

Collaborative UK Marine Mammals Strandings Project: summary of contaminant data for the period 1993-2001

R.J. Law , P.D. Jepson, R. Deaville, R.J. Reid,
I.A.P. Patterson, C.R. Allchin and B.R. Jones

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1. Introduction

In 1994, we published a technical report which outlined the current status of marine mammal contaminant studies undertaken around the UK, primarily within the collaborative strandings programme (Law (compiler), 1994). Within the report we outlined the methods used for the post-mortem and tissue sampling of cetaceans, the analytical methods used for the determination of a range of contaminants and the associated quality control measures applied, and listed the results generated from the programme during the period 1988-1992. In this report we update the protocols described above, and present additional data produced during the period 1993-2001. The aim of the report, as for the earlier one, is to make the entire contaminant dataset and relevant biological information available to other researchers in a way that is usually impossible for a dataset of this size within the space available for a journal article.

2. Guidelines for the post-mortem and tissue sampling of cetaceans

2.1 Introduction

These guidelines are meant primarily as an aid to veterinary surgeons carrying out postmortem examinations on stranded cetaceans in the U.K., as a part of the Defra-funded marine mammal projects in England, Wales, and Scotland. They are based partly on guidelines written by Dr John Baker, University of Liverpool, and partly on the protocol produced at the European Cetacean Society workshop on cetacean pathology, held in Leiden, The Netherlands, in September 1991.

All structures must be examined visually and by palpation, making incisions into the organs. A full post mortem record must be kept, preferably on the standard "cetacean postmortem report" form.

Lesions in any organs should be described, photographed and sampled. The description should include the size, location, colour, texture, shape, and the nature of the transition from normal to abnormal tissue. Photographs should include a ruler or similar object to indicate the size of the lesion. According to the suspected etiology of the lesion, samples should be collected for bacteriological examination (especially if the lesion is of a purulent nature), for virological examination, and for parasitological examination. In all cases, a sample of the lesion should be preserved for histopathological examination.

Any parasites found, regardless if they are associated with pathological lesions or not, should be preserved in 70% ethanol for identification. An attempt should be made to estimate the total number of parasites. Some predilection sites for parasites are indicated in the text.

If the state of decomposition of the carcass is advanced (condition code 4 or 5, see below), only the basic measurements, organ weights (when possible), and a

limited number of samples (epidermis, skull, teeth, food remains, gonads) should be taken.

The postmortem examination need not take place in the order described below. However, samples for bacteriological and virological examination need to be taken as early as possible. Also, examination of the G.I. tract should be left until last to prevent cross-contamination with enteric micro-organisms.

2.2 Basic measurements

Photographs: Photographs should be taken of the lateral views of the whole body, from both sides. Particularly in bottle-nosed dolphins, photographs should be taken of the dorsal fin, also from both sides. In baleen whales, the ventral side of the tail flukes should be photographed. Photographs should also be taken of any lesions of interest found during the postmortem.

Body condition: Estimate the body condition, that is the state of decomposition of the carcass, using the categories of the condition code¹.

Body weight: Weigh the carcass. If this is not possible, the body weight can be estimated from the heart weight².

Body length: Measure the body length by placing the carcass on its belly, holding a measuring tape or ruler next to the carcass in a straight line parallel to the longitudinal body axis and measuring the distance between the notch in the tail flukes and the tip of the upper jaw.

Body girth: Measure the body girth at the level of the anterior insertion of the dorsal fin.

1. The body condition, or state of decomposition of a carcass, can be described using the following condition code:
 - 1) live (becomes code 2 at death)
 - 2a) extremely fresh (as if just died, no bloating, meat is considered by most to be edible)
 - 2b) slight decomposition (slight bloating, blood imbibition visible)
 - 3) moderate decomposition (bloating, skin peeling, penis may be extended in males, organs still intact, excluding postmortem damage)
 - 4) advanced decomposition (major bloating, skin peeling, penis extended in males, organs beyond recognition, bones exposed due to decomposition)
 - 5) indeterminate (mummified carcass or skeletal remains, no organs present)
2. The body weight can be estimated from the heart weight using the formula $\log W = (\log H + 2.2) / 0.984$, with H = heart weight and W = body weight, both in kg.

2.3 External examination

Nutritional state: Indicate the nutritional state of the carcass, using one of the following three categories:

- good: the aspect of the upper flanks on either side of the dorsal fin is rounded;
- moderate: the aspect of the upper flanks on either side of the dorsal fin is sloping;
- poor: the aspect of the upper flanks on either side of the dorsal fin is hollow (in these animals, one can make out the transverse processes of the lumbar vertebrae, and there is an indentation dorsally just behind the head).

Body orifices: Examine the body orifices (mouth, eyes, ear openings, blow-hole, anus, genital slit and mammary slits) for lesions and any discharge. Collect and preserve left and right eyes separately in 10% formalin (only if both eyes are fully intact).

Epidermis: Examine the animal for external lesions and sample these accordingly. Examine the skin carefully for any ectoparasites. These are most likely to be found in or near the body orifices and next to the fins and flukes. Take a 4 cm² piece of epidermis down to the blubber for DNA-studies, and freeze.

Milk: Massage the skin in the area cranial to the mammary slits in a caudal direction to express any fluid present in the mammary glands. If fluid can be pressed out, collect a sample for organochlorine analysis in a hexane-washed glass container and freeze. If the lid is made of plastic, separate the sample from this with aluminium foil. Note the volume, colour, and consistency of the fluid.

Blubber: Cut a transverse strip of blubber about 2 cm wide from the anterior insertion of the dorsal fin, from the mid-dorsal to the mid-ventral region. Make sure to cut at right-angles to the surface of the skin. Measure the thickness of the blubber strip with a ruler 2 cm lateral to the dorsal mid-line, mid-laterally, and 2 cm lateral to the ventral mid-line. (Using this method, the tension of the blubber tissue is relieved before measuring.)

Cut a strip of blubber a few cm wide and a few cm long at the level of the caudal insertion of the dorsal fin. Make sure to cut at right-angles to the surface of the skin. From this blubber strip, take 2 x 20 g cross-sectional samples of blubber for organochlorine analysis. It is important to take samples of the whole layer, from the skin to the muscle. Wrap them in hexane-washed aluminium foil and freeze. Alternatively, they can be placed in Sovirel glass tubes.

Muscle: Take 2 x 20 g muscle samples for toxicological analysis, at the same location as and directly below the blubber sample, at the level of the caudal insertion of the dorsal fin. Wrap them in hexane-washed aluminium foil and freeze. Alternatively, they can be placed in Sovirel glass tubes.

With the animal on its right side make a mid-line ventral incision from the symphysis of the mandible to a short distance posterior of the anus, circumventing the genital slit and anus. From the posterior end of the ventral incision make a second one almost to the dorsal mid-line. Reflect the skin and blubber off the uppermost side. Any parasites in the blubber should be noted and collected. They may occur as white cysts less than 1 cm in diameter, often in the ano-genital region or the dorsal aspect of the chest wall.

Mammary gland: In females, examine the mammary gland for pathological changes and parasites. Collect a cross-sectional slice of about 1 cm thick from halfway along the length of the left mammary gland for histopathological examination, and place in 10% formalin.

Subcutaneous tissue: Examine the subcutaneous tissue for the presence of bruises and parasites.

Scapula: Remove the left scapula for (future) morphometric analysis and freeze.

2.4 Examination of abdominal organs (except G.I. tract, pancreas and spleen)

Rib: Remove the left abdominal wall, freeing the testis or ovary and uterus. Any parasites in the abdominal wall (for instance cysts under the peritoneum) should be collected. Remove the left thoracic wall, for example with bone shears. Remove the fifth left rib and freeze a 5 cm section of it.

Virology samples: Before handling the internal organs, take a 1 cm³ sample of lung tissue from the cranio-ventral part of the left lung and a 1 cm³ sample of kidney tissue from the left kidney for virological examination. Also take a sample of lung tissue from the cranio-ventral part of the left lung, a sample of kidney tissue from the left kidney and a sample of liver tissue from the left lobe of the liver for bacteriological examination.

Bacteriology samples: Sever the intestine close to the anus and the oesophagus close to the diaphragm.

Working forward along the dorsal aspect of the abdominal cavity, remove the stomach, intestines, pancreas, spleen and mesenteric lymph node, attached to each other, from the carcass. Leave the examination of the G.I. tract to the end of the postmortem examination to prevent cross-contamination of other tissues with enteric micro-organisms.

Urinary bladder: Open and examine the bladder *in situ*, noting the contents, if any. Preserve a 1 cm³ sample of the bladder in 10% formalin (for histopathology).

Female repr. tract: In females remove the entire reproductive tract, open the vagina and uterus, note any corpora lutea, corpora albicantia or follicles on each ovary and then place the ovaries separately in 10% formalin for reproduction studies. Preserve a 1 cm³ sample of the uterus in 10% formalin (for histopathology).

Foetus: If a foetus is present of sufficient size to examine the individual organs, a postmortem examination and tissue sampling of the foetus can take place in the same way as for cetaceans after birth. If it is too small for a full postmortem examination, the whole foetus and its placenta can be wrapped in hexane-washed aluminium foil and stored frozen for organochlorine analysis.

Male repr. tract: In males remove the testes and weigh them separately after removing the epididymis. After incision and examination, place the testes in 10% formalin for reproductive studies. If they are heavier than about 50 g each, place a cross-sectional slice about 1 cm thick from mid-way along the length in 10% formalin. Examine the penis and preputium.

Adrenal glands: Remove and examine the adrenal glands, and place them separately in 10% formalin.

Kidneys: Remove the kidneys from the body cavity and weigh them. Incise both kidneys longitudinally, and if possible, strip the capsule. Then, take 2 x 20 g samples for toxicological analysis from halfway the length of the left kidney. These samples should be cross-sectional and include both medullary and cortical tissue. Wrap them in hexane-washed aluminium foil and freeze. Alternatively, they can be placed in Sovirel glass tubes. Preserve 1 cm³ from a kidney in 10% formalin for histopathological examination.

Liver: Remove and weigh the liver. Examine both surfaces and make multiple incisions into the substance. Examine the bile ducts for parasites. Then, take 2 x 20 g for trace metal analysis. These samples should include approximately equal amounts of tissue from the edge of the left lobe, the edge of the right lobe, and the hilus of the liver. Wrap them in hexane-washed aluminium foil and freeze. Alternatively, they can be placed in Sovirel glass tubes. Place 1 cm³ of liver tissue in 10% formalin for histopathological examination.

2.5 Examination of organs of head, neck and thorax

Thyroid: Carefully remove the superficial muscles overlying the trachea and larynx to expose the thyroid gland. Examine this tissue and preserve 1 cm³ of tissue in 10% formalin for histopathological examination.

Incise along the internal aspects of both mandibles and free the tongue. Once the tongue is free reflect it backwards and cut the hyoid bones close to the skull.

Free the larynx from the sphincter muscle holding it in place and pulling the tongue backwards incise along the neck to free the trachea and oesophagus. Then, incising dorsally and ventrally in the thoracic cavity, free the heart and lungs. Note any attachments of the lungs to the thoracic walls. This procedure should give you the tongue, larynx, trachea, oesophagus, thymus, heart and lungs all still fastened together.

Tongue: Examine the surface of the tongue.

Oesophagus: Open the oesophagus longitudinally and check for lesions or parasites.

Respiratory tract: Open the larynx, trachea and major bronchi longitudinally. Make multiple incisions into the substance of both lungs. Any parasites should be collected. Two pieces of lung (about 1 cm³) from the hilus and periphery of the left lung, and the same from the right lung, should be collected in 10% formalin for histopathological examination. The samples should include part of the major bronchial tree. Open all major branches of the pulmonary veins and examine for the presence of parasites. Examine the bronchial and so-called 'pulmonary associated' lymph nodes. The latter can be found about halfway along the ventral edges of each lung. Cut a 1 cm thick cross-sectional slice from the middle of the left pulmonary associated lymph node, and place it in 10% formalin for histopathological examination.

Thymus: Examine and weigh the thymus, if present (noting the presence of any macroscopic cysts). Place 1 cm³ of thymus in 10% formalin for histopathological examination.

Serum: Collect any blood present in the heart lumen, to obtain serum for serological examination. The serum, acquired by centrifugation, should be stored frozen. Even if it is haemolytic, it is still of value.

Heart: Separate the heart from the lungs by cutting through the major blood vessels where they enter the heart. Open the left and right ventricles and atria for examination and to take out any blood clots present. Any parasites should be collected. Weigh the heart. Cut a 1 cm thick slice of heart tissue, to include a piece of the wall of the left ventricle and of the atrioventricular septum, and place it in 10% formalin for histopathological examination.

Tympanic bulla: Examine the tympanic bullae (which in cetaceans are not part of the skull but lie free just behind the mandibles). Carefully dissect each tympanic bulla (and associated cochlea) free of their connective tissue attachments to the skull. Examine the internal cavity of each bulla and recover any nematodes present (with forceps). Preserve the left tympanic bulla/cochlea and right tympanic bulla/cochlea separately in 10% formalin.

Teeth (baleen plates): If possible, remove two sets of (at least) 4 teeth from the middle of the lower jaw for ageing, and store frozen (separately). (In baleen whales, cut off 2 baleen plates as near as possible to their basis and store frozen.)

Brain: In freshly dead carcasses (condition code 2), open the skull, and examine the brain.

The skull can be opened by making a vertical cut parallel and about 2 cm posterior to the transverse dorsal ridge which is clearly visible and palpable on top of the skull. The second cut should be made in the horizontal plane, through the occipital condyles, making sure to leave the posterior portion of the condyles on the skull, so that the condylo-basal length can still be measured. Both cuts should be extended until they meet each other. The separated piece of skull can then be pried loose using a chisel or flat-bladed screwdriver, and the brain can be removed.

Take a 1 cm³ sample of brain for virological examination. Place the rest of the brain in 10% formalin for at least a week. To allow faster fixation, a longitudinal incision can be made in the cerebrum to expose the lateral ventricles. When it is fixed, make multiple slices into the tissue to look for pathological lesions, including the presence of parasites. Take 1 cm³ samples of the cortex, midbrain, cerebellum, and medulla, for histopathological examination. Dissect the pituitary gland from the pituitary fossa (located in the cranial floor) and preserve in 10% formalin.

Skull: In more decomposed carcasses, leave the skull intact. Both opened and completely intact skulls should be stored frozen for morphometrics studies.

2.6 Examination of the G.I. tract, pancreas and spleen

Spleen: Examine and weigh the spleen and put a piece (about 1 cm³), including a section of capsule, in 10% formalin for histopathological examination. One often finds smaller accessory spleens near to the main spleen.

Pancreas: Examine the pancreas. Look for parasites, particularly in the pancreatic ducts. Place a 1 cm³ piece of pancreas tissue in 10% formalin for histopathological examination.

Mesenteric In.: Examine the mesenteric lymph node and put a 1 cm thick cross-sectional slice from halfway its length in 10% formalin for histopathological examination.

Stomach: Open the cardiac section of the stomach. Collect any fish bones, otoliths and other food remains and preserve in 70% ethanol or freeze for prey studies. Any parasites should be collected. Describe any lesions, including the distribution and size of any ulcers.

Open the fundic and pyloric sections of the stomach. Any food material and parasites should be preserved as for the cardiac section. Any nodules in the walls of the fundic and pyloric sections should be noted and, if they are found, attempts should be made to express the contents. Any parasites found in the contents should be collected.

Intestine: Open the intestinal tract at several points along its length. Make note of any contents and/or lesions and collect any parasites that are found.

3. Analytical methods and associated quality control information

3.1 Determining the age of marine mammals

Wherever possible at least 4 teeth were removed from the middle of the lower jaw for aging purposes during postmortem examination and stored frozen. The teeth were decalcified, sectioned, stained and mounted on microscope slides. The sectioned and stained teeth were then examined under a binocular microscope and the growth layers in dentine and/or cementum counted. A fuller description of the procedure is given in Lockyer (1995).

3.2 Trace elements in liver

The basis of the methods used is described elsewhere (Jones and Laslett, 1994). Briefly, liver samples are digested in nitric acid with microwave heating in sealed vessels. The methods used for the determination of trace elements other than mercury are inductively-coupled plasma mass spectrometry (ICP-MS) and inductively-coupled plasma optical emission spectrophotometry (ICP-OES). Mercury has been determined using either cold vapour atomic fluorescence spectrometry (CVAFS) or cold vapour atomic absorption spectrophotometry (CVAAS). The current suite of trace elements determined is chromium, manganese, iron, nickel, copper, zinc, arsenic, selenium, silver, cadmium, mercury and lead.

3.3 Butyltins in liver

Tributyltin, dibutyltin and monobutyltin were analysed using a technique developed for use in long-term monitoring studies of the impact of tributyltin-based antifouling paints, and validated during that programme (Waldock *et al.*, 1989; Waldock and Waite, 1994). Briefly, samples were extracted by shaking with 0.1% sodium hydroxide and methanol after the addition of a known quantity of an internal standard (tripropyltin chloride) used for quantification. The organotin compounds were then back-extracted into *n*-hexane, and converted to their respective hydrides with sodium borohydride. The butyltin compounds tributyltin (TBT), dibutyltin (DBT) and monobutyltin (MBT) were determined using capillary gas chromatography with flame-photometric detection at 610 nm. Additional performance data are given in Law *et al.* (1998).

3.4 Organochlorine compounds in blubber

Organochlorine pesticides (OCs) and chlorobiphenyls (CBs) were determined using a method based on that of Allchin *et al.* (1989) and incorporating improvements validated within an intercomparison and method improvement programme conducted under the auspices of the International Council for the Exploration of the Sea. Briefly, blubber samples were extracted using a Soxhlet apparatus with *n*-hexane. Following clean-up and fractionation on alumina and silica columns, OCs and CBs were determined using capillary gas chromatography with electron-capture detection. The compounds determined are listed in Appendix 1.

3.5 Organobromine compounds in blubber

A range of brominated diphenylether (BDE) congeners was determined using a method developed within a collaborative project involving Cefas and two laboratories in the Netherlands (de Boer *et al.*, 2001). Briefly, blubber samples were extracted in a Soxhlet apparatus with a 1:1 mixture of *n*-hexane and acetone. Following clean-up on alumina and silica columns, BDEs were determined by capillary gas chromatography with detection by electron-capture negative ion chemical ionisation mass spectrometry (GC-ECNIMS), monitoring the bromine ions at 79 and 81 Daltons. The method was validated within an international intercomparison programme (de Boer and Cofino, 2002), which concluded that the method represented the current state-of-the-art for these novel compounds. The BDE congeners determined are listed in Appendix 1.

3.6 Analytical quality control

All chemical analyses have been conducted within an analytical quality control protocol which includes the analysis of reference materials and procedural blanks within each sample batch. The results obtained from these materials are used to plot control charts, which are used to monitor method performance over time, and the results for a sample batch are accepted only if the data obtained for the associated quality control samples are acceptable. Both laboratory and certified reference materials are analysed, and in addition Cefas participates in the QUASIMEME laboratory proficiency scheme which involves the analysis of samples in which the assigned values are not known at the time of analysis.

4. Results

The results are given in Tables 4.2 to 4.6. In all cases the data are presented on a wet weight basis, but can be converted to a dry weight basis (liver) or a lipid basis (blubber) using presented information, if desired.

4.1 Biological data

Table 4.1 lists the biological data for the animals analysed. Age, where given, is in years. Body length is given in cm, and was defined as the straight length measurement from the tip of the upper jaw to either the tip of the tail (for seals) or to the tail notch (for cetaceans). The main identifier used is the NHM number (Natural History Museum stranding incident reference number), as this provides a link to other information. Where no NHM number has been assigned another unique identifier has been created. The basic information comprises species, sex, age, length, and date and location where found, where each of these pieces of information is known. Dashes indicate where information is unavailable. Contaminant data are presented for 304 marine mammals, comprising 257 harbour porpoises (*Phocoena phocoena*); 11 grey seals (*Halichoerus grypus*); 7 sperm whales (*Physeter macrocephalus*); 4 Risso's dolphins (*Grampus griseus*); 3 common (harbour) seals (*Phoca vitulina*); 3 minke whales (*Balaenoptera acutorostata*); 2 bottlenose dolphins (*Tursiops truncatus*); 2 hooded seals (*Cystophora cristata*); 2 white-beaked dolphins (*Lagenorhynchus albirostris*);

2 Atlantic white-sided dolphins (*Lagenorhynchus acutus*); 2 fin whales (*Balaenoptera physalus*), and 1 each of the Blainville's beaked whale (*Mesoplodon densirostris*), Sowerby's beaked whale (*Mesoplodon bidens*), the humpback whale (*Megaptera novaeangliae*), the killer whale (*Orcinus orca*), the northern bottlenose whale (*Hyperoodon ampullatus*), the long-finned pilot whale (*Globicephala melas*), the pygmy sperm whale (*Kogia breviceps*), the common dolphin (*Delphinus delphis*) and the striped dolphin (*Stenella coeruleoalba*). The harbour porpoise was chosen as the main species of study as it is distributed all around the coast of the UK.

4.2 Trace elements in liver

The results are given in Table 4.2.

4.3 Butyltins in liver

The results are given in Table 4.3.

4.4 Organochlorine pesticides and chlorobiphenyls in blubber

The results are given in Tables 4.4 and 4.5.

4.5 Brominated diphenylethers in blubber

The results are given in Table 4.6.

Table 4.1. Basic information for marine mammals for which chemical data are presented.

| Ref No. | Species | Sex | Length (cm) | Age (years) | Date Found | Location |
|-------------|------------------------------|-----|-------------|-------------|------------|--|
| SS1990/12A | Grey seal | M | 116 | - | 10/12/1990 | Beadnell, Northumberland |
| SS1990/12B | Grey seal | F | 108 | - | 10/12/1990 | Beadnell, Northumberland |
| SS1991/1B | Grey seal | M | - | - | 04/01/1991 | St. Michael's Mount, Cornwall |
| SW1991/82 | Harbour porpoise | M | 80 | 0 | 14/07/1991 | Hedon Creek, East Yorkshire |
| SS1991/35 | Common seal | F | 78 | - | 16/07/1991 | Hunstanton, Norfolk |
| SS1991/38 | Common seal | F | 132 | - | 18/07/1991 | Old Hunstanton, Norfolk |
| SW1991/145 | Harbour porpoise | M | 126 | 2 | 20/11/1991 | Sunderland, Tyne & Wear |
| SW1992/6 | Harbour porpoise | F | 135 | 2 | 15/01/1992 | Sutton on Sea, Lincolnshire |
| SW1992/9 | Harbour porpoise | M | 168 | - | 29/01/1992 | Portscatho, Cornwall |
| SW1992/13 | Fin whale | F | 1660 | - | 4/02/1992 | Dane's Dyke, East Yorkshire |
| SW1992/124 | Harbour porpoise | M | 81 | 0 | 01/06/1992 | Withernsea, East Yorkshire |
| SW1992/142 | Harbour porpoise | M | 121 | 2 | 17/06/1992 | Burnham Overy Staith, Norfolk |
| SW1992/146 | Harbour porpoise | M | 78 | 0 | 24/06/1992 | Isle of Sheppey, Kent |
| SW1992/156 | Harbour porpoise | M | 89 | 0 | 02/07/1992 | Sizewell, Suffolk |
| SW1992/165 | Harbour porpoise | M | 148 | 18 | 19/07/1992 | Tywyn, Gwynedd |
| SW1992/166 | Harbour porpoise | M | 218 | - | 21/07/1992 | Porth Kidney Sands, St. Ives, Cornwall |
| SW1992/198 | Harbour porpoise | M | 136 | 15 | 23/09/1992 | Tresaith, Ceredigion |
| SW1992/202 | Harbour porpoise | F | 133 | - | 13/10/1992 | Sunderland, Tyne & Wear |
| SS1992/117 | Grey seal | M | 200 | - | 13/10/1992 | Point of Air, Clwyd |
| SW1992/215 | Harbour porpoise | M | 190 | 15 | 07/12/1992 | Marazion, Cornwall |
| CORK 2 | Harbour porpoise | M | 119 | - | unknown | Loop Head, Co. Clare, Eire |
| CORK 3 | Harbour porpoise | F | 151 | - | 14/04/1993 | off Eire (Dingle Bay ground) |
| CORK 5 | Harbour porpoise | F | 117 | - | 27/04/1993 | Co. Sligo, Eire |
| SW1993/12 | Harbour porpoise | M | 144 | - | 27/01/1993 | Cambois, Northumberland |
| SW1993/20 | Harbour porpoise | M | 143 | - | 15/02/1993 | Torbay, Devon |
| SW1993/27 | Harbour porpoise | F | 182 | - | 22/03/1993 | Seymour Tower, Jersey |
| SW1993/30 | Harbour porpoise | M | 119 | 1 | 04/03/1993 | Sunderland, Tyne & Wear |
| SW1993/31 | Harbour porpoise | M | 142 | - | 04/03/1993 | Dunwich, Suffolk |
| SW1993/36 | Harbour porpoise | M | 113 | 1 | 09/03/1993 | Bognor Regis, W. Sussex |
| SW1993/41 | Harbour porpoise | F | 144 | - | 16/03/1993 | Bodorgan Point, Anglesey, Gwynedd |
| SW1993/59 | Harbour porpoise | M | 126 | 2 | 29/04/1993 | Hornsea, East Yorkshire |
| SW1993/63 | Harbour porpoise | F | 172 | 5 | 10/05/1993 | Snettisham, Norfolk |
| SW1993/69 | Harbour porpoise | M | 73 | 0 | 16/06/1993 | Pembrey, Carmarthenshire |
| SW1993/70 | Harbour porpoise | M | 122 | 2 | 17/06/1993 | Penzance, Cornwall |
| SW1993/78 | Blainville's beaked whale | F | 411 | 21 + | 18/07/1993 | Aberaeron, Ceredigion |
| SS1993/135 | Grey seal | M | 196 | - | 03/08/1993 | West Kirby, Wirral |
| SW1993/91 | Harbour porpoise | M | 84 | 0 | 15/08/1993 | Hoylake, Merseyside |
| SW1993/94 | Harbour porpoise | M | 133 | 2 | 16/08/1993 | Cei Bach, Ceredigion |
| SW1993/107 | Harbour porpoise | M | 90 | 0 | 05/09/1993 | Tresaith, Ceredigion |
| SS1993/196 | Grey seal | M | 229 | - | 10/10/1993 | Hilbre Island, Wirral |
| SW1993/122 | Harbour porpoise | F | 156 | 12 | 16/10/1993 | New Quay, Ceredigion |
| SW1993/124 | Harbour porpoise | F | - | - | 22/10/1993 | Aberporth, Ceredigion |
| SW1993/126 | Harbour porpoise | M | 109 | 1 | 28/10/1993 | Pakefield Beach, Suffolk |
| SW1993/131 | Harbour porpoise | F | 100 | 1 | 18/11/1993 | Saundersfoot, Pembrokeshire |
| SW1993/133A | Harbour porpoise | F | 168 | - | 24/11/1993 | Felixstowe, Suffolk |
| SW1993/135 | Harbour porpoise | F | 131 | 1 | 29/11/1993 | Perran Sands, Cornwall |
| SS1993/243 | Grey seal | F | 176 | - | 25/12/1993 | Colwyn Bay, Clwyd |
| SW1993/149 | Harbour porpoise | M | 129 | 2 | 29/12/1993 | Carne Beach, Cornwall |
| SW1994/5 | Atlantic white-sided dolphin | M | 228 | 9 | 19/1/1994 | Rhossili Bay, West Glamorgan |
| SW1994/7 | Harbour porpoise | M | 151 | 10 | 23/01/1994 | Spurn Point, East Yorkshire |
| SW1994/7A | Harbour porpoise | F | 160 | 5 | 24/01/1994 | Pen-y-Bryn, Ceredigion |

Table 4.1. continued: Basic information for marine mammals for which chemical data are presented.

| Ref No. | Species | Sex | Length (cm) | Age (years) | Date Found | Location |
|------------------|------------------|-----|-------------|-------------|------------|---|
| SW1994/12 | Harbour porpoise | M | 136 | 4 | 04/02/1994 | Salcombe Harbour, Devon |
| SW1994/31 | Harbour porpoise | M | 123 | 3 | 01/03/1994 | Framilode, R. Severn, Gloucestershire |
| SW1994/32 | Harbour porpoise | M | 127 | 2 | 04/03/1994 | Westward Ho !, Devon |
| SW1994/38 | Harbour porpoise | F | 148 | 7 | 16/03/1994 | Borth, Ceredigion |
| SW1994/39 | Risso's dolphin | M | 207 | 0 | 18/03/1994 | Fishing Cove, Gunwalloe, Cornwall |
| SW1994/44 | Harbour porpoise | M | 139 | 4 | 31/03/1994 | Borth, Ceredigion |
| SW1994/45A | Harbour porpoise | M | 151 | 9 | 02/04/1994 | Rossall Point, Lancashire |
| SW1994/45B | Harbour porpoise | M | 140 | - | 02/04/1994 | Holbeach, Lincolnshire |
| SW1994/53 | Harbour porpoise | F | 167 | 3 | 10/04/1994 | Morfa Dyffryn, Gwynedd |
| SW1994/53 foetus | Harbour porpoise | - | - | - | 10/04/1994 | Morfa Dyffryn, Gwynedd |
| SW1994/67 | Harbour porpoise | M | 117 | 1 | 28/04/1994 | Bridlington, East Yorkshire |
| SW1994/68 | Harbour porpoise | F | 112 | 1 | 29/04/1994 | 6m off Walton pier, Essex |
| SW1994/72 | Harbour porpoise | M | 97 | 2 | 03/05/1994 | Ingoldmells, Skegness, Lincolnshire |
| SW1994/77 | Harbour porpoise | M | 114 | 1 | 04/05/1994 | Bridlington, East Yorkshire |
| SW1994/78 | Harbour porpoise | M | 113 | 2 | 04/05/1994 | Bridlington, East Yorkshire |
| SW1994/80 | Harbour porpoise | M | 122 | 4 | 06/05/1994 | Port Talbot, West Glamorgan |
| SW1994/83 | Harbour porpoise | M | 85 | 0 | 11/05/1994 | Eastern Green, Penzance, Cornwall |
| SS1994/63 | Grey seal | F | 141 | - | 24/05/1994 | Poppit Sands, Cardigan, Ceredigion |
| SW1994/99 | Harbour porpoise | M | 120 | 2 | 02/06/1994 | Tywyn, Gwynedd |
| SW1994/101 | Harbour porpoise | M | 82 | 0 | 03/06/1994 | Bardsey Island, Gwynedd |
| LAW-72 | Common seal | F | - | - | 08/06/1994 | Hartlepool, Cleveland |
| SW1994/105 | Harbour porpoise | M | 77 | 0 | 16/06/1994 | Abercastle, Pembrokeshire |
| SW1994/108 | Harbour porpoise | M | 75 | 0 | 25/06/1994 | Weston-super-mare, Avon |
| SW1994/114 | Harbour porpoise | F | 82 | 0 | 02/07/1994 | Briton Ferry, West Glamorgan |
| SW1994/115 | Harbour porpoise | F | 77 | 0 | 03/07/1994 | Ynyslas, Ceredigion |
| SW1994/117 | Harbour porpoise | M | 135 | 4 | 07/07/1994 | Silloth, Cumbria |
| SW1994/120 | Harbour porpoise | F | 108 | 1 | 12/07/1994 | Pembrey, Carmarthenshire |
| SW1994/133 | Harbour porpoise | M | 97 | 0 | 01/08/1994 | Manorbier, Pembrokeshire |
| SW1994/143 | Harbour porpoise | F | 87 | 0 | 24/08/1994 | Fairbourne, Gwynedd |
| SW1994/145 | Harbour porpoise | M | 92 | 0 | 28/08/1994 | Ynyslas, Ceredigion |
| SW1994/148 | Harbour porpoise | M | 130 | 2 | 01/09/1994 | Sandsend, Whitby, North Yorkshire |
| SW1994/153 | Harbour porpoise | M | 153 | - | 07/09/1994 | Ynyslas, Ceredigion |
| SS1994/277 | Grey seal | F | 179 | - | 07/10/1994 | Tywyn, Gwynedd |
| MI4059 | Sperm whale | M | 1390 | - | 04/11/1994 | Baltrum Island, Wadden Sea |
| SW1994/171 | Harbour porpoise | M | 146 | 2 | 22/11/1994 | Martello Bay, Clacton, Essex |
| SW1994/172 | Harbour porpoise | M | 122 | 3 | 22/11/1994 | Hornsea, East Yorkshire |
| SW1994/175 | Harbour porpoise | F | 176 | - | 04/12/1994 | Marazion, Cornwall |
| UK4026 | Sperm whale | M | 1230 | 20 + | 07/12/1994 | Sanday, Orkney Islands |
| UK4029 | Sperm whale | M | 1320 | 25 + | 07/12/1994 | Sanday, Orkney Islands |
| UK4031 | Sperm whale | M | 1340 | 23 + | 07/12/1994 | Sanday, Orkney Islands |
| SW1994/185 | Harbour porpoise | F | 145 | 5 | 30/12/1994 | Bosham Harbour, West Sussex |
| MI5004 | Sperm whale | M | 1410 | - | 12/01/1995 | Kijkduin, Scheveningen, the Netherlands |
| MI5005 | Sperm whale | M | 1470 | - | 12/01/1995 | Kijkduin, Scheveningen, the Netherlands |
| MI5006 | Sperm whale | M | 1500 | - | 12/01/1995 | Kijkduin, Scheveningen, the Netherlands |
| SW1995/7 | Harbour porpoise | M | 154 | 7 | 24/01/1995 | Aberaeron, Ceredigion |
| SW1995/52 | Harbour porpoise | M | 123 | 3 | 20/04/1995 | Seaton Sluice, Teesside |
| SW1995/54 | Killer whale | F | 545 | 24 | 26/04/1995 | Stour estuary, Sandwich, Kent |
| SW1995/55 | Harbour porpoise | M | 153 | 8 | 01/05/1995 | Seaton Sands, Teesside |
| SW1995/61 | Harbour porpoise | F | 148 | 7 | 08/06/1995 | Mablethorpe, Lincolnshire |
| SW1995/68 | Harbour porpoise | M | 67 | 0 | 25/06/1995 | Pendine Sands, Carmarthenshire |
| SW1995/76 | Harbour porpoise | M | 80 | 0 | 01/07/1995 | Newport, Norfolk |

Table 4.1. continued: Basic information for marine mammals for which chemical data are presented.

| Ref No. | Species | Sex | Length (cm) | Age (years) | Date Found | Location |
|------------------|------------------|-----|-------------|-------------|------------|--|
| SW1995/78 | Harbour porpoise | M | 111 | 4 | 02/07/1995 | Filey Brigg, North Yorkshire |
| SW1995/84 | Harbour porpoise | F | 154 | 5 | 04/07/1995 | Pen-y-Bryn, Ceredigion |
| SW1995/85 | Harbour porpoise | F | 86 | 0 | 05/07/1995 | Gorleston, Norfolk |
| SW1995/86 | Harbour porpoise | F | 172 | 5 | 07/07/1995 | Trearddur Bay, Anglesey, Gwynedd |
| SS1995/80 | Grey seal | M | 224 | - | 13/07/1995 | Broad Haven, Pembrokeshire |
| SW1995/94 | Harbour porpoise | F | 112 | 1 | 31/07/1995 | St. Mary's Island, Whitley Bay, Tyne and Wear |
| SS1995/143 | Grey seal | M | 226 | - | 11/09/1995 | River Thames |
| SW1995/102 | Harbour porpoise | F | 167 | 0 | 01/10/1995 | Aberystwyth, Ceredigion |
| SW1995/120A | Harbour porpoise | F | 107 | 1 | 05/10/1995 | Snettisham, Norfolk |
| SW1995/120b | Harbour porpoise | M | 138 | 7 | 04/10/1995 | Shandwick, Highland |
| SW1995/126 | Harbour porpoise | F | 95 | 0 | 13/10/1995 | Withernsea, East Yorkshire |
| SW1995/141 | Harbour porpoise | M | 127 | 1 | 18/12/1995 | South Shields, Tyne & Wear |
| SW1996/2 | Harbour porpoise | M | 140 | 5 | 03/01/1996 | Robin Hood's Bay, North Yorkshire |
| SW1996/27(1) | Harbour porpoise | M | 153 | 5 | 22/01/1996 | Praa Sands, Cornwall |
| SW1996/29 | Harbour porpoise | M | 126 | 1 | 25/01/1996 | Skegness, Lincolnshire |
| SW1996/30 | Harbour porpoise | M | 117 | 2 | 26/01/1996 | Blyth, Northumberland |
| SW1996/37 | Harbour porpoise | M | 137 | 9 | 07/02/1996 | Kessingland, Suffolk |
| SW1996/44 | Harbour porpoise | M | 105 | 1 | 19/02/1996 | Roker, Tyne & Wear |
| SW1996/46 | Harbour porpoise | M | 146 | - | 23/02/1996 | Polzeath, Cornwall |
| SW1996/50b | Harbour porpoise | M | 133 | 4 | 14/03/1996 | Rockfield, Highland |
| SW1996/60 | Harbour porpoise | M | 171 | 8 | 20/03/1996 | Falmouth, Cornwall |
| SW1996/67 | Harbour porpoise | M | 120 | 1 | 27/03/1996 | South Shields, Tyne & Wear |
| SW1996/84e | Harbour porpoise | M | 123 | 2 | 07/05/1996 | West Beach, Lossiemouth, Grampian |
| SW1996/87 | Harbour porpoise | M | 102 | 1 | 19/05/1996 | Seal Sands, Cleveland |
| SW1996/101 | Harbour porpoise | M | 125 | 2 | 12/06/1996 | Manorbier, Pembrokeshire |
| SW1996/111 | Harbour porpoise | M | 79 | 0 | 30/10/1996 | Ynyslas, Ceredigion |
| SW1996/119 | Harbour porpoise | M | 128 | 2 | 10/07/1996 | Whitehaven, Cumbria |
| SW1996/121 | Striped dolphin | M | 219 | 17 | 16/07/1996 | Ramsey Island, Pembrokeshire |
| SW1996/147a | Harbour porpoise | M | 148 | 12 | 13/09/1996 | Sandend Bay, Portsoy, Grampian |
| SW1996/150 | Harbour porpoise | F | 124 | 2 | 24/09/1996 | Sheringham, Norfolk |
| SW1996/160 | Harbour porpoise | F | 191 | 14 | 23/10/1996 | Fishguard, Pembrokeshire |
| SW1996/162 | Minke whale | F | 467 | - | 29/10/1996 | Purfleet, Essex |
| SW1996/163 | Harbour porpoise | M | 159 | 6 | 31/10/1996 | Borth-y-Gest, Gwynedd |
| SW1996/169a | Harbour porpoise | M | 132 | 6 | 17/11/1996 | East Beach, Findhorn, Grampian |
| SW1996/174 | Harbour porpoise | M | 124 | 2 | 30/11/1996 | Borth, Ceredigion |
| SW1997/1 | Harbour porpoise | M | 132 | 6 | 06/01/1997 | Great Yarmouth, Norfolk |
| SW1997/2 | Harbour porpoise | M | 151 | 2 | 08/01/1997 | Porthallow, Cornwall |
| SW1997/5 | Harbour porpoise | M | 127 | 0 | 10/01/1997 | Greeb Point, Cornwall |
| SW1997/21A | Harbour porpoise | F | 119 | 0 | 22/01/1997 | Kionlough, Isle of Man |
| SW1997/36 | Harbour porpoise | F | 154 | 7 | 29/01/1997 | Bridlington, East Yorkshire |
| SW1997/67f | Harbour porpoise | M | 107 | 1 | 11/04/1997 | off Mallaig, Highland |
| SW1997/72 | Harbour porpoise | F | 110 | 0 | 18/04/1997 | ½ mile off Cromer Point, North Yorkshire |
| SW1997/80 | Harbour porpoise | F | 123 | 1 | 14/05/1997 | 26 miles east of Runswick Bay, North Yorkshire |
| SW1997/81 | Harbour porpoise | F | 129 | 0 | 14/05/1997 | 26 miles east of Runswick Bay, North Yorkshire |
| SW1997/87 | Harbour porpoise | M | 111 | 2 | 02/06/1997 | Tynemouth Beach, Tyne & Wear |
| SW1997/89 | Harbour porpoise | M | 90 | 0 | 06/06/1997 | Great Yarmouth, Norfolk |
| SW1997/91 | Harbour porpoise | F | 89 | 0 | 09/06/1997 | Black Pill, Swansea, |
| SW1997/93 | Harbour porpoise | F | 160 | 6 | 13/06/1997 | Aberystwyth, Ceredigion |
| SW1997/93 foetus | Harbour porpoise | M | 74 | 0 | 13/06/1997 | Aberystwyth, Ceredigion |

Table 4.1. continued: Basic information for marine mammals for which chemical data are presented.

| Ref No. | Species | Sex | Length (cm) | Age (years) | Date Found | Location |
|---------------|------------------------------|-----|-------------|-------------|------------|--|
| SW1997/93b | Harbour porpoise | M | 115 | 3 | 17/06/1997 | Aberdeen, Grampian |
| SW1997/94 | Harbour porpoise | F | 172 | 5 | 19/06/1997 | Pembrey, Carmarthenshire |
| SW1997/96 | Harbour porpoise | F | 154 | 6 | 23/06/1997 | Llanrhystyd, Ceredigion |
| SW1997/97 | Harbour porpoise | F | 70 | 0 | 25/06/1997 | Pendine, Carmarthenshire |
| SW1997/97a | Harbour porpoise | M | 152 | 11 | 25/06/1997 | Sound of Harris, Western Isles |
| SW1997/102 | Harbour porpoise | F | 84 | 0 | 03/07/1997 | Hunstanton, Norfolk |
| SW1997/103 | Harbour porpoise | F | 117 | 1 | 03/07/1997 | Thurlestone Sands, South Devon |
| SW1997/111 | Harbour porpoise | F | 126 | 1 | 10/07/1997 | 5 miles east of Ulrome, East Yorkshire |
| SW1997/113 | Harbour porpoise | F | 78 | 0 | 13/07/1997 | Pembrey, Carmarthenshire |
| SW1997/118 | Harbour porpoise | F | 172 | 8 | 18/07/1997 | Prestatyn, Gwynedd |
| SW1997/124a | Harbour porpoise | M | 150 | 8 | 22/07/1997 | off Pittenweem, Fife |
| SW1997/135f | Harbour porpoise | M | 121 | 2 | 21/08/1997 | Minches, Western Isles |
| SW1997/138 | Harbour porpoise | F | 118 | 1 | 07/09/1997 | Blackpool, Lancashire |
| SW1997/141 | Harbour porpoise | M | 128 | 2 | 10/09/1997 | 7¾ miles northeast of Whitby, North Yorkshire |
| SW1997/142 | Harbour porpoise | M | 143 | 4 | 10/09/1997 | 7¾ miles east of Sandsend, North Yorkshire |
| SW1997/142b | Harbour porpoise | F | 132 | 5 | 11/09/1997 | 11¾ miles northeast of Kettleness, North Yorkshire |
| SW1997/152 | Harbour porpoise | F | 107 | 2 | 07/10/1997 | Seasalter, Kent |
| SW1997/159 | Pygmy sperm whale | F | 276 | 7 | 17/10/1997 | Manorbier, Pembrokeshire |
| SW1997/161a | Harbour porpoise | M | 137 | 12 | 23/10/1997 | off Buchan Ness, Grampian |
| SW1997/162 | Long-finned pilot whale | M | 502 | - | 25/10/1997 | Beadnell, Northumberland |
| SW1997/173 | Harbour porpoise | M | 137 | 2 | 24/11/1997 | Sidmouth beach, Devon |
| SW1997/174 | Harbour porpoise | F | 147 | 4 | 26/11/1997 | Gorleston, Norfolk |
| SW1997/178 | Harbour porpoise | F | 156 | 4 | 05/12/1997 | Whitley Bay, Tyne & Wear |
| SW1997/178c | Harbour porpoise | M | 116 | 8 | 06/12/1997 | Caiplie, Fife |
| SW1997/186(1) | Harbour porpoise | M | 113 | 1 | 22/12/1997 | Whitley Sands, Tyne & Wear |
| SW1997/186(2) | Harbour porpoise | F | 145 | 5 | 22/12/1997 | Whitley Sands, Tyne & Wear |
| SW1998/1 | Harbour porpoise | M | 157 | 1 | 05/01/1998 | Trenance, Cornwall |
| SW1998/4 | Harbour porpoise | F | 100 | 0 | 08/01/1998 | Mablethorpe, Lincolnshire |
| SW1998/16 | Harbour porpoise | M | 128 | 0 | 23/01/1998 | Porthscatho, Cornwall |
| SW1998/21 | Harbour porpoise | M | 129 | 1 | 08/02/1998 | Giltar Point, Pembrokeshire |
| SW1998/50 | Harbour porpoise | F | 131 | 0 | 13/03/1998 | Westward Ho !, Devon |
| SW1998/53 | Harbour porpoise | M | 117 | 0 | 19/03/1998 | Bridlington, East Yorkshire |
| SW1998/56a | Harbour porpoise | M | 133 | 18 | 23/03/1998 | 20 miles NW of Shetland |
| SW1998/71 | Harbour porpoise | M | 138 | 2 | 09/04/1998 | off Scarborough, North Yorkshire |
| SW1998/75 | Harbour porpoise | F | 114 | 0 | 20/04/1998 | 1 mile off Scarborough, North Yorkshire |
| SW1998/76 | Harbour porpoise | M | 141 | 6 | 22/04/1998 | off Scarborough, North Yorkshire |
| SW1998/81 | Sowerby's beaked whale | M | 444 | - | 30/04/1998 | Mablethorpe, Lincolnshire |
| SW1998/90 | Atlantic white-sided dolphin | F | 162 | - | 07/05/1998 | Scarborough, North Yorkshire |
| SW1998/97 | Harbour porpoise | F | 133 | 0 | 21/05/1998 | Caldey Island, Pembrokeshire |
| SW1998/104 | Common dolphin | F | 208 | 12 | 10/06/1998 | Aberaeron, Ceredigion |
| SW1998/115 | Harbour porpoise | M | 146 | 15 | 28/06/1998 | Mablethorpe, Lincolnshire |
| SW1998/116 | Harbour porpoise | M | 77 | 0 | 28/06/1998 | Borth, Ceredigion |
| SW1998/123a | Harbour porpoise | M | 140 | 15 | 01/07/1998 | Thurso Beach, Highland |
| SW1998/127 | Harbour porpoise | M | 82 | 0 | 04/07/1998 | Corton Beach, Suffolk |
| SW1998/129 | Harbour porpoise | F | 154 | - | 07/07/1998 | Sea Palling, Norfolk |
| SW1998/135 | Harbour porpoise | M | 76 | 0 | 18/07/1998 | Borth, Ceredigion |
| SW1998/139 | Harbour porpoise | M | 84 | 0 | 23/07/1998 | Snettisham, Norfolk |
| SW1998/145 | Harbour porpoise | M | 84 | 0 | 02/08/1998 | Greatstone-on-Sea, Kent |
| SW1998/149 | Harbour porpoise | M | 145 | 4 | 05/08/1998 | Newlyn, Cornwall |
| SW1998/154 | White-beaked dolphin | F | 215 | 5 | 06/08/1998 | Blyth, Northumberland |

Table 4.1. continued: Basic information for marine mammals for which chemical data are presented.

| Ref No. | Species | Sex | Length (cm) | Age (years) | Date Found | Location |
|--------------|---------------------------|-----|-------------|-------------|------------|--|
| SW1998/164 | Harbour porpoise | M | 142 | 5 | 25/08/1998 | Llanon, Ceredigion |
| SW1998/167A | Harbour porpoise | F | 113 | 1 | 09/09/1998 | off Lymington, Hampshire |
| SW1998/170 | Harbour porpoise | M | 143 | 4 | 17/09/1998 | Swansea Bay, West Glamorgan |
| SW1998/171 | Harbour porpoise | M | 77 | 0 | 17/09/1998 | Saunton Sands, Devon |
| SW1998/174 | Harbour porpoise | M | 147 | 7 | 28/09/1998 | Newport, Pembrokeshire |
| SW1998/179 | Harbour porpoise | M | 119 | 1 | 11/10/1998 | Fishguard, Pembrokeshire |
| SW1998/183 | Harbour porpoise | M | 121 | 2 | 18/10/1998 | Llanrhystyd, Ceredigion |
| SW1998/187 | Harbour porpoise | F | 164 | 9 | 03/11/1998 | Salthouse, Norfolk |
| SW1998/189 | Northern bottlenose whale | F | 610 | - | 06/11/1998 | Thurstaston, the Wirral |
| SW1998/191 | Harbour porpoise | F | 157 | 6 | 09/11/1998 | Aberystwyth, Ceredigion |
| SW1998/198 | Harbour porpoise | F | 123 | 2 | 27/11/1998 | Ynyslas, Ceredigion |
| SW1998/208 | Harbour porpoise | M | 117 | 2 | 16/12/1998 | Seaton sluice, Northumberland |
| SW1999/8b | Harbour porpoise | M | 145 | 12 | 14/01/1999 | Ardmillan Castle, Strathclyde |
| SW1999/10 | Harbour porpoise | F | 148 | - | 17/01/1999 | Druridge Bay, Northumberland |
| SW1999/17 | Harbour porpoise | F | 101 | 0 | 28/01/1999 | Bridlington, East Yorkshire |
| SW1999/26 | Harbour porpoise | M | 124 | 0 | 13/02/1999 | West Looe, Cornwall |
| SW1999/31 | Risso's dolphin | F | 305 | - | 20/02/1999 | Whitesand Bay, Cornwall |
| SW1999/40 | Harbour porpoise | F | 143 | 4 | 04/03/1999 | Westminster Bridge, London |
| SW1999/45 | Minke whale | F | 375 | - | 09/03/1999 | Holland-on-Sea, Essex |
| SW1999/48 | Harbour porpoise | F | 115 | 0 | 12/03/1999 | Sizewell, Suffolk |
| SW1999/48c | Harbour porpoise | M | 150 | 12 | 14/03/1999 | Lerwick, Shetland |
| SW1999/57a | Harbour porpoise | M | 129 | 5 | 22/03/1999 | West Voe of Quarff, Shetland |
| SW1999/60 | Harbour porpoise | M | 114 | 1 | 23/03/1999 | Ynyslas, Ceredigion |
| SW1999/63 | Harbour porpoise | M | 124 | 2 | 29/03/1999 | Pendine Sands, Carmarthenshire |
| SW1999/71 | Harbour porpoise | F | 98 | 0 | 05/04/1999 | North Ferriby, East Yorkshire |
| SW1999/72C.1 | Harbour porpoise | M | 125 | 4 | 08/04/1999 | 8 miles SW of Ailsa Craig, Strathclyde |
| SW1999/72C.2 | Harbour porpoise | M | 119 | 1 | 08/04/1999 | 8 miles SW of Ailsa Craig, Strathclyde |
| SW1999/74 | Harbour porpoise | F | 118 | 1 | 10/04/1999 | Theddlethorpe, Lincolnshire |
| SW1999/77 | Harbour porpoise | M | 122 | 2 | 13/04/1999 | Minsmere sluice, Suffolk |
| SW1999/96 | Harbour porpoise | F | 111 | 0 | 01/05/1999 | Wallog, Ceredigion |
| SW1999/96C | Harbour porpoise | M | 143 | 20 | 07/05/1999 | Hilton of Cadboll, Highland |
| SW1999/121B | Harbour porpoise | M | 126 | 8 | 22/06/1999 | near. Glecknabae, Bute, Strathclyde |
| SW1999/148 | Harbour porpoise | M | 87 | 0 | 29/07/1999 | Harwich, Essex |
| SW1999/148A | Harbour porpoise | M | 133 | 9 | 29/07/1999 | Montrose, Tayside |
| SW1999/167 | Risso's dolphin | F | - | - | 10/09/1999 | Trewent Point, Pembrokeshire |
| SW1999/172 | Harbour porpoise | M | 165 | - | 17/09/1999 | Poldhu Point, Cornwall |
| SW1999/174B | Harbour porpoise | F | 114 | 0 | 23/09/1999 | Mockbeggar Wharf, Merseyside |
| SW1999/175 | Bottlenose dolphin | F | 296 | - | 24/09/1999 | Llanbedrog, Gwynedd |
| SW1999/189 | Harbour porpoise | F | 116 | 1 | 26/10/1999 | Pen-y-Bryn, Ceredigion |
| SW1999/192 | Harbour porpoise | F | 148 | - | 29/10/1999 | Barmouth, Gwynedd |
| SW1999/194a | Harbour porpoise | M | 116 | 0 | 04/11/1999 | Rhuban, Eriskay, Western Isles |
| SW1999/197 | Bottlenose dolphin | F | 320 | - | 15/11/1999 | Ramsgate, Kent |
| SW1999/201A | White-beaked dolphin | F | 247 | - | 04/12/1999 | Spurn Point, East Yorkshire |
| SW1999/202 | Harbour porpoise | F | 113 | 0 | 05/12/1999 | Pontlyfry, Gwynedd |
| SW1999/208 | Harbour porpoise | F | 125 | 1 | 26/12/1999 | Langland Bay, Swansea |
| SW2000/13 | Harbour porpoise | F | 130 | 2 | 07/02/2000 | St. Michael's Mount, Cornwall |
| SW2000/14a | Harbour porpoise | M | 142 | 14 | 06/02/2000 | Torrin, Isle of Skye, Highland |
| SW2000/16 | Harbour porpoise | M | 125 | 2 | 07/02/2000 | Port Eynon, Swansea |
| SW2000/20 | Harbour porpoise | M | 128 | 2 | 14/02/2000 | Hele, Devon |
| SW2000/27 | Harbour porpoise | M | 93 | 0 | 20/02/2000 | Llanon, Ceredigion |
| SW2000/33 | Harbour porpoise | F | 109 | 1 | 29/02/2000 | Blyth, Northumberland |
| SW2000/37 | Harbour porpoise | F | 140 | 3 | 03/03/2000 | Westdale Bay, Pembrokeshire |

