

NRA Wales 70

BATHING WATERS REPORT

1991

ENVIRONMENT AGENCY

129010

NRA WELSH REGION

1991 BATHING WATER SURVEY

1. BACKGROUND

- 1.1 EC Directives are agreements between the EC and Member States. Thus the interpretation of them at national level, their adoption into national law, and accountability for compliance with the terms of the directives, lies entirely with national governments.
- 1.2 The EC Bathing Waters Directive (76/160/EEC) was intended primarily to safeguard public health and the environment by reducing the pollution of bathing waters and protecting such waters against further deterioration. Under the Water Act 1989, the NRA has been given the responsibility to carry out the necessary monitoring programmes in relation to certain water-related directives, which include the Bathing Waters directive, in England and Wales. The results from these monitoring programmes in Wales are submitted to the Welsh Office (WO) and the Department of the Environment (DoE). It is for such Government Departments, however, to interpret this and other such EC Directives within England and Wales, and it follows from the preceding paragraph that only they can assess 'compliance' or otherwise with the Directives.
- 1.3 When Directive (76/160/EEC) was first adopted, only a limited number of bathing waters were identified by the UK Government. A large list of bathing waters has since been added to the initial list, and all these are included in the Government's report to the EC. If bathing waters have not been included in this report then they do not come within the terms of the Directive and thus, by definition, cannot be said to comply, or fail to comply, with its conditions. A number of non-identified bathing waters are, however, routinely monitored by the NRA and the results are included in this report for comparison.
- 1.4 The Directive specifies a range of water quality standards which should be achieved in identified bathing waters and indicates the required monitoring frequency. These standards fall into two categories, mandatory (I) and guideline (G) standards, details of the requirements for compliance with which are given in Appendix 1.
- 1.5 The Bathing Waters (Classification) Regulations 1991 was published as a Statutory Instrument on 9th August 1991. The 'Notice' and 'Direction' to the NRA have not yet been implemented so the Regulations are not yet part of UK law.

- 1.6 The Government currently uses the E.coli and total coliforms "I" standards as the basis for determining UK compliance with the Directive. Additional microbiological "I" standards concern the occurrence of Salmonella, and enteroviruses and in the Welsh Region a limited sampling programme is undertaken for these determinands. Physico-chemical "I" standard parameters are tested as indicated in Appendix 1. The occurrence of faecal streptococci is also examined, although this parameter only has a non-mandatory "G" standard in the Directive. Welsh Region has been granted a derogation for transparency at all its bathing waters from 1991.

2. SAMPLING PROGRAMME

- 2.1 The 51 bathing waters in the Welsh region currently identified by the UK Government as falling within the scope of the Directive are displayed on Figure 1 and listed in Appendix 2. 50 of these bathing waters are in Wales and one, West Kirby, is in England.
- 2.2 The Government requires that these bathing waters are monitored in accordance with the requirements of the Bathing Waters Directive and the data reported to the WO and DOE by November of each year. This report summarises the results of the monitoring carried out during the 1991 bathing season.
- 2.3 Non-identified bathing waters (Appendix 3) are monitored in order to establish the impact of local discharges and to ensure that the water quality in these areas does not deteriorate.
- 2.4 A full report on the current status of Directive 76/160/EEC compliance in England and Wales will be published by the NRA in 1992.

3. 1991 MONITORING PROGRAMME FOR BATHING WATERS IDENTIFIED AS FALLING WITHIN THE TERMS OF THE BATHING WATERS DIRECTIVE

- 3.1 Monitoring is confined to the period 1st May - 30th September, which includes two weeks sampling prior to the DOE identified bathing season (15 May - 30th September).
- 3.2 By the beginning of the 1991 bathing season DOE had not issued formal detailed implementation advice for this Directive. The monitoring programme was therefore developed using informal guidance from DOE and previous years' experience incorporating detailed comment from HMIP on specific aspects.

- 3.3 Summary data on quality collected from the 51 identified bathing waters are reported in Appendix 4. These results, together with those from elsewhere in the UK have been published by the Government.
- 3.4 Table 1(a) summarises E.coli and total coliform sample statistics and compliance, as reported by the DOE, with the "I" values for the 51 identified Welsh Region bathing waters in 1991. These results indicate that overall 45 (88%) complied with the combined standard.
- 3.5 Table 1(b) summarises Salmonella sample statistics for the 51 identified Welsh Region bathing waters in 1991. The results indicate that at 29 (57%) no Salmonella were identified.
- 3.6 Table 1(c) summarises entero-virus sample statistics for the 51 identified Welsh Region bathing waters in 1991. The results indicate that at 33 (65%) no entero-virus were identified.
- 3.7 Table 1(d) summarises faecal streptococci sample statistics for the 51 identified Welsh Region bathing waters tested in 1991. The results indicate that 17 (33%) had <three samples with a value >100 faecal streptococci per 100 ml with no consecutive failures.

4. 1991 MONITORING PROGRAMME FOR BATHING WATERS NOT IDENTIFIED UNDER THE TERMS OF THE BATHING WATERS DIRECTIVE

- 4.1 A total of 142 non-identified bathing waters were monitored during 1991. These results have been reported to the WO. Wherever resources allowed, monitoring was undertaken at, at least, fortnightly intervals and, as in past years assistance with sampling was provided by some Local Authorities. Appendix 5 gives summary statistical details for this monitoring programme.
- 4.2 A summary of the analysis at each of these waters for E.coli and total coliforms is shown in Table 2(a). This shows that 97 (68%) had <two samples with a value >2000/100 ml for E.coli and that 113 (80%) had <two samples with a value >10000/100 ml for total coliforms. A total of 96 non-identified bathing waters (68%) had <two samples with >2000 E.coli and >10000 total coliforms per 100 ml.
- 4.3 A summary of the analysis for faecal streptococci is shown in Table 2(b). The results show that 44 (31%) had <three samples with a value of >100 faecal streptococci per 100 ml with no consecutive failures.

5. REMEDIAL MEASURES REQUIRED TO MEET LONG TERM OBJECTIVE

- 5.1 The long term objective is for all identified bathing waters to comply with the standards laid down in the Directive. In order to facilitate this an "EC Bathing Waters Improvement Strategy" has been drawn up by NRA Welsh Region to identify and prioritise the remedial works required at identified bathing waters to ensure that Dwr Cymru discharges are consistent with compliance, at most bathing waters, with the E.coli and total coliform standards by 1995. The requirements for remedial works at non-identified bathing waters are currently being reviewed.

Table 3 compares the compliance of the identified bathing waters over the period 1986 - 1991 (the assessment was carried out differently prior to 1986 and therefore cannot be included). It is important to realise that slightly different criteria were used for 1986 and 1987 where a look up table approach, which also entailed reduced sampling effort, was adopted by the Government. Therefore care must be taken when making any comparison of compliance between 1986/87 and subsequent years.

It must be emphasised that compliance is considered an unreliable indication of trends due to the statistical limitations of such a small data set. Variation in compliance from year to year therefore does not necessarily indicate genuine improvements or deteriorations.

In addition Table 3 indicates those bathing waters which are included in the Dwr Cymru cyf. investment programme designed to meet compliance by the UK with its obligations under the EC Bathing Waters Directive.

- 5.2 Table 4 gives details of remedial measures which have been completed in 1991.

6. SUMMARY

- 6.1 As reported by the DOE, a total of 45 out of the 51 identified bathing waters complied with the E.coli and total coliform "I" standards specified in the Directive (88% of the total).
- 6.2 Of the 142 non-identified bathing waters sampled in 1991 96 had <two samples with >2000 E.coli and >10000 total coliforms per 100 ml (68%).
- 6.3 Summary table showing compliance with the combined E.coli and total coliform standards:-

Bathing Water	Number	Number with <two samples with >2000 <u>E.coli</u> and >10000 total coliforms per 100 ml	Percent
EC	51	45	88%
non EC	142	96	68%

