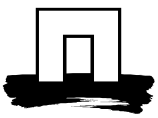
WAGENINGEN EVALUATING PROGRAMS FOR
ANALYTICAL LABORATORIES

PROF. TESTING
RvA R 002

International Soil-Analytical Exchange

Quarterly Report 2009.1 January - March 2009



WAGENINGEN UNIVERSITY
ENVIRONMENTAL SCIENCES

INTRODUCTION

Dear WEPAL-participants,

In this report for the first ringtest in 2009 WEPAL introduces a new method of statistical evaluation. There was no problem with the old statistical method to calculate the concensus value. The calculated mean was (and still is) reliable. The removal of outliers however had too much influence on the calculation of the standard deviation. In a number of datasets the standard deviation is underestimated by the old method.
We have tested several other statistical routines which should give a better estimate of the variation of the data. The aim of our study was to find a method which is not influenced by the presence or removal of outliers.
The new statistical model (Cofino NDA) that is chosen to calculate the mean and standard deviation uses probability functions. It calculates a best fit based on the observed values. The model is tested on simulated data sets and datasets of several interlaboratory studies. It is demonstrated that the model is robust and insensitive to outliers. It can cope with asymmetric, strongly tailing and multimodal distributions. A publication describing the procedure in more detail with the results of the tests is in preparation.
This year we will report both new and old statistics. So you can see what the differences are between the two methods. In general you will see that the new NDA mean and old median and mean are similar. The differences betrween the two methods can be observed in the standard deviation. In the NDA method they are not influenced by the presence or removal of outliers. Marking of outliers (**) and stragglers (*) is based on the old statistics. All results, including marked values, are used in the new NDA method.
The Z-scores are now calculated with the NDA standard deviation. Because in a number of cases the NDA standard deviation is higher than the 'old' standard deviation the Z-scores will be lower than in the past.

Early May we will move to our new building. Our telephone numbers, email and postal address will remain unchanged. Only our visiting address will change. Please note that if you send your mail by courier you must change the address.

WEPAL has a webpage where you can check if we have received and processed your data. We have also added the number of results. This way you can also see if all your results were processed correctly. Because you can see the status of the results that you sent us yourself it is no longer necessary to ask for a confirmation of receipt. You can also spare yourself and us the extra work for sending and processing extra copies. This information is published on "log received" page of the WEPAL website www.wepal.nl. Please note that we use your client number in this table, not your labnumber (or code number).

The WEPAL programs are organised to help you to improve the quality of your results. When you have ideas or remarks on the programs that can help us to improve them please feel free to contact us. We are always looking forward to hear from you,

Yours sincerely,

Bram Eijgenraam
Manager WEPAL

Calculated 02-04-2009 (15:59)

IMPORTANT INFORMATION

The results of the April - June 2009 period will be processed in the beginning of July 2009. Participants are kindly requested to take care that the results of this series are in Wageningen **before the first of July 2009.** All results, which are received later, will not be reported.

The 2009.3 samples will be mailed at the end of May 2009.

INTRODUCTION 1
GENERAL INFORMATION 3
Accreditation 3
Accreditation 3
Homogeneity of the distributed samples 5
Homogeneity tests 5
Check of results 5
The quarterly report 6
Reporting of data 6
New statistics: normal distribution approximation (NDA) 6
Old statistics: Calculation of median and MAD. 7
Rounding of results 7
Z-score 8
METHOD INDICATING CODE (MIC) 8
References and related literature 10
MATERIALS ANALYSED 11
NEW MEMBERS 11
Used abbrevations and symbols 11
Analysis ISE 2009.1 12
Real totals 13
Acid extractable (So-called totals) 36
Aqua Regia (ISO 11466) 56
Extraction with boiling 2M HNO3 70
Extraction with 0.1M NaNO3 75
Extraction with 0.01M CaCl2 1:10 77
Soil characteristics 81
Other determinations 92
Fluoride (Swiss standard procedure) 94
Digestion with conc. HNO3 + conc. HCl + H2O2 (UNEP-UN/EC 91075A) 95
Pot. CEC using 1M NH4-acetate at pH=7 96
Pot. CEC using 1M or 0.1M BaCl2-TEA at pH=8.1 (ISO 13536 OR BZE) 100
Pot. CEC using 1M NH4Cl (BZE) 102
Act. CEC using 0.01M BaCl2 (ISO 11260) 104
Act. CEC using 0.1M BaCl2 (UNEP-UN/EC 91065A) 105
Act. CEC using cobaltihexamine (AFNOR NFX 31 130) 107
Mehlich-3 109
Extraction with Ca-lactate (VDLUFA, Germany) 113
Extraction with double lactate (VDLUFA, Germany) 114
Water soluble 1:10 (w/v) (EN-12457-4) 115
Extraction with 0.01M CaCl2 - 0.005M DTPA 1:10 (w/v) 116
Extraction with 1M KCl 1:10 (w/v) 117
Phosphorus and related analysis 118
Extraction with 1M HCl (Polish standard) 120
Water soluble 1:10 (w/v) (Neth standard VPR C85-06) 123
ISE 2009.1 Z - Scores 124
Per Participant 125
Errors and Corrections ISE 2008 Period 4 187

GENERAL INFORMATION

Accreditation

Accreditation

The Wageningen Evaluating Programmes for Analytical Laboratories organisation is accredited for the organisation of Interlaboratory Studies by the Dutch Accreditation Council RvA since April 26, 2000. The accreditation is based on the ILAC-requirements (Guidelines for the requirements for the competence of providers of proficiency testing schemes, ILAC-G13: 2000). In the following table the scope is given for all WEPAL programs.

Table 1 *Scope of the WEPAL programs.*
IPE, International Plant-analytical Exchange Program
(Parameters in bold are in the scope of the accreditation)

Group	**Parameter**
Inorganic Chemical Composition	Ag, **As**, **B**, **Ba**, Be, Bi, Br, **Ca**, **Cd**, **Cl**, **Co**, **Cr**, Cs, **Cu**, F, **Fe**, Ga, **Hg**, I, **K**, Li, **Mg**, **Mn**, **Mo**, **N - Kjeldahl**, N - NH_4, **N - NO_3**, **Na**, **Ni**, **P**, **Pb**, Pd, Pt, Rb, Rh, **S**, Sb, **Se**, Sn, SO_4, **Sr**, Ti, **V**, **Zn**
Real totals	**Al**, **C - elementary**, **N - elementary**, Si
Acid extractable (So-called totals)	**Al**, Si
Other determinations	13C, 15N, delta 13C, delta 15N
Nutritional values	ADF-ash-containing, ADF-ash-free, Crude fibre, NDF-ash-containing, NDF-ash-free, Polysaccharides (starch), TDF, TDF-non-soluble, TDF-soluble, **Total ash**, Total Disaccharides, Total fat, Total monosaccharides

ISE, International Soil-analytical Exchange Program
(Parameters in bold are in the scope of the accreditation)

Group	**Parameter**
Real totals	Ag, **Al**, **As**, B, **Ba**, **Be**, Bi, **Br**, C - elementary, **Ca**, **Cd**, **Ce**, **Co**, **Cr**, Cs, **Cu**, F, **Fe**, **Ga**, Ge, **Hg**, I, **K**, **La**, **Li**, **Mg**, **Mn**, **Mo**, **N - elementary**, **Na**, **Nb**, **Nd**, **Ni**, **P**, **Pb**, Pd, Pt, **Rb**, Rh, **S**, **Sb**, **Sc**, Se, **Si**, **Sn**, **Sr**, Te, **Th**, **Ti**, Tl, **U**, **V**, W, **Y**, **Zn**, **Zr**
Acid extractable (So-called totals)	Ag, **Al**, **As**, **B**, **Ba**, **Be**, Bi, Br, **Ca**, **Cd**, Ce, **Co**, **Cr**, **Cu**, F, **Fe**, Ga, **Hg**, I, **K**, La, **Li**, **Mg**, **Mn**, **Mo**, **N**, **Na**, Nb, Nd, **Ni**, **P**, **Pb**, Pt, Rb, **S**, **Sb**, Sc, **Se**, Si, **Sn**, **Sr**, Te, Th, **Ti**, **Tl**, U, **V**, Y, **Zn**, Zr
Aqua Regia (ISO 11466)	Ag, **Al**, **As**, B, Ba, **Be**, Bi, Br, **Ca**, **Cd**, Ce, **Co**, **Cr**, **Cu**, F, **Fe**, Ga, **Hg**, I, **K**, La, Li, **Mg**, **Mn**, **Mo**, N, **Na**, Nb, Nd, **Ni**, **P**, **Pb**, Pt, Rb, **S**, Sb, Sc, Se, Si, Sn, Sr, Te, Th, Ti, Tl, U, **V**, Y, **Zn**, Zr
Extraction with boiling 2M HNO_3	**Cd**, **Co**, **Cr**, **Cu**, **Hg**, **Mo**, **Ni**, **Pb**, Tl, **Zn**
Extraction with 0.1M $NaNO_3$	**Cd**, **Cu**, **Ni**, Pb, **Zn**
Extraction with 0.01M $CaCl_2$ 1:10	Al, B, Cd, CN, Co, Cr, Cu, Fe, **K**, **Mg**, Mn, **N - NH_4**, **N - NO_3**, N total soluble, Na, Ni, P, Pb, SO_4, Zn
Extraction with 1M NH_4NO_3 1:2.5 (w/v) (DIN 19730)	As, Cd, Cr, Cu, Hg, Ni, Pb, Tl, Zn
Soil characteristics	**C - org others (W&B a.o.)**, **EC-SC (ISO 11265)**, **Fraction < 16 µm**, **Fraction < 2 µm**, **Fraction < 63 µm**, **Fraction > 63 µm**, **Org.matter (L.O.I.)**, **pH - $CaCl_2$**, **pH - H_2O**, **pH - KCl**, **TC=Total C (org.+inorg.)**, **TIC=Tot.Inorg, C($CaCO_3$)**, **TOC=Total Org. C**
Other determinations	C^{13}, N^{15}, B - Hot water, CN - Free, CN - Total, delta 13C, delta 15N, K - HCl, Mg - NaCl, Moisture-content

Group	Parameter
Fluoride (Swiss standard procedure)	F - Total
Digestion with conc. HNO_3 + conc. HCl + H_2O_2 (UNEP-UN/EC 91075A)	Al, As, B, Ba, Be, Br, Ca, Cd, Co, Cr, Cu, F, Fe, Ga, Hg, I, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Rb, S, Sb, Se, Si, Sn, Sr, Tl, V, Y, Zn, Zr
Pot. CEC using 1M NH_4-acetate at pH=7	Al, **Ca**, **CEC**, **K**, **Mg**, **Na**
Pot. CEC using 1M or 0.1M $BaCl_2$-TEA at pH=8.1 (ISO 13536 OR BZE)	Al, Ca, **CEC**, K, Mg, Na
Pot. CEC using 1M NH_4Cl (BZE)	Al, Ca, CEC, Fe, H, K, Mg, Mn, Na
Act. CEC using 0.01M $BaCl_2$ (ISO 11260)	Al, Ca, CEC, Fe, H, K, Mg, Mn, Na
Act. CEC using 0.1M $BaCl_2$ (UNEP-UN/EC 91065A)	Al, Ca, CEC, Fe, H, K, Mg, Mn, Na
Act. CEC using cobaltihexamine (AFNOR NFX 31 130)	Al, Ca, CEC, Fe, H, K, Mg, Mn, Na
Mehlich-3	Al, As, B, **Ca**, Cd, Cr, **Cu**, **Fe**, **K**, **Mg**, **Mn**, **Na**, **P**, Pb, **Zn**
Extraction with Ca-lactate (VDLUFA)	K, P
Extraction with double lactate (VDLUFA)	**K**, **P**
Water soluble 1:10 (w/v) (EN-12457-4)	Br, Cl, F, N - NO_3
Extraction with 0.01M $CaCl_2$ + 0.005M DTPA 1:10 (w/v)	Cu, Fe, Mn, Zn
Extraction with 1M KCl 1:10 (w/v)	N - NH_4, N - NO_3
Phosphorus and related analysis	Al - Ox, Fe - Ox, P - Ox, P - AL, **P - Bray**, **P - Olsen**, Pw
Extraction with 1M HCl (Polish standard)	B, Cu, Fe, Mn, Zn
Water soluble 1:10 (w/v) (NL VPR C85-06)	Br, Cl, F, SO_4

SETOC, International Sediment Exchange for Tests on Organic Contaminants

(Parameters in bold are in the scope of the accreditation)

Group	Parameter
Polycyclic aromatic hydrocarbons	**acenaphtene**, **acenaphtylene**, **anthracene**, **benz(a)anthracene**, **benzo(a)pyrene**, **benzo(b)fluoranthene**, **benzo(ghi)perylene**, **benzo(k)fluoranthene**, **chrysene**, **dibenz(ah)anthracene**, **fluoranthene**, **fluorene**, **indeno(1,2,3-cd)pyrene**, **naphtalene**, **phenanthrene**, **pyrene**
Polychlorobiphenyls	**PCB 028**, PCB 031, **PCB 052**, PCB 077, PCB 081, **PCB 101**, **PCB 105**, PCB 114, **PCB 118**, PCB 123, PCB 126, **PCB 128**, **PCB 138**, PCB 149, **PCB 153**, PCB 156, PCB 157, PCB 167, PCB 169, **PCB 180**, PCB 189
Organochlorine pesticides	1,2,3 trichlorobenzene, 1,2,3,4 tetrachlorobenzene, 1,2,3,5 tetrachlorobenzene, 1,2,4 trichlorobenzene, 1,2,4,5 tetrachlorobenzene, 1,3,5 trichlorobenzene, aldrin, alpha-endosulfan, alpha-HCH, beta-endosulfan, beta-HCH, chlordane, cis-chlordane, delta-HCH, dieldrin, endosulfan, endosulfan sulfate, endrin, gamma-HCH, heptachlor, heptachlor epoxide, **hexachlorobenzene**, **hexachlorobutadiene**, isodrin, **o,p`-DDD**, **o,p`-DDE**, **o,p`-DDT**, **p,p`-DDD**, **p,p`-DDE**, **p,p`-DDT**, **pentachlorobenzene**, Sum tetrachlorobenzenes, Sum trichlorobenzenes, telodrin, toxaphene, trans-chlordane
Other parameters	**AOX**, CN - Free, **CN - Total**, **EOX**, Inorganic carbon, **Mineral oil (GC)**, **Mineral oil (IR)**, **Organic carbon**, **Particles < 2 µm**, Particles < 63 µm, Particles > 63 µm

Group	Parameter
Metals (aqua regia)	**As**, Ba, **Cd**, Co, **Cr**, **Cu**, **Hg**, Mo, **Ni**, **Pb**, **Zn**
Dibenzo-P Dioxin	**1,2,3,4,6,7,8 Cl_7DD**, 1,2,3,4,7,8 Cl_6DD, **1,2,3,6,7,8 Cl_6DD**, 1,2,3,7,8 Cl_5DD, **1,2,3,7,8,9 Cl_6DD**, 2,3,7,8 Cl_4DD, **Cl_8DD**
Dibenzofuran	**1,2,3,4,6,7,8 Cl_7DF**, **1,2,3,4,7,8 Cl_6DF**, **1,2,3,4,7,8,9 Cl_7DF**, **1,2,3,6,7,8 Cl_6DF**, **1,2,3,7,8 Cl_5DF**, **1,2,3,7,8,9 Cl_6DF**, **2,3,4,6,7,8 Cl_6DF**, **2,3,4,7,8 Cl_5DF**, **2,3,7,8 Cl_4DF**, **Cl_8DF**
Brominated Flame Retarders	BDE 028, BDE 047, BDE 066, BDE 085, BDE 099, BDE 100, BDE 153, BDE 154, BDE 183, BDE 209
Experimental	DEHP, Tributyl Tin (TBT)

MARSEP, Manure and Refuse Sample Exchange Program

(Parameters in bold are in the scope of the accreditation)

Group	Parameter
Real totals	Ag, Al, As, B, Ba, Be, Bi, Br, C, Ca, Cd, Co, Cr, Cu, F, Fe, Ga, Hg, I, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Se, Si, Sn, Sr, Ti, Tl, V, Zn
Acid extractable (So-called totals)	Ag, **Al**, **As**, B, Ba, Be, Bi, Br, C, **Ca**, **Cd**, Cl, **Co**, **Cr**, **Cu**, F, **Fe**, Ga, **Hg**, I, **K**, Li, **Mg**, **Mn**, **Mo**, **N**, N - NH_4, N - NO_3, **Na**, **Ni**, **P**, **Pb**, S, SO_4, Sb, Se, Si, Sn, Sr, Ti, Tl, V, **Zn**
Other determinations	**AOX**, **loss-on-ignition**

The selection of parameters included in the scope of accreditation is based on the information that can be given about the homogeneity of the parameters in the samples. This information is based on the relation between the Coefficient of Variation as given in the Annual Reports and the concentration in the different samples used in the WEPAL-programs during the last years. Only in case of a clear and consistent pattern, conclusions can be drawn concerning homogeneity of the material. In the case of a large variation in CV values no distinction can be made between inhomogeneity of the material and the variation in the analytical performance caused by the participating laboratories. These parameters are not (yet) included in the scope of the accreditation.
Some aspects of the proficiency testing scheme may from time to time be subcontracted. When subcontracting occurs it is placed with a competent subcontractor. WEPAL is responsible to the scheme participants for the subcontractor's work.

Homogeneity of the distributed samples

Homogeneity tests

WEPAL has developed special equipment for the production of representative subsamples (Houba, 1993) from a bulk material. The proper functioning of this equipment is tested by a homogeneity test in the final subsamples. To perform this test, samples are collected at regular intervals during the preparation of the the samples. The collected samples, with a minimum of 10, are analysed in duplicate measurements under repeatability conditions. A selection of critical parameters is chosen for the tests. The results of the homogeneity tests are published in the annual reports.

Check of results

Before distribution of the periodic reports to the participants, a final check is made based on the results found by the participants. This check is made for all reported parameters. The Coefficient of Variances and concentrations found in the periodic reports are compared with the patterns as found in the latest Annual Report (part B). The expected pattern is a high CV at a low concentration and a gradually decreasing CV at higher concentrations till a more or less constant level of CV-values is reached (Houba et al., 1986). Deviations from this expected pattern are mentioned in the periodic reports. This might be an indication of inhomogeneity of the material for the certain parameter.

In sample 882 elevated Coefficient of Variances were observed for Ba (AE). This also was not found for Ba results in other method groups. We received no complaints about the homogeneity of this samples from the participants. No deviating values were found in the other samples.

The quarterly report

In order to evaluate the accuracy and precision of the analytical procedures used, four proficiency testing programs have been established. At this moment the WEPAL Exchange Programs comprises approximately 600 laboratories in many countries. The participating laboratories receive four air-dried samples every three months and analyse the samples according to their own procedures. The results of the determinations are collected and processed at Wageningen University and published every three months. The participating laboratories are informed of the results in the third week of the next three-month period. Each participant can compare his results with those of all the other members of the exchange program. WEPAL will not comment on results unless asked to do so.

Reporting of data

The analysed components must be reported in ovendry (105 °C) material. For this purpose the moisture content has to be determined separately and the analytical results have to be recalculated (see the form to report the results). To get reproducible results of these moisture contents we recommend you to dry the material during at least 3 hours at 105 °C and let cool down in a desiccator before weighing.

New statistics: normal distribution approximation (NDA)

Interlaboratory studies like the WEPAL proficiency testing ringtests frequently give rise to datasets that have complex distributions including excessive tailing and multiple modes. Consequently, sophisticated statistical methods are required to obtain meaningful assessments. The strategy that was used until now makes use of an outlier test followed by straightforward statistics. Problem with this strategy is that removal of outliers causes an underestimation of variance of the dataset. Therefore a methodology is needed that does not rely on arbitrary outlier removal or subjective manual interpretations. Ideally the new methodology must provide the characteristics of the highest mode of the dataset.
A new model is chosen to calculate population characteristics (mean and standard deviation) from experimental datasets (Cofino 2000). The model uses an estimate for the probability density function (pdf) of the measurement process and calculates a best fit based on all observed values. The implementation of the model that is used does not require uncertainty estimates for all data points. Instead it uses a normal distribution approximation (NDA) for the pdf of the individual data points. In essence, the pdf's of the individual datapoints are superposed on each other to create a continuous pdf representing the entire distribution (all datapoints).
With the mathematical model coefficients can be obtained by looking for the combination of data points that has the highest probability in the basis set. This maximization amounts to the identification of the first mode of the dataset. The coefficients can be used to calculate the weighted mean and standard deviation. Subsequent calculations give additional modes of the distribution and for each mode the expectation value (mean), the standard deviation and a percentage indicating the fraction of observations encompassed. In this report only mean and standard deviation for the first mode (combination with the highest probability in the dataset) are given.
The model is tested on simulated data sets and datasets of several interlaboratory studies. It is demonstrated that the model is robust and insensitive to outliers. It can cope with asymmetric, strongly tailing and multimodal distributions. Publications describing the procedure in more detail and results of the tests are in preparation.
With the NDA model mean and standard deviation are calculated using all reported data when at least 8 results are left after removal of reported 'lower than' (<) and 0 (= zero) values. No outliers are removed.

Table 2. The model summarised

- Each observation is attributed an ' Observation measurement function' (OMF, φ_i)
- An OMF is defined as the square root of the probability density function appropriate for the observation. If normal distributions are used: $\varphi_i=\sqrt{N(\mu_i,\sigma_i^2)}$
- The set of φ_i 's constitutes a basisset in which the population measurement function Ψ is constructed: $\Psi_i=\sum c_{ik}\,\varphi_k$
- The coefficients are obtained by finding the combination which renders highest probability density (maximise $\int\Psi^2 dx$, x being concentration). Mathematically this amounts to solving the eigenvector-eigenvalue equation $Sc=\lambda c$, S_{ij} being an overlap integral defined as $\int \varphi_i\,\varphi_j dx$, $0\leq S_{ij}\leq 1$
- Mean and standard deviation of Ψ_i are calculated from the first and second moment of the probability density function Ψ_i^2

$$\overline{m}_i = \frac{\int x\Psi_i^2 dx}{\int \Psi_i^2 dx},$$

$$s_i^2 = \frac{\int x^2\Psi_i^2 dx}{\int \Psi_i^2 dx} - \overline{m}_i^{\,2}$$

- The variance calculated by the model represents the sum of the estimates for the within-laboratory and between-laboratory variances, i.e. $s_i^2 = s_{between\,labs,i}^2 + s_{within\,labs,i}^2$
- When the NDA approximation is used, s_i^2 estimates the between-laboratory variance

Old statistics: Calculation of median and MAD.

Starting with the first proficiency tests in 2009 a new statical method was chosen. For reasons of continuity the statistical results of the old method will be reported in 2009. The old statistical method was preferred because strange values had less influence on the estimated central value (location) and the spread of this value (scale). Therefore estimators for location and scale were used which give less weight to observations in the tails (van Montfort, 1996). For each element a median value (μ_1) and a median of absolute deviations (MAD, σ_1) are calculated using all reported data except the reported '<' and 0 (= zero) values. The median is the middle observation of the sorted array of observations in the case of an odd sample size. Otherwise it is the mean of the two middle observations. Using the median instead of mean, extreme data are of less influence. MAD is the median of the absolute values of the observations minus their median. In case more than 7 data are reported, the values with $|(x - \mu_1)| / (f*\sigma_1) > 2$ are marked with a double asterisk (**). The factor f, aiming at 5% (singly or doubly) asterisked data in a sample of size n (n > 7) from a Gaussian distribution, is approximated by (0.7722 + 1.604 / n) * t, where t is the 2½ percent point of Student's t with (n - 1) degrees of freedom. A second median (μ_2) and a second MAD (σ_2) are computed then leaving out the items labelled **; included values with $|(x - \mu_2)| / (f*\sigma_2) > 2$ are marked with a single asterisk (*). Finally a third median and MAD are calculated, discarding both * and **.
In the case of small results which are heavily rounded the MAD often becomes 0 (= zero). This is very unsatisfactory because all results other than the median are marked as outlier. Therefore no results are marked as outlier in cases where MAD = 0. Mean and standard deviation are only calculated when at least 8 results are left after removal of outliers (**) and stragglers (*).

Rounding of results

Rounding interval is based on the first decimal value lower than sd / 2 (standard deviation divided by 2). If no standard deviation is available (less than 8 results) the MAD is used. At least three significant digits are shown as a minimum. If no standard deviation and MAD are available rounding is also based on three (most) significant digits. For the statistical results (mean, standard deviation, median and MAD) one extra digit is shown.
Note that larger results are also rounded (e.g. 1809 may be rounded as 1810).

Z-score

For all analytical data a Z-score is calculated according to the formula:

$$\text{Z-score} = \frac{\text{X-}\,\text{X}_{\text{mean}}}{\text{S}_{\text{d}}}$$

in which:

X = the reported value
X_{mean} = the mean of all values calculated with the NDA model
S_d = standard deviation calculated with the NDA model

METHOD INDICATING CODE (MIC)

In order to evaluate the analytical results for each reported element (see **Table 3** for the different element groups), a Method Indicating Code (MIC) is used. Details of the analytical procedures used by the individual participants are indicated by four characters, added at the end of each row with results. The first character indicates the method of extraction or digestion according to the codes explained in **Table 4**. The last three characters (see **Table 5**) indicate the method of detection of the element in the extracts or digests. In this way it is possible for all participants to compare the results of their analytical procedures more specifically with the results of other participants. This could be a further valuable tool in judgement of the individual results.

Table 3 *Used abbreviations*

Method	Abbreviation	Digestion/extraction procedure
1	RT	Real totals
2	AE	Acid extractable (So-called totals)
3	AR	Aqua Regia (ISO 11466)
5	NA	Extraction with boiling 2M HNO3
6	SN	Extraction with 0.1M NaNO3
7	CC	Extraction with 0.01M CaCl2 1:10
8	AN	Extraction with 1M NH4NO3 1:2.5 (w/v) (DIN 19730)
9	SC	Soil characteristics
10	OD	Other determinations
11	F	Fluoride (Swiss standard procedure)
12	AF	Digestion with conc. HNO3 + conc. HCl + H2O2 (UNEP-UN/EC 91075A)
13	AA	Pot. CEC using 1M NH4-acetate at pH=7
14	BC	Pot. CEC using 1M or 0.1M BaCl2-TEA at pH=8.1 (ISO 13536 OR BZE)
15	AC	Pot. CEC using 1M NH4Cl (BZE)
16	BA	Act. CEC using 0.01M BaCl2 (ISO 11260)
17	BB	Act. CEC using 0.1M BaCl2 (UNEP-UN/EC 91065A)
18	CH	Act. CEC using cobaltihexamine (AFNOR NFX 31 130)
19	M3	Mehlich-3
20	CAL	Extraction with Ca-lactate (VDLUFA, Germany)
21	DL	Extraction with double lactate (VDLUFA, Germany)
22	WS	Water soluble 1:10 (w/v) (EN-12457-4)
23	CAT	Extraction with 0.01M CaCl2 - 0.005M DTPA 1:10 (w/v)
24	KCL	Extraction with 1M KCl 1:10 (w/v)

Table 4 *Digestion/extraction and other procedures*

Code	Digestion/extraction Procedure
-	Details of elementnumbers 103, 126 and 127
$	No digestion or extraction
+	Exactly the method (procedure) mentioned on the form for results
A	Real total neutron activation analysis
B	Real total X-ray fluorescence with material melted
C	Real total X-ray fluorescence with material pressed

Code	Digestion/extraction Procedure
D	Real total melt
E	Real total acid digestion with HF and final medium HCl
F	Real total acid digestion with HF and final medium H_2SO_4
G	Real total acid digestion with HF and final medium HNO_3
H	Real total acid digestion with HF and final medium $HClO_4$
I	"Total analysis" mixture of conc. HNO_3 + conc. HCl (ISO 11466.2)
J	"Total analysis" others (specify)
K	"Total analysis" mixture of conc. H_2SO_4 + conc. HNO_3
L	"Total analysis" conc. H_2SO_4 + catalyst(s)
M	Extraction with 1 M NH_4NO_3 1:2.5 (W/V)
N	Extraction with boiling 2 M HNO_3 1:10 (W/V)
O	Extraction with 0.1 M $NaNO_3$ 1:2.5 (W/V)
P	Extraction with 0.01 M $CaCl_2$ 1:10 (W/V)
Q	Actual CEC + base saturation 0.01 M $BaCl_2$ (ISO 11260)
R	Potential CEC + base saturation 1 M Am. acetate
S	Potential CEC + base saturation using 1 M $BaCl_2$-TEA pH=8.1 (ISO 13536)
T	as I using boiling under reflux
U	as I using a microwave
V	Potential CEC+base saturation using 0.1 M $BaCl_2$+TEA (BZE method)
X	dry combustion
Z	Others

Table 5 *Methods of detection*

Code	Method of detection
AA	AAS Flame without preconcentration
AAA	without background correction using air acetylene
AAB	without background correction using N2O acetylene
AAC	with deuterium background correction using air acetylene
AAD	with deuterium background correction using N2O acetylene
AAE	with Zeeman background correction using air acetylene
AAF	with Zeeman background correction using N2O acetylene
AAG	with pulsed hollow cathode lamp background correction using air acetylene
AAH	with pulsed hollow cathode lamp background correction using N2O acetylene
AB	AAS Flame with preconcentration
ABA	without background correction using air acetylene
ABB	without background correction using N2O acetylene
ABC	with deuterium background correction using air acetylene
ABD	with deuterium background correction using N2O acetylene
ABE	with Zeeman background correction using air acetylene
ABF	with Zeeman background correction using N2O acetylene
ABG	with pulsed hollow cathode lamp background correction using air acetylene
ABH	with pulsed hollow cathode lamp background correction using N2O acetylene
BA	AAS ETA without preconcentration
BAA	without background correction without chemical modifier
BAB	without background correction with chemical modifier*
BAC	with deuterium background correction without chemical modifier
BAD	with deuterium background correction with chemical modifier*
BAE	with Zeeman background correction without chemical modifier
BAF	with Zeeman background correction with chemical modifier*
BAG	with pulsed hollow cathode lamp without chemical modifier
BAH	with pulsed hollow cathode lamp with chemical modifier*
CA	Flame emission
CB	ICP AES (different wavelengths possible; indicate wavelength)
CC	other excitation source (dif. wavelengths possible; indicate wavelength)
D	ICP MS
E	Spectrophotometry
F	Hydride technique (simular techniques using analyte volatilization;specify)
G	Cold vapour technique
H	Ion selective electrode

Code	Method of detection
IA	Direct voltammetry
IB	Stripping voltammetry
JA	Gas chromatography
JB	Liquid chromatography
JC	Ion chromatography
KA	X ray fluorescence with material melted
KB	X ray fluorescence with material pressed
L	Neutron activation analysis
M	Near infrared
O	Titrimetric/coulometric
P	Gravimetric
R	Fraction < 2 µm , < 63 µm and > 63 µm
RA	Pipet and sieve method
RB	Hydrometer method
RC	Instrumental methods (e.g. counters)
Q	Turbidimetric or Nephelometric
Z	Others

References and related literature

- Cofino, W.P., I. van Stokkum, D.E. Wells, R.A.L. Peerboom, F. Ariese (2000). A new model for the inference of population characteristics from experimental data using uncertainties. Application to interlaboratory studies. Chemom. Intell. Lab. Syst. 53, 37-55.
- Dijk, D. van and V.J.G. Houba (2000). Homogeneity and Stability of Materials Distributed Within the Wageningen Evaluating Programmes for Analytical Laboratories. Commun. Soil Sci. Plant Anal. 31 (11-14), 1745 -1756.
- Dijk, D. van, V.J.G. Houba and J.P.J. van Dalen (1996). Aspects of quality assurance within the Wageningen Evaluating Programmes for Analytical Laboratories (WEPAL). Commun. Soil SCi. Plant Anal. 27, 433 - 439.
- Eurachem (2000). Selection, use and interpretation of proficiency testing (PT) schemes by laboratories. Eurachem Nederland, task group 'proficiency testing schemes' and Laboratory of the Government Chemist (LGC), United Kingdom.
- Feinberg, M., E. Bugner, G. Theiller, V.J.G. Houba and F. Kadijk (1995). Expression of the reference value for proficiency tests. J. Chemometrics 9,197-209.
- Houba, V.J.G. (1993). A device for automatic subsampling of soil, sediment and plant material for proficiency testing. Fresenius J. Anal. Chem. 345, 156 -157.
- Houba, V.J.G., W.J. Chardon and K. Roelse (1993). Influence of grinding of soil on apparent chemical composition. Commun. Soil Sci. Plant Anal. 24, 1591 - 1602.
- Houba, V.J.G., J.J. van der Lee and I. Novozamsky (1996). Evaluating the state-of-the-practice in soil measurements in relation to environmental regulations. Accred. Qual. Assur. 1, 92 - 98.
- Houba, V.J.G. and I. Novozamsky (1998). Influence of storage time and temperature of air-dried soils on pH and extractable nutrients using 0.01 M CaCl2. Fresenius J. Anal. Chem. 360, 362 - 365.
- Houba, V.J.G., I. Novozamsky and J.J. van der Lee (1994a). Status and future of soil and plant analysis. Commun. Soil Sci. Plant Anal. 25, 753 - 765.
- Houba, V.J.G., I. Novozamsky and J.J. van der Lee (1994b). Standardization and validation of methods of soil and plant analysis as conditions for accreditation. Commun. Soil Sci. Plant Anal. 25, 827 - 841.
- Houba, V.J.G., I. Novozamsky and J.J. van der Lee (1994c). Aspects of pre-treatment of soils for inorganic chemical analysis. QuRmica AnalitRca 13, 94 - 99.
- Houba, V.J.G., I. Novozamsky and J.J. van der Lee (1995). Influence of storage of plant samples on their chemical composition. The Science of the Total Environment 176, 73 - 79.
- Houba, V.J.G., I. Novozamsky and J.J. van der Lee (1996). Quality aspects in laboratories for soil and plant analysis. Commun. Soil Sci. Plant Anal. 27, 327 - 348.
- Houba, V.J.G., J. Uittenbogaard and P. Pellen (1996). Wageningen Evaluating Programmes for Analytical Laboratories (WEPAL), organisation and purpose. Commun. Soil Sci. Plant Anal. 27, 421 - 431.
- ILAC-G13 (2000). ILAC Guidelines for the Requirements for the Competence of Providers of Proficiency Testing Schemes. 23 p.
- ISO/IEC (1997). Proficiency testing by interlaboratory comparisons - Part 1: Development and operation of proficiency testing schemes. ISO/IEC Guide 43, 2nd ed., ISO and IEC, Switzerland.
- Montfort, M. A.J. van (1996). Statistical remarks on laboratory-evaluating programs for comparing laboratories and methods. Commun. Soil Sci. Plant Anal. 27, 463 - 478.
- Novozamsky, I., V.J.G. Houba, R.Ch. Daniel and the members of CII (1993). Certification of cabbage and carnation samples and their use in an international proficiency study. Fresenius J. Anal. Chem. 345, 198 - 201.
- Thompson, M. and R. Wood (1993). The international harmonized protocol for the proficiency testing of (chemical) analytical laboratories. Pure and Appl. Chem. 65, 2123 - 2144.

MATERIALS ANALYSED

Table 6 Materials analysed in this period.

Sample	Sample ID	Type	Country
1	900	Calcareous brown soil	Zurich / Switzerland
2	986	Sandy Soil	Hengelo / Netherlands
3	910	Clay soil	Maren-Kessel / Netherlands
4	882	Heavy Clay	Suriname

NEW MEMBERS

Anton de Kom Universiteit van Suriname Fac. der Technologische Wetenschappen/Bodemlab, Paramaribo
Escuela Agricola Las Garzas Laboratorio Agropecuario, Chimbarongo-VI region, Chile
Faculty of Agriculture, Univ. of Zagreb Department of General Agronomy, Zagreb, Croatia
Instituto Techn. Agrario de Castilla y Leon Lab. Fisico-Quimico y Sensorial, Valladolid, Spain
Istanbul Buyuksehir Belediyesi Cevre Koruma ve Kontrol Daire Baskanligi, Sisli/ISTANBUL, Turkey
Laboratory Departmental of analysis of the Aisne Agronomy, Laon, France
Lam Laboratories Limited Room 1412, Honour Industrial Centre, Chai Wan, Hong Kong
LIA Agrochemical Research Center Analytical Department, Kaunas, Lithuania
Madzivhandila College of Agriculture Soil and Water Analysis Laboratory, Thohoyandou, South Africa
Peter Link AG Institut für Umweltschutz, Ebnat-Kappel, Switzerland
Umwelt-Technik-Weinfelden AG , Weinfelden, Switzerland
Veritas SPA Laboratorio Chimico, Fusina (Venezia), Italy

Used abbrevations and symbols

Table 7 *Used abbreviations and symbols*

Where	Abbreviation	Explanation
General Information	CV	coefficient of variation
General Information	MIC	method indicating code
General Information	MAD	median absolute deviation
General Information	Sd	standard deviation
General Information	f	f factor
General Information	μ_1	first median
General Information	μ_2	second median leaving out **
General Information	μ_3	third median leaving out * and **
General Information	σ_1	first MAD
General Information	σ_2	second MAD leaving out **
General Information	σ_3	third MAD leaving out * and **
General Information	<	value smaller than
General Information	*	straggler
General Information	**	outlier
Results	median "result" (0)	no median available
Results	median "result" (1)	first median (all results)
Results	median "result" (2)	second median leaving out **
Results	median "result" (3)	third median leaving out * and **
Results	-	no result was submitted
Results	x	zero (0) was submitted as result, not taken into account
Results	-	statistical values: not calculated
Z-scores	#	less than 8 values, no mean and Sd calculated
Z-scores	<	a smaller than value was reported
Z-scores	-	no result (or zero) was submitted
Errors	C	Correction participant
Errors	D	Results received after deadline (before publication date)
Errors	E	Error WEPAL
Errors	M	Modified results
Errors	N	New results
Errors	R	Results removed

