

National Centre for Instrumentation
and Marine Surveillance

COASTAL BASELINE SURVEY

January / February 1995

Results

Report NC/MAR/009
4th September 1995



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for
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**National Rivers Authority
National Centre for Instrumentation
and Marine Surveillance**

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COASTAL BASELINE SURVEY

January / February 1995

Results

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ENVIRONMENT AGENCY



135359

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Introduction

This document presents the Coastal Survey Vessel data from the January / February 1995 baseline survey coordinated by the NRA's National Centre for Instrumentation and Marine Surveillance.

Continuous monitoring data in the form of A1 plots is appended to this report in a separate package. An overview of the QUBIT system and a technical glossary are included herein.

The laboratory information is presented in two forms, plotted as maps and as tabular data. The maps use a minimum reporting limit (set to one tenth of the EQS (Environmental Quality Standard) where there is one), whilst the tables report the values returned from the laboratory.

Because of the poor weather conditions much of the southern area of the United Kingdom was not surveyed during the designated period of January and February. These areas were surveyed during March and April. The data from these two months are not comparable with January and February as they are effectively early Spring rather than Winter. To avoid misleading the reader two sets of maps have been produced, one for January / February and another for March / April. A single table of data is presented, covering the entire survey. This table contains the date of sampling, so the reader can interpret the results on a site by site basis.

More detail of the sampling and analysis procedures can be found in the laboratory data overview. The position of the sites and the suites measured at each site are detailed in the site record at the end of the document.

CONTINUOUS MONITORING DATA OVERVIEW

January / February 1995

The QUBIT system is the on board data gathering system that collects data from the electrochemical and spectral continuous monitoring devices used on board the NRA's coastal survey vessels. The actual determinands measured on each boat can vary, as can the calibration methods and the instruments used to gather them. The NRA is seeking to standardise. The basic determinands (Temperature, Salinity, Dissolved Oxygen, Transmission and Chlorophyll) are measured on all systems. Measurements are recorded every ten seconds along the boat's survey track.

The QUBIT continuous monitoring system's results in the form of A1 plots have been sent separately to this report. They have been annotated with notes that explain the occurrence of unusual data features and missing data. These notes are necessarily technical in nature, so a technical note is included below to aid the reader.

The plots were distributed in the following manner:

Area	Sheet Numbers
Northumbria / Yorkshire	1 - 4
Anglian	5 - 8
Thames	8 - 9
Southern	9 - 13
South Western	13 - 22
Severn Trent	22 - 23
Welsh	23 - 32
North West	32 - 34

QUBIT CONTINUOUS MONITORING DATA

TECHNICAL GLOSSARY OF TERMS USED ON PLOT SHEET NOTES

Aquashuttle (Towfish) - A platform towed at approx. 4m below the water surface, usually containing the following suite of instruments; temperature, conductivity, depth (upward), dissolved oxygen, pH, transmission, fluorimeter and plankton recorder (Vigilance).

Profiler - An instrument used primarily for gathering vertical profile data through the water column, usually down to a depth of 15m, although often used to collect data along the vessel's track as she steams between sample sites. Typical parameters include; temperature, conductivity, depth, pH and dissolved oxygen however transmission and fluorescence may also be included.

Moon pool - Refers to a data collection point on the vessel such that an instrument is lowered down a hole cut through the hull allowing data to be collected in-situ at a depth of approx. 1m. The instrument used is usually the profiler.

Flow cell - Again refers to a data collection point where by sea water is pumped from a depth of approx. 1m into a container in which the instrument is placed.

Turner - The manufacturer's name for a fluorometer. Sea water is pumped by a peristaltic pump from a depth of approx. 1m to the instrument which records the fluorescence which may be used as an estimate only of the amount of chlorophyll *a* present.

Hydrolab - The name given to an instrument used on the Sea Vigil where sea water is pumped through a small flow cell containing similar probes to those of the profiler.

QUBIT (TRAC V) - The central navigation / data logging computer on board each vessel. Data strings from each water quality instrument are filtered through a QDCF file which converts 'bit' values into engineering readings and merges these files with position data from the GPS (Global Positioning System). At this stage two files are stored down, a RAW DATA file containing all instrument parameters without fine calibration and a QPF file which contains ten selected parameters and has fine calibration applied.

LABORATORY DATA OVERVIEW

January / February 1995

The following data are from water samples taken by the Coastal Survey Vessels from 1 metre depth and sent to NRA laboratories for analysis.

Data from the following determinands has been mapped:

Dissolved metals:	Arsenic Cadmium Chromium Copper Lead Nickel Zinc
Total metals:	Mercury
Nutrients:	Ammonia Nitrite Orthophosphate Silicate Total Oxidised Nitrogen
Chlorophyll <i>a</i>	
Suspended solids:	105°C 500°C organic fraction

Organics (pesticides), where the values found were above the limit of detection.

Two NRA National Laboratory Service Laboratories were used. Llanelli Laboratory analysed samples from sites 1 to 137 (please see attached map), and Nottingham Laboratory analysed samples from sites 138 to 186, except total mercury, where the results shown are all from Llanelli Laboratory.

Sampling dates are given above the results columns of the tables. Although this survey was initially called a Winter survey, due to operational difficulties in poor weather conditions the range of dates is great, from 24 January to 7 April, and this has had significant effects on the data, especially on nutrient and chlorophyll values. For this reason, two versions of each map have been plotted, one of samples taken in January and February, the other of samples taken in March and April.

Some changes have been made to site positions in the North West Region (CSV Coastal Guardian) since the last survey. The new positions are given on the site listing (attached).

The determinand codes (left hand column of the results tables) are South Western determinand codes. These differ from those used by the other Regions, and the Laboratories. They can be used when contacting the National Centre with queries or data requests.

A less than sign (<) in results columns indicates that the result obtained was below the limit of detection. The LoD for each determinand is given in the third column of the results tables. The LoD values vary depending on the region, but in general can be equated to 1/10 of the EQS where the determinand has an EQS. Where the laboratory values are less than 1/10 EQS, they have been rounded up, giving a map plot minimum reporting limit of 1/10 EQS. The data in the tables are as received from the laboratories.

The majority of blank squares in the data tables indicate that no analysis was required for this determinand at the site, the remainder are where the required analysis was not possible, usually due to poor weather at the site.

The difference between the two suspended solids values (measured at 105°C (det code 135) and at 500°C (det code 143)) is the organic fraction of the solid matter, and these values have been calculated and plotted, both as a percentage and a real value.

Nottingham Laboratory chlorophyll a values have been corrected for phaeophytin, whereas Llanelli Laboratory chlorophylls have not, and these values are therefore not directly comparable. Future survey data reports should contain values of the same type.

If the data appears to contain any anomalies or unexpected values, these can be checked with the analysing laboratory. Contact the National Centre with the base number, date and determinand code if you require this to be done.

Laboratory data from this survey and previous Baseline Surveys are available in a variety of electronic and hard copy formats upon request. Contact Diana Milner (Data Officer) x4221 or Richard Saull (Data Manager) x4238 at the National Centre for Instrumentation and Marine Surveillance, Bath. (National code 7 27 x or 01278 457333.)

The information provided is based on that currently available to the National Centre: if you have any queries or questions, please contact us.

Laboratory Maps: January / February 1995

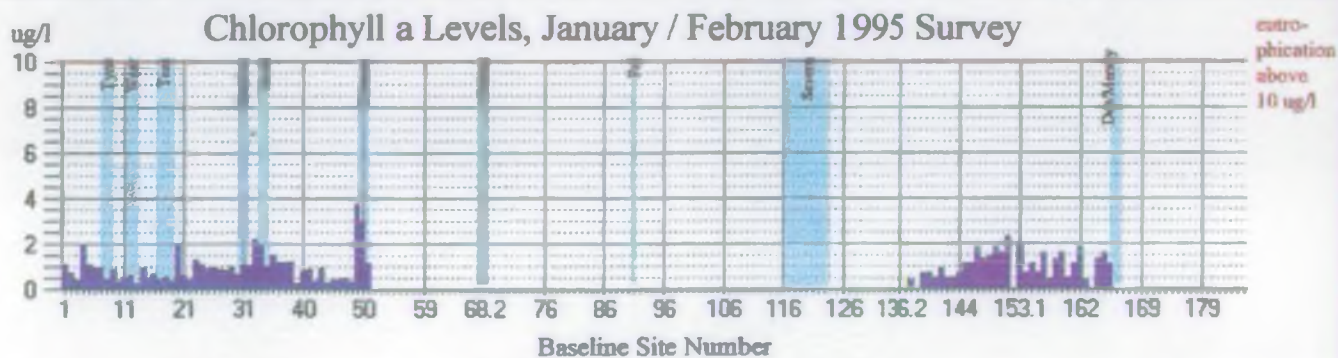
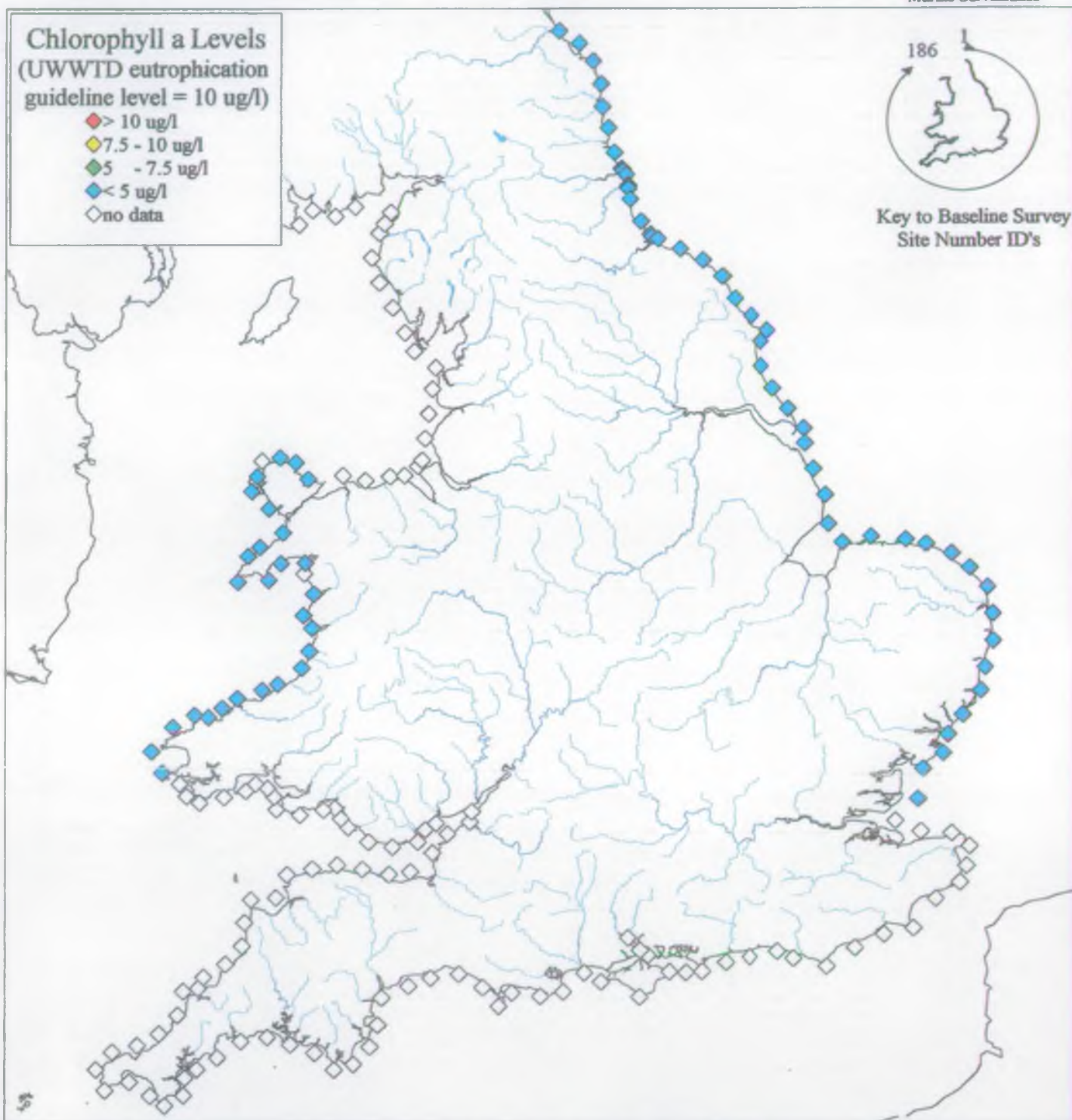
The following maps have been plotted:

Chlorophyll a	Jan / Feb
Chlorophyll a	Mar / Apr
Total Oxidised Nitrogen	Jan / Feb
Total Oxidised Nitrogen	Mar / Apr
Nitrite	Jan / Feb
Nitrite	Mar / Apr
Ammoniacal Nitrogen	Jan / Feb
Ammoniacal Nitrogen	Mar / Apr
Phosphate	Jan / Feb
Phosphate	Mar / Apr
Silicate	Jan / Feb
Silicate	Mar / Apr
Suspended Solids (105°C)	Jan / Feb
Suspended Solids (105°C)	Mar / Apr
Suspended Solids (500°C)	Jan / Feb
Suspended Solids (500°C)	Mar / Apr
Suspended Solids (organic)	Jan / Feb
Suspended Solids (organic)	Mar / Apr
Suspended Solids (organic %)	Jan / Feb
Suspended Solids (organic %)	Mar / Apr
Arsenic (dissolved)	Jan / Feb
Arsenic (dissolved)	Mar / Apr
Cadmium (dissolved)	Jan / Feb
Cadmium (dissolved)	Mar / Apr
Chromium (dissolved)	Jan / Feb
Chromium (dissolved)	Mar / Apr
Copper (dissolved)	Jan / Feb
Copper (dissolved)	Mar / Apr
Mercury (dissolved)	Jan / Feb
Mercury (dissolved)	Mar / Apr
Nickel (dissolved)	Jan / Feb
Nickel (dissolved)	Mar / Apr
Lead (dissolved)	Jan / Feb
Lead (dissolved)	Mar / Apr
Zinc (dissolved)	Jan / Feb
Zinc (dissolved)	Mar / Apr
Mercury (Total)	Jan / Feb
Mercury (Total)	Mar / Apr
Organic Occurrence	Jan / Feb
Organic Occurrence	Mar / Apr

Chlorophyll a Levels, National Baseline Survey, January / February 1995.



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Chlorophyll a Levels, National Baseline Survey, March / April 1995.



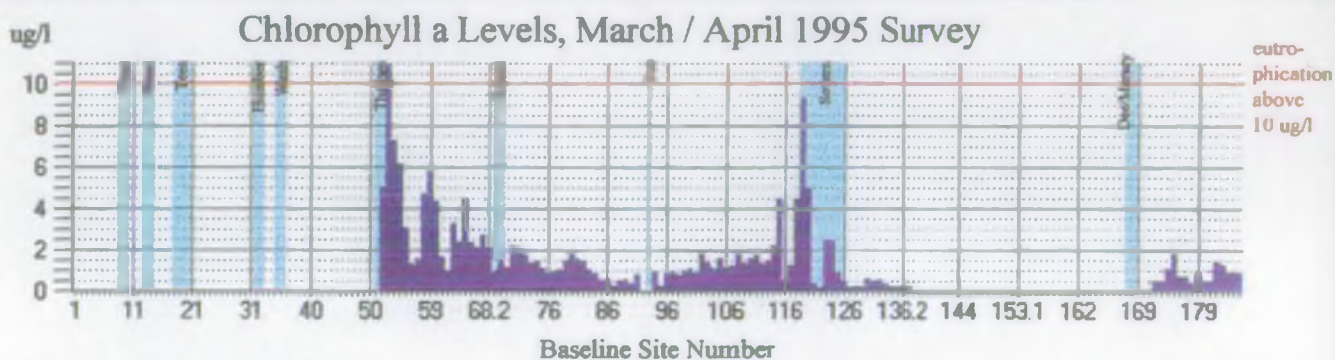
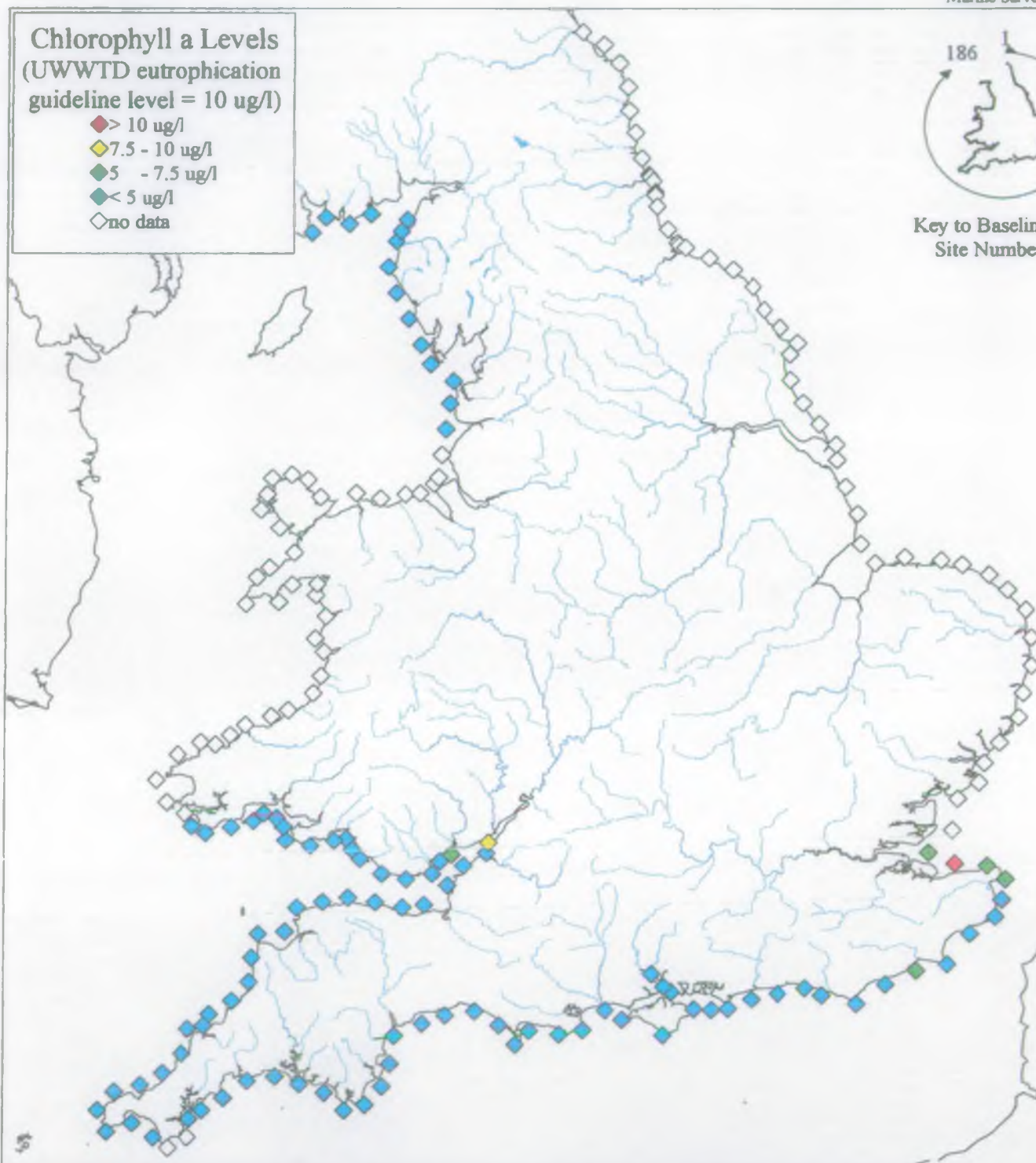
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Chlorophyll a Levels
(UWWTD eutrophication
guideline level = 10 ug/l)

- ◆ > 10 ug/l
- ◆ 7.5 - 10 ug/l
- ◆ 5 - 7.5 ug/l
- ◆ < 5 ug/l
- ◇ no data



Key to Baseline Survey
Site Number ID's



T.O.N. Levels, National Baseline Survey, January / February 1995.



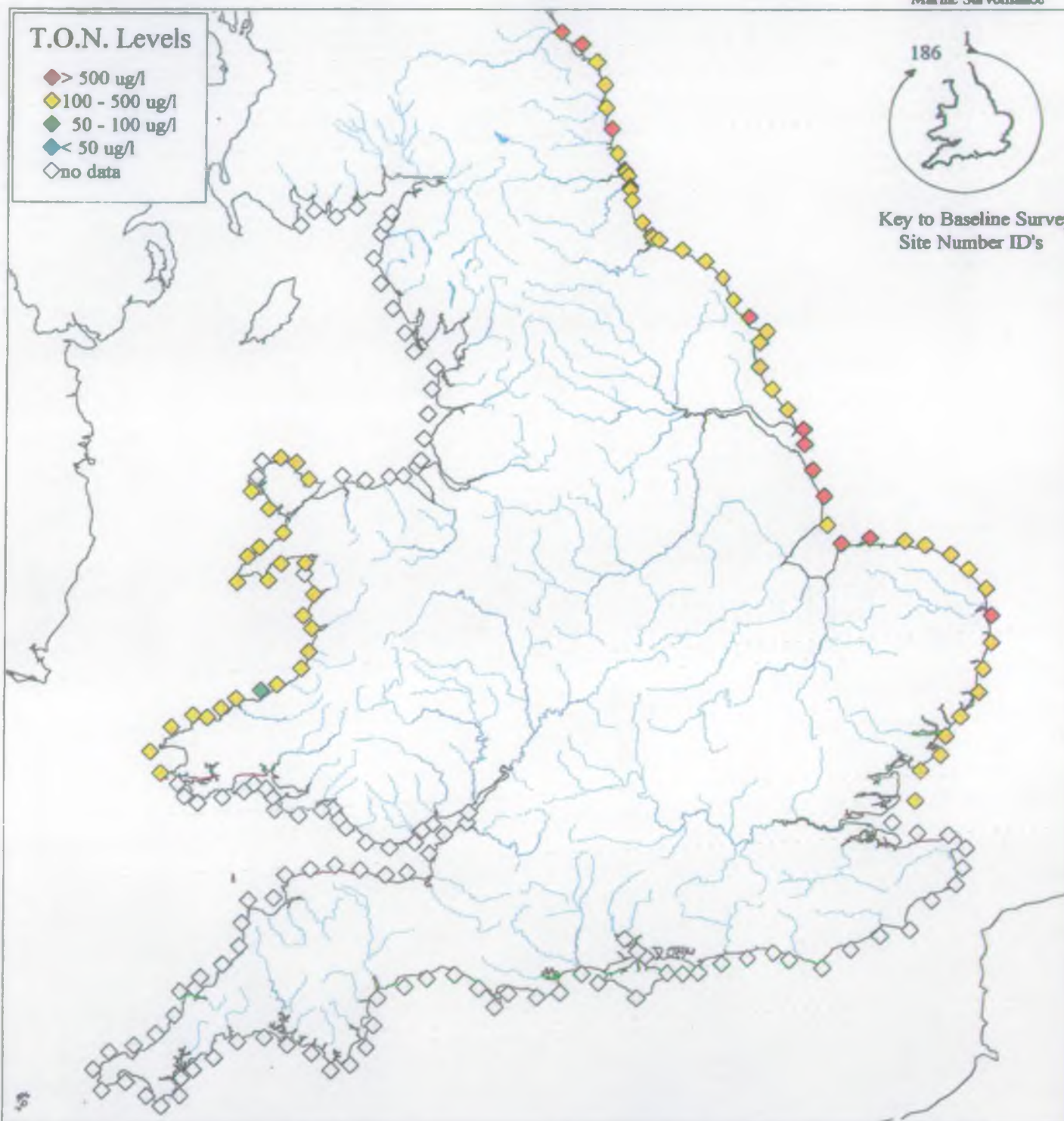
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T.O.N. Levels

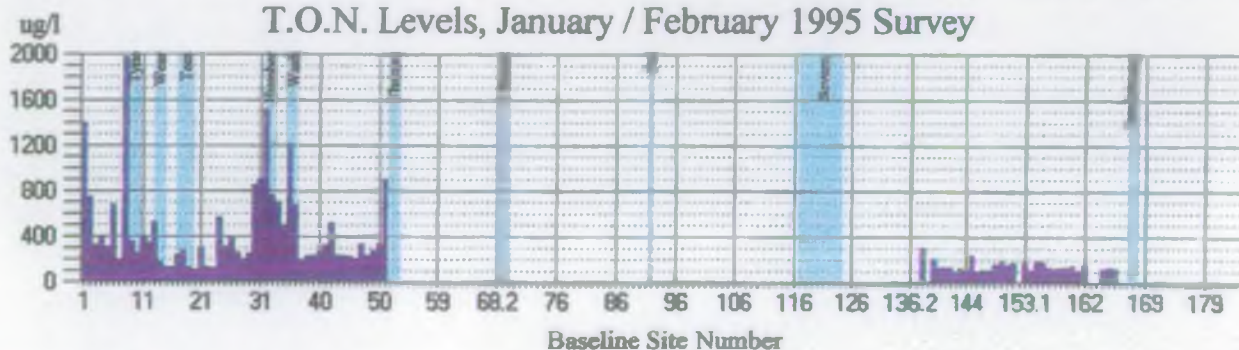
- ◆ > 500 ug/l
- ◆ 100 - 500 ug/l
- ◆ 50 - 100 ug/l
- ◆ < 50 ug/l
- ◇ no data



Key to Baseline Survey
Site Number ID's



T.O.N. Levels, January / February 1995 Survey



T.O.N. Levels, National Baseline Survey, March / April 1995.



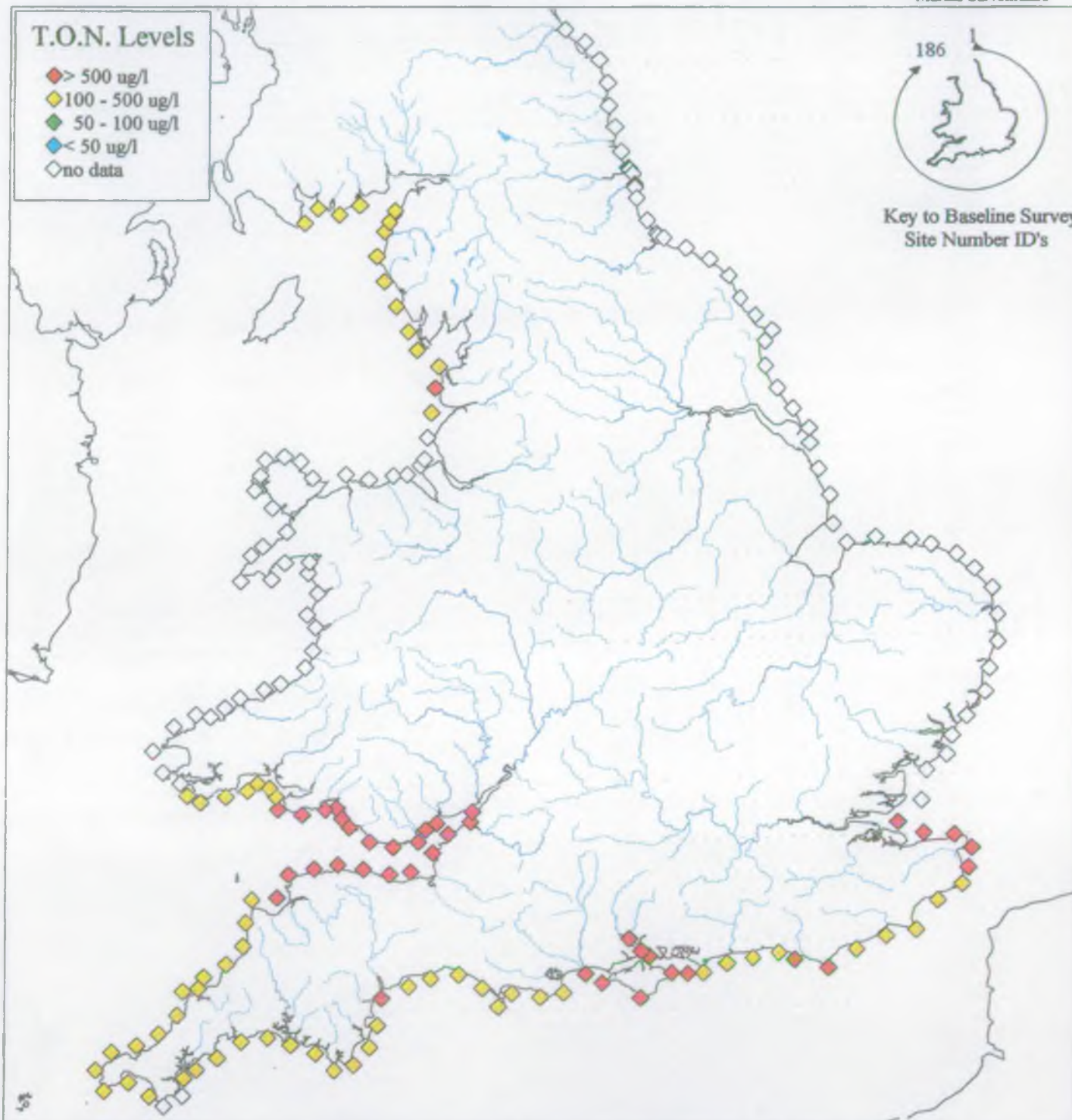
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Key to Baseline Survey
Site Number ID's

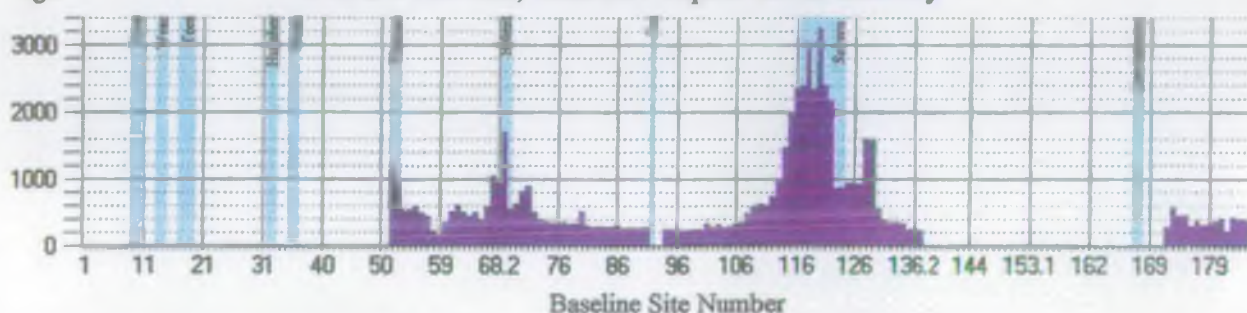
T.O.N. Levels

- ◆ > 500 ug/l
- ◆ 100 - 500 ug/l
- ◆ 50 - 100 ug/l
- ◆ < 50 ug/l
- ◇ no data



ug/l

T.O.N. Levels, March / April 1995 Survey



Nitrite Levels, National Baseline Survey, January / February 1995.



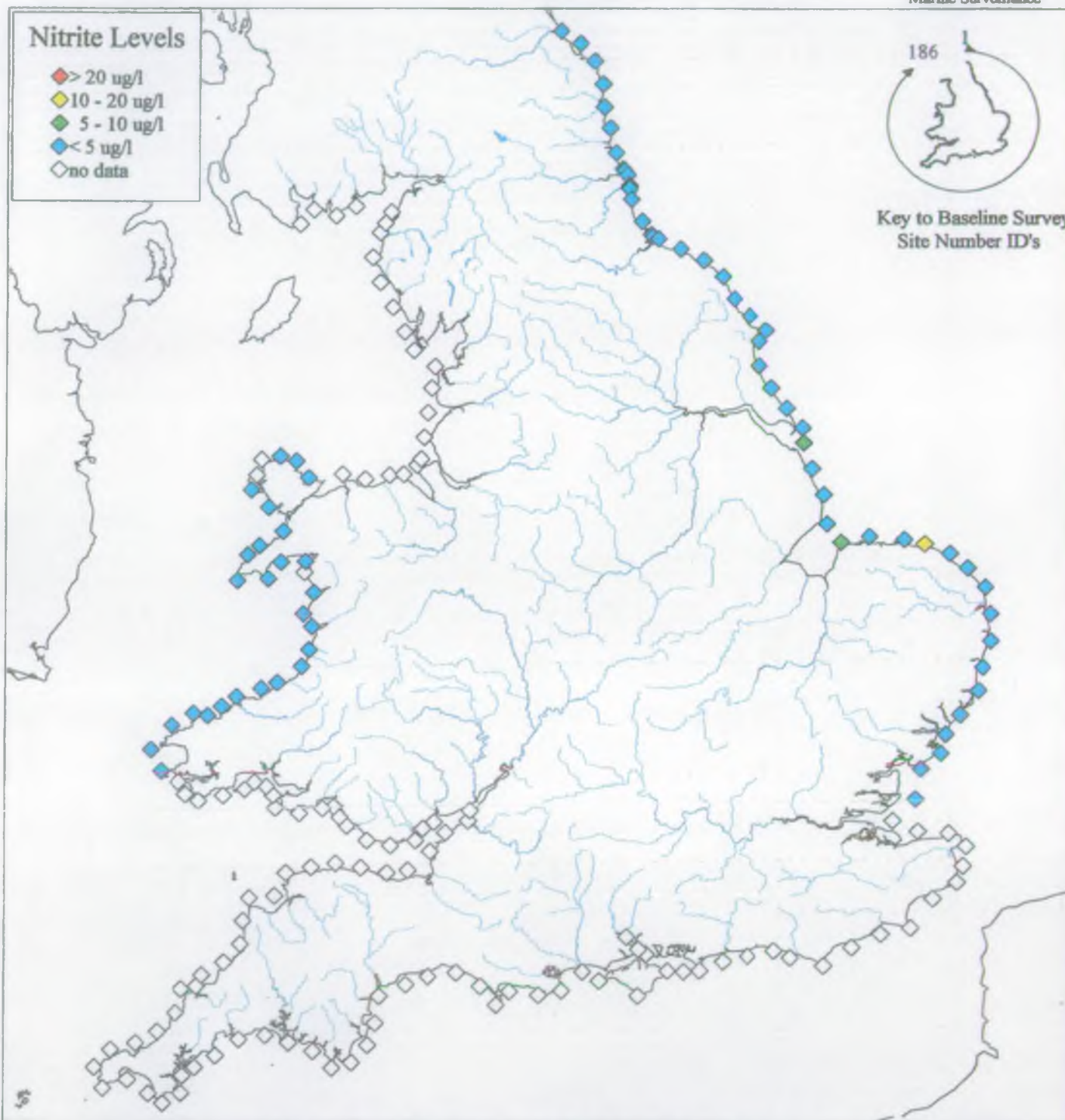
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Key to Baseline Survey
Site Number ID's

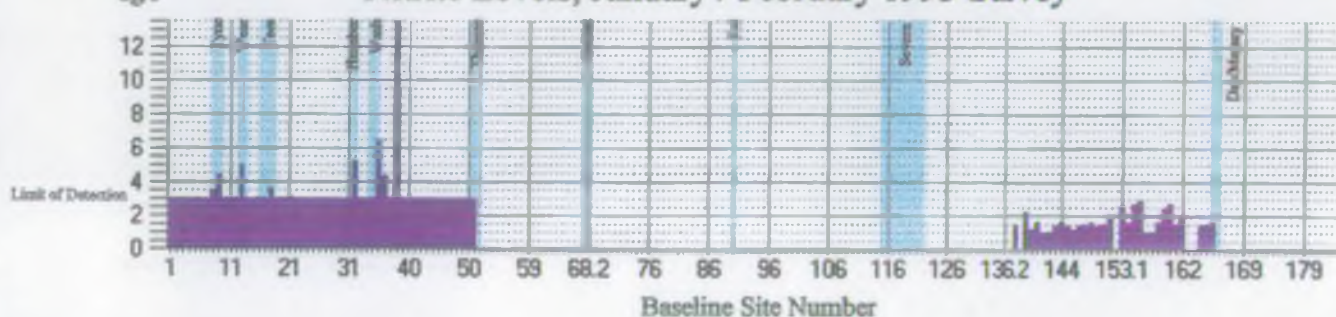
Nitrite Levels

- ◆ > 20 ug/l
- ◆ 10 - 20 ug/l
- ◆ 5 - 10 ug/l
- ◆ < 5 ug/l
- ◇ no data



ug/l

Nitrite Levels, January / February 1995 Survey



Nitrite Levels, National Baseline Survey, March / April 1995.