Figure 1

LOCATION OF IDENTIFIED BATHING WATER SAMPLING SITES IN WELSH REGION

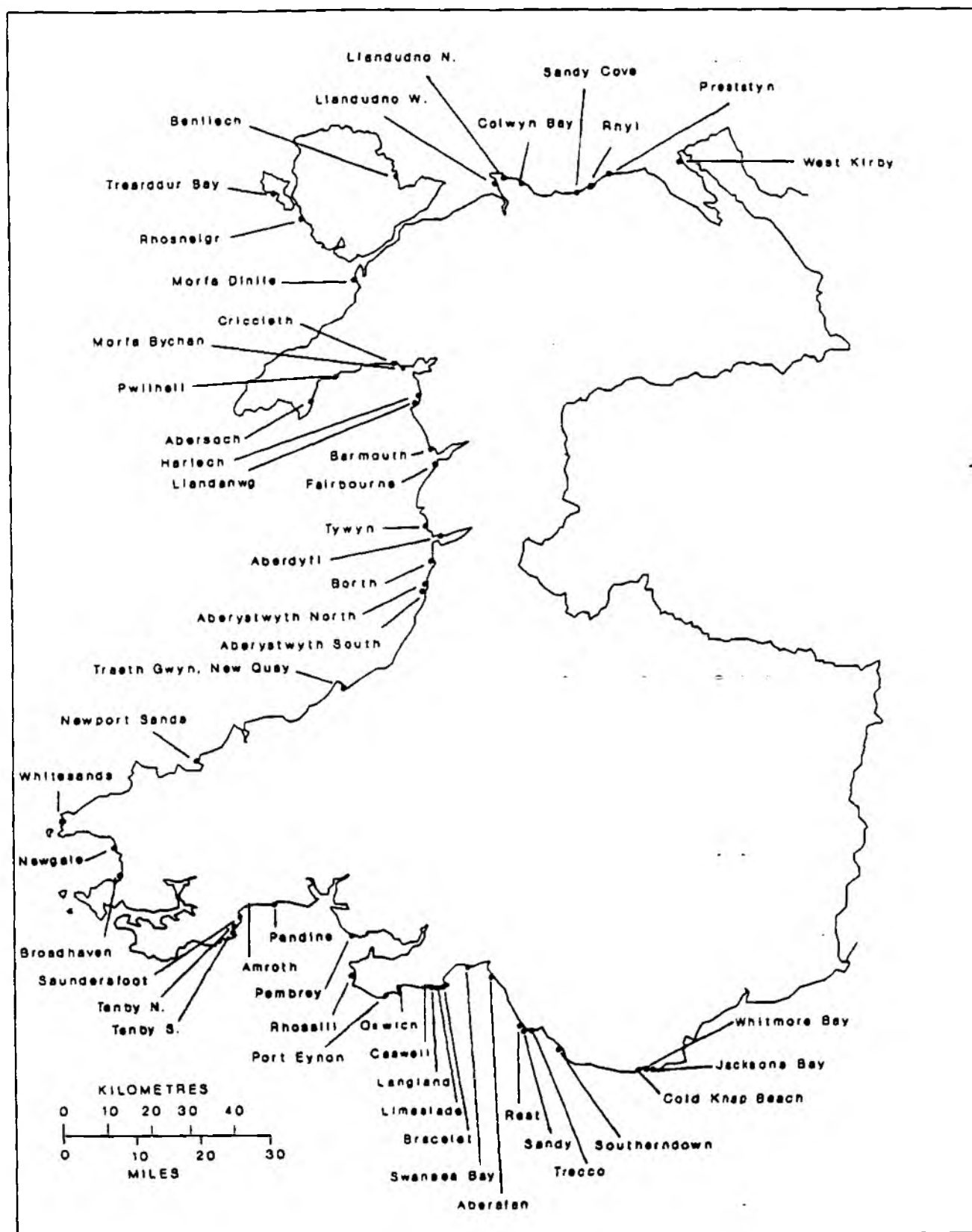


Table 1a

COMPLIANCE. AS COMPUTED BY THE DOE, OF IDENTIFIED BATHING WATERS WITH "I" VALUES FOR E.COLI AND TOTAL COLIFORMS

<u>Bathing Water</u>	<u>E.coli</u>			<u>Total Coliforms</u>			<u>Overall</u>
	<u>No. Samples</u>	<u>No. Fail</u>	<u>Pass/Fail</u>	<u>No. Samples</u>	<u>No. Fail</u>	<u>Pass/Fail</u>	<u>Pass/Fail</u>
<u>South East</u>							
Jacksons Bay	21	2	F	21	0	P	F
Whitmore Bay	21	0	P	21	0	P	P
Cold Knap Beach	21	0	P	21	0	P	P
<u>South West</u>							
Southerndown Beach	22	0	P	22	0	P	P
Trecco Bay	22	0	P	22	0	P	P
Sandy Bay	22	0	P	22	0	P	P
Rest Bay	22	0	P	22	0	P	P
Aberafan Slip	22	0	P	22	0	P	P
Swansea Bay	22	0	P	22	0	P	P
Bracelet Bay	22	0	P	22	0	P	P
Limeslade Bay	22	0	P	22	0	P	P
Langland Bay	22	0	P	22	0	P	P
Caswell Bay	22	0	P	22	0	P	P
Oxwich Bay	22	0	P	22	0	P	P
Port Eynon Bay	22	0	P	22	0	P	P
Rhossili Beach	22	0	P	22	0	P	P
Pembrey Beach	22	0	P	22	0	P	P
Pendine Beach	20	0	P	20	0	P	P
Amroth Beach	20	0	P	20	0	P	P
Saundersfoot Beach	20	1	P	20	1	P	P
Tenby N. Beach	20	0	P	20	0	P	P
Tenby S. Beach	20	1	P	20	0	P	P
Broadhaven	21	1	P	21	0	P	P
Newgale Beach	21	0	P	21	0	P	P
Whitesands	21	0	P	21	0	P	P
Newport Sands N.	21	0	P	21	0	P	P
Traeth Gwyn, New Quay	21	0	P	21	1	P	P
Aberystwyth S. Beach	21	1	P	21	0	P	P
Aberystwyth N. Beach	21	1	P	21	0	P	P
<u>North</u>							
Aberdyfi	21	1	P	21	0	P	P
Borth	21	0	P	21	0	P	P
Tywyn	21	1	P	21	1	P	P
Fairbourne Beach	21	0	P	21	0	P	P
Barmouth	21	0	P	21	0	P	P
Llandanwg Beach	21	0	P	21	0	P	P
Harlech	21	1	P	21	0	P	P
Morfa Bychan	21	0	P	21	0	P	P
Criccieth Beach E.	21	1	P	21	0	P	P
Pwllheli Beach	21	0	P	21	0	P	P
Abersoch	21	0	P	21	0	P	P
Morfa Dinlle	23	0	P	24	0	P	P
Benllech	21	3	F	21	0	P	F
Trearddur Bay	22	0	P	22	0	P	P
Rhosneigr	22	0	P	22	0	P	P
Llandudno W.	22	9	F	22	7	F	F
Llandudno N.	22	1	P	22	0	P	P
Colwyn Bay	22	1	P	22	0	P	P
Sandy Cove/Kinmel Bay	22	4	F	22	4	F	F
Rhyl	22	8	F	22	8	F	F
Prestatyn	22	1	P	22	1	P	P
W. Kirby	22	3	F	22	1	P	F

Table 1b

ANALYSIS OF IDENTIFIED BATHING WATERS RESULTS FOR SALMONELLA

<u>Bathing Water</u>	<u>Number Samples</u>	<u>Number of Positive Results</u>
<u>South East</u>		
Jacksons Bay	5	3
Whitmore Bay	5	1
Cold Knap Beach	5	1
<u>South West</u>		
Southerndown Beach	5	0
Trecco Bay	5	1
Sandy Bay	5	0
Rest Bay	5	1
Aberafan Slip	5	1
Swansea Bay	5	2
Bracelet Bay	5	1
Limeslade Bay	5	2
Langland Bay	5	2
Caswell Bay	5	1
Oxwich Bay	5	0
Port Eynon Bay	5	0
Rhossili Beach	5	0
Pembrey Beach	5	0
Pendine Beach	5	1
Amroth Beach	5	1
Saundersfoot Beach	5	1
Tenby N. Beach	5	0
Tenby S. Beach	5	1
Broadhaven	5	1
Newgale Beach	5	1
Whitesands	5	0
Newport Sands N.	5	0
Traeth Gwyn, New Quay	5	1
Aberystwyth S. Beach	5	1
Aberystwyth N. Beach	5	0
<u>North</u>		
Aberdyfi	5	1
Borth	5	0
Tywyn	5	0
Fairbourne Beach	5	0
Barmouth	5	0
Llandanwg Beach	5	0
Harlech	5	0
Morfa Bychan	5	0
Criccieth Beach E.	5	0
Pwllheli Beach	5	1
Abersoch	5	0
Morfa Dinlle	5	0
Benllech	5	0
Trearddur Bay	5	0
Rhosneigr	5	0
Llandudno W.	5	0
Llandudno N.	5	0
Colwyn Bay	5	0
Sandy Cove/Kinmel Bay	5	0
Rhyl	5	1
Prestatyn	5	0
W. Kirby	5	0

Table 1c

ANALYSIS OF IDENTIFIED BATHING WATERS RESULTS FOR ENTERO-VIRUS

<u>Bathing Water</u>	<u>Number Samples</u>	<u>Number of Positive Results</u>
<u>South East</u>		
Jacksons Bay	2	0
Whitmore Bay	2	0
Cold Knap Beach	2	1
<u>South West</u>		
Southerndown Beach	2	0
Trecco Bay	2	0
Sandy Bay	2	0
Rest Bay	2	0
Aberafan Slip	2	0
Swansea Bay	2	1
Bracelet Bay	2	1
Limeslade Bay	2	0
Langland Bay	2	1
Caswell Bay	2	1
Oxwich Bay	2	0
Port Eynon Bay	2	1
Rhossili Beach	2	1
Pembrey Beach	2	0
Pendine Beach	2	0
Amroth Beach	2	0
Saundersfoot Beach	2	1
Tenby N. Beach	2	1
Tenby S. Beach	2	0
Broadhaven	2	2
Newgale Beach	2	0
Whitesands	2	1
Newport Sands N.	2	0
Traeth Gwyn, New Quay	2	0
Aberystwyth S. Beach	2	0
Aberystwyth N. Beach	2	0
<u>North</u>		
Aberdyfi	2	0
Borth	2	0
Tywyn	2	0
Fairbourne Beach	2	0
Barmouth	2	1
Llandanwg Beach	2	0
Harlech	2	0
Morfa Bychan	2	0
Criccieth Beach E.	2	1
Pwllheli Beach	2	0
Abersoch	2	0
Morfa Dinlle	2	0
Benllech	2	1
Trearddur Bay	2	0
Rhosneigr	2	0
Llandudno W.	2	2
Llandudno N.	2	0
Colwyn Bay	2	1
Sandy Cove/Kinmel Bay	2	0
Rhyl	2	1
Prestatyn	2	1
West Kirby	2	0

Table 1d

ANALYSIS OF IDENTIFIED BATHING WATERS RESULTS FOR FAECAL STREPTOCOCCI

<u>Bathing Water</u>	<u>Number Samples</u>	<u>Number of samples >100/100 ml</u>
<u>South East</u>		
Jacksons Bay	21	18
Whitmore Bay	21	17
Cold Knap Beach	21	2
<u>South West</u>		
Southerndown Beach	22	6
Trecco Bay Central	22	4
Sandy Bay Central	22	3
Rest Bay	22	2
Aberafan Slip	22	3
Swansea Bay	22	14
Bracelet Bay	22	9
Limeslade Bay	22	8
Langland Bay	22	1
Caswell Bay	22	1
Oxwich Bay	22	0
Port Eynon	22	1
Rhossili Beach	22	1
Pembrey Beach	22	0
Pendine Beach	19	1
Amroth Beach	20	1
Saundersfoot Beach	20	9
Tenby N.Beach	20	4
Tenby S.Beach	20	6
Broadhaven	21	7
Newgale Beach	21	1
Whitesands	21	2
Newport Sands N.	21	4
Traeth Gwyn, New Quay	20	4
Aberystwyth S.Beach	21	9
Aberystwyth N.Beach	21	4
<u>North</u>		
Aberdyfi	21	7
Borth	21	3
Tywyn	21	3
Fairbourne Beach	21	1
Barmouth	21	3
Llandanvg Beach	21	3
Harlech	21	5
Morfa Bychan	21	2
Criccieth Beach E.	21	6
Pwllheli Beach	21	2
Abersoch	21	4
Morfa Dinlle	24	2
Benllech	21	12
Trearddur Bay	22	4
Rhosneigr	22	0
Llandudno W.	22	15
Llandudno N.	22	5
Colwyn Bay	22	8
Sandy Cove/Kinmel Bay	22	11
Rhyl	21	12
Prestatyn	22	6
West Kirby	22	11

Table 2a

ANALYSIS OF NON-IDENTIFIED BATHING WATERS RESULTS FOR E.COLI AND TOTAL COLIFORMS

<u>Bathing Water</u>	<u>E. Coli</u>		<u>Total Coliforms</u>	
	<u>No. Samples</u>	<u>No.with >2000 per 100 ml</u>	<u>No. Samples</u>	<u>No.with >10000 per 100 ml</u>
<u>South East</u>				
St Mary's Well Bay	21	5	21	2
Bendricks Beach	21	4	21	5
Whitmore Bay (19033)	21	0	21	0
Whitmore Bay (19035)	21	1	21	0
Little Island	21	0	21	0
Watchtower Bay	21	0	21	1
Fontygary Bay	21	2	21	2
<u>South West</u>				
Llantwit Major	27	3	27	1
Ogmore Central	22	2	22	2
Newton Bay Porthcawl	22	2	22	0
Margam Sands	21	0	21	0
Aberafan E.	21	1	21	1
Aberafan W.	21	1	21	1
Jersey Marine	21	1	21	0
Swansea Bay (39103)	22	2	22	0
Swansea Bay (39101)	20	1	20	0
Swansea Bay (39104)	21	2	21	1
Langland Bay E.	22	0	22	0
Brandy Cove	22	0	22	0
Crawley Wood	16	0	16	0
Broughton Beach	21	0	21	0
Llanelli Beach	21	15	21	14
Burry Port Beach E.	21	0	21	0
Pendine W.	20	0	20	0
Amroth Beach E.	20	0	20	0
Amroth Beach W.	20	0	20	0
Coppet Hall	20	2	20	0
Saundersfoot E.	20	1	20	2
Saundersfoot W.	20	1	20	1
Tenby N. Beach	17	0	17	0
Tenby S. (39022)	20	0	20	0
Tenby S. (39023)	20	0	20	0
Tenby S. (39025)	20	0	20	0
Lydstep	20	0	20	0
Manorbier Beach W.	20	0	21	0
Freshwater E. Beach	20	0	20	0
Broadhaven S.	20	0	20	0
Llanreath Bay	20	1	20	0
Neyland	20	3	20	1
Milford Beach	20	1	20	1
Gelliswick	19	2	19	0
Sandy Haven	20	0	20	0
Dale	20	0	20	0
Marloes	20	0	20	0
Musselwick	5	0	5	0
St Brides Haven	20	0	20	0
Newgale S.	21	0	21	0
Newgale N.	21	0	21	0
Caerfai	20	0	20	0

Table 2a (contd)

	<u>E. Coli</u>		<u>Total Coliforms</u>	
	<u>No.</u> <u>Samples</u>	<u>No. with >2000</u> <u>per 100 ml</u>	<u>No.</u> <u>Samples</u>	<u>No. with >10000</u> <u>per 100 ml</u>
<u>Bathing Water</u>				
Abereiddy	20	0	20	0
Goodwick Harbour	20	0	20	0
Goodwick Beach	20	0	20	0
Newport S.	21	0	21	0
Poppit Sands (39067)	20	0	20	0
Poppit Sands (39068)	20	0	20	0
Patch	21	5	21	7
Craig-y-Gwbert	21	8	21	4
Mwnt	21	0	21	1
Aberporth E.	21	4	21	2
Aberporth Slip	21	2	21	4
Tresaith	21	0	21	0
Penbryn	19	2	19	1
Llangranog Bay	21	3	21	1
Newquay N.	21	0	21	0
Newquay S. Beach	21	0	21	0
Llanina Beach	20	0	20	0
Little Quay	20	0	20	0
Gilfach yr Halen	21	0	21	0
Aberaeron S.	21	0	21	0
Aberaeron 4th Groyne	20	1	20	0
Aberaeron Beach N.	21	2	21	0
Aberarth	21	1	21	0
Llanon	21	0	21	0
Llansantffaid	21	0	21	0
Llanrhystud	21	0	21	0
Morfa Bychan	21	0	21	0
Tanybwllch	18	0	18	0
Aberystwyth S.	21	8	21	3
Aberystwyth Slip	21	4	21	2
Clarach S.	21	3	21	8
Clarach N.	21	2	21	3
<u>North</u>				
Ynyslas E.	21	0	21	1
Ynyslas N. Groyne	21	0	21	0
Aberdyfi (20170)	21	3	21	1
Aberdyfi (20172)	21	2	21	2
Llwyngwril	21	6	21	3
Barmouth	21	0	21	0
Llanaber	21	0	21	0
Llanenddwyn	21	0	21	0
Garreg Wen	21	3	21	3
Black Rock Sands	21	0	21	0
Criccieth W.	21	6	21	2
Pwllheli	21	1	21	0
Llanbedrog	21	2	21	1
Abersoch (22550)	20	0	20	0
Abersoch (23346)	21	0	21	0
Machroes	21	1	21	1
Porth Ceiriad	21	0	21	0
Porth Neigwl	22	0	23	0
Aberdaron	22	0	23	0
Porth Oer	22	0	23	0
Porth Iago	22	1	23	0
Porth Colmon	22	1	23	0

Table 2a (contd)

