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Forsmark site investigation

Chemical characterisation of deposits and biota

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September 2006

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Abstract

In order to characterise deposits and biota with respect to chemical composition in the Forsmark area a number of different samples were analysed for elements with ICP. In total 114 samples from terrestrial and limnic environments were analysed. Besides the content of the macronutrients carbon, nitrogen and phosphorus, 61 other elements were determined in the samples.

Sammanfattning

För att kemiskt karakterisera avlagringar och biota i Forsmarksområdet analyserades ett antal olika prover på grundämnen med hjälp av ICP. Totalt analyserades 114 prover från terrestra och limniska miljöer. Förutom innehållet av kol, kväve och fosfor analyserades proverna på 61 andra grundämnen.

Contents

1 Introduction

This document reports the data gained by the activities "Analyses of elements and isotopes in deposits and terrestrial vegetation" and "Analyses of elements and isotopes in biota samples", which are two of the activities performed within the site investigation at Forsmark. The work was carried out in accordance with activity plans AP PF 400-05-061 and AP PF 400-05-099. In Table 1-1 controlling documents for performing this activity are listed. Activity plans are SKB's internal controlling documents.

In order to characterise both deposits and biota with respect to the chemical composition, a number of different samples from the Forsmark area were analysed for elements. The initial intention was also that some specific isotopes should be determined on the same samples but this was never accomplished. Isotopes will instead be determined on other samples and reported in another report.

The samples were taken from terrestrial and limnic environments. A chemical characterisation of the marine environment in Forsmark has been performed and will be presented in /Kumblad and Bradshaw 2006/. Most of the analysed samples had been collected during other activities within the site investigation, whereas some samples were collected specifically for this investigation. A description of the samples is available in Chapter 3 whereas the equipment used and the procedures for the analyses are described in Chapters 4 and 5. The analyses were performed during the time period August 2005–March 2006.

The original results are stored in the primary data base (SICADA) and are traceable by the activity plan numbers (AP PF 400-05-061 and AP PF 400-05-099).

Table 1-1. Controlling documents for the performance of the activity.

Activity plan	Number	Version
Analyses of elements and isotopes in deposits and terrestrial vegetation	AP PF 400-05-061	1.0
Analyses of elements and isotopes in biota samples	AP PF 400-05-099	1.0

2 Objective and scope

Chemical analyses of elements were performed on samples of deposits and biota. The purpose was to generate information which will be used in different models of the surface (eco)systems at Forsmark. The information may also be used in an EIA (Environmental Impact Assessment) for a future repository for spent nuclear fuel.

The elements determined are shown in Table 2-1.

Table 2-1. Determined elements.

Oxides (in deposits except peat)	Unit	Elements (in non-deposit samples)	Unit
Al_2O_3	%	Al	mg/kg dw
CaO	%	Ca	mg/kg dw
Fe_2O_3	%	Fe	mg/kg dw
K2O	%	K	mg/kg dw
MgO	%	Mg	mg/kg dw
MnO	%	Mn	mg/kg dw
Na_2O	%	Na	mg/kg dw
P_2O_5	%	P	mg/kg dw
SiO_2	%	Si	mg/kg dw
TiO_2	%	Ti	mg/kg dw
Sum oxides	%		
LOI (Loss on ignition)	%		
In all samples			
Elements	**Unit**	**Macroelements[1]**	**Unit**
Ag	mg/kg dw	Total carbon[2]	mg/kg dw
As	mg/kg dw	Total organic carbon[2]	mg/kg dw
B	mg/kg dw	Total nitrogen	mg/kg dw
Ba	mg/kg dw	Total organic nitrogen	mg/kg dw
Be	mg/kg dw	Phosphate (PO_4)	mg/kg dw
Br	mg/kg dw		
Cd	mg/kg dw		
Ce	mg/kg dw		
Cl	mg/kg dw		
Co	mg/kg dw		
Cr	mg/kg dw		
Cs	mg/kg dw		
Cu	mg/kg dw		
Dy	mg/kg dw		
Er	mg/kg dw		
Eu	mg/kg dw		
Ga	mg/kg dw		
Gd	mg/kg dw		
Hf	mg/kg dw		
Hg	mg/kg dw		
Ho	mg/kg dw		

I	mg/kg dw
La	mg/kg dw
Li	mg/kg dw
Lu	mg/kg dw
Mo	mg/kg dw
Nb	mg/kg dw
Nd	mg/kg dw
Ni	mg/kg dw
Pb	mg/kg dw
Pr	mg/kg dw
Rb	mg/kg dw
S	mg/kg dw
Sb	mg/kg dw
Sc	mg/kg dw
Se	mg/kg dw
Sm	mg/kg dw
Sn	mg/kg dw
Sr	mg/kg dw
Ta	mg/kg dw
Tb	mg/kg dw
Th	mg/kg dw
Tl	mg/kg dw
Tm	mg/kg dw
U	mg/kg dw
V	mg/kg dw
W	mg/kg dw
Y	mg/kg dw
Yb	mg/kg dw
Zn	mg/kg dw
Zr	mg/kg dw
Dry substance (105°C)	%
Ash substance (550°C)[3]	%

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[1] In some cases the amount of sample material has been restricted. If enough sample for performing all analyses was not available, elements were prioritised before macroelements. If some, but not all, macroelements could be determined, carbon was prioritised before nitrogen and nitrogen before phosphorus.

[2] For biota samples it was assumed that all carbon and nitrogen are part of organic matter, and therefore only organic or total carbon/nitrogen are reported for most of these samples (except for terrestrial and limnic flora). Phosphate was generally measured only for organic parts of deposits; in biota samples phosphorus was determined instead.

[3] Only for a few samples (algal mat in lake and soil samples from one site). Ash substance was determined for organic samples.

3 Samples

The first batch of samples sent to Analytica AB for analyses were those included in activity plan AP PF 400-05-061 (deposits and terrestrial vegetation). The deposits were sampled earlier according to activity plans AP PF 400-02-46, AP PF 400-02-49 and AP PF 400-04-117 (sediments in lakes and shallow bays), AP PF 400-02-12 (quaternary deposits), AP PF 400-03-062 and AP PF 400-05-134 (peat and wetlands). The terrestrial vegetation, including roots, as well as the uppermost soil layers had been sampled according to AP PF 400-04-109. The samples are listed and further described in Table 3-1. The sites where these samples have been collected are shown in Figure 3-1.

The second batch of samples sent for analyses were those included in AP PF 400-05-099 (aquatic vegetation, terrestrial and aquatic fauna). The limnic vegetation was sampled earlier according to activity plan AP PF 400-04-063, whereas the bottom fauna (mussels) were collected specifically for this purpose in late autumn 2005. The fish samples were collected earlier according to AP PF 400-03-057. All limnic samples were considered to represent the lake where they were sampled and have been given the lake area code (see Table 3-1).

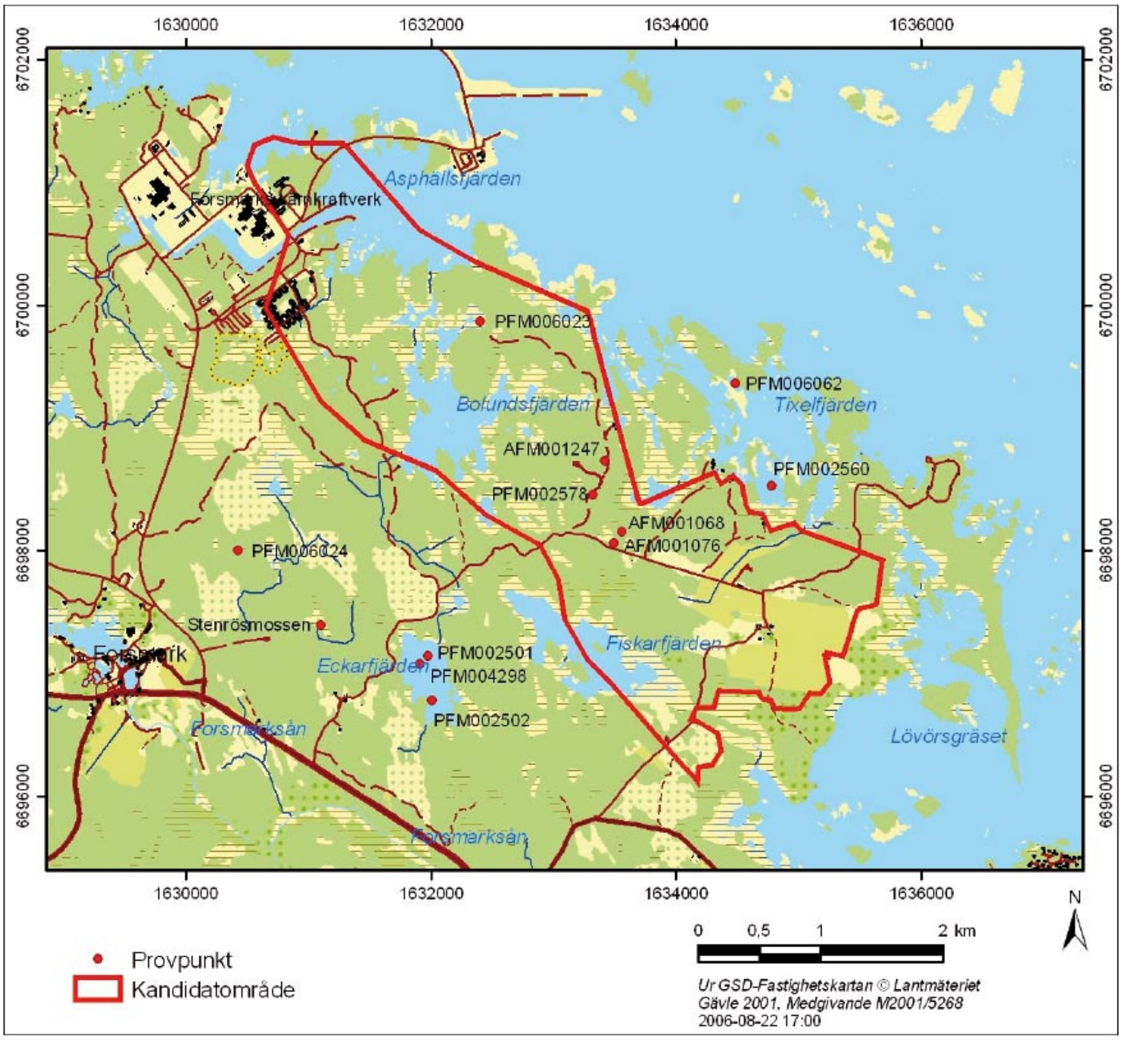

***Figure 3-1**. Sites where sediment, peat, wetland, soil and terrestrial vegetation samples were collected.*

Table 3-1. Sample description. When more than one replicate of the same sample were analysed, that is denoted (repl), otherwise more than one sample means different levels in the same core (sediment, peat, soil), different size and/or location (roots, moose) or different species (limnic vegetation, small rodents).

	Sampling site	Number and description of samples	Sample state before analysis
Deposits			
Sediment	**Eckarfjärden**		
	PFM002502	1 (algal mat)	Freeze-dried
	PFM002501	2 (upper sediment)	Cooled
	PFM004298	7 (deeper sediment)	Freeze-dried
	Tixelfjärden		
	PFM002560	2 (upper sediment)	Frozen
	PFM006062	5 (deeper sediment)	Cooled
Peat/wetland	**Puttan**		Frozen
	PFM006023	4	
	Rönningarna		
	PFM006024	6	
Soil	**Spruce wetland**		Frozen
	AFM001076	6	
	Mesic spruce forest		
	AFM001068	6	
	Spruce forest on thin soil		
	AFM001247	6	
	moraine		
	PFM002578 (deeper soil in the whole area)	1	
Terrestrial environment			
Roots (spruce)	**Spruce wetland** AFM001076	3 (root Ø < 1 mm in humus layer; 2,5 cm-, root Ø > 2 mm in whole humus layer, root Ø > 2 mm in mineral soil layer; 0–20 cm)	Dried
	Mesic spruce forest AFM001068	2 (root Ø < 1 mm in mineral soil layer; 0–10 cm, root Ø > 2 mm in mineral soil layer; 0–20 cm)	
	Spruce forest on thin soil AFM001247	3 (root Ø < 1 mm in humus layer; 2,5 cm-, root Ø > 2 mm in whole humus layer, root Ø > 2 mm in mineral soil layer; 0–20 cm)	
Vegetation (above ground)	**Spruce wetland** AFM001076	5 (*Picea abies* (green shoots and wood), *Fraxinus excelsior* (small bushes), *Rubus saxatilis*, moss)	Frozen
	Mesic spruce forest AFM001068	5 (*Picea abies* (green shoots and wood), *Vaccinium myrtillus*, *Rubus saxatilis*, *Rhytidiadelphus triquetrus*)	
	Spruce forest on thin soil AFM001247	5 (*Picea abies* (green shoots and wood), *Vaccinium myrtillus*, *Melampyrum sylvaticum*, *Hylocomium splendens*)	
Moose	**Forsmark area** AFM000100, AFM001272 (Björnbo), AFM001273 (Vamsta)	5	Frozen

	Sampling site	Number and description of samples	Sample state before analysis
Small rodents	**Forest**		Frozen
	PFM007322[1]	2 (yellow-necked mouse, bank vole)	
	AFM001289[2]	1 (bank vole autumn)	
	PFM007325[3]	1 (bank vole spring)	
	AFM001290[4]	1 (yellow-necked mouse autumn)	
	Ditch		
	PFM007323[5]	3 repl/1 (water vole spring/autumn)	
	PFM007324[6]	3 repl (water vole autumn)	
	Shrews		
	AFM001291[7]	1	
Fox	**Forsmark area** AFM000100	1	Frozen
Limnic environment			
Fish	**Bolundsfjärden** AFM000050	Bentivorous fish: ruffe 1 repl.[8] tench 3 repl Piscivorous fish: pike 1 repl	Frozen
	Eckarfjärden AFM000010	Planktivorous fish: small roach 1 repl[9] Bentivorous fish: tench 3 repl Piscivorous fish: pike 2 repl	
	Fiskarfjärden AFM000051	Planktivorous fish: small roach 1 repl[10] Bentivorous fish: tench 3 repl Piscivorous fish: pike 1 repl[11]	
Chara	**Bolundsfjärden** AFM000050	3 repl (*Chara tomentosa*)	Dried
	Fiskarfjärden AFM000051	1 repl (*Chara tomentosa*)	
Bottom fauna (mussel)	**Bolundsfjärden** AFM000050	3 repl (*Anodonta*)[12]	Frozen

[1] 8 and 10 individuals from site J5 in Figure 4-5a in SKB report P-04-04.

[2] 12 individuals from three different sites are represented by this idcode (site D8, F2 and L7 in Figure 4-5a in SKB report P-04-04).

