



# Norwegian State Pollution Monitoring Programme

## Report 585/94

Client State Pollution Control Authority

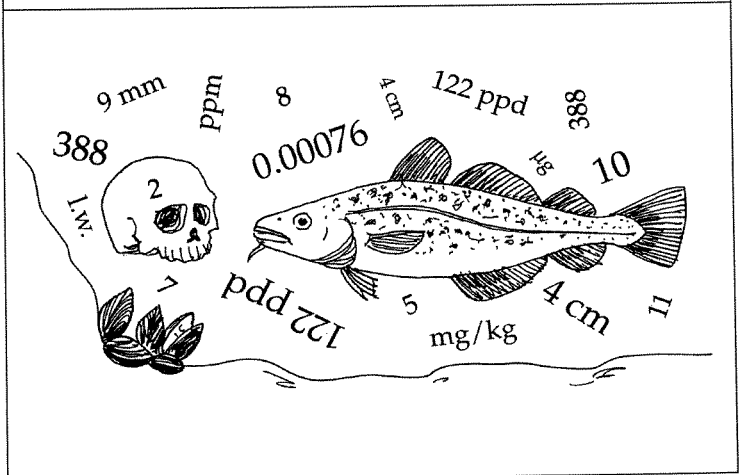
Contractor NIVA

## Contaminants in shellfish and fish 1981-92




The Joint Monitoring Programme (JMP)

Norwegian Biota Data



# NIVA - REPORT

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Abstract: This report is a compilation of data on contaminant concentrations in marine organisms used in the Norwegian contribution to the Joint Monitoring Programme and concerns mainly selected metals, organochlorines, polycyclic aromatic hydrocarbons that were collected during the period 1981 to 1992.
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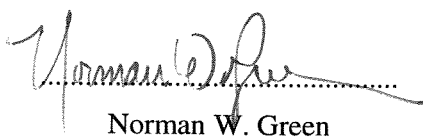
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1. Miljøgifter
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4. Ikdjflkdj ldjfl d4Norge

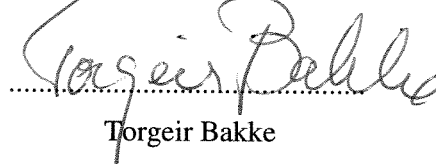
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# **Contaminants in shellfish and fish 1981-92**

**JOINT MONITORING PROGRAMME (JMP)  
NORWEGIAN BIOTA DATA**

Oslo, 20. November 1994

Project manager:        Norman W. Green

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## Preface

*This report presents a summary of the Norwegian data for contaminants in organisms 1981-1992 compiled for the Joint Monitoring Programme (JMP). JMP is administered by the Oslo and Paris Commissions (OSPARCOM) under the guidance of the International Council for the Exploration of the Seas (ICES). The programme is implemented by participating members comprising the Joint Monitoring Group (JMG).*

*The Norwegian JMP was primarily carried out by the Norwegian Institute for Water Research (NIVA) by contract from the Norwegian State Pollution Control Authority (SFT) (NIVA contract 80106). Other participating institutes have been:*

*Institute for Nutrition, Fisheries Directorate  
Institute of Marine Research (IMR)  
Nordic Analytical Center  
Swedish Environmental Research Institute  
Norwegian Veterinary Institute  
Foundation for Scientific and Industrial Research at the Norwegian Institute of Technology -  
SINTEF-SI (previously: Center for Industrial Research SI)*

*The Norwegian contribution to the JMP was initiated by SFT in 1981 as part of the national monitoring programme. It now comprises three areas: the Oslofjord and adjacent areas (Hvaler-Singlefjord area and Langesundfjord, 1981-), Sørffjord Hardangerfjord (1983-84, 1987-) and Orkdalsfjord area (1984-89, 1991).*

*Since the North Sea Task Force Monitoring Master Plan was implemented in 1990 additional areas have also been monitored. These include: Arendal area, Lista area and Bømlo-Sotra area.*

*On the initiative of NIVA and SFT blue mussel and fish were sampled at selected sites in merely diffusely contaminated areas (reference stations) from Bergen to Lofoten in 1991 and 1992.*

*Thanks are due to my colleagues at NIVA and the above mentioned institutes for helping to compile this data. These have been credited through the years in the National Comments. I am especially grateful to Audun Rønningen who has been responsible for the computer programs necessary to create the tables presented in this report.*

*Oslo, 20. November 1994.*

*Norman W. Green  
Project coordinator*

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# 1. Background and aims

The 1981-92 data for contaminants in organisms was compiled as part of the Norwegian contribution to the Joint Monitoring Programme (JMP) and the North Sea Task Force Monitoring Master Plan (NSTF-MMP) for the years 1990-91.

The JMP is performed as part of the Oslo and Paris Commissions (OSPARCOM). OSPARCOM was established in the seventies with the aim to protect the marine environment against anthropogenic contamination. The Oslo commission focuses on problems relating to dumping at sea in the northeast Atlantic and Baltic areas. Whereas the responsibility of the Paris commission is discharges from land based sources. Together, the commissions govern the "Joint Monitoring Group" (JMG) with the "International Council for the Exploration of the Sea" (ICES) as scientific adviser. Norway and other European countries, which are members of OSPARCOM have the following aims outlined in the "Joint Monitoring Program" (JMP) (OSPARCOM, 1990):

- 1) Assess the state of contamination,
- 2) Indicate possible remedial action.

The NSTF was established in 1989 by the countries bordering the North Sea. The NSTF aim is (NSTF, 1990):

*To carry out work leading, in a reasonable time-scale, to a dependable and comprehensive statement of circulation patterns, inputs and dispersion of contaminants, ecological conditions and effects of human activities in the North Sea.."*

Norway has designated three JMG areas: Oslofjord-area (including the Hvaler area, Singlefjord and Langesundsfjord), Sør fjord/Hardangerfjord and the Orkdalsfjord area and during 1990-91 have also included Arendal and Lista areas. The results have been presented for 1984-85 (Green, 1988), 1986 (Green, 1987; SFT, 1987), 1987 (SFT, 1988), 1988 (Green, 1989b; SFT, 1989), 1989 (Green, 1991, SFT, 1990), and 1990-91 (Green 1992, 1993a).

## 2. Sampling

The JMP stations monitored in 1981-92 by Norway are spread from the Swedish border to Lofoten (Fig.1 - 3).

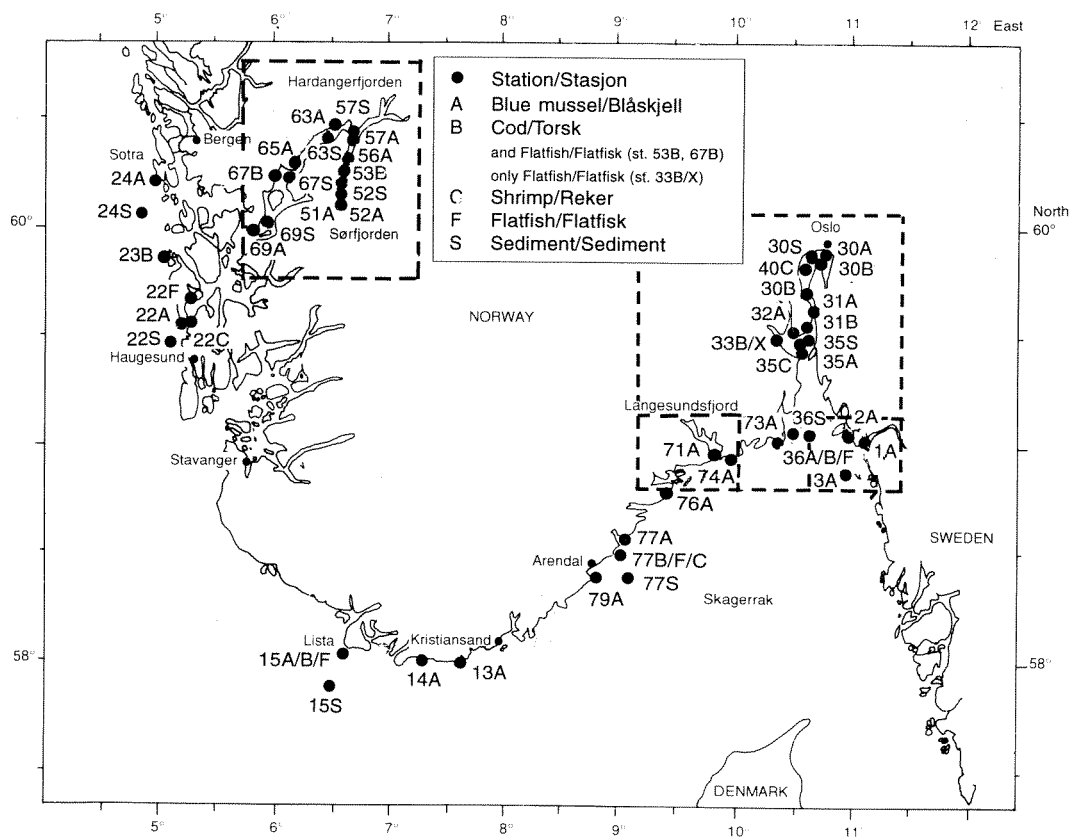
The sampling of biota has followed the ICES guidelines (ICES 1986, 1992) as closely as possible. For historical reason three size-groups of **mussels** (*Mytilus edulis*) have been sampled from most of the stations. The size classes were: 2-3, 3-4 and, 4-5cm. Fifty individuals were collected for each class. In order to obtain enough material for all analyses it was sometimes necessary to collect 100 individuals for the 2-3cm size class. In 1992 a stricter ICES approach was applied for new 1992 stations (north of the Bømlø area). For these stations 3 pooled samples of 20 individuals each will be collected (ICES, 1992). There is some evidence that the results from samples collected by the two methods are not significantly different. Pending further investigation it is proposed that all mussel samples for 1993 be collected by the "1992" ICES method.

To clean the intestinal canal (depuration) the mussels are kept alive for 12-24 hours in a 15 litre glass container with sea water from the respective sample localities and at ambient temperature. Following depuration the mussels were shucked and frozen. The depuration was omitted if there was sufficient evidence that the process had no significant influence on the body burden of the contaminants measured (cf., Green, 1989a).

Routinely, **cod** (*Gadus morhua*) and one flatfish species was sampled. An attempt was made to collect the same species at each station each sampling year. The order of preference for flatfish species was: **dab** (*Limanda limanda*), **flounder** (*Platichthys flesus*) and **plaice** (*Pleuronectes platessa*). At one station (St.67B in the Hardangerfjord) the only flatfish in abundance was **megrin** (*Lepidorhombus whiff-iajonis*) which has been sampled annually. If possible, the fish samples were sampled with five individuals within each of the five length classes roughly geometrically distributed:

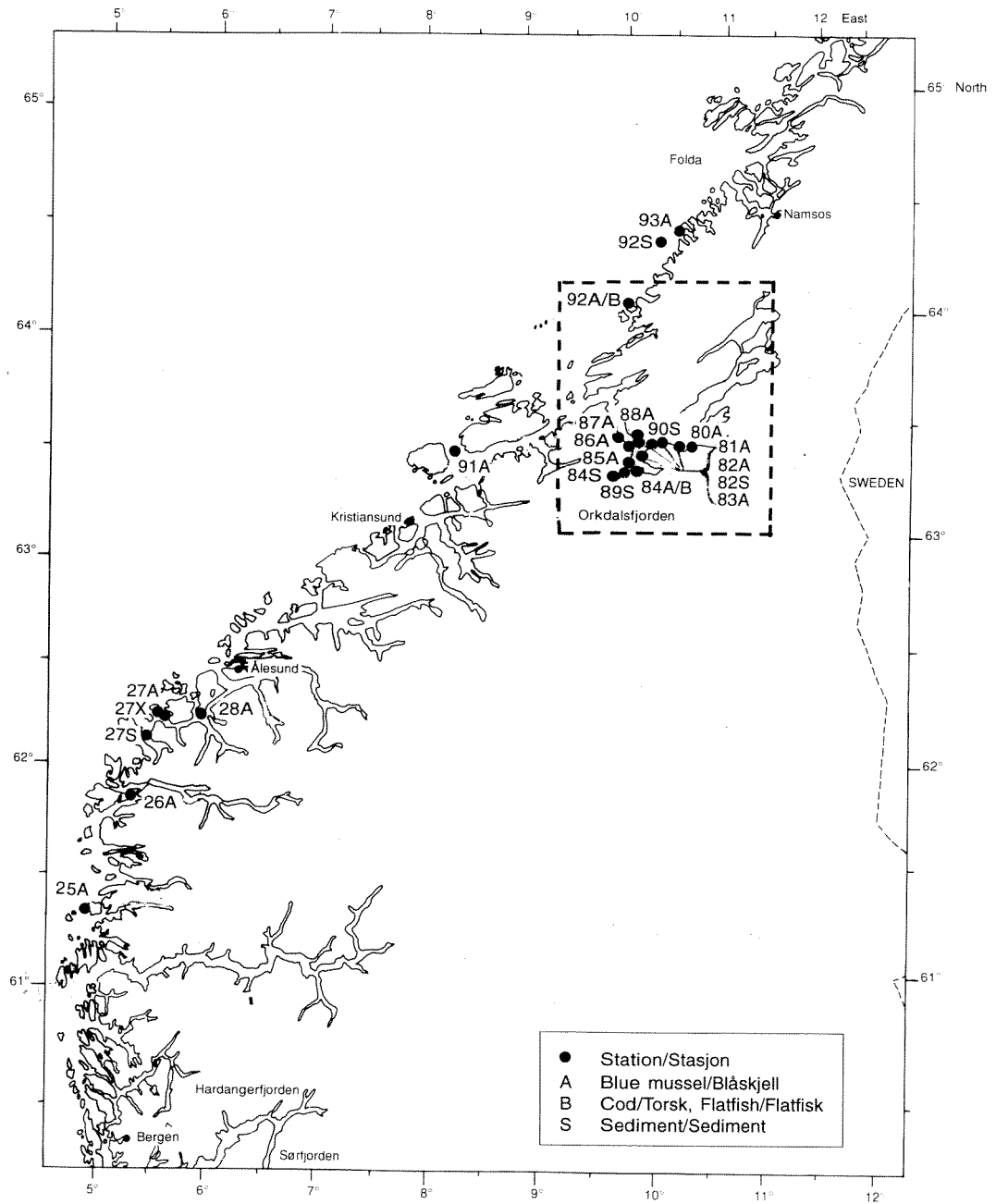
	cod	flatfish
size class 1	370-420mm	300-320mm
size class 2	420-475mm	320-340mm
size class 3	475-540mm	340-365mm
size class 4	540-615mm	365-390mm
size class 5	615-700mm	390-420mm

Two samples of 100 individuals of **Shrimp** (*Pandalus borealis*) were collected as supplementary data to assess possible health risk to the consumption of marine organisms.

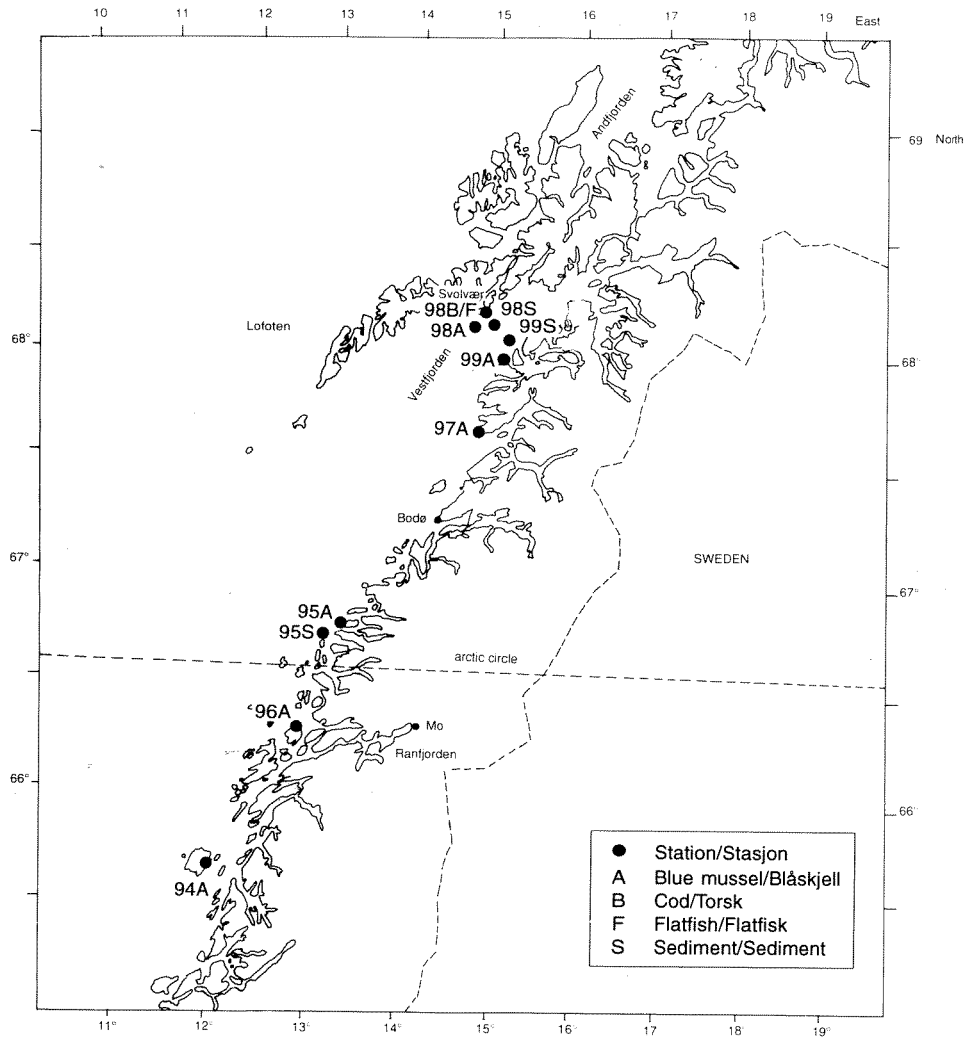


**Figur 1.** JMP sampling stations along the southern coast of Norway from the Swedish border to Bergen.





**Figur 2.** JMP sampling stations along the western coast of Norway from Bergen to Namsos.



**Figur 3.** JMP sampling stations along the northwest coast of Norway from the region of Ranfjord to Lofoten.

### 3. Analyses

JMG (OSPARCOM 1990) agreed that the concentration of at least cadmium, copper, mercury, lead, zinc and polychlorinated hydrocarbons should be monitored in biota. In these investigations many other contaminants have also been quantified. A complete list of variables used is given in section 4. An overview of the contaminants and associated analytical methods has been given by Green (1993b).

Recently JMG has preferred that **seven individual isomers of PCB** be quantified (Table 1). which provided a far better basis for assessing trends and gradients of PCB; besides easing comparison of the results from one country to another. In addition, it was favourable and practical to quantify **SumDDE+DDT**, **HCB**, and the remaining **HCH-isomers** in connection with the analysis of chlorinated compounds. In some cases (analyses at NIVA) it was also convenient to include determinations of pentachlorobenzene(**5-CB**), octachlorostyrene (**OCS**), **CB-156** (2 3 4 5- 3'4'), **CB-209** (2 3 4 5 6 - 2'3'4'5'6) and **CB-105** (2 3 4 - 3'4').

**Tabell 1.** Suggested PCB-isomers which were quantified in biota (ICES, 1986).

<b>IUPAC/CB no.</b>	<b>Structure</b>
<b>28</b>	2 4 - 4'
<b>52</b>	2 5 - 2'5'
<b>101</b>	2 4 5 - 2'5'
<b>118</b>	2 4 5 - 3'4'
<b>138</b>	2 3 4 - 2'4'5'
<b>153</b>	2 4 5 - 2'4'5'
<b>180</b>	2 3 4 5 - 2'4'5'

For **fish** two types of tissue were analysed. Fish fillet was analyzed for the mercury and PCB content and fish liver was analyzed for all mentioned contaminants except mercury. In addition, the age, sex, and pathological state for each individual was determined. Other measurements include: fish weight and length, weight of liver, liver dry weight and fat content (% total extractable fat), the fillet dry weight and its % fat content.

**Mussels** were analyzed for all contaminants, shell length of each mussel was measured. On a bulk basis the total shell weight, total soft tissue weight, dry weight and % fat content was measured.

## 4. Variables

List of determinands in the Norwegian JMP database (Green, 1993b). Codes are derived by ICES (1992). Only a selection of codes are used in Tables A - C

Abbreviation <sup>1</sup>	English	Norwegian
<b>ELEMENTS</b>		
<b>Al</b>	aluminium	<i>aluminium</i>
<b>As</b>	arsenic	<i>arsenikk</i>
<b>Cd</b>	cadmium	<i>kadmium</i>
<b>Co</b>	cobalt	<i>kobolt</i>
<b>Cr</b>	chromium	<i>krom</i>
<b>Cu</b>	copper	<i>kobber</i>
<b>Fe</b>	iron	<i>jern</i>
<b>Hg</b>	mercury	<i>kvikksølv</i>
<b>Li</b>	lithium	<i>litium</i>
<b>Mn</b>	manganese	<i>mangan</i>
<b>Ni</b>	nickel	<i>nikkel</i>
<b>Pb</b>	lead	<i>bly</i>
<b>Pb210</b>	lead-210	<i>bly-210</i>
<b>Se</b>	selenium	<i>selen</i>
<b>Ti</b>	titanium	<i>titan</i>
<b>Zn</b>	zinc	<i>sink</i>
<b>PAHs</b>		
<b>PAH</b>	polycyclic aromatic hydrocarbons	<i>polysykliske aromatiske hydrokarboner</i>
<b>ACNE</b>	acenaphthene	<i>acenaften</i>
<b>ACNLE</b>	acenaphthylene	<i>acenaftylen</i>
<b>ANT</b>	anthracene	<i>antracene</i>
<b>BAA</b> <sup>3</sup>	benz(a)anthracene	<i>benz(a)antracene</i>
<b>BAP</b> <sup>3</sup>	benzo(a)pyrene	<i>benzo(a)pyren</i>
<b>BBF</b> <sup>3</sup>	benzo(b)fluoranthene	<i>benzo(b)fluoranten</i>
<b>BBKF</b>	benzo(b+k)fluoranthene	<i>benzo(b+k)fluoranten</i>
<b>BEP</b>	benzo(e)pyrene	<i>benzo(e)pyren</i>
<b>BGHIP</b>	benzo(ghi)perylene	<i>benzo(ghi)perylen</i>
<b>BIPN</b> <sup>2</sup>	biphenyl	<i>bifenyl</i>
<b>BJKF</b> <sup>3</sup>	benzo(j,k)fluoranthene	<i>benzo(j,k)fluoranten</i>
<b>CHR</b>	chrysene	<i>chrysen</i>
<b>COR</b>	coronene	<i>coronen</i>
<b>DBAHA</b> <sup>3</sup>	(see DBA3A)	<i>(se DBA3A)</i>
<b>DBA3A</b> <sup>3</sup>	dibenz(a,c/a,h)anthracene	<i>dibenz(a,c/a,h)antracene</i>
<b>DBP</b>	dibenzopyrener	<i>dibenzopyren</i>
<b>DBT</b>	dibenzothiophene	<i>dibenzotiofen</i>
<b>DBTC1</b>	C <sub>1</sub> -dibenzothiophenes	<i>C<sub>1</sub>-dibenzotiofen</i>
<b>DBTC2</b>	C <sub>2</sub> -dibenzothiophenes	<i>C<sub>2</sub>-dibenzotiofen</i>

## Abbreviations (cont'd.)

Abbreviation <sup>1</sup>	English	Norwegian
<b>PAHs (cont.)</b>		
<b>DBTC3</b>	C <sub>3</sub> -dibenzothiophenes	<i>C<sub>3</sub>-dibenzotiofen</i>
<b>FLE</b>	fluorene	<i>fluoren</i>
<b>FLU</b>	fluoranthene	<i>fluoranten</i>
<b>ICDP</b> <sup>3</sup>	indeno(1,2,3-cd)pyrene	<i>indeno(1,2,3-cd)pyren</i>
<b>NAPTM</b> <sup>2</sup>	2,3,5-trimethylnaphthalene	<i>2,3,5-trimetylnaftalen</i>
<b>NAP</b> <sup>2</sup>	naphthalene	<i>naftalen</i>
<b>NAP1M</b> <sup>2</sup>	1-methylnaphthalene	<i>1-metylnaftalen</i>
<b>NAP2M</b> <sup>2</sup>	2-methylnaphthalene	<i>2-metylnaftalen</i>
<b>NAPC1</b> <sup>2</sup>	C <sub>1</sub> -naphthalenes	<i>C<sub>1</sub>-naftalen</i>
<b>NAPC2</b> <sup>2</sup>	C <sub>2</sub> -naphthalenes	<i>C<sub>2</sub>-naftalen</i>
<b>NAPC3</b> <sup>2</sup>	C <sub>3</sub> -naphthalenes	<i>C<sub>3</sub>-naftalen</i>
<b>NAPDI</b> <sup>2</sup>	2,6-dimethylnaphthalene	<i>2,6-dimetylnaftalen</i>
<b>PA</b>	phenanthrene	<i>fenantren</i>
<b>PAC1</b>	C <sub>1</sub> -phenanthrenes	<i>C<sub>1</sub>-fenantren</i>
<b>PAC2</b>	C <sub>2</sub> -phenanthrenes	<i>C<sub>2</sub>-fenantren</i>
<b>PAM1</b>	1-methylphenanthrene	<i>1-metylfenantren</i>
<b>PER</b>	perylene	<i>perylen</i>
<b>PYR</b>	pyrene	<i>pyren</i>
<b>DI-Σ<sub>n</sub></b>	sum of "n" dicyclic "PAH"s (footnote 2)	<i>sum "n" disykliske "PAH" (fotnote 2)</i>
<b>P-Σ<sub>n</sub></b>	sum "n" PAH	<i>sum "n" PAH</i>
<b>PK-Σ<sub>n</sub></b>	sum carcinogen PAH's (footnote 3)	<i>sum kreftfremkallende PAH (fotnote 3)</i>
<b>PAHΣΣ</b>	DI-Σ <sub>n</sub> + P-Σ <sub>n</sub> etc.	<i>DI-Σ<sub>n</sub> + P-Σ<sub>n</sub> mm..</i>
<b>SPA<sub>H</sub></b>	"total" PAH, specific compounds not quantified (outdated analytical method)	<i>"total" PAH, spesifikke forbindelser ikke kvantifisert (foreldret metode)</i>
<b>PCBs</b>		
<b>PCB</b>	polychlorinated biphenyls	<i>polyklorerte bifenyler</i>
<b>CB</b>	individual chlorobiphenyls (CB)	<i>enkelte klorobifenyl</i>
<b>CB28</b>	CB28 (IUPAC)	<i>CB28 (IUPAC)</i>
<b>CB31</b>	CB31 (IUPAC)	<i>CB31 (IUPAC)</i>
<b>CB44</b>	CB44 (IUPAC)	<i>CB44 (IUPAC)</i>
<b>CB52</b>	CB52 (IUPAC)	<i>CB52 (IUPAC)</i>
<b>CB95</b>	CB95 (IUPAC)	<i>CB95 (IUPAC)</i>
<b>CB101</b>	CB101 (IUPAC)	<i>CB101 (IUPAC)</i>
<b>CB105</b>	CB105 (IUPAC)	<i>CB105 (IUPAC)</i>
<b>CB110</b>	CB110 (IUPAC)	<i>CB110 (IUPAC)</i>
<b>CB118</b>	CB118 (IUPAC)	<i>CB118 (IUPAC)</i>
<b>CB128</b>	CB128 (IUPAC)	<i>CB128 (IUPAC)</i>
<b>CB138</b>	CB138 (IUPAC)	<i>CB138 (IUPAC)</i>

## Abbreviations (cont'd.)

Abbreviation <sup>1</sup>	English	Norwegian
<b>PCBs (cont.)</b>		
<b>CB149</b>	CB149 (IUPAC)	<i>CB149 (IUPAC)</i>
<b>CB153</b>	CB153 (IUPAC)	<i>CB153 (IUPAC)</i>
<b>CB156</b>	CB156 (IUPAC)	<i>CB156 (IUPAC)</i>
<b>CB170</b>	CB170 (IUPAC)	<i>CB170 (IUPAC)</i>
<b>CB180</b>	CB180 (IUPAC)	<i>CB180 (IUPAC)</i>
<b>CB194</b>	CB194 (IUPAC)	<i>CB194 (IUPAC)</i>
<b>CB209</b>	CB209 (IUPAC)	<i>CB209 (IUPAC)</i>
<b>CB-Σ7</b>	CB: 28+52+101+118+138+153+180	<i>CB: 28+52+101+118+138+153+180</i>
<b>CB-ΣΣ</b>	sum of CBs, includes CB-Σ7	<i>sum CBer, inkluderer CB-Σ 7</i>
<b>ALD</b>	aldrin	<i>aldrin</i>
<b>DIELD</b>	dieldrin	<i>dieldrin</i>
<b>ENDA</b>	endrin	<i>endrin</i>
<b>CCDAN</b>	cis-chlordane (=α-chlordane)	<i>cis-chlordan (=α -chlordan)</i>
<b>TCDAN</b>	trans-chlordane (=γ-chlordane)	<i>trans-chlordan (=γ -chlordan)</i>
<b>OCDAN</b>	oxy-chlordane	<i>oxy-chlordan</i>
<b>TNONC</b>	trans-nonachlor	<i>trans-nonaklor</i>
<b>TCDAN</b>	trans-chlordane	<i>trans-chlordan</i>
<b>OCS</b>	octachlorostyrene	<i>octaklorstyren</i>
<b>QCB</b>	pentachlorobenzene	<i>pentaklorbenzen</i>
<b>DDD</b>	dichlorodipenyldichloroethane 1,1-dichloro-2,2-bis- (4-chlorophenyl)ethane	<i>diklordifenyldikloretan</i> <i>1,1-dikloro-2,2-bis-(4-klorofenyl)etan</i>
<b>DDE</b>	dichlorodiphenylethylene (principle metabolite of DDT) 1,1-dichloro-2,2-bis- (4-chlorophenyl)ethylene*	<i>diklordifenyletylen</i> <i>(hovedmetabolitt av DDT)</i> <i>1,1-dikloro-2,2-bis-</i> <i>(4-klorofenyl)etylen</i>
<b>DDT</b>	dichlorodiphenyltrichloroethane 1,1,1-trichloro-2,2-bis- (4-chlorophenyl)ethane	<i>diklordifenyltrikloretan</i> <i>1,1,1-trikloro-2,2-bis-(4-klorofenyl)etan</i>
<b>DDEOP</b>	<i>o,p'</i> -DDE	<i>o,p'-DDE</i>
<b>DDEPP</b>	<i>p,p'</i> -DDE	<i>p,p'-DDE</i>
<b>DDTOP</b>	<i>o,p'</i> -DDT	<i>o,p'-DDT</i>
<b>DDTPP</b>	<i>p,p'</i> -DDT	<i>p,p'-DDT</i>
<b>TDEOP</b>	<i>o,p'</i> -DDD	<i>o,p'-DDD</i>
<b>TDEPP</b>	<i>p,p'</i> -DDD	<i>p,p'-DDD</i>

## Abbreviations (cont'd.)

Abbreviation <sup>1</sup>	English	Norwegian
<b>DDTEP</b>	p,p'-DDE + p,p'-DDT	<i>p,p'-DDE + p,p'-DDT</i>
<b>DD-nΣ</b>	sum of DDT and metabolites, n = number of compounds	<i>sum DDT og metaboliter, n = antall forbindelser</i>
<b>HCB</b>	hexachlorobenzene	<i>heksaklorbenzen</i>
<b>HCHG</b>	lindane γ HCH = gamma hexachlorocyclohexane (γ BHC = gamma benzenehexachloride, outdated synonym)	<i>lindan γHCH = gamma heksaklorsykloheksan (γBHC = gamma benzenheksaklorid, foreldret navn)</i>
<b>HCHA</b>	α HCH = alpha HCH	<i>αHCH = alpha HCH</i>
<b>HCHB</b>	β HCH = beta HCH	<i>βHCH = beta HCH</i>
<b>HC-nΣ</b>	sum of HCHs, n = count	<i>sum av HCHs, n = antall</i>
<b>EOCl</b>	extractable organically bound chlorine	<i>ekstraherbart organisk bundet klor</i>
<b>EPOCl</b>	extractable persistent organically bound chlorine	<i>ekstraherbart persistent organisk bundet klor</i>
<b>NTOT</b>	total organic nitrogen	<i>total organisk nitrogen</i>
<b>CORG</b>	organic carbon	<i>organisk karbon</i>
<b>GSAMT</b>	grain size	<i>kornfordeling</i>
<b>MOCON</b>	moisture content	<i>vanninnhold</i>

- 1) After: ICES Environmental Data Reporting Formats. International Council for the Exploration of the Sea. January 1992.
- 2) Indicates "PAH" compounds that are dicyclic and not truly PAH's typically identified during the analyses of PAH, include naphthalenes and "biphenyls".
- 3) Indicates PAH compounds potentially cancerogenic for humans according to IARC (1987), i.e., categories 2A+2B (possibly and probably carcinogenic).
- \*) The Pesticide Index, second edition. The Royal Society of Chemistry, 1991.

## 5. Analytical laboratories

The analytical laboratories involved in the 1981-92 biota survey are listed below (ICES laboratory codes) (from Green, 1993b):

Abbreviation <sup>1</sup>	English	Norwegian
<b>INSTITUTES</b>		
<b>FIER</b>	Institute for Nutrition, Fisheries Directorate	<i>Fiskeridirektoratets Ernæringsinstitutt</i>
<b>IMRN</b>	Institute of Marine Research (IMR)	<i>Havforskningsinstituttet</i>
<b>NACE</b>	Nordic Analytical Center	<i>Nordisk Analyse Center</i>
<b>NIVA</b>	Norwegian Institute for Water Research	<i>Norsk institutt for vannforskning</i>
<b>SERI</b>	Swedish Environmental Research Institute	<i>Institutionen för vatten- och luftvårdsforskning</i>
<b>VETN</b>	Norwegian Veterinary Institute	<i>Veterinærinstituttet</i>
<b>SIIF</b>	Fondation for Scientific and Industrial Research at the Norwegian Institute of Technology - SINTEF (a division, previously: Center for Industrial Research SI)	<i>Stiftelsen for industriell og teknisk forskning ved Norges tekniske høgskole-SINTEF (en avdeling, tidligere: Senter for industriforskning SI)</i>

<sup>1</sup>) After: ICES Environmental Data Reporting Formats. International Council for the Exploration of the Sea. January 1992.



## 6. Comment on quality assurance and detection limit

The analytical labs have been routinely involved in international and national intercalibration exercises. An overview of which exercises the laboratories have participated in has been given in Green (1993b). In addition the laboratories have (more regularly in recent years) analyzed standard reference material in connection with analyses of the samples used in monitoring. The results of incalibration excercises and analyses of the standard reference material is discussed in part in the annual National Comments.

The detections limits are approximations based on 3 times the standard deviation of the 'blank' or near zero concentration of a solution. Day-to-day variations in the analytical instrument may lead to minor variation in detection limits.

## 7. Explanation of Tables A and B

**Table A** and **Table B** presents concentration of the contaminants found in shellfish (blue mussel and shrimp) and fish, respectively. All data are on a **original basis** basis that is the basis on which the sample was analyzed. Two units of measure are used: **ppm** (parts per million, mg/kg) and **ppb** (parts per billion, µg/kg). The numeric values shown have been printed with a fixed number of digits and do not necessarily indicate analytical precision. (Refer also to the comments preceding the tables)

The data is sorted by (in descending order):

<b>Species</b>	ICES code, latin, English and Norwegian name follow
<b>Sample area</b>	refers to the official JMP designation and for some samples this may be undefined. The stations are sorted beginning with those near the Swedish border and continuing around the coast to Lofoten.
<b>Tissue</b>	refers to type of tissue analyzed
<b>Locality</b>	station name and position

## 8. References

- Green, N.W., 1987a. Joint Monitoring Programme (JMP). National comments to the Norwegian data for 1986. NIVA-project 80106, report 31.8.87, 40 pp.. (Also in documents MON 6/3/1-E and MON 6/3/1 Corr.1-E of the sixth meeting of JMG's Ad Hoc Working Group on Monitoring (MON).)
- Green, N.W., 1988. Felles europeisk overvåkingsprogram (JMP) i Norge. Overvåking av miljøgifter i sjøvannsmiljø. Oslofjord- området, Sørfjorden, Hardangerfjorden og Orkdalsfjord- området 1984-1985. NIVA project 80106, report number 2139. 76 pp..
- Green, N.W., 1989a. The effect of depuration on mussels analyses. Report of the 1989 meeting of the working group on statistical aspects of trend monitoring. The Hague, 24-27 April 1989. ICES-report C.M.1989/E:13 Annex 6:52-58.
- Green, N.W., 1989b. Joint Monitoring Programme (JMP). National Comments to the Norwegian Data for 1988. NIVA project 80106, report 27.10.89. 32pp.. (Also as document JMG 15/3/8-E.)
- Green, N.W., 1991. Joint Monitoring Programme (JMP). National Comments to the Norwegian Data for 1989. NIVA project 80106, report 25.01.91. 27pp.. (Also as document JMG 16 info 13.)
- Green, N.W., 1992. Joint Monitoring Programme (JMP) and North Sea Task Force - Master Monitoring Plan (NSTF/MMP) (contaminants only) National comments to the Norwegian Data for 1990, with special emphasis on contaminants in biota. NIVA project 80106, report 18.01.92 65pp. (Also as document JMG 17/3/18.).
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- OSPARCOM, 1990. Oslo and Paris Conventions. Principles and methodology of the Joint Monitoring Programme. [Monitoring manual for participants of the Joint Monitoring Programme (JMP) and North Sea Monitoring Master Plan (NSMMP)]. March 1990
- SFT, 1987. Overvåkingsresultater 1986. (Chapter) 8. Felles europeisk overvåkingsprogram (JMP) i Norge: Overvåking av PCB, DDT- derivater, kadmium, kvikksølv, kobber, bly og sink. Norwegian State Pollution Authority (SFT) Report 288/87:84- 85.
- SFT, 1988. Overvåkingsresultater 1987. (Chapter) 8. Felles europeisk overvåkingsprogram (JMP) i Norge: Overvåking av PCB, DDT- derivater, kadmium, kvikksølv, kobber, bly og sink. Norwegian State Pollution Authority (SFT) Report 330/88:96- 97.
- SFT, 1989. Overvåkingsresultater 1988. (Chapter) 8. Overvåking av miljøgifter: Joint Monitoring Programme (JMP). Norwegian State Pollution Authority (SFT) Report 379/89:98-101.
- SFT, 1990. Overvåkingsresultater 1989. (Chapter) 8 Overvåking av miljøgifter - Joint Monitoring Programme (JMP). Norwegian State Pollution Authority (SFT) Report 433/90:116-119.

**TABLE A**  
**SHELLFISH 1981-92**

REPORT INFORMATION : " S H E L L F I S H " .

```

----- : -----
Table-File-Name      : I:\TBX\JMG\BIO\TAB-OSHL.TB1
Limit-CheckFile     : )LIM\NO-LIMIT.SHL
Weight basis        : "ORIGINAL".
Table SORT-Mode     : 1. SPECIES.
                   : 2. TISSUE.
                   : 3. LOCALITY-index. (Predefined sequence)
                   : 4. DATE
                   : 5. SAMPLE-TYPE (Indiv.,Bulked,Homogenate)
----- : -----

```

NOTES :

- ☛ The detection limits given here are approximations based on 3 times the standard deviation of the "blank" or near zero concentration of a solution.  
Day to day variations in the analytical instrument may lead to different detection limits.
- ☛ Method codes are explained in: Green,N.W.,1993. Overview of Analytical Methods Employed by JMP in Norway 1981-92. NIVA project 80106.
- ☛ NB ! The numeric values shown have been printed with a FIXED number of digits, and do not necessarily indicate analytical precision.
- ☛ If a numeric value is suspect, the value is ignored in parameter statistics. (Unless all observations are suspect).  
If value can not be converted to basis for this table, the value is printed in the original basis but not included in any parameter statistics unless all values are in original basis.
- ☛ For "Σ" variables (e.g. CB\_Σ7, DD\_Σ4) , all the "<"-values (less than the detection limits) are counted only once.  
If two or more different "<"-values are present, the maximum of the least questionable (suspect) "<"-value is used.  
Any missing "Σ"-elements are ignored.
- ☛ If replicates are analyzed, the mean value of the replicates is counted in parameter statistics.
- ☛ If value is prefixed "<<", the number of "<" values is greater or equal to 25% of computed observations.  
Standard Deviation values are prefixed the character "~" if any "<" values are included.
- ☛ Footnotes consist of 4 parts:
  - 1: a letter code (e.g ? or a/A)  
The letter code may include one or more characters indicating possible matching letters referenced before or after numbers.  
When more letters are given, the syntax "A:D" means any of "A,B,C or D" while syntax "a/A" means any of "a" or "A" is referencing.
  - 2: a count (in paranthesis)
  - 3: a "!" or ">"  
"!" refer to notes BEFORE numeric values.  
">" refer to notes AFTER numeric values.
  - 4: The footnote explanation.

Species : **MYTI EDU**, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **01A Sponvika**, Latitude: 59°05.10N, Longitude: 11°13.90E.  
 Catch,date : **821014**, Count: 153, Sample type: **Bulked**.

Analytical Lab.	=>	SIIF	SIIF	SIIF
Analysis Code.	=>	130	120	111
Detection Limit.	=>	0.010	0.010	5.00
Shell-length -wght	No of	Fat	Hg	PCB
Repl. Min:Max,Mean	mean shell	ppm	ppm	ppb
no.	g	w.wt	w.wt	w.wt
01/ 0	40:50	45	51	117.0
02/ 0	30:40	35	50	37.0
03/ 0	20:30	26	52	13.0
Mean	35.3	51.0		55.7
Minimum	26	50		13.0
Maximum	45	52		117.0
St.dev.	9.5	1.0		54.5
Count	3	3	3	3

Sample.No 01 :  
 Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.  
 Sample.No 02 :  
 Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.  
 Sample.No 03 :  
 Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.

Species : **MYTI EDU**, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **01A Sponvika**, Latitude: 59°05.10N, Longitude: 11°13.90E.  
 Catch,date : **851016**, Count: 156, Sample type: **Bulked**.  
 Comment : **BLUE MUSSEL DRY WEIGHTS ARE BY 'FREEZE DRYING' WHICH IS ABOUT 2% HIGHER THAN 105 DEG. C DRIED SAMPLES (N=10) . WET WEIGHT VALUES RECALCULATED FROM FREEZE DRIED BASIS ARE ABOUT 10% HIGHER THAN VALUES RECALCULATED FROM A 105 DEG. C DRIED SAMPLE**

Analytical Lab.	=>	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF
Analysis Code.	=>	130	132	130	132	111	111	111
Detection Limit.	=>	0.010	0.010	0.020	0.040	5.00	0.50	0.20
Shell-length -wght	No of	Fat	Mn	Pb	Zn	PCB	DDTEP	HCB
Repl. Min:Max,Mean	mean shell	%	ppm	ppm	ppm	ppb	ppb	ppb
no.	g	w.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt
01/ 0	20:29	25	0.80	2.110	0.210	9.810	0.770	89.00
02/ 0	30:39	34	0.90	2.460	0.190	7.609	0.810	100.00
03/ 0	40:49	44	0.80	3.690	0.190	7.760	1.350	127.00
Mean	34.3	2.27	52.0	0.83	2.753	0.197	8.393	105.33
Minimum	25	0.80	50	0.80	2.110	0.190	7.609	89.00
Maximum	44	4.10	56	0.90	3.690	0.210	9.810	127.00
St.dev.	9.5	1.68	3.5	0.06	0.830	0.012	1.229	19.55
Count	3	3	3	3	3	3	3	3

miss(4) ! Missing value.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **01A Sponvika**, Latitude: 59°05.40N, Longitude: 11°12.50E.  
 Catch,date : **901106**, Count: 200, Sample type: **Bulked**.

Analytical Lab. Analysis Code. =>=>	Detection Limit. =>=>	NIVA		NIVA		NIVA		NIVA		NIVA	
		312	310	311	310	312	311	312	311	312	311
Samp/ Repl. no.	Shell-length -wght mean shell mm:mm	Mean Weight g	Dry %	Fat %	Cd ppm w.wt	Cu ppm w.wt	Hg ppm w.wt	Pb ppm w.wt	Zn ppm w.wt		
01/ 0	20:29	25	0.90	100		2.300	0.020	0.280	20.20		
02/ 0	30:39	35	2.20	50		1.400	0.020	0.200	23.20		
03/ 0	40:49	44	3.60	50		1.000	0.020	0.190	21.60		
Mean	34.7	2.23	66.7			1.567	0.020	0.223	21.67		
Minimum	25	0.90	50			1.000	0.020	0.190	20.20		
Maximum	44	3.60	100			2.300	0.020	0.280	23.20		
St.dev.	9.5	1.35	28.9			0.015	0.000	0.049	1.50		
Count	3	3	3			3	3	3	3		

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **02A Fugleskjær**, Latitude: 59°06.90N, Longitude: 10°59.00E.  
 Catch,date : **821014**, Count: 145, Sample type: **Bulked**.

Analytical Lab. Analysis Code. =>=>	Detection Limit. =>=>	SIIF		SIIF		SIIF		SIIF		SIIF	
		130	120	111	111	120	111	120	111	120	111
Samp/ Repl. no.	Shell-length -wght mean shell mm:mm	Mean Weight g	Dry %	Fat %	Cd ppm w.wt	Hg ppm w.wt	Pb ppm w.wt	PCB ppb w.wt			
01/ 0	40:50	45	50			0.310	0.029	28.0			
02/ 0	30:40	36	50			0.260	0.025	25.0			
03/ 0	20:30	26	45			0.360	0.041	53.0			
Mean	35.7	48.3				0.310	0.032	35.3			
Minimum	26	45				0.260	0.025	25.0			
Maximum	45	50				0.360	0.041	53.0			
St.dev.	9.5	2.9				0.15	0.008	15.4			
Count	3	3				3	3	3			

Sample.No 01 :  
 Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.

Sample.No 02 :  
 Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.

Sample.No 03 :  
 Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.





Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **03A Tisler**, Latitude: 58°58.80N, Longitude: 10°57.50E.  
 Catch,date : **821014**, Count: 100, Sample type: **Bulked**.

Analytical Lab.		=>		SIIF		SIIF		SIIF	
Analysis Code.		=>		130		120		111	
Detection Limit.		=>		0.010		0.010		5.00	
Samp/	Shell-length	-wght	No of	Dry	Fat	Cd	Hg	Pcb	
Repl.	Min:Max,	Mean	mean shell	%	%	ppm	ppm	ppb	
no.	mm:mm	mm	g			w.wt	w.wt	w.wt	
01/ 0	40:50	45	47	.	0.80	0.230	0.020	14.0	
02/ 0	30:40	36	53	.	0.50	0.210	0.024	16.0	
Mean	40.5	50.0		.	0.65	0.220	0.022	15.0	
Minimum	36	47		.	0.50	0.210	0.020	14.0	
Maximum	45	53		.	0.80	0.230	0.024	16.0	
St.dev.	6.4	4.2		.	0.21	0.014	0.003	1.4	
Count	2	2		.	2	2	2	2	

Sample.No 01 :  
 Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.

Sample.No 02 :  
 Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **03A Tisler**, Latitude: 58°58.80N, Longitude: 10°57.50E.  
 Catch,date : **851015**, Count: 103, Sample type: **Bulked**.  
 Comment : **BLUE MUSSEL DRY WEIGHTS ARE BY 'FREEZE DRYING' WHICH IS ABOUT 2% HIGHER THAN 105 DEG. C DRIED SAMPLES (N=10) . WET WEIGHT VALUES RECALCULATED FROM FREEZE DRIED BASIS ARE ABOUT 10% HIGHER THAN VALUES RECALCULATED FROM A 105 DEG. C DRIED SAMPLE**

Analytical Lab.		=>		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		
Analysis Code.		=>		130		120		132		130		132		111		111		111		
Detection Limit.		=>		0.010		0.010		0.040		0.020		0.40		5.00		0.50		0.20		
Samp/	Shell-length	-wght	No of	Dry	Fat	Cd	Hg	Mn	Pb	Zn	Pcb	DD	TEP	DD	Σ4	HCB				
Repl.	Min:Max,	Mean	mean shell	%	%	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	w.wt	w.wt	w.wt	
no.	mm:mm	mm	g			d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt				
01/ 0	20:28	23	0.60	21	20.00	1.30	0.950	5.200	0.650	79.20	<26.0	miss	miss	miss	<15.3	0.90	0.90	<<.57		
02/ 0	30:39	36	3.00	32	19.89	0.90	0.950	3.670	0.390	76.10	8.0	0.80	0.80	0.80	8.0	0.80	0.80	<0.10		
03/ 0	40:49	44	6.60	50	19.80	1.30	0.970	3.380	0.390	67.60	12.0	1.00	1.00	1.00	<26.0	1.00	1.00	1.00		
Mean	34.3	34.0	34.3		19.90	1.17	0.957	4.083	0.477	74.30	<15.3	0.90	0.90	0.90	<15.3	0.90	0.90	<<.57		
Minimum	23	0.60	21		19.80	0.90	0.950	3.380	0.390	67.60	8.0	0.80	0.80	0.80	8.0	0.80	0.80	<0.10		
Maximum	44	6.60	50		20.00	1.30	0.970	5.200	0.650	79.20	12.0	1.00	1.00	1.00	<26.0	1.00	1.00	1.00		
St.dev.	10.6	3.02	14.6		0.10	0.23	0.012	0.007	0.150	6.01	~9.5	0.14	0.14	0.14	~9.5	0.14	0.14	0.45		
Count	3	3	3		3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	

miss (2) ! Missing value.





Tab.width cont'd MYTI EDU, SB, J26, 302 Ormøya, 921102.

Analytical Lab.	=>	NIVA	NIVA	Σ(*)	NIVA	NIVA	NIVA
Analysis Code.	=>	341	341	!	341	341	341
Detection Limit.	=>	0.10	0.10	!	0.10	0.10	0.10
Samp/ Shell-length -weight No of		<b>HCHA HCHG HC Σ2 HCB QCB OCS</b>					
Repl. Mini:Max,Mean		ppb	ppb	ppb	ppb	ppb	ppb
no. mm:mm	mm g	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt
01/ 0	40:50 45 5.80 50	0.20	0.30	0.50	0.20	<0.10	<0.10
02/ 0	40:50 46 5.60 50	0.20	0.30	0.50	0.20	<0.10	<0.10
Mean	45.5 5.70 50.0	0.20	0.30	0.50	0.20	<<.10	<<.10
Minimum	45 5.60 50	0.20	0.30	0.50	0.20	<0.10	<0.10
Maximum	46 5.80 50	0.20	0.30	0.50	0.20	<0.10	<0.10
St.dev.	0.7 0.14 0.0	0.00	0.00	0.00	0.00	0.00	0.00
Count	2 2 2 2	2	2	2	2	2	2

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: J26 Oslofjorden, Tissue : Whole SOFT BODY .  
 Locality : 303 Malmøya, Latitude: 59°51.78N, Longitude: 10°45.95E.  
 Catch,date : 921102, Count: 100, Sample type: Bulkred.  
 Comment : Station name : Malmøya

Analytical Lab.	=>	NIVA	NIVA	Σ(*)	NIVA	NIVA	NIVA	Σ(*)	NIVA	NIVA	NIVA	Σ(*)	NIVA	NIVA	Σ(*)	NIVA	NIVA
Analysis Code.	=>	341	341	!	341	341	341	!	341	341	341	!	341	341	!	341	341
Detection Limit.	=>	0.10	0.10	!	0.10	0.10	0.10	!	0.10	0.10	0.10	!	0.10	0.10	!	0.10	0.10
Samp/ Shell-length -weight No of		<b>CB28 CB52 CB101 CB105 CB118 CB138 CB153 CB180 CB209 CB Σ7 CB ΣΣ DDEPP TDEPP DD Σ4 HCHA HCHG HC Σ2 HCB QCB</b>															
Repl. Mini:Max,Mean		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
no. mm:mm	mm g	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt
02/ 0	40:49 45 4.60 50	2.29	18.50	1.30	0.30	0.60	1.70	0.80	1.90	1.90	1.90	1.90	1.90	0.10	0.10	0.10	0.10
Mean		g	%	%	%	%	%	%	8.4	<9.4	0.5	0.40	0.90	0.10	0.30	0.40	0.10
St.dev.		0.10															
Count		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Tab.width cont'd MYTI EDU, SB, J26, 303 Malmøya, 921102.

Analytical Lab.	=>	NIVA
Analysis Code.	=>	341
Detection Limit.	=>	0.10
Samp/ Shell-length -weight No of		<b>OCS</b>
Repl. Mini:Max,Mean		ppb
no. mm:mm	mm g	W.Wt
02/ 0	40:49 45 4.60 50	<0.10











Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **30A Gressholmen**, Latitude: 59°52.50N, Longitude: 10°43.00E.  
 Catch,date : **871012**, Count: 182, Sample type: **Bulked**.

Analytical Lab. Code.	Detection Limit.	Shell-length -weight No of	Mean		NIVA		NIVA		NIVA		SIIF		SIIF		SIIF		SIIF		SIIF			
			g	%	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppb	w.Wt	ppb	w.Wt	ppb	w.Wt	ppb	w.Wt	miss	miss
01/ 0	20:29	24	1.00	27	0.60	5.410	<.050	1.360	126.00	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss
02/ 0	30:39	35	3.20	50	0.580	4.960	<.050	1.310	111.00	72.0	5.30	5.00	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40
03/ 0	30:39	36	3.70	22	1.90	1.90		0.150	3.00	54.0	3.50	3.30	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
04/ 0	40:49	46	6.60	53	1.90	1.90		0.150	3.00	47.0	2.70	2.70	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Mean	35.3	36.3	38.0		2.97	21.35	2.00	0.637	5.063	119.00	3.83	3.67	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Minimum	24	1.00	22		0.87	21.00	1.90	0.580	4.820	111.00	2.70	2.70	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Maximum	46	6.60	53		5.03	21.80	2.20	0.730	5.410	126.00	5.30	5.00	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40
St.dev.	9.0	2.30	15.8		1.71	0.33	0.17	0.081	0.308	7.55	1.33	1.19	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Count	4	4	4		4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

miss(8) ! Missing value.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **30A Gressholmen**, Latitude: 59°52.50N, Longitude: 10°43.00E.  
 Catch,date : **881107**, Count: 199, Sample type: **Bulked**.

Analytical Lab. Code.	Detection Limit.	Shell-length -weight No of	Mean		NIVA		NIVA		NIVA		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		
			g	%	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppb	w.Wt	ppb	w.Wt	ppb	w.Wt	ppb	w.Wt	ppb	w.Wt	ppb
01/ 0	20:28	24	0.60	100	0.740	6.900	0.320	1.500	110.00	39.0	0.10	0.60	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
02/ 0	30:39	36	1.80	50	0.610	5.480	0.130	1.220	84.40	39.0	0.10	0.50	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
03/ 0	40:48	42	3.30	49	0.530	4.260	0.110	1.330	93.10	45.0	0.10	0.70	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Mean	34.0	1.90	66.3		2.12	17.47	1.72	0.627	5.547	95.83	0.10	0.60	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Minimum	24	0.60	49		0.55	15.90	1.64	0.530	4.260	84.40	0.10	0.50	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Maximum	42	3.30	100		3.63	19.10	1.84	0.740	6.900	110.00	0.10	0.70	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
St.dev.	9.2	1.35	29.2		1.54	1.60	0.11	0.106	1.321	13.02	0.00	0.10	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Count	3	3	3		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Sample.No 01 : Whole Soft Body : Dry weight determination for chlorinated hydrocarbon subsample was 16.93%  
 Sample.No 02 : Whole Soft Body : Dry weight determination for chlorinated hydrocarbon subsample was 17.19%  
 Sample.No 03 : Whole Soft Body : Dry weight determination for chlorinated hydrocarbon subsample was 18.75%







Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **31A Solbergstrand**, Latitude: 59°36.90N, Longitude: 10°39.40E.  
 Catch,date : **811229**, Count: 100, Sample type: **Bulked**.

.	Analytical Lab.	=>	SIIF		SIIF		SIIF	
			130	120	130	120	110	110
.	Analysis Code.	=>	0.010	0.010	0.010	0.010	0.010	10.0
.	Detection Limit.	=>						
	Shell-length -wght	No of						
Repl. Min:Max,Mean	mm:mm	g						
01/ 0	35:50	42	0.200	0.030	0.200	0.030	90.0	
02/ 0	35:50	42	0.300	0.040	0.300	0.040	110.0	
Mean	42.0	50.0	0.250	0.035	0.250	0.035	100.0	
Minimum	42	50	0.200	0.030	0.200	0.030	90.0	
Maximum	42	50	0.300	0.040	0.300	0.040	110.0	
St.dev.	0.0	0.0	0.071	0.007	0.071	0.007	14.1	
Count	2	2	2	2	2	2	2	

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **31A Solbergstrand**, Latitude: 59°36.90N, Longitude: 10°39.40E.  
 Catch,date : **830302**, Count: 150, Sample type: **Bulked**.

.	Analytical Lab.	=>	SIIF		SIIF		SIIF	
			130	120	130	120	111	111
.	Analysis Code.	=>	0.010	0.010	0.010	0.010	5.00	
.	Detection Limit.	=>						
	Shell-length -wght	No of						
Repl. Min:Max,Mean	mm:mm	g						
01/ 0	40:50	46	0.180	0.014	0.180	0.014	47.0	
02/ 0	30:40	35	0.180	0.015	0.180	0.015	32.0	
03/ 0	20:30	26	0.210	0.016	0.210	0.016	miss	
Mean	35.7	50.0	0.190	0.015	0.190	0.015	39.5	
Minimum	26	50	0.180	0.014	0.180	0.014	32.0	
Maximum	46	50	0.210	0.016	0.210	0.016	47.0	
St.dev.	10.0	0.0	0.017	0.001	0.017	0.001	10.6	
Count	3	3	3	3	3	3	2	

miss(1) ! Missing value.

Sample.No 01 :

Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.

Sample.No 02 :

Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.

Sample.No 03 :

Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT. NO PCB DATA AVAILABLE FOR THIS PARTIAL BULK

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**  
 Locality : **31A Solbergstrand**, Latitude: 59°36.90N, Longitude: 10°39.40E.  
 Catch,date : **831012**, Count: 160, Sample type: **Bulked**.

Analytical Lab. Analysis Code. Detection Limit. Samp/ Shell-length -wght No of Repl. Min:Max,Mean mean shell no. mm:mm g	SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF	
	130	130	120	130	130	130	131	130	130	130	131	130	131	130	131	130
	0.010	0.010	0.010	0.020	0.020	0.020	0.40	5.00	5.00	5.00	0.50	0.50	0.50	0.50	0.50	0.50
	Fat %		Cu ppm		Ni ppm		Pb ppm		PCB ppm		DDTEP ppm		DDTEP ppm		HCB ppm	
	w.wt		w.wt		w.wt		w.wt		w.wt		w.wt		w.wt		w.wt	
01/ 0 20:30 26 60	18.50	1.19	0.260	1.680	0.014	0.280	0.380	23.40	20.0	20.0	2.00	2.00	2.00	2.00	2.80	2.80
02/ 0 30:40 34 50	20.20	1.19	0.280	1.420	0.015	0.230	0.360	17.40	22.0	22.0	2.10	2.10	2.10	2.10	2.70	2.70
03/ 0 40:50 44 50	19.40	1.20	0.260	1.250	0.016	0.180	0.340	17.10	21.0	21.0	3.00	3.00	3.00	3.00	2.00	2.00
Mean	34.7	1.19	0.267	1.450	0.015	0.230	0.360	19.30	21.0	21.0	2.37	2.37	2.37	2.37	2.50	2.50
Minimum	26	1.19	0.260	1.250	0.014	0.180	0.340	17.10	20.0	20.0	2.00	2.00	2.00	2.00	2.00	2.00
Maximum	44	1.20	0.280	1.680	0.016	0.280	0.380	23.40	22.0	22.0	3.00	3.00	3.00	3.00	2.80	2.80
St.dev.	9.0	0.01	0.012	0.217	0.001	0.050	0.020	3.55	1.0	1.0	0.55	0.55	0.55	0.55	0.44	0.44
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Sample.No 01 :  
 Whole Soft Body : DDTEP = p,p'-DDE + p,p'-DDT  
 Sample.No 02 :  
 Whole Soft Body : DDTEP = p,p'-DDE + p,p'-DDT  
 Sample.No 03 :  
 Whole Soft Body : DDTEP = p,p'-DDE + p,p'-DDT

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**  
 Locality : **31A Solbergstrand**, Latitude: 59°36.90N, Longitude: 10°39.40E.  
 Catch,date : **841011**, Count: 160, Sample type: **Bulked**.

Analytical Lab. Analysis Code. Detection Limit. Samp/ Shell-length -wght No of Repl. Min:Max,Mean mean shell no. mm:mm g	SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF	
	130	130	120	130	130	130	131	130	130	130	131	130	131	130	131	130	131	130
	0.010	0.010	0.010	0.010	0.010	0.040	0.020	0.40	5.00	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Fat %		Cd ppm		Cu ppm		Hg ppm		Mn ppm		Pb ppm		Zn ppm		PCB ppm		DDTEP ppm	
	w.wt		w.wt		w.wt		w.wt		w.wt		w.wt		w.wt		w.wt		w.wt	
01/ 0 20:30 26 60	0.72	14.50	0.80	0.180	1.010	0.020	0.770	50.020	19.20	19.20	20.0	1.50	1.50	1.50	1.50	1.50	1.50	1.50
02/ 0 30:40 34 50	1.80	13.70	0.70	0.180	0.900	q<.005	0.550	50.030	19.90	19.90	24.0	1.20	1.20	1.20	1.20	1.20	1.20	1.20
03/ 0 40:50 45 50	3.94	14.80	0.90	0.210	0.920	0.029	0.630	50.030	18.10	18.10	21.0	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Mean	2.15	14.33	0.80	0.190	0.943	0.025	0.650	50.027	19.07	19.07	21.7	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Minimum	0.72	13.70	0.70	0.180	0.900	0.020	0.550	50.020	18.10	18.10	20.0	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Maximum	3.94	14.80	0.90	0.210	1.010	0.029	0.770	50.030	19.90	19.90	24.0	1.50	1.50	1.50	1.50	1.50	1.50	1.50
St.dev.	1.64	0.57	0.10	0.017	0.059	0.006	0.111	0.006	0.91	0.91	2.1	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Count	3	3	3	3	3	12	3	3	3	3	3	3	3	3	3	3	3	3

s/q(7) ! Suspect value(s)  
 i (1) ! Suspect or ambiguous basis-value(s) ignored in statistics.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **31A Solbergstrand**, Latitude: 59°36.90N, Longitude: 10°39.40E.  
 Catch,date : **851024**, Count: 159, Sample type: **Bulked**.  
 Comment : **BLUE MUSSEL DRY WEIGHTS ARE BY 'FREEZE DRYING' WHICH IS ABOUT 2% HIGHER THAN 105 DEG. C DRIED SAMPLES (N=10). WET WEIGHT VALUES RECALCULATED FROM FREEZE DRIED BASIS ARE ABOUT 10% HIGHER THAN VALUES RECALCULATED FROM A 105 DEG. C DRIED SAMPLE**

Samp/ Repl. no.	Shell-length mm	-wght mm	No of mean shell	Analytical Lab.		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		
				Code	Detection Limit	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF
01/ 0	20:29	26	1.20	59		130	120	132	130	132	132	132	132	132	132	132	132	132	132	132
02/ 0	30:39	34	2.90	50		0.010	0.010	0.040	0.020	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040
03/ 0	40:49	44	5.80	50																
Mean	34.7	3.30	53.0																	
Minimum	26	1.20	50																	
Maximum	44	5.80	59																	
St.dev.	9.0	2.33	5.2																	
Count	3	3	3																	

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.

Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.

Locality : **31A Solbergstrand**, Latitude: 59°36.90N, Longitude: 10°39.40E.

Catch,date : **861020**, Count: 160, Sample type: **Bulked**.

Samp/ Repl. no.	Shell-length mm	-wght mm	No of mean shell	Analytical Lab.		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA	
				Code	Detection Limit	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
01/ 0	20:29	24	0.90	60		312	311	310	312	311	311	311	311	311	311	311	311	311	311	311	311
02/ 0	30:39	35	3.20	50		0.030	0.150	0.010	0.150	0.010	0.150	0.010	0.150	0.010	0.150	0.010	0.150	0.010	0.150	0.010	0.150
03/ 0	40:49	44	6.40	50																	
Mean	34.3	3.50	53.3																		
Minimum	24	0.90	50																		
Maximum	44	6.40	60																		
St.dev.	10.0	2.76	5.8																		
Count	3	3	3																		

s/q(6) ! Suspect value (s)

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area : J26 Oslofjorden, Tissue : Whole SOFT BODY.  
 Locality : 31A Solbergstrand, Latitude: 59°36.90N, Longitude: 10°39.40E.  
 Catch,date : 871105, Count: 149, Sample type: Bulked.

Analytical Lab. Analysis Code Detection Limit Shell-length - weight No of Repl. Min:Max,Mean mean shell no. mm:mm g	Fat %		Cu ppm		Cd ppm		Pb ppm		Zn ppm		PCB ppm		CB52 ppm		CB180 ppm		CB E7 ppm		CB E2 ppm		HCHG DD S4 ppm		HCHG HC S2 ppm		SIIF Σ(*) ppm		SIIF Σ(*) ppm		SIIF Σ(*) ppm			
	Mean	Weight	Dry	Fat	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt		
01/ 0	20:29	26	1.20	50	4.180	<.050	0.780	75.60	0.10	0.10	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
02/ 0	30:39	34	2.50	49	4.440	<.050	0.790	65.60	1.30	0.50	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	
03/ 0	40:48	43	4.20	50	4.820	<.050	0.760	66.30	1.20	0.40	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
Mean	34.3	2.63	49.7		4.480	<.050	0.777	69.17	0.87	0.33	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	
Minimum	26	1.20	49		4.180	<.050	0.760	65.60	0.10	0.10	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Maximum	43	4.20	50		4.820	<.050	0.790	75.60	1.30	0.50	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
St.dev.	8.5	1.50	0.6		0.322	~.000	0.015	5.58	1.12	0.67	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Count	3	3	3		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area : J26 Oslofjorden, Tissue : Whole SOFT BODY.  
 Locality : 31A Solbergstrand, Latitude: 59°36.90N, Longitude: 10°39.40E.  
 Catch,date : 881102, Count: 207, Sample type: Bulked.

Analytical Lab. Analysis Code Detection Limit Shell-length - weight No of Repl. Min:Max,Mean mean shell no. mm:mm g	Fat %		Cu ppm		Cd ppm		Pb ppm		Zn ppm		PCB ppm		CB28 ppm		CB52 ppm		CB101 ppm		CB138 ppm		CB153 ppm		CB E7 ppm		CB E2 ppm		DD S4 ppm		DD S4 ppm		DD S4 ppm		DD S4 ppm		
	Mean	Weight	Dry	Fat	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	
01/ 0	21:29	26	0.70	107	4.520	0.120	0.990	68.00	21.0	0.90	2.60	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	
02/ 0	30:39	35	1.70	52	4.300	0.090	0.870	67.70	16.0	0.80	2.20	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
03/ 0	40:49	45	4.40	48	5.340	0.080	0.810	67.00	18.0	0.80	2.10	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Mean	35.3	2.27	69.0		4.720	0.097	0.890	67.57	18.3	0.83	2.30	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Minimum	26	0.70	48		4.300	0.080	0.810	67.00	16.0	0.80	2.10	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Maximum	45	4.40	107		5.340	0.120	0.990	68.00	21.0	0.90	2.20	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
St.dev.	9.5	1.91	33.0		0.548	0.021	0.092	0.51	2.5	0.06	0.26	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	
Count	3	3	3		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Sample.No 01 : Whole Soft Body : Dry weight determination for chlorinated hydrocarbon subsample was 20.42%  
 Sample.No 02 : Whole Soft Body : Dry weight determination for chlorinated hydrocarbon subsample was 21.04%  
 Sample.No 03 : Whole Soft Body : Dry weight determination for chlorinated hydrocarbon subsample was 25.26%





Tab.width cont'd MYTI EDU, SB, J26, 31A Solbergstrand, 901107.

Analytical Lab.	=>	SIIF
Analysis Code.	=>	605
Detection Limit.	=>	40.0
Samp/Shell-length - weight	No of	EPOCLI
Repl. Min:Max,Mean	mean shell	ppb
no. mm:mm	mm	w.wt
01/ 0	21:29 26 1.30 100	460.0
02/ 0	30:39 35 2.50 50	180.0
03/ 0	40:49 45 4.70 50	220.0
Mean	35.3 2.83 66.7	286.7
Minimum	26 1.30 50	180.0
Maximum	45 4.70 100	460.0
St.dev.	9.5 1.72 28.9	151.4
Count	3 3 3	3

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: J26 Oslofjorden, Tissue : Whole SOFT BODY.  
 Locality : 31A Solbergstrand, Latitude: 59°36.9'N, Longitude: 10°39.40'E.  
 Catch,date : 911009, Count: 200, Sample type: Bulkcd.

Analytical Lab.	=>	SIIF																	
Analysis Code.	=>	605																	
Detection Limit.	=>	40.0																	
Samp/Shell-length - weight	No of	EPOCLI																	
Repl. Min:Max,Mean	mean shell	ppb																	
no. mm:mm	mm	w.wt																	
01/ 0	20:29 24 0.90 100	0.52																	
02/ 0	30:39 35 2.60 50	1.53																	
03/ 0	40:49 44 6.10 50	3.18																	
Mean	34.3 3.20 66.7	1.74																	
Minimum	24 0.90 50	0.52																	
Maximum	44 6.10 100	3.18																	
St.dev.	10.0 2.65 28.9	1.34																	
Count	3 3 3	3																	

Tab.width cont'd MYTI EDU, SB, J26, 31A Solbergstrand, 911009.

Analytical Lab.	=>	SIIF
Analysis Code.	=>	605
Detection Limit.	=>	130.0
Samp/Shell-length - weight	No of	EPOCLI
Repl. Min:Max,Mean	mean shell	ppb
no. mm:mm	mm	w.wt
01/ 0	20:29 24 0.90 100	410.0
02/ 0	30:39 35 2.60 50	270.0
03/ 0	40:49 44 6.10 50	270.0
Mean	34.3 3.20 66.7	316.7
Minimum	24 0.90 50	270.0
Maximum	44 6.10 100	410.0
St.dev.	10.0 2.65 28.9	80.8
Count	3 3 3	3



Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **32A Rødtangen**, Latitude: 59°31.50N, Longitude: 10°25.60E.  
 Catch,date : **821015**, Count: 163, Sample type: **Bulked**.

Samp/ Repl. no.	Shell-length mm	-wght mm	No of mean shell g	SIIF		SIIF		SIIF	
				Dry %	Fat %	Cd ppm	Hg ppm	Cd ppm	Hg ppm
01/ 0	40:50	45	52	.	2.10	0.360	0.027	63.0	SIIF 111
02/ 0	30:40	35	55	.	2.60	0.430	0.030	62.0	SIIF 120
03/ 0	20:30	26	56	.	.	0.330	0.032	miss	SIIF 111
Mean	35.3	54.3		.	2.35	0.373	0.030	62.5	
Minimum	26	52		.	2.10	0.330	0.027	62.0	
Maximum	45	56		.	2.60	0.430	0.032	63.0	
St.dev.	9.5	2.1		.	0.35	0.051	0.003	0.7	
Count	3	3		.	2	3	3	2	

miss(1) ! Missing value.

Sample.No 01 :

Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.

Sample.No 02 :

Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.

Sample.No 03 :

Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT. NO PCB DATA FOR THIS PARTIAL BULK

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.

Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **32A Rødtangen**, Latitude: 59°31.50N, Longitude: 10°25.60E.  
 Catch,date : **851017**, Count: 147, Sample type: **Bulked**.

Comment : BLUE MUSSEL DRY WEIGHTS ARE BY 'FREEZE DRYING' WHICH IS ABOUT 2% HIGHER THAN 105 DEG. C DRIED SAMPLES (N=10) . WET WEIGHT VALUES RECALCULATED FROM FREEZE DRIED BASIS ARE ABOUT 10% HIGHER THAN VALUES RECALCULATED FROM A 105 DEG. C DRIED SAMPLE

Samp/ Repl. no.	Shell-length mm	-wght mm	No of mean shell g	SIIF		SIIF		SIIF		SIIF		SIIF		SIIF	
				Dry %	Fat %	Cd ppm	Hg ppm	Cd ppm	Hg ppm	PCB ppb	PCB ppb	DD ppb	DD ppb	Σ4 ppb	HCB ppb
01/ 0	20:29	26	0.80	45	0.80	18.20	1.40	1.020	0.110	4.490	1.180	81.40	29.0	2.00	miss
02/ 0	30:39	35	2.30	52	2.02	17.70	1.50	1.170	0.120	4.320	1.270	87.30	41.0	3.00	<0.90
03/ 0	40:49	44	4.70	50	3.93	17.59	1.19	1.310	0.091	5.260	1.510	85.50	10.0	1.00	<0.07
Mean	35.0	2.60	49.0		2.25	17.83	1.36	1.167	0.107	4.690	1.320	84.73	26.7	2.00	<<.49
Minimum	26	0.80	45		0.80	17.59	1.19	1.020	0.091	4.320	1.180	81.40	10.0	1.00	<0.07
Maximum	44	4.70	52		3.93	18.20	1.50	1.310	0.120	5.260	1.510	87.30	41.0	3.00	<0.90
St.dev.	9.0	1.97	3.6		1.58	0.33	0.16	0.145	0.015	0.501	0.171	3.02	15.6	1.00	~0.59
Count	3	3	3		3	3	3	3	3	3	3	3	3	3	2

miss(1) ! Missing value.

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: J26 Oslofjorden, Tissue : Whole SOFT BODY.  
 Locality : 35A Mølen, Latitude: 59°29.20N, Longitude: 10°30.10E.  
 Catch,date : 811027, Count: 50, Sample type: Homogenate.

.	Analytical Lab.	=>	SIIF	SIIF	SIIF	SIIF
.	Analysis Code.	=>	130	120	110	110
.	Detection Limit.	=>	0.010	0.010	10.0	10.0
Samp/	Shell-length -wght	No of	Fat	Hg	PCB	PCB
Repl.	Min:Max,Mean	mean shell	%	ppm	ppb	ppb
no.	mm:mm	g	w.wt	w.wt	w.wt	w.wt
01/ 0	35:50	42	50	0.300	0.040	90.0

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: J26 Oslofjorden, Tissue : Whole SOFT BODY.  
 Locality : 35A Mølen, Latitude: 59°29.20N, Longitude: 10°30.10E.  
 Catch,date : 821015, Count: 159, Sample type: Bulked.

.	Analytical Lab.	=>	SIIF	SIIF	SIIF	SIIF
.	Analysis Code.	=>	130	120	111	111
.	Detection Limit.	=>	0.010	0.010	5.00	5.00
Samp/	Shell-length -wght	No of	Fat	Hg	PCB	PCB
Repl.	Min:Max,Mean	mean shell	%	ppm	ppb	ppb
no.	mm:mm	g	w.wt	w.wt	w.wt	w.wt
01/ 0	40:50	46	51	1.19	0.240	0.022
02/ 0	30:40	35	51	1.90	0.420	0.036
03/ 0	20:30	26	57	0.80	0.270	0.018
Mean	35.7	53.0	.	1.30	0.310	0.025
Minimum	26	51	.	0.80	0.240	0.018
Maximum	46	57	.	1.90	0.420	0.036
St.dev.	10.0	3.5	.	0.56	0.096	0.009
Count	3	3	.	3	3	3

Sample.No 01 :

Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.

Sample.No 02 :

Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.

Sample.No 03 :

Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **35A Mølen**, Latitude: 59°29.20N, Longitude: 10°30.10E.  
 Catch,date : **831007**, Count: 160, Sample type: **Bulked**.

. Analytical Lab. Analysis Code. Detection Limit. Samp/Shell-length -wght No of Repl. Min:Max,Mean mean shell no. mm:mm mm g	SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF	
	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
	0.010	0.010	0.010	0.010	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
	Fat %		Cu ppm		Hg ppm		Ni ppm		Pb ppm		Zn ppm		PCB ppb		DDTEP ppb		DDTEP ppb	
	w.wt		w.wt		w.wt		w.wt		w.wt		w.wt		w.wt		w.wt		w.wt	
01/ 0 20:30 25 60	1.19	0.260	1.170	0.020	0.200	0.320	0.320	0.320	0.320	0.320	17.00	19.0	2.40	2.40	2.40	2.40	2.40	2.40
02/ 0 30:40 34 50	1.19	0.220	1.840	0.016	0.180	0.280	0.280	0.280	0.280	0.280	14.00	22.0	3.40	3.40	3.40	3.40	3.40	3.40
03/ 0 40:50 45 50	1.20	0.260	1.180	0.018	0.180	0.390	0.390	0.390	0.390	0.390	18.30	19.0	3.60	3.60	3.60	3.60	3.60	3.60
Mean 34.7 53.3	1.19	0.247	1.397	0.018	0.187	0.330	0.330	0.330	0.330	0.330	16.43	20.0	3.13	3.13	3.13	3.13	3.13	3.13
Minimum 25 50	1.19	0.220	1.170	0.016	0.180	0.280	0.280	0.280	0.280	0.280	14.00	19.0	2.40	2.40	2.40	2.40	2.40	2.40
Maximum 45 60	1.20	0.260	1.840	0.020	0.200	0.390	0.390	0.390	0.390	0.390	18.30	22.0	3.60	3.60	3.60	3.60	3.60	3.60
St.dev. 10.0 5.8	0.42	0.01	0.023	0.002	0.012	0.056	0.056	0.056	0.056	0.056	2.21	1.7	0.64	0.64	0.64	0.64	0.64	0.64
Count 3 3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Sample.No 01 :  
 Whole Soft Body : DDTEP = p,p'-DDE + p,p'-DDT  
 Sample.No 02 :  
 Whole Soft Body : DDTEP = p,p'-DDE + p,p'-DDT  
 Sample.No 03 :  
 Whole Soft Body : DDTEP = p,p'-DDE + p,p'-DDT

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **35A Mølen**, Latitude: 59°29.20N, Longitude: 10°30.10E.  
 Catch,date : **841017**, Count: 158, Sample type: **Bulked**.

. Analytical Lab. Analysis Code. Detection Limit. Samp/Shell-length -wght No of Repl. Min:Max,Mean mean shell no. mm:mm mm g	SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF	
	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
	0.010	0.010	0.010	0.010	0.010	0.040	0.040	0.040	0.040	0.040	0.020	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	Fat %		Cu ppm		Hg ppm		Mn ppm		Pb ppm		Zn ppm		PCB ppb		DDTEP ppb		DDTEP ppb		DDTEP ppb	
	w.wt		w.wt		w.wt		w.wt		w.wt		w.wt		w.wt		w.wt		w.wt		w.wt	
01/ 0 20:30 25 1.10 58	1.40	0.210	0.203	0.014	0.017	0.700	0.700	0.700	0.700	0.700	0.040	24.00	40.0	3.80	3.80	3.80	3.80	3.80	3.80	3.80
02/ 0 30:40 35 3.60 50	1.19	0.200	0.200	0.010	0.010	0.580	0.580	0.580	0.580	0.580	0.020	16.10	27.0	2.90	2.90	2.90	2.90	2.90	2.90	2.90
03/ 0 40:50 44 6.90 50	1.60	0.200	0.200	0.016	0.016	0.500	0.500	0.500	0.500	0.500	0.050	17.20	19.0	4.10	4.10	4.10	4.10	4.10	4.10	4.10
Mean 34.7 3.87 52.7	1.40	0.203	0.203	0.014	0.014	0.593	0.593	0.593	0.593	0.593	0.037	19.10	28.7	3.60	3.60	3.60	3.60	3.60	3.60	3.60
Minimum 25 1.10 50	1.19	0.200	0.200	0.010	0.010	0.500	0.500	0.500	0.500	0.500	0.020	16.10	19.0	2.90	2.90	2.90	2.90	2.90	2.90	2.90
Maximum 44 6.90 58	1.60	0.210	0.210	0.017	0.017	0.700	0.700	0.700	0.700	0.700	0.050	24.00	40.0	4.10	4.10	4.10	4.10	4.10	4.10	4.10
St.dev. 9.5 2.91 4.6	0.81	0.006	0.006	0.004	0.004	0.101	0.101	0.101	0.101	0.101	0.015	4.28	10.6	0.62	0.62	0.62	0.62	0.62	0.62	0.62
Count 3 3 3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

s/q(6) ! Suspect value(s)

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **35A Mølen**, Latitude: 59°29.20N, Longitude: 10°30.10E.  
 Catch,date : **851017**, Count: 146, Sample type: **Bulked**.  
 Comment : BLUE MUSSEL DRY WEIGHTS ARE BY 'FREEZE DRYING' WHICH IS ABOUT 2% HIGHER THAN 105 DEG. C DRIED SAMPLES (N=10) . WET WEIGHT VALUES RECALCULATED FROM FREEZE DRIED BASIS ARE ABOUT 10% HIGHER THAN VALUES RECALCULATED FROM A 105 DEG. C DRIED SAMPLE

Analytical Lab.		=>		SIIF		SIIF		SIIF		SIIF		Σ(*)		SIIF	
Analysis Code.		=>		130		120		132		130		132		111	
Detection Limit.		=>		0.010		0.010		0.040		0.020		0.40		0.20	
Samp/	Shell-length	-wght	No of	Fat		Mn		Pb		Zn		PCB		DD Σ4 HCB	
Repl.	Min:Max,Mean	mm	mm	%		ppm		ppm		ppm		ppb		ppb	
no.	mm:mm	mm	g	%		d.wt		d.wt		d.wt		w.wt		w.wt	
01/ 0	20:29	25	0.90	62	1.80	4.140	0.073	7.880	1.520	142.00	<11.0	2.00	2.00	2.00	0.60
02/ 0	30:39	34	2.30	38	1.40	0.990	0.089	3.929	1.060	75.90	26.0	1.00	1.00	1.00	0.80
03/ 0	40:49	46	5.80	46	1.80	1.170	0.084	3.830	1.800	73.10	15.0	2.00	2.00	2.00	0.70
Mean	35.0	3.00	48.7		1.67	2.100	0.082	5.213	1.460	97.00	<<17.3	1.67	1.67	1.67	0.70
Minimum	25	0.90	38		1.40	0.990	0.073	3.830	1.060	73.10	<11.0	1.00	1.00	1.00	0.60
Maximum	46	5.80	62		1.80	1.440	0.089	7.880	1.800	142.00	26.0	2.00	2.00	2.00	0.80
St.dev.	10.5	2.52	12.2		0.23	1.769	0.008	2.310	0.374	39.00	~7.8	0.58	0.58	0.58	0.10
Count	3	3	3		3	3	3	3	3	3	3	3	3	3	3

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **35A Mølen**, Latitude: 59°29.20N, Longitude: 10°30.10E.  
 Catch,date : **861020**, Count: 117, Sample type: **Bulked**.

