



# Norwegian State Pollution Monitoring Programme

## Report 599/95

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Client **State Pollution Control Authority**

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Contractor **NIVA**

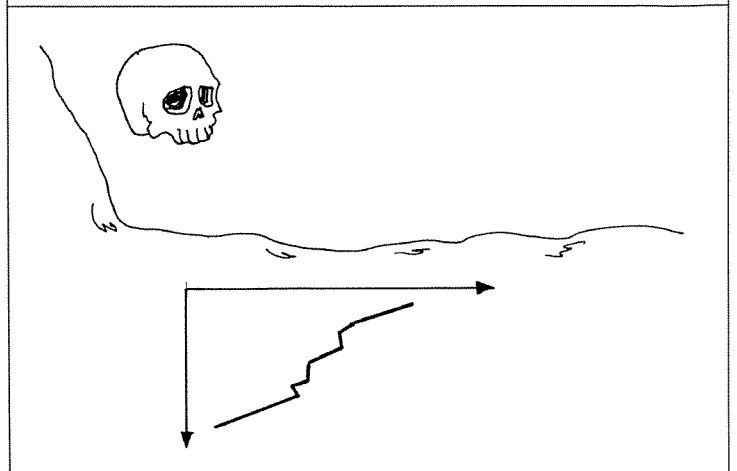
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## Contaminants in sediment 1986-92




**The Joint Monitoring  
Programme (JMP)**

**Norwegian data  
NIVA samples**



# NIVA - REPORT

Norwegian Institute for Water Research  NIVA

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<b>Abstract:</b> The report is a compilation of data used in the Norwegian contribution to the Joint Monitoring Programme and the North Sea Task Force Master Monitoring Plan for monitoring of contaminants (mainly: selected metals, organochlorines, polycyclic aromatic hydrocarbons) in sea bed sediment collected 1986-92. The samples were collected by gravity corers and along the coast from Oslofjord to Lofoten. The raw data and the mean and standard deviation of parallel samples are presented.
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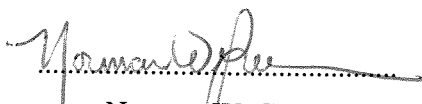
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Project manager

  
 Norman W. Green

For the Administration

  
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Norwegian Institute for Water Research

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## **Contaminants in sediment 1986-92**

**JOINT MONITORING PROGRAMME (JMP)  
NORWEGIAN DATA  
NIVA SAMPLES**

Oslo, 31. January 1994

Project manager: Norman W. Green

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## Preface

*This report presents a summary of the Norwegian data for contaminants in sediments 1986-1992 sampled by the Norwegian Institute for Water Research (NIVA) and 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 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 (a division thereof, 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 (NSTF-MMP) 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.*

*The Norwegian 1990 investigations on sediments for the NSTF-MMP and the JMP were carried out by the Institute of Marine Research (IMR referred to herein as ICES code IMRN) and the Norwegian Institute for Water Research (NIVA) and has been reported separately (Green & Klungsøyr, 1994). This investigation was funded by the Department of Fisheries and by the Norwegian State Pollution Control Authority. For the sake of simplicity "NIVA" stations sampled in 1990 are also included in this report.*

*It is with appreciation that the following are recognized for their contribution to this report:*

*NIVA*

- *Collection of samples: Unni Efriamsen, Frank Kjellberg and Roger Konieczny*
- *Metal analyses: Marit Villø and her colleagues*
- *Data entry: Marit Mjelde and Tone Jøran Oredalen*
- *Programming: Audun Rønningen and Gunnar Severinsen*

*IMRN*

- *Collection of samples: Kjell Westrheim and Svein Wilhelmsen*
- *Organic analyses: Kjell Westrheim and Svein Wilhelmsen*

*Other institutes*

- *Sediment age determinations: Anders Jensen (FORCE institutes, DK)*
- *Arsenic analyses: Kåre Helge Karstensen (SINTEF-SI, Oslo)*

*Oslo, 31. January 1995.*

*Norman W. Green  
Project coordinator*

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# 1. Background and aims

The 1982-92 data for contaminants in sediment 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 JMP areas: Oslofjord-area (including the Hvaler area, Singlefjord and Langesundsfjord), Sørfjord/Hardangerfjord and the Orkdalsfjord area and during 1990-92 have also included Arendal and Lista and selected stretches of coastline between Bergen and Lofoten (Fig.1 - 3). The sediment results have been presented for 1986 (Green, 1987) and 1990 (Green & Klungsøyr, 1994).

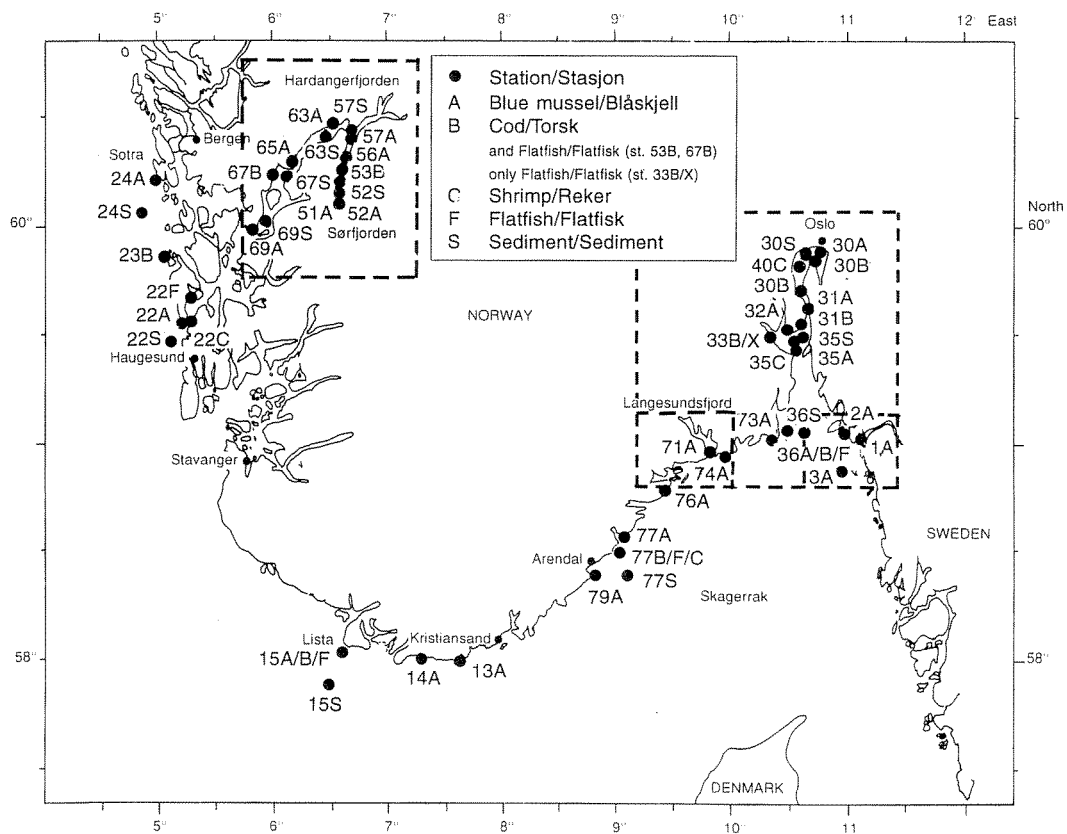
## 2. Sampling

The JMP sediment stations monitored in 1986-92 by Norway are spread from the Oslofjord to Lofoten (Fig.1 - 3).

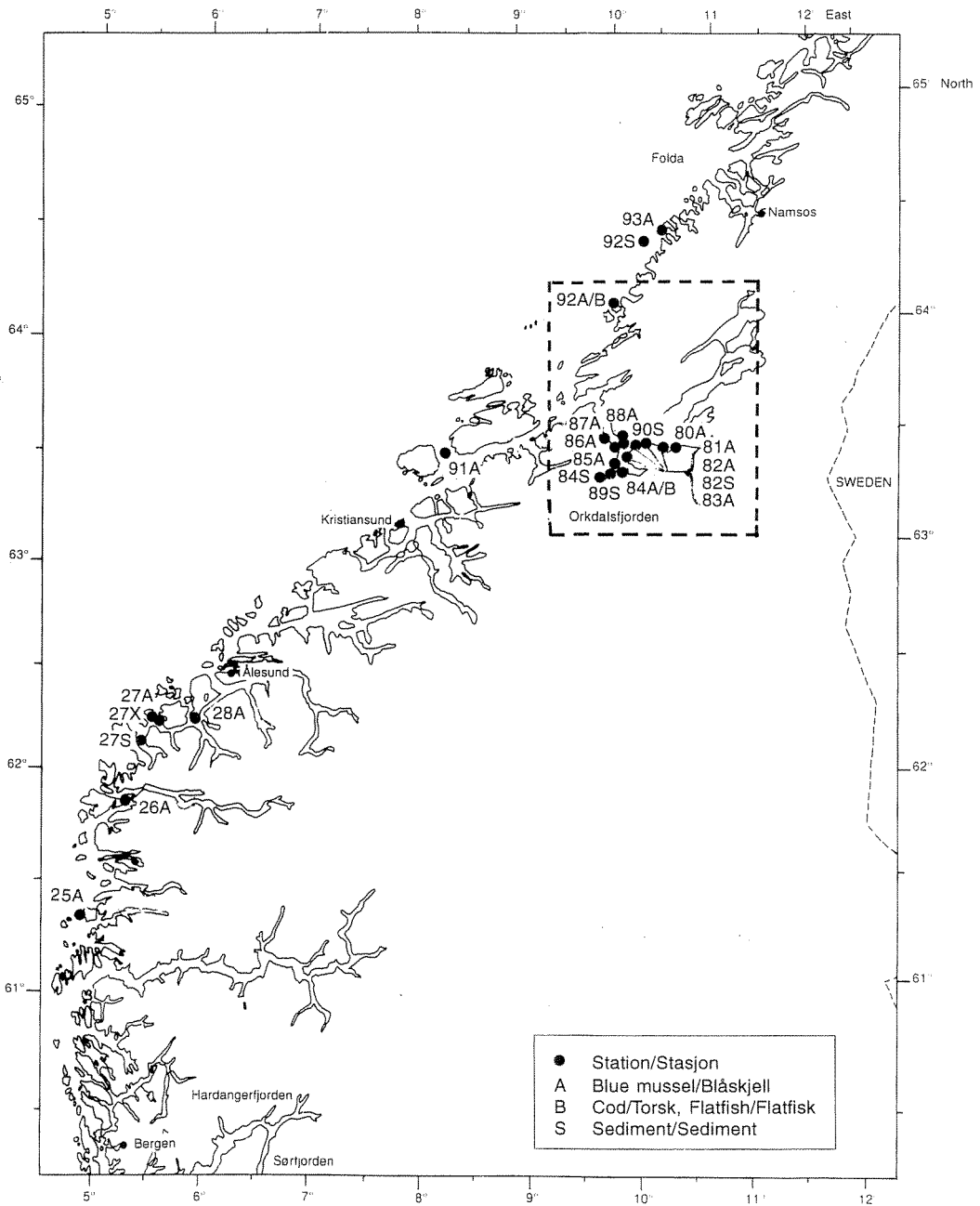
The sampling of sediment has followed the ICES guidelines (ICES 1986, 1992) as closely as possible. Sampling is done with a gravity corer. The cores were sliced, each slice was 1cm thick, less frequently 2 and 5cm. Parallel cores were taken at each station.

All analyses were carried out by NIVA except for analyses of PCB and PAH in 1990 which were carried out by Institute for Marine Research in Bergen and core dating which was analyzed by Water Quality Institute (previously part of FORCE institutes) in Denmark.

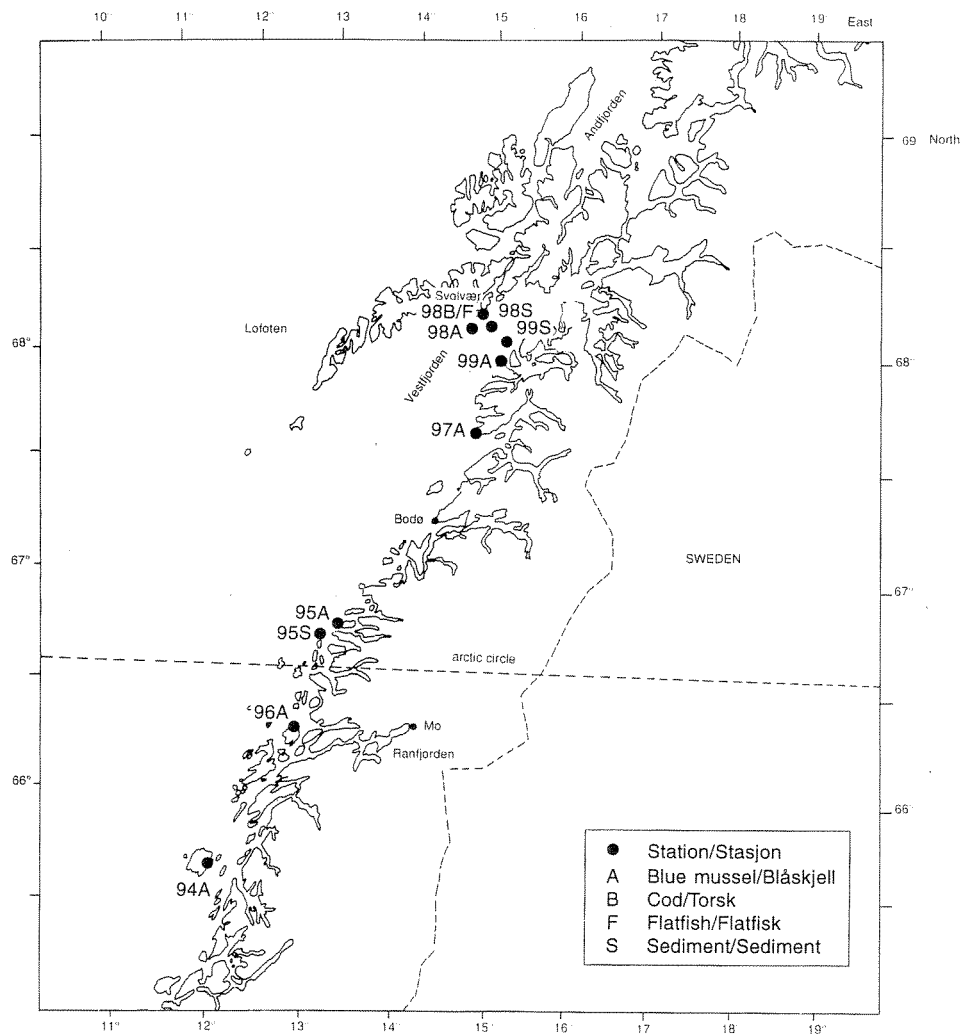




**Figur 1.** JMP sampling stations along the southern coast of Norway from the Swedish border to Bergen.



**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 Ranfjorden 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 (1993).

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 sediment (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'

## 4. Variables

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

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>antracen</i>
<b>BAA</b> <sup>3</sup>	benz(a)anthracene	<i>benz(a)antracen</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)antracen</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, spesifik 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>diklordifenyiltrikloretan</i> <i>1,1,1-trikloro-2,2-bis-(4-klorofenyl)etan</i>
<b>DDEOP</b>	o,p'-DDE	<i>o,p'-DDE</i>
<b>DDEPP</b>	p,p'-DDE	<i>p,p'-DDE</i>
<b>DDTOP</b>	o,p'-DDT	<i>o,p'-DDT</i>
<b>DDTPP</b>	p,p'-DDT	<i>p,p'-DDT</i>
<b>TDEOP</b>	o,p'-DDD	<i>o,p'-DDD</i>
<b>TDEPP</b>	p,p'-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 benzenhexachloride, outdated synonym)	<i>lindan γHCH = gamma heksaklorsyκλοheksan (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>EOCI</b>	extractable organically bound chlorine	<i>ekstraherbart organisk bundet klor</i>
<b>EPOCI</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 1986-92 sediment survey are listed below (ICES laboratory codes) (from Green, 1993):

Abbreviation <sup>1</sup>	English	Norwegian
<b>INSTITUTES</b>		
<b>FORC</b>	Water Quality Institute (earlier a part of FORCE Institutes, Div. for Isotope Technique and Analysis) [DK]	<i>Vannkvalitets instituttet (tidligere en del av FORCE Institutterne, Div. for Isotopteknik og Analyse) [DK]</i>
<b>IMRN</b>	Institute of Marine Research (IMR)	<i>Havforskningsinstituttet</i>
<b>NIVA</b>	Norwegian Institute for Water Research	<i>Norsk institutt for vannforskning</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. Analyses code descriptions

Brief descriptions of the analytical methods employed for JMP and NSTF-MMP have been coded and compiled (Green, 1993). With the exception of arsenic, those relevant to the 1990 sediment survey are listed below. Arsenic determinations were done by SIIF in 1993 using atomic absorption using hydride technique on an aliquot from NIVA HF extract (cf., code 351)

The following descriptions (excerpts from Green 1993) focus on the principles involved and hence are not intended as detailed specifications. The descriptions may vary arbitrarily in detail and are coupled to period analysis for the 1990 sample and hence, may not necessarily reflect methods currently practiced by the contributing institutes. Note also that the descriptions do not necessary list which specific compounds of PAH's and PCB's are determined. These can be derived from Annex A.

*code*      *description*

### 350      **Mercury in sea bed sediment (NIVA)**

#### Drying procedure

An accurately weighed sample of approximately 1g is dried at 105°C for one hour. The sample is cooled in a desiccator for one hour before weighing. Normally, determinations are on wet samples and the water content is determined of a subsample.

#### Extraction (oxidation)

Approximately 1g of the sample is accurately weighed in pyrex flasks, 20ml 7N (concentrated) nitric acid (suprapur) is added and the solution heated 120°C for 30min in an autoclave. The solution is transferred to a 100ml volumetric flask and diluted to the mark with deionized water.

#### Determination

A maximum of 100ml sample used, diluted if Hg >50ng/l; P-E 1100 B with gold trap used, helium replaced air as carrier gas and lowest signal was 2.5ng/l.

### 351      **Chromium, copper, iron, manganese, nikkel and zinc in sea bed sediment (NIVA)**

Same procedure as 350: #1, Drying.

#### Extraction (oxidation)

'Total' extraction (HFO): Approximately 0.1g of the sample is accurately weighed in, 2ml of hydroflouric acid and 2+2ml of concentrated nitric acid ('aqua regia') is added and the solution heated in a microwave oven. The solution is transferred to a 100ml volumetric clask and diluted to the marked with deionized water.

#### Determination

Determinations by **flame atomic absorption spectrometry** using acetylene/air flame. Instrument: *Prior to 1986* a Perkin Elmer model 2380 was used and *since 1986* the P-E

560 has been used. For determinations of low concentrations (below detection limits) the flameless method (352) is used. The following are elements often analyzed by flame and their respective detection limits of extract solution:

Element		$\mu\text{g/l}$
Al	aluminium	1000
Cr	chromium	50
Cu	copper	100
Fe	iron	200
Li	lithium	10
Mn	manganese	50
Ni	nickel	100
Zn	zinc	10

**352 Aluminium, cadmium, chromium, cobalt, copper, iron, lead, lithium, manganese, nickel, and zinc in seabed sediment (NIVA)**

Same procedure as 350: #1, Drying.

Extraction (oxidation)

'Total' extraction (HFO): Approximately 0.1g of the sample is accurately weighed in, 2ml of hydrofluoric acid and 2+2ml of concentrated nitric acid (suprapur) is added and the solution heated in a microwave oven. The solution is transferred to a 100ml volumetric flask and diluted to the mark with deionized water.

Determination

Concentrations are determined by **graphite furnace atomic absorption** electrothermal spectrometry or GFAAS using a hollow cathode lamp (HCL) or an electrodeless discharge lamp (EDL) as a light source. *Prior to 1986* a Perkin-Elmer model 560 with HGA-500 graphite furnace was used and *since 1986* the P-E 2380 has been used instead of the P-E 560.

A 20 $\mu\text{l}$  portion of extract, treated with  $\text{HNO}_3$ , is injected into graphite tube. The sample is then heated electrothermally in a stepwise manner through drying, ashing and atomization by a programme designed for each element. The programme which controls the ramp time, holding time and temperature for each phase is often adjusted to achieve optimal results.