Table 4.1. continued: Basic information for marine mammals for which chemical data are presented.

| Ref No. | Species | Sex | Length (cm) | Age (years) | Date Found | Location |
|---------------|--------------------|-----|-------------|-------------|------------|--|
| SW2000/50 | Harbour porpoise | F | 148 | - | 14/03/2000 | Battersea, Greater London |
| SW2000/52a | Harbour porpoise | M | 104 | 2 | 15/03/2000 | Findochty Harbour, Buckie, Grampian |
| SW2000/53 | Harbour porpoise | F | 115 | 0 | 15/03/2000 | Fishguard, Pembrokeshire |
| SW2000/55 | Harbour porpoise | F | 134 | 3 | 20/03/2000 | Lowestoft, Suffolk |
| SW2000/73 | Harbour porpoise | F | 152 | 4 | 04/04/2000 | off Sizewell, Suffolk |
| SW2000/74a | Harbour porpoise | M | 125 | - | 03/04/2000 | Portmahomack, Highland |
| SW2000/81 | Harbour porpoise | F | 150 | - | 12/04/2000 | Sea Palling, Norfolk |
| SW2000/81a | Harbour porpoise | M | 116 | 2 | 15/04/2000 | Spey Bay, Grampian |
| SW2000/103 | Harbour porpoise | M | 140 | 6 | 09/06/2000 | Aberystwyth, Ceredigion |
| SW2000/131 | Harbour porpoise | M | 88 | 0 | 11/07/2000 | Rhos-on-Sea, Conwy |
| SW2000/140 | Harbour porpoise | M | 140 | 3 | 09/08/2000 | off Bridlington, East Yorkshire |
| SW2000/144 | Harbour porpoise | M | 136 | - | 25/08/2000 | off Bridlington, East Yorkshire |
| SW2000/146(1) | Harbour porpoise | M | 104 | 1 | 29/08/2000 | off Bridlington, East Yorkshire |
| SW2000/146(2) | Harbour porpoise | M | 139 | 5 | 29/08/2000 | off Bridlington, East Yorkshire |
| SW2000/150A | Harbour porpoise | M | 125 | 3 | 08/09/2000 | off Bridlington, East Yorkshire |
| SW2000/157 | Harbour porpoise | M | 112 | 1 | 22/09/2000 | Borth, Ceredigion |
| SW2000/164 | Harbour porpoise | F | 122 | 2 | 08/10/2000 | off Bridlington, East Yorkshire |
| SW2000/166 | Harbour porpoise | M | 151 | - | 11/10/2000 | Aberarth, Ceredigion |
| SW2000/168 | Harbour porpoise | M | 135 | - | 19/10/2000 | 20 miles SE of Bridlington, East Yorkshire |
| SW2000/169 | Harbour porpoise | F | 132 | 3 | 21/10/2000 | 20 miles SE of Bridlington, East Yorkshire |
| SW2000/170 | Harbour porpoise | F | 152 | - | 21/10/2000 | 20 miles SE of Bridlington, East Yorkshire |
| SS2000/105 | Hooded seal | F | 119 | - | 24/10/2000 | Skegness, Lincolnshire |
| SW2000/174 | Harbour porpoise | F | 126 | 2 | 25/10/2000 | Black Rock Sands, Gwynedd |
| SW2000/176 | Harbour porpoise | M | 133 | - | 25/10/2000 | Friog, Gwynedd |
| SW2000/179 | Risso's dolphin | F | 187 | - | 25/10/2000 | Morfa Nefyn, Gwynedd |
| SS2000/106 | Hooded seal | M | 118 | - | 30/10/2000 | Sea Palling, Norfolk |
| SW2000/188A | Harbour porpoise | M | 109 | 1 | 05/11/2000 | off Bridlington, East Yorkshire |
| SW2000/196 | Harbour porpoise | M | 148 | - | 21/11/2000 | Woolacombe Sands, Devon |
| SW2000/200 | Fin whale | F | 1110 | - | 27/11/2000 | Morecambe Bay, Lancashire |
| SW2001/4 | Harbour porpoise | M | 122 | 2 | 03/01/2001 | Kingsbridge estuary, Devon |
| SW2001/21 | Harbour porpoise | F | 171 | - | 24/01/2001 | Crow Point, Devon |
| SW2001/23 | Harbour porpoise | M | 152 | - | 26/01/2001 | Thurrock, Essex |
| SW2001/24A | Harbour porpoise | M | 130 | 2 | 27/01/2001 | Westcombe Beach, Devon |
| SW2001/30 | Harbour porpoise | F | 129 | 2 | 07/02/2001 | Puttsborough, Devon |
| SW2001/36 | Harbour porpoise | F | 114 | 1 | 17/02/2001 | Reculver, Kent |
| SW2001/47 | Harbour porpoise | F | 168 | - | 12/03/2001 | South Milton Sands, Devon |
| SW2001/60 | Humpback whale | M | 1066 | - | 21/03/2001 | Sandwich Bay, Kent |
| SW2001/85 | Harbour porpoise | F | 122 | 2 | 21/04/2001 | Aberarth, Ceredigion |
| SW2001/92 | Harbour porpoise | F | 117 | 1 | 30/04/2001 | Walton-on-the-Naze, Essex |
| SW2001/94 | Harbour porpoise | M | 119 | 1 | 01/05/2001 | Aberporth, Ceredigion |
| SW2001/120 | Minke whale | M | 520 | - | 10/06/2001 | Holy Island, Northumberland |
| SW2001/127 | Harbour porpoise | M | 136 | - | 21/06/2001 | off Bridlington, East Yorkshire |
| SW2001/139 | Harbour porpoise | M | 140 | - | 04/07/2001 | 8 miles E of Bridlington, East Yorkshire |
| SW2001/141 | Bottlenose dolphin | F | 302 | - | 08/07/2001 | Wapping, Greater London |
| SW2001/144 | Harbour porpoise | F | 82 | 0 | 09/07/2001 | 8 miles S of Bridlington, East Yorkshire |
| SW2001/149 | Harbour porpoise | F | 138 | - | 12/07/2001 | 6 miles S of Bridlington, East Yorkshire |
| SW2001/158 | Harbour porpoise | F | 119 | 1 | 17/07/2001 | Sandwich Bay, Kent |
| SW2001/186 | Harbour porpoise | M | 149 | - | 06/08/2001 | Oxwich Bay, Swansea |
| SW2001/188 | Harbour porpoise | F | 98 | 0 | 08/08/2001 | Heacham, Norfolk |
| SW2001/193 | Harbour porpoise | M | 147 | - | 21/08/2001 | Freshwater East, Pembrokeshire |
| SW2001/198 | Harbour porpoise | F | 82 | 0 | 28/08/2001 | Cei Bach, Ceredigion |
| SW2001/203 | Harbour porpoise | M | 113 | 1 | 03/09/2001 | Llangranog, Ceredigion |

Table 4.2. Concentrations of trace elements in liver (mg kg⁻¹ wet weight).

| LSN | Reference no. | TS% | Cr | Mn | Fe | Ni | Cu | Zn | As | Se | Ag | Cd | Hg | Pb | Hg:Se |
|-----------|---------------------|------|------|----|-----|--------|-----|-----|------|------|--------|--------|------|--------|-------|
| 1995/28 | SW1991/82 | 48.0 | 1.1 | ND | ND | < 0.06 | 11 | 18 | 0.32 | 0.98 | 0.17 | < 0.01 | 1.0 | 0.03 | 0.40 |
| 1995/30 | SW1991/145 | 31.0 | 2.0 | ND | ND | 0.93 | 7.8 | 48 | 0.43 | 1.6 | 0.24 | 0.17 | 1.1 | 0.07 | 0.27 |
| 1995/62 | SW1992/6 | 22.0 | 0.27 | ND | ND | 0.18 | 8.9 | 145 | 0.32 | 2.0 | 0.19 | 0.09 | 2.5 | < 0.02 | 0.49 |
| 1995/66 | SW1992/9 | 25.0 | 0.43 | ND | ND | 0.2 | 5.0 | 102 | 0.49 | 13 | 0.92 | 0.22 | 35 | 0.15 | 1.06 |
| 1998/7002 | SW1992/13 | 26.8 | 0.69 | ND | 310 | 0.74 | 3.2 | 47 | 0.21 | 5.8 | < 0.05 | 3.1 | 1.6 | < 0.04 | 0.11 |
| 1995/60 | SW1992/124 | 42.0 | 0.26 | ND | ND | < 0.06 | 55 | 31 | 0.32 | 1.1 | 0.61 | < 0.02 | 0.5 | < 0.02 | 0.18 |
| 1995/64 | SW1992/142 | 34.0 | 0.21 | ND | ND | < 0.08 | 17 | 86 | 0.4 | 4.0 | 2.3 | 0.04 | 6.7 | 0.08 | 0.66 |
| 1995/1120 | SW1992/146 | 44.1 | 0.87 | ND | ND | < 0.07 | 26 | 37 | 0.37 | 1.1 | 0.38 | < 0.02 | 1.6 | < 0.02 | 0.57 |
| 1995/201 | SW1992/156 | 24.0 | 1.2 | ND | ND | < 0.06 | 44 | 51 | 0.2 | 1.7 | 0.99 | < 0.02 | 2.1 | 0.02 | 0.49 |
| 1995/68 | SW1992/165 | 27.0 | 1.6 | ND | ND | 0.83 | 7.1 | 70 | 0.92 | 42 | 0.36 | 0.15 | 96 | 0.6 | 0.90 |
| 1995/70 | SW1992/166 | 28.0 | 1.3 | ND | ND | 0.17 | 5.2 | 75 | 0.63 | 16 | 1.2 | 0.18 | 44 | 0.05 | 1.08 |
| 1995/73 | SW1992/198 | 30.3 | 0.81 | ND | ND | < 0.08 | 10 | 42 | 0.74 | 20 | 0.54 | 0.23 | 46 | 0.09 | 0.91 |
| 1995/75 | SW1992/202 | 27.0 | 0.14 | ND | ND | < 0.07 | 7.2 | 36 | 0.51 | 2.4 | 0.44 | 0.07 | 3.1 | < 0.02 | 0.51 |
| 1995/77 | SW1992/215 | 24.2 | 0.82 | ND | ND | < 0.07 | 6.6 | 36 | 0.81 | 19 | 0.82 | 0.32 | 43 | 0.06 | 0.89 |
| 1995/1122 | CORK 2 | 27.1 | 0.34 | ND | ND | < 0.07 | 7.4 | 19 | 0.55 | 2.9 | 0.22 | 0.17 | 2.8 | < 0.02 | 0.38 |
| 1995/1124 | CORK 3 | 31.1 | 0.53 | ND | ND | < 0.07 | 4.3 | 26 | 0.34 | 3.5 | 1.1 | 0.27 | 4.7 | < 0.02 | 0.53 |
| 1995/1126 | CORK 5 | 27.1 | 0.52 | ND | ND | < 0.07 | 5.7 | 41 | 0.49 | 1.9 | 0.57 | 0.07 | 2.9 | 0.04 | 0.60 |
| 1995/79 | SW1993/12 | 25.0 | 0.85 | ND | ND | 0.23 | 8.6 | 36 | 0.82 | 4.9 | 1.4 | 0.75 | 10 | 0.04 | 0.80 |
| 1995/81 | SW1993/20 | 25.0 | 0.85 | ND | ND | 0.09 | 4.6 | 34 | 0.4 | 12 | 0.39 | 0.04 | 28 | 0.03 | 0.92 |
| 1995/1128 | SW1993/27 | 26.7 | 0.51 | ND | ND | < 0.07 | 4.9 | 38 | 0.81 | 23 | 1.4 | 0.39 | 72 | 0.1 | 1.23 |
| 1995/83 | SW1993/30 | 26.0 | 0.69 | ND | ND | 0.2 | 6.5 | 79 | 0.37 | 2.1 | 0.43 | 0.44 | 2.8 | 0.04 | 0.52 |
| 1995/85 | SW1993/31 | 28.0 | 1.6 | ND | ND | 0.27 | 6.4 | 57 | 0.38 | 7.5 | 1.2 | 0.09 | 19 | 0.04 | 1.00 |
| 1995/194 | SW1993/36 | 24.8 | 0.72 | ND | ND | < 0.07 | 4.6 | 41 | 0.89 | 4.7 | 0.65 | 0.08 | 8.5 | 0.05 | 0.71 |
| 1995/628 | SW1993/41 | 28.8 | 0.27 | ND | ND | < 0.09 | 22 | 81 | 0.9 | 18 | 0.26 | 0.24 | 26 | 0.16 | 0.57 |
| 1995/203 | SW1993/63 | 33.0 | 1.4 | ND | ND | 0.32 | 9.9 | 170 | 0.49 | 8.3 | 0.2 | 0.24 | 19 | 0.08 | 0.90 |
| 1995/1209 | SW1993/70 | 29.4 | 0.39 | ND | ND | < 0.07 | 12 | 48 | 0.55 | 2.1 | 0.15 | 0.48 | 3.3 | < 0.02 | 0.62 |
| 1995/1515 | SW1993/78 | 33.8 | 0.63 | ND | ND | 0.75 | 5.6 | 41 | 2.5 | 98 | 0.74 | 6.2 | 248 | 0.05 | 1.00 |
| 1995/1211 | SW1993/94 | 31.2 | 0.49 | ND | ND | < 0.07 | 9.2 | 42 | 0.32 | 7.9 | 0.16 | 0.03 | 17 | 0.27 | 0.85 |
| 1995/630 | SW1993/107 | 29.4 | 0.37 | ND | ND | < 0.06 | 59 | 52 | 0.23 | 1.2 | 0.35 | < 0.02 | 0.48 | 0.05 | 0.16 |
| 1995/196 | SW1993/122 | 21.0 | 0.4 | ND | ND | 0.17 | 11 | 57 | 0.79 | 34 | 0.25 | 0.48 | 56 | 0.35 | 0.65 |
| 1995/1213 | SW1993/126 | 33.8 | 0.56 | ND | ND | < 0.07 | 11 | 153 | 0.25 | 1.3 | 0.54 | 0.11 | 1.1 | < 0.02 | 0.33 |
| 1995/199 | SW1993/131 | 29.0 | 0.3 | ND | ND | 0.08 | 4.7 | 44 | 0.27 | 0.94 | 0.17 | < 0.02 | 1.3 | < 0.02 | 0.54 |
| 1995/205 | SW1993/133A | 27.0 | 1.0 | ND | ND | 0.22 | 12 | 56 | 0.97 | 29 | 0.15 | 0.31 | 57 | 0.15 | 0.77 |
| 1995/1461 | SW1993/135 | 22.6 | 0.37 | ND | ND | 0.13 | 14 | 27 | 0.26 | 1.1 | 0.67 | 0.04 | 0.55 | 0.02 | 0.20 |
| 1998/7004 | SW1994/5 | 33.3 | 0.34 | ND | 660 | 0.35 | 11 | 61 | 0.67 | 24 | 1.6 | 5.9 | 43 | 0.16 | 0.71 |
| 1995/207 | SW1994/7 | 27.0 | 1.5 | ND | ND | 0.13 | 6.3 | 120 | 0.47 | 4.5 | 0.63 | 0.52 | 10 | 0.02 | 0.87 |
| 1995/323 | SW1994/12 | 29.0 | 1.7 | ND | ND | 0.85 | 13 | 62 | 0.59 | 5.6 | 0.44 | 0.18 | 5.9 | 0.08 | 0.41 |
| 1995/325 | SW1994/31 | 32.5 | 0.86 | ND | ND | 0.4 | 25 | 125 | 0.54 | 6.6 | 1.4 | 0.13 | 6.4 | 0.21 | 0.38 |
| 1995/327 | SW1994/32 | 33.1 | 0.93 | ND | ND | 0.38 | 16 | 73 | 0.92 | 5.0 | 0.29 | 0.18 | 4.9 | 0.17 | 0.39 |
| 1995/1463 | SW1994/38 | 26.8 | 0.28 | ND | ND | 0.07 | 8.6 | 43 | 0.72 | 9.6 | 0.2 | 0.14 | 15 | 0.37 | 0.62 |
| 1998/7012 | SW1994/39 | 29.9 | 0.26 | ND | 337 | 0.71 | 5.2 | 37 | 0.36 | 4.6 | 0.08 | 0.2 | 2.6 | 0.17 | 0.22 |
| 1995/927 | SW1994/44 | 28.3 | 0.84 | ND | ND | 0.14 | 6.3 | 29 | 0.51 | 11 | 0.56 | 0.18 | 30 | 0.46 | 1.07 |
| 1995/3739 | SW1994/45A | 25.2 | 0.4 | ND | ND | 0.11 | 6.2 | 35 | 0.65 | 4.9 | 1.1 | 0.44 | 9.3 | 0.53 | 0.75 |
| 1995/1464 | SW1994/45B | 25.2 | 0.45 | ND | ND | 0.23 | 9.4 | 110 | 0.74 | 6.0 | 1.4 | 0.54 | 13 | 0.05 | 0.85 |
| 1995/329 | SW1994/53 | 32.1 | 3.6 | ND | ND | 0.97 | 27 | 69 | 2.7 | 79 | 0.24 | 0.46 | 116 | 1.1 | 0.58 |
| 1995/331 | SW1994/53 foetus | 18.9 | 1.5 | ND | ND | 0.49 | 3.2 | 34 | 0.22 | 1.2 | 0.21 | < 0.02 | 0.25 | 0.08 | 0.08 |
| 1995/333 | SW1994/67 | 31.3 | 0.63 | ND | ND | 0.14 | 18 | 47 | 0.82 | 1.8 | 0.88 | 0.06 | 1.2 | 0.09 | 0.26 |
| 1995/335 | SW1994/68 | 29.2 | 0.65 | ND | ND | 0.09 | 17 | 46 | 0.82 | 2.5 | 0.95 | 0.11 | 0.67 | 0.2 | 0.11 |
| 1995/631 | SW1994/72 | 31.4 | 0.63 | ND | ND | 0.12 | 11 | 177 | 0.71 | 8.2 | 0.34 | 0.65 | 11 | 0.07 | 0.53 |
| 1995/935 | SW1994/77 | 33.3 | 0.46 | ND | ND | 0.37 | 9.8 | 31 | 0.94 | 2.8 | 1.4 | 0.05 | 4.0 | 0.12 | 0.56 |
| 1995/937 | SW1994/78 | 36.4 | 0.35 | ND | ND | 0.15 | 12 | 38 | 0.73 | 3.5 | 0.17 | 0.03 | 5.4 | 0.09 | 0.61 |
| 1995/321 | SW1994/7A | 29.2 | 0.31 | ND | ND | < 0.06 | 7.1 | 58 | 0.88 | 20 | 0.22 | 0.38 | 69 | 0.22 | 1.36 |

Table 4.2. continued: Concentrations of trace elements in liver
(mg kg⁻¹ wet weight).

| LSN | Reference no. | TS% | Cr | Mn | Fe | Ni | Cu | Zn | As | Se | Ag | Cd | Hg | Pb | Hg:Se |
|-----------|---------------|------|------|-----|-----|--------|-----|-----|------|------|------|--------|------|--------|-------|
| 1995/633 | SW1994/80 | 26.9 | 0.2 | ND | ND | < 0.08 | 9.6 | 96 | 0.41 | 6.9 | 0.01 | 0.09 | 0.31 | < 0.06 | 0.02 |
| 1995/939 | SW1994/83 | 39.8 | 0.47 | ND | ND | 0.14 | 21 | 59 | 0.29 | 0.94 | 0.15 | < 0.01 | 1.1 | 0.03 | 0.46 |
| 1995/1466 | SW1994/99 | 26.0 | 0.46 | ND | ND | 0.19 | 5.8 | 29 | 0.44 | 1.3 | 0.88 | 0.03 | 1.6 | 0.15 | 0.48 |
| 1995/1468 | SW1994/101 | 21.9 | 0.43 | ND | ND | 0.22 | 43 | 33 | 0.14 | 0.89 | 0.66 | < 0.02 | 1.0 | 0.19 | 0.44 |
| 1995/1470 | SW1994/105 | 29.6 | 0.5 | ND | ND | 0.15 | 55 | 36 | 0.27 | 1.1 | 0.5 | < 0.02 | 0.91 | 0.07 | 0.33 |
| 1995/941 | SW1994/108 | 43.2 | 0.49 | ND | ND | 0.18 | 84 | 24 | 0.27 | 4.9 | 0.67 | < 0.01 | 2.0 | 0.13 | 0.16 |
| 1995/943 | SW1994/114 | 28.2 | 0.41 | ND | ND | 0.07 | 138 | 52 | 0.3 | 1.9 | 1.1 | < 0.01 | 1.2 | 0.07 | 0.25 |
| 1995/1502 | SW1994/115 | 34.2 | 0.85 | ND | ND | 0.25 | 27 | 125 | 0.1 | 0.75 | 0.27 | < 0.02 | 0.84 | 0.07 | 0.44 |
| 1995/1506 | SW1994/120 | 29.1 | 0.29 | ND | ND | 0.06 | 29 | 43 | 0.1 | 0.61 | 0.46 | < 0.01 | 0.94 | 0.03 | 0.61 |
| 1995/635 | SW1994/133 | 21.5 | 0.18 | ND | ND | < 0.09 | 4.1 | 21 | 0.39 | 5.3 | 1.3 | 0.03 | 11 | < 0.07 | 0.82 |
| 1995/637 | SW1994/143 | 23.3 | 0.26 | ND | ND | < 0.09 | 25 | 89 | 0.15 | 0.96 | 0.4 | < 0.02 | 0.18 | < 0.07 | 0.07 |
| 1995/1496 | SW1994/145 | 27.0 | 0.45 | ND | ND | 0.17 | 81 | 28 | 0.62 | 1.2 | 0.85 | < 0.01 | 0.89 | 0.06 | 0.29 |
| 1995/1498 | SW1994/148 | 28.9 | 0.54 | ND | ND | 0.21 | 6.8 | 34 | 0.53 | 1.6 | 0.91 | 0.05 | 1.1 | 0.04 | 0.27 |
| 1995/921 | SW1994/153 | 29.1 | 1.0 | ND | ND | 0.32 | 9.7 | 25 | 0.67 | 20 | 0.12 | 0.2 | 59 | 0.13 | 1.16 |
| 1995/923 | SW1994/171 | 26.6 | 0.6 | ND | ND | 0.1 | 3.9 | 36 | 0.83 | 6.7 | 0.64 | 0.14 | 21 | 0.1 | 1.23 |
| 1995/1500 | SW1994/172 | 29.6 | 0.69 | ND | ND | 1.1 | 27 | 37 | 6.8 | 1.0 | 1.7 | 0.11 | 0.02 | 0.05 | 0.01 |
| 1995/925 | SW1994/185 | 28.0 | 0.55 | ND | ND | 0.13 | 5.0 | 43 | 0.5 | 11 | 0.12 | 0.15 | 16 | 0.11 | 0.57 |
| 1995/319 | MI5005 | 31.4 | 0.79 | ND | ND | 0.39 | 2.3 | 34 | 0.71 | 11 | ND | 30 | 34 | 0.11 | 1.22 |
| 1995/1216 | SW1995/54 | 23.9 | 0.81 | ND | ND | < 0.07 | 8.3 | 48 | 0.62 | 31 | 0.89 | 3.7 | 88 | < 0.02 | 1.12 |
| 2001/2982 | SW1995/68 | 30.1 | 0.16 | 3.4 | 309 | 0.17 | 74 | 40 | 0.19 | 0.54 | 0.3 | < 0.03 | 0.72 | 0.24 | 0.52 |
| 2001/3571 | SW1995/120b | 30.2 | 0.16 | 4.6 | 464 | 0.11 | 10 | 80 | 0.55 | 2.7 | 0.67 | 0.17 | 2.6 | 0.04 | 0.38 |
| 2001/2983 | SW1995/141 | 32.5 | 0.12 | 9.1 | 117 | 0.09 | 15 | 65 | 0.4 | 3.5 | 1.0 | 0.18 | 5.5 | 0.07 | 0.62 |
| 2001/2984 | SW1996/44 | 28.9 | 0.15 | 9.6 | 302 | 0.1 | 9.3 | 43 | 0.83 | 1.4 | 0.14 | 0.33 | 0.74 | 0.08 | 0.21 |
| 1999/1286 | SW1996/46 | 26.6 | 0.2 | ND | 499 | < 0.04 | 4.8 | 91 | 0.13 | 4.4 | 0.7 | 0.11 | 15 | 0.03 | 1.34 |
| 2001/3572 | SW1996/50b | 31.3 | 0.08 | 7.3 | 475 | 0.04 | 19 | 54 | 0.9 | 4.8 | 2.8 | 0.24 | 3.9 | 0.06 | 0.32 |
| 2001/2985 | SW1996/60 | 27.7 | 0.06 | 3.7 | 222 | < 0.04 | 4.8 | 25 | 0.48 | 9.8 | 0.88 | 0.29 | 23 | 0.05 | 0.92 |
| 2000/3623 | SW1996/67 | 32.4 | 0.52 | ND | 190 | 0.3 | 9.0 | 42 | 0.61 | 2.6 | 0.68 | 0.13 | 1.0 | 0.06 | 0.15 |
| 2001/3573 | SW1996/84e | 33.8 | 1.1 | 11 | 365 | 0.72 | 8.6 | 66 | 0.41 | 2.6 | 0.35 | 0.18 | 3.4 | 0.08 | 0.51 |
| 2000/3624 | SW1996/87 | 31.6 | 0.71 | ND | 243 | 0.46 | 11 | 83 | 0.55 | 2.5 | 0.53 | 0.3 | 3.7 | 0.07 | 0.58 |
| 1999/1288 | SW1996/101 | 31.5 | 0.19 | ND | 233 | < 0.04 | 11 | 54 | 0.2 | 3.0 | 0.96 | 0.49 | 9.7 | 0.04 | 1.27 |
| 2000/3625 | SW1996/111 | 43.9 | 0.74 | ND | 251 | 0.5 | 52 | 43 | 0.15 | 1.5 | 0.21 | < 0.02 | 1.0 | 0.06 | 0.26 |
| 2000/3626 | SW1996/119 | 32.2 | 0.25 | ND | 317 | 0.14 | 10 | 35 | 0.52 | 11 | 1.0 | 0.31 | 23 | 0.47 | 0.82 |
| 1998/7008 | SW1996/121 | 26.5 | 0.52 | ND | 214 | 0.53 | 5.4 | 37 | 0.73 | 56 | 0.61 | 0.99 | 146 | < 0.04 | 1.03 |
| 2001/3574 | SW1996/147a | 25.7 | 0.16 | 4.0 | 302 | 0.09 | 8.4 | 68 | 0.32 | 4.6 | 0.83 | 0.64 | 9.7 | 0.03 | 0.83 |
| 1999/1307 | SW1996/150 | 25.7 | 0.26 | ND | 338 | < 0.04 | 10 | 149 | 0.06 | 1.3 | 2.8 | 0.03 | 3.0 | 0.05 | 0.91 |
| 1999/1308 | SW1996/160 | 26.7 | 0.21 | ND | 209 | 0.07 | 5.4 | 51 | 0.45 | 7.8 | 3.5 | 0.47 | 26 | 0.04 | 1.31 |
| 1998/7001 | SW1996/162 | 28.1 | 0.35 | ND | 896 | 0.49 | 4.9 | 50 | 1.9 | 123 | 2.0 | 48 | 259 | 0.39 | 0.83 |
| 2000/3627 | SW1996/163 | 31.5 | 0.22 | ND | 467 | 0.12 | 14 | 59 | 0.35 | 37 | 3.6 | 0.11 | 8.6 | 0.18 | 0.09 |
| 2001/3575 | SW1996/169a | 32.9 | 0.11 | 6.4 | 568 | 0.05 | 12 | 43 | 0.48 | 4.4 | 2.7 | 0.32 | 4.7 | 0.04 | 0.42 |
| 2000/3628 | SW1996/174 | 29.1 | 0.12 | ND | 377 | < 0.03 | 5.4 | 52 | 0.49 | 7.6 | 0.27 | 0.15 | 15 | 0.06 | 0.78 |
| 2000/3629 | SW1997/1 | 28.7 | 0.28 | ND | 355 | 0.09 | 5.8 | 88 | 0.4 | 15 | 0.59 | 0.06 | 4.3 | 0.03 | 0.11 |
| 2000/3630 | SW1997/2 | 31.0 | 0.26 | ND | 481 | 0.18 | 8.3 | 29 | 0.77 | 3.4 | 0.58 | 0.17 | 3.8 | 0.03 | 0.44 |
| 2000/3631 | SW1997/5 | 40.8 | 0.27 | ND | 328 | 0.07 | 5.9 | 27 | 0.95 | 1.6 | 0.38 | 0.19 | 0.18 | 0.04 | 0.04 |
| 1999/1309 | SW1997/21A | 27.5 | 0.23 | ND | 388 | < 0.05 | 5.3 | 103 | 0.37 | 2.7 | 1.2 | < 0.05 | 5.0 | 1.0 | 0.73 |
| 2001/2986 | SW1997/36 | 28.6 | 0.1 | 5.8 | 480 | < 0.05 | 4.7 | 38 | 0.82 | 15 | 0.9 | 0.14 | 45 | 0.05 | 1.18 |
| 2001/3577 | SW1997/67f | 27.0 | 0.29 | 6.6 | 328 | 0.16 | 6.4 | 39 | 1.4 | 1.5 | 1.1 | 0.03 | 1.2 | 0.03 | 0.31 |
| 1998/7039 | SW1997/72 | 25.4 | 1.6 | ND | 234 | 0.82 | 14 | 36 | 1.6 | 1.7 | 1.3 | 0.19 | 1.1 | 0.05 | 0.25 |
| 1998/7040 | SW1997/80 | 26.2 | 1.2 | ND | 316 | 0.67 | 7.6 | 39 | 0.46 | 2.4 | 0.13 | 0.54 | 2.7 | 0.04 | 0.44 |
| 1998/7041 | SW1997/81 | 24.1 | 0.95 | ND | 310 | 0.29 | 8.8 | 34 | 0.39 | 4.6 | 2.8 | 0.16 | 4.4 | 0.05 | 0.38 |
| 1998/7042 | SW1997/87 | 26.6 | 0.68 | ND | 538 | 0.11 | 19 | 111 | 0.28 | 7.5 | 3.1 | 0.7 | 13 | 0.06 | 0.68 |
| 1998/7043 | SW1997/89 | 26.4 | 0.69 | ND | 329 | 0.1 | 80 | 58 | 0.09 | 1.9 | 0.75 | < 0.02 | 1.5 | < 0.02 | 0.31 |
| 1998/7044 | SW1997/91 | 23.7 | 0.8 | ND | 230 | 0.2 | 46 | 66 | 0.07 | 0.86 | 0.57 | < 0.02 | 1.5 | < 0.02 | 0.69 |
| 1998/7045 | SW1997/93 | 43.4 | 1.5 | ND | 145 | 0.25 | 16 | 39 | 1.1 | 29 | 8.5 | 0.13 | 45 | 0.24 | 0.61 |

Table 4.2. continued: Concentrations of trace elements in liver
(mg kg⁻¹ wet weight).

| LSN | Reference no. | TS% | Cr | Mn | Fe | Ni | Cu | Zn | As | Se | Ag | Cd | Hg | Pb | Hg:Se |
|-----------|---------------------|------|--------|-----|------|--------|-----|-----|--------|------|--------|--------|------|--------|-------|
| 1998/7046 | SW1997/93 foetus | 28.0 | 1.1 | ND | 448 | 0.41 | 77 | 56 | 0.15 | 2.1 | 0.59 | < 0.02 | 1.7 | 0.04 | 0.32 |
| 2001/3578 | SW1997/93b | 31.0 | 0.08 | 7.5 | 141 | 0.04 | 12 | 45 | 0.4 | 1.7 | 0.85 | 0.09 | 1.0 | 0.03 | 0.23 |
| 1998/7047 | SW1997/94 | 31.5 | 1.0 | ND | 128 | 0.29 | 6.8 | 48 | 0.64 | 31 | 2.1 | 0.26 | 69 | 0.2 | 0.88 |
| 1998/7048 | SW1997/96 | 32.9 | 0.93 | ND | 140 | 0.23 | 17 | 53 | 1.2 | 42 | 2.7 | 0.42 | 49 | 0.53 | 0.46 |
| 1998/7049 | SW1997/97 | 31.1 | 0.84 | ND | 216 | 0.19 | 65 | 58 | 0.47 | 0.64 | 0.5 | < 0.03 | 0.97 | 0.05 | 0.60 |
| 2001/3579 | SW1997/97a | 26.8 | 0.09 | 4.2 | 423 | 0.05 | 6.2 | 28 | 0.31 | 4.2 | 0.34 | 0.14 | 9.4 | 0.02 | 0.88 |
| 1998/7050 | SW1997/102 | 28.2 | 0.58 | ND | 340 | 0.22 | 28 | 38 | < 0.12 | 0.56 | 0.32 | < 0.03 | 0.79 | < 0.03 | 0.56 |
| 1998/7051 | SW1997/103 | 28.3 | 0.83 | ND | 300 | 0.24 | 5.6 | 110 | 0.19 | 1.2 | < 0.06 | 0.03 | 2.3 | 0.11 | 0.75 |
| 1998/7052 | SW1997/111 | 31.1 | 0.98 | ND | 349 | 0.09 | 10 | 30 | 0.37 | 4.3 | 2.4 | 0.09 | 9.3 | 0.07 | 0.85 |
| 1998/7053 | SW1997/113 | 28.4 | 0.66 | ND | 147 | 0.18 | 123 | 79 | 0.12 | 1.5 | 0.4 | < 0.03 | 1.9 | 0.05 | 0.50 |
| 1998/7054 | SW1997/118 | 24.3 | 0.29 | ND | 613 | 0.07 | 6.2 | 78 | 0.44 | 11 | 4.2 | 0.27 | 34 | 0.09 | 1.22 |
| 2001/3580 | SW1997/124a | 33.0 | 0.07 | 5.3 | 262 | < 0.04 | 12 | 33 | 0.61 | 11 | 2.5 | 0.78 | 22 | 0.02 | 0.79 |
| 2001/3581 | SW1997/135f | 26.5 | 0.08 | 5.3 | 313 | < 0.04 | 4.7 | 33 | 0.48 | 1.3 | 0.57 | 0.09 | 1.4 | < 0.01 | 0.42 |
| 1998/7055 | SW1997/138 | 32.0 | 0.31 | ND | 421 | 0.04 | 7.8 | 46 | 0.23 | 2.8 | 1.6 | < 0.03 | 5.9 | 0.05 | 0.83 |
| 1998/7056 | SW1997/141 | 27.4 | 0.35 | ND | 442 | 0.09 | 6.9 | 41 | 0.31 | 1.8 | 0.66 | 0.21 | 2.9 | < 0.02 | 0.63 |
| 1998/7057 | SW1997/142 | 28.7 | 0.3 | ND | 260 | < 0.03 | 8.4 | 34 | 0.22 | 6.4 | 0.53 | 0.48 | 19 | < 0.02 | 1.17 |
| 1998/7058 | SW1997/142b | 28.8 | 0.59 | ND | 334 | 0.67 | 7.7 | 36 | 0.55 | 3.1 | 1.8 | 0.23 | 6.2 | 0.08 | 0.79 |
| 1998/7059 | SW1997/152 | 24.8 | 0.25 | ND | 563 | 0.05 | 36 | 217 | 0.39 | 8.4 | 4.6 | 0.05 | 16 | 0.08 | 0.75 |
| 1998/7000 | SW1997/159 | 31.4 | 0.57 | ND | 1450 | 0.68 | 9.5 | 21 | 0.18 | 17 | 0.35 | 3.2 | 14 | 0.08 | 0.32 |
| 2001/3582 | SW1997/161a | 27.3 | 0.09 | 5.3 | 380 | < 0.04 | 7.7 | 32 | 0.34 | 3.0 | 0.92 | 0.22 | 6.0 | < 0.02 | 0.79 |
| 1998/7003 | SW1997/162 | 26.5 | 0.25 | ND | 2680 | 0.31 | 4.7 | 45 | < 0.13 | 2.1 | < 0.07 | 0.1 | 0.74 | < 0.05 | 0.14 |
| 1998/7060 | SW1997/173 | 31.2 | 0.39 | ND | 538 | 0.05 | 6.3 | 107 | 0.46 | 3.7 | 0.26 | 0.09 | 5.3 | < 0.03 | 0.56 |
| 1999/1324 | SW1997/174 | 30.7 | 0.2 | ND | 368 | < 0.05 | 5.8 | 118 | 0.13 | 3.7 | 2.2 | 0.09 | 1.1 | 0.05 | 0.12 |
| 1999/1310 | SW1997/178 | 24.3 | 0.22 | ND | 350 | < 0.05 | 5.0 | 43 | 0.55 | 17 | 3.3 | 0.56 | 22 | < 0.04 | 0.51 |
| 2001/3583 | SW1997/178c | 30.9 | 0.12 | 4.0 | 166 | 0.04 | 11 | 76 | 0.54 | 9.9 | 0.54 | 0.33 | 24 | 0.02 | 0.95 |
| 1998/7062 | SW1997/186(1) | 31.0 | 0.22 | ND | 357 | < 0.04 | 25 | 110 | 0.93 | 2.7 | 1.7 | 0.11 | 1.9 | 0.2 | 0.28 |
| 1998/7063 | SW1997/186(2) | 27.3 | 0.25 | ND | 158 | < 0.04 | 5.6 | 129 | 1.9 | 49 | 3.6 | 0.8 | 69 | 0.09 | 0.55 |
| 2000/3632 | SW1998/1 | 30.9 | 0.11 | ND | 445 | < 0.04 | 6.9 | 33 | 0.77 | 5.7 | 1.2 | 0.21 | 9.3 | < 0.03 | 0.64 |
| 1998/7064 | SW1998/4 | 25.4 | 0.17 | ND | 145 | < 0.03 | 6.3 | 31 | 0.64 | 2.8 | 0.52 | 0.06 | 0.72 | 0.05 | 0.10 |
| 2000/3633 | SW1998/16 | 26.3 | 0.17 | ND | 478 | < 0.04 | 16 | 34 | 0.32 | 1.4 | 0.89 | 0.13 | 0.34 | < 0.02 | 0.10 |
| 2000/3634 | SW1998/21 | 85.9 | 0.14 | ND | 91 | 0.11 | 3.9 | 16 | 0.45 | 2.3 | 1.4 | 0.3 | 1.5 | 0.04 | 0.26 |
| 1998/7065 | SW1998/50 | 28.2 | 0.21 | ND | 225 | < 0.03 | 18 | 67 | 0.23 | 1.6 | 5.9 | 0.05 | 1.4 | 0.03 | 0.34 |
| 1999/1311 | SW1998/53 | 30.8 | 0.25 | ND | 356 | < 0.18 | 7.5 | 26 | 1.7 | 1.6 | 0.18 | 0.17 | 0.74 | 0.05 | 0.18 |
| 2001/3584 | SW1998/56a | 29.3 | 0.06 | 8.4 | 265 | 0.05 | 24 | 192 | 0.65 | 3.5 | 0.58 | 0.48 | 9.3 | 0.02 | 1.05 |
| 1998/7066 | SW1998/71 | 29.9 | 0.2 | ND | 212 | < 0.03 | 13 | 51 | 0.93 | 7.4 | 3.8 | 1.4 | 20 | 0.03 | 1.06 |
| 1998/7067 | SW1998/75 | 30.3 | 0.25 | ND | 436 | 0.05 | 13 | 44 | 1.3 | 1.7 | 2.1 | 0.43 | 0.46 | 0.03 | 0.11 |
| 1998/7068 | SW1998/76 | 26.7 | 0.62 | ND | 417 | 0.12 | 4.5 | 76 | 0.96 | 10 | 1.6 | 0.54 | 12 | < 0.02 | 0.47 |
| 1998/6999 | SW1998/81 | 30.9 | 1.7 | ND | 172 | 1.0 | 19 | 83 | 2.3 | 133 | 5.5 | 20 | 322 | 0.11 | 0.95 |
| 2000/3703 | SW1998/90 | 28.9 | < 0.06 | ND | 280 | < 0.08 | 4.6 | 27 | 1.9 | 11 | 0.71 | 0.7 | 37 | 0.16 | 1.32 |
| 1998/7069 | SW1998/97 | 28.5 | 0.25 | ND | 283 | < 0.04 | 17 | 82 | 0.85 | 1.7 | 0.14 | 0.05 | 0.94 | < 0.03 | 0.22 |
| 1998/7009 | SW1998/104 | 24.6 | 0.21 | ND | 320 | 0.31 | 9.7 | 58 | 0.6 | 42 | 2.4 | 0.38 | 102 | 0.05 | 0.96 |
| 1998/7070 | SW1998/115 | 28.8 | 0.36 | ND | 326 | < 0.03 | 9.1 | 27 | 0.12 | 15 | 4.1 | 0.28 | 43 | 0.03 | 1.13 |
| 1998/7071 | SW1998/116 | 28.5 | 0.33 | ND | 345 | 0.12 | 50 | 108 | 0.86 | 1.7 | 0.35 | < 0.03 | 2.9 | 0.04 | 0.67 |
| 2001/3585 | SW1998/123a | 32.3 | 0.09 | 4.8 | 110 | 0.04 | 4.7 | 59 | 0.39 | 4.1 | 1.9 | 0.38 | 6.4 | < 0.01 | 0.61 |
| 1998/7072 | SW1998/127 | 26.9 | 0.31 | ND | 252 | 0.03 | 41 | 52 | 0.53 | 1.1 | 0.43 | < 0.02 | 1.6 | 0.02 | 0.57 |
| 1998/7073 | SW1998/129 | 25.2 | 0.37 | ND | 390 | < 0.03 | 9.3 | 43 | 0.28 | 31 | 19 | 0.14 | 78 | 0.1 | 0.99 |
| 2000/3635 | SW1998/135 | 27.0 | 0.38 | ND | 65 | 0.13 | 68 | 49 | 0.39 | 0.99 | 0.18 | < 0.02 | 0.47 | 0.02 | 0.19 |
| 1998/7074 | SW1998/139 | 29.8 | 0.42 | ND | 442 | < 0.02 | 63 | 54 | 0.07 | 2.1 | 0.72 | < 0.03 | 3 | < 0.02 | 0.56 |
| 1998/7075 | SW1998/145 | 35.7 | 0.51 | ND | 280 | < 0.02 | 20 | 56 | 0.22 | 0.95 | 0.44 | < 0.03 | 1.7 | < 0.02 | 0.70 |
| 2000/3636 | SW1998/149 | 34.3 | 0.59 | ND | 519 | 0.89 | 6.9 | 37 | 0.35 | 5.2 | 0.2 | 0.27 | 15 | < 0.04 | 1.14 |
| 1998/7006 | SW1998/154 | 30 | 0.34 | ND | 459 | 0.34 | 7.5 | 34 | 0.43 | 19 | 2.5 | < 0.03 | 12 | 0.36 | 0.25 |
| 1999/3869 | SW1998/164 | 25.7 | < 0.13 | ND | 685 | 0.16 | 20 | 149 | 0.45 | 8.2 | 1.1 | 0.14 | 19 | 0.05 | 0.91 |

Table 4.2. continued: Concentrations of trace elements in liver (mg kg⁻¹ wet weight).