[3] 11 individuals from site J8 in Figure 4-5a in SKB report P-04-04.

[4] 10 individuals from two different sites are represented by this idcode (L10 and L7 in Figure 4-5a in SKB report P-04-04).

[5] 6, 6, 6 and 8 individuals from site D10 in Figure 4-5a in SKB report P-04-04.

[6] 5, 8 and 8 individuals from site D4 in Figure 4-5a in SKB report P-04-04.

[7] 30 individuals from all sampling sites (for map see Figure 4-5a in SKB report P-04-04).

[8] 6 individuals.

[9] 18 individuals.

[10] 16 individuals.

[11] 5 individuals.

[12] 2 individuals.

The terrestrial fauna was sampled according to AP PF 400-03-035 (small rodents) whereas samples of moose and fox were provided by local hunters. For all fauna, muscle tissues were prepared and analysed. The samples are listed and further described in Table 3-1.

In order to gain enough sample matter for the small rodents, individuals were pooled together as one sample. In some cases all individuals in a sample were caught at the same site, but more often the samples contain individuals from more than one site, see Table 3-1 for more details.

4 Equipment

4.1 Description of equipment

The analyses were performed by ICP-AES, ICP-SFMS, ICP-QMS and AFS. In all techniques except AFS a plasma formed by argon gas was used.

ICP-AES stands for optical emission spectrometry with an inductively coupled plasma. The plasma flows through a radiofrequency field where it is kept in a state of partial ionisation, i.e. the gas consists partly of electrically charged particles. This allows it to reach very high temperatures of up to 10,000°C. At high temperature, most elements emit light of characteristic wavelengths, which can be measured and used to determine their concentrations.

In ICP-QMS (quadrupole mass spectrometry) and ICP-SFMS (sector field mass spectrometry) the plasma is of the same type as in ICP-AES, but it is used to convert elements to ions which are then separated by mass in a mass spectrometer. This allows the different elements in a sample (and their natural isotopes) to be separated and their concentrations determined.

Atomic fluorescence (AFS) has been used for the determination of Se. This technique uses photon emission from atoms as in ICP-AES, although excitation is not achieved thermally, but by light of a wavelength characteristic of the element. This light is absorbed by the atom and subsequently re-emitted to generate the analytical response.

5 Execution

5.1 General

The samples were collected by SKB and the sample preparations and elemental analyses were performed by Analytica AB. Macroelements were determined by a subcontractor, GBA (Gesellschaft für Bioanalytik, Hamburg).

The collected samples are of different types such as soil, sediment and biological material.

5.2 Preparations

Several digestion methods suitable for different types of samples have been used. Table 5-1 shows an overview of the analysis packages.

Description of the analysis packages:

MG1

- The sample was dried at 50°C. For the elements As, Cd, Hg, Cu and S, the sample was leached with 7 M nitric acid (HNO_3) in a closed Teflon vessel in a microwave oven. Concentrations have been reported on a dry weight (105°C) basis. For Br, Cl and I, the sample was leached in high purified water. The other elements were determined after fusion with lithium metaborate followed by dissolution in diluted nitric acid.

MG3

- The sample was dried at 50°C. For the elements As, Cd, Hg, Cu and S, the sample was leached in nitric acid (HNO_3)/hydrogen peroxide (H_2O_2) in a closed Teflon vessel in a microwave oven. Concentrations have been reported on a dry weight (105°C) basis. For Br, Cl and I, the sample was leached in high purified water. The other elements were determined after ashing at 550°C followed by fusion with lithium metaborate and dissolution in diluted nitric acid.

M4

- The sample was dried in 50°C and then leached with nitric acid (HNO_3) and a small amount of hydrofluoric acid (HF) in a closed Teflon vessel in a microwave oven.

Table 5-1. Overview of analysis packages.

Type of sample	Analysis package	Macroelements
Soil, sediment	MG1, M7	TOC, C-tot, N-tot, N-org., PO_4
Organic soil	MG3, M7	TOC, C-tot, N-tot, N-org., PO_4
Biological material (plant)	M4	C-tot, N-tot, N-org., PO_4
Biological material (animal)	M4F	C-tot*, N-tot*

* For some of the biological animal samples, triplicate analyses were performed.

M4F

- The sample was freeze dried and then leached with nitric acid (HNO_3) and a small amount of hydrofluoric acid (HF) in a closed Teflon vessel in a microwave oven.

M7

- Sample was digested using hydrofluoric acid (HF)/ perchloric acid ($HClO_4$)/nitric acid (HNO_3) on a hot plate.

Macroelements

- Total carbon and total organic carbon (TOC), were carried out according to standard method DIN ISO 10694, Soil quality – Determination of organic and total carbon after dry combustion (elementary analysis).
- Total nitrogen and organic nitrogen, were carried out according to standard method DIN ISO 11261, Soil quality – Determination of total nitrogen – Modified Kjeldahl method.
- Phosphate (PO_4) was determined with standard method DIN EN ISO 15681-2, Water quality – Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) – Part 2: Method by continuous flow analysis (CFA). This method is used after the sample has been extracted in calcium-lactate.

5.3 Execution of analysis

The instruments were optimised and calibrated at the start of each working day. Calibration consisted of running a sequence of synthetic blanks, sample preparation blanks, quality control samples (certified reference materials) prepared in parallel with the unknowns, and standard solutions. The calibration sequence was repeated after every 10–15 sample measurements. For measurements by ICP-AES and ICP-SFMS, the internal standard technique was employed to allow correction for instrumental drift and non-spectral interference effects during the analyses.

5.4 Data handling/post processing

SICADA orders were registered under three different order numbers in the LIMS (Laboratory Information Management System). Data from LIMS were extracted to Excel-files with the laboratory standard program LMM (LabMasterMail). Using a special macro for SICADA, information was extracted from the Excel-files to the SICADA template, then the templates were saved with names corresponding to the order numbers. The macro-file constituted a database that translated the element code to SICADA element code. After the SICADA templates were delivered to SKB the activity leader included some information concerning the different samples, e.g. comments on how many individuals were used in pooled samples and information about extra samples used.

5.5 Nonconformities

A somewhat poorer access to material than expected led to fewer samples of deposits and terrestrial vegetation than planned (according to AP PF 400-05-061).

For all animal samples, muscles were prepared and analysed. In order to investigate how the element composition deviated in fish muscle compared to the whole fish, it was planned to do the same analyses on muscle as well as on whole pike. Unfortunately this could not be performed as it was impossible to disintegrate the whole fish without using a metal mill which would have contaminated the sample. Instead, muscle has been analysed for both of these two samples.

6 Results

The original results are stored in the primary data base (SICADA) and these will be used for further interpretation. The data are traceable in SICADA by the activity Plan numbers (AP PF 400-05-061 and AP PF 400-05-099). The whole data set is presented in Appendix 1.

References

Kumblad L, Bradshaw C, 2006. Stoichiometry of biota, water and sediment in Tixelfjärden, Baltic Sea. SKB report in progress. Svensk Kärnbränslehantering AB.

