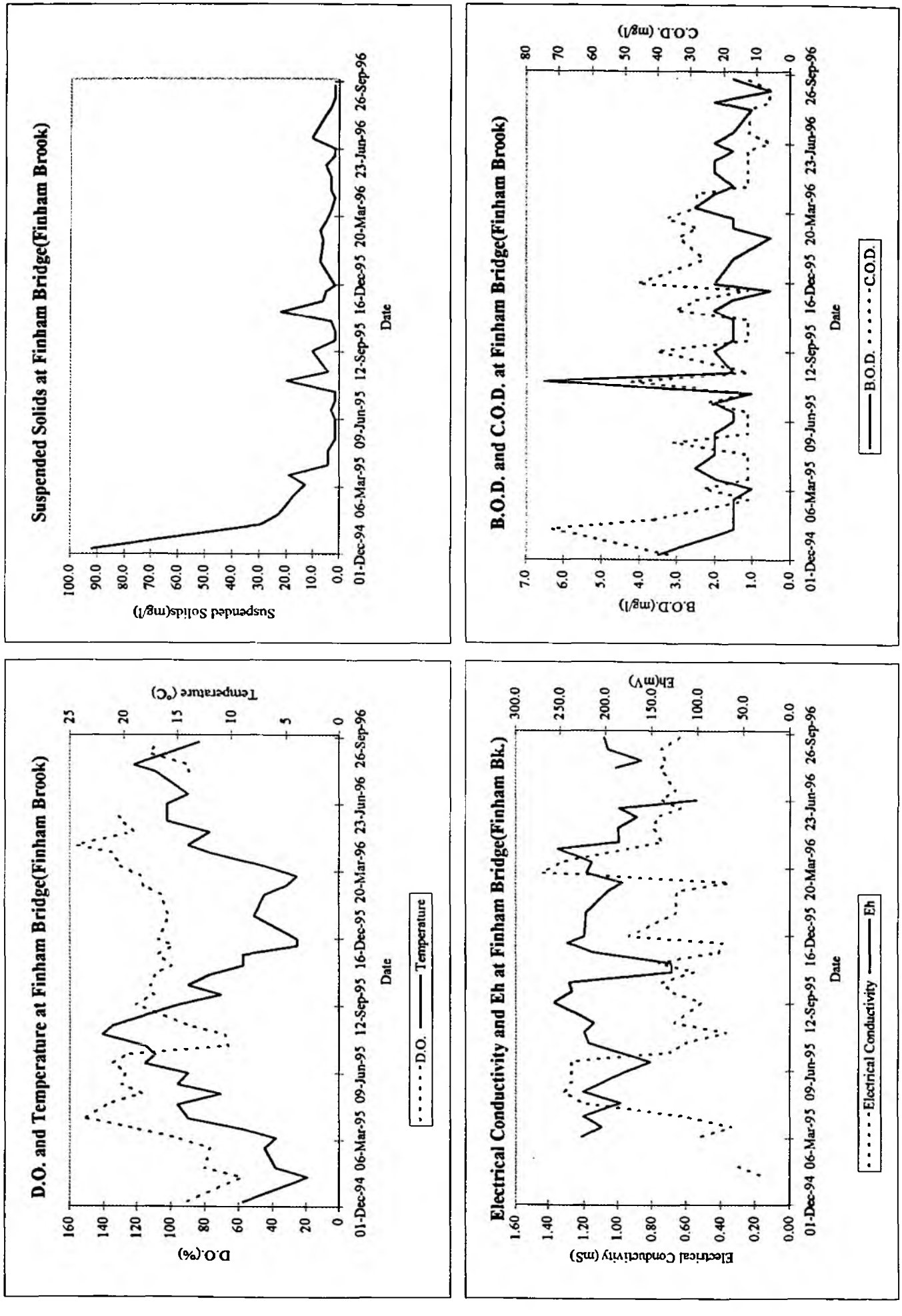

pH at Inchford Brook (Kenilworth Castle)
9.0
8.8
8.6
8.4
8.2
8.0
7.8
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

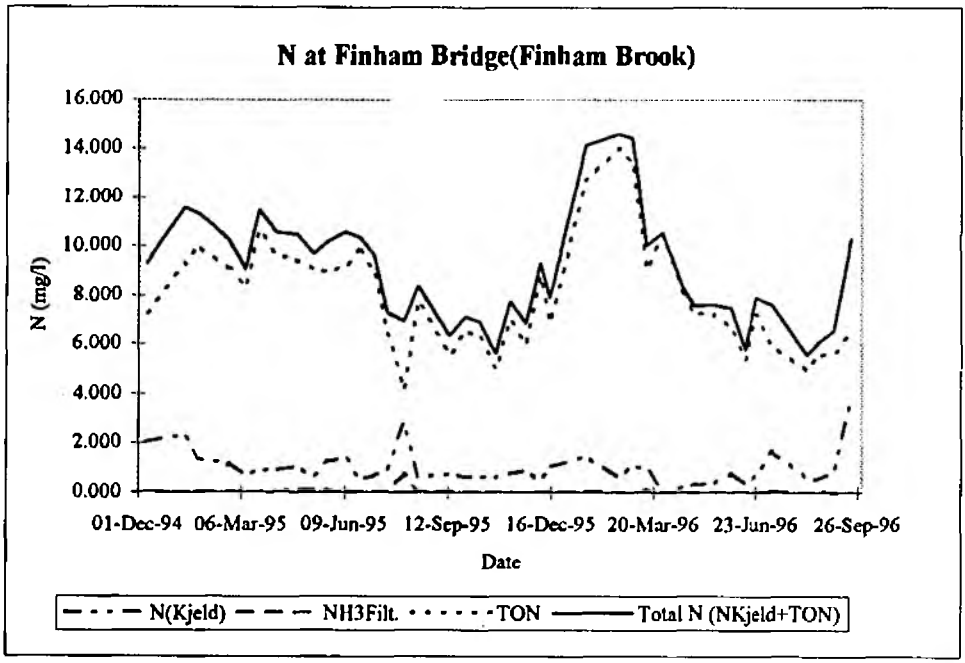


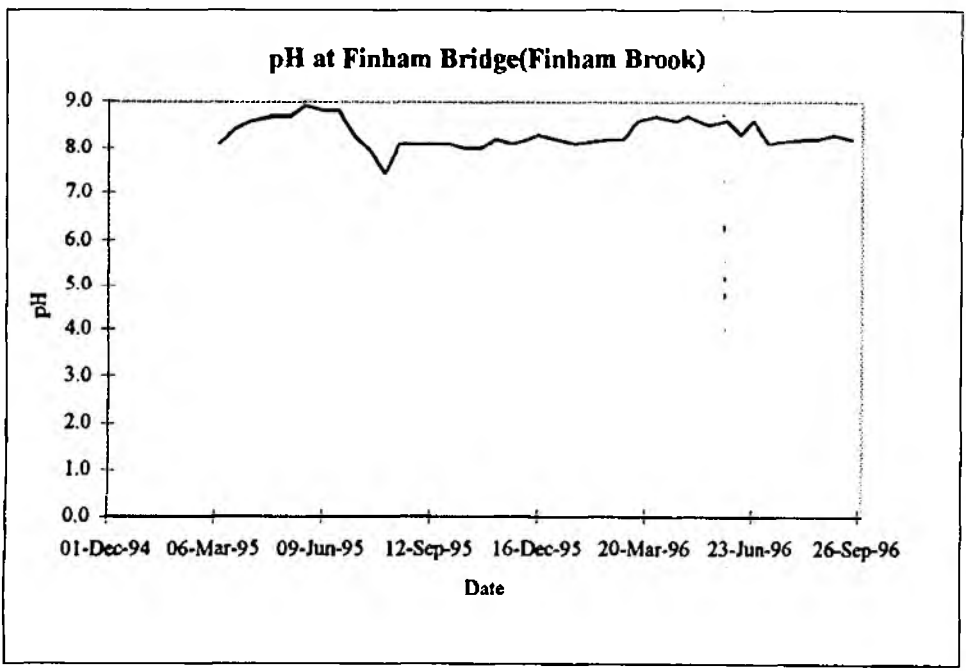


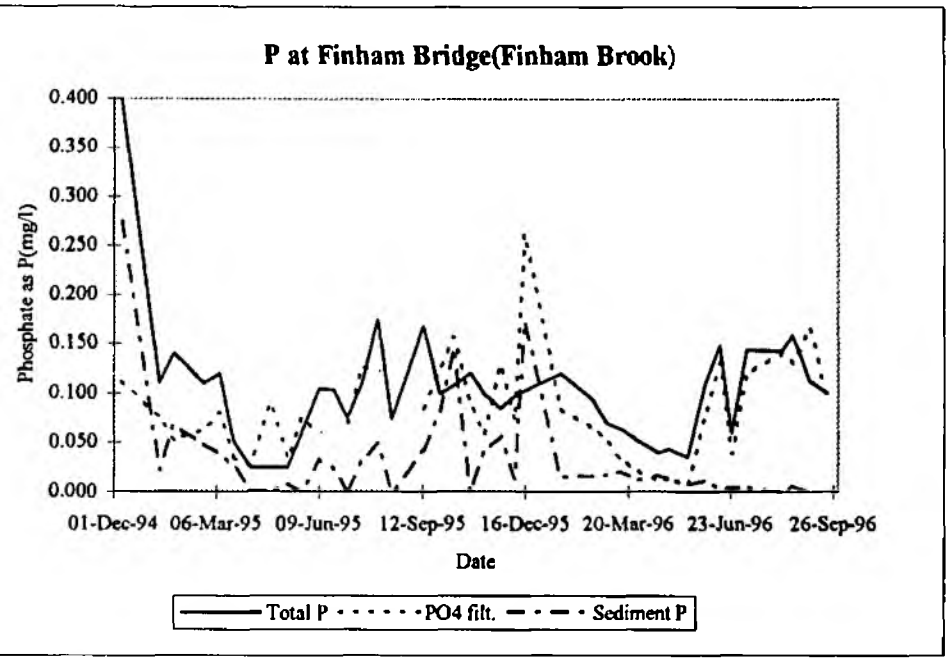
(Figure 26 cont.)

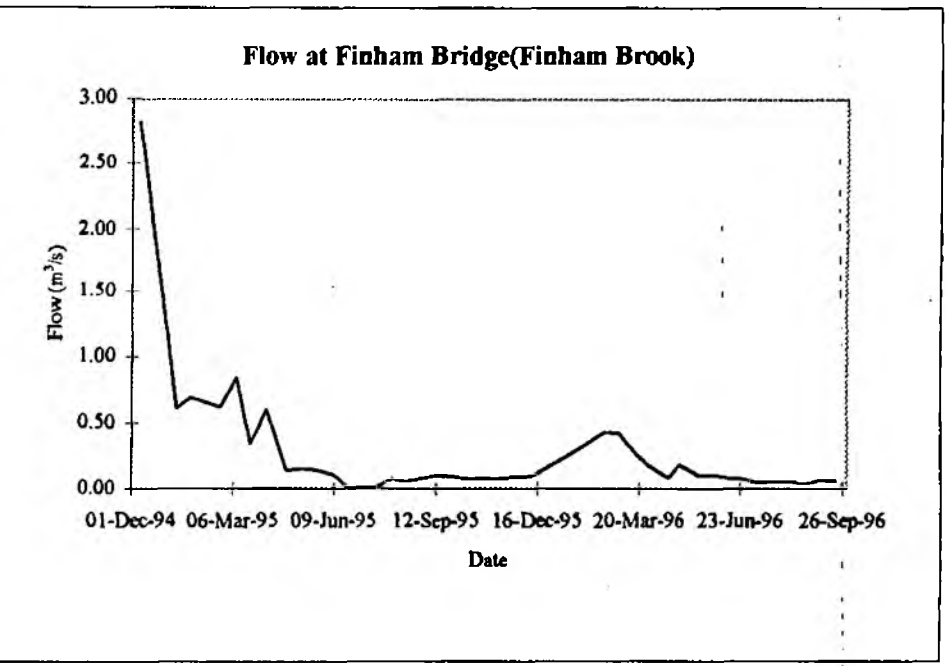
Figure 27 Finham Bridge (Finham Brook)




N at Finham Bridge(Finham Brook)
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

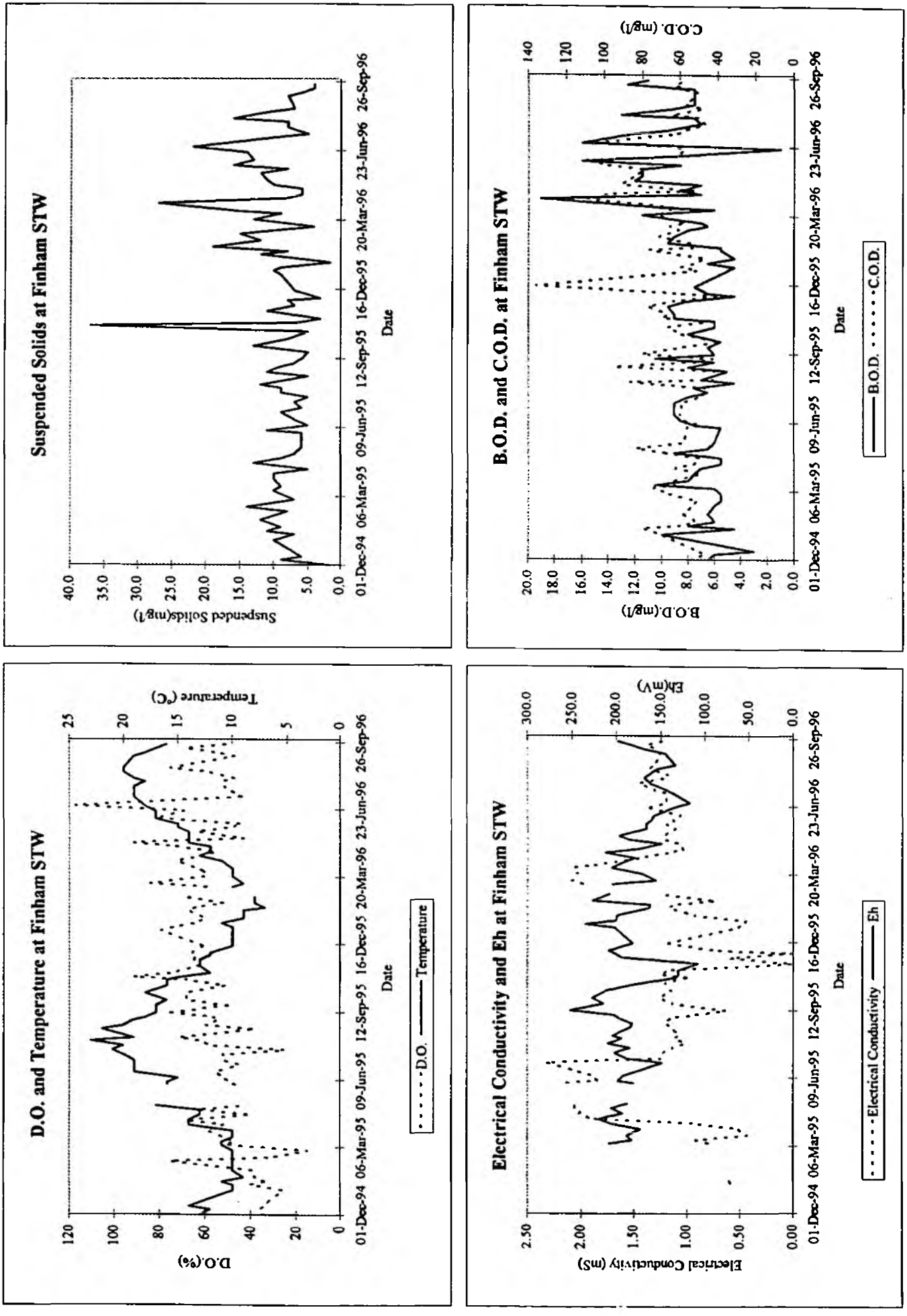

pH at Finham Bridge(Finham Brook)
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

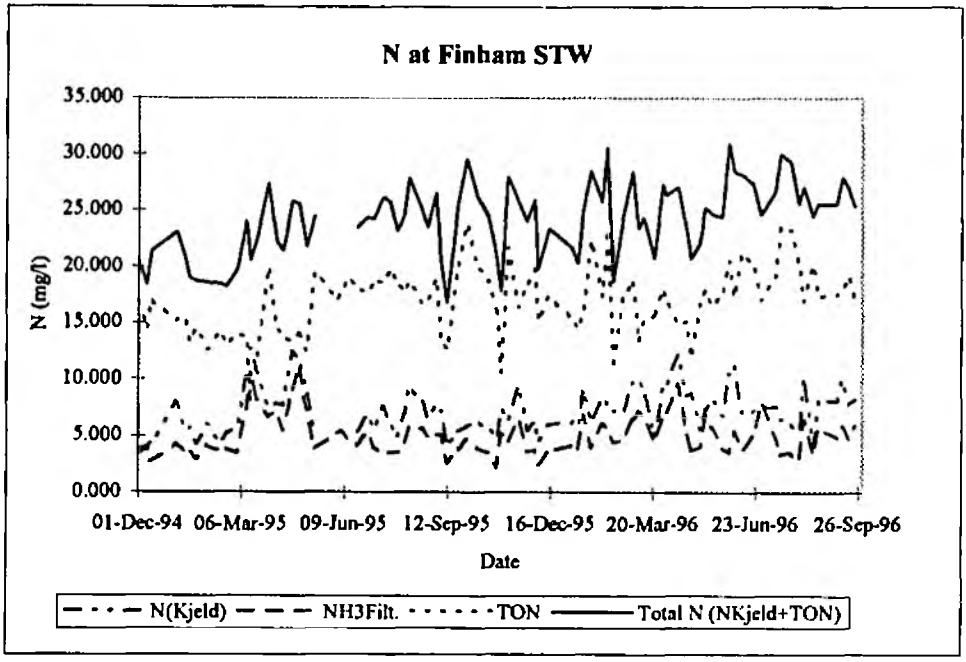


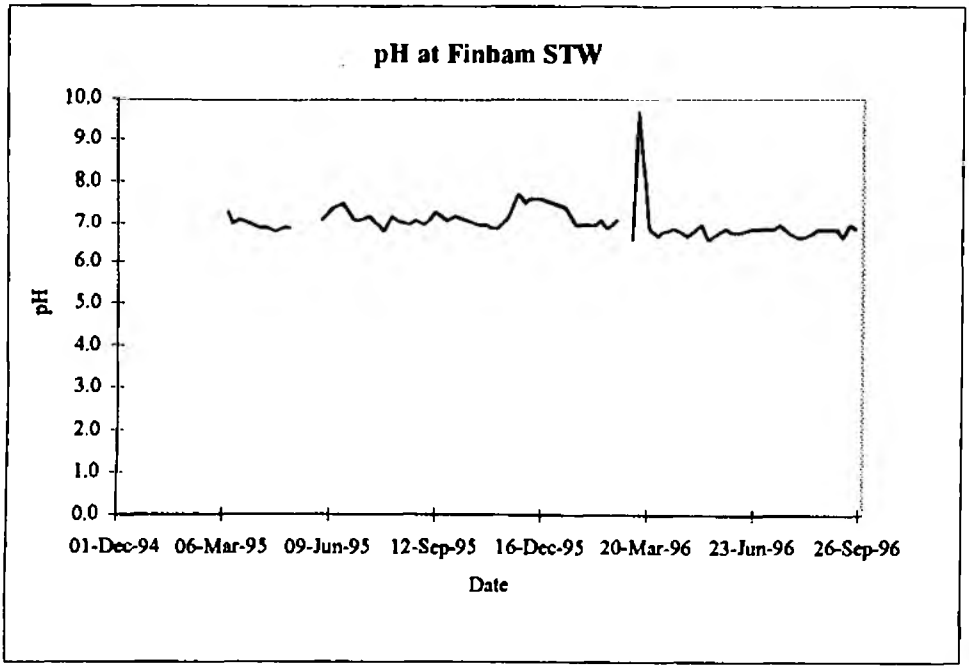


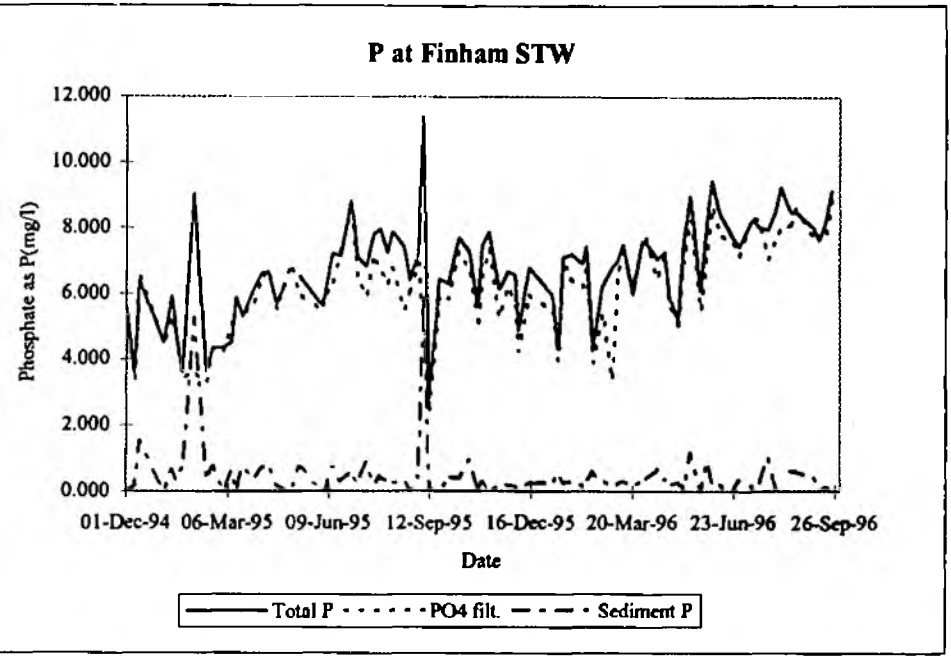
(Figure 27 cont.)

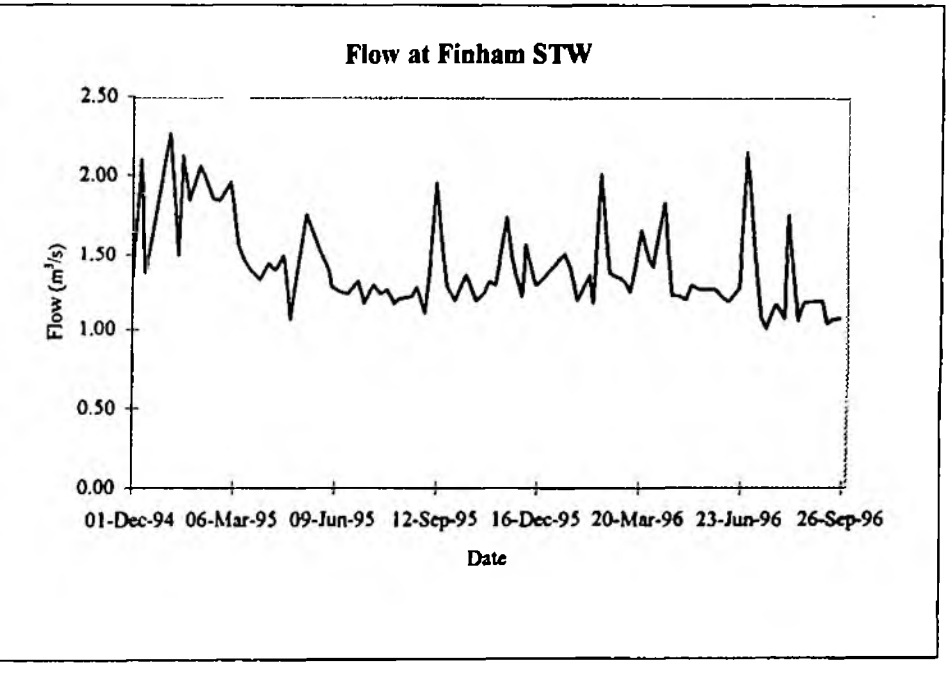
Figure 28 Finham STW




N at Finham STW
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

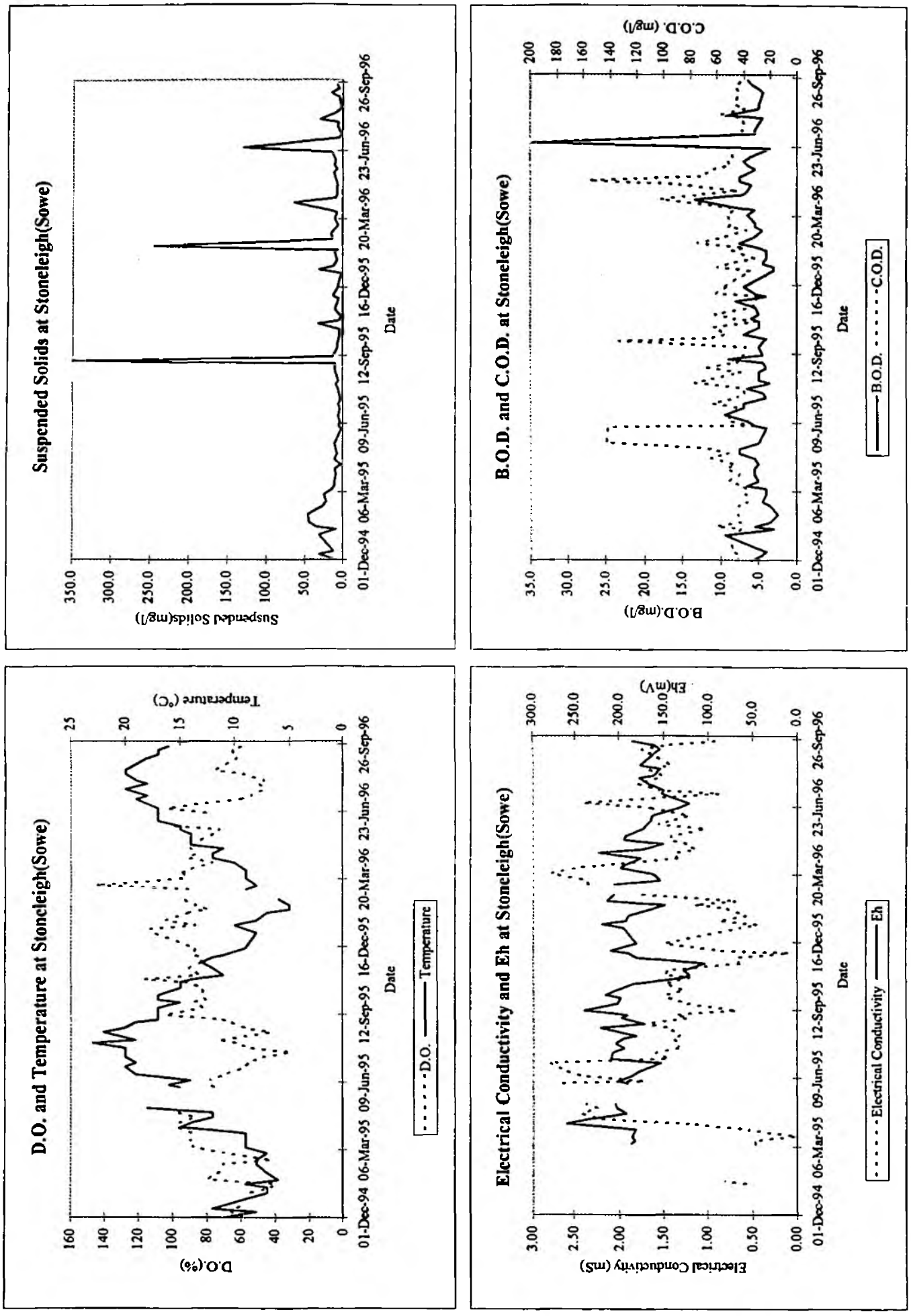

pH at Finham STW
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

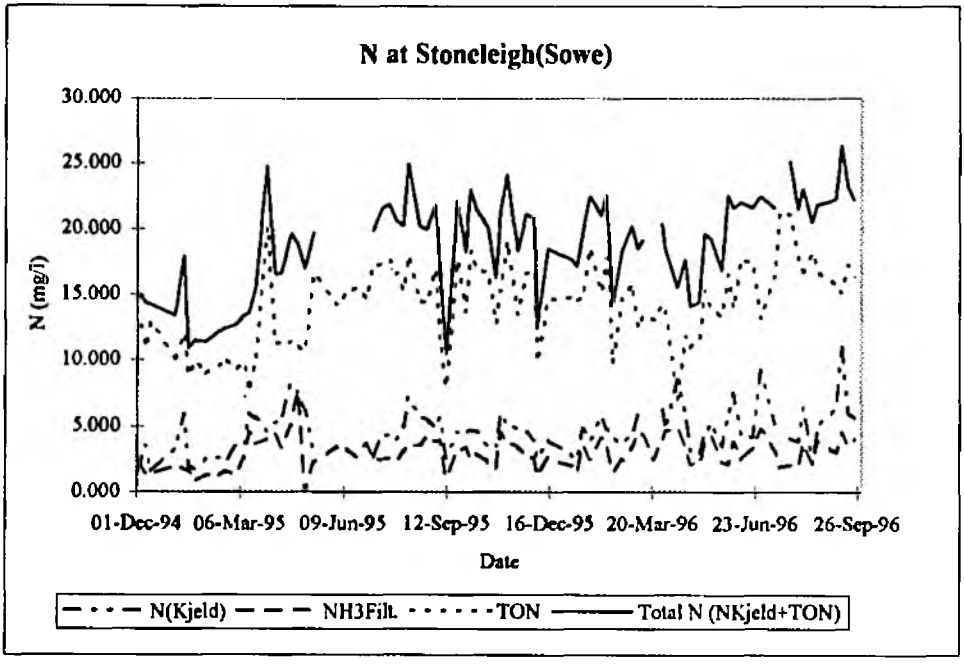


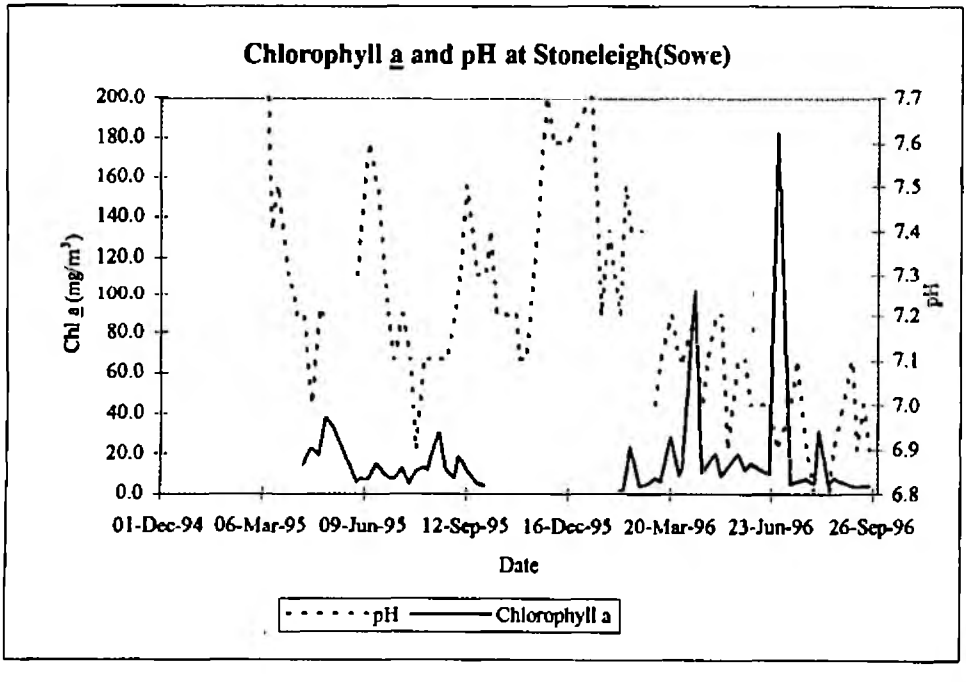


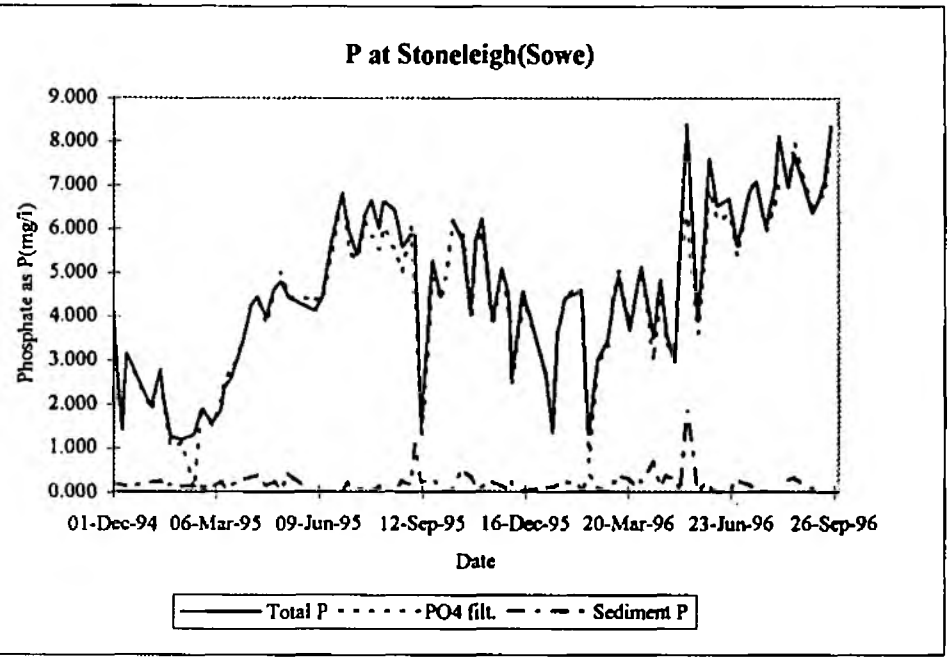
(Figure 28 cont.)

Figure 29 Stoneleigh (Sowe)




N at Stoneleigh(Sowe)
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)


Chlorophyll a and pH at Stoneleigh(Sowe)
200.0
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
Chl a (mg/m³)
7.7
7.6
7.5
7.4
7.3
7.2
7.1
7.0
6.9
6.8
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
pH
Chlorophyll a



(Figure 29 cont.)

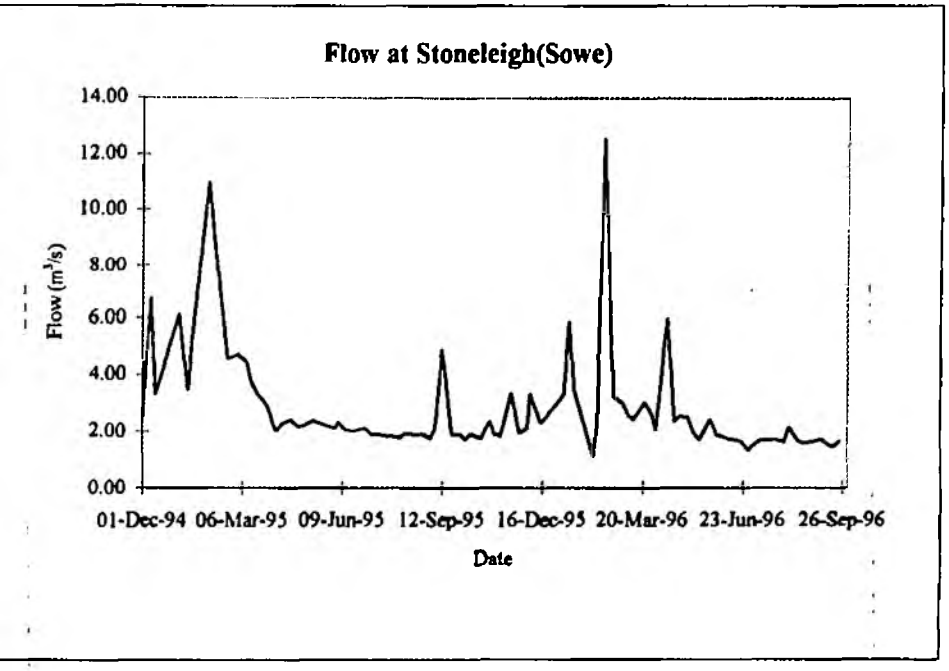
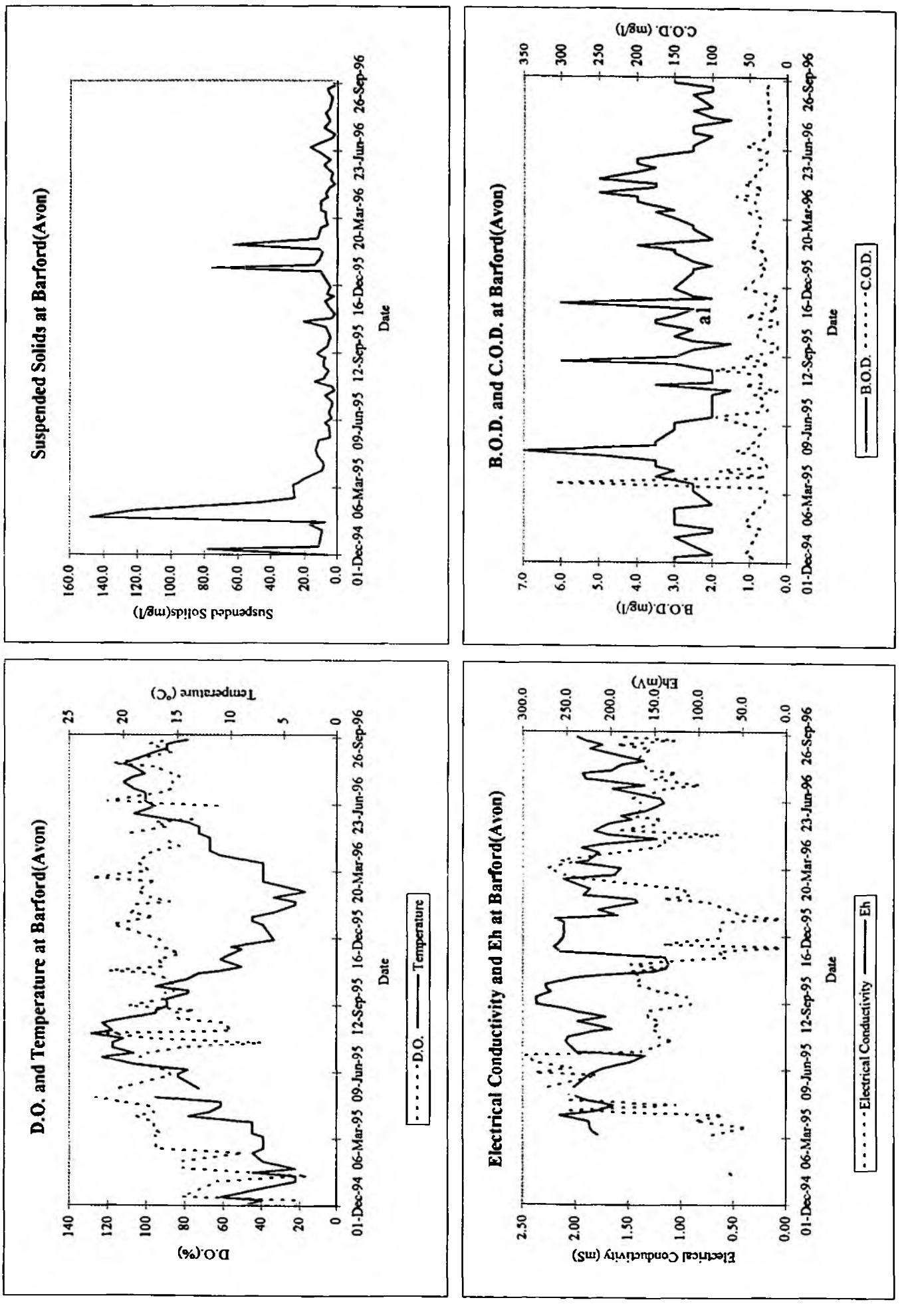
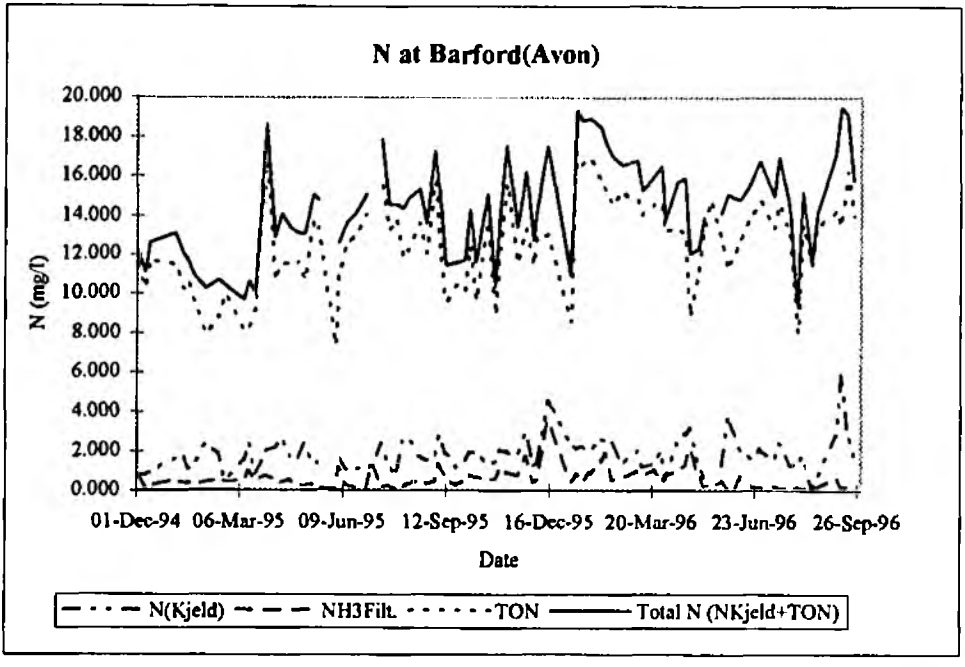
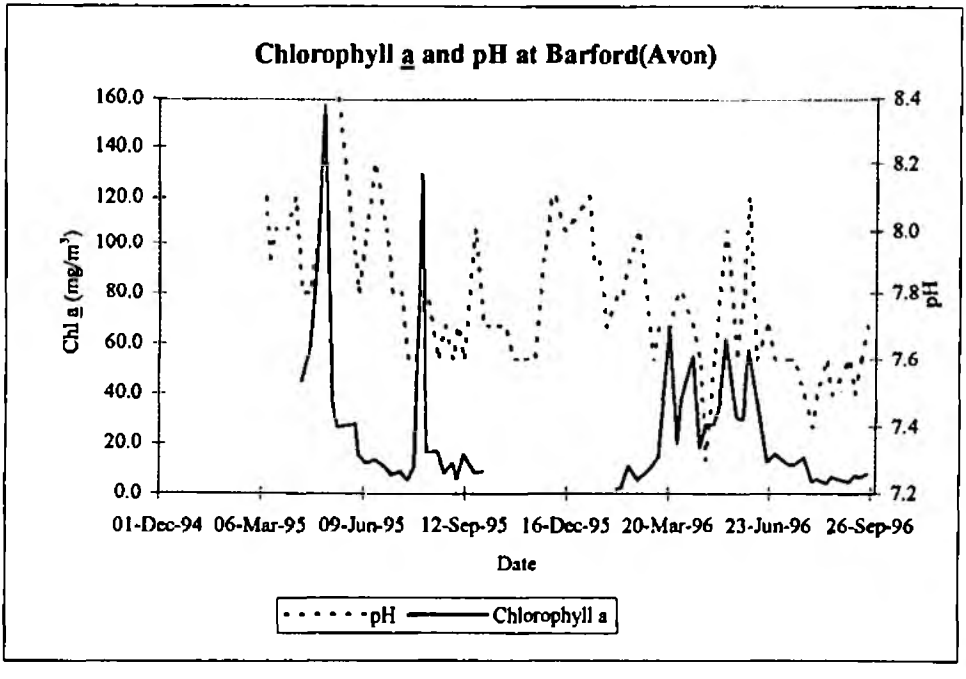
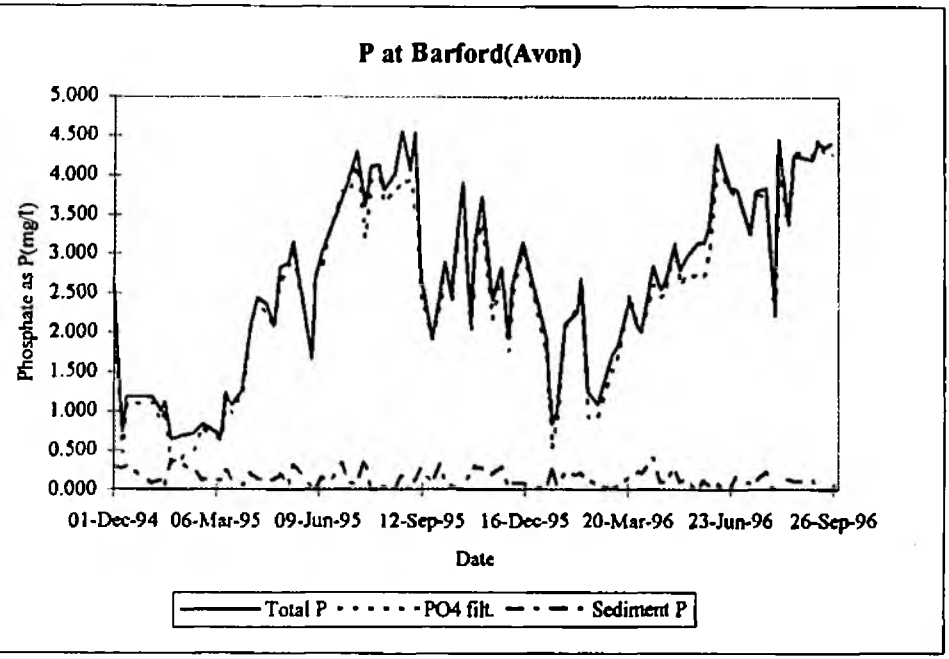


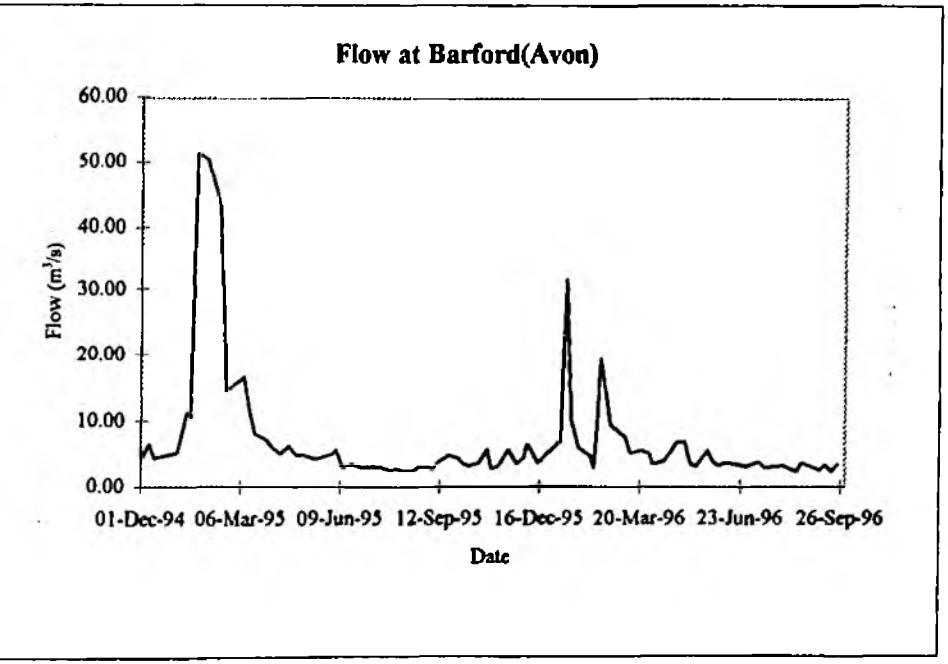
Figure 30 Barford (Avon)




N at Barford(Avon)
20.000
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
N(Kjeld) NH3Filt. TON Total N (NKjeld+TON)


Chlorophyll a and pH at Barford(Avon)
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
Chl a (mg/m³)
8.4
8.2
8.0
7.8
7.6
7.4
7.2
pH
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
pH Chlorophyll a



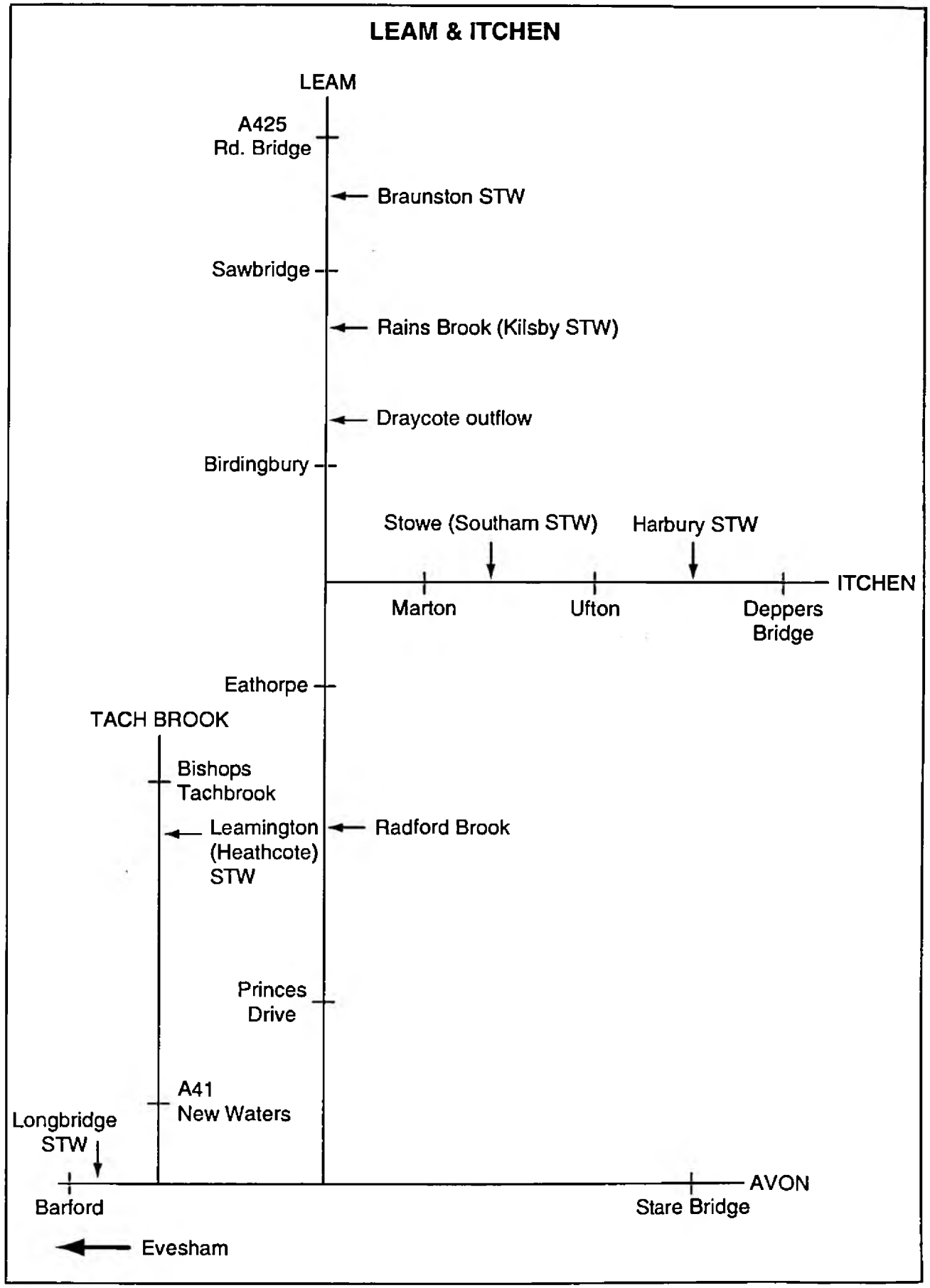


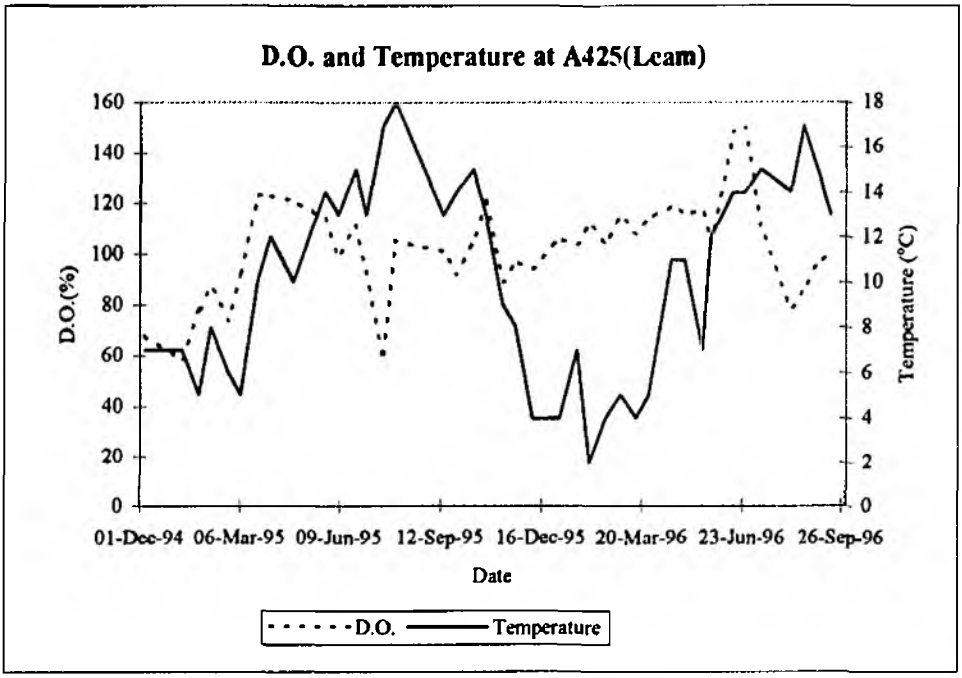
(Figure 30 cont.)

Appendix 1c

The River Leam and its sub-catchments

Figure 31 Site Location Map for the river Leam and its sub-catchments




D.O. and Temperature at A425(Leam)
D.O.(%)
Temperature (°C)
160
140
120
100
80
60
40
20
0
18
16
14
12
10
8
6
4
2
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature

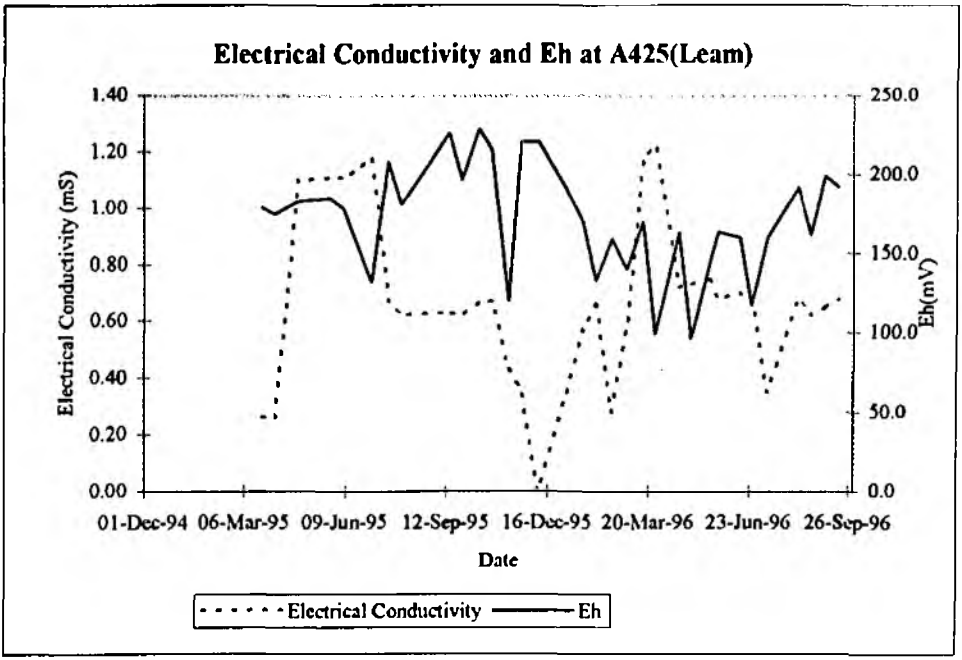
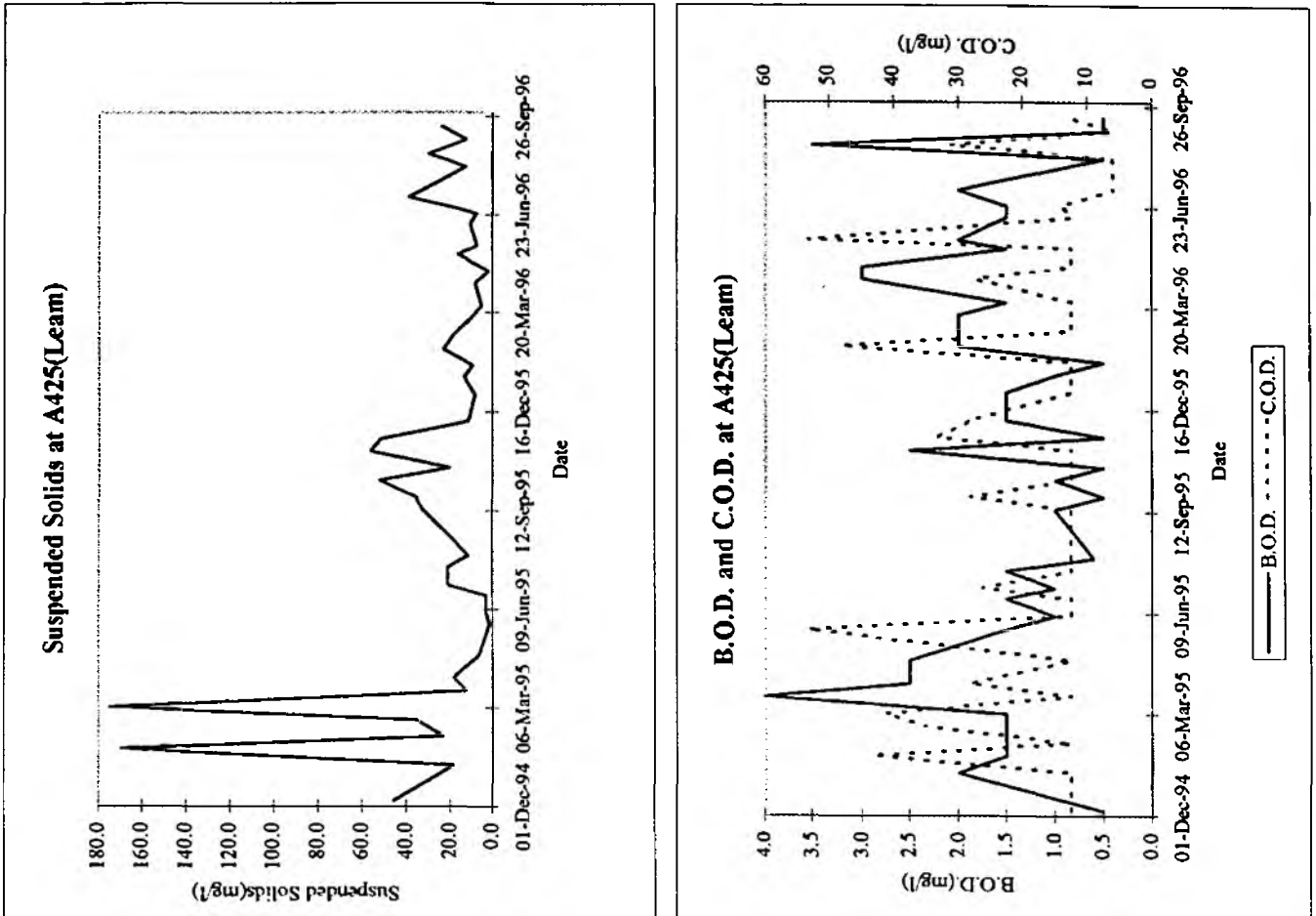
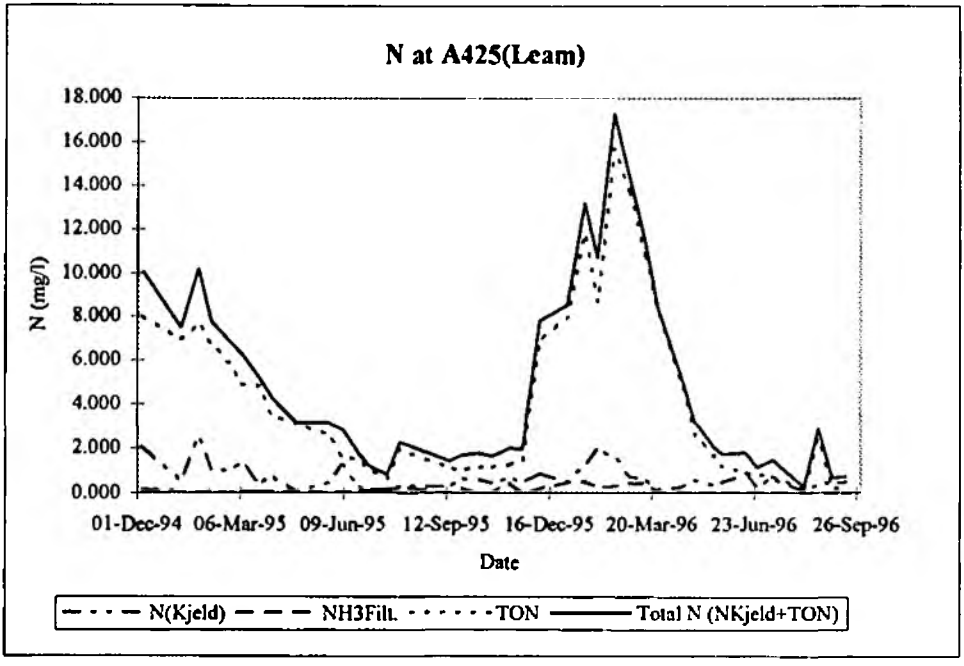
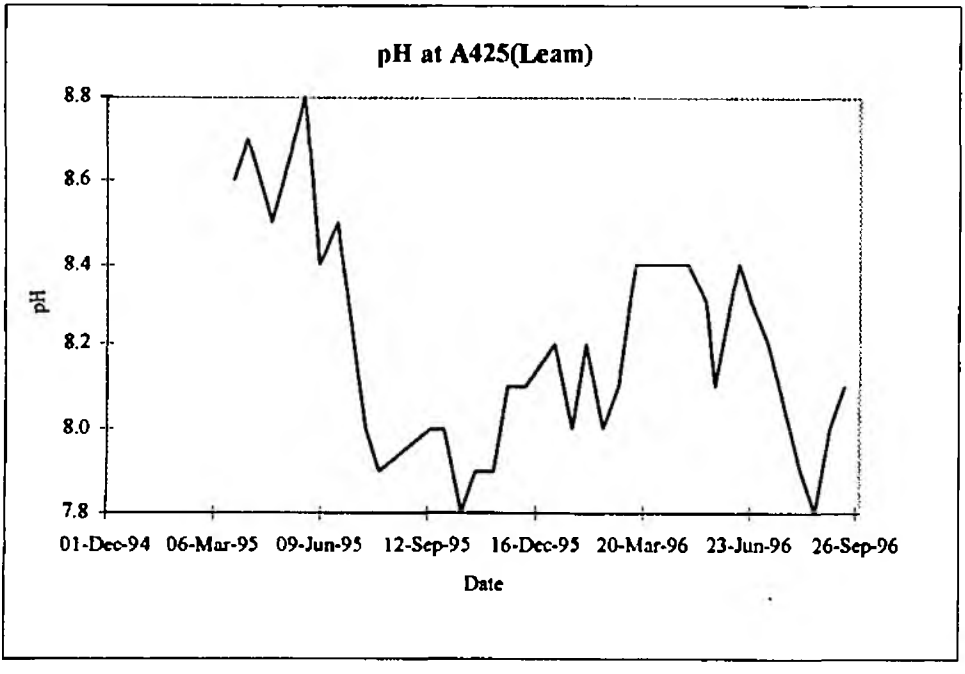
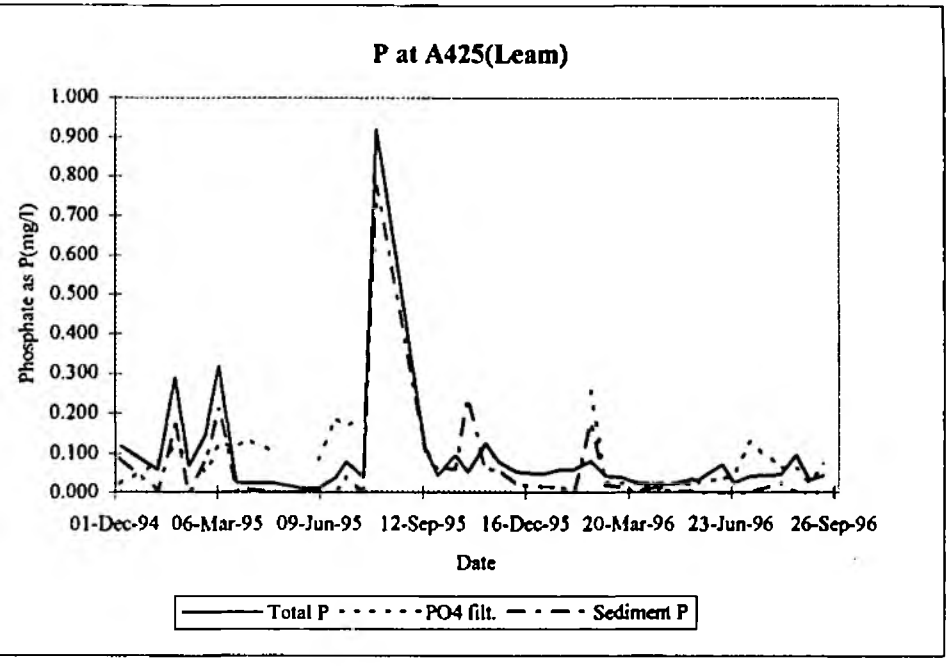

Electrical Conductivity and Eh at A425(Leam)
Electrical Conductivity (mS)
Eh(mV)
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh

Figure 32 A425 (Leam)

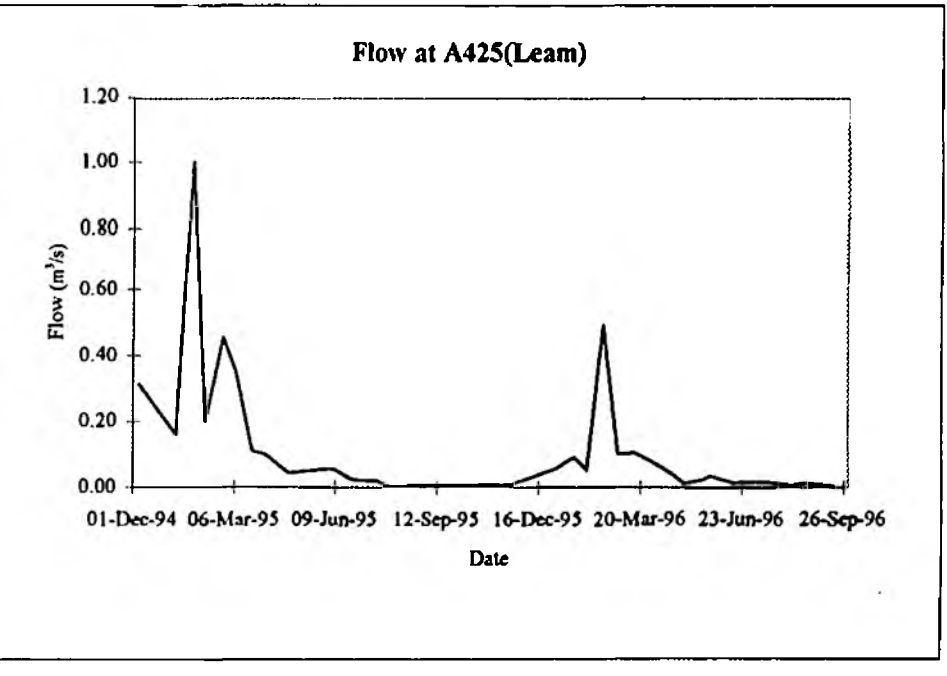


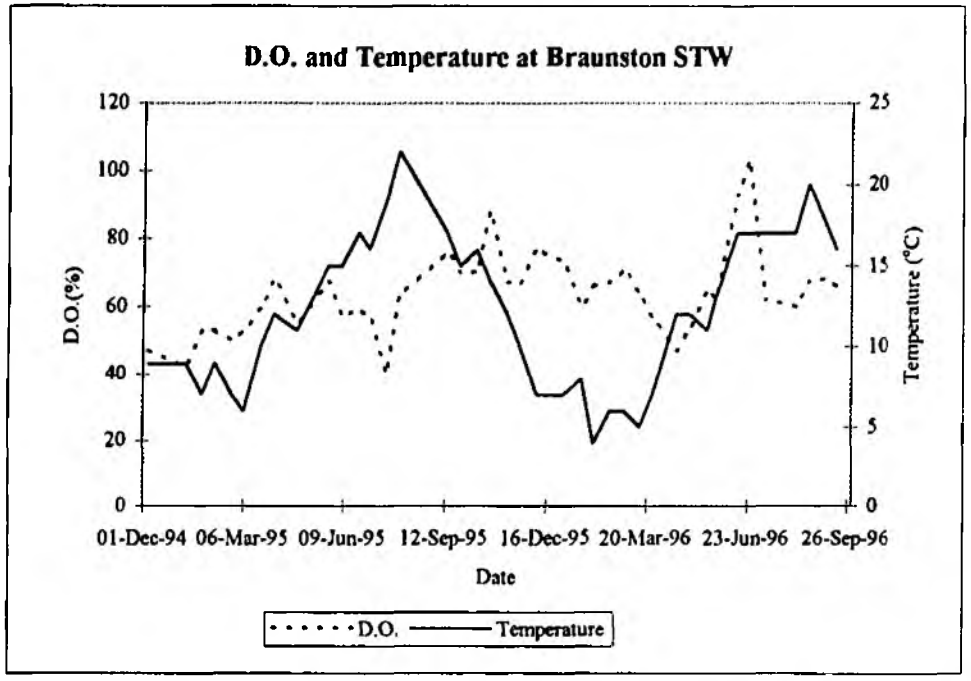

N at A425(Leam)
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

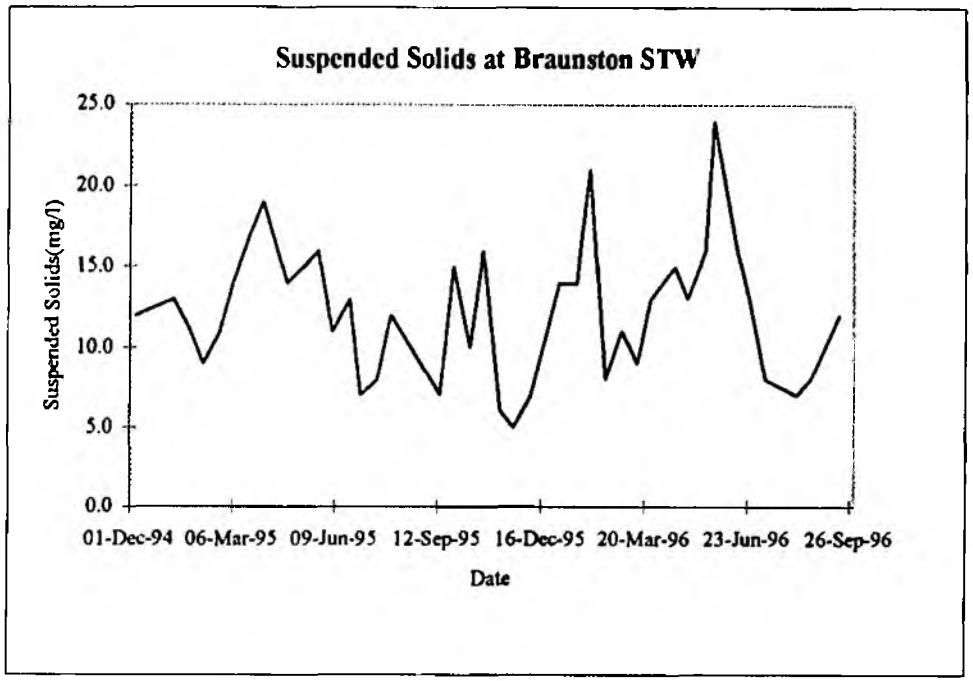

pH at A425(Leam)
8.8
8.6
8.4
8.2
8.0
7.8
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

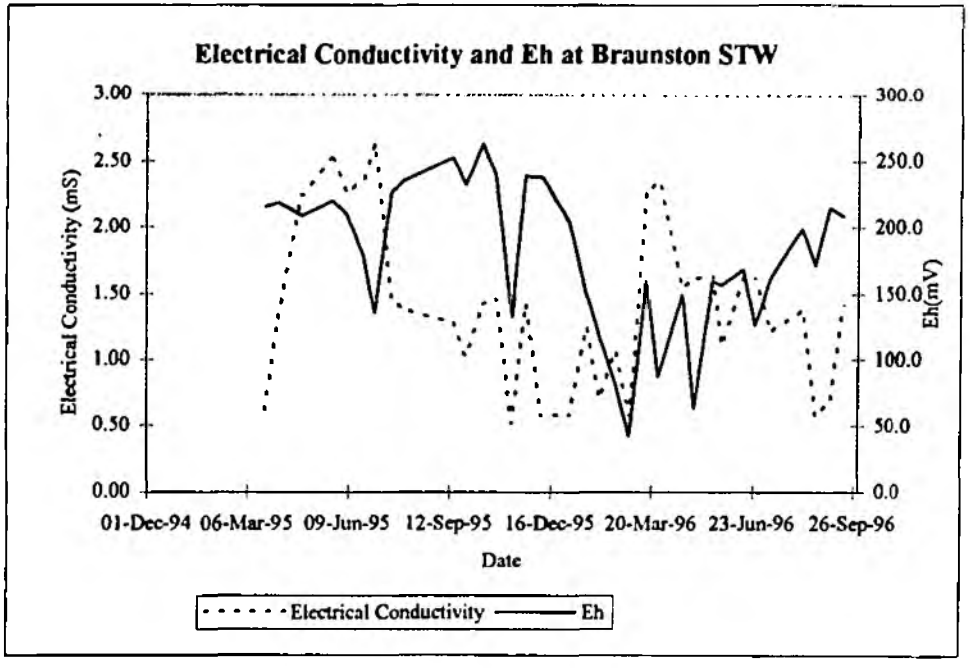


(Figure 32 cont.)









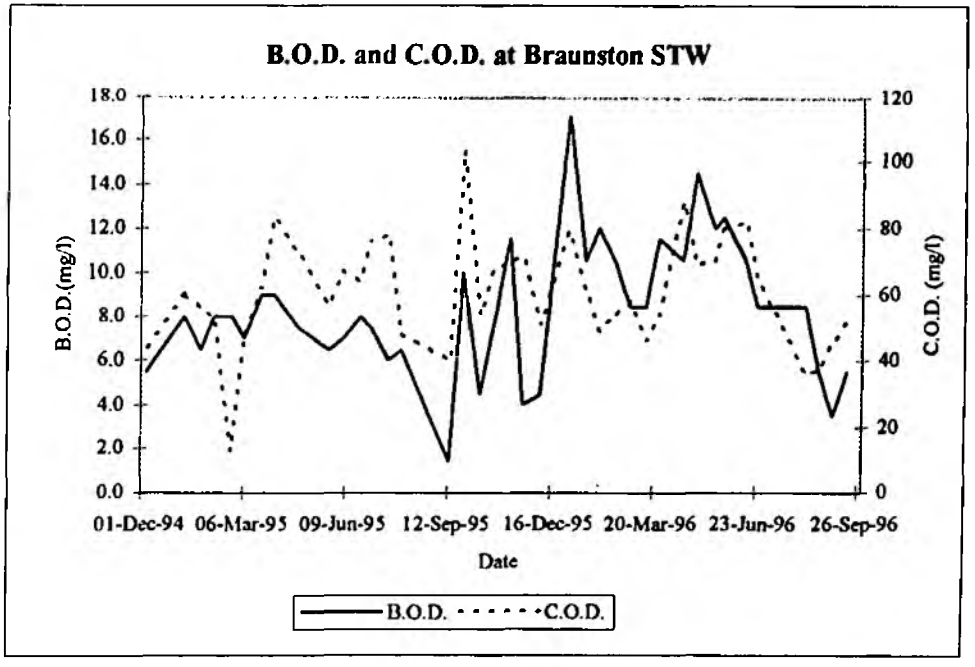
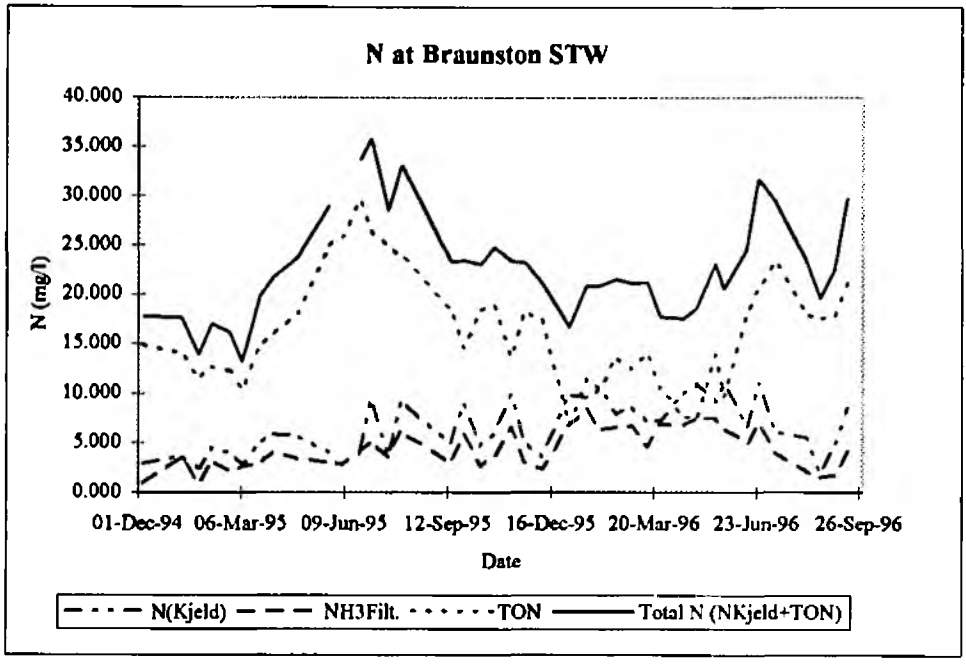
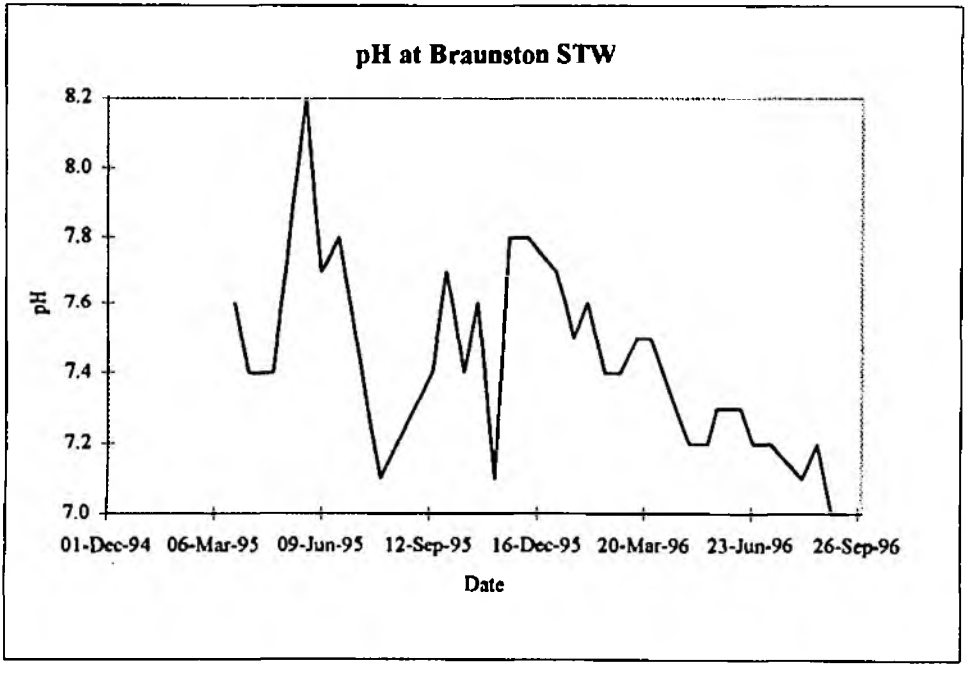
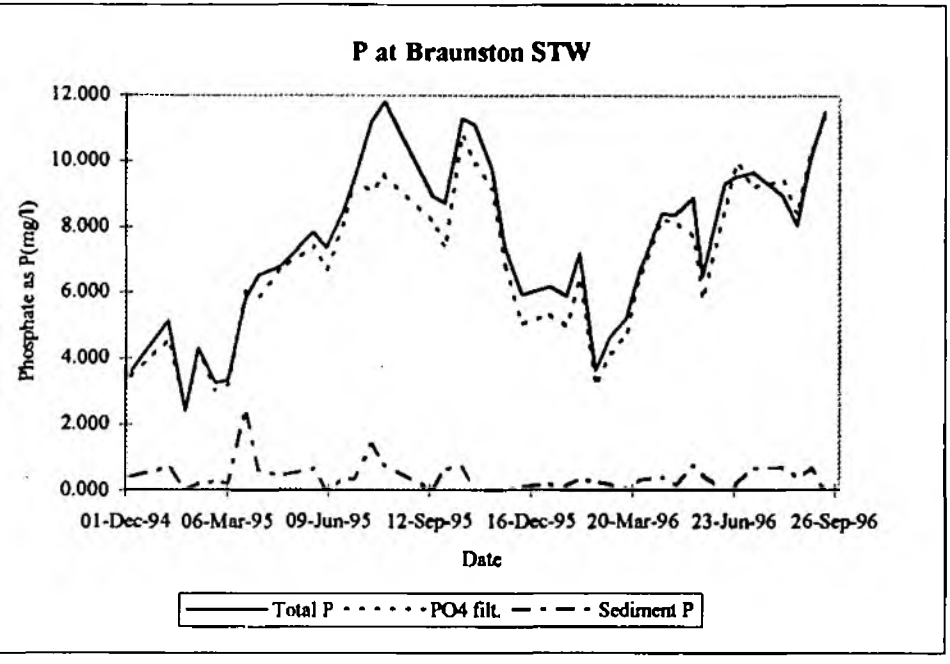
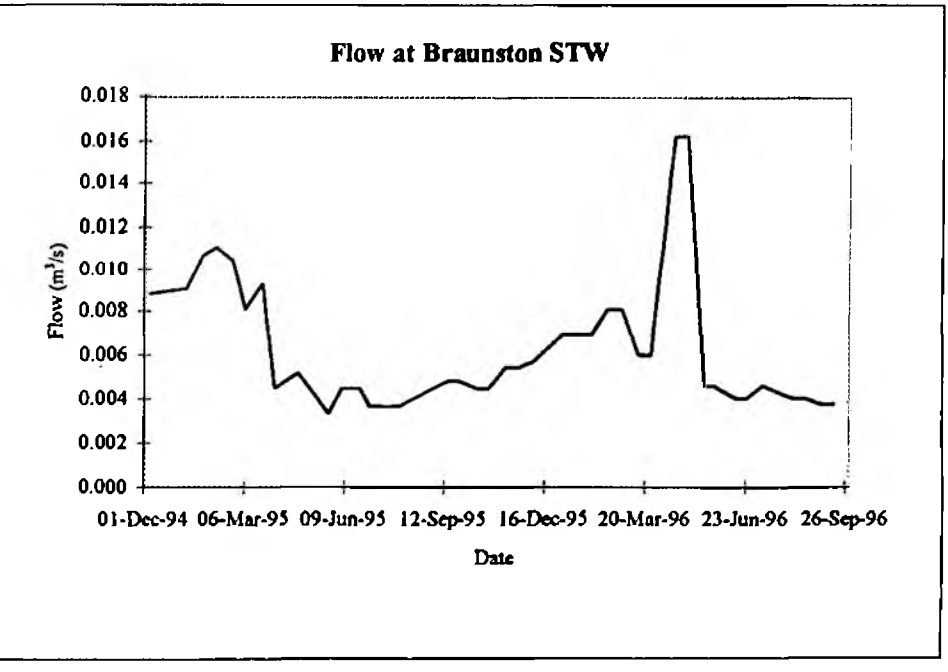


Figure 33 Braunston STW

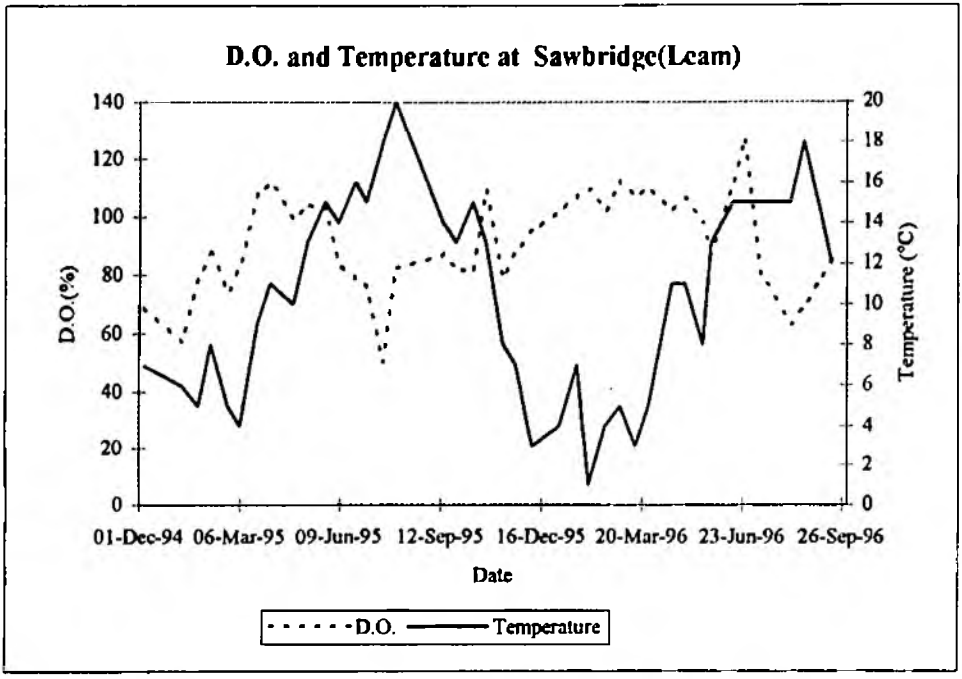

N at Braunston STW
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)


pH at Braunston STW
8.2
8.0
7.8
7.6
7.4
7.2
7.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date





(Figure 33 cont.)