The elements analyzed and approximated limit of detection for the extract are:

<b>Element</b>		<b>µg/l</b>
<b>Al</b>	<b>aluminium</b>	5
<b>Cd</b>	<b>cadmium</b>	0.1
<b>Co</b>	<b>cobalt</b>	5
<b>Cr</b>	<b>chromium</b>	0.5
<b>Cu</b>	<b>copper</b>	0.5
<b>Fe</b>	<b>iron</b>	5
<b>Li</b>	<b>lithium</b>	10
<b>Mn</b>	<b>manganese</b>	0.5
<b>Ni</b>	<b>nickel</b>	5
<b>Pb</b>	<b>lead</b>	0.5
<b>Zn</b>	<b>zinc</b>	10

#### 650 **Pb-210 dating (FORC)**

reference: Pheiffer Madsen, P., Sørensen, J., 1979. Validation of the Lead-210 dating method. *Journal of Radioanalysis and Chemistry* 54:39-48.

Excerpt (Larsen, B., & Jensen, A., 1989. *Marine Pollution Bulletin* 20(11):556-560.): "The determination of time- dependent sediment parameters is based on the vertical distribution of the natural radioactive isotope lead-210 [= <sup>210</sup> Pb] ... The content of unsupported lead-210, that lead-210 not produced in the sediment) decreases regularly downwards in undisturbed and steadily deposited sediment owing to radioactive decay. Departures from this predictable lead-210 profile in the topmost sediment column permit an assessment of mixing and/or intermittent erosion."

Dried slices of sediment are employed.

#### 760 **PCB in sea bed sediment (IMRN)**

PCB in total sediment (50g) were extracted by acetone and hexane:Acetone (3:1) using repeated ultrasonication and aggitation (Jensen et al., 1977).

Sulphur was removed with metallic mercury.

A florisil column (100-230 mesh, 30 cm x 6 mm ID) was used for the separation of the extract into 3 fractions. The first fraction eluted with 2 ml pentane was discarded; the second fraction eluted with 6.5 ml pentane contained PCB, HCB, aldrin, o,p-DDE, p,p-DDE and o,p-DDT; and the third fraction eluted with 10ml pentane:acetone (9:1) contained, alpha-HCH, beta-HCH, gamma-HCH (Lindane), o,p-DDD, p,p-DDD, o,p-DDT (20%) and p,p-DDT.

The third fraction needed further clean up on a neutral alumina column (30 cm x 6 mm ID; deactivated with 6% water). The chlorinated pesticides were eluted with 18 ml pentane. Beta-HCH was not eluted using this method.

A few samples (1990 sediment stations 15S-67S) were cleaned up before separation on the florisil column. A short silica column (10 cm x 6 mm ID) was used, followed by a

alumina column (10 cm x 6 mm ID, acidic Al<sub>2</sub>O<sub>3</sub>). Pentane:dichloromethane (4:1) was used for elution of the compounds.

The chlorinated compounds were quantified on GC (ECD) using two different columns: SE-54 CB, fused silica, 50 m x 0.20 mm, 0.11 µm; SP-2330, fused silica, 60 m x 0.25 mm, 0.20 µm.

Reference: Jensen, S., Renberg, L., Reutergårdh, L., 1977. Residue analysis of sediment and sewage sludge for organochlorines in the presence of elemental sulfur. Anal. Chem. 49:316-318.

**769 PAH in sea bed sediment (IMRN)**

Ca.50 g of total sediment (< 2mm) were extracted three times with acetone and hexane:acetone (3:1) using ultrasonication and agitation.

The clean-up of the extract was carried out on a short silica column (10 cm x 6 mm ID) using pentane:dichloromethane (9:1) as eluent. GC/MS equipped with a SE-54 fused silica capillary column (50 m x 0.20 mm ID, 0.11 µm film thickness) was used for the analysis of 2-6 ring aromatic hydrocarbons.

**390 Total organic nitrogen and organic carbon (CORG) in sea bed sediment (NIVA)**

5-8mg of freeze dried sample is weighed in a tin-foiled capsule and heated to over 1800 °C in an oven. The carbon in the gas is analyzed in a C-N 1106 Carlo-Erba element analyzer. Detection limit for C is 1 µg/mg and N is 1 µg/mg.

## **7. 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 (1995). 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 intercalibration exercises and analyses of the standard reference material is discussed in part in the annual National Comments.

The detection 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.

## 8. Explanation of Annexes A and B

Annex A present the raw data from the 1986-92 sediment investigations. Annex B presents the count, mean and standard deviation for parallel samples, if relevant. All data is on a **dry weight** basis. Three units of measure are used: **ppt** (parts per thousand), **ppm** (parts per million) and **ppb** (parts per billion). The numeric values shown have been printed with a fixed number of digits and do not necessarily indicate analytical precision.

The table headings are mostly self explanatory but the following may be helpful:

<b>Sample area</b>	refers to the official JMP designation and for the most part this is undefined (designated J99). The stations are sorted beginning with those in Oslofjord and continuing around the coast to Lofoten.
<b>Locality</b>	station name and position.
<b>Type</b>	refers to sample method: where GC = gravity corer (used by NIVA).
<b>Diameter</b>	refer to the inner diameter (mm) of GC.

The abbreviations for analytical laboratory, analysis code, detection limit and variable name have been explained in the preceding sections

The order of NIVA stations in the tables are as follows (see also Fig.1 - 3):

30S, 35S, 36S, 77S, 15S, 22S, 24S, 52S, 56S, 57S, 63S, 67S, 69S, 27S, 89S, 84S, 82S,  
90S, 92S, 95S, 99S, 98S

## 9. References

- Green, N.W., 1993. Joint Monitoring Programme - JMP. Overview of analytical methods employed by JMP in Norway 1981-1991. Norwegian Institute for Water Research. Project O-80106 report number 41 pp..
- Green, N.W., 1995. Joint Monitoring Programme (JMP) National comments to the Norwegian Data for 1993. NIVA project 80106, published 5.January.95 123pp.. (Also as document SIME 1/6/1).
- IARC, 1987. IARC monographs on the evaluation of the carcinogenic risk of chemicals to humans overallt evaluation of cascinogety: An updating og IARC Monographs vol. 1 to 42 Suppl. 7, Lyon.
- ICES, 1986. Interim reporting format for contaminants in fish and shellfish, JMP-version. ICES, May 1986.
- ICES, 1992. ICES Environmental Data Reporting Formats. Version 2.1. International Council for the Exploraion of the Sea. January 1992.
- Green, N.W., Klungsøyr, J., 1994. Norwegian 1990 sediment data for the North Sea Task Force (NSTF) and the Joint Monitoring Group (JMG). A joint report by Norwegian Institute for Water Research (NIVA) and Institute of Marine Research (IMR). NIVA project O-80106 (report number 3110), 17 pp + annexes. ISBN-82-577-2585-4
- NSTF, 1990. North Sea Task Force Monitoring Master Plan. North Sea Task Force, Oslo and Paris Commissions, International Council for the Exploration of the Sea. North Sea Environment. Report no. 3, 37 pp..
- 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

**Annex A**  
**Sediment 1986-92**  
**Raw data**



08/02-95

REPORT INFORMATION : " S E D I M E N T " .

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----- : -----
Table-File-Name      : I:\TBX\JMG\SED\TAB-0SED.TB1
Limit-CheckFile     : )LIM\NI941013.SED
Weight basis        : "DRY.weight".
Table SORT-Mode     : 1. LOCALITY-index
                     1.1: Sampling Lab = NIVA
                        (Predefined sequence)
                     1.2: OTHER Sampling Labs
                        (Position North:South,
                        and West:East)
                     : 2. Sample DATE.
                     : 3. Tables may be separated into
                        to "variable-groupes" tested
                        as: Subno = 0 and Subno > 0
----- : -----

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**NOTES :**

☞ NB ! The numeric values shown have been printed with a FIXED number of digits, and do not necessarily indicate analytical precision.

☞ For "Σ" variables (e.g. CB\_Σ7, DD\_ΣΣ) , 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.

☞ Footnotes consist of 4 parts:

1: a letter code (e.g ? or s)

The letter code may include one or more characters indicating possible matching letters referenced before or after numbers.

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 area: **J26 Oslofjorden**. All concentrations on **Dry-weight basis**.  
 Locality : **30S Steilene**, Latitude: 59°49.10N, Longitude: 10°33.80E  
 Sample date: **861029**, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless "\*" then <63µm.

Seq. no.	Water depth m	Core depth cm	Sub Slice-depth no upper lower	Analytical Lab.		NIVA		NIVA		NIVA		NIVA	
				Code.	Detection Limit	390	352	351	350	352	351	352	351
				CORG	Cd	Cu	Hg	Pb	Zn				
				ppt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppt
0301	98	35	01	0	1	0.09	54.00a	0.34a	134.00c	0.032	0.032	0.032	0.032
			02	1	2	0.15	54.98a	0.38a	122.00c	0.032	0.032	0.032	0.032
0302	99	34	01	0	1	26.80	44.99a	0.48a	96.97a	0.027	0.027	0.027	0.027
			02	1	2	0.20	39.97a	0.34a	87.94a	0.025	0.025	0.025	0.025
0303	97	34	01	0	1	30.90	60.99a	0.82c	125.00c	0.034	0.034	0.034	0.034
			02	1	2	0.14	61.00a	0.82c	126.00c	0.033	0.033	0.033	0.033
0304	98	41	01	0	1	0.10	57.94a	0.60a	133.90c	0.033	0.033	0.033	0.033
			02	1	2	0.17	58.93a	0.66c	127.00c	0.033	0.033	0.033	0.033

a(15) > Exceeds CLASS-1 limit.

c( 9) > Exceeds CLASS-3 limit.

Sample area: J26 Oslofjorden. All concentrations on Dry-weight basis.  
 Locality : 30S Steilene, Latitude: 59°49.10N, Longitude: 10°33.80E  
 Sample date: 901107, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 003 mm/year. Unfractionated sample unless <sup>mm</sup> then <53µm.

Seq. no.	Water depth m	Core depth cm	Sub slice no	Slice depth cm	Lower	ANALYTICAL		MOON		COORG		AL		Cd		Cu		Hg		Pb		Zn		FORC		
						NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
0301	100	43	01	0	2	99.66	27.80	75.800	0.06	33.70	0.74c	85.50a	0.340a	550	351	353	353	0.01	0.01	0.01	0.01	0.01	0.01	0.01	650	?
0302	100	57	01	0	1		27.00	72.700	0.04	32.20	0.77c	90.20a	0.300a													
			02	1	2		25.50	74.200	0.08	48.70a	0.78c	83.90a	0.310a													
			03	2	4		18.50	80.200	0.15	39.40a	0.41a	61.10a	0.230a													
			04	4	6		14.80	84.900	0.13	29.20	0.14	35.30a	0.170a													
			05	6	10		13.70	80.700	0.17	26.00	0.06	31.60a	0.150													
			06	10	15		13.90	83.100	0.08	25.60	0.04	27.80	0.140													
			07	15	20		12.90	87.000	0.12	25.50	0.03	27.50	0.150													
0303	100	43	01	0	1	98.57	29.30	72.700	0.12	73.70a	0.96c	92.80a	0.350a													
			02	1	2	98.15	30.30	75.100	0.08	81.70a	1.12c	105.00a	0.390a													
			03	2	4	99.03	28.40	76.500	0.13	79.70a	1.17c	110.00a	0.380a													
			04	4	6	98.88	29.90	77.200	0.12	90.30a	1.15c	121.00c	0.400a													
			05	6	10	96.36	28.00	77.100	0.21	79.90a	1.22c	121.00c	0.400a													
			06	10	15	86.06	20.50	80.100	0.25	46.50a	0.70c	72.80a	0.290a													
			07	15	20	99.04	14.90	84.500	0.12	31.10	0.04	49.50a	0.180a													
0304	100	36	01	0	2		74.76																			
			02	2	4		69.56																			
			03	4	6		64.97																			
			04	6	8		63.46																			
			05	8	10		62.19																			
			06	10	12		60.26																			
			07	12	14		59.73																			
			08	14	16		59.50																			
			09	16	18		60.00																			
			10	18	20		59.88																			
			11	20	22		58.87																			
			12	22	24		57.90																			
			13	24	26		57.21																			
			14	26	28		56.51																			
			15	28	30		54.33																			
			16	30	32		55.99																			
			17	32	34		56.25																			

miss(7) ! Missing value.  
 a (32) > Exceeds CLASS-1 limit.  
 c (11) > Exceeds CLASS-3 limit.

Sample area: J26 Oslofjorden. All concentrations on Dry-weight basis.  
 Locality : 30S Steilene, Latitude: 59°49.10N, Longitude: 10°33.80E  
 Sample date: 901107, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 003 mm/year. Unfractionated sample unless <sup>mm</sup> then <53µm.

Seq. no.	Water depth m	Core depth cm	Sub slice no	Slice depth cm	Lower	ANALYTICAL		MOON		COORG		AL		Cd		Cu		Hg		Pb		Zn		FORC				
						IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN	IMRN
0305	100	36	00	0	2	0.68	0.41	1.05	1.55	1.33	2.22	0.65	2.91	1.93	2.38	0.33	0.22	0.68	1.21	12.00a	17.28	1.15	1.09	<0.05	1.05	0.45	1.01	<4.80
0306	100	36	00	0	2	0.95	0.70	1.55	1.73	1.37	2.49	0.69	3.76	2.42	2.60	0.22	0.68	1.46	1.21	14.54c	20.62	1.06	1.27	<0.05	4.38	0.86	1.65	<9.27

a(5) > Exceeds CLASS-1 limit.  
 c(3) > Exceeds CLASS-3 limit.

Tab.width cont'd J26, 30S Steilene, 901107.

Seq.	water depth	Core no	Slice-depth	IMRN		Σ(*)		IMRN		Σ(*)		IMRN		Σ(*)		IMRN		Σ(*)		IMRN		Σ(*)		IMRN		Σ(*)		IMRN		Σ(*)		IMRN		Σ(*)		IMRN		Σ(*)	
				m	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm
0305	100	36	00	0	2	0.16	0.11	0.20	0.47	0.98a	0.11	13.00	18.00	31.00	31.00	10.00	55.00	23.00	7.00	7.00	71.00	96.00	9.00	106.00	122.00	122.00	51.00	51.00	11.00	11.00	21.00	21.00	63.00	63.00	83.00	83.00			
0306	100	36	00	0	2	0.16	0.51	0.19	0.86	1.55a	0.02	16.00	23.00	45.00	41.00	15.00	80.00	41.00	11.00	11.00	96.00	96.00	14.00	173.00	186.00	186.00	67.00	67.00	16.00	16.00	27.00	27.00	106.00	106.00	122.00	122.00			

Tab.width cont'd J26, 30S Steilene, 901107.

Seq.	water depth	Core no	Slice-depth	IMRN		Σ(*)		IMRN		Σ(*)		IMRN		Σ(*)		IMRN		Σ(*)		IMRN		Σ(*)		IMRN		Σ(*)		IMRN		Σ(*)		IMRN		Σ(*)		
				m	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	no	cm	
0305	100	36	00	0	2	216.00	99.00	67.00c	96.00	77.00	15.00	77.00	93.00	1279.00	438.00	1372.00a	1372.00	23.00	7.00	7.00	71.00	96.00	9.00	106.00	122.00	122.00	51.00	51.00	11.00	11.00	21.00	21.00	63.00	63.00	83.00	83.00
0306	100	36	00	0	2	292.00	144.00	93.00c	86.00	84.00	15.00	88.00	125.00	1758.00	592.00	1883.00a	1883.00	41.00	11.00	11.00	96.00	96.00	14.00	173.00	186.00	186.00	67.00	67.00	16.00	16.00	27.00	27.00	106.00	106.00	122.00	122.00

Sample.area: J26 Oslofjorden. All concentrations on Dry.weight basis.  
 Locality : 35S Holmestrand-Mølen, Latitude: 59°30.00N, Longitude: 10°35.70E  
 Sample date: 861020, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/Year. Unfractionated sample unless <sup>mm</sup> then <63µm.

Seq.	water depth	Core no	Slice-depth	CORG		Cd		Cu		Hg		Pb		Zn	
				ppt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
0351	131	42	01	0	1	16.30	0.09	35.00	0.26a	83.00a	0.172a				
			02	1	2	15.90	0.08	32.00	0.22a	77.00a	0.166a				
0352	129	37	01	0	1	17.30	0.07	31.00	0.16a	70.00a	0.160a				
			02	1	2	15.60	0.07	29.00	0.18a	69.00a	0.156a				
0353	131	44	01	0	1	17.30	0.07	32.00	0.22a	72.00a	0.170a				
			02	1	2	16.60	0.05	31.00	0.24a	77.00a	0.170a				
0354	131	48	01	0	1	17.90	0.08	32.00	0.20a	74.00a	0.169a				
			02	1	2	17.00	0.06	30.00	0.20a	81.00a	0.170a				

a(24) > Exceeds CLASS-1 limit.

Sample.area: J26 Oslofjorden. All concentrations on Dry.weight basis.  
 Locality : 35S Holmestrand-Mølen, Latitude: 59°30.00N, Longitude: 10°35.70E  
 Sample date: 901107, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 002 mm/Year. Unfractionated sample unless <sup>mm</sup> then <63µm.

Seq.	water depth	Core no	Slice-depth	CSAMT		Al		Cd		Cu		Hg		Pb		Zn	
				ppt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
0351	130	37	00	0	2	98.87	17.10	57.900	0.06	29.60	0.17a	56.70a	0.170a				
0352	130	38	00	0	2		18.90	59.400	0.05	34.20	0.27a	66.00a	0.190a				
0353	130	42	00	0	2		17.70	88.500	0.04	35.00	0.23a	65.00a	0.180a				

a(9) > Exceeds CLASS-1 limit.

Sample.area: J26 Oslofjorden. All concentrations on Dry-weight basis.  
 Locality : 36S Fårder area, Latitude: 59°00.40N, Longitude: 10°41.60E  
 Sample date: 861020 , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless "\*" then <63µm.

Seq. no.	Water depth	Core depth	Sub Slice-depth	Analytical Lab. Code	NIVA 390	NIVA 352	NIVA 351	NIVA 350	NIVA 352	NIVA 351	
0361	142	32	01	0	1	16.90	0.06	20.00	0.12	65.00a	0.119
				02	1	17.50	0.06	19.90	0.14	67.00a	0.125
0362	139	45	01	0	1	17.50	0.05	20.00	0.12	67.00a	0.121
				02	1	17.40	0.06	20.00	0.14	67.00a	0.124
0363	139	44	01	0	1	16.80	0.06	21.00	0.14	66.00a	0.120
				02	1	16.60	0.07	20.00	0.14	67.00a	0.121
0364	141	25	01	0	1	16.60	0.07	20.00	0.12	65.00a	0.118
				02	1	16.10	0.08	21.00	0.12	74.00a	0.120

a(8) > Exceeds CLASS-1 limit.

Sample area: J26 Oslofjorden. All concentrations on Dry-weight basis.  
 Locality : 36S Fårder area, Latitude: 59°00.40N, Longitude: 10°41.60E  
 Sample date: 900512, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless "\*" then <63µm.

Seq. no.	Water depth m	Core depth cm	Slice no	Depth lower	Analytical Lab. Code	NIVA %<63µ	MOCON	Al ppt	Li ppm	NIVA 353	NIVA 352	NIVA 353	NIVA 353	Cd ppm	Cu ppm	Hg ppt	Pb ppm	Zn ppt	FORC
0361	458	67	01	0	2	99.56		22.20	64.000	64.000	47.900	0.10	21.90	0.12	52.50a	0.130			
0362	458	54	01	0	1	99.30		22.40	67.000	67.000	44.000	0.11	26.00	0.08	52.50a	0.130			
			02	1	2	99.74		22.60			46.800	0.09	24.60	0.07	32.90a	0.130			
			03	2	4	99.69		22.30			67.200	0.06	26.50	0.06	34.10a	0.130			
			04	4	6	99.42		22.90			54.900	0.04	25.60	0.05	34.90a	0.150			
			05	6	10	99.74		22.70			57.200	0.07	24.80	0.05	34.70a	0.140			
			06	10	15	99.51		22.70			61.300	0.08	24.00	0.05	34.10a	0.130			
			07	15	20	99.71		21.20			54.100	0.07	23.00	0.08	38.00a	0.140			
0363	462	73	01	0	1			21.70	63.500	63.500	50.600	0.10	23.10	0.10	50.00a	0.120			
			02	1	2			22.50			58.900	0.06	23.40	0.10	27.80	0.120			
			03	2	4			21.90			60.900	0.05	24.00	0.07	31.20a	0.130			
			04	4	6			22.50			53.100	0.04	23.90	0.06	33.90a	0.130			
			05	6	10			23.00			51.900	0.10	24.80	0.06	31.10a	0.130			
			06	10	15			21.20			49.700	0.06	23.70	0.08	35.00a	0.130			
			07	15	20			20.10			48.500	0.09	22.30	0.10	34.40a	0.130			
0364	459	69	01	0	2		75.37												s51.67 miss
			02	2	4		69.83												s71.50 miss
			03	4	6		66.02												s75.00 miss
			04	6	8		64.39												s68.00 miss
			05	8	10		64.52												s56.67 miss
			06	10	12		64.86												s58.33 miss
			07	12	14		64.38												s65.83 miss
			08	14	16		61.42												s64.67 miss
			09	16	18		62.01												s63.17 miss
			10	18	20		61.95												miss
			11	20	22		61.09												miss
			12	22	24		62.48												miss
			13	24	26		62.11												miss
			14	26	28		62.56												miss
			15	28	30		60.86												miss
			16	30	32		60.89												miss
			17	32	34		62.04												miss
			18	34	36		60.48												miss
			19	36	38		60.09												miss
			20	38	40		60.56												33.00 miss
			21	40	42		61.44												miss
			22	42	44		59.50												44.67 miss
			23	44	46		60.68												miss

s ( 9) ! Suspect value(s)  
 miss(12) ! Missing value.  
 a (14) > Exceeds CLASS-1 limit.