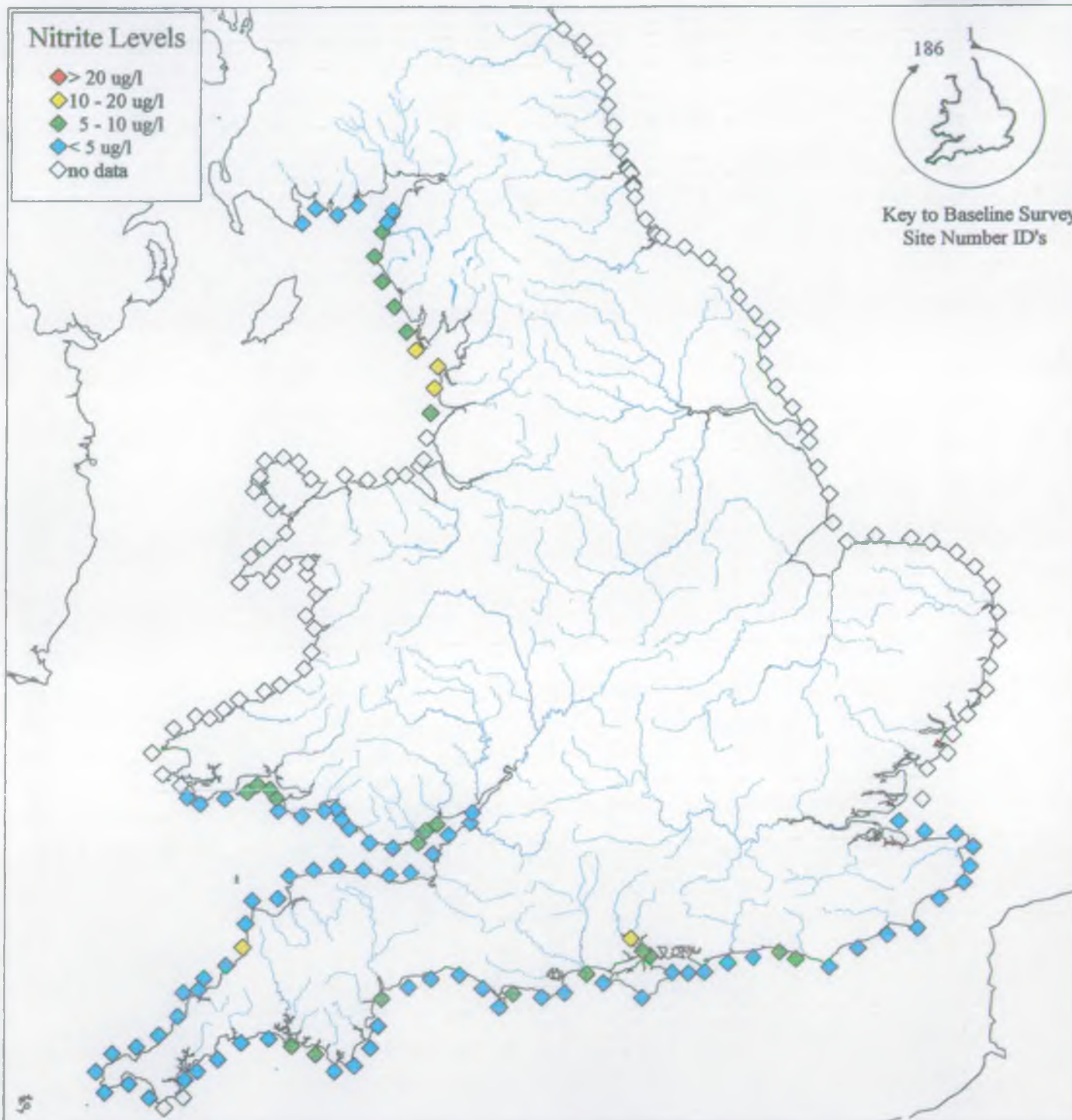
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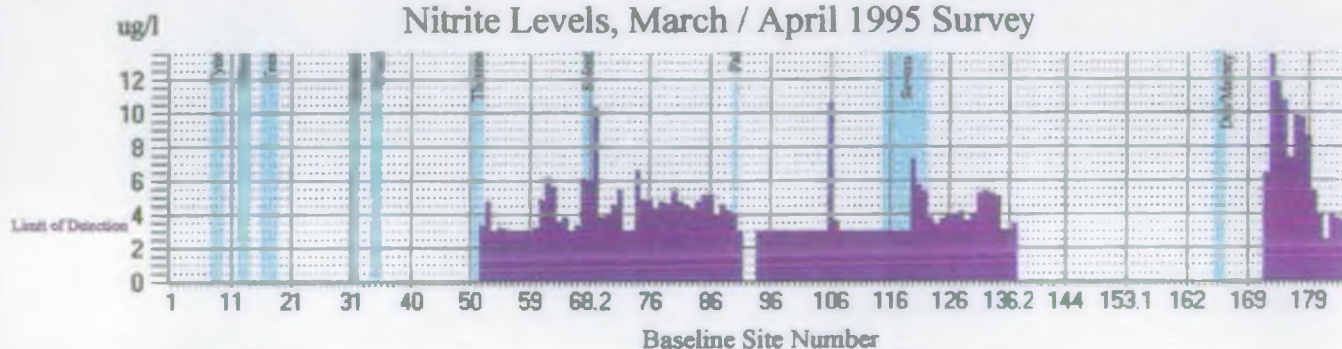
Key to Baseline Survey
Site Number ID's

Nitrite Levels

- ◆ > 20 ug/l
- ◆ 10 - 20 ug/l
- ◆ 5 - 10 ug/l
- ◆ < 5 ug/l
- ◇ no data



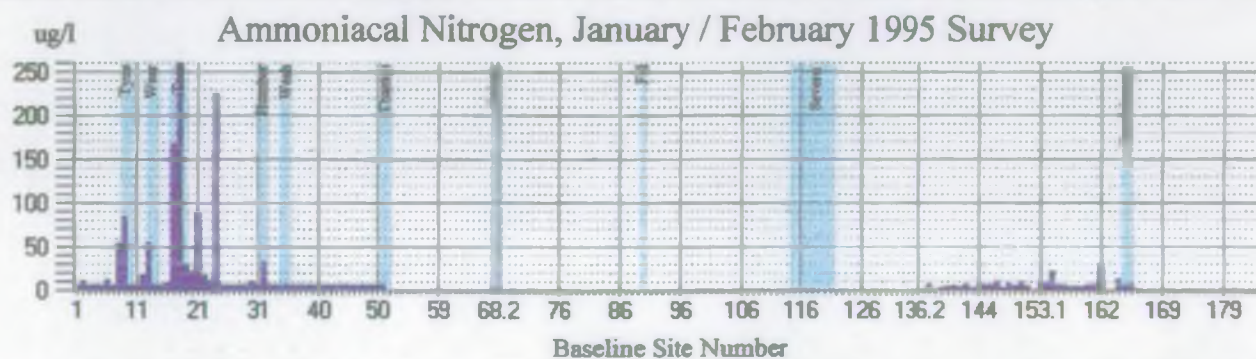
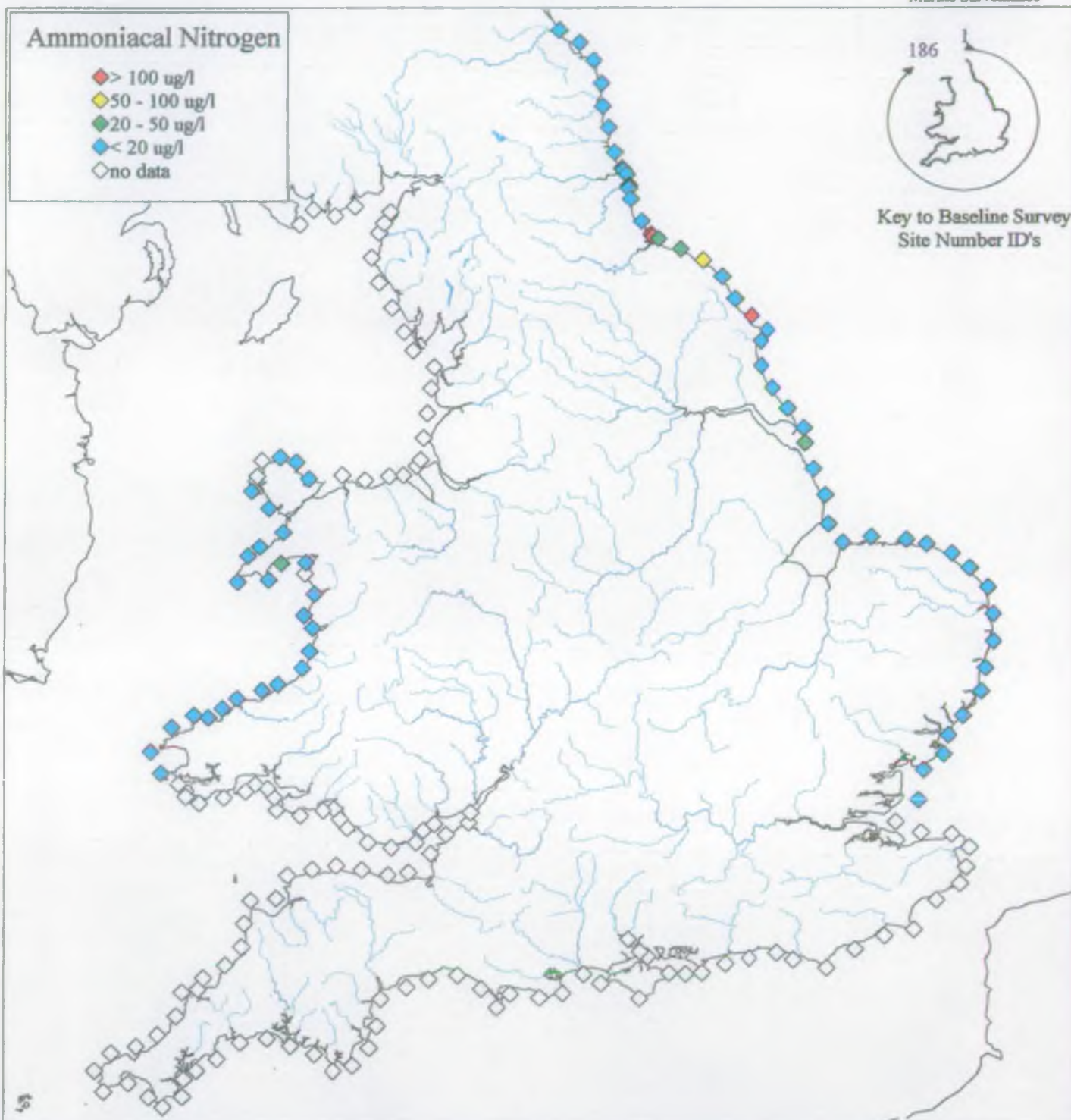
Nitrite Levels, March / April 1995 Survey



Ammoniacal Nitrogen, National Baseline Survey, January / February 1995.



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Ammoniacal Nitrogen, National Baseline Survey, March / April 1995.



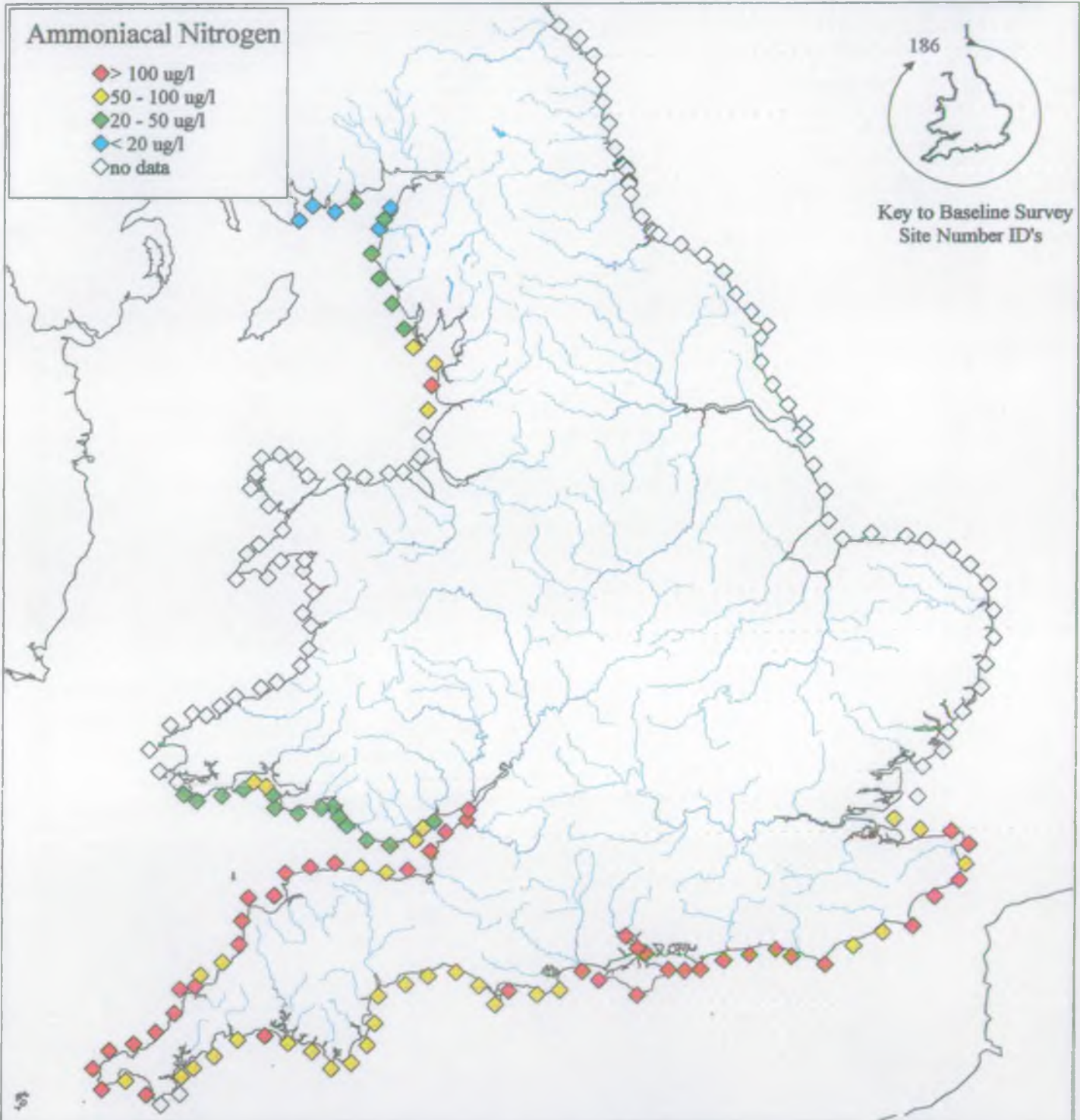
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Ammoniacal Nitrogen

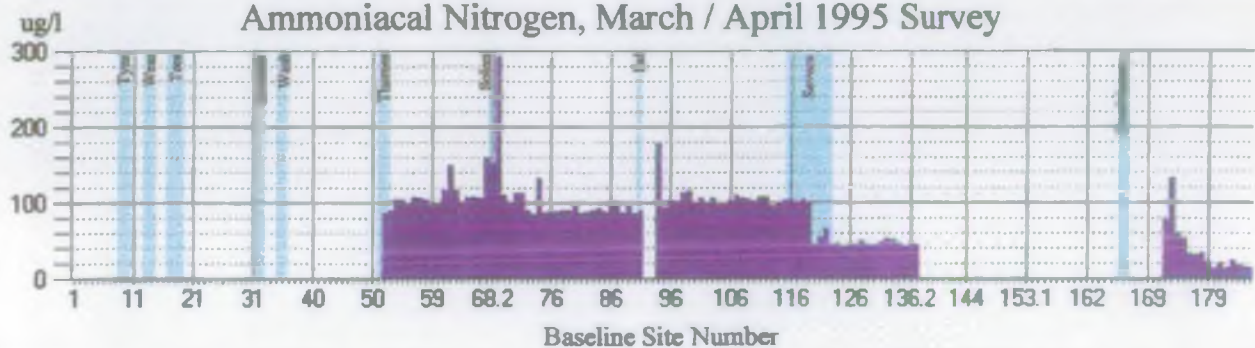
- ◆ > 100 ug/l
- ◆ 50 - 100 ug/l
- ◆ 20 - 50 ug/l
- ◆ < 20 ug/l
- ◇ no data



Key to Baseline Survey
Site Number ID's



Ammoniacal Nitrogen, March / April 1995 Survey



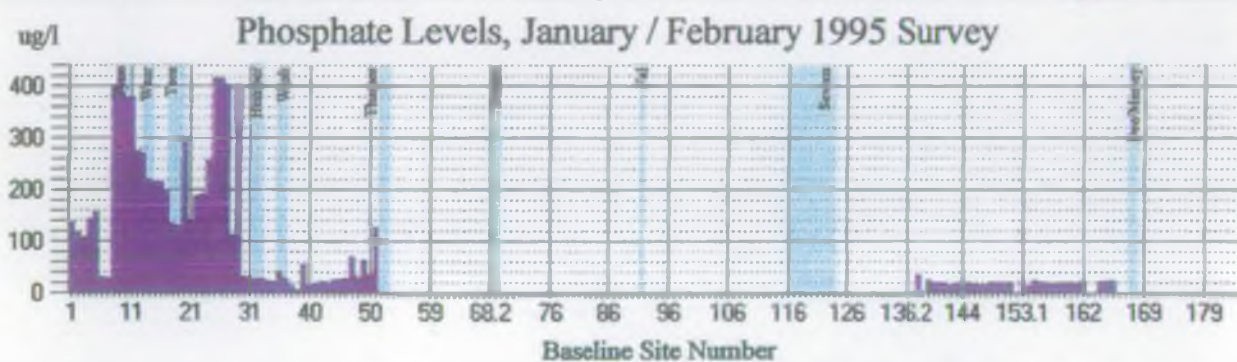
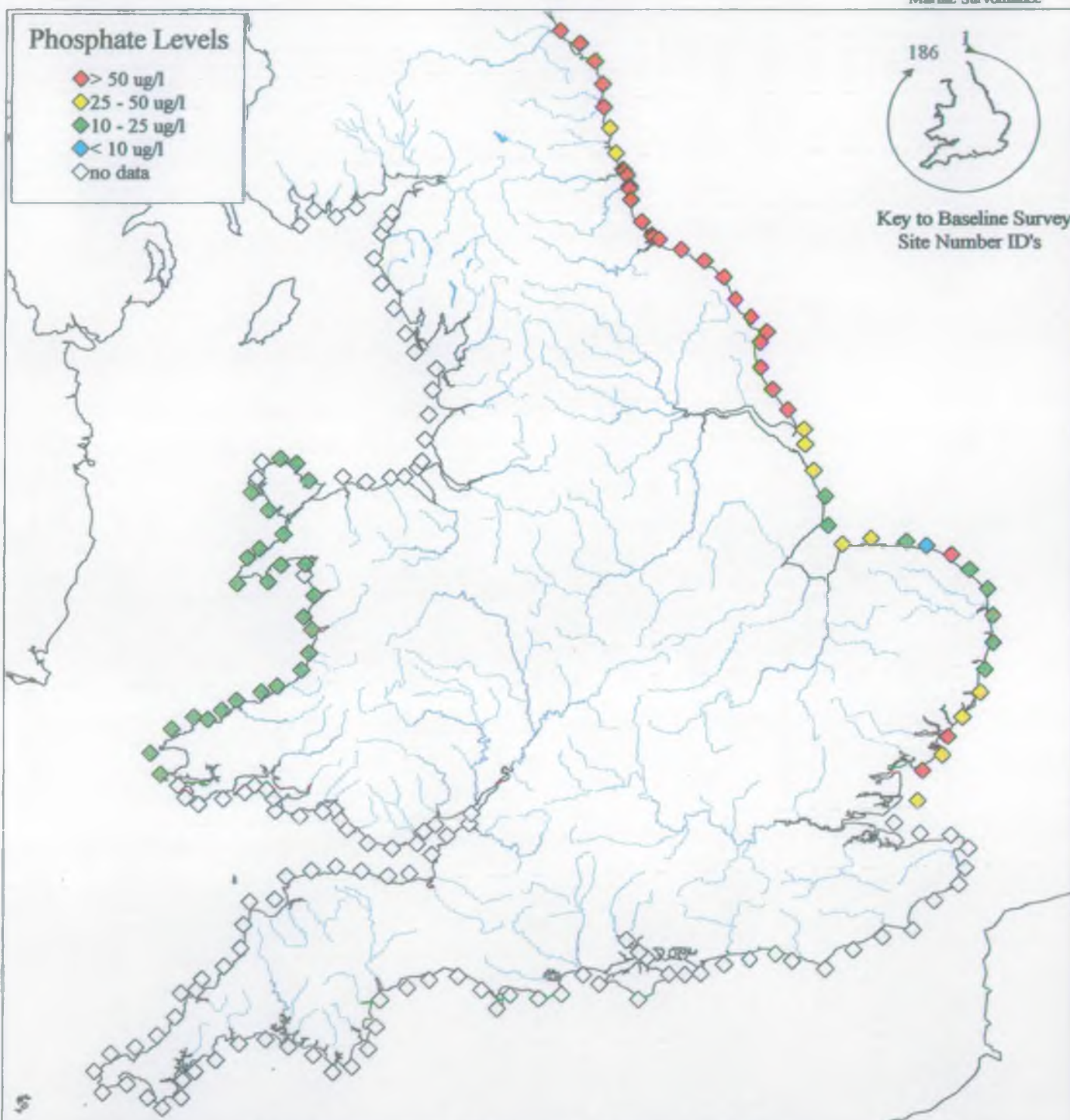
Phosphate Levels, National Baseline Survey, January / February 1995.



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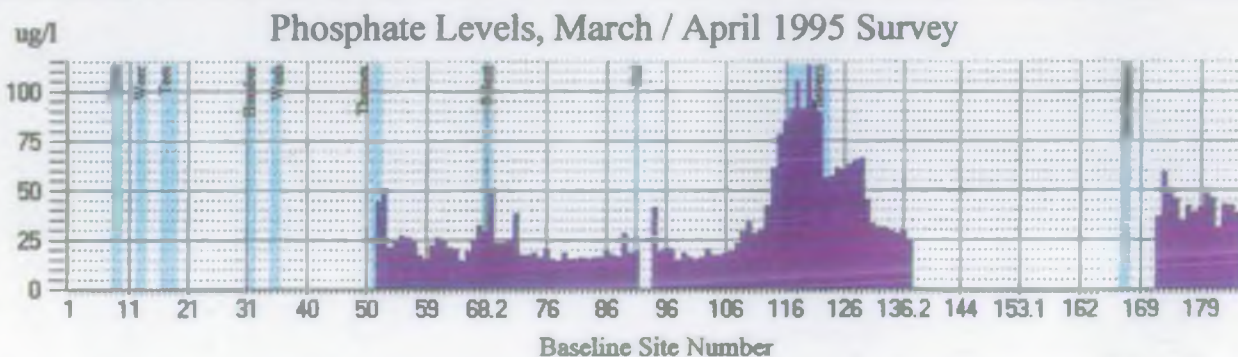
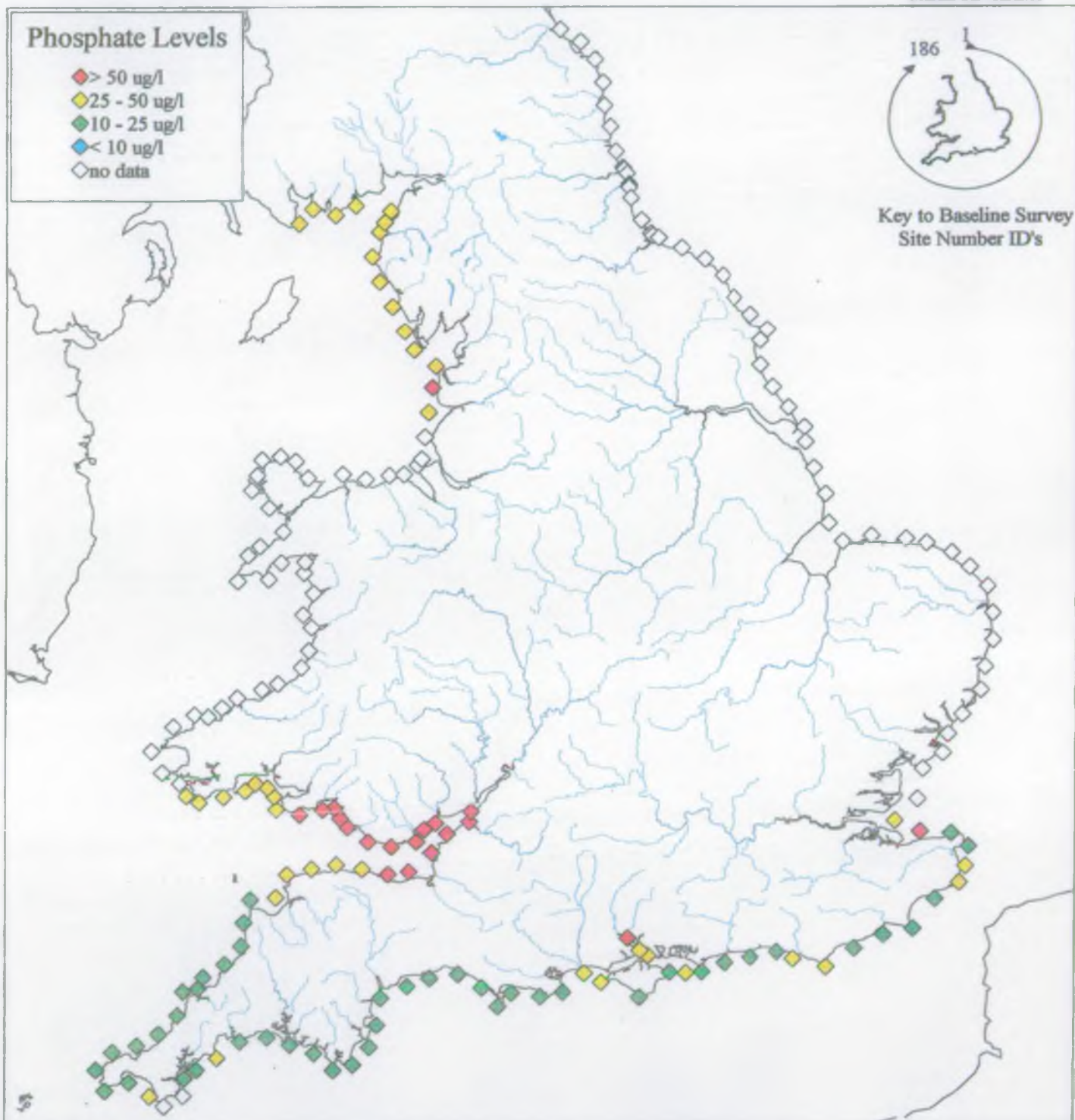
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Phosphate Levels, National Baseline Survey, March / April 1995.



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Silicate Levels, National Baseline Survey, January / February 1995.



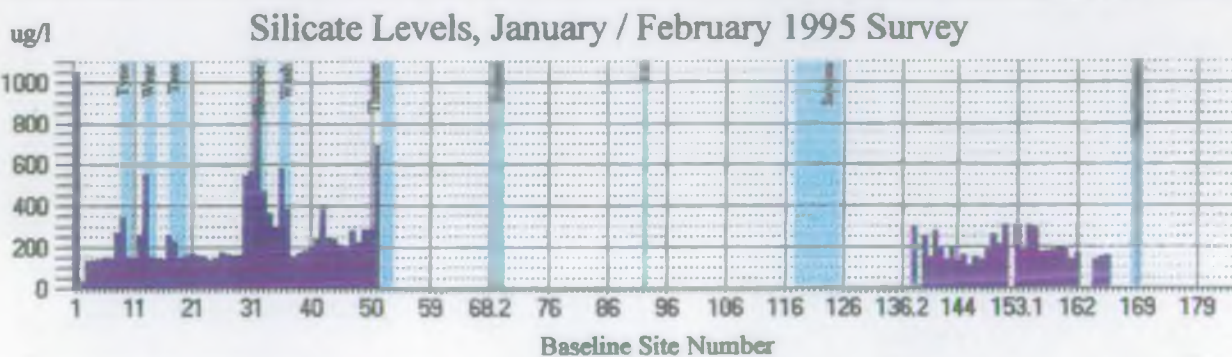
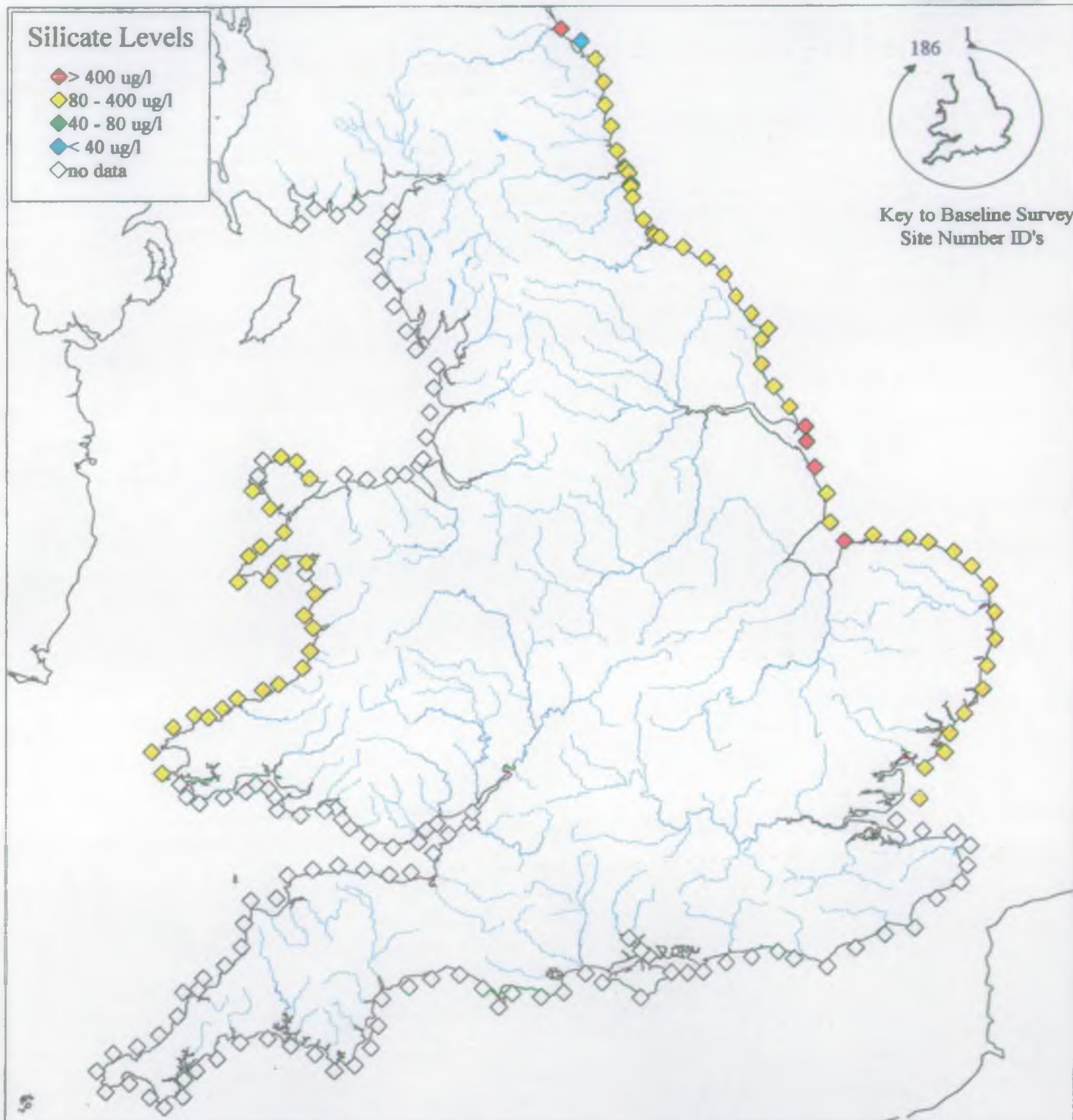
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Silicate Levels

- ◆ > 400 ug/l
- ◆ 80 - 400 ug/l
- ◆ 40 - 80 ug/l
- ◆ < 40 ug/l
- ◇ no data



Key to Baseline Survey
Site Number ID's



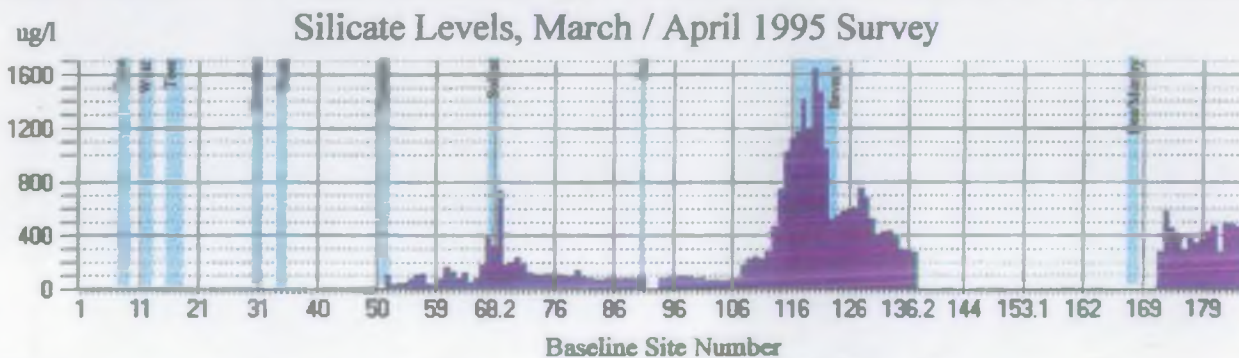
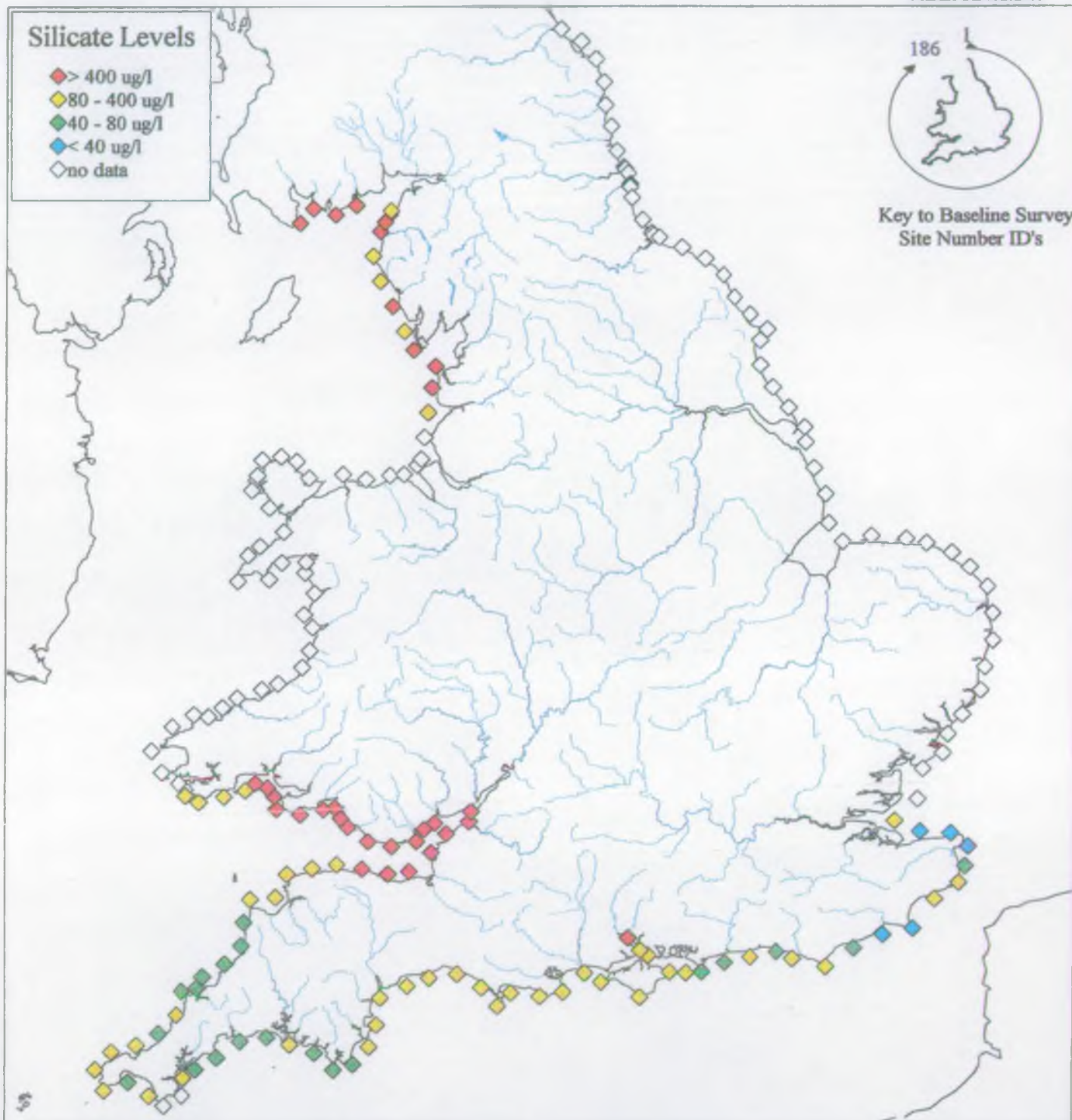
Silicate Levels, National Baseline Survey, March / April 1995.