Analysis ISE 2009.1

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Ag (mg/kg)										
HIDU	(82)	2.000	<	2.000	<	2.000	<	2.000	<	C| KB
JMCK	(160)	0.500	<	0.500	<	0.500	<	0.500	<	C| KB
HSIGLTLABA	(193)	0.200		0.080		0.150		0.050		$|CC
TNO-NITG	(293)	0.810		0.610		0.920		0.800		G| D
RIDIK	(926)	2.000	<	2.000	<	2.000	<	2.000	<	C|KB
Median		0.5050	(1)	0.3450	(1)	0.5350	(1)	0.4250	(1)	
MAD		0.3050		0.2650		0.3850		0.3750		
N		2		2		2		2		
Al (g/kg)										
LABTIUM	(16)	47.5		13.7		96.6		114		C|KB
LAS	(42)	46.9		12.0		94.3		113		G| CB
TCKI	(64)	46.6		12.2		94.8		112		B|KA
HIDU	(82)	47.8	*	13.7		82.7	**	101	**	C| KB
BKLABOR	(92)	46.4		12.0		94.8		113		B| KA
GAL	(95)	47.0		11.6		94.8		118	**	B| KA
POLASP	(96)	48.9	**	13.2		97.9		122	**	
VICTORY	(123)	44.3	**	9.5	*	95.2		114		C|KB
KEMIRAKEMI	(140)	46.6		12.4		96.7		114		B|KA
TYRKEY	(145)	42.0	**	10.5		89.6	*	104	**	D| O
GROTHE_XRF	(149)	46.9		11.9		94.5		112		B| KA
JMCK	(160)	46.8		12.5		95.7		113		B| KA
TEMAD	(175)	46.0		12.0		93.0		111		B|KA
HSIGLTLABA	(193)	46.8		12.8		94.0		110		$|CC
HULESCH	(197)	17.2	**	3.3	**	42.1	**	36	**	J| CB
IRI	(231)	45.9		11.3		91.0		111		A| L
FFEEBW	(284)	39.2	**	9.6		77.6	**	93	**	E|CB
TNO-NITG	(293)	46.1		11.9		94.4		109		D| KA
ANALGEO	(300)	46.6		12.2		91.5		111		B| KA
LUARE	(314)	58.0	**	19.4	**	85.7	**	106	*	C| KB
NFVGOE	(321)	46.8		9.9		94.0		112		G| CB
GLAGC	(327)	44.1	**	10.9		96.9		112		G| CB
SPASL	(855)	45.7		9.9		93.2		111		G| CB
WBT	(866)	45.8		12.1		92.1		110		B| KA
RIDIK	(926)	46.5		13.2		90.6		110		C|KB
LDAR02	(984)	12.9	**	46.5	**	93.5		109		J| D
NDA mean		46.56		11.92		94.15		111.6		
NDA st dev		0.83		1.36		2.55		2.6		
NDA N		26		26		26		26		
	Old statistics									
Median		46.60	(3)	12.00	(3)	94.38	(3)	112.0	(3)	
MAD		0.30		0.61		1.20		1.0		
Mean		46.52		11.88		94.26		111.7		
St Dev		0.48		1.16		1.94		1.6		
N		17		22		21		19		
As (mg/kg)										
LABTIUM	(16)	30.0	<	30.00	<	30.0	<	30.0	<	C|KB
FERGUSONIT	(21)	11.6		1.70		29.9		16.8		C| KB
LAS	(42)	10.7		1.21		29.6		17.4		J| F
HIDU	(82)	13.4	*	5.00	<	32.2		18.6		C| KB
GAL	(95)	10.2		-		28.2		16.8		C| KB
POLASP	(96)	7.5	**	1.50		17.8	**	11.4	**	
KEMIRAKEMI	(140)	5.8	**	18.90	**	-		2.6	**	
GROTHE_XRF	(149)	10.3		6.00	<	32.3		16.3		B| KA
JMCK	(160)	11.2		1.20		29.9		16.6		C| KB
TEMAD	(175)	11.0		3.00	<	25.0	**	6.0	**	C|KB
ZA/R	(200)	10.0	<	10.00	<	28.1		18.4		C|KB
IRI	(231)	12.3		1.49		31.4		17.3		A| L
FFEEBW	(284)	9.8		1.53		26.0		13.8	*	
NDA mean		11.11		1.396		29.33		16.78		(cont.)
NDA st dev		0.95		0.332		1.63		1.40		
NDA N		17		12		17		18		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
As (mg/kg)	(cont.)									
TNO-NITG	(293)	11.7		1.58		29.4		17.5		C| KB
ANALGEO	(300)	11.0		5.00	**	23.0	**	14.0	*	C| KB
LUARE	(314)	12.1		5.00	<	29.1		17.5		C| KB
GLAGC	(327)	11.1		1.10		29.6		16.5		G| CB
SPASL	(855)	11.4		0.65	*	25.3	**	15.3		G| CB
RIDIK	(926)	10.6		1.43		28.5		15.6		C|KB
NDA mean		11.11		1.396		29.33		16.78		
NDA st dev		0.95		0.332		1.63		1.40		
NDA N		17		12		17		18		
	Old statistics									
Median		11.05	(3)	1.490	(3)	29.60	(3)	16.80	(3)	
MAD		0.50		0.090		1.10		0.60		
Mean		11.07		1.416		29.55		16.97		
St Dev		0.71		0.201		1.74		0.97		
N		14		9		13		13		
B (mg/kg)										
GAL	(95)	55.0		13.0		61.0		55.0		D| CB
HSIGLTLABA	(193)	52.0		14.0		90.0		56.0		$|CC
Median		53.50	(1)	13.50	(1)	75.50	(1)	55.50	(1)	
MAD		1.50		0.50		14.50		0.50		
N		2		2		2		2		
Ba (mg/kg)										
LABTIUM	(16)	229		158		470		401		C|KB
FERGUSONIT	(21)	250		161		491		410		C| KB
LAS	(42)	230		146		477		371	*	G| CB
TCKI	(64)	193	**	65	**	552	**	420		B|KA
HIDU	(82)	234		161		473		393		C| KB
BKLABOR	(92)	225		103	**	472		396		B| KA
GAL	(95)	243		157		481		404		C| KB
VICTORY	(123)	235		136		518		414		C|KB
KEMIRAKEMI	(140)	251		143		542	**	401		B|KA
GROTHE_XRF	(149)	239		148		494		404		B| KA
JMCK	(160)	234		142		475		395		C| KB
TEMAD	(175)	255		153		515		427		C|KB
HSIGLTLABA	(193)	240		155		480		430		$|CC
ZA/R	(200)	253		167		504		378		C|KB
IRI	(231)	273		159		550	**	430		A| L
TNO-NITG	(293)	258		172		518		433		C| KB
ANALGEO	(300)	109	**	10	<	350	**	257	**	C| KB
LUARE	(314)	248		164		482		407		C| KB
NFVGOE	(321)	243		145		500		410		G| CB
GLAGC	(327)	233		138		499		404		G| CB
WBT	(866)	166	**	114	**	344	**	280	**	G| CB
RIDIK	(926)	247		159		478		407		C|KB
NDA mean		241.8		153.7		489.6		407.2		
NDA st dev		13.7		12.1		21.3		14.5		
NDA N		22		21		22		22		
	Old statistics									
Median		242.6	(3)	155.8	(3)	482.0	(3)	407.0	(3)	
MAD		8.5		8.2		10.0		7.0		
Mean		243.1		153.5		489.8		408.7		
St Dev		11.9		10.3		16.6		14.3		
N		19		18		17		19		
Be (mg/kg)										
GAL	(95)	1.65		0.270		3.63		3.31		G| CB
ANDESITE	(108)	1.40		0.200		2.90		2.70		G|D
Median		1.525	(1)	0.2500	(1)	3.190	(1)	2.905	(1)	
MAD		0.235		0.0300		0.395		0.380		
N		6		5		6		6		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Be (mg/kg)	(cont.)									
VICTORY	(123)	1.84		0.280		3.48		3.11		S|CC
ZA/R	(200)	1.21		0.200	<	2.31		1.94		G|D
TNO-NITG	(293)	1.73		0.250		3.59		3.33		G| D
GLAGC	(327)	1.26		0.190		2.80		2.55		G| CB
Median		1.525	(1)	0.2500	(1)	3.190	(1)	2.905	(1)	
MAD		0.235		0.0300		0.395		0.380		
N		6		5		6		6		
Bi (mg/kg)										
LABTIUM	(16)	45.5		44.0		47.0		51.0		C|KB
GROTHE_XRF	(149)	10.0	<	10.0	<	10.0	<	10.0	<	B| KA
JMCK	(160)	1.0	<	1.0	<	1.0	<	1.0	<	C| KB
TEMAD	(175)	3.0	<	3.0	<	3.0	<	3.0	<	C| KB
ANALGEO	(300)	3.0	<	3.0	<	3.0		3.0	<	C| KB
Median		45.50	(1)	44.00	(1)	25.00	(1)	51.00	(1)	
MAD		-		-		22.00		-		
N		1		1		2		1		
Br (mg/kg)										
HIDU	(82)	5.70		5.80		7.30		9.3		C| KB
GAL	(95)	6.30		6.30		7.70		9.7		C| KB
JMCK	(160)	5.50		6.90		8.00		11.7		C| KB
TEMAD	(175)	12.00	**	13.00	**	11.00	**	13.0		C|KB
IRI	(231)	6.60		6.59		9.10		10.7		A| L
AECSAGRICS	(248)	15.00	<	15.00	<	15.00	<	15.0	<	
ANALGEO	(300)	9.00	**	9.00	**	9.00		12.0		C| KB
LUARE	(314)	6.25		6.35		7.38		9.5		C| KB
RIDIK	(926)	6.02		6.04		7.26		9.4		C|KB
NDA mean		6.071		6.327		7.829		10.36		
NDA st dev		0.590		0.563		0.852		1.34		
NDA N		8		8		8		8		
	Old statistics									
Median		6.135	(2)	6.325	(2)	7.700	(2)	10.20	(3)	
MAD		0.300		0.275		0.400		0.84		
Mean		-		-		-		10.67		
St Dev		-		-		-		1.41		
N		6		6		7		8		
C - elementary (g/kg)										
IUNGPUL	(32)	23.2		20.3		38.4		24.6		
DATE	(89)	23.1		16.7		37.8		24.3		Z| Z
CPH340XYC	(134)	22.2		20.1		35.3		23.9		X| JA
LABORECOF	(194)	21.9		16.8		38.7		23.7		X|N
FRIS	(198)	19.0		17.6		34.7		23.0		$| Z
QLDNR&M	(210)	20.9		18.1		34.7		23.0		X| Z
REYEPS	(213)	18.3		17.0		33.6		21.8		$| RC
GSISMA	(214)	22.9		18.7		38.4		24.6		X| Z
OPBLab	(975)	23.4		19.6		38.8		24.3		X| Z
NDA mean		22.39		18.25		37.24		23.84		
NDA st dev		1.45		1.81		1.94		1.01		
NDA N		9		9		9		9		
	Old statistics									
Median		22.22	(3)	18.10	(3)	37.75	(3)	23.87	(3)	
MAD		0.98		1.30		1.05		0.73		
Mean		21.66		18.32		36.71		23.68		
St Dev		1.88		1.42		2.08		0.93		
N		9		9		9		9		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Ca (g/kg)										
LABTIUM	(16)	11.9		1.27		6.80		1.89		C|KB
FERGUSONIT	(21)	12.6		1.30		6.54		1.79		C| KB
LAS	(42)	12.1		1.24		7.11		1.85		G| CB
TCKI	(64)	12.7		1.10		7.20		1.90		B|KA
HIDU	(82)	13.9	**	2.84	**	7.47		2.89	**	C| KB
BKLABOR	(92)	11.9		1.05		6.81		1.80		B| KA
GAL	(95)	12.3		1.27		6.85		1.94		B| KA
POLASP	(96)	13.3	**	1.43		7.68	**	1.88		
VICTORY	(123)	11.6		1.12		6.83		1.87		C|KB
KEMIRAKEMI	(140)	12.2		1.16		7.18		2.00		B|KA
TYRKEY	(145)	12.0		1.54	*	6.94		2.57	**	D| O
GROTHE_XRF	(149)	12.3		1.16		6.97		1.96		B| KA
JMCK	(160)	12.0		1.26		7.05		1.99		B| KA
TEMAD	(175)	12.0		1.00		7.00		2.00		B|KA
HSIGLTLABA	(193)	12.2		1.34		6.80		2.20	**	$|CC
HULESCH	(197)	9.5	**	0.57	**	5.39	**	1.18	**	J| CB
ZA/R	(200)	11.3		1.01		6.22		1.65		D|CB
IRI	(231)	12.5		1.25		6.80		2.10		A| L
AECSAGRICS	(248)	11.4		1.27		6.51		2.10		
FFEEBW	(284)	11.4		1.09		6.48		1.81		E|CB
TNO-NITG	(293)	12.9		1.89	**	6.92		2.25	**	D| KA
ANALGEO	(300)	11.5		1.14		6.47		1.90		B| KA
LUARE	(314)	13.7	**	2.25	**	6.52		1.83		C| KB
NFVGOE	(321)	12.1		1.22		6.66		1.85		G| CB
GLAGC	(327)	12.0		1.10		7.26		2.23	**	G| CB
SPASL	(855)	12.4		0.95		6.83		1.99		G| CB
WBT	(866)	12.5		1.10		7.20		1.90		B| KA
RIDIK	(926)	12.4		1.33		6.65		1.98		C|KB
NDA mean		12.14		1.188		6.860		1.919		
NDA st dev		0.46		0.169		0.353		0.119		
NDA N		28		28		28		28		
	Old statistics									
Median		12.11	(3)	1.160	(3)	6.832	(3)	1.900	(3)	
MAD		0.25		0.100		0.200		0.075		
Mean		12.09		1.181		6.849		1.908		
St Dev		0.43		0.123		0.293		0.105		
N		24		23		26		22		
Cd (mg/kg)										
LAS	(42)	0.340		0.090		0.770		0.0300		G| D
HIDU	(82)	0.800	<	0.800	<	0.800	<	0.8000	<	C| KB
POLASP	(96)	0.340		0.080		0.640		0.0500		
VICTORY	(123)	0.380		0.120		0.670		0.0500		E|AAC
KEMIRAKEMI	(140)	-		-		2.700	**	1.2000	**	
TYRKEY	(145)	0.368		0.116		0.794		0.0740		G|BAC
JMCK	(160)	0.500	<	0.500	<	0.500	<	0.5000	<	C| KB
TEMAD	(175)	3.000	<	3.000	<	3.000	<	3.0000	<	C| KB
ZA/R	(200)	0.330		0.200	<	0.690		0.2000	<	G| D
AECSAGRICS	(248)	0.310		0.250	<	0.650		0.3000	**	
FFEEBW	(284)	0.345		0.250	<	0.695		0.2500	<	
TNO-NITG	(293)	0.570	**	0.260		1.000	*	0.2900	**	G| D
LUARE	(314)	0.800	<	0.800	<	0.800	<	0.8000	<	C| KB
NFVGOE	(321)	0.377		0.093		0.897		0.0470		G| CB
GLAGC	(327)	0.340		0.100	<	0.620		0.1000	<	G|BAF
SPASL	(855)	2.031	**	0.398		5.321	**	4.5550	**	G| CB
RIDIK	(926)	2.000	<	2.000	<	2.000	<	2.0000	<	C|KB
NDA mean		0.3474		-		0.7119		0.05121		(cont.)
NDA st dev		0.0308		-		0.1224		0.05409		
NDA N		11		7		12		9		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Cd (mg/kg) (cont.)										
NDA mean		0.3474		-		0.7119		0.05121		
NDA st dev		0.0308		-		0.1224		0.05409		
NDA N		11		7		12		9		
	Old statistics									
Median		0.3400	(3)	0.1160	(1)	0.6900	(3)	0.05000	(2)	
MAD		0.0100		0.0260		0.0500		0.00300		
Mean		0.3478		-		0.7140		-		
St Dev		0.0230		-		0.0897		-		
N		9		7		9		5		
Ce (mg/kg)										
LABTIUM	(16)	61.0		30.0	<	107.0		91.0		C|KB
HIDU	(82)	44.3		24.0		78.5		74.2	*	C| KB
GAL	(95)	52.5		8.2		92.2		90.0		D| CB
KEMIRAKEMI	(140)	32.1		7.2		62.3		54.3	**	
GROTHE_XRF	(149)	61.3		50.0	<	105.3		96.0		B| KA
JMCK	(160)	49.2		9.3		91.7		88.0		C| KB
TEMAD	(175)	57.0		3.0	<	79.0		77.0	*	
IRI	(231)	53.8		8.3		98.0		92.1		A| L
TNO-NITG	(293)	60.6		18.8		107.9		103.4	*	G| D
ANALGEO	(300)	75.0		22.0		118.0		121.0	**	C| KB
LUARE	(314)	49.5		13.7		88.9		88.0		C| KB
NDA mean		54.63		12.27		94.68		89.71		
NDA st dev		9.74		6.33		18.47		8.93		
NDA N		11		8		11		11		
	Old statistics									
Median		53.80	(3)	11.50	(3)	92.20	(3)	90.50	(3)	
MAD		6.79		3.79		13.20		2.05		
Mean		54.21		13.95		93.53		-		
St Dev		11.02		6.78		16.08		-		
N		11		8		11		6		
Co (mg/kg)										
WAGENINGEN	(14)	8.65		0.580		16.3		8.5		I| D
LAS	(42)	10.40		1.000	<	20.9		13.6		G| CB
HIDU	(82)	11.60		10.000	<	24.7		16.8		C| KB
GAL	(95)	-		-		14.0		-		G|AAA
POLASP	(96)	10.10		0.400		20.2		14.8		
VICTORY	(123)	10.80		1.170		18.9		13.6		S|CC
KEMIRAKEMI	(140)	12.20	*	0.440		24.6		22.3	**	
TYRKEY	(145)	8.43		4.000	<	14.8		7.9		E|AAC
JMCK	(160)	10.90		1.000	<	19.2		10.3		C| KB
TEMAD	(175)	10.00		3.000	<	21.0		21.0	**	C|KB
HSIGLTLABA	(193)	9.40		1.000		19.0		10.0		$|CC
ZA/R	(200)	9.70		0.600		16.6		9.7		G| D
IRI	(231)	10.08		0.640		17.8		11.0		A| L
FFEEBW	(284)	9.28		0.824		17.1		10.8		E|CB
TNO-NITG	(293)	82.52	**	136.040	**	28.7	**	24.4	**	G| D
ANALGEO	(300)	7.00	**	5.000	<	12.0		6.0		C| KB
NFVGOE	(321)	9.96		0.760		17.6		10.5		G| CB
GLAGC	(327)	9.85		1.500	<	18.3		10.7		G| CB
SPASL	(855)	13.09	**	1.736	*	22.5		17.4		G| CB
RIDIK	(926)	9.87		3.000	<	18.0		10.6		C|KB
LDAR02	(984)	1.55	**	12.450	**	22.5		16.7		J| D
NDA mean		9.997		0.7191		18.79		11.83		(cont.)
NDA st dev		1.101		0.3844		3.20		4.11		
NDA N		20		12		21		20		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Co (mg/kg)	(cont.)									
NDA mean		9.997		0.7191		18.79		11.83		
NDA st dev		1.101		0.3844		3.20		4.11		
NDA N		20		12		21		20		
	Old statistics									
Median		9.960	(3)	0.6400	(3)	18.60	(3)	10.70	(3)	
MAD		0.440		0.1840		2.15		2.21		
Mean		9.935		0.7127		18.80		11.69		
St Dev		0.820		0.2535		3.32		3.27		
N		15		9		20		17		
Cr (mg/kg)										
LABTIUM	(16)	129	**	30.0	<	138		100.0		C|KB
FERGUSONIT	(21)	113		16.8		122		88.1		C| KB
LAS	(42)	108		9.9		126		88.1		G| CB
TCKI	(64)	122		21.9	<	133		97.2		B|KA
HIDU	(82)	119		12.9		141		100.9		C| KB
GAL	(95)	99		-		118		85.4		C| KB
POLASP	(96)	79	**	9.2		121		81.1		
VICTORY	(123)	113		66.0	**	127		76.0		C|KB
KEMIRAKEMI	(140)	111		11.7		134		90.9		B|KA
TYRKEY	(145)	102		10.6		120		81.3		E|ABC
GROTHE_XRF	(149)	109		15.0	<	123		79.3		B| KA
JMCK	(160)	107		16.2		124		83.8		C| KB
TEMAD	(175)	111		33.0	**	137		105.0	*	C|KB
HSIGLTLABA	(193)	105		13.0		125		90.0		$|CC
ZA/R	(200)	112		9.0		120		86.4		G|D
IRI	(231)	132	**	22.7	*	138		95.3		A| L
FFEEBW	(284)	109		8.2		124		85.8		E|CB
TNO-NITG	(293)	116		16.8		128		88.8		C| KB
ANALGEO	(300)	98		24.0	*	115		70.0	**	C| KB
LUARE	(314)	114		17.3		135		101.0		C| KB
NFVGOE	(321)	103		9.2		126		85.6		G| CB
GLAGC	(327)	104		9.3		129		88.9		G| CB
SPASL	(855)	82	**	6.5		112		81.0		G| CB
WBT	(866)	75	**	17.0		105	**	83.0		G| CB
RIDIK	(926)	108		11.2		130		91.6		C|KB
NDA mean		109.4		12.48		126.3		87.47		
NDA st dev		7.7		5.47		8.3		7.69		
NDA N		25		21		25		25		
	Old statistics									
Median		108.9	(3)	11.20	(3)	125.8	(3)	88.10	(3)	
MAD		4.1		2.04		5.3		4.30		
Mean		109.1		12.04		126.9		88.24		
St Dev		6.3		3.56		7.7		6.96		
N		20		17		24		23		
Cs (mg/kg)										
JMCK	(160)	3.60		1.80		10.80		10.5		C| KB
IRI	(231)	4.57		0.73		11.00		11.2		A| L
Median		4.085	(1)	1.265	(1)	10.900	(1)	10.85	(1)	
MAD		0.485		0.535		0.100		0.35		
N		2		2		2		2		
Cu (mg/kg)										
LABTIUM	(16)	38.0	**	25.00	**	53.0	**	27.0	*	C|KB
FERGUSONIT	(21)	27.5		9.20		39.0		21.2		C| KB
LAS	(42)	25.9		7.91		39.6		21.0		G| CB
HIDU	(82)	24.1		6.80		33.2		17.6		C| KB
GAL	(95)	24.2		8.00		36.6		22.0		C| KB
POLASP	(96)	27.2		7.58		38.3		21.1		
NDA mean		26.21		7.894		37.32		20.77		(cont.)
NDA st dev		2.42		1.223		2.79		2.54		
NDA N		24		22		23		23		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Cu (mg/kg) (cont.)										
VICTORY	(123)	23.3		7.44		35.2		17.1	*	E|AAC
KEMIRAKEMI	(140)	26.4		5.10	*	33.5		27.4	**	B|KA
TYRKEY	(145)	30.0		10.60	*	38.2		22.0		E|ABA
JMCK	(160)	26.1		8.50		39.7		21.4		C| KB
TEMAD	(175)	30.0		8.00		48.0	**	26.0	*	C|KB
HSIGLTLABA	(193)	25.0		8.00		36.0		22.0		$|CC
ZA/R	(200)	28.9		10.00	<	37.8		22.9		C|KB
IRI	(231)	80.0	**	-		-		-		A| L
AECSAGRICS	(248)	23.0		6.00		33.0		18.0		
FFEEBW	(284)	22.2		6.40		33.4		17.8		E|CB
TNO-NITG	(293)	25.2		8.19		37.3		20.1		C| KB
ANALGEO	(300)	28.0		12.00	**	51.0	**	28.0	**	C| KB
LUARE	(314)	27.7		9.40		39.2		22.2		C| KB
NFVGOE	(321)	27.0		7.28		40.1		20.9		G| CB
GLAGC	(327)	26.7		7.50		38.3		19.1		G| CB
SPASL	(855)	28.3		11.78	**	40.2		42.6	**	G| CB
WBT	(866)	23.0		8.00		36.0		19.0		G| CB
RIDIK	(926)	25.9		8.95		36.4		20.0		C|KB
NDA mean		26.21		7.894		37.32		20.77		
NDA st dev		2.42		1.223		2.79		2.54		
NDA N		24		22		23		23		
	Old statistics									
Median		26.25	(3)	8.000	(3)	37.55	(3)	21.00	(3)	
MAD		1.60		0.500		1.60		1.00		
Mean		26.16		7.832		37.05		20.49		
St Dev		2.24		0.914		2.40		1.66		
N		22		17		20		17		
F (mg/kg)										
FERGUSONIT	(21)	488		100.0	<	726		627		D| H
TCKI	(64)	463		34.0	<	671		613		Z|H
ANDESITE	(108)	352		50.0	<	562		460		J|H
VICTORY	(123)	407		131.0		583		612		X|H
TEMAD	(175)	573		62.0		690		618		C|KB
Median		463.0	(1)	96.50	(1)	671.0	(1)	613.0	(1)	
MAD		56.0		34.50		55.0		5.0		
N		5		2		5		5		
Fe (g/kg)										
LABTIUM	(16)	24.2		2.59		57.0		56.4		C|KB
FERGUSONIT	(21)	24.4		2.21		54.7		54.0		C| KB
LAS	(42)	24.9		2.40		57.7		56.6		G| CB
TCKI	(64)	24.3		1.70		54.7		54.6		B|KA
HIDU	(82)	24.7		2.29		54.5		54.4		C| KB
BKLABOR	(92)	24.2		2.16		55.4		55.0		B| KA
GAL	(95)	24.3		-		57.5		56.1		B| KA
POLASP	(96)	26.6	**	2.53		60.6	**	61.8	**	
VICTORY	(123)	24.0		1.86		55.2		54.4		C|KB
KEMIRAKEMI	(140)	24.3		2.32		59.0	**	57.3	*	B|KA
TYRKEY	(145)	23.0	**	1.34	**	53.8		53.2		D| O
GROTHE_XRF	(149)	24.4		1.99		55.7		55.1		B| KA
JMCK	(160)	23.4	*	2.12		54.2		53.7		B| KA
TEMAD	(175)	11.0	**	3.00	<	21.0	**	22.0	**	B|KA
HSIGLTLABA	(193)	24.0		2.30		55.0		47.5	**	$|CC
ZA/R	(200)	22.8	**	1.91		54.2		54.0		D|CB
IRI	(231)	24.9		2.09		55.4		55.8		A| L
AECSAGRICS	(248)	23.4	*	1.89		54.9		54.1		A|L
FFEEBW	(284)	23.5	*	1.99		53.7		54.0		E|CB
TNO-NITG	(293)	24.4		2.19		56.3		55.2		D| KA
ANALGEO	(300)	24.0		1.80		53.1		54.1		B| KA
NDA mean		24.22		2.088		55.14		54.83		(cont.)
NDA st dev		0.38		0.299		1.46		1.68		
NDA N		27		25		27		27		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Fe (g/kg) (cont.)										
LUARE	(314)	27.2	**	2.45		56.2		56.1		C| KB
NFVGOE	(321)	24.2		2.09		54.0		53.7		G| CB
GLAGC	(327)	22.7	**	1.90		52.6		52.0		G| CB
SPASL	(855)	23.4	*	1.63		56.1		56.3		G| CB
WBT	(866)	24.4		1.70		56.2		56.2		B| KA
RIDIK	(926)	24.1		2.23		55.4		51.0	*	C|KB
NDA mean		24.22		2.088		55.14		54.83		
NDA st dev		0.38		0.299		1.46		1.68		
NDA N		27		25		27		27		
	Old statistics									
Median		24.30	(3)	2.105	(3)	55.10	(3)	54.50	(3)	
MAD		0.13		0.200		0.95		0.75		
Mean		24.34		2.097		55.14		54.77		
St Dev		0.28		0.267		1.30		1.21		
N		17		24		24		22		
Ga (mg/kg)										
LABTIUM	(16)	21.5	**	20.00	<	30.0	**	38.0	**	C|KB
FERGUSONIT	(21)	9.9		2.70		21.4		25.0		C| KB
HIDU	(82)	10.9		3.40		21.5		24.8		C| KB
BKLABOR	(92)	19.0	**	12.00	**	31.0	**	33.0	*	B| KA
GAL	(95)	10.1		-		22.3		27.0		C| KB
ANDESITE	(108)	11.0	*	2.20		23.0		27.0		G|D
VICTORY	(123)	8.1	**	2.46		29.2	**	33.7	**	S|CC
KEMIRAKEMI	(140)	11.8	*	2.26		25.9	*	29.3		
GROTHE_XRF	(149)	10.7		7.00	<	19.7		22.7		B| KA
JMCK	(160)	10.1		1.30		23.1		28.5		C| KB
HSIGLTLABA	(193)	10.0		2.50		22.0		28.0		$|CC
IRI	(231)	10.0		-		24.0		28.0		A| L
TNO-NITG	(293)	10.3		3.95	*	22.6		25.5		C| KB
ANALGEO	(300)	9.0	*	3.00	<	20.0		26.0		C| KB
LUARE	(314)	10.7		5.00	<	22.1		25.7		C| KB
GLAGC	(327)	10.0		5.00	<	22.0		29.0		C| KB
RIDIK	(926)	10.2		2.89		22.9		27.4		C|KB
NDA mean		10.28		2.573		22.25		27.04		
NDA st dev		0.70		0.559		1.53		2.45		
NDA N		17		10		17		17		
	Old statistics									
Median		10.10	(3)	2.480	(3)	22.10	(3)	27.00	(3)	
MAD		0.10		0.250		0.70		1.40		
Mean		10.26		2.464		22.04		26.70		
St Dev		0.34		0.607		1.21		1.86		
N		11		8		13		14		
Ge (mg/kg)										
JMCK	(160)	1.0	<	1.00	<	1.40		1.0	<	C| KB
Median		-	(0)	-	(0)	1.400	(1)	-	(0)	
MAD		-		-		-		-		
N		-		-		1		-		
Hg (µg/kg)										
LAS	(42)	53.2		22.2		97.7		53.9		X| G
LAROL	(56)	51.3		21.3		93.0		58.4		
LRSCONTROL	(63)	49.3		18.4		97.9		53.2		X| Z
GAL	(95)	40.0	**	15.2	**	82.0	**	47.0	**	$| BA
POLASP	(96)	51.0		25.0		91.0		54.0		
VICTORY	(123)	66.5	**	29.2	**	104.0		58.5		K|ABG
TYRKEY	(145)	45.7		19.2		98.5		49.9		$| Z
FRIS	(198)	51.5		19.5		95.5		55.0		$| Z
NDA mean		51.44		20.76		95.30		54.16		(cont.)
NDA st dev		2.45		2.03		3.67		2.54		
NDA N		14		14		14		14		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Hg (µg/kg) (cont.)										
ANALGIR	(199)	53.9		19.4		96.4		54.4		$|AAA
BESMOLAX	(217)	52.0		22.0		97.0		52.0		$| RC
TNO-NITG	(293)	60.0	**	20.0		90.0		60.0	*	X| N
ANALGEO	(300)	52.9		21.0		92.3		51.3		$| Z
SKRA	(336)	49.6		22.0		94.7		55.1		
SKLODPOL	(342)	51.0		22.0		95.0		55.0		$|
RIDIK	(926)	1000.0	<	1000.0	<	1000.0	<	1000.0	<	C|KB
NDA mean		51.44		20.76		95.30		54.16		
NDA st dev		2.45		2.03		3.67		2.54		
NDA N		14		14		14		14		
	Old statistics									
Median		51.30	(3)	21.15	(3)	95.50	(3)	54.20	(3)	
MAD		1.60		1.10		2.40		0.94		
Mean		51.04		21.00		95.61		54.22		
St Dev		2.26		1.82		3.68		2.54		
N		11		12		13		12		
I (mg/kg)										
HIDU	(82)	3.80		3.50		1.00		2.60		C| KB
GAL	(95)	3.80		1.50		2.80		3.30		C| KB
JMCK	(160)	3.00		0.90		1.50		3.40		C| KB
IRI	(231)	4.00		-		-		-		A| L
RIDIK	(926)	4.15		3.00	<	3.00	<	-		C|KB
Median		3.800	(1)	1.500	(1)	1.500	(1)	3.300	(1)	
MAD		0.200		0.600		0.500		0.100		
N		5		3		3		3		
K (mg/kg)										
LABTIUM	(16)	14700		6610		20500		19800		C|KB
FERGUSONIT	(21)	15400		7090	*	20100		19800		C| KB
LAS	(42)	15300		6510		21200		20600		G| CB
TCKI	(64)	15300		6720		21000		20900		B|KA
HIDU	(82)	14600		6970		18600	**	18700		C| KB
BKLABOR	(92)	14600		5960	*	20600		20100		B| KA
GAL	(95)	14600		6570		19900		19400		G| CB
POLASP	(96)	17600	**	7660	**	24200	**	23600	**	
VICTORY	(123)	14900		6350		20900		20600		C|KB
KEMIRAKEMI	(140)	14900		6490		21500		20800		B|KA
TYRKEY	(145)	15400		6700		22600	**	20700		E| CA
GROTHE_XRF	(149)	14800		6400		20600		20200		B| KA
JMCK	(160)	14900		6710		21000		20600		B| KA
PLATINA222	(172)	0	**	10	**	0	**	0	**	E| CA
TEMAD	(175)	14700		6600		20500		20200		B|KA
ZA/R	(200)	14600		6310		21200		21000		D|CB
IRI	(231)	15400		6600		21300		20900		A| L
AECSAGRICS	(248)	15500		7520	**	20000		16500	**	
FFEEBW	(284)	14500		6630		19700		19600		E|CB
TNO-NITG	(293)	14600		6580		20200		19600		D| KA
ANALGEO	(300)	14400		6250		19700		19700		B| KA
LUARE	(314)	15600		7170	*	18800	*	19000		C| KB
NFVGOE	(321)	14800		6660		20500		20100		G| CB
GLAGC	(327)	14300		6030	*	20300		19800		G| CB
SPASL	(855)	15800	*	5660	**	23300	**	22700	**	G| CB
WBT	(866)	14900		7000		20400		20400		B|
RIDIK	(926)	14900		6760		20300		19400		C|KB
NDA mean		14870		6604		20490		20130		(cont.)
NDA st dev		440		304		760		800		
NDA N		27		27		27		27		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
K (mg/kg) (cont.)										
NDA mean		14870		6604		20490		20130		
NDA st dev		440		304		760		800		
NDA N		27		27		27		27		
	Old statistics									
Median		14830	(3)	6602	(3)	20460	(3)	20150	(3)	
MAD		240		108		420		490		
Mean		14890		6601		20530		20080		
St Dev		380		197		520		640		
N		24		19		21		23		
La (mg/kg)										
LABTIUM	(16)	30.0	<	30.00	<	39.0		39.0		C|KB
HIDU	(82)	23.2	**	18.00	**	39.7		39.2		C| KB
GAL	(95)	27.5		5.00		49.5		49.6		D| CB
KEMIRAKEMI	(140)	26.2		36.30	**	55.7		43.4		
JMCK	(160)	26.5		4.50		50.7		48.8		C| KB
TEMAD	(175)	34.0	**	3.00	<	46.0		47.0		C| KB
HSIGLTLABA	(193)	27.0		5.00		50.0		45.0		$|CC
IRI	(231)	28.4		4.50		50.4		48.6		A| L
TNO-NITG	(293)	26.9		6.21		49.2		49.2		C| KB
ANALGEO	(300)	18.0	**	5.00	<	42.0		44.0		C| KB
LUARE	(314)	26.3		10.50		42.5		44.9		C| KB
RIDIK	(926)	30.5	**	-		40.3		-		C|KB
NDA mean		26.85		5.033		46.24		45.67		
NDA st dev		0.92		1.395		6.09		4.88		
NDA N		11		8		12		11		
	Old statistics									
Median		26.86	(2)	5.000	(2)	47.58	(3)	45.00	(3)	
MAD		0.56		0.500		4.10		3.60		
Mean		-		-		46.25		45.33		
St Dev		-		-		5.41		3.77		
N		7		6		12		11		
Li (mg/kg)										
LAS	(42)	43.0		8.02		86.1		93.5		G| CA
GAL	(95)	35.0		-		69.0		74.0		G| CB
VICTORY	(123)	42.0		7.02		86.7		90.9		F|CA
HSIGLTLABA	(193)	41.0		7.00		78.0		85.0		$|CC
AECSAGRICS	(248)	38.0		11.00		65.0		76.0		
TNO-NITG	(293)	41.4		7.42		84.7		93.5		G| D
GLAGC	(327)	37.0		7.40		75.7		81.9		G| CB
WBT	(866)	39.0		7.00		88.0		92.0		G| CB
NDA mean		39.82		-		80.89		86.99		
NDA st dev		2.96		-		8.52		8.38		
NDA N		8		7		8		8		
	Old statistics									
Median		40.00	(3)	7.400	(1)	81.35	(3)	87.95	(3)	
MAD		2.00		0.400		5.50		5.57		
Mean		39.55		-		79.15		85.85		
St Dev		2.76		-		8.71		7.88		
N		8		7		8		8		
Mg (mg/kg)										
LABTIUM	(16)	10200		273		8380		8570		C|KB
LAS	(42)	10220		382		8370		8610		G| CB
TCKI	(64)	9780		900	<	8220		8580		B|KA
HIDU	(82)	14500	**	3580	**	9130		9960	**	C| KB
BKLABOR	(92)	10160		867	**	8390		8550		B| KA
GAL	(95)	9780		368		8400		8360		B| KA
POLASP	(96)	11010		5040	**	8800		8930		
NDA mean		9739		341.4		8078		8366		(cont.)
NDA st dev		627		70.7		539		492		
NDA N		25		21		25		25		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Mg (mg/kg) (cont.)										
VICTORY	(123)	9130		500	<	7820		8230		C|KB
KEMIRAKEMI	(140)	9630		740	**	7680		7680		B|KA
TYRKEY	(145)	10150		380		8560		8730		D|AAA
GROTHE_XRF	(149)	9710		355		7990		8260		B| KA
JMCK	(160)	9890		420		8130		8360		B| KA
TEMAD	(175)	9450		373		7710		8110		B|KA
HSIGLTLABA	(193)	9800		350		8000		8200		$|CC
ZA/R	(200)	9420		292		7920		8210		D| CB
IRI	(231)	8600		-		6300	**	6000	**	A| L
AECSAGRICS	(248)	8370	*	326		6750	*	6800	**	
FFEEBW	(284)	10550		324		8770		9150		E|CB
TNO-NITG	(293)	8360	*	468	*	8040		8960		D| KA
ANALGEO	(300)	9600		224	*	7840		8280		B| KA
LUARE	(314)	14400	**	2000	<	8370		9480	**	C| KB
NFVGOE	(321)	9890		333		7970		8220		G| CB
GLAGC	(327)	9170		302		7240		7390		G| CB
SPASL	(855)	9220		296		7430		7800		G| CB
RIDIK	(926)	10900		352		7420		7830		C|KB
NDA mean		9739		341.4		8078		8366		
NDA st dev		627		70.7		539		492		
NDA N		25		21		25		25		
	Old statistics									
Median		9780	(3)	350.0	(3)	8041	(3)	8277	(3)	
MAD		370		26.0		331		293		
Mean		9822		341.7		8111		8333		
St Dev		583		40.3		468		435		
N		21		15		23		21		
Mn (mg/kg)										
LABTIUM	(16)	1040		90.0		471		221		C|KB
FERGUSONIT	(21)	1070		72.3		473		220		C| KB
LAS	(42)	1100		85.7		481		215		G| CB
TCKI	(64)	990		64.8	<	440		209		B|KA
HIDU	(82)	1120		76.0		480		220		C| KB
BKLABOR	(92)	1060		56.0		471		205		B| KA
GAL	(95)	1110		77.0		457		215		B| KA
POLASP	(96)	1110		86.0		520		272	**	
VICTORY	(123)	1040		98.0		493		243		C|KB
KEMIRAKEMI	(140)	1060		80.0		510		230		B|KA
TYRKEY	(145)	1100		83.4		454		189		D|AAA
GROTHE_XRF	(149)	1130		33.6	**	502		217		B| KA
JMCK	(160)	1040		90.0		490		220		B| KA
TEMAD	(175)	1100		99.0		506		242		B|KA
HSIGLTLABA	(193)	1100		75.0		480		190		$|CC
ZA/R	(200)	1230	**	92.2		553	**	265	**	C|KB
IRI	(231)	1030		68.0		465		226		A| L
AECSAGRICS	(248)	1110		79.0		499		242		A|L
FFEEBW	(284)	1020		61.5		450		209		E|CB
TNO-NITG	(293)	1150		87.7		456		194		D| KA
ANALGEO	(300)	1020		83.0		462		222		B| KA
LUARE	(314)	1180		150.0	<	468		218		C| KB
NFVGOE	(321)	1080		67.0		450		210		G| CB
GLAGC	(327)	1070		59.0		496		225		G| CB
SPASL	(855)	930	**	48.6		429		209		G| CB
WBT	(866)	680	**	46.0		307	**	137	**	G| CB
RIDIK	(926)	1080		77.2		472		206		C|KB
NDA mean		1079		78.36		474.8		216.6		(cont.)
NDA st dev		57		15.12		26.2		13.5		
NDA N		27		25		27		27		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Mn (mg/kg) (cont.)										
NDA mean		1079		78.36		474.8		216.6		
NDA st dev		57		15.12		26.2		13.5		
NDA N		27		25		27		27		
	Old statistics									
Median		1080	(3)	78.10	(3)	472.0	(3)	217.4	(3)	
MAD		31		9.84		18.0		8.4		
Mean		1079		76.56		475.0		216.5		
St Dev		45		14.50		23.0		14.6		
N		24		24		25		24		
Mo (mg/kg)										
LABTIUM	(16)	10.00	<	10.000	<	10.00	<	10.00	<	C|KB
LAS	(42)	1.12		0.190		1.06		1.30		G| D
HIDU	(82)	2.00	<	2.000	<	2.00	<	2.00	<	C| KB
VICTORY	(123)	1.00	<	1.250		1.00	<	1.00	<	
GROTHE_XRF	(149)	5.00	<	5.000	<	5.00	<	5.00	<	B| KA
JMCK	(160)	1.70		1.000	<	1.60		1.80		C| KB
TEMAD	(175)	3.00	<	3.000	<	3.00	<	3.00	<	C|KB
HSIGLTLABA	(193)	0.90		0.600		1.30		1.20		$|CC
ZA/R	(200)	1.05		0.200	<	1.01		2.43	**	G|D
FFEEBW	(284)	1.07		0.246		0.82		1.00		E|CB
TNO-NITG	(293)	1.54		0.230		1.09		1.35		G| D
SPASL	(855)	1.32		0.238		0.98		1.15		G| CB
RIDIK	(926)	1.31		0.500	<	-		0.76		C|KB
LDAR02	(984)	2.00	<	2.000	<	2.00	<	2.00	<	J| D
NDA mean		1.203		-		-		1.187		
NDA st dev		0.245		-		-		0.260		
NDA N		8		6		7		8		
	Old statistics									
Median		1.215	(3)	0.2420	(1)	1.060	(1)	1.200	(2)	
MAD		0.155		0.0320		0.081		0.150		
Mean		1.251		-		-		-		
St Dev		0.269		-		-		-		
N		8		6		7		7		
N - elementary (g/kg)										
OOSTERBEEK	(4)	2.00		1.25		3.95		2.29		X| RC
ATVC	(7)	3.10	**	1.25		4.21		2.55		RS
LABTIUM	(16)	2.40		1.90	**	4.50		2.90	*	
FERGUSONIT	(21)	2.12		1.28		4.07		2.45		X| Z
IUNGPUL	(32)	2.15		1.33		4.07		2.56		
BELFAST	(39)	2.20		1.22		4.33		2.62		X| Z
EXTAQS	(52)	2.06		1.23		3.83		2.34		
LRSCONTROL	(63)	2.23		1.30		4.33		2.62		X| Z
DATE	(89)	2.28		1.25		4.39		2.72		Z| Z
GAL	(95)	2.15		1.11	*	4.04		2.39		X| RC
POLASP	(96)	2.18		1.03	**	4.19		2.53		
974BRET	(99)	2.02		1.30		3.96		2.24		X| RC
LABVAL	(133)	2.05		1.25		3.87		2.61		X| Z
CPH340XYC	(134)	2.14		1.27		3.74		2.40		X| RC
XGCALAFIGA	(135)	2.37		1.13	*	4.46		2.85	*	X| Z
KEMIRAKEMI	(140)	1.78	**	1.08	**	3.98		2.08	**	
ECOSOIL	(165)	2.10		1.06	**	4.30		2.65		X|RC
NSSL	(167)	2.71	**	1.57	**	4.96	**	3.20	**	
PLATINA222	(172)	2.06		1.38	*	3.91		2.54		L| O
RISWC	(174)	2.16		1.23		3.75		2.46		L|E
LABORECOF	(194)	2.11		1.23		4.38		2.51		X| Z
UMADAKAR	(196)	2.09		1.24		3.66		2.39		X| Z
FRIS	(198)	1.81	**	1.21		3.80		2.65		$| Z
QLDNR&M	(210)	1.90		1.20		3.60		2.20		X| Z
FORTEST	(212)	2.03		1.33		3.96		2.46		X| JA
NDA mean		2.144		1.245		4.065		2.504		(cont.)
NDA st dev		0.133		0.077		0.286		0.178		
NDA N		45		45		45		45		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
N - elementary (g/kg) (cont.)										
REYEPS	(213)	2.01		1.06	**	3.69		1.95	**	$| RC
GSISMA	(214)	2.22		1.25		4.23		2.69		X| Z
MERLEWOOD	(222)	2.20		1.49	**	4.17		2.61		$| Z
AECSAGRICS	(248)	2.12		1.22		4.03		2.40		
PIEST-RIPP	(256)	1.95		1.20		3.96		2.31		X| Z
IGEOLUNAM	(273)	2.32		1.41	*	4.16		2.60		X| RC
SeqBioMpl	(274)	2.03		1.31		3.04	**	2.20		X|RC
MUMPFROG	(275)	2.23		1.05	**	4.07		2.59		X| Z
FFEEBW	(284)	2.27		1.23		4.56		2.54		
TNO-NITG	(293)	2.08		1.26		4.10		2.52		X| Z
RALA	(299)	1.94		1.22		3.86		2.30		X|
HLVAKASSEL	(313)	2.24		1.39	*	4.10		2.51		
NFVGOE	(321)	2.21		1.36		4.05		2.51		X| JA
FVABW	(322)	2.18		1.15		3.78		2.16	*	X| RC
GLAGC	(327)	2.18		0.96	**	3.81		2.35		X| RC
VILJAVUUSP	(419)	2.39		1.48	**	4.37		2.70		
IRRI	(843)	2.12		1.20		4.02		2.52		L| E
SPASL	(855)	2.48	**	1.59	**	4.61	*	3.14	**	X| RC
OPBLab	(975)	2.23		1.31		4.17		2.60		X| Z
AGROLAB	(977)	2.20		1.23		4.20		2.53		X|Z
NDA mean		2.144		1.245		4.065		2.504		
NDA st dev		0.133		0.077		0.286		0.178		
NDA N		45		45		45		45		
	Old statistics									
Median		2.150	(3)	1.250	(3)	4.059	(3)	2.520	(3)	
MAD		0.079		0.030		0.162		0.095		
Mean		2.148		1.252		4.062		2.491		
St Dev		0.119		0.047		0.240		0.140		
N		40		29		42		38		
Na (mg/kg)										
LABTIUM	(16)	7470		2880		3130		4380		C|KB
LAS	(42)	7180		2470		3080		4280		G| CB
TCKI	(64)	7420		2450		3490		4750		B|KA
HIDU	(82)	5610	**	-		3200		4840	*	C| KB
BKLABOR	(92)	6350		1700	*	2270		3530	**	B| KA
GAL	(95)	7170		2490		3030		4270		G| CB
VICTORY	(123)	6140	*	1080	**	2390		3500	**	C|KB
KEMIRAKEMI	(140)	7140		2460		3140		4290		B|KA
TYRKEY	(145)	7230		2440		3520		4630		E| CA
GROTHE_XRF	(149)	6880		2120		2790		4040		B| KA
JMCK	(160)	6730		2430		2680		4130		B| KA
TEMAD	(175)	7170		2790		2990		4160		B|KA
ZA/R	(200)	7080		2380		2990		4370		D| CB
IRI	(231)	7320		2280		3060		4300		A| L
AECSAGRICS	(248)	6270	*	2000		2550		3800		
FFEEBW	(284)	6410		2220		2690		3790	*	E|CB
TNO-NITG	(293)	7100		2740		3240		4290		D| KA
ANALGEO	(300)	7450		2600		3370		4450		B| KA
LUARE	(314)	7470		2000	<	4440	**	5820	**	C| KB
NFVGOE	(321)	7050		2600		3020		4250		G| CB
GLAGC	(327)	7090		2200		3420		4690		G| CB
SPASL	(855)	5680	**	1820		2610		3600	*	G| CB
WBT	(866)	980	**	330	**	410	**	590	**	G| CB
RIDIK	(926)	6620		3050		2880		4220		C|KB
NDA mean		7030		2427		3005		4268		(cont.)
NDA st dev		500		331		401		313		
NDA N		24		22		24		24		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Na (mg/kg) (cont.)										
NDA mean		7030		2427		3005		4268		
NDA st dev		500		331		401		313		
NDA N		24		22		24		24		
	Old statistics									
Median		7140	(3)	2448	(3)	3022	(3)	4289	(3)	
MAD		180		168		227		91		
Mean		7069		2444		2979		4312		
St Dev		335		302		343		232		
N		19		19		22		17		
Nb (mg/kg)										
LABTIUM	(16)	22.5	**	13.00	**	29.0	**	30.0	**	C|KB
FERGUSONIT	(21)	10.9		1.50		15.9		16.9		C| KB
HIDU	(82)	9.6		1.70		16.2		17.4		C| KB
GAL	(95)	11.0		-		17.5	**	19.1		C| KB
VICTORY	(123)	14.4	**	4.00		21.5	**	20.5		
GROTHE_XRF	(149)	11.0		5.00		16.3		17.0		B| KA
JMCK	(160)	9.6		1.90		16.0		17.9		C| KB
TEMAD	(175)	10.0		3.00	<	16.0		21.0		C| KB
HSIGLTLABA	(193)	10.0		3.00		17.0	*	21.0		$|CC
AECSAGRICS	(248)	10.0	<	10.00	<	17.0	*	10.0	<	
TNO-NITG	(293)	10.4		3.29		16.5	*	17.5		C| KB
ANALGEO	(300)	10.0		2.00	<	16.0		16.0		C| KB
LUARE	(314)	9.6		2.00		15.9		17.8		C| KB
RIDIK	(926)	10.3		2.60		16.0		19.1		C|KB
NDA mean		10.20		2.624		16.17		18.20		
NDA st dev		0.90		1.379		0.45		1.79		
NDA N		13		10		14		13		
	Old statistics									
Median		10.00	(3)	2.600	(3)	16.00	(3)	17.85	(3)	
MAD		0.40		0.700		0.05		1.10		
Mean		10.22		2.777		16.04		18.43		
St Dev		0.55		1.170		0.14		1.69		
N		11		9		8		12		
Nd (mg/kg)										
KEMIRAKEMI	(140)	20.3		17.40		62.3		54.3		
GROTHE_XRF	(149)	30.0	<	30.00	<	50.6		38.3		B| KA
JMCK	(160)	22.8		3.00		47.0		40.9		C| KB
TEMAD	(175)	23.0		3.00	<	44.0		48.0		C| KB
IRI	(231)	30.0		3.50		47.0		41.0		A| L
TNO-NITG	(293)	24.7		5.03		41.1		34.1		C| KB
Median		23.00	(1)	4.265	(1)	47.00	(1)	40.95	(1)	
MAD		1.65		1.015		3.30		4.73		
N		5		4		6		6		
Ni (mg/kg)										
LABTIUM	(16)	50.5	*	20.00	<	60.0		20.0	<	C|KB
FERGUSONIT	(21)	42.0		2.60		53.6		30.4		C| KB
LAS	(42)	44.6		1.53		55.5		28.8		G| CB
HIDU	(82)	43.7		2.00	<	56.5		29.5		C| KB
GAL	(95)	41.0		-		51.0		25.0		C| KB
POLASP	(96)	43.5		1.07		53.5		28.3		
VICTORY	(123)	52.0	**	4.05		64.5	**	32.6		E|AAC
KEMIRAKEMI	(140)	45.9		3.50		60.4		33.4		B|KA
TYRKEY	(145)	41.3		3.00	<	47.3		24.5		E|ABC
GROTHE_XRF	(149)	47.3		15.00	<	45.3		18.7	**	B| KA
JMCK	(160)	44.6		2.00		57.3		30.8		C| KB
TEMAD	(175)	35.0	**	3.00		49.0		33.0		C|KB
HSIGLTLABA	(193)	43.0		2.50		53.0		27.0		$|CC
NDA mean		43.79		2.370		53.45		29.35		(cont.)
NDA st dev		2.93		0.725		4.04		2.73		
NDA N		25		16		24		23		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Ni (mg/kg)	(cont.)									
HULESCH	(197)	34.0	**	-		39.3	**	17.3	**	J| CB
ZA/R	(200)	44.5		2.89		52.0		33.0		G|D
IRI	(231)	60.0	**	-		-		-		A| L
FFEEBW	(284)	40.6		2.42		51.5		28.9		E|CB
TNO-NITG	(293)	46.1		2.21		59.3		31.9		C| KB
ANALGEO	(300)	43.0		3.00	<	51.0		27.0		C| KB
LUARE	(314)	45.7		15.00	<	52.8		30.1		C| KB
NFVGOE	(321)	43.6		1.71		53.5		28.5		G| CB
GLAGC	(327)	44.8		1.90		56.3		29.5		G| CB
SPASL	(855)	42.0		2.11		51.1		27.4		G| CB
WBT	(866)	31.0	**	3.00		40.0	**	21.0	**	G| CB
RIDIK	(926)	43.4		2.38		53.5		28.3		C|KB
NDA mean		43.79		2.370		53.45		29.35		
NDA st dev		2.93		0.725		4.04		2.73		
NDA N		25		16		24		23		
	Old statistics									
Median		43.59	(3)	2.400	(3)	53.50	(3)	29.19	(3)	
MAD		1.21		0.495		2.50		1.68		
Mean		43.71		2.429		53.50		29.39		
St Dev		1.83		0.751		3.94		2.56		
N		19		16		21		20		
P (mg/kg)										
LABTIUM	(16)	1230	**	652		1600	**	462		C|KB
FERGUSONIT	(21)	1190	**	681		1300		365	**	C| KB
LAS	(42)	1080		579		1400		440		G| CB
TCKI	(64)	910	**	347	**	1250		305	**	B|KA
HIDU	(82)	1130	*	800	**	1200	*	460		C| KB
BKLABOR	(92)	1070		549		1430		447		B| KA
GAL	(95)	1060		589		1400		458		G| CB
POLASP	(96)	1190	**	619		1550		484		
VICTORY	(123)	1000	*	466		1350		402	*	C|KB
KEMIRAKEMI	(140)	1070		530		1440		470		B|KA
GROTHE_XRF	(149)	1070		530		1410		439		B| KA
JMCK	(160)	1100		590		1440		440		B| KA
PLATINA222	(172)	900	**	413		0	**	466		E| E
TEMAD	(175)	1100		574		1430		460		B|KA
HSIGLTLABA	(193)	1100		600		1400		450		$|CC
FFEEBW	(284)	1070		512		1560	*	446		E|CB
TNO-NITG	(293)	1030	*	525		1340		378	**	D| KA
ANALGEO	(300)	1070		542		1370		463		B| KA
LUARE	(314)	1620	**	2510	**	1290		506	**	C| KB
NFVGOE	(321)	1030		540		1330		410	*	G| CB
GLAGC	(327)	1060		480		1370		410	*	G| CB
SPASL	(855)	1060		502		1380		452		G| CB
RIDIK	(926)	1200	**	763	**	1170	**	419		C|KB
NDA mean		1072		551.2		1380		450.0		
NDA st dev		44		70.2		80		24.1		
NDA N		23		23		23		23		
	Old statistics									
Median		1070	(3)	542.0	(3)	1386	(3)	454.8	(3)	
MAD		7		40.3		43		8.5		
Mean		1072		551.2		1382		453.5		
St Dev		19		64.7		68		15.3		
N		13		19		18		16		
Pb (mg/kg)										
LABTIUM	(16)	54.5	**	30.0	<	120.0	**	63.0	**	C|KB
FERGUSONIT	(21)	28.6		9.6		74.8		28.4		C| KB
LAS	(42)	31.8		9.9		79.7		31.8		G| CB
NDA mean		31.62		10.64		78.72		31.84		(cont.)
NDA st dev		2.58		1.19		4.01		2.25		
NDA N		24		21		24		23		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Pb (mg/kg) (cont.)										
HIDU	(82)	33.1		13.3	*	80.5		35.1		C| KB
GAL	(95)	31.6		10.3		75.5		30.2		C| KB
POLASP	(96)	31.8		11.8		77.7		30.5		
VICTORY	(123)	30.7		10.1		78.5		32.1		C|KB
KEMIRAKEMI	(140)	35.4		13.7	**	77.8		36.1		B|KA
TYRKEY	(145)	34.8		10.7		81.8		36.9	*	E|ABC
GROTHE_XRF	(149)	32.7		20.0	<	80.7		33.3		B| KA
JMCK	(160)	32.0		10.5		82.6		33.1		C| KB
TEMAD	(175)	36.0		13.0	*	91.0	**	43.0	**	C|KB
HSIGLTLABA	(193)	30.0		10.0		79.0		30.0		$|CC
ZA/R	(200)	33.6		12.5		81.6		31.8		C|KB
AECSAGRICS	(248)	33.0		17.0	<	68.0	**	17.0	<	
FFEEBW	(284)	26.4		10.0		66.0	**	24.8	**	E|CB
TNO-NITG	(293)	47.5	**	11.6		80.7		33.1		C| KB
ANALGEO	(300)	30.0		11.0		71.0	*	32.0		C| KB
LUARE	(314)	31.8		10.5		80.5		32.3		C| KB
NFVGOE	(321)	31.6		10.9		78.1		33.2		G| CB
GLAGC	(327)	29.9		9.7		75.9		26.3	**	G| CB
SPASL	(855)	26.6		9.3		73.8		26.3	**	G| CB
RIDIK	(926)	29.8		11.3		77.8		30.7		C|KB
LDAR02	(984)	11.6	**	31.6	**	81.7		31.0		J| D
NDA mean		31.62		10.64		78.72		31.84		
NDA st dev		2.58		1.19		4.01		2.25		
NDA N		24		21		24		23		
	Old statistics									
Median		31.80	(3)	10.50	(3)	79.00	(3)	32.00	(3)	
MAD		1.80		0.51		1.70		1.15		
Mean		31.48		10.57		78.88		32.04		
St Dev		2.51		0.86		2.55		1.89		
N		21		17		19		17		
Rb (mg/kg)										
LABTIUM	(16)	79.5	**	25.0		129		127		C|KB
FERGUSONIT	(21)	86.5		26.2		129		131		C| KB
HIDU	(82)	85.8		24.7		126		128		C| KB
GAL	(95)	90.3		26.5		132		135		C| KB
ANDESITE	(108)	78.0	**	23.0		126		131		G|D
VICTORY	(123)	95.5		25.8		147		143		C|KB
KEMIRAKEMI	(140)	89.3		29.2	*	140		140		B|KA
GROTHE_XRF	(149)	90.0		24.3		136		138		B| KA
JMCK	(160)	87.3		24.9		131		133		C| KB
TEMAD	(175)	105.0	**	21.0		145		144		C|KB
IRI	(231)	92.0		24.2		133		139		A| L
AECSAGRICS	(248)	88.0		22.0		125		121		
TNO-NITG	(293)	88.6		26.1		135		136		C| KB
ANALGEO	(300)	87.0		31.0	**	122		128		C| KB
LUARE	(314)	91.7		24.9		136		140		C| KB
GLAGC	(327)	93.0		24.0		128		131		C| KB
WBT	(866)	103.0	**	23.0		180	**	175	**	G| CB
RIDIK	(926)	88.8		26.1		131		135		C|KB
NDA mean		89.13		24.80		131.2		134.5		
NDA st dev		3.70		1.74		6.6		6.6		
NDA N		18		18		18		18		
	Old statistics									
Median		89.05	(3)	24.80	(3)	131.3	(3)	135.0	(3)	
MAD		1.90		1.14		4.7		4.0		
Mean		89.56		24.48		132.4		134.2		
St Dev		2.74		1.58		6.9		6.2		
N		14		16		17		17		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
S (mg/kg)										
OOSTERBEEK	(4)	318		218		509		387		Z| CB
LABTIUM	(16)	325		160		668		635		C|KB
FERGUSONIT	(21)	388		300	<	671		514		X| Z
IUNGPUL	(32)	380		270		660		650		
EKOM	(35)	269	**	196		449		375		X|Q
LAS	(42)	442		276		789		798		X| N
EXTAQS	(52)	404		248		569		675		
TCKI	(64)	300		239		503		474		Z|CB
HIDU	(82)	636	**	562	**	772		755		C| KB
DATE	(89)	405		195		510		480		| |
VICTORY	(123)	341		215		637		635		C|KB
KEMIRAKEMI	(140)	376		193		712		707		
TEMAD	(175)	391		409	**	458		457		C|KB
FORTEST	(212)	351		218		649		620		X| Z
FFEEBW	(284)	385		438	**	708		710		
TNO-NITG	(293)	355		227		612		605		X| N
LUARE	(314)	647	**	1075	**	692		732		C| KB
NFVGOE	(321)	363		230		620		600		G| CB
GLAGC	(327)	400		240		680		650		G| CB
SPASL	(855)	385		215		608		613		G| CB
WBT	(866)	500	**	300		500		800		G| CB
RIDIK	(926)	341		255		621		603		C|KB
OPBLab	(975)	1048	**	723	**	1292	**	1164	**	X| Z
AGROLAB	(977)	380		290		630		890		X|Z
NDA mean		370.6		232.2		627.9		633.0		
NDA st dev		42.2		48.9		93.3		128.6		
NDA N		24		23		24		24		
	Old statistics									
Median		380.0	(3)	228.6	(3)	630.0	(3)	635.0	(3)	
MAD		24.0		22.9		61.0		75.0		
Mean		370.0		232.5		618.5		624.6		
St Dev		34.8		36.5		94.2		131.8		
N		19		18		23		23		
Sb (mg/kg)										
LABTIUM	(16)	100.00	<	100.000	<	100.00	<	100.000	<	
LAS	(42)	1.14		0.300		1.19		0.680		G| D
HIDU	(82)	1.40		1.000	<	1.30		1.000	<	C| KB
ANDESITE	(108)	1.00		0.300		1.10		0.600		G|D
JMCK	(160)	1.40		0.500	<	1.30		0.500	<	C| KB
TEMAD	(175)	3.00	<	3.000	<	3.00	<	3.000	<	C| KB
ZA/R	(200)	1.09		0.292		1.07		0.580		G|D
IRI	(231)	1.22		0.360		1.13		0.610		A| L
TNO-NITG	(293)	1.22		0.360		1.15		0.880		G| D
LUARE	(314)	4.00	<	4.000	<	4.00	<	4.000	<	C| KB
RIDIK	(926)	-		-		1.21		0.830		C|KB
NDA mean		-		-		1.171		-		
NDA st dev		-		-		0.085		-		
NDA N		7		5		8		6		
	Old statistics									
Median		1.220	(1)	0.3000	(1)	1.170	(3)	0.6450	(1)	
MAD		0.130		0.0080		0.055		0.0550		
Mean		-		-		1.181		-		
St Dev		-		-		0.086		-		
N		7		5		8		6		
Sc (mg/kg)										
LABTIUM	(16)	30.00	<	30.000	<	30.0	<	30.0	<	C|KB
GAL	(95)	7.00		-		17.0		17.1		G| CB
ANDESITE	(108)	7.00		1.000		17.0		17.0		G|D
NDA mean		7.871		-		17.34		16.46		(cont.)
NDA st dev		1.138		-		1.65		1.75		
NDA N		9		7		10		10		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Sc (mg/kg) (cont.)										
VICTORY	(123)	8.46		0.520		18.5		17.6		S|CC
KEMIRAKEMI	(140)	1.90	**	0.230		23.6	**	11.4		
GROTHE_XRF	(149)	10.00	<	10.000	<	13.7		14.3		B| KA
JMCK	(160)	9.40		2.800		17.3		16.3		C| KB
TEMAD	(175)	6.00		3.000	<	13.0		12.0		C| KB
HSIGLTLABA	(193)	8.50		1.300		18.0		16.0		$|CC
IRI	(231)	8.35		0.870		19.4		19.3		A| L
TNO-NITG	(293)	7.69		0.260		16.4		16.1		C| KB
NDA mean		7.871		-		17.34		16.46		
NDA st dev		1.138		-		1.65		1.75		
NDA N		9		7		10		10		
	Old statistics									
Median		8.020	(3)	0.8700	(1)	17.00	(3)	16.20	(3)	
MAD		0.750		0.4300		1.00		1.16		
Mean		7.800		-		16.69		15.71		
St Dev		1.090		-		2.11		2.47		
N		8		7		9		10		
Se (mg/kg)										
JMCK	(160)	1.000	<	1.00	<	1.20		1.000	<	C| KB
TEMAD	(175)	3.000	<	3.00	<	3.00	<	3.000	<	C|KB
IRI	(231)	-		-		1.40		-		A| L
TNO-NITG	(293)	0.700		0.26		1.61		0.840		G| D
LUARE	(314)	2.000	<	2.00	<	2.00	<	2.000	<	C| KB
SPASL	(855)	2.101		2.10		0.66		0.504		G| CB
RIDIK	(926)	0.120		-		0.76		0.540		C|KB
Median		0.7000	(1)	1.182	(1)	1.200	(1)	0.5400	(1)	
MAD		0.5800		0.922		0.410		0.0360		
N		3		2		5		3		
Si (g/kg)										
LABTIUM	(16)	344		427		252		249		C|KB
LAS	(42)	340		416	**	255		252		D| CB
TCKI	(64)	338		421	*	251		250		B|KA
HIDU	(82)	318	**	413	**	230	**	231	**	C| KB
BKLABOR	(92)	336		424		250		248		B| KA
GAL	(95)	342		428		253		250		B| KA
VICTORY	(123)	345		432		250		247		C|KB
KEMIRAKEMI	(140)	343		430		256		250		B|KA
TYRKEY	(145)	336		426		252		250		D| P
GROTHE_XRF	(149)	341		431		250		247		B| KA
JMCK	(160)	342		427		254		251		B| KA
TEMAD	(175)	345		428		255		254		B|KA
ZA/R	(200)	329		394	**	242	*	238	*	D|CB
IRI	(231)	260	**	400	**	240	*	270	**	A| L
TNO-NITG	(293)	343		428		252		244		D| KA
ANALGEO	(300)	333		427		237	*	240	*	B| KA
LUARE	(314)	281	**	314	**	229	**	234	**	C| KB
GLAGC	(327)	333		427		241	*	241	*	B| KA
SPASL	(855)	153	**	125	**	121	**	150	**	G| CB
WBT	(866)	338		435	*	249		249		C| KB
RIDIK	(926)	339		430		254		258	*	C|KB
NDA mean		339.4		427.8		251.0		248.3		
NDA st dev		6.7		4.1		5.7		5.2		
NDA N		21		21		21		21		
	Old statistics									
Median		340.0	(3)	427.8	(3)	252.0	(3)	249.6	(3)	
MAD		3.3		0.8		2.0		1.2		
Mean		339.2		428.0		252.2		249.2		
St Dev		4.6		2.1		2.2		2.6		
N		17		13		14		13		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Sn (mg/kg)										
WAGENINGEN	(14)	1.80	**	0.430		2.28	**	1.49	**	I| D
LABTIUM	(16)	20.00	<	20.000	<	20.00	<	20.00	<	C|KB
FERGUSONIT	(21)	3.80		1.000	<	4.00		3.70		C| KB
LAS	(42)	3.28		1.090		4.37		3.95		G| D
HIDU	(82)	4.80	**	1.000	<	4.50		3.60		C| KB
GAL	(95)	3.60		-		4.00		3.50		C| KB
ANDESITE	(108)	2.80		0.600		3.70		3.50		G|D
GROTHE_XRF	(149)	40.00	<	40.000	<	40.00	<	40.00	<	B| KA
JMCK	(160)	3.60		0.800		3.80		3.50		C| KB
TEMAD	(175)	3.00	<	3.000	<	3.00	<	3.00	<	C|KB
HSIGLTLABA	(193)	3.60		1.800		4.70		3.80		$|CC
LUARE	(314)	3.43		3.000	<	4.03		3.60		C| KB
RIDIK	(926)	3.19		2.580		3.54		3.24		C|KB
NDA mean		3.462		-		4.042		3.586		
NDA st dev		0.362		-		0.471		0.155		
NDA N		10		6		10		10		
	Old statistics									
Median		3.515	(3)	0.9450	(1)	4.000	(3)	3.600	(3)	
MAD		0.160		0.4300		0.300		0.100		
Mean		3.413		-		4.071		3.599		
St Dev		0.316		-		0.383		0.204		
N		8		6		9		9		
Sr (mg/kg)										
LABTIUM	(16)	64.5		28.0		88.0		105		C|KB
FERGUSONIT	(21)	62.1		29.3		82.0		101		C| KB
LAS	(42)	61.1		29.2		83.1		102		| CB
HIDU	(82)	63.3		29.6		82.8		102		C| KB
GAL	(95)	64.1		31.3		84.7		106		C| KB
VICTORY	(123)	66.4		31.0		89.9		111		C|KB
KEMIRAKEMI	(140)	62.7		26.6		89.3		109		B|KA
GROTHE_XRF	(149)	54.3	**	32.3		74.3	**	102		B| KA
JMCK	(160)	62.4		31.1		85.2		105		C| KB
TEMAD	(175)	64.0		26.0		80.0		104		C|KB
HSIGLTLABA	(193)	62.0		30.0		85.0		110		$|CC
IRI	(231)	42.0	**	35.0		70.0	**	90	**	A| L
AECSAGRICS	(248)	64.0		26.0		86.0		90	**	
TNO-NITG	(293)	65.6		30.3		87.1		107		C| KB
ANALGEO	(300)	58.0	*	26.0		74.0	**	99		C| KB
LUARE	(314)	66.5		28.3		86.5		108		C| KB
GLAGC	(327)	63.6		28.0		90.5		111		G| CB
SPASL	(855)	55.6	**	24.8		83.6		101		G| CB
WBT	(866)	42.0	**	22.0	**	58.0	**	70	**	G| CB
RIDIK	(926)	61.7		30.4		83.8		106		C|KB
NDA mean		63.37		28.97		85.19		105.0		
NDA st dev		2.15		2.69		3.71		5.0		
NDA N		20		20		20		20		
	Old statistics									
Median		63.60	(3)	29.30	(3)	85.10	(3)	105.1	(3)	
MAD		1.20		1.70		2.00		3.1		
Mean		63.60		29.12		85.47		105.2		
St Dev		1.66		2.56		2.97		3.8		
N		15		19		16		17		
Th (mg/kg)										
LABTIUM	(16)	10.00	<	10.00	<	15.0		14.0		C|KB
FERGUSONIT	(21)	8.90		2.70		13.7		14.8		C| KB
HIDU	(82)	8.00		0.80		12.9		15.6		C| KB
ANDESITE	(108)	7.00		0.90		12.0		14.0		G|D
VICTORY	(123)	7.54		2.00	<	13.6		17.0		C|KB
NDA mean		8.234		1.619		13.32		15.52		(cont.)
NDA st dev		0.881		1.055		1.33		1.58		
NDA N		11		8		14		14		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Th (mg/kg) (cont.)										
KEMIRAKEMI	(140)	10.40		2.42		14.0		14.6		
GROTHE_XRF	(149)	10.00	<	10.00	<	10.0		15.0		B| KA
JMCK	(160)	7.70		1.00	<	14.4		17.1		C| KB
TEMAD	(175)	9.00		3.00	<	10.0		11.0	**	C| KB
ZA/R	(200)	10.00	<	10.00	<	12.5		15.2		C|KB
IRI	(231)	8.43		1.35		13.9		17.0		A| L
AECSAGRICS	(248)	8.15		-		12.8		16.1		
TNO-NITG	(293)	-		1.21		-		-		G| D
ANALGEO	(300)	11.00	**	5.00		12.0		19.0		C| KB
RIDIK	(926)	8.40		1.94		14.3		15.7		C|KB
NDA mean		8.234		1.619		13.32		15.52		
NDA st dev		0.881		1.055		1.33		1.58		
NDA N		11		8		14		14		
	Old statistics									
Median		8.275	(3)	1.645	(3)	13.25	(3)	15.60	(3)	
MAD		0.600		0.760		0.90		1.00		
Mean		8.352		2.040		12.94		15.77		
St Dev		0.943		1.381		1.53		1.44		
N		10		8		14		13		
Ti (mg/kg)										
LABTIUM	(16)	3160		656		5100		5660		C|KB
FERGUSONIT	(21)	3000		587		4980		5440		C| KB
LAS	(42)	2950		554		4850		5300		D| CB
TCKI	(64)	3060		600		4980		5520		B|KA
HIDU	(82)	2980		550		4660	**	5270		C| KB
BKLABOR	(92)	3030		505		4980		5450		B| KA
GAL	(95)	3040		590		5160		5480		B| KA
VICTORY	(123)	3210	*	607		5270	**	5820		C|KB
KEMIRAKEMI	(140)	3060		540		5210	*	5650		
TYRKEY	(145)	3280	**	450		5010		5400		D| E
GROTHE_XRF	(149)	3070		511		4990		5470		B| KA
JMCK	(160)	3120		640		5000		5510		B| KA
TEMAD	(175)	3080		640		5060		5600		B|KA
HSIGLTLABA	(193)	3050		580		5050		5600		$|CC
ZA/R	(200)	2970		491		4990		5460		D|CB
IRI	(231)	2900	*	480		4920		5350		A| L
AECSAGRICS	(248)	2770	**	530		4970		4820	**	
FFEEBW	(284)	2900	*	468		4620	**	5150		
TNO-NITG	(293)	3200		586		5260	**	5790		C| KB
ANALGEO	(300)	3030		473		4750	**	5320		B| KA
LUARE	(314)	3090		631		4470	**	5110		C| KB
NFVGOE	(321)	3090		625		4920		5420		G| CB
GLAGC	(327)	2940		450		4820		5280		G| CB
WBT	(866)	3100		500		5000		5600		B| KA
RIDIK	(926)	3090		612		4930		5470		C|KB
NDA mean		3052		556.3		4988		5460		
NDA st dev		90		78.2		103		198		
NDA N		25		25		25		25		
	Old statistics									
Median		3060	(3)	554.0	(3)	4984	(3)	5466	(3)	
MAD		31		54.0		40		133		
Mean		3056		554.2		4983		5463		
St Dev		67		65.0		81		178		
N		20		25		18		24		
Tl (mg/kg)										
LAS	(42)	0.510		0.170		1.00		0.890		G| D
HIDU	(82)	2.000	<	2.000	<	2.00	<	2.000	<	C| KB
ANDESITE	(108)	0.500		0.200		1.00		0.800		G|D
Median		0.5600	(1)	0.1900	(1)	1.030	(1)	0.8400	(1)	
MAD		0.0430		0.0150		0.030		0.0500		
N		5		4		7		7		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Tl (mg/kg) (cont.)										
JMCK	(160)	1.000	<	1.000	<	1.00	<	1.000	<	C| KB
TEMAD	(175)	3.000	<	3.000	<	3.00		3.000		C|KB
ZA/R	(200)	0.578		0.248		1.03		0.720		G|D
TNO-NITG	(293)	0.560		0.180		1.08		0.840		G| D
GLAGC	(327)	0.380	<	0.380	<	1.00		0.900		G|BAF
RIDIK	(926)	0.603		0.500	<	1.03		0.834		C|KB
Median		0.5600	(1)	0.1900	(1)	1.030	(1)	0.8400	(1)	
MAD		0.0430		0.0150		0.030		0.0500		
N		5		4		7		7		
U (mg/kg)										
LABTIUM	(16)	10.00	<	10.000	<	10.00	<	10.00	<	C|KB
ANDESITE	(108)	1.90		0.300		3.20		2.30		G|D
VICTORY	(123)	2.31		2.000	<	2.64		2.44		
GROTHE_XRF	(149)	10.00	<	10.000	<	10.00	<	10.00	<	B| KA
JMCK	(160)	2.70		1.000	<	3.40		3.10		C| KB
TEMAD	(175)	3.00	<	3.000	<	3.00	<	3.00	<	C| KB
ZA/R	(200)	2.22		0.454		3.16		2.50		G|D
IRI	(231)	3.50		0.380		3.50		3.10		A| L
AECSAGRICS	(248)	1.94		-		2.16	**	2.15		
TNO-NITG	(293)	2.09		0.460		3.40		2.74		G| D
ANALGEO	(300)	4.00	**	2.000	<	5.00	**	4.00	**	C| KB
RIDIK	(926)	2.63		1.000	<	2.98		2.38		C|KB
NDA mean		2.319		-		3.221		2.528		
NDA st dev		0.540		-		0.323		0.365		
NDA N		9		4		9		9		
	Old statistics									
Median		2.265	(3)	0.4170	(1)	3.200	(2)	2.470	(3)	
MAD		0.347		0.0400		0.200		0.220		
Mean		2.411		-		-		2.589		
St Dev		0.528		-		-		0.358		
N		8		4		7		8		
V (mg/kg)										
LABTIUM	(16)	101.0	*	30.0	<	177	*	170	**	C|KB
FERGUSONIT	(21)	73.5		15.0	<	151		136		C| KB
LAS	(42)	76.7		12.2		151		138		G| CB
TCKI	(64)	130.0	**	47.1	**	215	**	201	**	B|KA
HIDU	(82)	84.5		3.9		161		153		C| KB
GAL	(95)	79.0		11.0		132		126		D| CB
VICTORY	(123)	83.0		50.0	<	151		140		S|CC
KEMIRAKEMI	(140)	76.7		2.5		154		154		
GROTHE_XRF	(149)	86.3		20.3		156		141		B| KA
JMCK	(160)	84.0		10.0		143		135		C| KB
TEMAD	(175)	90.0		17.0		158		143		C|KB
HSIGLTLABA	(193)	78.0		13.0		155		137		$|CC
ZA/R	(200)	78.6		8.4		136		118	*	G|D
IRI	(231)	87.0		10.5		160		145		A| L
TNO-NITG	(293)	80.5		11.1		156		140		C| KB
ANALGEO	(300)	74.0		15.0		144		125		C| KB
LUARE	(314)	90.9		15.6		146		132		C| KB
GLAGC	(327)	75.0		8.9		145		131		G| CB
WBT	(866)	124.0	**	15.0		209	**	214	**	G| CB
RIDIK	(926)	83.3		15.4		147		135		C|KB
NDA mean		81.34		12.26		150.9		137.1		(cont.)
NDA st dev		7.91		4.64		9.8		9.4		
NDA N		20		17		20		20		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
V (mg/kg) (cont.)										
NDA mean		81.34		12.26		150.9		137.1		
NDA st dev		7.91		4.64		9.8		9.4		
NDA N		20		17		20		20		
	Old statistics									
Median		80.50	(3)	11.64	(3)	151.0	(3)	137.5	(3)	
MAD		3.80		3.32		5.3		4.5		
Mean		81.24		11.86		149.8		138.1		
St Dev		5.42		4.65		8.1		8.1		
N		17		16		17		16		
W (mg/kg)										
JMCK	(160)	3.70		1.00		3.40		3.10		C| KB
ZA/R	(200)	1.72		0.26		1.87		1.82		G|D
IRI	(231)	2.10		-		2.00		2.10		A| L
RIDIK	(926)	2.59		1.89		2.76		3.16		C|KB
Median		2.345	(1)	1.000	(1)	2.380	(1)	2.600	(1)	
MAD		0.435		0.742		0.445		0.530		
N		4		3		4		4		
Y (mg/kg)										
LABTIUM	(16)	34.0	**	10.00	<	51.0	**	35.0	**	C|KB
FERGUSONIT	(21)	23.4		3.40		37.4		25.7		C| KB
HIDU	(82)	24.6		2.70		38.0		25.2		C| KB
GAL	(95)	25.2		-		39.0		29.0		C| KB
VICTORY	(123)	24.2		4.28		38.5		26.5		C|KB
KEMIRAKEMI	(140)	24.3		5.50		39.3		31.2		
GROTHE_XRF	(149)	26.0		8.00		38.0		28.0		B| KA
JMCK	(160)	24.0		4.00		38.6		25.6		C| KB
TEMAD	(175)	24.0		3.00	<	38.0		26.0		C|KB
HSIGLTLABA	(193)	25.0		5.00		38.0		28.0		$|CC
AECSAGRICS	(248)	23.0		10.00	<	35.0	**	22.0	**	
TNO-NITG	(293)	24.6		5.25		38.6		28.2		C| KB
ANALGEO	(300)	22.0	**	3.00	<	32.0	**	22.0	**	C| KB
LUARE	(314)	25.9		5.00	<	39.3		28.4		C| KB
GLAGC	(327)	25.0		5.00	<	36.0		26.0		C| KB
RIDIK	(926)	26.8		10.30	**	36.0		27.4		C|KB
NDA mean		24.56		4.496		38.22		26.94		
NDA st dev		0.96		1.450		1.15		1.95		
NDA N		16		9		16		16		
	Old statistics									
Median		24.61	(3)	4.640	(3)	38.00	(3)	27.40	(3)	
MAD		0.60		0.750		0.60		1.40		
Mean		24.72		4.766		38.05		27.32		
St Dev		1.04		1.614		1.07		1.71		
N		14		8		13		13		
Zn (mg/kg)										
LABTIUM	(16)	74.0		20.0	<	253		119		C|KB
FERGUSONIT	(21)	73.4		19.0		231		107		C| KB
LAS	(42)	78.0		20.5		247		117		G| CB
TCKI	(64)	252.0	**	148.5	**	431	**	301	**	B|KA
HIDU	(82)	77.7		24.5	*	225		110		C| KB
BKLABOR	(92)	72.0		19.0		227		105		B| KA
GAL	(95)	73.0		19.0		217		104		C| KB
POLASP	(96)	72.2		16.5		225		110		
VICTORY	(123)	90.0	**	32.5	**	250		127	**	E|AAC
KEMIRAKEMI	(140)	72.3		15.6		250		113		B|KA
TYRKEY	(145)	84.5	*	20.4		246		120		E|AAA
GROTHE_XRF	(149)	96.3	**	20.3		237		108		B| KA
JMCK	(160)	76.5		18.3		246		115		C| KB
NDA mean		74.49		19.32		235.0		110.6		(cont.)
NDA st dev		3.89		2.35		18.2		6.5		
NDA N		27		25		27		27		