Sample.area: **J99 Undefined**. All concentrations on **Dry-weight basis**.  
 Locality : **77S Arendal area**, Latitude: 58°24.20N, Longitude: 09°01.80E  
 Sample date: **900510** , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 005 mm/year. Unfractionated sample unless "a" then <63µm.

Seq. no.	Water depth m	Core depth cm	Slice depth cm	Lab. Code	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		FORC		
					Analysis	Detection	390	352	353	353	351	350	353	351	350	353	351	350	353	351	350	353	Pb
Limit					CORC		MOCON		AL		Li		Cd		Cu		Hg		Pb		Pb210		
no upper					ppt		%		ppt		ppm		ppm		ppm		ppm		ppm		mBq/g		
lower					ppt		%		ppt		ppm		ppm		ppm		ppm		ppm		mBq/g		
cm					ppt		%		ppt		ppm		ppm		ppm		ppm		ppm		mBq/g		
0771	350	53	01	0	2	2	98.70		21.20	47.800	66.500	0.10	22.40	0.10	55.00a	0.120							
0772	360	39	01	0	1	1	99.39		21.60	49.600	69.000	0.11	23.30	0.10	55.00a	0.130							
			02	1	2	2	99.40		22.10	51.500		0.09	24.80	0.11	33.90a	0.120							
			03	2	4	4	99.09		22.00	46.100		0.07	23.80	0.14	32.90a	0.120							
			04	4	6	6	99.21		22.80	43.400		0.05	23.50	0.07	34.60a	0.130							
			05	6	10	10	99.71		22.50	45.000		0.07	26.30	0.08	40.00a	0.130							
			06	10	15	15	99.58		22.30	54.300		0.06	24.40	0.07	42.50a	0.150							
			07	15	20	20	99.71		21.40	48.200		0.08	24.80	0.07	42.70a	0.150							
0773	346	44	01	0	1	1			22.30	43.700	65.000	0.10	22.50	0.12	55.00a	0.120							
			02	1	2	2			22.30	45.400		0.07	23.10	0.10	32.10a	0.130							
			03	2	4	4			22.00	47.100		0.08	22.60	0.10	32.80a	0.130							
			04	4	6	6			21.80	54.700		0.06	22.60	0.08	32.60a	0.130							
			05	6	10	10			22.10	58.800		0.04	22.50	0.06	36.30a	0.130							
			06	10	15	15			21.70	54.600		0.05	23.00	0.08	34.50a	0.130							
			07	15	20	20			21.20	46.800		0.07	25.50	0.08	35.40a	0.140							
0774	356	48	01	0	2	2															98.17		
			02	2	4	4															miss		
			03	4	6	6															99.00		
			04	6	8	8															miss		
			05	8	10	10															miss		
			06	10	12	12															miss		
			07	12	14	14															miss		
			08	14	16	16															miss		
			09	16	18	18															miss		
			10	18	20	20															miss		
			11	20	22	22															miss		
			12	22	24	24															miss		
			13	24	26	26															miss		
			14	26	28	28															miss		
			15	28	30	30															miss		
			16	30	32	32															miss		
			17	32	34	34															miss		
			18	34	36	36															miss		
			19	36	38	38															miss		
			20	38	40	40															miss		
			21	40	42	42															miss		
			22	42	44	44															miss		
			23	44	46	46															miss		
			24	46	48	48															miss		
			25	48	50	50															miss		
			26	50	51	51															miss		

miss(16) ! Missing value.  
 a (15) > Exceeds CLASS-1 limit.









Sample.area: **J99 Undefined**. All concentrations on **Dry-weight basis**.  
 Locality : **22S Bømlø area**, Latitude: 59°25.90N, Longitude: 04°50.20E  
 Sample date: **900504**, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/Year. Unfractionated sample unless  $\mu\text{m}$  then <math>\mu\text{m}</math>.

Seq. no.	Water depth	Core	Sub slice	Depth	IMRN		$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$						
					no	cm																no	cm	no	cm	no	cm
0225	200	10	00	0	2	0.04	0.02	0.08	0.13	0.07	0.13	0.04	0.23	0.12	0.18	0.02	0.06	0.12	0.91	1.24	0.06	0.23	0.04	0.26	0.10	0.24	0.95
0226	200	19	00	0	2	0.06	0.04	0.07	0.15	0.09	0.17	0.05	0.50	0.16	0.25	<0.05	0.06	0.14	1.14	<1.59	0.09	0.30	0.05	0.37	0.12	0.34	1.27

a(4) > Exceeds CLASS-1 limit.

**Tab.width cont'd J99, 22S Bømlø area, 900504.**

Seq. no.	Water depth	Core	Sub slice	Depth	IMRN		$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$
					no	cm																							
0225	200	10	00	0	2	0.02	0.05	0.03	0.10	0.12	0.04	1.00	16.00	71.00	68.00	7.00	21.00	2.00	1.00	34.00	3.00	24.00	20.00	22.00	3.00	2.00	2.00	17.00	28.00
0226	200	19	00	0	2	0.04	0.04	0.03	0.11	0.19	0.06	8.00	24.00	46.00	33.00	4.00	25.00	3.00	2.00	35.00	4.00	32.00	27.00	28.00	5.00	5.00	24.00	43.00	

**Tab.width cont'd J99, 22S Bømlø area, 900504.**

Seq. no.	Water depth	Core	Sub slice	Depth	IMRN		$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$	IMRN	$\Sigma(\ast)$
					no	cm																							
0225	200	10	00	0	2	91.00	35.00	19.00a	8.00	67.00	14.00	51.00	156.00	469.00	208.00	625.00a	625.00	2.00	1.00	34.00	3.00	24.00	20.00	22.00	3.00	2.00	2.00	17.00	28.00
0226	200	19	00	0	2	106.00	39.00	22.00a	8.00	68.00	14.00	52.00	111.00	546.00	254.00	657.00a	657.00	3.00	2.00	35.00	4.00	32.00	27.00	28.00	5.00	5.00	24.00	43.00	

Sample.area: **J99 Undefined**. All concentrations on **Dry-weight basis**.  
 Locality : **24S Sotra**, Latitude: 60°15.10N, Longitude: 04°33.30E  
 Sample date: **900503**, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/Year. Unfractionated sample unless  $\mu\text{m}$  then <math>\mu\text{m}</math>.

Seq. no.	Water depth	Core	Sub slice	Depth	NIVA		Li	Cd	Cu	Hg	Pb	Zn	NIVA	
					no	cm							no	cm
0241	294	16	00	0	2	40.57	9.50	33.900	60.000	0.07	14.10	0.03	40.50a	0.060
0242	294	34	00	0	2	.	8.90	35.600	60.500	0.07	14.40	0.02	36.40a	0.060
0243	294	27	00	0	2	.	8.20	35.600	61.000	0.06	12.30	0.02	38.00a	0.050

a(3) > Exceeds CLASS-1 limit.

Sample area: **J63 Sørforjorden**. All concentrations on **Dry weight basis**.  
 Locality : **52S Tyssedal**, Latitude: 60°06.90N, Longitude: 06°32.90E  
 Sample date: **901031**, Sampling Lab: NIVA, Type: GC, Diameter: 050.  
 Est. sedimentation rate 002 mm/year. Unfractionated sample unless **mm** then <63µm.

Seq. no.	Water depth m	Core slice cm	Sub slice cm	Depth cm	NIVA		NIVA		NIVA		NIVA		NIVA		
					390	352	351	350	353	355	351	353			
0521	111	8	00	0	2	83.59	27.80	41.600	12.20e	368.00c	13.50e	3150.00e	4.240c		
0522	111	17	00	0	2*	100.00	24.00	53.200	12.10e	395.00e	13.00e	3500.00e	4.550c		
0523	111	22	00	0	2*	100.00	14.50	49.000	6.78c	178.00c	5.93e	1330.00c	1.980c		
							13.80	52.200	6.13c	186.00c	5.81e	1430.00c	2.030c		
							25.60	44.800	5.50c	169.00c	7.04e	1250.00c	1.970c		
							100.00	22.10	55.800	6.09c	167.00c	6.10e	1220.00c	1.840c	

c(20) > Exceeds CLASS-3 limit.  
 e(10) > Exceeds CLASS-5 limit.

Sample area: **J63 Sørforjorden**. All concentrations on **Dry weight basis**.  
 Locality : **56S Kvalnes**, Latitude: 60°13.70N, Longitude: 06°35.60E  
 Sample date: **901101**, Sampling Lab: NIVA, Type: GC, Diameter: 050.  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless **mm** then <63µm.

Seq. no.	Water depth m	Core slice cm	Sub slice cm	Depth cm	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		FORC 650
					390	352	353	351	350	353	355	351	350	353	355	351	353		
0561	390	23	01	0	2	82.62	13.60	65.300	0.46a	64.20a	2.14c	288.00c	0.510a						
0562	390	23	01	0	2	87.39	15.60	68.300	0.58a	68.00a	2.53c	301.00c	0.710c						
							11.70	55.400	0.41a	66.10a	2.17c	285.00c	0.570a						
							83.75	14.20	55.300	0.44a	67.40a	2.14c	293.00c	0.490a					
							81.42	12.20	59.100	0.39a	67.20a	2.24c	301.00c	0.560a					
							80.53	12.40	80.300	0.55a	65.80a	1.88c	234.00c	0.440a					
							82.04	12.00	75.700	0.52a	58.20a	1.11c	150.00c	0.300a					
							73.60	9.90	83.600	0.09	44.20a	0.08	61.90a	0.140					
0563	390	24	01	1	2		14.40	74.700	0.50a	65.60a	2.19c	260.00c	0.630a						
							13.70	78.900	0.35a	67.20a	2.09c	294.00c	0.460a						
							12.00	47.700	0.46a	66.30a	2.27c	25.30	0.450a						
							12.70	54.500	0.45a	61.90a	2.33c	30.00	0.490a						
							13.20	55.500	0.40a	65.30a	2.44c	251.00c	0.430a						
							11.60	49.300	0.25	54.70a	0.82c	104.00a	0.250a						
							10.30	53.600	0.22	55.10a	0.71c	72.60a	0.220a						
0564	390	24	01	0	2		59.96												54.83
							55.06												54.00
							54.39												55.33
							52.99												47.67
							51.14												54.33
							48.65												25.00
							46.32												13.33
							43.29												-0.67
							43.20												1.67
							43.91												3.33
							40.08												miss
							36.50												-5.00

miss (1) ! Missing value.  
 a (43) > Exceeds CLASS-1 limit.  
 c (25) > Exceeds CLASS-3 limit.



Sample.area: **J62 Hardangerfjorden**. All concentrations on **Dry.weight basis**.  
 Locality : **63S Ranaskjær**, Latitude: 60°23.60N, Longitude: 06°27.10E  
 Sample date: **901101**, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless "µ" then <63µm.

Seq. no.	Water depth	Core depth	Sub slice	Slice-depth	NIVA		NIVA		NIVA		NIVA		NIVA	
					390	352	353	351	350	353	351	353	351	353
0631	680	15	00	0	2	96.56	15.40	57.900	0.17	45.10a	0.66c	138.00c	0.290a	
0632	680	16	00	0	2	.	15.10	54.600	0.12	42.50a	0.65c	138.00c	0.280a	
0633	680	13	00	0	2	.	15.40	57.400	0.17	44.50a	0.73c	173.00c	0.310a	

a(6) > Exceeds CLASS-1 limit.  
 c(6) > Exceeds CLASS-3 limit.

Sample.area: **J62 Hardangerfjorden**. All concentrations on **Dry.weight basis**.  
 Locality : **67S Strandebarbm**, Latitude: 60°13.50N, Longitude: 06°05.10E  
 Sample date: **901102**, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless "µ" then <63µm.

Seq. no.	Water depth	Core depth	Sub slice	Slice-depth	NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		NIVA		FORC
					390	352	353	351	350	353	351	353	350	353	350	353	351	353	
0671	650	18	01	0	2	97.32	14.20	54.500	0.11	32.40	0.24a	72.20a	0.200a	.	.	.	.	.	.
0672	650	23	02	1	1	95.96	13.80	54.400	0.16	34.00	0.27a	75.80a	0.230a	.	.	.	.	.	.
							13.20	53.800	0.12	33.10	0.28a	81.50a	0.220a	.	.	.	.	.	.
							15.70	56.000	0.12	34.40	0.32a	93.30a	0.230a	.	.	.	.	.	.
							14.50	57.400	0.17	34.90	0.17a	58.10a	0.170a	.	.	.	.	.	.
							13.80	55.400	0.12	32.40	0.11	48.70a	0.160a	.	.	.	.	.	.
							13.20	59.200	0.12	33.00	0.06	41.90a	0.150	.	.	.	.	.	.
							12.80	63.000	0.14	31.40	0.02	37.90a	0.140	.	.	.	.	.	.
							14.60	59.400	0.15	40.20a	0.28a	83.00a	0.270a	.	.	.	.	.	.
							14.20	58.700	0.10	32.70	0.29a	88.90a	0.220a	.	.	.	.	.	.
							14.70	64.500	0.15	35.10a	0.21a	74.80a	0.210a	.	.	.	.	.	.
							14.50	58.900	0.16	35.90a	0.15	64.00a	0.190a	.	.	.	.	.	.
							14.10	61.500	0.10	32.50	0.09	60.00a	0.170a	.	.	.	.	.	.
							13.30	62.600	0.15	31.30	0.02	41.00a	0.150	.	.	.	.	.	.
							10.80	63.800	0.11	29.30	0.02	31.30a	0.140	.	.	.	.	.	.
0674	650	23	01	0	2	.	64.28	.	.	.	.	.	.	.	.	.	.	.	115.50
							57.59	.	.	.	.	.	.	.	.	.	.	.	119.83
							57.68	.	.	.	.	.	.	.	.	.	.	.	85.00
							55.47	.	.	.	.	.	.	.	.	.	.	.	97.00
							56.53	.	.	.	.	.	.	.	.	.	.	.	104.83
							55.72	.	.	.	.	.	.	.	.	.	.	.	18.50
							51.91	.	.	.	.	.	.	.	.	.	.	.	1.67
							50.57	.	.	.	.	.	.	.	.	.	.	.	37.50
							49.29	.	.	.	.	.	.	.	.	.	.	.	24.00
							48.85	.	.	.	.	.	.	.	.	.	.	.	14.67
							48.34	.	.	.	.	.	.	.	.	.	.	.	0.33

a(37) > Exceeds CLASS-1 limit.





Sample area: **J99 Undefined**. All concentrations on **Dry-weight basis**.  
 Locality : **27S Statlandet (east of)**, Latitude: 62°09.30N, Longitude: 05°21.30E  
 Sample date: **920902**, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate m/yr. Unfractionated sample unless <sup>usu</sup> then <53µm.

Seq. no.	Water depth m	Core depth cm	Sub. slice no	Depth cm	MOON	CORG	Li	Cd	Cu	Hg	Pb	Zn	WKID	NIVA		NIVA		NIVA		Σ(*)	Σ(*)	NIVA	Σ(*)																												
														ppt	ppm	ppt	ppm	ppb	ppm					ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb																			
0271	289	33	01	0	2	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	390	353	351	350	350	360	0.01	0.05	0.05	<0.50	<0.50	<0.50	<1.60	<1.60	360	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05											
0272	289	39	01	0	2	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	360	353	351	360	360	360	0.05	0.05	0.05	<0.50	<0.50	<0.50	<1.80	<1.80	360	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05											
0273	289	40	01	0	1	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	360	353	351	360	360	360	0.05	0.05	0.05	<0.50	<0.50	<0.50	<1.80	<1.80	360	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										
0274	290	40	01	0	1	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	360	353	351	360	360	360	0.05	0.05	0.05	<0.50	<0.50	<0.50	<1.80	<1.80	360	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									
0275	289	51	01	0	1	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	360	353	351	360	360	360	0.05	0.05	0.05	<0.50	<0.50	<0.50	<1.80	<1.80	360	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									
0278	287	40	01	0	1	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss	miss						
						78.33	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	327.83	404.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83	327.83					
						77.07	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	404.83	327.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83	404.83			
						75.54	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	334.50	221.00	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50	334.50			
						74.55	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	221.00	236.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00	221.00		
						71.67	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	129.00	
						70.21	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83	39.83
						67.88	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33	12.33
						66.25	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	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	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	0.00	0.00	0.00
						61.86	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .																																					

s (46) ! Suspect value(s)  
 miss( 2) ! Missing value.  
 k ( 3) Values= 1000 \* given units.  
 a (24) > Exceeds CLASS-1 limit.  
 c ( 3) > Exceeds CLASS-3 limit.



Tab.width cont'd J99, 27S Stattdlandet (east of), 920902.

Seq. no.	Water depth	Core depth	Sub slice-depth	no	upper	lower	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)
	m	cm	cm	cm	cm	cm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
0271	289	33	01	0	2	71.00	297.00	141.00	145.00	118.00c	37.00	258.00	36.00	240.00	<1.00	<1.00	s68.00	s<1707.00	<908.00					s<1k78a
			02	27	32	27.00	233.00	85.00	105.00	63.00c	40.00	208.00	22.00	193.00	<1.00	<1.00	s<1.00	s<1094.00	<629.00					s<1k09a
0272	289	39	01	0	2	73.00	319.00	124.00	171.00	138.00c	41.00	284.00	36.00	294.00	<1.00	<1.00	s<6.00	s<1876.00	<959.00					s<1k88a
			02	33	38	11.00	s78.00	miss	25.00	16.00a	17.00	72.00	8.00	64.00	<1.00	<1.00	s<8.00	s<327.00	s<180.00					s<334.00a
0273	289	40	01	0	1																			
0274	290	40	01	0	1																			
			02	1	2																			
			03	2	4																			
			04	4	6																			
			05	6	10																			
			06	10	15																			
			07	15	20																			
			08	20	25																			
			09	25	30																			
0275	289	51	01	0	1																			
			02	1	2																			
			03	2	4																			
			04	4	6																			
			05	6	10																			
			06	10	15																			
			07	15	20																			
			08	20	25																			
			09	25	30																			
0278	287	40	01	0	1																			
			02	1	2																			
			03	2	3																			
			04	5	6																			
			05	8	9																			
			06	12	13																			
			07	19	20																			
			08	25	26																			
			09	31	32																			

Sample.area: J65 Orkdalsfjorden. All concentrations on Dry-weight basis.

Locality : 89S Thamshavn, Latitude: 63°19.08N, Longitude: 09°52.05E

Sample date: 871019 , Sampling Lab: NIVA, Type: GC, Diameter: 050

Est. sedimentation rate mm/year. Unfractionated sample unless \*\*\* then <63µm.

Seq. no.	Water depth	Core depth	Sub slice-depth	no	upper	lower	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA
	m	cm	cm	cm	cm	cm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
0891	17	01	0	1	1	9.84	64.700	0.20	202.00c	0.13	87.80a	0.198a												
			02	1	2	10.30	65.900	0.81a	192.00c	0.07	102.60a	0.205a												
0892	11	01	0	1	1	14.50	65.600	0.51a	412.00c	0.14	139.60c	0.366a												
			02	1	2	11.50	62.500	3.45c	252.00c	0.14	76.00a	0.252a												

a(9) > Exceeds CLASS-1 limit.

c(6) > Exceeds CLASS-3 limit.

Sample area: **J65 Orkdalsfjorden**. All concentrations on **Dry-weight basis**.  
 Locality : **89S Thamshavn**, Latitude: 63°19.08N, Longitude: 09°52.05E  
 Sample date: **920830** , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless "" then <63µm.