<u>Bathing Water</u>	<u>E. Coli</u>		<u>Total Coliforms</u>	
	<u>No.</u> <u>Samples</u>	<u>No. with >2000</u> <u>per 100 ml</u>	<u>No.</u> <u>Samples</u>	<u>No. with >10000</u> <u>per 100 ml</u>
Porth Tywyn	22	0	23	0
Porth Dinllaen	22	1	23	1
Porth Nefyn	21	1	22	0
Pontllyfni	22	0	23	0
Dinas Dinlle	22	0	23	0
Plas Menai	22	1	23	0
Port Dinorwic	22	3	23	3
Menai Br. Pier	22	5	23	2
Rhosneigr	22	1	22	1
Traeth Crigyll	22	1	22	0
Porth Gwr Mawr	22	20	22	18
Holyhead Newry	22	1	22	1
Penrhos Beach	22	1	22	0
Cemaes Bay	22	0	22	0
Benllech	22	1	22	0
Red Wharf Bay	22	2	22	0
Llanddona	22	0	22	0
Beaumaris Pier	22	0	23	0
Beaumaris (27829)	22	3	23	3
Llanfairfechan	22	0	23	0
Penmaenmawr E.	22	1	23	0
Penmaenmawr (23006)	22	0	23	0
Penmaenmawr (23005)	22	1	23	1
Deganwy	22	10	22	4
Llandudno W Shore	22	7	22	3
Llandudno N Shore	22	3	22	1
Penrhyn Bay	22	3	22	3
Colwyn Bay (25041)	22	2	22	2
Colwyn Bay (25042)	22	1	22	0
Llanddulas	22	1	22	1
Abergele	22	1	22	0
Kinmel Bay	22	6	22	3
Rhyl Splash Point	22	6	22	2
Ffrith Beach	22	2	22	0
Prestatyn, Barkby	22	3	22	1
Point of Ayr	22	1	22	1
Thurstaston Station Rd.	22	5	22	2
Caldycroft Drive	22	5	22	1
W Kirby at Marine Lake	22	0	22	0

Table 2b

ANALYSIS OF NON-IDENTIFIED BATHING WATERS RESULTS FOR FAECAL STREPTOCOCCI

<u>Bathing Water</u>	<u>Number Samples</u>	<u>Number of samples >100/100 ml</u>
<u>South East</u>		
St Mary's Well Bay	21	21
Bendricks Beach	21	19
Whitmore Bay (19033)	21	12
Whitmore Bay (19035)	21	15
Little Island	21	10
Watchtower Bay	21	7
Fontygary Bay	21	8
<u>South West</u>		
Llantwit Major	27	9
Ogmore Central	22	7
Newton Bay Porthcawl	22	10
Margam Sands	21	5
Aberafan E.	21	5
Aberafan W.	21	6
Jersey Marine	21	7
Swansea Bay (39103)	22	9
Swansea Bay (39101)	20	14
Swansea Bay (39104)	21	11
Langland Bay E.	22	2
Brandy Cove	22	3
Crawley Wood	16	0
Broughton Beach	21	2
Llanelli Beach	21	16
Burry Port Beach E.	21	3
Pendine W.	20	1
Amroth Beach E.	20	2
Amroth Beach W.	20	3
Coppet Hall	20	10
Saundersfoot E.	20	9
Saundersfoot W.	20	14
Tenby N. Beach	17	1
Tenby S. (39022)	20	2
Tenby S. (39023)	20	6
Tenby S. (39025)	20	4
Lydstep	20	3
Manorbier Beach W.	21	4
Freshwater E. Beach	20	3
Broadhaven S.	20	0
Llanreath Bay	20	9
Neyland	20	11
Milford Beach	20	4
Gelliswick	19	5
Sandy Haven	20	0
Dale	20	2
Marloes	20	2
Musselwick	5	0
St Brides Haven	20	2
Newgale S.	21	3
Newgale N.	21	2
Caerfai	20	0

Table 2b (contd)

<u>Bathing Water</u>	<u>Number Samples</u>	<u>Number of samples >100/100 ml</u>
Abereddy	20	1
Goodwick Harbour	20	1
Goodwick Beach	20	2
Newport S.	21	1
Poppit Sands (39067)	20	1
Poppit Sands (39068)	20	0
Patch	21	9
Craig-y-Gwbert	21	18
Mwnt	21	2
Aberporth E.	21	11
Aberporth Slip	21	6
Tresaith	21	3
Penbryn	19	3
Llangranog Bay	21	10
Newquay N.	21	3
Newquay S.	21	1
Llanina Beach	20	3
Little Quay	20	4
Gilfach yr Halen	21	2
Aberaeron S.	21	9
Aberaeron 4th Groyne	20	13
Aberaeron Beach N.	21	17
Aberarth	21	8
Llanon	21	7
Llansantffaid	21	2
Llanrhystud	21	2
Morfa Bychan	21	2
Tanybwllch	18	3
Aberystwyth S. Beach	21	10
Aberystwyth Slip	21	8
Clarach S.	21	12
Clarach N.	21	9
<u>North</u>		
Ynyslas E.	21	6
Ynyslas N. Groyne	21	0
Aberdyfi (20170)	21	8
Aberdyfi (20172)	21	11
Llwyngwrl	21	7
Barmouth	21	3
Llanaber	21	2
Llanenddwyn	21	0
Garreg Wen	21	9
Black Rock Sands	21	2
Criccieth W.	21	9
Pwllheli	21	1
Llanbedrog	21	7
Abersoch (22550)	20	6
Abersoch (23346)	21	7
Machroes	21	6
Porth Ceiriad	21	0
Porth Neigwl	23	1
Aberdaron	23	1
Porth Oer	23	1
Porth Iago	23	1
Porth Colmon	23	2

Table 2b (contd)

<u>Bathing Water</u>	<u>Number Samples</u>	<u>Number of samples >100/100 ml</u>
Porth Tywyn	23	0
Porth Dinllaen	23	6
Porth Nefyn	22	6
Pontllyfni	23	2
Dinas Dinlle	23	2
Plas Menai	22	4
Port Dinorwic	23	6
Menai Br. Pier	21	12
Rhosneigr	22	3
Traeth Crigyll	22	3
Porth Gwr Mawr	22	22
Holyhead Newry	22	2
Penrhos Beach	22	4
Cemaes Bay	22	8
Benllech	22	7
Red Wharf Bay	22	11
Llanddona	21	1
Beaumaris Pier	23	3
Beaumaris (27829)	23	4
Llanfairfechan	23	3
Penmaenmawr E.	23	3
Penmaenmawr (23006)	23	0
Penmaenmawr (23005)	23	2
Deganwy	23	19
Llandudno W Shore	22	10
Llandudno N Shore	22	16
Penrhyn Bay	22	5
Colwyn Bay (25041)	22	10
Colwyn Bay (25042)	22	5
Llanddulas	22	10
Abergele	22	7
Kinmel Bay	22	13
Rhyl Splash Point	22	13
Ffrith Beach	22	7
Prestatyn, Barkby	22	4
Point of Ayr	22	5
Thurstaston Station Rd.	22	12
Caldycroft Drive	22	15
W Kirby at Marine Lake	22	5

Table 3

COMPARISON OF 1986 TO 1991 COMPLIANCE FOR IDENTIFIED BATHING WATERS WITH "I" VALUES FOR E.COLI AND TOTAL COLIFORMS AS REPORTED BY THE DOE

<u>Bathing Water</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>Included in Dwr Cymru cyf Programme</u>
<u>South East</u>							
Jacksons Bay	F	F	F	F	F	F	*
Whitmore Bay	F	F	F	F	F	P	*
Cold Knap Beach	F	F	F	P	F	P	*
<u>South West</u>							
Southerndown Beach	F	P	F	P	P	P	*
Trecco Bay	F	F	P	F	P	P	*
Sandy Bay	F	F	F	P	F	P	*
Rest Bay	F	P	P	P	P	P	*
Aberafan Slip	F	P	P	P	P	P	*
Swansea Bay	F	F	F	P	F	P	*
Bracelet Bay	P	P	P	P	P	P	*
Limeslade Bay	F	F	P	F	P	P	*
Langland Bay	F	P	P	F	P	P	*
Caswell Bay	P	F	P	P	P	P	*
Oxwich Bay	P	P	P	P	P	P	*
Port Eynon Bay	P	P	P	P	P	P	
Rhossili Beach	F	P	P	P	P	P	*
Pembrey Beach	P	P	P	P	P	P	
Pendine Beach	P	P	P	P	P	P	
Amroth Beach	F	F	P	P	P	P	*
Saundersfoot Beach	P	F	P	P	F	P	*
Tenby N. Beach	P	F	F	P	P	P	*
Tenby S. Beach	F	P	P	P	P	P	
Broadhaven	F	P	P	P	P	P	*
Newgale Beach	F	P	P	P	P	P	*
Whitesands	P	P	P	P	P	P	
Newport Sands N.	P	P	P	P	P	P	
Traeth Gwyn, New Quay	P	P	P	P	P	P	
Aberystwyth S. Beach	F	F	P	P	F	P	*
Aberystwyth N. Beach	P	P	P	P	P	P	
<u>North</u>							
Aberdyfi	**				F	P	
Borth	P	P	P	P	P	P	
Tywyn	F	P	P	P	P	P	*
Fairbourne Beach	P	P	P	P	P	P	*
Barmouth	P	P	P	P	P	P	*
Llandanwg Beach	P	P	P	P	P	P	*
Harlech	P	P	P	P	P	P	*
Morfa Bychan	F	F	P	P	P	P	
Criccieth Beach E.	P	F	P	P	F	P	*
Pwllheli Beach	P	P	P	P	P	P	*
Abersoch	P	P	F	P	P	P	
Morfa Dinlle	*		P	P	P	P	
Benllech	P	F	P	P	F	F	*
Trearddur Bay	F	F	P	P	P	P	*
Rhosneigr	**				P	P	
Llandudno W.	F	F	F	F	F	F	*
Llandudno N.	P	P	P	P	F	P	

Table 3 (contd)

<u>Bathing Water</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>Included in Dwr Cymru cyf Programme</u>
Colwyn Bay	P	P	P	P	P	P	*
Sandy Cove/Kinmel Bay	F	F	F	F	F	F	*
Rhyl	F	F	F	F	F	F	*
Prestatyn	F	P	P	P	F	P	
W. Kirby	***					F	
Total No. Waters	47	47	48	48	50	51	
Total No. Pass	23	28	37	40	35	45	
Z Pass	49	60	77	83	70	88	

* This site was identified as falling within the scope of the Bathing Waters directive from 1988, however 1986 and 1987 samples confirm that it would have passed during those two years.

** These two sites were identified from 1990, analysis of samples taken in previous years shows that both sites would have failed in 1988 and both would have passed in 1989.

*** This site was identified from 1991. It is situated in England but falls within the Welsh Region of the NRA.

1986 data from WWA 1986 Bathing Water Survey Report
 1987 data from WWA 1987 Bathing Water Survey Report
 1988 data from WWA 1988 Bathing Water Survey Report
 1989 data from Welsh Region NRA 1989 Bathing Waters Report
 1990 data from Welsh Region NRA 1990 Bathing Waters Report

NB Amendments have been made to this table to correct errors reported in the 1989 Bathing Waters Report.

Table 4

REMEDIAL ACTIONS REQUIRED TO MEET THE LONG TERM OBJECTIVE COMPLETED IN 1991

<u>Scheme</u>	<u>Bathing Water Affected</u>
Irongate (Porthcawl)	Scheme completed in early 1991 and commissioned in the spring. This should affect affect quality at Trecco Bay, Sandy Bay and Rest Bay.
Trearddur Bay	The new headworks is being commissioned and will provide fine screening and disinfection for the 1992 bathing season. This should affect the water quality at Trearddur Bay.

Appendix 1

CRITERIA FOR ASSESSING COMPLIANCE WITH EC BATHING WATERS DIRECTIVE STANDARDS

1. Article 3 of the EC Directive on the quality of bathing waters (76/160/EEC) requires member states to set bathing water quality standards no less stringent than those specified as 'I' values in the Annex to the Directive. Article 3 also requires member states to endeavour to observe 'G' values as guidelines, whether or not there is a corresponding 'I' value.
2. Article 5 sets out the detailed requirements for compliance.

For 'I' value determinands:-

- a) 95% of the samples must comply with the 'I' value
- b) The 5% not complying with the 'I' value must not allow consecutive samples taken at statistically valid intervals to exceed the 'I' value, ie. 'I' value failures must be of short duration.

For 'G' value determinands:-

- a) 90% of the samples must conform with the 'G' value (80% in the case of total coliform and faecal coliform parameters).
- b) The 10 (or 20%) not complying with the 'G' value must not allow consecutive samples taken at statistically valid intervals to not exceed the 'G' value, ie. 'G' value failures should be of short duration.