ISE 2009.1 - Real totals

Sample		900		986		910		882		MIC
Zn (mg/kg) (cont.)										
TEMAD	(175)	76.0		18.0		248		116		C|KB
HSIGLTLABA	(193)	75.0		20.0		230		160	**	$|CC
ZA/R	(200)	79.2		21.7		250		116		C|KB
IRI	(231)	74.0		17.2		260		106		A| L
AECSAGRICS	(248)	67.0	*	30.0	<	215		95	*	H|IB
FFEEBW	(284)	75.1		20.5		229		110		E|CB
TNO-NITG	(293)	70.9		20.5		239		112		C| KB
ANALGEO	(300)	78.0		30.0	**	214		108		C| KB
LUARE	(314)	77.8		21.0		222		109		C| KB
NFVGOE	(321)	73.1		17.6		229		108		G| CB
GLAGC	(327)	72.8		18.1		234		108		G| CB
SPASL	(855)	68.6		9.9	**	225		111		G| CB
WBT	(866)	49.0	**	11.0	**	162	**	77	**	G| CB
RIDIK	(926)	75.6		20.4		232		137	**	C|KB
NDA mean		74.49		19.32		235.0		110.6		
NDA st dev		3.89		2.35		18.2		6.5		
NDA N		27		25		27		27		
	Old statistics									
Median		74.00	(3)	19.00	(3)	232.0	(3)	110.0	(3)	
MAD		1.79		1.40		10.0		3.0		
Mean		74.53		19.14		235.3		111.0		
St Dev		2.73		1.66		12.9		4.6		
N		21		19		25		21		
Zr (mg/kg)										
LABTIUM	(16)	217		181	**	166		170		C|KB
FERGUSONIT	(21)	210		150		163		165		C| KB
HIDU	(82)	221		136		165		167		C| KB
BKLABOR	(92)	224		130		165		171		B| KA
GAL	(95)	218		143		160		163		C| KB
VICTORY	(123)	229		138		168		173		C|KB
KEMIRAKEMI	(140)	216		138		168		169		
GROTHE_XRF	(149)	226		120		154	*	158		B| KA
JMCK	(160)	214		141		168		166		C| KB
TEMAD	(175)	329	**	243	**	197	**	228	**	C|KB
HSIGLTLABA	(193)	220		135		168		180		$|CC
IRI	(231)	209		168	*	150	**	190	**	A| L
AECSAGRICS	(248)	225		59	**	168		169		
TNO-NITG	(293)	223		135		162		165		C| KB
ANALGEO	(300)	194	**	83	**	154	*	163		C| KB
LUARE	(314)	205		101	*	164		170		C| KB
RIDIK	(926)	238		-		164		173		C|KB
NDA mean		219.2		137.3		165.0		168.0		
NDA st dev		8.5		14.2		4.4		5.6		
NDA N		17		16		17		17		
	Old statistics									
Median		220.0	(3)	136.8	(3)	165.0	(3)	169.0	(3)	
MAD		5.0		3.0		2.7		4.0		
Mean		219.7		136.5		165.3		168.1		
St Dev		8.4		7.9		2.6		5.2		
N		15		10		13		15		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Ag (mg/kg)										
LABTIUM	(16)	0.0700		0	<	0.110		0.0200		I|BAE
ENVIROPACE	(49)	5.0000	<	5	<	5.000	<	5.0000	<	J|CB
ANAMIL	(74)	2.0000	<	2	<	2.000	<	2.0000	<	I| CB
GGM	(98)	1.0000	<	1	<	1.000	<	1.0000	<	I| D
CISCA	(112)	-		-		1.000	<	1.0000	<	U| D
SPOOR	(305)	-		-		10.000	<	10.0000	<	Z| CB
Median		0.07000	(1)	-	(0)	0.1100	(1)	0.02000	(1)	
MAD		-		-		-		-		
N		1		-		1		1		
Al (g/kg)										
ALCONTROL	(1)	26.0	**	3.10		59.0	*	67.0	**	I| CB
LABTIUM	(16)	13.9		2.94		31.8	*	26.8	*	I|CB
ENVIROPACE	(49)	20.0		3.61		46.2		45.8		J|CB
EXTAQS	(52)	18.8		3.22		45.0		43.9		I|CB
ANAMIL	(74)	17.5		2.93		47.3		41.5		I| CB
US	(83)	13.3		2.59		25.0	**	18.9	**	
DATE	(89)	20.9		3.92		43.2		39.2		J| CB
CISCA	(112)	22.2		3.61		-		-		U| D
GSISMA	(214)	32.7	**	4.59	**	87.2	**	97.7	**	U| CB
FEJER	(278)	19.4		3.43		46.8		44.0		J| CB
JASZ	(280)	18.9		3.22		45.2		43.0		T|CB
VAS	(281)	19.0		3.18		48.0		44.2		J|CB
PLVHOLAB	(308)	19.6		3.43		36.9		48.4		
NFVGOE	(321)	20.8		3.22		51.3		53.8		I| CB
GLAGC	(327)	22.1		4.00		53.1		56.2		I| CB
RF-R&D	(905)	13.4		2.21		34.5	*	38.2		J| CB
NDA mean		19.61		3.288		45.45		44.21		
NDA st dev		2.57		0.429		7.65		7.02		
NDA N		16		16		15		15		
	Old statistics									
Median		19.20	(3)	3.220	(3)	46.50	(3)	44.00	(3)	
MAD		1.66		0.280		1.50		2.50		
Mean		18.56		3.241		46.30		45.29		
St Dev		3.00		0.469		4.42		5.60		
N		14		15		10		11		
As (mg/kg)										
ALCONTROL	(1)	8.10	**	4.00	<	22.0	*	11.0	**	I| CB
LABTIUM	(16)	9.37		1.00		24.8		12.2		I|CB
FERGUSONIT	(21)	9.73		1.18		25.2		14.0		J| D
IUNGPUL	(32)	10.70	*	1.06		28.2		13.9		
ENVIROPACE	(49)	10.00	<	10.00	<	24.9		13.8		J|BAF
EXTAQS	(52)	10.60	*	2.30	<	28.2		15.1		I|CB
MLABTW	(70)	10.27		5.00	<	27.3		13.8		I| CB
ARCHIMEDES	(73)	-		-		24.2		12.4		I| CB
ANAMIL	(74)	11.80	**	3.00	<	31.0	**	17.5	**	I| CB
US	(83)	6.81	**	0.49	**	15.7	**	9.4	**	
DATE	(89)	8.63	*	0.66	**	30.7	**	18.1	**	J| CB
GGM	(98)	9.67		3.00	<	26.5		13.4		I| D
CISCA	(112)	9.85		3.00	<	26.5		13.7		U| D
MERLIN	(159)	15.00	<	15.00	<	27.2		15.0	<	|
PLATINA222	(172)	8.08	**	0.99		23.4		26.0	**	J| F
EXACT	(190)	9.10	*	3.80	<	25.0		12.0		I| CB
BESMOLAX	(217)	10.00	<	10.00	<	19.6	**	10.0	<	J| CB
CHEMLAB	(228)	10.00		3.00	<	28.0		14.0		T| CB
UMEG-GB3	(241)	10.13		1.09		26.6		13.9		I| D
WROCLAB	(263)	9.42		1.16		26.1		20.8	**	I|F
FEJER	(278)	9.99		1.21		25.2		13.1		J| CB
JASZ	(280)	9.74		5.00	<	24.9		13.2		
NDA mean		9.843		1.098		25.82		13.61		(cont.)
NDA st dev		0.519		0.142		2.07		1.12		
NDA N		30		18		35		32		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
As (mg/kg)	(cont.)									
VAS	(281)	9.96		1.00	<	24.9		13.1		
MBT	(291)	11.00	**	1.09		23.6		12.3		U| F
ARRET	(298)	10.00	<	10.00	<	22.4	*	10.0	<	J| CB
SPOOR	(305)	10.00		4.00	<	26.0		15.0		Z| CB
PLVHOLAB	(308)	9.92		3.52	**	22.0	*	14.4		T|F
GLAGC	(327)	9.50		1.20		26.5		13.1		I| CB
SKRA	(336)	9.70		1.83	<	26.3		13.5		
GDAGRO	(338)	9.82		1.12		25.6		15.5		T|F
LABRES	(339)	9.70		1.00		26.0		15.0		I|F
GLOBI	(340)	11.00	**	1.13		28.7		14.0		T|F
MALWA	(343)	9.78		1.21		25.6		13.0		
VILJAVUUSP	(419)	7.84	**	1.81	**	27.4		14.2		I| CB
ADE	(424)	7.71	**	0.89		20.0	**	10.6	**	U| CB
NDA mean		9.843		1.098		25.82		13.61		
NDA st dev		0.519		0.142		2.07		1.12		
NDA N		30		18		35		32		
	Old statistics									
Median		9.800	(3)	1.105	(3)	26.00	(3)	13.80	(3)	
MAD		0.145		0.085		1.10		0.60		
Mean		9.808		1.095		26.03		13.67		
St Dev		0.237		0.097		1.39		0.92		
N		18		14		27		25		
B (mg/kg)										
LABTIUM	(16)	7.1		5.00	<	8.3		5.0	<	I|CB
ENVIROPACE	(49)	10.0	<	10.00	<	11.8		10.0	<	J|CB
BUNASOLS	(58)	2.1		1.81		5.9		9.4		
ANAMIL	(74)	14.1		10.00	<	24.6		10.0	<	I| CB
XGCALAFIGA	(135)	18.2		2.83		34.8		22.1		U| CB
FEJER	(278)	11.2		2.84		12.9		11.3		J| CB
VAS	(281)	12.0		2.53		12.5		8.3		J|CB
Median		11.60	(1)	2.680	(1)	12.50	(1)	10.36	(1)	
MAD		3.49		0.155		4.16		1.50		
N		6		4		7		4		
Ba (mg/kg)										
ALCONTROL	(1)	120.0	**	40.00	<	250		150.0	**	I| CB
LABTIUM	(16)	75.8		6.55		198		53.3		I|CB
ENVIROPACE	(49)	83.8		7.50		221		77.3		J|CB
EXTAQS	(52)	84.0		7.94		218		73.7		I|CB
MLABTW	(70)	76.5		7.00	<	191		56.8		I| CB
ARCHIMEDES	(73)	-		-		230		116.0		I| CB
ANAMIL	(74)	80.3		6.52		222		68.3		I| CB
US	(83)	53.4	**	5.95		108	**	37.5		
GGM	(98)	77.5		6.68		200		57.8		I| D
CISCA	(112)	101.0		7.98		261		111.0		U| D
EXACT	(190)	73.0		15.00	<	190		51.0		I| CB
CHEMLAB	(228)	75.0		7.00		190		68.0		T| CB
FEJER	(278)	82.9		7.38		215		62.4		J| CB
ARRET	(298)	76.4		8.96		181		50.1		J| CB
SPOOR	(305)	120.0	**	40.00	<	250		170.0	**	Z| CB
PLVHOLAB	(308)	88.5		8.05		184		92.5		
NFVGOE	(321)	93.0		10.00		243		90.0		I| CB
GLAGC	(327)	96.8		8.50		242		96.2		I| CB
NDA mean		81.62		7.494		215.4		71.50		(cont.)
NDA st dev		10.32		1.175		35.9		28.26		
NDA N		17		13		18		18		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Ba (mg/kg)	(cont.)									
NDA mean		81.62		7.494		215.4		71.50		
NDA st dev		10.32		1.175		35.9		28.26		
NDA N		17		13		18		18		
	Old statistics									
Median		81.60	(3)	7.500	(3)	218.0	(3)	68.15	(3)	
MAD		5.50		0.817		25.0		16.00		
Mean		83.18		7.616		216.9		72.62		
St Dev		8.70		1.123		25.9		22.84		
N		14		13		17		16		
Be (mg/kg)										
ALCONTROL	(1)	0.980		0.2000	<	2.20	*	1.90		I| CB
LABTIUM	(16)	0.820		0.2000	<	1.97		1.30		I|CB
EXTAQS	(52)	0.850		0.1000	<	2.09		1.52		I|CB
ANAMIL	(74)	1.000	<	1.0000	<	1.95		1.34		I| CB
US	(83)	0.487		0.0380		0.97	**	0.83		
DATE	(89)	0.850		0.0600		1.93		1.38		J| CB
GGM	(98)	0.895		1.0000	<	1.95		1.20		I| D
CISCA	(112)	1.000	<	1.0000	<	2.09		1.71		U| D
SPOOR	(305)	-		-		1.80		1.60		Z| CB
GLAGC	(327)	0.820		0.0500		2.00		1.60		I| CB
NDA mean		-		-		1.993		1.475		
NDA st dev		-		-		0.121		0.233		
NDA N		7		3		10		10		
	Old statistics									
Median		0.8500	(1)	0.05000	(1)	1.960	(3)	1.450	(3)	
MAD		0.0300		0.01000		0.035		0.150		
Mean		-		-		1.973		1.438		
St Dev		-		-		0.093		0.299		
N		7		3		8		10		
Bi (mg/kg)										
LABTIUM	(16)	0.230		0.0300		0.330		0.300		I|BAE
Median		0.2300	(1)	0.03000	(1)	0.3300	(1)	0.3000	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
Ca (g/kg)										
ALCONTROL	(1)	10.0	*	0.410	**	4.90	**	0.74	**	I| CB
REDUIT	(15)	10.0	**	0.872	*	6.87		1.32		I|AAC
LABTIUM	(16)	10.7		0.660		6.25		1.40		I|CB
FERGUSONIT	(21)	10.6		1.000	**	5.91		1.59		J| CB
ENVIROPACE	(49)	11.5		0.779		6.55		1.41		J|CB
EXTAQS	(52)	11.1		0.660		6.18		1.49		I|CB
BUNASOLS	(58)	32.5	**	2.890	**	15.45	**	4.08	**	
MLABTW	(70)	10.8		0.672		5.89		1.41		I| CB
ANAMIL	(74)	10.8		0.707		6.10		1.44		I| CB
US	(83)	0.7	**	0.891	*	1.16	**	1.13	**	
DATE	(89)	12.3	**	0.750		6.25		1.48		J| CB
CISCA	(112)	10.9		0.750		-		-		U| D
BCIMUZPOL	(132)	8.3	**	0.160	**	2.58	**	0.33	**	J|AAC
XGCALAFIGA	(135)	10.7		0.540	*	6.46		1.52		U| CB
MELILAB	(157)	11.2		0.690		6.49		1.64		U| CB
FEJER	(278)	11.2		0.710		6.23		1.59		J| CB
JASZ	(280)	11.1		0.690		6.17		1.57		T|CB
VAS	(281)	11.6		0.750		6.21		1.66		J|CB
PLVHOLAB	(308)	11.3		0.756		5.53		1.79		
NFVGOE	(321)	11.1		0.660		6.49		1.53		I| CB
GLAGC	(327)	11.0		0.800		6.46		1.51		I| CB
RF-R&D	(905)	11.2		0.727		6.16		1.31		J| CB
NDA mean		11.01		0.7227		6.256		1.498		(cont.)
NDA st dev		0.42		0.0831		0.377		0.143		
NDA N		22		22		21		21		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Ca (g/kg) (cont.)										
NDA mean		11.01		0.7227		6.256		1.498		
NDA st dev		0.42		0.0831		0.377		0.143		
NDA N		22		22		21		21		
	Old statistics									
Median		11.10	(3)	0.7100	(3)	6.230	(3)	1.510	(3)	
MAD		0.20		0.0400		0.230		0.080		
Mean		11.04		0.7174		6.247		1.509		
St Dev		0.28		0.0455		0.304		0.125		
N		16		15		17		17		
Cd (mg/kg)										
ALCONTROL	(1)	0.400	<	0.400	<	0.750		0.4000	<	I| CB
ATVC	(7)	0.500	<	0.500	<	0.761		0.5000	<	U| CB
LABTIUM	(16)	0.340		0.090		0.750		0.0500		I|BAE
FERGUSONIT	(21)	0.340		0.100	<	0.760		0.1000	<	J| D
IUNGPUL	(32)	0.330		0.100		0.720		0.1000	<	J|CB
EKOM	(35)	0.340		0.110		0.700		0.1200		T|ABA
LAF	(37)	0.300	*	0.100		0.600		0.1000	<	U|CB
ENVIROPACE	(49)	1.000	<	1.000	<	1.000	<	1.0000	<	J|CB
ZJKRK	(50)	0.500	<	0.500	<	0.680		0.5000	<	I|AAC
EXTAQS	(52)	0.360		0.120	<	0.790		0.1200	<	I|CB
MLABTW	(70)	0.500	<	0.400	<	0.900	<	0.4000	<	I| CB
ARCHIMEDES	(73)	-		-		0.868	*	0.1700	<	I| CB
ANAMIL	(74)	0.350		0.300	<	0.880	*	0.3000	<	I| CB
US	(83)	0.185	**	0.080		0.287	**	0.0540		
SCHRG	(90)	0.333		0.120		0.642		0.0500	<	I|BAC
GGM	(98)	0.278	*	0.100	<	0.100	<	0.2000	<	I| D
CISCA	(112)	0.340		0.300	<	0.750		0.1700	<	U| D
TYRKEY	(145)	0.298	*	0.101		0.724		0.0400	<	I|BAC
MELILAB	(157)	0.330		0.150	<	0.720		0.1500	<	U| CB
MERLIN	(159)	0.300	*	0.300	<	0.780		0.3000	<	J| CB
PLATINA222	(172)	0.330		0.250	<	0.780		0.2500	<	J|ABC
EXACT	(190)	0.300	*	0.170	<	0.800		0.1700	<	I| CB
ALFA	(206)	0.500	<	0.500	<	0.500	<	0.5000	<	I|ABC
GSISMA	(214)	0.450	**	0.133		1.150	**	0.2650	*	U| CB
BESMOLAX	(217)	1.000	<	1.000	<	2.620	**	1.9100	**	J| CB
CHEMLAB	(228)	2.100	**	0.240	**	4.300	**	3.3000	**	T| CB
UMEG-GB3	(241)	0.350		0.078		0.670		0.0850		I| D
WROCLAB	(263)	0.340		0.110		0.610		0.1200		I|ABA
FEJER	(278)	0.500	<	0.500	<	0.678		0.5000	<	J| CB
JASZ	(280)	0.500	<	0.500	<	0.680		0.5000	<	T|CB
VAS	(281)	0.500	<	0.500	<	0.700		0.5000	<	J|CB
MBT	(291)	0.480	**	0.100		0.620		0.2400		U|AAC
TNO-NITG	(293)	0.420	**	0.120		0.820		0.1200		I| D
ARRET	(298)	8.000	<	8.000	<	8.000	<	8.0000	<	J| CB
SPOOR	(305)	0.350	<	0.350	<	0.590		0.3500	<	Z| CB
FOHS-LAB	(306)	0.360		0.450	**	0.860		0.0400		J|BAF
PLVHOLAB	(308)	0.200	<	0.610	**	0.200	<	0.2000	<	T|AAC
NFVGOE	(321)	0.297	*	0.077		0.703		0.0330		I| CB
GLAGC	(327)	0.380	*	0.110		0.830		0.0400		I|BAF
OLESKA	(335)	0.370		0.100		0.640		0.1000		I|ABG
SKRA	(336)	0.370		0.330	<	0.670		0.3300	<	J|AAC
CHKS	(337)	0.340		0.110	<	0.680		0.1100	<	J|AAA
GDAGRO	(338)	0.330		0.105		0.697		0.1000	<	T|ABC
LABRES	(339)	0.340		0.220	<	0.680		0.2200	<	U|ABC
GLOBI	(340)	0.387	*	0.107		0.733		0.0930		G|AB
MALWA	(343)	0.340		0.200	<	0.710		0.2000	<	J|AAA
ADE	(424)	0.480	**	0.090		1.120	**	0.5200	**	I| CB
NDA mean		0.3385		0.1017		0.7164		0.09030		(cont.)
NDA st dev		0.0291		0.0200		0.0745		0.08626		
NDA N		33		21		41		16		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Cd (mg/kg)	(cont.)									
NDA mean		0.3385		0.1017		0.7164		0.09030		
NDA st dev		0.0291		0.0200		0.0745		0.08626		
NDA N		33		21		41		16		
	Old statistics									
Median		0.3400	(3)	0.1005	(3)	0.7065	(3)	0.08900	(3)	
MAD		0.0100		0.0095		0.0435		0.03300		
Mean		0.3438		0.1017		0.7141		0.09125		
St Dev		0.0128		0.0150		0.0665		0.05757		
N		19		18		34		12		
Co (mg/kg)										
ALCONTROL	(1)	9.00		2.000	<	16.0		11.00		I| CB
ATVC	(7)	9.29		1.000	<	16.9		10.40		U| CB
LABTIUM	(16)	9.11		0.800	*	16.1		7.64		I|CB
EXTAQS	(52)	8.57		0.560		16.3		8.45		I|CB
MLABTW	(70)	8.63		3.000	<	14.2		6.93		I| CB
ARCHIMEDES	(73)	-		-		16.9		10.30		I| CB
ANAMIL	(74)	8.47		2.000	<	16.8		8.29		I| CB
US	(83)	6.57	**	0.550		9.2	**	6.97		
DATE	(89)	9.82		0.670		16.3		8.36		J| CB
GGM	(98)	8.34		1.000	<	14.9		7.09		I| D
CISCA	(112)	8.52		2.000	<	15.7		8.76		U| D
XGCALAFIGA	(135)	9.03		0.610		16.7		8.41		U| CB
TYRKEY	(145)	8.01		4.000	<	13.9		6.28		E|AAC
MELILAB	(157)	8.35		0.630		15.9		8.82		U| CB
MERLIN	(159)	7.70		50.000	<	13.8		7.60		|
EXACT	(190)	9.10		1.000	<	16.0		7.70		I| CB
HULESCH	(197)	11.40	**	1.950	**	17.4		10.72		J| CB
CHEMLAB	(228)	10.00		1.000	<	17.0		11.00		T| CB
UMEG-GB3	(241)	9.46		0.460		17.1		8.65		I| CB
FEJER	(278)	8.95		0.600		16.4		8.85		J| CB
JASZ	(280)	9.00		0.610		17.0		8.80		T|CB
VAS	(281)	8.72		0.610		15.9		8.32		J|CB
MBT	(291)	10.80	**	2.000	<	16.0		13.00	**	U| CB
TNO-NITG	(293)	84.02	**	135.250	**	28.7	**	23.80	**	I| D
ARRET	(298)	8.63		3.000	<	14.1		6.53		J| CB
ANALGEO	(300)	9.00		2.000	<	16.0		8.00		U|AAC
SPOOR	(305)	8.60		2.000	<	14.0		9.40		Z| CB
PLVHOLAB	(308)	0.63	**	14.500	**	11.1	**	0.63	**	
NFVGOE	(321)	9.49		0.570		17.6		9.81		I| CB
GLAGC	(327)	9.55		0.670		17.4		9.62		I| CB
NDA mean		8.895		0.6050		16.21		8.565		
NDA st dev		0.678		0.0812		1.27		1.483		
NDA N		29		15		30		30		
	Old statistics									
Median		8.975	(3)	0.6100	(3)	16.10	(3)	8.450	(3)	
MAD		0.390		0.0400		0.80		0.850		
Mean		8.889		0.5945		16.01		8.619		
St Dev		0.551		0.0594		1.14		1.333		
N		24		11		27		27		
Cr (mg/kg)										
ALCONTROL	(1)	69.0	*	15.00	<	87.0	**	59.0	*	I| CB
ATVC	(7)	70.1	*	5.40		93.9	**	63.8	**	U| CB
LABTIUM	(16)	49.9		4.70		59.6	*	33.1		I|CB
FERGUSONIT	(21)	63.0		4.04	**	82.9	**	53.9		J| D
IUNGPUL	(32)	59.2		5.61		71.2		46.1		J|CB
EKOM	(35)	56.5		5.40		66.9		32.0		T|AAA
LAF	(37)	59.0		7.30	**	79.0	*	59.0	*	U|CB
ENVIROPACE	(49)	61.7		5.85		73.5		44.2		J|CB
ZJKRK	(50)	59.0		5.30		66.9		36.7		I|AAA
NDA mean		57.28		5.366		69.04		39.46		(cont.)
NDA st dev		6.43		0.534		6.44		9.15		
NDA N		46		41		48		48		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Cr (mg/kg)	(cont.)									
EXTAQS	(52)	59.6		4.93		66.5		37.5		I|CB
MLABTW	(70)	50.1		5.00	<	59.6	*	31.9		I| CB
ARCHIMEDES	(73)	-		-		71.8		47.7		I| CB
ANAMIL	(74)	57.1		4.88		77.2		40.8		I| CB
US	(83)	37.5	**	4.51	*	32.5	**	22.7		
DATE	(89)	56.7		7.15	**	65.6		39.5		J| CB
SCHRG	(90)	-		-		72.0		42.8		I|AAA
GGM	(98)	50.0		10.00	<	60.5		31.8		I| D
CISCA	(112)	66.8	*	5.64		82.6	**	49.6		U| D
XGCALAFIGA	(135)	58.0		4.64		76.4		42.9		U| CB
TYRKEY	(145)	48.7	*	5.45		55.1	**	27.5		I|ABC
MELILAB	(157)	58.4		5.39		67.9		47.2		U| CB
MERLIN	(159)	52.3		5.70		72.3		41.3		|
EXACT	(190)	52.0		10.00	<	61.0		33.0		I| CB
HULESCH	(197)	69.2	*	21.32	**	78.9	*	58.0	*	J| CB
GSISMA	(214)	75.0	**	7.68	**	106.2	**	71.2	**	U| CB
BESMOLAX	(217)	51.1		5.69		60.6		38.2		I| CB
CHEMLAB	(228)	53.0		5.00		67.0		39.0		T| CB
UMEG-GB3	(241)	60.3		5.20		70.7		40.0		I| CB
WROCLAB	(263)	55.8		5.40		66.3		30.8		I|AAA
FEJER	(278)	56.3		5.32		69.3		41.5		J| CB
JASZ	(280)	55.4		5.28		67.0		39.0		T|CB
VAS	(281)	57.9		5.50		70.8		43.8		J|CB
MBT	(291)	41.8	**	5.72		68.9		37.9		U| CB
ARRET	(298)	46.4	*	5.65		60.9		35.9		J| CB
ANALGEO	(300)	58.0		4.00	**	71.0		44.0		U|AAB
SPOOR	(305)	70.0	*	15.00	<	80.0	*	62.0	**	Z| CB
FOHS-LAB	(306)	65.6		7.12	**	70.8		38.5		J|ABC
PLVHOLAB	(308)	5.2	**	61.70	**	50.4	**	5.2	**	T|AAD
NFVGOE	(321)	63.2		5.02		80.6	*	49.1		I| CB
GLAGC	(327)	65.6		7.10	**	82.0	*	50.9		I| CB
SKRA	(336)	57.7		5.40		69.7		32.2		J|AAC
CHKS	(337)	57.4		5.40		68.6		36.9		J|AAA
GDAGRO	(338)	55.1		5.92		68.1		33.5		T|AAC
LABRES	(339)	57.5		5.50		68.0		33.0		U|ABA
GLOBI	(340)	55.0		6.67	**	53.3	**	32.5		T|AAA
MALWA	(343)	56.6		5.80		65.4		35.4		J|AAA
ADE	(424)	48.1	*	4.80		54.0	**	28.6		
RF-R&D	(905)	57.9		5.30		69.2		44.7		J| CB
NDA mean		57.28		5.366		69.04		39.46		
NDA st dev		6.43		0.534		6.44		9.15		
NDA N		46		41		48		48		
	Old statistics									
Median		57.45	(3)	5.400	(3)	68.60	(3)	38.50	(3)	
MAD		1.90		0.225		2.20		5.50		
Mean		57.12		5.360		68.45		38.72		
St Dev		4.04		0.340		4.13		6.90		
N		34		30		31		41		
Cu (mg/kg)										
ALCONTROL	(1)	21.0		5.10	*	34.0		15.0		I| CB
ATVC	(7)	21.9		6.97		34.9		15.9		U| CB
REDUIT	(15)	20.5		6.11		32.5		13.5		I|AAC
LABTIUM	(16)	23.0		7.10		36.9		14.7		I|CB
FERGUSONIT	(21)	22.8		7.45		35.1		17.4		J| D
IUNGPUL	(32)	23.0		6.59		34.6		16.1		J|CB
EKOM	(35)	22.8		6.90		34.8		15.3		T|AAA
LAF	(37)	23.0		6.30		36.0		16.0		U|CB
ENVIROPACE	(49)	21.8		10.00	<	34.8		13.5		J|CB
ZJKRK	(50)	23.9		7.00		34.8		15.5		I|AAA
EXTAQS	(52)	22.1		6.39		34.5		15.3		I|CB
NDA mean		22.58		6.627		34.93		15.13		(cont.)
NDA st dev		1.08		0.811		1.75		1.67		
NDA N		56		53		57		57		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Cu (mg/kg)	(cont.)									
BUNASOLS	(58)	21.5		5.30	*	32.7		18.4	*	
MLABTW	(70)	21.1		6.00	<	32.9		12.9		I| CB
ARCHIMEDES	(73)	-		-		38.8	**	17.8		I| CB
ANAMIL	(74)	24.6		5.43	*	39.4	**	16.1		I| CB
US	(83)	19.3	**	7.43		24.9	**	11.8	*	
DATE	(89)	23.7		6.01		34.1		13.3		J| CB
SCHRG	(90)	22.2		6.30		34.8		16.8		I|AAA
GGM	(98)	20.9		5.39	*	34.3		13.3		I| D
CISCA	(112)	21.9		6.44		36.4		16.2		U| D
BCIMUZPOL	(132)	22.4		8.70	**	35.9		17.7		J|AAC
XGCALAFIGA	(135)	21.0		4.95	**	33.3		14.0		U| CB
TYRKEY	(145)	23.9		7.59		38.4	*	16.1		I|ABA
MELILAB	(157)	22.4		6.42		35.2		16.8		U| CB
MERLIN	(159)	23.0		10.00	<	37.5	*	15.8		|
PLATINA222	(172)	20.6		5.19	*	32.3	*	13.2		J|AAC
EXACT	(190)	22.0		5.70		36.0		13.0		I| CB
UMADAKAR	(196)	20.0	**	4.00	**	40.0	**	22.0	**	I|AAA
HULESCH	(197)	19.4	**	6.19		30.1	**	11.8	*	J| CB
ALFA	(206)	22.9		6.78		34.5		14.3		I|AAA
GSISMA	(214)	24.4		8.59	**	37.9	*	17.3		U| CB
CHEMLAB	(228)	22.0		6.20		34.0		14.0		T| CB
UMEG-GB3	(241)	22.1		6.74		35.1		14.9		I| CB
WROCLAB	(263)	22.8		7.00		34.8		15.9		I|AAA
IGEOLUNAM	(273)	21.5		4.00	**	34.5		13.5		J|AAA
FEJER	(278)	22.8		6.82		35.1		14.5		J| CB
JASZ	(280)	22.9		6.93		35.0		14.1		T|CB
VAS	(281)	22.6		7.15		34.2		15.2		J|CB
MBT	(291)	17.9	**	6.72		34.1		12.6		U|AAC
TNO-NITG	(293)	24.1		8.34	*	43.7	**	18.2		I| D
ARRET	(298)	24.3		10.20	**	36.0		14.8		J| CB
ANALGEO	(300)	22.4		7.10		34.8		15.9		U|AAC
SPOOR	(305)	25.0	**	5.40	*	37.0		20.0	**	Z| CB
FOHS-LAB	(306)	23.8		6.75		38.7	**	15.7		J|ABC
PLVHOLAB	(308)	6.3	**	28.80	**	16.7	**	6.3	**	T|AAC
NFVGOE	(321)	24.8	**	6.66		39.7	**	17.9		I| CB
GLAGC	(327)	23.9		7.60		37.0		16.2		I| CB
OLESKA	(335)	23.0		5.77		36.4		16.1		I|AAG
SKRA	(336)	23.1		6.87		35.3		15.1		J|AAC
CHKS	(337)	22.8		6.63		35.0		15.8		J|AAA
GDAGRO	(338)	22.8		6.90		33.4		15.2		T|AAC
LABRES	(339)	23.5		7.00		35.0		15.5		U|ABA
GLOBI	(340)	22.3		6.70		33.3		15.0		G|AA
MALWA	(343)	22.6		6.90		33.8		14.1		J|AAA
ADE	(424)	21.4		7.60		32.0	*	13.2		
LABFOR	(846)	17.4	**	5.35	*	20.5	**	10.5	**	
RF-R&D	(905)	21.8		9.22	**	27.5	**	13.5		J| CB
NDA mean		22.58		6.627		34.93		15.13		
NDA st dev		1.08		0.811		1.75		1.67		
NDA N		56		53		57		57		
	Old statistics									
Median		22.70	(3)	6.780	(3)	34.80	(3)	15.25	(3)	
MAD		0.70		0.320		0.60		0.95		
Mean		22.56		6.749		34.80		15.20		
St Dev		1.02		0.480		1.11		1.44		
N		48		37		41		50		
Fe (g/kg)										
ALCONTROL	(1)	22.0		1.50		47.0		47.0		I| CB
LABTIUM	(16)	20.8		1.35		49.1		43.4		I|CB
FERGUSONIT	(21)	20.5		1.75	*	47.8		48.6		J| CB
EKOM	(35)	21.5		1.52		48.7		47.3		T|AAA
NDA mean		21.35		1.467		49.19		46.77		(cont.)
NDA st dev		1.01		0.160		2.17		2.84		
NDA N		41		41		40		40		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Fe (g/kg) (cont.)										
ENVIROPACE	(49)	22.7		1.51		51.7		48.6		J|CB
ZJKRK	(50)	22.0		1.60		49.0		47.0		I|AAA
EXTAQS	(52)	21.9		1.48		49.2		47.4		I|CB
BUNASOLS	(58)	6.8	**	0.92	**	31.4	**	33.7	**	
MLABTW	(70)	20.6		1.34		41.6	**	36.9	**	I| CB
ANAMIL	(74)	19.9		1.33		48.3		44.4		I| CB
US	(83)	16.1	**	1.17	*	36.4	**	33.8	**	
DATE	(89)	22.0		1.69		56.6	**	49.8		J| CB
SCHRG	(90)	20.9		1.39		44.3	*	42.1		I|AAC
CISCA	(112)	21.1		1.54		49.9		47.0		U| D
BCIMUZPOL	(132)	24.8	**	2.00	**	58.3	**	57.4	**	J|AAC
XGCALAFIGA	(135)	20.5		1.28		48.6		45.5		U| CB
MELILAB	(157)	22.9		1.48		47.5		45.3		U| CB
PLATINA222	(172)	21.9		1.22	*	56.9	**	51.8		J|AAC
HULESCH	(197)	21.3		1.31		54.3	**	47.2		J| CB
ALFA	(206)	20.5		1.48		51.0		45.5		I|AAA
GSISMA	(214)	24.7	**	1.91	**	57.4	**	56.5	**	U| CB
BESMOLAX	(217)	19.5		1.53		44.7	*	45.9		I| CB
WROCLAB	(263)	21.7		1.45		49.5		47.5		I|AAA
IGEOLUNAM	(273)	20.4		1.27		47.4		41.6		J|AAA
FEJER	(278)	21.5		1.43		49.1		44.0		J| CB
JASZ	(280)	21.4		1.45		48.8		45.0		T|CB
VAS	(281)	22.1		1.52		50.5		41.0	*	J|CB
ARRET	(298)	28.4	**	1.37		81.5	**	63.5	**	J| CB
FOHS-LAB	(306)	19.2	*	1.26		50.8		45.3		J|ABC
PLVHOLAB	(308)	20.4		1.67		38.3	**	46.7		
NFVGOE	(321)	22.6		1.45		52.6	*	50.3		I| CB
GLAGC	(327)	22.2		1.90	**	50.6		48.9		I| CB
OLESKA	(335)	21.1		1.65		50.3		45.3		I|AAG
SKRA	(336)	21.6		1.47		49.3		46.8		J|AAC
CHKS	(337)	21.6		1.48		49.2		49.0		J|AAA
GDAGRO	(338)	21.0		1.50		48.5		47.9		T|AAC
LABRES	(339)	21.0		1.60		48.6		48.0		U|ABA
GLOBI	(340)	22.5		1.50		48.3		50.0		G|AA
MALWA	(343)	21.2		1.49		48.2		43.9		J|AAA
LABFOR	(846)	21.8		1.80	*	51.5		50.7		
RF-R&D	(905)	19.3		1.41		-		-		J| CB
NDA mean		21.35		1.467		49.19		46.77		
NDA st dev		1.01		0.160		2.17		2.84		
NDA N		41		41		40		40		
	Old statistics									
Median		21.40	(3)	1.480	(3)	49.10	(3)	47.00	(3)	
MAD		0.60		0.053		0.80		1.70		
Mean		21.31		1.464		49.20		46.81		
St Dev		0.87		0.111		1.24		2.43		
N		35		33		27		33		
Hg (µg/kg)										
ALCONTROL	(1)	50.0	<	50.0	<	80.0		50.0		I| CB
LABTIUM	(16)	60.0	*	20.0		90.0		50.0		I|CB
FERGUSONIT	(21)	85.0	**	50.0	<	100.0		75.0	**	J| G
IUNGPUL	(32)	50.1		20.9		102.0		51.1		
EKOM	(35)	49.1		19.1		93.1		50.6		
LAF	(37)	46.0		20.0		74.0		43.0	*	U|Z
ENVIROPACE	(49)	2500.0	<	2500.0	<	2500.0	<	2500.0	<	I|G
ZJKRK	(50)	50.4		19.1		92.4		50.8		
EXTAQS	(52)	64.0	*	28.0	**	100.0		63.0	*	I|G
MLABTW	(70)	200.0	<	200.0	<	200.0	<	200.0	<	I| G
ARCHIMEDES	(73)	-		-		96.8		112.0	**	I| G
ANAMIL	(74)	56.6	*	50.0	<	91.5		53.5		I| CB
US	(83)	225.0	**	81.0	**	434.0	**	232.0	**	
NDA mean		50.70		20.11		91.85		52.70		(cont.)
NDA st dev		5.69		1.83		11.32		5.73		
NDA N		24		18		29		26		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Hg (µg/kg) (cont.)										
GGM	(98)	100.0	<	100.0	<	100.0	<	100.0	<	I| D
CISCA	(112)	75.5	**	50.0	<	78.5		50.0	<	U| D
MERLIN	(159)	48.8		50.0	<	87.8		60.0		J| F
PLATINA222	(172)	50.0	<	50.0	<	113.0		54.5		J| G
EXACT	(190)	50.0	<	50.0	<	60.0	**	50.0	<	U| G
CHEMLAB	(228)	50.0	<	50.0	<	80.0		50.0	<	T| G
UMEG-GB3	(241)	46.7		23.1		85.3		45.6		X| G
WROCLAB	(263)	49.5		24.9	**	91.8		55.0		Z|Z
FEJER	(278)	500.0	<	500.0	<	500.0	<	500.0	<	J| CB
JASZ	(280)	500.0	<	500.0	<	500.0	<	500.0	<	
VAS	(281)	500.0	<	500.0	<	500.0	<	500.0	<	
MBT	(291)	50.0		18.5		90.0		52.0		U| G
SPOOR	(305)	500.0	**	100.0	<	100.0		64.0	*	Z| CB
FOHS-LAB	(306)	52.0		20.0		100.0		58.0		J| Z
PLVHOLAB	(308)	60.0	*	50.0	<	100.0		50.0		T|G
GLAGC	(327)	46.3		19.1		83.5		47.7		I| G
OLESKA	(335)	51.9		22.4		91.5		49.1		Z| Z
CHKS	(337)	48.9		19.0		92.2		54.0		
GDAGRO	(338)	49.0		27.0	**	82.7		54.2		$|G
LABRES	(339)	50.6		20.6		94.4		54.1		$|Z
ADE	(424)	35.0	**	20.0		40.0	**	30.0	**	
LABAMB	(878)	60.0	*	25.0	**	100.0		60.0		Z| F
NDA mean		50.70		20.11		91.85		52.70		
NDA st dev		5.69		1.83		11.32		5.73		
NDA N		24		18		29		26		
	Old statistics									
Median		49.30	(3)	20.00	(3)	92.00	(3)	52.00	(3)	
MAD		0.95		0.90		8.00		2.10		
Mean		49.24		20.14		91.94		52.64		
St Dev		1.87		1.35		8.90		3.88		
N		14		13		26		19		
K (mg/kg)										
ALCONTROL	(1)	5600	*	380		9400	**	9400	**	I| CB
REDUIT	(15)	4680		450	*	2720		5240		I|CA
LABTIUM	(16)	2020		260		2730		2270	**	I|CB
ENVIROPACE	(49)	3680		332		5240		4750		
EXTAQS	(52)	3780		3330	**	5740		4830		I|CB
BUNASOLS	(58)	1120	**	113	**	2320	*	2420	**	
DATE	(89)	3670		318		4780		4310		J| CB
CISCA	(112)	5120		386		-		-		U| D
BCIMUZPOL	(132)	6950	**	748	**	12090	**	1210	**	J|CA
XGCALAFIGA	(135)	3300		298		6220		5060		U| CB
HULESCH	(197)	2690		304		3280		2930		J|AAA
FEJER	(278)	3640		340		4900		4120		J| CB
JASZ	(280)	3560		310		5060		3800		T|CB
VAS	(281)	3700		332		5260		4200		J|CB
PLVHOLAB	(308)	3860		347		4480		4930		
NFVGOE	(321)	4220		360		6180		5630		I| CB
GLAGC	(327)	4430		376		6130		5680		I| CB
RF-R&D	(905)	3090		232		5120		4930		J| CB
NDA mean		3766		334.4		4930		4621		
NDA st dev		835		55.2		1463		954		
NDA N		18		18		17		17		
	Old statistics									
Median		3683	(3)	332.0	(3)	5090	(3)	4830	(3)	
MAD		384		27.8		630		517		
Mean		3697		326.8		4846		4648		
St Dev		766		44.4		1181		764		
N		15		14		14		13		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
La (mg/kg)										
LABTIUM	(16)	11.4		1.92		28.8		19.0		I|CB
Median		11.40	(1)	1.920	(1)	28.80	(1)	19.00	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
Li (mg/kg)										
LABTIUM	(16)	20.1		1.00		39.3		29.3		I|CB
DATE	(89)	27.4		1.76		44.0		38.3		J| CB
BCIMUZPOL	(132)	19.6		1.20		45.5		48.2		J|AAC
FEJER	(278)	25.3		1.69		52.2		47.1		J| CB
PLVHOLAB	(308)	26.7		1.63		49.6		56.9		
GLAGC	(327)	27.2		1.80		60.2		55.3		I| CB
Median		26.00	(1)	1.660	(1)	47.55	(1)	47.65	(1)	
MAD		1.30		0.120		4.12		8.45		
N		6		6		6		6		
Mg (mg/kg)										
ALCONTROL	(1)	8000		260	**	5600		5700		I| CB
REDUIT	(15)	6720	**	2037	**	6360		5820		I|AAC
LABTIUM	(16)	7910		187	**	5010		4580	**	I|CB
ENVIROPACE	(49)	8780		245	*	6250		5710		J|CB
EXTAQS	(52)	8580		216		6120		5740		I|CB
BUNASOLS	(58)	6190	**	103	**	3070	**	3940	**	
MLABTW	(70)	7770		189	**	5150		4530	**	I| CB
ANAMIL	(74)	8080		214		6490		5510		I| CB
DATE	(89)	9340		223		4510		5180	*	J| CB
CISCA	(112)	8460		232		-		-		U| D
BCIMUZPOL	(132)	7130	*	2465	**	3470	**	3490	**	J|AAC
XGCALAFIGA	(135)	8640		219		6520		5900		U| CB
MELILAB	(157)	9050		229		6650		6020		U| CB
HULESCH	(197)	7580		175	**	4510		4150	**	J| CB
FEJER	(278)	8550		225		5960		5900		J| CB
JASZ	(280)	8400		221		5880		5510		T|CB
VAS	(281)	8720		228		6120		5800		J|CB
PLVHOLAB	(308)	8220		220		5120		6590	**	
NFVGOE	(321)	8680		220		6580		6300	*	I| CB
RF-R&D	(905)	7250		265	**	6060		5880		J| CB
NDA mean		8318		222.9		5901		5791		
NDA st dev		627		12.9		826		286		
NDA N		20		20		19		19		
	Old statistics									
Median		8457	(3)	221.0	(3)	6061	(3)	5800	(3)	
MAD		318		4.0		458		100		
Mean		8353		222.5		5816		5773		
St Dev		538		5.6		708		160		
N		17		11		17		11		
Mn (mg/kg)										
ALCONTROL	(1)	960	**	50.0	<	450		230	**	I| CB
REDUIT	(15)	730	**	27.1	**	199	**	89	**	I|AAC
LABTIUM	(16)	1020		44.7		437		163		I|CB
FERGUSONIT	(21)	980	*	63.7	**	399		195		J| D
IUNGPUL	(32)	1050		45.2		426		-		J|CB
EKOM	(35)	1040		45.3		212	**	180		T|AAA
ENVIROPACE	(49)	1060		44.9		420		167		J|CB
ZJKRK	(50)	1100	**	46.5		408		155		I|AAA
EXTAQS	(52)	1030		44.7		450		189		I|CB
BUNASOLS	(58)	1130	**	52.1	*	390	*	143		
ANAMIL	(74)	930	**	38.5	*	418		166		I| CB
NDA mean		1038		44.80		430.4		172.2		(cont.)
NDA st dev		28		4.01		23.1		22.1		
NDA N		41		40		40		39		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Mn (mg/kg)	(cont.)									
US	(83)	680	**	42.0		241	**	120	*	
DATE	(89)	1080	*	56.7	**	426		172		J| CB
SCHRG	(90)	1140	**	49.0		477	*	165		I|AAA
CISCA	(112)	1030		53.0	*	-		-		U| D
BCIMUZPOL	(132)	0	**	0.1	**	0	**	0	**	J|AAC
XGCALAFIGA	(135)	980	*	39.0		433		165		U| CB
TYRKEY	(145)	1050		47.5		450		168		I|AAA
MELILAB	(157)	1030		44.6		428		157		U| CB
PLATINA222	(172)	1000	*	32.2	**	425		161		J|AAC
UMADAKAR	(196)	1050		49.0		437		206		I|AAA
HULESCH	(197)	980	*	38.6	*	346	**	135		J| CB
ALFA	(206)	1040		43.0		424		182		I|AAA
GSISMA	(214)	1090	*	65.3	**	498	**	256	**	U| CB
WROCLAB	(263)	1040		44.8		441		190		I|AAA
IGEOLUNAM	(273)	1050		42.0		450		173		J|AAA
FEJER	(278)	1040		45.5		415		148		J| CB
JASZ	(280)	1030		44.9		418		160		T|CB
VAS	(281)	1100	**	46.3		458		150		J|CB
ANALGEO	(300)	1030		42.0		435		175		U|AAD
PLVHOLAB	(308)	950	**	41.6		350	**	198		
NFVGOE	(321)	1040		43.0		450		187		I| CB
GLAGC	(327)	1030		61.0	**	452		196		I| CB
OLESKA	(335)	960	**	57.4	**	429		182		I|AAG
SKRA	(336)	1040		44.3		423		183		J|AAC
CHKS	(337)	1050		47.7		414		174		J|AAA
GDAGRO	(338)	1030		46.3		437		192		T|AAC
LABRES	(339)	1050		47.0		420		193		U|ABA
GLOBI	(340)	1060		44.0		450		166		G|AA
MALWA	(343)	1020		43.3		417		146		J|AAA
RF-R&D	(905)	1060		62.6	**	403		170		J| CB
NDA mean		1038		44.80		430.4		172.2		
NDA st dev		28		4.01		23.1		22.1		
NDA N		41		40		40		39		
	Old statistics									
Median		1038	(3)	44.80	(3)	428.0	(3)	171.2	(3)	
MAD		8		1.50		10.0		11.5		
Mean		1039		44.74		430.4		172.1		
St Dev		11		2.33		15.7		17.4		
N		24		27		31		34		
Mo (mg/kg)										
LABTIUM	(16)	1.010		0.140		0.780		0.660		I|CB
IUNGPUL	(32)	0.940		0.500	<	0.540		0.500	<	
EXTAQS	(52)	1.160		0.140		0.980		0.830		I|D
ARCHIMEDES	(73)	-		-		1.500	<	1.500	<	I| CB
ANAMIL	(74)	1.990	**	1.000	<	1.000	<	1.000	<	I| CB
US	(83)	0.578		0.117		0.187		0.178		
GGM	(98)	3.000	<	3.000	<	3.000	<	3.000	<	I| D
CISCA	(112)	3.000	<	3.000	<	1.500	<	1.500	<	U| D
CHEMLAB	(228)	1.000	<	1.000	<	1.000	<	1.000	<	T| CB
FEJER	(278)	1.000	<	1.000	<	1.000	<	1.000	<	J| CB
JASZ	(280)	2.500	<	2.500	<	2.500	<	2.500	<	T|CB
VAS	(281)	1.110		1.000	<	1.000	<	1.000	<	J|CB
ARRET	(298)	4.000	<	4.000	<	5.410		4.250		J| CB
SPOOR	(305)	1.500	<	1.500	<	1.500	<	1.500	<	Z| CB
PLVHOLAB	(308)	0.770		0.400		0.340		0.410		
GLAGC	(327)	0.850		0.130		0.490		0.430		I| CB
NDA mean		0.9353		-		-		-		(cont.)
NDA st dev		0.2270		-		-		-		
NDA N		8		5		7		6		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Mo (mg/kg) (cont.)										
NDA mean		0.9353		-		-		-		
NDA st dev		0.2270		-		-		-		
NDA N		8		5		7		6		
	Old statistics									
Median		0.9400	(2)	0.1400	(1)	0.5400	(1)	0.5450	(1)	
MAD		0.1700		0.0100		0.2400		0.2100		
N		7		5		7		6		
N (g/kg)										
FELDA	(13)	1.72	**	1.00	**	2.87	**	2.04	**	L|E
WAGENINGEN	(14)	2.19		1.17		4.18		2.52		L| E
REDUIT	(15)	0.21	**	0.14	**	0.35	**	0.21	**	
SPNDTKLABS	(31)	2.39	**	1.22		3.85		2.44		L| O
EKOM	(35)	2.05		1.20		3.80		2.40		
LAF	(37)	2.30	*	1.40	**	4.30	**	2.70	**	L|O
SOILINST	(43)	1.85	*	0.91	**	3.90		2.31		X|Z
MSIRI	(48)	2.14		1.08		4.13		2.50		L| O
ZJKRK	(50)	2.05		1.19		3.75		2.46		
LAROL	(56)	2.07		1.27		3.80		2.42		
BUNASOLS	(58)	2.34	*	1.32		4.17		2.50		
AL-West	(78)	2.08		1.39	*	4.11		2.49		L| E
SAINTE-FOY	(80)	2.15		1.14		4.18		2.45		L| E
UAK MARDI	(120)	1.90		0.90	**	3.70		2.20	*	I|CB
BCIMUZPOL	(132)	2.39	**	1.57	**	3.96		2.60	*	J|E
ANALGIR	(199)	2.02		1.79	**	3.92		2.44		L| O
MARELI	(204)	2.10		1.18		3.80		2.37		L| O
WROCLAB	(263)	2.08		1.20		3.97		2.45		
AGROLAB-SL	(264)	2.30	*	1.30		3.95		2.55		L|O
LUNUWILA	(270)	2.31	*	1.09		3.92		2.39		L|E
SPAL	(282)	2.00		1.00	**	3.30	**	2.20	*	L|E
FOHS-LAB	(306)	2.04		1.15		4.05		2.44		L| E
SMBPLNUS	(315)	2.03		1.37	*	3.47	*	2.21	*	J|O
SRINAGAR	(320)	2.15		1.23		4.05		2.48		$| Z
FVABW	(322)	1.94		1.15		3.62		2.16	**	X| RC
SMART	(326)	2.00		1.01	*	3.32	**	2.24	*	
P-2000RG	(334)	2.02		1.21		3.64		2.27	*	U|O
SKRA	(336)	2.10		1.26		3.78		2.45		
CHKS	(337)	2.06		1.22		3.83		2.40		
LABRES	(339)	2.00		1.20		3.80		2.40		L|O
MALWA	(343)	2.02		1.24		3.80		2.42		L|O
LVDC	(344)	2.09		1.15		3.96		2.43		L| O
ADE	(424)	1.77	**	1.03	*	3.63		2.05	**	X| Z
PLZMBZEM	(806)	2.06		1.23		3.91		2.45		L|O
IRRI	(843)	1.96		1.02	*	3.85		2.28	*	X| Z
LABAMB	(878)	2.54	**	1.70	**	3.79		2.74	**	L| O
MICHAEL	(904)	-		1.24		-		-		Z| O
LABGLEB	(922)	2.15		1.14		3.86		2.44		
AZBY	(976)	1.92		1.18		3.56		2.07	**	Z| O
NDA mean		2.063		1.189		3.869		2.424		
NDA st dev		0.127		0.094		0.189		0.107		
NDA N		38		39		38		38		
	Old statistics									
Median		2.050	(3)	1.200	(3)	3.855	(3)	2.440	(3)	
MAD		0.048		0.040		0.100		0.030		
Mean		2.051		1.198		3.882		2.442		
St Dev		0.073		0.058		0.166		0.051		
N		27		25		32		24		
Na (mg/kg)										
ALCONTROL	(1)	50.0	<	50.0	<	110	**	650	*	I| CB
LABTIUM	(16)	51.1	*	20.0	<	137	*	866		I|CB
NDA mean		92.79		20.94		232.9		980.2		(cont.)
NDA st dev		19.45		4.15		45.4		122.0		
NDA N		14		12		15		15		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Na (mg/kg) (cont.)										
ENVIROPACE	(49)	100.0	<	100.0	<	235		907		J|CB
EXTAQS	(52)	103.0		43.3	**	249		1060		I|CB
BUNASOLS	(58)	13.7	**	172.2	**	266		330	**	
DATE	(89)	99.1		18.7		175	*	824		J| CB
CISCA	(112)	129.0	*	20.3		-		-		U| D
XGCALAFIGA	(135)	89.9		32.0	*	281		974		U| CB
HULESCH	(197)	72.0		17.9		175	*	991		J|AAA
FEJER	(278)	92.1		22.1		232		1060		J| CB
JASZ	(280)	88.0		20.5		220		960		T|CB
VAS	(281)	92.0		23.1		240		900		J|CB
PLVHOLAB	(308)	161.0	**	54.1	**	239		1070		
NFVGOE	(321)	83.0		20.0		233		1007		I| CB
GLAGC	(327)	108.0		23.0		271		1040		I| CB
RF-R&D	(905)	171.1	**	-		563	**	1222		J| CB
NDA mean		92.79		20.94		232.9		980.2		
NDA st dev		19.45		4.15		45.4		122.0		
NDA N		14		12		15		15		
	Old statistics									
Median		92.00	(3)	20.40	(3)	239.5	(3)	991.0	(3)	
MAD		7.12		1.72		8.5		69.0		
Mean		91.91		20.70		246.6		990.9		
St Dev		10.77		1.92		19.7		104.9		
N		9		8		10		13		
Ni (mg/kg)										
ALCONTROL	(1)	37.0		3.00	<	45.0		24.0		I| CB
ATVC	(7)	39.1		2.00	<	48.6		25.0		U| CB
LABTIUM	(16)	40.1		1.12	**	44.9		16.8		I|CB
FERGUSONIT	(21)	38.2		1.95	*	48.2		24.6		J| D
IUNGPUL	(32)	39.6		1.51		45.0		22.2		J|CB
EKOM	(35)	39.0		1.54		44.7		18.3		T|ABA
LAF	(37)	34.0	**	2.30	**	41.0		19.0		U|CB
ENVIROPACE	(49)	39.0		5.00	<	47.1		20.7		J|CB
ZJKRK	(50)	40.7		2.50	<	44.3		20.8		I|AAC
EXTAQS	(52)	40.7		1.45		47.8		20.5		I|CB
MLABTW	(70)	37.3		5.00	<	40.4		15.3		I| CB
ARCHIMEDES	(73)	-		-		47.5		23.0		I| CB
ANAMIL	(74)	40.0		2.00	<	49.7		19.5		I| CB
DATE	(89)	38.1		1.35	*	43.8		18.2		J| CB
SCHRG	(90)	37.4		-		47.1		14.9		I|AAC
GGM	(98)	38.9		3.00	<	44.8		16.4		I| D
CISCA	(112)	37.7		2.00	<	47.9		22.7		U| D
XGCALAFIGA	(135)	38.2		1.01	**	46.4		19.5		U| CB
TYRKEY	(145)	48.4	**	3.00	<	50.0		15.9		I|ABC
MELILAB	(157)	39.7		3.24	**	45.3		20.7		U| CB
MERLIN	(159)	34.2	**	15.00	<	43.2		19.6		|
PLATINA222	(172)	38.3		3.50	<	41.7		15.6		J|AAC
EXACT	(190)	39.0		3.00	<	43.0		17.0		I| CB
ALFA	(206)	39.0		1.58		42.4		14.1		I|ABC
GSISMA	(214)	39.0		1.92	*	49.7		27.7	**	U| CB
BESMOLAX	(217)	32.4	**	1.54		32.5	**	11.4	**	I| CB
CHEMLAB	(228)	37.0		3.00	<	46.0		21.0		T| CB
UMEG-GB3	(241)	41.1		1.33	*	47.6		20.1		I| CB
WROCLAB	(263)	36.8		1.60		42.2		18.2		I|AAC
IGEOLUNAM	(273)	36.5		6.00	**	41.5		17.5		J|AAC
FEJER	(278)	38.9		1.58		43.9		16.8		J| CB
JASZ	(280)	39.0		1.67		43.0		18.0		
VAS	(281)	38.6		1.65		43.6		18.6		
MBT	(291)	31.2	**	2.00	<	43.7		17.8		U| CB
TNO-NITG	(293)	42.3	**	2.63	**	50.5		27.4	**	I| D
ARRET	(298)	43.5	**	5.00	<	46.5		17.7		J| CB
NDA mean		39.09		1.570		45.15		18.97		(cont.)
NDA st dev		1.49		0.173		2.94		3.07		
NDA N		49		28		50		49		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Ni (mg/kg)	(cont.)									
ANALGEO	(300)	39.0		1.00	**	43.0		17.0		U|AAC
SPOOR	(305)	39.0		3.00	<	44.0		25.0		Z| CB
FOHS-LAB	(306)	42.8	**	20.00	<	53.8	**	20.0	<	J|ABC
PLVHOLAB	(308)	39.9		1.64		39.9		24.5		
NFVGOE	(321)	42.9	**	1.39	*	52.0	**	24.4		I| CB
GLAGC	(327)	43.5	**	1.90	*	51.2		23.8		I| CB
OLESKA	(335)	40.0		1.59		46.5		18.8		I|ABG
SKRA	(336)	39.3		1.60		44.3		18.6		J|AAC
CHKS	(337)	39.0		2.00	<	45.9		19.6		J|AAA
GDAGRO	(338)	38.8		1.60	<	46.9		19.0		T|ABC
LABRES	(339)	40.0		1.60		45.0		19.0		U|ABA
GLOBI	(340)	41.7		1.60		43.0		16.7		G|AB
MALWA	(343)	40.4		2.00	<	44.3		18.5		J|AAA
ADE	(424)	31.0	**	1.60		34.7	**	13.6		U| CB
NDA mean		39.09		1.570		45.15		18.97		
NDA st dev		1.49		0.173		2.94		3.07		
NDA N		49		28		50		49		
	Old statistics									
Median		39.00	(3)	1.600	(3)	44.95	(3)	18.90	(3)	
MAD		0.82		0.020		1.95		1.90		
Mean		38.97		1.584		45.26		19.31		
St Dev		1.21		0.056		2.74		3.01		
N		38		15		46		46		
P (mg/kg)										
ALCONTROL	(1)	960		500		1300		3200	**	I| CB
OOSTERBEEK	(4)	1054		419		1370		89	**	K| E
REDUIT	(15)	847		455		1210		305		I|E
LABTIUM	(16)	966		561		1230		279		I|CB
MSIRI	(48)	1071		456		1470	**	464	**	J| E
EXTAQS	(52)	1020		541		1280		328		I|CB
BUNASOLS	(58)	1132		681	*	1170		383		
ANAMIL	(74)	1000		441		1310		318		I| CB
AL-West	(78)	960		636		1260		369		L| E
DATE	(89)	1091		573		1270		306		J| CB
CISCA	(112)	932		497		-		-		U| D
BCIMUZPOL	(132)	468	**	2425	**	1650	**	1137	**	J|E
XGCALAFIGA	(135)	893		464		1150		268		U| CB
TYRKEY	(145)	752	**	402		1180		366		I| E
MELILAB	(157)	988		521		1290		343		U| CB
UMADAKAR	(196)	925		460		1300		274		I| E
HULESCH	(197)	981		523		1250		312		J| E
BESMOLAX	(217)	874		548		1110	*	288		I| CB
FEJER	(278)	986		522		1250		333		J| CB
JASZ	(280)	974		514		1270		318		T|CB
VAS	(281)	1000		515		1280		340		J|CB
MBT	(291)	1050		530		1260		355		J| CB
SPOOR	(305)	-		-		1170		350		Z| CB
FOHS-LAB	(306)	780	**	379		1070	**	210	**	J| E
PLVHOLAB	(308)	917		520		1030	**	321		
NFVGOE	(321)	1050		540		1320		330		I| CB
GLAGC	(327)	1000		641		1250		313		I| CB
LABAMB	(878)	911		574		1260		560	**	Z| Z
MICHAEL	(904)	-		542		-		-		| E
RF-R&D	(905)	980		574		1160		278		J| CB
NDA mean		977.2		517.4		1252		320.8		(cont.)
NDA st dev		81.2		72.7		67		46.0		
NDA N		28		29		28		28		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
P (mg/kg) (cont.)										
NDA mean		977.2		517.4		1252		320.8		
NDA st dev		81.2		72.7		67		46.0		
NDA N		28		29		28		28		
	Old statistics									
Median		980.5	(3)	521.0	(3)	1262	(3)	319.5	(3)	
MAD		48.5		40.0		37		22.0		
Mean		982.5		512.9		1252		321.7		
St Dev		68.7		63.7		57		32.1		
N		25		27		23		22		
Pb (mg/kg)										
ALCONTROL	(1)	26.0		13.00	<	65.0		27.0		I| CB
ATVC	(7)	23.6		7.10		67.4		21.2		U| CB
LABTIUM	(16)	26.7		7.91	*	74.2		29.9		I|CB
FERGUSONIT	(21)	24.3		5.64	**	68.7		25.9		J| D
IUNGPUL	(32)	27.5		6.72		73.6		27.3		J|CB
EKOM	(35)	25.6		6.92		70.5		25.8		T|ABA
LAF	(37)	30.0	**	7.30		81.0	**	46.0	**	U|CB
ENVIROPACE	(49)	26.3		7.55	*	72.5		27.3		J|CB
ZJKRK	(50)	26.0		6.90		73.0		28.5		I|AAC
EXTAQS	(52)	28.5	*	6.94		77.2		29.3		I|CB
MLABTW	(70)	24.8		6.00	<	62.1	*	19.7		I| CB
ARCHIMEDES	(73)	-		-		68.8		27.1		I| CB
ANAMIL	(74)	39.8	**	5.52	**	74.7		23.8		I| CB
US	(83)	18.4	**	6.49		39.2	**	20.3		
DATE	(89)	26.6		7.02		64.7		26.2		J| CB
SCHRG	(90)	24.9		5.80	**	66.7		26.1		I|BAC
GGM	(98)	25.8		5.86	*	71.0		24.6		I| D
CISCA	(112)	26.0		6.55		80.1	*	43.8	**	U| D
BCIMUZPOL	(132)	33.6	**	14.20	**	70.9		31.2		J|AAC
XGCALAFIGA	(135)	25.4		6.36		70.4		22.9		U| CB
TYRKEY	(145)	29.8	**	6.68		86.2	**	31.7		I|ABC
MELILAB	(157)	22.5	*	6.56		65.5		22.8		U| CB
MERLIN	(159)	21.7	**	15.00	<	62.2	*	21.7		|
PLATINA222	(172)	25.7		6.30	*	68.9		24.0		J|ABC
EXACT	(190)	28.0		10.00	<	76.0		28.0		I| CB
HULESCH	(197)	27.1		-		76.6		34.1	**	J| CB
ALFA	(206)	25.1		6.20	*	68.8		25.5		I|ABC
GSISMA	(214)	22.3	*	7.48		63.5		18.8	*	U| CB
BESMOLAX	(217)	28.3	*	6.78		67.8		26.1		I| CB
CHEMLAB	(228)	21.0	**	5.80	**	57.0	**	21.0		T| CB
UMEG-GB3	(241)	25.4		6.34		69.2		25.8		I| CB
WROCLAB	(263)	25.1		7.20		70.6		24.6		I|AAC
IGEOLUNAM	(273)	20.6	**	1.83	**	63.0		23.5		J|AAA
FEJER	(278)	25.3		7.05		70.9		25.0		J| CB
JASZ	(280)	25.0		7.20		73.0		25.0	<	T|CB
VAS	(281)	26.5		7.08		72.6		25.8		J|CB
MBT	(291)	32.4	**	6.98		69.0		22.0		U|AAC
TNO-NITG	(293)	43.8	**	10.31	**	83.2	**	29.1		I| D
ARRET	(298)	22.7	*	20.00	<	77.0		20.0	<	J| CB
ANALGEO	(300)	25.0		7.00		70.0		23.0		U|AAC
SPOOR	(305)	32.0	**	13.00	<	78.0		40.0	**	Z| CB
FOHS-LAB	(306)	25.5		6.41		76.8		28.3		J|ABC
PLVHOLAB	(308)	25.8		7.00		62.5		29.3		T|AAC
NFVGOE	(321)	31.5	**	7.06		77.9		28.2		I| CB
GLAGC	(327)	28.3		9.10	**	72.3		24.8		I| CB
OLESKA	(335)	28.9	*	-		69.2		25.9		I|ABG
SKRA	(336)	25.7		6.90		72.1		25.9		J|AAC
CHKS	(337)	26.1		6.83		68.6		25.3		J|AAA
GDAGRO	(338)	24.5		6.98		70.4		25.6		T|ABC
LABRES	(339)	26.5		7.00		72.0		26.5		U|ABA
GLOBI	(340)	24.7		6.80		71.3		26.7		G|AB
NDA mean		25.72		6.832		70.76		25.74		(cont.)
NDA st dev		1.76		0.470		4.72		3.27		
NDA N		52		44		53		51		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Pb (mg/kg)	(cont.)									
MALWA	(343)	26.4		6.82		70.5		30.0		J|AAA
ADE	(424)	23.5		5.40	**	55.5	**	22.3		
NDA mean		25.72		6.832		70.76		25.74		
NDA st dev		1.76		0.470		4.72		3.27		
NDA N		52		44		53		51		
	Old statistics									
Median		25.70	(3)	6.930	(3)	70.55	(3)	25.85	(3)	
MAD		0.70		0.140		2.00		1.95		
Mean		25.73		6.882		70.76		25.70		
St Dev		1.08		0.276		3.99		2.85		
N		34		30		44		46		
Rb (mg/kg)										
LABTIUM	(16)	15.4		1.95		24.5		17.8		
Median		15.40	(1)	1.950	(1)	24.50	(1)	17.80	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
S (mg/kg)										
ALCONTROL	(1)	270	**	190		560		550		I| CB
LABTIUM	(16)	339		210		568		528		I|CB
EXTAQS	(52)	363		221		608		588		I|CB
BUNASOLS	(58)	163	**	489	**	296	**	607		
MLABTW	(70)	352		208		567		555		I| CB
ANAMIL	(74)	351		171		596		566		I| CB
DATE	(89)	374		254		674		536		J| CB
SCHRG	(90)	334		267		410	**	377	**	
CISCA	(112)	4900	<	4700	<	-		-		U| D
TYRKEY	(145)	383		192		481	**	445	**	I| P
MELILAB	(157)	340		199		629		681	**	U| CB
FEJER	(278)	344		218		587		590		J| CB
JASZ	(280)	352		230		595		600		T|CB
VAS	(281)	336		222		590		643		J|CB
PLVHOLAB	(308)	354		238		513		594		
NFVGOE	(321)	360		213		627		603		I| CB
GLAGC	(327)	342		250		588		563		I| CB
NDA mean		349.0		217.8		590.3		579.2		
NDA st dev		14.4		28.1		35.1		39.0		
NDA N		16		16		16		16		
	Old statistics									
Median		351.5	(3)	218.0	(3)	590.0	(3)	588.0	(3)	
MAD		10.5		19.0		22.0		22.0		
Mean		351.7		218.9		592.5		578.6		
St Dev		14.3		26.1		38.9		32.5		
N		14		15		13		13		
Sb (mg/kg)										
LABTIUM	(16)	0.450		0.110		-		0.290		I|BAE
EXTAQS	(52)	0.610		0.110		0.780		0.290		I|D
ARCHIMEDES	(73)	-		-		1.000	<	1.000	<	I| CB
ANAMIL	(74)	3.000	<	3.000	<	3.000	<	3.000	<	I| CB
US	(83)	0.558		0.120		0.719		0.385		
GGM	(98)	1.000	<	1.000	<	1.000	<	1.000	<	I| D
CISCA	(112)	5.000	<	5.000	<	1.000	<	1.000	<	U| D
CHEMLAB	(228)	1.000	<	1.000	<	1.100		1.000	<	T|F
SPOOR	(305)	2.000	<	2.000	<	0.100	<	0.100	<	Z| CB
PLVHOLAB	(308)	0.730		0.250	<	1.150		1.430		
Median		0.5840	(1)	0.1100	(1)	0.9400	(1)	0.3375	(1)	
MAD		0.0800		-		0.1850		0.0475		
N		4		3		4		4		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Sc (mg/kg)										
LABTIUM	(16)	1.86		3.65		0.59		0.22		I|CB
DATE	(89)	4.15		0.30		7.75		6.69		J| CB
Median		3.005	(1)	1.975	(1)	4.170	(1)	3.455	(1)	
MAD		1.145		1.675		3.580		3.235		
N		2		2		2		2		
Se (mg/kg)										
LABTIUM	(16)	0.280		0.080	<	1.43		0.440		I|BAE
EXTAQS	(52)	0.670		0.500	<	1.84		0.700		I|D
ARCHIMEDES	(73)	-		-		10.00	<	10.000	<	I| CB
ANAMIL	(74)	5.000	<	5.000	<	5.00	<	5.000	<	I| CB
GGM	(98)	1.000	<	1.000	<	1.00	<	1.000	<	I| D
CISCA	(112)	5.000	<	5.000	<	10.00	<	10.000	<	U| D
CHEMLAB	(228)	2.000	<	2.000	<	2.00	<	2.000	<	T|BAD
FEJER	(278)	2.000	<	2.000	<	2.00	<	2.000	<	J| CB
JASZ	(280)	5.000	<	5.000	<	5.00	<	5.000	<	
VAS	(281)	1.000	<	1.000	<	1.00	<	1.000	<	
SPOOR	(305)	-		-		10.00	<	10.000	<	Z| CB
PLVHOLAB	(308)	0.500	<	0.520		0.50	<	0.500	<	
ADE	(424)	0.098		0.131		0.65		0.180		| F
Median		0.2800	(1)	0.3255	(1)	1.430	(1)	0.4400	(1)	
MAD		0.1820		0.1945		0.410		0.2600		
N		3		2		3		3		
Sn (mg/kg)										
ENVIROPACE	(49)	15.0	<	15.000	<	15.00	<	15.000	<	J|CB
EXTAQS	(52)	3.0	<	3.000	<	3.00	<	3.000	<	I|CB
MLABTW	(70)	5.0	<	5.000	<	5.00	<	5.000	<	I| CB
ARCHIMEDES	(73)	-		-		6.00	<	6.000	<	I| CB
ANAMIL	(74)	16.6		5.000	<	3.44		5.000	<	I| CB
GGM	(98)	2.0	<	2.000	<	2.00	<	2.000	<	I| D
CISCA	(112)	5.0	<	5.000	<	6.00	<	6.000	<	U| D
CHEMLAB	(228)	5.0	<	5.000	<	5.00	<	5.000	<	T| CB
SPOOR	(305)	6.0	<	6.000	<	6.00	<	6.000	<	Z| CB
PLVHOLAB	(308)	5.0	<	5.000	<	5.00	<	5.000	<	
Median		16.60	(1)	-	(0)	3.440	(1)	-	(0)	
MAD		-		-		-		-		
N		1		-		1		-		
Sr (mg/kg)										
ALCONTROL	(1)	29.0		5.00	<	50.0		53.0		I| CB
LABTIUM	(16)	19.8		2.72		30.2		32.9		I|CB
DATE	(89)	23.5		3.09		26.9		27.8		J| CB
FEJER	(278)	22.2		3.42		32.7		36.9		J| CB
PLVHOLAB	(308)	22.1		3.42		29.3		42.2		
GLAGC	(327)	25.8		4.70		43.8		45.0		I| CB
Median		22.85	(1)	3.420	(1)	31.45	(1)	39.55	(1)	
MAD		1.85		0.330		3.36		6.05		
N		6		5		6		6		
Th (mg/kg)										
LABTIUM	(16)	1.84		0.170		5.02		7.57		
SPOOR	(305)	-		-		10.00	<	10.00	<	Z| CB
Median		1.840	(1)	0.1700	(1)	5.020	(1)	7.570	(1)	
MAD		-		-		-		-		
N		1		1		1		1		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Ti (mg/kg)										
LABTIUM	(16)	89		44.6		44		38		I|CB
EXTAQS	(52)	222		64.6		183		139		
ANAMIL	(74)	219		200.0	<	320		200	<	I| CB
CISCA	(112)	364		118.0		-		-		U| D
PLVHOLAB	(308)	221		44.8		129		140		
NFVGOE	(321)	330		80.0		353		300		I| CB
GLAGC	(327)	350		114.0		359		338		I| CB
Median		222.0	(1)	72.30	(1)	251.5	(1)	140.0	(1)	
MAD		108.0		27.60		104.5		102.3		
N		7		6		6		5		
Tl (mg/kg)										
FERGUSONIT	(21)	0.340		0.1000	<	0.760		0.510		J| D
EXTAQS	(52)	0.210		0.0300		0.480		0.280		I|D
GGM	(98)	1.000	<	1.0000	<	1.000	<	1.000	<	I| D
CISCA	(112)	-		-		3.000	<	3.000	<	U| D
UMEG-GB3	(241)	0.207		0.0500	<	0.414		0.214		I| D
SPOOR	(305)	-		-		10.000	<	10.000	<	Z| CB
PLVHOLAB	(308)	2.500	<	2.5000	<	2.500	<	2.500	<	
Median		0.2100	(1)	0.03000	(1)	0.4800	(1)	0.2800	(1)	
MAD		0.0030		-		0.0660		0.0660		
N		3		1		3		3		
U (mg/kg)										
LABTIUM	(16)	0.840		0.160		1.85		0.84		
FERGUSONIT	(21)	1.040		1.000	<	2.09		1.00		J| D
EXTAQS	(52)	0.950		0.180		2.03		1.02		I|D
Median		0.9500	(1)	0.1700	(1)	2.030	(1)	1.000	(1)	
MAD		0.0900		0.0100		0.060		0.020		
N		3		2		3		3		
V (mg/kg)										
ALCONTROL	(1)	63.0		6.90		110.0		94.0		I| CB
LABTIUM	(16)	46.5		7.49		71.0		46.5		I|CB
EXTAQS	(52)	55.0		7.95		90.3		62.5		I|CB
MLABTW	(70)	45.2		7.00	<	71.7		45.6		I| CB
ARCHIMEDES	(73)	-		-		97.4		79.9		I| CB
ANAMIL	(74)	52.7		7.21		98.3		60.3		I| CB
US	(83)	35.6		7.65		41.2	**	36.6		
DATE	(89)	56.4		8.91		84.6		58.6		J| CB
GGM	(98)	44.0		7.23		68.8		43.6		I| D
CISCA	(112)	56.5		7.99		100.0		75.4		U| D
EXACT	(190)	49.0		6.50		76.0		50.0		I| CB
CHEMLAB	(228)	61.0		9.20		86.0		59.0		T| CB
FEJER	(278)	51.1		7.98		85.7		51.4		J| CB
SPOOR	(305)	-		-		88.0		76.0		Z| CB
PLVHOLAB	(308)	46.2		7.83		56.5		53.2		
GLAGC	(327)	57.5		9.40		97.3		71.0		I| CB
NDA mean		51.91		7.752		85.55		58.47		
NDA st dev		7.98		0.886		17.32		17.36		
NDA N		14		13		16		16		
	Old statistics									
Median		51.90	(3)	7.830	(3)	86.00	(3)	58.82	(3)	
MAD		5.50		0.605		11.40		12.25		
Mean		51.40		7.864		85.44		60.22		
St Dev		7.50		0.870		14.39		15.50		
N		14		13		15		16		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Y (mg/kg)										
LABTIUM	(16)	12.0		0.640		23.3		9.28		I|CB
DATE	(89)	13.6		0.770		22.8		9.39		J| CB
Median		12.81	(1)	0.7050	(1)	23.06	(1)	9.335	(1)	
MAD		0.81		0.0650		0.24		0.055		
N		2		2		2		2		
Zn (mg/kg)										
ALCONTROL	(1)	67.0		20.0	<	210		100.0		I| CB
ATVC	(7)	63.0		20.0	<	209		97.2		U| CB
REDUIT	(15)	63.7		19.2	*	225		96.4		I|AAC
LABTIUM	(16)	65.5		16.3		208		73.3		I|CB
FERGUSONIT	(21)	77.0	*	17.2		216		96.5		J| D
IUNGPUL	(32)	67.8		15.2		228		90.3		J|CB
EKOM	(35)	68.8		16.2		220		84.0		T|AAA
LAF	(37)	74.0		16.0		230		110.0		U|CB
ENVIROPACE	(49)	66.8		16.6		219		89.6		J|CB
ZJKRK	(50)	70.0		16.3		230		99.5		I|AAA
EXTAQS	(52)	69.0		19.9	**	228		94.1		I|CB
BUNASOLS	(58)	58.5	**	7.1	**	159	**	54.3	**	
MLABTW	(70)	59.4	*	13.0	**	194		73.5		I| CB
ARCHIMEDES	(73)	-		-		220		99.3		I| CB
ANAMIL	(74)	68.0		12.6	**	219		85.8		I| CB
US	(83)	41.1	**	13.6	*	102	**	60.8	**	
DATE	(89)	71.9		16.8		202		83.3		J| CB
SCHRG	(90)	64.9		17.2		229		76.5		I|AAC
GGM	(98)	61.3	*	13.7		192	*	75.0		I| D
CISCA	(112)	67.1		16.7		231		98.8		U| D
BCIMUZPOL	(132)	68.5		16.2		273	**	102.2		J|AAC
XGCALAFIGA	(135)	60.3	*	14.6		202		85.0		U| CB
TYRKEY	(145)	71.7		19.1	*	227		87.5		I|AAA
MELILAB	(157)	73.9		15.3		211		106.0		U| CB
MERLIN	(159)	68.6		17.1		224		92.6		J|CB
PLATINA222	(172)	71.4		14.4		235		91.5		J|AAC
EXACT	(190)	68.0		17.0	<	210		79.0		I| CB
UMADAKAR	(196)	67.0		20.0	**	208		99.0		I|AAA
HULESCH	(197)	67.7		15.8		218		81.7		J|AAC
ALFA	(206)	73.5		15.2		213		84.8		I|AAC
GSISMA	(214)	74.0		19.7	**	236		113.8	*	U| CB
BESMOLAX	(217)	58.6	**	14.1		182	**	74.2		I| CB
CHEMLAB	(228)	65.0		17.0		200		83.0		T| CB
UMEG-GB3	(241)	67.4		14.7		210		86.0		I| CB
WROCLAB	(263)	66.8		16.7		220		85.8		I|AAA
IGEOLUNAM	(273)	71.3		14.5		226		87.3		J|AAA
FEJER	(278)	70.1		16.6		220		91.5		J| CB
JASZ	(280)	68.1		16.6		222		90.0		T|CB
VAS	(281)	69.8		17.0		212		134.0	**	
MBT	(291)	80.0	**	14.0		208		90.0		U|AAC
TNO-NITG	(293)	67.0		20.4	**	212		95.7		I| D
ARRET	(298)	63.9		15.0	<	170	**	66.0	*	J| CB
ANALGEO	(300)	63.0		14.8		211		85.7		U|AAC
SPOOR	(305)	65.0		20.0	<	190	*	96.0		Z| CB
FOHS-LAB	(306)	82.3	**	20.0	<	282	**	105.0		J|ABC
PLVHOLAB	(308)	67.9		15.8		180	**	104.0		T|AAC
NFVGOE	(321)	72.9		17.8		238		101.8		I| CB
GLAGC	(327)	69.5		18.4		229		99.3		I| CB
OLESKA	(335)	67.2		16.0		224		97.5		I|AAG
SKRA	(336)	68.7		16.3		217		89.0		J|AAC
CHKS	(337)	70.7		16.4		226		102.0		J|AAA
GDAGRO	(338)	68.1		15.4		218		89.6		T|AAC
LABRES	(339)	71.3		16.5		220		95.0		U|ABA
GLOBI	(340)	66.3		16.3		217		90.0		G|AA
NDA mean		67.92		16.03		217.7		91.16		(cont.)
NDA st dev		4.15		1.44		12.6		11.09		
NDA N		56		50		57		57		

ISE 2009.1 - Acid extractable (So-called totals)

Sample		900		986		910		882		MIC
Zn (mg/kg)	(cont.)									
MALWA	(343)	68.5		16.4		211		78.2		J|AAA
ADE	(424)	58.3	**	14.9		184	**	71.4		| CB
RF-R&D	(905)	64.0		15.2		218		98.7		J| CB
NDA mean		67.92		16.03		217.7		91.16		
NDA st dev		4.15		1.44		12.6		11.09		
NDA N		56		50		57		57		
	Old statistics									
Median		68.05	(3)	16.25	(3)	219.0	(3)	90.15	(3)	
MAD		1.75		0.75		8.0		6.96		
Mean		68.35		15.96		218.3		90.75		
St Dev		2.93		1.08		9.9		9.44		
N		46		40		47		52		

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882		MIC
Ag (µg/kg)										
AL-West	(78)	1000.0	<	1000.0	<	1000	<	1000.0	<	U| CB
CPH340XYC	(134)	92.3		23.0		178		59.5		I| D
LABAMB	(878)	100.0	<	100.0	<	100	<	100.0	<	I| CB
Median		92.30	(1)	23.00	(1)	178.0	(1)	59.50	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
Al (g/kg)										
WAGENINGEN	(14)	21.6		3.85		57.2		57.9		I| CB
HAMELN	(25)	19.0		3.32		47.7		48.6		T| CB
LAS	(42)	19.5		3.30		46.6		45.4		I| CB
LRSCONTROL	(63)	16.8		2.97		33.2		32.7		I| CB
CPH340XYC	(134)	16.7		3.04		36.3		36.2		I| CB
ECOSOIL	(165)	15.6		2.80		36.1		34.3		T|CB
FRIS	(198)	17.4		3.19		40.8		35.5		I| CB
ABMCE	(230)	20.3		3.33		45.9		46.1		I| CB
MUMPFROG	(275)	21.8		3.37		48.7		51.3		I| CB
FFEEBW	(284)	19.9		3.74		43.2		46.1		
HLVAKASSEL	(313)	19.0		2.99		42.4		41.5		I|CB
FVABW	(322)	21.3		3.25		48.3		53.7		T| CB
VILJAVUUSP	(419)	16.7		2.81		35.8		34.6		I| CB
LABAMB	(878)	13.5		2.80		28.5		24.0		I| CB
CRC	(884)	25.4		3.35		60.6		49.0		
NDA mean		18.87		3.173		42.82		42.80		
NDA st dev		3.20		0.311		8.27		11.53		
NDA N		15		15		15		15		
	Old statistics									
Median		19.00	(3)	3.250	(3)	43.18	(3)	45.40	(3)	
MAD		2.26		0.210		5.47		8.33		
Mean		18.97		3.207		43.42		42.46		
St Dev		2.97		0.316		8.74		9.30		
N		15		15		15		15		
As (mg/kg)										
OOSTERBEEK	(4)	9.49		1.10		26.3		14.1		U| CB
WAGENINGEN	(14)	10.80		1.40	**	28.0		14.6		I| CB
HAMELN	(25)	10.30		1.16		25.9		14.1		T| D
LAROL	(56)	9.92		1.12		24.8		12.8		
AL-West	(78)	8.30		4.00	<	26.7		13.0		U| CB
CPH340XYC	(134)	9.40		1.14		25.0		12.9		I| D
HHAFU	(136)	10.54		2.00	<	29.0	**	14.3		+| CB
ECOSOIL	(165)	8.07		0.50	<	20.3	**	10.4		T|CB
ANALGIR	(199)	10.15		1.10		24.7		15.5		U| F
ABMCE	(230)	9.64		2.10	<	23.9		12.3		I| CB
MUMPFROG	(275)	9.47		1.11		24.1		13.0		I| D
FFEEBW	(284)	8.21		1.09		22.6		10.6		
ANALGEO	(300)	9.50		3.00	<	25.9		13.6		U| CB
HLVAKASSEL	(313)	7.74		1.00	*	18.0	**	10.5		I|F
FVABW	(322)	10.30		0.90	**	25.1		15.0		T| CB
SKLODPOL	(342)	9.57		0.83	**	23.1		8.3	**	I| F
CHEMHAL	(877)	8.55		1.15		25.2		11.7		IT|CB
LABAMB	(878)	9.80		1.30	**	26.0		13.2		I| CB
CRC	(884)	7.89		1.10		21.5	*	10.4		U|CB
CAC	(885)	9.00		5.00	<	25.5		14.0		I| CB
MICHAEL	(904)	-		1.01		-		-		I|BAF
SAC-CAL	(973)	7.88		1.07		18.4	**	11.8		I| F
LDAR02	(984)	1.20	**	9.00	**	25.8		12.5		I| Z
NDA mean		9.319		1.100		25.22		12.94		(cont.)
NDA st dev		1.164		0.071		1.57		1.73		
NDA N		22		17		22		22		

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882		MIC
As (mg/kg) (cont.)										
NDA mean		9.319		1.100		25.22		12.94		
NDA st dev		1.164		0.071		1.57		1.73		
NDA N		22		17		22		22		
	Old statistics									
Median		9.491	(3)	1.100	(3)	25.20	(3)	12.99	(3)	
MAD		0.809		0.020		0.70		1.13		
Mean		9.263		1.104		25.21		12.87		
St Dev		0.954		0.041		1.32		1.54		
N		21		11		17		21		
B (mg/kg)										
XGCALAFIGA	(135)	14.4		-		25.8		15.1		I| CB
HHAFU	(136)	17.5		10.00	<	30.0		17.4		+| CB
ECOSOIL	(165)	24.6		20.10		22.9		12.4		T|CB
HILL	(180)	6.0	<	6.00	<	11.0		7.0		
VILJAVUUSP	(419)	20.2		10.88		23.2		21.9		
LABAMB	(878)	7.5		2.70		7.5		6.5		I| CB
CRC	(884)	26.8		2.53		33.9		12.5		
Median		18.82	(1)	6.788	(1)	23.22	(1)	12.53	(1)	
MAD		5.10		4.173		6.78		4.85		
N		6		4		7		7		
Ba (mg/kg)										
HAMELN	(25)	84.1		7.92		214		79.3		T| CB
AL-West	(78)	86.0		15.00	<	227		79.9		U| CB
CPH340XYC	(134)	82.3		7.00		212		71.7		I| CB
HHAFU	(136)	83.0		8.40		221		74.0		+| CB
ECOSOIL	(165)	30.4	**	20.00	<	115	**	20.0	**	T|CB
MUMPFROG	(275)	89.8		8.05		216		85.3		I| D
LABAMB	(878)	77.0		6.90		185		54.0		I| CB
CRC	(884)	115.4	**	9.00		281	**	87.3		
AGROLAB	(977)	119.0	**	9.80		339	**	248.0	**	|CB
NDA mean		83.86		-		215.8		78.48		
NDA st dev		7.32		-		15.1		10.46		
NDA N		9		7		9		9		
	Old statistics									
Median		83.55	(2)	8.050	(1)	215.0	(2)	79.30	(2)	
MAD		1.87		0.950		4.5		6.00		
N		6		7		6		7		
Be (mg/kg)										
HAMELN	(25)	0.840		0.0500		1.96		1.54		T| D
AL-West	(78)	0.821		0.1000	<	2.00		1.51		U| CB
VICTORY	(123)	0.820		0.1000		2.12		1.30		
CPH340XYC	(134)	0.908		0.0620		2.30	*	1.65		I| D
HHAFU	(136)	0.890		0.1000	<	2.15		1.60		+| CB
ABMCE	(230)	0.860		0.3000	<	2.04		1.65		I| CB
HLVAKASSEL	(313)	0.892		0.0589		1.99		1.54		I|D
LABAMB	(878)	0.750		0.1000	<	1.80	*	1.20		I| CB
CRC	(884)	1.040		-		2.43	**	-		
CAC	(885)	0.970		0.5000	<	1.97		1.43		I| CB
NDA mean		0.8663		-		2.028		1.524		
NDA st dev		0.0670		-		0.122		0.157		
NDA N		10		4		10		9		
	Old statistics									
Median		0.8750	(3)	0.06045	(1)	2.001	(3)	1.540	(3)	
MAD		0.0445		0.00600		0.039		0.110		
Mean		0.8791		-		-		1.491		
St Dev		0.0821		-		-		0.155		
N		10		4		7		9		

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882		MIC
Bi (mg/kg)										
HAMELN	(25)	0.240		0.0400		0.320		0.330		T| D
Median		0.2400	(1)	0.04000	(1)	0.3200	(1)	0.3300	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
Ca (g/kg)										
WAGENINGEN	(14)	12.0		0.790	**	6.98		1.64		I| CB
HAMELN	(25)	10.7		0.720		6.16		1.47		T| CB
LAS	(42)	11.1		0.690		6.41		1.52		I| CB
LRSCONTROL	(63)	10.6		0.630		5.17	**	1.25		I| CB
CPH340XYC	(134)	10.4		0.623		5.97		1.39		I| CB
XGCALAFIGA	(135)	10.6		0.720		6.26		1.50		I| CB
HHAFU	(136)	11.1		0.770		6.58		1.57		+| CB
ECOSOIL	(165)	9.7		0.690		5.66		1.33		T|CB
HILL	(180)	10.8		0.690		6.14		1.40		
FRIS	(198)	10.0		0.623		5.82		1.31		I| CB
ABMCE	(230)	11.3		0.684		6.40		1.52		I| CB
MUMPFROG	(275)	11.0		0.736		5.91		1.36		I| CB
FFEEBW	(284)	10.4		0.768		5.78		1.29		
HLVAKASSEL	(313)	11.1		0.678		6.39		1.51		I|CB
FVABW	(322)	11.1		0.670		6.13		1.42		T| CB
VILJAVUUSP	(419)	10.4		0.696		6.30		1.47		
LABAMB	(878)	10.3		0.750		5.95		1.55		I| CB
MICHAEL	(904)	-		0.720		-		-		I|AAA
SAC-CAL	(973)	9.9		0.711		5.36		1.41		I| CB
NDA mean		10.68		0.7039		6.106		1.443		
NDA st dev		0.55		0.0391		0.385		0.112		
NDA N		18		19		18		18		
	Old statistics									
Median		10.66	(3)	0.6930	(3)	6.140	(3)	1.445	(3)	
MAD		0.38		0.0270		0.250		0.075		
Mean		10.69		0.6983		6.129		1.440		
St Dev		0.56		0.0443		0.382		0.106		
N		18		18		17		18		
Cd (mg/kg)										
OOSTERBEEK	(4)	0.324		0.1010	<	0.797		0.1040	<	U| CB
WAGENINGEN	(14)	0.490	**	0.1200	*	1.100	**	0.2600	**	I| CB
HAMELN	(25)	0.310		0.1000		0.680		0.1000	<	T| CB
LAS	(42)	0.330		0.0900		0.720		0.0300		I| D
LAROL	(56)	0.320		0.1200	<	0.640		0.1200	<	
AL-West	(78)	0.243	*	0.1700	<	0.459	*	0.1700	<	U| CB
VICTORY	(123)	0.270		0.0800		0.530		0.0300		
CPH340XYC	(134)	0.373		0.0980		0.840		0.0620		I| D
HHAFU	(136)	0.340		0.2000	<	0.790		0.2000	<	+| CB
ECOSOIL	(165)	0.570	**	0.1900	**	1.000	*	0.3200	**	T|CB
HILL	(180)	0.350		0.0900		0.750		0.0400		
FRIS	(198)	0.169	**	0.1980	<	0.537		0.1980	<	I|ABC
ANALGIR	(199)	0.350		0.1000		0.740		0.0500	<	U|BAC
ABMCE	(230)	0.350	<	0.3500	<	0.740		0.3500	<	I|AAA
MUMPFROG	(275)	0.323		0.0960		0.681		0.0520		I| D
FFEEBW	(284)	0.117	**	0.0960		0.602		0.0150	<	
ANALGEO	(300)	0.340		0.3000	<	0.770		0.3000	<	U| CB
HLVAKASSEL	(313)	0.357		0.0905		0.807		0.0402		I|D
FVABW	(322)	0.310		0.0800		0.700		0.0400	<	T| CB
SKLODPOL	(342)	0.270	<	0.2700	<	0.470	*	0.2700	<	I|AAC
VILJAVUUSP	(419)	0.459	**	0.1390	**	1.399	**	0.1190	*	I|BAE
CHEMHAL	(877)	0.430	*	0.1300	*	0.900		0.3200	**	IT|CB
LABAMB	(878)	0.400		0.1500	**	0.800		0.1500	*	I| CB
CAC	(885)	0.500	**	0.5000	<	1.220	**	0.5000	<	I| CB
NDA mean		0.3345		0.09508		0.7334		0.05644		(cont.)
NDA st dev		0.0490		0.01255		0.1362		0.04425		
NDA N		25		18		27		13		

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882		MIC
Cd (mg/kg)	(cont.)									
ALTAVILLA	(888)	0.540	**	0.1800	**	0.870		0.0900		AR|D
MICHAEL	(904)	-		0.2000	<	-		-		I|BAA
SAC-CAL	(973)	0.290		0.1000		0.590		0.1000	<	I| CB
AGROLAB	(977)	0.332		0.0960		0.800		0.0440		|BA
NDA mean		0.3345		0.09508		0.7334		0.05644		
NDA st dev		0.0490		0.01255		0.1362		0.04425		
NDA N		25		18		27		13		
	Old statistics									
Median		0.3310	(3)	0.09600	(3)	0.7400	(3)	0.04210	(3)	
MAD		0.0190		0.00400		0.0600		0.01100		
Mean		0.3324		0.09304		0.7278		0.04853		
St Dev		0.0312		0.00714		0.1034		0.01987		
N		16		12		21		8		
Co (mg/kg)										
HAMELN	(25)	8.61		0.530		16.4		9.28		T| D
AL-West	(78)	9.04		1.000	<	17.4		9.19		U| CB
VICTORY	(123)	6.98		1.000	<	12.0	**	5.70	**	
CPH340XYC	(134)	9.05		0.490		16.5		8.58		I| D
XGCALAFIGA	(135)	8.05		0.560		14.9		7.95		I| CB
HHAFU	(136)	9.34		1.000	<	17.3		9.28		+| CB
ECOSOIL	(165)	8.12		0.590		14.6		7.89		T|CB
HILL	(180)	8.00		0.480		12.6		6.19	**	
ABMCE	(230)	8.67		0.610		15.9		8.28		I| CB
MUMPFROG	(275)	8.90		0.520		15.4		8.85		I| D
FFEEBW	(284)	8.51		0.690		14.7		8.44		
ANALGEO	(300)	8.50		1.000	<	15.6		7.90		U| CB
HLVAKASSEL	(313)	9.43		0.660		18.3		9.32		I|CB
FVABW	(322)	9.70		0.600		15.3		8.90		T| CB
VILJAVUUSP	(419)	7.26		0.554		15.4		8.26		I| CB
LABAMB	(878)	8.40		0.500		14.0		6.90		I| CB
CRC	(884)	10.67	**	1.950	**	17.5		9.75		
CAC	(885)	8.50		2.000	<	15.4		7.40		I| CB
MICHAEL	(904)	-		5.000	<	-		-		I|AAC
AGROLAB	(977)	7.97		0.740		14.1		8.13		|CB
LDAR02	(984)	0.59	**	8.900	**	16.1		8.75		I| D
NDA mean		8.578		0.5696		15.59		8.532		
NDA st dev		0.753		0.0966		1.37		0.781		
NDA N		20		15		20		20		
	Old statistics									
Median		8.505	(3)	0.5600	(3)	15.40	(3)	8.510	(3)	
MAD		0.480		0.0500		0.81		0.585		
Mean		8.501		0.5788		15.65		8.503		
St Dev		0.709		0.0802		1.39		0.741		
N		18		13		19		18		
Cr (mg/kg)										
OOSTERBEEK	(4)	56.3		5.35		71.9		46.4		U| CB
WAGENINGEN	(14)	71.2	*	7.20		92.6		53.9		I| CB
HAMELN	(25)	61.1		5.77		75.0		46.5		T| CB
LAS	(42)	61.9		5.35		78.5		45.2		I| CB
LAROL	(56)	60.3		5.46		69.2		39.2		
AL-West	(78)	58.1		15.00	<	70.3		41.8		U| CB
CPH340XYC	(134)	60.7		6.01		71.8		43.7		I| CB
XGCALAFIGA	(135)	58.4		4.85		70.4		41.0		I| CB
HHAFU	(136)	63.0		6.20		80.0		46.0		+| CB
ECOSOIL	(165)	48.0	**	4.70		59.1		35.3		T|CB
FRIS	(198)	60.9		4.88		80.3		47.9		I| CB
ANALGIR	(199)	-		5.50		68.3		46.7		U|AAA
ABMCE	(230)	59.5		5.48		68.1		41.9		I| CB
NDA mean		60.37		5.487		72.81		43.75		(cont.)
NDA st dev		5.97		0.723		10.20		5.87		
NDA N		26		26		27		27		

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882		MIC
Cr (mg/kg) (cont.)										
MUMPFROG	(275)	63.6		5.37		75.3		47.7		I| D
FFEEBW	(284)	60.1		6.84		74.0		46.1		
ANALGEO	(300)	53.9		4.80		66.7		41.3		U| CB
HLVAKASSEL	(313)	62.5		5.58		77.6		45.0		I|CB
FVABW	(322)	68.3		5.20		78.0		49.8		T| CB
SKLODPOL	(342)	61.6		5.56		64.4		38.8		I|AAC
VILJAVUUSP	(419)	74.7	**	6.05		86.5		60.0	**	I|BAE
CHEMHAL	(877)	51.2	*	5.15		59.2		38.2		IT|CB
LABAMB	(878)	50.0	*	5.00		54.0		30.0	**	I| CB
CRC	(884)	71.5	*	6.55		88.4		45.3		U|CB
CAC	(885)	48.9	*	5.40		53.9		34.0		I| CB
ALTAVILLA	(888)	68.6		6.11		91.2		57.9	*	AR|CB
MICHAEL	(904)	-		10.00	<	-		-		|ABB
SAC-CAL	(973)	49.8	*	4.64		63.4		34.0		I| CB
AGROLAB	(977)	76.5	**	7.03		92.6		66.8	**	|CB
NDA mean		60.37		5.487		72.81		43.75		
NDA st dev		5.97		0.723		10.20		5.87		
NDA N		26		26		27		27		
	Old statistics									
Median		60.89	(3)	5.470	(3)	71.90	(3)	45.00	(3)	
MAD		1.61		0.505		6.60		3.10		
Mean		61.10		5.617		73.36		43.29		
St Dev		3.68		0.707		10.91		5.07		
N		17		26		27		23		
Cu (mg/kg)										
OOSTERBEEK	(4)	23.8		6.68		39.5		16.4		U| CB
WAGENINGEN	(14)	24.4		7.17		38.6		14.9		I| CB
HAMELN	(25)	22.4		6.64		35.3		15.2		T| CB
LAS	(42)	24.8		6.94		38.8		16.8		I| CB
LAROL	(56)	22.7		6.91		34.7		14.9		
LRSCONTROL	(63)	19.7		6.43		28.9		11.3	*	I| CB
AL-West	(78)	22.8		7.51	*	36.7		15.0		U| CB
VICTORY	(123)	22.0		7.31		35.4		11.0	**	
CPH340XYC	(134)	23.1		6.48		37.6		16.3		I| CB
XGCALAFIGA	(135)	20.5		6.56		32.6		13.9		I| CB
HHAFU	(136)	24.0		8.86	**	37.0		16.8		+| CB
ECOSOIL	(165)	16.9	**	5.00	**	27.2	**	11.0	**	T|CB
HILL	(180)	21.0		7.00		32.0		10.0	**	
FRIS	(198)	22.5		6.90		35.2		15.7		I|AAA
ANALGIR	(199)	23.5		6.75		35.5		19.6	**	U|AAA
ABMCE	(230)	22.3		6.97		34.7		16.0		I| CB
MUMPFROG	(275)	22.3		6.62		32.9		15.5		I| D
FFEEBW	(284)	21.0		7.35		30.8		11.8		
ANALGEO	(300)	23.3		7.00		37.1		15.7		U| CB
HLVAKASSEL	(313)	31.1	**	13.70	**	37.1		15.6		I|CB
FVABW	(322)	23.8		6.50		37.6		17.4		T| CB
SKLODPOL	(342)	22.8		7.10		33.0		14.5		I|AAC
VILJAVUUSP	(419)	23.3		7.90	**	36.8		16.4		I| CB
CHEMHAL	(877)	20.7		6.23		32.6		14.8		IT|CB
LABAMB	(878)	21.0		6.60		33.0		13.5		I| CB
CRC	(884)	23.0		6.79		38.0		17.3		U|CB
CAC	(885)	23.1		6.70		33.2		14.1		I| CB
ALTAVILLA	(888)	19.7		5.85	**	30.6		13.8		AR|CB
MICHAEL	(904)	-		6.80		-		-		|AAA
SAC-CAL	(973)	21.6		6.93		30.5		15.2		I| CB
AGROLAB	(977)	24.8		6.47		38.4		19.2	**	|CB
NDA mean		22.62		6.795		35.07		15.34		(cont.)
NDA st dev		1.54		0.350		3.43		1.77		
NDA N		30		31		30		30		

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882		MIC
Cu (mg/kg) (cont.)										
NDA mean		22.62		6.795		35.07		15.34		
NDA st dev		1.54		0.350		3.43		1.77		
NDA N		30		31		30		30		
	Old statistics									
Median		22.73	(3)	6.790	(3)	35.30	(3)	15.35	(3)	
MAD		0.91		0.190		2.30		0.90		
Mean		22.49		6.793		34.97		15.31		
St Dev		1.42		0.281		2.88		1.31		
N		28		25		29		24		
Fe (g/kg)										
WAGENINGEN	(14)	24.8		1.72	**	61.7		57.6		I| CB
HAMELN	(25)	22.7		1.56		53.5		48.6		T| CB
LAS	(42)	22.7		1.50		54.2		50.4		I| CB
LAROL	(56)	21.6		1.51		48.9		44.9		
LRSCONTROL	(63)	19.5		1.36	**	44.0		41.5		I| CB
CPH340XYC	(134)	22.1		1.48		51.4		48.4		I| CB
XGCALAFIGA	(135)	19.9		1.45		45.1		42.0		I| CB
HHAFU	(136)	22.0		1.66	**	52.0		48.0		+| CB
ECOSOIL	(165)	21.5		1.52		49.1		45.4		T|CB
HILL	(180)	20.1		1.46		49.9		45.3		
FRIS	(198)	20.7		1.54		39.5		42.8		I| CB
ANALGIR	(199)	22.1		1.54		52.2		46.8		U|AAA
ABMCE	(230)	22.3		1.54	<	53.1		51.4		I| CB
MUMPFROG	(275)	22.1		1.47		48.3		46.6		I| CB
FFEEBW	(284)	18.3		1.47		31.9	**	31.9	**	
HLVAKASSEL	(313)	22.4		1.47		51.7		49.0		I|CB
FVABW	(322)	21.2		1.50		48.5		49.2		T| CB
SKLODPOL	(342)	19.4		1.50		44.5		41.1		I|AAC
LABAMB	(878)	20.0		1.29	**	42.0		39.0		I| CB
CRC	(884)	23.1		1.50		54.0		50.3		U|CB
MICHAEL	(904)	-		1.52		-		-		|ABA
SAC-CAL	(973)	19.0		1.49		40.0		42.5		I| CB
NDA mean		21.39		1.497		49.28		46.21		
NDA st dev		1.64		0.041		5.85		5.18		
NDA N		21		21		21		21		
	Old statistics									
Median		21.60	(3)	1.500	(3)	49.49	(3)	46.70	(3)	
MAD		1.10		0.020		3.82		3.07		
Mean		21.31		1.498		49.18		46.54		
St Dev		1.59		0.031		5.45		4.39		
N		21		17		20		20		
Hg (µg/kg)										
OOSTERBEEK	(4)	56.1		28.3		85.8		53.1		U| F
HAMELN	(25)	50.0		20.0		90.0		50.0		T| G
LAS	(42)	51.7		21.1		91.3		53.4		I| G
AL-West	(78)	64.9		50.0	<	113.0		59.6		U| G
CPH340XYC	(134)	43.0		17.0		79.0		46.0		I| G
HHAFU	(136)	47.0		20.0	<	93.0		49.0		$| BA
ECOSOIL	(165)	54.8		25.1		97.0		56.6		|G
MUMPFROG	(275)	48.0		23.0		91.0		53.0		I| F
HLVAKASSEL	(313)	64.0		21.3		104.0		58.7		I|G
VILJAVUUSP	(419)	54.1		21.0		102.0		57.0		| F
CHEMHAL	(877)	50.0	<	50.0	<	99.8		50.0	<	IT|G
LABAMB	(878)	100.0	<	100.0	<	150.0	**	100.0	<	I| CB
ALTAVILLA	(888)	100.0	<	100.0	<	100.0	<	100.0	<	AR|D
MICHAEL	(904)	-		100.0	<	-		-		I| G
SAC-CAL	(973)	80.0		40.0	<	90.0		50.0		I| G
AGROLAB	(977)	79.2		27.2		147.0	**	88.2	**	|G
NDA mean		54.12		22.01		93.83		53.34		(cont.)
NDA st dev		10.20		2.86		8.76		5.08		
NDA N		12		9		14		12		