Seq. no.	Water depth	Core Slice	Sub Slice	no	depth	NIVA		NIVA		NIVA		NIVA		
						390	353	351	350	0.01	0.001	0.001	0.001	
Analytical Lab. :						NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	
Analysis Code. :						390	353	351	350	353	351	353	351	
Detection Limit :						0.2	0.001	0.001	0.01	0.001	0.001	0.001	0.0001	
CORG :						Li	Cd	Cu	Hg	Pb	Zn	Pb	Zn	
no. depth						Lngt	no	upper	lower	ppm	ppm	ppm	ppm	ppm
m						cm	cm	cm	cm	ppm	ppm	ppm	ppm	
0891	183	14	01	0	1	11.00	34.000	0.42a	230.00c	0.05	35.50a	0.294a	0.294a	
0892	179	12	01	0	1	11.70	33.500	1.00a	185.00c	0.07	31.50a	0.234a	0.234a	
0893	178	17	01	0	1	16.30	36.000	0.80a	426.00c	0.16a	90.00a	0.394a	0.394a	

a(10) > Exceeds CLASS-1 limit.  
 c( 3) > Exceeds CLASS-3 limit.

Sample area: **J65 Orkdalsfjorden**. All concentrations on **Dry-weight basis**.  
 Locality : **84S Trossavika**, Latitude: 63°21.70N, Longitude: 09°57.40E  
 Sample date: **871019** , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless "" then <63µm.

Seq. no.	Water depth	Core Slice	Sub Slice	no	depth	NIVA		NIVA		NIVA		NIVA	
						390	352	351	350	0.01	0.001	0.01	0.0001
Analytical Lab. :						NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	
Analysis Code. :						390	352	351	350	352	351	352	351
Detection Limit :						1.0	0.001	0.001	0.01	0.01	0.05	0.0001	0.0001
CORG :						Al	Cd	Cu	Hg	Pb	Zn	Pb	Zn
no. depth						Lngt	no	upper	lower	ppm	ppm	ppm	ppm
m						cm	cm	cm	cm	ppm	ppm	ppm	ppm
0841	18	01	0	1	2	11.30	70.000	0.47a	308.00c	0.29a	192.20c	0.472a	0.472a
	02	1	0	1	2	10.90	57.500	0.82c	469.20c	0.82c	469.20c	2.160c	2.160c
0842	23	01	0	1	1	12.50	59.800	0.46a	232.00c	0.28a	139.10c	0.352a	0.352a
	02	1	0	1	2	12.10	62.000	6.23c	419.00c	0.35a	218.10c	0.634a	0.634a
0843	23	01	0	1	1	12.30	64.500	0.87a	582.00c	0.54a	293.90c	0.864c	0.864c
	02	1	0	1	2	8.77	58.100	0.85a	854.00c	0.57a	374.60c	0.206a	0.206a
0844	21	01	0	1	1	12.30	63.300	0.96a	308.00c	0.27a	160.80c	0.500a	0.500a
	02	1	0	1	2	9.58	60.400	0.96a	308.00c	0.27a	160.80c	0.500a	0.500a

a(15) > Exceeds CLASS-1 limit.  
 c(22) > Exceeds CLASS-3 limit.

Sample area: **J65 Orkdalsfjorden**. All concentrations on **Dry-weight basis**.  
 Locality : **84S Trossavika**, Latitude: 63°21.70N, Longitude: 09°57.40E  
 Sample date: **920830** , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless "" then <63µm.

Seq. no.	Water depth	Core Slice	Sub Slice	no	depth	NIVA		NIVA		NIVA		NIVA	
						390	353	351	350	0.01	0.001	0.01	0.0001
Analytical Lab. :						NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	
Analysis Code. :						390	353	351	350	353	351	353	351
Detection Limit :						0.2	0.001	0.001	0.01	0.01	0.001	0.001	0.0001
CORG :						Li	Cd	Cu	Hg	Pb	Zn	Pb	Zn
no. depth						Lngt	no	upper	lower	ppm	ppm	ppm	ppm
m						cm	cm	cm	cm	ppm	ppm	ppm	ppm
0841	355	38	01	0	1	10.90	45.500	0.56a	247.00c	0.17a	90.00a	0.342a	0.342a
0842	355	23	01	0	1	11.20	40.000	4.10c	573.00c	0.32a	140.00c	0.613a	0.613a
0843	355	16	01	0	1	11.20	46.000	0.47a	405.00c	0.13	95.00a	0.405a	0.405a

a(9) > Exceeds CLASS-1 limit.  
 c(5) > Exceeds CLASS-3 limit.

Sample.area: **J65 Orkdalsfjorden**. All concentrations on **Dry.weight basis**.  
 Locality : **82S Flakk**, Latitude: 63°27.05N, Longitude: 10°11.08E  
 Sample date: **871019**, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/Year. Unfractionated sample unless "\*" then <63µm.

Seq. no.	Water depth m	Core depth cm	Sub Slice-depth no upper lower	Analytical Lab.		NIVA		NIVA		NIVA		NIVA	
				Code.	Detection Limit	390	352	351	350	352	351	350	352
						1.0	0.001	0.01	0.01	0.01	0.05	0.0001	0.0001
						<b>COBG</b>	<b>Al</b>	<b>Cd</b>	<b>Cu</b>	<b>Hg</b>	<b>Pb</b>	<b>Zn</b>	
						ppt	ppt	ppm	ppm	ppm	ppm	ppt	
0821	31	01	0	1		31.70	66.200	<0.07	50.40a	0.14	41.80a	0.137	
						35.00	61.400	<0.09	62.40a	0.17a	40.10a	0.152a	
0823	21	01	0	1		13.80	59.300	0.06	50.40a	0.08	85.30a	0.136	
						6.95	63.500	0.10	61.80a	0.07	84.60a	0.150	
0824	10	01	0	1		7.20	60.300	0.08	62.10a	0.14	93.10a	0.155a	
						7.10	67.800	0.14	62.50a	0.13	98.70a	0.171a	
0832	31	01	0	1		14.40	70.300	0.10	67.90a	0.17a	41.60a	0.153a	
						12.70	77.600	0.07	52.40a	0.20a	88.40a	0.144	

a(23) > Exceeds CLASS-1 limit.

Sample.area: **J65 Orkdalsfjorden**. All concentrations on **Dry.weight basis**.  
 Locality : **90S Outer Orkdalsfjord**, Latitude: 63°27.40N, Longitude: 10°03.00E  
 Sample date: **871019**, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/Year. Unfractionated sample unless "\*" then <63µm.

Seq. no.	Water depth m	Core depth cm	Sub Slice-depth no upper lower	Analytical Lab.		NIVA		NIVA		NIVA		NIVA	
				Code.	Detection Limit	390	352	351	350	352	351	350	352
						1.0	0.001	0.01	0.01	0.01	0.05	0.0001	0.0001
						<b>COBG</b>	<b>Al</b>	<b>Cd</b>	<b>Cu</b>	<b>Hg</b>	<b>Pb</b>	<b>Zn</b>	
						ppt	ppt	ppm	ppm	ppm	ppm	ppt	
0901	29	01	0	1		10.00	67.900	0.06	51.70a	0.14	89.70a	0.148	
						9.86	70.000	0.05	53.60a	0.14	71.40a	0.154a	
						10.30	64.900	0.06	56.20a	0.12	71.80a	0.159a	
						9.70	69.700	0.06	56.10a	0.16a	132.30c	0.160a	
0902	20	01	0	1		11.00	63.200	0.05	49.20a	0.14	33.70a	0.154a	
						10.70	65.000	0.06	49.00a	0.13	84.90a	0.157a	
						9.55	64.000	0.05	55.20a	0.13	71.40a	0.159a	
						9.73	70.700	0.06	54.70a	0.08	121.10c	0.168a	

a(22) > Exceeds CLASS-1 limit.

c(2) > Exceeds CLASS-3 limit.





Tab.width cont'd J65, 90S Outer Orkdalsfjord, 920830.

Seq. no.	Water depth m	Core depth cm	Sub slice no	Depth cm	Lower	Analytical Lab.	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	
.	.	.	.	.	.	.	369	369	369	369	369	369	369	369	369	369	369	!	!	!	!	!	
.	.	.	.	.	.	.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	!	!	!	!	!	
.	.	.	.	.	.	.	CHR	BBF	BJKF	BEP	BAP	PER	ICDP	DBA3A	BGHIP	COR	DBP	DI	ΣΣ	PA	ΣΣ	PK	ΣΣ
.	.	.	.	.	.	.	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
0901	494	36	01	0	2	24.00	108.00	44.00	44.00	32.00a	39.00	46.00	5.00	43.00	<1.00	<1.00	<1.00	<496.00	<249.00	<496.00	<249.00	<496.00a	
		02	30	35		7.00	s27.00	miss	<1.00	4.00	34.00	12.00	1.00	16.00	<1.00	<1.00	<1.00	s<1.00	s<127.00	s<48.00	s<127.00	s<127.00	
0902	494	28	01	0	2	19.00	81.00	33.00	30.00	22.00a	42.00	43.00	5.00	43.00	<1.00	<1.00	<1.00	s<21.00	s<393.00	<195.00	s<413.00a	s<413.00a	
0903	494	23	01	0	1	17.00	63.00	26.00	23.00	23.00a	73.00	38.00	4.00	40.00	<1.00	<1.00	<1.00	s<1.00	s<377.00	<166.00	s<377.00a	s<377.00a	
0904	492	46	01	0	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		02	1	2		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		03	2	4		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		04	4	6		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		05	6	10		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		06	10	15		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		07	15	20		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		08	40	45		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
0905	492	22	01	0	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		02	1	2		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		03	2	4		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		04	4	6		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		05	6	10		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		06	10	15		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		07	15	20		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
0906	492	27	01	0	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		02	1	2		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		03	2	3		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		04	3	4		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		05	5	6		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		06	8	9		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		07	13	14		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		08	17	18		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		09	21	22		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		10	26	27		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	







## Tab.width cont'd J99, 93S Raudøya (northeast of), 920829.

Seq. no.	Water depth m	Core Lngt cm	Sub slice-depth no upper Lower	Analytical Lab.	NIVA 369 1.0	NIVA 369 1.0	NIVA 369 1.0	NIVA 369 1.0	NIVA 369 1.0	NIVA 369 1.0	NIVA 369 1.0	NIVA 369 1.0	NIVA 369 1.0	NIVA 369 1.0	NIVA 369 1.0	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)	
					BBF ppb	BJKF ppb	BEP ppb	BAP ppb	PER ppb	ICDP ppb	DBA3A ppb	BGHIP ppb	COR ppb	DBP ppb	DI_ΣΣ ppb	PA_ΣΣ ppb	PK_ΣΣ ppb	PAHEΣΣ ppb			
0931	239	27	01	0	2	12.00	55.00	15.00	15.00a	8.00	43.00	6.00	29.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<144.00	<269.00
0932	237	25	01	0	2	12.00	46.00	18.00	12.00a	7.00	33.00	4.00	31.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<120.00	<285.00
0933	237	36	01	0	1																
0934	236	23	01	0	1																
			02	1	2																
			03	2	4																
			04	4	6																
			05	6	10																
			06	10	15																
			07	15	20																
			08	20	22																
0935	236	23	01	0	1																
			02	1	2																
			03	2	4																
			04	4	6																
			05	6	10																
			06	10	15																
			07	15	20																
			08	20	22																
0936	238	24	01	20	23	10.00	s68.00	miss	13.00a	12.00	53.00	5.00	48.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	s<322.00	s<322.00a
0937	238	24	01	20	23	2.00	s14.00	miss	<1.00	11.00	6.00	<1.00	9.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	s<91.00	s<22.00
0938	238	41	01	0	1																
			02	1	2																
			03	2	3																
			04	3	4																
			05	5	6																
			06	6	9																
			07	13	14																
			08	25	26																
			09	31	32																



Tab.width cont'd J99, 95S Rodø (east of), 920827.

Seq. no.	Water depth	Core depth	Sub Slice-depth	Detection Limit	Analysis Code	Lab.	no.	m	cm	no. upper	no. lower	cm	cm
0951	296	29	01	0	2								
0952	296	28	01	0	2								
0953	296	26	01	0	1								
0954	289	26	01	0	1								
		02	1	2									
		03	2	4									
		04	4	6									
		05	6	10									
		06	10	15									
		07	15	20									
		08	20	25									
0955	296	26	01	15	20								
0956	296	31	01	25	30								
0957	296	26	01	0	1								
		02	1	2									
		03	2	4									
		04	4	6									
		05	6	10									
		06	10	15									
		07	15	20									
		08	20	25									
0958	294	27	01	0	1								
		02	1	2									
		03	2	3									
		04	3	4									
		05	4	5									
		06	5	6									
		07	8	9									
		08	12	14									
		09	18	20									
		10	24	26									

Tab.width cont'd J99, 955 Rodø (east of), 920827.

Seq. no.	Water depth	Core Lngt	Sub slice-depth	no	upper	Lower		NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	NIVA	Σ(*)	Σ(*)	Σ(*)	Σ(*)	Σ(*)
	m	cm	cm	cm	cm	cm		369	369	369	369	369	369	369	369	369	369	369	369	369	ppb	ppb	ppb	ppb	ppb
								1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	DI	DI	DI	DI	DI
								BBF	BJKF	BEP	BAP	PER	ICDP	DBA3A	BGHP	COR	DBP	DBP	DBP	DBP	PK	PK	PK	PK	PK
0951	296	29	01	0	2		18.00	s57.00	miss	15.00	17.00a	4.00	45.00	6.00	38.00	<1.00	<1.00	<1.00	<1.00	s<6.00	s<300.00	s<139.00	s<305.00a		
0952	296	28	01	0	2		10.00	s90.00	miss	36.00	12.00a	3.00	41.00	6.00	44.00	<1.00	<1.00	<1.00	<1.00	s44.00	s<286.00	s<155.00	s<330.00a		
0953	296	26	01	0	1																				
0954	289	26	01	0	1																				
			02	1	2																				
			03	2	4																				
			04	4	6																				
			05	6	10																				
			06	10	15																				
			07	15	20																				
			08	20	25																				
0955	296	26	01	15	20		5.00	s16.00	miss	<1.00	1.00	<1.00	8.00	<1.00	10.00	<1.00	<1.00	<1.00	<1.00	s<87.00	s<57.00	s<27.00	s<143.00		
0956	296	31	01	25	30		3.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	3.00	<1.00	<1.00	<1.00	<1.00	s<58.00	<26.00	<1.00	s<83.00		
0957	296	26	01	0	1																				
			02	1	2																				
			03	2	4																				
			04	4	6																				
			05	6	10																				
			06	10	15																				
			07	15	20																				
			08	20	25																				
0958	294	27	01	0	1																				
			02	1	2																				
			03	2	3																				
			04	3	4																				
			05	4	5																				
			06	5	6																				
			07	8	9																				
			08	12	14																				
			09	18	20																				
			10	24	26																				













Tab.width cont'd J99, 98S Skrova (south of), 920825.

Seq. no.	Water depth m	Core Lngt cm	Sub depth cm	Slice- depth cm	Lower	Upper	Analytical Lab.	Concentration (ppb)												Σ(*)									
								NIVA 369	NIVA 369	NIVA 369	NIVA 369	NIVA 369	NIVA 369	NIVA 369	NIVA 369	NIVA 369	NIVA 369	NIVA 369	NIVA 369	NIVA 369	Σ(*)	Σ(*)							
0981	320	26	01	0	2		NIVA 369	miss	<1.00	4.00	<1.00	<1.00	2.00	<1.00	<1.00	5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	s<28.00	s<70.00			
0982	320	30	01	0	2		NIVA 369	miss	<1.00	7.00	<1.00	<1.00	5.00	<1.00	<1.00	7.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	s<38.00	s<103.00			
0983	320	36	01	0	1		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
0984	320	27	01	0	1		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			02	1	2		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			03	2	4		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			04	4	6		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			05	6	10		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			06	10	15		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			07	15	20		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			08	20	27		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
0985	320	32	01	0	1		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			02	1	2		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			03	2	4		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			04	4	6		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			05	6	10		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			06	10	15		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			07	15	20		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
			08	20	27		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
0986	320	34	01	29	34		NIVA 369	1.00	1.00	2.00	3.00	3.00	3.00	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	<19.00	<19.00
0987	320	29	01	24	28		NIVA 369	<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	<1.00	<75.00
0988	320	36	01	0	1		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
			02	1	2		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
			03	2	3		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
			04	5	6		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
			05	7	8		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
			06	8	9		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
			07	19	20		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
			08	25	26		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
			09	31	32		NIVA 369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

**Annex B**  
**Sediment 1986-92**  
**Parallel mean and standard deviation**

08/02-95

REPORT INFORMATION : " S E D I M E N T " .