Appendix 1

Results of chemical analyses

Start date	Stop date	Idcode	Secup m	Seclow m	Sub-sample no	DNO	Sample namn	Dry subst %	Ash subst %	Total C mg/kg dw	Total organic C mg/kg dw	Total N mg/kg dw	Total organic N mg/kg dw	PO_4 mg/kg dw	Al mg/kg dw	Al_2O_3 %	Ca mg/kg dw	CaO %	Fe mg/kg dw	Fe_2O_3 %	K mg/kg dw	K2O %	Mg mg/kg dw	MgO %	Mn mg/kg dw	MnO %	Na mg/kg dw	Na_2O %	P mg/kg dw	P_2O_5 %	Si mg/kg dw	SiO_2 %	Ti mg/kg dw	TiO_2 %	Sum oxides %	Loss on ignition %	Ag mg/kg dw	As mg/kg dw	B mg/kg dw	Ba mg/kg dw	Be mg/kg dw	Br mg/kg dw	Cd mg/kg dw	Ce mg/kg dw	Cl mg/kg dw	Co mg/kg dw
2005-08-24	2005-09-09	AFM001068	0	0.03	1	1	jord, humusskikt	54		200,000	190,000	8,460	7,940	330		8		3.48		2.59		2.24		0.78		0.0467		1.59		0.143		42.6		0.27	61.7	36	5.89	1.53	–1	395	1.21	2.51	0.303	35.1	71	5.09
2005-08-24	2005-09-09	AFM001068	0.03	0.03	2	1	jord, humusskikt	66.5		240,000	190,000	6,760	6,180	160		6.8		2.49		2.16		1.99		0.48		0.0343		1.46		0.12		39.7		0.2	55.4	42.5	6.02	2.41	–1	345	1.04	3.58	0.229	24.8	103	3.14
2005-08-24	2005-09-09	AFM001068	0	0.1	3	1	bulkjord,min.j.sk.	79.1		110,000	97,000	6,480	6,070	130		10.5		3.02		3.66		2.8		1.05		0.0553		1.98		0.124		53.6		0.37	77.2	20	5.7	2.11	–1	488	1.61	3.01	0.177	47	38	8.52
2005-08-24	2005-09-09	AFM001068	0.1	0.2	4	1	bulkjord,min.j.sk.	80.6		110,000	100,000	4,970	4,360	115		11.4		3.28		3.83		3.04		1.13		0.0584		2.15		0.134		59.3		0.41	84.7	19	5.66	1.89	–1	545	1.64	3.23	0.214	45.7	26	7.53
2005-08-24	2005-09-09	AFM001068	0	0.1	5	1	jord, min.j.skikt	80.4		120,000	120,000	4,570	4,040	115		10.1		3.08		3.53		2.73		1.01		0.0533		1.9		0.13		52.3		0.36	75.2	22.6	5.85	2.28	–1	475	1.69	2.9	0.181	51.5	30	6.83
2005-08-24	2005-09-09	AFM001068	0.1	0.2	6	1	jord, min.j.skikt	83.1		100,000	96,000	4,920	4,420	60		11		3.01		3.66		3		1.09		0.0532		2.04		0.119		57.3		0.38	81.7	17.6	5.73	2.24	–1	519	1.81	3.35	0.223	55.2	38	7.86
2005-08-24	2005-09-09	AFM001076	0	0.03	1	1	jord, humusskikt	37		200,000	200,000	12,400	11,300	215		4.9		1.82		1.27		1.55		0.31		0.0252		1.15		0.111		31.4		0.1	42.7	56.6	4.36	1.86	–1	247	0.7	5.17	0.17	15.1	229	1.92
2005-08-24	2005-09-09	AFM001076	0.03	0.03	2	1	jord, humusskikt	59.4		170,000	150,000	5,680	4,900	71		8.2		2.57		2.24		2.37		0.49		0.0355		1.87		0.082		46.2		0.17	64.2	30	5.15	2.7	–1	387	1.22	7.12	0.138	27.8	167	4.2
2005-08-24	2005-09-09	AFM001076	0	0.1	3	1	bulkjord,min.j.sk.	74.2		120,000	98,000	5,400	4,790	64		9.4		2.96		2.03		2.72		0.56		0.0443		2.15		0.073		57.4		0.2	77.5	19.1	4.87	2.18	–1	445	1.43	4.93	0.114	25.6	53	3.84
2005-08-24	2005-09-09	AFM001076	0.1	0.2	4	1	bulkjord,min.j.sk.	84.8		49,000	48,000	4,630	4,340	60		10.8		2.21		1.88		3.15		0.5		0.0374		2.54		0.063		71.5		0.22	92.9	8.2	4.63	1.46	–1	518	1.65	2.62	0.063	32.7	–25	3.33
2005-08-24	2005-09-09	AFM001076	0	0.1	5	1	jord, min.j.skikt	77.7		130,000	110,000	5,650	5,020	63		9		2.86		2.28		2.61		0.54		0.0414		2.1		0.077		52.9		0.2	72.6	22	4.57	1.41	–1	428	1.3	6.84	0.123	27.1	77	3.91
2005-08-24	2005-09-09	AFM001076	0.1	0.2	6	1	jord, min.j.skikt	77.2		110,000	89,000	4,670	4,210	63		9.8		2.81		2.45		2.85		0.55		0.0423		2.24		0.074		58.8		0.21	79.8	15.9	4.74	2.11	–1	466	1.5	5.81	0.121	32.2	43	4.21
2005-08-24	2005-09-09	AFM001247	0	0.03	1	1	jord, humusskikt	34.4	18.5	480,000	330,000	18,400	17,100	460		1.9		1.68		0.39		0.59		0.15		0.0522		0.43		0.190		12.2		0.06	17.7		6.66	0.218	–1	154	0.21	2.31	0.06	7	281	0.872
2005-08-24	2005-09-09	AFM001247	0.03	0.03	2	1	jord, humusskikt	36.3	17.7	470,000	200,000	18,500	17,500	310		1.8		1.12		0.40		0.55		0.11		0.0152		0.41		0.134		12.2		0.05	16.8		5.13	0.414	–1	165	0.19	1.63	0.097	7.2	173	0.768
2005-08-24	2005-09-09	AFM001247	0	0.1	3	1	bulkjord,min.j.sk.	79.4	69.6	130,000	89,000	13,000	12,800	56		8.3		1.68		1.72		2.19		0.41		0.0219		1.86		0.105		52.0		0.24	68.5		5.55	1.57	–1	376	1.16	1.41	0.293	36.2	57	3.24
2005-08-24	2005-09-09	AFM001247	0.1	0.2	4	1	bulkjord,min.j.sk.	82.3	85.5	63,000	53,000	10,500	10,300	30		9.6		2.11		1.90		2.86		0.52		0.0350		2.09		0.118		58.1		0.24	77.6		5.38	2.21	–1	472	1.58	1.09	0.357	49.8	–25	4.51
2005-08-24	2005-09-09	AFM001247	0	0.1	5	1	jord, min.j.skikt	58.7	55	290,000	150,000	19,100	18,700	114		6.4		1.22		0.82		1.94		0.21		0.0145		1.56		0.069		41.4		0.12	53.8		5.02	1.23	–1	323	0.88	1.75	0.327	11.8	67	1.71
2005-08-24	2005-09-09	AFM001247	0.1	0.2	6	1	jord, min.j.skikt	74.8		150,000	150,000	12,300	11,700	120		9.1		3.36		2.79		2.45		0.47		0.0719		2.02		0.172		51.7		0.19	72.3	25.9	7.61	3.44	–2	427	1.52	3.73	0.86	48	72	6.98
2005-08-24	2005-09-13	PFM004459	3.5	3.5	1	1	jord; moränlera	99.3								9.4		13.4		2.88		2.86		0.91		0.0761		1.76		0.122		56.3		0.36	88.1	10.5	5.46	25.4	–10	452	1.56	0.603	0.093	42.3	26	6
2005-08-24	2005-09-13	PFM004460	1	1	1	1	jord; ospec morän	99.8								10.2		10.1		2.23		3.04		0.72		0.0507		2.48		0.093		62.6		0.25	91.8	7.4	5.14	8.59	–10	524	1.87	–0.5	0.061	38.7	26	3.71
2005-08-24	2005-09-13	PFM004460	1.5	1.5	2	1	jord; ospec morän	99.8								9.9		11.4		2.14		2.86		0.74		0.0512		2.47		0.092		60.5		0.24	90.4	8.3	5.13	6.01	–10	483	1.6	–0.5	0.059	39.4	33	3.76
2005-08-24	2005-09-13	PFM002578	0.7	0.7	1	1	jord; ospec morän	94								9.7		9.94		2.08		2.87		0.66		0.0514		2.29		0.103		63.7		0.25	91.6	7.5	4.82	14.7	–10	454	1.76	–0.5	0.077	32.8	139	3.54
2006-03-08	2006-04-10	PFM006023 1)	0.66	0.69	1	1	våtmark; gyttja	14.8			110,000					6.9		1.28		3.02		1.88		1.37		0.0273		1.13		0.091		55.5		0.34	71.6	26.6	–0.2	2.39	–1	249	1.42	11.8	1.17	15.5	3,810	6.03
2006-03-08	2006-04-10	PFM006023 2)	1.03	1.06	2	1	våtmark; lerig gyttja	14.3		99,000	100,000	2,180	1,580	39		6.5		1.16		3.37		1.77		1.29		0.0285		0.984		0.111		56.2		0.32	71.7	26.4	–0.2	3.46	–1	239	1.3	6.39	0.968	49.9	1,380	6.49
2006-03-08	2006-04-10	PFM006023	1.58	1.61	3	1	våtmark; sand	84.6		2,400	2,102	1,640	1,560	18		12.3		1.59		4.56		3.84		0.54		0.0579		2.94		0.085		72.4		0.17	98.5	1.1	–0.2	0.787	–0.9	599	1.67	–0.5	0.065	27.9	78	2.05
2006-03-08	2006-04-10	PFM006023	1.93	1.96	4	1	våtmark; glaciallera	48.8		8,400	3,821	1,680	1,510	54		16.8		3.9		8.25		4.3		3.16		0.0819		1.76		0.172		51.8		0.78	91	5.7	0.37	5.69	–1	642	2.66	–1	0.209	100	129	19.3
2006-03-08	2006-04-10	PFM006024 3)	0.33	0.36	1	1	torv	8.8		440,000	460,000	3,900	3,700		426		1,390		580		–200		535		4		371		123		322		8.63				–0.03	0.409	0.318	2.7	0.01	9.65	0.178	0.2	680	0.122
2006-03-08	2006-04-10	PFM006024 3)	1.13	1.16	2	1	torv	6.2		440,000	440,000	3,150	3,200		148		8,830		250		–200		1,160		11		218		116		250		3.6				–0.03	0.225	0.953	6	0	5.75	0.133	0.1	500	0.057
2006-03-08	2006-04-10	PFM006024 3)	1.53	1.56	3	1	vasstorv	7.7		480,000	460,000	21,030	19,000		533		22,600		500		210		1,880		44		212		311		460		9.65				–0.03	0.402	16.6	26.3	0.02	84	0.055	1.3	700	0.312
2006-03-08	2006-04-10	PFM006024 4)	1.73	1.76	4	1	våtmark; alggyttja	5.7			400,000	4,890	1,720			0.3		2.35		0.17		0.12		0.27		0.0108		0.076		0.066		1.5		0.02	5		–0.2	0.514	–3	37.6	–0.3	1.08	0.12	2.9	168	1.16
2006-03-08	2006-04-10	PFM006024	1.93	1.96	5	1	våtmark; lerig gyttja	28.2		81,000	78,950	2,390	1,710	38		9		1.67		3.95		2.41		1.57		0.0439		1.07		0.193		56.5		0.46	76.9	19.4	0.26	3.5	–1	370	1.78	7.1	0.376	63	77	7.98
2006-03-08	2006-04-10	PFM006024	2.63	2.66	6	1	våtmark; glaciallera	61.9		35,000	6,123	1,620	1,410	39		12.4		15.8		5.84		3.67		2.47		0.087		1.08		0.141		39.6		0.66	81.8	12.1	3.01	3.35	–1	437	2.04	–1	0.159	71.8	–50	13.5
2005-08-24	2005-09-09	PFM002501	0	0.16 7)	1	1	sjösediment			350,000	180,000	33,400	31,900	450		0.9		3.3		0.72		0.23		0.28		0.0192		0.183		0.277		12.4		0.04	18.4	79.8	5.9	4.53	4.23	55.9	0.27	23.5	1.23	13.9	1,010	2.91
2005-08-24	2005-09-09	PFM002501	0.2	0.3 7)	2	1	sjösediment			400,000	370,000	34,400	32,900	160		1.3		3		0.91		0.29		0.35		0.0165		0.235		0.151		12.8		0.06	19.1	78.2	4.89	6.37	3.58	70.6	0.37	16.4	1.13	17.2	1,020	3.19
2005-08-24	2005-09-21	PFM002502 5)	0	0.03 7)	1	1	algmatta, sjö		23.5	380,000	410,000	37,300	35,500			0.6		7.44		0.56		0.2		0.22		0.0239		0.125		0.263		8.2		0.03	17.7		14.5	1.66	7.13	66.4	0.13	12.6	0.305	31.1	518	1.5
2005-08-24	2005-09-09	PFM004298 6)	2.53	2.64 7)	1	1	sjösed, alggyttja	6.4		440,000	400,000					1.2		10.3		1.04		0.32		0.31		0.0197		0.194		0.159		9.9		0.06	23.5	75.4	21.5	3.02	86	82.6	0.17	14.4	0.711	13.4	591	2.74
2005-08-24	2005-09-09	PFM004298 3)	2.64	2.71 7)	2	1	sjösed, kalkgyttja	7.1		240,000	210,000	18,500	16,900			0.6		25.9		0.83		0.17		0.27		0.0253		0.115		0.108		5.8		0.03	33.9	63.1	45.2	2.67	36.9	81.9	0.13	16	0.262	6.8	452	1.9
2005-08-24	2005-09-09	PFM004298 6)	3.1	3.2 7)	3	1	sjösed, alggyttja	8.6		350,000	270,000					2.2		2.8		1.66		0.58		0.61		0.0388		0.353		0.118		24.5		0.11	33	63.9	16.6	2.71	69.9	132	0.45	68	0.463	19.7	832	3.48
2005-08-24	2005-09-09	PFM004298	3.56	3.62 7)	4	1	sjösed, lergyttja	30.7		88,000	80,000	5,980	4,120	84		9.3		1.77		5.26		2.43		1.52		0.0464		1.23		0.198		54.4		0.45	76.6	20.7	23.5	6.14	–20	468	3.91	93.8	0.259	60.9	334	23.5
2005-08-24	2005-09-09	PFM004298	3.87	3.92 7)	5	1	sjösediment; lera	65								18.8		1.67		9.76		4.52		3.53		0.0942		2.21		0.225		56.2		0.94	98	5	8.78	11.7	21	945	3.84	2.69	0.111	120	76	17.6
2005-08-24	2005-09-09	PFM004298	4.02	4.07 7)	6	1	sjösediment; lera	65.1								15.5		5.89		9.51		4		2.89		0.0973		1.84		0.217		53.8		0.81	94.6	6.7	8.26	6.81	22.7	720	3.15	1.32	0.056	99.3	70	19.8
2005-08-24	2005-09-09	PFM004298	4.2	4.25 7)	7	1	sjösediment; lera	64.6								16.1		7.01		7.77		4.2		2.99		0.0896		1.72		0.184		52.8		0.79	93.6	8.2	7.5	5.19	22.8	674	3.14	1.01	0.164	92.5	84	15.7
2005-08-24	2005-09-09	PFM002560	0.14	0.16	1	1	havssediment			100,000	100,000	6,200	5,850	38		7.5		0.89		3.69		2.03		1.71		0.0336		2.61		0.115		38.4		0.33	57.3	24.5	7.27	5.45	–1	282	1.62	91.7	1.54	52	16,800	7.91
2005-08-24	2005-09-09	PFM002560	0.28	0.3	2	1	havssediment			9,900	9,800	1,330	1,190	42		11.9		1.45		3.28		3.59		0.67		0.0348		2.93		0.092		73.2		0.21	97.4	2.5	4.98	2.42	–1	580	1.9	9.83	0.142	34.8	1,550	4.9
2005-11-07	2005-11-29	PFM006062	2.09	2.21	1	1	havssediment	37.9		34,000	36,000	5,000	4,600	50		10.8		1.29		4.4		2.86		1.77		0.0547		1.88		0.166		62.1		0.53	85.9	12.3	0.16	6.52	–1	441	1.32	19.3	0.254	57.2	3,850	10.7
2005-11-07	2005-11-29	PFM006062	2.24	2.3	2	1	havssed; sand/grus	72.8								11.2		6.17		3.85		2.86		0.78		0.0606		3.01		0.084		66		0.26	94.3	5.2	0.05	5.46	–1	496	0.65	4.39	0.131	36.5	757	5.66
2005-11-07	2005-11-29	PFM006062	2.34	2.41	3	1	havssed; lera	56								18.4		1.62		9.54		4.53		3.64		0.0862		2.02		0.186		53		0.87	93.9	5.5	0.16	14.1	–1	682	2.81	6.66	0.198	96.5	1,820	24.6
2005-11-07	2005-11-29	PFM006062	2.6	2.67	4	1	havssed; lera	63.3								14		8.34		6.39		3.7		2.49		0.0807		1.86		0.157		52.3		0.66	90	9	0.1	6.18	–1	547	1.78	4.62	0.167	68.9	1,260	15.8
2005-11-07	2005-11-29	PFM006062	2.8	2.87	5	1	havssed; lera	63.6								14.2		10.5		6.82		3.81		2.68		0.089		1.67		0.155		47.8		0.69	88.4	11.3	0.1	6.68	–1	552	1.86	5.04	0.165	69.8	1,380	17.2
2005-09-19	2005-10-10	AFM001068			7	1	kranshakmossa	81.1		547,000		11,000	10,000	470	1,400		11,100		688		5,480		1,340		59		457		961		5,080		47				–0.03	0.196	10.5	57.2	–0.2	52	0.143	1.3	4,700	0.28
2005-09-19	2005-10-10	AFM001068			8	1	stenbär	19.8		469,000		17,000	16,000	1,940	42		15,100		65		24,500		6,310		19		–40		1,450		755		–3				–0.03	–0.3	24.7	3.9	–0.2	0.2	0.038	0	40,000	0.0272
2005-09-19	2005-10-10	AFM001068			9	1	blåbär	33.5		592,000		13,000	12,000	1,390	97		8,430		54		9,360		1,650		531		52.3		1,330		951		–3				–0.03	–0.1	15	63.2	–0.2	2	0.115	0	5,800	0.0274
2005-09-19	2005-10-10	AFM001068			10	1	gran, gröna skott	32.7		533,000		8,500	7,600	1,150	–40		3,920		19		12,500		859		72		–40		1,790		955		–3				–0.03	–0.1	12.9	23.2	–0.2	3.3	0.021	0	6,100	0.0501
2005-09-19	2005-10-10	AFM001068			11	1	gran, ved	51.4		523,000		2,000	1,800	150	–40		1,610		–20		700		66		4		–40		53		644		–3				0.07	–0.1	2.61	7.9	–0.2	0.4	–0.008	0	1,900	–0.008
2005-09-19	2005-10-10	AFM001068	0	0.1	12	1	rot,mineral,<1mm dia			526,000		8,200	7,400	320	6,300		18,800		3,750		4,040		1,650		113		1,790		773		13,000		248				0.16	1.23	11.7	71.2	0.24	170	1.22	8.4	2,600	1.89
2005-09-19	2005-10-10	AFM001068	0	0.2	13	1	rot,mineral,>2mm dia			587,000		4,100	3,800	260	580		9,590		368		2,460		588		37		203		373		1,870		23.9				0.04	0.179	8.25	40.2	–0.2	22	0.111	1	3,600	0.247
2005-09-19	2005-10-10	AFM001076			7	1	mossa	19.4		500,000		7,400	5,600	710	3,360		19,900		1,280		5,920		1,450		139		1,150		841		10,800		81.9				0.04	0.764	16.6	53.1	–0.2	290	0.334	2.9	9,600	0.688
2005-09-19	2005-10-10	AFM001076			8	1	stenbär	22.3		462,000		23,000	22,000	1,960	–40		12,900		63		24,600		6,170		38		51.8		1,600		935		–3				–0.03	–0.4	56.9	4.6	–0.2	19	0.169	0.1	68,000	0.0737
2005-09-19	2005-10-10	AFM001076			9	1	buskskikt; ask	35.5		569,000		13,000	13,000	1,300	–40		9,460		41		7,780		2,020		268		73		1,180		849		–3				–0.03	–0.2	15.1	57.8	–0.2	6.6	0.067	0	20,000	0.013
2005-09-19	2005-10-10	AFM001076			10	1	gran, gröna skott	33.9		541,000		12,000	12,000	800	–40		2,840		17		12,800		946		58		–40		1,610		1,110		–3				–0.03	–0.2	26	14.2	–0.2	3.8	0.02	0	15,000	0.0746
2005-09-19	2005-10-10	AFM001076			11	1	gran, ved	64.6		522,000		2,800	2,600	970	–40		4,340		–20		647		147		38		–40		51		723		–3				0.05	–0.1	4.76	13	–0.2	0.7	0.014	0	5,600	0.0092
2005-09-19	2005-10-10	AFM001076	0.03		12	1	rot,humus,<1mm diam			418,000		10,000	9,100	160	1,140		12,600		1,190		2,140		970		79		1,140		669		3,310		42.5				–0.03	0.948	8.67	20.9	–0.2	200	0.581	1.5	4,200	0.764
2005-09-19	2005-10-10	AFM001076	0		13	1	rot,humus,>2mm diam			596,000		6,900	6,600	210	71		9,610		1,230		2,330		543		38		194		331		872		–3				–0.03	3.78	9.77	25	–0.2	50	0.079	0.3	3,100	0.212
2005-09-19	2005-10-10	AFM001076	0	0.2	14	1	rot,mineral,>2mm dia			606,000		6,500	6,200	250	430		5,360		2,290		2,540		779		43		218		241		1,610		18.2				–0.03	4.41	11.5	10.8	–0.2	56	0.066	2.7	2,000	0.605
2005-09-19	2005-10-10	AFM001247			7	1	husmossa	88.9		503,000		9,900	8,500	420	282		5,480		218		4,410		905		232		151		1,220		2,280		11.1				–0.03	0.176	4.88	31.8	–0.2	31	0.142	0.3	890	0.121
2005-09-19	2005-10-10	AFM001247			8	1	skogskovall	14.3		452,000		24,000	23,000	12,000	51		29,600		67		81,100		4,070		2,600		–40		8,010		6,460		–3				0.13	–0.1	82.1	287	–0.2	13	0.663	0	31,000	0.387
2005-09-19	2005-10-10	AFM001247			9	1	blåbär	34.6		507,000		12,000	11,000	1,620	153		10,700		51		7,760		2,150		2,030		51.2		1,280		861		–3				–0.03	–0.1	19.4	157	–0.2	4.5	0.225	0	12,000	0.0371
2005-09-19	2005-10-10	AFM001247			10	1	gran, gröna skott	35.6		532,000		11,000	10,000	1,220	–40		2,700		21		12,500		859		191		–40		1,980		938		–3				–0.03	–0.1	19.3	20.5	–0.2	2.6	0.104	0	10,000	0.114
2005-09-19	2005-10-10	AFM001247			11	1	gran, ved	72.8		511,000		12,000	11,000	117	–40		1,320		–20		566		86		40		–40		48		715		–3				0.08	–0.1	4.09	12.1	–0.2	1	0.129	0	3,600	0.0178
2005-09-19	2005-10-10	AFM001247	0.03		12	1	rot,humus,<1mm diam			627,000		8,700	7,900	270	427		6,960		357		1,690		643		236		968		840		1,700		19.2				0.23	0.448	7.69	51.1	–0.2	77	1.46	1.4	4,200	0.609
2005-09-19	2005-10-10	AFM001247	0		13	1	rot,humus,>2mm diam			566,000		3,900	3,600	340	96		8,470		71		2,250		404		173		143		463		923		3.64				0.04	–0.1	7.84	59.5	–0.2	9.7	0.306	0.3	2,500	0.138
2005-09-19	2005-10-10	AFM001247	0	0.2	14	1	rot,mineral,>2mm dia			582,000		3,400	3,000	310	129		5,980		132		1,770		414		83		120		362		805		3.94				0.04	–0.1	5.87	50.2	–0.2	11	0.204	0.5	3,000	0.176