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882		MIC
Hg (µg/kg) (cont.)										
NDA mean		54.12		22.01		93.83		53.34		
NDA st dev		10.20		2.86		8.76		5.08		
NDA N		12		9		14		12		
	Old statistics									
Median		54.45	(3)	21.30	(3)	92.15	(3)	53.07	(3)	
MAD		6.95		1.70		5.62		3.53		
Mean		57.74		22.67		94.65		53.31		
St Dev		12.04		3.62		9.07		4.33		
N		12		9		12		11		
K (mg/kg)										
WAGENINGEN	(14)	4380		415		7080		5940		I| CB
HAMELN	(25)	3510		327		5460		4580		T| CB
LAS	(42)	3730		321		5010		4320		I| CA
LRSCONTROL	(63)	3270		274		3470		3050		I| CB
CPH340XYC	(134)	2780		262		3990		3720		I| CB
XGCALAFIGA	(135)	3510		339		5100		4420		I| CB
HHAFU	(136)	3890		380		5680		4660		+| CB
ECOSOIL	(165)	2600	*	219		3560		3190		T|CB
HILL	(180)	2100	**	276		2750		2380		
FRIS	(198)	3540		232		4300		3620		I| CB
ABMCE	(230)	3870		360	<	5160		4740		I| CB
MUMPFROG	(275)	4250		360		5840		5030		I| CB
FFEEBW	(284)	4110		385		5830		5220		
HLVAKASSEL	(313)	3840		324		5040		4280		I|CB
FVABW	(322)	4640	*	350		6360		5850		T| CB
VILJAVUUSP	(419)	3590		298		4810		4440		| CB
LABAMB	(878)	1900	**	230		2350		2250		I| CB
CRC	(884)	6230	**	309		10160	**	5410		
MICHAEL	(904)	-		330		-		-		I|AAA
SAC-CAL	(973)	3410		328		4390		4980		I| CB
NDA mean		3703		316.9		4903		4464		
NDA st dev		485		54.3		1193		1061		
NDA N		19		19		19		19		
	Old statistics									
Median		3658	(3)	324.0	(3)	5023	(3)	4440	(3)	
MAD		221		36.0		766		720		
Mean		3691		313.6		4786		4320		
St Dev		415		54.4		1234		1057		
N		14		19		18		19		
Li (mg/kg)										
HAMELN	(25)	25.2		1.56		55.8		49.0		T| CB
VICTORY	(123)	15.8		1.11		24.2		18.8		
HLVAKASSEL	(313)	26.2		1.44		56.0		50.6		I|D
LABAMB	(878)	21.0		1.50		37.0		30.0		I| CB
Median		23.10	(1)	1.470	(1)	46.40	(1)	39.50	(1)	
MAD		2.60		0.060		9.50		10.30		
N		4		4		4		4		
Mg (mg/kg)										
WAGENINGEN	(14)	9050		234		7020		6580		I| CB
HAMELN	(25)	8690		231		6110		5730		T| CB
LAS	(42)	8730		226		6110		5710		I| CB
LRSCONTROL	(63)	8090		193		4920		4680		I| CB
CPH340XYC	(134)	8260		197		5600		5490		I| CB
XGCALAFIGA	(135)	8420		235		6220		5710		I| CB
HHAFU	(136)	8630		236		6340		5880		+| CB
ECOSOIL	(165)	7290	**	225		4800	*	4450		T|CB
HILL	(180)	8690		202		4910		4510		
NDA mean		8468		223.3		5936		5632		(cont.)
NDA st dev		480		21.6		638		746		
NDA N		18		18		18		18		

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882		MIC
Mg (mg/kg)	(cont.)									
FRIS	(198)	7470	*	193		5380		4650		I| CB
ABMCE	(230)	8580		435	<	6360		6180		I| CB
MUMPFROG	(275)	8220		240		5610		5240		I| CB
FFEEBW	(284)	7690		245		6010		5920		
HLVAKASSEL	(313)	8840		220		6420		5990		I|CB
FVABW	(322)	8590		220		6150		6160		T| CB
VILJAVUUSP	(419)	8150		203		5910		580	**	
LABAMB	(878)	7200	**	190		4450	**	4200		I| CB
CRC	(884)	9390		243		7550	**	6720		
MICHAEL	(904)	-		240		-		-		I|AAA
NDA mean		8468		223.3		5936		5632		
NDA st dev		480		21.6		638		746		
NDA N		18		18		18		18		
	Old statistics									
Median		8590	(3)	225.5	(3)	6110	(3)	5712	(3)	
MAD		251		14.5		250		468		
Mean		8534		220.7		5939		5517		
St Dev		417		19.3		570		770		
N		15		18		15		17		
Mn (mg/kg)										
WAGENINGEN	(14)	1050		49.7	*	441		180		I| CB
HAMELN	(25)	1080		48.2		447		180		T| CB
LAS	(42)	1050		43.6		449		180		I| CB
LAROL	(56)	1040		43.8		423		162		
LRSCONTROL	(63)	860	*	39.1	*	327	**	134	**	I| CB
CPH340XYC	(134)	1050		44.6		444		182		I| CB
XGCALAFIGA	(135)	960		43.0		425		167		I| CB
HHAFU	(136)	1040		52.0	**	454		186		+| CB
ECOSOIL	(165)	840	**	1.0	<	325	**	109	**	T|CB
HILL	(180)	1060		46.0		420		161		
FRIS	(198)	990		40.4		421		154		I| CB
ANALGIR	(199)	1040		45.2		432		195		U|AAA
ABMCE	(230)	1010		50.0	<	457		184		I| CB
MUMPFROG	(275)	950		43.7		388		171		I| CB
FFEEBW	(284)	1010		52.9	**	417		177		
ANALGEO	(300)	1000		43.3		429		177		U| CB
HLVAKASSEL	(313)	1080		45.0		452		186		I|CB
FVABW	(322)	1000		50.0	*	410		180		T| CB
SKLODPOL	(342)	1120		45.7		427		200		I|AAC
VILJAVUUSP	(419)	910		43.3		392		161		
LABAMB	(878)	1000		46.0		430		165		I| CB
CRC	(884)	910		55.1	**	426		176		
CAC	(885)	970		49.4		411		166		I| CB
MICHAEL	(904)	-		44.2		-		-		|AAA
NDA mean		1013		44.99		429.6		175.5		
NDA st dev		65		2.87		21.2		13.1		
NDA N		23		22		23		23		
	Old statistics									
Median		1010	(3)	44.40	(3)	427.0	(3)	177.0	(3)	
MAD		40		1.13		14.0		9.0		
Mean		1014		44.71		428.4		175.7		
St Dev		54		2.12		18.8		11.7		
N		21		16		21		21		
Mo (mg/kg)										
HAMELN	(25)	1.260		0.180		0.870		0.750		T| D
AL-West	(78)	1.500	<	1.500	<	1.500	<	1.500	<	U| CB
CPH340XYC	(134)	1.130		0.146		0.908		0.830		I| D
HHAFU	(136)	1.230		1.000	<	1.000	<	1.000	<	+| CB
NDA mean		1.0109		0.1518		0.7062		0.6195		(cont.)
NDA st dev		0.1903		0.0473		0.2305		0.1891		
NDA N		12		9		9		8		

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882		MIC
Mo (mg/kg)	(cont.)									
ECOSOIL	(165)	1.070		0.200	<	0.520		0.290		T|CB
HILL	(180)	1.000		0.200	<	0.700		0.500		
ABMCE	(230)	0.990		0.500	<	0.500	<	0.500	<	I| CB
MUMPFROG	(275)	0.951		0.132		0.717		0.600		I| D
FFEEBW	(284)	0.885		0.182		0.547		0.491		
HLVAKASSEL	(313)	1.130		0.142		0.882		0.781		I|D
VILJAVUUSP	(419)	0.873		0.048		0.100	<	0.100	<	
LABAMB	(878)	0.600		0.200		0.500		0.600		I| CB
SAC-CAL	(973)	0.750		0.120		0.100	<	0.100	<	I| CB
LDAR02	(984)	10390.000	<	12000.000	**	12000.000	**	11000.000	<	I| D
NDA mean		1.0109		0.1518		0.7062		0.6195		
NDA st dev		0.1903		0.0473		0.2305		0.1891		
NDA N		12		9		9		8		
	Old statistics									
Median		0.9950	(3)	0.1440	(3)	0.7085	(3)	0.6000	(3)	
MAD		0.1285		0.0300		0.1675		0.1295		
Mean		0.9891		0.1438		0.7055		0.6053		
St Dev		0.1936		0.0475		0.1695		0.1797		
N		12		8		8		8		
N (g/kg)										
ECOSOIL	(165)	1.99		1.13		3.85		2.37		L|O
Median		1.990	(1)	1.130	(1)	3.850	(1)	2.370	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
Na (mg/kg)										
WAGENINGEN	(14)	84.0		35.0		313		1089		I| CB
HAMELN	(25)	81.5		31.0		238		969		T| CB
LAS	(42)	100.0		23.2		252		997		I| CB
CPH340XYC	(134)	56.5		11.0		152		862		I| CB
XGCALAFIGA	(135)	69.8		16.4		195		928		I| CB
HHAFU	(136)	65.0		50.0	<	292		1017		+| CB
ECOSOIL	(165)	74.2		1.0	<	148		877		T|CB
HILL	(180)	48.0		20.0	<	132		874		
FRIS	(198)	88.9		27.0		186		1004		I| CB
ABMCE	(230)	295.0	<	295.0	<	295	<	1020		I| CB
MUMPFROG	(275)	88.8		13.1		233		931		I| CB
FFEEBW	(284)	122.0	**	43.5		226		853		
FVABW	(322)	80.0		20.0	<	210		900		T| CB
LABAMB	(878)	85.0		46.0		160		945		I| CB
MICHAEL	(904)	-		25.4		-		-		I|AAA
SAC-CAL	(973)	70.1		7.7		167		1020		I| CB
NDA mean		78.32		24.62		201.2		950.7		
NDA st dev		14.17		14.09		57.8		93.6		
NDA N		14		11		14		15		
	Old statistics									
Median		80.00	(3)	25.40	(3)	202.7	(3)	945.0	(3)	
MAD		8.89		9.60		39.2		68.5		
Mean		76.29		25.39		207.5		952.3		
St Dev		14.31		12.78		54.8		71.1		
N		13		11		14		15		
Ni (mg/kg)										
OOSTERBEEK	(4)	36.1		2.53	<	42.6		21.1		U| CB
WAGENINGEN	(14)	47.7		1.59		58.4	**	24.1		I| CB
HAMELN	(25)	40.8		1.59		47.5		21.8		T| CB
LAS	(42)	43.0		2.00	<	50.9	*	21.5		I| CB
LAROL	(56)	41.7		1.53		44.9		16.4		
NDA mean		39.25		1.471		44.01		19.80		(cont.)
NDA st dev		3.92		0.150		3.17		3.09		
NDA N		29		22		29		29		

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882	MIC
Ni (mg/kg) (cont.)									
LRSCONTROL	(63)	34.0		2.80	<	34.1	**	13.5	I| CB
AL-West	(78)	38.5		3.00	<	45.1		20.6	U| CB
VICTORY	(123)	45.5		1.88	**	44.3		16.5	
CPH340XYC	(134)	42.0		1.54		45.3		20.0	I| CB
XGCALAFIGA	(135)	35.7		1.16		42.7		18.0	I| CB
HHAFU	(136)	42.0		2.00	<	50.0		21.0	+| CB
ECOSOIL	(165)	33.9		0.86	**	39.4		16.4	T|CB
FRIS	(198)	38.9		12.10	<	45.5		19.7	I|AAC
ANALGIR	(199)	40.3		1.40		45.2		24.7	U|AAC
ABMCE	(230)	38.6		1.46		43.6		20.5	I| CB
MUMPFROG	(275)	41.3		1.49		45.8		22.2	I| D
FFEEBW	(284)	36.5		1.40		40.4		17.9	
ANALGEO	(300)	38.8		1.50		44.4		19.1	U| CB
HLVAKASSEL	(313)	44.3		1.64		49.7		22.0	I|D
FVABW	(322)	44.5		1.30		45.9		22.1	T| CB
SKLODPOL	(342)	38.8		1.50		41.5		18.0	I|AAC
VILJAVUUSP	(419)	40.1		1.98	**	44.3		16.4	
CHEMHAL	(877)	34.5		2.10	**	39.4		20.0	IT|CB
LABAMB	(878)	39.0		1.30		40.0		16.0	I| CB
CRC	(884)	39.6		1.55		49.4		22.5	U|CB
CAC	(885)	40.7		1.50		42.3		16.6	I| CB
ALTAVILLA	(888)	36.2		1.31		44.7		23.1	AR|CB
MICHAEL	(904)	-		5.00	<	-		-	|ABC
SAC-CAL	(973)	34.0		2.22	<	41.3		15.1	I| CB
AGROLAB	(977)	36.5		1.21		41.5		21.1	|CB
NDA mean		39.25		1.471		44.01		19.80	
NDA st dev		3.92		0.150		3.17		3.09	
NDA N		29		22		29		29	
	Old statistics								
Median		39.00	(3)	1.495	(3)	44.37	(3)	20.04	(3)
MAD		2.70		0.095		1.75		2.06	
Mean		39.43		1.443		44.11		19.58	
St Dev		3.61		0.137		2.99		2.87	
N		29		18		26		29	
P (mg/kg)									
WAGENINGEN	(14)	988		577	*	1240		267	I| CB
HAMELN	(25)	935		529		1160		297	T| CB
LAS	(42)	997		528		1320		318	I| CB
LRSCONTROL	(63)	887		484	*	1030		248	I| CB
CPH340XYC	(134)	923		515		1190		288	I| CB
XGCALAFIGA	(135)	901		490	*	1140		257	I| CB
HHAFU	(136)	962		554		1290		330	+| CB
ECOSOIL	(165)	831	**	444	**	1040		250	T|CB
HILL	(180)	934		569		1130		231	
FRIS	(198)	1101	**	524		1390		400	I| BA
ABMCE	(230)	989		533		1310		357	I| CB
MUMPFROG	(275)	957		532		1180		364	I| CB
FFEEBW	(284)	957		601	**	1180		307	
ANALGEO	(300)	988		542		1220		317	U| CB
HLVAKASSEL	(313)	995		528		1260		328	I|CB
FVABW	(322)	940		520		1210		320	T| CB
VILJAVUUSP	(419)	888		525		1140		246	
LABAMB	(878)	1050		590	*	1300		300	I| CB
CRC	(884)	1086	**	613	**	1780	**	327	U|CB
CAC	(885)	980		570		1270		281	I| CB
SAC-CAL	(973)	830	**	537		950	*	248	I| CB
NDA mean		956.4		535.5		1209		296.0	(cont.)
NDA st dev		53.2		26.9		108		45.2	
NDA N		21		21		21		21	

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882		MIC
P (mg/kg) (cont.)										
NDA mean		956.4		535.5		1209		296.0		
NDA st dev		53.2		26.9		108		45.2		
NDA N		21		21		21		21		
	Old statistics									
Median		957.0	(3)	530.5	(3)	1210	(3)	300.0	(3)	
MAD		31.0		6.6		69		30.0		
Mean		957.1		536.2		1209		299.1		
St Dev		43.6		17.0		95		44.7		
N		17		14		19		21		
Pb (mg/kg)										
OOSTERBEEK	(4)	23.7		6.07	<	64.2		26.2		U| CB
WAGENINGEN	(14)	24.9		6.77		69.6		17.7		I| CB
HAMELN	(25)	26.6		6.90		70.6		29.8		T| CB
LAS	(42)	28.2		7.37		77.8		26.7		I| CB
LAROL	(56)	24.6		6.48		71.8		23.1		
LRSCONTROL	(63)	23.2		5.75	**	58.1		23.9		I| CB
AL-West	(78)	27.5		13.00	<	76.7		31.8	*	U| CB
VICTORY	(123)	32.8	**	8.32	**	90.8	**	28.0		
CPH340XYC	(134)	26.9		3.60	**	78.5		31.2	*	I| D
XGCALAFIGA	(135)	25.2		6.01		68.9		23.5		I| CB
HHAFU	(136)	26.0		7.05		76.0		25.0		+| CB
ECOSOIL	(165)	27.6		6.90		75.3		37.4	**	T|CB
FRIS	(198)	20.7	**	10.85	<	61.6		17.3		I|ABC
ANALGIR	(199)	25.0		6.75		70.5		23.6		U|AAC
ABMCE	(230)	24.5		13.00	<	70.7		22.0		I|AAA
MUMPFROG	(275)	26.1		6.77		68.5		25.6		I| D
FFEEBW	(284)	25.0		6.90		65.4		23.4		
ANALGEO	(300)	25.5		6.50		70.4		25.1		U| CB
HLVAKASSEL	(313)	28.9		6.52		74.7		25.9		I|D
FVABW	(322)	28.1		6.50		69.1		25.7		T| CB
SKLODPOL	(342)	24.2		6.93		64.1		21.3		I|AAC
VILJAVUUSP	(419)	23.4		6.30		71.2		18.0		|BAE
CHEMHAL	(877)	24.1		6.54		62.0		22.7		IT|CB
LABAMB	(878)	26.0		7.10		71.0		23.0		I| CB
CRC	(884)	35.1	**	8.49	**	90.2	**	40.5	**	U|CB
CAC	(885)	29.5	*	8.10	**	80.7		30.1		I| CB
ALTAVILLA	(888)	26.5		7.56		98.3	**	26.7		AR|CB
MICHAEL	(904)	-		10.00	<	-		-		|AAC
SAC-CAL	(973)	22.7		6.76		56.2		21.3		I| CB
AGROLAB	(977)	24.4		5.70	**	59.5		22.5		|CB
NDA mean		25.49		6.735		70.14		24.42		
NDA st dev		2.07		0.417		7.85		3.44		
NDA N		29		25		29		29		
	Old statistics									
Median		25.19	(3)	6.770	(3)	70.45	(3)	23.60	(3)	
MAD		1.12		0.250		4.95		2.10		
Mean		25.55		6.769		69.35		23.92		
St Dev		1.68		0.364		6.47		3.31		
N		25		19		26		25		
Rb (mg/kg)										
CPH340XYC	(134)	26.5		2.45		49.0		37.2		| D
Median		26.50	(1)	2.450	(1)	49.00	(1)	37.20	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
S (mg/kg)										
WAGENINGEN	(14)	366		238		624		606		I| CB
HAMELN	(25)	333		212		556		541		T| CB
NDA mean		341.0		231.3		574.2		568.2		(cont.)
NDA st dev		8.8		12.7		26.4		26.2		
NDA N		10		10		10		10		

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882		MIC
S (mg/kg) (cont.)										
LAS	(42)	347		218		615		588		I| CB
HHAFU	(136)	365		253		636		638		+| CB
HILL	(180)	335		234		574		561		
MUMPFROG	(275)	342		233		558		563		I| CB
FFEEBW	(284)	333		236		547		537		
ANALGEO	(300)	343		226		574		566		U| CB
HLVAKASSEL	(313)	347		243		572		566		I|CB
FVABW	(322)	340		220		580		580		T| CB
NDA mean		341.0		231.3		574.2		568.2		
NDA st dev		8.8		12.7		26.4		26.2		
NDA N		10		10		10		10		
	Old statistics									
Median		342.5	(3)	233.5	(3)	574.0	(3)	566.0	(3)	
MAD		6.0		8.5		17.0		18.0		
Mean		345.1		231.3		583.6		574.6		
St Dev		11.9		12.4		30.6		30.2		
N		10		10		10		10		
Sb (mg/kg)										
HAMELN	(25)	0.570		0.110		0.550		0.220		T| CB
AL-West	(78)	1.000	<	1.000	<	1.000	<	1.000	<	U| CB
CPH340XYC	(134)	0.719		0.139		0.961		0.341		I| D
MUMPFROG	(275)	0.512		0.101		0.546		0.176		I| D
HLVAKASSEL	(313)	0.532		0.093		0.591		0.198		I|D
LABAMB	(878)	0.600		0.150		0.700		0.250		I| CB
Median		0.5700	(1)	0.1100	(1)	0.5910	(1)	0.2200	(1)	
MAD		0.0380		0.0172		0.0450		0.0300		
N		5		5		5		5		
Sc (mg/kg)										
VICTORY	(123)	4.35		0.420		7.89		7.38		
Median		4.350	(1)	0.4200	(1)	7.890	(1)	7.380	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
Se (mg/kg)										
HAMELN	(25)	0.160		0.130		1.010		0.260		T| F
HILL	(180)	0.200	<	0.200	<	1.000		0.300		
MUMPFROG	(275)	0.197		0.168		1.050		3.200		I| D
HLVAKASSEL	(313)	0.128		0.125		0.930		0.263		I|D
LABAMB	(878)	0.300		0.150		1.100		0.350		I| CB
CRC	(884)	-		-		0.891		-		U|CB
SAC-CAL	(973)	0.100		0.100		0.880		0.260		I| CB
LDAR02	(984)	0.210	<	0.220	<	0.930		0.300		I| Z
NDA mean		-		-		0.9681		-		
NDA st dev		-		-		0.0871		-		
NDA N		5		5		8		7		
	Old statistics									
Median		0.1600	(1)	0.1300	(1)	0.9650	(3)	0.3000	(1)	
MAD		0.0370		0.0200		0.0595		0.0400		
Mean		-		-		0.9739		-		
St Dev		-		-		0.0786		-		
N		5		5		8		7		
Si (g/kg)										
CRC	(884)	372		463		342		326		
Median		372.0	(1)	463.0	(1)	342.0	(1)	326.0	(1)	
MAD		-		-		-		-		
N		1		1		1		1		

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882		MIC
Sn (mg/kg)										
HAMELN	(25)	2.21		1.000	<	2.24		1.61		T| D
AL-West	(78)	6.00	<	6.000	<	6.00	<	6.00	<	U| CB
HHAFU	(136)	2.68		2.000	<	5.61		3.91		+| CB
HLVAKASSEL	(313)	2.12		0.442		2.37		1.66		I|D
LABAMB	(878)	1.60		0.600		1.80		1.20		I| CB
CRC	(884)	3.00		1.480		3.83		2.30		
Median		2.210	(1)	0.6000	(1)	2.370	(1)	1.660	(1)	
MAD		0.470		0.1580		0.570		0.460		
N		5		3		5		5		
Sr (mg/kg)										
HAMELN	(25)	21.7		3.84		36.3		38.8		T| CB
HHAFU	(136)	24.0		4.09		43.0		42.0		+| CB
MUMPFROG	(275)	24.4		4.20		38.0		40.9		I| D
HLVAKASSEL	(313)	22.8		2.89		38.5		40.3		I|D
LABAMB	(878)	25.0		3.10		30.0		33.0		I| CB
AGROLAB	(977)	30.1		5.25		61.5		66.6		|CB
Median		24.20	(1)	3.965	(1)	38.25	(1)	40.60	(1)	
MAD		1.10		0.550		3.35		1.60		
N		6		6		6		6		
Ti (mg/kg)										
HHAFU	(136)	312		100.0		324		267		+| CB
ECOSOIL	(165)	180		56.0		105		89		T|CB
MUMPFROG	(275)	282		77.9		245		209		I| CB
FFEEBW	(284)	278		89.2		255		217		
HLVAKASSEL	(313)	303		71.0		244		183		I|CB
LABAMB	(878)	120		51.0		55		55		I| CB
Median		280.0	(1)	74.45	(1)	244.5	(1)	196.0	(1)	
MAD		27.5		16.62		45.0		46.0		
N		6		6		6		6		
Tl (mg/kg)										
HAMELN	(25)	0.240		0.0300		0.590		0.330		T| D
AL-West	(78)	3.000	<	3.0000	<	3.000	<	3.000	<	U| CB
CPH340XYC	(134)	0.208		0.0230		0.510		0.300		I| D
HLVAKASSEL	(313)	0.270		0.0350	<	0.573		0.322		I|D
LABAMB	(878)	0.150		0.1000	<	0.300		0.200		I| CB
Median		0.2240	(1)	0.02650	(1)	0.5415	(1)	0.3110	(1)	
MAD		0.0310		0.00350		0.0400		0.0150		
N		4		2		4		4		
U (mg/kg)										
HAMELN	(25)	0.850		0.150		1.74		0.92		T| D
CPH340XYC	(134)	0.985		0.179		2.19		1.10		I| D
Median		0.9175	(1)	0.1645	(1)	1.965	(1)	1.010	(1)	
MAD		0.0675		0.0145		0.225		0.090		
N		2		2		2		2		
V (mg/kg)										
HAMELN	(25)	53.1		7.35		90.6		65.0		T| D
VICTORY	(123)	51.8		8.66	**	68.3		50.2		
CPH340XYC	(134)	53.3		7.60		87.7		61.4		I| D
HHAFU	(136)	54.0		7.70		99.0		71.0		+| CB
ECOSOIL	(165)	43.9		6.67	**	70.6		48.6		T|CB
ABMCE	(230)	53.4		7.64		87.1		62.4		I| CB
MUMPFROG	(275)	57.4		8.22	*	89.7		67.3		I| D
NDA mean		53.00		7.661		85.77		62.27		(cont.)
NDA st dev		5.99		0.365		13.79		7.91		
NDA N		13		14		13		13		

ISE 2009.1 - Aqua Regia (ISO 11466)

Sample		900		986		910		882		MIC
V (mg/kg) (cont.)										
ANALGEO	(300)	48.3		7.50		79.1		58.6		U| CB
HLVAKASSEL	(313)	60.5		8.71	**	96.6		68.1		I|CB
VILJAVUUSP	(419)	57.5		8.04		93.2		65.9		| CB
LABAMB	(878)	46.0		7.70		67.0		47.0		I| CB
CRC	(884)	59.0		9.22	**	106.0		65.5		
CAC	(885)	47.7		7.50		66.1		47.9		I| CB
MICHAEL	(904)	-		7.55		-		-		|BAE
NDA mean		53.00		7.661		85.77		62.27		
NDA st dev		5.99		0.365		13.79		7.91		
NDA N		13		14		13		13		
	Old statistics									
Median		53.30	(3)	7.600	(3)	87.70	(3)	62.40	(3)	
MAD		4.20		0.100		8.90		4.90		
Mean		52.76		7.619		84.70		59.92		
St Dev		5.13		0.191		13.25		8.56		
N		13		9		13		13		
Zn (mg/kg)										
OOSTERBEEK	(4)	64.6		15.2		208		90.5		U| CB
WAGENINGEN	(14)	70.8		17.4		228		96.1		I| CB
HAMELN	(25)	68.3		15.8		218		94.7		T| CB
LAS	(42)	73.0		17.3		234		98.2		I| CB
LAROL	(56)	69.3		16.0		220		82.1		
LRSCONTROL	(63)	53.5	**	13.7		160	**	66.8	**	I| CB
AL-West	(78)	64.6		17.0	<	212		88.2		U| CB
VICTORY	(123)	72.7		24.2	**	207		83.9		
CPH340XYC	(134)	71.3		15.5		221		94.4		I| CB
XGCALAFIGA	(135)	58.0		13.0	*	190		79.0		I| CB
HHAFU	(136)	71.0		16.9		232		97.0		+| CB
ECOSOIL	(165)	59.8		18.0		190		80.2		T|CB
HILL	(180)	63.0		16.0		194		70.0	*	
FRIS	(198)	27.3	**	12.3	**	79	**	35.6	**	I|AAC
ANALGIR	(199)	69.0		16.7		220		92.8		U|AAC
ABMCE	(230)	66.3		17.2		213		90.0		I| CB
MUMPFROG	(275)	67.2		15.4		202		89.2		I| D
FFEEBW	(284)	64.0		16.4		206		90.2		
ANALGEO	(300)	63.2		14.6		208		86.1		U| CB
HLVAKASSEL	(313)	67.5		17.3		219		90.0		I|CB
FVABW	(322)	69.0		14.0		218		101.0		T| CB
SKLODPOL	(342)	72.9		16.2		220		94.7		I|AAC
VILJAVUUSP	(419)	64.2		15.4		212		87.9		I| CB
CHEMHAL	(877)	61.7		17.3		187		79.5		IT|CB
LABAMB	(878)	64.0		15.5		200		70.0	*	I| CB
CRC	(884)	67.7		15.7		213		91.3		U|CB
CAC	(885)	43.0	**	11.6	**	189		64.3	**	I| CB
ALTAVILLA	(888)	69.3		15.1		220		102.5		AR|CB
MICHAEL	(904)	-		16.3		-		-		|AAC
SAC-CAL	(973)	55.5	**	16.5		193		79.7		I| CB
AGROLAB	(977)	67.6		13.9		192		93.8		|CB
NDA mean		66.97		15.96		210.2		89.33		
NDA st dev		4.68		1.34		15.1		9.05		
NDA N		30		30		30		30		
	Old statistics									
Median		67.54	(3)	16.00	(3)	212.0	(3)	90.17	(3)	
MAD		3.31		0.74		8.1		4.53		
Mean		66.92		15.97		209.5		90.12		
St Dev		4.01		1.14		13.6		6.69		
N		26		26		28		25		

ISE 2009.1 - Extraction with boiling 2M HNO3

Sample		900		986		910		882		MIC
Cd (mg/kg)										
PESEUX	(5)	0.200	**	0.088		0.850		0.0670	*	N|CB
LABOR M	(22)	0.700	<	0.150	<	1.001	**	0.1500	<	N| CB
FRIDOLIN	(29)	0.358		0.103		0.788		0.0340		N| D
LIEBEFELD	(36)	0.313		0.100	<	1.005	**	0.1000	<	N/CB
KUSLSH	(60)	0.310		0.096		0.810		0.0380		N|BAF
AGROCH	(75)	0.310		0.070	**	0.800		0.0400		N|BAC
HIDU	(82)	-		0.070	**	-		0.0500	<	N| D
MERLIN	(159)	0.320		0.090		0.800		0.0500	<	J| CB
CHECKSOL	(161)	0.430	<	0.430	<	0.640	**	0.4300	<	N|AAC
BODEN ZH	(162)	0.336		0.101		0.746		0.0500	<	N| CB
SCSF	(184)	0.332		0.101		0.723		0.0500	<	N| CB
ZA/R	(200)	0.338		0.089		0.687	*	0.0500	<	N|D
GEWBODLAB	(203)	0.411		0.120	*	0.839		0.1000	*	N|BAF
MIRES	(224)	0.340		0.200	**	1.000	**	0.2000	**	N|CB
URKANTONE	(232)	0.287		0.106		0.937	*	0.0500	<	N| CB
CH-SAMEN	(261)	0.370		0.100		0.810		0.0400		N|D
UAN AUE BL	(290)	0.366		0.099		0.830		0.0380		N| D
MBT	(291)	0.470	**	0.100		0.810		0.1700	**	N|AAC
SEELABO25	(918)	0.357		0.106		0.874		0.1260	**	
FRESHERTEN	(920)	0.340		0.100		0.730		0.0700	*	N| CB
ELEMENT	(980)	0.260	*	0.060	**	0.770		0.0100	<	N|CB
H62B12	(983)	0.350		0.092		0.790		0.0350		N|AAE
NDA mean		0.3361		0.0984		0.7988		0.04688		
NDA st dev		0.0354		0.0086		0.0612		0.02497		
NDA N		19		19		21		12		
	Old statistics									
Median		0.3390	(3)	0.1000	(3)	0.8000	(3)	0.03800	(3)	
MAD		0.0190		0.0035		0.0300		0.00200		
Mean		0.3399		0.0979		0.7980		-		
St Dev		0.0296		0.0060		0.0427		-		
N		16		14		15		6		
Co (mg/kg)										
PESEUX	(5)	7.94		0.490		13.1		5.55		N|CB
LABOR M	(22)	6.89	**	0.700	<	13.8		5.43		N| CB
FRIDOLIN	(29)	8.03		0.460		13.2		5.75		N| D
LIEBEFELD	(36)	6.81	**	0.467		12.4		5.64		N/CB
KUSLSH	(60)	7.90		0.400	*	12.9		4.97		N| CB
AGROCH	(75)	7.91		0.450		12.4		5.99		N|BAD
HIDU	(82)	7.78		0.500	<	14.0		5.96		N| D
MERLIN	(159)	7.58	*	0.550	**	12.5		5.49		|
BODEN ZH	(162)	8.02		0.463		13.9		6.04		N| CB
GEWBODLAB	(203)	8.31	*	0.548	**	14.7		6.80	**	| CB
MIRES	(224)	7.90		0.500		13.0		5.80		N|CB
URKANTONE	(232)	7.89		0.485		13.9		5.61		N| CB
CH-SAMEN	(261)	7.10	**	1.900	<	11.6		5.38		N|CB
UAN AUE BL	(290)	8.13		0.452		13.5		5.97		N| D
MBT	(291)	9.78	**	1.000	<	12.6		8.34	**	N| CB
SEELABO25	(918)	6.90	**	0.460		12.0		5.30		
FRESHERTEN	(920)	7.94		0.480		13.9		6.88	**	N| CB
ELEMENT	(980)	6.77	**	0.320	**	11.8		5.04		N|CB
NDA mean		7.933		0.4702		13.07		5.640		
NDA st dev		0.248		0.0254		1.04		0.413		
NDA N		18		14		18		18		
	Old statistics									
Median		7.925	(3)	0.4650	(3)	13.05	(3)	5.608	(3)	
MAD		0.030		0.0140		0.74		0.228		
Mean		7.944		0.4707		13.07		5.595		
St Dev		0.096		0.0170		0.87		0.335		
N		10		10		18		15		

ISE 2009.1 - Extraction with boiling 2M HNO3

Sample		900		986		910		882		MIC
Cr (mg/kg)										
PESEUX	(5)	38.9	**	5.45	**	40.0		23.0		N|CB
LABOR M	(22)	25.9		3.79		38.2		20.5		N| CB
FRIDOLIN	(29)	33.4		4.21		41.5		23.3		N| D
LIEBEFELD	(36)	31.6		4.16		43.5		24.3		N/CB
KUSLSH	(60)	32.2		4.19		41.4		22.0		N| CB
AGROCH	(75)	30.8		3.65		39.9		22.2		N|AAB
HIDU	(82)	32.3		4.29		43.3		24.9		N| CB
MERLIN	(159)	31.3		4.70		41.0		23.2		|
CHECKSOL	(161)	30.7		3.30	<	36.4	**	21.2		N|AAC
BODEN ZH	(162)	33.6		4.02		43.4		24.1		N| CB
SCSF	(184)	30.1		5.00	<	38.6		21.2		N| CB
ZA/R	(200)	33.8		3.82		41.5		23.6		N|D
GEWBODLAB	(203)	32.7		4.42		42.3		24.3		N| CB
MIRES	(224)	33.0		4.20		40.0		23.0		N|CB
URKANTONE	(232)	32.3		4.19		41.9		22.2		N| CB
CH-SAMEN	(261)	28.2		4.27		37.1		22.3		N|CB
UAN AUE BL	(290)	33.7		4.25		42.2		24.7		N| D
MBT	(291)	28.8		4.01		41.8		21.1		N| CB
SEELABO25	(918)	27.2		3.99		34.9	**	20.3		
FRESHERTEN	(920)	34.4		4.60		43.9		26.5		N| CB
ELEMENT	(980)	29.5		4.91	**	40.6		23.5		N|CB
H62B12	(983)	28.0		5.00	<	36.0	**	21.0		N|AAA
NDA mean		31.57		4.171		41.24		22.77		
NDA st dev		2.58		0.281		1.96		1.72		
NDA N		22		19		22		22		
	Old statistics									
Median		31.63	(3)	4.190	(3)	41.50	(3)	23.00	(3)	
MAD		1.77		0.170		1.50		1.18		
Mean		31.12		4.162		41.16		22.84		
St Dev		2.42		0.272		1.87		1.60		
N		21		17		19		22		
Cu (mg/kg)										
PESEUX	(5)	17.8	*	7.08		32.9		8.3	*	N|CB
LABOR M	(22)	21.2	*	7.70	**	55.0	**	24.3	**	N| CB
FRIDOLIN	(29)	19.6		6.66		31.5		10.1		N| D
LIEBEFELD	(36)	18.5		6.16	**	33.5		9.8		N/CB
KUSLSH	(60)	19.3		6.83		32.2		9.8		N| CB
AGROCH	(75)	19.1		6.37	*	32.2		10.4		N|AAA
HIDU	(82)	19.5		6.84		33.1		10.3		N| CB
MERLIN	(159)	20.8		7.60	**	35.0		11.4		|
CHECKSOL	(161)	18.7		6.14	**	29.3	*	9.7		N|AAC
BODEN ZH	(162)	19.9		6.24	**	31.2		11.2		N| CB
SCSF	(184)	18.9		6.78		32.7		9.6		N| CB
ZA/R	(200)	2.0	**	6.61		33.2		11.5		N|D
GEWBODLAB	(203)	19.3		6.78		31.7		10.1		N| CB
MIRES	(224)	21.0		6.90		35.0		11.0		N|CB
URKANTONE	(232)	19.5		6.75		32.8		11.0		N| CB
CH-SAMEN	(261)	19.7		6.78		35.6	*	10.5		N|CB
UAN AUE BL	(290)	19.7		6.75		32.5		10.8		N| D
MBT	(291)	17.0	**	6.70		32.7		10.3		N|AAC
SEELABO25	(918)	16.8	**	6.86		28.1	**	9.2		
FRESHERTEN	(920)	20.1		7.11	*	31.6		10.4		N| CB
ELEMENT	(980)	12.1	**	1.45	**	22.9	**	2.0	**	N|CB
H62B12	(983)	20.0		8.60	**	34.0		13.0	**	N|AAA
NDA mean		19.51		6.771		32.70		10.36		(cont.)
NDA st dev		0.94		0.213		1.52		0.92		
NDA N		22		22		22		22		

ISE 2009.1 - Extraction with boiling 2M HNO3

Sample		900		986		910		882		MIC
Cu (mg/kg)	(cont.)									
NDA mean		19.51		6.771		32.70		10.36		
NDA st dev		0.94		0.213		1.52		0.92		
NDA N		22		22		22		22		
	Old statistics									
Median		19.57	(3)	6.780	(3)	32.70	(3)	10.34	(3)	
MAD		0.38		0.060		0.54		0.52		
Mean		19.60		6.793		32.80		10.39		
St Dev		0.68		0.118		1.11		0.66		
N		16		13		17		18		
Hg (µg/kg)										
PESEUX	(5)	47.7		22.1		94.0		57.3		
FRIDOLIN	(29)	44.7		18.8		90.3		50.7		N| G
LIEBEFELD	(36)	39.7		16.8		84.2		46.3		N/G
KUSLSH	(60)	45.8		15.6		86.5		47.6		N| F
AGROCH	(75)	47.4		21.2		94.9		53.8		N|G
HIDU	(82)	38.1		17.7		80.0		45.2		N| G
MERLIN	(159)	47.0		50.0	<	106.0		55.5		|
BODEN ZH	(162)	40.9		17.5		78.4		45.2		N| F
ZA/R	(200)	50.0	<	50.0	<	69.0		50.0	<	N|D
GEWBODLAB	(203)	39.6		17.7		72.1		44.6		N|CB
MIRES	(224)	93.0	**	41.0	**	230.0	**	110.0	**	N|D
URKANTONE	(232)	45.3		20.2		77.0		44.3		N| G
CH-SAMEN	(261)	30.0	**	12.0		64.0		31.0	**	N|G
UAN AUE BL	(290)	49.0		14.3		99.7		50.6		N| F
MBT	(291)	45.2		19.7		88.0		49.1		N| G
SEELABO25	(918)	65.0	**	25.0		90.0		50.0		
FRESHERTEN	(920)	49.0		23.0		97.0		70.0	**	N| G
ELEMENT	(980)	50.0		19.0		71.0		48.0		N|G
H62B12	(983)	100.0	<	100.0	<	160.0	**	100.0	<	L|G
NDA mean		45.38		18.74		85.10		48.68		
NDA st dev		4.62		3.28		13.76		5.39		
NDA N		17		16		19		17		
	Old statistics									
Median		45.53	(3)	18.80	(3)	86.50	(3)	48.55	(3)	
MAD		2.82		1.98		8.42		2.81		
Mean		44.95		18.70		84.83		49.16		
St Dev		3.89		3.38		11.83		4.13		
N		14		15		17		14		
Mo (mg/kg)										
PESEUX	(5)	0.073		0.128		0.243		0.0500	<	
FRIDOLIN	(29)	0.110		0.101	**	0.302		0.0650		N| D
KUSLSH	(60)	0.130		0.120		0.300		0.1100		N|BAC
AGROCH	(75)	0.120		0.130		0.340		0.0500	<	N|AAB
HIDU	(82)	0.250	<	0.250	<	0.250	<	0.2500	<	N| D
ZA/R	(200)	0.136		0.117		0.321		0.1060		N|D
GEWBODLAB	(203)	0.211		0.125		0.296		0.0990		| CB
MIRES	(224)	0.200	<	0.200	<	0.300		0.2000	<	N|D
CH-SAMEN	(261)	0.297	**	0.242	**	0.683	**	0.4160	**	N|D
UAN AUE BL	(290)	0.131		0.123		0.359		0.0890		N| D
SEELABO25	(918)	0.078		0.110		0.209		0.0530		
FRESHERTEN	(920)	0.150		0.130		0.380		0.1500		N| CB
ELEMENT	(980)	36.550	**	9.760	**	72.750	**	61.1500	**	N|CB
H62B12	(983)	0.500	<	0.500	<	0.500	<	0.5000	<	N|AAA
NDA mean		0.1218		0.1236		0.3099		0.09529		(cont.)
NDA st dev		0.0310		0.0075		0.0537		0.05204		
NDA N		11		11		12		9		

ISE 2009.1 - Extraction with boiling 2M HNO3

Sample		900		986		910		882		MIC
Mo (mg/kg)	(cont.)									
NDA mean		0.1218		0.1236		0.3099		0.09529		
NDA st dev		0.0310		0.0075		0.0537		0.05204		
NDA N		11		11		12		9		
	Old statistics									
Median		0.1300	(3)	0.1240	(3)	0.3010	(3)	0.09900	(2)	
MAD		0.0200		0.0050		0.0295		0.01100		
Mean		0.1266		0.1229		0.3050		-		
St Dev		0.0408		0.0070		0.0508		-		
N		9		8		10		7		
Ni (mg/kg)										
PESEUX	(5)	39.7	**	1.23		34.8		11.8		N|CB
LABOR M	(22)	27.4		0.91	**	34.0		10.5		N| CB
FRIDOLIN	(29)	33.1		1.18		34.6		12.2		N| D
LIEBEFELD	(36)	32.7		0.50	<	41.7	**	17.2	**	N/CB
KUSLSH	(60)	31.5		1.19		33.5		11.8		N| CB
AGROCH	(75)	29.1		2.00	<	30.7		9.9		N|AAC
HIDU	(82)	34.6		1.20		38.2		13.6		N| D
MERLIN	(159)	32.4		2.50	<	34.2		12.1		|
CHECKSOL	(161)	30.2		4.10	<	29.5	*	10.8		N|AAC
BODEN ZH	(162)	32.7		1.12	*	35.8		12.7		N| CB
SCSF	(184)	31.6		2.50	<	33.7		11.5		N| CB
ZA/R	(200)	33.8		1.04	**	36.6		13.3		N|D
GEWBODLAB	(203)	33.1		1.21		35.6		12.8		N| CB
MIRES	(224)	32.0		1.40	**	35.0		12.0		N|CB
URKANTONE	(232)	31.2		1.24		38.5		11.1		N| CB
CH-SAMEN	(261)	30.2		1.80	<	31.7		12.0		N|CB
UAN AUE BL	(290)	34.0		1.20		35.8		12.9		N| D
MBT	(291)	30.0		1.20		34.2		14.3		N| CB
SEELABO25	(918)	29.0		1.21		30.5		10.8		
FRESHERTEN	(920)	33.3		1.51	**	38.0		15.8	**	N| CB
ELEMENT	(980)	29.7		0.97	**	28.9	**	12.3		N|CB
H62B12	(983)	40.0	**	5.00	<	51.0	**	20.0	**	N|AAA
NDA mean		31.77		1.203		34.65		12.05		
NDA st dev		2.41		0.040		2.46		1.29		
NDA N		22		15		22		22		
	Old statistics									
Median		31.80	(3)	1.200	(3)	34.70	(3)	12.00	(3)	
MAD		1.55		0.010		1.10		0.81		
Mean		31.58		1.208		34.74		12.02		
St Dev		1.94		0.020		2.31		1.11		
N		20		9		18		19		
Pb (mg/kg)										
PESEUX	(5)	26.1		6.62		74.9		24.4		N|CB
LABOR M	(22)	23.4		6.32		78.8	*	20.6		N| CB
FRIDOLIN	(29)	24.1		6.63		66.2		20.1		N| D
LIEBEFELD	(36)	24.0		6.63		71.8		23.6		N/CB
KUSLSH	(60)	23.5		6.87		69.0		18.2		N| CB
AGROCH	(75)	25.2		6.74		76.6		20.6		N|AAC
HIDU	(82)	27.5		7.10		80.7	**	27.0	**	N| D
MERLIN	(159)	27.7		7.90	**	71.6		20.6		|
CHECKSOL	(161)	25.9		6.93		67.2		18.4		N|AAC
BODEN ZH	(162)	24.7		6.23	*	74.5		19.9		N| CB
SCSF	(184)	25.2		6.86		70.4		18.7		N| CB
ZA/R	(200)	25.3		6.35		67.9		20.6		N|D
GEWBODLAB	(203)	26.4		6.73		71.3		19.6		N| CB
MIRES	(224)	26.0		6.00	**	68.0		18.0		N|CB
URKANTONE	(232)	25.4		6.74		70.2		19.8		N| CB
CH-SAMEN	(261)	22.4	*	6.87		67.7		18.6		N|CB
UAN AUE BL	(290)	26.8		6.40		74.3		21.4		N| D
NDA mean		25.37		6.734		70.34		19.99		(cont.)
NDA st dev		1.43		0.250		3.78		1.90		
NDA N		22		22		22		22		

ISE 2009.1 - Extraction with boiling 2M HNO3

Sample		900		986		910		882		MIC
Pb (mg/kg) (cont.)										
MBT	(291)	34.0	**	6.65		70.1		19.7		N|AAC
SEELABO25	(918)	21.9	**	7.04		59.3	**	17.5		
FRESHERTEN	(920)	26.2		6.87		68.0		21.6		N| CB
ELEMENT	(980)	25.7		7.71	**	65.3		22.4		N|CB
H62B12	(983)	25.0		7.40	**	72.0		20.0		N|AAE
NDA mean		25.37		6.734		70.34		19.99		
NDA st dev		1.43		0.250		3.78		1.90		
NDA N		22		22		22		22		
	Old statistics									
Median		25.38	(3)	6.740	(3)	70.17	(3)	20.00	(3)	
MAD		0.72		0.130		2.17		1.30		
Mean		25.48		6.727		70.37		20.21		
St Dev		1.21		0.225		3.14		1.77		
N		19		17		19		21		
Tl (mg/kg)										
FRIDOLIN	(29)	0.088		0.0150		0.122		0.077		N| D
AGROCH	(75)	0.120		0.0500	<	0.190		0.140		N|BAD
HIDU	(82)	0.050	<	0.0500	<	0.050	<	0.050	<	N| D
MIRES	(224)	0.090		0.0200		0.180		0.090		N|D
UAN AUE BL	(290)	0.112		0.0500	<	0.161		0.113		N| D
SEELABO25	(918)	0.940		0.4000	<	0.400	<	0.400	<	
FRESHERTEN	(920)	0.150		0.0200		0.230		0.170		N| D
Median		0.1160	(1)	0.02000	(1)	0.1800	(1)	0.1130	(1)	
MAD		0.0270		-		0.0190		0.0270		
N		6		3		5		5		
Zn (mg/kg)										
PESEUX	(5)	67.2	**	15.4		172		57.9		N|CB
LABOR M	(22)	47.9	**	13.2		164		52.3		N| CB
FRIDOLIN	(29)	57.9		15.4		163		56.1		N| D
LIEBEFELD	(36)	49.4	*	10.1	**	163		53.5		N/CB
KUSLSH	(60)	56.3		15.1		170		45.7		N| CB
AGROCH	(75)	56.6		14.9		173		59.8		N|AAC
HIDU	(82)	59.5		15.0		178		64.3		N| CB
MERLIN	(159)	64.7	*	18.5	**	186		65.9		|
CHECKSOL	(161)	56.3		15.1		161		51.4		N|AAC
BODEN ZH	(162)	59.1		14.4		171		63.6		N| CB
SCSF	(184)	54.5		14.5		161		53.8		N| CB
ZA/R	(200)	60.3		14.2		169		59.8		N|D
GEWBODLAB	(203)	58.8		15.5		170		63.4		N| CB
MIRES	(224)	55.0		14.0		170		57.0		N|CB
URKANTONE	(232)	55.0		14.7		171		54.8		N| CB
CH-SAMEN	(261)	58.7		13.9		178		61.6		N|CB
UAN AUE BL	(290)	53.6		14.0		154		55.2		N| D
MBT	(291)	72.2	**	15.0		176		72.0		N|AAC
SEELABO25	(918)	48.8	**	14.7		141	**	49.8		
FRESHERTEN	(920)	62.3		16.0		180		68.2		N| CB
ELEMENT	(980)	58.2		19.4	**	154		61.6		N|CB
H62B12	(983)	56.0		16.0		165		57.0		N|AAA
NDA mean		57.16		14.83		168.9		58.08		
NDA st dev		3.41		0.78		9.4		6.23		
NDA N		22		22		22		22		
	Old statistics									
Median		57.25	(3)	14.90	(3)	170.0	(3)	57.45	(3)	
MAD		1.70		0.50		6.4		4.14		
Mean		57.38		14.79		169.0		58.39		
St Dev		2.36		0.73		8.2		6.35		
N		16		19		21		22		

ISE 2009.1 - Extraction with 0.1M NaNO3

Sample		900		986		910		882		MIC
Cd (µg/kg)										
FRIDOLIN	(29)	0.470		1.770		7.18		0.490		O| D
KUSLSH	(60)	1.000	<	1.860		6.90		1.000	<	O| CB
AGROCH	(75)	0.750	<	2.000		8.68		1.680		O|BAD
HIDU	(82)	0.410		1.860		7.36		0.610		O| D
MERLIN	(159)	5.000	<	5.000	<	7.56		5.000	<	O| CB
BODEN ZH	(162)	2.500	<	2.500	<	8.04		2.500	<	O| CB
MIRES	(224)	5.000	<	5.000	<	9.00		5.000	<	O|D
UAN AUE BL	(290)	1.000	<	1.853		7.07		1.000	<	O| D
SEELABO25	(918)	5.000	<	5.000	<	8.00		5.000	<	
FRESHERTEN	(920)	5.000	<	5.000	<	7.00		5.000	<	O| CB
NDA mean		-		-		7.531		-		
NDA st dev		-		-		0.737		-		
NDA N		2		5		10		3		
	Old statistics									
Median		0.4400	(1)	1.8600	(1)	7.460	(3)	0.6100	(1)	
MAD		0.0300		0.0070		0.500		0.1200		
Mean		-		-		7.679		-		
St Dev		-		-		0.729		-		
N		2		5		10		3		
Cu (µg/kg)										
FRIDOLIN	(29)	130		46.6		56.8		6.24		O| D
KUSLSH	(60)	121		50.0		57.0		50.00	<	O| CB
AGROCH	(75)	132		56.7		66.4		50.00	<	O|BAD
HIDU	(82)	139		46.6		60.6		4.01		O| D
MERLIN	(159)	144		63.9		82.7		50.00	<	|
BODEN ZH	(162)	178		57.2		69.7		50.00	<	O| CB
MIRES	(224)	47	**	10.0	<	31.0	**	10.00	<	O|D
UAN AUE BL	(290)	119		49.7		58.3		5.00	<	O| D
SEELABO25	(918)	150		104.0	**	86.0	**	112.00		
FRESHERTEN	(920)	185		52.0		64.0		10.00		O| CB
NDA mean		138.0		52.11		62.55		-		
NDA st dev		21.4		7.15		8.05		-		
NDA N		10		9		10		4		
	Old statistics									
Median		139.1	(3)	51.00	(3)	62.32	(3)	8.120	(1)	
MAD		10.9		4.43		4.70		2.995		
Mean		144.2		52.83		64.44		-		
St Dev		23.4		6.02		8.71		-		
N		9		8		8		4		
Ni (µg/kg)										
FRIDOLIN	(29)	13.6		11.5		96.9		31.4		O| D
KUSLSH	(60)	16.0		14.0		102.0		34.0		O| CB
AGROCH	(75)	25.0	<	25.0	<	103.9		46.6		O|BAD
HIDU	(82)	16.5		11.8		97.9		30.0		O| D
MERLIN	(159)	90.5	**	25.0	<	199.0	**	249.8	**	|
BODEN ZH	(162)	25.0	<	25.0	<	92.2		30.0		O| CB
MIRES	(224)	34.0	**	21.0		92.0		75.0	**	O|D
UAN AUE BL	(290)	15.1		13.4		100.0		33.1		O| D
SEELABO25	(918)	52.1	**	42.1		118.0	**	86.5	**	
FRESHERTEN	(920)	18.0		13.0		99.0		34.0		O| CB
NDA mean		15.85		-		98.29		32.44		
NDA st dev		3.56		-		4.98		5.09		
NDA N		8		7		10		10		
	Old statistics									
Median		16.00	(2)	13.40	(1)	98.46	(3)	33.10	(2)	
MAD		0.90		1.58		2.55		1.70		
Mean		-		-		97.99		-		
St Dev		-		-		4.25		-		
N		5		7		8		7		

ISE 2009.1 - Extraction with 0.1M NaNO3

Sample		900		986		910		882		MIC
Pb (µg/kg)										
FRIDOLIN	(29)	0.350		4.76		0.940		3.55		O| D
KUSLSH	(60)	25.000	<	25.00	<	25.000	<	25.00	<	O| CB
AGROCH	(75)	25.000	<	25.00	<	25.000	<	25.00	<	O|BAD
HIDU	(82)	25.000	<	25.00	<	25.000	<	25.00	<	O| D
MERLIN	(159)	25.000	<	25.00	<	25.000	<	25.00	<	|
BODEN ZH	(162)	25.000	<	25.00	<	25.000	<	25.00	<	O| CB
MIRES	(224)	4.000	<	4.00	<	4.000	<	4.00	<	O|D
UAN AUE BL	(290)	5.000	<	6.96		5.000	<	8.97		O| D
SEELABO25	(918)	50.000	<	50.00	<	50.000	<	50.00	<	
FRESHERTEN	(920)	10.000	<	10.00	<	10.000	<	10.00	<	O| D
Median		0.3500	(1)	5.860	(1)	0.9400	(1)	6.260	(1)	
MAD		-		1.100		-		2.710		
N		1		2		1		2		
Zn (µg/kg)										
FRIDOLIN	(29)	1.9		480		144		212		O| D
KUSLSH	(60)	25.0	<	500		138		208		O| CB
AGROCH	(75)	50.0	<	490		131		219		O|AAC
HIDU	(82)	50.0	<	516		147		209		O| D
MERLIN	(159)	50.0	<	503		57	**	218		|
BODEN ZH	(162)	50.0	<	502		125		200		O| CB
MIRES	(224)	25.0	<	480		76	**	150	**	O|D
UAN AUE BL	(290)	25.0	<	517		149		217		O| D
SEELABO25	(918)	124.0		606	**	361	**	521	**	
FRESHERTEN	(920)	10.0	<	495		126		208		O| CB
NDA mean		-		498.1		137.0		211.6		
NDA st dev		-		17.8		15.3		8.9		
NDA N		2		10		10		10		
	Old statistics									
Median		62.95	(1)	500.0	(3)	138.0	(2)	210.5	(3)	
MAD		61.05		10.5		9.5		4.5		
Mean		-		498.1		-		211.3		
St Dev		-		13.5		-		6.4		
N		2		9		7		8		

ISE 2009.1 - Extraction with 0.01M CaCl2 1:10

Sample		900		986		910		882		MIC
Al (µg/kg)										
AGROLAB	(977)	7.36		4.45		5.07		4.12		
Median		7.360	(1)	4.450	(1)	5.070	(1)	4.120	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
B (µg/kg)										
OOSTERBEEK	(4)	321		75.83	<	247		165		P| CB
Median		320.5	(1)	-	(0)	246.5	(1)	165.2	(1)	
MAD		-		-		-		-		
N		1		-		1		1		
Co (µg/kg)										
OOSTERBEEK	(4)	3	<	18.3		45.6		89.9		P| D
Median		-	(0)	18.25	(1)	45.60	(1)	89.88	(1)	
MAD		-		-		-		-		
N		-		1		1		1		
Cu (µg/kg)										
OOSTERBEEK	(4)	98.1		49.6		128		22.4		P| D
Median		98.09	(1)	49.57	(1)	128.0	(1)	22.44	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
Fe (mg/kg)										
PIEST-RIPP	(256)	0.320		0.870		0.420		1.11		P| CB
Median		0.3200	(1)	0.8700	(1)	0.4200	(1)	1.110	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
K (mg/kg)										
OOSTERBEEK	(4)	132		53.1		54.9		127.9	**	P| CB
WAGENINGEN	(14)	136		52.7		57.3		136.0		P| CA
ISA	(62)	132		57.4		57.6		136.9		P|CA
SIRI	(119)	137		59.0		39.0	**	137.0		+|AAA
BCIMUZPOL	(132)	121		52.9		49.2		115.1	**	P|CA
PIEST-RIPP	(256)	143		54.6		57.1		137.0		P| CB
SPAL	(282)	125		50.0		48.3		116.6	**	P|CA
HLVAKASSEL	(313)	130		48.0		54.8		136.0		P|CB
NDA mean		132.2		53.32		55.07		136.59		
NDA st dev		6.7		3.51		3.90		1.22		
NDA N		8		8		8		8		
	Old statistics									
Median		132.0	(3)	52.99	(3)	54.90	(2)	136.90	(2)	
MAD		4.5		2.33		2.40		0.10		
Mean		132.1		53.45		-		-		
St Dev		6.9		3.60		-		-		
N		8		8		7		5		
Mg (mg/kg)										
OOSTERBEEK	(4)	247		31.7		270	*	872		P| CB
EKOM	(35)	244		36.7		244		810		
ZJKRK	(50)	240		36.0		246		400	<	P|AAA
LAROL	(56)	244		35.5		250		835		
ISA	(62)	249		28.8	**	262		626	**	P|E
SCHRG	(90)	249		40.0		243		632	**	P|AAA
SIRI	(119)	4	**	0.3	**	5	**	12	**	+| CA
NDA mean		248.5		35.13		253.2		835.9		(cont.)
NDA st dev		9.5		2.57		13.2		37.5		
NDA N		22		24		22		20		

ISE 2009.1 - Extraction with 0.01M CaCl2 1:10

Sample		900		986		910		882		MIC
Mg (mg/kg) (cont.)										
BCIMUZPOL	(132)	115	**	11.8	**	325	**	448	**	P|AAC
ANALGIR	(199)	245		36.0		250		768	*	P|AAA
ALFA	(206)	253		35.5		250		840		
REYEPS	(213)	239		31.0		258		799		P|AAA
PIEST-RIPP	(256)	258		32.1		286	**	825		P| CB
WROCLAB	(263)	245		37.0		250		835		P|AAA
HLVAKASSEL	(313)	276	**	30.1	*	312	**	967	**	P|CB
P-2000RG	(334)	260		30.7		287	**	859		P|AAA
OLESKA	(335)	248		32.0		253		838		P| AA
SKRA	(336)	250		35.0		255		840		
CHKS	(337)	200	<	35.2		200	<	200	<	
GDAGRO	(338)	241		35.0		240		-		
LABRES	(339)	240		37.0		250		830		P|AAA
GLOBI	(340)	255		37.0		255		605	**	
SKLODPOL	(342)	256		36.3		281	*	863		P|AAA
MALWA	(343)	200	<	36.0		200	<	200	<	P|AA
PLZMBZEM	(806)	259		55.4	**	289	**	846		P|AAA
NDA mean		248.5		35.13		253.2		835.9		
NDA st dev		9.5		2.57		13.2		37.5		
NDA N		22		24		22		20		
	Old statistics									
Median		248.0	(3)	35.50	(3)	250.0	(3)	838.0	(3)	
MAD		5.0		1.20		4.5		8.0		
Mean		248.5		35.03		250.4		837.8		
St Dev		6.7		2.45		6.0		20.1		
N		19		19		14		13		
Mn (mg/kg)										
OOSTERBEEK	(4)	0.96		7.42		11.6		21.1		P| CB
BCIMUZPOL	(132)	1.08		7.19		8.1		14.0		P|AAC
PIEST-RIPP	(256)	1.11		7.25		11.8		19.2		P| CB
Median		1.080	(1)	7.250	(1)	11.59	(1)	19.20	(1)	
MAD		0.030		0.060		0.21		1.88		
N		3		3		3		3		
N - NH4 (as N) (mg/kg)										
OOSTERBEEK	(4)	11.13		12.23	**	4.21		20.6		P| E
WAGENINGEN	(14)	8.20		7.80		6.70		22.5		P| E
AL-West	(78)	10.08		8.45		6.74		22.9		P| E
CISCA	(112)	12.90		7.81		-		-		P| E
BCIMUZPOL	(132)	16.05		15.65	**	10.73	**	27.3		P|E
POVLT	(158)	5.84		7.87		3.44		15.2	*	P| E
ALNN	(185)	1.08	**	-		-		8.8	**	
FORTEST	(212)	12.50		10.36		18.52	**	52.4	**	Z| Z
SPAL	(282)	9.15		8.31		5.38		21.9		P|E
HLVAKASSEL	(313)	7.63		8.28		5.59		23.1		P|E
PLZMBZEM	(806)	9.38		9.35		5.86		26.0		P|E
NDA mean		9.818		8.262		5.590		22.83		
NDA st dev		2.709		0.797		1.287		3.79		
NDA N		11		10		9		10		
	Old statistics									
Median		9.730	(3)	8.295	(3)	5.590	(2)	22.94	(3)	
MAD		1.815		0.455		1.110		1.05		
Mean		10.286		8.529		-		-		
St Dev		2.963		0.896		-		-		
N		10		8		7		7		

ISE 2009.1 - Extraction with 0.01M CaCl2 1:10

Sample		900		986		910		882		MIC
N - NO3 (as N) (mg/kg)										
OOSTERBEEK	(4)	16.2		17.8		18.3		21.6		P| E
WAGENINGEN	(14)	14.2		16.6		17.2		21.1		P| E
CISCA	(112)	6.9		15.4		-		-		P| E
BCIMUZPOL	(132)	14.3		16.7		19.9	**	23.2		P|E
POVLT	(158)	15.5		16.9		16.9		20.7		P| E
ALNN	(185)	1.1	**	24.5	**	14.8		18.4		
FORTEST	(212)	17.0		17.7		16.5		22.0		Z| Z
HLVAKASSEL	(313)	21.4		15.2		16.3		18.9		P|E
PLZMBZEM	(806)	12.9		16.7		16.4		20.4		P|E
AGROADGAZA	(971)	11.5		12.5		15.6		19.1		P|E
NDA mean		14.59		16.59		16.52		20.57		
NDA st dev		3.44		1.42		1.03		1.84		
NDA N		10		10		9		9		
	Old statistics									
Median		14.29	(3)	16.69	(3)	16.46	(3)	20.66	(3)	
MAD		1.93		0.97		0.58		1.30		
Mean		14.43		16.17		16.50		20.58		
St Dev		3.99		1.62		1.04		1.56		
N		9		9		8		9		
N total soluble (mg/kg)										
OOSTERBEEK	(4)	44.3		37.9		45.8		57.7		P| E
WAGENINGEN	(14)	43.0		34.0		49.0		59.0		P| E
VILJAVUUSP	(419)	149.7		61.1		88.6		83.3		
Median		44.28	(1)	37.91	(1)	49.00	(1)	59.00	(1)	
MAD		1.28		3.91		3.19		1.35		
N		3		3		3		3		
Na (mg/kg)										
OOSTERBEEK	(4)	10.65		5.06	<	59.2		704		P| CB
WAGENINGEN	(14)	9.79		4.94		60.1		741		P| CA
HLVAKASSEL	(313)	9.93		5.23		57.9		694		P|CB
Median		9.930	(1)	5.085	(1)	59.22	(1)	703.7	(1)	
MAD		0.140		0.145		0.88		9.7		
N		3		2		3		3		
P (mg/kg)										
OOSTERBEEK	(4)	1.51		1.96		1.16		0.21	<	P| E
WAGENINGEN	(14)	1.60		1.50		0.80		-		P| E
ISA	(62)	2.20		2.00		1.40		0.90		P|E
SIRI	(119)	0.35		1.48		-		-		+| E
BCIMUZPOL	(132)	1.91		2.62		1.44		0.75		P|E
PIEST-RIPP	(256)	3.46		2.78		2.39		2.05		P| CB
LVDC	(344)	1009.00		532.00		1302.00		406.00		U| E
Median		1.910	(1)	2.000	(1)	1.420	(1)	1.475	(1)	
MAD		0.396		0.520		0.440		0.650		
N		7		7		6		4		
SO4 (mg/kg)										
FORTEST	(212)	5.9		5.8		14.0		131.3		Z| JC
PIEST-RIPP	(256)	58.4		35.3		68.4		40.0		P| Z
Median		32.16	(1)	20.54	(1)	41.18	(1)	85.65	(1)	
MAD		26.25		14.76		27.22		45.65		
N		2		2		2		2		

ISE 2009.1 - Extraction with 0.01M CaCl2 1:10

Sample		900		986		910		882		MIC
Zn (µg/kg)										
OOSTERBEEK	(4)	103	<	1970		465		520		P| D
BCIMUZPOL	(132)	566		2550		1111		1032		
Median		566.0	(1)	2259	(1)	787.8	(1)	776.2	(1)	
MAD		-		287		323.3		255.9		
N		1		2		2		2		

ISE 2009.1 - Soil characteristics

Sample		900		986		910		882		MIC
C - org others (W&B a.o.) (g/kg)										
LQA-ATP	(2)	15.7		12.7		27.8		20.1		Z|E
ATVC	(7)	18.0		20.0		31.6		20.2		MP
REDUIT	(15)	20.7		20.4		37.8		24.5		
SPNDTKLABS	(31)	14.3		9.6	**	31.2		19.0		J| O
LAF	(37)	20.6		20.1		41.1		24.0		+|O
MONS IZAR	(47)	17.6		20.9		33.8		20.5		J| O
MSIRI	(48)	15.9		14.3		32.1		18.6		J| E
ZJKRK	(50)	18.6		17.4		34.8		24.8		
LAROL	(56)	17.8		17.3		33.5		21.5		
BUNASOLS	(58)	19.6		20.2		21.9	**	21.8		
SAINTE-FOY	(80)	18.8		14.2		36.6		21.7		Z| O
DATE	(89)	16.9		18.2		29.6		15.8	*	Z| E
CORBANA	(110)	17.6		17.6		35.4		19.8		
HWASS02	(116)	17.8		17.0		30.1		17.7		
ELAEIS.S	(130)	19.3		16.6		-		21.4		
MELILAB	(157)	19.4		17.6		35.2		23.8		Z| O
PLATINA222	(172)	19.2		20.4		35.1		22.3		+| E
RISWC	(174)	16.9		15.1		31.7		19.9		Z|O
DOLE	(177)	17.4		14.9		32.7		16.8		
MARELI	(204)	15.0		16.0		15.1	**	20.4		Z| E
QLDNR&M	(210)	18.0		16.6		31.6		20.4		Z| E
WROCLAB	(263)	17.6		16.2		34.2		21.0		
AGROLAB-SL	(264)	18.3		20.9		36.0		20.8		+|RC
EVI707	(272)	18.7		15.5		36.0		21.0		
SPAL	(282)	22.0		21.0		37.0		20.0		
Momotombo	(297)	13.5	*	10.0	*	25.8		14.4	**	Z| Z
SPOOR	(305)	2.8	**	2.8	**	5.9	**	4.0	**	
ERSAFVGSCA	(307)	21.0		18.0		34.0		28.0	**	+|O
SMART	(326)	18.5		17.0		31.9		26.5	*	
SKRA	(336)	18.8		17.0		33.7		19.6		
SEEDLING	(346)	18.6		17.4		36.6		23.8		+| E
IRRI	(843)	16.3		15.0		31.2		18.5		+| E
VBBH	(859)	19.8		20.8		38.8		21.8		Z|O
WBT	(866)	20.3		17.6		42.9	**	22.5		+| O
CUP Analab	(870)	20.2		20.7		36.8		21.8		Z| O
ARA SUE	(872)	20.8		22.8		40.4		23.7		Z| E
LABAMB	(878)	15.4		15.0		28.2		18.0		+|
CAC	(885)	17.5		16.5		39.6		37.1	**	Z| O
MICHAEL	(904)	20.1		17.9		32.9		21.2		+| O
RF-R&D	(905)	20.4		19.2		36.8		24.0		+| O
AGROADGAZA	(971)	21.0		33.6	**	38.8		23.5		Z|E
AZBY	(976)	15.2		16.5		28.8		18.3		+| O
LS-MRC	(978)	20.7		17.8		31.5		199.2	**	Z|O
NDA mean		18.51		17.53		34.07		21.06		
NDA st dev		2.28		3.16		3.99		2.85		
NDA N		43		43		42		43		
	Old statistics									
Median		18.59	(3)	17.40	(3)	33.90	(3)	21.00	(3)	
MAD		1.21		1.81		2.54		1.27		
Mean		18.44		17.70		33.96		21.07		
St Dev		1.89		2.32		3.63		2.07		
N		41		39		38		36		
EC-SC (ISO 11265) (mS/m)										
ALCONTROL	(1)	30.0	**	6.10		14.0		47.0		Z| IA
LQA-ATP	(2)	20.0		7.55		12.4		44.3		Z|RC
OOSTERBEEK	(4)	18.5		6.37		11.7		46.1		Z| Z
WAGENINGEN	(14)	15.3		7.15		11.4		44.4		Z| Z
FERGUSONIT	(21)	21.4		7.81		13.2		45.8		Z| Z
SPNDTKLABS	(31)	13.5		7.30		10.0		3.7	**	J| Z
LAF	(37)	20.0		8.00		12.0		50.0	*	$|Z
NDA mean		19.00		7.407		12.17		45.16		(cont.)
NDA st dev		3.17		1.758		1.84		2.94		
NDA N		37		39		37		37		

ISE 2009.1 - Soil characteristics

Sample		900		986		910		882		MIC
EC-SC (ISO 11265) (mS/m)	(cont.)									
AL-West	(78)	19.9		8.41		12.6		46.1		Z| Z
SAINTE-FOY	(80)	17.2		6.80		10.8		40.8	*	Z| RC
CISCA	(112)	-		6.11		-		-		Z| Z
SIRI	(119)	21.9		11.80	**	16.1	*	52.3	**	+| H
XGCALAFIGA	(135)	17.0		6.30		11.0		43.0		Z| RC
HHAFU	(136)	19.8		7.31		12.7		45.0		| Z
MELILAB	(157)	18.9		10.20		10.6		33.2	**	Z| RC
POVLT	(158)	22.7		9.67		15.7		50.0	*	Z| Z
ECOSOIL	(165)	19.2		10.70	*	15.7		44.4		+|RC
HILL	(180)	16.0		4.00	*	11.0		45.0		Z|Z
FRIS	(198)	24.0		7.50		14.0		38.0	**	+| IA
MARELI	(204)	19.6		10.38	*	15.1		40.0	*	Z| Z
QLDNR&M	(210)	18.0		7.00		12.0		44.0		Z| Z
FORTEST	(212)	88.6	**	63.30	**	48.5	**	183.5	**	Z| Z
AECSAGRICS	(248)	20.0		4.92		11.6		44.1		Z|Z
AGROLAB-SL	(264)	22.4		11.16	*	17.2	**	51.4	*	Z|RC
LUNUWILA	(270)	18.9		7.21		13.8		50.6	*	
Momotombo	(297)	15.6		6.44		10.6		38.3	**	Z| Z
SPOOR	(305)	17.2		6.43		10.8		45.5		Z| RC
PLVHOLAB	(308)	17.6		6.33		11.7		44.8		Z|Z
VILJAVUUSP	(419)	23.0		10.13		12.3		37.1	**	| IA
IRRI	(843)	18.0		8.00		13.0		47.0		Z| Z
VBBH	(859)	17.1		6.50		12.3		44.0		Z|Z
ARA SUE	(872)	19.0		8.00		12.0		46.0		$| RC
GUA SUE	(873)	12.0	*	4.64		7.6	**	45.5		Z|Z
BAR SUE	(874)	20.5		8.40		12.2		45.5		+|Z
LABAMB	(878)	93.0	**	31.00	**	55.0	**	222.5	**	| Z
MICHAEL	(904)	-		7.64		-		-		Z| Z
AGROADGAZA	(971)	15.0		7.00		11.0		44.0		
SAC-CAL	(973)	22.6		14.07	**	13.3		47.9		+| IA
EALG	(981)	28.0	**	11.00	*	25.0	**	76.0	**	S|RC
LDAR02	(984)	7.0	**	17.90	**	11.5		43.3		+| Z
NDA mean		19.00		7.407		12.17		45.16		
NDA st dev		3.17		1.758		1.84		2.94		
NDA N		37		39		37		37		
	Old statistics									
Median		19.00	(3)	7.210	(3)	12.00	(3)	45.00	(3)	
MAD		1.80		0.790		1.00		0.95		
Mean		19.02		7.283		12.32		45.12		
St Dev		2.57		1.301		1.47		1.25		
N		31		29		31		22		
Fraction < 16 µm (%)										
ALCONTROL	(1)	39.0		2.90		82.0		88.0		Z| R
ATVC	(7)	44.1		2.30		81.6		87.9		MP|CM
EKOM	(35)	35.9		2.79		63.3		71.9		
MLABTW	(70)	39.9		2.75		87.4		91.6		Z| RA
AL-West	(78)	39.9		2.14		64.5		51.0	**	Z| RC
US	(83)	37.2		2.51		80.2		86.8		
ANDESITE	(108)	50.2		3.69		96.2		96.6		
ALNN	(185)	40.1		4.98	*	88.6		91.0		
ANALGIR	(199)	34.3		-		62.3		72.9		
WROCLAB	(263)	35.8		2.80		62.6		74.7		
TNO-NITG	(293)	49.9		4.69		88.5		89.8		Z| RC
OLESKA	(335)	34.5		1.65		61.0		73.2		
SKLODPOL	(342)	33.2		2.38		58.7		68.1		
LABAMB	(878)	40.9		6.10	**	73.2		78.1		| RB
CRC	(884)	47.5		9.90	**	87.3		93.4		Z|RB
ALTAVILLA	(888)	32.4		0.47	*	33.9		51.7	**	RA
MICHAEL	(904)	-		3.89		-		-		$| Z
AGROADGAZA	(971)	45.0		7.80	**	71.8		86.8		Z|RC
NDA mean		39.22		2.882		74.94		82.86		(cont.)
NDA st dev		6.17		1.305		15.84		12.75		
NDA N		17		17		17		17		