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----- : -----
Table-File-Name   : I:\TBX\JMG\SED\TAB-1SED.TB1
Limit-CheckFile   : )LIM\NI941013.SED
Weight basis      : "DRY.weight".
Table SORT-Mode   : 1. LOCALITY-index
                   :   1.1: Sampling Lab = NIVA
                   :         (Predefined sequence)
                   :   1.2: OTHER Sampling Labs
                   :         (Position North:South,
                   :         and West:East)
                   : 2. Sample DATE.
                   : 3. Tables may be separated into
                   :   to "variable-groupes" tested
                   :   as: Subno = 0 and Subno > 0
----- : -----

```

NOTES :

NB ! The numeric values shown have been printed with a FIXED number of digits, and do not necessarily indicate analytical precision.

For " $\Sigma$ " variables (e.g. CB\_ $\Sigma$ 7, DD\_ $\Sigma$ ), 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 " $\Sigma$ "-elements are ignored.

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 s)

The letter code may include one or more characters indicating possible matching letters referenced before or after numbers.

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.area: **J26 Oslofjorden**. All concentrations on **Dry-weight basis**.  
 Locality : **30S Steilene**, Latitude: 59°49.10N, Longitude: 10°33.80E  
 Sample date: **861029** , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless "u" then <63µm.

Slice.Depth cm		CORG	Cd	Cu	Hg	Pb	Zn
up:lower		ppt	ppm	ppm	ppm	ppm	ppt
00:001	Count	2	4	4	4	4	4
	Mean	28.85	0.13	54.48a	0.56a	122.47c	0.031
	St.dev	2.90	0.04	6.94	0.20	17.51	0.003
01:002	Count	.	4	4	4	4	4
	Mean	.	0.17	53.72a	0.55a	115.74a	0.031
	St.dev	.	0.03	9.50	0.23	18.66	0.004

a(5) > Exceeds CLASS-1 limit.  
 c(1) > Exceeds CLASS-3 limit.

Sample-area: J26 Oslofjorden. All concentrations on Dry-weight basis.  
 Locality : 30S Steilene, Latitude: 59°49.10N, Longitude: 10°33.80E  
 Sample date: 901107, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 003 mm/year. Unfractionated sample unless "x" then <63µm.

Slice.Depth cm up:lower	GSAMT %<63µ	MOCON %	CORG ppt	Al ppt	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt	Pb210 mBq/g
00:001 Count	1		2	2	2	2	2	2	2	
Mean	98.57		28.15	72.700	0.08	52.95a	0.87c	91.50a	0.325a	
St.dev			1.63	0.000	0.06	29.34	0.13	1.84	0.035	
Count	1	1	1	1	1	1	1	1	1	
00:002 Mean	99.66	74.76	27.80	75.800	0.06	33.70	0.74c	85.50a	0.340a	73.00
Count	1	2	2	2	2	2	2	2	2	
01:002 Mean	98.15		27.90	74.650	0.08	65.20a	0.95c	94.45a	0.350a	
St.dev			3.39	0.636	0.00	23.33	0.24	14.92	0.057	
Count	1	1	2	2	2	2	2	2	2	
02:004 Mean	99.03	69.56	23.45	78.350	0.14	59.55a	0.79c	85.55a	0.305a	91.33
St.dev			7.00	2.616	0.01	28.50	0.54	34.58	0.106	
Count	1	1	2	2	2	2	2	2	2	
04:006 Mean	98.88	64.97	22.35	81.050	0.13	59.75a	0.65c	78.15a	0.285a	61.33
St.dev			10.68	5.445	0.01	43.20	0.71	60.60	0.163	
Count	1	1								1
06:008 Mean		63.46								53.50
Count	1		2	2	2	2	2	2	2	
06:010 Mean	96.36		20.85	78.900	0.19	52.95a	0.64c	76.30a	0.275a	
St.dev			10.11	2.546	0.03	38.11	0.82	63.22	0.177	
Count	1	1								miss
08:010 Mean		62.19								1
Count	1	1								23.00
10:012 Mean		60.26								
Count	1		2	2	2	2	2	2	2	
10:015 Mean	86.06		17.20	81.600	0.17	36.05a	0.37a	50.30a	0.215a	
St.dev			4.67	2.121	0.12	14.78	0.47	31.82	0.106	
Count	1	1								miss
12:014 Mean		59.73								1
Count	1	1								-1.67
14:016 Mean		59.50								
Count	1		2	2	2	2	2	2	2	
15:020 Mean	99.04		13.90	85.750	0.12	28.30	0.04	38.50a	0.165a	
St.dev			1.41	1.768	0.00	3.96	0.01	15.56	0.021	
Count	1	1								miss
16:018 Mean		60.00								1
Count	1	1								1.33
18:020 Mean		59.68								
Count	1	1								miss
20:022 Mean		58.87								miss
Count	1	1								miss
22:024 Mean		57.90								miss
Count	1	1								miss
24:026 Mean		57.21								miss
Count	1	1								1
26:028 Mean		56.51								0.83
Count	1	1								miss
28:030 Mean		54.33								miss
Count	1	1								-1.33
30:032 Mean		55.99								1
Count	1	1								0.50
32:034 Mean		56.25								

miss (7) | Missing value.  
 a (23) > Exceeds CLASS-1 limit.  
 c (6) > Exceeds CLASS-3 limit.



Sample.area: J26 Oslofjorden. All concentrations on Dry-weight basis.

Locality : 30S Steilene, Latitude: 59°49.10N, Longitude: 10°35.80E  
 Sample date: 901107, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 003 mm/year. Unfractionated sample unless <sup>mm</sup> then <63µm.

Slice-Depth cm up:lower	CB28 ppb	CB31 ppb	CB52 ppb	CB101 ppb	CB105 ppb	CB118 ppb	CB128 ppb	CB138 ppb	CB149 ppb	CB153 ppb	CB156 ppb	CB170 ppb	CB180 ppb	CB_Σ7 ppb	CB_ΣΣ ppb	DBOP ppb	DBEPP ppb	DDTOP ppb	DDTTP ppb	TDROP ppb	TDPEPP ppb	DD_ΣΣ ppb
00:002 Count Mean St.dev	2 0.81 0.19	2 0.55 0.21	2 1.30 0.35	2 1.64 0.13	2 1.35 0.03	2 2.36 0.19	2 0.67 0.03	2 3.34 0.60	2 2.18 0.35	2 2.49 0.76	2 0.28 0.08	2 0.66 0.04	2 1.34 0.18	2 13.27c 1.80	2 18.95 2.36	2 1.11 0.06	2 1.18 0.13	2 <<0.05 0.00	2 2.72 2.55	2 0.66 0.29	2 1.33 0.45	2 <<7.04 3.16

a(2) > Exceeds CLASS-1 limit.  
 c(2) > Exceeds CLASS-3 limit.

Tab.width cont'd J26, 30S Steilene, 901107.

Slice-Depth cm up:lower	HCHA ppb	HCHB ppb	HCHG ppb	HC ppb	Σ3 ppb	HCBA ppb	ALD ppb	NAP ppb	NAPC1 ppb	NAPC2 ppb	NAPC3 ppb	FILE ppb	PA ppb	ANT ppb	DBT ppb	PAC1 ppb	DBIC1 ppb	FLU ppb	PYR ppb	PAC2 ppb	DBIC2 ppb	DBIC3 ppb	BAA ppb	CHR ppb
00:002 Count Mean St.dev	2 0.16 0.00	2 0.31 0.28	2 0.20 0.01	2 0.67 0.28	2 1.27a 0.40	2 0.07 0.06	2 14.50 2.12	2 20.50 3.54	2 38.00 9.90	2 36.00 7.07	2 12.50 3.54	2 67.50 17.68	2 32.00 12.73	2 9.00 2.83	2 83.50 17.68	2 11.50 3.54	2 139.50 47.58	2 154.00 45.25	2 59.00 11.31	2 13.50 3.54	2 24.00 4.24	2 85.50 51.82	2 102.50 27.58	

Tab.width cont'd J26, 30S Steilene, 901107.

Slice-Depth cm up:lower	BBKF ppb	BEP ppb	BAP ppb	PER ppb	ICDP ppb	DBAHA ppb	BGHP ppb	DI_ΣΣ ppb	PA_ΣΣ ppb	PK_ΣΣ ppb	PAHΣΣ ppb	SPAH ppb
00:002 Count Mean St.dev	2 254.00 53.74	2 121.50 31.82	2 80.00c 18.38	2 91.00 7.07	2 80.50 4.95	2 15.00 0.00	2 82.50 7.78	2 109.00 22.63	2 1518.50 338.70	2 515.00 108.89	2 1627.50a 361.53	2 1627.5 361.5

Sample.area: J26 Oslofjorden. All concentrations on Dry-weight basis.

Locality : 35S Holmestrand-Mølen, Latitude: 59°30.00N, Longitude: 10°35.70E  
 Sample date: 861020, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless <sup>mm</sup> then <63µm.

Slice-Depth cm up:lower	CORG ppt	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt
00:001 Count Mean St.dev	4 17.20 0.66	4 0.08 0.01	4 32.50 1.73	4 0.21a 0.04	4 74.75a 5.74	4 0.168a 0.005
01:002 Count Mean St.dev	4 16.28 0.64	4 0.07 0.01	4 30.50 1.29	4 0.21a 0.03	4 76.00a 5.03	4 0.165a 0.007

a(6) > Exceeds CLASS-1 limit.

Sample.area: J26 Oslofjorden. All concentrations on Dry-weight basis.

Locality : 35S Holmestrand-Mølen, Latitude: 59°30.00N, Longitude: 10°35.70E  
 Sample date: 901107, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 002 mm/year. Unfractionated sample unless <sup>mm</sup> then <63µm.

Slice-Depth cm up:lower	GSAMT ppt	CORG ppt	Al ppt	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt
00:002 Count Mean St.dev	1 98.87 .	3 17.90 0.92	3 68.600 17.250	3 0.05 0.01	3 32.93 2.91	3 0.22a 0.05	3 62.57a 5.11	3 0.180a 0.010

a(3) > Exceeds CLASS-1 limit.

Sample.area: J26 Oslofjorden. All concentrations on Dry-weight basis.  
 Locality : 36S Fårder area, Latitude: 59°00.40N, Longitude: 10°41.60E  
 Sample date: 861020 , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless \*\*\* then <63µm.

Slice.Depth cm up:lower	CORG ppt	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt
00:001 Count	4	4	4	4	4	4
Mean	16.95	0.06	20.25	0.13	65.75a	0.119
St.dev	0.39	0.01	0.50	0.01	0.96	0.001
01:002 Count	4	4	4	4	4	4
Mean	16.90	0.07	20.23	0.14	68.75a	0.122
St.dev	0.67	0.01	0.52	0.01	3.50	0.002

a(2) > Exceeds CLASS-1 limit.

Sample.area: J26 Oslofjorden. All concentrations on Dry-weight basis.  
 Locality : 36S Fårder area, Latitude: 59°00.40N, Longitude: 10°41.60E  
 Sample date: 900512, Sampling Lab: NIVA, Type: 6C, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless "u" then <63µm.

Slice.Depth cm up:lower	GSAMT %<63µ	MOCON %	CORG ppt	Al ppt	Li ppm	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt	Pb210 mbq/g
00:001	Count 99.30	1	2 22.05	2 47.300	2 65.250	2 0.11	2 24.55	2 0.09	2 51.25a	2 0.125	.
	Mean	.	0.49	4.667	2.475	0.01	2.05	0.01	1.77	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	1
00:002	Count 99.56	1	2 22.20	2 47.900	2 64.000	2 0.10	2 21.90	2 0.12	2 52.50a	2 0.130	s51.67
	Mean	75.37	22.55	52.850	.	0.08	24.00	0.09	30.35a	0.125	.
	St.dev	.	0.07	8.556	.	0.02	0.85	0.02	3.61	0.007	.
01:002	Count 99.74	1	2 22.10	2 64.050	2 64.000	2 0.06	2 25.25	2 0.07	2 32.65a	2 0.130	miss
	Mean	69.83	0.28	4.455	.	0.01	1.77	0.01	2.05	0.000	.
	St.dev	.	2	2	2	2	2	2	2	2	1
04:006	Count 99.42	1	2 22.70	2 54.000	2 64.000	2 0.04	2 24.75	2 0.06	2 34.40a	2 0.140	s71.50
	Mean	66.02	0.28	1.273	.	0.00	1.20	0.01	0.71	0.014	.
	St.dev	.	1	1	1	1	1	1	1	1	miss
06:008	Count 99.74	1	2 22.85	2 54.550	2 64.39	2 0.09	2 24.80	2 0.06	2 32.90a	2 0.135	.
	Mean	64.39	0.21	3.748	.	0.02	0.00	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	s75.00
08:010	Count 99.51	1	2 21.95	2 55.500	2 64.52	2 0.07	2 23.85	2 0.07	2 34.55a	2 0.130	miss
	Mean	64.86	1.06	8.202	.	0.01	0.21	0.02	0.64	0.000	.
	St.dev	.	1	1	1	1	1	1	1	1	s68.00
10:012	Count 99.71	1	2 20.65	2 51.300	2 61.42	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	61.42	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	s56.67
12:014	Count 99.71	1	2 20.65	2 51.300	2 62.01	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	62.01	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	s58.33
14:016	Count 99.71	1	2 20.65	2 51.300	2 61.95	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	61.95	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	s58.33
15:020	Count 99.71	1	2 20.65	2 51.300	2 61.09	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	61.09	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	s65.83
16:018	Count 99.71	1	2 20.65	2 51.300	2 62.48	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	62.48	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	s64.67
18:020	Count 99.71	1	2 20.65	2 51.300	2 62.11	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	62.11	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	s64.67
20:022	Count 99.71	1	2 20.65	2 51.300	2 62.56	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	62.56	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	s63.17
22:024	Count 99.71	1	2 20.65	2 51.300	2 60.86	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	60.86	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	miss
24:026	Count 99.71	1	2 20.65	2 51.300	2 60.89	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	60.89	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	s64.67
26:028	Count 99.71	1	2 20.65	2 51.300	2 62.04	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	62.04	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	miss
28:030	Count 99.71	1	2 20.65	2 51.300	2 60.48	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	60.48	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	miss
30:032	Count 99.71	1	2 20.65	2 51.300	2 60.09	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	60.09	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	miss
32:034	Count 99.71	1	2 20.65	2 51.300	2 60.56	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	60.56	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	miss
34:036	Count 99.71	1	2 20.65	2 51.300	2 60.48	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	60.48	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	miss
36:038	Count 99.71	1	2 20.65	2 51.300	2 60.09	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	60.09	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	miss
38:040	Count 99.71	1	2 20.65	2 51.300	2 60.56	2 0.08	2 22.65	2 0.09	2 36.20a	2 0.135	miss
	Mean	60.56	0.78	3.960	.	0.01	0.49	0.01	2.55	0.007	.
	St.dev	.	1	1	1	1	1	1	1	1	s33.00

Tab.length cont'd J26, 36S Fårder area, 900512.

Slice.Depth cm up:lower	GSAMI %<63µ	MOON %	CORG ppt	Al ppt	Li ppm	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppm	Pb210 mBq/g
38:040 St.dev	.	.	.	.	.	.	.	.	.	.	.
40:042 Count	1	.	.	.	.	.	.	.	.	.	.
Mean	61.44	.	.	.	.	.	.	.	.	.	miss
42:044 Count	1	.	.	.	.	.	.	.	.	.	1
Mean	59.50	.	.	.	.	.	.	.	.	.	44.67
44:046 Count	1	.	.	.	.	.	.	.	.	.	miss
Mean	60.68	.	.	.	.	.	.	.	.	.	miss

s ( 9) ! Suspect value(s)  
 miss(12) ! Missing value.  
 a ( 8) > Exceeds CLASS-1 limit.

Sample.area: J26 Oslofjorden. All concentrations on DRY-weight basis.  
 Locality : 36S Fårder area, Latitude: 59°00.40N, Longitude: 10°41.60E  
 Sample date: 900512, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless \*\*\* then <63µm.

Slice.Depth cm up:lower	CB28 ppb	CB31 ppb	CB52 ppb	CB101 ppb	CB105 ppb	CB118 ppb	CB128 ppb	CB138 ppb	CB149 ppb	CB153 ppb	CB156 ppb	CB170 ppb	CB180 ppb	CB_Σ7 ppb	CB_ΣΣ ppb	DDEOP ppb	DDIOP ppb	DDTTP ppb	DDDEPP ppb	DDIOPP ppb	DDDEPP ppb	DD_ΣΣ ppb	DD_ΣΣ ppb	
00:002 Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
Mean	0.61	0.38	0.41	0.93	0.53	1.10	0.28	1.53	0.75	1.18	0.07	0.21	0.39	6.15a	8.37	1.00	1.28	<0.05	0.33	0.08	0.01	1.04	<<4.02	
St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.96	0.68	0.00	0.08	0.01	0.04	0.04	1.68	

a(2) > Exceeds CLASS-1 limit.  
 c(2) > Exceeds CLASS-3 limit.

Tab.width cont'd J26, 36S Fårder area, 900512.

Slice.Depth cm up:lower	HCHA ppb	HCHB ppb	HCHG ppb	HC_Σ3 ppb	HCB ppb	ALD ppb	NAP ppb	NAPC1 ppb	NAPC2 ppb	NAPC3 ppb	FLE ppb	PA ppb	ANT ppb	DBT ppb	PAC1 ppb	DBIC1 ppb	FLU ppb	PYR ppb	PAC2 ppb	DBIC2 ppb	DBIC3 ppb	BAA ppb	CHR ppb	
00:002 Count	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mean	0.22	0.31	0.27	0.79	0.65a	0.08	45.50	149.50	304.50	233.00	30.00	120.50	17.00	12.00	175.00	23.50	170.00	139.00	153.00	27.00	40.50	83.50	141.00	
St.dev	0.00	0.23	0.03	0.26	0.05	0.04	3.54	0.71	9.19	15.56	0.00	2.12	0.00	0.00	15.56	0.71	7.07	5.66	5.66	0.00	0.71	6.36	16.97	

Tab.width cont'd J26, 36S Fårder area, 900512.

Slice.Depth cm up:lower	BBKF ppb	BEP ppb	BAP ppb	PER ppb	ICDP ppb	DBAHA ppb	BGHIP ppb	DI_ΣΣ ppb	PA_ΣΣ ppb	PK_ΣΣ ppb	PARDE ppb	SPAH ppb
00:002 Count	2	2	2	2	2	2	2	2	2	2	2	2
Mean	334.00	135.50	110.50c	72.50	129.50	28.00	114.50	732.50	2056.50	685.50	2789.00c	2789.0
St.dev	19.80	6.36	4.95	3.54	2.12	1.41	6.36	20.51	92.63	34.65	72.12	72.1

Sample area: J99 Undefined. All concentrations on Dry weight basis.  
 Locality : 77S Arendal area, Latitude: 58°24.20N, Longitude: 09°01.80E  
 Sample date: 900510 , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 005 mm/year. Unfractionated sample unless "u" then <63µm.

Slice, Depth cm up: lower	GSAMT %<63µ	MOCON %	CORG ppt	Al ppt	Li ppm	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt	Pb210 mBq/g
00:001	1 99.39	.	2 21.50 0.14	2 46.650 4.172	2 67.000 2.828	2 0.11 0.01	2 22.90 0.57	2 0.11 0.01	2 55.00a 0.00	2 0.125 0.007	.
00:002	1 98.70	1 69.36	1 21.20	1 47.800	1 66.500	1 0.10	1 22.40	1 0.10	1 55.00a	1 0.120	1 98.17
01:002	1 99.40	.	2 22.20 0.14	2 48.450 4.313	.	2 0.08 0.01	2 23.95 1.20	2 0.11 0.01	2 33.00a 1.27	2 0.125 0.007	.
02:004	1 99.09	1 65.39	2 22.00 0.00	2 46.600 0.707	.	2 0.08 0.01	2 23.20 0.85	2 0.12 0.03	2 32.85a 0.07	2 0.125 0.007	miss
04:006	1 99.21	1 66.61	2 22.30 0.71	2 49.050 7.990	.	2 0.06 0.01	2 23.05 0.64	2 0.08 0.01	2 33.60a 1.41	2 0.125 0.007	1 99.00
06:008	.	1 65.15	.	.	.	.	.	.	.	.	miss
06:010	1 99.71	.	2 22.30 0.28	2 51.900 9.758	.	2 0.06 0.02	2 24.40 2.69	2 0.07 0.01	2 38.15a 2.62	2 0.130 0.000	.
08:010	.	1 62.72	.	.	.	.	.	.	.	.	123.83
10:012	.	1 61.51	.	.	.	.	.	.	.	.	miss
10:015	1 99.58	.	2 22.00 0.42	2 54.450 0.212	.	2 0.06 0.01	2 23.70 0.99	2 0.08 0.01	2 38.50a 5.66	2 0.140 0.014	.
12:014	.	1 59.53	.	.	.	.	.	.	.	.	miss
14:016	.	1 59.43	.	.	.	.	.	.	.	.	miss
15:020	1 99.71	.	2 21.30 0.14	2 47.500 0.990	.	2 0.08 0.01	2 25.15 0.49	2 0.08 0.01	2 39.05a 5.16	2 0.145 0.007	.
16:018	.	1 59.68	.	.	.	.	.	.	.	.	103.67
18:020	.	1 59.66	.	.	.	.	.	.	.	.	miss
20:022	.	1 59.25	.	.	.	.	.	.	.	.	92.67
22:024	.	1 59.78	.	.	.	.	.	.	.	.	miss
24:026	.	1 60.39	.	.	.	.	.	.	.	.	miss
26:028	.	1 60.24	.	.	.	.	.	.	.	.	69.00
28:030	.	1 59.84	.	.	.	.	.	.	.	.	miss
30:032	.	1 60.12	.	.	.	.	.	.	.	.	miss
32:034	.	1 60.55	.	.	.	.	.	.	.	.	36.83
34:036	.	1 59.88	.	.	.	.	.	.	.	.	miss
36:038	.	1 58.88	.	.	.	.	.	.	.	.	miss
38:040	.	1 57.77	.	.	.	.	.	.	.	.	19.00

Tab.length cont'd J99, 77S Arendal area, 900510.

Slice.Depth cm up:lower	GSAMT MOON %<53µ	CORG ppt	Al ppt	Li ppm	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt	Pb210 mBq/g
38:040	.	.	.	.	.	.	.	.	.	.
40:042	58.34	1	.	.	.	.	.	.	.	miss
42:044	57.97	1	.	.	.	.	.	.	.	miss
44:046	58.15	1	.	.	.	.	.	.	20.50	1
46:048	57.31	1	.	.	.	.	.	.	.	miss
48:050	58.57	1	.	.	.	.	.	.	.	miss
50:051	58.34	1	.	.	.	.	.	.	.	1
Mean										1.50

miss(16)  
a ( 8)  
! Missing value.  
> Exceeds CLASS-1 limit.

Sample.area: J99 Undefined. All concentrations on Dry.weight basis.  
Locality : 77S Arendal area, Latitude: 58°24.20N, Longitude: 09°01.80E  
Sample date: 900510 , Sampling Lab: NIVA, Type: GC, Diameter: 050  
Est. sedimentation rate 005 mm/year. Unfractionated sample unless "uu" then <63µm.

Slice.Depth cm up:lower	CB28	CB31	CB52	CB101	CB105	CB118	CB128	CB138	CB149	CB153	CB156	CB170	CB180	CB_Σ7	CB_ΣE	DDEOP	DDIOP	DDTTP	IDDEOP	IDDEPP	DD	ΣE
00:002	0.52	0.30	0.33	0.72	0.39	0.85	0.21	1.13	0.56	0.86	0.09	0.16	0.29	4.70a	6.39	0.18	0.73	0.05	0.26	0.28	0.98	2.47
Mean	0.01	0.01	0.04	0.25	0.09	0.30	0.06	0.27	0.13	0.18	0.06	0.04	0.04	1.10	1.47	0.05	0.00	0.01	0.06	0.01	0.04	0.07
St.dev																						

a(2)  
c(2)  
> Exceeds CLASS-1 limit.  
> Exceeds CLASS-3 limit.

Tab.width cont'd J99, 77S Arendal area, 900510.

Slice.Depth cm up:lower	HCHA	HCHB	HCHG	HC_Σ3	HCB	ALD	NAP	NAPC1	NAPC2	NAPC3	FILE	PA	ANT	DBT	PAC1	DBTC1	FLU	PYR	PAC2	DBTC2	DBTC3	BAA	CHR
00:002	0.20	0.23	0.22	0.65	0.65a	0.16	51.50	188.00	404.00	267.50	28.00	131.50	20.00	13.50	201.50	25.00	169.00	140.50	167.00	31.00	45.50	98.00	167.50
Mean	0.00	0.16	0.02	0.13	0.05	0.01	0.71	14.14	29.70	16.26	1.41	6.36	1.41	0.71	0.71	1.41	9.90	7.78	8.49	1.41	0.71	7.07	9.19
St.dev																							

Tab.width cont'd J99, 77S Arendal area, 900510.

Slice.Depth cm up:lower	BBKF	BEP	BAP	PER	ICDP	DBAFA	BGHIP	DI_ΣΣ	PA_ΣΣ	PK_ΣΣ	PARHΣΣ	SPAH