Idcode	Secup m	Seclow m	Sub-sample no	DNO	Cr mg/kg dw	Cs mg/kg dw	Cu mg/kg dw	Dy mg/kg dw	Er mg/kg dw	Eu mg/kg dw	Ga mg/kg dw	Gd mg/kg dw	Hf mg/kg dw	Hg mg/kg dw	Ho mg/kg dw	I mg/kg dw	La mg/kg dw	Li mg/kg dw	Lu mg/kg dw	Mo mg/kg dw	Nb mg/kg dw	Nd mg/kg dw	Ni mg/kg dw	Pb mg/kg dw	Pr mg/kg dw	Rb mg/kg dw	S mg/kg dw	Sb mg/kg dw	Sc mg/kg dw	Se mg/kg dw	Sm mg/kg dw	Sn mg/kg dw	Sr mg/kg dw	Ta mg/kg dw	Tb mg/kg dw	Th mg/kg dw	Tl mg/kg dw	Tm mg/kg dw	U mg/kg dw	V mg/kg dw	W mg/kg dw	Y mg/kg dw	Yb mg/kg dw	Zn mg/kg dw	Zr mg/kg dw
AFM001068	0	0.03	1	1	33.9	2.19	49.7	2.68	2.06	0.545	6.66	3.18	2.78	–0.04	0.605	1.03	23.7	13.2	0.25	–2	3.83	17.5	35.6	21.1	4.85	79.4	984	0.409	5.48	–1	2.35	–1	118	0.567	0.537	1.55	0.591	0.264	5.75	32.7	2.87	18.3	1.96	62.1	84.8
AFM001068	0.03	0.03	2	1	36.2	1.48	16.3	2.3	1.12	0.557	9.15	1.63	2.92	0.15	0.471	1.96	16.7	7.28	0.187	–2	2.48	11.4	9.25	28	3.51	70.4	1,250	0.734	4.28	–1	1.65	1.65	110	0.496	0.299	2.5	0.475	0.183	2.14	22.4	0.898	14	1.22	34.7	88.1
AFM001068	0	0.1	3	1	49.8	2.94	19.4	3.62	2.02	0.767	11.1	3.94	4	–0.04	0.821	1.14	31.3	19	0.289	–2	5.76	20.2	13.1	24.4	6.51	101	753	0.524	7.73	–1	3.24	1.98	133	0.586	0.733	3.48	0.73	0.424	6.72	46.8	3.3	22.9	2.34	53.4	142
AFM001068	0.1	0.2	4	1	57	3.48	81.2	4.22	2.15	0.755	11.5	4.39	3.09	–0.04	0.851	1.04	34.6	19.4	0.306	2.72	5.87	23	14.6	25.5	6.02	110	817	0.489	8.1	–1	3.74	1.88	144	0.736	0.712	3.16	0.738	0.351	8.58	50.2	7.93	24.7	1.74	52	123
AFM001068	0	0.1	5	1	53.6	3.28	20	3.64	2.13	0.674	11.2	4.52	3.78	–0.04	0.853	1.01	31.6	18.5	0.269	–2	6.62	24.3	13.1	26.1	6.63	91.4	836	0.504	7.49	–1	4.53	2.25	129	0.852	0.691	3.19	0.747	0.258	7.42	44.6	2.19	21.6	1.79	52.6	101
AFM001068	0.1	0.2	6	1	64.2	3.32	24.8	2.95	2.36	0.745	17.9	2.92	3.72	0.064	0.681	1.12	33.2	19.9	0.254	2.63	6.1	26.9	16.9	24.7	6.85	103	776	0.485	8.02	–1	4.05	2.06	140	0.946	0.771	6.98	0.762	0.328	6.57	47.8	1.47	24.4	1.96	56.8	158
AFM001076	0	0.03	1	1	18.7	0.864	9.45	1.25	1.16	0.311	9.16	0.934	1.53	0.116	0.388	1.5	6.81	3.74	0.124	–2	2.71	7.02	4.75	20.2	2.63	50.6	1,440	0.488	2.78	–1	1.38	–1	89.5	0.404	0.288	1.41	0.311	0.145	1.27	11.2	0.847	8.98	0.931	36.6	34.2
AFM001076	0.03	0.03	2	1	27.8	1.53	14.9	2.09	1.04	0.479	13.2	2.91	1.86	0.074	0.432	1.59	9.07	7.17	0.186	4.86	1.67	14	9.18	20.2	3.53	71.4	1,300	0.468	4.14	–1	2.26	1.74	126	0.336	0.4	2.15	0.485	0.255	2.55	17.7	0.907	14.8	1.57	21.3	57.8
AFM001076	0	0.1	3	1	37	1.73	7.74	2.5	1.83	0.59	10.8	2.35	2.25	–0.04	0.604	1.21	12	7.89	0.198	–2	2.73	13.5	6.33	16.5	3.87	89.8	897	0.322	5.37	–1	2.14	7.17	144	0.402	0.342	2.15	0.549	0.251	3.61	20.6	0.769	16.9	1.43	17.9	73.2
AFM001076	0.1	0.2	4	1	36.8	1.78	5.53	1.99	1.51	0.564	13.7	2.06	2.79	–0.04	0.478	0.578	22.1	8.76	0.217	–2	4.59	16.4	5.04	16.5	4.72	101	567	0.229	5.23	–1	2.34	2.58	154	0.413	0.395	5.39	0.619	0.214	2.61	19.7	1.01	16.1	1.48	17.5	114
AFM001076	0	0.1	5	1	39.9	1.68	13.6	2.79	1.53	0.444	6.73	2.17	2.4	–0.04	0.593	1.58	13.5	7.76	0.205	–2	1.9	12.4	7.48	18	3.71	76.2	962	0.387	4.87	–1	2.01	–1	138	0.287	0.443	1	0.568	0.233	4.1	22.5	2.45	15.4	1.44	18.4	71
AFM001076	0.1	0.2	6	1	52.2	1.85	14.9	2.4	1.6	0.455	13.6	2.01	2.56	0.042	0.64	1.31	16.4	8.49	0.206	–2	2.67	14.6	10.3	18.6	4.26	91.4	927	0.457	5.47	–1	2.72	–1	147	0.41	0.449	3.12	0.594	0.219	3.46	24	0.829	17.2	1.95	20.7	96.5
AFM001247	0	0.03	1	1	9.96	0.489	1.31	2.76	0.105	0.372	1.8	0.505	1.05	0.052	0.107	1.4	3.29	1.39	0.0461	0.58	1.16	3.24	0.416	32.1	0.783	16.5	1,820	0.702	1.08	–1	0.511	0.79	47.4	0.182	0.0746	0.494	0.251	0.0537	0.814	8.26	1.03	3.26	0.309	85.5	28.2
AFM001247	0.03	0.03	2	1	7.48	0.322	1.37	0.464	0.0929	0.315	2.6	0.404	1.03	0.05	0.117	1.02	3.36	0.92	0.0358	0.6	1.08	2.81	0.32	36.8	0.819	14.3	1,820	0.809	1.07	–1	0.566	1.22	46.3	0.166	0.0667	0.542	0.158	0.0572	1.16	6.91	0.756	3.1	0.285	83.6	28.3
AFM001247	0	0.1	3	1	21.3	1.11	6.52	2.64	0.452	1.29	–1	2.53	4.63	0.088	0.489	1.03	15.2	7.49	0.2	–2	5.15	15.3	2.36	31.7	4.22	66.7	906	0.326	4.21	–1	2.9	1.92	120	0.692	0.385	4.86	0.478	0.252	3.6	21.9	1.22	14.8	1.36	56.9	141
AFM001247	0.1	0.2	4	1	25.7	2.04	9.83	3.68	0.545	2.1	–1	3.29	3.94	0.061	0.649	1.06	21.5	14	0.203	–2	5.08	20.9	4.98	24.9	5.45	81.6	656	0.214	5.29	–1	4.33	1.44	131	0.695	0.56	5.04	0.59	0.286	5.52	23.8	1.77	20.4	1.53	35.6	128
AFM001247	0	0.1	5	1	13.6	0.911	7.2	1.12	0.289	0.819	1.15	3	2.03	0.085	0.202	1.11	6.21	4.16	0.115	–2	1.95	4.83	1.45	33.3	1.35	51.8	1,230	0.365	2.62	–1	1.06	1.17	93.6	0.369	0.17	0.973	0.433	0.111	1.79	11.2	1.43	7.29	0.742	42.5	71.5
AFM001247	0.1	0.2	6	1	37.5	1.81	39.3	3.69	1.32	0.646	9.12	3.98	1.9	0.122	0.691	3.47	37.9	9.36	0.228	–2	4.03	22	13.3	41.5	6.02	85.3	890	0.702	5.13	–1	3.83	1.45	131	0.486	0.688	2.38	0.655	0.272	9.89	27.7	0.865	23.6	1.8	41.3	66.8
PFM004459	3.5	3.5	1	1	40.6	2.63	12	3.91	1.92	0.793	12.1	3.4	5.09	–0.04	0.822	–0.5	25.4	148	0.287	–2	6.52	19.6	9.39	20.8	4.74	84.3	1,470	0.771	6.43	–1	3.6	2.33	171	0.621	0.654	7.55	0.691	0.323	4.26	38	1.16	22.2	1.96	385	182
PFM004460	1	1	1	1	33.7	1.75	7.25	3.59	2.21	0.625	7.98	3.19	5.85	–0.04	0.778	–0.5	21.7	94.9	0.298	–2	5.98	17.3	4.61	16.3	4.36	82	247	0.727	5.04	–1	3.46	7.26	182	0.761	0.536	7.17	0.604	0.401	2.77	25.1	0.65	21.3	1.96	308	206
PFM004460	1.5	1.5	2	1	24.6	1.46	7.37	3.06	2.16	0.579	9.21	3.06	4.63	–0.04	0.783	–0.5	23.6	94.6	0.305	–2	6.36	16.9	4.7	19.8	4.68	78.9	854	0.647	5.38	–1	3.22	3.16	179	0.68	0.538	6.91	0.624	0.341	2.9	24.1	0.913	21.5	1.96	289	157
PFM002578	0.7	0.7	1	1	29	1.44	7.45	2.98	2.17	0.618	4.78	3.16	6.17	–0.04	0.649	–0.5	20	82.4	0.291	–2	5.33	16.7	4.39	17.3	4.08	76.5	205	0.444	4.75	–1	2.88	1.36	176	0.672	0.489	5.57	0.58	0.31	2.03	24.6	0.754	20.3	2.04	292	233
PFM006023[1]	0.66	0.69	1	1	52.3	3.8	53.8	1.19	0.585	0.18	–1	1.05	0.615	0.042	0.244	1.62	9.38	22.3	0.1	5.1	2.32	9.74	27.5	74.9	2.32	27.6	10,600	–0.04	7.37	–1	1.87	–1	84.3	0.286	0.135	2.07	0.777	–0.1	6.33	46.4	0.634	19.8	0.71	125	82.7
PFM006023[2]	1.03	1.06	2	1	53.4	3.59	33.9	2.72	1.27	0.649	3.7	2.41	1.33	–0.05	0.579	1.75	23	21.1	0.219	14.2	6.74	22.7	28.3	130	5.3	72.5	17,200	–0.04	7.13	–1	4.98	1.71	78.9	0.715	0.414	5.87	0.612	0.2	11.1	47.4	1.17	18.7	1.68	111	74.7
PFM006023	1.58	1.61	3	1	99.2	1.79	5.26	1.5	1.53	0.582	6.84	2.24	1.45	–0.04	0.374	–0.5	15.4	12.9	0.195	–2	3.91	12.7	5.16	137	3.33	123	1,570	0.244	2.58	–1	2.83	–1	154	0.432	0.236	5.43	0.912	0.171	2.05	34	0.706	13	1.34	41.8	123
PFM006023	1.93	1.96	4	1	116	10.1	41.2	4.76	3.22	1.09	19.9	4.37	4.6	–0.04	1.02	–0.5	49.5	62.6	0.43	–2	16.8	42.5	46.4	107	12	195	539	0.358	17.1	–1	6.68	3.18	145	1.33	0.851	16.2	1.48	0.528	8.01	123	1.77	32.7	3.51	145	170
PFM006024[3]	0.33	0.36	1	1	0.327	0.0092	0.58	0.0072	0.0046	0.0015	0.0779	0.0063	0.0082	0.024	0.0014	0.61	0.105	0.11	–0.0007	0.07	0.0353	0.0843	0.413	9.6	0.0239	0.2	1,210	0.189	0.0426	0.223	0.0112	0.1	5.5	0.014	0.0011	–0.01	–0.03	–0.0007	0.0188	0.403	0.0371	0.071	0.0046	10.3	0.289
PFM006024[3]	1.13	1.16	2	1	0.244	0.0075	0.53	0.005	0.0027	0.0011	0.0209	0.0047	0.0033	–0.02	0.001	0.48	0.0654	0.1	–0.0007	0.06	0.0126	0.0496	0.496	1.27	0.0145	0.2	460	0.059	0.0247	0.198	0.0079	0.04	22.2	0.013	0.0009	–0.01	–0.03	–0.0007	0.0099	0.166	–0.01	0.035	0.0023	2.4	0.114
PFM006024[3]	1.53	1.56	3	1	0.723	0.0272	2.05	0.129	0.088	0.0219	0.0521	0.11	0.0343	–0.02	0.0286	1.3	0.819	0.18	0.0128	0.57	0.0663	0.845	2.09	1.01	0.211	0.5	8,110	0.135	0.152	0.401	0.148	0.04	39.8	0.024	0.0204	0.0477	–0.03	0.0127	3.02	0.845	0.0135	1.06	0.084	2	1.12
PFM006024[4]	1.73	1.76	4	1	–10	0.181	9.46	0.491	0.448	0.067	–1	0.407	–0.1	–0.04	0.0969	0.502	3.33	2.01	–0.04	–2	0.269	3.41	8.6	356	–1	3.8	13,600	0.19	–1	–1	0.667	–1	57.6	–0.06	–0.1	1.02	0.051	–0.1	8.32	3.58	–0.4	–0.6	0.491	73.5	2.6
PFM006024	1.93	1.96	5	1	67.8	4.86	33.6	4.44	2.21	0.902	7.91	5.21	3.5	–0.04	0.879	1.12	34.7	27.4	0.418	3.05	9.88	33.8	28.1	17.2	8.54	102	15,100	–0.04	10.4	–1	5.52	–1	90	0.735	0.717	10	0.707	0.412	10.6	62.5	1.47	31.8	2.39	75.5	140
PFM006024	2.63	2.66	6	1	87.3	9.58	25.1	3.86	1.71	0.931	15.8	3.28	2.5	–0.04	0.74	–0.5	37.5	49.9	0.272	–2	15.8	31	28.5	162	8.78	151	195	2.4	12.7	–1	5.81	3.35	182	1.25	0.661	12	1.1	0.319	4.58	90.4	1.2	25.5	2.15	115	115
PFM002501	0	0.16	1	1	22.3	0.458	53.9	1.88	1.28	0.267	–1	1.97	0.905	0.21	0.481	8.88	8.17	2.77	0.174	3.49	0.905	9.78	19.9	68.1	2.4	7.4	17,900	1.44	2.13	1.17	1.86	–1	31	0.181	0.353	0.372	0.3	0.215	26	12.8	2.57	12.5	0.996	138	14
PFM002501	0.2	0.3	2	1	16	0.601	71.6	2.8	1.68	0.326	–1	2.63	0.56	0.111	0.554	7.57	11.7	3.86	0.269	6.48	0.74	14.2	19.1	57.6	3.01	9	22,700	1.73	3.23	1.65	2.9	–1	37.2	0.131	0.506	0.672	0.363	0.269	49.4	14.7	1.77	18.3	1.47	119	19.8
PFM002502[5]	0	0.03	1	1	10.3	0.213	17.3	5.16	2.92	0.646	–1	4.69	2.11	0.068	1.08	6.04	20.4	–2	0.441	17.9	3.06	24.1	8.25	20.6	5.8	19.9	11,700	0.522	1.39	–2	4.42	4.82	37.7	0.305	0.751	3.87	0.104	0.602	70.3	8.28	4.77	8.37	2.72	36	14.3
PFM004298[6]	2.53	2.64	1	1	20.1	0.698	64.6	2.05	1.72	0.386	–1	2.04	0.991	0.077	0.604	7.41	13.1	27.8	0.216	3.06	1.3	12.5	18.8	39.2	2.76	8.6	18,800	1.27	2.55	–1	2.53	–1	56.9	0.245	0.192	1.89	0.869	0.291	34.6	13.8	1.96	15.4	1.47	754	15.2
PFM004298[3]	2.64	2.71	2	1	13.4	0.329	39.9	1.36	0.716	0.225	–1	0.401	0.256	0.042	0.378	8.31	5.82	20.6	0.145	2.71	0.842	7.49	12.6	24.6	1.79	4.8	13,300	1.41	1.4	–2	1.87	–1	100	0.274	–0.1	0.81	0.266	–0.1	23.7	11.4	1.05	9.2	1.25	426	6.3