Quality Standards for Bathing Waters used in this Report

<u>Parameter</u>	<u>Imperative Standard</u>	<u>Guide Standard</u>
<u>Microbiological</u>		
<u>E.coli</u>	2000/100 ml	100/100 ml
Total coliforms	10000/100 ml	500/100 ml
Faecal streptococci		100/100 ml
Salmonella	0 / litre	
Enteroviruses	0 PFU/10 litres	

Appendix 1 (contd)

<u>Parameter</u>	<u>Imperative Standard</u>	<u>Guide Standard</u>
<u>Physico-chemical</u>		
pH	6 - 9	-
Colour	No abnormal change in colour	-
Mineral Oils	No film visible on water surface and no odour	0.3 mg / litre
Surface Active Substances	No lasting foam	0.3 mg / litre
Phenols	No specific odour (0.05 mg / litre)	0.005 mg / litre
Transparency *	Extinction depth of 1m for Secchi disc - equivalent to 6.665 ftu (turbidity)	Extinction depth of 2m - equivalent turbidity value not yet calculated
Tarry Residues and Persistent Floating Solids	-	Must be absent

- * Welsh Region has been granted a derogation for transparency at all its bathing waters so is not required to comply with these standards.

Appendix 2

IDENTIFIED BATHING WATER SAMPLE POINT AND DOE REFERENCE NUMBERS

<u>Bathing Water</u>	<u>Sampling Point Number</u>	<u>DOE Reference Number</u>
<u>South East</u>		
Jacksons Bay Beach, Barry	19055	36100
Whitmore Bay Central, Barry	19034	36200
Cold Knap Beach, Barry	19037	36300
<u>South West</u>		
Southerndown Beach (Centre)	19100	36400
Trecco Bay Central, Porthcawl	19114	36500
Sandy Bay Central, Porthcawl	19117	36600
Rest Bay, Porthcawl	19122	36700
Aberafan Slip	19051	36800
Swansea Bay at Slip	74006	36900
Bracelet Bay, Mumbles Head	39105	37000
Limeslade Bay	39106	37100
Langland Bay West	39109	37200
Caswell Bay Central	39111	37300
Oxwich Bay West End	39123	37400
Port Eynon Bay West	39127	37500
Rhossili Beach at Hillend	74010	37600
Pembrey Beach, Cefn Sidan	39005	37700
Pendine Beach East	39010	37800
Amroth Beach Central	39013	37900
Saundersfoot Beach Slip	39017	38000
Tenby North Beach, Gosker Rock	39020	38100
Tenby South Beach, Old Outfall	39024	38200
Broadhaven Centre	84231	38300
Newgale Beach Centre	39048	38400
Whitesands Centre	84232	38500
Newport Sands North	39065	38600
Traeth Gwyn, New Quay	39080	38700
Aberystwyth South Beach	39091	38800
Aberystwyth North Beach	39093	38900
<u>North</u>		
Aberdyfi	20171	39050
Borth, Opposite Hotel	20023	39000
Tywyn Main Beach Access	20019	39100
Fairbourne Beach	20402	39200
Barmouth Coastguard Station	20014	39300
Llandanwg, Centre of Beach	20028	39400
Harlech, North of Beach Access	22596	39500
Morfa Bychan, Black Rock Sands	22539	39600
Criccieth Beach East	23142	39700
Pwllheli Beach	22589	39800
Abersoch, South End	22552	39900
Morfa Dinlle	22564	39970
Benllech	27551	40100
Trearddur Bay	27532	40000
Rhosneigr	27536	39990
Llandudno West Shore	25032	40200
Llandudno North Shore	25046	40300
Colwyn Bay, Op. Railway Underpass	25049	40400
Sandy Cove, Kinnel Bay	3604	40500
Rhyl, High Street	3608	40600
Prestatyn Central, West Car Park	3612	40700
W. Kirby, Dee Lane	3646	40750

Appendix 3

NON-IDENTIFIED BATHING WATERS SITES SAMPLED IN 1991

<u>Bathing Water</u>	<u>Sample Point Number</u>
<u>South East</u>	
St Mary's Well Bay Beach	19032
Bendricks Beach	19076
Whitmore Bay	19033
Whitmore Bay	19035
Little Island	19056
Watchtower Bay Beach, Barry	68603
Fontygary Bay Beach, Rhose	19038
<u>South West</u>	
Llantwit Major Beach	74050
Ogmore Central	19043
Newton Bay Porthcawl	19112
Margam Sands, opp. Steel Works	19135
Aberafan E.	19050
Aberafan W.	19052
Jersey Marine	39153
Swansea Bay, Black Pill	39101
Swansea Bay, Knab Rock	39103
Swansea Bay, Mumbles Pier	39104
Langland Bay E.	39107
Brandy Cove	74061
Crawley Wood	74062
Broughton Beach	74025
Llanelli Beach, 4th Groyne	39001
Burry Port Beach E.	39003
Pendine Beach W.	39011
Amroth Beach E.	39012
Amroth Beach W.	39014
Coppet Hall	32421
Saundersfoot Beach E.	39016
Saundersfoot W. Beach	39019
Tenby N. Beach, at Lifeboat Slip	39021
Tenby S. Beach, at St Catherines Island	39022
Tenby S. Beach, off Atlantic Hotel Steps	39023
Tenby S. Beach, opp Footpath to Kiln Park	39025
Lydstep	39026
Manorbier Beach W.	39028
Freshwater E. Beach	39030
Broadhaven S.	32422
Llanreath Bay	86106
Neyland	85110
Milford Beach	39191
Gelliswick	39037
Sandy Haven	39192
Dale	39040
Marloes	39139
Musselwick	39140
St Brides Haven	39042
Newgale S.	39047
Newgale N.	39049
Caerfai	39142

Appendix 3 (contd)

Bathing WaterSample Point Number

Abereddy	39053
Goodwick Harbour S.	39058
Goodwick Beach	39059
Newport Sands S.	39064
Poppit Sands	39067
Poppit Sands	39068
Patch	32424
Craig-y-Gwbert	83515
Mwnt	32425
Aberporth E.	83502
Aberporth Slip	39072
Tresaith	39073
Penbryn	39147
Llangranog Bay Centre	39075
Newquay N.	39077
Newquay S. Beach	39079
Llanina Beach	39146
Little Quay, Central Groyne	39081
Gilfach yr Halen	32427
Aberaeron S.	39082
Aberaeron 4th Groyne	39083
Aberaeron Beach N.	39427
Aberarth	32428
Llanon	32429
Llansantffaid	32430
Llanrhystud	39087
Morfa Bychan	32431
Tanybwllch	32432
Aberystwyth S.	39090
Aberystwyth Slip	82103
Clarach S. of River	39095
Clarach N.	39096

North

Ynyslas 300m East Tywyi Bach	20399
Ynyslas N. Groyne	20022
Aberdyfi Beach	20170
Aberdyfi Beach	20172
Llwyngwrl	20189
Barmouth	20181
Llanaber	20025
Llanenddwyn	20027
Garreg Wen	23253
Black Rock Sands	22540
Criccieth West Beach, opp. Lon Parc	22541
Pwllheli	22546
Llanbedrog	22549
Abersoch	22550
Abersoch	23346
Machroes	20335
Porth Ceiriad	20334
Porth Neigwl	23331
Aberdaron	22553
Porth Oer	22555
Porth Iago	22556
Porth Colmon	22557

Appendix 3 (contd)

Bathing WaterSample Point Number

Porth Tywyn	22558
Porth Dinllaen	22559
Porth Nefyn	22560
Pontllyfni	22563
Dinas Dinlle	23244
Plas Menai	23290
Port Dinorwic	23252
Menai Br. Pier	27568
Rhosneigr, opp. Beach Road	27534
Traeth Crigyll	27557
Porth Gwr Mawr	27544
Holyhead Newry	27559
Penrhos Beach	27817
Cemaes Bay	27529
Benllech, 50m N. of Craig Dyllan	27827
Red Wharf Bay	27552
Llanddona	27562
Beaumaris, 150m W. of Beaumaris Pier	27828
Beaumaris, opp. Swimming Baths	27829
Llanfairfechan	23245
Penmaenmawr E.	22995
Penmaenmawr, off Dwygfylchi	23006
Penmaenmawr, off Dwygfylchi	23005
Deganwy	25034
Llandudno W Shore	25033
Llandudno N Shore	25026
Penrhyn Bay	25045
Colwyn Bay E.	25041
Colwyn Bay	25042
Llanddulas	3597
Abergele	3601
Kinmel Bay	3605
Rhyl Splash Point	3610
Ffrith Beach	3611
Prestatyn, Barkby	3614
Point of Ayr Lighthouse	3617
Thurstaston Station Rd.	3649
Caldycroft Drive	3648
W Kirby at Marine Lake	3647

Appendix 4

SUMMARY DATA FOR IDENTIFIED BATHING WATERS

<u>Bathing Water</u>	<u>E.Coli</u>		<u>Total Coliforms</u>	
	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
<u>South East</u>				
Jacksons Bay	21	100-4700	21	300-8200
Whitmore Bay	21	50-1700	21	300-6500
Cold Knap Beach	21	<10-510	21	<100-3800
<u>South West</u>				
Southerndown Beach	22	15-1900	22	50-8800
Trecco Bay	22	<10-1300	22	20-3800
Sandy Bay	22	<10-2000	22	10-3000
Rest Bay	22	5-800	22	30-2700
Aberafan Slip	22	5-700	22	30-4000
Swansea Bay	22	50-1800	22	100-7200
Bracelet Bay	22	<100-1900	22	200-3800
Limeslade Bay	22	<100-1600	22	<100-3400
Langland Bay	22	<10-800	22	30-1400
Caswell Bay	22	<10-500	22	40-2400
Oxwich Bay	22	<2-160	22	<2-2400
Port Eynon Bay	22	1-91	22	<2-1400
Rhossili Beach	22	<2-116	22	2-200
Pembrey Beach	22	<2-400	22	<2-2200
Pendine Beach	20	<5-1000	20	8-1200
Amroth Beach	20	1-800	20	<5-6000
Saundersfoot Beach	20	<10-3600	20	50-44000
Tenby N. Beach	20	<5-500	20	5-1600
Tenby S. Beach	20	<10-3800	20	<10-9400
Broadhaven	21	<10-3600	21	25-4000

<u>Salmonella</u>		<u>Viruses</u>		<u>Faecal Strep.</u>	
<u>No.</u> <u>Samples</u>	<u>+ve</u> <u>Result</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(b)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
5	3	2	0	21	50-1180
5	1	2	0	21	30-980
5	1	2	0-1	21	<5-432
5	0	2	0	22	<5-945
5	1	2	0	22	<2-410
5	0	2	0	22	<2-500
5	1	2	0	22	<2-200
5	1	2	0	22	2-320
5	2	2	0-1	22	6-680
5	1	2	0-1	22	4-625
5	2	2	0	22	<5-220
5	2	2	0-12	22	4-102
5	1	2	0-1	22	<2-110
5	0	2	0	22	<1-60
5	0	2	0-2	22	<1-152
5	0	2	0-1	22	<1-704
5	0	2	0	22	<1-31
5	1	2	0	19	<1-169
5	1	2	0	20	<1-340
5	1	2	0-2	20	8-1125
5	0	2	0-4	20	<1-915
5	1	2	0	20	<2-1500
5	1	2	2	21	<2-380

Appendix 4 (contd)

<u>Bathing Water</u>	<u>E.Coli</u>		<u>Total Coliforms</u>	
	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
Newgale Beach	21	<2-112	21	<5-310
Whitesands	21	2-500	21	4-1400
Newport Sands N.	21	<2-1700	21	5-1800
Traeth Gwyn, New Quay	21	<5-485	21	<10-11000
Aberystwyth S. Beach	21	10-4600	21	50-8200
Aberystwyth N. Beach	21	5-5200	21	20-5400
<u>North</u>				
Aberdyfi	21	<10-2380	21	60-7600
Borth	21	<2-400	21	2-900
Tywyn	21	<10-3180	21	10-17900
Fairbourne Beach	21	<10-330	21	<10-1030
Barmouth	21	<10-1040	21	<10-4000
Llandanwg Beach	21	<10-710	21	10-5600
Harlech	21	<10-4930	21	<10-9400
Morfa Bychan	21	<10-1210	21	<10-2270
Criccieth Beach E.	21	<10-2280	21	<10-4100
Pwllheli Beach	21	<10-420	21	<10-420
Abersoch	21	<10-1670	21	<10-2330
Morfa Dinlle	23	<10-310	24	<10-470
Benllech	21	<10-4940	21	<10-8000
Trearddur Bay	22	<10-1660	22	<10-2120
Rhosneigr	22	<10-110	22	<10-230
Llandudno W.	22	<10-13400	22	50-31900
Llandudno N.	22	10-2020	22	20-2480
Colwyn Bay	22	<10-2550	22	30-4100
Sandy Cove/Kinmel Bay	22	40-10800	22	110-22200
Rhyl	22	10-24100	22	150->50000
Prestatyn	22	<10-2080	22	<10-10600
W. Kirby	22	<10-8200	22	<10-15300