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Key to Baseline Survey
Site Number ID's



Suspended Solids at 105°C, National Baseline Survey, January / February 1995.



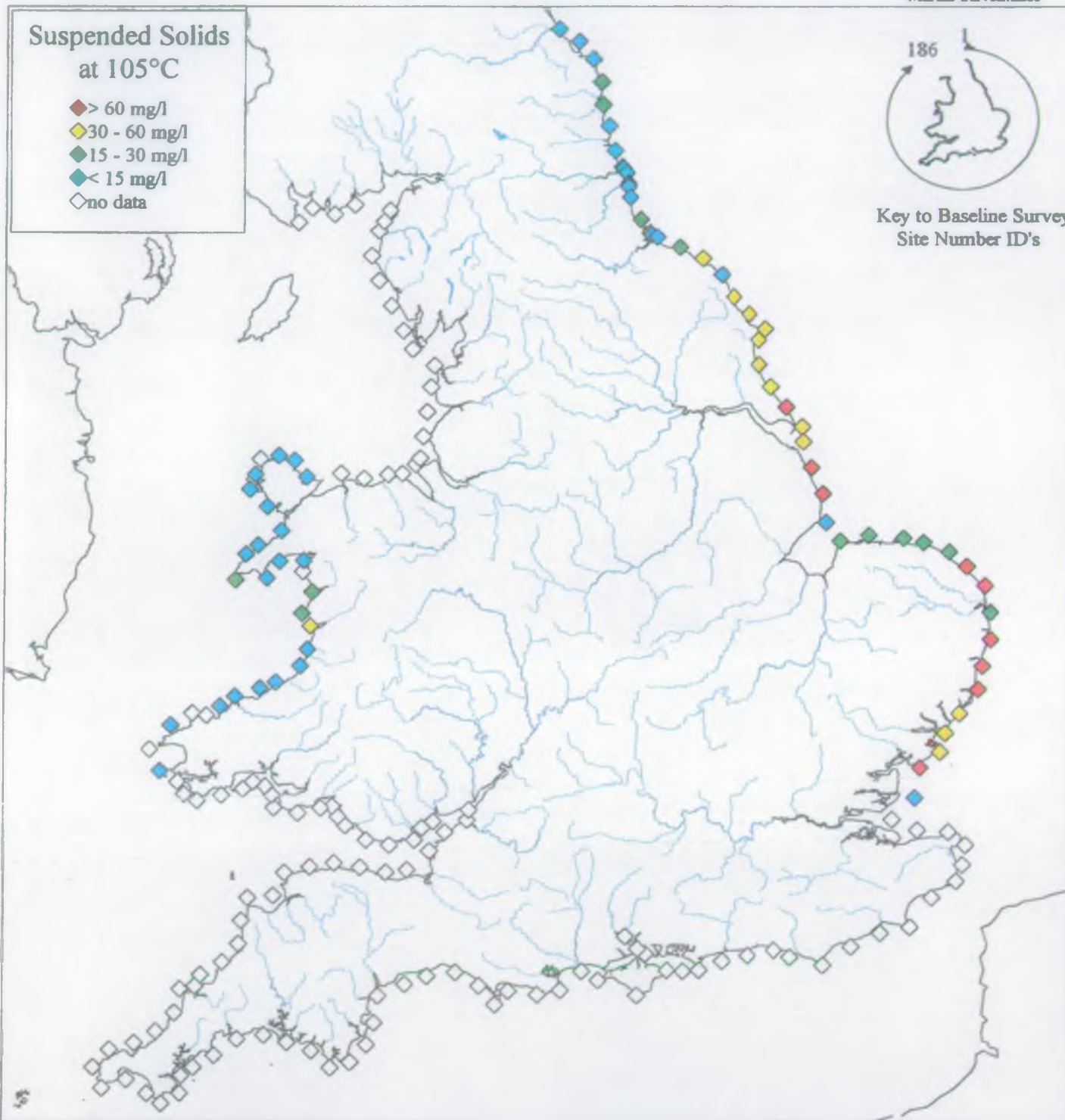
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Suspended Solids at 105°C

- ◆ > 60 mg/l
- ◆ 30 - 60 mg/l
- ◆ 15 - 30 mg/l
- ◆ < 15 mg/l
- ◇ no data

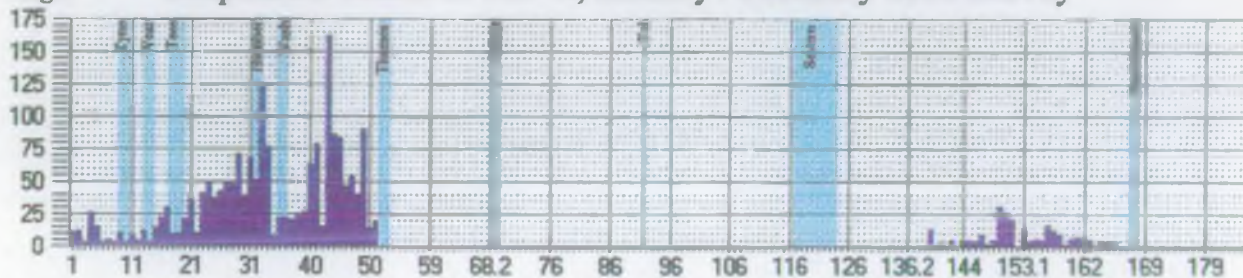


Key to Baseline Survey
Site Number ID's



mg/l

Suspended Solids at 105°C, January / February 1995 Survey



Baseline Site Number

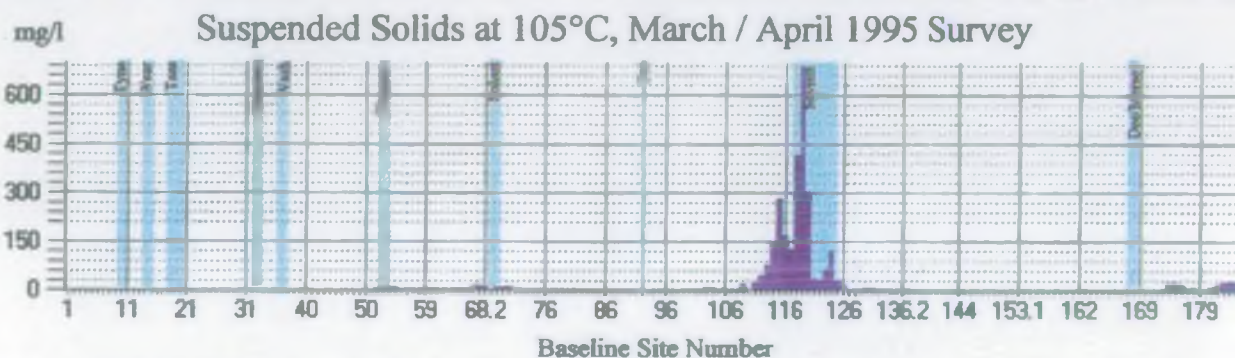
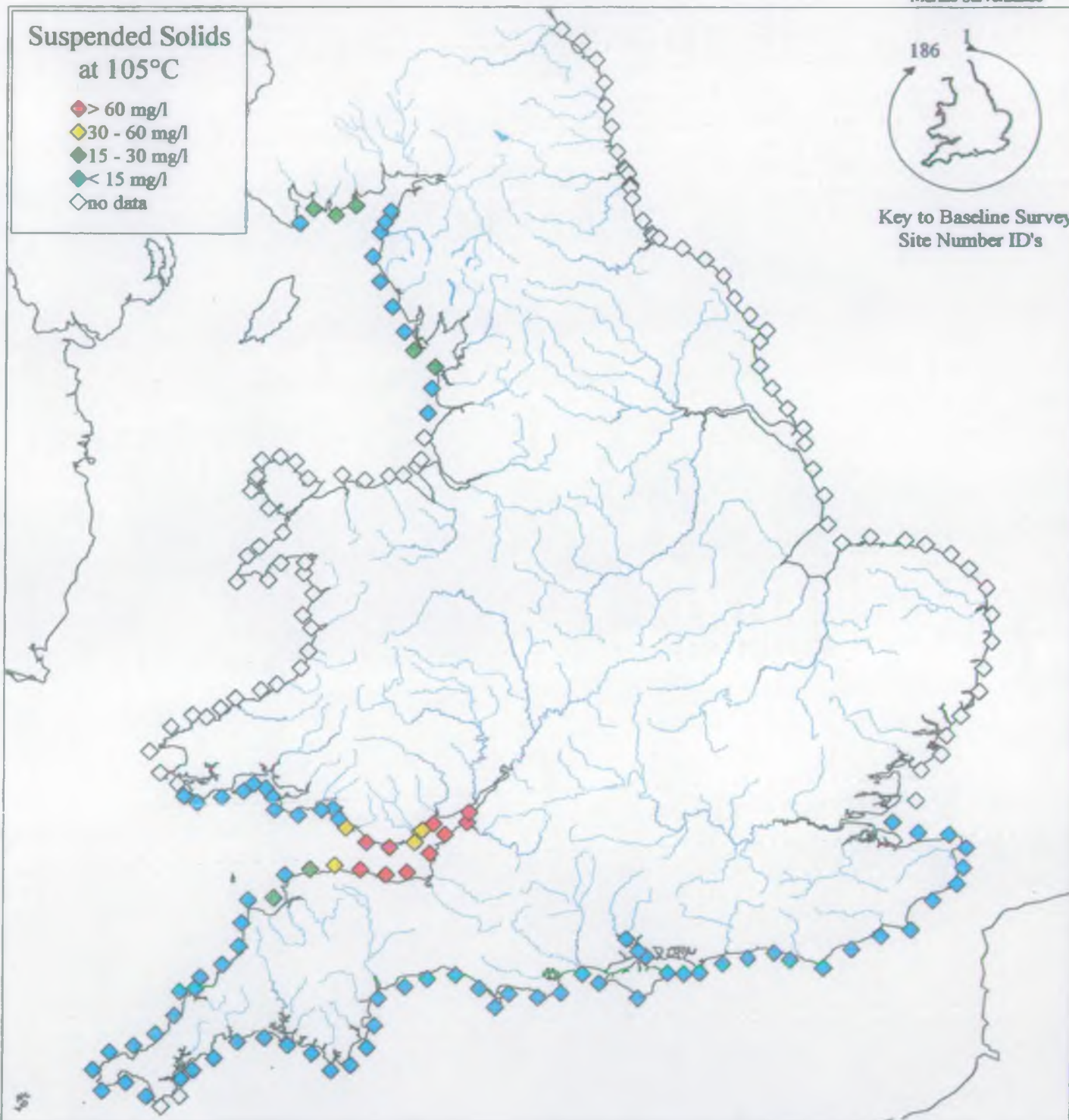
Suspended Solids at 105°C, National Baseline Survey, March / April 1995.



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Key to Baseline Survey
Site Number ID's



Suspended Solids at 500°C, National Baseline Survey, January / February 1995.



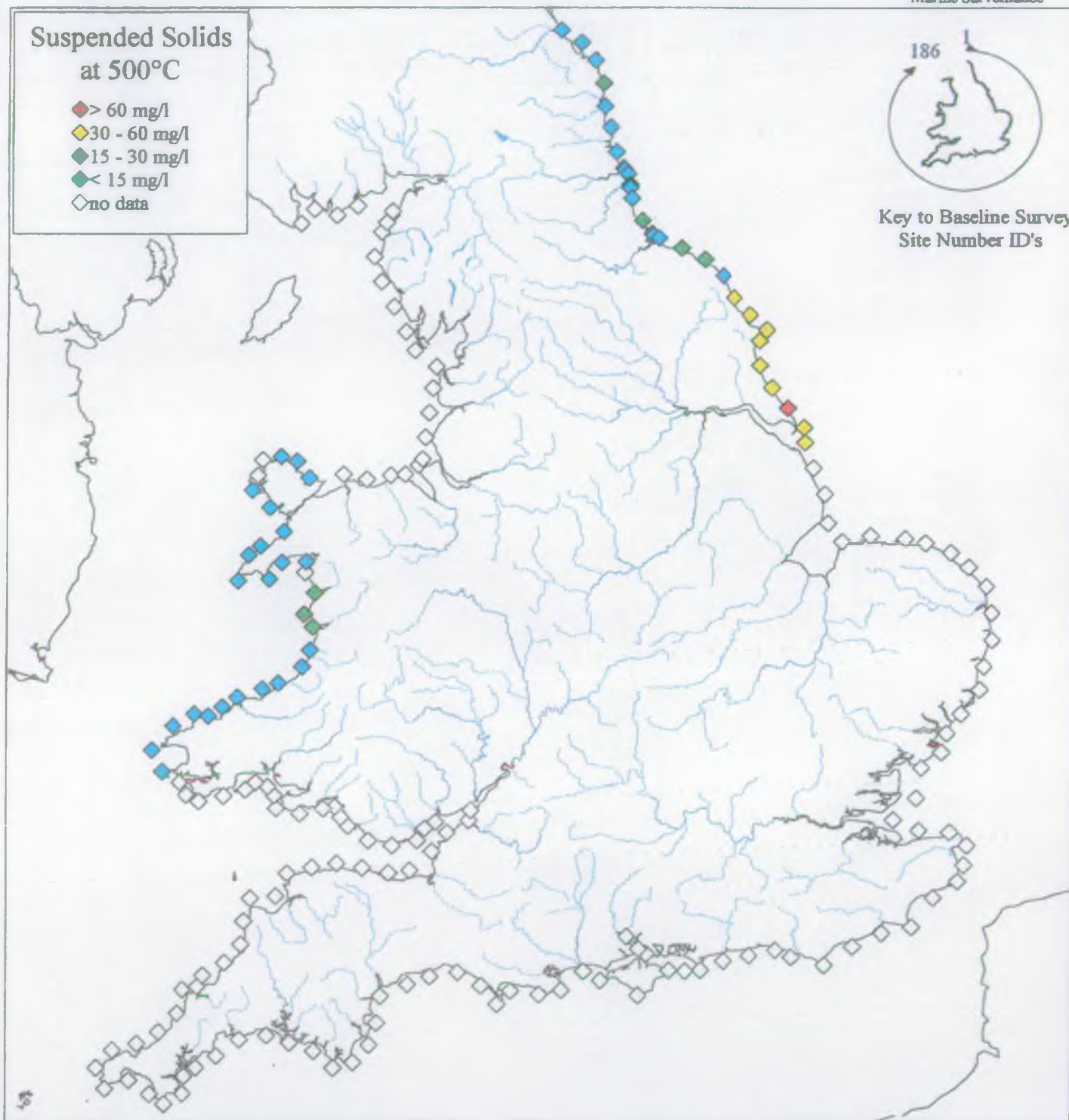
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Site Number ID's

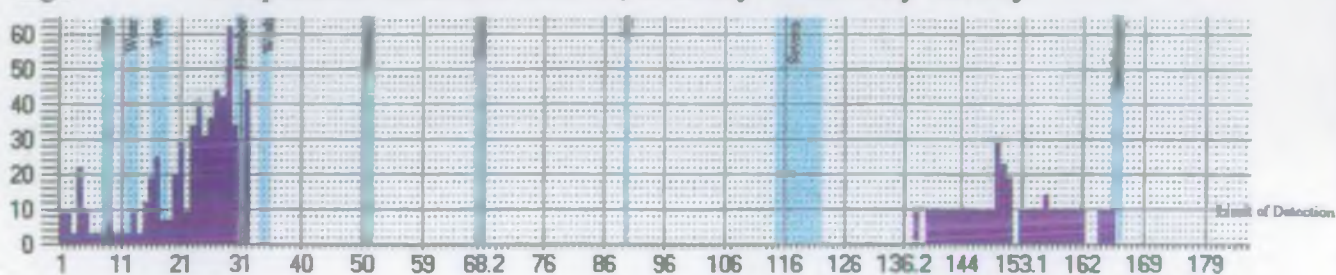
Suspended Solids at 500°C

- ◆ > 60 mg/l
- ◆ 30 - 60 mg/l
- ◆ 15 - 30 mg/l
- ◆ < 15 mg/l
- ◇ no data



mg/l

Suspended Solids at 500°C, January / February Survey

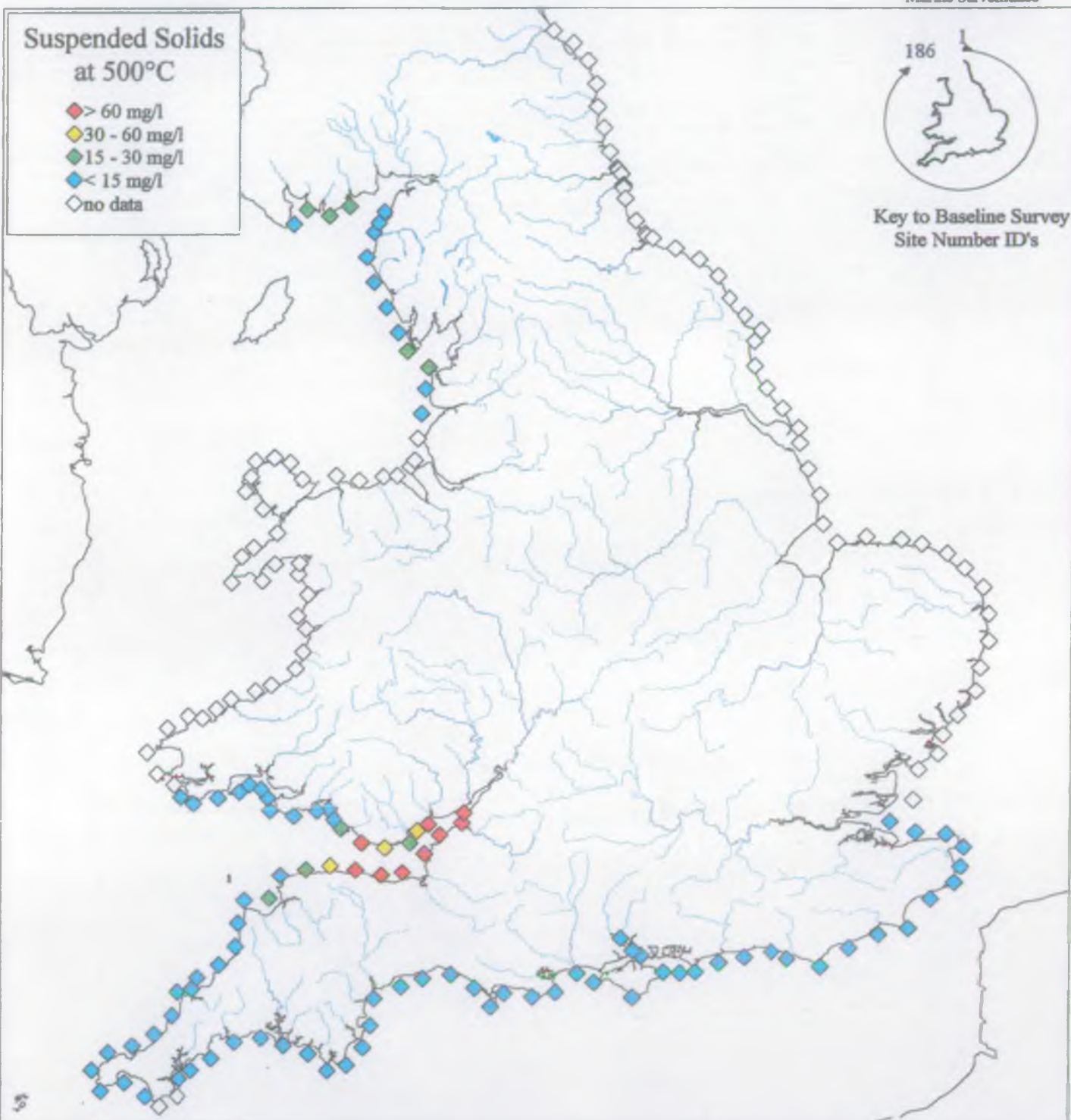


Baseline Site Number

Suspended Solids at 500°C, National Baseline Survey, March / April 1995.

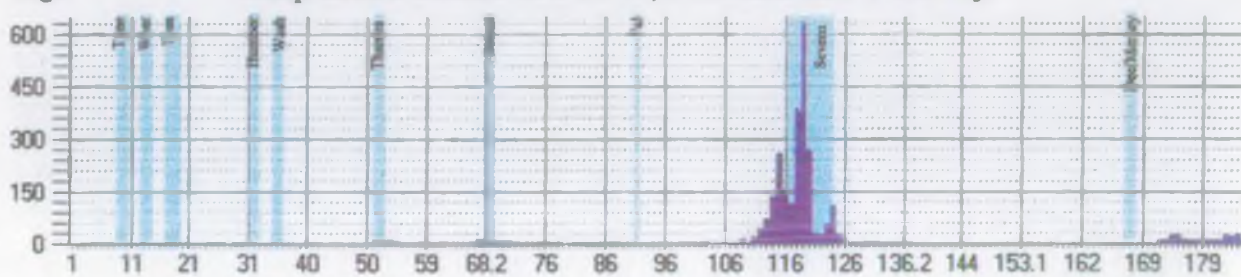


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mg/l

Suspended Solids at 500°C, Autumn 1994 Survey



Baseline Site Number

Suspended Solids - Organic Fraction, National Baseline Survey, January / February 1995.



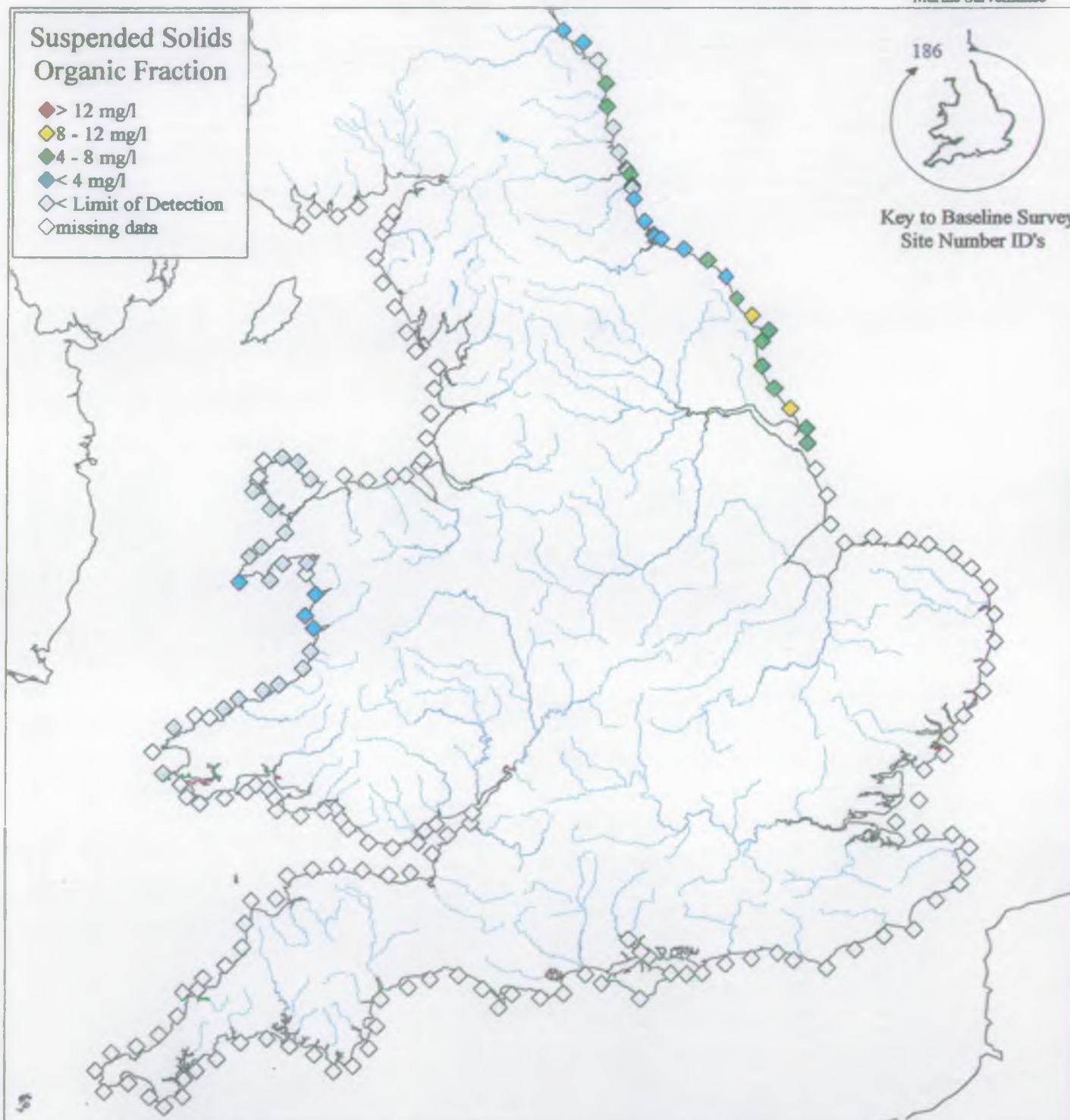
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Suspended Solids Organic Fraction

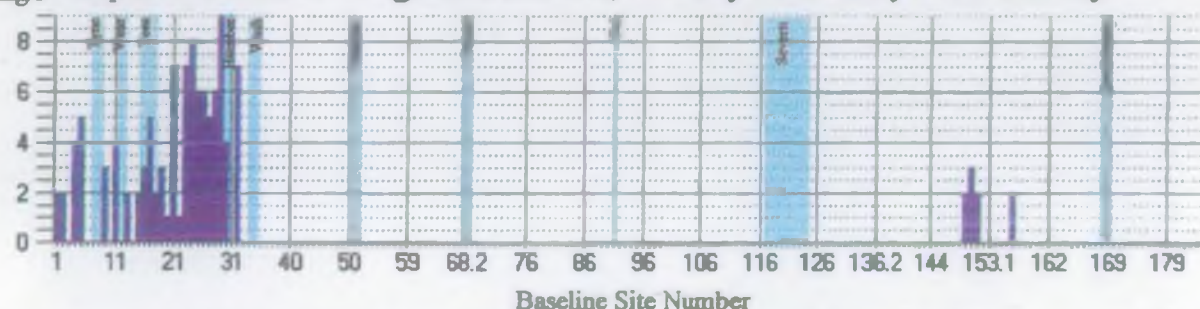
- ◆ > 12 mg/l
- ◆ 8 - 12 mg/l
- ◆ 4 - 8 mg/l
- ◆ < 4 mg/l
- ◇ < Limit of Detection
- ◇ missing data



Key to Baseline Survey
Site Number ID's



mg/l Suspended Solids - Organic Fraction, January / February 1995 Survey



Suspended Solids - Organic Fraction, National Baseline Survey, March / April 1995



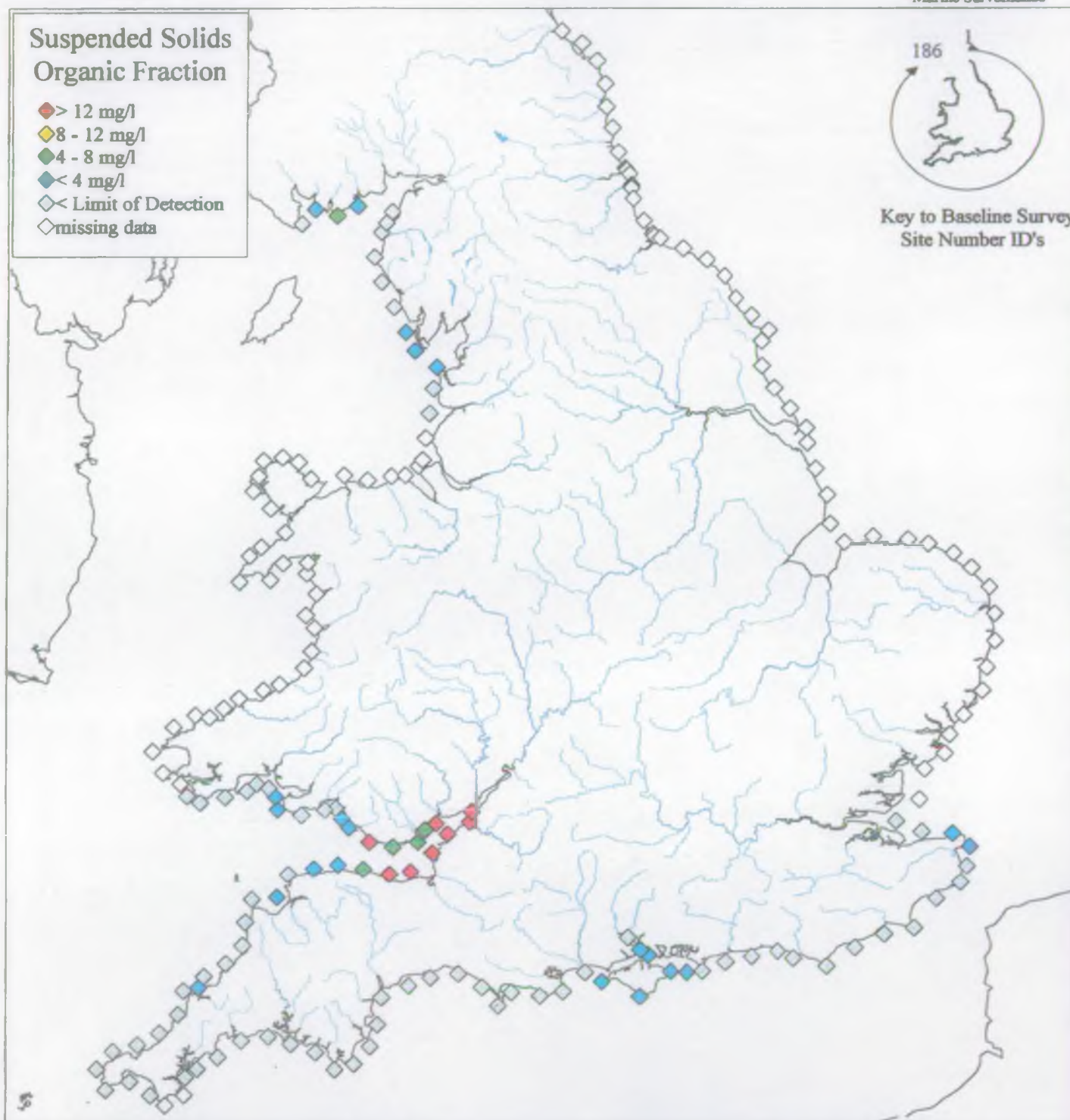
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Suspended Solids Organic Fraction

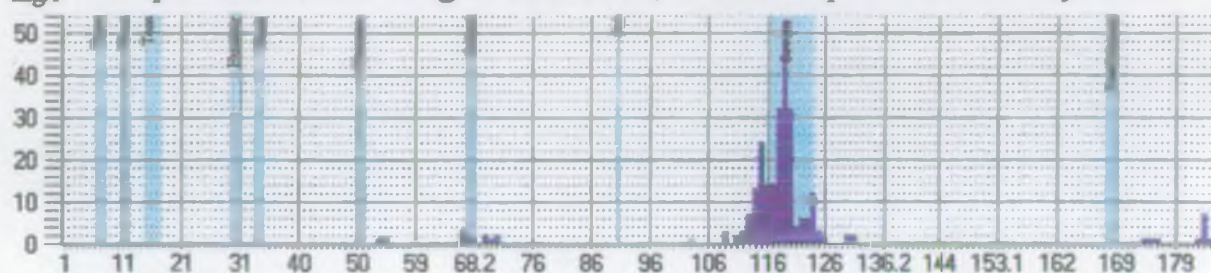
- ◆ > 12 mg/l
- ◆ 8 - 12 mg/l
- ◆ 4 - 8 mg/l
- ◆ < 4 mg/l
- ◇ < Limit of Detection
- ◇ missing data



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mg/l Suspended Solids - Organic Fraction, March / April 1995 Survey



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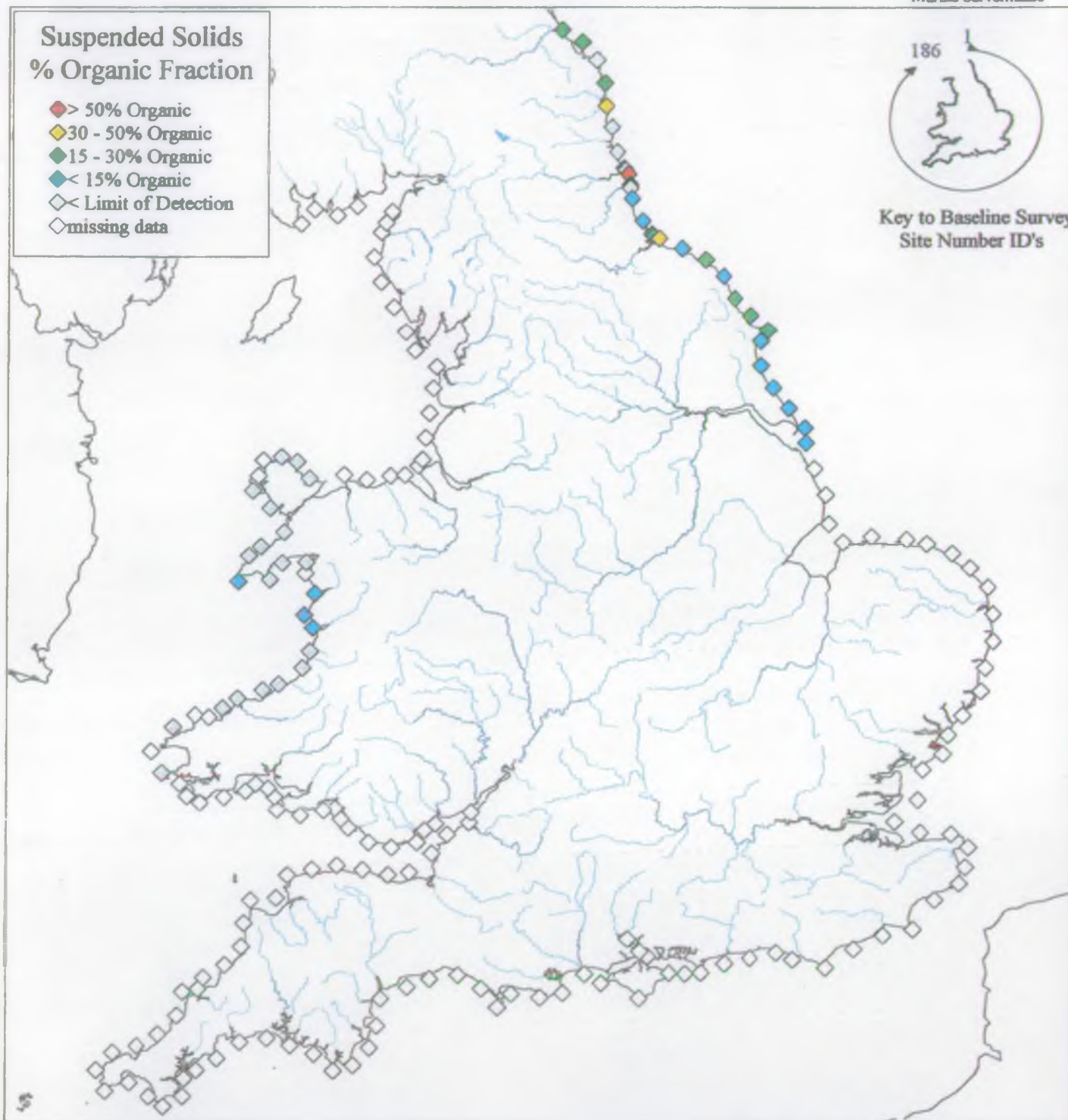
Suspended Solids - % Organic Fraction, National Baseline Survey, January / February 1995.