| LSN | Reference no. | TS% | Cr | Mn | Fe | Ni | Cu | Zn | As | Se | Ag | Cd | Hg | Pb | Hg:Se |
|-----------|---------------|------|--------|-----|-----|--------|-----|-----|--------|------|------|--------|------|--------|-------|
| 1998/7076 | SW1998/167A | 24.7 | 0.35 | ND | 475 | 0.05 | 7.2 | 134 | 0.21 | 2.5 | 0.33 | 0.04 | 7.4 | < 0.02 | 1.17 |
| 2000/3637 | SW1998/170 | 26.7 | 0.46 | ND | 630 | 0.56 | 9.6 | 55 | < 0.12 | 3.7 | 0.45 | 0.16 | 12 | < 0.05 | 1.28 |
| 1999/3870 | SW1998/171 | 29.1 | < 0.09 | ND | 207 | 0.08 | 10 | 44 | 1.1 | 1.8 | 0.36 | 0.06 | 1.5 | 0.09 | 0.33 |
| 2000/3638 | SW1998/174 | 28.2 | 0.18 | ND | 518 | 0.44 | 7.3 | 41 | 0.52 | 11 | 0.91 | 0.12 | 44 | 0.09 | 1.57 |
| 1998/7077 | SW1998/179 | 25.0 | 0.33 | ND | 402 | 0.03 | 6.8 | 83 | 0.06 | 1.7 | 1.0 | 0.05 | 3.0 | 0.03 | 0.69 |
| 1998/7078 | SW1998/183 | 36.7 | 0.5 | ND | 125 | 0.23 | 10 | 48 | 0.5 | 5.9 | 2.9 | 0.03 | 13 | 0.08 | 0.87 |
| 1999/1312 | SW1998/187 | 27.1 | 0.22 | ND | 576 | < 0.16 | 14 | 80 | 0.28 | 10 | 9.8 | 1.1 | 40 | 0.03 | 1.57 |
| 1999/1313 | SW1998/191 | 28.0 | 0.21 | ND | 443 | < 0.05 | 7.5 | 143 | 0.45 | 13 | 3.8 | 0.16 | 20 | < 0.04 | 0.61 |
| 1999/1314 | SW1998/198 | 29.6 | 0.22 | ND | 278 | < 0.06 | 6.8 | 41 | 0.6 | 6.7 | 2.5 | 0.13 | 10 | < 0.05 | 0.59 |
| 1999/1315 | SW1998/208 | 30.2 | 0.2 | ND | 292 | < 0.06 | 15 | 63 | 1.1 | 2.3 | 0.65 | 1.0 | 2.6 | < 0.05 | 0.45 |
| 1999/1316 | SW1999/10 | 29.5 | 0.41 | ND | 435 | < 0.07 | 15 | 97 | 1.3 | 45 | 4.6 | 0.6 | 80 | < 0.06 | 0.70 |
| 1999/1317 | SW1999/17 | 28.3 | 0.18 | ND | 411 | < 0.05 | 6.9 | 36 | 1.9 | 3.3 | 0.17 | 0.26 | 1.5 | < 0.04 | 0.18 |
| 1999/1318 | SW1999/26 | 30.8 | 0.25 | ND | 512 | < 0.05 | 7.2 | 42 | 0.91 | 2.3 | 0.1 | < 0.06 | 1.4 | < 0.04 | 0.24 |
| 2000/3704 | SW1999/31 | 26.4 | < 0.06 | ND | 281 | < 0.08 | 14 | 155 | 1.3 | 3.1 | 0.09 | 0.13 | 0.53 | < 0.05 | 0.07 |
| 1999/1319 | SW1999/40 | 30.1 | 0.21 | ND | 83 | < 0.06 | 6.6 | 29 | 0.47 | 22 | 3.7 | < 0.06 | 38 | < 0.05 | 0.68 |
| 2000/3705 | SW1999/45 | 26.0 | 0.25 | ND | 953 | < 0.05 | 36 | 45 | 0.06 | 0.56 | 0.15 | < 0.03 | 0.05 | < 0.02 | 0.04 |
| 1999/1320 | SW1999/48 | 27.5 | 0.18 | ND | 215 | < 0.05 | 10 | 31 | 0.64 | 1.4 | 1.1 | < 0.03 | 1.3 | 0.03 | 0.37 |
| 2001/3587 | SW1999/48c | 23.7 | 0.05 | 5.2 | 151 | < 0.04 | 11 | 63 | 0.56 | 4.8 | 1.7 | 2.2 | 9.1 | 0.02 | 0.75 |
| 2001/3588 | SW1999/57a | 30.4 | 0.07 | 5.9 | 412 | < 0.04 | 41 | 94 | 0.82 | 4.4 | 1.2 | 0.55 | 5.4 | 0.04 | 0.48 |
| 2000/3639 | SW1999/60 | 30.3 | 1.17 | ND | 213 | 0.81 | 11 | 42 | 0.72 | 1.9 | 0.79 | < 0.03 | 1.6 | < 0.04 | 0.33 |
| 2000/3640 | SW1999/63 | 30.0 | 0.46 | ND | 319 | 0.19 | 12 | 41 | 0.85 | 1.6 | 0.95 | < 0.03 | 1.6 | < 0.03 | 0.39 |
| 1999/1321 | SW1999/71 | 25.4 | 0.23 | ND | 156 | < 0.05 | 6.6 | 54 | 0.54 | 2.7 | 0.56 | < 0.06 | 2.0 | < 0.04 | 0.29 |
| 2001/3589 | SW1999/72C.1 | 28.5 | 0.08 | 3.7 | 335 | < 0.04 | 5.8 | 29 | 0.53 | 2.5 | 0.73 | 0.21 | 4.1 | 0.09 | 0.65 |
| 2001/3590 | SW1999/72C.2 | 31.5 | 0.05 | 6.6 | 485 | < 0.04 | 6.1 | 51 | 0.61 | 1.5 | 0.25 | 0.03 | 1.5 | 0.11 | 0.39 |
| 1999/1322 | SW1999/74 | 26.5 | 0.18 | ND | 218 | < 0.03 | 8.1 | 42 | 0.77 | 1.6 | 0.95 | 0.3 | 0.86 | 0.07 | 0.21 |
| 1999/1323 | SW1999/77 | 27.8 | 0.21 | ND | 402 | < 0.02 | 10 | 36 | 0.66 | 3.3 | 1.4 | < 0.03 | 0.25 | 0.04 | 0.03 |
| 2001/3586 | SW1999/8b | 25.7 | 0.07 | 4.6 | 118 | < 0.03 | 11 | 37 | 1.3 | 21 | 12 | 0.17 | 42 | 0.12 | 0.79 |
| 1999/3841 | SW1999/96 | 30.0 | < 0.11 | ND | 206 | 0.17 | 9.7 | 41 | 1.1 | 1.5 | 0.32 | 0.11 | 1.5 | 0.09 | 0.39 |
| 2001/3591 | SW1999/96C | 28.6 | < 0.04 | 4.8 | 230 | < 0.04 | 8.4 | 46 | 0.33 | 3.8 | 2.2 | 0.22 | 9.4 | 0.03 | 0.97 |
| 2001/3592 | SW1999/121B | 24.1 | 0.19 | 5.7 | 96 | < 0.08 | 5.5 | 81 | 0.2 | 1.9 | 1.5 | 0.09 | 4.2 | 0.05 | 0.87 |
| 2000/3641 | SW1999/148 | 33.3 | 0.3 | ND | 302 | 0.29 | 103 | 41 | 0.2 | 1.5 | 0.53 | < 0.03 | 0.89 | < 0.04 | 0.23 |
| 2001/3593 | SW1999/148A | 27.0 | 0.05 | 5.9 | 545 | < 0.04 | 11 | 49 | 0.24 | 4.1 | 0.49 | 0.69 | 8.0 | < 0.02 | 0.77 |
| 2000/3642 | SW1999/172 | 28.4 | 0.16 | ND | 312 | 0.13 | 8.6 | 44 | 0.2 | 7.0 | 1.2 | 0.38 | 23 | < 0.04 | 1.29 |
| 2000/3517 | SW1999/174B | 27.2 | 0.18 | ND | 221 | 0.07 | 31 | 99 | 0.24 | 1.3 | 0.87 | < 0.02 | 3.7 | 0.05 | 1.12 |
| 2000/3518 | SW1999/189 | 27.0 | 0.1 | ND | 405 | 0.06 | 9.8 | 34 | 0.59 | 1.7 | 0.42 | 0.04 | 2.4 | < 0.01 | 0.56 |
| 2000/3519 | SW1999/192 | 29.3 | 0.59 | ND | 173 | 0.29 | 11 | 35 | 0.7 | 14 | 2.3 | 0.08 | 26 | 0.04 | 0.73 |
| 2001/3594 | SW1999/194a | 26.3 | 0.11 | 4.8 | 149 | < 0.04 | 5.3 | 50 | 0.22 | 0.65 | 0.12 | 0.05 | 0.73 | < 0.01 | 0.44 |
| 2000/3706 | SW1999/197 | 30.4 | 0.25 | ND | 753 | < 0.05 | 8.9 | 56 | 4.2 | 159 | 0.29 | 0.06 | 589 | 0.46 | 1.46 |
| 2000/3707 | SW1999/201A | 28.9 | 0.2 | ND | 128 | < 0.05 | 7.0 | 31 | 1.5 | 31 | 2.8 | 0.12 | 32 | 0.51 | 0.41 |
| 2000/3520 | SW1999/202 | 22.7 | 0.19 | ND | 133 | 0.12 | 35 | 22 | 0.44 | 0.69 | 0.44 | 0.02 | 0.64 | 0.01 | 0.37 |
| 2000/3521 | SW1999/208 | 25.2 | 0.11 | ND | 192 | 0.34 | 7.3 | 26 | 0.52 | 0.68 | 0.45 | < 0.02 | 0.6 | < 0.01 | 0.35 |
| 2000/3522 | SW2000/13 | 31.6 | 0.06 | ND | 545 | 0.07 | 27 | 34 | 0.54 | 1.2 | 0.8 | 0.04 | 1.4 | 0.01 | 0.46 |
| 2001/3595 | SW2000/14a | 31.1 | 0.1 | 5.1 | 554 | < 0.04 | 11 | 46 | 0.68 | 9.4 | 2.6 | 0.91 | 12 | 0.02 | 0.50 |
| 2000/3643 | SW2000/16 | 30.4 | 0.15 | ND | 97 | < 0.03 | 3.9 | 57 | 0.55 | 1.9 | 0.94 | < 0.03 | 4.0 | < 0.04 | 0.83 |
| 2000/3644 | SW2000/20 | 29.4 | < 0.1 | ND | 270 | 0.13 | 12 | 48 | 0.52 | 3.0 | 0.48 | 0.12 | 5.1 | < 0.04 | 0.67 |
| 2000/3645 | SW2000/27 | 26.6 | 0.21 | ND | 129 | 0.39 | 13 | 42 | 0.69 | 1.8 | 0.29 | 0.04 | 1.2 | < 0.04 | 0.26 |
| 2000/3523 | SW2000/33 | 28.6 | 0.77 | ND | 433 | 0.46 | 15 | 45 | 1.2 | 2.2 | 0.6 | 0.31 | 2.8 | 0.05 | 0.50 |
| 2000/3524 | SW2000/37 | 28.0 | 0.85 | ND | 538 | 0.46 | 13 | 67 | 1.5 | 6.8 | 2.9 | 0.11 | 18 | 0.07 | 1.04 |
| 2000/3525 | SW2000/50 | 23.8 | 0.9 | ND | 163 | 0.51 | 6.9 | 29 | 0.33 | 10 | 6.4 | 0.15 | 22 | 0.11 | 0.87 |
| 2001/3596 | SW2000/52a | 28.9 | 0.07 | 7.5 | 368 | < 0.04 | 10 | 84 | 1.4 | 1.8 | 0.35 | 0.23 | 0.69 | < 0.02 | 0.15 |
| 2000/3526 | SW2000/53 | 27.8 | 0.43 | ND | 271 | 0.24 | 18 | 64 | 1.1 | 7.6 | 3.2 | 0.06 | 16 | 0.12 | 0.83 |
| 2000/3527 | SW2000/55 | 27.7 | 0.87 | ND | 558 | 0.48 | 9.9 | 30 | 0.59 | 7.5 | 4.9 | 0.17 | 13 | 0.04 | 0.68 |

Table 4.2. continued: Concentrations of trace elements in liver
[mg kg⁻¹ wet weight].

| LSN | Reference no. | TS% | Cr | Mn | Fe | Ni | Cu | Zn | As | Se | Ag | Cd | Hg | Pb | Hg:Se |
|-----------|---------------|------|--------|-----|------|--------|-----|-----|------|------|--------|--------|------|--------|-------|
| 2000/3528 | SW2000/73 | 28.1 | 0.5 | ND | 232 | 0.24 | 6.8 | 28 | 1.0 | 17 | 8.8 | 0.19 | 24 | 0.08 | 0.56 |
| 2001/3597 | SW2000/74a | 22.9 | 0.07 | 4.4 | 464 | < 0.04 | 7.2 | 114 | 0.47 | 1.3 | 0.34 | 0.05 | 2.1 | < 0.02 | 0.64 |
| 2000/3529 | SW2000/81 | 26.6 | 0.64 | ND | 277 | 0.34 | 8.7 | 120 | 0.47 | 15 | 6.5 | 0.21 | 25 | 0.08 | 0.66 |
| 2001/3598 | SW2000/81a | 26.9 | 0.06 | 5.6 | 147 | < 0.04 | 10 | 48 | 0.72 | 2.4 | 1.5 | 0.14 | 2.4 | < 0.02 | 0.39 |
| 2000/3646 | SW2000/103 | 28.8 | 0.1 | ND | 343 | < 0.07 | 10 | 42 | 0.79 | 8.5 | 1.3 | 0.11 | 28 | 0.04 | 1.30 |
| 2001/3056 | SS2000/105 | 35.0 | < 0.06 | 4.4 | 420 | < 0.06 | 11 | 30 | 0.19 | 2.0 | 0.15 | 3.1 | 3.0 | < 0.02 | 0.59 |
| 2001/3057 | SS2000/106 | 34.7 | 0.12 | 3.3 | 374 | 0.1 | 6.0 | 29 | 0.13 | 1.5 | 0.04 | 1.8 | 2.8 | 0.03 | 0.73 |
| 2000/3647 | SW2000/131 | 32.0 | 0.07 | ND | 380 | < 0.07 | 31 | 37 | 0.14 | 1.3 | 0.25 | < 0.04 | 1.9 | < 0.04 | 0.58 |
| 2000/3648 | SW2000/140 | 25.6 | 0.12 | ND | 248 | < 0.08 | 6.9 | 31 | 0.29 | 2.9 | 0.27 | 0.25 | 7.8 | < 0.05 | 1.06 |
| 2000/3649 | SW2000/144 | 27.4 | < 0.05 | ND | 1080 | < 0.07 | 6.2 | 31 | 0.33 | 6.4 | 2.0 | 0.2 | 16 | < 0.04 | 0.98 |
| 2000/3650 | SW2000/146(1) | 24.9 | < 0.06 | ND | 344 | < 0.07 | 14 | 38 | 0.33 | 1.1 | 0.76 | < 0.04 | 0.73 | < 0.04 | 0.26 |
| 2000/3651 | SW2000/146(2) | 28.4 | < 0.05 | ND | 601 | < 0.07 | 129 | 45 | 0.44 | 6.1 | 0.94 | 0.16 | 20 | < 0.04 | 1.29 |
| 2001/2987 | SW2000/150A | 28.2 | < 0.04 | 4.7 | 655 | < 0.04 | 6.4 | 28 | 0.41 | 4.0 | 0.42 | 0.8 | 8.1 | 0.02 | 0.80 |
| 2001/2988 | SW2000/157 | 25.7 | 0.1 | 9.6 | 177 | < 0.04 | 25 | 95 | 0.26 | 0.46 | 0.35 | < 0.02 | 0.57 | < 0.02 | 0.49 |
| 2001/2989 | SW2000/164 | 28.2 | 0.08 | 6.0 | 820 | < 0.04 | 12 | 69 | 0.53 | 7.2 | 1.3 | 0.15 | 13 | 0.03 | 0.71 |
| 2001/2990 | SW2000/166 | 27.8 | 0.09 | 5.9 | 341 | < 0.05 | 7.6 | 31 | 0.42 | 4.7 | 2.0 | 0.22 | 10 | < 0.02 | 0.84 |
| 2001/2991 | SW2000/168 | 27.3 | 0.15 | 4.2 | 376 | 0.13 | 7.7 | 42 | 0.62 | 9.9 | 0.47 | 0.2 | 29 | 0.03 | 1.15 |
| 2001/2992 | SW2000/169 | 29.9 | 0.12 | 4.7 | 285 | 0.08 | 5.8 | 40 | 0.46 | 4.3 | 0.94 | 0.24 | 16 | < 0.02 | 1.46 |
| 2001/2993 | SW2000/170 | 27.0 | 0.05 | 3.1 | 207 | < 0.04 | 15 | 26 | 2.3 | 49 | 0.45 | 0.28 | 92 | 0.21 | 0.74 |
| | SS2000/105 | 35.0 | < 0.06 | 4.4 | 420 | < 0.06 | 11 | 30 | 0.19 | 2.0 | 0.15 | 3.1 | 3.0 | < 0.02 | 0.59 |
| 2001/2994 | SW2000/174 | 28.2 | 0.09 | 6.4 | 349 | < 0.04 | 9.7 | 34 | 0.29 | 1.4 | 0.99 | 0.14 | 2.6 | < 0.02 | 0.73 |
| 2001/2995 | SW2000/176 | 29.3 | < 0.1 | 6.4 | 161 | < 0.1 | 16 | 44 | 0.4 | 4.5 | 16 | 0.08 | 10 | < 0.04 | 0.87 |
| 2001/3058 | SW2000/179 | 28.1 | 0.05 | 3.7 | 194 | < 0.04 | 13 | 63 | 0.24 | 0.7 | 0.15 | < 0.03 | 0.75 | 0.03 | 0.42 |
| | SS2000/106 | 34.7 | 0.12 | 3.3 | 374 | 0.1 | 6.0 | 29 | 0.13 | 1.5 | 0.04 | 1.8 | 2.8 | 0.03 | 0.73 |
| 2001/2996 | SW2000/188A | 27.7 | 0.08 | 6.0 | 204 | < 0.04 | 75 | 38 | 0.34 | 0.4 | 0.8 | < 0.02 | 0.87 | < 0.01 | 0.86 |
| 2001/2997 | SW2000/196 | 26.1 | < 0.04 | 3.7 | 281 | < 0.04 | 2.5 | 97 | 0.43 | 4.9 | 0.68 | 0.09 | 18 | < 0.02 | 1.45 |
| 2001/2998 | SW2001/4 | 28.4 | 0.09 | 4.4 | 409 | 0.04 | 9.9 | 44 | 0.43 | 1.1 | 0.36 | < 0.02 | 0.72 | < 0.01 | 0.26 |
| 2001/2999 | SW2001/21 | 28.3 | < 0.05 | 4.5 | 120 | < 0.05 | 6.4 | 42 | 1.1 | 25 | 1.4 | 0.3 | 80 | 0.04 | 1.26 |
| 2001/3000 | SW2001/23 | 30.5 | < 0.04 | 5.9 | 154 | < 0.04 | 13 | 40 | 1.4 | 26 | 23 | 0.41 | 40 | 0.04 | 0.61 |
| 2001/3001 | SW2001/24A | 27.9 | 0.05 | 7.4 | 221 | < 0.04 | 3.4 | 85 | 0.23 | 1.9 | 0.42 | 0.04 | 3.6 | < 0.02 | 0.75 |
| 2001/3002 | SW2001/30 | 30.7 | 0.06 | 4.9 | 199 | < 0.04 | 7.6 | 76 | 0.18 | 0.67 | 0.51 | < 0.02 | 0.97 | < 0.02 | 0.57 |
| 2001/3003 | SW2001/36 | 35.0 | 0.24 | 6.4 | 392 | 0.11 | 5.6 | 48 | 0.11 | 0.39 | 0.43 | < 0.03 | 0.72 | < 0.02 | 0.73 |
| 2001/3004 | SW2001/47 | 28.7 | 0.1 | 3.6 | 77 | 0.04 | 5.5 | 42 | 0.67 | 11 | 2.5 | 0.25 | 17 | 0.02 | 0.61 |
| 2001/3060 | SW2001/60 | 29.8 | 0.32 | 4.4 | 953 | 0.17 | 2.8 | 518 | 0.51 | 0.42 | < 0.02 | 0.37 | 0.11 | 0.07 | 0.10 |
| 2001/3005 | SW2001/85 | 30.2 | < 0.04 | 6.8 | 504 | < 0.04 | 16 | 37 | 0.41 | 1.9 | 0.73 | 0.03 | 4.4 | < 0.02 | 0.91 |
| 2001/3006 | SW2001/92 | 23.7 | 0.1 | 8.2 | 426 | 0.07 | 31 | 162 | 0.41 | 1.2 | 1.1 | 0.05 | 2.4 | 0.03 | 0.79 |
| 2001/3007 | SW2001/94 | 30.9 | 0.07 | 7.5 | 420 | < 0.03 | 43 | 55 | 0.79 | 2.9 | 0.9 | 0.05 | 4.0 | 0.03 | 0.54 |
| 2001/3061 | SW2001/120 | 30.5 | 0.11 | 3.3 | 348 | 0.08 | 4.2 | 36 | 0.33 | 0.87 | < 0.02 | 0.07 | 0.16 | 0.04 | 0.07 |
| 2001/3008 | SW2001/127 | 27.9 | 0.19 | 5.0 | 401 | 0.09 | 9.3 | 28 | 0.38 | 8.7 | 1.8 | 0.53 | 29 | 0.03 | 1.31 |
| 2001/3009 | SW2001/139 | 30.4 | 0.09 | 5.5 | 307 | < 0.04 | 11 | 30 | 0.83 | 19 | 1.2 | 0.44 | 36 | 0.03 | 0.75 |
| 2001/3062 | SW2001/141 | 25.2 | 0.07 | 1.5 | 387 | < 0.04 | 4.3 | 45 | 3.2 | 84 | 0.97 | 0.04 | 275 | 0.17 | 1.29 |
| 2001/3010 | SW2001/144 | 29.3 | 0.23 | 3.0 | 357 | 0.19 | 50 | 54 | 0.5 | 1.0 | 0.43 | < 0.03 | 0.89 | < 0.02 | 0.35 |
| 2001/3011 | SW2001/149 | 29.9 | 0.15 | 5.2 | 340 | 0.17 | 8.2 | 30 | 0.54 | 7.1 | 2.1 | 0.25 | 22 | 0.05 | 1.22 |
| 2001/3012 | SW2001/158 | 32.8 | 0.08 | 5.6 | 336 | < 0.05 | 5.9 | 55 | 0.22 | 1.6 | 0.96 | 0.03 | 1.9 | < 0.02 | 0.47 |
| 2001/3013 | SW2001/186 | 25.4 | 0.04 | 6.1 | 431 | 0.05 | 18 | 127 | 0.24 | 7.9 | 3.2 | 0.13 | 22 | 0.04 | 1.10 |
| 2001/3014 | SW2001/188 | 32.1 | 0.11 | 9.3 | 215 | 0.07 | 35 | 47 | 0.17 | 0.65 | 0.75 | < 0.03 | 0.67 | < 0.02 | 0.41 |
| 2001/3015 | SW2001/193 | 27.7 | 0.17 | 6.0 | 286 | 0.11 | 5.7 | 73 | 0.21 | 4.1 | 0.61 | 0.18 | 14 | < 0.02 | 1.34 |
| 2001/3016 | SW2001/198 | 55.9 | < 0.07 | 2.9 | 214 | 0.51 | 20 | 20 | 0.77 | 0.56 | 0.13 | < 0.04 | 0.93 | < 0.03 | 0.65 |
| 2001/3017 | SW2001/203 | 30.0 | 0.17 | 6.3 | 284 | 0.21 | 13 | 39 | 0.35 | 3.8 | 0.99 | 0.2 | 10 | 0.02 | 1.04 |

Table 4.3. Concentrations of butyltins in liver (mg kg⁻¹ wet weight).

| LSN | Reference no. | TBT | DBT | MBT | ΣBT |
|-----------|---------------|---------|---------|---------|-------|
| 1998/7002 | SW1992/13 | < 0.003 | 0.019 | < 0.003 | 0.019 |
| 1995/75 | SW1992/202 | 0.18 | 0.35 | 0.11 | 0.64 |
| 1998/7011 | SW1992/213 | 0.019 | 0.062 | < 0.003 | 0.081 |
| 1995/79 | SW1993/12 | 0.039 | 0.15 | 0.063 | 0.252 |
| 1995/1515 | SW1993/78 | < 0.006 | 0.033 | < 0.005 | 0.033 |
| 1996/7797 | SS1993/243 | 0.006 | 0.005 | < 0.01 | 0.011 |
| 1998/7004 | SW1994/5 | < 0.003 | 0.029 | < 0.003 | 0.029 |
| 1995/327 | SW1994/32 | 0.021 | 0.099 | < 0.01 | 0.12 |
| 1998/7012 | SW1994/39 | 0.033 | 0.026 | 0.007 | 0.066 |
| 1995/3739 | SW1994/45A | 0.009 | 0.025 | 0.019 | 0.053 |
| 1995/329 | SW1994/53 | 0.019 | 0.046 | 0.009 | 0.074 |
| 1995/335 | SW1994/68 | 0.053 | 0.15 | 0.05 | 0.253 |
| 1995/633 | SW1994/80 | 0.023 | 0.082 | 0.016 | 0.121 |
| 1996/7799 | SS1994/277 | < 0.004 | 0.006 | 0.014 | 0.02 |
| 1995/1466 | SW1994/99 | < 0.01 | 0.014 | 0.008 | 0.014 |
| 1995/941 | SW1994/108 | < 0.01 | 0.013 | 0.1 | 0.013 |
| 1995/1498 | SW1994/148 | 0.04 | 0.16 | 0.09 | 0.29 |
| 1995/921 | SW1994/153 | 0.021 | 0.097 | 0.026 | 0.144 |
| 1996/7798 | SS1994/63 | < 0.004 | < 0.005 | 0.003 | 0.003 |
| 1995/923 | SW1994/171 | 0.057 | 0.21 | < 0.01 | 0.267 |
| 1997/709 | SW1994/175 | 0.008 | 0.071 | 0.049 | 0.128 |
| 1995/925 | SW1994/185 | 0.036 | 0.46 | 0.13 | 0.626 |
| 1997/710 | SW1995/52 | 0.041 | 0.14 | < 0.01 | 0.18 |
| 1997/681 | SW1995/55 | 0.047 | 0.19 | 0.014 | 0.251 |
| 2001/2982 | SW1995/68 | 0.01 | 0.013 | 0.004 | 0.027 |
| 1997/711 | SW1995/76 | 0.047 | 0.058 | < 0.01 | 0.11 |
| 1997/712 | SW1995/78 | 0.12 | 0.44 | 0.018 | 0.578 |
| 1997/684 | SW1995/85 | 0.019 | 0.071 | 0.007 | 0.097 |
| 1997/685 | SW1995/86 | 0.046 | 0.21 | 0.009 | 0.265 |
| 1996/7801 | SS1995/143 | < 0.004 | 0.011 | 0.011 | 0.022 |
| 1997/686 | SW1995/94 | 0.033 | 0.079 | 0.008 | 0.12 |
| 1996/7800 | SS1995/80 | < 0.004 | < 0.004 | 0.011 | 0.011 |
| 1997/687 | SW1995/102 | 0.014 | 0.15 | 0.016 | 0.18 |
| 1997/688 | SW1995/120A | 0.016 | 0.12 | < 0.01 | 0.14 |
| 2001/3571 | SW1995/120b | 0.02 | 0.105 | 0.025 | 0.15 |
| 1997/689 | SW1995/126 | 0.064 | 0.15 | < 0.04 | 0.21 |
| 2001/2983 | SW1995/141 | 0.012 | 0.069 | 0.014 | 0.095 |
| 1998/7005 | SW1995/145 | 0.038 | 0.101 | < 0.003 | 0.139 |
| 1997/690 | SW1996/2 | 0.041 | 0.021 | < 0.007 | 0.062 |
| 1997/691 | SW1996/27(1) | 0.039 | 0.24 | 0.012 | 0.291 |
| 1997/692 | SW1996/29 | 0.042 | 0.091 | < 0.006 | 0.13 |
| 1997/693 | SW1996/30 | 0.032 | 0.065 | < 0.006 | 0.097 |
| 1997/694 | SW1996/37 | 0.076 | 0.3 | 0.015 | 0.391 |
| 1998/7007 | SW1996/40 | 0.077 | 0.084 | < 0.003 | 0.161 |
| 2001/2984 | SW1996/44 | 0.017 | 0.094 | 0.023 | 0.134 |
| 1999/1286 | SW1996/46 | 0.015 | 0.059 | 0.015 | 0.089 |
| 2001/3572 | SW1996/50b | 0.023 | 0.03 | < 0.006 | 0.053 |
| 2001/2985 | SW1996/60 | 0.036 | 0.147 | 0.01 | 0.193 |
| 2000/3623 | SW1996/67 | 0.038 | 0.116 | 0.021 | 0.175 |
| 2001/3573 | SW1996/84e | 0.066 | 0.089 | 0.019 | 0.174 |
| 2000/3624 | SW1996/87 | 0.076 | 0.156 | 0.013 | 0.245 |
| 1999/1288 | SW1996/101 | 0.017 | 0.035 | 0.026 | 0.078 |
| 2000/3625 | SW1996/111 | < 0.002 | < 0.001 | < 0.001 | nd |
| 2000/3626 | SW1996/119 | 0.013 | 0.012 | 0.014 | 0.039 |

Table 4.3. continued: Concentrations of butyltins in liver [mg kg⁻¹ wet weight].

| LSN | Reference no. | TBT | DBT | MBT | ΣBT |
|-----------|-----------------|---------|---------|---------|-------|
| 1998/7008 | SW1996/121 | 0.082 | 0.23 | < 0.004 | 0.312 |
| 2001/3574 | SW1996/147a | 0.056 | 0.097 | 0.02 | 0.173 |
| 1999/1307 | SW1996/150 | 0.022 | 0.015 | 0.028 | 0.065 |
| 1999/1308 | SW1996/160 | 0.026 | 0.058 | 0.012 | 0.096 |
| 1998/7001 | SW1996/162 | < 0.004 | 0.056 | < 0.004 | 0.056 |
| 2000/3627 | SW1996/163 | 0.006 | 0.061 | 0.02 | 0.087 |
| 2001/3575 | SW1996/169a | 0.061 | 0.122 | 0.019 | 0.202 |
| 2000/3628 | SW1996/174 | < 0.001 | 0.016 | 0.01 | 0.026 |
| 2000/3629 | SW1997/1 | 0.028 | 0.126 | 0.071 | 0.225 |
| 2000/3630 | SW1997/2 | 0.035 | 0.057 | 0.033 | 0.125 |
| 2000/3631 | SW1997/5 | 0.009 | 0.006 | 0.009 | 0.024 |
| 1999/1309 | SW1997/21A | 0.012 | 0.047 | 0.013 | 0.072 |
| 2001/2986 | SW1997/36 | 0.064 | 0.101 | 0.008 | 0.173 |
| 2001/3577 | SW1997/67f | 0.007 | 0.027 | 0.004 | 0.038 |
| 1998/7039 | SW1997/72 | 0.072 | 0.128 | 0.023 | 0.223 |
| 1998/7040 | SW1997/80 | 0.015 | 0.035 | 0.015 | 0.065 |
| 1998/7041 | SW1997/81 | 0.099 | 0.134 | 0.015 | 0.248 |
| 1998/7042 | SW1997/87 | 0.057 | 0.124 | 0.029 | 0.21 |
| 1998/7043 | SW1997/89 | 0.074 | 0.045 | 0.013 | 0.132 |
| 1998/7044 | SW1997/91 | 0.009 | 0.03 | 0.009 | 0.048 |
| 1998/7045 | SW1997/93 | 0.016 | 0.021 | 0.03 | 0.067 |
| 1998/7046 | SW1997/93foetus | 0.01 | 0.007 | < 0.001 | 0.017 |
| 2001/3578 | SW1997/93b | 0.116 | 0.209 | 0.033 | 0.358 |
| 1998/7047 | SW1997/94 | 0.014 | 0.038 | 0.089 | 0.141 |
| 1998/7048 | SW1997/96 | 0.015 | 0.039 | 0.063 | 0.117 |
| 1998/7049 | SW1997/97 | < 0.002 | < 0.001 | 0.01 | 0.01 |
| 2001/3579 | SW1997/97a | 0.017 | 0.034 | < 0.002 | 0.051 |
| 1998/7050 | SW1997/102 | 0.056 | 0.084 | 0.026 | 0.166 |
| 1998/7051 | SW1997/103 | 0.183 | 0.317 | 0.175 | 0.675 |
| 1998/7052 | SW1997/111 | 0.168 | 0.361 | 0.182 | 0.711 |
| 1998/7053 | SW1997/113 | 0.006 | 0.01 | 0.012 | 0.028 |
| 1998/7054 | SW1997/118 | 0.052 | 0.12 | 0.081 | 0.253 |
| 2001/3580 | SW1997/124a | 0.04 | 0.071 | 0.015 | 0.126 |
| 2001/3581 | SW1997/135f | 0.01 | 0.028 | 0.008 | 0.046 |
| 1998/7055 | SW1997/138 | 0.024 | 0.024 | 0.032 | 0.08 |
| 1998/7056 | SW1997/141 | 0.063 | 0.14 | 0.025 | 0.228 |
| 1998/7057 | SW1997/142 | 0.028 | 0.08 | 0.044 | 0.152 |
| 1998/7058 | SW1997/142b | 0.034 | 0.064 | 0.045 | 0.143 |
| 1998/7059 | SW1997/152 | 0.091 | 0.41 | 0.072 | 0.573 |
| 1998/7000 | SW1997/159 | < 0.004 | 0.05 | 0.035 | 0.085 |
| 2001/3582 | SW1997/161a | 0.032 | 0.075 | 0.011 | 0.118 |
| 1998/7003 | SW1997/162 | < 0.003 | 0.019 | 0.003 | 0.022 |
| 1998/7060 | SW1997/173 | 0.023 | 0.032 | 0.034 | 0.089 |
| 1999/1310 | SW1997/178 | 0.075 | 0.182 | 0.021 | 0.278 |
| 2001/3583 | SW1997/178c | 0.08 | 0.29 | 0.047 | 0.417 |
| 1998/7062 | SW1997/186(1) | 0.02 | 0.045 | 0.077 | 0.142 |
| 1998/7063 | SW1997/186(2) | 0.055 | 0.127 | 0.049 | 0.231 |
| 2000/3632 | SW1998/1 | 0.028 | 0.128 | 0.045 | 0.201 |
| 1998/7064 | SW1998/4 | 0.04 | 0.07 | 0.061 | 0.171 |
| 2000/3633 | SW1998/16 | 0.037 | 0.108 | 0.022 | 0.167 |
| 2000/3634 | SW1998/21 | 0.013 | 0.037 | 0.012 | 0.062 |
| 1999/1311 | SW1998/53 | 0.035 | 0.169 | 0.013 | 0.217 |
| 2001/3584 | SW1998/56a | 0.031 | 0.075 | 0.01 | 0.116 |
| 1998/7066 | SW1998/71 | < 0.002 | 0.093 | < 0.03 | 0.093 |

Table 4.3. continued: Concentrations of butyltins in liver (mg kg⁻¹ wet weight).

| LSN | Reference no. | TBT | DBT | MBT | ΣBT |
|-----------|---------------|---------|---------|---------|-------|
| 1998/7067 | SW1998/75 | 0.05 | 0.169 | < 0.03 | 0.219 |
| 1998/7068 | SW1998/76 | 0.167 | 0.277 | < 0.03 | 0.444 |
| 1998/6999 | SW1998/81 | 0.024 | 0.034 | < 0.004 | 0.058 |
| 2000/3703 | SW1998/90 | 0.041 | 0.075 | 0.018 | 0.134 |
| 1998/7069 | SW1998/97 | 0.038 | 0.052 | < 0.02 | 0.09 |
| 1998/7009 | SW1998/104 | 0.068 | 0.195 | < 0.004 | 0.263 |
| 1998/7070 | SW1998/115 | 0.2 | 0.539 | < 0.06 | 0.739 |
| 1998/7071 | SW1998/116 | < 0.002 | 0.006 | < 0.003 | 0.006 |
| 2001/3585 | SW1998/123a | 0.011 | 0.023 | 0.013 | 0.047 |
| 1998/7072 | SW1998/127 | 0.083 | 0.059 | < 0.008 | 0.142 |
| 1998/7073 | SW1998/129 | 0.143 | 0.39 | < 0.03 | 0.533 |
| 2000/3635 | SW1998/135 | < 0.001 | 0.005 | 0.004 | 0.009 |
| 1998/7075 | SW1998/145 | 0.012 | 0.022 | 0.014 | 0.048 |
| 1998/7010 | SW1998/148 | 0.053 | 0.132 | < 0.004 | 0.185 |
| 2000/3636 | SW1998/149 | 0.012 | 0.014 | 0.01 | 0.036 |
| 1998/7006 | SW1998/154 | 0.036 | 0.134 | < 0.004 | 0.17 |
| 1999/3869 | SW1998/164 | 0.012 | 0.109 | 0.009 | 0.13 |
| 2000/3637 | SW1998/170 | 0.025 | 0.154 | 0.029 | 0.208 |
| 2000/3638 | SW1998/174 | 0.016 | 0.04 | 0.011 | 0.067 |
| 1998/7077 | SW1998/179 | 0.005 | 0.31 | 0.023 | 0.338 |
| 1998/7078 | SW1998/183 | 0.019 | 0.049 | 0.035 | 0.103 |
| 1999/1312 | SW1998/187 | 0.012 | 0.026 | 0.019 | 0.057 |
| 1998/7243 | SW1998/189 | < 0.003 | 0.028 | < 0.003 | 0.028 |
| 1998/7243 | SW1998/189 | < 0.003 | 0.028 | < 0.003 | 0.028 |
| 1999/1313 | SW1998/191 | 0.016 | 0.054 | 0.007 | 0.077 |
| 1999/1315 | SW1998/208 | 0.064 | 0.148 | 0.022 | 0.234 |
| 2001/3586 | SW1999/8b | 0.037 | 0.11 | 0.021 | 0.168 |
| 1999/1316 | SW1999/10 | 0.034 | 0.146 | 0.03 | 0.21 |
| 1999/1317 | SW1999/17 | 0.052 | 0.136 | 0.013 | 0.201 |
| 1999/1318 | SW1999/26 | 0.042 | 0.219 | 0.012 | 0.273 |
| 1999/1319 | SW1999/40 | 0.14 | 0.225 | 0.015 | 0.38 |
| 2000/3705 | SW1999/45 | < 0.003 | < 0.002 | < 0.003 | nd |
| 1999/1320 | SW1999/48 | 0.017 | 0.113 | 0.044 | 0.174 |
| 2001/3587 | SW1999/48c | 0.04 | 0.075 | 0.011 | 0.126 |
| 2001/3588 | SW1999/57a | 0.018 | 0.047 | 0.015 | 0.08 |
| 2000/3639 | SW1999/60 | < 0.002 | 0.01 | < 0.002 | 0.01 |
| 2000/3640 | SW1999/63 | < 0.002 | 0.022 | 0.005 | 0.027 |
| 1999/1321 | SW1999/71 | 0.079 | 0.136 | 0.02 | 0.235 |
| 2001/3589 | SW1999/72C.1 | 0.026 | 0.034 | 0.007 | 0.067 |
| 2001/3590 | SW1999/72C.2 | 0.031 | 0.075 | 0.014 | 0.12 |
| 1999/1322 | SW1999/74 | 0.038 | 0.083 | 0.006 | 0.127 |
| 1999/1323 | SW1999/77 | 0.068 | 0.269 | 0.015 | 0.352 |
| 1999/3841 | SW1999/96 | 0.025 | 0.057 | 0.003 | 0.085 |
| 2001/3591 | SW1999/96C | 0.155 | 0.454 | 0.03 | 0.639 |
| 2001/3592 | SW1999/121B | 0.045 | 0.1 | 0.009 | 0.154 |
| 2000/3641 | SW1999/148 | < 0.002 | 0.029 | 0.01 | 0.039 |
| 2001/3593 | SW1999/148A | 0.057 | 0.17 | 0.026 | 0.253 |
| 2000/3642 | SW1999/172 | 0.01 | 0.031 | 0.009 | 0.05 |
| 2000/3517 | SW1999/174B | < 0.003 | 0.164 | < 0.003 | 0.164 |
| 2000/3518 | SW1999/189 | < 0.002 | 0.037 | 0.017 | 0.054 |
| 2000/3519 | SW1999/192 | < 0.002 | 0.029 | 0.021 | 0.05 |
| 2001/3594 | SW1999/194a | < 0.001 | 0.006 | 0.006 | 0.012 |
| 2000/3706 | SW1999/197 | 0.023 | 0.124 | 0.024 | 0.171 |
| 2000/3707 | SW1999/201A | 0.034 | 0.054 | 0.027 | 0.115 |
| 2000/3520 | SW1999/202 | < 0.004 | 0.141 | 0.066 | 0.207 |
| 2000/3521 | SW1999/208 | < 0.003 | 0.11 | 0.03 | 0.14 |
| 2000/3522 | SW2000/13 | < 0.002 | 0.032 | 0.016 | 0.048 |

Table 4.3. continued: Concentrations of butyltins in liver [mg kg⁻¹ wet weight].

| LSN | Reference no. | TBT | DBT | MBT | ΣBT |
|-----------|---------------|---------|---------|---------|-------|
| 2001/3595 | SW2000/14a | 0.024 | 0.059 | 0.009 | 0.092 |
| 2000/3643 | SW2000/16 | 0.008 | 0.025 | 0.011 | 0.044 |
| 2000/3644 | SW2000/20 | 0.011 | 0.037 | 0.02 | 0.068 |
| 2000/3645 | SW2000/27 | < 0.003 | 0.005 | < 0.002 | 0.005 |
| 2000/3523 | SW2000/33 | 0.093 | 0.123 | 0.015 | 0.231 |
| 2000/3524 | SW2000/37 | 0.01 | 0.046 | 0.009 | 0.065 |
| 2000/3525 | SW2000/50 | 0.341 | 0.755 | 0.107 | 1.203 |
| 2001/3596 | SW2000/52a | 0.026 | 0.148 | 0.017 | 0.191 |
| 2000/3526 | SW2000/53 | 0.015 | 0.048 | 0.014 | 0.077 |
| 2000/3527 | SW2000/55 | 0.07 | 0.271 | 0.073 | 0.414 |
| 2000/3528 | SW2000/73 | 0.087 | 0.26 | 0.051 | 0.398 |
| 2001/3597 | SW2000/74a | 0.01 | 0.013 | < 0.001 | 0.023 |
| 2000/3529 | SW2000/81 | 0.042 | 0.21 | 0.054 | 0.306 |
| 2001/3598 | SW2000/81a | 0.01 | 0.018 | 0.006 | 0.034 |
| 2000/3646 | SW2000/103 | 0.035 | 0.105 | 0.014 | 0.154 |
| 2000/3647 | SW2000/131 | 0.01 | 0.039 | 0.027 | 0.076 |
| 2000/3648 | SW2000/140 | < 0.002 | 0.026 | 0.017 | 0.043 |
| 2000/3649 | SW2000/144 | 0.064 | 0.189 | 0.048 | 0.301 |
| 2000/3650 | SW2000/146(1) | 0.032 | 0.163 | 0.029 | 0.224 |
| 2000/3651 | SW2000/146(2) | 0.04 | 0.162 | 0.029 | 0.231 |
| 2001/2987 | SW2000/150A | 0.079 | 0.332 | 0.016 | 0.427 |
| 2001/2988 | SW2000/157 | 0.008 | 0.024 | < 0.001 | 0.032 |
| 2001/2989 | SW2000/164 | 0.083 | 0.177 | 0.014 | 0.274 |
| 2001/2990 | SW2000/166 | 0.036 | 0.169 | 0.012 | 0.217 |
| 2001/2991 | SW2000/168 | 0.041 | 0.136 | 0.008 | 0.185 |
| 2001/2992 | SW2000/169 | 0.054 | 0.116 | 0.007 | 0.177 |
| 2001/2993 | SW2000/170 | 0.171 | 0.214 | 0.014 | 0.399 |
| 2001/3056 | SS2000/105 | < 0.004 | < 0.003 | < 0.003 | nd |
| 2001/2994 | SW2000/174 | 0.017 | 0.114 | 0.006 | 0.137 |
| 2001/2995 | SW2000/176 | 0.007 | 0.039 | 0.006 | 0.052 |
| 2001/3058 | SW2000/179 | < 0.003 | 0.007 | < 0.002 | 0.007 |
| 2001/3057 | SS2000/106 | 0.014 | < 0.01 | 0.01 | 0.024 |
| 2001/2996 | SW2000/188A | 0.014 | 0.075 | 0.006 | 0.095 |
| 2001/2997 | SW2000/196 | 0.008 | 0.022 | 0.008 | 0.038 |
| 2001/2999 | SW2001/21 | 0.022 | 0.067 | 0.011 | 0.1 |
| 2001/3000 | SW2001/23 | 0.146 | 0.229 | 0.033 | 0.408 |
| 2001/3001 | SW2001/24A | 0.043 | 0.155 | 0.018 | 0.216 |
| 2001/3002 | SW2001/30 | 0.016 | 0.044 | 0.006 | 0.066 |
| 2001/3003 | SW2001/36 | 0.022 | 0.233 | 0.051 | 0.306 |
| 2001/2998 | SW2001/4 | 0.029 | 0.065 | 0.006 | 0.1 |
| 2001/3004 | SW2001/47 | 0.121 | 0.193 | 0.021 | 0.335 |
| 2001/3060 | SW2001/60 | < 0.006 | 0.013 | < 0.005 | 0.013 |
| 2001/3005 | SW2001/85 | 0.025 | 0.099 | 0.008 | 0.132 |
| 2001/3006 | SW2001/92 | 0.063 | 0.064 | 0.01 | 0.137 |
| 2001/3007 | SW2001/94 | 0.041 | 0.195 | 0.011 | 0.247 |
| 2001/3061 | SW2001/120 | 0.045 | 0.04 | 0.01 | 0.095 |
| 2001/3008 | SW2001/127 | 0.099 | 0.306 | 0.016 | 0.421 |
| 2001/3009 | SW2001/139 | 0.044 | 0.177 | 0.027 | 0.248 |
| 2001/3062 | SW2001/141 | 0.025 | 0.22 | 0.02 | 0.265 |
| 2001/3010 | SW2001/144 | 0.057 | 0.034 | 0.006 | 0.097 |
| 2001/3011 | SW2001/149 | 0.133 | 0.184 | 0.029 | 0.346 |
| 2001/3012 | SW2001/158 | 0.106 | 0.63 | 0.061 | 0.797 |
| 2001/3013 | SW2001/186 | 0.042 | 0.174 | 0.022 | 0.238 |
| 2001/3014 | SW2001/188 | 0.006 | 0.034 | 0.009 | 0.049 |
| 2001/3015 | SW2001/193 | 0.033 | 0.242 | 0.012 | 0.287 |
| 2001/3016 | SW2001/198 | < 0.006 | < 0.004 | 0.01 | 0.01 |
| 2001/3017 | SW2001/203 | < 0.005 | 0.041 | 0.01 | 0.051 |

Table 4.4. Concentrations of organochlorine pesticides in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | α -HCH | γ -HCH | HCB | p, p' -DDE | p, p' -TDE | p, p' -DDT | Dieldrin | Σ DDT | DDE/ Σ DDT |
|-----------|---------------|------|---------------|---------------|-------|--------------|--------------|--------------|----------|--------------|-------------------|
| 1995/61 | SW1992/6 | 84 | 0.055 | 0.16 | 0.39 | 5.4 | 1.1 | 1.2 | 3.3 | 7.7 | 0.70 |
| 1998/7461 | SW1992/13 | 62 | 0.05 | 0.02 | 0.22 | 0.78 | 0.24 | 0.18 | 0.39 | 1.2 | 0.65 |
| 1995/63 | SW1992/142 | 84 | 0.056 | 0.43 | 0.64 | 6.8 | 2.6 | 1.2 | 5.7 | 10.6 | 0.64 |
| 1995/72 | SW1992/198 | 80 | 0.05 | 0.15 | 0.45 | 7.6 | 5.0 | 2.5 | 6.7 | 15.1 | 0.50 |
| 1995/74 | SW1992/202 | 84 | 0.29 | 1.4 | 0.29 | 2.1 | 0.032 | 0.026 | 0.067 | 2.158 | 0.97 |
| 1995/84 | SW1993/31 | 84 | 0.03 | 0.068 | 0.19 | 9.0 | 2.5 | 2.3 | 4.7 | 13.8 | 0.65 |
| 1995/193 | SW1993/36 | 90 | 0.036 | 0.21 | 0.29 | 8.3 | 1.6 | 1.5 | 3.1 | 11.4 | 0.73 |
| 1995/627 | SW1993/41 | 89 | 0.042 | 0.14 | 0.42 | 4.6 | 3.4 | 1.1 | 3.2 | 9.1 | 0.51 |
| 1995/1516 | SW1993/78 | 83 | < 0.001 | 0.056 | 0.066 | 2.9 | 0.65 | 2.6 | 0.074 | 6.15 | 0.47 |
| 1995/1210 | SW1993/94 | 90 | 0.007 | 0.054 | 0.35 | 4.9 | 4.6 | 1.0 | 4 | 10.5 | 0.47 |
| 1995/195 | SW1993/122 | 89 | 0.026 | 0.04 | 0.019 | 3.1 | 0.14 | 0.14 | 0.23 | 3.38 | 0.92 |
| 1995/1212 | SW1993/126 | 84 | 0.037 | 0.21 | 0.23 | 1.6 | 0.5 | 0.23 | 1.8 | 2.33 | 0.69 |
| 1998/7454 | SW1994/5 | 77 | 0.073 | 0.028 | 0.28 | 11 | 1.5 | 2.1 | 1.2 | 14.6 | 0.75 |
| 1995/320 | SW1994/7A | 92 | 0.029 | 0.076 | 0.12 | 1.3 | 1.1 | 0.51 | 0.96 | 2.91 | 0.45 |
| 1995/324 | SW1994/31 | 55 | 0.017 | 0.03 | 0.14 | 1.5 | 0.31 | 0.094 | 0.34 | 1.904 | 0.79 |
| 1998/7459 | SW1994/39 | 81 | 0.022 | 0.057 | 0.14 | 1.7 | 0.4 | 0.19 | 0.88 | 2.29 | 0.74 |
| 1995/926 | SW1994/44 | 90 | 0.01 | 0.12 | 0.2 | 11 | 8.3 | 4.1 | 12 | 23.4 | 0.47 |
| 1995/632 | SW1994/80 | 88 | 0.039 | 0.13 | 0.37 | 4.6 | 2.5 | 1.1 | 2.1 | 8.2 | 0.56 |
| 1995/1469 | SW1994/105 | 55 | 0.002 | 0.33 | 0.073 | 0.42 | 0.46 | 0.36 | 0.41 | 1.24 | 0.34 |
| 1995/1501 | SW1994/115 | 42 | 0.019 | 0.047 | 0.16 | 0.96 | 0.29 | 0.1 | 0.41 | 1.35 | 0.71 |
| 1995/1495 | SW1994/145 | 91 | 0.023 | 0.22 | 0.46 | 3.2 | 2.9 | 0.017 | 5.0 | 6.117 | 0.52 |
| 1995/920 | SW1994/153 | 43 | 0.017 | 0.15 | 0.13 | 2.3 | 2.2 | 0.67 | 5.1 | 5.17 | 0.44 |
| 1995/922 | SW1994/171 | 83 | 0.032 | 0.26 | 0.35 | 18 | 5.3 | 3.0 | 14 | 26.3 | 0.68 |
| 1995/924 | SW1994/185 | 84 | 0.007 | 0.38 | 0.11 | 3.1 | 1.6 | 2.0 | 3.1 | 6.7 | 0.46 |
| 1995/1215 | SW1995/54 | 49 | 0.066 | 0.053 | 0.74 | 18 | 2.9 | 3.6 | 2.4 | 24.5 | 0.73 |
| 2001/3018 | SW1995/68 | 69 | 0.037 | < 0.001 | 0.13 | 0.51 | 0.41 | 0.15 | 1.1 | 1.07 | 0.48 |
| 1999/1287 | SW1996/101 | 86 | 0.043 | 0.19 | 0.35 | 1.6 | 0.84 | 0.7 | 1.9 | 3.14 | 0.51 |
| 2000/3654 | SW1996/111 | 59 | 0.012 | 0.068 | 0.18 | 0.55 | 0.42 | 0.13 | 0.68 | 1.1 | 0.50 |
| 2000/3655 | SW1996/119 | 82 | 0.042 | 0.29 | 0.27 | 3.7 | 2.9 | 0.69 | 1.3 | 7.29 | 0.51 |
| 2001/3599 | SW1995/120b | 79 | 0.026 | 0.06 | 0.31 | 0.95 | 0.29 | 0.25 | 1.2 | 1.49 | 0.64 |
| 2001/3019 | SW1995/141 | 88 | 0.063 | < 0.001 | 0.26 | 1.5 | 0.59 | 0.52 | 1.5 | 2.61 | 0.57 |
| 1998/7455 | SW1995/145 | 46 | 0.027 | 0.052 | 0.2 | 4.5 | 0.85 | 0.72 | 1.3 | 6.07 | 0.74 |
| 2001/3020 | SW1996/44 | 90 | 0.087 | < 0.001 | 0.45 | 2.7 | 1.2 | 0.67 | 2.5 | 4.57 | 0.59 |
| 1999/1285 | SW1996/46 | 91 | 0.033 | 0.2 | 0.42 | 3.7 | 1.5 | 2.0 | 4.0 | 7.2 | 0.51 |
| 2001/3600 | SW1996/50b | 90 | 0.02 | 0.036 | 0.12 | 0.51 | 0.2 | 0.21 | 0.47 | 0.92 | 0.55 |
| 2001/3021 | SW1996/60 | 94 | 0.043 | < 0.001 | 0.2 | 2.0 | 1.2 | 0.67 | 2.0 | 3.87 | 0.52 |
| 2000/3652 | SW1996/67 | 92 | 0.039 | 0.12 | 0.36 | 2.7 | 0.75 | 0.54 | 2.4 | 3.99 | 0.68 |
| 2001/3601 | SW1996/84e | 87 | 0.021 | 0.044 | 0.18 | 0.85 | 0.2 | 0.23 | 0.59 | 1.28 | 0.66 |
| 2000/3653 | SW1996/87 | 69 | 0.066 | 0.2 | 0.69 | 6.6 | 1.3 | 1.2 | 3.9 | 9.1 | 0.73 |
| 1998/7457 | SW1996/121 | 39 | 0.011 | 0.023 | 0.09 | 37 | 0.94 | 0.78 | 1.1 | 38.72 | 0.96 |
| 2001/3602 | SW1996/147a | 86 | < 0.001 | 0.43 | 0.18 | 1.7 | 0.48 | 0.87 | 1.2 | 3.05 | 0.56 |
| 1999/1289 | SW1996/150 | 87 | 0.073 | 0.5 | 0.75 | 6.6 | 2.1 | 1.5 | 4.9 | 10.2 | 0.65 |
| 1999/1290 | SW1996/160 | 81 | 0.014 | 0.04 | 0.036 | 0.19 | 0.08 | 0.13 | 0.14 | 0.4 | 0.48 |
| 1998/7462 | SW1996/162 | 26 | 0.32 | 0.04 | 0.35 | 0.85 | 0.42 | 0.3 | 0.92 | 1.57 | 0.54 |
| 2000/3656 | SW1996/163 | 92 | 0.035 | 0.1 | 0.38 | 3.0 | 2.2 | 1.1 | 3.8 | 6.3 | 0.48 |
| 2001/3603 | SW1996/169a | 87 | < 0.001 | 0.025 | 0.14 | 0.73 | 0.21 | 0.22 | 0.57 | 1.16 | 0.63 |
| 2000/3657 | SW1996/174 | 92 | 0.037 | 0.068 | 0.22 | 1.4 | 0.63 | 0.32 | 0.77 | 2.35 | 0.60 |
| 2000/3658 | SW1997/1 | 87 | 0.052 | 0.18 | 0.29 | 5.1 | 1.3 | 1.1 | 2.8 | 7.5 | 0.68 |
| 2000/3659 | SW1997/2 | 90 | 0.021 | 0.09 | 0.11 | 0.83 | 0.27 | 0.34 | 0.56 | 1.44 | 0.58 |
| 1999/1291 | SW1997/21A | 82 | 0.031 | 0.24 | 0.55 | 3.4 | 2.6 | 0.67 | 3.2 | 6.67 | 0.51 |
| 2001/3022 | SW1997/36 | 85 | 0.035 | < 0.001 | 0.15 | 1.8 | 0.7 | 0.39 | 0.98 | 2.89 | 0.62 |
| 2000/3660 | SW1997/5 | 92 | 0.039 | 0.098 | 0.12 | 0.36 | 0.15 | 0.24 | 0.34 | 0.75 | 0.48 |