D.O. and Temperature at Sawbridge(Leam)
D.O.(%)
Temperature (°C)
140
120
100
80
60
40
20
0
20
18
16
14
12
10
8
6
4
2
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature

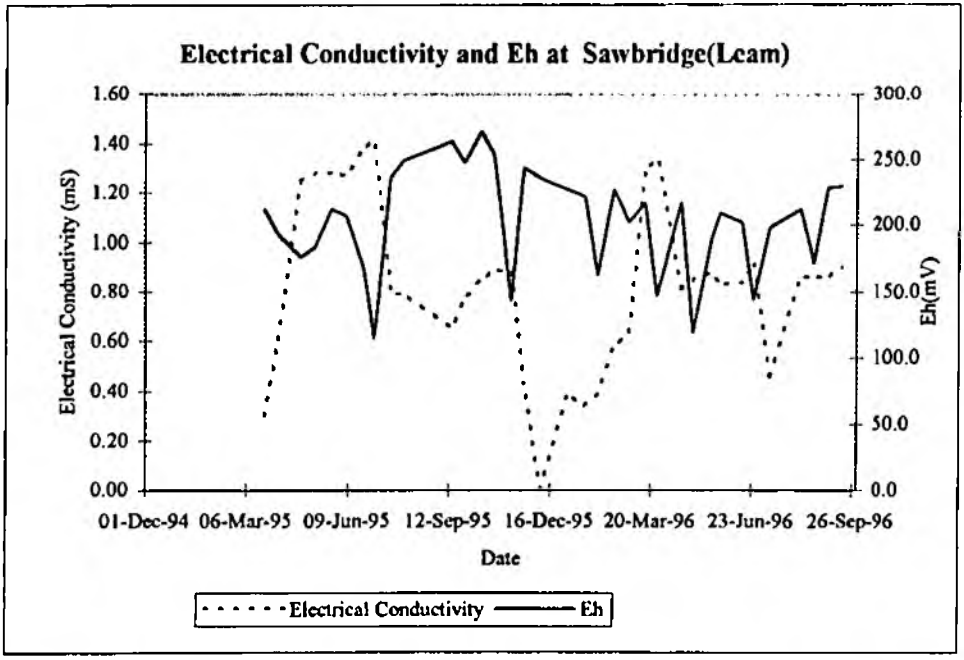
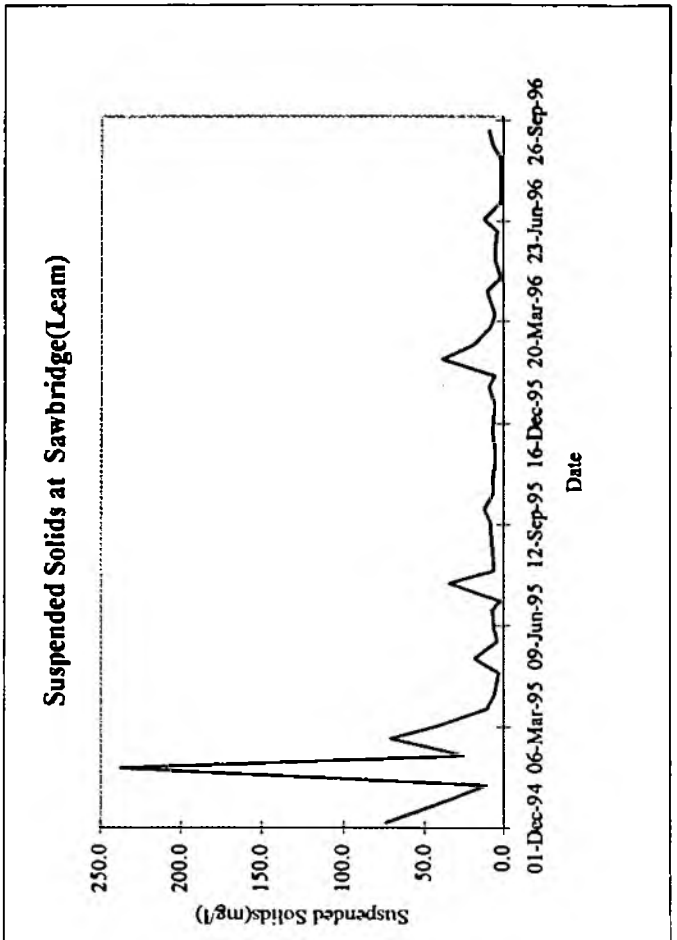
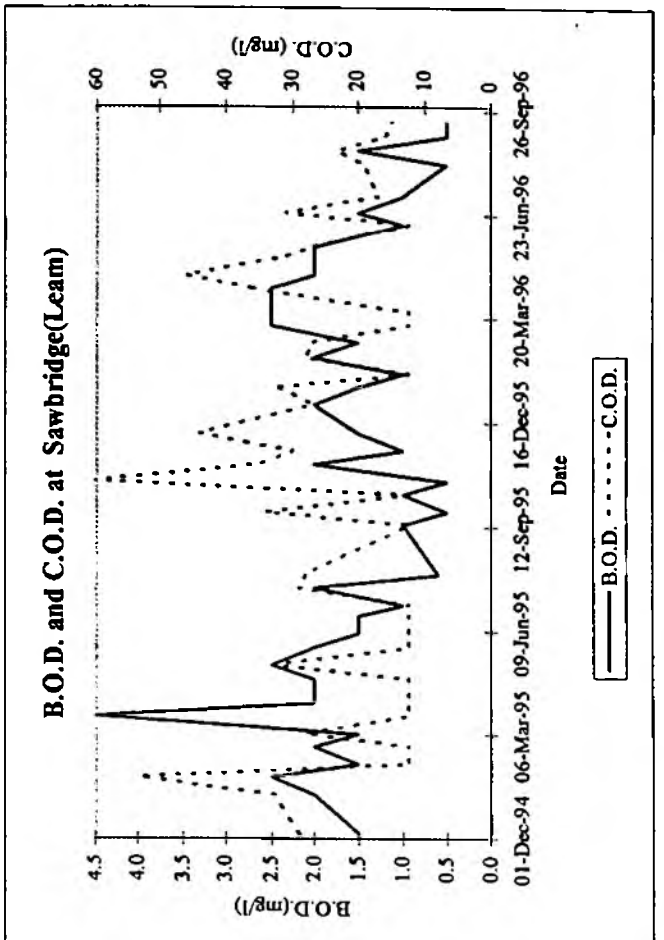
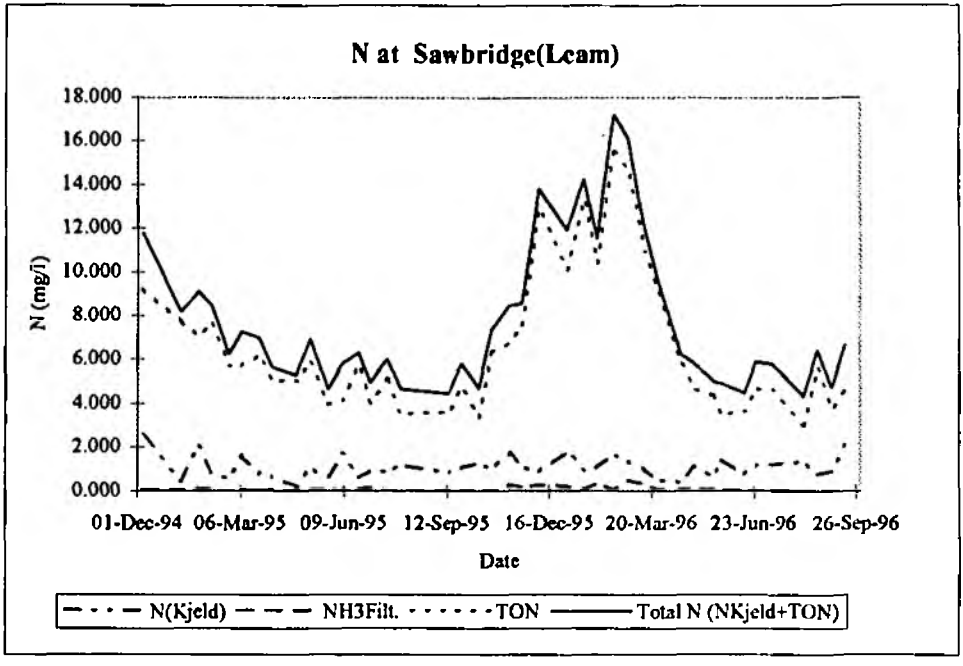
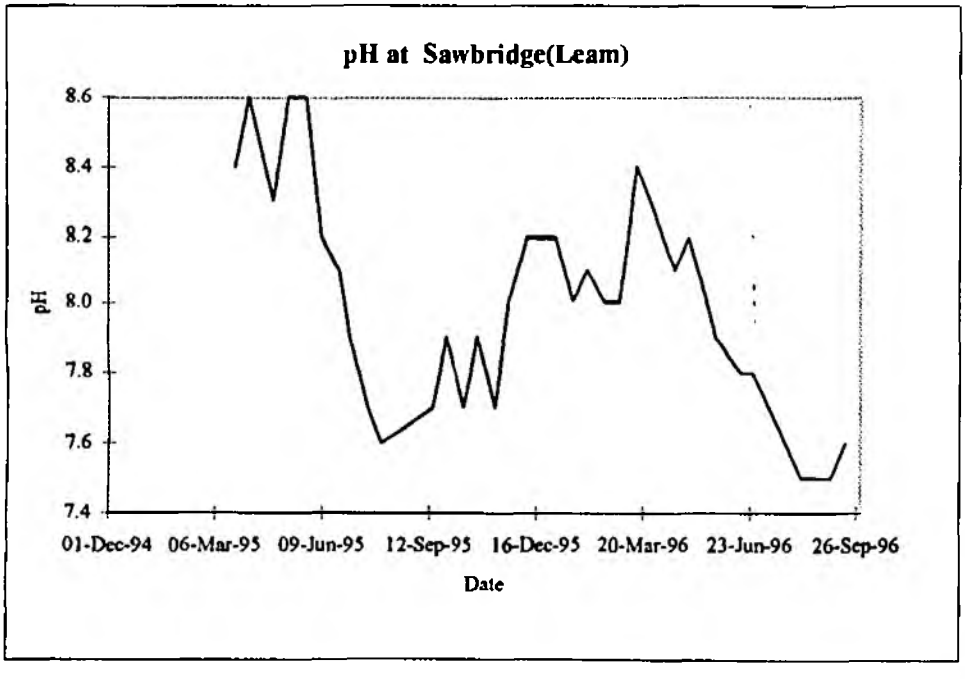

Electrical Conductivity and Eh at Sawbridge(Leam)
Electrical Conductivity (mS)
Eh(mV)
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
300.0
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh

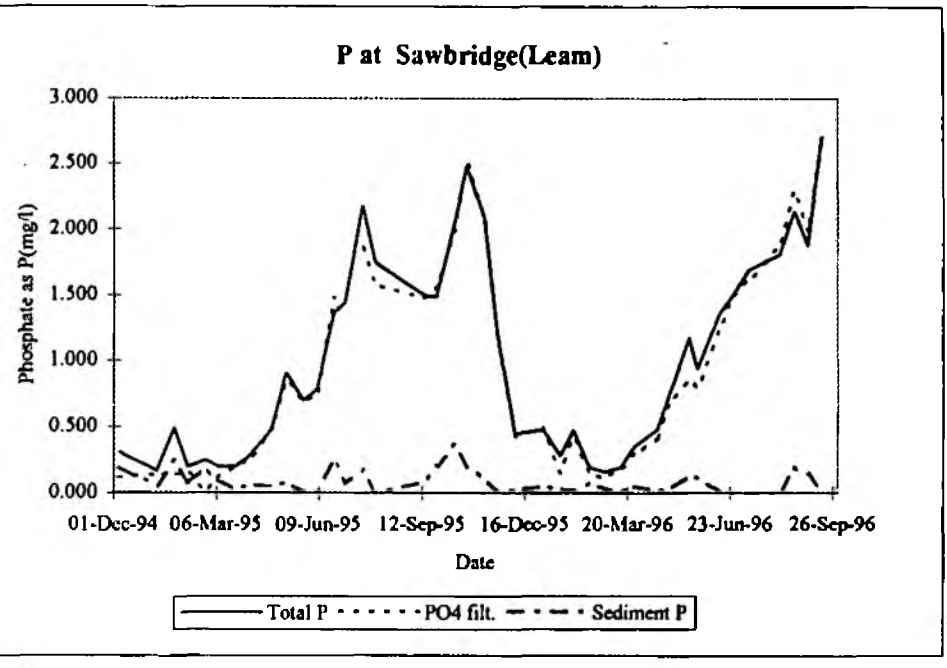
Figure 34 Sawbridge (Leam)

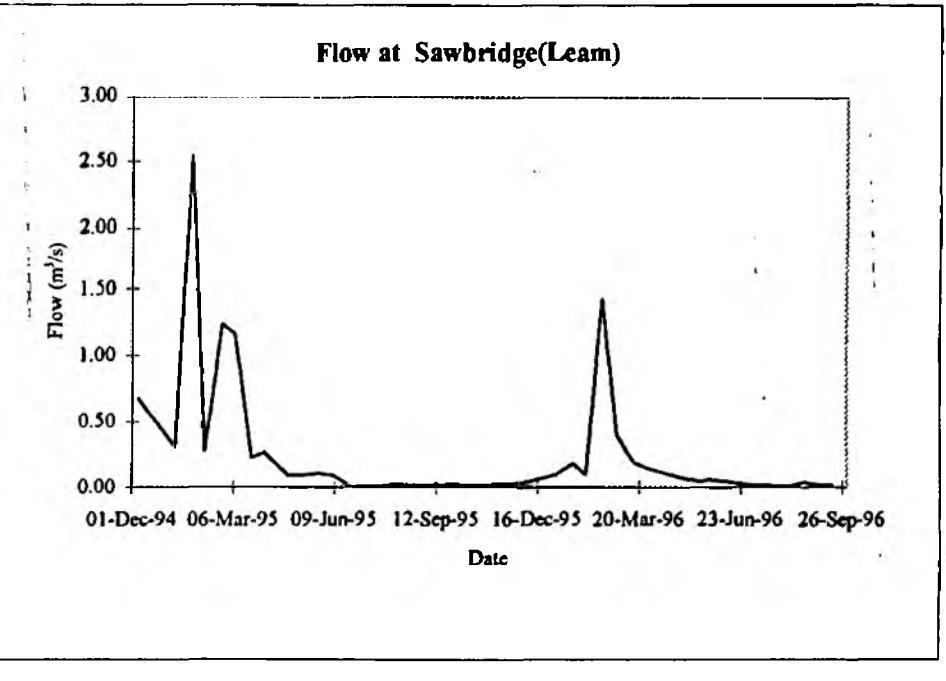




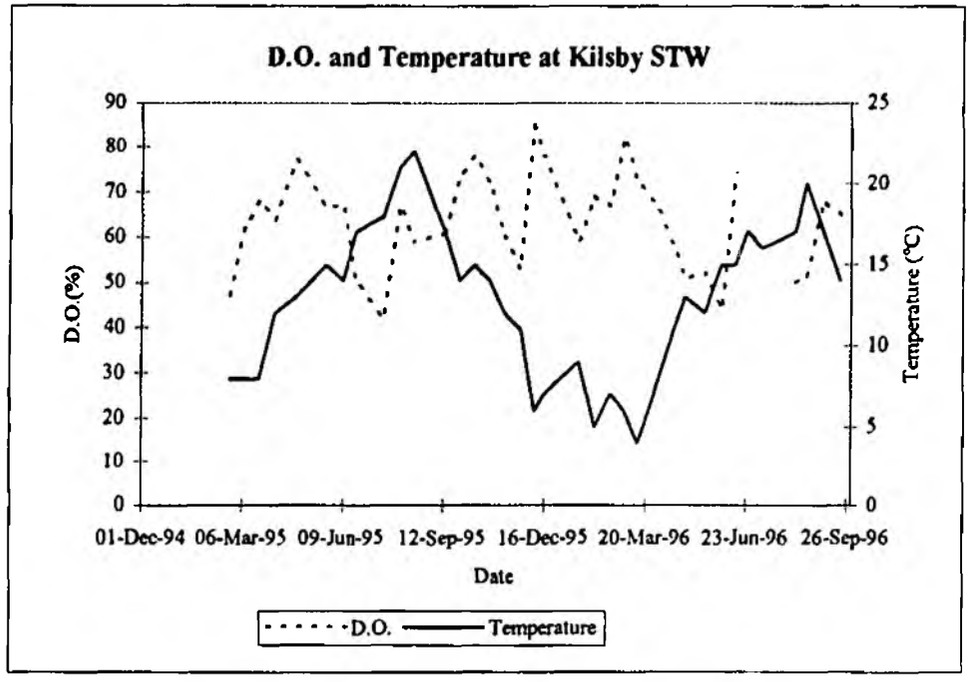

N at Sawbridge(Leam)
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

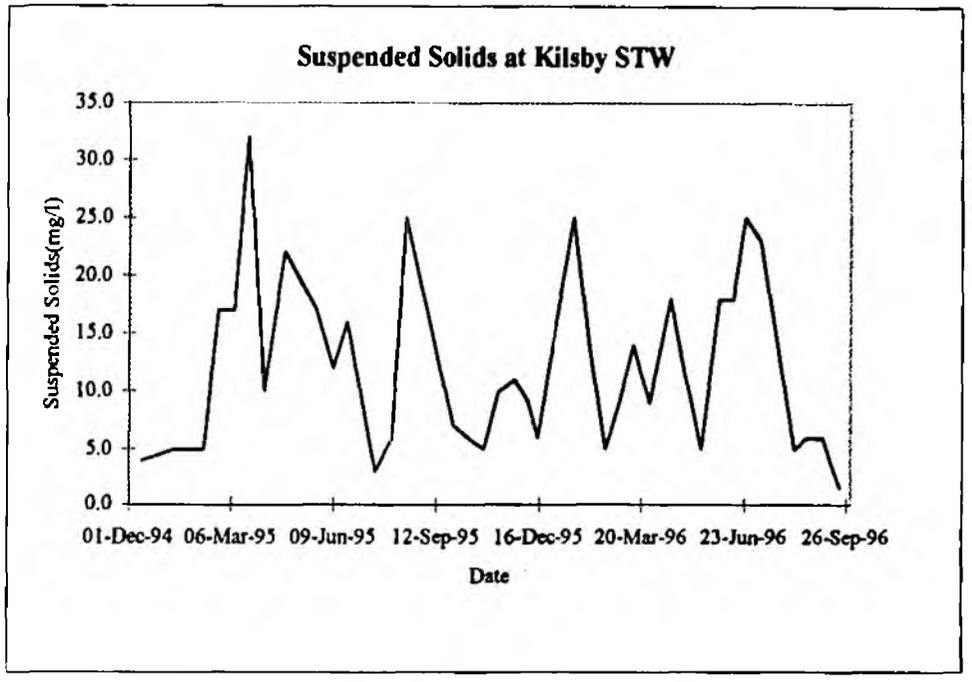

pH at Sawbridge(Leam)
8.6
8.4
8.2
8.0
7.8
7.6
7.4
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

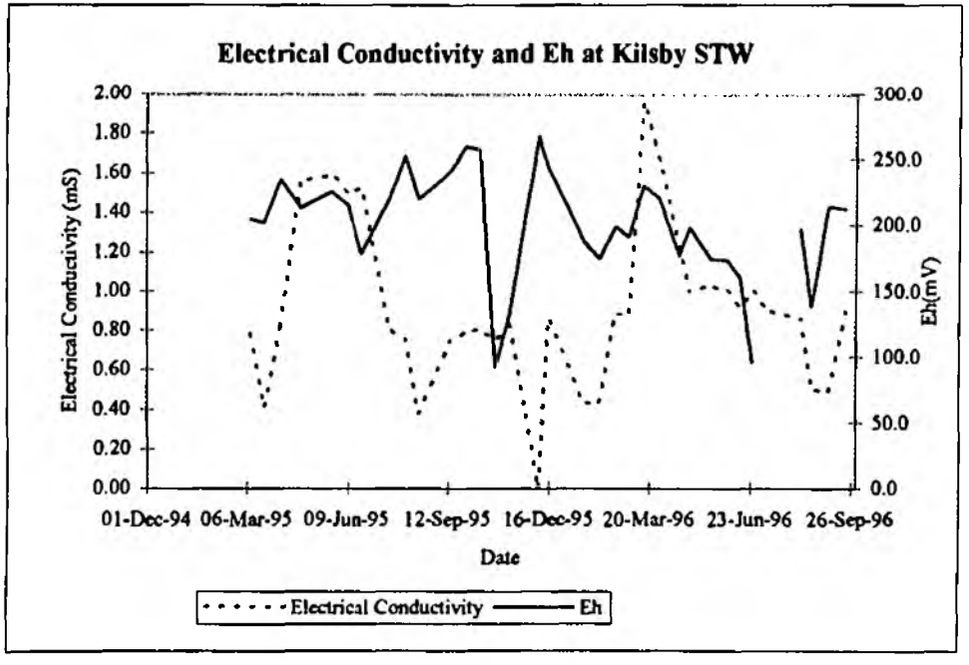




(Figure 34 cont.)







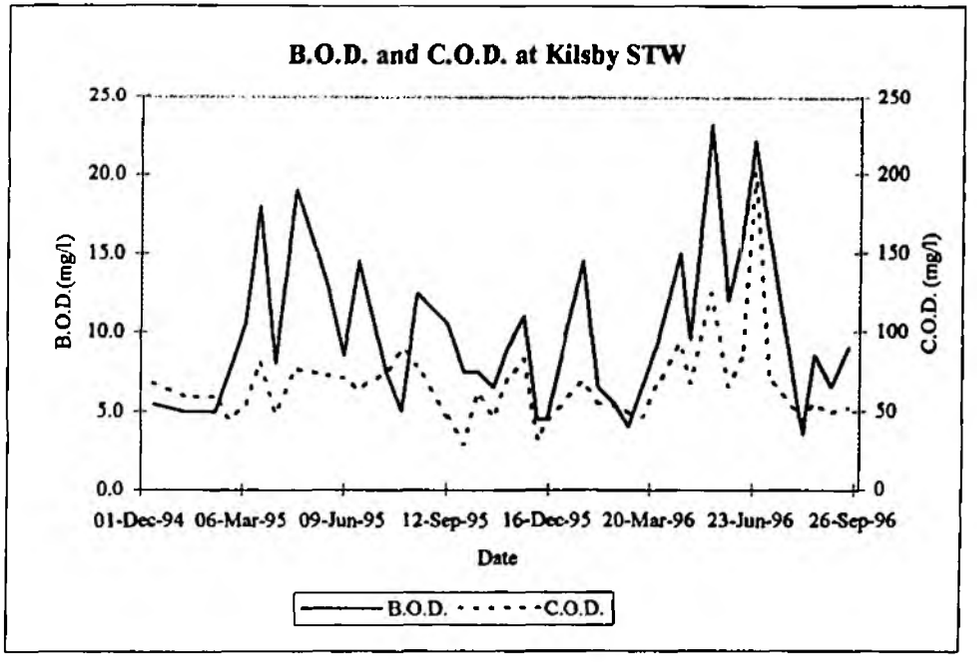
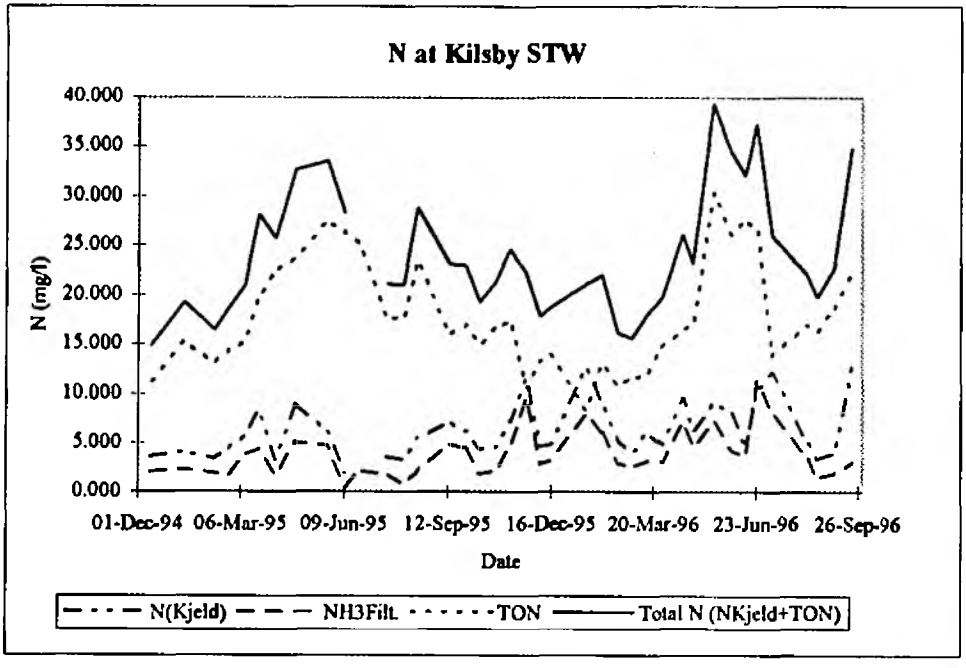
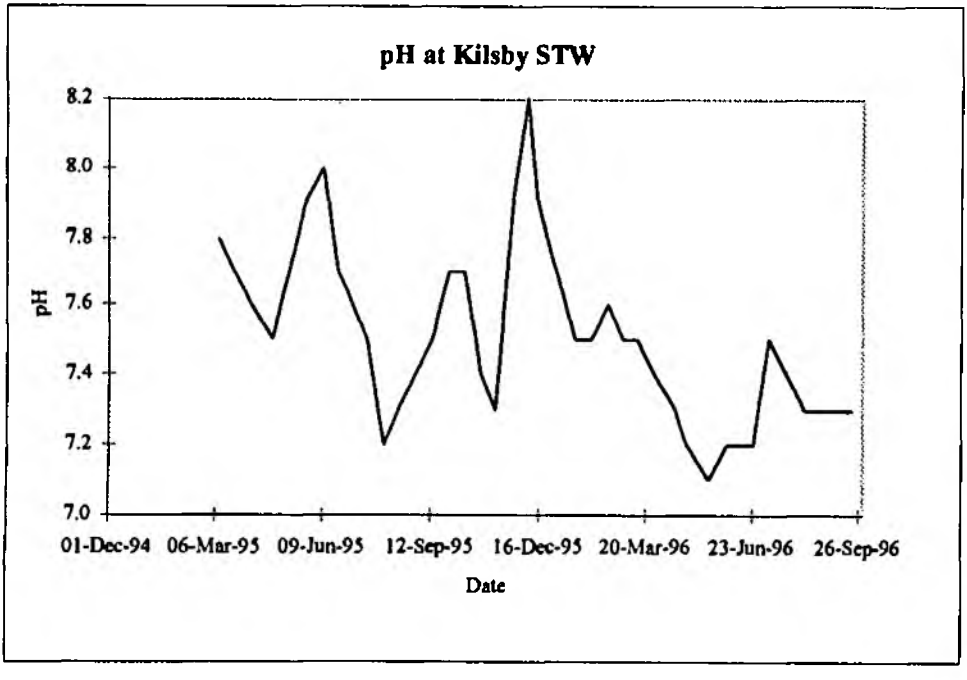
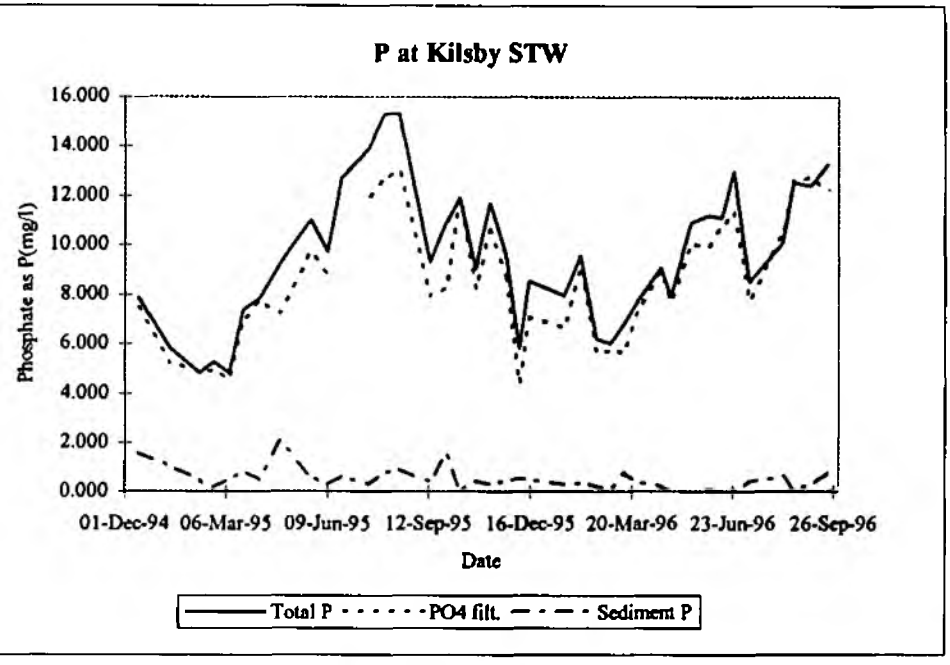
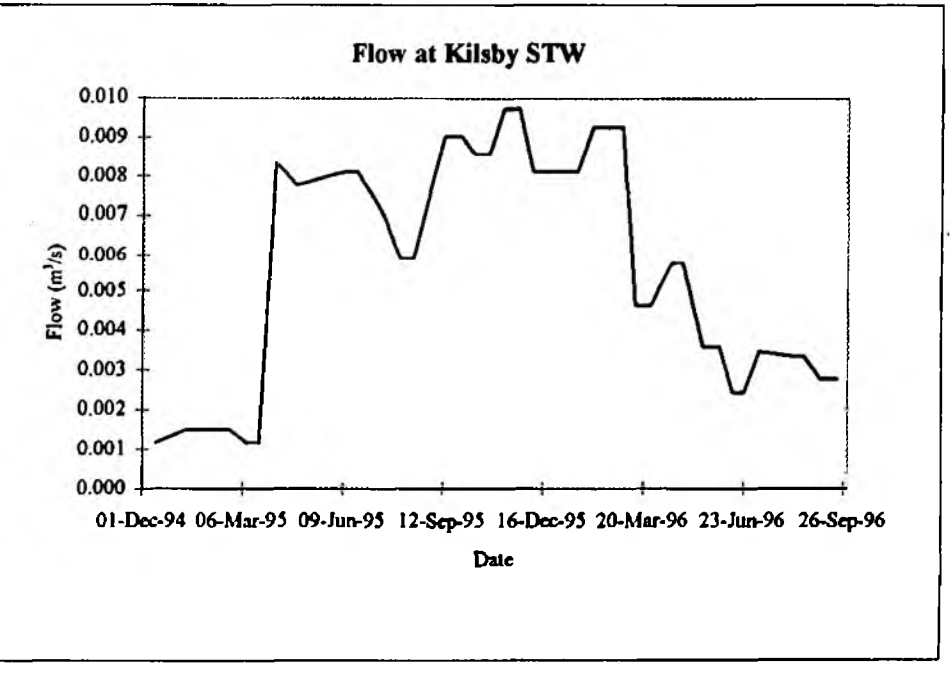


Figure 35 Kilsby STW

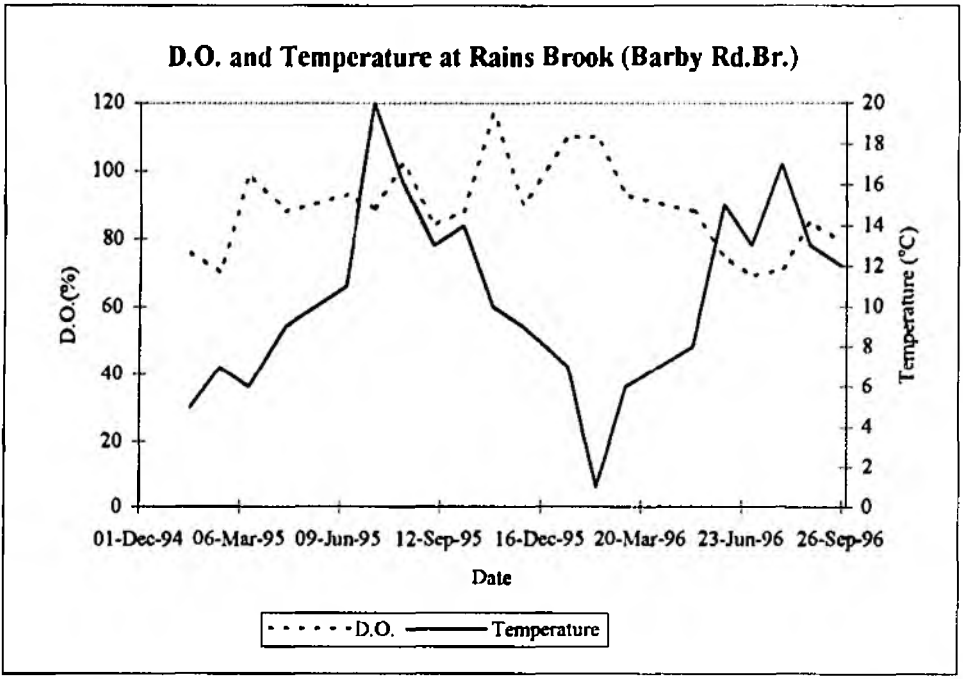

N at Kilsby STW
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt
TON
Total N (NKjeld+TON)


pH at Kilsby STW
8.2
8.0
7.8
7.6
7.4
7.2
7.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date





(Figure 35 cont.)


D.O. and Temperature at Rains Brook (Barby Rd.Br.)
D.O.(%)
Temperature (°C)
120
100
80
60
40
20
0
20
18
16
14
12
10
8
6
4
2
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature

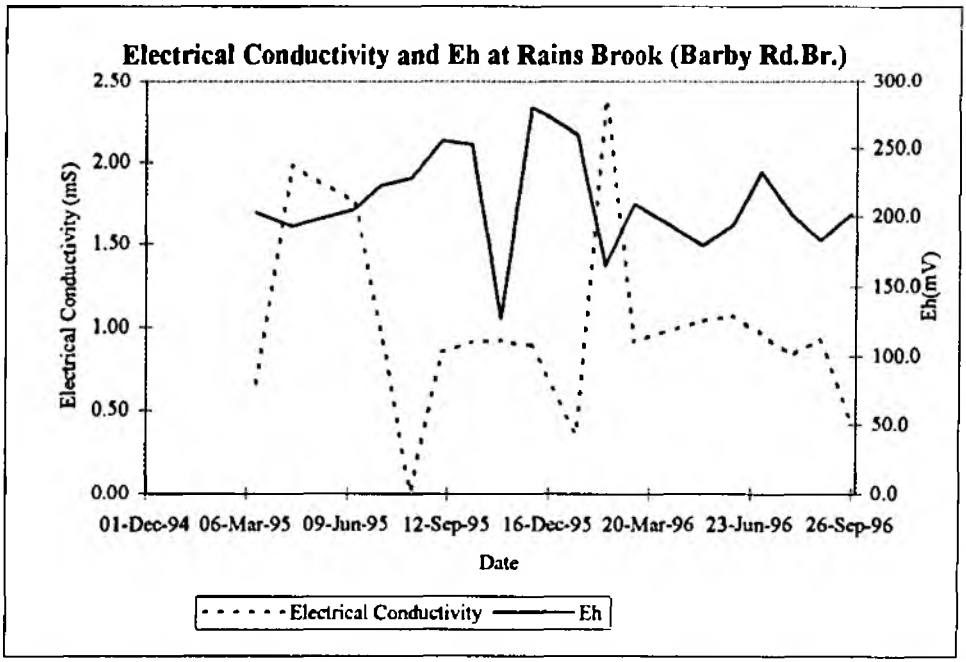
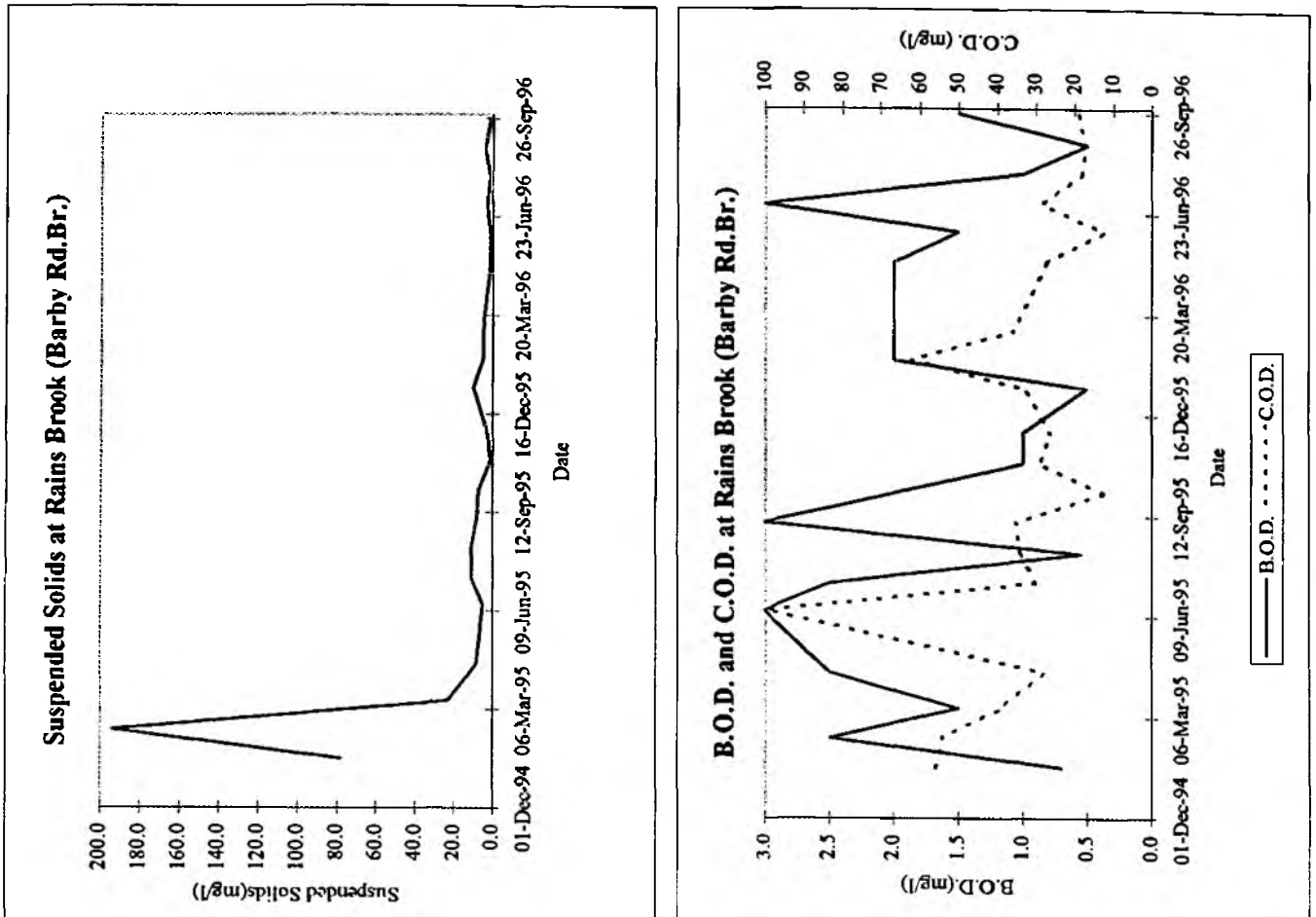
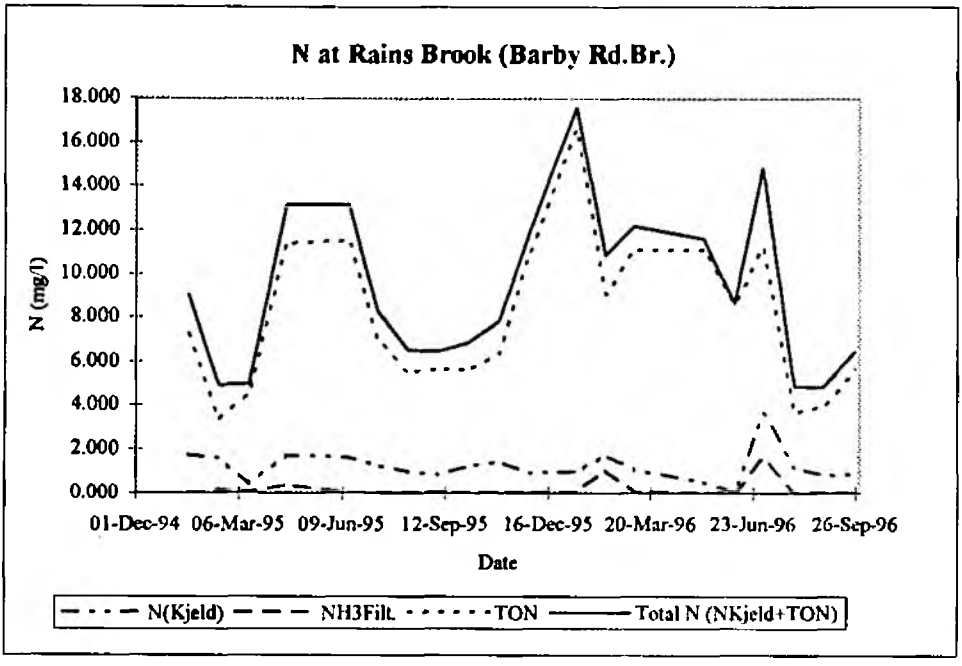
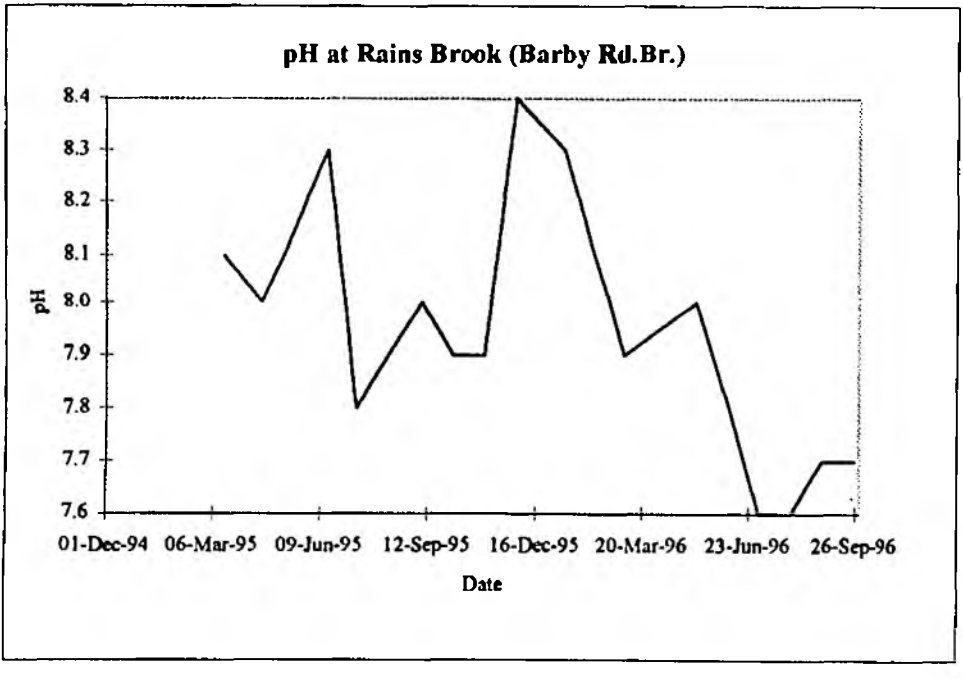
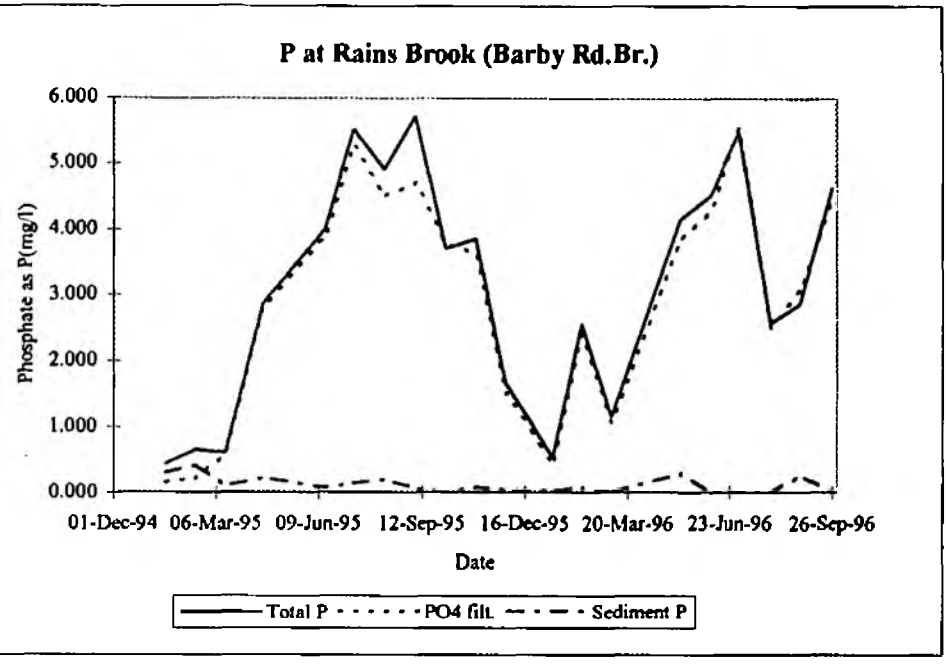

Electrical Conductivity and Eh at Rains Brook (Barby Rd.Br.)
Electrical Conductivity (mS)
Eh(mV)
2.50
2.00
1.50
1.00
0.50
0.00
300.0
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh

Figure 36 Rains Brook (Barby Rd. Br.)




N at Rains Brook (Barby Rd.Br.)
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)


pH at Rains Brook (Barby Rd.Br.)
8.4
8.3
8.2
8.1
8.0
7.9
7.8
7.7
7.6
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date



(Figure 36 cont.)

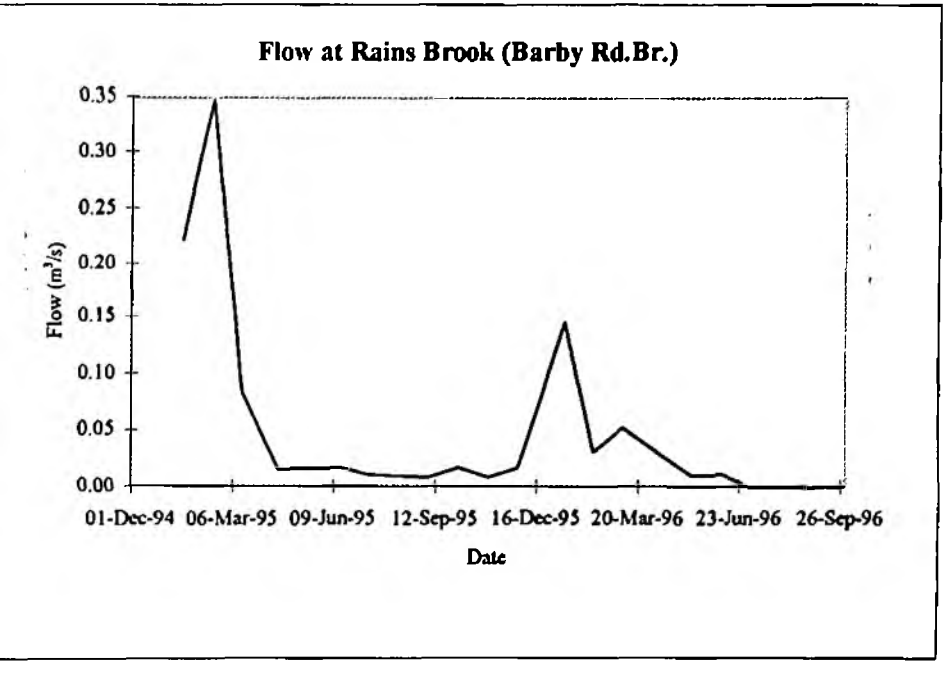
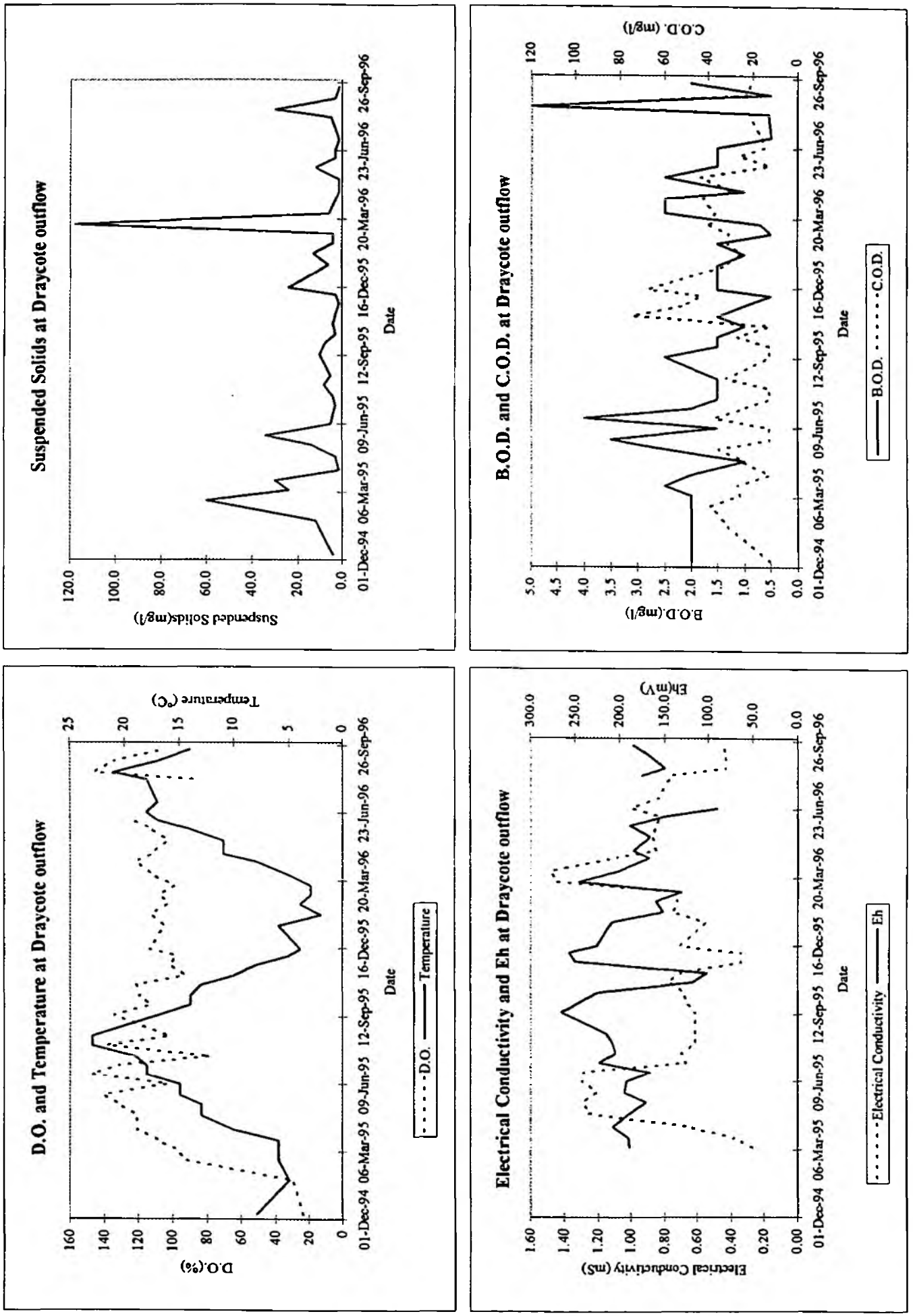
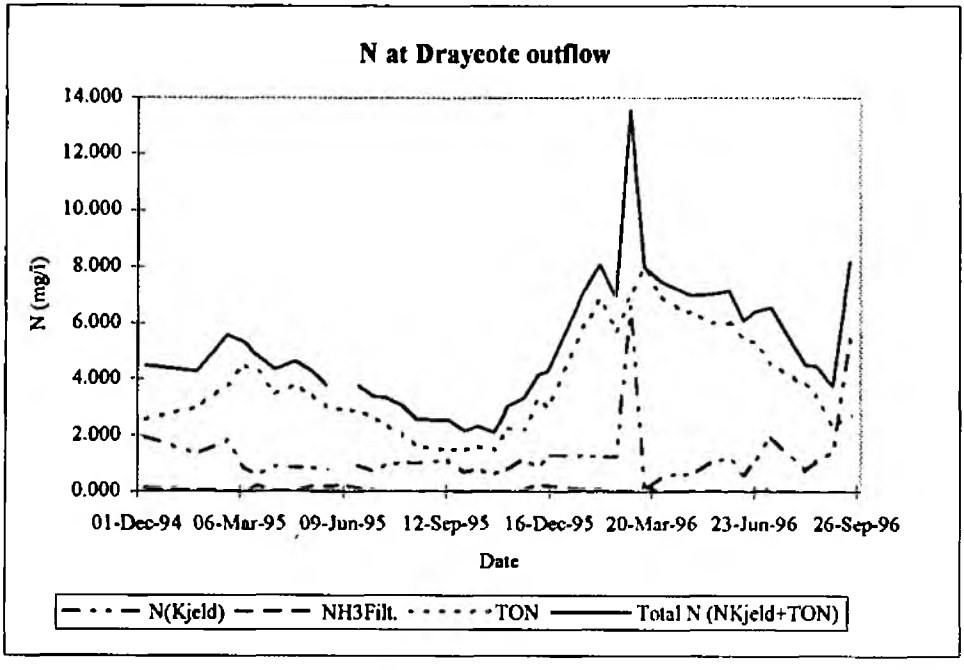
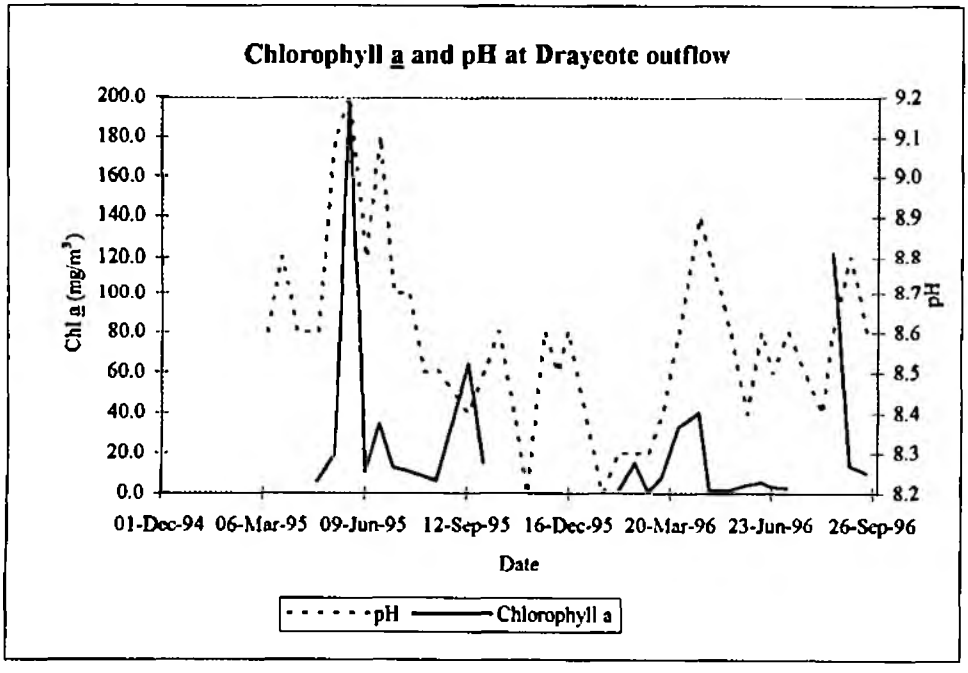


Figure 37 Draycote Outflow




N at Draycote outflow
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)


Chlorophyll a and pH at Draycote outflow
200.0
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
Chl a (mg/m³)
9.2
9.1
9.0
8.9
8.8
8.7
8.6
8.5
8.4
8.3
8.2
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
pH
Chlorophyll a

(Figure 37cont.)

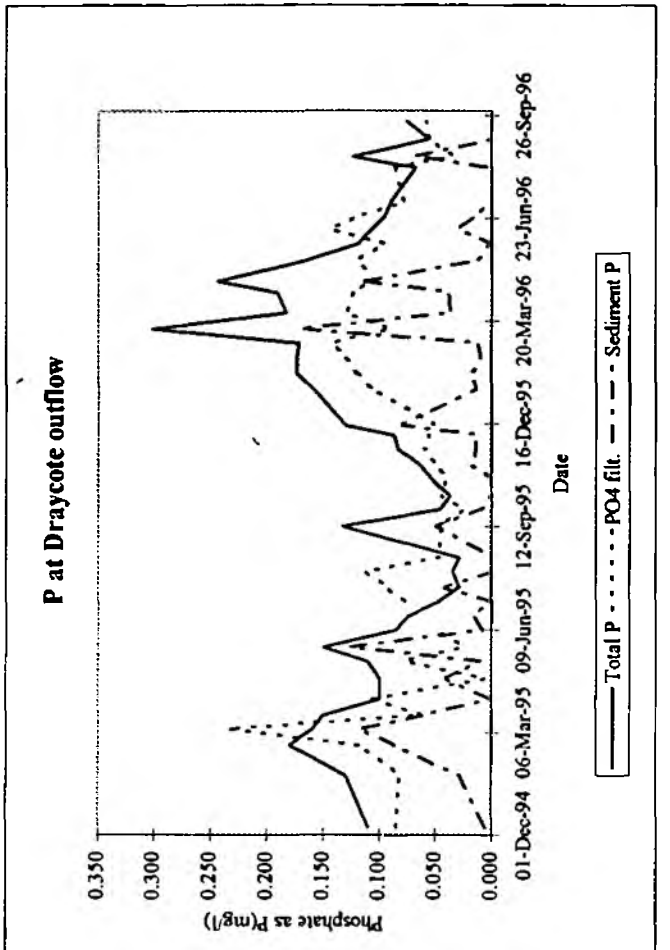
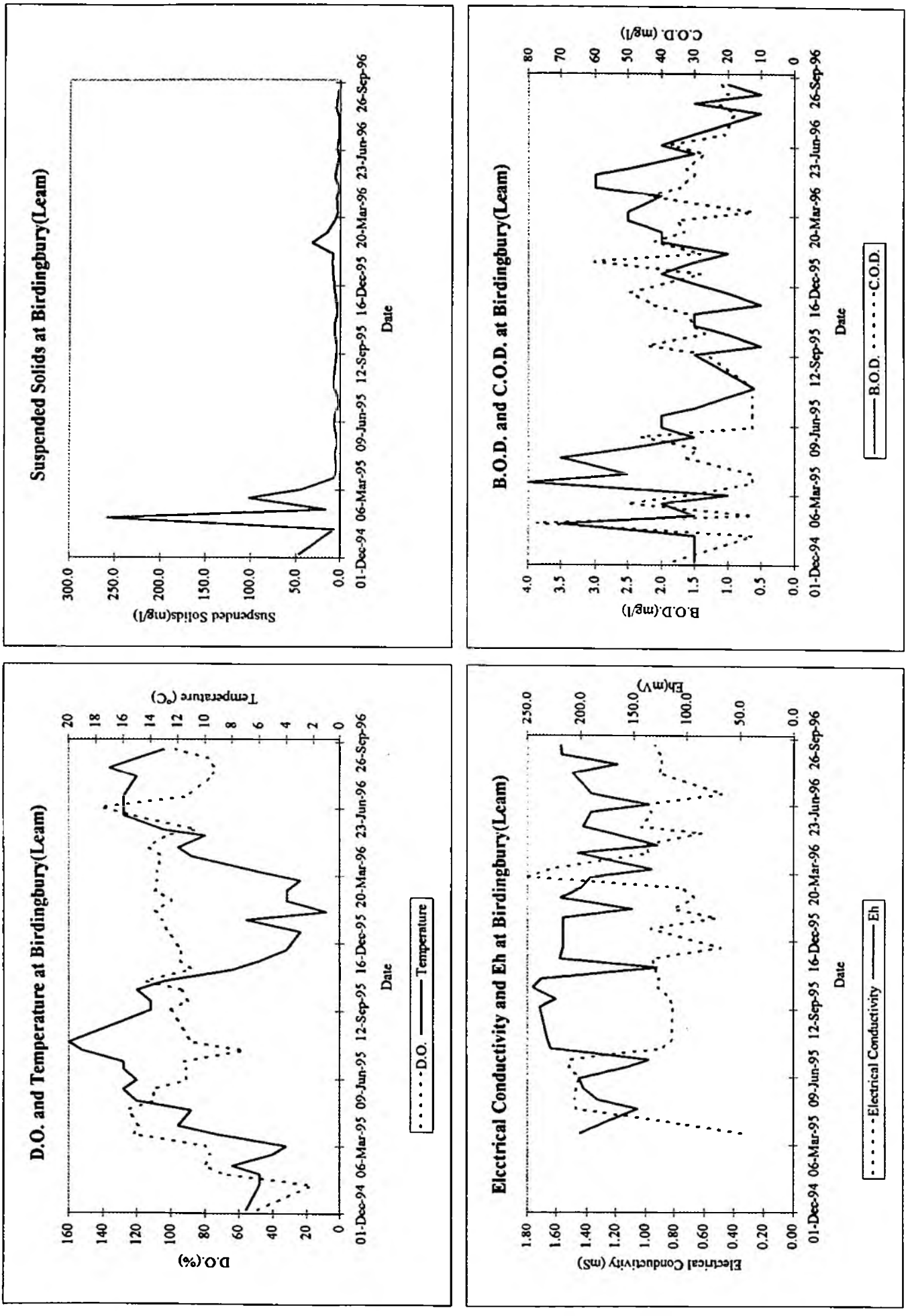
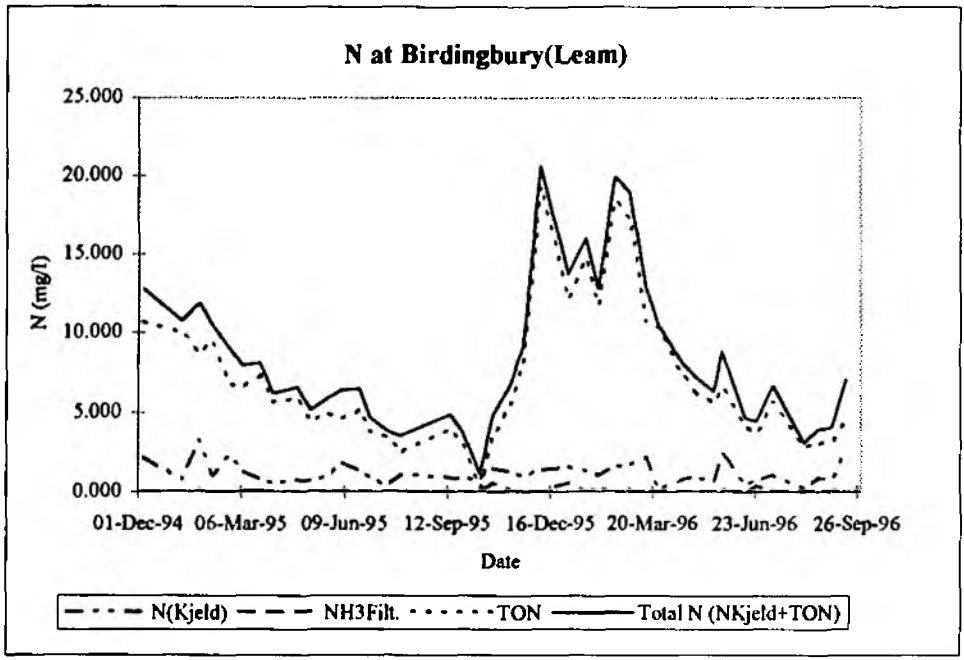
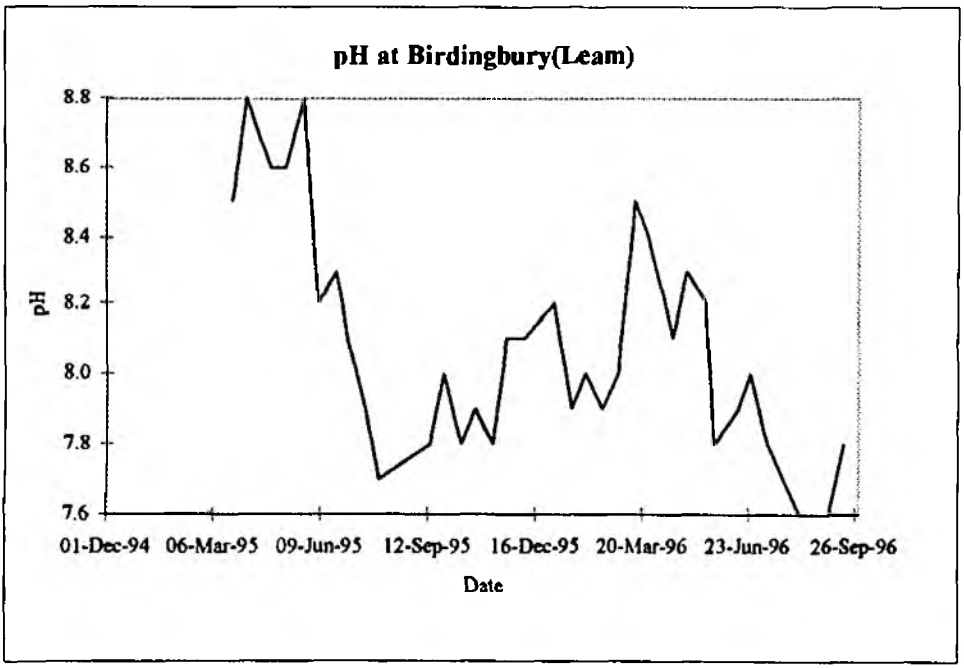
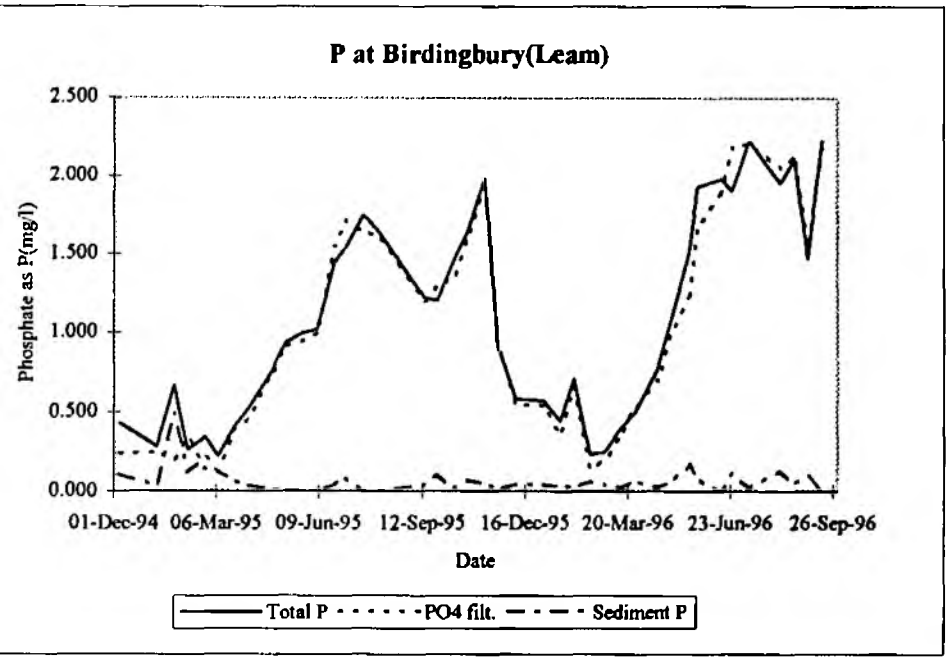


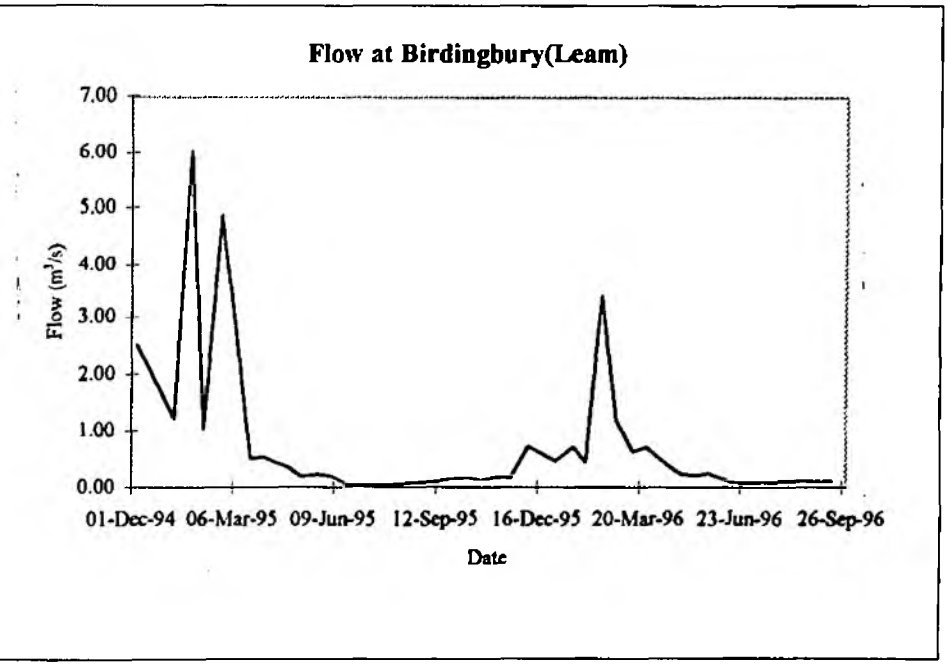
Figure 38 Birdingbury (Leam)




N at Birdingbury(Leam)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

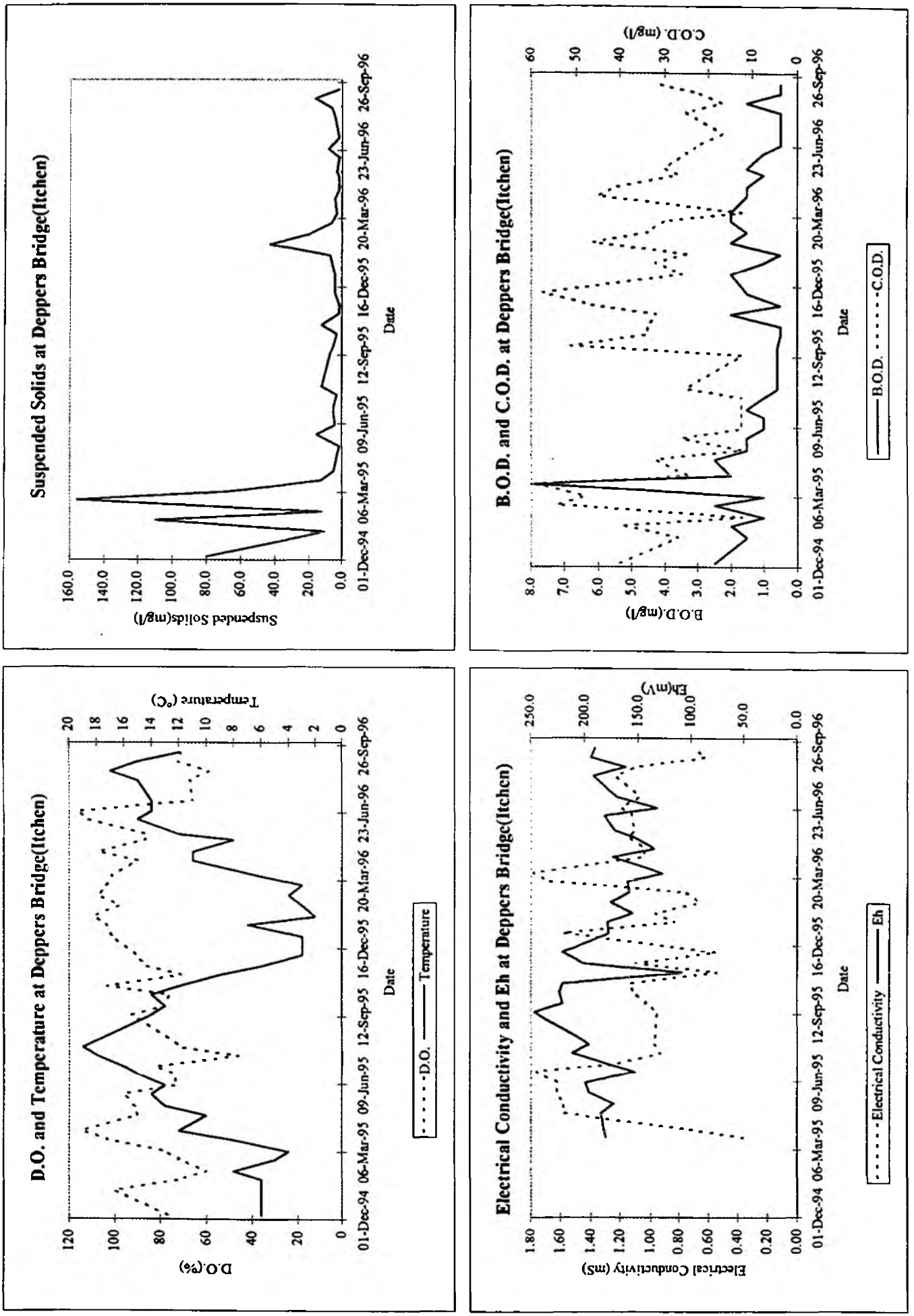

pH at Birdingbury(Leam)
8.8
8.6
8.4
8.2
8.0
7.8
7.6
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

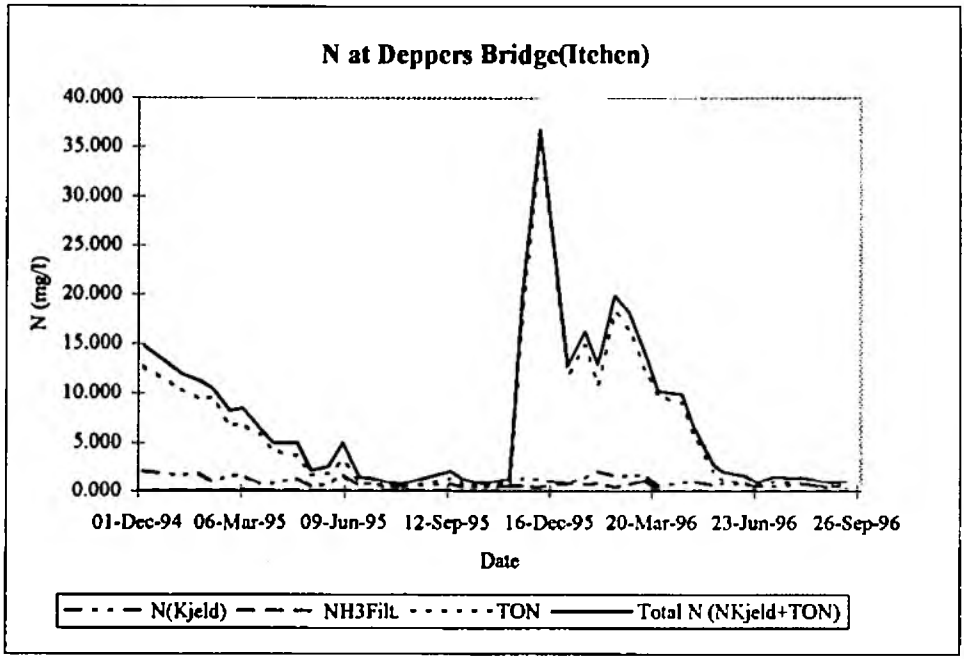


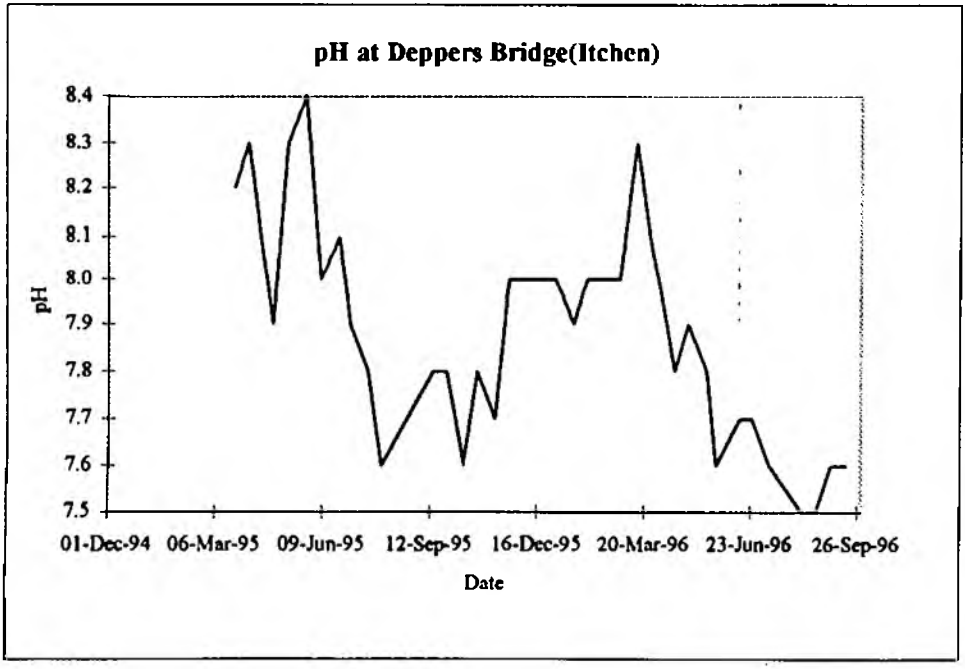


(Figure 38 cont.)

Figure 39 Deppers Bridge (Itchen)




N at Deppers Bridge(Itchen)
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt
TON
Total N (NKjeld+TON)


pH at Deppers Bridge(Itchen)
8.4
8.3
8.2
8.1
8.0
7.9
7.8
7.7
7.6
7.5
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

(Figure 39 cont.)

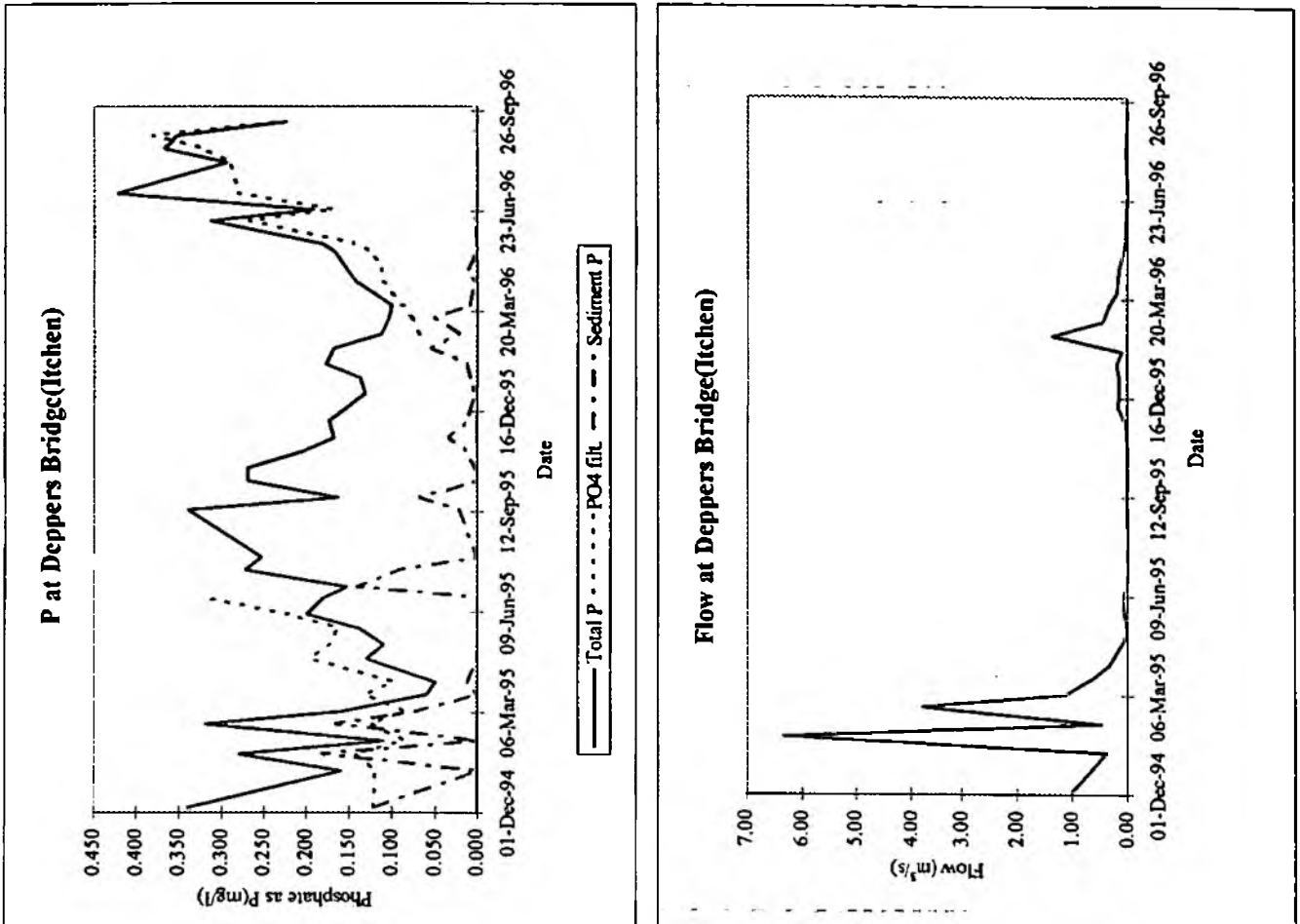
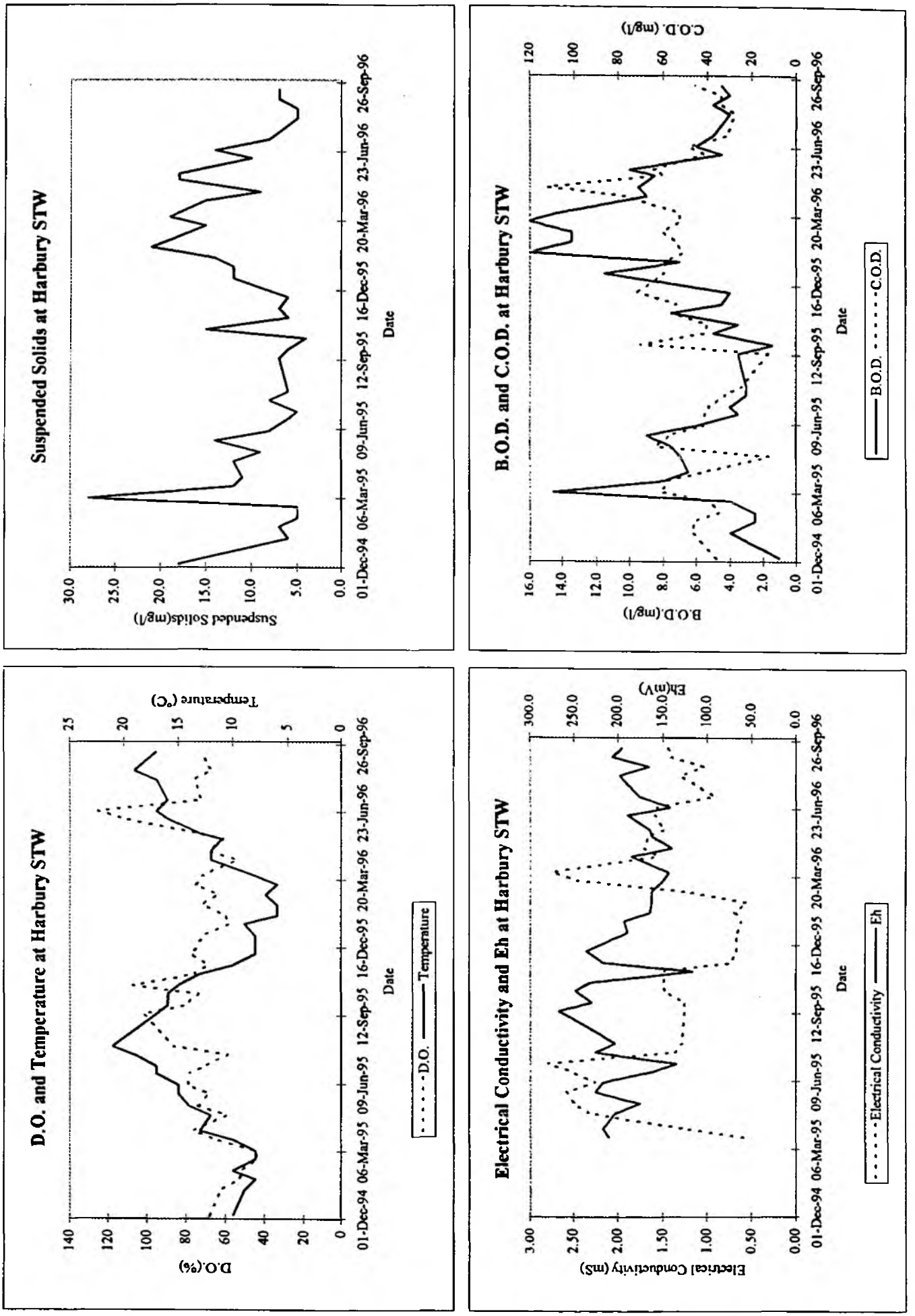
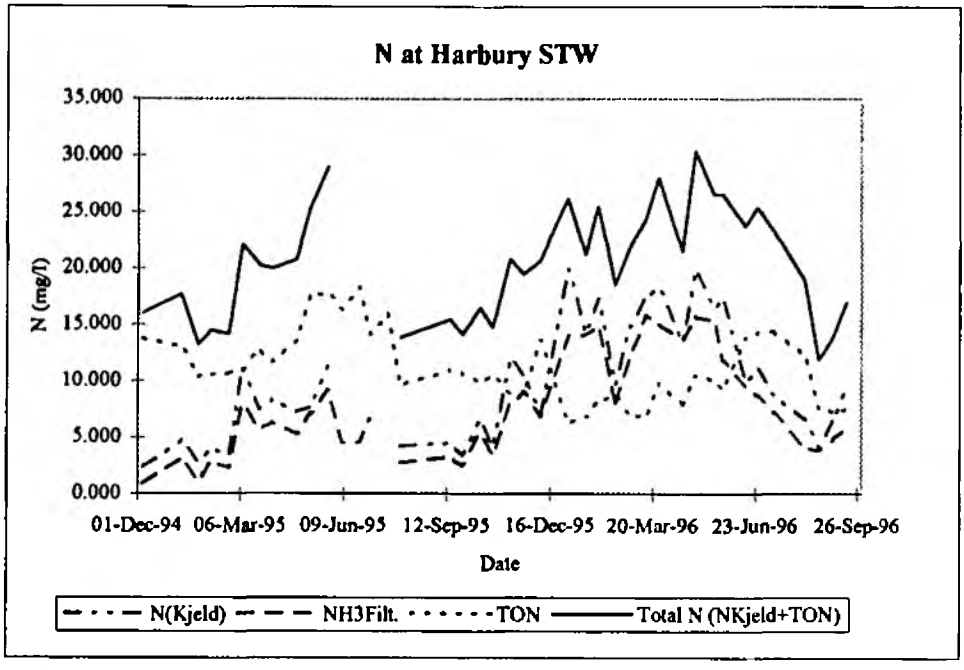
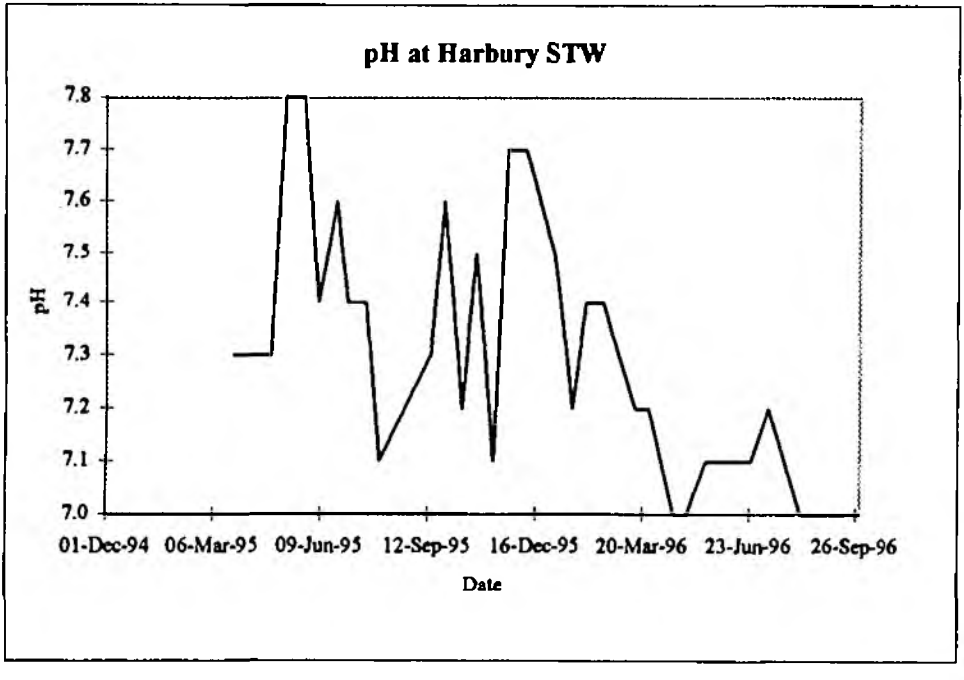
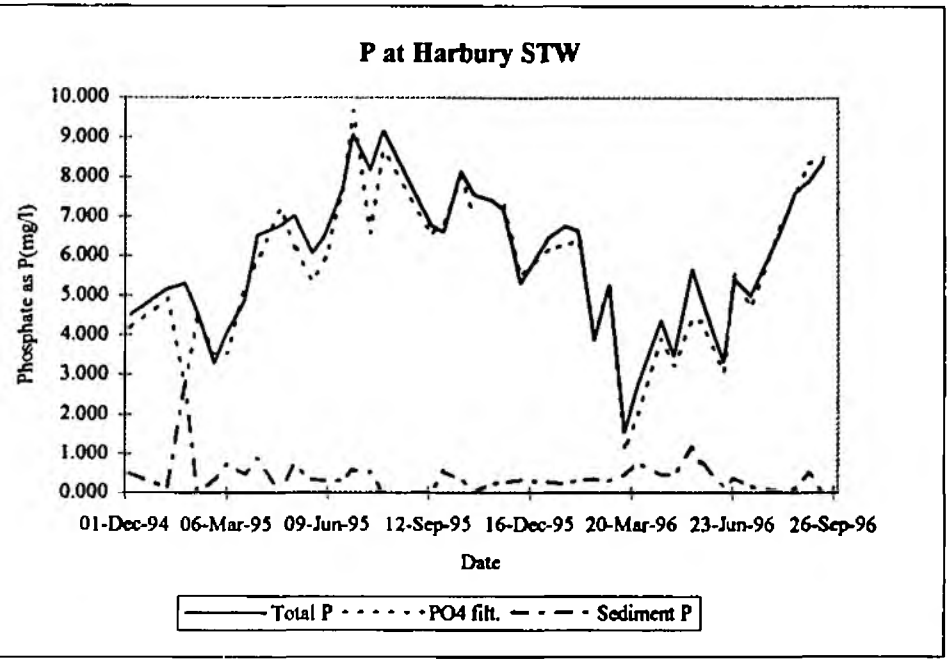


Figure 40 Harbury STW

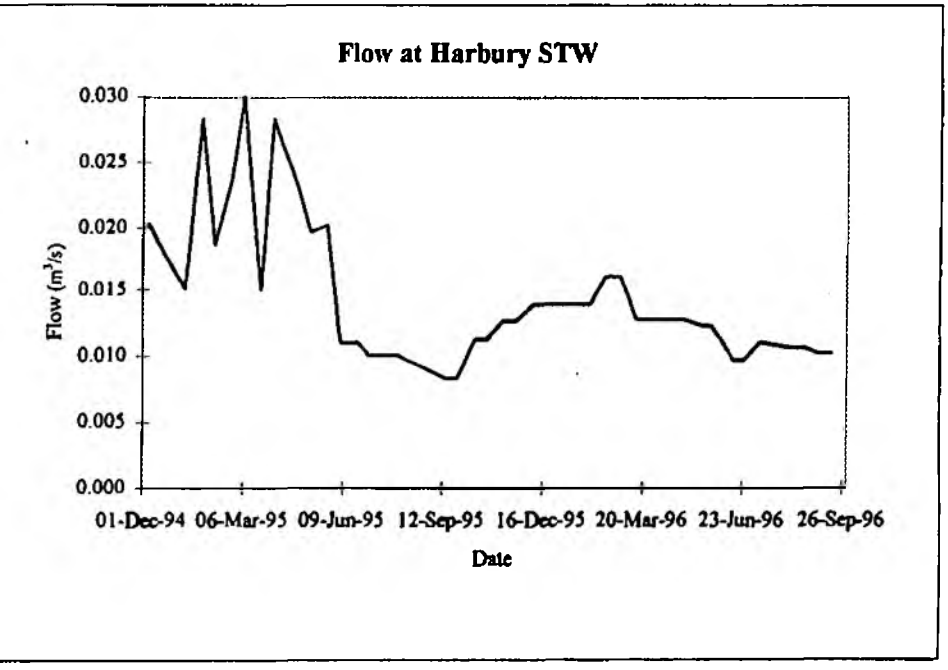


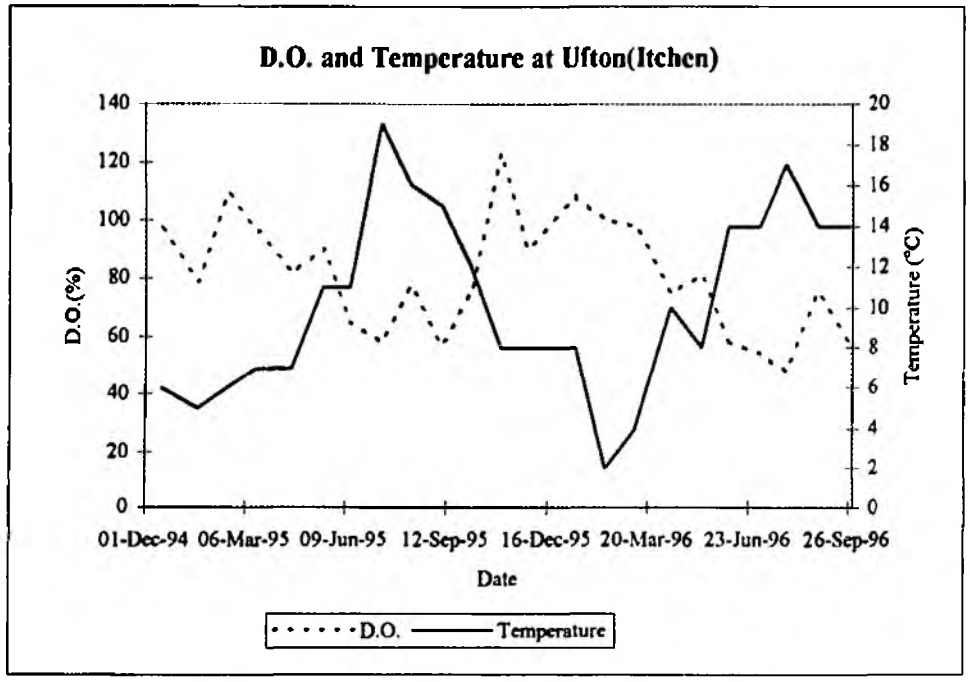

N at Harbury STW
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

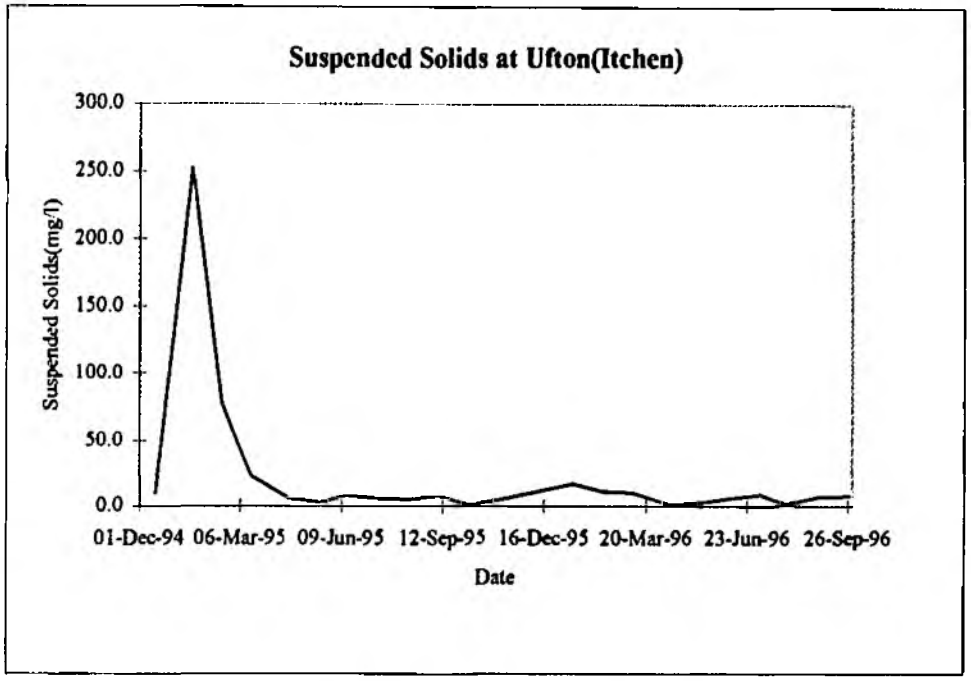

pH at Harbury STW
7.8
7.7
7.6
7.5
7.4
7.3
7.2
7.1
7.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

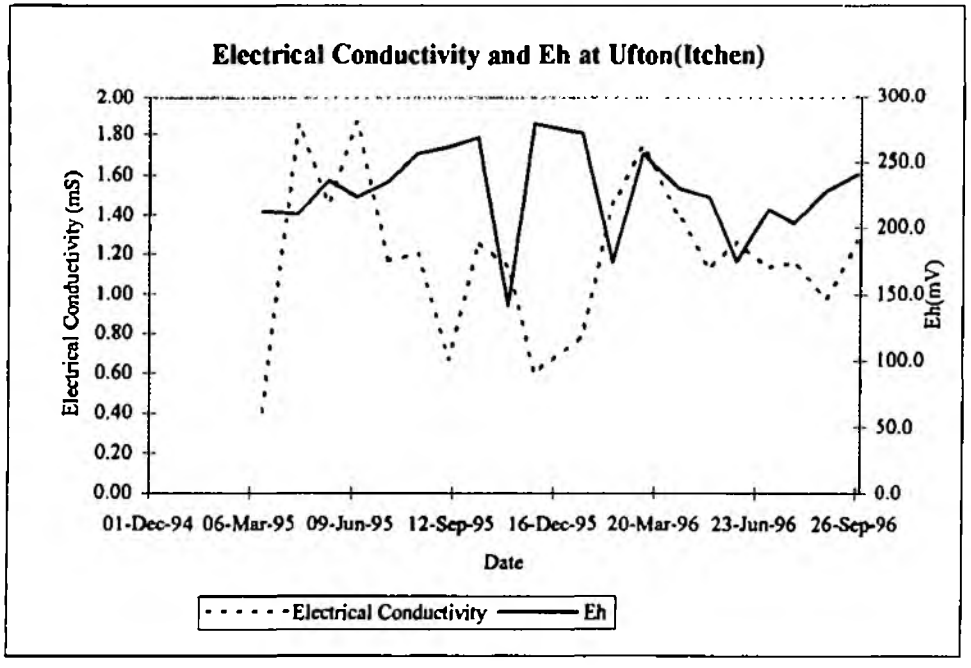


(Figure 40 cont.)