ISE 2009.1 - Soil characteristics

Sample		900		986		910		882		MIC
Fraction < 16 µm (%) (cont.)										
NDA mean		39.22		2.882		74.94		82.86		
NDA st dev		6.17		1.305		15.84		12.75		
NDA N		17		17		17		17		
	Old statistics									
Median		39.85	(3)	2.770	(3)	73.20	(3)	86.80	(3)	
MAD		4.25		0.430		10.93		6.60		
Mean		39.99		2.874		73.12		83.37		
St Dev		5.65		0.841		15.64		9.23		
N		17		12		17		15		
Fraction < 2 µm (%)										
ALCONTROL	(1)	22.0		1.60		46.0	*	50.0		Z| R
LQA-ATP	(2)	23.7		1.62		63.5		70.1		Z|R
OOSTERBEEK	(4)	20.2		2.04		61.7		69.0		Z| RA
ATVC	(7)	17.7		1.20		51.6		59.5		MP|CM
MONS IZAR	(47)	20.1		4.52	*	45.2	*	58.3		Z| RA
LRSCONTROL	(63)	25.1		0.98		63.6		68.2		-| RA
TCKI	(64)	26.1		5.00	<	61.4		69.8		Z|R
MLABTW	(70)	21.7		2.03		57.4		65.4		Z| RA
ARCHIMEDES	(73)	-		-		49.1		54.5		Z| RA
ANAMIL	(74)	26.6		8.01	**	56.6		61.7		Z| RA
AL-West	(78)	23.4		1.00	<	44.1	*	37.3	**	Z| RC
US	(83)	20.5		1.81		56.3		64.7		
GGM	(98)	22.2		2.74		55.2		62.9		Z| RA
ANDESITE	(108)	14.1	**	0.80		53.6		61.9		
CISCA	(112)	26.4		6.97	**	57.6		59.2		-| R
XGCALAFIGA	(135)	22.1		1.83		58.9		64.1		Z| RA
MELILAB	(157)	8.9	**	2.10		45.8	*	58.0		Z| RA
NSSL	(167)	25.6		1.20		67.8		70.3		-|RA
ALNN	(185)	23.3		4.62	*	60.3		66.1		Z|P
EXACT	(190)	21.0		2.00	<	59.0		65.0		Z| RA
FRIS	(198)	22.3		4.65	*	57.9		66.2		Z| R
CHEMLAB	(228)	22.0		1.70		55.0		66.0		Z| RA
AGROLAB-SL	(264)	22.0		3.50		59.5		68.7		Z|R
IGEOLUNAM	(273)	26.1		7.31	**	46.6	*	71.0		Z| RA
MUMPFROG	(275)	24.7		4.70	*	66.3		70.7		$| RA
TNO-NITG	(293)	31.2	**	2.43		57.9		66.8		Z| RC
SPOOR	(305)	21.1		1.44		57.6		60.3		Z| R
ERSAFVGSCA	(307)	17.0		4.00		34.0	**	53.0		Z|RA
PLVHOLAB	(308)	21.1		1.70		58.2		64.3		Z|P
IRRI	(843)	22.0		1.00		58.0		63.0		+| RA
SPASL	(855)	33.8	**	14.61	**	63.3		72.1		$| RB
VBBH	(859)	23.2		1.40		66.4		70.2		Z|R
WBT	(866)	20.0		-		40.0	**	55.0		-| RC
ARA SUE	(872)	28.0	*	4.00		60.0		48.0		Z| RB
LABAMB	(878)	13.1	**	5.60	**	38.0	**	47.9	*	| R
CRC	(884)	10.0	**	7.40	**	34.9	**	49.2		Z|RB
ALTAVILLA	(888)	6.6	**	2.98		11.8	**	31.5	**	RA
MICHAEL	(904)	-		2.22		-		-		
AGROADGAZA	(971)	20.3		1.60		30.6	**	58.2		Z|RC
NDA mean		22.41		2.190		57.12		63.55		
NDA st dev		2.84		1.437		7.54		7.67		
NDA N		37		34		38		38		
	Old statistics									
Median		22.00	(3)	1.755	(3)	58.20	(3)	64.30	(3)	
MAD		1.49		0.410		2.10		4.80		
Mean		22.39		1.996		59.02		62.89		
St Dev		2.46		0.888		4.37		6.62		
N		29		24		27		35		

ISE 2009.1 - Soil characteristics

Sample		900		986		910		882		MIC
Fraction < 63 µm (%)										
ALCONTROL	(1)	59.0	*	6.6		90.0	*	94.0		Z| R
ATVC	(7)	60.4	*	4.3		83.5	**	91.3	*	MP|CM
EKOM	(35)	71.1		7.5		95.9		95.6		
MONS IZAR	(47)	65.5		12.7		96.4		96.6		Z| RA
LRSCONTROL	(63)	64.6		3.4		98.8		98.8		-| RA
AL-West	(78)	59.2	*	6.3		66.6	**	53.7	**	Z| RA
US	(83)	58.4	*	7.3		81.3	**	87.6	**	
ANDESITE	(108)	67.6		9.6		98.7		99.0		
XGCALAFIGA	(135)	69.9		11.2		98.5		98.9		Z| RA
FRIS	(198)	69.0		10.2		98.9		99.0		Z| R
ANALGIR	(199)	71.6		-		97.3		96.8		
WROCLAB	(263)	68.4		10.2		96.3		97.5		
IGEOLUNAM	(273)	70.9		13.9		99.0		99.7		Z| RA
MUMPFROG	(275)	70.3		10.3		99.4		99.3		$| RA
TNO-NITG	(293)	68.5		11.9		99.4		100.0		Z| RC
ERSAFVGSCA	(307)	67.0		10.0		90.0	*	95.0		Z|RA
OLESKA	(335)	37.3	**	3.9		28.1	**	21.0	**	
SKLODPOL	(342)	67.0		8.1		93.2		94.6		
IRRI	(843)	69.0		10.0		99.0		99.0		+| RA
SPASL	(855)	74.5		16.7		100.0		100.0		$| RB
ARA SUE	(872)	32.0	**	4.0		30.0	**	44.0	**	Z| RB
LABAMB	(878)	70.1		10.5		97.3		98.2		| R
CRC	(884)	56.5	**	8.2		96.0		95.9		Z|RA
ALTAVILLA	(888)	19.6	**	1.6		16.7	**	8.6	**	RA
MICHAEL	(904)	-		10.4		-		-		$| P
AGROADGAZA	(971)	70.6		13.5		83.3	**	93.9		Z|RC
NDA mean		68.27		9.10		97.26		97.35		
NDA st dev		4.41		3.66		4.16		3.31		
NDA N		25		25		25		25		
	Old statistics									
Median		69.00	(3)	10.00	(3)	98.61	(3)	98.20	(3)	
MAD		1.60		2.47		1.06		1.52		
Mean		69.15		8.89		97.76		97.47		
St Dev		2.40		3.65		1.80		2.09		
N		17		25		16		19		
Fraction > 63 µm (%)										
EKOM	(35)	28.9		92.5		4.11		4.41		
LRSCONTROL	(63)	35.4		96.6	**	1.22		1.19		-| R
TCKI	(64)	35.8		90.7		3.10		0.90	<	Z|R
AL-West	(78)	40.8	**	93.7		33.40	**	46.31	**	Z| RA
ANDESITE	(108)	32.4		90.4		1.33		0.99		
XGCALAFIGA	(135)	30.1		88.8		1.46		1.09		Z| RA
FRIS	(198)	31.0		89.8		1.07		0.98		Z| P
ANALGIR	(199)	28.4		-		2.74		3.17		
WROCLAB	(263)	31.6		89.9		2.67		2.50		
IGEOLUNAM	(273)	29.2		86.1		1.02		0.28		Z| RA
MUMPFROG	(275)	29.7		89.7		0.60		0.70		$| RA
TNO-NITG	(293)	31.5		88.1		0.58		-		Z| RC
ERSAFVGSCA	(307)	33.0		90.0		10.00	**	5.00		Z|RA
OLESKA	(335)	28.2		94.5	*	10.86	**	5.81		
SKLODPOL	(342)	33.0		91.9		6.76	*	5.39		
IRRI	(843)	31.0		90.0		1.00		1.00		+| RA
SPASL	(855)	25.6		83.3	**	-		-		$| RB
WBT	(866)	31.0		89.7		1.75		0.15		| RA
ARA SUE	(872)	40.0	**	92.0		10.00	**	8.00		Z| RB
LABAMB	(878)	29.9		89.5		2.70		1.80		| R
CRC	(884)	43.5	**	91.8		4.00		4.10		Z|RA
ALTAVILLA	(888)	41.4	**	94.9	*	37.60	**	8.20		RA
MICHAEL	(904)	-		89.6		-		-		$| P
AGROADGAZA	(971)	29.4		86.5		16.70	**	6.10		Z|RC
NDA mean		30.74		90.43		2.088		2.821		(cont.)
NDA st dev		2.85		2.61		2.260		2.916		
NDA N		23		23		22		20		

ISE 2009.1 - Soil characteristics

Sample		900		986		910		882		MIC
Fraction > 63 µm (%) (cont.)										
NDA mean		30.74		90.43		2.088		2.821		
NDA st dev		2.85		2.61		2.260		2.916		
NDA N		23		23		22		20		
	Old statistics									
Median		31.00	(3)	89.90	(3)	1.460	(3)	2.500	(3)	
MAD		1.60		0.80		0.860		1.800		
Mean		30.78		90.04		1.957		3.203		
St Dev		2.48		1.89		1.175		2.617		
N		19		19		15		19		
Org.matter (L.O.I.) (%)										
ALCONTROL	(1)	5.40		2.61	**	12.2		11.70	**	| P
OOSTERBEEK	(4)	5.28		3.51		11.3		9.42		X| P
WAGENINGEN	(14)	5.34		3.40		11.6		9.67		X| P
EKOM	(35)	5.33		3.63		11.0		9.39		
ISA	(62)	7.90	**	4.40	**	16.7	**	12.70	**	$|P
MLABTW	(70)	4.72	*	3.44		12.8	**	10.78	**	---
ARCHIMEDES	(73)	-		-		11.8		9.81		Z| P
AL-West	(78)	4.50	*	3.00	**	10.0	**	7.80	**	X| P
US	(83)	5.32		3.46		11.5		9.46		
SCHRG	(90)	5.09		3.62		11.2		9.40		
GGM	(98)	5.56		3.44		11.5		10.78	**	---
CISCA	(112)	3.91	**	3.09	**	8.5	**	6.56	**	Z| Z
VICTORY	(123)	4.95		3.84		11.1		9.35		
BCIMUZPOL	(132)	6.42	**	3.52		11.9		10.25	*	Z|P
XGCALAFIGA	(135)	5.26		3.88		10.9		8.89		X| P
HHAFU	(136)	5.27		3.67		11.9		9.87		| P
ALNN	(185)	5.20		3.55		11.0		9.10		$|P
EXACT	(190)	5.37		3.60		10.8		9.05		Z| P
ANALGIR	(199)	5.32		3.94	**	11.0		9.37		X| P
ZA/R	(200)	5.83	*	3.55		12.2		10.12		X| P
MARELI	(204)	7.80	**	3.85		15.6	**	11.85	**	X| P
FORTEST	(212)	4.41	*	3.37		10.1	**	8.02	**	| P
MERLEWOOD	(222)	5.35		3.66		11.6		9.56		Z|P
CHEMLAB	(228)	4.50	*	3.50		8.7	**	6.00	**	Z| P
AECSAGRICS	(248)	5.30		3.60		11.3		9.22		
TNO-NITG	(293)	5.65		3.41		12.2		10.29	*	X| P
SPOOR	(305)	5.00		3.40		11.5		35.30	**	Z| P
FOHS-LAB	(306)	5.72		3.53		11.6		9.78		| P
PLVHOLAB	(308)	5.38		3.56		11.9		9.90		-|P
P-2000RG	(334)	5.41		3.42		11.8		10.03		Z|O
CHKS	(337)	5.40		3.65		11.1		9.25		
GDAGRO	(338)	4.98		3.63		11.1		9.62		
LABRES	(339)	5.40		3.65		11.0		9.60		X|P
SKLODPOL	(342)	5.70		3.22		11.6		9.42		X| P
MALWA	(343)	5.37		3.62		11.2		9.22		Z|P
LVDC	(344)	5.04		3.58		11.3		9.42		X| P
LABFOR	(846)	2.13	**	2.53	**	4.7	**	3.07	**	
SPASL	(855)	4.27	**	3.39		8.8	**	6.05	**	$| Z
CUP Analab	(870)	5.71		3.94	**	11.1		9.09		X| P
SAC-CAL	(973)	4.70	*	3.70		10.7		9.10		X| P
EALG	(981)	3.68	**	3.32		7.2	**	5.14	**	Z|E
NDA mean		5.275		3.549		11.36		9.516		
NDA st dev		0.426		0.170		0.51		0.547		
NDA N		40		40		41		41		
	Old statistics									
Median		5.340	(3)	3.550	(3)	11.29	(3)	9.420	(3)	
MAD		0.070		0.100		0.29		0.200		
Mean		5.337		3.551		11.41		9.466		
St Dev		0.211		0.150		0.43		0.318		
N		27		33		31		26		

ISE 2009.1 - Soil characteristics

Sample		900		986		910		882		MIC
pH - CaCl2 (...)										
OOSTERBEEK	(4)	7.30		4.72		5.56		4.61		P| H
WAGENINGEN	(14)	7.54	**	4.75		5.61		4.64		P| H
FERGUSONIT	(21)	7.27		4.72		5.54		4.64		Z| H
SPNDTKLABS	(31)	6.59	**	4.28	**	5.10	**	4.27	**	P| Z
SOILINST	(43)	7.08		4.73		5.48		4.63		$|H
KUSLSH	(60)	7.25		4.67		5.60		4.61		Z| Z
ISA	(62)	6.90	**	5.10	**	5.50		4.60		P|RC
LRSCONTROL	(63)	7.40		4.70		5.60		4.70	**	Z| IA
MLABTW	(70)	7.30		4.74		5.48		4.58		Z| H
ARCHIMEDES	(73)	7.31		4.73		5.52		4.63		Z| Z
AL-West	(78)	7.35		4.78		5.60		4.65		P| H
SAINTE-FOY	(80)	7.18		4.64		5.55		4.66		Z| H
US	(83)	7.33		4.73		5.57		4.63		
GGM	(98)	7.29		4.72		5.45		4.59		P| IA
CISCA	(112)	7.33		4.73		5.60		4.66		-| Z
SIRI	(119)	7.33		5.35	**	5.76	**	4.72	**	+| H
BCIMUZPOL	(132)	6.50	**	5.30	**	5.65		4.75	**	+|H
HHAFU	(136)	7.25		4.67		5.53		4.60		$| H
MELILAB	(157)	7.23		4.75		5.49		4.56		Z| RC
JMCK	(160)	7.24		4.73		5.52		4.59		P| Z
ECOSOIL	(165)	7.24		4.64		5.50		4.54		+|H
NSSL	(167)	7.10		4.60		5.50		4.60		+|Z
PLATINA222	(172)	6.85	**	4.58		5.38		4.55		Z| RC
DOLE	(177)	7.15		4.65		5.44		4.53		
HILL	(180)	7.30		4.70		5.50		4.70	**	+|H
EXACT	(190)	7.40		4.70		5.60		4.60		P| Z
FRIS	(198)	7.13		4.75		5.57		4.63		+| IA
ZA/R	(200)	7.47	*	4.79		5.62		4.64		Z|H
QLDNR&M	(210)	7.10		4.70		5.50		4.60		Z| Z
FORTEST	(212)	7.19		4.62		5.47		4.62		Z| H
REYEPS	(213)	7.12		4.66		5.57		4.63		P| H
CHEMLAB	(228)	7.33		4.62		5.50		4.56		P| H
EVI707	(272)	7.22		4.66		5.52		4.60		
MUMPFROG	(275)	7.22		4.63		5.47		4.52	**	Z| Z
FFEEBW	(284)	7.25		4.84		5.59		4.63		
DAR	(296)	6.87	**	4.68		5.46		4.53		Z|H
SPOOR	(305)	6.80	**	4.78		5.68		4.62		Z| RC
PLVHOLAB	(308)	7.31		4.64		5.51		4.60		Z|H
NFVGOE	(321)	7.26		4.72		5.60		4.68		$| H
FVABW	(322)	7.28		4.65		5.54		4.59		$| H
GLAGC	(327)	7.40		4.80		5.70	*	4.70	**	$| H
SEEDLING	(346)	6.79	**	4.64		5.43		4.56		+| Z
ADE	(424)	7.29		4.62		5.55		4.59		$| H
IRRI	(843)	7.30		4.60		5.60		4.60		+| Z
SPASL	(855)	7.32		4.76		5.56		4.63		$| Z
CHEMHAL	(877)	7.19		4.78		5.58		4.67		P
SAC-CAL	(973)	7.10		4.70		5.50		4.60		Z| H
AGROLAB	(977)	7.16		4.55		5.47		4.48	**	
NDA mean		7.260		4.696		5.537		4.612		
NDA st dev		0.114		0.072		0.078		0.039		
NDA N		48		48		48		48		
	Old statistics									
Median		7.260	(3)	4.700	(3)	5.530	(3)	4.600	(3)	
MAD		0.061		0.050		0.050		0.030		
Mean		7.251		4.695		5.535		4.607		
St Dev		0.087		0.065		0.063		0.037		
N		39		44		45		40		
pH - H2O (...)										
ALCONTROL	(1)	8.10		5.70	*	6.50	*	5.50		| IA
LQA-ATP	(2)	7.10	**	4.90	**	5.90		4.90		Z|Z
NDA mean		7.693		5.356		6.133		5.164		(cont.)
NDA st dev		0.235		0.166		0.192		0.203		
NDA N		87		87		88		88		

ISE 2009.1 - Soil characteristics

Sample		900		986		910		882		MIC
pH - H2O (...)	(cont.)									
ATVC	(7)	7.80		5.40		6.20		5.10		MP
FELDA	(13)	7.39		5.09	*	5.20	**	4.95		Z|Z
WAGENINGEN	(14)	8.11		5.45		6.41		5.43		Z| H
REDUIT	(15)	7.00	**	5.07	*	5.40	**	4.91		
FERGUSONIT	(21)	7.73		5.35		6.15		5.25		Z| H
SPNDTKLABS	(31)	6.97	**	4.83	**	5.53	**	4.64	**	Z| Z
EKOM	(35)	7.70		5.40		6.10		5.40		
LAF	(37)	7.80		5.50		6.30		5.20		$|H
BELFAST	(39)	7.79		5.37		6.18		5.12		Z| H
MONS IZAR	(47)	7.93		5.43		6.14		5.23		Z| Z
MSIRI	(48)	7.67		5.07	*	5.97		5.03		Z| Z
KUSLSH	(60)	7.72		5.39		6.19		5.11		Z| Z
LRSCONTROL	(63)	7.70		5.20		6.20		5.20		Z| IA
MLABTW	(70)	7.52		5.43		6.26		5.37		Z| H
AL-West	(78)	7.86		5.63	*	6.41		5.47		Z| H
SAINTE-FOY	(80)	7.66		5.26		6.15		5.09		Z| H
DATE	(89)	7.77		5.29		5.69	**	4.99		Z| Z
SCHRG	(90)	7.77		5.46		6.35		5.39		
GGM	(98)	7.50		5.41		6.24		5.35		Z| H
974BRET	(99)	7.82		5.32		6.15		5.19		Z| H
CORBANA	(110)	7.38		5.38		6.16		5.12		
HWASS02	(116)	7.47		5.24		6.08		4.96		
SIRI	(119)	8.16		5.53		6.17		5.24		+| H
UAK MARDI	(120)	7.45		5.73	**	5.50	**	5.28		
ELAEIS.S	(130)	7.35		5.13		5.76	*	4.78		
BCIMUZPOL	(132)	6.79	**	5.95	**	6.14		5.17		Z|H
XGCALAFIGA	(135)	7.77		5.35		6.23		5.15		Z| Z
HHAFU	(136)	7.86		5.48		6.19		5.22		$| H
MELILAB	(157)	7.83		5.43		6.18		5.27		Z| RC
ECOSOIL	(165)	7.53		5.18		6.06		5.19		+|H
NSSL	(167)	7.50		5.00	**	6.10		5.00		+|Z
PLATINA222	(172)	7.70		5.54		6.14		5.22		Z| RC
DOLE	(177)	7.58		5.45		5.95		4.90		
HILL	(180)	7.50		5.30		5.90		5.10		+|H
CSS	(186)	7.80		5.36		6.25		5.30		Z|H
LABORECOF	(194)	7.58		5.38		6.10		5.11		Z| H
UMADAKAR	(196)	7.67		5.12		6.14		5.08		Z| Z
FRIS	(198)	7.40		5.37		5.85		5.13		+| IA
MARELI	(204)	7.78		6.38	**	6.27		5.31		Z| H
FORTEST	(212)	7.40		5.10	*	5.84		4.85		Z| H
GSISMA	(214)	7.69		5.41		6.07		5.11		Z| H
WBD	(216)	7.80		5.40		6.20		5.20		
MERLEWOOD	(222)	8.14		5.23		6.27		5.19		Z| H
KLAL	(233)	7.56		5.31		5.95		5.08		Z|H
AECSAGRICS	(248)	7.87		5.08	*	6.03		5.21		Z|Z
CIRADFLHOR	(249)	7.27		5.32		5.81		5.10		Z|RC
WROCLAB	(263)	7.70		5.30		6.20		5.40		
AGROLAB-SL	(264)	7.90		5.47		6.04		5.04		Z|RC
LUNUWILA	(270)	7.47		5.48		5.68	**	4.86		
EVI707	(272)	7.86		5.38		6.32		5.30		
MUMPFROG	(275)	7.77		5.14		5.99		5.10		Z| Z
SPAL	(282)	7.62		5.32		6.21		5.23		Z|Z
FFEEBW	(284)	7.69		5.50		6.20		5.42		
Momotombo	(297)	7.30		5.03	*	5.69	**	4.80		Z| Z
RALA	(299)	7.89		5.45		6.20		5.23		Z| Z
ANALGEO	(300)	7.66		5.45		6.09		5.26		Z| H
SPOOR	(305)	7.78		5.95	**	6.52	*	5.49		Z| RC
FOHS-LAB	(306)	8.03		5.61		6.31		5.42		
PLVHOLAB	(308)	7.94		5.34		6.34		5.35		Z|H
HLVAKASSEL	(313)	7.66		5.34		6.20		5.28		Z|Z
NFVGOE	(321)	7.85		5.38		6.38		5.46		$| H
FVABW	(322)	7.86		5.44		6.26		5.29		$| H
NDA mean		7.693		5.356		6.133		5.164		(cont.)
NDA st dev		0.235		0.166		0.192		0.203		
NDA N		87		87		88		88		

ISE 2009.1 - Soil characteristics

Sample		900		986		910		882		MIC
pH - H2O (...)	(cont.)									
SMART	(326)	7.54		5.18		5.96		4.97		
GDAGRO	(338)	7.69		5.39		6.37		5.52		
MALWA	(343)	7.62		5.37		6.14		5.34		Z|Z
SEEDLING	(346)	7.22	*	5.41		5.90		5.05		+| Z
VILJAVUUSP	(419)	7.60		5.63	*	6.10		5.86	**	| IA
ADE	(424)	7.70		4.81	**	6.00		5.17		
IRRI	(843)	7.50		5.10	*	5.60	**	4.90		+| Z
LABFOR	(846)	8.03		5.72	**	6.28		5.16		
SPASL	(855)	7.59		5.22		6.00		4.96		$| Z
CUP Analab	(870)	7.57		5.13		6.01		4.88		X| H
ARA SUE	(872)	8.10		5.40		6.00		5.00		| Z
GUA SUE	(873)	7.10	**	5.30		5.70	**	4.80		Z|Z
BAR SUE	(874)	7.54		5.70	*	6.06		5.06		+|H
LABAMB	(878)	7.90		5.35		6.11		5.14		+|
CRC	(884)	7.77		5.53		6.20		5.42		Z|Z
CAC	(885)	7.55		5.09	*	5.78	*	4.85		Z| Z
ALTAVILLA	(888)	7.79		5.34		6.18		5.12		Z|H
MICHAEL	(904)	7.80		5.30		6.00		5.00		Z| Z
LABGLEB	(922)	-		-		6.32		5.35		
MCA	(970)	7.96		5.79	**	6.19		5.41		
AGROADGAZA	(971)	6.43	**	6.31	**	5.14	**	7.74	**	
AZBY	(976)	8.00		5.50		6.30		5.30		$| H
LS-MRC	(978)	7.45		5.30		5.76	*	4.89		Z|H
EALG	(981)	7.40		5.16		5.83		4.90		S|H
NDA mean		7.693		5.356		6.133		5.164		
NDA st dev		0.235		0.166		0.192		0.203		
NDA N		87		87		88		88		
	Old statistics									
Median		7.700	(3)	5.375	(3)	6.150	(3)	5.170	(3)	
MAD		0.150		0.073		0.090		0.130		
Mean		7.706		5.360		6.138		5.160		
St Dev		0.206		0.110		0.144		0.188		
N		80		64		73		85		
pH - KCl (...)										
LQA-ATP	(2)	7.00		4.50		5.00		4.10		Z|Z
OOSTERBEEK	(4)	7.37		4.51		5.05		4.16		Z| H
WAGENINGEN	(14)	7.52		4.52		5.10		4.17		Z| H
SPNDTKLABS	(31)	6.70	**	4.22	**	4.67	**	3.78	**	Z| Z
EKOM	(35)	7.25		4.58		5.09		4.20		
ZJKRK	(50)	7.30		4.60		5.10		4.20		Z|Z
LAROL	(56)	7.28		4.56		5.09		4.12		
LRSCONTROL	(63)	7.40		4.50		5.10		4.30	*	Z| IA
MLABTW	(70)	7.27		4.68		5.02		4.10		Z| H
AL-West	(78)	7.36		4.59		5.11		4.20		Z| H
DATE	(89)	7.26		4.59		4.93		4.09		Z| Z
SCHRG	(90)	7.35		4.55		5.09		4.21		-|H
GGM	(98)	7.25		4.70		5.00		4.10		Z| H
974BRET	(99)	7.24		4.42		4.96		4.03		Z| H
BCIMUZPOL	(132)	6.50	**	5.28	**	5.31	**	4.32	*	Z|H
XGCALAFIGA	(135)	7.21		4.76	**	5.20		4.31	*	Z| Z
MELILAB	(157)	7.31		4.49		5.04		4.12		Z| RC
POVLT	(158)	7.48		4.54		5.10		4.21		Z| H
ECOSOIL	(165)	7.22		4.42		5.01		4.07		+|H
ETMKK	(166)	7.17		4.53		5.02		4.13		
PLATINA222	(172)	6.69	**	4.29	**	4.76	**	3.88	**	Z| RC
RISWC	(174)	7.34		4.58		5.08		4.19		
DOLE	(177)	7.01		4.38		4.85		3.95	*	
ALNN	(185)	7.42		4.66		5.20		4.36	**	Z|CB
CSS	(186)	7.05		4.65		5.25	**	4.40	**	Z|Z
LABORECOF	(194)	7.07		4.45		4.94		4.00		Z| H
NDA mean		7.266		4.523		5.034		4.138		(cont.)
NDA st dev		0.153		0.093		0.097		0.090		
NDA N		62		62		63		63		

ISE 2009.1 - Soil characteristics

Sample		900		986		910		882		MIC
pH - KCl (...)	(cont.)									
UMADAKAR	(196)	7.11		4.51		4.94		4.05		Z| Z
FRIS	(198)	6.95	*	4.60		4.99		4.09		+| IA
ANALGIR	(199)	7.25		4.58		5.06		4.13		Z| H
ALFA	(206)	7.31		4.57		5.01		4.12		
KLAL	(233)	7.08		4.46		4.90		3.99		Z|H
WROCLAB	(263)	7.20		4.50		5.00		4.10		
AGROLAB-SL	(264)	7.08		4.42		4.93		4.00		Z|RC
EVI707	(272)	7.23		4.44		4.98		4.10		
IGEOLUNAM	(273)	7.07		4.44		4.93		4.02		Z| RC
MUMPFROG	(275)	7.45		4.50		5.07		4.16		Z| Z
SPAL	(282)	7.18		4.55		5.02		4.16		Z|Z
FFEEBW	(284)	7.24		4.51		4.98		4.09		
RALA	(299)	7.40		4.51		5.03		4.12		Z| Z
SPOOR	(305)	7.17		4.41		5.10		4.15		Z| RC
ERSAFVGSCA	(307)	7.00		5.20	**	5.10		4.20		Z|H
PLVHOLAB	(308)	7.41		4.44		5.00		4.09		Z|H
HLVAKASSEL	(313)	7.04		4.48		5.03		4.15		
NFVGOE	(321)	7.43		4.49		5.06		4.18		$| H
FVABW	(322)	7.44		4.46		5.01		4.08		$| H
SMART	(326)	7.24		4.46		4.92		4.03		
P-2000RG	(334)	7.20		4.60		5.00		4.30	*	Z|H
OLESKA	(335)	7.40		4.50		5.00		4.20		
SKRA	(336)	7.21		4.50		5.00		4.17		
CHKS	(337)	7.26		4.58		5.10		4.18		
GDAGRO	(338)	7.22		4.53		5.01		4.13		
LABRES	(339)	7.30		4.60		5.10		4.18		Z|H
GLOBI	(340)	7.29		4.60		5.09		4.20		
SKLODPOL	(342)	7.40		4.63		5.13		4.23		Z| RC
MALWA	(343)	7.22		4.55		5.07		4.22		Z|Z
LVDC	(344)	7.51		4.51		5.08		4.17		Z| Z
IRRI	(843)	7.00		4.30	**	4.80	*	3.90	**	+| Z
VBBH	(859)	7.43		4.45		5.00		4.29		Z|Z
CRC	(884)	7.27		4.72	*	5.17		4.37	**	Z|Z
ALTAVILLA	(888)	7.27		4.46		4.95		4.04		Z|H
LABGLEB	(922)	-		-		5.01		4.09		
MCA	(970)	7.33		4.56		5.06		4.10		
LS-MRC	(978)	7.38		5.10	**	5.56	**	4.65	**	Z|H
NDA mean		7.266		4.523		5.034		4.138		
NDA st dev		0.153		0.093		0.097		0.090		
NDA N		62		62		63		63		
	Old statistics									
Median		7.260	(3)	4.510	(3)	5.020	(3)	4.130	(3)	
MAD		0.090		0.055		0.060		0.040		
Mean		7.261		4.526		5.033		4.130		
St Dev		0.136		0.073		0.072		0.067		
N		58		54		57		51		
TC=Total C (org.+inorg.) (g/kg)										
OOSTERBEEK	(4)	22.7		18.4		38.1		24.1		X| RC
ATVC	(7)	22.6		20.0		38.2		23.9		RS
FERGUSONIT	(21)	22.1		19.0		36.6		23.1		X| Z
BELFAST	(39)	22.5		17.5		38.8		24.2		X| JA
SOILINST	(43)	21.6		16.0		37.8		23.5		
LRSCONTROL	(63)	22.3		18.5		39.2		24.3		X| N
SAINTE-FOY	(80)	23.0		19.3		39.0		24.0		X| N
GAL	(95)	22.0		18.4		38.0		23.7		X| RC
ANDESITE	(108)	20.9	**	19.6		37.1		20.8	**	X|N
UAK MARDI	(120)	22.9		20.8		37.4		23.9		
VICTORY	(123)	24.1	**	17.9		39.6		24.8		
LABVAL	(133)	23.5		21.0		39.7		25.1		X| Z
XGCALAFIGA	(135)	22.7		17.6		38.8		24.5		X| N
NDA mean		22.33		18.20		37.12		23.67		(cont.)
NDA st dev		0.71		1.86		2.03		0.83		
NDA N		39		38		39		39		

ISE 2009.1 - Soil characteristics

Sample		900		986		910		882		MIC
TC=Total C (org.+inorg.) (g/kg)		(cont.)								
NSSL	(167)	21.4		15.0		36.2		23.1		
HILL	(180)	21.8		21.3		35.9		22.8		X|Z
LABORECOF	(194)	21.9		16.8		38.7		23.7		X| N
UMADAKAR	(196)	21.3		18.2		33.6		22.4		X|
QLDNR&M	(210)	20.9	**	18.1		34.7		23.0		X| Z
FORTEST	(212)	21.9		19.9		36.2		23.5		X| JA
MERLEWOOD	(222)	22.7		22.3		38.1		24.2		
IGEOLUNAM	(273)	23.5		20.0		38.0		24.2		X| RC
SeqBioMpl	(274)	22.0		17.3		34.8		24.0		X|RC
MUMPFROG	(275)	22.6		15.2		36.3		23.2		X| Z
FFEEBW	(284)	23.9	*	17.8		41.0		25.6	**	
TNO-NITG	(293)	22.5		17.7		38.5		28.1	**	X| N
RALA	(299)	22.2		18.1		35.7		23.4		X|
HLVAKASSEL	(313)	23.8		21.6		39.1		24.5		
SRINAGAR	(320)	22.5		18.5		35.8		22.9		Z| Z
NFVGOE	(321)	22.6		19.0		36.1		23.4		X| JA
FVABW	(322)	21.7		16.6		35.2		21.7	**	X| RC
GLAGC	(327)	21.8		15.4		35.1		22.9		X| Z
ADE	(424)	22.7		18.1		36.3		23.6		X| N
IRRI	(843)	22.4		17.5		36.4		23.0		X| Z
SPASL	(855)	23.0		18.4		38.8		24.3		X| RC
VBBH	(859)	21.5		16.0		35.6		22.5		X|N
WBT	(866)	22.5		15.2		35.1		23.8		X| N
CHEMHAL	(877)	22.8		19.9		37.7		24.4		$|N
LABGLEB	(922)	22.2		-		36.3		23.4		
AGROLAB	(977)	21.1		16.1		33.6		21.5	**	X|Z
NDA mean		22.33		18.20		37.12		23.67		
NDA st dev		0.71		1.86		2.03		0.83		
NDA N		39		38		39		39		
	Old statistics									
Median		22.50	(3)	18.16	(3)	37.10	(3)	23.68	(3)	
MAD		0.40		1.25		1.40		0.54		
Mean		22.35		18.26		37.10		23.69		
St Dev		0.63		1.85		1.77		0.66		
N		35		38		39		34		
TIC=Tot.Inorg C(CaCO3) (%)										
ALCONTROL	(1)	1.80		0.200	<	0.200	<	0.200		X| P
OOSTERBEEK	(4)	2.11		0.101	<	0.104		0.102	<	Z| Z
ATVC	(7)	2.10		1.000	<	1.000	<	1.000	<	MP
FERGUSONIT	(21)	2.08		0.100	<	0.100	<	0.100	<	Z| Z
LAF	(37)	4.00		3.000	<	4.000	**	3.000	<	Z|O
SOILINST	(43)	0.51	**	0.090		0.370		0.270		Z|Z
EXTAQS	(52)	0.83	<	0.830	<	0.830	<	0.830	<	
ISA	(62)	0.80	**	0.100	<	0.100	<	0.100	<	
LRSCONTROL	(63)	2.65		0.200	<	0.200	<	0.200	<	+| Z
TCKI	(64)	1.66		0.180	<	0.190	<	0.190	<	Z|Z
MLABTW	(70)	3.10		0.500	<	0.500	<	0.500	<	Z| P
AL-West	(78)	4.98	**	0.430		3.563	**	3.351	**	Z| P
US	(83)	2.27		-		-		0.050		
DATE	(89)	3.20		0.500	<	0.500	<	0.500	<	Z| Z
ANDESITE	(108)	2.82		0.220		0.320		0.310		Z|Z
CISCA	(112)	2.48		-		-		-		Z| Z
VICTORY	(123)	1.56		0.250	<	0.250	<	0.250	<	
XGCALAFIGA	(135)	1.28		-		-		-		Z| Z
MELILAB	(157)	2.15		-		-		-		Z| RC
ECOSOIL	(165)	2.08		0.500	<	0.500	<	0.500	<	X|Z
NSSL	(167)	3.00		-		-		-		
PLATINA222	(172)	3.20		-		-		-		Z| E
ALNN	(185)	2.90		0.500	<	0.500	<	0.500	<	Z|P
FRIS	(198)	2.02		-		-		-		Z| Z
NDA mean		2.508		-		0.3197		0.2567		(cont.)
NDA st dev		0.764		-		0.4323		0.3200		
NDA N		31		6		9		9		

ISE 2009.1 - Soil characteristics

Sample		900		986		910		882		MIC
TIC=Tot.Inorg C(CaCO3) (%)	(cont.)									
MARELI	(204)	0.10	<	0.100	<	0.100	<	0.100	<	Z| Z
GSISMA	(214)	3.35		0.200		0.740		0.930		Z| Z
WBD	(216)	2.80		0.100		0.400		0.400		
AGROLAB-SL	(264)	2.86		-		-		-		Z|RC
SPOOR	(305)	-		-		0.015		0.070		Z| Z
NFVGOE	(321)	0.28	**	-		-		-		X| N
FVABW	(322)	2.50		0.100	<	0.300	<	0.100	<	X| RC
GLAGC	(327)	2.74		0.100	<	0.100	<	0.100	<	J| Z
VBBH	(859)	3.14		-		-		-		Z|O
AGROADGAZA	(971)	4.35	**	0.610		2.240	**	1.680	**	
NDA mean		2.508		-		0.3197		0.2567		
NDA st dev		0.764		-		0.4323		0.3200		
NDA N		31		6		9		9		
	Old statistics									
Median		2.575	(3)	0.2100	(1)	0.3450	(2)	0.2700	(2)	
MAD		0.485		0.1150		0.1480		0.1300		
Mean		2.533		-		-		-		
St Dev		0.637		-		-		-		
N		26		6		6		7		
TOC=Total Org. C (g/kg)										
ALCONTROL	(1)	21.5	*	17.9		34.1		22.4		| N
OOSTERBEEK	(4)	18.5		18.3		36.9		23.2		X| RC
FERGUSONIT	(21)	19.6		19.0		36.6		23.1		X| N
SOILINST	(43)	16.7	*	15.8		32.0		19.6	**	
EXTAQS	(52)	22.1	**	17.4		36.9		23.3		
LRSCONTROL	(63)	19.1		18.4		39.1		24.2		X| N
TCKI	(64)	20.1		17.8		38.8		24.0		X|N
GAL	(95)	18.0		16.8		36.3		23.5		X| RC
974BRET	(99)	19.0		19.7		38.1		22.7		X| N
ANDESITE	(108)	17.5		19.3		36.7		20.4	**	Z|Z
CISCA	(112)	17.9		-		-		-		Z| Z
VICTORY	(123)	22.2	**	17.9		39.6		24.8		
BCIMUZPOL	(132)	18.7		13.5	**	38.9		25.6	**	
CPH340XYC	(134)	18.9		20.7		34.4		23.3		X| Z
POVLT	(158)	20.0		20.2		36.7		23.8		Z| E
JMCK	(160)	19.0		13.5	**	38.8		24.8		X| Z
ECOSOIL	(165)	19.2		16.8		36.4		23.4		X|RC
QLDNR&M	(210)	-		18.1		34.7		23.0		X| Z
TNO-NITG	(293)	15.8	**	15.1		30.5	**	18.8	**	X| N
HLVAKASSEL	(313)	18.4		18.0		35.1		22.3		
FVABW	(322)	18.7		16.6		34.8		21.7		X| RC
GLAGC	(327)	19.2		15.3		35.0		22.7		$| Z
OSCHR-OL	(341)	21.2	*	16.5		38.5		24.6		
ADE	(424)	22.4	**	18.1		36.3		23.6		
VBBH	(859)	19.0		16.0		35.6		22.5		X|N
CHEMHAL	(877)	18.5		18.9		35.8		22.9		|N
AGROLAB	(977)	16.8	*	16.1		32.2		20.7	**	X|Z
NDA mean		18.87		17.55		36.38		23.25		
NDA st dev		1.22		1.77		2.32		1.03		
NDA N		26		26		26		26		
	Old statistics									
Median		18.93	(3)	17.90	(3)	36.40	(3)	23.30	(3)	
MAD		0.34		1.10		1.60		0.60		
Mean		18.85		17.70		36.33		23.32		
St Dev		0.67		1.51		2.04		0.83		
N		18		24		25		21		

ISE 2009.1 - Other determinations

Sample		900		986		910		882		MIC
13C (atom%*100)										
MERLEWOOD	(222)	109		108		108		108		
Median		108.6	(1)	108.2	(1)	108.2	(1)	108.3	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
15N (atom%*100)										
MERLEWOOD	(222)	36.9		36.8		36.9		36.7		
TNO-NITG	(293)	6.3		4.8		6.5		2.8		X| RC
Median		21.61	(1)	20.82	(1)	21.68	(1)	19.77	(1)	
MAD		15.28		16.01		15.19		16.97		
N		2		2		2		2		
B - Hot water (mg/kg)										
LRSCONTROL	(63)	1.13		0.324		1.38		1.15		+| CB
GSISMA	(214)	0.39		0.192		1.00		0.90		Z| CB
SAC-CAL	(973)	1.10		0.300	<	1.00		0.90		Z| CB
EALG	(981)	1.40		4.210		2.24		1.62		+|E
Median		1.115	(1)	0.3240	(1)	1.190	(1)	1.025	(1)	
MAD		0.150		0.1320		0.190		0.125		
N		4		3		4		4		
CN - Free (mg/kg)										
EXACT	(190)	1.30		2.00		1.60		1.50		Z| E
Median		1.300	(1)	2.000	(1)	1.600	(1)	1.500	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
CN - Total (mg/kg)										
ALCONTROL	(1)	1.80		2.70		4.70		3.40		Z| E
AL-West	(78)	5.00	<	5.00	<	5.57		5.00	<	Z| E
EXACT	(190)	1.60		2.40		2.50		2.40		Z| E
Median		1.700	(1)	2.550	(1)	4.700	(1)	2.900	(1)	
MAD		0.100		0.150		0.871		0.500		
N		2		2		3		2		
delta 13C (‰ V-PDB)										
MERLEWOOD	(222)	-22.86		-26.5		-26.9		-26.0		
TNO-NITG	(293)	-23.04		-27.0		-27.3		-26.5		X|RC
Median		-22.949	(1)	-26.76	(1)	-27.14	(1)	-26.23	(1)	
MAD		0.089		0.21		0.20		0.23		
N		2		2		2		2		
delta 15N (‰ Air)										
MERLEWOOD	(222)	6.68		5.40		6.55		2.790		
TNO-NITG	(293)	6.33		4.81		6.49		2.802		X|RC
Median		6.503	(1)	5.107	(1)	6.522	(1)	2.7960	(1)	
MAD		0.178		0.294		0.028		0.0060		
N		2		2		2		2		
Moisture-content (%)										
WAGENINGEN	(14)	2.96		0.890		6.92		4.24	*	$| P
LAF	(37)	2.80		1.200		6.70		4.10	*	$|P
LRSCONTROL	(63)	2.96		0.997		6.36		3.91		Z| P
ECOSOIL	(165)	1.99		0.650		5.28		3.11	*	
FRIS	(198)	98.36	**	98.940	**	93.06	**	98.14	**	Z| P
NDA mean		2.403		0.8789		6.082		3.948		(cont.)
NDA st dev		0.650		0.3153		0.749		0.262		
NDA N		11		11		11		11		

ISE 2009.1 - Other determinations

Sample		900	986	910	882	MIC
Moisture-content (%) (cont.)						
ZA/R	(200)	2.46	0.960	5.76	3.87	P
GSISMA	(214)	1.78	1.120	5.95	3.88	Z| P
RF-R&D	(905)	2.36	0.849	5.10	2.81 **	$| P
SAC-CAL	(973)	2.10	0.600	4.20	2.10 **	Z| P
AGROLAB	(977)	2.59	0.650	6.51	3.90	
LDAR02	(984)	0.90	2.900 **	6.20	3.90	Z| P
NDA mean		2.403	0.8789	6.082	3.948	
NDA st dev		0.650	0.3153	0.749	0.262	
NDA N		11	11	11	11	
	Old statistics					
Median		2.410 (3)	0.8900 (3)	6.075 (3)	3.900 (3)	
MAD		0.405	0.2300	0.530	0.010	
Mean		2.290	0.8796	5.898	-	
St Dev		0.632	0.2137	0.836	-	
N		10	9	10	5	

ISE 2009.1 - Fluoride (Swiss standard procedure)

Sample		900	986	910	882	MIC
F - Total (mg/kg)						
FRIDOLIN	(29)	334	30.0	359	306	Z| H
AGROCH	(75)	331	43.3	426	354	Z|H
FRESHERTEN	(920)	436	29.0	613	502	+| H
Median		334.0 (1)	30.00 (1)	425.5 (1)	353.9 (1)	
MAD		2.8	1.00	66.5	47.9	
N		3	3	3	3	

ISE 2009.1 - Digestion with HNO3 + HCl + H2O2 (UNEP-UN/EC 91075A)

Sample		900	986	910	882	MIC
S (mg/kg)						
ALNN	(185)	350	262	618	623	
Median		350.0 (1)	262.0 (1)	618.0 (1)	623.0 (1)	
MAD		-	-	-	-	
N		1	1	1	1	

ISE 2009.1 - Pot. CEC using 1M NH4-acetate at pH=7

Sample		900		986		910		882		MIC
Al (cmol+/kg)										
ELAEIS.S	(130)	-		-		-		0.820		
Median		-	(0)	-	(0)	-	(0)	0.8200	(1)	
MAD		-		-		-		-		
N		-		-		-		1		
Ca (cmol+/kg)										
LQA-ATP	(2)	18.6		2.70		26.5		5.95		
FELDA	(13)	17.9		2.83		24.7		4.50	*	R|AAA
REDUIT	(15)	14.5		1.68	**	17.4	**	4.34	**	
SPNDTKLABS	(31)	8.4	**	0.85	**	13.7	**	2.70	**	R|AAB
LAF	(37)	19.6		2.41		27.5		6.02		R|CB
SOILINST	(43)	20.6		2.36		28.7		6.50		R|E
MSIRI	(48)	23.6		2.42		29.1		6.21		R|AAA
LRSCONTROL	(63)	15.4		2.08		26.4		5.67		R|AAA
SIRI	(119)	18.0		4.50	**	25.5		9.50	**	Z| O
UAK MARDI	(120)	21.0		2.05		23.0		5.09		
ELAEIS.S	(130)	20.0		2.31		30.5		6.47		
XGCALAFIGA	(135)	23.0		2.39		27.2		5.93		R| CB
NSSL	(167)	26.3		2.50		29.4		6.40		+|AA
PLATINA222	(172)	14.9		2.10		25.5		4.67	*	R|AAA
HILL	(180)	19.4		2.30		26.3		5.90		R|CB
UMADAKAR	(196)	15.4		1.83	*	19.5	**	4.42	*	R|AAB
MARELI	(204)	17.7		2.45		26.1		6.19		R|AAA
GSISMA	(214)	20.0		2.18		27.6		5.89		R| CB
AECSAGRICS	(248)	22.0		2.56		28.1		6.42		
CIRADFLHOR	(249)	23.9		3.06	**	26.7		5.91		+|AAA
AGROLAB-SL	(264)	18.9		2.52		24.7		5.67		R|AAA
LUNUWILA	(270)	10.6	**	1.11	**	14.9	**	3.00	**	R|AAA
IGEOLUNAM	(273)	22.7		2.53		28.5		6.21		R|AAA
SPAL	(282)	28.2		2.52		37.4	**	7.61	**	R|AAC
DAR	(296)	21.7		2.75		29.5		6.39		R|AAB
Momotombo	(297)	23.9		2.23		31.4		5.72		R|AAG
ERSAFVGSCA	(307)	21.6		2.40		26.0		6.10		
SMBPLNUS	(315)	16.0		1.66	**	22.7		4.78	*	R|AAC
SMART	(326)	22.5		2.12		28.2		5.66		
IRRI	(843)	23.8		2.01		27.9		5.81		+| CB
CUP Analab	(870)	21.9		2.55		28.6		6.38		R|AAA
ARA SUE	(872)	21.5		2.20		29.3		6.80		Z|AAA
LABGLEB	(922)	25.6		-		-		-		
MCA	(970)	13.1		1.48	**	15.8	**	5.55		
AZBY	(976)	18.9		2.50		25.2		6.11		R|AAA
LS-MRC	(978)	21.3		2.38		24.9		5.44		R|AAA
EALG	(981)	13.5		1.81	*	24.2		5.13		+|E
NDA mean		20.29		2.350		26.96		5.905		
NDA st dev		3.80		0.289		2.68		0.677		
NDA N		37		36		36		36		
	Old statistics									
Median		20.60	(3)	2.400	(3)	26.94	(3)	5.950	(3)	
MAD		2.44		0.130		1.61		0.280		
Mean		20.20		2.383		26.99		5.982		
St Dev		3.68		0.214		2.15		0.414		
N		35		27		30		27		
CEC (cmol+/kg)										
LQA-ATP	(2)	23.9	**	6.68		43.8		40.5	**	
FELDA	(13)	32.1	**	17.30	**	25.2		29.8		R|E
LAF	(37)	14.9		5.30		34.2		8.1	**	R|O
SIRI	(119)	21.7	*	8.33		43.3		38.3	*	Z| O
UAK MARDI	(120)	16.6		4.83		32.1		27.6		
ELAEIS.S	(130)	15.9		5.61		33.6		27.9		
NDA mean		16.40		6.295		37.82		31.53		(cont.)
NDA st dev		2.36		2.125		8.33		4.47		
NDA N		22		22		22		21		

ISE 2009.1 - Pot. CEC using 1M NH4-acetate at pH=7

Sample		900		986		910		882		MIC
CEC (cmol+/kg)	(cont.)									
XGCALAFIGA	(135)	17.4		6.44		38.7		-		R| O
NSSL	(167)	15.4		5.70		36.6		31.6		+|Z
PLATINA222	(172)	20.0		10.40	*	43.9		37.3	*	R| AA
HILL	(180)	16.3		7.94		38.9		34.4		R|CB
UMADAKAR	(196)	13.4		8.28		44.0		29.9		R| E
CIRADFLHOR	(249)	21.7	*	1.68	*	46.9		54.3	**	
SPAL	(282)	16.6		7.20		32.0		30.5		R|E
DAR	(296)	15.1		7.10		37.6		29.9		R|O
Momotombo	(297)	17.1		4.98		43.7		32.8		R|AAG
ERSAFVGSCA	(307)	18.3		8.10		44.9		37.6	*	
SMART	(326)	16.9		6.35		31.8		29.6		
VILJAVUUSP	(419)	10.7	**	4.35		23.1		21.3	*	R| O
IRRI	(843)	16.2		5.05		34.8		29.0		+| E
ARA SUE	(872)	22.7	**	12.58	**	49.9		38.7	*	Z|AAA
MCA	(970)	15.7		1.97	*	18.9		13.0	**	
AZBY	(976)	14.1		6.00		34.7		29.9		R| O
NDA mean		16.40		6.295		37.82		31.53		
NDA st dev		2.36		2.125		8.33		4.47		
NDA N		22		22		22		21		
	Old statistics									
Median		16.25	(3)	6.350	(3)	37.11	(3)	29.87	(3)	
MAD		0.85		1.050		5.76		0.75		
Mean		16.24		6.367		36.94		30.24		
St Dev		1.59		1.292		7.94		1.92		
N		16		17		22		12		
K (cmol+/kg)										
LQA-ATP	(2)	0.750		0.220		0.670		1.09		
FELDA	(13)	0.820		0.250	*	0.500	*	0.90		R|CA
REDUIT	(15)	0.502	**	0.033	**	0.327	**	0.68	**	
SPNDTKLABS	(31)	0.850		0.210		0.660		0.94		R| CA
LAF	(37)	0.760		0.240		66.000	**	1.00		R|CB
BELFAST	(39)	0.769		0.205		0.590		0.99		R| CA
SOILINST	(43)	0.770		0.190		0.670		1.12		R|E
MSIRI	(48)	0.779		0.191		0.660		1.10		R| CA
LRSCONTROL	(63)	0.671		0.212		0.584		0.93		R| CA
SIRI	(119)	0.750		0.230		0.570		0.97		Z| CA
UAK MARDI	(120)	0.800		0.190		0.710		1.03		
ELAEIS.S	(130)	0.770		0.210		0.650		1.04		
XGCALAFIGA	(135)	0.710		0.210		0.610		0.96		R| CB
NSSL	(167)	0.800		0.200		0.700		1.00		+|AA
PLATINA222	(172)	0.730		0.200		0.610		0.87		R| AA
HILL	(180)	0.700		0.220		0.660		0.96		R|CB
UMADAKAR	(196)	0.760		0.220		0.560		0.88		R|AAA
MARELI	(204)	0.840		0.220		0.640		1.02		R|AAA
GSISMA	(214)	0.650		0.150	**	0.640		1.04		R| CB
CIRADFLHOR	(249)	0.710		0.200		0.520		0.96		+|CA
AGROLAB-SL	(264)	0.639		0.196		0.571		0.92		R|AAA
LUNUWILA	(270)	0.896		0.236		0.745		1.25	**	R|AAA
IGEOLUNAM	(273)	0.854		0.220		0.670		1.04		R| CA
SPAL	(282)	0.080	**	0.240		0.710		1.08		R|CA
DAR	(296)	0.810		0.230		0.590		0.99		R|CA
Momotombo	(297)	0.770		0.200		0.700		1.02		R|AAG
ERSAFVGSCA	(307)	1.000	**	0.300	**	0.800		1.50	**	
SMBPLNUS	(315)	0.790		0.190		0.590		1.02		R|CA
SMART	(326)	0.760		0.200		0.655		1.04		
IRRI	(843)	0.880		0.200		0.760		1.19	*	+| CB
CUP Analab	(870)	0.868		0.278	**	0.735		1.13		R| CA
ARA SUE	(872)	0.710		0.160	**	0.590		0.98		Z|AAA
LABGLEB	(922)	0.834		-		-		-		
MCA	(970)	0.784		0.207		0.672		1.08		
NDA mean		0.7751		0.2087		0.6474		1.009		(cont.)
NDA st dev		0.0784		0.0202		0.0786		0.087		
NDA N		38		37		37		37		

ISE 2009.1 - Pot. CEC using 1M NH4-acetate at pH=7

Sample		900		986		910		882		MIC
K (cmol+/kg)	(cont.)									
AGROADGAZA	(971)	0.980	**	0.410	**	0.820	*	1.23	**	R|AAA
AZBY	(976)	0.790		0.210		0.650		1.09		R| CA
LS-MRC	(978)	0.780		0.470	**	0.700		0.93		R|AAA
EALG	(981)	0.666		0.189		0.610		0.99		+|E
NDA mean		0.7751		0.2087		0.6474		1.009		
NDA st dev		0.0784		0.0202		0.0786		0.087		
NDA N		38		37		37		37		
	Old statistics									
Median		0.7700	(3)	0.2100	(3)	0.6550	(3)	1.000	(3)	
MAD		0.0400		0.0100		0.0450		0.040		
Mean		0.7712		0.2099		0.6501		1.004		
St Dev		0.0646		0.0154		0.0635		0.069		
N		34		29		33		32		
Mg (cmol+/kg)										
LQA-ATP	(2)	3.45		0.310		4.24		11.9		
FELDA	(13)	3.25		0.330		4.23		11.9		R|AAA
REDUIT	(15)	2.71		0.192	*	3.36	*	9.5		
SPNDTKLABS	(31)	1.63	**	0.130	**	2.34	**	6.7	**	R|AAA
LAF	(37)	3.35		0.340		4.54		13.8		R|CB
BELFAST	(39)	3.01		0.280		4.52		13.5		R| AA
SOILINST	(43)	3.16		0.280		0.45	**	1.3	**	R|AAC
MSIRI	(48)	3.10		0.314		4.46		12.6		R|AAA
LRSCONTROL	(63)	3.02		0.308		4.54		11.1		R|AAA
SIRI	(119)	3.84		0.280		4.84		11.5		Z| Z
UAK MARDI	(120)	3.19		0.240		3.75		10.8		
ELAEIS.S	(130)	3.32		0.320		4.85		13.8		
XGCALAFIGA	(135)	3.32		0.320		4.42		12.4		R| CB
NSSL	(167)	4.20	**	0.300		4.50		13.6		+|AA
PLATINA222	(172)	2.81		0.300		4.31		11.0		R|AAA
HILL	(180)	3.11		0.320		4.38		12.3		R|CB
UMADAKAR	(196)	3.09		0.340		3.83		11.0		R|AAA
MARELI	(204)	3.47		0.400	*	4.92		15.8		R|AAA
GSISMA	(214)	3.11		0.300		5.57	*	15.2		R| CB
AECSAGRICS	(248)	2.95		0.290		4.22		12.4		
CIRADFLHOR	(249)	3.48		0.350		4.83		13.6		+|AAC
AGROLAB-SL	(264)	3.27		0.501	**	4.35		12.8		R|AAA
LUNUWILA	(270)	1.65	**	0.175	**	2.21	**	3.2	**	R|AAA
IGEOLUNAM	(273)	3.33		0.310		4.43		10.2		R|AAA
SPAL	(282)	2.86		0.270		6.26	**	16.4	*	R|AAC
DAR	(296)	3.15		0.360		4.38		12.4		R|AAA
Momotombo	(297)	3.70		0.230		5.25	*	12.8		R|AAG
ERSAFVGSCA	(307)	3.50		0.400	*	4.60		12.8		
SMBPLNUS	(315)	3.97		0.350		5.46	*	17.2	**	R|AAC
SMART	(326)	3.03		0.275		3.96		10.6		
IRRI	(843)	3.71		0.270		4.51		12.9		+| CB
CUP Analab	(870)	3.56		0.380		4.77		12.9		R|AAA
ARA SUE	(872)	3.09		0.270		3.47	*	12.5		Z|AAA
LABGLEB	(922)	3.81		-		-		-		
MCA	(970)	1.82	**	0.280		2.49	**	6.4	**	
AGROADGAZA	(971)	2.72		0.300		3.67	*	10.3		R|AAA
AZBY	(976)	3.46		0.380		4.56		15.3		R|AAA
LS-MRC	(978)	2.43		0.540	**	2.76	**	3.7	**	R|AAA
EALG	(981)	2.40		0.243		4.11		11.3		+|E
NDA mean		3.233		0.3046		4.421		12.39		(cont.)
NDA st dev		0.430		0.0497		0.570		1.89		
NDA N		39		38		38		38		

ISE 2009.1 - Pot. CEC using 1M NH4-acetate at pH=7

Sample		900		986		910		882		MIC
Mg (cmol+/kg)	(cont.)									
NDA mean		3.233		0.3046		4.421		12.39		
NDA st dev		0.430		0.0497		0.570		1.89		
NDA N		39		38		38		38		
	Old statistics									
Median		3.190	(3)	0.3000	(3)	4.445	(3)	12.42	(3)	
MAD		0.240		0.0200		0.145		1.12		
Mean		3.221		0.3045		4.425		12.40		
St Dev		0.369		0.0380		0.299		1.51		
N		35		31		26		31		
Na (cmol+/kg)										
LQA-ATP	(2)	0.0400		0.0400		0.230		4.03	*	
SPNDTKLABS	(31)	0.0900		0.0800		0.350		1.82	**	R| CA
LAF	(37)	0.2200	**	0.1700	**	0.470	**	3.28		R|CB
SOILINST	(43)	0.0600		0.0300		0.320		3.41		R|E
LRSCONTROL	(63)	0.0680		0.0460		0.383		3.39		R| CA
UAK MARDI	(120)	0.2300	**	0.1400	**	0.500	**	2.93		
ELAEIS.S	(130)	0.0600		0.0400		0.340		3.07		
XGCALAFIGA	(135)	0.0500		0.0200		0.290		3.15		R| CB
NSSL	(167)	-		-		0.200		3.60		+|AA
PLATINA222	(172)	0.0800		0.0500		0.330		2.76		R| AA
HILL	(180)	0.0500		0.0500	<	0.280		2.99		R|CB
UMADAKAR	(196)	0.0800		0.0700		0.310		2.89		R|AAA
MARELI	(204)	0.3400	**	0.1300	**	0.370		3.28		R|AAA
GSISMA	(214)	0.0400		0.0200		0.276		3.48		R| CB
AGROLAB-SL	(264)	0.2210	**	0.1220	*	0.439	*	1.36	**	R|AAA
LUNUWILA	(270)	0.0780		0.0500		0.332		1.07	**	R|AAA
IGEOLUNAM	(273)	0.0730		0.0300		0.270		3.68		R| CA
SPAL	(282)	0.1300	**	0.0900	*	0.370		3.23		R|CA
DAR	(296)	0.4100	**	0.0800		0.810	**	3.23		R|CA
Momotombo	(297)	0.0500		0.1000	*	0.180	*	1.20	**	R| E
ERSAFVGSCA	(307)	0.0800		0.0400		0.400		4.20	**	
SMART	(326)	0.0500		0.0100		0.280		2.95		
IRRI	(843)	0.0600		0.0300		0.300		3.16		+| CB
CUP Analab	(870)	0.0550		0.0310		0.274		3.84		R| CA
ARA SUE	(872)	0.0500		0.0200		0.280		3.31		Z|AAA
LABGLEB	(922)	0.0681		-		-		-		
MCA	(970)	0.0770		0.0690		0.276		3.73		
AZBY	(976)	0.0600		0.0300		0.270		2.98		R| CA
LS-MRC	(978)	1.5300	**	1.1000	**	0.720	**	4.44	**	R|AAA
EALG	(981)	0.0422		0.0271		0.300		3.39		+|E
NDA mean		0.06201		0.04599		0.3059		3.286		
NDA st dev		0.02381		0.03502		0.0598		0.404		
NDA N		29		27		29		29		
	Old statistics									
Median		0.06000	(3)	0.03550	(3)	0.3000	(3)	3.255	(3)	
MAD		0.01000		0.01250		0.0300		0.205		
Mean		0.06188		0.04066		0.3057		3.260		
St Dev		0.01476		0.02041		0.0488		0.289		
N		22		20		23		22		

ISE 2009.1 - Pot. CEC using 1M or 0.1M BaCl2-TEA at pH=8.1 (ISO 13536 OR BZE)

Sample		900	986	910	882	MIC
Al (cmol+/kg)						
LABAMB	(878)	0.160	4.34	0.240	0.520	S| CB
Median		0.1600 (1)	4.340 (1)	0.2400 (1)	0.5200 (1)	
MAD		-	-	-	-	
N		1	1	1	1	
Ca (cmol+/kg)						
RISWC	(174)	18.7	2.80	30.0	-	V|AAB
KLAL	(233)	16.9	2.74	18.8	5.94	
NFVGOE	(321)	16.2	-	27.9	-	V| CB
FVABW	(322)	15.8	-	28.0	-	V| CB
GLAGC	(327)	16.6	-	-	-	S| CB
LABAMB	(878)	12.7	2.15	21.3	4.24	S| CB
Median		16.41 (1)	2.740 (1)	27.92 (1)	5.090 (1)	
MAD		0.54	0.060	2.08	0.850	
N		6	3	5	2	
CEC (cmol+/kg)						
RISWC	(174)	20.5	10.5	42.3	-	V|CA
GSISMA	(214)	18.5	9.8	38.8	30.2	S| CB
NFVGOE	(321)	20.6	-	32.1	-	V| Z
FVABW	(322)	20.3	-	33.6	-	V| Z
GLAGC	(327)	17.9	-	-	-	S| CB
LABAMB	(878)	27.2	17.8	53.8	43.6	S| O
CRC	(884)	18.0	17.5	35.5	28.5	
CAC	(885)	16.8	4.7	30.5	23.2	Z| O
ALTAVILLA	(888)	22.7	14.5	47.5	37.7	Z|O
MICHAEL	(904)	23.8	14.4	44.7	35.9	V|
NDA mean		20.08	-	39.02	-	
NDA st dev		3.30	-	8.56	-	
NDA N		10	7	9	6	
	Old statistics					
Median		20.41 (3)	14.40 (1)	38.80 (3)	33.05 (1)	
MAD		2.34	3.40	5.90	4.59	
Mean		20.63	-	39.87	-	
St Dev		3.18	-	7.82	-	
N		10	7	9	6	
K (cmol+/kg)						
RISWC	(174)	1.09	0.200	0.950	-	V|AAA
KLAL	(233)	0.71	0.160	0.580	0.930	
NFVGOE	(321)	1.02	-	0.730	-	V| CB
FVABW	(322)	1.09	-	0.900	-	V| CB
LABAMB	(878)	0.84	0.290	0.630	1.030	S| CB
Median		1.020 (1)	0.2000 (1)	0.7300 (1)	0.9800 (1)	
MAD		0.070	0.0400	0.1500	0.0500	
N		5	3	5	2	
Mg (cmol+/kg)						
RISWC	(174)	3.13	0.150	4.12	-	V|AAC
KLAL	(233)	2.94	0.320	3.59	11.1	
NFVGOE	(321)	3.30	-	4.30	-	V| CB
FVABW	(322)	3.25	-	4.31	-	V| CB
GLAGC	(327)	3.23	-	-	-	S| CB
LABAMB	(878)	2.71	0.280	3.45	10.0	S| CB
Median		3.180 (1)	0.2800 (1)	4.120 (1)	10.53 (1)	
MAD		0.095	0.0400	0.190	0.52	
N		6	3	5	2	

ISE 2009.1 - Pot. CEC using 1M or 0.1M BaCl2-TEA at pH=8.1 (ISO 13536 OR BZE)

Sample		900	986	910	882	MIC
Na (cmol+/kg)						
KLAL	(233)	0.140	0.190	0.420	3.13	
NFVGOE	(321)	0.071	-	0.302	-	V| CB
FVABW	(322)	0.210	-	0.400	-	S| CB
GLAGC	(327)	0.040	-	-	-	S| CB
LABAMB	(878)	0.280	0.260	0.490	3.42	O| CB
Median		0.1400 (1)	0.2250 (1)	0.4100 (1)	3.275 (1)	
MAD		0.0700	0.0350	0.0450	0.145	
N		5	2	4	2	

ISE 2009.1 - Pot. CEC using 1M NH4Cl (BZE)

Sample		900		986		910		882		MIC
Al (cmol+/kg)										
SAINTE-FOY	(80)	0.0900	<	0.310		0.090	<	0.97		Z| CB
NFVGOE	(321)	-		0.578		-		2.43		+| CB
FVABW	(322)	-		0.570		-		1.32		+| CB
GLAGC	(327)	-		0.660		0.190		1.75		Z| CB
SPASL	(855)	0.0010		0.288		-		1.23		Z| CB
Median		0.00100	(1)	0.5700	(1)	0.1900	(1)	1.320	(1)	
MAD		-		0.0900		-		0.350		
N		1		5		1		5		
Ca (cmol+/kg)										
SAINTE-FOY	(80)	18.0		2.31		26.2		6.12		Z| CB
CSS	(186)	23.1		2.93		26.7		7.34		
NFVGOE	(321)	-		2.54		-		6.80		+| CB
FVABW	(322)	-		2.27		-		5.98		+| CB
GLAGC	(327)	-		2.81		32.2		7.09		Z| CB
SPASL	(855)	18.9		4.03		41.6		10.06		Z| CB
Median		18.92	(1)	2.675	(1)	29.46	(1)	6.945	(1)	
MAD		0.97		0.310		3.00		0.610		
N		3		6		4		6		
CEC (cmol+/kg)										
NFVGOE	(321)	-		3.71		-		27.4		+| Z
FVABW	(322)	-		3.45		-		24.1		+| Z
GLAGC	(327)	-		4.10		38.8		28.4		Z| CB
Median		-	(0)	3.710	(1)	38.80	(1)	27.40	(1)	
MAD		-		0.260		-		1.00		
N		-		3		1		3		
Fe (cmol+/kg)										
SAINTE-FOY	(80)	0.0020		0.0130		0.0100		0.0250		Z| CB
NFVGOE	(321)	-		0.0120		-		0.0560		+| CB
FVABW	(322)	-		0.0100		-		0.0200		+| CB
GLAGC	(327)	-		0.0100	<	0.0100	<	0.0200		Z| CB
SPASL	(855)	-		0.0010		-		0.0030		Z| CB
Median		0.00200	(1)	0.01100	(1)	0.01000	(1)	0.02000	(1)	
MAD		-		0.00150		-		0.00500		
N		1		4		1		5		
H (cmol+/kg)										
FVABW	(322)	-		0.0400		-		0.1100		+| H
GLAGC	(327)	-		0.0200		0.0100	<	0.0800		| H
Median		-	(0)	0.03000	(1)	-	(0)	0.09500	(1)	
MAD		-		0.01000		-		0.01500		
N		-		2		-		2		
K (cmol+/kg)										
SAINTE-FOY	(80)	0.740		0.190		0.620		0.99		Z| CB
CSS	(186)	0.781		0.228		0.629		1.03		
NFVGOE	(321)	-		0.196		-		1.08		+| CB
FVABW	(322)	-		0.190		-		1.02		+| CB
GLAGC	(327)	-		0.200		0.750		1.14		Z| CB
SPASL	(855)	1.001		0.278		0.796		1.42		Z| CB
Median		0.7810	(1)	0.1980	(1)	0.6895	(1)	1.054	(1)	
MAD		0.0410		0.0080		0.0650		0.049		
N		3		6		4		6		

ISE 2009.1 - Pot. CEC using 1M NH4Cl (BZE)

Sample		900	986	910	882	MIC
Mg (cmol+/kg)						
SAINTE-FOY	(80)	3.06	0.300	4.46	12.9	Z| CB
CSS	(186)	3.46	0.365	4.28	14.9	
NFVGOE	(321)	-	0.303	-	13.5	+| CB
FVABW	(322)	-	0.290	-	12.4	+| CB
GLAGC	(327)	-	0.330	5.10	14.4	Z| CB
SPASL	(855)	3.83	0.430	6.43	24.2	Z| CB
Median		3.455 (1)	0.3165 (1)	4.780 (1)	13.95 (1)	
MAD		0.377	0.0215	0.413	1.04	
N		3	6	4	6	
Mn (cmol+/kg)						
SAINTE-FOY	(80)	0.0400	0.0500	0.140	0.180	Z| CB
NFVGOE	(321)	-	0.0520	-	0.196	+| CB
FVABW	(322)	-	0.0500	-	0.170	+| CB
GLAGC	(327)	-	0.0600	0.200	0.230	Z| CB
SPASL	(855)	0.0160	0.0610	0.152	0.235	Z| CB
Median		0.02800 (1)	0.05200 (1)	0.1520 (1)	0.1960 (1)	
MAD		0.01200	0.00200	0.0120	0.0260	
N		2	5	3	5	
Na (cmol+/kg)						
CSS	(186)	0.1270	0.0350	0.372	3.01	
NFVGOE	(321)	-	0.0300	-	3.43	+| CB
FVABW	(322)	-	0.0400	-	3.11	+| CB
GLAGC	(327)	-	0.0200	0.330	3.65	Z| CB
SPASL	(855)	0.0610	0.0320	0.405	5.27	Z| CB
Median		0.09400 (1)	0.03200 (1)	0.3720 (1)	3.430 (1)	
MAD		0.03300	0.00300	0.0330	0.320	
N		2	5	3	5	

ISE 2009.1 - Act. CEC using 0.01M BaCl2 (ISO 11260)

Sample		900	986	910	882	MIC
Ca (cmol+/kg)						
WAGENINGEN	(14)	17.6	2.10	29.0	6.13	Q| CB
Median		17.60 (1)	2.100 (1)	29.00 (1)	6.130 (1)	
MAD		-	-	-	-	
N		1	1	1	1	
CEC (cmol+/kg)						
WAGENINGEN	(14)	18.7	2.83	35.5	23.9	Q| CB
Median		18.70 (1)	2.830 (1)	35.50 (1)	23.90 (1)	
MAD		-	-	-	-	
N		1	1	1	1	
K (cmol+/kg)						
WAGENINGEN	(14)	0.870	0.190	0.730	1.07	Q| CB
Median		0.8700 (1)	0.1900 (1)	0.7300 (1)	1.070 (1)	
MAD		-	-	-	-	
N		1	1	1	1	
Mg (cmol+/kg)						
WAGENINGEN	(14)	3.22	0.240	4.58	12.8	Q| CB
Median		3.220 (1)	0.2400 (1)	4.580 (1)	12.80 (1)	
MAD		-	-	-	-	
N		1	1	1	1	
Na (cmol+/kg)						
WAGENINGEN	(14)	0.0300	-	0.290	3.21	Q| CB
Median		0.03000 (1)	- (0)	0.2900 (1)	3.210 (1)	
MAD		-	-	-	-	
N		1	-	1	1	

ISE 2009.1 - Act. CEC using 0.1M BaCl2 (UNEP-UN/EC 91065A)

Sample		900		986		910		882		MIC
Al (cmol+/kg)										
MONS IZAR	(47)	-		0.260		-		0.660		+|AAB
FORTEST	(212)	0.0100		0.400		0.0800		0.770		+| CB
FFEEBW	(284)	0.0340		0.335		0.0510		0.640		
FVABW	(322)	0.0100	<	0.320		0.0100		0.630		+| CB
SEEDLING	(346)	0.1820		0.501		0.2300		1.457		+|AAB
Median		0.03400	(1)	0.3350	(1)	0.06550	(1)	0.6600	(1)	
MAD		0.02400		0.0650		0.03500		0.0300		
N		3		5		4		5		
Ca (cmol+/kg)										
MONS IZAR	(47)	16.4		2.61		10.1		5.71		+|AAB
FORTEST	(212)	16.3		2.30		28.0		5.80		+| CB
FFEEBW	(284)	14.0		2.14		22.4		5.05		
FVABW	(322)	14.3		1.98		24.0		5.25		+| CB
SEEDLING	(346)	14.0		2.25		20.7		5.18		+|AAA
Median		14.27	(1)	2.250	(1)	22.38	(1)	5.250	(1)	
MAD		0.27		0.110		1.67		0.200		
N		5		5		5		5		
CEC (cmol+/kg)										
FORTEST	(212)	20.2		3.20		33.6		22.70		+| CB
FVABW	(322)	17.7		2.78		28.5		20.30		+| Z
SEEDLING	(346)	17.9		3.27		25.9		22.74		+| Z
Median		17.90	(1)	3.200	(1)	28.50	(1)	22.700	(1)	
MAD		0.20		0.070		2.58		0.040		
N		3		3		3		3		
Fe (cmol+/kg)										
MONS IZAR	(47)	-		0.0100		-		0.0500		+|AAA
FORTEST	(212)	-		0.0100		0.0200		0.0200		+| CB
FFEEBW	(284)	0.0090		0.0130		0.0120		0.0360		
FVABW	(322)	0.0100	<	0.0100		0.0100	<	0.0200		+| CB
SEEDLING	(346)	0.0120		0.0150		0.0140		0.0220		+|AAA
Median		0.01050	(1)	0.01000	(1)	0.01400	(1)	0.02200	(1)	
MAD		0.00150		-		0.00200		0.00200		
N		2		5		3		5		
H (cmol+/kg)										
FFEEBW	(284)	-		0.0740		0.0510		0.167		
FVABW	(322)	0.0100	<	0.0500		0.0100		0.070		+| H
Median		-	(0)	0.06200	(1)	0.03050	(1)	0.1185	(1)	
MAD		-		0.01200		0.02050		0.0485		
N		-		2		2		2		
K (cmol+/kg)										
MONS IZAR	(47)	0.670		0.200		0.440		0.740		+|AAA
FORTEST	(212)	0.660		0.190		0.470		0.740		+| CB
FFEEBW	(284)	0.611		0.173		0.407		0.710		
FVABW	(322)	0.610		0.150		0.410		0.700		+| CB
SEEDLING	(346)	0.614		0.170		0.377		0.695		+| CA
Median		0.6140	(1)	0.1730	(1)	0.4100	(1)	0.7100	(1)	
MAD		0.0040		0.0170		0.0300		0.0150		
N		5		5		5		5		