Analytical Lab.		=>		NIVA		NIVA		NIVA		NIVA		NIVA		Σ(*)		SIIF		SIIF	
Analysis Code.		=>		312		311		310		312		311		111		111		111	
Detection Limit.		=>		0.030		0.150		0.010		0.150		3.00		0.50		3.00		5000.0	
Samp/	Shell-length	-wght	No of	Fat		Cu		Hg		Pb		Zn		PCB		DD Σ4 HCHG HC Σ2 HCB EPOCL			
Repl.	Min:Max,Mean	mm	mm	%		ppm		ppm		ppm		ppm		ppb		ppb		ppb	
no.	mm:mm	mm	g	%		d.wt		d.wt		d.wt		d.wt		w.wt		w.wt		w.wt	
01/ 0	20:29	25	0.80	60	1.30	1.380	8.060	0.070	4.160	91.70	22.0	1.60	1.60	<3.00	<3.00	0.10	0.10	0.10	570.0
02/ 0	30:39	34	1.60	50	1.00	1.300	8.000	0.170	5.100	89.80	20.0	1.60	1.60	<3.00	<3.00	0.20	0.20	0.20	170.0
03/ 0	40:47	43	4.00	7	1.40	1.040	8.520	0.200	3.160	72.60	miss	miss	miss	miss	miss	miss	miss	miss	miss
Mean	34.0	2.13	39.0		1.23	1.240	8.060	0.147	4.140	84.70	21.0	1.60	1.60	<3.00	<3.00	0.15	0.15	0.15	370.0
Minimum	25	0.80	7		1.00	1.040	8.060	0.070	3.160	72.60	20.0	1.60	1.60	<3.00	<3.00	0.10	0.10	0.10	170.0
Maximum	43	4.00	60		1.40	1.380	8.060	0.200	5.100	91.70	22.0	1.60	1.60	<3.00	<3.00	0.20	0.20	0.20	570.0
St.dev.	9.0	1.67	28.2		0.21	0.178	0.068	0.970	1.4	10.52	1.4	0.00	0.00	~0.00	~0.00	0.07	0.07	0.07	282.8
Count	3	3	3		3	3	i1	3	3	3	2	2	2	2	2	2	2	2	2

s/q (2) ! Suspect value(s)  
 i (1) ! Suspect or ambiguous basis-value(s) ignored in statistics.  
 miss(5) ! Missing value.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **35A Mølen**, Latitude: 59°29.20N, Longitude: 10°30.10E.  
 Catch,date : **871105**, Count: 148, Sample type: **Bulked**.

Analytical Lab.	=>																												
	Analysis Code		Detection Limit		Shell-length -weight No of		Mean		NIVA		SIIF		Σ(*)		SIIF														
Repl. no.	Min:	Max:	Mean	mm	g	Dry %	Fat %	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppm	PCB ppb	CB52 ppb	SIIF w.wt	Σ(*) w.wt	CB Σ7 ppb	Σ(*) w.wt	CB Σ7 ppb	Σ(*) w.wt	CB Σ7 ppb	Σ(*) w.wt	CB Σ7 ppb	Σ(*) w.wt	CB Σ7 ppb	Σ(*) w.wt	CB Σ7 ppb	Σ(*) w.wt	
01/0	20:29	26	1.10	48	1.02	19.50	2.00	4.990	0.590	0.050	1.280	89.50	29.0	1.90	1.30	0.60	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
02/0	30:39	35	2.30	50	2.65	20.50	2.10	4.890	0.520	0.050	1.270	68.40	29.0	2.30	1.40	0.50	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
03/0	40:48	44	4.10	50	5.39	21.40	2.29	4.820	0.460	0.050	1.170	65.60	25.0	1.70	1.20	0.50	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Mean	35.0	2.50	49.3		3.02	20.47	2.13	4.900	0.523	0.050	1.240	74.50	27.7	1.97	1.30	0.53	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	
Minimum	26	1.10	48		1.02	19.50	2.00	4.820	0.460	0.050	1.170	65.60	25.0	1.70	1.20	0.50	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	
Maximum	44	4.10	50		5.39	21.40	2.29	4.990	0.590	0.050	1.280	89.50	29.0	2.30	1.40	0.60	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	
St.dev.	9.0	1.51	1.2		2.21	0.95	0.15	0.065	0.085	0.000	0.061	13.07	2.3	0.31	0.10	0.06	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
Count	3	3	3		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **35A Mølen**, Latitude: 59°29.20N, Longitude: 10°30.10E.  
 Catch,date : **881103**, Count: 203, Sample type: **Bulked**.

Analytical Lab.	=>																										
	Analysis Code		Detection Limit		Shell-length -weight No of		Mean		NIVA		SIIF		Σ(*)		SIIF												
Repl. no.	Min:	Max:	Mean	mm	g	Dry %	Fat %	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppm	PCB ppb	CB28 ppb	SIIF w.wt	Σ(*) w.wt	CB Σ7 ppb	Σ(*) w.wt	CB Σ7 ppb	Σ(*) w.wt	CB Σ7 ppb	Σ(*) w.wt	CB Σ7 ppb	Σ(*) w.wt	CB Σ7 ppb	Σ(*) w.wt	
01/0	21:29	26	0.60	99	0.65	17.70	1.50	6.170	0.780	0.320	1.220	83.50	10.0	0.60	0.30	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
02/0	30:39	34	1.60	54	1.67	17.90	1.51	6.580	0.180	0.180	1.210	81.50	11.0	0.50	0.30	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
03/0	40:49	45	4.40	50	4.63	20.30	1.76	6.570	0.130	0.130	0.990	80.10	11.0	0.60	0.40	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Mean	35.0	2.20	67.7		2.32	18.63	1.59	6.670	0.210	0.210	1.140	81.70	10.7	0.57	0.33	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	
Minimum	26	0.60	50		0.65	17.70	1.50	6.570	0.130	0.130	0.990	80.10	10.0	0.50	0.30	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	
Maximum	45	4.40	99		4.63	20.30	1.76	6.780	0.320	0.320	1.220	83.50	11.0	0.60	0.40	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	
St.dev.	9.5	1.97	27.2		2.07	1.45	0.15	0.105	0.998	0.098	0.130	1.71	0.6	0.06	0.06	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	
Count	3	3	3		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	

Sample.No 01 :  
 Whole Soft Body : Dry weight determination for chlorinated hydrocarbon subsample was 15.85%  
 Sample.No 02 :  
 Whole Soft Body : Dry weight determination for chlorinated hydrocarbon subsample was 16.53%  
 Sample.No 03 :  
 Whole Soft Body : Dry weight determination for chlorinated hydrocarbon subsample was 18.62%





Tab.width cont'd MYTI EDU, SB, J26, 35A Mølén, 901107.

Analytical Lab.	SIIF
. Analysis Code.	605
. Detection Limit.	40.0
Samp/Shell-length - weight No of	EPOCL
Repl. Min:Max,Mean mean shell	ppb
no. mm:mm mm g	w.wt
01/ 0 20:29 25 1.00 100	460.0
02/ 0 30:39 35 2.50 50	340.0
03/ 0 40:49 45 4.40 50	230.0
Mean	343.3
Minimum	25 1.00 50 230.0
Maximum	45 4.40 100 460.0
St.dev.	10.0 1.70 28.9 115.0
Count	3 3 3

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: J26 Oslofjorden, Tissue : Whole SOFT BODY .  
 Locality : 35A Mølén, Latitude: 59°29.20N, Longitude: 10°30.10E.  
 Catch,date : 911009, Count: 200, Sample type: Bulked.

Analytical Lab.	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF
. Analysis Code.	311	311	311	311	311	311	311	311	311	311	311	311	311	311	311	311	311	311	311	311
. Detection Limit.	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
Samp/Shell-length - weight No of	Ni	Ni	Ni	Ni	Ni	Ni	Ni	Ni	Ni	Ni	Ni	Ni	Ni	Ni	Ni	Ni	Ni	Ni	Ni	Ni
Repl. Min:Max,Mean mean shell	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
no. mm:mm mm g	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 20:29 25 1.10 100	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80
02/ 0 30:39 35 2.70 50	23.80	23.80	23.80	23.80	23.80	23.80	23.80	23.80	23.80	23.80	23.80	23.80	23.80	23.80	23.80	23.80	23.80	23.80	23.80	23.80
03/ 0 40:49 44 4.80 50	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20
Mean	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
Minimum	25 1.10 50	1.740	1.740	1.740	1.740	1.740	1.740	1.740	1.740	1.740	1.740	1.740	1.740	1.740	1.740	1.740	1.740	1.740	1.740	1.740
Maximum	44 4.80 100	1.670	1.670	1.670	1.670	1.670	1.670	1.670	1.670	1.670	1.670	1.670	1.670	1.670	1.670	1.670	1.670	1.670	1.670	1.670
St.dev.	9.5 1.86 28.9	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Count	3 3 3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Tab.width cont'd MYTI EDU, SB, J26, 35A Mølén, 911009.

Analytical Lab.	SIIF
. Analysis Code.	605
. Detection Limit.	130.0
Samp/Shell-length - weight No of	EPOCL
Repl. Min:Max,Mean mean shell	ppb
no. mm:mm mm g	w.wt
01/ 0 20:29 25 1.10 100	490.0
02/ 0 30:39 35 2.70 50	350.0
03/ 0 40:49 44 4.80 50	450.0
Mean	430.0
Minimum	25 1.10 50 350.0
Maximum	44 4.80 100 490.0
St.dev.	9.5 1.86 28.9 72.1
Count	3 3 3



Species : **MYTI EDU**, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **36A Fårder**, Latitude: 59°01.60N, Longitude: 10°31.70E.  
 Catch,date : **830301**, Count: 87, Sample type: **Bulked**.

Analytical Lab. Analysis Code. Detection Limit.	=> => =>	SIIF	
		130	120
Shell-length -wght No of		0.010	0.010
Repl. Min:Max,Mean mean shell		<b>Cd Hg</b>	
no. mm:mm mm		ppm	ppm
		w.wt	w.wt
01/ 0 30:40 35	37	0.150	0.014
02/ 0 20:30 25	50	0.120	0.024
Mean	30.0	0.135	0.019
Minimum	25	0.120	0.014
Maximum	35	0.150	0.024
St.dev.	7.1	0.021	0.007
Count	2	2	2
Dry %	.		
Fat %	.		

Sample.No 01 :  
 Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT.  
 Sample.No 02 :  
 Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT.

Species : **MYTI EDU**, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **36A Fårder**, Latitude: 59°01.60N, Longitude: 10°31.70E.  
 Catch,date : **831006**, Count: 156, Sample type: **Bulked**.  
 Comment : **GROWING ON BUOY**

Analytical Lab. Analysis Code. Detection Limit.	=> => =>	SIIF		SIIF		SIIF		SIIF		SIIF		Σ (*)	
		130	120	130	130	131	111	131	111	0.50	111	0.50	!
Shell-length -wght No of		0.010	0.010	0.020	0.020	0.40	5.00	5.00	5.00				
Repl. Min:Max,Mean mean shell		<b>Cu Hg Ni Pb Zn</b>		<b>Pb Ni Pb Zn</b>		<b>Pb Ni Pb Zn</b>		<b>Pb Ni Pb Zn</b>		<b>Pb Ni Pb Zn</b>		<b>PCB DD Σ 4 HCB</b>	
no. mm:mm mm		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 20:30 25	60	0.170	0.013	0.170	0.170	13.10	8.1	13.10	8.1	1.50	1.50	1.50	3.30
02/ 0 30:40 35	50	0.180	0.011	0.210	0.140	15.10	11.0	15.10	11.0	1.80	1.80	1.80	3.20
03/ 0 40:50 44	46	0.160	0.011	0.180	0.160	13.40	10.0	13.40	10.0	1.80	1.80	1.80	2.60
Mean	34.7	0.170	0.012	0.187	0.157	13.87	9.7	13.87	9.7	1.70	1.70	1.70	3.03
Minimum	25	0.160	0.011	0.170	0.140	13.10	8.1	13.10	8.1	1.50	1.50	1.50	2.60
Maximum	44	0.180	0.013	0.210	0.170	15.10	11.0	15.10	11.0	1.80	1.80	1.80	3.30
St.dev.	9.5	0.010	0.001	0.021	0.015	1.08	1.5	1.08	1.5	0.17	0.17	0.17	0.38
Count	3	3	3	3	3	3	3	3	3	3	3	3	3

Sample.No 01 :  
 Whole Soft Body : DDTEP = p,p'-DDE + p,p'-DDT  
 Sample.No 02 :  
 Whole Soft Body : DDTEP = p,p'-DDE + p,p'-DDT  
 Sample.No 03 :  
 Whole Soft Body : DDTEP = p,p'-DDE + p,p'-DDT







Tab.width cont'd MYTI EDU, SB, J26, 36A Fårder, 891018.

Analysis Code	SIIF	SIIF
605	605	605
Detection Limit	170.0	40.0
Samp/ Shell-length - weight	EFOCI EFOCI	
Repl. Min:Max,Mean	ppb	ppb
no. mm:mm	W.Wt	W.Wt
01/ 0 20:29 25 0.50 100	1700.0	1700.0
02/ 0 31:39 35 1.30 50	200.0	200.0
03/ 0 40:49 43 2.10 50	140.0	140.0
03/99	2000.0	2000.0
Mean	34.3	1.30
Minimum	25	0.50
Maximum	43	2.10
St.dev.	9.0	0.80
Count	3	3

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample area: J26 Oslofjorden, Tissue : Whole SOFT BODY.  
 Locality : 36A Fårder, Latitude: 59°01.60N, Longitude: 10°31.70E.  
 Catch, date : 901106, Count: 200, Sample type: Bulked.

Analysis Code	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF					
605	605	605	605	605	605	605	605	605	605	605	605	605	605	605	605	605	605	605	605	605	605	605		
Samp/ Shell-length - weight	EFOCI EFOCI																							
Repl. Min:Max,Mean	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
no. mm:mm	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	
01/ 0 20:29 25 0.90 100	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
02/ 0 30:39 35 2.20 50	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
03/ 0 40:49 45 3.80 50	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Mean	35.0	2.30	66.7	480.0	330.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0
Minimum	25	0.90	100	350.0	250.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0
Maximum	45	3.80	100	480.0	330.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0
St.dev.	10.0	1.45	28.9	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Tab.width cont'd MYTI EDU, SB, J26, 36A Fårder, 901106.

Analysis Code	SIIF	SIIF
605	605	605
Detection Limit	40.0	40.0
Samp/ Shell-length - weight	EFOCI EFOCI	
Repl. Min:Max,Mean	ppb	ppb
no. mm:mm	W.Wt	W.Wt
01/ 0 20:29 25 0.90 100	480.0	480.0
02/ 0 30:39 35 2.20 50	390.0	390.0
03/ 0 40:49 45 3.80 50	330.0	330.0
Mean	35.0	2.30
Minimum	25	0.90
Maximum	45	3.80
St.dev.	10.0	1.45
Count	3	3









Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **71A Bjørkøya (Risøyodd.)**, Latitude: 59°01.40N, Longitude: 09°45.30E.  
 Catch,date : **810317**, Count: 50, Sample type: **Homogenate**.  
 Comment : Station name : **Bjørkøya (Risøyodd.)**

Analytical Lab.	=>	SIIF	SIIF	SIIF
Analysis Code.	=>	130	120	110
Detection Limit.	=>	0.010	0.010	10.0
Samp/ Shell-length -wgt No of		<b>Fat</b>	<b>Hg</b>	<b>PCB</b>
Repl. Min:Max,Mean mean shell		%	ppm	ppb
no. mm:mm mm g		w.wt	w.wt	w.wt
01/ 0	50	1.200	0.090	40.0

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **71A Bjørkøya (Risøyodd.)**, Latitude: 59°01.40N, Longitude: 09°45.30E.  
 Catch,date : **821110**, Count: 150, Sample type: **Bulked**.  
 Comment : Station name : **Bjørkøya (Risøyodd.)**

Analytical Lab.	=>	SIIF	SIIF	SIIF
Analysis Code.	=>	130	120	111
Detection Limit.	=>	0.010	0.010	5.00
Samp/ Shell-length -wgt No of		<b>Fat</b>	<b>Hg</b>	<b>PCB</b>
Repl. Min:Max,Mean mean shell		%	ppm	ppb
no. mm:mm mm g		w.wt	w.wt	w.wt
01/ 0	50	2.00	0.440	0.098
02/ 0	50	1.70	0.260	0.059
03/ 0	50	1.50	0.270	0.058
Mean	35.7	1.73	0.323	0.072
Minimum	26	1.50	0.260	0.058
Maximum	46	2.00	0.440	0.098
St.dev.	10.0	0.25	0.101	0.023
Count	3	3	3	3

Sample.No 01 :  
 Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.  
 Sample.No 02 :  
 Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.  
 Sample.No 03 :  
 Whole Soft Body : DETECTION LIMITS: HG = 0.03 MG/KG DRY WT. DETECTION LIMITS: CD = 0.05 MG/KG DRY WT. DETECTION LIMITS: PCB= 0.5 UG/KG WET WT.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **71A Bjørkøya (Risøyodd.)**, Latitude: 59°01.40N, Longitude: 09°45.30E.  
 Catch,date : **831109**, Count: 152, Sample type: **Bulked**.  
 Comment : Station name : Bjørkøya (Risøyodd.)

Analytical Lab. Analysis Code. Detection Limit. Shell-length -wght No of Repl. Min:Max,Mean mean shell no. mm:mm mm g	SIIF														Σ(*)		Σ(*)	
	Fat %	Dry %	Cd ppm w.wt	Cu ppm w.wt	Hg ppm w.wt	Ni ppm w.wt	Pb ppm w.wt	Zn ppm w.wt	SIIF 130	SIIF 120	SIIF 130	SIIF 130	SIIF 131	SIIF 111	SIIF 111	SIIF 111	SIIF 111	SIIF 111
01/ 0 20:30 25 54	0.48	0.48	0.270	1.120	0.044	0.370	0.270	0.270	0.044	0.370	0.270	0.270	16.80	8.2	1.20	1.20	1.20	1.80
02/ 0 30:40 36 49	0.64	0.64	0.330	1.000	0.050	0.240	0.240	0.240	0.050	0.240	0.240	0.240	14.30	8.5	1.40	1.40	1.40	1.80
03/ 0 40:50 46 49	0.79	0.79	0.320	0.990	0.049	0.240	0.310	0.310	0.049	0.240	0.310	0.310	15.70	10.0	1.70	1.70	1.70	1.20
Mean	0.64	0.64	0.307	1.037	0.048	0.283	0.273	0.273	0.048	0.283	0.273	0.273	15.60	8.9	1.43	1.43	1.43	1.60
Minimum	0.48	0.48	0.270	0.990	0.044	0.240	0.240	0.240	0.044	0.240	0.240	0.240	14.30	8.2	1.20	1.20	1.20	1.20
Maximum	0.79	0.79	0.330	1.120	0.050	0.370	0.310	0.310	0.050	0.370	0.310	0.310	16.80	10.0	1.70	1.70	1.70	1.80
St.dev.	0.75	0.16	0.032	0.072	0.003	0.075	0.035	0.035	0.003	0.075	0.035	0.035	1.25	1.0	0.25	0.25	0.25	0.35
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Sample.No 01 :  
 Whole Soft Body : DDTEP = p,p'-DDE + p,p'-DDT  
 Sample.No 02 :  
 Whole Soft Body : DDTEP = p,p'-DDE + p,p'-DDT  
 Sample.No 03 :  
 Whole Soft Body : DDTEP = p,p'-DDE + p,p'-DDT

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **71A Bjørkøya (Risøyodd.)**, Latitude: 59°01.40N, Longitude: 09°45.30E.  
 Catch,date : **841108**, Count: 159, Sample type: **Bulked**.  
 Comment : Station name : Bjørkøya (Risøyodd.)

Analytical Lab. Analysis Code. Detection Limit. Shell-length -wght No of Repl. Min:Max,Mean mean shell no. mm:mm mm g	SIIF														Σ(*)		Σ(*)	
	Fat %	Dry %	Cd ppm w.wt	Cu ppm w.wt	Hg ppm w.wt	Mn ppm w.wt	Pb ppm w.wt	Zn ppm w.wt	SIIF 130	SIIF 120	SIIF 132	SIIF 132	SIIF 130	SIIF 132	SIIF 111	SIIF 111	SIIF 111	SIIF 111
01/ 0 20:30 25 59	0.60	16.20	0.320	0.320	0.850	0.035	2.750	2.750	0.320	0.850	0.035	2.750	0.040	21.90	22.0	3.30	3.30	1.10
02/ 0 30:40 35 50	0.90	16.40	0.340	0.340	0.860	0.045	3.950	3.950	0.340	0.860	0.045	3.950	0.030	20.50	20.0	2.40	2.40	1.70
03/ 0 40:50 45 50	1.20	16.09	0.300	0.300	0.660	0.039	2.200	2.200	0.300	0.660	0.039	2.200	0.040	18.70	19.0	2.50	2.50	6.30
Mean	0.90	16.23	0.320	0.320	0.790	0.040	2.967	2.967	0.320	0.790	0.040	2.967	0.037	20.37	20.3	2.73	2.73	3.03
Minimum	0.60	16.09	0.300	0.300	0.660	0.035	2.200	2.200	0.300	0.660	0.035	2.200	0.030	18.70	19.0	2.40	2.40	1.10
Maximum	1.20	16.40	0.340	0.340	0.860	0.045	3.950	3.950	0.340	0.860	0.045	3.950	0.040	21.90	22.0	3.30	3.30	6.30
St.dev.	0.30	0.16	0.020	0.020	0.113	0.005	0.895	0.895	0.020	0.113	0.005	0.895	0.006	1.60	1.5	0.49	0.49	2.84
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

s/q(6) ! Suspect value(s)

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **71A Bjørkøya (Risøyodd.)**, Latitude: 59°01.40N, Longitude: 09°45.30E.  
 Catch,date : **851024**, Count: 106, Sample type: **Bulked**.  
 Comment : Station name : **Bjørkøya (Risøyodd.)** ABOUT 2% HIGHER THAN 105 DEG. C DRIED SAMPLES (N=10) . WET WEIGHT VALUES RECALCULATED FROM FREEZE DRIED BASIS ARE ABOUT 10% HIGHER THAN VALUES RECALCULATED FROM A 105 DEG. C DRIED SAMPLE

Analytical Lab. => Analysis Code. => Detection Limit. =>	SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF	
	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF
Sample/ Shell-length -wght No of	130	120	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132
Repl. Min:Max,Mean mean shell	0.010	0.010	0.040	0.020	0.040	0.020	0.040	0.020	0.040	0.020	0.040	0.020	0.040	0.020	0.040	0.020	0.040	0.020
no. mm:mm	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt
01/ 0 20:29 25 1.00 56	2.40	1.370	0.170	9.390	0.970	78.50	35.0	2.00	2.00	2.00	14.00	3.00	3.00	3.00	30.00			
02/ 0 30:39 35 2.40 50	1.90	1.470	0.280	9.960	1.050	75.60	32.0	3.00	3.00	3.00								
Mean	2.15	1.420	0.225	9.675	1.010	77.05	33.5	2.50	2.50	2.50	22.00							
Minimum	1.90	1.370	0.170	9.390	0.970	75.60	32.0	2.00	2.00	2.00	14.00							
Maximum	2.40	1.470	0.280	9.960	1.050	78.50	35.0	3.00	3.00	3.00	30.00							
St.dev.	7.1	0.99	4.2															
Count	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Sample.No 01 : Sample for 4-5cm has been misplaced. By chance a parallel sample was collected (for PAH analyses) but does not strictly meet JMG requirements (n=28, 40-52mm), however, JMG contaminant analyses carried out, results on request (rg 11.5.93).

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **71A Bjørkøya (Risøyodd.)**, Latitude: 59°01.40N, Longitude: 09°45.30E.  
 Catch,date : **861021**, Count: 152, Sample type: **Bulked**.  
 Comment : Station name : **Bjørkøya (Risøyodd.)**

Analytical Lab. => Analysis Code. => Detection Limit. =>	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA	
	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
Sample/ Shell-length -wght No of	312	311	310	312	312	311	311	311	311	311	311	311	311	311	311	311	311	311
Repl. Min:Max,Mean mean shell	0.030	0.150	0.010	0.150	0.150	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
no. mm:mm	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt	ppm	d.wt
01/ 0 20:29 24 1.10 59	2.170	17.400	0.290	2.260	2.260	119.00	16.0	1.30	1.30	1.30	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
02/ 0 30:39 35 2.60 43	1.850	14.000	0.210	2.060	2.060	111.00	11.0	1.00	1.00	1.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
03/ 0 40:49 43 4.60 50	1.50	miss	miss	miss	miss	miss	12.0	0.90	0.90	0.90	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
Mean	2.010	15.700	0.250	2.160	2.160	115.00	13.0	1.07	1.07	1.07	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
Minimum	1.850	14.000	0.210	2.060	2.060	111.00	11.0	0.90	0.90	0.90	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
Maximum	2.170	17.400	0.290	2.260	2.260	119.00	16.0	1.30	1.30	1.30	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
St.dev.	9.5	1.76	8.0				2.6	0.21	0.21	0.21	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

s/q (5) ! Suspect value(s)  
 miss (5) ! Missing value.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **71A Bjørkøya (Risøyodd.)**, Latitude: 59°01.40N, Longitude: 09°45.30E.  
 Catch,date : **871022**, Count: 154, Sample type: **Bulked**.  
 Comment : Station name : **Bjørkøya (Risøyodd.)**

Analytical Lab.	=>	Analysis Code.	=>	Detection Limit.	=>	NIVA		NIVA		NIVA		SIIF		SIIF		Σ(*)		SIIF		Σ(*)		SIIF		SIIF	
						312	310	312	310	311	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
Shell-length	-	mm	mm	mm	mm	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g
Mean	18.00	2.00	0.980	6.080	0.080	1.700	101.00	25.0	111	111	1.30	0.70	2.0	2.0	2.0	2.40	2.40	<5.00	<5.00	<5.00	41.00	320.0	320.0	320.0	
Repl. Min:	17.40	2.00	0.930	6.550	0.120	1.730	99.30	25.0	0.20	0.20	1.20	0.80	2.9	2.9	2.9	2.00	2.00	<5.00	<5.00	<5.00	36.00	280.0	280.0	280.0	
Max:	15.80	1.60	1.630	5.920	0.120	1.760	110.00	19.0	5.00	0.20	0.90	0.60	2.2	2.2	2.2	1.50	1.50	<5.00	<5.00	<5.00	30.00	200.0	200.0	200.0	
St.dev.	1.14	0.23	0.391	0.327	0.023	0.030	5.75	3.5	0.20	0.21	0.14	0.10	0.5	0.5	0.5	0.45	0.45	~0.00	~0.00	~0.00	5.51	61.1	61.1	61.1	
Count	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	

miss(1) ! Missing value.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J26 Oslofjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **71A Bjørkøya (Risøyodd.)**, Latitude: 59°01.40N, Longitude: 09°45.30E.  
 Catch,date : **881103**, Count: 211, Sample type: **Bulked**.  
 Comment : Station name : **Bjørkøya (Risøyodd.)**

Analytical Lab.	=>	Analysis Code.	=>	Detection Limit.	=>	NIVA		NIVA		NIVA		SIIF		SIIF		Σ(*)		SIIF		Σ(*)		SIIF		SIIF	
						312	310	312	310	311	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
Shell-length	-	mm	mm	mm	mm	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g
Mean	11.70	0.74	1.930	8.740	0.270	1.620	135.00	8.4	0.30	<0.10	<0.10	<0.10	1.00	1.00	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Repl. Min:	10.80	0.68	2.110	8.430	0.400	1.890	169.00	<5.0	<0.10	<0.10	<0.10	<1.20	1.20	1.20	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Max:	10.90	0.75	2.150	8.030	0.340	1.810	176.00	7.2	0.10	<0.10	<0.10	<1.00	1.00	1.00	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
St.dev.	0.49	0.04	0.117	0.356	0.065	0.139	21.93	~1.7	~0.12	~0.00	~0.00	0.12	0.12	0.12	~0.4	~0.4	~0.4	~0.4	~0.4	~0.4	~0.12	~0.12	~0.12	~0.12	~0.12
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Sample.No 01 :  
 Whole Soft Body : Dry weight determination for chlorinated hydrocarbon subsample was 11.75%  
 Sample.No 02 :  
 Whole Soft Body : Dry weight determination for chlorinated hydrocarbon subsample was 10.67%  
 Sample.No 03 :  
 Whole Soft Body : Dry weight determination for chlorinated hydrocarbon subsample was 10.52%





Tab.width cont'd MYTI EDU, SB, J26, 71A Bjørkøya (Risøyodd.), 901105.

Analytical Lab.	=>	SIIF
Analysis Code.	=>	605
Detection Limit.	=>	40.0
Samp/Shell-length-weight		EPOCL
Repl. Min:Max,Mean		ppb
no. mm:mm	g	w.Wt
01/ 0	20:29 26	1.00 100
02/ 0	30:39 35	2.20 50
03/ 0	40:49 44	4.30 50
Mean	35.0	2.50 66.7
Minimum	26	1.00 50
Maximum	44	4.30 100
St.dev.	9.0	1.67 28.9
Count	3	3

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample area: J26 Oslofjorden, Tissue : Whole SOFT BODY.  
 Locality : 71A Bjørkøya (Risøyodd.), Latitude: 59°01.40N, Longitude: 09°45.40E.  
 Catch, date : 9111008, Count: 99, Sample type: Bulked.

Analytical Lab.	=>	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF
Analysis Code.	=>	605	605	605	605	605	605	605	605	605	605	605	605	605	605	605	605
Detection Limit.	=>	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Samp/Shell-length-weight		EPOCL	EPOCL	EPOCL	EPOCL	EPOCL	EPOCL	EPOCL	EPOCL	EPOCL	EPOCL	EPOCL	EPOCL	EPOCL	EPOCL	EPOCL	EPOCL
Repl. Min:Max,Mean		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
no. mm:mm		w.Wt	w.Wt	w.Wt	w.Wt	w.Wt	w.Wt	w.Wt	w.Wt	w.Wt	w.Wt	w.Wt	w.Wt	w.Wt	w.Wt	w.Wt	w.Wt
01/ 0	20:29 25	1.10 99	0.82	19.30	2.40	0.210	1.980	0.028	0.140	28.10	12.0	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
02/ 0	30:39 34	2.60 50	2.16	18.80	2.20	0.190	1.770	0.025	0.140	23.70	13.0	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
03/ 0	40:49 45	5.20 50	4.08	16.50	1.70	0.280	1.840	0.027	0.130	23.60	11.0	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Mean	34.7	2.97 66.3	2.35	18.20	2.10	0.227	1.863	0.027	0.137	25.13	12.0	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Minimum	25	1.10 50	0.82	16.50	1.70	0.190	1.770	0.025	0.130	23.60	11.0	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Maximum	45	5.20 99	4.08	19.30	2.40	0.280	1.980	0.028	0.140	28.10	13.0	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
St.dev.	10.0	2.07 28.3	1.64	1.49	0.36	0.047	0.107	0.002	0.006	2.57	1.0	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Tab.width cont'd MYTI EDU, SB, J26, 71A Bjørkøya (Risøyodd.), 911008.

Analytical Lab.	=>	SIIF
Analysis Code.	=>	605
Detection Limit.	=>	130.0
Samp/Shell-length-weight		EPOCL
Repl. Min:Max,Mean		ppb
no. mm:mm	g	w.Wt
01/ 0	20:29 25	1.10 99
02/ 0	30:39 34	2.60 50
03/ 0	40:49 45	5.20 50
Mean	34.7	2.97 66.3
Minimum	25	1.10 50
Maximum	45	5.20 99
St.dev.	10.0	2.07 28.3
Count	3	3









Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J99 Undefined**, Tissue : **Whole SOFT BODY**.  
 Locality : **79A Gjerdsvoldøyen east**, Latitude: 58°24.80N, Longitude: 08°45.30E.  
 Catch,date : **901104**, Count: 200, Sample type: **Bulked**.  
 Comment : Station name : Gjerdsvoldøyen east

Samp/ Repl. no.	Shell-length mm	-length mm	-weight g	No of mean shell	NIVA			NIVA			NIVA									
					312	311	310	312	311	310	312	311	310							
01/ 0	20:29	25	1.10	100																
02/ 0	30:39	35	2.80	50																
03/ 0	40:49	44	5.40	50																
Mean	34.7	3.10	66.7																	
Minimum	25	1.10	50																	
Maximum	44	5.40	100																	
St.dev.	9.5	2.17	28.9																	
Count	3	3	3																	

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J99 Undefined**, Tissue : **Whole SOFT BODY**.  
 Locality : **79A Gjerdsvoldøyen east**, Latitude: 58°24.80N, Longitude: 08°45.30E.  
 Catch,date : **911007**, Count: 142, Sample type: **Bulked**.

Samp/ Repl. no.	Shell-length mm	-length mm	-weight g	No of mean shell	NIVA			NIVA			NIVA									
					312	311	310	312	311	310	312	311	310							
01/ 0	21:29	25	1.10	42																
02/ 0	30:39	34	2.60	50																
03/ 0	40:49	45	5.90	50																
Mean	34.7	3.20	47.3																	
Minimum	25	1.10	42																	
Maximum	45	5.90	50																	
St.dev.	10.0	2.46	4.6																	
Count	3	3	3																	

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J99 Undefined**, Tissue : **Whole SOFT BODY**.  
 Locality : **13A Langøesund**, Latitude: 57°59.80N, Longitude: 07°34.60E.  
 Catch,date : **901104**, Count: 24, Sample type: **Homogenate**.

Samp/ Repl. no.	Shell-length mm	-length mm	-weight g	No of mean shell	NIVA			NIVA			NIVA									
					312	311	310	312	311	310	312	311	310							
01/ 0	65:86	74	27.70	24																
Mean	14.39	14.00																		
Minimum																				
Maximum																				
St.dev.																				
Count																				

Sample.No 01 :  
 Whole Soft Body : Uncertain dry wt.%. Some liquid loss during storage.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J99 Undefined**, Tissue: **Whole SOFT BODY**.  
 Locality : **13A Langøsumd**, Latitude: 57°59.80N, Longitude: 07°34.60E.  
 Catch.date : **9111007**, Count: 139, Sample type: **Bulked**.

Samp/ Repl. no.	Shell-length mm	-weight mm:mm	No of mean shell	Dry %		Fat %		Cd ppm		Cu ppm		Hg ppm		Pb ppm		Zn ppm	
				Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.
01/ 0	21:29	25	1.00	50	17.40	0.180	0.010	0.050	0.010	0.010	0.050	0.010	0.050	0.050	0.050	1.00	311
02/ 0	30:39	35	2.30	33	17.30	0.120	0.140	1.880	0.006	0.200	0.200	22.20					
03/ 0	40:49	45	5.00	32	17.60	0.140	1.980	0.012	0.300	0.300	37.30						
04/ 0	66:95	79	30.60	24	13.55	0.250											
Mean	46.0	9.73	34.8		4.69	0.170	1.610	0.009	0.223	26.87							
Minimum	25	1.00	24		0.53	0.120	1.250	0.006	0.170	21.10							
Maximum	79	30.60	50		13.55	0.250	1.980	0.012	0.300	37.30							
St.dev.	23.5	14.02	10.9		6.02	0.070	0.373	0.003	0.068	9.05							
Count	4	4	4		4	13	4	13	13	13							

s/q(4) ! Suspect value(s)

! (4) ! Suspect or ambiguous basis-value(s) ignored in statistics.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J99 Undefined**, Tissue: **Whole SOFT BODY**.  
 Locality : **14A Aavigen**, Latitude: 58°02.20N, Longitude: 07°13.20E.  
 Catch.date : **901103**, Count: 189, Sample type: **Bulked**.

Samp/ Repl. no.	Shell-length mm	-weight mm:mm	No of mean shell	Dry %		Fat %		Cd ppm		Cu ppm		Hg ppm		Pb ppm		Zn ppm	
				Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.
01/ 0	20:29	26	0.70	89	18.90	1.79	0.100	1.100	0.020	0.260	28.80						
02/ 0	30:39	35	1.40	50	17.60	1.63	0.080	1.200	0.020	0.270	22.80						
03/ 0	40:47	43	2.40	50	17.60	1.52	0.090	0.900	0.010	0.230	21.50						
Mean	34.7	1.50	63.0		1.33	1.65	0.090	1.067	0.017	0.253	24.37						
Minimum	26	0.70	50		0.51	1.52	0.080	0.900	0.010	0.230	21.50						
Maximum	43	2.40	89		2.23	1.79	0.100	1.200	0.020	0.270	28.80						
St.dev.	8.5	0.85	22.5		0.86	0.75	0.14	0.153	0.006	0.021	3.89						
Count	3	3	3		3	3	3	3	3	3	3						

Tab.width cont'd **MYTI EDU, SB, J99, 14A Aavigen, 901103**.

Samp/ Repl. no.	Shell-length mm	-weight mm:mm	No of mean shell	EPOCI	
				ppb	W.Wt
01/ 0	20:29	26	0.70	89	160.0
02/ 0	30:39	35	1.40	50	190.0
03/ 0	40:47	43	2.40	50	140.0
Mean	34.7	1.50	63.0		163.3
Minimum	26	0.70	50		140.0
Maximum	43	2.40	89		190.0
St.dev.	8.5	0.85	22.5		25.2
Count	3	3	3		3

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
Sample area: J99 Undefined, Tissue: Whole SOFT BODY  
Locality : 14A Aavigen, Latitude: 58°02.20N, Longitude: 07°13.20E.  
Catch, date : 911006, Count: 211, Sample type: Bulkred.

Table with columns for Analytical Lab., Analysis Code, Detection Limit, Sample, Shell-length, Weight, Fat, Dry, NIVA, PCB, CB, SIIF, and Sigma(\*) for various elements and contaminants.

Tab.width cont'd MYTI EDU, SB, J99, 14A Aavigen, 911006.

Table with columns for Analytical Lab., Analysis Code, Detection Limit, Sample, Shell-length, Weight, Fat, Dry, NIVA, PCB, CB, SIIF, and Sigma(\*) for various elements and contaminants.

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
Sample area: J99 Undefined, Tissue: Whole SOFT BODY  
Locality : 15A Gåsøy, Latitude: 58°02.60N, Longitude: 06°54.80E.  
Catch, date : 901103, Count: 110, Sample type: Bulkred.

Table with columns for Analytical Lab., Analysis Code, Detection Limit, Sample, Shell-length, Weight, Fat, Dry, NIVA, PCB, CB, SIIF, and Sigma(\*) for various elements and contaminants.





Tab.width cont'd MYTI EDU, SB, J99, 22A Espeværi, west, 901029.

Analytical Lab.	SIIF
Analysis Code.	605
Detection Limit.	40.0
Samp/ Shell-length - weight No of	EPOCL
Repl. Min:Max, Mean mean shell	ppb
no. mm:mm mm g	W.Wt
01/ 0 22:29 26 0.90 100	260.0
02/ 0 30:39 36 2.50 50	220.0
03/ 0 40:48 43 4.90 50	240.0
Mean	240.0
Minimum	220.0
Maximum	260.0
St.dev.	20.0
Count	3

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.

Sample.area: J99 Undefined, Tissue: Whole SOFT BODY.

Locality : 22A Espeværi, west, Latitude: 59°35.20N, Longitude: 05°08.50E.

Catch,date : 910930, Count: 199, Sample type: Bulked.

Comment : Station name : Espeværi, west

Analytical Lab.	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF
Analysis Code.	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
Detection Limit.	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Samp/ Shell-length - weight No of	CB101	CB118	CB138	CB153	CB180	CB 177	CB 180	CB 180	CB 180	CB 180	CB 180	CB 180	CB 180	CB 180	CB 180	CB 180
Repl. Min:Max, Mean mean shell	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
no. mm:mm mm g	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt
01/ 0 20:29 25 1.00 99	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
02/ 0 30:39 35 2.40 50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
03/ 0 40:49 44 4.90 50	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Mean	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Minimum	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Maximum	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
St.dev.	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Tab.width cont'd MYTI EDU, SB, J99, 22A Espeværi, west, 910930.

Analytical Lab.	SIIF
Analysis Code.	605
Detection Limit.	130.0
Samp/ Shell-length - weight No of	EPOCL
Repl. Min:Max, Mean mean shell	ppb
no. mm:mm mm g	W.Wt
01/ 0 20:29 25 1.00 99	270.0
02/ 0 30:39 35 2.40 50	250.0
03/ 0 40:49 44 4.90 50	350.0
Mean	290.0
Minimum	250.0
Maximum	350.0
St.dev.	52.9
Count	3





Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J63 Sør fjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **51A Byrkjenes**, Latitude: 60°05.10N, Longitude: 06°33.10E.  
 Catch,date : **870902**, Count: 146, Sample type: **Bulked**.

.	Analytical Lab.		NIVA		NIVA		NIVA		NIVA	
	Code.	=>	312	311	310	312	311	310	312	311
Shell-length	mm	mm	0.030		0.150		0.010		0.150	
Repl. Min:Max,Mean	mm	mm	ppm		ppm		ppm		ppm	
no.	mm	mm	d.wt		d.wt		d.wt		d.wt	
01/ 0	20:29	25	46.900	10.200	0.240	53.100	353.00			
02/ 0	30:39	34	36.000	5.060	0.220	76.400	378.00			
03/ 0	40:49	44	42.800	7.140	0.290	117.000	440.00			
Mean	34.3	2.33	41.900	7.467	0.250	82.167	390.33			
Minimum	25	1.20	36.000	5.060	0.220	53.100	353.00			
Maximum	44	3.40	46.900	10.200	0.290	117.000	440.00			
St.dev.	9.5	1.10	5.505	2.586	0.036	32.338	44.79			
Count	3	3	3	3	3	3	3			

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J63 Sør fjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **51A Byrkjenes**, Latitude: 60°05.10N, Longitude: 06°33.10E.  
 Catch,date : **881006**, Count: 146, Sample type: **Bulked**.

.	Analytical Lab.		NIVA		NIVA		NIVA		NIVA	
	Code.	=>	312	311	310	312	311	310	312	311
Shell-length	mm	mm	0.030		0.150		0.010		0.150	
Repl. Min:Max,Mean	mm	mm	ppm		ppm		ppm		ppm	
no.	mm	mm	d.wt		d.wt		d.wt		d.wt	
01/ 0	20:29	26	50.900	6.750	0.270	18.700	233.00			
02/ 0	30:39	36	62.400	6.140	0.220	27.300	253.00			
03/ 0	40:49	45	58.200	5.550	0.250	70.500	291.00			
Mean	35.7	1.20	57.167	6.147	0.247	38.833	259.00			
Minimum	26	0.40	50.900	5.550	0.220	18.700	233.00			
Maximum	45	2.10	62.400	6.750	0.270	70.500	291.00			
St.dev.	9.5	0.85	5.819	0.600	0.025	27.759	29.46			
Count	3	3	3	3	3	3	3			

Sample.No 01 :  
 Whole Soft Body : undepurated  
 Sample.No 02 :  
 Whole Soft Body : undepurated  
 Sample.No 03 :  
 Whole Soft Body : undepurated



Tab.width cont'd **MYTI EDU, SB, J63, 52A Eitrheimsneset, 901031.**

Analytical Lab.	⇒	SIIF
Analysis Code.	⇒	605
Detection Limit.	⇒	40.0
Samp/ Shell-length	-	Weight
Repl. Min:Max,Mean	-	mean shell
no. mm:mm	mm	g
01/ 0 23:29	27	0.50
02/ 0 30:39	35	1.00
03/ 0 40:47	42	1.60
Mean	34.7	1.03
Minimum	27	0.50
Maximum	42	1.60
St.dev.	7.5	0.55
Count	3	3

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J63 Sørifjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **52A Eitrheimsneset**, Latitude: 60°05.80N, Longitude: 06°32.20E.  
 Catch,date : **911002**, Count: 136, Sample type: **Bulked**.

Analytical Lab.	⇒	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
Analysis Code.	⇒	312	311	310	312	311	311
Detection Limit.	⇒	0.010	0.050	0.010	0.050	1.00	1.00
Samp/ Shell-length	-	Weight	Fat	Dry	Mean	Cd	Hg
Repl. Min:Max,Mean	-	mean shell	%	%	g	ppm	ppm
no. mm:mm	mm	g	%	%	g	ppm	ppm
01/ 0 21:29	25	0.40	11.700	25.500	0.749	48.900	62.70
02/ 0 30:39	34	0.90	9.610	8.650	0.361	37.500	54.30
03/ 0 40:47	43	1.50	7.440	4.650	0.293	34.700	51.60
Mean	34.0	0.93	9.583	12.933	0.468	40.367	56.20
Minimum	25	0.40	7.440	4.650	0.293	34.700	51.60
Maximum	43	1.50	11.700	25.500	0.749	48.900	62.70
St.dev.	9.0	0.55	2.130	11.065	0.246	7.522	5.79
Count	3	3	3	3	3	3	3

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J63 Sørifjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **52A Eitrheimsneset**, Latitude: 60°05.80N, Longitude: 06°32.20E.  
 Catch,date : **920906**, Count: 150, Sample type: **Bulked**.  
 Comment : Station name : Eitrheimsneset

Analytical Lab.	⇒	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
Analysis Code.	⇒	312	311	310	312	311	312	311	312	310	310	341	341
Detection Limit.	⇒	0.010	0.010	0.010	0.050	1.00	0.050	1.00	0.050	0.010	0.010	0.10	0.10
Samp/ Shell-length	-	Weight	Fat	Dry	Mean	Cd	Hg	Pb	Zn	Pb	Pb	Pb	Pb
Repl. Min:Max,Mean	-	mean shell	%	%	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
no. mm:mm	mm	g	%	%	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
01/ 0 23:29	26	0.60	1.10	5.570	1.770	0.150	24.700	42.60	53.00	0.40	0.40	0.40	0.40
02/ 0 30:39	35	0.90	1.20	5.300	1.150	0.120	23.300	50.20	53.00	0.30	0.30	0.30	0.30
03/ 0 40:49	44	1.70	1.40	5.250	1.170	0.120	19.100	53.00	53.00	0.50	0.50	0.50	0.50
Mean	35.0	1.07	1.23	5.373	1.363	0.130	22.367	48.60	53.00	0.40	0.40	0.40	0.40
Minimum	26	0.60	1.10	5.250	1.150	0.120	19.100	42.60	53.00	0.30	0.30	0.30	0.30
Maximum	44	1.70	1.40	5.570	1.170	0.150	24.700	53.00	53.00	0.50	0.50	0.50	0.50
St.dev.	9.0	0.57	0.15	0.172	0.352	0.017	2.914	5.38	5.38	0.12	0.12	0.12	0.12
Count	3	3	3	3	3	3	3	3	3	3	3	3	3

miss(2) ! Missing value.

Tab.width cont'd **MYTI EDU, SB, J63, 52A Eitrheimsneset, 920906.**

Analytical Lab.	=>	NIVA	NIVA	Σ (*)	NIVA	NIVA	NIVA
Analysis Code.	=>	341	341	!	341	341	341
Detection Limit.	=>	0.10	0.10	!	0.10	0.10	0.10
Samp/ Shell-length -wght No of		<b>HCHA</b>	<b>HCHG</b>	<b>HC_Σ2</b>	<b>HC B</b>	<b>QCB</b>	<b>OCS</b>
Repl. Min:Max,Mean		ppb	ppb	ppb	ppb	ppb	ppb
no. mm:mm	g	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0	23:29	26	0.60	50	<0.10	<0.10	<0.10
02/ 0	30:39	35	0.90	50	<0.10	<0.10	miss
03/ 0	40:49	44	1.70	50	<0.10	0.10	miss
Mean	35.0	1.07	50.0	<<0.10	0.13	<<0.23	<<0.10
Minimum	26	0.60	50	<0.10	0.10	<0.20	<0.10
Maximum	44	1.70	50	<0.10	0.20	<0.30	<0.10
St.dev.	9.0	0.57	0.0	~0.00	0.06	~0.06	~0.00
Count	3	3	3	3	3	3	1

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.

Sample.area: **J63 Sørfjorden**, Tissue : **Whole SOFT BODY**.

Locality : **56A Kvalnes**, Latitude: 60°13.40N, Longitude: 06°36.10E.

Catch,date : **870902**, Count: 160, Sample type: **Bulked**.

Analytical Lab.	=>	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
Analysis Code.	=>	312	311	312	311	312	311
Detection Limit.	=>	0.030	0.150	0.030	0.150	0.150	3.00
Samp/ Shell-length -wght No of		<b>Cd</b>	<b>Cu</b>	<b>Cd</b>	<b>Cu</b>	<b>Hg</b>	<b>Zn</b>
Repl. Min:Max,Mean		ppm	ppm	ppm	ppm	ppm	ppm
no. mm:mm	g	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt
01/ 0	20:29	25	0.60	55	0.55	15.92	41.000
02/ 0	30:39	35	1.70	52	1.41	15.19	55.900
03/ 0	40:49	43	2.90	53	2.06	15.93	74.500
Mean	34.3	1.73	53.3	1.34	15.68	57.133	8.145
Minimum	25	0.60	52	0.55	15.19	41.000	7.030
Maximum	43	2.90	55	2.06	15.93	74.500	9.260
St.dev.	9.0	1.15	1.5	0.76	0.42	16.784	1.577
Count	3	3	3	3	3	3	i2

s/q(1) ! Suspect value(s)

i (1) ! Suspect or ambiguous basis-value(s) ignored in statistics.

k (1) Value= 1000 \* given units.











Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J63 Sør fjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **57A Krossanes**, Latitude: 60°23.20N, Longitude: 06°41.20E.  
 Catch,date : **870903**, Count: 158, Sample type: **Bulked**.

Samp/ Repl. no.	Shell-length mm:mm	-wght g	No of mean shell	Dry %		Fat %		Cd ppm		Cu ppm		Hg ppm		Pb ppm		Zn ppm		
				Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean
01/ 0	20:29	25	0.50	52	15.23		21.700	8.700	0.170	11.700	350.00							
02/ 0	30:39	33	1.00	52	16.28		21.100	8.210	0.160	15.500	378.00							
03/ 0	40:49	44	2.00	54	16.61		20.100	5.580	0.180	63.600	563.00							
Mean	34.0	1.17	52.7		16.04		20.967	7.497	0.170	30.267	430.33							
Minimum	25	0.50	52		15.23		20.100	5.580	0.160	11.700	350.00							
Maximum	44	2.00	54		16.61		21.700	8.700	0.180	63.600	563.00							
St.dev.	9.5	0.76	1.2		0.72		0.808	1.678	0.010	28.930	115.74							
Count	3	3	3		3		3	3	3	3	3							

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J63 Sør fjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **57A Krossanes**, Latitude: 60°23.20N, Longitude: 06°41.20E.  
 Catch,date : **881006**, Count: 152, Sample type: **Bulked**.

Samp/ Repl. no.	Shell-length mm:mm	-wght g	No of mean shell	Dry %		Fat %		Cd ppm		Cu ppm		Hg ppm		Pb ppm		Zn ppm	
				Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.
01/ 0	20:29	26	0.40	51	18.17		43.200	6.880	0.140	5.190	198.00						
02/ 0	30:39	34	1.20	49	17.66		38.100	5.810	0.210	8.510	263.00						
03/ 0	40:48	43	2.40	52	16.40		44.100	6.330	0.250	88.100	457.00						
Mean	34.3	1.33	50.7		17.41		41.800	6.340	0.200	33.933	306.00						
Minimum	26	0.40	49		16.40		38.100	5.810	0.140	5.190	198.00						
Maximum	43	2.40	52		18.17		44.100	6.880	0.250	88.100	457.00						
St.dev.	8.5	1.01	1.5		0.91		3.236	0.535	0.056	46.939	134.75						
Count	3	3	3		3		3	3	3	3	3						

Sample.No 01 :  
 Whole Soft Body : undepurated  
 Sample.No 02 :  
 Whole Soft Body : undepurated  
 Sample.No 03 :  
 Whole Soft Body : undepurated





Tab.width cont'd **MYTI EDU, SB, J63, 57A Krossanes, 920905.**

Analytical Lab.	=>	NIVA	NIVA	Σ (*)	NIVA	NIVA	NIVA
Analysis Code.	=>	341	341	!	341	341	341
Detection Limit.	=>	0.10	0.10	!	0.10	0.10	0.10
Samp/ Shell-length -wght No of		HCHA	HCHG	HC_Σ2	HCB	QCB	OCS
Repl. Min:Max,Mean	mm	ppb	ppb	ppb	ppb	ppb	ppb
no.	mm:mm	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0	20:29	24	0.70	50	<0.10	<0.10	<0.10
02/ 0	30:39	36	2.00	50	<0.10	miss	<0.10
03/ 0	40:48	43	3.00	50	<0.10	miss	<0.10
Mean	34.3	1.90	50.0	<<0.10	0.17	<<0.10	<<0.10
Minimum	24	0.70	50	<0.10	0.10	<0.10	<0.10
Maximum	43	3.00	50	0.10	0.20	<0.30	<0.10
St.dev.	9.6	1.15	0.0	~0.00	0.06	~0.06	~0.00
Count	3	3	3	3	3	3	1

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.Sample.area: **J62 Hardangerfjorden**, Tissue : **Whole SOFT BODY**.Locality : **63A Ranaskjær**, Latitude: 60°25.10N, Longitude: 06°24.50E.Catch,date : **870901**, Count: 142, Sample type: **Bulked**.

Analytical Lab.	=>	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
Analysis Code.	=>	312	311	312	310	312	311
Detection Limit.	=>	0.030	0.150	0.010	0.150	0.150	3.00
Samp/ Shell-length -wght No of		Cd	Cu	Hg	Pb	Pb	Zn
Repl. Min:Max,Mean	mm	ppm	ppm	ppm	ppm	ppm	ppm
no.	mm:mm	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt
01/ 0	20:29	25	0.60	49	0.31	15.72	21.500
02/ 0	30:39	35	1.80	51	0.93	14.92	47.200
03/ 0	40:49	43	2.90	42	1.51	14.56	48.600
Mean	34.3	1.77	47.3	0.92	15.07	39.100	9.983
Minimum	25	0.60	42	0.31	14.56	21.500	9.410
Maximum	43	2.90	51	1.51	15.72	48.600	10.700
St.dev.	9.0	1.15	4.7	0.60	0.59	15.258	0.657
Count	3	3	3	3	3	3	3

















Tab.width cont'd MYTI EDU, SB, J62, 69A Lille Terøy, 920905.

Samp/ Repl. no.	Shell-length mm	-weight mm	No of mean shell g	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA				
				Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)
01/0	41:49	45	4.40	50	<0.10	<0.40	0.10	miss	<0.10	13.0	16.0	12.0	2.9	3.7	1.7	1.7	0.4	0.7	1.3	3.4	<0.2	1.3	3.7	0.3	0.7	3.0	0.7	3.0	0.7	3.0	1.3	0.4
02/0	41:49	45	4.40	20	<0.10	<0.40	0.10	miss	<0.10																							
03/0	41:49	45	4.30	20	<0.10	<0.40	0.10	miss	<0.10																							
Mean	45.0	4.37	30.0		<0.10	<0.40	0.10	.	<<.10	13.0	16.0	12.0	2.9	3.7	1.7	1.7	0.4	0.7	1.3	3.4	<0.2	1.3	3.7	0.3	0.7	3.0	0.7	3.0	1.3	0.4		
Minimum	45	4.30	20		<0.10	<0.40	0.10	.	<0.10	13.0	16.0	12.0	2.9	3.7	1.7	1.7	0.4	0.7	1.3	3.4	<0.2	1.3	3.7	0.3	0.7	3.0	0.7	3.0	1.3	0.4		
Maximum	45	4.40	50		<0.10	<0.40	0.10	.	<0.10	13.0	16.0	12.0	2.9	3.7	1.7	1.7	0.4	0.7	1.3	3.4	<0.2	1.3	3.7	0.3	0.7	3.0	0.7	3.0	1.3	0.4		
St.dev.	0.0	0.06	17.3		"0.00	"0.00	0.00	.	"0.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
Count	3	3	3		3	3	3		3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Tab.width cont'd MYTI EDU, SB, J62, 69A Lille Terøy, 920905.

Samp/ Repl. no.	Shell-length mm	-weight mm	No of mean shell g	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA			
				Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)
01/0	41:49	45	4.40	50	0.9	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	49.3	<18.0	<3.0	<67.3																
02/0	41:49	45	4.40	20																											
03/0	41:49	45	4.30	20																											
Mean	45.0	4.37	30.0		0.9	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	49.3	<18.0	<3.0	<67.3																
Minimum	45	4.30	20		0.9	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	49.3	<18.0	<3.0	<67.3																
Maximum	45	4.40	50		0.9	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	49.3	<18.0	<3.0	<67.3																
St.dev.	0.0	0.06	17.3		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Count	3	3	3		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: J65 Orkdalsfjorden, Tissue : Whole SOFT BODY.  
 Locality : 80A \stmarknes, Latitude: 63°27.50N, Longitude: 10°27.50E.  
 Catch,date : 84.10.24, Count: 50, Sample type: Homogenate.

Samp/ Repl. no.	Shell-length mm	-weight mm	No of mean shell g	SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		
				Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)
01/0	22:31	25	50	0.71	14.10	1.20	0.200	0.950	0.018	0.540	s0.050	16.70	17.0	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	0.40

s/(q(1) ! Suspect value(s)



Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **80A \stmarknes**, Latitude: 63°27.50N, Longitude: 10°27.50E.  
 Catch,date : **851104**, Count: 80, Sample type: **Bulked**.  
 Comment : **BLUE MUSSEL, DRY WEIGHTS ARE BY 'FREEZE DRYING' WHICH IS ABOUT 2% HIGHER THAN 105 DEG. C DRIED SAMPLES (N=10). WET WEIGHT VALUES RECALCULATED FROM FREEZE DRIED BASIS ARE ABOUT 10% HIGHER THAN VALUES RECALCULATED FROM A 105 DEG. C DRIED SAMPLE**

Analytical Lab. Code	=>	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	Σ(*)	SIIF
Detection Limit.	=>	0.010	0.010	0.040	0.020	0.020	0.40	0.40	5.00	5.00	0.50	!	!
Shell-length -wght	=>	<b>Cd</b>	<b>Hg</b>	<b>Mn</b>	<b>Pb</b>	<b>Zn</b>	<b>Pb</b>	<b>Zn</b>	<b>Pb</b>	<b>Pb</b>	<b>Pb</b>	<b>DD_Σ4</b>	<b>HCb</b>
Repl. Min:Max,Mean	mm	ppm	ppm	ppm	ppm	ppm	d.wt	d.wt	d.wt	ppm	ppm	w.wt	w.wt
no.	mm	d.wt	d.wt	d.wt	d.wt	d.wt				d.wt	d.wt	w.wt	w.wt
01/ 0	20:29	24	1.10	66	1.90	1.210	0.180	4.670	2.520	110.00	77.0	miss	0.80
02/ 0	30:39	32	2.40	14	1.00	1.170	miss	3.420	2.590	90.00	miss	<3.00	miss
Mean		28.0	1.75	40.0	1.45	1.190	0.180	4.045	2.555	100.00	77.0	<3.00	<3.00
Minimum		24	1.10	14	1.00	1.170	0.180	3.420	2.520	90.00	77.0	<3.00	0.80
Maximum		32	2.40	66	1.90	1.210	0.180	4.670	2.590	110.00	77.0	<3.00	0.80
St.dev.		5.7	0.92	36.8	0.64	0.028	.	0.884	0.049	14.14	.	.	.
Count		2	2	2	2	2	1	2	2	2	1	1	1

miss(4) ! Missing value.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **81A Biologisk Stasjon**, Latitude: 63°26.50N, Longitude: 10°21.40E.  
 Catch,date : **841024**, Count: 50, Sample type: **Homogenate**.  
 Comment : **Site approximate to oil/gasoline port which may explain high lead content in mussel samples.**

Analytical Lab. Code	=>	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	Σ(*)
Detection Limit.	=>	0.010	0.010	0.010	0.040	0.040	0.020	0.40	0.40	5.00	5.00	0.50	!
Shell-length -wght	=>	<b>Cd</b>	<b>Cu</b>	<b>Hg</b>	<b>Mn</b>	<b>Pb</b>	<b>Zn</b>	<b>Pb</b>	<b>Zn</b>	<b>Pb</b>	<b>Pb</b>	<b>DD_Σ4</b>	<b>HCb</b>
Repl. Min:Max,Mean	mm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
no.	mm	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0	25:38	32	50	1.80	1.80	0.170	1.650	0.008	0.600	s11.470	38.80	16.0	1.60
				14.70	14.70	1.80	1.650	0.008	0.600	s11.470	38.80	16.0	1.60

s/q(1) ! Suspect value(s)

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **82A Flak**, Latitude: 63°27.10N, Longitude: 10°12.60E.  
 Catch,date : **841024**, Count: 50, Sample type: **Homogenate**.

Analytical Lab. Code	=>	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	Σ(*)
Detection Limit.	=>	0.010	0.010	0.010	0.040	0.040	0.020	0.40	0.40	5.00	5.00	0.50	!
Shell-length -wght	=>	<b>Cd</b>	<b>Cu</b>	<b>Hg</b>	<b>Mn</b>	<b>Pb</b>	<b>Zn</b>	<b>Pb</b>	<b>Zn</b>	<b>Pb</b>	<b>Pb</b>	<b>DD_Σ4</b>	<b>HCb</b>
Repl. Min:Max,Mean	mm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
no.	mm	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0	28:40	33	50	0.70	0.70	0.250	1.130	0.009	0.620	s0.020	22.40	36.0	1.90
				17.70	17.70	0.70	1.130	0.009	0.620	s0.020	22.40	36.0	1.90

s/q(1) ! Suspect value(s)





Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **82A Flak**, Latitude: 63°27.10N, Longitude: 10°12.60E.  
 Catch,date : **911101**, Count: 199, Sample type: **Bulked**.

Analytical Lab.		NIVA		NIVA		NIVA		NIVA	
Analysis Code	Detection Limit	312	311	310	311	312	311	310	311
Shell-length	Weight	Cd	Cu	Hg	Pb	Pb	Zn	Pb	Zn
mm:mm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Repl. Min:Max,Mean	Repl. Min:Max,Mean	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 20:30 26	1.30 100	0.240	1.760	0.013	0.290	0.290	24.40	0.290	24.40
02/ 0 30:39 35	2.60 50	0.210	2.790	0.011	0.230	0.230	23.50	0.230	23.50
03/ 0 39:51 44	5.00 49	0.210	2.060	0.013	0.190	0.190	25.90	0.190	25.90
Mean	35.0 2.97 66.3	0.220	2.203	0.012	0.237	0.237	24.60	0.237	24.60
Minimum	26 1.30 49	0.210	1.760	0.011	0.190	0.190	23.50	0.190	23.50
Maximum	44 5.00 100	0.240	2.790	0.013	0.290	0.290	25.90	0.290	25.90
St.dev.	9.0 1.88 29.2	0.017	0.530	0.001	0.050	0.050	1.21	0.050	1.21
Count	3 3 3	3	3	3	3	3	3	3	3

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **82A Flak**, Latitude: 63°27.10N, Longitude: 10°12.60E.  
 Catch,date : **920830**, Count: 70, Sample type: **Bulked**.  
 Comment : Station name : Flak

Analytical Lab.		NIVA		NIVA		NIVA		NIVA	
Analysis Code	Detection Limit	312	311	310	312	311	310	312	311
Shell-length	Weight	Cd	Cu	Hg	Pb	Pb	Zn	Pb	Zn
mm:mm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Repl. Min:Max,Mean	Repl. Min:Max,Mean	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 20:29 24	1.30 50	0.260	1.250	0.010	0.190	0.190	26.70	0.190	26.70
02/ 0 30:39 34	2.80 20	0.210	1.400	0.010	0.170	0.170	20.90	0.170	20.90
Mean	29.0 2.05 35.0	0.235	1.325	0.010	0.180	0.180	23.80	0.180	23.80
Minimum	24 1.30 20	0.210	1.250	0.010	0.170	0.170	20.90	0.170	20.90
Maximum	34 2.80 50	0.260	1.400	0.010	0.190	0.190	26.70	0.190	26.70
St.dev.	7.1 1.06 21.2	0.035	0.106	0.000	0.014	0.014	4.10	0.014	4.10
Count	2 2 2	2	2	2	2	2	2	2	2

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **83A Frøsetskjær**, Latitude: 63°25.50N, Longitude: 10°07.80E.  
 Catch,date : **841024**, Count: 50, Sample type: **Homogenate**.

Analytical Lab.		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF	
Analysis Code	Detection Limit	130	130	120	132	130	132	111	111	111	111	111	111
Shell-length	Weight	Cd	Cu	Hg	Mn	Pb	Zn	Pb	Zn	Pb	Zn	Pb	Zn
mm:mm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Repl. Min:Max,Mean	Repl. Min:Max,Mean	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 33:42 37	50	0.010	1.180	0.010	0.570	s0.020	20.20	10.0	1.30	1.30	1.30	1.30	0.30
Mean	2.02 15.40 1.40 0.200	0.010	1.180	0.010	0.570	s0.020	20.20	10.0	1.30	1.30	1.30	1.30	0.30
Weight	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Repl. Min:Max,Mean	Repl. Min:Max,Mean	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt

s/q(1) ! Suspect value(s)

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **84A Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **841023**, Count: 110, Sample type: **Bulked**.

Analytical Lab. Analysis Code Detection Limit. Shell-length -wght No of Repl. Min:Max,Mean mean shell no. mm:mm mm g	SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		
	130	132	120	132	130	132	130	132	130	132	130	132	111	111	111	111	111	111	111	111	
Mean	0.010	0.010	0.010	0.040	0.020	0.040	0.010	0.010	0.010	0.040	0.020	0.40	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
Weight	Fat %		Hg ppm		Pb ppm		Mn ppm		Zn ppm		PCB ppm		DD <sub>Σ4</sub> ppb		HCB ppb		w.wt		w.wt		
g	1.50	2.10	0.009	0.570	0.050	0.460	0.014	0.460	0.014	0.460	0.030	18.70	17.0	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<0.50	
01/ 0 22:30 25	0.230	1.870	0.009	0.570	0.050	0.460	0.014	0.460	0.014	0.460	0.030	16.10	15.0	0.70	0.70	0.70	0.70	0.70	0.70	0.50	
02/ 0 30:40 34	0.180	1.210	0.014	0.460	0.030	0.460	0.014	0.460	0.014	0.460	0.030	16.10	15.0	0.70	0.70	0.70	0.70	0.70	0.70	0.50	
Mean	0.205	1.540	0.012	0.515	0.040	0.460	0.014	0.460	0.014	0.460	0.030	17.40	16.0	<<1.10	<<1.10	<<1.10	<<1.10	<<1.10	<<1.10	<<0.50	
Minimum	0.180	1.210	0.009	0.460	0.030	0.460	0.014	0.460	0.014	0.460	0.030	16.10	15.0	0.70	0.70	0.70	0.70	0.70	0.70	<0.50	
Maximum	0.230	1.870	0.014	0.570	0.050	0.460	0.014	0.460	0.014	0.460	0.030	18.70	17.0	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	0.50	
St.dev.	0.035	0.467	0.004	0.078	0.014	0.078	0.004	0.078	0.014	0.014	0.014	1.84	1.4	~0.57	~0.57	~0.57	~0.57	~0.57	~0.57	~0.00	
Count	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

s/q(5) ! Suspect value (s)

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **84A Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **851104**, Count: 138, Sample type: **Bulked**.

Comment : **BLUE MUSSEL DRY WEIGHTS ARE BY 'FREEZE DRYING' WHICH IS ABOUT 2% HIGHER THAN 105 DEG. C DRIED SAMPLES (N=10). WET WEIGHT VALUES RECALCULATED FROM FREEZE DRIED BASIS ARE ABOUT 10% HIGHER THAN VALUES RECALCULATED FROM A 105 DEG. C DRIED SAMPLE**

Analytical Lab. Analysis Code Detection Limit. Shell-length -wght No of Repl. Min:Max,Mean mean shell no. mm:mm mm g	SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF	
	130	132	120	132	130	132	130	132	130	132	130	132	111	111	111	111	111	111	111	111
Mean	0.010	0.010	0.010	0.040	0.40	0.40	0.010	0.040	0.020	0.40	0.40	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Weight	Fat %		Hg ppm		Pb ppm		Mn ppm		Zn ppm		PCB ppm		DD <sub>Σ4</sub> ppb		HCB ppb		w.wt		w.wt	
g	0.40	0.60	0.083	1.380	162.00	162.00	0.150	4.550	1.380	162.00	162.00	74.0	miss	miss	miss	miss	miss	miss	miss	miss
01/ 0 20:29 26	2.320	1.860	0.150	4.550	160.00	160.00	4.350	4.550	1.610	130.00	130.00	78.0	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
02/ 0 30:39 33	1.630	1.630	0.150	4.550	160.00	160.00	4.350	4.550	1.610	130.00	130.00	78.0	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
03/ 0 40:46 42	1.937	1.630	0.150	4.550	160.00	160.00	4.350	4.550	1.610	130.00	130.00	78.0	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
Mean	0.57	0.40	0.083	1.380	150.67	150.67	4.350	4.550	1.720	150.67	150.67	76.0	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
Minimum	0.40	0.40	0.083	1.380	130.00	130.00	4.350	4.550	1.380	130.00	130.00	74.0	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
Maximum	0.70	0.70	0.150	4.550	162.00	162.00	4.550	4.550	1.720	162.00	162.00	78.0	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
St.dev.	0.351	0.047	0.047	0.849	17.93	17.93	0.849	0.849	0.406	17.93	17.93	2.8	miss	miss	miss	miss	miss	miss	miss	miss
Count	3	3	2	3	3	3	3	3	3	3	3	12	1	1	1	1	1	1	1	1

s/q (1) ! Suspect value(s)

i (1) ! Suspect or ambiguous basis-value(s) ignored in statistics.  
 miss(4) ! Missing value.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **84A Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **861117**, Count: 161, Sample type: **Bulked**.

Analytical Lab. Analysis Code. Detection Limit. Samp/ Shell-length -weight No of Repl. Min:Max,Mean mean shell no. mm:mm mm g	=>		=>		=>		=>		=>		=>		=>		=>		=>		=>		=>	
	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF
01/ 0 22:29 27 1.20 61	312	311	310	312	311	311	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	605
02/ 0 30:39 34 2.00 50	0.030	0.150	0.010	0.150	3.00	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5000.0
03/ 0 40:49 43 3.10 50	Fat	Cd	Cu	Hg	Pb	Zn	DDTEP	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	EPOCCL
	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
Mean	14.40	1.19	2.380	0.150	0.890	182.00	8.1	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	440.0
Minimum	15.00	1.20	2.380	0.060	0.560	163.00	6.6	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	82.0
Maximum	15.00	0.90	2.090	0.170	0.640	148.00	9.6	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	170.0
St.dev.	8.0	0.35	0.17	0.167	0.059	17.04	1.5	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	186.6
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

s/q(2) ! Suspect value(s)  
 i (1) ! Suspect or ambiguous basis-value(s) ignored in statistics.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **84A Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **871021**, Count: 147, Sample type: **Bulked**.

Analytical Lab. Analysis Code. Detection Limit. Samp/ Shell-length -weight No of Repl. Min:Max,Mean mean shell no. mm:mm mm g	=>		=>		=>		=>		=>		=>		=>		=>		=>		=>		=>		=>	
	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	
01/ 0 20:29 25 0.40 50	312	311	310	312	311	311	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	605	
02/ 0 30:39 35 1.30 49	0.030	0.150	0.010	0.150	3.00	5.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	40.0	
03/ 0 40:49 43 2.30 48	Fat	Cd	Cu	Hg	Pb	Zn	CB52	CB101	CB180	CB	DDTEP	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	DD	EPOCCL	
	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	
Mean	11.60	0.60	1.970	0.080	1.530	148.00	5.0	1.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	50.0	
Minimum	10.60	0.70	2.250	0.080	1.390	133.00	7.0	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	50.0	
Maximum	12.40	0.80	2.100	0.080	1.500	122.00	7.0	1.30	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	50.0	
St.dev.	9.0	0.90	0.10	0.140	0.116	13.05	1.4	0.21	0.14	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	50.0	
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	

s/q (12) ! Suspect value(s)  
 i (12) ! Suspect or ambiguous basis-value(s) ignored in statistics.  
 miss(2) ! Missing value.



Tab.width cont'd MYTI EDU, SB, J65, 84A Trossavika, 891024.

Samp/ Repl. no.	Shell-length mm	-weight mm	No of mean shell g	SIIF	
				Analysis Code.	Detection Limit.
01/ 0	21:30	27	1.10	99	270.0
02/ 0	32:39	35	1.90	50	210.0
05/ 0	40:49	44	3.50	50	280.0
Mean	35.3	2.17	66.3		253.3
Minimum	27	1.10	50		210.0
Maximum	44	3.50	99		280.0
St.dev.	8.5	1.22	28.3		37.9
Count	3	3	3		3

Species : MYTI EDU, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: J65 Orkdalsfjorden, Tissue : Whole SOFT BODY.  
 Locality : 84A Trossavika, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : 911101, Count: 200, Sample type: Bulkred.

Samp/ Repl. no.	Shell-length mm	-weight mm	No of mean shell g	NIVA		NIVA		NIVA		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF	
				311	312	310	312	311	311	311	311	311	311	311	311	311	311	311	311	311	311	311	311
01/ 0	20:30	24	1.10	100																			
02/ 0	30:40	35	3.80	50																			
03/ 0	40:48	43	4.60	50																			
Mean	34.0	3.17	66.7																				
Minimum	24	1.10	50																				
Maximum	43	4.60	100																				
St.dev.	9.5	1.85	28.9																				
Count	3	3	3																				

Tab.width cont'd MYTI EDU, SB, J65, 84A Trossavika, 911101.

Samp/ Repl. no.	Shell-length mm	-weight mm	No of mean shell g	SIIF	
				Analysis Code.	Detection Limit.
01/ 0	20:30	24	1.10	100	140.0
02/ 0	30:40	35	3.80	50	240.0
03/ 0	40:48	43	4.60	50	250.0
Mean	34.0	3.17	66.7		203.3
Minimum	24	1.10	50		140.0
Maximum	43	4.60	100		240.0
St.dev.	9.5	1.85	28.9		55.1
Count	3	3	3		3





Species : **MYTI EDU**, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **85A Geitstrand**, Latitude: 63°21.90N, Longitude: 09°56.30E.  
 Catch,date : **841023**, Count: 50, Sample type: **Homogenate**.

Analytical Lab.	=>	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF			
Analysis Code.	=>	130	130	120	132	130	132	130	132	111	111	111	111			
Detection Limit.	=>	0.010	0.010	0.010	0.040	0.020	0.040	0.020	0.040	5.00	5.00	5.00	0.20			
Shell-length -weight	No of	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF			
Repl. Min:Max,Mean	mean shell	Fat	Fat	Hg	Mn	Pb	Zn	PCB	DDTEP	DD	Σ4	HCB	ppb			
mm:mm	g	%	%	ppm	ppm	ppm	ppm	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt			
01/ 0	34:50	39	50	2.21	18.40	1.70	0.240	1.120	0.010	0.620	s<.020	21.10	11.0	1.50	1.50	0.40

s/q(1) ! Suspect value(s)

Species : **MYTI EDU**, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **86A Geitnes**, Latitude: 63°26.60N, Longitude: 09°59.20E.  
 Catch,date : **841023**, Count: 60, Sample type: **Homogenate**.

Analytical Lab.	=>	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF
Analysis Code.	=>	130	130	120	132	130	132	130	132	132	132	132	132
Detection Limit.	=>	0.010	0.010	0.010	0.040	0.020	0.040	0.020	0.040	0.40	0.40	0.40	0.40
Shell-length -weight	No of	Fat	Fat	Hg	Mn	Pb	Zn	PCB	DDTEP	DD	Σ4	HCB	ppb
Repl. Min:Max,Mean	mean shell	%	%	ppm	ppm	ppm	ppm	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
mm:mm	g			w.wt	w.wt	w.wt	w.wt						
01/ 0	16:24	17	60	0.29	19.00	-	0.220	1.040	0.010	0.620	s0.060	19.70	

s/q(1) ! Suspect value(s)

Sample.No 01 :  
 Whole Soft Body : **SAMPLE TOO SMALL FOR DETERMINATION OF FAT WT. AND ORGANOCHELORINES**

Species : **MYTI EDU**, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **87A Ingdalsbukkt**, Latitude: 63°27.80N, Longitude: 09°54.80E.  
 Catch,date : **841023**, Count: 60, Sample type: **Homogenate**.

Analytical Lab.	=>	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF
Analysis Code.	=>	130	130	120	132	130	132	130	132	130	132	132	132
Detection Limit.	=>	0.010	0.010	0.010	0.040	0.020	0.040	0.020	0.040	0.40	0.40	0.40	0.40
Shell-length -weight	No of	Fat	Fat	Hg	Mn	Pb	Zn	PCB	DDTEP	DD	Σ4	HCB	ppb
Repl. Min:Max,Mean	mean shell	%	%	ppm	ppm	ppm	ppm	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
mm:mm	g			w.wt	w.wt	w.wt	w.wt						
01/ 0	14:22	15	60	0.20	18.59	-	0.180	0.850	0.033	0.660	s0.020	18.60	

s/q(1) ! Suspect value(s)

Sample.No 01 :  
 Whole Soft Body : **SAMPLE TOO SMALL FOR DETERMINATION OF FAT WT. AND ORGANOCHELORINES**

Species : **MYTI EDU**, Mytilus edulis, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **87A Ingdalsbukkt**, Latitude: 63°27.80N, Longitude: 09°54.80E.  
 Catch,date : **851104**, Count: 122, Sample type: **Homogenate**.  
 Comment : **BLUE MUSSEL DRY WEIGHTS ARE BY 'FREEZE DRYING' WHICH IS ABOUT 2% HIGHER THAN 105 DEG. C DRIED SAMPLES (N=10). WET WEIGHT VALUES RECALCULATED FROM FREEZE DRIED BASIS ARE ABOUT 10% HIGHER THAN VALUES RECALCULATED FROM A 105 DEG. C DRIED SAMPLE**

Analytical Lab.	=>	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF	SIIF
Analysis Code.	=>	130	130	120	132	130	132	130	132	111	111	111	111
Detection Limit.	=>	0.010	0.010	0.010	0.040	0.020	0.040	0.020	0.040	5.00	5.00	5.00	0.20
Shell-length -weight	No of	Fat	Fat	Hg	Mn	Pb	Zn	PCB	DDTEP	DD	Σ4	HCB	ppb
Repl. Min:Max,Mean	mean shell	%	%	ppm	ppm	ppm	ppm	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
mm:mm	g			w.wt	w.wt	w.wt	w.wt						
01/ 0	15:24	16	0.30	0.14	20.40	0.60	1.020	miss	6.600	1.310	92.80	miss	miss

miss(4) ! Missing value.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **87A Ingdalsbukt**, Latitude: 63°27.80N, Longitude: 09°54.80E.  
 Catch,date : **861117**, Count: 18, Sample type: **Homogenate**.

Analytical Lab.	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
Analysis Code.	312	311	310	312	311	311	111	111	111	111	111	111	111	605
Detection Limit.	0.030	0.150	0.010	0.150	3.00	5.00	0.50	3.00	0.20	5000.0	5000.0			
Sample/Shell-length - weight	Fat	Cd	Cu	Hg	Pb	Zn	PCB	DDIPEP	HCHG	HC	BC	EPOC1	HC	BC
Repl. Min:Max,Mean	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
No. mm:mm	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/0 20:24	21	0.60	18	0.42	6.40	1.950	18.300	0.150	1.620	97.70	miss	miss	miss	miss

s/g (1) ! Suspect value(s)  
 miss(5) ! Missing value.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **87A Ingdalsbukt**, Latitude: 63°27.80N, Longitude: 09°54.80E.  
 Catch,date : **871021**, Count: 31, Sample type: **Homogenate**.

Analytical Lab.	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
Analysis Code.	312	311	310	312	311	311	111	111	111	111	111	111	111	605
Detection Limit.	0.030	0.150	0.010	0.150	3.00	5.00	0.20	0.20	0.20	0.50	5.00	0.20	0.20	40.0
Sample/Shell-length - weight	Fat	Cd	Cu	Hg	Pb	Zn	PCB	CB52	CB101	CB180	DDIPEP	HCHG	HC	BC
Repl. Min:Max,Mean	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
No. mm:mm	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/0 20:23	21	0.50	31	0.25	18.00	0.770	20.100	<.050	1.000	102.00	miss	miss	<.500	miss

miss(7) ! Missing value.

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **87A Ingdalsbukt**, Latitude: 63°27.80N, Longitude: 09°54.80E.  
 Catch,date : **881117**, Count: 101, Sample type: **Homogenate**.