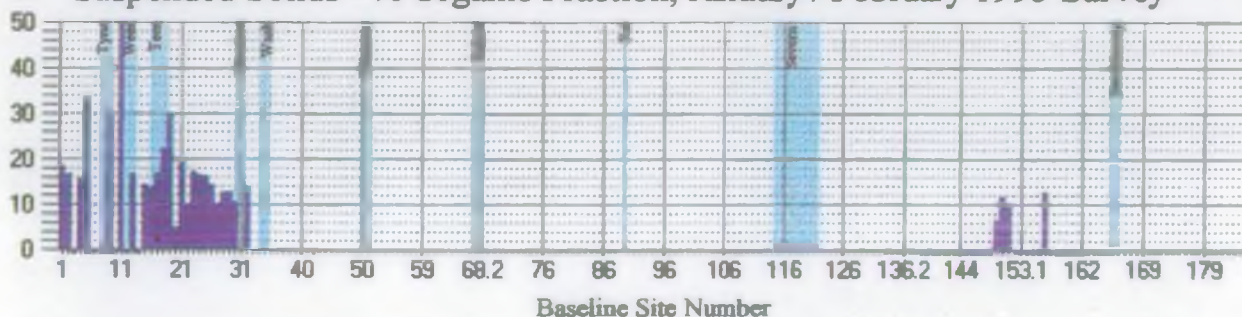
Key to Baseline Survey
Site Number ID's

Suspended Solids % Organic Fraction

- ◆ > 50% Organic
- ◆ 30 - 50% Organic
- ◆ 15 - 30% Organic
- ◆ < 15% Organic
- ◇ < Limit of Detection
- ◇ missing data



% Suspended Solids - % Organic Fraction, January / February 1995 Survey



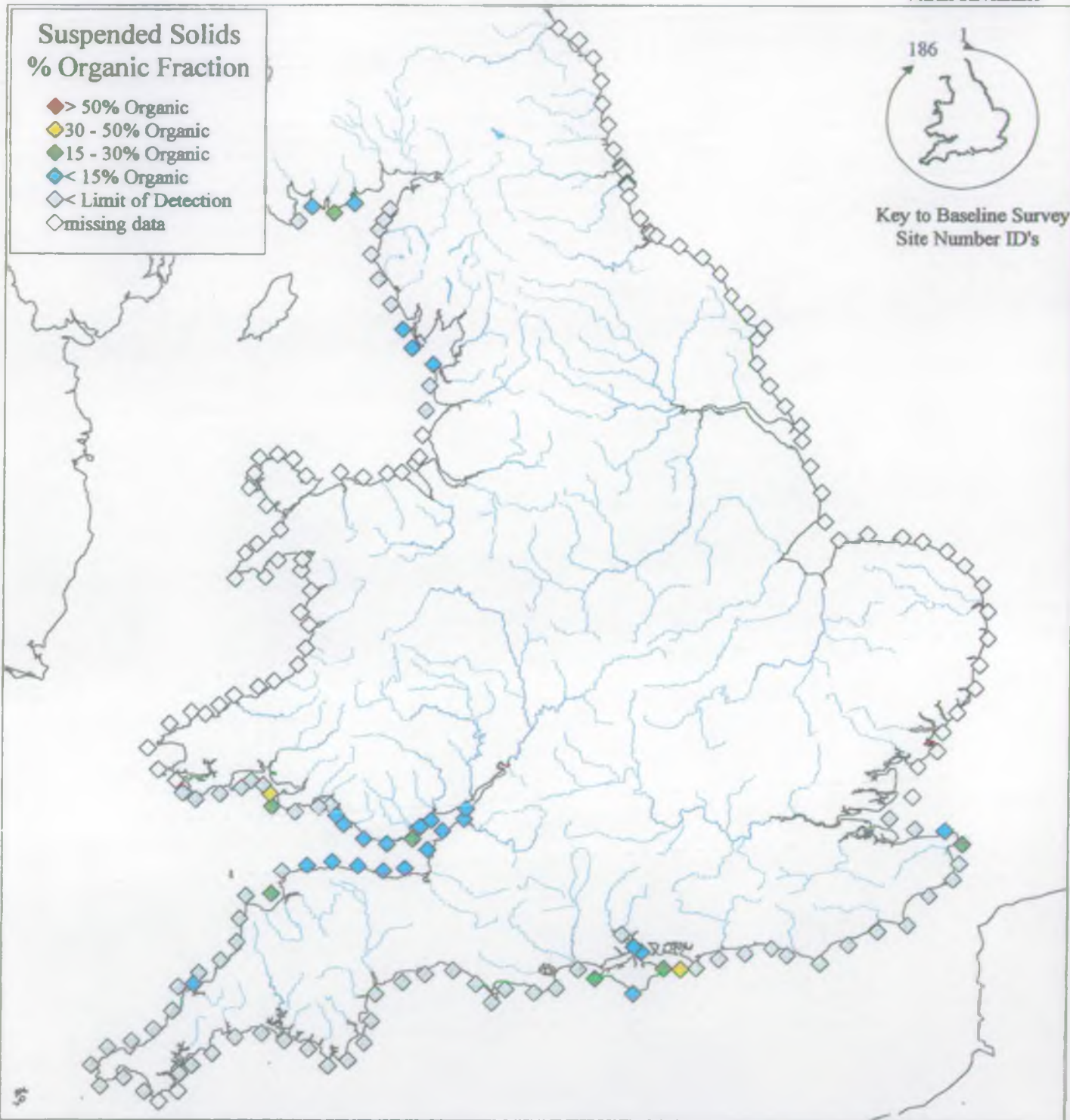
Suspended Solids - % Organic Fraction, National Baseline Survey, March / April 1995.



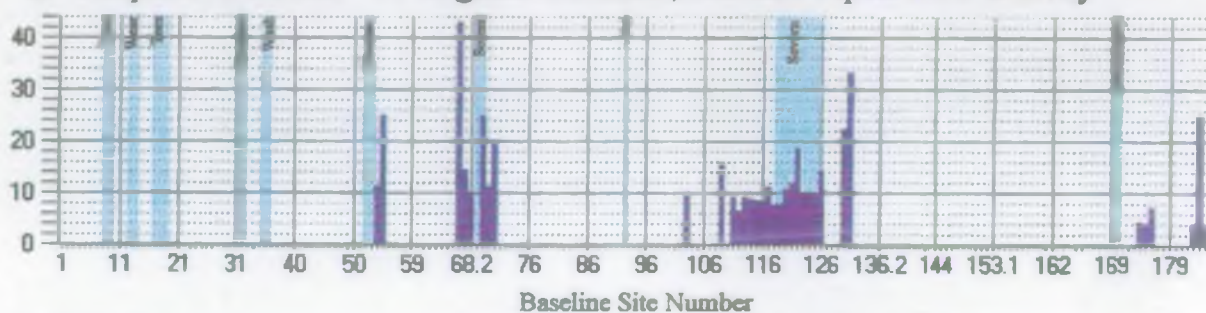
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Key to Baseline Survey
Site Number ID's



% Suspended Solids - % Organic Fraction, March / April 1995 Survey



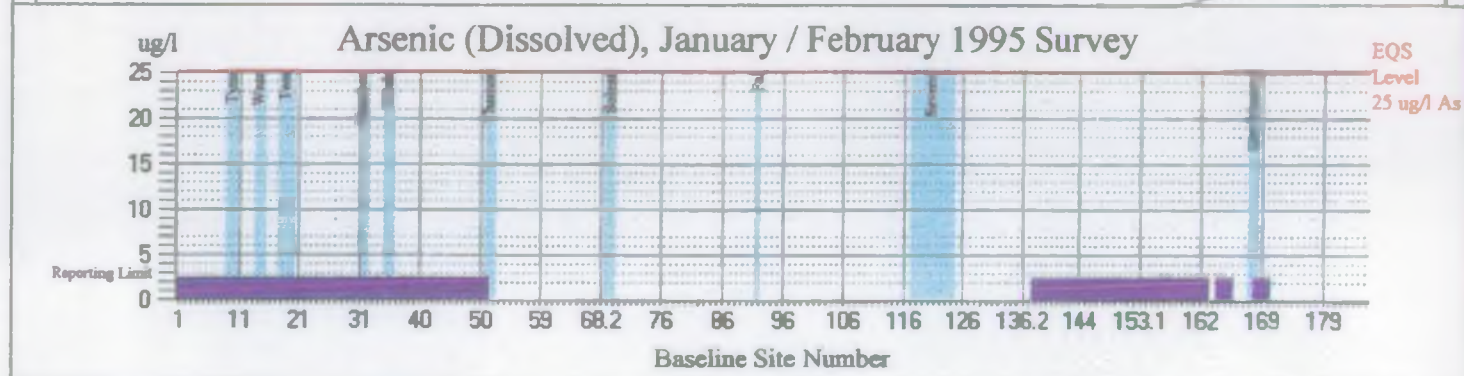
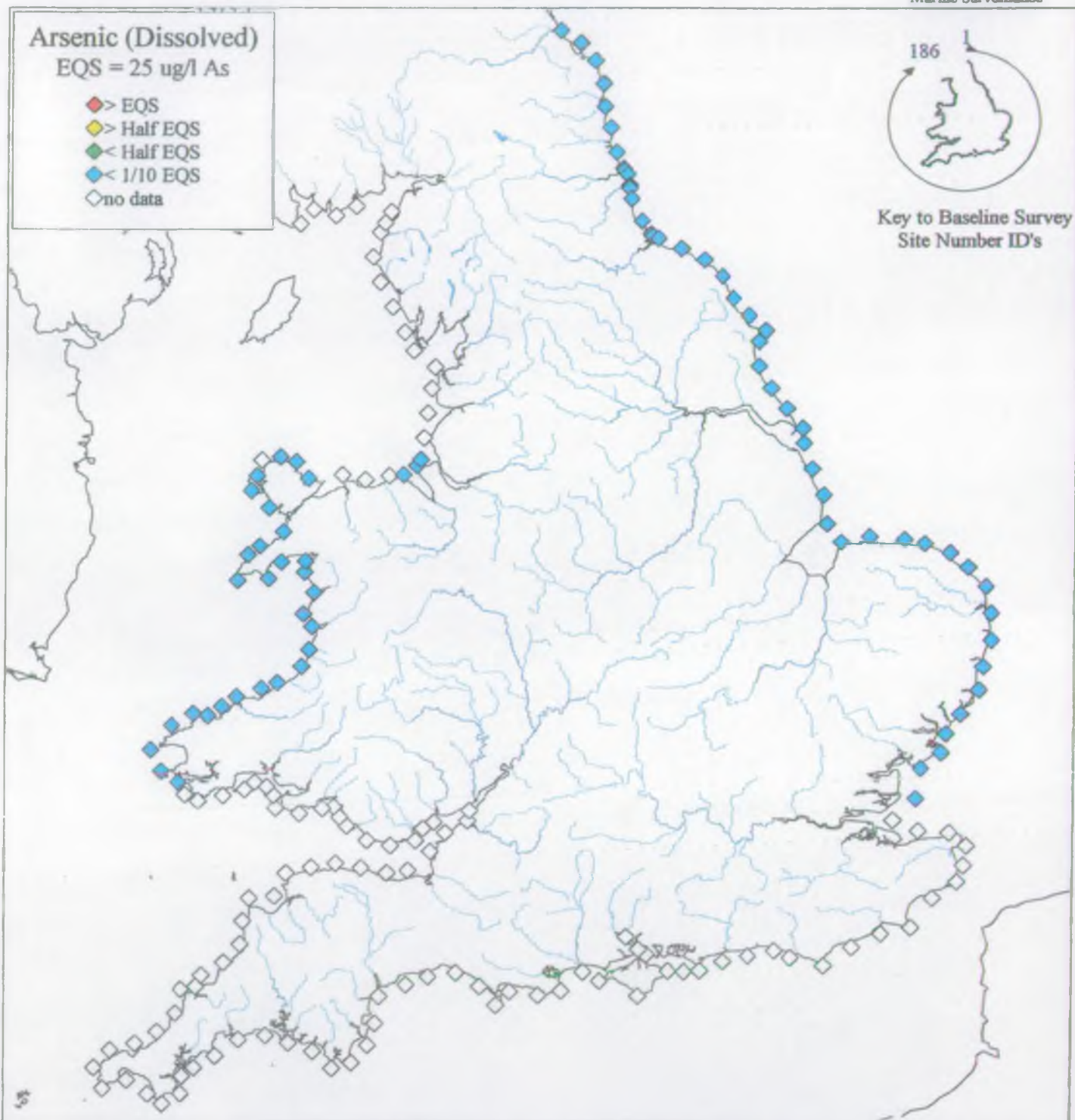
Arsenic (Dissolved), National Baseline Survey, January / February 1995.



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Key to Baseline Survey
Site Number ID's



Arsenic (Dissolved), National Baseline Survey, March / April 1995.



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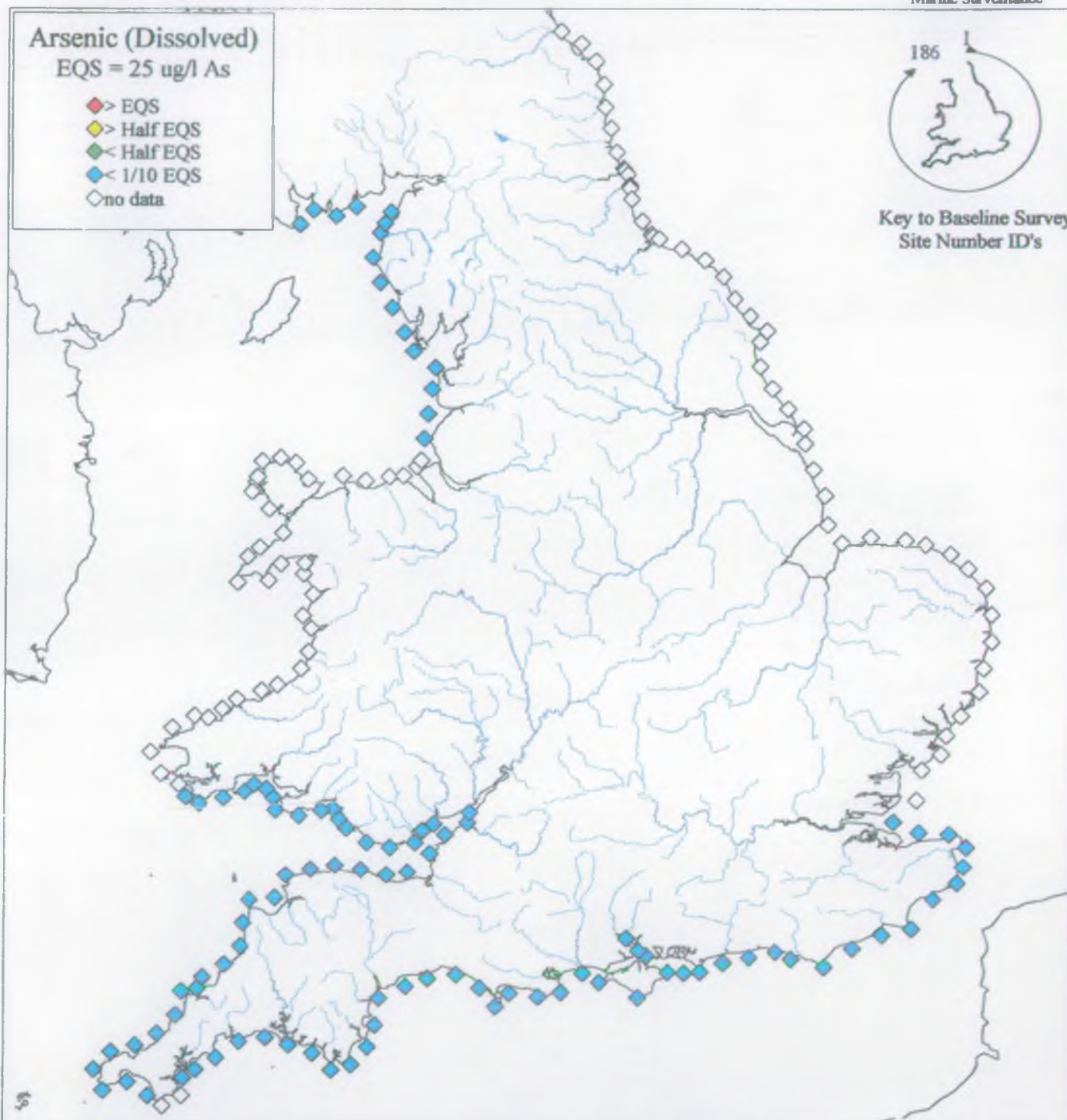


Key to Baseline Survey
Site Number ID's

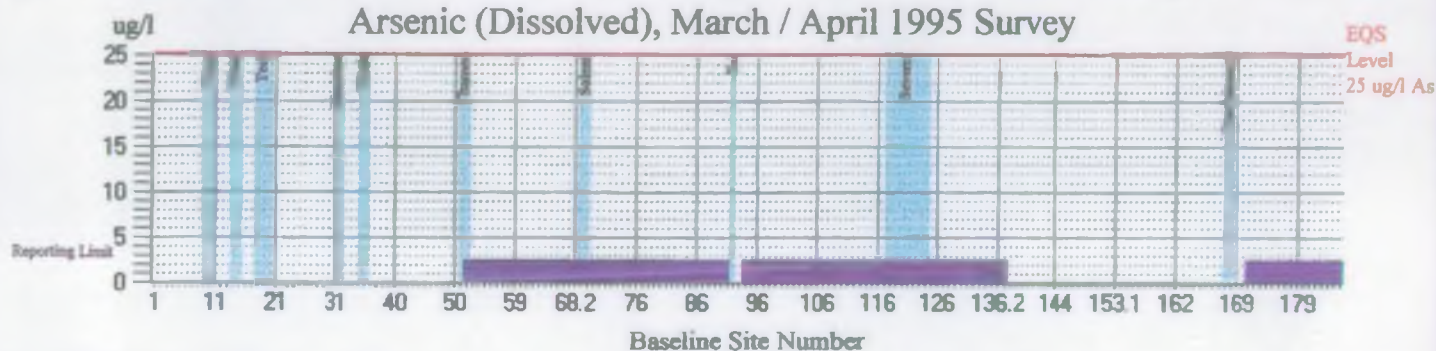
Arsenic (Dissolved)

EQS = 25 ug/l As

- ◆ > EQS
- ◆ > Half EQS
- ◆ < Half EQS
- ◆ < 1/10 EQS
- ◇ no data



Arsenic (Dissolved), March / April 1995 Survey



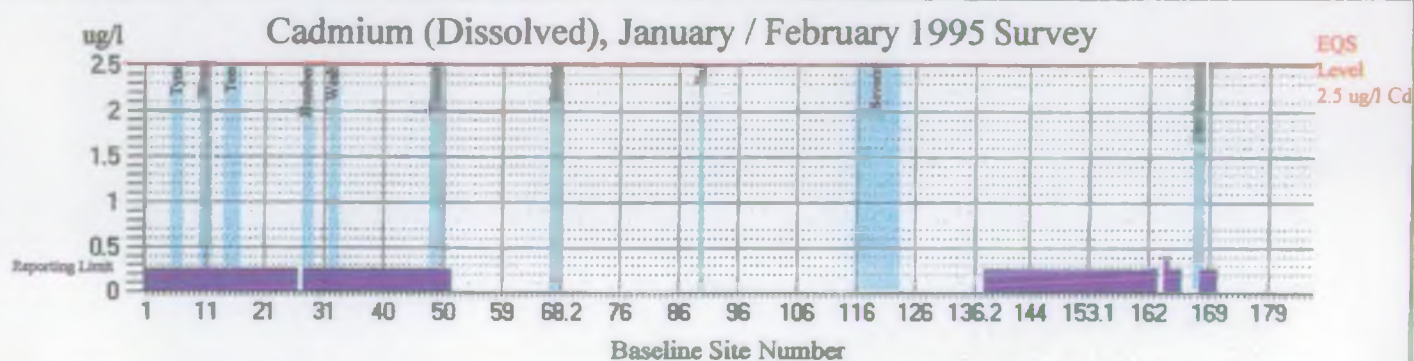
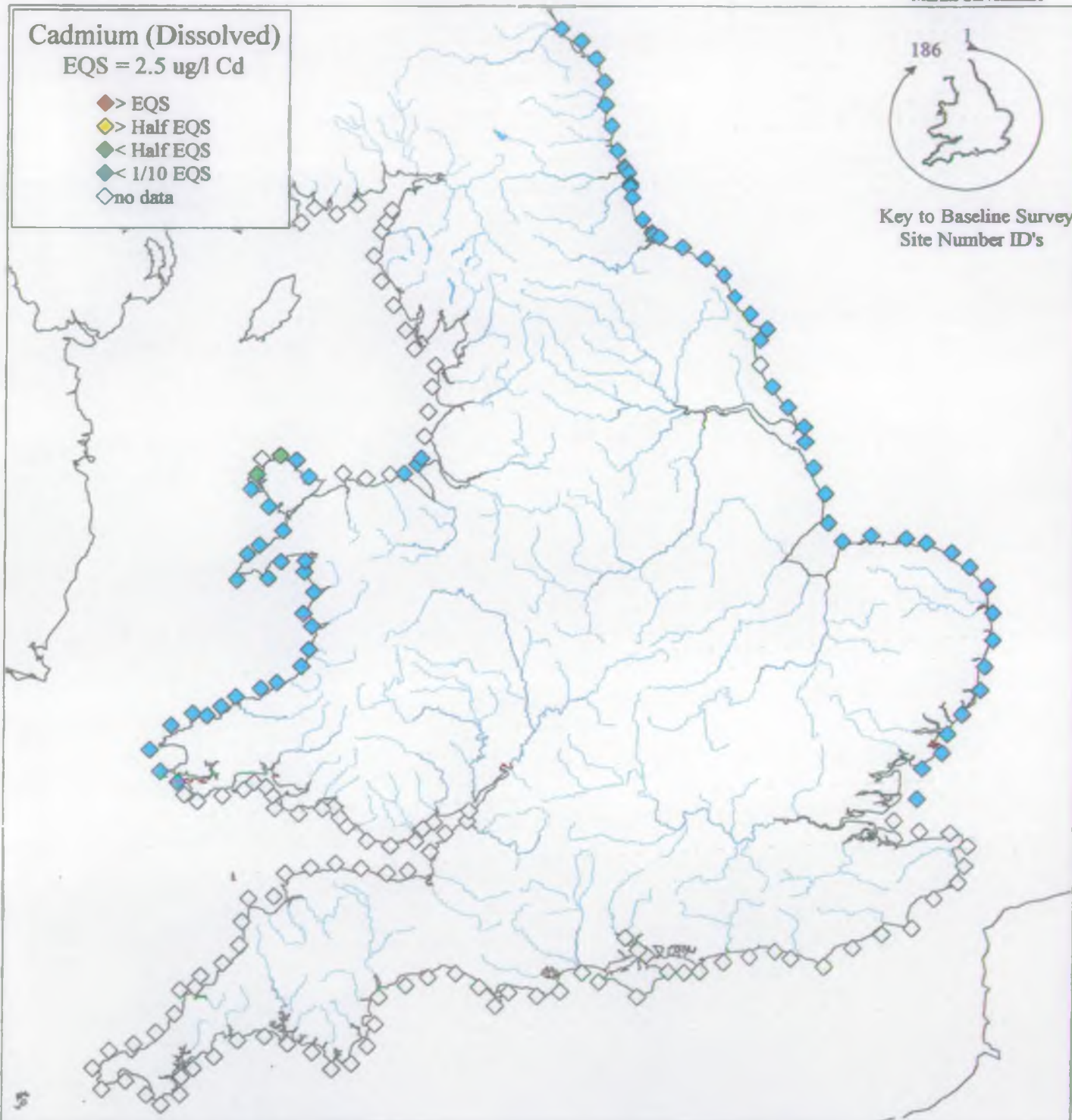
Cadmium (Dissolved), National Baseline Survey, January / February 1995.



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Site Number ID's



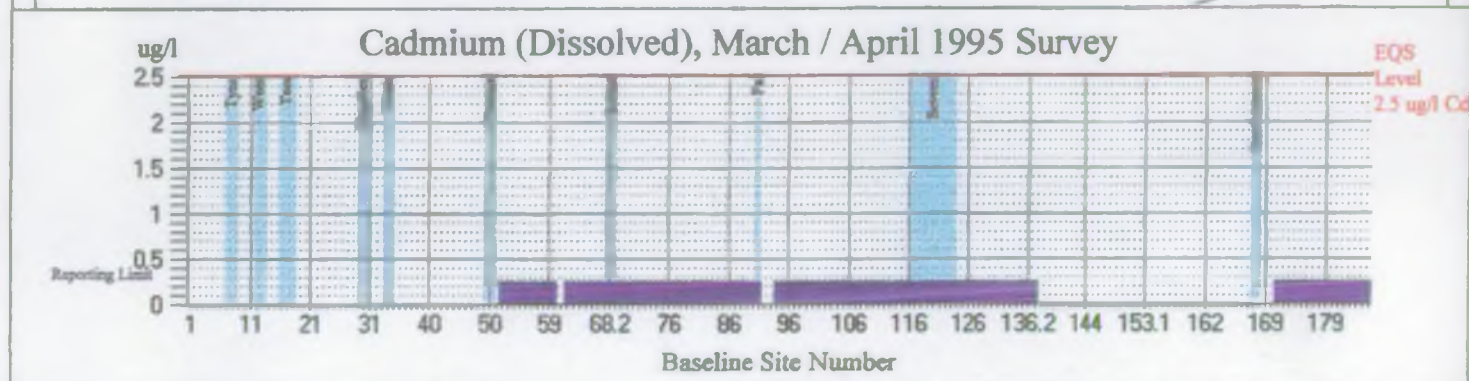
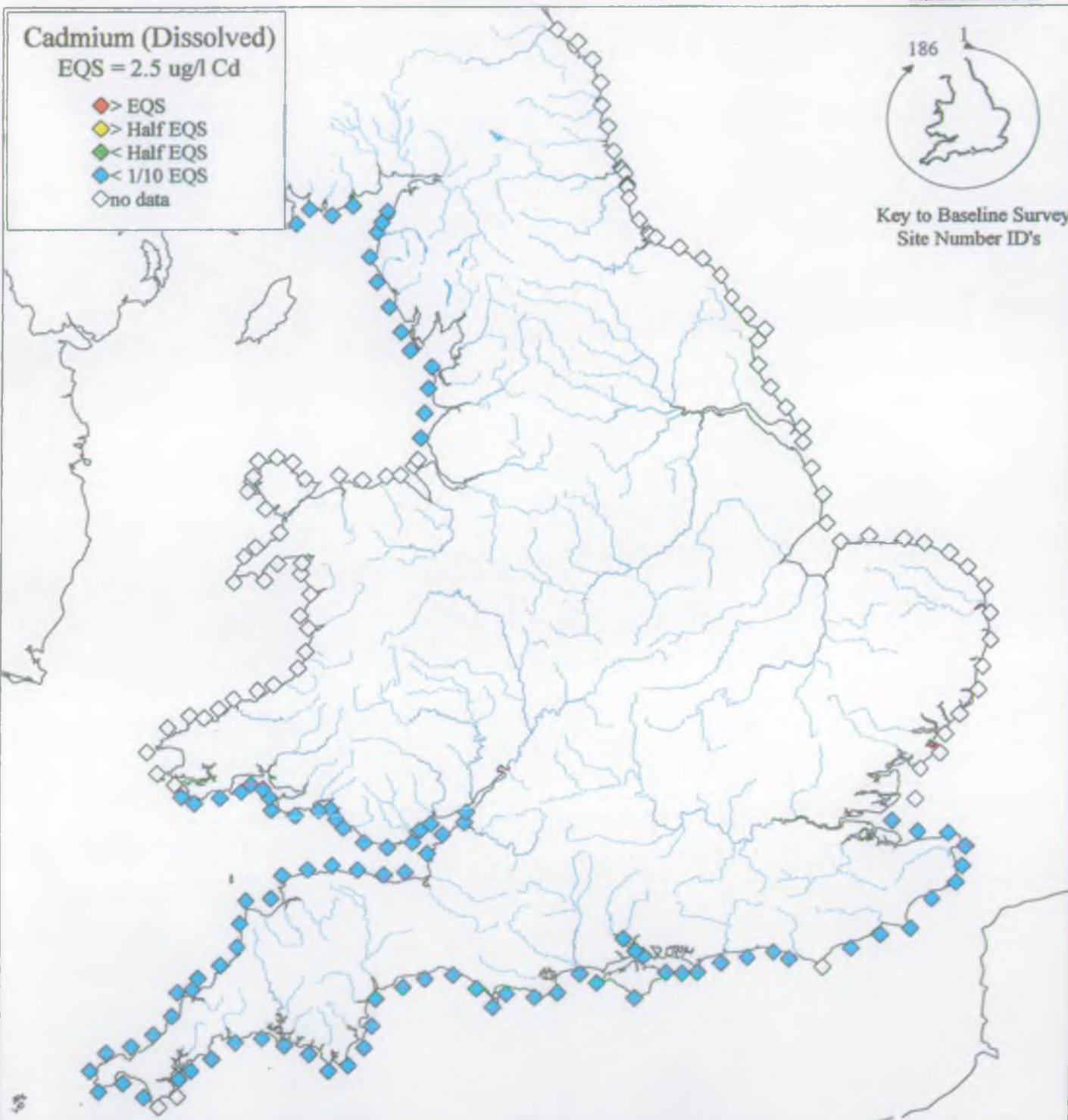
Cadmium (Dissolved), National Baseline Survey, March / April 1995.



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Key to Baseline Survey
Site Number ID's



Chromium (Dissolved), National Baseline Survey, January / February 1995.



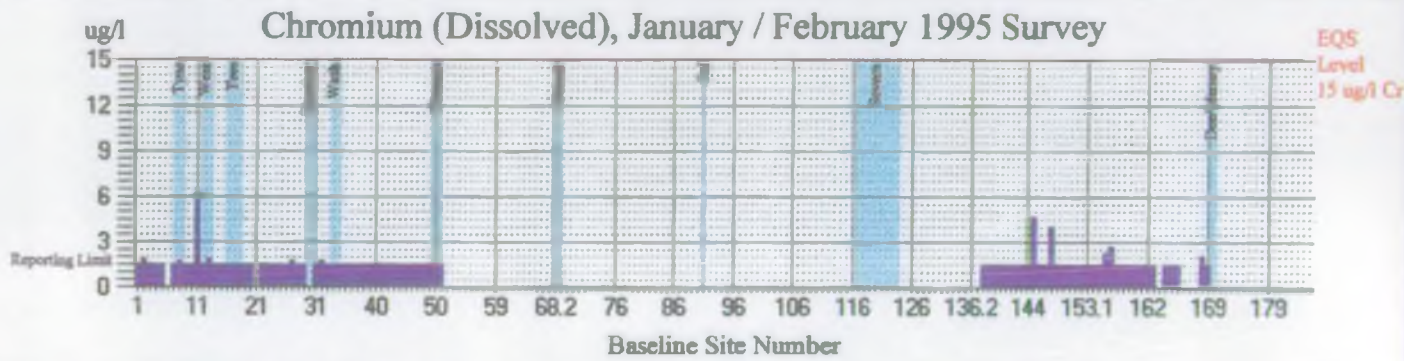
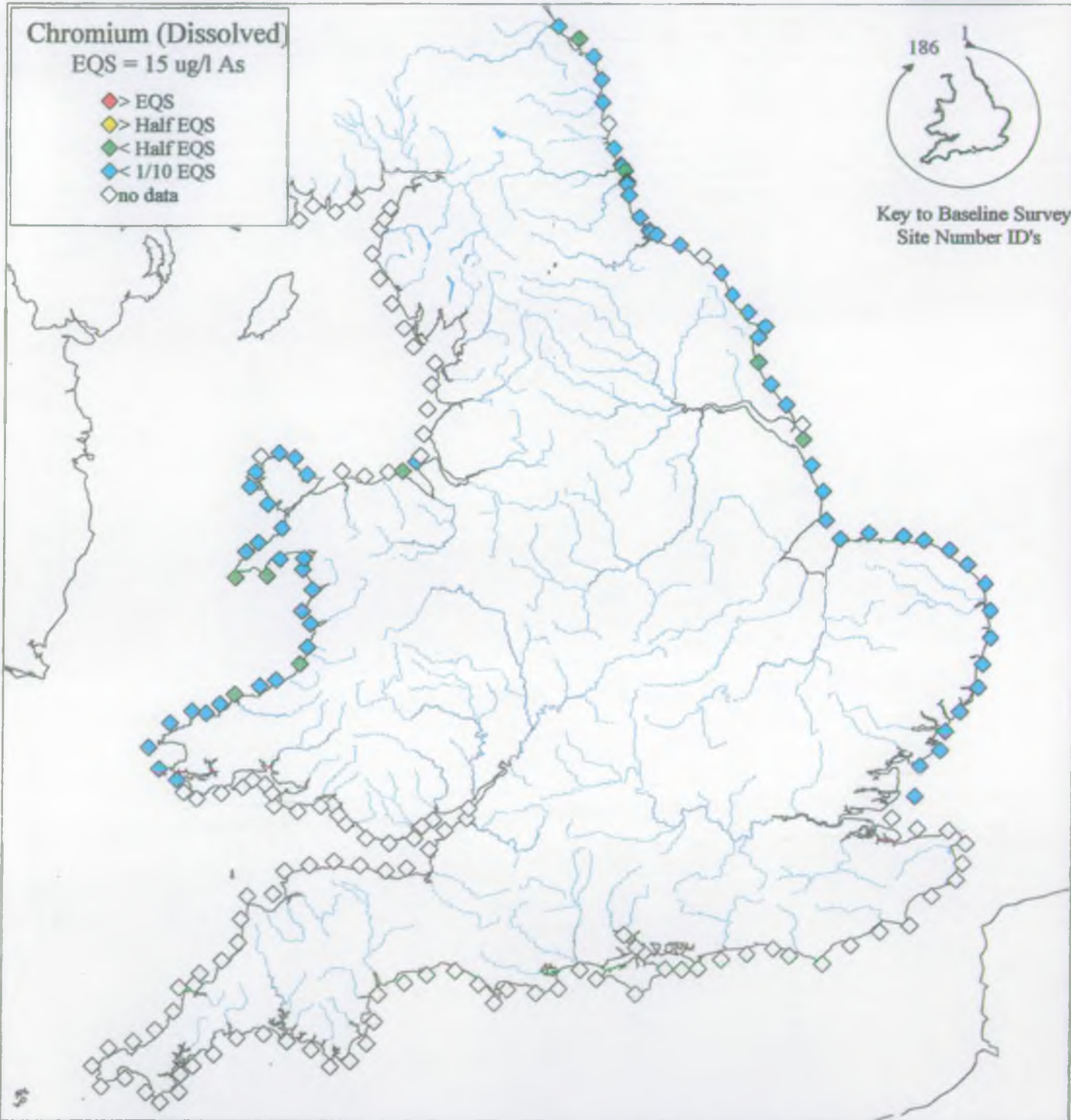
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Key to Baseline Survey
Site Number ID's

Chromium (Dissolved)
EQS = 15 ug/l As

- ◆ > EQS
- ◆ > Half EQS
- ◆ < Half EQS
- ◆ < 1/10 EQS
- ◇ no data



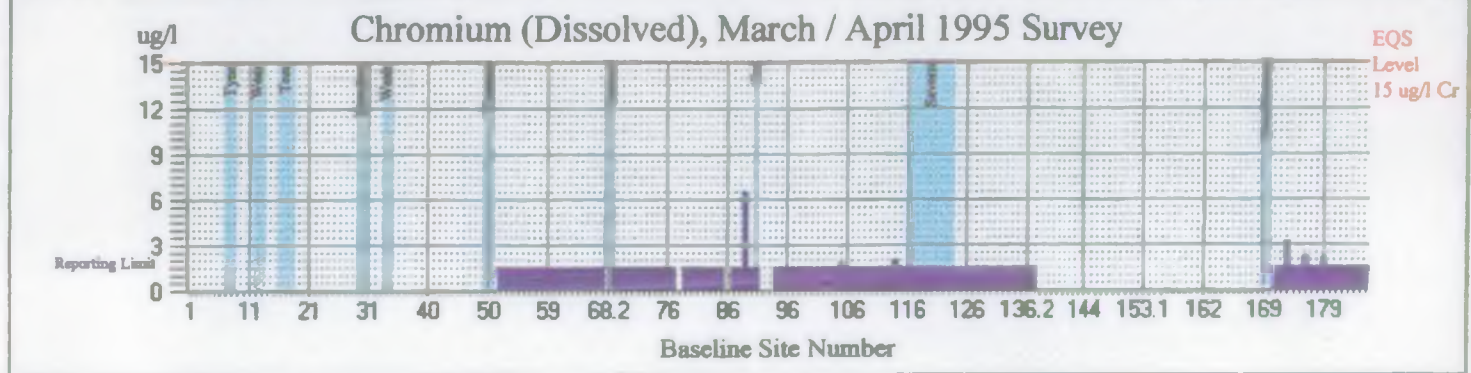
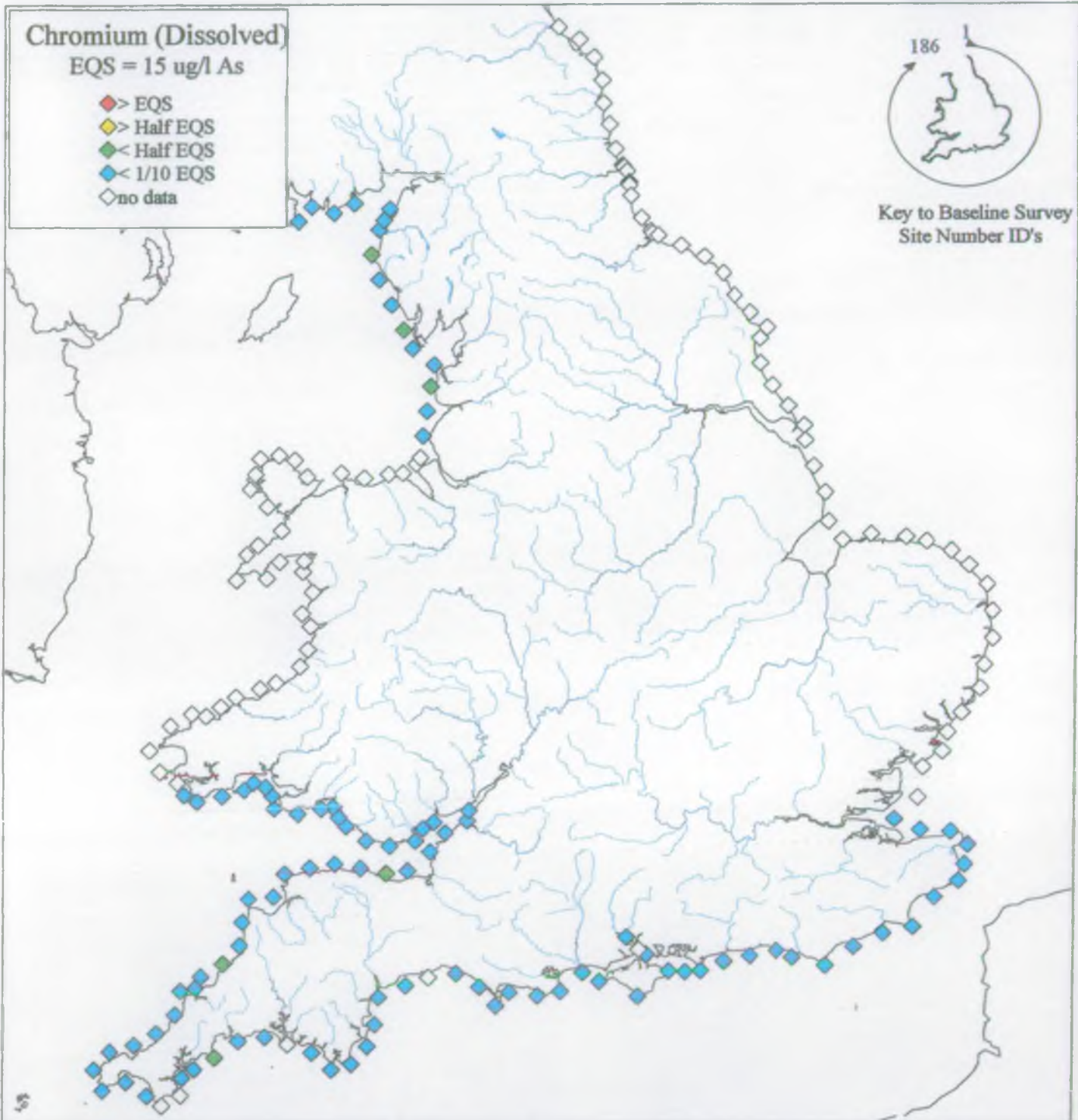
Chromium (Dissolved), National Baseline Survey, March / April 1995.