ISE 2009.1 - Act. CEC using 0.1M BaCl2 (UNEP-UN/EC 91065A)

Sample		900	986	910	882	MIC
Mg (cmol+/kg)						
MONS IZAR	(47)	3.46	0.320	4.78	13.1	+|AAA
FORTEST	(212)	3.15	0.260	4.55	12.3	+| CB
FFEEBW	(284)	2.88	0.249	3.93	11.1	
FVABW	(322)	2.75	0.230	3.77	10.8	+| CB
SEEDLING	(346)	3.04	0.277	4.19	12.1	+|AAA
Median		3.038 (1)	0.2600 (1)	4.193 (1)	12.12 (1)	
MAD		0.158	0.0170	0.357	0.98	
N		5	5	5	5	
Mn (cmol+/kg)						
MONS IZAR	(47)	0.0200	0.0500	0.140	0.1600	+|AAA
FORTEST	(212)	0.0200	0.0300	0.130	0.1400	+| CB
FFEEBW	(284)	0.0170	0.0350	0.108	0.1410	
FVABW	(322)	0.0100	0.0300	0.100	0.1400	+| CB
Median		0.01850 (1)	0.03250 (1)	0.1190 (1)	0.14050 (1)	
MAD		0.00150	0.00250	0.0150	0.00050	
N		4	4	4	4	
Na (cmol+/kg)						
MONS IZAR	(47)	0.0500	0.0200	0.270	2.92	+|AAA
FORTEST	(212)	0.0500	0.0200	0.320	3.00	+| CB
FFEEBW	(284)	0.0740	0.0590	0.258	2.51	
FVABW	(322)	0.0400	0.0100	0.220	2.77	+| CB
SEEDLING	(346)	0.0400	0.0190	0.270	3.12	+| CA
Median		0.05000 (1)	0.02000 (1)	0.2700 (1)	2.920 (1)	
MAD		0.01000	0.00100	0.0120	0.150	
N		5	5	5	5	

ISE 2009.1 - Act. CEC using cobaltihexamine (AFNOR NFX 31 130)

Sample		900		986		910		882		MIC
Al (cmol+/kg)										
LAS	(42)	0.0500		0.300		0.0800		1.13		+| CB
Median		0.05000	(1)	0.3000	(1)	0.08000	(1)	1.130	(1)	
MAD		-		-		-		-		
N		1		1		1		1		
Ca (cmol+/kg)										
OOSTERBEEK	(4)	16.5		1.47		29.46		6.37		+| CB
LAS	(42)	16.4		1.59		29.30		6.06		+| CB
974BRET	(99)	15.6		1.54		29.60		2.41		+|AAA
LDAR02	(984)	1.2		15.44		2.80		0.41		+| AA
Median		16.00	(1)	1.565	(1)	29.380	(1)	4.235	(1)	
MAD		0.44		0.061		0.150		1.978		
N		4		4		4		4		
CEC (cmol+/kg)										
OOSTERBEEK	(4)	19.0		1.82		36.5		25.9		+| E
LAS	(42)	17.7		1.47		35.1		24.7		+| E
974BRET	(99)	17.8		2.10		37.8		8.3		+|AAA
LDAR02	(984)	1.3		17.85		35.6		25.2		+| E
Median		17.75	(1)	1.958	(1)	36.07	(1)	24.93	(1)	
MAD		0.67		0.315		0.72		0.58		
N		4		4		4		4		
H (cmol+/kg)										
LAS	(42)	0.1	<	0.05	<	0.1	<	0.1	<	+| O
Median		-	(0)	-	(0)	-	(0)	-	(0)	
MAD		-		-		-		-		
N		-		-		-		-		
K (cmol+/kg)										
OOSTERBEEK	(4)	0.731		0.147		0.605		0.829		+| CB
LAS	(42)	0.750		0.180		0.600		0.970		+| CB
974BRET	(99)	0.710		0.160		0.650		0.340		+|AAA
LDAR02	(984)	0.177		0.765		0.637		0.993		+| AA
Median		0.7205	(1)	0.1700	(1)	0.6210	(1)	0.8995	(1)	
MAD		0.0200		0.0165		0.0185		0.0820		
N		4		4		4		4		
Mg (cmol+/kg)										
OOSTERBEEK	(4)	3.29		0.210		5.00		13.9		+| CB
LAS	(42)	3.19		0.200		4.81		13.6		+| CB
974BRET	(99)	3.09		0.220		4.91		4.9		+|AAC
LDAR02	(984)	0.15		3.022		4.54		13.3		+| AA
Median		3.140	(1)	0.2150	(1)	4.860	(1)	13.43	(1)	
MAD		0.099		0.0100		0.095		0.30		
N		4		4		4		4		
Mn (cmol+/kg)										
LAS	(42)	0.0100		0.0200		0.1200		0.1500		+| CB
SEEDLING	(346)	0.0120		0.0390		0.1220		0.1510		+|AAA
Median		0.01100	(1)	0.02950	(1)	0.12100	(1)	0.15050	(1)	
MAD		0.00100		0.00950		0.00100		0.00050		
N		2		2		2		2		

ISE 2009.1 - Act. CEC using cobaltihexamine (AFNOR NFX 31 130)

Sample		900	986	910	882	MIC
Na (cmol+/kg)						
OOSTERBEEK	(4)	0.0420	0.0300 <	0.298	3.45	+| CB
LAS	(42)	0.0500	0.0300	0.320	3.67	+| CA
974BRET	(99)	0.0600	0.0300	0.320	0.93	+|AAA
LDAR02	(984)	0.0260	0.0530	0.299	3.26	+| AA
Median		0.04600 (1)	0.03000 (1)	0.3095 (1)	3.358 (1)	
MAD		0.00900	-	0.0105	0.204	
N		4	3	4	4	

ISE 2009.1 - Mehlich-3

Sample		900		986		910		882		MIC
Al (mg/kg)										
SAINTE-FOY	(80)	598		1400		1050		1310		Z| CB
CORBANA	(110)	525		1220		1130		1530		
HILL	(180)	458		1020		1020		1340		+|CB
Median		525.0	(1)	1216	(1)	1049	(1)	1343	(1)	
MAD		67.0		187		31		34		
N		3		3		3		3		
B (mg/kg)										
SAINTE-FOY	(80)	2.04		1.000	<	1.000	<	1.000	<	Z| CB
DOLE	(177)	1.53		0.340		1.070		1.160		
HILL	(180)	1.06		0.450	<	0.450	<	0.450	<	+|CB
QLDNR&M	(210)	1.49		0.120		0.120		0.120		Z| CB
FORTEST	(212)	2.46		0.320		1.570		1.330		+| CB
ADE	(424)	1.56		0.070		0.400		0.290		+| CB
Median		1.545	(1)	0.2200	(1)	0.7350	(1)	0.7250	(1)	
MAD		0.270		0.1100		0.4750		0.5200		
N		6		4		4		4		
Ca (mg/kg)										
SAINTE-FOY	(80)	4000		495		5280		1160		Z| CB
CORBANA	(110)	3870		495		5060		1150		Z|CB
HWASS02	(116)	3980		567		4910		1240		
ETMKK	(166)	4020		512		4860		1100		Z| CB
RISWC	(174)	3950		577		4620		1290		Z|AAB
DOLE	(177)	4830	**	627		4930		1080		
HILL	(180)	3530	**	383		4860		970		+|CB
QLDNR&M	(210)	3880		484		4960		1190		Z| CB
FORTEST	(212)	4500	**	501		5850	**	1280		+| CB
ABMCE	(230)	4120		700		4820		1330		Z|AAA
PIEST-RIPP	(256)	3580	*	411		4540		930		+| CB
ADE	(424)	4110		658		4000	**	1020		
LSF	(895)	3970		490		5110		1180		
NDA mean		3974		522.6		4911		1161		
NDA st dev		158		96.8		205		121		
NDA N		13		13		13		13		
	Old statistics									
Median		3978	(3)	500.6	(3)	4914	(3)	1161	(3)	
MAD		45		66.7		94		78		
Mean		3988		530.7		4904		1148		
St Dev		88		91.9		210		123		
N		9		13		11		13		
Cu (mg/kg)										
SAINTE-FOY	(80)	7.16		3.02		5.31		1.000	<	Z| CB
CORBANA	(110)	6.64		2.69		5.03		0.360		Z|CB
HWASS02	(116)	6.29		2.97		4.11		0.410		
ETMKK	(166)	7.43		4.03		1.58		0.130		Z| CB
HILL	(180)	5.49		2.12		6.18		1.400	**	+|CB
QLDNR&M	(210)	6.85		3.00		5.89		0.610		Z| CB
FORTEST	(212)	6.73		3.43		7.04		1.740	**	+| CB
PIEST-RIPP	(256)	6.75		2.83		4.63		0.250		+| CB
CUP Analab	(870)	7.01		3.82		1.27		0.288		Z|AAA
LSF	(895)	6.00		2.00		3.00		1.000		
NDA mean		6.750		2.976		4.750		0.3781		(cont.)
NDA st dev		0.509		0.582		1.844		0.2910		
NDA N		10		10		10		9		

ISE 2009.1 - Mehlich-3

Sample		900		986		910		882		MIC
Cu (mg/kg)	(cont.)									
NDA mean		6.750		2.976		4.750		0.3781		
NDA st dev		0.509		0.582		1.844		0.2910		
NDA N		10		10		10		9		
	Old statistics									
Median		6.740	(3)	2.985	(3)	4.830	(3)	0.3600	(2)	
MAD		0.346		0.370		1.205		0.1100		
Mean		6.635		2.991		4.404		-		
St Dev		0.573		0.652		1.928		-		
N		10		10		10		7		
Fe (mg/kg)										
SAINTE-FOY	(80)	255		219		469		483		Z| CB
CORBANA	(110)	267		186		574		690	**	Z|CB
HWASS02	(116)	255		203		428		469		
DOLE	(177)	241		192		371		387	*	
HILL	(180)	192	**	138	*	557		627	*	+|CB
QLDNR&M	(210)	243		216		476		491		Z| CB
FORTEST	(212)	299		264		710	**	749	**	+| CB
PIEST-RIPP	(256)	246		205		494		485		+| CB
ADE	(424)	272		256		503		533		
CUP Analab	(870)	370	**	315	**	528		537		Z|AAA
LSF	(895)	260		220		467		485		
NDA mean		255.5		213.1		491.9		498.2		
NDA st dev		17.1		35.3		51.7		61.6		
NDA N		11		11		11		11		
	Old statistics									
Median		255.2	(3)	216.0	(3)	485.0	(3)	485.0	(3)	
MAD		11.8		13.4		30.3		6.0		
Mean		259.8		217.9		486.7		-		
St Dev		18.2		26.7		59.8		-		
N		9		9		10		7		
K (mg/kg)										
SAINTE-FOY	(80)	293		79.6		233		379		Z| CB
CORBANA	(110)	297		85.5		227		373		Z|CB
HWASS02	(116)	291		81.4		216		363		
ETMKK	(166)	296		84.0		224		364		Z| CB
RISWC	(174)	276		92.0		207		342		Z|AAA
DOLE	(177)	332		95.5		251		399		
HILL	(180)	244		67.6		215		325		+|CB
QLDNR&M	(210)	338		92.0		233		405		Z| CB
FORTEST	(212)	259		63.5		213		327		+| CB
ABMCE	(230)	307		109.0		241		369		Z|AAA
PIEST-RIPP	(256)	368		90.0		281	**	517	**	+| CA
ADE	(424)	303		94.0		188		292		
LSF	(895)	234		60.5		176	**	289		
NDA mean		294.2		87.01		223.2		355.8		
NDA st dev		31.2		10.31		16.7		48.6		
NDA N		13		13		13		13		
	Old statistics									
Median		296.0	(3)	85.50	(3)	224.0	(3)	363.6	(3)	
MAD		20.0		6.50		9.4		28.5		
Mean		295.2		84.20		222.6		352.3		
St Dev		37.3		13.81		17.4		37.9		
N		13		13		11		12		
Mg (mg/kg)										
SAINTE-FOY	(80)	422		37.6		540		1550		Z| CB
CORBANA	(110)	423		39.4		531		1540		Z|CB
HWASS02	(116)	404		39.4		488		1400		
NDA mean		416.1		37.72		518.5		1550		(cont.)
NDA st dev		22.9		2.38		57.0		77		
NDA N		13		13		13		13		

ISE 2009.1 - Mehlich-3

Sample		900		986		910		882		MIC
Mg (mg/kg)	(cont.)									
ETMKK	(166)	407		38.0		486		1610		Z| CB
RISWC	(174)	421		37.2		506		1620		Z|AAC
DOLE	(177)	510	**	37.4		610		1260	**	
HILL	(180)	370		30.2	**	491		1550		+|CB
QLDNR&M	(210)	386		36.0		469		1560		Z| CB
FORTEST	(212)	489	**	40.4		636		1600		+| CB
ABMCE	(230)	437		50.0	**	546		1460		Z|AAA
PIEST-RIPP	(256)	425		35.7		554		1580		+| CB
ADE	(424)	475		52.0	**	434		1400		
LSF	(895)	412		37.2		532		1540		
NDA mean		416.1		37.72		518.5		1550		
NDA st dev		22.9		2.38		57.0		77		
NDA N		13		13		13		13		
	Old statistics									
Median		421.0	(3)	37.50	(3)	531.0	(3)	1550	(3)	
MAD		14.0		1.00		40.0		40		
Mean		416.5		37.83		524.8		1534		
St Dev		27.1		1.51		55.5		75		
N		11		10		13		12		
Mn (mg/kg)										
SAINTE-FOY	(80)	288		17.5		41.4		42.5		Z| CB
CORBANA	(110)	277		15.8		41.3		47.0		Z|CB
HWASS02	(116)	292		21.2		46.4		49.8		
ETMKK	(166)	396	**	33.0	**	55.0		57.0		Z| CB
DOLE	(177)	318		17.1		41.7		46.0		
HILL	(180)	237	**	10.0	*	41.2		50.9		+|CB
QLDNR&M	(210)	289		16.0		41.0		44.0		Z| CB
FORTEST	(212)	371	**	17.4		48.7		50.5		+| CB
PIEST-RIPP	(256)	303		14.0		34.2		37.3		+| CB
ADE	(424)	305		23.0		32.0		36.0		
CUP Analab	(870)	382	**	23.4		51.0		44.8		Z|AAA
LSF	(895)	318		17.5		45.0		46.0		
NDA mean		298.5		17.50		43.16		46.20		
NDA st dev		23.1		3.74		6.19		5.40		
NDA N		12		12		12		12		
	Old statistics									
Median		297.3	(3)	17.43	(3)	41.55	(3)	46.00	(3)	
MAD		8.9		1.53		4.15		3.65		
Mean		298.7		18.29		43.24		45.98		
St Dev		14.8		3.16		6.52		5.83		
N		8		10		12		12		
Na (mg/kg)										
SAINTE-FOY	(80)	13.6		8.70		70.8		754		Z| CB
HWASS02	(116)	12.9		8.08		67.1		759		
HILL	(180)	10.0		6.00		59.0		649		+|CB
QLDNR&M	(210)	13.0		5.00		63.0		801		Z| CB
FORTEST	(212)	10.7		4.75		60.0		244		+| CB
ADE	(424)	17.0		8.00		54.0		478		
Median		12.95	(1)	7.000	(1)	61.50	(1)	701.6	(1)	
MAD		1.46		1.390		4.05		78.7		
N		6		6		6		6		
P (mg/kg)										
SAINTE-FOY	(80)	105.0		361		70.5		7.30		Z| CB
CORBANA	(110)	82.7		293		67.1		6.30		
HWASS02	(116)	78.4		302		52.2		5.02		
ETMKK	(166)	102.0		384		39.0		4.00		Z| CB
NDA mean		91.67		340.5		60.23		5.921		(cont.)
NDA st dev		12.15		59.5		10.96		1.831		
NDA N		14		14		14		14		

ISE 2009.1 - Mehlich-3

Sample		900		986		910		882		MIC
P (mg/kg) (cont.)										
NSSL	(167)	337.0	**	93	**	58.7		3.30		Z|E
RISWC	(174)	90.1		356		56.5		4.00		Z|E
DOLE	(177)	91.0		346		47.6		6.78		
HILL	(180)	80.9		235		74.7		11.30	**	+|CB
QLDNR&M	(210)	90.0		354		62.0		6.00		Z| CB
FORTEST	(212)	113.6		450		81.6		7.43		+| CB
ABMCE	(230)	88.0		281		56.0		12.00	**	Z| E
PIEST-RIPP	(256)	87.8		316		52.3		0.41	**	+| CB
ADE	(424)	94.0		423		62.0		7.00		
LSF	(895)	102.0		347		66.0		6.00		
NDA mean		91.67		340.5		60.23		5.921		
NDA st dev		12.15		59.5		10.96		1.831		
NDA N		14		14		14		14		
	Old statistics									
Median		90.10	(3)	347.0	(3)	60.35	(3)	6.000	(3)	
MAD		7.40		37.0		7.40		1.000		
Mean		92.73		342.1		60.45		5.739		
St Dev		10.29		58.1		11.20		1.447		
N		13		13		14		11		
Zn (mg/kg)										
SAINTE-FOY	(80)	7.16		8.06		8.50		3.80		Z| CB
CORBANA	(110)	6.82		7.75		9.37		4.03		Z|CB
HWASS02	(116)	8.00		9.22		9.54		4.14		
DOLE	(177)	6.02		6.65		6.95		3.49		
HILL	(180)	5.44		5.85		8.41		3.73		+|CB
QLDNR&M	(210)	6.76		7.48		8.92		3.35		Z| CB
FORTEST	(212)	8.86		9.75		12.47		4.74		+| CB
PIEST-RIPP	(256)	6.42		6.77		7.04		2.20		+| CB
ADE	(424)	7.20		9.80		7.10		3.00		
CUP Analab	(870)	8.77		10.01		10.14		5.79	**	Z|AAA
LSF	(895)	7.00		7.45		7.75		3.45		
NDA mean		6.968		8.023		8.438		3.666		
NDA st dev		0.904		1.619		1.493		0.565		
NDA N		11		11		11		11		
	Old statistics									
Median		7.000	(3)	7.750	(3)	8.500	(3)	3.610	(3)	
MAD		0.580		1.100		1.040		0.340		
Mean		7.131		8.072		8.744		3.593		
St Dev		1.062		1.427		1.639		0.687		
N		11		11		11		10		

ISE 2009.1 - Extraction with Ca-lactate (VDLUFA, Germany)

Sample		900	986	910	882	MIC
K (mg/kg)						
REYEPS	(213)	217	72.3	127	242	Z| CC
Median		217.0 (1)	72.30 (1)	127.0 (1)	242.0 (1)	
MAD		-	-	-	-	
N		1	1	1	1	
P (mg/kg)						
REYEPS	(213)	88.6	86.8	68.1	34.6	Z| E
Median		88.60 (1)	86.80 (1)	68.10 (1)	34.60 (1)	
MAD		-	-	-	-	
N		1	1	1	1	

ISE 2009.1 - Extraction with double lactate (VDLUFA, Germany)

Sample		900		986		910		882		MIC
K (mg/kg)										
EKOM	(35)	238		75.5		163.0		302		
ZJKRK	(50)	237		73.9		161.0		301		
LAROL	(56)	239		73.3		161.0		303		
SCHRG	(90)	248	**	68.9	**	166.0	**	315	*	-|CA
ANALGIR	(199)	235		73.0		162.0		381	**	Z| CA
ALFA	(206)	235		72.5		161.9		275	**	
WROCLAB	(263)	238		76.0		170.0	**	302		
P-2000RG	(334)	252	**	68.3	**	161.0		312	*	Z|CA
SKRA	(336)	236		73.9		161.0		301		
CHKS	(337)	240		74.7		162.0		307		
GDAGRO	(338)	243		70.8		163.0		300		
LABRES	(339)	240		74.7		162.0		303		Z|CA
GLOBI	(340)	233		73.9		160.2		286	**	
SKLODPOL	(342)	241		75.5		159.0		310		Z| CA
MALWA	(343)	240		73.0		162.0		298		Z|CA
NDA mean		238.3		74.00		161.59		303.1		
NDA st dev		3.0		1.37		1.37		5.8		
NDA N		15		15		15		15		
	Old statistics									
Median		238.0	(3)	73.90	(3)	161.90	(3)	302.0	(3)	
MAD		2.0		0.90		0.90		1.3		
Mean		238.1		73.90		161.47		302.7		
St Dev		2.8		1.42		1.10		3.5		
N		13		13		13		10		
P (mg/kg)										
EKOM	(35)	99.0		74.3	**	64.0		8.72	<	
ZJKRK	(50)	99.5		77.7		63.3		8.70	<	
LAROL	(56)	102.0	**	77.7		64.0		3.00		
SCHRG	(90)	94.2	**	71.5	**	61.0		6.50	<	-|E
ANALGIR	(199)	99.4		78.0		63.4		-		Z| E
ALFA	(206)	97.7		78.3		62.4		3.40		
WROCLAB	(263)	99.0		77.0		65.6		4.40	<	
P-2000RG	(334)	81.6	**	47.9	**	53.6	**	7.20		Z|E
OLESKA	(335)	99.4		77.0		65.2		4.69		Z| E
SKRA	(336)	100.0		78.3		62.9		4.40	<	
CHKS	(337)	98.5		77.4		63.2		9.00	<	
GDAGRO	(338)	100.0		77.8		61.0		13.00	<	
LABRES	(339)	100.0		79.3		62.8		4.36	<	Z|E
GLOBI	(340)	100.2		59.7	**	59.7	*	4.80		
SKLODPOL	(342)	109.0	**	78.0		65.9		1.32		| E
MALWA	(343)	99.0		73.7	**	62.3		4.80		Z|E
NDA mean		99.41		77.81		63.18		-		
NDA st dev		0.87		0.86		1.49		-		
NDA N		16		16		16		7		
	Old statistics									
Median		99.38	(3)	77.80	(3)	63.25	(3)	4.690	(1)	
MAD		0.50		0.40		0.80		1.290		
Mean		99.30		77.86		63.36		-		
St Dev		0.73		0.65		1.50		-		
N		12		11		14		7		

ISE 2009.1 - Water soluble 1:10 (w/v) (EN-12457-4)

Sample		900		986		910		882		MIC
Br (mg/kg)										
ARCHIMEDES	(73)	5.0	<	5.0	<	5.0	<	5.00	<	Z| JC
Median		-	(0)	-	(0)	-	(0)	-	(0)	
MAD		-		-		-		-		
N		-		-		-		-		
Cl (mg/kg)										
ARCHIMEDES	(73)	50.0	<	50.0	<	50.0	<	240		Z| JC
LABAMB	(878)	44.0		26.0		30.0		306		+| JC
Median		44.00	(1)	26.00	(1)	30.00	(1)	273.0	(1)	
MAD		-		-		-		33.0		
N		1		1		1		2		
F (mg/kg)										
AGROCH	(75)	7.98		2.56		19.1		3.71		Z|H
LABAMB	(878)	12.00		5.00		10.0		6.00		+| JC
SEELABO25	(918)	0.15		0.05	<	0.3		0.05	<	
FRESHERTEN	(920)	7.70		2.10		17.5		2.40		+| H
Median		7.840	(1)	2.560	(1)	13.75	(1)	3.710	(1)	
MAD		2.150		0.460		4.57		1.310		
N		4		3		4		3		
N - NO3 (as N) (mg/kg)										
LAF	(37)	319		14.0		14.0		18.0		Z|E
LABAMB	(878)	13		18.0		17.0		22.0		+| JC
Median		166.0	(1)	16.00	(1)	15.50	(1)	20.00	(1)	
MAD		153.0		2.00		1.50		2.00		
N		2		2		2		2		

ISE 2009.1 - Extraction with 0.01M CaCl2 - 0.005M DTPA 1:10 (w/v)

Sample		900	986	910	882	MIC
Cu (mg/kg)						
974BRET	(99)	1.57	1.45	11.70	3.84	+|AAA
AGROADGAZA	(971)	3.02	0.92	6.24	1.62	Z|AAA
EALG	(981)	2.81	0.77	6.85	1.92	+|E
LDAR02	(984)	0.80	3.10	7.25	1.70	Z| AA
Median		2.190 (1)	1.185 (1)	7.050 (1)	1.810 (1)	
MAD		0.725	0.339	0.505	0.150	
N		4	4	4	4	
Fe (mg/kg)						
974BRET	(99)	52.5	76.2	578	721	+|AAA
AGROADGAZA	(971)	58.2	110.0	226	281	Z|AAA
EALG	(981)	24.0	35.0	240	306	+|E
LDAR02	(984)	39.0	23.7	223	253	Z| AA
Median		45.73 (1)	55.60 (1)	233.0 (1)	293.6 (1)	
MAD		9.63	26.25	8.5	26.6	
N		4	4	4	4	
Mn (mg/kg)						
974BRET	(99)	58.6	11.9	56.0	58.7	+|AAA
AGROADGAZA	(971)	101.2	49.5	34.6	34.2	Z|AAA
EALG	(981)	29.1	8.3	36.6	35.0	+|E
LDAR02	(984)	9.9	23.4	38.3	34.8	Z| AA
Median		43.85 (1)	17.65 (1)	37.45 (1)	34.88 (1)	
MAD		24.38	7.55	1.85	0.40	
N		4	4	4	4	
Zn (mg/kg)						
974BRET	(99)	3.71	5.55	10.70	4.89	+|AAC
AGROADGAZA	(971)	2.50	4.42	5.60	2.82	Z|AAA
EALG	(981)	2.05	3.79	5.89	2.65	+|E
LDAR02	(984)	4.35	2.40	72.00	2.65	Z| AA
Median		3.105 (1)	4.105 (1)	8.295 (1)	2.735 (1)	
MAD		0.830	0.880	2.550	0.085	
N		4	4	4	4	

ISE 2009.1 - Extraction with 1M KCl 1:10 (w/v)

Sample		900	986	910	882	MIC
N - NH4 (as N) (mg/kg)						
DATE	(89)	17.3	11.4	16.7	43.3	Z| Z
Median		17.32 (1)	11.42 (1)	16.74 (1)	43.34 (1)	
MAD		-	-	-	-	
N		1	1	1	1	
N - NO3 (as N) (mg/kg)						
DATE	(89)	37.2	27.1	30.1	25.3	Z| Z
PIEST-RIPP	(256)	13.7	18.2	20.0	19.6	P| Z
Median		25.45 (1)	22.65 (1)	25.05 (1)	22.43 (1)	
MAD		11.75	4.45	5.05	2.83	
N		2	2	2	2	

ISE 2009.1 - Phosphorus and related analysis

Sample		900		986		910		882		MIC
Al - Ox (mg/kg)										
OOSTERBEEK	(4)	1070		1771		1950		1870		Z| CB
WAGENINGEN	(14)	1020		1794		1900		1770		Z| CB
Median		1040	(1)	1782.5	(1)	1923	(1)	1821	(1)	
MAD		25		11.5		24		49		
N		2		2		2		2		
Fe - Ox (mg/kg)										
OOSTERBEEK	(4)	2390		480.7		15580		9480		Z| CB
WAGENINGEN	(14)	2160		477.0		15200		9120		Z| CB
Median		2272	(1)	478.85	(1)	15389	(1)	9300	(1)	
MAD		115		1.85		191		176		
N		2		2		2		2		
P - Ox (mg/kg)										
OOSTERBEEK	(4)	608		480		845		107		Z| CB
WAGENINGEN	(14)	570		459		833		94		Z| CB
Median		589.1	(1)	469.7	(1)	839.2	(1)	100.1	(1)	
MAD		19.1		10.7		6.2		6.5		
N		2		2		2		2		
P - AL (as P) (mg/kg)										
OOSTERBEEK	(4)	152		184		90.1		13.62	<	Z| E
WAGENINGEN	(14)	136		181		86.0		1.00		| E
ALNN	(185)	146		282		126.0		19.50		
AGROLAB	(977)	138		145		88.8		5.03		|E
Median		141.9	(1)	182.4	(1)	89.46	(1)	5.030	(1)	
MAD		5.0		19.3		2.06		4.030		
N		4		4		4		3		
P - Bray (as P) (mg/kg)										
FELDA	(13)	64.3		327		47.6		2.92		Z|E
UAK MARDI	(120)	56.9		273		38.1		1.60		Z|E
ELAEIS.S	(130)	128.0	**	-		54.0		8.82	**	
NSSL	(167)	77.8	*	354		31.4		2.30		+|Z
FORTEST	(212)	64.7		344		42.7		2.30		+| E
KLAL	(233)	50.6		291		27.9		4.10		Z|E
LUNUWILA	(270)	49.4		317		39.0		2.56		
IGEOLUNAM	(273)	40.1		282		23.2		39.75	**	Z| E
SPAL	(282)	48.6		441	*	24.8		2.59		Z|E
DAR	(296)	232.2	**	650	**	443.7	**	24.21	**	Z|E
SMBPLNUS	(315)	165.2	**	355		38.8		5.43		Z|E
SMART	(326)	48.2		66	**	26.3		0.85		
IRRI	(843)	126.0	**	301		25.0		5.90	*	+| E
SPASL	(855)	3.5	**	31	**	386.9	**	62.39	**	Z| CB
RF-R&D	(905)	51.2		293		31.4		1.62		+| E
MCA	(970)	6.6	*	12	**	7.2		0.40		
AZBY	(976)	52.3		310		20.6		1.60		+| E
LS-MRC	(978)	25.0	*	106	**	12.6		4.09		Z|E
NDA mean		50.93		315.5		30.52		2.559		
NDA st dev		18.21		56.8		11.90		1.899		
NDA N		18		17		18		18		
	Old statistics									
Median		50.90	(3)	309.9	(3)	29.65	(3)	2.300	(3)	
MAD		2.52		18.5		8.75		0.700		
Mean		52.63		313.3		30.66		2.489		
St Dev		7.53		28.5		12.37		1.399		
N		10		11		16		13		

ISE 2009.1 - Phosphorus and related analysis

Sample		900		986		910		882		MIC
P - Olsen (as P) (mg/kg)										
LAF	(37)	54.0	**	113		57.0		5.30		Z|E
BELFAST	(39)	33.3		118		50.2		5.60		Z| E
LAS	(42)	39.7		119		51.0		4.97		+| E
974BRET	(99)	39.4		130		57.5		5.07		+| E
XGCALAFIGA	(135)	36.0		117		50.0		4.00		Z| E
NSSL	(167)	34.3		140		44.7		4.90		
PLATINA222	(172)	48.0		94		72.0		9.00	*	+| E
HILL	(180)	34.9		103		62.2		6.59		+|E
CSS	(186)	32.0		70		56.5		6.64		Z|E
MARELI	(204)	45.8		168		60.2		10.20	**	Z| E
GSISMA	(214)	38.3		101		64.0		8.82	*	+| E
AECSAGRICS	(248)	37.1		115		53.6		3.47		E|Z
AGROLAB-SL	(264)	40.9		133		63.6		9.06	*	Z|E
IGEOLUNAM	(273)	39.2		118		58.0		7.90		Z| E
SPAL	(282)	9.7	**	51		21.9	**	4.45		Z|O
Momotombo	(297)	36.0		105		65.0		4.30		Z| E
ERSAFVGSCA	(307)	42.1		150		72.4		5.60		Z|E
ADE	(424)	35.0		105		26.0	**	5.00		| Z
IRRI	(843)	38.0		77		23.0	**	4.30		+| E
CUP Analab	(870)	43.4		154		63.3		7.46		X| E
ARA SUE	(872)	33.0		123		49.0		-		Z| E
GUA SUE	(873)	41.3		165		61.7		5.39		Z|E
BAR SUE	(874)	44.4		160		73.3		7.24		+|E
LABAMB	(878)	59.0	**	145		85.0	**	45.00	**	+| E
LSF	(895)	42.0		95		19.5	**	2.00		
AGROADGAZA	(971)	36.2		139		38.4		3.92		
SAC-CAL	(973)	29.7		155		42.2		6.20		+| E
AZBY	(976)	39.8		157		59.9		5.20		+| E
EALG	(981)	31.6		74		47.4		5.11		+|E
NDA mean		38.05		122.6		57.24		5.460		
NDA st dev		5.35		31.9		10.74		1.712		
NDA N		29		29		29		28		
	Old statistics									
Median		38.15	(3)	118.3	(3)	57.75	(3)	5.110	(3)	
MAD		3.20		21.5		6.50		0.810		
Mean		38.13		120.4		57.21		5.244		
St Dev		4.60		30.5		9.34		1.358		
N		26		29		24		23		
P - w (as P) (mg/l soil)										
OOSTERBEEK	(4)	19.0		12.3		15.4		1.8	<	Z| E
WAGENINGEN	(14)	32.0		20.0		26.0		-		| E
ALNN	(185)	10.6		8.7		10.1		10.8		
Median		19.02	(1)	12.27	(1)	15.40	(1)	10.80	(1)	
MAD		8.42		3.54		5.30		-		
N		3		3		3		1		

ISE 2009.1 - Extraction with 1M HCl (Polish standard)

Sample		900		986		910		882		MIC
B (mg/kg)										
EKOM	(35)	3.03		0.650		2.70		2.00		
LAROL	(56)	3.38		0.600		3.16		2.50		
SCHRG	(90)	2.08		0.500	<	1.90		1.06		
ANALGIR	(199)	2.74		0.520		2.20		1.51		Z
WROCLAB	(263)	2.82		0.660		3.11		2.18		
GLOBI	(340)	2.80		0.700		2.76		1.22		
OSCHR-OL	(341)	3.20		0.600		3.00		-		
SKLODPOL	(342)	2.67		0.430		2.60		1.81		
MALWA	(343)	3.22		0.580		3.12		2.45		FB|Z
NDA mean		2.948		0.6085		2.802		1.863		
NDA st dev		0.316		0.0797		0.489		0.660		
NDA N		9		8		9		8		
	Old statistics									
Median		2.820	(3)	0.6000	(3)	2.760	(3)	1.905	(3)	
MAD		0.210		0.0550		0.350		0.470		
Mean		2.882		0.5925		2.728		1.841		
St Dev		0.388		0.0856		0.439		0.541		
N		9		8		9		8		
Cu (mg/kg)										
EKOM	(35)	11.7		5.00		18.5		4.40		
ZJKRK	(50)	11.0		5.20		17.9		4.40		
LAROL	(56)	11.2		5.10		18.4		4.50		
SCHRG	(90)	11.6		5.30		18.2		4.50		
ANALGIR	(199)	11.2		5.40		18.5		4.70		AAA
ALFA	(206)	9.6	**	4.60		15.7	**	3.92	**	
WROCLAB	(263)	11.6		4.90		18.2		4.50		
P-2000RG	(334)	11.1		5.21		19.9	**	4.53		
OLESKA	(335)	10.9		4.70		18.4		4.30		
SKRA	(336)	11.5		5.01		18.4		4.60		
LABRES	(339)	11.4		4.90		17.6	**	4.20		
GLOBI	(340)	11.5		5.00		18.2		4.50		
OSCHR-OL	(341)	11.5		5.20		18.0		4.50		
SKLODPOL	(342)	11.2		5.05		19.0		4.40		
MALWA	(343)	11.1		5.10		18.4		4.30		Z|AAA
NDA mean		11.32		5.068		18.30		4.457		
NDA st dev		0.39		0.215		0.29		0.142		
NDA N		15		15		15		15		
	Old statistics									
Median		11.30	(3)	5.050	(3)	18.40	(3)	4.500	(3)	
MAD		0.20		0.150		0.15		0.100		
Mean		11.32		5.045		18.34		4.452		
St Dev		0.25		0.213		0.27		0.130		
N		14		15		12		14		
Fe (mg/kg)										
EKOM	(35)	1540		406		9530		6450		
ZJKRK	(50)	1580		410		4000	<	4000	<	
LAROL	(56)	1570		390		9430		6770		
SCHRG	(90)	1600		449	**	8980	*	6390		
ANALGIR	(199)	1500		420		9180		6160		AAA
ALFA	(206)	0	**	0	**	10	**	10	**	
WROCLAB	(263)	1530		416		9610		6210		
P-2000RG	(334)	1640		398		11320	**	7170	*	
OLESKA	(335)	1550		-		9750		-		
SKRA	(336)	1540		397		9690		6670		
LABRES	(339)	1480		410		9700		6600		
GLOBI	(340)	1500		358	**	9440		6490		
OSCHR-OL	(341)	1600		410		9800		7000		
SKLODPOL	(342)	1520		378	*	10080		6700		
NDA mean		1547		406.7		9625		6554		(cont.)
NDA st dev		54		15.2		267		304		
NDA N		15		14		14		13		

ISE 2009.1 - Extraction with 1M HCl (Polish standard)

Sample		900		986		910		882		MIC
Fe (mg/kg)	(cont.)									
MALWA	(343)	1550		416		9800		6450		Z|AAA
NDA mean		1547		406.7		9625		6554		
NDA st dev		54		15.2		267		304		
NDA N		15		14		14		13		
	Old statistics									
Median		1543	(3)	410.0	(3)	9687	(3)	6485	(3)	
MAD		32		6.0		113		182		
Mean		1550		407.3		9636		6535		
St Dev		45		9.6		241		246		
N		14		10		11		11		
Mn (mg/kg)										
EKOM	(35)	642		36.9		169		76.7		
ZJKRK	(50)	630		40.0	**	175		78.0		
LAROL	(56)	637		37.2		166		76.7		
SCHRG	(90)	590		44.1	**	180		88.9	**	
ANALGIR	(199)	616		34.1	*	159		79.2		AAA
ALFA	(206)	593		37.1		139		73.4		
WROCLAB	(263)	665		36.7		174		71.8		
P-2000RG	(334)	708	**	36.6		181		80.7		
OLESKA	(335)	641		37.5		179		73.3		
SKRA	(336)	637		36.6		166		76.2		
LABRES	(339)	630		34.8		170		75.5		
GLOBI	(340)	650		36.0		161		74.0		
OSCHR-OL	(341)	610		40.0	**	180		80.0		
SKLODPOL	(342)	620		36.1		158		75.5		
MALWA	(343)	625		38.1		153		76.2		Z|AAA
NDA mean		630.0		36.77		168.9		76.17		
NDA st dev		18.3		1.18		13.4		3.11		
NDA N		15		15		15		15		
	Old statistics									
Median		630.0	(3)	36.70	(3)	169.0	(3)	76.21	(3)	
MAD		11.4		0.50		9.7		2.00		
Mean		627.6		36.69		167.2		76.23		
St Dev		20.8		0.87		11.9		2.61		
N		14		11		15		14		
Zn (mg/kg)										
EKOM	(35)	14.6		10.00		32.0		10.3		
ZJKRK	(50)	14.9		11.00		31.6		11.1		
LAROL	(56)	14.1		9.90		30.4		10.0		
SCHRG	(90)	15.7	**	10.90		30.9		11.4	**	
ANALGIR	(199)	14.0		9.90		27.8	**	9.0	**	AAA
ALFA	(206)	13.2	**	9.90		26.1	**	7.8	**	
WROCLAB	(263)	14.5		10.50		31.3		10.1		
P-2000RG	(334)	14.7		10.50		36.0	**	10.5		
OLESKA	(335)	14.3		9.47		33.6	*	10.3		
SKRA	(336)	14.0		9.97		32.5		10.3		
LABRES	(339)	14.2		9.80		32.6		10.2		
GLOBI	(340)	14.3		10.50		31.5		10.6		
OSCHR-OL	(341)	14.5		9.60		31.5		10.5		
SKLODPOL	(342)	13.5	*	9.69		31.9		9.6		
MALWA	(343)	14.2		10.00		31.7		9.8		Z|AAA
NDA mean		14.30		9.996		31.72		10.25		(cont.)
NDA st dev		0.43		0.424		0.96		0.38		
NDA N		15		15		15		15		

ISE 2009.1 - Extraction with 1M HCl (Polish standard)

Sample		900		986		910		882		MIC
Zn (mg/kg)	(cont.)									
NDA mean		14.30		9.996		31.72		10.25		
NDA st dev		0.43		0.424		0.96		0.38		
NDA N		15		15		15		15		
	Old statistics									
Median		14.30	(3)	9.970	(3)	31.60	(3)	10.26	(3)	
MAD		0.20		0.280		0.30		0.24		
Mean		14.36		10.109		31.63		10.27		
St Dev		0.29		0.462		0.64		0.39		
N		12		15		11		12		

ISE 2009.1 - Water soluble 1:10 (w/v) (Neth standard VPR C85-06)

Sample		900		986		910		882		MIC
Br (mg/kg)										
ALCONTROL	(1)	15.0	<	15.00	<	15.0	<	15.00	<	Z| JC
CISCA	(112)	-		-		1.0	<	1.09		Z| JC
EXACT	(190)	5.0	<	5.00	<	5.0	<	5.00	<	
Median		-	(0)	-	(0)	-	(0)	1.090	(1)	
MAD		-		-		-		-		
N		-		-		-		1		
Cl (mg/kg)										
ALCONTROL	(1)	21.0		47.0		36.0		280		Z| JC
CISCA	(112)	50.0	<	50.0	<	7.1		260		Z| JC
EXACT	(190)	31.0		10.0	<	10.0	<	280		
Median		26.00	(1)	47.00	(1)	21.54	(1)	280.0	(1)	
MAD		5.00		-		14.47		-		
N		2		1		2		3		
SO4 (mg/kg)										
ALCONTROL	(1)	21.0		20.0	<	20.0	<	390		Z| JC
CISCA	(112)	-		-		45.2		344		Z| JC
EXACT	(190)	25.0		20.0	<	44.0		350		
Median		23.00	(1)	-	(0)	44.60	(1)	350.0	(1)	
MAD		2.00		-		0.60		6.0		
N		2		-		2		3		

ISE 2009.1
Z - Scores

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
ALCONTROL (1)					
Al (AE)	2.48	-0.44	1.77	3.25	
As (AE)	-3.36	<	-1.84	-2.33	
Ba (AE)	3.72	<	0.96	2.78	
Be (AE)	#	<	1.71	1.82	
Ca (AE)	-2.38	-3.77	-3.60	-5.28	
Cd (AE)	<	<	0.45	<	
Co (AE)	0.15	<	-0.17	1.64	
Cr (AE)	1.82	<	2.79	2.13	
Cu (AE)	-1.46	-1.88	-0.53	-0.08	
Fe (AE)	0.64	0.20	-1.01	0.08	
Hg (AE)	<	<	-1.05	-0.47	
K (AE)	2.20	0.83	3.05	5.01	
Mg (AE)	-0.51	2.86	-0.36	-0.32	
Mn (AE)	-2.81	<	0.85	2.61	
Na (AE)	<	<	-2.71	-2.71	
Ni (AE)	-1.40	<	-0.05	1.64	
P (AE)	-0.21	-0.24	0.72	62.57	
Pb (AE)	0.16	<	-1.22	0.39	
S (AE)	-5.50	-0.99	-0.86	-0.75	
Sr (AE)	#	<	#	#	
V (AE)	1.39	-0.96	1.41	2.05	
Zn (AE)	-0.22	<	-0.61	0.80	
EC-SC (ISO 11265) (SC)	3.47	-0.74	0.99	0.63	
Fraction < 16 µm (SC)	-0.03	0.01	0.45	0.40	
Fraction < 2 µm (SC)	-0.15	-0.41	-1.48	-1.77	
Fraction < 63 µm (SC)	-2.10	-0.68	-1.74	-1.01	
Org.matter (L.O.I.) (SC)	0.29	-5.52	1.66	3.99	
pH - H2O (SC)	1.73	2.08	1.91	1.66	
TIC=Tot.Inorg C(CaCO3) (SC)	-0.93	<	<	-0.18	
TOC=Total Org. C (SC)	2.16	0.20	-0.99	-0.83	
CN - Total (OD)	#	#	#	#	
Br (WSVPR)	<	<	<	<	
Cl (WSVPR)	#	#	#	#	
SO4 (WSVPR)	#	<	<	#	
LQA-ATP (2)					
C - org others (W&B a.o.) (SC)	-1.23	-1.53	-1.57	-0.34	
EC-SC (ISO 11265) (SC)	0.32	0.08	0.12	-0.29	
Fraction < 2 µm (SC)	0.45	-0.40	0.85	0.85	
pH - H2O (SC)	-2.52	-2.75	-1.21	-1.30	
pH - KCl (SC)	-1.73	-0.25	-0.35	-0.43	
Ca (AA)	-0.44	1.21	-0.17	0.07	
CEC (AA)	3.18	0.18	0.72	2.00	
K (AA)	-0.32	0.56	0.29	0.93	
Mg (AA)	0.51	0.11	-0.32	-0.26	
Na (AA)	-0.92	-0.17	-1.27	1.84	
OOSTERBEEK (4)					
N - elementary (RT)	-1.11	0.06	-0.42	-1.21	
S (RT)	-1.24	-0.29	-1.28	-1.91	
P (AE)	0.95	-1.35	1.81	-5.05	
As (AR)	0.15	-0.02	0.71	0.68	
Cd (AR)	-0.22	<	0.47	<	
Cr (AR)	-0.68	-0.19	-0.09	0.45	
Cu (AR)	0.74	-0.33	1.29	0.60	
Hg (AR)	0.20	2.20	-0.92	-0.05	
Ni (AR)	-0.81	<	-0.46	0.43	
Pb (AR)	-0.87	<	-0.75	0.51	
Zn (AR)	-0.51	-0.54	-0.13	0.13	
B (CC)	#	<	#	#	
Co (CC)	<	#	#	#	
Cu (CC)	#	#	#	#	
K (CC)	0.02	-0.08	-0.04	-7.14	
Mg (CC)	-0.16	-1.35	1.26	0.95	
Mn (CC)	#	#	#	#	
N - NH4 (as N) (CC)	0.48	4.98	-1.07	-0.58	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
OOSTERBEEK (4) (cont.)					
N - NO3 (as N) (CC)	0.47	0.86	1.72	0.53	
N total soluble (CC)	#	#	#	#	
Na (CC)	#	<	#	#	
P (CC)	#	#	#	<	
Zn (CC)	<	#	#	#	
EC-SC (ISO 11265) (SC)	-0.15	-0.59	-0.27	0.30	
Fraction < 2 µm (SC)	-0.78	-0.11	0.61	0.71	
Org.matter (L.O.I.) (SC)	0.02	-0.24	-0.16	-0.17	
pH - CaCl2 (SC)	0.35	0.33	0.29	-0.04	
pH - KCl (SC)	0.68	-0.14	0.17	0.24	
TC=Total C (org.+inorg.) (SC)	0.45	0.11	0.46	0.56	
TIC=Tot.Inorg C(CaCO3) (SC)	-0.52	<	-0.50	<	
TOC=Total Org. C (SC)	-0.31	0.40	0.23	-0.09	
Ca (CH)	#	#	#	#	
CEC (CH)	#	#	#	#	
K (CH)	#	#	#	#	
Mg (CH)	#	#	#	#	
Na (CH)	#	<	#	#	
Al - Ox (PHOS)	#	#	#	#	
Fe - Ox (PHOS)	#	#	#	#	
P - Ox (PHOS)	#	#	#	#	
P - AL (as P) (PHOS)	#	#	#	<	
P - w (as P) (PHOS)	#	#	#	<	
PESEUX (5)					
Cd (NA)	-3.84	-1.21	0.84	0.81	
Co (NA)	0.03	0.78	0.03	-0.22	
Cr (NA)	2.84	4.56	-0.63	0.13	
Cu (NA)	-1.82	1.45	0.13	-2.28	
Hg (NA)	0.50	1.03	0.65	1.60	
Mo (NA)	-1.57	0.58	-1.25	<	
Ni (NA)	3.29	0.67	0.06	-0.19	
Pb (NA)	0.51	-0.46	1.21	2.31	
Zn (NA)	2.94	0.73	0.33	-0.03	
ATVC (7)					
N - elementary (RT)	7.20	0.06	0.51	0.26	
Cd (AE)	<	<	0.60	<	
Co (AE)	0.58	<	0.54	1.24	
Cr (AE)	1.99	0.06	3.86	2.66	
Cu (AE)	-0.63	0.42	-0.01	0.46	
Ni (AE)	0.01	<	1.17	1.97	
Pb (AE)	-1.20	0.57	-0.71	-1.39	
Zn (AE)	-1.19	<	-0.69	0.54	
C - org others (W&B a.o.) (SC)	-0.22	0.78	-0.62	-0.30	
Fraction < 16 µm (SC)	0.79	-0.45	0.42	0.40	
Fraction < 2 µm (SC)	-1.66	-0.69	-0.73	-0.53	
Fraction < 63 µm (SC)	-1.79	-1.31	-3.31	-1.83	
pH - H2O (SC)	0.46	0.27	0.35	-0.31	
TC=Total C (org.+inorg.) (SC)	0.38	0.96	0.53	0.28	
TIC=Tot.Inorg C(CaCO3) (SC)	-0.53	<	<	<	
FELDA (13)					
N (AE)	-2.70	-2.02	-5.28	-3.58	
pH - H2O (SC)	-1.29	-1.61	-4.86	-1.05	
Ca (AA)	-0.63	1.66	-0.84	-2.08	
CEC (AA)	6.66	5.18	-1.52	-0.39	
K (AA)	0.57	2.05	-1.88	-1.25	
Mg (AA)	0.04	0.51	-0.34	-0.28	
P - Bray (as P) (PHOS)	0.74	0.20	1.43	0.19	
WAGENINGEN (14)					
Co (RT)	-1.22	-0.36	-0.78	-0.81	
Sn (RT)	-4.59	#	-3.74	-13.56	
N (AE)	1.00	-0.20	1.64	0.89	
Al (AR)	0.85	2.18	1.74	1.31	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
WAGENINGEN (14) (cont.)					
As (AR)	1.27	4.25	1.77	0.96	
Ca (AR)	2.38	2.20	2.27	1.76	
Cd (AR)	3.17	1.99	2.69	4.60	
Cr (AR)	1.81	2.37	1.94	1.73	
Cu (AR)	1.15	1.07	1.03	-0.25	
Fe (AR)	2.08	5.43	2.13	2.20	
K (AR)	1.39	1.81	1.83	1.39	
Mg (AR)	1.21	0.50	1.70	1.27	
Mn (AR)	0.60	1.64	0.54	0.34	
Na (AR)	0.40	0.74	1.94	1.48	
Ni (AR)	2.16	0.80	4.54	1.39	
P (AR)	0.59	1.54	0.27	-0.64	
Pb (AR)	-0.28	0.08	-0.07	-1.95	
S (AR)	2.85	0.53	1.88	1.45	
Zn (AR)	0.82	1.08	1.18	0.75	
K (CC)	0.56	-0.18	0.57	-0.48	
N - NH4 (as N) (CC)	-0.60	-0.58	0.86	-0.09	
N - NO3 (as N) (CC)	-0.11	0.00	0.66	0.29	
N total soluble (CC)	#	#	#	#	
Na (CC)	#	#	#	#	
P (CC)	#	#	#	-	
EC-SC (ISO 11265) (SC)	-1.16	-0.15	-0.42	-0.26	
Org.matter (L.O.I.) (SC)	0.15	-0.88	0.47	0.28	
pH - CaCl2 (SC)	2.45	0.75	0.94	0.73	
pH - H2O (SC)	1.77	0.57	1.44	1.31	
pH - KCl (SC)	1.66	-0.03	0.69	0.35	
Moisture-content (OD)	0.86	0.04	1.12	1.11	
Ca (BA)	#	#	#	#	
CEC (BA)	#	#	#	#	
K (BA)	#	#	#	#	
Mg (BA)	#	#	#	#	
Na (BA)	#	-	#	#	
Al - Ox (PHOS)	#	#	#	#	
Fe - Ox (PHOS)	#	#	#	#	
P - Ox (PHOS)	#	#	#	#	
P - AL (as P) (PHOS)	#	#	#	#	
P - w (as P) (PHOS)	#	#	#	-	
REDUIT (15)					
Ca (AE)	-2.47	1.80	1.63	-1.24	
Cu (AE)	-1.92	-0.64	-1.38	-0.97	
K (AE)	1.09	2.10	-1.51	0.65	
Mg (AE)	-2.54	140.13	0.55	0.11	
Mn (AE)	-10.93	-4.41	-10.02	-3.78	
N (AE)	-14.58	-11.21	-18.58	-20.62	
P (AE)	-1.60	-0.86	-0.61	-0.34	
Zn (AE)	-1.02	2.20	0.58	0.47	
C - org others (W&B a.o.) (SC)	0.96	0.91	0.94	1.21	
pH - H2O (SC)	-2.94	-1.73	-3.82	-1.25	
Ca (AA)	-1.52	-2.32	-3.57	-2.31	
K (AA)	-3.48	-8.70	-4.08	-3.82	
Mg (AA)	-1.22	-2.26	-1.86	-1.50	
LABTIUM (16)					
Al (RT)	1.13	1.31	0.96	0.91	
As (RT)	<	<	<	<	
Ba (RT)	-0.93	0.36	-0.92	-0.43	
Bi (RT)	#	#	#	#	
Ca (RT)	-0.53	0.49	-0.17	-0.24	
Ce (RT)	0.65	<	0.67	0.14	
Cr (RT)	2.54	<	1.41	1.63	
Cu (RT)	4.87	13.98	5.62	2.45	
Fe (RT)	-0.06	1.68	1.27	0.94	
Ga (RT)	16.06	<	5.06	4.47	
K (RT)	-0.38	0.01	-0.04	-0.38	
La (RT)	<	<	-1.19	-1.37	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
LABTIUM (16) (cont.)					
Mg (RT)	0.74	-0.97	0.56	0.41	
Mn (RT)	-0.72	0.77	-0.15	0.33	
Mo (RT)	<	<	<	<	
N - elementary (RT)	1.93	8.49	1.52	2.23	
Na (RT)	0.87	1.37	0.31	0.36	
Nb (RT)	13.64	7.52	28.67	6.59	
Ni (RT)	2.28	<	1.62	<	
P (RT)	3.62	1.44	2.70	0.50	
Pb (RT)	8.86	<	10.29	13.86	
Rb (RT)	-2.60	0.12	-0.33	-1.13	
S (RT)	-1.08	-1.48	0.43	0.02	
Sb (RT)	<	<	<	<	
Sc (RT)	<	<	<	<	
Si (RT)	0.68	-0.20	0.18	0.13	
Sn (RT)	<	<	<	<	
Sr (RT)	0.52	-0.36	0.76	0.00	
Th (RT)	<	<	1.26	-0.96	
Ti (RT)	1.25	1.27	1.09	1.01	
U (RT)	<	<	<	<	
V (RT)	2.49	<	2.65	3.50	
Y (RT)	9.86	<	11.13	4.12	
Zn (RT)	-0.13	<	0.99	1.29	
Zr (RT)	-0.26	3.08	0.24	0.36	
Ag (AE)	#	<	#	#	
Al (AE)	-2.22	-0.81	-1.78	-2.48	
As (AE)	-0.91	-0.69	-0.49	-1.26	
B (AE)	#	<	#	<	
Ba (AE)	-0.56	-0.80	-0.49	-0.64	
Be (AE)	#	<	-0.19	-0.75	
Bi (AE)	#	#	#	#	
Ca (AE)	-0.73	-0.75	-0.02	-0.68	
Cd (AE)	0.05	-0.59	0.45	-0.47	
Co (AE)	0.32	2.40	-0.09	-0.62	
Cr (AE)	-1.15	-1.25	-1.47	-0.70	
Cu (AE)	0.39	0.58	1.13	-0.26	
Fe (AE)	-0.54	-0.73	-0.04	-1.19	
Hg (AE)	1.64	-0.06	-0.16	-0.47	
K (AE)	-2.09	-1.35	-1.50	-2.47	
La (AE)	#	#	#	#	
Li (AE)	#	#	#	#	
Mg (AE)	-0.66	-2.78	-1.08	-4.25	
Mn (AE)	-0.84	-0.03	0.29	-0.42	
Mo (AE)	0.33	#	#	#	
Na (AE)	-2.14	<	-2.11	-0.94	
Ni (AE)	0.68	-2.60	-0.09	-0.71	
P (AE)	-0.14	0.60	-0.40	-0.91	
Pb (AE)	0.56	2.29	0.73	1.27	
Rb (AE)	#	#	#	#	
S (AE)	-0.70	-0.28	-0.64	-1.32	
Sb (AE)	#	#	-	#	
Sc (AE)	#	#	#	#	
Se (AE)	#	<	#	#	
Sr (AE)	#	#	#	#	
Th (AE)	#	#	#	#	
Ti (AE)	#	#	#	#	
U (AE)	#	#	#	#	
V (AE)	-0.68	-0.30	-0.84	-0.69	
Y (AE)	#	#	#	#	
Zn (AE)	-0.58	0.19	-0.77	-1.61	
FERGUSONIT (21)					
As (RT)	0.52	0.92	0.35	0.01	
Ba (RT)	0.59	0.60	0.06	0.20	
Ca (RT)	1.00	0.67	-0.91	-1.08	
Cr (RT)	0.47	0.79	-0.52	0.08	
Cu (RT)	0.53	1.07	0.60	0.17	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
FERGUSONIT (21) (cont.)					
F (RT)	#	<	#	#	
Fe (RT)	0.55	0.40	-0.31	-0.47	
Ga (RT)	-0.54	0.23	-0.55	-0.83	
K (RT)	1.22	1.60	-0.52	-0.41	
Mn (RT)	-0.16	-0.40	-0.07	0.25	
N - elementary (RT)	-0.18	0.45	0.02	-0.30	
Nb (RT)	0.77	-0.82	-0.61	-0.72	
Ni (RT)	-0.61	0.32	0.04	0.39	
P (RT)	2.70	1.85	-1.00	-3.52	
Pb (RT)	-1.17	-0.87	-0.98	-1.53	
Rb (RT)	-0.71	0.81	-0.33	-0.52	
S (RT)	0.41	<	0.46	-0.93	
Sn (RT)	0.93	<	-0.09	0.74	
Sr (RT)	-0.59	0.12	-0.86	-0.80	
Th (RT)	0.76	1.03	0.29	-0.46	
Ti (RT)	-0.58	0.39	-0.07	-0.10	
V (RT)	-0.99	<	0.01	-0.12	
Y (RT)	-1.22	-0.76	-0.71	-0.63	
Zn (RT)	-0.28	-0.14	-0.22	-0.56	
Zr (RT)	-1.09	0.89	-0.45	-0.53	
As (AE)	-0.22	0.58	-0.30	0.35	
Ca (AE)	-0.96	3.34	-0.92	0.64	
Cd (AE)	0.05	<	0.59	<	
Cr (AE)	0.89	-2.48	2.15	1.58	
Cu (AE)	0.21	1.01	0.10	1.36	
Fe (AE)	-0.84	1.77	-0.64	0.64	
Hg (AE)	6.03	<	0.72	3.90	
Mn (AE)	-2.13	4.71	-1.36	1.03	
Ni (AE)	-0.60	2.20	1.04	1.83	
Pb (AE)	-0.81	-2.53	-0.44	0.05	
Tl (AE)	#	<	#	#	
U (AE)	#	<	#	#	
Zn (AE)	2.19	0.81	-0.13	0.48	
EC-SC (ISO 11265) (SC)	0.76	0.23	0.56	0.22	
pH - CaCl2 (SC)	0.09	0.33	0.04	0.73	
pH - H2O (SC)	0.16	-0.04	0.09	0.42	
TC=Total C (org.+inorg.) (SC)	-0.28	0.41	-0.25	-0.66	
TIC=Tot.Inorg C(CaCO3) (SC)	-0.56	<	<	<	
TOC=Total Org. C (SC)	0.63	0.80	0.10	-0.13	
LABOR M (22)					
Cd (NA)	<	<	3.30	<	
Co (NA)	-4.22	<	0.74	-0.51	
Cr (NA)	-2.21	-1.37	-1.55	-1.35	
Cu (NA)	1.85	4.38	14.68	15.15	
Ni (NA)	-1.82	-7.36	-0.27	-1.22	
Pb (NA)	-1.36	-1.66	2.23	0.31	
Zn (NA)	-2.70	-2.12	-0.57	-0.93	
HAMELN (25)					
Al (AR)	0.04	0.47	0.59	0.50	
As (AR)	0.84	0.85	0.43	0.67	
Ba (AR)	0.03	#	-0.12	0.08	
Be (AR)	-0.39	#	-0.55	0.10	
Bi (AR)	#	#	#	#	
Ca (AR)	0.03	0.41	0.14	0.24	
Cd (AR)	-0.50	0.39	-0.39	<	
Co (AR)	0.04	-0.41	0.59	0.96	
Cr (AR)	0.12	0.39	0.22	0.47	
Cu (AR)	-0.14	-0.44	0.07	-0.08	
Fe (AR)	0.80	1.54	0.72	0.46	
Hg (AR)	-0.40	-0.70	-0.44	-0.66	
K (AR)	-0.40	0.19	0.46	0.11	
Li (AR)	#	#	#	#	
Mg (AR)	0.45	0.36	0.28	0.13	
Mn (AR)	0.97	1.12	0.82	0.34	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
HAMELN (25) (cont.)					
Mo (AR)	1.31	0.60	0.71	0.69	
Na (AR)	0.22	0.45	0.64	0.20	
Ni (AR)	0.40	0.80	1.10	0.65	
P (AR)	-0.40	-0.24	-0.43	0.02	
Pb (AR)	0.54	0.40	0.06	1.56	
S (AR)	-0.91	-1.52	-0.69	-1.04	
Sb (AR)	#	#	#	#	
Se (AR)	#	#	0.48	#	
Sn (AR)	#	<	#	#	
Sr (AR)	#	#	#	#	
Tl (AR)	#	#	#	#	
U (AR)	#	#	#	#	
V (AR)	0.02	-0.85	0.35	0.35	
Zn (AR)	0.28	-0.12	0.52	0.59	
FRIDOLIN (29)					
Cd (NA)	0.62	0.54	-0.18	-0.52	
Co (NA)	0.39	-0.40	0.13	0.27	
Cr (NA)	0.71	0.14	0.13	0.31	
Cu (NA)	0.09	-0.52	-0.79	-0.29	
Hg (NA)	-0.15	0.02	0.38	0.37	
Mo (NA)	-0.38	-2.99	-0.15	-0.58	
Ni (NA)	0.55	-0.59	-0.02	0.12	
Pb (NA)	-0.89	-0.42	-1.09	0.06	
Tl (NA)	#	#	#	#	
Zn (NA)	0.22	0.73	-0.63	-0.32	
Cd (SN)	#	#	-0.48	#	
Cu (SN)	-0.37	-0.77	-0.71	#	
Ni (SN)	-0.63	#	-0.28	-0.20	
Pb (SN)	#	#	#	#	
Zn (SN)	#	-1.01	0.46	0.04	
F - Total (F)	#	#	#	#	
SPNDTKLABS (31)					
N (AE)	2.58	0.33	-0.10	0.15	
C - org others (W&B a.o.) (SC)	-1.85	-2.51	-0.72	-0.72	
EC-SC (ISO 11265) (SC)	-1.73	-0.06	-1.20	-14.11	
pH - CaCl2 (SC)	-5.85	-5.74	-5.61	-8.74	
pH - H2O (SC)	-3.07	-3.18	-3.14	-2.58	
pH - KCl (SC)	-3.69	-3.26	-3.75	-4.00	
Ca (AA)	-3.14	-5.19	-4.95	-4.73	
K (AA)	0.96	0.07	0.16	-0.80	
Mg (AA)	-3.73	-3.51	-3.65	-3.01	
Na (AA)	1.18	0.97	0.74	-3.63	
IUNGPUL (32)					
C - elementary (RT)	0.56	1.13	0.60	0.75	
N - elementary (RT)	0.04	1.10	0.02	0.32	
S (RT)	0.22	0.77	0.34	0.13	
As (AE)	1.65	-0.27	1.15	0.26	
Cd (AE)	-0.29	-0.09	0.05	<	
Cr (AE)	0.30	0.46	0.33	0.73	
Cu (AE)	0.39	-0.05	-0.19	0.58	
Hg (AE)	-0.11	0.43	0.90	-0.28	
Mn (AE)	0.42	0.10	-0.19	-	
Mo (AE)	0.02	<	#	<	
Ni (AE)	0.34	-0.35	-0.05	1.05	
Pb (AE)	1.01	-0.24	0.60	0.48	
Zn (AE)	-0.03	-0.58	0.82	-0.08	
EKOM (35)					
S (RT)	-2.41	-0.74	-1.92	-2.01	
Cd (AE)	0.05	0.41	-0.22	0.34	
Cr (AE)	-0.12	0.06	-0.33	-0.82	
Cu (AE)	0.21	0.34	-0.07	0.10	
Fe (AE)	0.15	0.33	-0.23	0.19	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
EKOM (35) (cont.)				
Hg (AE)	-0.28	-0.55	0.11	-0.37
Mn (AE)	-0.01	0.12	-9.46	0.35
N (AE)	-0.10	0.12	-0.37	-0.22
Ni (AE)	-0.06	-0.17	-0.15	-0.22
Pb (AE)	-0.07	0.19	-0.05	0.02
Zn (AE)	0.21	0.12	0.18	-0.65
Mg (CC)	-0.47	0.61	-0.70	-0.69
Fraction < 16 µm (SC)	-0.53	-0.07	-0.74	-0.86
Fraction < 63 µm (SC)	0.63	-0.43	-0.33	-0.53
Fraction > 63 µm (SC)	-0.63	0.78	0.89	0.54
Org.matter (L.O.I.) (SC)	0.13	0.48	-0.71	-0.23
pH - H2O (SC)	0.03	0.27	-0.17	1.16
pH - KCl (SC)	-0.10	0.62	0.58	0.69
K (DL)	-0.10	1.10	1.03	-0.20
P (DL)	-0.47	-4.07	0.55	<
B (HCLPN)	0.26	0.52	-0.21	0.21
Cu (HCLPN)	0.96	-0.31	0.69	-0.40
Fe (HCLPN)	-0.21	-0.05	-0.37	-0.34
Mn (HCLPN)	0.66	0.11	0.01	0.17
Zn (HCLPN)	0.70	0.01	0.29	0.12
LIEBEFELD (36)				
Cd (NA)	-0.65	<	3.37	<
Co (NA)	-4.53	-0.12	-0.62	0.01
Cr (NA)	0.02	-0.04	1.17	0.86
Cu (NA)	-1.10	-2.88	0.50	-0.56
Hg (NA)	-1.23	-0.59	-0.06	-0.45
Ni (NA)	0.40	<	2.85	3.97
Pb (NA)	-0.95	-0.41	0.40	1.87
Zn (NA)	-2.27	-6.04	-0.61	-0.73
LAF (37)				
Cd (AE)	-1.32	-0.09	-1.56	<
Cr (AE)	0.27	3.62	1.55	2.13
Cu (AE)	0.39	-0.40	0.61	0.52
Hg (AE)	-0.83	-0.06	-1.58	-1.69
N (AE)	1.87	2.26	2.27	2.57
Ni (AE)	-3.41	4.23	-1.41	0.01
Pb (AE)	2.43	0.99	2.17	6.21
Zn (AE)	1.46	-0.02	0.98	1.70
C - org others (W&B a.o.) (SC)	0.92	0.81	1.76	1.03
EC-SC (ISO 11265) (SC)	0.32	0.34	-0.09	1.65
pH - H2O (SC)	0.46	0.87	0.87	0.18
TIC=Tot.Inorg C(CaCO3) (SC)	1.95	<	8.51	<
Moisture-content (OD)	0.61	1.02	0.82	0.58
Ca (AA)	-0.18	0.21	0.20	0.17
CEC (AA)	-0.64	-0.47	-0.43	-5.24
K (AA)	-0.19	1.55	831.97	-0.11
Mg (AA)	0.27	0.71	0.21	0.75
Na (AA)	6.64	3.54	2.75	-0.01
N - NO3 (as N) (WS)	#	#	#	#
P - Olsen (as P) (PHOS)	2.98	-0.30	-0.02	-0.09
BELFAST (39)				
N - elementary (RT)	0.42	-0.33	0.93	0.65
pH - H2O (SC)	0.41	0.09	0.24	-0.22
TC=Total C (org.+inorg.) (SC)	0.24	-0.38	0.83	0.64
K (AA)	-0.08	-0.18	-0.73	-0.20
Mg (AA)	-0.52	-0.50	0.17	0.58
P - Olsen (as P) (PHOS)	-0.89	-0.14	-0.66	0.08
LAS (42)				
Al (RT)	0.41	0.06	0.06	0.52
As (RT)	-0.43	-0.56	0.17	0.44
Ba (RT)	-0.86	-0.63	-0.59	-2.50
Ca (RT)	-0.09	0.31	0.71	-0.58

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
LAS (42) (cont.)				
Cd (RT)	-0.24	#	0.47	-0.39
Co (RT)	0.37	<	0.66	0.43
Cr (RT)	-0.18	-0.47	-0.04	0.08
Cu (RT)	-0.13	0.01	0.82	0.09
Fe (RT)	1.80	1.04	1.75	1.06
Hg (RT)	0.72	0.71	0.65	-0.10
K (RT)	0.97	-0.31	0.86	0.64
Li (RT)	1.07	#	0.61	0.78
Mg (RT)	0.77	0.57	0.54	0.50
Mn (RT)	0.37	0.49	0.24	-0.12
Mo (RT)	-0.34	#	#	0.44
Na (RT)	0.30	0.13	0.19	0.04
Ni (RT)	0.27	-1.16	0.51	-0.20
P (RT)	0.06	0.40	0.20	-0.41
Pb (RT)	0.07	-0.63	0.25	-0.02
S (RT)	1.69	0.90	1.73	1.28
Sb (RT)	#	#	0.23	#
Si (RT)	0.08	-2.86	0.71	0.70
Sn (RT)	-0.50	#	0.70	2.35
Sr (RT)	-1.06	0.09	-0.56	-0.60
Ti (RT)	-1.09	-0.03	-1.36	-0.80
Tl (RT)	#	#	#	#
V (RT)	-0.59	-0.01	0.01	0.10
Zn (RT)	0.90	0.50	0.66	0.99
Al (AR)	0.20	0.41	0.46	0.23
Ca (AR)	0.75	-0.36	0.79	0.69
Cd (AR)	-0.09	-0.41	-0.10	-0.60
Cr (AR)	0.26	-0.19	0.56	0.25
Cu (AR)	1.41	0.41	1.09	0.82
Fe (AR)	0.80	0.08	0.84	0.81
Hg (AR)	-0.24	-0.32	-0.29	0.01
K (AR)	0.06	0.08	0.09	-0.14
Mg (AR)	0.54	0.13	0.27	0.10
Mn (AR)	0.56	-0.48	0.92	0.34
Na (AR)	1.53	-0.10	0.88	0.50
Ni (AR)	0.96	<	2.17	0.55
P (AR)	0.76	-0.28	1.03	0.49
Pb (AR)	1.31	1.52	0.98	0.66
S (AR)	0.69	-1.05	1.54	0.76
Zn (AR)	1.29	1.00	1.58	0.98
Al (CH)	#	#	#	#
Ca (CH)	#	#	#	#
CEC (CH)	#	#	#	#
H (CH)	<	<	<	<
K (CH)	#	#	#	#
Mg (CH)	#	#	#	#
Mn (CH)	#	#	#	#
Na (CH)	#	#	#	#
P - Olsen (as P) (PHOS)	0.31	-0.11	-0.58	-0.29
SOILINST (43)				
N (AE)	-1.67	-2.98	0.16	-1.06
pH - CaCl2 (SC)	-1.57	0.47	-0.73	0.47
TC=Total C (org.+inorg.) (SC)	-1.02	-1.18	0.34	-0.21
TIC=Tot.Inorg C(CaCO3) (SC)	-2.62	#	0.12	0.04
TOC=Total Org. C (SC)	-1.79	-0.99	-1.89	-3.54
Ca (AA)	0.08	0.04	0.65	0.88
K (AA)	-0.06	-0.92	0.29	1.27
Mg (AA)	-0.17	-0.50	-6.97	-5.88
Na (AA)	-0.08	-0.46	0.24	0.31
MONS IZAR (47)				
C - org others (W&B a.o.) (SC)	-0.40	1.07	-0.07	-0.20
Fraction < 2 µm (SC)	-0.81	1.62	-1.58	-0.68
Fraction < 63 µm (SC)	-0.63	0.98	-0.21	-0.23
pH - H2O (SC)	1.01	0.45	0.04	0.33