Analytical Lab.	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
Analysis Code.	312	311	310	312	311	311	111	111	111	111	111	111	111	605
Detection Limit.	0.030	0.150	0.010	0.150	3.00	5.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	40.0
Sample/Shell-length - weight	Fat	Cd	Cu	Hg	Pb	Zn	PCB	CB28	CB52	CB101	CB138	CB153	CB180	CB
Repl. Min:Max,Mean	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
No. mm:mm	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/0 20:27	21	0.60	101	0.35	21.80	1.81	0.690	8.350	0.260	1.190	105.00	4.7	0.10	0.10

Sample.No 01 :  
 Whole Soft Body : Dry weight determination for chlorinated hydrocarbon subsample was 22.64%

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **87A Ingdalsbukt**, Latitude: 63°27.80N, Longitude: 09°54.80E.  
 Catch,date : **891024**, Count: 99, Sample type: **Homogenate**.

Analytical Lab.	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
Analysis Code.	312	311	310	312	311	311	111	111	111	111	111	111	111	111
Detection Limit.	0.030	0.150	0.010	0.150	3.00	5.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	50.00
Sample/Shell-length - weight	Fat	Cd	Cu	Hg	Pb	Zn	PCB	CB28	CB52	CB101	CB118	CB138	CB153	CB180
Repl. Min:Max,Mean	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
No. mm:mm	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/0 21:29	25	1.10	99	0.54	23.80	2.60	0.180	1.400	0.011	0.170	23.00	5.7	0.40	<.10

miss(5) ! Missing value.  
 miss(5) ! Missing value.  
 miss(5) ! Missing value.  
 miss(5) ! Missing value.  
 miss(5) ! Missing value.

Tab.width cont'd **MYTI EDU, SB, J65, 87A** Ingdalsbuktt, 891024.

. Analytical Lab.	=>	SIIF
. Analysis Code.	=>	605
. Detection Limit.	=>	40.0
Samp/ Shell-length -wght	No of	<b>E P O C L</b>
Repl. Min:Max,Mean	mean shell	ppb
no. mm:mm	g	w.wt
01/ 0 21:29 25 1.10 99		660.0

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **87A Ingdalsbuktt**, Latitude: 63°27.80N, Longitude: 09°54.80E.  
 Catch,date : **911101**, Count: 100, Sample type: **Homogenate**.

. Analytical Lab.	=>	NIVA	NIVA	NIVA	NIVA
. Analysis Code.	=>	312	311	310	311
. Detection Limit.	=>	0.010	0.050	0.010	0.050
Samp/ Shell-length -wght	No of	<b>C d</b>	<b>C u</b>	<b>H g</b>	<b>Z n</b>
Repl. Min:Max,Mean	mean shell	ppm	ppm	ppm	ppm
no. mm:mm	g	w.wt	w.wt	w.wt	w.wt
01/ 0 20:34 24 1.00 100		0.36	19.50	0.170	1.420
				0.011	0.190
					22.80

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **87A Ingdalsbuktt**, Latitude: 63°27.80N, Longitude: 09°54.80E.  
 Catch,date : **920830**, Count: 100, Sample type: **Bulked**.  
 Comment : Station name : Ingdalsbuktt

. Analytical Lab.	=>	NIVA	NIVA	NIVA	NIVA
. Analysis Code.	=>	312	311	310	311
. Detection Limit.	=>	0.010	0.010	0.010	0.050
Samp/ Shell-length -wght	No of	<b>C d</b>	<b>C u</b>	<b>H g</b>	<b>Z n</b>
Repl. Min:Max,Mean	mean shell	ppm	ppm	ppm	ppm
no. mm:mm	g	w.wt	w.wt	w.wt	w.wt
01/ 0 20:25 22 0.50 50		0.32	18.40	0.180	1.160
				0.010	0.160
					21.00

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **Whole SOFT BODY**.  
 Locality : **88A Rødberg**, Latitude: 63°29.20N, Longitude: 10°00.00E.  
 Catch,date : **841023**, Count: 60, Sample type: **Homogenate**.

. Analytical Lab.	=>	SIIF	SIIF	SIIF	SIIF	SIIF
. Analysis Code.	=>	130	130	130	130	132
. Detection Limit.	=>	0.010	0.010	0.010	0.040	0.40
Samp/ Shell-length -wght	No of	<b>C d</b>	<b>C u</b>	<b>H g</b>	<b>M n</b>	<b>P b</b>
Repl. Min:Max,Mean	mean shell	ppm	ppm	ppm	ppm	ppm
no. mm:mm	g	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 15:24 17 60		0.23	17.59	0.200	1.030	0.014
				0.014	0.610	0.040
					19.80	

s/q(1) ! Suspect value(s)















Tab.width cont'd **MYTI EDU, SB, J99, 92A Stokken, 920829.**

Analytical Lab.		=>		NIVA		NIVA		NIVA		NIVA		NIVA		Σ(*)		Σ(*)		Σ(*)	
Analysis Code.	=>	309	309	309	309	309	309	309	309	309	309	309	309	309	!	!	!	!	!
Detection Limit.	=>	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	!	!	!	!	!
Samp/ Shell-length -wght No of		BEP	BAP	PER	ICDP	DBA3A	BGHIP	COR	DBP	DI	Σ6	P	Σ20	PK	Σ7	PAHEΣ			
Repl. Min:Max,Mean	mm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
no.	mm:mm	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0	40:46	42	1.90	20	0.4	<0.2	<0.2	0.3	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	16.8	<6.8	<1.0	<23.6	
02/ 0	40:46	42	1.90	20	0.5	<0.2	<0.2	0.3	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	19.5	<7.3	<1.5	<26.8	
03/ 0	40:46	42	1.90	20	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
04/ 0	20:29	26	0.50	100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
05/ 0	30:38	34	1.10	50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
06/ 0	40:45	42	1.90	50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	38.0	1.53	43.3		0.5	<0.2	<0.2	0.3	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	18.2	<7.1	<1.3	<25.2	
Minimum	26	0.50	20		0.4	<0.2	<0.2	0.3	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	16.8	<6.8	<1.0	<23.6	
Maximum	42	1.90	100		0.5	<0.2	<0.2	0.3	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	19.5	<7.3	<1.5	<26.8	
St.dev.	6.7	0.60	31.4		0.1	~0.0	~0.0	0.0	~0.0	0.0	~0.0	~0.0	~0.0	~0.0	1.9	~0.4	~0.4	~2.3	
Count	6	6	6		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Species : **MYTI EDU**, *Mytilus edulis*, GB: Blue mussel, N: Blåskjell.  
 Sample.area: **J99 Undefined**, Tissue : **Whole SOFT BODY**.  
 Locality : **93A Sætervik**, Latitude : 64°23.50N, Longitude: 10°28.00E.  
 Catch,date : **920829**, Count: 148, Sample type: **Bulked**.  
 Comment : Station name : Låven (Sætervik)

Analytical Lab.		=>		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA	
Analysis Code.	=>	311	311	311	311	311	311	311	311	311	311	311	311	311	311
Detection Limit.	=>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Samp/ Shell-length -wght No of		BEP	BAP	PER	ICDP	DBA3A	BGHIP	COR	DBP	DI	Σ6	P	Σ20	PK	Σ7
Repl. Min:Max,Mean	mm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
no.	mm:mm	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0	30:38	34	1.10	20	1.08	15.80	.	0.190	1.020	0.010	0.180	14.70			
02/ 0	31:38	34	1.20	20	1.07	16.20	.	0.200	1.090	0.011	0.170	15.30			
03/ 0	31:38	34	1.20	20	1.06	16.00	.	0.210	1.010	0.012	0.210	16.40			
Mean	34.0	1.17	20.0		1.07	16.00	.	0.200	1.040	0.011	0.187	15.47			
Minimum	34	1.10	20		1.06	15.80	.	0.190	1.010	0.010	0.170	14.70			
Maximum	34	1.20	20		1.08	16.20	.	0.210	1.090	0.012	0.210	16.40			
St.dev.	0.0	0.06	0.0		0.01	0.20	.	0.010	0.044	0.001	0.021	0.86			
Count	3	3	3		3	3		3	3	3	3	3			

Mean Weight g  
 Fat %  
 Dry %  
 Cu ppm  
 Cd ppm  
 Hg ppm  
 Pb ppm  
 Zn ppm















Tab.width cont'd PAND BOR, TM, J26, 40C Steilene, 921220.

Analytical Lab.	Analysis Code.	Detection Limit.	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA	
			341	341	341	341	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Shell-length	⇒		0.10	0.10	0.10	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Mean	⇒		<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	3.7	2.0	1.5	0.7	0.3	0.3	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2
Minimum	⇒		<<0.10	<<0.10	<<0.10	<<0.10	3.7	2.2	1.7	0.8	0.4	0.4	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2
Maximum	⇒		<0.10	<0.10	<0.10	<0.10	6.8	2.4	1.8	1.5	0.7	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
St.dev.	⇒		0.00	0.00	0.00	0.00	2.2	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Count	⇒		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Tab.width cont'd PAND BOR, TM, J26, 40C Steilene, 921220.

Analytical Lab.	Analysis Code.	Detection Limit.	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA	
			309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Shell-length	⇒		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Mean	⇒		<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Minimum	⇒		<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Maximum	⇒		<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
St.dev.	⇒		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Count	⇒		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Sample.No 01 : Tail weight 230.9 grams. Length min. = 70 mm, max = 100 mm.

Sample.No 02 : Tail weight 160.3 grams. Length min. = 65 mm, max. = 80 mm.

Species : PAND BOR, Pardalus borealis, ♂♂: Prawn, N: Reker.

Sample.area: J26 Oslofjorden, Tissue : TAIL MUSCLE.

Locality : 31C Solbergstrand, Latitude: 59°36.90N, Longitude: 10°39.40E.

Catch,date : 841210, Count: 93, Sample type: Homogenate.

Analytical Lab.	Analysis Code.	Detection Limit.	SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF		SIIF	
			130	130	130	130	132	132	130	130	130	130	130	130	130	130	130	130	130	130	130	130
Mean	⇒		0.010	0.010	0.010	0.010	0.040	0.020	0.40	5.00	0.50	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	
Weight	⇒		g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	
Dry	⇒		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
Count	⇒		93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	

s/q(1) ! Suspect value(s)

Sample.No 01 : From commercial catch. Length approximately 70-130mm.









**TABLE B**  
**FISH 1981-92**

REPORT INFORMATION : " F I S H " .