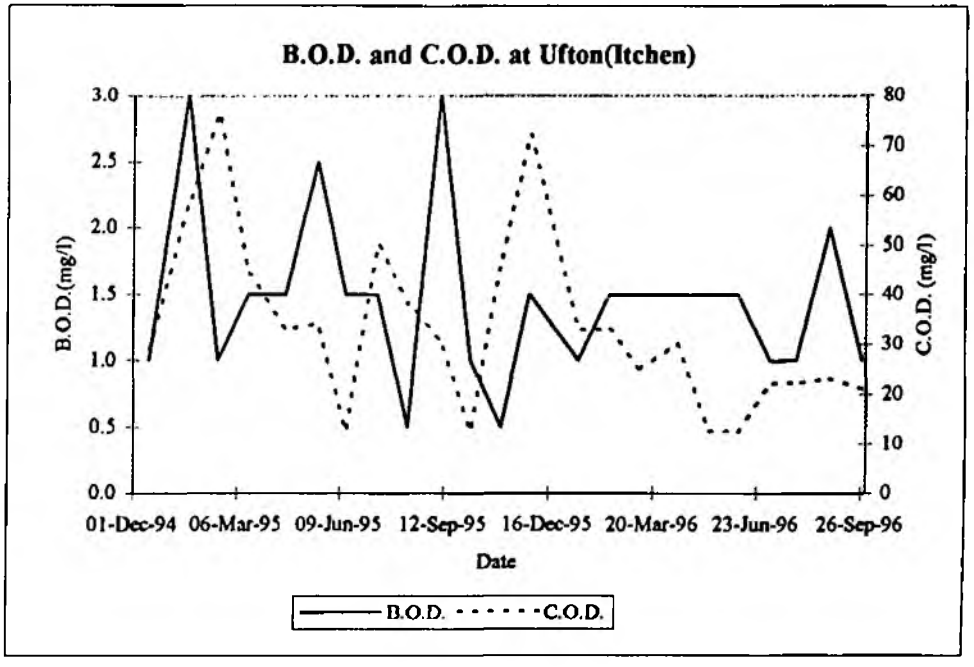
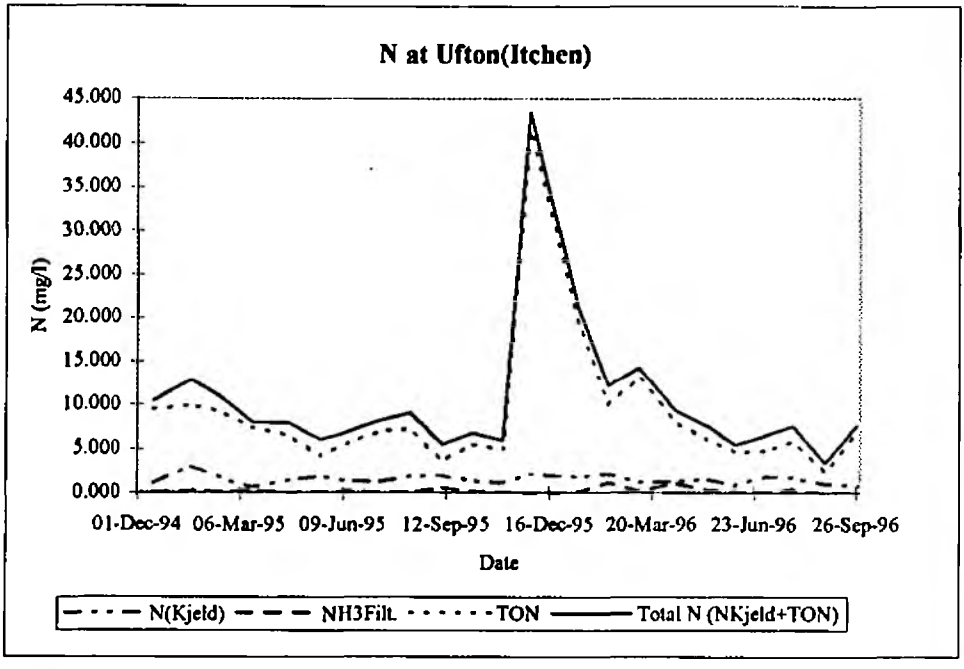
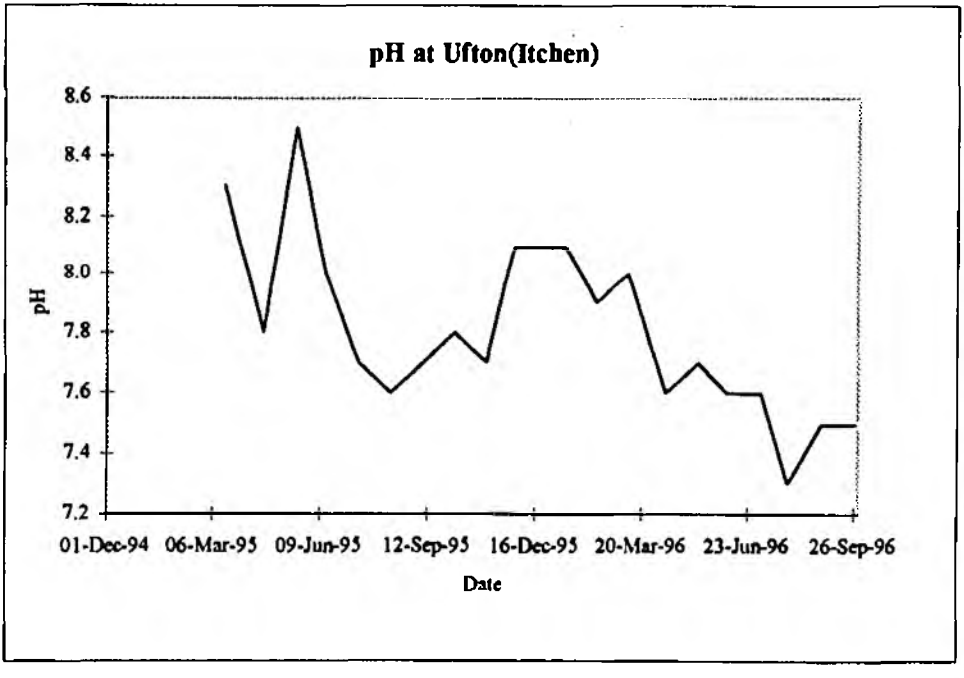
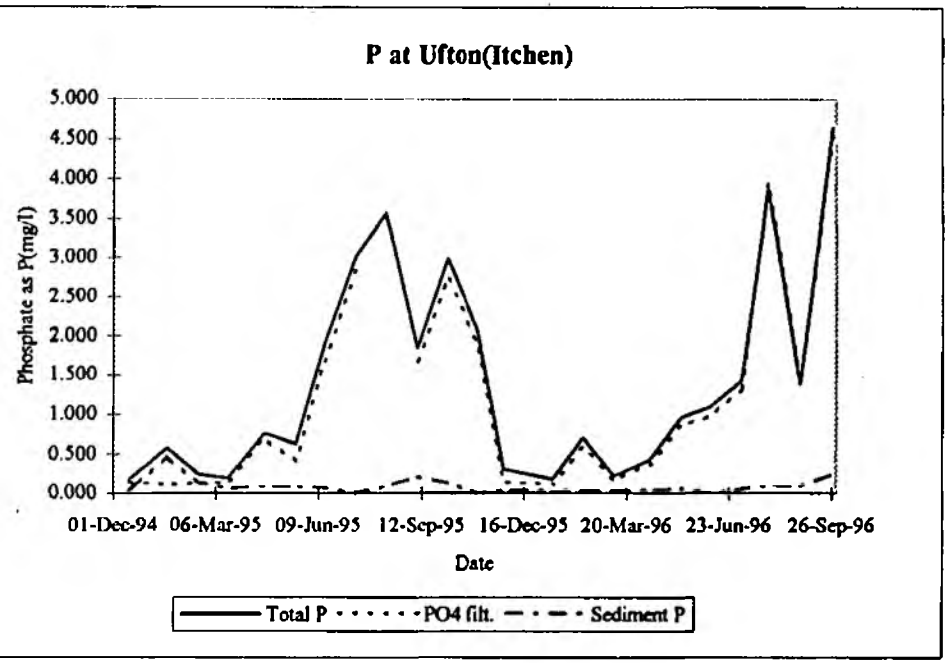


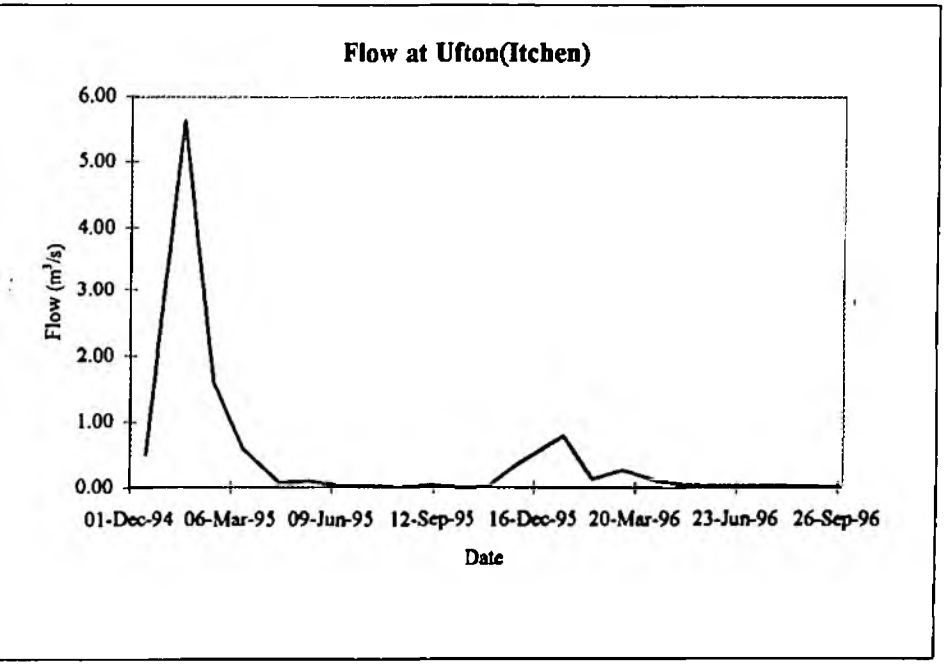
Figure 41 Ufton (Itchen)

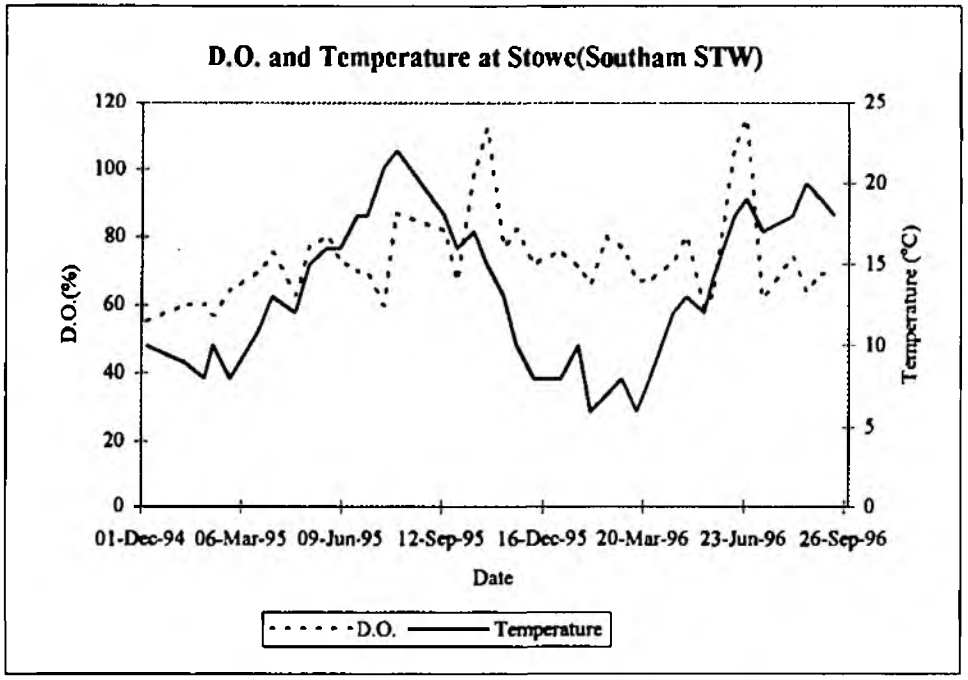

N at Ufton(Itchen)
45.000
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

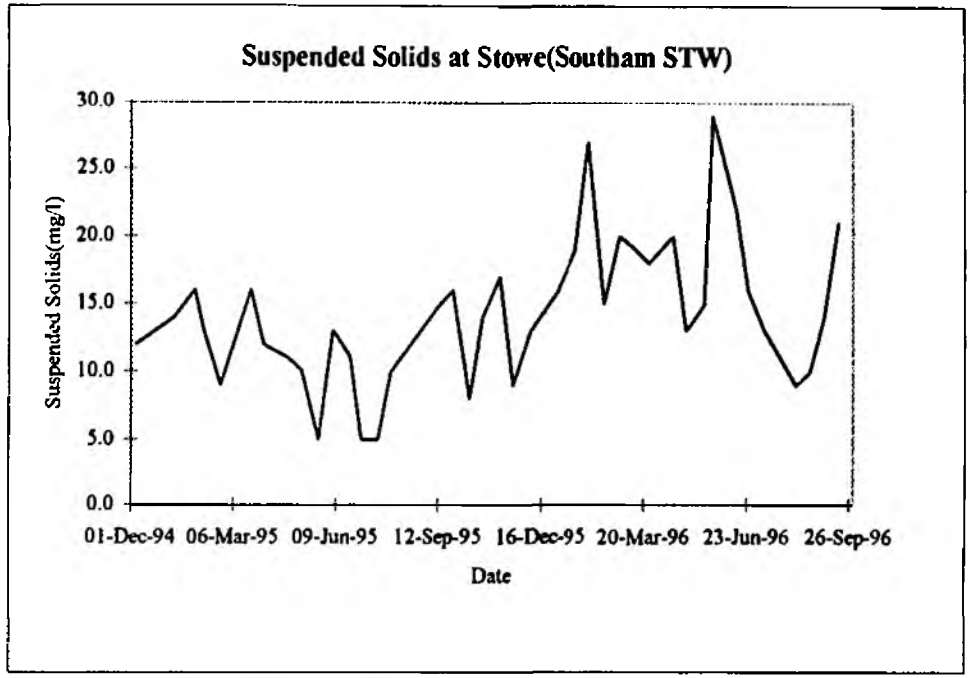

pH at Ufton(Itchen)
8.6
8.4
8.2
8.0
7.8
7.6
7.4
7.2
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

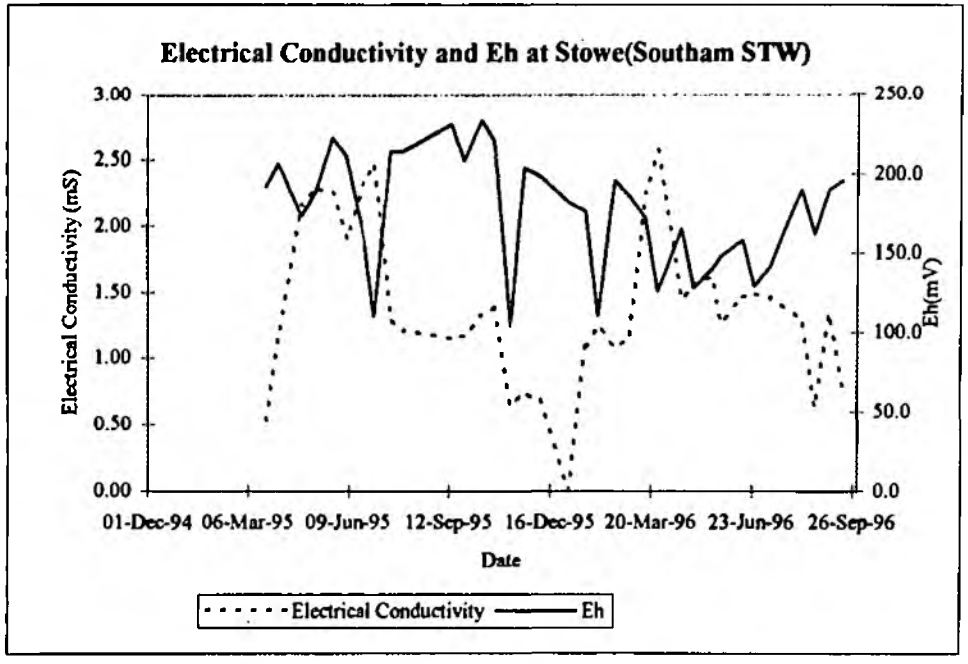


(Figure 41 cont.)









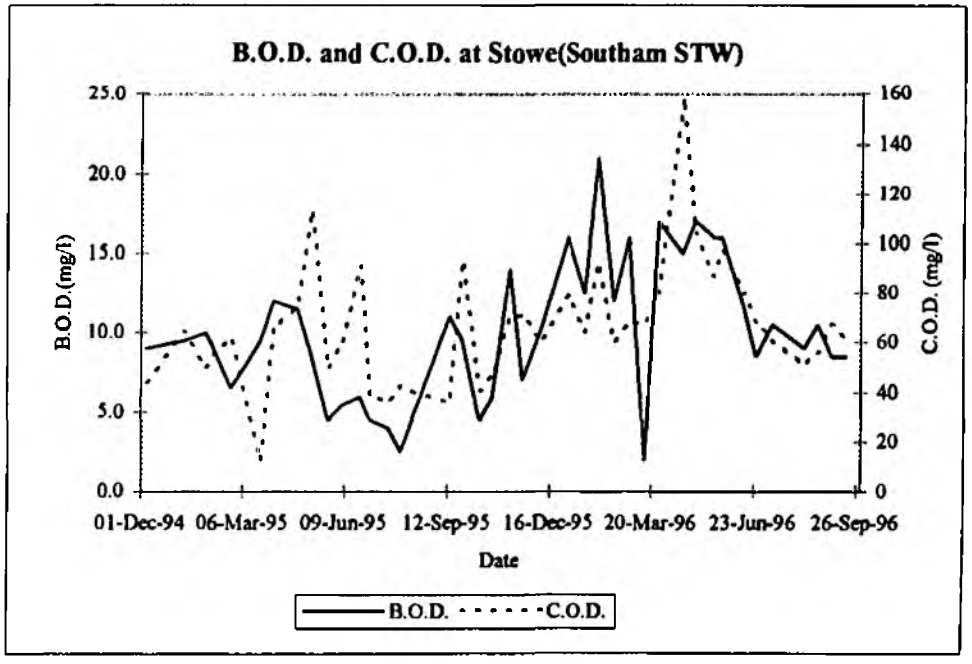
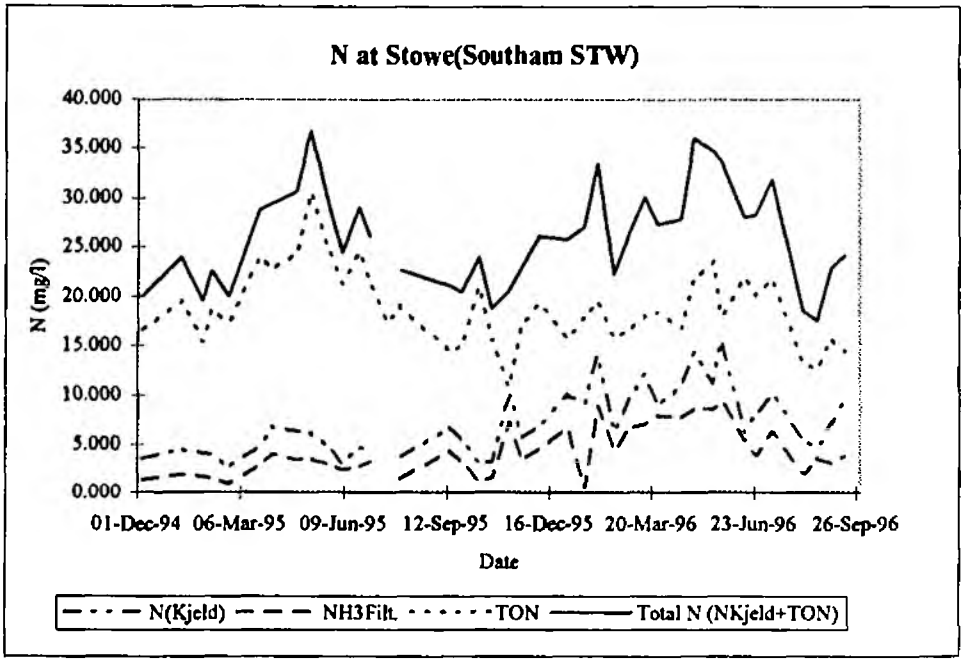
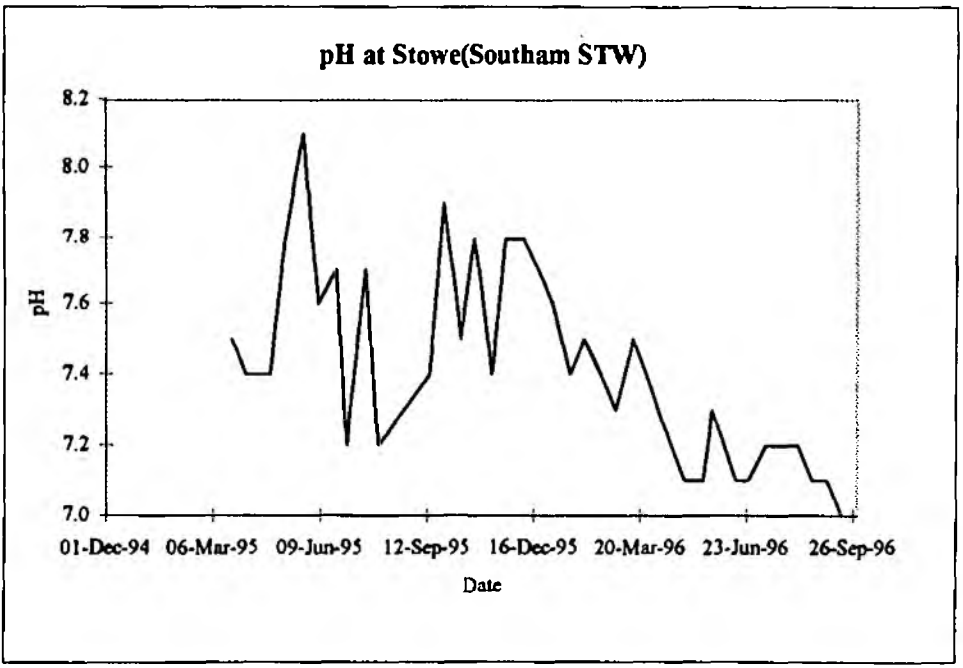
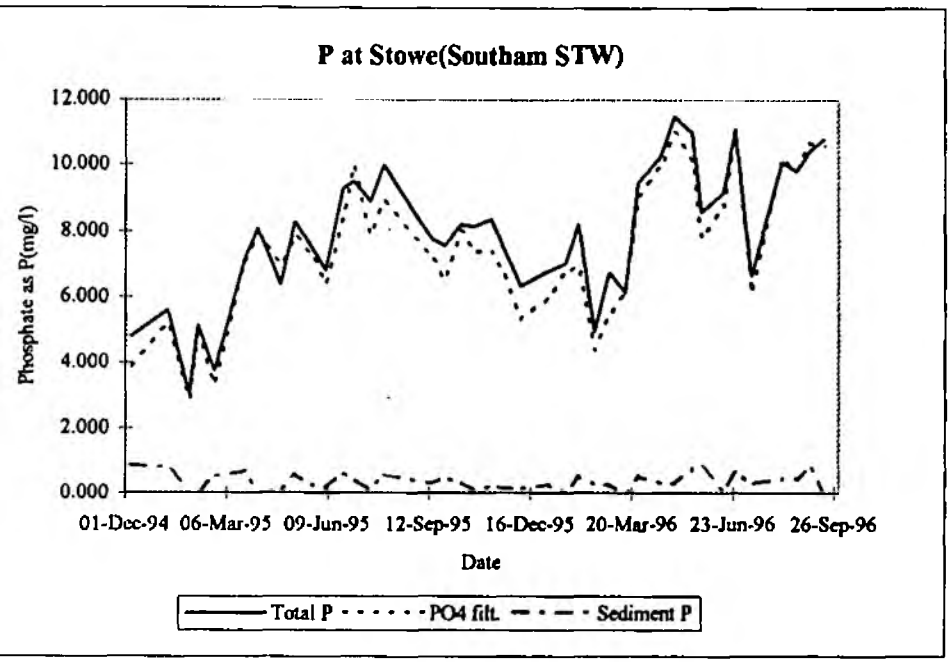
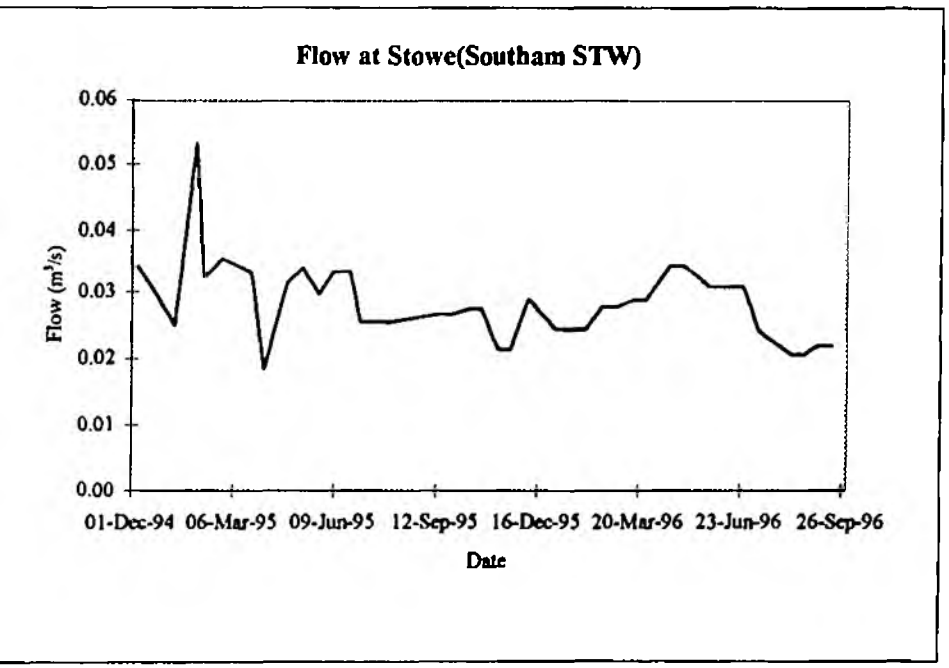


Figure 42 Stowe (Southam STW)


N at Stowe(Southam STW)
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

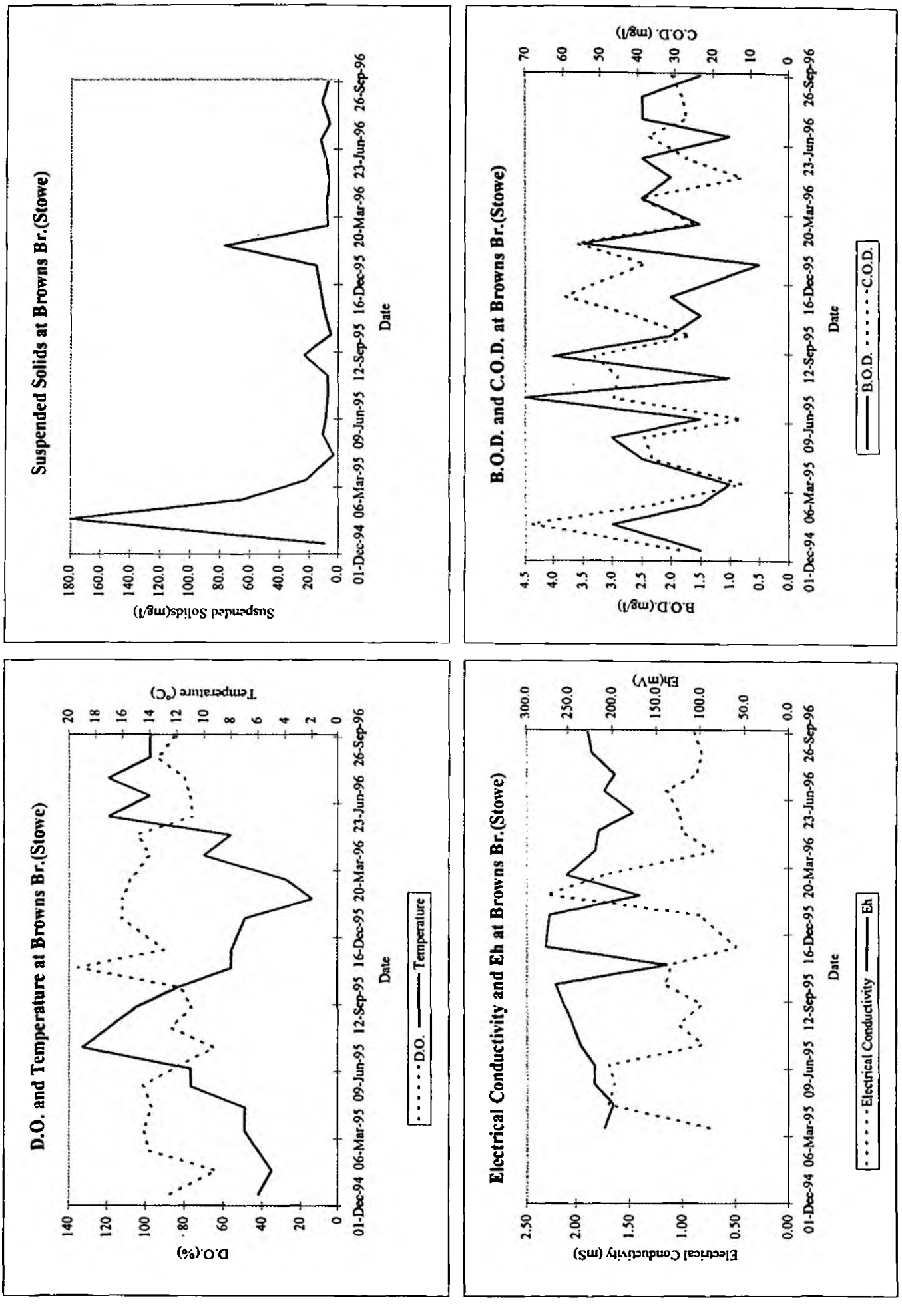

pH at Stowe(Southam STW)
8.2
8.0
7.8
7.6
7.4
7.2
7.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

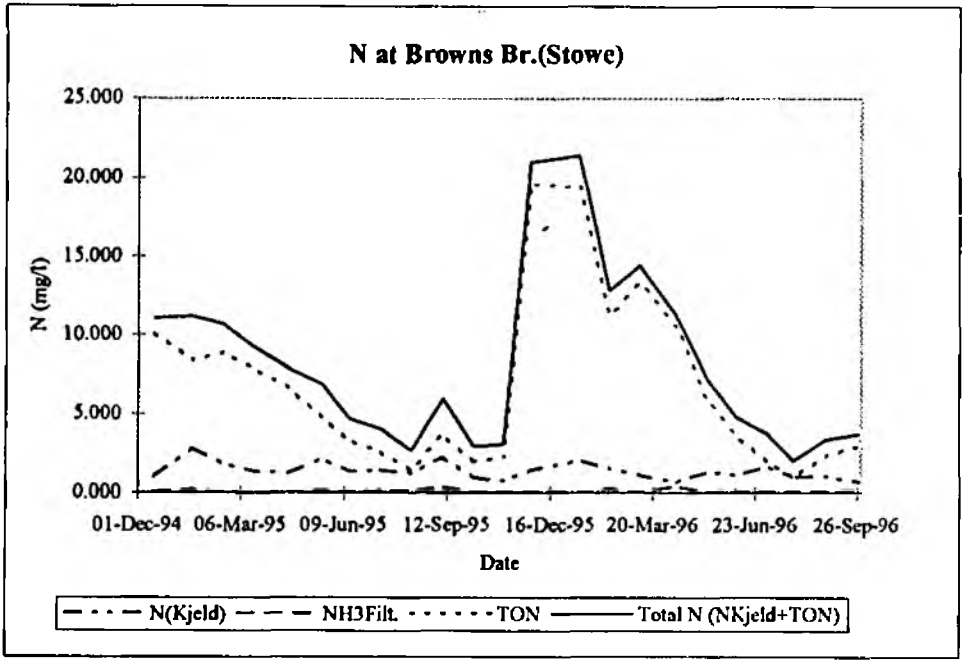


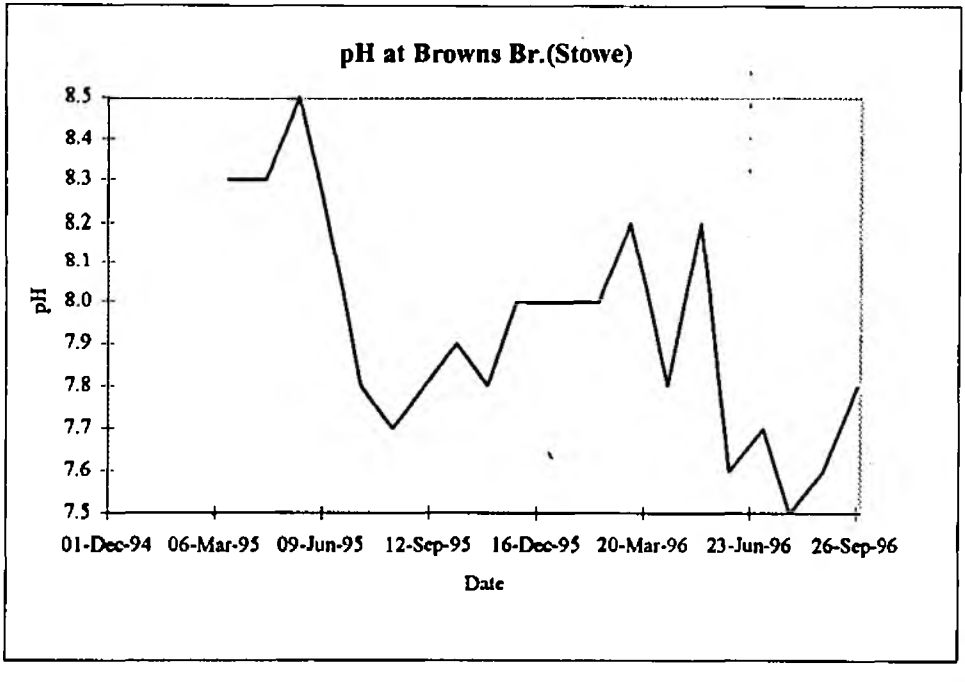


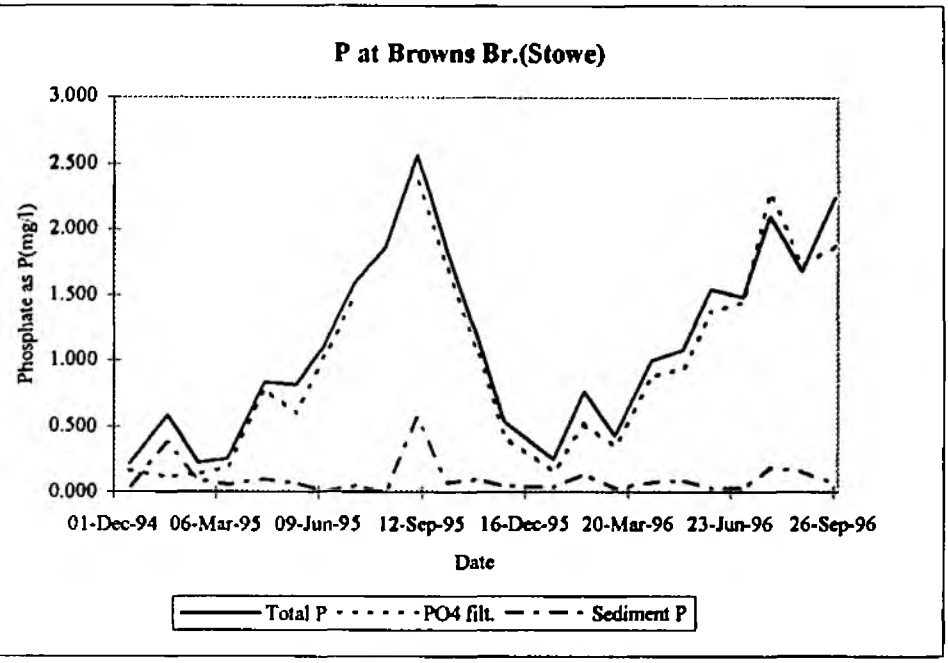
(Figure 42 cont.)

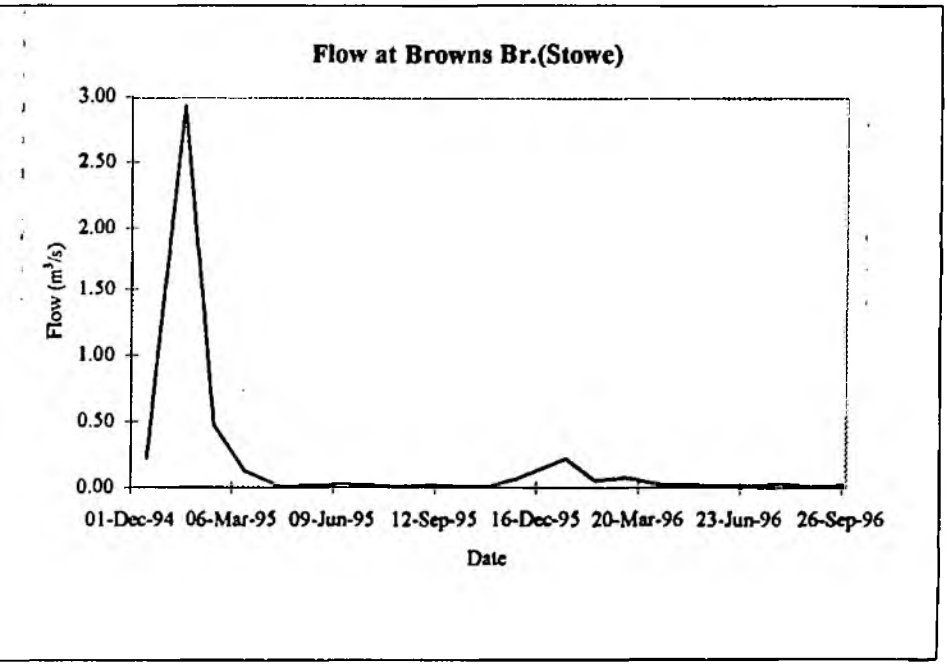
Figure 43 Browns Br. (Stowe)



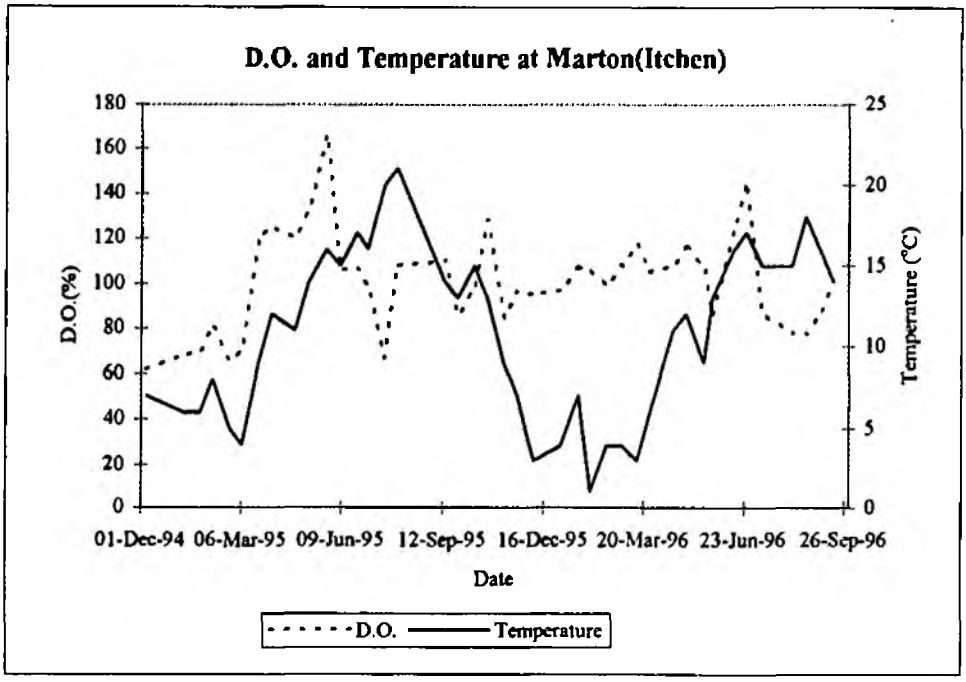

N at Browns Br.(Stowe)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

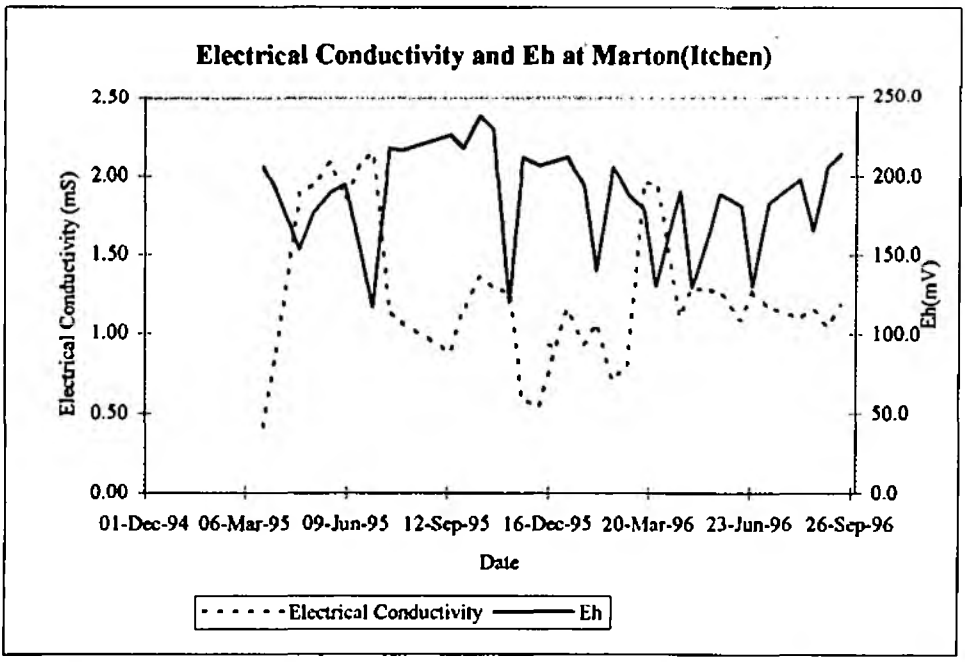

pH at Browns Br.(Stowe)
8.5
8.4
8.3
8.2
8.1
8.0
7.9
7.8
7.7
7.6
7.5
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

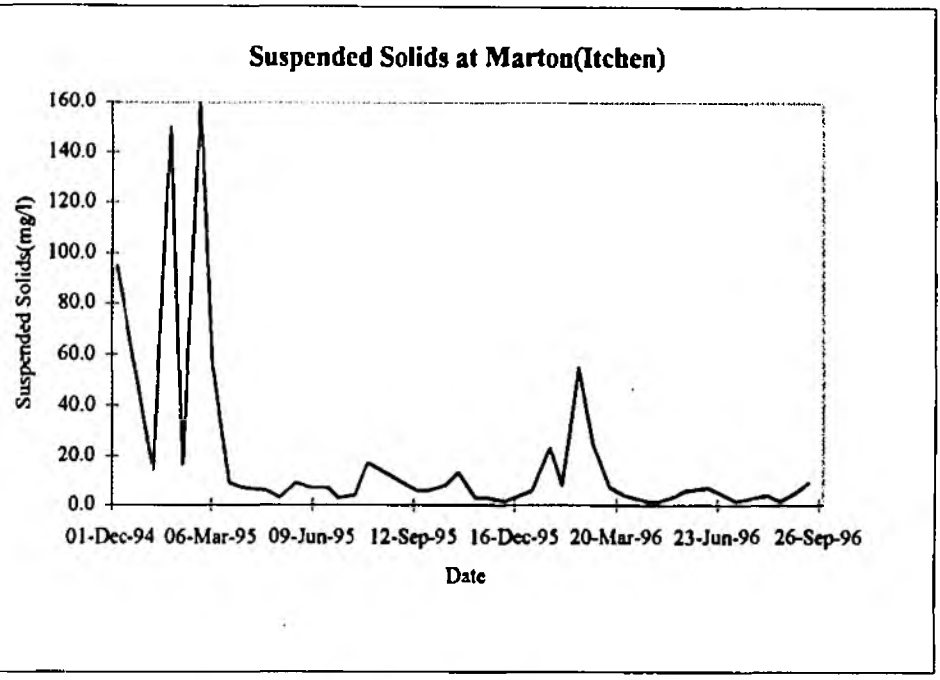




(Figure 43 cont.)


D.O. and Temperature at Marton(Itchen)
D.O.(%)
Temperature (°C)
180
160
140
120
100
80
60
40
20
0
25
20
15
10
5
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature


Electrical Conductivity and Eh at Marton(Itchen)
Electrical Conductivity (mS)
Eh(mV)
2.50
2.00
1.50
1.00
0.50
0.00
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh



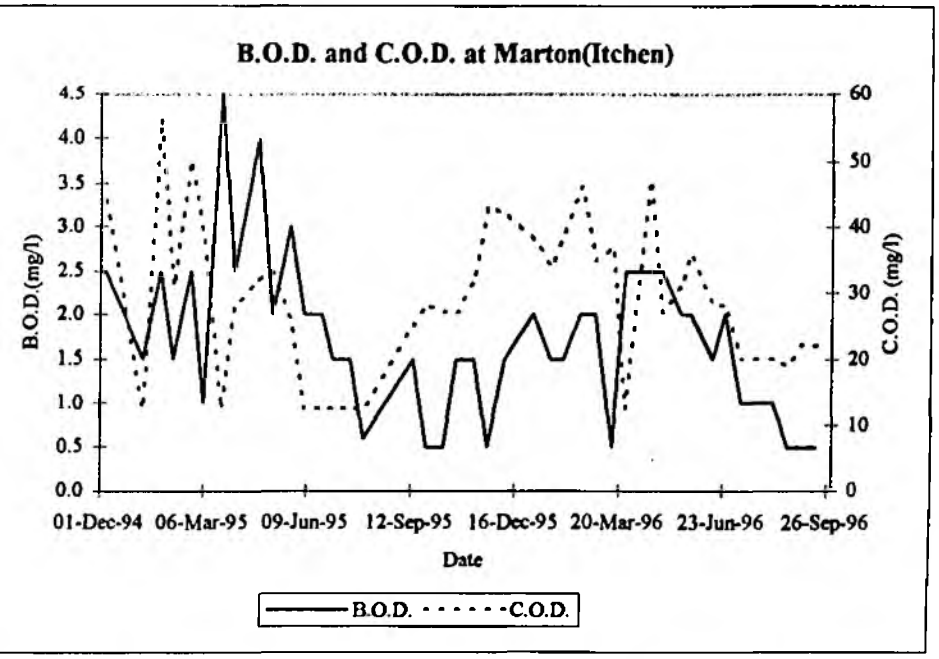
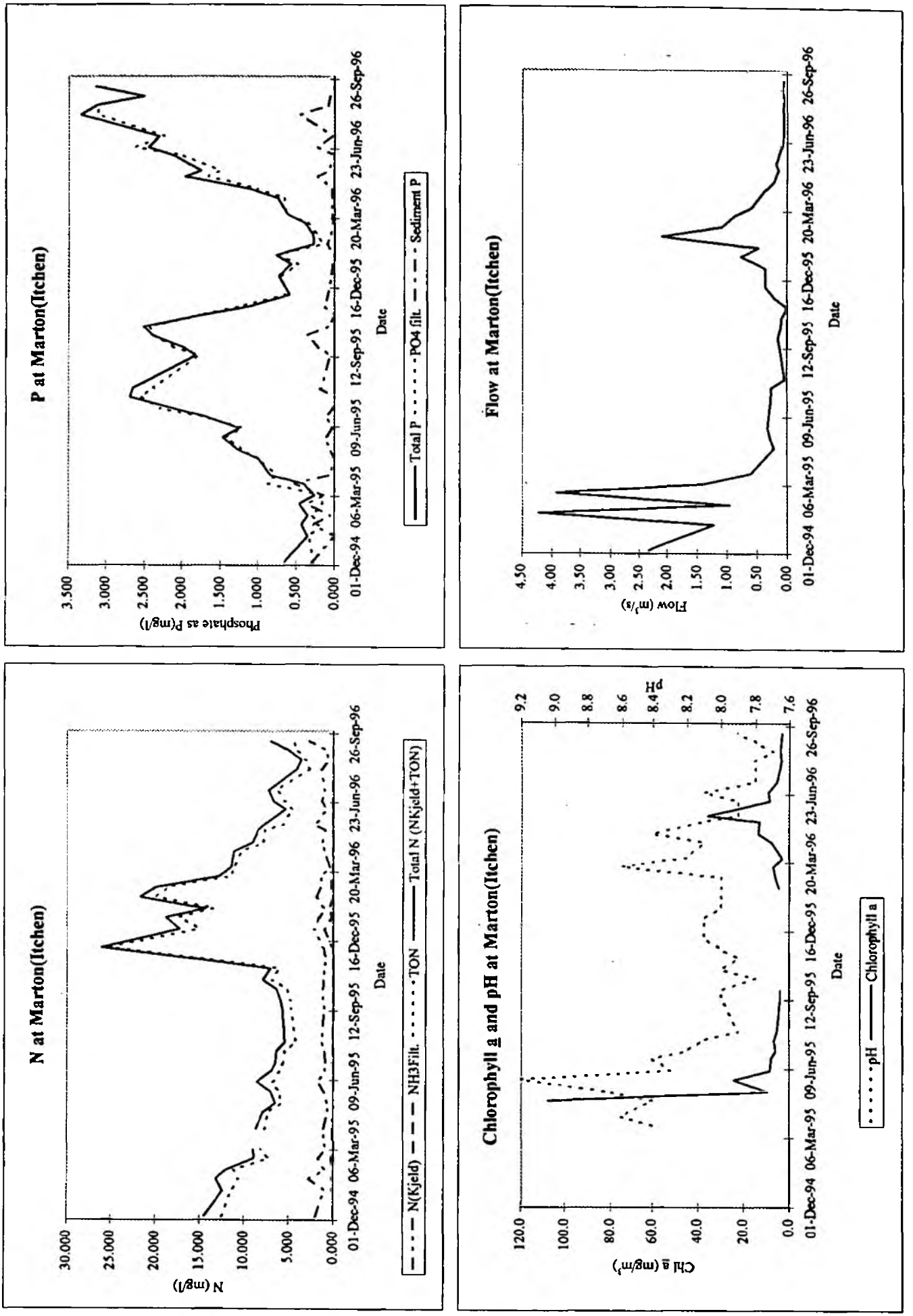
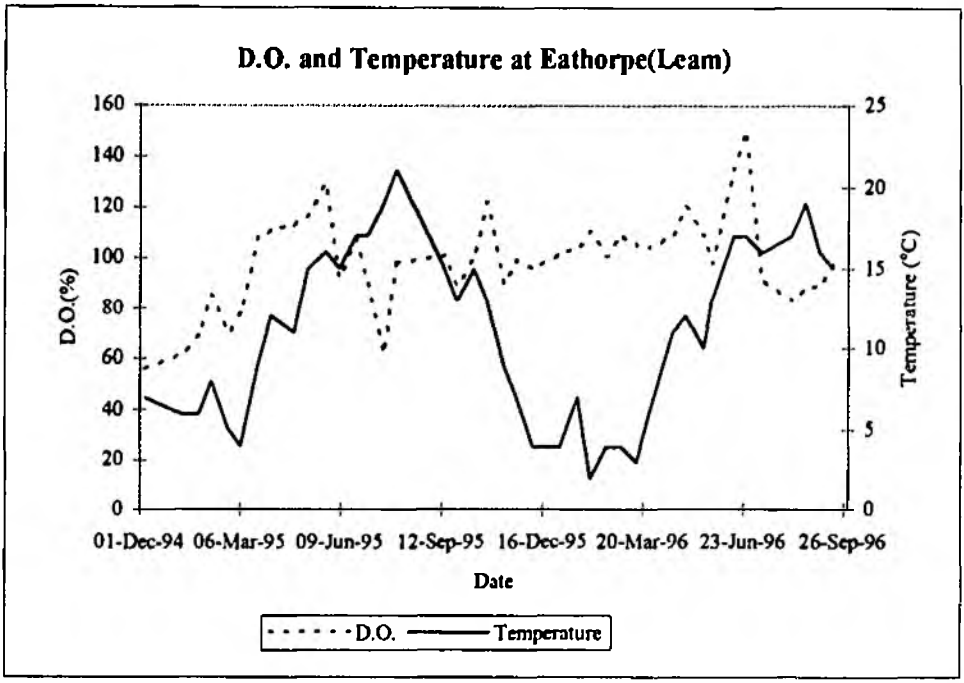
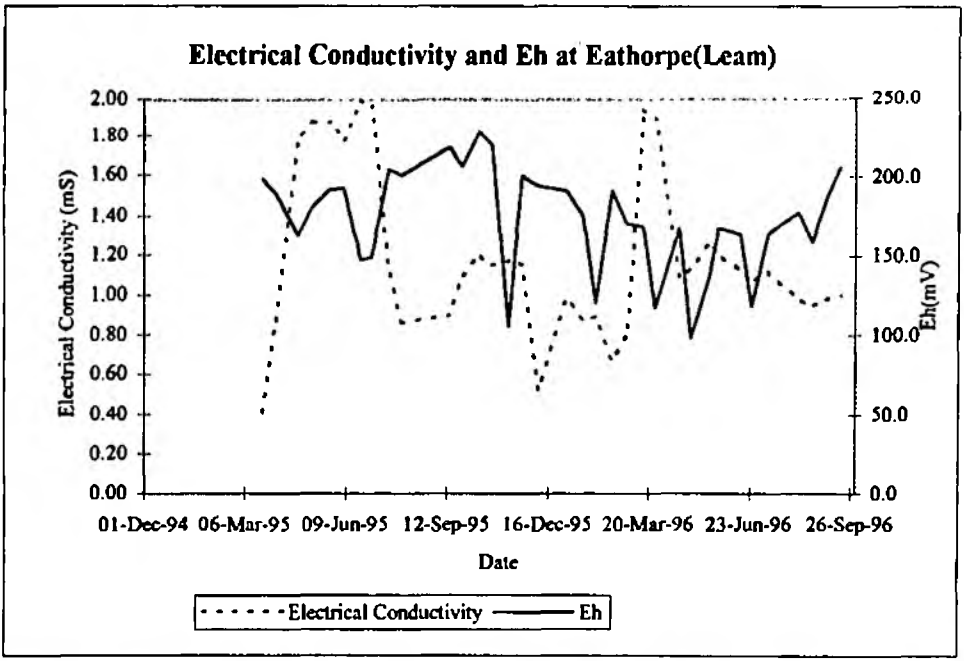


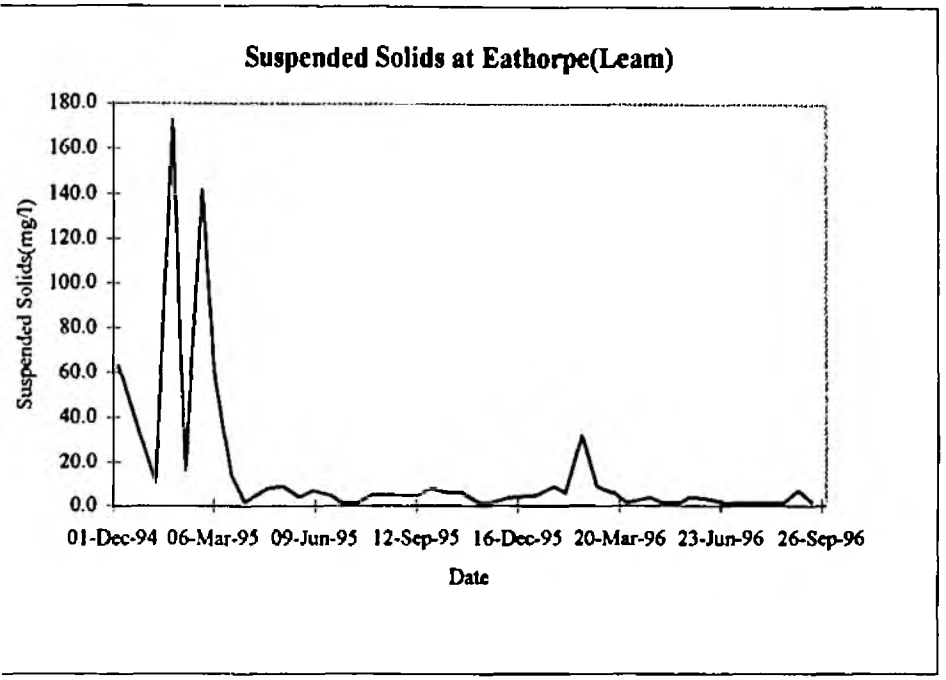
Figure 44 Marton (Itchen)

(Figure 44 cont.)




D.O. and Temperature at Eathorpe(Leam)
D.O.(%)
Temperature (°C)
160
140
120
100
80
60
40
20
0
25
20
15
10
5
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature


Electrical Conductivity and Eh at Eathorpe(Leam)
Electrical Conductivity (mS)
Eh(mV)
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh



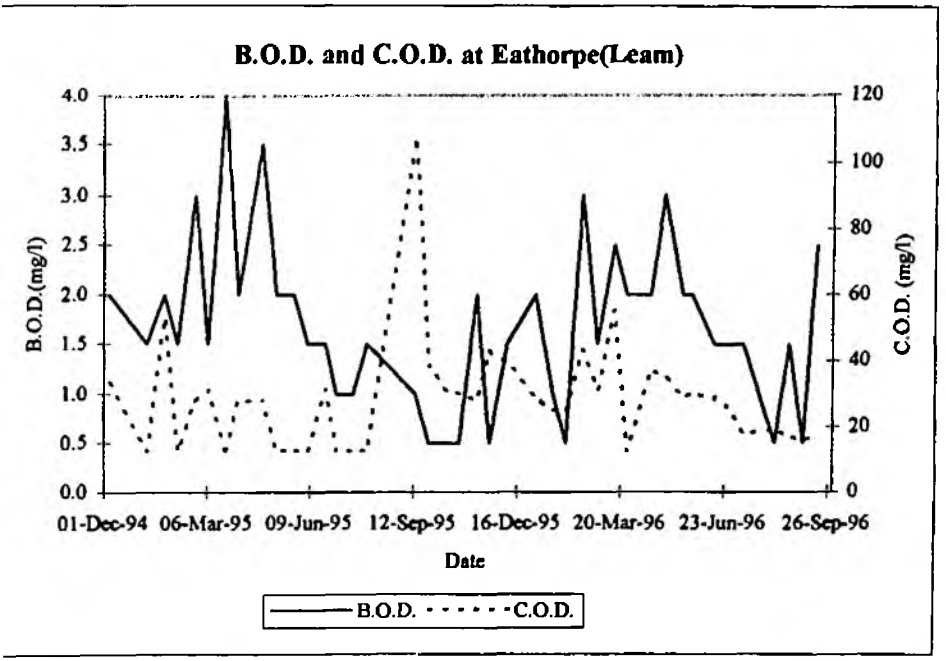


Figure 45 Eathorpe (Leam)

(Figure 45 cont.)

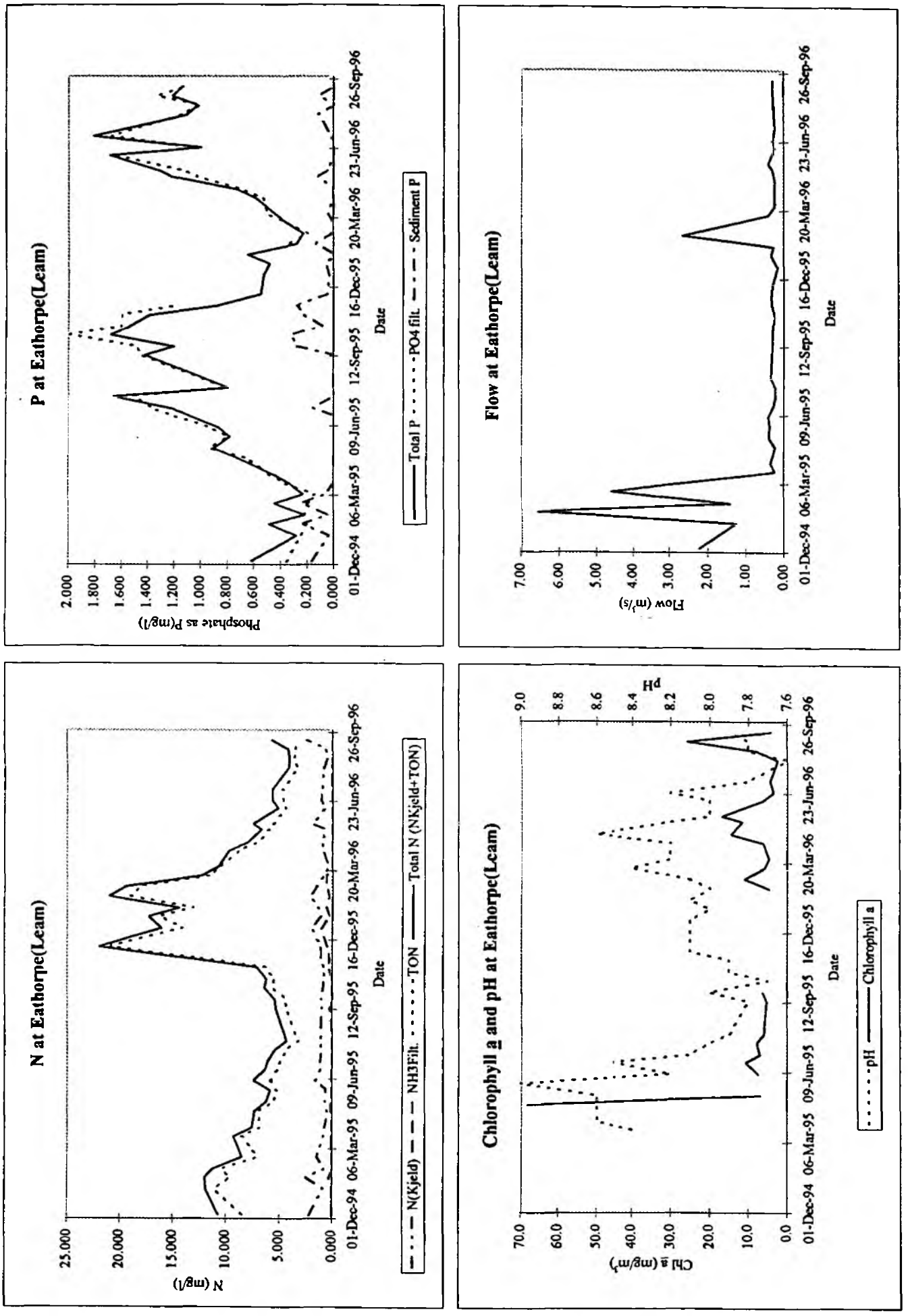
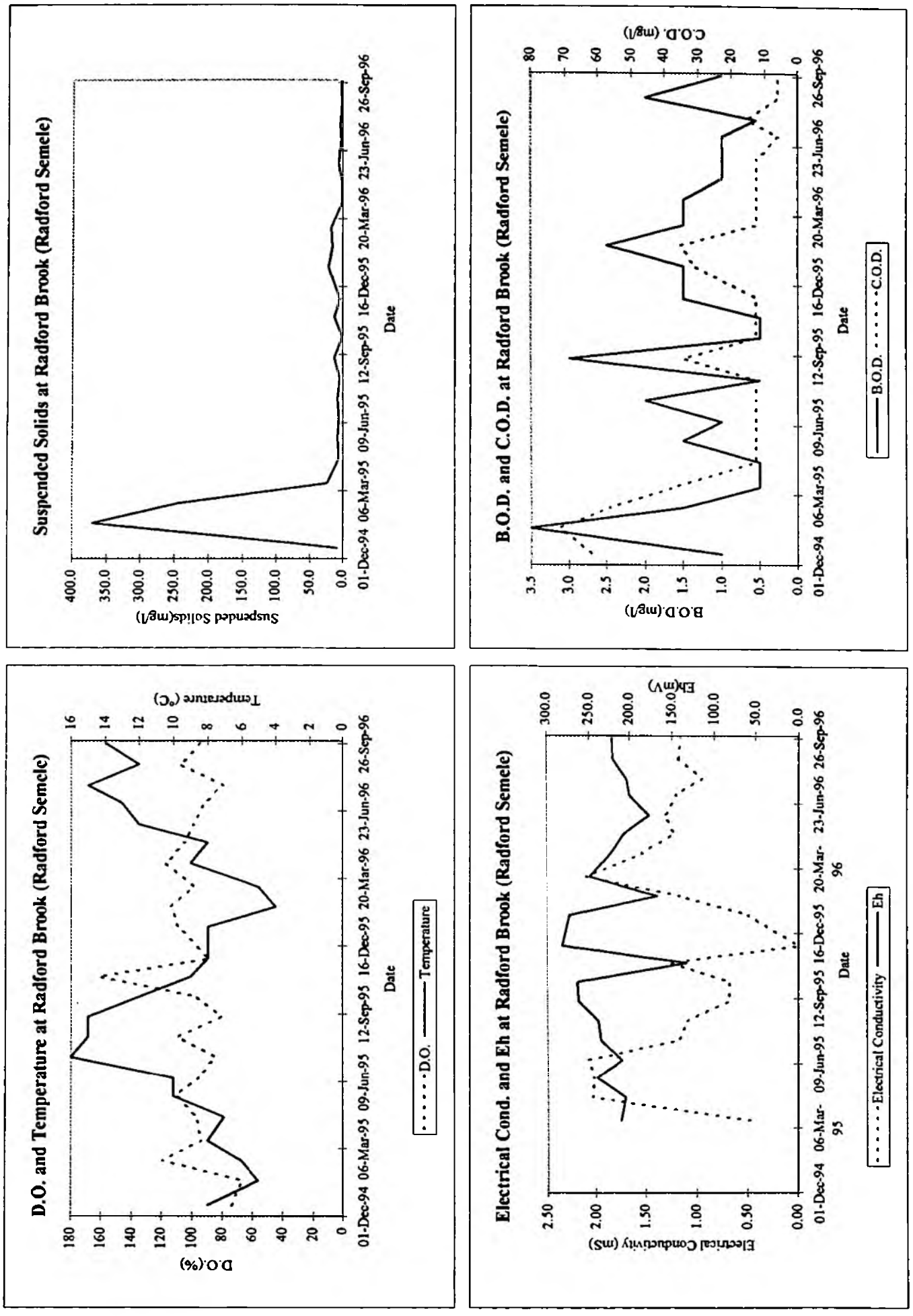
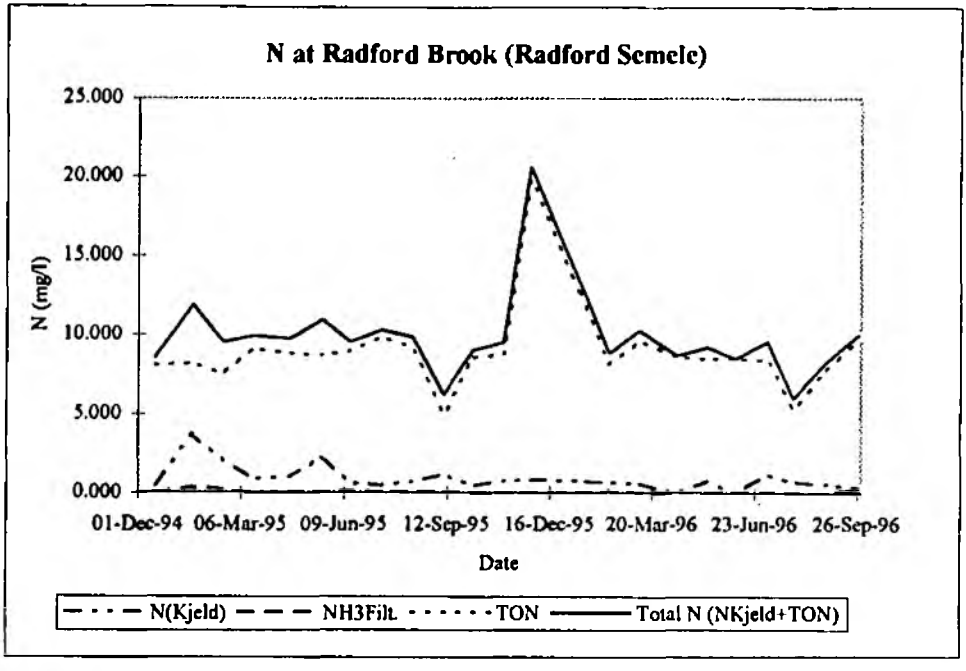
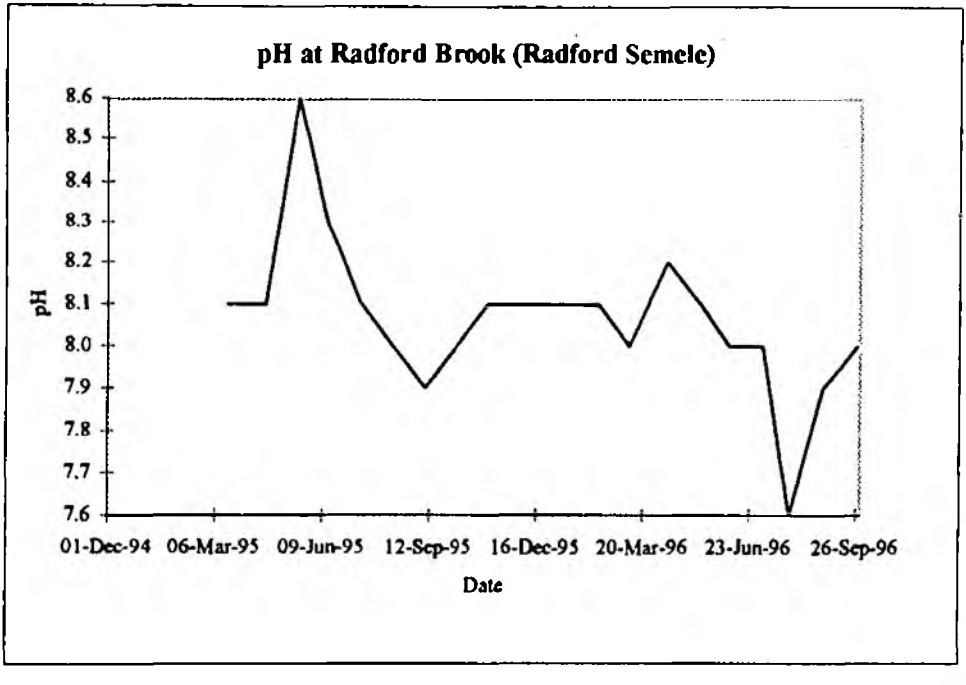
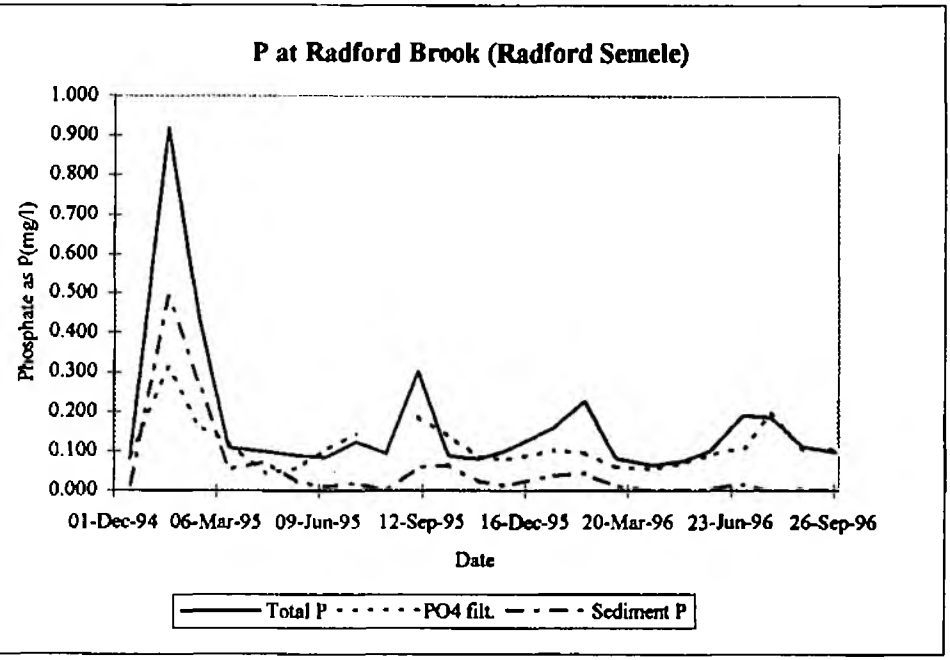


Figure 46 Radford Brook (Radford Semele)

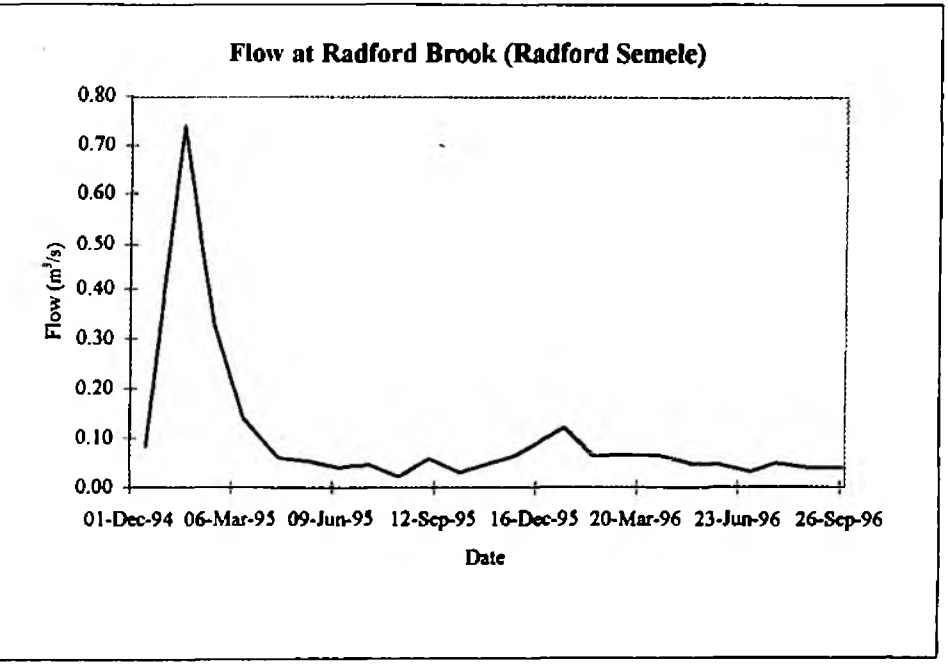


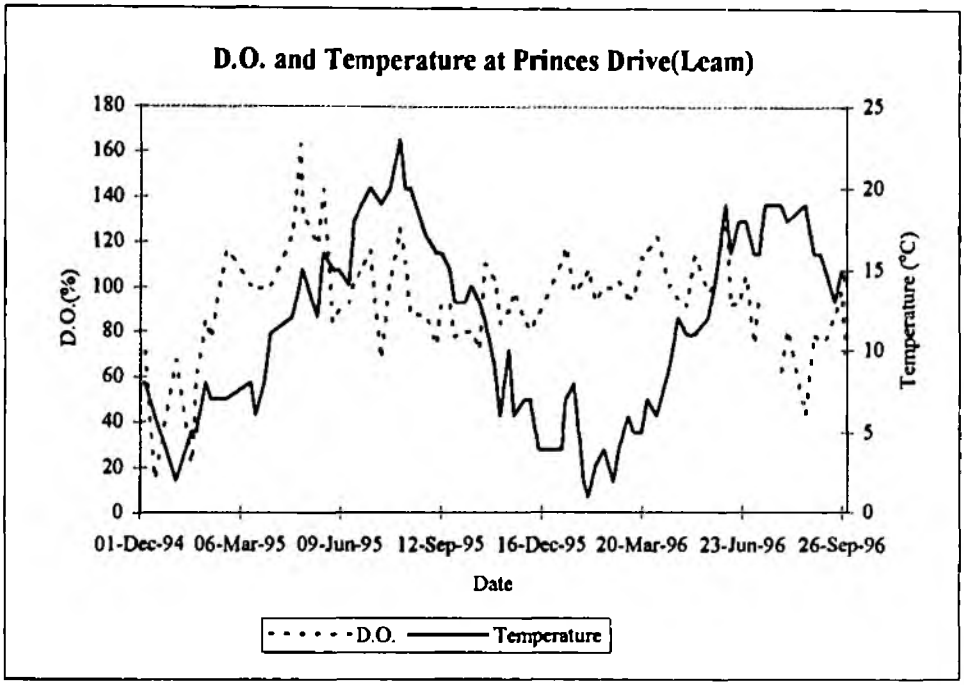

N at Radford Brook (Radford Semele)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt
TON
Total N (NKjeld+TON)

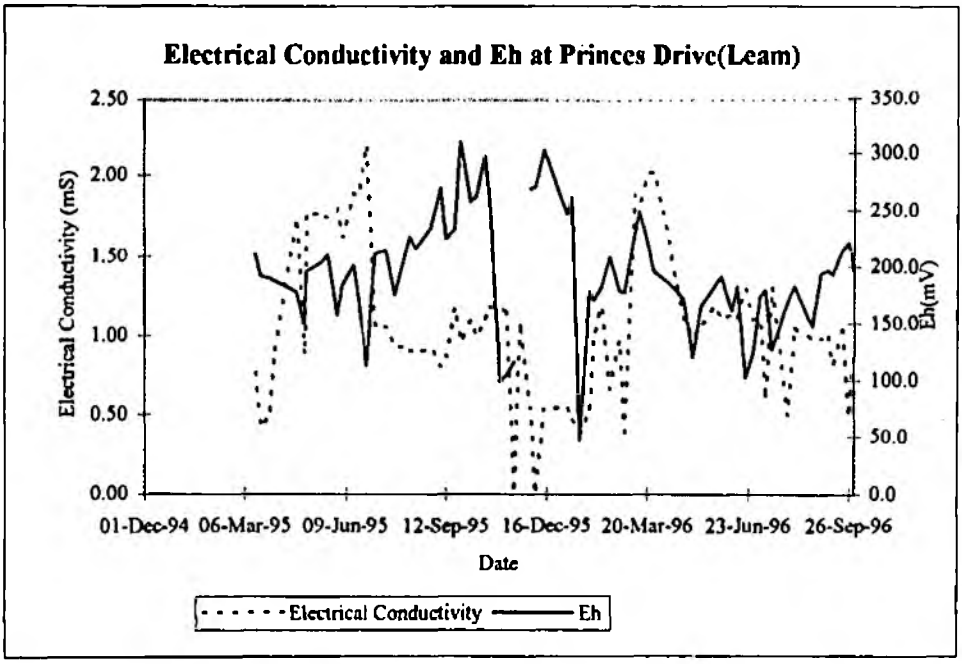

pH at Radford Brook (Radford Semele)
8.6
8.5
8.4
8.3
8.2
8.1
8.0
7.9
7.8
7.7
7.6
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date



(Figure 46 cont.)




D.O. and Temperature at Princes Drive(Leam)
D.O.(%)
Temperature (°C)
180
160
140
120
100
80
60
40
20
0
25
20
15
10
5
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature


Electrical Conductivity and Eh at Princes Drive(Leam)
Electrical Conductivity (mS)
Eh(mV)
2.50
2.00
1.50
1.00
0.50
0.00
350.0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh

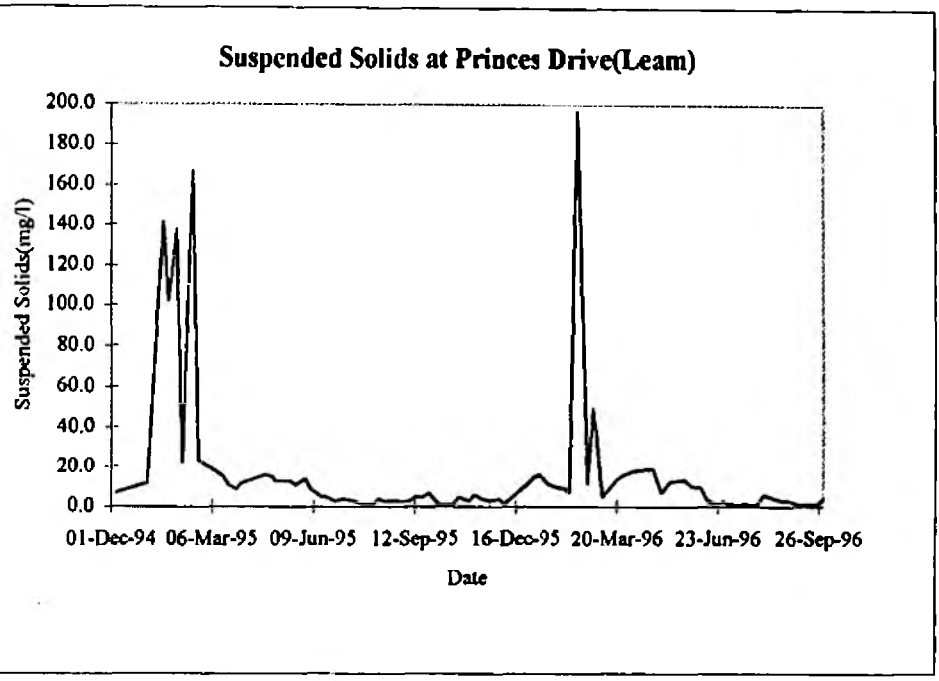
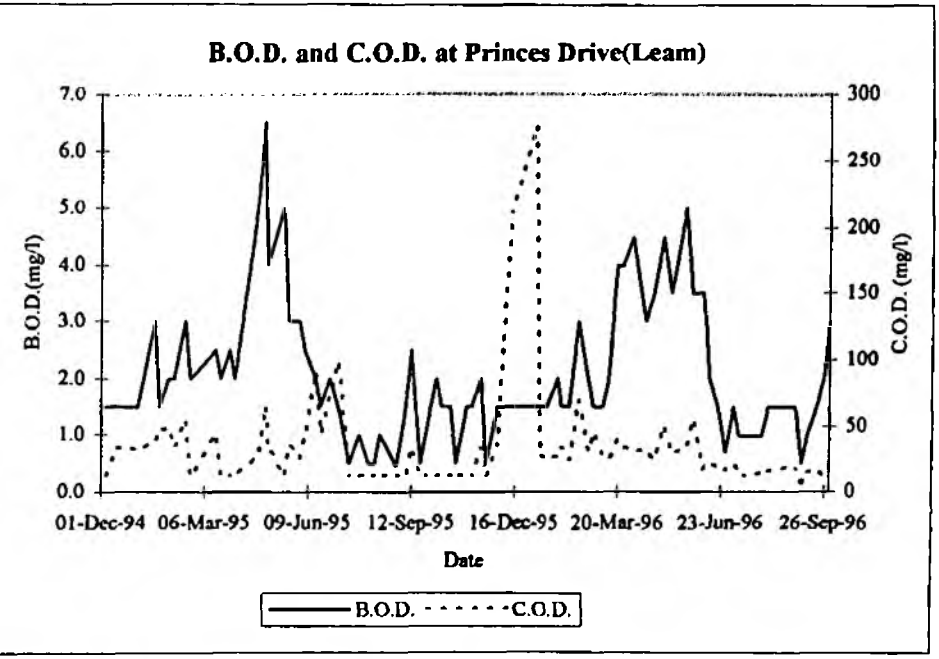
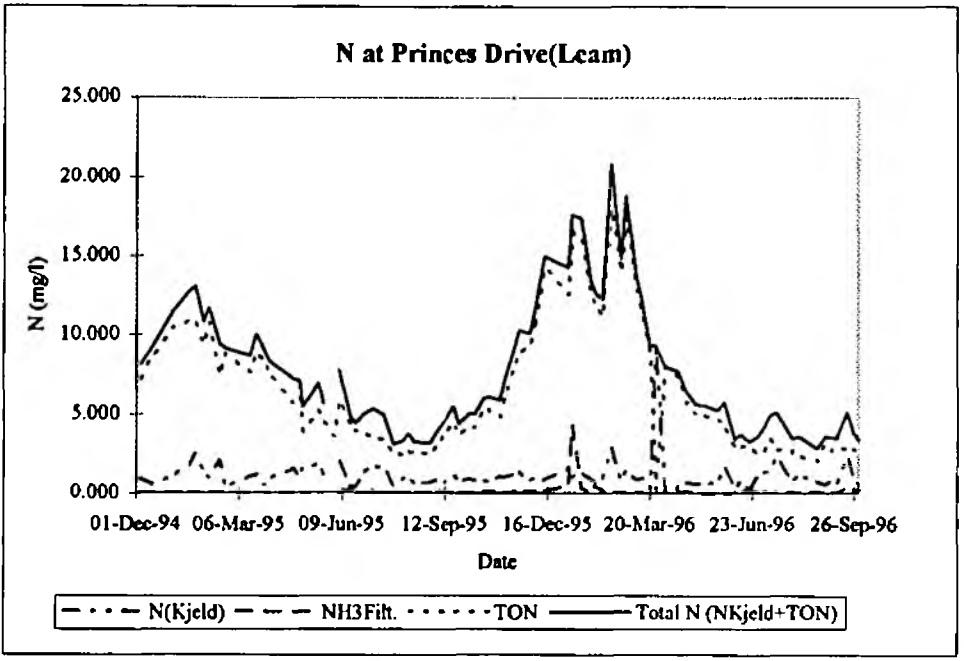
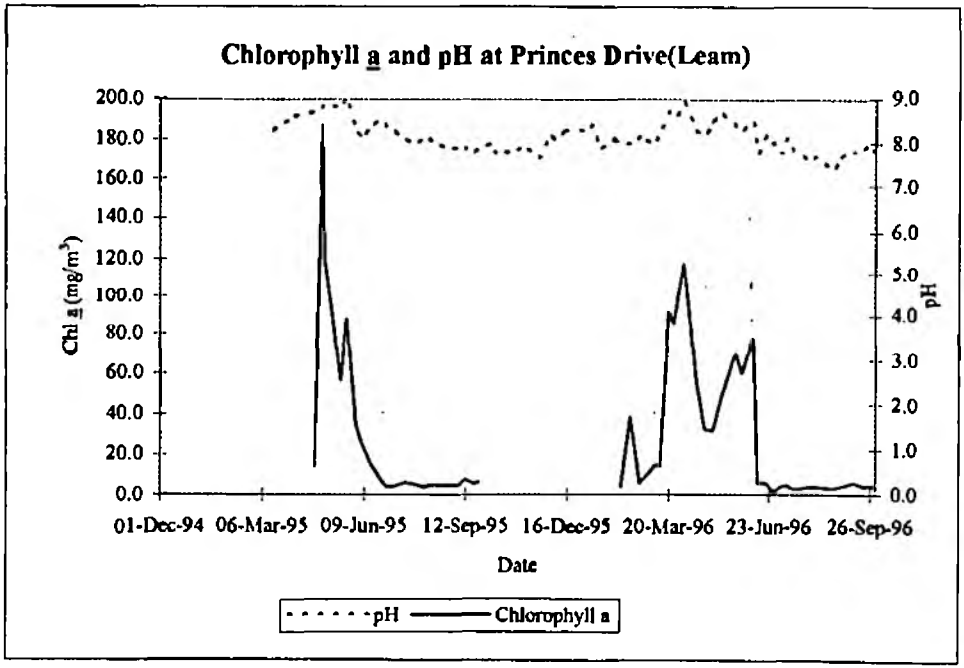
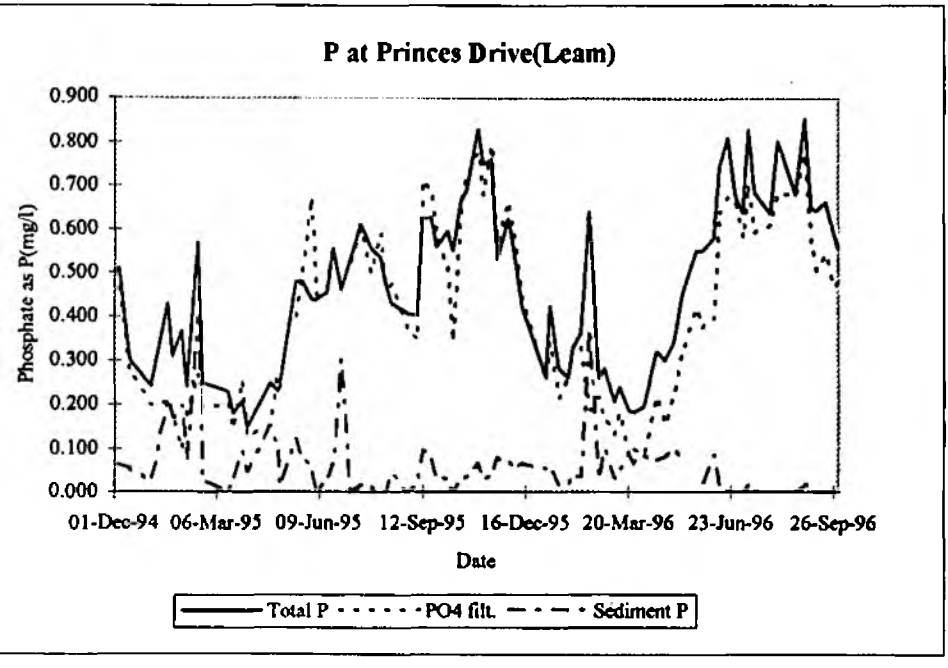


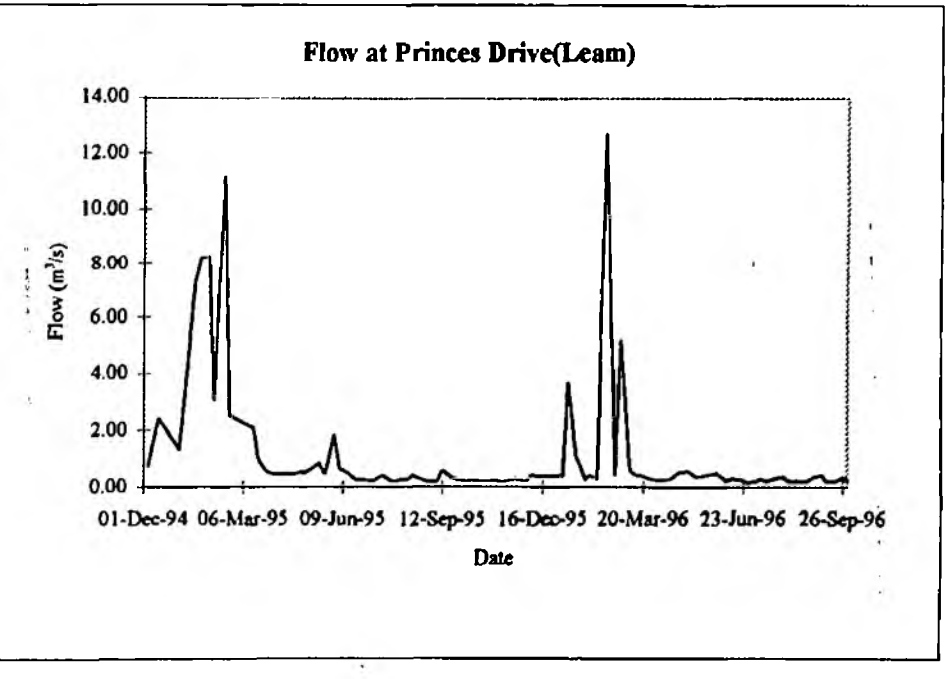
Figure 47 Princes Drive (Leam)




N at Princes Drive(Leam)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

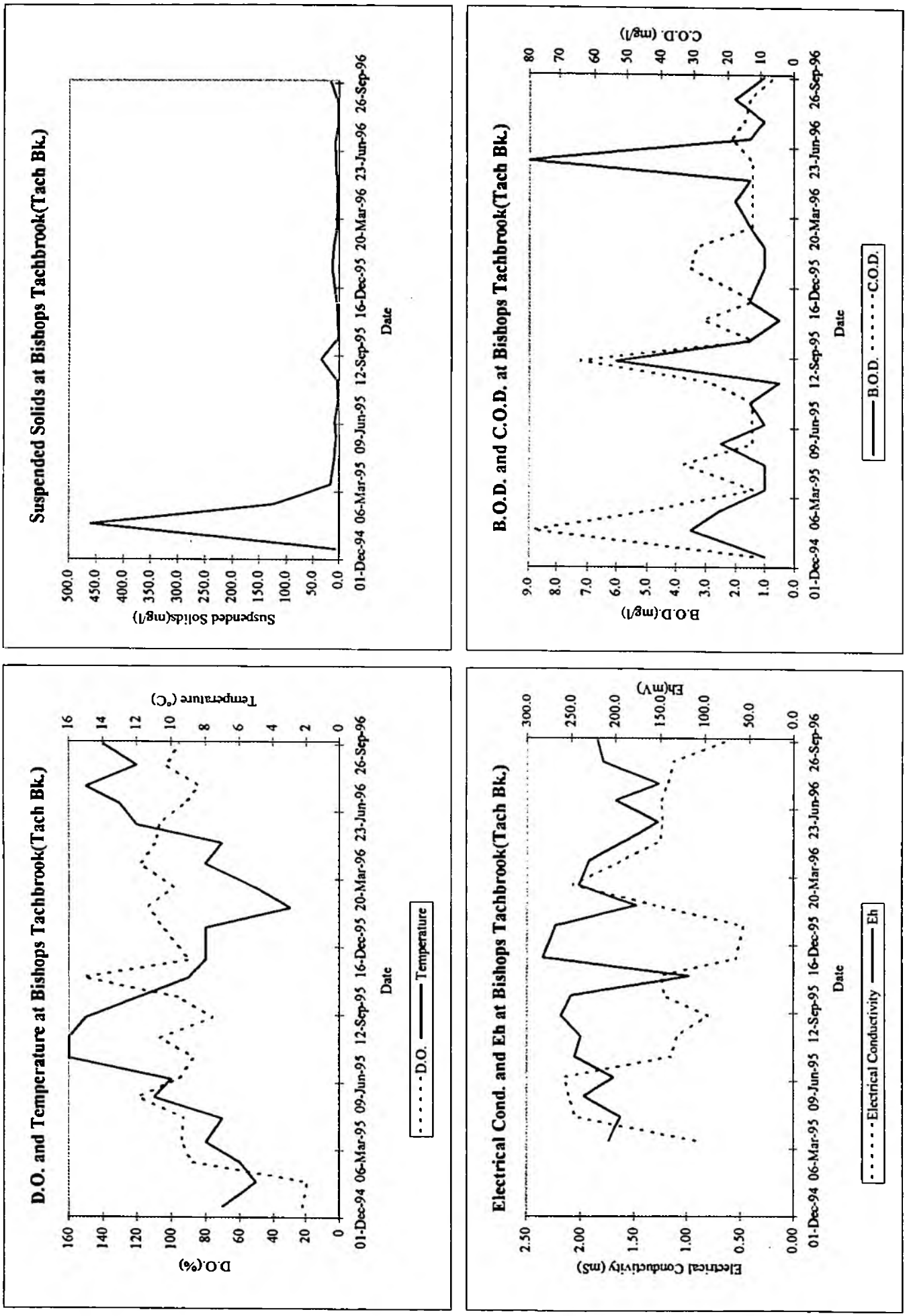

Chlorophyll a and pH at Princes Drive(Leam)
200.0
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
Chl a (mg/m³)
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
pH
Chlorophyll a

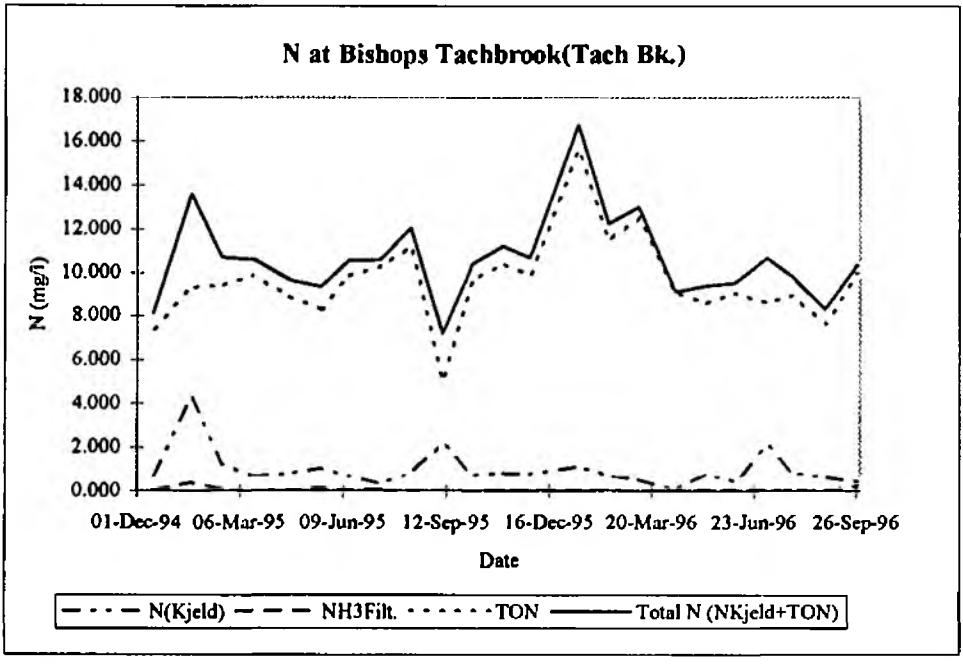


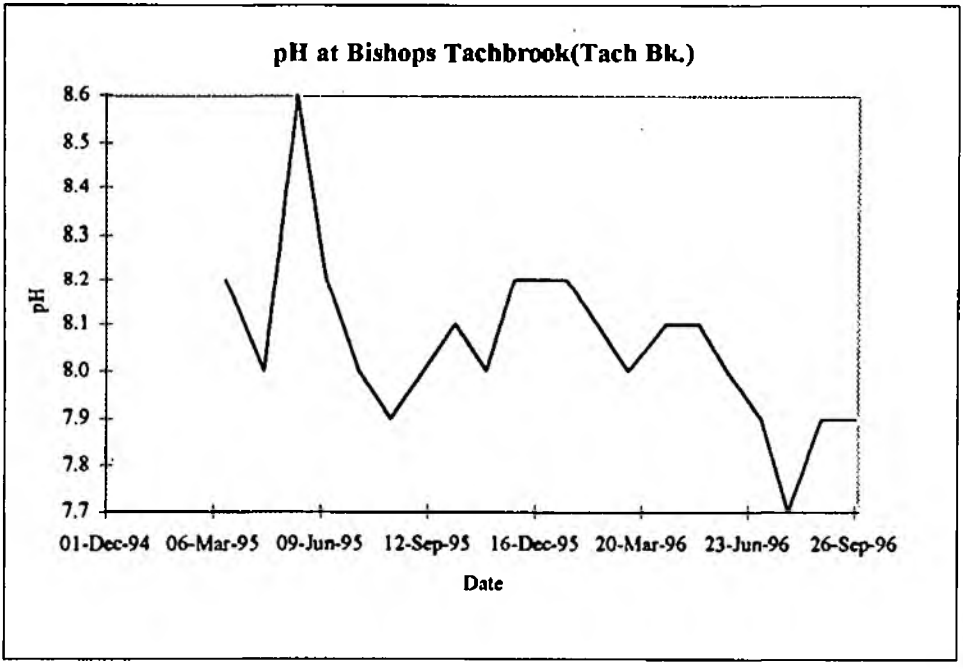


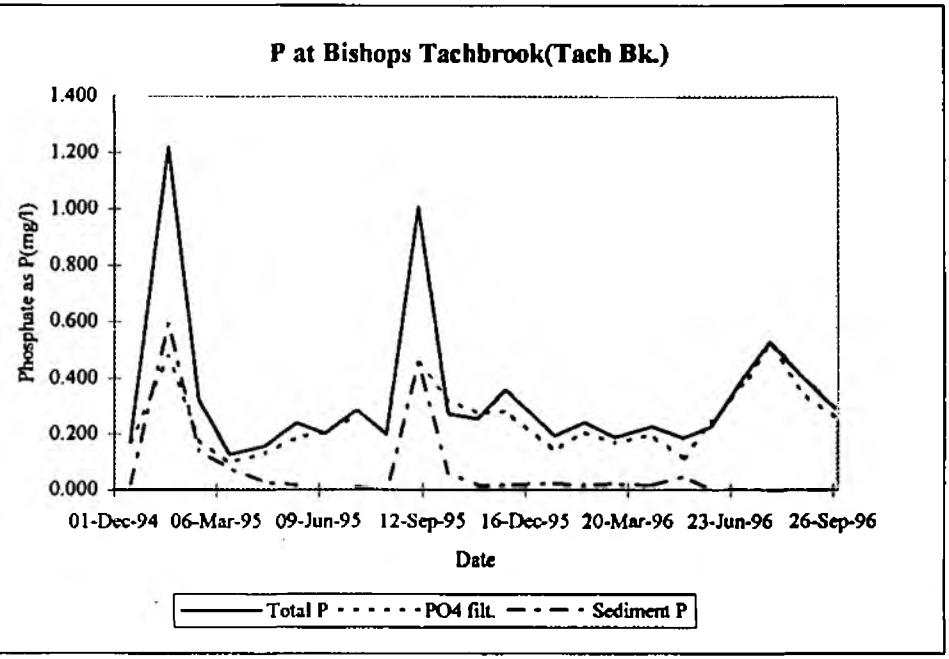
(Figure 47 cont.)