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
MONS IZAR (47) (cont.)					
Al (BB)	-	#	-	#	
Ca (BB)	#	#	#	#	
Fe (BB)	-	#	-	#	
K (BB)	#	#	#	#	
Mg (BB)	#	#	#	#	
Mn (BB)	#	#	#	#	
Na (BB)	#	#	#	#	
MSIRI (48)					
N (AE)	0.62	-1.13	1.37	0.74	
P (AE)	1.15	-0.84	3.29	3.11	
C - org others (W&B a.o.) (SC)	-1.14	-1.02	-0.50	-0.86	
pH - H2O (SC)	-0.10	-1.73	-0.85	-0.66	
Ca (AA)	0.88	0.24	0.80	0.45	
K (AA)	0.05	-0.87	0.16	1.02	
Mg (AA)	-0.30	0.19	0.07	0.10	
ENVIROPACE (49)					
Ag (AE)	<	<	<	<	
Al (AE)	0.15	0.75	0.10	0.23	
As (AE)	<	<	-0.44	0.17	
B (AE)	<	<	#	<	
Ba (AE)	0.21	0.00	0.16	0.21	
Ca (AE)	1.16	0.68	0.78	-0.61	
Cd (AE)	<	<	<	<	
Cr (AE)	0.69	0.91	0.69	0.52	
Cu (AE)	-0.72	<	-0.07	-0.97	
Fe (AE)	1.33	0.27	1.16	0.64	
Hg (AE)	<	<	<	<	
K (AE)	-0.10	-0.04	0.21	0.14	
Mg (AE)	0.73	1.70	0.42	-0.28	
Mn (AE)	0.64	0.02	-0.45	-0.24	
Na (AE)	<	<	0.05	-0.60	
Ni (AE)	-0.06	<	0.66	0.56	
Pb (AE)	0.33	1.53	0.37	0.48	
Sn (AE)	<	<	<	<	
Zn (AE)	-0.27	0.39	0.11	-0.14	
ZJKRK (50)					
Cd (AE)	<	<	-0.49	<	
Cr (AE)	0.27	-0.12	-0.33	-0.30	
Cu (AE)	1.22	0.46	-0.07	0.22	
Fe (AE)	0.64	0.83	-0.09	0.08	
Hg (AE)	-0.05	-0.55	0.05	-0.33	
Mn (AE)	2.22	0.42	-0.97	-0.78	
N (AE)	-0.10	0.01	-0.63	0.34	
Ni (AE)	1.08	<	-0.29	0.60	
Pb (AE)	0.16	0.14	0.47	0.85	
Zn (AE)	0.50	0.19	0.98	0.75	
Mg (CC)	-0.89	0.34	-0.55	<	
C - org others (W&B a.o.) (SC)	0.04	-0.04	0.18	1.31	
pH - KCl (SC)	0.22	0.83	0.69	0.69	
K (DL)	-0.29	-0.07	-0.43	-0.46	
P (DL)	0.10	-0.13	0.08	<	
Cu (HCLPN)	-0.82	0.62	-1.40	-0.40	
Fe (HCLPN)	0.62	0.22	<	<	
Mn (HCLPN)	0.00	2.75	0.46	0.59	
Zn (HCLPN)	1.39	2.37	-0.12	2.25	
EXTAQS (52)					
N - elementary (RT)	-0.63	-0.20	-0.82	-0.92	
S (RT)	0.79	0.32	-0.63	0.33	
Al (AE)	-0.31	-0.16	-0.06	-0.04	
As (AE)	1.46	<	1.15	1.34	
Ba (AE)	0.23	0.38	0.07	0.08	
Be (AE)	#	<	0.80	0.19	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
EXTAQS (52) (cont.)				
Ca (AE)	0.22	-0.75	-0.20	-0.05
Cd (AE)	0.74	<	0.99	<
Co (AE)	-0.48	-0.55	0.07	-0.08
Cr (AE)	0.36	-0.82	-0.40	-0.21
Cu (AE)	-0.44	-0.29	-0.24	0.10
Fe (AE)	0.55	0.08	0.00	0.22
Hg (AE)	2.34	4.30	0.72	1.80
K (AE)	0.02	54.31	0.55	0.22
Mg (AE)	0.42	-0.54	0.26	-0.18
Mn (AE)	-0.30	-0.03	0.85	0.76
Mo (AE)	0.99	#	#	#
Na (AE)	0.53	5.38	0.35	0.65
Ni (AE)	1.08	-0.69	0.90	0.50
P (AE)	0.53	0.32	0.42	0.16
Pb (AE)	1.58	0.23	1.36	1.09
S (AE)	0.97	0.11	0.51	0.22
Sb (AE)	#	#	#	#
Se (AE)	#	<	#	#
Sn (AE)	<	<	<	<
Ti (AE)	#	#	#	#
Tl (AE)	#	#	#	#
U (AE)	#	#	#	#
V (AE)	0.39	0.22	0.27	0.23
Zn (AE)	0.26	2.68	0.82	0.27
TIC=Tot.Inorg C(CaCO3) (SC)	<	<	<	<
TOC=Total Org. C (SC)	2.65	-0.08	0.22	0.04
LAROL (56)				
Hg (RT)	-0.06	0.27	-0.63	1.67
N (AE)	0.06	0.87	-0.37	-0.04
As (AR)	0.52	0.28	-0.27	-0.08
Cd (AR)	-0.30	<	-0.69	<
Cr (AR)	-0.01	-0.04	-0.35	-0.77
Cu (AR)	0.05	0.33	-0.11	-0.25
Fe (AR)	0.13	0.32	-0.06	-0.25
Mn (AR)	0.36	-0.41	-0.31	-1.03
Ni (AR)	0.63	0.40	0.28	-1.10
Pb (AR)	-0.43	-0.61	0.21	-0.38
Zn (AR)	0.50	0.03	0.65	-0.80
Mg (CC)	-0.47	0.14	-0.24	-0.02
C - org others (W&B a.o.) (SC)	-0.31	-0.07	-0.14	0.16
pH - KCl (SC)	0.09	0.40	0.58	-0.21
K (DL)	0.24	-0.51	-0.43	-0.03
P (DL)	2.97	-0.13	0.55	#
B (HCLPN)	1.37	-0.11	0.73	0.97
Cu (HCLPN)	-0.31	0.15	0.34	0.31
Fe (HCLPN)	0.42	-1.10	-0.71	0.72
Mn (HCLPN)	0.38	0.37	-0.22	0.17
Zn (HCLPN)	-0.46	-0.23	-1.37	-0.67
BUNASOLS (58)				
B (AE)	#	#	#	#
Ca (AE)	50.70	26.10	24.39	18.02
Cu (AE)	-1.00	-1.64	-1.28	1.97
Fe (AE)	-14.33	-3.42	-8.20	-4.61
K (AE)	-3.17	-4.01	-1.78	-2.31
Mg (AE)	-3.40	-9.26	-3.42	-6.47
Mn (AE)	3.39	1.81	-1.76	-1.33
N (AE)	2.18	1.40	1.59	0.71
Na (AE)	-4.07	36.43	0.74	-5.33
P (AE)	1.91	2.26	-1.24	1.35
S (AE)	-12.96	9.63	-8.39	0.71
Zn (AE)	-2.28	-6.19	-4.63	-3.32
C - org others (W&B a.o.) (SC)	0.46	0.83	-3.05	0.26

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
KUSLSH (60)					
Cd (NA)	-0.74	-0.28	0.18	-0.36	
Co (NA)	-0.13	-2.76	-0.16	-1.62	
Cr (NA)	0.25	0.07	0.08	-0.45	
Cu (NA)	-0.23	0.28	-0.33	-0.61	
Hg (NA)	0.09	-0.96	0.10	-0.20	
Mo (NA)	0.27	-0.48	-0.18	0.28	
Ni (NA)	-0.11	-0.34	-0.47	-0.19	
Pb (NA)	-1.31	0.54	-0.35	-0.94	
Zn (NA)	-0.25	0.35	0.11	-1.99	
Cd (SN)	<	#	-0.86	<	
Cu (SN)	-0.79	-0.30	-0.69	<	
Ni (SN)	0.04	#	0.74	0.31	
Pb (SN)	<	<	<	<	
Zn (SN)	<	0.11	0.06	-0.41	
pH - CaCl2 (SC)	-0.08	-0.36	0.81	-0.04	
pH - H2O (SC)	0.12	0.21	0.30	-0.27	
ISA (62)					
K (CC)	-0.10	1.16	0.65	0.26	
Mg (CC)	0.10	-2.46	0.67	-5.61	
P (CC)	#	#	#	#	
Org.matter (L.O.I.) (SC)	6.15	5.00	10.56	5.82	
pH - CaCl2 (SC)	-3.14	5.58	-0.48	-0.30	
TIC=Tot.Inorg C(CaCO3) (SC)	-2.24	<	<	<	
LRSCONTROL (63)					
Hg (RT)	-0.87	-1.16	0.71	-0.38	
N - elementary (RT)	0.65	0.71	0.93	0.65	
Al (AR)	-0.65	-0.66	-1.16	-0.88	
Ca (AR)	-0.15	-1.89	-2.43	-1.72	
Cu (AR)	-1.89	-1.04	-1.80	-2.28	
Fe (AR)	-1.16	-3.32	-0.90	-0.91	
K (AR)	-0.89	-0.79	-1.20	-1.33	
Mg (AR)	-0.79	-1.40	-1.59	-1.28	
Mn (AR)	-2.30	-2.05	-4.84	-3.17	
Ni (AR)	-1.34	<	-3.12	-2.04	
P (AR)	-1.31	-1.91	-1.67	-1.06	
Pb (AR)	-1.11	-2.36	-1.53	-0.15	
Zn (AR)	-2.88	-1.69	-3.33	-2.49	
Fraction < 2 µm (SC)	0.95	-0.84	0.86	0.61	
Fraction < 63 µm (SC)	-0.83	-1.55	0.37	0.44	
Fraction > 63 µm (SC)	1.64	2.36	-0.38	-0.56	
pH - CaCl2 (SC)	1.23	0.06	0.81	2.26	
pH - H2O (SC)	0.03	-0.94	0.35	0.18	
pH - KCl (SC)	0.88	-0.25	0.69	1.81	
TC=Total C (org.+inorg.) (SC)	-0.04	0.16	1.03	0.76	
TIC=Tot.Inorg C(CaCO3) (SC)	0.19	<	<	<	
TOC=Total Org. C (SC)	0.18	0.48	1.17	0.92	
B - Hot water (OD)	#	#	#	#	
Moisture-content (OD)	0.86	0.37	0.37	-0.14	
Ca (AA)	-1.29	-0.93	-0.21	-0.35	
K (AA)	-1.33	0.17	-0.81	-0.88	
Mg (AA)	-0.50	0.07	0.21	-0.68	
Na (AA)	0.25	0.00	1.29	0.26	
TCKI (64)					
Al (RT)	0.05	0.20	0.26	0.22	
Ba (RT)	-3.53	-7.28	2.91	0.89	
Ca (RT)	1.22	-0.52	0.96	-0.16	
Cr (RT)	1.61	<	0.77	1.26	
F (RT)	#	<	#	#	
Fe (RT)	0.21	-1.30	-0.30	-0.13	
K (RT)	0.92	0.39	0.66	0.98	
Mg (RT)	0.07	<	0.26	0.44	
Mn (RT)	-1.62	<	-1.35	-0.56	
Na (RT)	0.78	0.07	1.20	1.53	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
TCKI (64) (cont.)				
P (RT)	-3.65	-2.91	-1.56	-6.02
S (RT)	-1.68	0.15	-1.33	-1.24
Si (RT)	-0.23	-1.67	0.03	0.34
Ti (RT)	0.09	0.56	-0.07	0.30
V (RT)	6.15	7.52	6.53	6.82
Zn (RT)	45.64	54.95	10.78	29.33
Fraction < 2 µm (SC)	1.30	<	0.57	0.81
Fraction > 63 µm (SC)	1.78	0.10	0.45	<
TIC=Tot.Inorg C(CaCO3) (SC)	-1.11	<	<	<
TOC=Total Org. C (SC)	1.01	0.14	1.04	0.72
MLABTW (70)				
As (AE)	0.82	<	0.69	0.19
Ba (AE)	-0.49	<	-0.67	-0.52
Ca (AE)	-0.61	-0.61	-0.96	-0.60
Cd (AE)	<	<	<	<
Co (AE)	-0.39	<	-1.55	-1.10
Cr (AE)	-1.12	<	-1.47	-0.82
Cu (AE)	-1.41	<	-1.13	-1.31
Fe (AE)	-0.70	-0.78	-3.49	-3.48
Hg (AE)	<	<	<	<
Mg (AE)	-0.87	-2.62	-0.91	-4.40
Ni (AE)	-1.20	<	-1.61	-1.19
Pb (AE)	-0.52	<	-1.84	-1.84
S (AE)	0.22	-0.36	-0.67	-0.63
Sn (AE)	<	<	<	<
V (AE)	-0.85	<	-0.80	-0.74
Zn (AE)	-2.04	-2.10	-1.88	-1.59
Fraction < 16 µm (SC)	0.10	-0.10	0.79	0.68
Fraction < 2 µm (SC)	-0.25	-0.11	0.03	0.24
Org.matter (L.O.I.) (SC)	-1.30	-0.64	2.87	2.31
pH - CaCl2 (SC)	0.35	0.61	-0.73	-0.81
pH - H2O (SC)	-0.73	0.45	0.66	1.02
pH - KCl (SC)	0.03	1.69	-0.14	-0.43
TIC=Tot.Inorg C(CaCO3) (SC)	0.77	<	<	<
ARCHIMEDES (73)				
As (AE)	-	-	-0.78	-1.08
Ba (AE)	-	-	0.41	1.57
Cd (AE)	-	-	2.03	<
Co (AE)	-	-	0.54	1.17
Cr (AE)	-	-	0.43	0.90
Cu (AE)	-	-	2.21	1.60
Hg (AE)	-	-	0.44	10.36
Mo (AE)	-	-	<	<
Ni (AE)	-	-	0.80	1.31
Pb (AE)	-	-	-0.41	0.42
Sb (AE)	-	-	<	<
Se (AE)	-	-	<	<
Sn (AE)	-	-	<	<
V (AE)	-	-	0.68	1.23
Zn (AE)	-	-	0.18	0.73
Fraction < 2 µm (SC)	-	-	-1.06	-1.18
Org.matter (L.O.I.) (SC)	-	-	0.87	0.54
pH - CaCl2 (SC)	0.44	0.47	-0.22	0.47
Br (WS)	<	<	<	<
Cl (WS)	<	<	<	#
ANAMIL (74)				
Ag (AE)	<	<	<	<
Al (AE)	-0.82	-0.83	0.24	-0.39
As (AE)	3.77	<	2.50	3.49
B (AE)	#	<	#	<
Ba (AE)	-0.13	-0.83	0.18	-0.11
Be (AE)	<	<	-0.36	-0.58
Ca (AE)	-0.49	-0.19	-0.41	-0.42

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
ANAMIL (74) (cont.)					
Cd (AE)	0.40	<	2.20	<	
Co (AE)	-0.63	<	0.43	-0.19	
Cr (AE)	-0.03	-0.91	1.27	0.15	
Cu (AE)	1.87	-1.48	2.55	0.58	
Fe (AE)	-1.43	-0.86	-0.41	-0.84	
Hg (AE)	1.04	<	-0.03	0.14	
Mg (AE)	-0.38	-0.69	0.71	-0.97	
Mn (AE)	-3.85	-1.57	-0.54	-0.28	
Mo (AE)	4.65	<	<	<	
Ni (AE)	0.61	<	1.55	0.17	
P (AE)	0.28	-1.05	0.91	-0.06	
Pb (AE)	7.99	-2.79	0.83	-0.59	
S (AE)	0.14	-1.66	0.16	-0.34	
Sb (AE)	<	<	<	<	
Se (AE)	<	<	<	<	
Sn (AE)	#	<	#	<	
Ti (AE)	#	<	#	<	
V (AE)	0.10	-0.61	0.74	0.11	
Zn (AE)	0.02	-2.38	0.11	-0.48	
Fraction < 2 µm (SC)	1.47	4.05	-0.07	-0.24	
AGROCH (75)					
Cd (NA)	-0.74	-3.31	0.02	-0.28	
Co (NA)	-0.09	-0.79	-0.67	0.85	
Cr (NA)	-0.31	-1.85	-0.67	-0.31	
Cu (NA)	-0.46	-1.88	-0.35	0.02	
Hg (NA)	0.44	0.76	0.71	0.96	
Mo (NA)	-0.06	0.85	0.56	<	
Ni (NA)	-1.09	<	-1.61	-1.63	
Pb (NA)	-0.10	0.02	1.65	0.33	
Tl (NA)	#	<	#	#	
Zn (NA)	-0.16	0.09	0.46	0.28	
Cd (SN)	<	#	1.56	#	
Cu (SN)	-0.29	0.64	0.48	<	
Ni (SN)	<	<	1.13	2.78	
Pb (SN)	<	<	<	<	
Zn (SN)	<	-0.48	-0.43	0.83	
F - Total (F)	#	#	#	#	
F (WS)	#	#	#	#	
AL-West (78)					
N (AE)	0.15	2.16	1.25	0.63	
P (AE)	-0.21	1.63	0.15	1.05	
Ag (AR)	<	<	<	<	
As (AR)	-0.87	<	0.92	0.03	
Ba (AR)	0.30	<	0.76	0.13	
Be (AR)	-0.68	<	-0.22	-0.09	
Cd (AR)	-1.87	<	-2.01	<	
Co (AR)	0.61	<	1.28	0.84	
Cr (AR)	-0.38	<	-0.25	-0.33	
Cu (AR)	0.08	2.03	0.48	-0.18	
Hg (AR)	1.06	<	2.19	1.24	
Mo (AR)	<	<	<	<	
Ni (AR)	-0.19	<	0.35	0.24	
Pb (AR)	0.99	<	0.83	2.15	
Sb (AR)	<	<	<	<	
Sn (AR)	<	<	<	<	
Tl (AR)	<	<	<	<	
Zn (AR)	-0.51	<	0.15	-0.12	
N - NH4 (as N) (CC)	0.10	0.24	0.89	0.03	
EC-SC (ISO 11265) (SC)	0.27	0.57	0.22	0.32	
Fraction < 16 µm (SC)	0.10	-0.57	-0.66	-2.50	
Fraction < 2 µm (SC)	0.33	<	-1.72	-3.42	
Fraction < 63 µm (SC)	-2.06	-0.75	-7.36	-13.20	
Fraction > 63 µm (SC)	3.53	1.24	13.86	14.91	
Org.matter (L.O.I.) (SC)	-1.82	-3.23	-2.69	-3.14	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
AL-West (78) (cont.)				
pH - CaCl2 (SC)	0.79	1.16	0.81	0.98
pH - H2O (SC)	0.71	1.66	1.44	1.51
pH - KCl (SC)	0.61	0.72	0.79	0.69
TIC=Tot.Inorg C(CaCO3) (SC)	3.24	#	7.50	9.67
CN - Total (OD)	<	<	#	<
SAINTE-FOY (80)				
N (AE)	0.69	-0.52	1.64	0.24
C - org others (W&B a.o.) (SC)	0.13	-1.05	0.63	0.23
EC-SC (ISO 11265) (SC)	-0.57	-0.35	-0.75	-1.48
pH - CaCl2 (SC)	-0.70	-0.77	0.17	1.24
pH - H2O (SC)	-0.14	-0.58	0.09	-0.36
TC=Total C (org.+inorg.) (SC)	0.95	0.59	0.93	0.40
Al (AC)	<	#	<	#
Ca (AC)	#	#	#	#
Fe (AC)	#	#	#	#
K (AC)	#	#	#	#
Mg (AC)	#	#	#	#
Mn (AC)	#	#	#	#
Al (M3)	#	#	#	#
B (M3)	#	<	<	<
Ca (M3)	0.18	-0.29	1.81	0.00
Cu (M3)	0.81	0.07	0.30	<
Fe (M3)	-0.05	0.17	-0.44	-0.25
K (M3)	-0.04	-0.72	0.61	0.48
Mg (M3)	0.24	-0.05	0.37	0.01
Mn (M3)	-0.47	0.00	-0.28	-0.68
Na (M3)	#	#	#	#
P (M3)	1.10	0.34	0.94	0.75
Zn (M3)	0.21	0.02	0.04	0.24
HIDU (82)				
Ag (RT)	<	<	<	<
Al (RT)	1.50	1.31	-4.48	-3.91
As (RT)	2.42	<	1.77	1.30
Ba (RT)	-0.56	0.63	-0.78	-0.95
Br (RT)	-0.63	-0.94	-0.62	-0.79
Ca (RT)	3.85	9.80	1.73	8.16
Cd (RT)	<	<	<	<
Ce (RT)	-1.06	1.85	-0.88	-1.74
Co (RT)	1.46	<	1.85	1.21
Cr (RT)	1.20	0.08	1.74	1.75
Cu (RT)	-0.87	-0.89	-1.48	-1.25
Fe (RT)	1.27	0.67	-0.44	-0.25
Ga (RT)	0.89	1.48	-0.49	-0.91
I (RT)	#	#	#	#
K (RT)	-0.61	1.20	-2.49	-1.77
La (RT)	-3.97	9.29	-1.07	-1.33
Mg (RT)	7.59	45.83	1.95	3.24
Mn (RT)	0.72	-0.16	0.20	0.25
Mo (RT)	<	<	<	<
Na (RT)	-2.84	-	0.49	1.83
Nb (RT)	-0.67	-0.67	0.06	-0.44
Ni (RT)	-0.03	<	0.75	0.06
P (RT)	1.32	3.54	-2.25	0.42
Pb (RT)	0.57	2.23	0.44	1.45
Rb (RT)	-0.90	-0.06	-0.85	-0.92
S (RT)	6.29	6.73	1.54	0.95
Sb (RT)	#	<	1.52	<
Si (RT)	-3.12	-3.60	-3.66	-3.34
Sn (RT)	3.69	<	0.97	0.09
Sr (RT)	-0.03	0.24	-0.65	-0.66
Th (RT)	-0.27	-0.78	-0.31	0.05
Ti (RT)	-0.80	-0.08	-3.17	-0.96
Tl (RT)	<	<	<	<
V (RT)	0.40	-1.80	1.03	1.65

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
HIDU (82) (cont.)					
Y (RT)	0.04	-1.24	-0.19	-0.89	
Zn (RT)	0.82	2.20	-0.54	-0.17	
Zr (RT)	0.19	-0.12	-0.01	-0.18	
Cd (NA)	-	-3.31	-	<	
Co (NA)	-0.61	<	0.85	0.78	
Cr (NA)	0.30	0.43	1.06	1.26	
Cu (NA)	0.02	0.33	0.25	-0.11	
Hg (NA)	-1.58	-0.33	-0.37	-0.64	
Mo (NA)	<	<	<	<	
Ni (NA)	1.17	-0.09	1.43	1.18	
Pb (NA)	1.52	1.46	2.75	3.66	
Tl (NA)	<	<	<	<	
Zn (NA)	0.67	0.23	0.93	1.00	
Cd (SN)	#	#	-0.23	#	
Cu (SN)	0.05	-0.78	-0.24	#	
Ni (SN)	0.18	#	-0.08	-0.47	
Pb (SN)	<	<	<	<	
Zn (SN)	<	1.00	0.68	-0.28	
US (83)					
Al (AE)	-2.44	-1.63	-2.67	-3.60	
As (AE)	-5.85	-4.26	-4.88	-3.77	
Ba (AE)	-2.73	-1.31	-2.99	-1.20	
Be (AE)	#	#	-8.50	-2.77	
Ca (AE)	-24.40	2.03	-13.52	-2.59	
Cd (AE)	-5.27	-1.08	-5.76	-0.42	
Co (AE)	-3.43	-0.68	-5.54	-1.08	
Cr (AE)	-3.07	-1.60	-5.67	-1.83	
Cu (AE)	-3.03	0.99	-5.72	-1.99	
Fe (AE)	-5.17	-1.85	-5.92	-4.57	
Hg (AE)	30.66	33.22	30.23	31.32	
Mn (AE)	-12.76	-0.70	-8.20	-2.36	
Mo (AE)	-1.57	#	#	#	
Pb (AE)	-4.15	-0.73	-6.68	-1.67	
Sb (AE)	#	#	#	#	
V (AE)	-2.04	-0.11	-2.56	-1.26	
Zn (AE)	-6.46	-1.69	-9.15	-2.74	
Fraction < 16 µm (SC)	-0.33	-0.28	0.33	0.31	
Fraction < 2 µm (SC)	-0.67	-0.26	-0.11	0.14	
Fraction < 63 µm (SC)	-2.24	-0.49	-3.83	-2.95	
Org.matter (L.O.I.) (SC)	0.11	-0.52	0.24	-0.10	
pH - CaCl2 (SC)	0.61	0.47	0.42	0.47	
TIC=Tot.Inorg C(CaCO3) (SC)	-0.31	-	-	-0.65	
DATE (89)					
C - elementary (RT)	0.48	-0.86	0.26	0.42	
N - elementary (RT)	1.02	0.06	1.14	1.22	
S (RT)	0.81	-0.76	-1.26	-1.19	
Al (AE)	0.51	1.47	-0.29	-0.72	
As (AE)	-2.34	-3.08	2.37	4.05	
Be (AE)	#	#	-0.52	-0.41	
Ca (AE)	3.07	0.33	-0.02	-0.12	
Co (AE)	1.36	0.80	0.03	-0.14	
Cr (AE)	-0.08	3.34	-0.54	0.01	
Cu (AE)	1.03	-0.76	-0.45	-1.07	
Fe (AE)	0.66	1.39	3.43	1.06	
K (AE)	-0.11	-0.30	-0.10	-0.32	
Li (AE)	#	#	#	#	
Mg (AE)	1.62	0.01	-1.69	-2.12	
Mn (AE)	1.61	2.95	-0.19	-0.01	
Na (AE)	0.33	-0.55	-1.27	-1.28	
Ni (AE)	-0.67	-1.27	-0.47	-0.25	
P (AE)	1.40	0.77	0.32	-0.32	
Pb (AE)	0.50	0.40	-1.28	0.15	
S (AE)	1.70	1.29	2.39	-1.12	
Sc (AE)	#	#	#	#	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
DATE (89) (cont.)					
Sr (AE)	#	#	#	#	
V (AE)	0.57	1.31	-0.06	0.01	
Y (AE)	#	#	#	#	
Zn (AE)	0.95	0.54	-1.24	-0.71	
C - org others (W&B a.o.) (SC)	-0.72	0.20	-1.13	-1.86	
pH - H2O (SC)	0.33	-0.40	-2.31	-0.86	
pH - KCl (SC)	-0.04	0.72	-1.07	-0.54	
TIC=Tot.Inorg C(CaCO3) (SC)	0.91	<	<	<	
N - NH4 (as N) (KCL)	#	#	#	#	
N - NO3 (as N) (KCL)	#	#	#	#	
SCHRG (90)					
Cd (AE)	-0.19	0.91	-1.00	<	
Cr (AE)	-	-	0.46	0.36	
Cu (AE)	-0.35	-0.40	-0.07	1.00	
Fe (AE)	-0.44	-0.48	-2.26	-1.65	
Mn (AE)	3.76	1.05	2.02	-0.34	
Ni (AE)	-1.13	-	0.66	-1.33	
Pb (AE)	-0.47	-2.19	-0.86	0.11	
S (AE)	-1.06	1.75	-5.15	-5.19	
Zn (AE)	-0.73	0.81	0.90	-1.32	
Mg (CC)	0.06	1.89	-0.77	-5.43	
Org.matter (L.O.I.) (SC)	-0.43	0.42	-0.42	-0.21	
pH - H2O (SC)	0.33	0.63	1.13	1.11	
pH - KCl (SC)	0.55	0.29	0.58	0.80	
K (DL)	3.30	-3.74	3.22	2.12	
P (DL)	-5.99	-7.32	-1.47	<	
B (HCLPN)	-2.75	<	-1.84	-1.22	
Cu (HCLPN)	0.71	1.08	-0.35	0.31	
Fe (HCLPN)	0.97	2.75	-2.40	-0.53	
Mn (HCLPN)	-2.20	6.24	0.82	4.09	
Zn (HCLPN)	3.25	2.13	-0.85	3.05	
BKLABOR (92)					
Al (RT)	-0.19	0.06	0.26	0.52	
Ba (RT)	-1.23	-4.18	-0.83	-0.77	
Ca (RT)	-0.53	-0.82	-0.14	-1.00	
Fe (RT)	-0.06	0.24	0.18	0.10	
Ga (RT)	12.49	16.87	5.71	2.43	
K (RT)	-0.68	-2.12	0.08	-0.08	
Mg (RT)	0.68	7.44	0.58	0.37	
Mn (RT)	-0.26	-1.48	-0.15	-0.86	
Na (RT)	-1.37	-2.19	-1.82	-2.35	
P (RT)	-0.06	-0.03	0.62	-0.12	
Si (RT)	-0.51	-0.92	-0.17	-0.07	
Ti (RT)	-0.26	-0.66	-0.05	-0.05	
Zn (RT)	-0.64	-0.14	-0.44	-0.86	
Zr (RT)	0.56	-0.52	0.01	0.54	
GAL (95)					
Al (RT)	0.53	-0.24	0.24	2.44	
As (RT)	-0.96	-	-0.69	0.01	
B (RT)	#	#	#	#	
Ba (RT)	0.06	0.24	-0.43	-0.19	
Be (RT)	#	#	#	#	
Br (RT)	0.39	-0.05	-0.15	-0.49	
Ca (RT)	0.34	0.49	-0.03	0.18	
Ce (RT)	-0.22	-0.64	-0.13	0.03	
Co (RT)	-	-	-1.49	-	
Cr (RT)	-1.41	-	-0.97	-0.27	
Cu (RT)	-0.83	0.09	-0.26	0.48	
Fe (RT)	0.21	-	1.61	0.73	
Ga (RT)	-0.25	-	0.03	-0.01	
Hg (RT)	-4.67	-2.74	-3.62	-2.82	
I (RT)	#	#	#	#	
K (RT)	-0.58	-0.10	-0.85	-0.90	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
GAL (95) (cont.)				
La (RT)	0.70	-0.02	0.54	0.81
Li (RT)	-1.63	-	-1.40	-1.55
Mg (RT)	0.07	0.38	0.60	-0.01
Mn (RT)	0.60	-0.09	-0.68	-0.12
N - elementary (RT)	0.04	-1.76	-0.09	-0.64
Na (RT)	0.27	0.18	0.06	0.01
Nb (RT)	0.88	-	2.97	0.50
Ni (RT)	-0.95	-	-0.61	-1.60
P (RT)	-0.31	0.54	0.20	0.33
Pb (RT)	-0.01	-0.29	-0.80	-0.73
Rb (RT)	0.32	0.98	0.07	0.08
Sc (RT)	-0.77	-	-0.20	0.37
Si (RT)	0.37	0.02	0.30	0.24
Sn (RT)	0.38	-	-0.09	-0.56
Sr (RT)	0.34	0.87	-0.13	0.24
Ti (RT)	-0.09	0.43	1.63	0.11
V (RT)	-0.30	-0.27	-1.92	-1.18
Y (RT)	0.66	-	0.68	1.05
Zn (RT)	-0.38	-0.14	-0.99	-1.02
Zr (RT)	-0.14	0.41	-1.13	-0.89
TC=Total C (org.+inorg.) (SC)	-0.46	0.08	0.43	0.03
TOC=Total Org. C (SC)	-0.72	-0.42	-0.04	0.24
POLASP (96)				
Al (RT)	2.80	0.92	1.48	3.79
As (RT)	-3.78	0.31	-7.09	-3.84
Ca (RT)	2.47	1.44	2.32	-0.33
Cd (RT)	-0.24	#	-0.59	-0.02
Co (RT)	0.09	-0.83	0.43	0.72
Cr (RT)	-3.90	-0.60	-0.65	-0.83
Cu (RT)	0.40	-0.26	0.36	0.13
Fe (RT)	6.17	1.48	3.71	4.17
Hg (RT)	-0.18	2.09	-1.17	-0.06
K (RT)	6.34	3.48	4.83	4.28
Mg (RT)	2.03	66.49	1.34	1.15
Mn (RT)	0.46	0.51	1.72	4.12
N - elementary (RT)	0.27	-2.79	0.44	0.15
Ni (RT)	-0.09	-1.79	0.02	-0.40
P (RT)	2.77	0.97	2.14	1.41
Pb (RT)	0.07	0.95	-0.26	-0.58
Zn (RT)	-0.59	-1.19	-0.54	-0.07
GGM (98)				
Ag (AE)	<	<	<	<
As (AE)	-0.33	<	0.35	-0.18
Ba (AE)	-0.40	-0.69	-0.42	-0.48
Be (AE)	#	<	-0.36	-1.19
Cd (AE)	-2.07	<	<	<
Co (AE)	-0.82	<	-1.03	-0.99
Cr (AE)	-1.13	<	-1.33	-0.83
Cu (AE)	-1.56	-1.53	-0.34	-1.07
Hg (AE)	<	<	<	<
Mo (AE)	<	<	<	<
Ni (AE)	-0.13	<	-0.13	-0.85
Pb (AE)	0.03	-2.07	0.04	-0.36
Sb (AE)	<	<	<	<
Se (AE)	<	<	<	<
Sn (AE)	<	<	<	<
Tl (AE)	<	<	<	<
V (AE)	-1.00	-0.59	-0.97	-0.86
Zn (AE)	-1.60	-1.60	-2.03	-1.46
Fraction < 2 µm (SC)	-0.07	0.38	-0.25	-0.09
Org.matter (L.O.I.) (SC)	0.67	-0.64	0.34	2.31
pH - CaCl2 (SC)	0.26	0.33	-1.12	-0.55
pH - H2O (SC)	-0.82	0.33	0.56	0.92
pH - KCl (SC)	-0.10	1.91	-0.35	-0.43

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
974BRET (99)				
N - elementary (RT)	-0.93	0.71	-0.37	-1.48
pH - H2O (SC)	0.54	-0.22	0.09	0.13
pH - KCl (SC)	-0.17	-1.11	-0.76	-1.21
TOC=Total Org. C (SC)	0.10	1.22	0.74	-0.54
Ca (CH)	#	#	#	#
CEC (CH)	#	#	#	#
K (CH)	#	#	#	#
Mg (CH)	#	#	#	#
Na (CH)	#	#	#	#
Cu (CAT)	#	#	#	#
Fe (CAT)	#	#	#	#
Mn (CAT)	#	#	#	#
Zn (CAT)	#	#	#	#
P - Olsen (as P) (PHOS)	0.25	0.23	0.02	-0.23
ANDESITE (108)				
Be (RT)	#	#	#	#
F (RT)	#	<	#	#
Ga (RT)	1.04	-0.67	0.49	-0.01
Rb (RT)	-3.01	-1.04	-0.78	-0.52
Sb (RT)	#	#	-0.83	#
Sc (RT)	-0.77	#	-0.20	0.31
Sn (RT)	-1.83	#	-0.73	-0.56
Th (RT)	-1.40	-0.68	-0.99	-0.96
Tl (RT)	#	#	#	#
U (RT)	-0.78	#	-0.07	-0.63
Fraction < 16 µm (SC)	1.78	0.62	1.34	1.08
Fraction < 2 µm (SC)	-2.92	-0.97	-0.47	-0.22
Fraction < 63 µm (SC)	-0.15	0.13	0.34	0.50
Fraction > 63 µm (SC)	0.58	0.01	-0.34	-0.63
TC=Total C (org.+inorg.) (SC)	-2.01	0.75	-0.01	-3.45
TIC=Tot.Inorg C(CaCO3) (SC)	0.41	#	0.00	0.17
TOC=Total Org. C (SC)	-1.13	0.99	0.14	-2.77
CORBANA (110)				
C - org others (W&B a.o.) (SC)	-0.40	0.02	0.33	-0.44
pH - H2O (SC)	-1.33	0.15	0.14	-0.22
Al (M3)	#	#	#	#
Ca (M3)	-0.68	-0.29	0.70	-0.09
Cu (M3)	-0.22	-0.49	0.15	-0.06
Fe (M3)	0.67	-0.77	1.59	3.12
K (M3)	0.09	-0.15	0.23	0.35
Mg (M3)	0.30	0.70	0.22	-0.15
Mn (M3)	-0.93	-0.45	-0.30	0.15
P (M3)	-0.74	-0.80	0.63	0.21
Zn (M3)	-0.16	-0.17	0.62	0.65
CISCA (112)				
Ag (AE)	-	-	<	<
Al (AE)	1.01	0.75	-	-
As (AE)	0.01	<	0.33	0.09
Ba (AE)	1.88	0.41	1.27	1.40
Be (AE)	<	<	0.80	1.01
Ca (AE)	-0.26	0.33	-	-
Cd (AE)	0.05	<	0.45	<
Co (AE)	-0.55	<	-0.40	0.13
Cr (AE)	1.48	0.51	2.10	1.11
Cu (AE)	-0.63	-0.23	0.84	0.64
Fe (AE)	-0.24	0.45	0.33	0.08
Hg (AE)	4.36	<	-1.18	<
K (AE)	1.63	0.94	-	-
Mg (AE)	0.22	0.70	-	-
Mn (AE)	-0.23	2.04	-	-
Mo (AE)	<	<	<	<
Na (AE)	1.86	-0.16	-	-
Ni (AE)	-0.93	<	0.94	1.22

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
CISCA (112) (cont.)				
P (AE)	-0.56	-0.28	-	-
Pb (AE)	0.16	-0.60	1.98	5.53
S (AE)	<	<	-	-
Sb (AE)	<	<	<	<
Se (AE)	<	<	<	<
Sn (AE)	<	<	<	<
Ti (AE)	#	#	-	-
Tl (AE)	-	-	<	<
V (AE)	0.57	0.27	0.83	0.98
Zn (AE)	-0.20	0.46	1.05	0.69
N - NH4 (as N) (CC)	1.14	-0.57	-	-
N - NO3 (as N) (CC)	-2.24	-0.84	-	-
EC-SC (ISO 11265) (SC)	-	-0.74	-	-
Fraction < 2 µm (SC)	1.40	3.33	0.06	-0.57
Org.matter (L.O.I.) (SC)	-3.20	-2.70	-5.60	-5.40
pH - CaCl2 (SC)	0.61	0.47	0.81	1.24
TIC=Tot.Inorg C(CaCO3) (SC)	-0.04	-	-	-
TOC=Total Org. C (SC)	-0.80	-	-	-
Br (WSVPR)	-	-	<	#
Cl (WSVPR)	<	<	#	#
SO4 (WSVPR)	-	-	#	#
HWASS02 (116)				
C - org others (W&B a.o.) (SC)	-0.31	-0.17	-0.99	-1.18
pH - H2O (SC)	-0.95	-0.70	-0.28	-1.00
Ca (M3)	0.03	0.46	0.01	0.65
Cu (M3)	-0.90	-0.01	-0.35	0.11
Fe (M3)	-0.02	-0.30	-1.23	-0.48
K (M3)	-0.11	-0.54	-0.41	0.15
Mg (M3)	-0.52	0.70	-0.54	-1.91
Mn (M3)	-0.30	0.99	0.52	0.67
Na (M3)	#	#	#	#
P (M3)	-1.09	-0.65	-0.73	-0.49
Zn (M3)	1.14	0.74	0.74	0.84
SIRI (119)				
K (CC)	0.71	1.62	-4.12	0.34
Mg (CC)	-25.76	-13.54	-18.81	-21.97
P (CC)	#	#	-	-
EC-SC (ISO 11265) (SC)	0.91	2.50	2.13	2.43
pH - CaCl2 (SC)	0.61	9.04	2.86	2.77
pH - H2O (SC)	1.98	1.05	0.19	0.38
Ca (AA)	-0.60	7.44	-0.55	5.31
CEC (AA)	2.23	0.96	0.66	1.52
K (AA)	-0.32	1.06	-0.99	-0.45
Mg (AA)	1.41	-0.50	0.74	-0.46
UAK MARDI (120)				
N (AE)	-1.28	-3.09	-0.89	-2.09
pH - H2O (SC)	-1.03	2.26	-3.30	0.57
TC=Total C (org.+inorg.) (SC)	0.81	1.39	0.14	0.28
Ca (AA)	0.19	-1.04	-1.48	-1.20
CEC (AA)	0.09	-0.69	-0.69	-0.88
K (AA)	0.32	-0.92	0.80	0.24
Mg (AA)	-0.10	-1.30	-1.18	-0.82
Na (AA)	7.06	2.68	3.25	-0.88
P - Bray (as P) (PHOS)	0.33	-0.75	0.64	-0.51
VICTORY (123)				
Al (RT)	-2.73	-1.80	0.41	0.91
Ba (RT)	-0.50	-1.46	1.33	0.47
Be (RT)	#	#	#	#
Ca (RT)	-1.19	-0.40	-0.09	-0.41
Cd (RT)	1.06	#	-0.34	-0.02
Co (RT)	0.73	1.17	0.04	0.43
Cr (RT)	0.47	9.78	0.08	-1.49

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
VICTORY (123) (cont.)					
Cu (RT)	-1.20	-0.37	-0.76	-1.44	
F (RT)	#	#	#	#	
Fe (RT)	-0.59	-0.76	0.04	-0.25	
Ga (RT)	-3.06	-0.20	4.53	2.72	
Hg (RT)	6.14	4.16	2.37	1.71	
K (RT)	0.08	-0.84	0.53	0.59	
Li (RT)	0.74	#	0.68	0.47	
Mg (RT)	-0.97	<	-0.48	-0.28	
Mn (RT)	-0.69	1.30	0.69	1.96	
Mo (RT)	<	#	<	<	
Na (RT)	-1.78	-4.07	-1.53	-2.45	
Nb (RT)	4.66	1.00	11.91	1.29	
Ni (RT)	2.80	2.32	2.74	1.19	
P (RT)	-1.69	-1.21	-0.37	-1.99	
Pb (RT)	-0.36	-0.45	-0.05	0.11	
Rb (RT)	1.72	0.58	2.39	1.30	
S (RT)	-0.70	-0.35	0.10	0.02	
Sc (RT)	0.52	#	0.70	0.65	
Si (RT)	0.83	1.01	-0.17	-0.26	
Sr (RT)	1.41	0.76	1.27	1.20	
Th (RT)	-0.79	<	0.21	0.94	
Ti (RT)	1.76	0.65	2.73	1.82	
U (RT)	-0.02	<	-1.80	-0.24	
V (RT)	0.21	<	0.01	0.31	
Y (RT)	-0.38	-0.15	0.25	-0.22	
Zn (RT)	3.99	5.61	0.83	2.53	
Zr (RT)	1.15	0.05	0.69	0.90	
Be (AR)	-0.69	#	0.75	-1.42	
Cd (AR)	-1.32	-1.20	-1.49	-0.60	
Co (AR)	-2.12	<	-2.62	-3.62	
Cu (AR)	-0.40	1.47	0.09	-2.45	
Li (AR)	#	#	#	#	
Ni (AR)	1.60	2.74	0.09	-1.07	
Pb (AR)	3.53	3.80	2.63	1.04	
Sc (AR)	#	#	#	#	
V (AR)	-0.20	2.74	-1.27	-1.53	
Zn (AR)	1.22	6.16	-0.21	-0.60	
Org.matter (L.O.I.) (SC)	-0.76	1.71	-0.51	-0.30	
TC=Total C (org.+inorg.) (SC)	2.49	-0.16	1.22	1.36	
TIC=Tot.Inorg C(CaCO3) (SC)	-1.24	<	<	<	
TOC=Total Org. C (SC)	2.73	0.20	1.39	1.50	
ELAEIS.S (130)					
C - org others (W&B a.o.) (SC)	0.35	-0.29	-	0.12	
pH - H2O (SC)	-1.46	-1.36	-1.94	-1.89	
Al (AA)	-	-	-	#	
Ca (AA)	-0.08	-0.14	1.32	0.83	
CEC (AA)	-0.21	-0.32	-0.51	-0.81	
K (AA)	-0.06	0.07	0.03	0.35	
Mg (AA)	0.20	0.31	0.75	0.75	
Na (AA)	-0.08	-0.17	0.57	-0.53	
P - Bray (as P) (PHOS)	4.23	-	1.97	3.30	
BCIMUZPOL (132)					
Ca (AE)	-6.37	-6.78	-9.75	-8.15	
Cu (AE)	-0.16	2.55	0.56	1.54	
Fe (AE)	3.40	3.33	4.21	3.75	
K (AE)	3.82	7.50	4.89	-3.57	
Li (AE)	#	#	#	#	
Mg (AE)	-1.90	173.18	-2.94	-8.06	
Mn (AE)	-37.26	-11.15	-18.63	-7.78	
N (AE)	2.58	4.08	0.48	1.64	
P (AE)	-6.26	26.25	6.01	17.73	
Pb (AE)	4.47	15.66	0.03	1.67	
Zn (AE)	0.14	0.12	4.37	1.00	
K (CC)	-1.67	-0.11	-1.52	-17.66	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
BCIMUZPOL (132) (cont.)					
Mg (CC)	-14.10	-9.08	5.47	-10.34	
Mn (CC)	#	#	#	#	
N - NH4 (as N) (CC)	2.30	9.28	3.99	1.19	
N - NO3 (as N) (CC)	-0.09	0.07	3.31	1.41	
P (CC)	#	#	#	#	
Zn (CC)	#	#	#	#	
Org.matter (L.O.I.) (SC)	2.68	-0.17	1.11	1.34	
pH - CaCl2 (SC)	-6.64	8.34	1.45	3.54	
pH - H2O (SC)	-3.83	3.59	0.04	0.03	
pH - KCl (SC)	-4.99	8.14	2.85	2.03	
TOC=Total Org. C (SC)	-0.15	-2.32	1.10	2.26	
LABVAL (133)					
N - elementary (RT)	-0.71	0.06	-0.68	0.60	
TC=Total C (org.+inorg.) (SC)	1.65	1.50	1.27	1.72	
CPH340XYC (134)					
C - elementary (RT)	-0.12	1.02	-0.99	0.03	
N - elementary (RT)	-0.03	0.32	-1.14	-0.58	
Ag (AR)	#	#	#	#	
Al (AR)	-0.68	-0.43	-0.79	-0.57	
As (AR)	0.07	0.56	-0.14	-0.02	
Ba (AR)	-0.21	#	-0.25	-0.65	
Be (AR)	0.62	#	2.23	0.80	
Ca (AR)	-0.51	-2.07	-0.35	-0.47	
Cd (AR)	0.78	0.23	0.78	0.13	
Co (AR)	0.63	-0.82	0.66	0.06	
Cr (AR)	0.06	0.72	-0.10	-0.01	
Cu (AR)	0.31	-0.90	0.74	0.54	
Fe (AR)	0.43	-0.41	0.36	0.42	
Hg (AR)	-1.09	-1.75	-1.69	-1.44	
K (AR)	-1.90	-1.01	-0.77	-0.70	
Mg (AR)	-0.44	-1.22	-0.52	-0.18	
Mn (AR)	0.50	-0.14	0.68	0.49	
Mo (AR)	0.63	-0.12	0.88	1.11	
Na (AR)	-1.54	-0.97	-0.85	-0.95	
Ni (AR)	0.70	0.46	0.41	0.06	
P (AR)	-0.63	-0.76	-0.22	-0.18	
Pb (AR)	0.68	-7.51	1.07	1.97	
Rb (AR)	#	#	#	#	
Sb (AR)	#	#	#	#	
Tl (AR)	#	#	#	#	
U (AR)	#	#	#	#	
V (AR)	0.05	-0.17	0.14	-0.11	
Zn (AR)	0.92	-0.34	0.72	0.56	
TOC=Total Org. C (SC)	-0.02	1.80	-0.86	0.05	
XGCALAFIGA (135)					
N - elementary (RT)	1.70	-1.50	1.38	1.95	
B (AE)	#	#	#	#	
Ca (AE)	-0.63	-2.20	0.54	0.16	
Co (AE)	0.20	0.06	0.41	-0.10	
Cr (AE)	0.11	-1.36	1.14	0.38	
Cu (AE)	-1.43	-2.07	-0.96	-0.66	
Fe (AE)	-0.85	-1.17	-0.30	-0.43	
K (AE)	-0.56	-0.66	0.88	0.46	
Mg (AE)	0.51	-0.30	0.75	0.38	
Mn (AE)	-2.20	-1.45	0.11	-0.33	
Na (AE)	-0.15	2.66	1.06	-0.05	
Ni (AE)	-0.62	-3.24	0.41	0.18	
P (AE)	-1.04	-0.73	-1.50	-1.15	
Pb (AE)	-0.16	-1.00	-0.07	-0.88	
Zn (AE)	-1.83	-0.97	-1.25	-0.56	
B (AR)	#	-	#	#	
Ca (AR)	-0.11	0.41	0.40	0.51	
Co (AR)	-0.70	-0.10	-0.49	-0.75	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
XGCALAFIGA (135) (cont.)					
Cr (AR)	-0.33	-0.88	-0.23	-0.47	
Cu (AR)	-1.39	-0.67	-0.73	-0.80	
Fe (AR)	-0.90	-1.13	-0.71	-0.81	
K (AR)	-0.40	0.41	0.16	-0.05	
Mg (AR)	-0.11	0.54	0.45	0.11	
Mn (AR)	-0.89	-0.69	-0.20	-0.64	
Na (AR)	-0.60	-0.59	-0.10	-0.25	
Ni (AR)	-0.91	-2.08	-0.42	-0.57	
P (AR)	-1.04	-1.69	-0.62	-0.86	
Pb (AR)	-0.14	-1.74	-0.16	-0.26	
Zn (AR)	-1.92	-2.21	-1.34	-1.14	
EC-SC (ISO 11265) (SC)	-0.63	-0.63	-0.64	-0.73	
Fraction < 2 µm (SC)	-0.11	-0.25	0.23	0.07	
Fraction < 63 µm (SC)	0.38	0.56	0.31	0.47	
Fraction > 63 µm (SC)	-0.24	-0.61	-0.28	-0.59	
Org.matter (L.O.I.) (SC)	-0.04	1.94	-0.85	-1.14	
pH - H2O (SC)	0.33	-0.04	0.50	-0.07	
pH - KCl (SC)	-0.36	2.55	1.72	1.92	
TC=Total C (org.+inorg.) (SC)	0.52	-0.32	0.83	1.00	
TIC=Tot.Inorg C(CaCO3) (SC)	-1.61	-	-	-	
Ca (AA)	0.73	0.14	0.09	0.04	
CEC (AA)	0.41	0.07	0.11	-	
K (AA)	-0.83	0.07	-0.48	-0.57	
Mg (AA)	0.20	0.31	0.00	0.01	
Na (AA)	-0.50	-0.74	-0.27	-0.34	
P - Olsen (as P) (PHOS)	-0.38	-0.18	-0.67	-0.85	
HHAFU (136)					
As (AR)	1.05	<	2.41	0.76	
B (AR)	#	<	#	#	
Ba (AR)	-0.12	#	0.34	-0.43	
Be (AR)	0.35	<	1.00	0.49	
Ca (AR)	0.68	1.69	1.23	1.14	
Cd (AR)	0.11	<	0.42	<	
Co (AR)	1.01	<	1.28	0.96	
Cr (AR)	0.44	0.99	0.71	0.38	
Cu (AR)	0.89	5.90	0.56	0.80	
Fe (AR)	0.37	3.97	0.47	0.35	
Hg (AR)	-0.70	<	-0.09	-0.85	
K (AR)	0.38	1.16	0.65	0.18	
Mg (AR)	0.33	0.59	0.63	0.33	
Mn (AR)	0.36	2.44	1.15	0.80	
Mo (AR)	1.15	<	<	<	
Na (AR)	-0.94	<	1.57	0.71	
Ni (AR)	0.70	<	1.89	0.39	
P (AR)	0.11	0.69	0.77	0.75	
Pb (AR)	0.25	0.76	0.75	0.17	
S (AR)	2.73	1.71	2.34	2.67	
Sn (AR)	#	<	#	#	
Sr (AR)	#	#	#	#	
Ti (AR)	#	#	#	#	
V (AR)	0.17	0.11	0.96	1.10	
Zn (AR)	0.86	0.70	1.45	0.85	
EC-SC (ISO 11265) (SC)	0.25	-0.06	0.29	-0.05	
Org.matter (L.O.I.) (SC)	-0.01	0.71	1.13	0.65	
pH - CaCl2 (SC)	-0.08	-0.36	-0.09	-0.30	
pH - H2O (SC)	0.71	0.75	0.30	0.28	
KEMIRAKEMI (140)					
Al (RT)	0.05	0.35	1.00	0.91	
As (RT)	-5.61	52.75	-	-10.16	
Ba (RT)	0.67	-0.88	2.46	-0.43	
Ca (RT)	0.12	-0.16	0.91	0.68	
Cd (RT)	-	-	16.24	21.24	
Ce (RT)	-2.31	-0.80	-1.75	-3.97	
Co (RT)	2.00	-0.73	1.82	2.55	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
KEMIRAKEMI (140) (cont.)				
Cr (RT)	0.21	-0.14	0.93	0.45
Cu (RT)	0.08	-2.28	-1.37	2.61
Fe (RT)	0.21	0.77	2.64	1.47
Ga (RT)	2.18	-0.56	2.38	0.92
K (RT)	0.08	-0.38	1.32	0.84
La (RT)	-0.71	22.41	1.55	-0.46
Mg (RT)	-0.17	5.64	-0.74	-1.39
Mn (RT)	-0.33	0.11	1.34	1.00
N - elementary (RT)	-2.74	-2.15	-0.30	-2.39
Na (RT)	0.22	0.10	0.34	0.07
Nd (RT)	#	#	#	#
Ni (RT)	0.72	1.56	1.72	1.49
P (RT)	-0.06	-0.30	0.75	0.83
Pb (RT)	1.46	2.56	-0.23	1.89
Rb (RT)	0.05	2.53	1.33	0.84
S (RT)	0.13	-0.80	0.90	0.58
Sc (RT)	-5.25	#	3.79	-2.89
Si (RT)	0.53	0.52	0.88	0.32
Sr (RT)	-0.31	-0.88	1.11	0.80
Th (RT)	2.46	0.76	0.51	-0.58
Ti (RT)	0.09	-0.21	2.15	0.96
V (RT)	-0.59	-2.10	0.31	1.80
Y (RT)	-0.28	0.69	0.94	2.18
Zn (RT)	-0.56	-1.58	0.83	0.37
Zr (RT)	-0.38	0.05	0.69	0.18
TYRKEY (145)				
Al (RT)	-5.51	-1.05	-1.78	-2.92
Ca (RT)	-0.31	2.09	0.23	5.47
Cd (RT)	0.67	#	0.67	0.42
Co (RT)	-1.42	<	-1.24	-0.96
Cr (RT)	-0.96	-0.34	-0.77	-0.80
Cu (RT)	1.57	2.21	0.31	0.48
Fe (RT)	-3.24	-2.50	-0.92	-0.97
Hg (RT)	-2.34	-0.77	0.87	-1.68
K (RT)	1.16	0.32	2.81	0.74
Mg (RT)	0.66	0.55	0.88	0.73
Mn (RT)	0.32	0.33	-0.79	-2.05
Na (RT)	0.40	0.05	1.28	1.15
Ni (RT)	-0.85	<	-1.52	-1.78
Pb (RT)	1.23	0.05	0.77	2.25
Si (RT)	-0.51	-0.44	0.18	0.32
Ti (RT)	2.54	-1.36	0.22	-0.30
Zn (RT)	2.57	0.46	0.61	1.45
Cd (AE)	-1.39	-0.04	0.10	<
Co (AE)	-1.31	<	-1.82	-1.54
Cr (AE)	-1.33	0.16	-2.17	-1.31
Cu (AE)	1.22	1.19	1.98	0.58
Mn (AE)	0.28	0.67	0.85	-0.19
Ni (AE)	6.23	<	1.65	-1.00
P (AE)	-2.77	-1.59	-1.04	0.98
Pb (AE)	2.32	-0.32	3.27	1.83
S (AE)	2.36	-0.92	-3.12	-3.45
Zn (AE)	0.91	2.13	0.74	-0.33
GROTHE_XRF (149)				
Al (RT)	0.45	-0.04	0.14	0.14
As (RT)	-0.82	<	1.83	-0.35
Ba (RT)	-0.23	-0.50	0.19	-0.20
Bi (RT)	<	<	<	<
Ca (RT)	0.24	-0.17	0.32	0.32
Ce (RT)	0.68	<	0.58	0.70
Cr (RT)	-0.09	<	-0.40	-1.06
Fe (RT)	0.42	-0.34	0.38	0.19
Ga (RT)	0.61	<	-1.68	-1.78
K (RT)	-0.21	-0.68	0.20	0.10

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
GROTHE_XRF (149) (cont.)					
Mg (RT)	-0.05	0.19	-0.17	-0.22	
Mn (RT)	0.83	-2.96	1.02	0.02	
Mo (RT)	<	<	<	<	
Na (RT)	-0.31	-0.91	-0.54	-0.72	
Nb (RT)	0.88	1.72	0.29	-0.67	
Nd (RT)	<	<	#	#	
Ni (RT)	1.19	<	-2.02	-3.92	
P (RT)	-0.08	-0.31	0.35	-0.45	
Pb (RT)	0.41	<	0.49	0.65	
Rb (RT)	0.24	-0.29	0.73	0.49	
Sc (RT)	<	<	-2.22	-1.22	
Si (RT)	0.16	0.65	-0.22	-0.25	
Sn (RT)	<	<	<	<	
Sr (RT)	-4.21	1.25	-2.94	-0.54	
Th (RT)	<	<	-2.48	-0.33	
Ti (RT)	0.23	-0.59	-0.01	0.06	
U (RT)	<	<	<	<	
V (RT)	0.63	1.74	0.54	0.41	
Y (RT)	1.50	2.42	-0.19	0.54	
Zn (RT)	5.61	0.43	0.11	-0.45	
Zr (RT)	0.80	-1.20	-2.44	-1.78	
MELILAB (157)					
Ca (AE)	0.33	-0.39	0.62	0.99	
Cd (AE)	-0.29	<	0.05	<	
Co (AE)	-0.80	0.31	-0.21	0.17	
Cr (AE)	0.17	0.04	-0.18	0.85	
Cu (AE)	-0.14	-0.26	0.15	0.98	
Fe (AE)	1.51	0.08	-0.78	-0.52	
Mg (AE)	1.17	0.47	0.90	0.81	
Mn (AE)	-0.26	-0.05	-0.10	-0.69	
Ni (AE)	0.41	9.67	0.06	0.55	
P (AE)	0.13	0.05	0.57	0.48	
Pb (AE)	-1.84	-0.58	-1.12	-0.89	
S (AE)	-0.63	-0.67	1.10	2.61	
Zn (AE)	1.44	-0.52	-0.53	1.34	
C - org others (W&B a.o.) (SC)	0.39	0.02	0.28	0.96	
EC-SC (ISO 11265) (SC)	-0.03	1.59	-0.85	-4.07	
Fraction < 2 µm (SC)	-4.76	-0.06	-1.50	-0.72	
pH - CaCl2 (SC)	-0.26	0.75	-0.60	-1.32	
pH - H2O (SC)	0.58	0.45	0.24	0.52	
pH - KCl (SC)	0.29	-0.35	0.07	-0.21	
TIC=Tot.Inorg C(CaCO3) (SC)	-0.47	-	-	-	
POVLT (158)					
N - NH4 (as N) (CC)	-1.47	-0.49	-1.67	-2.00	
N - NO3 (as N) (CC)	0.27	0.24	0.33	0.05	
EC-SC (ISO 11265) (SC)	1.16	1.29	1.91	1.65	
pH - KCl (SC)	1.40	0.18	0.69	0.80	
TOC=Total Org. C (SC)	0.89	1.52	0.14	0.48	
MERLIN (159)					
As (AE)	<	<	0.67	<	
Cd (AE)	-1.32	<	0.85	<	
Co (AE)	-1.76	<	-1.90	-0.65	
Cr (AE)	-0.77	0.62	0.51	0.20	
Cu (AE)	0.39	<	1.47	0.40	
Hg (AE)	-0.33	<	-0.36	1.27	
Ni (AE)	-3.27	<	-0.66	0.21	
Pb (AE)	-2.28	<	-1.81	-1.24	
Zn (AE)	0.16	0.74	0.50	0.13	
Cd (NA)	-0.45	-0.98	0.02	<	
Co (NA)	-1.42	3.15	-0.54	-0.36	
Cr (NA)	-0.10	1.89	-0.12	0.25	
Cu (NA)	1.37	3.90	1.52	1.13	
Hg (NA)	0.35	<	1.52	1.27	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
MERLIN (159) (cont.)				
Ni (NA)	0.26	<	-0.18	0.04
Pb (NA)	1.64	4.66	0.33	0.32
Zn (NA)	2.21	4.71	1.80	1.26
Cd (SN)	<	<	0.04	<
Cu (SN)	0.30	1.65	2.50	<
Ni (SN)	20.98	<	20.22	42.72
Pb (SN)	<	<	<	<
Zn (SN)	<	0.29	-5.23	0.66
JMCK (160)				
Ag (RT)	<	<	<	<
Al (RT)	0.24	0.43	0.62	0.69
As (RT)	0.10	-0.59	0.35	-0.13
Ba (RT)	-0.58	-0.98	-0.70	-0.86
Bi (RT)	<	<	<	<
Br (RT)	-0.97	1.02	0.20	1.00
Ca (RT)	-0.31	0.43	0.54	0.60
Cd (RT)	<	<	<	<
Ce (RT)	-0.56	-0.47	-0.16	-0.19
Co (RT)	0.82	<	0.13	-0.37
Cr (RT)	-0.28	0.68	-0.32	-0.48
Cs (RT)	#	#	#	#
Cu (RT)	-0.04	0.50	0.85	0.25
Fe (RT)	-2.10	0.11	-0.66	-0.65
Ga (RT)	-0.25	-2.28	0.56	0.60
Ge (RT)	<	<	#	<
I (RT)	#	#	#	#
K (RT)	-0.04	0.35	0.65	0.53
La (RT)	-0.38	-0.38	0.73	0.64
Mg (RT)	0.24	1.11	0.10	-0.01
Mn (RT)	-0.69	0.77	0.58	0.25
Mo (RT)	2.03	<	#	2.36
Na (RT)	-0.60	0.01	-0.81	-0.44
Nb (RT)	-0.67	-0.53	-0.38	-0.17
Nd (RT)	#	#	#	#
Ni (RT)	0.27	-0.51	0.95	0.53
P (RT)	0.63	0.55	0.75	-0.41
Pb (RT)	0.15	-0.12	0.97	0.56
Rb (RT)	-0.49	0.06	0.02	-0.17
Sb (RT)	#	<	1.52	<
Sc (RT)	1.34	#	-0.02	-0.09
Se (RT)	<	<	#	<
Si (RT)	0.34	-0.17	0.45	0.47
Sn (RT)	0.38	#	-0.51	-0.56
Sr (RT)	-0.45	0.79	0.00	0.02
Th (RT)	-0.61	<	0.81	1.00
Ti (RT)	0.76	1.07	0.12	0.25
Tl (RT)	<	<	<	<
U (RT)	0.71	<	0.55	1.57
V (RT)	0.34	-0.49	-0.83	-0.23
W (RT)	#	#	#	#
Y (RT)	-0.59	-0.34	0.33	-0.68
Zn (RT)	0.52	-0.43	0.58	0.65
Zr (RT)	-0.58	0.24	0.63	-0.28
pH - CaCl2 (SC)	-0.17	0.47	-0.22	-0.55
TOC=Total Org. C (SC)	0.10	-2.29	1.04	1.50
CHECKSOL (161)				
Cd (NA)	<	<	-2.59	<
Cr (NA)	-0.34	<	-2.46	-0.91
Cu (NA)	-0.86	-2.96	-2.24	-0.74
Ni (NA)	-0.65	<	-2.09	-0.97
Pb (NA)	0.37	0.78	-0.83	-0.84
Zn (NA)	-0.25	0.35	-0.84	-1.07

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
BODEN ZH (162)				
Cd (NA)	0.00	0.30	-0.86	<
Co (NA)	0.35	-0.28	0.80	0.97
Cr (NA)	0.79	-0.54	1.10	0.77
Cu (NA)	0.41	-2.49	-0.99	0.91
Hg (NA)	-0.97	-0.38	-0.49	-0.65
Ni (NA)	0.39	-2.11	0.47	0.51
Pb (NA)	-0.47	-2.01	1.10	-0.05
Zn (NA)	0.57	-0.55	0.22	0.89
Cd (SN)	<	<	0.69	<
Cu (SN)	1.87	0.71	0.89	<
Ni (SN)	<	<	-1.22	-0.48
Pb (SN)	<	<	<	<
Zn (SN)	<	0.22	-0.79	-1.31
ECOSOIL (165)				
N - elementary (RT)	-0.33	-2.41	0.82	0.82
Al (AR)	-1.03	-1.20	-0.81	-0.74
As (AR)	-1.07	<	-3.16	-1.45
B (AR)	#	#	#	#
Ba (AR)	-7.30	<	-6.70	-5.59
Ca (AR)	-1.77	-0.36	-1.16	-1.00
Cd (AR)	4.81	7.56	1.96	5.96
Co (AR)	-0.61	0.21	-0.73	-0.82
Cr (AR)	-2.07	-1.09	-1.34	-1.44
Cu (AR)	-3.70	-5.13	-2.29	-2.45
Fe (AR)	0.06	0.57	-0.04	-0.16
Hg (AR)	0.07	1.08	0.36	0.64
K (AR)	-2.29	-1.80	-1.13	-1.21
Mg (AR)	-2.46	0.08	-1.78	-1.58
Mn (AR)	-2.59	<	-4.94	-5.08
Mo (AR)	0.31	<	-0.81	-1.74
N (AR)	#	#	#	#
Na (AR)	-0.29	<	-0.92	-0.79
Ni (AR)	-1.37	-4.08	-1.46	-1.10
P (AR)	-2.36	-3.40	-1.60	-1.02
Pb (AR)	1.02	0.40	0.66	3.77
Ti (AR)	#	#	#	#
V (AR)	-1.52	-2.72	-1.10	-1.72
Zn (AR)	-1.53	1.53	-1.33	-1.01
EC-SC (ISO 11265) (SC)	0.06	1.87	1.92	-0.26
pH - CaCl2 (SC)	-0.17	-0.77	-0.48	-1.83
pH - H2O (SC)	-0.69	-1.06	-0.38	0.13
pH - KCl (SC)	-0.30	-1.11	-0.24	-0.76
TIC=Tot.Inorg C(CaCO3) (SC)	-0.56	<	<	<
TOC=Total Org. C (SC)	0.27	-0.42	0.01	0.14
Moisture-content (OD)	-0.64	-0.73	-1.07	-3.20
ETMKK (166)				
pH - KCl (SC)	-0.62	0.08	-0.14	-0.09
Ca (M3)	0.31	-0.11	-0.26	-0.47
Cu (M3)	1.34	1.81	-1.72	-0.85
K (M3)	0.06	-0.29	0.05	0.17
Mg (M3)	-0.40	0.12	-0.57	0.77
Mn (M3)	4.23	4.14	1.91	2.00
P (M3)	0.85	0.73	-1.94	-1.05
NSSL (167)				
N - elementary (RT)	4.26	4.21	3.13	3.92
Fraction < 2 µm (SC)	1.12	-0.69	1.42	0.88
pH - CaCl2 (SC)	-1.39	-1.32	-0.48	-0.30
pH - H2O (SC)	-0.82	-2.15	-0.17	-0.81
TC=Total C (org.+inorg.) (SC)	-1.30	-1.72	-0.45	-0.69
TIC=Tot.Inorg C(CaCO3) (SC)	0.64	-	-	-
Ca (AA)	1.58	0.52	0.91	0.73
CEC (AA)	-0.42	-0.28	-0.15	0.02
K (AA)	0.32	-0.43	0.67	-0.11

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
NSSL (167) (cont.)					
Mg (AA)	2.25	-0.09	0.14	0.64	
Na (AA)	-	-	-1.77	0.78	
P (M3)	20.18	-4.15	-0.14	-1.43	
P - Bray (as P) (PHOS)	1.48	0.67	0.07	-0.14	
P - Olsen (as P) (PHOS)	-0.70	0.54	-1.17	-0.33	
PLATINA222 (172)					
K (RT)	-33.91	-21.71	-26.93	-25.02	
N - elementary (RT)	-0.63	1.75	-0.54	0.20	
P (RT)	-4.01	-1.97	-17.23	0.66	
As (AE)	-3.40	-0.76	-1.17	11.10	
Cd (AE)	-0.29	<	0.85	<	
Cu (AE)	-1.83	-1.77	-1.50	-1.15	
Fe (AE)	0.55	-1.55	3.56	1.77	
Hg (AE)	<	<	1.87	0.31	
Mn (AE)	-1.34	-3.14	-0.23	-0.51	
Ni (AE)	-0.53	<	-1.17	-1.10	
Pb (AE)	-0.01	-1.13	-0.39	-0.53	
Zn (AE)	0.84	-1.13	1.37	0.03	
C - org others (W&B a.o.) (SC)	0.30	0.90	0.26	0.45	
pH - CaCl2 (SC)	-3.58	-1.60	-2.02	-1.58	
pH - H2O (SC)	0.03	1.11	0.04	0.28	
pH - KCl (SC)	-3.75	-2.50	-2.82	-2.89	
TIC=Tot.Inorg C(CaCO3) (SC)	0.91	-	-	-	
Ca (AA)	-1.43	-0.86	-0.56	-1.82	
CEC (AA)	1.52	1.93	0.72	1.30	
K (AA)	-0.58	-0.43	-0.48	-1.60	
Mg (AA)	-0.98	-0.09	-0.19	-0.76	
Na (AA)	0.76	0.11	0.40	-1.30	
P - Olsen (as P) (PHOS)	1.86	-0.90	1.37	2.07	
RISWC (174)					
N - elementary (RT)	0.12	-0.20	-1.10	-0.25	
C - org others (W&B a.o.) (SC)	-0.71	-0.77	-0.59	-0.41	
pH - KCl (SC)	0.48	0.62	0.48	0.58	
Ca (BC)	#	#	#	-	
CEC (BC)	0.13	#	0.38	-	
K (BC)	#	#	#	-	
Mg (BC)	#	#	#	-	
Ca (M3)	-0.17	0.56	-1.45	1.03	
K (M3)	-0.58	0.48	-0.97	-0.28	
Mg (M3)	0.21	-0.22	-0.22	0.86	
P (M3)	-0.13	0.26	-0.34	-1.05	
TEMAD (175)					
Al (RT)	-0.68	0.06	-0.45	-0.24	
As (RT)	-0.11	<	-2.66	-7.73	
Ba (RT)	0.96	-0.06	1.19	1.37	
Bi (RT)	<	<	<	<	
Br (RT)	10.05	11.85	3.72	1.97	
Ca (RT)	-0.31	-1.11	0.40	0.68	
Cd (RT)	<	<	<	<	
Ce (RT)	0.24	<	-0.85	-1.42	
Co (RT)	0.00	<	0.69	2.23	
Cr (RT)	0.21	3.75	1.29	2.28	
Cu (RT)	1.57	0.09	3.83	2.06	
F (RT)	#	#	#	#	
Fe (RT)	-35.03	<	-23.34	-19.52	
K (RT)	-0.28	-0.01	-0.06	0.03	
La (RT)	7.77	<	-0.04	0.27	
Mg (RT)	-0.46	0.45	-0.68	-0.53	
Mn (RT)	0.41	1.37	1.19	1.89	
Mo (RT)	<	<	<	<	
Na (RT)	0.27	1.11	-0.03	-0.33	
Nb (RT)	-0.23	<	-0.38	1.56	
Nd (RT)	#	<	#	#	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
TEMAD (175) (cont.)					
Ni (RT)	-3.00	0.87	-1.10	1.34	
P (RT)	0.59	0.33	0.63	0.42	
Pb (RT)	1.70	1.98	3.06	4.96	
Rb (RT)	4.29	-2.19	2.09	1.45	
S (RT)	0.48	3.61	-1.82	-1.37	
Sb (RT)	<	<	<	<	
Sc (RT)	-1.64	<	-2.63	-2.55	
Se (RT)	<	<	<	<	
Si (RT)	0.83	0.04	0.71	1.08	
Sn (RT)	<	<	<	<	
Sr (RT)	0.29	-1.10	-1.40	-0.20	
Th (RT)	0.87	<	-2.48	-2.86	
Ti (RT)	0.34	1.07	0.66	0.69	
Tl (RT)	<	<	#	#	
U (RT)	<	<	<	<	
V (RT)	1.09	1.02	0.72	0.63	
Y (RT)	-0.59	<	-0.19	-0.48	
Zn (RT)	0.39	-0.56	0.72	0.83	
Zr (RT)	12.94	7.46	7.32	10.72	
DOLE (177)					
C - org others (W&B a.o.) (SC)	-0.49	-0.83	-0.34	-1.49	
pH - CaCl2 (SC)	-0.96	-0.63	-1.25	-2.09	
pH - H2O (SC)	-0.48	0.57	-0.95	-1.30	
pH - KCl (SC)	-1.67	-1.54	-1.89	-2.10	
B (M3)	#	#	#	#	
Ca (M3)	5.40	1.08	0.11	-0.64	
Fe (M3)	-0.85	-0.60	-2.34	-1.81	
K (M3)	1.21	0.82	1.66	0.89	
Mg (M3)	4.10	-0.13	1.60	-3.78	
Mn (M3)	0.84	-0.11	-0.24	-0.04	
P (M3)	-0.06	0.09	-1.15	0.47	
Zn (M3)	-1.05	-0.85	-1.00	-0.31	
HILL (180)					
B (AR)	<	<	#	#	
Ca (AR)	0.21	-0.36	0.09	-0.38	
Cd (AR)	0.32	-0.41	0.12	-0.37	
Co (AR)	-0.77	-0.93	-2.18	-3.00	
Cu (AR)	-1.05	0.59	-0.90	-3.01	
Fe (AR)	-0.79	-0.89	0.11	-0.18	
K (AR)	-3.31	-0.75	-1.80	-1.97	
Mg (AR)	0.46	-0.98	-1.61	-1.50	
Mn (AR)	0.71	0.35	-0.45	-1.11	
Mo (AR)	-0.06	<	-0.03	-0.63	
Na (AR)	-2.14	<	-1.20	-0.82	
P (AR)	-0.42	1.24	-0.73	-1.44	
S (AR)	-0.68	0.21	-0.01	-0.27	
Se (AR)	<	<	0.37	#	
Zn (AR)	-0.85	0.03	-1.07	-2.14	
EC-SC (ISO 11265) (SC)	-0.94	-1.94	-0.64	-0.05	
pH - CaCl2 (SC)	0.35	0.06	-0.48	2.26	
pH - H2O (SC)	-0.82	-0.34	-1.21	-0.31	
TC=Total C (org.+inorg.) (SC)	-0.74	1.66	-0.60	-1.05	
Ca (AA)	-0.23	-0.17	-0.25	-0.01	
CEC (AA)	-0.04	0.77	0.13	0.64	
K (AA)	-0.96	0.56	0.16	-0.57	
Mg (AA)	-0.29	0.31	-0.07	-0.05	
Na (AA)	-0.50	<	-0.43	-0.73	
Al (M3)	#	#	#	#	
B (M3)	#	<	<	<	
Ca (M3)	-2.80	-1.44	-0.23	-1.57	
Cu (M3)	-2.47	-1.47	0.78	3.51	
Fe (M3)	-3.71	-2.13	1.26	2.09	
K (M3)	-1.61	-1.88	-0.49	-0.63	
Mg (M3)	-2.02	-3.15	-0.48	0.00	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
HILL (180) (cont.)					
Mn (M3)	-2.67	-2.00	-0.32	0.87	
Na (M3)	#	#	#	#	
P (M3)	-0.89	-1.77	1.32	2.94	
Zn (M3)	-1.69	-1.34	-0.02	0.11	
P - Olsen (as P) (PHOS)	-0.59	-0.62	0.46	0.66	
SCSF (184)					
Cd (NA)	-0.12	0.30	-1.24	<	
Cr (NA)	-0.57	<	-1.34	-0.91	
Cu (NA)	-0.65	0.04	0.00	-0.85	
Ni (NA)	-0.07	<	-0.38	-0.42	
Pb (NA)	-0.12	0.50	0.02	-0.68	
Zn (NA)	-0.78	-0.42	-0.84	-0.69	
ALNN (185)					
N - NH4 (as N) (CC)	-3.23	-	-	-3.69	
N - NO3 (as N) (CC)	-3.92	5.58	-1.67	-1.18	
Fraction < 16 µm (SC)	0.14	1.61	0.86	0.64	
Fraction < 2 µm (SC)	0.31	1.69	0.42	0.33	
Org.matter (L.O.I.) (SC)	-0.18	0.01	-0.71	-0.76	
pH - KCl (SC)	1.01	1.48	1.72	2.48	
TIC=Tot.Inorg C(CaCO3) (SC)	0.51	<	<	<	
S (AF)	#	#	#	#	
P - AL (as P) (PHOS)	#	#	#	#	
P - w (as P) (PHOS)	#	#	#	#	
CSS (186)					
pH - H2O (SC)	0.46	0.03	0.61	0.67	
pH - KCl (SC)	-1.41	1.37	2.23	2.92	
Ca (AC)	#	#	#	#	
K (AC)	#	#	#	#	
Mg (AC)	#	#	#	#	
Na (AC)	#	#	#	#	
P - Olsen (as P) (PHOS)	-1.13	-1.67	-0.07	0.69	
EXACT (190)					
As (AE)	-1.43	<	-0.39	-1.44	
Ba (AE)	-0.83	<	-0.71	-0.73	
Cd (AE)	-1.32	<	1.12	<	
Co (AE)	0.30	<	-0.17	-0.58	
Cr (AE)	-0.82	<	-1.25	-0.71	
Cu (AE)	-0.54	-1.14	0.61	-1.27	
Hg (AE)	<	<	-2.81	<	
Ni (AE)	-0.06	<	-0.73	-0.64	
Pb (AE)	1.29	<	1.11	0.69	
V (AE)	-0.37	-1.41	-0.55	-0.49	
Zn (AE)	0.02	<	-0.61	-1.10	
Fraction < 2 µm (SC)	-0.50	<	0.25	0.19	
Org.matter (L.O.I.) (SC)	0.22	0.30	-1.05	-0.85	
pH - CaCl2 (SC)	1.23	0.06	0.81	-0.30	
CN - Free (OD)	#	#	#	#	
CN - Total (OD)	#	#	#	#	
Br (WSVPR)	<	<	<	<	
Cl (WSVPR)	#	<	<	#	
SO4 (WSVPR)	#	<	#	#	
HSIGLTLABA (193)					
Ag (RT)	#	#	#	#	
Al (RT)	0.29	0.65	-0.06	-0.62	
B (RT)	#	#	#	#	
Ba (RT)	-0.13	0.11	-0.45	1.58	
Ca (RT)	0.12	0.90	-0.17	2.36	
Co (RT)	-0.54	0.73	0.07	-0.44	
Cr (RT)	-0.57	0.09	-0.16	0.33	
Cu (RT)	-0.50	0.09	-0.48	0.48	
Fe (RT)	-0.59	0.71	-0.09	-4.36	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
HSIGLTLABA (193) (cont.)				
Ga (RT)	-0.39	-0.13	-0.16	0.39
La (RT)	0.16	-0.02	0.62	-0.14
Li (RT)	0.40	#	-0.34	-0.24
Mg (RT)	0.10	0.12	-0.15	-0.34
Mn (RT)	0.37	-0.22	0.20	-1.97
Mo (RT)	-1.24	#	#	0.05
Nb (RT)	-0.23	0.27	1.85	1.56
Ni (RT)	-0.27	0.18	-0.11	-0.86
P (RT)	0.63	0.70	0.25	0.00
Pb (RT)	-0.63	-0.54	0.07	-0.82
Sc (RT)	0.55	#	0.40	-0.26
Sn (RT)	0.38	#	1.40	1.38
Sr (RT)	-0.64	0.38	-0.05	1.00
Ti (RT)	-0.02	0.30	0.60	0.71
V (RT)	-0.42	0.16	0.41	-0.01
Y (RT)	0.46	0.35	-0.19	0.54
Zn (RT)	0.13	0.29	-0.27	7.61
Zr (RT)	0.09	-0.16	0.69	2.15
LABORECOF (194)				
C - elementary (RT)	-0.32	-0.80	0.75	-0.18
N - elementary (RT)	-0.26	-0.20	1.10	0.04
pH - H2O (SC)	-0.49	0.15	-0.19	-0.26
pH - KCl (SC)	-1.31	-0.80	-0.97	-1.50
TC=Total C (org.+inorg.) (SC)	-0.56	-0.75	0.78	-0.01
UMADAKAR (196)				
N - elementary (RT)	-0.41	-0.07	-1.42	-0.64
Cu (AE)	-2.39	-3.24	2.90	4.11
Mn (AE)	0.38	1.05	0.29	1.53
P (AE)	-0.64	-0.79	0.72	-1.02
Zn (AE)	-0.22	2.75	-0.77	0.71
pH - H2O (SC)	-0.10	-1.42	0.04	-0.41
pH - KCl (SC)	-1.01	-0.14	-0.97	-0.99
TC=Total C (org.+inorg.) (SC)	-1.45	0.00	-1.74	-1.53
Ca (AA)	-1.28	-1.80	-2.77	-2.19
CEC (AA)	-1.29	0.93	0.74	-0.37
K (AA)	-0.19	0.56	-1.11	-1.48
Mg (AA)	-0.33	0.71	-1.04	-0.72
Na (AA)	0.76	0.69	0.07	-0.98
HULESCH (197)				
Al (RT)	-35.46	-6.37	-20.38	-28.86
Ca (RT)	-5.87	-3.66	-4.17	-6.21
Ni (RT)	-3.35	-	-3.51	-4.41
Co (AE)	3.69	16.55	0.93	1.45
Cr (AE)	1.86	29.87	1.52	2.02
Cu (AE)	-2.96	-0.54	-2.78	-1.96
Fe (AE)	-0.04	-0.98	2.35	0.14
K (AE)	-1.28	-0.54	-1.13	-1.77
Mg (AE)	-1.18	-3.68	-1.68	-5.73
Mn (AE)	-2.07	-1.56	-3.65	-1.66
Na (AE)	-1.07	-0.74	-1.27	0.09
P (AE)	0.04	0.08	-0.05	-0.19
Pb (AE)	0.75	-	1.25	2.55
Zn (AE)	-0.06	-0.14	0.02	-0.86
FRIS (198)				
C - elementary (RT)	-2.35	-0.37	-1.31	-0.80
Hg (RT)	0.02	-0.62	0.05	0.33
N - elementary (RT)	-2.52	-0.46	-0.93	0.82
Al (AR)	-0.47	0.05	-0.25	-0.63
Ca (AR)	-1.28	-2.07	-0.74	-1.18
Cd (AR)	-3.38	<	-1.44	<
Cr (AR)	0.09	-0.84	0.73	0.71
Cu (AR)	-0.08	0.30	0.04	0.20