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----- : -----
Table-File-Name      : I:\TBX\JMG\BIO\TAB-0FSH.TB1
Limit-CheckFile     : )LIM\NO-LIMIT.FSH
Weight basis        : "ORIGINAL".
Table SORT-Mode     : 1. SPECIES.
                   : 2. TISSUE.
                   : 3. LOCALITY-index. (Predefined sequence)
                   : 4. DATE
                   : 5. SAMPLE-TYPE (Indiv.,Bulked,Homogenate)
----- : -----

```

NOTES :

- ☛ The detection limits given here are approximations based on 3 times the standard deviation of the "blank" or near zero concentration of a solution.  
Day to day variations in the analytical instrument may lead to different detection limits.
- ☛ Method codes are explained in: Green,N.W.,1993. Overview of Analytical Methods Employed by JMP in Norway 1981-92. NIVA project 80106.
- ☛ NB ! The numeric values shown have been printed with a FIXED number of digits, and do not necessarily indicate analytical precision.
- ☛ If a numeric value is suspect, the value is ignored in parameter statistics. (Unless all observations are suspect).  
If value can not be converted to basis for this table, the value is printed in the original basis but not included in any parameter statistics unless all values are in original basis.
- ☛ For "Σ" variables (e.g. CB\_Σ7, DD\_Σ4) , all the "<"-values (less than the detection limits) are counted only once.  
If two or more different "<"-values are present, the maximum of the least questionable (suspect) "<"-value is used.  
Any missing "Σ"-elements are ignored.
- ☛ If replicates are analyzed, the mean value of the replicates is counted in parameter statistics.
- ☛ If value is prefixed "<<", the number of "<" values is greater or equal to 25% of computed observations.  
Standard Deviation values are prefixed the character "~" if any "<" values are included.
- ☛ Footnotes consist of 4 parts:
  - 1: a letter code (e.g ? or a/A)  
The letter code may include one or more characters indicating possible matching letters referenced before or after numbers.  
When more letters are given, the syntax "A:D" means any of "A,B,C or D" while syntax "a/A" means any of "a" or "A" is referencing.
  - 2: a count (in paranthesis)
  - 3: a "!" or ">"  
"!" refer to notes BEFORE numeric values.  
">" refer to notes AFTER numeric values.
  - 4: The footnote explanation.









Sample.No 01 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 02 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 03 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 04 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 05 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 06 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 07 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 08 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 09 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 10 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 11 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 12 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 13 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 14 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 15 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 16 : Skin with metacercari of cf. Cryptocotyle lingua.  
 LIVER : Liver with signs of inner bleeding.  
 Sample.No 17 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 18 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 19 : Skin with metacercari of cf. Cryptocotyle lingua.  
 LIVER : Liver with signs of inner bleeding.  
 Sample.No 20 : Skin with metacercari of cf. Cryptocotyle lingua.  
 LIVER : Liver with signs of inner bleeding.  
 Sample.No 21 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 23 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 24 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 25 : Skin with metacercari of cf. Cryptocotyle lingua.



Sample.No 01 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 02 : Skin with metacercari of cf. Cryptocotyle lingua  
 Sample.No 03 : Skin with metacercari of cf. Cryptocotyle lingua  
 Sample.No 04 : Skin with metacercari of cf. Cryptocotyle lingua  
 Sample.No 05 : Skin with metacercari of cf. Cryptocotyle lingua  
 Sample.No 06 : Skin with metacercari of cf. Cryptocotyle lingua  
 Sample.No 07 : Skin with metacercari of cf. Cryptocotyle lingua  
 Sample.No 09 : Skin with metacercari of cf. Cryptocotyle lingua.  
     LIVER : Liver unevenly colored.  
 Sample.No 10 : Skin with metacercari of cf. Cryptocotyle lingua.  
     LIVER : Liver unevenly colored.  
 Sample.No 11 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 12 : Skin with metacercari of cf. Cryptocotyle lingua.  
     LIVER : Liver unevenly colored.  
 Sample.No 13 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 14 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 15 : Skin with metacercari of cf. Cryptocotyle lingua.  
     LIVER : Liver unevenly colored.  
 Sample.No 16 : Skin with metacercari of cf. Cryptocotyle lingua.  
     LIVER : Liver unevenly colored.  
 Sample.No 17 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 18 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 19 : Skin with metacercari of cf. Cryptocotyle lingua.  
     LIVER : Liver unevenly colored.  
 Sample.No 20 : Skin with metacercari of cf. Cryptocotyle lingua.  
     LIVER : Liver unevenly colored.  
 Sample.No 21 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 22 : Skin with metacercari of cf. Cryptocotyle lingua, few.  
 Sample.No 23 : Skin with metacercari of cf. Cryptocotyle lingua.  
     LIVER : Liver unevenly colored.  
 Sample.No 25 : Skin with metacercari of cf. Cryptocotyle lingua.

Species : GADU MOR, Gadus morhua, GB: Cod, N: Torsk.  
Sample.area: J26 Oslofjorden, Tissue : LIVER.  
Locality : 30B Oslo City area, Latitude: 59°52.00N, Longitude: 10°39.00E.  
Catch,date : 890116, Count: 25, Sample type: Individual.

Table with columns: Analytical Lab., Analysis Code, Detection Limit, Mean, Weight, Dry, Fat, NIVA (Cd, Cu, Pb, Zn), PCB, DDEPP, DD, HCHG, HC, HCB, NACE, NACE, Σ(\*), Σ(\*), NACE, NACE, NACE. It contains 25 rows of chemical analysis data for fish samples.

Sample.No 01 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
Sample.No 02 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
Sample.No 03 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
Sample.No 04 : LIVER : 1 partition on liver  
Sample.No 05 : LIVER : 2 partitions on liver  
Sample.No 06 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
Sample.No 07 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
Sample.No 08 : LIVER : 1 partition on liver  
Sample.No 09 : LIVER : 1 partition on liver  
Sample.No 10 : LIVER : PCB, DDEPP, HCHG and HCB values are mean of two analyses.  
Sample.No 11 : LIVER : PCB, DDEPP, HCHG and HCB values are mean of two analyses.  
Sample.No 12 : LIVER : PCB, DDEPP, HCHG and HCB values are mean of two analyses.  
Sample.No 13 : LIVER : 1 partition on liver  
Sample.No 14 : LIVER : 1 partition on liver  
Sample.No 15 : LIVER : 1 partition on liver  
Sample.No 16 : LIVER : 1 partition on liver  
Sample.No 17 : LIVER : 1 partition on liver  
Sample.No 18 : LIVER : 1 partition on liver  
Sample.No 19 : LIVER : 1 partition on liver  
Sample.No 20 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
Sample.No 21 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
Sample.No 22 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
Sample.No 23 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
Sample.No 24 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
Sample.No 25 : Skin with metacercari cf. Cryptocotyle lingua on head and back





Tab.width cont'd GADU MOR, LI, J26, 30B Oslo City area, 891113.

Analytical Lab. :		NACE	NACE			
Analysis Code :		510	610			
Detection Limit :		20.00	0.800			
Samp/ Sex Age Wght Lngt		HCB EPOCL				
Repl. F/M	year	g	mm			
no.		ppb	w.wt			
		w.wt	w.wt			
01/ 0	F	7	2165	610	20.00	7.200
02/ 0	F	5	2723	670	<20.00	13.700
03/ 0	F	5	1806	550	30.00	7.820
04/ 0	M	3	960	450	150.00	5.050
05/ 0	F	2	1412	500	190.00	13.300
06/ 0	M	2	1403	535	60.00	6.060
07/ 0	F	2	2378	615	<20.00	4.880
08/ 0	F	3	1860	570	80.00	13.200
09/ 0	M	4	1519	540	50.00	14.700
10/ 0	M	2	1415	510	70.00	5.300
11/ 0	F	5	2513	625	50.00	5.160
12/ 0	F	3	1821	560	30.00	6.910
13/ 0	M	5	2254	620	20.00	11.100
14/ 0	M	5	1891	555	70.00	9.910
15/ 0	M	6	1851	580	30.00	6.520
16/ 0	M	1	1042	470	60.00	11.500
17/ 0	M	2	1024	505	70.00	13.400
18/ 0	F	4	1201	510	50.00	9.030
19/ 0	F	2	1104	475	90.00	13.200
20/ 0	F	3	898	475	90.00	9.300
21/ 0	F	3	858	445	50.00	14.000
22/ 0	F	2	761	425	50.00	5.020
23/ 0	M	2	1284	470	50.00	8.190
24/ 0	M	2	1084	470	70.00	9.660
25/ 0	F	2	1037	475	30.00	20.400
Mean	3.3	1531	528		<60.00	9.780
Minim.	1	761	425		<20.00	4.880
Maxim.	7	2723	670		190.00	20.400
St.dev	1.6	564	66		~39.90	3.983
Count	25	25	25		25	25
Sample.No 01	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 02	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 03	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 04	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 05	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 06	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 07	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 08	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 09	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 10	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 11	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 12	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 13	:	Skin with metacercari cf.	Cryptocotyle lingua			
LIVER	:	liver somewhat unevenly coloured.				
Sample.No 15	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 17	:	Skin with metacercari cf.	Cryptocotyle lingua			
LIVER	:	liver with 2 cyst-like lobes.				
Sample.No 18	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 19	:	Uncertain age determination				
Sample.No 20	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 23	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 24	:	Skin with metacercari cf.	Cryptocotyle lingua			
Sample.No 25	:	Skin with metacercari cf.	Cryptocotyle lingua			

considerable.

Uncertain age determination  
Uncertain age determination



Tab.width cont'd GADU MOR, LI, J26, 30B Oslo City area, 901204.

Samp/ Repl. no.	Sex F/M	Age year	Wght g	Lngr mm	Analytical Lab. :		Σ (*)		NIVA		NIVA		NIVA	
					Code. :	Detection Limit :	HC_E2 ppb w.wt	HCB ppb w.wt	QCB ppb w.wt	OCS ppb w.wt	EPOCL ppm w.wt	340	340	340
01/ 0	M	3	744	420			19.00	6.00	<3.00	7.00	28.800			
02/ 0	M	4	1161	460			52.00	13.00	6.00	6.00	36.800			
03/ 0	F	5	1147	470			31.00	8.00	2.00	8.00	207.700			
04/ 0	M	4	1028	480			11.00	3.00	<1.00	4.00	344.100			
05/ 0	F	3	977	480			51.00	12.00	3.00	8.00	9.800			
06/ 0	M	4	1035	480			10.00	4.00	1.00	4.00	4.800			
07/ 0	F	3	1484	490			33.00	9.00	3.00	4.00	46.200			
08/ 0	M	6	1568	500			24.00	8.00	2.00	10.00	15.800			
09/ 0	F	3	1334	510			36.00	9.00	2.00	8.00	4.700			
10/ 0	F	4	1580	510			47.00	24.00	4.00	13.00	73.700			
11/ 0	M	4	1644	530			45.00	10.00	2.00	8.00	9.400			
12/ 0	F	5	1632	540			45.00	14.00	4.00	7.00	57.400			
13/ 0	F	3	1368	540			32.00	8.00	2.00	10.00	407.600			
14/ 0	M	4	1867	550			51.00	15.00	3.00	7.00	30.800			
15/ 0	F	4	1765	550			20.00	9.00	<1.00	8.00	12.400			
16/ 0	F	4	1932	560			47.00	18.00	5.00	8.00	22.600			
17/ 0	F	4	1877	560			41.00	11.00	2.00	6.00	24.000			
18/ 0	M	4	1979	560			54.00	15.00	4.00	11.00	29.800			
19/ 0	F	4	2077	570			29.00	11.00	2.00	8.00	46.100			
20/ 0	F	4	1826	570			26.00	8.00	2.00	8.00	4.900			
21/ 0	F	4	2243	580			37.00	14.00	3.00	14.00	22.300			
22/ 0	M	5	2635	620			24.00	12.00	2.00	21.00	37.700			
23/ 0	F	2	2344	620			29.00	10.00	2.00	9.00	64.900			
24/ 0	F	2	2708	620			33.00	7.00	2.00	3.00	115.800			
25/ 0	F	2	2942	650			19.00	7.00	1.00	7.00	45.300			
Mean		3.8	1716	537			33.84	10.60	<2.56	8.28	68.136			
Minim.		2	744	420			10.00	3.00	<1.00	3.00	4.700			
Maxim.		6	2942	650			54.00	24.00	6.00	21.00	407.600			
St.dev		1.0	568	57			12.95	4.52	~1.26	3.71	102.462			
Count		25	25	25			25	25	25	25	25			

Sample.No 01 : NIVA no.6. Skin with metacercariae of cf. *Cryptocotyle lingua*.

LIVER : Liver with necrotic cysts or tumours.

Sample.No 02 : NIVA no.17

Sample.No 03 : NIVA no.16

Sample.No 04 : NIVA no.20

Sample.No 05 : NIVA no.22. Skin with metacercariae of cf. *Cryptocotyle lingua*, skin and or oral cavity w/caligiform and lemnaeopodiiform copepods  
LIVER : Liver/guts with *Anasakis* larvae.

Sample.No 06 : NIVA no.24. Lateral line necrosis.

Sample.No 07 : NIVA no.25. Skin with metacercariae of cf. *Cryptocotyle lingua*.

Sample.No 08 : NIVA no.14

Sample.No 09 : NIVA no.19

Sample.No 10 : NIVA no.09

Sample.No 11 : NIVA no.15. Skin with metacercariae of cf. *Cryptocotyle lingua*. Skin and or oral cavity w/caligiform and lemnaeopodiiform copepods.

Sample.No 12 : NIVA no.05.

Sample.No 13 : NIVA no.21. Skin with metacercariae of cf. *Cryptocotyle lingua*. Skin and or oral cavity w/caligiform and lemnaeopodiiform copepods.

Sample.No 14 : NIVA no.13.

LIVER : Liver with very loose consistency with slight rotten smell. Liver with necrotic areas or discoloured. Renanalysis: 72.1% dry wt..

Sample.No 15 : NIVA no.02.

Sample.No 16 : NIVA no.04. Skin with metacercariae of cf. *Cryptocotyle lingua*.

Sample.No 17 : NIVA no.12. Skin and or oral cavity w/caligiform and lemnaeopodiiform copepods.

Sample.No 18 : NIVA no.23

Sample.No 19 : NIVA no.03

Sample.No 20 : NIVA no.18

LIVER : Liver with necrotic cysts or tumours.

Sample.No 21 : NIVA no.11

Sample.No 22 : NIVA no.01. Skin with metacercariae of cf. *Cryptocotyle lingua*.

Sample.No 23 : NIVA no.08. Skin with metacercariae of cf. *Cryptocotyle lingua*.

LIVER : Liver/guts with *Anasakis* larvae.

Sample.No 24 : NIVA no.10. Lateral line necrosis.

Sample.No 25 : NIVA no.07.



Tab.width cont'd GADU MOR, LI, J26, 30B Oslo City area, 911003.

Samp/ Repl. no.	Sex	Age	Wght	Lngt	mm	g	F/M	year	Σ(*)	NIVA		NIVA		NIVA		
										HC	Σ2	ppb	w.wt	HC	Σ2	ppb
02/0	M	2	665	410					<20.00	15.00	3.00	3.00	<3.00			
03/0	F	2	725	410					<23.00	18.00	4.00	4.00	9.00			
04/0	F	2	774	420					<29.00	16.00	<5.00	<5.00	13.00			
05/0	M	2	750	420					<19.00	12.00	3.00	3.00	4.00			
06/0	M	2	798	430					<23.00	15.00	<4.00	<4.00	4.00			
07/0	M	2	767	440					<21.00	23.00	4.00	4.00	5.00			
08/0	M	2	906	450					<18.00	15.00	3.00	3.00	7.00			
09/0	M	2	956	450					<13.00	10.00	2.00	2.00	5.00			
10/0	F	2	951	470					7.00	4.00	4.00	<1.00	3.00			
11/0	F	2	1095	490					<24.00	22.00	miss	miss	19.00			
12/0	M	2	1132	500					<10.00	16.00	3.00	3.00	14.00			
13/0	F	2	1063	510					<19.00	27.00	4.00	4.00	20.00			
14/0	F	2	1427	510					<12.00	12.00	<3.00	<3.00	25.00			
15/0	F	3	1155	520					<11.00	11.00	<3.00	<3.00	14.00			
16/0	F	3	1417	520					<5.00	5.00	<2.00	<2.00	7.00			
17/0	F	4	1469	550					<16.00	19.00	<4.00	<4.00	16.00			
18/0	M	3	1656	560					<11.00	17.00	<3.00	<3.00	13.00			
19/0	F	3	1728	560					<14.00	19.00	<4.00	<4.00	13.00			
20/0	M	4	2093	600					<19.00	45.00	<4.00	<4.00	31.00			
21/0	F	4	2433	630					<16.00	22.00	<4.00	<4.00	15.00			
22/0	M	5	2903	680					43.00	23.00	15.00	15.00	34.00			
23/0	F	5	3264	720					45.00	27.00	16.00	16.00	35.00			
24/0	F	5	3768	740					41.00	22.00	15.00	15.00	37.00			
25/0	F	5	3617	750					<<19.96	18.04	<<4.95	<<4.95	<15.04			
Mean		2.9	1563	531					<5.00	4.00	<1.00	<1.00	<3.00			
Minim.		2	665	410					45.00	45.00	16.00	16.00	37.00			
Maxim.		5	3768	750					~10.78	8.47	~4.31	~4.31	~10.77			
St.dev		1.2	953	106					23	23	22	22	23			
Count		24	24	24												

Sample.No 02 : Skin with metacercariae of cf. Cryptocotyle lingua Skin with ulceration, lymphocytic areas and/or lesions  
 Sample.No 04 : Skin with metacercariae of cf. Cryptocotyle lingua Skin with ulceration, lymphocytic areas and/or lesions  
 LIVER : Sample partly lost - PCB etc lacking.

Sample.No 05 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 06 : Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods  
 Sample.No 10 : Skin with metacercariae of cf. Cryptocotyle lingua Skin with ulceration, lymphocytic areas and/or lesions  
 Sample.No 11 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 12 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 13 : Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods  
 Sample.No 14 : Liver and/or intestinal guts with larvae of Anisakis simplex Liver with necrotic areas and/or discolouration  
 Sample.No 15 : Skin with metacercariae of cf. Cryptocotyle lingua Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 16 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 17 : Skin with metacercariae of cf. Cryptocotyle lingua Skin with ulceration, lymphocytic areas and/or lesions  
 Sample.No 18 : Liver with necrotic areas and/or discolouration  
 Sample.No 21 : Skin with metacercariae of cf. Cryptocotyle lingua Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods Liver and/or intestinal guts with larvae of Anisakis simplex Liver with necrotic areas and/or discolouration  
 Sample.No 22 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 23 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 24 : Liver and/or intestinal guts with larvae of Anisakis simplex Liver with necrotic cysts or tumors  
 Sample.No 25 : Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods Liver and/or intestinal guts with larvae of Anisakis simplex









## Tab.width cont'd GADU MOR, LI, J26, 30X West of Nesodden, 930314.

Samp/ Repl. no.	Sex	Age	Wght	Lngr	mm	Analytical Lab. :		NIVA		Σ(*)		NIVA		NIVA		NIVA		
						Code	Detection Limit	HCHA	HCHG	HC	HC	HC	HC	HC	HC	HC	HC	HC
01/0	M	3	788	410				340	340	!	!	340	340	340	340	340	340	340
02/0	M	3	737	435				5.00	5.00	!	!	5.00	5.00	5.00	5.00	5.00	5.00	5.00
03/0	M	4	819	440				HCHA	HCHG	HC	HC	HCB	HCB	HCB	HCB	HCB	HCB	HCB
04/0	M	3	817	440				ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
05/0	M	3	1006	450				w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
06/0	M	3	858	450				<5.00	5.00	<10.00	<10.00	12.00	12.00	<5.00	<5.00	<5.00	<5.00	<5.00
07/0	M	4	1084	470				6.00	10.00	16.00	16.00	17.00	17.00	<5.00	<5.00	<5.00	<5.00	<5.00
08/0	M	4	1102	480				<5.00	<5.00	<5.00	<5.00	11.00	11.00	<5.00	<5.00	<5.00	<5.00	<5.00
09/0	M	4	1036	480				6.00	10.00	16.00	16.00	20.00	20.00	<5.00	<5.00	<5.00	<5.00	<5.00
10/0	F	4	1312	490				<5.00	<5.00	<5.00	<5.00	7.00	7.00	<5.00	<5.00	<5.00	<5.00	<5.00
11/0	F	3	1166	500				<5.00	<5.00	<5.00	<5.00	7.00	7.00	<5.00	<5.00	<5.00	<5.00	<5.00
12/0	F	4	1295	545				<5.00	<5.00	<5.00	<5.00	17.00	17.00	<5.00	<5.00	<5.00	<5.00	<5.00
13/0	F	4	2228	580				<5.00	<5.00	<5.00	<5.00	11.00	11.00	<5.00	<5.00	<5.00	<5.00	<5.00
14/0	F	4	2438	590				<5.00	<5.00	<5.00	<5.00	7.00	7.00	<5.00	<5.00	<5.00	<5.00	<5.00
15/0	F	4	2543	620				<5.00	<5.00	<5.00	<5.00	17.00	17.00	<5.00	<5.00	<5.00	<5.00	<5.00
16/0	F	4	3155	680				<5.00	<5.00	<5.00	<5.00	16.00	16.00	<5.00	<5.00	<5.00	<5.00	<5.00
17/0	M	4	3559	680				<5.00	8.00	<13.00	<13.00	30.00	30.00	<5.00	<5.00	<5.00	<5.00	<5.00
18/0	F	6	2958	690				<5.00	<5.00	<5.00	<5.00	23.00	23.00	<5.00	<5.00	<5.00	<5.00	<5.00
19/0	F	8	3865	720				<5.00	<5.00	<5.00	<5.00	22.00	22.00	<5.00	<5.00	<5.00	<5.00	<5.00
Mean	4.0	1725	534					<<5.11	<<5.79	<<7.47	<<7.47	14.32	14.32	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00
Minim.	3	737	410					<5.00	<5.00	<5.00	<5.00	7.00	7.00	<5.00	<5.00	<5.00	<5.00	<5.00
Maxim.	8	3865	720					6.00	10.00	16.00	16.00	30.00	30.00	<5.00	<5.00	<5.00	<5.00	<5.00
St.dev	1.2	1045	101					~0.32	~1.65	~3.99	~3.99	6.18	6.18	~0.00	~0.00	~0.00	~0.00	~6.68
Count	19	19	19					19	19	19	19	19	19	19	19	19	19	19

Sample.No 01 : Skin with metacercariae of cf. Cryptocotyle lingua

Sample.No 03 : Skin with reddish film

Sample.No 04 : Skin with metacercariae of cf. Cryptocotyle lingua

Sample.No 05 : Skin with metacercariae of cf. Cryptocotyle lingua

Sample.No 06 : Skin with metacercariae of cf. Cryptocotyle lingua

Sample.No 07 : Skin with metacercariae of cf. Cryptocotyle lingua

Sample.No 08 : Skin with metacercariae of cf. Cryptocotyle lingua

Sample.No 09 : poorly developed roe mass

Sample.No 12 : Muscle with signs of inner bleeding

Sample.No 13 : Muscle with metacercariae of cf. Cryptocotyle lingua

Sample.No 14 : Skin with metacercariae of cf. Cryptocotyle lingua

Sample.No 16 : Liver and/or intestinal guts with larvae of Anisakis simplex

Sample.No 18 : Liver and/or intestinal guts with larvae of Anisakis simplex

Muscle with signs of inner bleeding



Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample area: **J26 Oslofjorden**, Tissue : **LIVER**.  
 Locality : **31B Solbergstrand**, Latitude: 59°36.90N, Longitude: 10°39.40E.  
 Catch,date : **811223**, Count: 10, Sample type: **Individual**.

Analytical Lab. :		SIIF		SIIF		SIIF					
Analysis Code. :		130	120	120	110						
Detection Limit :		0.010		0.010		0.010					
Samp/	Sex	Dry	Fat	Cd	Hg	P	CB				
Repl.	F/M	Wght	%	ppm	ppm	ppm	ppm				
no.	Year	g	%	w.wt	w.wt	w.wt	w.wt				
01/	0	M	3	2160	630	60.0	70.60	63.80	0.047	0.030	8.900
02/	0	X	1	430	340	11.0	55.60	41.50	0.048	.	2.900
03/	0	F	1	510	370	9.0	45.80	20.70	0.252	.	4.500
04/	0	F	1	210	280	4.0	43.30	13.30	0.202	.	0.640
05/	0	X	1	155	280	0.2	30.80	.	0.338	.	.
06/	0	M	3	1350	520	50.0	63.60	51.10	0.049	0.030	3.800
07/	0	F	2	1150	490	27.0	50.00	16.20	0.064	0.041	1.200
08/	0	M	2	1540	530	61.0	65.70	55.40	0.064	<.020	3.400
09/	0	F	3	1540	590	31.0	51.10	41.00	0.054	0.069	3.900
10/	0	F	1	520	370	12.0	49.90	47.70	0.027	.	6.400
Mean	1.8	957	440	26.5	52.64	38.97	0.115	<.038	3.960		
Minim.	1	155	280	0.2	30.80	13.30	0.027	<.020	0.640		
Maxim.	3	2160	630	61.0	70.60	63.80	0.338	0.069	8.900		
St.dev	0.9	682	128	23.2	11.78	18.14	0.109	~.019	2.519		
Count	10	10	10	10	10	9	10	5	9		

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample area: **J26 Oslofjorden**, Tissue : **LIVER**.  
 Locality : **31B Solbergstrand**, Latitude: 59°36.90N, Longitude: 10°39.40E.  
 Catch date : **821200**, Count: 27, Sample type: **Individual**.  
 Comment : **SAMPLING DATES: I01-15 : 821020; I16-22 : 821105; I23-24 : 821215; I25-27 : 830223**

Samp/ Repl. no.	Sex	Age	Wght	Lngt	mm	Analytical Lab. :	Analysis Code. :	Detection Limit :	Dry		Fat		VETN		VETN		VETN		VETN		Σ(*)	
									g	%	ppm	w.wt	ppm	w.wt	ppm	w.wt	ppm	w.wt	ppm	w.wt	ppm	w.wt
01/ 0	F	2	640	400					56.00	47.00	0.040	<.010	1.260	2.100	130.00	130.00						
02/ 0	M	1	530	380					61.00	55.00	0.040	<.010	1.230	1.300	110.00	110.00						
03/ 0	M	2	710	420					57.00	55.00	0.020	<.010	1.210	2.100	160.00	160.00						
04/ 0	F	2	760	420					62.00	57.00	0.020	0.040	1.400	1.800	170.00	170.00						
05/ 0	M	2	740	420					51.00	59.00	0.040	<.010	1.240	2.100	170.00	170.00						
06/ 0	F	2	790	440					60.00	62.00	0.020	0.020	1.210	1.600	160.00	160.00						
07/ 0	M	2	710	440					51.00	54.00	0.040	0.040	1.160	4.400	370.00	370.00						
08/ 0	M	2	900	450					61.00	59.00	0.020	0.030	1.120	2.000	170.00	170.00						
09/ 0	M	2	840	440					62.00	67.00	0.040	0.010	1.480	1.400	140.00	140.00						
10/ 0	F	2	730	430					62.00	64.00	0.030	0.030	1.170	1.500	120.00	120.00						
11/ 0	F	2	1140	510					50.00	44.00	0.020	0.050	1.370	4.700	350.00	350.00						
12/ 0	F	2	1020	480					46.00	35.00	0.080	0.040	0.950	3.400	320.00	320.00						
13/ 0	M	2	1070	510					50.00	47.00	0.070	0.040	1.340	7.600	740.00	740.00						
14/ 0	F	2	990	490					57.00	68.00	0.110	0.050	1.600	3.800	750.00	750.00						
15/ 0	F	2	1270	530					51.00	40.00	0.040	0.090	1.150	5.400	520.00	520.00						
16/ 0	F	2	904	410					52.00	39.00	0.040	0.040	1.770	2.000	180.00	180.00						
17/ 0	M	4	1717	580					64.00	35.00	0.040	0.050	1.430	3.900	370.00	370.00						
18/ 0	M	3	1678	610					67.00	25.00	0.060	0.130	1.130	2.100	160.00	160.00						
19/ 0	F	2	817	460					39.00	23.00	0.100	0.070	1.980	5.100	390.00	390.00						
20/ 0	F	3	2252	630					62.00	28.00	0.040	0.160	1.840	7.700	660.00	660.00						
21/ 0	F	3	1359	580					46.00	37.00	0.170	0.100	1.720	11.000	860.00	860.00						
22/ 0	X	64								45.00	0.020	0.050		0.940	70.00	70.00						
23/ 0	M	3	3711	750					63.00	58.00	0.020	<.010	1.420	2.800	300.00	300.00						
24/ 0	M	3	1750	600					60.00	47.00	0.030	0.050	1.730	7.500	550.00	550.00						
25/ 0	F	5	3500	740					54.00	39.00	0.130	0.250	1.550	12.000	1220.00	1220.00						
26/ 0	F	3	2640	690					55.00	57.00	0.040	0.130	1.730	7.100	690.00	690.00						
27/ 0	F	3	2290	690					54.00	36.00	0.060	0.150	3.020	6.600	700.00	700.00						
Mean		2.4	1316	519					55.88	47.48	0.051	<.062	1.470	4.220	390.00	390.00						
Minim.		1	64	380					39.00	23.00	0.020	<.010	0.950	0.940	70.00	70.00						
Maxim.		5	3711	750					67.00	68.00	0.170	0.250	3.020	12.000	1220.00	1220.00						
St.dev		0.8	884	111					6.70	12.79	0.037	~.058	0.411	3.009	291.59	291.59						
Count		26	27	26					18	26	27	27	26	27	27	27						

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **LIVER**.  
 Locality : **36B Fårder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch,date : **811229**, Count: 10, Sample type: **Individual**.

Samp/ Repl. no.	Sex	Age	Year	g	mm	Lngt	Dry		Fat		SIIF		SIIF		SIIF	
							g	%	g	%	ppm	w.wt	ppm	w.wt	ppm	w.wt
01/	0	M	2	1200	520		19.0	41.10	23.30	0.116	0.070	0.070	4.800			
02/	0	F	2	1180	500		18.0	52.20	28.20	0.095	0.071	0.071	1.600			
03/	0	F	2	1210	500		16.0	49.80	38.40	0.125	0.067	0.067	3.300			
04/	0	F	2	1460	530		14.0	27.60	5.40	0.106	0.138	0.138	2.300			
05/	0	M	2	840	460		19.0	55.90	41.90	0.064	0.056	0.056	1.100			
06/	0	F	2	1260	520		25.0	51.40	37.90	0.040	0.038	0.038	2.400			
07/	0	F	2	1080	490		27.0	60.30	48.40	0.042	0.030	0.030	1.800			
08/	0	F	2	1710	580		37.0	61.10	49.90	0.033	0.073	0.073	5.100			
09/	0	F	2	1260	520		24.0	56.60	42.60	0.056	0.141	0.141	2.900			
10/	0	F	2	1080	490		29.0	62.70	49.00	0.302	0.048	0.048	1.600			
Mean			2.0	1228	511		22.8	51.87	36.50	0.098	0.073	0.073	2.690			
Minim.			2	840	460		14.0	27.60	5.40	0.033	0.030	0.030	1.100			
Maxim.			2	1710	580		37.0	62.70	49.90	0.302	0.141	0.141	5.100			
St.dev			0.0	232	32		7.0	10.66	13.98	0.079	0.038	0.038	1.358			
Count			10	10	10		10	10	10	10	10	10	10			

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **LIVER**.  
 Locality : **36B Farder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch,date : **821200**, Count: 27, Sample type: **Individual**.  
 Comment : **SAMPLING DATES: I01-05, I09-12, I15-20, I23-27 : 830202; I06-08, I13-14, I21-22 : 830301**

Samp/ Repl. no.	Sex	Age	Wght	Lngr	mm	Dry %	Fat %	VETN		VETN		VETN		VETN		VETN		Σ(*)
								Cd ppm	w.wt	Hg ppm	w.wt	Se ppm	w.wt	PCB ppm	w.wt	DD ppm	w.wt	
01/0	X	1	600	390		41.00	22.00	0.040	0.040			1.100	60.00	60.00				60.00
02/0	M	2	460	370			21.00	0.130				0.790	<50.00	<50.00				<50.00
03/0	M	1	480	370			20.00	0.060	0.140			1.800	150.00	150.00				150.00
04/0	M	1	600	390			19.00	0.050	0.010	2.080		0.950	70.00	70.00				70.00
05/0	F	2	670	430		28.00	13.00	0.110	<0.10			0.520	<50.00	<50.00				<50.00
06/0	M	3	910	460			38.00	0.150	0.130	2.060		1.600	100.00	100.00				100.00
07/0	F	2	720	440			27.00	0.140				0.760	50.00	50.00				50.00
08/0	F	2	1020	470		37.00	35.00	0.060	0.100	1.470		2.300	240.00	240.00				240.00
09/0	M	1	780	440		62.00	53.00	0.040	0.040	0.880		2.700	230.00	230.00				230.00
10/0	F	3	1110	500		36.00	20.00	0.120	0.130	1.940		3.900	300.00	300.00				300.00
11/0	F	3	1090	500		35.00	22.00	0.080	0.050	1.750		3.100	270.00	270.00				270.00
12/0	M	2	1080	480		35.00	77.00	0.060	0.100	1.690		2.000	110.00	110.00				110.00
13/0	F	3	1230	530			7.00	0.140	0.150			1.100	80.00	80.00				80.00
14/0	M	2	1040	500		33.00	34.00	0.070	0.100	1.620		2.600	190.00	190.00				190.00
15/0	F	3	1790	590		46.00	69.00	0.060	0.120	1.400		4.500	320.00	320.00				320.00
16/0	F	2	1720	560		52.00	41.00	0.040	0.080	0.870		1.700	130.00	130.00				130.00
17/0	F	3	1590	580		46.00	39.00	0.080	0.080	1.490		3.700	310.00	310.00				310.00
18/0	F	3	2090	580		46.00	33.00	0.050	0.090	0.940		2.100	180.00	180.00				180.00
19/0	F	3	1900	610		29.00	12.00	0.130	0.110	1.920		4.400	370.00	370.00				370.00
20/0	F	3	2410	650		54.00	52.00	0.010	0.030	1.000		2.300	220.00	220.00				220.00
21/0	F	4	2610	670		19.00	11.00	0.210	0.180	2.600		2.100	160.00	160.00				160.00
22/0	F	3	3350	690		52.00	55.00	0.040	0.200	1.740		4.600	390.00	390.00				390.00
23/0	M	3	3680	720		56.00	51.00	0.050	0.110	2.310		3.100	350.00	350.00				350.00
24/0	M	3	2700	660		53.00	51.00	0.030	0.070	0.930		3.000	260.00	260.00				260.00
25/0	F	3	2700	670		56.00	49.00	0.030	0.090	1.920		2.600	290.00	290.00				290.00
26/0	F	5	3400	770		43.00	32.00	0.120	0.140	1.470		9.100	960.00	960.00				960.00
27/0	M	1	430	350				0.130										
Mean		2.5	1561	532		42.95	34.73	0.083	<.096	1.604		2.632	<226.54	<226.54				<226.54
Minim.		1	430	350		19.00	7.00	0.010	<.010	0.870		0.520	<50.00	<50.00				<50.00
Maxim.		5	3680	770		62.00	77.00	0.210	0.200	2.600		9.100	960.00	960.00				960.00
St.dev		1.0	987	119		11.29	18.32	0.048	~.050	0.497		1.770	~184.26	~184.26				~184.26
Count		27	27	27		20	26	27	24	20		26	26	26				26

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **LIVER**.  
 Locality : **36B Farder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch,date : **831201**, Count: 23, Sample type: **Individual**.

Samp/ Repl. no.	Sex	Age	Wght	Lngt	mm	Analytical Lab. :			VETIN		VETIN		Σ (*)		VETIN								
						Analysis Code. :	Detection Limit :	Sex	Wght	Lngt	mm	Mean	Weight	g	Dry	%	Fat	%	230	210	210	210	!
01/0	F	8	7330	1000		163.3	43.40	41.00	0.160	14.200	1090.00	1090.00	1090.00	130.00									
02/0	F	2	710	390		4.6	27.00	3.80	0.680	0.810	60.00	60.00	60.00	<10.00									
03/0	F	3	5000	760		140.0	35.90	53.00	0.030	1.700	190.00	190.00	190.00	50.00									
04/0	M	2	540	370		4.1		2.40	0.250	0.470	<50.00	<50.00	<50.00	<10.00									
05/0	F	2	500	380		3.9	40.10	1.70	0.240	0.250	<50.00	<50.00	<50.00	<10.00									
06/0	M	2	1400	520		19.7	26.50	8.40	0.400	0.680	60.00	60.00	60.00	10.00									
07/0	F	2	730	420		10.2	50.20	40.00	0.310	3.000	180.00	180.00	180.00	40.00									
08/0	F	2	795	440		8.1	30.90	1.40	0.230	0.640	<50.00	<50.00	<50.00	<10.00									
09/0	F	3	1620	580		9.0	26.30	3.80	0.210	0.990	70.00	70.00	70.00	<10.00									
10/0	F	2	550	360		5.7	22.70	1.40	0.090	0.070	<50.00	<50.00	<50.00	<10.00									
11/0	M	2	1270	500		36.0	25.10	48.00	0.040	1.800	130.00	130.00	130.00	50.00									
12/0	F	2	1240	480		8.2	42.00	7.00	0.120	1.100	70.00	70.00	70.00	<10.00									
13/0	M	4	3040	700		19.9	25.80	2.60	0.330	1.100	60.00	60.00	60.00	<10.00									
14/0	F	3	3050	580		42.2	51.90	52.00	0.040	4.300	310.00	310.00	310.00	60.00									
15/0	F	2	320	330		2.9		2.80	0.230	0.260	<50.00	<50.00	<50.00	<10.00									
16/0	M	4	2470	640		37.7	47.00	47.00	0.130	4.500	530.00	530.00	530.00	70.00									
17/0	F	1	600	400		5.4	26.10	4.70	0.110	0.320	<50.00	<50.00	<50.00	<10.00									
18/0	F	3	1040	480		18.3	26.80	3.10	0.420	0.190	<50.00	<50.00	<50.00	<10.00									
19/0	M	2	710	420		6.2	25.60	2.80	0.260	0.380	<50.00	<50.00	<50.00	<10.00									
20/0	F	3	1620	700		23.3	45.60	40.00	0.100	3.100	260.00	260.00	260.00	40.00									
21/0	F	2	650	490		5.8	24.40	7.10	0.220	1.800	170.00	170.00	170.00	10.00									
22/0	M	1	650	420		17.2	54.10	52.00	0.060	1.400	80.00	80.00	80.00	40.00									
23/0	M	2	500	380		6.4	29.10	4.10	0.360	0.220	<50.00	<50.00	<50.00	<10.00									
Mean		2.6	1580	510		26.0	34.60	18.70	0.218	1.882	<<161.30	<<161.30	<<161.30	<<27.39									
Minim.		1	320	330		2.9	22.70	1.40	0.030	0.070	<50.00	<50.00	<50.00	<10.00									
Maxim.		8	7330	1000		163.3	54.10	53.00	0.680	14.200	1090.00	1090.00	1090.00	130.00									
St.dev		1.4	1679	161		41.4	10.55	21.16	0.154	2.973	~233.36	~233.36	~233.36	~29.73									
Count		23	23	23		23	21	23	23	23	23	23	23	23									

Sample.No 01 : A necrotic part on the forehead (ca 1 cm diameter). Some parasites Caligus diaphanus at the skin.

Sample.No 03 : Some Anisakis larvae in the liver.

Sample.No 06 : Some Anisakis larvae at the liver surface.

Sample.No 14 : Some Anisakis larvae at the liver surface.

Sample.No 16 : Some Anisakis larvae at the liver surface.

Sample.No 19 : A scar at the basis of the mid-dorsal fin, with some (1 cm dia) brownish-red muscle underneath.

Sample.No 20 : A few Anisakis larvae and mis-colored parts of the liver.

Sample.No 21 : A copepod Lernaeocera branchialis at the gills.

Sample.No 22 : A few Anisakis larvae at the liver surface.





Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **LIVER**.  
 Locality : **36B Fårder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch, date : **851216**, Count: 14, Sample type: **Individual**.  
 Comment : All samples were infected with metacercari of Cryptocotyle lingua. on skin tissue Otoliths from all samples (for age determin.) lost in mail.

. .	Analytical Lab. :		VEITN		VEITN		VEITN		Σ(*)		VEITN	
	Analysis Code. :	Detection Limit :	230	210	210	210	!	!	!	!	210	210
Sample/	Sex	Age	Wght	Ingt	CD	PCB	DDEPP	DD_Σ4	HCB			
Repl. no.	F/M	year	g	mm	ppm	ppm	ppb	ppb	ppb	w.wt	w.wt	w.wt
01/ 0	M	1237	530		0.050	5.700	760.00	760.00	40.00			
02/ 0	F	1774	560		0.020	3.200	260.00	260.00	30.00			
03/ 0	F	1056	490		0.290	2.400	200.00	200.00	20.00			
04/ 0	F	636	410		0.080	1.200	100.00	100.00	<100.00			
05/ 0	M	627	420		0.080	1.200	50.00	50.00	<100.00			
06/ 0	M	1797	560		0.040	1.600	170.00	170.00	60.00			
07/ 0	F	3460	730		0.030	2.500	230.00	230.00	40.00			
08/ 0	F	2884	690		0.070	2.500	250.00	250.00	20.00			
09/ 0	M	1517	530		0.050	3.000	250.00	250.00	40.00			
10/ 0	M	1220	490		0.030	2.300	250.00	250.00	40.00			
11/ 0	F	2578	630		0.010	2.400	260.00	260.00	40.00			
12/ 0	F	2032	610		0.040	7.200	640.00	640.00	20.00			
13/ 0	M	1488	550		0.060	3.200	320.00	320.00	30.00			
14/ 0	F	1837	580		0.100	3.000	350.00	350.00	20.00			
Mean		1725	556		0.068	2.957	292.14	292.14	<42.86			
Minim.		627	410		0.010	1.200	50.00	50.00	20.00			
Maxim.		3460	730		0.290	7.200	760.00	760.00	<100.00			
St.dev		815	91		0.069	1.644	191.00	191.00	~26.73			
Count		14	14		14	14	14	14	14			

Sample.No 06 : Surface of liver with a few Anisakis larvae  
 Sample.No 10 : Surface of liver with a few Anisakis larvae

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **LIVER**.  
 Locality : **36B Færder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch,date : **870204**, Count: 25, Sample type: **Individual**.  
 Comment : Extremely cold and stormy conditions Nov.'86 prohibited fishing for local cod (<50m depth). Color can be used to help distinguish between local and other cod.

Analytical Lab. Code : Detection Limit : Samp/ Sex Age Wght Lngt Repl. F/M year g mm no.	Mean Weight g	Dry %	Fat %	NIVA		NIVA		NIVA		NACE		Σ(*)		NACE		Σ(*)		NACE		
				312	311	312	311	510	510	DD	Σ4	HC	HC	Σ2	HC	HC	Σ2	HC	HC	Σ2
				ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
				d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	
01/ 0	F	2	1520	520	0.250	75.900	1.290	175.00	0.600	60.00	40.00	100.00	70.00	70.00	30.00	30.00	3.200			
02/ 0	F	2	2200	610	0.240	44.800	0.690	102.00	1.300	180.00	90.00	270.00	<30.00	<30.00	<10.00	<0.800				
03/ 1	M	4	3400	650	0.200	35.800	0.480	76.80	1.830	220.00	<40.00	<260.00	60.00	60.00	30.00	3.100				
03/ 2	M	3	4050	695	0.250	30.000	0.420	84.00	2.680	700.00	260.00	960.00	100.00	100.00	50.00	3.400				
04/ 0	F	1	3650	675	0.160	26.400	0.450	89.70	1.800	190.00	40.00	230.00	50.00	50.00	30.00	4.100				
05/ 0	F	1	840	435	0.330	31.800	0.950	159.00	0.140	20.00	<40.00	<60.00	<30.00	<30.00	10.00	2.900				
06/ 0	F	1	880	460	0.630	47.400	1.070	152.00	0.110	<20.00	<40.00	<40.00	50.00	50.00	40.00	<0.800				
07/ 0	F	2	1160	490	0.430	32.300	0.650	108.00	0.500	40.00	<40.00	<80.00	<30.00	<30.00	<10.00	1.400				
08/ 0	F	2	1620	570	0.760	67.200	1.270	173.00	0.180	20.00	<40.00	<60.00	<30.00	<30.00	<10.00	1.500				
09/ 0	M	2	2150	605	0.380	69.800	1.020	140.00	1.080	170.00	<40.00	<210.00	<30.00	<30.00	10.00	<0.800				
10/ 2	M	3	2000	585	0.170	33.400	1.290	87.60	3.010	570.00	200.00	770.00	<30.00	<30.00	30.00	4.700				
11/ 0	M	3	2050	610	0.120	20.700	0.630	57.40	0.440	40.00	<40.00	<80.00	60.00	60.00	30.00	1.800				
12/ 0	F	3	2185	515	0.570	34.900	0.890	133.00	0.800	110.00	<40.00	<150.00	<30.00	<30.00	<10.00	<0.800				
13/ 0	F	2	1445	530	0.230	64.000	1.170	175.00	1.000	90.00	<40.00	<130.00	<30.00	<30.00	<10.00	2.000				
14/ 0	F	2	1445	530	0.200	35.200	0.910	117.00	1.000	90.00	<40.00	<130.00	<30.00	<30.00	<10.00	2.000				
15/ 0	M	1	1130	485	0.100	15.100	0.480	47.90	0.540	80.00	<40.00	<120.00	50.00	50.00	40.00	2.300				
16/ 0	X	1	605	430	0.650	30.400	1.000	152.00	0.220	40.00	<40.00	<80.00	<10.00	<10.00	<10.00	2.100				
17/ 0	F	1	750	440	0.130	15.699	1.570	41.90	6.770	1260.00	320.00	1580.00	270.00	270.00	80.00	<0.800				
18/ 0	M	1	602	395	0.170	18.000	0.310	57.60	0.690	100.00	50.00	150.00	<30.00	<30.00	40.00	9.600				
19/ 0	X	1	820	460	0.390	36.400	1.040	124.00	0.340	20.00	<40.00	<60.00	<30.00	<30.00	30.00	3.100				
20/ 0	F	1	820	460	0.700	77.900	1.230	432.00	0.460	80.00	<40.00	<120.00	50.00	50.00	30.00	1.300				
21/ 0	F	2	700	405	0.160	32.100	0.400	65.70	1.940	540.00	110.00	650.00	200.00	200.00	70.00	<0.800				
22/ 0	F	1	455	360	0.250	21.000	0.840	62.90	0.960	80.00	<40.00	<120.00	50.00	50.00	40.00	3.300				
23/ 0	F	1	330	330	0.250	24.100	1.060	106.00	0.240	20.00	<40.00	<60.00	<30.00	<30.00	10.00	3.800				
24/ 0	M	1	300	315	0.260	26.400	1.020	120.00	0.590	60.00	<40.00	<100.00	<30.00	<30.00	20.00	0.800				
25/ 0	F	1	240	300	0.230	34.600	0.810	109.00	0.290	20.00	<40.00	<60.00	90.00	90.00	40.00	1.400				
Mean		1.8	1389	491	0.487	36.524	0.869	120.13	1.140	<189.20	<<71.60	<<260.00	<<58.80	<<58.80	<28.00	<2.424				
Minim.		1	240	300	0.070	15.100	0.310	41.90	0.110	<20.00	<40.00	<40.00	<10.00	<10.00	<10.00	<0.800				
Maxim.		4	4050	695	0.260	77.900	1.570	432.00	6.770	1260.00	320.00	1580.00	270.00	270.00	80.00	9.600				
St.dev		0.9	1053	113	0.510	18.242	0.335	77.36	1.412	289.31	74.98	361.99	57.76	57.76	19.36	~1.917				
Count		23	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25

Sample.No 01 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 03 :  
 LIVER : Liver with signs of inner bleeding.  
 Sample.No 04 : Skin with metacercari of cf. Cryptocotyle lingua.  
 LIVER : Liver surface with some cf. Anisakis larvae.  
 Sample.No 06 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 07 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 08 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 11 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 15 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 18 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 19 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 21 : Skin with metacercari of cf. Cryptocotyle lingua.



Species : GADU MOR, Gadus morhua, GB: Cod, N: Torsk.  
 Sample area: J26 Oslofjorden, Tissue : LIVER.  
 Locality : 36B Fårder, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch, date : 881213, Count: 25, Sample type: Individual.

Analysis Code	Detection Limit	Mean Weight	Dry %	Fat %	NIVA Cd	NIVA Cu	NIVA Pb	NIVA Zn	NIVA DDEPP	NIVA DD	NIVA HCHG	NIVA HC	NIVA HCB	Σ(*)	Σ(*)	NACE	NACE
01/0	F 4	866	470	6.7	44.40	27.40	0.080	13.100	0.210	87.10	2.220	200.00	60.00	260.00	<40.00	<40.00	4.410
02/0	F 4	1521	560	35.9	39.20	19.40	0.060	32.400	0.360	90.60	1.670	90.00	<40.00	<130.00	<40.00	<40.00	3.650
03/0	F 3	1846	590	31.5	54.70	42.60	0.050	9.810	<.120	52.40	4.390	280.00	80.00	360.00	<40.00	<40.00	19.900
04/0	F 3	1328	530	37.9	63.60	51.30	<.030	6.910	<.140	42.50	2.770	240.00	50.00	290.00	<40.00	<40.00	4.050
05/0	M 4	1977	605	35.2	33.70	15.00	0.130	12.000	0.300	114.00	2.420	220.00	<40.00	<260.00	<40.00	<40.00	5.560
06/0	M 3	3080	695	68.5	53.60	39.50	<.350	32.800	<.170	52.40	3.500	290.00	70.00	360.00	<40.00	<40.00	18.100
07/0	F 3	1172	485	41.7	67.00	64.10	0.030	7.990	<.140	47.30	2.540	210.00	130.00	340.00	<40.00	<40.00	7.250
08/0	M 4	1327	510	36.2	56.20	44.00	0.040	12.400	<.140	53.00	2.630	170.00	<40.00	<210.00	<40.00	<40.00	35.600
09/0	M 3	825	465	13.1	22.50	2.50	0.500	93.000	0.830	211.00	0.800	60.00	<40.00	<100.00	<40.00	<40.00	26.600
10/0	F 1	652	400	9.8	39.00	22.70	0.120	30.900	0.310	69.00	1.880	100.00	<40.00	<140.00	<40.00	<40.00	4.440
11/0	F 4	1055	480	23.9	60.70	52.50	0.030	11.500	0.140	54.80	3.450	370.00	<40.00	<410.00	<40.00	<40.00	6.730
12/0	F 1	429	365	5.6	27.40	9.50	0.240	16.300	0.520	144.00	1.450	50.00	<40.00	<90.00	<40.00	<40.00	33.500
13/0	M 2	1168	505	35.1	64.20	54.30	0.050	15.100	0.150	47.80	3.070	310.00	90.00	400.00	<40.00	<40.00	6.670
14/0	F 2	1016	490	14.8	36.30	17.70	0.190	49.200	0.200	115.00	2.020	100.00	<40.00	<140.00	<40.00	<40.00	12.700
15/0	F 2	1180	490	21.8	53.10	44.00	0.030	19.600	0.130	53.20	3.170	230.00	70.00	300.00	<40.00	<40.00	9.330
16/0	F 3	1642	580	27.5	26.70	1.30	0.130	46.300	0.520	153.00	0.680	50.00	<40.00	<90.00	<40.00	<40.00	30.300
17/0	M 3	829	435	25.2	63.40	57.40	<.030	9.840	<.160	40.60	2.070	120.00	<40.00	<160.00	<40.00	<40.00	24.900
18/0	F 4	2181	595	34.5	53.60	39.10	0.040	6.690	<.140	71.80	4.840	410.00	50.00	460.00	<40.00	<40.00	27.600
19/0	M 6	3330	720	44.1	37.40	20.90	0.130	44.600	0.200	106.00	8.910	430.00	<40.00	<470.00	<40.00	<40.00	15.800
20/0	M 5	3059	695	81.1	66.80	42.40	0.030	37.600	<.120	53.00	3.470	200.00	<40.00	<240.00	<40.00	<40.00	48.300
21/0	F 4	1424	540	16.5	26.10	23.10	1.330	143.000	0.340	211.00	1.710	100.00	<40.00	<140.00	<40.00	<40.00	17.200
22/0	F 4	2447	635	42.3	34.40	15.40	0.060	68.100	0.210	130.00	2.060	110.00	<40.00	<150.00	<40.00	<40.00	5.000
23/0	F 3	1147	490	34.4	68.50	50.50	0.020	7.090	0.080	48.40	3.520	320.00	<40.00	<360.00	<40.00	<40.00	24.300
24/0	F 4	752	450	10.4	40.80	34.20	0.110	16.400	0.200	105.00	5.400	590.00	130.00	720.00	<40.00	<40.00	11.900
25/0	F 1	503	360	6.7	39.30	23.00	0.080	5.530	0.160	84.90	1.560	70.00	<40.00	<110.00	<40.00	<40.00	3.460
Mean	3.2	1470	526	29.6	46.90	32.55	<.156	29.926	<.240	89.51	2.888	212.80	<.54.80	<.267.60	<.40.00	<.40.00	16.290
Minim.	1	429	360	5.6	22.50	1.30	0.020	5.530	0.080	40.60	0.680	50.00	<40.00	<90.00	<40.00	<40.00	3.460
Maxim.	6	3330	720	81.1	68.50	64.10	1.330	143.000	0.830	211.00	8.910	590.00	130.00	720.00	<40.00	<40.00	48.300
St. dev	1.2	808	97	18.4	14.66	17.75	~.269	31.998	~.169	49.35	1.709	137.98	~26.79	~153.60	~0.00	~0.00	12.289
Count	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25

Sample.No 03 : Worm tissue between bone structure of tailfin  
 Sample.No 04 : Lesion (0.5-1.0cm) 2-3cm posterior to anal pore  
 Sample.No 05 : Worm tissue between bone structure on tailfin  
 Sample.No 15 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
 Sample.No 18 :  
 LIVER : 2 partitions on liver  
 Sample.No 24 :  
 LIVER : PCB, DDEPP, HCHG and HCB values are mean of two analyses.



Tab.width cont'd GADU MOR, LI, J26, 36B Farder, 891201.

Sample/ Repl. no.	F/M	year	g	mm	Analytical Lab. :	NACE	NACE
					Analysis Code. :	510	610
					Detection Limit :	20.00	0.800
					Sex Age Wght Lngt	HCB	EPOCI
					ppb	ppb	ppm
					w. wt	w. wt	w. wt
01/ 0	F	1	2180	595		20.00	8.050
02/ 0	F	1	1177	500		<20.00	1.580
03/ 0	F	1	643	430		60.00	miss
04/ 0	M	1	1463	535		120.00	4.630
05/ 0	M	4	1641	595		20.00	13.100
06/ 0	F	1	697	420		20.00	2.030
07/ 0	F	1	456	355		30.00	miss
08/ 0	M	1	655	400		130.00	0.420
09/ 0	M	4	2162	555		40.00	9.690
10/ 0	F	2	941	460		50.00	1.060
11/ 0	F	2	1205	515		<20.00	6.780
12/ 0	F	1	1325	520		<20.00	2.260
13/ 0	F	1	441	390		<20.00	miss
14/ 0	F	2	526	395		miss	miss
15/ 0	M	2	809	450		<20.00	3.670
16/ 0	F	3	934	450		20.00	3.640
17/ 0	M	1	1063	475		<20.00	5.020
18/ 0	F	1	1028	495		<20.00	6.640
19/ 0	F	2	1653	540		20.00	2.170
20/ 0	F	1	1010	495		40.00	5.750
21/ 0	M	2	1124	480		<20.00	2.310
22/ 0	F	4	4237	700		<20.00	3.540
23/ 0	F	1	940	450		<20.00	7.690
24/ 0	M	2	1357	475		20.00	2.430
25/ 0	F	1	478	370		<20.00	0.840
Mean		1.7	1206	482		<<33.75	4.443
Minim.		1	441	355		<20.00	0.420
Maxim.		4	4237	700		130.00	13.100
St.dev		1.0	791	79		~30.19	3.268
Count		25	25	25		24	21

Sample.No 01 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 02 : LIVER : liver yellow-green

Sample.No 03 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 04 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 05 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 06 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 07 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 08 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 09 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 10 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 11 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 12 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 13 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 14 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 15 : Skin with metacercari cf. Cryptocotyle lingua

Sample.No 21 : Uncertain age determination

Uncertain age determination

Uncertain age determination

Species : GADU MOR, Gadus morhua, GB: Cod, N: Torsk.  
 Sample area: J26 Oslofjorden, Tissue : LIVER.  
 Locality : 36B Fårder, Latitude: 59°02.00N, Longitude: 10°27.00E.  
 Catch, date : 901105, Count: 24, Sample type: Individual.

Sample/ Repl. no.	Sex	F/M	Year	g	mm	Analytical Lab. :			NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA			
						Code :	Detection Limit :	Weight	Dry	Fat	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
01/ 0	F	1	518	380	5.3	19.00	2.60	0.066	10.800	0.160	41.70	0.80	3.40	11.60	7.80	1.70	0.80	<26.5	<27.3	2.70	miss	NIVA	340	NIVA	340	
02/ 0	F	1	549	390	16.9	64.40	50.80	0.011	6.700	0.140	22.70	11.00	32.00	48.00	46.00	12.00	4.00	165.0	169.0	23.00	miss	NIVA	340	NIVA	340	
03/ 0	M	1	643	410	17.2	62.00	52.90	0.013	7.100	0.070	23.90	11.00	10.00	76.00	78.00	19.00	5.00	219.0	<24.0	40.00	miss	NIVA	340	NIVA	340	
04/ 0	M	1	708	420	25.3	55.50	47.50	0.010	6.000	0.070	23.90	6.00	31.00	55.00	66.00	13.00	4.00	184.0	<188.0	23.00	miss	NIVA	340	NIVA	340	
05/ 0	F	1	821	430	19.6	52.30	42.10	0.014	12.100	0.090	30.80	6.00	64.00	59.00	115.00	21.00	4.00	329.0	<353.0	41.00	miss	NIVA	340	NIVA	340	
06/ 0	M	3	836	430	33.7	63.50	55.30	0.009	10.100	0.060	22.90	6.00	78.00	66.00	133.00	40.00	2.00	344.0	557.0	57.00	miss	NIVA	340	NIVA	340	
07/ 0	M	1	771	430	10.4	33.30	16.60	0.024	5.500	0.130	31.40	3.00	46.00	70.00	91.00	16.00	2.00	238.0	<40.0	32.00	miss	NIVA	340	NIVA	340	
08/ 0	M	1	941	440	32.5	70.20	60.10	0.011	6.800	0.060	22.50	6.00	33.00	55.00	61.00	14.00	5.00	190.0	<195.0	24.00	miss	NIVA	340	NIVA	340	
09/ 0	F	3	982	450	46.3	54.90	42.40	0.017	13.800	0.080	26.00	6.00	56.00	98.00	108.00	19.00	4.00	313.0	317.0	31.00	miss	NIVA	340	NIVA	340	
10/ 0	F	2	1035	470	32.4	57.70	48.40	0.008	9.300	0.080	27.30	12.00	174.00	93.00	218.00	71.00	5.00	789.0	794.0	194.00	miss	NIVA	340	NIVA	340	
11/ 0	F	3	1328	490	26.8	40.30	24.60	0.034	11.100	0.110	33.80	4.00	85.00	163.00	202.00	43.00	9.00	520.0	529.0	135.00	miss	NIVA	340	NIVA	340	
12/ 0	M	3	1026	500	10.4	25.30	7.60	0.049	28.300	0.160	50.80	2.00	38.00	70.00	95.00	19.00	2.00	232.0	234.0	23.00	miss	NIVA	340	NIVA	340	
13/ 0	M	3	1289	520	43.6	65.10	58.10	0.016	16.500	0.130	33.50	8.00	78.00	134.00	151.00	28.00	6.00	439.0	445.0	82.00	miss	NIVA	340	NIVA	340	
14/ 0	F	3	1333	550	13.8	21.10	2.20	0.077	11.900	0.200	45.20	0.50	12.50	20.70	30.20	3.40	0.80	69.1	69.9	11.60	miss	NIVA	340	NIVA	340	
15/ 0	M	3	1365	550	28.7	58.80	48.30	0.036	10.500	0.110	31.40	8.00	196.00	236.00	360.00	102.00	7.00	983.0	990.0	135.00	miss	NIVA	340	NIVA	340	
16/ 0	M	3	1601	560	34.6	55.60	44.60	0.027	8.100	0.120	29.70	6.00	128.00	233.00	365.00	71.00	9.00	878.0	887.0	103.00	miss	NIVA	340	NIVA	340	
17/ 0	M	4	1794	580	31.9	50.60	37.80	0.039	22.000	0.130	41.40	8.00	174.00	303.00	461.00	102.00	11.00	1120.0	1131.0	148.00	miss	NIVA	340	NIVA	340	
18/ 0	F	3	1872	580	53.2	62.70	54.90	0.019	16.000	0.120	35.70	11.00	170.00	103.00	427.00	104.00	20.00	920.0	940.0	243.00	miss	NIVA	340	NIVA	340	
19/ 0	M	3	2035	590	54.9	59.10	53.70	0.027	18.800	0.100	37.20	11.00	184.00	300.00	408.00	82.00	15.00	1070.0	1085.0	218.00	miss	NIVA	340	NIVA	340	
20/ 0	M	3	1954	600	64.6	61.40	54.90	0.022	6.800	0.090	28.70	8.00	86.00	83.00	180.00	47.00	14.00	444.0	458.0	119.00	miss	NIVA	340	NIVA	340	
21/ 0	M	3	1775	600	26.7	40.90	27.40	0.040	10.600	0.160	35.00	9.00	369.00	320.00	474.00	153.00	14.00	1371.0	1385.0	221.00	miss	NIVA	340	NIVA	340	
22/ 0	F	3	1795	600	61.0	67.80	62.00	0.023	18.400	0.090	34.20	15.00	148.00	218.00	253.00	51.00	13.00	764.0	777.0	193.00	miss	NIVA	340	NIVA	340	
23/ 0	F	2	2231	620	44.0	39.50	21.30	0.083	7.200	0.180	32.20	65.00	961.00	595.00	751.00	205.00	8.00	2775.0	2783.0	309.00	miss	NIVA	340	NIVA	340	
24/ 0	M	4	2630	660	55.0	55.40	40.80	0.038	27.100	0.250	44.70	9.00	223.00	352.00	559.00	137.00	15.00	1354.0	1369.0	200.00	miss	NIVA	340	NIVA	340	
Mean		2.4	1327	510	32.9	51.52	39.87	0.030	12.563	0.120	32.78	9.68	140.83	162.18	235.00	57.25	<16.28	<655.7	<672.0	108.68	.		108.68		<6.53	
Minim.		1	518	380	5.3	19.00	2.20	0.008	5.500	0.060	22.50	0.50	3.40	11.60	7.80	1.70	0.80	<26.5	<27.3	2.70	.		2.70		1.50	0.40
Max.im.		4	2630	660	64.6	70.20	62.00	0.083	28.300	0.250	50.80	65.00	961.00	595.00	751.00	205.00	213.00	2775.0	2783.0	309.00	.		309.00		78.00	16.00
St.dev		1.0	582	83	16.9	14.80	18.38	0.021	6.437	0.047	7.76	12.32	194.98	137.48	196.11	53.29	42.22	609.0	608.7	89.19	.		89.19		19.39	3.99
Count		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	.		24		24	24

! Missing value.

miss(24)



Tab.width cont'd **GADU MOR, LI, J26, 36B Færder, 901105.**

Repl. no.	F/M	year	g	mm	Analytical Lab. :	Analysis Code. :	Detection Limit :	Σ(*)		NIVA		NIVA		NIVA	
								HC	Σ2	HC	QB	OC	CS	EPOCL	
								ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt
01/	0	F	1	518	380			1.90	<0.40	<0.40	<0.40	<0.40	3.700		
02/	0	F	1	549	390			<42.00	4.00	<4.00	<4.00	<4.00	12.400		
03/	0	M	1	643	410			<76.00	7.00	5.00	<5.00	<5.00	31.000		
04/	0	M	1	708	420			<42.00	5.00	<4.00	<4.00	<4.00	26.900		
05/	0	F	1	821	430			37.00	7.00	<4.00	<4.00	<4.00	160.200		
06/	0	M	3	836	430			58.00	6.00	<5.00	169.00	165.700			
07/	0	M	1	771	430			<18.00	2.00	<2.00	<2.00	4.700			
08/	0	M	1	941	440			39.00	4.00	<5.00	<5.00	49.000			
09/	0	F	3	982	450			46.00	5.00	<3.00	<3.00	103.500			
10/	0	F	2	1035	470			31.00	6.00	<4.00	29.00	130.100			
11/	0	F	3	1328	490			37.00	4.00	<2.00	37.00	68.700			
12/	0	M	3	1026	500			5.00	1.00	<1.00	<1.00	26.600			
13/	0	M	3	1289	520			53.00	12.00	<5.00	25.00	187.100			
14/	0	F	3	1333	550			4.30	0.30	<0.20	2.80	6.600			
15/	0	M	3	1365	550			39.00	9.00	<4.00	14.00	146.700			
16/	0	M	3	1601	560			39.00	10.00	<2.00	5.00	118.200			
17/	0	M	4	1794	580			53.00	15.00	<3.00	6.00	106.700			
18/	0	F	3	1872	580			71.00	27.00	<2.00	100.00	148.400			
19/	0	M	3	2035	590			68.00	22.00	<5.00	60.00	215.000			
20/	0	M	3	1964	600			62.00	14.00	<5.00	57.00	295.500			
21/	0	M	3	1775	600			34.00	9.00	<3.00	47.00	156.400			
22/	0	F	3	1795	600			90.00	35.00	<6.00	88.00	395.900			
23/	0	F	2	2231	620			<43.00	9.00	<5.00	8.00	386.000			
24/	0	M	4	2630	660			55.00	15.00	<4.00	17.00	105.200			
Mean	2.4		1327	510			<43.51	<9.53	<<3.48	<<28.88	127.092				
Minim.	1		518	380			1.90	0.30	<0.20	<0.40	3.700				
Maxim.	4		2630	660			90.00	35.00	<6.00	169.00	395.900				
St.dev	1.0		582	83			~22.11	~8.51	~1.62	~41.13	110.643				
Count	24		24	24			24	24	24	24	24				

Sample.No 01 : NIVA no. 23. Skin with metacercariae of cf. Cryptocotyle lingua.

Sample.No 02 : NIVA no. 24. Bacterial fin rot. Skin with metacercariae of cf. Cryptocotyle lingua. Skin and or oral cavity w/caligiform and lernaepodiiform copepods.

- Sample.No 03 : NIVA no. 20. Skin with metacercariae of cf. Cryptocotyle lingua.  
 LIVER : Liver with necrotic cysts or tumours.
- Sample.No 04 : NIVA no. 22. Bacterial fin rot. Skin with metacercariae of cf. Cryptocotyle lingua. Skin and oral cavity w/caligiform or lernaepodiiform copepods.  
 LIVER : Liver with necrotic areas or discoloured; red.
- Sample.No 05 : NIVA no. 16. Bacterial fin rot. Skin and oral cavity w/caligiform or lernaepodiiform copepods. Gills with Lernaecocera copepods.  
 LIVER : Liver with necrotic areas or discoloured; green.
- Sample.No 06 : NIVA no. 18. Bacterial fin rot. Skin with nematoda. Skin with metacercariae of cf. Cryptocotyle lingua. Skin and oral cavity w/caligiform or lernaepodiiform copepods. Lesions on jaw, fin or tissue.  
 LIVER : Liver/guts with Anasakis larvae.
- Sample.No 07 : NIVA no. 21. Bacterial fin rot. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 08 : NIVA no. 19. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 09 : NIVA no. 15. Bacterial fin rot. Skin with metacercariae of cf. Cryptocotyle lingua. Lesions on jaw, fin or tissue.  
 Sample.No 10 : NIVA no. 17. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 11 : NIVA no. 12. Skin with metacercariae of cf. Cryptocotyle lingua. Skin and oral cavity w/caligiform or lernaepodiiform copepods.  
 LIVER : Liver with necrotic areas or discoloured; red.
- Sample.No 12 : NIVA no. 14. Internal organs with signs of decomposition.  
 Sample.No 13 : NIVA no. 13. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 14 : NIVA no. 08. Skin with metacercariae of cf. Cryptocotyle lingua.  
 LIVER : Liver with very loose consistency. Reanalyses: 21.6% dry, 2.3% exlip.  
 Sample.No 15 : NIVA no. 11. Bacterial fin rot.  
 LIVER : Liver/guts with Anasakis larvae.
- Sample.No 16 : NIVA no. 06. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 17 : NIVA no. 03. Skin with metacercariae of cf. Cryptocotyle lingua.  
 LIVER : Liver with necrotic areas or discoloured.
- Sample.No 18 : NIVA no. 07. Skin with metacercariae of cf. Cryptocotyle lingua. Internal organs with signs of decomposition.  
 Sample.No 19 : NIVA no. 02. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 20 : NIVA no. 04. Skin with metacercariae of cf. Cryptocotyle lingua. Skin and oral cavity w/caligiform or lernaepodiiform copepods.  
 Sample.No 21 : NIVA no. 09. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 22 : NIVA no. 10. Bacterial fin rot. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 23 : NIVA no. 05. Bacterial fin rot. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 24 : NIVA no. 01. Skin and oral cavity w/caligiform or lernaepodiiform copepods. Gills with Lernaecocera copepods.



Tab.width cont'd **GADU MOR, LI, J26, 36B Færdex, 911201.**

Sample/ Repl. no.	Sex	Age	Wght	Lngt	mm	NIVA		Σ(*)		NIVA		NIVA		NIVA	
						ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt
01/ 0	M	2	621	390		<5.00	14.00	<19.00	8.00	<5.00	<5.00	<5.00	<5.00	2.200	
02/ 0	M	2	695	390		<5.00	17.00	<22.00	11.00	<5.00	<5.00	<5.00	<5.00	14.860	
03/ 0	M	2	722	420		<5.00	13.00	<18.00	9.00	<5.00	<5.00	<5.00	<5.00	7.210	
04/ 0	M	3	792	430		<5.00	19.00	<24.00	10.00	<5.00	<5.00	<5.00	<5.00	15.580	
05/ 0	F	3	1031	450		<5.00	17.00	<22.00	10.00	<5.00	<5.00	<5.00	<5.00	8.630	
06/ 0	F	3	1064	470		<5.00	18.00	<23.00	10.00	<5.00	<5.00	<5.00	<5.00	17.190	
07/ 0	F	3	1111	470		<5.00	13.00	<18.00	7.00	<5.00	<5.00	<5.00	<5.00	10.430	
08/ 0	M	3	1307	490		<5.00	14.00	<19.00	8.00	<5.00	<5.00	<5.00	<5.00	7.630	
09/ 0	M	3	1220	490		<5.00	18.00	<23.00	9.00	<5.00	<5.00	<5.00	<5.00	15.380	
10/ 0	M	3	1215	500		<5.00	14.00	<19.00	8.00	<5.00	<5.00	<5.00	<5.00	2.520	
11/ 0	F	3	1279	500		<5.00	12.00	<17.00	8.00	<5.00	<5.00	<5.00	<5.00	1.190	
12/ 0	F	3	1210	500		<5.00	10.00	<15.00	8.00	<5.00	<5.00	<5.00	<5.00	0.340	
13/ 0	M	3	1398	500		<5.00	20.00	<25.00	12.00	<5.00	<5.00	<5.00	<5.00	11.400	
14/ 0	M	3	1552	500		<5.00	14.00	<19.00	13.00	<5.00	<5.00	<5.00	<5.00	2.940	
15/ 0	F	3	1585	500		<5.00	12.00	<17.00	6.00	<5.00	<5.00	<5.00	<5.00	2.900	
16/ 0	M	3	1325	510		<5.00	15.00	<20.00	8.00	<5.00	<5.00	<5.00	<5.00	3.200	
17/ 0	M	3	1558	520		<5.00	15.00	<20.00	9.00	<5.00	<5.00	<5.00	<5.00	3.750	
18/ 0	F	3	1307	530		<5.00	14.00	<19.00	12.00	<5.00	<5.00	<5.00	<5.00	5.070	
19/ 0	F	3	1686	530		<5.00	9.00	<14.00	7.00	<5.00	<5.00	<5.00	<5.00	7.300	
20/ 0	F	3	1558	540		<5.00	16.00	<21.00	7.00	<5.00	<5.00	<5.00	<5.00	11.000	
21/ 0	M	3	1761	550		<5.00	16.00	<21.00	11.00	<5.00	<5.00	<5.00	<5.00	8.290	
22/ 0	F	3	2064	560		<5.00	14.00	<19.00	9.00	<5.00	<5.00	<5.00	<5.00	7.050	
23/ 0	F	3	2126	590		<5.00	12.00	<17.00	10.00	<5.00	<5.00	<5.00	<5.00	4.830	
24/ 0	M	3	1812	590		<5.00	17.00	<22.00	12.00	<5.00	<5.00	<5.00	<5.00	5.750	
25/ 0	F	3	2601	620		<5.00	12.00	<17.00	9.00	<5.00	<5.00	<5.00	<5.00	7.650	
Mean		2.9	1384	502		<<5.00	14.60	<<19.60	9.24	<<5.00	<<5.00	<<5.00	<<5.00	7.372	
Minim.		2	621	390		<5.00	9.00	<14.00	6.00	<5.00	<5.00	<5.00	<5.00	0.340	
Maxim.		3	2601	620		<5.00	20.00	<25.00	13.00	<5.00	<5.00	<5.00	<5.00	17.190	
St.dev		0.3	470	58		~0.00	2.74	~2.74	1.83	~0.00	~0.00	~0.00	~0.00	4.778	
Count		25	25	25		25	25	25	25	25	25	25	25	25	
Sample.No 01	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 02	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 03	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 04	: Muscle with signs of inner bleeding														
Sample.No 05	: Muscle with signs of inner bleeding														
Sample.No 06	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 07	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 08	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 09	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 10	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 11	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 12	: Skin with metacercariae of cf. Cryptocotyle lingua Liver with necrotic areas and/or discolouration														
Sample.No 13	: Skin with metacercariae of cf. Cryptocotyle lingua Liver with necrotic areas and/or discolouration														
Sample.No 14	: Skin with metacercariae of cf. Cryptocotyle lingua Liver with necrotic areas and/or discolouration														
Sample.No 15	: Skin with metacercariae of cf. Cryptocotyle lingua Liver with necrotic areas and/or discolouration														
Sample.No 16	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 17	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 18	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 19	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 20	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 21	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 22	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 23	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 24	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														
Sample.No 25	: Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding														

Liver and/or intestinal guts with larvae of Anisakis simplex

Liver with necrotic areas and/or discolouration



Tab.width cont'd GADU MOR, LI, J26, 36B Færdær, 921215.

Sample/ Repl. no.	Sex	Age	Wght	Lngt	mm	NIVA		Σ(*)		NIVA		NIVA		NIVA	
						ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt
01/0	M	2	563	370		<5.00	8.00	<13.00	miss	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
02/0	M	2	542	380		<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
03/0	F	2	590	390		<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
04/0	M	2	553	395		<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
05/0	F	3	808	420		7.00	12.00	19.00	miss	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
06/0	F	3	848	440		6.00	12.00	18.00	miss	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
07/0	M	3	788	440		<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
08/0	F	3	774	450		<5.00	7.00	<12.00	11.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
09/0	F	3	1180	490		<5.00	10.00	15.00	9.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
10/0	M	3	1254	490		<5.00	6.00	<11.00	9.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
11/0	F	3	1333	500		11.00	20.00	31.00	16.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
12/0	M	3	1370	500		<5.00	5.00	<10.00	12.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
13/0	M	3	1313	510		<5.00	7.00	<12.00	14.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
14/0	M	4	1296	510		6.00	11.00	17.00	11.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
15/0	F	3	1447	520		<5.00	9.00	<14.00	9.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
16/0	F	3	1513	520		9.00	17.00	26.00	13.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
17/0	F	3	1663	540		10.00	17.00	27.00	16.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
18/0	F	4	1965	560		7.00	12.00	19.00	11.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
19/0	F	4	1744	570		5.00	9.00	14.00	12.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
20/0	F	4	1760	570		5.00	9.00	14.00	14.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
21/0	F	4	1662	575		5.00	10.00	15.00	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
22/0	F	3	2114	600		<5.00	5.00	<10.00	7.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
23/0	F	4	2377	605		<5.00	<5.00	<5.00	6.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
24/0	F	4	2047	610		5.00	10.00	15.00	11.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
25/0	F	4	2968	660		<5.84	<9.04	<<13.68	<9.23	<<5.00	<<6.16	<<5.00	<<5.00	<<5.00	<<5.00
Mean		3.2	1379	505		11.00	20.00	31.00	16.00	11.00	16.00	11.00	16.00	11.00	16.00
Minim.		4	542	370		~1.70	~4.23	~7.11	~3.72	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00
Maxim.		4	2968	660											
St.dev		0.7	625	79											
Count		25	25	25											

Sample.No 01 : film on gills  
 Sample.No 02 : Liver with necrotic areas and/or discoloration  
 Sample.No 03 : Niva no.4 Liver with necrotic areas and/or discoloration  
 Sample.No 04 : Niva no.3 Liver with necrotic areas and/or discoloration  
 Sample.No 05 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 06 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 07 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 08 : head with red film  
 Sample.No 09 : Muscle with signs of inner bleeding  
 Sample.No 10 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 11 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 12 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 13 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 14 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 15 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 16 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 17 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 18 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 19 : Niva no.20  
 Sample.No 20 : Niva no.21 Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 21 : Niva no.19  
 Sample.No 22 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 23 : Skin with red discoloration  
 Sample.No 24 : Liver sample for metal analyses lost.  
 Sample.No 25 : skin with red discoloration

and/or intestinal guts with larvae of Anisakis simplex

Muscle with signs of inner bleeding

reddish discoloration

Species : GADU MOR, Gadus morhua, GB: Cod, N: Torsk.  
 Sample-area: J99 Undefined, Tissue : LIVER.  
 Locality : 77B Borøy area, Latitude: 58°33.00N, Longitude: 09°01.00E.  
 Catch,date : 901104, Count: 14, Sample type: Individual.

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lrgt Repl. F/M year g mm no.	Mean	Dry %	Fat %	Cd ppm	Cu ppm	Pb ppm	Zn ppm	CB28	CB52	CB101	CB118	CB138	CB153	CB180	CB209	CB_27	CB_ΣΣ	DOEPP	TKDEPP	NIVA	ΣZ(*)	NIVA	ΣZ(*)	NIVA	ΣZ(*)	NIVA	ΣZ(*)	HCHA	HCHG		
																														W.Wt	W.Wt
01/ 0 F 1 1081 460	21.8	47.40	28.70	0.030	16.100	0.140	29.90	6.00	4.00	12.00	42.00	72.00	110.00	23.00	25.00	269.0	294.0	45.00	45.00	miss	miss	45.00	45.00	miss	45.00	45.00	18.00	18.00	29.00		
02/ 0 F 2 1011 460	14.7	33.70	15.70	0.044	4.700	0.160	30.10	3.00	1.00	3.00	29.00	40.00	65.00	21.00	6.00	162.0	168.0	42.00	42.00	miss	miss	42.00	42.00	miss	42.00	42.00	7.00	7.00	10.00		
03/ 0 M 4 1220 500	28.8	54.00	37.60	0.025	15.000	0.080	28.30	5.00	3.00	10.00	37.00	54.00	146.00	54.00	65.00	309.0	374.0	39.00	39.00	miss	miss	39.00	39.00	miss	39.00	39.00	14.00	14.00	22.00		
04/ 0 F 3 1284 500	46.0	48.50	34.50	0.041	12.700	0.150	29.60	7.00	2.00	6.00	32.00	48.00	99.00	29.00	33.00	223.0	256.0	35.00	35.00	miss	miss	35.00	35.00	miss	35.00	35.00	18.00	18.00	32.00		
05/ 0 M 2 1467 520	39.9	58.20	50.60	0.021	13.570	0.140	26.50	7.00	4.00	11.00	37.00	52.00	129.00	42.00	58.00	282.0	340.0	42.00	42.00	miss	miss	42.00	42.00	miss	42.00	42.00	18.00	18.00	35.00		
06/ 0 M 3 1613 540	70.6	72.30	67.00	0.005	9.900	0.080	24.00	12.00	6.00	19.00	35.00	65.00	84.00	30.00	7.00	251.0	258.0	59.00	59.00	miss	miss	59.00	59.00	miss	59.00	59.00	27.00	27.00	56.00		
07/ 0 F 2 1623 540	45.9	53.50	41.50	0.021	12.900	0.110	28.90	7.00	3.00	11.00	42.00	72.00	137.00	45.00	61.00	317.0	378.0	47.00	47.00	miss	miss	47.00	47.00	miss	47.00	47.00	16.00	16.00	34.00		
08/ 0 F 3 1512 540	26.9	37.40	22.30	0.057	17.300	0.130	38.00	3.00	5.00	23.00	57.00	97.00	195.00	60.00	18.00	440.0	458.0	66.00	66.00	miss	miss	66.00	66.00	miss	66.00	66.00	6.00	6.00	9.00		
09/ 0 F 3 1782 580	40.2	47.10	35.20	0.037	28.500	0.160	39.50	7.00	5.00	19.00	73.00	110.00	236.00	70.00	79.00	520.0	599.0	69.00	69.00	miss	miss	69.00	69.00	miss	69.00	69.00	18.00	18.00	30.00		
10/ 0 M 2 1878 580	66.1	67.50	63.00	0.015	5.270	0.110	21.10	5.00	4.00	8.00	25.00	30.00	59.00	20.00	23.00	151.0	174.0	35.00	35.00	miss	miss	35.00	35.00	miss	35.00	35.00	7.00	7.00	12.00		
11/ 0 F 3 1965 600	24.6	33.30	15.70	0.069	27.500	0.170	47.60	4.00	2.00	10.00	47.00	80.00	196.00	54.00	73.00	393.0	466.0	57.00	57.00	miss	miss	57.00	57.00	miss	57.00	57.00	7.00	7.00	2.00		
12/ 0 M 3 2153 610	25.8	26.40	8.30	0.077	43.100	0.140	53.90	2.00	1.00	7.00	35.00	67.00	149.00	40.00	46.00	301.0	347.0	41.00	41.00	miss	miss	41.00	41.00	miss	41.00	41.00	3.00	3.00	2.00		
13/ 0 M 3 2415 650	49.5	54.50	39.30	0.038	11.700	0.090	30.10	8.00	7.00	36.00	98.00	160.00	323.00	95.00	38.00	727.0	765.0	147.00	147.00	miss	miss	147.00	147.00	miss	147.00	147.00	14.00	14.00	28.00		
14/ 0 M 3 3541 730	39.2	28.40	10.70	0.079	18.400	0.120	54.20	4.00	1.00	5.00	64.00	89.00	184.00	51.00	54.00	398.0	452.0	58.00	58.00	miss	miss	58.00	58.00	miss	58.00	58.00	4.00	4.00	3.00		
Mean	38.6	47.30	33.58	0.040	16.903	0.127	34.41	5.71	3.43	12.86	46.64	74.00	150.86	45.29	41.86	338.8	380.6	55.86	55.86	.	.	55.86	55.86	.	55.86	55.86	13.43	13.43	23.57		
Minim.	14.7	26.40	8.30	0.005	4.700	0.080	21.10	2.00	1.00	3.00	25.00	30.00	59.00	20.00	6.00	151.0	168.0	35.00	35.00	.	.	35.00	35.00	.	35.00	35.00	3.00	3.00	2.00		
Maxim.	70.6	72.30	67.00	0.079	43.100	0.170	54.20	12.00	7.00	36.00	98.00	160.00	323.00	95.00	79.00	727.0	765.0	147.00	147.00	.	.	147.00	147.00	.	147.00	147.00	27.00	27.00	56.00		
St.dev	16.3	14.04	18.27	0.023	10.171	0.030	10.67	2.58	1.91	8.78	20.07	33.13	71.95	21.03	23.99	151.6	162.3	28.49	28.49	.	.	28.49	28.49	.	28.49	28.49	6.97	6.97	14.92		
Count	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	

miss(14) ! Missing value.

## Tab. width cont'd GADU MOR, LI, J99, 77B Borøy area, 901104.

Samp/ Repl. no.	Sex F/M	Age year	Wght g	Ingt mm	Σ(*)	NIVA		NIVA		NIVA	
						ppb	w.wt	ppb	w.wt	ppb	w.wt
01/0	F	1	1081	460	47.00	9.00	<1.00	10.00	340	340	615
02/0	F	2	1011	460	17.00	4.00	1.00	8.00	2.00	2.00	0.040
03/0	M	4	1220	500	36.00	10.00	<2.00	24.00	OCB	OCB	EPOCL
04/0	F	3	1284	500	50.00	11.00	<2.00	14.00	ppb	ppb	ppm
05/0	M	2	1467	520	53.00	14.00	<2.00	22.00	w.wt	w.wt	w.wt
06/0	M	3	1613	540	83.00	13.00	<3.00	4.00			21.300
07/0	F	2	1623	540	50.00	11.00	<2.00	19.00			
08/0	F	3	1512	540	15.00	3.00	<1.00	11.00			
09/0	F	3	1782	580	48.00	12.00	<1.00	33.00			11.300
10/0	M	2	1878	580	46.00	9.00	<2.00	15.00			
11/0	F	3	1965	600	19.00	5.00	2.00	<1.00			
12/0	M	3	2153	610	5.00	3.00	2.00	<1.00			
13/0	M	3	2415	650	42.00	15.00	2.00	19.00			
14/0	M	3	3541	730	7.00	4.00	<1.00	14.00			4.300
Mean	2.6	1753	558		37.00	8.79	<<1.71	<13.93			12.300
Minim.	1	1011	460		5.00	3.00	<1.00	<1.00			4.300
Maxim.	4	3541	730		83.00	15.00	<3.00	33.00			21.300
St.dev	0.7	653	74		21.79	4.23	~0.61	~9.09			8.544
Count	14	14	14		14	14	14	14			3

Sample.No 01 : NIVA no. 14. Skin with metacercariae of cf. Cryptocotyle lingua.

Sample.No 02 : NIVA no. 13. Bacterial fin rot. Lesions on jaw, fin or tissue. Skin and or oral cavity w/caligiform or lernaepodiiform copepods.

Sample.No 03 : NIVA no. 12. Gills with Lernaecera copepods and Mytilus edulis juv. Oral cavity with Anasakis larvae.

Sample.No 04 : NIVA no. 11. Skin with metacercariae of cf. Cryptocotyle lingua. Gills with Lernaecera copepods. Oral cavity with Anasakis larvae.

Sample.No 05 : NIVA no. 10. Lesions on jaw, fin or tissue. Skin with metacercariae of cf. Cryptocotyle lingua.

Sample.No 06 : NIVA no. 09.

Sample.No 07 : NIVA no. 08.

Sample.No 08 : NIVA no. 07. Skin with metacercariae of cf. Cryptocotyle lingua.

Sample.No 09 : NIVA no. 06. Skin and or oral cavity w/caligiform or lernaepodiiform copepods.

Sample.No 10 : NIVA no. 05. Lesions on jaw, fin or tissue. Gills with Lernaecera copepods. Oral cavity with Anasakis larvae.

Sample.No 11 : NIVA no. 04.

Sample.No 12 : NIVA no. 03.

LIVER : Liver with loose consistency

Sample.No 13 : NIVA no. 02. Lesions on jaw, fin or tissue. Oral cavity with Anasakis larvae. Gills with Lernaecera copepods.

LIVER : Liver/guts with Anasakis larvae.

Sample.No 14 : NIVA no. 01.

LIVER : Liver/guts with Anasakis larvae.





Tab.width cont'd GADU MOR, LI, J99, 77B Borøy area, 911001.

Sample/ Rep'l. no.	Sex	Age	F/M	Year	g	mm	NIVA		Σ(*)		NIVA		NIVA		NIVA	
							ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt
01/0	M	2			464	370	<5.00	9.00	<14.00	9.00	<5.00	5.00	23.420			
02/0	F	2			531	390	<5.00	6.00	<11.00	7.00	<5.00	<5.00	14.480			
03/0	F	2			551	390	<5.00	10.00	<15.00	7.00	<5.00	<5.00	17.390			
04/0	F	2			566	390	<5.00	7.00	<12.00	5.00	<5.00	<5.00	<0.050			
05/0	F	2			621	410	<5.00	9.00	<14.00	18.00	<5.00	<5.00	1.780			
07/0	M	2			687	410	<5.00	5.00	<10.00	8.00	<5.00	8.00	1.870			
08/0	M	2			642	410	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<0.050			
09/0	F	2			735	430	<5.00	8.00	<13.00	8.00	<5.00	8.00	2.130			
10/0	M	2			772	440	<5.00	<5.00	<5.00	6.00	<5.00	8.00	2.350			
11/0	M	2			719	440	<5.00	5.00	<10.00	8.00	<5.00	7.00	0.530			
13/0	F	2			778	460	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	1.080			
14/0	M	3			790	470	<5.00	5.00	<10.00	10.00	<5.00	13.00	1.290			
15/0	M	3			1006	480	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	0.470			
16/0	F	3			891	480	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2.000			
17/0	M	3			1035	490	<5.00	<5.00	<5.00	12.00	<5.00	35.00	2.000			
19/0	M	3			1282	540	<5.00	10.00	<15.00	18.00	<5.00	20.00	<0.050			
20/0	M	3			1650	540	<5.00	<5.00	<5.00	21.00	<5.00	<5.00	0.900			
21/0	M	3			1927	540	<5.00	6.00	<11.00	11.00	<5.00	15.00	1.010			
22/0	F	3			1609	560	<5.00	12.00	<17.00	22.00	<5.00	64.00	1.160			
23/0	M	3			1895	570	<5.00	14.00	<19.00	10.00	<5.00	<5.00	5.350			
25/0	M	3			2094	580	<5.00	10.00	<15.00	16.00	<5.00	14.00	0.380			
26/0	F	3			2199	610	<5.00	11.00	<16.00	24.00	<5.00	16.00	<0.050			
27/0	F	3			2335	620	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	38.00			
28/0	F	4			2006	640	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	1.060			
29/0	F	5			2680	670	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	0.120			
Mean		2.7			1219	493	<<5.00	<<7.83	<<11.17	<<10.00	<<5.00	<<13.46	<3.374			
Minim.		2			464	370	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<0.050			
Maxim.		5			2680	670	<5.00	21.00	<26.00	24.00	<5.00	64.00	23.420			
St.dev		0.7			682	88	0.00	3.91	5.56	5.64	0.00	14.24	6.074			
Count		25			25	25	24	24	24	24	24	24	24			

Sample.No	Findings	Observations
Sample.No 01	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 02	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 03	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 04	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 05	: Skin with metacercariae of cf. Cryptocotyle lingua	skin with ulceration, lymphocytic areas and/or lesions
Sample.No 07	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 08	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 09	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 10	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 11	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 13	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 14	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 15	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 16	: Skin with metacercariae of cf. Cryptocotyle lingua and/or discoloration	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods Liver with necrotic areas
Sample.No 17	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 19	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 20	: Muscle with signs of inner bleeding	lymphocytic areas and/or lesions
Sample.No 21	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 25	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods
Sample.No 26	: Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods	Muscle with signs of inner bleeding Liver and/or intestinal guts with larvae of Anisakis simplex
Sample.No 27	: Muscle with signs of inner bleeding	
Sample.No 28	: Muscle with signs of inner bleeding	
Sample.No 29	: Skin with metacercariae of cf. Cryptocotyle lingua	skin and/or oral cavity with caligiform and/or lernaepodiiform copepods Bacterial fin rot Liver with necrotic areas and/or discoloration



Tab.width cont'd GADU MOR, LI, J99, 15B Ullerø area, 901103.

Samp/ Repl. no.	Sex	Age	Wght	Lngr	mm	g	F/M	year	no.	Σ (*)		NIVA		NIVA		NIVA	
										ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt
Analytical Lab. :										NIVA		NIVA		NIVA		NIVA	
Analysis Code. :										340		340		340		615	
Detection Limit :										!		!		2.00		0.040	
HC_Σ 2										ppb		QCB		OCS		EPOCL	
Repl. F/M year										w.wt		ppb		w.wt		ppb	
no.										w.wt		w.wt		w.wt		w.wt	
01/ 0	F	2	645	400						38.00	5.00	<2.00	<2.00				
02/ 0	F	2	674	420						10.00	1.00	<1.00	<1.00				
03/ 0	M	3	712	420						18.00	5.00	2.00	8.00				
04/ 0	F	2	698	430						20.00	5.00	<1.00	3.00				
05/ 0	M	2	622	430						44.00	11.00	<6.00	<6.00	15.310			
06/ 0	M	2	753	430						<2.00	<1.00	<1.00	<1.00				
07/ 0	M	2	825	440						19.00	3.00	1.00	<1.00				
08/ 0	M	2	928	450						34.00	4.00	<1.00	<1.00				
09/ 0	M	2	745	450						18.00	4.00	4.00	5.00				
10/ 0	F	3	788	460						2.00	1.00	1.00	1.00	miss			
11/ 0	F	2	1100	470						22.00	4.00	<2.00	<2.00				
12/ 0	M	2	861	470						2.00	1.00	2.00	2.00				
13/ 0	F	2	1165	510						19.00	4.00	1.00	2.00				
14/ 0	F	3	1137	510						4.00	1.00	<1.00	1.00				
15/ 0	M	3	1442	520						35.00	6.00	<4.00	<4.00	15.960			
16/ 0	M	3	1507	550						19.00	6.00	<2.00	2.00				
17/ 0	F	3	1596	560						39.00	13.00	6.00	7.00				
18/ 0	M	2	2553	610						49.00	9.00	4.00	4.00				
19/ 0	F	4	1932	610						2.00	3.00	3.00	9.00				
20/ 0	M	4	2517	630						36.00	6.00	<6.00	<6.00	13.570			
21/ 0	M	3	2938	660						35.00	6.00	<3.00	4.00				
22/ 0	F	4	2707	670						28.00	6.00	<2.00	6.00				
23/ 0	F	3	2701	680						44.00	17.00	<3.00	<3.00				
24/ 0	M	4	3275	690						<21.00	17.00	<3.00	19.00				
25/ 0	M	5	3485	700						77.00	20.00	<6.00	<6.00	16.720			