Figure 48 Bishops Tachbrook (Tach Bk.)




N at Bishops Tachbrook(Tach Bk.)
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)


pH at Bishops Tachbrook(Tach Bk.)
8.6
8.5
8.4
8.3
8.2
8.1
8.0
7.9
7.8
7.7
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date



(Figure 48 cont.)

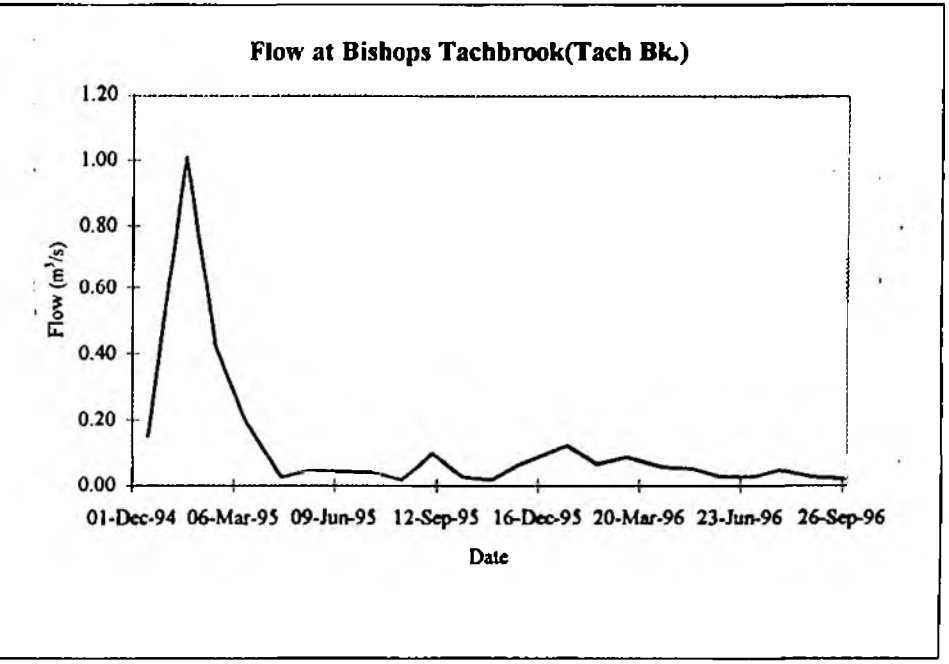
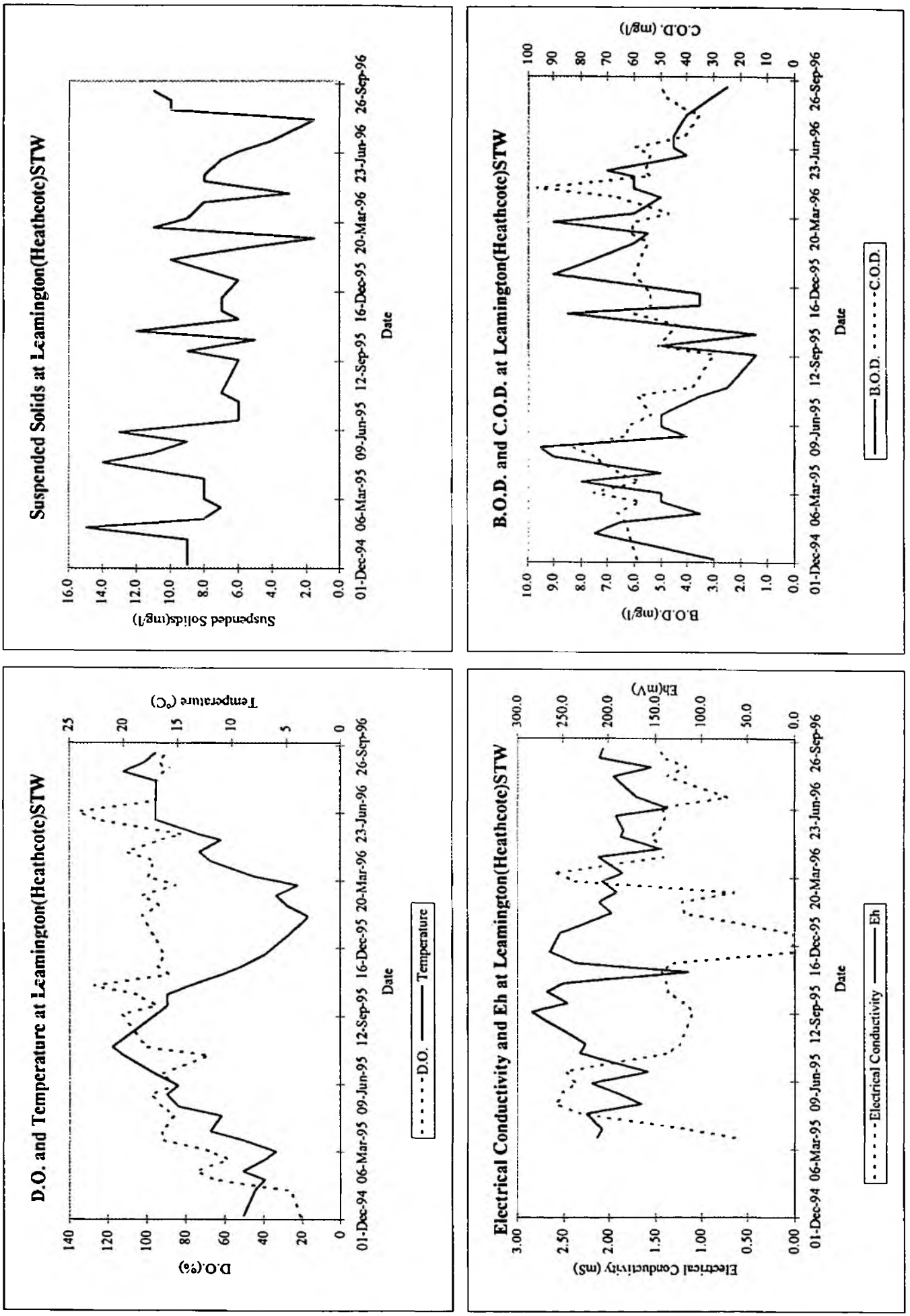
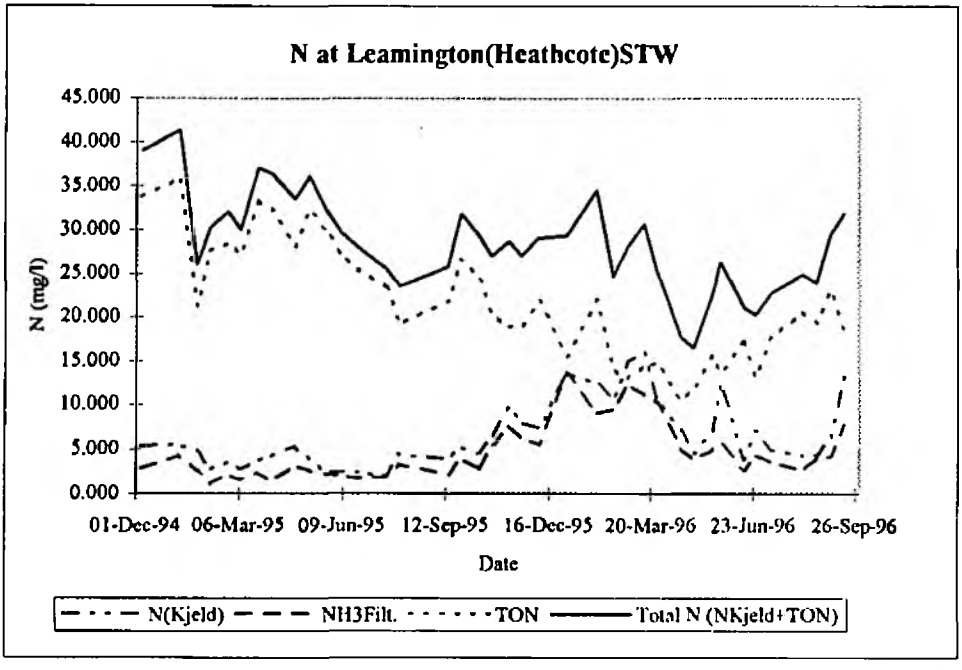
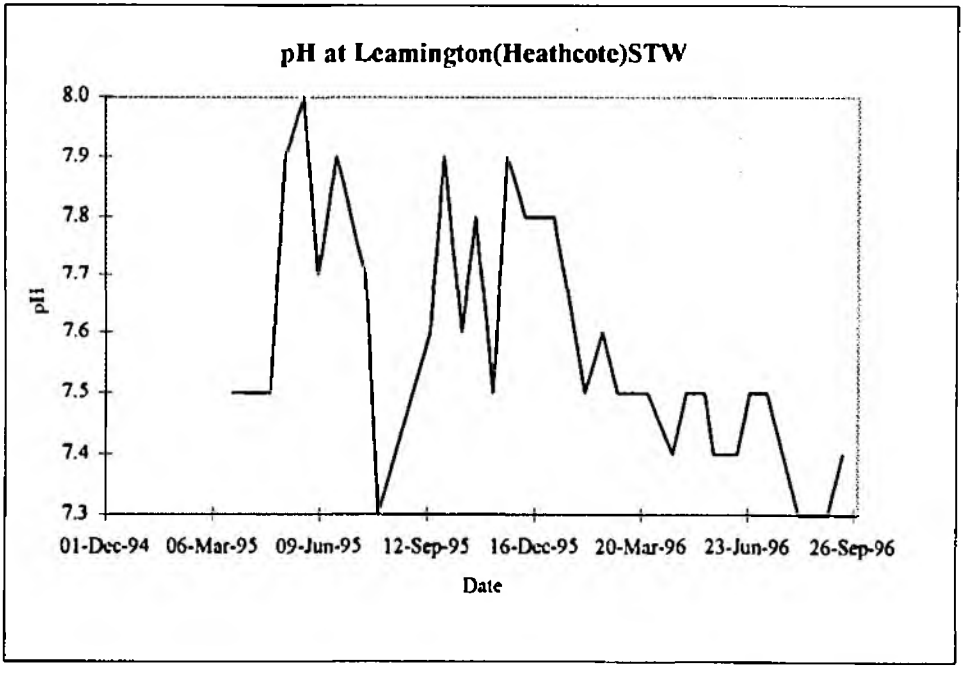
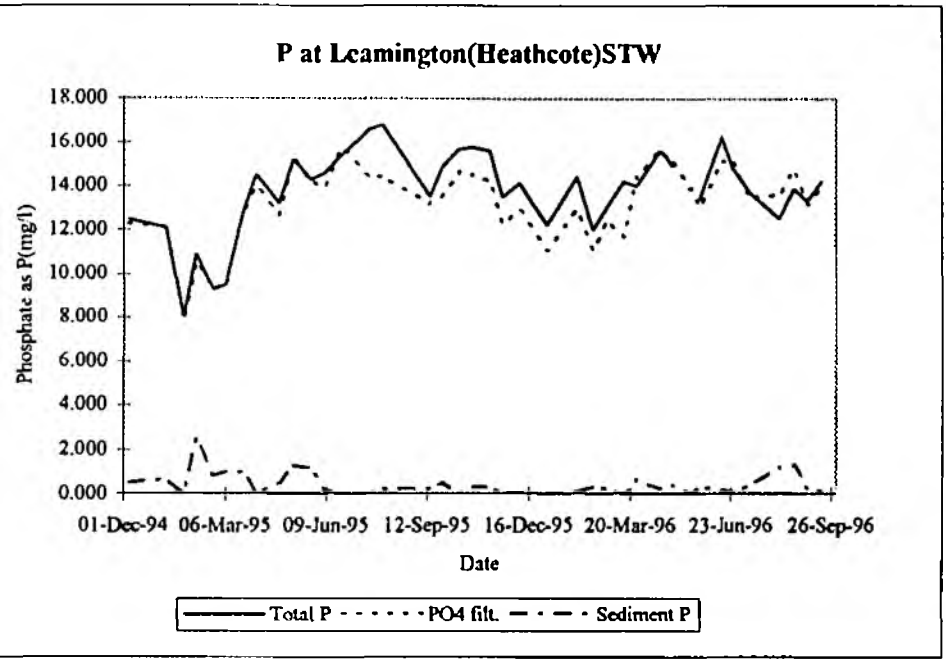


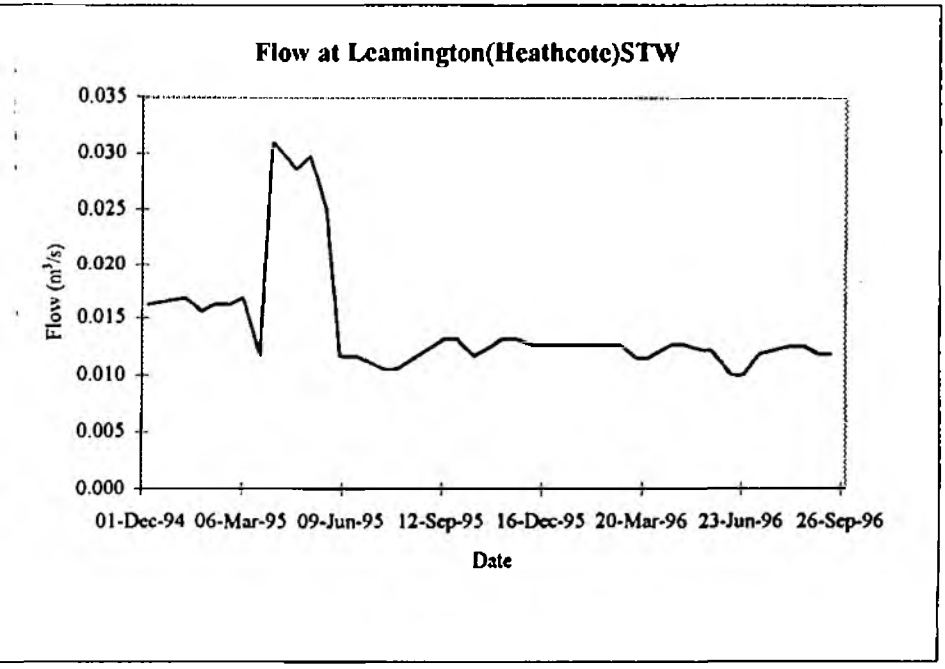
Figure 49 Leamington (Heathcote) STW



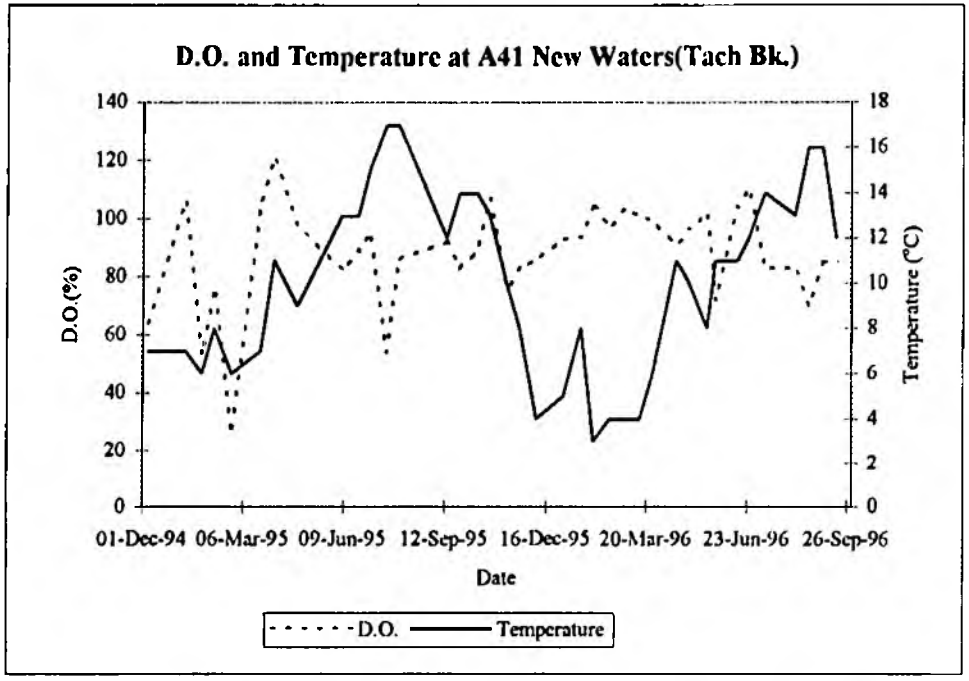

N at Leamington(Heathcote)STW
45.000
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

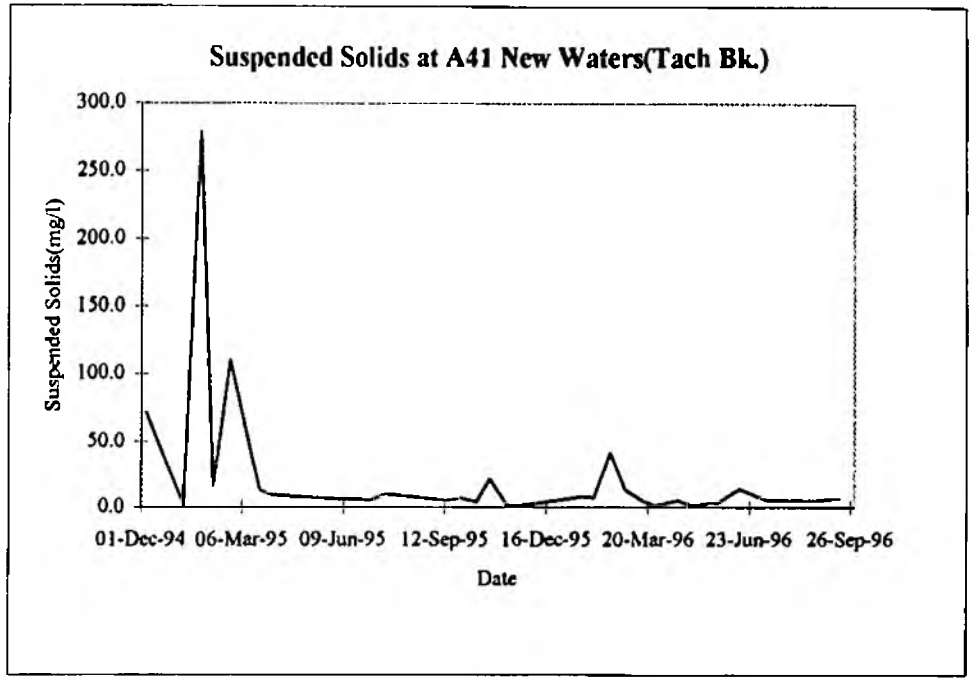

pH at Leamington(Heathcote)STW
8.0
7.9
7.8
7.7
7.6
7.5
7.4
7.3
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

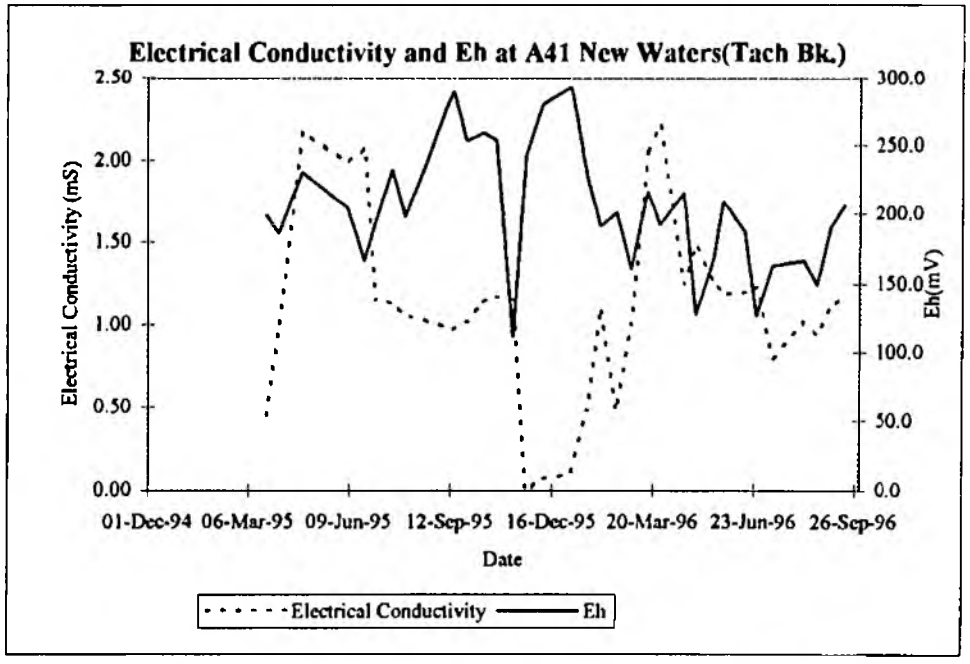




(Figure 49 cont.)







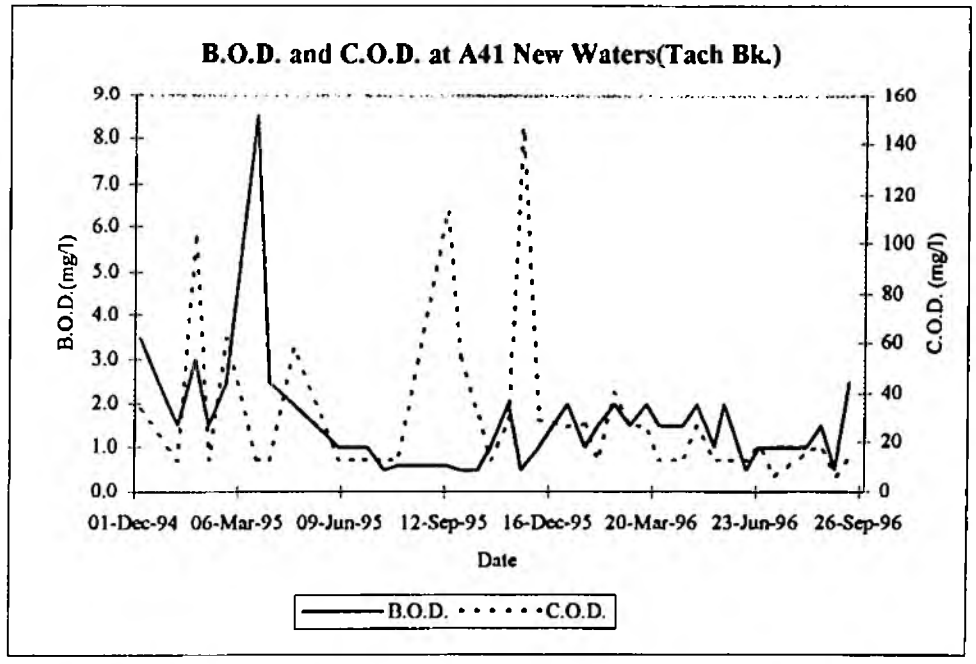
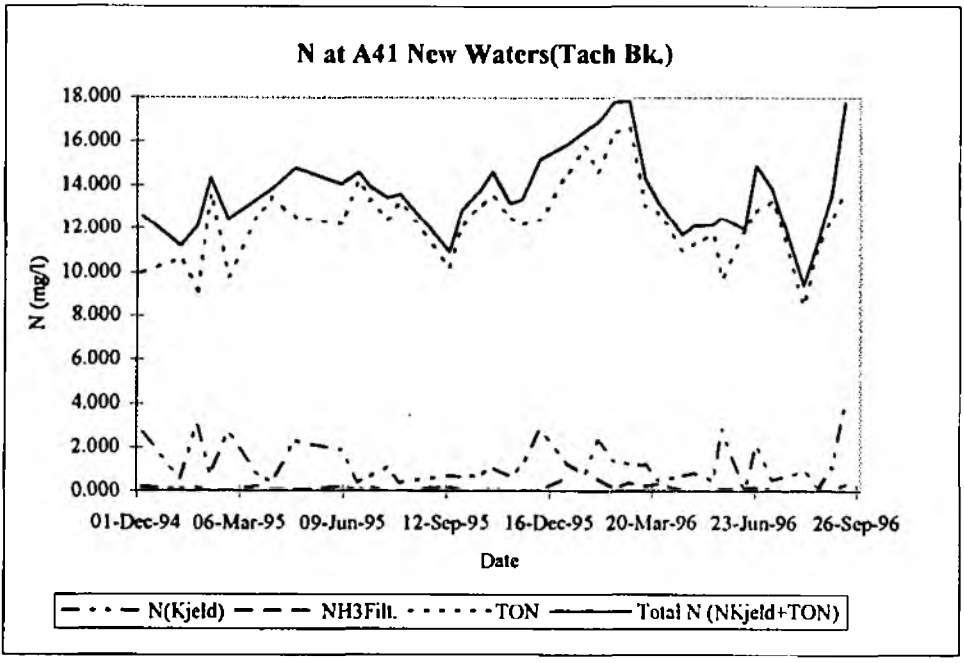
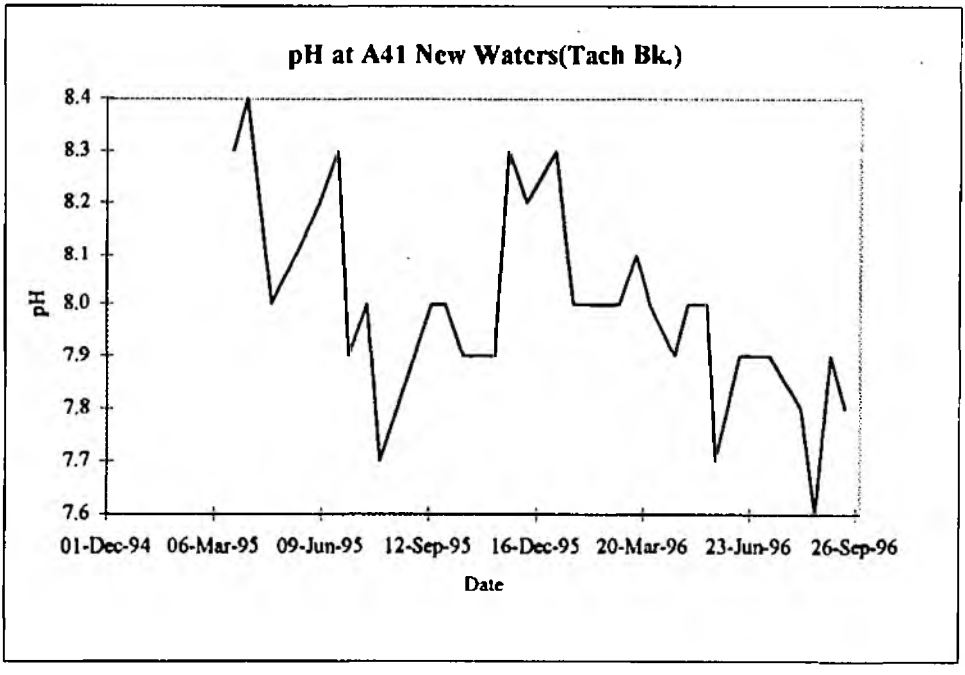
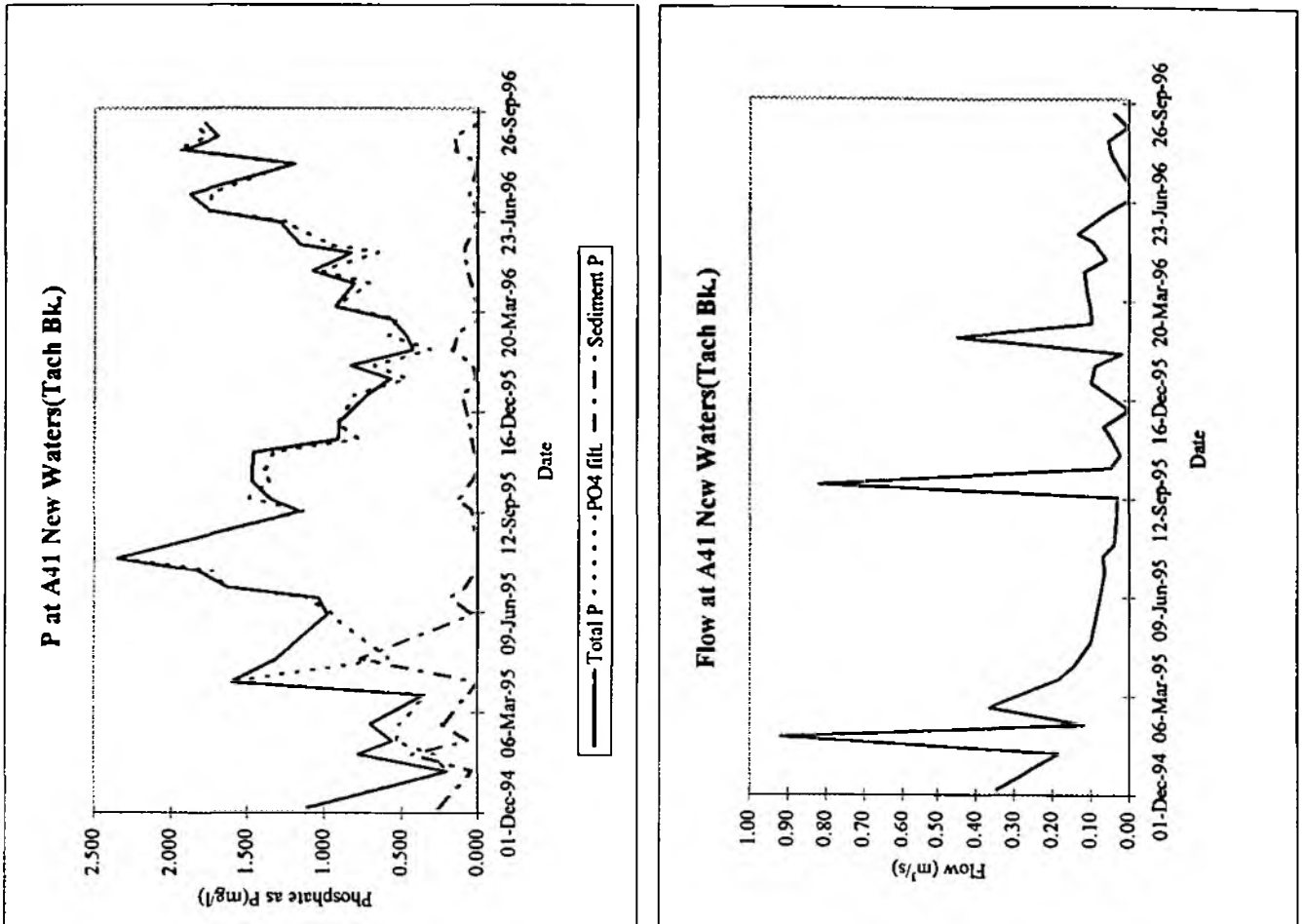


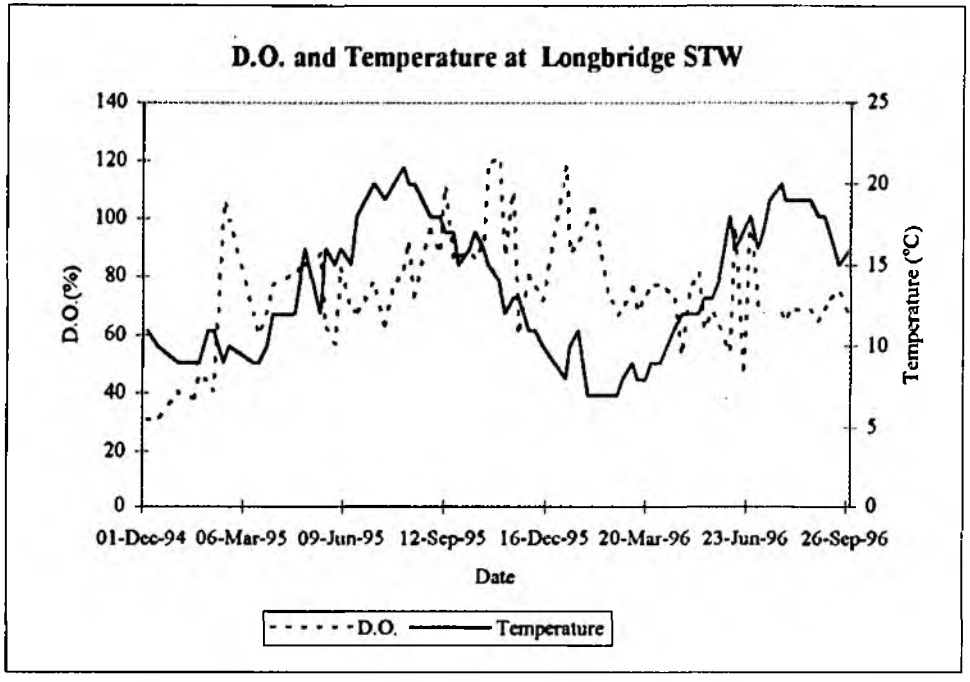
Figure 50 A41 New Waters (Tach Bk.)

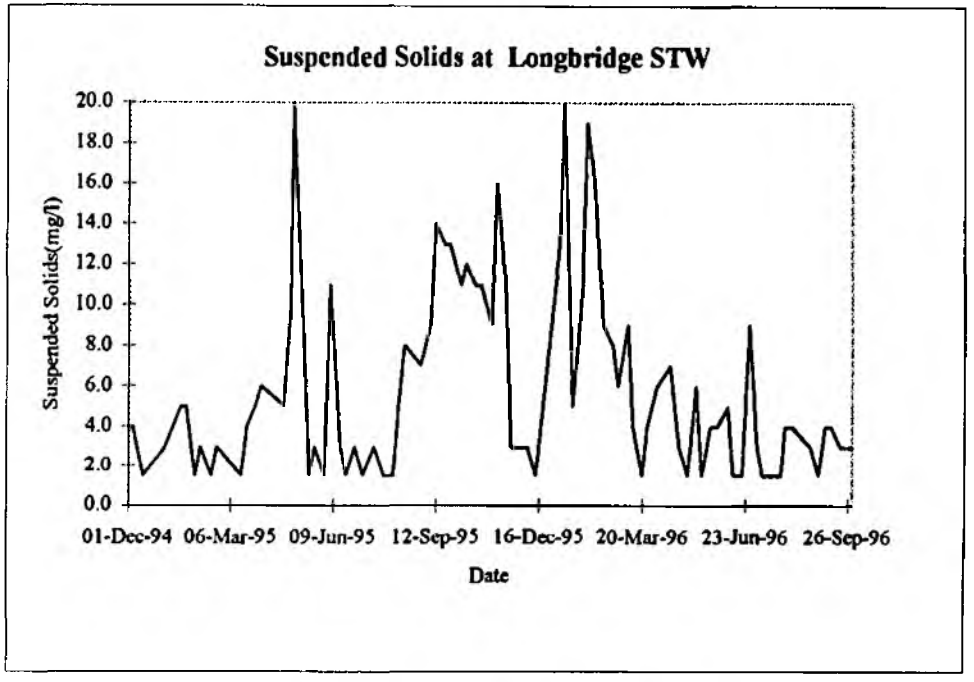

N at A41 New Waters(Tach Bk.)
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

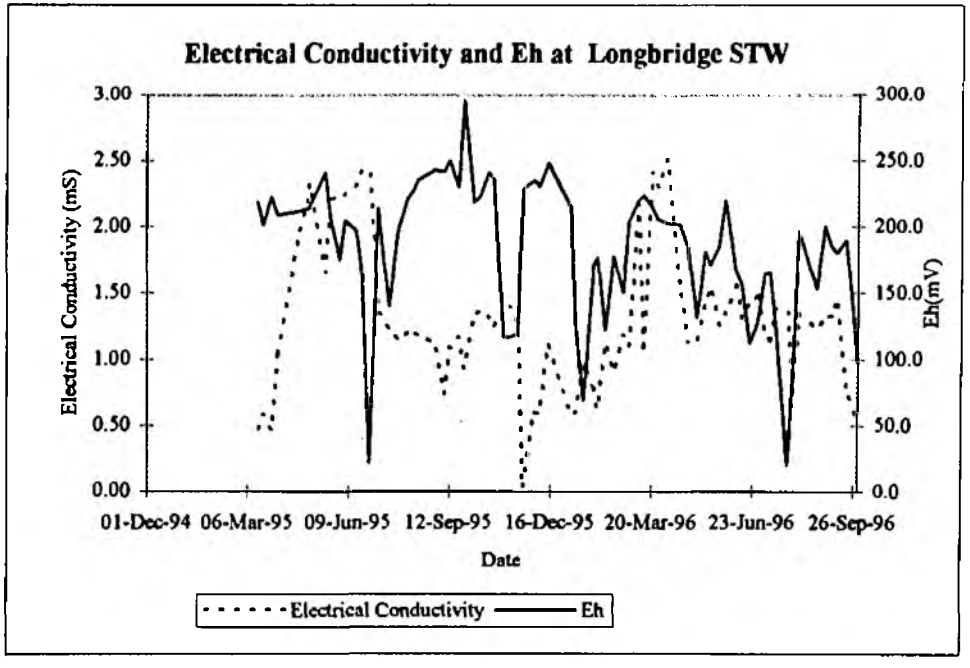

pH at A41 New Waters(Tach Bk.)
8.4
8.3
8.2
8.1
8.0
7.9
7.8
7.7
7.6
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

(Figure 50 cont.)









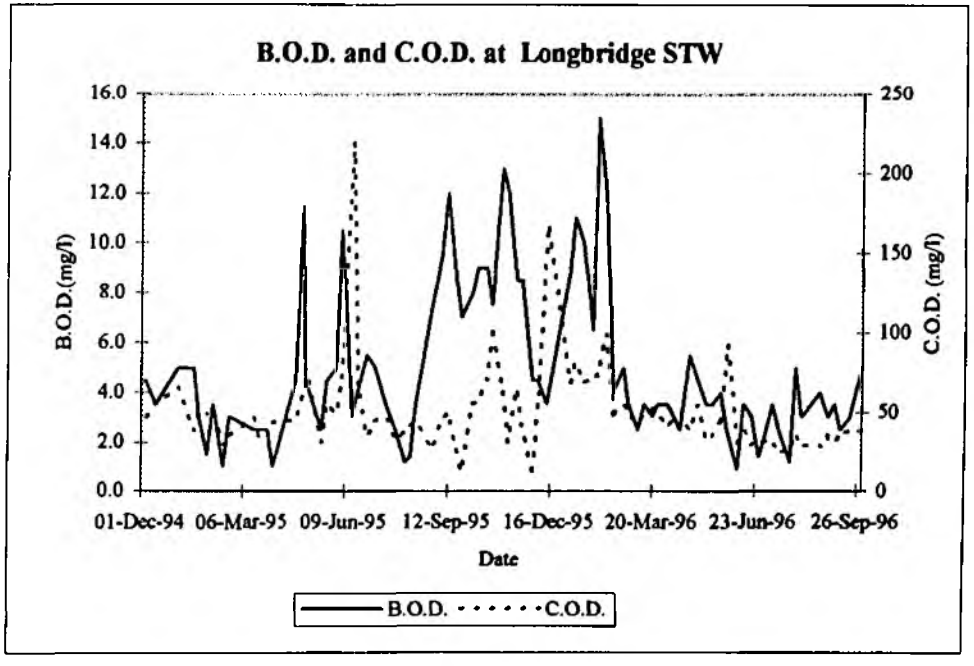
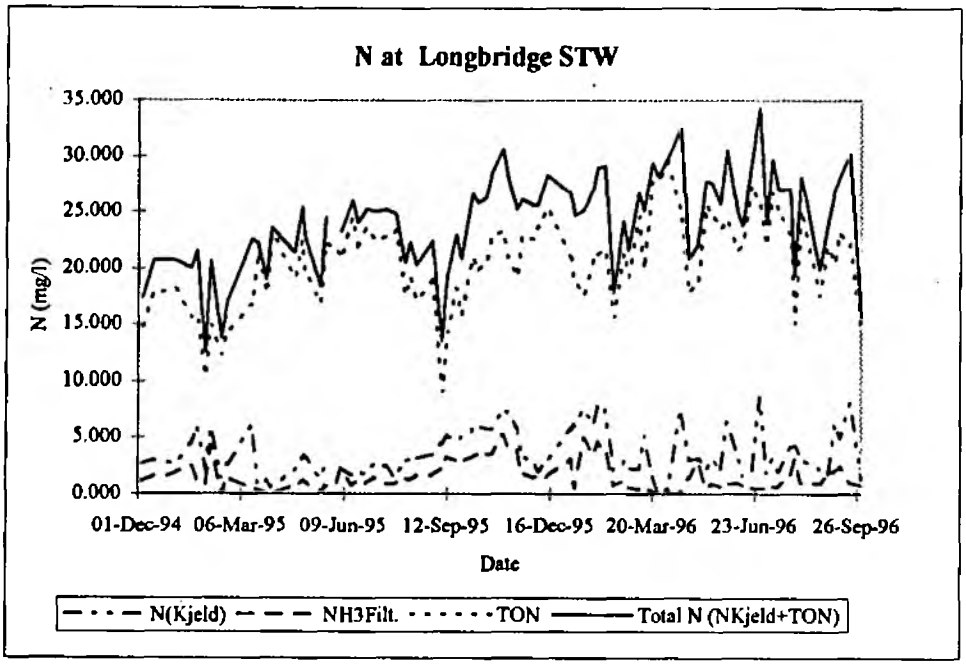
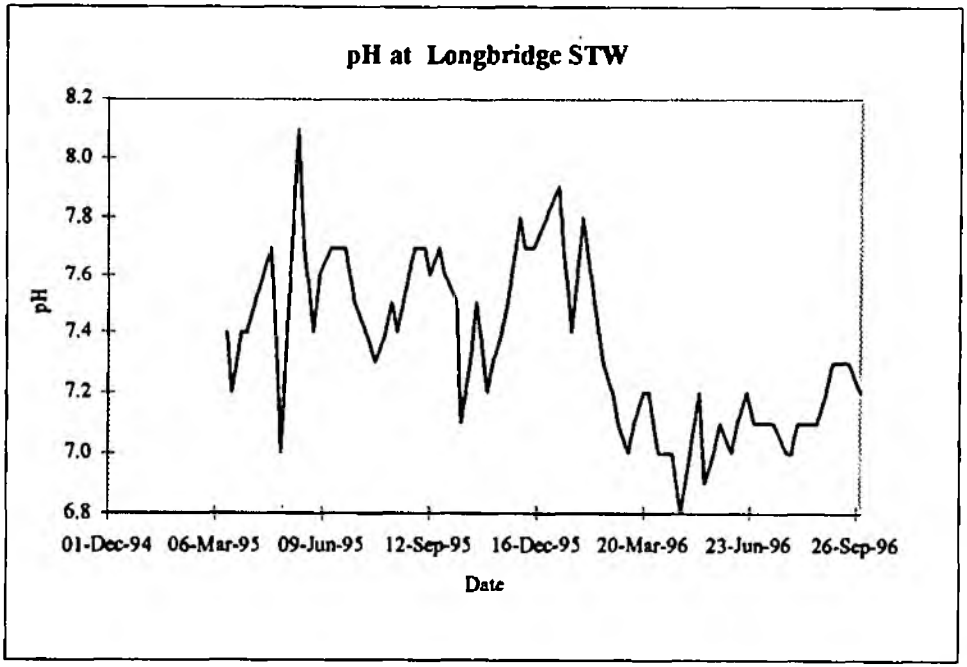
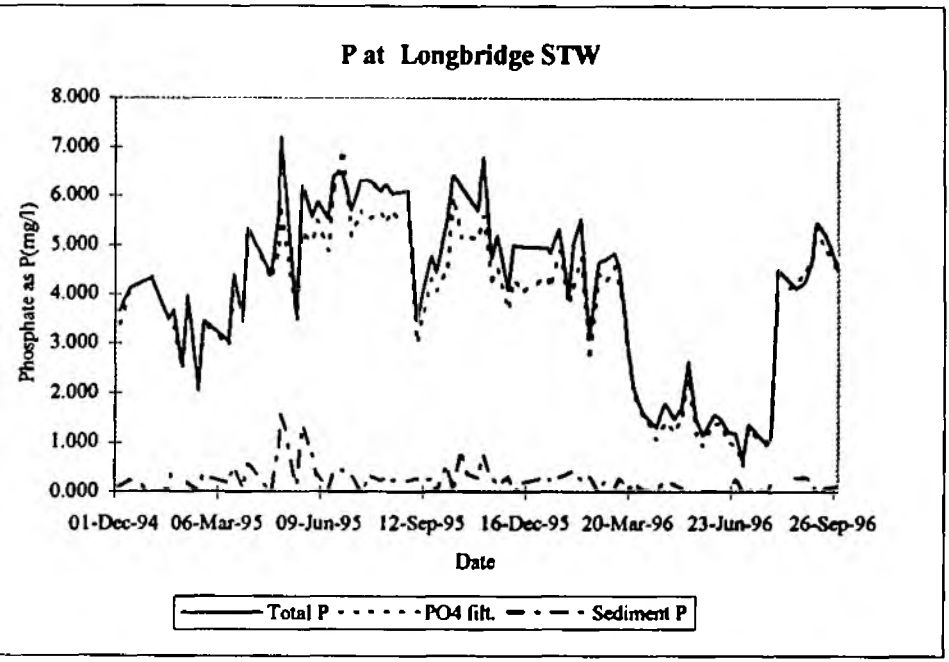
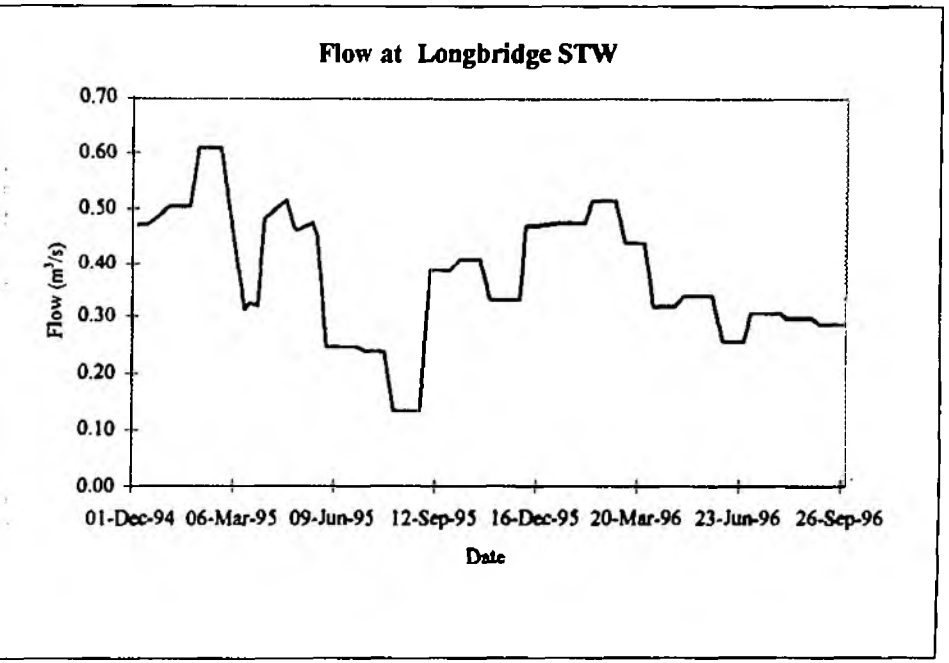


Figure 51 Longbridge STW


N at Longbridge STW
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)


pH at Longbridge STW
8.2
8.0
7.8
7.6
7.4
7.2
7.0
6.8
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date





(Figure 51 cont.)

Appendix 1d

The Rivers Arrow and Alne and their sub-catchments

Figure 52 Site Loction Map for the rivers Arrow and Alne and their sub-catchments

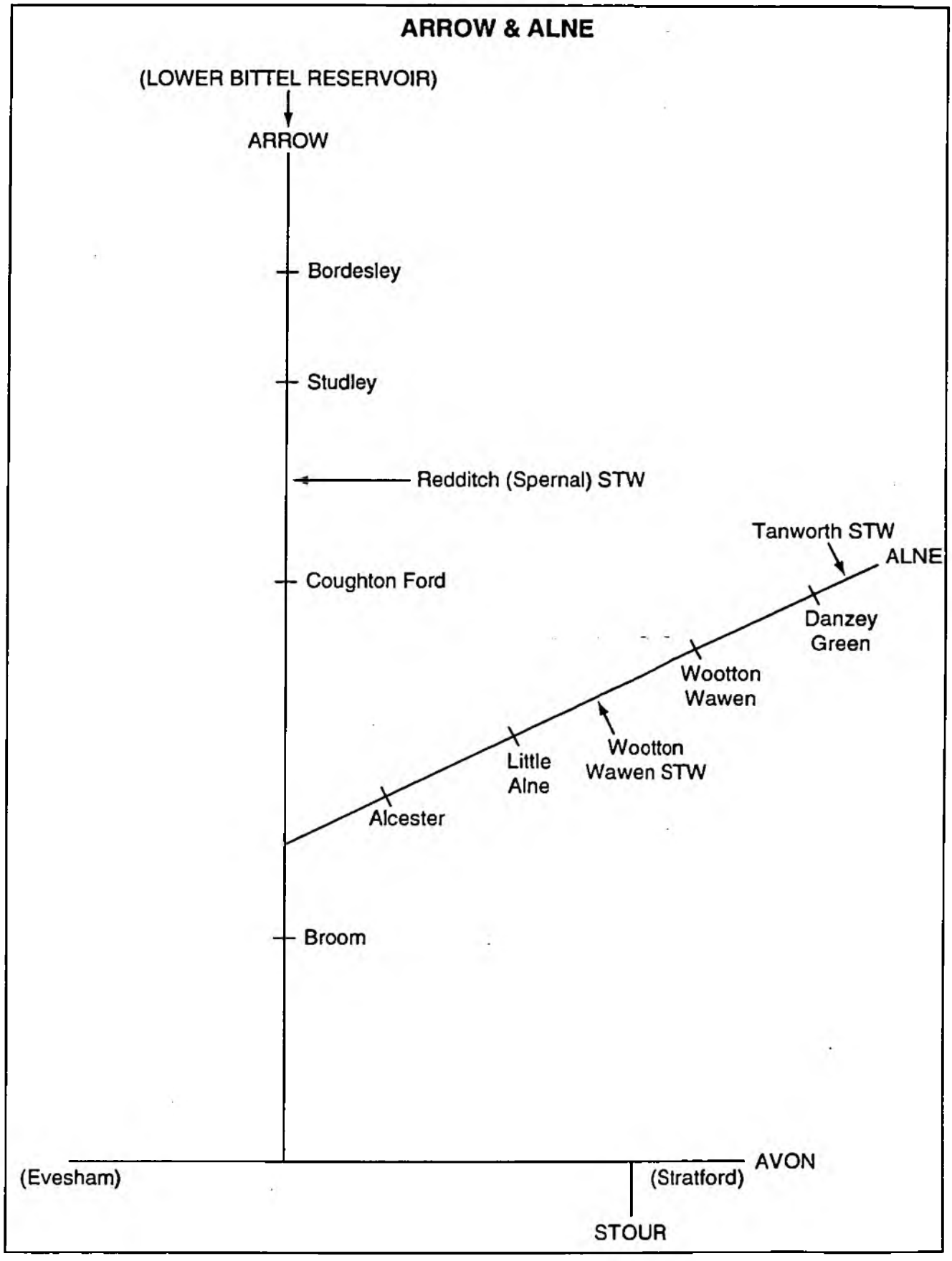
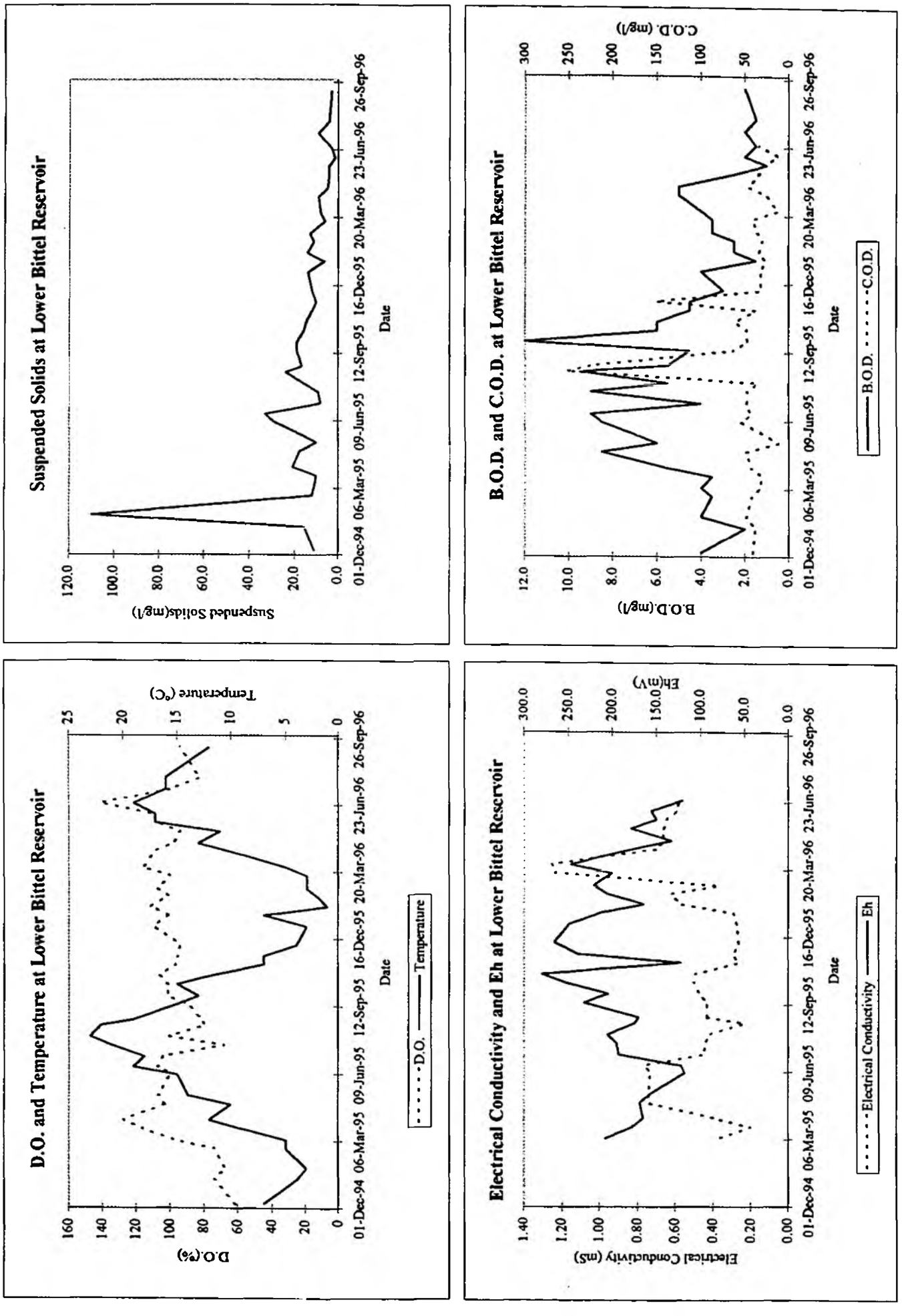
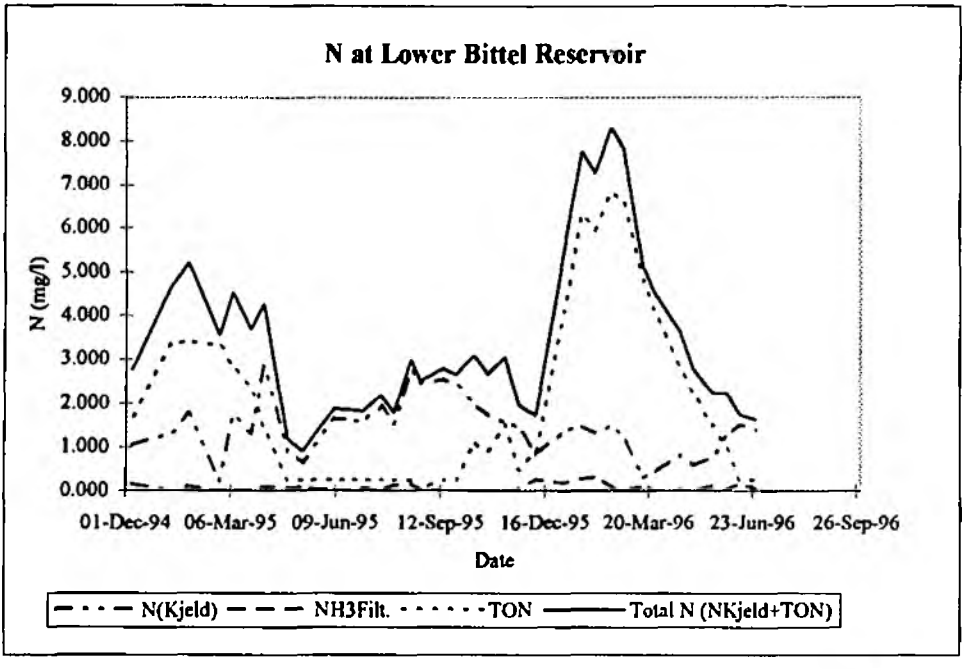
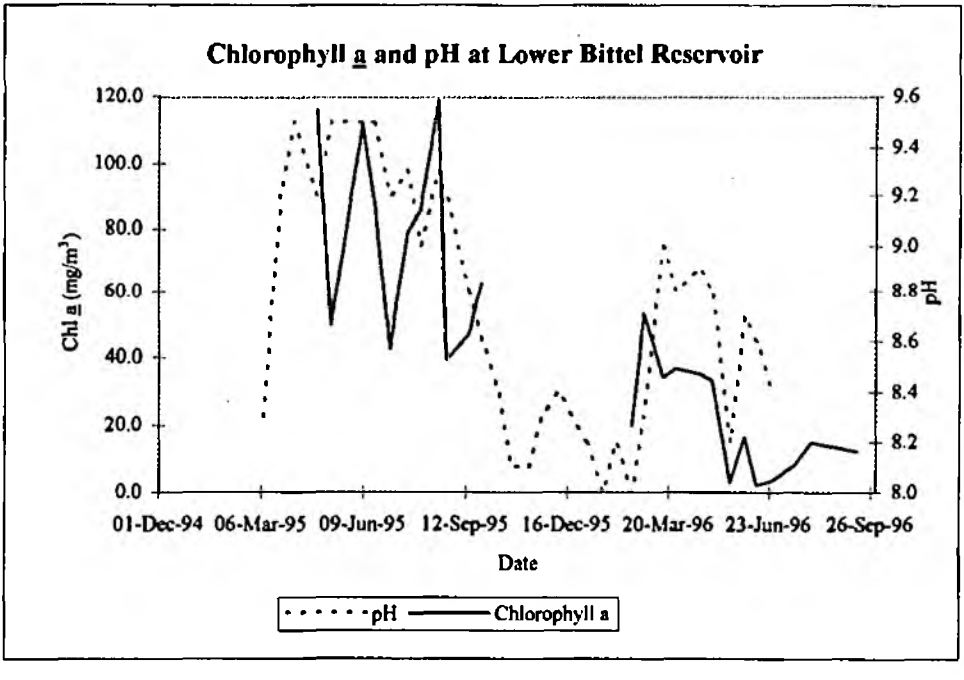
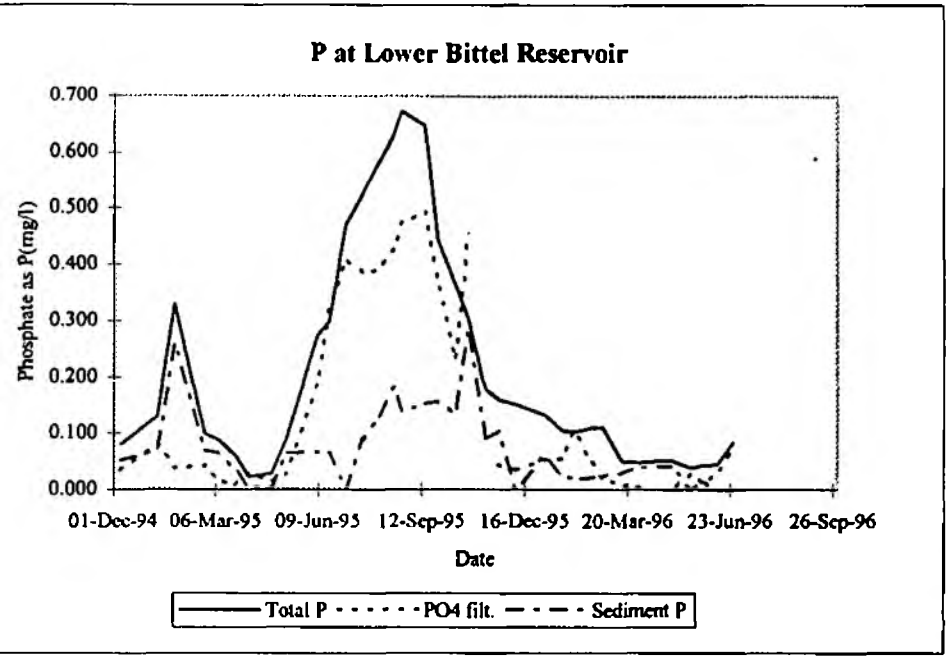


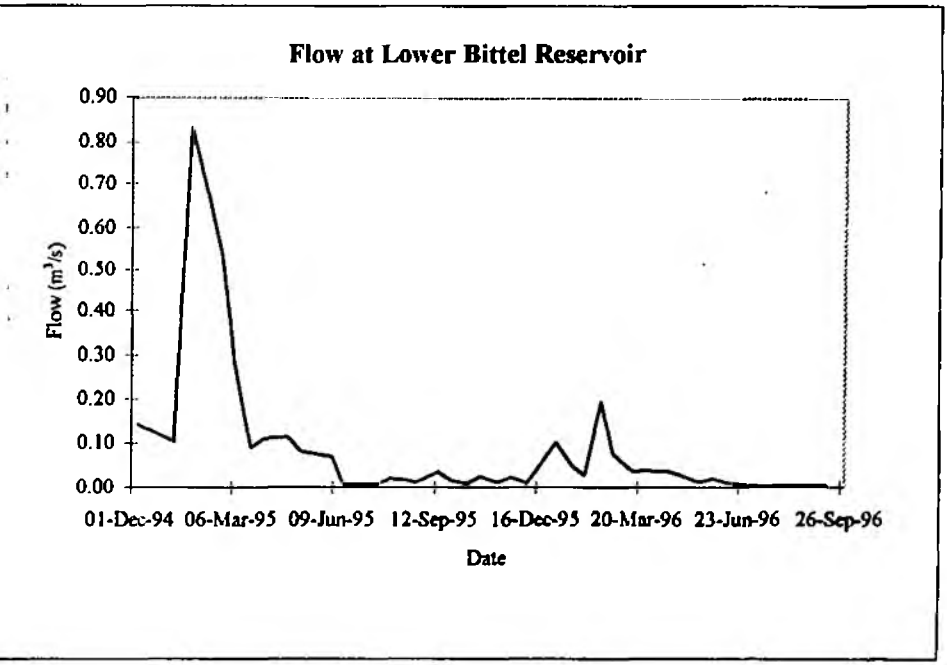
Figure 53 Lower Bittel Reservoir




N at Lower Bittel Reservoir
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

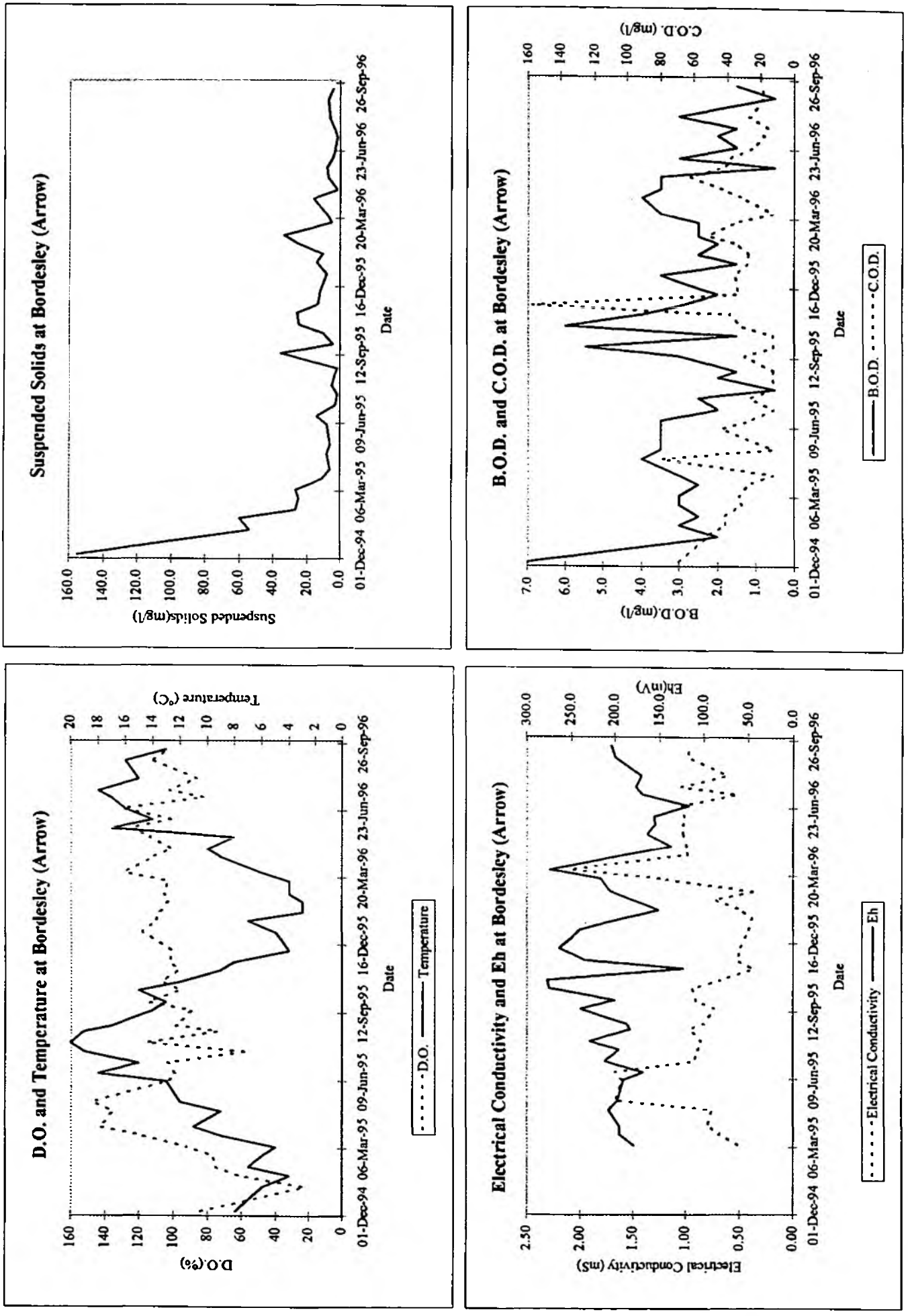

Chlorophyll a and pH at Lower Bittel Reservoir
120.0
100.0
80.0
60.0
40.0
20.0
0.0
Chl a (mg/m³)
9.6
9.4
9.2
9.0
8.8
8.6
8.4
8.2
8.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
pH
Chlorophyll a

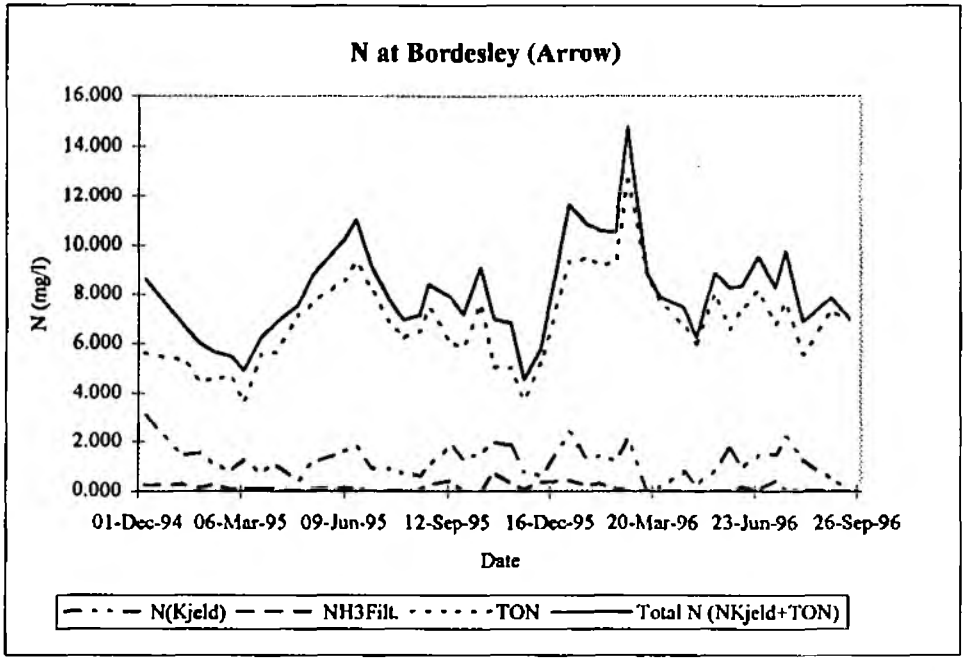


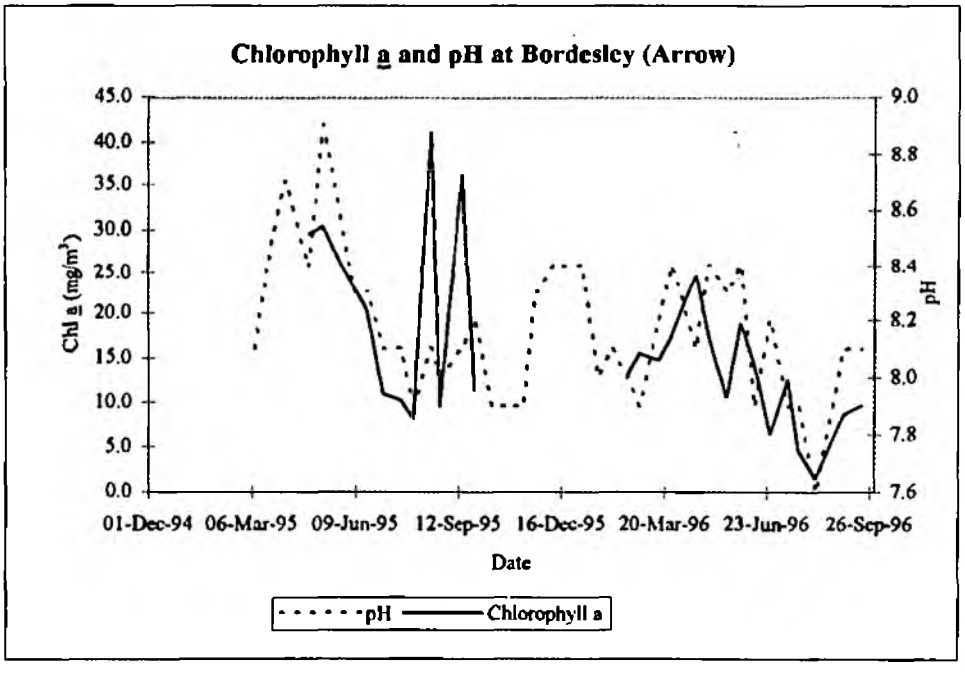


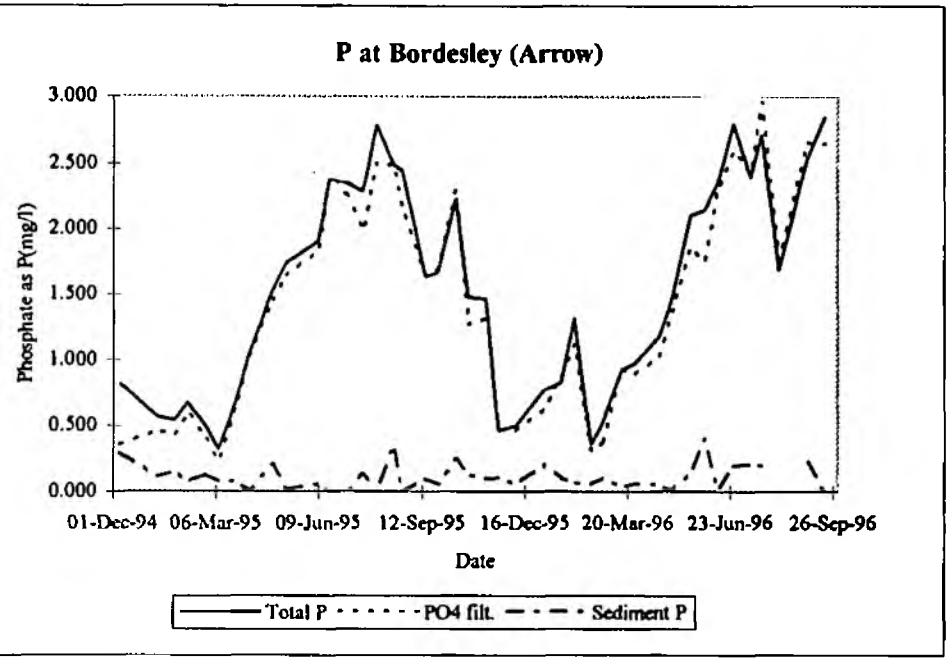
(Figure 53 cont.)

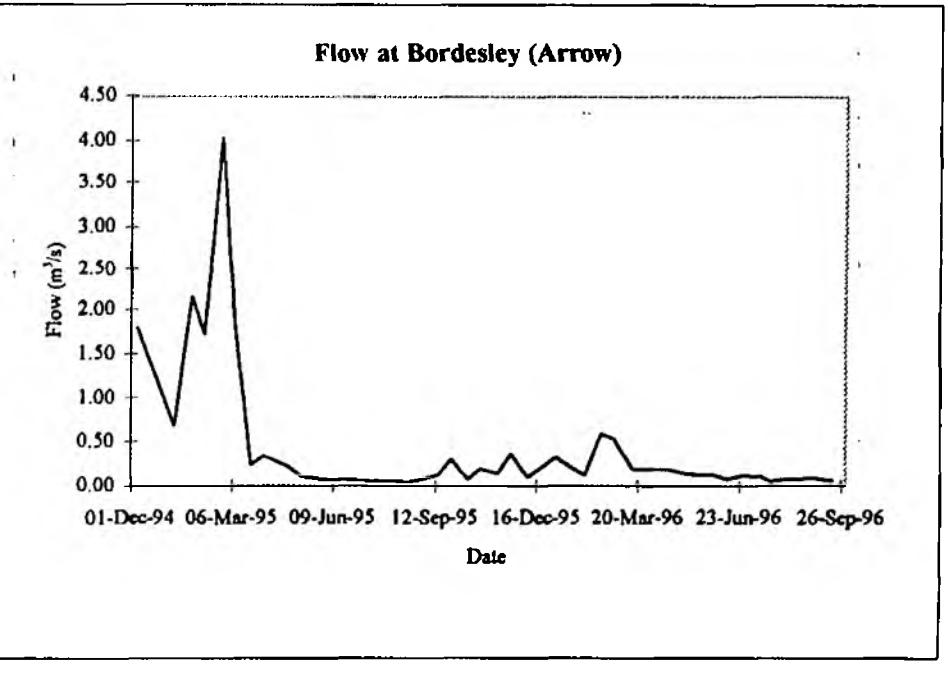
Figure 54 Bordesley (Arrow)




N at Bordesley (Arrow)
N (mg/l)
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

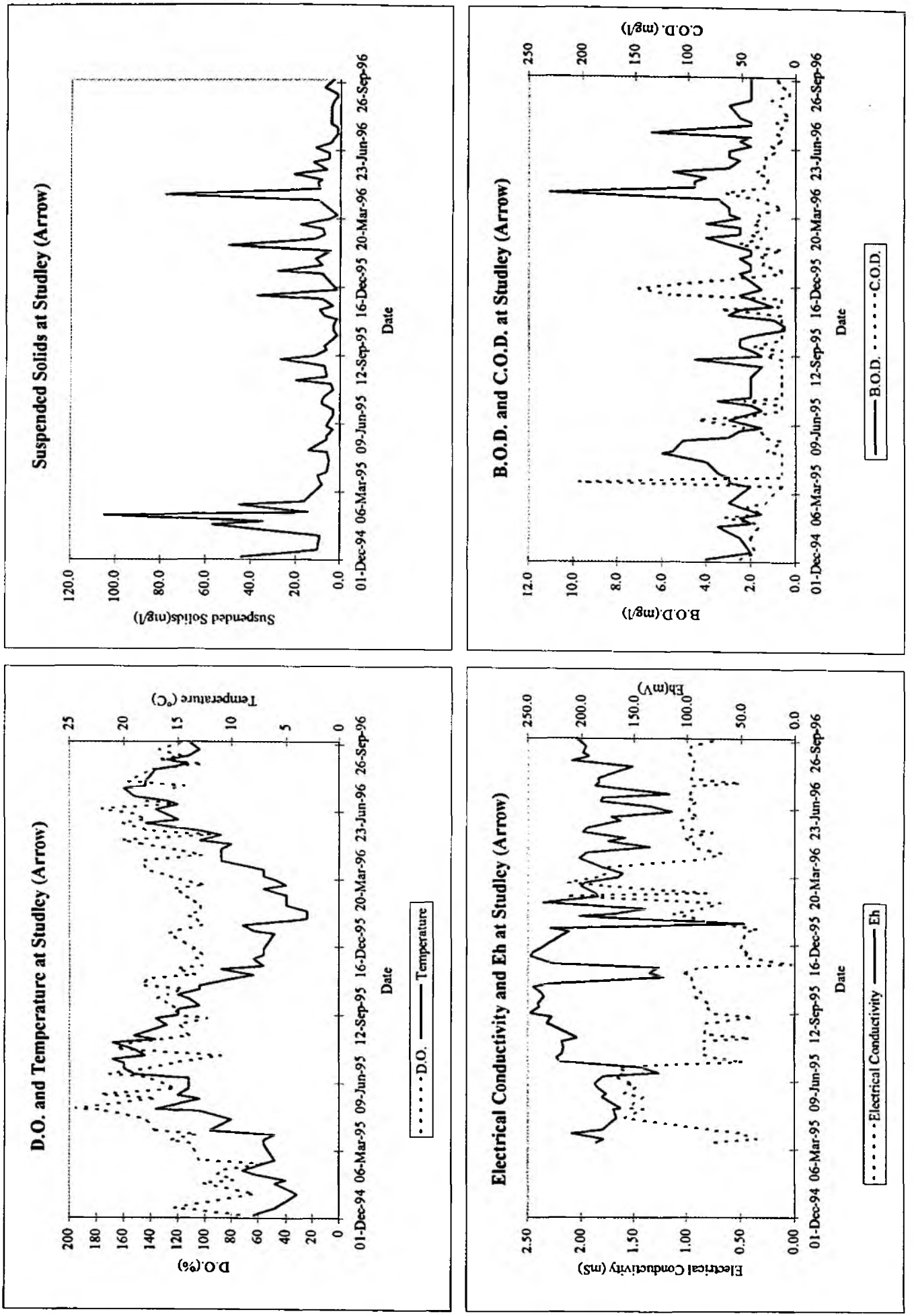

Chlorophyll a and pH at Bordesley (Arrow)
Chl a (mg/m³)
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
pH
9.0
8.8
8.6
8.4
8.2
8.0
7.8
7.6
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
pH
Chlorophyll a

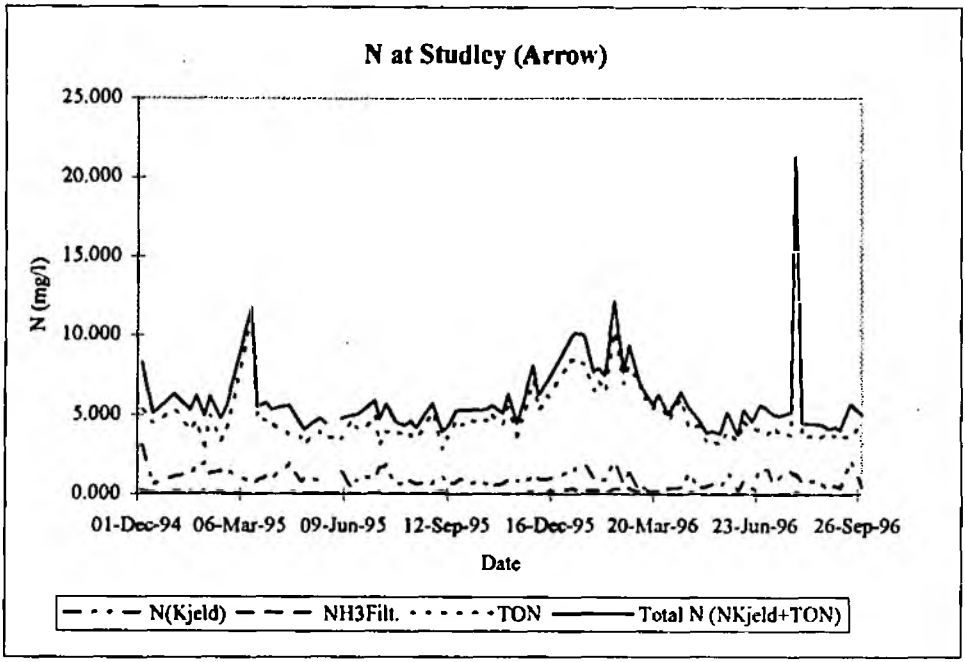


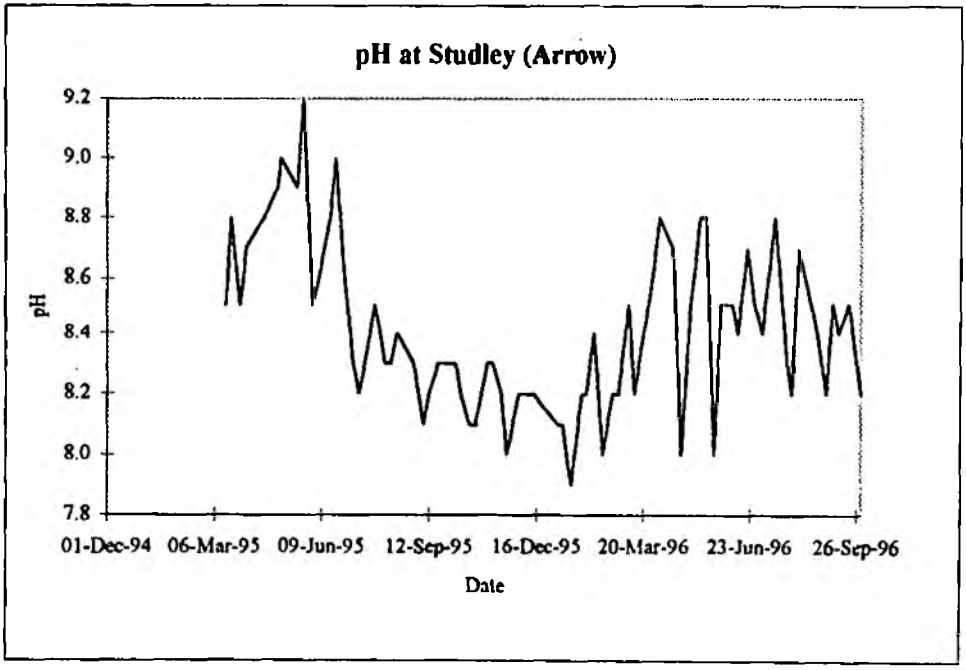


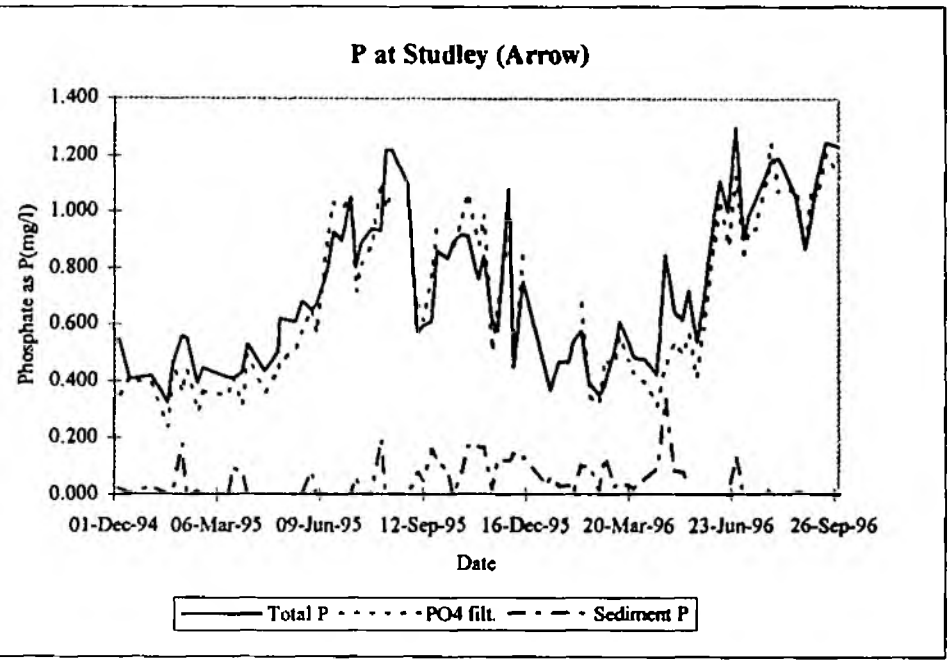
(Figure 54 cont.)