(a) = No./100 ml

(b) = PFU/10 litres

<u>Salmonella</u>		<u>Viruses</u>		<u>Faecal Strep.</u>	
<u>No.</u> <u>Samples</u>	<u>+ve</u> <u>Result</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(b)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
5	1	2	0	21	<1-240
5	0	2	0-1	21	<1-267
5	0	2	0	21	<1-424
5	1	2	0	20	<1-454
5	1	2	0	21	2-1454
5	0	2	0	21	1-756
5	1	2	0	21	<2-482
5	0	2	0	21	<1-314
5	0	2	0	21	<2-708
5	0	2	0	21	<2-174
5	0	2	0-1	21	<2->1600
5	0	2	0	21	<2-216
5	0	2	0	21	<2-198
5	0	2	0	21	<2-168
5	0	2	0-5	21	<2-192
5	1	2	0	21	<2-200
5	0	2	0	21	<2-506
5	0	2	0	24	<2-440
5	0	2	0-2	21	<2->2000
5	0	2	0	22	<2-1488
5	0	2	0	22	<2-12
5	0	2	2	22	<2->1200
5	0	2	0	22	4->1200
5	0	2	0-2	22	<2->600
5	0	2	0	22	6-960
5	1	2	0-4	21	4-1028
5	0	2	0-2	22	<2->2000
5	0	2	0	22	<2->2000

Appendix 5

SUMMARY DATA FOR NON-IDENTIFIED BATHING WATERS

<u>Bathing Water</u>	<u>E.Coli</u>		<u>Total Coliforms</u>		<u>Faecal Strep.</u>	
	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
<u>South East</u>						
St Mary's Well Bay	21	200-9200	21	1100-30000	21	110-2000
Bendricks Beach	21	<100-28000	21	1000-60000	21	40-10000
Whitmore Bay (19033)	21	30-1700	21	200-3800	21	40-1160
Whitmore Bay (19035)	21	40-2300	21	300-4000	21	25-2880
Little Island	21	70-920	21	210-3300	21	20-1085
Watchtower Bay	21	50-1100	21	400-18400	21	<10-1058
Fontygary Bay	21	80-11200	21	<100-40000	21	<10-1440
<u>South West</u>						
Llantwit Major	27	30-8000	27	100-16000	27	4-5500
Ogmore Central	22	<100-9000	22	200-13500	22	8-2660
Newton Bay Porthcawl	22	10-6500	22	80-8400	22	2-945
Margam Sands	21	5-1130	21	40-5000	21	2-410
Aberafan E.	21	5-3400	21	30-11000	21	4-735
Aberafan W.	21	20-2500	21	60-10200	21	<2-405
Jersey Marine	21	60->3000	21	300-9700	21	6-1625
Swansea Bay (39103)	22	<10-6000	22	40-7600	22	<2-6000
Swansea Bay (39101)	20	10-2280	20	80-8500	20	<2-2960
Swansea Bay (39104)	21	<100-4300	21	200-14100	21	14-992
Langland Bay E.	22	<10-680	22	40-1800	22	<2-244
Brandy Cove	22	<10-1350	22	30-8700	22	2-310
Crawley Wood	16	<1-38	16	2-100	16	<1-18
Broughton Beach	21	<2-465	21	<2-715	21	<1-160
Llanelli Beach	21	800-119000	21	2000-217000	21	20-12200
Burry Port Beach E.	21	<5-1600	21	10-3000	21	1-480
Pendine W.	20	20-580	20	80-2100	20	1-122
Amroth Beach E.	20	5-1250	20	10-4000	20	<1-210
Amroth Beach W.	20	5-310	20	5-990	20	1-760
Coppet Hall	20	<10-3000	20	<10-10000	20	<5-1350
Saundersfoot E.	20	<10-3200	20	20-32000	20	<2-1400
Saundersfoot W.	20	40-6000	20	50-12000	20	<10-6600
Tenby N. Beach	17	4-1100	17	10-1100	17	<2-320
Tenby S. (39022)	20	5-1380	20	20-2400	20	<2-604
Tenby S. (39023)	20	<10-2000	20	10-4840	20	4-1055
Tenby S. (39025)	20	<5-872	20	<10-2280	20	<2-632
Lydstep	20	4-220	20	5-5000	20	1-284
Manorbier Beach W.	20	5-206	21	5-2400	21	<2-672
Freshwater E. Beach	20	<2-400	20	2-400	20	<1-258
Broadhaven S.	20	<2-1000	20	4-1000	20	<1-38
Llanreath Bay	20	<10-4100	20	10-4900	20	<2-7500
Neyland	20	50-14600	20	100-38200	20	10-2710
Milford Beach	20	<10-2200	20	100-15000	20	2-970
Gelliswick	19	5-3500	19	<10-9500	19	2-1704
Sandy Haven	20	<2-355	20	<5-375	20	<1-97
Dale	20	5-660	20	5-840	20	<2-260
Marloes	20	<1-1600	20	<1->1600	20	<1-444
Musselwick	5	<2-14	5	2-38	5	<1-83
St Brides Haven	20	<2-180	20	10-355	20	<1-808
Newgale S.	21	4-2000	21	10-2000	21	<1-2000
Newgale N.	21	5-1280	21	20-4300	21	<1-1200
Caerfai	20	<1-52	20	<1-56	20	<1-38

Appendix 5 (contd)

	<u>E.Coli</u>		<u>Total Coliforms</u>		<u>Faecal Strep.</u>	
	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
<u>Bathing Water</u>						
Abereiddy	20	<2-1200	20	<5-1250	20	<1-324
Goodwick Harbour	20	<2-1240	20	<5-2600	20	<1-450
Goodwick Beach	20	15-590	20	30-1500	20	<2-375
Newport S.	21	<1-520	21	<2-1200	21	<1-138
Poppit Sands (39067)	20	<2-1200	20	5-4000	20	<1-175
Poppit Sands (39068)	20	<5-650	20	<10-9500	20	1-86
Patch	21	10-7400	21	90-52000	21	4-2200
Craig-y-Gwbert	21	<100-16800	21	200->300	21	<10-9000
Mwnt	21	4-1200	21	4-14000	21	<1-592
Aberporth E.	21	20-16400	21	<100-280000	21	10-1440
Aberporth Slip	21	20-15400	21	40-30000	21	5-2980
Tresaith	21	10-560	21	80-1800	21	4-470
Penbryn	19	2-40000	19	5-50000	19	<1-1456
Llangranog Bay	21	<5-35000	21	10-45000	21	2-4780
Newquay N.	21	4-725	21	10-1030	21	<2-1323
Newquay S. Beach	21	4-710	21	10-1770	21	1-616
Llanina Beach	20	<5-285	20	<10-700	20	<1-508
Little Quay	20	1-184	20	2-460	20	<1-380
Gilfach yr Halen	21	<2-520	21	<10-2000	21	<1-452
Aberaeron S.	21	4-200	21	10-1000	21	2-1200
Aberaeron 4th Groyne	20	10-2200	20	40-2800	20	10-5900
Aberaeron Beach N.	21	40-6400	21	<100-6400	21	10->60000
Aberarth	21	2-7000	21	<5-8000	21	2-4330
Llanon	21	<5-790	21	<10-1180	21	<2-2400
Llansantffraed	21	<2-725	21	<5-1410	21	<2-1200
Llanrhystud	21	<1-152	21	<2-315	21	<1-400
Morfa Bychan	21	<5-1210	21	<5-9000	21	<2-1216
Tanybwllch	18	<5-455	18	20-4700	18	<2-574
Aberystwyth S.	21	30-12800	21	30-20000	21	8-4220
Aberystwyth Slip	21	20-80000	21	500-500000	21	10-13200
Clarach S.	21	<10-14800	21	100-36000	21	<5-1810
Clarach N.	21	<10-11400	21	<10-60000	21	<2-1710
<u>North</u>						
Ynyslas E.	21	<5-800	21	20-12000	21	2-155
Ynyslas N. Groyne	21	<2-380	21	<5-3000	21	<1-74
Aberdyfi (20170)	21	<10-9500	21	10-22100	21	2->800
Aberdyfi (20172)	21	<10-10200	21	<10-13000	21	<2->1600
Llwyngwril	21	<10-15700	21	60->50000	21	6->600
Barmouth	21	<10-1210	21	<10-5300	21	<2-892
Llanaber	21	<10-670	21	<10-4800	21	<2-502
Llanenddwyn	21	<10-220	21	<10-360	21	<2-96
Garreg Wen	21	30-14500	21	240->50000	21	6->1000
Black Rock Sands	21	<10-1390	21	<10-2710	21	<2-212
Criccieth W.	21	<10-7200	21	<10-10900	21	<2-4000
Pwllheli	21	<10-4530	21	10-6900	21	<2-1200
Llanbedrog	21	<10-7800	21	<10-10300	21	<2->1200
Abersoch (22550)	20	<10-990	20	<10-1170	20	<2-202
Abersoch (23346)	21	20-1470	21	60-4500	21	<2->1400
Machroes	21	<10-3440	21	<10->15000	21	<2->2000
Porth Ceiriad	21	<10-100	21	<10-100	21	<2-24
Porth Neigwl	22	<10-70	23	<10-150	23	<2-214
Aberdaron	22	<10-750	23	<10-1290	23	<2-294
Porth Oer	22	<10-400	23	<10-400	23	<2-136
Porth Iago	22	<10-2010	23	<10-7200	23	<2->600
Porth Colmon	22	<10-2960	23	<10-3280	23	<2-538

Appendix 5 (contd)

<u>Bathing Water</u>	<u>E.Coli</u>		<u>Total Coliforms</u>		<u>Faecal Strep.</u>	
	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
Porth Tywyn	22	<10-240	23	<10-720	23	<2-94
Porth Dinllaen	22	<10-7400	23	<10-13500	23	<2->600
Porth Nefyn	21	<10-4300	22	<10-5900	22	<2-1082
Pontllyfni	22	<10-1810	23	<10-2700	23	<2->800
Dinas Dinlle	22	<10-1130	23	<10-2280	23	<2-154
Plas Menai	22	<10-8400	23	<10-8400	22	<2->1000
Port Dinorwic	22	10-6000	23	90-17900	23	2->1000
Menai Br. Pier	22	20-10600	23	20-32500	21	12->1000
Rhosneigr	22	<10-3900	22	<10-12600	22	<2->1000
Traeth Crigyll	22	<10-3100	22	<10-9300	22	<2->1000
Porth Gwr Mawr	22	1560->200000	22	3280->500000	22	222->4000
Holyhead Newry	22	<10-10400	22	<10-12800	22	<2-198
Penrhos Beach	22	10-2960	22	10-7500	22	<2-434
Cemaes Bay	22	<10-1640	22	40-3960	22	<2-1540
Benllech	22	<10-2700	22	<10-3900	22	2-1200
Red Wharf Bay	22	10-4200	22	10-7400	22	<2-744
Llanddona	22	<10-990	22	<10-990	21	<2-244
Beaumaris Pier	22	10-690	23	80-1270	23	<2-330
Beaumaris (27829)	22	<10-33600	23	10->50000	23	<2->1200
Llanfairfechan	22	<10-780	23	10-2300	23	<2-250
Penmaenmawr E.	22	<10-2900	23	<10-3000	23	<2-1088
Penmaenmawr (23006)	22	<10-1700	23	10-4100	23	<2-96
Penmaenmawr (23005)	22	<10-10000	23	10-29600	23	<2-2000
Deganwy	22	240-10700	22	580->30000	23	12->2000
Llandudno W Shore	22	30-23800	22	110-21800	22	<2-1144
Llandudno N Shore	22	40-10100	22	60-15600	22	<2-1052
Penrhyn Bay	22	120->100000	22	470->100000	22	4->1000
Colwyn Bay (25041)	22	30-8800	22	50->20000	22	<2->600
Colwyn Bay (25042)	22	10-2160	22	60-7500	22	<2-652
Llanddulas	22	30-2520	22	100-13000	22	8-444
Abergele	22	50-4000	22	90-6000	22	8-614
Kinmel Bay	22	50-9000	22	140-19700	22	14-1755
Rhyl Splash Point	22	40-6300	22	60-14600	22	6->1000
Ffrith Beach	22	<10-4300	22	<10-8200	22	4->3000
Prestatyn, Barkby	22	<10-3600	22	10-15600	22	2-868
Point of Ayr	22	10-3760	22	30-19700	22	<2-250
Thurstaston Station Rd.	22	30-7100	22	110-28100	22	<2-630
Caldycroft Drive	22	<10-5200	22	<10-10900	22	<2->1000
W Kirby at Marine Lake	22	<10-380	22	<10-850	22	2-426