00:002	324.50	131.00	106.00c	61.00	121.00	27.50	105.50	911.00	2114.50	677.00	3025.50c	2976.5
Mean	7.78	5.66	9.90	5.66	4.24	0.71	60.81	84.15	28.28	144.96	75.7	
St.dev												

Sample area: **J99 Undefined**. All concentrations on **Dry weight basis**.  
 Locality : **15S Lista area**, Latitude: 58°01.00N, Longitude: 06°34.30E  
 Sample date: **900507**, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless "x" then <63µm.

Slice Depth cm up: lower	GSAMT %<63µ	MOCON %	CORG ppt	Al ppt	Li ppm	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt	Pb210 mBq/g
00:001	Count 88.93	1	2	2	2	2	2	2	2	2	.
	Mean	.	17.20	55.250	61.750	0.10	21.65	0.04	58.75a	0.110	.
	St.dev	.	1.70	2.616	0.354	0.02	2.05	0.01	5.30	0.000	.
00:002	Count	1	.	.	.	.	.	.	.	.	1
	Mean	73.10	.	.	.	.	.	.	.	.	158.17
01:002	Count	1	2	2	.	.	2	2	2	2	.
	Mean	.	17.65	65.700	.	0.04	22.05	0.04	46.00a	0.115	.
	St.dev	.	0.64	1.980	.	0.00	0.07	0.01	3.96	0.007	.
02:004	Count	1	2	2	2	2	2	2	2	2	1
	Mean	59.64	16.20	51.650	.	0.07	20.05	0.03	51.75a	0.115	130.67
	St.dev	.	2.69	2.616	.	0.01	3.61	0.00	1.77	0.021	.
04:006	Count	1	2	2	2	2	2	2	2	2	1
	Mean	86.02	15.30	60.400	.	0.07	20.00	0.04	45.25a	0.110	64.33
	St.dev	.	1.56	4.808	.	0.03	1.41	0.01	3.32	0.014	.
06:008	Count	1	.	.	.	.	.	.	.	.	miss
	Mean	51.54	.	.	.	.	.	.	.	.	.
06:010	Count	1	2	2	.	2	2	2	2	2	.
	Mean	86.71	13.75	61.000	.	0.06	22.00	0.03	33.85a	0.095	.
	St.dev	.	1.34	0.424	.	0.00	1.13	0.01	2.76	0.007	.
08:010	Count	1	.	.	.	.	.	.	.	.	1
	Mean	51.68	.	.	.	.	.	.	.	.	0.33
10:012	Count	1	.	.	.	.	.	.	.	.	1
	Mean	53.90	.	.	.	.	.	.	.	.	2.00
10:015	Count	1	2	2	.	2	2	2	2	2	.
	Mean	88.84	12.90	55.000	.	0.07	18.80	0.02	27.85	0.090	.
	St.dev	.	0.99	7.354	.	0.01	1.27	0.00	3.18	0.000	.
12:014	Count	1	.	.	.	.	.	.	.	.	miss
	Mean	48.23	.	.	.	.	.	.	.	.	1
14:016	Count	1	.	.	.	.	.	.	.	.	-2.83
	Mean	55.26	.	.	.	.	.	.	.	.	.
15:020	Count	1	2	2	.	2	2	2	2	2	.
	Mean	89.80	11.45	67.700	.	0.08	19.50	0.02	23.45	0.090	.
	St.dev	.	2.76	7.212	.	0.01	2.40	0.00	3.18	0.000	.
16:018	Count	1	.	.	.	.	.	.	.	.	miss
	Mean	48.97	.	.	.	.	.	.	.	.	1
18:020	Count	1	.	.	.	.	.	.	.	.	-0.67
	Mean	51.69	.	.	.	.	.	.	.	.	.
20:022	Count	1	.	.	.	.	.	.	.	.	miss
	Mean	50.42	.	.	.	.	.	.	.	.	1
22:024	Count	1	.	.	.	.	.	.	.	.	14.67
	Mean	51.08	.	.	.	.	.	.	.	.	.
24:026	Count	1	.	.	.	.	.	.	.	.	miss
	Mean	50.08	.	.	.	.	.	.	.	.	1
26:028	Count	1	.	.	.	.	.	.	.	.	-0.33
	Mean	43.14	.	.	.	.	.	.	.	.	.
28:030	Count	1	.	.	.	.	.	.	.	.	miss
	Mean	41.52	.	.	.	.	.	.	.	.	1
30:032	Count	1	.	.	.	.	.	.	.	.	-1.33
	Mean	40.56	.	.	.	.	.	.	.	.	.

! Missing value.  
 > Exceeds CLASS-1 limit.

Sample area: J99 Undefined. All concentrations on Dry weight basis.

Locality : 15S Lista area, Latitude: 58°01.00N, Longitude: 06°34.30E

Sample date: 900507 , Sampling Lab: NIVA, Type: GC, Diameter: 050

Est. sedimentation rate 001 mm/year. Unfractionated sample unless <sup>mm</sup> then <63µm.

Slice.Depth cm up:lower	CB28 ppb	CB31 ppb	CB52 ppb	CB101 ppb	CB105 ppb	CB118 ppb	CB128 ppb	CB138 ppb	CB149 ppb	CB153 ppb	CB156 ppb	CB170 ppb	CB180 ppb	CB_Σ7 ppb	CB_ΣΣ ppb	DDEOP ppb	DDEPP ppb	DDIOP ppb	DDIPP ppb	TDIOP ppb	TDIOPP ppb	DD_ΣΣ ppb
00:002 Count	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1
Mean	0.26	0.15	0.61	2.45	1.26	2.73	1.16	2.90	1.57	2.05	<0.22	0.35	0.69	11.68a	<<16.37	0.58	0.81	<0.05	0.65	0.28	0.78	<3.15
St.dev	0.01	0.00	0.03	0.51	0.21	0.57	0.54	0.57	0.23	0.23	0.23	0.03	0.04	1.89	2.05	.	.	.	.	.	.	.

a(3) > Exceeds CLASS-1 limit.

c(1) > Exceeds CLASS-3 limit.

Tab.width cont'd J99, 15S Lista area, 900507.

Slice.Depth cm up:lower	HCHA ppb	HCHB ppb	HCHG ppb	HC_Σ3 ppb	HCB ppb	A1D ppb	NAP ppb	NAPC1 ppb	NAPC2 ppb	NAPC3 ppb	FILE ppb	PA ppb	ANT ppb	DBT ppb	PAC1 ppb	DBIC1 ppb	FLU ppb	PYR ppb	PAC2 ppb	DBIC2 ppb	DBIC3 ppb	BAA ppb	CHR ppb	
00:002 Count	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mean	0.09	0.08	0.10	0.27	0.61a	0.10	16.00	63.50	172.50	172.50	25.00	84.00	12.00	7.50	112.50	13.00	121.50	100.50	80.50	13.50	14.00	68.50	116.00	
St.dev	.	.	.	.	.	.	0.00	41.72	50.20	27.58	7.07	18.38	2.83	2.12	37.48	4.24	2.12	2.12	27.58	3.54	2.83	7.78	11.31	

Tab.width cont'd J99, 15S Lista area, 900507.

Slice.Depth cm up:lower	BBKF ppb	BEP ppb	BAP ppb	PER ppb	ICDP ppb	DEAFA ppb	BGHIP ppb	DI_ΣΣ ppb	PA_ΣΣ ppb	PK_ΣΣ ppb	PAHΣΣ ppb	SPAH ppb
00:002 Count	2	2	2	2	2	2	2	2	2	2	2	2
Mean	276.50	105.50	76.50c	31.00	146.50	33.50	118.00	424.50	1556.00	601.50	1980.50a	1980.5
St.dev	4.95	4.95	0.71	4.24	12.02	3.54	8.49	64.35	96.17	3.54	160.51	160.5

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Sample.area: J99 Undefined. All concentrations on Dry.weight basis.  
 Locality : 22S Bømlø area, Latitude: 59°25.90N, Longitude: 04°50.20E  
 Sample date: 900504 , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless  $\mu\text{m}$  then <63 $\mu\text{m}$ .

Slice.Depth cm up:lower	GSAMT %<63 $\mu$	MOCON %	CORG ppt	Al ppt	Li ppm	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt	Pb210 mBq/g
00:001	Count 48.85	1	2 8.55	2 52.900	2 32.750	2 0.05	2 11.50	2 0.02	2 39.25a	2 0.060	.
	Mean	.	2.19	10.465	9.546	0.01	2.69	0.01	11.67	0.014	.
	St.dev	1	1	1	1	1	1	1	1	1	1
00:002	Count 64.93	1	13.00	56.900	46.000	0.06	17.50	0.02	65.00a	0.090	184.00
	Mean	.	2	2	2	<0.03	12.55	0.03	32.55a	0.065	.
	St.dev	1	1.48	5.940	5.940	0.01	0.92	0.00	8.41	0.021	.
01:002	Count 53.50	1	2	2	2	2	2	2	2	2	1
	Mean	.	10.15	59.700	46.000	0.09	14.10	0.02	46.10a	0.760c	63.33
	St.dev	1	1.20	4.384	4.384	0.08	1.13	0.00	1.41	0.962	.
04:006	Count 53.63	1	2	2	2	2	2	2	2	2	miss
	Mean	.	9.55	58.500	46.000	0.03	13.65	0.02	31.75a	0.130	miss
	St.dev	1	0.07	3.111	3.111	0.00	2.33	0.00	6.15	0.085	.
06:008	Count .	1	.	.	.	.	.	.	.	.	1
	Mean	.	43.42	.	.	.	.	.	.	.	4.50
06:010	Count 44.98	1	2	2	2	2	2	2	2	2	.
	Mean	.	7.45	50.500	46.000	0.06	10.60	0.02	21.30	0.055	.
	St.dev	1	0.92	2.970	2.970	0.00	0.14	0.01	1.84	0.007	.
08:010	Count .	1	.	.	.	.	.	.	.	.	1
	Mean	.	28.29	.	.	.	.	.	.	.	-1.33
10:012	Count .	1	.	.	.	.	.	.	.	.	1
	Mean	.	35.28	.	.	.	.	.	.	.	0.67
10:015	Count 37.87	1	2	2	2	2	2	2	2	2	.
	Mean	.	5.95	45.600	46.000	0.06	9.45	<0.01	14.95	0.060	.
	St.dev	1	1.48	1.556	1.556	0.01	0.07	0.00	1.48	0.014	.
12:014	Count .	1	.	.	.	.	.	.	.	.	1
	Mean	.	32.24	.	.	.	.	.	.	.	-1.33
14:016	Count .	1	.	.	.	.	.	.	.	.	1
	Mean	.	37.24	.	.	.	.	.	.	.	2.17
15:020	Count 33.97	1	2	2	2	2	2	2	2	2	.
	Mean	.	5.60	56.200	46.000	0.08	10.80	0.01	17.85	0.115	.
	St.dev	1	0.99	11.597	11.597	0.01	2.26	0.00	2.47	0.078	.
16:018	Count .	1	.	.	.	.	.	.	.	.	miss
	Mean	.	39.75	.	.	.	.	.	.	.	miss
18:020	Count .	1	.	.	.	.	.	.	.	.	miss
	Mean	.	33.15	.	.	.	.	.	.	.	miss
20:022	Count .	1	.	.	.	.	.	.	.	.	miss
	Mean	.	32.68	.	.	.	.	.	.	.	miss
22:023	Count .	1	.	.	.	.	.	.	.	.	miss
	Mean	.	27.48	.	.	.	.	.	.	.	miss

miss(5)  
 a (5)  
 c (1)  
 ! Missing value.  
 > Exceeds CLASS-1 limit.  
 > Exceeds CLASS-3 limit.

Sample.area: J99 Undefined. All concentrations on Dry.weight basis.  
 Locality : 22S Bømlø area, Latitude: 59°25.90N, Longitude: 04°50.20E  
 Sample date: 900504 , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless  $\mu\text{m}$  then <63 $\mu\text{m}$ .

Slice.Depth cm up:lower	CB28	CB31	CB52	CB101	CB105	CB118	CB128	CB138	CB149	CB153	CB156	CB170	CB180	CB_Σ7	CB_ΣΣ	DDEOP	DDTTP	DDTDP	DD_ΣΣ		
00:002	Count 0.05	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	Mean	0.01	0.03	0.08	0.14	0.08	0.05	0.27	0.14	0.22	<0.04	0.06	0.13	1.05	<<1.42	0.08	0.27	0.05	0.32	0.11	0.29
	St.dev	0.01	0.01	0.01	0.01	0.03	0.01	0.05	0.03	0.05	0.02	0.00	0.01	0.16	0.25	0.02	0.05	0.01	0.08	0.01	0.07

a(2)  
 > Exceeds CLASS-1 limit.

Tab.width cont'd J99, 22S Bømlø area, 900504.

Slice.Depth cm up:lower	HCHA ppb	HCHB ppb	HCHG ppb	HC_E3 ppb	HCB ppb	ALD ppb	NAP ppb	NAP1 ppb	NAP2 ppb	NAP3 ppb	FILE ppb	PA ppb	ANT ppb	DBT ppb	PAC1 ppb	DBTC1 ppb	FLU ppb	PYR ppb	PAC2 ppb	DBTC2 ppb	DBTC3 ppb	BAA ppb	CHR ppb	
00:002	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Count	0.03	0.05	0.03	0.11	0.16	0.05	4.50	20.00	58.50	50.50	5.50	23.00	2.50	1.50	34.50	3.50	28.00	23.50	25.00	4.00	3.50	20.50	35.50	
Mean	0.01	0.01	0.00	0.01	0.05	0.01	4.95	5.66	17.68	24.75	2.12	2.83	0.71	0.71	0.71	0.71	5.66	4.95	4.24	1.41	2.12	4.95	10.61	
St.dev																								

Tab.width cont'd J99, 22S Bømlø area, 900504.

Slice.Depth cm up:lower	BBKF ppb	BEP ppb	BAP ppb	PER ppb	ICDP ppb	DBAHA ppb	BGHP ppb	DI ppb	ΣΣ ppb	PA ppb	ΣΣ ppb	PK ppb	ΣΣ ppb	PAHEE ppb	SPAH ppb
00:002	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Count	98.50	37.00	20.50a	8.00	67.50	14.00	51.50	133.50	507.50	221.00	641.00a	641.0	641.0	641.0	641.0
Mean	10.61	2.83	2.12	0.00	0.71	0.00	0.71	31.82	54.45	18.38	22.63	22.6	22.6	22.6	22.6
St.dev															

Sample.area: J99 Undefined. All concentrations on Dry.weight basis.

Locality : 24S Sotra, Latitude: 60°15.10N, Longitude: 04°33.30E

Sample date: 900503, Sampling Lab: NIVA, Type: GC, Diameter: 050

Est. sedimentation rate 001 mm/year. Unfractionated sample unless  $\mu\mu\mu$  then <63 $\mu\mu$ .

Slice.Depth cm up:lower	GSAMT %<63 $\mu$	CORG ppt	Al ppt	Li ppm	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt
00:002	1	3	3	3	3	3	3	3	3
Count	40.57	8.87	33.867	60.500	0.07	13.60	0.02	38.30a	0.057
Mean	.	0.65	1.750	0.500	0.01	1.14	0.01	2.07	0.006
St.dev									

a(1) > Exceeds CLASS-1 limit.

Sample.area: J63 Sørfjorden. All concentrations on Dry.weight basis.

Locality : 52S Tyssedal, Latitude: 60°06.90N, Longitude: 06°32.90E

Sample date: 901031, Sampling Lab: NIVA, Type: GC, Diameter: 050

Est. sedimentation rate 002 mm/year. Unfractionated sample unless  $\mu\mu\mu$  then <63 $\mu\mu$ .

Slice.Depth cm up:lower	GSAMT %<63 $\mu$	CORG ppt	Al ppt	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt
00:002	1	3	3	3	3	3	3	3
Count	83.59	22.63	45.133	8.16c	238.33c	8.82e	1910.00e	2.730c
Mean	.	7.13	3.711	3.56	112.38	4.09	1074.62	1.308
St.dev								
00:002*	3	3	3	3	3	3	3	3
Count	100.00	19.97	53.733	8.11c	249.33c	8.30e	2050.00e	2.807c
Mean	0.00	5.42	1.858	3.46	126.51	4.07	1260.12	1.513
St.dev								

c(6) > Exceeds CLASS-3 limit.

e(4) > Exceeds CLASS-5 limit.

Sample area: **J63 Sørfljorden**. All concentrations on **Dry weight basis**.  
 Locality : **56S Kvalnes**, Latitude: 60°13.70N, Longitude: 06°35.60E  
 Sample date: **901101**, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless **\*\*\*** then <63µm.

GSAMT	MOON	CORG	Al	Cd	Cu	Hg	Pb	Zn	Pb210
%<63µ	%	ppt	ppt	ppm	ppm	ppm	ppm	ppt	mBq/g
Count	Count	Count	Count	Count	Count	Count	Count	Count	Count
Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev
Count	Count	Count	Count	Count	Count	Count	Count	Count	Count
Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev
Count	Count	Count	Count	Count	Count	Count	Count	Count	Count
Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev
Count	Count	Count	Count	Count	Count	Count	Count	Count	Count
Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev
Count	Count	Count	Count	Count	Count	Count	Count	Count	Count
Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev
Count	Count	Count	Count	Count	Count	Count	Count	Count	Count
Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev
Count	Count	Count	Count	Count	Count	Count	Count	Count	Count
Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev
Count	Count	Count	Count	Count	Count	Count	Count	Count	Count
Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev

miss( 1) Missing value.  
 a (25) > Exceeds CLASS-1 limit.  
 c (14) > Exceeds CLASS-3 limit.

Sample area: **J63 Sørfljorden**. All concentrations on **Dry weight basis**.  
 Locality : **56S Kvalnes**, Latitude: 60°13.70N, Longitude: 06°35.60E  
 Sample date: **901101**, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless **\*\*\*** then <63µm.

CB28	CB31	CB52	CB101	CB105	CB118	CB128	CB138	CB149	CB153	CB156	CB170	CB180	CB 17	CB 11	DDEPP	DDTPP	TDEOP	TDREPP	DD 11	DD 12
ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count
Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev	St.dev

a(1) > Exceeds CLASS-1 limit.  
 c(2) > Exceeds CLASS-3 limit.

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Tab.width cont'd J63, 56S Kvalnes, 901101.

Slice.Depth cm up:lower	HCHA		HCHB		HCHG		HC_Σ3		HCB		A1D		NAP		NAPC1		NAPC2		NAPC3		FLE		PA		ANT		DBT		PAC1		DEIC1		FLU		PAC2		DEIC2		DEIC3		BAA		CHR			
	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	ppb	ppb	ppb	ppb		
00:002	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Count	0.10	0.09	0.12	0.31	0.14	0.02	0.14	0.02	0.14	0.02	15.50	16.50	23.50	14.50	14.50	14.50	24.00	164.00	34.50	13.50	79.50	9.50	237.50	196.00	37.50	8.00	5.50	172.00	243.50	19.09	8.49	6.36	2.83	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	
Mean	0.01	0.01	0.01	0.04	0.03	0.01	0.03	0.01	0.03	0.01	0.71	2.12	9.19	3.54	3.54	11.31	2.83	11.31	3.54	6.36	2.12	9.19	8.49	2.83	6.36	0.71	0.71	12.73	12.73	12.73	12.73	12.73	12.73	12.73	12.73	12.73	12.73	12.73	12.73	12.73	12.73	12.73				
St.dev																																														

Tab.width cont'd J63, 56S Kvalnes, 901101.

Slice.Depth cm up:lower	BBKF		BEP		BAP		PER		ICDP		DEAFA		BGHIP		DI_ΣΣ		PA_ΣΣ		PK_ΣΣ		PAHEΣ		SFAH		
	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
00:002	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Count	308.50	140.00	133.50c	40.00	185.50	41.00	141.00	70.00	2214.50	840.50	2284.50c	2284.5	27.6												
Mean	60.10	32.53	31.82	11.31	61.52	12.73	42.43	15.56	43.13	30.41	27.58	27.6													
St.dev																									

Sample.area: J63 Sørfjorden. All concentrations on Dry.weight basis.  
 Locality : 57S Krossanes, Latitude: 60°23.10N, Longitude: 06°40.70E  
 Sample date: 901101, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless "uu" then <63µm.

Slice.Depth cm up:lower	GSAMT		CORG		Al		Cd		Cu		Hg		Pb		Zn	
	%<63µ	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
00:002	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Count	80.72	12.57	51.833	0.31a	41.67a	1.32c	186.67c	0.283a								
Mean		1.33	2.001	0.10	3.66	0.35	65.36	0.067								
St.dev																
00:002*	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Count	100.00	10.07	57.000	0.23	39.93a	0.98c	173.67c	0.250a								
Mean		0.49	3.470	0.06	3.16	0.28	44.06	0.036								
St.dev																

a(5) > Exceeds CLASS-1 limit.  
 c(4) > Exceeds CLASS-3 limit.

Sample.area: J62 Hardangerfjorden. All concentrations on Dry.weight basis.  
 Locality : 63S Ranaskjær, Latitude: 60°23.60N, Longitude: 06°27.10E  
 Sample date: 901101, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless "uu" then <63µm.

Slice.Depth cm up:lower	GSAMT		CORG		Al		Cd		Cu		Hg		Pb		Zn	
	%<63µ	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
00:002	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Count	96.56	15.30	56.633	0.15	44.03a	0.68c	149.67c	0.293a								
Mean		0.17	1.779	0.03	1.36	0.04	20.21	0.015								
St.dev																

a(2) > Exceeds CLASS-1 limit.  
 c(2) > Exceeds CLASS-3 limit.

Sample.area: **J62 Hardangerfjorden**. All concentrations on **Dry-weight basis**.  
 Locality : **67S Strandebarbm**, Latitude: 60°13.50N, Longitude: 06°05.10E  
 Sample date: **901102**, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless "uu" then <63µm.

Slice.Depth cm up: lower	GSAMT %<53µ	MOON %	CORG ppt	Al ppt	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppb	Pb210 mBq/g
00:001	Count 95.96	1	14.20	2	0.16	2	2	2	2	2
	Mean		0.57	56.900	37.10a	0.28a	79.40a	0.250a	0.028	
	St.dev		3.536	0.01	4.38	0.01	5.09	0.028		
00:002	Count	1	1	1	1	1	1	1	1	1
	Mean	64.28	14.20	54.500	0.11	32.40	72.20a	0.200a	115.50	
	St.dev		2	2	2	2	2	2	2	
01:002	Count	1	13.70	56.250	0.11	32.90	85.20a	0.220a		
	Mean	94.81	0.71	3.465	0.01	0.28	5.23	0.000		
	St.dev		2	2	2	2	2	2	2	
02:004	Count	1	15.20	60.250	0.14	34.75	84.05a	0.220a	119.83	
	Mean	96.54	0.71	6.010	0.02	0.49	13.08	0.014		
	St.dev		2	2	2	2	2	2	2	
04:006	Count	1	14.50	58.150	0.17	35.40a	61.05a	0.180a	85.00	
	Mean	97.61	0.00	1.061	0.01	0.71	4.17	0.014		
	St.dev		2	2	2	2	2	2	2	
06:008	Count	1	55.47						97.00	
	Mean									
	St.dev		2	2	2	2	2	2	2	
06:010	Count	1	13.95	58.450	0.11	32.45	54.35a	0.165a		
	Mean	98.16	0.21	4.313	0.01	0.07	7.99	0.007		
	St.dev		1	1	1	1	1	1	1	
08:010	Count	1	56.53						104.83	
	Mean									
	St.dev		2	2	2	2	2	2	2	
10:012	Count	1	55.72						18.50	
	Mean									
	St.dev		2	2	2	2	2	2	2	
10:015	Count	1	13.25	60.900	0.14	32.15	41.45a	0.150		
	Mean	98.43	0.07	2.404	0.02	1.20	0.64	0.000		
	St.dev		1	1	1	1	1	1	1	
12:014	Count	1	51.91						1.67	
	Mean									
	St.dev		1	1	1	1	1	1	1	
14:016	Count	1	50.57						37.50	
	Mean									
	St.dev		2	2	2	2	2	2	2	
15:020	Count	1	11.80	63.400	0.13	30.35	34.60a	0.140		
	Mean	98.30	1.41	0.566	0.02	1.48	4.67	0.000		
	St.dev		1	1	1	1	1	1	1	
16:018	Count	1	49.29						24.00	
	Mean									
	St.dev		1	1	1	1	1	1	1	
18:020	Count	1	48.85						14.67	
	Mean									
	St.dev		1	1	1	1	1	1	1	
20:022	Count	1	48.34						0.33	
	Mean									
	St.dev		1	1	1	1	1	1	1	

a(21) > Exceeds CLASS-1 limit.

Sample.area: **J62 Hardangerfjorden**. All concentrations on **Dry-weight basis**.  
 Locality : **67S Strandebarbm**, Latitude: 60°13.50N, Longitude: 06°05.10E  
 Sample date: **901102**, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate 001 mm/year. Unfractionated sample unless "uu" then <63µm.

Slice.Depth cm up: lower	CB28	CB31	CB52	CB101	CB105	CB118	CB128	CB138	CB149	CB153	CB156	CB170	CB180	CB Σ7	CB ΣΣ	DDEPP	DDIOP	DDTTP	DDEOP	DDOPP	DD ΣΣ
00:002	Count	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	0.04	0.03	0.08	0.18	0.12	0.22	0.07	0.46	0.35	<0.04	0.12	0.27	1.59	<<2.21	0.10	0.95	0.22	3.95	0.32	0.98
	St.dev	0.01	0.00	0.04	0.06	0.04	0.06	0.01	0.12	0.11	0.01	0.03	0.08	0.47	0.62	0.03	0.18	0.01	1.36	0.05	0.05

a(2) > Exceeds CLASS-1 limit.

Tab.width cont'd J62, 67S Strandebarrow, 901102.

Slice.Depth cm up: Lower	HCHA ppb	HCHB ppb	HCHG ppb	HC_Σ3 ppb	HCB ppb	ALD ppb	NAP ppb	NAPC1 ppb	NAPC2 ppb	NAPC3 ppb	FILE ppb	PA ppb	ANT ppb	DBT ppb	PAC1 ppb	DBTC1 ppb	FLU ppb	PYR ppb	PAC2 ppb	DBTC2 ppb	DBTC3 ppb	BAA ppb	CHR ppb	
00:002	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mean	0.04	0.03	0.03	0.09	0.12	<<.04	7.00	17.00	32.00	22.50	6.00	44.50	7.00	3.50	39.00	3.50	68.50	59.50	25.00	3.50	3.00	40.50	65.00	
St.dev	0.01	0.01	0.01	0.02	0.04	0.01	1.41	2.83	8.49	3.54	2.83	13.44	2.83	0.71	11.31	0.71	14.85	10.61	5.66	0.71	1.41	9.19	15.56	