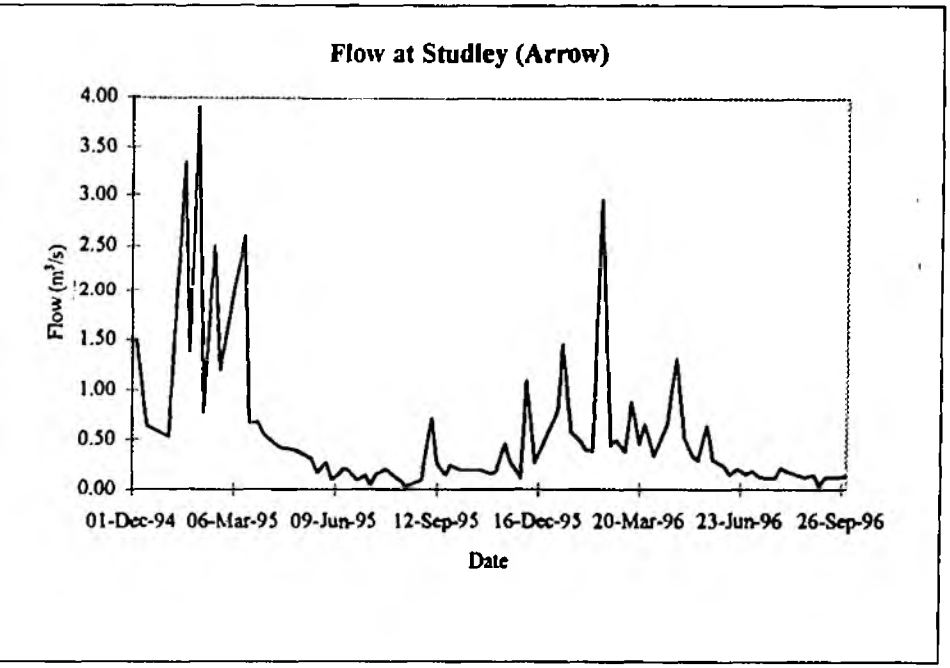
Figure 55 Studley (Arrow)




N at Studley (Arrow)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

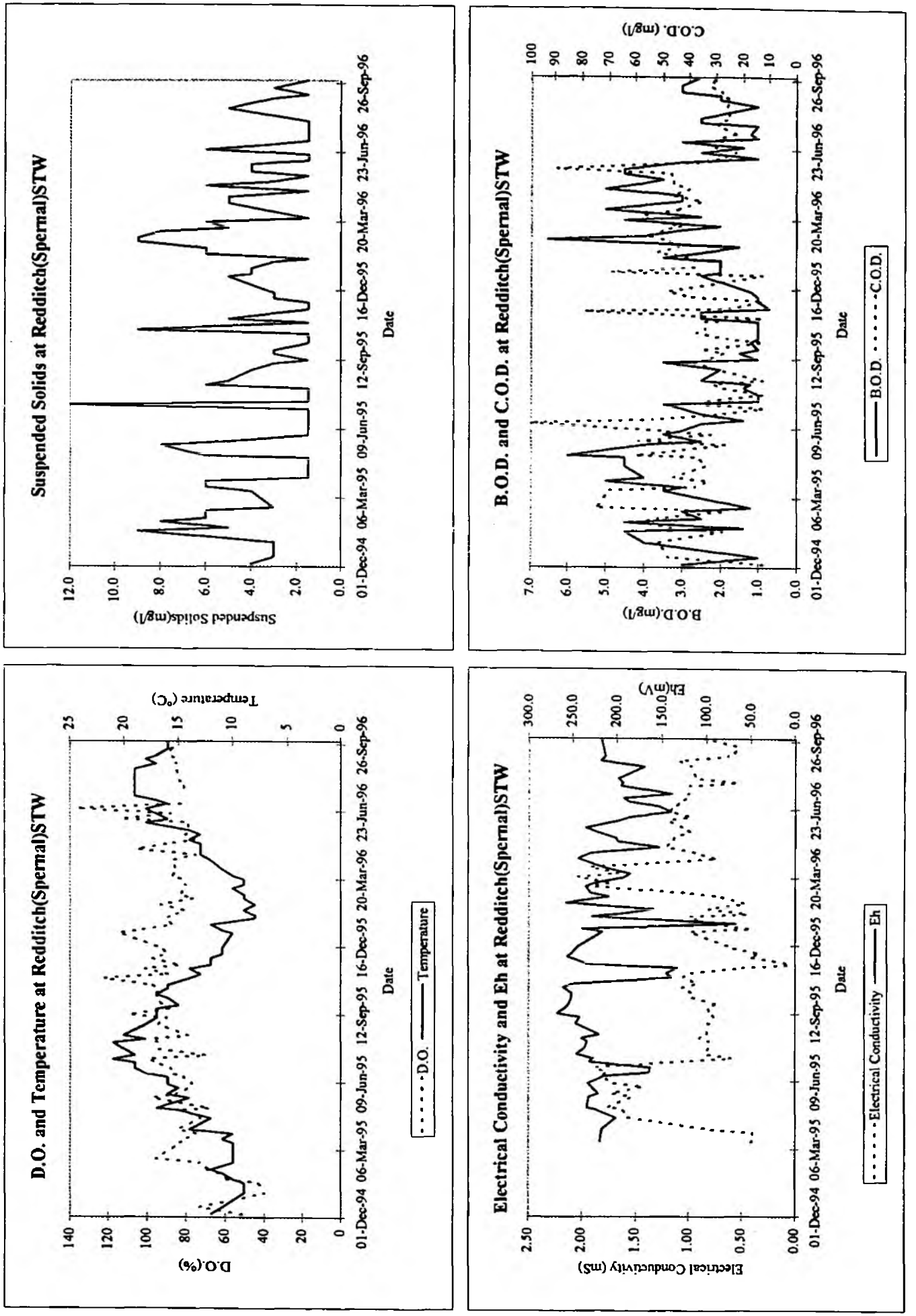

pH at Studley (Arrow)
9.2
9.0
8.8
8.6
8.4
8.2
8.0
7.8
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

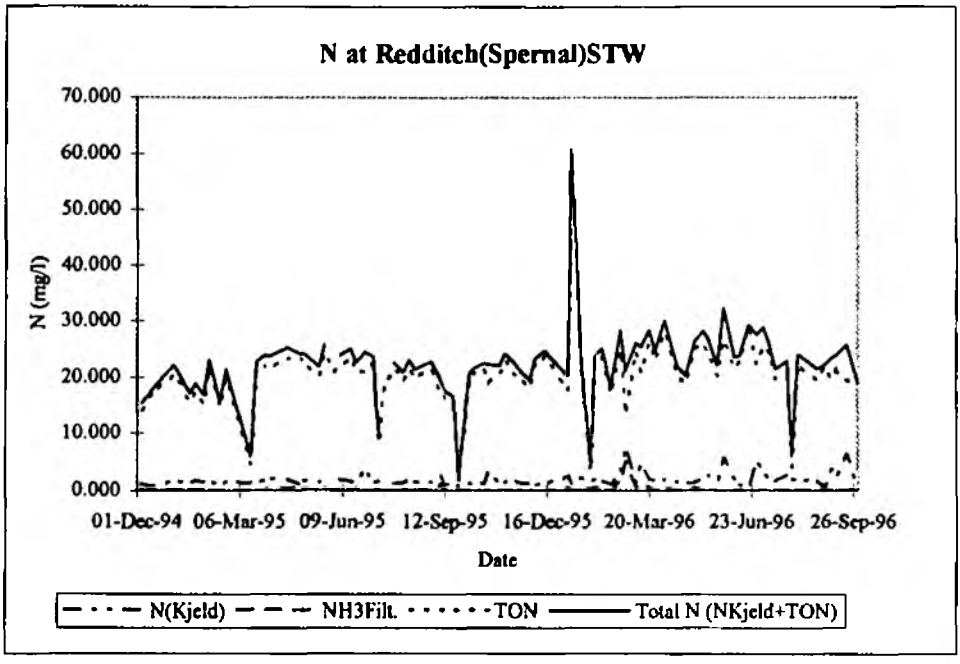


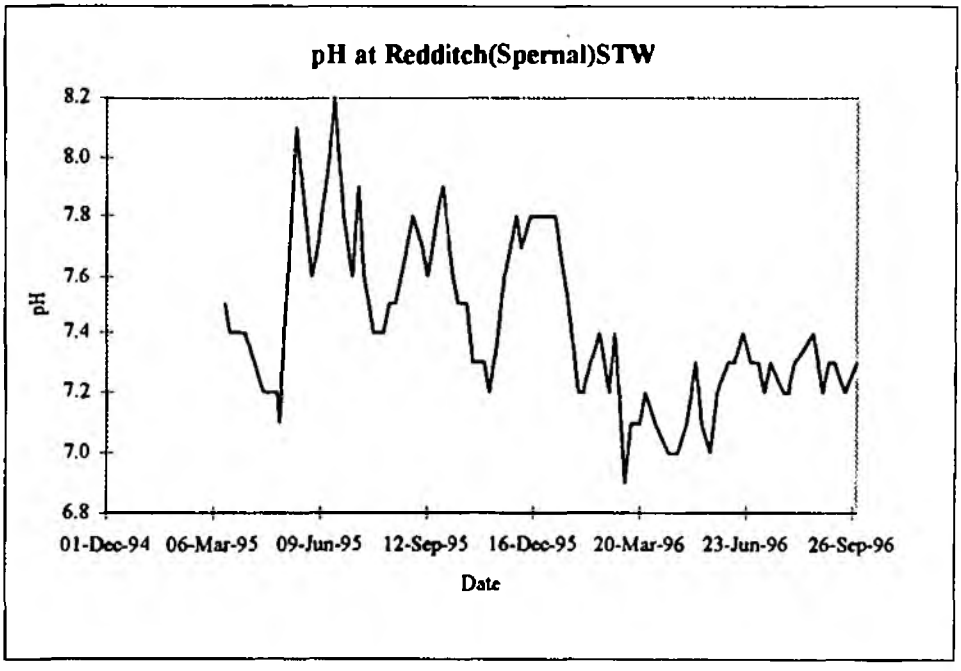


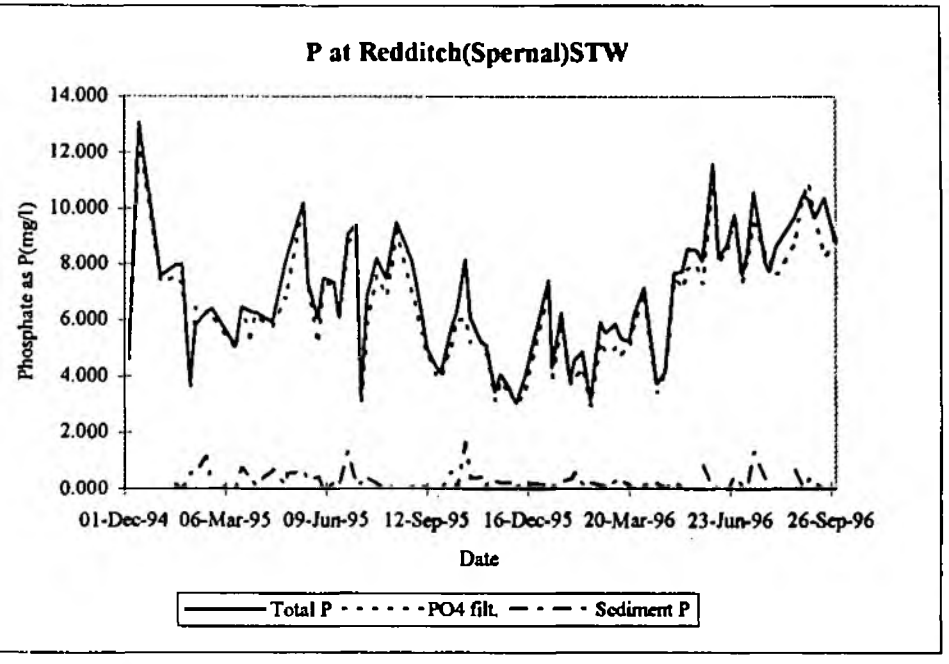
(Figure 55 cont.)

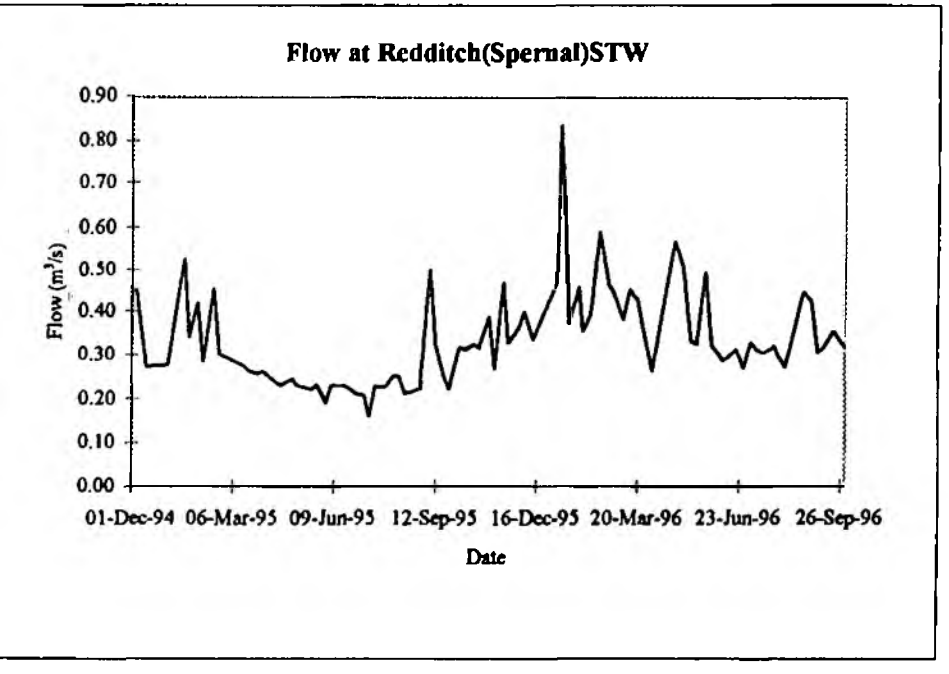
Figure 56 Redditch (Spernal) STW




N at Redditch(Spernal)STW
70.000
60.000
50.000
40.000
30.000
20.000
10.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

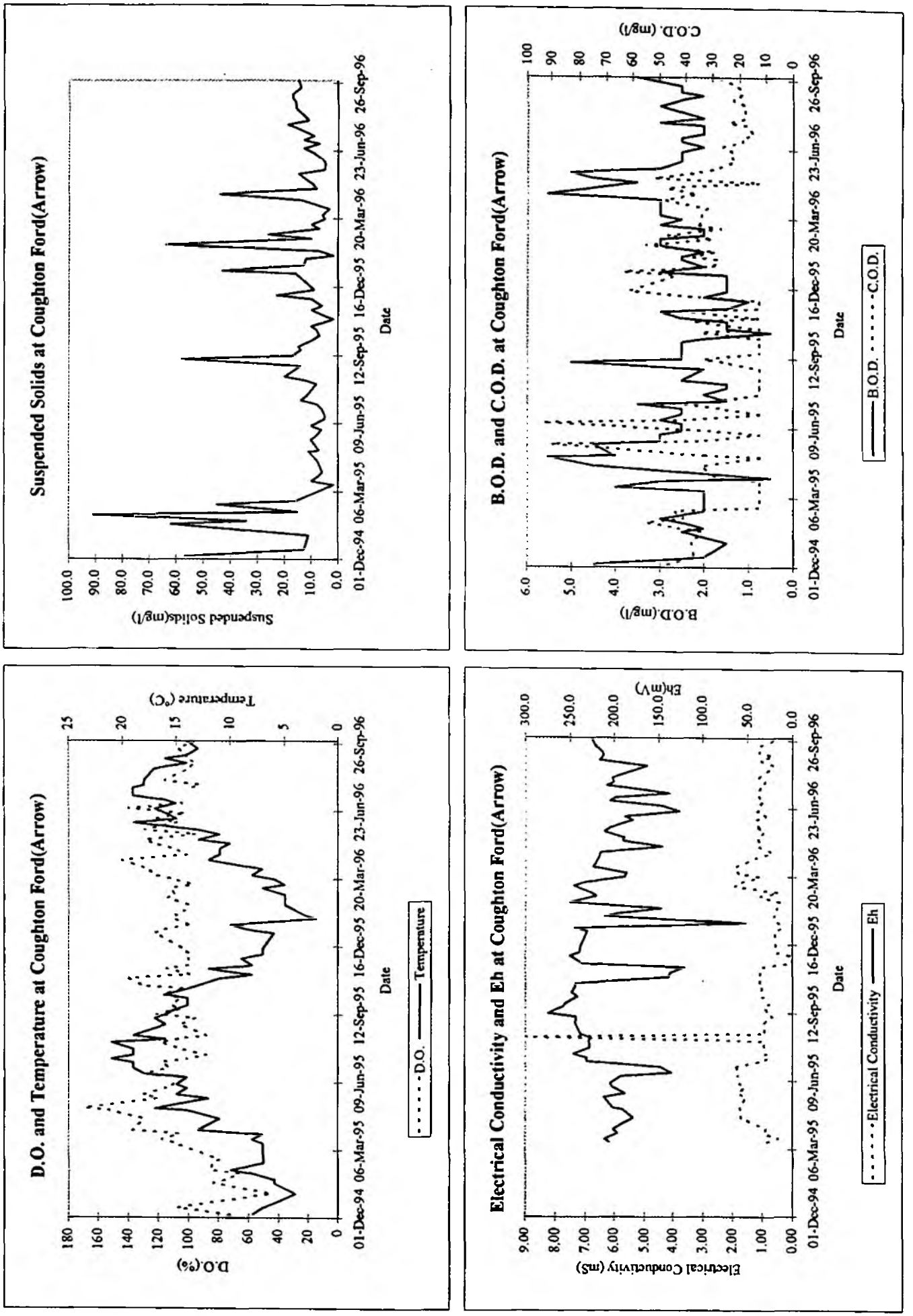

pH at Redditch(Spernal)STW
8.2
8.0
7.8
7.6
7.4
7.2
7.0
6.8
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

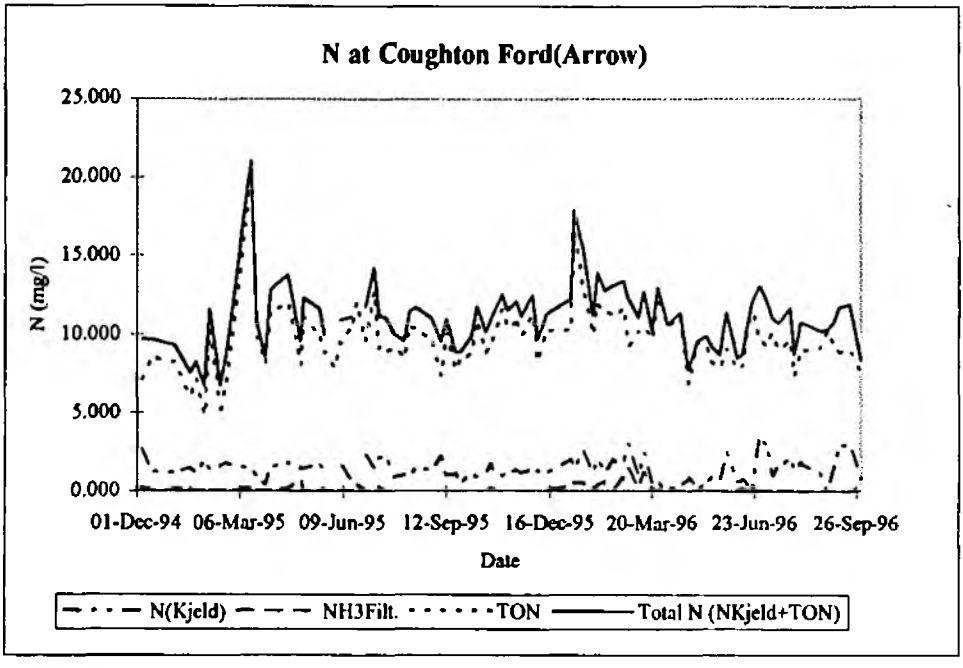


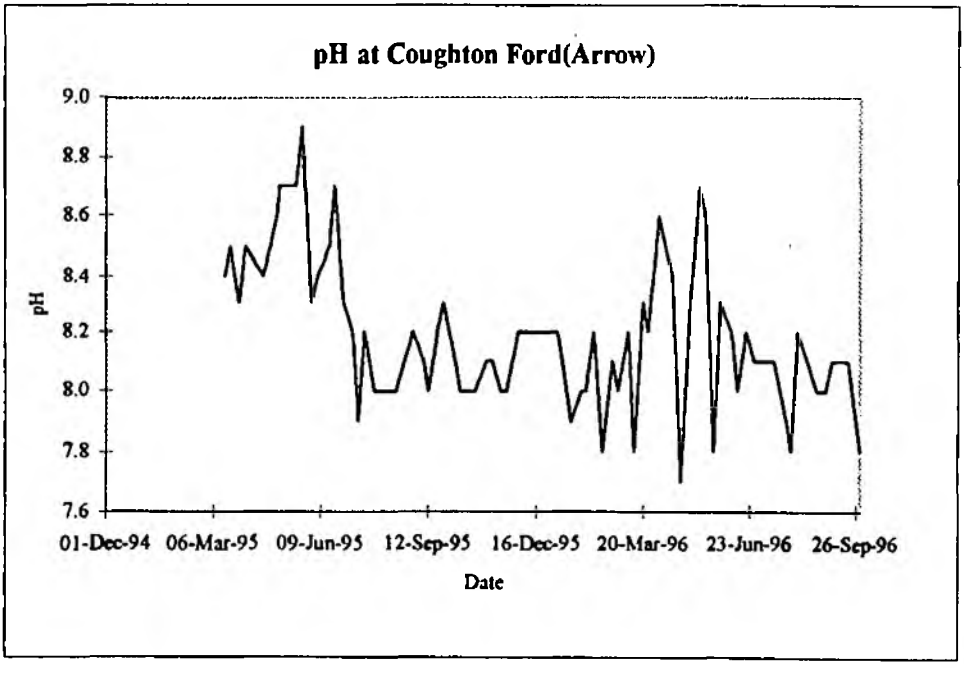


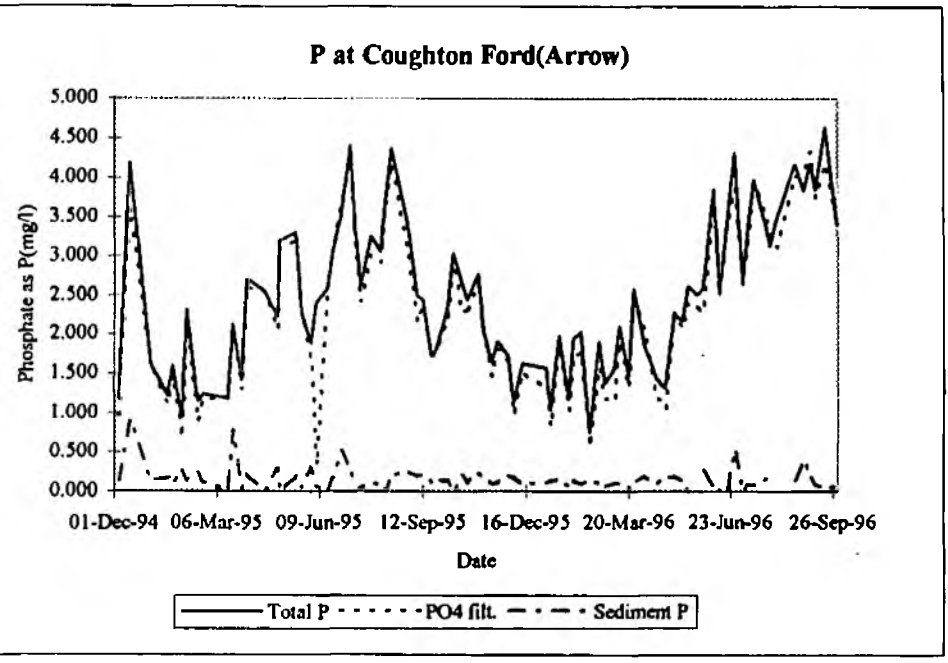
(Figure 56 cont.)

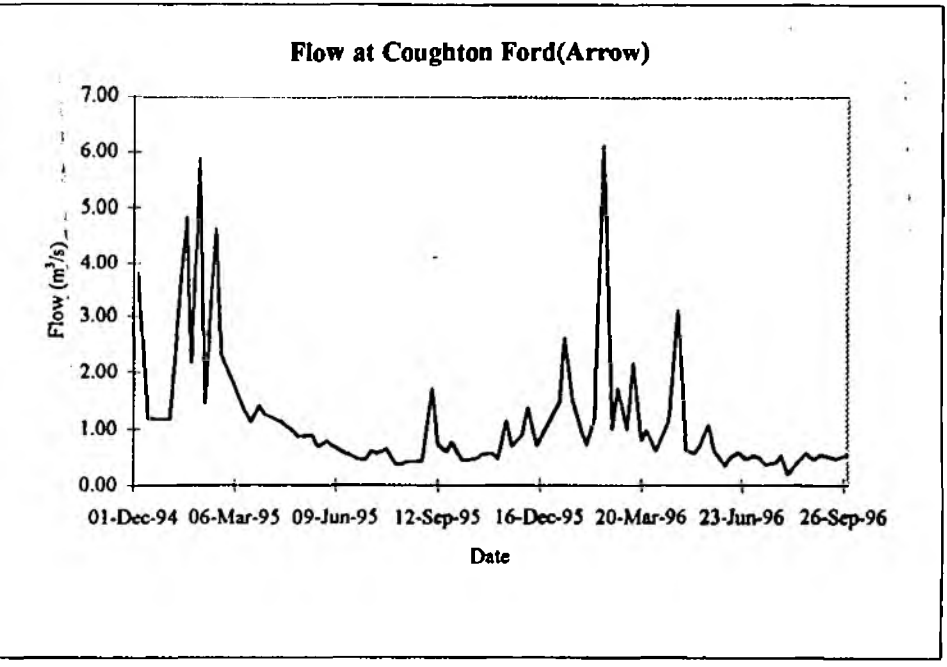
Figure 57 Coughton Ford (Arrow)




N at Coughton Ford(Arrow)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

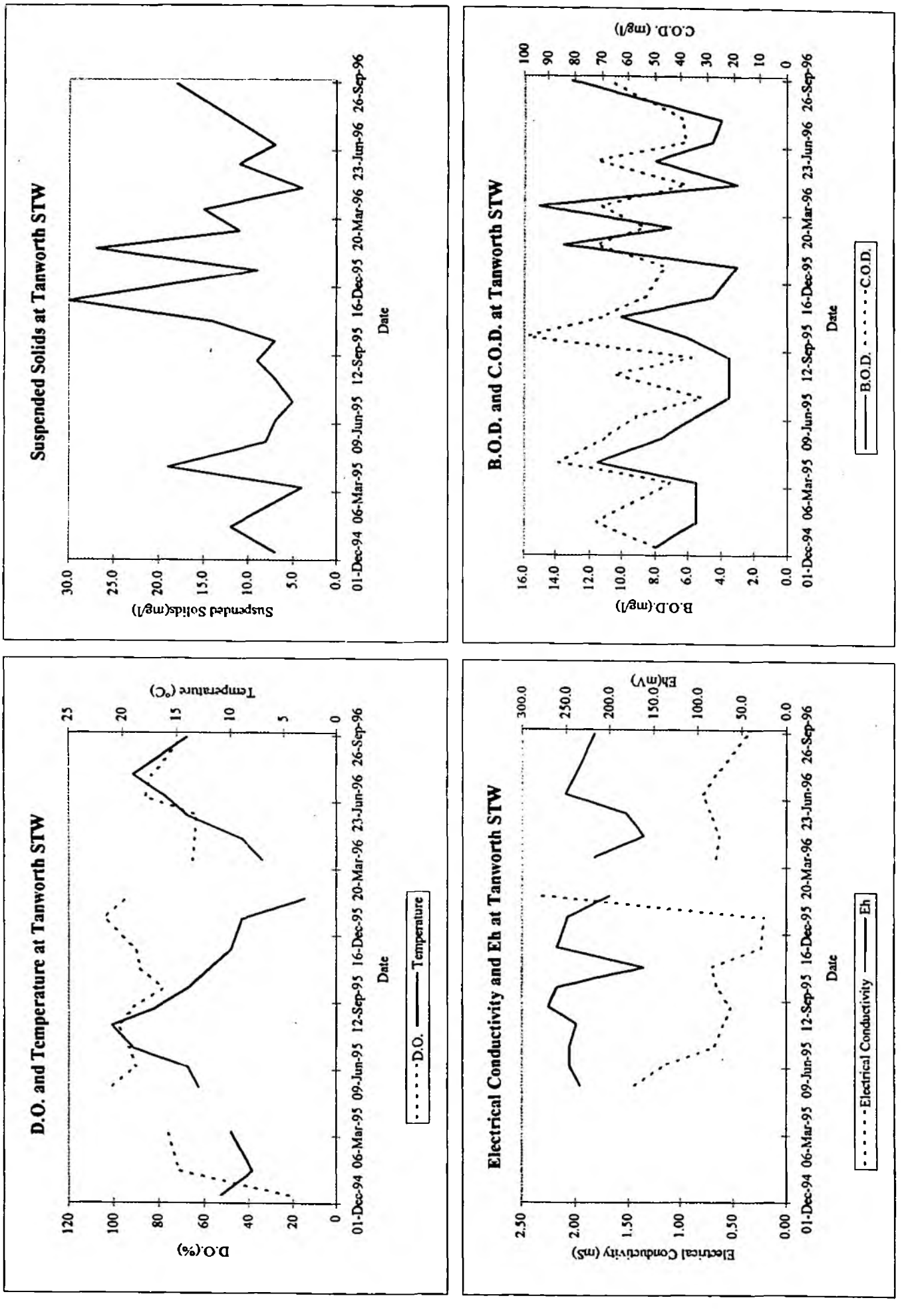

pH at Coughton Ford(Arrow)
9.0
8.8
8.6
8.4
8.2
8.0
7.8
7.6
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

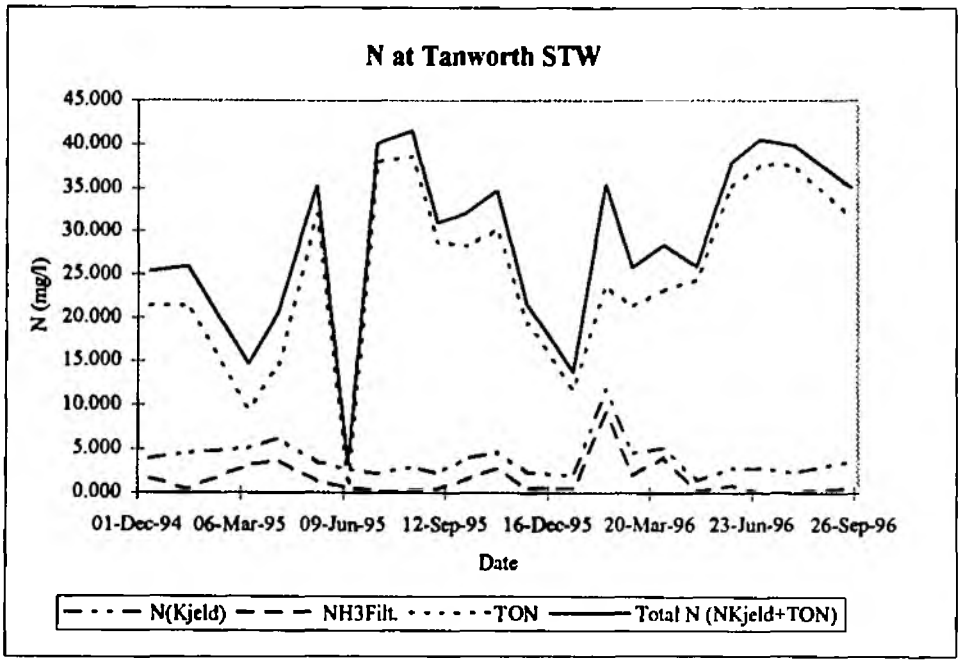


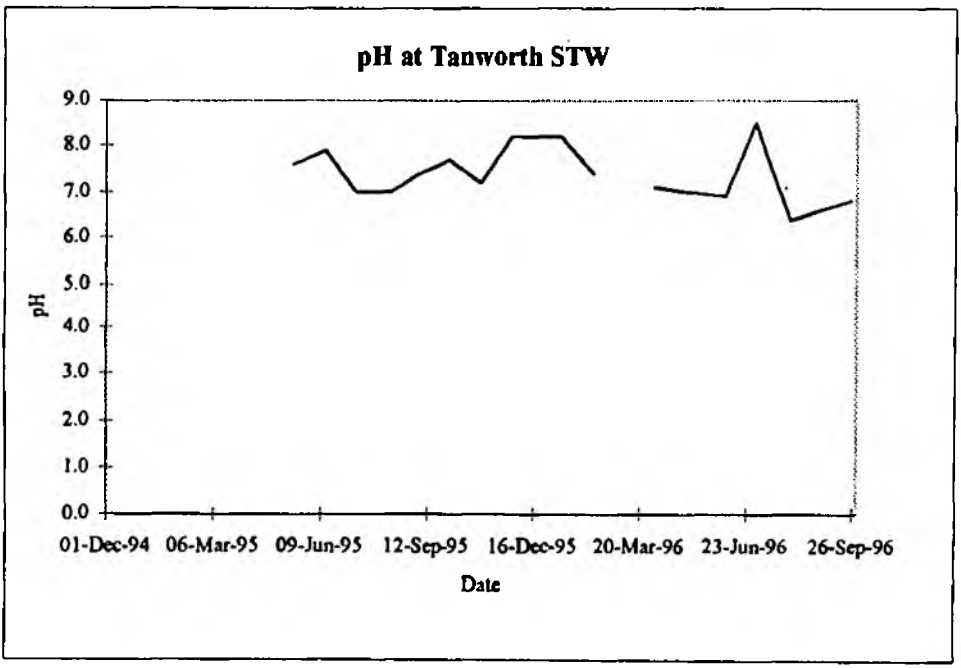


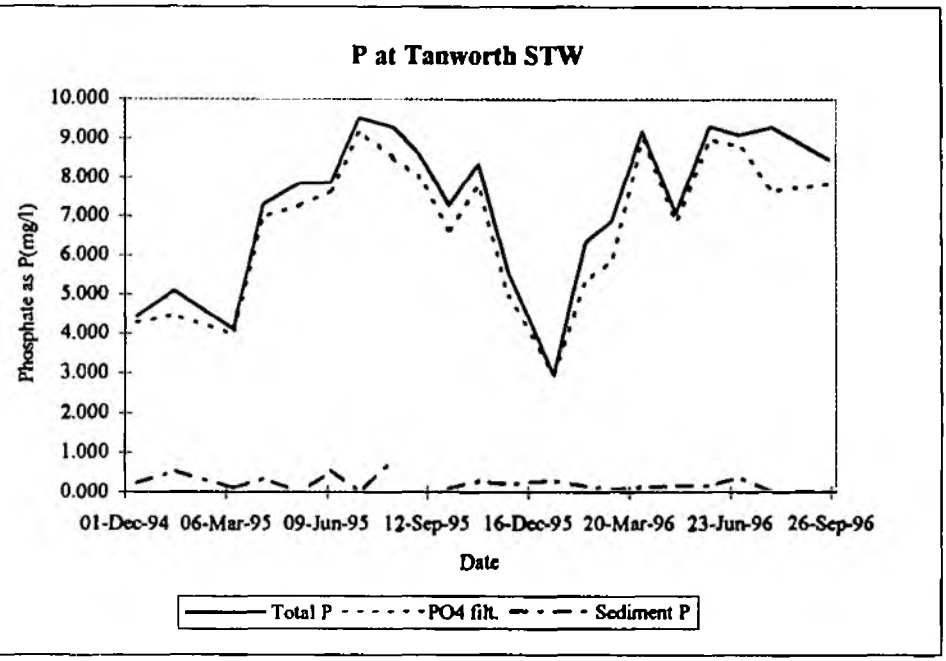
(Figure 57 cont.)

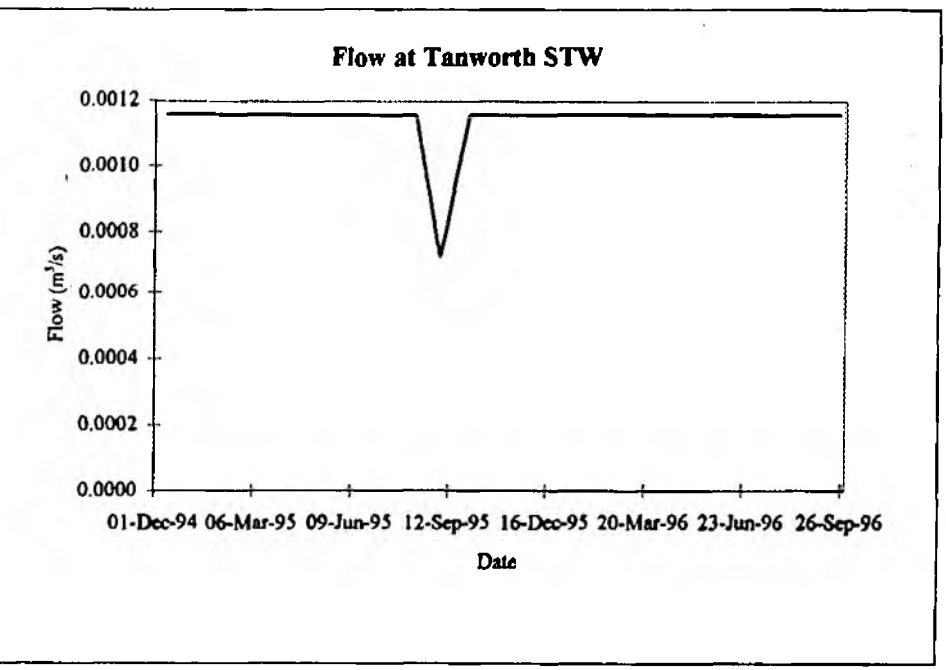
Figure 58 Tanworth STW




N at Tanworth STW
45.000
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

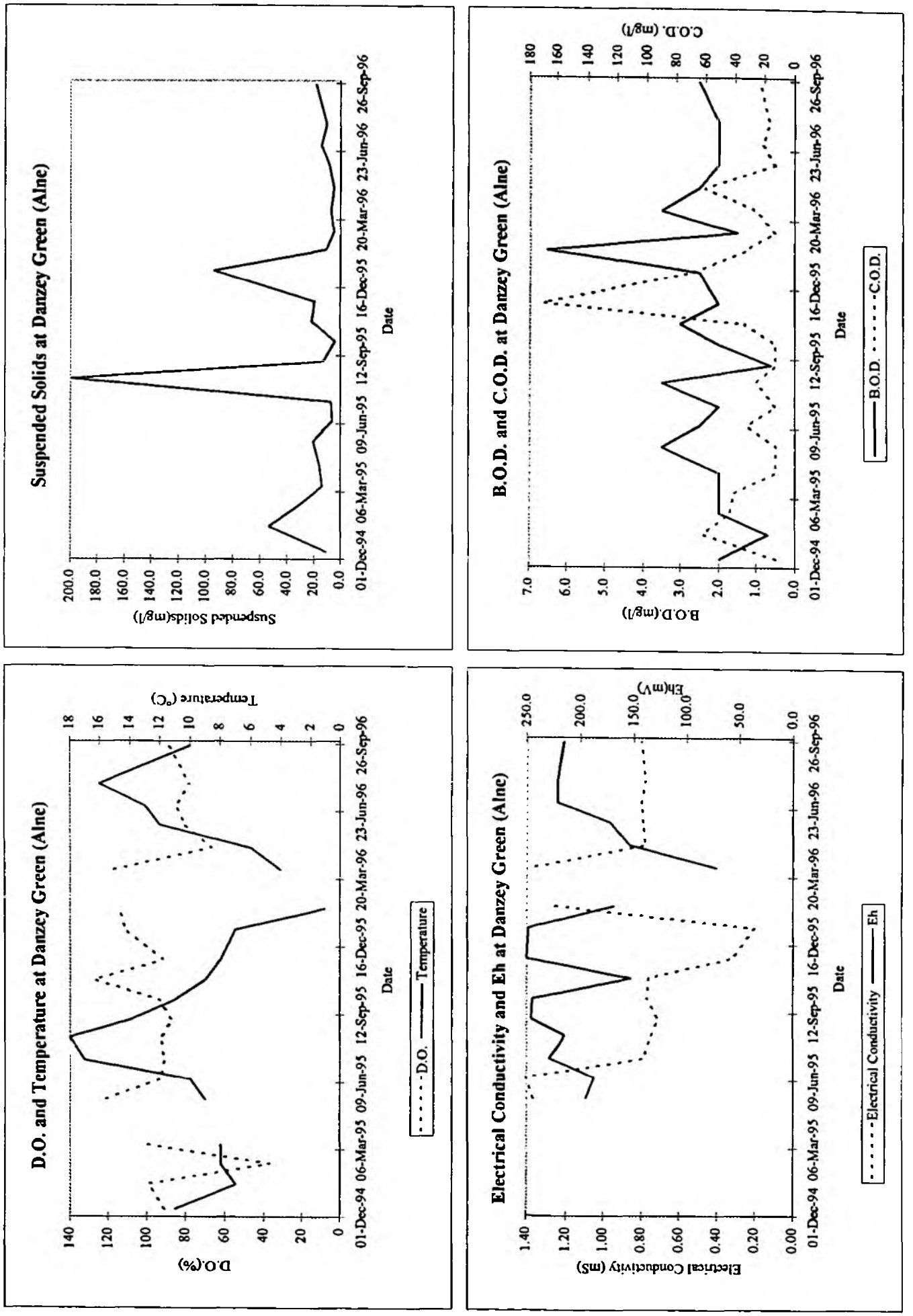

pH at Tanworth STW
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

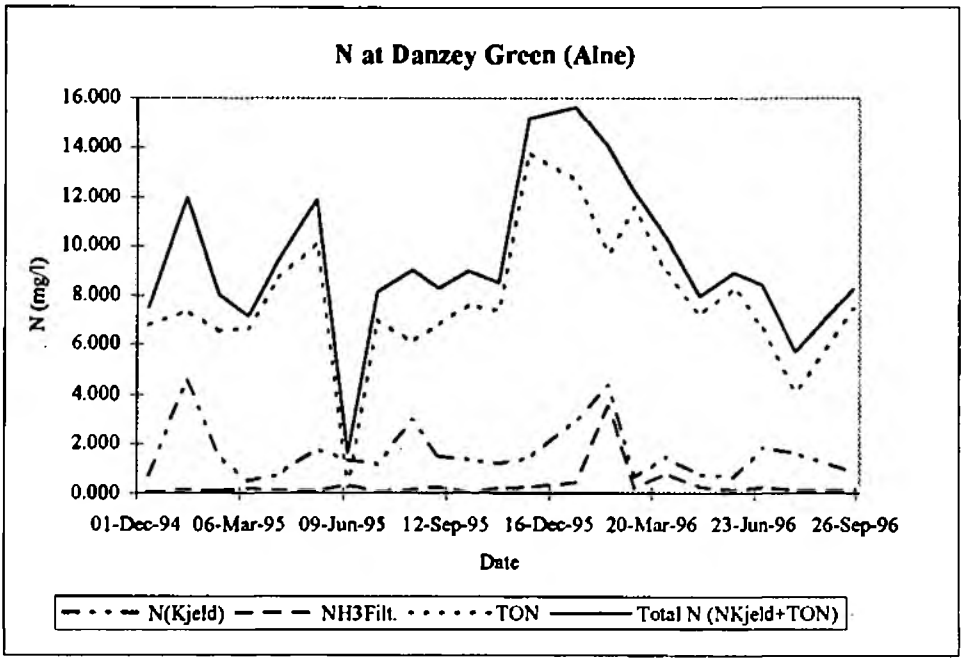


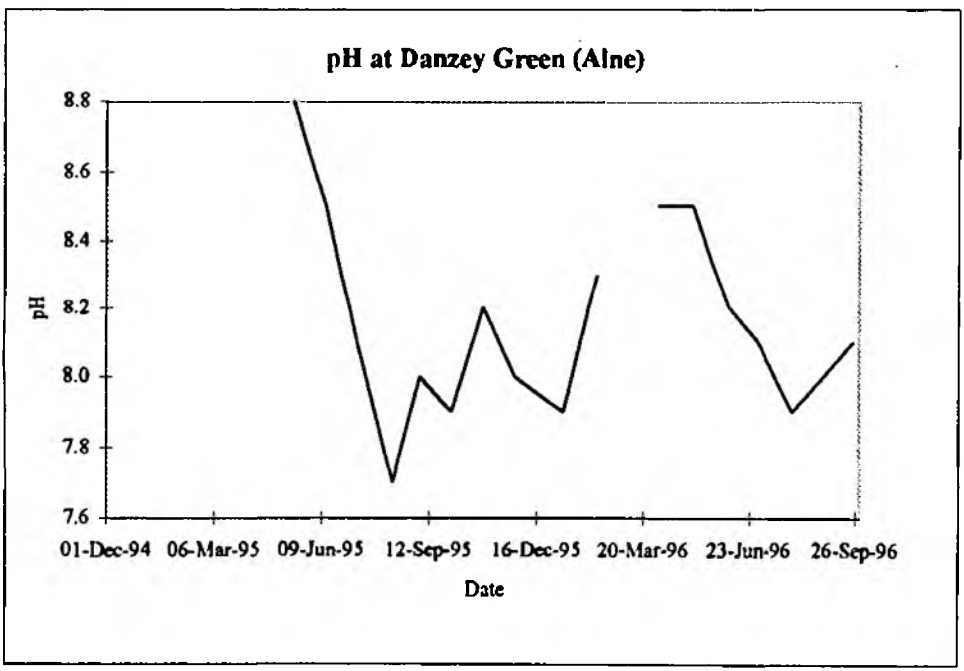


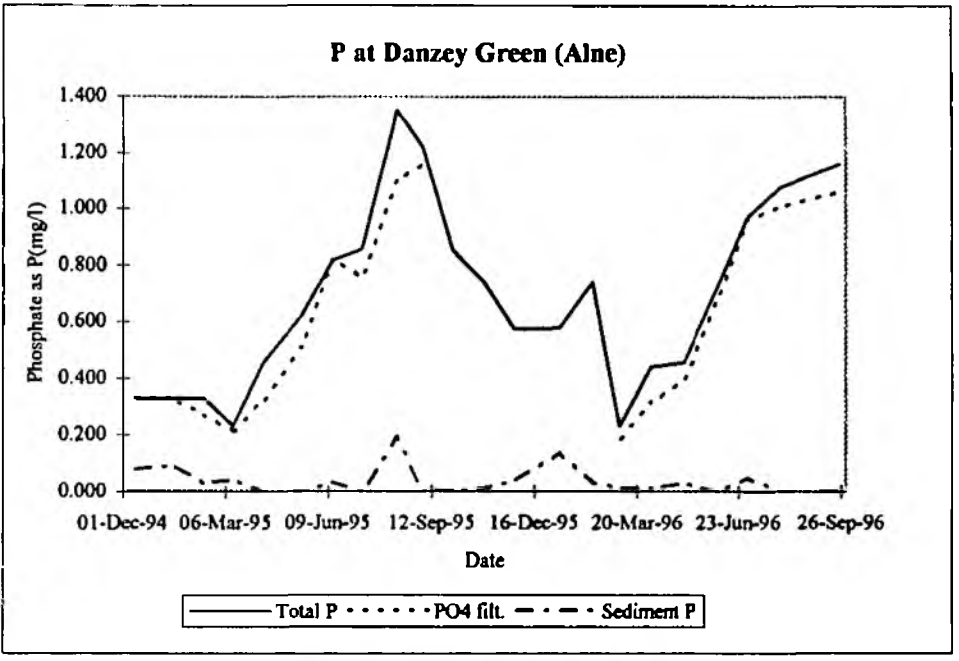
(Figure 58 cont.)

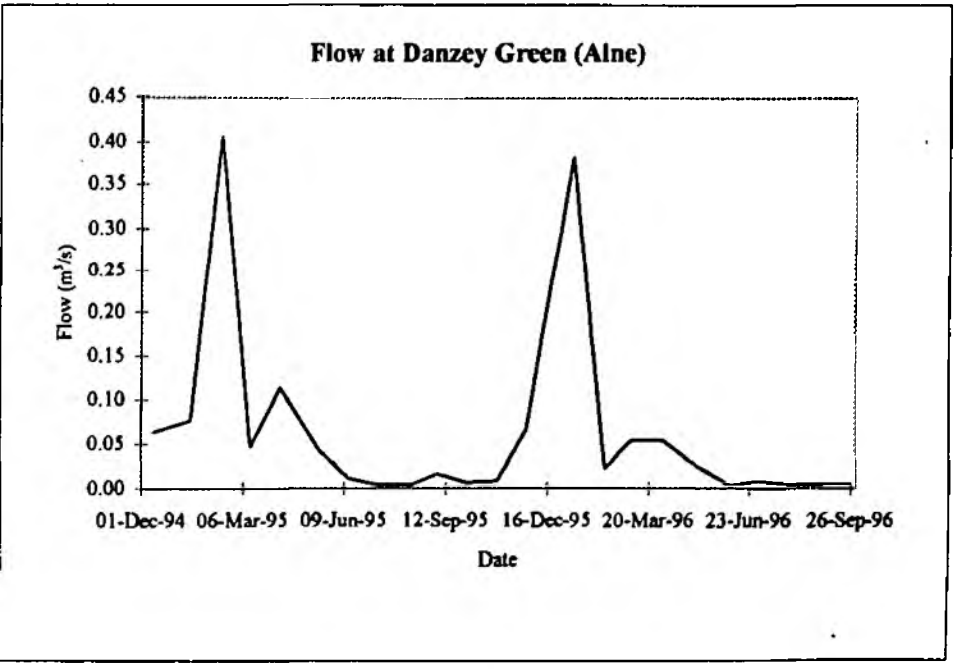
Figure 59 Danzey Green (Alne)




N at Danzey Green (Alne)
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

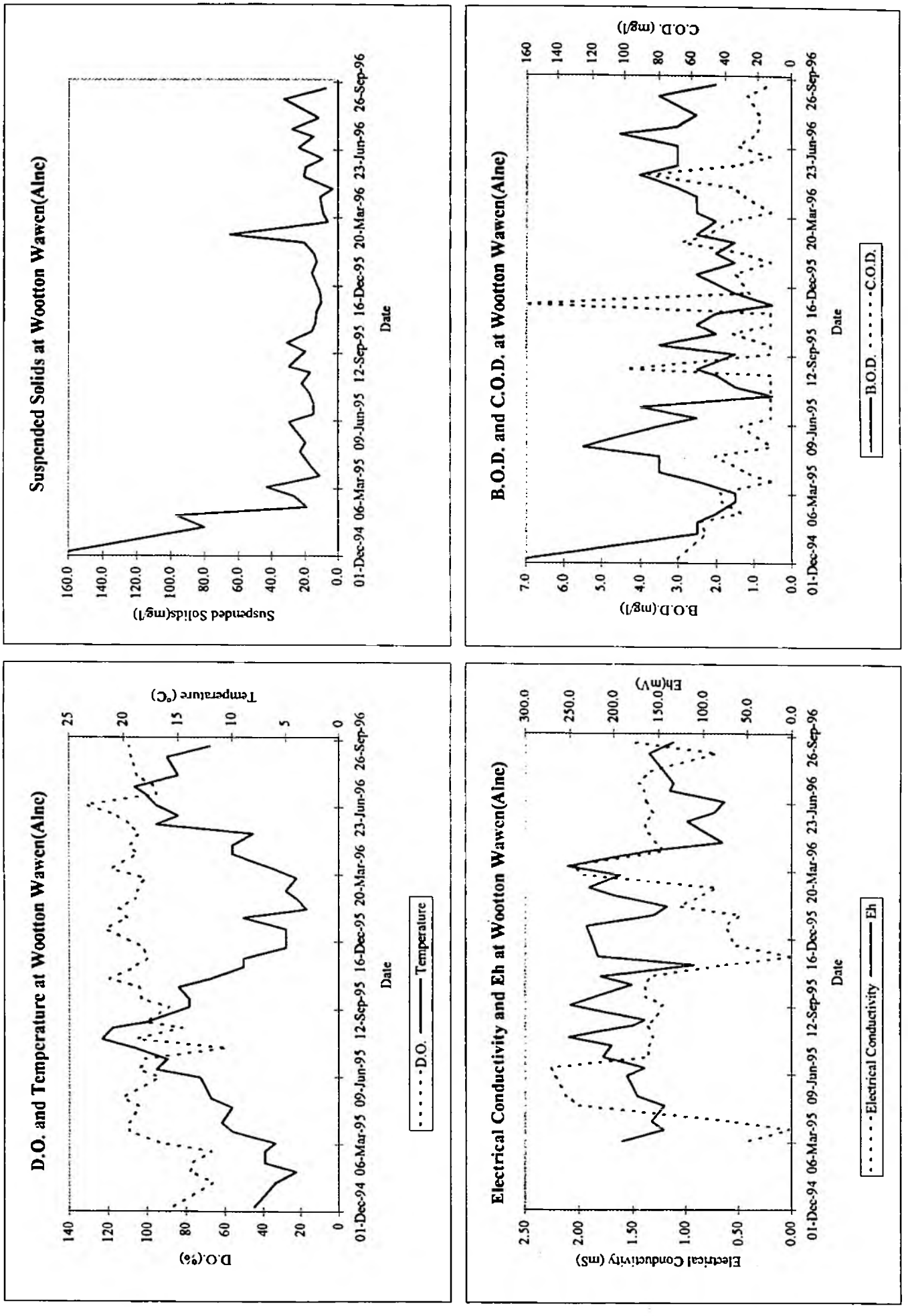

pH at Danzey Green (Alne)
8.8
8.6
8.4
8.2
8.0
7.8
7.6
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

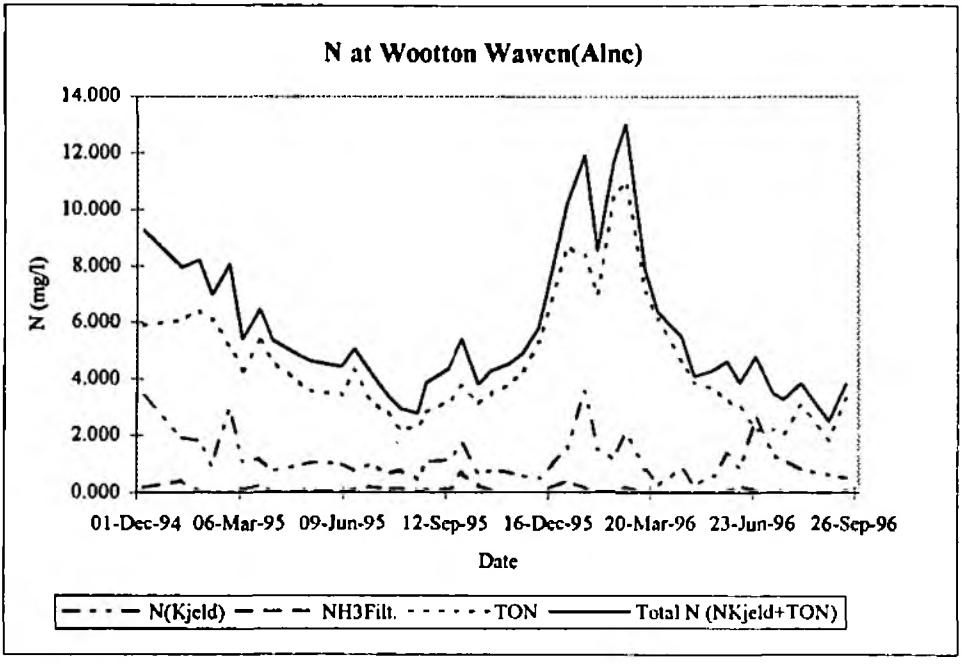


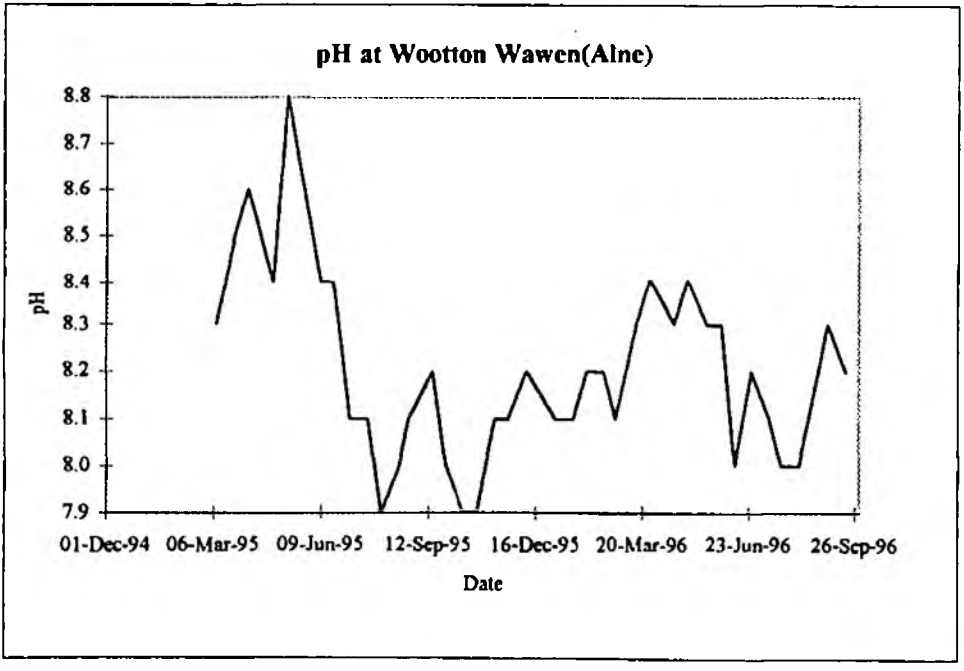


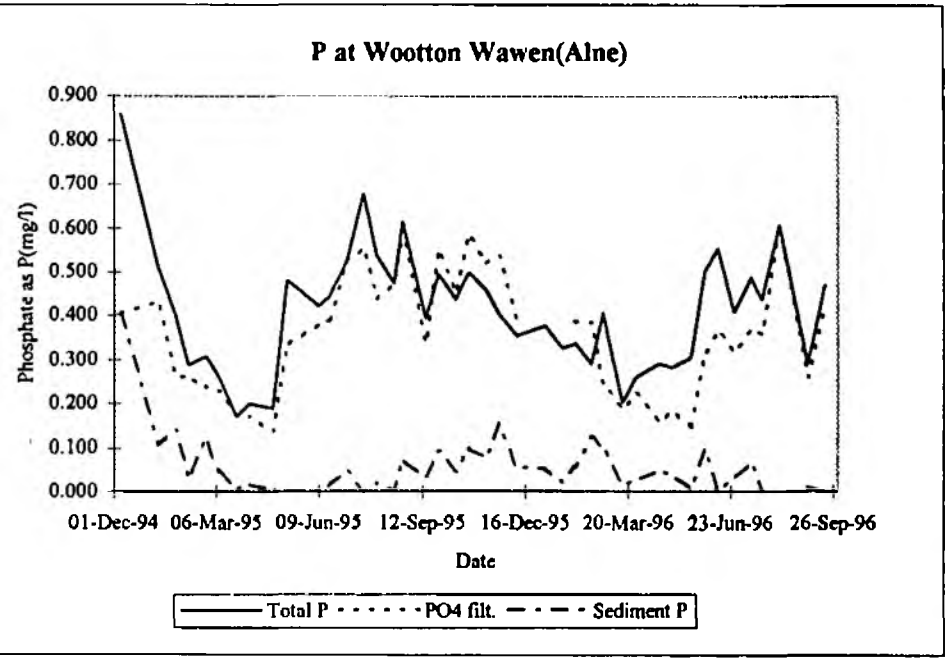
(Figure 59 cont.)

Figure 60 Wootton Wawen (Alne)

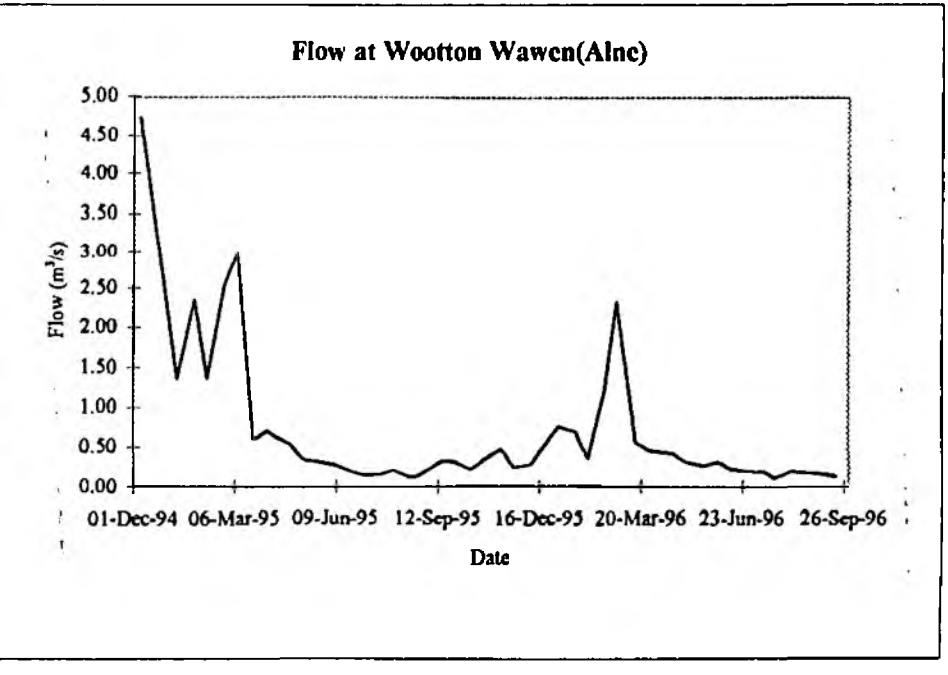


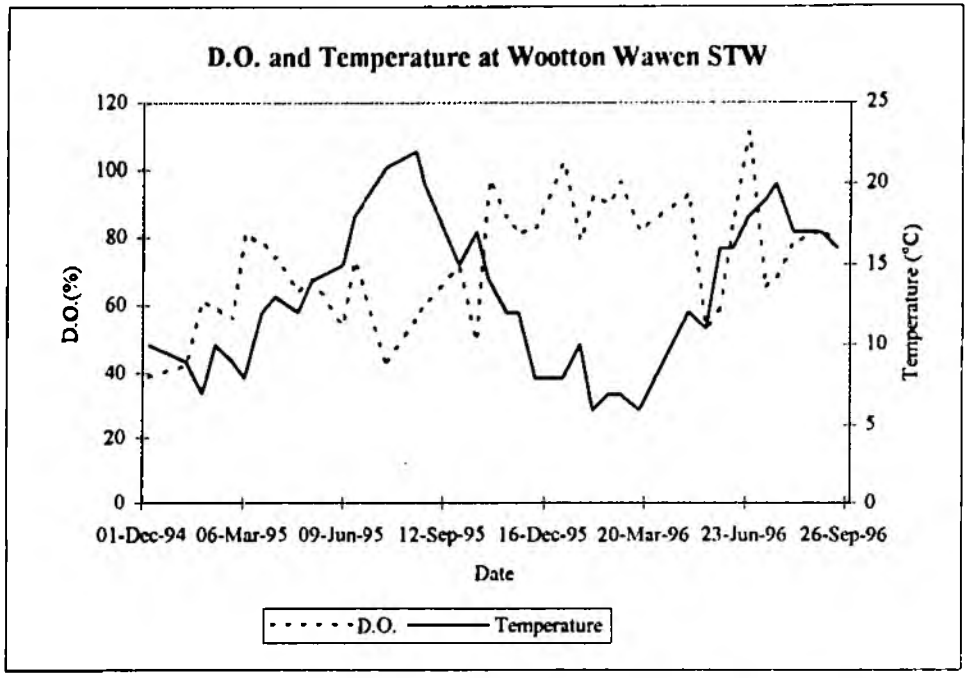

N at Wootton Wawen(Alnc)
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

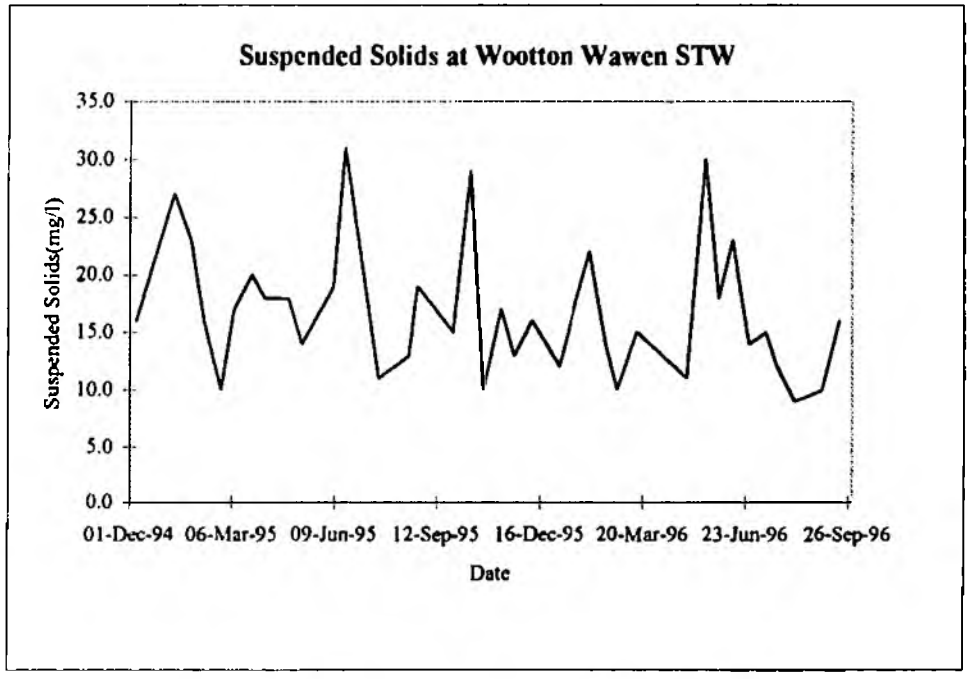

pH at Wootton Wawen(Alnc)
8.8
8.7
8.6
8.5
8.4
8.3
8.2
8.1
8.0
7.9
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

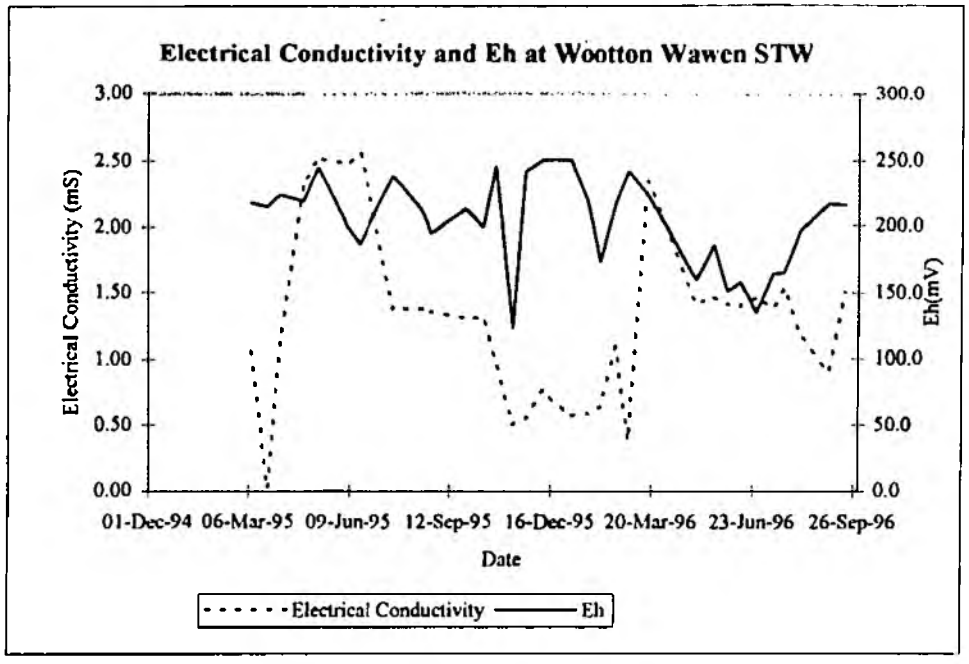


(Figure 60 cont.)









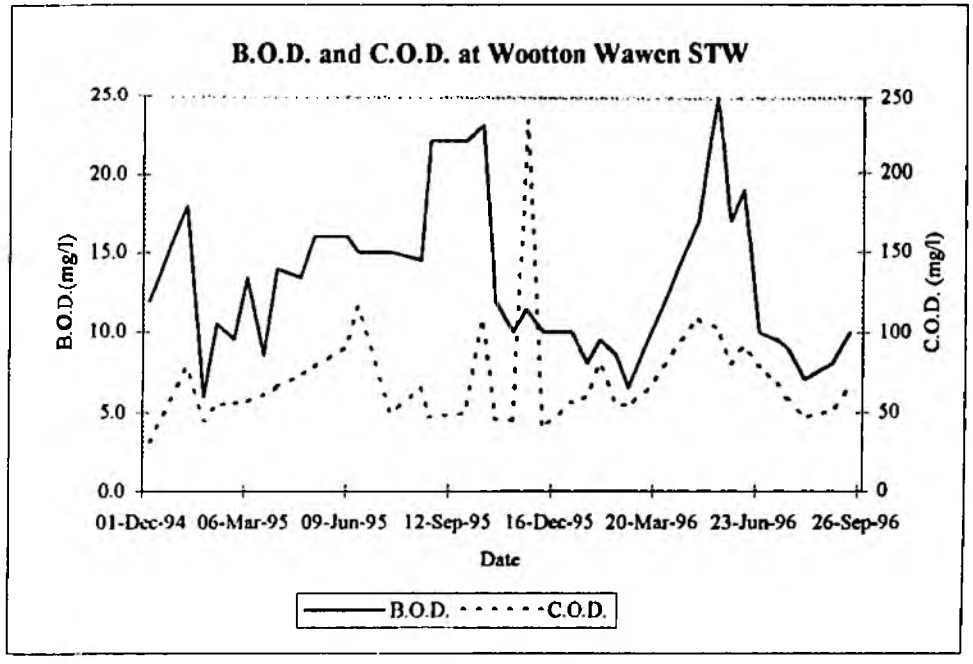
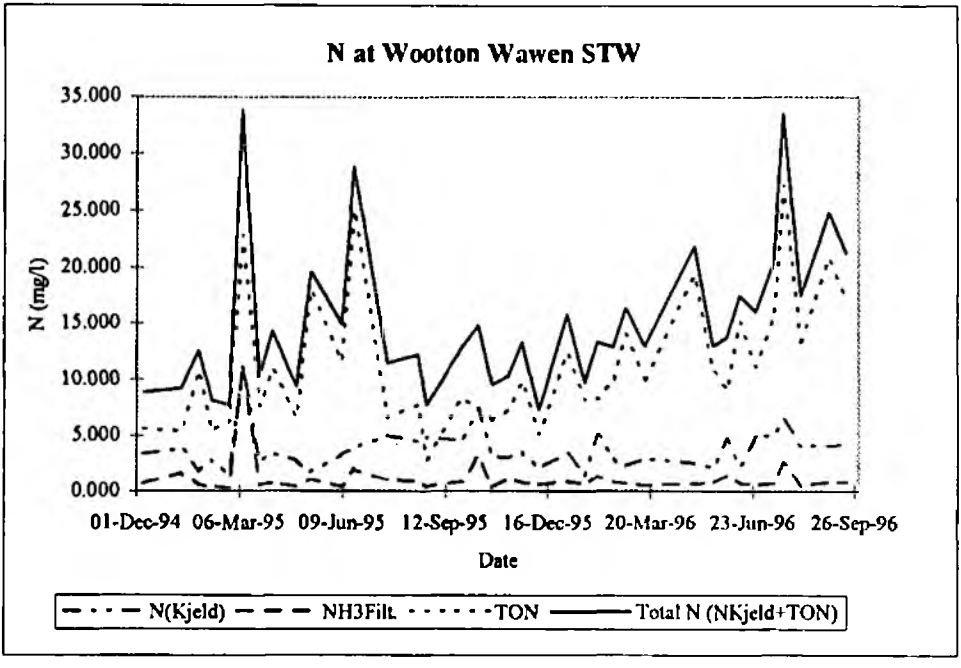
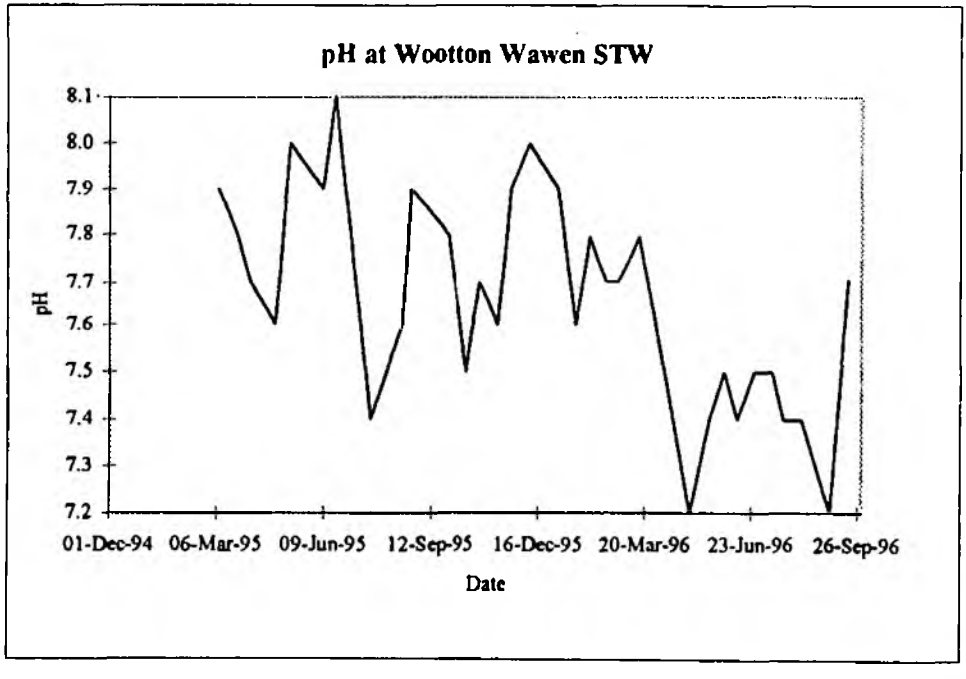
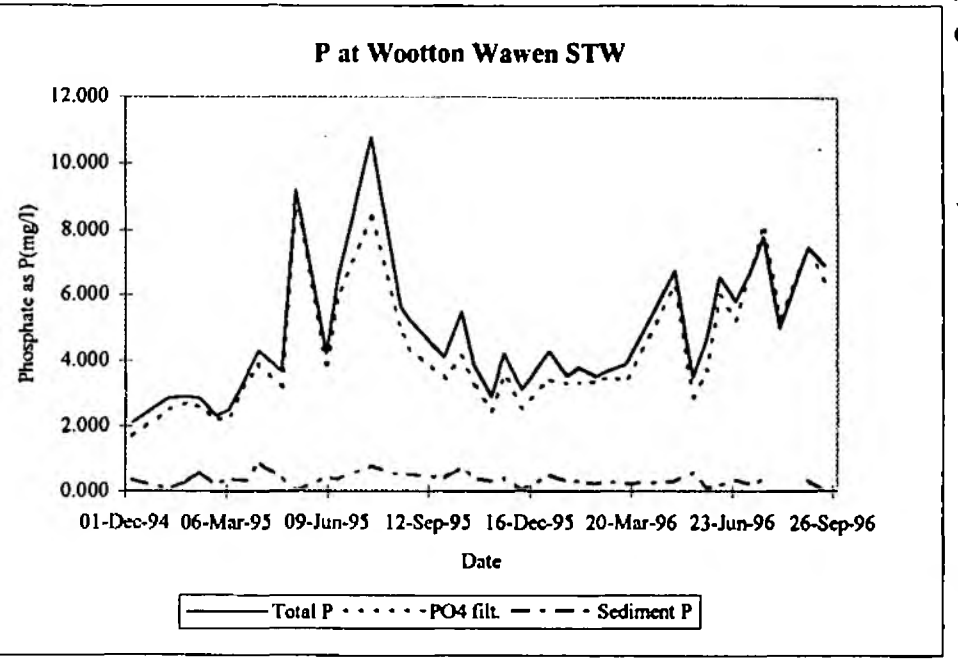
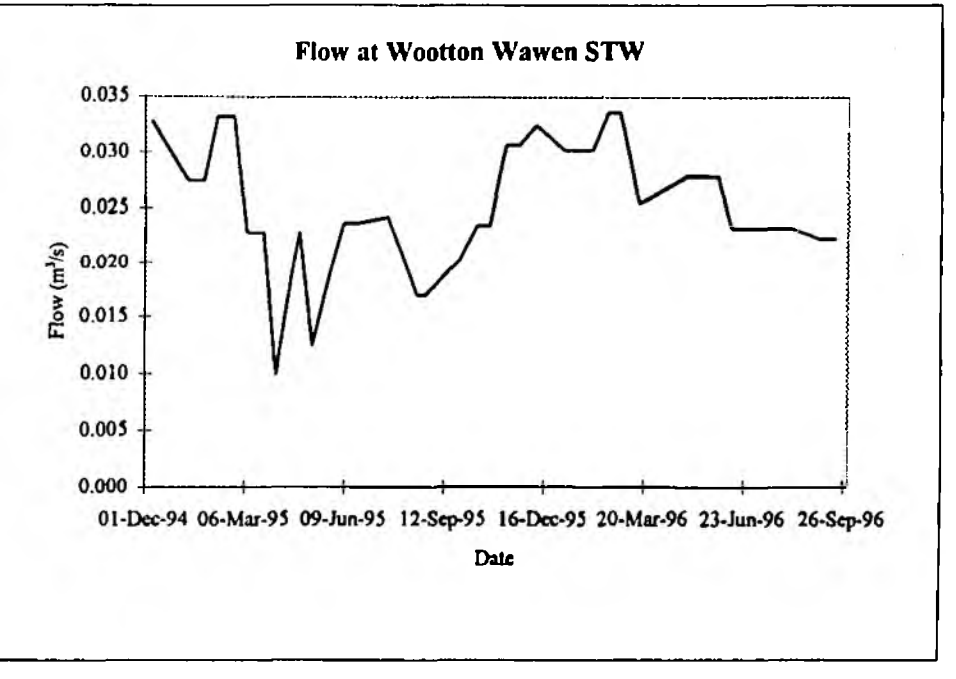


Figure 61 Wootton Wawen STW


N at Wootton Wawen STW
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt
TON
Total N (NKjeld+TON)

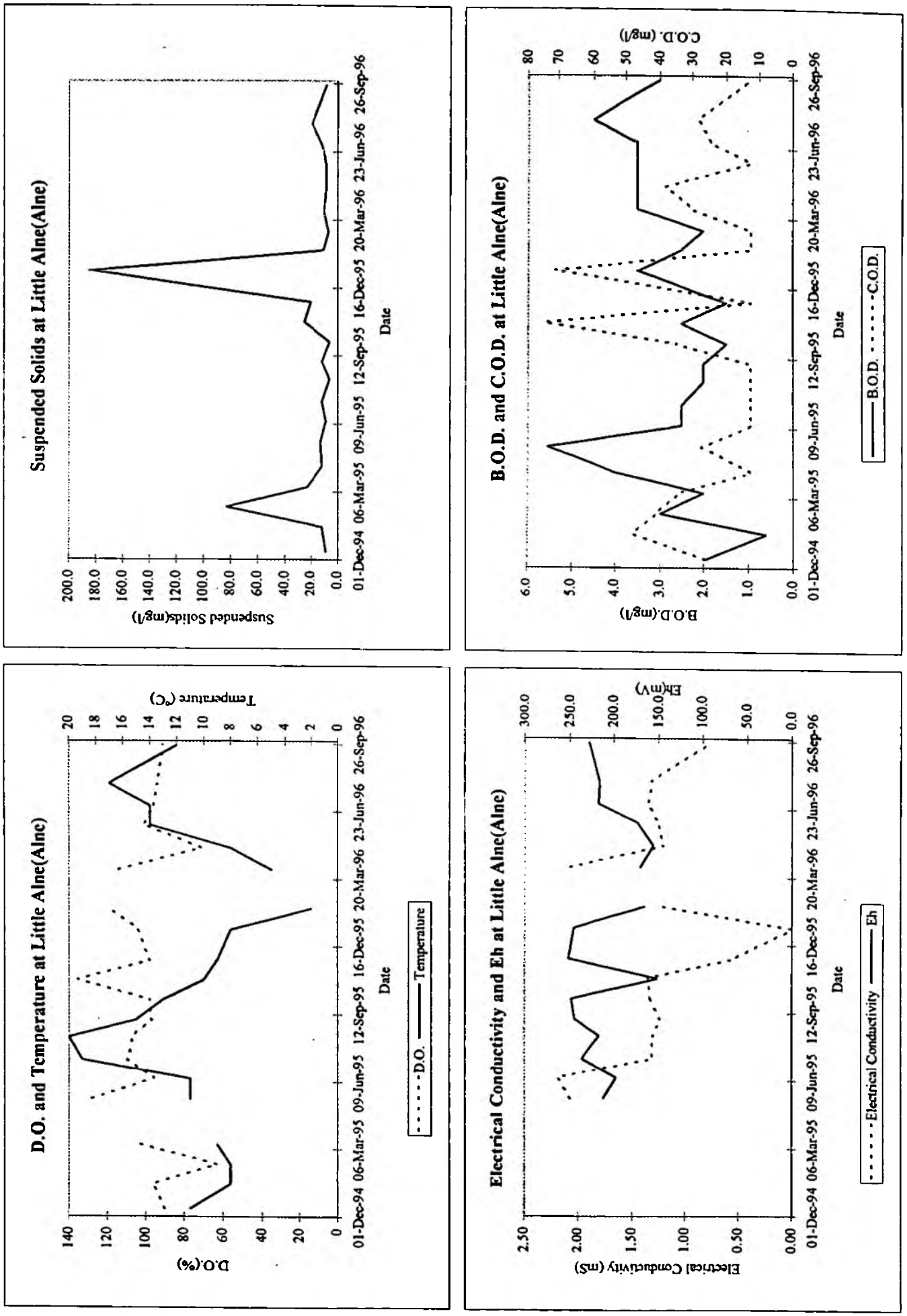

pH at Wootton Wawen STW
8.1
8.0
7.9
7.8
7.7
7.6
7.5
7.4
7.3
7.2
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

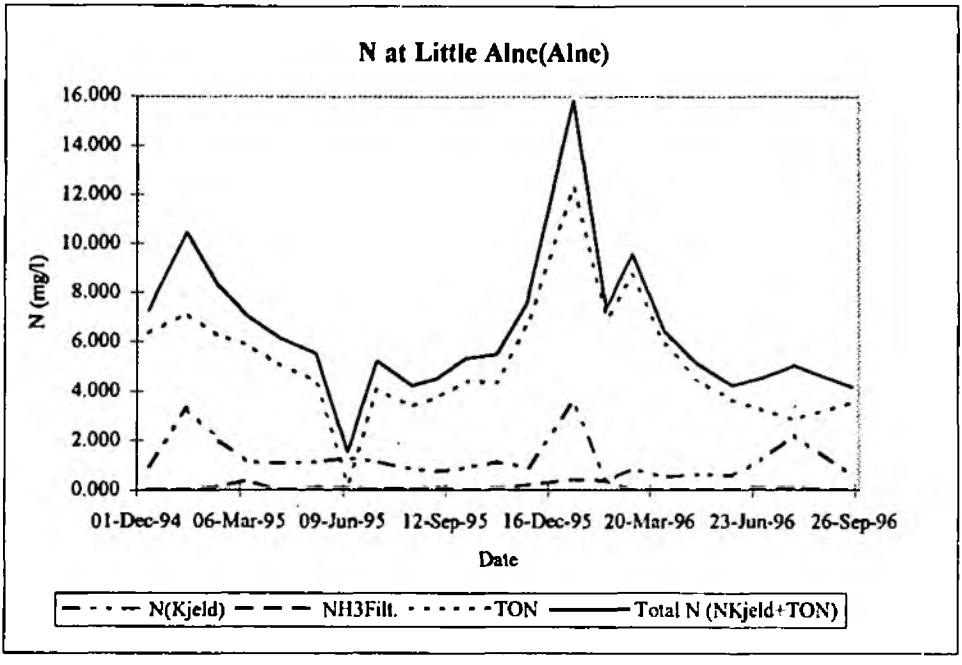


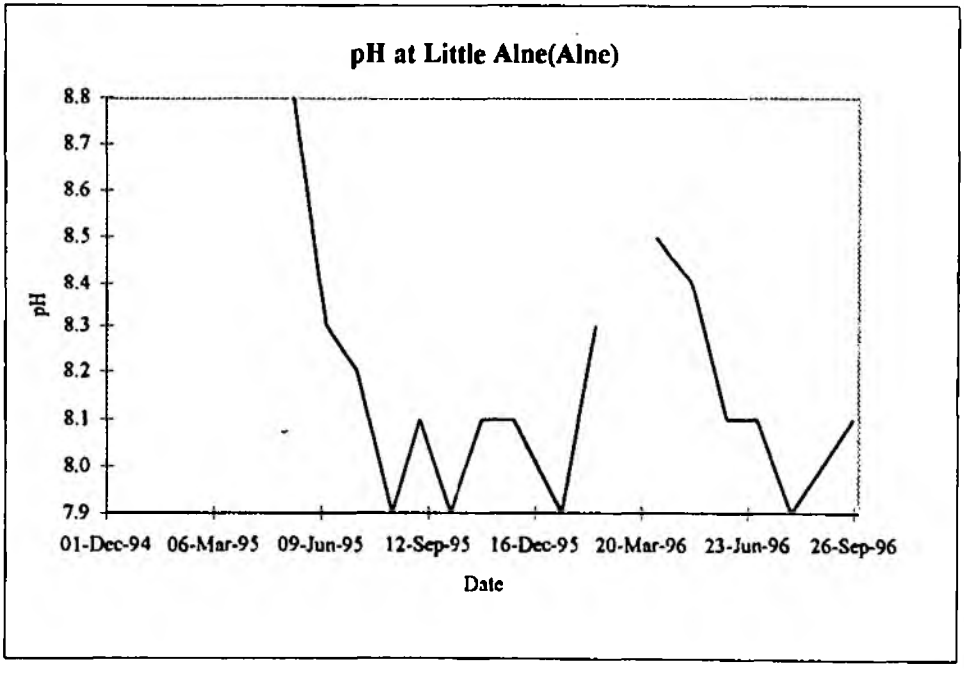


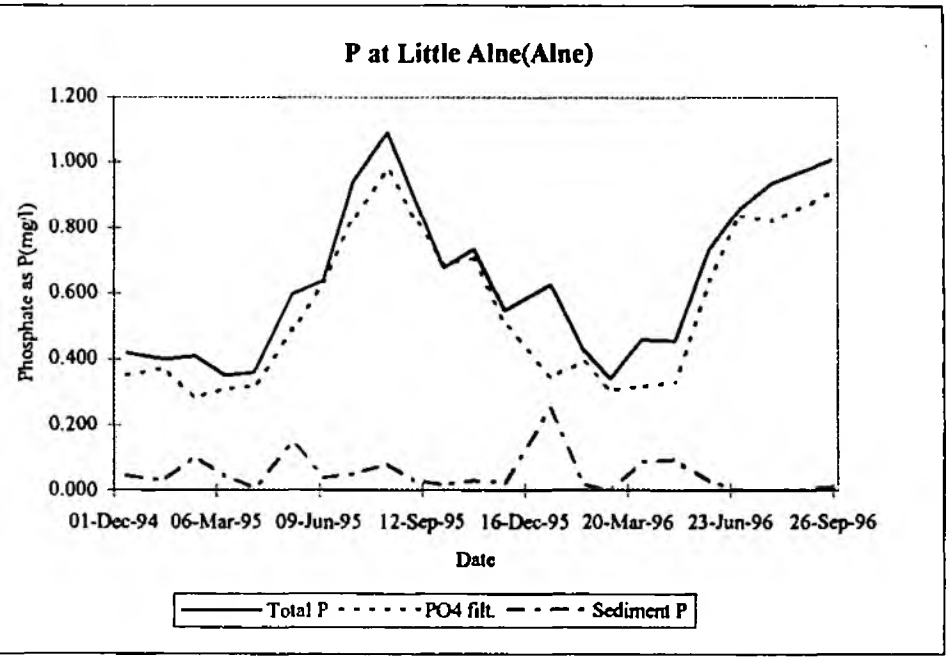
(Figure 61 cont.)