(a) - No./100 ml

Appendix 2

IDENTIFIED BATHING WATER SAMPLE POINT AND DOE REFERENCE NUMBERS

<u>Bathing Water</u>	<u>Sampling Point Number</u>	<u>DOE Reference Number</u>
<u>South East</u>		
Jacksons Bay Beach, Barry	19055	36100
Whitmore Bay Central, Barry	19034	36200
Cold Knap Beach, Barry	19037	36300
<u>South West</u>		
Southerndown Beach (Centre)	19100	36400
Trecco Bay Central, Porthcawl	19114	36500
Sandy Bay Central, Porthcawl	19117	36600
Rest Bay, Porthcawl	19122	36700
Aberafan Slip	19051	36800
Swansea Bay at Slip	74006	36900
Bracelet Bay, Mumbles Head	39105	37000
Limeslade Bay	39106	37100
Langland Bay West	39109	37200
Caswell Bay Central	39111	37300
Oxwich Bay West End	39123	37400
Port Eynon Bay West	39127	37500
Rhossili Beach at Hillend	74010	37600
Pembrey Beach, Cefn Sidan	39005	37700
Pendine Beach East	39010	37800
Amroth Beach Central	39013	37900
Saundersfoot Beach Slip	39017	38000
Tenby North Beach, Gosker Rock	39020	38100
Tenby South Beach, Old Outfall	39024	38200
Broadhaven Centre	84231	38300
Newgale Beach Centre	39048	38400
Whitesands Centre	84232	38500
Newport Sands North	39065	38600
Traeth Gwyn, New Quay	39080	38700
Aberystwyth South Beach	39091	38800
Aberystwyth North Beach	39093	38900
<u>North</u>		
Aberdyfi	20171	39050
Borth, Opposite Hotel	20023	39000
Tywyn Main Beach Access	20019	39100
Fairbourne Beach	20402	39200
Barmouth Coastguard Station	20014	39300
Llandanwg, Centre of Beach	20028	39400
Harlech, North of Beach Access	22596	39500
Morfa Bychan, Black Rock Sands	22539	39600
Criccieth Beach East	23142	39700
Pwllheli Beach	22589	39800
Abersoch, South End	22552	39900
Morfa Dinlle	22564	39970
Benllech	27551	40100
Trearddur Bay	27532	40000
Rhosneigr	27536	39990
Llandudno West Shore	25032	40200
Llandudno North Shore	25046	40300
Colwyn Bay, Op. Railway Underpass	25049	40400
Sandy Cove, Kinmel Bay	3604	40500
Rhyl, High Street	3608	40600
Prestatyn Central, West Car Park	3612	40700
W. Kirby, Dee Lane	3646	40750

Appendix 3

NON-IDENTIFIED BATHING WATERS SITES SAMPLED IN 1991

<u>Bathing Water</u>	<u>Sample Point Number</u>
<u>South East</u>	
St Mary's Well Bay Beach	19032
Bendricks Beach	19076
Whitmore Bay	19033
Whitmore Bay	19035
Little Island	19056
Watchtower Bay Beach, Barry	68603
Fontygary Bay Beach, Rhose	19038
<u>South West</u>	
Llantwit Major Beach	74050
Ogmore Central	19043
Newton Bay Porthcawl	19112
Margam Sands, opp. Steel Works	19135
Aberafan E.	19050
Aberafan W.	19052
Jersey Marine	39153
Swansea Bay, Black Pill	39101
Swansea Bay, Knab Rock	39103
Swansea Bay, Mumbles Pier	39104
Langland Bay E.	39107
Brandy Cove	74061
Crawley Wood	74062
Broughton Beach	74025
Llanelli Beach, 4th Groyne	39001
Burry Port Beach E.	39003
Pendine Beach W.	39011
Amroth Beach E.	39012
Amroth Beach W.	39014
Coppet Hall	32421
Saundersfoot Beach E.	39016
Saundersfoot W. Beach	39019
Tenby N. Beach, at Lifeboat Slip	39021
Tenby S. Beach, at St Catherines Island	39022
Tenby S. Beach, off Atlantic Hotel Steps	39023
Tenby S. Beach, opp Footpath to Kiln Park	39025
Lydstep	39026
Manorbier Beach W.	39028
Freshwater E. Beach	39030
Broadhaven S.	32422
Llanreath Bay	86106
Neyland	85110
Milford Beach	39191
Gelliswick	39037
Sandy Haven	39192
Dale	39040
Marloes	39139
Musselwick	39140
St Brides Haven	39042
Newgale S.	39047
Newgale N.	39049
Caerfai	39142

Appendix 3 (contd)

Bathing WaterSample Point Number

Abereddy	39053
Goodwick Harbour S.	39058
Goodwick Beach	39059
Newport Sands S.	39064
Poppit Sands	39067
Poppit Sands	39068
Patch	32424
Craig-y-Gwbert	83515
Mwnt	32425
Aberporth E.	83502
Aberporth Slip	39072
Tresaith	39073
Penbryn	39147
Llangranog Bay Centre	39075
Newquay N.	39077
Newquay S. Beach	39079
Llanina Beach	39146
Little Quay, Central Groyne	39081
Gilfach yr Halen	32427
Aberaeron S.	39082
Aberaeron 4th Groyne	39083
Aberaeron Beach N.	39427
Aberarth	32428
Llanon	32429
Llansantffaid	32430
Llanrhystud	39087
Morfa Bychan	32431
Tanybwllch	32432
Aberystwyth S.	39090
Aberystwyth Slip	82103
Clarach S. of River	39095
Clarach N.	39096

North

Ynyslas 300m East Tywyi Bach	20399
Ynyslas N. Groyne	20022
Aberdyfi Beach	20170
Aberdyfi Beach	20172
Llwyngwril	20189
Barmouth	20181
Llanaber:	20025
Llanenddwyn	20027
Garreg Wen	23253
Black Rock Sands	22540
Criccieth West Beach, opp. Lon Parc	22541
Pwllheli	22546
Llanbedrog	22549
Abersoch	22550
Abersoch	23346
Machroes	20335
Porth Ceiriad	20334
Porth Neigwl	23331
Aberdaron	22553
Porth Oer	22555
Porth Iago	22556
Porth Colmon	22557

Appendix 3 (contd)

Bathing WaterSample Point Number

Porth Tywyn	22558
Porth Dinllaen	22559
Porth Nefyn	22560
Pontllyfni	22563
Dinas Dinlle	23244
Plas Menai	23290
Port Dinorwic	23252
Menai Br. Pier	27568
Rhosneigr, opp. Beach Road	27534
Traeth Crigyll	27557
Porth Gwr Mawr	27544
Holyhead Newry	27559
Penrhos Beach	27817
Cemaes Bay	27529
Benllech, 50m N. of Craig Dyllan	27827
Red Wharf Bay	27552
Llanddona	27562
Beaumaris, 150m W. of Beaumaris Pier	27828
Beaumaris, opp. Swimming Baths	27829
Llanfairfechan	23245
Penmaenmawr E.	22995
Penmaenmawr, off Dwygfylchi	23006
Penmaenmawr, off Dwygfylchi	23005
Deganwy	25034
Llandudno W Shore	25033
Llandudno N Shore	25026
Penrhyn Bay	25045
Colwyn Bay E.	25041
Colwyn Bay	25042
Llanddulas	3597
Abergele	3601
Kinmel Bay	3605
Rhyl Splash Point	3610
Ffrith Beach	3611
Prestatyn, Barkby	3614
Point of Ayr Lighthouse	3617
Thurstaston Station Rd.	3649
Caldycroft Drive	3648
W Kirby at Marine Lake	3647

Appendix 4

SUMMARY DATA FOR IDENTIFIED BATHING WATERS

<u>Bathing Water</u>	<u>E.Coli</u>		<u>Total Coliforms</u>	
	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
<u>South East</u>				
Jacksons Bay	21	100-4700	21	300-8200
Whitmore Bay	21	50-1700	21	300-6500
Cold Knap Beach	21	<10-510	21	<100-3800
<u>South West</u>				
Southerndown Beach	22	15-1900	22	50-8800
Trecco Bay	22	<10-1300	22	20-3800
Sandy Bay	22	<10-2000	22	10-3000
Rest Bay	22	5-800	22	30-2700
Aberafan Slip	22	5-700	22	30-4000
Swansea Bay	22	50-1800	22	100-7200
Bracelet Bay	22	<100-1900	22	200-3800
Limeslade Bay	22	<100-1600	22	<100-3400
Langland Bay	22	<10-800	22	30-1400
Caswell Bay	22	<10-500	22	40-2400
Oxwich Bay	22	<2-160	22	<2-2400
Port Eynon Bay	22	1-91	22	<2-1400
Rhossili Beach	22	<2-116	22	2-200
Pembrey Beach	22	<2-400	22	<2-2200
Pendine Beach	20	<5-1000	20	8-1200
Amroth Beach	20	1-800	20	<5-6000
Saundersfoot Beach	20	<10-3600	20	50-44000
Tenby N. Beach	20	<5-500	20	5-1600
Tenby S. Beach	20	<10-3800	20	<10-9400
Broadhaven	21	<10-3600	21	25-4000

<u>Salmonella</u>		<u>Viruses</u>		<u>Faecal Strep.</u>	
<u>No.</u> <u>Samples</u>	<u>+ve</u> <u>Result</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(b)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
5	3	2	0	21	50-1180
5	1	2	0	21	30-980
5	1	2	0-1	21	<5-432
5	0	2	0	22	<5-945
5	1	2	0	22	<2-410
5	0	2	0	22	<2-500
5	1	2	0	22	<2-200
5	1	2	0	22	2-320
5	2	2	0-1	22	6-680
5	1	2	0-1	22	4-625
5	2	2	0	22	<5-220
5	2	2	0-12	22	4-102
5	1	2	0-1	22	<2-110
5	0	2	0	22	<1-60
5	0	2	0-2	22	<1-152
5	0	2	0-1	22	<1-704
5	0	2	0	22	<1-31
5	1	2	0	19	<1-169
5	1	2	0	20	<1-340
5	1	2	0-2	20	8-1125
5	0	2	0-4	20	<1-915
5	1	2	0	20	<2-1500
5	1	2	2	21	<2-380

Appendix 4 (contd)

<u>Bathing Water</u>	<u>E.Coli</u>		<u>Total Coliforms</u>	
	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
Newgale Beach	21	<2-112	21	<5-310
Whitesands	21	2-500	21	4-1400
Newport Sands N.	21	<2-1700	21	5-1800
Traeth Gwyn, New Quay	21	<5-485	21	<10-11000
Aberystwyth S. Beach	21	10-4600	21	50-8200
Aberystwyth N. Beach	21	5-5200	21	20-5400
<u>North</u>				
Aberdyfi	21	<10-2380	21	60-7600
Borth	21	<2-400	21	2-900
Tywyn	21	<10-3180	21	10-17900
Fairbourne Beach	21	<10-330	21	<10-1030
Barmouth	21	<10-1040	21	<10-4000
Llandanwg Beach	21	<10-710	21	10-5600
Harlech	21	<10-4930	21	<10-9400
Morfa Bychan	21	<10-1210	21	<10-2270
Criccieth Beach E.	21	<10-2280	21	<10-4100
Pwllheli Beach	21	<10-420	21	<10-420
Abersoch	21	<10-1670	21	<10-2330
Morfa Dinlle	23	<10-310	24	<10-470
Benllech	21	<10-4940	21	<10-8000
Trearddur Bay	22	<10-1660	22	<10-2120
Rhosneigr	22	<10-110	22	<10-230
Llandudno W.	22	<10-13400	22	50-31900
Llandudno N.	22	10-2020	22	20-2480
Colwyn Bay	22	<10-2550	22	30-4100
Sandy Cove/Kinmel Bay	22	40-10800	22	110-22200
Rhyl	22	10-24100	22	150->50000
Prestatyn	22	<10-2080	22	<10-10600
W. Kirby	22	<10-8200	22	<10-15300

(a) = No./100 ml

(b) = PFU/10 litres

<u>Salmonella</u>		<u>Viruses</u>		<u>Faecal Strep.</u>	
<u>No.</u> <u>Samples</u>	<u>+ve</u> <u>Result</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(b)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
5	1	2	0	21	<1-240
5	0	2	0-1	21	<1-267
5	0	2	0	21	<1-424
5	1	2	0	20	<1-454
5	1	2	0	21	2-1454
5	0	2	0	21	1-756
5	1	2	0	21	<2-482
5	0	2	0	21	<1-314
5	0	2	0	21	<2-708
5	0	2	0	21	<2-174
5	0	2	0-1	21	<2->1600
5	0	2	0	21	<2-216
5	0	2	0	21	<2-198
5	0	2	0	21	<2-168
5	0	2	0-5	21	<2-192
5	1	2	0	21	<2-200
5	0	2	0	21	<2-506
5	0	2	0	24	<2-440
5	0	2	0-2	21	<2->2000
5	0	2	0	22	<2-1488
5	0	2	0	22	<2-12
5	0	2	2	22	<2->1200
5	0	2	0	22	4->1200
5	0	2	0-2	22	<2->600
5	0	2	0	22	6-960
5	1	2	0-4	21	4-1028
5	0	2	0-2	22	<2->2000
5	0	2	0	22	<2->2000