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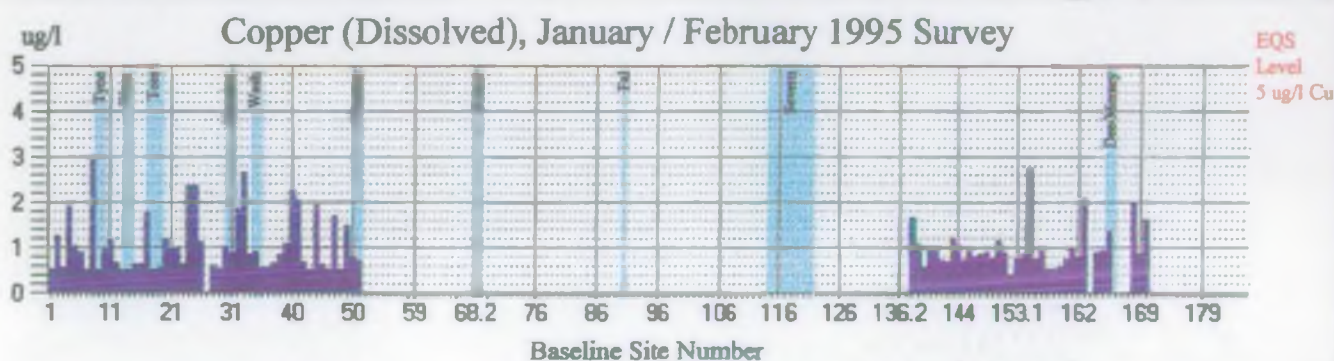
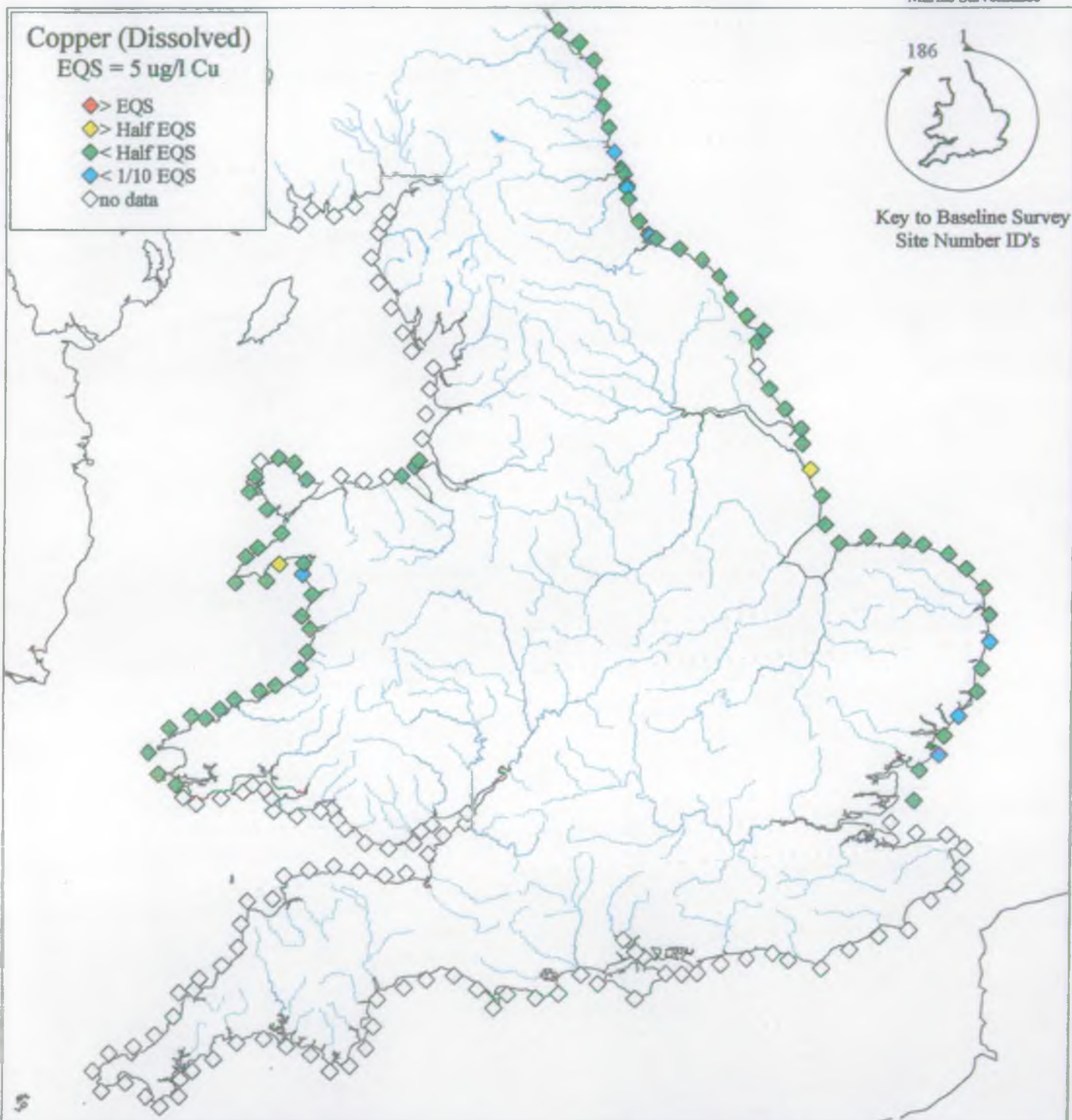
Key to Baseline Survey
Site Number ID's



Copper (Dissolved), National Baseline Survey, January / February 1995.



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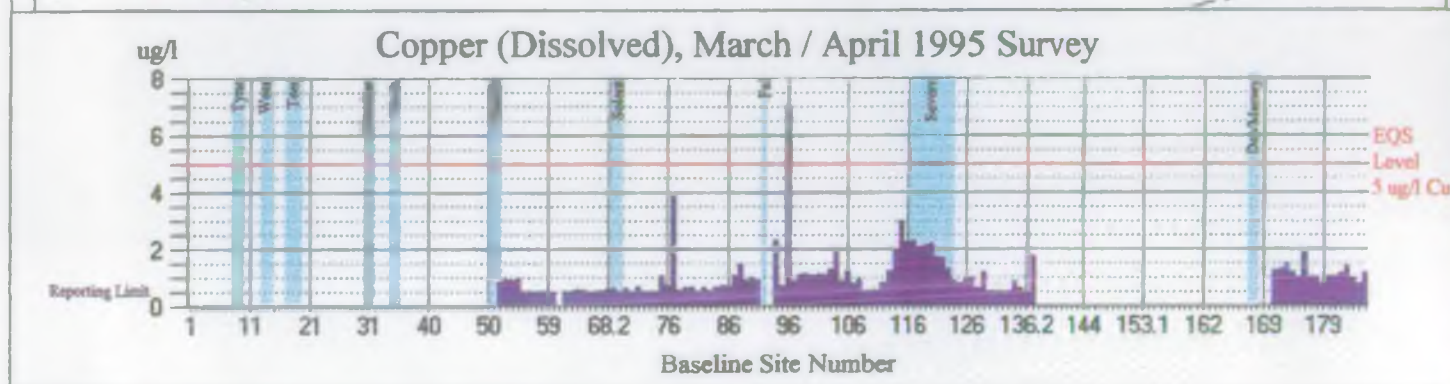
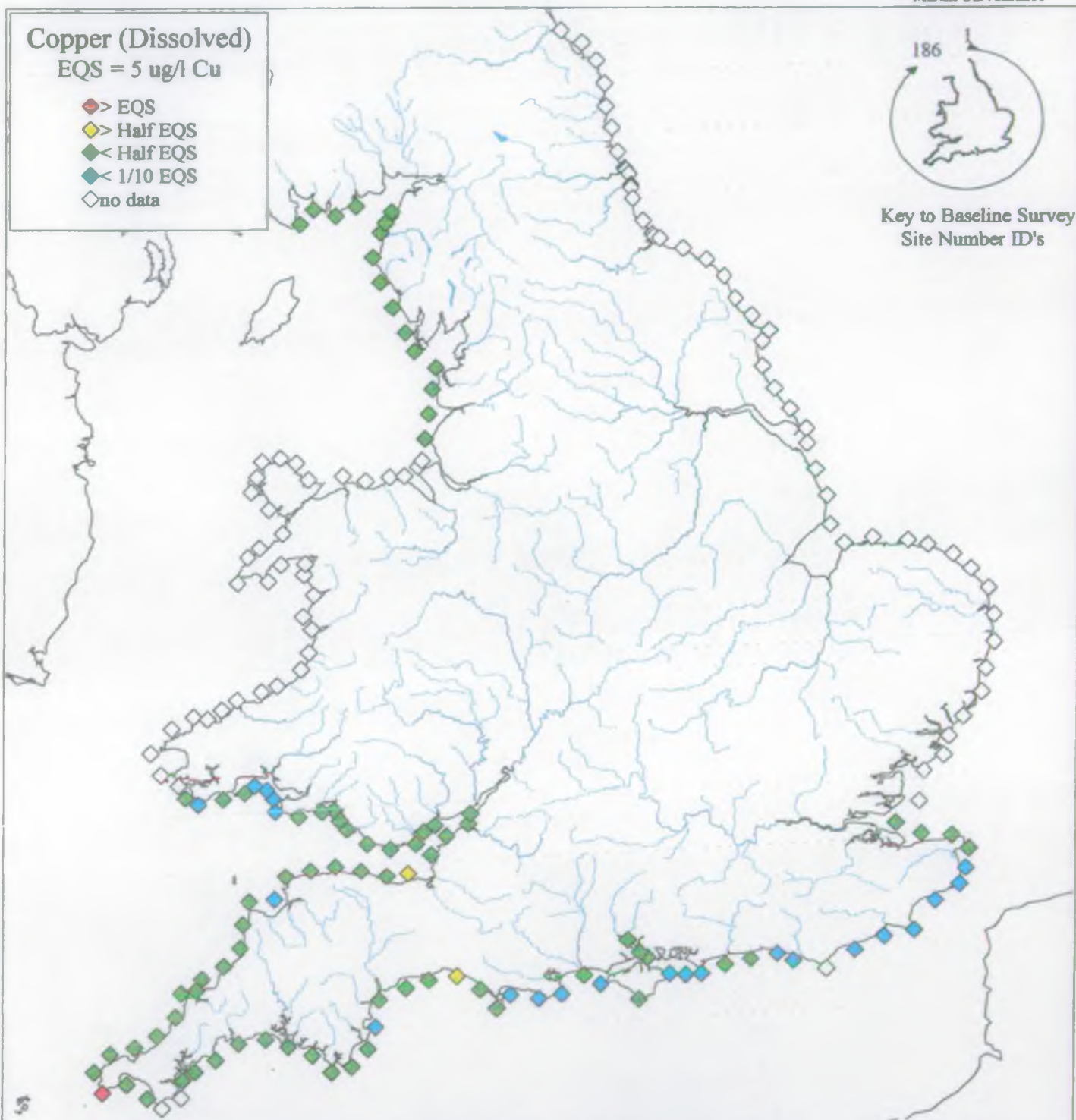
Copper (Dissolved), National Baseline Survey, March / April 1995.



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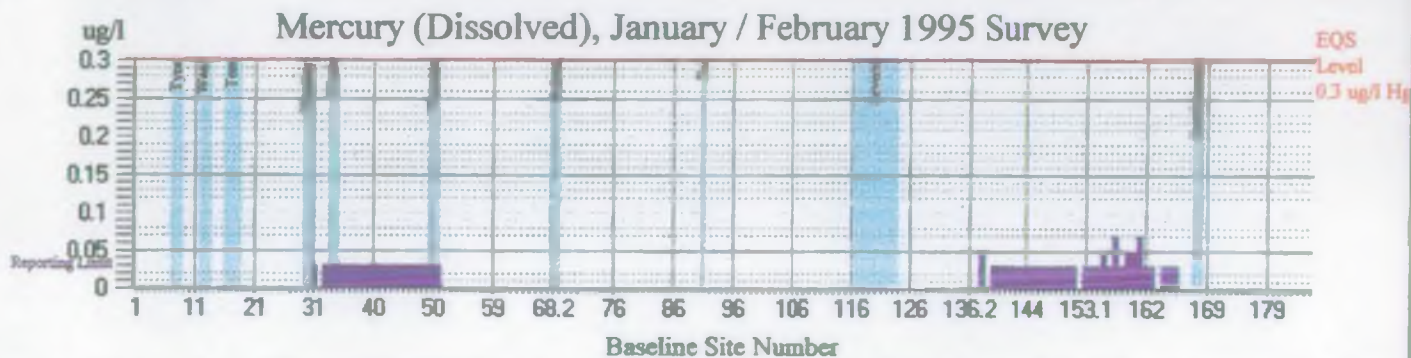
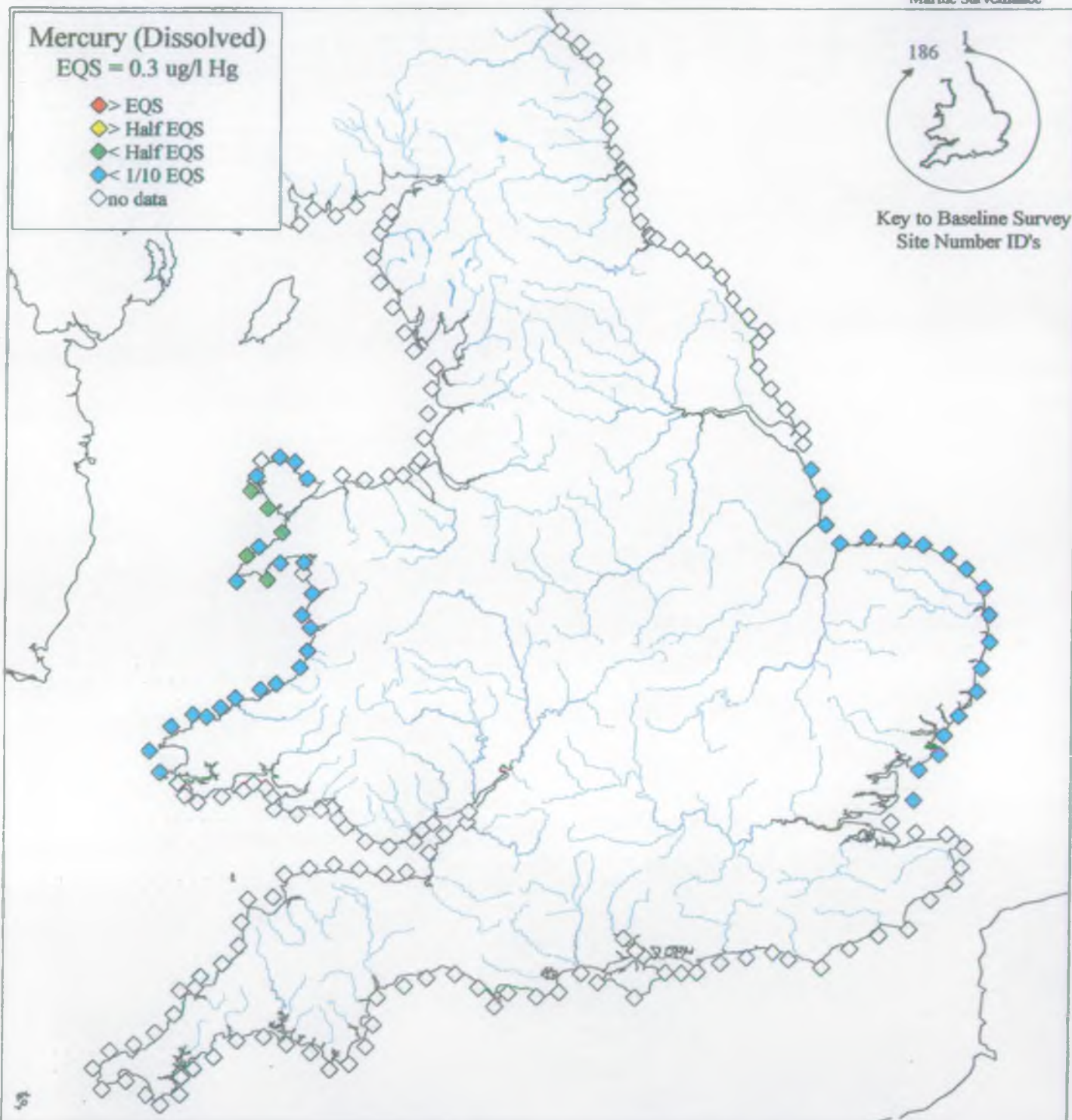
Key to Baseline Survey
Site Number ID's



Mercury (Dissolved), National Baseline Survey, January / February 1995.



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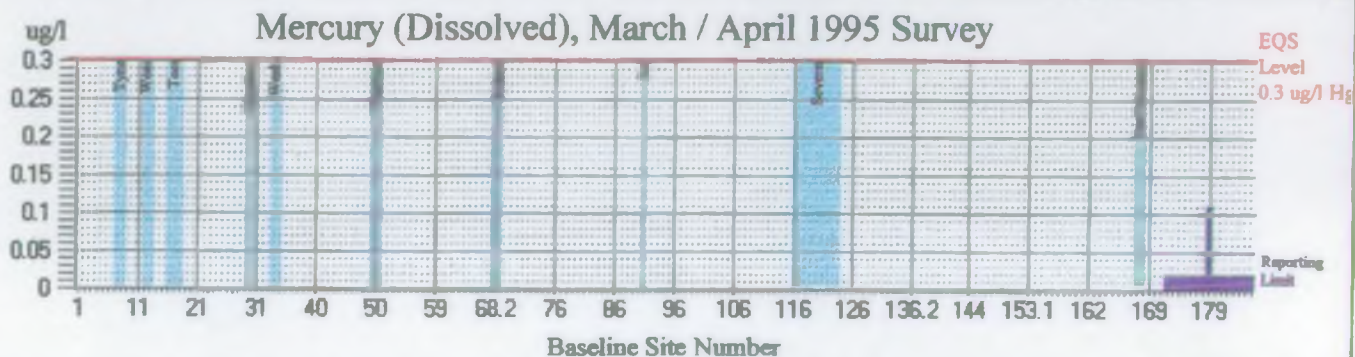
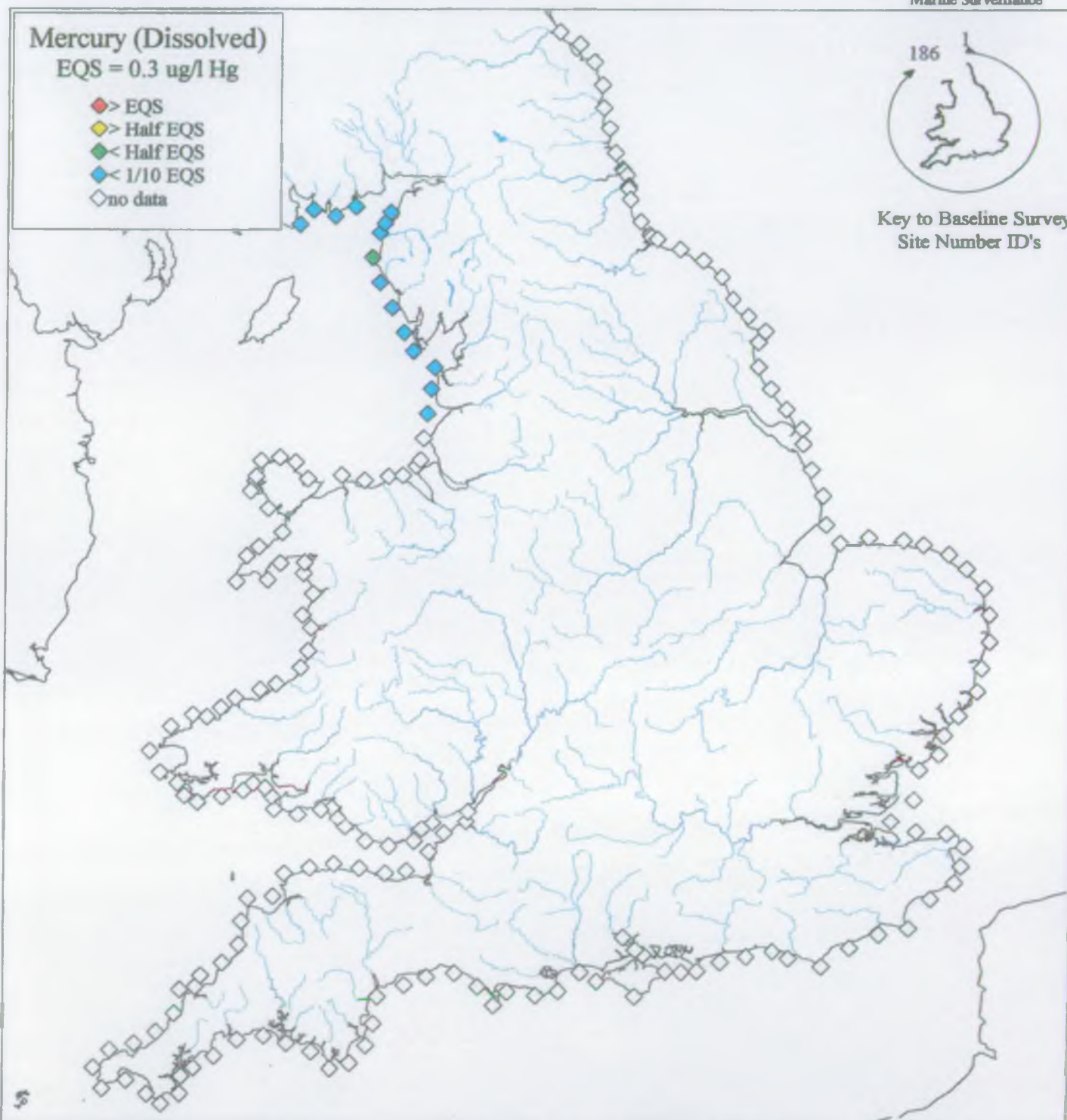
Mercury (Dissolved), National Baseline Survey, March / April 1995.



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Key to Baseline Survey
Site Number ID's



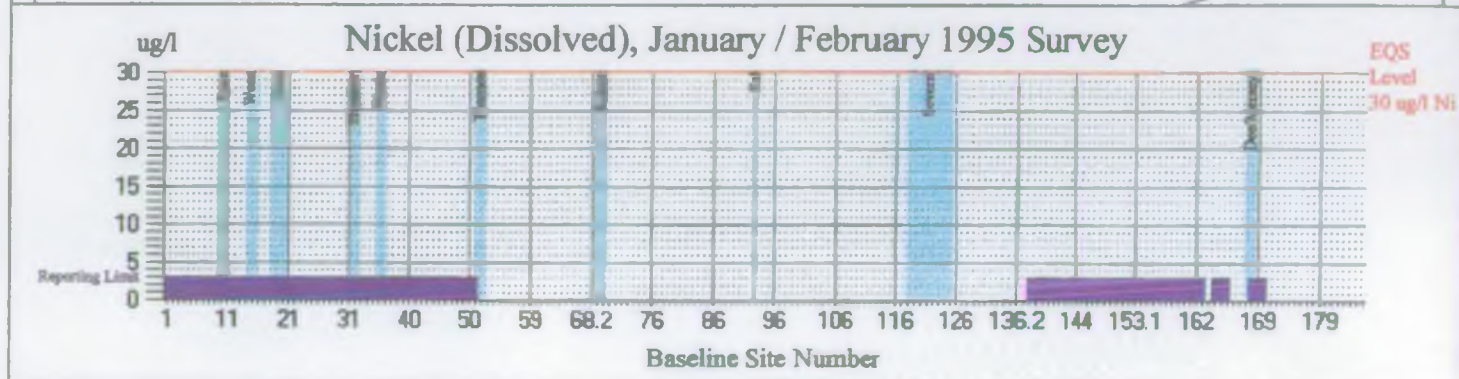
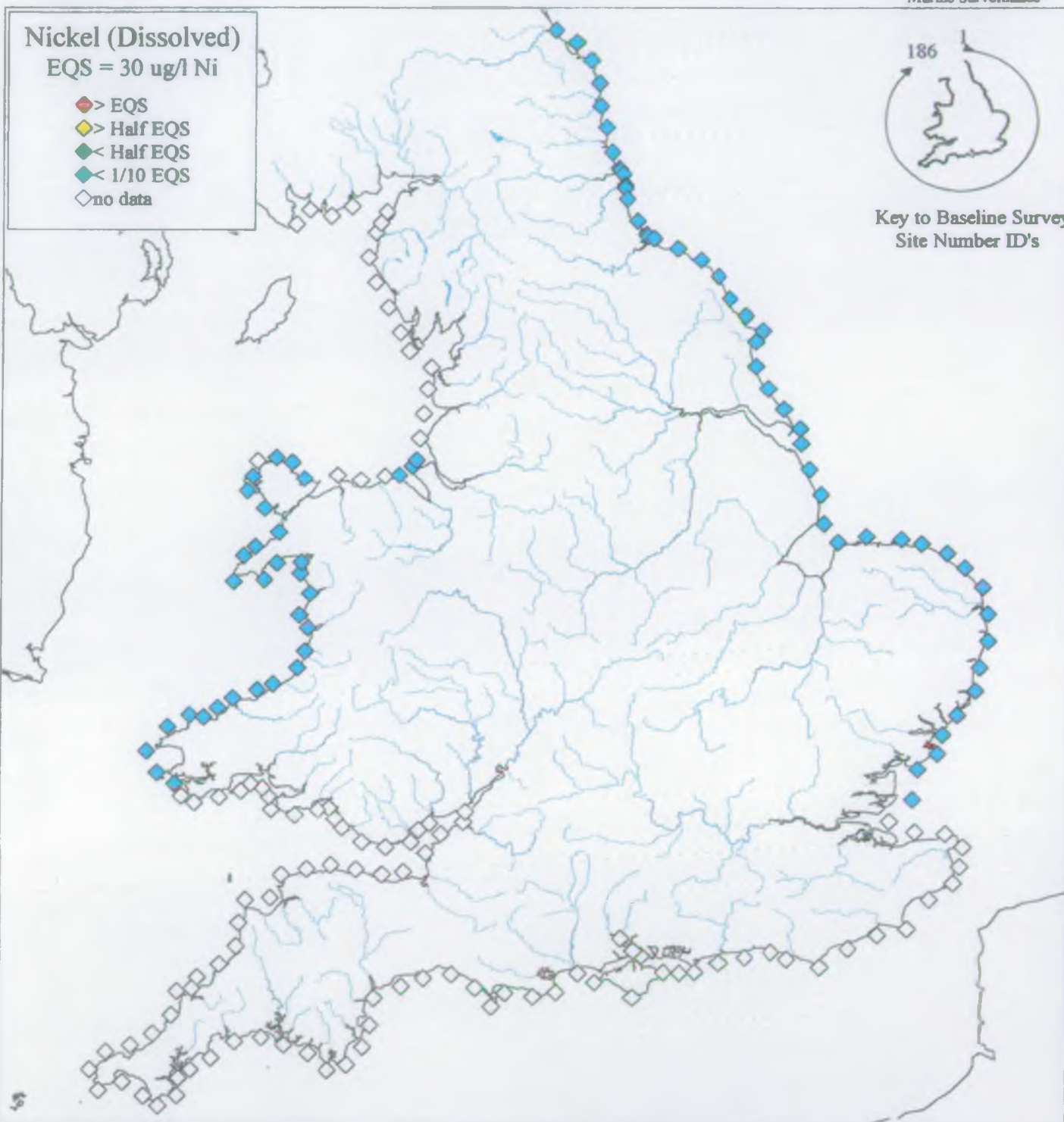
Nickel (Dissolved), National Baseline Survey, January / February 1995.



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Key to Baseline Survey
Site Number ID's



Nickel (Dissolved), National Baseline Survey, March / April 1995.