PFM004298[6]	3.1	3.2	3	1	29.6	1.17	57.7	1.94	0.97	0.335	1.99	1.85	1.3	–0.04	0.456	11.9	14.8	63.7	0.209	7.98	3.26	13.4	29.8	12.8	3.2	22.4	21,300	0.694	3.09	–2	1.92	–1	60.4	0.431	0.384	1.6	0.335	0.167	41.1	25.8	1.46	13.9	1.23	447	25.2
PFM004298	3.56	3.62	4	1	67.2	9.68	39.4	4.53	2.74	0.826	17.2	3.86	3.88	–0.04	0.966	7.88	41.2	269	0.362	6.95	7.85	31.1	29.1	42.6	9.03	98.1	16,500	1.26	10.6	–1	5.09	–1	99.2	0.884	0.991	9.45	1.68	0.416	10.2	60.9	2.04	29.6	2.44	682	140
PFM004298	3.87	3.92	5	1	131	8.45	48.9	7.21	4.12	1.5	27.4	8.21	5.3	–0.04	1.42	–0.5	76.5	642	0.587	–2	21.1	49.9	51.5	37	13.7	151	5,100	0.843	20	–1	9	3.9	163	1.77	1.36	19.9	1.42	0.729	3.98	149	2.29	43.2	4.34	1,570	179
PFM004298	4.02	4.07	6	1	122	9.31	39.7	7.11	3.85	1.53	21.3	7.94	5.15	–0.04	1.38	–0.5	59.1	528	0.498	–2	18.6	46.7	41.2	25.9	11.6	127	538	0.752	16.5	–1	8.8	4.14	163	1.66	1.27	17	0.883	0.681	3.15	120	2.63	37.4	3.89	1,150	192
PFM004298	4.2	4.25	7	1	104	9.6	37.4	6.46	3.04	1.37	23.1	6.88	5.71	–0.04	1.25	–0.5	55.3	563	0.549	–2	17.2	44.7	38.1	26.3	11	138	438	0.782	16.7	–1	7.78	2.8	164	1.5	0.936	16	1.02	0.6	4.22	118	2.48	35.1	3.56	1,140	180
PFM002560	0.14	0.16	1	1	57.5	4.35	47.7	3.48	2.31	0.617	15.7	3.31	1.88	–0.04	0.675	10.3	27.1	23.9	0.245	17.7	2.38	26.6	30.2	22.1	6.7	79.6	15,300	0.587	8.05	–1	3.33	–1	97.9	0.542	0.639	5.18	0.608	0.284	11.3	53.7	1.47	22.9	1.75	290	63.1
PFM002560	0.28	0.3	2	1	43.7	2.48	13.8	2.34	1.27	0.493	17	2.17	3.09	–0.04	0.506	1.04	22.7	14.5	0.219	–2	6.14	15.4	13.4	19.4	4.84	116	3,630	0.308	4.6	–1	2.69	1.69	155	0.361	0.454	5.21	0.763	0.227	1.99	27.8	1.38	15.6	1.29	44.1	125
PFM006062	2.09	2.21	1	1	82.7	4.84	53.4	4.61	2.46	0.781	17.3	3.92	4.78	–0.04	0.853	1.36	36	26.6	0.333	2.64	11	28.8	33.8	27.2	7.87	94.7	14,000	0.041	11.2	–1	5.69	–1	109	0.941	0.827	8.04	0.489	0.347	4.97	74.1	2.49	31.9	2.69	131	201
PFM006062	2.24	2.3	2	1	45.8	1.32	15.7	2.99	2.26	0.535	9.35	3.26	3.69	–0.04	0.686	–0.5	19	10.5	0.299	1.69	5.45	19.2	12.2	8.04	4.84	84.2	4,090	–0.04	5.72	–1	2.93	1.14	131	0.49	0.528	6.2	0.204	0.331	2.56	41.4	1.75	24.2	2.05	46.2	168
PFM006062	2.34	2.41	3	1	124	9.52	52.9	4.96	2.57	1.02	19.4	4.73	4.2	–0.04	1.05	–0.5	62.5	66.4	0.376	0.69	16.6	43.1	67.2	29.7	11.6	172	4,970	–0.04	19	–1	7.54	1.42	140	1.52	1.03	13.9	0.998	0.559	5.35	142	2.89	35.9	2.65	159	178
PFM006062	2.6	2.67	4	1	98.9	7.15	32.3	4.26	2.42	0.846	14.5	4.19	4.02	–0.04	0.852	–0.5	36.8	47.5	0.301	–2	13.5	33.1	42.6	20.1	8.37	132	510	–0.04	13.2	–1	5.94	1.18	163	1.17	0.854	9.89	0.793	0.391	4.55	118	1.91	30.8	2.47	112	188
PFM006062	2.8	2.87	5	1	94.1	7.86	34.4	3.78	2.62	0.888	15	4.17	3.48	–0.04	0.826	–0.5	42	51	0.296	0.45	14.5	33.3	44.9	19.8	8.83	140	545	–0.04	14.1	–1	5.19	1.24	167	1.17	0.818	9.74	0.769	0.403	3.34	102	1.83	29	2	111	142
AFM001068			7	1	1.85	0.141	5.02	0.0916	0.0513	0.017	0.376	0.105	0.0981	0.121	0.0179	1.2	0.642	0.63	0.0072	0.3	0.144	0.59	1.47	4.9	0.151	6.4	1,070	0.096	0.152	–0.2	0.112	0.17	34	0.019	0.0158	0.186	0.045	0.0077	0.452	2.2	0.0897	0.474	0.0484	44.3	2.91
AFM001068			8	1	0.444	0.0207	6.02	0.0021	0.0013	–0.0007	0.0173	0.0022	0.0019	0.02	–0.0007	6.7	0.0183	–0.08	–0.0007	0.73	0.0063	0.0144	0.707	0.124	0.004	19.9	1,440	0.01	0.0054	–0.2	0.0023	–0.03	12.1	0.007	–0.0007	–0.01	–0.03	–0.0007	0.0044	0.078	0.0205	0.011	0.0012	34.9	0.074
AFM001068			9	1	0.168	0.0448	6.4	0.0014	0.0008	–0.001	–0.01	0.0015	0.0023	–0.02	–0.0006	–0.1	0.0183	0.16	–0.0006	0.24	0.0026	0.0109	0.367	0.151	0.0036	13.9	1,660	0.01	0.0039	–0.2	0.0022	–0.03	9.7	0.007	–0.0006	–0.01	–0.03	–0.0006	0.0018	0.069	–0.01	0.0086	0.0008	30.4	0.0592
AFM001068			10	1	0.063	0.0575	4.61	–0.0007	–0.0007	–0.0007	–0.01	–0.0007	–0.0007	–0.02	–0.0007	–0.1	0.002	0.15	–0.0007	0.2	–0.0007	0.0015	0.452	–0.07	–0.0007	14.3	933	–0.007	–0.0007	–0.2	–0.0007	–0.03	13.4	0.008	–0.0007	–0.01	–0.03	–0.0007	0.0004	–0.03	–0.01	0.0012	–0.0007	41.1	–0.02
AFM001068			11	1	0.054	–0.003	0.82	–0.0007	–0.0007	–0.0007	–0.01	–0.0007	–0.0007	–0.02	–0.0007	–0.1	0.0009	–0.08	–0.0007	0.01	–0.0007	0.0007	0.076	–0.07	–0.0007	0.2	45	–0.007	–0.0007	–0.2	–0.0007	–0.03	6	0.009	–0.0007	–0.01	–0.03	–0.0007	–0.0003	–0.03	–0.01	–0.0007	–0.0007	9.2	–0.02
AFM001068	0	0.1	12	1	5.94	0.624	20.2	0.617	0.336	0.119	1.77	0.736	0.283	0.11	0.121	1.4	4.62	3.15	0.0449	1.29	0.731	4.18	4.48	7.21	1.1	15	1,080	0.248	0.912	–0.2	0.803	0.38	36.3	0.061	0.105	1.02	0.257	0.0475	4.49	11.6	0.131	3.45	0.294	57.3	8.12
AFM001068	0	0.2	13	1	0.69	0.0751	4.28	0.0684	0.0367	0.0109	0.189	0.0829	0.0264	0.019	0.0131	0.3	0.625	0.37	0.005	0.35	0.0762	0.507	0.703	0.638	0.134	3.6	357	0.038	0.0789	–0.2	0.0913	0.03	20.9	0.017	0.0116	0.109	0.045	0.0052	1.22	1.4	0.0192	0.409	0.0333	42.9	0.748
AFM001076			7	1	2.71	0.324	12.7	0.203	0.114	0.052	1.05	0.236	0.136	0.167	0.0396	3	1.46	1.25	0.0159	0.78	0.303	1.38	2.63	10.2	0.364	13.6	2,480	0.22	0.168	–0.2	0.265	0.41	46.6	0.033	0.0345	0.117	0.082	0.0166	6.33	4.8	0.154	1.07	0.105	70.3	4.08
AFM001076			8	1	0.426	0.066	8.28	0.0031	0.0018	–0.0007	0.0146	0.0039	0.0017	0.034	–0.0007	0.6	0.0336	0.24	–0.0007	0.94	0.0092	0.0295	0.862	0.218	0.0076	44.9	1,640	0.02	0.0074	–0.2	0.0044	0.04	25.5	0.014	–0.0007	–0.01	–0.03	–0.0007	0.0287	0.116	–0.01	0.0151	0.0012	40.2	0.051
AFM001076			9	1	0.153	0.0365	8.24	–0.0007	–0.0007	–0.001	–0.01	0.0007	–0.0007	0.028	–0.0007	0.15	0.0082	0.13	–0.0007	0.03	0.0017	0.0052	0.511	0.551	0.0015	9.8	2,070	–0.007	0.0029	–0.2	0.001	–0.03	14.7	0.006	–0.0007	–0.01	–0.03	–0.0007	0.0028	0.042	–0.01	0.0034	–0.0007	37.2	0.0206
AFM001076			10	1	0.081	0.0755	6.4	–0.0007	–0.0007	–0.0007	–0.01	–0.0007	–0.0007	0.056	–0.0007	0.21	0.0036	0.26	–0.0007	0.24	0.0017	0.0025	0.562	–0.07	–0.0007	26.9	978	–0.007	–0.0007	–0.2	–0.0007	–0.03	21.9	0.013	–0.0007	–0.01	–0.03	–0.0007	0.0007	0.041	–0.01	0.0021	–0.0007	49.3	–0.02
AFM001076			11	1	–0.05	0.0044	0.61	–0.0007	–0.0007	–0.0007	–0.01	–0.0007	–0.0007	–0.02	–0.0007	–0.1	0.0013	–0.08	–0.0007	0.01	–0.0007	0.0008	–0.07	0.129	–0.0007	0.6	55.8	–0.007	0.0008	–0.2	–0.0007	–0.03	15.5	0.01	–0.0007	–0.01	–0.03	–0.0007	–0.0003	–0.03	–0.01	0.0007	–0.0007	19.5	–0.02
AFM001076	0.03		12	1	0.977	0.0936	12.5	0.0999	0.0551	0.0173	0.297	0.12	0.0292	0.08	0.0197	1.1	0.725	0.35	0.0076	1.17	0.117	0.673	1.71	6.83	0.176	3.6	1,620	0.152	0.134	–0.2	0.13	0.14	24	0.019	0.0169	0.145	0.084	0.0077	3.23	4.32	0.0726	0.541	0.0473	55.2	0.932
AFM001076	0		13	1	0.157	0.0224	4.94	0.017	0.0083	0.0015	–0.01	0.0199	0.0036	0.031	0.0029	0.9	0.178	0.11	0.0011	0.6	0.0126	0.139	0.388	2.54	0.0376	3.5	908	0.038	0.0102	–0.2	0.0251	–0.03	34.7	0.012	0.0031	0.0183	0.05	0.0013	0.516	0.766	0.0157	0.0917	0.0079	36.1	0.0861
AFM001076	0	0.2	14	1	0.749	0.0523	6.82	0.14	0.0704	0.0266	0.128	0.176	0.03	–0.02	0.0256	1.5	1.39	0.31	0.0089	0.88	0.088	1.21	0.832	3.22	0.329	4.1	868	0.08	0.0844	–0.2	0.214	0.05	15.9	0.022	0.0246	0.177	0.074	0.0098	1.37	5.96	0.0212	0.723	0.0599	19.5	0.841
AFM001247			7	1	1.64	0.152	4.98	0.0173	0.0109	0.0019	0.0968	0.0211	0.0119	0.121	0.0034	1.1	0.171	0.14	0.0017	0.27	0.0344	0.13	1.5	5.14	0.035	12	1,000	0.123	0.0394	–0.2	0.0242	0.17	14.8	0.012	0.003	0.0349	0.137	0.0015	0.0372	1.4	0.0794	0.0945	0.0092	47.8	0.339
AFM001247			8	1	0.317	1.94	33.8	0.0019	0.0008	–0.006	0.05	0.0021	0.0027	0.051	–0.0007	0.32	0.0216	0.19	0.0007	0.5	0.0039	0.014	3.02	0.269	0.0037	301	3,620	0.015	0.0071	–0.2	0.0032	–0.03	66.5	0.009	–0.0007	–0.01	0.334	–0.0007	0.0062	0.07	0.0142	0.0115	–0.0007	506	0.0839
AFM001247			9	1	0.208	0.445	7.97	0.0024	0.0012	–0.003	–0.01	0.0027	0.0012	0.028	–0.0007	0.15	0.0241	–0.08	–0.0007	0.24	0.004	0.0148	0.421	0.26	0.0042	43.8	1,640	0.012	0.0024	–0.2	0.0032	–0.03	12.5	0.011	–0.0007	–0.01	–0.03	–0.0007	0.0059	0.074	–0.01	0.0177	0.001	43.9	0.0298
AFM001247			10	1	0.095	0.505	5.27	–0.0007	–0.0007	–0.0007	–0.01	–0.0007	–0.0007	0.023	–0.0007	–0.1	0.0039	–0.08	–0.0007	0.17	0.0012	0.0023	1.16	–0.07	–0.0007	71.3	922	–0.007	–0.0007	–0.2	–0.0007	–0.03	7.1	0.012	–0.0007	–0.01	–0.03	–0.0007	0.0004	–0.03	–0.01	0.0014	–0.0007	52.4	0.0167
AFM001247			11	1	0.105	0.0089	1.1	–0.0007	–0.0007	–0.0007	–0.01	–0.0007	–0.0007	–0.02	–0.0007	–0.1	0.0017	–0.08	–0.0007	0.01	0.0014	0.0013	0.092	0.193	–0.0007	1.7	49.7	0.007	–0.0007	–0.2	–0.0007	–0.03	4.5	0.013	–0.0007	–0.01	–0.03	–0.0007	–0.0003	–0.03	–0.01	–0.0007	–0.0007	17.7	–0.02
AFM001247	0.03		12	1	0.481	0.22	11.9	0.0707	0.0349	0.0088	0.181	0.0973	0.0147	0.121	0.0135	0.7	0.825	0.12	0.0044	0.3	0.0519	0.628	1.54	12.7	0.169	7	985	0.157	0.0645	–0.2	0.116	0.19	17.8	0.013	0.0127	0.0643	0.504	0.0046	0.793	1.66	0.0747	0.392	0.0276	91.5	0.407
AFM001247	0		13	1	0.132	0.0832	3.61	0.0288	0.0144	–0.002	0.0234	0.0354	0.0075	0.026	0.0053	0.2	0.324	–0.08	0.0018	0.12	0.0096	0.217	0.25	2.11	0.0604	7.5	343	0.022	0.0208	–0.2	0.0385	–0.03	19.2	0.012	0.0048	0.0178	0.192	0.002	0.189	0.282	–0.01	0.176	0.0113	58	0.228
AFM001247	0	0.2	14	1	0.169	0.0639	2.8	0.0366	0.0184	0.0027	0.0429	0.0488	0.0025	0.023	0.0071	0.2	0.446	–0.08	0.0021	0.06	0.0124	0.301	0.315	4.51	0.0815	5.3	294	0.031	0.0228	–0.2	0.0529	–0.03	18.1	0.01	0.0064	0.0232	0.114	0.0023	0.488	0.273	–0.01	0.226	0.014	66.4	0.0539