Appendix 5

SUMMARY DATA FOR NON-IDENTIFIED BATHING WATERS

<u>Bathing Water</u>	<u>E.Coli</u>		<u>Total Coliforms</u>		<u>Faecal Strep.</u>	
	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
<u>South East</u>						
St Mary's Well Bay	21	200-9200	21	1100-30000	21	110-2000
Bendricks Beach	21	<100-28000	21	1000-60000	21	40-10000
Whitmore Bay (19033)	21	30-1700	21	200-3800	21	40-1160
Whitmore Bay (19035)	21	40-2300	21	300-4000	21	25-2880
Little Island	21	70-920	21	210-3300	21	20-1085
Watchtower Bay	21	50-1100	21	400-18400	21	<10-1058
Fontygary Bay	21	80-11200	21	<100-40000	21	<10-1440
<u>South West</u>						
Llantwit Major	27	30-8000	27	100-16000	27	4-5500
Ogmore Central	22	<100-9000	22	200-13500	22	8-2660
Newton Bay Porthcawl	22	10-6500	22	80-8400	22	2-945
Margam Sands	21	5-1130	21	40-5000	21	2-410
Aberafan E.	21	5-3400	21	30-11000	21	4-735
Aberafan W.	21	20-2500	21	60-10200	21	<2-405
Jersey Marine	21	60->3000	21	300-9700	21	6-1625
Swansea Bay (39103)	22	<10-6000	22	40-7600	22	<2-6000
Swansea Bay (39101)	20	10-2280	20	80-8500	20	<2-2960
Swansea Bay (39104)	21	<100-4300	21	200-14100	21	14-992
Langland Bay E.	22	<10-680	22	40-1800	22	<2-244
Brandy Cove	22	<10-1350	22	30-8700	22	2-310
Crawley Wood	16	<1-38	16	2-100	16	<1-18
Broughton Beach	21	<2-465	21	<2-715	21	<1-160
Llanelli Beach	21	800-119000	21	2000-217000	21	20-12200
Burry Port Beach E.	21	<5-1600	21	10-3000	21	1-480
Pendine W.	20	20-580	20	80-2100	20	1-122
Amroth Beach E.	20	5-1250	20	10-4000	20	<1-210
Amroth Beach W.	20	5-310	20	5-990	20	1-760
Coppet Hall	20	<10-3000	20	<10-10000	20	<5-1350
Saundersfoot E.	20	<10-3200	20	20-32000	20	<2-1400
Saundersfoot W.	20	40-6000	20	50-12000	20	<10-6600
Tenby N. Beach	17	4-1100	17	10-1100	17	<2-320
Tenby S. (39022)	20	5-1380	20	20-2400	20	<2-604
Tenby S. (39023)	20	<10-2000	20	10-4840	20	4-1055
Tenby S. (39025)	20	<5-872	20	<10-2280	20	<2-632
Lydstep	20	4-220	20	5-5000	20	1-284
Manorbier Beach W.	20	5-206	21	5-2400	21	<2-672
Freshwater E. Beach	20	<2-400	20	2-400	20	<1-258
Broadhaven S.	20	<2-1000	20	4-1000	20	<1-38
Llanreath Bay	20	<10-4100	20	10-4900	20	<2-7500
Neyland	20	50-14600	20	100-38200	20	10-2710
Milford Beach	20	<10-2200	20	100-15000	20	2-970
Gelliswick	19	5-3500	19	<10-9500	19	2-1704
Sandy Haven	20	<2-355	20	<5-375	20	<1-97
Dale	20	5-660	20	5-840	20	<2-260
Marloes	20	<1-1600	20	<1->1600	20	<1-444
Musselwick	5	<2-14	5	2-38	5	<1-83
St Brides Haven	20	<2-180	20	10-355	20	<1-808
Newgale S.	21	4-2000	21	10-2000	21	<1-2000
Newgale N.	21	5-1280	21	20-4300	21	<1-1200
Caerfai	20	<1-52	20	<1-56	20	<1-38

Appendix 5 (contd)

<u>Bathing Water</u>	<u>E.Coli</u>		<u>Total Coliforms</u>		<u>Faecal Strep.</u>	
	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
Abereiddy	20	<2-1200	20	<5-1250	20	<1-324
Goodwick Harbour	20	<2-1240	20	<5-2600	20	<1-450
Goodwick Beach	20	15-590	20	30-1500	20	<2-375
Newport S.	21	<1-520	21	<2-1200	21	<1-138
Poppit Sands (39067)	20	<2-1200	20	5-4000	20	<1-175
Poppit Sands (39068)	20	<5-650	20	<10-9500	20	1-86
Patch	21	10-7400	21	90-52000	21	4-2200
Craig-y-Gwbert	21	<100-16800	21	200->300	21	<10-9000
Mwnt	21	4-1200	21	4-14000	21	<1-592
Aberporth E.	21	20-16400	21	<100-280000	21	10-1440
Aberporth Slip	21	20-15400	21	40-30000	21	5-2980
Tresaith	21	10-560	21	80-1800	21	4-470
Penbryn	19	2-40000	19	5-50000	19	<1-1456
Llangranog Bay	21	<5-35000	21	10-45000	21	2-4780
Newquay N.	21	4-725	21	10-1030	21	<2-1323
Newquay S. Beach	21	4-710	21	10-1770	21	1-616
Llanina Beach	20	<5-285	20	<10-700	20	<1-508
Little Quay	20	1-184	20	2-460	20	<1-380
Gilfach yr Halen	21	<2-520	21	<10-2000	21	<1-452
Aberaeron S.	21	4-200	21	10-1000	21	2-1200
Aberaeron 4th Groyne	20	10-2200	20	40-2800	20	10-5900
Aberaeron Beach N.	21	40-6400	21	<100-6400	21	10->60000
Aberarth	21	2-7000	21	<5-8000	21	2-4330
Llanon	21	<5-790	21	<10-1180	21	<2-2400
Llansantffraed	21	<2-725	21	<5-1410	21	<2-1200
Llanrhystud	21	<1-152	21	<2-315	21	<1-400
Morfa Bychan	21	<5-1210	21	<5-9000	21	<2-1216
Tanybwllch	18	<5-455	18	20-4700	18	<2-574
Aberystwyth S.	21	30-12800	21	30-20000	21	8-4220
Aberystwyth Slip	21	20-80000	21	500-500000	21	10-13200
Clarach S.	21	<10-14800	21	100-36000	21	<5-1810
Clarach N.	21	<10-11400	21	<10-60000	21	<2-1710
<u>North</u>						
Ynyslas E.	21	<5-800	21	20-12000	21	2-155
Ynyslas N. Groyne	21	<2-380	21	<5-3000	21	<1-74
Aberdyfi (20170)	21	<10-9500	21	10-22100	21	2->800
Aberdyfi (20172)	21	<10-10200	21	<10-13000	21	<2->1600
Llwyngwril	21	<10-15700	21	60->50000	21	6->600
Barmouth	21	<10-1210	21	<10-5300	21	<2-892
Llanaber	21	<10-670	21	<10-4800	21	<2-502
Llanenddwyn	21	<10-220	21	<10-360	21	<2-96
Garreg Wen	21	30-14500	21	240->50000	21	6->1000
Black Rock Sands	21	<10-1390	21	<10-2710	21	<2-212
Criccieth W.	21	<10-7200	21	<10-10900	21	<2-4000
Pwllheli	21	<10-4530	21	10-6900	21	<2-1200
Llanbedrog	21	<10-7800	21	<10-10300	21	<2->1200
Abersoch (22550)	20	<10-990	20	<10-1170	20	<2-202
Abersoch (23346)	21	20-1470	21	60-4500	21	<2->1400
Machroes	21	<10-3440	21	<10->15000	21	<2->2000
Porth Ceiriad	21	<10-100	21	<10-100	21	<2-24
Porth Neigwl	22	<10-70	23	<10-150	23	<2-214
Aberdaron	22	<10-750	23	<10-1290	23	<2-294
Porth Oer	22	<10-400	23	<10-400	23	<2-136
Porth Iago	22	<10-2010	23	<10-7200	23	<2->600
Porth Colmon	22	<10-2960	23	<10-3280	23	<2-538

Appendix 5 (contd)

<u>Bathing Water</u>	<u>E.Coli</u>		<u>Total Coliforms</u>		<u>Faecal Strep.</u>	
	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>	<u>No.</u> <u>Samples</u>	<u>Range</u> <u>(a)</u>
Porth Tywyn	22	<10-240	23	<10-720	23	<2-94
Porth Dinllaen	22	<10-7400	23	<10-13500	23	<2->600
Porth Nefyn	21	<10-4300	22	<10-5900	22	<2-1082
Pontllyfni	22	<10-1810	23	<10-2700	23	<2->800
Dinas Dinlle	22	<10-1130	23	<10-2280	23	<2-154
Plas Menai	22	<10-8400	23	<10-8400	22	<2->1000
Port Dinorwic	22	10-6000	23	90-17900	23	2->1000
Menai Br. Pier	22	20-10600	23	20-32500	21	12->1000
Rhosneigr	22	<10-3900	22	<10-12600	22	<2->1000
Traeth Crigyll	22	<10-3100	22	<10-9300	22	<2->1000
Porth Gwr Mawr	22	1560->200000	22	3280->500000	22	222->4000
Holyhead Newry	22	<10-10400	22	<10-12800	22	<2-198
Penrhos Beach	22	10-2960	22	10-7500	22	<2-434
Cemaes Bay	22	<10-1640	22	40-3960	22	<2-1540
Benllech	22	<10-2700	22	<10-3900	22	2-1200
Red Wharf Bay	22	10-4200	22	10-7400	22	<2-744
Llanddona	22	<10-990	22	<10-990	21	<2-244
Beaumaris Pier	22	10-690	23	80-1270	23	<2-330
Beaumaris (27829)	22	<10-33600	23	10->50000	23	<2->1200
Llanfairfechan	22	<10-780	23	10-2300	23	<2-250
Penmaenmawr E.	22	<10-2900	23	<10-3000	23	<2-1088
Penmaenmawr (23006)	22	<10-1700	23	10-4100	23	<2-96
Penmaenmawr (23005)	22	<10-10000	23	10-29600	23	<2-2000
Deganwy	22	240-10700	22	580->30000	23	12->2000
Llandudno W Shore	22	30-23800	22	110-21800	22	<2-1144
Llandudno N Shore	22	40-10100	22	60-15600	22	<2-1052
Penrhyn Bay	22	120->100000	22	470->100000	22	4->1000
Colwyn Bay (25041)	22	30-8800	22	50->20000	22	<2->600
Colwyn Bay (25042)	22	10-2160	22	60-7500	22	<2-652
Llanddulas	22	30-2520	22	100-13000	22	8-444
Abergele	22	50-4000	22	90-6000	22	8-614
Kinmel Bay	22	50-9000	22	140-19700	22	14-1755
Rhyl Splash Point	22	40-6300	22	60-14600	22	6->1000
Ffrith Beach	22	<10-4300	22	<10-8200	22	4->3000
Prestatyn, Barkby	22	<10-3600	22	10-15600	22	2-868
Point of Ayr	22	10-3760	22	30-19700	22	<2-250
Thurstaston Station Rd.	22	30-7100	22	110-28100	22	<2-630
Caldycroft Drive	22	<10-5200	22	<10-10900	22	<2->1000
W Kirby at Marine Lake	22	<10-380	22	<10-850	22	2-426

(a) - No./100 ml

1991 BATHING WATERS REPORT

PART II

1. INTRODUCTION

- 1.1 Part II of the Bathing Waters Report contains information regarding compliance with the "G" standards for those parameters for which "I" standards also exist, ie E.coli and total coliforms. Compliance with the "G" standards is not mandatory but the Directive states that Member States should "endeavour" to observe them as guidelines. The "G" standard compliance is specified in Appendix 1 of the main report.

2. BATHING WATERS IDENTIFIED AS FALLING WITHIN THE TERMS OF THE DIRECTIVE

- 2.1 Table 5 summarises E.coli and total coliform sample statistics and compliance with the "G" values for the 51 identified Welsh Region bathing waters in 1991. These results indicate that overall 12 (24%) complied with the combined standard.

3. BATHING WATERS NOT IDENTIFIED AS FALLING WITHIN THE TERMS OF THE DIRECTIVE

- 3.1 The compliance of the non-identified bathing waters with the E.coli/total coliform "G" standard of the Bathing Waters Directive is shown in Table 6. This shows that 25 (18%) complied with this Directive standard in 1991.