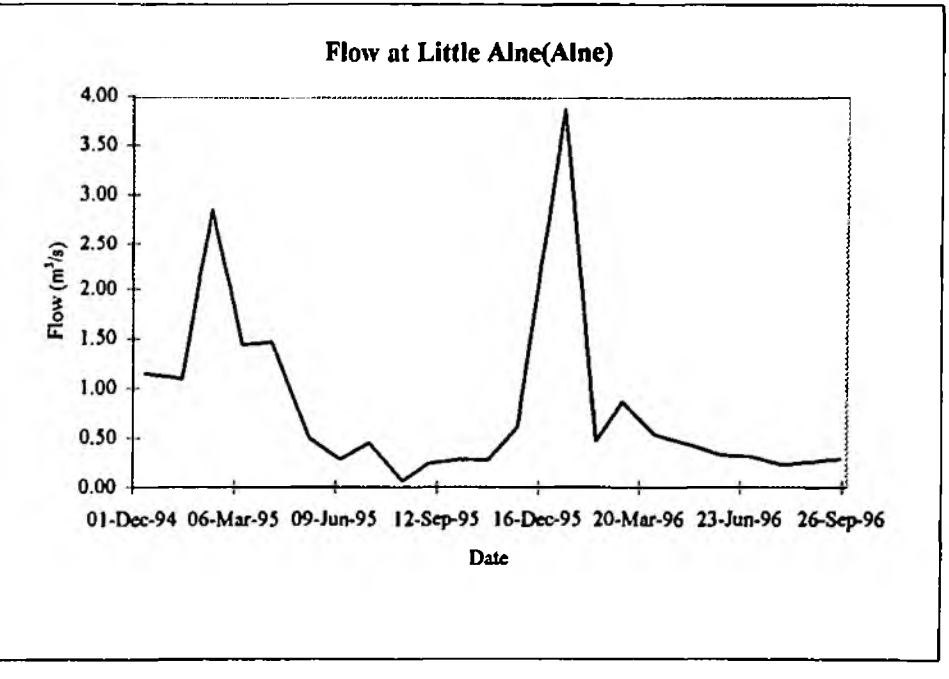
Figure 62 Little Alne (Alne)




N at Little Alne(Alne)
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

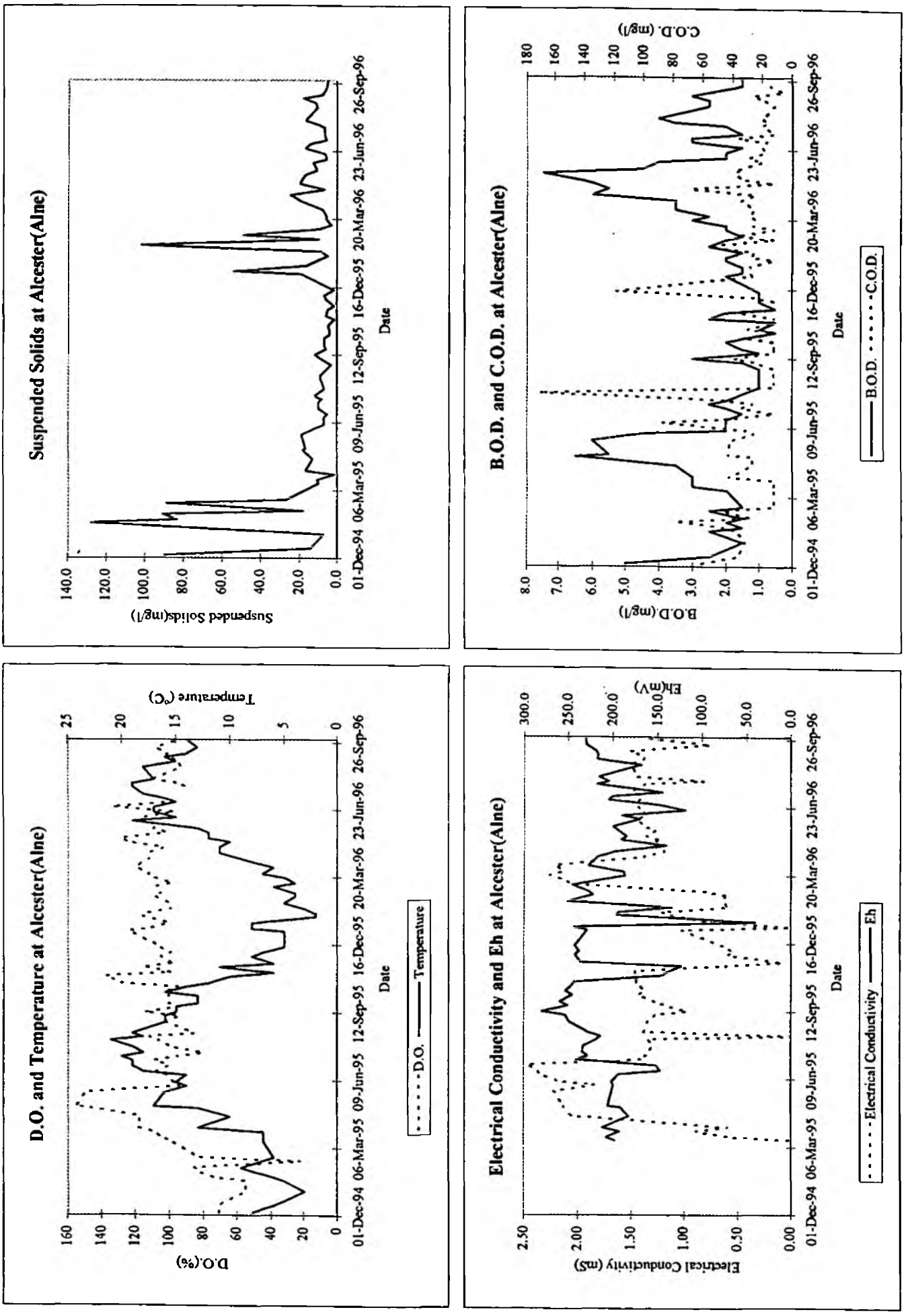

pH at Little Alne(Alne)
8.8
8.7
8.6
8.5
8.4
8.3
8.2
8.1
8.0
7.9
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

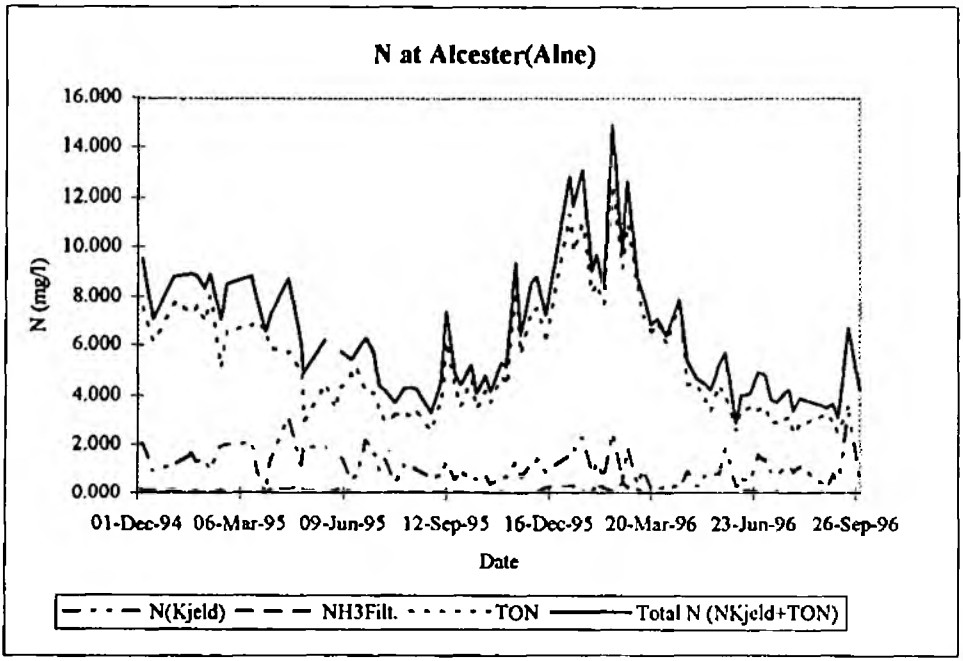


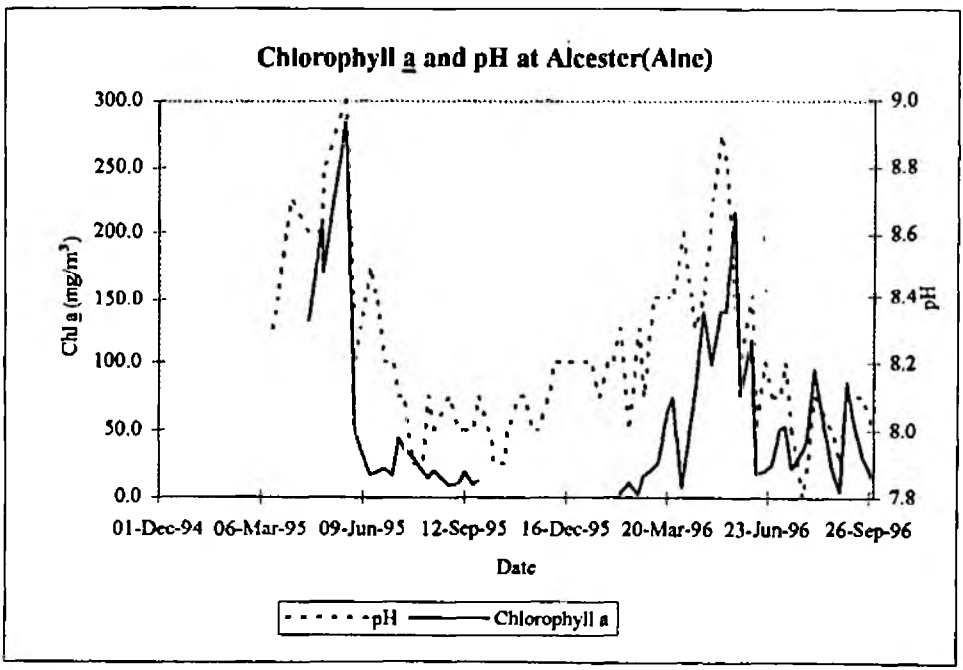


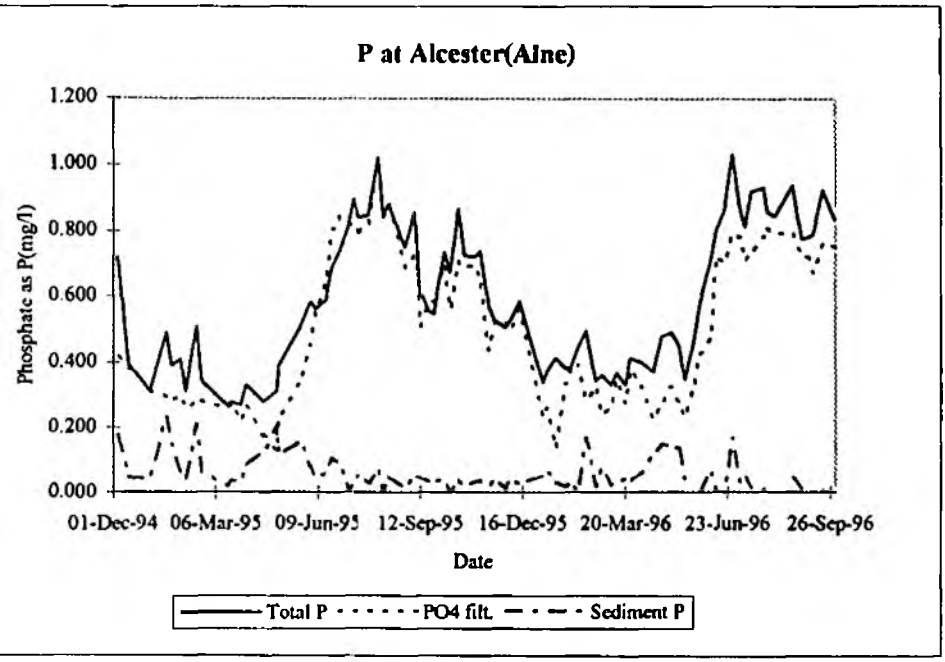
(Figure 62 cont.)

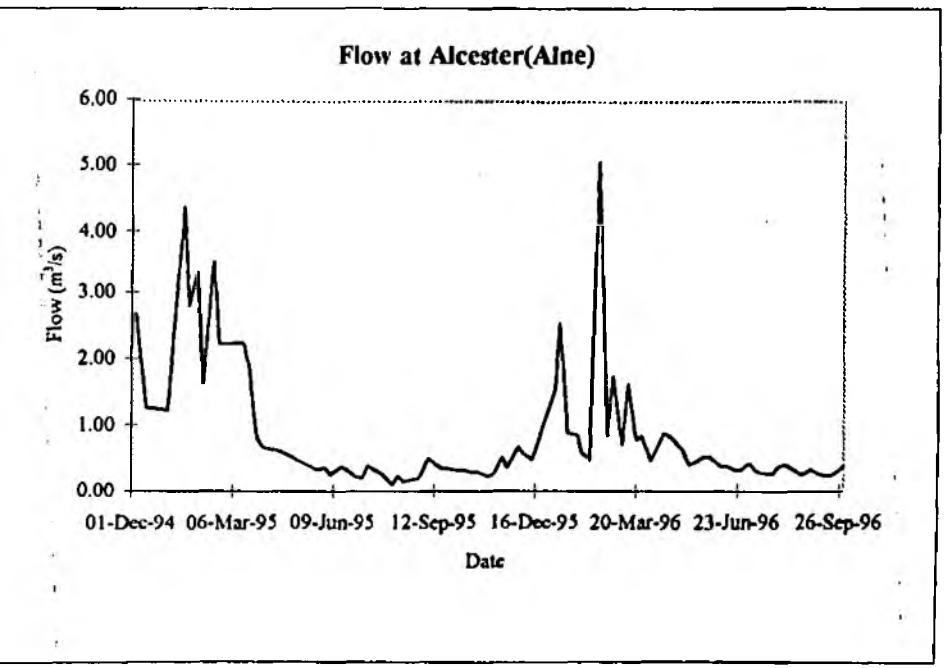
Figure 63 Alcester (Alne)




N at Alcester(Aln)
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
N(Kjeld) NH3Filt. TON Total N (NKjeld+TON)

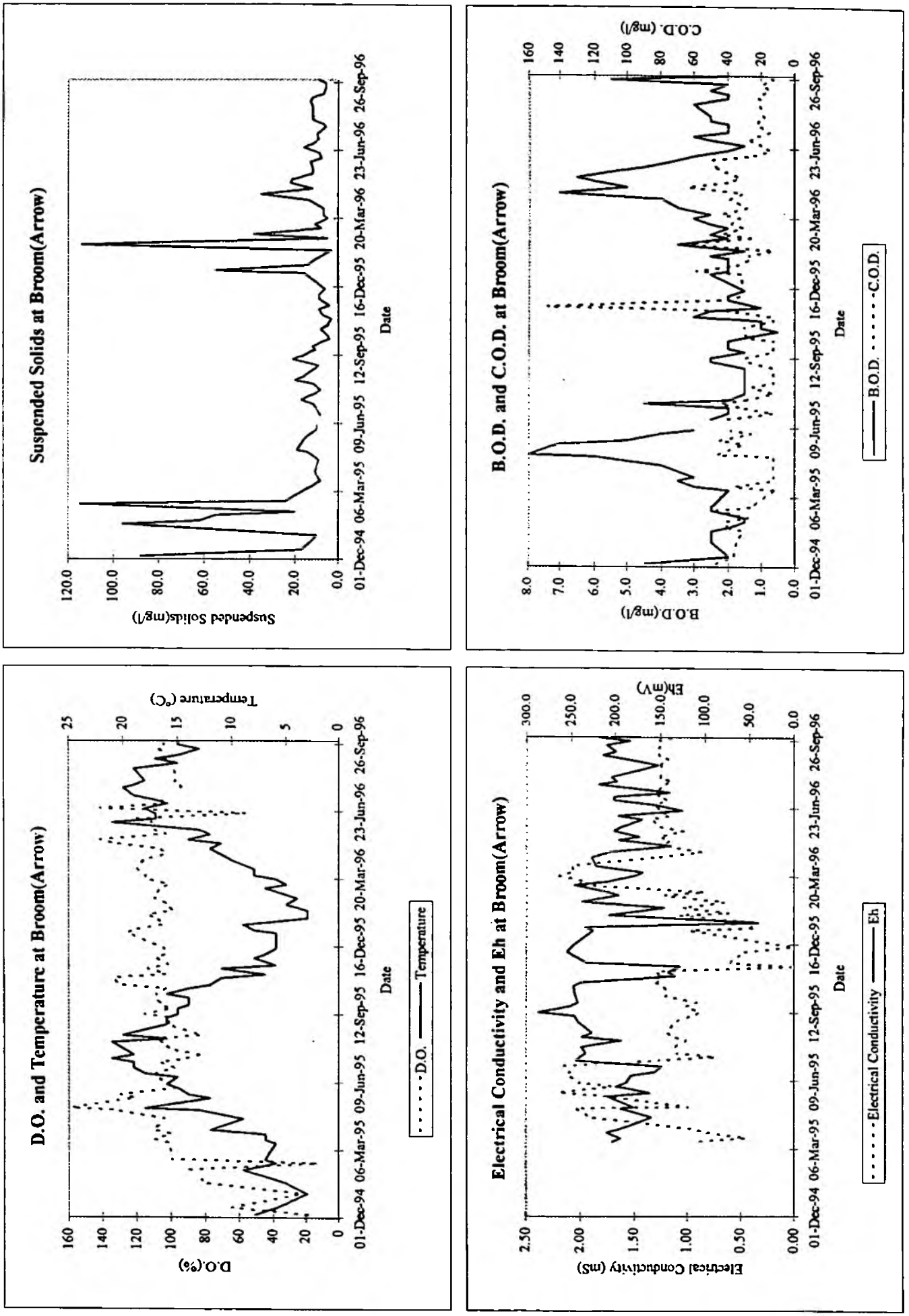

Chlorophyll a and pH at Alcester(Aln)
300.0
250.0
200.0
150.0
100.0
50.0
0.0
Chl a (mg/m3)
9.0
8.8
8.6
8.4
8.2
8.0
7.8
pH
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
pH Chlorophyll a

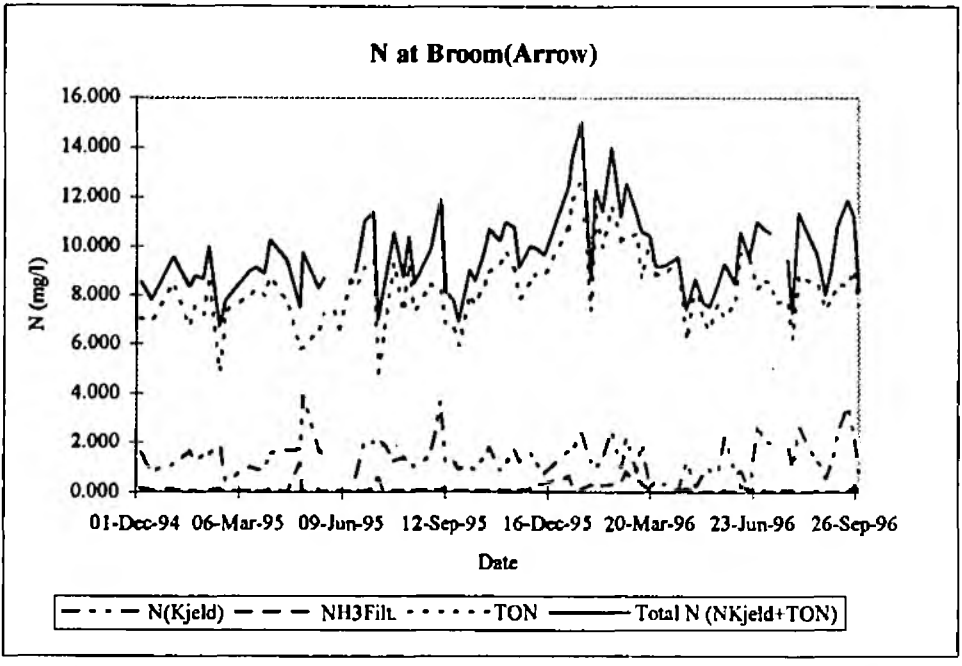


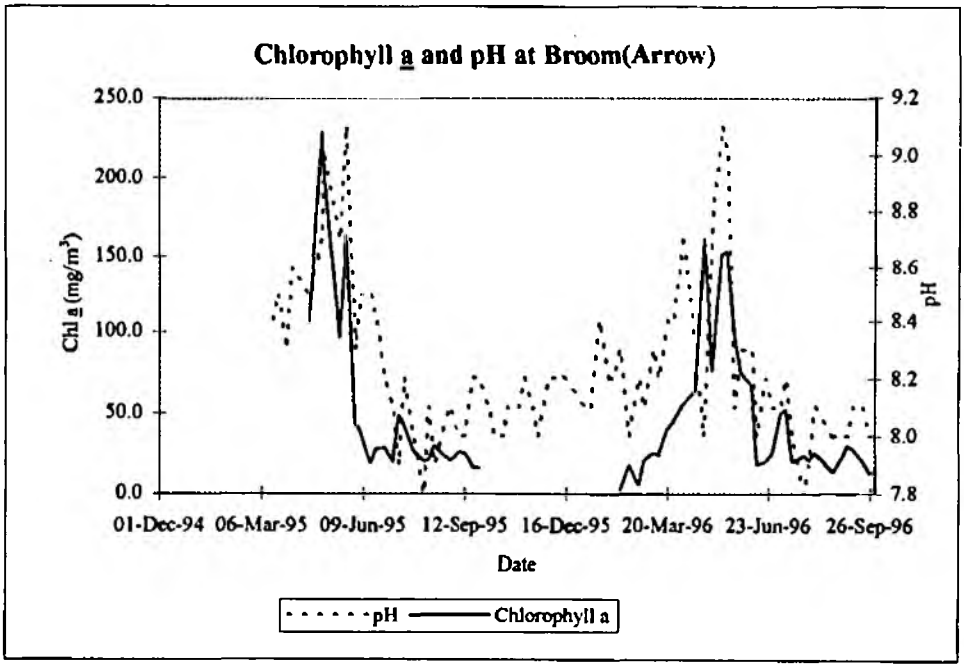


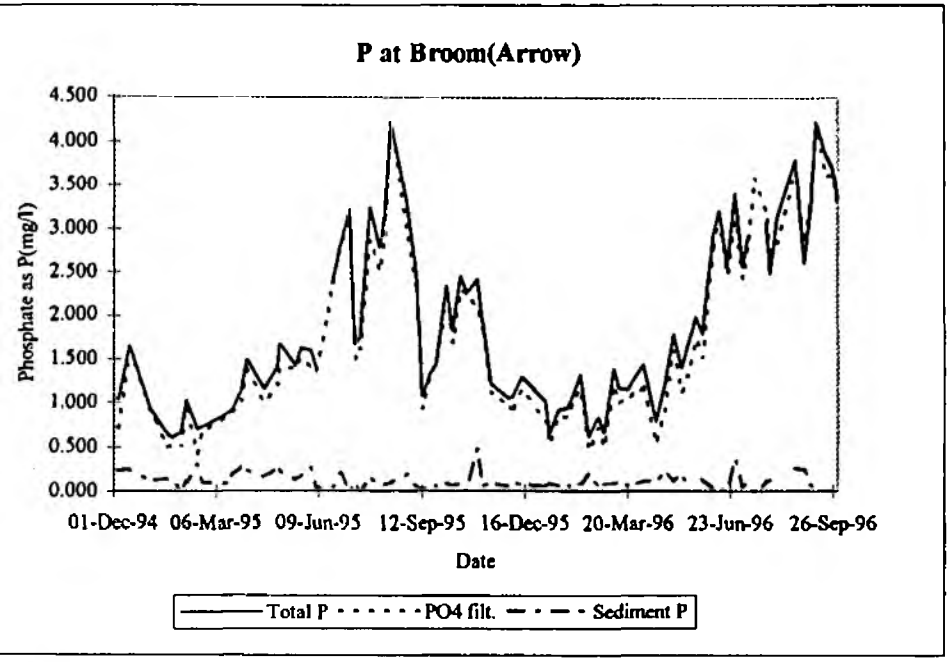
(Figure 63 cont.)

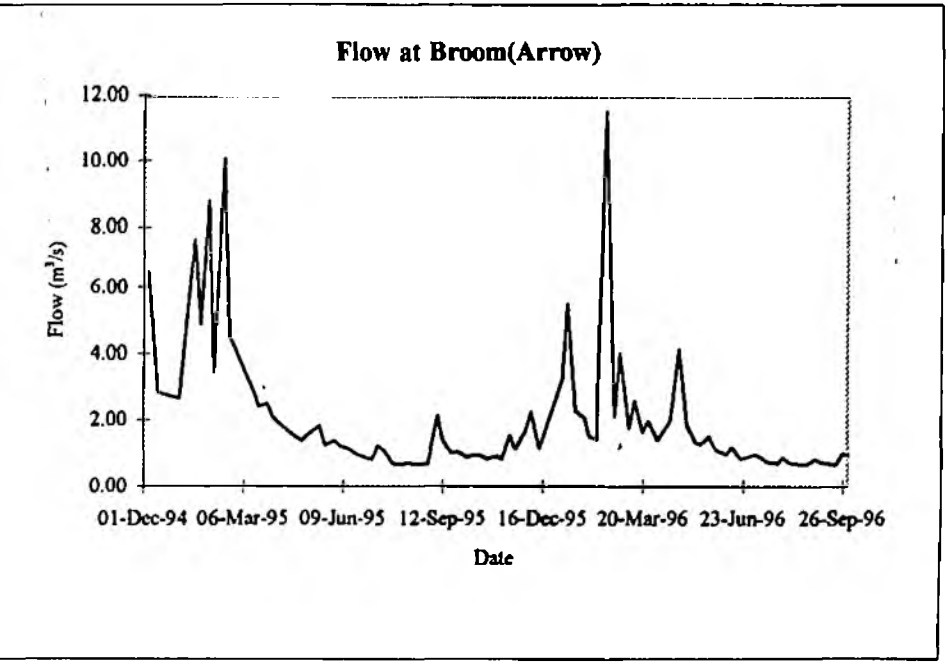
Figure 64 Broom (Arrow)




N at Broom(Arrow)
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
N(Kjeld) NH3Filt TON Total N (NKjeld+TON)


Chlorophyll a and pH at Broom(Arrow)
250.0
200.0
150.0
100.0
50.0
0.0
Chl a (mg/m³)
9.2
9.0
8.8
8.6
8.4
8.2
8.0
7.8
pH
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
pH Chlorophyll a



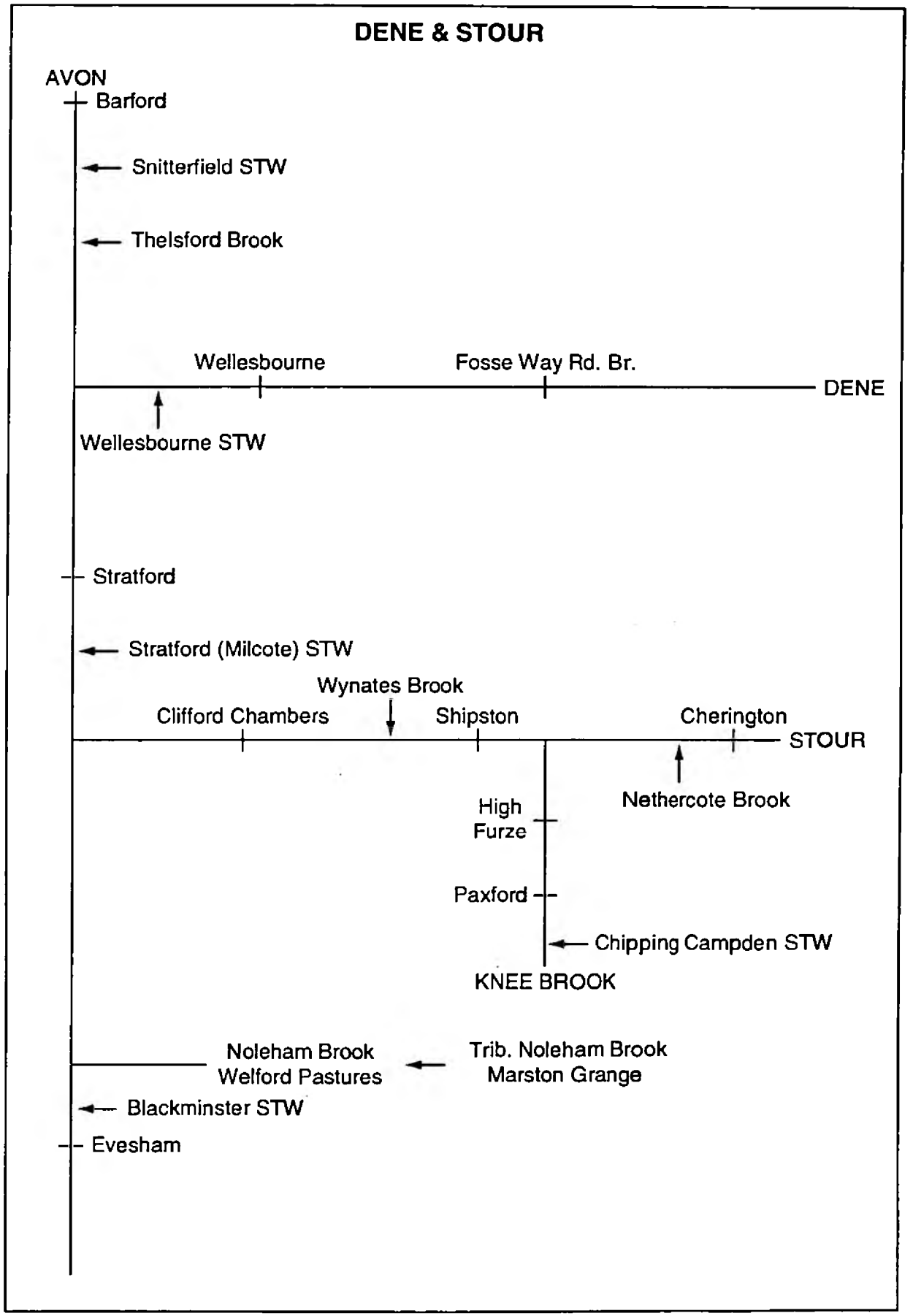


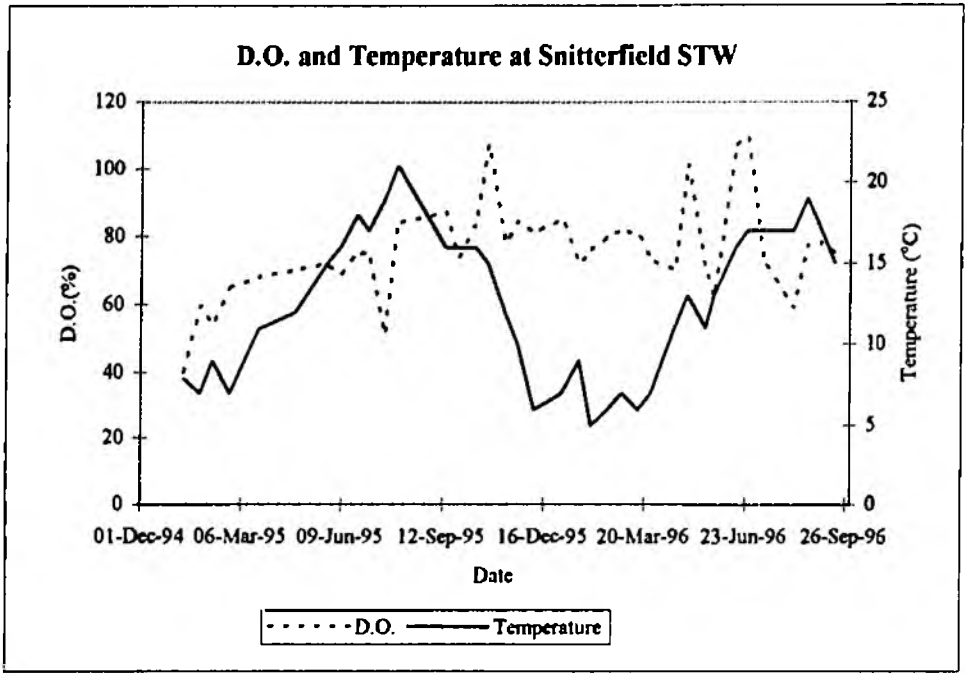
(Figure 64 cont.)

Appendix 1e

The Rivers Dene and Stour and the middle Avon sub-catchments

Figure 65 Site Location Map for the rivers Stour and Dene and their sub-catchments




D.O. and Temperature at Snitterfield STW
D.O.(%)
Temperature (°C)
120
100
80
60
40
20
0
25
20
15
10
5
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature

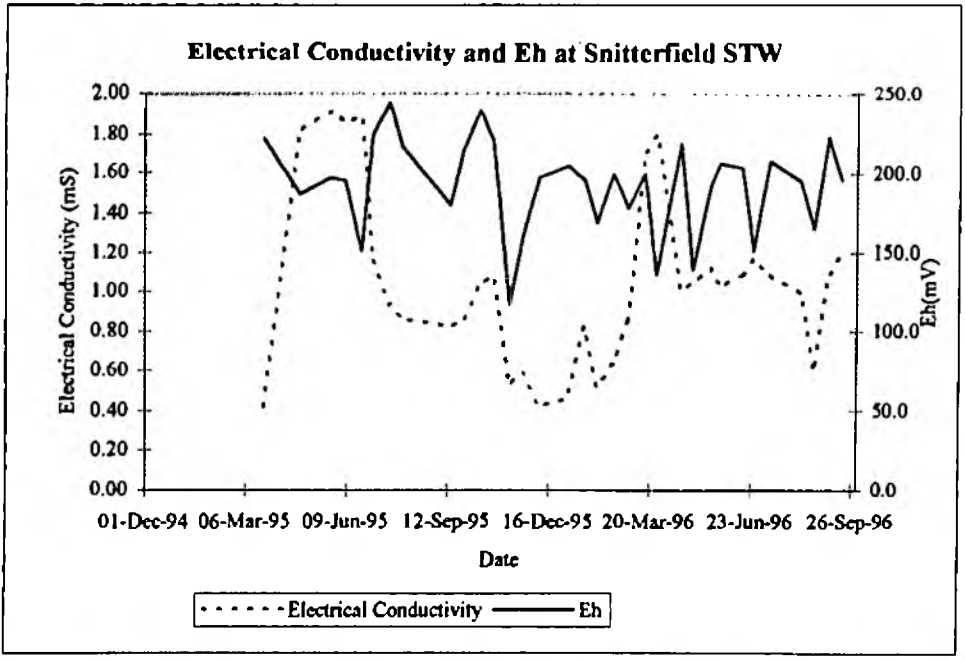
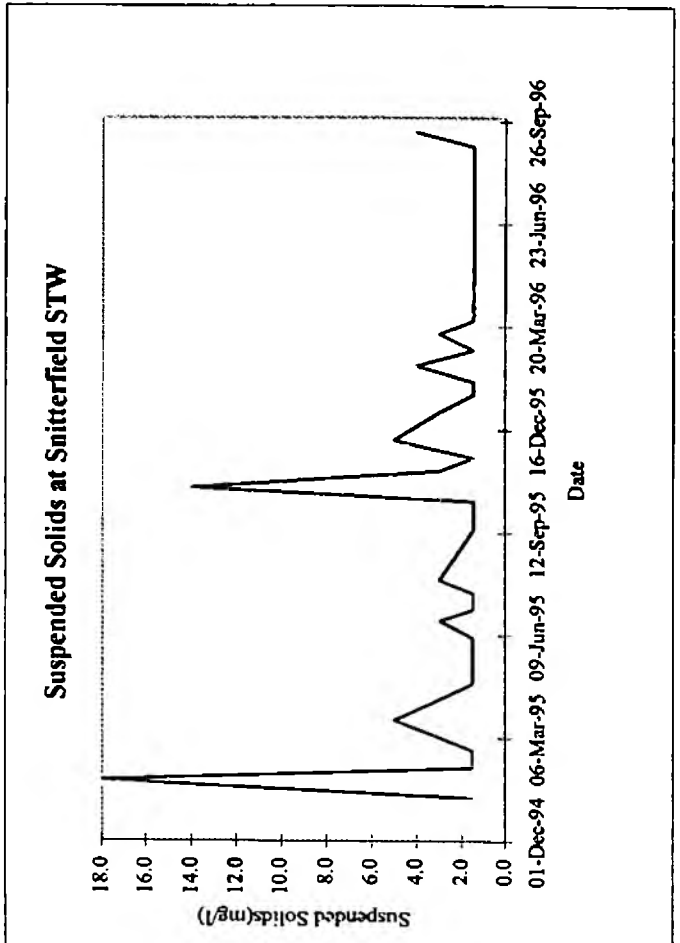
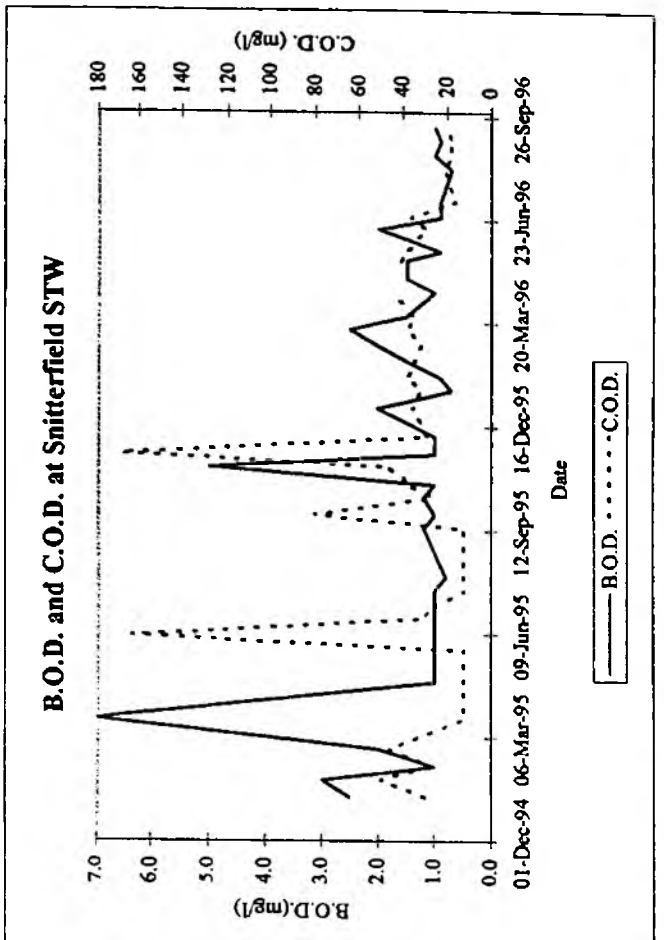
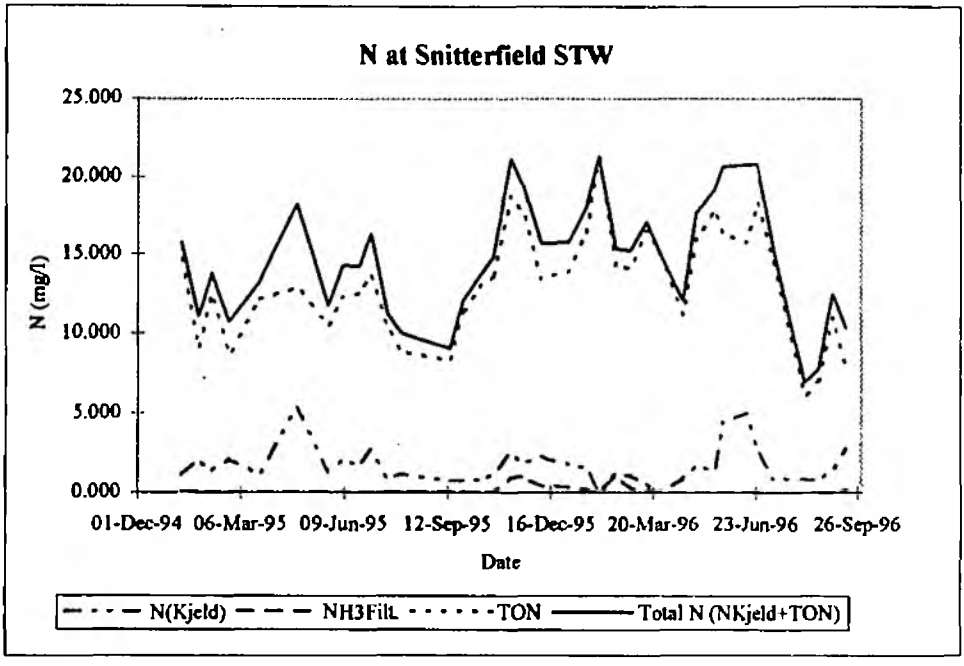
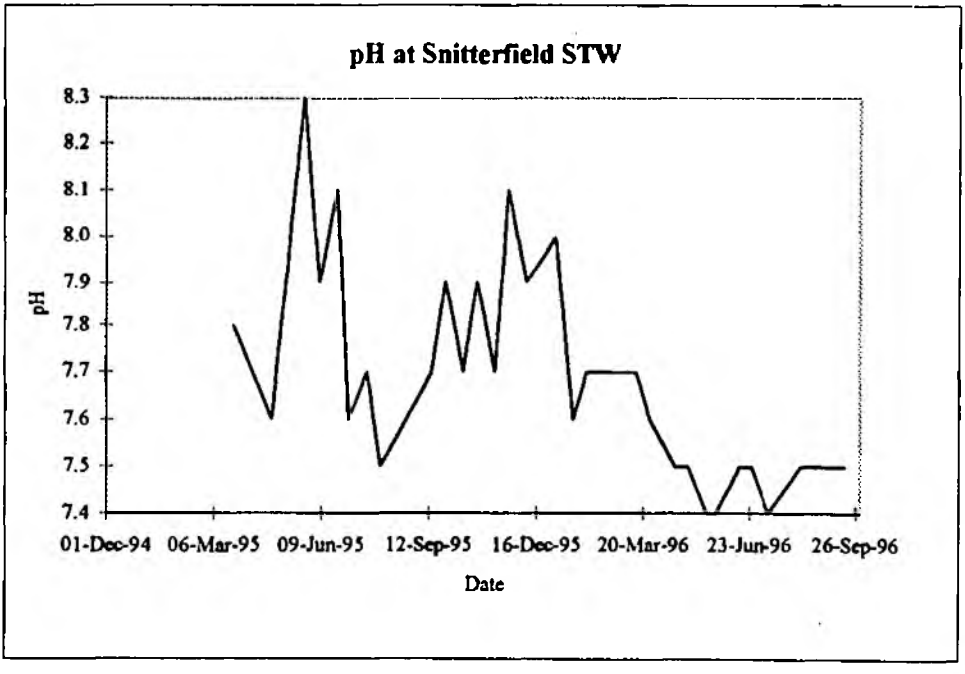

Electrical Conductivity and Eh at Snitterfield STW
Electrical Conductivity (mS)
Eh(mV)
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh

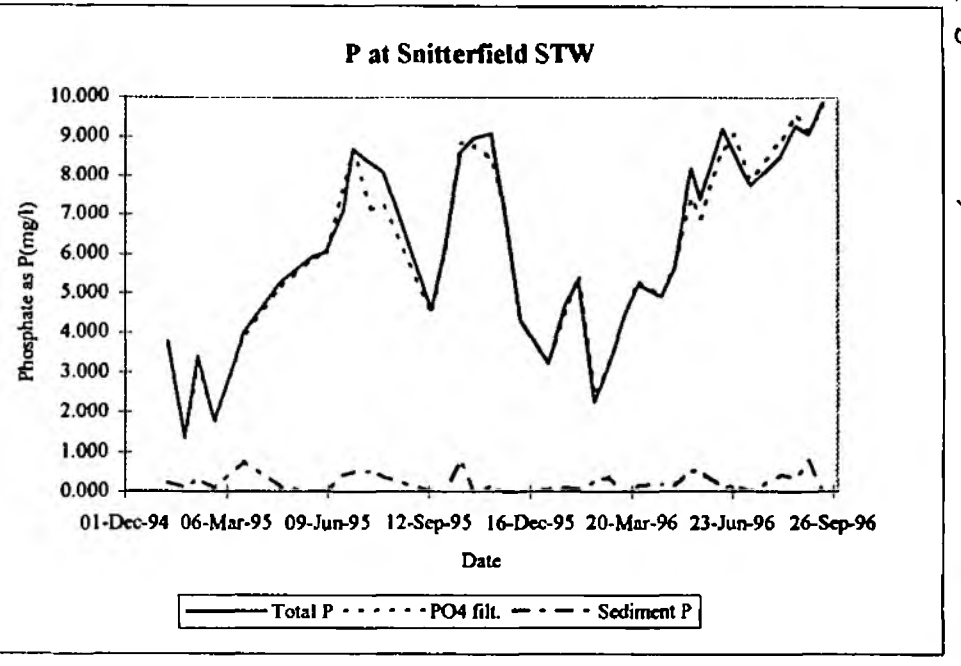
Figure 66 Snitterfield STW

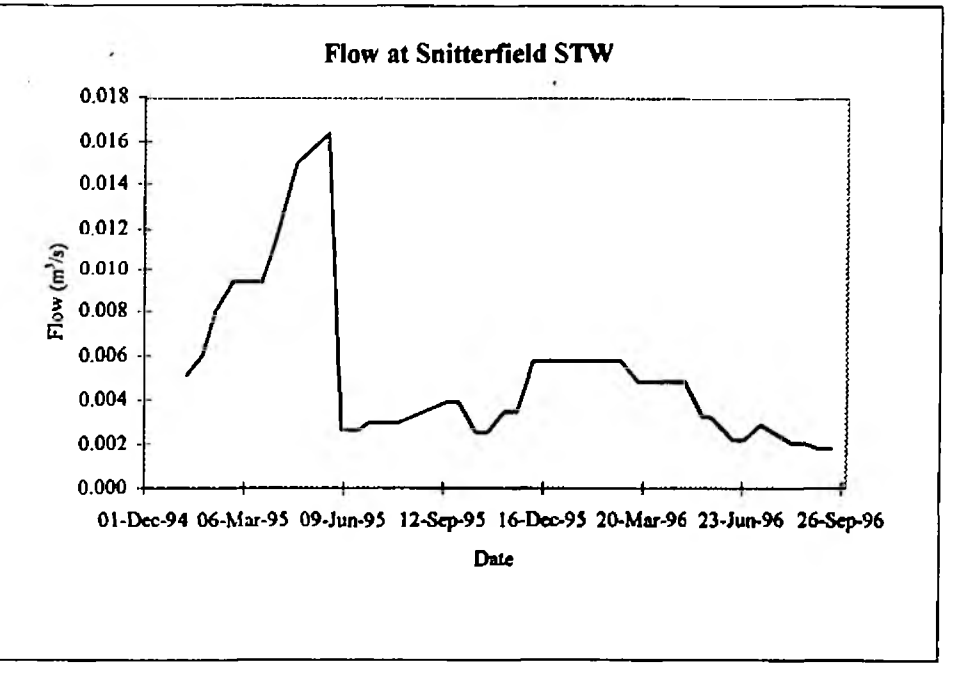





N at Snitterfield STW
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt
TON
Total N (NKjeld+TON)

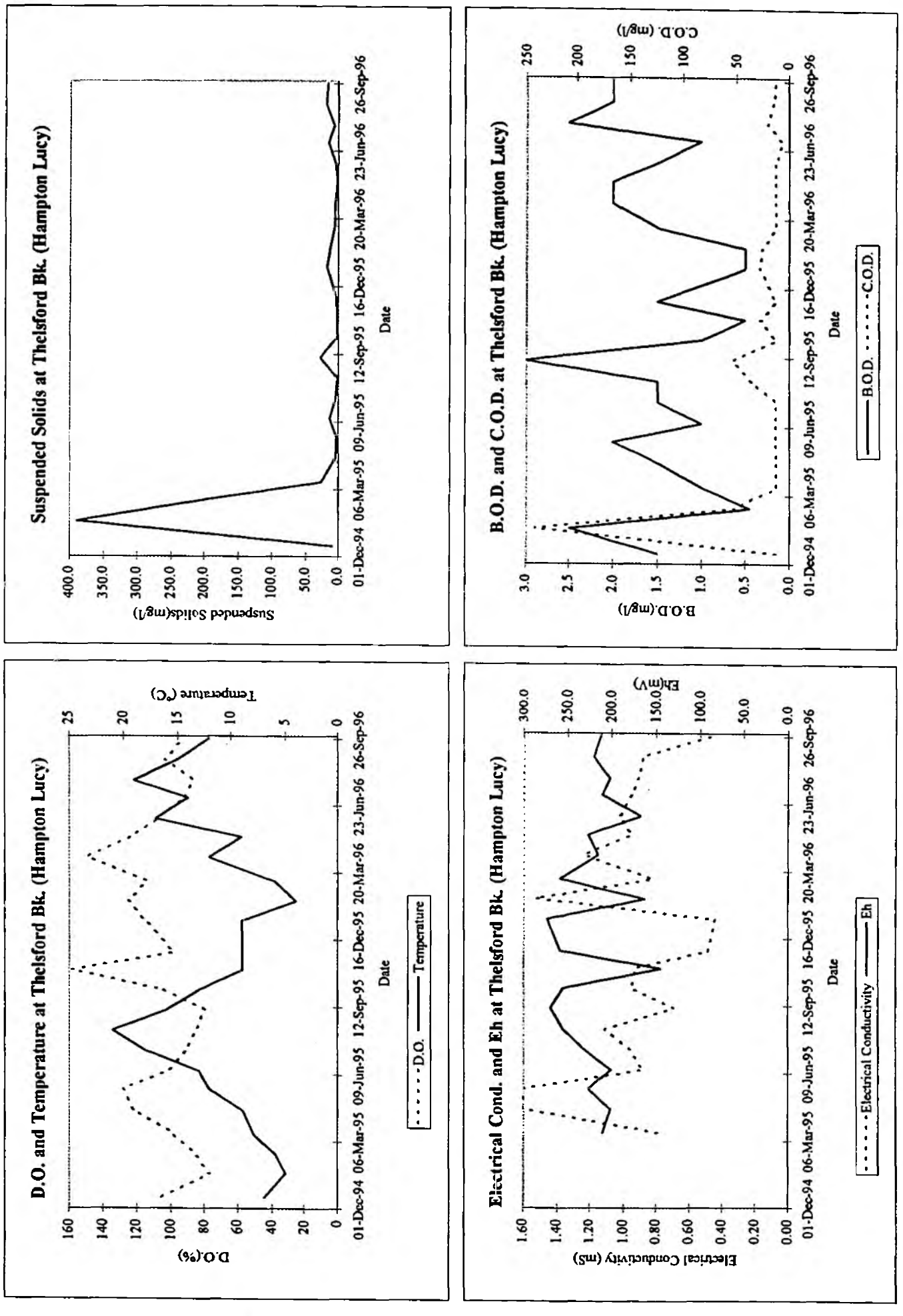

pH at Snitterfield STW
8.3
8.2
8.1
8.0
7.9
7.8
7.7
7.6
7.5
7.4
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

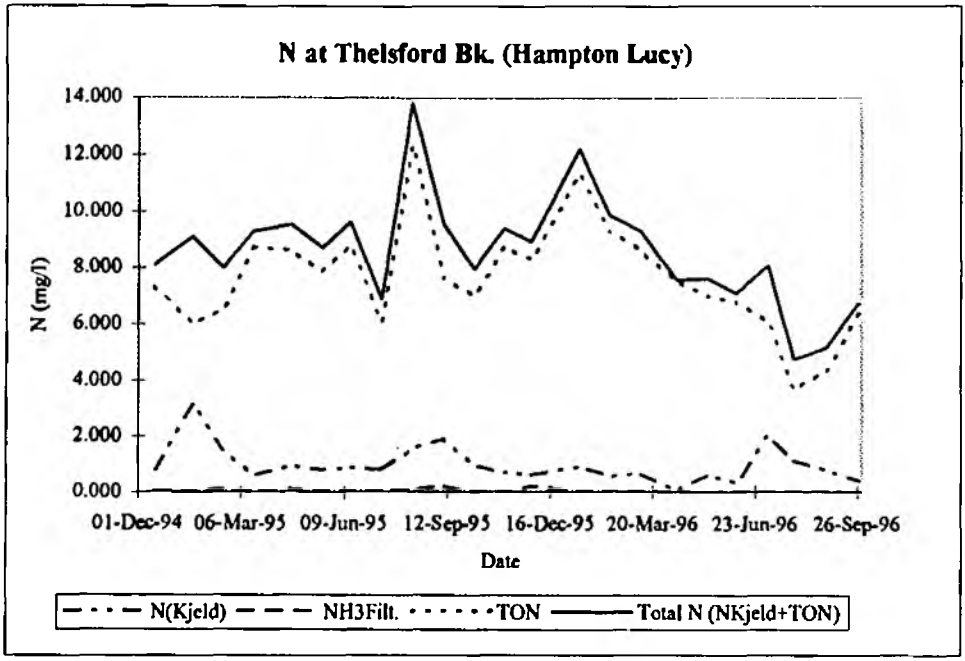


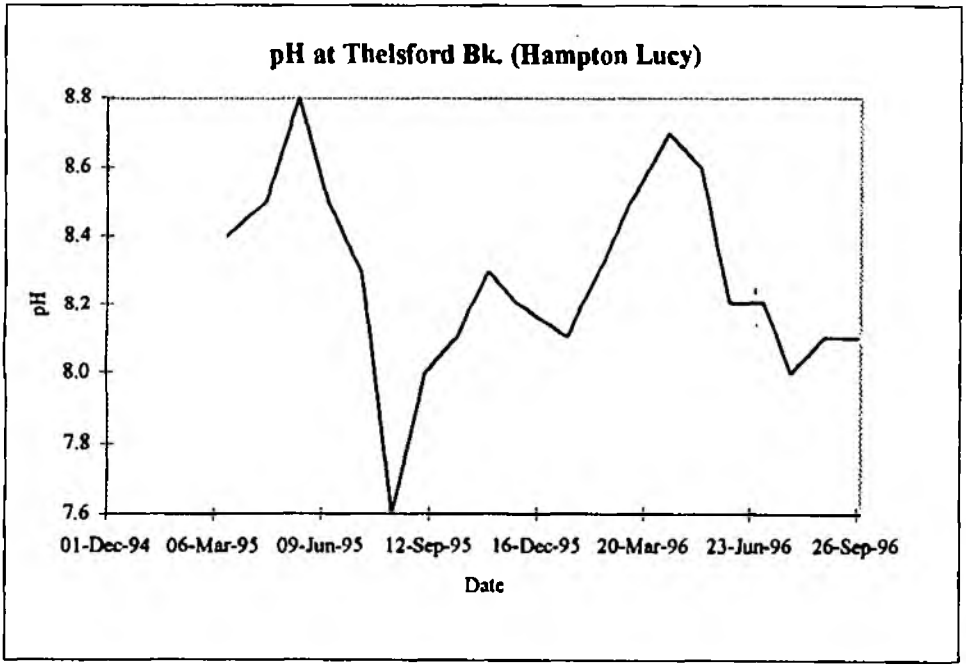


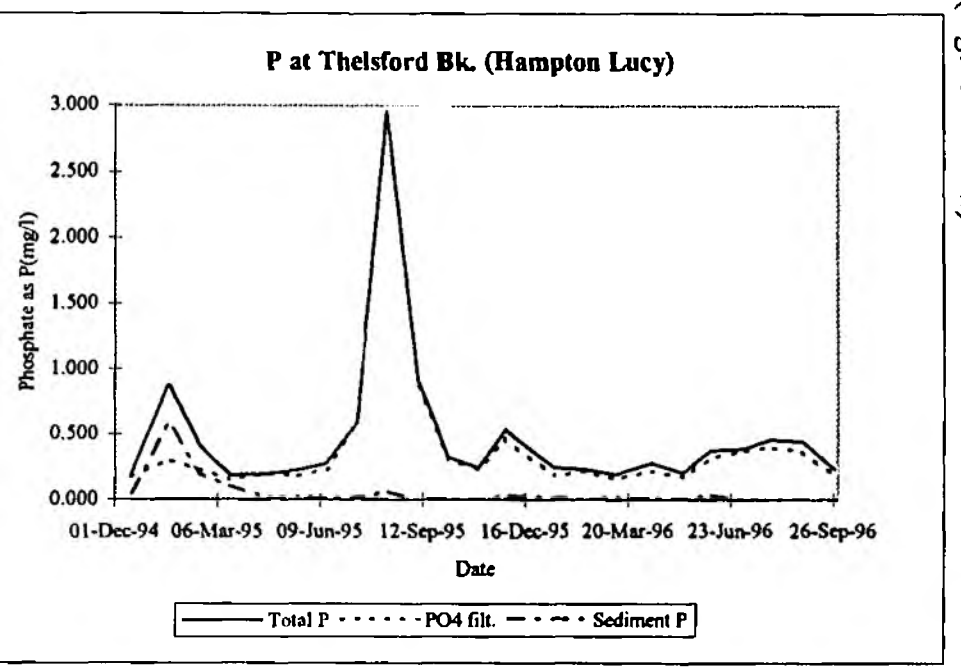
(Figure 66 cont.)

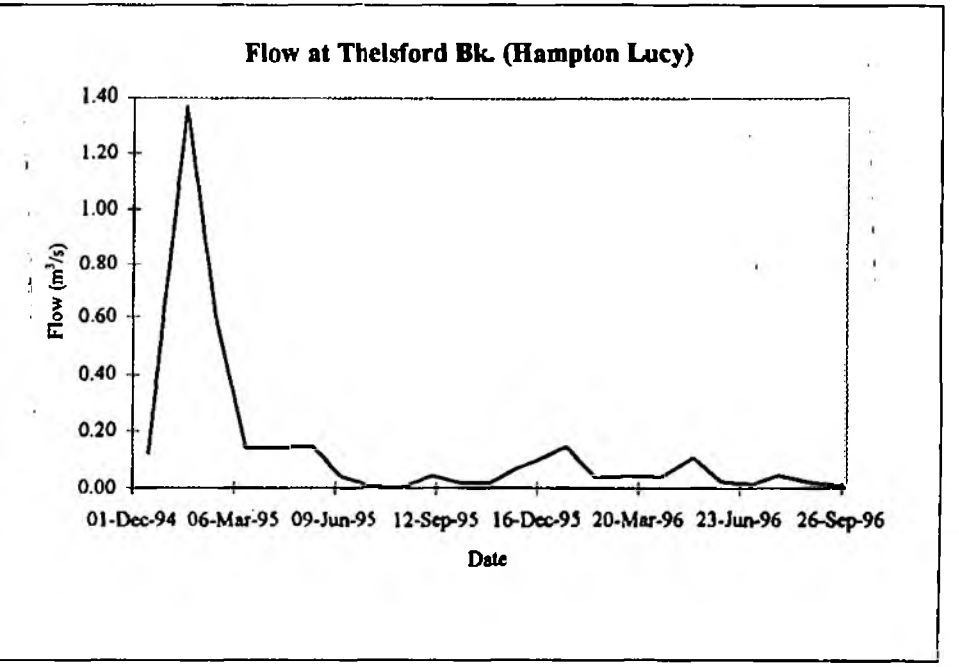
Figure 67 Thelsford Bk. (Hampton Lucy)



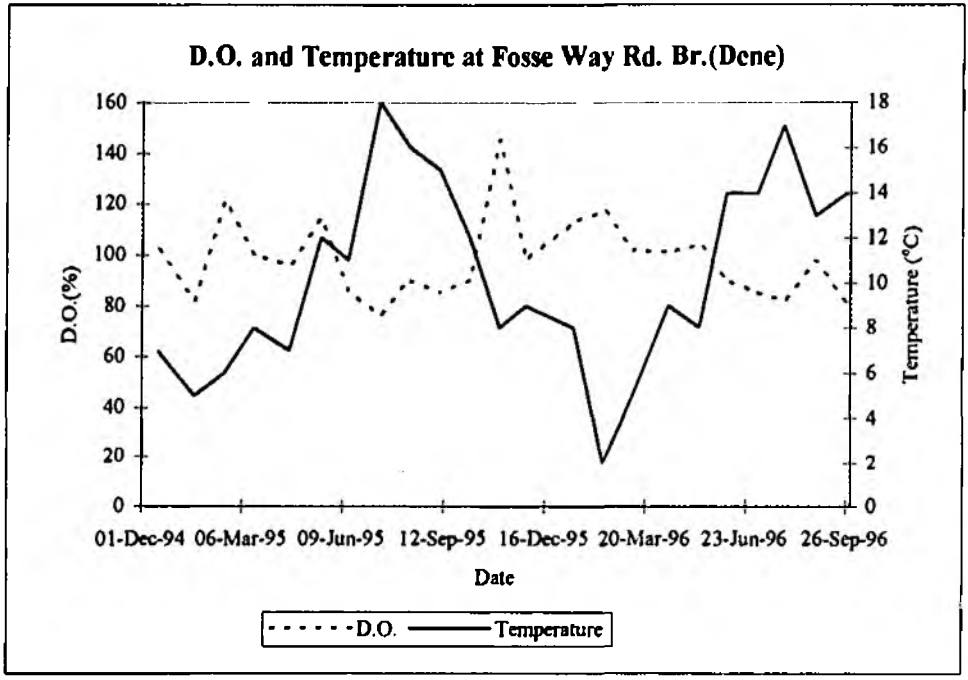

N at Thelsford Bk. (Hampton Lucy)
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

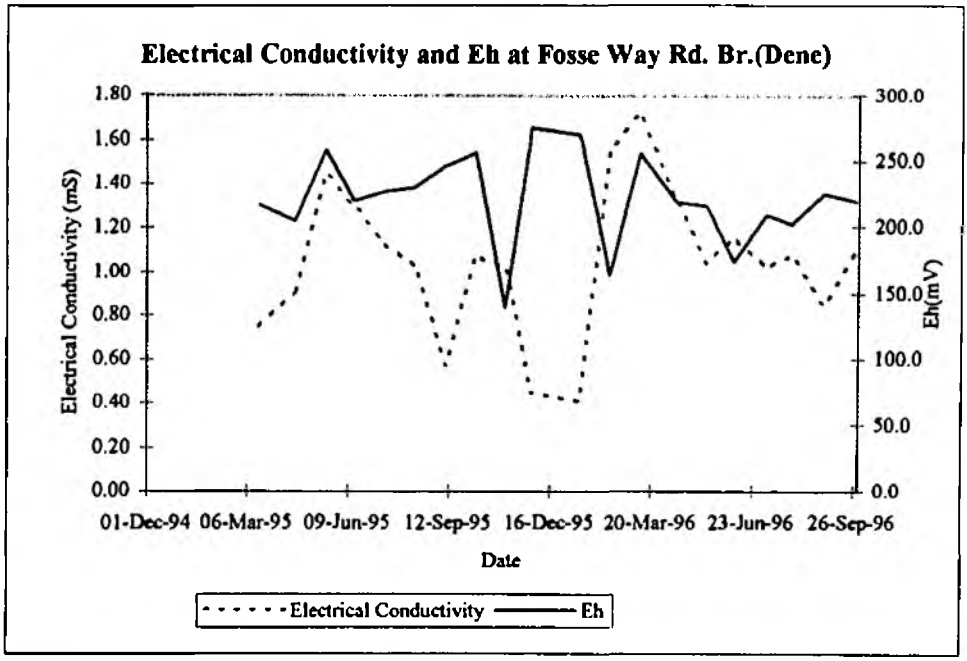

pH at Thelsford Bk. (Hampton Lucy)
8.8
8.6
8.4
8.2
8.0
7.8
7.6
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

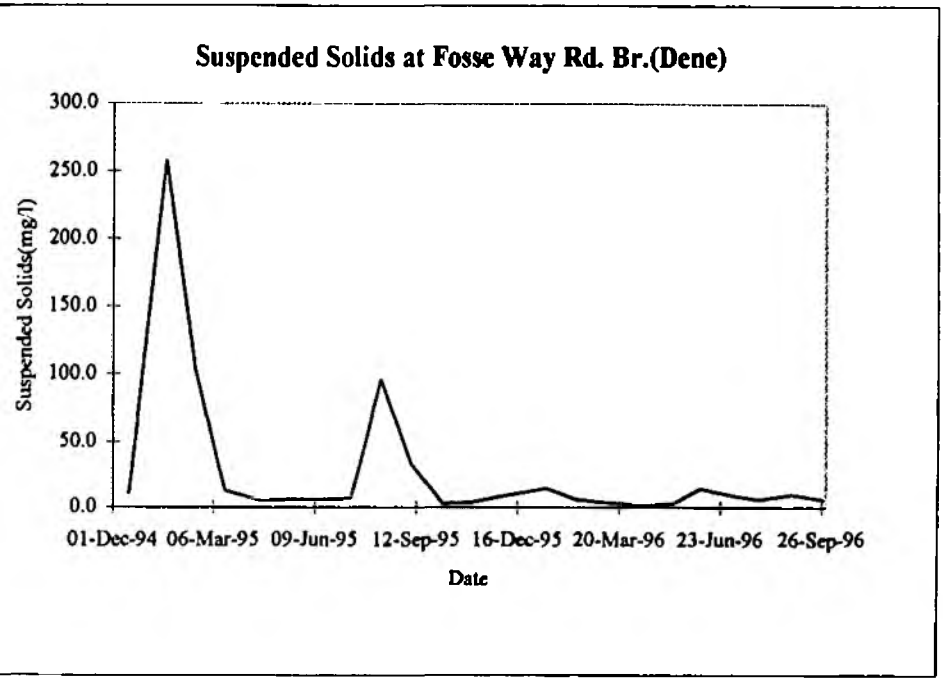




(Figure 67 cont.)


D.O. and Temperature at Fosse Way Rd. Br.(Dene)
D.O.(%)
Temperature (°C)
160
140
120
100
80
60
40
20
0
18
16
14
12
10
8
6
4
2
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature


Electrical Conductivity and Eh at Fosse Way Rd. Br.(Dene)
Electrical Conductivity (mS)
Eh(mV)
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
300.0
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh



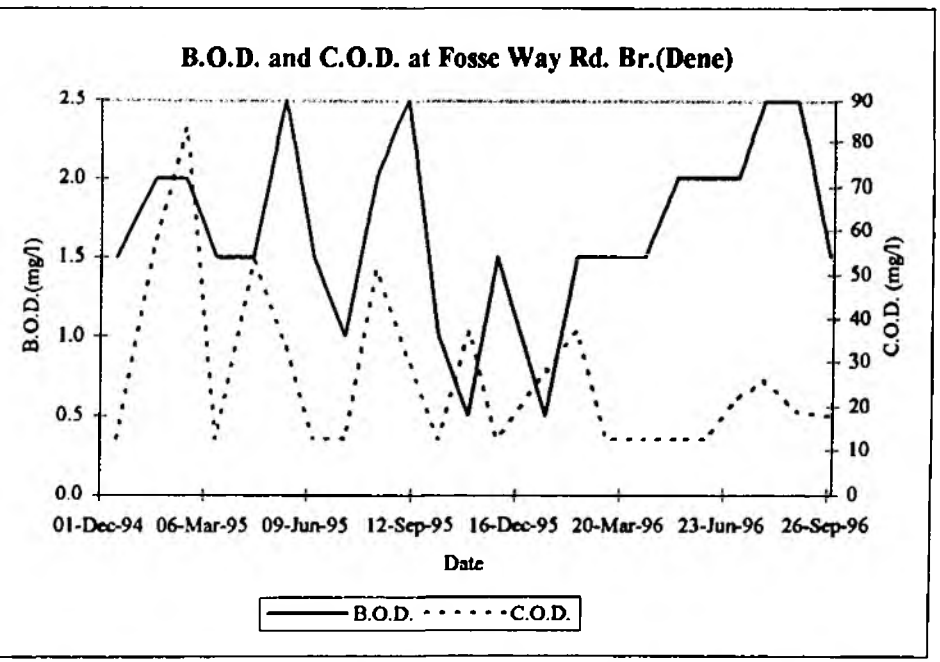
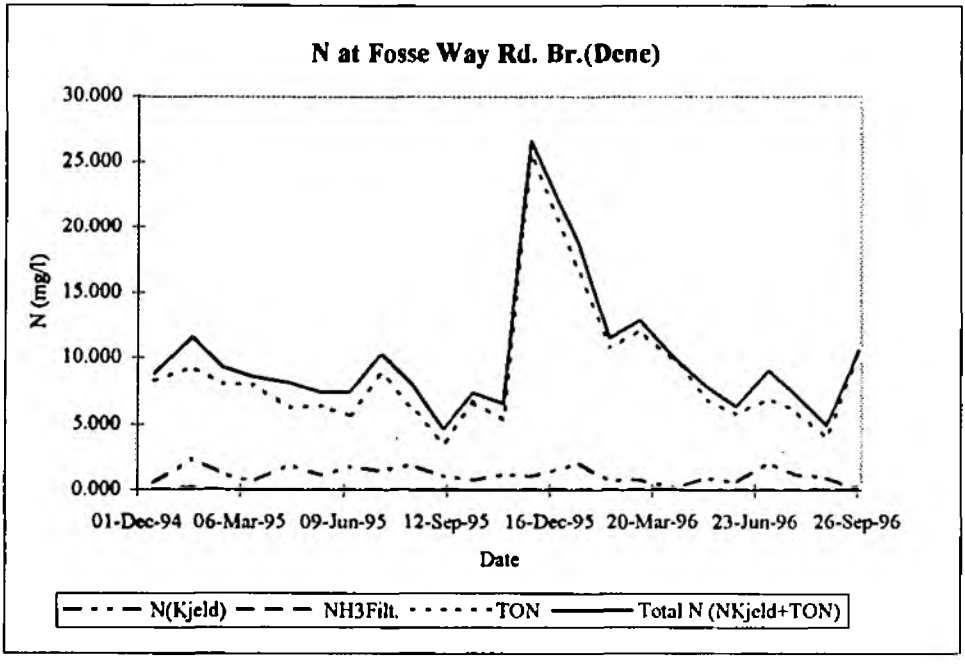
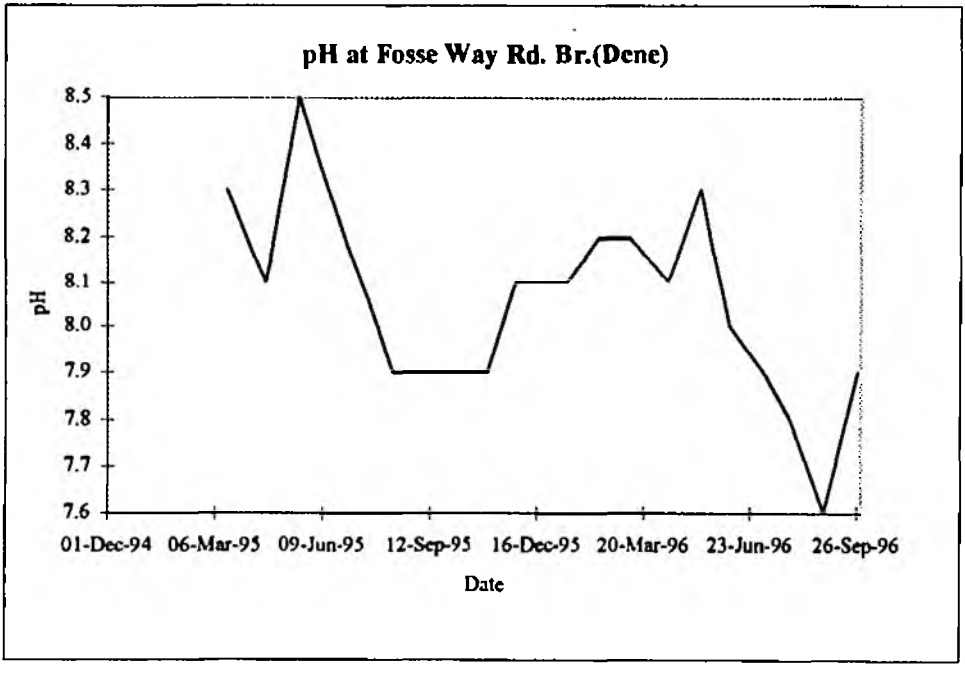
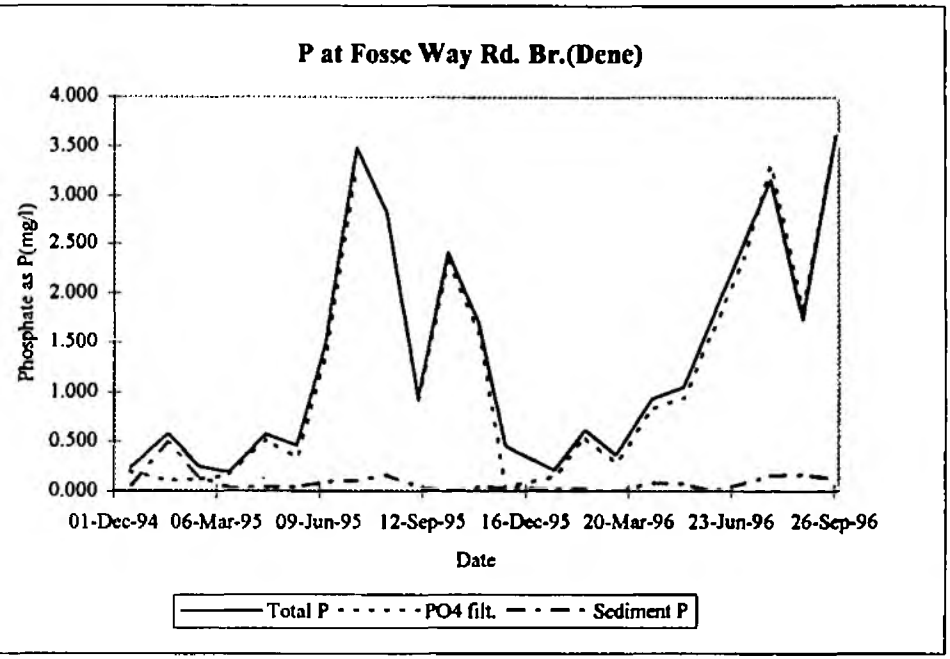
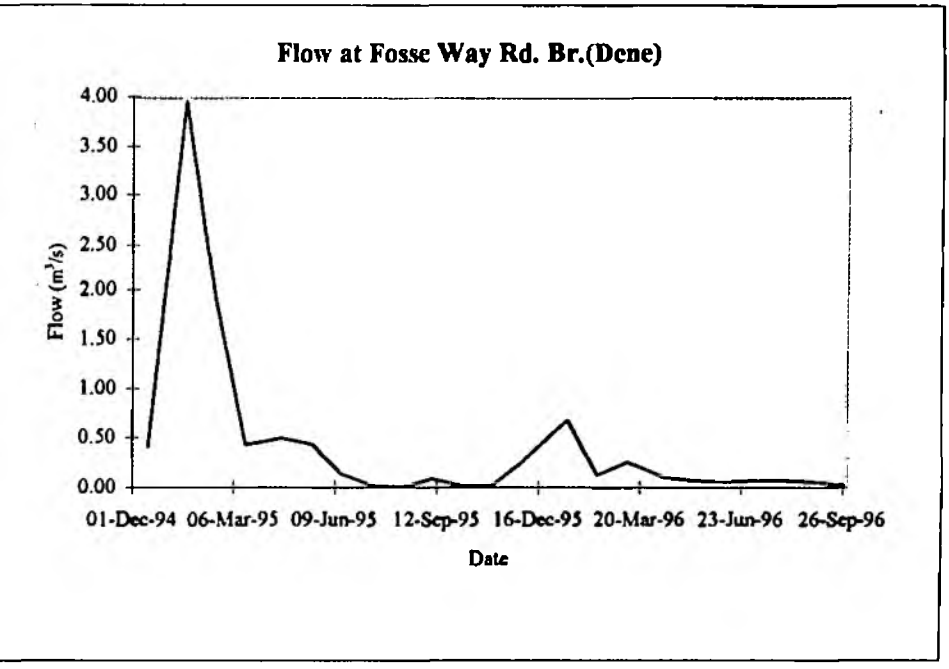


Figure 68 Fosse Way Rd. Br. (Dene)


N at Fosse Way Rd. Br.(Dene)
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

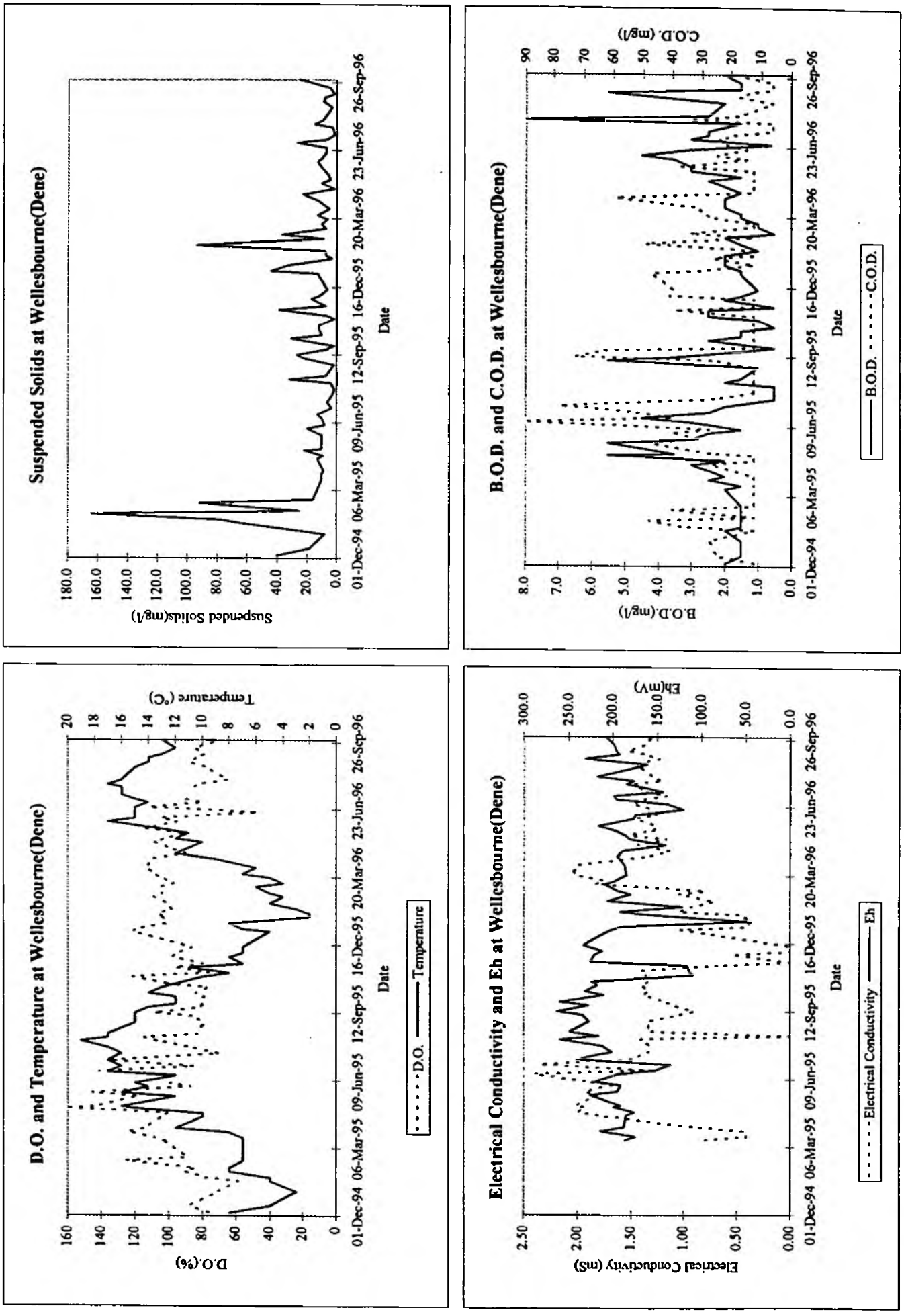

pH at Fosse Way Rd. Br.(Dene)
8.5
8.4
8.3
8.2
8.1
8.0
7.9
7.8
7.7
7.6
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

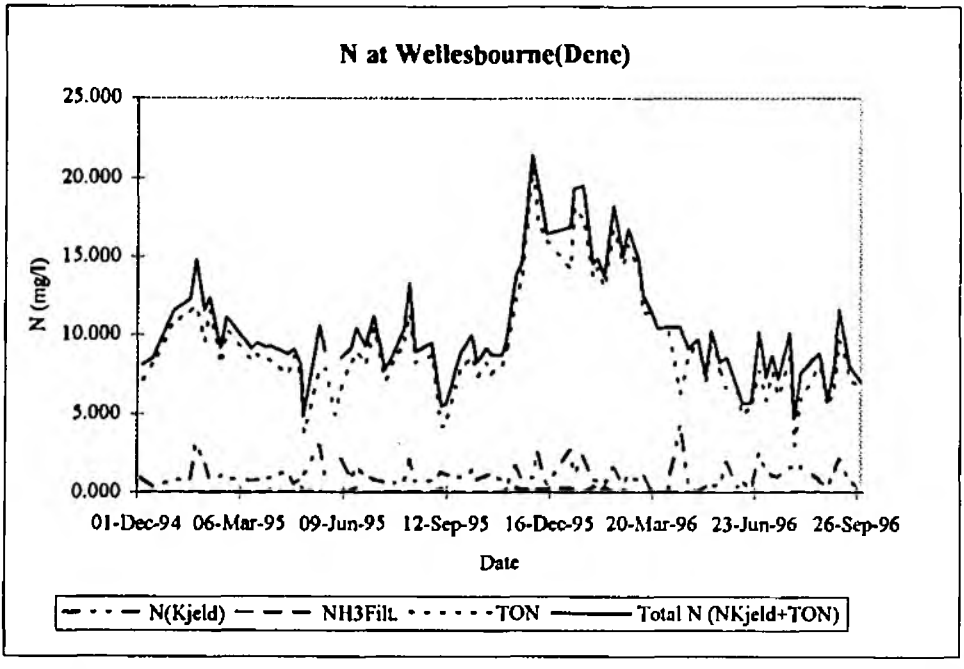


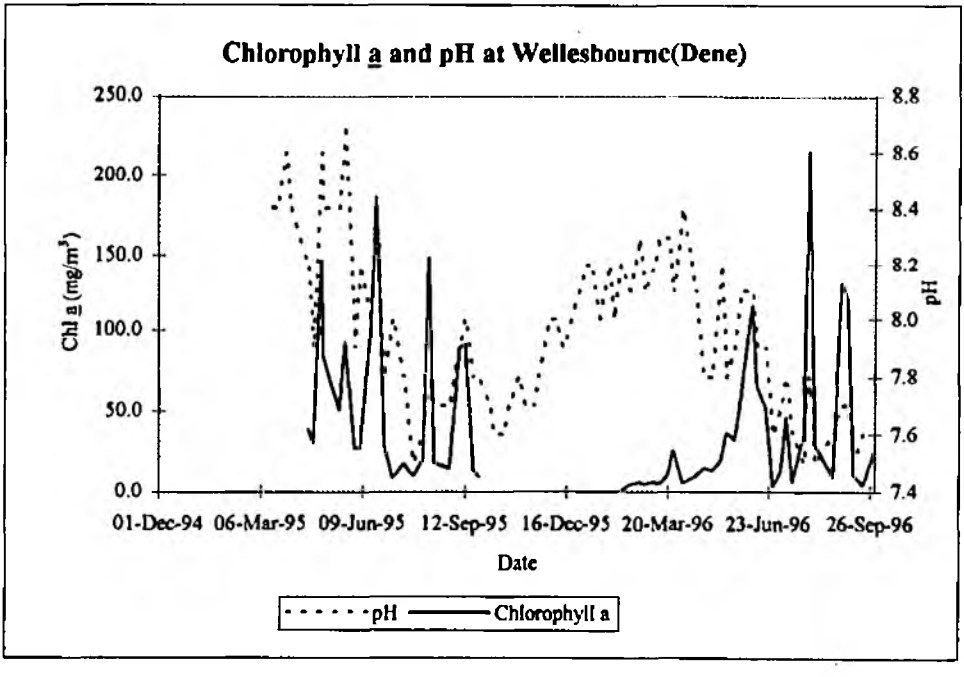


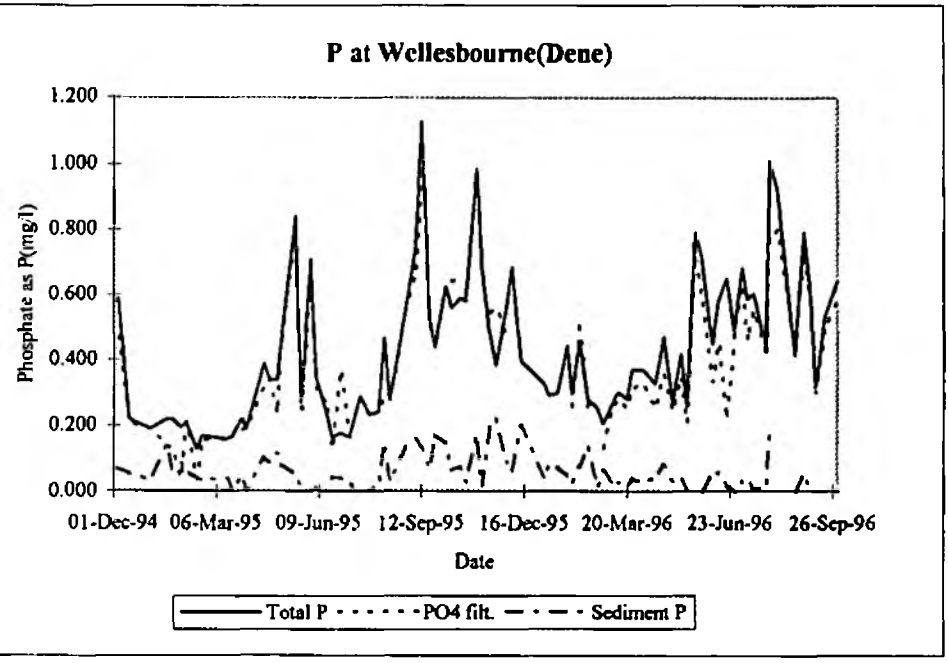
(Figure 68 cont.)

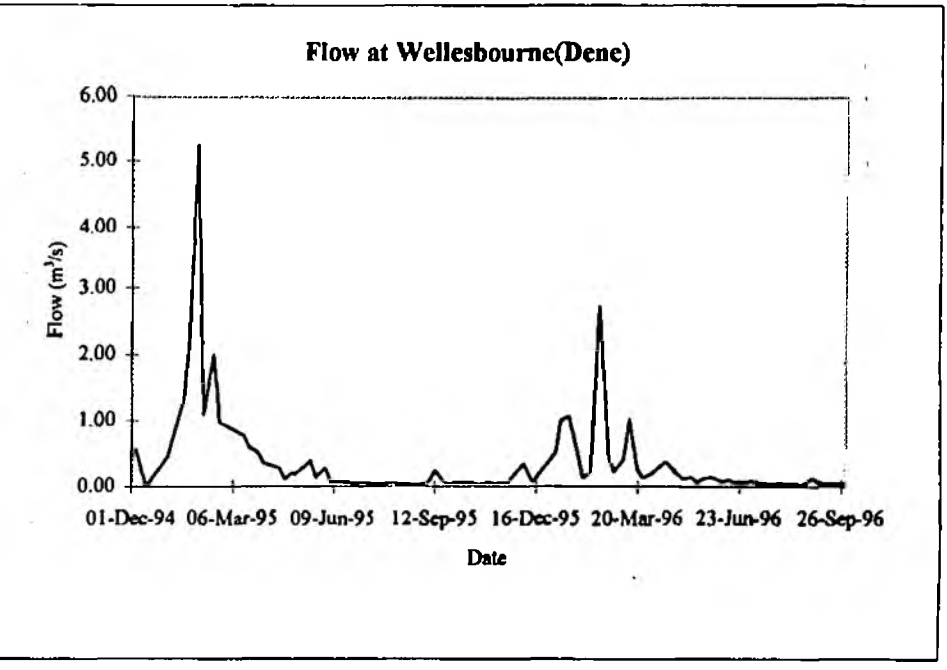
Figure 69 Wellesbourne (Dene)




N at Wellesbourne(Dene)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

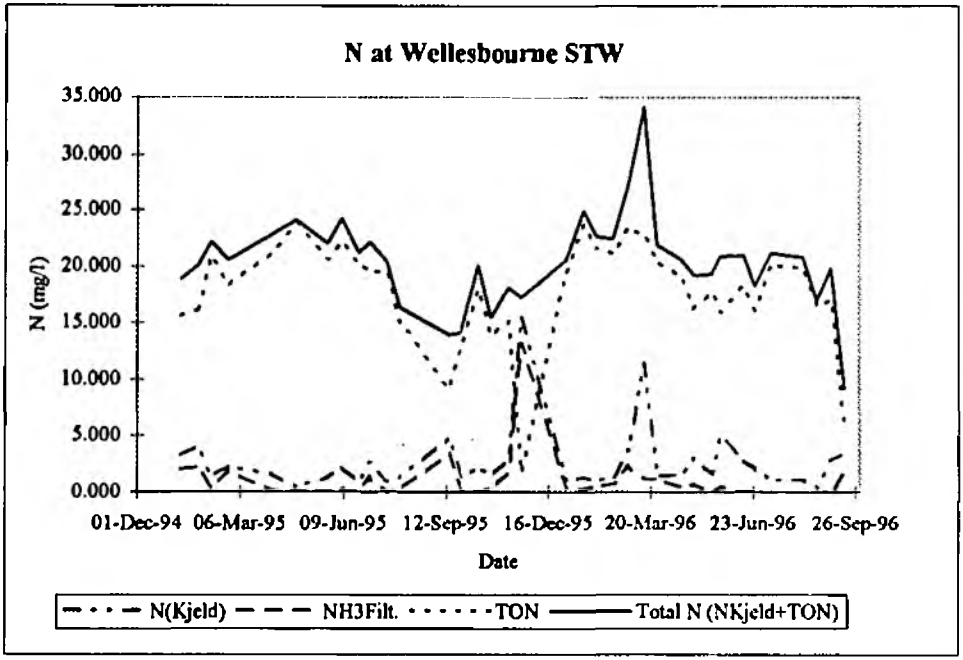

Chlorophyll a and pH at Wellesbourne(Dene)
250.0
200.0
150.0
100.0
50.0
0.0
Chl a (mg/m³)
8.8
8.6
8.4
8.2
8.0
7.8
7.6
7.4
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
pH
Chlorophyll a

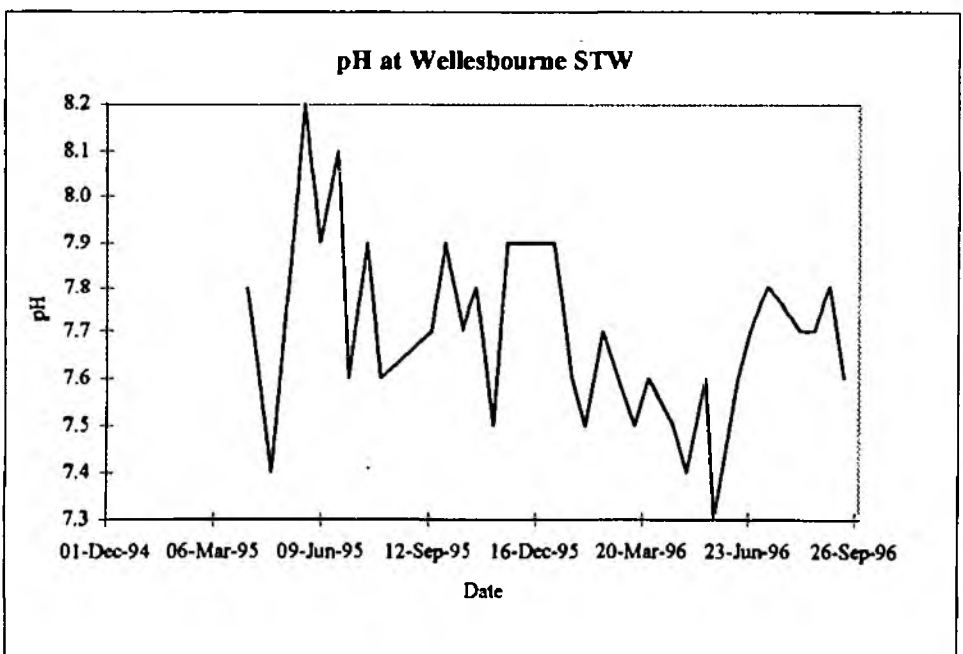


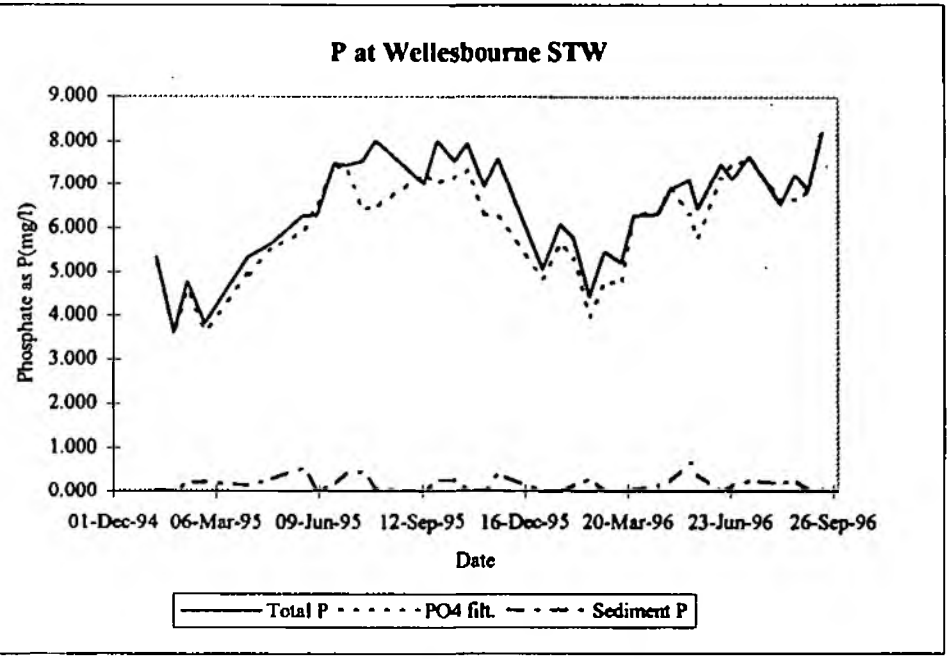


(Figure 69 cont.)