Tab.width cont'd J62, 67S Strandebarrow, 901102.

Slice.Depth cm up: Lower	BBKF ppb	BEP ppb	BAP ppb	PER ppb	ICDP ppb	DBAHA ppb	BGHP ppb	DI_ΣΣ ppb	PA_ΣΣ ppb	PK_ΣΣ ppb	PAHΣΣ ppb	SPAH ppb
00:002	2	2	2	2	2	2	2	2	2	2	2	2
Mean	166.50	67.50	41.50a	17.50	104.00	21.50	82.50	78.50	869.50	374.00	948.00a	948.0
St.dev	17.68	4.95	6.36	3.54	5.66	3.54	4.95	16.26	136.47	42.43	152.74	152.7

Sample area: J62 Hardangerfjorden. All concentrations on Dry weight basis.

Locality : 69S Kvinnheradsfjorden, Latitude: 60°01.30N, Longitude: 05°56.10E

Sample date: 901030, Sampling Lab: NIVA, Type: GC, Diameter: 050

Est. sedimentation rate 001 mm/year. Unfractionated sample unless "xxx" then <63µm.

Slice.Depth cm up: Lower	GSMT %<63µ	CORG ppt	Al ppt	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt
00:002	1	3	3	3	3	3	3	3
Mean	98.69	13.60	60.100	0.11	30.77	0.13	65.53a	0.167a
St.dev	.	0.79	2.946	0.02	1.42	0.02	4.23	0.012

a(2) > Exceeds CLASS-1 limit.

Sample.area: J99 Undefined. All concentrations on DRY weight basis.  
 Locality : 27S Statlandet (east of), Latitude: 62°09.30N, Longitude: 05°21.30E  
 Sample date: 920902 , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless <sup>iii</sup> then <63µm.

MOON	CORG	Li	Cd	Cu	Hg	Pb	Zn	Pb210	CB28	CB52	CB101	CB105	CB118	CB138	CB153	CB156	CB180	CB209	CB Σ7	CB ΣΣ	DDEPP
%	ppt	ppm	ppm	ppm	ppm	ppm	ppt	mBq/g	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	3	3	3	3	3	3	3	1													
78.33	33.23	30.000	0.12	29.83	0.12	53.00a	0.107	327.83													
	0.55	0.500	0.01	0.76	0.01	2.18	0.002														
1	2	2	2	2	2	2	2	1													
77.07	34.55	30.250	0.12	30.00	0.12	54.75a	0.108	404.83													
	0.35	1.768	0.01	0.00	0.01	1.06	0.003														
1	2	2	2	2	2	2	2	1													
75.54								334.50													
	2	2	2	2	2	2	2														
	34.60	30.750	0.13	33.50	0.13	55.75a	0.112														
	0.71	1.061	0.00	0.00	0.01	1.06	0.001														
	2	2	2	2	2	2	2														
	35.10	31.500	0.14	34.50	0.12	58.25a	0.114														
	0.42	0.707	0.00	1.41	0.00	1.06	0.001														
1								1													
74.55								221.00													
	2	2	2	2	2	2	2														
	35.00	31.250	0.14	35.00	0.12	58.50a	0.115														
	0.28	0.354	0.02	0.71	0.01	1.41	0.001														
1								1													
71.67								236.00													
	2	2	2	2	2	2	2														
	33.95	30.750	0.12	34.00	0.11	57.00a	0.114														
	0.64	0.354	0.00	0.00	0.00	1.41	0.001														
1								1													
70.21								129.00													
	2	2	2	2	2	2	2														
	33.35	31.750	0.14	31.75	0.09	51.25a	0.104														
	0.78	0.354	0.00	1.77	0.00	1.06	0.000														
1								1													
67.88								39.83													
	1	1	1	1	1	1	1														
66.25								12.33													
1								1													
61.86								0.00													
	1	1	1	1	1	1	1														
	29.70	31.500	0.20	26.50	0.03	27.50	0.074														
	1	1	1	1	1	1	1														
	27.90	31.500	0.21	28.00	0.03	22.00	0.075														

s (35)  
 ! Suspect value(s)  
 ! Missing value.  
 k (3) Value= 1000 \* given units.  
 a (13) > Exceeds CLASS-1 limit.  
 c (2) > Exceeds CLASS-3 limit.

Tab.width cont'd J99, 27S Stattlandet (east of), 920902.

Slice.Depth cm Up:Lower	TDEPP	DD	Σ	HCHA	HCHG	HC	Σ3	HCB	QCB	OCS	NAP	NAP2M	NAP1M	BIPN	NAPDI	NAPIM	ACNLE	ACNIE	FILE	PA	ANT	PAMI	FLUJ	PYR	BAA
	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
00:001	Count																								
	Mean																								
	St.dev																								
00:002	Count	2		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	0.50	1.10	<<0.50	<<0.50	<<1.30a	<<0.55	<<0.50	s<<7.50	s<<13.50	s<<9.00	s<<9.90	s<<3.50	s<<3.50	s<<3.50	s<<1.50	s6.00	s3.00	2.50	38.00	6.00	5.50	154.50	106.50	57.00
	St.dev	0.00	0.14	0.00	0.00	1.13	0.07	0.00	9.19	14.85	9.90	3.54	3.54	0.71	0.00	0.00	0.00	2.12	4.24	0.00	0.71	14.85	4.95	0.00	
01:002	Count																								
	Mean																								
	St.dev																								
02:003	Count																								
	Mean																								
	St.dev																								
02:004	Count																								
	Mean																								
	St.dev																								
04:006	Count																								
	Mean																								
	St.dev																								
05:006	Count																								
	Mean																								
	St.dev																								
06:010	Count																								
	Mean																								
	St.dev																								
08:009	Count																								
	Mean																								
	St.dev																								
10:015	Count																								
	Mean																								
	St.dev																								
12:013	Count																								
	Mean																								
	St.dev																								
15:020	Count																								
	Mean																								
	St.dev																								
19:020	Count																								
	Mean																								
	St.dev																								
25:026	Count																								
	Mean																								
	St.dev																								
27:032	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	<0.50	<0.50	<0.50	<0.50	0.90a	<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	<0.50	<0.50	<0.50	<0.50
	St.dev																								
31:032	Count																								
	Mean																								
	St.dev																								
33:038	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	<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	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	St.dev																								
34:039	Count																								
	Mean																								
	St.dev																								
45:050	Count																								
	Mean																								
	St.dev																								



Tab.width cont'd J99, 27S Stattlandet (east of), 920902.

	CHR	BF	BJKF	BEP	BAP	PER	ICDP	DBA3A	BGHIP	COR	DBP	DI	PA	PK	PAR
	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
00:001	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
00:002	Count	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	72.00	132.50	158.00	128.00c	39.00	271.00	36.00	267.00	<<1.00	<<1.00	<<37.00	s<<1k79	<<933.50	s<<1k83a
	St.dev	1.41	12.02	18.38	14.14	2.83	18.38	0.00	38.18	0.00	0.00	43.84	119.50	36.06	74.95
01:002	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:003	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:004	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
04:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
05:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
06:010	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
08:009	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
10:015	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
12:013	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
15:020	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
19:020	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
25:026	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
27:032	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	27.00	233.00	85.00	105.00	40.00	208.00	22.00	193.00	<1.00	<1.00	s<1.00	s<1094.00	<629.00	s<1k09a
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
31:032	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
33:038	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	11.00	s78.00	miss	25.00	16.00a	17.00	8.00	64.00	<1.00	<1.00	s<8.00	s<327.00	s<180.00	s<334.00a
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
34:039	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
45:050	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Sample.area: **J65 Orkdalsfjorden**. All concentrations on **Dry-weight basis**.  
 Locality : **89S Thamshavn**, Latitude: 63°19.08N, Longitude: 09°52.05E  
 Sample date: **871019** , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless "" then <63µm.

Slice.Depth cm up: lower	CORG ppt	Al ppt	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt
00:001 Count	2	2	2	2	2	2	2
Mean	12.17	65.150	0.36a	307.00c	0.14	113.70a	0.282a
St.dev	3.30	0.636	0.22	148.49	0.01	36.63	0.119
01:002 Count	2	2	2	2	2	2	2
Mean	10.90	64.200	2.13c	222.00c	0.11	89.30a	0.229a
St.dev	0.85	2.404	1.87	42.43	0.05	18.81	0.033

a(5) > Exceeds CLASS-1 limit.  
 c(3) > Exceeds CLASS-3 limit.

Sample.area: **J65 Orkdalsfjorden**. All concentrations on **Dry-weight basis**.  
 Locality : **89S Thamshavn**, Latitude: 63°19.08N, Longitude: 09°52.05E  
 Sample date: **920830** , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless "" then <63µm.

Slice.Depth cm up: lower	CORG ppt	Li ppm	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt
00:001 Count	3	3	3	3	3	3	3
Mean	13.00	34.500	0.74a	280.33c	0.09	52.33a	0.307a
St.dev	2.88	1.323	0.29	128.14	0.06	32.68	0.081

a(3) > Exceeds CLASS-1 limit.  
 c(1) > Exceeds CLASS-3 limit.

Sample.area: **J65 Orkdalsfjorden**. All concentrations on **Dry-weight basis**.  
 Locality : **84S Trossavika**, Latitude: 63°21.70N, Longitude: 09°57.40E  
 Sample date: **871019** , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless "" then <63µm.

Slice.Depth cm up: lower	CORG ppt	Al ppt	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt
00:001 Count	4	4	4	4	4	4	4
Mean	12.10	64.400	0.69a	357.50c	0.35a	196.50c	0.547a
St.dev	0.54	4.232	0.26	153.89	0.13	68.49	0.221
01:002 Count	4	4	1	4	4	4	4
Mean	10.34	59.500	6.23c	742.50c	0.60c	368.25c	1.183c
St.dev	1.47	2.083	.	220.39	0.20	107.41	0.915

a(3) > Exceeds CLASS-1 limit.  
 c(7) > Exceeds CLASS-3 limit.

Sample.area: **J65 Orkdalsfjorden**. All concentrations on **Dry-weight basis**.  
 Locality : **84S Trossavika**, Latitude: 63°21.70N, Longitude: 09°57.40E  
 Sample date: **920830** , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless "" then <63µm.

Slice.Depth cm up: lower	CORG ppt	Li ppm	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt
00:001 Count	3	3	3	3	3	3	3
Mean	11.10	43.833	1.71c	408.33c	0.21a	108.33a	0.453a
St.dev	0.17	3.329	2.07	163.03	0.10	27.54	0.142

a(3) > Exceeds CLASS-1 limit.  
 c(2) > Exceeds CLASS-3 limit.

Sample.area: **J65 Orkdalsfjorden**. All concentrations on **Dry-weight basis**.  
 Locality : **82S Flakk**, Latitude: 63°27.05N, Longitude: 10°11.08E  
 Sample date: **871019** , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless "\*" then <63µm.

Slice.Depth cm up:lower	CORG ppt	Al ppt	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt
00:001 Count	4	4	4	4	4	4	4
Mean	16.78	64.025	<<0.08	57.70a	0.13	65.45a	0.145
St.dev	10.47	5.174	0.02	8.76	0.04	27.61	0.010
01:002 Count	4	4	4	4	4	4	4
Mean	15.44	67.575	<<0.10	59.78a	0.14	77.95a	0.154a
St.dev	13.31	7.195	0.03	4.93	0.06	25.93	0.012

a(5) > Exceeds CLASS-1 limit.

Sample.area: **J65 Orkdalsfjorden**. All concentrations on **Dry-weight basis**.  
 Locality : **90S Outer Orkdalsfjord**, Latitude: 63°27.40N, Longitude: 10°03.00E  
 Sample date: **871019** , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless "\*" then <63µm.

Slice.Depth cm up:lower	CORG ppt	Al ppt	Cd ppm	Cu ppm	Hg ppm	Pb ppm	Zn ppt
00:001 Count	2	2	2	2	2	2	2
Mean	10.50	65.550	0.06	50.45a	0.14	61.70a	0.151a
St.dev	0.71	3.323	0.01	1.77	0.00	39.60	0.004
01:002 Count	2	2	2	2	2	2	2
Mean	10.28	67.500	0.06	51.30a	0.14	78.15a	0.156a
St.dev	0.59	3.536	0.01	3.25	0.01	9.55	0.002
02:004 Count	2	2	2	2	2	2	2
Mean	9.93	64.450	0.06	55.70a	0.13	71.60a	0.159a
St.dev	0.53	0.636	0.01	0.71	0.01	0.28	0.000
04:006 Count	2	2	2	2	2	2	2
Mean	9.72	70.200	0.06	55.40a	0.12	126.70c	0.164a
St.dev	0.02	0.707	0.00	0.99	0.06	7.92	0.006

a(11) > Exceeds CLASS-1 limit.

c( 1) > Exceeds CLASS-3 limit.



Tab.width cont'd J65, 90S Outer Orkdalsfjord, 920830.

Slice.Depth cm up:lower	TDI	DE	DD	ΣΣ	HCHA	HCHG	HC	Σ3	HCB	QCB	OCS	NAP	NAP2M	NAP1M	BIIPN	NAPDI	NAP1M	NAP1M	ACNLE	ACNE	FILE	PA	ANT	PAMI	FLU	PYR	BAA
	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
00:001	Count	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
00:002	Mean	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	s16.00	s2.00	s<1.00	s2.00	s<1.00	s2.00	s<1.00	s<1.00	<<1.00	14.00	<<2.00	2.50	36.00	25.50	11.50	
01:002	St.dev	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									0.00	1.41	1.41	2.12	9.90	9.19	2.12	
02:003	Count																										
02:004	Mean																										
02:004	Count																										
03:004	Mean																										
04:006	St.dev																										
05:006	Count																										
06:010	Mean																										
08:009	St.dev																										
10:015	Count																										
13:014	Mean																										
15:020	Count																										
17:018	Mean																										
21:022	Count																										
22:027	Mean	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
26:027	Count	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	8.00	<1.00	<1.00	28.00	19.00	11.00
30:035	Mean	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
40:045	Count	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.00	4.00	1.00	8.00	6.00	3.00
	Mean																										

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Tab.width cont'd J65, 90S Outer Orkdalsfjord, 920830.

Slice.Depth cm up:lower	CHR ppb	BBF ppb	BJKF ppb	BEP ppb	BAP ppb	PER ppb	ICDP ppb	DBA3A ppb	BGHIP ppb	COR ppb	DBP ppb	DI_ΣΣ ppb	PA_ΣΣ ppb	PK_ΣΣ ppb	PARΣΣ ppb
00:001	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
00:002	Count	2	2	2	2	2	2	2	2	2	2	1	1	2	1
	Mean	21.50	38.50	37.00	27.00a	40.50	44.50	5.00	43.00	<<1.00	<<1.00	s<21.00	<496.00	<<222.00	<496.00a
	St.dev	3.54	7.78	9.90	7.07	2.12	2.12	0.00	0.00	0.00	0.00	.	.	38.18	.
01:002	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:003	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:004	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
03:004	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
04:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
05:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
06:010	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
08:009	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
10:015	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
13:014	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
15:020	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
17:018	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
21:022	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
22:027	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	17.00	63.00	23.00	23.00a	73.00	38.00	4.00	40.00	<1.00	<1.00	s<1.00	s<377.00	<166.00	s<377.00a
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
26:027	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
30:035	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	7.00	s27.00	<1.00	4.00	34.00	12.00	1.00	16.00	<1.00	<1.00	s<1.00	s<127.00	s<48.00	s<127.00
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
40:045	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Sample area: J99 Undefined. All concentrations on Dry weight basis.  
 Locality : 93S Raudøya (northeast of ), Latitude: 64°22.70N, Longitude: 10°27.80E  
 Sample date: 920829 , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless noted then <63µm.

MOON	CORG	Li	Cd	Cu	Hg	Pb	Zn	Pb210	CB28	CB52	CB101	CB105	CB118	CB138	CB153	CB156	CB180	CB209	CB E7	CB ΣE	DDEPP	
%	ppt	ppm	ppm	ppm	ppm	ppm	ppt	mBq/g	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	3	3	3	3	3	3	3	1														
65.15	17.97	19.500	0.12	23.50	0.03	25.33	0.073	182.83														
	0.83	0.500	0.02	2.00	0.01	0.76	0.004															
1	2	2	2	2	2	2	2	1														
62.66	18.55	20.500	0.12	21.50	0.04	26.25	0.075	134.83														
	0.07	0.000	0.00	0.71	0.01	0.35	0.001															
1	2	2	2	2	2	2	2	1														
63.77								113.00														
1	2	2	2	2	2	2	2	1														
57.39	17.45	20.000	0.13	24.00	0.04	26.00	0.075															
	1.20	0.707	0.03	0.00	0.00	0.71	0.002															
1	2	2	2	2	2	2	2	1														
54.38	16.90	20.750	0.11	22.50	0.04	24.75	0.074															
	0.57	1.061	0.00	0.71	0.01	0.35	0.004															
1	2	2	2	2	2	2	2	1														
51.35	14.95	20.000	0.15	22.00	0.03	22.50	0.070															
	1.34	2.121	0.01	2.12	0.01	2.83	0.006															
1	2	2	2	2	2	2	2	1														
49.68	10.70	11.500	0.20	16.75	<0.01	13.75	0.041															
	0.28	2.121	0.04	1.06	0.00	5.30	0.011															
1	2	2	2	2	2	2	2	1														
49.68	25.20	23.750	0.15	24.75	0.03	23.50	0.072															
	1.56	2.475	0.03	1.06	0.01	2.83	0.001															
1	2	2	2	2	2	2	2	1														
59.37	27.65	25.000	0.17	25.50	0.02	20.25	0.070															
	0.64	0.000	0.01	2.83	0.01	1.77	0.001															
1	2	2	2	2	2	2	2	1														
58.80																						
1	2	2	2	2	2	2	2	1														
59.37																						
1	2	2	2	2	2	2	2	1														
58.80																						

s (22)  
 miss( 1)  
 a ( 1)  
 ! Suspect value(s)  
 ! Missing value.  
 > Exceeds CLASS-1 limit.

Tab.width cont'd J99, 93S Raudøya (northeast of), 920829.

	TDPEP	DD	ΣΣ	HCHA	HCHG	HC	Σ3	HCB	QCB	OCS	NAP	NAP2M	NAP1M	BIPN	NAPDI	NAP1M	ACNE	ACNE	FLE	PA	ANT	PAMI	FLU	PYR	BAA
Sl.ice.Depth cm	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
00:001																									
	Count	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<1.00	<<1.00	<<1.00	<<1.00	<<1.50	<<1.00	<<1.00	<<1.00	<<1.00	12.50	<<2.00	4.50	38.00	21.00	
00:002	St.dev	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.00	3.54	1.41	0.71	25.46	11.31	
01:002	Count																								
	Mean																								
02:003	St.dev																								
	Count																								
	Mean																								
02:004	Count																								
	Mean																								
	St.dev																								
03:004	Count																								
	Mean																								
04:006	Count																								
	Mean																								
	St.dev																								
05:006	Count																								
	Mean																								
06:010	Count																								
	Mean																								
	St.dev																								
08:009	Count																								
	Mean																								
10:015	Count																								
	Mean																								