[1] På grund av för liten provmängd kunde inte totalkol, totalkväve, organiskt kväve samt fosfat analyseras på detta prov.

[2] För analys av Ag, B, Be, Co, Cs, Pb, Sb, Se, Tl, Li, Zn, Br, Cl, I, torrsubstans, TOC, organiskt kväve och totalkväve har ett extraprov från 1.00–1.03 cm använts.

[3] På grund av för liten provmängd kunde inte fosfat analyseras på detta prov.

[4] För analys av Ag, B, Be, Co, Cs, Pb, Sb, Se, Tl, Li, Zn, Br, Cl, I, torrsubstans, TOC, organiskt kväve och totalkväve har ett extraprov från 1.70–1.73 cm använts. På grund av för liten provmängd kunde inte totalkol samt fosfat analyseras på detta prov.

[5] För analys av Ag, B, Be, Co, Cs, Pb, Sb, Se, Tl, Li, Zn, Br, Cl, I och torrsubstans har ett samlingsprov från 0–5 cm använts, för övriga analyser endast prov från 0–2.5 cm. På grund av för liten provmängd kunde inte fosfat analyseras på detta prov.

[6] På grund av för liten provmängd kunde inte fosfat, organiskt kväve samt totalkväve analyseras på detta prov.

[7] Olika provtagningsmetoder och referenssystem har använts för PFM002501 och PFM002502 jämfört med PFM004298. För de första proverna har sedimentytan används som 0-nivå, i PFM002501 fanns ingen algmatta så 0 = överyta sediment medan för PFM002502 är 0 = överyta algmatta. Dessa prover är tagna med rörhämtare. För PFM004298 är 0-nivån isens överyta, vattendjupet har bestämts med ett lod och provtagningen av sedimenten har skett med ryssborr. Det uppmätta vattendjupet (2.30 m) är troligen överskattat och innehåller förmodligen även de lösa ytsedimenten och eventuell algmatta. Ett visst överlapp finns för PFM002501 och PFM004298. En bedömning utifrån lagerbeskrivningar och djupnivåer ger att prov PFM002501_2 och PFM004298_1 representerar samma lager. För att relatera proverna till en enhetlig djupskala har vi antagit att dessa provers överyta ligger på samma nivå och underliggande lager justeras därefter. Den 0-nivån som använts är algmattans överyta. Provernas inbördes ordning (uppifrån och ner) samt djup blir då: PFM002502_1; 0–0.03 m, PFM002501_1; 0.03–0.19 m, PFM002501_2; 0.23–0.33 m, PFM004298_1; 0.23–0.34, PFM004298_2; 0.34–0.41, PFM004298_3; 0.80–0.90, PFM004298_4; 1.26–1.32, PFM004298_5; 1.57–1.62, PFM004298_6; 1.72–1.77, PFM004298_7; 1.90–1.95.