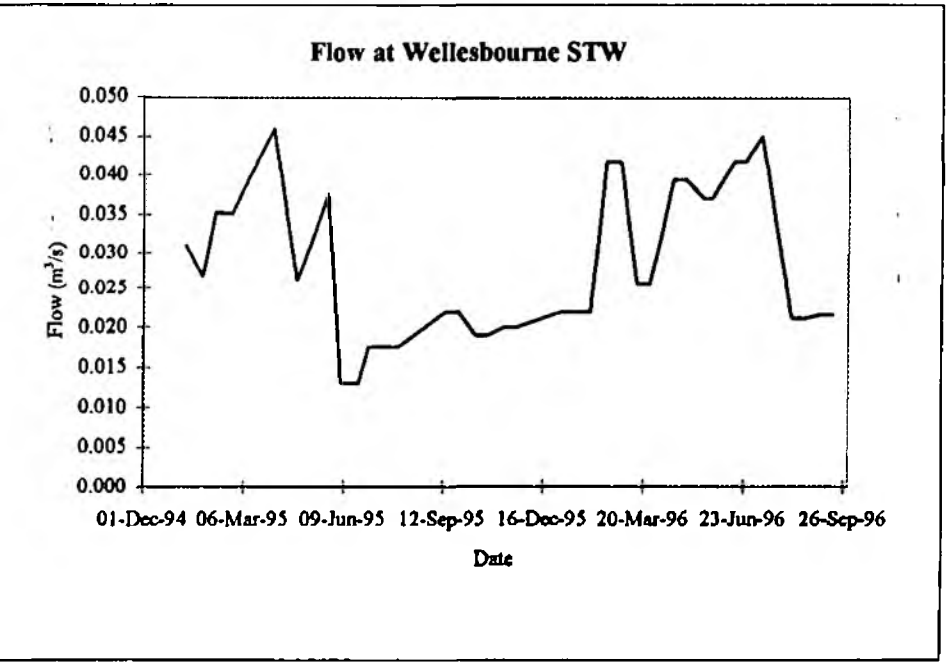
Figure 70 Wellesbourne STW

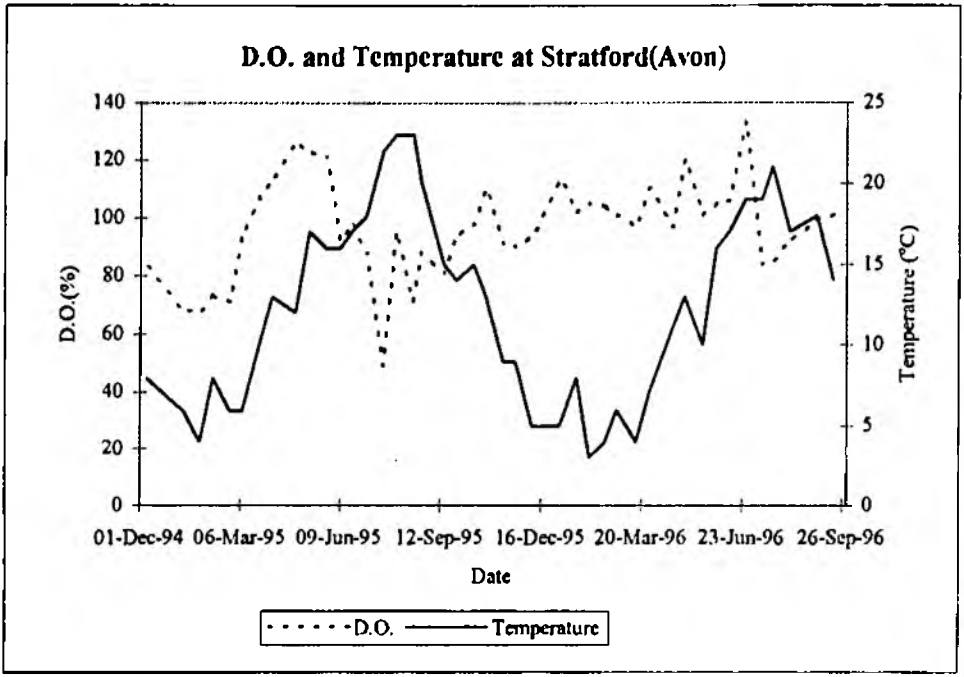

N at Wellesbourne STW
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

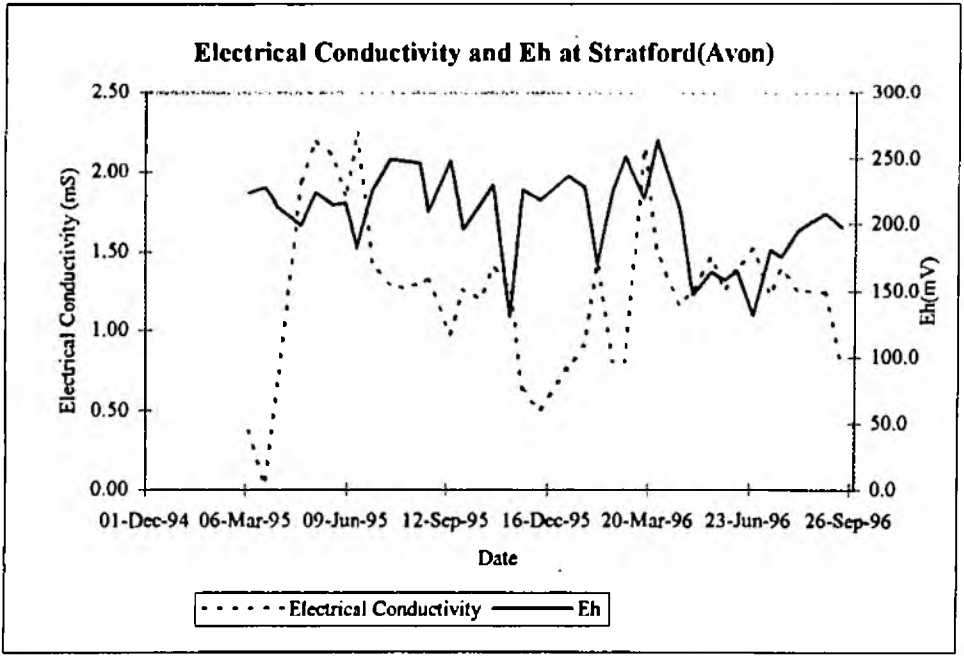

pH at Wellesbourne STW
8.2
8.1
8.0
7.9
7.8
7.7
7.6
7.5
7.4
7.3
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

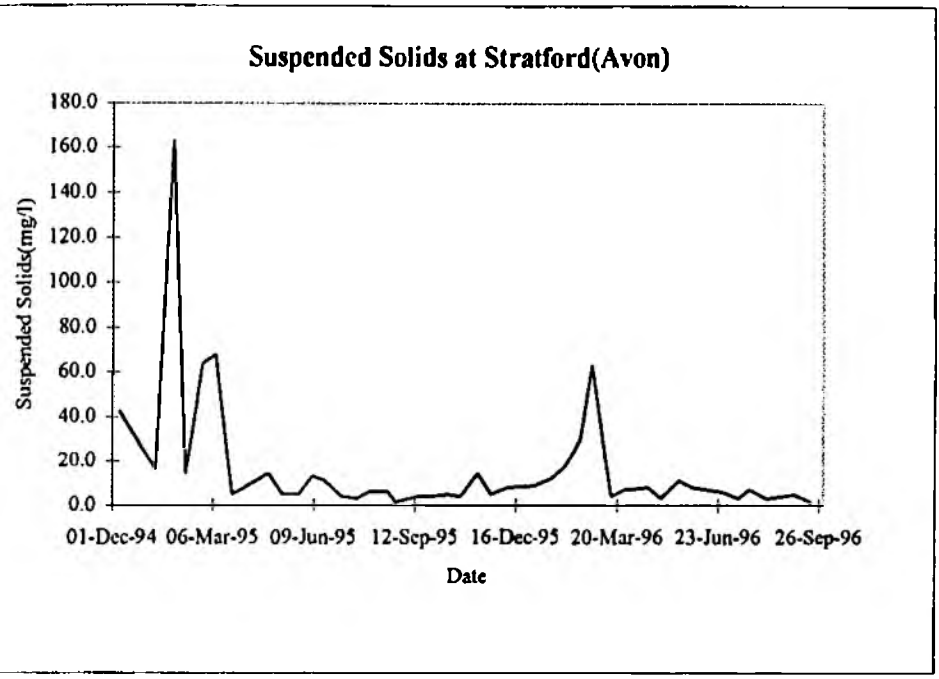


(Figure 70 cont.)




D.O. and Temperature at Stratford(Avon)
D.O.(%)
Temperature (°C)
140
120
100
80
60
40
20
0
25
20
15
10
5
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature


Electrical Conductivity and Eh at Stratford(Avon)
Electrical Conductivity (mS)
Eh(mV)
2.50
2.00
1.50
1.00
0.50
0.00
300.0
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh



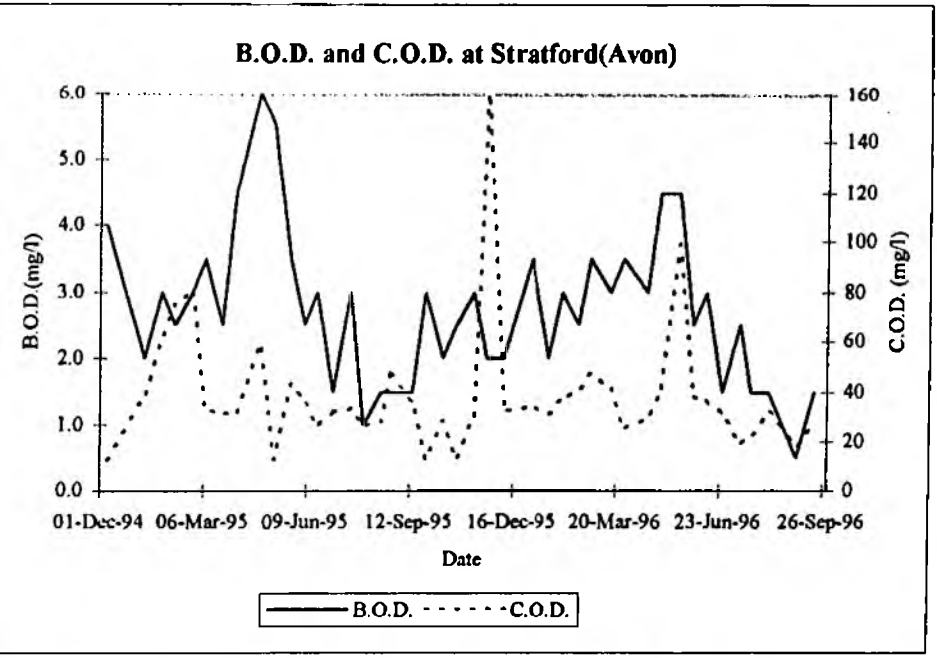
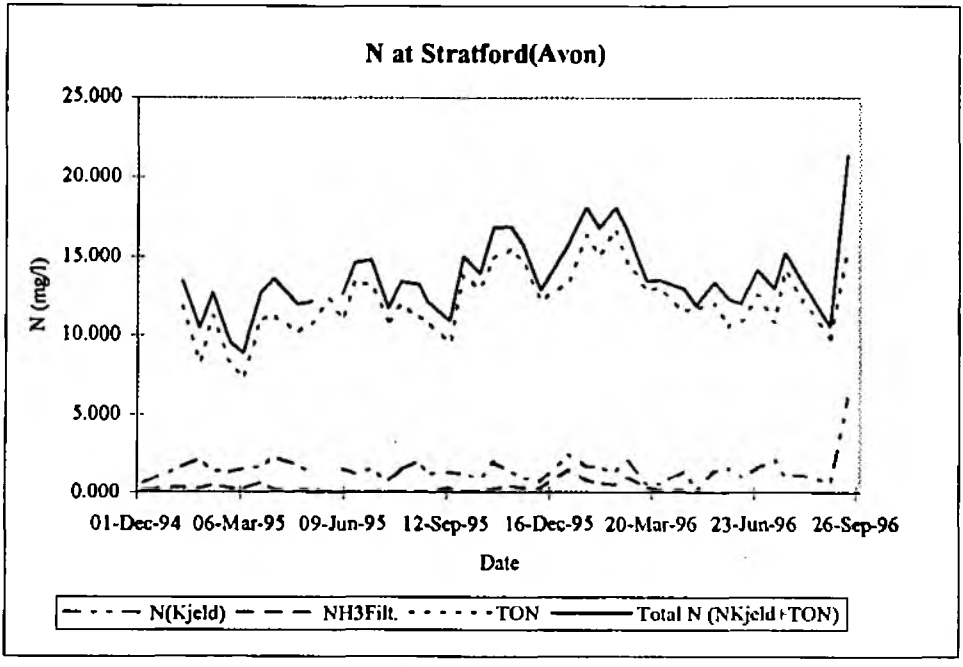
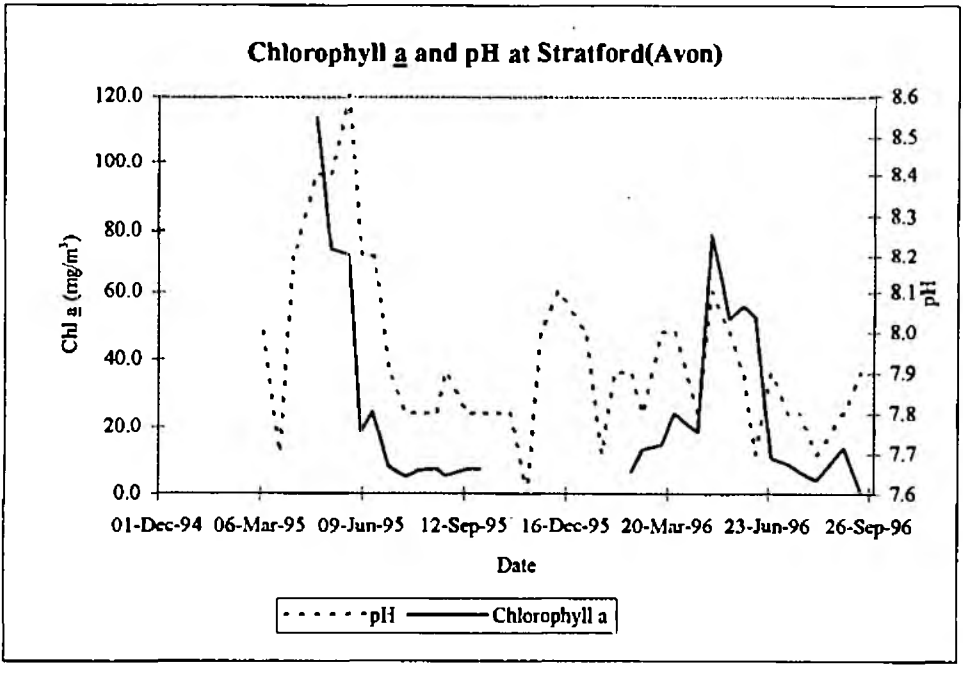
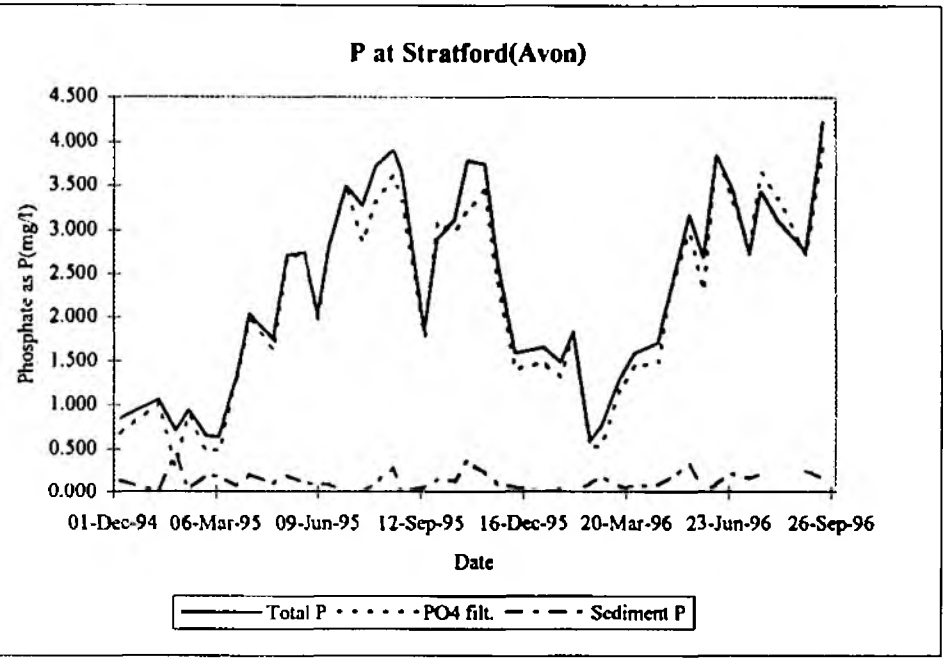
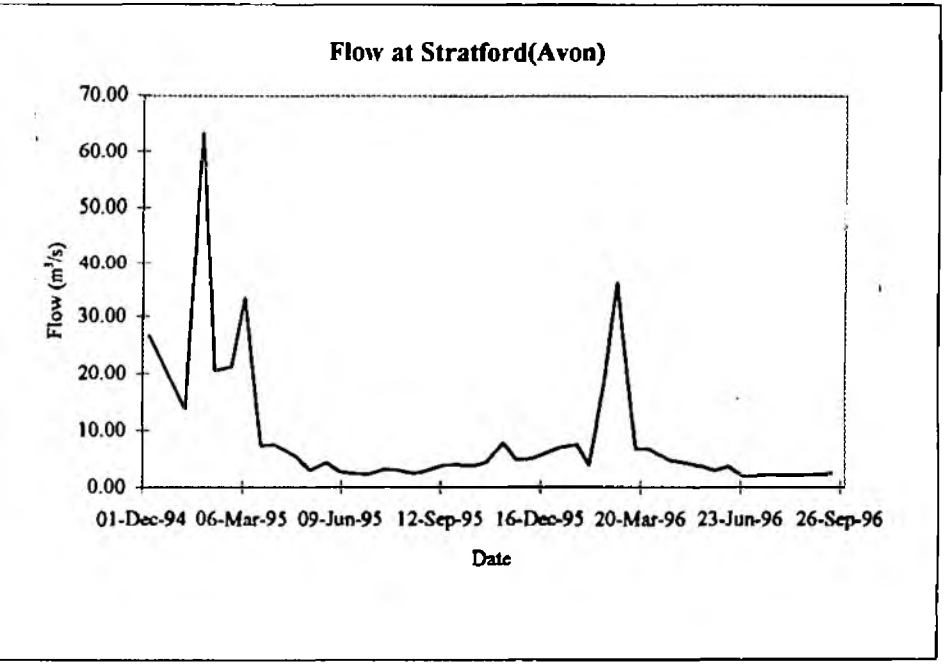


Figure 71 Stratford (Avon)


N at Stratford(Avon)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

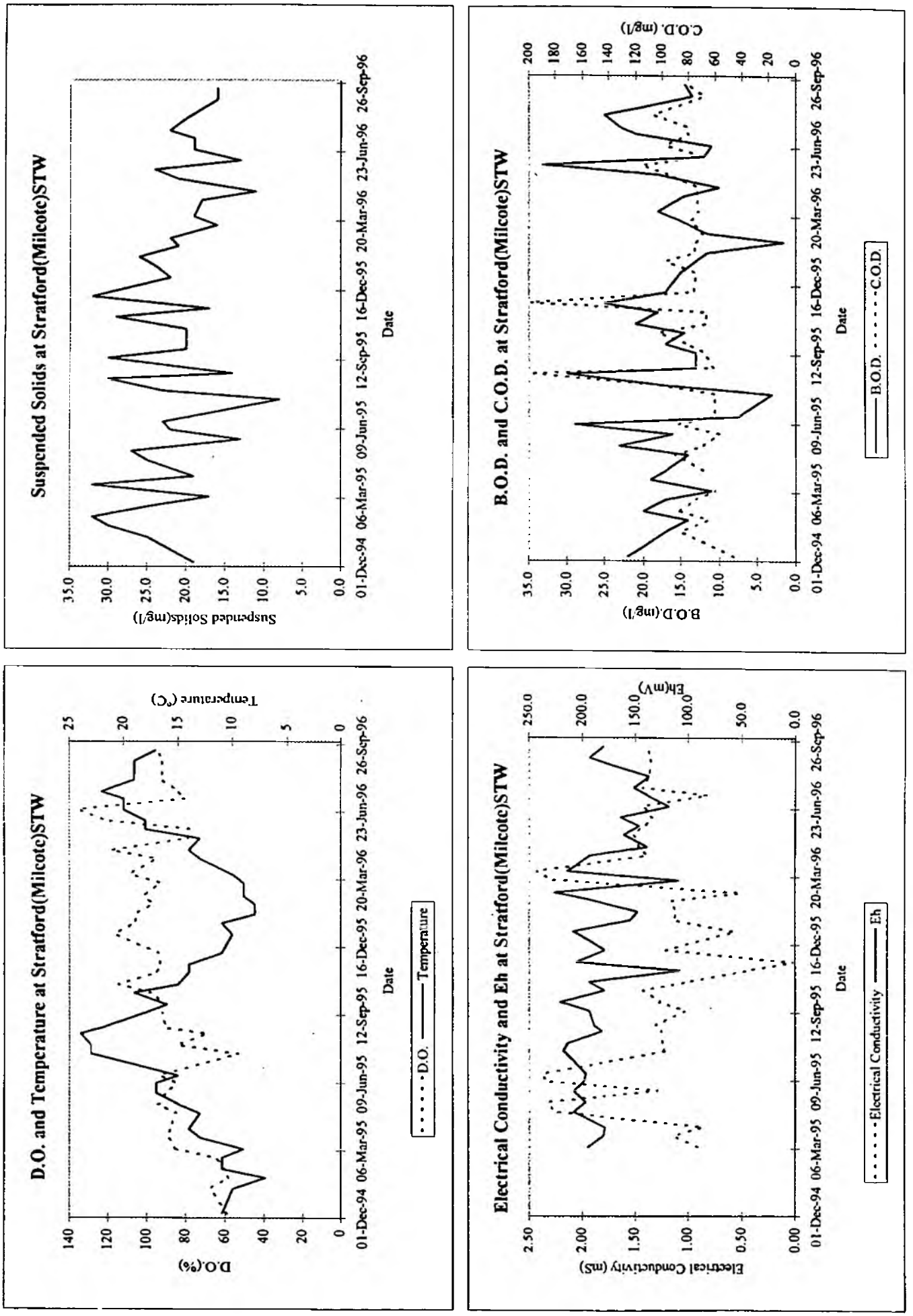

Chlorophyll a and pH at Stratford(Avon)
120.0
100.0
80.0
60.0
40.0
20.0
0.0
Chl a (mg/m³)
8.6
8.5
8.4
8.3
8.2
8.1
8.0
7.9
7.8
7.7
7.6
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
pH
Chlorophyll a

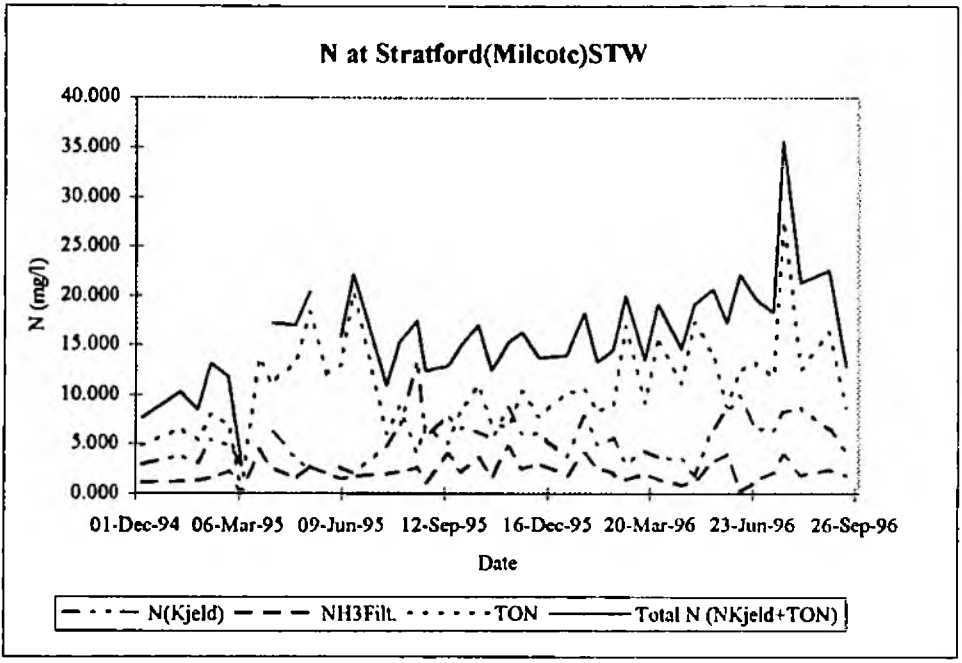


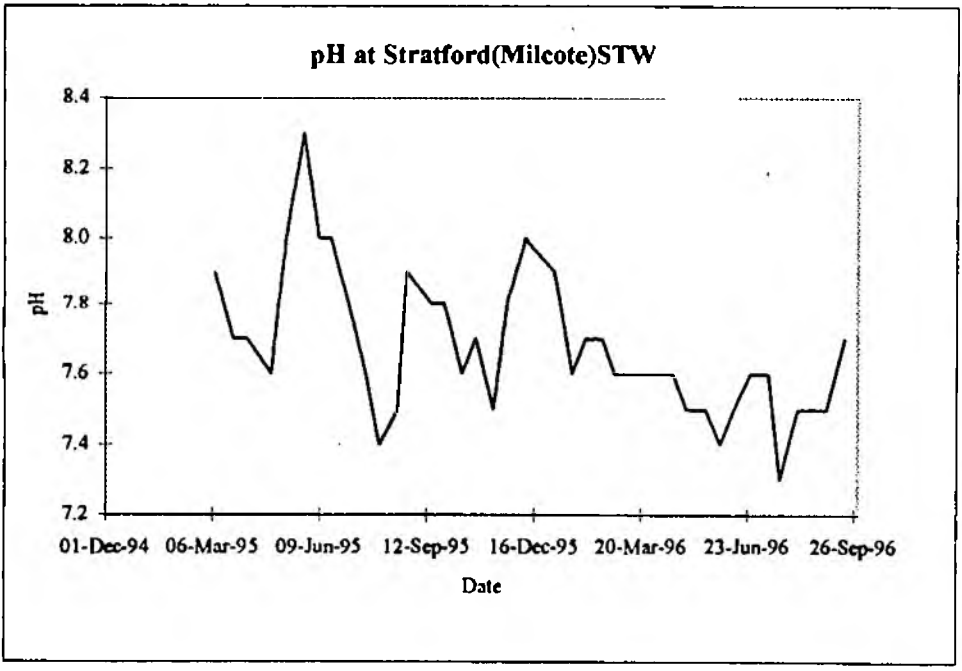


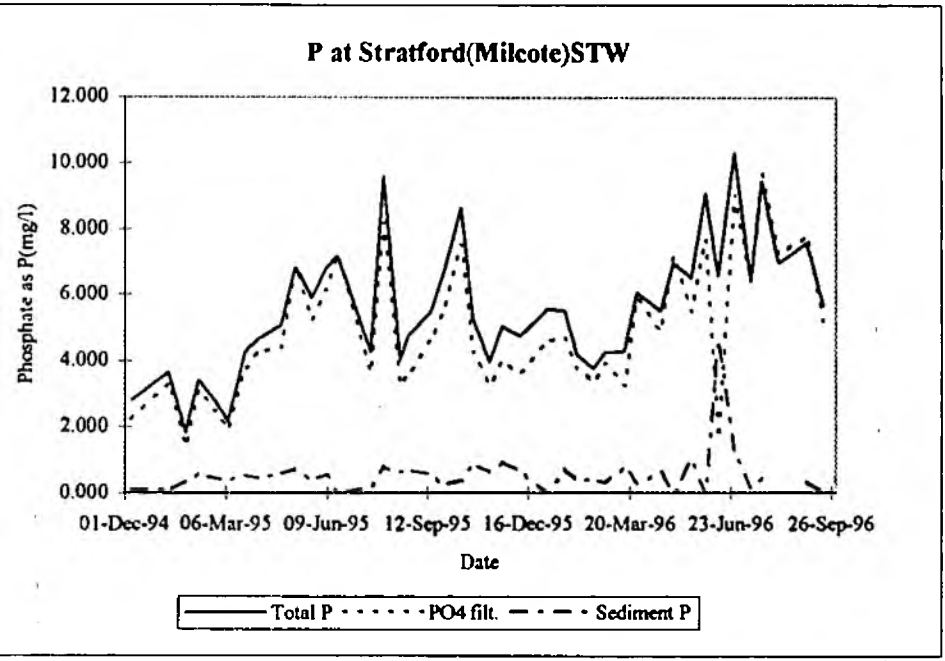
(Figure 71 cont.)

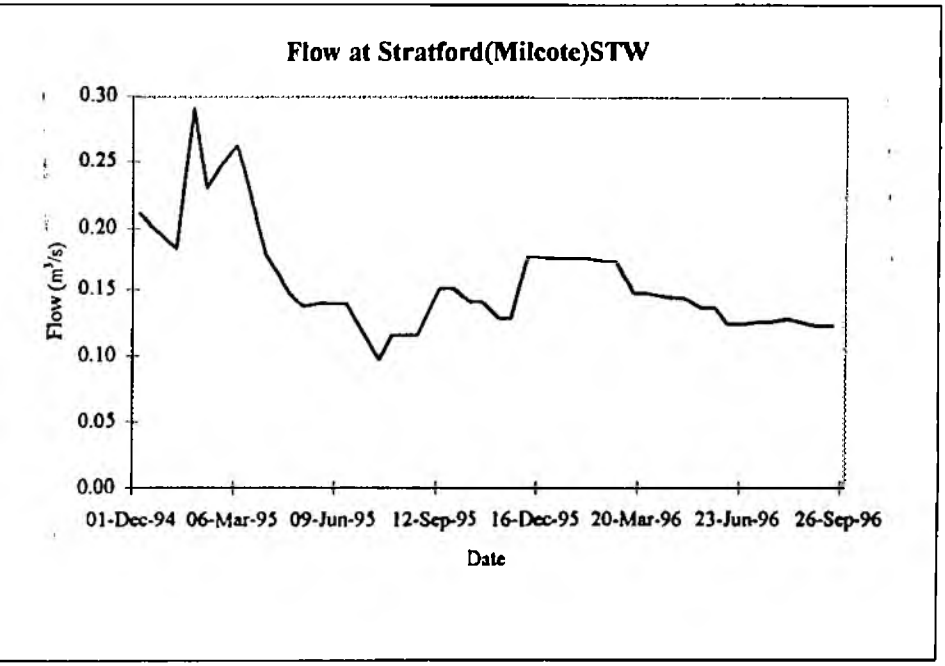
Figure 72 Stratford (Milcote) STW




N at Stratford(Milcote)STW
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

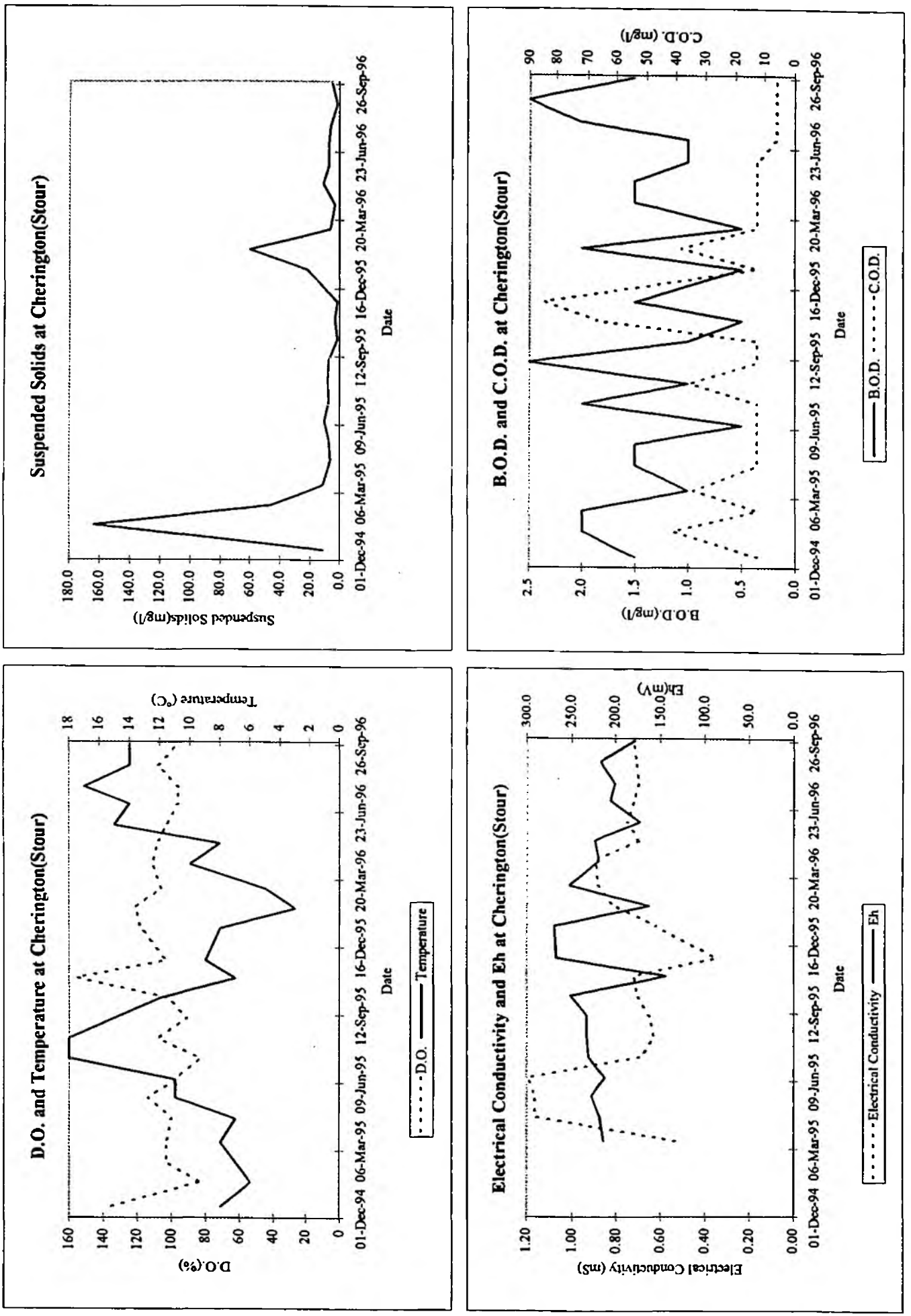

pH at Stratford(Milcote)STW
8.4
8.2
8.0
7.8
7.6
7.4
7.2
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

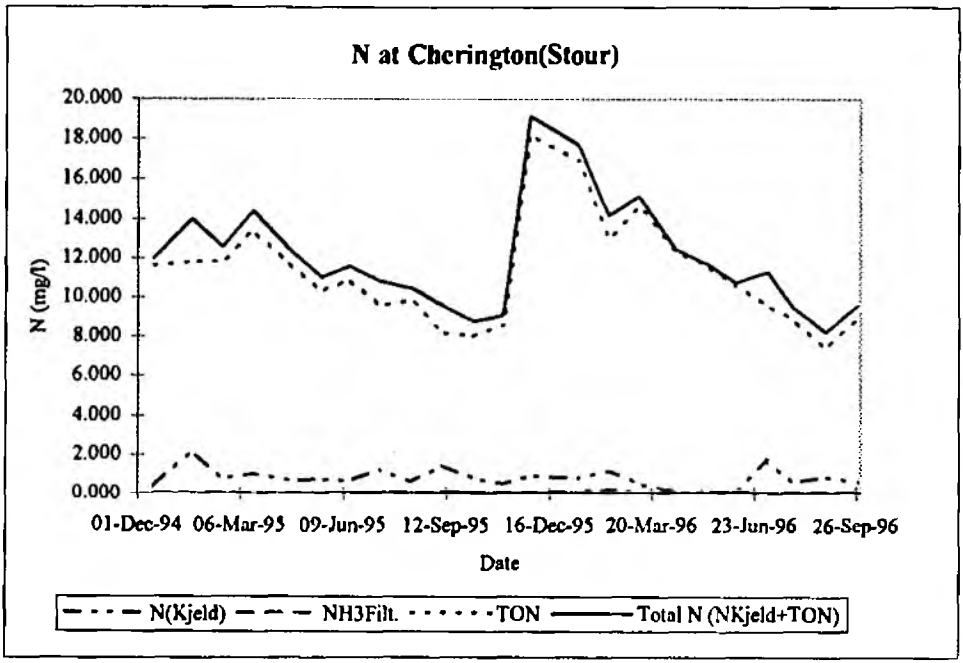


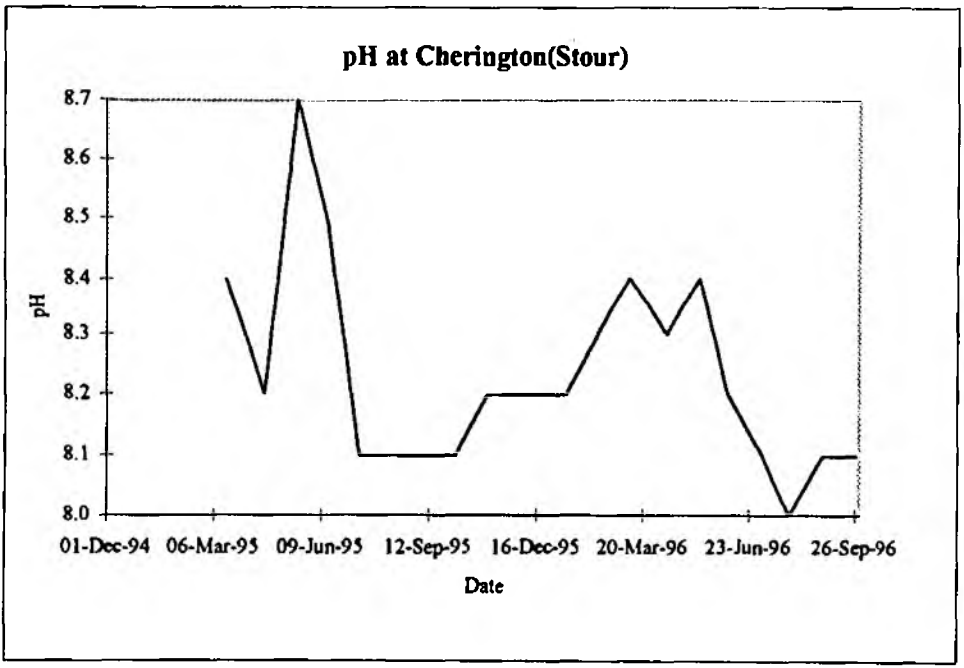


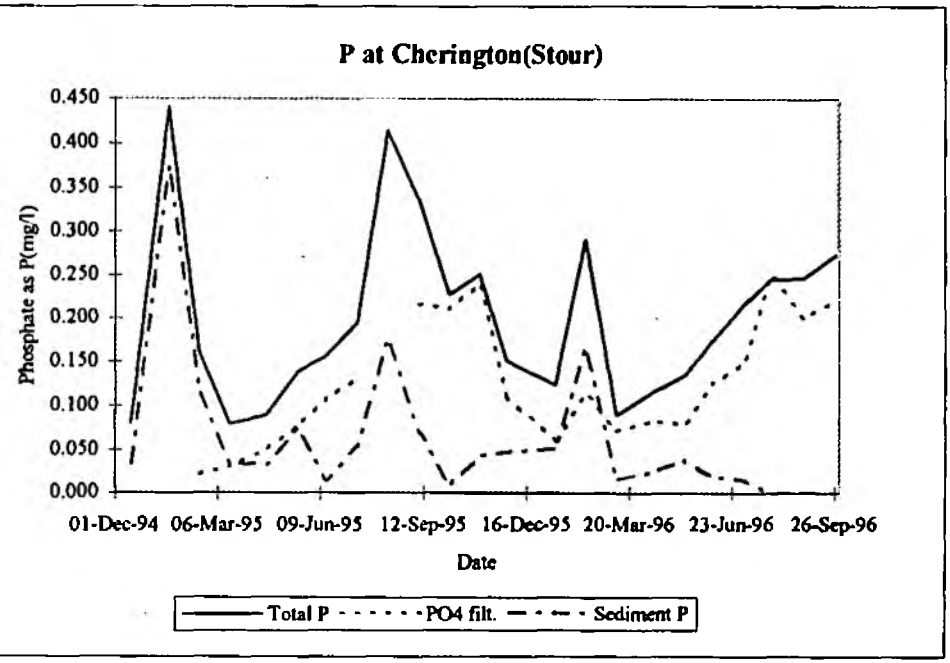
(Figure 72 cont.)

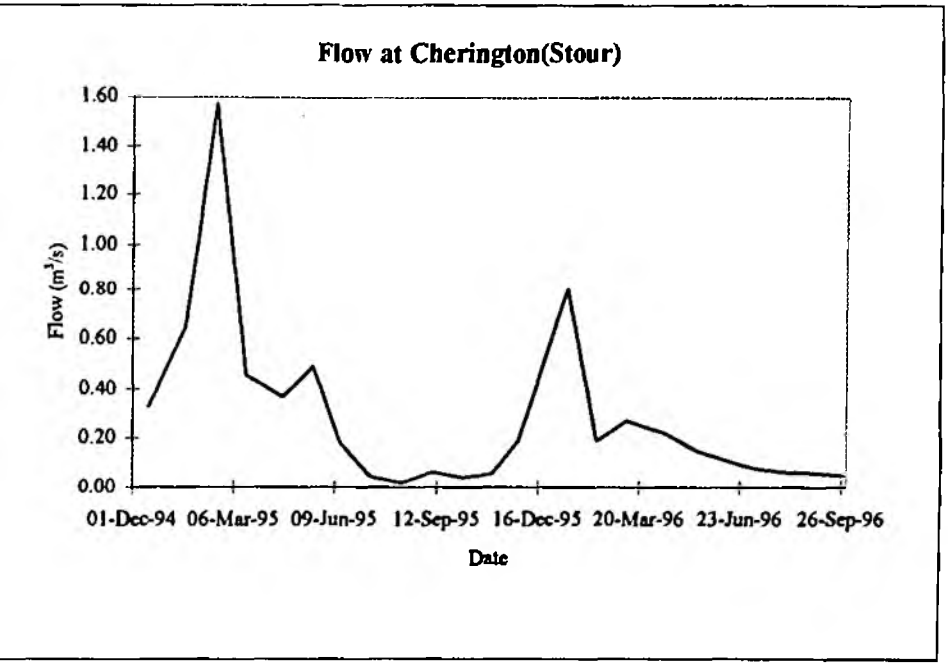
Figure 73 Cherington (Stour)




N at Cherington(Stour)
20.000
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

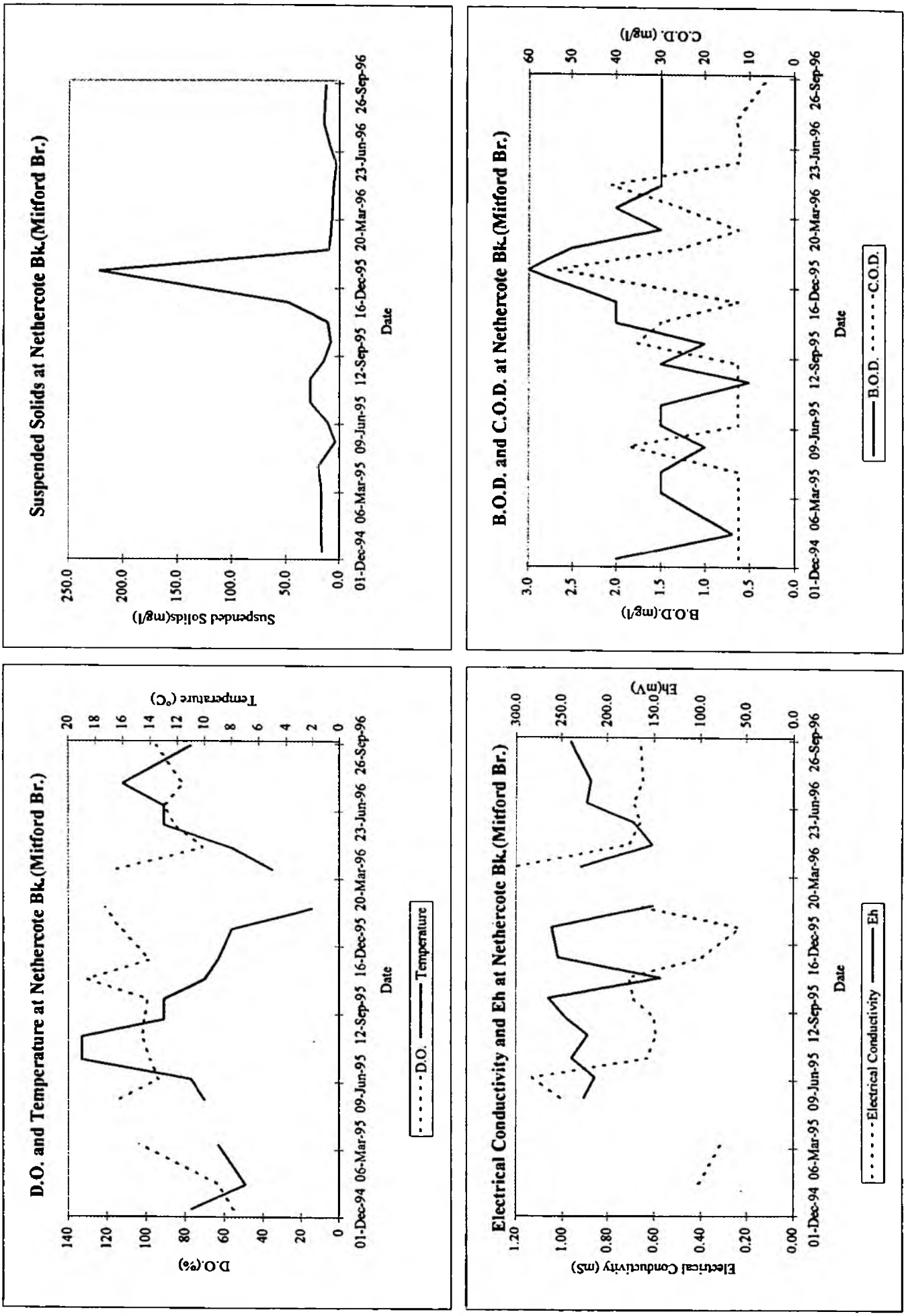

pH at Cherington(Stour)
8.7
8.6
8.5
8.4
8.3
8.2
8.1
8.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

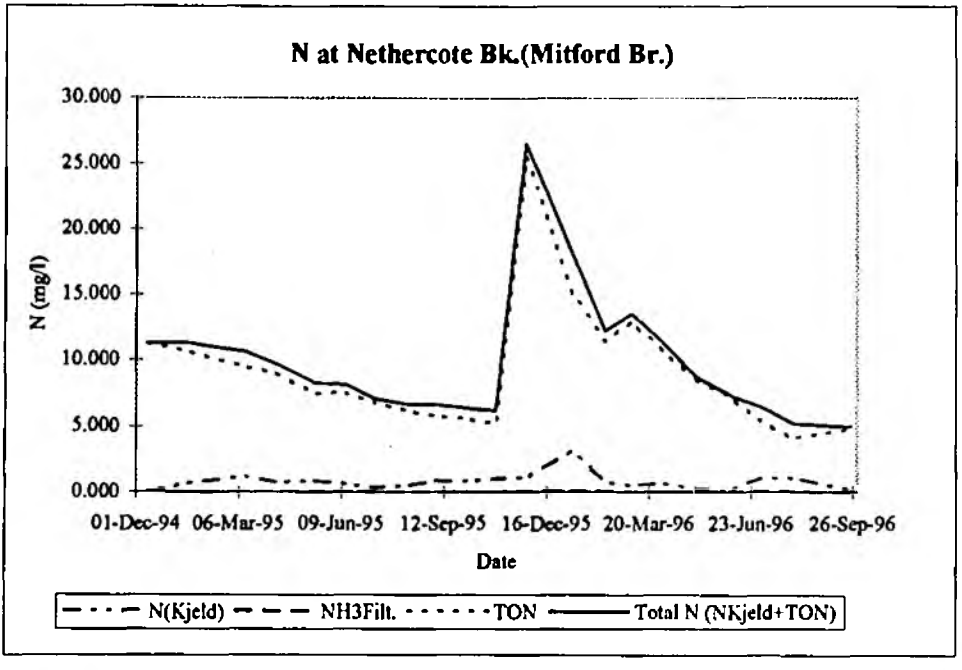


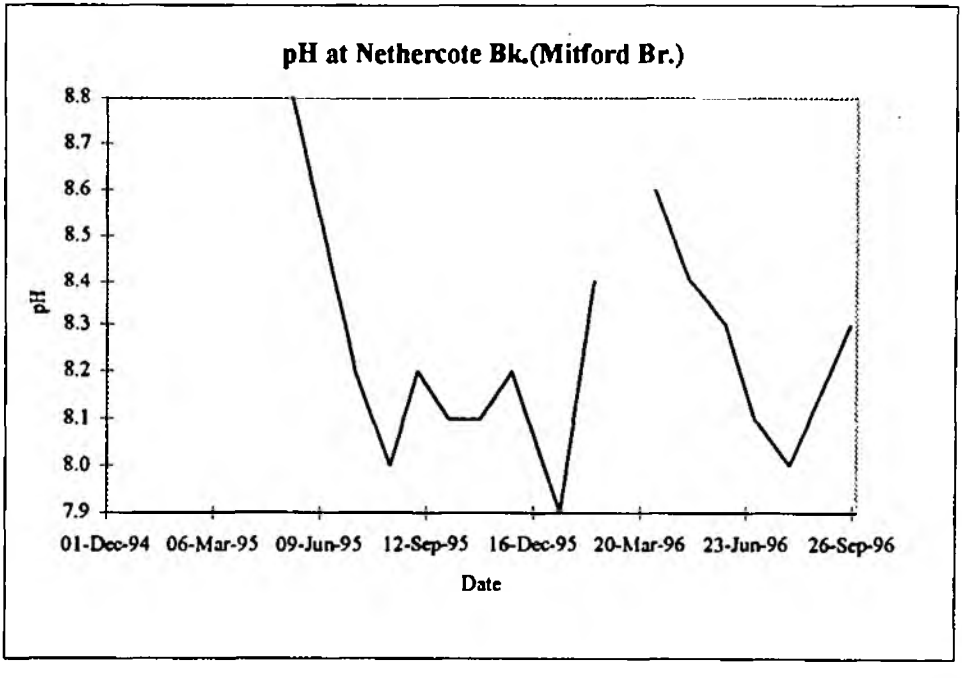


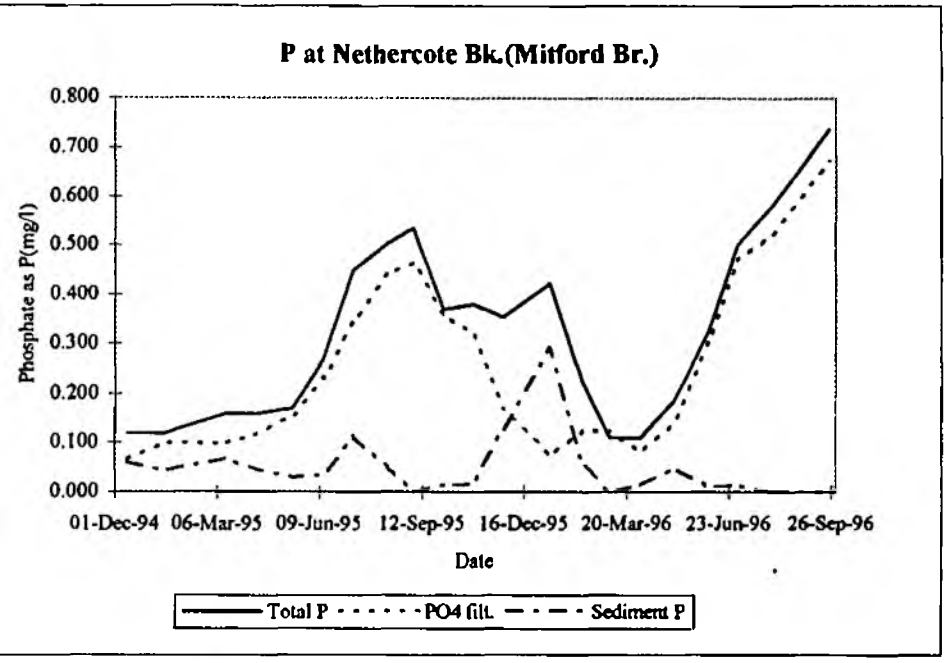
(Figure 73 cont.)

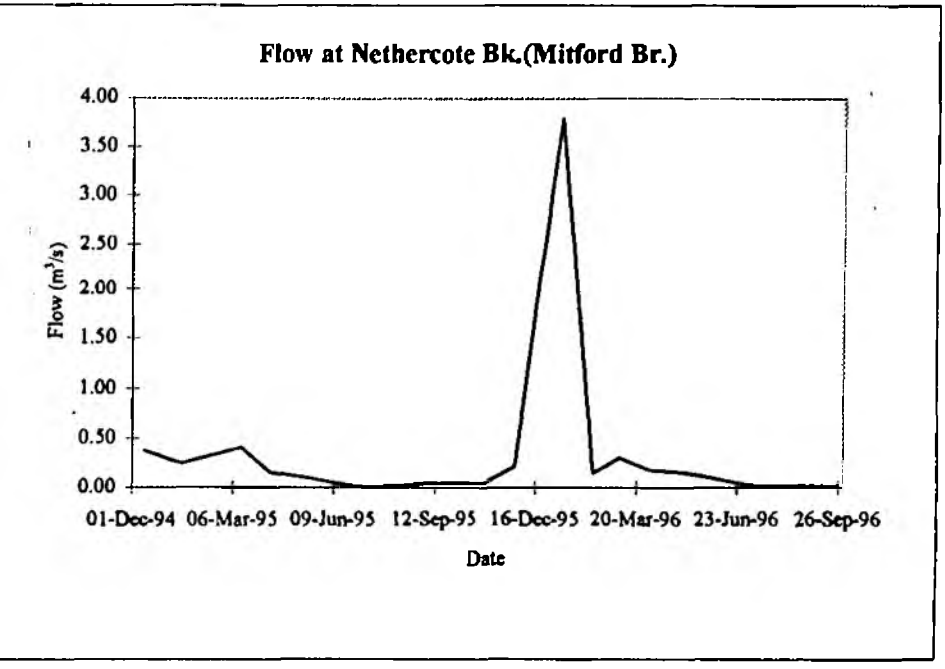
Figure 74 Nethercote Bk. (Mitford Br.)



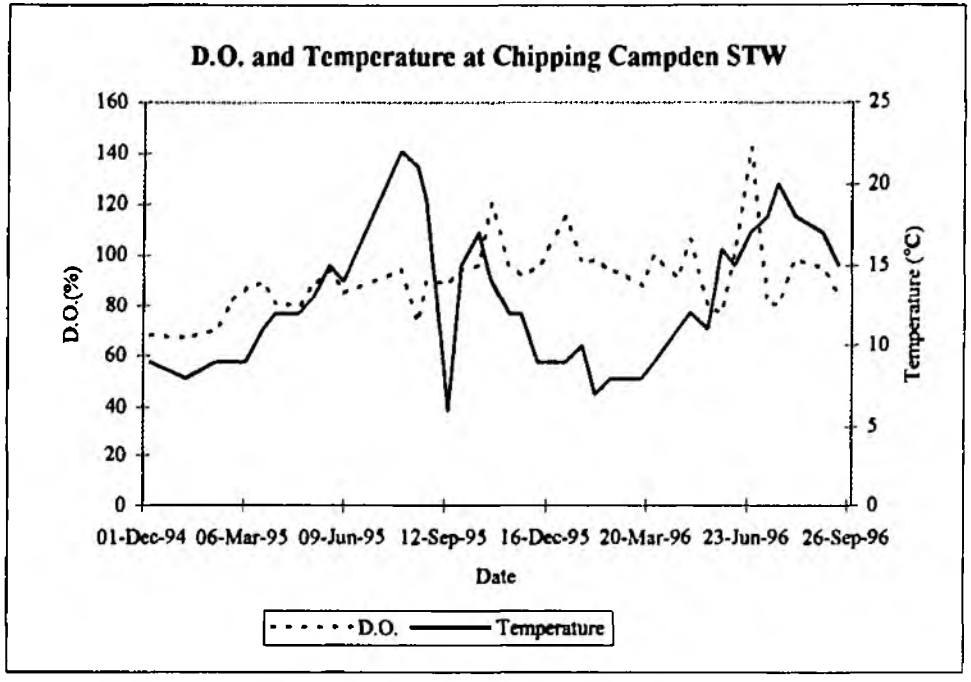

N at Nethercote Bk.(Mitford Br.)
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

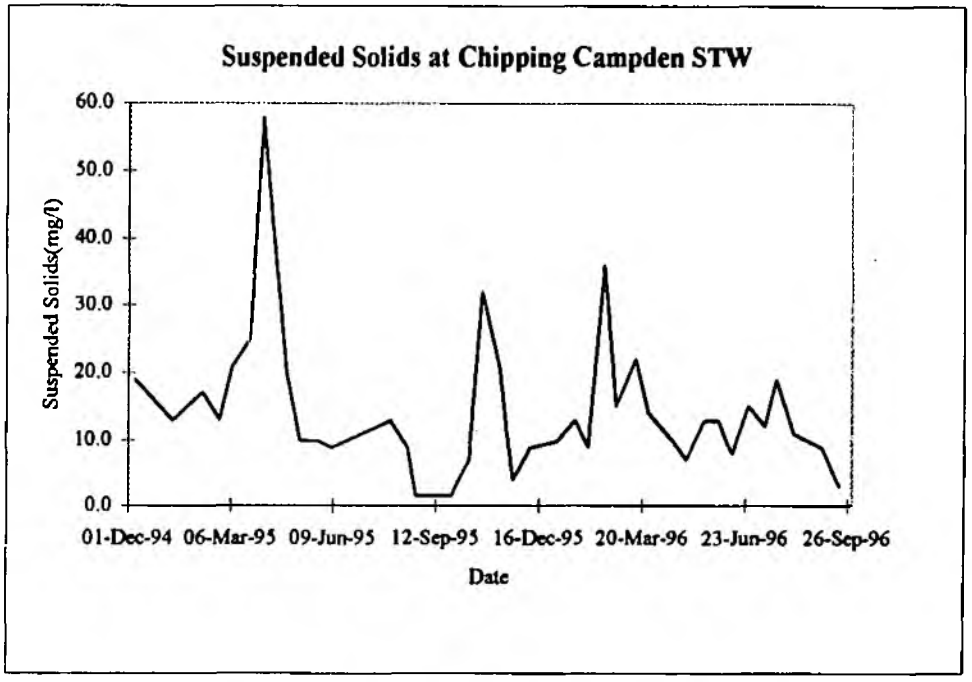

pH at Nethercote Bk.(Mitford Br.)
8.8
8.7
8.6
8.5
8.4
8.3
8.2
8.1
8.0
7.9
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

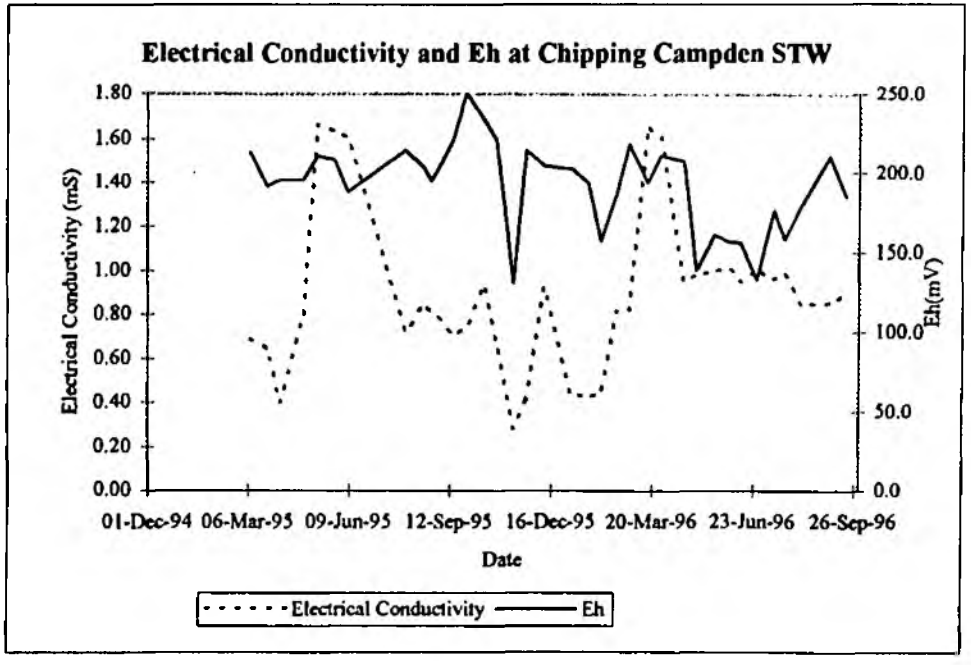




(Figure 74 cont.)







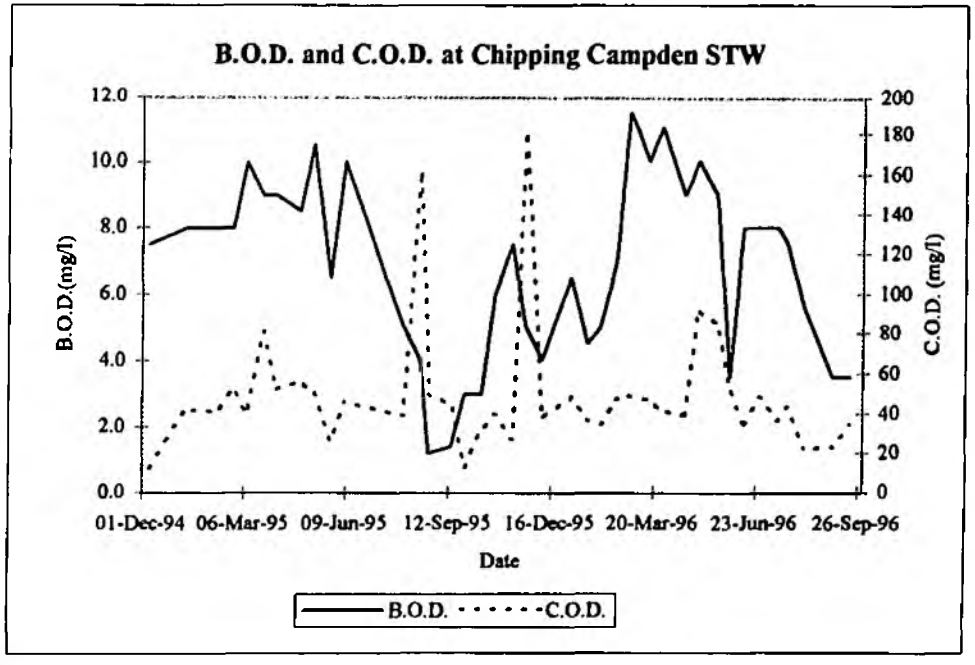
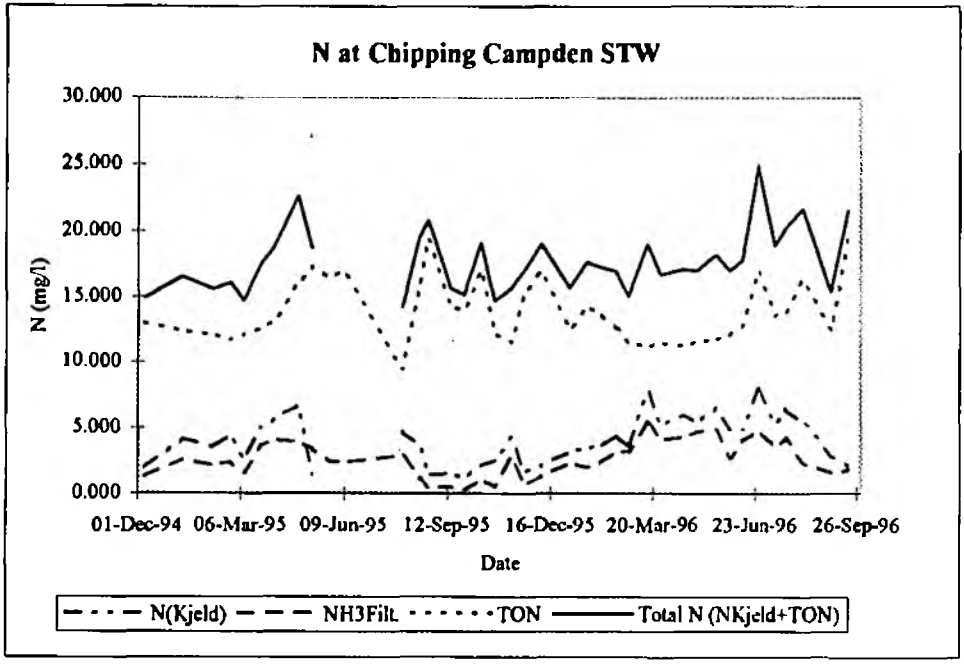
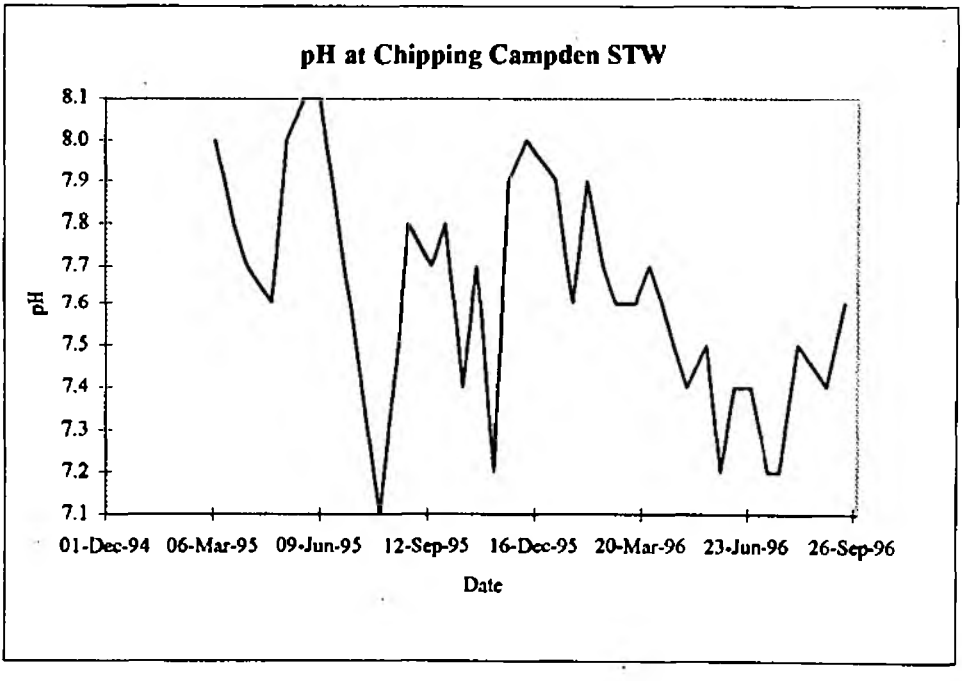
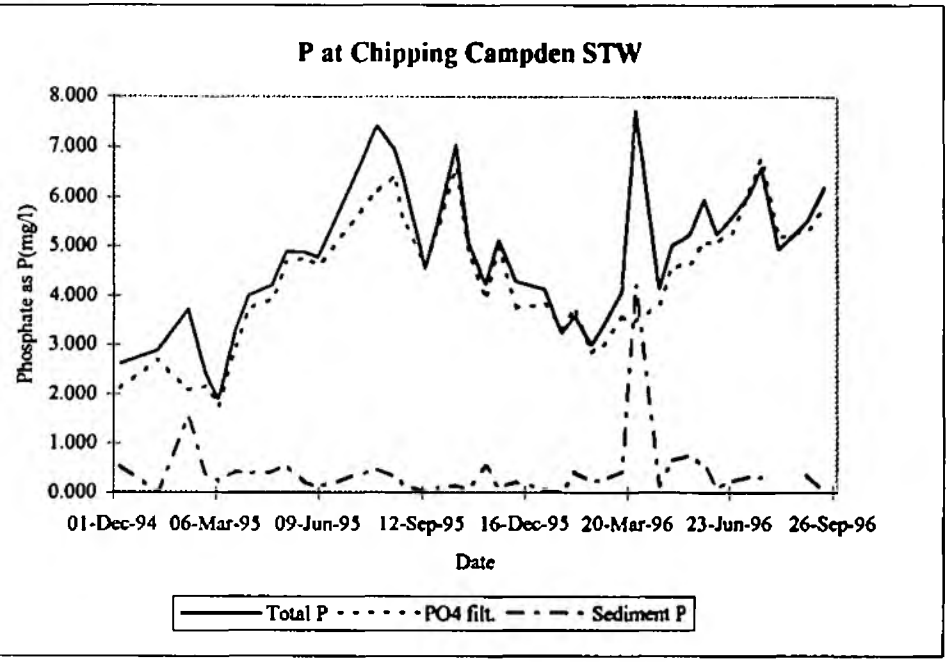


Figure 75 Chipping Campden STW


N at Chipping Campden STW
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt
TON
Total N (NKjeld+TON)


pH at Chipping Campden STW
8.1
8.0
7.9
7.8
7.7
7.6
7.5
7.4
7.3
7.2
7.1
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

(Figure 75 cont.)



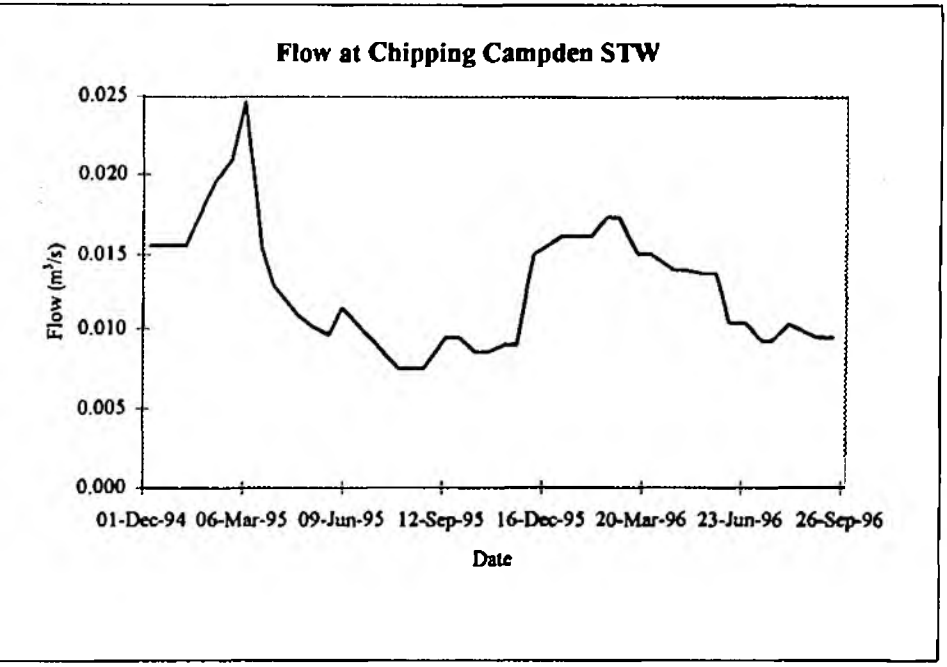
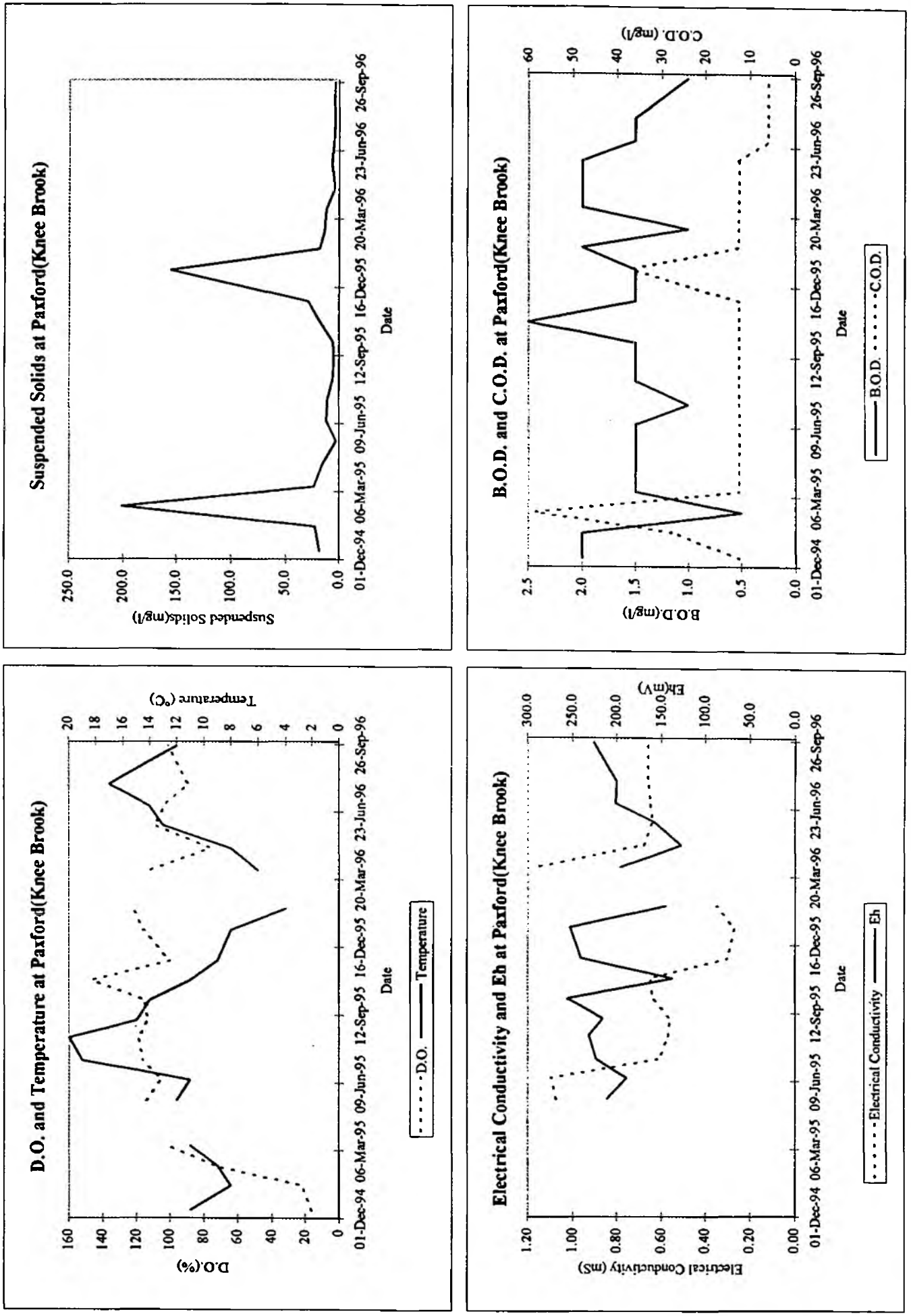
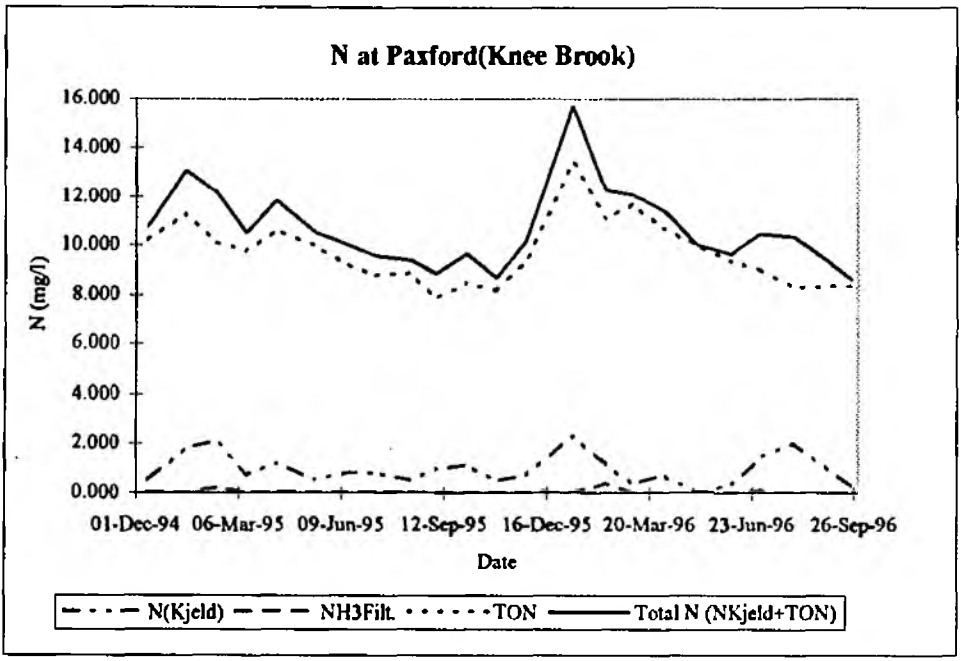
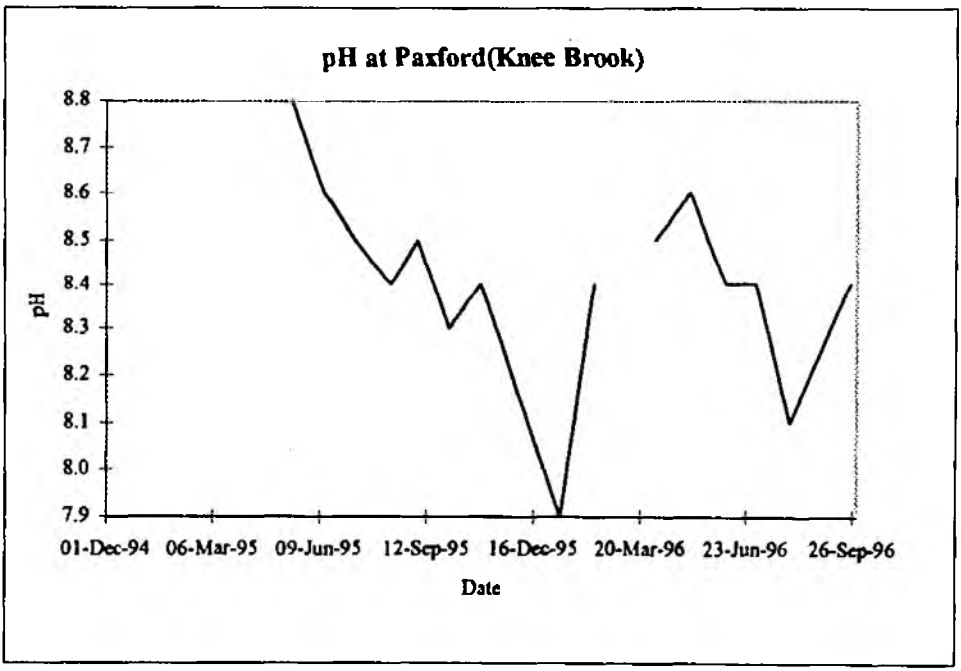
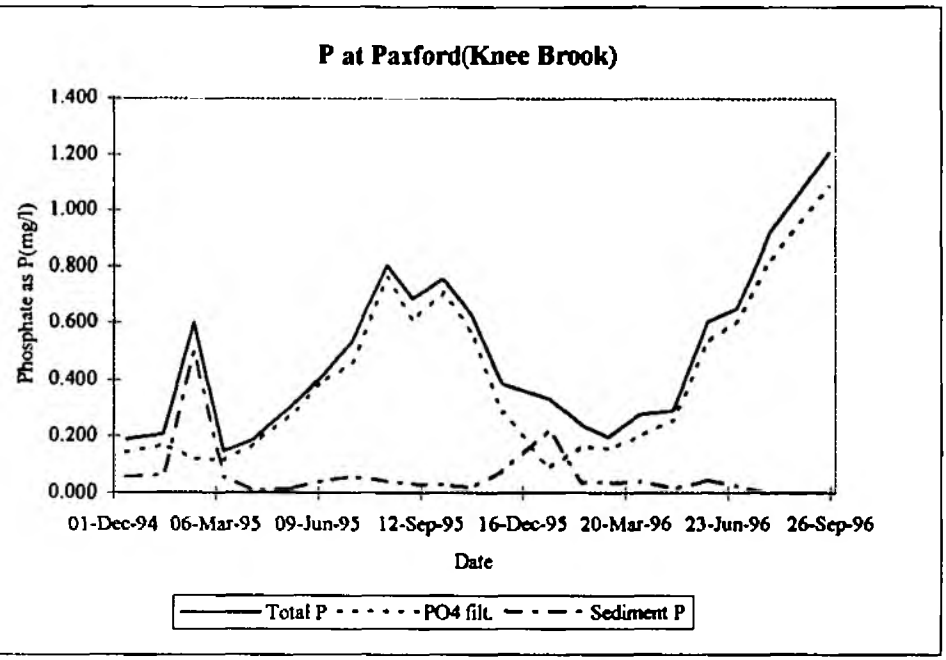


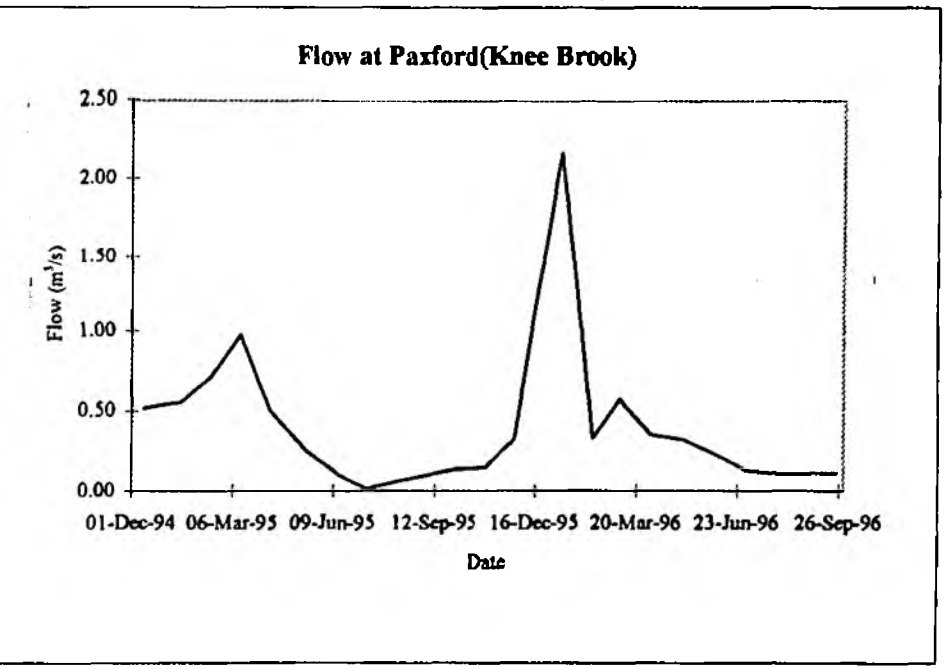
Figure 76 Paxford (Knee Brook)




N at Paxford(Knee Brook)
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

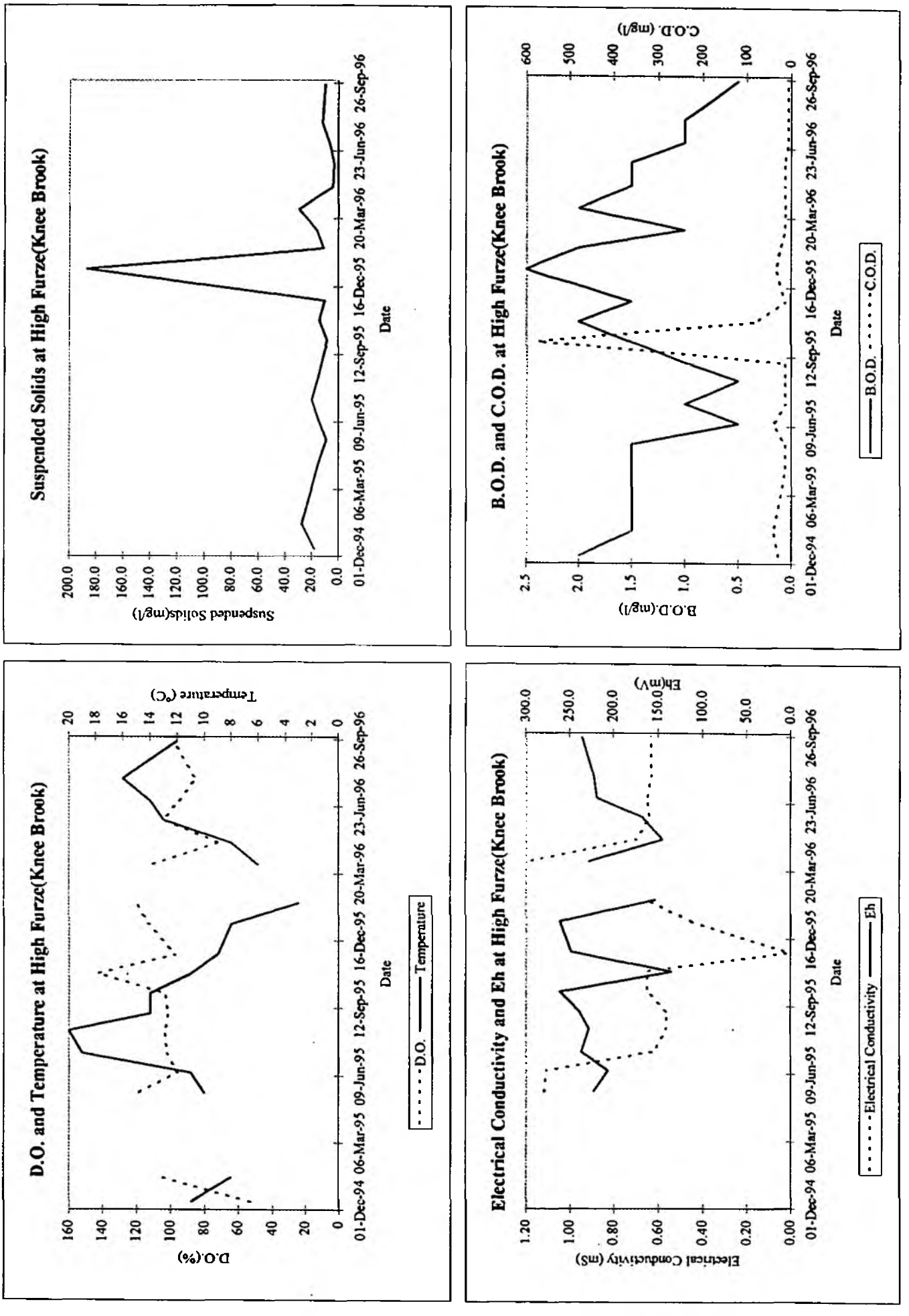

pH at Paxford(Knee Brook)
8.8
8.7
8.6
8.5
8.4
8.3
8.2
8.1
8.0
7.9
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

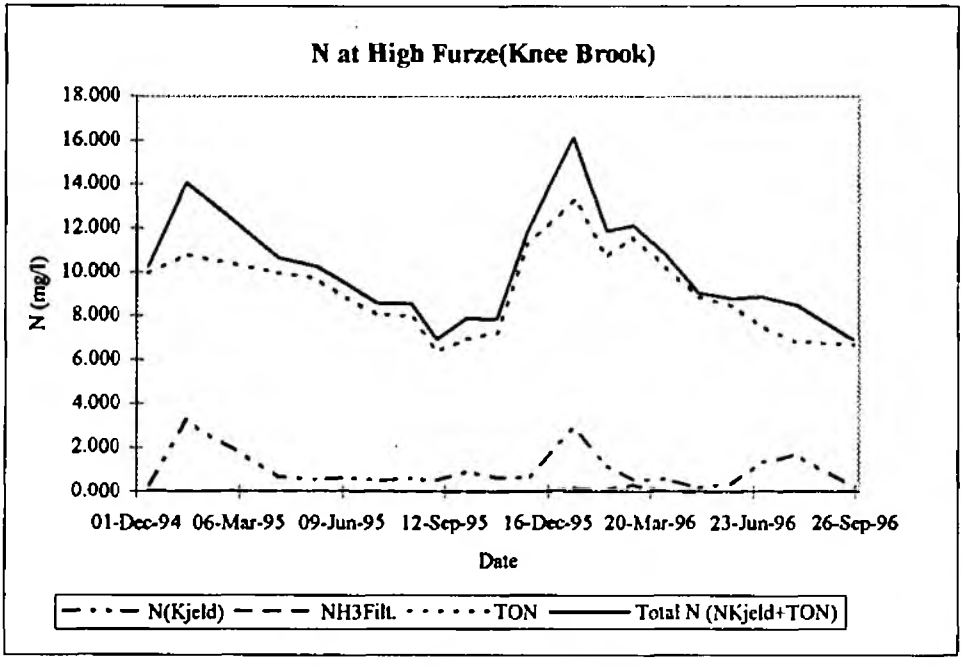


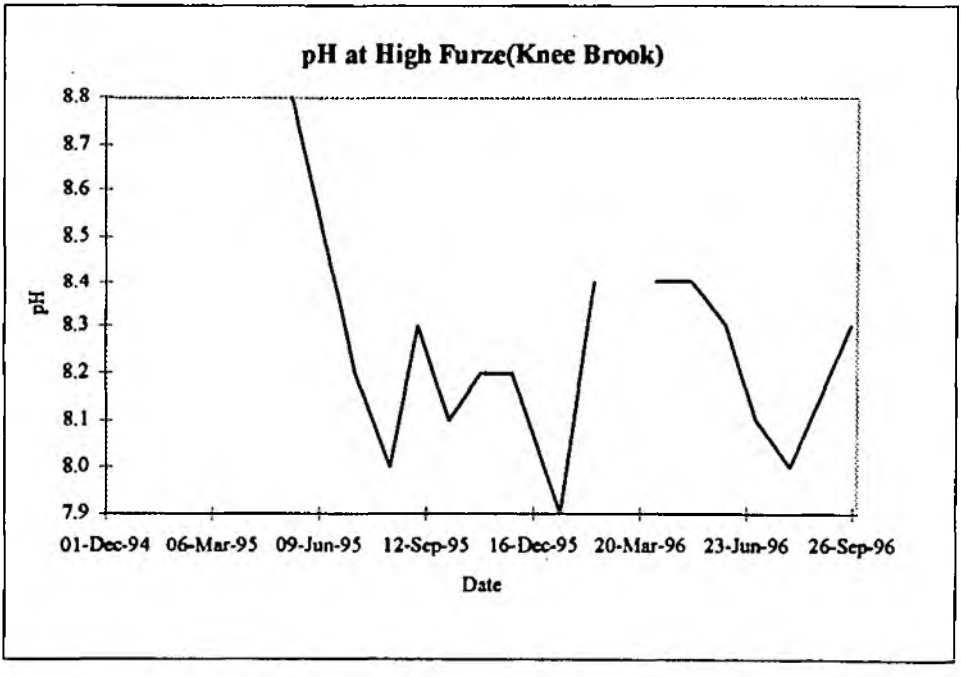


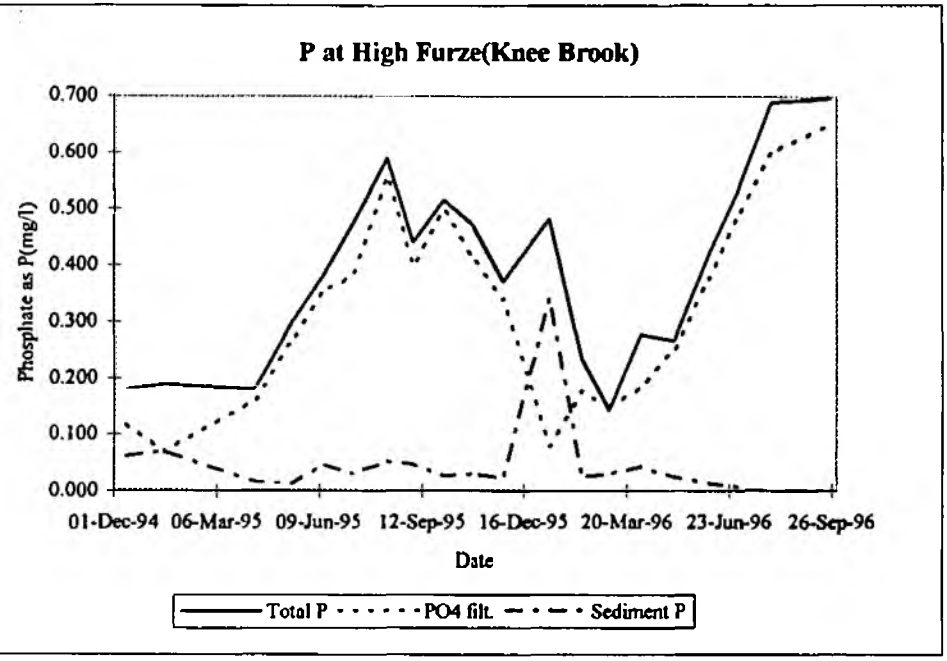
(Figure 76 cont.)