Table 4.4. continued: Concentrations of organochlorine pesticides in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | α -HCH | γ -HCH | HCB | p, p' -DDE | p, p' -TDE | p, p' -DDT | Dieldrin | Σ DDT | DDE/ Σ DDT |
|-----------|---------------------|------|---------------|---------------|-------|--------------|--------------|--------------|----------|--------------|----------------------|
| 2001/3605 | SW1997/67f | 78 | 0.082 | 0.13 | 0.45 | 2.4 | 0.76 | 0.3 | 1.3 | 3.46 | 0.69 |
| 1998/7466 | SW1997/72 | 88 | 0.033 | 0.13 | 0.16 | 0.69 | 0.23 | 0.18 | 0.64 | 1.1 | 0.63 |
| 1998/7467 | SW1997/80 | 84 | 0.032 | 0.08 | 0.14 | 0.87 | 0.22 | 0.18 | 0.58 | 1.27 | 0.69 |
| 1998/7468 | SW1997/81 | 95 | 0.031 | 0.13 | 0.17 | 1.2 | 0.58 | 0.31 | 1.1 | 2.09 | 0.57 |
| 1998/7469 | SW1997/87 | 90 | 0.036 | 0.15 | 0.26 | 2.1 | 0.98 | 0.54 | 1.2 | 3.62 | 0.58 |
| 1998/7470 | SW1997/89 | 60 | 0.032 | 0.17 | 0.16 | 0.84 | 0.3 | 0.17 | 0.7 | 1.31 | 0.64 |
| 1998/7471 | SW1997/91 | 63 | 0.03 | 0.094 | 0.11 | 0.92 | 0.28 | 0.27 | 0.35 | 1.47 | 0.63 |
| 1998/7472 | SW1997/93 | 91 | 0.018 | 0.035 | 0.033 | 0.17 | 0.11 | 0.1 | 0.12 | 0.38 | 0.45 |
| 2001/3606 | SW1997/93b | 85 | 0.052 | 0.12 | 0.11 | 0.73 | 0.21 | 0.21 | 0.45 | 1.15 | 0.63 |
| 1998/7473 | SW1997/93 foetus | 79 | 0.019 | 0.037 | 0.033 | 0.13 | 0.071 | 0.095 | 0.11 | 0.296 | 0.44 |
| 1998/7474 | SW1997/94 | 87 | 0.004 | 0.036 | 0.025 | 0.19 | 0.1 | 0.059 | 0.12 | 0.349 | 0.54 |
| 1998/7475 | SW1997/96 | 90 | 0.007 | 0.047 | 0.057 | 0.32 | 0.22 | 0.084 | 0.23 | 0.624 | 0.51 |
| 1998/7476 | SW1997/97 | 59 | 0.015 | 0.2 | 0.24 | 0.97 | 0.81 | 0.22 | 1.4 | 2.0 | 0.49 |
| 2001/3607 | SW1997/97a | 83 | < 0.001 | 0.035 | 0.15 | 0.73 | 0.18 | 0.15 | 0.62 | 1.06 | 0.69 |
| 1998/7477 | SW1997/102 | 77 | 0.059 | 0.45 | 0.63 | 3.0 | 1.5 | 0.56 | 2.9 | 5.06 | 0.59 |
| 1998/7478 | SW1997/103 | 76 | 0.019 | 0.23 | 0.22 | 1.3 | 0.6 | 0.49 | 1.4 | 2.39 | 0.54 |
| 1998/7479 | SW1997/111 | 90 | 0.028 | 0.15 | 0.28 | 2.0 | 1.5 | 0.71 | 1.1 | 4.21 | 0.48 |
| 1998/7480 | SW1997/113 | 50 | 0.017 | 0.075 | 0.16 | 0.96 | 1.0 | 0.26 | 0.91 | 2.22 | 0.43 |
| 1998/7481 | SW1997/118 | 85 | 0.013 | 0.018 | 0.049 | 0.4 | 0.2 | 0.2 | 0.23 | 0.8 | 0.50 |
| 2001/3608 | SW1997/124a | 86 | < 0.001 | 0.053 | 0.19 | 1.8 | 0.51 | 0.54 | 1.4 | 2.85 | 0.63 |
| 2001/3609 | SW1997/135f | 90 | 0.053 | 0.068 | 0.35 | 1.9 | 0.49 | 0.37 | 1.2 | 2.76 | 0.69 |
| 1998/7482 | SW1997/138 | 80 | 0.033 | 0.23 | 0.75 | 3.5 | 2.2 | 1.3 | 3.6 | 7.0 | 0.50 |
| 1998/7483 | SW1997/141 | 83 | 0.029 | 0.13 | 0.19 | 1.1 | 0.42 | 0.36 | 1.3 | 1.88 | 0.59 |
| 1998/7484 | SW1997/142 | 90 | 0.034 | 0.13 | 0.25 | 3.0 | 1.6 | 1.1 | 2.5 | 5.7 | 0.53 |
| 1998/7485 | SW1997/142b | 88 | 0.027 | 0.11 | 0.18 | 1.3 | 0.64 | 0.47 | 1.2 | 2.41 | 0.54 |
| 1998/7486 | SW1997/152 | 70 | 0.03 | 0.46 | 0.58 | 5.2 | 2.3 | 1.4 | 4.3 | 8.9 | 0.58 |
| 1998/7463 | SW1997/159 | 66 | 0.024 | 0.015 | 0.056 | 0.8 | 0.17 | 0.31 | 0.55 | 1.28 | 0.63 |
| 2001/3610 | SW1997/161a | 86 | 0.021 | 0.047 | 0.18 | 1.2 | 0.34 | 0.31 | 0.12 | 1.85 | 0.65 |
| 1998/7460 | SW1997/162 | 46 | 0.016 | 0.012 | 0.36 | 19 | 2.1 | 2.8 | 1.2 | 23.9 | 0.79 |
| 1998/7487 | SW1997/173 | 91 | 0.026 | 0.16 | 0.28 | 2.2 | 0.95 | 1.1 | 1.7 | 4.25 | 0.52 |
| 1998/7488 | SW1997/174 | 90 | 0.022 | 0.12 | 0.1 | 2.0 | 0.97 | 0.96 | 1.5 | 3.93 | 0.51 |
| 1999/1292 | SW1997/178 | 86 | 0.015 | 0.057 | 0.028 | 0.39 | 0.15 | 0.15 | 0.19 | 0.69 | 0.57 |
| 2001/3611 | SW1997/178c | 88 | 0.039 | 0.1 | 0.34 | 3.3 | 1.5 | 1.0 | 2.4 | 5.8 | 0.57 |
| 1998/7489 | SW1997/186(1) | 91 | 0.023 | 0.15 | 0.19 | 1.3 | 0.4 | 0.37 | 1.1 | 2.07 | 0.63 |
| 1998/7490 | SW1997/186(2) | 93 | 0.012 | 0.029 | 0.018 | 0.23 | 0.089 | 0.14 | 0.13 | 0.459 | 0.50 |
| 2000/3661 | SW1998/1 | 93 | 0.021 | 0.074 | 0.16 | 0.92 | 0.32 | 0.33 | 0.58 | 1.57 | 0.59 |
| 1998/7491 | SW1998/4 | 82 | 0.05 | 0.26 | 0.34 | 2.1 | 0.85 | 0.8 | 2.2 | 3.75 | 0.56 |
| 2000/3663 | SW1998/21 | 87 | 0.009 | 0.093 | 0.11 | 0.39 | 0.2 | 0.1 | 0.39 | 0.69 | 0.57 |
| 1998/7492 | SW1998/50 | 93 | 0.018 | 0.13 | 0.098 | 0.8 | 0.31 | 0.32 | 0.41 | 1.43 | 0.56 |
| 1999/1293 | SW1998/53 | 90 | 0.049 | 0.24 | 0.16 | 0.75 | 0.21 | 0.22 | 0.64 | 1.18 | 0.64 |
| 2001/3612 | SW1998/56a | 99 | 0.04 | 0.048 | 0.36 | 3.8 | 1.0 | 1.2 | 0.21 | 6.0 | 0.63 |
| 1998/7493 | SW1998/71 | 80 | 0.023 | 0.13 | 0.15 | 1.5 | 0.59 | 0.5 | 1.3 | 2.59 | 0.58 |
| 1998/7494 | SW1998/75 | 99 | 0.059 | 0.41 | 0.21 | 0.83 | 0.32 | 0.31 | 0.91 | 1.46 | 0.57 |
| 1998/7495 | SW1998/76 | 91 | 0.016 | 0.04 | 0.17 | 1.2 | 0.39 | 0.38 | 0.8 | 1.97 | 0.61 |
| 1998/7464 | SW1998/81 | 56 | 0.023 | 0.015 | 0.46 | 17 | 3.2 | 3.0 | 0.9 | 23.2 | 0.73 |
| 2000/3708 | SW1998/90 | 68 | 0.15 | 0.46 | 0.81 | 17 | 1.8 | 2.3 | 5.1 | 21.1 | 0.81 |
| 1998/7496 | SW1998/97 | 78 | 0.043 | 0.27 | 0.31 | 1.3 | 0.53 | 0.66 | 1.0 | 2.49 | 0.52 |
| 1998/7458 | SW1998/104 | 71 | 0.017 | 0.037 | 0.029 | 0.48 | 0.09 | 0.12 | 0.094 | 0.69 | 0.70 |
| 1998/7497 | SW1998/115 | 88 | 0.031 | 0.29 | 0.34 | 4.9 | 2.6 | 2.0 | 5.9 | 9.5 | 0.52 |
| 1998/7498 | SW1998/116 | 85 | 0.012 | 0.094 | 0.1 | 0.42 | 0.4 | 0.11 | 0.44 | 0.93 | 0.45 |
| 2001/3613 | SW1998/123a | 92 | 0.037 | 0.041 | 0.2 | 2.4 | 0.61 | 0.66 | 1.2 | 3.67 | 0.65 |
| 1998/7499 | SW1998/127 | 76 | 0.019 | 0.21 | 0.32 | 2.0 | 0.98 | 0.42 | 1.8 | 3.4 | 0.59 |

Table 4.4. continued: Concentrations of organochlorine pesticides in blubber [mg kg⁻¹ wet weight].

| LSN | Reference no. | %HEL | α -HCH | γ -HCH | HCB | <i>p</i> , <i>p'</i> -DDE | <i>p</i> , <i>p'</i> -TDE | <i>p</i> , <i>p'</i> -DDT | Dieldrin | Σ DDT | DDE/ Σ DDT |
|-----------|---------------|------|---------------|---------------|-------|---------------------------|---------------------------|---------------------------|----------|--------------|-------------------|
| 1998/7500 | SW1998/129 | 84 | 0.03 | 0.39 | 0.24 | 2.2 | 1.6 | 0.85 | 1.7 | 4.65 | 0.47 |
| 2000/3664 | SW1998/135 | 90 | 0.078 | 0.28 | 0.35 | 1.3 | 0.7 | 0.36 | 1.5 | 2.36 | 0.55 |
| 1998/7501 | SW1998/139 | 80 | 0.035 | 0.22 | 0.24 | 1.4 | 0.44 | 0.33 | 1.1 | 2.17 | 0.65 |
| 1998/7502 | SW1998/145 | 64 | 0.035 | 0.25 | 0.22 | 2.0 | 0.89 | 0.52 | 1.0 | 3.41 | 0.59 |
| 2000/3665 | SW1998/149 | 86 | 0.027 | 0.091 | 0.22 | 1.5 | 0.49 | 0.69 | 0.83 | 2.68 | 0.56 |
| 1998/7456 | SW1998/154 | 74 | 0.019 | 0.18 | 0.42 | 14 | 2.3 | 1.2 | 3.8 | 17.5 | 0.80 |
| 2000/3662 | SW1998/16 | 90 | 0.022 | 0.11 | 0.1 | 0.59 | 1.6 | 0.25 | 0.3 | 2.44 | 0.24 |
| 1999/3871 | SW1998/164 | 93 | 0.032 | 0.29 | 0.44 | 2.6 | 3.0 | 0.68 | 3.9 | 6.28 | 0.41 |
| 1998/7503 | SW1998/167A | 74 | 0.023 | 0.27 | 0.5 | 2.5 | 1.4 | 0.96 | 2.8 | 4.86 | 0.51 |
| 2000/3666 | SW1998/170 | 92 | 0.029 | 0.19 | 0.35 | 2.9 | 0.88 | 0.73 | 1.6 | 4.51 | 0.64 |
| 1999/3872 | SW1998/171 | 82 | 0.019 | 0.17 | 0.15 | 0.78 | 0.23 | 0.33 | 0.55 | 1.34 | 0.58 |
| 2000/3667 | SW1998/174 | 89 | 0.041 | 0.15 | 0.32 | 5.5 | 3.2 | 1.8 | 4.0 | 10.5 | 0.52 |
| 1998/7504 | SW1998/179 | 83 | 0.025 | 0.27 | 0.32 | 1.8 | 1.6 | 0.42 | 1.4 | 3.82 | 0.47 |
| 1998/7505 | SW1998/183 | 92 | 0.015 | 0.15 | 0.22 | 1.1 | 1.5 | 0.54 | 1.3 | 3.14 | 0.35 |
| 1999/1294 | SW1998/187 | 85 | 0.031 | 0.037 | 0.16 | 1.2 | 0.27 | 0.34 | 0.37 | 1.81 | 0.66 |
| 1999/1295 | SW1998/191 | 86 | 0.007 | 0.031 | 0.019 | 0.16 | 0.081 | 0.067 | 0.079 | 0.308 | 0.52 |
| 1999/1296 | SW1998/198 | 89 | 0.009 | 0.095 | 0.11 | 0.55 | 0.21 | 0.12 | 0.48 | 0.88 | 0.63 |
| 1999/1297 | SW1998/208 | 80 | 0.026 | 0.11 | 0.15 | 0.97 | 0.31 | 0.21 | 0.72 | 1.49 | 0.65 |
| 2001/3614 | SW1999/8b | 91 | 0.02 | 0.073 | 0.15 | 2.4 | 2.1 | 0.99 | 2.8 | 5.49 | 0.44 |
| 1999/1298 | SW1999/10 | 90 | 0.02 | 0.033 | 0.019 | 0.21 | 0.068 | 0.063 | 0.11 | 0.341 | 0.62 |
| 1999/1299 | SW1999/17 | 76 | 0.053 | 0.19 | 0.42 | 1.7 | 0.47 | 0.43 | 1.8 | 2.6 | 0.65 |
| 1999/1300 | SW1999/26 | 89 | 0.03 | 0.3 | 0.31 | 1.2 | 0.39 | 0.32 | 1.3 | 1.91 | 0.63 |
| 2000/3709 | SW1999/31 | 53 | < 0.001 | < 0.001 | 0.017 | 0.5 | 0.092 | < 0.001 | 0.26 | 0.59 | 0.84 |
| 1999/1301 | SW1999/40 | 89 | 0.018 | 0.065 | 0.045 | 0.36 | 0.12 | 0.046 | 0.17 | 0.526 | 0.68 |
| 2000/3710 | SW1999/45 | 42 | 0.027 | < 0.001 | 0.12 | 0.16 | 0.095 | < 0.001 | 0.26 | 0.26 | 0.63 |
| 1999/1302 | SW1999/48 | 89 | 0.023 | 0.11 | 0.1 | 0.87 | 0.21 | 0.15 | 0.47 | 1.23 | 0.71 |
| 2001/3615 | SW1999/48c | 86 | 0.022 | 0.047 | 0.23 | 2.1 | 0.64 | 0.51 | 1.6 | 3.25 | 0.65 |
| 2001/3616 | SW1999/57a | 93 | 0.042 | 0.13 | 0.19 | 0.82 | 0.28 | 0.25 | 0.92 | 1.35 | 0.61 |
| 2000/3668 | SW1999/60 | 87 | < 0.001 | < 0.001 | 0.1 | 0.4 | 0.18 | < 0.001 | 0.3 | 0.58 | 0.69 |
| 2000/3669 | SW1999/63 | 90 | < 0.001 | 0.13 | 0.091 | 0.3 | 0.17 | < 0.001 | 0.3 | 0.47 | 0.64 |
| 1999/1303 | SW1999/71 | 76 | 0.029 | 0.27 | 0.29 | 1.3 | 0.57 | 0.13 | 0.71 | 2.0 | 0.65 |
| 2001/3617 | SW1999/72C.1 | 93 | 0.034 | 0.047 | 0.19 | 1.0 | 0.44 | 0.24 | 0.73 | 1.68 | 0.60 |
| 2001/3618 | SW1999/72C.2 | 86 | 0.033 | 0.16 | 0.14 | 1.1 | 1.5 | 0.24 | 1.0 | 2.84 | 0.39 |
| 1999/1304 | SW1999/74 | 90 | 0.044 | 0.14 | 0.23 | 1.2 | 0.36 | 0.17 | 0.84 | 1.73 | 0.69 |
| 1999/1305 | SW1999/77 | 91 | 0.027 | 0.19 | 0.14 | 1.0 | 0.45 | 0.15 | 0.74 | 1.6 | 0.63 |
| 1999/3842 | SW1999/96 | 94 | 0.024 | 0.13 | 0.14 | 0.66 | 0.26 | 0.061 | 0.5 | 0.981 | 0.67 |
| 2001/3619 | SW1999/96C | 87 | < 0.001 | 0.026 | 0.16 | 1.9 | 0.49 | 0.99 | 1.4 | 3.38 | 0.56 |
| 2001/3620 | SW1999/121B | 88 | 0.022 | 0.075 | 0.32 | 0.89 | 0.38 | 0.18 | 1.1 | 1.45 | 0.61 |
| 2000/3670 | SW1999/148 | 92 | 0.016 | 0.31 | 0.34 | 2.4 | 1.4 | 0.57 | 2.3 | 4.37 | 0.55 |
| 2001/3621 | SW1999/148A | 89 | < 0.001 | 0.058 | 0.32 | 3.1 | 1.1 | 1.9 | 1.8 | 6.1 | 0.51 |
| 2000/3671 | SW1999/172 | 93 | 0.017 | 0.092 | 0.27 | 1.9 | 0.6 | 0.7 | 1.2 | 3.2 | 0.59 |
| 2000/3530 | SW1999/174B | 88 | 0.014 | 0.095 | 0.091 | 0.99 | 1.0 | 0.19 | 0.39 | 2.18 | 0.45 |
| 2000/3531 | SW1999/189 | 95 | 0.037 | 0.096 | 0.17 | 0.74 | 0.37 | 0.19 | 0.55 | 1.3 | 0.57 |
| 2000/3532 | SW1999/192 | 83 | < 0.001 | 0.038 | 0.12 | 0.92 | 0.34 | 0.17 | 0.45 | 1.43 | 0.64 |
| 2001/3622 | SW1999/194a | 93 | 0.024 | 0.026 | 0.15 | 1.0 | 0.23 | 0.21 | 0.38 | 1.44 | 0.69 |
| 2000/3711 | SW1999/197 | 90 | < 0.001 | 0.026 | 0.12 | 1.2 | 0.18 | 0.31 | 0.2 | 1.69 | 0.71 |
| 2000/3712 | SW1999/201A | 88 | 0.032 | 0.15 | 0.24 | 42 | 1.7 | 1.5 | 3.7 | 45.2 | 0.93 |
| 2000/3533 | SW1999/202 | 85 | 0.035 | 0.065 | 0.084 | 0.45 | 0.26 | 0.14 | 0.22 | 0.85 | 0.53 |
| 2000/3534 | SW1999/208 | 88 | 0.034 | 0.065 | 0.061 | 0.27 | 0.15 | 0.15 | 0.24 | 0.57 | 0.47 |
| 2000/3535 | SW2000/13 | 91 | 0.049 | 0.081 | 0.11 | 0.52 | 0.15 | 0.15 | 0.25 | 0.82 | 0.63 |
| 2000/3672 | SW2000/16 | 90 | < 0.001 | 0.042 | 0.11 | 0.54 | 0.18 | 0.18 | 0.37 | 0.9 | 0.60 |
| 2000/3673 | SW2000/20 | 87 | 0.046 | 0.5 | 0.98 | 7.2 | 3.0 | 2.3 | 4.1 | 12.5 | 0.58 |
| 2000/3674 | SW2000/27 | 90 | 0.014 | 0.25 | 0.56 | 1.7 | 1.4 | 0.44 | 2.1 | 3.54 | 0.48 |
| 2000/3536 | SW2000/33 | 68 | 0.03 | 0.16 | 0.5 | 3.4 | 0.89 | 0.63 | 0.23 | 4.92 | 0.69 |
| 2000/3537 | SW2000/37 | 77 | 0.021 | 0.13 | 0.24 | 1.1 | 1.0 | 0.38 | 1.3 | 2.48 | 0.44 |

Table 4.4. continued: Concentrations of organochlorine pesticides in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | α -HCH | γ -HCH | HCB | p, p' -DDE | p, p' -TDE | p, p' -DDT | Dieldrin | Σ DDT | DDE/ Σ DDT |
|-----------|---------------|------|---------------|---------------|-------|--------------|--------------|--------------|----------|--------------|----------------------|
| 2000/3538 | SW2000/50 | 82 | < 0.001 | 0.11 | 0.14 | 1.3 | 0.48 | 0.33 | 0.1 | 2.11 | 0.62 |
| 2001/3624 | SW2000/52a | 92 | 0.056 | 0.12 | 0.11 | 0.52 | 0.15 | 0.13 | 0.52 | 0.8 | 0.65 |
| 2000/3539 | SW2000/53 | 86 | < 0.001 | 0.053 | 0.09 | 0.48 | 0.22 | 0.086 | 0.51 | 0.786 | 0.61 |
| 2000/3540 | SW2000/55 | 83 | < 0.001 | 0.098 | 0.12 | 0.97 | 0.32 | 0.18 | 0.82 | 1.47 | 0.66 |
| 2000/3541 | SW2000/73 | 84 | < 0.001 | 0.051 | 0.055 | 0.62 | 0.25 | 0.19 | 0.44 | 1.06 | 0.58 |
| 2001/3625 | SW2000/74a | 86 | < 0.001 | 0.11 | 0.19 | 0.82 | 2.4 | 0.61 | 2.6 | 3.83 | 0.21 |
| 2000/3542 | SW2000/81 | 84 | 0.015 | 0.12 | 0.21 | 2.2 | 0.98 | 0.48 | 1.9 | 3.66 | 0.60 |
| 2001/3626 | SW2000/81a | 88 | 0.034 | 0.06 | 0.32 | 0.9 | 0.38 | 0.27 | 1.0 | 1.55 | 0.58 |
| 2000/3675 | SW2000/103 | 86 | < 0.001 | 0.082 | 0.17 | 1.1 | 1.0 | 0.31 | 1.2 | 2.41 | 0.46 |
| 2000/3676 | SW2000/131 | 92 | 0.02 | 0.2 | 0.35 | 2.0 | 0.18 | < 0.001 | 1.2 | 2.18 | 0.92 |
| 2000/3677 | SW2000/140 | 89 | 0.02 | 0.11 | 0.14 | 2.6 | 1.3 | 0.92 | 2.3 | 4.82 | 0.54 |
| 2000/3678 | SW2000/144 | 88 | < 0.001 | 0.072 | 0.25 | 1.8 | 0.69 | 0.35 | 1.6 | 2.84 | 0.63 |
| 2000/3679 | SW2000/146(1) | 76 | 0.026 | 0.073 | 0.26 | 1.2 | 0.33 | 0.2 | 0.8 | 1.73 | 0.69 |
| 2000/3680 | SW2000/146(2) | 86 | 0.024 | 0.092 | 0.32 | 1.9 | 0.86 | 0.45 | 1.7 | 3.21 | 0.59 |
| 2001/3623 | SW2000/14a | 94 | 0.013 | 0.019 | 0.2 | 0.76 | 0.35 | 0.25 | 0.89 | 1.36 | 0.56 |
| 2001/3023 | SW2000/150A | 56 | < 0.001 | < 0.001 | 0.21 | 1.4 | 1.6 | 0.37 | 1.8 | 3.37 | 0.42 |
| 2001/3024 | SW2000/157 | 88 | < 0.001 | < 0.001 | 0.26 | 1.2 | 0.61 | 0.16 | 1.3 | 1.97 | 0.61 |
| 2001/3025 | SW2000/164 | 86 | 0.033 | < 0.001 | 0.32 | 2.7 | 1.3 | 0.52 | 1.9 | 4.52 | 0.60 |
| 2001/3026 | SW2000/166 | 89 | < 0.001 | 0.12 | 0.29 | 1.4 | 1.1 | 0.52 | 2.0 | 3.02 | 0.46 |
| 2001/3027 | SW2000/168 | 89 | 0.019 | 0.058 | 0.18 | 1.5 | 0.61 | 0.29 | 0.91 | 2.4 | 0.63 |
| 2001/3028 | SW2000/169 | 90 | < 0.001 | 0.044 | 0.18 | 1.8 | 0.73 | 0.44 | 1.1 | 2.97 | 0.61 |
| 2001/3029 | SW2000/170 | 90 | < 0.001 | < 0.001 | 0.029 | 0.25 | 0.08 | < 0.001 | 0.096 | 0.33 | 0.76 |
| 2001/3054 | SS2000/105 | 91 | < 0.001 | < 0.001 | 0.011 | 0.88 | < 0.001 | 0.14 | 0.057 | 1.02 | 0.86 |
| 2001/3030 | SW2000/174 | 92 | < 0.001 | 0.11 | 0.25 | 1.1 | 0.94 | 0.23 | 1.1 | 2.27 | 0.48 |
| 2001/3031 | SW2000/176 | 92 | 0.019 | 0.083 | 0.19 | 0.74 | 0.56 | 0.18 | 0.83 | 1.48 | 0.50 |
| 2001/3063 | SW2000/179 | 48 | < 0.001 | 0.018 | 0.072 | 0.29 | 0.074 | < 0.001 | 0.37 | 0.364 | 0.80 |
| 2001/3055 | SS2000/106 | 90 | 0.02 | < 0.001 | 0.023 | 0.57 | < 0.001 | 0.078 | 0.08 | 0.648 | 0.88 |
| 2001/3032 | SW2000/188A | 90 | 0.035 | < 0.001 | 0.13 | 0.8 | 0.37 | 0.17 | 0.7 | 1.34 | 0.60 |
| 2001/3033 | SW2000/196 | 88 | < 0.001 | 0.058 | 0.15 | 1.3 | 0.59 | 0.31 | 1.0 | 2.2 | 0.59 |
| 2001/3064 | SW2000/200 | 82 | < 0.001 | < 0.001 | 0.039 | 0.07 | < 0.001 | < 0.001 | 0.096 | 0.07 | 1.00 |
| 2001/3034 | SW2001/4 | 86 | < 0.001 | 0.04 | 0.077 | 0.43 | 0.13 | < 0.001 | 0.27 | 0.56 | 0.77 |
| 2001/3035 | SW2001/21 | 87 | < 0.001 | < 0.001 | 0.012 | 0.097 | 0.049 | < 0.001 | 0.062 | 0.146 | 0.66 |
| 2001/3036 | SW2001/23 | 92 | < 0.001 | 0.083 | 0.18 | 5.7 | 1.4 | 1.3 | 4.2 | 8.4 | 0.68 |
| 2001/3037 | SW2001/24A | 90 | 0.031 | 0.098 | 0.18 | 1.1 | 0.73 | 0.2 | 0.98 | 2.03 | 0.54 |
| 2001/3038 | SW2001/30 | 95 | < 0.001 | 0.038 | 0.061 | 0.24 | 0.08 | 0.11 | 0.17 | 0.43 | 0.56 |
| 2001/3039 | SW2001/36 | 89 | < 0.001 | 0.11 | 0.31 | 1.7 | 0.47 | 0.33 | 0.14 | 2.5 | 0.68 |
| 2001/3040 | SW2001/47 | 92 | < 0.001 | < 0.001 | 0.021 | 0.18 | 0.06 | 0.14 | 0.086 | 0.38 | 0.47 |
| 2001/3065 | SW2001/60 | 76 | < 0.001 | < 0.001 | 0.078 | 0.11 | 0.059 | < 0.001 | 0.15 | 0.169 | 0.65 |
| 2001/3041 | SW2001/85 | 93 | < 0.001 | 0.04 | 0.1 | 0.27 | 0.14 | 0.11 | 0.26 | 0.52 | 0.52 |
| 2001/3042 | SW2001/92 | 85 | 0.055 | 0.16 | 0.27 | 1.6 | 1.0 | 0.46 | 1.5 | 3.06 | 0.52 |
| 2001/3043 | SW2001/94 | 91 | 0.034 | 0.051 | 0.15 | 0.44 | 0.32 | 0.15 | 0.37 | 0.91 | 0.48 |
| 2001/3066 | SW2001/120 | 69 | < 0.001 | < 0.001 | 0.13 | 0.32 | 0.11 | 0.11 | 0.28 | 0.54 | 0.59 |
| 2001/3044 | SW2001/127 | 88 | 0.023 | 0.07 | 0.26 | 2.3 | 1.2 | 0.51 | 1.9 | 4.01 | 0.57 |
| 2001/3045 | SW2001/139 | 88 | < 0.001 | 0.072 | 0.29 | 2.3 | 1.2 | 0.57 | 2.2 | 4.07 | 0.57 |
| 2001/3067 | SW2001/141 | 51 | < 0.001 | 0.047 | 0.15 | 108 | 2.5 | 0.76 | 2.0 | 111.26 | 0.97 |
| 2001/3046 | SW2001/144 | 55 | < 0.001 | 0.029 | 0.093 | 0.62 | 0.19 | 0.13 | 0.3 | 0.94 | 0.66 |
| 2001/3047 | SW2001/149 | 87 | < 0.001 | 0.041 | 0.11 | 1.7 | 1.0 | 0.38 | 0.95 | 3.08 | 0.55 |
| 2001/3048 | SW2001/158 | 90 | 0.012 | 0.065 | 0.22 | 1.4 | 0.26 | 0.15 | 0.5 | 1.81 | 0.77 |
| 2001/3049 | SW2001/186 | 86 | < 0.001 | 0.081 | 0.28 | 1.8 | 1.1 | 0.4 | 2.5 | 3.3 | 0.55 |
| 2001/3050 | SW2001/188 | 72 | 0.049 | 0.13 | 0.49 | 2.3 | 0.57 | 0.35 | 1.6 | 3.22 | 0.71 |
| 2001/3051 | SW2001/193 | 75 | < 0.001 | 0.04 | 0.22 | 1.4 | 0.55 | 0.29 | 0.98 | 2.24 | 0.63 |
| 2001/3052 | SW2001/198 | 90 | 0.015 | 0.031 | 0.11 | 0.57 | 0.28 | 0.15 | 0.29 | 1.0 | 0.57 |
| 2001/3053 | SW2001/203 | 92 | 0.017 | 0.053 | 0.23 | 1.3 | 0.97 | 0.23 | 1.7 | 2.5 | 0.52 |