4. SUMMARY

- 4.1 Summary table showing compliance with the combined E.coli and total coliform "G" and "I" standards:-

Bathing Water	Number	"I" Standard Pass		"G" Standard Pass	
		Number	Percent	Number	Percent
EC	51	45	88%	12	24%
non EC	142	96	68%	25	49%

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הַיְיָ אֱלֹהֵינוּ

	<u>E.coli</u>			<u>Total Coliforms</u>			<u>Overall</u>
<u>Bathing Water</u>	<u>No. Samples</u>	<u>No. Fail</u>	<u>Pass/Fail</u>	<u>No. Samples</u>	<u>No. Fail</u>	<u>Pass/Fail</u>	<u>Pass/Fail</u>
<u>South East</u>							
Jacksons Bay	21	20	F	21	20	F	F
Whitmore Bay	21	18	F	21	18	F	F
Cold Knap Beach	21	12	F	21	8	F	F
<u>South West</u>							
Southerndown Beach	22	14	F	22	12	F	F
Trecco Bay	22	4	P	22	4	FP	F
Sandy Bay	22	9	F	22	6	F	F
Rest Bay	22	3	P	22	5	F	F
Aberafan Slip	22	10	F	22	10	F	F
Swansea Bay	22	18	F	22	18	F	F
Bracelet Bay	22	18	F	22	20	F	F
Limeslade Bay	22	19	F	22	17	F	F
Langland Bay	22	16	F	22	6	F	F
Caswell Bay	22	6	F	22	3	P	F
Oxwich Bay	22	1	P	22	1	P	P
Port Eynon Bay	22	0	P	22	1	P	P
Rhossili Beach	22	1	P	22	0	P	P
Pembrey Beach	22	1	P	22	1	P	P
Pendine Beach	20	6	F	20	2	FP	F
Amroth Beach	20	6	F	20	3	P	F
Saundersfoot Beach	20	11	F	20	13	F	F
Tenby N. Beach	20	4	P	20	2	P	P
Tenby S. Beach	20	8	F	20	4	FP	F
Broadhaven	21	13	F	21	5	F	F
Newgale Beach	21	1	P	21	0	P	P
Whitesands	21	2	P	21	2	P	P
Newport Sands N.	21	6	F	21	3	P	F
Traeth Gwyn, New Quay	21	8	F	21	4	P	F
Aberystwyth S. Beach	21	11	F	21	11	F	F
Aberystwyth N. Beach	21	12	F	21	7	F	F
<u>North</u>							
Aberdyfi	21	12	F	21	8	F	F
Borth	21	3	P	21	1	P	PP
Tywyn	21	7	F	21	5	F	F
Fairbourne Beach	21	8	F	21	1	P	F
Barmouth	21	4	P	21	1	P	P
Llandanwg Beach	21	11	F	21	8	F	F
Harlech	21	7	F	21	5	F	F
Morfa Bychan	21	9	F	21	5	F	F
Criccieth Beach E.	21	10	F	21	7	F	F
Pwllheli Beach	21	2	P	21	0	P	P
Abersoch	21	8	F	21	5	F	F
Morfa Dinlle	23	4	P	24	0	P	P
Benllech	21	18	F	21	12	F	F
Trearddur Bay	22	5	F	22	2	P	F
Rhosneigr	22	1	P	22	0	P	P
Llandudno W.	22	18	F	22	18	F	F
Llandudno N.	22	13	F	22	4	FP	F

* CONFIDENTIAL *

Table 5 (contd)

<u>Bathing Water</u>	<u>E.coli</u>			<u>Total Coliforms</u>			<u>Overall</u>
	<u>No.</u> <u>Samples</u>	<u>No.</u> <u>Fail</u>	<u>Pass/</u> <u>Fail</u>	<u>No.</u> <u>Samples</u>	<u>No.</u> <u>Fail</u>	<u>Pass/</u> <u>Fail</u>	<u>Pass/</u> <u>Fail</u>
Colwyn Bay	22	18	F	22	11	F	F
Sandy Cove/Kinmel Bay	22	20	F	22	17	F	F
Rhyl	22	21	F	22	21	F	F
Prestatyn	22	16	F	22	14	F	F
W. Kirby	22	14	F	22	12	F	F

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* CONFIDENTIAL *

Table 6

COMPLIANCE OF NON-IDENTIFIED BATHING WATERS WITH "G" VALUES FOR
E. COLI. AND TOTAL COLIFORMS

<u>Bathing Water</u>	<u>E. Coli</u>			<u>Total Coliforms</u>			<u>Overall</u>
	<u>No. Samples</u>	<u>No. Fail</u>	<u>Pass/Fail</u>	<u>No. Samples</u>	<u>No. Fail</u>	<u>Pass/Fail</u>	<u>Pass/Fail</u>
<u>South East</u>							
St Mary's Well Bay	21	21	F	21	21	F	F
Bendricks Beach	21	20	F	21	21	F	F
Whitmore Bay (19033)	21	18	F	21	16	F	F
Whitmore Bay (19035)	21	18	F	21	19	F	F
Little Island	21	20	F	21	15	F	F
Watchtower Bay	21	16	F	21	14	F	F
Fontygary Bay	21	17	F	21	14	F	F
<u>South West</u>							
Llantwit Major	27	16	F	27	15	F	F
Ogmore Central	22	21	F	22	18	F	F
Newton Bay Porthcawl	22	14	F	22	13	F	F
Margam Sands	21	8	F	21	5	F	F
Aberafan E.	21	10	F	21	8	F	F
Aberafan W.	21	16	F	21	10	F	F
Jersey Marine	21	17	F	21	18	F	F
Swansea Bay (39103)	22	16	F	22	14	F	F
Swansea Bay (39101)	20	15	F	20	14	F	F
Swansea Bay (39104)	21	18	F	21	17	F	F
Langland Bay E.	22	19	F	22	10	F	F
Brandy Cove	22	14	F	22	6	F	F
Crawley Wood	16	0	P	16	0	P	P
Broughton Beach	21	6	F	21	1	P	F
Llanelli Beach	21	21	F	21	21	F	F
Burry Port Beach E.	21	11	F	21	7	F	F
Pendine W.	20	8	F	20	3	P	F
Amroth Beach E.	20	6	F	20	4	P	F
Amroth Beach W.	20	5	F	20	2	P	F
Coppet Hall	20	12	F	20	12	F	F
Saundersfoot E.	20	9	F	20	10	F	F
Saundersfoot W.	20	17	F	20	16	F	F
Tenby N. Beach	17	2	P	17	2	P	P
Tenby S. (39022)	20	5	F	20	2	FP	F
Tenby S. (39023)	20	10	F	20	3	FP	F
Tenby S. (39025)	20	6	F	20	3	FP	F
Lydstep	20	4	FP	20	3	P	FP
Manorbier Beach W.	20	2	P	21	1	P	PF
Freshwater E. Beach	20	3	FP	20	0	P	FAF
Broadhaven S.	20	1	P	20	1	P	P
Llanreath Bay	20	13	F	20	8	F	F
Neyland	20	16	F	20	13	F	F
Milford Beach	20	9	F	20	6	F	F
Gelliswick	19	7	F	19	7	F	F
Sandy Haven	20	4	FP	20	0	P	FD
Dale	20	8	F	20	4	P	F
Marloes	20	2	P	20	2	P	P
Musselwick	5	0	P	5	0	P	P
St Brides Haven	20	3	P	20	0	P	P
Newgale S.	21	4	P	21	1	P	PF
Newgale N.	21	6	F	21	6	F	F
Caerfai	20	0	P	20	0	P	P

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Table 6 (contd)

	<u>E. Coli</u>			<u>Total Coliforms</u>			<u>Overall</u>
	<u>No.</u>	<u>No.</u>	<u>Pass/</u>	<u>No.</u>	<u>No.</u>	<u>Pass/</u>	<u>Pass/</u>
<u>Bathing Water</u>	<u>Samples</u>	<u>Fail</u>	<u>Fail</u>	<u>Samples</u>	<u>Fail</u>	<u>Fail</u>	<u>Fail</u>
Abereiddy	20	1	P	20	1	P	P
Goodwick Harbour	20	4	FP	20	3	FP	FP
Goodwick Beach	20	8	F	20	6	F	F
Newport S.	21	6	F	21	2	P	F
Poppit Sands (39067)	20	1	P	20	4	P	P
Poppit Sands (39068)	20	5	F	20	4	P	F
Patch	21	15	F	21	18	F	F
Craig-y-Gwbert	21	18	F	21	20	F	F
Mwnt	21	3	P	21	3	P	P
Aberporth E.	21	16	F	21	15	F	F
Aberporth Slip	21	11	F	21	14	F	F
Tresaith	21	13	F	21	6	F	F
Penbryn	19	7	F	19	3	FP	F
Llangranog Bay	21	15	F	21	15	F	F
Newquay N.	21	7	F	21	3	P	F
Newquay S. Beach	21	4	P	21	5	F	F
Llanina Beach	20	5	F	20	2	P	F
Little Quay	20	3	P	20	0	P	PF
Gilfach yr Halen	21	8	F	21	5	F	F
Aberaeron S.	21	3	P	21	1	P	PF
Aberaeron 4th Groyne	20	10	F	20	6	F	F
Aberaeron Beach N.	21	11	F	21	11	F	F
Aberarth	21	5	F	21	5	F	F
Llanon	21	8	F	21	4	P	F
Llansantffaid	21	5	F	21	1	P	F
Llanrhystud	21	2	P	21	0	P	P
Morfa Bychan	21	9	F	21	9	F	F
Tanybwllch	18	8	F	18	7	F	F
Aberystwyth S.	21	14	F	21	16	F	F
Aberystwyth Slip	21	18	F	21	20	F	F
Clarach S.	21	15	F	21	18	F	F
Clarach N.	21	12	F	21	16	F	F
<u>North</u>							
Ynyslas E.	21	12	F	21	6	F	F
Ynyslas N. Groyne	21	3	P	21	2	P	P
Aberdyfi (20170)	21	14	F	21	10	F	F
Aberdyfi (20172)	21	19	F	21	12	F	F
Llwyngwrl	21	15	F	21	12	F	F
Barmouth	21	5	F	21	3	P	F
Llanaber	21	5	F	21	2	FP	F
Llanenddwyn	21	2	P	21	0	P	P
Garreg Wen	21	19	F	21	16	F	F
Black Rock Sands	21	8	F	21	3	P	F
Criccieth W.	21	12	F	21	11	F	F
Pwllheli	21	5	F	21	2	FP	F
Llanbedrog	21	12	F	21	8	F	F
Abersoch (22550)	20	6	F	20	2	P	F
Abersoch (23346)	21	20	F	21	15	F	F
Machroes	21	11	F	21	6	F	F
Porth Ceiriad	21	0	P	21	0	P	P
Porth Neigwl	22	0	P	23	0	P	P
Aberdaron	22	1	P	23	2	P	P
Porth Oer	22	2	P	23	0	P	P
Porth Iago	22	1	P	23	1	P	P
Porth Colmon	22	7	F	23	2	P	F

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Table 6 (contd)

	<u>E. Coli</u>			<u>Total Coliforms</u>			<u>Overall</u>
	<u>No.</u> <u>Samples</u>	<u>No.</u> <u>Fail</u>	<u>Pass/</u> <u>Fail</u>	<u>No.</u> <u>Samples</u>	<u>No.</u> <u>Fail</u>	<u>Pass/</u> <u>Fail</u>	<u>Pass/</u> <u>Fail</u>
<u>Bathing Water</u>							
Porth Tywyn	22	2	P	23	1	P	P
Porth Dinllaen	22	6	F	23	4	P	F
Porth Nefyn	21	8	F	22	4	P	F
Pontllyfni	22	5	F	23	3	P	F
Dinas Dinlle	22	5	F	23	2	P	F
Plas Menai	22	16	F	23	12	F	F
Port Dinorwic	22	19	F	23	14	F	F
Menai Br. Pier	22	20	F	23	17	F	F
Rhosneigr	22	3	P	22	7	F	F
Traeth Crigyll	22	8	F	22	5	F	F
Porth Gwr Mawr	22	22	F	22	22	F	F
Holyhead Newry	22	3	P	22	1	P	P
Penrhos Beach	22	8	F	22	7	F	F
Cemaes Bay	22	14	F	22	10	F	F
Benllech	22	12	F	22	9	F	F
Red Wharf Bay	22	11	F	22	7	F	F
Llanddona	22	5	F	22	2	P	F
Beaumaris Pier	22	16	F	23	11	F	F
Beaumaris (27829)	22	8	F	23	8	F	F
Llanfairfechan	22	10	F	23	9	F	F
Penmaenmawr E.	22	6	F	23	6	F	F
Penmaenmawr (23006)	22	9	F	23	8	F	F
Penmaenmawr (23005)	22	12	F	23	9	F	F
Deganwy	22	22	F	22	22	F	F
Llandudno W Shore	22	18	F	22	17	F	F
Llandudno N Shore	22	18	F	22	12	F	F
Penrhyn Bay	22	22	F	22	21	F	F
Colwyn Bay (25041)	22	19	F	22	15	F	F
Colwyn Bay (25042)	22	15	F	22	5	F	F
Llanddulas	22	18	F	22	16	F	F
Abergele	22	18	F	22	14	F	F
Kinmel Bay	22	19	F	22	19	F	F
Rhyl Splash Point	22	19	F	22	17	F	F
Ffrith Beach	22	12	F	22	15	F	F
Prestatyn, Barkby	22	14	F	22	12	F	F
Point of Ayr	22	14	F	22	9	F	F
Thurstaston Station Rd.	22	21	F	22	20	F	F
Caldycroft Drive	22	20	F	22	17	F	F
W Kirby at Marine Lake	22	3	P	22	2	P	P