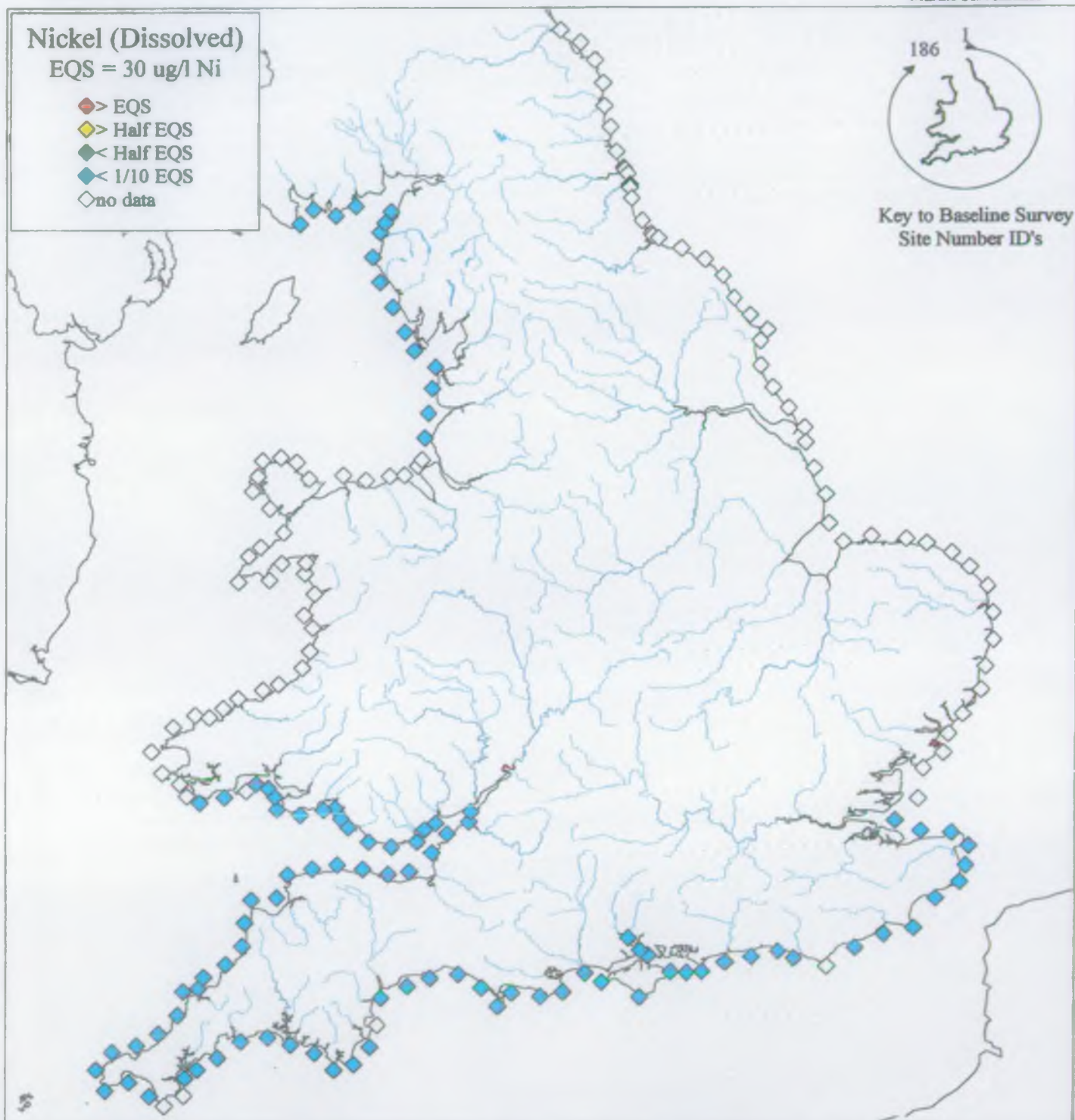
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Nickel (Dissolved)
EQS = 30 ug/l Ni

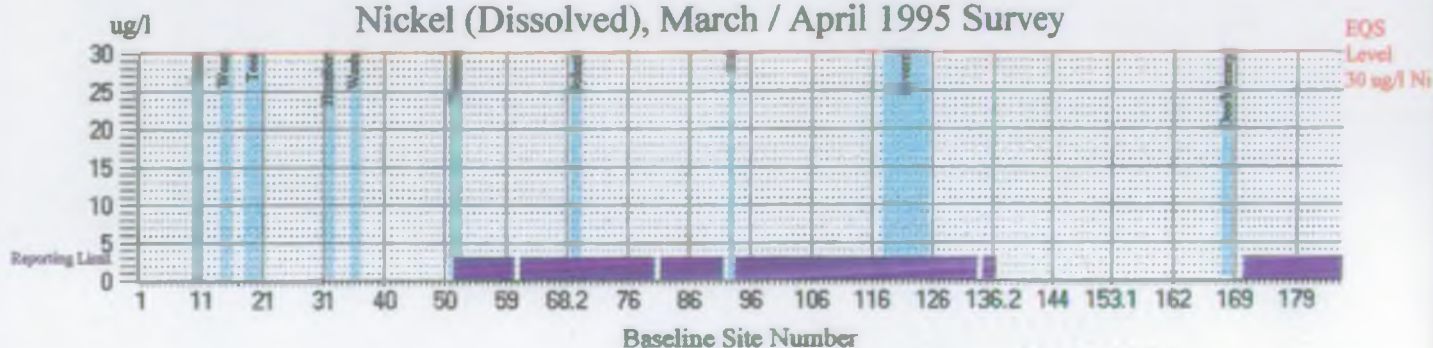
- ◆ > EQS
- ◆ > Half EQS
- ◆ < Half EQS
- ◆ < 1/10 EQS
- ◇ no data



Key to Baseline Survey
Site Number ID's



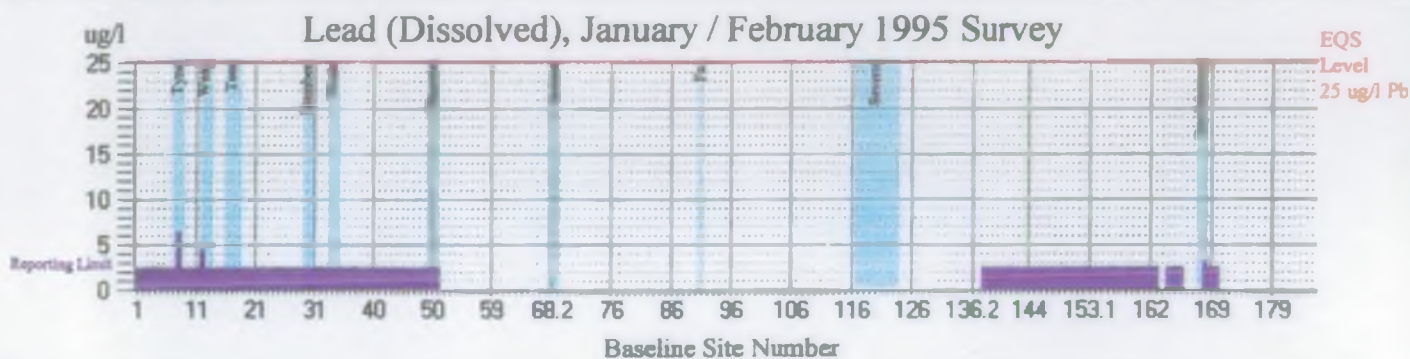
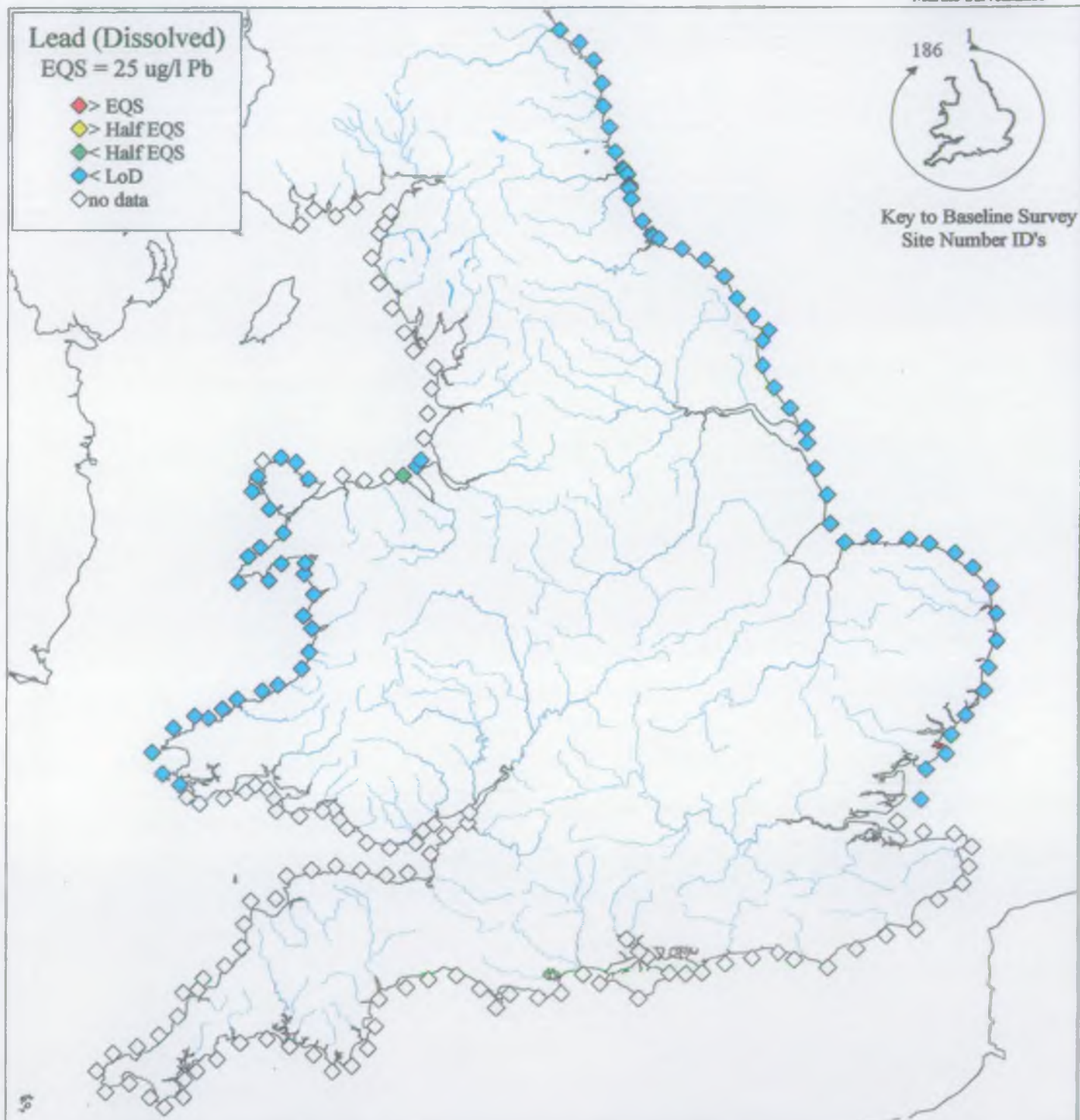
Nickel (Dissolved), March / April 1995 Survey



Lead (Dissolved), National Baseline Survey, January / February 1995.



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Lead (Dissolved), National Baseline Survey, March / April 1995.



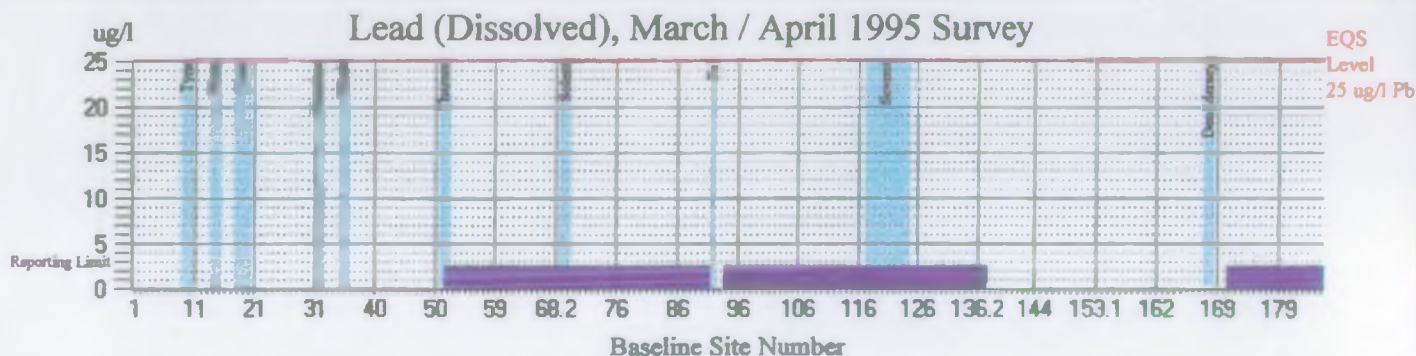
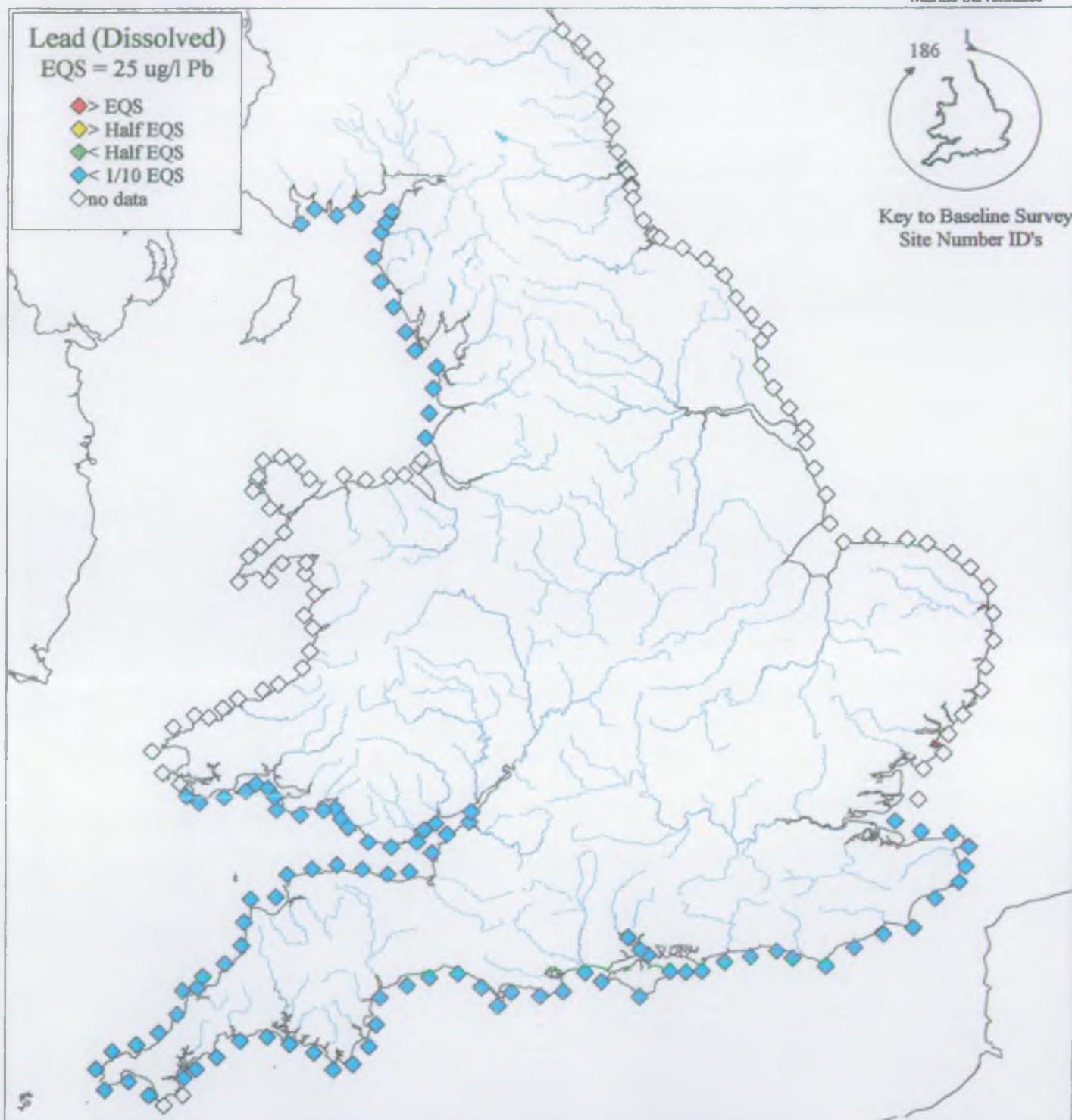
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Key to Baseline Survey
Site Number ID's

Lead (Dissolved)
EQS = 25 ug/l Pb

- ◆ > EQS
- ◆ > Half EQS
- ◆ < Half EQS
- ◆ < 1/10 EQS
- ◇ no data



Zinc (Dissolved), National Baseline Survey, January / February 1995.



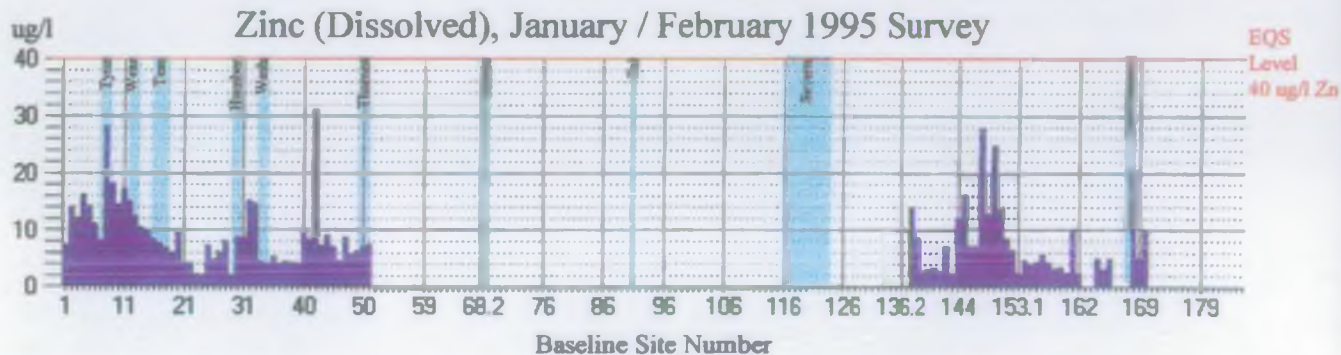
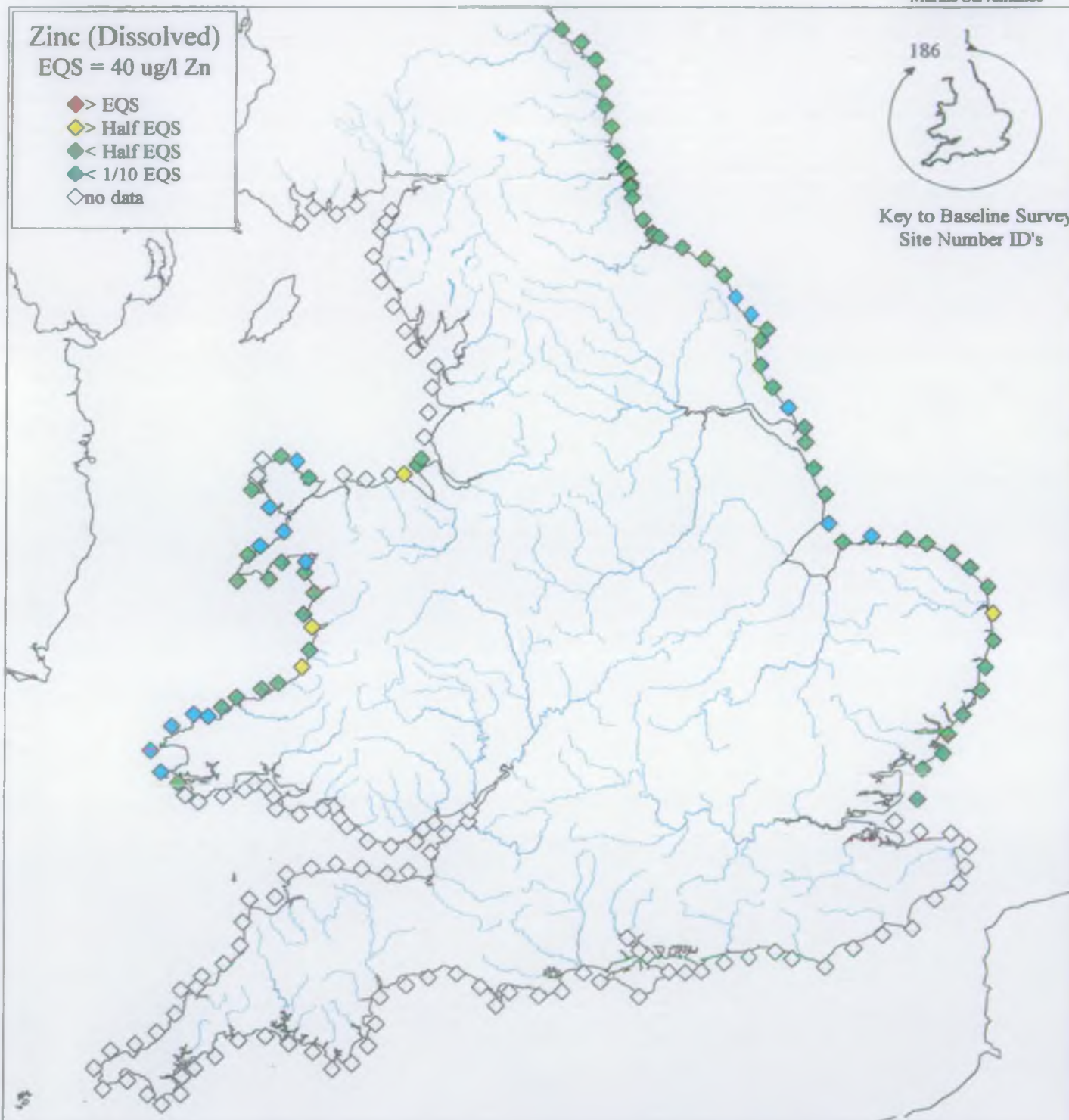
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Key to Baseline Survey
Site Number ID's

Zinc (Dissolved)
EQS = 40 ug/l Zn

- ◆ > EQS
- ◆ > Half EQS
- ◆ < Half EQS
- ◆ < 1/10 EQS
- ◇ no data



Zinc (Dissolved), National Baseline Survey, March / April 1995.



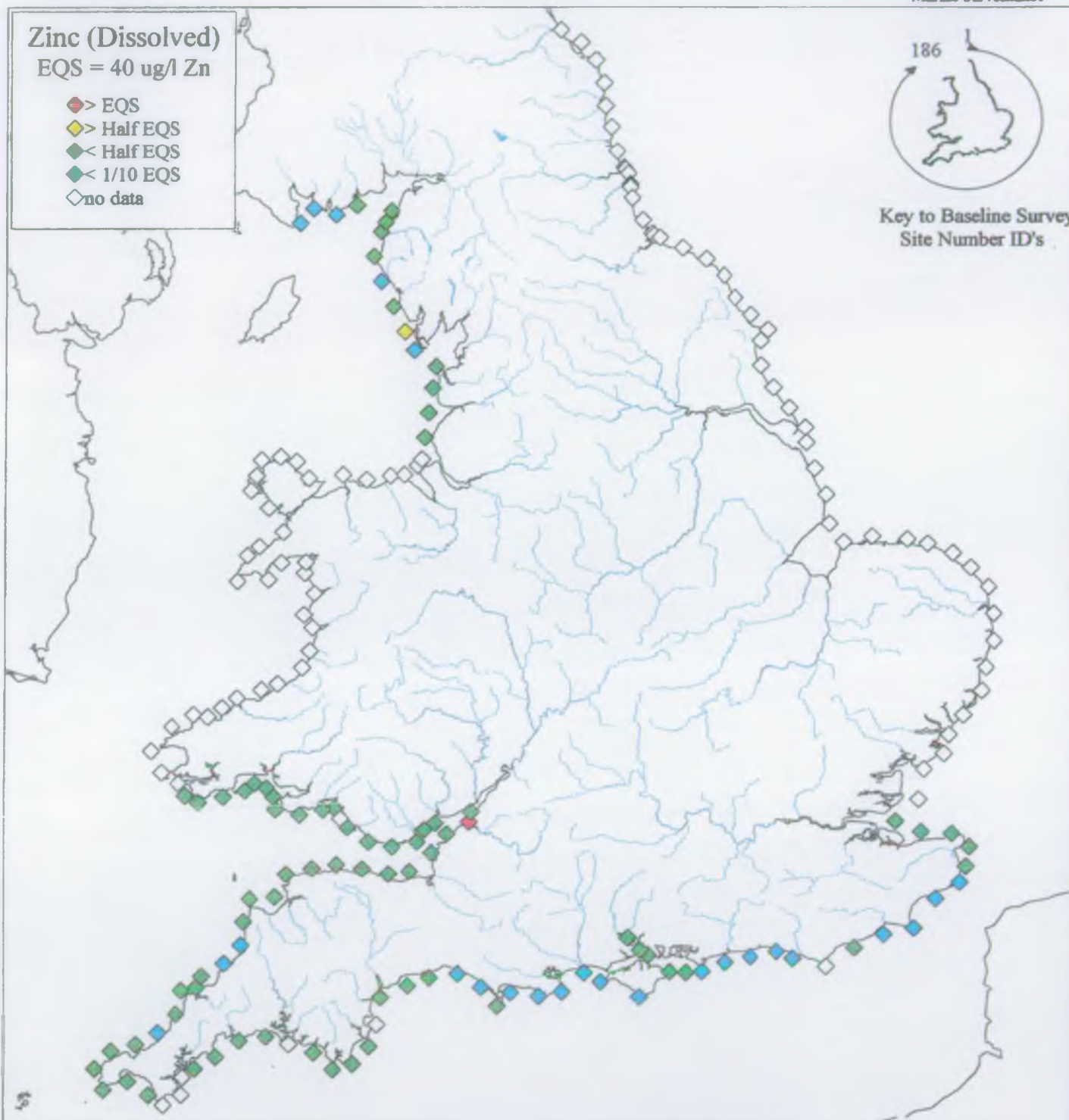
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Key to Baseline Survey
Site Number ID's

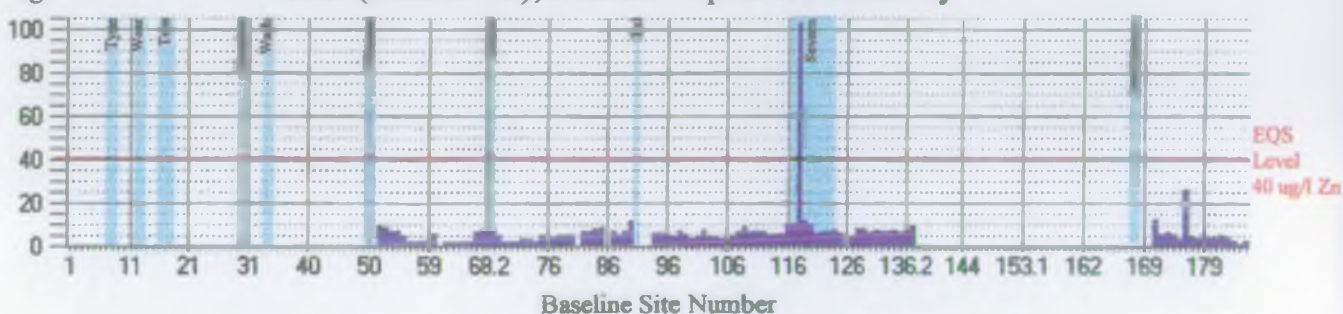
Zinc (Dissolved)
EQS = 40 ug/l Zn

- ◆ > EQS
- ◆ > Half EQS
- ◆ < Half EQS
- ◆ < 1/10 EQS
- ◇ no data



ug/l

Zinc (Dissolved), March / April 1995 Survey



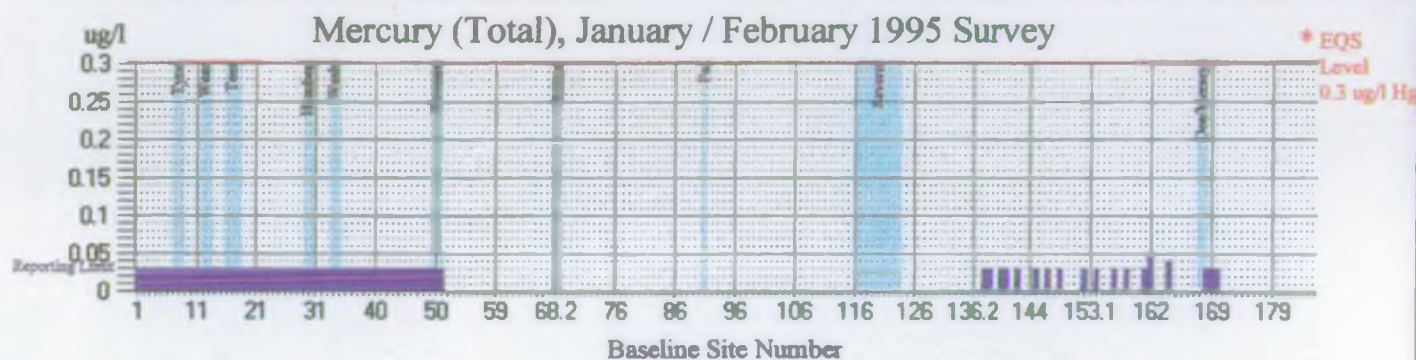
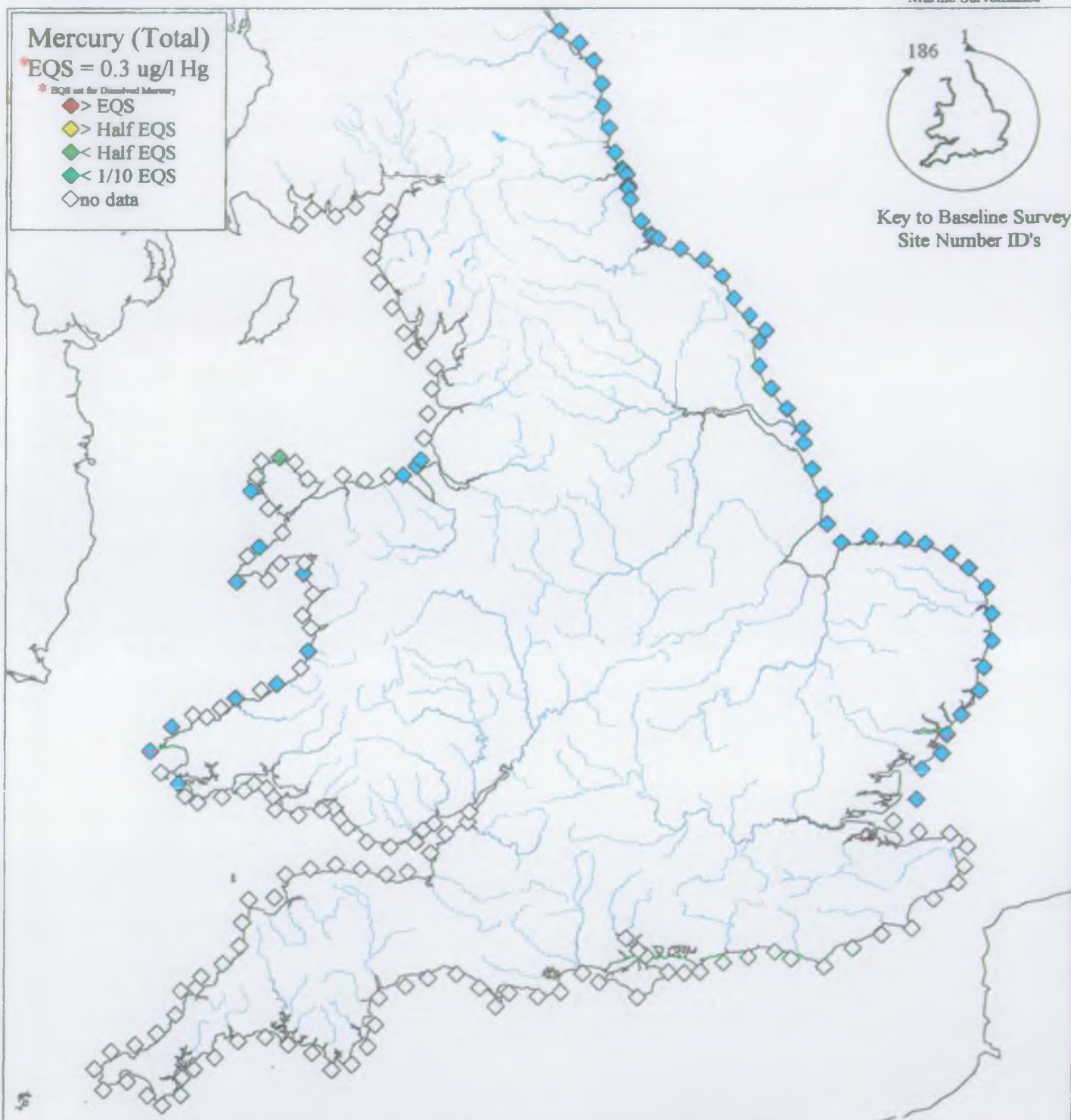
Mercury (Total), National Baseline Survey, January / February 1995.



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Key to Baseline Survey
Site Number ID's



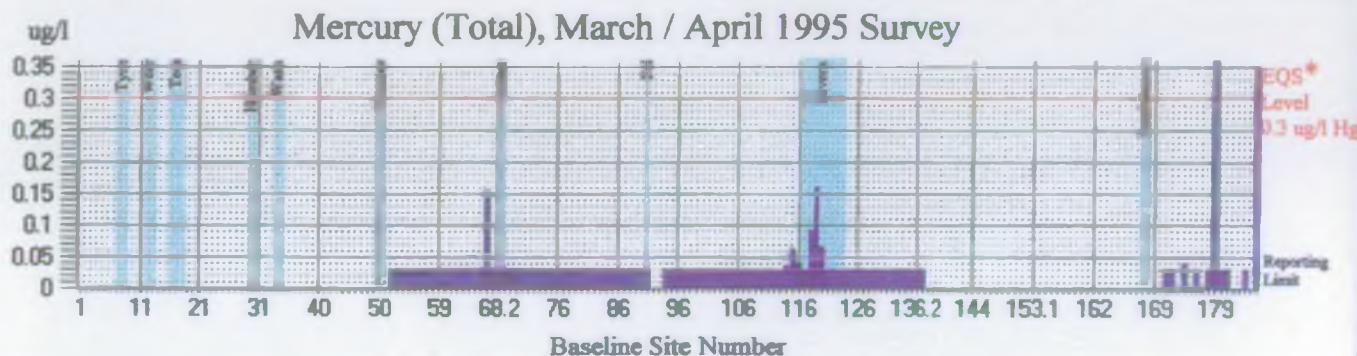
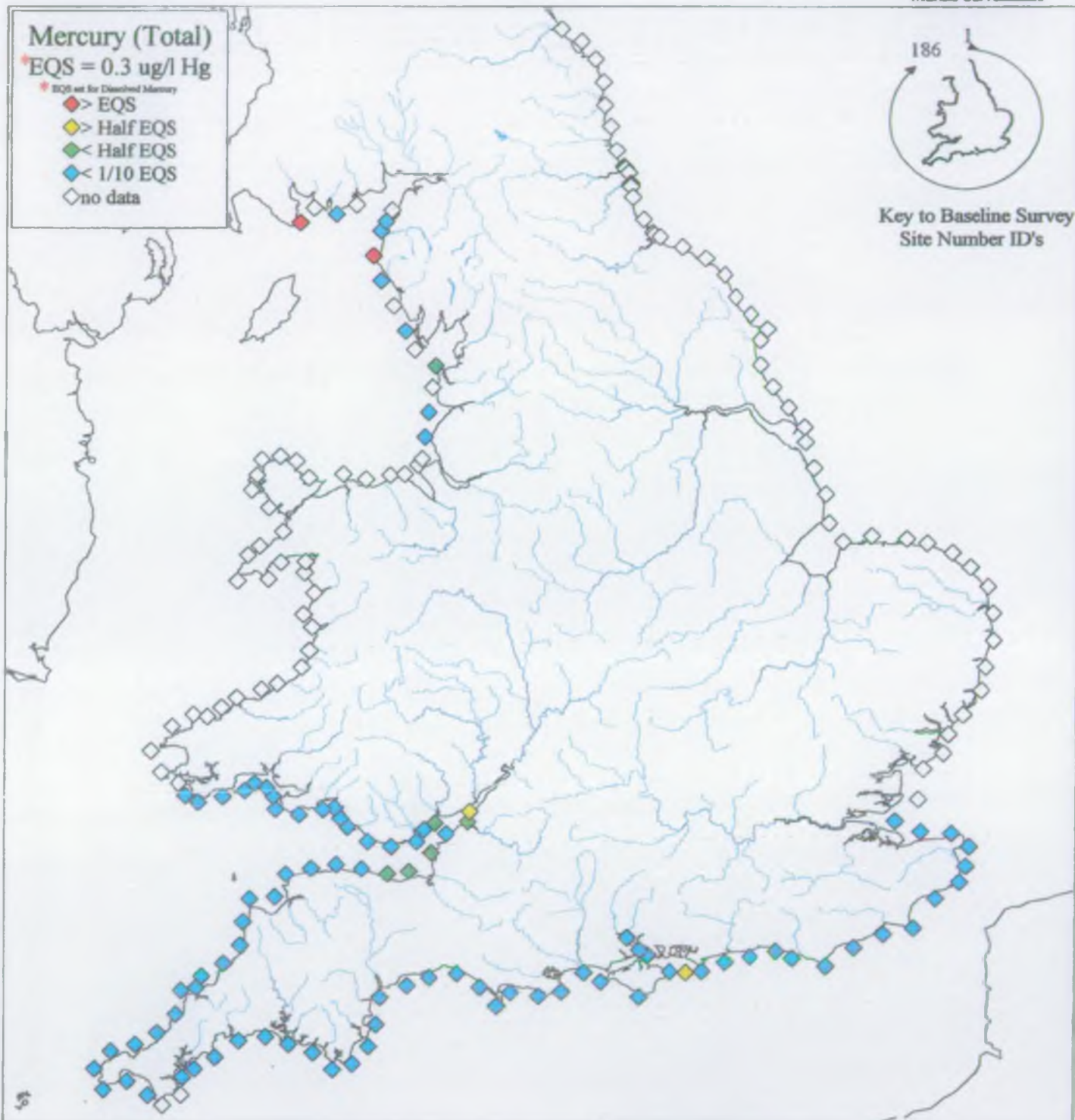
Mercury (Total), National Baseline Survey, March / April 1995.