Mean	2.8	1532	527							<25.48	<6.36	<<2.72	<<4.24	15.390			
Minim.	2	622	400							<2.00	<1.00	<1.00	<1.00	13.570			
Maxim.	5	3485	700							77.00	20.00	<6.00	19.00	16.720			
St.dev	0.9	937	100							~18.04	~5.32	~1.77	~3.91	1.343			
Count	25	25	25							25	25	25	25	4			

- Sample.No 01 : NIVA no. 23. Skin and or oral cavity w/caligiform or lernaepodiform copepods. Lesions on jaw, fin or tissue.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 02 : NIVA no. 25. Lesions on jaw, fin or tissue.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 03 : NIVA no. 16. Skin and or oral cavity w/caligiform or lernaepodiform copepods. Lesions on jaw, fin or tissue.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 04 : NIVA no. 20.  
LIVER : Liver/guts with Anasakis larvae. Liver with necrotic cysts or tumours.
- Sample.No 05 : NIVA no. 22. Lesions on jaw, fin or tissue.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 06 : NIVA no. 24. Skin and or oral cavity w/caligiform or lernaepodiform copepods. Lesions on jaw, fin or tissue.  
LIVER : Liver with very loose consistency. Liver/guts with Anasakis larvae.
- Sample.No 07 : NIVA no. 15.  
Sample.No 08 : NIVA no. 19. Bacterial fin rot. Skin with metacercariae of cf. Cryptocotyle lingua. Skin and or oral cavity w/caligiform or lernaepodiform copepods.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 09 : NIVA no. 21.  
LIVER : Liver with necrotic cysts or tumours.
- Sample.No 10 : NIVA no. 18. Skin and or oral cavity w/caligiform or lernaepodiform copepods. Lesions on jaw, fin or tissue.  
Sample.No 11 : NIVA no. 13.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 12 : NIVA no. 17. Skin with metacercariae of cf. Cryptocotyle lingua. Skin and or oral cavity w/caligiform or lernaepodiform copepods.  
LIVER : Liver with very loose consistency. Liver/guts with Anasakis larvae.
- Sample.No 13 : NIVA no. 12. Gills with Lernaocera copepods. Skin with metacercariae of cf. Cryptocotyle lingua. Skin and or oral cavity w/caligiform or lernaepodiform copepods. Bacterial fin rot.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 14 : NIVA no. 14  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 15 : NIVA no. 11  
Sample.No 16 : NIVA no. 09. Bacterial fin rot.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 17 : NIVA no. 08. Skin with metacercariae of cf. Cryptocotyle lingua. Skin and or oral cavity w/caligiform or lernaepodiform copepods.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 18 : NIVA no. 06  
Sample.No 19 : NIVA no. 10. Bacterial fin rot. Skin and or oral cavity w/caligiform or lernaepodiform copepods.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 20 : NIVA no. 07  
Sample.No 21 : NIVA no. 03. Skin and or oral cavity w/caligiform or lernaepodiform copepods.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 22 : NIVA no. 05. Skin and or oral cavity w/caligiform or lernaepodiform copepods. Bacterial fin rot.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 23 : NIVA no. 04. Skin with metacercariae of cf. Cryptocotyle lingua. Skin and or oral cavity w/caligiform or lernaepodiform copepods. Bacterial fin rot.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 24 : NIVA no. 01.  
LIVER : Liver/guts with Anasakis larvae.
- Sample.No 25 : NIVA no. 02.



Tab.width cont'd GADU MOR, LI, J99, 15B Ullerø area, 911025.

Samp/ Repl. no.	Sex	Age	Wght	Lngt	mm	Σ(*)		NIVA		NIVA	
						ppb	w.wt	ppb	w.wt	ppb	w.wt
HC	Σ2	HC	Σ2	QCB	OCS	ppb	w.wt	ppb	w.wt	ppb	w.wt
01/0	M	2	506	380							
02/0	M	2	576	390							
03/0	M	2	802	420							
04/0	M	2	842	440							
05/0	F	2	910	440							
06/0	F	3	929	450							
07/0	F	2	1112	480							
08/0	F	2	1278	490							
09/0	F	3	1407	490							
10/0	F	2	1188	490							
11/0	M	2	1124	490							
12/0	M	2	1270	490							
13/0	M	2	1361	490							
14/0	F	2	1320	530							
15/0	M	3	1775	530							
16/0	F	3	1781	550							
17/0	M	3	1870	550							
18/0	F	2	1993	560							
19/0	M	2	1905	570							
20/0	F	3	1775	570							
21/0	M	3	2142	590							
22/0	M	3	3270	650							
23/0	F	3	3677	670							
24/0	F	4	3225	700							
Mean	2.5	1585	517			63.59	20.73	<18.27	31.32		
Minim.	2	506	380			25.00	7.00	<6.00	6.00		
Maxim.	4	3677	700			103.00	41.00	31.00	53.00		
St.dev	0.6	830	82			18.68	7.15	5.78	10.17		
Count	24	24	24			22	22	22	22		

Sample.No 01 : Skin with metacercariae of cf. Cryptocotyle lingua Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods Liver with necrotic areas and/or discoloration

Sample.No 02 : Skin with metacercariae of cf. Cryptocotyle lingua Liver with necrotic areas and/or discoloration

Sample.No 03 : Skin with ulceration, lymphocytic areas and/or lesions Liver and/or intestinal guts with larvae of Anisakis simplex

Sample.No 04 : Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods Liver with necrotic areas and/or discoloration

Sample.No 05 : Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods

Sample.No 07 : Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods Skin with ulceration, lymphocytic areas and/or lesions Liver and/or intestinal guts with larvae of Anisakis simplex Liver with necrotic areas and/or discoloration

Sample.No 09 : Skin with metacercariae of cf. Cryptocotyle lingua Bacterial fin rot Liver with necrotic areas and/or discoloration

Sample.No 14 : Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods Liver and/or intestinal guts with larvae of Anisakis simplex

Sample.No 19 : Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods Liver and/or intestinal guts with larvae of Anisakis simplex

Sample.No 20 : Liver with necrotic areas and/or discoloration

Sample.No 21 : Liver and/or intestinal guts with larvae of Anisakis simplex

Sample.No 22 : Liver and/or intestinal guts with larvae of Anisakis simplex





Tab.width cont'd GADU MOR, LI, J99, 15B Ullero area, 921215.

Samp/ Repl. no.	Sex	Age	Wght	Lngt	mm	NIVA		Σ (*)		NIVA		NIVA		NIVA		
						ppb	w. wt	HCHA	HC	HC	E2	HC	HC	Q	CB	O
01/	0	M	2	1008	440	8.00	16.00	24.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	<5.00
02/	0	M	2	1020	450	5.00	13.00	18.00	18.00	12.00	12.00	12.00	12.00	12.00	12.00	<5.00
03/	0	M	3	1055	470	<5.00	6.00	<11.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	<5.00
04/	0	M	3	1144	470	<5.00	7.00	<12.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	<5.00
05/	0	M	3	1098	480	<5.00	5.00	<10.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	<5.00
06/	0	M	3	1370	480	<5.00	<5.00	<5.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	<5.00
07/	0	M	3	1503	490	<5.00	7.00	<12.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	<5.00
08/	0	M	3	1499	490	<5.00	8.00	<13.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	<5.00
09/	0	M	3	1549	490	<5.00	5.00	<10.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	<5.00
10/	0	M	3	1234	500	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
11/	0	M	3	1386	505	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
12/	0	M	3	1312	510	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
13/	0	M	3	1439	515	6.00	11.00	17.00	17.00	8.00	8.00	8.00	8.00	8.00	8.00	<5.00
14/	0	M	4	1591	520	7.00	11.00	18.00	18.00	11.00	11.00	11.00	11.00	11.00	11.00	8.00
15/	0	F	3	1688	520	6.00	11.00	17.00	17.00	14.00	14.00	14.00	14.00	14.00	14.00	<5.00
16/	0	M	3	2256	530	<5.00	7.00	<12.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	<5.00
17/	0	M	3	2190	540	5.00	8.00	13.00	13.00	10.00	10.00	10.00	10.00	10.00	10.00	<5.00
18/	0	F	3	1882	545	<5.00	5.00	<10.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	<5.00
19/	0	M	3	1822	550	<5.00	7.00	<12.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	<5.00
20/	0	F	3	2015	550	7.00	12.00	19.00	19.00	16.00	16.00	16.00	16.00	16.00	16.00	<5.00
21/	0	F	4	2742	555	<5.00	6.00	<11.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	<5.00
22/	0	F	3	2332	560	<5.00	6.00	<11.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	<5.00
23/	0	F	4	3356	650	<5.00	7.00	<12.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	<5.00
Mean	3.0			1674	513	<<5.39	<7.74	<<12.26	<10.04	<<5.00	<<5.00	<<5.13	<<5.00	<<5.00	<<5.00	<<5.13
Minim.	2			1008	440	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Maxim.	4			3356	650	8.00	16.00	24.00	24.00	16.00	16.00	16.00	16.00	16.00	16.00	8.00
St. dev	0.5			591	45	~0.84	~3.09	~4.89	~3.36	~3.36	~3.36	~3.36	~3.36	~3.36	~3.36	~0.63
Count	23			23	23	23	23	23	23	23	23	23	23	23	23	23

Sample.No 02 : Liver with necrotic areas and/or discolouration  
 Sample.No 03 : Liver with necrotic areas and/or discolouration  
 Sample.No 04 : Niva no.6  
 Sample.No 05 : Niva no.4  
 Sample.No 06 : Niva no.5 Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 09 : Niva no .11  
 LIVER : Niva no.11  
 Sample.No 10 : Niva no.9  
 Sample.No 11 : Niva no.10 skin with red film  
 Sample.No 12 : Liver with necrotic areas and/or discolouration skin with red film  
 Sample.No 15 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 18 : Liver with necrotic areas and/or discolouration



Tab.width cont'd GADU MOR, LI, J99, 23B Karihavet area, 901007.

Samp/ Repl. no.	Sex F/M	Age year	Wght g	Lngr mm	Analytical Lab. :		Σ (*) ppb w.wt	NIVA		NIVA		NIVA		
					Code. :	340		340	340	340	615			
Detection Limit :					HC_Σ2		HCB		QCB		OCS		EPOCLI	
					ppb		ppb		ppb		ppb		ppm	
					w.wt		w.wt		w.wt		w.wt		w.wt	
01/ 0	F	2	520	370	19.00	3.00	<1.00	<1.00	<1.00	.	.	.	.	
02/ 0	F	3	542	390	22.00	7.00	2.00	<1.00	<1.00	.	.	.	.	
03/ 0	M	3	764	410	28.00	5.00	<2.00	<2.00	<2.00	.	.	.	.	
04/ 0	F	2	528	410	28.00	2.00	1.00	<1.00	<1.00	.	.	.	.	
05/ 0	F	2	710	410	27.00	4.00	<4.00	<4.00	<4.00	9.050	.	.	.	
06/ 0	M	4	446	440	34.00	4.00	3.00	<2.00	<2.00	.	.	.	.	
07/ 0	F	3	840	440	30.00	4.00	<2.00	<2.00	<2.00	.	.	.	.	
08/ 0	M	2	472	450	33.00	7.00	3.00	<2.00	<2.00	.	.	.	.	
09/ 0	M	4	711	460	23.00	4.00	4.00	<2.00	<2.00	.	.	.	.	
10/ 0	M	3	906	460	33.00	6.00	<5.00	<5.00	<5.00	7.480	.	.	.	
11/ 0	F	3	1170	510	17.00	3.00	2.00	1.00	1.00	.	.	.	.	
12/ 0	F	3	1018	510	16.00	4.00	6.00	<2.00	<2.00	.	.	.	.	
13/ 0	F	3	637	520	38.00	8.00	4.00	<2.00	<2.00	.	.	.	.	
14/ 0	F	4	1154	530	25.00	5.00	<2.00	<2.00	<2.00	.	.	.	.	
15/ 0	F	3	1275	530	58.00	12.00	<5.00	<5.00	<5.00	14.100	.	.	.	
16/ 0	F	4	1394	540	15.00	6.00	3.00	1.00	1.00	.	.	.	.	
17/ 0	F	3	1019	540	30.00	17.00	19.00	<3.00	<3.00	.	.	.	.	
18/ 0	F	4	1606	560	40.00	12.00	<2.00	<2.00	<2.00	.	.	.	.	
19/ 0	F	3	844	570	8.00	4.00	<2.00	<2.00	<2.00	.	.	.	.	
20/ 0	F	3	1330	610	59.00	10.00	<4.00	<4.00	<4.00	10.680	.	.	.	
21/ 0	M	5	1345	620	30.00	12.00	<3.00	<3.00	<3.00	.	.	.	.	
22/ 0	F	4	1679	630	21.00	15.00	<3.00	<3.00	<3.00	.	.	.	.	
23/ 0	F	5	1446	630	28.00	18.00	<3.00	<3.00	<3.00	.	.	.	.	
24/ 0	F	4	1628	640	26.00	7.00	<2.00	<2.00	<2.00	.	.	.	.	
25/ 0	F	5	2863	700	47.00	13.00	<5.00	<5.00	<5.00	11.140	.	.	.	
Mean		3.4	1074	515	29.40	7.68	<3.68	<2.36	<2.36	10.490	.	.	.	
Minim.		2	446	370	8.00	2.00	<1.00	<1.00	<1.00	7.480	.	.	.	
Maxim.		5	2863	700	59.00	18.00	19.00	<5.00	<5.00	14.100	.	.	.	
St.dev		0.9	537	90	12.17	4.63	~3.45	~1.15	~1.15	2.481	.	.	.	
Count		25	25	25	25	25	25	25	25	5	.	.	.	

- Sample.No 01 : NIVA no. 24. Lesions on jaw, fin or tissue.  
 LIVER : Liver/guts with Anasakis larvae.
- Sample.No 02 : NIVA no. 23. Lesions on jaw, fin or tissue. Skin with metacercariae of cf. Cryptocotyle lingua.  
 LIVER : Liver/guts with Anasakis larvae.
- Sample.No 03 : NIVA no. 22. Skin with metacercariae of cf. Cryptocotyle lingua.  
 LIVER : Liver with necrotic areas or discoloured.
- Sample.No 04 : NIVA no. 25. Lesions on jaw, fin or tissue. Skin and or oral cavity w/caligiform or lemaeopodiiform copepods.  
 LIVER : Liver with very dried out appearance.
- Sample.No 05 : NIVA no. 21. Bacterial fin rot. Lesions on jaw, fin or tissue.  
 LIVER : Liver/guts with Anasakis larvae.
- Sample.No 06 : NIVA no. 10.  
 Sample.No 07 : NIVA no. 12. Lesions on jaw, fin or tissue. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 08 : NIVA no. 09. Skin with metacercariae of cf. Cryptocotyle lingua.
- Sample.No 09 : NIVA no. 19.  
 Sample.No 10 : NIVA no. 20. Skin with metacercariae of cf. Cryptocotyle lingua. Skin and or oral cavity w/caligiform or lemaeopodiiform copepods.  
 Sample.No 11 : NIVA no. 16. Lesions on jaw, fin or tissue. Skin with metacercariae of cf. Cryptocotyle lingua.  
 LIVER : Reanalysis: 2.11 E - 07 g Cd / g.
- Sample.No 12 : NIVA no. 18.  
 Sample.No 13 : NIVA no. 06. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 14 : NIVA no. 08. Lesions on jaw, fin or tissue. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 15 : NIVA no. 17. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 16 : NIVA no. 11.  
 Sample.No 17 : NIVA no. 15.  
 Sample.No 18 : NIVA no. 14. Lesions on jaw, fin or tissue. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 19 : NIVA no. 07.  
 LIVER : Liver with very dried out appearance.
- Sample.No 20 : NIVA no. 13. Skin and or oral cavity w/caligiform or lemaeopodiiform copepods.  
 Sample.No 21 : NIVA no. 05.  
 Sample.No 22 : NIVA no. 01.  
 Sample.No 23 : NIVA no. 03.  
 LIVER : Nematodes
- Sample.No 24 : NIVA no. 04.  
 Sample.No 25 : NIVA no. 02.







Tab.width cont'd GADU MOR, LI, J99, 23B Karihavet area, 921215.

Samp/ Repl. no.	Sex	Age	Wght	Lngt	mm	NIVA		Σ(*)		NIVA		NIVA		HCHA		HCB		HCB		QCB		OCS	
						ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt
01/0	M	3	542	365		7.00	48.00	55.00	9.00	9.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
02/0	M	2	587	375		7.00	12.00	19.00	16.00	16.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
03/0	M	2	633	385		7.00	11.00	18.00	12.00	12.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
04/0	M	2	656	400		7.00	12.00	19.00	14.00	14.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
05/0	M	3	790	415		7.00	11.00	18.00	10.00	10.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
06/0	M	4	913	435		5.00	9.00	14.00	17.00	17.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
07/0	M	3	929	460		6.00	11.00	17.00	10.00	10.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
08/0	M	3	1133	470		5.00	10.00	15.00	13.00	13.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
09/0	M	3	1246	480		<5.00	5.00	<10.00	6.00	6.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
10/0	F	4	1411	500		<5.00	10.00	<15.00	12.00	12.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
11/0	M	5	1113	510		7.00	11.00	18.00	14.00	14.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
12/0	M	4	1280	510		<5.00	5.00	<10.00	7.00	7.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
13/0	M	4	1786	510		7.00	12.00	19.00	12.00	12.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
14/0	M	4	1461	515		9.00	14.00	23.00	15.00	15.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
15/0	M	3	1616	515		8.00	17.00	25.00	12.00	12.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
16/0	M	2	1302	525		7.00	15.00	22.00	19.00	19.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
17/0	M	3	1313	535		5.00	11.00	16.00	8.00	8.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
18/0	M	3	1858	550		5.00	12.00	17.00	7.00	7.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
19/0	M	4	1958	590		8.00	14.00	22.00	20.00	20.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
20/0	M	5	2398	590		<5.00	9.00	<14.00	7.00	7.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
21/0	M	3	2209	605		<5.00	9.00	<14.00	9.00	9.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
22/0	M	5	2032	620		<5.00	7.00	<12.00	8.00	8.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
23/0	M	4	3081	630		5.00	12.00	17.00	10.00	10.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
24/0	F	5	4002	670		8.00	15.00	23.00	18.00	18.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
25/0	F	4	3172	700		5.00	14.00	19.00	15.00	15.00	340	340	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
Mean	3.5		1577	514		<6.20	12.64	<18.84	12.00	12.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	
Minim.	2		542	365		<5.00	5.00	<10.00	6.00	6.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	
Maxim.	5		4002	700		9.00	48.00	55.00	20.00	20.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
St.dev	1.0		873	91		~1.29	7.92	~8.47	4.03	4.03	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	
Count	25		25	25		25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
Sample.No 01	Skin with metacercariae of cf. Cryptocotyle lingua																						
Sample.No 02	reddish skin																						
Sample.No 03	reddish skin																						
Sample.No 04	reddish skin																						
Sample.No 05	reddish skin																						
Sample.No 06	Skin with metacercariae of cf. Cryptocotyle lingua																						
Sample.No 08	Skin with metacercariae of cf. Cryptocotyle lingua																						
Sample.No 09	Niva no.25																						
Sample.No 10	Skin with metacercariae of cf. Cryptocotyle lingua																						
Sample.No 11	Niva no.10																						
Sample.No 12	Niva no.14																						
Sample.No 13	Skin with metacercariae of cf. Cryptocotyle lingua																						
Sample.No 14	Skin with metacercariae of cf. Cryptocotyle lingua																						
Sample.No 15	Niva no.16																						
Sample.No 16	Niva no.12																						
Sample.No 17	Skin with metacercariae of cf. Cryptocotyle lingua																						
Sample.No 18	Niva no.17																						
Sample.No 19	Niva no.18 reddish skin																						
Sample.No 20	Niva no.19 reddish skin																						
Sample.No 21	Niva no.20 reddish skin																						
Sample.No 22	Niva no.21																						
Sample.No 23	Niva no.22																						
Sample.No 24	Liver and/or intecstinal guts with larvae of Anisakis simplex																						
Sample.No 25	Skin with metacercariae of cf. Cryptocotyle lingua																						

Liver and/or intecstinal guts with larvae of Anisakis simplex



Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample-area: **J63 Sørffjorden**, Tissue : **LIVER**.  
 Locality : **53B Inner Sørffjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **870222**, Count: 12, Sample type: **Individual**.

Samp/ Repl. no.	Sex	Age	Wght	Lngt	mm	Dry %		Fat %		Cd ppm		Cu ppm		Pb ppm		Zn ppm		FIER		
						%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
01/ 0	X		460				30.00	0.170	7.000	0.580	0.580	21.00								
02/ 0	X		1310				38.10	0.190	5.600	0.170	22.30									
03/ 0	X		915				9.29	4.500	15.500	5.000	116.00									
04/ 0	X		710				23.30	1.600	14.400	0.390	33.80									
05/ 0	X		490				50.10	0.130	8.800	0.160	23.90									
06/ 0	X		560				53.40	0.270	9.700	0.380	26.80									
07/ 0	X		510				37.60	1.100	25.600	0.460	30.50									
08/ 0	X						29.00	1.000	7.600	0.190	28.00									
09/ 0	X						54.40	1.400	11.400	0.280	35.70									
10/ 0	X		420				12.90	0.260	13.200	0.510	30.00									
11/ 0	X		320				48.40	0.470	15.200	4.500	25.00									
12/ 0	X		2600				0.30	0.920	22.000	2.200	81.80									
Mean			830				32.23	1.001	13.000	1.235	39.57									
Minim.			320				0.30	0.130	5.600	0.160	21.00									
Maxim.			2600				54.40	4.500	25.600	5.000	116.00									
St.dev			686				18.09	1.215	6.059	1.734	28.99									
Count			10				12	12	12	12	12	12	12	12	12	12	12	12	12	12

Sample.No 01 : caught at "Skreol" by Ednhatunnel, 22.2.87.  
 Sample.No 02 : caught at K/S Ilmenittsmelteverket, Tyssedal, 22.2.87.  
 Sample.No 03 : caught at Kvitura across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 04 : caught at Kvitura across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 05 : caught at Kvitura, across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 06 : caught at Kvitura, across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 07 : caught at Kvitura, across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 08 : caught at Kvitura, across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 09 : caught at Kvitura, across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 10 : caught at Kvitura, across from sulfur tank, Norzink, 20.2.87 gills partly covered with particle layer.  
 Sample.No 11 : caught at power station, Tyssedal, 100m from land, 20.2.87. Gills partly covered with slime layer.  
 Sample.No 12 : caught at power station, Tyssedal, 100m from land, 6.3.87. Black film around mouth and on gills.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample-area: **J63 Sørffjorden**, Tissue : **LIVER**.  
 Locality : **53B Inner Sørffjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **870222**, Count: 12, Sample type: **Homogenate**.

Samp/ Repl. no.	Sex	Age	Wght	Lngt	mm	Dry %		Fat %		PCB ppb		PAH ppb		NIVA	
						%	%	ppm	ppm	ppm	ppm	ppm	ppm		
13/ 0	X		830			23.10	39.19	0.370	33.0						

Sample.No 13 : Bulk of fish 01-12. Weight statistics based on only 10 fish (missing data for I08 and I09)

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J63 Sørforjorden**, Tissue : **LIVER**.  
 Locality : **53B Inner Sørforjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **881117**, Count: 25, Sample type: **Homogenate**.

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lrgt Repl. F/M year g mm no.	NIVA		NIVA		NIVA		NIVA		NACE		ΣZ(*)		NACE		ΣZ(*)			
	312	311	312	311	510	510	510	510	510	510	510	510	510	510	510	510	510	
	0.030	0.150	0.150	3.00	0.040	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	0.800	
	<b>Cd</b>	<b>Cu</b>	<b>Pb</b>	<b>Zn</b>	<b>PCB</b>	<b>DDEPP</b>	<b>DDIPP</b>	<b>DD</b>	<b>Σ4</b>	<b>HCHG</b>	<b>HC</b>	<b>Σ2</b>	<b>HC</b>	<b>HC</b>	<b>Σ2</b>	<b>HC</b>	<b>HC</b>	<b>Σ2</b>
	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppm
	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 X 3 724 401	72.50	64.50	0.080	9.800	0.230	37.00	6.240	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050	

Sample.No 01 : Bulk of spec.no. 1-25  
 LIVER : PCB, DDEPP, HCHG and HCB values mean of two analyses.

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J63 Sørforjorden**, Tissue : **LIVER**.  
 Locality : **53B Inner Sørforjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **891125**, Count: 12, Sample type: **Individual**.

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lrgt Repl. F/M year g mm no.	NIVA		NIVA		NIVA		NIVA		NIVA		NACE		ΣZ(*)		NACE		ΣZ(*)							
	312	311	312	311	510	510	510	510	510	510	510	510	510	510	510	510	510	510						
	0.030	0.150	0.150	3.00	0.020	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00						
	<b>Fat</b>	<b>Cd</b>	<b>Cu</b>	<b>Pb</b>	<b>Zn</b>	<b>PCB</b>	<b>CB28</b>	<b>CB52</b>	<b>CB101</b>	<b>CB118</b>	<b>CB138</b>	<b>CB153</b>	<b>CB180</b>	<b>CB</b>	<b>Σ7</b>	<b>CB</b>	<b>Σ2</b>	<b>DDEPP</b>	<b>DD</b>	<b>Σ4</b>	<b>HCHG</b>	<b>HC</b>	<b>Σ2</b>	
	%	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 F 1 564 370	10.0	52.61	37.80	0.520	20.800	0.410	55.50	4.260	80.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050
02/ 0 F 1 675 395	13.0	63.93	53.50	0.260	18.100	0.340	44.00	44.480	170.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050
03/ 0 F 1 750 400	18.0	49.41	37.20	0.370	21.500	0.440	52.30	5.150	90.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050
04/ 0 M 1 581 410	13.0	58.09	60.20	0.160	8.770	0.410	60.80	6.100	400.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050
06/ 0 F 2 749 410	28.0	93.24	71.90	0.040	6.290	0.210	16.70	55.490	1420.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050
07/ 0 F 3 375 425	4.0	20.66	28.400	0.280	28.400	0.280	236.00	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss
08/ 0 F 1212 440	59.0	88.39	67.80	0.040	6.140	0.200	19.50	11.410	480.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050
09/ 0 F 1 1138 455	34.0	93.28	66.60	0.120	6.480	0.350	28.80	1.420	820.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050
11/ 0 F 1 996 495	10.0	25.36	4.90	0.930	52.600	0.770	189.00	11.770	820.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050
12/ 0 M 1 1334 500	31.0	71.91	55.60	0.090	6.270	0.410	39.20	71.190	1600.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050
13/ 0 M 2 1342 520	46.0	73.84	69.20	0.100	6.270	0.300	36.40	12.330	490.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050
14/ 0 F 5 2690 555	103.0	80.31	53.40	0.100	6.670	0.330	34.70	6.320	160.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050

Mean	1.7	1034	448																					
Minim.	1	375	370																					
Maxim.	5	2690	555																					
St.dev	1.3	612	57																					
Count	11	12	12																					
	30.8	64.25	52.55	0.248	14.535	0.379	52.45	20.902	530.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050
	4.0	20.66	4.90	0.040	6.140	0.200	16.70	1.420	80.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050
	103.0	93.28	71.90	0.930	52.600	0.770	189.00	71.190	1600.00	820.00	470.00	1290.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	3.050
	28.0	24.27	19.68	0.271	14.087	0.152	47.40	24.217	523.74	134.77	3580.89	3264.43	6581.11	5204.37	636.47	19299.5	19299.5	3762.36	11k08	3601.00	28.22	28.22	28.22	3.050
	12	12	11	111	111	111	111	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	3.050

s/q (130)  
 ! Suspect value(s)  
 ! Suspect or ambiguous basis-value(s) ignored in statistics.  
 ! Missing value.  
 k ( 10)  
 Value= 1000 \* given units.

## Tab.width cont'd GADU MOR, LI, J63, 53B Inner Sørffjord, 891125.

Analytical Lab. :		NACE	NACE
Analysis Code. :		510	610
Detection Limit :		20.00	0.800
Samp/	Sex Age Wght Lngt	HC B	EPOCL
Repl. F/M	year g mm	ppb	ppm
no.		w.wt	w.wt
01/ 0	F 1 564 370	<20.00	7.210
02/ 0	F 1 675 395	20.00	9.580
03/ 0	F 1 750 400	20.00	51.600
04/ 0	M 1 581 410	30.00	11.400
06/ 0	F 2 749 410	20.00	60.000
07/ 0	F 3 375 425	miss	miss
08/ 0	F 1212 440	20.00	17.700
09/ 0	F 1 1138 455	20.00	5.730
11/ 0	F 1 996 495	170.00	6.530
12/ 0	M 1 1334 500	<20.00	7.330
13/ 0	M 2 1342 520	20.00	17.600
14/ 0	F 5 2690 555	30.00	8.430
Mean	1.7 1034 448	<35.45	18.465
Minim.	1 375 370	<20.00	5.730
Maxim.	5 2690 555	170.00	60.000
St.dev	1.3 612 57	~44.80	18.998
Count	11 12 12	11	11

Sample.No 01 : Edna 10m depth. Uncertain age determination

Sample.No 02 : Apold 20m depth.

Sample.No 03 : Edna 15m depth. Uncertain age determination

Sample.No 04 : Edna 10m depth. Uncertain age determination. Emaciated individual

Sample.No 06 : Stana 15m depth.

Sample.No 07 : Edna 10m depth. Uncertain age determination. Emaciated individual

LIVER : Emaciated individual

Sample.No 08 : Apold 10m depth. Uncertain age determination

Sample.No 09 : Tyssedal 15m depth. Uncertain age determination

Sample.No 11 : Tyssedal 15m depth. Uncertain age determination

Sample.No 12 : Apold 20m depth. Uncertain age determination

Sample.No 13 : Tyssedal 15m depth. Uncertain age determination

Sample.No 14 : Edna 10m depth.





Sample.No 01 : NIVA no. 23.  
Sample.No 02 : NIVA no. 25.  
Sample.No 03 : NIVA no. 10.  
Sample.No 04 : NIVA no. 11.  
Sample.No 05 : NIVA no. 22.  
LIVER : Liver with necrotic cysts or tumours.  
Sample.No 06 : NIVA no. 24.  
Sample.No 07 : NIVA no. 09.  
LIVER : Liver with necrotic cysts or tumours.  
Sample.No 08 : NIVA no. 13.  
Sample.No 09 : NIVA no. 17.  
Sample.No 10 : NIVA no. 14.  
Sample.No 11 : NIVA no. 19.  
Sample.No 12 : NIVA no. 06.  
LIVER : Liver/guts with Anasakis larvae.  
Sample.No 13 : NIVA no. 07.  
LIVER : Liver with necrotic areas or discoloured.  
Sample.No 14 : NIVA no. 15.  
Sample.No 15 : NIVA no. 03.  
LIVER : Liver with necrotic areas or discoloured.  
Sample.No 16 : NIVA no. 05.  
LIVER : Liver/guts with Anasakis larvae.  
Sample.No 17 : NIVA no. 16.  
Sample.No 18 : NIVA no. 18. Bacterial fin rot.  
Sample.No 19 : NIVA no. 08. Bacterial fin rot.  
Sample.No 20 : NIVA no. 04.  
Sample.No 21 : NIVA no. 01. Bacterial fin rot.  
Sample.No 22 : NIVA no. 12.  
Sample.No 23 : NIVA no. 21.  
Sample.No 24 : NIVA no. 02.  
LIVER : Liver with necrotic areas or discoloured.  
Sample.No 25 : NIVA no. 20.



## Tab.width cont'd GADU MOR, LI, J63, 53B Inner Sørfjord, 911101.

Samp/ Repl. no.	Sex F/M	Age year	Height g	Lengt mm	Σ(*)	NIVA		NIVA		NIVA	
						ppb	w.wt	ppb	w.wt	ppb	w.wt
01/ 0	F	3	563	380	19.00	17.00	14.00	<5.00	3.300		
02/ 0	M	3	554	390	20.00	10.00	9.00	<5.00	14.900		
03/ 0	M	3	675	390	<11.00	8.00	<5.00	<5.00	6.900		
04/ 0	F	3	601	400							
05/ 0	M	2	572	400	<4.00	2.00	<2.00	<2.00	1.200		
07/ 0	M	3	574	400	21.00	14.00	<5.00	<5.00	7.100		
08/ 0	F	3	703	400	<4.00	3.00	<2.00	<2.00	2.700		
09/ 0	F	3	657	410							
10/ 0	M	3	690	410	6.00	7.00	2.00	<2.00	10.500		
11/ 0	F	3	758	440	15.00	10.00	<4.00	<4.00	6.500		
13/ 0	F	4	970	460	25.00	13.00	9.00	<5.00	10.900		
14/ 0	M	4	1105	470	34.00	13.00	<5.00	<5.00	9.800		
15/ 0	M	3	1174	480	22.00	11.00	6.00	<5.00	10.400		
16/ 0	M	3	1353	480	21.00	8.00	<5.00	<5.00	4.600		
17/ 0	F	4	899	480	13.00	9.00	<5.00	<5.00	12.440		
19/ 0	M	3	1172	490							
20/ 0	F	3	1102	490							
21/ 0	F	4	1219	500	16.00	10.00	<5.00	<5.00	440.400		
22/ 0	M	3	1132	500	27.00	24.00	10.00	<5.00	7.100		
23/ 0	F	3	1064	510	12.00	10.00	<5.00	<5.00	13.000		
25/ 0	M	3	1101	520	22.00	10.00	<5.00	<5.00	7.600		
26/ 0	F	4	1352	540	12.00	6.00	<5.00	<5.00	4.200		
27/ 0	M	5	1234	540	22.00	17.00	13.00	<5.00	5.500		
28/ 0	F	4	1751	560	33.00	19.00	8.00	<5.00	17.440		
29/ 0	M	4	1832	570							
Mean		3.3	992	464	<17.95	11.05	<<6.20	<<4.50	29.824		
Minim.		2	554	380	<4.00	2.00	<2.00	<2.00	1.200		
Maxim.		5	1832	570	34.00	24.00	14.00	<5.00	440.400		
St.dev		0.6	360	59	8.51	5.31	3.33	1.10	96.732		
Count		25	25	25	20	20	20	20	20		

Sample.No 01 : NIVA NO. 21  
 Sample.No 02 : NIVA NO. 04.  
 Sample.No 03 : NIVA NO. 10.  
 Sample.No 04 : NIVA NO. 01.  
 Sample.No 05 : NIVA NO. 02  
 Sample.No 07 : NIVA NO. 05  
 Sample.No 08 : NIVA NO. 11.  
 Sample.No 09 : NIVA NO. 06  
 Sample.No 10 : NIVA NO. 12.  
 Sample.No 11 : NIVA NO. 03.  
 Sample.No 13 : NIVA NO. 22.  
 Sample.No 14 : NIVA NO. 07.  
 Sample.No 15 : NIVA NO. 13.  
 Sample.No 16 : NIVA NO. 14  
 Sample.No 17 : NIVA NO. 16.  
 Sample.No 19 : NIVA NO. 17.  
 Sample.No 20 : NIVA NO. 18.  
 Sample.No 21 : NIVA NO. 08.  
 Sample.No 22 : NIVA NO. 19.  
 Sample.No 23 : NIVA NO. 23.  
 Sample.No 25 : NIVA NO. 15.  
 Sample.No 26 : NIVA NO. 09.  
 Sample.No 27 : NIVA NO. 20.  
 Sample.No 28 : NIVA NO. 24.  
 Sample.No 29 : NIVA NO. 25.

Skin and/or oral cavity with caligiform and/or lernaepodiform copepods

Liver with necrotic areas and/or discoloration

Skin with metacercariae of cf. Cryptocotyle lingua Bacterial fin rot

Muscle with signs of inner bleeding Liver with necrotic areas and/or discoloration

Liver and/or intestinal guts with larvae of Anisakis simplex

Skin with ulceration, lymphocytic areas and/or lesions Bacterial fin rot

Muscle with signs of inner bleeding

Muscle with signs of inner bleeding Liver with necrotic areas and/or discoloration

Skin with ulceration, lymphocytic areas and/or lesions Liver with necrotic areas and/or discoloration

Liver with necrotic areas and/or discoloration

Skin and/or oral cavity with caligiform and/or lernaepodiform copepods





Tab.width cont'd GADU MOR, LI, J63, 53B Inner Sørfjord, 921215.

Repl. no.	Sex	Age	Wght	Lengt	mm	NIVA		Σ(*)		NIVA		NIVA	
						ppb	w.wt	HCHA	HCB	HC	ppb	ppb	w.wt
01/0	M	2	532	400		<5.00	<5.00	<5.00	<5.00	14.00	7.00	<5.00	<5.00
02/0	F	3	665	440		<5.00	<5.00	<5.00	<5.00	10.00	<5.00	<5.00	<5.00
03/0	M	1	746	450		<5.00	<5.00	<5.00	<5.00	18.00	<5.00	<5.00	<5.00
04/0	M	2	796	450		<5.00	<5.00	<5.00	<5.00	5.00	<5.00	<5.00	<5.00
05/0	F	3	804	460		<5.00	<5.00	<5.00	<5.00	28.00	16.00	<5.00	<5.00
06/0	F	3	916	470		<5.00	<5.00	<5.00	<5.00	20.00	13.00	<5.00	<5.00
07/0	F	3	944	490		<5.00	<5.00	<5.00	<5.00	23.00	22.00	<5.00	<5.00
08/0	F	3	1224	510		<5.00	<5.00	<5.00	<5.00	7.00	<5.00	<5.00	<5.00
09/0	F	4	1122	510		<5.00	<5.00	<5.00	<5.00	24.00	11.00	<5.00	<5.00
10/0	F	4	1522	510		<5.00	<5.00	<5.00	<5.00	17.00	12.00	<5.00	<5.00
11/0	F	4	1593	520		<5.00	<5.00	<5.00	<5.00	12.00	8.00	<5.00	<5.00
12/0	F	4	1440	550		<5.00	<5.00	<5.00	<5.00	20.00	19.00	<5.00	<5.00
13/0	M	5	1582	550		<5.00	<18.00	<5.00	<18.00	34.00	22.00	<5.00	<5.00
14/0	M	3	1576	560		<5.00	<5.00	<5.00	<5.00	14.00	6.00	<5.00	<5.00
15/0	F	3	1851	560		<5.00	<5.00	<5.00	<5.00	20.00	12.00	<5.00	<5.00
16/0	F	3	1876	570		<5.00	<16.00	<21.00	<21.00	16.00	8.00	<5.00	<5.00
17/0	M	3	1909	570		10.00	19.00	29.00	29.00	43.00	30.00	<5.00	<5.00
18/0	F	3	2242	570		<5.00	14.00	<19.00	<19.00	16.00	6.00	<5.00	<5.00
19/0	F	4	2447	580		<5.00	<5.00	<5.00	<5.00	12.00	9.00	<5.00	<5.00
20/0	F	5	2655	610		<5.00	<5.00	<5.00	<5.00	34.00	21.00	<5.00	<5.00
21/0	M	4	2234	650		<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
22/0	F	4	3487	700		<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Mean	3.3	1553	531			<<5.23	<<6.91	<<8.05	<<8.05	<18.05	<<11.45	<<5.00	<<5.00
Minim.	1	532	400			<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Maxim.	5	3487	700			10.00	19.00	29.00	29.00	43.00	30.00	<5.00	<5.00
St. dev	1.0	747	72			~1.07	~4.26	~6.88	~6.88	~10.04	~7.23	~0.00	~0.00
Count	21	22	22			22	22	22	22	22	22	22	22

Sample.No 03 : Bacterial fin rot

Sample.No 09 : Bacterial fin rot

Sample.No 10 : Liver and/or intestinal guts with larvae of Anisakis simplex

Sample.No 12 : NIVA no.18

Sample.No 13 : NIVA no.19

Sample.No 15 : Otolith partly chrysalized, no age determination

Sample.No 16 : NIVA no.12

Sample.No 17 : NIVA no.13

Sample.No 18 : NIVA no.20

Sample.No 19 : NIVA no.16

Sample.No 20 : NIVA no.21

Sample.No 21 : NIVA no.22

Sample.No 22 : NIVA no.17

Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods

Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods

Bacterial fin rot

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J62 Hardangerfjorden**, Tissue : **LIVER**.  
 Locality : **67B Strandebrarm**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **871125**, Count: 22, Sample type: **Individual**.  
 Comment : Station name : Strandebrarm

Analytical Lab. :		FIER		FIER		FIER	
Analysis Code. :		402		404		403	
Detection Limit :		0.001		0.050		0.010	
Samp/	Sex	Age	Wght	Lngt			
Repl.	F/M	year	g	mm			
no.					Mean	Dry	Fat
					Weight	%	%
					g		
01/	0	F	3	956	450	60.90	40.19
02/	0	F	3	2883	600	71.20	35.30
03/	0	F	3	1360	490	64.39	53.70
04/	0	F	1	928	440	73.20	60.20
05/	0	F	2	1483	545	67.10	61.00
06/	0	F	2	1341	525	72.39	58.80
07/	0	M	2	1612	555	64.50	78.39
08/	0	M	3	1728	550	77.39	79.80
09/	0	M	3	2109	605	77.80	85.80
10/	0	F	3	1858	580	76.70	75.39
11/	0	F	3	986	460	73.00	51.60
12/	0	M	3	1646	530	76.50	85.00
13/	0	F	3	1289	490	79.20	72.50
14/	0	M	3	1498	525	79.00	0.071
15/	0	M	3	1737	545	64.20	63.20
16/	0	F	2	1671	545	73.70	84.30
17/	0	F	3	1241	495	66.00	62.10
18/	0	M	3	1435	530	75.10	74.70
19/	0	M	3	1670	535	72.70	73.89
20/	0	F	3	2028	580	75.30	38.90
21/	0	M	3	1331	490	65.00	66.20
22/	0	M	3	1019	445	60.80	53.30
Mean			2.7	1537	523	71.19	65.15
Minim.			1	928	440	60.80	35.30
Maxim.			3	2883	605	79.20	85.80
St.dev			0.6	446	48	5.98	15.20
Count			22	22	22	22	22

Sample.No 17 :  
 LIVER : Liver with signs of inner bleeding.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J62 Hardangerfjorden**, Tissue : **LIVER**.  
 Locality : **67B Strandebrarm**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **881011**, Count: 25, Sample type: **Homogenate**.

Analytical Lab. :		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA	
Analysis Code. :		312		311		312		311		312		311		312		311	
Detection Limit :		0.030		0.150		0.150		0.150		0.150		0.150		0.150		0.150	
Samp/	Sex	Age	Wght	Lngt													
Repl.	F/M	year	g	mm													
no.					Mean	Dry	Fat	Cd	Cu	Pb	Zn	Pb	Pb	Pb	Pb	Pb	Pb
					Weight	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
					g			d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt
01/	0	X	3	1334	493	74.20	56.20	0.070	9.310	0.270	30.00	0.840	330.00	200.00	530.00	<40.00	<40.00

Sample.No 01 : Bulk of spec.no. 1-25



## Tab.width cont'd GADU MOR, LI, J62, 67B Strandebarrow, 891015.

Samp/ Repl. no.	Sex	Age	F/M	year	g	mm	Analytical Lab. :		MACE	MACE
							Analysis Code. :	610		
Detection Limit :							HCB		EPOCI	
Repl. F/M year g mm							ppb	ppm	ppb	ppm
							w.wt	w.wt	w.wt	w.wt
01/ 0	M	2		1883	540		<20.00		2.370	
02/ 0	F	2		1044	450		<20.00		7.210	
03/ 0	M	2		1324	520		<20.00		7.020	
04/ 0	M	1		1491	530		<20.00		4.800	
05/ 0	F	1		1234	505		20.00		5.010	
06/ 0	M	1		1176	515		30.00		5.970	
07/ 0	M	1		1529	550		20.00		6.910	
08/ 0	F	1		1846	520		<20.00		3.450	
09/ 0	F	2		1324	545		20.00		5.930	
10/ 0	F	1		1548	535		<20.00		7.760	
11/ 0	F	1		1819	540		40.00		6.280	
12/ 0	F	1		842	440		20.00		5.910	
13/ 0	F	2		787	435		<20.00		10.200	
14/ 0	M	1		1575	515		<20.00		2.620	
15/ 0	F	3		1959	570		50.00		5.000	
16/ 0	F	1		1606	550		<20.00		4.020	
17/ 0	F	1		1247	500		20.00		4.910	
18/ 0	M	1		1368	520		30.00		5.600	
19/ 0	F	1		1592	525		<20.00		13.400	
20/ 0	F	2		1009	460		<20.00		4.460	
21/ 0	M	2		1379	515		70.00		7.140	
22/ 0	F	1		1197	540		30.00		4.340	
Mean	1.4			1399	515		<<25.91		5.923	
Minim.	1			787	435		<20.00		2.370	
Maxim.	3			1959	570		70.00		13.400	
St.dev	0.6			324	37		~12.60		2.440	
Count	22			22	22		22		22	

Sample.No 01 : seine 50m depth  
Sample.No 02 : seine 50m depth. Uncertain age determination  
Sample.No 03 : seine 20m depth.  
Sample.No 04 : seine 20m depth  
Sample.No 05 : weir 5m depth. Skin with metacercari cf. Cryptocotyle lingua  
Sample.No 06 : seine 50m depth. Uncertain age determination  
Sample.No 07 : seine 30m depth.  
Sample.No 08 : seine 30m depth. Skin with metacercari cf. Cryptocotyle lingua  
Sample.No 09 : weir 5m depth. Uncertain age determination  
Sample.No 10 : seine 40m depth. Skin with metacercari cf. Cryptocotyle lingua  
Sample.No 11 : seine 60m depth. Skin with metacercari cf. Cryptocotyle lingua  
Sample.No 12 : weir 10m depth.  
Sample.No 13 : weir 5m depth.  
Sample.No 14 : weir 10m depth.  
Sample.No 15 : weir 5m depth.  
Sample.No 17 : weir 5m depth. Skin with metacercari cf. Cryptocotyle lingua  
Sample.No 18 : weir 5m depth.  
Sample.No 19 : seine 20m depth.  
Sample.No 20 : weir 10m depth. Skin with metacercari cf. Cryptocotyle lingua  
Sample.No 21 : weir 5m depth.  
Sample.No 22 : weir 10m depth. Skin with metacercari cf. Cryptocotyle lingua

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample area: **J62 Hardangerfjorden**, Tissue : **LIVER**.  
 Locality : **67B Strandebar**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch, date : **901009**, Count: 13, Sample type: **Individual**.  
 Comment : Caught 1009-1201. All but ind. nos. 4, 6 and 10 sent frozen to NIVA for preparation. Ind. nos. 4, 6 and 10 prepared fresh.

Samp/ Repl. no.	Sex	Age	Wght	Lngt	g	mm	Analytical Lab. :		NIVA		NIVA		NIVA		NIVA	
							Code	Detection Limit	Cd	Cu	Pb	Zn	Cd	Cu	Pb	Zn
Weight	Dry	Fat														
g	%	%														
6.6	30.70	.	0.121	6.620	0.130	27.00	0.069	12.300	0.060	0.050	3.00	0.010	0.150	0.050	0.050	3.00
29.1	57.00	.	0.130	9.000	0.100	26.50	0.080	13.700	0.110	0.110	18.90	0.019	8.940	0.110	0.110	21.60
48.6	67.50	.	0.100	6.330	0.210	22.10	0.100	6.330	0.210	0.050	12.50	0.022	4.160	0.050	0.050	12.50
68.7	75.70	.	0.038	9.260	0.160	27.20	0.038	9.260	0.160	0.170	35.10	0.084	9.950	0.170	0.170	35.10
71.9	72.90	.	0.125	7.620	0.160	28.30	0.125	7.620	0.160	0.200	24.10	0.042	5.170	0.200	0.200	24.10
45.2	55.10	.	0.057	14.700	0.160	46.20	0.057	14.700	0.160	0.070	28.90	0.042	5.170	0.200	0.200	24.10
83.7	84.00	.	0.013	7.090	0.070	28.90	0.013	7.090	0.070	0.070	28.90	0.013	7.090	0.070	0.070	28.90
60.5	67.60	.	0.069	8.834	0.130	26.62	0.069	8.834	0.130	0.130	26.62	0.069	8.834	0.130	0.130	26.62
21.0	49.30	.	0.013	4.160	0.050	12.50	0.013	4.160	0.050	0.050	12.50	0.013	4.160	0.050	0.050	12.50
62.2	69.00	.	0.130	14.700	0.210	46.20	0.130	14.700	0.210	0.210	46.20	0.130	14.700	0.210	0.210	46.20
36.8	43.60	.	0.041	3.195	0.052	8.04	0.041	3.195	0.052	0.052	8.04	0.041	3.195	0.052	0.052	8.04
23.5	32.40	.	13	13	13	13	13	13	13	13	13	13	13	13	13	13
58.2	64.50	.														
47.4	59.18	.														
6.6	30.70	.														
83.7	84.00	.														
22.8	16.41	.														
13	13	.														

Sample.No 01 : NIVA no. 13  
 Sample.No 02 : NIVA no. 04  
 Sample.No 03 : NIVA no. 07  
 Sample.No 04 : NIVA no. 02  
 Sample.No 05 : NIVA no. 10  
 Sample.No 06 : NIVA no. 01.  
 Sample.No 07 : NIVA no. 08  
 Sample.No 08 : NIVA no. 05.  
 Sample.No 09 : NIVA no. 09.  
 Sample.No 10 : NIVA no. 03.  
 Sample.No 11 : NIVA no. 11.  
 LIVER : Liver/guts with *Anasakis* larvae.  
 Sample.No 12 : NIVA no. 06.  
 Sample.No 13 : NIVA no. 12.

Skin with metacercariae of cf. *Cryptocotyle lingua*.







Tab.width cont'd GADU MOR, LI, J62, 67B Strandebar, 911023.

Sample/ Repl. no.	Sex F/M	Age year	Wght g	Lngt mm	NIVA		HCHG		HC		Σ(*)		NIVA		HCB		QCB		OCS		EPOCLI	
					ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt
01/0	F	2	639	400	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<0.050
02/0	F	2	797	430	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<0.050
03/0	F	2	772	440	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<0.050
04/0	M	3	960	450	<5.00	11.00	<16.00	<16.00	13.00	7.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2.540
05/0	M	3	1184	470	<5.00	11.00	<16.00	<16.00	7.00	8.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<0.050
07/0	F	3	1197	470	<5.00	8.00	<13.00	<13.00	8.00	8.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	13.400
08/0	M	3	1103	480	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	1.930
09/0	F	3	1139	510	<5.00	6.00	<11.00	<11.00	7.00	7.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	14.870
10/0	F	4	1316	510	<5.00	10.00	<15.00	<15.00	6.00	6.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	23.150
11/0	M	4	1264	510	<5.00	8.00	<13.00	<13.00	11.00	11.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	21.440
13/0	F	3	1253	510	<5.00	7.00	<12.00	<12.00	7.00	7.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	22.320
14/0	M	3	1325	520	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	4.320
15/0	M	3	1384	520	<5.00	16.00	<21.00	<21.00	17.00	17.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	31.210
16/0	M	4	1305	520	<5.00	11.00	<16.00	<16.00	12.00	12.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	5.420
17/0	M	3	1366	530	<5.00	8.00	<13.00	<13.00	9.00	9.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	11.520
19/0	M	3	1595	540	<5.00	6.00	<11.00	<11.00	8.00	8.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	10.390
20/0	M	3	1516	550	<5.00	6.00	<11.00	<11.00	9.00	9.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	8.260
21/0	M	4	1644	550	<5.00	7.00	<12.00	<12.00	11.00	11.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	9.830
23/0	F	4	1487	570	<5.00	12.00	<17.00	<17.00	14.00	14.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	12.370
Mean	3.1	1223	499		<5.00	<8.00	<11.68	<11.68	<8.63	<8.63	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.167
Minim.	2	639	400		<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<0.050
Maxim.	4	1644	570		<5.00	16.00	<21.00	<21.00	17.00	17.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	31.210
St.dev	0.7	275	45		~0.00	~3.07	~4.78	~4.78	~3.52	~3.52	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~9.193
Count	19	19	19		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19

Sample.No 04 : Skin with ulceration, lymphocytic areas and/or lesions

Sample.No 09 : Bacterial fin rot

Sample.No 15 : Bacterial fin rot

Sample.No 16 : Skin with metacercariae of cf. Cryptocotyle lingua Skin with ulceration, lymphocytic areas and/or lesions

Sample.No 19 : Diverse

Sample.No 21 : Diverse

Sample.No 23 : Muscle with signs of inner bleeding



Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **LIVER**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **841000**, Count: 13, Sample type: **Individual**.

Samp/ Repl. no.	F/M year	g	mm	Analytical Lab. :		VETN		VETN		VETN		Σ (*)		VETN	
				Code. :	Detection Limit :	Dry %	Fat %	230	210	210	210	!	!	!	!
01/ 0	M	1200	510			0.230	15.80	0.230	1.200	160.00	160.00	160.00	160.00	10.00	10.00
02/ 0	M	1400	540			0.290	36.19	0.290	0.870	100.00	100.00	100.00	100.00	30.00	30.00
03/ 0	F	2900	690			0.100	80.20	0.100	1.200	220.00	220.00	220.00	220.00	60.00	60.00
04/ 0	M	2000	620			0.070	53.80	0.070	1.200	290.00	290.00	290.00	290.00	60.00	60.00
05/ 0	M	1200	530			0.130	26.20	0.130	1.600	290.00	290.00	290.00	290.00	10.00	10.00
06/ 0	M	1000	470			0.060	56.00	0.060	0.830	160.00	160.00	160.00	160.00	40.00	40.00
07/ 0	M	350	340			0.250	6.20	0.250	0.350	<50.00	<50.00	<50.00	<50.00	<10.00	<10.00
08/ 0	M	1020	510			0.420	4.00	0.420	0.630	60.00	60.00	60.00	60.00	<10.00	<10.00
09/ 0	M	930	470			0.090	8.00	0.090	0.600	130.00	130.00	130.00	130.00	<10.00	<10.00
10/ 0	F	720	440			0.150	4.00	0.150	0.250	<50.00	<50.00	<50.00	<50.00	<10.00	<10.00
11/ 0	F	270	320			0.280	3.00	0.280	0.140	<50.00	<50.00	<50.00	<50.00	<10.00	<10.00
12/ 0	F	1750	570			0.080	36.40	0.080	0.990	140.00	140.00	140.00	140.00	20.00	20.00
13/ 0	M	1000	470			0.080	38.60	0.080	1.400	190.00	190.00	190.00	190.00	30.00	30.00
Mean		1211	498			0.172	27.38	0.172	0.866	<145.38	<145.38	<145.38	<145.38	<23.85	<23.85
Minim.		270	320			0.060	3.00	0.060	0.140	<50.00	<50.00	<50.00	<50.00	<10.00	<10.00
Maxim.		2900	690			0.420	80.20	0.420	1.600	290.00	290.00	290.00	290.00	60.00	60.00
St.dev		700	101			0.112	24.87	0.112	0.454	~85.01	~85.01	~85.01	~85.01	~18.95	~18.95
Count		13	13			13	13	13	13	13	13	13	13	13	13

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **LIVER**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **851127**, Count: 10, Sample type: **Homogenate**.  
 Comment : All samples were infected with metacercari of Cryptocotyle lingua on skin tissue

Samp/ Repl. no.	F/M year	g	mm	Analytical Lab. :		VETN		VETN		VETN		Σ (*)		VETN	
				Code. :	Detection Limit :	Dry %	Fat %	230	210	210	210	!	!	!	!
11/ 1	X	3	1349	481		38.30	45.70	0.100	0.100	0.380	50.00	50.00	50.00	50.00	30.00
11/ 2						38.30	45.70	0.090	0.090	0.350	50.00	50.00	50.00	50.00	30.00
Mean		3.0	1349	481		38.30	45.70	0.095	0.095	0.365	50.00	50.00	50.00	50.00	30.00
Minim.		3	1349	481		38.30	45.70	0.095	0.095	0.365	50.00	50.00	50.00	50.00	30.00
Maxim.		3	1349	481		38.30	45.70	0.095	0.095	0.365	50.00	50.00	50.00	50.00	30.00
St.dev															
Count		1	1	1		1	1	1	1	1	1	1	1	1	1

Sample.No 11 : Bulk livers of fish 01-10: min.2.4g, max.=287.3g, sd.=89.67g  
 LIVER : Dry weight reanalysis = 49.4%. Ext. lipid reanalysis = 38.3% (no difference!).





Tab.width cont'd GADU MOR, LI, J99, 98B Lille Molla, 921201.

Sample/ Repl. no.	Sex	Age	Wght	Lngt	mm	NIVA		Σ(*)		NIVA		NIVA		NIVA	
						ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt
Analytical Lab. :						340	340	340	340	340	340	340	340	340	340
Detection Limit :						5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
HCHA						HCHG	HC	Σ2	HC	HC	HC	HC	HC	HC	HC
ppb						ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
w.wt						w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0	M	6	1416	500		6.00	5.00	11.00	24.00	24.00	<5.00	<5.00	<5.00	<5.00	<5.00
02/ 0	M	4	1386	520		<5.00	<5.00	<5.00	9.00	9.00	<5.00	<5.00	<5.00	<5.00	<5.00
03/ 0	F	3	1603	530		8.00	7.00	15.00	8.00	8.00	<5.00	<5.00	<5.00	<5.00	<5.00
04/ 0	M	6	1951	535		5.00	7.00	15.00	14.00	14.00	<5.00	<5.00	<5.00	<5.00	<5.00
05/ 0	M	4	1836	540		5.00	<5.00	<10.00	22.00	22.00	<5.00	<5.00	<5.00	<5.00	<5.00
06/ 0	M	5	1677	540		5.00	<5.00	<10.00	14.00	14.00	<5.00	<5.00	<5.00	<5.00	<5.00
07/ 0	M	6	1763	540		9.00	8.00	17.00	21.00	21.00	<5.00	<5.00	<5.00	<5.00	<5.00
08/ 0	F	3	1969	540		6.00	5.00	11.00	17.00	17.00	<5.00	<5.00	<5.00	<5.00	<5.00
09/ 0	F	4	1826	540		5.00	<5.00	<10.00	14.00	14.00	<5.00	<5.00	<5.00	<5.00	<5.00
10/ 0	F	3	1819	550		6.00	6.00	12.00	15.00	15.00	<5.00	<5.00	<5.00	<5.00	<5.00
11/ 0	M	6	2070	550		7.00	6.00	13.00	16.00	16.00	<5.00	<5.00	<5.00	<5.00	<5.00
12/ 0	M	5	1848	570		11.00	10.00	21.00	22.00	22.00	<5.00	<5.00	<5.00	<5.00	<5.00
13/ 0	M	5	2174	570		8.00	7.00	15.00	22.00	22.00	<5.00	<5.00	<5.00	<5.00	<5.00
14/ 0	M	6	2101	580		6.00	5.00	11.00	18.00	18.00	<5.00	<5.00	<5.00	<5.00	<5.00
15/ 0	M	4	2194	585		10.00	9.00	19.00	20.00	20.00	<5.00	<5.00	<5.00	<5.00	<5.00
16/ 0	F	5	2101	590		<5.00	<5.00	<5.00	10.00	10.00	<5.00	<5.00	<5.00	<5.00	<5.00
17/ 0	M	5	2138	595		10.00	9.00	19.00	20.00	20.00	<5.00	<5.00	<5.00	<5.00	<5.00
18/ 0	M	7	2138	595		6.00	5.00	11.00	37.00	37.00	<5.00	<5.00	<5.00	<5.00	<5.00
19/ 0	M	6	2620	600		8.00	7.00	15.00	12.00	12.00	<5.00	<5.00	<5.00	<5.00	<5.00
20/ 0	F	4	2511	610		7.00	6.00	13.00	24.00	24.00	<5.00	<5.00	<5.00	<5.00	<5.00
21/ 0	M	5	1931	620		<5.00	<5.00	<5.00	48.00	48.00	<5.00	<5.00	<5.00	<5.00	<5.00
22/ 0	F	5	2517	640		6.00	5.00	11.00	30.00	30.00	<5.00	<5.00	<5.00	<5.00	<5.00
23/ 0	F	5	2516	650		7.00	5.00	12.00	23.00	23.00	<5.00	<5.00	<5.00	<5.00	<5.00
24/ 0	M	5	2883	670		12.00	10.00	22.00	33.00	33.00	<5.00	<5.00	<5.00	<5.00	<5.00
25/ 0	M	4	2768	700		<5.00	<5.00	<5.00	55.00	55.00	<5.00	<5.00	<5.00	<5.00	<5.00
Mean		4.8	2070	578		<7.04	<<6.28	<<12.52	21.92	21.92	<<5.00	<<5.32	<<5.00	<<5.00	<<5.00
Minim.		3	1386	500		12.00	10.00	22.00	55.00	55.00	<5.00	<5.00	<5.00	<5.00	<5.00
Maxim.		7	2883	700		~2.05	~1.70	~4.78	11.40	11.40	~0.00	~1.11	~0.00	~1.11	~1.11
St.dev		1.1	393	50											
Count		25	25	25		25	25	25	25	25	25	25	25	25	25
Sample.No 02	: Liver with necrotic cysts or tumors														
Sample.No 03	: Skin with metacercariae of cf. Cryptocotyle lingua														
Sample.No 04	: Muscle with signs of inner bleeding														
Sample.No 05	: Liver and/or intestinal guts with larvae of Anisakis simplex														
Sample.No 06	: body unusually soft														
Sample.No 07	: Skin with metacercariae of cf. Cryptocotyle lingua Liver with necrotic cysts or tumors														
Sample.No 10	: Liver and/or intestinal guts with larvae of Anisakis simplex														
Sample.No 11	: Liver and/or intestinal guts with larvae of Anisakis simplex														
Sample.No 12	: Liver with necrotic areas and/or discolouration														
Sample.No 13	: Liver and/or intestinal guts with larvae of Anisakis simplex														
Sample.No 15	: Liver with necrotic areas and/or discolouration														
Sample.No 16	: Liver and/or intestinal guts with larvae of Anisakis simplex														
Sample.No 17	: Liver and/or intestinal guts with larvae of Anisakis simplex Liver with necrotic areas and/or discolouration														
Sample.No 18	: Liver and/or intestinal guts with larvae of Anisakis simplex														
Sample.No 19	: Liver and/or intestinal guts with larvae of Anisakis simplex														
Sample.No 20	: Liver and/or intestinal guts with larvae of Anisakis simplex														
Sample.No 21	: Liver and/or intestinal guts with larvae of Anisakis simplex														
Sample.No 22	: Muscle with signs of inner bleeding Liver with necrotic areas and/or discolouration														
Sample.No 23	: Muscle with signs of inner bleeding Liver and/or intestinal guts with larvae of Anisakis simplex														
Sample.No 24	: Liver and/or intestinal guts with larvae of Anisakis simplex														
Sample.No 25	: Liver with necrotic cysts or tumors														

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **30B Oslo City area**, Latitude: 59°52.00N, Longitude: 10°39.00E.  
 Catch,date : **841126**, Count: 29, Sample type: **Individual**.

Analytical Lab. :		VETN		VETN						
Analysis Code. :		220		211						
Detection Limit :		0.010		0.050						
Samp/	Sex	Age	Wght	Lngt	Dry	Fat	Hg	P	C	B
Repl. no.	F/M	year	g	mm	%	%	ppm	ppm	ppm	w. wt
01/	0	F	1	550	390		0.120	<0.050		
02/	0	M	1	795	410		0.150	<0.050		
03/	0	F	1	1550	550		0.230	<0.050		
04/	0	M	2	726	450		0.200	<0.050		
05/	0	F	1	824	420		0.230	<0.050		
06/	0	F	1	515	380		0.140	<0.050		
07/	0	M	2	1613	550		0.200	<0.050		
08/	0	F	1	783	430		0.140	<0.050		
09/	0	M	2	941	460		0.100	<0.050		
10/	0	M	1	1115	540		0.130	<0.050		
11/	0	F	2	1438	530		0.150	<0.050		
12/	0	F	2	1592	540		0.230	<0.050		
13/	0	M	1	1329	490		0.190	<0.050		
14/	0	M	2	1263	510		0.140	<0.050		
15/	0	F	2	954	500		0.150	<0.050		
16/	0	F	1	1259	530		0.180	<0.050		
17/	0	M	1	789	430		0.080	<0.050		
18/	0	F	2	600	410		0.120	<0.050		
19/	0	M	1	1081	480		0.110	<0.050		
20/	0	M	1	1316	510		0.160	<0.050		
21/	0	M	2	1391	510		0.130	<0.050		
22/	0	M		324	330		0.110	<0.050		
23/	0	F		540	370		0.110	<0.050		
24/	0	M		545	380		0.080	<0.050		
25/	0	F		442	360		0.130	<0.050		
26/	0	M	1	387	350		0.120	<0.050		
27/	0	M	1	532	410		0.170	<0.050		
28/	0	M		366	330		0.100	<0.050		
29/	0	M	1	459	370		0.210	<0.050		
Mean	1.4			897	446		0.149	<<.050		
Minim.	1			324	330		0.080	<0.050		
Maxim.	2			1613	550		0.230	<0.050		
St.dev	0.5			412	72		0.044	~0.000		
Count	23			29	29		29	29		

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **30B Oslo City area**, Latitude: 59°52.00N, Longitude: 10°39.00E.  
 Catch,date : **851111**, Count: 25, Sample type: **Individual**.

Samp/ Repl. no.	Sex	Age	Wght	Lngt	mm	Analytical Lab. :		VETN		VETN	
						F/M	year	Dry	Fat	Hg	PCB
			g			%	%	ppm	ppm	ppm	w.wt
01/	0	F	2	267	310	20.70	.	0.100	<0.060	211	<0.050
02/	0	F	2	468	370	19.59	.	0.150	<0.050	220	<0.050
03/	0	M	2	455	350	19.70	.	0.110	<0.050	0.010	0.050
04/	0	F	3	516	400	18.30	.	0.090	<0.050		
05/	0	M	2	245	290	20.09	.	0.070	<0.050		
06/	0	F	2	454	360	19.50	.	0.080	<0.050		
07/	0	F	2	549	390	19.50	.	0.120	<0.050		
08/	0	M	2	291	320	19.30	.	0.070	<0.050		
09/	0	M	2	340	320	22.20	.	0.100	<0.050		
10/	0	F	2	548	380	21.40	.	0.120	<0.050		
11/	0	M	1	332	350	19.80	.	0.080	<0.050		
12/	0	M	2	338	340	20.09	.	0.080	<0.050		
13/	0	M	2	212	320	19.89	.	0.060	<0.050		
14/	0	M	2	635	420	19.30	.	0.080	<0.050		
15/	0	M	2	437	380	19.20	.	0.070	<0.050		
16/	0	F	2	347	340	20.40	.	0.110	<0.050		
17/	0	F	4	617	420	19.50	.	0.120	<0.050		
18/	0	F	2	379	340	20.30	.	0.100	<0.050		
19/	0	F	2	376	330	20.90	.	0.080	<0.050		
20/	0	F	2	377	330	20.20	.	0.180	<0.050		
21/	0	M	2	348	330	20.90	.	0.130	<0.050		
22/	0	F	1	360	340	20.40	.	0.070	<0.050		
23/	0	F	2	391	350	20.60	.	0.090	<0.050		
24/	0	F	2	316	340	19.89	.	0.070	<0.050		
25/	0	F	2	310	330	21.00	.	0.070	<0.050		
Mean	2.0			396	350	20.11	.	0.096	<<.050		
Minim.	1			212	290	18.30	.	0.060	<0.050		
Maxim.	4			635	420	22.20	.	0.180	<0.060		
St.dev	0.5			111	33	0.82	.	0.029	~0.002		
Count	25			25	25	25	.	25	25		

Sample.No 01 :  
 MUSCLE : NOTE: DETECTION LIMIT FOR PCB BY VETN = <0.05



Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **30B Oslo City area**, Latitude: 59°44.00N, Longitude: 10°32.00E.  
 Catch,date : **861119**, Count: 25, Sample type: **Individual**.  
 Comment : Station name : Oslo City area

Analytical Lab. :		NIVA		NACE		
Analysis Code. :		310		511		
Detection Limit :		0.010		0.020		
Samp/ Repl.	Sex Age Wght Lngt	Dry %	Fat %	Hg ppm	PCB ppm	
F/M	year	g	mm	d.wt	w.wt	
01/ 0	F	1	645	400	0.370	0.030
02/ 0	M	2	565	400	0.420	0.030
03/ 0	F	1	395	360	0.260	0.030
04/ 0	F	1	450	370	0.450	0.020
05/ 0	M	2	415	365	0.380	<0.020
06/ 0	M	1	520	365	0.440	0.030
07/ 0	M	1	510	395	0.320	0.020
08/ 0	F	1	355	340	0.490	<0.020
09/ 0	F	1	850	450	0.310	0.020
10/ 0	F	2	915	470	0.460	<0.020
11/ 0	M	1	555	390	0.400	0.030
12/ 0	M	1	615	400	1.410	0.020
13/ 0	F	2	700	425	0.240	0.020
14/ 0	M	1	500	380	0.560	0.020
15/ 0	F	1	735	440	0.270	0.020
16/ 0	F	1	625	415	0.530	0.020
17/ 0	M	1	395	355	0.640	<0.020
18/ 0	M	1	570	380	0.490	<0.020
19/ 0	M	1	575	390	0.350	<0.020
20/ 0	M	1	480	385	0.360	0.030
21/ 0	M	1	545	390	0.330	0.020
22/ 0	F	1	845	445	0.500	0.030
23/ 0	M	1	725	415	0.360	0.020
24/ 0	F	1	635	410	0.250	<0.020
25/ 0	M	1	585	405	0.340	<0.020
Mean		1.2	588	398	0.437	<<.023
Minim.		1	355	340	0.240	<0.020
Maxim.		2	915	470	1.410	0.030
St.dev		0.4	146	32	0.227	~0.005
Count		21	25	25	25	25

Sample.No 01 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 02 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 03 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 04 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 05 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 06 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 07 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 08 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 09 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 10 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 11 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 12 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 13 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 14 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 15 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 16 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 17 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 18 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 19 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 20 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 21 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 23 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 24 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 25 : Skin with metacercari of cf. Cryptocotyle lingua.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **30B Oslo City area**, Latitude: 59°52.00N, Longitude: 10°39.00E.  
 Catch,date : **871111**, Count: 25, Sample type: **Individual**.

Analytical Lab. :		NIVA		NACE	
Analysis Code. :	310	511			
Detection Limit :	0.010	0.020			
Samp/ Sex Age Wght Lngt	Dry	Fat	Hg	PCB	
Repl. F/M year g mm	%	%	ppm	ppm	ppm
no.			d.wt	w.wt	w.wt
01/ 0 F 3 642 425	19.89	0.10	0.220	<0.020	<0.020
02/ 0 F 1 771 440	21.40	0.10	0.190	<0.020	<0.020
03/ 0 F 2 734 425	20.70	0.10	0.200	<0.020	<0.020
04/ 0 F 2 866 465	20.70	0.10	0.180	<0.020	<0.020
05/ 0 F 1 871 460	20.90	0.10	0.180	<0.020	<0.020
06/ 0 F 2 683 420	20.30	0.10	0.150	<0.020	<0.020
07/ 0 M 2 665 430	20.50	0.10	0.320	0.020	0.020
08/ 0 M 2 754 440	20.50	0.10	0.190	<0.020	<0.020
09/ 0 M 2 764 430	19.89	0.10	0.160	0.090	0.090
10/ 0 F 2 831 455	20.70	0.30	0.180	0.030	0.030
11/ 0 F 2 840 445	20.50	0.05	0.170	0.080	0.080
12/ 0 F 2 673 440	19.09	0.10	0.280	<0.020	<0.020
13/ 0 F 2 931 450	18.09	0.05	0.150	0.020	0.020
14/ 0 M 2 666 420	21.70	0.10	0.180	<0.020	<0.020
15/ 0 M 2 529 410	19.89	0.10	0.250	<0.020	<0.020
16/ 0 F 2 665 430	19.30	0.10	0.180	0.030	0.030
17/ 0 F 2 578 405	20.09	0.10	0.170	0.070	0.070
18/ 0 M 2 615 425	20.50	0.10	0.300	0.050	0.050
19/ 0 F 2 698 445	19.59	0.10	0.200	0.020	0.020
20/ 0 M 2 604 400	20.00	0.10	0.170	0.020	0.020
21/ 0 M 2 749 425	20.50	0.20	0.160	<0.020	<0.020
22/ 0 F 2 643 440	20.40	0.10	0.190	<0.020	<0.020
23/ 0 F 2 532 425	18.80	0.10	0.230	0.040	0.040
24/ 0 F 2 716 435	20.09	0.10	0.190	<0.020	<0.020
25/ 0 M 2 911 475	20.30	0.10	0.160	<0.020	<0.020
Mean	20.17	0.11	0.198	<<.030	<<.030
Minim.	18.09	0.05	0.150	<0.020	<0.020
Maxim.	21.70	0.30	0.320	0.090	0.090
St.dev	0.78	0.05	0.045	~0.020	~0.020
Count	25	25	25	25	25

Sample.No 01 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 58,30 g tissue used in analysis.  
 Sample.No 02 : Skin with metacercari of cf. Cryptocotyle lingua  
   MUSCLE : 68,70 g tissue used in analysis.  
 Sample.No 03 : Skin with metacercari of cf. Cryptocotyle lingua  
   MUSCLE : 73,60 g tissue used in analysis.  
 Sample.No 04 : Skin with metacercari of cf. Cryptocotyle lingua  
   MUSCLE : 73,10 g tissue used in analysis.  
 Sample.No 05 : Skin with metacercari of cf. Cryptocotyle lingua  
   MUSCLE : 83,80 g tissue used in analysis.  
 Sample.No 06 : Skin with metacercari of cf. Cryptocotyle lingua  
   MUSCLE : 71,50 g tissue used in analysis.  
 Sample.No 07 : Skin with metacercari of cf. Cryptocotyle lingua  
   MUSCLE : 75,20 g tissue used in analysis.  
 Sample.No 08 :  
   MUSCLE : 78,39 g tissue used in analysis.  
 Sample.No 09 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 72,10 g tissue used in analysis.  
 Sample.No 10 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 71,89 g tissue used in analysis.  
 Sample.No 11 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 88,40 g tissue used in analysis.  
 Sample.No 12 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 61,40 g tissue used in analysis.  
 Sample.No 13 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 86,90 g tissue used in analysis.  
 Sample.No 14 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 72,39 g tissue used in analysis.  
 Sample.No 15 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 63,40 g tissue used in analysis.  
 Sample.No 16 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 68,39 g tissue used in analysis.  
 Sample.No 17 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 57,00 g tissue used in analysis.  
 Sample.No 18 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 61,40 g tissue used in analysis.  
 Sample.No 19 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 68,80 g tissue used in analysis.  
 Sample.No 20 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 67,70 g tissue used in analysis.  
 Sample.No 21 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 76,39 g tissue used in analysis.  
 Sample.No 22 : Skin with metacercari of cf. Cryptocotyle lingua, few.  
   MUSCLE : 75,39 g tissue used in analysis.  
 Sample.No 23 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 56,90 g tissue used in analysis.  
 Sample.No 24 :  
   MUSCLE : 73,00 g tissue used in analysis.  
 Sample.No 25 : Skin with metacercari of cf. Cryptocotyle lingua.  
   MUSCLE : 73,20 g tissue used in analysis.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **30B Oslo City area**, Latitude: 59°52.00N, Longitude: 10°39.00E.  
 Catch,date : **890116**, Count: 25, Sample type: **Individual**.

Analytical Lab. : NIVA		310					
Analysis Code. : 0.010		H g					
Detection Limit :		ppm					
Samp/	Sex	Age	Wght	Lngt	Dry	Fat	NIVA
Repl.	F/M	year	g	mm	%	%	d.wt
no.							
01/ 0	F	5	2085	610	21.00	.	0.380
02/ 0	M	6	1330	540	20.60	.	0.670
03/ 0	F	4	699	395	22.30	.	0.280
04/ 0	M	5	1150	485	21.00	.	0.600
05/ 0	F	5	869	440	21.90	.	0.520
06/ 0	F	4	638	415	20.90	.	0.300
07/ 0	M	3	474	370	22.00	.	0.240
08/ 0	F	4	451	360	23.00	.	<.010
09/ 0	M	4	546	380	21.80	.	0.220
10/ 0	M	6	1560	595	23.60	.	1.200
11/ 0	M	3	929	455	21.90	.	0.510
12/ 0	F	6	1424	535	21.80	.	0.170
13/ 0	F	3	989	445	22.80	.	0.200
14/ 0	M	6	2403	660	20.20	.	1.240
15/ 0	M	6	1580	585	19.50	.	1.280
16/ 0	M	4	689	395	22.50	.	0.210
17/ 0	M	2	744	430	21.10	.	0.260
18/ 0	M	5	900	495	20.80	.	0.430
19/ 0	F	4	960	460	21.70	.	0.710
20/ 0	M	6	1200	465	22.00	.	0.710
21/ 0	M	4	1073	510	20.90	.	0.460
22/ 0	M	6	918	440	22.10	.	1.000
23/ 0	F	4	872	445	22.60	.	0.610
24/ 0	F	5	2502	665	20.60	.	0.870
25/ 0	M	6	1518	530	21.70	.	0.720
Mean		4.6	1140	484	21.61	.	<.552
Minim.		2	451	360	19.50	.	<.010
Maxim.		6	2502	665	23.60	.	1.280
St.dev		1.2	556	87	0.95	.	~.353
Count		25	25	25	25	.	25

Sample.No 01 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
 MUSCLE : 0114,30 g tissue used in analysis.  
 Sample.No 02 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
 MUSCLE : 0102,20 g tissue used in analysis.  
 Sample.No 03 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
 MUSCLE : 0092,60 g tissue used in analysis.  
 Sample.No 04 :  
 MUSCLE : 0097,80 g tissue used in analysis.  
 Sample.No 05 :  
 MUSCLE : 0107,90 g tissue used in analysis.  
 Sample.No 06 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
 MUSCLE : 0097,10 g tissue used in analysis.  
 Sample.No 07 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
 MUSCLE : 0073,00 g tissue used in analysis.  
 Sample.No 08 :  
 MUSCLE : 0063,30 g tissue used in analysis.  
 Sample.No 09 :  
 MUSCLE : 0078,60 g tissue used in analysis.  
 Sample.No 10 :  
 MUSCLE : 0102,20 g tissue used in analysis.  
 Sample.No 11 :  
 MUSCLE : 0095,30 g tissue used in analysis.  
 Sample.No 12 :  
 MUSCLE : 0104,20 g tissue used in analysis.  
 Sample.No 13 :  
 MUSCLE : 0112,80 g tissue used in analysis.  
 Sample.No 14 :  
 MUSCLE : 0109,70 g tissue used in analysis.  
 Sample.No 15 :  
 MUSCLE : 0118,90 g tissue used in analysis.  
 Sample.No 16 :  
 MUSCLE : 0087,60 g tissue used in analysis.  
 Sample.No 17 :  
 MUSCLE : 0098,60 g tissue used in analysis.  
 Sample.No 18 :  
 MUSCLE : 0103,30 g tissue used in analysis.  
 Sample.No 19 :  
 MUSCLE : 0107,00 g tissue used in analysis.  
 Sample.No 20 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
 MUSCLE : 0125,30 g tissue used in analysis.  
 Sample.No 21 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
 MUSCLE : 0113,20 g tissue used in analysis.  
 Sample.No 22 :  
 MUSCLE : 0104,40 g tissue used in analysis.  
 Sample.No 23 :  
 MUSCLE : 0107,30 g tissue used in analysis.  
 Sample.No 24 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
 MUSCLE : 0106,50 g tissue used in analysis.  
 Sample.No 25 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
 MUSCLE : 0119,20 g tissue used in analysis.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **30B Oslo City area**, Latitude: 59°52.00N, Longitude: 10°39.00E.  
 Catch,date : **890116**, Count: 25, Sample type: **Homogenate**.

• Analytical Lab. :	NACE		
• Analysis Code. :	511		
• Detection Limit :	0.020		
Samp/ Sex Age Wght Lngt	Dry	Fat	PCB
Repl. F/M year g mm	%	%	ppm
no.			w.wt
26/ 0 X 5 1140 484	21.60	0.30	0.030

Sample.No 26 : Bulk of spec.no. 1-25

MUSCLE : bulk of spec.no. 1-25 (muscle)

Species : GADU MOR, Gadus morhua, GB: Cod, N: Torsk.  
 Sample area: J26 Oslofjorden, Tissue : MUSCLE.  
 Locality : 30B Oslo City area, Latitude: 59°52.00N, Longitude: 10°39.00E.  
 Catch,date : 891113, Count: 25, Sample type: Individual.  
 Comment : Station name : Oslo City area

		Analytical Lab. : NIVA							
		Analysis Code. : 310		0.100					
		Detection Limit : 0.100							
Samp/	Sex	Age	Wght	Lngt		Dry	Fat	Hg	
Repl.	F/M	year	g	mm	no.	%	%	ppm	d.wt
01/ 0	F	7	2165	610		16.27	.	0.600	
02/ 0	F	5	2723	670		22.31	.	0.800	
03/ 0	F	5	1806	550		17.47	.	0.600	
04/ 0	M	3	960	450		22.68	.	0.400	
05/ 0	F	2	1412	500		21.71	.	0.600	
06/ 0	M	2	1403	535		26.23	.	0.300	
07/ 0	F	2	2378	615		26.78	.	0.300	
08/ 0	F	3	1860	570		22.02	.	0.700	
09/ 0	M	4	1519	540		29.98	.	0.500	
10/ 0	M	2	1415	510		22.55	.	0.500	
11/ 0	F	5	2513	625		22.42	.	0.900	
12/ 0	F	3	1821	560		22.42	.	0.800	
13/ 0	M	5	2254	620		24.45	.	1.200	
14/ 0	M	5	1891	555		21.16	.	1.100	
15/ 0	M	6	1851	580		21.14	.	1.000	
16/ 0	M	1	1042	470		24.62	.	0.500	
17/ 0	M	2	1024	505		21.63	.	0.500	
18/ 0	F	4	1201	510		22.06	.	0.600	
19/ 0	F	2	1104	475		20.88	.	0.800	
20/ 0	F	3	898	475		21.14	.	0.700	
21/ 0	F	3	858	445		21.47	.	0.600	
22/ 0	F	2	761	425		22.73	.	0.300	
23/ 0	M	2	1284	470		22.35	.	0.400	
24/ 0	M	2	1084	470		23.82	.	0.500	
25/ 0	F	2	1037	475		21.68	.	1.000	
Mean	3.3	1531	528			22.48	.	0.648	
Minim.	1	761	425			16.27	.	0.300	
Maxim.	7	2723	670			29.98	.	1.200	
St.dev	1.6	564	66			2.69	.	0.250	
Count	25	25	25			25	.	25	

Sample.No 01 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0078,50 g tissue used in analysis.  
 Sample.No 02 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0108,00 g tissue used in analysis.  
 Sample.No 03 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0072,10 g tissue used in analysis.  
 Sample.No 04 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0089,30 g tissue used in analysis.  
 Sample.No 05 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0114,10 g tissue used in analysis.  
 Sample.No 06 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0106,30 g tissue used in analysis.  
 Sample.No 07 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0129,80 g tissue used in analysis.  
 Sample.No 08 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0115,40 g tissue used in analysis.  
 Sample.No 09 :  
 MUSCLE : 0095,60 g tissue used in analysis.  
 Sample.No 10 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0106,10 g tissue used in analysis.  
 Sample.No 11 : Skin with metacercari cf. Cryptocotyle lingua, considerable.  
 MUSCLE : 0143,20 g tissue used in analysis.  
 Sample.No 12 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0116,70 g tissue used in analysis.  
 Sample.No 13 :  
 MUSCLE : 0103,30 g tissue used in analysis.  
 Sample.No 14 :  
 MUSCLE : 0089,90 g tissue used in analysis.  
 Sample.No 15 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0094,20 g tissue used in analysis.  
 Sample.No 16 :  
 MUSCLE : 0092,40 g tissue used in analysis.  
 Sample.No 17 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0081,70 g tissue used in analysis.  
 Sample.No 18 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0085,10 g tissue used in analysis.  
 Sample.No 19 : Uncertain age determination  
 MUSCLE : 0103,90 g tissue used in analysis.  
 Sample.No 20 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0101,60 g tissue used in analysis.  
 Sample.No 21 :  
 MUSCLE : 0104,10 g tissue used in analysis.  
 Sample.No 22 :  
 MUSCLE : 0091,50 g tissue used in analysis.  
 Sample.No 23 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0116,00 g tissue used in analysis.  
 Sample.No 24 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0105,90 g tissue used in analysis.  
 Sample.No 25 : Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0096,30 g tissue used in analysis.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **30B Oslo City area**, Latitude: 59°52.00N, Longitude: 10°39.00E.  
 Catch,date : **891113**, Count: 25, Sample type: **Homogenate**.  
 Comment : Station name : Oslo City area

• Analytical Lab. :	NACE		
• Analysis Code. :	511		
• Detection Limit :	0.020		
Sample/ Sex Age Wght Lngt	Dry	Fat	PCB
Repl. F/M year g mm	%	%	ppm
no.			w.wt
26/ 0 H 3 1531 528	22.13	0.44	<0.020

Sample.No 26 : Bulk of ind. no. 1-25

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **30B Oslo City area**, Latitude : 59°44.00N, Longitude: 10°32.00E.  
 Catch,date : **901204**, Count: 25, Sample type: **Individual**.  
 Comment : Station name : Oslo City area

Analytical Lab. : NIVA		310		0.010		H g		ppm		w.wt	
Analysis Code. :		310		0.010		H g		ppm		w.wt	
Detection Limit :		310		0.010		H g		ppm		w.wt	
Samp/	Sex	Age	Wght	Lngt	Dry	Fat	H g	ppm	w.wt		
Repl.	F/M	year	g	mm	%	%					
no.											
01/	0	M	3	744	420	19.80	.	0.120			
02/	0	M	4	1161	460	19.90	.	0.130			
03/	0	F	5	1147	470	19.80	.	0.120			
04/	0	M	4	1028	480	18.50	.	0.070			
05/	0	F	3	977	480	19.60	.	0.050			
06/	0	M	4	1035	480	18.80	.	0.070			
07/	0	F	3	1484	490	19.80	.	0.130			
08/	0	M	6	1568	500	19.40	.	0.120			
09/	0	F	3	1334	510	19.70	.	0.140			
10/	0	F	4	1580	510	20.00	.	0.140			
11/	0	M	4	1644	530	19.50	.	0.140			
12/	0	F	5	1632	540	20.20	.	0.080			
13/	0	F	3	1368	540	19.80	.	0.260			
14/	0	M	4	1867	550	20.10	.	0.080			
15/	0	F	4	1765	550	20.30	.	0.170			
16/	0	F	4	1932	560	21.00	.	0.120			
17/	0	F	4	1877	560	20.30	.	0.100			
18/	0	M	4	1979	560	20.90	.	0.090			
19/	0	F	4	2077	570	20.10	.	0.110			
20/	0	F	4	1826	570	19.50	.	0.140			
21/	0	F	4	2243	580	20.40	.	0.150			
22/	0	M	5	2635	620	20.30	.	0.350			
23/	0	F	2	2344	620	20.50	.	0.080			
24/	0	F	2	2708	620	20.70	.	0.360			
25/	0	F	2	2942	650	20.20	.	0.180			
Mean			3.8	1716	537	19.96	.	0.140			
Minim.			2	744	420	18.50	.	0.050			
Maxim.			6	2942	650	21.00	.	0.360			
St.dev			1.0	568	57	0.58	.	0.078			
Count			25	25	25	25	.	25			





Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **30B Oslo City area**, Latitude: 59°44.00N, Longitude: 10°32.00E.  
 Catch,date : **911003**, Count: 25, Sample type: **Individual**.

Analytical Lab. :		NIVA	
Analysis Code. :		510	
Detection Limit :		0.100	
Sample Repl. no.	Sex Age Wght Lngt F/M year g mm	Dry %	Fat %
			Hg ppm
			M.Wt
01/ 0	F 2 602 400	19.60	0.120
02/ 0	M 2 665 410	-	0.090
03/ 0	F 2 725 410	20.00	0.090
04/ 0	M 2 774 420	19.90	0.100
05/ 0	F 2 750 420	19.90	0.100
06/ 0	M 2 798 430	19.80	0.090
07/ 0	M 2 767 440	19.30	0.060
08/ 0	M 2 906 450	19.40	0.080
09/ 0	M 2 956 450	19.90	0.080
10/ 0	F 2 951 470	19.20	0.080
11/ 0	F 2 1095 490	18.60	0.070
12/ 0	M 2 1132 500	19.40	0.140
13/ 0	F 2 1063 510	19.10	0.100
14/ 0	F 2 1427 510	19.20	0.060
15/ 0	F 3 1155 520	18.20	0.220
16/ 0	F 3 1417 520	18.80	0.140
17/ 0	F 4 1469 550	18.90	0.160
18/ 0	M 3 1656 560	19.20	0.080
19/ 0	F 3 1728 560	19.30	0.090
20/ 0	M 4 2093 600	20.50	<.010
21/ 0	F 4 2433 630	18.10	0.260
22/ 0	M 5 2903 680	18.70	0.150
23/ 0	F 5 3264 720	19.90	<.010
24/ 0	F 5 3768 740	20.50	0.130
25/ 0	F 5 3617 750	19.70	<.010
Mean	2.9 1525 526	19.41	<.101
Minim.	2.2 602 400	18.10	<.010
Maxim.	5 3768 750	20.50	0.260
St.dev	1.2 953 107	0.63	~.058
Count	25 25 25	25	25

Sample.No 02 : Skin with metacercariae of cf. Cryptocotyle lingua Skin with ulceration, lymphocytic areas and/or lesions  
 Sample.No 04 : Skin with metacercariae of cf. Cryptocotyle lingua Skin with ulceration, lymphocytic areas and/or lesions  
 MUSCLE : 0042.45 g tissue used in analysis.  
 Sample.No 05 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 06 : Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods  
 Sample.No 10 : Skin with metacercariae of cf. Cryptocotyle lingua Skin with ulceration, lymphocytic areas and/or lesions  
 Sample.No 11 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 12 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 13 : Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods  
 Sample.No 14 : Liver and/or intestinal guts with larvae of Anisakis simplex Liver with necrotic areas and/or discolouration  
 Sample.No 15 : Skin with metacercariae of cf. Cryptocotyle lingua Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 16 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 17 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 18 : Liver with necrotic areas and/or discolouration  
 Sample.No 21 : Skin with metacercariae of cf. Cryptocotyle lingua Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 22 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 23 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 24 : Liver and/or intestinal guts with larvae of Anisakis simplex Liver with necrotic cysts or tumors  
 Sample.No 25 : Skin and/or oral cavity with caligiform and/or lernaepodiiform copepods Liver and/or intestinal guts with larvae of Anisakis simplex



Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **30B Oslo City area**, Latitude: 59°49.00N, Longitude: 10°33.00E.  
 Catch,date : **921230**, Count: 18, Sample type: **Individual**.  
 Comment : Station name : Oslo City area Caught by trawl, 70-100m depth

Analytical Lab. :		NIVA	
Analysis Code. :		310	
Detection Limit :		0.100	
Samp/ Repl. no.	Sex Age Wght Ingt	Dry %	Fat %
F/M	year g mm	%	Hg ppm w.wt
01/0	F 3 520 360	19.00	0.120
02/0	M 4 537 370	20.70	0.100
04/0	M 3 672 400	20.50	0.110
05/0	F 3 770 405	20.10	0.130
06/0	M 3 837 410	21.20	0.060
07/0	M 3 807 410	20.10	0.110
08/0	F 5 737 420	19.30	0.100
09/0	F 5 925 440	19.00	0.110
10/0	M 3 990 470	20.40	0.120
11/0	F 4 1014 480	18.90	0.160
12/0	M 4 1059 485	18.50	0.120
13/0	F 4 1399 500	18.50	0.260
14/0	F 4 1523 510	18.90	0.150
15/0	F 3 1646 550	19.00	0.220
16/0	F 4 1663 555	19.10	0.140
17/0	M 3 1959 560	19.30	0.150
18/0	F 4 2535 620	20.00	0.130