	St.dev																								
13:014	Count																								
	Mean																								
15:020	Count																								
	Mean																								
	St.dev																								
20:022	Count																								
	Mean																								
	St.dev																								
20:023	Count	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<1.00	<<1.00	<<1.00	<<1.00	<<1.00	<<1.00	<<1.00	<<1.00	<<1.00	19.50	<<1.00	3.50	29.00	16.00	
	St.dev	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	0.00	7.78	0.00	0.71	14.14	7.07	
25:026	Count																								
	Mean																								
	St.dev																								
31:032	Count																								
	Mean																								



Tab.width cont'd J99, 93S Raudøya (northeast of), 920829.

slice.Depth cm up:lower	CHR ppb	BBF ppb	BJKF ppb	BEP ppb	BAP ppb	PER ppb	ICDP ppb	DBA3A ppb	BGHIP ppb	COR ppb	DBP ppb	DI_ΣΣ ppb	PA_ΣΣ ppb	PK_ΣΣ ppb	PARHΣΣ ppb
00:001	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
00:002	Count	2	2	2	2	2	2	2	2	2	2	2	2	2	1
	Mean	12.00	16.50	13.50a	7.50	38.00	5.00	30.00	30.00	<<1.00	<<1.00	<<276.00	<<132.00	<<269.00	
	St.dev	0.00	2.12	2.12	0.71	7.07	1.41	1.41	1.41	0.00	0.00	1.41	9.90	16.97	
01:002	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:003	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:004	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
03:004	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
04:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
05:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
06:010	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
08:009	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
10:015	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
13:014	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
15:020	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
20:022	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
20:023	Count	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	6.00	s41.00	<<9.50	11.50	29.50	<<3.00	28.50	28.50	<<1.00	<<1.00	s<<1.00	s<<206.50	s<<83.50	s<<206.50
	St.dev	5.66	38.18	12.02	0.71	33.23	2.83	27.58	27.58	0.00	0.00	163.34	86.97	163.34	
25:026	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
31:032	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Sample.area: J99 Undefined. All concentrations on Dry.weight basis.  
 Locality : 955 Rodø (east of), Latitude: 66°41.80N, Longitude: 13°09.90E  
 Sample date: 920827, Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless <sup>1000</sup> then <63µm.

Slice.Depth cm	MOCON	CORG	Li	Cd	Cu	Hg	Pb	Zn	Pb210	CB28	CB52	CB101	CB105	CB118	CB138	CB153	CB156	CB180	CB209	CB_E7	CB_EE	DDEPP
up: lower	%	ppt	ppm	ppm	ppm	ppm	ppm	ppt	mBq/g	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
00:001	Count	3	3	3	3	3	3	3	1													
	Mean	12.97	26.667	0.08	19.50	0.04	30.50a	0.085	156.17													
	St.dev	1.52	1.528	0.01	1.50	0.01	1.80	0.007														
00:002	Count									2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean									<<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
	St.dev									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
01:002	Count	1	2	2	2	2	2	2	1													
	Mean	60.56	29.000	0.08	19.50	0.04	31.25a	0.089	130.17													
	St.dev	0.28	0.707	0.01	2.12	0.01	1.77	0.001														
02:003	Count	1							1													
	Mean	61.27							154.50													
02:004	Count		2	2	2	2	2	2														
	Mean		13.60	0.10	19.75	0.04	30.50a	0.086														
	St.dev		0.85	0.000	0.04	0.01	3.54	0.004														
03:004	Count	1							1													
	Mean	60.83							159.83													
04:005	Count	1							1													
	Mean	59.43							166.00													
04:006	Count		2	2	2	2	2	2														
	Mean		12.95	0.08	19.50	0.04	30.00	0.084														
	St.dev		1.20	0.01	1.41	0.01	1.41	0.004														
05:006	Count	1							1													
	Mean	58.25							140.00													
06:010	Count		2	2	2	2	2	2														
	Mean		13.00	0.08	18.25	0.04	28.50	0.083														
	St.dev		1.27	0.01	1.06	0.01	0.00	0.004														
08:009	Count	1							1													
	Mean	56.83							144.00													
10:015	Count		2	2	2	2	2	2														
	Mean		13.10	0.11	19.25	0.03	23.75	0.082														
	St.dev		0.42	0.01	0.35	0.00	2.47	0.001														
12:014	Count	1							1													
	Mean	54.03							2.17													
15:020	Count		2	2	2	2	2	2														
	Mean		12.30	0.14	18.75	0.01	17.25	0.073														
	St.dev		0.14	0.00	1.77	0.00	1.77	0.002														
18:020	Count	1							1													
	Mean	54.17							0.00													
20:025	Count		2	2	2	2	2	2														
	Mean		10.05	0.15	19.00	<0.01	15.75	0.075														
	St.dev		0.21	0.01	1.41	0.00	0.35	0.006														
24:026	Count	1							1													
	Mean	44.42							3.00													
25:030	Count																					
	Mean																					
	St.dev																					

r ( 4)  
 s (36)  
 miss( 2)  
 k ( 1)  
 a ( 6)

! Replaced value included.  
 ! Suspect value(s)  
 ! Missing value.  
 Value= 1000 \* given units.  
 > Exceeds CLASS-1 limit.

Tab.width cont'd J99, 95S Rodø (east of), 920827.

Slice.Depth cm up:lower	TDEPP	DD	ΣΣ	HCHA	HCHG	HC	Σ3	HCB	QCB	OCS	NAP	NAP2M	NAP1M	BIPN	NAPDI	NAPIM	ACNLE	ACNE	FILE	PA	ANT	PAMI	FLU	PYR	BAA
	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
00:001	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
00:002	Count	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	s<<8.00	s<<2.00	s6.50	s<<4.50	s4.00	s<<1.50	s1.00	s<<1.00	<<1.00	10.50	<<1.00	2.00	27.50	21.00	9.00
	St.dev	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.90	1.41	6.36	4.95	1.41	0.71	0.00	0.00	0.00	4.95	0.00	1.41	16.26	11.31	5.66
01:002	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:003	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:004	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
03:004	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
04:005	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
04:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
05:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
06:010	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
08:009	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
10:015	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
12:014	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
15:020	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	Mean	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	s74.00	s7.00	s4.00	s1.00	s<1.00	s1.00	s<1.00	s<1.00	<1.00	4.00	<1.00	2.00	4.00	4.00	1.00
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
18:020	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
20:025	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
24:026	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
25:030	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	Mean	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.20a	0.60	<0.50	s52.00	s2.00	s1.00	s1.00	s1.00	s<1.00	s<1.00	s<1.00	<1.00	7.00	<1.00	3.00	5.00	4.00	<1.00
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Tab.width cont'd J99, 95S Rodø (east of), 920827.

Slice.Depth cm up:lower	CHR	BBF	BJKF	BEP	BAP	PER	ICDP	DEA3A	BGHIP	COR	DBP	DI_ΣΣ	PA_ΣΣ	PK_ΣΣ	PAHΣΣ
	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
00:001	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
00:002	Count	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	14.00	miss	25.50	14.50a	3.50	43.00	6.00	41.00	<<1.00	<<1.00	<<25.00	<<293.00	<<147.00	s<<0k32a
	St.dev	5.66	23.33	14.85	3.54	0.71	2.83	0.00	4.24	0.00	0.00	26.87	9.90	11.31	17.68
01:002	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:003	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:004	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
03:004	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
04:005	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
04:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
05:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
06:010	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
08:009	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
10:015	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
12:014	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
15:020	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	5.00	s16.00	<1.00	1.00	<1.00	8.00	<1.00	10.00	<1.00	<1.00	s<87.00	s<57.00	s<27.00	s<143.00
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
18:020	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
20:025	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
24:026	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
25:030	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	3.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	3.00	<1.00	<1.00	s<58.00	<26.00	<1.00	s<83.00
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.

2



Tab.width cont'd J99, 99S Lunday (north of), 920826.

Slice.Depth cm	TIDEPP	DD	Σ	HCHA	HCHG	HC	Σ3	HCB	QCB	OCS	NAP	NAP2M	NAP1M	BIPN	NAPDI	NAPIM	ACNLE	ACNE	FILE	PA	ANT	PAMI	FLUJ	PYR	BAA
up:lower	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
00:001																									
Count																									
Mean																									
St.dev																									
00:002	2	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	<<0.50	s75.00	s14.00	s5.50	s9.50	s3.50	s<<1.00	s2.00	s<<1.50	<<1.00	11.50	<<1.00	2.00	12.50	10.00	2.50
Mean																									
St.dev	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.24	7.07	2.12	0.71	2.12	0.00	0.00	0.71	0.00	6.36	0.00	0.00	0.71	1.41	0.71
01:002																									
Count																									
Mean																									
St.dev																									
02:003																									
Count																									
Mean																									
Count																									
Mean																									
Count																									
Mean																									
St.dev																									
03:004																									
Count																									
Mean																									
Count																									
Mean																									
Count																									
Mean																									
St.dev																									
04:006																									
Count																									
Mean																									
Count																									
Mean																									
St.dev																									
05:006																									
Count																									
Mean																									
Count																									
Mean																									
St.dev																									
06:010																									
Count																									
Mean																									
Count																									
Mean																									
St.dev																									
08:009																									
Count																									
Mean																									
Count																									
Mean																									
Count																									
Mean																									
St.dev																									
10:015																									
Count																									
Mean																									
Count																									
Mean																									
St.dev																									
13:014																									
Count																									
Mean																									
Count																									
Mean																									
St.dev																									
15:020																									
Count																									
Mean																									
Count																									
Mean																									
St.dev																									
19:020																									
Count																									
Mean																									
Count																									
Mean																									
St.dev																									
25:026																									
Count																									
Mean																									
Count																									
Mean																									
St.dev																									

Tab.width cont'd J99, 99S Lundøy (north of), 920826.

	CHR	BBF	BJKF	BEP	BAP	PER	ICDP	DEA3A	BGHIP	COR	DBP	DI_ΣΣ	PA_ΣΣ	PK_ΣΣ	PAHΣΣ
	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
00:001	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
00:002	Count	2	1	1	1	2	2	2	2	2	2	2	2	2	2
	Mean	5.50	<1.00	<1.00	<1.00	19.00	12.00	<<1.00	<<1.00	<<1.00	<<1.00	<<1.00	<<1.00	<<1.00	<<1.00
	St.dev	4.95	.	.	.	7.07	2.83	0.00	0.00	0.00	0.00	14.85	24.75	9.90	9.90
01:002	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:003	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:004	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
03:004	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
04:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
05:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
06:010	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
08:009	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
10:015	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
13:014	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
15:020	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
19:020	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
25:026	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
31:036	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
35:040	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	2.00	1.00	1.00	2.00	3.00	1.00	<1.00	1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	St.dev	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
37:042	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	<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
	St.dev	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

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Sample.area: J99 Undefined. All concentrations on Dry-weight basis.  
 Locality : 98S Skrova (south of), Latitude: 68°07.00N, Longitude: 14°41.00E  
 Sample date: 920825 , Sampling Lab: NIVA, Type: GC, Diameter: 050  
 Est. sedimentation rate mm/year. Unfractionated sample unless noted otherwise then <63µm.

MOCON	CORG	Li	Cd	Cu	Hg	Pb	Zn	Pb210	CB28	CB52	CB101	CB105	CB118	CB138	CB153	CB156	CB180	CB209	CB_Σ7	CB_ΣΣ	DDEPP
%	ppt	ppm	ppm	ppm	ppm	ppm	ppt	mBq/g	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
00:001	Count	3	3	3	3	3	3	1													
	Mean	5.67	0.09	13.00	0.02	27.33	0.099	83.17													
	St.dev	0.42	0.01	1.00	0.00	0.76	0.004														
00:002	Count																				
	Mean																				
	St.dev																				
01:002	Count	1	2	2	2	2	2	1													
	Mean	5.15	0.10	13.00	0.02	27.25	0.099	76.17													
	St.dev	0.21	0.01	1.41	0.00	0.35	0.001														
02:003	Count	1						1													
	Mean	48.20						59.33													
02:004	Count	2	2	2	2	2	2	2													
	Mean	5.15	0.08	13.50	0.02	28.50	0.102														
	St.dev	0.21	0.01	0.71	0.00	0.00	0.001														
04:006	Count	2	2	2	2	2	2	2													
	Mean	5.15	0.10	12.75	0.02	27.25	0.100														
	St.dev	0.64	0.03	1.06	0.00	1.77	0.004														
05:006	Count	1						1													
	Mean	42.51						22.33													
06:010	Count	2	2	2	2	2	2	2													
	Mean	4.70	0.11	13.75	0.02	25.50	0.097														
	St.dev	0.14	0.01	0.35	0.00	0.71	0.003														
07:008	Count	1						1													
	Mean	41.45						8.33													
08:009	Count	1						1													
	Mean	40.46						6.00													
10:015	Count	2	2	2	2	2	2	2													
	Mean	4.25	0.10	11.75	<0.01	22.75	0.094														
	St.dev	0.21	0.01	1.06	0.00	0.35	0.001														
15:020	Count	2	2	2	2	2	2	2													
	Mean	3.85	0.10	11.75	<0.01	21.25	0.092														
	St.dev	0.07	0.01	1.06	0.00	0.35	0.002														
19:020	Count	1						1													
	Mean	37.92						0.00													
20:025	Count	1	1	1	1	1	1	1													
	Mean	3.50	0.09	9.50	<0.01	19.50	0.090														
20:027	Count	1	1	1	1	1	1	1													
	Mean	3.20	0.10	11.00	<0.01	21.00	0.100														
24:028	Count								1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean								<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
25:026	Count	1						1													
	Mean	34.36						-5.67													
29:034	Count								1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean								<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
31:032	Count	1						1													
	Mean	40.15						7.00													

s (32) ! Suspect value(s)  
 miss( 1) ! Missing value.





Tab.width cont'd J99, 98S Skrova (south of), 920825.

Slice.Depth cm up:lower	CHR ppb	BBF ppb	BJKF ppb	BEP ppb	BAP ppb	PER ppb	ICDP ppb	DBA3A ppb	BGHIP ppb	COR ppb	DBP ppb	DI_ΣΣ ppb	PA_ΣΣ ppb	PK_ΣΣ ppb	PAHΣΣ ppb
00:001	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
00:002	Count	2	miss	2	2	2	2	2	2	2	2	2	2	2	2
	Mean	4.50	s19.00	5.50	<<1.00	<<1.00	3.50	<<1.00	6.00	<<1.00	<<1.00	s<<4.50	s<<83.00	s<<33.00	s<<86.50
	St.dev	2.12	1.41	2.12	0.00	0.00	2.12	0.00	1.41	0.00	0.00	4.95	28.28	7.07	23.33
01:002	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:003	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
02:004	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
04:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
05:006	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
06:010	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
07:008	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
08:009	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
10:015	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
15:020	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
19:020	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
20:025	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
20:027	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
24:028	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<15.00	<1.00	s<75.00
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
25:026	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
29:034	Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	1.00	1.00	2.00	2.00	3.00	3.00	1.00	1.00	<1.00	<1.00	<1.00	<19.00	<8.00	<19.00
	St.dev	.	.	.	.	.	.	.	.	.	.	.	.	.	.
31:032	Count	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Mean	.	.	.	.	.	.	.	.	.	.	.	.	.	.



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