Table 4.5. Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB18 | CB31 | CB28 | CB52 | CB49 | CB47 | CB44 | CB66 | CB101 |
|-----------|---------------|------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| 1996/7804 | SS1990/12A | 74 | < 0.001 | < 0.001 | < 0.001 | 0.044 | 0.036 | 0.017 | < 0.001 | 0.018 | 0.078 |
| 1996/7805 | SS1990/12B | 89 | < 0.001 | < 0.001 | < 0.001 | 0.078 | 0.036 | 0.03 | < 0.001 | 0.027 | 0.14 |
| 1996/7806 | SS1991/1B | 70 | < 0.001 | < 0.001 | 0.006 | 0.19 | 0.048 | 0.07 | 0.005 | 0.075 | 0.37 |
| 1995/27 | SW1991/82 | 66 | 0.028 | < 0.011 | < 0.016 | 0.88 | 0.079 | 0.14 | 0.027 | < 0.011 | 0.55 |
| 1996/7802 | SS1991/35 | 67 | < 0.001 | < 0.001 | 0.015 | 0.054 | < 0.001 | 0.034 | < 0.001 | 0.028 | 0.12 |
| 1996/7803 | SS1991/38 | 47 | 0.004 | < 0.001 | 0.009 | 0.056 | 0.015 | 0.036 | < 0.001 | 0.028 | 0.17 |
| 1995/29 | SW1991/145 | 86 | < 0.013 | 0.032 | < 0.016 | 0.4 | < 0.013 | < 0.015 | 0.013 | 0.43 | 0.21 |
| 1995/61 | SW1992/6 | 84 | 0.011 | 0.017 | 0.039 | 0.5 | 0.14 | 0.17 | 0.032 | 0.77 | 0.5 |
| 1995/65 | SW1992/9 | 90 | 0.04 | < 0.011 | < 0.016 | 3.0 | < 0.013 | 0.3 | 0.053 | < 0.01 | 0.5 |
| 1998/7461 | SW1992/13 | 62 | 0.019 | 0.003 | 0.007 | 0.068 | 0.013 | 0.005 | 0.014 | 0.065 | 0.089 |
| 1995/629 | SW1993/107 | 54 | 0.028 | < 0.011 | 0.016 | 0.35 | 0.082 | 0.088 | 0.015 | < 0.01 | 0.41 |
| 1995/59 | SW1992/124 | 78 | 0.011 | < 0.011 | 0.017 | 0.19 | < 0.013 | < 0.015 | 0.036 | < 0.011 | 0.27 |
| 1995/63 | SW1992/142 | 84 | 0.04 | 0.009 | 0.025 | 1.1 | 0.096 | 0.22 | 0.028 | 1.7 | 0.63 |
| 1995/1119 | SW1992/146 | 71 | 0.012 | < 0.011 | 0.05 | 0.14 | 0.065 | 0.033 | 0.049 | < 0.01 | 0.33 |
| 1995/200 | SW1992/156 | 84 | 0.035 | < 0.011 | 0.036 | 0.31 | 0.013 | 0.083 | 0.053 | < 0.011 | 0.74 |
| 1995/67 | SW1992/165 | 68 | 0.024 | < 0.011 | < 0.016 | 2.7 | 0.045 | 0.22 | 0.018 | < 0.01 | 0.32 |
| 1995/69 | SW1992/166 | 68 | 0.029 | < 0.011 | 0.03 | 1.7 | 0.037 | 0.5 | 0.034 | < 0.01 | 1.4 |
| 1995/72 | SW1992/198 | 80 | 0.023 | 0.022 | 0.03 | 1.3 | 0.032 | 0.079 | 0.026 | 1.6 | 0.27 |
| 1995/74 | SW1992/202 | 84 | 0.017 | < 0.001 | 0.018 | 0.3 | 0.038 | 0.055 | 0.014 | 0.37 | 0.21 |
| 1996/7807 | SS1992/117 | 82 | < 0.001 | < 0.001 | 0.008 | 0.084 | 0.044 | 0.071 | < 0.001 | 0.036 | 0.18 |
| 1995/76 | SW1992/215 | 90 | < 0.013 | < 0.011 | < 0.016 | 0.029 | < 0.013 | < 0.015 | < 0.013 | < 0.011 | 0.074 |
| 1995/1121 | CORK 2 | 26 | 0.01 | < 0.011 | 0.036 | 0.21 | 0.031 | 0.037 | < 0.013 | < 0.01 | 0.15 |
| 1995/1123 | CORK 3 | 49 | 0.018 | < 0.011 | 0.036 | 0.47 | 0.044 | 0.07 | 0.038 | < 0.01 | 0.27 |
| 1995/1125 | CORK 5 | 49 | 0.043 | < 0.011 | 0.031 | 0.67 | 0.068 | 0.11 | 0.035 | < 0.01 | 0.41 |
| 1995/78 | SW1993/12 | 90 | 0.02 | < 0.011 | < 0.016 | 0.93 | < 0.013 | 0.14 | 0.015 | < 0.01 | 0.18 |
| 1995/80 | SW1993/20 | 87 | 0.029 | < 0.011 | 0.023 | 0.93 | < 0.013 | 0.21 | 0.026 | < 0.01 | 0.56 |
| 1995/1127 | SW1993/27 | 59 | 0.04 | < 0.011 | 0.04 | 1.1 | < 0.013 | 0.11 | 0.071 | < 0.01 | 0.33 |
| 1995/82 | SW1993/30 | 84 | 0.011 | < 0.01 | 0.017 | 0.72 | < 0.013 | 0.22 | 0.016 | < 0.01 | 0.16 |
| 1995/84 | SW1993/31 | 84 | 0.014 | 0.014 | 0.021 | 1.1 | 0.074 | 0.11 | 0.02 | 1.6 | 0.28 |
| 1995/193 | SW1993/36 | 90 | 0.025 | 0.013 | 0.034 | 0.6 | 0.16 | 0.16 | 0.049 | 1.1 | 1.2 |
| 1995/627 | SW1993/41 | 89 | 0.021 | 0.012 | 0.025 | 0.72 | 0.058 | 0.037 | 0.028 | 1.1 | 0.43 |
| 1995/1129 | SW1993/59 | 86 | 0.037 | < 0.01 | 0.037 | 0.36 | 0.045 | 0.059 | 0.013 | < 0.01 | 0.24 |
| 1995/202 | SW1993/63 | 90 | 0.032 | < 0.011 | 0.021 | 0.97 | < 0.013 | 0.22 | 0.017 | < 0.01 | 0.43 |
| 1995/1207 | SW1993/69 | 80 | 0.018 | < 0.01 | 0.041 | 0.32 | 0.039 | 0.063 | 0.01 | < 0.01 | 0.14 |
| 1995/1208 | SW1993/70 | 91 | 0.01 | < 0.001 | 0.023 | 0.21 | < 0.001 | 0.056 | 0.035 | 0.35 | 0.4 |
| 1995/1516 | SW1993/78 | 83 | 0.015 | 0.003 | 0.015 | 0.08 | 0.055 | 0.017 | 0.021 | 0.12 | 0.22 |
| 1996/7808 | SS1993/135 | 10 | < 0.001 | < 0.001 | < 0.001 | 0.06 | 0.038 | 0.12 | < 0.001 | 0.013 | 0.19 |
| 1995/1131 | SW1993/91 | 39 | 0.057 | < 0.01 | 0.067 | 0.94 | 0.26 | 0.25 | 0.081 | < 0.01 | 1.5 |
| 1995/1210 | SW1993/94 | 90 | < 0.064 | < 0.056 | 0.065 | 0.51 | 0.084 | 0.11 | 0.025 | 0.067 | 0.34 |
| 1996/7809 | SS1993/196 | 87 | < 0.001 | < 0.001 | 0.012 | 0.094 | 0.052 | 0.073 | < 0.001 | 0.031 | 0.18 |
| 1995/195 | SW1993/122 | 89 | < 0.001 | 0.015 | 0.024 | 0.047 | 0.018 | 0.044 | 0.017 | 0.11 | 0.11 |
| 1995/197 | SW1993/124 | 89 | < 0.013 | < 0.011 | < 0.016 | 0.3 | 0.055 | 0.085 | 0.014 | < 0.01 | 0.34 |
| 1995/1212 | SW1993/126 | 84 | < 0.064 | < 0.056 | 0.069 | 0.11 | 0.032 | 0.051 | 0.031 | 0.26 | 0.25 |
| 1995/198 | SW1993/131 | 90 | 0.021 | 0.008 | 0.05 | < 0.023 | 0.21 | 0.11 | 0.041 | < 0.01 | 0.39 |
| 1995/204 | SW1993/133A | 80 | < 0.013 | < 0.011 | < 0.016 | 0.13 | 0.037 | 0.034 | < 0.013 | < 0.01 | 0.24 |
| 1998/7454 | SW1994/5 | 77 | 0.027 | 0.004 | 0.039 | 0.31 | 0.037 | 0.073 | 0.025 | 0.5 | 0.34 |
| 1995/206 | SW1994/7 | 81 | 0.036 | < 0.01 | 0.017 | 1.5 | < 0.013 | 0.15 | 0.023 | < 0.01 | 0.47 |
| 1995/322 | SW1994/12 | 92 | < 0.013 | < 0.011 | < 0.016 | 0.16 | 0.034 | 0.033 | < 0.013 | < 0.01 | 0.26 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB18 | CB31 | CB28 | CB52 | CB49 | CB47 | CB44 | CB66 | CB101 |
|-----------|---------------|------|---------|----------|---------|-------|---------|---------|---------|---------|-------|
| 1995/324 | SW1994/31 | 55 | 0.006 | < 0.001 | 0.013 | 0.19 | 0.021 | 0.025 | 0.015 | 0.29 | 0.14 |
| 1995/326 | SW1994/32 | 89 | < 0.013 | < 0.011 | < 0.016 | 0.52 | 0.021 | 0.086 | 0.017 | < 0.01 | 0.14 |
| 1998/7459 | SW1994/39 | 81 | 0.13 | 0.062 | 0.17 | 0.28 | 0.21 | 0.12 | 0.1 | 0.33 | 0.68 |
| 1995/926 | SW1994/44 | 90 | < 0.064 | < 0.056 | 0.069 | 1.1 | 0.1 | 0.11 | 0.032 | 0.098 | 0.22 |
| 1995/328 | SW1994/53 | 92 | < 0.013 | < 0.011 | < 0.016 | 0.021 | < 0.013 | < 0.013 | < 0.013 | 0.024 | 0.079 |
| 1995/332 | SW1994/67 | 82 | < 0.013 | < 0.011 | < 0.016 | 0.17 | < 0.013 | 0.037 | 0.024 | < 0.01 | 0.34 |
| 1995/334 | SW1994/68 | 95 | < 0.013 | < 0.011 | < 0.016 | 0.12 | 0.039 | 0.025 | 0.016 | < 0.01 | 0.21 |
| 1995/934 | SW1994/77 | 96 | < 0.013 | < 0.011 | < 0.016 | 0.11 | 0.037 | 0.035 | 0.01 | < 0.01 | 0.2 |
| 1995/936 | SW1994/78 | 93 | 0.035 | < 0.011 | 0.035 | 0.3 | 0.099 | 0.11 | 0.037 | 0.11 | 0.55 |
| 1995/320 | SW1994/7A | 92 | 0.005 | 0.017 | 0.022 | 0.26 | 0.027 | 0.064 | 0.021 | 0.45 | 0.23 |
| 1995/632 | SW1994/80 | 88 | 0.026 | 0.012 | 0.027 | 0.6 | 0.078 | 0.079 | 0.038 | 0.95 | 0.56 |
| 1995/938 | SW1994/83 | 49 | < 0.013 | < 0.011 | < 0.016 | 0.12 | 0.062 | 0.038 | 0.042 | < 0.01 | 0.4 |
| 1996/7811 | SS1994/63 | 59 | < 0.001 | < 0.001 | < 0.001 | 0.03 | 0.032 | 0.023 | < 0.001 | 0.014 | 0.078 |
| 1995/1467 | SW1994/101 | 74 | 0.013 | < 0.001 | 0.025 | 0.77 | < 0.001 | 0.13 | < 0.001 | 1.1 | 0.29 |
| 1996/4100 | LAW-72 | 82 | 0.012 | < 0.011 | 0.005 | 0.067 | 0.018 | 0.032 | < 0.001 | < 0.001 | 0.16 |
| 1995/1469 | SW1994/105 | 55 | < 0.064 | < 0.056 | 0.067 | 0.009 | 0.012 | 0.036 | 0.024 | 0.072 | 0.15 |
| 1995/940 | SW1994/108 | 31 | 0.82 | 0.046 | 0.15 | 0.075 | 0.095 | 0.044 | < 0.013 | 0.25 | 0.51 |
| 1995/942 | SW1994/114 | 19 | 0.014 | < 0.011 | 0.062 | 0.16 | 0.071 | 0.071 | 0.031 | 0.11 | 0.32 |
| 1995/1501 | SW1994/115 | 42 | < 0.064 | < 0.056 | 0.037 | 0.1 | 0.021 | 0.045 | 0.014 | 0.012 | 0.19 |
| 1995/1505 | SW1994/120 | 84 | 0.01 | 0.025 | 0.036 | 0.39 | < 0.001 | 0.099 | 0.083 | 0.73 | 1.1 |
| 1995/636 | SW1994/143 | 76 | < 0.013 | < 0.011 | 0.025 | 0.093 | 0.036 | 0.031 | 0.013 | < 0.01 | 0.23 |
| 1995/1495 | SW1994/145 | 91 | < 0.064 | < 0.056 | 0.069 | 0.61 | 0.093 | 0.12 | 0.028 | 0.074 | 0.34 |
| 1995/1497 | SW1994/148 | 86 | 0.037 | < 0.001 | 0.023 | 0.81 | < 0.001 | 0.15 | < 0.001 | 1.1 | 0.44 |
| 1995/920 | SW1994/153 | 43 | < 0.064 | < 0.056 | 0.032 | 0.34 | 0.066 | 0.053 | 0.014 | 0.044 | 0.1 |
| 1996/7812 | SS1994/277 | 82 | < 0.001 | < 0.001 | < 0.001 | 0.026 | 0.027 | 0.011 | < 0.001 | 0.015 | 0.069 |
| 1995/922 | SW1994/171 | 83 | < 0.064 | < 0.056 | 0.065 | 1.4 | 0.15 | 0.19 | 0.027 | 0.12 | 0.51 |
| 1995/1499 | SW1994/172 | 88 | 0.012 | 0.021 | 0.036 | 0.42 | < 0.001 | 0.091 | < 0.001 | 0.38 | 0.41 |
| 1995/924 | SW1994/185 | 84 | < 0.064 | < 0.056 | 0.065 | 0.28 | 0.047 | 0.083 | 0.024 | 0.058 | 0.27 |
| 1996/3927 | SW1995/7 | 85 | 0.018 | 0.004 | 0.013 | 0.93 | 0.02 | 0.096 | 0.02 | 0.97 | 0.13 |
| 1996/3928 | SW1995/52 | 86 | 0.024 | < 0.011 | 0.011 | 0.31 | < 0.013 | 0.06 | 0.02 | 0.49 | 0.29 |
| 1995/1215 | SW1995/54 | 49 | 0.035 | 0.01 | 0.058 | 0.67 | 0.097 | 0.14 | 0.067 | 0.82 | 0.82 |
| 1996/3929 | SW1995/55 | 83 | 0.064 | < 0.011 | 0.022 | 2.5 | 0.18 | 0.4 | 0.052 | 3.0 | 1.4 |
| 1996/3930 | SW1995/61 | 93 | 0.027 | < 0.011 | 0.016 | 0.74 | 0.07 | 0.13 | 0.03 | 1.0 | 0.38 |
| 2001/3018 | SW1995/68 | 69 | 0.039 | < 0.001 | < 0.001 | 0.27 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.22 |
| 1996/3931 | SW1995/76 | 45 | 0.004 | < 0.011 | 0.016 | 0.1 | 0.036 | 0.023 | 0.024 | 0.19 | 0.19 |
| 1996/3932 | SW1995/78 | 80 | 0.022 | < 0.011 | 0.014 | 0.27 | 0.069 | 0.069 | 0.021 | 0.44 | 0.4 |
| 1996/3933 | SW1995/84 | 86 | < 0.013 | 0.01 | < 0.016 | 0.041 | 0.087 | 0.016 | 0.01 | 0.028 | 0.097 |
| 1996/3934 | SW1995/85 | 72 | 0.043 | < 0.011 | 0.014 | 0.98 | 0.13 | 0.19 | 0.049 | 1.3 | 1.0 |
| 1996/3935 | SW1995/86 | 85 | 0.007 | < 0.011 | 0.015 | 0.046 | 0.017 | 0.02 | 0.012 | 0.034 | 0.097 |
| 1996/7813 | SS1995/80 | 8.0 | < 0.001 | < 0.001 | < 0.001 | 0.018 | 0.018 | 0.025 | < 0.001 | < 0.001 | 0.051 |
| 1996/3936 | SW1995/94 | 84 | < 0.013 | 0.006 | < 0.016 | 0.011 | < 0.013 | < 0.015 | < 0.013 | < 0.01 | 0.048 |
| 1999/1287 | SW1996/101 | 86 | 0.026 | < 0.0006 | 0.013 | 0.48 | 0.071 | 0.095 | 0.027 | 0.57 | 0.42 |
| 1996/3948 | SW1995/102 | 39 | 0.057 | < 0.011 | 0.014 | 1.6 | 0.17 | 0.27 | 0.034 | < 0.01 | 1.4 |
| 1996/3949 | SW1995/120A | 80 | 0.014 | < 0.011 | 0.012 | 0.19 | 0.038 | 0.055 | 0.014 | < 0.01 | 0.34 |
| 2001/3599 | SW1995/120b | 79 | 0.17 | < 0.001 | < 0.001 | 0.19 | < 0.001 | 0.024 | < 0.001 | 0.2 | 0.089 |
| 1996/3950 | SW1995/126 | 74 | 0.1 | 0.02 | 0.019 | 1.6 | 0.1 | 0.22 | < 0.013 | < 0.01 | 0.63 |
| 2001/3019 | SW1995/141 | 88 | 0.057 | < 0.001 | < 0.001 | 0.34 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.33 |
| 1998/7455 | SW1995/145 | 46 | 0.059 | 0.01 | 0.017 | 0.45 | 0.081 | 0.13 | 0.046 | 0.43 | 0.89 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB18 | CB31 | CB28 | CB52 | CB49 | CB47 | CB44 | CB66 | CB101 |
|-----------|---------------------|------|----------|----------|----------|-------|----------|----------|----------|---------|-------|
| 1996/3956 | SW1996/2 | 81 | 0.011 | < 0.011 | 0.02 | 0.49 | 0.032 | 0.068 | 0.01 | < 0.01 | 0.15 |
| 1996/3952 | SW1996/27(1) | 86 | 0.02 | < 0.011 | 0.075 | 0.63 | 0.021 | 0.081 | 0.017 | < 0.01 | 0.18 |
| 1996/3955 | SW1996/29 | 84 | 0.011 | < 0.011 | 0.009 | 0.15 | 0.044 | 0.041 | 0.015 | < 0.01 | 0.32 |
| 1996/3953 | SW1996/30 | 81 | 0.015 | < 0.011 | 0.075 | 0.13 | 0.036 | 0.035 | 0.01 | < 0.01 | 0.24 |
| 1996/3954 | SW1996/37 | 79 | 0.008 | < 0.011 | 0.014 | 0.73 | 0.031 | 0.085 | 0.014 | < 0.01 | 0.28 |
| 2001/3020 | SW1996/44 | 90 | 0.088 | < 0.001 | < 0.001 | 0.74 | 0.077 | 0.12 | < 0.001 | < 0.001 | 0.44 |
| 1999/1285 | SW1996/46 | 91 | 0.033 | < 0.0006 | 0.016 | 1.2 | 0.052 | 0.11 | 0.021 | 1.3 | 0.33 |
| 2001/3600 | SW1996/50b | 90 | < 0.001 | < 0.001 | < 0.001 | 0.08 | < 0.001 | < 0.001 | < 0.001 | 0.092 | 0.12 |
| 2001/3021 | SW1996/60 | 94 | 0.19 | 0.057 | < 0.001 | 0.93 | < 0.001 | 0.13 | 0.075 | < 0.001 | 0.41 |
| 2000/3652 | SW1996/67 | 92 | 0.053 | < 0.001 | < 0.001 | 0.54 | 0.082 | 0.091 | 0.033 | < 0.001 | 0.43 |
| 2001/3601 | SW1996/84e | 87 | < 0.001 | < 0.001 | < 0.001 | 0.13 | < 0.001 | < 0.001 | < 0.001 | 0.14 | 0.11 |
| 2000/3653 | SW1996/87 | 69 | 0.13 | < 0.001 | < 0.001 | 1.2 | 0.12 | 0.21 | 0.063 | < 0.001 | 0.77 |
| 2000/3654 | SW1996/111 | 59 | < 0.001 | < 0.001 | < 0.001 | 0.16 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.17 |
| 2000/3655 | SW1996/119 | 82 | 0.1 | < 0.001 | 0.16 | 0.56 | 0.29 | 0.17 | 0.19 | < 0.001 | 1.5 |
| 1998/7457 | SW1996/121 | 39 | 0.099 | 0.037 | 0.074 | 0.53 | 0.09 | 0.19 | 0.097 | 1.3 | 0.82 |
| 2001/3602 | SW1996/147a | 86 | < 0.001 | < 0.001 | < 0.001 | 0.31 | < 0.001 | < 0.001 | < 0.001 | 0.29 | 0.09 |
| 1999/1289 | SW1996/150 | 87 | 0.083 | 0.005 | 0.04 | 1.7 | 0.25 | 0.31 | 0.063 | 0.15 | 1.4 |
| 1999/1290 | SW1996/160 | 81 | 0.004 | < 0.0006 | 0.007 | 0.033 | 0.012 | 0.009 | 0.005 | 0.018 | 0.072 |
| 1998/7462 | SW1996/162 | 26 | 0.034 | 0.008 | 0.01 | 0.17 | 0.041 | 0.019 | 0.008 | 0.16 | 0.19 |
| 2000/3656 | SW1996/163 | 92 | 0.14 | 0.018 | 0.012 | 1.4 | 0.11 | 0.14 | 0.072 | < 0.001 | 0.52 |
| 2001/3603 | SW1996/169a | 87 | < 0.001 | < 0.001 | < 0.001 | 0.11 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.07 |
| 2000/3657 | SW1996/174 | 92 | 0.037 | 0.014 | 0.008 | 0.29 | 0.046 | 0.085 | 0.038 | < 0.001 | 0.29 |
| 2000/3658 | SW1997/1 | 87 | 0.066 | < 0.001 | < 0.001 | 0.78 | 0.086 | 0.16 | 0.054 | < 0.001 | 0.59 |
| 2000/3659 | SW1997/2 | 90 | < 0.001 | < 0.001 | < 0.001 | 0.23 | < 0.001 | < 0.001 | 0.043 | < 0.001 | 0.25 |
| 2000/3660 | SW1997/5 | 92 | < 0.001 | < 0.001 | < 0.001 | 0.077 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.18 |
| 1999/1291 | SW1997/21A | 82 | 0.039 | < 0.0006 | 0.034 | 1.1 | 0.11 | 0.19 | 0.034 | 0.11 | 0.58 |
| 2001/3022 | SW1997/36 | 85 | 0.049 | < 0.001 | < 0.001 | 0.25 | 0.075 | < 0.001 | < 0.001 | < 0.001 | 0.42 |
| 2001/3605 | SW1997/67f | 78 | < 0.001 | < 0.001 | < 0.001 | 0.3 | 0.044 | 0.055 | < 0.001 | 0.3 | 0.34 |
| 1998/7466 | SW1997/72 | 88 | 0.001 | < 0.0006 | 0.008 | 0.13 | 0.045 | < 0.0007 | 0.018 | 0.029 | 0.19 |
| 1998/7467 | SW1997/80 | 84 | 0.02 | < 0.0006 | 0.005 | 0.17 | 0.038 | 0.008 | 0.008 | 0.19 | 0.18 |
| 1998/7468 | SW1997/81 | 95 | 0.071 | < 0.0006 | 0.016 | 0.27 | 0.083 | 0.046 | 0.017 | 0.3 | 0.26 |
| 1998/7469 | SW1997/87 | 90 | 0.09 | 0.007 | 0.03 | 0.35 | 0.13 | 0.099 | 0.034 | 0.36 | 0.38 |
| 1998/7470 | SW1997/89 | 60 | 0.02 | < 0.0006 | 0.021 | 0.2 | 0.078 | 0.023 | 0.034 | 0.24 | 0.31 |
| 1998/7471 | SW1997/91 | 63 | 0.088 | 0.006 | 0.031 | 0.27 | 0.15 | 0.076 | 0.042 | 0.05 | 0.52 |
| 1998/7472 | SW1997/93 | 91 | < 0.0006 | < 0.0006 | 0.003 | 0.025 | 0.011 | < 0.0007 | 0.003 | 0.025 | 0.079 |
| 2001/3606 | SW1997/93b | 85 | < 0.001 | < 0.001 | < 0.001 | 0.095 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.14 |
| 1998/7473 | SW1997/93 foetus | 79 | < 0.0006 | < 0.0006 | < 0.0008 | 0.006 | < 0.0007 | < 0.0007 | < 0.0006 | 0.01 | 0.061 |
| 1998/7474 | SW1997/94 | 87 | 0.008 | < 0.0006 | 0.01 | 0.036 | 0.021 | 0.02 | 0.01 | 0.081 | 0.11 |
| 1998/7475 | SW1997/96 | 90 | 0.009 | < 0.0006 | 0.01 | 0.06 | 0.024 | 0.021 | 0.012 | 0.1 | 0.14 |
| 1998/7476 | SW1997/97 | 59 | 0.035 | < 0.0006 | 0.01 | 0.45 | 0.056 | 0.11 | 0.027 | 0.69 | 0.33 |
| 2001/3607 | SW1997/97a | 83 | < 0.001 | < 0.001 | < 0.001 | 0.11 | < 0.001 | < 0.001 | < 0.001 | 0.11 | 0.083 |
| 1998/7477 | SW1997/102 | 77 | 0.06 | < 0.0006 | 0.029 | 0.72 | 0.17 | 0.13 | 0.065 | 0.12 | 1.0 |
| 1998/7478 | SW1997/103 | 76 | 0.045 | < 0.0006 | 0.022 | 0.55 | 0.082 | 0.17 | 0.054 | 1.0 | 0.48 |
| 1998/7479 | SW1997/111 | 90 | 0.027 | < 0.0006 | 0.007 | 0.34 | 0.046 | 0.079 | 0.016 | 0.49 | 0.3 |
| 1998/7480 | SW1997/113 | 50 | 0.026 | < 0.0006 | 0.018 | 0.2 | 0.08 | 0.073 | 0.03 | 0.1 | 0.47 |
| 1998/7481 | SW1997/118 | 85 | 0.009 | < 0.0006 | 0.01 | 0.059 | 0.023 | 0.2 | 0.014 | 0.12 | 0.14 |
| 2001/3608 | SW1997/124a | 86 | < 0.001 | < 0.001 | < 0.001 | 0.32 | < 0.001 | 0.029 | < 0.001 | 0.31 | 0.12 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB18 | CB31 | CB28 | CB52 | CB49 | CB47 | CB44 | CB66 | CB101 |
|-----------|---------------|------|---------|----------|---------|-------|---------|---------|---------|---------|-------|
| 2001/3609 | SW1997/135f | 90 | 0.075 | < 0.001 | < 0.001 | 0.2 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.13 |
| 1998/7482 | SW1997/138 | 80 | 0.078 | < 0.0006 | 0.012 | 1.1 | 0.12 | 0.23 | 0.048 | 1.2 | 0.74 |
| 1998/7483 | SW1997/141 | 83 | 0.021 | < 0.0006 | 0.008 | 0.19 | 0.036 | 0.04 | 0.018 | 0.3 | 0.29 |
| 1998/7484 | SW1997/142 | 90 | 0.019 | < 0.0006 | 0.007 | 0.69 | 0.035 | 0.097 | 0.011 | 0.75 | 0.29 |
| 1998/7485 | SW1997/142b | 88 | 0.014 | 0.004 | 0.003 | 0.25 | 0.025 | 0.045 | 0.007 | 0.006 | 0.21 |
| 1998/7486 | SW1997/152 | 70 | 0.037 | < 0.0006 | 0.005 | 1.4 | 0.098 | 0.25 | 0.02 | 0.056 | 0.74 |
| 1998/7463 | SW1997/159 | 66 | 0.014 | 0.003 | 0.006 | 0.008 | 0.016 | 0.004 | 0.009 | 0.034 | 0.076 |
| 2001/3610 | SW1997/161a | 86 | < 0.001 | < 0.001 | < 0.001 | 0.22 | < 0.001 | 0.02 | < 0.001 | 0.22 | 0.12 |
| 1998/7460 | SW1997/162 | 46 | 0.11 | 0.027 | 0.081 | 0.79 | 0.24 | 0.18 | 0.072 | 1.0 | 1.4 |
| 1998/7487 | SW1997/173 | 91 | 0.017 | < 0.0006 | 0.005 | 0.73 | 0.061 | 0.17 | 0.041 | 0.89 | 0.4 |
| 1998/7488 | SW1997/174 | 90 | 0.014 | < 0.0006 | 0.008 | 0.41 | 0.057 | 0.063 | 0.02 | 0.53 | 0.36 |
| 1999/1292 | SW1997/178 | 86 | 0.005 | 0.003 | 0.011 | 0.078 | 0.033 | 0.025 | 0.017 | 0.035 | 0.16 |
| 2001/3611 | SW1997/178c | 88 | 0.18 | < 0.001 | < 0.001 | 0.65 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.28 |
| 1998/7489 | SW1997/186(1) | 91 | 0.013 | 0.003 | 0.003 | 0.23 | 0.031 | 0.042 | 0.006 | 0.014 | 0.22 |
| 1998/7490 | SW1997/186(2) | 93 | 0.003 | < 0.0006 | 0.004 | 0.025 | 0.007 | 0.007 | 0.004 | 0.012 | 0.057 |
| 2000/3661 | SW1998/1 | 93 | < 0.001 | < 0.001 | < 0.001 | 0.21 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.2 |
| 1998/7491 | SW1998/4 | 82 | 0.031 | < 0.0006 | 0.006 | 0.51 | 0.044 | 0.085 | 0.012 | 0.51 | 0.3 |
| 2000/3662 | SW1998/16 | 90 | < 0.001 | < 0.001 | < 0.001 | 0.15 | 0.048 | < 0.001 | 0.029 | < 0.001 | 0.28 |
| 2000/3663 | SW1998/21 | 87 | < 0.001 | < 0.001 | < 0.001 | 0.16 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.26 |
| 1998/7492 | SW1998/50 | 93 | 0.055 | 0.051 | 0.008 | 0.14 | 0.044 | 0.048 | 0.015 | 0.032 | 0.36 |
| 1999/1293 | SW1998/53 | 90 | 0.013 | < 0.0006 | 0.015 | 0.14 | 0.046 | 0.031 | 0.015 | 0.036 | 0.23 |
| 2001/3612 | SW1998/56a | 99 | 0.14 | < 0.001 | < 0.001 | 0.68 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.2 |
| 1998/7493 | SW1998/71 | 80 | 0.014 | < 0.0006 | 0.005 | 0.31 | 0.031 | 0.053 | 0.009 | 0.39 | 0.23 |
| 1998/7494 | SW1998/75 | 99 | 0.016 | < 0.0006 | 0.015 | 0.19 | 0.046 | 0.045 | 0.014 | 0.31 | 0.29 |
| 1998/7495 | SW1998/76 | 91 | 0.009 | < 0.0006 | 0.01 | 0.21 | 0.029 | 0.037 | 0.01 | 0.28 | 0.18 |
| 1998/7464 | SW1998/81 | 56 | 0.083 | 0.021 | 0.058 | 0.54 | 0.17 | 0.15 | 0.088 | 0.59 | 0.65 |
| 2000/3708 | SW1998/90 | 68 | 0.066 | < 0.001 | 0.2 | 1.3 | 0.069 | 0.45 | 0.078 | < 0.001 | 1.8 |
| 1998/7496 | SW1998/97 | 78 | 0.025 | < 0.0006 | 0.024 | 0.39 | 0.13 | 0.11 | 0.059 | 0.61 | 0.71 |
| 1998/7458 | SW1998/104 | 71 | 0.023 | 0.006 | 0.021 | 0.053 | 0.047 | 0.01 | 0.017 | 0.11 | 0.19 |
| 1998/7497 | SW1998/115 | 88 | 0.04 | < 0.0006 | 0.013 | 1.8 | 0.068 | 0.2 | 0.032 | 2.7 | 0.43 |
| 1998/7498 | SW1998/116 | 85 | 0.014 | < 0.0006 | 0.022 | 0.12 | 0.047 | 0.036 | 0.019 | 0.21 | 0.21 |
| 2001/3613 | SW1998/123a | 92 | < 0.001 | < 0.001 | < 0.001 | 0.29 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.18 |
| 1998/7499 | SW1998/127 | 76 | 0.023 | < 0.0006 | 0.015 | 0.5 | 0.071 | 0.11 | 0.027 | 0.7 | 0.49 |
| 1998/7500 | SW1998/129 | 84 | 0.019 | < 0.0006 | 0.011 | 0.4 | 0.071 | 0.1 | 0.019 | 0.59 | 0.45 |
| 2000/3664 | SW1998/135 | 90 | 0.054 | < 0.001 | < 0.001 | 0.47 | 0.086 | 0.12 | < 0.001 | < 0.001 | 0.41 |
| 1998/7501 | SW1998/139 | 80 | 0.015 | < 0.0006 | 0.028 | 0.24 | 0.067 | 0.055 | 0.025 | 0.41 | 0.36 |
| 1998/7502 | SW1998/145 | 64 | 0.022 | < 0.0006 | 0.025 | 0.33 | 0.11 | 0.089 | 0.048 | 0.57 | 0.76 |
| 2000/3665 | SW1998/149 | 86 | < 0.001 | < 0.001 | < 0.001 | 0.32 | 0.052 | < 0.001 | 0.046 | < 0.001 | 0.35 |
| 1998/7456 | SW1998/154 | 74 | 0.27 | 0.077 | 0.12 | 1.8 | 0.35 | 0.77 | 0.18 | 2.8 | 4.3 |
| 1999/3871 | SW1998/164 | 93 | 0.039 | 0.011 | 0.024 | 1 | 0.078 | 0.16 | 0.04 | 1.1 | 0.41 |
| 1998/7503 | SW1998/167A | 74 | 0.03 | < 0.0006 | 0.018 | 1.1 | 0.07 | 0.2 | 0.071 | 1.6 | 0.52 |
| 2000/3666 | SW1998/170 | 92 | 0.12 | 0.076 | < 0.001 | 0.93 | 0.16 | 0.24 | 0.12 | < 0.001 | 0.88 |
| 1999/3872 | SW1998/171 | 82 | 0.019 | < 0.0006 | 0.023 | 0.22 | 0.085 | 0.089 | 0.04 | 0.31 | 0.57 |
| 2000/3667 | SW1998/174 | 89 | 0.16 | < 0.001 | < 0.001 | 1.8 | 0.17 | 0.24 | 0.11 | < 0.001 | 0.86 |
| 1998/7504 | SW1998/179 | 83 | 0.019 | < 0.0006 | 0.017 | 0.45 | 0.08 | 0.13 | 0.023 | 0.62 | 0.54 |
| 1998/7505 | SW1998/183 | 92 | 0.015 | 0.003 | 0.007 | 0.34 | 0.038 | 0.082 | 0.014 | 0.035 | 0.26 |
| 1999/1294 | SW1998/187 | 85 | 0.009 | < 0.0006 | 0.005 | 0.092 | 0.019 | 0.019 | 0.013 | 0.026 | 0.14 |
| 1999/1295 | SW1998/191 | 86 | 0.004 | < 0.0006 | 0.009 | 0.029 | 0.012 | 0.01 | 0.006 | 0.025 | 0.069 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB18 | CB31 | CB28 | CB52 | CB49 | CB47 | CB44 | CB66 | CB101 |
|-----------|---------------|------|---------|----------|---------|-------|---------|---------|---------|---------|-------|
| 1999/1296 | SW1998/198 | 89 | 0.006 | < 0.0006 | 0.006 | 0.12 | 0.019 | 0.032 | 0.003 | 0.14 | 0.12 |
| 1999/1297 | SW1998/208 | 80 | 0.02 | 0.002 | 0.007 | 0.13 | 0.031 | 0.025 | 0.013 | 0.16 | 0.17 |
| 1999/1298 | SW1999/10 | 90 | 0.005 | < 0.0006 | 0.004 | 0.027 | 0.009 | 0.004 | 0.006 | 0.041 | 0.064 |
| 1999/1299 | SW1999/17 | 76 | 0.029 | < 0.0006 | 0.008 | 0.33 | 0.061 | 0.072 | 0.015 | 0.34 | 0.31 |
| 1999/1300 | SW1999/26 | 89 | 0.025 | 0.013 | 0.012 | 0.48 | 0.067 | 0.12 | 0.054 | 0.67 | 0.39 |
| 2000/3709 | SW1999/31 | 53 | < 0.001 | < 0.001 | 0.033 | 0.045 | < 0.001 | < 0.001 | < 0.001 | 0.09 | 0.18 |
| 1999/1301 | SW1999/40 | 89 | 0.006 | < 0.0006 | 0.008 | 0.044 | 0.019 | 0.009 | 0.006 | 0.062 | 0.11 |
| 2000/3710 | SW1999/45 | 42 | < 0.001 | < 0.001 | < 0.001 | 0.03 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.014 |
| 1999/1302 | SW1999/48 | 89 | 0.011 | < 0.0006 | 0.007 | 0.14 | 0.038 | 0.025 | 0.016 | 0.19 | 0.24 |
| 2001/3615 | SW1999/48c | 86 | < 0.001 | < 0.001 | < 0.001 | 0.35 | < 0.001 | 0.028 | < 0.001 | 0.29 | 0.13 |
| 2001/3616 | SW1999/57a | 93 | < 0.001 | < 0.001 | < 0.001 | 0.15 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.18 |
| 2000/3668 | SW1999/60 | 87 | < 0.001 | < 0.001 | < 0.001 | 0.091 | < 0.001 | < 0.001 | < 0.001 | 0.13 | 0.17 |
| 2000/3669 | SW1999/63 | 90 | < 0.001 | < 0.001 | < 0.001 | 0.11 | < 0.001 | 0.038 | < 0.001 | 0.17 | 0.17 |
| 1999/1303 | SW1999/71 | 76 | 0.011 | < 0.0006 | 0.011 | 0.18 | 0.045 | 0.055 | 0.015 | 0.038 | 0.33 |
| 2001/3617 | SW1999/72C.1 | 93 | < 0.001 | < 0.001 | < 0.001 | 0.15 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.17 |
| 2001/3618 | SW1999/72C.2 | 86 | 0.098 | < 0.001 | < 0.001 | 0.29 | 0.084 | < 0.001 | < 0.001 | < 0.001 | 0.39 |
| 1999/1304 | SW1999/74 | 90 | 0.019 | < 0.0006 | 0.011 | 0.19 | 0.039 | 0.041 | 0.018 | 0.24 | 0.3 |
| 1999/1305 | SW1999/77 | 91 | 0.012 | < 0.0006 | 0.012 | 0.18 | 0.039 | 0.049 | 0.016 | 0.23 | 0.27 |
| 2001/3614 | SW1999/8b | 91 | 0.23 | < 0.001 | < 0.001 | 0.66 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.24 |
| 1999/3842 | SW1999/96 | 94 | 0.011 | < 0.0006 | 0.017 | 0.12 | 0.044 | 0.041 | 0.016 | 0.067 | 0.22 |
| 2001/3619 | SW1999/96C | 87 | 0.069 | < 0.001 | < 0.001 | 0.36 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.082 |
| 2001/3620 | SW1999/121B | 88 | < 0.001 | < 0.001 | < 0.001 | 0.17 | < 0.001 | 0.022 | < 0.001 | 0.18 | 0.12 |
| 2000/3670 | SW1999/148 | 92 | < 0.001 | < 0.001 | < 0.001 | 0.69 | 0.058 | 0.12 | < 0.001 | 0.85 | 0.43 |
| 2001/3621 | SW1999/148A | 89 | 0.059 | < 0.001 | < 0.001 | 0.086 | < 0.001 | 0.08 | < 0.001 | < 0.001 | 0.29 |
| 2000/3671 | SW1999/172 | 93 | < 0.001 | < 0.001 | < 0.001 | 0.38 | < 0.001 | 0.067 | < 0.001 | 0.47 | 0.3 |
| 2000/3530 | SW1999/174B | 88 | 0.029 | < 0.001 | 0.009 | 0.15 | 0.062 | 0.057 | 0.024 | < 0.001 | 0.32 |
| 2000/3531 | SW1999/189 | 95 | 0.013 | < 0.001 | < 0.001 | 0.17 | 0.018 | 0.042 | < 0.001 | < 0.001 | 0.46 |
| 2000/3532 | SW1999/192 | 83 | 0.007 | < 0.001 | 0.009 | 0.13 | 0.002 | 0.039 | < 0.001 | < 0.001 | 0.43 |
| 2001/3622 | SW1999/194a | 93 | < 0.001 | < 0.001 | < 0.001 | 0.088 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.16 |
| 2000/3711 | SW1999/197 | 90 | < 0.001 | < 0.001 | 0.045 | 0.12 | 0.048 | 0.038 | 0.032 | 0.13 | 0.36 |
| 2000/3712 | SW1999/201A | 88 | 0.15 | < 0.001 | < 0.001 | 1.9 | 0.054 | 0.66 | 0.033 | < 0.001 | 1.7 |
| 2000/3533 | SW1999/202 | 85 | 0.009 | < 0.001 | 0.016 | 0.048 | 0.018 | 0.013 | < 0.001 | 0.1 | 0.5 |
| 2000/3534 | SW1999/208 | 88 | 0.009 | < 0.001 | 0.019 | 0.065 | 0.007 | 0.036 | < 0.001 | < 0.001 | 0.35 |
| 2000/3535 | SW2000/13 | 91 | 0.013 | 0.006 | 0.007 | 0.083 | 0.029 | 0.026 | 0.024 | < 0.001 | 0.23 |
| 2001/3623 | SW2000/14a | 94 | < 0.001 | < 0.001 | < 0.001 | 0.15 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.092 |
| 2000/3672 | SW2000/16 | 90 | < 0.001 | < 0.001 | < 0.001 | 0.13 | < 0.001 | < 0.001 | < 0.001 | 0.18 | 0.16 |
| 2000/3673 | SW2000/20 | 87 | < 0.001 | < 0.001 | < 0.001 | 1.9 | 0.21 | 0.43 | 0.11 | 2.8 | 1.7 |
| 2000/3674 | SW2000/27 | 90 | < 0.001 | < 0.001 | < 0.001 | 0.53 | 0.071 | 0.14 | < 0.001 | 0.56 | 0.46 |
| 2000/3536 | SW2000/33 | 68 | 0.082 | 0.003 | 0.005 | 0.62 | 0.067 | 0.11 | 0.04 | < 0.001 | 0.49 |
| 2000/3537 | SW2000/37 | 77 | 0.063 | 0.007 | 0.008 | 0.32 | 0.048 | 0.078 | 0.034 | < 0.001 | 0.25 |
| 2000/3538 | SW2000/50 | 82 | < 0.001 | < 0.001 | < 0.001 | 0.3 | 0.042 | 0.067 | < 0.001 | < 0.001 | 0.24 |
| 2001/3624 | SW2000/52a | 92 | < 0.001 | < 0.001 | < 0.001 | 0.09 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.17 |
| 2000/3539 | SW2000/53 | 86 | < 0.001 | < 0.001 | < 0.001 | 0.08 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.14 |
| 2000/3540 | SW2000/55 | 83 | < 0.001 | < 0.001 | < 0.001 | 0.28 | 0.044 | 0.06 | < 0.001 | < 0.001 | 0.29 |
| 2000/3541 | SW2000/73 | 84 | < 0.001 | < 0.001 | < 0.001 | 0.11 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.15 |
| 2001/3625 | SW2000/74a | 86 | 0.062 | < 0.001 | < 0.001 | 0.94 | 0.17 | 0.23 | 0.038 | 0.94 | 0.55 |
| 2000/3542 | SW2000/81 | 84 | < 0.001 | < 0.001 | < 0.001 | 0.43 | 0.046 | 0.069 | < 0.001 | < 0.001 | 0.33 |
| 2001/3626 | SW2000/81a | 88 | 0.041 | < 0.001 | < 0.001 | 0.14 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.2 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB18 | CB31 | CB28 | CB52 | CB49 | CB47 | CB44 | CB66 | CB101 |
|-----------|---------------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2000/3675 | SW2000/103 | 86 | < 0.001 | < 0.001 | < 0.001 | 0.34 | < 0.001 | 0.054 | < 0.001 | 0.36 | 0.16 |
| 2000/3676 | SW2000/131 | 92 | < 0.001 | < 0.001 | < 0.001 | 0.37 | 0.078 | 0.1 | < 0.001 | 0.44 | 0.5 |
| 2000/3677 | SW2000/140 | 89 | < 0.001 | < 0.001 | < 0.001 | 0.46 | < 0.001 | 0.061 | < 0.001 | 0.59 | 0.2 |
| 2000/3678 | SW2000/144 | 88 | < 0.001 | < 0.001 | < 0.001 | 0.38 | < 0.001 | 0.048 | < 0.001 | 0.41 | 0.21 |
| 2000/3679 | SW2000/146(1) | 76 | < 0.001 | < 0.001 | < 0.001 | 0.22 | 0.042 | 0.056 | < 0.001 | 0.26 | 0.33 |
| 2000/3680 | SW2000/146(2) | 86 | < 0.001 | < 0.001 | < 0.001 | 0.43 | 0.034 | 0.082 | < 0.001 | 0.48 | 0.29 |
| 2001/3023 | SW2000/150A | 56 | 0.099 | < 0.001 | < 0.001 | 0.54 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.29 |
| 2001/3024 | SW2000/157 | 88 | 0.048 | < 0.001 | < 0.001 | 0.37 | < 0.001 | 0.1 | < 0.001 | < 0.001 | 0.31 |
| 2001/3025 | SW2000/164 | 86 | 0.09 | < 0.001 | < 0.001 | 0.43 | 0.069 | 0.11 | < 0.001 | < 0.001 | 0.52 |
| 2001/3026 | SW2000/166 | 89 | 0.11 | < 0.001 | < 0.001 | 0.52 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.18 |
| 2001/3027 | SW2000/168 | 89 | < 0.001 | < 0.001 | < 0.001 | 0.17 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.16 |
| 2001/3028 | SW2000/169 | 90 | < 0.001 | < 0.001 | < 0.001 | 0.2 | < 0.001 | 0.059 | < 0.001 | < 0.001 | 0.31 |
| 2001/3029 | SW2000/170 | 90 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| 2001/3054 | SS2000/105 | 91 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| 2001/3030 | SW2000/174 | 92 | < 0.001 | < 0.001 | < 0.001 | 0.31 | < 0.001 | 0.074 | < 0.001 | < 0.001 | 0.18 |
| 2001/3031 | SW2000/176 | 92 | < 0.001 | < 0.001 | < 0.001 | 0.2 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.2 |
| 2001/3063 | SW2000/179 | 48 | < 0.001 | < 0.001 | 0.047 | 0.043 | 0.025 | 0.018 | 0.017 | 0.11 | 0.14 |
| 2001/3055 | SS2000/106 | 90 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| 2001/3032 | SW2000/188A | 90 | < 0.001 | < 0.001 | < 0.001 | 0.14 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.21 |
| 2001/3033 | SW2000/196 | 88 | 0.058 | < 0.001 | < 0.001 | 0.24 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.22 |
| 2001/3064 | SW2000/200 | 82 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.024 |
| 2001/3034 | SW2001/4 | 86 | 0.042 | < 0.001 | < 0.001 | 0.19 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.31 |
| 2001/3035 | SW2001/21 | 87 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.064 |
| 2001/3036 | SW2001/23 | 92 | < 0.001 | < 0.001 | < 0.001 | 1.4 | 0.1 | 0.21 | 0.081 | < 0.001 | 0.59 |
| 2001/3037 | SW2001/24A | 90 | 0.27 | < 0.001 | < 0.001 | 1.4 | 0.13 | 0.47 | 0.093 | < 0.001 | 0.63 |
| 2001/3038 | SW2001/30 | 95 | < 0.001 | < 0.001 | < 0.001 | 0.063 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.21 |
| 2001/3039 | SW2001/36 | 89 | 0.12 | < 0.001 | < 0.001 | 0.52 | 0.11 | 0.13 | 0.05 | < 0.001 | 0.52 |
| 2001/3040 | SW2001/47 | 92 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.13 |
| 2001/3065 | SW2001/60 | 76 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| 2001/3041 | SW2001/85 | 93 | < 0.001 | < 0.001 | < 0.001 | 0.068 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.13 |
| 2001/3042 | SW2001/92 | 85 | 0.065 | < 0.001 | < 0.001 | 0.3 | 0.13 | < 0.001 | 0.082 | < 0.001 | 0.66 |
| 2001/3043 | SW2001/94 | 91 | 0.037 | < 0.001 | < 0.001 | 0.12 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.21 |
| 2001/3066 | SW2001/120 | 69 | < 0.001 | < 0.001 | < 0.001 | 0.045 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.11 |
| 2001/3044 | SW2001/127 | 88 | 0.071 | < 0.001 | < 0.001 | 0.48 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.37 |
| 2001/3045 | SW2001/139 | 88 | 0.1 | < 0.001 | < 0.001 | 0.49 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.34 |
| 2001/3067 | SW2001/141 | 51 | 0.17 | 0.037 | 0.043 | 2.9 | 0.15 | 1.2 | 0.074 | 5.4 | 1.1 |
| 2001/3046 | SW2001/144 | 55 | < 0.001 | < 0.001 | < 0.001 | 0.12 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.25 |
| 2001/3047 | SW2001/149 | 87 | 0.05 | < 0.001 | < 0.001 | 0.27 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.3 |
| 2001/3048 | SW2001/158 | 90 | 0.13 | < 0.001 | < 0.001 | 0.42 | 0.15 | 0.13 | 0.064 | < 0.001 | 0.64 |
| 2001/3049 | SW2001/186 | 86 | 0.15 | < 0.001 | < 0.001 | 0.68 | 0.086 | 0.2 | 0.068 | < 0.001 | 0.45 |
| 2001/3050 | SW2001/188 | 72 | 0.12 | < 0.001 | < 0.001 | 0.41 | 0.11 | < 0.001 | < 0.001 | < 0.001 | 0.58 |
| 2001/3051 | SW2001/193 | 75 | 0.22 | 0.059 | < 0.001 | 1.0 | 0.11 | 0.25 | 0.085 | < 0.001 | 0.44 |
| 2001/3052 | SW2001/198 | 90 | < 0.001 | < 0.001 | < 0.001 | 0.11 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.25 |
| 2001/3053 | SW2001/203 | 92 | 0.063 | < 0.001 | < 0.001 | 0.42 | < 0.001 | 0.11 | < 0.001 | < 0.001 | 0.28 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB110 | CB151 | CB149 | CB118 | CB153 | CB105 | CB141 | CB138 | CB158 |
|-----------|---------------|------|---------|-------|-------|-------|---------|---------|-------|---------|-------|
| 1996/7804 | SS1990/12A | 74 | 0.034 | 0.008 | 0.083 | 0.062 | 1.6 | 0.021 | 0.008 | 0.94 | 0.029 |
| 1996/7805 | SS1990/12B | 89 | 0.027 | 0.016 | 0.16 | 0.062 | 1.9 | < 0.001 | 0.007 | 1.1 | 0.026 |
| 1996/7806 | SS1991/1B | 70 | 0.083 | 0.058 | 0.54 | 0.2 | 4.7 | 0.085 | 0.027 | 3 | 0.13 |
| 1995/27 | SW1991/82 | 66 | 0.12 | 0.6 | 2.2 | 0.6 | 4.4 | 0.18 | 0.06 | 3.3 | 0.24 |
| 1996/7802 | SS1991/35 | 67 | 0.031 | 0.022 | 0.14 | 0.06 | 1.3 | < 0.001 | 0.017 | 0.97 | 0.031 |
| 1996/7803 | SS1991/38 | 47 | 0.029 | 0.035 | 0.22 | 0.082 | < 0.001 | 0.023 | 0.021 | < 0.001 | 0.054 |
| 1995/29 | SW1991/145 | 86 | 0.084 | 0.31 | 1.0 | 0.27 | 2.3 | 0.32 | 0.013 | 1.8 | 0.087 |
| 1995/61 | SW1992/6 | 84 | 0.097 | 0.034 | 1.1 | 0.54 | 2.1 | 0.16 | 0.061 | 1.9 | 0.098 |
| 1995/65 | SW1992/9 | 90 | < 0.016 | 2.6 | 8.2 | 1.2 | 25 | < 0.015 | 0.082 | 17 | 0.87 |
| 1998/7461 | SW1992/13 | 62 | 0.039 | 0.021 | 0.099 | 0.077 | 0.13 | 0.024 | 0.012 | 0.12 | 0.004 |
| 1995/629 | SW1993/107 | 54 | 0.049 | 0.3 | 1.0 | 0.69 | 2.6 | 0.18 | 0.04 | 2.2 | 0.13 |
| 1995/59 | SW1992/124 | 78 | 0.13 | 0.12 | 0.41 | 0.25 | 0.73 | 0.079 | 0.029 | 0.6 | 0.034 |
| 1995/63 | SW1992/142 | 84 | 0.078 | 0.84 | 2.7 | 1.2 | 6.0 | 0.18 | 0.054 | 0.45 | 0.3 |
| 1995/1119 | SW1992/146 | 71 | 0.3 | 0.13 | 0.42 | 0.34 | 0.92 | 0.14 | 0.059 | 0.74 | 0.05 |
| 1995/200 | SW1992/156 | 84 | 0.27 | 0.36 | 1.1 | 0.82 | 2.8 | 0.25 | 0.093 | 2.3 | 0.12 |
| 1995/67 | SW1992/165 | 68 | < 0.016 | 1.5 | 8.0 | 0.86 | 30 | < 0.015 | 0.052 | 19 | 1.0 |
| 1995/69 | SW1992/166 | 68 | < 0.016 | 3.5 | 7.3 | 2.0 | 21 | 0.82 | 0.1 | 16 | 1.0 |
| 1995/72 | SW1992/198 | 80 | 0.067 | 0.9 | 4.0 | 0.61 | 11 | 1.5 | 0.045 | 9.0 | 0.5 |
| 1995/74 | SW1992/202 | 84 | 0.068 | 0.25 | 0.81 | 0.3 | 1.7 | 0.058 | 0.023 | 1.3 | 0.072 |
| 1996/7807 | SS1992/117 | 82 | 0.18 | 0.033 | 0.45 | 0.1 | 9.9 | < 0.001 | 0.016 | 4.9 | 0.09 |
| 1995/76 | SW1992/215 | 90 | 0.05 | 0.063 | 0.18 | 0.12 | 0.58 | 0.041 | 0.021 | 0.42 | 0.018 |
| 1995/1121 | CORK 2 | 26 | 0.057 | 0.13 | 0.43 | 0.29 | 1.3 | 0.11 | 0.027 | 1.0 | 0.06 |
| 1995/1123 | CORK 3 | 49 | < 0.016 | 0.63 | 1.9 | 0.6 | 5.3 | < 0.015 | 0.049 | 4.2 | 0.17 |
| 1995/1125 | CORK 5 | 49 | < 0.016 | 0.56 | 1.9 | 0.96 | 5.0 | 0.23 | 0.052 | 4.1 | 0.18 |
| 1995/78 | SW1993/12 | 90 | 0.17 | 0.56 | 2.0 | 0.29 | 4.3 | < 0.015 | 0.016 | 3.4 | 0.15 |
| 1995/80 | SW1993/20 | 87 | 0.14 | 1.0 | 3.4 | 1.1 | 9.5 | 0.25 | 0.075 | 6.9 | 0.43 |
| 1995/1127 | SW1993/27 | 59 | < 0.016 | 1.3 | 4.4 | 1.1 | 13 | < 0.015 | 0.068 | 9.3 | 0.39 |
| 1995/82 | SW1993/30 | 84 | 0.034 | 0.36 | 1.2 | 0.28 | 2.5 | < 0.015 | 0.012 | 2.0 | 0.1 |
| 1995/84 | SW1993/31 | 84 | 0.18 | 0.93 | 3.3 | 0.45 | 7.4 | 1.3 | 0.034 | 6.2 | 0.31 |
| 1995/193 | SW1993/36 | 90 | 0.19 | 0.8 | 2.3 | 1.9 | 5.5 | 0.55 | 0.15 | 5.2 | 0.26 |
| 1995/627 | SW1993/41 | 89 | 0.096 | 0.75 | 2.6 | 2.6 | 6.9 | 0.15 | 0.074 | 6.1 | 0.37 |
| 1995/1129 | SW1993/59 | 86 | 0.061 | 0.26 | 0.88 | 0.33 | 1.8 | 0.13 | 0.032 | 1.6 | 0.08 |
| 1995/202 | SW1993/63 | 90 | < 0.016 | 0.94 | 2.9 | 0.8 | 7.0 | 0.12 | 0.028 | 5.5 | 0.23 |
| 1995/1207 | SW1993/69 | 80 | 0.07 | 0.24 | 0.94 | 0.25 | 2.5 | < 0.015 | 0.031 | 2.1 | 0.11 |
| 1995/1208 | SW1993/70 | 91 | 0.076 | 0.27 | 0.79 | 0.56 | 2 | 0.34 | 0.078 | 1.6 | 0.08 |
| 1995/1516 | SW1993/78 | 83 | 0.09 | 0.097 | 0.26 | 0.31 | 0.76 | 0.083 | 0.068 | 0.66 | 0.034 |
| 1996/7808 | SS1993/135 | 10 | 0.58 | 0.013 | 1.6 | 0.083 | 52 | < 0.001 | 0.019 | 23 | 0.26 |
| 1995/1131 | SW1993/91 | 39 | 0.31 | 1.0 | 3.3 | 2.7 | 8.9 | 0.83 | 0.24 | 7.2 | 0.47 |
| 1995/1210 | SW1993/94 | 90 | 0.29 | 0.55 | 2.1 | 0.7 | 6.1 | 0.69 | 0.13 | 5.3 | 0.28 |
| 1996/7809 | SS1993/196 | 87 | 0.11 | 0.035 | 0.38 | 0.12 | 7.9 | < 0.001 | 0.018 | 4.1 | 0.078 |
| 1995/195 | SW1993/122 | 89 | 0.052 | 0.081 | 0.26 | 0.15 | 0.84 | 0.06 | 0.035 | 0.68 | 0.038 |
| 1995/197 | SW1993/124 | 89 | 0.048 | 0.33 | 1.1 | 0.52 | 2.9 | 0.14 | 0.053 | 2.6 | 0.14 |
| 1995/1212 | SW1993/126 | 84 | 0.092 | 0.16 | 0.41 | 0.3 | 0.99 | 0.15 | 0.086 | 0.95 | 0.058 |
| 1995/198 | SW1993/131 | 90 | 0.21 | 0.35 | 1.1 | 0.63 | 2.9 | 0.21 | 0.084 | 2.4 | 0.15 |
| 1995/204 | SW1993/133A | 80 | 0.12 | 0.48 | 1.7 | 0.39 | 5.4 | 0.14 | 0.038 | 4.0 | 0.14 |
| 1998/7454 | SW1994/5 | 77 | 0.28 | 0.44 | 1.0 | 0.26 | 2.2 | 0.089 | 0.02 | 1.7 | 0.078 |
| 1995/206 | SW1994/7 | 81 | 0.29 | 1.0 | 3.8 | 0.57 | 9.0 | < 0.015 | 0.048 | 6.6 | 0.34 |
| 1995/322 | SW1994/12 | 92 | 0.055 | 0.2 | 0.62 | 0.37 | 1.5 | 0.097 | 0.044 | 1.2 | 0.058 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB110 | CB151 | CB149 | CB118 | CB153 | CB105 | CB141 | CB138 | CB158 |
|-----------|---------------|------|---------|-------|-------|---------|-------|---------|---------|-------|---------|
| 1995/324 | SW1994/31 | 55 | 0.028 | 0.24 | 0.84 | 0.31 | 2.5 | 0.08 | 0.022 | 2.1 | 0.11 |
| 1995/326 | SW1994/32 | 89 | 0.081 | 0.54 | 2.0 | 0.27 | 5.6 | < 0.015 | 0.021 | 3.9 | 0.21 |
| 1998/7459 | SW1994/39 | 81 | 0.54 | 0.33 | 1.1 | 0.98 | 3.6 | 0.36 | 0.14 | 2.7 | 0.17 |
| 1995/926 | SW1994/44 | 90 | 0.45 | 0.86 | 3.6 | 0.5 | 11 | 1.1 | 0.12 | 8.5 | 0.4 |
| 1995/328 | SW1994/53 | 92 | 0.072 | 0.043 | 0.13 | 0.11 | 0.44 | 0.048 | 0.026 | 0.38 | 0.024 |
| 1995/332 | SW1994/67 | 82 | 0.091 | 0.16 | 0.53 | 0.37 | 1.0 | 0.11 | 0.044 | 0.93 | 0.041 |
| 1995/334 | SW1994/68 | 95 | 0.072 | 0.11 | 0.38 | 0.27 | 0.76 | 0.089 | 0.028 | 0.69 | 0.031 |
| 1995/934 | SW1994/77 | 96 | 0.037 | 0.11 | 0.34 | 0.28 | 1.1 | 0.1 | 0.026 | 0.9 | 0.056 |
| 1995/936 | SW1994/78 | 93 | 0.22 | 0.26 | 0.79 | 0.79 | 2.6 | 0.24 | 0.13 | 2.1 | 0.14 |
| 1995/320 | SW1994/7A | 92 | 0.07 | 0.36 | 1.1 | 0.37 | 2.9 | 0.1 | 0.044 | 2.5 | 0.13 |
| 1995/632 | SW1994/80 | 88 | 0.13 | 0.76 | 2.6 | 1.1 | 7.1 | 0.27 | 0.11 | 6.1 | 0.37 |
| 1995/938 | SW1994/83 | 49 | 0.31 | 0.18 | 0.6 | 0.46 | 1.4 | 0.13 | 0.077 | 1.0 | 0.052 |
| 1996/7811 | SS1994/63 | 59 | 0.043 | 0.009 | 0.13 | 0.047 | 3.6 | < 0.001 | 0.008 | 2.1 | 0.057 |
| 1995/1467 | SW1994/101 | 74 | 0.24 | 0.68 | 2.8 | < 0.001 | 7.6 | 1.1 | 0.04 | 5.6 | 0.31 |
| 1996/4100 | LAW-72 | 82 | 0.034 | 0.024 | 0.16 | 0.063 | 1.9 | 0.027 | 0.01 | 1.3 | 0.033 |
| 1995/1469 | SW1994/105 | 55 | 0.092 | 0.1 | 0.28 | 0.24 | 0.84 | 0.13 | 0.084 | 0.71 | 0.058 |
| 1995/940 | SW1994/108 | 31 | 0.28 | 1.3 | 0.15 | 0.81 | 0.42 | 0.24 | 0.15 | 3.5 | < 0.008 |
| 1995/942 | SW1994/114 | 19 | 0.19 | 0.27 | 0.82 | 0.65 | 2.8 | 0.24 | 0.11 | 2.2 | 0.15 |
| 1995/1501 | SW1994/115 | 42 | 0.065 | 0.47 | 0.44 | 0.39 | 1.6 | 0.14 | 0.046 | 1.3 | 0.25 |
| 1995/1505 | SW1994/120 | 84 | 0.48 | 0.56 | 1.8 | 1.9 | 4.6 | 0.63 | 0.24 | 3.6 | 0.24 |
| 1995/636 | SW1994/143 | 76 | 0.051 | 0.12 | 0.45 | 0.37 | 1.3 | 0.12 | 0.035 | 1.1 | 0.063 |
| 1995/1495 | SW1994/145 | 91 | 0.2 | 0.47 | 1.9 | 0.66 | 5.6 | 0.68 | 0.096 | 4.8 | 0.25 |
| 1995/1497 | SW1994/148 | 86 | 0.21 | 0.61 | 2.3 | 0.81 | 5.5 | 0.97 | 0.039 | 4.5 | 0.21 |
| 1995/920 | SW1994/153 | 43 | 0.21 | 0.36 | 1.3 | 0.22 | 3.6 | 0.41 | 0.42 | 3.1 | 0.15 |
| 1996/7812 | SS1994/277 | 82 | 0.029 | 0.009 | 0.13 | 0.047 | 1.6 | < 0.001 | 0.008 | 0.97 | 0.03 |
| 1995/922 | SW1994/171 | 83 | 0.21 | 1.3 | 4.2 | 0.71 | 9.8 | 1.4 | 0.11 | 8.6 | 0.37 |
| 1995/1499 | SW1994/172 | 88 | 0.11 | 0.25 | 0.8 | 0.56 | 2.4 | 0.32 | 0.082 | 2 | 0.14 |
| 1995/924 | SW1994/185 | 84 | 0.19 | 0.45 | 1.5 | 0.53 | 4 | 0.53 | 0.093 | 3.4 | 0.14 |
| 1996/3927 | SW1995/7 | 85 | 0.23 | 0.59 | 2.5 | 0.39 | 6.6 | 0.84 | 0.014 | 5.3 | 0.23 |
| 1996/3928 | SW1995/52 | 86 | 0.045 | 0.28 | 0.89 | 0.37 | 1.8 | 0.11 | 0.022 | 1.7 | 0.062 |
| 1995/1215 | SW1995/54 | 49 | 0.31 | 0.6 | 1.4 | 0.89 | 2.9 | 0.33 | 0.096 | 2.9 | 0.14 |
| 1996/3929 | SW1995/55 | 83 | 0.22 | 2.1 | 5.9 | 1.3 | 11.6 | 2.3 | 0.16 | 10.2 | 0.62 |
| 1996/3930 | SW1995/61 | 93 | 0.23 | 0.66 | 2.2 | 0.51 | 4.6 | 0.82 | 0.03 | 4.0 | 0.16 |
| 2001/3018 | SW1995/68 | 69 | < 0.001 | 0.24 | 0.81 | 0.31 | 1.8 | < 0.001 | < 0.001 | 1.8 | 0.11 |
| 1996/3931 | SW1995/76 | 45 | 0.068 | 0.092 | 0.29 | 0.15 | 0.62 | 0.049 | 0.022 | 0.43 | 0.023 |
| 1996/3932 | SW1995/78 | 80 | 0.052 | 0.26 | 0.81 | 0.51 | 1.9 | 0.15 | 0.035 | 1.6 | 0.066 |
| 1996/3933 | SW1995/84 | 86 | 0.054 | 0.047 | 0.15 | 0.14 | 0.54 | 0.05 | 0.024 | 0.44 | 0.023 |
| 1996/3934 | SW1995/85 | 72 | 0.21 | 0.79 | 2.4 | 1.3 | 6.1 | 0.95 | 0.094 | 5.1 | 0.24 |
| 1996/3935 | SW1995/86 | 85 | 0.061 | 0.11 | 0.35 | 0.18 | 1.6 | 0.071 | 0.029 | 1.2 | 0.054 |
| 1996/7813 | SS1995/80 | 8.0 | 0.047 | 0.007 | 0.17 | 0.021 | 24 | < 0.001 | 0.005 | 7.2 | 0.068 |
| 1996/3936 | SW1995/94 | 84 | 0.003 | 0.005 | 0.017 | 0.008 | 0.034 | 0.046 | 0.001 | 0.045 | 0.002 |
| 1999/1287 | SW1996/101 | 86 | 0.14 | 0.42 | 1.5 | 0.93 | 3.3 | 0.53 | 0.055 | 2.6 | 0.14 |
| 1996/3948 | SW1995/102 | 39 | < 0.001 | 2 | 7.6 | 1.8 | 18.9 | 2.4 | 0.08 | 13.9 | 0.46 |
| 1996/3949 | SW1995/120A | 80 | 0.099 | 0.24 | 0.81 | 0.45 | 1.9 | 0.073 | 0.054 | 1.6 | 0.1 |
| 2001/3599 | SW1995/120b | 79 | < 0.001 | 0.11 | 0.33 | 0.17 | 0.76 | < 0.001 | < 0.001 | 0.67 | 0.031 |
| 1996/3950 | SW1995/126 | 74 | < 0.001 | 0.99 | 3.9 | 0.82 | 9.2 | 1.2 | 0.05 | 6.2 | 0.33 |
| 2001/3019 | SW1995/141 | 88 | < 0.001 | 0.33 | 0.92 | 0.41 | 2.0 | < 0.001 | < 0.001 | 1.9 | 0.085 |
| 1998/7455 | SW1995/145 | 46 | 0.16 | 0.41 | 1.0 | 0.68 | 3.5 | 0.14 | 0.076 | 2.5 | 0.14 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB110 | CB151 | CB149 | CB118 | CB153 | CB105 | CB141 | CB138 | CB158 |
|-----------|---------------------|------|---------|-------|-------|-------|-------|---------|---------|-------|---------|
| 1996/3956 | SW1996/2 | 81 | < 0.001 | 0.18 | 0.57 | 0.43 | 1.4 | 0.071 | 0.041 | 1.2 | 0.052 |
| 1996/3952 | SW1996/27(1) | 86 | NR | 0.95 | 3.4 | 0.24 | 10.4 | 0.96 | 0.03 | 7.9 | 0.29 |
| 1996/3955 | SW1996/29 | 84 | 0.076 | 0.18 | 0.57 | 0.43 | 1.4 | 0.071 | 0.041 | 1.2 | 0.052 |
| 1996/3953 | SW1996/30 | 81 | 0.047 | 0.13 | 0.42 | 0.28 | 0.94 | 0.049 | 0.03 | 0.84 | 0.036 |
| 1996/3954 | SW1996/37 | 79 | < 0.001 | 0.86 | 3.0 | 0.6 | 11.5 | < 0.001 | 0.085 | 6.6 | 0.33 |
| 2001/3020 | SW1996/44 | 90 | < 0.001 | 0.51 | 1.7 | 0.47 | 3.2 | < 0.001 | < 0.001 | 2.4 | 0.13 |
| 1999/1285 | SW1996/46 | 91 | 0.091 | 0.91 | 4.0 | 0.78 | 12 | 1.3 | 0.051 | 7.7 | 0.39 |
| 2001/3600 | SW1996/50b | 90 | < 0.001 | 0.058 | 0.17 | 0.13 | 0.5 | < 0.001 | < 0.001 | 0.44 | < 0.001 |
| 2001/3021 | SW1996/60 | 94 | < 0.001 | 1.1 | 3.6 | 0.54 | 15 | < 0.001 | 0.069 | 8.8 | 0.28 |
| 2000/3652 | SW1996/67 | 92 | 0.1 | 0.31 | 0.16 | 0.44 | 1.9 | < 0.001 | 0.029 | 1.5 | 0.079 |
| 2001/3601 | SW1996/84e | 87 | < 0.001 | 0.089 | 0.29 | 0.17 | 0.69 | < 0.001 | < 0.001 | 0.6 | 0.025 |
| 2000/3653 | SW1996/87 | 69 | 0.2 | 0.77 | 3.2 | 0.78 | 6.9 | < 0.001 | 0.046 | 5.2 | 0.22 |
| 2000/3654 | SW1996/111 | 59 | < 0.001 | 0.1 | 0.43 | 0.27 | 1.6 | 0.061 | < 0.001 | 1.1 | 0.062 |
| 2000/3655 | SW1996/119 | 82 | 0.1 | 0.61 | 2.1 | 1.7 | 4.7 | 0.6 | 0.29 | 0.38 | 0.26 |
| 1998/7457 | SW1996/121 | 39 | 0.5 | 2.6 | 7.2 | 0.75 | 16 | 0.5 | 0.13 | 11 | 0.42 |
| 2001/3602 | SW1996/147a | 86 | < 0.001 | 0.17 | 0.6 | 0.14 | 1.6 | < 0.001 | < 0.001 | 1.2 | 0.054 |
| 1999/1289 | SW1996/150 | 87 | 0.21 | 1.3 | 4.1 | 2.0 | 9.6 | 0.6 | 0.1 | 7.5 | 0.41 |
| 1999/1290 | SW1996/160 | 81 | 0.039 | 0.045 | 0.13 | 0.14 | 0.36 | 0.034 | 0.016 | 0.3 | 0.014 |
| 1998/7462 | SW1996/162 | 26 | 0.076 | 0.029 | 0.25 | 0.47 | 0.49 | 0.042 | 0.004 | 0.48 | 0.036 |
| 2000/3656 | SW1996/163 | 92 | < 0.001 | 0.81 | 4.7 | 0.53 | 16 | < 0.001 | 0.064 | 9.4 | 0.45 |
| 2001/3603 | SW1996/169a | 87 | < 0.001 | 0.078 | 0.24 | 0.13 | 0.68 | < 0.001 | < 0.001 | 0.56 | 0.022 |
| 2000/3657 | SW1996/174 | 92 | 0.1 | 0.41 | 1.6 | 0.52 | 4.9 | 0.1 | 0.045 | 3.4 | 0.19 |
| 2000/3658 | SW1997/1 | 87 | 0.2 | 0.92 | 3.0 | 0.7 | 6.8 | < 0.001 | 0.039 | 5.1 | 0.25 |
| 2000/3659 | SW1997/2 | 90 | 0.1 | 0.37 | 1.1 | 0.42 | 3.1 | < 0.001 | < 0.001 | 2.1 | 0.084 |
| 2000/3660 | SW1997/5 | 92 | < 0.001 | 0.085 | 0.28 | 0.19 | 0.54 | < 0.001 | < 0.001 | 0.44 | < 0.001 |
| 1999/1291 | SW1997/21A | 82 | 0.14 | 0.68 | 2.7 | 1.1 | 7.6 | 0.3 | 0.068 | 5.0 | 0.35 |
| 2001/3022 | SW1997/36 | 85 | 0.11 | 0.27 | 0.73 | 0.57 | 2.1 | 0.14 | 0.07 | 1.9 | 0.11 |
| 2001/3605 | SW1997/67f | 78 | < 0.001 | 0.2 | 0.64 | 0.53 | 1.6 | 0.13 | < 0.001 | 1.3 | 0.057 |
| 1998/7466 | SW1997/72 | 88 | 0.034 | 0.081 | 0.26 | 0.19 | 0.48 | 0.045 | 0.019 | 0.43 | 0.02 |
| 1998/7467 | SW1997/80 | 84 | 0.026 | 0.12 | 0.041 | 0.21 | 0.76 | 0.039 | 0.012 | 0.66 | 0.03 |
| 1998/7468 | SW1997/81 | 95 | 0.032 | 0.21 | 0.77 | 0.32 | 1.6 | 0.063 | 0.018 | 1.4 | 0.059 |
| 1998/7469 | SW1997/87 | 90 | 0.051 | 0.28 | 0.88 | 0.45 | 2.4 | 0.086 | 0.037 | 1.8 | 0.1 |
| 1998/7470 | SW1997/89 | 60 | 0.13 | 0.13 | 0.5 | 0.32 | 0.9 | 0.061 | 0.033 | 0.74 | 0.036 |
| 1998/7471 | SW1997/91 | 63 | 0.17 | 0.3 | 1 | 0.63 | 2.2 | 0.15 | 0.064 | 1.7 | 0.091 |
| 1998/7472 | SW1997/93 | 91 | 0.032 | 0.036 | 0.15 | 0.13 | 0.5 | 0.032 | 0.017 | 0.43 | 0.024 |
| 2001/3606 | SW1997/93b | 85 | < 0.001 | 0.092 | 0.27 | 0.15 | 0.63 | < 0.001 | < 0.001 | 0.51 | < 0.001 |
| 1998/7473 | SW1997/93 foetus | 79 | 0.019 | 0.014 | 0.1 | 0.098 | 0.3 | 0.019 | 0.008 | 0.25 | 0.014 |
| 1998/7474 | SW1997/94 | 87 | 0.085 | 0.073 | 0.19 | 0.19 | 0.75 | 0.08 | 0.039 | 0.66 | 0.041 |
| 1998/7475 | SW1997/96 | 90 | 0.05 | 0.071 | 0.24 | 0.23 | 0.85 | 0.085 | 0.03 | 0.7 | 0.041 |
| 1998/7476 | SW1997/97 | 59 | 0.1 | 0.37 | 1.5 | 0.52 | 3.5 | 0.63 | 0.047 | 2.7 | 0.18 |
| 2001/3607 | SW1997/97a | 83 | < 0.001 | 0.07 | 0.2 | 0.14 | 0.57 | < 0.001 | < 0.001 | 0.43 | < 0.001 |
| 1998/7477 | SW1997/102 | 77 | 0.27 | 0.45 | 1.6 | 1.1 | 2.6 | 0.32 | 0.086 | 2.1 | 0.12 |
| 1998/7478 | SW1997/103 | 76 | 0.2 | 0.76 | 2.6 | 1.6 | 7.3 | 0.94 | 0.076 | 5.0 | 0.24 |
| 1998/7479 | SW1997/111 | 90 | 0.055 | 0.31 | 1.0 | 0.44 | 2.3 | 0.43 | 0.025 | 1.8 | 0.11 |
| 1998/7480 | SW1997/113 | 50 | 0.15 | 0.21 | 0.75 | 0.83 | 2.4 | 0.28 | 0.097 | 1.9 | 0.13 |
| 1998/7481 | SW1997/118 | 85 | 0.076 | 0.089 | 0.26 | 0.21 | 0.77 | 0.076 | 0.031 | 0.65 | 0.032 |
| 2001/3608 | SW1997/124a | 86 | < 0.001 | 0.2 | 0.64 | 0.23 | 1.5 | < 0.001 | < 0.001 | 1.5 | 0.059 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB110 | CB151 | CB149 | CB118 | CB153 | CB105 | CB141 | CB138 | CB158 |
|-----------|---------------|------|---------|-------|-------|-------|-------|---------|---------|-------|-------|
| 2001/3609 | SW1997/135f | 90 | < 0.001 | 0.19 | 0.59 | 0.23 | 1.8 | < 0.001 | < 0.001 | 0.13 | 0.051 |
| 1998/7482 | SW1997/138 | 80 | 0.16 | 0.89 | 3.1 | 1.5 | 12 | 1.2 | 0.13 | 8.5 | 0.54 |
| 1998/7483 | SW1997/141 | 83 | 0.053 | 0.17 | 0.5 | 0.29 | 1.1 | 0.088 | 0.026 | 0.94 | 0.045 |
| 1998/7484 | SW1997/142 | 90 | 0.21 | 0.6 | 2.2 | 0.44 | 5.4 | 0.19 | 0.022 | 3.9 | 0.17 |
| 1998/7485 | SW1997/142b | 88 | 0.032 | 0.23 | 0.75 | 0.26 | 1.4 | 0.088 | 0.015 | 1.2 | 0.057 |
| 1998/7486 | SW1997/152 | 70 | 0.44 | 1.2 | 4.7 | 1.5 | 13 | 0.46 | 0.063 | 8.2 | 0.46 |
| 1998/7463 | SW1997/159 | 66 | 0.047 | 0.032 | 0.11 | 0.089 | 0.32 | 0.026 | 0.031 | 0.23 | 0.009 |
| 2001/3610 | SW1997/161a | 86 | < 0.001 | 0.14 | 0.44 | 0.19 | 1.2 | < 0.001 | < 0.001 | 1.0 | 0.04 |
| 1998/7460 | SW1997/162 | 46 | 0.39 | 0.69 | 2.1 | 1.6 | 4.2 | 0.64 | 0.094 | 3.5 | 0.21 |
| 1998/7487 | SW1997/173 | 91 | 0.1 | 0.91 | 2.8 | 1.5 | 7.3 | 0.27 | 0.059 | 5.1 | 0.25 |
| 1998/7488 | SW1997/174 | 90 | 0.098 | 0.46 | 1.5 | 0.44 | 3.5 | 0.19 | 0.041 | 2.6 | 0.13 |
| 1999/1292 | SW1997/178 | 86 | 0.096 | 0.11 | 0.31 | 0.21 | 0.92 | 0.065 | 0.025 | 0.72 | 0.031 |
| 2001/3611 | SW1997/178c | 88 | < 0.001 | 0.47 | 2.0 | 0.36 | 4.4 | < 0.001 | < 0.001 | 3.3 | 0.18 |
| 1998/7489 | SW1997/186(1) | 91 | 0.059 | 0.21 | 0.69 | 0.29 | 1.5 | 0.061 | 0.011 | 1.1 | 0.054 |
| 1998/7490 | SW1997/186(2) | 93 | 0.026 | 0.036 | 0.092 | 0.067 | 0.24 | 0.032 | 0.01 | 0.23 | 0.012 |
| 2000/3661 | SW1998/1 | 93 | < 0.001 | 0.31 | 1.0 | 0.35 | 2.7 | < 0.001 | < 0.001 | 1.8 | 0.094 |
| 1998/7491 | SW1998/4 | 82 | 0.035 | 0.33 | 1.1 | 0.43 | 2.1 | 0.17 | 0.02 | 1.7 | 0.094 |
| 2000/3662 | SW1998/16 | 90 | < 0.001 | 0.21 | 0.66 | 0.37 | 1.5 | < 0.001 | 0.028 | 1.2 | 0.048 |
| 2000/3663 | SW1998/21 | 87 | 0.098 | 0.2 | 0.72 | 0.35 | 1.9 | < 0.001 | 0.035 | 1.5 | 0.093 |
| 1998/7492 | SW1998/50 | 93 | 0.079 | 0.32 | 1.0 | 0.58 | 2.6 | 0.15 | 0.083 | 2.0 | 0.12 |
| 1999/1293 | SW1998/53 | 90 | 0.053 | 0.12 | 0.38 | 0.29 | 0.77 | 0.076 | 0.02 | 0.65 | 0.029 |
| 2001/3612 | SW1998/56a | 99 | < 0.001 | 0.4 | 1.6 | 0.26 | 4.6 | < 0.001 | < 0.001 | 3.1 | 0.17 |
| 1998/7493 | SW1998/71 | 80 | 0.043 | 0.29 | 0.92 | 0.26 | 1.9 | 0.087 | 0.017 | 1.6 | 0.074 |
| 1998/7494 | SW1998/75 | 99 | 0.059 | 0.19 | 0.56 | 0.35 | 1.1 | 0.096 | 0.025 | 0.92 | 0.043 |
| 1998/7495 | SW1998/76 | 91 | 0.049 | 0.15 | 0.46 | 0.28 | 1.1 | 0.08 | 0.016 | 0.88 | 0.046 |
| 1998/7464 | SW1998/81 | 56 | 0.11 | 0.48 | 1.3 | 1.2 | 3.3 | 0.088 | 0.066 | 2.6 | 0.16 |
| 2000/3708 | SW1998/90 | 68 | 0.26 | 2.0 | 4.1 | 1.5 | 11 | 0.44 | 0.13 | 8.6 | 0.37 |
| 1998/7496 | SW1998/97 | 78 | 0.17 | 0.48 | 1.5 | 1.4 | 3.4 | 0.28 | 0.12 | 2.7 | 0.15 |
| 1998/7458 | SW1998/104 | 71 | 0.11 | 0.15 | 0.38 | 0.2 | 1.4 | 0.062 | 0.04 | 0.98 | 0.049 |
| 1998/7497 | SW1998/115 | 88 | 0.53 | 1.5 | 5.0 | 0.74 | 14 | 0.59 | 0.044 | 9.6 | 0.43 |
| 1998/7498 | SW1998/116 | 85 | 0.096 | 0.096 | 0.36 | 0.32 | 0.92 | 0.12 | 0.038 | 0.75 | 0.052 |
| 2001/3613 | SW1998/123a | 92 | < 0.001 | 0.2 | 0.55 | 0.23 | 1.6 | < 0.001 | < 0.001 | 1.3 | 0.061 |
| 1998/7499 | SW1998/127 | 76 | 0.15 | 0.38 | 1.4 | 0.75 | 3.0 | 0.17 | 0.049 | 2.3 | 0.15 |
| 1998/7500 | SW1998/129 | 84 | 0.15 | 0.44 | 1.3 | 0.77 | 3.2 | 0.2 | 0.067 | 2.7 | 0.17 |
| 2000/3664 | SW1998/135 | 90 | 0.11 | 0.31 | 1.3 | 0.59 | 0.35 | < 0.001 | 0.039 | 2.7 | 0.16 |
| 1998/7501 | SW1998/139 | 80 | 0.077 | 0.22 | 0.7 | 0.5 | 1.6 | 0.16 | 0.027 | 1.3 | 0.071 |
| 1998/7502 | SW1998/145 | 64 | 0.32 | 0.37 | 1.2 | 0.96 | 2.5 | 0.3 | 0.12 | 2.1 | 0.13 |
| 2000/3665 | SW1998/149 | 86 | 0.12 | 0.45 | 1.3 | 0.5 | 3.6 | < 0.001 | 0.038 | 2.6 | 0.11 |
| 1998/7456 | SW1998/154 | 74 | 0.87 | 2.9 | 6.9 | 2.7 | 25 | 0.47 | 0.3 | 18 | 0.83 |
| 1999/3871 | SW1998/164 | 93 | 0.12 | 0.82 | 3.3 | 0.71 | 9.4 | 0.16 | 0.045 | 7.1 | 0.37 |
| 1998/7503 | SW1998/167A | 74 | 0.32 | 1.0 | 3.2 | 1.9 | 9.1 | 0.51 | 0.064 | 6.8 | 0.35 |
| 2000/3666 | SW1998/170 | 92 | 0.3 | 1.2 | 4.1 | 1.2 | 11 | < 0.001 | 0.11 | 7.7 | 0.34 |
| 1999/3872 | SW1998/171 | 82 | 0.2 | 0.41 | 1.4 | 0.8 | 3.4 | 0.15 | 0.16 | 2.5 | 0.18 |
| 2000/3667 | SW1998/174 | 89 | 0.36 | 1.4 | 5.5 | 0.95 | 17 | < 0.001 | 0.095 | 11 | 0.59 |
| 1998/7504 | SW1998/179 | 83 | 0.18 | 0.48 | 1.6 | 1.3 | 4.7 | 0.4 | 0.087 | 3.8 | 0.26 |
| 1998/7505 | SW1998/183 | 92 | 0.053 | 0.36 | 1.4 | 0.55 | 4.5 | 0.13 | 0.039 | 3.3 | 0.19 |
| 1999/1294 | SW1998/187 | 85 | 0.046 | 0.091 | 0.26 | 0.24 | 0.7 | 0.058 | 0.016 | 0.58 | 0.023 |
| 1999/1295 | SW1998/191 | 86 | 0.041 | 0.048 | 0.15 | 0.12 | 0.48 | 0.029 | 0.015 | 0.4 | 0.019 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB110 | CB151 | CB149 | CB118 | CB153 | CB105 | CB141 | CB138 | CB158 |
|-----------|---------------|------|---------|---------|-------|-------|-------|---------|---------|-------|---------|
| 1999/1296 | SW1998/198 | 89 | 0.022 | 0.11 | 0.38 | 0.29 | 1.4 | 0.072 | 0.015 | 1.1 | 0.059 |
| 1999/1297 | SW1998/208 | 80 | 0.042 | 0.12 | 0.38 | 0.19 | 0.81 | 0.048 | 0.02 | 0.69 | 0.033 |
| 1999/1298 | SW1999/10 | 90 | 0.029 | 0.037 | 0.13 | 0.08 | 0.23 | 0.031 | 0.009 | 0.22 | 0.009 |
| 1999/1299 | SW1999/17 | 76 | 0.039 | 0.2 | 0.62 | 0.4 | 1.5 | 0.097 | 0.019 | 1.3 | 0.06 |
| 1999/1300 | SW1999/26 | 89 | 0.14 | 0.67 | 2.2 | 1 | 5.9 | 0.16 | 0.057 | 3.7 | 0.19 |
| 2000/3709 | SW1999/31 | 53 | < 0.001 | 0.097 | 0.32 | 0.34 | 1.5 | 0.11 | 0.036 | 1.0 | 0.053 |
| 1999/1301 | SW1999/40 | 89 | 0.042 | 0.099 | 0.24 | 0.2 | 0.85 | 0.053 | 0.009 | 0.8 | 0.021 |
| 2000/3710 | SW1999/45 | 42 | < 0.001 | < 0.001 | 0.021 | 0.029 | 0.036 | < 0.001 | < 0.001 | 0.041 | < 0.001 |
| 1999/1302 | SW1999/48 | 89 | 0.057 | 0.14 | 0.5 | 0.28 | 1.1 | 0.076 | 0.019 | 0.85 | 0.041 |
| 2001/3615 | SW1999/48c | 86 | < 0.001 | 0.22 | 0.73 | 0.22 | 1.8 | < 0.001 | < 0.001 | 1.4 | 0.071 |
| 2001/3616 | SW1999/57a | 93 | < 0.001 | 0.13 | 0.38 | 0.22 | 0.81 | < 0.001 | < 0.001 | 0.7 | < 0.001 |
| 2000/3668 | SW1999/60 | 87 | < 0.001 | 0.091 | 0.3 | 0.29 | 1.1 | 0.067 | 0.038 | 0.85 | 0.054 |
| 2000/3669 | SW1999/63 | 90 | < 0.001 | 0.15 | 0.46 | 0.28 | 1.3 | < 0.001 | 0.045 | 1.1 | 0.072 |
| 1999/1303 | SW1999/71 | 76 | 0.057 | 0.29 | 0.73 | 0.67 | 2.8 | 0.14 | 0.021 | 2.3 | 0.08 |
| 2001/3617 | SW1999/72C.1 | 93 | < 0.001 | 0.12 | 0.33 | 0.27 | 0.93 | < 0.001 | < 0.001 | 0.69 | < 0.001 |
| 2001/3618 | SW1999/72C.2 | 86 | < 0.001 | 0.29 | 0.9 | 0.52 | 1.6 | 0.13 | 0.048 | 1.6 | 0.1 |
| 1999/1304 | SW1999/74 | 90 | 0.056 | 0.16 | 0.52 | 0.33 | 1 | 0.097 | 0.021 | 0.88 | 0.042 |
| 1999/1305 | SW1999/77 | 91 | 0.044 | 0.18 | 0.67 | 0.39 | 1.7 | 0.099 | 0.029 | 1.5 | 0.084 |
| 2001/3614 | SW1999/8b | 91 | < 0.001 | 0.64 | 2.5 | 0.35 | 7.3 | < 0.001 | < 0.001 | 7.3 | 0.26 |
| 1999/3842 | SW1999/96 | 94 | 0.058 | 0.11 | 0.41 | 0.4 | 1.4 | 0.12 | 0.038 | 1.1 | 0.068 |
| 2001/3619 | SW1999/96C | 87 | < 0.001 | 0.22 | 0.94 | 0.13 | 2.6 | < 0.001 | < 0.001 | 2.5 | 0.091 |
| 2001/3620 | SW1999/121B | 88 | < 0.001 | 0.14 | 0.42 | 0.24 | 1.2 | < 0.001 | < 0.001 | 0.94 | 0.031 |
| 2000/3670 | SW1999/148 | 92 | 0.17 | 0.52 | 2 | 0.69 | 4.8 | < 0.001 | 0.036 | 3.2 | 0.19 |
| 2001/3621 | SW1999/148A | 89 | < 0.001 | 0.54 | 2.0 | 0.38 | 3.7 | < 0.001 | < 0.001 | 2.5 | 0.16 |
| 2000/3671 | SW1999/172 | 93 | 0.11 | 0.49 | 1.5 | 0.55 | 4.9 | < 0.001 | 0.049 | 3.1 | 0.14 |
| 2000/3530 | SW1999/174B | 88 | 0.079 | 0.18 | 0.61 | 0.46 | 2.0 | 0.11 | 0.044 | 1.5 | 0.083 |
| 2000/3531 | SW1999/189 | 95 | < 0.001 | 0.19 | 0.74 | 0.43 | 2.2 | < 0.001 | 0.018 | 1.8 | 0.094 |
| 2000/3532 | SW1999/192 | 83 | < 0.001 | 0.17 | 0.61 | 0.5 | 2.5 | 0.087 | 0.02 | 2.0 | 0.11 |
| 2001/3622 | SW1999/194a | 93 | < 0.001 | 0.079 | 0.24 | 0.21 | 0.55 | 0.049 | < 0.001 | 0.47 | 0.021 |
| 2000/3711 | SW1999/197 | 90 | 0.2 | 0.14 | 0.38 | 0.51 | 1.8 | 0.15 | 0.064 | 1.2 | 0.063 |
| 2000/3712 | SW1999/201A | 88 | 0.25 | 3.7 | 7.5 | 0.92 | 36 | 0.13 | 0.13 | 25 | 1.1 |
| 2000/3533 | SW1999/202 | 85 | 0.01 | 0.075 | 0.27 | 0.29 | 0.88 | 0.067 | 0.014 | 0.72 | 0.039 |
| 2000/3534 | SW1999/208 | 88 | < 0.001 | 0.2 | 0.62 | 0.38 | 2.1 | 0.088 | 0.032 | 1.7 | 0.12 |
| 2000/3535 | SW2000/13 | 91 | 0.13 | 0.16 | 0.57 | 0.3 | 1.3 | 0.088 | 0.049 | 1.0 | 0.051 |
| 2001/3623 | SW2000/14a | 94 | < 0.001 | 0.1 | 0.32 | 0.19 | 0.91 | < 0.001 | < 0.001 | 0.73 | 0.034 |
| 2000/3672 | SW2000/16 | 90 | < 0.001 | 0.14 | 0.45 | 0.3 | 1.2 | < 0.001 | < 0.001 | 0.9 | 0.043 |
| 2000/3673 | SW2000/20 | 87 | 0.74 | 3.2 | 11 | 3.7 | 26 | 0.44 | 0.18 | 16 | 0.84 |
| 2000/3674 | SW2000/27 | 90 | 0.14 | 0.44 | 1.6 | 1.1 | 4.9 | 0.19 | 0.065 | 3.9 | 0.24 |
| 2000/3536 | SW2000/33 | 68 | 0.14 | 0.46 | 1.5 | 0.6 | 3.2 | < 0.001 | 0.034 | 2.7 | 0.11 |
| 2000/3537 | SW2000/37 | 77 | 0.087 | 0.27 | 1.1 | 0.31 | 3.6 | < 0.001 | 0.028 | 2.7 | 0.14 |
| 2000/3538 | SW2000/50 | 82 | < 0.001 | 0.41 | 1.5 | 0.37 | 4.5 | < 0.001 | < 0.001 | 3.1 | 0.12 |
| 2001/3624 | SW2000/52a | 92 | < 0.001 | 0.096 | 0.29 | 0.18 | 0.64 | < 0.001 | < 0.001 | 0.5 | < 0.001 |
| 2000/3539 | SW2000/53 | 86 | < 0.001 | 0.095 | 0.29 | 0.29 | 1.4 | 0.064 | < 0.001 | 1.0 | 0.06 |
| 2000/3540 | SW2000/55 | 83 | < 0.001 | 0.3 | 1.1 | 0.44 | 2.6 | < 0.001 | < 0.001 | 1.9 | 0.083 |
| 2000/3541 | SW2000/73 | 84 | < 0.001 | 0.18 | 0.56 | 0.18 | 1.9 | < 0.001 | < 0.001 | 1.3 | 0.049 |
| 2001/3625 | SW2000/74a | 86 | 0.11 | 0.74 | 2.7 | 0.8 | 4.7 | 0.19 | 0.059 | 3.4 | 0.23 |
| 2000/3542 | SW2000/81 | 84 | < 0.001 | 0.42 | 1.5 | 0.33 | 3.3 | < 0.001 | 0.034 | 2.4 | 0.13 |
| 2001/3626 | SW2000/81a | 88 | < 0.001 | 0.13 | 0.39 | 0.26 | 1.2 | < 0.001 | < 0.001 | 0.87 | < 0.001 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB110 | CB151 | CB149 | CB118 | CB153 | CB105 | CB141 | CB138 | CB158 |
|-----------|---------------|------|---------|---------|---------|---------|-------|---------|---------|-------|---------|
| 2000/3675 | SW2000/103 | 86 | 0.096 | 0.29 | 1.1 | 0.31 | 3.1 | < 0.001 | < 0.001 | 2.3 | 0.13 |
| 2000/3676 | SW2000/131 | 92 | 0.14 | 0.39 | 1.5 | 0.9 | 4.2 | 0.16 | 0.068 | 3.3 | 0.19 |
| 2000/3677 | SW2000/140 | 89 | 0.093 | 0.42 | 1.6 | 0.29 | 3.5 | < 0.001 | < 0.001 | 2.6 | 0.11 |
| 2000/3678 | SW2000/144 | 88 | 0.1 | 0.37 | 1.2 | 0.25 | 0.4 | < 0.001 | < 0.001 | 2.2 | 0.1 |
| 2000/3679 | SW2000/146(1) | 76 | 0.052 | 0.024 | 0.76 | 0.46 | 2.1 | 0.11 | 0.029 | 1.4 | 0.072 |
| 2000/3680 | SW2000/146(2) | 86 | 0.12 | 0.046 | 1.6 | 0.41 | 4.3 | < 0.001 | 0.022 | 2.5 | 0.14 |
| 2001/3023 | SW2000/150A | 56 | < 0.001 | 0.51 | 2.0 | 0.46 | 7.3 | < 0.001 | 0.046 | 4.5 | 0.26 |
| 2001/3024 | SW2000/157 | 88 | < 0.001 | 0.32 | 1.0 | 0.63 | 3.1 | 0.12 | < 0.001 | 2.2 | 0.14 |
| 2001/3025 | SW2000/164 | 86 | < 0.001 | 0.42 | 1.3 | 0.65 | 3.6 | 0.12 | 0.05 | 2.3 | 0.17 |
| 2001/3026 | SW2000/166 | 89 | < 0.001 | 0.42 | 1.8 | 0.34 | 5.7 | < 0.001 | < 0.001 | 4.1 | 0.22 |
| 2001/3027 | SW2000/168 | 89 | < 0.001 | 0.16 | 0.48 | 0.26 | 1.8 | < 0.001 | < 0.001 | 1.3 | 0.081 |
| 2001/3028 | SW2000/169 | 90 | < 0.001 | 0.26 | 0.71 | 0.48 | 3.0 | < 0.001 | 0.05 | 1.9 | 0.13 |
| 2001/3029 | SW2000/170 | 90 | < 0.001 | < 0.001 | 0.035 | 0.073 | 0.32 | < 0.001 | < 0.001 | 0.24 | < 0.001 |
| 2001/3054 | SS2000/105 | 91 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.21 | < 0.001 | < 0.001 | 0.15 | < 0.001 |
| 2001/3030 | SW2000/174 | 92 | < 0.001 | 0.27 | 1.0 | 0.39 | 3.8 | < 0.001 | < 0.001 | 2.8 | 0.16 |
| 2001/3031 | SW2000/176 | 92 | < 0.001 | 0.21 | 0.72 | 0.37 | 2.3 | < 0.001 | < 0.001 | 1.8 | 0.095 |
| 2001/3063 | SW2000/179 | 48 | 0.2 | 0.066 | 0.23 | 0.35 | 0.92 | 0.11 | 0.033 | 0.72 | 0.032 |
| 2001/3055 | SS2000/106 | 90 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.19 | < 0.001 | < 0.001 | 0.1 | < 0.001 |
| 2001/3032 | SW2000/188A | 90 | < 0.001 | 0.13 | 0.4 | 0.24 | 0.84 | < 0.001 | < 0.001 | 0.65 | 0.047 |
| 2001/3033 | SW2000/196 | 88 | < 0.001 | 0.24 | 0.72 | 0.26 | 1.9 | < 0.001 | < 0.001 | 1.5 | 0.084 |
| 2001/3064 | SW2000/200 | 82 | < 0.001 | < 0.001 | 0.056 | < 0.001 | 0.08 | < 0.001 | < 0.001 | 0.066 | < 0.001 |
| 2001/3034 | SW2001/4 | 86 | 0.11 | 0.33 | 0.96 | 0.64 | 2.2 | 0.12 | 0.049 | 1.5 | 0.089 |
| 2001/3035 | SW2001/21 | 87 | < 0.001 | < 0.001 | 0.14 | 0.11 | 0.55 | < 0.001 | < 0.001 | 0.37 | < 0.001 |
| 2001/3036 | SW2001/23 | 92 | < 0.001 | 1.6 | 4.2 | 0.62 | 16 | < 0.001 | 0.056 | 9.8 | 0.39 |
| 2001/3037 | SW2001/24A | 90 | 0.21 | 1.7 | 5.7 | 1.9 | 15 | 0.19 | 0.075 | 9.7 | 0.47 |
| 2001/3038 | SW2001/30 | 95 | 0.096 | 0.15 | 0.4 | 0.31 | 1.1 | 0.084 | 0.046 | 0.84 | 0.057 |
| 2001/3039 | SW2001/36 | 89 | < 0.001 | 0.4 | 1.2 | 0.75 | 3.5 | 0.15 | 0.032 | 2.6 | 0.11 |
| 2001/3040 | SW2001/47 | 92 | < 0.001 | 0.12 | 0.31 | 0.21 | 1.1 | < 0.001 | < 0.001 | 0.68 | < 0.001 |
| 2001/3065 | SW2001/60 | 76 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.027 | < 0.001 | < 0.001 | 0.031 | < 0.001 |
| 2001/3041 | SW2001/85 | 93 | < 0.001 | 0.077 | 0.24 | 0.25 | 0.96 | < 0.001 | < 0.001 | 0.72 | 0.044 |
| 2001/3042 | SW2001/92 | 85 | 0.43 | 0.32 | 0.91 | 0.62 | 1.7 | 0.16 | 0.088 | 1.6 | 0.1 |
| 2001/3043 | SW2001/94 | 91 | < 0.001 | 0.14 | 0.44 | 0.4 | 1.7 | 0.09 | < 0.001 | 1.3 | 0.079 |
| 2001/3066 | SW2001/120 | 69 | 0.053 | < 0.001 | 0.13 | 0.2 | 0.26 | < 0.001 | < 0.001 | 0.26 | < 0.001 |
| 2001/3044 | SW2001/127 | 88 | < 0.001 | 0.45 | 1.5 | 0.49 | 3.0 | < 0.001 | < 0.001 | 2.2 | 0.15 |
| 2001/3045 | SW2001/139 | 88 | < 0.001 | 0.47 | 1.4 | 0.38 | 3.4 | < 0.001 | < 0.001 | 2.3 | 0.18 |
| 2001/3067 | SW2001/141 | 51 | 0.29 | 6.7 | 15 | 1.9 | 48 | 0.41 | 0.14 | 36 | 2.2 |
| 2001/3046 | SW2001/144 | 55 | 0.12 | 0.12 | 0.37 | 0.27 | 0.85 | < 0.001 | < 0.001 | 0.58 | < 0.001 |
| 2001/3047 | SW2001/149 | 87 | 0.12 | 0.34 | 1.1 | 0.34 | 2.4 | < 0.001 | 0.043 | 1.7 | 1.3 |
| 2001/3048 | SW2001/158 | 90 | 0.14 | 0.42 | 1.3 | 0.9 | 3.0 | 0.16 | 0.059 | 2.5 | 0.11 |
| 2001/3049 | SW2001/186 | 86 | < 0.001 | 0.95 | 2.8 | 0.74 | 12 | 0.13 | 0.075 | 8.9 | 0.55 |
| 2001/3050 | SW2001/188 | 72 | < 0.001 | 0.31 | 1.0 | 0.68 | 2.3 | 0.15 | < 0.001 | 1.9 | 0.088 |
| 2001/3051 | SW2001/193 | 75 | < 0.001 | 1.2 | 3.9 | 0.72 | 14 | < 0.001 | 0.045 | 8.8 | 0.34 |
| 2001/3052 | SW2001/198 | 90 | < 0.001 | 0.15 | 0.5 | 0.44 | 2.2 | 0.12 | 0.044 | 1.6 | 0.094 |
| 2001/3053 | SW2001/203 | 92 | < 0.001 | 0.39 | 1.3 | 0.49 | 4.5 | < 0.001 | 0.032 | 3.3 | 0.21 |