Mean	3.6 1153 467	19.56	0.135
Minim.	3 520 360	18.50	0.060
Maxim.	5 2535 620	21.20	0.260
St.dev	0.7 554 74	0.82	0.047
Count	17 17 17	17	17

Sample.No 01 : Liver with necrotic areas and/or discolouration

Sample.No 06 : Liver with necrotic areas and/or discolouration

Sample.No 09 : Muscle with signs of inner bleeding Liver with necrotic areas and/or discolouration

Sample.No 11 : Muscle with signs of inner bleeding Liver with necrotic areas and/or discolouration Pale gills will scarlet terminal parts

Sample.No 12 : Muscle with signs of inner bleeding Liver with necrotic areas and/or discolouration

Sample.No 13 : Liver with necrotic areas and/or discolouration

Sample.No 14 : Liver with necrotic areas and/or discolouration

Sample.No 15 : Liver with necrotic areas and/or discolouration

Sample.No 16 : Liver with necrotic areas and/or discolouration

Sample.No 17 : poorly developed gonads



Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **30X West of Nesodden**, Latitude: 59°48.50N, Longitude: 10°36.00E.  
 Catch,date : **930314**, Count: 19, Sample type: **Individual**.  
 Comment : Station name : West of Nesodden Extra cod station Caught by siene, 15-40m depth

		Analytical Lab. : NIVA					
		310					
		0.100					
		H g					
		ppm					
		w. wt					
Samp/	Sex	Age	Wght	Lngt	Dry	Fat	
Repl.	F/M	year	g	mm	%	%	
no.							
01/	0	M	3	788	410	18.40	0.080
02/	0	M	3	737	435	19.80	0.080
03/	0	M	4	819	440	18.20	0.060
04/	0	M	3	817	440	20.30	0.050
05/	0	M	3	1006	450	19.00	0.080
06/	0	M	3	858	450	19.90	0.060
07/	0	M	4	1084	470	20.30	0.080
08/	0	M	4	1102	480	19.80	0.050
09/	0	M	4	1036	480	18.60	0.060
10/	0	F	4	1312	490	19.00	0.090
11/	0	F	3	1166	500	19.20	0.090
12/	0	F	4	1295	545	17.50	0.080
13/	0	F	4	2228	580	18.90	0.090
14/	0	F	4	2438	590	18.80	0.210
15/	0	F	4	2543	620	17.90	0.140
16/	0	F	4	3155	680	18.70	0.170
17/	0	M	4	3559	680	19.00	0.230
18/	0	F	6	2958	690	17.70	0.350
19/	0	F	8	3865	720	17.70	0.230
Mean	4.0		1725	534	18.88	0.120	
Minim.	3		737	410	17.50	0.050	
Maxim.	8		3865	720	20.30	0.350	
St.dev	1.2		1045	101	0.86	0.081	
Count	19		19	19	19	19	

Sample.No 01 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 03 : skin with reddish film  
 Sample.No 04 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 05 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 06 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 07 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 08 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 09 : poorly developed roe mass  
 Sample.No 12 : Muscle with signs of inner bleeding  
 Sample.No 13 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
 Sample.No 14 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 16 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 18 : Liver and/or intestinal guts with larvae of Anisakis simplex



Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **31B Solbergstrand**, Latitude: 59°36.90N, Longitude: 10°39.40E.  
 Catch, date : **811223**, Count: 10, Sample type: **Individual**.

Analytical Lab. :		SIIF	SIIF	SIIF					
Analysis Code. :		130	120	110					
Detection Limit :		0.005	0.010	0.010					
Samp/	Sex	Fat	Hg	P					
Repl.	Age	%	ppm	C					
F/M	year		w.wt	B					
no.	g		w.wt	ppm					
	mm			w.wt					
01/ 0	M	3	2160	630	19.30	0.37	0.014	0.057	0.030
02/ 0	X	1	430	340	20.80	0.47	0.012	0.034	0.010
03/ 0	F	1	510	370	19.20	0.38	0.009	0.014	0.030
04/ 0	F	1	210	280	20.00	0.41	.	0.020	0.010
05/ 0	X	1	155	280	26.60	0.50	0.051	0.046	0.010
06/ 0	M	3	1350	520	20.30	0.39	0.005	0.116	0.010
07/ 0	F	2	1150	490	20.20	0.46	0.011	0.050	0.010
08/ 0	M	2	1540	530	20.00	0.40	0.015	0.040	0.010
09/ 0	F	3	1540	590	19.30	0.49	0.012	0.088	0.020
10/ 0	F	1	520	370	21.50	0.42	0.005	0.035	0.020
Mean	1.8	957	440		20.72	0.43	0.015	0.050	0.016
Minim.	1	155	280		19.20	0.37	0.005	0.014	0.010
Maxim.	3	2160	630		26.60	0.50	0.051	0.116	0.030
St.dev	0.9	682	128		2.19	0.05	0.014	0.031	0.008
Count	10	10	10	10	10	10	9	10	10



Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **31B Solbergstrand**, Latitude: 59°36.90N, Longitude: 10°39.40E.  
 Catch,date : **821200**, Count: 27, Sample type: **Individual**.  
 Comment : **SAMPLING DATES: I01-15 : 821020; I16-22 : 821105; I23-24 : 821215; I25-27 : 830223**

Samp/ Repl. no.	Sex	Age	Wght	Lngt	mm	Dry %	Fat %	VETN		VETN		VETN	
								Hg ppm	w.wt	Se ppm	w.wt	P ppm	C ppm
01/ 0	F	2	640	400		22.00	0.30	0.060	0.320	<0.050	<0.050	<0.050	<0.050
02/ 0	M	1	530	380		20.00	0.30	0.080	0.250	<0.050	<0.050	<0.050	<0.050
03/ 0	M	2	710	420		22.00	0.30	0.070	0.300	<0.050	<0.050	<0.050	<0.050
04/ 0	F	2	760	420		21.00	0.30	0.090	0.270	<0.050	<0.050	<0.050	<0.050
05/ 0	M	2	740	420		23.00	0.30	0.100	0.250	<0.050	<0.050	<0.050	<0.050
06/ 0	F	2	790	440		22.00	0.40	0.050	0.260	<0.050	<0.050	<0.050	<0.050
07/ 0	M	2	710	440		23.00	0.40	0.050	0.310	<0.050	<0.050	<0.050	<0.050
08/ 0	M	2	900	450		22.00	0.40	0.080	0.300	<0.050	<0.050	<0.050	<0.050
09/ 0	M	2	840	440		22.00	0.40	0.030	0.250	<0.050	<0.050	<0.050	<0.050
10/ 0	F	2	730	430		22.00	0.40	0.040	0.260	<0.050	<0.050	<0.050	<0.050
11/ 0	F	2	1140	510		21.00	0.20	0.080	0.280	<0.050	<0.050	<0.050	<0.050
12/ 0	F	2	1020	480		20.00	0.20	0.090	0.260	<0.050	<0.050	<0.050	<0.050
13/ 0	M	2	1070	510		22.00	0.20	0.090	0.290	<0.050	<0.050	<0.050	<0.050
14/ 0	F	2	990	490		22.00	0.20	0.090	0.240	<0.050	<0.050	<0.050	<0.050
15/ 0	F	2	1270	530		21.00	0.20	0.120	0.260	<0.050	<0.050	<0.050	<0.050
16/ 0	F	2	904	410		21.00	0.50	0.080	0.320	<0.050	<0.050	<0.050	<0.050
17/ 0	M	4	1717	580		23.00	0.50	0.150	0.320	<0.050	<0.050	<0.050	<0.050
18/ 0	M	3	1678	610		22.00	0.50	0.110	0.350	<0.050	<0.050	<0.050	<0.050
19/ 0	F	2	817	460		20.00	0.50	0.080	0.380	<0.050	<0.050	<0.050	<0.050
20/ 0	F	3	2252	630		22.00	0.50	0.300	0.420	<0.050	<0.050	<0.050	<0.050
21/ 0	F	3	1359	580		20.00	0.50	0.120	0.350	<0.050	<0.050	<0.050	<0.050
22/ 0	X	64				20.00	0.20	0.030	0.320	<0.050	<0.050	<0.050	<0.050
23/ 0	M	3	3711	750		21.00	0.20	0.150	0.270	<0.050	<0.050	<0.050	<0.050
24/ 0	M	3	1750	600		21.00	0.20	0.140	0.430	<0.050	<0.050	<0.050	<0.050
25/ 0	F	5	3500	740		24.00	0.20	0.210	0.400	<0.050	<0.050	<0.050	<0.050
26/ 0	F	3	2640	690		23.00	0.20	0.150	0.370	<0.050	<0.050	<0.050	<0.050
27/ 0	F	3	2290	690		24.00	0.20	0.140	0.350	<0.050	<0.050	<0.050	<0.050
Mean		2.4	1316	519		21.70	0.32	0.103	0.310	<<.050	<<.050	<<.050	<<.050
Minim.		1	64	380		20.00	0.20	0.030	0.240	<0.050	<0.050	<0.050	<0.050
Maxim.		5	3711	750		24.00	0.50	0.300	0.430	<0.050	<0.050	<0.050	<0.050
St.dev		0.8	884	111		1.17	0.12	0.058	0.055	~0.000	~0.000	~0.000	~0.000
Count		26	27	26		27	27	27	27	27	27	27	27

r(3) ! Replaced value.



Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36B Færder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch,date : **821200**, Count: 27, Sample type: **Individual**.  
 Comment : **SAMPLING DATES: I01-05, I09-12, I15-20, I23-27 : 830202; I06-08, I13-14, I21-22 : 830301**

Samp/ Repl. no.	Sex	Age	Wght	Lngr	mm	Dry %	Fat %	VEITN		VEITN		VEITN	
								Hg ppm	w.wt	Se ppm	w.wt	P CB ppm	w.wt
01/ 0	X	1	600	390		19.00	0.10	0.040	0.250	<0.050	220	240	211
02/ 0	M	2	460	370		19.00	0.10	0.090	0.570	<0.050	0.010	0.010	0.050
03/ 0	M	1	480	370		20.00	0.10	0.060	0.360	<0.050			
04/ 0	M	1	600	390		19.00	0.10	0.060	0.300	<0.050			
05/ 0	F	2	670	430		30.00	0.10	0.080	0.520	<0.050			
06/ 0	M	3	910	460		17.00	0.10	0.090	0.400	<0.050			
07/ 0	F	2	720	440		18.00	0.10	0.080	0.460	<0.050			
08/ 0	F	2	1020	470		18.00	0.10	0.130	0.460	<0.050			
09/ 0	M	1	780	440		22.00	0.10	0.050	0.370	<0.050			
10/ 0	F	3	1110	500		18.00	0.10	0.150	0.440	0.060			
11/ 0	F	3	1090	500		20.00	.	0.200	0.520	<0.050			
12/ 0	M	2	1080	480		21.00	.	0.070	0.460	<0.050			
13/ 0	F	3	1230	530		19.00	.	0.170	0.340	<0.050			
14/ 0	M	2	1040	500		19.00	.	0.080	0.520	<0.050			
15/ 0	F	3	1790	590		20.00	.	0.090	0.380	<0.050			
16/ 0	F	2	1720	560		21.00	0.40	0.160	0.280	<0.050			
17/ 0	F	3	1590	580		21.00	0.40	0.150	0.530	<0.050			
18/ 0	F	3	2090	580		21.00	0.40	0.090	0.300	<0.050			
19/ 0	F	3	1900	610		21.00	0.40	0.240	0.490	<0.050			
20/ 0	F	3	2410	650		22.00	0.40	0.080	0.320	<0.050			
21/ 0	F	4	2610	670		18.00	0.20	0.310	0.390	0.060			
22/ 0	F	3	3350	690		21.00	0.20	0.190	0.530	<0.050			
23/ 0	M	3	3680	720		22.00	0.20	0.140	0.440	<0.050			
24/ 0	M	3	2700	660		22.00	0.20	0.260	0.400	<0.050			
25/ 0	F	3	2700	670		23.00	0.20	0.110	0.450	<0.050			
26/ 0	F	5	3400	770		20.00	0.20	0.380	0.400	<0.050			
27/ 0	M	1	430	350		20.00	.	0.040	0.310	<0.050			
Mean	2.5	1561	532			20.41	0.20	0.133	0.414	<<.051			
Minim.	1	430	350			17.00	0.10	0.040	0.250	<0.050			
Maxim.	5	3680	770			30.00	0.40	0.380	0.570	0.060			
St.dev	1.0	987	119			2.45	0.12	0.085	0.088	~0.003			
Count	27	27	27			27	21	27	27	27			

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36B Fårder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch,date : **831201**, Count: 23, Sample type: **Individual**.

Samp/ Repl. no.	Sex	Age	Wght	Lngt	mm	Analytical Lab. :		Dry %	Fat %	VETN		VETN		Σ (*)		VETN	
						F/M	year			g	mm	Hg	P	C	B	DD	Σ
01/0	F	8	7330	1000						1.310	<0.050	<50.00	<50.00	<50.00	<10.00		
02/0	F	2	710	390						0.080	<0.050	<50.00	<50.00	<50.00	<10.00		
03/0	F	3	5000	760						0.200	<0.050	<50.00	<50.00	<50.00	<10.00		
04/0	M	2	540	370						0.090	<0.050	<50.00	<50.00	<50.00	<10.00		
05/0	F	2	500	380						0.120	<0.050	<50.00	<50.00	<50.00	<10.00		
06/0	M	2	1400	520						0.190	<0.050	<50.00	<50.00	<50.00	<10.00		
07/0	F	2	730	420						0.200	<0.050	<50.00	<50.00	<50.00	<10.00		
08/0	F	2	795	440						0.130	<0.050	<50.00	<50.00	<50.00	<10.00		
09/0	F	3	1620	580						0.140	<0.050	<50.00	<50.00	<50.00	<10.00		
10/0	F	2	550	360						0.090	<0.050	<50.00	<50.00	<50.00	<10.00		
11/0	M	2	1270	500						0.130	<0.050	<50.00	<50.00	<50.00	<10.00		
12/0	F	2	1240	480						0.040	<0.050	<50.00	<50.00	<50.00	<10.00		
13/0	M	4	3040	700						0.180	<0.050	<50.00	<50.00	<50.00	<10.00		
14/0	F	3	3050	580						0.180	<0.050	<50.00	<50.00	<50.00	<10.00		
15/0	F	2	320	330						0.110	<0.050	<50.00	<50.00	<50.00	<10.00		
16/0	M	4	2470	640						0.200	<0.050	<50.00	<50.00	<50.00	<10.00		
17/0	F	1	600	400						0.080	<0.050	<50.00	<50.00	<50.00	<10.00		
18/0	F	3	1040	480						0.100	<0.050	<50.00	<50.00	<50.00	<10.00		
19/0	M	2	710	420						0.120	<0.050	<50.00	<50.00	<50.00	<10.00		
20/0	F	3	1620	700						0.150	<0.050	<50.00	<50.00	<50.00	<10.00		
21/0	F	2	650	490						0.050	<0.050	<50.00	<50.00	<50.00	<10.00		
22/0	M	1	650	420						0.120	<0.050	<50.00	<50.00	<50.00	<10.00		
23/0	M	2	500	380						r<.010	<0.050	<50.00	<50.00	<50.00	<10.00		
Mean	2.6		1580	510						r<.175	<<.050	<<50.00	<<50.00	<<50.00	<<10.00		
Minim.	1		320	330						r<.010	<0.050	<50.00	<50.00	<50.00	<10.00		
Maxim.	8		7330	1000						1.310	<0.050	<50.00	<50.00	<50.00	<10.00		
St.dev	1.4		1679	161						0.253	~0.000	~0.00	~0.00	~0.00	~0.00		
Count	23		23	23						23	23	23	23	23	23		

r(3) ! Replaced value.  
 Sample.No 01 : A necrotic part on the forehead (ca 1 cm diameter). Some parasites Caligus diaphanus at the skin.  
 Sample.No 03 : Some Anisakis larvae in the liver.  
 Sample.No 06 : Some Anisakis larvae at the liver surface.  
 Sample.No 14 : Some Anisakis larvae at the liver surface.  
 Sample.No 16 : Some Anisakis larvae at the liver surface.  
 Sample.No 19 : A scar at the basis of the mid-dorsal fin, with some (1 cm dia) brownish-red muscle underneath.  
 Sample.No 20 : A few Anisakis larvae and mis-colored parts of the liver.  
 Sample.No 21 : A copepod Lernaeocera branchialis at the gills.  
 Sample.No 22 : A few Anisakis larvae at the liver surface.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36B Fårder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch,date : **841214**, Count: 24, Sample type: **Individual**.

.		Analytical Lab. :		VEITN		VEITN						
.		Analysis Code. :		220		211						
.		Detection Limit :		0.010		0.050						
Samp/	Sex	Age	Wght	Lngt	Dry	Fat	Hg	P	C	B	ppm	ppm
Repl.	F/M	year	g	mm	%	%	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/	0	M	3	3018	610	19.59	.	0.240	<0.050	0.050	<0.050	<0.050
02/	0	M	4	2389	620	21.30	.	0.260	<0.050	0.050	<0.050	<0.050
03/	0	F	4	2787	650	21.80	.	0.240	<0.050	0.050	<0.050	<0.050
04/	0	M	5	2363	630	21.00	.	0.360	<0.050	0.050	<0.050	<0.050
05/	0	M	4	4279	700	21.10	.	0.280	<0.050	0.050	<0.050	<0.050
06/	0	M	3	1930	560	20.80	.	0.200	<0.050	0.050	<0.050	<0.050
07/	0	F	3	1871	570	21.50	.	0.160	<0.050	0.050	<0.050	<0.050
08/	0	M	3	1336	530	20.50	.	0.160	<0.050	0.050	<0.050	<0.050
09/	0	M	3	1765	550	21.30	.	0.190	<0.050	0.050	<0.050	<0.050
10/	0	M	1	1655	540	23.00	.	0.120	<0.050	0.050	<0.050	<0.050
11/	0	M	2	1027	450	19.70	.	0.080	<0.050	0.050	<0.050	<0.050
12/	0	F	3	1168	530	21.10	.	0.190	<0.050	0.050	<0.050	<0.050
13/	0	F	2	1281	520	21.30	.	0.150	<0.050	0.050	<0.050	<0.050
14/	0	F	2	1217	490	20.80	.	0.080	<0.050	0.050	<0.050	<0.050
15/	0	X	3	1255	510	20.30	.	0.090	<0.050	0.050	<0.050	<0.050
16/	0	F	2	459	370	19.50	.	0.070	<0.050	0.050	<0.050	<0.050
17/	0	M	2	728	430	21.80	.	0.090	<0.050	0.050	<0.050	<0.050
18/	0	M	2	691	430	21.30	.	0.060	<0.050	0.050	<0.050	<0.050
19/	0	F	2	877	440	20.90	.	0.100	<0.050	0.050	<0.050	<0.050
20/	0	F	2	815	440	21.00	.	0.060	<0.050	0.050	<0.050	<0.050
21/	0	F	1	517	380	19.50	.	0.030	<0.050	0.050	<0.050	<0.050
22/	0	F	1	538	380	21.40	.	0.040	<0.050	0.050	<0.050	<0.050
23/	0	F	3	649	430	20.09	.	0.170	<0.050	0.050	<0.050	<0.050
24/	0	F	1	612	400	21.80	.	0.030	<0.050	0.050	<0.050	<0.050
Mean		2.5	1468	507	20.93	.	.	0.144	<<.050	0.050	<<.050	<<.050
Minim.		1	459	370	19.50	.	.	0.030	<0.050	0.050	<0.050	<0.050
Maxim.		5	4279	700	23.00	.	.	0.360	<0.050	0.050	<0.050	<0.050
St.dev		1.1	950	93	0.85	.	.	0.088	~0.000	0.000	~0.000	~0.000
Count		24	24	24	24	.	.	24	24	24	24	24

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36B Fårder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch,date : **851216**, Count: 14, Sample type: **Individual**.  
 Comment : All samples were infected with metacercari of *Cryptocotyle lingua*. on skin tissue Otoliths from all samples (for age determin.) lost in mail.

Analytical Lab. :		VEIN	VEIN	
Analysis Code. :		220	211	
Detection Limit :		0.010	0.050	
Samp/	Sex	Fat	Hg	PCB
Repl. no.	Age	%	ppm	ppm
F/M	year		w. wt	w. wt
g	mm			
no.				
01/ 0	M	20.60	0.110	<0.050
02/ 0	F	20.20	0.120	<0.050
03/ 0	F	21.00	0.080	<0.050
04/ 0	F	20.70	0.070	<0.050
05/ 0	M	20.40	0.120	<0.050
06/ 0	M	21.30	0.090	<0.050
07/ 0	F	19.40	0.160	<0.050
08/ 0	F	21.30	0.120	<0.050
09/ 0	M	21.40	0.060	<0.050
10/ 0	M	20.30	0.080	<0.050
11/ 0	F	21.30	0.110	<0.050
12/ 0	F	20.70	0.160	<0.050
13/ 0	M	21.90	0.070	<0.050
14/ 0	F	21.00	0.070	<0.050
Mean		20.82	0.101	<<.050
Minim.		19.40	0.060	<0.050
Maxim.		21.90	0.160	<0.050
St.dev		0.63	0.033	~0.000
Count		14	14	14

Sample.No 06 : Surface of liver with a few *Anisakis* larvae  
 Sample.No 10 : Surface of liver with a few *Anisakis* larvae

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36B Færder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch.date : **870204**, Count: 25, Sample type: **Individual**.  
 Comment : **Extremely cold and stormy conditions Nov.'86 prohibited fishing for local cod (<50m depth)**. Color can be used to help distinguish between local and other cod.

Samp/ Repl. no.	F/M	Sex	Age	Wght	Ingt	mm	Dry %	Fat %	NIVA		NACE	
									Hg	ppm	310	511
01/	0	F	2	1520	520		19.74	.	0.470	0.470	0.040	0.040
02/	0	F	2	2200	610		19.05	.	0.470	0.470	0.030	0.030
03/	0	M	4	3400	650		20.00	.	0.950	0.950	0.030	0.030
04/	0	M	3	4050	695		19.79	.	0.880	0.880	0.030	0.030
05/	0	F	1	3650	675		20.04	.	0.760	0.760	0.030	0.030
06/	0	F	1	840	435		18.67	.	0.540	0.540	0.020	0.020
07/	0	F	1	880	460		18.29	.	0.660	0.660	<0.020	<0.020
08/	0	F	2	1160	490		19.88	.	0.540	0.540	0.040	0.040
09/	0	M	2	1620	570		18.97	.	1.150	1.150	0.040	0.040
10/	0	M	3	2150	605		18.47	.	0.610	0.610	0.050	0.050
11/	0	M	3	2000	585		20.26	.	0.550	0.550	0.040	0.040
12/	0	F	3	2050	610		19.43	.	0.740	0.740	0.030	0.030
13/	0	F	2	1185	515		19.30	.	0.460	0.460	0.040	0.040
14/	0	F	2	1445	530		19.97	.	0.500	0.500	0.030	0.030
15/	0	M	2	1130	485		20.07	.	0.140	0.140	0.050	0.050
16/	0	X	1	605	430		18.91	.	0.350	0.350	0.030	0.030
17/	0	F	1	750	440		19.25	.	0.470	0.470	0.050	0.050
18/	0	M	1	602	395		19.78	.	0.110	0.110	<0.020	<0.020
19/	0	X	1	635	410		27.18	.	0.130	0.130	0.020	0.020
20/	0	F	1	820	460		18.45	.	0.230	0.230	0.070	0.070
21/	0	F	2	700	405		20.94	.	0.320	0.320	<0.020	<0.020
22/	0	F	1	455	360		19.54	.	0.290	0.290	0.030	0.030
23/	0	F	1	330	330		19.80	.	0.220	0.220	<0.020	<0.020
24/	0	M	1	300	315		19.18	.	0.350	0.350	0.030	0.030
25/	0	F	1	240	300		19.40	.	0.130	0.130	0.030	0.030
Mean	1.8			1389	491		19.77	.	0.481	0.481	<0.034	<0.034
Minim.	1			240	300		18.29	.	0.110	0.110	<0.020	<0.020
Maxim.	4			4050	695		27.18	.	1.150	1.150	0.070	0.070
St.dev	0.9			1053	113		1.67	.	0.271	0.271	~0.012	~0.012
Count	23			25	25		25	.	25	25	25	25

Sample.No 01 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 04 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 06 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 07 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 08 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 11 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 15 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 18 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 19 : Skin with metacercari of cf. Cryptocotyle lingua.  
 Sample.No 21 : Skin with metacercari of cf. Cryptocotyle lingua.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36B Fårder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch,date : **880105**, Count: 25, Sample type: **Individual**.

Analytical Lab. :		NIVA		NACE					
Analysis Code. :		310	511	310	511				
Detection Limit :		0.010	0.020	0.010	0.020				
Samp/	Sex	Age	Wght	Lngt					
Repl. no.	F/M	year	g	mm					
			Dry %	Fat %	Hg ppm	PCB ppm			
					d.wt	w.wt			
01/	0	M	2	876	445	20.20	0.10	0.200	<0.020
02/	0	F	2	852	470	20.90	0.10	0.230	<0.020
03/	0	M	2	1000	460	20.70	0.10	0.130	<0.020
04/	0	F	2	1000	460	20.20	0.20	0.280	0.030
05/	0	M	2	694	445	25.50	0.05	0.210	0.020
06/	0	F	2	591	400	19.80	0.10	0.210	<0.020
07/	0	F	2	698	430	20.50	0.10	0.210	0.020
08/	0	F	2	795	450	17.90	0.20	0.120	0.020
09/	0	M	2	1098	480	17.80	0.10	0.290	<0.020
10/	0	F	2	626	400	19.80	0.20	0.170	<0.020
11/	0	M	2	708	465	20.30	0.10	0.170	<0.020
12/	0	F	2	573	410	20.20	0.30	0.130	<0.020
13/	0	M	2	727	465	20.20	0.05	0.190	0.040
14/	0	M	2	901	465	20.70	0.10	0.170	<0.020
15/	0	M	2	744	420	19.00	0.10	0.160	<0.020
16/	0	M	2	791	445	20.00	0.10	0.200	<0.020
17/	0	M	2	624	420	21.20	0.05	0.110	<0.020
18/	0	F	2	588	395	20.80	0.10	0.100	<0.020
19/	0	F	2	1158	490	20.30	0.10	0.190	<0.020
20/	0	M	2	604	410	20.70	0.10	0.160	<0.020
21/	0	F	1	557	400	21.50	0.10	0.120	<0.020
22/	0	M	2	532	400	19.89	0.10	0.180	<0.020
23/	0	M	2	605	405	18.50	0.10	0.190	<0.020
24/	0	F	2	636	405	20.60	0.10	0.100	<0.020
25/	0	F	2	507	380	17.40	0.10	0.210	<0.020
Mean		2.0		739	433	20.18	0.11	0.177	<<.021
Minim.		1		507	380	17.40	0.05	0.100	<0.020
Maxim.		2		1158	490	25.50	0.30	0.290	0.040
St.dev		0.2		181	31	1.53	0.05	0.050	~0.004
Count		25		25	25	25	25	25	25



Sample.No 01 : Skin with metacercari of cf. Cryptocotyle lingua.  
 MUSCLE : 50,90 g tissue used in analysis.  
 Sample.No 02 : Skin with metacercari of cf. Cryptocotyle lingua.  
 MUSCLE : 57,20 g tissue used in analysis.  
 Sample.No 03 :  
 MUSCLE : 59,40 g tissue used in analysis.  
 Sample.No 04 : Skin with metacercari of cf. Cryptocotyle lingua, few.  
 MUSCLE : 83,00 g tissue used in analysis.  
 Sample.No 05 : Skin with metacercari of cf. Cryptocotyle lingua. Edge of tail-fin worn.  
 MUSCLE : 40,50 g tissue used in analysis.  
 Sample.No 06 : Skin with metacercari of cf. Cryptocotyle lingua.  
 MUSCLE : 67,80 g tissue used in analysis.  
 Sample.No 07 : Skin with metacercari of cf. Cryptocotyle lingua.  
 MUSCLE : 52,40 g tissue used in analysis.  
 Sample.No 08 :  
 MUSCLE : 71,70 g tissue used in analysis.  
 Sample.No 09 :  
 MUSCLE : 87,80 g tissue used in analysis.  
 Sample.No 10 :  
 MUSCLE : 60,10 g tissue used in analysis.  
 Sample.No 11 :  
 MUSCLE : 72,00 g tissue used in analysis.  
 Sample.No 12 : Skin with metacercari of cf. Cryptocotyle lingua.  
 MUSCLE : 58,50 g tissue used in analysis.  
 Sample.No 13 : Skin with metacercari of cf. Cryptocotyle lingua. Skin with lesions. Fins distinctly worn.  
 MUSCLE : 46,60 g tissue used in analysis.  
 Sample.No 14 :  
 MUSCLE : 73,20 g tissue used in analysis.  
 Sample.No 15 : Skin with metacercari of cf. Cryptocotyle lingua, few.  
 MUSCLE : 62,80 g tissue used in analysis.  
 Sample.No 16 :  
 MUSCLE : 63,60 g tissue used in analysis.  
 Sample.No 17 : Skin with metacercari of cf. Cryptocotyle lingua, few. Edge of tail-fin worn.  
 MUSCLE : 57,40 g tissue used in analysis.  
 Sample.No 18 : Skin with metacercari of cf. Cryptocotyle lingua, few.  
 MUSCLE : 62,10 g tissue used in analysis.  
 Sample.No 19 : Skin with metacercari of cf. Cryptocotyle lingua, few.  
 MUSCLE : 77,80 g tissue used in analysis.  
 Sample.No 20 : Skin with metacercari of cf. Cryptocotyle lingua, few.  
 MUSCLE : 57,20 g tissue used in analysis.  
 Sample.No 21 : Skin with metacercari of cf. Cryptocotyle lingua, few.  
 MUSCLE : 55,70 g tissue used in analysis.  
 Sample.No 22 : Skin with metacercari of cf. Cryptocotyle lingua, few.  
 MUSCLE : 61,00 g tissue used in analysis.  
 Sample.No 23 : Skin with metacercari of cf. Cryptocotyle lingua, few.  
 MUSCLE : 78,09 g tissue used in analysis.  
 Sample.No 24 : Skin with metacercari of cf. Cryptocotyle lingua, few.  
 MUSCLE : 70,10 g tissue used in analysis.  
 Sample.No 25 : Skin with metacercari of cf. Cryptocotyle lingua, few.  
 MUSCLE : 48,50 g tissue used in analysis.

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36B Fårder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch,date : **881213**, Count: 25, Sample type: **Individual**.

Analytical Lab. : Analysis Code. : Detection Limit :		NIVA 310 0.010	
Samp/ Repl. no.	Sex Age Wght Lmgt F/M year g mm	Dry %	Fat % H g ppm d.wt
01/ 0	F 4 866 470	20.60	0.310
02/ 0	F 4 1521 560	21.70	0.340
03/ 0	F 3 1846 590	25.20	0.430
04/ 0	F 3 1328 530	23.00	0.280
05/ 0	M 4 1977 605	22.30	0.270
06/ 0	M 3 3080 695	21.60	0.590
07/ 0	F 3 1172 485	21.90	0.260
08/ 0	M 4 1327 510	22.70	0.360
09/ 0	M 3 825 465	19.80	0.340
10/ 0	F 1 652 400	20.80	0.060
11/ 0	F 4 1055 480	20.60	0.240
12/ 0	F 1 429 365	20.00	0.190
13/ 0	M 2 1168 505	22.90	0.230
14/ 0	F 2 1016 490	21.50	0.340
15/ 0	F 2 1180 490	21.20	0.230
16/ 0	F 3 1642 580	18.10	0.590
17/ 0	M 3 829 435	20.30	0.280
18/ 0	F 4 2181 595	21.60	0.340
19/ 0	M 6 3330 720	18.60	0.800
20/ 0	M 5 3059 695	21.50	0.840
21/ 0	F 4 1424 540	21.60	0.390
22/ 0	F 4 2447 635	20.60	0.350
23/ 0	F 3 1147 490	22.00	0.230
24/ 0	F 4 752 450	21.30	0.260
25/ 0	F 1 503 360	20.80	0.140
Mean	3.2 1470 526	21.29	0.348
Minim.	1 429 360	18.10	0.060
Maxim.	6 3330 720	25.20	0.840
St.dev	1.2 808 97	1.44	0.184
Count	25 25 25	25	25

Sample.No 01 : MUSCLE : 0057,00 g tissue used in analysis.  
 Sample.No 02 : MUSCLE : 0074,40 g tissue used in analysis.  
 Sample.No 03 : Worn tissue between bone structure of tailfin  
 MUSCLE : 0066,50 g tissue used in analysis.  
 Sample.No 04 : Lesion (0.5-1.0cm) 2-3cm posterior to anal pore  
 MUSCLE : 0070,50 g tissue used in analysis.  
 Sample.No 05 : Worn tissue between bone structure on tailfin  
 MUSCLE : 0106,00 g tissue used in analysis.  
 Sample.No 06 : MUSCLE : 0094,70 g tissue used in analysis.  
 Sample.No 07 : MUSCLE : 0071,40 g tissue used in analysis.  
 Sample.No 08 : MUSCLE : 0070,60 g tissue used in analysis.  
 Sample.No 09 : MUSCLE : 0055,90 g tissue used in analysis.  
 Sample.No 10 : MUSCLE : 0051,30 g tissue used in analysis.  
 Sample.No 11 : MUSCLE : 0069,80 g tissue used in analysis.  
 Sample.No 12 : MUSCLE : 0039,50 g tissue used in analysis.  
 Sample.No 13 : MUSCLE : 0071,30 g tissue used in analysis.  
 Sample.No 14 : MUSCLE : 0061,00 g tissue used in analysis.  
 Sample.No 15 : Skin with metacercari cf. Cryptocotyle lingua on head and back  
 MUSCLE : 0078,00 g tissue used in analysis.  
 Sample.No 16 : MUSCLE : 0087,20 g tissue used in analysis.  
 Sample.No 17 : MUSCLE : 0072,00 g tissue used in analysis.  
 Sample.No 18 : MUSCLE : 0088,00 g tissue used in analysis.  
 Sample.No 19 : MUSCLE : 0099,60 g tissue used in analysis.  
 Sample.No 20 : MUSCLE : 0103,00 g tissue used in analysis.  
 Sample.No 21 : MUSCLE : 0078,00 g tissue used in analysis.  
 Sample.No 22 : MUSCLE : 0093,30 g tissue used in analysis.  
 Sample.No 23 : MUSCLE : 0072,40 g tissue used in analysis.  
 Sample.No 24 : MUSCLE : 0055,20 g tissue used in analysis.  
 Sample.No 25 : MUSCLE : 0049,30 g tissue used in analysis.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36B Fårder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch,date : **881213**, Count: 25, Sample type: **Homogenate**.

Analytical Lab. :	NACE
Analysis Code. :	511
Detection Limit :	0.020
Samp/ Sex Age Wght Lngt	Diry Fat
Repl. F/M year g mm	% %
no.	ppm w.wt
26/ 0 X 3 1470 526	21.30 0.30 0.020

Sample.No 26 : Bulk of spec.no. 1-25.  
 MUSCLE : bulk of spec.no.1-25 (muscle)

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36B Farder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch,date : **891201**, Count: 25, Sample type: **Individual**.

		Analytical Lab. : NIVA					
		Analysis Code. : 310					
		Detection Limit : 0.100					
Samp/	Sex	Age	Wght	Lngt	Dry	Fat	Hg
Repl.	F/M	year	g	mm	%	%	ppm
no.							d.wt
01/	0	F	1	2180	595	42.37	0.300
02/	0	F	1	1177	500	31.14	0.300
03/	0	F	1	643	430	38.81	0.300
04/	0	M	1	1463	535	42.58	0.300
05/	0	M	4	1641	595	21.80	0.700
06/	0	F	1	697	420	34.74	0.300
07/	0	F	1	456	355	42.34	0.300
08/	0	M	1	655	400	25.21	0.200
09/	0	M	4	2162	555	31.80	0.200
10/	0	F	2	941	460	50.81	0.100
11/	0	F	2	1205	515	46.69	<.100
12/	0	F	1	1325	520	24.69	0.200
13/	0	F	1	441	390	43.67	0.100
14/	0	F	2	526	395	23.86	0.300
15/	0	M	2	809	450	35.42	0.200
16/	0	F	3	934	450	29.84	0.200
17/	0	M	1	1063	475	22.06	0.300
18/	0	F	1	1028	495	38.41	0.200
19/	0	F	2	1653	540	42.34	0.100
20/	0	F	1	1010	495	35.54	0.200
21/	0	M	2	1124	480	42.45	0.100
22/	0	F	4	4237	700	30.60	0.300
23/	0	F	1	940	450	22.06	0.200
24/	0	M	2	1357	475	46.87	0.100
25/	0	F	1	478	370	43.82	0.200
Mean		1.7	1206	482	35.60	.	<.232
Minim.		1	441	355	21.80	.	<.100
Maxim.		4	4237	700	50.81	.	0.700
St.dev		1.0	791	79	8.85	.	~.125
Count		25	25	25	25	.	25

Sample.No 01 : skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0124,00 g tissue used in analysis.  
 Sample.No 02 :  
 MUSCLE : 0097,00 g tissue used in analysis.  
 Sample.No 03 : skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0085,00 g tissue used in analysis.  
 Sample.No 04 : skin with metacercari cf. Cryptocotyle lingua Uncertain age determination  
 MUSCLE : 0102,00 g tissue used in analysis.  
 Sample.No 05 : skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0100,00 g tissue used in analysis.  
 Sample.No 06 : skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0085,00 g tissue used in analysis.  
 Sample.No 07 : skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0054,00 g tissue used in analysis.  
 Sample.No 08 : skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0091,00 g tissue used in analysis.  
 Sample.No 09 : skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0126,00 g tissue used in analysis.  
 Sample.No 10 : skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0082,00 g tissue used in analysis.  
 Sample.No 11 : skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0101,00 g tissue used in analysis.  
 Sample.No 12 : skin with metacercari cf. Cryptocotyle lingua Uncertain age determination  
 MUSCLE : 0101,00 g tissue used in analysis.  
 Sample.No 13 : skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0058,00 g tissue used in analysis.  
 Sample.No 14 : skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0083,00 g tissue used in analysis.  
 Sample.No 15 : skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0095,00 g tissue used in analysis.  
 Sample.No 16 :  
 MUSCLE : 0097,00 g tissue used in analysis.  
 Sample.No 17 :  
 MUSCLE : 0095,00 g tissue used in analysis.  
 Sample.No 18 :  
 MUSCLE : 0099,00 g tissue used in analysis.  
 Sample.No 19 :  
 MUSCLE : 0100,00 g tissue used in analysis.  
 Sample.No 20 :  
 MUSCLE : 0092,00 g tissue used in analysis.  
 Sample.No 21 : Uncertain age determination  
 MUSCLE : 0102,00 g tissue used in analysis.  
 Sample.No 22 :  
 MUSCLE : 0127,00 g tissue used in analysis.  
 Sample.No 23 :  
 MUSCLE : 0112,00 g tissue used in analysis.  
 Sample.No 24 :  
 MUSCLE : 0104,00 g tissue used in analysis.  
 Sample.No 25 :  
 MUSCLE : 0073,00 g tissue used in analysis.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36B Fårder**, Latitude: 59°02.00N, Longitude: 10°32.00E.  
 Catch,date : **891201**, Count: 25, Sample type: **Homogenate**.

• Analytical Lab. :	NACE		
• Analysis Code. :	511		
• Detection Limit :	0.020		
• Samp/ Sex Age Wght Lngt	Dry	Fat	PCB
Repl. F/M year g mm	%	%	ppm
no.			w.wt
26/ 0 H 2 1206 482	33.52	0.18	0.050

Sample.No 26 : Bulk of ind.no. 1-25

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36B Fårder**, Latitude: 59°02.00N, Longitude: 10°27.00E.  
 Catch,date : **901105**, Count: 24, Sample type: **Individual**.

Analytical Lab. : NIVA		310		0.010			
Analysis Code. :		H g		ppm			
Detection Limit :		w. wt					
Samp/	Sex	Age	Wght	Lmgt	Dry	Fat	H g
Repl.	F/M	year	g	mm	%	%	
no.							
01/ 0	F	1	518	380	19.60	.	0.040
02/ 0	F	1	549	390	21.70	.	0.040
03/ 0	M	1	643	410	19.70	.	0.040
04/ 0	M	1	708	420	18.50	.	0.050
05/ 0	F	1	821	430	19.30	.	0.050
06/ 0	M	3	836	430	19.60	.	0.110
07/ 0	M	1	771	430	18.90	.	0.060
08/ 0	M	1	941	440	19.10	.	0.060
09/ 0	F	3	982	450	19.40	.	0.100
10/ 0	F	2	1035	470	19.00	.	0.100
11/ 0	F	3	1328	490	18.30	.	0.110
12/ 0	M	3	1026	500	21.00	.	0.100
13/ 0	M	3	1289	520	20.80	.	0.080
14/ 0	F	3	1333	550	17.10	.	0.070
15/ 0	M	3	1365	550	20.20	.	0.120
16/ 0	M	3	1601	560	19.90	.	0.110
17/ 0	M	4	1794	580	19.20	.	0.160
18/ 0	F	3	1872	580	20.40	.	0.130
19/ 0	M	3	2035	590	19.00	.	0.110
20/ 0	M	3	1964	600	17.40	.	0.080
21/ 0	M	3	1775	600	19.70	.	0.130
22/ 0	F	3	1795	600	21.30	.	0.080
23/ 0	F	2	2231	620	18.20	.	0.170
24/ 0	M	4	2630	660	19.00	.	0.180
Mean	2.4		1327	510	19.43	.	0.095
Minim.	1		518	380	17.10	.	0.040
Maxim.	4		2630	660	21.70	.	0.180
St.dev	1.0		582	83	1.13	.	0.041
Count	24		24	24	24	.	24



Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36B Fårder**, Latitude: 59°02.00N, Longitude: 10°27.00E.  
 Catch,date : **911201**, Count: 25, Sample type: **Individual**.

Analytical Lab. : Analysis Code. : Detection Limit :		NIVA 310 0.100	
Samp/ Repl. no.	Sex Age Wght Lngt F/M year g mm	Dry %	Fat % Hg ppm w.wt
01/ 0	M 2 621 390	21.50	0.060
02/ 0	M 2 695 390	18.70	0.030
03/ 0	M 2 722 420	18.60	0.030
04/ 0	M 3 792 430	21.40	0.050
05/ 0	F 3 1031 450	19.50	0.050
06/ 0	F 3 1064 470	20.00	0.090
07/ 0	F 3 1111 470	19.40	0.070
08/ 0	M 3 1307 490	20.30	0.080
09/ 0	M 3 1220 490	19.40	0.080
10/ 0	M 3 1215 500	19.90	0.070
11/ 0	F 3 1279 500	20.60	0.060
12/ 0	F 3 1210 500	19.40	0.050
13/ 0	M 3 1398 500	21.40	0.090
14/ 0	M 3 1552 500	20.80	0.100
15/ 0	F 3 1585 500	19.50	0.050
16/ 0	M 3 1325 510	19.00	0.050
17/ 0	M 3 1558 520	21.60	0.100
18/ 0	F 3 1307 530	21.10	0.150
19/ 0	F 3 1686 530	19.50	0.100
20/ 0	F 3 1558 540	21.50	0.060
21/ 0	M 3 1761 550	18.40	0.100
22/ 0	F 3 2064 560	19.40	0.110
23/ 0	F 3 2126 590	20.40	0.090
24/ 0	M 3 1812 590	19.80	0.120
25/ 0	F 3 2601 620	20.70	0.100
Mean	2.9 1384 502	20.07	0.078
Minim.	2 621 390	18.40	0.030
Maxim.	3 2601 620	21.60	0.150
St.dev	0.3 470 58	0.98	0.029
Count	25 25 25	25	25



Sample.No 01 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0027,90 g tissue used in analysis.  
 Sample.No 02 : Skin with metacercariae of cf. Cryptocotyle lingua  
   MUSCLE : 0042,50 g tissue used in analysis.  
 Sample.No 03 : Skin with metacercariae of cf. Cryptocotyle lingua  
   MUSCLE : 0037,50 g tissue used in analysis.  
 Sample.No 04 : Muscle with signs of inner bleeding  
   MUSCLE : 0040,30 g tissue used in analysis.  
 Sample.No 05 : Muscle with signs of inner bleeding  
   MUSCLE : 0051,80 g tissue used in analysis.  
 Sample.No 06 : Skin with metacercariae of cf. Cryptocotyle lingua  
   MUSCLE : 0050,40 g tissue used in analysis.  
 Sample.No 07 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding Liver and/or intestinal guts with  
   larvae of Anisakis simplex  
   MUSCLE : 0050,10 g tissue used in analysis.  
 Sample.No 08 :  
   MUSCLE : 0049,60 g tissue used in analysis.  
 Sample.No 09 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0049,80 g tissue used in analysis.  
 Sample.No 10 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0051,30 g tissue used in analysis.  
 Sample.No 11 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0050,00 g tissue used in analysis.  
 Sample.No 12 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0049,00 g tissue used in analysis.  
 Sample.No 13 : Skin with metacercariae of cf. Cryptocotyle lingua Liver with necrotic areas and/or discolouration  
   MUSCLE : 0050,70 g tissue used in analysis.  
 Sample.No 14 :  
   MUSCLE : 0051,50 g tissue used in analysis.  
 Sample.No 15 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0051,70 g tissue used in analysis.  
 Sample.No 16 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0051,10 g tissue used in analysis.  
 Sample.No 17 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0051,90 g tissue used in analysis.  
 Sample.No 18 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0055,10 g tissue used in analysis.  
 Sample.No 19 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0049,60 g tissue used in analysis.  
 Sample.No 20 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding Liver with necrotic areas and/or  
   discolouration  
   MUSCLE : 0050,70 g tissue used in analysis.  
 Sample.No 21 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0051,90 g tissue used in analysis.  
 Sample.No 22 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0051,10 g tissue used in analysis.  
 Sample.No 23 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0050,60 g tissue used in analysis.  
 Sample.No 24 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0052,80 g tissue used in analysis.  
 Sample.No 25 : Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
   MUSCLE : 0053,40 g tissue used in analysis.

Species : GADU MOR, Gadus morhua, GB: Cod, N: Torsk.  
Sample.area: J26 Oslofjorden, Tissue : MUSCLE.  
Locality : 36B Farder, Latitude: 59°02.00N, Longitude: 10°27.00E.  
Catch,date : 911201, Count: 25, Sample type: Bulked.

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Weight Lrht Repl. F/M year g mm no.	NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341						
	Fat		CB28		CB52		CB101		CB105		CB153		CB156		CB180		CB209		CB_E7		CB_ΣE		IDDEPP		ID_ΣA				
	%	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt		
26/ 0 X 3 772 416	19.90	0.50	<0.05	0.08	0.09	0.17	0.20	0.29	<0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	<1.0	0.20	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05
27/ 0 X 3 1183 484	19.80	0.50	0.07	0.08	0.11	0.26	0.26	0.37	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<1.4	0.22	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
28/ 0 X 3 1405 500	20.30	0.50	0.08	0.09	0.16	0.35	0.34	0.45	<0.05	0.07	0.07	<0.05	0.07	0.07	0.07	0.07	0.07	0.07	<1.8	0.29	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
29/ 0 X 3 1487 526	20.60	0.50	<0.05	0.08	0.13	0.22	0.27	0.47	<0.05	0.09	0.09	<0.05	0.09	0.09	0.09	0.09	0.09	0.09	<1.4	0.31	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	
30/ 0 X 3 2073 582	19.70	0.50	0.06	0.12	0.17	0.32	0.34	0.56	<0.05	0.08	0.08	<0.05	0.08	0.08	0.08	0.08	0.08	0.08	<1.8	0.30	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
Mean 3.0 1384 502	20.06	0.50	<<0.06	0.09	0.13	0.26	0.28	0.43	<<0.05	0.07	0.07	<<0.05	0.07	0.07	0.07	0.07	0.07	0.07	<<1.5	0.26	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
Minim. 3 772 416	19.70	0.50	<0.05	0.08	0.09	0.17	0.20	0.29	<0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	<1.0	0.20	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05
Maxim. 3 2073 582	20.60	0.50	0.08	0.12	0.17	0.35	0.34	0.56	<0.05	0.09	0.09	<0.05	0.09	0.09	0.09	0.09	0.09	0.09	<1.8	0.31	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	<0.05
St.dev 0.0 475 61	0.38	0.00	~0.01	0.02	0.03	0.07	0.06	0.10	~0.00	0.02	0.02	~0.00	0.02	0.02	0.02	0.02	0.02	0.02	~0.3	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	~0.00
Count 5 5 5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Tab.width cont'd GADU MOR, MU, J26, 36B Farder, 911201.

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Weight Lrht Repl. F/M year g mm no.	NIVA 341		OCS	
	Fat		ppb	
	%	ppb	w.wt	w.wt
26/ 0 X 3 772 416	<0.05	<0.05		
27/ 0 X 3 1183 484	<0.05	<0.05		
28/ 0 X 3 1405 500	<0.05	<0.05		
29/ 0 X 3 1487 526	<0.05	<0.05		
30/ 0 X 3 2073 582	<0.05	<0.05		
Mean 3.0 1384 502	<<0.05	<<0.05		
Minim. 3 772 416	<<0.05	<<0.05		
Maxim. 3 2073 582	<0.05	<0.05		
St.dev 0.0 475 61	~0.00	~0.00		
Count 5 5 5	5	5		

Sample.No 26 : NIVA NO. 01+02+03+04+05.  
Sample.No 27 : NIVA NO. 06+07+08+09+10.  
Sample.No 28 : NIVA NO. 11+12+13+14+15.  
Sample.No 29 : NIVA NO. 16+17+18+19+20.  
Sample.No 30 : NIVA NO. 21+22+23+24+25.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36B Færder**, Latitude: 59°02.00N, Longitude: 10°27.00E.  
 Catch,date : **921215**, Count: 25, Sample type: **Individual**.  
 Comment : Station name : Færder

Analytical Lab. : NIVA		310	
Analysis Code. : 0.100		Hg	
Detection Limit :		ppm	
Sample Repl. no.	Sex Age	Wght	Lngt
F/M	year	g	mm
01/ 0	M	2	563
02/ 0	M	2	542
03/ 0	F	2	590
04/ 0	M	2	553
05/ 0	F	3	808
06/ 0	F	3	848
07/ 0	M	3	788
08/ 0	F	3	774
09/ 0	F	3	1180
10/ 0	M	3	1254
11/ 0	F	3	1333
12/ 0	M	3	1370
13/ 0	M	3	1313
14/ 0	M	4	1296
15/ 0	F	3	1447
16/ 0	M	3	1513
17/ 0	F	3	1663
18/ 0	F	4	1965
19/ 0	F	4	1744
20/ 0	F	4	1760
21/ 0	F	4	1662
22/ 0	M	3	2114
23/ 0	F	4	2377
24/ 0	F	4	2047
25/ 0	F	4	2968
Mean	3.2	1379	505
Minim.	2	542	370
Maxim.	4	2968	660
St.dev	0.7	625	79
Count	25	25	25

Sample.No	Dry %	Fat %	Hg ppm	w.wt
01/ 0	20.00	.	0.050	0.040
02/ 0	18.80	.	0.040	0.040
03/ 0	18.80	.	0.040	0.040
04/ 0	19.90	.	0.080	0.050
05/ 0	20.10	.	0.110	0.080
06/ 0	20.30	.	0.080	0.080
07/ 0	18.30	.	0.070	0.050
08/ 0	19.40	.	0.070	0.100
09/ 0	18.90	.	0.050	0.130
10/ 0	19.90	.	0.080	0.100
11/ 0	20.50	.	0.070	0.080
12/ 0	20.50	.	0.050	0.050
13/ 0	19.00	.	0.070	0.090
14/ 0	19.50	.	0.080	0.110
15/ 0	20.20	.	0.080	0.072
16/ 0	18.70	.	0.050	0.040
17/ 0	19.80	.	0.100	0.130
18/ 0	19.90	.	0.080	0.050
19/ 0	19.50	.	0.050	0.060
20/ 0	19.50	.	0.050	0.090
21/ 0	19.70	.	0.080	0.110
22/ 0	21.00	.	0.050	
23/ 0	18.90	.	0.060	
24/ 0	19.20	.	0.090	
25/ 0	20.00	.	0.110	
Mean	19.52	.	0.072	
Minim.	18.20	.	0.040	
Maxim.	21.00	.	0.130	
St.dev	0.70	.	0.025	
Count	25	.	25	

Sample.No 01 : film on gills  
 Sample.No 02 : Liver with necrotic areas and/or discolouration  
 Sample.No 03 : Niva no.4 Liver with necrotic areas and/or discolouration  
 Sample.No 04 : Niva no.3 Liver with necrotic areas and/or discolouration  
 Sample.No 05 : Skin with metacercariae of cf. Cryptocotyle lingua Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 06 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 07 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 08 : head with red film  
 Sample.No 09 : Muscle with signs of inner bleeding  
 Sample.No 10 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 14 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 16 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 17 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 18 : Skin with metacercariae of cf. Cryptocotyle lingua skin with reddish discoloration  
 Sample.No 19 : Niva no.20  
 Sample.No 20 : Niva no.21 Skin with metacercariae of cf. Cryptocotyle lingua Muscle with signs of inner bleeding  
 Sample.No 21 : Niva no.19  
 Sample.No 23 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 24 : skin with red discoloration  
 Sample.No 25 : skin with red discoloration  
 MUSCLE : Tissue used in analysis = 20 .00 g

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE** .  
 Locality : **36B Færder**, Latitude: 59°02.00N, Longitude: 10°27.00E.  
 Catch,date : **921215**, Count: 25, Sample type: **Bulked**.  
 Comment : Station name : Færder

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lrgt Repl. F/M year g mm no.	NIVA 341 0.10 Fat % Dry %	CB28 ppb w.wt	NIVA 341 0.10 CB101 ppb w.wt	NIVA 341 0.10 CB105 ppb w.wt	NIVA 341 0.10 CB118 ppb w.wt	NIVA 341 0.10 CB138 ppb w.wt	NIVA 341 0.10 CB153 ppb w.wt	NIVA 341 0.10 CB156 ppb w.wt	NIVA 341 0.10 CB180 ppb w.wt	CB209 ppb w.wt	CB Σ7 ppb w.wt	CB ΣΣ ppb w.wt	DOEPP ppb w.wt	DO Σ4 ppb w.wt	HCHA ppb w.wt	HCHG HC Σ2 ppb w.wt	NIVA 341 0.10 Σ(*) ppb w.wt	NIVA 341 0.10 Σ(*) ppb w.wt	NIVA 341 0.10 Σ(*) ppb w.wt	NIVA 341 0.10 Σ(*) ppb w.wt	NIVA 341 0.10 Σ(*) ppb w.wt
26/ 0 X 2 611 391	0.40	<0.10	<0.10	0.20	0.60	0.90	1.30	0.10	0.20	<0.10	<3.3	<3.6	0.60	0.10	<0.10	0.10	<0.20	0.10	<0.10	<0.10	
27/ 0 X 3 969 462	0.30	<0.10	<0.10	0.10	0.40	0.50	0.80	<0.10	0.20	<0.10	<2.1	<2.3	0.20	<0.10	<0.10	0.10	<0.20	0.10	<0.10	<0.10	
28/ 0 X 3 1352 508	0.30	<0.10	<0.10	0.10	0.30	0.40	0.50	<0.10	0.10	<0.10	<1.5	<1.7	0.20	<0.10	<0.10	0.10	<0.20	0.10	<0.10	<0.10	
29/ 0 X 4 1712 553	0.10	<0.10	<0.10	0.10	0.10	0.20	0.20	<0.10	0.10	<0.10	<0.8	<0.9	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
30/ 0 X 4 2250 609	0.30	<0.10	<0.10	0.20	0.40	0.50	0.70	<0.10	0.10	<0.10	<2.0	<2.2	0.30	<0.10	<0.10	0.10	<0.20	0.10	<0.10	<0.10	
Mean	0.28	<0.10	<0.10	0.14	0.36	0.50	0.70	<0.10	0.14	<0.10	<<1.9	<<2.1	0.28	<<0.10	<<0.10	<0.10	<<0.18	<0.10	<0.10	<<0.10	
Minim.	0.10	<0.10	<0.10	0.10	0.10	0.20	0.20	<0.10	0.10	<0.10	<0.8	<0.9	0.10	<0.10	<0.10	0.10	<0.10	<0.10	<0.10	<0.10	
Maxim.	0.40	<0.10	<0.10	0.20	0.60	0.90	1.30	0.10	0.20	<0.10	<3.3	<3.6	0.60	0.10	<0.10	0.10	<0.20	0.10	<0.10	<0.10	
St.dev	0.11	0.00	0.00	0.05	0.18	0.25	0.41	0.00	0.05	0.00	0.9	1.0	0.19	0.00	0.00	0.00	0.04	0.00	0.00	0.00	
Count	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	

Tab.width cont'd **GADU MOR, MU, J26, 36B Færder, 921215.**

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lrgt Repl. F/M year g mm no.	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 OCS ppb w.wt
26/ 0 X 2 611 391	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
27/ 0 X 3 969 462	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
28/ 0 X 3 1352 508	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
29/ 0 X 4 1712 553	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
30/ 0 X 4 2250 609	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Mean	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10
Minim.	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Maxim.	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
St.dev	0.8	638	84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Count	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Sample.No 26 : Bulk of NIVA nos.:1,2,3,4,5  
 Sample.No 27 : Bulk of NIVA nos.:6,7,8,9,10  
 Sample.No 28 : Bulk of NIVA nos.:11,12,13,14,15  
 Sample.No 29 : Bulk of NIVA nos.:16,17,18,20,21  
 Sample.No 30 : Bulk of NIVA nos.:19,22,23,24,25

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J99 Undefined**, Tissue : **MUSCLE**.  
 Locality : **77B Borøy area**, Latitude: 58°33.00N, Longitude: 09°01.00E.  
 Catch,date : **901104**, Count: 14, Sample type: **Individual**.

Samp/ Repl. no.	F/M	year	g	mm	Lngt	Analytical Lab. :		NIVA	
						Code. :	310	Hg	ppm
Detection Limit :						Dry	Fat	w. wt	
Limit :						%	%		
01/	0	F	1	1081	460	19.00	.	0.080	
02/	0	F	2	1011	460	19.70	.	0.070	
03/	0	M	4	1220	500	18.90	.	0.180	
04/	0	F	3	1284	500	18.60	.	0.140	
05/	0	M	2	1467	520	20.00	.	0.110	
06/	0	M	3	1613	540	20.30	.	0.110	
07/	0	F	2	1623	540	20.00	.	0.130	
08/	0	F	3	1512	540	19.70	.	0.130	
09/	0	F	3	1782	580	21.10	.	0.160	
10/	0	M	2	1878	580	20.00	.	0.070	
11/	0	F	3	1965	600	19.90	.	0.130	
12/	0	M	3	2153	610	20.10	.	0.190	
13/	0	M	3	2415	650	19.00	.	0.180	
14/	0	M	3	3541	730	19.50	.	0.140	
Mean	2.6		1753	558		19.70	.	0.130	
Minim.	1		1011	460		18.60	.	0.070	
Maxim.	4		3541	730		21.10	.	0.190	
St.dev	0.7		653	74		0.66	.	0.039	
Count	14		14	14		14	.	14	

Sample.No 01 : NIVA no. 14. Skin with metacercariae of cf. Cryptocotyle lingua.

Sample.No 02 : NIVA no. 13. Bacterial fin rot. Lesions on jaw, fin or tissue. Skin and or oral cavity w/caligiform or lernaeopodiform copepods.

Sample.No 03 : NIVA no. 12. Gills with Lernaeocera copepods and Mytilus edulis juv. Oral cavity with Anasakis larvae.

Sample.No 04 : NIVA no. 11. Skin with metacercariae of cf. Cryptocotyle lingua. Gills with Lernaeocera copepods. Oral cavity with Anasakis larvae.

Sample.No 05 : NIVA no. 10. Lesions on jaw, fin or tissue. Skin with metacercariae of cf. Cryptocotyle lingua.

Sample.No 06 : NIVA no. 09.

Sample.No 07 : NIVA no. 08.

Sample.No 08 : NIVA no. 07. Skin with metacercariae of cf. Cryptocotyle lingua.

Sample.No 09 : NIVA no. 06. Skin and or oral cavity w/caligiform or lernaeopodiform copepods.

Sample.No 10 : NIVA no. 05. Lesions on jaw, fin or tissue. Gills with Lernaeocera copepods. Oral cavity with Anasakis larvae.

Sample.No 11 : NIVA no. 04.

Sample.No 12 : NIVA no. 03.

Sample.No 13 : NIVA no. 02. Lesions on jaw, fin or tissue. Oral cavity with Anasakis larvae. Gills with Lernaeocera copepods.

Sample.No 14 : NIVA no. 01.

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J99 Undefined**, Tissue : **MUSCLE**.  
 Locality : **77B Borøy area**, Latitude: 58°33.00N, Longitude: 09°01.00E.  
 Catch.date : **901104**, Count: 14, Sample type: **Bulked**.

Analytical Lab. : Analysis Code. : Detection Limit : Sample/ Sex Age Wght Lngt Repl. F/M year g mm no.	NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		
	CB28	CB52	CB101	CB118	CB138	CB153	CB180	CB209	CB Σ7	CB ΣΣ	DDPP	DD ΣA	HCHA	HCHG	HC Σ2	HCB	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
15/ 0 H 2 1213 488	<0.05	<0.05	0.06	0.24	0.44	0.92	0.17	0.27	<1.9	<2.2	0.31	miss	0.31	0.31	0.08	0.39	0.14	<0.05	0.16	22.50	0.30	3	3	3	3
16/ 0 H 3 1633 550	<0.05	<0.05	0.05	0.11	0.21	0.38	0.08	0.09	<0.9	<1.0	0.14	miss	0.14	0.06	0.31	0.09	<0.05	0.07	21.00	0.30	3	3	3	3	3
17/ 0 H 3 2390 634	<0.05	<0.05	<0.05	<0.05	0.18	0.34	0.07	0.19	<0.6	<0.8	0.12	miss	0.12	0.08	0.37	0.12	<0.05	0.08	21.00	0.30	3	3	3	3	3
Mean	<<0.05	<<0.05	<<0.05	<<0.13	0.28	0.55	0.11	0.18	<<1.1	<<1.3	0.19	.	0.19	0.07	0.36	0.12	<<0.05	0.10	21.57	0.30	3	3	3	3	3
Minim.	<0.05	<0.05	<0.05	<0.05	0.18	0.34	0.07	0.09	<0.6	<0.8	0.12	.	0.12	0.06	0.31	0.09	<0.05	0.07	21.00	0.30	3	3	3	3	3
Maxim.	<0.05	<0.05	0.06	0.24	0.44	0.92	0.17	0.27	<1.9	<2.2	0.31	.	0.31	0.08	0.39	0.14	<0.05	0.16	22.50	0.30	3	3	3	3	3
St.dev	~0.00	~0.00	0.01	0.10	0.14	0.32	0.06	0.09	~0.7	~0.7	0.10	.	0.10	0.01	0.04	0.03	~0.00	0.05	0.81	0.00	3	3	3	3	3
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

miss(3) ! Missing value.

Sample.No 15 : NIVA no. 01,02,03,04,05.

MUSCLE : NIVA ind.no.: 1, 2, 3, 4, and 5

Sample.No 16 : NIVA no. 06,07,08,09.

MUSCLE : NIVA ind.no.: 6, 7, 8, and 9

Sample.No 17 : NIVA no. 10,11,12,13,14.

MUSCLE : NIVA ind.no.: 10, 11, 12, 13, and 14

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J99 Undefined**, Tissue : **MUSCLE**.  
 Locality : **77B Borøy area**, Latitude: 58°33.00N, Longitude: 09°01.00E.  
 Catch,date : **911001**, Count: 25, Sample type: **Individual**.

Analytical Lab. : Analysis Code. : Detection Limit :		NIVA 310 0.100	
Samp/ Repl. no.	Sex Age Wght Lngt F/M year g mm	Dry %	Fat % H g ppm w.wt
01/ 0	M 2 464 370	22.50	0.020
02/ 0	F 2 531 390	19.40	<.010
03/ 0	F 2 551 390	19.00	0.080
04/ 0	F 2 566 390	17.00	0.080
05/ 0	F 2 621 410	19.50	0.040
07/ 0	M 2 687 410	18.30	0.030
08/ 0	M 2 642 410	18.40	0.080
09/ 0	F 2 735 430	15.60	0.070
10/ 0	M 2 772 440	21.30	0.090
11/ 0	M 2 719 440	18.20	0.030
13/ 0	F 2 778 460	19.10	0.020
14/ 0	M 3 790 470	19.60	0.090
15/ 0	M 3 1006 480	21.40	0.040
16/ 0	F 3 891 480	17.60	0.070
17/ 0	M 3 1035 490	17.40	0.200
19/ 0	M 3 1282 540	16.20	0.060
20/ 0	M 3 1650 540	20.50	0.100
21/ 0	M 3 1927 540	21.00	0.030
22/ 0	F 3 1609 560	20.00	0.010
23/ 0	M 3 1895 570	19.20	0.170
25/ 0	M 3 2094 580	19.90	0.040
26/ 0	F 3 2199 610	20.00	0.140
27/ 0	F 3 2335 620	18.00	0.110
28/ 0	M 4 2006 640	17.20	0.230
29/ 0	F 5 2680 670	22.00	0.140
Mean	2.7 1219 493	19.13	<.079
Minim.	2 464 370	15.60	<.010
Maxim.	5 2680 670	22.50	0.230
St.dev	0.7 682 88	1.77	~.059
Count	25 25 25	25	25





Tab.width cont'd GADU MOR, MU, J99, 77B Borøy area, 911001.

		Analytical Lab. :		NIVA	
		Analysis Code. :		341	
		Detection Limit :		0.05	
		O C S		ppb	
		w.wt			
Samp/	Sex	Age	Wght	Lngt	
Repl.	F/M	year	g	mm	
no.					
06/ 0	X	2	547	390	0.10
12/ 0	X	2	711	426	0.10
18/ 0	X	3	900	476	0.10
24/ 0	X	3	1672	550	0.10
30/ 0	X	4	2262	624	0.40
Mean		2.8	1218	493	0.16
Minim.		2	547	390	0.10
Maxim.		4	2262	624	0.40
St.dev		0.8	725	95	0.13
Count		5	5	5	5

Sample.No 06 : SPEC. NO. 01+02+03+04+05

Sample.No 12 : SPEC. NO. 07+08+09+10+11

Sample.No 18 : SPEC. NO. 13+14+15+16+17

Sample.No 24 : SPEC. NO. 19+20+21+22+23

Sample.No 30 : SPEC. NO. 25+26+27+28+29

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J99 Undefined**, Tissue : **MUSCLE**.  
 Locality : **15B Ullerø area**, Latitude: 58°03.00N, Longitude: 06°43.00E.  
 Catch,date : **901103**, Count: 25, Sample type: **Individual**.

Analytical Lab. : NIVA		310					
Analysis Code. : 0.010		0.010					
Detection Limit :		0.010					
Samp/	Sex	Age	Wght	Lngt	Dry	Fat	Hg
Repl.	F/M	year	g	mm	%	%	ppm
no.							w.wt
01/	0	F	2	645	400	19.20	0.060
02/	0	F	2	674	420	19.20	0.060
03/	0	M	3	712	420	19.90	0.040
04/	0	F	2	698	430	22.30	0.040
05/	0	M	2	622	430	21.80	0.110
06/	0	M	2	753	430	19.10	0.090
07/	0	M	2	825	440	20.10	0.110
08/	0	M	2	928	450	20.40	0.100
09/	0	M	2	745	450	20.80	0.070
10/	0	F	3	788	460	21.60	0.050
11/	0	F	2	1100	470	20.60	0.090
12/	0	M	2	861	470	20.10	0.040
13/	0	F	2	1165	510	19.80	0.090
14/	0	F	3	1137	510	20.30	0.070
15/	0	M	3	1442	520	20.80	0.100
16/	0	M	3	1507	550	19.50	0.060
17/	0	F	3	1596	560	19.20	0.040
18/	0	M	2	2553	610	21.10	0.170
19/	0	F	4	1932	610	20.00	0.320
20/	0	M	4	2517	630	20.40	0.210
21/	0	M	3	2938	660	20.40	0.140
22/	0	F	4	2707	670	19.80	0.140
23/	0	F	3	2701	680	20.20	0.130
24/	0	M	4	3275	690	21.80	0.110
25/	0	M	5	3485	700	20.10	0.100
Mean	2.8		1532	527	20.34		0.102
Minim.	2		622	400	19.10		0.040
Maxim.	5		3485	700	22.30		0.320
St.dev	0.9		937	100	0.87		0.062
Count	25		25	25	25		25



Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J99 Undefined**, Tissue : **MUSCLE**.  
 Locality : **15B Ullerø area**, Latitude: 58°03.00N, Longitude: 06°43.00E.  
 Catch,date : **911025**, Count: 24, Sample type: **Individual**.

Sample/ Repl. no.	Sex	Age	Wght	Lngt	Analytical Lab. : Analysis Code. : Detection Limit :	Dry %	Fat %	Hg ppm	NIVA 310 0.100
Repl. no.	F/M	year	g	mm					
01/ 0	M	2	506	380		19.60	.	0.050	
02/ 0	M	2	576	390		20.70	.	0.030	
03/ 0	M	2	802	420		19.70	.	0.060	
04/ 0	M	2	842	440		19.20	.	0.040	
05/ 0	F	2	910	440		19.40	.	0.040	
06/ 0	F	3	929	450		20.00	.	0.040	
07/ 0	F	2	1112	480		19.60	.	0.050	
08/ 0	F	2	1278	490		20.90	.	0.060	
09/ 0	F	3	1407	490		20.10	.	<.010	
10/ 0	F	2	1188	490		19.80	.	0.040	
11/ 0	M	2	1124	490		20.00	.	0.070	
12/ 0	M	2	1270	490		19.10	.	0.040	
13/ 0	M	2	1361	490		18.80	.	0.060	
14/ 0	F	2	1320	530		18.70	.	0.070	
15/ 0	M	3	1775	530		19.60	.	0.050	
16/ 0	F	3	1781	550		19.70	.	0.060	
17/ 0	M	3	1870	550		22.50	.	0.070	
18/ 0	F	2	1993	560		21.80	.	0.070	
19/ 0	M	2	1905	570		18.80	.	0.070	
20/ 0	F	3	1775	570		20.50	.	0.070	
21/ 0	M	3	2142	590		19.20	.	0.100	
22/ 0	M	3	3270	650		20.90	.	0.170	
23/ 0	F	3	3677	670		22.20	.	0.100	
24/ 0	F	4	3225	700		20.80	.	0.170	
Mean	2.5	1585	517			20.07	.	<.066	
Minim.	2	506	380			18.70	.	<.010	
Maxim.	4	3677	700			22.50	.	0.170	
St.dev	0.6	830	82			1.04	.	~.038	
Count	24	24	24			24	.	24	

Sample.No 01 : Skin with metacercariae of cf. Cryptocotyle lingua Skin and/or oral cavity with caligiform and/or lernaepodiform copepods Liver with necrotic areas and/or discolouration

Sample.No 02 : Skin with metacercariae of cf. Cryptocotyle lingua Liver with necrotic areas and/or discolouration

Sample.No 03 : Skin with ulceration, lymphocytic areas and/or lesions Liver and/or intestinal guts with larvae of Anisakis simplex

Sample.No 04 : Skin and/or oral cavity with caligiform and/or lernaepodiform copepods Liver with necrotic areas and/or discolouration

Sample.No 05 : Skin and/or oral cavity with caligiform and/or lernaepodiform copepods

Sample.No 07 : Skin and/or oral cavity with caligiform and/or lernaepodiform copepods Skin with ulceration, lymphocytic areas and/or lesions Liver and/or intestinal guts with larvae of Anisakis simplex Liver with necrotic areas and/or discolouration

Sample.No 09 : Skin with metacercariae of cf. Cryptocotyle lingua Bacterial fin rot Liver with necrotic areas and/or discolouration

Sample.No 14 : Skin and/or oral cavity with caligiform and/or lernaepodiform copepods Liver and/or intestinal guts with larvae of Anisakis simplex

Sample.No 19 : Skin and/or oral cavity with caligiform and/or lernaepodiform copepods Liver and/or intestinal guts with larvae of Anisakis simplex

Sample.No 20 : Liver with necrotic areas and/or discolouration

Sample.No 21 : Liver and/or intestinal guts with larvae of Anisakis simplex

Sample.No 22 : Liver and/or intestinal guts with larvae of Anisakis simplex

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J99 Undefined**, Tissue : **MUSCLE**.  
 Locality : **15B Ullerø area**, Latitude: 58°03.00N, Longitude: 06°43.00E.  
 Catch,date : 911025, Count: 24, Sample type: **Bulked**.

Analytical Lab. :		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA	
Analysis Code. :		341		341		341		341		341		341		341		341		341		341		341	
Detection Limit :		0.05		0.05		0.05		0.05		0.05		0.05		0.05		0.05		0.05		0.05		0.05	
Samp/ Sex	Age	Wght	Lrht	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Repl. no.	F/M	year	g mm	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt
25/ 0	H	2	727	414	0.05	0.06	0.15	0.10	0.31	0.59	0.79	0.47	0.14	0.05	0.14	0.05	0.21	0.21	0.09	0.21	0.09	0.21	0.09
26/ 0	H	3	1181	478	<0.05	0.07	0.13	0.05	0.14	0.23	0.25	0.21	0.05	<0.05	0.05	0.05	0.11	0.11	0.07	0.11	0.07	0.11	0.07
27/ 0	H	2	1252	498	0.05	0.07	0.16	0.06	0.17	0.32	0.39	0.27	0.07	0.07	0.07	0.10	0.31	0.21	0.31	0.16	0.21	0.31	0.16
28/ 0	H	3	1864	552	<0.05	0.06	0.12	<0.05	0.11	0.21	0.21	0.16	0.02	<0.05	0.02	0.08	0.08	0.16	0.08	0.16	0.08	0.16	0.08
29/ 0	H	3	2817	636	0.05	<0.05	0.15	0.09	0.25	0.47	0.71	0.47	0.15	<0.05	0.15	0.09	0.25	0.47	0.71	0.47	0.15	0.09	0.25
Mean		2.6	1568	516	<0.05	<0.06	0.14	<0.07	0.20	0.36	0.47	0.36	0.14	<0.05	0.14	<0.07	0.20	0.36	0.47	0.36	0.14	<0.07	0.20
Minim.		2	727	414	<0.05	<0.05	0.12	<0.05	0.11	0.21	0.21	0.21	0.05	<0.05	0.05	0.05	0.11	0.11	0.11	0.11	0.05	<0.05	0.11
Maxim.		3	2817	636	0.05	0.07	0.16	0.10	0.31	0.59	0.79	0.59	0.16	0.07	0.16	0.10	0.31	0.59	0.79	0.59	0.16	0.10	0.31
St.dev		0.5	807	83	0.00	0.04	0.02	0.02	0.08	0.16	0.27	0.27	0.02	0.01	0.02	0.08	0.08	0.16	0.27	0.27	0.02	0.08	0.16
Count		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Tab.width cont'd **GADU MOR, MU, J99, 15B Ullerø area, 911025.**

Analytical Lab. :		NIVA					
Analysis Code. :		341					
Detection Limit :		0.05					
Samp/ Sex	Age	Wght	Lrht				
Repl. no.	F/M	year	g mm				
25/ 0	H	2	727	414	<0.05	<0.05	<0.05
26/ 0	H	3	1181	478	<0.05	<0.05	<0.05
27/ 0	H	2	1252	498	<0.05	<0.05	<0.05
28/ 0	H	3	1864	552	<0.05	<0.05	<0.05
29/ 0	H	3	2817	636	<0.05	<0.05	<0.05
Mean		2.6	1568	516	<<0.05	<<0.05	<<0.05
Minim.		2	727	414	<0.05	<0.05	<0.05
Maxim.		3	2817	636	<0.05	<0.05	<0.05
St.dev		0.5	807	83	0.00	0.04	0.02
Count		5	5	5	5	5	5

Sample.No 25 : SPEC. NO 01+02+03+04+05.  
 Sample.No 26 : SPEC.NO. 06+07+08+09.  
 Sample.No 27 : SPEC. NO 10+11+12+13+14.  
 Sample.No 28 : SPEC. NO. 15+16+17+18+19.  
 Sample.No 29 : SPEC.NO. 20+21+22+23+24.

Species : GADU MOR, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: J99 Undefined, Tissue : MUSCLE.  
 Locality : 15B Ullerø area, Latitude: 58°03.00N, Longitude: 06°43.00E.  
 Catch,date : 921215, Count: 23, Sample type: Individual.  
 Comment : Station name : Ullerø area

		Analytical Lab. :	NIVA	
		Analysis Code. :	310	
		Detection Limit. :	0.100	
Samp/	Sex	Age	Wght	Lngt
Repl.	F/M	year	g	mm
no.				
01/	0	M	2 1008	440
02/	0	M	2 1020	450
03/	0	M	3 1055	470
04/	0	M	3 1144	470
05/	0	M	3 1098	480
06/	0	M	3 1370	480
07/	0	M	3 1503	490
08/	0	M	3 1499	490
09/	0	M	3 1549	490
10/	0	M	3 1234	500
11/	0	M	3 1386	505
12/	0	M	3 1312	510
13/	0	M	3 1439	515
14/	0	M	4 1591	520
15/	0	F	3 1688	520
16/	0	M	3 2256	530
17/	0	M	3 2190	540
18/	0	F	3 1882	545
19/	0	M	3 1822	550
20/	0	F	3 2015	550
21/	0	F	4 2742	555
22/	0	F	3 2332	560
23/	0	F	4 3356	650
Mean		3.0	1674	513
Minim.		2	1008	440
Maxim.		4	3356	650
St.dev		0.5	591	45
Count		23	23	23

	Dry %	Fat %	Hg ppm
19.90	.	0.011	0.011
20.10	.	0.011	0.011
19.20	.	0.026	0.026
19.40	.	0.025	0.025
19.10	.	0.015	0.015
19.80	.	0.026	0.026
18.60	.	0.031	0.031
19.40	.	0.026	0.026
18.80	.	0.048	0.048
17.70	.	0.051	0.051
19.50	.	0.051	0.051
19.80	.	0.052	0.052
19.70	.	0.089	0.089
19.10	.	0.077	0.077
19.30	.	0.063	0.063
19.20	.	0.067	0.067
18.50	.	0.055	0.055
19.80	.	0.030	0.030
19.10	.	0.038	0.038
19.30	.	0.102	0.102
18.40	.	0.042	0.042
19.80	.	0.076	0.076
19.25	.	0.045	0.045
17.70	.	0.011	0.011
20.10	.	0.102	0.102
0.57	.	0.025	0.025
23	.	23	23

Sample.No 02 : Liver with necrotic areas and/or discolouration  
 Sample.No 03 : Liver with necrotic areas and/or discolouration  
 Sample.No 04 : Niva no.6  
 Sample.No 05 : Niva no.4  
 Sample.No 06 : Niva no.5 Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 09 : Niva no.11  
 Sample.No 10 : Niva no.9  
 Sample.No 11 : Niva no.10 skin with red film  
 Sample.No 12 : Liver with necrotic areas and/or discolouration skin with red film  
 Sample.No 15 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 18 : Liver with necrotic areas and/or discolouration

Species : GADU MOR, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: J99 Undefined, Tissue : MUSCLE.  
 Locality : 15B Ullerø area, Latitude: 58°03.00N, Longitude: 06°43.00E.  
 Catch,date : 921215, Count: 23, Sample type: Bulked.  
 Comment : Station name : Ullerø area

Analytical Lab. :	Analysis Code. :	Detection Limit :	Samp/ Sex Age Wght Lrgt	Repl. F/M year g mm	Dry %	Fat %	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA							
							341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341
			24/ 0 M 3 1323 482		0.40	0.20	0.10	0.20	0.10	0.30	0.40	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10				
			25/ 0 M 3 1384 504		0.30	miss	0.10	0.10	0.10	0.40	miss	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10			
			26/ 0 X 3 1921 531		0.30	miss	0.10	0.10	0.10	0.20	0.30	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10		
			27/ 0 X 3 2453 573		0.30	0.10	0.10	0.10	0.10	0.20	0.20	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10		
Mean	3.0	1770	523		0.33	0.15	<<0.10	0.13	0.10	0.28	0.30	0.30	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	
Minim.	3	1323	482		0.30	0.10	<0.10	0.10	0.10	0.20	0.20	0.20	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Maxim.	3	2453	573		0.40	0.20	0.10	0.20	0.10	0.40	0.40	0.40	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
St.dev	0.0	529	39		0.05	0.07	~0.00	0.05	0.00	0.10	0.10	0.10	0.05	0.26	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Count	4	4	4		4	2	4	4	4	4	4	3	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

miss(3) ! Missing value.

Tab.width cont'd GADU MOR, MU, J99, 15B Ullerø area, 921215.

Analytical Lab. :	Analysis Code. :	Detection Limit :	Samp/ Sex Age Wght Lrgt	Repl. F/M year g mm	NIVA		OCS	
					341	0.10	ppb	w.wt
			24/ 0 M 3 1323 482		<0.10	<0.10	<0.10	<0.10
			25/ 0 M 3 1384 504		<0.10	<0.10	<0.10	<0.10
			26/ 0 X 3 1921 531		<0.10	<0.10	<0.10	<0.10
			27/ 0 X 3 2453 573		<0.10	<0.10	<0.10	<0.10
Mean	3.0	1770	523		<<0.10	<<0.10	<<0.10	<<0.10
Minim.	3	1323	482		<0.10	<0.10	<0.10	<0.10
Maxim.	3	2453	573		<0.10	<0.10	<0.10	<0.10
St.dev	0.0	529	39		~0.00	~0.00	~0.00	~0.00
Count	4	4	4		4	4	4	4

Sample.No 24 : Bulk of NIVA nos.:1,2,3,4,5,6,7,8  
 Sample.No 25 : Bulk of NIVA nos.:9,10,11,12,13  
 Sample.No 26 : Bulk of NIVA nos.:14,15,16,17,18  
 Sample.No 27 : Bulk of NIVA nos.:19,20,21,22,23

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample area: **J99 Undefined**, Tissue : **MUSCLE**.  
 Locality : **23B Karihavet area**, Latitude: 59°55.00N, Longitude: 05°07.00E.  
 Catch,date : **901007**, Count: 25, Sample type: **Individual**.  
 Comment : Caught 1007-1029.

Analytical Lab. : NIVA		Analysis Code. : 310							
Detection Limit : 0.010		Fat %							
Samp/ Repl.	Sex	Age	Wght	Lngt	Dry %	Fat %	Hg	ppm	w.wt
F/M	year	g	mm	mm					
01/ 0	F	2	520	370	18.40	.	0.060		
02/ 0	F	3	542	390	19.00	.	0.110		
03/ 0	M	3	764	410	19.40	.	0.050		
04/ 0	F	2	528	410	19.30	.	0.040		
05/ 0	F	2	710	410	18.60	.	0.060		
06/ 0	M	4	446	440	19.80	.	0.070		
07/ 0	F	3	840	440	18.90	.	0.060		
08/ 0	M	2	472	450	19.30	.	0.060		
09/ 0	M	4	711	460	18.60	.	0.100		
10/ 0	M	3	906	460	20.00	.	0.070		
11/ 0	F	3	1170	510	19.40	.	0.230		
12/ 0	F	3	1018	510	19.40	.	0.180		
13/ 0	F	3	637	520	20.00	.	0.110		
14/ 0	F	4	1154	530	19.90	.	0.090		
15/ 0	F	3	1275	530	20.60	.	0.150		
16/ 0	F	4	1394	540	19.10	.	0.180		
17/ 0	F	3	1019	540	20.30	.	0.320		
18/ 0	F	4	1606	560	19.70	.	0.100		
19/ 0	F	3	844	570	18.80	.	0.070		
20/ 0	F	3	1330	610	19.90	.	0.160		
21/ 0	M	5	1345	620	20.70	.	0.220		
22/ 0	F	4	1679	630	18.90	.	0.150		
23/ 0	F	5	1446	630	19.40	.	0.190		
24/ 0	F	4	1628	640	18.10	.	0.330		
25/ 0	F	5	2863	700	20.20	.	0.210		
Mean	3.4		1074	515	19.43	.	0.135		
Minim.	2		446	370	18.10	.	0.040		
Maxim.	5		2863	700	20.70	.	0.330		
St.dev	0.9		537	90	0.68	.	0.082		
Count	25		25	25	25	.	25		



- Sample.No 01 : NIVA no. 24. Lesions on jaw, fin or tissue.  
 Sample.No 02 : NIVA no. 23. Lesions on jaw, fin or tissue. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 03 : NIVA no. 22. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 04 : NIVA no. 25. Lesions on jaw, fin or tissue. Skin and or oral cavity w/caligiform or lernaeopodiiform copepods.  
 Sample.No 05 : NIVA no. 21. Bacterial fin rot. Lesions on jaw, fin or tissue.  
 Sample.No 06 : NIVA no. 10.  
 Sample.No 07 : NIVA no. 12. Lesions on jaw, fin or tissue. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 08 : NIVA no. 09. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 09 : NIVA no. 19.  
 Sample.No 10 : NIVA no. 20. Skin with metacercariae of cf. Cryptocotyle lingua. Skin and or oral cavity w/caligiform or lernaeopodiiform copepods.  
 Sample.No 11 : NIVA no. 16. Lesions on jaw, fin or tissue. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 12 : NIVA no. 18.  
 Sample.No 13 : NIVA no. 06. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 14 : NIVA no. 08. Lesions on jaw, fin or tissue. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 15 : NIVA no. 17. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 16 : NIVA no. 11.  
 Sample.No 17 : NIVA no. 15.  
 Sample.No 18 : NIVA no. 14. Lesions on jaw, fin or tissue. Skin with metacercariae of cf. Cryptocotyle lingua.  
 Sample.No 19 : NIVA no. 07.  
 Sample.No 20 : NIVA no. 13. Skin and or oral cavity w/caligiform or lernaeopodiiform copepods.  
 Sample.No 21 : NIVA no. 05.  
 Sample.No 22 : NIVA no. 01.  
 Sample.No 23 : NIVA no. 03.  
 Sample.No 24 : NIVA no. 04.  
 Sample.No 25 : NIVA no. 02.

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area : **J99 Undefined**, Tissue : **MUSCLE**.  
 Locality : **23B Karihavet area**, Latitude: 59°55.00N, Longitude: 05°07.00E.  
 Catch,date : **901007**, Count: 25, Sample type: **Bulked**.  
 Comment : Caught 1007-1029.

Analytical Lab. :	Analysis Code. :	Detection Limit :	Dry %	Fat %	NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341	
					ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt
26/ 0	H	2	613	398	<0.05	<0.05	0.16	0.26	0.06	<0.05	<0.05	<0.6	<0.6	0.21	0.08	0.11	0.19	0.08	<0.05	<0.05
27/ 0	H	3	675	450	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.2	<0.2	0.13	0.28	0.11	0.39	0.07	0.07	<0.05	<0.05
28/ 0	H	3	1051	520	<0.05	<0.05	0.23	0.22	0.07	<0.05	<0.7	<0.7	0.21	0.27	0.06	0.33	0.06	<0.05	<0.05	<0.05
29/ 0	H	3	1239	564	<0.05	<0.05	0.06	0.51	<0.05	<0.7	<0.7	0.50	0.50	0.50	0.22	0.12	0.34	0.09	<0.05	<0.05
30/ 0	H	5	1792	644	<0.05	<0.05	<0.05	0.30	<0.05	<0.6	<0.6	0.42	0.42	0.42	0.25	0.17	0.42	0.11	<0.05	<0.05
Mean		3.2	1074	515	<0.05	<0.05	<0.11	0.28	<0.06	<0.5	<0.5	0.29	0.22	0.22	0.11	0.33	0.08	<0.05	<0.05	<0.05
Minim.		2	613	398	<0.05	<0.05	<0.05	0.12	<0.05	<0.2	<0.2	0.13	0.08	0.13	0.08	0.06	0.19	0.06	<0.05	<0.05
Maxim.		5	1792	644	<0.05	<0.05	0.23	0.51	0.07	<0.7	<0.7	0.50	0.28	0.50	0.28	0.17	0.42	0.11	<0.05	<0.05
St.dev		1.1	478	96	<0.00	<0.00	<0.06	0.14	<0.01	<0.2	<0.2	0.16	0.08	0.16	0.04	0.04	0.09	0.02	<0.00	<0.00
Count		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

miss(5)  
 Sample.No 26 : NIVA no. 24,23,22,25,21.  
 Sample.No 27 : NIVA no. 10,12,09,19,20.  
 Sample.No 28 : NIVA no. 16,18,06,08,17.  
 Sample.No 29 : NIVA no. 11,15,14,07,13.  
 Sample.No 30 : NIVA no. 05,01,03,04,02.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J99 Undefined**, Tissue : **MUSCLE**.  
 Locality : **23B Karihavet area**, Latitude: 59°55.00N, Longitude: 05°07.00E.  
 Catch,date : **910930**, Count: 25, Sample type: **Individual**.

.		Analytical Lab. :		NIVA	
.		Analysis Code. :		310	
.		Detection Limit :		0.100	
Samp/	Sex	Age	Wght	Lngt	
Repl.	F/M	year	g	mm	
no.					
01/	0	F	2	337	320
02/	0	M	2	364	360
03/	0	F	2	631	370
04/	0	F	2	416	350
05/	0	M	2	622	390
06/	0	M	2	402	350
07/	0	F	3	530	390
08/	0	F	3	530	390
09/	0	M	3	621	360
10/	0	F	3	641	420
11/	0	M	3	681	400
12/	0	F	3	555	380
13/	0	M	2	653	390
14/	0	F	3	680	420
15/	0	F	3	849	430
16/	0	M	4	962	460
17/	0	F	4	722	420
18/	0	F	4	967	480
19/	0	M	4	1159	490
20/	0	F	4	1104	500
21/	0	F	4	1450	530
22/	0	M	4	949	450
23/	0	M	5	1107	480
24/	0	F	5	1464	510
25/	0	F	6	2928	700
Mean		3.3	853	430	
Minim.		2	337	320	
Maxim.		6	2928	700	
St.dev		1.1	533	80	
Count		25	25	25	25
				17.90	0.110
				17.20	0.070
				18.10	0.050
				19.80	0.030
				20.30	0.060
				19.30	0.230
				19.20	0.090
				19.40	0.070
				17.70	0.110
				18.30	0.240
				19.60	0.080
				19.70	0.060
				19.40	0.040
				19.20	0.030
				18.50	0.160
				19.20	0.090
				19.10	0.050
				18.50	0.080
				16.60	0.120
				18.30	0.160
				18.10	0.080
				17.70	0.170
				19.50	0.110
				19.50	0.110
				17.80	0.190
				18.72	0.104
				16.60	0.030
				20.30	0.240
				0.92	0.058
				25	25

- Sample.No 01 : Skin with metacercariae of cf. Cryptocotyle lingua  
 MUSCLE : 0037,33 g tissue used in analysis.
- Sample.No 02 :  
 MUSCLE : 0041,23 g tissue used in analysis.
- Sample.No 03 : Skin with metacercariae of cf. Cryptocotyle lingua Skin with ulceration, lymphocytic areas and/or lesions
- Sample.No 04 : Skin with ulceration, lymphocytic areas and/or lesions
- Sample.No 05 : Skin with ulceration, lymphocytic areas and/or lesions Bacterial fin rot
- Sample.No 06 : Skin with metacercariae of cf. Cryptocotyle lingua  
 MUSCLE : 0034,06 g tissue used in analysis.
- Sample.No 07 :  
 MUSCLE : 0040,44 g tissue used in analysis.
- Sample.No 08 : Skin with metacercariae of cf. Cryptocotyle lingua Skin and/or oral cavity with caligiform and/or lernaepodiform copepods
- MUSCLE : 0032,29 g tissue used in analysis.
- Sample.No 09 : Skin with metacercariae of cf. Cryptocotyle lingua
- MUSCLE : 0039,03 g tissue used in analysis.
- Sample.No 10 : Skin with metacercariae of cf. Cryptocotyle lingua Liver with necrotic areas and/or discolouration
- MUSCLE : 0051,18 g tissue used in analysis.
- Sample.No 11 : Skin with ulceration, lymphocytic areas and/or lesions
- MUSCLE : 0044,69 g tissue used in analysis.
- Sample.No 12 : Skin with ulceration, lymphocytic areas and/or lesions
- MUSCLE : 0048,83 g tissue used in analysis.
- Sample.No 13 :  
 MUSCLE : 0052,17 g tissue used in analysis.
- Sample.No 14 : Skin with metacercariae of cf. Cryptocotyle lingua Skin with ulceration, lymphocytic areas and/or lesions
- MUSCLE : 0036,33 g tissue used in analysis.
- Sample.No 15 : Skin with metacercariae of cf. Cryptocotyle lingua Skin with ulceration, lymphocytic areas and/or lesions
- MUSCLE : 0048,01 g tissue used in analysis.
- Sample.No 16 : Skin with metacercariae of cf. Cryptocotyle lingua Skin and/or oral cavity with caligiform and/or lernaepodiform copepods
- MUSCLE : 0063,70 g tissue used in analysis.
- Sample.No 17 : Skin with metacercariae of cf. Cryptocotyle lingua Skin and/or oral cavity with caligiform and/or lernaepodiform copepods Liver and/or intestinal guts with larvae of Anisakis simplex
- MUSCLE : 0041,67 g tissue used in analysis.
- Sample.No 18 : Skin with ulceration, lymphocytic areas and/or lesions Bacterial fin rot
- MUSCLE : 0047,61 g tissue used in analysis.
- Sample.No 19 : Skin with metacercariae of cf. Cryptocotyle lingua Skin and/or oral cavity with caligiform and/or lernaepodiform copepods Skin with ulceration, lymphocytic areas and/or lesions Bacterial fin rot
- MUSCLE : 0047,55 g tissue used in analysis.
- Sample.No 20 : Liver and/or intestinal guts with larvae of Anisakis simplex
- MUSCLE : 0062,77 g tissue used in analysis.
- Sample.No 21 : Skin with metacercariae of cf. Cryptocotyle lingua Bacterial fin rot Liver and/or intestinal guts with larvae of Anisakis simplex Liver with necrotic areas and/or discolouration Liver with necrotic cysts or tumors
- MUSCLE : 0058,13 g tissue used in analysis.
- Sample.No 22 : Skin with metacercariae of cf. Cryptocotyle lingua Skin and/or oral cavity with caligiform and/or lernaepodiform copepods Bacterial fin rot
- MUSCLE : 0050,16 g tissue used in analysis.
- Sample.No 23 : Skin and/or oral cavity with caligiform and/or lernaepodiform copepods Liver and/or intestinal guts with larvae of Anisakis simplex
- MUSCLE : 0071,77 g tissue used in analysis.
- Sample.No 24 : Skin with metacercariae of cf. Cryptocotyle lingua
- MUSCLE : 0055,28 g tissue used in analysis.
- Sample.No 25 : Skin with metacercariae of cf. Cryptocotyle lingua Skin and/or oral cavity with caligiform and/or lernaepodiform copepods Liver and/or intestinal guts with larvae of Anisakis simplex
- MUSCLE : 0066,15 g tissue used in analysis.



Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J99 Undefined**, Tissue : **MUSCLE**.  
 Locality : **23B Karihavet area**, Latitude: 59°55.00N, Longitude: 05°07.00E.  
 Catch,date : **921215**, Count: 25, Sample type: **Individual**.  
 Comment : Station name : Karihavet area

		Analytical Lab. : NIVA				
		Analysis Code. : 310				
		Detection Limit : 0.100				
Samp/ Repl. no.	Sex F/M	Age year	Lngrt mm			
		g				
			Hg ppm			
			w. wt			
			Fat %			
			Dry %			
01/ 0	M	3	365	19.90	.	0.040
02/ 0	M	2	587	20.10	.	0.060
03/ 0	M	2	633	20.50	.	0.040
04/ 0	M	2	656	20.40	.	0.070
05/ 0	M	3	790	19.80	.	0.070
06/ 0	M	4	913	19.20	.	0.060
07/ 0	M	3	929	20.20	.	0.030
08/ 0	M	3	1133	20.10	.	0.070
09/ 0	M	3	1246	19.20	.	0.050
10/ 0	F	4	1411	19.80	.	0.090
11/ 0	M	5	1113	19.90	.	0.060
12/ 0	M	4	1280	19.40	.	0.090
13/ 0	M	4	1786	19.20	.	0.070
14/ 0	M	4	1461	20.20	.	0.040
15/ 0	M	3	1616	20.80	.	0.050
16/ 0	M	2	1302	19.20	.	0.050
17/ 0	M	3	1313	19.80	.	0.070
18/ 0	M	3	1858	19.30	.	0.040
19/ 0	M	4	1958	19.20	.	0.140
20/ 0	M	5	2398	19.10	.	0.110
21/ 0	M	3	2209	20.40	.	0.110
22/ 0	M	5	2032	19.80	.	0.100
23/ 0	M	4	3081	20.80	.	0.050
24/ 0	F	5	4002	21.60	.	0.160
25/ 0	F	4	3172	19.50	.	0.150
Mean	3.5	1577	514	19.90	.	0.075
Minim.	2	542	365	19.10	.	0.030
Maxim.	5	4002	700	21.60	.	0.160
St.dev	1.0	873	91	0.63	.	0.036
Count	25	25	25	25	.	25



Tab.width cont'd GADU MOR, MU, J99, 23B Karihavet area, 921215.

.		Analytical Lab. :		NIVA	
.		Analysis Code. :		341	
.		Detection Limit :		0.10	
Samp/		Sex Age Wght Lngt		O C S	
Repl. no.	F/M	year	g	mm	ppb
					w.wt
26/ 0	M	2	642	388	<0.10
27/ 0	X	3	1126	469	<0.10
28/ 0	M	4	1451	512	<0.10
29/ 0	M	4	1766	558	<0.10
30/ 0	X	4	2899	645	<0.10
Mean		3.4	1577	514	<<0.10
Minim.		2	642	388	<0.10
Maxim.		4	2899	645	<0.10
St.dev		0.9	848	96	~0.00
Count		5	5	5	5

Sample.No 26 : Bulk of NIVA nos.:1,2,3,4,5

Sample.No 27 : Bulk of NIVA no.:6,7,8,9,25

Sample.No 28 : Bulk of NIVA nos.:10,11,14,15,16

Sample.No 29 : Bulk of NIVA nos.:12,13,17,18,19

Sample.No 30 : Bulk of NIVA nos.:20,21,22,23,24

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J63 Sørffjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørffjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **870222**, Count: 12, Sample type: **Individual**.

Analytical Lab. : Analysis Code. : Detection Limit :		FIER 401 0.010	
Samp/	Sex Age Wght Lngt	Dry	Fat
Repl. F/M year	g mm	%	%
no.			Hg ppm w.wt
01/ 0	X 460	23.90	6.28
02/ 0	X 1310	24.70	3.07
03/ 0	X 915	19.20	0.20
04/ 0	X 710	17.50	0.25
05/ 0	X 490	20.09	0.76
06/ 0	X 560	22.90	0.87
07/ 0	X 510	21.60	0.23
08/ 0	X	21.80	0.25
09/ 0	X	24.90	5.63
10/ 0	X 420	23.60	0.26
11/ 0	X 320	22.20	0.43
12/ 0	X 2600	18.00	0.21
Mean	830	21.70	1.54
Minim.	320	17.50	0.20
Maxim.	2600	24.90	6.28
St.dev	686	2.51	2.22
Count	10	12	12

Sample.No 01 : caught at "Skreo" by Edhatunnel, 22.2.87.  
 Sample.No 02 : caught at K/S Ilmenittmelteverket, Tyssedal, 22.2.87.  
 Sample.No 03 : caught at Kvitura across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 04 : caught at Kvitura across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 05 : caught at Kvitura, across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 06 : caught at Kvitura, across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 07 : caught at Kvitura, across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 08 : caught at Kvitura, across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 09 : caught at Kvitura, across from sulfur tank, Norzink, 20.2.87.  
 Sample.No 10 : caught at Kvitura, across from sulfur tank, Norzink, 20.2.87 Gills partly covered with particle layer.  
 Sample.No 11 : caught at power station, Tyssedal, 100m from land, 20.2.87. Gills partly covered with slime layer.  
 Sample.No 12 : caught at power station, Tyssedal, 100m from land, 6.3.87. Black film around mouth and on gills.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J63 Sørffjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørffjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **881117**, Count: 25, Sample type: **Homogenate**.

Analytical Lab. : Analysis Code. : Detection Limit :		NIVA 310 0.010	
Samp/	Sex Age Wght Lngt	Dry	Fat
Repl. F/M year	g mm	%	%
no.			Hg ppm w.wt
01/ 0	X 3 724 401	22.40	0.20
			0.470
			0.030