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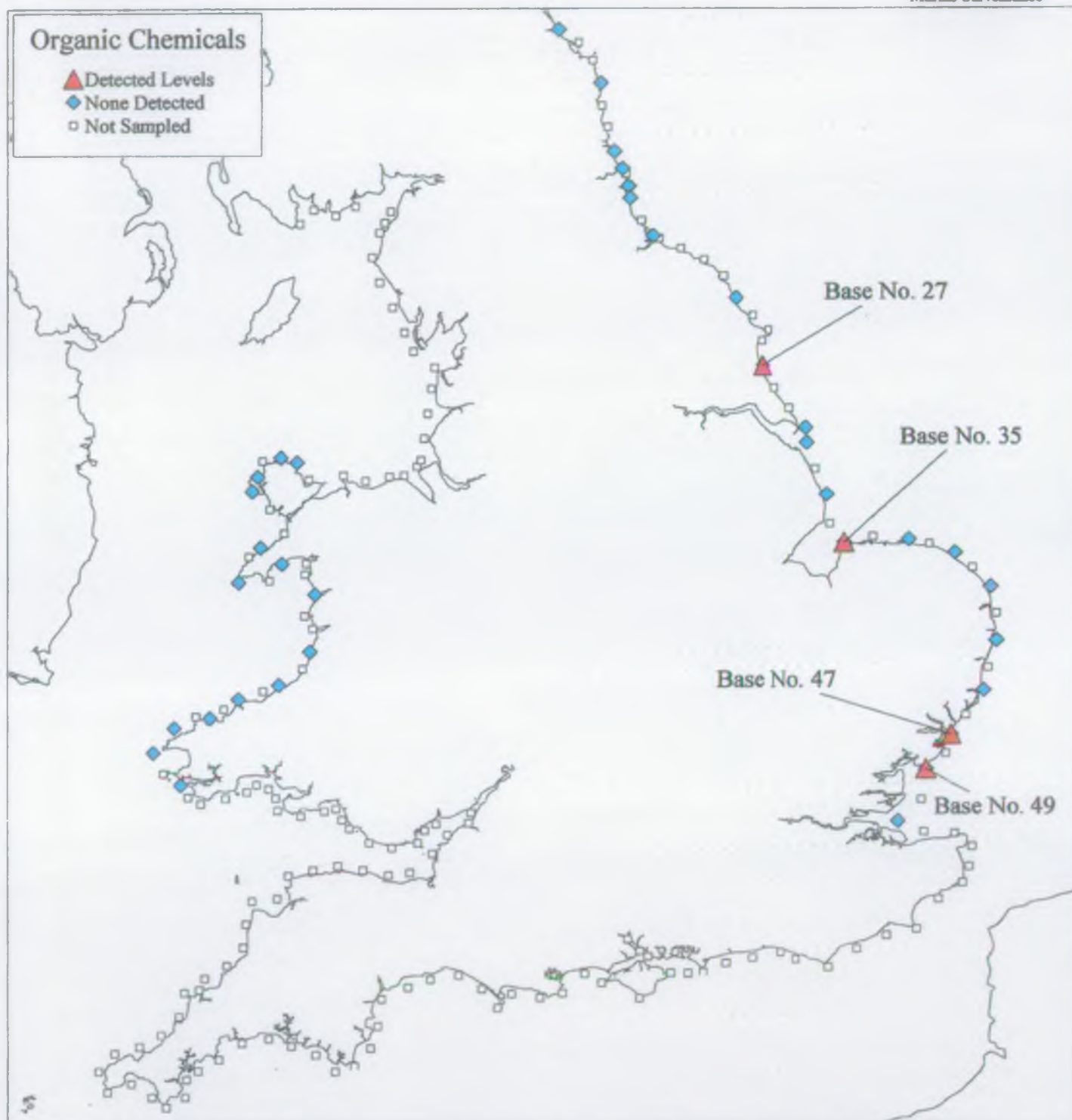
Key to Baseline Survey
Site Number ID's



Organic Chemicals, National Baseline Survey, January / February 1995.



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Sample Sites Where Organic Chemicals Found Above Limit of Detection

Base 27 : 0.00114 ug/l of PCB'180

Base 35 : 0.00113 ug/l of HCH gamma

Base 47 : 0.00125 ug/l of HCH gamma

Base 49 : 0.00114 ug/l of HCH gamma

Organic Chemicals

-
- Organic Chemicals**
- ▲ Detected Levels
 - ◆ None Detected
 - Not Sampled
- Base No. 180
- Base No. 134
- Base No. 130
- Base No. 123
- Base No. 120
- Base No. 119
- Base No. 125
- Base No. 115
- Base No. 109
- Base No. 103
- Base No. 97
- Base No. 86
- Base No. 91
- Base No. 78
- Base No. 71
- Base No. 68.2
- Base No. 66
- Base No. 61
- Base No. 56
- Base No. 51

Base 51 : 0.0012 ug/l of HCH alpha & 0.0018 ug/l of HCH gamma
Base 56 : 0.0012 ug/l of HCH alpha & 0.0014 ug/l of HCH gamma
Base 61 : 0.0012 ug/l of HCH alpha & 0.0013 ug/l of HCH gamma
Base 66 : 0.0016 ug/l of HCH alpha & 0.0014 ug/l of HCH gamma
Base 68.2 : 0.0015 ug/l HCH gamma
Base 71 : 0.0014 ug/l HCH alpha & 0.0015 ug/l of HCH gamma
Base 72 : 0.0018 ug/l HCH alpha & 0.0014 ug/l of HCH gamma
Base 78 : 0.0013 ug/l HCH alpha & 0.0014 ug/l of HCH gamma
Base 81 : 0.0011 of HCH alpha & 0.0013 ug/l of HCH gamma
Base 86 : 0.0011 of HCH alpha & 0.0013 ug/l of HCH gamma
Base 91 : 0.0011 of HCH alpha & 0.0013 ug/l of HCH gamma
Base 97 : 0.0011 of HCH alpha & 0.0013 ug/l of HCH gamma

Base 103 : 0.0015 ug/l of HCH alpha & 0.0013 ug/l of HCH gamma
Base 109 : 0.0011 ug/l of HCH alpha & 0.0013 ug/l of HCH gamma
Base 115 : 0.0012 ug/l of HCH alpha & 0.0018 ug/l of HCH gamma
Base 119 : 0.0019 ug/l of HCH alpha & 0.0014 ug/l of HCH gamma
Base 120 : 0.0011 ug/l of Dieldrin & 0.0015 ug/l of HCH gamma
Base 123 : 0.0011 ug/l of HCH alpha & 0.0011 ug/l of HCH gamma
Base 125 : 0.0011 ug/l of HCH alpha & 0.0013 ug/l of HCH gamma
Base 130 : 0.0014 ug/l of HCH alpha & 0.0017 ug/l of HCH gamma
Base 134 : 0.0014 ug/l of HCH alpha & 0.0017 ug/l of HCH gamma
Base 137 : 0.002 ug/l of PCB'138 & 0.0011 ug/l of HCH alpha
& 0.0014 ug/l of HCH gamma
Base 180 : 0.25 ug/l of Hexachlorobutadiene

National Marine Baseline Survey, Laboratory Sampling Sites



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Laboratory Data Tables: January / February 1995

All of the data from the January / February and March / April sections of the survey are compiled into one table, and each site is referenced with the date on which it was taken.

**WATER GUARDIAN
INORGANICS**

WATER GUARDIAN																				
INORGANICS																				
Det	Parameter	L of D	Units	Base																
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				02Feb	02Feb	02Feb	03Feb	03Feb	03Feb	03Feb	04Feb	04Feb	04Feb	04Feb	04Feb	04Feb	04Feb	04Feb	04Feb	04Feb
				Berwick	Castlehead Rocks	Shoreston Outcars	Craster	Warkworth	Brig Head	Blyth	Tyne (North)	Tyne (Middle)	Tyne (South)	Marsden	Wear (North)	Wear (Middle)	Wear (South)	Pincushon Rock	Blackhall	Tees (North)
105	Mercury total	0.008	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
106	Cadmium dissolved	0.25	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
108	Cadmium total	0.25	ug/l	<		<			<						<			<		
7213	Copper dissolved	0.5	ug/l	0.52	1.25	0.56	1.89	1.03	0.89	<	3.00	<	0.96	1.15	0.66	<	<	0.63	0.64	1.77
7215	Copper total	0.5	ug/l	0.60		0.93			1.43			1.74			0.66			0.71		
7230	Lead dissolved	2.5	ug/l	<	<	<	<	<	<	<	6.41	<	<	<	4.47	<	<	<	<	<
7229	Lead total	2.5	ug/l	<		3.33			3.01			9.72			11.30			4.95		
7243	Zinc dissolved	2	ug/l	7.3	14.0	12.1	16.2	14.1	11.1	8.1	28.2	18.3	14.5	17.3	15.1	12.4	10.4	9.9	8.3	7.7
7245	Zinc total	2	ug/l	7.6		12.1			11.1			24.0			15.1			9.9		
7354	Arsenic dissolved	2	ug/l	<	2.2	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
7356	Arsenic total	2	ug/l	<		2.1			<			<			<			<		
7373	Chromium dissolved	0.35	ug/l	<	1.85	<	0.92	<		1.35	1.72	<	<	6.19	1.16	1.86	0.78	0.76	0.93	0.65
7375	Chromium total	0.35	ug/l	<		<			0.65			1.10			2.08			1.39		
7427	Nickel dissolved	3	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
7429	Nickel total	3	ug/l	<		<			<			<			<			<		
3403	Ammonia	6	ug/l N	<	11	<	<	<	12	<	55	84	<	7	18	55	<	7	9	168
3404	Nitrite	3	ug/l N	<	<	<	<	<	<	<	3.5	4.4	<	<	<	5.0	<	<	<	<
9991	Total Oxidised Nitrogen	10	ug/l N	1396	746	325	401	306	679	188	1976	357	254	404	340	524	174	129	124	236
3420	Silicate	25	ug/l-Si	1049	33	131	134	140	151	148	270	342	153	146	258	551	152	142	140	254
189	Orthophosphate	5	ug/l P	137	118	108	142	156	30	28	401	438	377	377	275	270	220	215	215	199
135	Suspended solids 105°C	3	mg/l	11	12	<	26	15	<	5	<	10	<	8	4	12	<	14	22	30
143	Suspended solids 500°C	3	mg/l	9	10	<	22	10	<	<	<	7	<	4	<	10	<	12	19	25
729	Chlorophyll a	0.2	ug/l	1.07	0.72	0.41	1.96	1.09	0.94	0.94	0.45	0.85	0.34	0.52	0.63	0.25	0.89	0.44	0.64	0.42

WATER GUARDIAN
INORGANICS

WATER GUARDIAN INORGANICS																			
				Tees (Middle)	Tees (South)	Skinningrove	Sandsend	Robin Hoods Bay	Scarborough Outfall	Filey Brigg	Flamborough (North)	Bridlington	Homsea	Beacon Hill	Withemsea	Spum Head	Haile Sand Flat		
				Base	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Det	Parameter	L of D	Units	04Feb	04Feb	04Feb	04Feb	04Feb	04Feb	05Feb	05Feb	05Feb	05Feb	05Feb	05Feb	05Feb	05Feb		
105	Mercury total	0.008	ug/l	<	<	<	<	<	0.013	0.013	<	<	<	<	<	<	<		
106	Cadmium dissolved	0.25	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<		
108	Cadmium total	0.25	ug/l	<			<			<			<			<	<		
7213	Copper dissolved	0.5	ug/l	<	0.53	1.18	0.97	1.00	0.63	2.35	2.36	1.12		0.60	0.52	1.02	1.84		
7215	Copper total	0.5	ug/l	0.97			1.79			2.40			0.65			1.67	2.43		
7230	Lead dissolved	2.5	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<		
7229	Lead total	2.5	ug/l	4.43			4.79			9.29			3.14			4.60	6.22		
7243	Zinc dissolved	2	ug/l	6.9	6.0	9.5	4.1	4.2	2.1	<	7.2	4.8	6.1	8.0	<	8.7	15.1		
7245	Zinc total	2	ug/l	9.9			11.2			7.8			7.3			15.6	16.8		
7354	Arsenic dissolved	2	ug/l	<	2.2	<	<	<	<	<	<	<	<	<	<	<	<		
7356	Arsenic total	2	ug/l	<			<			<			<			<	2.1		
7373	Chromium dissolved	0.35	ug/l	0.71	0.58	0.60		0.78	0.62	0.96	0.83	0.73	1.72	1.36	0.37		1.74		
7375	Chromium total	0.35	ug/l	0.85			2.67			4.63			2.13			2.66	4.99		
7427	Nickel dissolved	3	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<		
7429	Nickel total	3	ug/l	<			<			9.16			<			<	5.71		
3403	Ammonia	6	ug/l N	260	30	21	89	17	11	225	<	<	<	<	<	10	33		
3404	Nitrite	3	ug/l N	3.6	<	<	<	<	<	<	<	<	<	<	<	<	5.2		
9991	Total Oxidised Nitrogen	10	ug/l N	271	126	108	297	129	120	5655	306	386	255	197	249	849	1514		
3420	Silicate	25	ug/l Si	227	143	162	171	157	153	133	142	173	162	154	157	542	916		
189	Orthophosphate	5	ug/l P	134	130	301	139	187	191	255	414	414	402	111	402	30	25		
135	Suspended solids 105°C	3	mg/l	9	10	21	36	10	41	49	37	42	49	48	71	38	51		
143	Suspended solids 500°C	3	mg/l	7	7	20	29	9	34	41	31	36	44	42	62	34	44		
729	Chlorophyll a	0.2	ug/l	0.53	0.34	1.96	0.59	0.43	1.28	1.09	0.90	0.94	0.85	0.82	0.99	0.66	1.05		

SEA VIGIL
INORGANICS

SEA VIGIL INORGANICS				Haile Sand Flat	Theddlethorpe	Chapel St. Leonards	Outer Dogs Head												
			Base	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Det	Parameter	L of D	Units	24Jan	24Jan	24Jan	24Jan	24Jan	24Jan	24Jan	25Jan	25Jan	25Jan	25Jan	25Jan	25Jan	25Jan	25Jan	25Jan
105	Mercury total	0.03	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
106	Cadmium dissolved	0.25	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
108	Cadmium total	0.25	ug/l	<		<		0.31		<				0.37		<		<	
7213	Copper dissolved	0.5	ug/l	0.87	2.65	0.84	0.91	0.55	0.54	0.66	0.84	1.08	2.25	2.04	0.67	<	1.92	0.62	<
7215	Copper total	0.5	ug/l	3.00		5.13		2.48		3.27				2.04		3.12		2.70	
7230	Lead dissolved	2.5	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
7229	Lead total	2.5	ug/l	5.87		8.28		2.70		<				5.39		4.81		2.88	
7243	Zinc dissolved	3	ug/l	8.6	14.6	4.4	4.0	5.3	4.0	4.4	4.3	4.1	9.7	8.3	31.1	7.2	9.0	7.0	4.5
7245	Zinc total	3	ug/l	17.6		18.6		11.0		10.9				13.6		17.3		12.0	
7354	Arsenic dissolved	2.5	ug/l	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
7356	Arsenic total	2.5	ug/l																
7373	Chromium dissolved	1.5	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
7375	Chromium total	1.5	ug/l	<		<		<		<						2.17		<	
7427	Nickel dissolved	3	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
7429	Nickel total	3	ug/l	<		<		<		<				<		<		<	
3403	Ammonia	6	ug/l N	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3404	Nitrite	3	ug/l N	<	<	<	<	6.5	4.3	<	13.5	<	<	<	<	<	<	<	<
9991	Total Oxidised Nitrogen	10	ug/l N	903	762	696	494	1210	670	193	228	231	261	320	513	230	229	223	200
3420	Silicate	25	ug/l Si	566	471	361	292	578	381	151	166	180	196	237	392	240	236	209	202
189	Orthophosphate	5	ug/l P	29	27	23	22	40	26	15	<	54	14	18	22	20	24	26	27
135	Suspended solids 105°C	3	mg/l	68	124	77	8	22	22	20	25	26	63	78	15	162	86	83	46
143	Suspended solids 500°C	3	mg/l																
729	Chlorophyll a	0.2	ug/l	1.04	2.17	1.97	1.00	1.52	1.16	1.18	1.20	0.23	0.76	0.87	0.35	0.91	0.29	0.41	0.42

SEA VIGIL
INORGANICS

Det	Parameter	L of D	Units	Felixstowe	Walton	Jaywick	Maplin Bank	Medway Buoy
				Base 47	25Jan 48	25Jan 49	27Jan - 27Jan 50	27Jan 51
105	Mercury total	0.03	ug/l	<	<	<	<	<
106	Cadmium dissolved	0.25	ug/l	<	<	<	<	<
108	Cadmium total	0.25	ug/l	<		<		<
7213	Copper dissolved	0.5	ug/l	1.68	<	1.48	0.78	0.71
7215	Copper total	0.5	ug/l	1.68		2.85		1.91
7230	Lead dissolved	2.5	ug/l	<	<	<	<	<
7229	Lead total	2.5	ug/l	<		3.14		<
7243	Zinc dissolved	3	ug/l	8.7	5.7	6.2	7.1	7.5
7245	Zinc total	3	ug/l	9.8		11.3		7.5
7354	Arsenic dissolved	2.5	ug/l	2.5	2.5	2.5	2.5	2.5
7356	Arsenic total	2.5	ug/l					
7373	Chromium dissolved	1.5	ug/l	<	<	<	<	<
7375	Chromium total	1.5	ug/l	6.22		<		<
7427	Nickel dissolved	3	ug/l	<	<	<	<	<
7429	Nickel total	3	ug/l	<		<		<
3403	Ammonia	6	ug/l N	<	<	<	<	<
3404	Nitrite	3	ug/l N	<	<	<	<	<
9991	Total Oxidised Nitrogen	10	ug/l N	328	231	274	328	902
3420	Silicate	25	ug/l Si	276	220	280	283	687
189	Orthophosphate	5	ug/l P	69	30	63	35	126
135	Suspended solids 105°C	3	mg/l	54	40	90	14	19
143	Suspended solids 500°C	3	mg/l					
729	Chlorophyll a	0.2	ug/l	0.48	0.33	3.73	2.98	1.12

VIGILANCE
INORGANICS

VIGILANCE INORGANICS				Medway Buoy	Shivering sand Buoy	East Margate	East Brake Buoy	Goodwin Fork Buoy	South Foreland	Sandgate Bay	Dungeness	Rye Bay	Bexhill	Beachy Head	Newhaven	Brighton	Worthing	Middleton-on-Sea	Selsey Bill	Nab Tower	
Det	Parameter	L of D	Units	Base 07Apr	51 07Apr	52 07Apr	53 07Apr	54 07Apr	55 07Apr	56 07Apr	57 07Apr	58 07Apr	59 07Apr	60 07Apr	61 07Apr	62 07Apr	63 05Apr	64 05Apr	65 05Apr	66 05Apr	67 05Apr
105	Mercury total	0.008	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	0.155	
106	Cadmium dissolved	0.042	ug/l	<	<	<	<	0.05	<	<	<	<	<		<	<	<	<	<	<	
108	Cadmium total	0.042	ug/l	<					<						<				<		
7213	Copper dissolved	0.05	ug/l	0.84	0.94	0.91	0.96	0.48	0.45	0.30	0.20	0.19	0.18		0.40	0.33	0.56	0.55	0.17	0.39	
7215	Copper total	0.05	ug/l	1.08					0.50						0.38				0.94		
7230	Lead dissolved	0.024	ug/l	<	0.04	<	<	<	<	<	<	<	<	<	0.13	<	<	<	0.06	0.10	<
7229	Lead total	0.042	ug/l	0.38					0.21						0.15					0.20	
7243	Zinc dissolved	2	ug/l	9.1	8.6	6.6	6.9	4.5	<	<	2.5	<	5.5		<	<	<	<	<	6.4	
7245	Zinc total	2	ug/l	18.4					<						<				9.4		
7354	Arsenic dissolved	2	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	
7356	Arsenic total	2	ug/l	<					<						<				<		
7373	Chromium dissolved	0.35	ug/l	<	0.71	<	<	0.44	<	<	<	<	<	<	<	<	<	<	0.43	<	<
7375	Chromium total	0.35	ug/l	<					<						<				<		
7427	Nickel dissolved	0.058	ug/l	0.72	0.90	0.67	0.57	0.47	0.45	0.48	0.40	0.37	0.48		0.56	0.56	1.16	0.72	0.50	0.55	
7429	Nickel total	0.058	ug/l	0.82					0.53						0.54				0.50		
3403	Ammonia	6	ug/l N	86	90	104	104	99	107	106	104	97	99	117	150	116	101	107	107	106	
3404	Nitrite	3	ug/l N	3.3	4.7	<	3.2	3.1	<	<	<	<	3.2	4.8	6.2	5.6	3.5	3.8	<	3.3	
9991	Total Oxidised Nitrogen	10	ug/l N	1131	960	529	538	579	487	441	216	155	354	506	606	496	433	496	387	577	
3420	Silicate	25	ug/l Si	103	34	39	39	75	106	109	36	<	76	158	126	76	121	43	75	176	
189	Orthophosphate	5	ug/l P	44	51	21	24	27	26	24	17	15	22	26	25	21	20	14	19	25	
135	Suspended solids 105°C	3	mg/l	<	<	9	8	<	<	<	<	<	6	<	<	<	<	<	<	7	
143	Suspended solids 500°C	3	mg/l	<	<	8	6	<	<	<	<	<	<	<	<	<	<	<	<	4	
729	Chlorophyll a	0.2	ug/l	5.04	10.93	7.27	6.16	3.03	1.29	1.52	4.73	5.80	4.33	1.65	0.98	3.26	2.36	4.46	2.32	2.10	

VIGILANCE
INORGANICS

VIGILANCE INORGANICS																					
Det	Parameter	L of D	Units	Base																81	
				68.1	68.2	68.3	68.4	69	70	71	72	73	74	75	76	77	78	79	80		
				04Apr	04Apr	04Apr	04Apr	04Apr	04Apr	04Apr	03Apr	03Apr	03Apr	03Apr	03Apr	03Apr	03Apr	03Apr	03Apr	30Mar	
105	Mercury total	0.008	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	
106	Cadmium dissolved	0.042	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	
108	Cadmium total	0.042	ug/l		<					<	<							<			
7213	Copper dissolved	0.05	ug/l	0.51	0.58	0.64	0.33	0.62	0.11	0.66	0.50	0.45	0.24	1.04	0.70	3.90	0.55	0.63	0.66	0.46	
7215	Copper total	0.05	ug/l		0.88					1.10	0.68						0.55			0.49	
7230	Lead dissolved	0.024	ug/l	<	<	0.13	<	<	0.19	<	<	<	<	<	<	<	<	<	<	0.04	
7229	Lead total	0.042	ug/l		0.54					0.13	0.09						0.07			0.17	
7243	Zinc dissolved	2	ug/l	6.9	6.7	6.7	4.9	<	<	<	3.5	3.4	<	5.0	3.2	4.0	4.9	4.9	5.1		
7245	Zinc total	2	ug/l		9.3					7.1	8.3						5.4			6.4	
7354	Arsenic dissolved	2	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	
7356	Arsenic total	2	ug/l		<					<	<									<	
7373	Chromium dissolved	0.35	ug/l	<		0.59	<	<	<	<	0.52	0.92	<	1.33	<	<		<	<	<	
7375	Chromium total	0.35	ug/l		<					<	0.89									0.46	
7427	Nickel dissolved	0.058	ug/l	0.66	0.67	0.78	0.52	0.50	0.57	0.46	0.36	0.34	0.43	0.36	0.12	0.27	0.47	0.34	0.29		
7429	Nickel total	0.058	ug/l		0.69					0.60	0.40						0.68			0.25	
3403	Ammonia	6	ug/l N	159	153	292	110	101	113	113	90	85	132	87	89	88	90	90	97	86	
3404	Nitrite	3	ug/l N	6.1	5.9	10.3	3.8	4.0	4.5	5.4	<	<	6.6	4.8	4.8	4.3	4.7	4.6	5.5	4.7	
9991	Total Oxidised Nitrogen	10	ug/l N	1041	938	1697	548	624	818	893	496	390	361	337	333	342	315	325	507	291	
3420	Silicate	25	ug/l Si	380	319	735	177	191	231	186	121	104	102	110	109	104	94	91	133	91	
189	Orthophosphate	5	ug/l P	32	29	51	23	23	25	38	17	17	18	16	20	15	14	18	15	15	
135	Suspended solids 105°C	3	mg/l	14	10	<	8	9	10	<	<	<	<	<	<	<	<	<	<	<	
143	Suspended solids 500°C	3	mg/l	12	9	<	6	8	8	<	<	<	<	<	<	<	<	<	<	<	
729	Chlorophyll a	0.2	ug/l	2.68	2.10	0.94	1.43	1.12	2.19	2.14	1.74	1.34	1.43	1.07	0.85	0.94	1.02	1.47	1.92	1.52	

East Brambles

Calshot

Dockhead

West Princessa

St. Catherines

The Needles

Hengistbury Head

Anvil Point

St. Aldhelms

Weymouth Bay

Portland Bill

Chesil

Bridport

Seaton

Sidmouth

Exmouth

Torbay

**VIGILANCE
INORGANICS**

Det	Parameter	L of D	Units	Base 30Mar	82 30Mar	83 30Mar	84 30Mar	85 30Mar	86 30Mar	87 30Mar	88 30Mar	89 30Mar	90 30Mar	91 22Mar	94 22Mar	95 21Mar	96 21Mar	97 21Mar	98 21Mar	99 21Mar	100 21Mar
					Dartmouth	Start Point	Salcombe	Bigbury Bay	Plymouth	East Looe	Fowey	Dodman Point	St. Antony Head	Falmouth	Mullion	Penzance	Runnel Stone	Cape Cornwall	The Carracks	Godrevy Island	St. Agnes
105	Mercury total	0.008	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
106	Cadmium dissolved	0.042	ug/l	<	<	<	<	<	<	<	<	<	<	<	0.05	<	<	<	<	<	<
108	Cadmium total	0.042	ug/l						0.34					<				<			
7213	Copper dissolved	0.05	ug/l	0.65	0.55	0.67	0.71	0.69	1.07	1.49	0.91	1.00	0.93	2.32	0.71	7.01	0.87	1.11	1.12	1.08	
7215	Copper total	0.05	ug/l						0.89					0.96				1.04			
7230	Lead dissolved	0.024	ug/l	<	<	<	0.04	0.04	0.08	<	0.06	0.26	0.06	0.14	0.03	<	<	<	0.16	0.09	
7229	Lead total	0.042	ug/l						0.27					0.11				0.05			
7243	Zinc dissolved	2	ug/l	7.0	6.7	7.8	8.5		7.0	5.2	7.0	11.7		6.2	6.2	5.9	4.5	7.1	5.3	3.7	
7245	Zinc total	2	ug/l						9.1					7.8				4.5			
7354	Arsenic dissolved	2	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
7356	Arsenic total	2	ug/l						<					<				<			
7373	Chromium dissolved	0.35	ug/l	<	0.42	<	0.43		0.42	<	6.51	<	<	0.58	<	<	<	<	<	0.65	
7375	Chromium total	0.35	ug/l						<					0.42				<			
7427	Nickel dissolved	0.058	ug/l	<	0.23	0.46	0.12	<	0.13	0.34	0.31	0.34	0.13	0.29	0.21	<	<	<	<	<	<
7429	Nickel total	0.058	ug/l						0.31					0.41				<			
3403	Ammonia	6	ug/l N	88	90	92	88	95	101	87	96	86	90	178	94	103	102	113	115	100	
3404	Nitrite	3	ug/l N	4.5	4.3	4.7	5.1	5.2	3.9	4.5	4.2	4.0	<	<	<	<	<	<	<	<	<
9991	Total Oxidised Nitrogen	10	ug/l N	271	286	271	275	293	254	264	264	258	270	250	239	233	225	224	243	242	
3420	Silicate	25	ug/l Si	81	68	64	76	86	74	79	78	77	84	80	79	87	94	95	91	77	
189	Orthophosphate	5	ug/l P	16	15	16	16	19	17	16	28	18	19	41	19	21	20	14	18	16	
135	Suspended solids 105°C	3	mg/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	4	
143	Suspended solids 500°C	3	mg/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	4	
729	Chlorophyll a	0.2	ug/l	1.43	1.03	0.85	0.54	0.54	0.27	0.49	0.54	0.36	0.80	0.94	0.27	0.85	0.94	0.80	0.98	1.07	

**VIGILANCE
INORGANICS**

VIGILANCE INORGANICS																					
				Newquay	Trevoze	Padstow	Port Isaac	Boscastle	Bude	Morewenstowe	Hartland Point	Bideford	Bull Point	Combe Martin	Foreland	Porlock	Minehead	Bridgwater Bar	Weston-super-Mare	Clevedon	
				Base	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117
Det	Parameter	L of D	Units	21Mar	21Mar	21Mar	21Mar	21Mar	21Mar	21Mar	21Mar	21Mar	20Mar	20Mar	20Mar	20Mar	20Mar	20Mar	20Mar	20Mar	
105	Mercury total	0.008	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	0.013	0.035	0.062	0.041	0.029
106	Cadmium dissolved	0.042	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	0.07	0.08	0.13	0.13	0.15
108	Cadmium total	0.042	ug/l			<							0.05						0.19		
7213	Copper dissolved	0.05	ug/l	1.10	1.10	1.27	1.93	0.87	1.19	0.78	0.92	0.38	0.53	0.54	0.80	1.21	1.96	2.97	2.27	2.29	
7215	Copper total	0.05	ug/l			1.27							0.79						9.41		
7230	Lead dissolved	0.024	ug/l	<	<	<	<	<	<	0.12	1.67	<	<	<	<	<	<	<	0.06	<	
7229	Lead total	0.042	ug/l			0.21							1.24						26.50		
7243	Zinc dissolved	2	ug/l	4.4	7.4	4.6	4.3	3.5	3.6	5.0	6.7	8.7	6.4	6.9	6.7	5.3	5.4	5.6	10.2	10.4	
7245	Zinc total	2	ug/l			5.6							8.7						45.2		
7354	Arsenic dissolved	2	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	
7356	Arsenic total	2	ug/l			<							<						<		
7373	Chromium dissolved	0.35	ug/l	<	<	<	1.27	1.83	<	<	<	<	<	<	<	<	2.01	<	<	<	
7375	Chromium total	0.35	ug/l			<							<						2.13		
7427	Nickel dissolved	0.058	ug/l	<	<	0.27	0.31	0.31	0.40	0.44	0.42	0.32	0.48	0.49	0.50	0.68	1.08	1.18	1.20	1.12	
7429	Nickel total	0.058	ug/l			0.27							0.64						3.68		
3403	Ammonia	6	ug/l N	106	100	106	97	98	103	110	106	104	102	107	107	95	99	103	104	101	
3404	Nitrite	3	ug/l N	<	<	<	<	<	10.6	3.6	<	<	<	<	<	<	<	<	<	<	
9991	Total Oxidised Nitrogen	10	ug/l N	327	279	309	269	292	327	351	484	583	621	604	729	971	1464	1962	2342	2394	
3420	Silicate	25	ug/l Si	85	62	67	62	61	71	75	174	220	239	222	277	463	742	1023	1124	1172	
189	Orthophosphate	5	ug/l P	15	16	20	17	17	18	19	23	29	34	28	30	42	61	78	85	91	
135	Suspended solids 105°C	3	mg/l	<	<	10	8	<	5	4	<	19	<	22	47	78	148	282	169	127	
143	Suspended solids 500°C	3	mg/l	<	<	9	<	<	5	<	<	16	<	20	44	71	135	258	155	113	
729	Chlorophyll a	0.2	ug/l	0.89	1.92	1.38	1.07	1.56	1.12	1.25	1.96	1.34	1.56	1.74	1.34	1.47	2.23	4.46	0.45	1.26	

**VIGILANCE
INORGANICS**

		Base		118		119		120		121		122		123		124		125		126		127		128		129		130		131		132		133		134	
				20Mar		20Mar		14Mar		14Mar		14Mar		14Mar		14Mar		14Mar		14Mar		14Mar		14Mar		14Mar		14Mar		14Mar		14Mar		14Mar		13Mar	
Del	Parameter	L of D	Units	Avonmouth	No. 1 Beacon	Newport Deep	Cardiff Road	Lavernock	Aberthaw	Nash Point	Porthcawl	Kenfig	Port Talbot	Mumbles	Oxwich	Worms Head	Llanelli	Burry Port	Carmarthen	Caldey Island																	
105	Mercury total	0.008	ug/l	0.093	0.160	0.066	<	<	0.014	0.022	<	<	<	<	<	<	<	<	<	<																	
106	Cadmium dissolved	0.042	ug/l	0.13	0.11	0.14	0.10	0.08	0.06	0.10	0.08	0.07	0.10	0.12	0.11	0.05	0.06	<	0.05	0.05																	
108	Cadmium total	0.042	ug/l		0.36	0.20			0.10		0.12	0.15				0.08		0.06		0.06																	
7213	Copper dissolved	0.05	ug/l	2.08	2.12	2.19	1.72	1.69	1.30	0.89	0.78	0.93	0.99	0.64	1.17	0.29	0.26	0.27	0.11	0.86																	
7215	Copper total	0.05	ug/l		15.50	6.75			2.61		1.45	1.82				0.69		0.39		0.86																	
7230	Lead dissolved	0.024	ug/l	0.06	0.04	0.10	0.10	0.05	0.09	0.10	0.07	0.08	0.05	0.08	0.28	0.12	0.04	<	0.07	0.12																	
7229	Lead total	0.042	ug/l		70.50	32.20			6.29		3.29	1.93				0.99		0.28		0.26																	
7243	Zinc dissolved	2	ug/l	103.0	12.1	10.3	6.1	6.8	6.9	7.9	6.1		4.9	8.4	8.2	6.5	7.3	6.7	6.7	7.3																	
7245	Zinc total	2	ug/l		121.8	20.5			14.8		10.9	2.2				8.5		6.7		7.9																	
7354	Arsenic dissolved	2	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<																	
7356	Arsenic total	2	ug/l		<	<			<		<	<				<		<		<																	
7373	Chromium dissolved	0.35	ug/l	<	<	1.03	<	<	0.66	1.03	<	<	<	<	<	<	<	<	<	<																	
7375	Chromium total	0.35	ug/l		0.59	7.90			4.26		2.23	<				0.52		1.18		<																	
7427	Nickel dissolved	0.058	ug/l	1.33	1.40	1.23	0.64	0.93	0.76	0.74	0.85	0.62	0.65	0.77	0.76	0.62	0.66	0.56	0.51																		
7429	Nickel total	0.058	ug/l		7.85	4.08			1.50		1.08	0.67				0.82		0.60		0.47																	
3403	Ammonia	6	ug/l N	104	101	44	54	66	44	46	42	43	44	49	44	43	47	52	51	46																	
3404	Nitrite	3	ug/l N	<	<	7.3	5.7	5.3	3.8	3.4	3.7	3.9	3.9	4.1	3.6	4.0	5.2	5.4	5.2	5.0																	
9991	Total Oxidised Nitrogen	10	ug/l N	3056	2339	3241	2399	2168	851	872	933	929	917	1595	1578	549	379	339	346	331																	
3420	Silicate	25	ug/l Si	1412	1186	1644	1468	1049	517	545	573	589	605	756	684	520	405	422	429	382																	
189	Orthophosphate	5	ug/l P	105	91	113	94	89	56	57	61	60	63	65	66	45	33	31	31	29																	
135	Suspended solids 105°C	3	mg/l	416	687	300	34	32	62	121	30	14	<	<	<	9	6	<	<	<																	
143	Suspended solids 500°C	3	mg/l	384	634	268	30	26	56	109	27	12	<	<	<	7	4	<	<	<																	
729	Chlorophyll a	0.2	ug/l	4.46	9.37	5.00	0.36	<	2.50	2.48	0.89	0.49	<	0.22	0.22	0.58	0.49	0.54	0.36	0.22																	

VIGILANCE
INORGANICS

Old Castle Head (Off)

St. Govans (Off)

Turbot Bank

Det	Parameter	L of D	Units	Base	135.2	136.2	137
				13Mar	13Mar	13Mar	13Mar
105	Mercury total	0.008	ug/l	<	<	<	
106	Cadmium dissolved	0.042	ug/l	<	0.10	<	
108	Cadmium total	0.042	ug/l			0.05	
7213	Copper dissolved	0.05	ug/l	0.61	0.26	1.75	
7215	Copper total	0.05	ug/l			1.96	
7230	Lead dissolved	0.024	ug/l	0.04	0.12	0.06	
7229	Lead total	0.042	ug/l			0.32	
7243	Zinc dissolved	2	ug/l	6.4	7.1	9.1	
7245	Zinc total	2	ug/l			9.1	
7354	Arsenic dissolved	2	ug/l	<	<	<	
7356	Arsenic total	2	ug/l			<	
7373	Chromium dissolved	0.35	ug/l	<	0.48	<	
7375	Chromium total	0.35	ug/l			<	
7427	Nickel dissolved	0.058	ug/l	0.43	0.41		
7429	Nickel total	0.058	ug/l			0.32	
3403	Ammonia	6	ug/l N	42	44	44	
3404	Nitrite	3	ug/l N	<	<	3.4	
9991	Total Oxidised Nitrogeh	10	ug/l N	240	246	227	
3420	Silicate	25	ug/l Si	294	291	270	
189	Orthophosphate	5	ug/l P	28	29	25	
135	Suspended solids 105°C	3	mg/l	<	<	<	
143	Suspended solids 500°C	3	mg/l	<	<	<	
729	Chlorophyll a	0.2	ug/l	0.22	<	0.36	