Table 4.5. Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB187 | CB183 | CB128 | CB156 | CB180 | CB170 | CB194 | ∑ICES7 | ∑25CBs |
|-----------|---------------|------|---------|-------|-------|---------|---------|-------|-------|--------|--------|
| 1996/7804 | SS1990/12A | 74 | 0.29 | 0.2 | 0.083 | 0.059 | 0.78 | 0.33 | 0.1 | 3.5 | 4.8 |
| 1996/7805 | SS1990/12B | 89 | 0.26 | 0.11 | 0.1 | 0.044 | 0.34 | 0.17 | 0.018 | 3.6 | 4.7 |
| 1996/7806 | SS1991/1B | 70 | 1.2 | 0.51 | 0.43 | 0.21 | 1.7 | 0.81 | 0.16 | 10.2 | 14.6 |
| 1995/27 | SW1991/82 | 66 | 1.4 | 0.47 | 0.34 | < 0.009 | 1.3 | 0.5 | 0.082 | 11.0 | 17.5 |
| 1996/7802 | SS1991/35 | 67 | 0.28 | 0.093 | 0.11 | 0.028 | 0.3 | 0.14 | 0.017 | 2.8 | 3.8 |
| 1996/7803 | SS1991/38 | 47 | < 0.001 | 0.62 | 0.18 | 0.064 | < 0.001 | 0.81 | 0.49 | 0.3 | 2.9 |
| 1995/29 | SW1991/145 | 86 | 0.52 | 0.21 | 0.19 | 0.086 | 0.62 | 0.26 | 0.038 | 5.6 | 9.2 |
| 1995/61 | SW1992/6 | 84 | 0.74 | 0.19 | 0.21 | 0.033 | 0.53 | 0.21 | 0.032 | 6.1 | 10.2 |
| 1995/65 | SW1992/9 | 90 | 7.2 | 3.1 | 1.3 | 1.2 | 9.2 | 4.3 | 0.89 | 55.9 | 86.0 |
| 1998/7461 | SW1992/13 | 62 | 0.055 | 0.016 | 0.014 | 0.01 | 0.051 | 0.022 | 0.003 | 0.542 | 0.98 |
| 1995/629 | SW1993/107 | 54 | 0.97 | 0.3 | 0.34 | 0.15 | 1.1 | 0.48 | 0.062 | 7.4 | 11.6 |
| 1995/59 | SW1992/124 | 78 | 0.14 | 0.057 | 0.08 | 0.01 | 0.16 | 0.066 | 0.009 | 2.2 | 3.4 |
| 1995/63 | SW1992/142 | 84 | 1.5 | 0.45 | 0.59 | 0.21 | 1.5 | 0.67 | 0.076 | 10.9 | 20.6 |
| 1995/1119 | SW1992/146 | 71 | 0.23 | 0.06 | 0.12 | < 0.009 | 0.2 | 0.1 | 0.011 | 2.7 | 4.5 |
| 1995/200 | SW1992/156 | 84 | 0.82 | 0.25 | 0.29 | 0.07 | 0.81 | 0.38 | 0.044 | 7.8 | 12.0 |
| 1995/67 | SW1992/165 | 68 | 11 | 4.7 | 0.98 | 1.6 | 13 | 5.5 | 1.8 | 65.9 | 102.3 |
| 1995/69 | SW1992/166 | 68 | 7.7 | 2.6 | 2.7 | 1.0 | 8.1 | 3.5 | 0.39 | 50.2 | 81.4 |
| 1995/72 | SW1992/198 | 80 | 4.6 | 1.5 | 0.61 | 0.67 | 5.3 | 2.3 | 0.58 | 27.5 | 46.6 |
| 1995/74 | SW1992/202 | 84 | 0.56 | 0.17 | 0.12 | < 0.001 | 0.45 | 0.18 | 0.03 | 4.3 | 7.1 |
| 1996/7807 | SS1992/117 | 82 | 3.3 | 1.4 | 0.51 | 0.32 | 4.9 | 1.9 | 0.65 | 20.1 | 29.1 |
| 1995/76 | SW1992/215 | 90 | 0.27 | 0.12 | 0.053 | 0.027 | 0.48 | 0.18 | 0.094 | 1.7 | 2.8 |
| 1995/1121 | CORK 2 | 26 | 0.33 | 0.1 | 0.13 | < 0.009 | 0.34 | 0.15 | 0.022 | 3.3 | 5.0 |
| 1995/1123 | CORK 3 | 49 | 1.8 | 0.54 | 0.36 | < 0.009 | 2.0 | 0.81 | 0.11 | 12.9 | 19.4 |
| 1995/1125 | CORK 5 | 49 | 1.5 | 0.46 | 0.42 | < 0.009 | 1.6 | 0.61 | 0.092 | 12.8 | 19.0 |
| 1995/78 | SW1993/12 | 90 | 1.3 | 0.4 | 0.24 | 0.17 | 1.2 | 0.52 | 0.083 | 10.3 | 16.1 |
| 1995/80 | SW1993/20 | 87 | 2.3 | 0.95 | 0.8 | 0.41 | 3.0 | 1.4 | 0.23 | 22.0 | 33.7 |
| 1995/1127 | SW1993/27 | 59 | 4.5 | 1.6 | 0.48 | < 0.009 | 5.5 | 2.4 | 0.46 | 30.4 | 46.2 |
| 1995/82 | SW1993/30 | 84 | 0.51 | 0.19 | 0.15 | 0.079 | 0.55 | 0.2 | 0.028 | 6.2 | 9.3 |
| 1995/84 | SW1993/31 | 84 | 2.8 | 0.83 | 0.31 | 0.34 | 2.5 | 1.1 | 0.19 | 18.0 | 31.4 |
| 1995/193 | SW1993/36 | 90 | 1.9 | 0.5 | 0.73 | 0.16 | 1.7 | 0.79 | 0.12 | 16.1 | 26.1 |
| 1995/627 | SW1993/41 | 89 | 2.6 | 0.97 | 0.67 | 0.41 | 3.2 | 1.4 | 0.31 | 20.0 | 31.6 |
| 1995/1129 | SW1993/59 | 86 | 0.67 | 0.16 | 0.17 | < 0.009 | 0.5 | 0.2 | 0.031 | 4.9 | 7.7 |
| 1995/202 | SW1993/63 | 90 | 1.8 | 0.5 | 0.62 | 0.26 | 0.8 | 0.8 | 0.095 | 15.5 | 24.1 |
| 1995/1207 | SW1993/69 | 80 | 0.74 | 0.23 | 0.2 | < 0.009 | 0.72 | 0.3 | 0.046 | 6.1 | 9.1 |
| 1995/1208 | SW1993/70 | 91 | 0.74 | 0.2 | 0.22 | 0.1 | 0.71 | 0.33 | 0.048 | 5.5 | 9.2 |
| 1995/1516 | SW1993/78 | 83 | 0.48 | 0.17 | 0.12 | 0.082 | 0.64 | 0.24 | 0.15 | 2.685 | 4.79 |
| 1996/7808 | SS1993/135 | 10 | 16 | 6.9 | 2.2 | < 0.001 | 23 | 9.5 | 3.2 | 98.3 | 138.8 |
| 1995/1131 | SW1993/91 | 39 | 3.3 | 1.2 | 1.0 | < 0.009 | 3.6 | 1.5 | 0.3 | 24.9 | 39.0 |
| 1995/1210 | SW1993/94 | 90 | 2 | 0.69 | 0.49 | 0.34 | 2 | 0.82 | 0.19 | 15.0 | 23.9 |
| 1996/7809 | SS1993/196 | 87 | 2.5 | 1.1 | 0.37 | 0.27 | 3.8 | 1.4 | 0.51 | 16.2 | 23.1 |
| 1995/195 | SW1993/122 | 89 | 0.57 | 0.19 | 0.093 | 0.027 | 0.7 | 0.27 | 0.13 | 2.6 | 4.6 |
| 1995/197 | SW1993/124 | 89 | 1.1 | 0.34 | 0.37 | < 0.009 | 1.1 | 0.51 | 0.11 | 7.8 | 12.2 |
| 1995/1212 | SW1993/126 | 84 | 0.32 | 0.14 | 0.22 | 0.95 | 0.25 | 0.19 | 0.05 | 2.9 | 6.1 |
| 1995/198 | SW1993/131 | 90 | 1.1 | 0.47 | 0.34 | 0.19 | 1.5 | 0.59 | 0.13 | 7.9 | 13.2 |
| 1995/204 | SW1993/133A | 80 | 2.4 | 0.65 | 0.31 | 0.29 | 2.0 | 0.98 | 0.17 | 12.2 | 19.6 |
| 1998/7454 | SW1994/5 | 77 | 0.88 | 0.27 | 0.26 | 0.08 | 0.84 | 0.29 | 0.051 | 5.689 | 10.093 |
| 1995/206 | SW1994/7 | 81 | 2.7 | 0.92 | 0.5 | 0.36 | 2.5 | 1.1 | 0.2 | 20.7 | 32.1 |
| 1995/322 | SW1994/12 | 92 | 0.54 | 0.15 | 0.14 | 0.024 | 0.52 | 0.21 | 0.037 | 4.0 | 6.3 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB187 | CB183 | CB128 | CB156 | CB180 | CB170 | CB194 | ∑ICES7 | ∑25CBs |
|-----------|---------------|------|-------|-------|-------|---------|-------|-------|---------|--------|--------|
| 1995/324 | SW1994/31 | 55 | 0.93 | 0.31 | 0.21 | 0.13 | 1.1 | 0.45 | 0.1 | 6.4 | 10.2 |
| 1995/326 | SW1994/32 | 89 | 1.9 | 0.69 | 0.29 | 0.27 | 2.0 | 0.81 | 0.14 | 12.4 | 19.5 |
| 1998/7459 | SW1994/39 | 81 | 1.4 | 0.48 | 0.44 | 0.18 | 1.5 | 0.62 | 0.14 | 9.91 | 16.762 |
| 1995/926 | SW1994/44 | 90 | 4.5 | 1.4 | 0.38 | 0.57 | 4.2 | 1.4 | 0.46 | 25.6 | 41.2 |
| 1995/328 | SW1994/53 | 92 | 0.25 | 0.079 | 0.052 | 0.03 | 0.29 | 0.11 | 0.066 | 1.3 | 2.3 |
| 1995/332 | SW1994/67 | 82 | 0.34 | 0.075 | 0.13 | 0.034 | 0.24 | 0.1 | 0.017 | 3.1 | 4.8 |
| 1995/334 | SW1994/68 | 95 | 0.22 | 0.05 | 0.097 | 0.015 | 0.14 | 0.069 | 0.009 | 2.2 | 3.4 |
| 1995/934 | SW1994/77 | 96 | 0.3 | 0.14 | 0.13 | 0.017 | 0.41 | 0.15 | 0.039 | 3.0 | 4.5 |
| 1995/936 | SW1994/78 | 93 | 0.7 | 0.29 | 0.32 | 0.1 | 0.89 | 0.36 | 0.071 | 7.3 | 11.3 |
| 1995/320 | SW1994/7A | 92 | 1.7 | 0.5 | 0.27 | 0.19 | 1.7 | 0.67 | 0.25 | 8.0 | 14.0 |
| 1995/632 | SW1994/80 | 88 | 2.8 | 1.0 | 0.27 | 0.41 | 3.3 | 1.4 | 0.27 | 18.8 | 30.4 |
| 1995/938 | SW1994/83 | 49 | 0.46 | 0.12 | 0.14 | 0.049 | 0.45 | 0.18 | 0.019 | 3.8 | 6.3 |
| 1996/7811 | SS1994/63 | 59 | 0.93 | 0.47 | 0.18 | 0.14 | 1.7 | 0.82 | 0.21 | 7.6 | 10.6 |
| 1995/1467 | SW1994/101 | 74 | 2 | 0.59 | 0.45 | 0.32 | 1.9 | 0.86 | 0.085 | 16.2 | 26.9 |
| 1996/4100 | LAW-72 | 82 | 0.35 | 0.16 | 0.1 | 0.046 | 0.54 | 0.23 | 0.037 | 4.0 | 5.3 |
| 1995/1469 | SW1994/105 | 55 | 0.3 | 0.15 | 0.2 | 0.085 | 0.33 | 0.2 | 0.054 | 2.3 | 4.2 |
| 1995/940 | SW1994/108 | 31 | 0.67 | 2.1 | 0.47 | 4.1 | 0.015 | 0.23 | 1.3 | 5.5 | 17.7 |
| 1995/942 | SW1994/114 | 19 | 0.83 | 0.4 | 0.32 | < 0.009 | 1.4 | 0.51 | 0.1 | 7.6 | 11.8 |
| 1995/1501 | SW1994/115 | 42 | 0.4 | 0.17 | 0.19 | 0.28 | 0.57 | 0.24 | 0.057 | 4.2 | 7.0 |
| 1995/1505 | SW1994/120 | 84 | 1.4 | 0.37 | 0.45 | 0.21 | 1.3 | 0.6 | 0.088 | 12.9 | 20.9 |
| 1995/636 | SW1994/143 | 76 | 0.43 | 0.13 | 0.17 | 0.035 | 0.49 | 0.2 | 0.041 | 3.6 | 5.5 |
| 1995/1495 | SW1994/145 | 91 | 1.7 | 0.55 | 0.44 | 0.28 | 1.8 | 0.71 | 0.15 | 13.9 | 21.6 |
| 1995/1497 | SW1994/148 | 86 | 1.4 | 0.35 | 0.48 | 0.21 | 1.1 | 0.54 | 0.063 | 13.2 | 21.9 |
| 1995/920 | SW1994/153 | 43 | 1.3 | 0.42 | 0.22 | 0.21 | 1.3 | 0.54 | 0.14 | 8.7 | 14.5 |
| 1996/7812 | SS1994/277 | 82 | 0.72 | 0.28 | 0.084 | 0.072 | 1.2 | 0.44 | 0.22 | 3.9 | 6.0 |
| 1995/922 | SW1994/171 | 83 | 3.2 | 0.85 | 0.58 | 0.38 | 2.5 | 1 | 0.19 | 23.6 | 37.9 |
| 1995/1499 | SW1994/172 | 88 | 0.82 | 0.32 | 0.29 | 0.15 | 0.97 | 0.4 | 0.091 | 6.8 | 11.1 |
| 1995/924 | SW1994/185 | 84 | 1.3 | 0.34 | 0.22 | 0.19 | 1 | 0.49 | 0.1 | 9.5 | 15.3 |
| 1996/3927 | SW1995/7 | 85 | 2.8 | 0.83 | 0.29 | 0.37 | 2.5 | 1.1 | 0.21 | 15.9 | 27.0 |
| 1996/3928 | SW1995/52 | 86 | 0.59 | 0.13 | 0.18 | 0.073 | 0.37 | 0.18 | 0.019 | 4.9 | 8.0 |
| 1995/1215 | SW1995/54 | 49 | 1.2 | 0.39 | 0.51 | < 0.001 | 1.3 | 0.57 | 0.12 | 9.538 | 16.373 |
| 1996/3929 | SW1995/55 | 83 | 4.2 | 1.3 | 1.1 | 0.6 | 3.5 | 1.7 | 0.25 | 30.5 | 54.7 |
| 1996/3930 | SW1995/61 | 93 | 1.6 | 0.38 | 0.4 | 0.2 | 1.1 | 0.55 | 0.071 | 11.3 | 19.9 |
| 2001/3018 | SW1995/68 | 69 | 0.7 | 0.24 | 0.17 | < 0.001 | 0.75 | 0.3 | 0.055 | 5.15 | 7.814 |
| 1996/3931 | SW1995/76 | 45 | 0.18 | 0.046 | 0.045 | 0.014 | 0.12 | 0.051 | 0.007 | 1.6 | 2.8 |
| 1996/3932 | SW1995/78 | 80 | 0.6 | 0.14 | 0.81 | 0.036 | 0.44 | 0.19 | 0.028 | 5.1 | 8.9 |
| 1996/3933 | SW1995/84 | 86 | 0.25 | 0.085 | 0.075 | 0.023 | 0.31 | 0.13 | 0.05 | 1.6 | 2.7 |
| 1996/3934 | SW1995/85 | 72 | 1.5 | 0.38 | 0.67 | 0.21 | 1.2 | 0.54 | 0.06 | 15.7 | 25.5 |
| 1996/3935 | SW1995/86 | 85 | 1.1 | 0.38 | 0.14 | 0.17 | 1.4 | 0.56 | 0.24 | 4.5 | 7.9 |
| 1996/7813 | SS1995/80 | 8.0 | 5.6 | 3.2 | 0.26 | < 0.001 | 14 | 5.6 | 2.8 | 45.3 | 63.1 |
| 1996/3936 | SW1995/94 | 84 | 0.03 | 0.018 | 0.032 | 0.031 | 0.035 | 0.027 | 0.005 | 0.2 | 0.4 |
| 1999/1287 | SW1996/101 | 86 | 1.2 | 0.32 | 0.38 | 0.17 | 1.0 | 0.49 | 0.076 | 8.743 | 14.953 |
| 1996/3948 | SW1995/102 | 39 | 4.5 | 0.91 | 1.4 | 0.46 | 2.8 | 1.4 | 0.12 | 40.4 | 62.3 |
| 1996/3949 | SW1995/120A | 80 | 0.82 | 0.25 | 0.2 | < 0.009 | 0.74 | 0.29 | 0.059 | 5.2 | 8.3 |
| 2001/3599 | SW1995/120b | 79 | 0.2 | 0.059 | 0.073 | < 0.001 | 0.15 | 0.074 | < 0.001 | 2.029 | 3.3 |
| 1996/3950 | SW1995/126 | 74 | 2.5 | 0.85 | 0.57 | < 0.009 | 2.3 | 0.93 | 0.14 | 20.8 | 32.7 |
| 2001/3019 | SW1995/141 | 88 | 0.74 | 0.18 | 0.21 | < 0.001 | 0.56 | 0.23 | 0.042 | 5.5 | 8.334 |
| 1998/7455 | SW1995/145 | 46 | 0.79 | 0.28 | 0.43 | 0.11 | 0.83 | 0.35 | 0.076 | 8.867 | 13.585 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB187 | CB183 | CB128 | CB156 | CB180 | CB170 | CB194 | ∑ICES7 | ∑25CBs |
|-----------|---------------------|------|---------|---------|-------|----------|-------|-------|---------|--------|--------|
| 1996/3956 | SW1996/2 | 81 | 0.46 | 0.12 | 0.19 | < 0.009 | 0.36 | 0.17 | 0.021 | 4.1 | 6.0 |
| 1996/3952 | SW1996/27(1) | 86 | 4.1 | 1.3 | 0.63 | < 0.009 | 3.8 | 1.9 | 0.34 | 23.2 | 37.3 |
| 1996/3955 | SW1996/29 | 84 | 0.46 | 0.12 | 0.19 | 0.034 | 0.36 | 0.17 | 0.021 | 3.9 | 6.0 |
| 1996/3953 | SW1996/30 | 81 | 0.3 | 0.075 | 0.11 | 0.013 | 0.21 | 0.092 | 0.013 | 2.7 | 4.1 |
| 1996/3954 | SW1996/37 | 79 | 2.6 | 0.82 | 0.56 | < 0.009 | 2.6 | 1.2 | 0.19 | 22.3 | 32.1 |
| 2001/3020 | SW1996/44 | 90 | 0.94 | 0.21 | 0.28 | < 0.001 | 0.62 | 0.26 | 0.031 | 7.87 | 12.216 |
| 1999/1285 | SW1996/46 | 91 | 4.1 | 1.3 | 0.48 | 0.57 | 3.5 | 1.6 | 0.34 | 25.526 | 42.174 |
| 2001/3600 | SW1996/50b | 90 | 0.12 | 0.037 | 0.056 | < 0.001 | 0.11 | 0.05 | < 0.001 | 1.38 | 1.963 |
| 2001/3021 | SW1996/60 | 94 | 5.2 | 1.8 | 0.55 | < 0.001 | 5.1 | 2.2 | 0.52 | 30.78 | 46.551 |
| 2000/3652 | SW1996/67 | 92 | 0.58 | 0.14 | 0.19 | < 0.001 | 0.4 | 0.16 | 0.025 | 5.21 | 7.242 |
| 2001/3601 | SW1996/84e | 87 | 0.2 | 0.057 | 0.065 | < 0.001 | 0.17 | 0.076 | < 0.001 | 1.87 | 2.812 |
| 2000/3653 | SW1996/87 | 69 | 2.0 | 0.35 | 0.51 | < 0.001 | 1.1 | 0.46 | 0.06 | 15.95 | 24.289 |
| 2000/3654 | SW1996/111 | 59 | 0.28 | 0.1 | 0.13 | < 0.001 | 0.39 | 0.15 | 0.022 | 3.69 | 5.025 |
| 2000/3655 | SW1996/119 | 82 | 2.0 | 0.61 | 0.75 | 0.2 | 1.9 | 0.79 | 0.21 | 10.9 | 20.17 |
| 1998/7457 | SW1996/121 | 39 | 8.7 | 2.8 | 1.3 | 0.88 | 11 | 3.8 | 0.79 | 40.174 | 71.607 |
| 2001/3602 | SW1996/147a | 86 | 0.47 | 0.13 | 0.082 | < 0.001 | 0.4 | 0.16 | 0.032 | 3.74 | 5.728 |
| 1999/1289 | SW1996/150 | 87 | 2.2 | 0.61 | 1.0 | 0.33 | 1.6 | 0.92 | 0.097 | 23.84 | 36.578 |
| 1999/1290 | SW1996/160 | 81 | 0.21 | 0.054 | 0.046 | 0.016 | 0.2 | 0.087 | 0.055 | 1.112 | 1.906 |
| 1998/7462 | SW1996/162 | 26 | 0.071 | 0.025 | 0.059 | 0.043 | 0.08 | 0.039 | 0.002 | 1.89 | 2.836 |
| 2000/3656 | SW1996/163 | 92 | 5.3 | 1.7 | 0.42 | < 0.001 | 5.6 | 2.3 | 0.59 | 33.462 | 50.276 |
| 2001/3603 | SW1996/169a | 87 | 0.19 | 0.053 | 0.055 | < 0.001 | 0.15 | 0.069 | 0.013 | 1.7 | 2.42 |
| 2000/3657 | SW1996/174 | 92 | 1.9 | 0.59 | 0.41 | < 0.001 | 2.1 | 0.92 | 0.23 | 11.508 | 18.223 |
| 2000/3658 | SW1997/1 | 87 | 2.6 | 0.62 | 0.47 | < 0.001 | 2.2 | 0.84 | 0.15 | 16.17 | 25.625 |
| 2000/3659 | SW1997/2 | 90 | 1.0 | 0.25 | 0.21 | < 0.001 | 0.93 | 0.41 | 0.053 | 7.03 | 10.65 |
| 2000/3660 | SW1997/5 | 92 | 0.2 | 0.043 | 0.055 | < 0.001 | 0.16 | 0.063 | < 0.001 | 1.587 | 2.313 |
| 1999/1291 | SW1997/21A | 82 | 2.2 | 0.79 | 0.62 | 0.38 | 2.1 | 1.0 | 0.21 | 17.514 | 27.435 |
| 2001/3022 | SW1997/36 | 85 | 1.0 | 0.34 | 0.25 | < 0.001 | 1.1 | 0.43 | 0.15 | 6.34 | 10.064 |
| 2001/3605 | SW1997/67f | 78 | 0.42 | 0.12 | 0.15 | 0.047 | 0.34 | 0.15 | 0.021 | 4.41 | 6.744 |
| 1998/7466 | SW1997/72 | 88 | 0.17 | 0.035 | 0.069 | 0.004 | 0.11 | 0.041 | 0.007 | 1.538 | 2.416 |
| 1998/7467 | SW1997/80 | 84 | 0.25 | 0.049 | 0.089 | < 0.0004 | 0.14 | 0.062 | 0.009 | 2.125 | 3.116 |
| 1998/7468 | SW1997/81 | 95 | 0.48 | 0.12 | 0.17 | < 0.0004 | 0.35 | 0.15 | 0.019 | 4.216 | 6.824 |
| 1998/7469 | SW1997/87 | 90 | 0.61 | 0.22 | 0.024 | 0.017 | 0.57 | 0.024 | 0.04 | 5.98 | 9.069 |
| 1998/7470 | SW1997/89 | 60 | 0.23 | 0.05 | 0.11 | 0.003 | 0.16 | 0.65 | 0.007 | 2.651 | 4.986 |
| 1998/7471 | SW1997/91 | 63 | 0.72 | 0.18 | 0.25 | 0.029 | 0.59 | 0.25 | 0.033 | 5.941 | 9.59 |
| 1998/7472 | SW1997/93 | 91 | 0.28 | 0.1 | 0.067 | 0.008 | 0.36 | 0.13 | 0.061 | 1.527 | 2.503 |
| 2001/3606 | SW1997/93b | 85 | 0.19 | < 0.001 | 0.074 | < 0.001 | 0.13 | 0.071 | < 0.001 | 1.655 | 2.352 |
| 1998/7473 | SW1997/93 foetus | 79 | 0.095 | 0.023 | 0.036 | < 0.0004 | 0.1 | 0.038 | 0.009 | 0.815 | 1.2 |
| 1998/7474 | SW1997/94 | 87 | 0.46 | 0.17 | 0.12 | 0.11 | 0.6 | 0.25 | 0.18 | 2.356 | 4.294 |
| 1998/7475 | SW1997/96 | 90 | 0.42 | 0.14 | 0.11 | 0.084 | 0.5 | 0.21 | 0.09 | 2.49 | 4.227 |
| 1998/7476 | SW1997/97 | 59 | 0.95 | 0.33 | 0.33 | 0.21 | 0.99 | 0.44 | 0.065 | 8.5 | 14.57 |
| 2001/3607 | SW1997/97a | 83 | < 0.001 | 0.043 | 0.044 | < 0.001 | 0.13 | 0.061 | < 0.001 | 1.463 | 1.991 |
| 1998/7477 | SW1997/102 | 77 | 0.62 | 0.15 | 0.34 | 0.058 | 0.43 | 0.19 | 0.018 | 7.979 | 12.746 |
| 1998/7478 | SW1997/103 | 76 | 2.5 | 0.66 | 0.63 | 0.39 | 2.3 | 1.1 | 0.18 | 17.252 | 28.879 |
| 1998/7479 | SW1997/111 | 90 | 0.78 | 0.25 | 0.28 | 0.16 | 0.69 | 0.3 | 0.055 | 5.877 | 10.29 |
| 1998/7480 | SW1997/113 | 50 | 0.65 | 0.29 | 0.38 | 0.075 | 0.91 | 0.45 | 0.086 | 6.728 | 10.585 |
| 1998/7481 | SW1997/118 | 85 | 0.53 | 0.15 | 0.096 | 0.09 | 0.54 | 0.24 | 0.081 | 2.379 | 4.496 |
| 2001/3608 | SW1997/124a | 86 | 0.47 | 0.14 | 0.12 | 0.053 | 0.41 | 0.18 | 0.031 | 4.08 | 6.312 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB187 | CB183 | CB128 | CB156 | CB180 | CB170 | CB194 | ∑ICES7 | ∑25CBs |
|-----------|---------------|------|-------|-------|-------|---------|-------|-------|---------|--------|--------|
| 2001/3609 | SW1997/135f | 90 | 0.47 | 0.13 | 0.091 | < 0.001 | 0.42 | 0.17 | < 0.001 | 2.91 | 4.677 |
| 1998/7482 | SW1997/138 | 80 | 2.9 | 1.2 | 1.1 | 0.66 | 3.5 | 1.5 | 0.29 | 27.352 | 42.698 |
| 1998/7483 | SW1997/141 | 83 | 0.34 | 0.081 | 0.14 | 0.055 | 0.23 | 0.11 | 0.015 | 3.048 | 5.086 |
| 1998/7484 | SW1997/142 | 90 | 1.7 | 0.43 | 0.31 | 0.2 | 1.2 | 0.54 | 0.081 | 11.927 | 19.492 |
| 1998/7485 | SW1997/142b | 88 | 0.48 | 0.11 | 0.15 | 0.061 | 0.3 | 0.13 | 0.019 | 3.623 | 5.846 |
| 1998/7486 | SW1997/152 | 70 | 2.9 | 0.88 | 0.83 | 0.45 | 2.4 | 1.2 | 0.15 | 27.245 | 41.439 |
| 1998/7463 | SW1997/159 | 66 | 0.18 | 0.061 | 0.03 | 0.021 | 0.22 | 0.082 | 0.016 | 0.949 | 1.674 |
| 2001/3610 | SW1997/161a | 86 | 0.32 | 0.095 | 0.093 | 0.04 | 0.26 | 0.12 | 0.022 | 3.0 | 4.54 |
| 1998/7460 | SW1997/162 | 46 | 1.6 | 0.53 | 0.56 | 0.22 | 1.8 | 0.74 | 0.14 | 13.371 | 22.914 |
| 1998/7487 | SW1997/173 | 91 | 2.1 | 0.57 | 0.55 | 0.26 | 1.8 | 0.8 | 0.1 | 16.835 | 26.783 |
| 1998/7488 | SW1997/174 | 90 | 1.3 | 0.32 | 0.26 | 0.15 | 0.91 | 0.41 | 0.064 | 8.228 | 13.835 |
| 1999/1292 | SW1997/178 | 86 | 0.48 | 0.13 | 0.098 | 0.034 | 0.42 | 0.2 | 0.083 | 2.519 | 4.299 |
| 2001/3611 | SW1997/178c | 88 | 1.5 | 0.44 | 0.29 | < 0.001 | 1.3 | 0.51 | 0.082 | 10.29 | 15.942 |
| 1998/7489 | SW1997/186(1) | 91 | 0.49 | 0.11 | 0.13 | 0.056 | 0.29 | 0.13 | 0.02 | 3.633 | 5.763 |
| 1998/7490 | SW1997/186(2) | 93 | 0.18 | 0.045 | 0.034 | 0.026 | 0.13 | 0.06 | 0.026 | 0.753 | 1.365 |
| 2000/3661 | SW1998/1 | 93 | 1.0 | 0.26 | 0.2 | < 0.001 | 0.92 | 0.4 | 0.075 | 6.18 | 9.519 |
| 1998/7491 | SW1998/4 | 82 | 0.59 | 0.15 | 0.21 | 0.077 | 0.37 | 0.17 | 0.017 | 5.416 | 9.061 |
| 2000/3662 | SW1998/16 | 90 | 0.55 | 0.12 | 0.15 | < 0.001 | 4.6 | 0.2 | 0.027 | 8.1 | 10.17 |
| 2000/3663 | SW1998/21 | 87 | 0.76 | 0.27 | 0.18 | < 0.001 | 0.94 | 0.35 | 0.093 | 5.11 | 7.909 |
| 1998/7492 | SW1998/50 | 93 | 1.1 | 0.33 | 0.27 | 0.15 | 1.0 | 0.44 | 0.089 | 6.688 | 11.064 |
| 1999/1293 | SW1998/53 | 90 | 0.25 | 0.055 | 0.099 | 0.021 | 0.16 | 0.075 | 0.011 | 2.255 | 3.585 |
| 2001/3612 | SW1998/56a | 99 | 1.3 | 0.41 | 0.2 | < 0.001 | 1.2 | 0.54 | 0.08 | 10.04 | 14.88 |
| 1998/7493 | SW1998/71 | 80 | 0.63 | 0.15 | 0.17 | 0.078 | 0.41 | 0.19 | 0.027 | 4.715 | 7.888 |
| 1998/7494 | SW1998/75 | 99 | 0.36 | 0.077 | 0.13 | 0.06 | 0.23 | 0.12 | 0.017 | 3.095 | 5.263 |
| 1998/7495 | SW1998/76 | 91 | 0.34 | 0.092 | 0.11 | 0.058 | 0.3 | 0.13 | 0.023 | 2.96 | 4.879 |
| 1998/7464 | SW1998/81 | 56 | 1.2 | 0.44 | 0.24 | 0.18 | 1.4 | 0.59 | 0.12 | 9.748 | 15.824 |
| 2000/3708 | SW1998/90 | 68 | 0.25 | 0.74 | 1.4 | < 0.001 | 1.6 | 0.87 | 0.087 | 26 | 37.31 |
| 1998/7496 | SW1998/97 | 78 | 1.2 | 0.32 | 0.45 | 0.085 | 1.1 | 0.55 | 0.076 | 9.724 | 16.039 |
| 1998/7458 | SW1998/104 | 71 | 1.2 | 0.39 | 0.13 | 0.11 | 1.5 | 0.5 | 0.22 | 4.344 | 7.898 |
| 1998/7497 | SW1998/115 | 88 | 4.3 | 1.2 | 0.76 | 0.74 | 3.3 | 1.7 | 0.32 | 29.883 | 50.037 |
| 1998/7498 | SW1998/116 | 85 | 0.31 | 0.097 | 0.13 | 0.067 | 0.34 | 0.15 | 0.03 | 2.682 | 4.554 |
| 2001/3613 | SW1998/123a | 92 | 0.4 | 0.13 | 0.13 | < 0.001 | 0.39 | 0.18 | 0.031 | 3.99 | 5.672 |
| 1998/7499 | SW1998/127 | 76 | 0.64 | 0.2 | 0.3 | 0.14 | 0.61 | 0.29 | 0.032 | 7.665 | 12.497 |
| 1998/7500 | SW1998/129 | 84 | 1.4 | 0.42 | 0.38 | 0.26 | 1.4 | 0.68 | 0.23 | 8.931 | 15.427 |
| 2000/3664 | SW1998/135 | 90 | 0.96 | 0.31 | 0.33 | < 0.001 | 1.1 | 0.44 | 0.069 | 5.62 | 9.908 |
| 1998/7501 | SW1998/139 | 80 | 0.48 | 0.12 | 0.19 | 0.082 | 0.4 | 0.2 | 0.027 | 4.428 | 7.354 |
| 1998/7502 | SW1998/145 | 64 | 0.73 | 0.22 | 0.35 | 0.15 | 0.69 | 0.34 | 0.047 | 7.365 | 12.481 |
| 2000/3665 | SW1998/149 | 86 | 1.2 | 0.33 | 0.22 | < 0.001 | 1.1 | 0.47 | 0.07 | 8.47 | 12.876 |
| 1998/7456 | SW1998/154 | 74 | 6.4 | 1.8 | 2.9 | 0.63 | 5.5 | 2.7 | 0.37 | 57.42 | 88.937 |
| 1999/3871 | SW1998/164 | 93 | 3.3 | 1.1 | 0.47 | 0.042 | 2.8 | 1.2 | 0.26 | 21.444 | 34.059 |
| 1998/7503 | SW1998/167A | 74 | 2.7 | 0.74 | 0.96 | 0.5 | 2.3 | 1.1 | 0.17 | 21.738 | 35.323 |
| 2000/3666 | SW1998/170 | 92 | 3.7 | 0.86 | 0.69 | < 0.001 | 3.2 | 1.4 | 0.19 | 24.91 | 38.516 |
| 1999/3872 | SW1998/171 | 82 | 1.8 | 0.63 | 0.4 | 0.19 | 1.9 | 0.77 | 0.19 | 9.413 | 16.436 |
| 2000/3667 | SW1998/174 | 89 | 6.4 | 1.8 | 0.72 | < 0.001 | 6.2 | 2.5 | 0.61 | 37.81 | 58.465 |
| 1998/7504 | SW1998/179 | 83 | 1.6 | 0.54 | 0.67 | 0.35 | 1.7 | 0.96 | 0.18 | 12.507 | 20.686 |
| 1998/7505 | SW1998/183 | 92 | 1.4 | 0.49 | 0.39 | 0.23 | 1.3 | 0.7 | 0.12 | 10.257 | 15.946 |
| 1999/1294 | SW1998/187 | 85 | 0.24 | 0.067 | 0.076 | 0.015 | 0.21 | 0.095 | 0.013 | 1.967 | 3.053 |
| 1999/1295 | SW1998/191 | 86 | 0.38 | 0.11 | 0.06 | 0.019 | 0.42 | 0.17 | 0.095 | 1.527 | 2.72 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB187 | CB183 | CB128 | CB156 | CB180 | CB170 | CB194 | ∑ICES7 | ∑25CBs |
|-----------|---------------|------|---------|---------|---------|---------|-------|---------|---------|--------|---------|
| 1999/1296 | SW1998/198 | 89 | 0.46 | 0.15 | 0.16 | 0.075 | 0.51 | 0.23 | 0.055 | 3.546 | 5.534 |
| 1999/1297 | SW1998/208 | 80 | 0.27 | 0.071 | 0.091 | 0.01 | 0.18 | 0.084 | 0.014 | 2.177 | 3.611 |
| 1999/1298 | SW1999/10 | 90 | 0.16 | 0.037 | 0.029 | 0.007 | 0.12 | 0.055 | 0.025 | 0.745 | 1.368 |
| 1999/1299 | SW1999/17 | 76 | 0.34 | 0.083 | 0.15 | 0.014 | 0.21 | 0.1 | 0.01 | 4.058 | 6.307 |
| 1999/1300 | SW1999/26 | 89 | 1.6 | 0.48 | 0.46 | 0.031 | 1.3 | 0.72 | 0.091 | 12.782 | 20.53 |
| 2000/3709 | SW1999/31 | 53 | 0.75 | 0.2 | 0.14 | 0.074 | 0.78 | 0.26 | 0.1 | 3.878 | 6.108 |
| 1999/1301 | SW1999/40 | 89 | 0.54 | 0.072 | 0.081 | 0.013 | 0.24 | 0.14 | 0.045 | 2.252 | 3.709 |
| 2000/3710 | SW1999/45 | 42 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.004 | < 0.001 | < 0.001 | 0.154 | 0.175 |
| 1999/1302 | SW1999/48 | 89 | 0.32 | 0.071 | 0.11 | 0.013 | 0.19 | 0.091 | 0.012 | 2.807 | 4.537 |
| 2001/3615 | SW1999/48c | 86 | 0.59 | 0.19 | 0.12 | 0.069 | 0.61 | 0.26 | 0.048 | 4.51 | 7.126 |
| 2001/3616 | SW1999/57a | 93 | 0.25 | 0.059 | 0.094 | < 0.001 | 0.16 | 0.088 | < 0.001 | 2.22 | 3.221 |
| 2000/3668 | SW1999/60 | 87 | 0.4 | 0.14 | 0.1 | < 0.001 | 0.5 | 0.2 | 0.047 | 3.001 | 4.568 |
| 2000/3669 | SW1999/63 | 90 | 0.56 | 0.2 | 0.14 | < 0.001 | 0.65 | 0.26 | 0.059 | 3.61 | 5.764 |
| 1999/1303 | SW1999/71 | 76 | 1.1 | 0.14 | 0.29 | 0.032 | 0.46 | 0.25 | 0.032 | 6.751 | 10.077 |
| 2001/3617 | SW1999/72C.1 | 93 | 0.26 | 0.063 | 0.08 | < 0.001 | 0.21 | 0.086 | < 0.001 | 2.42 | 3.359 |
| 2001/3618 | SW1999/72C.2 | 86 | 0.93 | 0.25 | 0.18 | < 0.001 | 0.78 | 0.28 | 0.068 | 5.18 | 8.538 |
| 1999/1304 | SW1999/74 | 90 | 0.29 | 0.072 | 0.13 | 0.018 | 0.17 | 0.082 | 0.011 | 2.881 | 4.737 |
| 1999/1305 | SW1999/77 | 91 | 0.52 | 0.16 | 0.17 | 0.02 | 0.51 | 0.2 | 0.036 | 4.562 | 7.12 |
| 2001/3614 | SW1999/8b | 91 | 3.1 | 1.2 | 0.18 | < 0.001 | 3.0 | 1.3 | 0.37 | 18.9 | 28.63 |
| 1999/3842 | SW1999/96 | 94 | 0.42 | 0.15 | 0.17 | 0.033 | 0.53 | 0.21 | 0.049 | 3.787 | 5.802 |
| 2001/3619 | SW1999/96C | 87 | 0.9 | 0.25 | 0.089 | < 0.001 | 0.84 | 0.33 | 0.062 | 6.512 | 9.463 |
| 2001/3620 | SW1999/121B | 88 | 0.33 | 0.091 | 0.093 | 0.039 | 0.27 | 0.12 | 0.018 | 2.94 | 4.424 |
| 2000/3670 | SW1999/148 | 92 | 1.1 | 0.3 | 0.27 | < 0.001 | 0.84 | 0.38 | 0.038 | 10.65 | 16.682 |
| 2001/3621 | SW1999/148A | 89 | 1.5 | 0.41 | 0.28 | < 0.001 | 1.3 | 0.49 | 0.091 | 8.256 | 13.866 |
| 2000/3671 | SW1999/172 | 93 | 1.6 | 0.4 | 0.22 | < 0.001 | 1.5 | 0.6 | 0.1 | 10.73 | 16.476 |
| 2000/3530 | SW1999/174B | 88 | 0.71 | 0.23 | 0.21 | < 0.001 | 0.79 | 0.31 | 0.086 | 5.229 | 8.053 |
| 2000/3531 | SW1999/189 | 95 | 0.83 | 0.29 | 0.25 | < 0.001 | 1.0 | 0.39 | 0.2 | 6.1 | 9.135 |
| 2000/3532 | SW1999/192 | 83 | 0.75 | 0.35 | 0.3 | 0.14 | 1.2 | 0.48 | 0.25 | 6.769 | 10.084 |
| 2001/3622 | SW1999/194a | 93 | 0.16 | 0.039 | 0.057 | < 0.001 | 0.11 | 0.05 | < 0.001 | 1.588 | 2.283 |
| 2000/3711 | SW1999/197 | 90 | 0.65 | 0.2 | 0.17 | 0.074 | 0.72 | 0.23 | 0.12 | 4.755 | 7.444 |
| 2000/3712 | SW1999/201A | 88 | 9.7 | 3.0 | 3.4 | < 0.001 | 9.5 | 4.2 | 0.9 | 75.02 | 109.927 |
| 2000/3533 | SW1999/202 | 85 | 0.26 | 0.093 | 0.11 | < 0.001 | 0.3 | 0.1 | 0.14 | 2.754 | 4.072 |
| 2000/3534 | SW1999/208 | 88 | 0.88 | 0.46 | 0.23 | < 0.001 | 1.4 | 0.53 | 0.22 | 6.014 | 9.446 |
| 2000/3535 | SW2000/13 | 91 | 0.59 | 0.14 | 0.15 | < 0.001 | 0.5 | 0.2 | 0.043 | 3.42 | 5.689 |
| 2001/3623 | SW2000/14a | 94 | 0.25 | 0.074 | 0.068 | < 0.001 | 0.24 | 0.09 | 0.016 | 2.312 | 3.264 |
| 2000/3672 | SW2000/16 | 90 | 0.44 | 0.12 | 0.1 | < 0.001 | 0.42 | 0.18 | 0.033 | 3.11 | 4.796 |
| 2000/3673 | SW2000/20 | 87 | 8.2 | 2.3 | 1.5 | 0.95 | 8.1 | 3.5 | 0.47 | 57.4 | 94.27 |
| 2000/3674 | SW2000/27 | 90 | 1.5 | 0.51 | 0.46 | 0.23 | 1.7 | 0.82 | 0.15 | 12.59 | 19.706 |
| 2000/3536 | SW2000/33 | 68 | 0.86 | 0.19 | 0.32 | < 0.001 | 5.2 | 0.24 | 0.033 | 12.815 | 17.004 |
| 2000/3537 | SW2000/37 | 77 | 1.2 | 0.39 | 0.26 | < 0.001 | 1.4 | 0.57 | 0.14 | 8.588 | 13.003 |
| 2000/3538 | SW2000/50 | 82 | 1.6 | 0.34 | 0.23 | < 0.001 | 1.2 | 0.48 | 0.092 | 9.71 | 14.591 |
| 2001/3624 | SW2000/52a | 92 | 0.19 | < 0.001 | 0.063 | < 0.001 | 0.1 | 0.046 | < 0.001 | 1.68 | 2.365 |
| 2000/3539 | SW2000/53 | 86 | 0.48 | 0.16 | 0.15 | < 0.001 | 0.6 | 0.23 | 0.072 | 3.5 | 5.111 |
| 2000/3540 | SW2000/55 | 83 | 0.76 | 0.17 | 0.2 | < 0.001 | 0.57 | 0.24 | 0.04 | 6.08 | 9.077 |
| 2000/3541 | SW2000/73 | 84 | 0.69 | 0.16 | 0.13 | < 0.001 | 0.54 | 0.23 | 0.047 | 4.18 | 6.226 |
| 2001/3625 | SW2000/74a | 86 | 1.8 | 0.63 | 0.36 | 0.24 | 1.5 | 0.63 | 0.14 | 11.89 | 21.159 |
| 2000/3542 | SW2000/81 | 84 | 1.3 | 0.31 | 0.23 | < 0.001 | 0.93 | 0.35 | 0.089 | 7.72 | 12.198 |
| 2001/3626 | SW2000/81a | 88 | 0.3 | 0.065 | 0.1 | < 0.001 | 0.19 | 0.08 | < 0.001 | 2.86 | 3.966 |