Sample.No 01 : Bulk of spec.no. 1-25



Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J63 Sørforjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørforjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **891125**, Count: 12, Sample type: **Individual**.

Analytical Lab. : NIVA			
Analysis Code : 310			
Detection Limit : 0.100			
Samp/	Dry	Fat	Hg
Repl. F/M year g mm	%	%	ppm
no.			d.wt
01/ 0 F 1 564 370	21.43	.	0.800
02/ 0 F 1 675 395	22.82	.	0.500
03/ 0 F 1 750 400	21.84	.	0.700
04/ 0 M 1 581 410	20.82	.	0.500
06/ 0 F 2 749 410	20.85	.	0.800
07/ 0 F 3 375 425	11.97	.	2.900
08/ 0 F 1 1212 440	20.97	.	0.900
09/ 0 F 1 1138 455	23.60	.	0.500
11/ 0 F 1 996 495	21.14	.	0.900
12/ 0 M 1 1334 500	20.99	.	3.000
13/ 0 M 2 1342 520	21.73	.	1.000
14/ 0 F 5 2690 555	21.55	.	1.900
Mean	1.7	1034	448
Minim.	1	375	370
Maxim.	5	2690	555
St.dev	1.3	612	57
Count	11	12	12

Sample.No 01 : Edna 10m depth. Uncertain age determination  
 MUSCLE : 0084,00 g tissue used in analysis.  
 Sample.No 02 : Apold 20m depth.  
 MUSCLE : 0090,00 g tissue used in analysis.  
 Sample.No 03 : Edna 15m depth. Uncertain age determination  
 MUSCLE : 0103,00 g tissue used in analysis.  
 Sample.No 04 : Edna 10m depth. Uncertain age determination. Emaciated individual  
 MUSCLE : 0083,00 g tissue used in analysis.  
 Sample.No 06 : Stana 15m depth.  
 MUSCLE : 0080,00 g tissue used in analysis.  
 Sample.No 07 : Edna 10m depth. Uncertain age determination. Emaciated individual  
 MUSCLE : 0021,00 g tissue used in analysis.  
 Sample.No 08 : Apold 10m depth. Uncertain age determination  
 MUSCLE : 0083,00 g tissue used in analysis.  
 Sample.No 09 : Tyssedal 15m depth. Uncertain age determination  
 MUSCLE : 0097,00 g tissue used in analysis.  
 Sample.No 11 : Tyssedal 15m depth. Uncertain age determination  
 MUSCLE : 0107,00 g tissue used in analysis.  
 Sample.No 12 : Apold 20m depth. Uncertain age determination  
 MUSCLE : 0104,00 g tissue used in analysis.  
 Sample.No 13 : Tyssedal 15m depth. Uncertain age determination  
 MUSCLE : 0092,00 g tissue used in analysis.  
 Sample.No 14 : Edna 10m depth.  
 MUSCLE : 0100,00 g tissue used in analysis.

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J63 Sør fjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sør fjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch, date : **891125**, Count: 12, Sample type: **Bulked**.

Analytical Lab. :		NACE							
Analysis Code. :		511							
Detection Limit :		0.020							
Samp/	Sex	Age	Wght	Lngt	Dry	Fat	P	C	B
Repl.	F/M	year	g	mm	%	%	ppm	ppm	w. wt
05/ 0	H	1	643	394	21.73	0.33	<0.020		
10/ 0	H	2	869	433	24.59	0.35	0.040		
15/ 0	H	2	1591	518	21.35	0.31	<0.020		
Mean		1.7	1034	448	22.56	0.33	<<.027		
Minim.		1	643	394	21.35	0.31	<0.020		
Maxim.		2	1591	518	24.59	0.35	0.040		
St.dev		0.6	495	63	1.77	0.02	~0.012		
Count		3	3	3	3	3			

Sample.No 05 : Bulk of spec.no. 1-4. Uncertain age determination  
 Sample.No 10 : Bulk of spec.no. 6-9. Uncertain age determinations  
 Sample.No 15 : Bulk of spec.no. 11-14. Uncertain age determination

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample area: **J63 Sørffjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørffjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch, date : **901014**, Count: 25, Sample type: **Individual**.  
 Comment : Caught 1014-1023 at various sites in inner Sørffjord; frozen before preparation.

Analytical Lab. :		NIVA				
Analysis Code. :		310				
Detection Limit :		0.010				
Samp/	Sex	Age	Lngt	Dry	Fat	Hg
Repl.	F/M	year	g	%	%	ppm
no.			mm			w. wt
01/ 0	M	4	594	340		0.140
02/ 0	M	2	460	340		0.090
03/ 0	M	2	565	350		0.110
04/ 0	M	3	536	350		0.160
05/ 0	F	2	609	360		0.170
06/ 0	F	3	566	360		0.250
07/ 0	M	2	558	370		0.670
08/ 0	M	2	579	370		0.200
09/ 0	F	2	550	370		0.240
10/ 0	F	2	674	380		0.200
11/ 0	F	3	820	380		0.200
12/ 0	F	2	712	390		0.160
13/ 0	M	2	643	390		0.170
14/ 0	F	2	741	390		0.220
15/ 0	F	3	843	400		0.140
16/ 0	F	2	854	400		0.170
17/ 0	F	2	666	400		0.190
18/ 0	F	3	684	400		0.130
19/ 0	F	3	795	410		0.150
20/ 0	F	2	748	420		0.120
21/ 0	M	2	995	420		0.170
22/ 0	M	2	916	420		0.120
23/ 0	F	2	779	420		0.250
24/ 0	M	2	1065	460		0.240
25/ 0	M	2	1315	480		0.250
Mean	2.3	731	391	20.32		0.196
Minim.	2	460	340	18.80		0.090
Maxim.	4	1315	480	22.90		0.670
St. dev	0.6	194	35	0.92		0.109
Count	25	25	25	25		25

Sample.No 01 : NIVA no. 23.  
 Sample.No 02 : NIVA no. 25.  
 Sample.No 03 : NIVA no. 10.  
 Sample.No 04 : NIVA no. 11.  
 Sample.No 05 : NIVA no. 22.  
 Sample.No 06 : NIVA no. 24.  
 Sample.No 07 : NIVA no. 09.  
 Sample.No 08 : NIVA no. 13.  
 Sample.No 09 : NIVA no. 17.  
 Sample.No 10 : NIVA no. 14.  
 Sample.No 11 : NIVA no. 19.  
 Sample.No 12 : NIVA no. 06.  
 Sample.No 13 : NIVA no. 07.  
 Sample.No 14 : NIVA no. 15.  
 Sample.No 15 : NIVA no. 03.  
 Sample.No 16 : NIVA no. 05.  
 Sample.No 17 : NIVA no. 16.  
 Sample.No 18 : NIVA no. 18. Bacterial fin rot.  
 Sample.No 19 : NIVA no. 08. Bacterial fin rot.  
 Sample.No 20 : NIVA no. 04.  
 Sample.No 21 : NIVA no. 12. Bacterial fin rot.  
 Sample.No 22 : NIVA no. 01.  
 Sample.No 23 : NIVA no. 21.  
 Sample.No 24 : NIVA no. 02.  
 Sample.No 25 : NIVA no. 20.

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J63 Sørifjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørifjorden**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **901014**, Count: **25**, Sample type: **Bulked**.  
 Comment : Caught 10/14-10/23 at various sites in inner Sørifjordi; frozen before preparation.

Analytical Lab. : Analysis Code. : Detection Limit : Sample/ Sex Age Weight Length Repl. F/M year g mm no.	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		
	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	
26/ 0 H 3 553 348	<0.05	0.15	0.93	0.25	3.11	3.36	0.37	<0.05	<8.2	<8.2	1.64	0.35	1.64	0.09	0.44	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	<0.05
27/ 0 H 2 592 370	<0.05	0.14	1.62	7.03	7.48	7.85	0.84	<25.0	<25.0	3.09	0.24	3.09	0.12	0.36	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	<0.05
28/ 0 H 2 752 390	<0.05	0.07	0.15	0.23	0.43	0.50	0.15	<1.6	<1.6	1.72	0.33	1.72	1.40	1.73	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	<0.05
29/ 0 H 2 718 400	<0.05	<0.05	0.09	0.11	0.22	0.30	0.11	<0.9	<0.9	2.36	0.33	2.36	0.08	0.41	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	<0.05
30/ 0 H 2 1014 440	<0.05	0.45	2.63	4.66	4.91	4.91	0.49	<18.1	<18.1	3.46	0.44	3.46	0.16	0.60	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	<0.05
Mean	<<0.05	0.17	1.08	2.46	3.23	3.38	0.39	<<10.8	<<10.8	2.45	0.34	2.45	0.37	0.71	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	<<0.05
Minimum	<0.05	<0.05	0.09	0.11	0.22	0.30	0.11	<0.9	<0.9	1.64	0.24	1.64	0.08	0.36	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	<0.05
Maximum	0.50	0.45	2.63	7.03	7.48	7.85	0.84	<25.0	<25.0	3.46	0.44	3.46	1.40	1.73	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	<0.05
St.dev	0.53	0.09	1.07	3.21	3.07	3.17	0.30	~10.6	~10.6	0.81	0.07	0.81	0.58	0.58	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	~0.00	
Count	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

miss(5)  
 ! Missing value.  
 Sample.No 26 : NIVA no. 23, 25, 10, 11, 22.  
 Sample.No 27 : NIVA no. 24, 09, 13, 17, 14.  
 Sample.No 28 : NIVA no. 19, 06, 07, 15, 03.  
 Sample.No 29 : NIVA no. 05, 16, 18, 08, 04.  
 Sample.No 30 : NIVA no. 01, 12, 21, 02, 20.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample area: **J63 Sør fjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sør fjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch, date : **911101**, Count: 25, Sample type: **Individual**.

Analytical Lab. : NIVA		310					
Analysis Code. : 0.100		H g					
Detection Limit : 0.100		ppm					
Samp/ Repl.	Sex	Age	Wght	Lngt	Dry %	Fat %	H g
F/M		year	g	mm			w. wt
01/ 0	F	3	563	380	18.60	.	0.250
02/ 0	M	3	554	390	18.70	.	0.190
03/ 0	M	3	675	390	17.70	.	0.050
04/ 0	F	3	601	400	18.30	.	0.260
05/ 0	M	2	572	400	18.30	.	0.310
07/ 0	M	3	574	400	17.80	.	0.160
08/ 0	F	3	703	400	19.10	.	0.220
09/ 0	F	3	657	410	17.70	.	0.140
10/ 0	M	3	690	410	22.10	.	0.330
11/ 0	F	3	758	440	20.50	.	0.140
13/ 0	F	4	970	460	22.60	.	0.230
14/ 0	M	4	1105	470	19.10	.	0.080
15/ 0	M	3	1174	480	23.00	.	0.090
16/ 0	M	3	1353	480	19.00	.	0.140
17/ 0	F	4	899	480	20.30	.	0.160
19/ 0	M	3	1172	490	19.80	.	0.380
20/ 0	F	3	1102	490	19.10	.	0.140
21/ 0	F	4	1219	500	22.00	.	0.290
22/ 0	M	3	1132	500	19.00	.	0.500
23/ 0	F	3	1064	510	18.70	.	0.460
25/ 0	M	3	1101	520	22.80	.	0.150
26/ 0	F	4	1352	540	22.30	.	0.290
27/ 0	M	5	1234	540	18.70	.	0.580
28/ 0	F	4	1751	560	21.40	.	0.170
29/ 0	M	4	1832	570	19.50	.	0.250
Mean	3.3	992	464		19.84	.	0.238
Minim.	2	554	380		17.70	.	0.050
Maxim.	5	1832	570		23.00	.	0.580
St.dev	0.6	360	59		1.73	.	0.133
Count	25	25	25		25	.	25

Sample.No 01 : NIVA NO. 21  
   MUSCLE : 0039,20 g tissue used in analysis.  
 Sample.No 02 : NIVA NO. 04.  
   MUSCLE : 0025,50 g tissue used in analysis.  
 Sample.No 03 : NIVA NO. 10.  
   MUSCLE : 0039,20 g tissue used in analysis.  
 Sample.No 04 : NIVA NO. 01. Skin and/or oral cavity with caligiform and/or lemaeopodiiform copepods  
   MUSCLE : 0025,30 g tissue used in analysis.  
 Sample.No 05 : NIVA NO. 02  
   MUSCLE : 0024,90 g tissue used in analysis.  
 Sample.No 07 : NIVA NO. 05 Liver with necrotic areas and/or discolouration  
   MUSCLE : 0027,90 g tissue used in analysis.  
 Sample.No 08 : NIVA NO. 11. Skin with metacercariae of cf. Cryptocotyle lingua Bacterial fin rot  
   MUSCLE : 0038,20 g tissue used in analysis.  
 Sample.No 09 : NIVA NO. 06  
   MUSCLE : 0032,80 g tissue used in analysis.  
 Sample.No 10 : NIVA NO. 12. Muscle with signs of inner bleeding Liver with necrotic areas and/or discolouration  
   MUSCLE : 0031,60 g tissue used in analysis.  
 Sample.No 11 : NIVA NO. 03.  
   MUSCLE : 0040,20 g tissue used in analysis.  
 Sample.No 13 : NIVA NO. 22. Liver and/or intestinal guts with larvae of Anisakis simplex  
   MUSCLE : 0050,80 g tissue used in analysis.  
 Sample.No 14 : NIVA NO. 07. Skin with ulceration, lymphocytic areas and/or lesions Bacterial fin rot  
   MUSCLE : 0039,90 g tissue used in analysis.  
 Sample.No 15 : NIVA NO. 13.  
   MUSCLE : 0063,50 g tissue used in analysis.  
 Sample.No 16 : NIVA NO. 14  
   MUSCLE : 0067,80 g tissue used in analysis.  
 Sample.No 17 : NIVA NO. 16.  
   MUSCLE : 0047,20 g tissue used in analysis.  
 Sample.No 19 : NIVA NO. 17.  
   MUSCLE : 0052,20 g tissue used in analysis.  
 Sample.No 20 : NIVA NO. 18.  
   MUSCLE : 0058,70 g tissue used in analysis.  
 Sample.No 21 : NIVA NO. 08. Muscle with signs of inner bleeding  
   MUSCLE : 0036,70 g tissue used in analysis.  
 Sample.No 22 : NIVA NO. 19. Muscle with signs of inner bleeding Liver with necrotic areas and/or discolouration  
   MUSCLE : 0057,20 g tissue used in analysis.  
 Sample.No 23 : NIVA NO. 23. Skin with ulceration, lymphocytic areas and/or lesions Liver with necrotic areas and/or discolouration  
   MUSCLE : 0047,70 g tissue used in analysis.  
 Sample.No 25 : NIVA NO. 15.  
   MUSCLE : 0047,40 g tissue used in analysis.  
 Sample.No 26 : NIVA NO. 09.  
   MUSCLE : 0049,80 g tissue used in analysis.  
 Sample.No 27 : NIVA NO. 20. Liver with necrotic areas and/or discolouration  
   MUSCLE : 0057,50 g tissue used in analysis.  
 Sample.No 28 : NIVA NO. 24.  
   MUSCLE : 0068,60 g tissue used in analysis.  
 Sample.No 29 : NIVA NO. 25. Skin and/or oral cavity with caligiform and/or lemaeopodiiform copepods  
   MUSCLE : 0050,50 g tissue used in analysis.

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J63 Sør fjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sør fjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch.date : **911101**, Count: **25**, Sample type: **Bulked**.

. .	Analytical Lab. :	Analysis Code. :	Detection Limit :	Sample/ Repl. no.	Sex	Age	Wght	Lngt	Dry %	Fat %	NIVA		CB209		CB_E7		CB_EE		DD_YA		HCHA		HC_HC		HCB		NIVA		OCS		
											ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb
06/ 0	H	3	593	392					18.30	0.40	<0.02	0.07	0.26	0.63	0.97	0.28	<0.02	<2.2	<2.2	2.16	0.23	2.39	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
12/ 0	H	3	676	412				19.40	0.40	0.03	0.14	0.37	0.82	1.17	0.38	2.9	<3.0	5.44	0.51	5.95	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
18/ 0	H	4	1101	474				20.80	0.40	<0.02	0.07	0.06	0.13	0.13	0.08	<0.5	<0.5	1.26	0.14	1.40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
24/ 0	H	3	1138	498				19.70	0.40	0.03	0.09	0.39	0.67	1.50	0.64	5.2	<5.2	5.27	0.53	5.80	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
30/ 0	H	4	1455	546				20.90	0.40	<0.02	0.13	0.18	0.36	0.41	0.16	<1.3	<1.3	1.41	0.22	1.63	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
Mean		3.4	993	464				19.82	0.40	<<0.02	0.16	0.31	0.69	0.91	0.31	<<2.4	<<2.4	3.11	0.33	3.43	<<0.02	<<0.02	<<0.02	<<0.02	<<0.02	<<0.02	<<0.02	<<0.02	<<0.02		
Minim.		3	593	392				18.30	0.40	<0.02	0.07	0.06	0.13	0.13	0.08	<0.5	<0.5	1.26	0.14	1.40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
Max1im.		4	1455	546				20.90	0.40	0.03	0.09	0.67	1.50	1.88	0.64	5.2	<5.2	5.44	0.53	5.95	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
St.dev		0.5	356	63				1.08	0.00	~0.01	0.13	0.23	0.52	0.68	0.22	~1.8	~1.8	2.08	0.18	2.26	~0.01	~0.01	~0.01	~0.01	~0.01	~0.01	~0.01	~0.01			
Count		5	5	5				5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5		

Sample.No 06 : SPEC .NO. 01+02+03+04+05  
 Sample.No 12 : SPEC. NO. 07+08+09+10+11  
 Sample.No 18 : SPEC.NO. 13+14+15+16+17.  
 Sample.No 24 : SPEC. NO. 19+20+21+22+23  
 Sample.No 30 : SPEC. NO. 25+26+27+28+29.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J63 Sørkjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørkjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **921215**, Count: 22, Sample type: **Individual**.  
 Comment : Station name : Inner Sørkjord

Analytical Lab. :		NIVA	
Analysis Code. :		310	
Detection Limit. :		0.100	
Samp/ Repl. no.	Sex Age Wght Ingt F/M year g mm	Dry %	Fat % Hg ppm w. wt
01/0	M 2 532 400	22.10	0.319
02/0	F 3 665 440	18.80	0.134
03/0	M 1 746 450	.	0.148
04/0	M 2 796 450	17.10	0.520
05/0	F 3 804 460	20.90	0.223
06/0	F 3 916 470	19.90	0.335
07/0	F 3 944 490	17.70	0.564
08/0	F 3 1224 510	20.10	0.461
09/0	F 4 1122 510	21.80	0.541
10/0	F 4 1522 510	18.70	0.497
11/0	F 4 1593 520	20.40	0.360
12/0	F 4 1440 550	19.90	0.396
13/0	M 5 1582 550	18.80	0.307
14/0	M 3 1576 560	18.80	0.389
15/0	F 3 1851 560	21.60	0.630
16/0	F 3 1876 570	19.10	0.111
17/0	M 3 1909 570	18.60	0.223
18/0	F 3 2242 570	18.80	0.445
19/0	F 4 2447 580	19.90	0.400
20/0	F 5 2655 610	19.60	0.327
21/0	M 4 2234 650	19.00	0.811
22/0	F 4 3487 700	17.10	0.640
Mean	3.3 1553 531	19.46	0.399
Minim.	1 532 400	17.10	0.111
Maxim.	5 3487 700	22.10	0.811
St. dev	1.0 747 72	1.39	0.178
Count	21 22 22	21	22

Sample.No 03 : Bacterial fin rot  
 MJSCTE : Dry weight sample lost  
 Sample.No 09 : Bacterial fin rot  
 Sample.No 10 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 12 : NIVA no.18  
 Sample.No 13 : NIVA no.19  
 Sample.No 15 : Otolith partly chrysalized, no age determination Skin and/or oral cavity with caligiform and/or lernaepodiform copepods  
 Sample.No 16 : NIVA no.12  
 Sample.No 17 : NIVA no.13  
 Sample.No 18 : NIVA no.20 Skin and/or oral cavity with caligiform and/or lernaepodiform copepods  
 Sample.No 19 : NIVA no.16 Bacterial fin rot  
 Sample.No 20 : NIVA no.21  
 Sample.No 21 : NIVA no.22  
 Sample.No 22 : NIVA no.17



Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample-area: **J63 Sørifjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørifjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **921215**, Count: 22, Sample type: **Bulked**.  
 Comment : Station name : Inner Sørifjord

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Weight Lrght Repl. F/M year g mm no.	NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341	
	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb
•	0.30	<0.10	<0.10	2.00	2.30	4.70	6.40	6.20	0.70	1.10	1.10	<0.10	<0.10	<23.5	6.50	0.70	7.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
•	0.40	<0.10	<0.10	0.70	1.10	2.20	3.40	3.70	0.40	0.90	0.90	<0.10	<0.10	<12.5	7.00	0.70	7.70	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
•	0.30	<0.10	<0.10	0.30	0.40	0.90	1.30	1.40	0.20	0.40	0.40	<0.10	<0.10	<4.4	4.70	0.60	5.30	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
•	0.30	<0.10	<0.10	2.10	5.10	12.60	17.20	19.60	2.30	3.80	3.80	<0.10	<0.10	<62.8	27.20	2.00	29.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
•	0.33	<0.10	<0.10	1.28	2.23	5.10	7.08	7.73	0.90	1.55	1.55	<0.10	<0.10	<26.0	11.35	1.00	12.35	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
•	0.30	<0.10	<0.10	0.30	0.40	0.90	1.30	1.40	0.20	0.40	0.40	<0.10	<0.10	<4.4	4.70	0.60	5.30	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
•	0.40	<0.10	<0.10	2.10	5.10	12.60	17.20	19.60	2.30	3.80	3.80	<0.10	<0.10	<55.4	27.20	2.00	29.20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
•	0.05	~0.00	~0.00	0.91	2.07	5.24	7.07	8.16	0.96	1.53	1.53	~0.00	~0.00	~22.7	10.61	0.67	11.28	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	
•	Count	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	

Tab.width cont'd **GADU MOR, MU, J63, 53B Inner Sørifjord, 921215.**

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Weight Lrght Repl. F/M year g mm no.	NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341		NIVA 341	
	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb	W.Wt	ppb
23/ 0 X 2 841 464	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
24/ 0 F 4 1380 520	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
25/ 0 X 4 1759 562	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
26/ 0 X 4 2613 622	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Mean	3.5	1648	542	<<0.10												
Minim.	2	841	464	<0.10												
Maxim.	4	2613	622	<0.10												
St.dev	1.0	745	67	~0.00												
Count	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Sample.No 23 : Bulk of NIVA nos.:3,4,5,6,7  
 Sample.No 24 : Bulk of NIVA nos.:8,9,10,11,18  
 Sample.No 25 : Bulk of NIVA nos.:12,13,14,15,19  
 Sample.No 26 : Bulk of NIVA nos.:16,17,20,21,22

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample area: **J62 Hardangerfjorden**, Tissue : **MUSCLE**.  
 Locality : **67B Strandebar**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch, date : **871125**, Count: 22, Sample type: **Individual**.  
 Comment : Station name : Strandebar

Analytical Lab. :		FIER					
Analysis Code. :		401					
Detection Limit :		0.010					
Samp/	Sex	Age	Wght	Lngt	Dry	Fat	Hg
Repl.	F/M	year	g	mm	%	%	ppm
no.							w.wt
01/ 0	F	3	956	450	16.80	.	0.084
02/ 0	F	3	2883	600	19.50	.	0.270
03/ 0	F	3	1360	490	20.00	.	0.100
04/ 0	F	1	928	440	20.60	.	0.045
05/ 0	F	2	1483	545	19.70	.	0.100
06/ 0	M	2	1341	525	19.70	.	0.060
07/ 0	F	2	1612	555	19.89	.	0.170
08/ 0	M	3	1728	550	19.80	.	0.160
09/ 0	M	3	2109	605	20.00	.	0.250
10/ 0	F	3	1858	580	20.09	.	0.210
11/ 0	F	3	986	460	20.60	.	0.087
12/ 0	M	3	1646	530	20.60	.	0.160
13/ 0	F	3	1289	490	22.00	.	0.094
14/ 0	M	3	1498	525	21.50	.	0.120
15/ 0	M	3	1737	545	20.90	.	0.170
16/ 0	F	2	1671	545	20.40	.	0.110
17/ 0	F	3	1241	495	20.40	.	0.110
18/ 0	M	3	1435	530	20.60	.	0.060
19/ 0	M	3	1670	535	21.60	.	0.099
20/ 0	F	3	2028	580	20.40	.	0.290
21/ 0	M	3	1331	490	20.60	.	0.160
22/ 0	M	3	1019	445	20.40	.	0.190
Mean		2.7	1537	523	20.28	.	0.141
Minim.		1	928	440	16.80	.	0.045
Maxim.		3	2883	605	22.00	.	0.290
St.dev		0.6	446	48	1.00	.	0.069
Count		22	22	22	22	.	22

Sample.No 01 : MUSCLE : 70,80 g tissue used in analysis.  
 Sample.No 02 : MUSCLE : 72,39 g tissue used in analysis.  
 Sample.No 03 : MUSCLE : 73,89 g tissue used in analysis.  
 Sample.No 04 : MUSCLE : 70,30 g tissue used in analysis.  
 Sample.No 05 : MUSCLE : 85,90 g tissue used in analysis.  
 Sample.No 06 : MUSCLE : 66,80 g tissue used in analysis.  
 Sample.No 07 : MUSCLE : 71,50 g tissue used in analysis.  
 Sample.No 08 : MUSCLE : 74,00 g tissue used in analysis.  
 Sample.No 09 : MUSCLE : 84,30 g tissue used in analysis.  
 Sample.No 10 : MUSCLE : 95,00 g tissue used in analysis.  
 Sample.No 11 : MUSCLE : 56,90 g tissue used in analysis.  
 Sample.No 12 : MUSCLE : 71,60 g tissue used in analysis.  
 Sample.No 13 : MUSCLE : 89,60 g tissue used in analysis.  
 Sample.No 14 : MUSCLE : 110,20 g tissue used in analysis.  
 Sample.No 15 : MUSCLE : 91,10 g tissue used in analysis.  
 Sample.No 16 : MUSCLE : 95,70 g tissue used in analysis.  
 Sample.No 17 : MUSCLE : 84,00 g tissue used in analysis.  
 Sample.No 18 : MUSCLE : 84,50 g tissue used in analysis.  
 Sample.No 19 : MUSCLE : 99,90 g tissue used in analysis.  
 Sample.No 20 : MUSCLE : 106,50 g tissue used in analysis.  
 Sample.No 21 : MUSCLE : 86,30 g tissue used in analysis.  
 Sample.No 22 : MUSCLE : 93,40 g tissue used in analysis.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J62 Hardangerfjorden**, Tissue : **MUSCLE**.  
 Locality : **67B Strandebar**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **881011**, Count: 25, Sample type: **Homogenate**.

• Analytical Lab. :	NIVA	MACE
• Analysis Code. :	310	511
• Detection Limit :	0.010	0.020
Samp/ Sex Age Wght Lngt	Dry	Fat
Repl. F/M year g mm	%	Hg
no.		ppm
		d.wt
01/ 0 X 3 1334 493	22.90	0.40 0.370 <0.020

Sample.No 01 : Bulk of spec.no. 1-25

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J62 Hardangerfjorden**, Tissue : **MUSCLE**.  
 Locality : **67B Strandebar**m, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **891015**, Count: 22, Sample type: **Individual**.

Analytical Lab. : NIVA		310					
Analysis Code. : 0.100		Hg					
Detection Limit :		ppm					
Samp/	Sex	Age	Wght	Lmgt	Dry	Fat	Hg
Repl.	F/M	year	g	mm	%	%	d.wt
no.							
01/	0	M	2	1883	540	21.98	0.500
02/	0	F	2	1044	450	22.04	0.500
03/	0	M	2	1324	520	20.62	0.300
04/	0	M	1	1491	530	20.95	0.300
05/	0	F	1	1234	505	20.48	0.200
06/	0	M	1	1176	515	20.62	0.600
07/	0	M	1	1529	550	20.31	0.500
08/	0	F	1	1846	520	38.38	0.400
09/	0	F	2	1324	545	20.38	0.400
10/	0	F	1	1548	535	22.48	0.400
11/	0	F	1	1819	540	22.06	0.500
12/	0	F	1	842	440	21.76	0.400
13/	0	F	2	787	435	20.79	0.400
14/	0	M	1	1575	515	22.55	0.400
15/	0	F	3	1959	570	20.36	0.400
16/	0	F	1	1606	550	22.05	0.700
17/	0	F	1	1247	500	21.29	0.400
18/	0	M	1	1368	520	20.96	0.500
19/	0	F	1	1592	525	21.48	0.400
20/	0	F	2	1009	460	21.16	0.700
21/	0	M	2	1379	515	21.92	0.700
22/	0	F	1	1197	540	21.56	0.600
Mean	1.4		1399	515	22.10		0.464
Minim.	1		787	435	20.31		0.200
Maxim.	3		1959	570	38.38		0.700
St.dev	0.6		324	37	3.71		0.133
Count	22		22	22	22		22

Sample.No 01 : seine 50m depth  
 MUSCLE : 0090,00 g tissue used in analysis.  
 Sample.No 02 : seine 50m depth. Uncertain age determination  
 MUSCLE : 0080,00 g tissue used in analysis.  
 Sample.No 03 : seine 20m depth.  
 MUSCLE : 0079,00 g tissue used in analysis.  
 Sample.No 04 : seine 20m depth  
 MUSCLE : 0102,00 g tissue used in analysis.  
 Sample.No 05 : weir 5m depth. Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0092,00 g tissue used in analysis.  
 Sample.No 06 : seine 50m depth. Uncertain age determination  
 MUSCLE : 0091,00 g tissue used in analysis.  
 Sample.No 07 : seine 30m depth.  
 MUSCLE : 0088,00 g tissue used in analysis.  
 Sample.No 08 : seine 30m depth. Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0086,00 g tissue used in analysis.  
 Sample.No 09 : weir 5m depth. Uncertain age determination  
 MUSCLE : 0101,00 g tissue used in analysis.  
 Sample.No 10 : seine 40m depth. Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0099,00 g tissue used in analysis.  
 Sample.No 11 : seine 60m depth. Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0091,00 g tissue used in analysis.  
 Sample.No 12 : weir 10m depth.  
 MUSCLE : 0087,00 g tissue used in analysis.  
 Sample.No 13 : weir 5m depth.  
 MUSCLE : 0072,00 g tissue used in analysis.  
 Sample.No 14 : weir 10m depth.  
 MUSCLE : 0111,00 g tissue used in analysis.  
 Sample.No 15 : weir 5m depth.  
 MUSCLE : 0116,00 g tissue used in analysis.  
 Sample.No 16 :  
 MUSCLE : 0097,00 g tissue used in analysis.  
 Sample.No 17 : weir 5m depth. Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0112,00 g tissue used in analysis.  
 Sample.No 18 : weir 5m depth.  
 MUSCLE : 0098,00 g tissue used in analysis.  
 Sample.No 19 : seine 20m depth.  
 MUSCLE : 0089,00 g tissue used in analysis.  
 Sample.No 20 : weir 10m depth. Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0099,00 g tissue used in analysis.  
 Sample.No 21 : weir 5m depth.  
 MUSCLE : 0106,00 g tissue used in analysis.  
 Sample.No 22 : weir 10m depth. Skin with metacercari cf. Cryptocotyle lingua  
 MUSCLE : 0093,00 g tissue used in analysis.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J62 Hardangerfjorden**, Tissue : **MUSCLE** .  
 Locality : **67B Strandebar**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **891015**, Count: 22, Sample type: **Homogenate**.

Analytical Lab. :	NACE		
Analysis Code. :	511		
Detection Limit :	0.020		
Samp/ Repl. no.	Sex	Age	Wght Lngt
F/M	year	g	mm
23/ 0	H	1	1399 515
			22.58 0.20 <0.020
			ppm w.wt

Sample.No 23 : Bulk of ind.no. 1-22. Uncertain age determination for some individuals

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J62 Hardangerfjorden**, Tissue : **MUSCLE**.  
 Locality : **67B Strandebarbm**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **901009**, Count: 13, Sample type: **Individual**.  
 Comment : Caught 1009-1201. All but ind. nos. 4, 6 and 10 sent frozen to NIVA for preparation. Ind. nos. 4, 6 and 10 prepared fresh.

Analytical Lab. :		NIVA						
Analysis Code. :		310						
Detection Limit :		0.010						
Samp/ Repl. no.	Sex	Age	Wght	Lrgt	Dry %	Fat %	Hg ppm	w. wt
01/ 0	F	1	424	350	19.70	.	0.050	
02/ 0	F	1	974	460	21.40	.	0.100	
03/ 0	M	2	1181	460	21.70	.	0.070	
04/ 0	M	3	1424	500	21.90	.	0.040	
05/ 0	M	2	1384	500	20.50	.	0.190	
06/ 0	F	3	1404	510	19.00	.	0.090	
07/ 0	F	3	1395	510	20.00	.	0.080	
08/ 0	M	2	1420	520	20.70	.	0.120	
09/ 0	M	1	1267	520	19.40	.	0.260	
10/ 0	M	5	1614	540	19.50	.	0.340	
11/ 0	F	1	1898	550	19.20	.	0.330	
12/ 0	M	4	1828	580	19.90	.	0.200	
13/ 0	F	3	2139	610	19.80	.	0.250	
Mean	2.4	1412	508		20.21	.	0.163	
Minim.	1	424	350		19.00	.	0.040	
Maxim.	5	2139	610		21.90	.	0.340	
St.dev	1.3	430	63		0.96	.	0.105	
Count	13	13	13		13	.	13	

Sample.No 01 : NIVA no. 13  
 Sample.No 02 : NIVA no. 04  
 Sample.No 03 : NIVA no. 07  
 Sample.No 04 : NIVA no. 02  
 Sample.No 05 : NIVA no. 10  
 Sample.No 06 : NIVA no. 01.  
 Sample.No 07 : NIVA no. 08  
 Sample.No 08 : NIVA no. 05.  
 Sample.No 09 : NIVA no. 09.  
 Sample.No 10 : NIVA no. 03.  
 Sample.No 11 : NIVA no. 11.  
 Sample.No 12 : NIVA no. 06.  
 Sample.No 13 : NIVA no. 12.

Skin with metacercariae of cf. *Cryptocotyle lingua*.







Tab.width cont'd **GADU MOR, MU, J62, 67B Strandebar, 911023.**

Analytical Lab. : NIVA	
Analysis Code. : 341	
Detection Limit : 0.05	
<b>OCS</b>	
ppb	
w. wt	
06/ 0 X 2 871 438	<0.05
12/ 0 X 3 1205 496	<0.05
18/ 0 X 3 1326 520	<0.05
24/ 0 X 4 1548 552	<0.05
Mean 3.0 1238 502	<<0.05
Minim. 2 871 438	<0.05
Maxim. 4 1548 552	<0.05
St.dev 0.8 283 48	~0.00
Count 4 4 4	4

Sample.No 06 : SPEC.NO. 01+02+03+04+05  
 Sample.No 12 : SPEC.NO. 07+08+09+10+11  
 Sample.No 18 : SPEC.NO. 13+14+15+16+17  
 Sample.No 24 : SPEC.NO. 19+20+21+22+23

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J62 Hardangerfjorden**, Tissue : **MUSCLE**.  
 Locality : **67B Strandebar**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **921201**, Count: 8, Sample type: **Individual**.  
 Comment : Station name : Strandebar

Analytical Lab. : NIVA		
Analysis Code. : 310		
Detection Limit : 0.100		
<b>Hg</b>		
ppm		
w. wt		
01/ 0 M 3 884 430	19.70	0.071
02/ 0 M 1 1110 430	25.10	0.035
03/ 0 F 2 1198 450	20.60	0.117
04/ 0 F 2 1110 470	20.70	0.101
05/ 0 M 5 1069 470	19.10	0.128
06/ 0 M 3 1186 490	21.60	0.155
07/ 0 F 3 2103 560	21.60	0.054
08/ 0 M 3 1849 590	20.20	0.167
Mean 2.8 1314 486	21.08	0.104
Minim. 1 884 430	19.10	0.035
Maxim. 5 2103 590	25.10	0.167
St.dev 1.2 425 59	1.84	0.047
Count 8 8 8	8	8

Sample.No 03 : Skin with metacercariae of cf. Cryptocotyle lingua

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area : **J62 Hardangerfjorden**, Tissue : **MUSCLE**.  
 Locality : **67B Strandebarbarm**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **921201**, Count: 8, Sample type: **Homogenate**.  
 Comment : Station name : **Strandebarbarm**

Anal. Lab. Code	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341
0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
CB28	CB52	CB101	CB105	CB118	CB138	CB153	CB156	CB180	CB209	CB277	CB277	CB277	CB277	CB277	CB277	CB277	CB277	CB277	CB277	CB277
ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
0.30	<0.10	<0.10	0.10	0.10	0.10	0.30	<0.10	0.10	<0.10	<1.1	<1.2	1.40	0.50	1.90	0.10	0.10	0.20	<0.10	<0.10	<0.10
09/ 0 X 3	1463	516																		

Tab.width cont'd **GADU MOR, MU, J62, 67B Strandebarbarm, 921201.**

Anal. Lab. Code	NIVA
341	341
0.10	0.10
OCS	OCS
ppb	ppb
w.wt	w.wt
09/ 0 X 3	1463 516
	<0.10

Sample.No 09 : Bulk of NIVA nos.:1,2,3,4,5,6,7,8

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area : **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **841000**, Count: 13, Sample type: **Individual**.

Anal. Lab. Code	VETN	VETN	Dry %	Fat %	Hg ppm	PCB ppm
220	220	211	0.010	0.050		
0.010	0.010	0.050				
0.060	0.060	<0.050				
0.050	0.050	<0.050				
0.060	0.060	<0.050				
0.070	0.070	<0.050				
0.030	0.030	<0.050				
0.070	0.070	<0.050				
0.040	0.040	<0.050				
0.030	0.030	<0.050				
0.040	0.040	<0.050				
0.060	0.060	<0.050				
20.30	20.30	510	20.48	0.049	<<.050	
21.50	21.50	540	19.00	0.030	<0.050	
21.70	21.70	690	21.70	0.070	<0.050	
21.60	21.60	620	0.87	0.015	<0.000	
20.30	20.30	530	13	13	13	
20.80	20.80	470				
20.60	20.60	340				
19.30	19.30	510				
19.50	19.50	470				
19.00	19.00	440				
20.00	20.00	320				
21.10	21.10	570				
20.60	20.60	470				
1211	1211	498				
270	270	320				
2900	2900	690				
700	700	101				
13	13	13				

Mean	Minim.	Maxim.	St.dev	Count
20.48	19.00	21.70	0.87	13
0.049	0.030	0.070	0.015	13
<<.050	<0.050	<0.050	<0.000	13

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **851127**, Count: 10, Sample type: **Individual**.  
 Comment : All samples were infected with metacercari of Cryptocotyle lingua on skin tissue

Analytical Lab. :		VETN		VETN	
Analysis Code. :		220		211	
Detection Limit :		0.010		0.050	
Samp/ Repl.	Sex Age Wght Lngt	Dry %	Fat %	Hg ppm	PCB ppm
no.	F/M year g mm			w.wt	w.wt
01/ 0	F 3 306 320	20.80	.	0.040	<0.050
02/ 0	M 2 1205 520	20.20	.	0.040	<0.050
03/ 0	F 3 1447 450	22.90	.	0.060	<0.050
04/ 0	F 5 4750 770	19.70	.	0.080	<0.050
05/ 0	F 2 721 440	26.60	.	0.030	<0.050
06/ 0	M 3 931 450	22.70	.	0.040	<0.050
07/ 0	M 3 919 440	21.50	.	0.040	<0.050
08/ 0	M 3 811 440	20.90	.	0.070	<0.050
09/ 0	M 5 785 450	19.40	.	0.030	<0.050
10/ 0	M 5 1611 530	20.40	.	0.090	<0.050
Mean	3.4 1349 481	21.51	.	0.052	<<.050
Minim.	2 306 320	19.40	.	0.030	<0.050
Maxim.	5 4750 770	26.60	.	0.090	<0.050
St.dev	1.2 1252 116	2.13	.	0.021	~0.000
Count	10 10 10	10	.	10	10

Sample.No 04 : Surface of liver with a few Anisakis larvae

Sample.No 06 :  
 MUSCLE : Signs of inner bleeding in the muscle tissue.

Sample.No 07 :  
 MUSCLE : Surface of liver with a few Anisakis larvae

Sample.No 10 : Surface of liver with a few Anisakis larvae

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **861118**, Count: 1, Sample type: **Individual**.

Analytical Lab. :		NIVA		NACE	
Analysis Code. :		310		511	
Detection Limit :		0.010		0.020	
Samp/ Repl.	Sex Age Wght Lngt	Dry %	Fat %	Hg ppm	PCB ppm
no.	F/M year g mm			d.wt	w.wt
01/ 0	F 2 2300 640	20.54	.	0.120	0.040

Sample.No 01 : Skin with metacercari of cf. Cryptocotyle lingua. Internal organs with signs of decomposition.

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Torsk.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **871020**, Count: 1, Sample type: **Individual**.

Analytical Lab. :		NIVA	
Analysis Code. :		310	
Detection Limit :		0.010	
Samp/ Repl.	Sex Age Wght Lngt	Dry %	Fat %
no.	F/M year g mm		
01/ 0	F 1 60 200	.	.
			0.070

Sample.No 01 :  
 MUSCLE : 5,00 g tissue used in analysis.

Species : **GADU MOR**, Gadus morhua, GB: Cod, N: Torsk.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **881117**, Count: 4, Sample type: **Homogenate**.

.	Analytical Lab. :	NIVA	NACE
.	Analysis Code. :	310	511
	Detection Limit :	0.010	0.020
Samp/	Sex Age Wght Lngt	Fat	P C B
Repl. F/M year	g mm	%	ppm
no.		d.wt	w.wt
01/ 0 X 3 1154 471		20.90 0.20 0.210	<0.020

Sample.No 01 : Bulk of spec.no. 1-4

Species : **GADU MOR**, *Gadus morhua*, GB: Cod, N: Iorsk.  
 Sample.area: **J99 Undefined**, Tissue : **MUSCLE**.  
 Locality : **98B Lille Molla**, Latitude: 68°12.00N, Longitude: 14°48.00E.  
 Catch,date : **921201**, Count: 25, Sample type: **Individual**.  
 Comment : Station name : Lille Molla

Samp/ Repl. no.	Sex	Age	Wght	Lngt	Analytical Lab. : Analysis Code. : Detection Limit :	NIVA 310 0.100	Dry %	Fat %	Hg ppm w.wt
01/0	M	6	1416	500			17.40	0.187	
02/0	M	4	1386	520			18.00	0.098	
03/0	F	3	1603	530			19.40	0.048	
04/0	M	6	1951	535			20.00	0.066	
05/0	M	4	1836	540			20.20	0.068	
06/0	M	5	1677	540			19.10	0.064	
07/0	M	6	1763	540			19.00	0.057	
08/0	F	3	1969	540			19.70	0.040	
09/0	F	4	1826	540			18.70	0.067	
10/0	F	3	1819	550			18.70	0.095	
11/0	M	6	2070	550			19.00	0.080	
12/0	M	5	1848	570			19.70	0.062	
13/0	M	5	2174	570			19.80	0.067	
14/0	M	6	2101	580			18.90	0.063	
15/0	M	4	2194	585			19.00	0.024	
16/0	F	5	2101	590			19.10	0.107	
17/0	M	5	2138	595			21.90	0.056	
18/0	M	7	2138	595			19.60	0.056	
19/0	M	6	2620	600			19.70	0.037	
20/0	F	4	2511	610			19.30	0.161	
21/0	M	5	1931	620			19.00	0.073	
22/0	F	5	2517	640			17.90	0.135	
23/0	F	5	2516	650			18.60	0.091	
24/0	M	5	2883	670			21.00	0.055	
25/0	M	4	2768	700			17.10	0.067	
Mean		4.8	2070	578			19.19	0.077	
Minim.		3	1386	500			17.10	0.024	
Maxim.		7	2883	700			21.90	0.187	
St.dev		1.1	393	50			1.03	0.038	
Count		25	25	25			25	25	

Sample.No 02 : Liver with necrotic cysts or tumors  
 Sample.No 03 : Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 04 : Muscle with signs of inner bleeding  
 Sample.No 05 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 06 : body unusually soft  
 Sample.No 07 : Skin with metacercariae of cf. Cryptocotyle lingua Liver with necrotic cysts or tumors  
 Sample.No 10 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 11 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 12 : Liver with necrotic areas and/or discoloration  
 Sample.No 13 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 15 : Liver with necrotic areas and/or discoloration  
 Sample.No 16 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 17 : Liver and/or intestinal guts with larvae of Anisakis simplex Liver with necrotic areas and/or discoloration  
 Sample.No 18 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 19 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 20 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 21 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 22 : Muscle with signs of inner bleeding Liver with necrotic cysts or tumors  
 Sample.No 23 : Muscle with signs of inner bleeding Liver and/or intestinal guts and/or discoloration  
 Sample.No 24 : Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 25 : Liver with necrotic cysts or tumors



Species : **GLYP CYN**, Glyptocephalus cynoglossus GB: Witch, N: Smørflyndre.  
 Sample.area: **J63 Sørfjorden**, Tissue : **LIVER**.  
 Locality : **53B Inner Sørfjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **870222**, Count: 3, Sample type: **Individual**.

Analytical Lab. :		FIER 402		FIER 404		FIER 403		FIER 405	
Analysis Code. :		0.001		0.050		0.010		0.02	
Detection Limit :		Cd		Cu		Pb		Zn	
Samp/ Repl.	Sex Age Wght Lngt	Mean	Diry	Fat	ppm	ppm	ppm	ppm	ppm
F/M	year	g	%	%	w.wt	w.wt	w.wt	w.wt	w.wt
02/ 0	F 1	334	360	3.6	26.00	1.300	8.400	9.200	28.90
03/ 0	F 3	492	345	4.8	26.00	2.200	7.600	6.400	26.70
Mean	2.0	413	353	4.2	26.00	1.750	8.000	7.800	27.80
Minim.	1	334	345	3.6	26.00	1.300	7.600	6.400	26.70
Maxim.	3	492	360	4.8	26.00	2.200	8.400	9.200	28.90
St.dev	1.4	112	11	0.8	0.00	0.636	0.566	1.980	1.56
Count	2	2	2	2	2	2	2	2	2

Sample.No 02 : Caught at "Skreo", ca. 100m from Tyssedal quay.  
 Sample.No 03 : Caught at "Skreo", ca. 100m from Tyssedal quay.

Species : **GLYP CYN**, Glyptocephalus cynoglossus GB: Witch, N: Smørflyndre.  
 Sample.area: **J63 Sørfjorden**, Tissue : **LIVER**.  
 Locality : **53B Inner Sørfjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **870222**, Count: 5, Sample type: **Bulked**.

Analytical Lab. :		NIVA 340		PCB	
Analysis Code. :		0.000		ppm	
Detection Limit :		Fat		w.wt	
Samp/ Repl.	Sex Age Wght Lngt	Diry	Fat	ppm	w.wt
F/M	year	%	%	ppm	w.wt
04/ 0	X 2	413	353	27.70	1.023

Sample.No 04 : Bulk of fish 02 and 03.

Species : **GLYP CYN**, Glyptocephalus cynoglossus GB: Witch, N: Smørflyndre.  
 Sample.area: **J63 Sørfjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørfjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **870222**, Count: 3, Sample type: **Individual**.

Analytical Lab. :		FIER 401		Hg	
Analysis Code. :		0.010		ppm	
Detection Limit :		Fat		w.wt	
Samp/ Repl.	Sex Age Wght Lngt	Diry	Fat	ppm	w.wt
F/M	year	%	%	ppm	w.wt
01/ 0	M	257	340	19.70	0.23
02/ 0	F 1	334	360	19.50	0.16
03/ 0	F 3	492	345	22.60	0.19
Mean	2.0	361	348	20.60	0.19
Minim.	1	257	340	19.50	0.16
Maxim.	3	492	360	22.60	0.23
St.dev	1.4	120	10	1.73	0.04
Count	2	3	3	3	3

Sample.No 01 : Caught at "Skreo", ca. 100m from Tyssedal quay. Liver not found.  
 MUSCLE : 29,00 g tissue used in analysis.  
 Sample.No 02 : Caught at "Skreo", ca. 100m from Tyssedal quay.  
 MUSCLE : 32,10 g tissue used in analysis.  
 Sample.No 03 : Caught at "Skreo", ca. 100m from Tyssedal quay.  
 MUSCLE : 26,90 g tissue used in analysis.

Species : **LEPI WHI**, Lepidorhombus whiff-iajonis, GB: Megrin, N: Glassvar.  
 Sample.area: **J62 Hardangerfjorden**, Tissue : **LIVER**.  
 Locality : **67B Strandebram**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **840200**, Count: 19, Sample type: **Individual**.

Analytical Lab. :		FIER	
Analysis Code. :		402	
Detection Limit :		0.001	
Samp/	Sex Age Wght Lngt	Dry	Fat
Repl. F/M year	g mm	%	%
no.			Cd
			ppm
			w.wt
01/ 0	F 250 320	45.80	0.140
02/ 0	M 300 350	42.00	miss
03/ 0	M 350 300	39.69	0.180
04/ 0	F 400 400	38.19	0.150
05/ 0	F 500 400	42.00	0.290
06/ 0	M 500 420	49.40	0.380
07/ 0	M 8 600 450	47.10	0.076
08/ 0	M 9 650 450	27.30	0.237
09/ 0	F 7 700 450	.	miss
10/ 0	F 7 450 400	50.90	0.166
11/ 0	X 7 450 400	24.20	miss
12/ 0	F 500 370	56.80	0.181
13/ 0	M 8 500 400	79.89	miss
14/ 0	M 8 500 400	44.70	0.207
15/ 0	M 7 550 400	47.60	0.187
16/ 0	F 750 450	46.70	miss
17/ 0	F 800 450	55.90	miss
18/ 0	F 9 1150 500	60.50	0.311
19/ 0	F 9 1100 500	51.50	0.081
Mean	7.9 579 411	47.23	0.199
Minim.	7 250 300	24.20	0.076
Maxim.	9 1150 500	79.89	0.380
St.dev	0.9 239 53	12.31	0.088
Count	10 19 19	18	13

miss(6) ! Missing value.

Species : **LEPI WHI**, Lepidorhombus whiff-iajonis, GB: Megrin, N: Glassvar.  
 Sample.area: **J62 Hardangerfjorden**, Tissue : **LIVER**.  
 Locality : **67B Strandebram**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **871125**, Count: 19, Sample type: **Homogenate**.

Analytical Lab. :		FIER		FIER		FIER	
Analysis Code. :		402		404		403	
Detection Limit :		0.001		0.050		0.010	
Samp/	Sex Age Wght Lngt	Dry	Fat	Cu	Pb	Zn	
Repl. F/M year	g mm	%	%	ppm	ppm	ppm	
no.				w.wt	w.wt	w.wt	
01/ 0	X 6 509 398	9.2	10.00	15.300	0.110	80.50	
Mean							
Weight							

Sample.No 01 :  
 LIVER : homogenate of 19 fish livers: min.=2.9g, max.=14.3g, mean=7.76g, sd=3.03g



Species : LEP1 WHI, Lepidorhombus whiff-iagonis, GB: Megrin, N: Glassvar.  
 Sample.area: J62 Hardangerfjorden, Tissue : LIVER.  
 Locality : 67B Strandebar, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : 881011, Count: 25, Sample type: Homogenate.

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lngt Repl. F/M year g mm no.	NIVA		NIVA		NIVA		NIVA		NIVA		NACE		NACE		Σ(*)		NACE		Σ(*)		NACE		
	312	311	312	311	312	311	510	510	510	510	510	510	510	510	!	!	!	510	!	!	510	!	
	0.030	0.150	0.150	0.150	0.150	0.150	0.040	510	510	510	510	510	510	!	!	!	40.00	!	!	40.00	!	!	
	Cd	Cu	Pb	Cu	Pb	Zn	PCB	DDEPP	DDTTP	DDTTP	DDTTP	DDTTP	DDTTP	DDTTP	DDTTP	DDTTP	HCHG	HCHG	HCHG	HCHG	HCHG	HCHG	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	
01/ 0 X 7 569 405	40.30	25.60	25.60	0.270	0.270	35.200	0.310	264.00	0.680	160.00	<40.00	<200.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00

Sample.No 01 : Bulk of spec.no. 1-25

Species : **LEPI WHI**, Lepidorhombus whiffiagonis, GB: Megrim, N: Glassvar.  
 Sample.area: **J62 Hardangerfjorden**, Tissue: **LIVER**  
 Locality : **67B Strandebarim**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **891208**, Count: 25, Sample type: **Individual**.

Analytical Lab. :		NIVA 312		NIVA 311		NIVA 312		NIVA 311	
Analysis Code. :		Cd		Cu		Pb		Zn	
Detection Limit. :		ppm		ppm		ppm		ppm	
Sampl. Repl.	Sex	Age	Wght	Lngt	Fat	Dry	Mean	Weight	Mean
no.	F/M	year	g	mm	%	%	g	g	d.wt
01/ 0	M	7	404	340	.	62.65	7.8	62.65	0.030
02/ 0	M	6	415	345	.	35.94	2.6	35.94	0.060
03/ 0	F	2	472	380	.	41.23	7.0	41.23	0.160
04/ 0	F	4	427	385	.	32.93	4.3	32.93	0.130
05/ 0	F	4	369	385	.	21.52	2.2	21.52	0.190
07/ 0	M	5	480	390	.	32.84	6.2	32.84	0.130
08/ 0	M	2	480	390	.	38.20	7.7	38.20	0.260
09/ 0	M	3	546	395	.	34.43	6.4	34.43	0.360
10/ 0	F	4	489	400	.	21.72	3.6	21.72	0.300
11/ 0	F	2	510	400	.	35.96	4.4	35.96	0.040
13/ 0	F	5	540	405	.	29.74	4.9	29.74	0.110
14/ 0	F	6	553	405	.	41.64	7.7	41.64	0.050
15/ 0	M	4	652	410	.	38.01	8.7	38.01	0.090
16/ 0	M	5	437	410	.	33.70	4.4	33.70	0.950
17/ 0	F	3	381	415	.	17.19	1.5	17.19	2.100
19/ 0	M	3	562	420	.	36.92	4.9	36.92	0.500
20/ 0	F	3	530	420	.	31.20	5.3	31.20	0.300
21/ 0	F	6	729	440	.	31.83	6.3	31.83	0.360
22/ 0	M	7	489	445	.	24.59	1.9	24.59	6.410
23/ 0	F	4	618	450	.	27.66	6.4	27.66	0.640
25/ 0	F	4	776	460	.	31.60	6.8	31.60	0.400
26/ 0	F	7	1064	465	.	20.47	6.6	20.47	2.950
27/ 0	F	6	1003	470	.	51.35	16.9	51.35	0.080
28/ 0	F	7	911	470	.	39.15	13.2	39.15	0.100
29/ 0	F	7	1005	485	.	32.90	12.2	32.90	0.300
Mean		4.6	594	415	.	33.81	6.4	33.81	0.680
Minim.		2	369	340	.	17.19	1.5	17.19	0.030
Maxim.		7	1064	485	.	62.65	16.9	62.65	6.410
St.dev		1.7	205	38	.	9.68	3.6	9.68	1.371
Count		25	25	25	.	25	25	25	25

Sample.No	Depth	Analysis
Sample.No 01	: seine 20m	depth.
Sample.No 02	: seine 40m	depth.
Sample.No 03	: seine 75m	depth. Uncertain age determination
Sample.No 04	: seine 50m	depth. Uncertain age determination
Sample.No 05	: seine 50m	depth. Uncertain age determination
Sample.No 07	: seine 60m	depth. Uncertain age determination
Sample.No 08	: seine 20m	depth. Uncertain age determination
Sample.No 09	: seine 20m	depth. Uncertain age determination
Sample.No 10	: seine 20m	depth. Uncertain age determination
Sample.No 11	: seine 60m	depth. Uncertain age determination
Sample.No 13	: seine 55m	depth. Uncertain age determination
Sample.No 14	: seine 40m	depth. Uncertain age determination
Sample.No 15	: seine 75m	depth. Uncertain age determination
Sample.No 16	: Uncertain age	determination
Sample.No 17	: seine 20m	depth. Uncertain age determination
Sample.No 19	: seine 40m	depth. Uncertain age determination
Sample.No 20	: seine 50m	depth. Uncertain age determination
Sample.No 21	: seine 30m	depth. Uncertain age determination
Sample.No 22	: seine 40m	depth. Uncertain age determination
Sample.No 25	: Uncertain age	determination
Sample.No 26	: seine 30m	depth. Uncertain age determination
Sample.No 27	: seine 80m	depth. Uncertain age determination
Sample.No 28	: seine 80m	depth. Uncertain age determination
Sample.No 29	: seine 50m	depth. Uncertain age determination







Tab.width cont'd LEPI WHI, LI, J62, 67B Strandebar, 921201.

Samp/ Repl. no.	Sex	Age	Wght	Lngt	NIVA		Σ(*)		NIVA		NIVA		NIVA	
					F	M	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt
01/0	X	6	289	342	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
02/0	X	6	410	375	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
03/0	X	6	584	418	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Mean	6.0	428	378	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00
Minim.	6	289	342	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Maxim.	6	584	418	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
St.dev	0.0	148	38	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Sample.No 01 : Bulk of NIVA nos.:1,2,3,4,5 No.5: internal organs not found (I)  
 Sample.No 02 : Bulk of NIVA no.:6,7,8,9,10 No.8: only one otolith No.10:Skin with ulceration, Lymphocytic areas and/or lesions  
 Sample.No 03 : Bulk of NIVA no.:11,12,13,14,15

Species : LEPI WHI, Lepidorhombus whiff-iajonis, GB: Megrin, N: Glassvar.  
 Sample.area: J62 Hardangerfjorden, Tissue : MUSCLE.  
 Locality : 67B Strandebar, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : 840200, Count: 19, Sample type: Individual.

Samp/ Repl. no.	Sex	Age	Wght	Lngt	Dry %	Fat %	Hg ppm	W.Wt	FIER	
									401	0.010
01/0	F	250	320	22.80	.	.	0.190	.	.	.
02/0	M	300	350	21.90	.	.	miss	.	.	.
03/0	M	350	300	24.40	.	.	0.220	.	.	.
04/0	F	400	400	21.50	.	.	0.550	.	.	.
05/0	F	500	400	22.00	.	.	miss	.	.	.
06/0	M	500	420	22.90	.	.	0.210	.	.	.
07/0	M	600	450	22.40	.	.	0.530	.	.	.
08/0	M	650	450	20.09	.	.	0.660	.	.	.
09/0	F	700	450	21.90	.	.	0.390	.	.	.
10/0	F	750	400	22.20	.	.	0.110	.	.	.
11/0	X	750	400	17.09	.	.	0.620	.	.	.
12/0	F	500	370	20.50	.	.	0.190	.	.	.
13/0	M	500	400	23.30	.	.	0.250	.	.	.
14/0	M	500	400	21.40	.	.	0.460	.	.	.
15/0	M	550	400	21.60	.	.	0.160	.	.	.
16/0	F	750	450	21.00	.	.	0.580	.	.	.
17/0	F	800	450	22.20	.	.	0.250	.	.	.
18/0	F	1150	500	20.90	.	.	0.600	.	.	.
19/0	F	1100	500	21.90	.	.	0.470	.	.	.
Mean	7.9	579	411	21.68	.	.	0.379	.	.	.
Minim.	7	250	300	17.09	.	.	0.110	.	.	.
Maxim.	9	1150	500	24.40	.	.	0.660	.	.	.
St.dev	0.9	239	53	1.50	.	.	0.189	.	.	.
Count	10	19	19	19	.	.	17	.	.	.

miss(2) i Missing value.

Species : **LEPI WHI**, Lepidorhombus whiffiagonis, GB: Megrin, N: Glassvar.  
 Sample.area: **J62 Hardangerfjorden**, Tissue : **MUSCLE**.  
 Locality : **67B Strandebar**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **871125**, Count: 19, Sample type: **Homogenate**.

Analytical Lab. :	FIER		
Analysis Code. :	401		
Detection Limit :	0.010		
Samp/ Sex Age Wght Lngt	Dry	Fat	
Repl. F/M year g mm	%	%	H g
no.			ppm
01/ 0 X 6 509 398	21.20	.	0.350
			w.wt

Sample.No 01 :

MUSCLE : homogenate of 19 fish filets (part) : min.=30.7g, max.=73.3g 0324.70 g tissue used in analysis.

Species : **LEPI WHI**, Lepidorhombus whiffiagonis, GB: Megrin, N: Glassvar.  
 Sample.area: **J62 Hardangerfjorden**, Tissue : **MUSCLE**.  
 Locality : **67B Strandebar**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **881011**, Count: 25, Sample type: **Homogenate**.

Analytical Lab. :	NIVA		
Analysis Code. :	310		
Detection Limit :	0.010		
Samp/ Sex Age Wght Lngt	Dry	Fat	
Repl. F/M year g mm	%	%	H g
no.			ppm
01/ 0 X 7 569 405	22.20	0.20	1.480
			<0.020
			d.wt
			w.wt

Sample.No 01 : Bulk of spec.no. 1-25

Species : LEPI WHI, Lepidorhombus whiffiagonis, GB: Megrim, N: Glassvar.  
 Sample.area: J62 Hardangerfjorden, Tissue : MUSCLE.  
 Locality : 67B Strandebar, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : 891208, Count: 25, Sample type: Individual.

Analytical Lab. : NIVA		310					
Analysis Code. : 0.100		H g					
Detection Limit :		ppm					
Samp/	Sex	Age	Wght	Lngt	Dry	Fat	H g
Repl.	F/M	year	g	mm	%	%	d.wt
no.							
01/ 0	M	7	404	340	23.99	.	0.500
02/ 0	M	6	415	345	23.43	.	0.300
03/ 0	F	2	472	380	22.62	.	1.900
04/ 0	F	4	427	385	21.56	.	1.100
05/ 0	F	4	369	385	19.38	.	5.800
07/ 0	M	5	480	390	20.61	.	0.700
08/ 0	F	2	480	390	21.05	.	1.200
09/ 0	M	3	546	395	22.65	.	1.300
10/ 0	F	4	489	400	21.30	.	0.800
11/ 0	F	2	510	400	22.20	.	0.500
13/ 0	F	5	540	405	21.08	.	0.900
14/ 0	F	6	553	405	21.12	.	1.100
15/ 0	M	4	652	410	21.25	.	1.900
16/ 0	F	5	437	410	21.51	.	3.500
17/ 0	F	3	381	415	17.51	.	3.100
19/ 0	M	3	562	420	22.62	.	1.200
20/ 0	F	3	530	420	20.91	.	1.700
21/ 0	F	6	729	440	22.14	.	1.300
22/ 0	M	7	489	445	20.45	.	2.600
23/ 0	F	4	618	450	22.41	.	2.200
25/ 0	F	4	776	460	24.35	.	0.600
26/ 0	F	7	1064	465	21.33	.	5.900
27/ 0	F	6	1003	470	22.60	.	0.900
28/ 0	F	7	911	470	26.55	.	0.400
29/ 0	F	7	1005	485	20.50	.	1.200
Mean	4.6	594	415		21.80	.	1.704
Minim.	2	369	340		17.51	.	0.300
Maxim.	7	1064	485		26.55	.	5.900
St.dev	1.7	205	38		1.74	.	1.492
Count	25	25	25		25	.	25



Sample.No 01 : seine 20m depth.  
 MUSCLE : 0062,10 g tissue used in analysis.  
 Sample.No 02 : seine 40m depth.  
 MUSCLE : 0056,20 g tissue used in analysis.  
 Sample.No 03 : seine 75m depth. Uncertain age determination  
 MUSCLE : 0057,00 g tissue used in analysis.  
 Sample.No 04 : seine 50m depth. Uncertain age determination  
 MUSCLE : 0058,40 g tissue used in analysis.  
 Sample.No 05 : seine 50m depth. Uncertain age determination  
 MUSCLE : 0044,40 g tissue used in analysis.  
 Sample.No 07 : seine 60m depth. Uncertain age determination  
 MUSCLE : 0075,50 g tissue used in analysis.  
 Sample.No 08 : seine 20m depth. Uncertain age determination  
 MUSCLE : 0068,10 g tissue used in analysis.  
 Sample.No 09 : seine 20m depth.  
 MUSCLE : 0056,90 g tissue used in analysis.  
 Sample.No 10 : seine 20m depth. Uncertain age determination  
 MUSCLE : 0059,10 g tissue used in analysis.  
 Sample.No 11 : seine 60m depth. Uncertain age determination  
 MUSCLE : 0058,10 g tissue used in analysis.  
 Sample.No 13 : seine 55m depth. Uncertain age determination  
 MUSCLE : 0065,00 g tissue used in analysis.  
 Sample.No 14 : seine 40m depth. Uncertain age determination  
 MUSCLE : 0073,20 g tissue used in analysis.  
 Sample.No 15 : seine 75m depth. Uncertain age determination  
 MUSCLE : 0060,60 g tissue used in analysis.  
 Sample.No 16 : Uncertain age determination  
 MUSCLE : 0063,20 g tissue used in analysis.  
 Sample.No 17 : seine 20m depth. Uncertain age determination  
 MUSCLE : 0040,70 g tissue used in analysis.  
 Sample.No 19 : seine 40m depth.  
 MUSCLE : 0060,00 g tissue used in analysis.  
 Sample.No 20 : seine 50m depth. Uncertain age determination  
 MUSCLE : 0068,70 g tissue used in analysis.  
 Sample.No 21 : seine 30m depth. Uncertain age determination  
 MUSCLE : 0061,40 g tissue used in analysis.  
 Sample.No 22 : seine 40m depth. Uncertain age determination  
 MUSCLE : 0044,70 g tissue used in analysis.  
 Sample.No 23 :  
 MUSCLE : 0079,10 g tissue used in analysis.  
 Sample.No 25 : Uncertain age determination  
 MUSCLE : 0065,00 g tissue used in analysis.  
 Sample.No 26 : seine 30m depth. Uncertain age determination  
 MUSCLE : 0062,20 g tissue used in analysis.  
 Sample.No 27 : seine 80m depth. Uncertain age determination  
 MUSCLE : 0097,00 g tissue used in analysis.  
 Sample.No 28 : seine 80m depth.  
 MUSCLE : 0073,80 g tissue used in analysis.  
 Sample.No 29 : seine 50m depth. Uncertain age determination  
 MUSCLE : 0076,60 g tissue used in analysis.

Species : **LEPI WHI**, *Lepidorhombus whiffiagonis*, GB: Megrin, N: Glassvar.  
 Sample.area : **J62 Hardangerfjorden**, Tissue : **MUSCLE**.  
 Locality : **67B Strandebar**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **891208**, Count: 25, Sample type: **Bulked**.

Analytical Lab. :		NACE	
Analysis Code. :		511	
Detection Limit :		0.020	
Samp/ Sex Age Lght Lngt		Dry	Fat
Repl. F/M year g mm		%	%
		ppm	ppm
		w.wt	w.wt
06/ 0 H	5 417 367	22.20	0.31
12/ 0 H	3 501 395	21.56	0.20
18/ 0 H	5 513 409	20.49	<0.020
24/ 0 H	5 586 435	21.71	0.28
30/ 0 X	6 952 470	23.07	<0.020
Mean	4.8 594 415	21.81	0.25
Minim.	3 417 367	20.49	<0.020
Maxim.	6 952 470	23.07	0.31
St.dev	1.1 209 39	0.94	0.04
Count	5 5 5	5	5

Sample.No 06 : Bulk of ind.no. 1-5. Uncertain age determination for some individuals  
 Sample.No 12 : Bulk of ind.no. 7-11. Uncertain age determination on some individuals  
 Sample.No 18 : Bulk of ind.no. 13-17. Uncertain age determinations  
 Sample.No 24 : Bulk of ind.no. 19-23. Uncertain age determination on some individuals  
 Sample.No 30 : Bulk of ind.no. 25-29. Uncertain age determination on some individuals

Species : **LEPI WHI**, *Lepidorhombus whiffiagonis*, GB: Megrin, N: Glassvar.  
 Sample.area : **J62 Hardangerfjorden**, Tissue : **MUSCLE**.  
 Locality : **67B Strandebar**, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : **901101**, Count: 25, Sample type: **Bulked**.  
 Comment : Caught 1001-1217. All but ind. nos. 1-3, 6, 10 and 25 sent frozen to NIVA for preparation. Ind. nos. 1-3, 6, 10 and 25 prepared fresh.

Analytical Lab. :		NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA						
Analysis Code. :		310	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341						
Detection Limit :		0.010	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05						
Samp/ Sex Age Lght Lngt		Hg	Fat	Fat	Dry	CB28	CB52	CB101	CB118	CB138	CB153	CB180	CB209	CB 27	CB 28	DD 24	HCHA	HCHG	HC 22	HCB	HCB	OCB	OCS	
Repl. F/M year g mm		ppm	%	%	%	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
		w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 H	6 349 328	0.210	0.40	<0.05	21.20	<0.05	<0.05	0.09	0.08	0.14	0.18	0.06	<0.05	<0.6	<0.9	1.42	0.14	0.12	0.26	0.09	<0.05	<0.05	<0.05	
02/ 0 H	6 547 396	0.210	0.40	<0.05	19.50	<0.05	0.11	0.11	0.11	0.19	0.27	0.08	<0.05	<0.9	<0.9	1.99	0.10	0.06	0.16	0.09	<0.05	<0.05	<0.05	
03/ 0 H	5 584 424	0.520	0.40	0.11	19.50	<0.05	0.25	0.24	0.24	0.37	0.56	0.15	<0.05	<1.7	4.48	4.48	0.14	0.06	0.20	0.14	<0.05	<0.05	<0.05	
04/ 0 H	5 783 448	0.510	0.40	0.05	20.00	<0.05	0.14	0.12	0.12	0.20	0.27	0.09	<0.05	<0.9	2.67	2.67	0.15	0.07	0.22	0.09	<0.05	<0.05	<0.05	
05/ 0 H	6 785 464	0.680	0.40	<0.05	20.10	<0.05	0.10	0.10	0.12	0.18	0.30	0.09	<0.05	<0.8	2.56	2.56	0.15	0.08	0.23	0.09	<0.05	<0.05	<0.05	
Mean	5.6 610 412	0.496	0.40	<0.05	20.14	<0.05	0.14	0.13	0.13	0.22	0.32	0.09	<0.05	<1.0	<1.0	2.62	0.14	0.08	0.21	0.10	<0.05	<0.05	<0.05	
Minim.	5 349 328	0.210	0.40	<0.05	19.50	<0.05	0.09	0.08	0.08	0.14	0.18	0.06	<0.05	<0.6	<0.6	1.42	0.10	0.06	0.16	0.09	<0.05	<0.05	<0.05	
Maxim.	6 785 464	0.680	0.40	0.11	21.20	<0.05	0.25	0.24	0.24	0.37	0.56	0.15	<0.05	<1.7	4.48	4.48	0.15	0.12	0.26	0.14	<0.05	<0.05	<0.05	
St.dev	0.5 183 54	0.174	0.00	0.03	0.63	0.00	0.07	0.06	0.06	0.09	0.14	0.03	0.00	0.4	0.4	1.15	0.02	0.02	0.04	0.02	0.00	0.00	0.00	
Count	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	

miss(5)  
 ! Missing value.  
 Sample.No 01 : NIVA no. 02,05,03,22,18.  
 MUSCLE : Muscle with signs of inner bleeding in specimen no. 18.  
 Sample.No 02 : NIVA no. 04,08,14,23,09.  
 Sample.No 03 : NIVA no. 12,20,01,15,24.  
 Sample.No 04 : NIVA no. 10,11,17,21,25.  
 MUSCLE : Muscle with signs of inner bleeding in specimen no. 10.  
 Sample.No 05 : NIVA no. 13,07,16,19,06.



Species : LEPI WHI, Lepidionchus whiff-iaionis, GB: Megrinim, N: Glassvar.  
 Sample.area: J62 Hardangerfjorden, Tissue : MUSCLE.  
 Locality : 67B Strandebarrow, Latitude: 60°16.00N, Longitude: 06°02.00E.  
 Catch,date : 921201, Count: 15, Sample type: Bulkied.  
 Comment : Station name : Strandebarrow

Analytical Lab. :	NIVA				Dry %	Fat %	Hg ppm	HCB ppb	DD ppb	DEPP ppb	HCHA ppb	HC ppb	HCB ppb
	310	341	341	341									
01/ 0 X 6 289 342	0.100	0.10	0.10	0.10	24.00	0.20	0.174	miss	0.10	1.70	0.40	2.10	0.10
02/ 0 X 6 410 375		0.10	0.10	0.10	23.80	0.40	0.118	0.70	0.10	3.20	0.80	4.00	0.10
03/ 0 X 6 584 418					24.60	0.20	0.327	miss	0.10	2.50	0.70	3.20	0.10
Mean 6.0 428 378					24.13	0.27	0.206	0.70	0.20	2.47	0.63	3.10	<<0.10
Minim. 6 289 342					23.80	0.20	0.118	0.70	0.10	1.70	0.40	2.10	<0.10
Maxim. 6 584 418					24.60	0.40	0.327	0.70	0.10	3.20	0.80	4.00	<0.10
St.dev 0.0 148 38					0.42	0.12	0.108	0.15	0.10	0.75	0.21	0.95	<0.10
Count 3 3 3					3	3	3	1	3	3	3	3	3

miss(2) : Missing value.

Tab.width cont'd LEPI WHI, MU, J62, 67B Strandebarrow, 921201.

Analytical Lab. :	NIVA		QCB ppb	OCS ppb
	341	341		
01/ 0 X 6 289 342	0.10	0.10	<0.10	<0.10
02/ 0 X 6 410 375	<0.10	<0.10	<0.10	<0.10
03/ 0 X 6 584 418	<0.10	<0.10	<0.10	<0.10
Mean 6.0 428 378	<<0.10	<<0.10	<<0.10	<<0.10
Minim. 6 289 342	<0.10	<0.10	<0.10	<0.10
Maxim. 6 584 418	<0.10	<0.10	<0.10	<0.10
St.dev 0.0 148 38	~0.00	~0.00	~0.00	~0.00
Count 3 3 3	3	3	3	3

Sample.No 01 : Bulk of NIVA nos.:1,2,3,4,5 No.5: internal organs not found (!)  
 Sample.No 02 : Bulk of NIVA no.:6,7,8,9,10 No.8: only one otolith No.10:Skin with ulceration, lymphocytic areas and/or lesions  
 Sample.No 03 : Bulk of NIVA no.:11,12,13,14,15











Tab.width cont'd LIMA LIM, LI, J99, 15B Ullerø area, 911025.

Analysis Code	NIVA	Σ(*)	NIVA	Σ(*)	NIVA	Σ(*)	NIVA	Σ(*)	NIVA	Σ(*)
340	340	!	340	340	340	615				
1.00	1.00	!	1.00	2.00	2.00	0.040				
HCHA	HCHG	HC	Σ2	HCB	QCB	OCS	EPOCL			
ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm			
W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt			
01/0 X	2	257	290	<2.00	3.00	<5.00	4.00	<2.00	2.00	335.700
02/0 X	2	303	307	<2.00	3.00	<5.00	4.00	<2.00	2.00	287.630
03/0 X	3	460	356	<2.00	3.00	<5.00	5.00	<2.00	3.00	265.080
Mean	2.3	340	318	<<2.00	3.00	<<5.00	4.33	<<2.00	2.33	296.137
Minim.	2	257	290	<2.00	3.00	<5.00	4.00	<2.00	2.00	265.080
Maxim.	3	460	356	<2.00	3.00	<5.00	5.00	<2.00	3.00	335.700
St.dev	0.6	106	34	0.00	0.00	0.58	0.58	0.00	0.58	36.070
Count	3	3	3	3	3	3	3	3	3	3

Sample.No 01 : Bulk of NIVA nos.:1,2,3,4,5

Sample.No 02 : Bulk of NIVA nos.:6,7,8,9,10,11

Sample.No 03 : Bulk of NIVA nos.:12,13,14,15,16

Species : LIMA LIM, Linanda limanda, GB: Dab, N: Sandflyndre.

Sample.area: J99 Undefined, Tissue: LIVER.

Locality : 22F Børøfjorden, Latitude: 59°43.00N, Longitude: 05°21.00E.

Catch,date : 901021, Count: 25, Sample type: Bulked.

Comment : Caught 1021-1027. Three larger fish prepared but not analyzed.

Analysis Code	NIVA	Σ(*)	NIVA	Σ(*)	NIVA	Σ(*)	NIVA	Σ(*)	NIVA	Σ(*)	NIVA	Σ(*)	NIVA	Σ(*)	NIVA	Σ(*)	NIVA	Σ(*)	
312	311	312	311	311	311	311	311	311	311	311	311	311	311	311	311	311	311	311	
0.010	0.150	0.050	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Ca	Cu	Pb	Zn	CB28	CB52	CB101	CB118	CB138	CB153	CB180	CB209	CB_Σ7	CB_ΣΣ	DOEPP	DO_Σ4	HCHA	HCHG		
ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt
01/0 H	3	60	210	1.2	26.80	0.157	13.800	0.720	41.30										
02/0 H	3	135	242	1.8	30.90	11.70	0.140	10.200	0.340	39.20	1.00	2.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
03/0 H	3	155	266	3.2	42.70	26.70	0.079	8.740	0.200	42.80	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
04/0 H	4	205	290	4.0	38.00	21.70	0.095	9.490	0.250	41.40	2.00	4.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
05/0 H	3	281	314	6.3	42.90	31.10	0.095	9.830	0.180	39.30	4.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Mean	3.2	167	264	3.3	36.26	22.80	0.113	10.412	0.338	40.80	2.25	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Minim.	3	60	210	1.2	26.80	11.70	0.079	8.740	0.180	39.20	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Maxim.	4	281	314	6.3	42.90	31.10	0.157	13.800	0.720	42.80	4.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
St.dev	0.4	82	41	2.0	7.19	8.34	0.034	1.969	0.222	1.53	1.26	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16
Count	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

miss(4) : Missing value.

Tab.width cont'd LIMA LIM, LI, J99, 22F Børøyfjorden, 901021.

Analytical Lab. :	Analysis Code. :	Detection Limit :	NIVA		NIVA		NIVA	
			Σ(*)	!	340	340	340	615
Samp/ Sex Age Wght Lrgt	HC Σ2	HCB	OCB	OCB	OCB	OCB	OCB	OCB
Repl. F/M year g mm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 H 3 60 210								
02/ 0 H 3 135 242	11.00	4.00	2.00	<1.00	0.710			
03/ 0 H 3 155 266	25.00	6.00	<2.00	<2.00	1.360			
04/ 0 H 4 205 290	26.00	6.00	<2.00	<2.00	0.770			
05/ 0 H 3 281 314	31.00	9.00	3.00	<2.00	5.600			
Mean	23.25	6.25	<<2.25	<<1.75	2.110			
Minim.	3	4.00	<2.00	<1.00	0.710			
Maxim.	4	9.00	3.00	<2.00	5.600			
St.dev	0.4	82	2.06	0.50	2.345			
Count	5	5	4	4	4			

Sample.No 01 : NIVA no.15, 18, 22, 21, 09. ALL specimens except no. 09 liver/guts with Anasakis larvae.  
 LIVER : ALL specimens except no. 09 liver/guts with Anasakis larvae. Insufficient material for organic analyses and hence, no fat wt. determinations.  
 Sample.No 02 : NIVA no.19, 16, 17, 28, 04. ALL specimens except no. 19 liver/guts with Anasakis larvae.  
 LIVER : ALL specimens except no. 19 liver/guts with Anasakis larvae.  
 Sample.No 03 : NIVA no.05, 11, 06, 07, 12. ALL specimens except no. 05 liver/guts with Anasakis larvae. Specimen no. 06 liver with necrotic cysts or tumours.  
 LIVER : ALL specimens except no. 05 liver/guts with Anasakis larvae. Specimen no. 06 liver with necrotic cysts or tumours.  
 Sample.No 04 : NIVA no.20, 27, 03, 13, 14. ALL specimens except nos.03 and 14 liver/guts with Anasakis larvae.  
 LIVER : ALL specimens except nos. 03 and 14 liver/guts with Anasakis larvae.  
 Sample.No 05 : NIVA no.01, 02, 26, 24, 25. ALL specimens except no 02 liver/guts with Anasakis larvae.  
 LIVER : ALL specimens except no. 02 liver/guts with Anasakis larvae.

Species : LIMA LIM, Limerda Limerda, CB: Dab, N: Sandflyndre.  
 Sample.area: J99 Undefined, Tissue : LIVER.  
 Locality : 22F Børøyfjorden, Latitude: 59°43.00N, Longitude: 05°21.00E.  
 Catch,date : 910901, Count: 25, Sample type: Bulked.

Analytical Lab. :	Analysis Code. :	Detection Limit :	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		
			Σ(*)	!	Σ(*)	!	Σ(*)	!	Σ(*)	!	Σ(*)	!	Σ(*)	!	Σ(*)	!	Σ(*)	!	Σ(*)	!	Σ(*)
Samp/ Sex Age Wght Lrgt	HC Σ2	HCB	OCB	OCB	OCB	OCB	OCB	OCB	OCB	OCB	OCB	OCB	OCB	OCB	OCB	OCB	OCB	OCB	OCB	OCB	OCB
Repl. F/M year g mm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 X	102	212																			
02/ 0 X	189	248	1.3	36.60	22.00	0.111	6.790	0.250	34.50	29.00	3.00	2.00	2.00	3.00	miss	miss	miss	miss	miss	miss	miss
03/ 0 X	268	278	5.1	40.90	26.20	0.091	7.130	0.160	29.00	26.30	2.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
04/ 0 X	352	300	7.0	32.80	20.60	0.059	3.760	0.140	26.30	20.40	2.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
05/ 0 X	626	362	14.1	33.80	18.30	0.209	6.660	0.920	43.40	43.40	2.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Mean	307	280	6.1	36.03	21.78	0.107	5.552	0.312	30.72	30.72	2.25	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
Minim.	102	212	1.3	32.80	18.30	0.054	3.420	0.090	20.40	20.40	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Maxim.	626	362	14.1	40.90	26.20	0.209	7.130	0.920	43.40	43.40	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
St.dev	201	57	5.0	3.63	3.32	0.061	1.803	0.345	8.72	8.72	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Count	5	5	5	4	4	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4

miss(17) ! Missing value.



Tab.width cont'd LIMA LIM, LI, J99, 22F Børøyfjorden, 921215.

Analytical Lab. :	NIVA	NIVA	Σ(*)	NIVA	NIVA	NIVA
Analysis Code. :	340	340	!	340	340	340
Detection Limit :	5.00	5.00	!	5.00	5.00	5.00
Sampl/ Sex Age Wght Lngt	HCHA	HCHG	HC	Σ2	HC	BC
Repl. F/M year g mm	ppb	ppb	ppb	ppb	ppb	ppb
	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt
01/ 0 X 5 302 290	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
02/ 0 X 4 353 317	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
03/ 0 X 6 485 335	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
04/ 0 F 7 739 380	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Mean	5.5	4.70	3.31	<5.00	<5.00	<5.00
Minim.	4	302	290	<5.00	<5.00	<5.00
Maxim.	7	739	380	<5.00	<5.00	<5.00
St.dev	1.3	195	38	~0.00	~0.00	~0.00
Count	4	4	4	4	4	4

Sample.No 01 : Bulk of NIVA nos.:1,2,3,4,5 No.1:Liver and/or intestinal guts with larvae of Anisakis sj No.3: Gills with Lemaecera copepods and skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 02 : Bulk of NIVA nos.:6,7,8,9,10 Nos.6,8,9&10: Liver and/or intestinal guts with larvae of Anisakis simplex No.8: Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 03 : Bulk of NIVA nos.:11,12,13,14 Nos 12&14: Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 04 : Bulk of NIVA nos.:15,16,17,18 Nos 15 & 17: Liver and/or intestinal guts with larvae of Anisakis simplex Nos 16&18:Skin with metacercariae of cf. Cryptocotyle lingua and Muscle with signs of inner bleeding

Species : LIMA LIM, Limanda limanda, GB: Deb, N: Sandflyndre.  
 Sample.area: J26 Oslofjorden, Tissue : MUSCLE.  
 Locality : 36F Fårder area, Latitude: 59°04.00N, Longitude: 10°23.00E.  
 Catch,date : 901101, Count: 25, Sample type: Bulked.  
 Comment : Caught 'November-december', sent frozen to NIVA for prep..

Analytical Lab. :	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
Analysis Code. :	310	Hg	CB28	CB101	CB118	CB138	CB153	CB180	CB209	CB 27	CB 28	CB 29	CB 30	CB 31	CB 32	CB 33	CB 34	CB 35	CB 36
Detection Limit :	0.010	%	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Sampl/ Sex Age Wght Lngt	Fat	Dry	CB28	CB101	CB118	CB138	CB153	CB180	CB209	CB 27	CB 28	CB 29	CB 30	CB 31	CB 32	CB 33	CB 34	CB 35	CB 36
Repl. F/M year g mm	%	%	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt	W.Wt
01/ 0 H 3 112 218	22.10	0.70	0.040	0.15	0.49	0.63	0.83	0.08	<0.05	2.3	<2.4	47.9	47.9	47.9	47.9	47.9	47.9	47.9	47.9
02/ 0 H 3 150 240	21.90	1.00	0.050	0.36	9.68	14.08	18.56	2.08	0.55	47.3	<2.4	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80
03/ 0 H 3 172 252	22.00	0.60	0.070	0.05	0.57	0.79	1.22	0.13	<0.05	<2.9	<2.9	0.41	miss	miss	miss	miss	miss	miss	miss
04/ 0 H 3 263 280	21.30	0.60	0.080	0.05	0.53	0.78	1.13	0.11	0.16	2.8	2.9	0.35	miss	miss	miss	miss	miss	miss	miss
05/ 0 H 4 311 296	20.90	0.70	0.120	<0.05	0.45	0.68	0.99	0.09	<0.05	<2.3	<2.3	0.48	miss	miss	miss	miss	miss	miss	miss
Mean	21.64	0.72	0.072	<0.11	2.34	3.39	4.55	0.54	<0.17	<<11.5	<<11.7	1.08	.	.	.	.	.	.	.
Minim.	20.90	0.60	0.040	<0.05	0.45	0.63	0.83	0.08	<0.05	2.3	<2.3	0.35	.	.	.	.	.	.	.
Maxim.	22.10	1.00	0.120	0.36	9.68	14.08	18.56	2.08	0.55	47.3	47.9	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80
St.dev	0.4	0.52	0.16	0.051	0.11	0.14	0.88	0.11	0.22	~20.0	~20.2	1.52	.	.	.	.	.	.	.
Count	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

miss(5)  
 ! Missing value.  
 Sample.No 01 : NIVA no. 25,24,23,22,20.  
 Sample.No 02 : NIVA no. 19,18,15,14,13.  
 Sample.No 03 : NIVA no. 21,17,16,04,12.  
 Sample.No 04 : NIVA no. 11,08,07,05,02.  
 Sample.No 05 : NIVA no. 10,09,03,01,06. Specimen no. 06 skin with metacercariae of cf. Cryptocotyle lingua ?



Species : **LIMA LIM**, *Limanda limanda*, GB: Dab, N: Sændflýndre.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **36F Fårder area**, Latitude: 59°04.00N, Longitude: 10°23.00E.  
 Catch,date : **921215**, Count: 25, Sample type: **Bulked**.  
 Comment : Station name : Fårder area

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lrgt Repl. F/M year g mm	NIVA 310 0.100 Hg ppm w.wt	NIVA 341 0.10 Fat %	NIVA 341 0.10 Dry %	NIVA 341 0.10 CB28 ppb w.wt	NIVA 341 0.10 CB52 ppb w.wt	NIVA 341 0.10 CB101 ppb w.wt	NIVA 341 0.10 CB105 ppb w.wt	NIVA 341 0.10 CB118 ppb w.wt	NIVA 341 0.10 CB138 ppb w.wt	NIVA 341 0.10 CB153 ppb w.wt	NIVA 341 0.10 CB156 ppb w.wt	NIVA 341 0.10 CB180 ppb w.wt	NIVA 341 0.10 CB209 ppb w.wt	ΣK(*) !	NIVA 341 0.10 DOKEPP ppb w.wt	NIVA 341 0.10 DOKEPP ppb w.wt	ΣK(*) !	NIVA 341 0.10 HCHA ppb w.wt	NIVA 341 0.10 HCHA ppb w.wt	ΣK(*) !	NIVA 341 0.10 HCHG ppb w.wt	NIVA 341 0.10 HCHG ppb w.wt	ΣK(*) !	NIVA 341 0.10 HCB ppb w.wt
Mean	5.0	301	301	19.44	0.46	0.097	<<0.10	<<0.10	<<0.10	1.86	2.58	0.12	0.38	0.18	<<6.3	<<7.0	0.86	<<0.10	<<0.10	<<0.10	0.12	<<0.22	<<0.22	0.10
Minim.	4	202	265	17.70	0.40	0.058	<0.10	<0.10	<0.10	1.40	1.80	0.10	0.20	0.10	<4.7	<5.2	0.60	<0.10	<0.10	<0.10	0.10	<0.20	<0.20	0.10
Maxim.	6	414	346	21.30	0.50	0.149	<0.10	<0.10	<0.10	2.80	3.90	0.60	0.60	0.30	<9.3	<10.3	1.30	<0.10	<0.10	<0.10	0.20	<0.30	<0.30	0.10
St.dev	0.7	82	31	1.30	0.05	0.036	~0.00	~0.00	~0.00	0.55	0.82	0.16	0.16	0.08	~1.8	~2.0	0.32	~0.00	~0.00	~0.00	0.04	~0.04	~0.04	0.00
Count	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Tab.width cont'd **LIMA LIM, MU, J26, 36F Fårder area, 921215.**

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lrgt Repl. F/M year g mm	NIVA 341 0.10 QCB ppb w.wt	NIVA 341 0.10 OCS ppb w.wt	NIVA 341 0.10 QCB ppb w.wt	NIVA 341 0.10 OCS ppb w.wt
Mean	5.0	301	301	<<0.10
Minim.	4	202	265	<0.10
Maxim.	6	414	346	<0.10
St.dev	0.7	82	31	~0.00
Count	5	5	5	5

Sample.No 01 : Bulk of NIVA nos.:1,2,3,4,5 No.2: Skin with metacercariae of cf. Cryptocotyle lingua and Liver and/or intestinal guts with larvae of Anisakis simplex  
 No.1: Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 02 : Bulk of NIVA nos.:6,7,8,9,10 No.8: Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 03 : Bulk of NIVA nos.:11,12,13,14,15  
 Sample.No 04 : Bulk of NIVA nos.:16,17,18,19,20 No.16: Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 05 : Bulk of NIVA nos.:21,22,23,24,25

Species : LIMA LIM, Limerca, GB: Dab, N: Sandflyndre.  
 Sample.area: J99 Undefined, Tissue : MUSCLE.  
 Locality : 15B Ullerø area, Latitude: 58°03.00N, Longitude: 06°43.00E.  
 Catch,date : 911025, Count: 16, Sample type: Bulked.

. Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lrgt Repl. F/M year g mm no.	Fat		Hg		CB28		CB52		CB101		CB105		CB118		CB138		CB153		CB156		CB180		CB209		CB_Σ7		CB_ΣΣ		DD_Σ4		HCHA		HCHG		HC_Σ2		NIVA																																																																																																																																																													
	g	%	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb																																																																																																																																																							
	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT																																																																																																																																																						
01/ 0 X 2 257 290	21.40	0.60	0.090	<0.05	0.09	0.15	0.36	0.19	0.20	0.10	0.35	0.75	1.18	<0.05	0.25	0.10	0.10	<2.9	<3.1	0.96	0.17	1.13	<0.05	0.10	<0.15	0.12	0.02/ 0 X 2 303 307	20.10	0.90	0.070	0.09	0.13	0.20	0.30	0.18	0.48	1.05	1.42	<0.05	0.25	0.11	1.40	<0.05	0.14	<0.19	0.20	0.30/ 0 X 3 460 356	22.60	1.10	0.150	0.12	0.22	0.57	0.30	0.88	1.49	2.49	0.09	0.41	0.09	0.42	2.69	0.12	0.17	0.29	0.30	Mean	2.3	340	318	21.37	0.87	0.103	<<0.09	0.15	0.36	0.19	0.57	1.10	1.70	<<0.06	0.30	0.10	<<4.3	<<4.6	1.48	0.26	1.74	<<0.07	0.14	<<0.21	0.21	Minim.	2	257	290	20.10	0.60	0.070	<0.05	0.09	0.20	0.10	0.35	0.75	1.18	<0.05	0.25	0.09	<2.9	<3.1	0.96	0.17	1.13	<0.05	0.10	<0.15	0.12	Maxim.	3	460	356	22.60	1.10	0.150	0.12	0.22	0.57	0.30	0.88	1.49	2.49	0.09	0.41	0.11	6.2	6.7	2.27	0.42	2.69	0.12	0.17	0.29	0.30	St.dev	0.6	106	34	1.25	0.25	0.042	~0.04	0.07	0.19	0.10	0.28	0.37	0.70	~0.02	0.09	0.01	~1.7	~1.9	0.70	0.14	0.83	~0.04	0.04	~0.07	0.09	Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Tab.width cont'd LIMA LIM, MU, J99, 15B Ullerø area, 911025.

. Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lrgt Repl. F/M year g mm no.	NIVA		OCS		QCB	
	341	341	ppb	ppb	ppb	ppb
	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT
01/ 0 X 2 257 290	<0.05	0.06	<0.05	0.11	<<0.05	0.08
02/ 0 X 2 303 307	<0.05	0.07	<0.05	0.11	<<0.05	0.06
03/ 0 X 3 460 356	<0.05	0.11	<0.05	0.11	<<0.05	0.11
Mean	2.3	340	318	<<0.05	0.08	3
Minim.	2	257	290	<0.05	0.06	3
Maxim.	3	460	356	<0.05	0.11	3
St.dev	0.6	106	34	~0.00	0.03	3
Count	3	3	3	3	3	3

Sample.No 01 : Bulk of NIVA nos.:1,2,3,4,5  
 Sample.No 02 : Bulk of NIVA nos.:6,7,8,9,10,11  
 Sample.No 03 : Bulk of NIVA nos.:12,13,14,15,16

Species : **LIMA LIM**, Limanda limanda, GB: Dab, N: Sandfl Lyndre.  
 Sample.area : **J99 Undefined**, Tissue : **MUSCLE**.  
 Locality : **Børøyfjorden**, Latitude: 59°43.00N, Longitude: 05°21.00E.  
 Catch.date : **901021**, Count: **5**, Sample type: **Bulked**.  
 Comment : Caught 1021-1027. Three larger fish prepared but not analyzed.

Analytical Lab. :	Analysis Code. :	Detection Limit :	Samp/ Sex Age Wght Lrgt	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA			
				310	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341
Repl. F/M year g mm	Dry %	Fat %	Hg ppm	CB28	CB52	CB101	CB118	CB138	CB153	CB180	CB209	CB 17	CB 17	DOEPP	DOEPP	DOEPP	DOEPP	DOEPP	DOEPP	DOEPP	DOEPP	DOEPP	DOEPP		
				ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb		
01/0 H 3	22.90	0.60	0.070	0.05	0.05	0.11	0.40	0.66	1.06	0.29	0.06	2.6	1.16	1.16	0.21	1.16	0.92	1.16	0.21	0.25	0.25	0.46	0.46	0.12	<0.05
02/0 H 3	22.90	0.60	0.100	0.05	0.06	0.14	0.28	0.44	0.65	0.17	<0.05	1.8	0.92	0.92	0.23	0.92	miss	0.92	0.23	0.26	0.26	0.49	0.49	0.14	<0.05
03/0 H 3	22.60	0.60	0.130	<0.05	0.06	0.12	0.25	0.39	0.59	0.15	<0.05	<1.6	0.84	0.84	0.21	0.84	miss	0.84	0.21	0.25	0.25	0.46	0.46	0.12	<0.05
04/0 H 4	22.00	0.60	0.160	<0.05	0.05	0.15	0.35	0.50	0.70	0.19	<0.05	<2.0	1.10	1.10	0.19	1.10	miss	1.10	0.19	0.21	0.21	0.40	0.40	0.11	<0.05
05/0 H 3	21.80	0.90	0.190	<0.05	0.10	0.33	0.57	0.90	1.23	0.35	<0.05	<3.5	1.65	1.65	0.28	1.65	miss	1.65	0.28	0.35	0.35	0.63	0.63	0.18	<0.05
Mean	22.44	0.66	0.130	<<0.05	0.06	0.17	0.37	0.58	0.85	0.23	<<0.05	<<2.3	1.13	1.13	0.22	1.13	miss	1.13	0.22	0.26	0.26	0.49	0.49	0.13	<<0.05
Minim.	21.80	0.60	0.070	<0.05	0.05	0.11	0.25	0.39	0.59	0.15	<0.05	<1.6	0.84	0.84	0.19	0.84	miss	0.84	0.19	0.21	0.21	0.40	0.40	0.11	<0.05
Maxim.	22.90	0.90	0.190	0.05	0.10	0.33	0.57	0.90	1.23	0.35	0.06	<3.5	1.65	1.65	0.28	1.65	miss	1.65	0.28	0.35	0.35	0.63	0.63	0.18	<0.05
St.dev	0.4	0.51	0.13	0.047	0.00	0.09	0.13	0.21	0.28	0.09	0.00	0.8	0.32	0.32	0.03	0.32	miss	0.32	0.03	0.05	0.05	0.09	0.09	0.03	0.00
Count	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	miss	5	5	5	5	5	5	5	5

miss(5)  
 ! Missing value.  
 Sample.No 01 : NIVA no.15,18,22,21,09. All specimens except no. 09 liver/guts with Anasakis larvae.  
 Sample.No 02 : NIVA no.19,16,17,28,04. All specimens except no. 19 liver/guts with Anasakis larvae.  
 Sample.No 03 : NIVA no.05,11,06,07,12. All specimens except no. 05 liver/guts with Anasakis larvae.  
 Sample.No 04 : NIVA no.20,27,05,13,14. All specimens except nos.05 and 14 liver/guts with Anasakis larvae. Specimen no. 06 liver with necrotic cysts or tumours.  
 Sample.No 05 : NIVA no.01,02,26,24,25. All specimens except no 02 liver/guts with Anasakis larvae. Specimen nos. 13 and 14 lesions on jaw, fin or tissue.

Species : **LIMA LIM**, Limanda limanda, GB: Dab, N: Sandfl Lyndre.  
 Sample.area : **J99 Undefined**, Tissue : **MUSCLE**.  
 Locality : **Børøyfjorden**, Latitude: 59°43.00N, Longitude: 05°21.00E.  
 Catch.date : **910901**, Count: **5**, Sample type: **Bulked**.

Analytical Lab. :	Analysis Code. :	Detection Limit :	Samp/ Sex Age Wght Lrgt	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA			
				310	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341
Repl. F/M year g mm	Dry %	Fat %	Hg ppm	CB28	CB52	CB101	CB105	CB118	CB138	CB153	CB180	CB209	CB 17	CB 17	DOEPP	DOEPP	DOEPP	DOEPP	DOEPP	DOEPP	DOEPP	DOEPP	DOEPP		
				ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb		
01/0 X	19.40	0.80	0.040	0.10	0.10	0.20	0.20	0.60	1.00	1.70	0.10	0.40	<0.10	4.1	4.1	1.50	2.00	4.5	4.5	0.20	1.70	1.70	<0.10	0.10	0.10
02/0 X	20.60	0.80	0.040	0.10	0.10	0.40	0.20	0.60	1.00	1.60	<0.10	0.40	<0.10	4.2	4.2	1.50	2.50	4.5	4.5	0.30	1.80	1.80	<0.10	0.20	0.30
03/0 X	18.70	0.90	0.080	0.10	0.10	0.40	0.20	0.70	1.20	2.00	0.10	0.50	<0.10	5.0	5.0	2.00	5.00	5.4	5.4	0.20	2.50	2.50	<0.10	0.20	0.20
04/0 X	18.80	1.10	0.110	0.20	0.20	0.80	0.60	2.10	3.10	5.70	0.20	1.10	14.1	13.2	4.90	4.90	14.1	14.1	0.30	6.40	6.40	<0.10	0.30	<0.40	
05/0 X	20.60	0.90	0.210	0.10	0.20	0.70	0.30	1.20	1.90	3.00	0.10	0.70	8.3	7.8	3.40	3.40	8.3	8.3	0.20	4.60	4.60	<0.10	0.10	0.20	
Mean	19.62	0.90	0.096	0.12	0.14	0.50	0.30	1.04	1.64	2.80	<0.12	0.62	<<7.4	6.9	6.9	2.66	2.66	7.4	7.4	0.74	3.40	3.40	<<0.10	0.18	<0.28
Minim.	18.70	0.80	0.040	0.10	0.10	0.20	0.20	0.60	1.00	1.60	<0.10	0.40	<0.10	4.1	4.1	1.50	2.00	4.5	4.5	0.20	1.70	1.70	<0.10	0.20	0.30
Maxim.	20.60	1.10	0.210	0.20	0.20	0.80	0.60	2.10	3.10	5.70	0.20	1.10	13.2	13.2	4.90	4.90	14.1	14.1	0.30	6.40	6.40	<0.10	0.30	<0.40	
St.dev	0.93	0.12	0.070	0.04	0.05	0.24	0.17	0.64	0.90	1.71	0.04	0.29	0.00	3.8	3.8	1.47	1.47	4.1	4.1	0.58	2.04	2.04	0.00	0.08	0.08
Count	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

miss(5)  
 ! Missing value.





Tab. width cont'd LIMA LIM, MU, J99, 22F Børøyfjorden, 921215.

Analytical Lab. :		NIVA	NIVA
Analysis Code. :		341	341
Detection Limit. :		0.10	0.10
Samp/	Sex Age Wght Ingt	QCB	OCS
Repl. F/M year	g mm	ppb	ppb
no.		w.wt	w.wt
01/ 0	X 5 302 290	<0.10	<0.10
02/ 0	X 4 353 317	<0.10	<0.10
03/ 0	X 6 485 335	<0.10	<0.10
04/ 0	F 7 739 380	<0.10	0.10
Mean	5.5 470 331	<<0.10	<<0.10
Minim.	4 302 290	<0.10	<0.10
Maxim.	7 739 380	<0.10	0.10
St.dev	1.3 195 38	~0.00	~0.00
Count	4 4 4	4	4

Sample.No 01 : Bulk of NIVA nos.:1,2,3,4,5 No.1: Liver and/or intestinal guts with larvae of Anisakis si No.3: Gills with Lernaeocera copepods and Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 02 : Bulk of NIVA nos.:6,7,8,9,10 Nos.6,8,9&10: Liver and/or intestinal guts with larvae of Anisakis simplex No.8: Skin with metacercariae of cf. Cryptocotyle lingua  
 Sample.No 03 : Bulk of NIVA nos.:11,12,13,14 Nos 12&14: Liver and/or intestinal guts with larvae of Anisakis simplex  
 Sample.No 04 : Bulk of NIVA nos.:15,16,17,18 Nos 15 & 17: Liver and/or intestinal guts with larvae of Anisakis simplex Nos 16&18: Skin with metacercariae of cf. Cryptocotyle lingua and Muscle with signs of inner bleeding

Species : **MELA ARG**, *Melanogrammus aeglefinus*, CB: Haddock, N: Hyse.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : LIVER.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **861118**, Count: 13, Sample type: **Homogenate**.

Analytical Lab. :	Analysis Code. :	Detection Limit. :	Samp/	Sex Age Wght Ingt	Repl. F/M year	g mm	no.	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA	
								312	311	312	311	510	510	510	510	510	510	510	510	510	510	510	510
								0.030	0.150	0.150	0.150	0.040	0.040	20.00	40.00	40.00	40.00	30.00	30.00	30.00	30.00	30.00	30.00
								Fat	%	Fat	%	PCB	ppm	DDEPP	ppb	DD	Σ4	HCHG	HC	Σ2	HCB	EPOCL	
								Dry	%	Dry	%	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
								Weight	g	Weight	g	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	
01/ 1	H 2	775	429					26.6	70.86	65.00	0.005	4.020	0.140	10.50	0.290	40.00	40.00	40.00	40.00	60.00	60.00	20.00	
01/ 2								26.6	70.86	65.00					0.390	40.00	50.00	90.00	60.00	60.00	20.00	1.900	
Mean	2.0	775	429					26.6	70.86	65.00	0.005	4.020	0.140	10.50	0.340	40.00	45.00	85.00	60.00	60.00	20.00	2.350	
Minim.	2	775	429					26.6	70.86	65.00	0.005	4.020	0.140	10.50	0.340	40.00	45.00	85.00	60.00	60.00	20.00	2.350	
Maxim.	2	775	429					26.6	70.86	65.00	0.005	4.020	0.140	10.50	0.340	40.00	45.00	85.00	60.00	60.00	20.00	2.350	
St.dev																							
Count	1	1	1					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Sample.No 01 : Individual length, weight and age determinations available. The following comments applied to all 13 specimens: Skin with metacercari of cf. Cryptocotyle lingua. Internal organs with signs of decomposition.  
 LIVER : Bulk Liver weight data: n=12 (out of 13), min.=23.0, max.=38.3 - mean=28.8, sd.=5.3. Dry weight reanalysis = 70.73%. Ext. Lipid reanalysis = 63.2%.

Species : **MELA AEG**, *Melanogrammus aeglefinus*, GB: Haddock, N: Hyse.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **LIVER**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **871020**, Count: 11, Sample type: **Homogenate**.

Analytical Lab. :		NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NACE	NACE	NACE	NACE	NACE	NACE	
Analysis Code. :		312	311	312	311	510	510	510	510	510	510	510	510	510	
Detection Limit :		0.030	0.150	0.150	0.150	0.040	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	
Samp/	Sex	Age	Wght	Lngt											
Repl.	F/M	year	g	mm											
01/ 1	X	2	857	433	2.150	<.200	19.50	0.300	50.00	60.00	110.00	40.00	40.00	<40.00	<0.800
01/ 2					8.170	<.200	27.60								
Mean	2.0	857	433		5.160	<.200	23.55	0.300	50.00	60.00	110.00	40.00	40.00	<40.00	<0.800
Minim.	2	857	433		5.160	<.200	23.55	0.300	50.00	60.00	110.00	40.00	40.00	<40.00	<0.800
Maxim.	2	857	433		5.160	<.200	23.55	0.300	50.00	60.00	110.00	40.00	40.00	<40.00	<0.800
St.dev															
Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Sample.No 01 : Skin with metacercari of cf. *Cryptocotyle lingua* on all but one fish.  
 LIVER : homogenate of 11 fish livers: min.=16.4g, max.=50.9g, mean=33.5g, sd=9.14g. Liver infested with nematodes.

Species : **MELA AEG**, *Melanogrammus aeglefinus*, GB: Haddock, N: Hyse.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **LIVER**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **881117**, Count: 4, Sample type: **Homogenate**.

Analytical Lab. :		NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NACE	NACE	NACE	NACE	NACE	NACE	
Analysis Code. :		312	311	312	311	510	510	510	510	510	510	510	510	510	
Detection Limit :		0.030	0.150	0.150	0.150	0.040	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	
Samp/	Sex	Age	Wght	Lngt											
Repl.	F/M	year	g	mm											
01/ 0	X	4	828	451	2.710	<.090	15.10	0.590	<40.00	<40.00	<40.00	<40.00	<40.00	<40.00	7.670

Sample.No 01 : Bulk of spec.no. 1-4

Species : **MELA AEG**, *Melanogrammus aeglefinus*, GB: Haddock, N: Hyse.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **861118**, Count: 13, Sample type: **Homogenate**.

Analytical Lab. :		NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NACE	NACE	NACE	NACE	NACE	NACE
Analysis Code. :		310	0.010	0.020	0.010	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Samp/	Sex	Age	Wght	Lngt										
Repl.	F/M	year	g	mm										
01/ 1	H	2	775	429	0.100	<.020								
01/ 2														
Mean	2.0	775	429		0.100	<.020								
Minim.	2	775	429		0.100	<.020								
Maxim.	2	775	429		0.100	<.020								
St.dev														
Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Sample.No 01 : Individual length, weight and age determinations available. The following comments applied to all 13 specimens: Skin with metacercari of cf. *Cryptocotyle lingua*. Internal organs with signs of decomposition.  
 MUSCLE : Dry weight reanalysis = 22.11%

Species : **MELA AEG**, *Melanogrammus aeglefinus*, GB: Haddock, N: Hyse.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **871020**, Count: 11, Sample type: **Homogenate**.

Analytical Lab. :		NIVA	NACE
Analysis Code :		310	511
Detection Limit :		0.010	0.020
Samp/ Sex Age Wght Ingt	Dry %	Hg	PCB
Repl. F/M year g mm		ppm	ppm
no.		d.wt	w.wt
01/ 0 X 2 857 433	20.50	0.10	0.370 <0.020

Sample.No 01 : Skin with metacercari of cf. *Cryptocotyle lingua* on all but one fish.  
 MUSCLE : homogenate of 11 fish filets (part) : min.=21.8g, max.=51.9, mean=40.2g, sd.=10.0g. 0442.20 g tissue used in analysis.

Species : **MELA AEG**, *Melanogrammus aeglefinus*, GB: Haddock, N: Hyse.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **881117**, Count: 4, Sample type: **Homogenate**.

Analytical Lab. :		NIVA	NACE
Analysis Code :		310	511
Detection Limit :		0.010	0.020
Samp/ Sex Age Wght Ingt	Dry %	Hg	PCB
Repl. F/M year g mm		ppm	ppm
no.		d.wt	w.wt
01/ 0 X 4 828 451	22.60	0.20	0.060 <0.020

Sample.No 01 : Bulk of spec.no. 1-4

Species : **MERL MNG**, *Merlangus merlangus*, GB: Whiting, N: Hvitting.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **LIVER**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **871020**, Count: 5, Sample type: **Homogenate**.

Analytical Lab. :		NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NACE	NACE	NACE	Σ (*)	Σ (*)	NACE	NACE
Analysis Code :		312	311	312	311	312	311	510	510	510	!	!	510	510
Detection Limit :		0.030	0.150	0.150	0.150	0.150	0.150	40.00	40.00	40.00	!	!	40.00	40.00
Samp/ Sex Age Wght Ingt	Weight g	Fat %	Dry %	Cu	Pb	Zn	PCB	DDEPP	DDTTP	DD	Σ 4	HC	HCHG	HC
Repl. F/M year g mm		%	%	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
no.		d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 1 X 1 492 380	22.7	78.39	60.20	7.810	<.180	32.80	0.440	120.00	340.00	460.00	<40.00	<40.00	<40.00	<40.00
01/ 2	22.7	78.39	60.20	8.820	<.180	31.60	.	.	.	.	.	.	.	.
Mean	22.7	78.39	60.20	8.315	<.180	32.20	0.440	120.00	340.00	460.00	<40.00	<40.00	<40.00	<40.00
Minimum	1	492	380	8.315	<.180	32.20	0.440	120.00	340.00	460.00	<40.00	<40.00	<40.00	<40.00
Maximum	1	492	380	8.315	<.180	32.20	0.440	120.00	340.00	460.00	<40.00	<40.00	<40.00	<40.00
St.dev														
Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Sample.No 01 :

LIVER : homogenate of 5 fish livers: min.=14.0g, max.=33.0g, mean=22.6g, sd=7.8g.

Species : **MERL MNG**, Merlangus merlangus, GB: Whiting, N: Hvitting.  
 Sample area: **J65 Orkdalsfjorden**, Tissue : **LIVER**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch, date : **881117**, Count: 6, Sample type: **Homogenate**.

Analytical Lab. :	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NACE	NACE	Σ (*)	NACE	Σ (*)	NACE	NACE
Analysis Code. :	312	311	312	311	510	510	510	510	!	510	!	510	510
Detection Limit :	0.030	0.150	0.150	0.040	40.00	40.00	40.00	40.00	!	40.00	!	40.00	0.800
Samp/ Sex Age Wght Lngt	<b>Fat</b>	<b>Cd</b>	<b>Cu</b>	<b>Pb</b>	<b>P CB</b>	<b>DDEPP</b>	<b>DDTTP</b>	<b>DD</b>	<b>Σ4</b>	<b>HCHG</b>	<b>HC</b>	<b>HC</b>	<b>EPOCL</b>
Repl. F/M year g mm	%	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm
no.	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 X 1 404 352	76.80	61.50	0.070	5.030	0.100	23.90	1.090	140.00	140.00	280.00	<40.00	<40.00	<40.00

miss(1) ! Missing value.  
 Sample.No 01 : Bulk of spec.no. 1-6

Species : **MERL MNG**, Merlangus merlangus, GB: Whiting, N: Hvitting.  
 Sample area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch, date : **871020**, Count: 5, Sample type: **Homogenate**.

Analytical Lab. :	NIVA	NACE
Analysis Code. :	310	511
Detection Limit :	0.010	0.020
Samp/ Sex Age Wght Lngt	<b>Fat</b>	<b>P CB</b>
Repl. F/M year g mm	%	ppm
no.	d.wt	w.wt
01/ 1 X 1 492 380	22.10	0.30
01/ 2	22.10	0.30
Mean	1.0	492
Minim.	1	492
Maxim.	1	492
St.dev	1	1
Count	1	1

Sample.No 01 :

**MUSCLE** : homogenate of 5 fish filets (part) : min.=21.4g, max.=42.9g, mean=31.6g, sd=7.8g. 157.90 g tissue used in analysis.

Species : **MERL MNG**, Merlangus merlangus, GB: Whiting, N: Hvitting.  
 Sample area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch, date : **881117**, Count: 6, Sample type: **Homogenate**.

Analytical Lab. :	NIVA	NACE
Analysis Code. :	310	511
Detection Limit :	0.010	0.020
Samp/ Sex Age Wght Lngt	<b>Fat</b>	<b>P CB</b>
Repl. F/M year g mm	%	ppm
no.	d.wt	w.wt
01/ 0 X 1 404 352	21.50	0.20

Sample.No 01 : Bulk of spec.no. 1-6

Species : **MICR KIT**, Microstomus kitt, GB: Lemon sole, N: Lomre.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **LIVER**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **881117**, Count: 2, Sample type: **Homogenate**.

Analytical Lab. :	NIVA	NIVA	NIVA	NIVA	NACE	NACE	NACE	Σ(*)	NACE	Σ(*)	NACE	NACE
Analysis Code. :	311	312	311	311	510	510	510	!	510	!	510	610
Detection Limit :	0.030	0.150	0.150	3.00	0.040	40.00	40.00	!	40.00	!	40.00	0.800
Samp/ Sex Age Wght Lngt	<b>Cd</b>	<b>Pb</b>	<b>Cu</b>	<b>Zn</b>	<b>PCB</b>	<b>DDEPP</b>	<b>DDTTPP</b>	<b>DD Σ4</b>	<b>HCHG</b>	<b>HC Σ2</b>	<b>HCB</b>	<b>EPOCL</b>
Repl. F/M year g mm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppm
	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 X 5 372 310	36.00	14.20	0.490	56.000	0.340	157.00	0.250	<40.00	<40.00	<40.00	<40.00	2.500

Sample.No 01 : Bulk of spec.no. 1-2

Species : **MICR KIT**, Microstomus kitt, GB: Lemon sole, N: Lomre.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **881117**, Count: 2, Sample type: **Homogenate**.

Analytical Lab. :	NIVA	NACE
Analysis Code. :	310	511
Detection Limit :	0.010	0.020
Samp/ Sex Age Wght Lngt	<b>Hg</b>	<b>PCB</b>
Repl. F/M year g mm	ppm	ppm
	d.wt	w.wt
01/ 0 X 5 372 310	23.00	0.20
	0.050	<0.020

Sample.No 01 : Bulk of spec.no. 1-2

Species : **PLAT FLE**, Platicthys flesus, GB: Flounder, N: Skrubbe.  
 Sample.area: **J26 Oslofjorden**, Tissue : **LIVER**.  
 Locality : **31B Solbergstrand**, Latitude: 59°36.90N, Longitude: 10°39.40E.  
 Catch,date : **811223**, Count: 8, Sample type: **Individual**.

Analytical Lab. :	SIIF	SIIF
Analysis Code. :	130	110
Detection Limit :	0.010	0.010
Samp/ Sex Age Wght Lngt	<b>Fat</b>	<b>PCB</b>
Repl. F/M year g mm	g	ppm
	g	w.wt
01/ 0 X 4 540 630	12.0	0.342
02/ 0 M 6 780 420	12.0	0.276
03/ 0 F 4 430 330	8.0	0.243
04/ 0 M 4 450 360	6.0	0.196
05/ 0 F 5 405 340	8.0	0.619
06/ 0 X 4 340 300	5.0	0.215
07/ 0 X 4 395 330	4.0	0.121
08/ 0 X 4 415 340	4.0	0.480
Mean	7.6	1.068
Minim.	4.0	0.121
Maxim.	12.0	2.300
St.dev	3.0	0.748
Count	8	8

Species : PIAT FLE, Platichthys flesus, GB: Flounder, N: Skrubbe.  
 Sample.area: J26 Oslofjorden, Tissue : LIVER.  
 Locality : 33B Sande (east side), Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : 831229, Count: 25, Sample type: Individual.

Samp/ Repl. no.	Sex	Age	Wght	Ingt	mm	Dry %		Fat %		VETN		VETN		VETN		Σ (*)		VETN	
						ppm	w.wt	ppm	w.wt	miss	0.010	PCB	DDEPP	DD_Σ4	ppb	w.wt	ppb	w.wt	ppb
01/	0	M	4	140	230	23.10	6.80	miss	0.100	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
02/	0	F	4	280	300	27.10	2.90	0.280	0.140	50.00	50.00	50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
03/	0	M	2	140	250	.	3.00	miss	0.110	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
04/	0	F	2	210	270	26.40	1.70	0.130	0.110	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
05/	0	M	3	140	240	.	2.50	0.170	0.070	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
06/	0	M	3	200	280	.	4.49	0.270	0.100	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
07/	0	F	2	160	250	.	4.49	0.090	0.210	70.00	70.00	70.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
08/	0	M	2	150	260	.	5.80	0.140	0.130	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
09/	0	F	3	200	260	30.30	9.00	0.090	0.310	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
10/	0	F	3	280	290	28.50	6.00	0.130	0.070	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
11/	0	M	3	230	280	.	3.60	0.310	0.080	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
12/	0	M	2	150	250	.	5.80	0.160	0.590	120.00	120.00	120.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
13/	0	F	3	230	260	32.60	3.80	0.070	0.060	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
14/	0	F	3	320	310	32.19	6.40	0.270	0.200	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
15/	0	F	3	200	270	.	4.70	0.220	0.390	70.00	70.00	70.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
16/	0	M	3	200	280	.	7.20	0.340	0.100	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
17/	0	F	3	130	240	.	4.49	0.130	<0.050	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
18/	0	F	2	150	240	30.30	5.40	0.060	0.140	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
19/	0	M	3	280	320	34.00	14.00	0.290	0.160	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
20/	0	F	3	410	340	29.00	10.00	0.190	0.170	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
21/	0	F	2	170	250	.	5.00	0.280	0.100	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
22/	0	F	3	290	290	.	11.40	0.700	0.170	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
23/	0	F	2	270	290	27.10	4.00	0.260	0.080	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
24/	0	M	2	170	260	.	6.40	0.170	0.140	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
25/	0	F	4	220	260	27.90	13.20	0.290	0.690	110.00	110.00	110.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
Mean	2.8	213	271			29.04	6.08	0.219	<0.179	<56.80	<56.80	<56.80	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
Minim.	2	130	230			23.10	1.70	0.060	<0.050	<50.00	<50.00	<50.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
Maxim.	4	410	340			34.00	14.00	0.700	0.690	120.00	120.00	120.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
St.dev	0.7	69	27			3.04	3.20	0.135	~0.159	~18.42	~18.42	~18.42	~18.42	~18.42	~18.42	~18.42	~18.42	~18.42	~18.42
Count	25	25	25			12	25	23	25	25	25	25	25	25	25	25	25	25	25

miss (2) ! Missing value.

Sample.No 04 : The gut wall was densely populated by small whit protuberances, the unicellular parasite Glugea stephani. In the gut there was also the round-worm Cucullanus heterochrous.

Sample.No 06 : Lymfocystis at parts of the ventral side.

Sample.No 13 : Some haemorrhages in the liver probably caused under catch.

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J26 Oslofjorden**, Tissue : **LIVER**.  
 Locality : **33B Sande (east side)**, Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : **851113**, Count: 25, Sample type: **Homogenate**.

Analytical Lab. :	VEIN	VEIN	VEIN	VEIN	Σ (*)	VEIN
Analysis Code. :	230	210	210	210	!	210
Detection Limit :	0.010	0.050	50.00	!	!	10.00
Samp/ Sex Age Wght Ingt	<b>Cd</b>	<b>PCB</b>	<b>DDEPP</b>	<b>DD_Σ4</b>	<b>HCB</b>	<b>HCB</b>
Repl. F/M year g mm	ppm	ppm	ppb	ppb	ppb	ppb
	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
26/ 1 X 177 252	26.7	25.60	8.79	0.200	0.060	<50.00
26/ 2	26.7	25.60	8.79	0.190	0.060	<50.00
Mean	26.7	25.60	8.79	0.195	0.060	<50.00
Minimum	26.7	25.60	8.79	0.195	0.060	<50.00
Maximum	26.7	25.60	8.79	0.195	0.060	<50.00
St.dev	.	.	.	.	.	.
Count	1	1	1	1	1	1

Sample.No 26 : Bulk livers of fish 01-25: min.=1.1g, max.=6.3g, sd.=1.21g.  
 LIVER : Dry weight reanalysis = 25.5%. Ext. lipid reanalysis = 4.70% (half of first analysis!).

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J26 Oslofjorden**, Tissue : **LIVER**.  
 Locality : **33B Sande (east side)**, Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : **861119**, Count: 22, Sample type: **Homogenate**.

Analytical Lab. :	NIVA	NIVA	NIVA	NIVA	NIVA	NACE	Σ (*)	NACE	Σ (*)	NACE	NACE
Analysis Code. :	312	311	312	311	311	510	!	510	!	510	510
Detection Limit :	0.030	0.150	0.150	3.00	0.040	20.00	!	30.00	!	10.00	0.800
Samp/ Sex Age Wght Ingt	<b>Cd</b>	<b>Cu</b>	<b>Pb</b>	<b>Zn</b>	<b>PCB</b>	<b>DDEPP</b>	<b>DD_Σ4</b>	<b>HCHG</b>	<b>HC_Σ2</b>	<b>HCB</b>	<b>EPOCL</b>
Repl. F/M year g mm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppm
	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 1 H 3 172 244	3.3	25.10	9.90	0.700	86.600	0.910	210.00	<0.040	<20.00	50.00	30.00
01/ 2	3.3	25.10	9.90	.	.	.	0.160	<20.00	<40.00	<30.00	10.00
Mean	3.3	25.10	9.90	0.700	86.600	0.910	210.00	<20.00	<40.00	50.00	20.00
Minimum	3.3	25.10	9.90	0.700	86.600	0.910	210.00	<20.00	<40.00	<40.00	20.00
Maximum	3.3	25.10	9.90	0.700	86.600	0.910	210.00	<20.00	<40.00	<40.00	20.00
St.dev	.	.	.	.	.	.	.	<20.00	<40.00	<40.00	20.00
Count	1	1	1	1	1	1	1	1	1	1	1

Sample.No 01 : Contaminant determinations on bulk samples (22 fish), Ventral lacerations in two of the 22 specimens. Individual length, weight and age determinations available.

LIVER : Bulk liver weight data: n=22, min.=0.7, max.=21.6, sd.=4.31 mean=3.33 (calculated by ICES). Dry weight reanalysis = 25.06% Ext. lipid reanalysis = 7.7%



Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J26 Oslofjorden**, Tissue : **LIVER**.  
 Locality : **33B Sande (east side)**, Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : **871110**, Count: 26, Sample type: **Bulked**.

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lngt Repl. F/M year g mm no.	NIVA 311 0.030 0.150 0.150 0.040		NIVA 312 0.150 0.150 0.040 0.040		NIVA 311 510 510 40.00 40.00		NIVA 312 510 510 40.00 40.00		NACE Σ(*) HCHG HC Σ2 ppb ppb ppb w.wt		NACE Σ(*) HCHG HC Σ2 ppb ppb ppb w.wt	
	Mean Weight g	Fat %	Cd ppm d.wt	Pb ppm d.wt	Cu ppm d.wt	Zn ppm d.wt	PCB ppm d.wt	DDEPP ppb w.wt	DDTTPP ppb w.wt	NACE w.wt	Σ(*) w.wt	NACE w.wt
01/ 1 X 2 167 255	6.7	22.00	4.70	1.170	166.000	2.090	408.00	0.050	<40.00	<40.00	<40.00	<40.00
01/ 2	6.7	22.00	4.70	1.110	152.000	1.890	420.00	0.050	<40.00	<40.00	<40.00	<40.00
Mean	6.7	22.00	4.70	1.140	159.000	1.990	414.00	0.050	<40.00	<40.00	<40.00	<40.00
Minim.	6.7	22.00	4.70	1.140	159.000	1.990	414.00	0.050	<40.00	<40.00	<40.00	<40.00
Maxim.	6.7	22.00	4.70	1.140	159.000	1.990	414.00	0.050	<40.00	<40.00	<40.00	<40.00
St.dev Count	1	1	1	1	1	1	1	1	1	1	1	1

Sample.No 01 : ISkin with lesions.on four specimens. Parasites on tail-root of one specimen One specimen without otholith.  
 LIVER : homogenate of 26 fish livers: min.=1.1g, max.=7.1g, mean=2.89g, sd=1.53g

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J26 Oslofjorden**, Tissue : **LIVER**.  
 Locality : **33B Sande (east side)**, Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : **871110**, Count: 26, Sample type: **Homogenate**.

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lngt Repl. F/M year g mm no.	NIVA 311 0.030 0.150 0.150 0.040		NIVA 312 0.150 0.150 0.040 0.040		NIVA 311 510 510 40.00 40.00		NIVA 312 510 510 40.00 40.00		NACE Σ(*) HCHG HC Σ2 ppb ppb ppb w.wt		NACE Σ(*) HCHG HC Σ2 ppb ppb ppb w.wt	
	Mean Weight g	Fat %	Cd ppm d.wt	Pb ppm d.wt	Cu ppm d.wt	Zn ppm d.wt	PCB ppm d.wt	DDEPP ppb w.wt	DDTTPP ppb w.wt	NACE w.wt	Σ(*) w.wt	NACE w.wt
01/ 1 X 2 167 255	6.7	22.00	4.70	1.170	166.000	2.090	408.00	0.050	<40.00	<40.00	<40.00	<40.00
01/ 2	6.7	22.00	4.70	1.110	152.000	1.890	420.00	0.050	<40.00	<40.00	<40.00	<40.00
Mean	6.7	22.00	4.70	1.140	159.000	1.990	414.00	0.050	<40.00	<40.00	<40.00	<40.00
Minim.	6.7	22.00	4.70	1.140	159.000	1.990	414.00	0.050	<40.00	<40.00	<40.00	<40.00
Maxim.	6.7	22.00	4.70	1.140	159.000	1.990	414.00	0.050	<40.00	<40.00	<40.00	<40.00
St.dev Count	1	1	1	1	1	1	1	1	1	1	1	1

Sample.No 01 : Skin with lesions.on four specimens. Parasites on tail-root of one specimen One specimen without otholith.  
 LIVER : homogenate of 26 fish livers: min.=1.1g, max.=7.1g, mean=2.89g, sd=1.53g

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J26 Oslofjorden**, Tissue : **LIVER**.  
 Locality : **33B Sande (east side)**, Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : **881001**, Count: 25, Sample type: **Homogenate**.

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lngt Repl. F/M year g mm no.	NIVA 311 0.030 0.150 0.150 0.040		NIVA 312 0.150 0.150 0.040 0.040		NIVA 311 510 510 40.00 40.00		NIVA 312 510 510 40.00 40.00		NACE Σ(*) HCHG HC Σ2 ppb ppb ppb w.wt		NACE Σ(*) HCHG HC Σ2 ppb ppb ppb w.wt	
	Mean Dry %	Fat %	Cd ppm d.wt	Pb ppm d.wt	Cu ppm d.wt	Zn ppm d.wt	PCB ppm d.wt	DDEPP ppb w.wt	DDTTPP ppb w.wt	NACE w.wt	Σ(*) w.wt	NACE w.wt
01/ 0 X 4 178 250	25.40	8.60	0.240	64.000	0.340	215.00	0.280	<40.00	<40.00	<40.00	<40.00	<40.00

Sample.No 01 : Bulk of spec.no. 1-25



Tab.width cont'd PLAT FLE, LI, J26, 33B Sande (east side), 901113.

Samp/ Repl. no.	Sex	Age	Wght	Lrgt	HC	Σ22	HC	QCB	OC	S	EPOC	LI	NIVA	NIVA	Σ(*)	LI	NIVA	NIVA	Σ(*)		
			g	mm	ppb	ppb	ppb	ppb	ppb	ppm	ppm	ppm	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt		
01/0	H	4	425	350	<1.00	<1.00	<1.00	<1.00	<1.00	2.560	1.414	6.60	1.20	<<1.00	<<1.00	<1.00	<1.00	<1.00	2.560	1.414	6.60
02/0	H	5	401	334	<1.00	<1.00	<1.00	<1.00	<1.00	0.280	0.280	4.00	1.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.280	0.280	4.00
03/0	H	4	354	319	<1.00	<1.00	<1.00	<1.00	<1.00	0.820	2.620	12.00	2.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.820	2.620	12.00
04/0	H	4	313	307	<1.00	<1.00	<1.00	<1.00	<1.00	2.620	1.095	3.29	0.45	~0.00	~0.00	~0.00	~0.00	~0.00	2.620	1.095	3.29
05/0	H	4	255	294	<1.00	<1.00	<1.00	<1.00	<1.00	0.790	1.570	6.60	1.20	<<1.00	<<1.00	<<1.00	<<1.00	<<1.00	0.790	1.570	6.60
Mean	4.2	350	321							1.414	6.60										
Minim.	4	255	294							0.280	4.00										
Maxim.	5	425	350							2.620	12.00										
St.dev	0.4	68	22							1.095	3.29										
Count	5	5	5							5	5										

Sample.No 01 : NIVA no. 01,02,03,04,05. Specimen no. 02 lesions on jaw, fin and or tissue.

Sample.No 02 : NIVA no. 06,07,08,09,10.

Sample.No 03 : NIVA no. 11,12,13,14,15.

Sample.No 04 : NIVA no. 16,17,18,19,20. Specimen no. 20 lesions on jaw, fin and or tissue.

Sample.No 05 : NIVA no. 21,22,23,24,25. Specimen no. 24 lesions on jaw, fin and or tissue.

LIVER : Specimen no. 23 liver with necrotic cysts or tumours. Specimen no. 25 liver with necrotic areas or discoloured; partly black.

Species : PLAT FLE, Platichthys flesus, 08: Flourder, N: Skrubbe.

Sample.area : J26 Oslofjorden, Tissue : LIVER.

Locality : 33B Sande (east side), Latitude: 59°31.70N, Longitude: 10°21.00E.

Catch,date : 911023, Count: 23, Sample type: Bulked.

Samp/ Repl. no.	Sex	Age	Wght	Lrgt	Dry	%	Fat	%	Li	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	Σ(*)	Li	NIVA	NIVA	NIVA	NIVA	NIVA	Σ(*)	Li	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	Σ(*)	Li	NIVA	NIVA	NIVA	NIVA	Σ(*)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
			g	mm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
01/0	H	2	145	245	1.7	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	31.1	<31.6	9.10	2.00	11.10	0.70	<0.50	1.70	20.00	3.40	0.188	18.300	0.400	39.40	1.30	1.40	2.20	5.40	8.00	10.00	2.80	<0.50	



Tab.width cont'd PLAT FLE, LI, J26, 33B Sande (east side), 921012.

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lrgt Repl. F/M year g mm no.	NIVA		Σ(*)		NIVA		NIVA		NIVA	
	340	340	!	!	340	340	340	340	340	340
	5.00	5.00	!	!	5.00	5.00	5.00	5.00	5.00	5.00
	HCHA	HCHG	HC	Σ2	HCB	QCB	OCS			
	ppb	ppb	ppb	ppb	ppb	ppb	ppb			
	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT			
01/ 0 X 4 162 239	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
02/ 0 X 5 224 273	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
03/ 0 X 4 250 282	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
04/ 0 X 4 292 297	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
05/ 0 X 4 362 322	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Mean 4.2 258 283	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00	<<5.00
Minim. 4 162 239	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Maxim. 5 362 322	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
St.dev 0.4 75 31	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00
Count 5 5 5	5	5	5	5	5	5	5	5	5	5

Sample.No 01 : Bulk of NIVA nos.:1,2,3,4,5 No.3: poorly developed inner organs No.5: Liver with necrotic areas and/or discoloration

Sample.No 02 : Bulk of NIVA nos.:6,7,8,9,10

Sample.No 03 : Bulk of NIVA nos.:11,12,13,14,15 No.13: Discoloration on ventral side

Sample.No 04 : Bulk of NIVA nos.:16,17,18,19,20 No.17-19: Liver with necrotic areas and/or discoloration

Sample.No 05 : Bulk of NIVA nos.:21,22,23,24,25 No.23&25: Liver with necrotic areas and/or discoloration No.25: poorly developed roe mass

Species : PLAT FLE, Platichthys flesus, GB: Flounder, N: Skrubbe.

Sample.area: J26 Oslofjorden, Tissue : LIVER.

Locality : 33X Sande (west side), Latitude: 59°31.70N, Longitude: 10°20.40E.

Catch,date : 901106, Count: 15, sample type: Bulked.

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lrgt Repl. F/M year g mm no.	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA	
	312	311	312	311	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340
	0.010	0.150	0.050	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Fat	Dry	%	%	Zn	Pb	Cu	Cd																
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT
01/ 0 H 5 178 268	2.4	24.20	4.20	0.214	24.000	0.330	58.40	4.00	2.00	2.00	3.00	12.00	12.00	12.00	17.00	5.00	5.00	17.00	5.00	5.00	6.00	6.00	6.00	6.00
02/ 0 H 3 130 258	1.5	23.30	3.40	0.131	20.900	0.420	57.40	3.00	2.00	2.00	5.00	5.00	5.00	5.00	6.00	2.00	2.00	6.00	2.00	2.00	6.00	6.00	6.00	6.00
03/ 0 H 3 87 208	1.0	21.80	3.10	0.094	25.400	0.290	57.60	2.00	1.00	1.00	3.00	3.00	3.00	4.00	4.00	1.00	1.00	4.00	1.00	1.00	4.00	4.00	4.00	4.00
Mean 3.7 132 238	1.6	23.10	3.57	0.146	23.433	0.347	57.80	3.00	1.67	2.00	6.67	7.00	6.67	7.00	9.00	2.67	2.67	9.00	2.67	2.67	9.00	9.00	9.00	9.00
Minim. 3 87 208	1.0	21.80	3.10	0.094	20.900	0.290	57.40	2.00	1.00	1.00	3.00	3.00	3.00	4.00	4.00	1.00	1.00	4.00	1.00	1.00	4.00	4.00	4.00	4.00
Maxim. 5 178 268	2.4	24.20	4.20	0.214	25.400	0.420	58.40	4.00	2.00	2.00	5.00	5.00	5.00	5.00	6.00	2.00	2.00	6.00	2.00	2.00	6.00	6.00	6.00	6.00
St.dev 1.2 46 30	0.7	1.21	0.57	0.061	2.303	0.067	0.53	1.00	0.58	1.00	4.73	4.36	4.73	4.36	7.00	2.08	2.08	7.00	2.08	2.08	7.00	7.00	7.00	7.00
Count 3 3 3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

miss(3) ! Missing value.

Tab.width cont'd PLAT FLE, LI, J26, 33X Sande (west side), 901106.

Analytical Lab. :		NIVA		NIVA		NIVA								
Analysis Code. :		340		340		340								
Detection Limit :		1.00		2.00		0.040								
Samp/	Sex	Age	Wght	Lngt	HC	Σ2	HC	Σ2	HC	Σ2	HC	Σ2	HC	Σ2
Repl.	F/M	year	g	mm	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt	ppb	w.wt
no.														
01/	0	H	5	178	268	4.00	1.00	<1.00	<1.00	<1.00	1.050	1.050	1.050	1.050
02/	0	H	3	130	238	3.00	1.00	<1.00	<1.00	<1.00	0.880	0.880	0.880	0.880
03/	0	H	3	87	208	3.00	1.00	<1.00	<1.00	<1.00	0.720	0.720	0.720	0.720
Mean	3.7		132	238		3.33	1.00	<<1.00	<<1.00	<<1.00	0.883	0.883	0.883	0.883
Minim.	3		87	208		3.00	1.00	<1.00	<1.00	<1.00	0.720	0.720	0.720	0.720
Maxim.	5		178	268		4.00	1.00	<1.00	<1.00	<1.00	1.050	1.050	1.050	1.050
St.dev	1.2		46	30		0.58	0.00	~0.00	~0.00	~0.00	0.165	0.165	0.165	0.165
Count	3		3	3		3	3	3	3	3	3	3	3	3

Sample.No 01 : NIVA no. 11,12,13,14,15. Specimen no. 11-13 with bacterial fin rot.  
 Sample.No 02 : NIVA no. 16,17,18,19,20. Specimen no. 20 with bacterial fin rot.  
 Sample.No 03 : NIVA no. 21,22,23,24,25. Specimen no. 21 and 25 with bacterial fin rot.

Species : **PLAT FLE**, Platichthys flesus, GB: Flounder, N: Skrubbe.  
 Sample.area: **J63 Sørforjorden**, Tissue : **LIVER**.  
 Locality : **53B Inner Sørforjorden**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **840317**, Count: 22, Sample type: **Individual**.

Analytical Lab. :		FIER					
Analysis Code. :		402					
Detection Limit :		0.001					
Samp/	Sex	Age	Wght	Lngt	Dry	Fat	Cd
Repl.	F/M	year	g	mm	%	%	ppm
no.							w.wt
01/	0	M	2	107	230	17.50	miss
02/	0	M	3	110	260	22.00	miss
03/	0	M	2	120	240	10.00	miss
04/	0	M	2	158	250	16.70	miss
05/	0	F	2	163	260	miss	miss
06/	0	X	174	260	36.80	miss	miss
07/	0	M	3	187	250	28.90	0.870
08/	0	X	189	300	15.80	miss	miss
09/	0	X	2	190	250	18.50	miss
10/	0	M	2	200	250	29.20	0.820
11/	0	M	3	213	270	32.90	miss
12/	0	M	4	219	340	22.20	miss
13/	0	M	4	244	300	23.30	miss
14/	0	F	3	308	300	15.60	0.140
15/	0	X	2	310	330	18.90	1.680
16/	0	M	6	322	350	40.50	0.560
17/	0	M	5	482	400	23.30	3.230
18/	0	F	441	340	25.00	miss	0.500
19/	0	F	3	533	350	26.30	1.100
20/	0	F	550	420	37.50	miss	1.470
21/	0	M	4	552	370	miss	miss
22/	0	M	8	655	470	19.80	0.660
Mean	3.3		292	309	24.04	miss	1.083
Minim.	2		107	230	10.00	miss	0.140
Maxim.	8		655	470	40.50	miss	3.230
St.dev	1.6		167	65	8.16	miss	0.894
Count	18		22	22	20	miss	10

miss(12) : Missing value.

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J63 Sør fjorden**, Tissue : **LIVER**.  
 Locality : **53B Inner Sør fjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **881118**, Count: 21, Sample type: **Homogenate**.

	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NACE	NACE	NACE	Σ (*)	NACE	Σ (*)	NACE	NACE
Analytical Lab. :	312	311	312	311	510	510	510	510	510	510	!	510	!	510	610
Analysis Code. :	0.030	0.150	0.150	3.00	0.040	40.00	40.00	40.00	40.00	40.00	!	40.00	!	40.00	0.800
Detection Limit :	<b>Cd</b>	<b>Cu</b>	<b>Pb</b>	<b>Zn</b>	<b>PCB</b>	<b>DDEPP</b>	<b>DDTTP</b>	<b>DD_Σ4</b>	<b>HCHG</b>	<b>HC_Σ2</b>		<b>HCB</b>		<b>EPOCL</b>	
Sampl. F/M year	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppm
Repl. no.	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 X 5 339 297	31.80	17.50	7.030	44.000	1.300	171.00	1.420	130.00	<40.00	<170.00	<40.00	<40.00	<40.00	<40.00	11.200

Sample.No 01 : Bulk of spec.no. 1-21

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample area: **J63 Sørforjorden**, Tissue : **LIVER**.  
 Locality : **53B Inner Sørforjorden**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch, date : **891228**, Count: 25, Sample type: **Individual**.

Sample no.	Sex	Age	Wght	Lngt	mm	Mean Weight	Dry %	Fat %	NIVA		NIVA		NIVA		
									Cd	Cu	Pb	Zn	Cd	Cu	Pb
Repl.	F/M	year	g	mm		g	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
									d.wt	d.wt	d.wt	d.wt	d.wt	d.wt	d.wt
06/ 0	X	2	94	190		1.0	25.66	.	5.040	30.200	3.560	198.00			
07/ 0	F	2	98	195		1.0	26.68	.	13.700	49.700	3.570	195.00			
08/ 0	F	1	149	220		2.0	24.82	.	3.710	37.100	4.490	219.00			
09/ 0	F	3	132	225		1.0	84.96	.	4.060	7.260	6.490	149.00			
10/ 0	X	3	117	230		1.0	25.08	.	1.430	32.200	3.280	152.00			
11/ 0	F	3	145	230		0.5	30.04	.	12.700	35.100	7.430	180.00			
12/ 0	M	3	140	230		1.0	24.64	.	2.260	22.600	2.830	136.00			
13/ 0	F	5	148	230		2.0	20.88	.	2.920	17.500	2.510	143.00			
14/ 0	F	2	125	235		0.5	21.96	.	22.800	57.100	61.200	269.00			
15/ 0	M	3	170	240		1.0	25.47	.	4.000	44.400	2.480	209.00			
16/ 0	M	4	195	255		1.0	25.68	.	10.900	61.100	1.580	193.00			
17/ 0	F	4	311	260		4.0	32.88	.	5.760	74.000	2.770	211.00			
18/ 0	F	7	231	270		2.0	25.03	.	6.100	69.700	1.500	264.00			
19/ 0	F	3	264	280		2.0	23.98	.	15.500	28.400	6.620	173.00			
20/ 0	M	4	352	300		4.0	30.25	.	3.560	27.700	1.550	138.00			
21/ 0	F	4	418	305		8.0	30.55	.	3.380	18.800	0.870	120.00			
22/ 0	M	4	378	310		4.0	26.48	.	6.850	99.300	10.800	387.00			
23/ 0	F	6	362	320		7.0	25.19	.	3.180	35.800	7.440	226.00			
24/ 0	F	3	342	320		3.0	28.70	.	8.230	18.000	2.490	139.00			
25/ 0	F	2	484	335		10.0	34.79	.	4.710	8.940	1.260	133.00			
26/ 0	F	3	426	340		5.0	29.14	.	6.670	9.500	2.420	125.00			
27/ 0	F	2	448	345		3.0	19.71	.	59.200	48.800	6.930	153.00			
28/ 0	F	4	378	350		1.0	31.03	.	0.030	54.100	0.350	78.40			
29/ 0	F	4	582	355		8.0	33.75	.	2.040	7.790	0.900	65.30			
30/ 0	F	5	796	365		6.0	48.10	.	2.890	55.000	0.350	95.50			
Mean		3.4	291	277		3.2	30.22	.	8.465	38.004	5.827	174.05			
Minim.		1	94	190		0.5	19.71	.	0.030	7.260	0.350	65.30			
Maxim.		7	796	365		10.0	84.96	.	59.200	99.300	61.200	387.00			
St.dev		1.4	175	54		2.7	12.74	.	11.774	23.316	11.841	68.26			
Count		23	25	25		25	25	.	25	25	25	25			

Sample.No 06 : Digranes 15m depth.  
 Sample.No 07 : Apold 12m depth. Uncertain age determination  
 Sample.No 08 : Tyssedal 20m depth. Uncertain age determination  
 Sample.No 09 : Digranes 15m depth. Uncertain age determination  
 Sample.No 10 : Digranes 20m depth. Uncertain age determination  
 Sample.No 11 : Digranes 15m depth. Uncertain age determination  
 Sample.No 12 : Tyssedal 15m depth. Uncertain age determination  
 Sample.No 13 : Tyssedal 20m depth. Uncertain age determination  
 Sample.No 14 : Digranes 15m depth. One otholitt crystallized  
 Sample.No 15 : Digranes 15m depth.  
 Sample.No 16 : Edna 20m depth. Otholitts ruined  
 Sample.No 17 : Digranes 15m depth. One otholitt edge chrysalized  
 Sample.No 18 : Digranes 20m depth.  
 Sample.No 19 : Digranes 15m depth.  
 Sample.No 20 : Digranes 15m depth.  
 Sample.No 21 : Edna 20m depth.  
 Sample.No 22 : Edna 20m depth. Otholitts chrysalized  
 Sample.No 23 : Apold 12m depth. Uncertain age determination  
 Sample.No 24 : Stana 15m depth. One otholitt, Uncertain age determination  
 Sample.No 25 : Digranes 15m depth.  
 Sample.No 26 : Stana 15m depth.  
 Sample.No 27 : Tyssedal 20m depth. Uncertain age determination  
 Sample.No 28 : Apold 12m depth. Uncertain age determination.  
 Sample.No 29 : Digranes 20m depth.  
 Sample.No 30 : Stana 15m depth. Uncertain age determination



Species : **PLAT FLE**, Platichthys flesus, GB: Flounder, N: Skrubbe.  
 Sample.area: **J63 Sør fjorden**, Tissue : **LIVER**.  
 Locality : **53B Inner Sør fjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **891228**, Count: 25, Sample type: **Bulked**.

Analytical Lab. :		NACE	NACE	NACE	NACE	NACE	NACE	NACE	NACE	NACE	NACE	NACE	NACE	NACE								
Analysis Code. :		510	510	510	510	510	510	510	510	510	510	510	510	510								
Detection Limit :		0.020	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00								
Sampl	Sex	Age	Wght	Lrgt																		
Repl.	F/M	year	g	mm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb								
no.					W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT								
01/	0	H	4	118	212	1.980	s100.00	s130.00	s320.00	s220.00	s520.00	s430.00	s80.00	s1800.0	s1800.0	960.00	<20.00	<20.00	<20.00	<20.00	<20.00	10.600
02/	0	H	3	146	233	0.600	s390.00	s470.00	s70.00	s20.00	s1200.0	s130.00	s<20.00	s<1200.0	140.00	2410.00	2550.00	50.00	50.00	50.00	50.00	1.270
03/	0	H	4	267	273	0.330	s170.00	s210.00	s20.00	s30.00	s20.00	s70.00	s20.00	s540.0	20.00	1010.00	1030.00	20.00	20.00	20.00	20.00	5.340
04/	0	H	4	397	318	1.270	s190.00	s170.00	s210.00	s110.00	s330.00	s270.00	s30.00	s1310.0	220.00	1580.00	1800.00	40.00	40.00	40.00	40.00	5.180
05/	0	H	4	526	351	1.090	s60.00	s70.00	s180.00	s100.00	s250.00	s230.00	s20.00	s910.0	210.00	160.00	370.00	40.00	40.00	40.00	40.00	1.510
Mean	3.8			291	277	1.054	s182.00	s210.00	s160.00	s96.00	s248.00	s226.00	s<34.00	s<1152.0	310.00	<1k04	<1346.00	<34.00	<34.00	<34.00	<34.00	4.780
Minim.	3			118	212	0.330	s60.00	s70.00	s20.00	s20.00	s20.00	s70.00	s20.00	s540.0	20.00	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00	1.270
Maxim.	4			526	351	1.980	s390.00	s470.00	s320.00	s220.00	s520.00	s430.00	s80.00	s1800.0	960.00	2410.00	2550.00	50.00	50.00	50.00	50.00	10.600
St.dev	0.4			172	58	4.91	127.55	154.27	118.53	80.19	193.05	138.85	26.08	~469.1	372.02	998.01	~842.93	~13.42	~13.42	~13.42	~13.42	3.787
Count	5			5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

s/q(72) ! Suspect value(s)  
 k ( 1) Value= 1000 \* given units.

Sample.No 01 : Bulk of spec.no. 6-10. Uncertain age determination  
 Sample.No 02 : Bulk of spec.no. 11-15. Uncertain age determination  
 Sample.No 03 : Bulk of spec.no. 16-20.  
 Sample.No 04 : Bulk of spec.no. 21-25. Uncertain age determinations on 4 fish  
 Sample.No 05 : Bulk of spec.no. 26-30. Uncertain age determinations on 4 fish

Species : **PLAT FLE**, Platichthys flesus, GB: Flounder, N: Skrubbe.  
 Sample.area: **J63 Sør fjorden**, Tissue : **LIVER**.  
 Locality : **53B Inner Sør fjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **901012**, Count: 25, Sample type: **Bulked**.  
 Comment : Caught 1012-1022 at various sites in inner Sør fjord; frozen before preparation.

Analytical Lab. :		NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	
Analysis Code. :		312	311	312	311	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	
Detection Limit :		0.010	0.150	0.050	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Sampl	Sex	Age	Wght	Lrgt																				
Repl.	F/M	year	g	mm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
no.					W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	W.WT	
01/	0	H	3	214	262	1.537	5.790	1.290	43.70	9.00	19.00	80.00	115.00	111.00	16.00	16.00	<1.00	445.0	445.0	446.0	44.00	44.00	44.00	7.00
02/	0	H	4	273	282	0.770	8.190	0.560	40.90	8.00	23.00	100.00	130.00	123.00	19.00	19.00	<1.00	448.0	449.0	449.0	33.00	33.00	33.00	7.00
03/	0	H	3	320	302	1.110	6.500	1.000	41.20	41.00	42.00	133.00	126.00	126.00	35.00	35.00	<2.00	609.0	611.0	611.0	115.00	115.00	115.00	14.00
04/	0	H	4	385	314	1.781	9.840	0.710	51.30	42.00	56.00	198.00	168.00	190.00	52.00	52.00	<2.00	853.0	855.0	855.0	146.00	146.00	146.00	4.00
05/	0	H	3	663	368	1.930	12.800	0.450	43.30	16.00	34.00	115.00	106.00	114.00	28.00	28.00	<1.00	509.0	510.0	510.0	94.00	94.00	94.00	3.00
Mean	3.4			371	306	1.426	8.624	0.802	44.08	23.20	34.80	125.20	128.20	132.80	30.00	30.00	<<1.40	572.8	<574.2	<574.2	86.40	86.40	86.40	12.00
Minim.	3			214	262	0.770	5.790	0.450	40.90	8.00	19.00	80.00	106.00	111.00	16.00	16.00	<1.00	445.0	446.0	446.0	33.00	33.00	33.00	7.00
Maxim.	4			663	368	1.930	12.800	1.290	51.30	42.00	56.00	198.00	168.00	190.00	52.00	52.00	<2.00	853.0	855.0	855.0	146.00	146.00	146.00	4.00
St.dev	0.5			175	40	6.61	2.813	0.342	4.22	16.99	14.92	45.12	36.62	23.94	32.57	14.40	~0.55	170.1	~170.6	~170.6	47.64	47.64	47.64	4.85
Count	5			5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

miss(5) ! Missing value.







Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area : **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **33B Sande (east side)**, Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : **831229**, Count: 25, Sample type: **Individual**.

Samp/ Repl. no.	Sex	Age	F/M	year	g	mm	Analytical Lab. :		VEITN		VEITN		VEITN		Σ(*)		VEITN	
							Code	Detection Limit	Fat %	Dry %	Hg ppm	PCB ppm	DDEPP ppb	DD_Σ4 ppb	HCB ppb	210	211	210
01/0	M	4		140	230				0.070	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
02/0	F	4		280	300				0.230	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
03/0	M	2		140	250				0.100	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
04/0	F	2		210	270				0.100	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
05/0	M	3		140	240				0.250	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
06/0	M	3		200	280				0.100	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
07/0	F	2		160	250				0.120	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
08/0	M	2		150	260				0.090	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
09/0	F	3		200	260				0.130	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
10/0	F	3		280	290				0.340	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
11/0	M	3		230	280				0.100	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
12/0	M	2		150	250				0.130	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
13/0	F	3		230	260				0.080	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
14/0	F	3		320	310				0.290	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
15/0	F	3		200	270				0.100	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
16/0	M	3		200	280				0.100	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
17/0	F	3		130	240				0.080	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
18/0	F	2		150	240				0.110	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
19/0	M	3		280	320				0.160	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
20/0	F	3		410	340				0.270	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
21/0	F	2		170	250				0.110	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
22/0	F	3		290	290				0.200	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
23/0	F	2		270	290				0.120	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
24/0	M	2		170	260				0.130	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
25/0	F	4		220	260				0.320	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
Mean		2.8		213	271				0.153	<<.050	<<.050	<<50.00	<<50.00	<<10.00	<<50.00	<<50.00	<<10.00	<<10.00
Minim.		2		130	230				0.070	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
Maxim.		4		410	340				0.340	<0.050	<0.050	<50.00	<50.00	<10.00	<50.00	<50.00	<10.00	<10.00
St.dev		0.7		69	27				0.081	~0.000	~0.000	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00
Count		25		25	25				25	25	25	25	25	25	25	25	25	25

Sample.No 04 : The gut wall was densely populated by small white protuberances, the unicellular parasite *Glugea stephani*. In the gut there was also the round-worm *Cucullanus heterochrous*.

Sample.No 06 : *Lymfocystis* at parts of the ventral side.

Sample.No 13 : Some haemorrhages in the liver probably caused under catch.

Species : PLAT FLE, Platichthys flesus, GB: Flounder, N: Skrubbe.  
 Sample.area: J26 Oslofjorden, Tissue : MUSCLE.  
 Locality : 33B Sande (east side), Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : 851113, Count: 25, Sample type: Individual.

Samp/ Repl. no.	Sex	Age	Wght	Lngt	mm	Analytical Lab. :		VEITN		VEITN	
						Code. :	Detection Limit :	220	211	0.010	0.050
F/M	year	g	mm			Dry	Fat	Hg	P	C	B
						%	%	ppm	ppm	ppm	ppm
								w.wt	w.wt	w.wt	w.wt
01/ 0	F	233	260			20.00	.	0.100	<0.050		
02/ 0	M	161	240			18.90	.	0.100	<0.050		
03/ 0	F	166	240			20.70	.	0.110	<0.050		
04/ 0	F	141	240			20.20	.	0.090	<0.050		
05/ 0	X	153	250			17.59	.	0.080	<0.050		
06/ 0	M	211	270			19.50	.	0.090	<0.050		
07/ 0	M	168	250			20.09	.	0.110	<0.050		
08/ 0	F	145	250			19.00	.	0.080	<0.050		
09/ 0	M	176	260			19.50	.	0.080	<0.050		
10/ 0	F	184	260			20.50	.	0.120	<0.050		
11/ 0	F	171	250			19.20	.	0.100	<0.050		
12/ 0	F	137	230			19.00	.	0.120	<0.050		
13/ 0	M	141	240			19.80	.	0.080	<0.050		
14/ 0	M	127	230			21.20	.	0.080	<0.050		
15/ 0	M	118	230			18.00	.	0.090	<0.050		
16/ 0	M	174	260			20.30	.	0.120	<0.050		
17/ 0	M	166	240			22.20	.	0.090	<0.050		
18/ 0	F	150	240			19.70	.	0.080	<0.050		
19/ 0	F	163	240			21.10	.	0.090	<0.050		
20/ 0	F	250	270			20.70	.	0.060	<0.050		
21/ 0	M	199	270			20.60	.	0.100	<0.050		
22/ 0	F	195	260			20.40	.	0.090	<0.050		
23/ 0	M	218	280			20.00	.	0.090	<0.050		
24/ 0	F	286	290			21.00	.	0.100	<0.050		
25/ 0	F	163	250			19.80	.	0.110	<0.050		
Mean		176	252			19.96	.	0.094	<<.050		
Minim.		118	230			17.59	.	0.060	<0.050		
Maxim.		286	290			22.20	.	0.120	<0.050		
St.dev		40	16			1.01	.	0.015	~0.000		
Count		25	25			25	.	25	25		

Sample.No 06 : Liver had some small necrotic areas. Signs of parasite boring.  
 Sample.No 22 : Skin with lymphocystic changes.

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **33B Sande (east side)**, Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : **861119**, Count: 22, Sample type: **Homogenate**.

Analytical Lab. :		NIVA		NACE	
Analysis Code. :		310		511	
Detection Limit :		0.010		0.020	
Samp/	Sex Age Wght Lngt	Dry	Fat	P	C B
Repl. F/M year	g mm	%	%	ppm	ppm
no.			d.wt	w.wt	w.wt
01/ 1	H 3 172 244	20.24	0.380	<0.020	
01/ 2		20.24	.	0.040	
Mean	3.0 172 244	20.24	0.380	<0.030	
Minim.	3 172 244	20.24	0.380	<0.030	
Maxim.	3 172 244	20.24	0.380	<0.030	
St.dev		.	.	.	.
Count	1 1 1	1	1	1	1

Sample.No 01 : Contaminant determinations on bulk samples (22 fish), Ventral lacerations in two of the 22 specimens. Individual length, weight and age determinations available.

MUSCLE : Dry weight reanalysis = 19.71%

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **33B Sande (east side)**, Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : **871110**, Count: 26, Sample type: **Bulked**.

Analytical Lab. :		NIVA		NACE	
Analysis Code. :		310		511	
Detection Limit :		0.010		0.020	
Samp/	Sex Age Wght Lngt	Dry	Fat	P	C B
Repl. F/M year	g mm	%	%	ppm	ppm
no.			d.wt	w.wt	w.wt
01/ 1	X 2 167 255	23.80	0.20	0.080	<0.020
01/ 2		23.80	0.20	0.100	<0.020
Mean	2.0 167 255	23.80	0.20	0.090	<0.020
Minim.	2 167 255	23.80	0.20	0.090	<0.020
Maxim.	2 167 255	23.80	0.20	0.090	<0.020
St.dev		.	.	.	.
Count	1 1 1	1	1	1	1

Sample.No 01 : !Skin with lesions on four specimens. Parasites on tail-root of one specimen without otholith.  
 MUSCLE : homogenate of 26 fish filets: min.=6.6g, max.=21.6g, mean=12.5g, sd=3.71g 0324.70 g tissue used in analysis.

Species : **PLAT FLE**, Platichthys flesus, GB: Flounder, N: Skrubbe.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **33B Sande (east side)**, Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : **871110**, Count: 26, Sample type: **Homogenate**.

Analytical Lab. :		NIVA		NACE	
Analysis Code. :		310		511	
Detection Limit :		0.010		0.020	
Samp/	Sex	Age	Wght	Lngt	
Repl.	F/M	year	g	mm	
no.					
01/	1	X	2	167	255
01/	2				
Mean	2.0	167	255		
Minim.	2	167	255		
Maxim.	2	167	255		
St.dev					
Count	1	1	1	1	1

Sample.No 01 : Skin with lesions on four specimens. Parasites on tail-root of one specimen without otholith.  
 MUSCLE : homogenate of 26 fish filets: min.=6.6g, max.=21.6g, mean=12.5g, sd=3.71g 0324.70 g tissue used in analysis.

Species : **PLAT FLE**, Platichthys flesus, GB: Flounder, N: Skrubbe.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **33B Sande (east side)**, Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : **881001**, Count: 25, Sample type: **Homogenate**.

Analytical Lab. :		NIVA		NACE	
Analysis Code. :		310		511	
Detection Limit :		0.010		0.020	
Samp/	Sex	Age	Wght	Lngt	
Repl.	F/M	year	g	mm	
no.					
01/	0	X	4	178	250
Mean					
Minim.					
Maxim.					
St.dev					
Count	1	1	1	1	1

Sample.No 01 : Bulk of spec.no. 1-25

Species : **PLAT FLE**, Platichthys flesus, GB: Flounder, N: Skrubbe.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **33B Sande (east side)**, Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : **891018**, Count: 18, Sample type: **Homogenate**.

Analytical Lab. :		NIVA		NACE	
Analysis Code. :		310		511	
Detection Limit :		0.100		0.020	
Samp/	Sex	Age	Wght	Lngt	
Repl.	F/M	year	g	mm	
no.					
01/	0	H	4	180	249
Mean					
Minim.					
Maxim.					
St.dev					
Count	1	miss	0.32	miss	0.020

miss(1) ! Missing value.

Sample.No 01 : Uncertain age determination for some individuals





Species : **PLAT FLE**, *Platichthys flesus*, **CB**: Flounder, **N**: Skrubbe.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **33B Sande (east side)**, Latitude: 59°31.70N, Longitude: 10°21.00E.  
 Catch,date : **921012**, Count: 25, Sample type: **Bulked**.  
 Comment : Station name : **Sande (east side)**

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lrgt Repl. F/M year g mm no.	NIVA 310 0.100 Dry % Fat % Hg ppm W.Wt	NIVA 341 0.10 Fat % Hg ppm W.Wt	NIVA 341 0.10 CB28 ppb W.Wt	NIVA 341 0.10 CB52 ppb W.Wt	NIVA 341 0.10 CB101 ppb W.Wt	NIVA 341 0.10 CB105 ppb W.Wt	NIVA 341 0.10 CB118 ppb W.Wt	NIVA 341 0.10 CB138 ppb W.Wt	NIVA 341 0.10 CB153 ppb W.Wt	NIVA 341 0.10 CB156 ppb W.Wt	NIVA 341 0.10 CB180 ppb W.Wt	NIVA 341 0.10 CB209 ppb W.Wt	Σ(*) ppb W.Wt	NIVA 341 0.10 DD 24 ppb W.Wt	NIVA 341 0.10 HCHA ppb W.Wt	NIVA 341 0.10 HCHG ppb W.Wt	NIVA 341 0.10 HC 22 ppb W.Wt	Σ(*) ppb W.Wt	NIVA 341 0.10 HCB ppb W.Wt
01/ 0 X 4	0.106	0.10	<0.10	<0.10	0.10	0.10	0.30	0.30	<0.10	<0.10	0.10	<0.10	<1.1	0.40	<0.10	<0.10	<0.10	0.50	<0.10
02/ 0 X 5	0.126	0.10	<0.10	<0.10	0.20	0.30	0.50	0.50	<0.10	<0.10	0.20	<0.10	<1.8	0.60	<0.10	<0.10	<0.10	0.70	<0.10
03/ 0 X 4	0.110	0.10	<0.10	<0.10	0.20	0.10	0.40	0.40	<0.10	<0.10	0.10	<0.10	<1.5	0.50	<0.10	<0.10	<0.10	0.60	<0.10
04/ 0 X 4	0.170	0.10	<0.10	<0.10	0.20	0.20	0.60	0.70	<0.10	<0.10	0.20	<0.10	<2.2	0.70	<0.10	<0.10	<0.10	0.80	<0.10
05/ 0 X 4	0.225	0.10	<0.10	<0.10	0.20	0.20	0.60	0.70	<0.10	<0.10	0.20	<0.10	<2.2	0.70	<0.10	<0.10	<0.10	0.80	<0.10
Mean	0.22	0.18	<<0.10	<<0.10	0.16	0.16	0.48	0.52	<<0.10	<<0.10	0.16	<<0.10	<<1.8	0.58	<<0.10	<<0.10	<<0.10	0.68	<<0.10
Minim.	0.10	0.10	<0.10	<0.10	0.10	0.10	0.30	0.30	<0.10	<0.10	0.10	<0.10	<1.1	0.40	<0.10	<0.10	<0.10	0.50	<0.10
Maxim.	0.30	0.20	<0.10	<0.10	0.20	0.20	0.60	0.70	<0.10	<0.10	0.20	<0.10	<2.2	0.70	<0.10	<0.10	<0.10	0.80	<0.10
St.dev	0.08	0.04	~0.00	~0.00	0.04	0.05	0.13	0.18	~0.00	~0.00	0.05	~0.00	~0.5	0.13	~0.00	~0.00	~0.00	0.13	~0.00
Count	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Tab.width cont'd **PLAT FLE, MU, J26, 33B Sande (east side), 921012.**

Analytical Lab. : Analysis Code. : Detection Limit : Samp/ Sex Age Wght Lrgt Repl. F/M year g mm no.	NIVA 341 0.10 OCB OCS ppb W.Wt	NIVA 341 0.10 ppb W.Wt	NIVA 341 0.10 ppb W.Wt	
				01/ 0 X 4 162 239
01/ 0 X 4	<0.10	<0.10	<0.10	
02/ 0 X 5	<0.10	<0.10	<0.10	
03/ 0 X 4	<0.10	<0.10	<0.10	
04/ 0 X 4	<0.10	<0.10	<0.10	
05/ 0 X 4	<0.10	<0.10	<0.10	
Mean	<<0.10	<<0.10	<<0.10	
Minim.	<0.10	<0.10	<0.10	
Maxim.	<0.10	<0.10	<0.10	
St.dev	~0.00	~0.00	~0.00	
Count	5	5	5	

Sample.No 01 : Bulk of NIVA nos.:1,2,3,4,5 No.3: poorly developed inner organs No.5: Liver with necrotic areas and/or discoloration  
 Sample.No 02 : Bulk of NIVA nos.:6,7,8,9,10  
 Sample.No 03 : Bulk of NIVA nos.:11,12,13,14,15 No.13: Discoloration on ventral side  
 Sample.No 04 : Bulk of NIVA nos.:16,17,18,19,20 No.17-19: Liver with necrotic areas and/or discoloration  
 Sample.No 05 : Bulk of NIVA nos.:21,22,23,24,25 No.23&25: Liver with necrotic areas and/or discoloration No.25: poorly developed roe mass

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J26 Oslofjorden**, Tissue : **MUSCLE**.  
 Locality : **33X Sande (west side)**, Latitude: 59°31.70N, Longitude: 10°20.40E.  
 Catch,date : **901106**, Count: 15, Sample type: **Bulked**.

Analytical Lab. : NIVA	
Analysis Code. : 310	
Detection Limit : 0.010	
Samp/ Repl.	Fat %
Sex Age Wght Lngt	Hg ppm
F/M year g mm	w.wt
01/ 0 H 5 178 268	18.80
02/ 0 H 3 130 238	22.00
03/ 0 H 3 87 208	23.00
Mean	21.27
Minim.	18.80
Maxim.	23.00
St.dev	2.19
Count	3

Sample.No 01 : NIVA no. 11,12,13,14,15. Specimen no. 11-13 with bacterial fin rot.  
 Sample.No 02 : NIVA no. 16,17,18,19,20. Specimen no. 20 with bacterial fin rot.  
 Sample.No 03 : NIVA no. 21,22,23,24,25. Specimen no. 21 and 25 with bacterial fin rot.

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J63 Sørfjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørfjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **840317**, Count: 22, Sample type: **Individual**.

Analytical Lab. : FIER	
Analysis Code. : 401	
Detection Limit : 0.010	
Samp/ Repl.	Fat %
Sex Age Wght Lngt	Hg ppm
F/M year g mm	w.wt
01/ 0 M 2 107 230	18.20
02/ 0 M 3 110 260	20.70
03/ 0 M 2 120 240	19.59
04/ 0 M 2 158 250	17.30
05/ 0 F 2 163 260	17.50
06/ 0 X 2 174 260	21.50
07/ 0 M 3 187 250	19.09
08/ 0 X 2 189 300	17.59
09/ 0 X 2 190 250	19.70
10/ 0 M 2 200 250	20.09
11/ 0 M 3 213 270	20.50
12/ 0 M 4 219 340	16.80
13/ 0 M 4 244 300	21.00
14/ 0 F 3 308 300	20.60
15/ 0 X 2 310 330	17.30
16/ 0 M 6 322 350	19.89
17/ 0 M 5 482 400	16.59
18/ 0 F 4 441 340	18.30
19/ 0 F 3 533 350	21.60
20/ 0 F 5 550 420	19.40
21/ 0 M 4 552 370	19.59
22/ 0 M 8 655 470	16.90
Mean	19.08
Minim.	16.59
Maxim.	21.60
St.dev	1.61
Count	22

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J63 Sørffjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørffjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **881118**, Count: 21, Sample type: **Homogenate**.

Analytical Lab. :		NIVA	NACE
Analysis Code. :		310	511
Detection Limit :		0.010	0.020
Samp/	Sex	Hg	PCB
Repl. F/M	year	ppm	ppm
no.	g	mm	w.wt
01/ 0	X 5	339	297
		21.70	0.50 0.510 0.050
			Dry % Fat %

Sample.No 01 : Bulk of spec.no. 1-21

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J63 Sørffjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørffjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **891228**, Count: 25, Sample type: **Individual**.

Analytical Lab. :		NIVA		
Analysis Code. :		310	0.100	
Detection Limit :			Hg	
Samp/	Sex	Age	Wght	Lngt
Repl. F/M	year	g	mm	mm
no.				
06/ 0	X	2	94	190
07/ 0	F	2	98	195
08/ 0	F	1	149	220
09/ 0	F	3	132	225
10/ 0	X	3	117	230
11/ 0	F	3	145	230
12/ 0	M	3	140	230
13/ 0	F	5	148	230
14/ 0	F	2	125	235
15/ 0	M	3	170	240
16/ 0	M	4	195	255
17/ 0	F	4	311	260
18/ 0	F	7	231	270
19/ 0	F	3	264	280
20/ 0	M	4	332	300
21/ 0	F	4	418	305
22/ 0	M		378	310
23/ 0	F	6	362	320
24/ 0	F	3	342	320
25/ 0	F	2	484	335
26/ 0	F	3	426	340
27/ 0	F	2	448	345
28/ 0	F		378	350
29/ 0	F	4	582	355
30/ 0	F	5	796	365
Mean		3.4	291	277
Minim.		1	94	190
Maxim.		7	796	365
St.dev		1.4	175	54
Count		23	25	25
			Dry % Fat %	
			20.17	0.400
			22.51	0.300
			21.26	0.600
			21.47	0.500
			22.66	0.200
			21.25	0.900
			21.93	0.200
			22.64	0.200
			22.24	1.300
			21.77	0.300
			21.28	0.300
			36.69	0.500
			20.53	0.400
			34.53	0.400
			21.14	0.400
			30.43	0.200
			29.62	0.400
			32.22	0.300
			21.14	1.700
			27.39	0.400
			21.46	0.400
			17.43	1.800
			22.96	0.700
			24.51	0.800
			21.26	0.900

Sample.No 06 : Digranes 15m depth.  
   MUSCLE : 0014,00 g tissue used in analysis.  
 Sample.No 07 : Apold 12m depth. Uncertain age determination  
   MUSCLE : 0013,00 g tissue used in analysis.  
 Sample.No 08 : Tyssedal 20m depth. Uncertain age determination  
   MUSCLE : 0017,00 g tissue used in analysis.  
 Sample.No 09 : Digranes 15m depth. Uncertain age determination  
   MUSCLE : 0020,00 g tissue used in analysis.  
 Sample.No 10 : Digranes 20m depth. Uncertain age determination  
   MUSCLE : 0007,00 g tissue used in analysis.  
 Sample.No 11 : Digranes 15m depth. Uncertain age determination  
   MUSCLE : 0019,00 g tissue used in analysis.  
 Sample.No 12 : Digranes 15m depth. Uncertain age determination  
   MUSCLE : 0016,00 g tissue used in analysis.  
 Sample.No 13 : Tyssedal 20m depth. Uncertain age determination  
   MUSCLE : 0016,00 g tissue used in analysis.  
 Sample.No 14 : Digranes 15m depth. One otholitt chrystalized  
   MUSCLE : 0021,00 g tissue used in analysis.  
 Sample.No 15 : Digranes 15m depth.  
   MUSCLE : 0016,00 g tissue used in analysis.  
 Sample.No 16 : Edna 20m depth. Otholitts ruined  
   MUSCLE : 0022,00 g tissue used in analysis.  
 Sample.No 17 : Digranes 15m depth. One otholitt edge chrystalized  
   MUSCLE : 0055,00 g tissue used in analysis.  
 Sample.No 18 : Digranes 20m depth.  
   MUSCLE : 0021,00 g tissue used in analysis.  
 Sample.No 19 : Digranes 15m depth.  
   MUSCLE : 0039,00 g tissue used in analysis.  
 Sample.No 20 : Digranes 15m depth.  
   MUSCLE : 0037,00 g tissue used in analysis.  
 Sample.No 21 : Edna 20m depth.  
   MUSCLE : 0047,00 g tissue used in analysis.  
 Sample.No 22 : Edna 20m depth. Otholitts chrystalized  
   MUSCLE : 0043,00 g tissue used in analysis.  
 Sample.No 23 : Apold 12m depth. Uncertain age determination  
   MUSCLE : 0049,00 g tissue used in analysis.  
 Sample.No 24 : Stana 15m depth. One otholitt, Uncertain age determination  
   MUSCLE : 0042,00 g tissue used in analysis.  
 Sample.No 25 : Digranes 15m depth.  
   MUSCLE : 0070,00 g tissue used in analysis.  
 Sample.No 26 : Stana 15m depth.  
   MUSCLE : 0049,00 g tissue used in analysis.  
 Sample.No 27 : Tyssedal 20m depth. Uncertain age determination  
   MUSCLE : 0029,00 g tissue used in analysis.  
 Sample.No 28 : Apold 12m depth. uncertain age determination.  
   MUSCLE : 0048,00 g tissue used in analysis.  
 Sample.No 29 : Digranes 20m depth.  
   MUSCLE : 0062,00 g tissue used in analysis.  
 Sample.No 30 : Stana 15m depth. Uncertain age determination  
   MUSCLE : 0068,00 g tissue used in analysis.

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J63 Sørifjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørifjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **891228**, Count: 25, Sample type: **Bulked**.

Samp/ Repl.	Sex	Age	Wght	Lrgt	mm	Analytical Lab. :	
						MADE	511
Analysis Code. :						0.020	
Detection Limit :						PCB	
Dry %						Fat %	
01/0	H	4	118	212		21.61	0.52
02/0	H	3	146	233		21.97	0.36
03/0	H	4	267	273		26.83	0.53
04/0	H	4	397	318		28.16	0.74
05/0	H	4	526	351		21.52	0.52
Mean		3.8	291	277		24.02	0.53
Minim.		3	118	212		21.52	0.36
Max.im.		4	526	351		28.16	0.74
St.dev		0.4	172	58		3.21	0.14
Count		5	5	5		5	5

Sample.No 01 : Bulk of spec.no. 6-10. Uncertain age determination  
 Sample.No 02 : Bulk of spec.no. 11-15. Uncertain age determination  
 Sample.No 03 : Bulk of spec.no. 16-20.  
 Sample.No 04 : Bulk of spec.no. 21-25. Uncertain age determinations on 4 fish  
 Sample.No 05 : Bulk of spec.no. 26-50. Uncertain age determinations on 4 fish

Species : **PLAT FLE**, *Platichthys flesus*, GB: Flounder, N: Skrubbe.  
 Sample.area: **J63 Sørifjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørifjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **901012**, Count: 25, sample type: **Bulked**.  
 Comment : Caught 1012-1022 at various sites in inner Sørifjord; frozen before preparation.

Samp/ Repl.	Sex	Age	Wght	Lrgt	mm	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA	
						310	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341	341
Analysis Code. :						0.010		0.05		0.05		0.05		0.05		0.05		0.05		0.05		0.05	
Detection Limit :						Hg		PCB		PCB		PCB		PCB		PCB		PCB		PCB		PCB	
Dry %						Fat %		Fat %		Fat %		Fat %		Fat %		Fat %		Fat %		Fat %		Fat %	
01/0	H	3	214	262		21.00	0.70	1.28	4.39	1.68	4.61	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73
02/0	H	4	273	282		20.80	0.60	1.28	4.82	2.09	4.90	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88
03/0	H	3	320	302		22.50	1.10	1.67	2.03	5.62	5.74	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88
04/0	H	4	385	314		22.90	1.00	1.80	6.49	4.69	5.30	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95
05/0	H	3	663	368		22.20	1.60	3.14	10.81	7.94	9.03	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81
Mean		3.4	371	306		21.88	1.00	1.91	6.70	4.40	5.92	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25
Minim.		3	214	262		20.80	0.60	1.28	4.39	1.68	4.61	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73	4.73
Max.im.		4	663	368		22.90	1.60	3.14	10.81	7.94	9.03	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81
St.dev		0.5	175	40		0.93	0.39	0.58	2.54	2.59	1.79	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07
Count		5	5	5		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

miss(5)  
 Sample.No 01 : NIVA no. 23,22,24,19,20. Specimen no. 19 internal organs with signs of decomposition.  
 Sample.No 02 : NIVA no. 21,25,17,18,14.  
 Sample.No 03 : NIVA no. 11,12,13,16,08.  
 Sample.No 04 : NIVA no. 09,10,15,06,07.  
 Sample.No 05 : NIVA no. 04,05,03,02,01.









Tab.width cont'd PLEU PLA, LI, J99, 15B Ullerø area, 921215.

Table with 4 columns: Analytical Lab., Analysis Code, Detection Limit, and various chemical results (NIVA, HCHA, HCHG, HC, Σ2, OCS, QCB, HCB, ppb, W.Wt).

Sample.No 01 : Bulk of NIVA nos.:1,2,3,4,5 No.2: Muscle with signs of inner bleeding
Sample.No 02 : Bulk of NIVA nos.:6,7,8,9,10 No.8: red spots on ventral side
Sample.No 03 : Bulk of NIVA nos.:11,12,13

Species : PLEU PLA, Pleuroctes platessa, GB: Plaice, N: Rødsplette.
Sample.area: J26 Oslofjorden, Tissue : MUSCLE.
Locality : 30F Oslo City area, Latitude: 59°47.00N, Longitude: 10°34.00E.
Catch,date : 921215, Count: 9, Sample type: Bulked.
Comment : Station name : Oslo city area caught by trawl, 95-100m depth

Table with 4 columns: Analytical Lab., Analysis Code, Detection Limit, and various chemical results (NIVA, CB, Σ(\*), W.Wt) for multiple samples.

Tab.width cont'd PLEU PLA, MU, J26, 30F Oslo City area, 921215.

Table with 4 columns: Analytical Lab., Analysis Code, Detection Limit, and various chemical results (NIVA, QCB, OCS, NAF, NAP, BIP, NAPI, ACNE, FILE, PA, ANT, PAMI, FLU, PYR, BAA, CHR, BBF, BJKF, BEP, BAP, PER, ICDF, DR3A, W.Wt) for multiple samples.

Tab.width cont'd PLEU PLA, MU, J26, 30F Oslo City area, 921215.

Analytical Lab. :		NIVA	NIVA	NIVA	Σ(*)	Σ(*)	Σ(*)					
Analysis Code. :		309	309		!	!	!					
Detection Limit :		0.20	0.20	!	!	!	!					
Samp/ Sex	Age Wght	LRgt	BCHIP	COR	DBP	DI	Σ6	P	Σ20	PK	Σ7	PAHEE
Repl.	F/M	year	g	mm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
no.					w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0	X	3	512	346	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
02/ 0	M	3	492	348	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Mean	3.0	502	347		<<0.2	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2	<<0.2
Minim.	3	492	346		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Maxim.	3	512	348		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
St.dev	0.0	14	1		~0.0	~0.0	~0.0	~0.0	~0.0	~0.0	~0.0	~0.0
Count	2	2	2	2	2	2	2	2	2	2	2	2

Sample.No 01 : Bulk of NIVA nos.:1,4,6,7,10 No.4: discolouration on ventral side  
 Sample.No 02 : Bulk of NIVA nos.:2,3,5,8,9

Species : PLEU PLA, Pleuronectes platessa, GB: Plaice, N: Rødsplette.

Sample.area: J99 Undefined, Tissue : MUSCLE.

Locality : 15B Ullerø area, Latitude: 58°03.00N, Longitude: 06°43.00E.

Catch,date : 921215, Count: 13, Sample type: Bulked.

Comment : Station name : Ullerø area

Analytical Lab. :		NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA							
Analysis Code. :		310	341	341	341	341	341	341	341	341	341	341	341							
Detection Limit :		0.100	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10							
Samp/ Sex	Age Wght	LRgt	CB28	CB52	CB101	CB105	CB118	CB138	CB153	CB156	CB180	CB209	CB Σ7	CB ΣΣ	DDREPP	DD ΣA	HCHA	HCHG	HC Σ2	HC B
Repl.	F/M	year	g	mm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
no.					w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0	M	4	435	330	20.30	0.50	0.022	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	<0.10	0.30	<0.10	<0.10	<0.10	<0.10	<0.10
02/ 0	X	4	596	368	19.30	0.40	0.028	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	<0.10	0.20	<0.10	<0.10	<0.10	<0.10	<0.10
03/ 0	X	4	777	403	22.00	0.50	0.017	<0.10	<0.10	<0.10	<0.10	0.10	0.10	0.10	0.20	<0.10	<0.10	<0.10	<0.10	<0.10
Mean	4.0	603	367		20.53	0.47	0.022	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10	0.23	<<0.10	<<0.10	<<0.10	<<0.10	<<0.10
Minim.	4	435	330		19.30	0.40	0.017	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	<0.10	0.20	<0.10	<0.10	<0.10	<0.10	<0.10
Maxim.	4	777	403		22.00	0.50	0.028	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	<0.10	0.20	<0.10	<0.10	<0.10	<0.10	<0.10
St.dev	0.0	171	37		1.37	0.06	0.006	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	~0.00	0.06	~0.00	~0.00	~0.00	~0.00	~0.00
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Tab.width cont'd PLEU PLA, MU, J99, 15B Ullerø area, 921215.

Analytical Lab. :		NIVA	NIVA	
Analysis Code. :		341	341	
Detection Limit :		0.10	0.10	
Samp/ Sex	Age Wght	LRgt	OCB	
Repl.	F/M	year	g	
no.			mm	
01/ 0	M	4	435	330
02/ 0	X	4	596	368
03/ 0	X	4	777	403
Mean	4.0	603	367	
Minim.	4	435	330	
Maxim.	4	777	403	
St.dev	0.0	171	37	
Count	3	3	3	3

Sample.No 01 : Bulk of NIVA nos.:1,2,3,4,5 No.2: Muscle with signs of inner bleeding

Sample.No 02 : Bulk of NIVA nos.:6,7,8,9,10 No.8: red spots on ventral side

Sample.No 03 : Bulk of NIVA nos.:11,12,13

Species : **POLL POL**, Pollachius pollachius, GB: Pollack, N: Lyr.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **LIVER**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **851127**, Count: 16, Sample type: **Homogenate**.  
 Comment : **POLL POL = POLLACHIUS POLLACHIUS** All samples were infected with metacercari of Cryptocotyle lingua on skin tissue.

Analytical Lab. :		VEIN	VEIN	VEIN	Σ (*)	VEIN
Analysis Code. :		230	210	210	!	210
Detection Limit :		0.010	0.050	50.00	!	10.00
Samp/ Sex Age Wght Inrgt	Mean	<b>Cd</b>	<b>PCB</b>	<b>DDEPP</b>	<b>DD Σ4</b>	<b>HCB</b>
Repl. F/M year g mm	Weight g	ppm	ppb	ppb	ppb	ppb
		w.wt	w.wt	w.wt	w.wt	w.wt
17/ 1 X 3 1351 501	4.7 71.10 61.70 0.070 0.790 110.00 110.00	0.070	0.870	120.00	120.00	50.00
17/ 2	4.7 71.10 61.70 0.070 0.870 120.00 120.00	0.070	0.870	120.00	120.00	50.00
Mean	4.7 71.10 61.70 0.070 0.830 115.00 115.00	0.830	115.00	115.00	115.00	50.00
Minimum.	4.7 71.10 61.70 0.070 0.830 115.00 115.00	0.830	115.00	115.00	115.00	50.00
Maximum.	4.7 71.10 61.70 0.070 0.830 115.00 115.00	0.830	115.00	115.00	115.00	50.00
St. dev						
Count	1 1 1 1 1 1 1					

Sample.No 17 : Weight and age statistics based on 15 (not 16) fish. Bulk livers of fish 01-10: min.=26.0, max.=158.2, sd.=42.78g  
 LIVER : Dry weight reanalysis = 71.2%. Ext. lipid reanalysis = 70.2%.

Species : **POLL POL**, Pollachius pollachius, GB: Pollack, N: Lyr.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **LIVER**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **861118**, Count: 1, Sample type: **Individual**.

Analytical Lab. :		NIVA	NIVA	NIVA	NIVA	NIVA	NACE	Σ (*)	NACE	Σ (*)	NACE	NACE
Analysis Code. :		312	311	312	311	311	510	!	510	!	510	610
Detection Limit :		0.030	0.150	0.150	3.00	0.040	20.00	!	40.00	!	30.00	!
Samp/ Sex Age Wght Inrgt	Mean	<b>Cd</b>	<b>Cu</b>	<b>Pb</b>	<b>Zn</b>	<b>PCB</b>	<b>DDEPP</b>	<b>DD Σ4</b>	<b>HCHG</b>	<b>HC</b>	<b>HC</b>	<b>HC</b>
Repl. F/M year g mm	Weight g	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppm
		d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 M 540 410	12.3 63.96 58.70 0.130 15.800 0.250 59.80 0.620 140.00 90.00 230.00 50.00 50.00	0.130	15.800	0.250	59.80	0.620	140.00	90.00	230.00	50.00	50.00	10.200

Sample.No 01 : Skin with metacercari of cf. Cryptocotyle lingua. Internal organs with signs of decomposition.

Species : **POLL POL**, Pollachius pollachius, GB: Pollack, N: Lyr.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **LIVER**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **881117**, Count: 7, Sample type: **Homogenate**.

Analytical Lab. :		NIVA	NIVA	NIVA	NIVA	NIVA	NACE	Σ (*)	NACE	Σ (*)	NACE	NACE
Analysis Code. :		312	311	312	311	311	510	!	510	!	510	610
Detection Limit :		0.030	0.150	0.150	3.00	0.040	40.00	!	40.00	!	40.00	0.800
Samp/ Sex Age Wght Inrgt	Mean	<b>Cd</b>	<b>Cu</b>	<b>Pb</b>	<b>Zn</b>	<b>PCB</b>	<b>DDEPP</b>	<b>DD Σ4</b>	<b>HCHG</b>	<b>HC</b>	<b>HC</b>	<b>HC</b>
Repl. F/M year g mm	Weight g	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppm
		d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 X 4 1324 511	79.10 60.00 0.030 2.920 <.130 22.50 1.200 140.00 90.00 230.00 <40.00 <40.00 <40.00	0.030	2.920	<.130	22.50	1.200	140.00	90.00	230.00	<40.00	<40.00	7.000

Sample.No 01 : Bulk of spec.no. 1-7

Species : **POLL POL**, *Pollachius pollachius*, GB: Pollack, N: Lyr.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **851127**, Count: 16, Sample type: **Individual**.  
 Comment : **POLL POL = POLLACHIUS POLLACHIUS** All samples were infected with metacercari of *Cryptocotyle lingua* on skin tissue.

Analytical Lab. :		VETN		VETN	
Analysis Code. :		220		211	
Detection Limit :		0.010		0.050	
Samp/	Sex	Age	Lght	Lngt	
Repl.	F/M	year	g	mm	
no.					
01/ 0	M	3	2042	570	0.070 <0.050
02/ 0	M	5	2656	650	0.070 <0.050
03/ 0	F	4	846	420	0.040 <0.050
04/ 0	M	3	1011	470	0.040 <0.050
05/ 0	F	3	842	440	0.030 <0.050
06/ 0	F	3	440	440	0.050 <0.050
07/ 0	F	3	1006	450	0.030 <0.050
08/ 0	F	4	2256	590	0.050 <0.050
09/ 0	F	4	1541	520	0.070 <0.050
10/ 0	F	4	1395	590	0.050 <0.050
11/ 0	F	4	1212	500	0.050 <0.050
12/ 0	F	4	1331	510	0.060 <0.050
13/ 0	M	4	1048	480	0.040 <0.050
14/ 0	F	4	1194	490	0.040 <0.050
15/ 0	F	4	879	430	0.030 <0.050
16/ 0	F	4	1010	460	0.040 <0.050
Mean		3.7	1351	501	0.048 <<.050
Minim.		3	842	420	0.030 <0.050
Maxim.		5	2656	650	0.070 <0.050
St.dev		0.6	552	67	0.014 ~0.000
Count		15	15	16	16

Sample.No 01 : Surface of liver with a few Anisakis larvae  
 Sample.No 02 : Surface of liver with a few Anisakis larvae  
 Sample.No 03 : Surface of liver with a few Anisakis larvae  
 Sample.No 05 : Surface of liver with a few Anisakis larvae  
 Sample.No 07 : Surface of liver with a few Anisakis larvae  
 Sample.No 08 : Surface of liver with a few Anisakis larvae  
 Sample.No 10 : Surface of liver with a few Anisakis larvae  
 Sample.No 13 : Surface of liver with a few Anisakis larvae

Species : **POLL POL**, *Pollachius pollachius*, GB: Pollack, N: Lyr.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **861118**, Count: 1, Sample type: **Individual**.

Analytical Lab. :		NIVA		NACE	
Analysis Code. :		310		511	
Detection Limit :		0.010		0.020	
Samp/	Sex	Age	Lght	Lngt	
Repl.	F/M	year	g	mm	
no.					
01/ 0	M		540	410	0.140 0.040

Sample.No 01 : Skin with metacercari of cf. *Cryptocotyle lingua*. Internal organs with signs of decomposition.

Species : **POLL POL**, Pollachius pollachius, GB: Pollack, N: Lyr.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **881117**, Count: 7, Sample type: **Homogenate**.

Analytical Lab. :	NIVA	NACE
Analysis Code. :	310	511
Detection Limit :	0.010	0.020
Samp/ Sex Age Wght Lngt	Fat	P C B
Repl. F/M year g mm	%	ppm
no.	d.wt	w.wt
01/ 0 X 4 1324 511	22.40 0.20 0.160	<0.020

Sample.No 01 : Bulk of spec.no. 1-7

Species : **POLL VIR**, Pollachius virens, GB: Saithe, N: Sei.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **LIVER**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **881117**, Count: 3, Sample type: **Homogenate**.

Analytical Lab. :	NIVA	NIVA	NIVA	NIVA	NIVA	NACE	NACE	Σ (*)	Σ (*)	NACE	NACE
Analysis Code. :	312	311	312	311	311	510	510	!	!	510	510
Detection Limit :	0.030	0.150	0.150	0.040	0.040	40.00	40.00	!	!	40.00	40.00
Samp/ Sex Age Wght Lngt	Dry	Fat	Pb	Zn	Pb	DDEPP	DDTTP	DD_Σ4	HCHG	HC_Σ2	HCB
Repl. F/M year g mm	%	%	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb
no.	d.wt	d.wt	d.wt	d.wt	d.wt	w.wt	w.wt	w.wt	w.wt	w.wt	w.wt
01/ 0 X 2 1079 465	80.60 64.30 0.020	8.730 0.120 26.70	0.510	70.00	<40.00	<40.00	<40.00	<110.00	<40.00	<40.00	1.480

Sample.No 01 : BULK OF SPEC.NO. 1-3

Species : **POLL VIR**, Pollachius virens, GB: Saithe, N: Sei.  
 Sample.area: **J65 Orkdalsfjorden**, Tissue : **MUSCLE**.  
 Locality : **84B Trossavika**, Latitude: 63°20.80N, Longitude: 09°57.80E.  
 Catch,date : **881117**, Count: 3, Sample type: **Homogenate**.

Analytical Lab. :	NIVA	NACE
Analysis Code. :	310	511
Detection Limit :	0.010	0.020
Samp/ Sex Age Wght Lngt	Fat	P C B
Repl. F/M year g mm	%	ppm
no.	d.wt	w.wt
01/ 0 X 2 1079 465	23.00 0.20 0.020	<0.020

Sample.No 01 : BULK OF SPEC.NO. 1-3



Tab.width cont'd **SALM TRU, LI, J63, 53B Inner Sørfjord, 901001.**

Analytical Lab. : NIVA	
Analysis Code. : 615	
Detection Limit : 0.040	
Samp/ Sex Age Wght Lngt EPOCL	
Repl. F/M year	ppm
no.	w.wt
11/ 0 H 5 522 358	1.630
12/ 0 H 6 511 338	1.590
Mean	1.610
Minim.	1.590
Maxim.	1.630
St.dev	0.028
Count	2

Sample.No 11 : NIVA no. 09.02.05.07.04.  
 Sample.No 12 : NIVA no. 01.03.06.08.10.

Species : **SALM TRU**, Salmo trutta, GB: Sea trout, N: Sjøørret.  
 Sample.area: **J63 Sørfjorden**, Tissue : **MUSCLE**.  
 Locality : **53B Inner Sørfjord**, Latitude: 60°10.00N, Longitude: 06°34.00E.  
 Catch,date : **901001**, Count: 10, Sample type: **Individual**.  
 Comment : Uncertain catch date. Frozen before preparation.

Analytical Lab. : NIVA		310	
Analysis Code. : 0.010		Hg	
Detection Limit :		ppm	
Samp/ Sex Age Wght Lngt	Repl. F/M year	Dry %	Fat %
g	mm		
no.			w.wt
01/ 0 F 4 332 360		25.90	0.030
02/ 0 M 5 642 380		28.50	0.140
03/ 0 F 6 529 350		26.70	0.070
04/ 0 M 4 596 340		26.60	0.070
05/ 0 F 6 512 360		28.20	0.060
06/ 0 F 726 380		27.20	0.160
07/ 0 M 6 548 340		26.10	0.140
08/ 0 F 5 425 320		24.80	0.100
09/ 0 F 6 402 330		26.70	0.140
10/ 0 F 4 452 320		26.40	0.090
Mean	5.1 516 348	26.71	0.100
Minim.	4 332 320	24.80	0.030
Maxim.	6 726 380	28.50	0.160
St.dev	0.9 119 22	1.08	0.043
Count	9 10 10	10	10

Sample.No 01 : NIVA no. 09.  
 Sample.No 02 : NIVA no. 02.  
 Sample.No 03 : NIVA no. 05.  
 Sample.No 04 : NIVA no. 07.  
 Sample.No 05 : NIVA no. 04.  
 Sample.No 06 : NIVA no. 01.  
 Sample.No 07 : NIVA no. 03.  
 Sample.No 08 : NIVA no. 06.  
 Sample.No 09 : NIVA no. 08.  
 Sample.No 10 : NIVA no. 10.





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