Start date	Stop date	Idcode	Secup m	Seclow m	Sub-sample no	DNO	Sample namn	Dry subst %	Ash subst %	Total C mg/kg dw	Total organic C mg/kg dw	Total N mg/kg dw	Total organic N mg/kg dw	PO_4 mg/kg dw	Al mg/kg dw	Al_2O_3 %	Ca mg/kg dw	CaO %	Fe mg/kg dw	Fe_2O_3 %	K mg/kg dw	K2O %	Mg mg/kg dw	MgO %	Mn mg/kg dw	MnO %	Na mg/kg dw	Na_2O %	P mg/kg dw	P_2O_5 %	Si mg/kg dw	SiO_2 %	Ti mg/kg dw	TiO_2 %	Sum oxides %	Loss on ignition %	Ag mg/kg dw	As mg/kg dw	B mg/kg dw	Ba mg/kg dw	Be mg/kg dw	Br mg/kg dw	Cd mg/kg dw	Ce mg/kg dw	Cl mg/kg dw	Co mg/kg dw
2005-12-02	2006-02-02	AFM000010[8]			1	1	mört	18.6		440,000		140,000			0		2,560		12		14,200		1,730		1		2,160		10,000		317		0.02				–0.06	0.049	–0.1	0.6	–0.3	5.5	–0.01	0	4,000	–0.01
2005-12-02	2006-02-02	AFM000010[8]			1	2	mört			440,000		140,000																																		
2005-12-02	2006-02-02	AFM000010[8]			1	3	mört			440,000		140,000																																		
2005-12-02	2006-01-27	AFM000010			2	1	sutare	20.9		450,000		87,230			0		4,490		9		17,200		1,220		1		4,070		11,600		82		0.36				–0.01	–0.18	–0.03	0.9	–0.05	11	–0.003	0	2,100	0.0043
2005-12-02	2006-01-27	AFM000010			3	1	sutare	20.7		430,000		137,300			0		3,010		27		18,900		1,220		1		3,630		11,900		82		0.23				–0.01	–0.19	–0.03	0.7	–0.05	10.4	–0.003	0	1,900	0.0067
2005-12-02	2006-01-27	AFM000010			4	1	sutare	21.5		460,000		130,000			–0		669		14		17,600		1,100		0		2,940		10,400		80		0.23				–0.01	–0.15	–0.03	0.1	–0.05	7.66	–0.003	0	1,300	0.0052
2005-12-02	2006-01-27	AFM000010			4	2	sutare			460,000		140,000																																		
2005-12-02	2006-01-27	AFM000010			4	3	sutare			460,000		140,000																																		
2005-12-02	2006-01-27	AFM000010			5	1	gädda	20.9		450,000		145,400			–0		7,230		3		17,400		1,450		2		1,930		14,100		92		0.26				–0.01	–0.09	–0.03	0.1	–0.05	4.37	–0.003	0	1,100	–0.003
2005-12-02	2006-01-27	AFM000010			6	1	gädda	20.4		430,000		150,000			–0		5,290		5		17,800		1,450		2		2,860		13,300		93		0.38				–0.01	–0.1	–0.03	0.2	–0.05	8.6	–0.003	0	1,200	0.0032
2005-12-02	2006-01-27	AFM000010			6	2	gädda			430,000		130,000																																		
2005-12-02	2006-01-27	AFM000010			6	3	gädda			430,000		140,000																																		
2005-12-02	2006-02-02	AFM000050[9]			1	1	gärs	18.9		450,000		101,200			8		1,200		6		15,900		1,720		1		3,820		9,390		564		0.01				–0.06	–0.04	–0.1	0	–0.3	12	–0.01	0	5,800	–0.01
2005-12-02	2006-01-27	AFM000050			2	1	sutare	20.1		450,000		136,700			0		3,840		12		20,400		1,400		1		4,180		12,300		107		0.37				–0.01	–0.12	0.03	0.7	–0.05	14.7	–0.003	0	1,800	0.0042
2005-12-02	2006-01-27	AFM000050			3	1	sutare	21		430,000		148,000			–0		801		21		18,100		1,230		0		3,610		9,850		89		0.22				–0.01	–0.14	–0.03	0.1	–0.05	13.9	–0.003	0	1,700	0.0063
2005-12-02	2006-01-27	AFM000050			4	1	sutare	20		440,000		91,770			–0		982		14		19,400		1,240		0		3,720		10,400		87		0.08				–0.01	–0.16	–0.03	0.2	–0.05	14.4	–0.003	0	1,900	0.0045
2005-12-02	2006-01-27	AFM000050			5	1	gädda	19.8		420,000		143,500			0		2,860		4		18,200		1,480		1		2,180		12,000		91		0.42				–0.01	0.167	–0.03	0.1	–0.05	8.84	–0.003	0	1,000	–0.003
2005-12-02	2005-12-20	AFM000050			6	1	kransalger, sjö			250,000		6,600	6,300	500	250		237,000		388		167		2,100		95		240		491		5,560		8.83				–0.01	0.165	6.89	109	–0.05	10.3	0.049	1	520	0.274
2005-12-02	2005-12-20	AFM000050			7	1	kransalger, sjö			240,000		6,900	6,700	400	280		220,000		421		184		2,040		93		236		501		5,490		10.4				–0.01	0.215	6.29	108	–0.05	11.6	0.056	1.1	2,100	0.242
2005-12-02	2005-12-20	AFM000050			8	1	kransalger, sjö			250,000		7,600	7,400	440	246		223,000		374		187		2,060		89		229		479		4,610		10.2				–0.01	0.141	5.25	109	–0.05	13.4	0.044	0.8	240	0.223
2005-12-02	2006-01-27	AFM000050[10]			9	1	dammussla	3.8		340,000		77,000			124		86,600		1,980		2,360		1,480		8,150		12,200		27,500		1,890		3.67				0.53	2.21	1.73	420	–0.05	43.1	4.24	0.8	2,100	0.698
2005-12-02	2006-01-27	AFM000050[10]			10	1	dammussla	4.3		340,000		71,000			274		42,700		1,440		2,620		1,220		3,900		10,400		19,600		3,650		7.57				0.22	1.83	1.7	170	–0.05	38.7	1.94	0.8	1,600	0.525
2005-12-02	2006-01-27	AFM000050[10]			11	1	dammussla	4		340,000		73,000			177		112,000		2,980		2,440		1,600		13,200		13,000		38,200		1,090		2.92				0.43	1.83	1.78	581	–0.05	53.4	4.52	0.7	3,000	1.04
2005-12-02	2006-02-02	AFM000051[11]			1	1	mört	21		440,000		212,500			2		5,400		16		12,700		1,500		2		2,710		10,600		378		0.09				–0.08	–0.08	0.205	1.2	–0.4	11.6	–0.02	0	5,600	0.0293
2005-12-02	2006-01-27	AFM000051			2	1	sutare	20.4		450,000		64,130			0		1,990		16		20,600		1,330		0		3,130		11,900		82		0.3				–0.01	–0.14	–0.03	0.9	–0.05	14	–0.003	0	1,300	0.0043
2005-12-02	2006-01-27	AFM000051			3	1	sutare	20.5		430,000		74,280			0		759		16		17,600		1,210		0		3,330		9,900		82		0.23				–0.01	–0.17	–0.03	0.2	–0.05	21.2	–0.003	0	2,000	0.0054
2005-12-02	2006-01-27	AFM000051			4	1	sutare	18.7		430,000		143,800			1		776		8		18,300		1,280		0		2,430		10,800		88		0.23				–0.01	–0.15	–0.03	0.2	–0.05	11.3	–0.003	0	1,400	0.0039
2005-12-02	2006-01-27	AFM000051[12]			5	1	gädda	20.1		430,000		142,800			0		3,430		8		19,800		1,740		1		2,290		13,900		62		0.4				–0.01	–0.09	–0.03	0.1	–0.05	13.4	–0.003	0	1,000	0.0038
2005-12-02	2005-12-20	AFM000051			6	1	kransalger, sjö			330,000		6,200	5,400	670	372		105,000		396		229		2,310		128		261		629		12,400		14.4				0.01	0.223	11.8	159	–0.05	11.8	0.073	0.9	380	0.374
2005-12-02	2006-01-27	AFM000100			1	1	älg, kalv	22.7		450,000		135,400			0		213		91		18,000		1,010		1		3,140		10,200		83		0.36				–0.01	–0.12	1.48	0.1	–0.05	213	0.009	0	1,600	0.0139
2005-12-02	2006-01-27	AFM000100			2	1	älg, ko	25.2		480,000		124,700			0		139		122		12,400		813		1		2,640		7,620		83		0.2				–0.01	–0.07	0.616	0.1	–0.05	11.3	0.011	0	900	0.0091
2005-12-02	2006-01-27	AFM000100			3	1	älg, ko	24.5		480,000		122,900			1		178		143		14,600		879		1		2,840		8,380		87		0.28				–0.01	–0.08	0.839	0.2	–0.05	11.7	0.014	0	1,100	0.0144
2005-12-02	2006-01-27	AFM001272			1	1	älg, tjur	25.3		460,000		140,000			1		179		96		17,400		1,080		1		2,380		9,990		78		0.08				–0.01	–0.09	0.91	0.1	–0.05	15.4	0.004	0	1,100	0.0056
2005-12-02	2006-01-27	AFM001272			1	2	älg, tjur			460,000		140,000																																		
2005-12-02	2006-01-27	AFM001272			1	3	älg, tjur			460,000		130,000																																		
2005-12-02	2006-01-27	AFM001273			1	1	älg, ko	25.4		490,000		73,720			0		177		138		14,100		912		1		2,280		8,970		78		0.23				–0.01	–0.07	0.746	0.1	–0.05	18.1	0.025	0	810	0.0248
2005-12-02	2006-02-02	AFM001289[13]			1	1	ängssork	25.7		470,000		78,730			1		1,500		180		13,900		992		4		4,980		10,000		142		0.04				–0.05	0.49	0.584	0.4	–0.3	9.4	0.052	0	8,400	0.0425
2005-12-02	2006-02-02	AFM001290[14]			1	1	större skogsmus	25.6		470,000		130,000			1		1,070		88		13,100		1,140		2		4,450		9,790		167		0.06				–0.05	–0.04	0.408	0.1	–0.3	7.8	–0.01	0	6,600	0.0161
2005-12-02	2006-02-02	AFM001290[14]			1	2	större skogsmus			470,000		130,000																																		
2005-12-02	2006-02-02	AFM001290[14]			1	3	större skogsmus			470,000		130,000																																		
2005-12-02	2006-02-02	AFM001291[15]			1	1	näbbmus	29.5		450,000		61,110			10		3,400		247		13,200		851		11		5,780		12,000		217		0.66				–0.06	–0.04	–0.2	0.6	–0.3	18.3	0.761	0	10,400	0.203
2005-12-02	2006-02-02	PFM007322[16]			1	1	skogsmus	28.6		470,000		87,470			6		834		128		11,600		1,010		5		4,280		8,960		212		0.22				–0.05	–0.04	0.203	0.2	–0.3	8.1	0.057	0	5,300	0.0227
2005-12-02	2006-02-02	PFM007322[14]			2	1	ängssork	26.1		480,000		85,270			1		1,150		165		14,600		920		5		4,630		10,300		144		0.04				–0.05	–0.04	0.826	0.2	–0.3	8.1	0.049	0	7,800	0.0391
2005-12-02	2006-02-02	PFM007323[9]			1	1	vattensork	24.1		440,000		88,060			8		708		166		16,300		1,060		1		4,190		9,490		221		0.35				–0.06	–0.04	0.314	0.2	–0.3	460	–0.01	0	7,900	0.0154
2005-12-02	2006-02-02	PFM007323[9]			2	1	vattensork	23.5		430,000		134,600			6		655		153		16,600		1,130		1		4,160		10,200		177		0.29				–0.05	–0.04	0.331	0.1	–0.3	375	–0.01	0	6,900	0.0128
2005-12-02	2006-02-02	PFM007323[9]			3	1	vattensork	23.3		430,000		132,400			5		2,370		145		16,500		1,130		1		4,000		10,500		180		0.21				–0.05	–0.04	0.312	0.5	–0.3	407	–0.01	0	7,500	–0.01
2005-12-02	2006-02-02	PFM007323[16]			4	1	vattensork	23.7		450,000		130,000			9		816		125		16,300		1,120		1		3,960		9,930		192		0.22				–0.06	–0.04	0.345	0.1	–0.3	302	–0.01	0	7,200	–0.01
2005-12-02	2006-02-02	PFM007323[16]			4	2	vattensork			450,000		130,000																																		
2005-12-02	2006-02-02	PFM007323[16]			4	3	vattensork			450,000		130,000																																		
2005-12-02	2006-02-02	PFM007324[17]			1	1	vattensork	22.8		470,000		126,100			35		736		134		15,300		1,100		2		5,160		9,820		126		0.37				–0.05	–0.04	0.511	0.3	–0.3	96	–0.01	0	7,100	0.017
2005-12-02	2006-02-02	PFM007324[16]			2	1	vattensork	23.7		450,000		131,800			4		775		142		14,100		1,180		2		5,370		9,780		128		0.29				–0.06	–0.04	0.644	0.1	–0.3	92	–0.02	0	8,800	–0.02
2005-12-02	2006-02-02	PFM007324[16]			3	1	vattensork	23		460,000		131,100			4		985		155		14,700		1,190		2		5,770		9,440		188		0.18				–0.06	–0.04	0.675	0.3	–0.3	63	–0.01	0	9,300	–0.01
2005-12-02	2006-02-02	PFM007325[18]			1	1	ängssork	26.1		450,000		125,800			3		2,220		154		15,600		1,170		20		5,010		11,000		146		0.13				–0.05	–0.04	0.691	1	–0.3	8.6	0.032	0	8,100	0.0724
2006-03-08	2006-03-26	AFM000100			4	1	räv	26		510,000		137,700			80		221		162		18,600		1,450		2		3,270		12,700		34		0.24				–0.02	0.16	0.241	1.2	–0.1	25.7	–0.005	0	2,260	0.0626