Table 4.5. continued: Concentrations of chlorobiphenyl congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | CB187 | CB183 | CB128 | CB156 | CB180 | CB170 | CB194 | ∑ICES7 | ∑25CBs |
|-----------|---------------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2000/3675 | SW2000/103 | 86 | 1.2 | 0.35 | 0.14 | < 0.001 | 1.2 | 0.43 | 0.11 | 7.41 | 11.67 |
| 2000/3676 | SW2000/131 | 92 | 1.4 | 0.44 | 0.31 | 0.19 | 1.5 | 0.56 | 0.097 | 10.77 | 16.833 |
| 2000/3677 | SW2000/140 | 89 | 1.1 | 0.23 | 0.18 | 0.11 | 0.63 | 0.29 | 0.035 | 7.68 | 12.499 |
| 2000/3678 | SW2000/144 | 88 | 1.1 | 0.26 | 0.16 | 0.1 | 0.83 | 0.31 | 0.067 | 4.27 | 8.495 |
| 2000/3679 | SW2000/146(1) | 76 | 0.6 | 0.16 | 0.17 | 0.063 | 0.48 | 0.19 | 0.029 | 4.99 | 7.607 |
| 2000/3680 | SW2000/146(2) | 86 | 1.4 | 0.36 | 0.27 | 0.13 | 1.1 | 0.42 | 0.081 | 9.03 | 14.215 |
| 2001/3023 | SW2000/150A | 56 | 2.6 | 0.92 | 0.38 | < 0.001 | 3.0 | 1.2 | 0.3 | 16.1 | 24.405 |
| 2001/3024 | SW2000/157 | 88 | 1.1 | 0.28 | 0.33 | < 0.001 | 1.0 | 0.4 | 0.076 | 7.6 | 11.524 |
| 2001/3025 | SW2000/164 | 86 | 1.4 | 0.43 | 0.33 | < 0.001 | 1.3 | 0.46 | 0.13 | 8.8 | 13.879 |
| 2001/3026 | SW2000/166 | 89 | 2.1 | 0.65 | 0.34 | < 0.001 | 1.9 | 0.93 | 0.21 | 12.74 | 19.52 |
| 2001/3027 | SW2000/168 | 89 | 0.48 | 0.2 | 0.16 | < 0.001 | 0.55 | 0.23 | 0.055 | 4.24 | 6.086 |
| 2001/3028 | SW2000/169 | 90 | 0.35 | 0.37 | 0.29 | < 0.001 | 0.96 | 0.4 | 0.096 | 6.9 | 9.565 |
| 2001/3029 | SW2000/170 | 90 | 0.15 | 0.07 | 0.043 | < 0.001 | 0.22 | 0.092 | 0.052 | 0.853 | 1.295 |
| 2001/3054 | SS2000/105 | 91 | 0.041 | < 0.001 | < 0.001 | < 0.001 | 0.053 | < 0.001 | < 0.001 | 0.413 | 0.454 |
| 2001/3030 | SW2000/174 | 92 | 1.0 | 0.4 | 0.38 | < 0.001 | 1.3 | 0.54 | 0.11 | 8.8 | 12.714 |
| 2001/3031 | SW2000/176 | 92 | 0.79 | 0.25 | 0.22 | < 0.001 | 0.81 | 0.35 | 0.086 | 5.7 | 8.401 |
| 2001/3063 | SW2000/179 | 48 | 0.34 | 0.088 | 0.099 | 0.053 | 0.33 | 0.13 | 0.032 | 2.55 | 4.133 |
| 2001/3055 | SS2000/106 | 90 | 0.028 | < 0.001 | < 0.001 | < 0.001 | 0.052 | < 0.001 | < 0.001 | 0.342 | 0.37 |
| 2001/3032 | SW2000/188A | 90 | 0.29 | 0.081 | 0.092 | < 0.001 | 0.22 | 0.093 | < 0.001 | 2.3 | 3.433 |
| 2001/3033 | SW2000/196 | 88 | 0.67 | 0.22 | 0.16 | < 0.001 | 0.65 | 0.25 | 0.074 | 4.77 | 7.246 |
| 2001/3064 | SW2000/200 | 82 | 0.041 | < 0.001 | < 0.001 | < 0.001 | 0.042 | < 0.001 | < 0.001 | 0.212 | 0.309 |
| 2001/3034 | SW2001/4 | 86 | 0.92 | 0.21 | 0.24 | < 0.001 | 0.74 | 0.32 | 0.053 | 5.58 | 9.023 |
| 2001/3035 | SW2001/21 | 87 | 0.31 | 0.1 | 0.06 | < 0.001 | 0.38 | 0.14 | 0.082 | 1.474 | 2.306 |
| 2001/3036 | SW2001/23 | 92 | 4.5 | 1.3 | 0.64 | < 0.001 | 3.4 | 1.6 | 0.28 | 31.81 | 46.767 |
| 2001/3037 | SW2001/24A | 90 | 3.7 | 0.97 | 0.96 | < 0.001 | 3.2 | 1.4 | 0.21 | 31.83 | 48.378 |
| 2001/3038 | SW2001/30 | 95 | 0.46 | 0.15 | 0.13 | < 0.001 | 0.47 | 0.19 | 0.046 | 2.993 | 4.802 |
| 2001/3039 | SW2001/36 | 89 | 0.76 | 0.15 | 0.31 | < 0.001 | 0.47 | 0.23 | 0.024 | 8.36 | 12.136 |
| 2001/3040 | SW2001/47 | 92 | 0.72 | 0.19 | 0.081 | < 0.001 | 0.76 | 0.3 | 0.14 | 2.88 | 4.741 |
| 2001/3065 | SW2001/60 | 76 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | 0.058 | 0.058 |
| 2001/3041 | SW2001/85 | 93 | 0.29 | 0.1 | 0.12 | < 0.001 | 0.36 | 0.15 | 0.04 | 2.488 | 3.549 |
| 2001/3042 | SW2001/92 | 85 | 0.77 | 0.21 | 0.21 | < 0.001 | 0.59 | 0.24 | 0.047 | 5.47 | 9.232 |
| 2001/3043 | SW2001/94 | 91 | 0.54 | 0.19 | 0.19 | < 0.001 | 0.68 | 0.29 | 0.078 | 4.41 | 6.484 |
| 2001/3066 | SW2001/120 | 69 | 0.062 | < 0.001 | 0.023 | < 0.001 | 0.053 | < 0.001 | < 0.001 | 0.928 | 1.196 |
| 2001/3044 | SW2001/127 | 88 | 1.2 | 0.36 | 0.28 | < 0.001 | 1.1 | 0.4 | 0.096 | 7.6 | 12.147 |
| 2001/3045 | SW2001/139 | 88 | 1.5 | 0.49 | 0.3 | < 0.001 | 1.3 | 0.53 | 0.15 | 8.21 | 13.33 |
| 2001/3067 | SW2001/141 | 51 | 18 | 6.6 | 4.8 | 0.21 | 22 | 7.2 | 2.3 | 111.943 | 182.824 |
| 2001/3046 | SW2001/144 | 55 | 0.26 | 0.06 | 0.079 | < 0.001 | 0.19 | 0.079 | < 0.001 | 2.26 | 3.348 |
| 2001/3047 | SW2001/149 | 87 | 1.2 | 0.36 | 0.23 | < 0.001 | 0.99 | 0.43 | 0.088 | 6.0 | 11.261 |
| 2001/3048 | SW2001/158 | 90 | 0.84 | 0.19 | 0.32 | < 0.001 | 0.62 | 0.3 | 0.044 | 8.1 | 12.437 |
| 2001/3049 | SW2001/186 | 86 | 3.7 | 1.6 | 0.82 | < 0.001 | 5.1 | 2.0 | 0.47 | 27.87 | 41.469 |
| 2001/3050 | SW2001/188 | 72 | 0.67 | 0.14 | 0.23 | < 0.001 | 0.39 | 0.18 | 0.024 | 6.26 | 9.282 |
| 2001/3051 | SW2001/193 | 75 | 4.4 | 1.3 | 0.52 | < 0.001 | 3.8 | 1.6 | 0.3 | 28.8 | 43.089 |
| 2001/3052 | SW2001/198 | 90 | 0.64 | 0.25 | 0.24 | < 0.001 | 0.83 | 0.36 | 0.087 | 5.43 | 7.915 |
| 2001/3053 | SW2001/203 | 92 | 1.6 | 0.53 | 0.43 | < 0.001 | 1.8 | 0.72 | 0.15 | 10.79 | 16.325 |

Table 4.6. Concentrations of brominated diphenylether congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | BDE28 | BDE47 | BDE66 | BDE71 | BDE75 | BDE77 | BDE85 | BDE99 |
|-----------|---------------|------|---------|---------|---------|-------|-------|-------|---------|---------|
| 2001/3054 | SS2000/105 | 91 | < 0.005 | 0.005 | < 0.005 | ND | ND | ND | < 0.005 | < 0.005 |
| 2001/3055 | SS2000/106 | 90 | < 0.005 | 0.007 | < 0.005 | ND | ND | ND | < 0.005 | < 0.005 |
| 2001/3018 | SW1995/68 | 69 | 0.005 | 0.27 | 0.006 | ND | ND | ND | < 0.005 | 0.069 |
| 2001/3599 | SW1995/120b | 79 | < 0.005 | 0.23 | < 0.005 | ND | ND | ND | < 0.005 | 0.046 |
| 2001/3019 | SW1995/141 | 88 | 0.023 | 1.7 | 0.046 | ND | ND | ND | < 0.005 | 1.5 |
| 2001/3602 | SW1996/147a | 86 | < 0.005 | 0.12 | < 0.005 | ND | ND | ND | < 0.005 | < 0.005 |
| 2001/3603 | SW1996/169a | 87 | < 0.005 | 0.41 | < 0.005 | ND | ND | ND | < 0.005 | 0.11 |
| 2001/3020 | SW1996/44 | 90 | < 0.005 | < 0.005 | < 0.005 | ND | ND | ND | < 0.005 | < 0.005 |
| 2001/3600 | SW1996/50b | 90 | 0.008 | 0.61 | < 0.005 | ND | ND | ND | < 0.005 | 0.11 |
| 2001/3021 | SW1996/60 | 94 | < 0.005 | 0.017 | 0.005 | ND | ND | ND | 0.005 | 0.11 |
| 2001/3601 | SW1996/84e | 87 | < 0.005 | 0.54 | < 0.005 | ND | ND | ND | < 0.005 | 1.2 |
| 2001/3022 | SW1997/36 | 85 | 0.07 | 4.4 | 0.096 | ND | ND | ND | < 0.005 | 1.0 |
| 2001/3605 | SW1997/67f | 78 | < 0.005 | 0.6 | < 0.005 | ND | ND | ND | < 0.005 | 0.16 |
| 2001/3606 | SW1997/93b | 85 | 0.045 | 1.5 | 0.053 | ND | ND | ND | < 0.005 | 0.87 |
| 2001/3607 | SW1997/97a | 83 | < 0.005 | 0.12 | < 0.005 | ND | ND | ND | < 0.005 | 0.029 |
| 2001/3608 | SW1997/124a | 86 | < 0.005 | 0.18 | 0.008 | ND | ND | ND | < 0.005 | 0.14 |
| 2001/3609 | SW1997/135f | 90 | < 0.005 | 0.18 | < 0.005 | ND | ND | ND | < 0.005 | 0.088 |
| 2001/3610 | SW1997/161a | 86 | 0.006 | 0.51 | 0.009 | ND | ND | ND | < 0.005 | 0.23 |
| 2001/3611 | SW1997/178c | 88 | < 0.005 | 0.29 | 0.032 | ND | ND | ND | < 0.005 | 0.77 |
| 2001/3612 | SW1998/56a | 99 | < 0.005 | 0.092 | 0.009 | ND | ND | ND | < 0.005 | 0.27 |
| 2001/3613 | SW1998/123a | 92 | 0.006 | 0.27 | 0.018 | ND | ND | ND | < 0.005 | 0.43 |
| 2001/3614 | SW1999/8b | 91 | < 0.005 | 0.053 | 0.008 | ND | ND | ND | < 0.005 | 0.12 |
| 2001/3615 | SW1999/48c | 86 | < 0.005 | 0.14 | < 0.005 | ND | ND | ND | < 0.005 | 0.23 |
| 2001/3616 | SW1999/57a | 93 | 0.016 | 1.1 | 0.022 | ND | ND | ND | < 0.005 | 0.68 |
| 2001/3617 | SW1999/72C.1 | 93 | < 0.005 | 0.13 | 0.016 | ND | ND | ND | < 0.005 | 0.34 |
| 2001/3618 | SW1999/72C.2 | 86 | < 0.005 | 0.054 | 0.024 | ND | ND | ND | 0.006 | 0.23 |
| 2001/3619 | SW1999/96C | 87 | < 0.005 | 0.064 | < 0.005 | ND | ND | ND | < 0.005 | 0.032 |
| 2001/3620 | SW1999/121B | 88 | < 0.005 | 0.25 | < 0.005 | ND | ND | ND | < 0.005 | 0.11 |
| 2001/3621 | SW1999/148A | 89 | 0.005 | 0.68 | < 0.005 | ND | ND | ND | < 0.005 | 0.4 |
| 2001/3622 | SW1999/194a | 93 | < 0.005 | 0.44 | 0.007 | ND | ND | ND | < 0.005 | 0.055 |
| 2001/3623 | SW2000/14a | 94 | < 0.005 | 0.34 | < 0.005 | ND | ND | ND | < 0.005 | 0.15 |
| 2001/3624 | SW2000/52a | 92 | 0.012 | 0.35 | < 0.005 | ND | ND | ND | < 0.005 | 0.14 |
| 2001/3625 | SW2000/74a | 86 | < 0.005 | 0.13 | < 0.005 | ND | ND | ND | 0.005 | 0.53 |
| 2001/3626 | SW2000/81a | 88 | < 0.005 | 0.044 | 0.009 | ND | ND | ND | < 0.005 | 0.12 |
| 2001/3023 | SW2000/150A | 56 | < 0.005 | 0.11 | < 0.005 | ND | ND | ND | < 0.005 | 0.18 |
| 2001/3024 | SW2000/157 | 88 | < 0.005 | 0.76 | 0.006 | ND | ND | ND | < 0.005 | 0.16 |
| 2001/3025 | SW2000/164 | 86 | 0.011 | 1.3 | 0.04 | ND | ND | ND | < 0.005 | 1.5 |
| 2001/3026 | SW2000/166 | 89 | < 0.005 | 0.054 | 0.007 | ND | ND | ND | < 0.005 | 0.2 |
| 2001/3027 | SW2000/168 | 89 | 0.011 | 1.6 | 0.011 | ND | ND | ND | < 0.005 | 0.33 |
| 2001/3028 | SW2000/169 | 90 | 0.031 | 4.3 | 0.027 | ND | ND | ND | < 0.005 | 0.66 |
| 2001/3029 | SW2000/170 | 90 | < 0.005 | 0.44 | 0.011 | ND | ND | ND | < 0.005 | < 0.005 |
| 2001/3030 | SW2000/174 | 92 | < 0.005 | 0.22 | < 0.005 | ND | ND | ND | < 0.005 | < 0.005 |
| 2001/3031 | SW2000/176 | 92 | < 0.005 | 0.42 | < 0.005 | ND | ND | ND | < 0.005 | 0.18 |
| 2001/3063 | SW2000/179 | 48 | 0.007 | 0.19 | < 0.005 | ND | ND | ND | < 0.005 | 0.11 |
| 2001/3032 | SW2000/188A | 90 | 0.017 | 0.92 | < 0.005 | ND | ND | ND | < 0.005 | 0.25 |
| 2001/3033 | SW2000/196 | 88 | 0.011 | 1.5 | < 0.005 | ND | ND | ND | < 0.005 | 0.64 |
| 2001/3064 | SW2000/200 | 82 | < 0.005 | 0.007 | < 0.005 | ND | ND | ND | < 0.005 | < 0.005 |
| 2001/3034 | SW2001/4 | 86 | 0.005 | 0.21 | < 0.005 | ND | ND | ND | < 0.005 | 0.043 |

Table 4.6. continued: Concentrations of brominated diphenylether congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | BDE28 | BDE47 | BDE66 | BDE71 | BDE75 | BDE77 | BDE85 | BDE99 |
|-----------|---------------|------|---------|---------|---------|-------|-------|-------|---------|---------|
| 2001/3035 | SW2001/21 | 87 | < 0.005 | 0.084 | < 0.005 | ND | ND | ND | < 0.005 | 0.036 |
| 2001/3036 | SW2001/23 | 92 | < 0.005 | 0.11 | < 0.005 | ND | ND | ND | < 0.005 | 0.41 |
| 2001/3037 | SW2001/24A | 90 | < 0.005 | 0.27 | < 0.005 | ND | ND | ND | < 0.005 | 0.045 |
| 2001/3038 | SW2001/30 | 95 | 0.006 | 0.2 | 0.007 | ND | ND | ND | < 0.005 | 0.047 |
| 2001/3039 | SW2001/36 | 89 | < 0.005 | 0.29 | 0.024 | ND | ND | ND | < 0.005 | 0.089 |
| 2001/3040 | SW2001/47 | 92 | < 0.005 | 0.061 | < 0.005 | ND | ND | ND | < 0.005 | 0.013 |
| 2001/3065 | SW2001/60 | 76 | < 0.005 | 0.011 | < 0.005 | ND | ND | ND | < 0.005 | < 0.005 |
| 2001/3041 | SW2001/85 | 93 | < 0.005 | 0.23 | < 0.005 | ND | ND | ND | < 0.005 | 0.044 |
| 2001/3042 | SW2001/92 | 85 | 0.04 | 0.2 | 0.077 | ND | ND | ND | < 0.005 | 0.47 |
| 2001/3043 | SW2001/94 | 91 | 0.006 | 0.37 | < 0.005 | ND | ND | ND | < 0.005 | 0.12 |
| 2001/3066 | SW2001/120 | 69 | < 0.005 | 0.08 | 0.018 | ND | ND | ND | < 0.005 | 0.036 |
| 2001/3044 | SW2001/127 | 88 | < 0.005 | 0.83 | 0.022 | ND | ND | ND | < 0.005 | 0.81 |
| 2001/3045 | SW2001/139 | 88 | < 0.005 | 0.66 | 0.013 | ND | ND | ND | < 0.005 | 0.59 |
| 2001/3067 | SW2001/141 | 51 | < 0.005 | < 0.005 | < 0.005 | ND | ND | ND | < 0.005 | < 0.005 |
| 2001/3046 | SW2001/144 | 55 | 0.013 | 0.63 | 0.018 | ND | ND | ND | < 0.005 | 0.12 |
| 2001/3047 | SW2001/149 | 87 | < 0.005 | 1.2 | < 0.005 | ND | ND | ND | < 0.005 | 0.51 |
| 2001/3048 | SW2001/158 | 90 | < 0.005 | 0.56 | < 0.005 | ND | ND | ND | < 0.005 | 0.097 |
| 2001/3049 | SW2001/186 | 86 | < 0.005 | 0.19 | 0.009 | ND | ND | ND | < 0.005 | 0.12 |
| 2001/3050 | SW2001/188 | 72 | 0.011 | 0.63 | < 0.005 | ND | ND | ND | < 0.005 | 0.21 |
| 2001/3051 | SW2001/193 | 75 | < 0.005 | 0.07 | < 0.005 | ND | ND | ND | < 0.005 | 0.086 |
| 2001/3052 | SW2001/198 | 90 | < 0.005 | 0.44 | < 0.005 | ND | ND | ND | < 0.005 | 0.061 |
| 2001/3053 | SW2001/203 | 92 | < 0.005 | 0.13 | < 0.005 | ND | ND | ND | < 0.005 | 0.18 |

| LSN | Reference no. | %HEL | BDE100 | BDE138 | BDE153 | BDE154 | BDE183 | BDE190 | BDE209 | Σ10BDE |
|-----------|---------------|------|---------|---------|---------|---------|---------|--------|--------|--------|
| 2001/3054 | SS2000/105 | 91 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | ND | ND | 0.005 |
| 2001/3055 | SS2000/106 | 90 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | ND | ND | 0.007 |
| 2001/3018 | SW1995/68 | 69 | 0.051 | < 0.005 | 0.009 | 0.016 | < 0.005 | ND | ND | 0.426 |
| 2001/3599 | SW1995/120b | 79 | 0.041 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | ND | ND | 0.317 |
| 2001/3019 | SW1995/141 | 88 | 0.46 | < 0.005 | 0.11 | 0.13 | < 0.005 | ND | ND | 3.969 |
| 2001/3602 | SW1996/147a | 86 | 0.079 | < 0.005 | < 0.005 | 0.047 | < 0.005 | ND | ND | 0.246 |
| 2001/3603 | SW1996/169a | 87 | 0.12 | < 0.005 | 0.017 | 0.043 | < 0.005 | ND | ND | 0.700 |
| 2001/3020 | SW1996/44 | 90 | 0.014 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | ND | ND | 0.014 |
| 2001/3600 | SW1996/50b | 90 | 0.17 | < 0.005 | 0.011 | 0.035 | < 0.005 | ND | ND | 0.944 |
| 2001/3021 | SW1996/60 | 94 | 0.035 | 0.005 | 0.031 | 0.043 | < 0.005 | ND | ND | 0.251 |
| 2001/3601 | SW1996/84e | 87 | 0.13 | < 0.005 | 0.018 | 0.042 | < 0.005 | ND | ND | 1.930 |
| 2001/3022 | SW1997/36 | 85 | 0.81 | < 0.005 | 0.19 | 0.39 | < 0.005 | ND | ND | 6.956 |
| 2001/3605 | SW1997/67f | 78 | 0.12 | < 0.005 | 0.013 | < 0.005 | < 0.005 | ND | ND | 0.893 |
| 2001/3606 | SW1997/93b | 85 | 0.34 | < 0.005 | 0.034 | 0.06 | < 0.005 | ND | ND | 2.902 |
| 2001/3607 | SW1997/97a | 83 | < 0.005 | 0.015 | < 0.005 | < 0.005 | < 0.005 | ND | ND | 0.164 |
| 2001/3608 | SW1997/124a | 86 | 0.14 | < 0.005 | 0.032 | 0.079 | < 0.005 | ND | ND | 0.579 |
| 2001/3609 | SW1997/135f | 90 | 0.047 | < 0.005 | 0.014 | 0.021 | < 0.005 | ND | ND | 0.350 |
| 2001/3610 | SW1997/161a | 86 | 0.13 | < 0.005 | 0.034 | 0.073 | < 0.005 | ND | ND | 0.992 |
| 2001/3611 | SW1997/178c | 88 | 0.52 | < 0.005 | 0.14 | 0.27 | < 0.005 | ND | ND | 2.022 |
| 2001/3612 | SW1998/56a | 99 | 0.15 | 0.005 | < 0.005 | < 0.005 | < 0.005 | ND | ND | 0.526 |
| 2001/3613 | SW1998/123a | 92 | 0.16 | < 0.005 | 0.04 | 0.063 | < 0.005 | ND | ND | 0.987 |
| 2001/3614 | SW1999/8b | 91 | 0.061 | 0.013 | 0.059 | 0.072 | < 0.005 | ND | ND | 0.386 |