COASTAL GUARDIAN
INORGANICS

Det	Parameter	L of D	Units	Base	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153
				10Feb	10Feb	10Feb	10Feb	10Feb	09Feb	09Feb	09Feb	09Feb	09Feb	09Feb	09Feb	09Feb	09Feb	09Feb	09Feb	09Feb
					St. Anns	Skomer	South Bishop	Aberiddy	Strumble Head	Fishguard	Pwll-Coch	Cardigan Island	Peny-Badell	New Quay Head	Pen Pigyn	Aberystwyth	Aberdovey	Pen-Bwch Point	Barmouth	Shell Island
105	Mercury total	0.008	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	0.008	<	<	<
106	Cadmium dissolved	0.04	ug/l	0.06	<	<	<	<	<	<	<	<	<	0.25	<	<	0.25	<	0.05	0.04
108	Cadmium total	0.04	ug/l	0.07		<	<		<			0.05		<		<			<	
7213	Copper dissolved	0.5	ug/l	1.65	0.55	0.95	0.99	0.71	0.68	1.05	0.72	0.92	0.79	0.85	0.89	0.76	1.14	0.88	0.40	
7215	Copper total	0.5	ug/l	1.18		0.90	0.66		0.63		1.04		0.64		1.16				1.32	
7230	Lead dissolved	0.04	ug/l	0.99	0.20	<	<	<	0.12	0.22	0.70	0.31	<2.5	0.28	0.17	<2.5	0.13	0.08	0.04	
7229	Lead total	0.04	ug/l	2.05		0.37	0.20		0.29		1.44		0.52		0.81				1.85	
7243	Zinc dissolved	0.25	ug/l	13.9	2.69	2.93	3.19	2.64	7.03	11.90	16.10	7.19	7.18	27.80	12.80	24.80	13.60	8.44	6.40	
7245	Zinc total	0.25	ug/l	12.3		2.92	2.42		4.84		17.10		5.42		11.10				9.40	
7354	Arsenic dissolved	1	ug/l	1.7	1.6	1.8	1.5	1.6	1.6	1.6	1.8	1.8	1.5	1.7	1.7	1.7	1.7	1.8	1.6	<
7356	Arsenic total	1	ug/l	1.7		1.9	2.0		1.5		2.0		1.7		1.9				1.9	
7373	Chromium dissolved	2	ug/l	<	<	<	<	<	<	<	4.66	<	<	4.00	<	<	<	<	<	<
7375	Chromium total	2	ug/l	<		<	<		<		4.80		<		<				<	
7427	Nickel dissolved	0.25	ug/l	0.41	<	<	<	<	<	<	<	<	<	0.43	<		1.00	0.31	0.34	0.57
7429	Nickel total	0.25	ug/l	0.45		0.45	0.45		<		0.36		<		0.30				0.68	
3403	Ammonia	3	ug/l N	7	<	4	5	4	7	4	6	7	11	3	8	5	10	5		
3404	Nitrite	1	ug/l N	1.4	2.2	1.2	1.6	<	<	1.6	1.4	1.2	1.4	1.5	1.6	1.4	1.5	2.1		
9991	Total Oxidised Nitrogen	10	ug/l N	303.4	203.2	130.2	134.6	128.0	95.1	109.6	233.4	97.4	111.4	105.5	156.6	186.4	151.5	172.1		
3420	Silicate	25	ug/l Si	295.9	250.1	144.7	273.0	193.2	136.3	133.0	157.3	108.7	147.9	132.5	184.8	256.7	210.9	304.7		
189	Orthophosphate	5	ug/l P	34.2	24.8	19.4	19.7	18.8	15.5	17.4	19.9	15.6	16.1	16.1	20.2	20.1	18.9	19.9		
135	Suspended solids 105°C	2	mg/l		13		3		5	5	5	4	9	2	5	31	26	21		
143	Suspended solids 500°C	10	mg/l	<	<	<	<	<	<	<	<	<	<	<	<	<	29	23	19	
729	Chlorophyll a	0.4	ug/l	<	0.7	0.7	0.5	0.9	0.5	0.7	1.1	1.1	1.8	1.3	1.4	1.8	1.6	2.3		

COASTAL GUARDIAN
INORGANICS

INORGANICS				Porthmadog	Pwllheli	Porth Cefniad	Bardsey	Pentrhyn Colmon	Dinuaen	Dylan	Aberffraw	Penthos	Holyhead	Middle Mouse	Lynas Point	Red Wharf	Welsh Channel	He 1 Buoy	North Wirral
		Base	153.1	154	155	156	157	158	159	160	161	162	163	163.1	164	168	169	170	
Det	Parameter	L of D	Units	09Feb	08Feb	08Feb	08Feb	08Feb	08Feb	08Feb	08Feb	07Feb	07Feb	07Feb	07Feb	06Feb	06Feb	06Feb	
105	Mercury total	0.008	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	0.130	<	0.160	
106	Cadmium dissolved	0.04	ug/l	<	0.05	<	<	<	<	<	0.09	0.06	0.42	0.23	<	0.19	0.08	0.10	
108	Cadmium total	0.04	ug/l		<		<		<		0.07	<	0.48			0.30		1.02	
7213	Copper dissolved	0.5	ug/l	0.76	0.85	0.74	1.02	0.52	0.52	0.58	0.73	0.98	0.78	0.88	0.93	1.36	1.97	0.85	1.61
7215	Copper total	0.5	ug/l		0.96		0.76		0.53			1.18	1.08	1.08			3.25		12.80
7230	Lead dissolved	0.04	ug/l	0.07	0.09	<	<	<	<	<	<	0.33	<	<	0.08	0.20	3.14	0.47	0.73
7229	Lead total	0.04	ug/l		0.74		1.43		0.46			1.26	0.37	0.42			9.24		11.80
7243	Zinc dissolved	0.25	ug/l	2.29	4.69	4.26	5.64	4.23	3.15	3.37	2.43	10.10	2.20	5.07	3.13	4.92	20.70	5.20	9.70
7245	Zinc total	0.25	ug/l		5.44		4.78		2.28			9.34	2.25	4.41			23.50		59.80
7354	Arsenic dissolved	1	ug/l	1.4	1.5	1.6	1.6	1.8	1.5	1.6	<	1.8	1.6	1.9	1.8	1.5	<	<	<
7356	Arsenic total	1	ug/l		1.7		2.3		1.7			1.8	1.7	<			<		<
7373	Chromium dissolved	2	ug/l	<	<	2.29	2.73	<	<	<	<	<	<	<	<				
7375	Chromium total	2	ug/l		<		2.50		<			<	<	<					
7427	Nickel dissolved	0.25	ug/l	0.31	0.40	0.26	0.49	0.44	0.34	0.40	0.35	0.77	<	0.52	0.55	0.29	1.13	0.68	0.56
7429	Nickel total	0.25	ug/l		0.44		0.40		<			0.48	0.38	0.35			1.46		3.34
3403	Ammonia	3	ug/l N	9	9	6	6	4	4	4	6	7	26	13	6	8			
3404	Nitrite	1	ug/l N	2.6	1.6	2.9	<	<	1.6	2.4	2.7	1.5	2.0	1.4	1.5	1.7			
9991	Total Oxidised Nitrogeh	10	ug/l N	187.6	111.6	180.9	125.0	114.0	122.6	127.4	139.7	100.2	145.0	115.4	122.5	121.7			
3420	Silicate	25	ug/l Si	305.2	183.9	291.2	173.6	174.5	182.5	189.0	187.6	135.8	166.6	132.5	148.9	153.5			
189	Orthophosphate	5	ug/l P	19.7	14.6	20.3	19.0	18.2	19.0	19.0	20.0	17.9	20.8	20.3	21.9	22.2			
135	Suspended solids 105°C	2	mg/l	12	4	5	16	12	9	2	6	7	4	4	<	4			
143	Suspended solids 500°C	10	mg/l	<	<	<	14	<	<	<	<	<	<	<	<	<			
729	Chlorophyll a	0.4	ug/l	2.0	0.7	0.7	1.6	<	1.3	1.6	0.5	1.1	1.8	1.3	1.6	1.1			

COASTAL GUARDIAN
INORGANICS

Fomby Point
Gut
Blackpool
Shell Wharf
Hilpsford
Duddon
Selker
Calder Hall
Whitehaven
Workington
Maryport
Solway Buoy
Balcarry
Abbey Head
Meggerland
St. Ninians

			Base	171	172	173	174	175	176	177	178	179	180	180.1	181	183	184	185	186
Det	Parameter	L of D	Units	13Mar	13Mar	13Mar	13Mar	13Mar	13Mar	13Mar	13Mar	13Mar	13Mar	13Mar	14Mar	14Mar	14Mar	14Mar	14Mar
105	Mercury total	0.008	ug/l	<	0.009	0.008	0.110	0.130	<	0.008	<	<	<	0.008	<	<	<	<	<
106	Cadmium dissolved	0.04	ug/l	<2	<	<	<	<	0.05	<	0.06	<	<	<	0.06	<	<	<	<
108	Cadmium total	0.04	ug/l		0.08		0.08		0.07		0.07	<	0.08	<			0.06		<
7213	Copper dissolved	0.5	ug/l	1.23	1.30	1.49	1.17	1.00	1.85	1.02	0.98	0.77	1.02	1.03	1.14	1.41	0.96	0.76	1.16
7215	Copper total	0.5	ug/l		1.33		1.43		1.92		0.83	0.94	0.76	0.83			1.04		1.39
7230	Lead dissolved	0.04	ug/l	0.17	<	0.08	<	<	0.28	<	0.13	<	<	<	<	<	0.05	0.07	0.05
7229	Lead total	0.04	ug/l		0.41		0.99		1.08		0.42	0.24	0.50	1.09			0.47		0.58
7243	Zinc dissolved	0.25	ug/l	12.20	5.49	6.25	5.31	3.38	25.90	4.40	3.70	5.43	4.22	4.24	5.41	4.30	2.49	1.21	2.75
7245	Zinc total	0.25	ug/l		5.89		6.05		27.80		5.74	4.64	6.36	3.44			3.00		3.47
7354	Arsenic dissolved	1	ug/l	<	2.1	<	1.7	1.7	<	1.6	1.6	1.6	1.9	1.6	1.4	1.7	1.6	1.6	1.5
7356	Arsenic total	1	ug/l		2.2		2.1		2.1		2.1	1.8	2.1	1.9			1.7		<
7373	Chromium dissolved	2	ug/l		<	3.18	<	<	2.19	<	<	2.04	<	<	<	<	<	<	<
7375	Chromium total	2	ug/l		<		<		<		<	<	<	<			<		<
7427	Nickel dissolved	0.25	ug/l	1.73	0.89	1.06	0.78	0.69	0.73	0.60	0.68	0.48	0.53	0.52	0.78	0.53	0.52	<	0.40
7429	Nickel total	0.25	ug/l		0.73		0.61		0.96		0.61	0.73	0.68	<			0.50		0.52
3403	Ammonia	3	ug/l N		77	132	59	53	32	30	33	21	13	20	13	23	18	15	14
3404	Nitrite	1	ug/l N		6.4	13.4	11.8	10.7	7.3	9.8	9.7	8.6	5.3	4.0	2.4	4.0	3.7	3.5	3.4
9991	Total Oxidised Nitrogen	10	ug/l N		274.4	575.4	448.8	459.7	290.3	369.8	303.7	302.6	353.3	404.0	220.4	419.0	390.7	385.5	357.4
3420	Silicate	25	ug/l Si		274.9	578.7	451.3	406.0	289.8	400.4	341.1	362.6	423.3	471.3	270.7	490.0	485.3	460.1	494.7
189	Orthophosphate	5	ug/l P		36.2	58.8	49.1	45.5	33.9	41.9	38.5	41.2	47.8	45.7	30.9	42.5	42.0	37.8	38.7
135	Suspended solids 105°C	2	mg/l		<	4	23	25	14	5	7	<	4	9	14	26	28	27	3
143	Suspended solids 500°C	10	mg/l		<	<	22	24	13	<	<	<	<	<	<	25	21	26	<
729	Chlorophyll a	0.4	ug/l		0.5	0.5	1.1	1.8	0.7	0.7	<	0.9	0.5	0.5	1.4	1.3	0.9	0.9	0.9

WATER GUARDIAN ORGANICS

WATER GUARDIAN ORGANICS														
Del	Parameter	L of D	Units	Base										
				1	4	7	9	13	15	18	23	27	30	31
				Berwick	Craster	Blyth	Tyne (Middle)	Wear (Middle)	Pincushon Rock	Tees (Middle)	Scarborough Outfall	Homsea	Spurn Head	Haile Sand Flat
3081	Isodrin	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3276	Aldrin	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3301	Dieldrin	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3306	Endrin	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3082	Hexachlorobenzene	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3083	Hexachlorobutadiene	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3142	PCB 28	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3145	PCB 52	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3148	PCB 101	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3151	PCB 118	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3154	PCB 138	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3157	PCB 153	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3160	PCB 180	0.001	ug/l	<	<	<	<	<	<	<	<	0.001	<	<
3295	DDE (Op)	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3294	DDE (Pp)	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3296	DDT (Op)	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3297	DDT (Pp)	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3329	TDE (Op)	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3330	TDE (Pp)	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3310	HCH alpha	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3311	HCH beta	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3312	HCH delta	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<
3313	HCH gamma	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<

SEA VIGIL
ORGANICS

SEA VIGIL ORGANICS				Haile Sand Flat	Chapel St. Leonards										
			Base	31	33	35	37	39	41	43	45	47	49	51	
Det	Parameter	L of D	Units	24Jan	24Jan	18Jan	24Jan	25Jan	25Jan	25Jan	25Jan	25Jan	27Jan	27Jan	
3081	Isodrin	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3276	Aldrin	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3301	Dieldrin	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3306	Endrin	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3082	Hexachlorobenzene	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3083	Hexachlorobutadiene	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3142	PCB 28	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3145	PCB 52	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3148	PCB 101	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3151	PCB 118	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3154	PCB 138	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3157	PCB 153	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3160	PCB 180	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3295	DDE (Op')	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3294	DDE (Pp')	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3296	DDT (Op')	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3297	DDT (Pp')	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3329	TDE (Op')	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3330	TDE (Pp')	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3310	HCH alpha	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3311	HCH beta	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3312	HCH delta	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	
3313	HCH gamma	0.001	ug/l	<	<	0.001	<	<	<	<	<	0.001	0.001	<	

VIGILANCE ORGANICS

VIGILANCE ORGANICS		Base																
		51	56	61	66	68.2	71	72	78	81	86	91	97	103	109	115	119	120
		Medway Buoy	South Foreland	Beachy Head	Selsey Bill	Calshot	Hengistbury Head	Anvil Point	Seaton	Torbay	Plymouth	Falmouth	Cape Cornwall	Padstow	Bideford	Bridgwater Bar	No. 1 Beacon	Newport Deep
Det	Parameter	L of D	Units	07Apr	07Apr	07Apr	05Apr	04Apr	04Apr	03Apr	03Apr	30Mar	30Mar	22Mar	21Mar	21Mar	20Mar	20Mar
3081	Isodrin	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3276	Aldrin	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3301	Dieldrin	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	0.001
3306	Endrin	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3082	Hexachlorobenzene	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3083	Hexachlorobutadiene	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3142	PCB 28	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	0.002
3145	PCB 52	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3148	PCB 101	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3151	PCB 118	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3154	PCB 138	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3157	PCB 153	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3160	PCB 180	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3295	DDE (Op)	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3294	DDE (Pp)	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3296	DDT (Op)	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3297	DDT (Pp)	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3329	TDE (Op)	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3330	TDE (Pp)	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3310	HCH alpha	0.001	ug/l	0.001	0.001	0.001	0.002	<	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.002	<
3311	HCH beta	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3312	HCH delta	0.001	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3313	HCH gamma	0.001	ug/l	0.002	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002

VIGILANCE
ORGANICS

Det	Parameter	L of D	Units	Base	Aberthaw	Porthcawl	Kenfig	Worms Head	Caldey Island	Turbot Bank
					123	125	126	130	134	137
					14Mar	14Mar	14Mar	14Mar	13Mar	13Mar
3081	Isodrin	0.001	ug/l		<	<	<	<	<	<
3276	Aldrin	0.001	ug/l		<	<	<	<	<	<
3301	Dieldrin	0.001	ug/l		<	<	<	<	<	<
3306	Endrin	0.001	ug/l		<	<	<	<	<	<
3082	Hexachlorobenzene	0.001	ug/l		<	<	<	<	<	<
3083	Hexachlorobutadiene	0.001	ug/l		<	<	<	<	<	<
3142	PCB 28	0.001	ug/l		<	<	<	<	<	<
3145	PCB 52	0.001	ug/l		<	<	<	<	<	<
3148	PCB 101	0.001	ug/l		<	<	<	<	<	<
3151	PCB 118	0.001	ug/l		<	<	<	<	<	<
3154	PCB 138	0.001	ug/l		<	<	<	<	<	0.002
3157	PCB 153	0.001	ug/l		<	<	<	<	<	<
3160	PCB 180	0.001	ug/l		<	<	<	<	<	<
3295	DDE (Op')	0.001	ug/l		<	<	<	<	<	<
3294	DDE (Pp')	0.001	ug/l		<	<	<	<	<	<
3296	DDT (Op')	0.001	ug/l		<	<	<	<	<	<
3297	DDT (Pp')	0.001	ug/l		<	<	<	<	<	<
3329	TDE (Op')	0.001	ug/l		<	<	<	<	<	<
3330	TDE (Pp')	0.001	ug/l		<	<	<	<	<	<
3310	HCH alpha	0.001	ug/l		0.001	0.001	<	0.001	0.001	0.001
3311	HCH beta	0.001	ug/l		<	<	<	<	<	<
3312	HCH delta	0.001	ug/l		<	<	<	<	<	<
3313	HCH gamma	0.001	ug/l		0.001	0.001	<	0.002	0.001	0.001

COASTAL GUARDIAN
ORGANICS

ORGANICS				St. Anns	South Bishop	Aberiddy	Fishguard	Cardigan Island	New Quay Head	Aberystwyth	Barmouth	Pwllheli	Bardsey	Dinuaen	Penrhos	Holyhead	Middle Mouse	Lynas Point	Gut	Shell Wharf
Det	Parameter	L of D	Units	138	140	141	143	145	147	149	152	154	156	158	161	162	163	163.1	172	174
				10Feb	10Feb	10Feb	09Feb	09Feb	09Feb	09Feb	09Feb	08Feb	08Feb	08Feb	08Feb	07Feb	07Feb	07Feb	13Mar	13Mar
3081	Isodrin		ug/l																	
3276	Aldrin	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3301	Dieldrin	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3306	Endrin	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3082	Hexachlorobenzene	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3083	Hexachlorobutadiene	0.005	ug/l	<	<	<	<	<	<		<		<	<0.3	<		<	<	<	<
3142	PCB 28	0.005	ug/l	<	<	<	<	<	<	<		<	<	<	<	<	<	<	<	<
3145	PCB 52	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3148	PCB 101	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3151	PCB 118	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3154	PCB 138	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3157	PCB 153	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3160	PCB 180	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3295	DDE (Op')		ug/l																	
3294	DDE (Pp')	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3296	DDT (Op')	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3297	DDT (Pp')	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3329	TDE (Op')		ug/l																	
3330	TDE (Pp')	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3310	HCH alpha	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3311	HCH beta	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
3312	HCH delta		ug/l																	
3313	HCH gamma	0.005	ug/l	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<

COASTAL GUARDIAN
ORGANICS

Det	Parameter	L of D	Units	Duddon	Calder Hall	Workington	Maryport	Abbey Head	St. Ninians
				Base 176	178	180	180.1	184	186
				13Mar	13Mar	13Mar	13Mar	14Mar	14Mar
3081	Isodrin		ug/l						
3276	Aldrin	0.005	ug/l	<	<	<	<	<	<
3301	Dieldrin	0.005	ug/l	<	<	<	<	<	<
3306	Endrin	0.005	ug/l	<	<	<	<	<	<
3082	Hexachlorobenzene.	0.005	ug/l	<	<	<	<	<	<
3083	Hexachlorobutadiene	0.005	ug/l	<	<	0.250	<	<	<
3142	PCB 28	0.005	ug/l	<	<	<	<	<	<
3145	PCB 52	0.005	ug/l	<	<	<	<	<	<
3148	PCB 101	0.005	ug/l	<	<	<	<	<	<
3151	PCB 118	0.005	ug/l	<	<	<	<	<	<
3154	PCB 138	0.005	ug/l	<	<	<	<	<	<
3157	PCB 153	0.005	ug/l	<	<	<	<	<	<
3160	PCB 180	0.005	ug/l	<	<	<	<	<	<
3295	DDE (Op')		ug/l						
3294	DDE (Pp')	0.005	ug/l	<	<	<	<	<	<
3296	DDT (Op')	0.005	ug/l	<	<	<	<	<	<
3297	DDT (Pp')	0.005	ug/l	<	<	<	<	<	<
3329	TDE (Op')		ug/l						
3330	TDE (Pp')	0.005	ug/l	<	<	<	<	<	<
3310	HCH alpha	0.005	ug/l	<	<	<	<	<	<
3311	HCH beta	0.005	ug/l	<	<	<	<	<	<
3312	HCH delta		ug/l						
3313	HCH gamma	0.005	ug/l	<	<	<	<	<	<

Site position record: January / February Survey 1995

The position of all the laboratory sampling points are shown on a map and listed as Latitude / Longitude pairs. The determinand suites measured at each site are also listed. The determinands that make up each suite are listed in a separate table.

Some new points have been added / amended in this survey:

153.1 is a new site, added by the region and included in this data

163.1 is a new site, added by the region and included in this data

182 is no longer sampled and has been replaced by 180.1

Base	Site name	Latitude	Longitude	Group 1 measured	Group 2 measured	Group 3 measured
1	Berwick	55.761 N	1.979 W	*	*	*
2	Castlehead Rocks	55.695 N	1.787 W	*		
3	Shoreston Outcars	55.599 N	1.653 W	*	*	
4	Craster	55.476 N	1.583 W	*		*
5	Warkworth	55.355 N	1.568 W	*		
6	Brig Head	55.242 N	1.516 W	*	*	
7	Blyth	55.107 N	1.462 W	*		*
8	Tyne (North)	55.020 N	1.401 W	*		
9	Tyne (Middle)	55.014 N	1.390 W	*	*	*
10	Tyne (South)	55.020 N	1.385 W	*		
11	Marsden	54.988 N	1.359 W	*		
12	Wear (North)	54.930 N	1.340 W	*	*	
13	Wear (Middle)	54.921 N	1.338 W	*		*
14	Wear (South)	54.914 N	1.336 W	*		
15	Pincushon Rock	54.859 N	1.325 W	*	*	*
16	Blackhall	54.737 N	1.228 W	*		
17	Tees (North)	54.666 N	1.138 W	*		
18	Tees (Middle)	54.654 N	1.129 W	*	*	*
19	Tees (South)	54.643 N	1.077 W	*		
20	Skinningrove	54.586 N	0.871 W	*		
21	Sandsend	54.523 N	0.677 W	*	*	
22	Robin Hoods Bay	54.434 N	0.500 W	*		
23	Scarborough Outfall	54.314 N	0.395 W	*		*
24	Filey Brigg	54.222 N	0.257 W	*	*	
25	Flamborough (North)	54.137 N	0.093 W	*		*
26	Bridlington	54.079 N	0.159 W	*		
27	Hornsea	53.947 N	0.158 W	*	*	*
28	Beacon Hill	53.826 N	0.064 W	*		
29	Withernsea	53.717 N	0.075 W	*		
30	Spurn Head	53.606 N	0.214 E	*	*	*
31	Haile Sand Flat	53.528 N	0.219 E	*	*	*
32	Theddlethorpe	53.386 N	0.287 E	*		
33	Chapel St. Leonards	53.244 N	0.379 E	*	*	*
34	Outer Dogs Head	53.089 N	0.399 E	*		
35	Wash	52.985 N	0.516 E	*	*	*
36	Overy, Staithe	53.012 N	0.763 E	*		
37	Cley, Lookout	52.987 N	1.066 E	*	*	*
38	Sheringham	52.961 N	1.239 E	*		
39	Mundesley	52.909 N	1.450 E	*		*
40	Lessingham	52.823 N	1.594 E	*		
41	Winterton	52.714 N	1.743 E	*	*	*
42	Gorleston	52.568 N	1.778 E	*		
43	Kessingland	52.423 N	1.770 E	*	*	*
44	Dunwich Cliffs	52.283 N	1.686 E	*		
45	Thorpeness	52.160 N	1.641 E	*	*	*
46	Shingle Street	52.033 N	1.482 E	*		
47	Felixstowe	51.932 N	1.352 E	*	*	*
48	Walton	51.832 N	1.302 E	*		
49	Jaywick	51.752 N	1.129 E	*	*	*
50	Maplin Bank	51.592 N	1.080 E	*		
51	Medway Buoy	51.479 N	0.882 E	*	*	*
52	Shivering Sand Buoy	51.417 N	1.091 E	*		
53	East Margate	51.400 N	1.345 E	*		
54	East Brake Buoy	51.326 N	1.482 E	*		
55	Goodwin Fork Buoy	51.220 N	1.448 E	*		
56	South Foreland	51.135 N	1.392 E	*	*	*

Base	Site name	Latitude	Longitude	Group 1 measured	Group 2 measured	Group 3 measured
57	Sandgate Bay	51.054 N	1.187 E	*		
58	Dungeness	50.899 N	1.003 E	*		
59	Rye Bay	50.874 N	0.754 E	*		
60	Bexhill	50.806 N	0.507 E	*		
61	Beachy Head	50.710 N	0.273 E	*	*	*
62	Newhaven	50.759 N	0.001 E	*		
63	Brighton	50.789 N	0.132 W	*		
64	Worthing	50.772 N	0.368 W	*		
65	Middleton-on-Sea	50.747 N	0.585 W	*		
66	Selsey Bill	50.700 N	0.774 W	*	*	*
67	Nab Tower	50.695 N	0.907 W	*		
68.1	East Brambles	50.789 N	1.226 W	*		
68.2	Calshot	50.818 N	1.291 W	*	*	*
68.3	Dockhead	50.884 N	1.388 W	*		
68.4	West Princessa	50.700 N	1.044 W	*		
69	St. Catherines	50.567 N	1.296 W	*		
70	The Needles	50.650 N	1.614 W	*		
71	Hengistbury Head	50.698 N	1.749 W	*	*	*
72	Anvil Point	50.597 N	1.932 W	*	*	*
73	St. Aldhelms	50.572 N	2.122 W	*		
74	Weymouth Bay	50.593 N	2.354 W	*		
75	Portland Bill	50.519 N	2.469 W	*		
76	Chesil	50.618 N	2.599 W	*		
77	Bridport	50.689 N	2.792 W	*		
78	Seaton	50.666 N	3.030 W	*	*	*
79	Sidmouth	50.623 N	3.212 W	*		
80	Exmouth	50.555 N	3.430 W	*		
81	Torbay	50.412 N	3.455 W	*	*	*
82	Dartmouth	50.295 N	3.513 W	*		
83	Start Point	50.198 N	3.644 W	*		
84	Salcombe	50.166 N	3.801 W	*		
85	Bigbury Bay	50.255 N	3.961 W	*		
86	Plymouth	50.295 N	4.161 W	*	*	*
87	East Looe	50.330 N	4.352 W	*		
88	Fowey	50.303 N	4.574 W	*		
89	Dodman Point	50.212 N	4.758 W	*		
90	St. Antony Head	50.146 N	4.925 W	*		
91	Falmouth	50.097 N	5.019 W	*	*	*
92	Black Head	50.005 N	5.026 W	*		
93	Lizard	49.945 N	5.174 W	*		
94	Mullion	49.996 N	5.302 W	*		
95	Penzance	50.063 N	5.477 W	*		
96	Runnel Stone	50.012 N	5.669 W	*		
97	Cape Cornwall	50.123 N	5.749 W	*	*	*
98	The Carracks	50.220 N	5.623 W	*		
99	Godrevy Island	50.261 N	5.424 W	*		
100	St. Agnes	50.329 N	5.250 W	*		
101	Newquay	50.432 N	5.106 W	*		
102	Trevoze	50.560 N	5.068 W	*		
103	Padstow	50.579 N	4.943 W	*	*	*
104	Port Isaac	50.640 N	4.900 W	*		
105	Boscastle	50.712 N	4.722 W	*		
106	Bude	50.814 N	4.592 W	*		
107	Morewenstowe	50.939 N	4.579 W	*		
108	Hartland Point	51.064 N	4.531 W	*		
109	Bideford	51.080 N	4.320 W	*	*	*

Base	Site name	Latitude	Longitude	Group 1 measured	Group 2 measured	Group 3 measured
110	Bull Point	51.205 N	4.232 W	.		
111	Combe Martin	51.238 N	4.028 W	.		
112	Foreland	51.263 N	3.823 W	.		
113	Portlock	51.243 N	3.608 W	.		
114	Minehead	51.219 N	3.390 W	.		
115	Bridgwater Bar	51.236 N	3.215 W	.	.	.
116	Weston-super-Mare	51.338 N	3.028 W	.		
117	Clevedon	51.440 N	2.902 W	.		
118	Avonmouth	51.505 N	2.720 W	.		
119	No. 1 Beacon	51.561 N	2.704 W	.	.	.
120	Newport Deep	51.497 N	3.001 W	.	.	.
121	Cardiff Road	51.462 N	3.096 W	.		
122	Lavernock	51.397 N	3.154 W	.		
123	Aberthaw	51.366 N	3.365 W	.	.	.
124	Nash Point	51.392 N	3.560 W	.	.	.
125	Porthcawl	51.466 N	3.734 W	.	.	.
126	Kenfig	51.512 N	3.799 W	.	.	.
127	Port Talbot	51.569 N	3.851 W	.		
128	Mumbles	51.556 N	3.949 W	.		
129	Oxwich	51.527 N	4.142 W	.		
130	Worms Head	51.552 N	4.342 W	.	.	.
131	Llanelli	51.620 N	4.361 W	.		
132	Burry Port	51.666 N	4.421 W	.	.	.
133	Carmarthen	51.688 N	4.527 W	.		
134	Caldey Island	51.646 N	4.606 W	.	.	.
135.1	Old Castle Head (Inner)	51.557 N	4.790 W	.		
135.2	Old Castle Head (Off)	51.608 N	4.787 W	.		
136.1	St. Govans (Inner)	51.524 N	4.996 W	.		
136.2	St. Govans (Off)	51.572 N	4.996 W	.	.	.
137	Turbot Bank	51.36.32 N	5 06.42 W	.	.	.
138	St. Anns	51 40.23 N	5 10.43 W	.	.	.
139	Skomer	51 43.50 N	5 19.70 W	.		
140	South Bishop	51 50.20 N	5 25.50 W	.	.	.
141	Aberiddy	51 57.50 N	5 14.00 W	.	.	.
142	Strumble Head	52 02.50 N	5 04.30 W	.	.	.
143	Fishguard	52 02.00 N	4 57.00 W	.		
144	Pwll-Coch	52 05.15 N	4 50.00 W	.		
145	Cardigan Island	52 08.50 N	4 42.50 W	.	.	.
146	Penly-Badell	52 11.45 N	4 30.00 W	.		
147	New Quay Head	52 13.50 N	4 22.00 W	.	.	.
148	Pen Pigyn	52 19.00 N	4 11.00 W	.		
149	Aberystwyth	52 24.90 N	4 07.50 W	.	.	.
150	Aberdovey	52 32.00 N	4 05.50 W	.		
151	Pen-Bwch Point	52 35.70 N	4 11.50 W	.		
152	Barmouth	52 43.00 N	4 05.80 W	.	.	.
153	Shell Island	52 49.50 N	4 10.40 W	.		
153.1	Porthmadog	52 53.00 N	4 10.00 W	.		
154	Pwllheli	52 52.50 N	4 22.50 W	.	.	.
155	Porth Ceiriad	52 47.00 N	4 28.85 W	.		
156	Bardsey	52 46.00 N	4 45.00 W	.	.	.
157	Penrhyn Colmon	52 53.00 N	4 42.50 W	.		
158	Dinuaen	52 57.50 N	4 34.00 W	.	.	.
159	Dylan	53 02.50 N	4 22.00 W	.		
160	Aberffraw	53 10.00 N	4 30.00 W	.	.	.
161	Penrhos	53 15.50 N	4 39.60 W	.	.	.
162	Holyhead	53 20.30 N	4 36.70 W	.	.	.

Base	Site name	Latitude	Longitude	Group 1 measured	Group 2 measured	Group 3 measured
163	Middle Mouse	53 26.70 N	4 25.00 W	*	*	*
163.1	Lynas Point	53 25.30 N	4 16.60 W	*		*
164	Red Wharf	53 20.00 N	4 10.00 W	*		
165	Great Orme	53 21.50 N	3 52.00 W	*		*
166	Llanddulas	53 20.00 N	3 40.00 W	*		
167	Chester Flat	53 21.50 N	3 27.50 W	*		
168	Welsh Channel	53 22.00 N	3 20.00 W	*	*	
169	He 1 Buoy	53 25.00 N	3 13.00 W	*		
170	North Wirral	53 27.00 N	3 10.80 W	*	*	
171	Formby Point	53 34.00 N	3 09.53 W	*		
172	Gut	53 42.00 N	3 09.00 W	*	*	*
173	Blackpool	53 50.00 N	3 05.90 W	*		
174	Shell Wharf	53 55.90 N	3 09.00 W	*	*	*
175	Hilpsford	54 02.00 N	3 16.00 W	*		
176	Duddon	54 08.00 N	3 21.23 W	*	*	*
177	Selker	54 16.00 N	3 28.05 W	*		
178	Calder Hall	54 24.00 N	3 35.05 W	*	*	*
179	Whitehaven	54 32.00 N	3 39.55 W	*	*	
180	Workington	54 40.00 N	3 35.69 W	*	*	*
180.1	Maryport	54 43.10 N	3 33.20 W	*	*	*
181	Solway Buoy	54 46.40 N	3 31.50 W	*		
183	Balcary	54 47.60 N	3 49.00 W	*		
184	Abbey Head	54 45.00 N	4 00.00 W	*	*	*
185	Meggerland	54 46.80 N	4 12.22 W	*		
186	St. Ninians	54 42.00 N	4 19.40 W	*	*	*

National Coastal Baseline Determinand Suites

Det Code	Determinand	Units
Group 1 - measured at every baseline site		
105	Mercury Total	ug/l
106	Cadmium Dissolved	ug/l
135	Suspended Solids 105°C	mg/l
143	Suspended Solids 500°C	mg/l
189	Orthophosphate	ug/l P
729	Chlorophyll a	ug/l
3403	Ammonia	ug/l N
3404	Nitrite	ug/l N
3420	Silicate	ug/l Si
7213	Copper Dissolved	ug/l
7230	Lead Dissolved	ug/l
7243	Zinc Dissolved	ug/l
354	Arsenic Dissolved	ug/l
7373	Chromium Dissolved	ug/l
7427	Nickel Dissolved	ug/l
9991	Total Oxidised Nitrogen	ug/l N

Group 2 - measured at approximately every third baseline site

108	Cadmium Total	ug/l
7215	Copper Total	ug/l
7229	Lead Total	ug/l
7245	Zinc Total	ug/l
7356	Arsenic Total	ug/l
7375	Chromium Total	ug/l
7429	Nickel Total	ug/l

Group 3 - measured at occasional sites of interest

3081	Isodrin	ug/l
3276	Aldrin	ug/l
3301	Dieldrin	ug/l
3306	Endrin	ug/l
3082	Hexachloro-Benzene	ug/l
3083	Hexachloro-Butadiene	ug/l
3142	PCB 28	ug/l
3145	PCB 52	ug/l
3148	PCB 101	ug/l
3151	PCB 118	ug/l
3154	PCB 138	ug/l
3157	PCB 153	ug/l
3160	PCB 180	ug/l
3294	DDE-PP'	ug/l
3295	DDE-OP'	ug/l
3296	DDT-OP'	ug/l
3297	DDT-PP'	ug/l
3310	HCH-Alpha	ug/l
3311	HCH-Beta	ug/l
3312	HCH-Delta	ug/l
3313	HCH-Gamma	ug/l
3329	TDE-OP'	ug/l
3330	TDE-PP'	ug/l