Idcode	Secup m	Seclow m	Sub-sample no	DNO	Cr mg/kg dw	Cs mg/kg dw	Cu mg/kg dw	Dy mg/kg dw	Er mg/kg dw	Eu mg/kg dw	Ga mg/kg dw	Gd mg/kg dw	Hf mg/kg dw	Hg mg/kg dw	Ho mg/kg dw	I mg/kg dw	La mg/kg dw	Li mg/kg dw	Lu mg/kg dw	Mo mg/kg dw	Nb mg/kg dw	Nd mg/kg dw	Ni mg/kg dw	Pb mg/kg dw	Pr mg/kg dw	Rb mg/kg dw	S mg/kg dw	Sb mg/kg dw	Sc mg/kg dw	Se mg/kg dw	Sm mg/kg dw	Sn mg/kg dw	Sr mg/kg dw	Ta mg/kg dw	Tb mg/kg dw	Th mg/kg dw	Tl mg/kg dw	Tm mg/kg dw	U mg/kg dw	V mg/kg dw	W mg/kg dw	Y mg/kg dw	Yb mg/kg dw	Zn mg/kg dw	Zr mg/kg dw
AFM000010[8]			1	1	–0.09	0.0531	1.04	–0.001	–0.001	–0.001	–0.02	–0.001	–0.001	0.454	–0.001	–0.5	–0.001	–0.1	–0.001	0.02	–0.001	–0.001	–0.1	–0.1	–0.001	20.1	12,400	–0.01	–0.001	0.12	–0.001	–0.06	0.8	–0.006	–0.001	–0.02	–0.06	–0.001	–0.0006	–0.06	–0.02	–0.001	–0.001	61.4	–0.03
AFM000010[8]			1	2																																									
AFM000010[8]			1	3																																									
AFM000010			2	1	–0.01	0.0833	0.89	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	1.16	–0.0002	–0.4	–0.0002	0.1	–0.0002	0.02	0.0005	–0.0002	–0.02	–0.02	–0.0002	28.5	10,100	–0.002	0.0034	0.422	–0.0002	–0.01	2.1	0.004	–0.0002	–0.004	–0.01	–0.0002	0.002	–0.01	–0.004	–0.0002	–0.0002	15.9	–0.005
AFM000010			3	1	–0.01	0.0821	1.2	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	1.72	–0.0002	–0.4	–0.0002	0.11	–0.0002	0.03	0.0005	–0.0002	–0.02	–0.02	–0.0002	28	9,810	–0.002	0.0035	0.447	–0.0002	–0.01	1.5	0.004	–0.0002	–0.004	–0.01	–0.0002	0.0018	–0.01	–0.004	–0.0002	–0.0002	15.1	–0.005
AFM000010			4	1	–0.01	0.0725	1.14	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	0.921	–0.0002	–0.4	–0.0002	0.12	–0.0002	0.02	–0.0002	–0.0002	–0.02	–0.02	–0.0002	24.2	10,400	–0.002	0.0009	0.443	–0.0002	–0.01	0.2	0.004	–0.0002	–0.004	–0.01	–0.0002	0.0001	–0.01	–0.004	–0.0002	–0.0002	14.1	–0.005
AFM000010			4	2																																									
AFM000010			4	3																																									
AFM000010			5	1	–0.01	0.165	0.36	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	3.9	–0.0002	–0.4	–0.0002	0.07	–0.0002	0	0.0002	–0.0002	–0.02	–0.02	–0.0002	23.7	10,700	–0.002	0.0041	0.382	–0.0002	–0.01	1.4	0.003	–0.0002	–0.004	–0.01	–0.0002	0.0004	–0.01	–0.004	–0.0002	–0.0002	70.3	–0.005
AFM000010			6	1	–0.01	0.18	0.57	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	3.37	–0.0002	–0.4	0.001	0.07	–0.0002	0.01	0.0005	–0.0002	–0.02	–0.02	–0.0002	27.6	11,800	–0.002	0.005	0.206	–0.0002	–0.01	1.1	0.003	0.0002	–0.004	–0.01	–0.0002	0.0004	–0.01	–0.004	–0.0002	–0.0002	60.2	–0.005
AFM000010			6	2																																									
AFM000010			6	3																																									
AFM000050[9]			1	1	–0.08	0.0618	0.67	–0.001	–0.001	–0.001	–0.02	–0.001	–0.001	0.355	–0.001	–0.5	–0.001	–0.1	–0.001	–0.01	–0.001	–0.001	–0.1	–0.1	–0.001	18.9	13,700	–0.01	–0.001	0.147	–0.001	–0.06	0.3	–0.006	–0.001	–0.02	–0.06	–0.001	–0.0006	–0.06	–0.02	–0.001	–0.001	34.2	–0.03
AFM000050			2	1	–0.01	0.0596	0.56	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	0.905	–0.0002	–0.4	–0.0002	0.15	–0.0002	0.02	0.0004	–0.0002	–0.02	–0.02	–0.0002	13.8	10,300	–0.002	0.003	0.632	–0.0002	–0.01	2.3	0.004	–0.0002	–0.004	–0.01	–0.0002	0.0051	0.019	–0.004	0.0003	–0.0002	12.1	–0.005
AFM000050			3	1	–0.01	0.049	0.78	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	0.744	–0.0002	–0.4	–0.0002	0.09	–0.0002	0.03	0.0004	–0.0002	–0.02	–0.02	–0.0002	13.6	10,500	–0.002	0.0022	0.594	–0.0002	–0.01	0.4	0.004	–0.0002	–0.004	–0.01	–0.0002	0.0005	–0.01	–0.004	–0.0002	–0.0002	13.9	–0.005
AFM000050			4	1	–0.01	0.0622	0.68	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	0.809	–0.0002	–0.4	–0.0002	0.09	–0.0002	0.02	0.0004	–0.0002	–0.02	–0.02	–0.0002	18.4	11,000	–0.002	0.0017	0.55	–0.0002	–0.01	0.5	0.003	–0.0002	–0.004	–0.01	–0.0002	0.0006	–0.01	–0.004	–0.0002	–0.0002	13.8	–0.005
AFM000050			5	1	–0.01	0.17	0.53	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	2.7	–0.0002	1	0.0004	0.08	–0.0002	0.01	0.0003	–0.0002	–0.02	–0.02	–0.0002	19.5	12,000	–0.002	0.002	0.318	–0.0002	–0.01	1.3	0.004	–0.0002	–0.004	0.011	–0.0002	0.0007	–0.01	–0.004	–0.0002	–0.0002	60.1	–0.005
AFM000050			6	1	0.562	0.0225	10.3	0.111	0.0743	0.0344	0.0593	0.1	0.0045	0.01	0.0238	5.9	0.768	–0.7	0.0112	0.1	0.0492	0.629	1.14	1.5	0.157	0.5	1,960	0.014	0.157	0.259	0.115	0.08	169	0.011	0.0169	0.0168	0.015	0.0108	0.705	0.64	0.0229	0.877	0.0727	24	0.194
AFM000050			7	1	0.559	0.0267	11.2	0.11	0.0798	0.0356	0.0563	0.103	0.0079	0.009	0.0242	6.39	0.806	0.57	0.0114	0.12	0.0569	0.67	1.18	1.62	0.168	0.6	2,090	–20	0.147	–0.2	0.123	0.08	148	0.012	0.0173	0.0242	0.017	0.0108	0.684	0.664	0.0269	0.891	0.0743	25.1	0.292
AFM000050			8	1	0.463	0.0189	11	0.0989	0.0677	0.0309	0.0388	0.0906	0.0098	–0.005	0.0202	5.58	0.681	0.5	0.0095	0.1	0.0498	0.551	1.04	1.31	0.137	0.4	2,020	0.012	0.161	0.205	0.105	0.06	143	0.007	0.0144	0.0514	0.014	0.01	0.622	0.55	0.0202	0.755	0.0648	25.8	0.461
AFM000050[10]			9	1	0.655	0.0173	18.3	0.0393	0.0229	0.0681	0.0433	0.0499	0.0044	0.37	0.0079	4.66	0.739	0.23	0.0048	0.41	0.0336	0.341	0.912	3.59	0.0916	2.3	8,630	0.015	0.0736	2.18	0.0609	0.04	119	0.003	0.007	0.0354	0.135	0.0037	0.263	0.27	0.0281	0.28	0.0262	518	0.195
AFM000050[10]			10	1	0.598	0.0313	9.62	0.0412	0.026	0.0292	0.0464	0.0496	0.0069	0.191	0.0086	3.84	0.615	0.25	0.0042	0.37	0.0413	0.357	0.699	2.22	0.091	2.9	8,400	0.013	0.0678	1.93	0.0622	0.04	64.4	0.004	0.0068	0.0608	0.043	0.0037	0.209	0.435	0.0362	0.264	0.0253	183	0.298
AFM000050[10]			11	1	0.889	0.0158	17.7	0.0359	0.023	0.0879	0.0543	0.0428	0.0045	0.399	0.0079	4.73	0.619	0.25	0.005	0.35	0.0345	0.285	0.959	5.46	0.076	2.5	7,890	0.015	0.104	1.94	0.0525	0.03	185	0.003	0.0061	0.0287	0.161	0.0035	0.325	0.304	0.0222	0.269	0.0258	722	0.186
AFM000051[11]			1	1	–0.1	0.0163	1.46	–0.002	–0.002	–0.002	–0.03	–0.002	0.0021	0.098	–0.002	–0.6	–0.002	–0.2	–0.002	0.05	–0.002	–0.002	–0.2	–0.2	–0.002	10.7	12,000	0.019	–0.002	0.132	–0.002	–0.08	4.3	–0.008	–0.002	–0.03	–0.08	–0.002	0.003	–0.08	–0.03	0.0056	–0.002	59.5	0.0967
AFM000051			2	1	–0.01	0.0248	0.61	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	0.103	–0.0002	–0.4	–0.0002	0.1	–0.0002	0.02	0.0004	–0.0002	–0.02	–0.02	–0.0002	14.4	10,800	–0.002	0.0023	0.424	–0.0002	–0.01	1.8	0.004	–0.0002	–0.004	–0.01	–0.0002	0.0013	–0.01	–0.004	–0.0002	–0.0002	14.7	–0.005
AFM000051			3	1	–0.01	0.0296	0.78	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	0.155	–0.0002	–0.4	–0.0002	0.11	–0.0002	0.02	–0.0002	–0.0002	–0.02	–0.02	–0.0002	12.1	10,800	–0.002	0.0022	0.435	–0.0002	–0.01	0.5	0.003	–0.0002	–0.004	–0.01	–0.0002	0.0004	–0.01	–0.004	–0.0002	–0.0002	15.4	–0.005
AFM000051			4	1	–0.01	0.0341	0.57	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	0.234	–0.0002	–0.4	0.0002	0.12	–0.0002	0.02	0.0004	–0.0002	–0.02	–0.02	–0.0002	14.6	11,100	–0.002	0.0013	0.518	–0.0002	–0.01	0.6	0.004	–0.0002	–0.004	–0.01	–0.0002	0.0003	–0.01	–0.004	–0.0002	–0.0002	13.8	–0.005
AFM000051[12]			5	1	–0.01	0.0567	0.67	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	0.224	–0.0002	–0.4	–0.0002	0.07	–0.0002	0.01	0.0003	–0.0002	–0.02	–0.02	–0.0002	18.2	14,100	–0.002	0.0025	0.358	–0.0002	–0.01	1.8	0.003	–0.0002	–0.004	–0.01	–0.0002	0.0001	–0.01	–0.004	–0.0002	–0.0002	22.3	–0.005
AFM000051			6	1	0.67	0.033	21	0.0708	0.0442	0.0393	0.0928	0.0804	0.0174	0.008	0.0154	11.3	0.607	0.38	0.0067	0.29	0.0614	0.501	1.26	2.45	0.131	0.7	4,410	0.035	0.1	0.35	0.0931	0.09	101	0.01	0.0128	0.0979	0.014	0.0066	0.981	0.949	0.0208	0.455	0.0434	41.2	0.644
AFM000100			1	1	–0.01	0.1	4.99	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	0.01	–0.0002	–0.4	0.0002	0.25	–0.0002	0.03	0.0006	–0.0002	–0.02	–0.02	–0.0002	23.7	10,600	–0.002	0.0021	0.155	–0.0002	–0.01	0	0.005	–0.0002	–0.004	–0.01	–0.0002	–0.0001	–0.01	–0.004	–0.0002	–0.0002	275	–0.005
AFM000100			2	1	–0.01	0.173	4.2	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	–0.005	–0.0002	–0.4	–0.0002	0.1	–0.0002	0.02	0.0003	–0.0002	–0.02	–0.02	–0.0002	32.7	8,630	–0.002	0.0011	0.117	–0.0002	0.02	0	0.004	–0.0002	–0.004	–0.01	–0.0002	–0.0001	–0.01	–0.004	–0.0002	–0.0002	267	–0.005
AFM000100			3	1	–0.01	0.209	4.26	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	0.006	–0.0002	–0.4	0.0007	0.1	–0.0002	0.04	0.0006	0.0006	–0.02	–0.02	–0.0002	42.2	9,710	–0.002	0.002	0.214	–0.0002	–0.01	0	0.004	–0.0002	–0.004	–0.01	–0.0002	0.0001	–0.01	–0.004	0.0008	–0.0002	276	–0.005
AFM001272			1	1	–0.01	0.114	3.97	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	0.009	–0.0002	–0.4	0.0002	0.09	–0.0002	0.02	0.0003	0.0002	–0.02	–0.02	–0.0002	40.1	11,100	–0.002	0.0014	0.108	–0.0002	–0.01	0	0.005	–0.0002	–0.004	–0.01	–0.0002	0.0001	–0.01	–0.004	–0.0002	–0.0002	222	–0.005
AFM001272			1	2																																									
AFM001272			1	3																																									
AFM001273			1	1	0.017	0.351	4.24	–0.0002	–0.0002	–0.0002	–0.004	–0.0002	–0.0002	0.006	–0.0002	–0.4	0.0003	0.14	–0.0002	0.02	0.0003	–0.0002	–0.02	–0.02	–0.0002	60.2	9,860	–0.002	0.0011	0.221	–0.0002	–0.01	0.1	0.006	–0.0002	–0.004	–0.01	–0.0002	–0.0001	–0.01	–0.004	0.0003	–0.0002	341	–0.005
AFM001289[13]			1	1	–0.08	1.19	6.53	–0.001	–0.001	–0.001	–0.02	–0.001	–0.001	0.041	–0.001	–0.4	0.001	–0.1	–0.001	0.07	–0.001	–0.001	0.188	–0.1	–0.001	84.5	11,200	–0.01	–0.001	0.209	–0.001	–0.05	0.3	–0.005	–0.001	–0.02	–0.05	–0.001	–0.0005	–0.05	–0.02	0.0017	–0.001	36.7	–0.03
AFM001290[14]			1	1	–0.08	0.0845	4.05	–0.001	–0.001	–0.001	–0.02	–0.001	–0.001	–0.03	–0.001	–0.4	–0.001	–0.1	–0.001	0.08	–0.001	–0.001	0.144	–0.1	–0.001	21.8	13,100	–0.01	–0.001	0.105	–0.001	–0.05	0.2	–0.005	–0.001	–0.02	–0.05	–0.001	–0.0005	–0.05	–0.02	0.0014	–0.001	32.8	–0.03
AFM001290[14]			1	2																																									
AFM001290[14]			1	3																																									
AFM001291[15]			1	1	–0.09	0.163	9.09	–0.001	–0.001	–0.001	–0.02	–0.001	–0.001	0.186	–0.001	0.593	0.0076	–0.2	–0.001	0.19	0.0052	0.0066	–0.1	0.295	0.0017	40	12,000	0.015	0.0013	0.34	–0.001	–0.06	0.6	0.026	–0.001	–0.02	–0.06	–0.001	0.0088	–0.06	–0.02	0.0089	–0.001	69.5	0.049
PFM007322[16]			1	1	0.122	0.411	4.81	–0.001	–0.001	–0.001	–0.02	–0.001	–0.001	0.029	–0.001	–0.4	0.0019	–0.1	–0.001	0.1	–0.001	0.0018	0.226	–0.1	–0.001	53.5	11,500	–0.01	0.001	0.093	–0.001	–0.05	0.2	–0.005	–0.001	–0.02	–0.05	–0.001	0.0007	–0.05	–0.02	0.0037	–0.001	36.6	0.0431
PFM007322[14]			2	1	–0.08	0.336	6.9	–0.001	–0.001	–0.001	–0.02	–0.001	0.0029	–0.03	–0.001	–0.4	–0.001	–0.1	–0.001	0.07	–0.001	–0.001	0.274	–0.1	–0.001	48.3	11,700	–0.01	–0.001	0.091	–0.001	–0.05	0.3	–0.005	–0.001	–0.02	–0.05	–0.001	–0.0005	–0.05	–0.02	0.012	–0.001	33.7	0.136
PFM007323[9]			1	1	–0.09	0.0448	2.97	–0.001	–0.001	–0.001	–0.02	–0.001	0.0021	–0.03	–0.001	–0.5	0.0045	0.25	–0.001	0.12	0.0047	0.0042	–0.1	–0.1	–0.001	19.6	11,500	–0.01	0.0013	0.071	–0.001	–0.06	0.2	–0.006	–0.001	–0.02	–0.06	–0.001	0.0011	–0.06	–0.02	0.0098	–0.001	45.8	0.1
PFM007323[9]			2	1	–0.08	0.0417	2.89	–0.001	–0.001	–0.001	–0.02	–0.001	0.0018	–0.03	–0.001	–0.4	0.0043	0.22	–0.001	0.12	0.0047	0.0038	–0.1	–0.1	0.0011	19.1	11,600	–0.01	0.0012	0.067	–0.001	–0.05	0.2	–0.005	–0.001	–0.02	–0.05	–0.001	0.0013	–0.05	–0.02	0.0073	–0.001	43.4	0.0812
PFM007323[9]			3	1	–0.08	0.0473	3.34	–0.001	–0.001	–0.001	–0.02	–0.001	0.0019	–0.03	–0.001	–0.4	0.0039	–0.1	–0.001	0.11	0.0049	0.0038	–0.1	–0.1	–0.001	21.3	11,900	–0.01	0.0013	0.068	–0.001	–0.05	0.7	–0.005	–0.001	–0.02	–0.05	–0.001	0.001	–0.05	–0.02	0.0092	–0.001	54	0.0932
PFM007323[16]			4	1	–0.08	0.0499	2.71	–0.001	–0.001	–0.001	–0.02	–0.001	0.002	–0.03	–0.001	–0.4	0.0068	–0.1	–0.001	0.1	0.0035	0.0055	–0.1	–0.1	0.0015	22.4	11,600	0.028	0.0012	0.082	–0.001	–0.06	0.2	–0.006	–0.001	–0.02	–0.06	–0.001	0.0012	–0.06	–0.02	0.0083	–0.001	37.4	0.0894
PFM007323[16]			4	2																																									
PFM007323[16]			4	3																																									
PFM007324[17]			1	1	–0.08	0.0576	4.2	–0.001	–0.001	–0.001	–0.02	–0.001	0.0012	–0.03	–0.001	–0.4	0.0081	–0.1	–0.001	0.14	0.002	0.0071	–0.1	–0.1	0.0018	40.4	11,700	–0.01	0.0024	0.064	0.0012	–0.05	0.5	–0.005	–0.001	–0.02	–0.05	–0.001	0.0028	–0.05	–0.02	0.0093	–0.001	49.5	0.0586
PFM007324[16]			2	1	–0.09	0.0936	3.92	–0.001	–0.001	–0.001	–0.02	–0.001	–0.001	–0.03	–0.001	–0.5	0.0028	–0.2	–0.001	0.15	0.0015	0.0027	–0.1	–0.1	–0.001	41.3	12,100	0.024	–0.001	0.074	–0.001	–0.06	0.5	–0.006	–0.001	–0.02	–0.06	–0.001	0.0012	–0.06	–0.02	0.0049	–0.001	50.1	0.0441
PFM007324[16]			3	1	–0.08	0.0834	4.08	–0.001	–0.001	–0.001	–0.02	–0.001	0.0013	–0.03	–0.001	–0.4	0.0026	0.18	–0.001	0.12	0.0012	0.0023	–0.1	–0.1	–0.001	39.3	12,300	0.03	–0.001	0.067	–0.001	–0.06	0.6	0.006	–0.001	–0.02	–0.06	–0.001	0.0012	–0.06	–0.02	0.0051	–0.001	50.9	0.0576
PFM007325[18]			1	1	0.097	0.264	7.21	–0.001	–0.001	–0.001	–0.02	–0.001	–0.001	0.029	–0.001	–0.4	0.0021	–0.1	–0.001	0.07	–0.001	0.0015	0.319	–0.1	–0.001	59.7	11,900	–0.01	–0.001	0.107	–0.001	–0.05	0.7	–0.005	–0.001	–0.02	–0.05	–0.001	–0.0005	–0.05	–0.02	0.0022	–0.001	44.9	–0.03
AFM000100			4	1	0.257	0.416	11.8	–0.0004	–0.0004	–0.0004	–0.008	–0.0004	0.0017	0.128	–0.0004	–0.4	0.0028	–0.05	–0.0004	0.14	0.0013	0.0016	0.306	0.742	0.0005	36.6	11,900	0.017	0.0021	0.457	–0.0004	0.05	0.1	0.004	–0.0004	–0.008	–0.02	–0.0004	0.0005	0.05	0.0424	0.0024	–0.0004	90.2	0.0932

[8] Samlingsprov av 18 individer.

[9] Samlingsprov av 6 individer.

[10] Samlingsprov av 2 individer.

[11] Samlingsprov av 16 individer, de flesta i upplösningstillstånd.

[12] Samlingsprov av 5 individer.

[13] Samlingsprov av 12 individer.

[14] Samlingsprov av 10 individer.

[15] Samlingsprov av 30 individer.

[16] Samlingsprov av 8 individer.

[17] Samlingsprov av 5 individer.

[18] Samlingsprov av 11 individer.