Table 4.6. continued: Concentrations of brominated diphenylether congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | BDE100 | BDE138 | BDE153 | BDE154 | BDE183 | BDE190 | BDE209 | ∑10BDE |
|-----------|---------------|------|---------|---------|---------|---------|---------|--------|--------|--------|
| 2001/3615 | SW1999/48c | 86 | 0.089 | < 0.005 | 0.035 | < 0.005 | < 0.005 | ND | ND | 0.494 |
| 2001/3616 | SW1999/57a | 93 | 0.28 | < 0.005 | 0.041 | 0.065 | < 0.005 | ND | ND | 2.204 |
| 2001/3617 | SW1999/72C.1 | 93 | 0.14 | < 0.005 | 0.032 | 0.051 | < 0.005 | ND | ND | 0.709 |
| 2001/3618 | SW1999/72C.2 | 86 | 0.18 | 0.006 | 0.033 | 0.056 | < 0.005 | ND | ND | 0.589 |
| 2001/3619 | SW1999/96C | 87 | 0.049 | < 0.005 | < 0.005 | 0.044 | < 0.005 | ND | ND | 0.189 |
| 2001/3620 | SW1999/121B | 88 | 0.052 | < 0.005 | 0.014 | 0.023 | < 0.005 | ND | ND | 0.449 |
| 2001/3621 | SW1999/148A | 89 | 0.32 | 0.01 | 0.086 | 0.18 | < 0.005 | ND | ND | 1.681 |
| 2001/3622 | SW1999/194a | 93 | 0.058 | < 0.005 | 0.005 | 0.01 | < 0.005 | ND | ND | 0.575 |
| 2001/3623 | SW2000/14a | 94 | 0.088 | < 0.005 | 0.022 | 0.04 | < 0.005 | ND | ND | 0.640 |
| 2001/3624 | SW2000/52a | 92 | 0.077 | < 0.005 | < 0.005 | 0.014 | < 0.005 | ND | ND | 0.593 |
| 2001/3625 | SW2000/74a | 86 | 0.18 | < 0.005 | 0.066 | 0.093 | < 0.005 | ND | ND | 1.004 |
| 2001/3626 | SW2000/81a | 88 | 0.08 | < 0.005 | < 0.005 | 0.033 | < 0.005 | ND | ND | 0.286 |
| 2001/3023 | SW2000/150A | 56 | < 0.005 | < 0.005 | 0.092 | 0.16 | < 0.005 | ND | ND | 0.542 |
| 2001/3024 | SW2000/157 | 88 | 0.22 | < 0.005 | 0.024 | 0.051 | < 0.005 | ND | ND | 1.221 |
| 2001/3025 | SW2000/164 | 86 | 1.2 | 0.006 | 0.28 | 0.64 | < 0.005 | ND | ND | 4.977 |
| 2001/3026 | SW2000/166 | 89 | 0.15 | < 0.005 | 0.091 | 0.14 | < 0.005 | ND | ND | 0.642 |
| 2001/3027 | SW2000/168 | 89 | 0.45 | < 0.005 | 0.079 | 0.29 | < 0.005 | ND | ND | 2.771 |
| 2001/3028 | SW2000/169 | 90 | 0.96 | 0.007 | 0.13 | 0.49 | < 0.005 | ND | ND | 6.605 |
| 2001/3029 | SW2000/170 | 90 | 0.17 | < 0.005 | 0.032 | 0.091 | < 0.005 | ND | ND | 0.744 |
| 2001/3030 | SW2000/174 | 92 | 0.21 | < 0.005 | < 0.005 | 0.088 | < 0.005 | ND | ND | 0.518 |
| 2001/3031 | SW2000/176 | 92 | 0.13 | < 0.005 | 0.028 | 0.057 | < 0.005 | ND | ND | 0.815 |
| 2001/3063 | SW2000/179 | 48 | 0.069 | 0.013 | < 0.005 | 0.019 | < 0.005 | ND | ND | 0.408 |
| 2001/3032 | SW2000/188A | 90 | 0.22 | < 0.005 | 0.032 | 0.072 | < 0.005 | ND | ND | 1.511 |
| 2001/3033 | SW2000/196 | 88 | 0.55 | < 0.005 | 0.19 | 0.46 | < 0.001 | ND | ND | 3.351 |
| 2001/3064 | SW2000/200 | 82 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | ND | ND | 0.007 |
| 2001/3034 | SW2001/4 | 86 | 0.047 | < 0.005 | 0.007 | 0.012 | < 0.005 | ND | ND | 0.324 |
| 2001/3035 | SW2001/21 | 87 | 0.027 | 0.015 | 0.012 | 0.024 | < 0.005 | ND | ND | 0.198 |
| 2001/3036 | SW2001/23 | 92 | 0.22 | < 0.005 | 0.1 | 0.15 | < 0.005 | ND | ND | 0.990 |
| 2001/3037 | SW2001/24A | 90 | 0.074 | < 0.005 | 0.014 | 0.033 | < 0.005 | ND | ND | 0.436 |
| 2001/3038 | SW2001/30 | 95 | 0.045 | < 0.005 | < 0.005 | 0.013 | < 0.005 | ND | ND | 0.318 |
| 2001/3039 | SW2001/36 | 89 | 0.12 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | ND | ND | 0.523 |
| 2001/3040 | SW2001/47 | 92 | 0.015 | 0.018 | 0.008 | 0.023 | < 0.005 | ND | ND | 0.138 |
| 2001/3065 | SW2001/60 | 76 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | ND | ND | 0.011 |
| 2001/3041 | SW2001/85 | 93 | 0.06 | < 0.005 | < 0.005 | 0.023 | < 0.005 | ND | ND | 0.357 |
| 2001/3042 | SW2001/92 | 85 | 0.48 | < 0.005 | 0.083 | 0.18 | < 0.005 | ND | ND | 1.530 |
| 2001/3043 | SW2001/94 | 91 | 0.12 | < 0.005 | 0.02 | 0.045 | < 0.005 | ND | ND | 0.681 |
| 2001/3066 | SW2001/120 | 69 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | ND | ND | 0.134 |
| 2001/3044 | SW2001/127 | 88 | 0.65 | < 0.005 | 0.25 | 0.43 | < 0.005 | ND | ND | 2.992 |
| 2001/3045 | SW2001/139 | 88 | 0.55 | < 0.005 | 0.24 | 0.53 | < 0.005 | ND | ND | 2.583 |
| 2001/3067 | SW2001/141 | 51 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | ND | ND | nd |
| 2001/3046 | SW2001/144 | 55 | 0.17 | < 0.005 | 0.014 | 0.039 | < 0.005 | ND | ND | 1.004 |
| 2001/3047 | SW2001/149 | 87 | 0.45 | < 0.005 | 0.17 | 0.34 | < 0.005 | ND | ND | 2.670 |
| 2001/3048 | SW2001/158 | 90 | 0.11 | < 0.005 | 0.012 | 0.024 | < 0.005 | ND | ND | 0.803 |
| 2001/3049 | SW2001/186 | 86 | 0.15 | < 0.005 | 0.054 | 0.12 | < 0.005 | ND | ND | 0.643 |
| 2001/3050 | SW2001/188 | 72 | 0.27 | < 0.005 | < 0.005 | 0.074 | < 0.005 | ND | ND | 1.195 |
| 2001/3051 | SW2001/193 | 75 | 0.058 | < 0.005 | 0.051 | 0.074 | < 0.005 | ND | ND | 0.339 |
| 2001/3052 | SW2001/198 | 90 | 0.095 | < 0.005 | 0.008 | 0.023 | < 0.005 | ND | ND | 0.627 |
| 2001/3053 | SW2001/203 | 92 | 0.17 | < 0.005 | 0.058 | 0.094 | < 0.005 | ND | ND | 0.632 |

Table 4.6. continued: Concentrations of brominated diphenylether congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | BDE28 | BDE47 | BDE66 | BDE71 | BDE75 | BDE77 | BDE85 | BDE99 |
|-----------|---------------------|------|---------|---------|---------|-------|---------|---------|---------|---------|
| 1999/1285 | SW1996/46 | 91 | < 0.005 | 0.32 | 0.008 | ND | 0.015 | < 0.005 | < 0.005 | 0.26 |
| 1999/1287 | SW1996/101 | 86 | 0.01 | 0.63 | 0.02 | ND | 0.014 | < 0.005 | < 0.005 | 0.48 |
| 1999/1289 | SW1996/150 | 87 | 0.064 | 2.5 | 0.07 | ND | 0.005 | 0.01 | < 0.005 | 1.3 |
| 1999/1290 | SW1996/160 | 81 | < 0.005 | 0.12 | 0.01 | ND | < 0.005 | < 0.005 | < 0.005 | 0.097 |
| 1999/1291 | SW1997/21A | 82 | 0.014 | 1.1 | 0.014 | ND | < 0.005 | < 0.005 | < 0.005 | 0.37 |
| 1998/7466 | SW1997/72 | 88 | 0.053 | 2.1 | 0.053 | ND | 0.027 | 0.008 | < 0.005 | 0.28 |
| 1998/7467 | SW1997/80 | 84 | 0.042 | 1.8 | 0.034 | ND | 0.028 | 0.002 | < 0.005 | 0.86 |
| 1998/7468 | SW1997/81 | 95 | 0.039 | 2.4 | 0.035 | ND | 0.038 | 0.003 | < 0.005 | < 0.005 |
| 1998/7469 | SW1997/87 | 90 | 0.081 | 6.1 | 0.078 | ND | 0.064 | 0.009 | 0.005 | < 0.005 |
| 1998/7470 | SW1997/89 | 60 | 0.049 | 2.3 | 0.043 | ND | 0.031 | 0.007 | < 0.005 | 0.31 |
| 1998/7471 | SW1997/91 | 63 | 0.014 | 1.3 | 0.016 | ND | < 0.005 | 0.004 | < 0.005 | 0.095 |
| 1998/7472 | SW1997/93 | 91 | 0.004 | 0.39 | 0.005 | ND | < 0.005 | 0.023 | < 0.005 | 0.08 |
| 1998/7473 | SW1997/93 foetus | 79 | 0.002 | 0.26 | 1.0 | ND | < 0.005 | 0.008 | < 0.005 | 0.034 |
| 1998/7474 | SW1997/94 | 87 | 0.01 | 0.2 | 0.017 | ND | < 0.005 | 0.014 | < 0.005 | 0.045 |
| 1998/7475 | SW1997/96 | 90 | 0.011 | 0.21 | 0.016 | ND | < 0.005 | 0.024 | < 0.005 | 0.092 |
| 1998/7476 | SW1997/97 | 59 | 0.012 | 0.42 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.084 |
| 1998/7477 | SW1997/102 | 77 | 0.071 | 4.1 | 0.07 | ND | < 0.005 | < 0.005 | < 0.005 | 0.77 |
| 1998/7478 | SW1997/103 | 76 | < 0.005 | 0.3 | 0.018 | ND | 0.091 | 0.014 | < 0.005 | 0.067 |
| 1998/7479 | SW1997/111 | 90 | 0.03 | 2.3 | 0.036 | ND | 0.042 | < 0.005 | < 0.005 | 0.76 |
| 1998/7480 | SW1997/113 | 50 | 0.014 | 0.72 | 0.021 | ND | < 0.005 | 0.033 | < 0.005 | 0.14 |
| 1998/7481 | SW1997/118 | 85 | 0.012 | 0.21 | 0.022 | ND | < 0.005 | 0.021 | < 0.005 | 0.12 |
| 1998/7482 | SW1997/138 | 80 | < 0.005 | 1.3 | < 0.005 | ND | < 0.005 | 0.025 | < 0.005 | 0.31 |
| 1998/7483 | SW1997/141 | 83 | 0.029 | 1.2 | 0.048 | ND | < 0.005 | 0.014 | < 0.005 | 0.72 |
| 1998/7484 | SW1997/142 | 90 | < 0.005 | 1.6 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.64 |
| 1998/7485 | SW1997/142b | 88 | 0.023 | 1.4 | 0.029 | ND | 0.031 | < 0.005 | < 0.005 | 0.53 |
| 1998/7486 | SW1997/152 | 70 | < 0.005 | 2.2 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.5 |
| 1998/7487 | SW1997/173 | 91 | 0.016 | 0.33 | 0.021 | ND | 0.031 | < 0.005 | < 0.005 | 0.1 |
| 1998/7488 | SW1997/174 | 90 | 0.029 | 1.5 | 0.03 | ND | < 0.005 | < 0.005 | < 0.005 | 0.39 |
| 1999/1292 | SW1997/178 | 86 | 0.012 | 0.38 | 0.022 | ND | < 0.005 | < 0.005 | < 0.005 | 0.26 |
| 1998/7489 | SW1997/186(1) | 91 | 0.022 | 1.2 | 0.024 | ND | 0.027 | < 0.005 | < 0.005 | 0.33 |
| 1998/7490 | SW1997/186(2) | 93 | 0.022 | 0.47 | 0.024 | ND | < 0.005 | < 0.005 | < 0.005 | 0.15 |
| 1998/7491 | SW1998/4 | 82 | 0.038 | 2.9 | 0.045 | ND | 0.043 | < 0.005 | < 0.005 | 1.2 |
| 1998/7492 | SW1998/50 | 93 | 0.016 | 0.62 | 0.021 | ND | < 0.005 | 0.018 | 0.019 | 0.1 |
| 1999/1293 | SW1998/53 | 90 | 0.026 | 0.85 | 0.031 | ND | < 0.005 | < 0.005 | < 0.005 | 0.34 |
| 1998/7493 | SW1998/71 | 80 | 0.022 | 1.3 | 0.024 | ND | 0.032 | < 0.005 | < 0.005 | 0.53 |
| 1998/7494 | SW1998/75 | 99 | 0.019 | 0.34 | 0.011 | ND | < 0.005 | < 0.005 | < 0.005 | 0.17 |
| 1998/7495 | SW1998/76 | 91 | 0.02 | 0.62 | 0.014 | ND | < 0.005 | 0.007 | < 0.005 | 0.3 |
| 1998/7496 | SW1998/97 | 78 | 0.026 | 0.94 | 0.015 | ND | 0.025 | 0.016 | 0.014 | 0.15 |
| 1998/7497 | SW1998/115 | 88 | < 0.005 | < 0.005 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| 1998/7498 | SW1998/116 | 85 | 0.02 | 0.45 | 0.008 | ND | < 0.005 | 0.028 | < 0.005 | 0.17 |
| 1998/7499 | SW1998/127 | 76 | 0.03 | 2.0 | 0.027 | ND | 0.049 | < 0.005 | < 0.005 | 0.46 |
| 1998/7500 | SW1998/129 | 84 | 0.04 | 2.5 | 0.046 | ND | 0.056 | 0.006 | < 0.005 | 1.1 |
| 1998/7501 | SW1998/139 | 80 | 0.057 | 2.3 | 0.04 | ND | 0.054 | 0.01 | < 0.005 | 0.33 |
| 1998/7502 | SW1998/145 | 64 | 0.065 | 3.2 | 0.078 | ND | < 0.005 | 0.019 | < 0.005 | 0.6 |
| 1999/3871 | SW1998/164 | 93 | < 0.005 | 0.68 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.28 |
| 1998/7503 | SW1998/167A | 74 | 0.02 | 0.99 | 0.029 | ND | 0.04 | 0.011 | < 0.005 | 0.23 |
| 1999/3872 | SW1998/171 | 82 | 0.028 | 1.8 | 0.036 | ND | 0.021 | 0.01 | 0.009 | 0.6 |

Table 4.6. continued: Concentrations of brominated diphenylether congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | BDE28 | BDE47 | BDE66 | BDE71 | BDE75 | BDE77 | BDE85 | BDE99 |
|-----------|---------------|------|---------|-------|---------|-------|---------|---------|---------|-------|
| 1998/7504 | SW1998/179 | 83 | 0.027 | 1.9 | 0.022 | ND | 0.033 | 0.043 | 0.013 | 0.58 |
| 1998/7505 | SW1998/183 | 92 | < 0.005 | 0.71 | < 0.005 | ND | < 0.005 | 0.025 | 0.019 | 0.17 |
| 1999/1294 | SW1998/187 | 85 | 0.01 | 0.4 | 0.013 | ND | < 0.005 | < 0.005 | < 0.005 | 0.19 |
| 1999/1295 | SW1998/191 | 86 | < 0.005 | 0.16 | 0.007 | ND | < 0.005 | < 0.005 | < 0.005 | 0.12 |
| 1999/1296 | SW1998/198 | 89 | < 0.005 | 0.38 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.12 |
| 1999/1297 | SW1998/208 | 80 | 0.023 | 1.2 | 0.041 | ND | < 0.005 | 0.01 | < 0.005 | 0.72 |
| 1999/1298 | SW1999/10 | 90 | < 0.005 | 0.19 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.1 |
| 1999/1299 | SW1999/17 | 76 | < 0.005 | 2.5 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.9 |
| 1999/1300 | SW1999/26 | 89 | < 0.005 | 0.22 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.042 |
| 1999/1301 | SW1999/40 | 89 | < 0.005 | 0.052 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.005 |
| 1999/1302 | SW1999/48 | 89 | < 0.005 | 0.54 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.093 |
| 1999/1303 | SW1999/71 | 76 | < 0.005 | 0.34 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.081 |
| 1999/1304 | SW1999/74 | 90 | < 0.005 | 1.3 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.26 |
| 1999/1305 | SW1999/77 | 91 | < 0.005 | 0.69 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.13 |
| 1999/3842 | SW1999/96 | 94 | < 0.005 | 0.55 | < 0.005 | ND | < 0.005 | < 0.005 | < 0.005 | 0.095 |

| LSN | Reference no. | %HEL | BDE100 | BDE119 | BDE138 | BDE153 | BDE154 | BDE190 | BDE209 | Σ15BDE |
|-----------|--------------------|------|---------|---------|---------|--------|---------|---------|---------|--------|
| 1999/1285 | SW1996/46 | 91 | 0.07 | < 0.005 | < 0.005 | 0.073 | 0.054 | < 0.008 | < 0.008 | 0.799 |
| 1999/1287 | SW1996/101 | 86 | 0.13 | < 0.005 | < 0.005 | 0.066 | 0.05 | < 0.008 | < 0.008 | 1.401 |
| 1999/1289 | SW1996/150 | 87 | 0.63 | < 0.005 | < 0.005 | 0.17 | 0.1 | < 0.008 | < 0.008 | 4.849 |
| 1999/1290 | SW1996/160 | 81 | 0.019 | < 0.005 | < 0.005 | 0.013 | 0.012 | < 0.008 | < 0.008 | 0.271 |
| 1999/1291 | SW1997/21A | 82 | 0.29 | < 0.005 | < 0.005 | 0.19 | 0.076 | < 0.008 | < 0.008 | 2.054 |
| 1998/7466 | SW1997/72 | 88 | 0.3 | < 0.005 | 0.006 | 0.049 | < 0.005 | < 0.008 | < 0.008 | 2.876 |
| 1998/7467 | SW1997/80 | 84 | 0.32 | < 0.005 | 0.005 | 0.066 | < 0.005 | < 0.008 | < 0.008 | 3.157 |
| 1998/7468 | SW1997/81 | 95 | 0.46 | < 0.005 | 0.007 | 0.087 | < 0.005 | < 0.008 | < 0.008 | 3.069 |
| 1998/7469 | SW1997/87 | 90 | < 0.005 | < 0.005 | < 0.005 | 0.3 | < 0.005 | < 0.008 | < 0.008 | 6.637 |
| 1998/7470 | SW1997/89 | 60 | 0.27 | < 0.005 | < 0.005 | 0.028 | < 0.005 | < 0.008 | < 0.008 | 3.038 |
| 1998/7471 | SW1997/91 | 63 | 0.14 | < 0.005 | 0.006 | 0.015 | < 0.005 | < 0.008 | < 0.008 | 1.590 |
| 1998/7472 | SW1997/93 | 91 | 0.059 | < 0.005 | 0.011 | 0.023 | < 0.005 | < 0.008 | < 0.008 | 0.595 |
| 1998/7473 | SW1997/93 fetus | 79 | 0.033 | < 0.005 | < 0.005 | 0.007 | < 0.005 | < 0.008 | < 0.008 | 1.344 |
| 1998/7474 | SW1997/94 | 87 | 0.056 | < 0.005 | < 0.005 | 0.028 | < 0.005 | < 0.008 | < 0.008 | 0.380 |
| 1998/7475 | SW1997/96 | 90 | 0.067 | < 0.005 | < 0.005 | 0.036 | < 0.005 | < 0.008 | < 0.008 | 0.480 |
| 1998/7476 | SW1997/97 | 59 | 0.084 | < 0.005 | < 0.005 | 0.028 | < 0.005 | < 0.008 | < 0.008 | 0.628 |
| 1998/7477 | SW1997/102 | 77 | 0.49 | < 0.005 | < 0.005 | 0.047 | < 0.005 | < 0.008 | < 0.008 | 5.548 |
| 1998/7478 | SW1997/103 | 76 | 0.066 | 0.021 | 0.025 | 0.03 | < 0.005 | < 0.008 | < 0.008 | 0.632 |
| 1998/7479 | SW1997/111 | 90 | 0.58 | < 0.005 | < 0.005 | 0.097 | < 0.005 | < 0.008 | < 0.008 | 3.845 |
| 1998/7480 | SW1997/113 | 50 | 0.18 | < 0.005 | < 0.005 | 0.02 | < 0.005 | < 0.008 | < 0.008 | 1.128 |
| 1998/7481 | SW1997/118 | 85 | 0.053 | < 0.005 | 0.027 | 0.034 | < 0.005 | < 0.008 | < 0.008 | 0.499 |
| 1998/7482 | SW1997/138 | 80 | 0.36 | < 0.005 | < 0.005 | 0.062 | < 0.005 | < 0.008 | < 0.008 | 2.057 |
| 1998/7483 | SW1997/141 | 83 | 0.32 | < 0.005 | < 0.005 | 0.055 | < 0.005 | < 0.008 | < 0.008 | 2.386 |
| 1998/7484 | SW1997/142 | 90 | 0.29 | < 0.005 | < 0.005 | 0.012 | < 0.005 | < 0.008 | < 0.008 | 2.542 |
| 1998/7485 | SW1997/142b | 88 | 0.29 | < 0.005 | < 0.005 | 0.078 | < 0.005 | < 0.008 | < 0.008 | 2.381 |

Table 4.6. continued: Concentrations of brominated diphenylether congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | BDE100 | BDE119 | BDE138 | BDE153 | BDE154 | BDE190 | BDE209 | Σ15BDE |
|-----------|---------------|------|---------|---------|---------|---------|---------|---------|---------|--------|
| 1998/7486 | SW1997/152 | 70 | 0.42 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.008 | < 0.008 | 3.120 |
| 1998/7487 | SW1997/173 | 91 | 0.065 | 0.023 | < 0.005 | 0.029 | < 0.005 | < 0.008 | < 0.008 | 0.615 |
| 1998/7488 | SW1997/174 | 90 | 0.2 | < 0.005 | < 0.005 | 0.047 | < 0.005 | < 0.008 | < 0.008 | 2.196 |
| 1999/1292 | SW1997/178 | 86 | 0.068 | < 0.005 | < 0.005 | 0.046 | 0.036 | < 0.008 | < 0.008 | 0.824 |
| 1998/7489 | SW1997/186(1) | 91 | 0.24 | < 0.005 | < 0.005 | 0.053 | < 0.005 | < 0.008 | < 0.008 | 1.896 |
| 1998/7490 | SW1997/186(2) | 93 | 0.067 | < 0.005 | 0.021 | 0.034 | < 0.005 | < 0.008 | < 0.008 | 0.788 |
| 1998/7491 | SW1998/4 | 82 | 0.63 | < 0.005 | < 0.005 | 0.059 | < 0.005 | < 0.008 | < 0.008 | 4.915 |
| 1998/7492 | SW1998/50 | 93 | 0.11 | < 0.005 | < 0.005 | 0.029 | < 0.005 | < 0.008 | < 0.008 | 0.933 |
| 1999/1293 | SW1998/53 | 90 | 0.12 | < 0.005 | < 0.005 | 0.033 | 0.025 | < 0.008 | < 0.008 | 1.425 |
| 1998/7493 | SW1998/71 | 80 | 0.24 | < 0.005 | < 0.005 | 0.055 | < 0.005 | < 0.008 | < 0.008 | 2.203 |
| 1998/7494 | SW1998/75 | 99 | 0.082 | < 0.005 | < 0.005 | 0.019 | < 0.005 | < 0.008 | < 0.008 | 0.641 |
| 1998/7495 | SW1998/76 | 91 | 0.18 | < 0.005 | 0.009 | 0.05 | < 0.005 | < 0.008 | < 0.008 | 1.200 |
| 1998/7496 | SW1998/97 | 78 | 0.1 | < 0.005 | 0.011 | 0.02 | < 0.005 | < 0.008 | < 0.008 | 1.317 |
| 1998/7497 | SW1998/115 | 88 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.008 | < 0.008 | nd |
| 1998/7498 | SW1998/116 | 85 | 0.097 | < 0.005 | < 0.005 | 0.018 | < 0.005 | < 0.008 | < 0.008 | 0.791 |
| 1998/7499 | SW1998/127 | 76 | 0.41 | < 0.005 | < 0.005 | 0.048 | < 0.005 | < 0.008 | < 0.008 | 3.024 |
| 1998/7500 | SW1998/129 | 84 | 0.54 | < 0.005 | < 0.005 | 0.28 | < 0.005 | < 0.008 | < 0.008 | 4.568 |
| 1998/7501 | SW1998/139 | 80 | 0.38 | < 0.005 | 0.014 | 0.042 | < 0.005 | < 0.008 | < 0.008 | 3.227 |
| 1998/7502 | SW1998/145 | 64 | 0.6 | < 0.005 | < 0.005 | 0.052 | < 0.005 | < 0.008 | < 0.008 | 4.614 |
| 1999/3871 | SW1998/164 | 93 | 0.083 | < 0.005 | < 0.005 | 0.094 | 0.065 | < 0.008 | < 0.008 | 1.202 |
| 1998/7503 | SW1998/167A | 74 | 0.2 | < 0.005 | < 0.005 | 0.035 | < 0.005 | < 0.008 | < 0.008 | 1.555 |
| 1999/3872 | SW1998/171 | 82 | 0.32 | 0.016 | 0.008 | 0.06 | 0.11 | < 0.008 | < 0.008 | 3.018 |
| 1998/7504 | SW1998/179 | 83 | 0.47 | < 0.005 | < 0.005 | 0.07 | < 0.005 | < 0.008 | < 0.008 | 3.158 |
| 1998/7505 | SW1998/183 | 92 | 0.15 | < 0.005 | < 0.005 | 0.035 | < 0.005 | < 0.008 | < 0.008 | 1.109 |
| 1999/1294 | SW1998/187 | 85 | 0.067 | < 0.005 | < 0.005 | 0.031 | 0.023 | < 0.008 | < 0.008 | 0.734 |
| 1999/1295 | SW1998/191 | 86 | 0.041 | < 0.005 | < 0.005 | 0.037 | 0.03 | < 0.008 | < 0.008 | 0.395 |
| 1999/1296 | SW1998/198 | 89 | 0.071 | < 0.005 | < 0.005 | 0.044 | 0.029 | < 0.008 | < 0.008 | 0.644 |
| 1999/1297 | SW1998/208 | 80 | 0.39 | 0.005 | < 0.005 | 0.091 | < 0.005 | < 0.005 | < 0.008 | 2.480 |
| 1999/1298 | SW1999/10 | 90 | 0.04 | < 0.005 | < 0.005 | 0.024 | 0.015 | < 0.008 | < 0.008 | 0.369 |
| 1999/1299 | SW1999/17 | 76 | 0.56 | < 0.005 | < 0.005 | 0.1 | 0.042 | < 0.008 | < 0.008 | 4.102 |
| 1999/1300 | SW1999/26 | 89 | 0.035 | < 0.005 | < 0.005 | 0.016 | 0.007 | < 0.008 | < 0.008 | 0.320 |
| 1999/1301 | SW1999/40 | 89 | 0.005 | < 0.005 | < 0.005 | 0.005 | 0.002 | < 0.008 | < 0.008 | 0.069 |
| 1999/1302 | SW1999/48 | 89 | 0.062 | < 0.005 | < 0.005 | 0.023 | 0.011 | < 0.008 | < 0.008 | 0.729 |
| 1999/1303 | SW1999/71 | 76 | 0.028 | < 0.005 | < 0.005 | 0.01 | 0.006 | < 0.008 | < 0.008 | 0.465 |
| 1999/1304 | SW1999/74 | 90 | 0.036 | < 0.005 | < 0.005 | 0.014 | 0.013 | < 0.008 | < 0.008 | 1.623 |
| 1999/1305 | SW1999/77 | 91 | 0.065 | < 0.005 | < 0.005 | 0.026 | 0.018 | < 0.008 | < 0.008 | 0.929 |
| 1999/3842 | SW1999/96 | 94 | 0.022 | < 0.005 | < 0.005 | 0.009 | 0.007 | < 0.008 | < 0.008 | 0.683 |

Table 4.6. continued: Concentrations of brominated diphenylether congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | BDE28 | BDE47 | BDE66 | BDE71 | BDE75 | BDE77 | BDE85 | BDE99 |
|-----------|---------------|------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1998/7461 | SW1992/13 | 62 | < 0.005 | 0.013 | < 0.005 | < 0.005 | < 0.005 | 0.008 | < 0.005 | 0.012 |
| 1998/7454 | SW1994/5 | 77 | 0.014 | 0.033 | 0.028 | < 0.005 | 0.021 | 0.014 | < 0.005 | 0.021 |
| 1998/7459 | SW1994/39 | 81 | 0.02 | 0.63 | 0.036 | 0.038 | < 0.005 | 0.048 | < 0.005 | 0.39 |
| 1998/7455 | SW1995/145 | 46 | 0.029 | 2.5 | 0.031 | 0.029 | < 0.005 | 0.019 | < 0.005 | 0.62 |
| 1998/7457 | SW1996/121 | 39 | 0.006 | 0.16 | 0.03 | 0.007 | 0.007 | 0.006 | < 0.005 | 0.077 |
| 1998/7462 | SW1996/162 | 26 | 0.006 | 0.047 | 0.009 | < 0.005 | 0.007 | 0.005 | < 0.005 | 0.013 |
| 1998/7463 | SW1997/159 | 66 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| 1998/7460 | SW1997/162 | 46 | 0.008 | 0.16 | 0.016 | < 0.005 | 0.011 | 0.009 | < 0.005 | 0.051 |
| 1998/7464 | SW1998/81 | 56 | < 0.005 | 0.062 | 0.027 | < 0.005 | 0.014 | < 0.005 | < 0.005 | 0.027 |
| 1998/7458 | SW1998/104 | 71 | 0.012 | 0.12 | 0.014 | 0.019 | < 0.005 | 0.014 | < 0.005 | 0.099 |
| 1998/7456 | SW1998/154 | 74 | 0.028 | 5.8 | 0.015 | < 0.005 | 0.046 | 0.02 | < 0.005 | 1.5 |

| LSN | Reference no. | %HEL | BDE100 | BDE119 | BDE138 | BDE153 | BDE154 | BDE190 | BDE209 | ∑13BDE |
|-----------|---------------|------|---------|---------|---------|---------|--------|---------|--------|--------|
| 1998/7461 | SW1992/13 | 62 | 0.005 | < 0.005 | < 0.005 | < 0.005 | ND | < 0.005 | ND | 0.038 |
| 1998/7454 | SW1994/5 | 77 | 0.013 | 0.015 | 0.019 | 0.014 | ND | < 0.005 | ND | 0.192 |
| 1998/7459 | SW1994/39 | 81 | 0.18 | < 0.005 | 0.022 | 0.031 | ND | < 0.005 | ND | 1.395 |
| 1998/7455 | SW1995/145 | 46 | 0.54 | < 0.005 | < 0.005 | 0.04 | ND | < 0.005 | ND | 3.808 |
| 1998/7457 | SW1996/121 | 39 | 0.053 | 0.011 | 0.069 | 0.022 | ND | < 0.005 | ND | 0.448 |
| 1998/7462 | SW1996/162 | 26 | 0.005 | 0.007 | < 0.005 | < 0.005 | ND | < 0.005 | ND | 0.099 |
| 1998/7463 | SW1997/159 | 66 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | ND | < 0.005 | ND | nd |
| 1998/7460 | SW1997/162 | 46 | 0.02 | 0.006 | 0.026 | 0.0 | ND | < 0.005 | ND | 0.316 |
| 1998/7464 | SW1998/81 | 56 | < 0.005 | < 0.005 | 0.042 | < 0.005 | ND | < 0.005 | ND | 0.172 |
| 1998/7458 | SW1998/104 | 71 | 0.038 | 0.011 | 0.011 | 0.025 | ND | < 0.005 | ND | 0.363 |
| 1998/7456 | SW1998/154 | 74 | 1.9 | < 0.005 | < 0.005 | 0.11 | ND | < 0.005 | ND | 9.419 |

Table 4.6. continued: Concentrations of brominated diphenylether congeners in blubber (mg kg⁻¹ wet weight).

| LSN | Reference no. | %HEL | BDE28 | BDE47 | BDE66 | BDE71 | BDE75 | BDE77 | BDE85 | BDE99 |
|-----------|---------------|------|---------|-------|---------|---------|---------|---------|---------|-------|
| 1995/74 | SW1992/202 | 84 | 0.015 | 1.3 | 0.017 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.52 |
| 1995/78 | SW1993/12 | 90 | 0.013 | 0.57 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.25 |
| 1995/1210 | SW1993/94 | 90 | 0.006 | 0.81 | 0.006 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.19 |
| 1995/1212 | SW1993/126 | 84 | 0.017 | 0.73 | 0.016 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.23 |
| 1995/326 | SW1994/32 | 89 | < 0.005 | 0.15 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.056 |
| 1995/328 | SW1994/53 | 92 | < 0.005 | 0.18 | 0.006 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.065 |
| 1995/334 | SW1994/68 | 95 | 0.031 | 1.2 | 0.026 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.42 |
| 1995/632 | SW1994/80 | 88 | 0.01 | 1.2 | 0.013 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.53 |
| 1995/1469 | SW1994/105 | 55 | 0.006 | 0.34 | 0.009 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.096 |
| 1995/1497 | SW1994/148 | 86 | 0.016 | 1.8 | 0.015 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.64 |
| 1995/922 | SW1994/171 | 83 | 0.019 | 1.7 | 0.019 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.59 |
| 1995/924 | SW1994/185 | 84 | 0.006 | 0.53 | 0.007 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.15 |

| LSN | Reference no. | %HEL | BDE100 | BDE119 | BDE138 | BDE153 | BDE154 | BDE190 | BDE209 | Σ15BDE |
|-----------|---------------|------|--------|---------|---------|--------|--------|---------|---------|--------|
| 1995/74 | SW1992/202 | 84 | 0.23 | < 0.005 | < 0.005 | 0.05 | 0.073 | < 0.005 | < 0.008 | 2.205 |
| 1995/78 | SW1993/12 | 90 | 0.094 | < 0.005 | < 0.005 | 0.038 | 0.047 | < 0.005 | < 0.008 | 1.022 |
| 1995/1210 | SW1993/94 | 90 | 0.2 | < 0.005 | < 0.005 | 0.034 | 0.11 | < 0.005 | < 0.008 | 1.356 |
| 1995/1212 | SW1993/126 | 84 | 0.095 | < 0.005 | < 0.005 | 0.01 | 0.019 | < 0.005 | < 0.008 | 1.117 |
| 1995/326 | SW1994/32 | 89 | 0.035 | < 0.005 | < 0.005 | 0.009 | 0.019 | < 0.005 | < 0.008 | 0.269 |
| 1995/328 | SW1994/53 | 92 | 0.041 | < 0.005 | < 0.005 | 0.008 | 0.017 | < 0.005 | < 0.008 | 0.317 |
| 1995/334 | SW1994/68 | 95 | 0.17 | < 0.005 | < 0.005 | 0.017 | 0.026 | < 0.005 | < 0.008 | 1.890 |
| 1995/632 | SW1994/80 | 88 | 0.31 | < 0.005 | < 0.005 | 0.054 | 0.12 | < 0.005 | < 0.008 | 2.237 |
| 1995/1469 | SW1994/105 | 55 | 0.067 | < 0.005 | < 0.005 | 0.006 | 0.013 | < 0.005 | < 0.008 | 0.537 |
| 1995/1497 | SW1994/148 | 86 | 0.36 | < 0.005 | < 0.005 | 0.059 | 0.1 | < 0.005 | < 0.008 | 2.990 |
| 1995/922 | SW1994/171 | 83 | 0.33 | < 0.005 | < 0.005 | 0.086 | 0.13 | < 0.005 | < 0.008 | 2.874 |
| 1995/924 | SW1994/185 | 84 | 0.1 | < 0.005 | < 0.005 | 0.031 | 0.06 | < 0.005 | < 0.008 | 0.884 |

5. Associations between contaminants and infectious disease mortality

Within the UK marine mammals stranding programme, possible associations between contaminant concentrations in tissues and infectious disease mortality have been investigated. Two groups of porpoises were compared – those which died as a result of infectious disease and a control group of otherwise healthy animals dying of acute physical trauma (mostly as a result of being bycaught in fisheries). Statistically significant associations were found for elevated levels of PCBs in blubber, and mercury in liver (Bennett *et al.*, 2001; Jepson *et al.*, 1999, 2005). Recently, these data have been used to quantitatively determine the risk of infectious disease death with increasing chlorobiphenyl concentrations in blubber (Hall *et al.*, in press).

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Appendix 1.

Organohalogen compounds determined in this study

Organochlorine pesticides

| Acronym | Compound |
|-------------------|---|
| α -HCH | alpha-hexachlorocyclohexane |
| γ -HCH | gamma-hexachlorocyclohexane (lindane) |
| HCB | hexachlorobenzene |
| <i>p, p'</i> -DDE | 2, 2-Bis(4-chlorophenyl)-1, 1-dichloroethylene |
| <i>p, p'</i> -TDE | 2, 2-Bis(4-chlorophenyl)-1, 1-dichloroethane |
| <i>p, p'</i> -DDT | 1, 1-Bis(4-chlorophenyl)-2, 2, 2-trichloroethane |
| Dieldrin | 1, 2, 3, 4, 10, 10-hexachloro-6, 7-epoxy-1, 4-4a, 5, 6, 7, 8, 8a-octahydro-1, 4-endo-endo-5, 8-dimethanonaphthalene |

Chlorobiphenyl congeners

| Congener number | Structure |
|-----------------|--|
| CB18 | 2,2',5-trichlorobiphenyl |
| CB28* | 2,4,4'-trichlorobiphenyl |
| CB31 | 2,4',5-trichlorobiphenyl |
| CB44 | 2,2',3,5'-tetrachlorobiphenyl |
| CB47 | 2,2',4,4'-tetrachlorobiphenyl |
| CB49 | 2,2',4,5'-tetrachlorobiphenyl |
| CB52* | 2,2',5,5'-tetrachlorobiphenyl |
| CB66 | 2,3',4,4'-tetrachlorobiphenyl |
| CB101* | 2,2',4,5,5'-pentachlorobiphenyl |
| CB105 | 2,3,3',4,4'-pentachlorobiphenyl |
| CB110 | 2,3,3',4',6-pentachlorobiphenyl |
| CB118* | 2,3',4,4',5-pentachlorobiphenyl |
| CB128 | 2,2',3,3',4,4'-hexachlorobiphenyl |
| CB138* | 2,2',3,4,4',5'-hexachlorobiphenyl |
| CB141 | 2,2',3,4,5,5'-hexachlorobiphenyl |
| CB149 | 2,2',3,4',5',6-hexachlorobiphenyl |
| CB151 | 2,2',3,5,5',6-hexachlorobiphenyl |
| CB153* | 2,2',4,4',5,5'-hexachlorobiphenyl |
| CB156 | 2,3,3',4,4',5-hexachlorobiphenyl |
| CB158 | 2,3,3',4,4',6-hexachlorobiphenyl |
| CB170 | 2,2',3,3',4,4',5-heptachlorobiphenyl |
| CB180* | 2,2',3,4,4',5,5'-heptachlorobiphenyl |
| CB183 | 2,2',3,4,4',5',6-heptachlorobiphenyl |
| CB187 | 2,2',3,4',5,5',6-heptachlorobiphenyl |
| CB194 | 2,2',3,3',4,4',5,5'-octachlorobiphenyl |

The suite of 25 CB congeners comprises 3 trichlorobiphenyls, 5 tetrachlorobiphenyls, 4 pentachlorobiphenyls, 8 hexachlorobiphenyls, 4 heptachlorobiphenyls and 1 octachlorobiphenyl. The seven congeners comprising the ICES primary list are indicated by asterisks.

Bromodiphenylether congeners

| Congener | Structure |
|----------|---|
| BDE28 | 2,4,4'-tribromodiphenylether |
| BDE47 | 2,2',4,4'-tetrabromodiphenylether |
| BDE66 | 2,3',4,4'-tetrabromodiphenylether |
| BDE71 | 2,3',4',6-tetrabromodiphenylether |
| BDE75 | 2,4,4',6-tetrabromodiphenylether |
| BDE77 | 3,3',4,4'-tetrabromodiphenylether |
| BDE85 | 2,2',3,4,4'-pentabromodiphenylether |
| BDE99 | 2,2',4,4',5- pentabromodiphenylether |
| BDE100 | 2,2',4,4',6-pentabromodiphenylether |
| BDE119 | 2,3',4,4',6-pentabromodiphenylether |
| BDE138 | 2,2',3,4,4',5'-hexabromodiphenylether |
| BDE153 | 2,2',4,4',5,5'-hexabromodiphenylether |
| BDE154 | 2,2',4,4',5,6'-hexabromodiphenylether |
| BDE190 | 2,3,3',4,4',5,6-heptabromodiphenylether |
| BDE209 | decabromodiphenylether |

The suite of BDEs determined was changed in the course of our initial studies, and the listed data reflect this.

Appendix 2. Cetacean postmortem report form

CETACEAN POSTMORTEM REPORT

When this report has been completed, please send a copy to: Marine Mammal Strandings Project, Veterinary Science Division, Institute of Zoology, Regent's Park, London NW1 4RY, Tel: 020 7449 6691 or 6672 Fax: 020 7586 1457
email: paul.jepson@ioz.ac.uk or rob.deaville@ioz.ac.uk

SW NO. : PM NO. :

SPECIES : SEX :

LOCATION FOUND :

DATE FOUND : FOUND BY :

PATHOLOGIST : DATE OF PM :

FROZEN?: Y / N

1. BASIC MEASUREMENTS

BODY CONDITION USING CONDITION CODE :

Condition code:

- | | |
|--|--|
| <p>1) live (becomes code 2 at death)</p> <p>2a) extremely fresh (as if just died, no bloating, meat is considered by most to be edible)</p> <p>2b) slight decomposition (slight bloating, blood imbibition visible)</p> <p>3) moderate decomposition (moderate bloating, skin peeling, penis may be extended in males, organs still intact, excluding postmortem damage)</p> | <p>4) advanced decomposition (major bloating, skin peeling, penis extended in males, organs beyond recognition, bones exposed due to decomposition)</p> <p>5) indeterminate (mummified carcass or skeletal remains, no organs present)</p> |
|--|--|

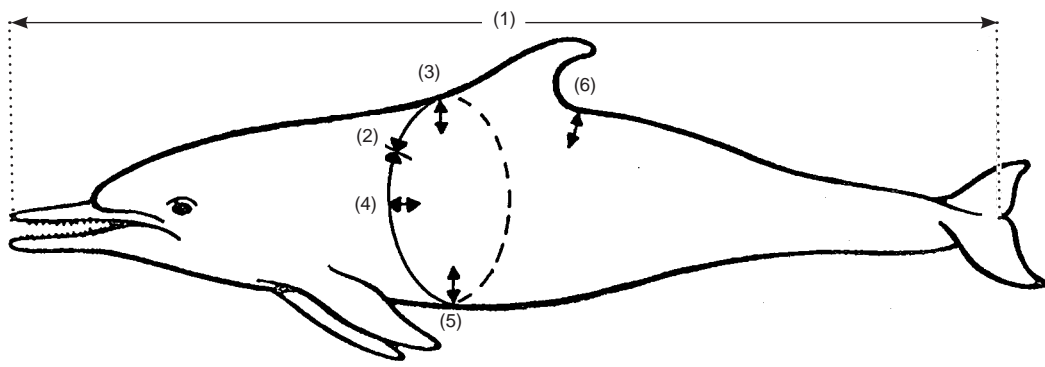
PHOTOGRAPHS TAKEN

- lateral views whole body, both sides: Y/N
- lateral views dorsal fin, both sides: Y/N
- baleen whales: ventral view tail flukes: Y/N
- other photographs (list):-
-
-
- BODY WEIGHT (kg):

LENGTH, GIRTH AND BLUBBER

THICKNESS (see diagram below):

- tip upper jaw to tail notch (cm) (1).....
- girth in front of dorsal fin (cm) (2):
- blubber thickness in front of dorsal fin:
 - dorsal mid-line (mm) (3):.....
 - lateral (mm) (4):
 - ventral mid-line (mm) (5):



2. GROSS PATHOLOGICAL EXAMINATION*Encircle the appropriate category:**NE = not examined**NAD = nothing abnormal detected**A = abnormal (describe fully in section 5)***EXTERNAL EXAMINATION**

NE NAD A -body orifices
 NE NAD A -fins and flukes
 nutritional state: good / moderate / poor

INTEGUMENT

NE NAD A -epidermis
 NE NAD A -blubber
 NE NAD A -subcutaneous tissue
 NE NAD A -mammary glands

MUSCULOSKELETAL SYSTEM

NE NAD A -skull
 NE NAD A -other bones
 NE NAD A -back muscle mass
 NE NAD A -other muscles

NERVOUS SYSTEM

NE NAD A -brain
 NE NAD A -spinal cord
 NE NAD A -peripheral nerves

CARDIOVASCULAR SYSTEM

NE NAD A -pericardial sac
 NE NAD A -myocardium
 NE NAD A -valves
 NE NAD A -arteries, veins

RESPIRATORY SYSTEM

NE NAD A -nasal cavity
 NE NAD A -sinuses
 NE NAD A -trachea, bronchi
 NE NAD A -lungs
 NE NAD A -pleura/pleural cavity

ALIMENTARY SYSTEM

NE NAD A -mouth
 NE NAD A -oesophagus
 NE NAD A -cardiac section stomach
 NE NAD A -fundic section stomach
 NE NAD A -pyloric section stomach
 NE NAD A -intestine
 NE NAD A -anus
 NE NAD A -liver
 NE NAD A -pancreas
 NE NAD A -peritoneum/peritoneal cavity

UROGENITAL SYSTEM

NE NAD A -kidneys
 NE NAD A -ureters
 NE NAD A -urinary bladder
 NE NAD A -urethra
 NE NAD A -ovaries/testes
 NE NAD A -uterus
 NE NAD A -vagina/penis
 NE NAD A -vulva/preputium

LYMPHATIC AND ENDOCRINE SYSTEMS

NE NAD A -adrenal glands
 NE NAD A -thyroid gland
 NE NAD A -spleen
 NE NAD A -thymus
 NE NAD A -lymph nodes

3. CHECKLIST OF STANDARD SAMPLES

In each square, enter: ✓ = sample taken

Blank = sample not taken or not present

Record any extra samples taken in section 4.

Weights

| | | | |
|--------------------------------------|-----------|--------|-----------|
| left testis | (g):..... | liver | (g):..... |
| right testis | (g):..... | kidney | (g):..... |
| heart | (g):..... | spleen | (g):..... |
| food remains cardiac section stomach | (g):..... | thymus | (g):..... |

Ethanol

| | |
|--|-----------|
| <input type="checkbox"/> food remains | all |
| from: | |
| | |
| | |
| | |
| <input type="checkbox"/> parasites from: | pref. all |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Freeze at -20°C

| | |
|--|-------------------|
| <input type="checkbox"/> blubber | 2 x 20 g |
| <input type="checkbox"/> epidermis | 4 cm ² |
| <input type="checkbox"/> foetus/placenta | whole |
| <input type="checkbox"/> kidney | 2 x 20 g |
| <input type="checkbox"/> liver | 2 x 20 g |
| <input type="checkbox"/> milk | up to 20 ml |
| <input type="checkbox"/> muscle | 2 x 20 g |
| <input type="checkbox"/> rib (fifth) | 15 cm |
| <input type="checkbox"/> scapula | whole |
| <input type="checkbox"/> serum (also haemolytic) | up to 20 ml |
| <input type="checkbox"/> skull | whole |
| <input type="checkbox"/> teeth (baleen plates) | >4 (2 sets) |

10% Formalin

| | |
|--|-----------------------|
| <input type="checkbox"/> adrenal glands | both |
| <input type="checkbox"/> bladder | 1 cm ³ |
| <input type="checkbox"/> brain | whole |
| <input type="checkbox"/> eyes | both |
| <input type="checkbox"/> heart | 1 cm ³ |
| <input type="checkbox"/> kidney | 1 cm ³ |
| <input type="checkbox"/> liver | 1 cm ³ |
| <input type="checkbox"/> lung | 4 x 1 cm ³ |
| <input type="checkbox"/> lung (for morb.) | 4 x 1 cm ³ |
| <input type="checkbox"/> mammary gland | 1 cm slice |
| <input type="checkbox"/> mesenteric ln. | 1 cm slice |
| <input type="checkbox"/> ovaries | both |
| <input type="checkbox"/> pancreas | 1 cm ³ |
| <input type="checkbox"/> pituitary | whole |
| <input type="checkbox"/> pulm. ass. ln. | 1 cm slice |
| <input type="checkbox"/> spleen | 1 cm ³ |
| <input type="checkbox"/> testes | both/slices |
| <input type="checkbox"/> thymus | 1 cm ³ |
| <input type="checkbox"/> thyroid | 1 cm ³ |
| <input type="checkbox"/> tympanic bullae/cochlea | both |
| <input type="checkbox"/> uterus | 1 cm ³ |

Bacteriology

| | |
|--------------------------------------|------------|
| <input type="checkbox"/> heart blood | - |
| <input type="checkbox"/> kidney | swab/block |
| <input type="checkbox"/> liver | swab/block |
| <input type="checkbox"/> lung | swab/block |

Virology (freeze at -70°C)

| | |
|---|-------------------|
| <input type="checkbox"/> brain | 1 cm ³ |
| <input type="checkbox"/> kidney | 1 cm ³ |
| <input type="checkbox"/> lung | 1 cm ³ |
| <input type="checkbox"/> lung (for PCR) | 1 cm ³ |

4. LIST OF EXTRA SAMPLES

Extra samples of
lesions taken for
histological examination
(list):

-
-
-
-
-
-

Extra samples of
lesions taken for
bacteriological examination
(list):

-
-
-
-
-
-

Other extra samples
taken (list):

-
-
-
-
-
-

5. DESCRIPTION OF ABNORMALITIES ON GROSS PATHOLOGICAL EXAMINATION

(add extra pages if necessary)

PRELIMINARY DIAGNOSIS OF GROSS PATHOLOGICAL EXAMINATION
(in order of importance):

a.

b.

c.

d.

e.

6. RESULTS OF HISTOLOGICAL EXAMINATION (add extra pages if necessary)

7. RESULTS OF BACTERIOLOGICAL EXAMINATION

Heart blood:

Lung:

Liver:

Kidney:

Other:

.....

.....

8. MISCELLANEOUS RESULTS**9. FINAL DIAGNOSIS** (in order of importance):

a.

b.

c.

d.

e.



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