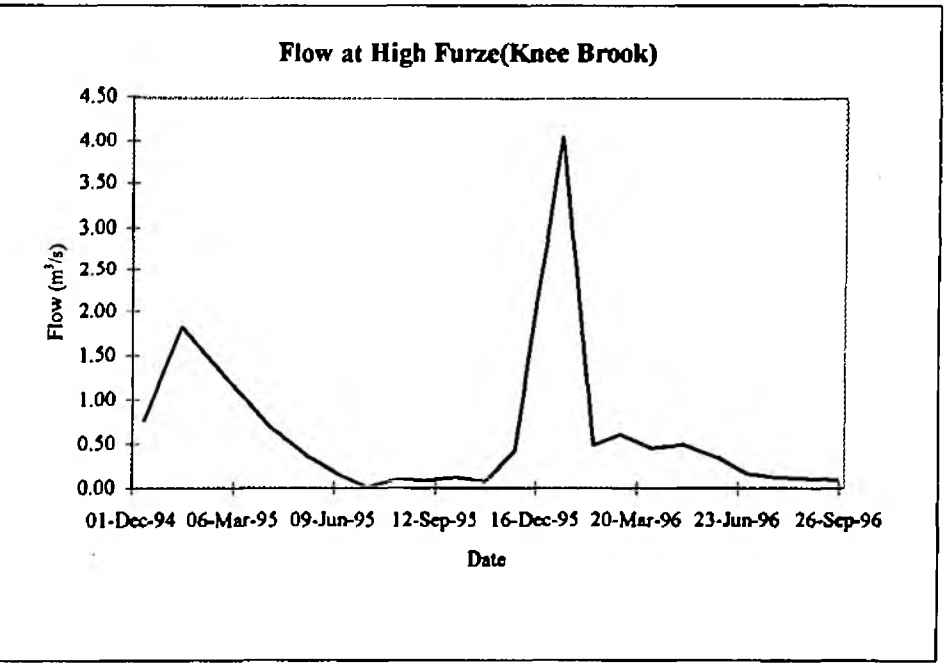
Figure 77 High Furze (Knee Brook)




N at High Furze(Knee Brook)
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

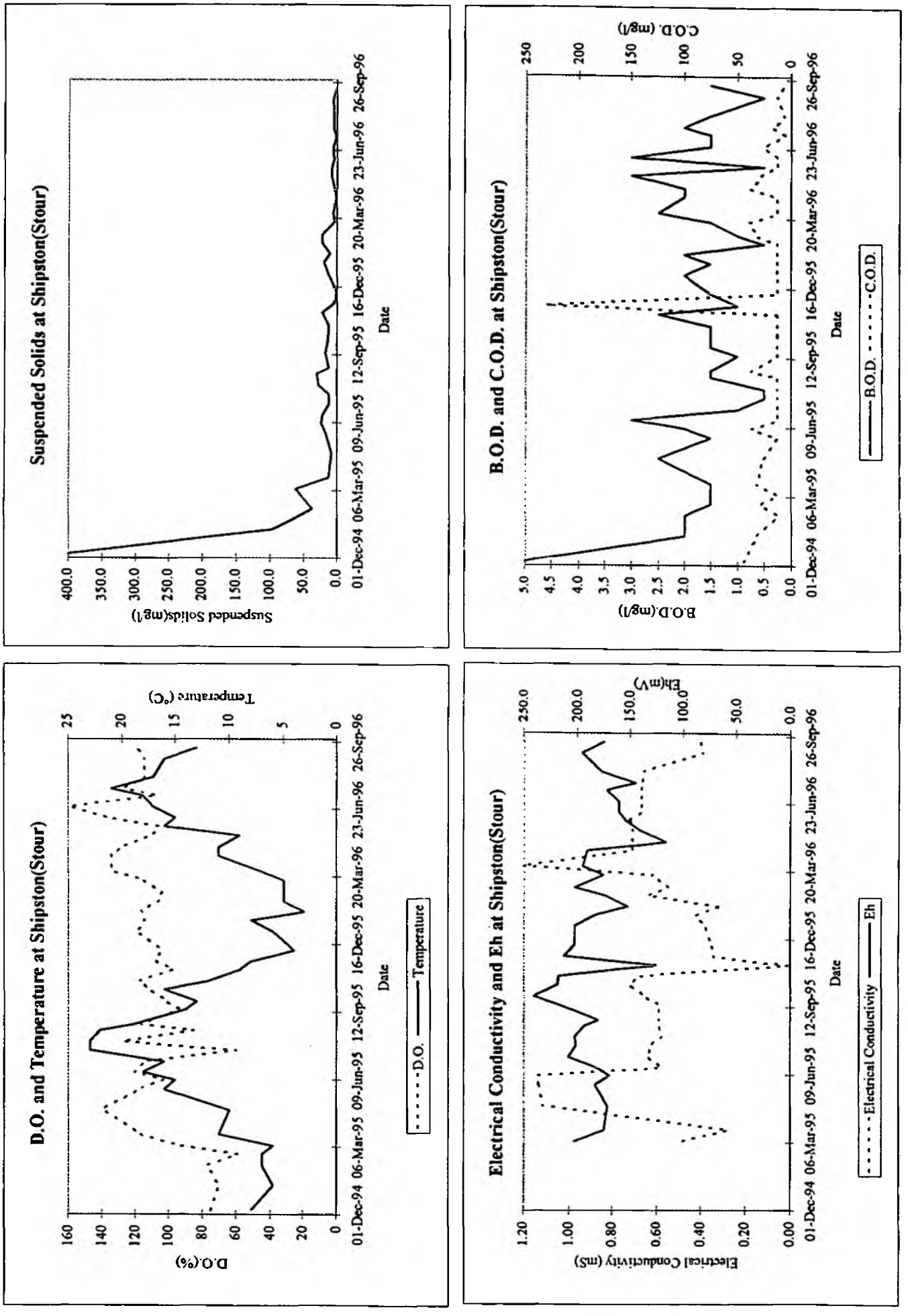

pH at High Furze(Knee Brook)
8.8
8.7
8.6
8.5
8.4
8.3
8.2
8.1
8.0
7.9
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

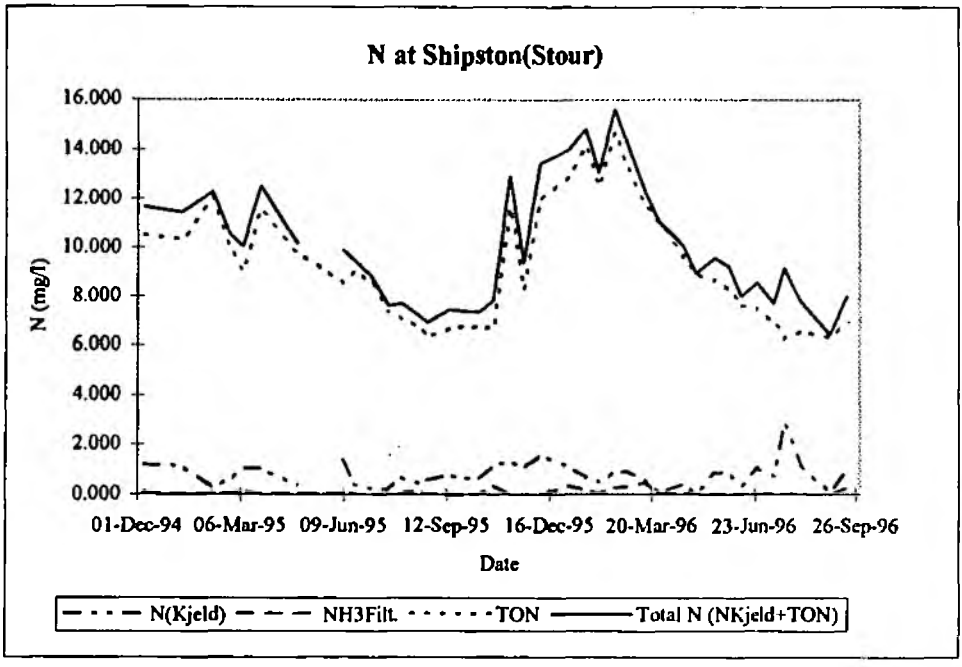


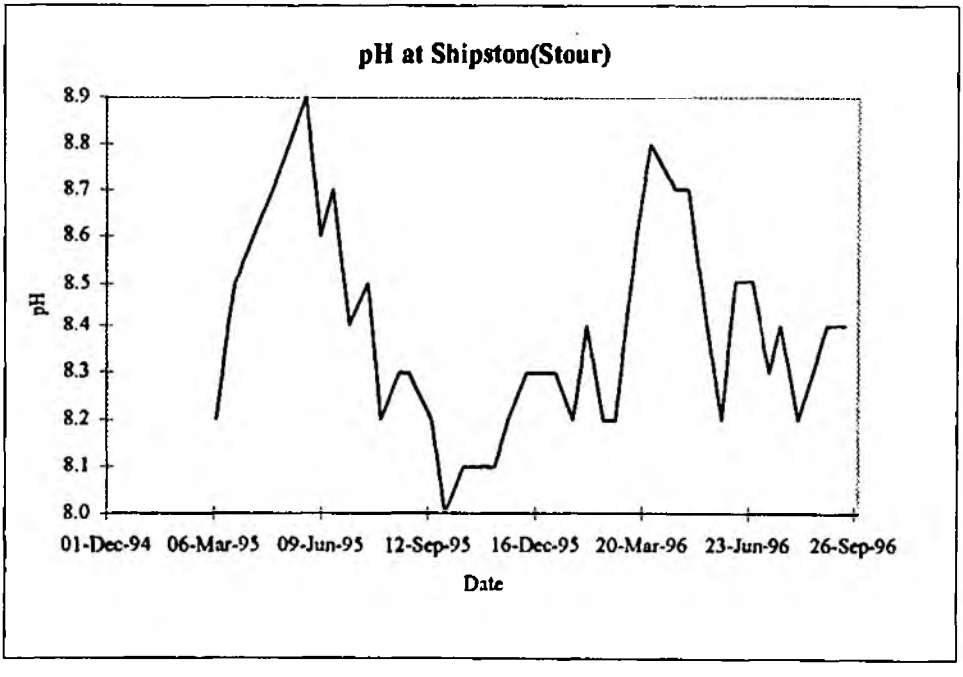


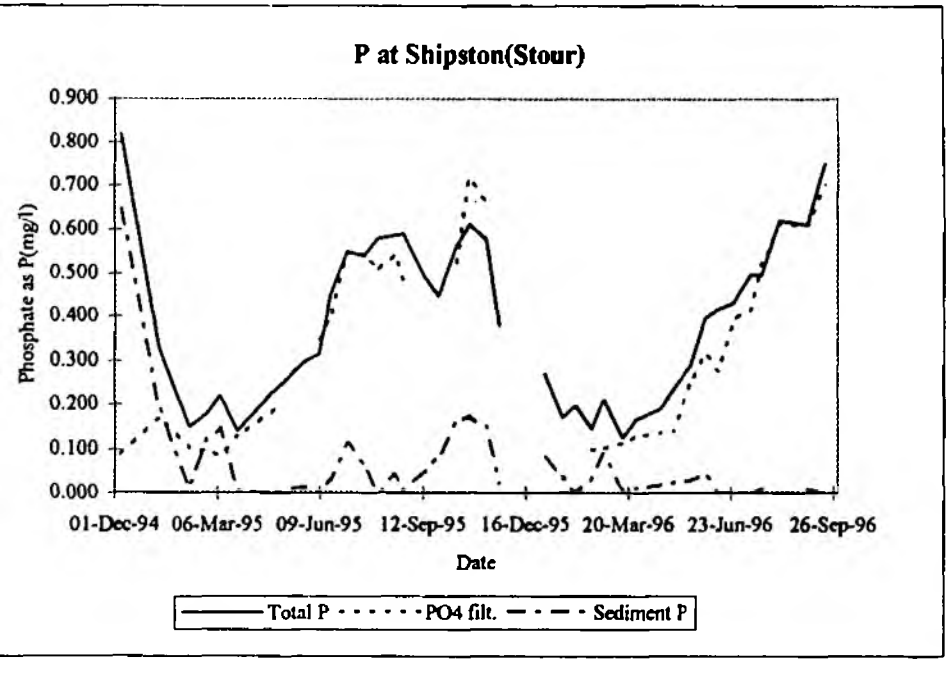
(Figure 77 cont.)

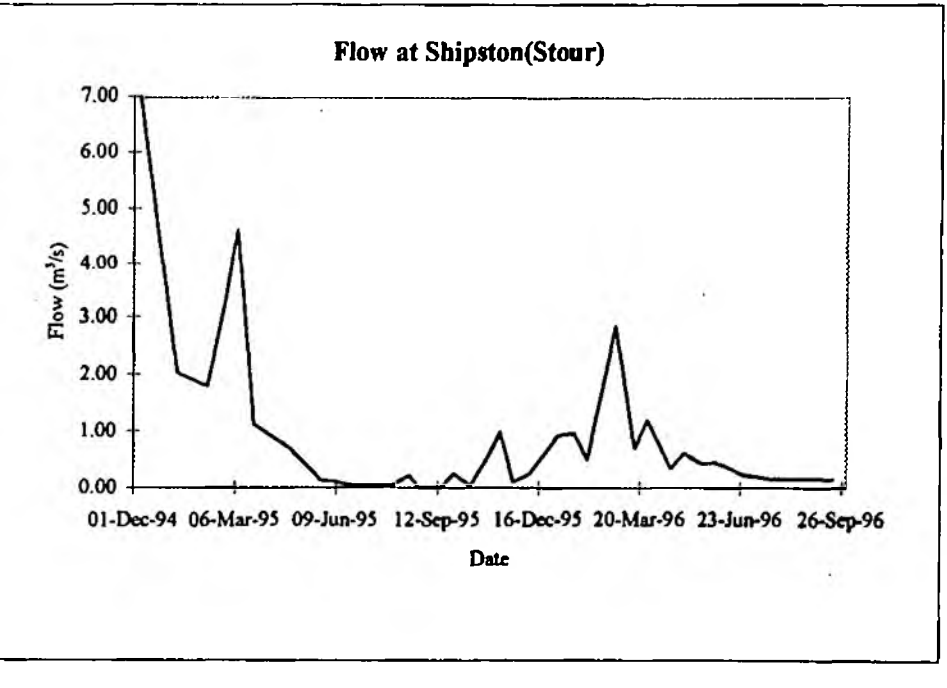
Figure 78 Shipston (Stour)




N at Shipston(Stour)
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

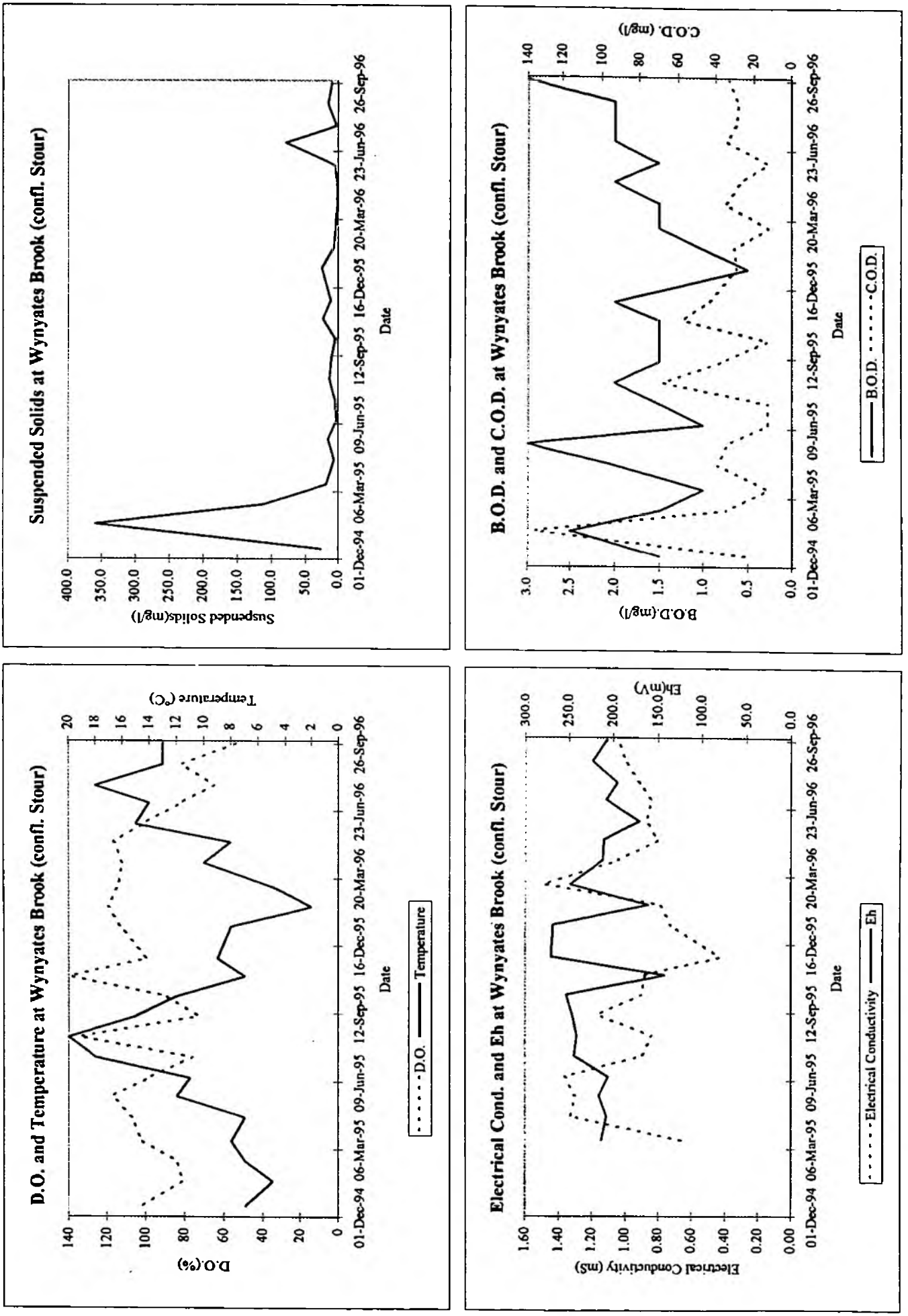

pH at Shipston(Stour)
8.9
8.8
8.7
8.6
8.5
8.4
8.3
8.2
8.1
8.0
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

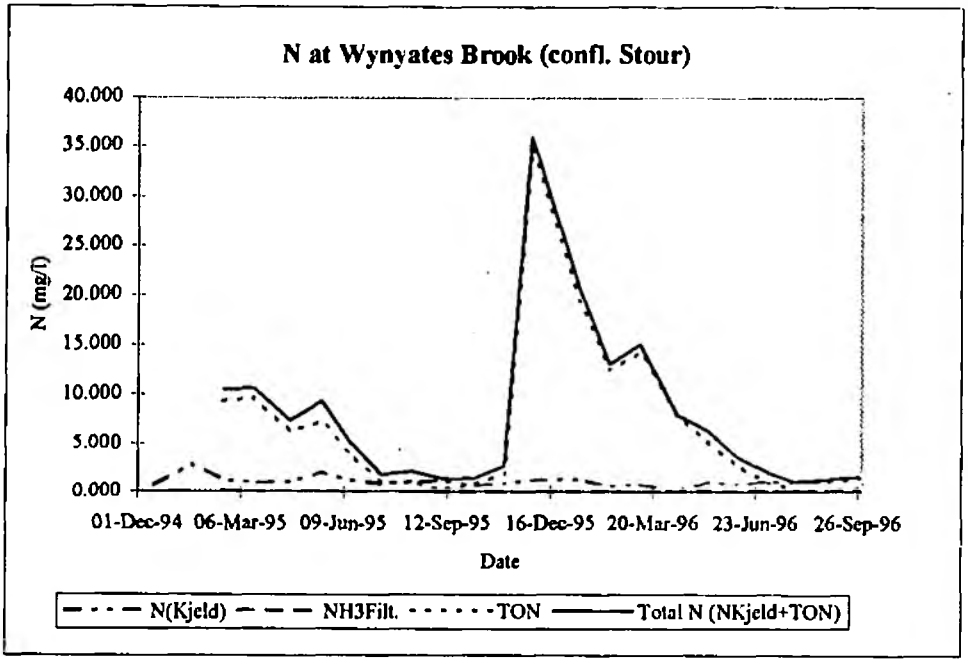


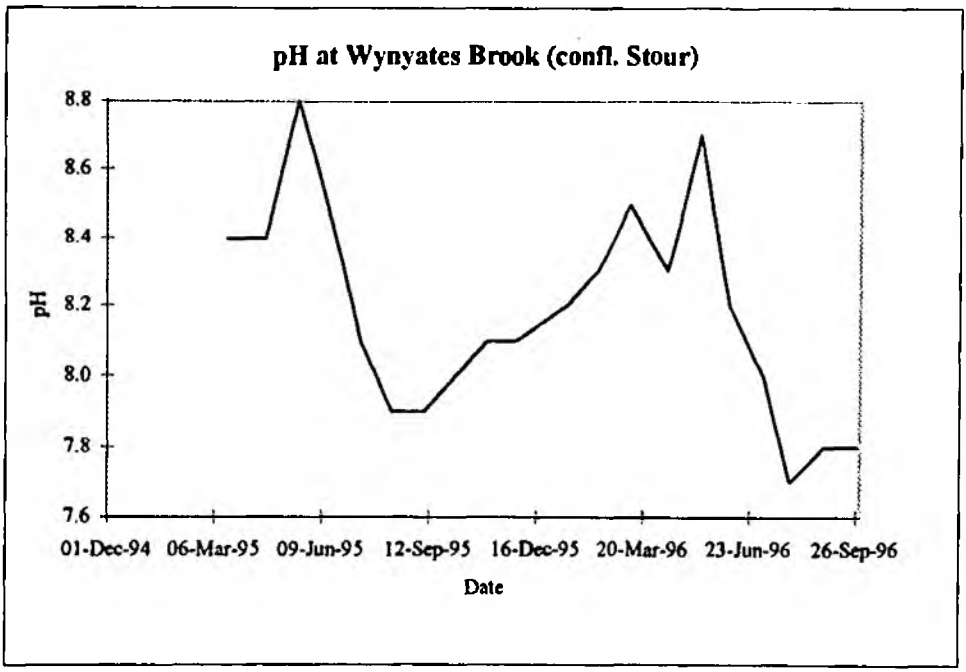


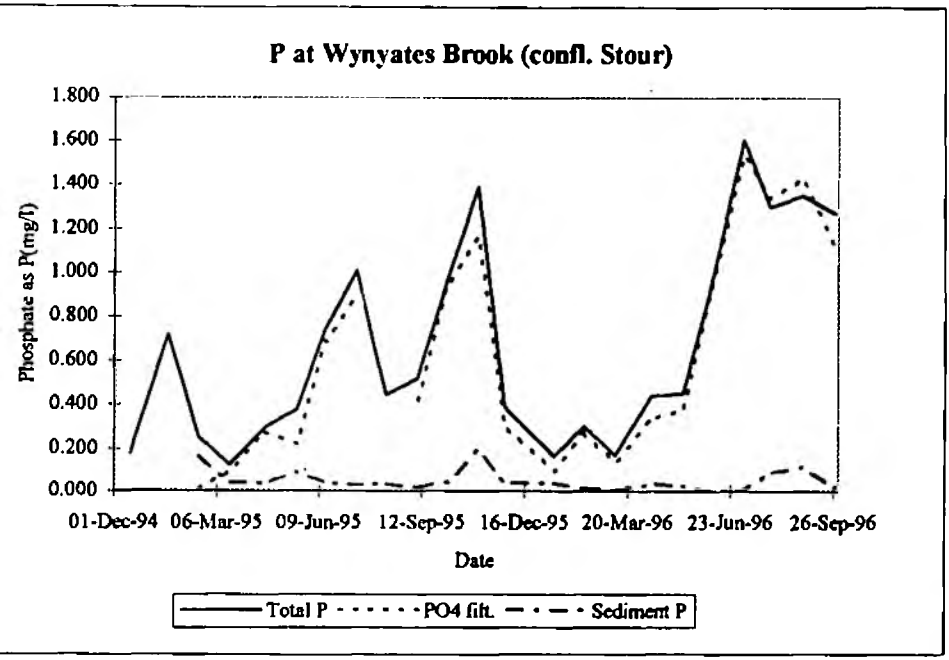
(Figure 78 cont.)

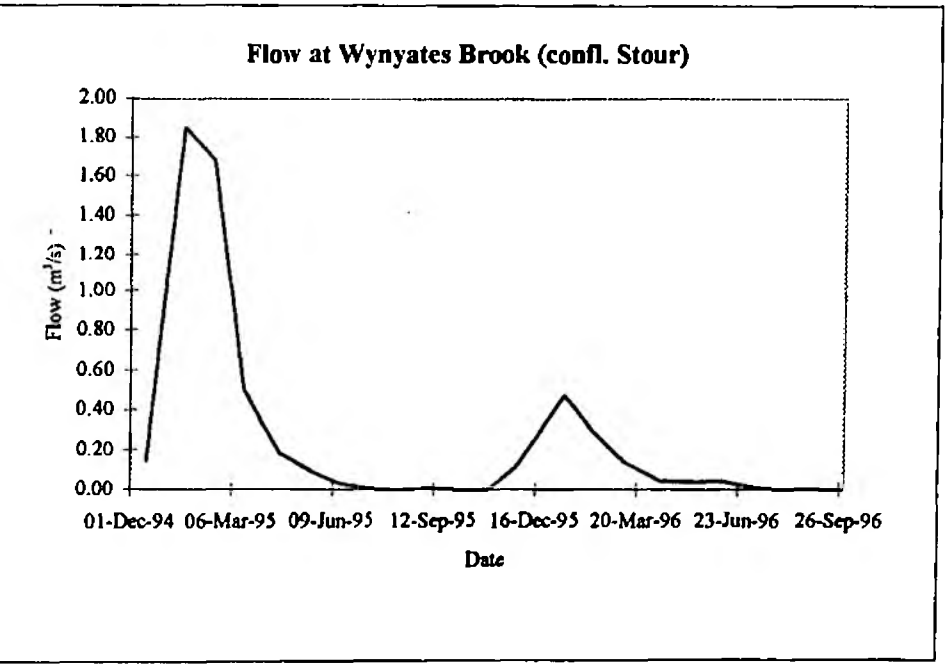
Figure 79 Wynyates Brook (confl. Stour)



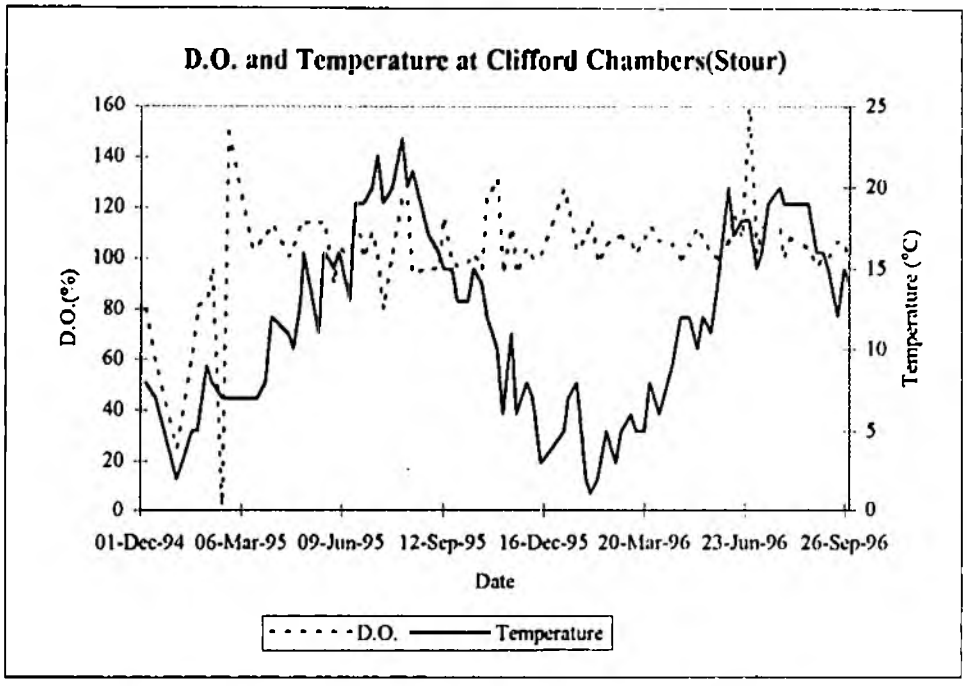

N at Wynyates Brook (confl. Stour)
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

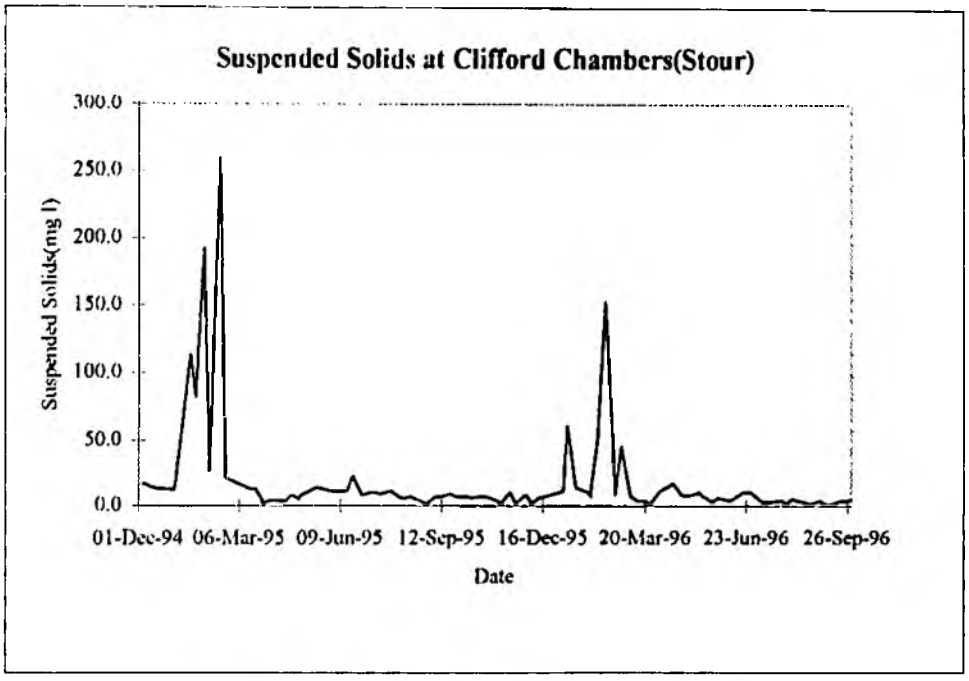

pH at Wynyates Brook (confl. Stour)
8.8
8.6
8.4
8.2
8.0
7.8
7.6
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

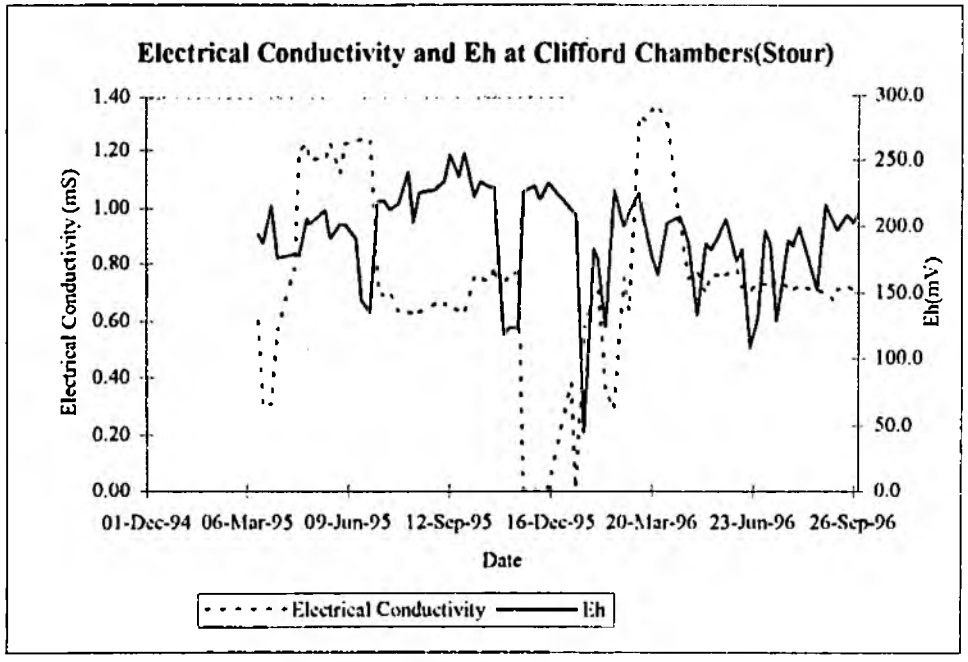




(Figure 79 cont.)







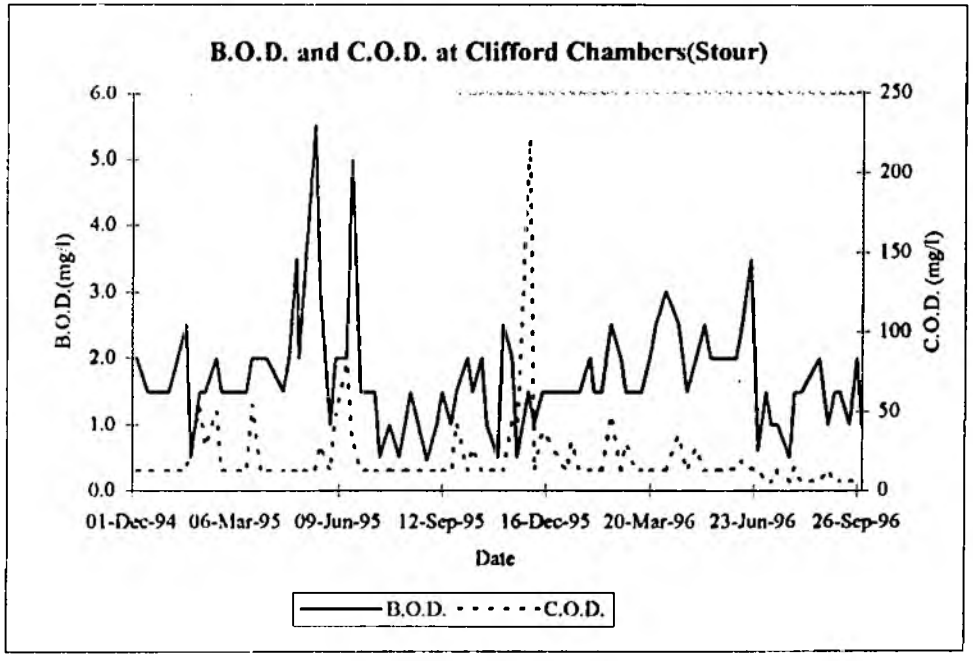
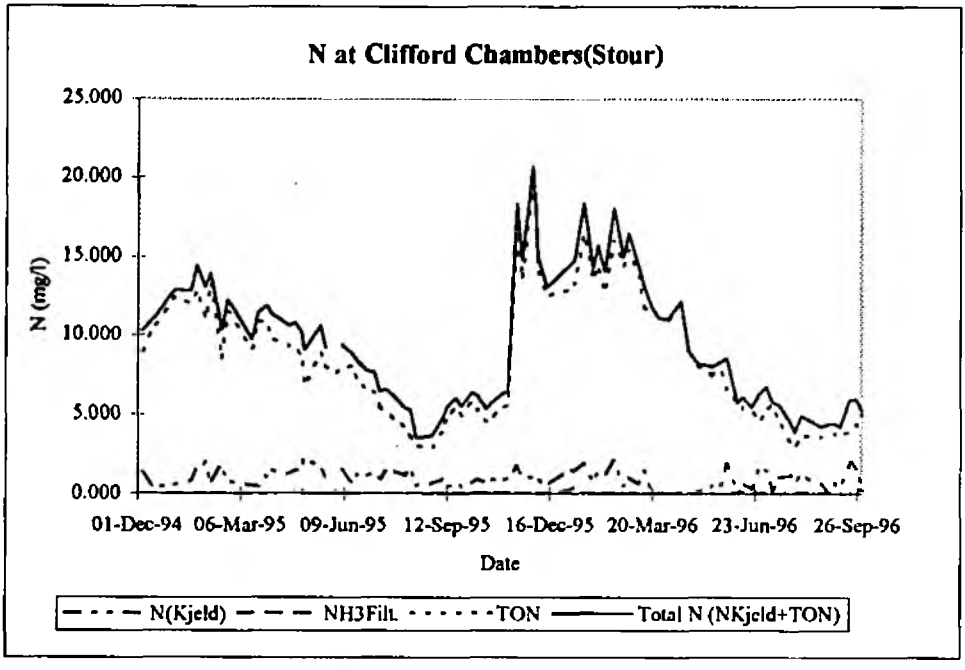
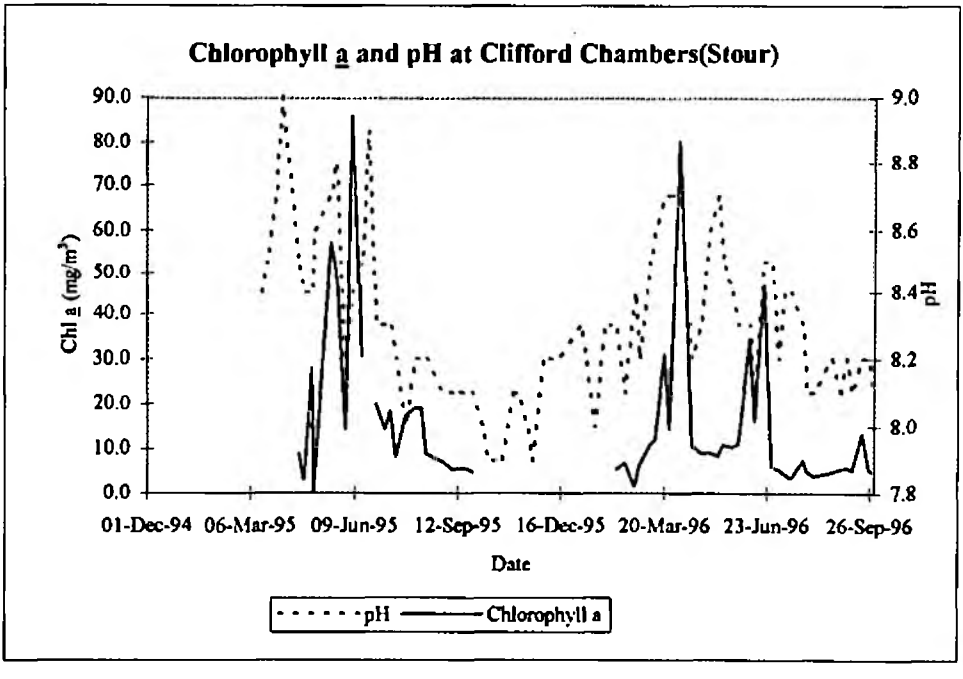
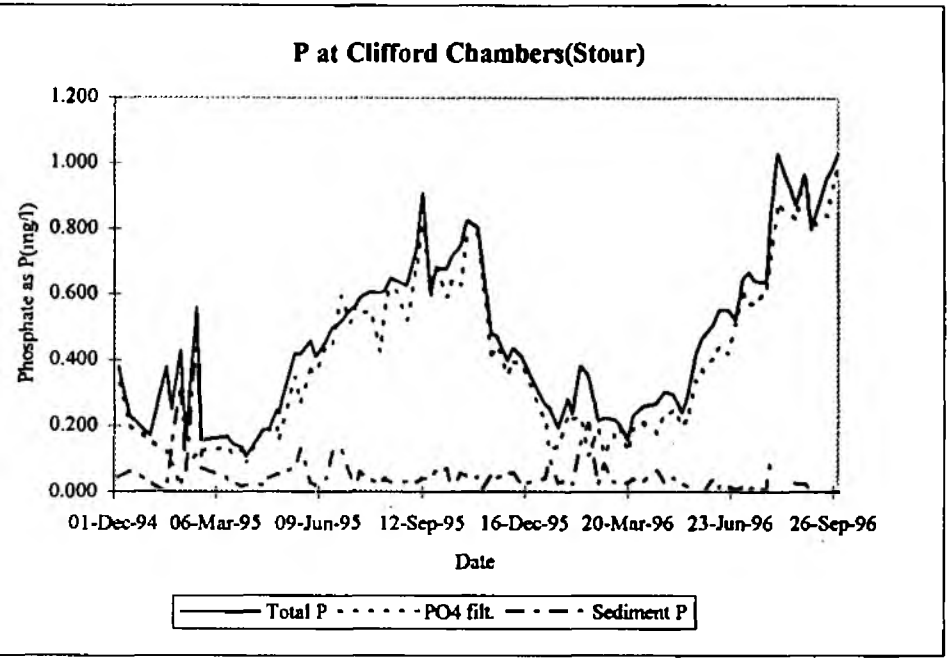
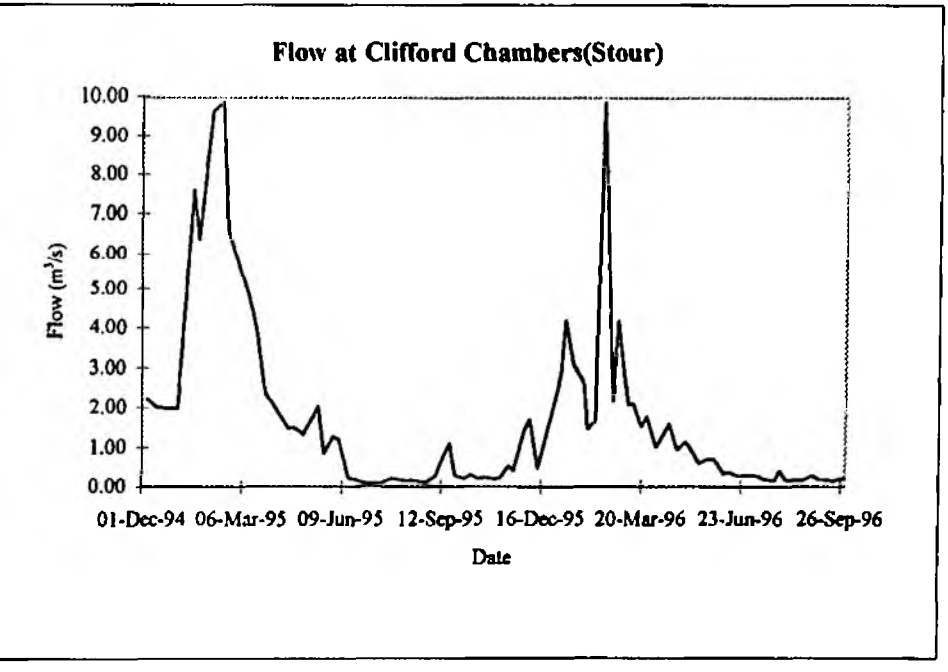


Figure 80 Clifford Chambers (Stour)


N at Clifford Chambers(Stour)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

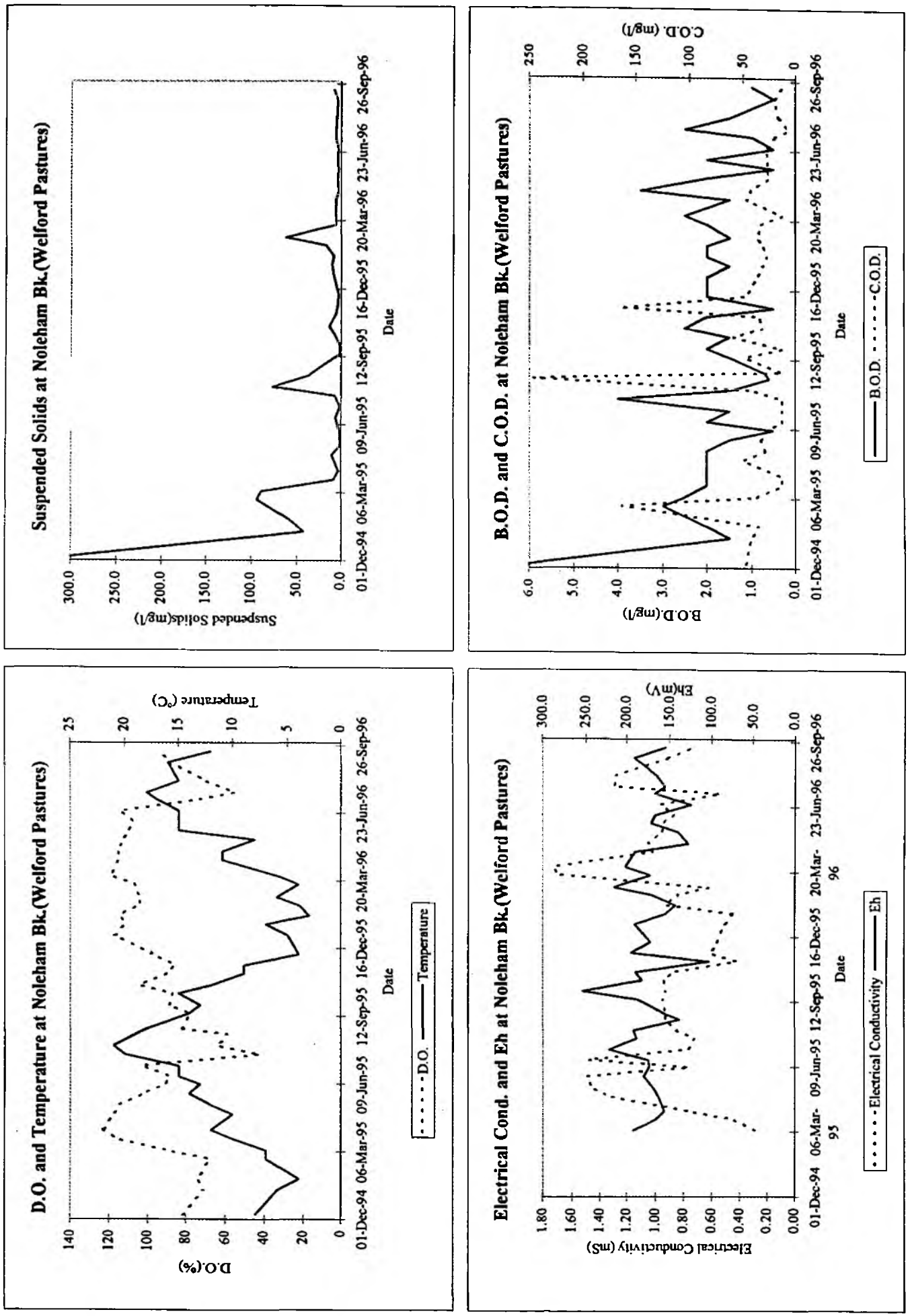

Chlorophyll a and pH at Clifford Chambers(Stour)
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
Chl a (mg/m³)
9.0
8.8
8.6
8.4
8.2
8.0
7.8
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
pH
Chlorophyll a

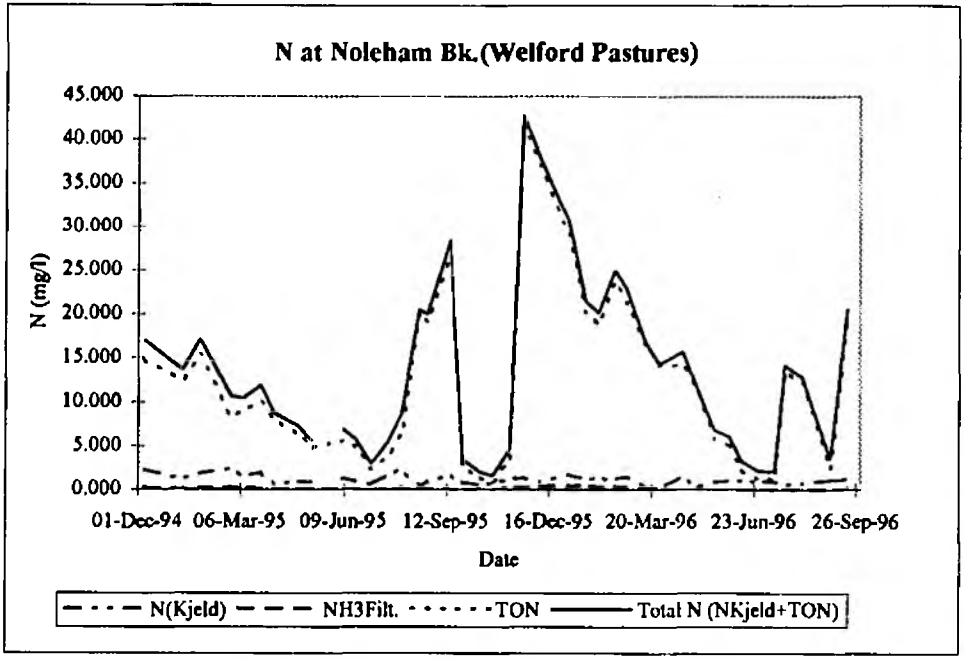


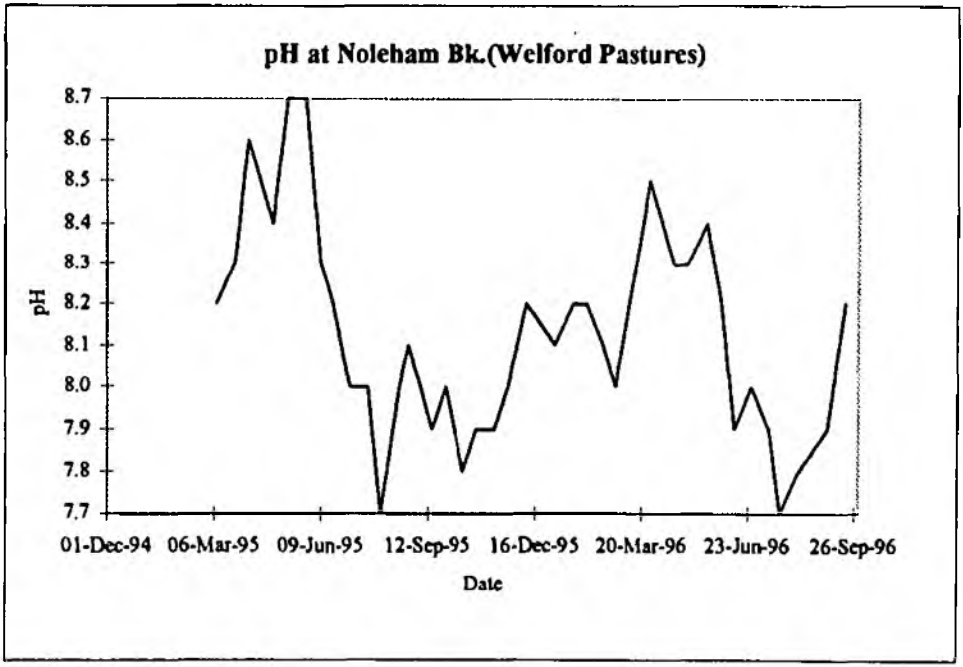


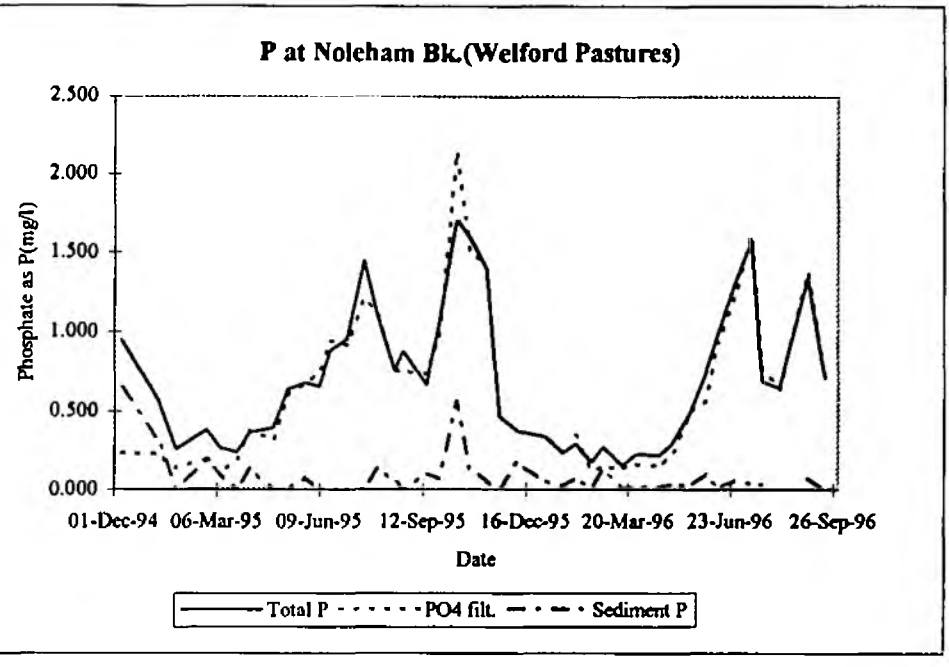
(Figure 80 cont.)

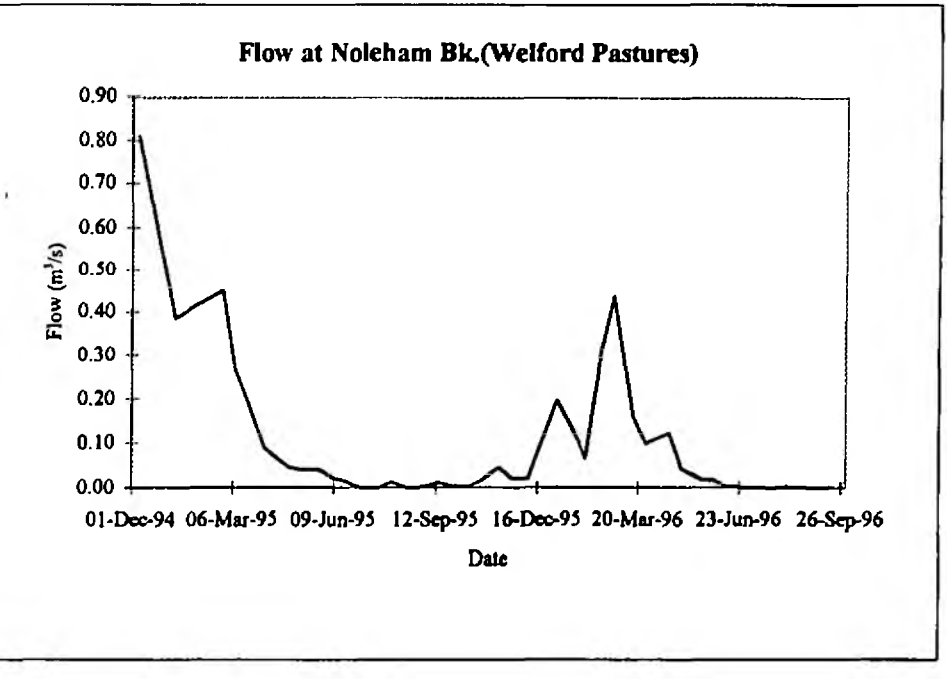
Figure 81 Noleham Bk. (Welford Pastures)




N at Noleham Bk.(Welford Pastures)
45.000
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

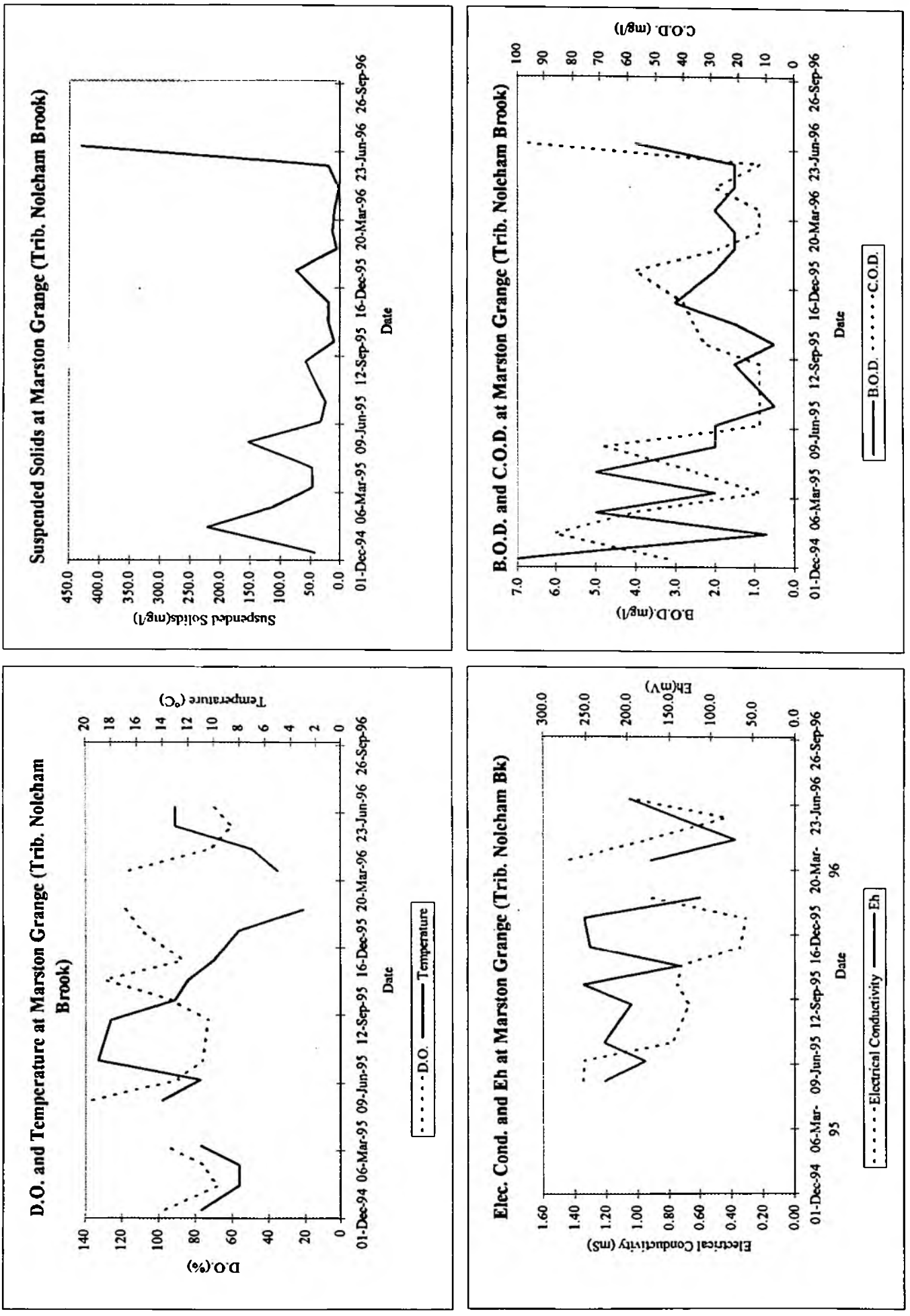

pH at Noleham Bk.(Welford Pastures)
8.7
8.6
8.5
8.4
8.3
8.2
8.1
8.0
7.9
7.8
7.7
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

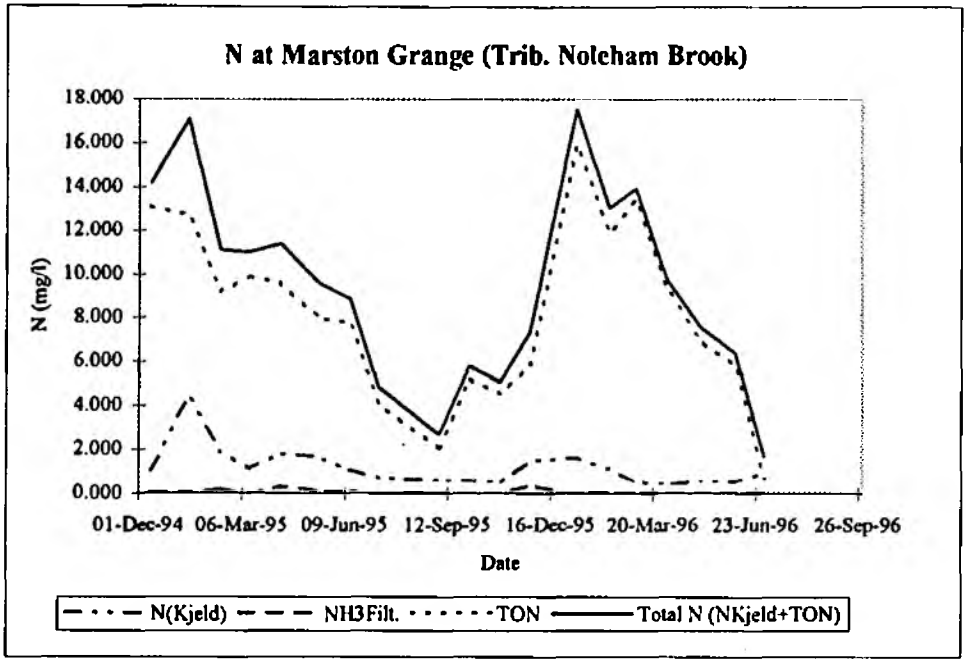


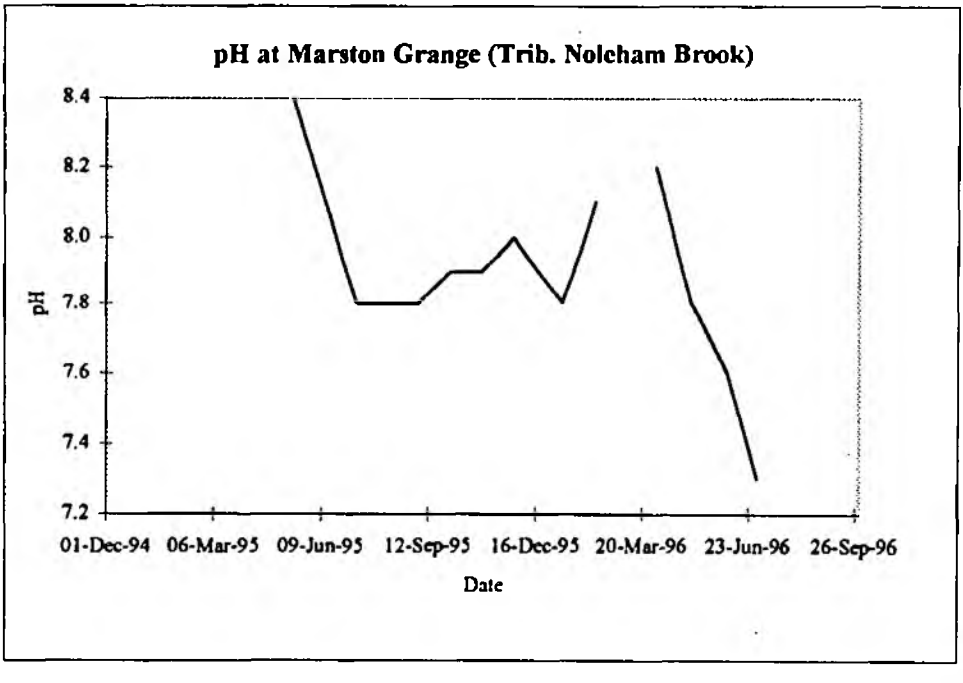


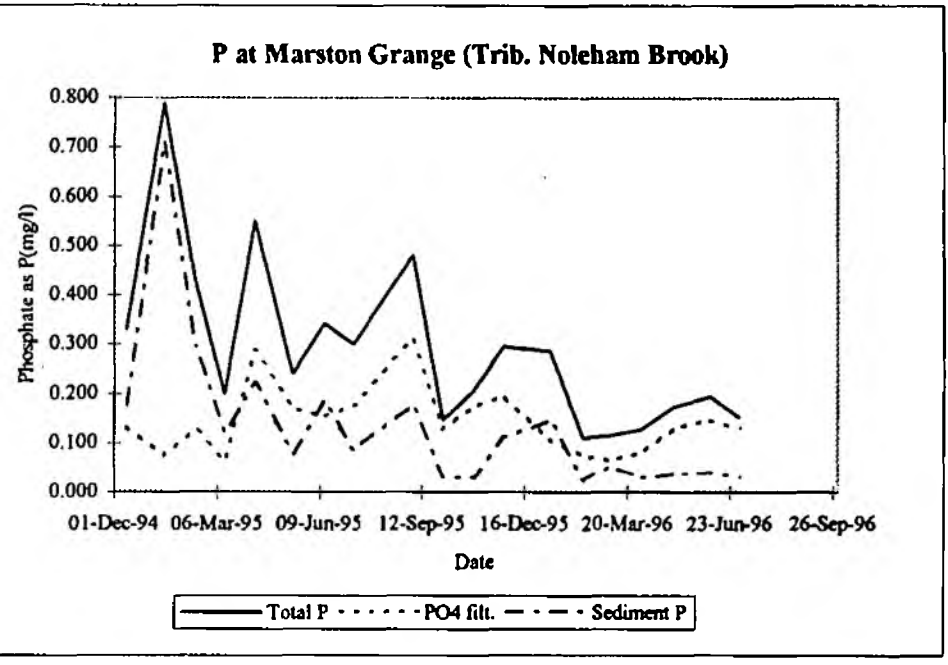
(Figure 81 cont.)

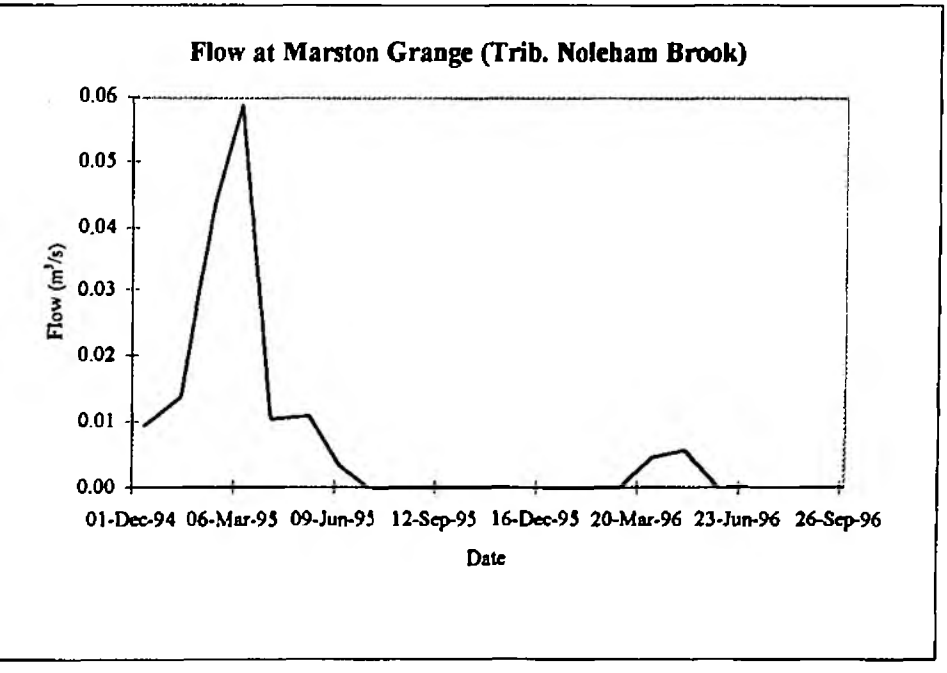
Figure 82 Marston Grange (Trib. Noleham Brook)



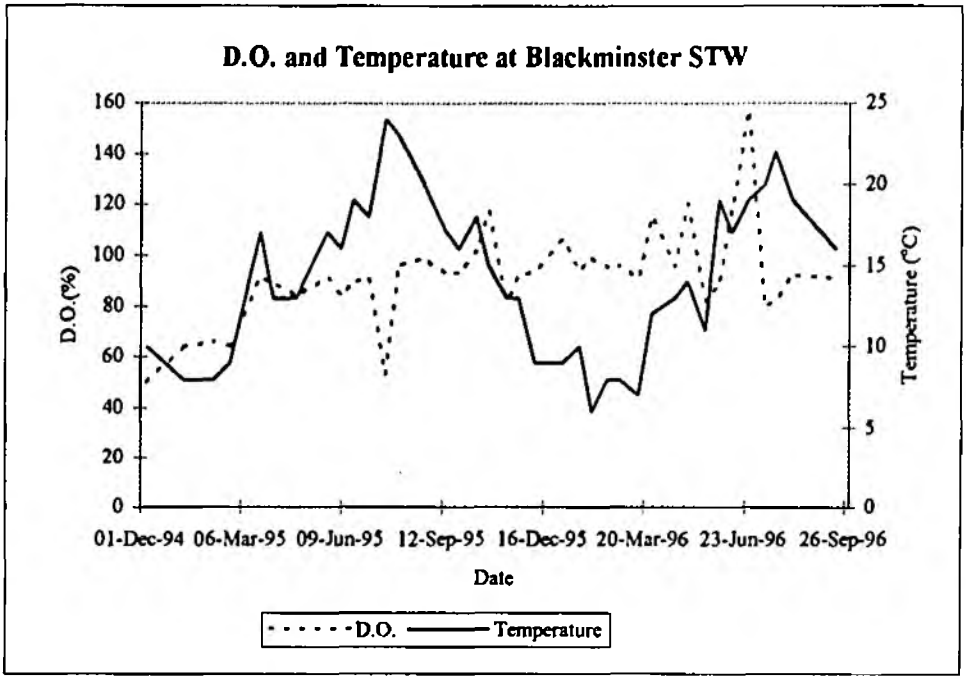

N at Marston Grange (Trib. Nolcham Brook)
18.000
16.000
14.000
12.000
10.000
8.000
6.000
4.000
2.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

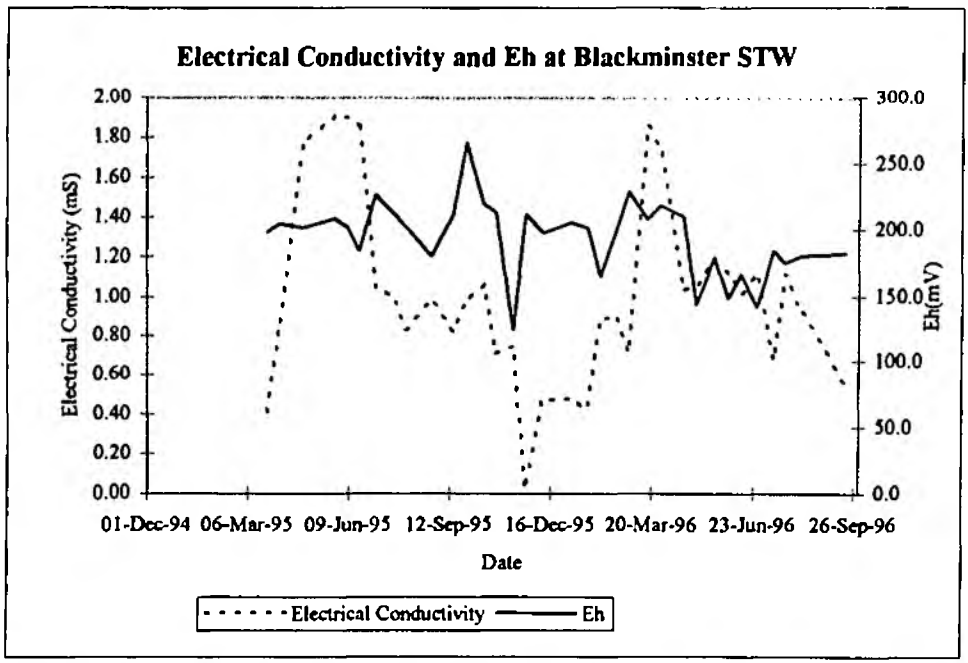

pH at Marston Grange (Trib. Nolcham Brook)
8.4
8.2
8.0
7.8
7.6
7.4
7.2
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

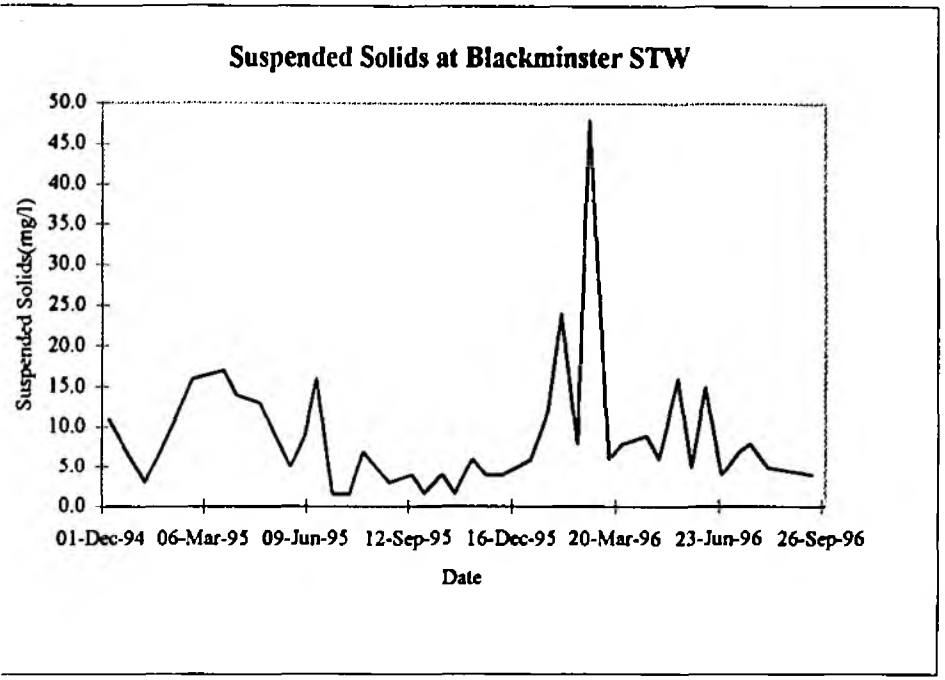




(Figure 82 cont.)


D.O. and Temperature at Blackminster STW
D.O.(%)
Temperature (°C)
160
140
120
100
80
60
40
20
0
25
20
15
10
5
0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
D.O.
Temperature


Electrical Conductivity and Eh at Blackminster STW
Electrical Conductivity (mS)
Eh(mV)
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
300.0
250.0
200.0
150.0
100.0
50.0
0.0
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
Electrical Conductivity
Eh



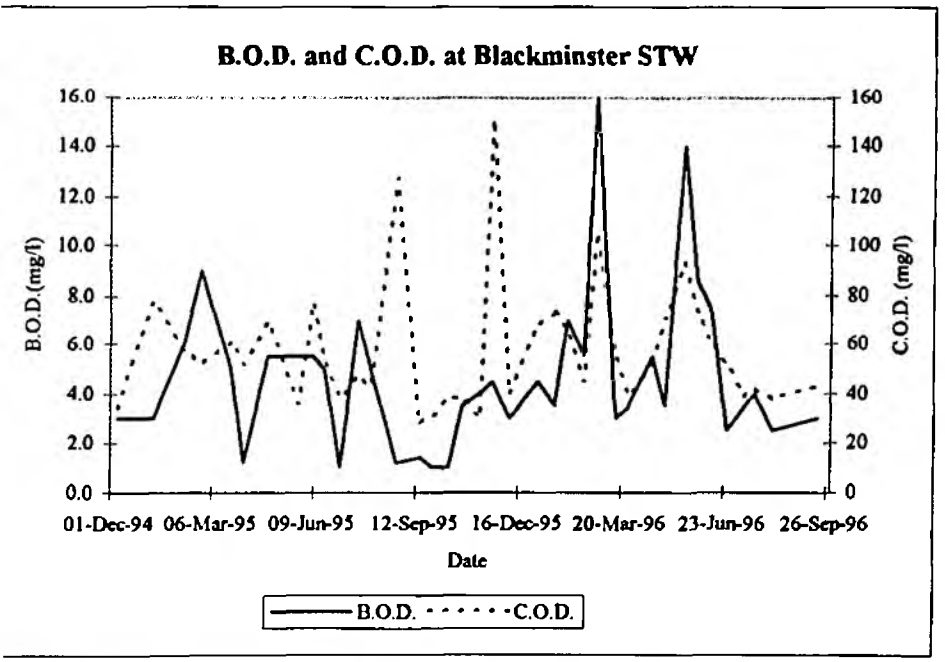
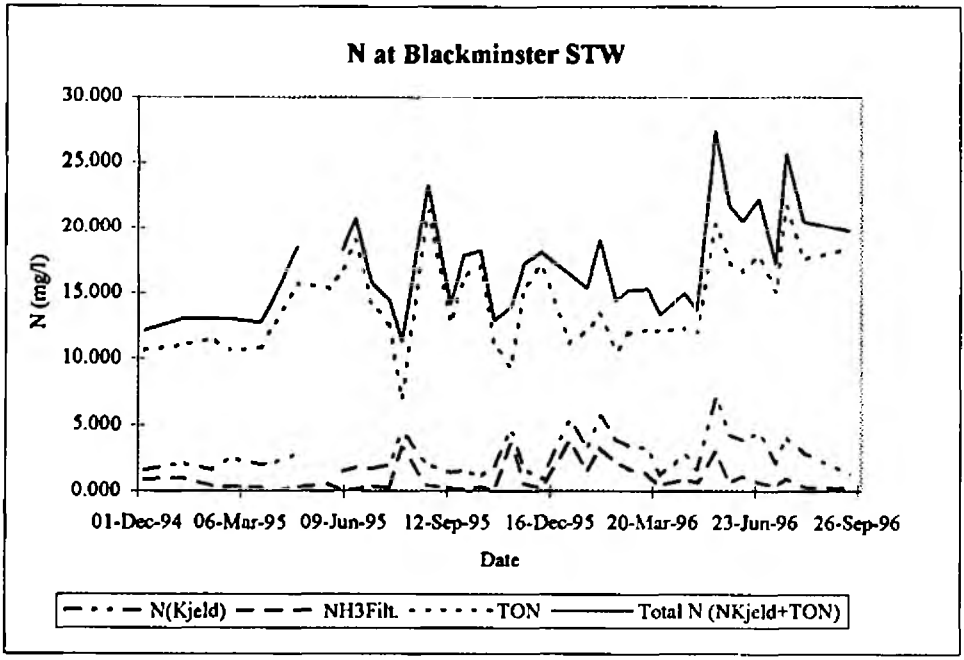
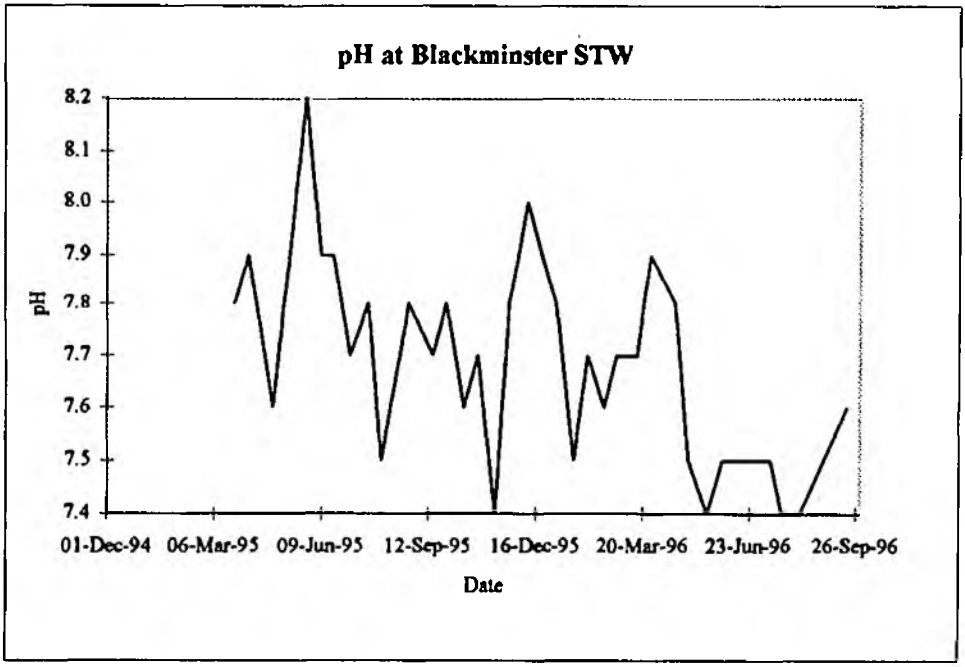
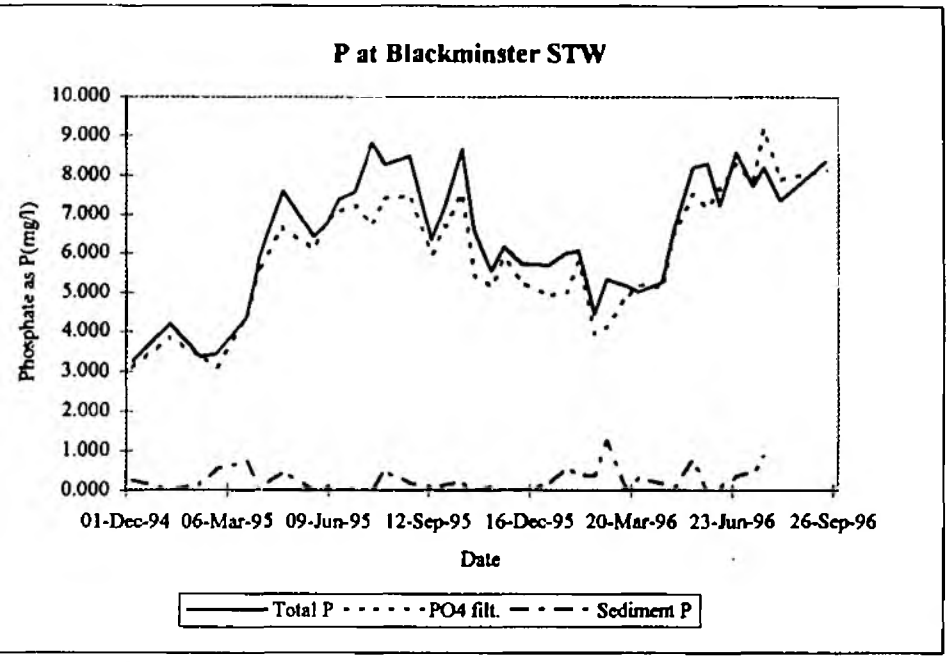
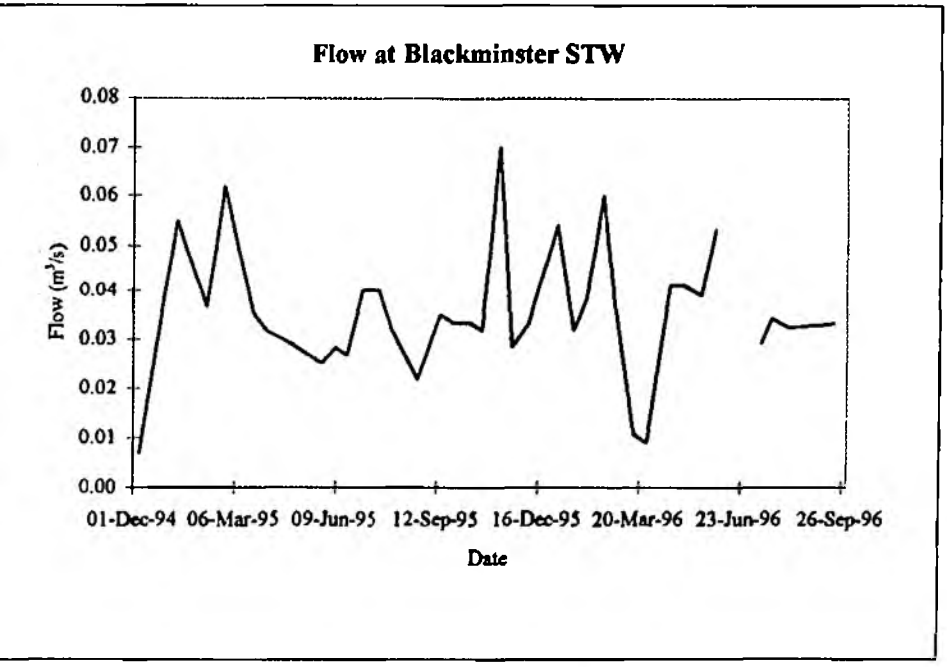


Figure 83 Blackminster STW


N at Blackminster STW
30.000
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)

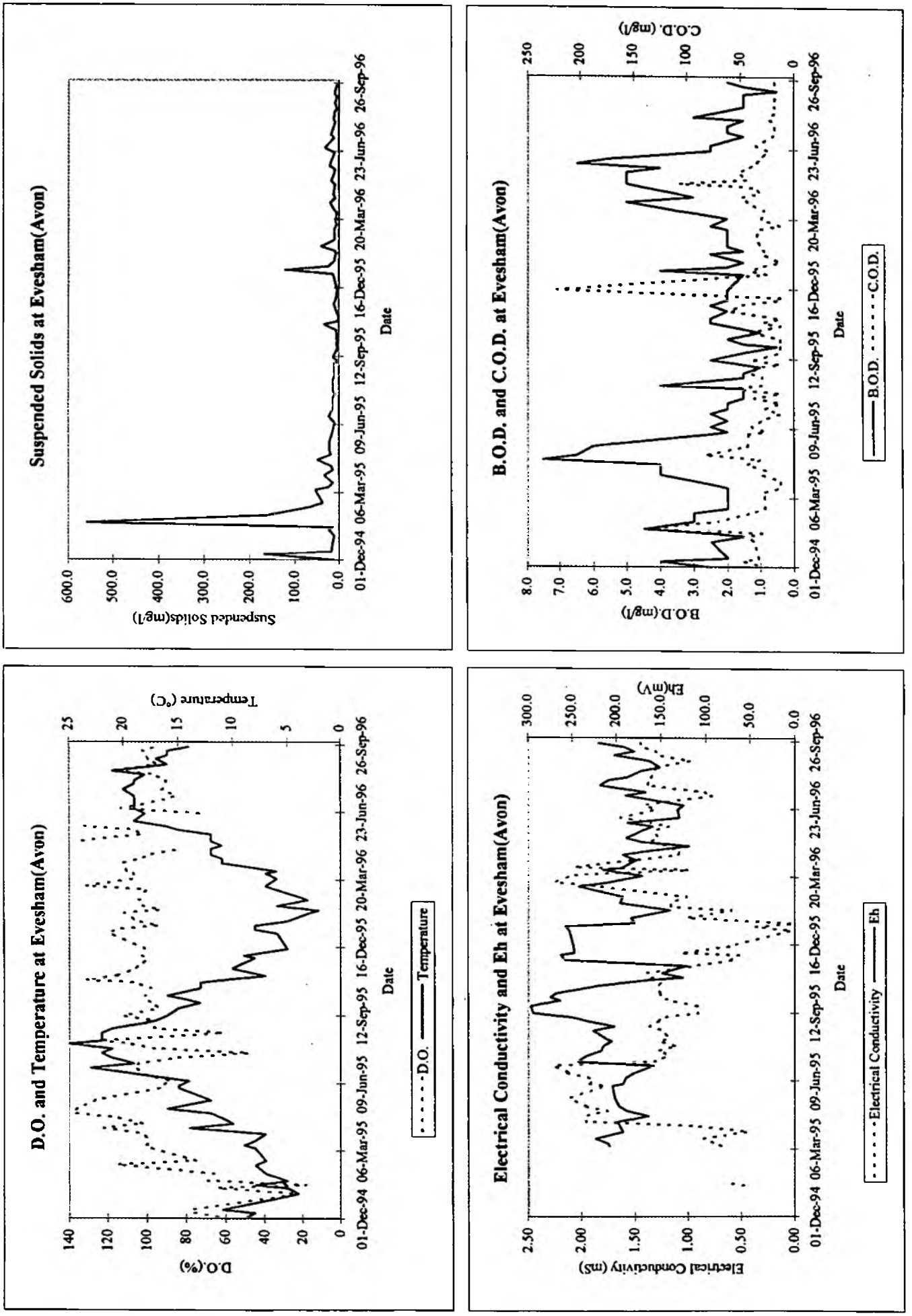

pH at Blackminster STW
8.2
8.1
8.0
7.9
7.8
7.7
7.6
7.5
7.4
pH
01-Dec-94
06-Mar-95
09-Jun-95
12-Sep-95
16-Dec-95
20-Mar-96
23-Jun-96
26-Sep-96
Date

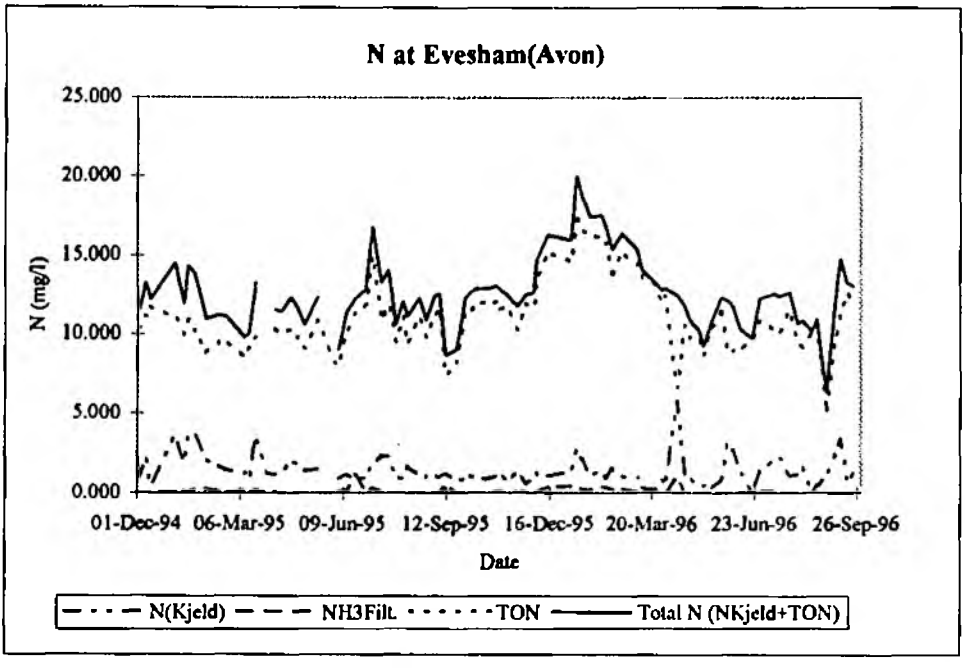


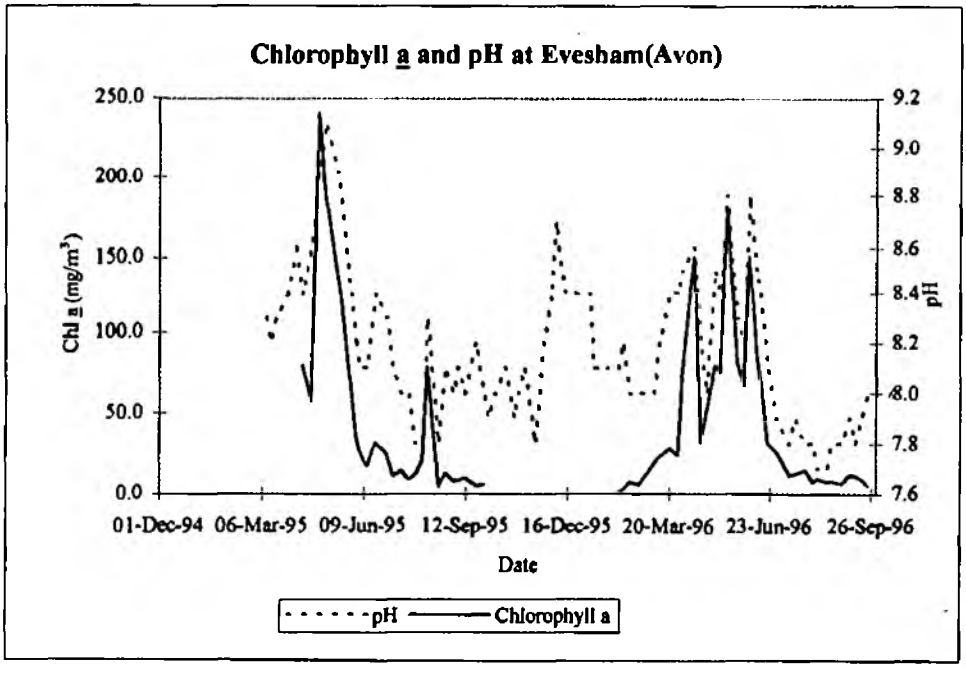


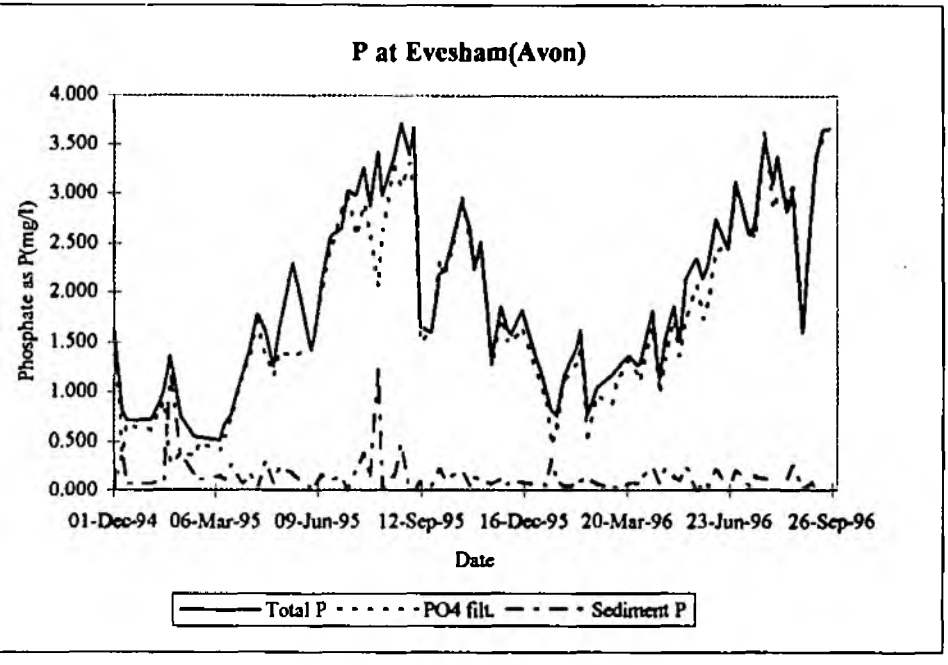
(Figure 83 cont.)

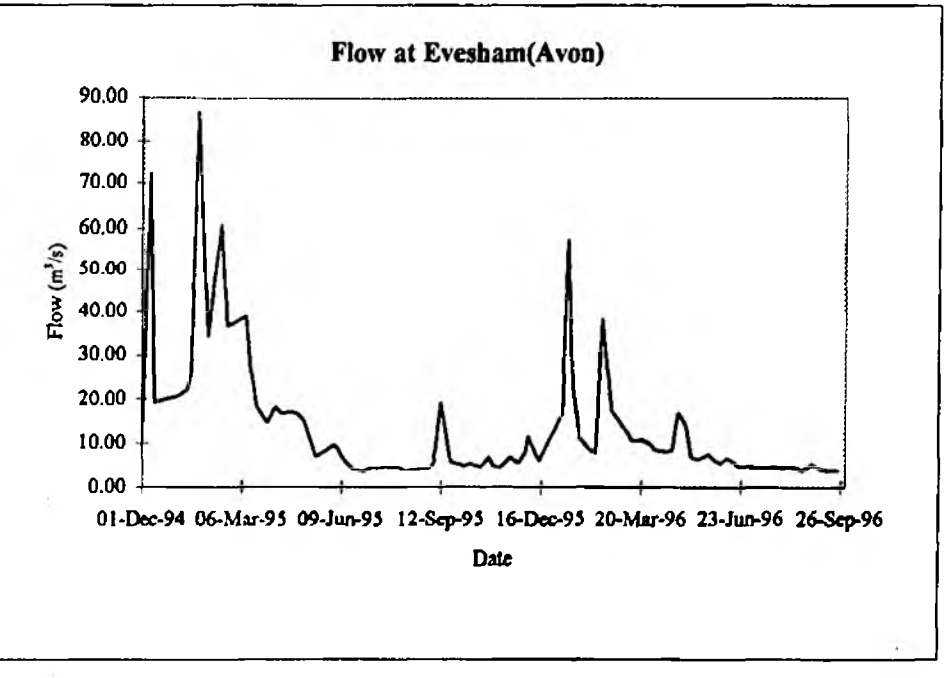
Figure 84 Evesham (Avon)




N at Evesham(Avon)
25.000
20.000
15.000
10.000
5.000
0.000
N (mg/l)
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
N(Kjeld)
NH3Filt.
TON
Total N (NKjeld+TON)


Chlorophyll a and pH at Evesham(Avon)
250.0
200.0
150.0
100.0
50.0
0.0
Chl a (mg/m3)
9.2
9.0
8.8
8.6
8.4
8.2
8.0
7.8
7.6
pH
01-Dec-94 06-Mar-95 09-Jun-95 12-Sep-95 16-Dec-95 20-Mar-96 23-Jun-96 26-Sep-96
Date
pH
Chlorophyll a





(Figure 84 cont.)