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
FRIS (198) (cont.)					
Fe (AR)	-0.42	0.93	-1.67	-0.66	
K (AR)	-0.33	-1.57	-0.51	-0.80	
Mg (AR)	-2.07	-1.41	-0.87	-1.32	
Mn (AR)	-0.33	-1.59	-0.41	-1.64	
Na (AR)	0.75	0.17	-0.26	0.57	
Ni (AR)	-0.09	<	0.47	-0.03	
P (AR)	2.72	-0.43	1.66	2.30	
Pb (AR)	-2.31	<	-1.09	-2.07	
Zn (AR)	-8.47	-2.73	-8.71	-5.94	
EC-SC (ISO 11265) (SC)	1.58	0.05	0.99	-2.44	
Fraction < 2 µm (SC)	-0.06	1.71	0.10	0.35	
Fraction < 63 µm (SC)	0.17	0.31	0.40	0.51	
Fraction > 63 µm (SC)	0.09	-0.25	-0.45	-0.63	
pH - CaCl2 (SC)	-1.13	0.75	0.42	0.47	
pH - H2O (SC)	-1.24	0.09	-1.47	-0.17	
pH - KCl (SC)	-2.06	0.83	-0.45	-0.54	
TIC=Tot.Inorg C(CaCO3) (SC)	-0.64	-	-	-	
Moisture-content (OD)	147.63	311.02	116.09	359.26	
ANALGIR (199)					
Hg (RT)	1.00	-0.67	0.30	0.09	
N (AE)	-0.34	6.43	0.27	0.15	
As (AR)	0.71	-0.01	-0.33	1.48	
Cd (AR)	0.32	0.39	0.05	<	
Cr (AR)	-	0.02	-0.44	0.50	
Cu (AR)	0.57	-0.13	0.12	2.40	
Fe (AR)	0.43	1.05	0.50	0.11	
Mn (AR)	0.36	0.07	0.11	1.49	
Ni (AR)	0.27	-0.47	0.37	1.59	
Pb (AR)	-0.24	0.04	0.05	-0.24	
Zn (AR)	0.43	0.55	0.65	0.38	
Mg (CC)	-0.36	0.34	-0.24	-1.81	
Fraction < 16 µm (SC)	-0.80	-	-0.80	-0.79	
Fraction < 63 µm (SC)	0.76	-	0.00	-0.16	
Fraction > 63 µm (SC)	-0.83	-	0.29	0.12	
Org.matter (L.O.I.) (SC)	0.11	2.30	-0.71	-0.27	
pH - KCl (SC)	-0.10	0.62	0.27	-0.09	
K (DL)	-1.09	-0.73	0.30	13.48	
P (DL)	-0.01	0.22	0.15	-	
B (HCLPN)	-0.66	-1.11	-1.23	-0.53	
Cu (HCLPN)	-0.31	1.55	0.62	1.71	
Fe (HCLPN)	-0.86	0.87	-1.68	-1.30	
Mn (HCLPN)	-0.77	-2.27	-0.74	0.97	
Zn (HCLPN)	-0.70	-0.23	-4.08	-3.33	
ZA/R (200)					
As (RT)	<	<	-0.76	1.16	
Ba (RT)	0.81	1.10	0.67	-2.02	
Be (RT)	#	<	#	#	
Ca (RT)	-1.85	-1.05	-1.81	-2.26	
Cd (RT)	-0.56	<	-0.18	<	
Co (RT)	-0.27	-0.31	-0.68	-0.52	
Cr (RT)	0.34	-0.63	-0.77	-0.14	
Cu (RT)	1.11	<	0.17	0.84	
Fe (RT)	-3.77	-0.60	-0.64	-0.49	
K (RT)	-0.71	-0.97	0.90	1.11	
Mg (RT)	-0.51	-0.70	-0.30	-0.31	
Mn (RT)	2.57	0.92	2.98	3.60	
Mo (RT)	-0.62	<	#	4.79	
Na (RT)	0.10	-0.14	-0.04	0.33	
Ni (RT)	0.24	0.72	-0.36	1.34	
Pb (RT)	0.77	1.56	0.72	-0.02	
Sb (RT)	#	#	-1.18	#	
Si (RT)	-1.55	-8.16	-1.57	-1.98	
Th (RT)	<	<	-0.61	-0.20	
Ti (RT)	-0.93	-0.84	0.02	0.01	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
ZA/R (200) (cont.)				
Tl (RT)	#	#	#	#
U (RT)	-0.18	#	-0.19	-0.08
V (RT)	-0.35	-0.84	-1.52	-2.03
W (RT)	#	#	#	#
Zn (RT)	1.21	1.01	0.83	0.83
Cd (NA)	0.05	-1.09	-1.83	<
Cr (NA)	0.87	-1.25	0.13	0.48
Cu (NA)	-18.62	-0.75	0.33	1.23
Hg (NA)	<	<	-1.17	<
Mo (NA)	0.46	-0.87	0.21	0.21
Ni (NA)	0.84	-4.13	0.80	0.97
Pb (NA)	-0.05	-1.54	-0.64	0.32
Zn (NA)	0.92	-0.81	0.01	0.28
Org.matter (L.O.I.) (SC)	1.30	0.01	1.68	1.10
pH - CaCl2 (SC)	1.84	1.30	1.07	0.73
Moisture-content (OD)	0.09	0.26	-0.43	-0.30
GEWBODLAB (203)				
Cd (NA)	2.11	2.52	0.66	2.13
Co (NA)	1.52	3.07	1.58	2.82
Cr (NA)	0.45	0.89	0.54	0.86
Cu (NA)	-0.24	0.03	-0.67	-0.25
Hg (NA)	-1.25	-0.32	-0.94	-0.76
Mo (NA)	2.88	0.19	-0.26	0.07
Ni (NA)	0.57	0.27	0.37	0.60
Pb (NA)	0.72	-0.01	0.27	-0.19
Zn (NA)	0.48	0.83	0.12	0.86
MARELI (204)				
N (AE)	0.28	-0.10	-0.37	-0.48
C - org others (W&B a.o.) (SC)	-1.53	-0.47	-4.76	-0.23
EC-SC (ISO 11265) (SC)	0.19	1.69	1.56	-1.76
Org.matter (L.O.I.) (SC)	5.92	1.77	8.38	4.26
pH - H2O (SC)	0.37	6.18	0.71	0.72
TIC=Tot.Inorg C(CaCO3) (SC)	<	<	<	<
Ca (AA)	-0.69	0.35	-0.32	0.42
K (AA)	0.83	0.56	-0.09	0.12
Mg (AA)	0.55	1.92	0.88	1.80
Na (AA)	11.68	2.40	1.07	-0.01
P - Olsen (as P) (PHOS)	1.45	1.42	0.28	2.77
ALFA (206)				
Cd (AE)	<	<	<	<
Cu (AE)	0.25	0.19	-0.25	-0.51
Fe (AE)	-0.84	0.08	0.84	-0.45
Mn (AE)	-0.05	-0.45	-0.28	0.44
Ni (AE)	-0.09	0.06	-0.95	-1.59
Pb (AE)	-0.33	-1.34	-0.42	-0.07
Zn (AE)	1.34	-0.58	-0.34	-0.57
Mg (CC)	0.48	0.14	-0.24	0.11
pH - KCl (SC)	0.29	0.51	-0.24	-0.21
K (DL)	-1.23	-1.10	0.23	-4.87
P (DL)	-1.97	0.57	-0.52	#
Cu (HCLPN)	-4.34	-2.17	-9.17	-3.77
Fe (HCLPN)	-28.64	-26.73	-36.01	-21.54
Mn (HCLPN)	-2.03	0.28	-2.27	-0.89
Zn (HCLPN)	-2.64	-0.23	-5.85	-6.47
QLDNR&M (210)				
C - elementary (RT)	-1.03	-0.09	-1.31	-0.83
N - elementary (RT)	-1.84	-0.59	-1.63	-1.71
C - org others (W&B a.o.) (SC)	-0.22	-0.29	-0.62	-0.23
EC-SC (ISO 11265) (SC)	-0.31	-0.23	-0.09	-0.39
pH - CaCl2 (SC)	-1.39	0.06	-0.48	-0.30
TC=Total C (org.+inorg.) (SC)	-2.01	-0.06	-1.19	-0.81
TOC=Total Org. C (SC)	-	0.31	-0.73	-0.25

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
QLDNR&M (210) (cont.)					
B (M3)	#	#	#	#	
Ca (M3)	-0.59	-0.40	0.23	0.23	
Cu (M3)	0.20	0.04	0.62	0.80	
Fe (M3)	-0.73	0.08	-0.31	-0.12	
K (M3)	1.40	0.48	0.58	1.01	
Mg (M3)	-1.32	-0.72	-0.87	0.13	
Mn (M3)	-0.41	-0.40	-0.35	-0.41	
Na (M3)	#	#	#	#	
P (M3)	-0.14	0.23	0.16	0.04	
Zn (M3)	-0.23	-0.34	0.32	-0.56	
FORTEST (212)					
N - elementary (RT)	-0.86	1.10	-0.37	-0.25	
S (RT)	-0.47	-0.29	0.23	-0.10	
N - NH4 (as N) (CC)	0.99	2.63	10.05	7.79	
N - NO3 (as N) (CC)	0.70	0.75	-0.01	0.76	
SO4 (CC)	#	#	#	#	
EC-SC (ISO 11265) (SC)	21.93	31.79	19.74	47.06	
Org.matter (L.O.I.) (SC)	-2.03	-1.05	-2.43	-2.73	
pH - CaCl2 (SC)	-0.61	-1.05	-0.86	0.21	
pH - H2O (SC)	-1.24	-1.54	-1.53	-1.55	
TC=Total C (org.+inorg.) (SC)	-0.67	0.90	-0.45	-0.16	
Al (BB)	#	#	#	#	
Ca (BB)	#	#	#	#	
CEC (BB)	#	#	#	#	
Fe (BB)	-	#	#	#	
K (BB)	#	#	#	#	
Mg (BB)	#	#	#	#	
Mn (BB)	#	#	#	#	
Na (BB)	#	#	#	#	
B (M3)	#	#	#	#	
Ca (M3)	3.33	-0.23	4.57	1.01	
Cu (M3)	-0.04	0.78	1.24	4.68	
Fe (M3)	2.56	1.45	4.22	4.07	
K (M3)	-1.11	-2.28	-0.59	-0.60	
Mg (M3)	3.20	1.13	2.06	0.69	
Mn (M3)	3.15	-0.04	0.90	0.79	
Na (M3)	#	#	#	#	
P (M3)	1.81	1.84	1.95	0.82	
Zn (M3)	2.09	1.07	2.70	1.90	
P - Bray (as P) (PHOS)	0.76	0.50	1.03	-0.14	
REYEPS (213)					
C - elementary (RT)	-2.82	-0.69	-1.88	-2.01	
N - elementary (RT)	-1.01	-2.41	-1.31	-3.12	
Mg (CC)	-1.00	-1.61	0.36	-0.98	
pH - CaCl2 (SC)	-1.22	-0.50	0.42	0.47	
K (CAL)	#	#	#	#	
P (CAL)	#	#	#	#	
GSISMA (214)					
C - elementary (RT)	0.35	0.25	0.60	0.75	
N - elementary (RT)	0.57	0.06	0.58	1.05	
Al (AE)	5.09	3.04	5.46	7.62	
Cd (AE)	3.83	1.56	5.82	2.03	
Cr (AE)	2.76	4.33	5.77	3.47	
Cu (AE)	1.69	2.42	1.70	1.30	
Fe (AE)	3.31	2.77	3.79	3.43	
Mn (AE)	2.00	5.11	2.92	3.77	
Ni (AE)	-0.06	2.03	1.55	2.84	
Pb (AE)	-1.94	1.38	-1.54	-2.12	
Zn (AE)	1.46	2.55	1.42	2.04	
pH - H2O (SC)	-0.01	0.33	-0.33	-0.27	
TIC=Tot.Inorg C(CaCO3) (SC)	1.10	#	0.97	2.10	
B - Hot water (OD)	#	#	#	#	
Moisture-content (OD)	-0.96	0.76	-0.18	-0.26	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
GSISMA (214) (cont.)					
Ca (AA)	-0.07	-0.59	0.24	-0.02	
K (AA)	-1.60	-2.91	-0.09	0.35	
Mg (AA)	-0.29	-0.09	2.02	1.49	
Na (AA)	-0.92	-0.74	-0.50	0.48	
CEC (BC)	-0.48	#	-0.03	#	
P - Olsen (as P) (PHOS)	0.05	-0.67	0.63	1.96	
WBD (216)					
pH - H2O (SC)	0.46	0.27	0.35	0.18	
TIC=Tot.Inorg C(CaCO3) (SC)	0.38	#	0.19	0.45	
BESMOLAX (217)					
Hg (RT)	0.23	0.61	0.46	-0.85	
As (AE)	<	<	-2.99	<	
Cd (AE)	<	<	25.55	21.10	
Cr (AE)	-0.95	0.60	-1.31	-0.13	
Fe (AE)	-1.83	0.41	-2.08	-0.32	
Ni (AE)	-4.48	-0.15	-4.32	-2.46	
P (AE)	-1.27	0.42	-2.09	-0.71	
Pb (AE)	1.49	-0.11	-0.63	0.11	
Zn (AE)	-2.25	-1.34	-2.82	-1.53	
MERLEWOOD (222)					
N - elementary (RT)	0.42	3.17	0.37	0.60	
Org.matter (L.O.I.) (SC)	0.18	0.65	0.41	0.08	
pH - H2O (SC)	1.90	-0.76	0.71	0.13	
TC=Total C (org.+inorg.) (SC)	0.48	2.18	0.47	0.64	
13C (OD)	#	#	#	#	
15N (OD)	#	#	#	#	
delta 13C (OD)	#	#	#	#	
delta 15N (OD)	#	#	#	#	
MIRES (224)					
Cd (NA)	0.11	11.85	3.29	6.13	
Co (NA)	-0.13	1.18	-0.07	0.39	
Cr (NA)	0.56	0.10	-0.63	0.13	
Cu (NA)	1.58	0.61	1.52	0.69	
Hg (NA)	10.30	6.80	10.53	11.38	
Mo (NA)	<	<	-0.18	<	
Ni (NA)	0.09	4.97	0.14	-0.04	
Pb (NA)	0.44	-2.93	-0.62	-1.05	
Tl (NA)	#	#	#	#	
Zn (NA)	-0.63	-1.06	0.11	-0.17	
Cd (SN)	<	<	1.99	<	
Cu (SN)	-4.25	<	-3.92	<	
Ni (SN)	5.10	#	-1.26	8.36	
Pb (SN)	<	<	<	<	
Zn (SN)	<	-1.01	-3.99	-6.96	
CHEMLAB (228)					
As (AE)	0.30	<	1.05	0.35	
Ba (AE)	-0.64	-0.42	-0.71	-0.12	
Cd (AE)	60.44	6.90	48.10	37.21	
Co (AE)	1.63	<	0.62	1.64	
Cr (AE)	-0.67	-0.69	-0.32	-0.05	
Cu (AE)	-0.54	-0.53	-0.53	-0.67	
Hg (AE)	<	<	-1.05	<	
Mo (AE)	<	<	<	<	
Ni (AE)	-1.40	<	0.29	0.66	
Pb (AE)	-2.68	-2.19	-2.91	-1.45	
Sb (AE)	<	<	#	<	
Se (AE)	<	<	<	<	
Sn (AE)	<	<	<	<	
V (AE)	1.14	1.64	0.03	0.03	
Zn (AE)	-0.70	0.67	-1.40	-0.74	
Fraction < 2 µm (SC)	-0.15	-0.34	-0.28	0.32	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
CHEMLAB (228) (cont.)				
Org.matter (L.O.I.) (SC)	-1.82	-0.29	-5.26	-6.42
pH - CaCl2 (SC)	0.61	-1.05	-0.48	-1.32
ABMCE (230)				
Al (AR)	0.45	0.50	0.37	0.29
As (AR)	0.28	<	-0.84	-0.37
Be (AR)	-0.09	<	0.10	0.80
Ca (AR)	1.12	-0.51	0.76	0.69
Cd (AR)	<	<	0.05	<
Co (AR)	0.12	0.42	0.23	-0.32
Cr (AR)	-0.15	-0.01	-0.46	-0.31
Cu (AR)	-0.21	0.50	-0.11	0.37
Fe (AR)	0.56	<	0.65	1.00
K (AR)	0.34	<	0.22	0.26
Mg (AR)	0.23	<	0.66	0.73
Mn (AR)	-0.05	<	1.29	0.65
Mo (AR)	-0.11	<	<	<
Na (AR)	<	<	<	0.74
Ni (AR)	-0.17	-0.07	-0.13	0.23
P (AR)	0.61	-0.09	0.94	1.35
Pb (AR)	-0.48	<	0.07	-0.70
V (AR)	0.07	-0.06	0.10	0.02
Zn (AR)	-0.14	0.93	0.19	0.07
Ca (M3)	0.93	1.83	-0.45	1.40
K (M3)	0.41	2.13	1.06	0.27
Mg (M3)	0.91	5.15	0.48	-1.18
P (M3)	-0.30	-1.00	-0.39	3.32
IRI (231)				
Al (RT)	-0.80	-0.46	-1.23	-0.24
As (RT)	1.26	0.28	1.27	0.37
Ba (RT)	2.27	0.44	2.83	1.58
Br (RT)	0.90	0.47	1.49	0.25
Ca (RT)	0.78	0.37	-0.17	1.52
Ce (RT)	-0.09	-0.63	0.18	0.27
Co (RT)	0.08	-0.21	-0.31	-0.20
Cr (RT)	2.93	1.87	1.41	1.02
Cs (RT)	#	#	#	#
Cu (RT)	22.21	-	-	-
Fe (RT)	1.80	0.01	0.18	0.58
Ga (RT)	-0.39	-	1.14	0.39
I (RT)	#	-	-	-
K (RT)	1.22	-0.01	1.06	0.96
La (RT)	1.68	-0.38	0.68	0.60
Mg (RT)	-1.82	-	-3.30	-4.80
Mn (RT)	-0.86	-0.69	-0.37	0.70
Na (RT)	0.58	-0.44	0.14	0.10
Nd (RT)	#	#	#	#
Ni (RT)	5.52	-	-	-
Rb (RT)	0.78	-0.35	0.28	0.69
Sb (RT)	#	#	-0.48	#
Sc (RT)	0.42	#	1.25	1.62
Se (RT)	-	-	#	-
Si (RT)	-11.77	-6.72	-1.92	4.15
Sr (RT)	-9.95	2.24	-4.10	-2.99
Th (RT)	0.22	-0.25	0.44	0.94
Ti (RT)	-1.69	-0.98	-0.65	-0.55
U (RT)	2.19	#	0.86	1.57
V (RT)	0.72	-0.38	0.92	0.84
W (RT)	#	-	#	#
Zn (RT)	-0.13	-0.90	1.38	-0.71
Zr (RT)	-1.20	2.17	-3.42	3.93

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
URKANTONE (232)				
Cd (NA)	-1.39	0.89	2.26	<
Co (NA)	-0.17	0.58	0.80	-0.08
Cr (NA)	0.30	0.05	0.33	-0.31
Cu (NA)	0.03	-0.11	0.07	0.69
Hg (NA)	-0.02	0.43	-0.59	-0.82
Ni (NA)	-0.24	1.03	1.57	-0.73
Pb (NA)	0.01	0.04	-0.04	-0.08
Zn (NA)	-0.63	-0.10	0.24	-0.53
KLAL (233)				
pH - H2O (SC)	-0.56	-0.28	-0.95	-0.41
pH - KCl (SC)	-1.21	-0.68	-1.38	-1.66
Ca (BC)	#	#	#	#
K (BC)	#	#	#	#
Mg (BC)	#	#	#	#
Na (BC)	#	#	#	#
P - Bray (as P) (PHOS)	-0.02	-0.42	-0.22	0.81
UMEG-GB3 (241)				
As (AE)	0.55	-0.06	0.39	0.29
Cd (AE)	0.40	-1.18	-0.62	-0.06
Co (AE)	0.83	-1.78	0.66	0.06
Cr (AE)	0.47	-0.31	0.26	0.05
Cu (AE)	-0.47	0.14	0.12	-0.11
Hg (AE)	-0.70	1.63	-0.58	-1.24
Ni (AE)	1.37	-1.39	0.83	0.37
Pb (AE)	-0.20	-1.05	-0.33	0.01
Tl (AE)	#	<	#	#
Zn (AE)	-0.14	-0.94	-0.58	-0.47
AECSAGRICS (248)				
Br (RT)	<	<	<	<
Ca (RT)	-1.71	0.49	-0.99	1.52
Cd (RT)	-1.21	<	-0.51	4.60
Cu (RT)	-1.32	-1.55	-1.55	-1.09
Fe (RT)	-2.15	-0.66	-0.17	-0.43
K (RT)	1.56	3.00	-0.60	-4.47
Li (RT)	-0.61	#	-1.87	-1.31
Mg (RT)	-2.19	-0.22	-2.47	-3.19
Mn (RT)	0.51	0.04	0.92	1.89
N - elementary (RT)	-0.18	-0.33	-0.12	-0.58
Na (RT)	-1.53	-1.28	-1.14	-1.48
Nb (RT)	<	<	1.85	<
Pb (RT)	0.53	<	-2.67	<
Rb (RT)	-0.31	-1.61	-0.93	-2.04
Sr (RT)	0.29	-1.10	0.22	-2.99
Th (RT)	-0.10	-	-0.39	0.34
Ti (RT)	-3.10	-0.34	-0.17	-3.25
U (RT)	-0.71	-	-3.30	-1.04
Y (RT)	-1.63	<	-2.80	-2.53
Zn (RT)	-1.93	<	-1.10	-2.41
Zr (RT)	0.68	-5.53	0.69	0.18
EC-SC (ISO 11265) (SC)	0.32	-1.41	-0.33	-0.36
Org.matter (L.O.I.) (SC)	0.06	0.30	-0.20	-0.54
pH - H2O (SC)	0.75	-1.67	-0.54	0.23
Ca (AA)	0.46	0.73	0.43	0.76
Mg (AA)	-0.66	-0.29	-0.35	0.02
P - Olsen (as P) (PHOS)	-0.17	-0.23	-0.34	-1.16
CIRADFLHOR (249)				
pH - H2O (SC)	-1.80	-0.22	-1.68	-0.31
Ca (AA)	0.94	2.46	-0.11	0.01
CEC (AA)	2.26	-2.17	1.09	5.08
K (AA)	-0.83	-0.43	-1.62	-0.57
Mg (AA)	0.57	0.91	0.72	0.65

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
PIEST-RIPP (256)				
N - elementary (RT)	-1.46	-0.59	-0.37	-1.09
Fe (CC)	#	#	#	#
K (CC)	1.61	0.36	0.52	0.34
Mg (CC)	1.01	-1.18	2.49	-0.29
Mn (CC)	#	#	#	#
P (CC)	#	#	#	#
SO4 (CC)	#	#	#	#
Ca (M3)	-2.47	-1.15	-1.83	-1.88
Cu (M3)	0.00	-0.25	-0.06	-0.44
Fe (M3)	-0.56	-0.23	0.04	-0.21
K (M3)	2.36	0.29	3.45	3.31
Mg (M3)	0.39	-0.85	0.62	0.35
Mn (M3)	0.19	-0.94	-1.45	-1.65
P (M3)	-0.32	-0.41	-0.72	-3.01
Zn (M3)	-0.61	-0.77	-0.94	-2.59
N - NO3 (as N) (KCL)	#	#	#	#
CH-SAMEN (261)				
Cd (NA)	0.96	0.19	0.18	-0.28
Co (NA)	-3.35	<	-1.41	-0.63
Cr (NA)	-1.30	0.35	-2.11	-0.27
Cu (NA)	0.20	0.04	1.91	0.15
Hg (NA)	-3.33	-2.06	-1.53	-3.28
Mo (NA)	5.66	15.69	6.94	6.16
Ni (NA)	-0.65	<	-1.20	-0.04
Pb (NA)	-2.08	0.54	-0.70	-0.73
Zn (NA)	0.45	-1.19	0.96	0.56
WROCLAB (263)				
As (AE)	-0.82	0.44	0.14	6.44
Cd (AE)	0.05	0.41	-1.43	0.34
Cr (AE)	-0.23	0.06	-0.43	-0.95
Cu (AE)	0.21	0.46	-0.07	0.46
Fe (AE)	0.35	-0.11	0.12	0.26
Hg (AE)	-0.21	2.61	0.00	0.40
Mn (AE)	-0.01	0.00	0.46	0.80
N (AE)	0.14	0.12	0.53	0.24
Ni (AE)	-1.53	0.18	-1.00	-0.25
Pb (AE)	-0.35	0.78	-0.03	-0.35
Zn (AE)	-0.27	0.46	0.18	-0.48
Mg (CC)	-0.36	0.72	-0.24	-0.02
C - org others (W&B a.o.) (SC)	-0.40	-0.42	0.03	-0.02
Fraction < 16 µm (SC)	-0.55	-0.06	-0.78	-0.64
Fraction < 63 µm (SC)	0.04	0.30	-0.23	0.05
Fraction > 63 µm (SC)	0.29	-0.20	0.26	-0.11
pH - H2O (SC)	0.03	-0.34	0.35	1.16
pH - KCl (SC)	-0.43	-0.25	-0.35	-0.43
K (DL)	-0.10	1.46	6.15	-0.20
P (DL)	-0.47	-0.94	1.63	<
B (HCLPN)	-0.41	0.65	0.63	0.48
Cu (HCLPN)	0.71	-0.78	-0.35	0.31
Fe (HCLPN)	-0.25	0.61	-0.07	-1.15
Mn (HCLPN)	1.92	-0.06	0.35	-1.40
Zn (HCLPN)	0.46	1.19	-0.44	-0.41
AGROLAB-SL (264)				
N (AE)	1.87	1.19	0.43	1.17
C - org others (W&B a.o.) (SC)	-0.09	1.07	0.48	-0.09
EC-SC (ISO 11265) (SC)	1.06	2.13	2.74	2.12
Fraction < 2 µm (SC)	-0.16	0.91	0.31	0.67
pH - H2O (SC)	0.88	0.69	-0.48	-0.61
pH - KCl (SC)	-1.21	-1.11	-1.07	-1.55
TIC=Tot.Inorg C(CaCO3) (SC)	0.46	-	-	-
Ca (AA)	-0.36	0.59	-0.85	-0.35
K (AA)	-1.74	-0.63	-0.97	-1.07
Mg (AA)	0.09	3.95	-0.12	0.22

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
AGROLAB-SL (264) (cont.)					
Na (AA)	6.68	2.17	2.23	-4.77	
P - Olsen (as P) (PHOS)	0.54	0.33	0.59	2.10	
LUNUWILA (270)					
N (AE)	1.95	-1.06	0.27	-0.32	
EC-SC (ISO 11265) (SC)	-0.03	-0.11	0.88	1.85	
pH - H2O (SC)	-0.95	0.75	-2.36	-1.50	
Ca (AA)	-2.56	-4.27	-4.52	-4.28	
K (AA)	1.54	1.35	1.24	2.76	
Mg (AA)	-3.69	-2.61	-3.88	-4.87	
Na (AA)	0.67	0.11	0.44	-5.48	
P - Bray (as P) (PHOS)	-0.08	0.03	0.71	0.00	
EVI707 (272)					
C - org others (W&B a.o.) (SC)	0.09	-0.64	0.48	-0.02	
pH - CaCl2 (SC)	-0.35	-0.50	-0.22	-0.30	
pH - H2O (SC)	0.71	0.15	0.97	0.67	
pH - KCl (SC)	-0.23	-0.89	-0.55	-0.43	
IGEOLUNAM (273)					
N - elementary (RT)	1.32	2.14	0.33	0.54	
Cu (AE)	-1.00	-3.24	-0.24	-0.97	
Fe (AE)	-0.98	-1.24	-0.83	-1.82	
Mn (AE)	0.24	-0.70	0.85	0.04	
Ni (AE)	-1.73	25.64	-1.24	-0.48	
Pb (AE)	-2.93	-10.63	-1.64	-0.69	
Zn (AE)	0.81	-1.06	0.66	-0.35	
Fraction < 2 µm (SC)	1.29	3.56	-1.40	0.97	
Fraction < 63 µm (SC)	0.59	1.31	0.41	0.72	
Fraction > 63 µm (SC)	-0.56	-1.65	-0.47	-0.87	
pH - KCl (SC)	-1.28	-0.89	-1.12	-1.32	
TC=Total C (org.+inorg.) (SC)	1.71	0.98	0.43	0.67	
Ca (AA)	0.64	0.62	0.55	0.44	
K (AA)	1.01	0.56	0.29	0.35	
Mg (AA)	0.21	0.11	0.02	-1.18	
Na (AA)	0.46	-0.46	-0.60	0.96	
P - Bray (as P) (PHOS)	-0.59	-0.58	-0.61	19.59	
P - Olsen (as P) (PHOS)	0.22	-0.16	0.07	1.43	
SeqBioMpl (274)					
N - elementary (RT)	-0.86	0.84	-3.59	-1.71	
TC=Total C (org.+inorg.) (SC)	-0.42	-0.47	-1.14	0.34	
MUMPFROG (275)					
N - elementary (RT)	0.62	-2.54	0.01	0.47	
Al (AR)	0.92	0.62	0.70	0.73	
As (AR)	0.13	0.14	-0.72	0.04	
Ba (AR)	0.81	#	0.01	0.65	
Ca (AR)	0.51	0.82	-0.51	-0.72	
Cd (AR)	-0.24	0.07	-0.38	-0.10	
Co (AR)	0.43	-0.51	-0.14	0.41	
Cr (AR)	0.54	-0.16	0.24	0.67	
Cu (AR)	-0.21	-0.50	-0.63	0.09	
Fe (AR)	0.46	-0.77	-0.16	0.08	
Hg (AR)	-0.60	0.35	-0.32	-0.07	
K (AR)	1.13	0.79	0.79	0.53	
Mg (AR)	-0.51	0.77	-0.51	-0.53	
Mn (AR)	-0.95	-0.45	-1.96	-0.35	
Mo (AR)	-0.31	-0.42	0.05	-0.10	
Na (AR)	0.74	-0.82	0.55	-0.21	
Ni (AR)	0.52	0.13	0.56	0.78	
P (AR)	0.01	-0.13	-0.31	1.50	
Pb (AR)	0.30	0.08	-0.21	0.34	
S (AR)	0.12	0.13	-0.62	-0.20	
Sb (AR)	#	#	#	#	
Se (AR)	#	#	0.94	#	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
MUMPFROG (275) (cont.)				
Sr (AR)	#	#	#	#
Ti (AR)	#	#	#	#
V (AR)	0.74	1.53	0.29	0.64
Zn (AR)	0.05	-0.42	-0.54	-0.01
Fraction < 2 µm (SC)	0.81	1.75	1.22	0.93
Fraction < 63 µm (SC)	0.46	0.33	0.51	0.59
Fraction > 63 µm (SC)	-0.37	-0.28	-0.66	-0.73
pH - CaCl2 (SC)	-0.35	-0.91	-0.86	-2.35
pH - H2O (SC)	0.33	-1.30	-0.74	-0.31
pH - KCl (SC)	1.20	-0.25	0.38	0.24
TC=Total C (org.+inorg.) (SC)	0.31	-1.61	-0.41	-0.60
FEJER (278)				
Al (AE)	-0.08	0.33	0.18	-0.03
As (AE)	0.28	0.79	-0.30	-0.45
B (AE)	#	#	#	#
Ba (AE)	0.12	-0.10	-0.01	-0.32
Ca (AE)	0.45	-0.15	-0.07	0.64
Cd (AE)	<	<	-0.52	<
Co (AE)	0.08	-0.06	0.15	0.19
Cr (AE)	-0.15	-0.09	0.04	0.22
Cu (AE)	0.21	0.24	0.10	-0.38
Fe (AE)	0.15	-0.23	-0.04	-0.98
Hg (AE)	<	<	<	<
K (AE)	-0.15	0.10	-0.02	-0.52
Li (AE)	#	#	#	#
Mg (AE)	0.37	0.16	0.07	0.38
Mn (AE)	0.10	0.17	-0.67	-1.09
Mo (AE)	<	<	<	<
Na (AE)	-0.04	0.28	-0.02	0.65
Ni (AE)	-0.13	0.06	-0.43	-0.71
P (AE)	0.11	0.06	-0.03	0.27
Pb (AE)	-0.24	0.46	0.03	-0.23
S (AE)	-0.35	0.01	-0.09	0.28
Se (AE)	<	<	<	<
Sr (AE)	#	#	#	#
V (AE)	-0.10	0.26	0.01	-0.41
Zn (AE)	0.52	0.39	0.18	0.03
JASZ (280)				
Al (AE)	-0.27	-0.16	-0.03	-0.17
As (AE)	-0.20	<	-0.44	-0.36
Ca (AE)	0.22	-0.39	-0.23	0.51
Cd (AE)	<	<	-0.49	<
Co (AE)	0.15	0.06	0.62	0.16
Cr (AE)	-0.29	-0.16	-0.32	-0.05
Cu (AE)	0.30	0.37	0.04	-0.61
Fe (AE)	0.05	-0.11	-0.18	-0.62
Hg (AE)	<	<	<	<
K (AE)	-0.25	-0.44	0.09	-0.86
Mg (AE)	0.13	-0.15	-0.03	-0.98
Mn (AE)	-0.33	0.02	-0.54	-0.55
Mo (AE)	<	<	<	<
Na (AE)	-0.25	-0.11	-0.28	-0.17
Ni (AE)	-0.06	0.58	-0.73	-0.32
P (AE)	-0.04	-0.05	0.27	-0.06
Pb (AE)	-0.41	0.78	0.47	<
S (AE)	0.21	0.43	0.13	0.53
Se (AE)	<	<	<	<
Zn (AE)	0.04	0.39	0.34	-0.10
VAS (281)				
Al (AE)	-0.24	-0.25	0.33	0.00
As (AE)	0.22	<	-0.44	-0.45
B (AE)	#	#	#	#
Ca (AE)	1.40	0.33	-0.12	1.13

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
VAS (281) (cont.)					
Cd (AE)	<	<	-0.22	<	
Co (AE)	-0.26	0.06	-0.25	-0.16	
Cr (AE)	0.10	0.25	0.27	0.47	
Cu (AE)	0.02	0.64	-0.41	0.04	
Fe (AE)	0.74	0.33	0.60	-2.03	
Hg (AE)	<	<	<	<	
K (AE)	-0.08	-0.04	0.23	-0.44	
Mg (AE)	0.64	0.39	0.26	0.03	
Mn (AE)	2.22	0.37	1.20	-1.00	
Mo (AE)	0.77	<	<	<	
Na (AE)	-0.04	0.52	0.16	-0.66	
Ni (AE)	-0.33	0.46	-0.53	-0.12	
P (AE)	0.28	-0.03	0.45	0.42	
Pb (AE)	0.44	0.53	0.39	0.02	
S (AE)	-0.91	0.15	-0.01	1.64	
Se (AE)	<	<	<	<	
Zn (AE)	0.45	0.67	-0.45	3.86	
SPAL (282)					
N (AE)	-0.49	-2.02	-3.00	-2.09	
K (CC)	-1.02	-0.96	-1.73	-16.39	
N - NH4 (as N) (CC)	-0.25	0.06	-0.16	-0.25	
C - org others (W&B a.o.) (SC)	1.53	1.10	0.73	-0.37	
pH - H2O (SC)	-0.31	-0.22	0.40	0.33	
pH - KCl (SC)	-0.56	0.29	-0.14	0.24	
Ca (AA)	2.09	0.59	3.89	2.52	
CEC (AA)	0.09	0.43	-0.70	-0.23	
K (AA)	-8.86	1.55	0.80	0.81	
Mg (AA)	-0.87	-0.70	3.23	2.13	
Na (AA)	2.86	1.26	1.07	-0.14	
P - Bray (as P) (PHOS)	-0.13	2.21	-0.48	0.02	
P - Olsen (as P) (PHOS)	-5.30	-2.25	-3.29	-0.59	
FFEEBW (284)					
Al (RT)	-8.86	-1.71	-6.49	-7.28	
As (RT)	-1.36	0.40	-2.08	-2.17	
Ca (RT)	-1.63	-0.58	-1.08	-0.91	
Cd (RT)	-0.08	<	-0.14	<	
Co (RT)	-0.65	0.27	-0.52	-0.25	
Cr (RT)	-0.05	-0.78	-0.27	-0.22	
Cu (RT)	-1.64	-1.22	-1.40	-1.18	
Fe (RT)	-1.94	-0.33	-0.96	-0.51	
K (RT)	-0.84	0.08	-1.02	-0.69	
Mg (RT)	1.30	-0.25	1.28	1.59	
Mn (RT)	-1.04	-1.12	-0.95	-0.56	
Mo (RT)	-0.54	#	#	-0.72	
N - elementary (RT)	0.95	-0.20	1.73	0.20	
Na (RT)	-1.24	-0.62	-0.79	-1.52	
Ni (RT)	-1.10	0.07	-0.49	-0.18	
P (RT)	-0.17	-0.56	2.28	-0.16	
Pb (RT)	-2.02	-0.55	-3.16	-3.11	
S (RT)	0.34	4.21	0.86	0.60	
Ti (RT)	-1.70	-1.13	-3.55	-1.56	
Zn (RT)	0.16	0.49	-0.33	-0.09	
Al (AR)	0.33	1.82	0.04	0.28	
As (AR)	-0.95	-0.15	-1.70	-1.35	
Ca (AR)	-0.51	1.64	-0.85	-1.36	
Cd (AR)	-4.44	0.07	-0.96	<	
Co (AR)	-0.09	1.25	-0.65	-0.12	
Cr (AR)	-0.05	1.87	0.12	0.39	
Cu (AR)	-1.03	1.59	-1.24	-2.00	
Fe (AR)	-1.88	-0.65	-2.97	-2.77	
K (AR)	0.84	1.25	0.78	0.71	
Mg (AR)	-1.61	1.00	0.12	0.38	
Mn (AR)	-0.13	2.75	-0.60	0.11	
Mo (AR)	-0.66	0.64	-0.69	-0.68	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
FFEEBW (284) (cont.)				
Na (AR)	3.08	1.34	0.43	-1.04
Ni (AR)	-0.71	-0.47	-1.13	-0.61
P (AR)	0.01	2.43	-0.29	0.24
Pb (AR)	-0.23	0.40	-0.60	-0.29
S (AR)	-0.91	0.37	-1.03	-1.19
Ti (AR)	#	#	#	#
Zn (AR)	-0.64	0.32	-0.28	0.09
pH - CaCl2 (SC)	-0.08	1.99	0.68	0.47
pH - H2O (SC)	-0.01	0.87	0.35	1.26
pH - KCl (SC)	-0.17	-0.14	-0.55	-0.54
TC=Total C (org.+inorg.) (SC)	2.26	-0.24	1.91	2.32
Al (BB)	#	#	#	#
Ca (BB)	#	#	#	#
Fe (BB)	#	#	#	#
H (BB)	-	#	#	#
K (BB)	#	#	#	#
Mg (BB)	#	#	#	#
Mn (BB)	#	#	#	#
Na (BB)	#	#	#	#
UAN AUE BL (290)				
Cd (NA)	0.84	0.07	0.51	-0.36
Co (NA)	0.80	-0.72	0.41	0.80
Cr (NA)	0.83	0.28	0.49	1.12
Cu (NA)	0.20	-0.10	-0.13	0.47
Hg (NA)	0.78	-1.35	1.06	0.36
Mo (NA)	0.30	-0.08	0.91	-0.12
Ni (NA)	0.93	-0.09	0.47	0.66
Pb (NA)	1.00	-1.34	1.05	0.74
Tl (NA)	#	<	#	#
Zn (NA)	-1.04	-1.06	-1.59	-0.46
Cd (SN)	<	#	-0.62	<
Cu (SN)	-0.89	-0.34	-0.53	<
Ni (SN)	-0.21	#	0.34	0.13
Pb (SN)	<	#	<	#
Zn (SN)	<	1.06	0.78	0.61
MBT (291)				
As (AE)	2.23	-0.06	-1.07	-1.17
Cd (AE)	4.86	-0.09	-1.29	1.74
Co (AE)	2.81	<	-0.17	2.99
Cr (AE)	-2.41	0.66	-0.02	-0.17
Cu (AE)	-4.33	0.11	-0.47	-1.51
Hg (AE)	-0.12	-0.88	-0.16	-0.12
Ni (AE)	-5.28	<	-0.49	-0.38
P (AE)	0.90	0.17	0.12	0.74
Pb (AE)	3.79	0.31	-0.37	-1.14
Zn (AE)	2.91	-1.41	-0.77	-0.10
Cd (NA)	3.78	0.19	0.18	4.93
Co (NA)	7.44	<	-0.45	6.55
Cr (NA)	-1.07	-0.57	0.29	-0.97
Cu (NA)	-2.67	-0.33	0.00	-0.07
Hg (NA)	-0.04	0.29	0.21	0.08
Ni (NA)	-0.74	-0.09	-0.18	1.75
Pb (NA)	6.05	-0.34	-0.06	-0.15
Zn (NA)	4.41	0.22	0.75	2.23
TNO-NITG (293)				
Ag (RT)	#	#	#	#
Al (RT)	-0.56	-0.01	0.09	-0.88
As (RT)	0.63	0.55	0.03	0.53
Ba (RT)	1.16	1.52	1.32	1.78
Be (RT)	#	#	#	#
Ca (RT)	1.59	4.17	0.17	2.78
Cd (RT)	7.22	#	2.35	4.41
Ce (RT)	0.61	1.04	0.72	1.54

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
TNO-NITG (293) (cont.)					
Co (RT)	65.87	351.99	3.08	3.06	
Cr (RT)	0.88	0.79	0.19	0.17	
Cu (RT)	-0.43	0.24	-0.01	-0.27	
Fe (RT)	0.58	0.34	0.77	0.25	
Ga (RT)	0.02	2.46	0.23	-0.63	
Hg (RT)	3.49	-0.38	-1.44	2.30	
K (RT)	-0.58	-0.09	-0.44	-0.61	
La (RT)	0.01	0.84	0.48	0.72	
Li (RT)	0.54	#	0.45	0.78	
Mg (RT)	-2.20	1.80	-0.07	1.20	
Mn (RT)	1.31	0.62	-0.73	-1.70	
Mo (RT)	1.38	#	#	0.63	
N - elementary (RT)	-0.48	0.19	0.12	0.09	
Na (RT)	0.14	0.96	0.59	0.07	
Nb (RT)	0.24	0.48	0.78	-0.41	
Nd (RT)	#	#	#	#	
Ni (RT)	0.77	-0.22	1.45	0.93	
P (RT)	-1.03	-0.37	-0.53	-3.00	
Pb (RT)	6.15	0.80	0.50	0.57	
Rb (RT)	-0.13	0.73	0.62	0.29	
S (RT)	-0.37	-0.10	-0.17	-0.22	
Sb (RT)	#	#	-0.24	#	
Sc (RT)	-0.16	#	-0.60	-0.21	
Se (RT)	#	#	#	#	
Si (RT)	0.57	-0.01	0.11	-0.90	
Sr (RT)	1.03	0.48	0.51	0.45	
Th (RT)	-	-0.39	-	-	
Ti (RT)	1.62	0.38	2.62	1.66	
Tl (RT)	#	#	#	#	
U (RT)	-0.42	#	0.55	0.58	
V (RT)	-0.11	-0.26	0.49	0.27	
Y (RT)	0.06	0.52	0.33	0.63	
Zn (RT)	-0.92	0.48	0.24	0.15	
Zr (RT)	0.46	-0.19	-0.65	-0.57	
Cd (AE)	2.80	0.91	1.39	0.34	
Co (AE)	110.77	1657.20	9.81	10.27	
Cu (AE)	1.42	2.11	4.99	1.81	
Ni (AE)	2.17	6.14	1.81	2.73	
Pb (AE)	10.25	7.39	2.63	1.02	
Zn (AE)	-0.23	3.02	-0.46	0.41	
Fraction < 16 µm (SC)	1.73	1.39	0.86	0.54	
Fraction < 2 µm (SC)	3.08	0.17	0.10	0.42	
Fraction < 63 µm (SC)	0.06	0.77	0.52	0.80	
Fraction > 63 µm (SC)	0.26	-0.90	-0.67	-	
Org.matter (L.O.I.) (SC)	0.88	-0.82	1.72	1.41	
TC=Total C (org.+inorg.) (SC)	0.24	-0.27	0.68	5.32	
TOC=Total Org. C (SC)	-2.52	-1.39	-2.56	-4.32	
15N (OD)	#	#	#	#	
delta 13C (OD)	#	#	#	#	
delta 15N (OD)	#	#	#	#	
DAR (296)					
pH - CaCl2 (SC)	-3.40	-0.22	-0.99	-2.09	
Ca (AA)	0.37	1.38	0.95	0.72	
CEC (AA)	-0.53	0.38	-0.02	-0.37	
K (AA)	0.45	1.06	-0.73	-0.22	
Mg (AA)	-0.19	1.11	-0.07	-0.02	
Na (AA)	14.62	0.97	8.43	-0.14	
P - Bray (as P) (PHOS)	9.95	5.89	34.71	11.40	
Momotombo (297)					
C - org others (W&B a.o.) (SC)	-2.20	-2.38	-2.07	-2.34	
EC-SC (ISO 11265) (SC)	-1.07	-0.55	-0.85	-2.33	
pH - H2O (SC)	-1.67	-1.97	-2.31	-1.79	
Ca (AA)	0.95	-0.41	1.65	-0.27	
CEC (AA)	0.30	-0.62	0.71	0.28	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
Momotombo (297) (cont.)					
K (AA)	-0.06	-0.43	0.67	0.12	
Mg (AA)	1.09	-1.50	1.46	0.22	
Na (AA)	-0.50	1.54	-2.11	-5.16	
P - Olsen (as P) (PHOS)	-0.38	-0.55	0.72	-0.68	
ARRET (298)					
As (AE)	<	<	-1.65	<	
Ba (AE)	-0.51	1.25	-0.96	-0.76	
Cd (AE)	<	<	<	<	
Co (AE)	-0.39	<	-1.67	-1.37	
Cr (AE)	-1.69	0.53	-1.26	-0.39	
Cu (AE)	1.59	4.40	0.61	-0.20	
Fe (AE)	6.95	-0.61	14.92	5.90	
Mo (AE)	<	<	#	#	
Ni (AE)	2.95	<	0.46	-0.41	
Pb (AE)	-1.71	<	1.32	<	
Zn (AE)	-0.97	<	-3.77	-2.27	
RALA (299)					
N - elementary (RT)	-1.52	-0.33	-0.71	-1.15	
pH - H2O (SC)	0.82	0.54	0.35	0.33	
pH - KCl (SC)	0.88	-0.14	-0.09	-0.21	
TC=Total C (org.+inorg.) (SC)	-0.16	-0.04	-0.71	-0.31	
ANALGEO (300)					
Al (RT)	0.05	0.20	-1.04	-0.24	
As (RT)	-0.11	10.86	-3.89	-1.99	
Ba (RT)	-9.67	<	-6.55	-10.39	
Bi (RT)	<	<	#	<	
Br (RT)	4.96	4.75	1.37	1.22	
Ca (RT)	-1.41	-0.28	-1.11	-0.16	
Ce (RT)	2.09	1.54	1.26	3.50	
Co (RT)	-2.72	<	-2.12	-1.42	
Cr (RT)	-1.48	2.10	-1.37	-2.27	
Cu (RT)	0.74	3.36	4.90	2.84	
Fe (RT)	-0.59	-0.96	-1.39	-0.43	
Ga (RT)	-1.82	<	-1.47	-0.42	
Hg (RT)	0.59	0.12	-0.82	-1.13	
K (RT)	-0.96	-1.17	-1.09	-0.58	
La (RT)	-9.63	<	-0.70	-0.34	
Mg (RT)	-0.23	-1.66	-0.44	-0.18	
Mn (RT)	-1.07	0.31	-0.49	0.40	
Na (RT)	0.84	0.53	0.92	0.58	
Nb (RT)	-0.23	<	-0.38	-1.23	
Ni (RT)	-0.27	<	-0.61	-0.86	
P (RT)	-0.06	-0.13	-0.08	0.54	
Pb (RT)	-0.63	0.30	-1.92	0.07	
Rb (RT)	-0.58	3.57	-1.38	-0.98	
Si (RT)	-0.95	-0.20	-2.44	-1.60	
Sr (RT)	-2.50	-1.10	-3.02	-1.20	
Th (RT)	3.14	3.21	-0.99	2.20	
Ti (RT)	-0.21	-1.07	-2.35	-0.70	
U (RT)	3.11	<	5.51	4.03	
V (RT)	-0.93	0.59	-0.71	-1.29	
Y (RT)	-2.68	<	-5.41	-2.53	
Zn (RT)	0.90	4.54	-1.15	-0.40	
Zr (RT)	-2.97	-3.84	-2.51	-0.89	
Co (AE)	0.15	<	-0.17	-0.38	
Cr (AE)	0.11	-2.56	0.30	0.50	
Cu (AE)	-0.16	0.58	-0.07	0.46	
Mn (AE)	-0.19	-0.70	0.20	0.13	
Ni (AE)	-0.06	-3.30	-0.73	-0.64	
Pb (AE)	-0.41	0.36	-0.16	-0.84	
Zn (AE)	-1.19	-0.86	-0.53	-0.49	
As (AR)	0.16	<	0.43	0.38	
Cd (AR)	0.11	<	0.27	<	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
ANALGEO (300) (cont.)					
Co (AR)	-0.10	<	0.01	-0.81	
Cr (AR)	-1.08	-0.95	-0.60	-0.42	
Cu (AR)	0.44	0.59	0.59	0.20	
Mn (AR)	-0.14	-0.59	-0.03	0.11	
Ni (AR)	-0.11	0.20	0.12	-0.23	
P (AR)	0.59	0.24	0.07	0.46	
Pb (AR)	0.01	-0.56	0.03	0.20	
S (AR)	0.23	-0.42	-0.01	-0.08	
V (AR)	-0.78	-0.44	-0.48	-0.46	
Zn (AR)	-0.81	-1.01	-0.14	-0.36	
pH - H2O (SC)	-0.14	0.57	-0.22	0.47	
SPOOR (305)					
Ag (AE)	-	-	<	<	
As (AE)	0.30	<	0.09	1.25	
Ba (AE)	3.72	<	0.96	3.49	
Be (AE)	-	-	-1.60	0.54	
Cd (AE)	<	<	-1.70	<	
Co (AE)	-0.44	<	-1.74	0.56	
Cr (AE)	1.98	<	1.70	2.46	
Cu (AE)	2.24	-1.51	1.18	2.91	
Hg (AE)	79.03	<	0.72	1.97	
Mo (AE)	<	<	<	<	
Ni (AE)	-0.06	<	-0.39	1.97	
P (AE)	-	-	-1.22	0.64	
Pb (AE)	3.56	<	1.53	4.37	
Sb (AE)	<	<	<	<	
Se (AE)	-	-	<	<	
Sn (AE)	<	<	<	<	
Th (AE)	-	-	<	<	
Tl (AE)	-	-	<	<	
V (AE)	-	-	0.14	1.01	
Zn (AE)	-0.70	<	-2.19	0.44	
C - org others (W&B a.o.) (SC)	-6.90	-4.66	-7.06	-5.98	
EC-SC (ISO 11265) (SC)	-0.57	-0.56	-0.75	0.12	
Fraction < 2 µm (SC)	-0.48	-0.52	0.06	-0.42	
Org.matter (L.O.I.) (SC)	-0.65	-0.88	0.28	47.11	
pH - CaCl2 (SC)	-4.02	1.16	1.84	0.21	
pH - H2O (SC)	0.37	3.59	2.01	1.61	
pH - KCl (SC)	-0.62	-1.21	0.69	0.13	
TIC=Tot.Inorg C(CaCO3) (SC)	-	-	-0.70	-0.58	
FOHS-LAB (306)					
Cd (AE)	0.74	17.38	1.93	-0.58	
Cr (AE)	1.29	3.28	0.27	-0.11	
Cu (AE)	1.13	0.15	2.15	0.34	
Fe (AE)	-2.12	-1.30	0.74	-0.52	
Hg (AE)	0.23	-0.06	0.72	0.93	
N (AE)	-0.18	-0.41	0.95	0.15	
Ni (AE)	2.48	<	2.94	<	
P (AE)	-2.43	-1.90	-2.71	-2.41	
Pb (AE)	-0.12	-0.90	1.28	0.78	
Zn (AE)	3.46	<	5.09	1.25	
Org.matter (L.O.I.) (SC)	1.04	-0.11	0.47	0.48	
pH - H2O (SC)	1.43	1.53	0.92	1.26	
ERSAFVGSCA (307)					
C - org others (W&B a.o.) (SC)	1.10	0.15	-0.02	2.44	
Fraction < 2 µm (SC)	-1.91	1.26	-3.07	-1.38	
Fraction < 63 µm (SC)	-0.29	0.25	-1.74	-0.71	
Fraction > 63 µm (SC)	0.79	-0.16	3.50	0.75	
pH - KCl (SC)	-1.73	7.28	0.69	0.69	
Ca (AA)	0.35	0.17	-0.36	0.29	
CEC (AA)	0.81	0.85	0.85	1.36	
K (AA)	2.87	4.52	1.94	5.63	
Mg (AA)	0.62	1.92	0.31	0.22	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
ERSAFVGSCA (307) (cont.)					
Na (AA)	0.76	-0.17	1.57	2.26	
P - Olsen (as P) (PHOS)	0.76	0.85	1.41	0.08	
PLVHOLAB (308)					
Al (AE)	0.00	0.33	-1.12	0.60	
As (AE)	0.15	17.06	-1.84	0.71	
Ba (AE)	0.67	0.47	-0.88	0.74	
Ca (AE)	0.69	0.40	-1.93	2.04	
Cd (AE)	<	25.36	<	<	
Co (AE)	-12.19	171.02	-4.03	-5.35	
Cr (AE)	-8.10	105.47	-2.90	-3.74	
Cu (AE)	-15.11	27.33	-10.40	-5.30	
Fe (AE)	-0.93	1.27	-5.03	-0.02	
Hg (AE)	1.64	<	0.72	-0.47	
K (AE)	0.11	0.23	-0.31	0.32	
Li (AE)	#	#	#	#	
Mg (AE)	-0.16	-0.23	-0.95	2.79	
Mn (AE)	-3.35	-0.80	-3.48	1.17	
Mo (AE)	-0.73	#	#	#	
Na (AE)	3.51	7.99	0.13	0.74	
Ni (AE)	0.54	0.41	-1.79	1.80	
P (AE)	-0.74	0.04	-3.31	0.01	
Pb (AE)	0.05	0.36	-1.75	1.09	
S (AE)	0.35	0.72	-2.20	0.38	
Sb (AE)	#	<	#	#	
Se (AE)	<	#	<	<	
Sn (AE)	<	<	<	<	
Sr (AE)	#	#	#	#	
Ti (AE)	#	#	#	#	
Tl (AE)	<	<	<	<	
V (AE)	-0.72	0.09	-1.68	-0.30	
Zn (AE)	-0.01	-0.16	-2.98	1.16	
EC-SC (ISO 11265) (SC)	-0.44	-0.61	-0.26	-0.12	
Fraction < 2 µm (SC)	-0.46	-0.34	0.14	0.10	
Org.matter (L.O.I.) (SC)	0.25	0.06	1.07	0.70	
pH - CaCl2 (SC)	0.44	-0.77	-0.35	-0.30	
pH - H2O (SC)	1.05	-0.10	1.08	0.92	
pH - KCl (SC)	0.94	-0.89	-0.35	-0.54	
HLVAKASSEL (313)					
N - elementary (RT)	0.72	1.88	0.12	0.04	
Al (AR)	0.04	-0.59	-0.05	-0.11	
As (AR)	-1.36	-1.42	-4.61	-1.41	
Be (AR)	0.38	#	-0.31	0.10	
Ca (AR)	0.75	-0.66	0.74	0.60	
Cd (AR)	0.46	-0.37	0.54	-0.37	
Co (AR)	1.13	0.94	1.98	1.01	
Cr (AR)	0.36	0.13	0.47	0.21	
Cu (AR)	5.49	19.75	0.59	0.15	
Fe (AR)	0.62	-0.65	0.41	0.54	
Hg (AR)	0.97	-0.25	1.16	1.05	
K (AR)	0.28	0.13	0.11	-0.17	
Li (AR)	#	#	#	#	
Mg (AR)	0.78	-0.15	0.76	0.48	
Mn (AR)	0.94	0.00	1.06	0.80	
Mo (AR)	0.63	-0.21	0.76	0.85	
Ni (AR)	1.29	1.13	1.79	0.71	
P (AR)	0.73	-0.28	0.51	0.71	
Pb (AR)	1.65	-0.51	0.58	0.43	
S (AR)	0.69	0.92	-0.09	-0.08	
Sb (AR)	#	#	#	#	
Se (AR)	#	#	-0.44	#	
Sn (AR)	#	#	#	#	
Sr (AR)	#	#	#	#	
Ti (AR)	#	#	#	#	
Tl (AR)	#	<	#	#	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
HLVAKASSEL (313) (cont.)				
V (AR)	1.25	2.87	0.79	0.74
Zn (AR)	0.11	1.00	0.58	0.07
K (CC)	-0.33	-1.52	-0.07	-0.48
Mg (CC)	2.90	-1.95	4.45	3.49
N - NH4 (as N) (CC)	-0.81	0.02	0.00	0.07
N - NO3 (as N) (CC)	1.98	-0.98	-0.21	-0.91
Na (CC)	#	#	#	#
pH - H2O (SC)	-0.14	-0.10	0.35	0.57
pH - KCl (SC)	-1.47	-0.46	-0.04	0.13
TC=Total C (org.+inorg.) (SC)	2.07	1.82	0.98	1.00
TOC=Total Org. C (SC)	-0.39	0.26	-0.55	-0.93
LUARE (314)				
Al (RT)	13.81	5.50	-3.31	-2.15
As (RT)	1.05	<	-0.14	0.51
Ba (RT)	0.45	0.85	-0.36	-0.01
Br (RT)	0.30	0.04	-0.53	-0.64
Ca (RT)	3.41	6.30	-0.96	-0.75
Cd (RT)	<	<	<	<
Ce (RT)	-0.53	0.23	-0.31	-0.19
Cr (RT)	0.60	0.88	1.05	1.76
Cu (RT)	0.62	1.23	0.67	0.56
Fe (RT)	7.89	1.21	0.73	0.76
Ga (RT)	0.61	<	-0.10	-0.54
K (RT)	1.68	1.86	-2.23	-1.40
La (RT)	-0.60	3.92	-0.61	-0.17
Mg (RT)	7.43	<	0.54	2.26
Mn (RT)	1.78	<	-0.26	0.11
Na (RT)	0.88	<	3.57	4.95
Nb (RT)	-0.67	-0.45	-0.61	-0.22
Ni (RT)	0.65	<	-0.16	0.28
P (RT)	12.58	27.89	-1.12	2.32
Pb (RT)	0.07	-0.12	0.44	0.20
Rb (RT)	0.70	0.06	0.73	0.84
S (RT)	6.54	17.23	0.69	0.77
Sb (RT)	<	<	<	<
Se (RT)	<	<	<	<
Si (RT)	-8.66	-27.47	-3.84	-2.75
Sn (RT)	-0.09	<	-0.02	0.09
Sr (RT)	1.45	-0.25	0.35	0.60
Ti (RT)	0.42	0.96	-5.01	-1.76
V (RT)	1.21	0.72	-0.50	-0.54
Y (RT)	1.40	<	0.94	0.75
Zn (RT)	0.85	0.71	-0.71	-0.25
Zr (RT)	-1.68	-2.57	-0.22	0.36
SMBPLNUS (315)				
N (AE)	-0.26	1.94	-2.11	-1.99
Ca (AA)	-1.13	-2.39	-1.60	-1.66
K (AA)	0.19	-0.92	-0.73	0.12
Mg (AA)	1.72	0.91	1.82	2.55
P - Bray (as P) (PHOS)	6.27	0.69	0.69	1.51
SRINAGAR (320)				
N (AE)	0.69	0.44	0.95	0.52
TC=Total C (org.+inorg.) (SC)	0.27	0.14	-0.67	-0.90
NFVGOE (321)				
Al (RT)	0.25	-1.48	-0.06	0.17
Ba (RT)	0.09	-0.72	0.49	0.20
Ca (RT)	-0.05	0.21	-0.57	-0.58
Cd (RT)	0.96	#	1.51	-0.08
Co (RT)	-0.03	0.11	-0.36	-0.33
Cr (RT)	-0.80	-0.61	-0.10	-0.24
Cu (RT)	0.33	-0.50	1.01	0.06
Fe (RT)	-0.08	0.01	-0.79	-0.70

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
NFVGOE (321) (cont.)					
K (RT)	-0.15	0.17	0.05	0.03	
Mg (RT)	0.24	-0.12	-0.21	-0.30	
Mn (RT)	0.02	-0.75	-0.95	-0.49	
N - elementary (RT)	0.50	1.49	-0.05	0.04	
Na (RT)	0.05	0.52	0.03	-0.06	
Ni (RT)	-0.07	-0.91	0.02	-0.30	
P (RT)	-0.91	-0.16	-0.58	-1.66	
Pb (RT)	-0.01	0.18	-0.17	0.58	
S (RT)	-0.18	-0.05	-0.08	-0.26	
Ti (RT)	0.39	0.88	-0.65	-0.22	
Zn (RT)	-0.36	-0.73	-0.32	-0.42	
Al (AE)	0.47	-0.16	0.76	1.37	
Ba (AE)	1.10	2.13	0.77	0.65	
Ca (AE)	0.19	-0.75	0.62	0.23	
Cd (AE)	-1.42	-1.23	-0.18	-0.66	
Co (AE)	0.88	-0.43	1.09	0.84	
Cr (AE)	0.92	-0.64	1.80	1.05	
Cu (AE)	2.02	0.04	2.71	1.67	
Fe (AE)	1.27	-0.11	1.56	1.25	
K (AE)	0.55	0.46	0.85	1.06	
Mg (AE)	0.58	-0.23	0.82	1.77	
Mn (AE)	-0.05	-0.45	0.85	0.67	
Na (AE)	-0.50	-0.23	0.00	0.22	
Ni (AE)	2.54	-1.04	2.32	1.75	
P (AE)	0.90	0.31	0.97	0.20	
Pb (AE)	3.29	0.48	1.52	0.74	
S (AE)	0.76	-0.17	1.05	0.61	
Ti (AE)	#	#	#	#	
Zn (AE)	1.21	1.20	1.59	0.96	
pH - CaCl2 (SC)	0.00	0.33	0.81	1.75	
pH - H2O (SC)	0.67	0.15	1.29	1.46	
pH - KCl (SC)	1.07	-0.35	0.27	0.47	
TC=Total C (org.+inorg.) (SC)	0.37	0.40	-0.51	-0.35	
TIC=Tot.Inorg C(CaCO3) (SC)	-2.92	-	-	-	
Ca (BC)	#	-	#	-	
CEC (BC)	0.16	-	-0.80	-	
K (BC)	#	-	#	-	
Mg (BC)	#	-	#	-	
Na (BC)	#	-	#	-	
Al (AC)	-	#	-	#	
Ca (AC)	-	#	-	#	
CEC (AC)	-	#	-	#	
Fe (AC)	-	#	-	#	
K (AC)	-	#	-	#	
Mg (AC)	-	#	-	#	
Mn (AC)	-	#	-	#	
Na (AC)	-	#	-	#	
FVABW (322)					
N - elementary (RT)	0.27	-1.24	-1.00	-1.94	
N (AE)	-0.96	-0.41	-1.32	-2.46	
Al (AR)	0.77	0.25	0.67	0.95	
As (AR)	0.84	-2.84	-0.08	1.19	
Ca (AR)	0.81	-0.87	0.06	-0.20	
Cd (AR)	-0.50	-1.20	-0.25	<	
Co (AR)	1.49	0.31	-0.21	0.47	
Cr (AR)	1.33	-0.40	0.51	1.03	
Cu (AR)	0.76	-0.84	0.74	1.16	
Fe (AR)	-0.09	0.08	-0.13	0.59	
K (AR)	1.93	0.61	1.22	1.31	
Mg (AR)	0.25	-0.15	0.34	0.71	
Mn (AR)	-0.21	1.74	-0.93	0.34	
Na (AR)	0.12	<	0.15	-0.54	
Ni (AR)	1.34	-1.14	0.60	0.75	
P (AR)	-0.31	-0.58	0.01	0.53	
Pb (AR)	1.26	-0.56	-0.13	0.37	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
FVABW (322) (cont.)					
S (AR)	-0.11	-0.89	0.22	0.45	
Zn (AR)	0.43	-1.46	0.52	1.29	
pH - CaCl2 (SC)	0.18	-0.63	0.04	-0.55	
pH - H2O (SC)	0.71	0.51	0.66	0.62	
pH - KCl (SC)	1.14	-0.68	-0.24	-0.65	
TC=Total C (org.+inorg.) (SC)	-0.88	-0.86	-0.95	-2.37	
TIC=Tot.Inorg C(CaCO3) (SC)	-0.01	<	<	<	
TOC=Total Org. C (SC)	-0.14	-0.54	-0.68	-1.51	
Ca (BC)	#	-	#	-	
CEC (BC)	0.07	-	-0.63	-	
K (BC)	#	-	#	-	
Mg (BC)	#	-	#	-	
Na (BC)	#	-	#	-	
Al (AC)	-	#	-	#	
Ca (AC)	-	#	-	#	
CEC (AC)	-	#	-	#	
Fe (AC)	-	#	-	#	
H (AC)	-	#	-	#	
K (AC)	-	#	-	#	
Mg (AC)	-	#	-	#	
Mn (AC)	-	#	-	#	
Na (AC)	-	#	-	#	
Al (BB)	<	#	#	#	
Ca (BB)	#	#	#	#	
CEC (BB)	#	#	#	#	
Fe (BB)	<	#	<	#	
H (BB)	<	#	#	#	
K (BB)	#	#	#	#	
Mg (BB)	#	#	#	#	
Mn (BB)	#	#	#	#	
Na (BB)	#	#	#	#	
SMART (326)					
N (AE)	-0.49	-1.91	-2.90	-1.71	
C - org others (W&B a.o.) (SC)	0.00	-0.17	-0.54	1.91	
pH - H2O (SC)	-0.65	-1.06	-0.90	-0.96	
pH - KCl (SC)	-0.17	-0.68	-1.17	-1.21	
Ca (AA)	0.58	-0.79	0.46	-0.36	
CEC (AA)	0.21	0.03	-0.72	-0.43	
K (AA)	-0.19	-0.43	0.10	0.35	
Mg (AA)	-0.47	-0.60	-0.81	-0.94	
Na (AA)	-0.50	-1.03	-0.43	-0.83	
P - Bray (as P) (PHOS)	-0.15	-4.40	-0.35	-0.90	
GLAGC (327)					
Al (RT)	-2.97	-0.75	1.08	0.14	
As (RT)	-0.01	-0.89	0.17	-0.20	
Ba (RT)	-0.64	-1.29	0.44	-0.22	
Be (RT)	#	#	#	#	
Ca (RT)	-0.31	-0.52	1.13	2.62	
Cd (RT)	-0.24	<	-0.75	<	
Co (RT)	-0.13	<	-0.15	-0.27	
Cr (RT)	-0.70	-0.58	0.32	0.19	
Cu (RT)	0.20	-0.32	0.35	-0.66	
Fe (RT)	-4.03	-0.63	-1.74	-1.68	
Ga (RT)	-0.39	<	-0.16	0.80	
K (RT)	-1.41	-1.89	-0.26	-0.41	
Li (RT)	-0.95	#	-0.61	-0.61	
Mg (RT)	-0.91	-0.56	-1.56	-1.98	
Mn (RT)	-0.16	-1.28	0.81	0.63	
N - elementary (RT)	0.27	-3.70	-0.89	-0.87	
Na (RT)	0.12	-0.68	1.03	1.35	
Ni (RT)	0.34	-0.65	0.71	0.06	
P (RT)	-0.29	-1.01	-0.12	-1.66	
Pb (RT)	-0.67	-0.79	-0.70	-2.46	
Rb (RT)	1.05	-0.46	-0.48	-0.52	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
GLAGC (327) (cont.)				
S (RT)	0.70	0.16	0.56	0.13
Si (RT)	-0.95	-0.20	-1.74	-1.41
Sr (RT)	0.11	-0.36	1.43	1.20
Ti (RT)	-1.25	-1.36	-1.62	-0.91
Tl (RT)	<	<	#	#
V (RT)	-0.80	-0.72	-0.60	-0.65
Y (RT)	0.46	<	-1.93	-0.48
Zn (RT)	-0.44	-0.52	-0.05	-0.40
Al (AE)	0.97	1.66	1.00	1.71
As (AE)	-0.66	0.72	0.33	-0.45
Ba (AE)	1.47	0.86	0.74	0.87
Be (AE)	#	#	0.06	0.54
Ca (AE)	-0.02	0.93	0.54	0.09
Cd (AE)	1.42	0.41	1.52	-0.58
Co (AE)	0.97	0.80	0.94	0.71
Cr (AE)	1.29	3.25	2.01	1.25
Cu (AE)	1.22	1.20	1.18	0.64
Fe (AE)	0.84	2.71	0.65	0.75
Hg (AE)	-0.77	-0.55	-0.74	-0.87
K (AE)	0.80	0.75	0.82	1.11
Li (AE)	#	#	#	#
Mn (AE)	-0.15	4.04	0.94	1.08
Mo (AE)	-0.38	#	#	#
Na (AE)	0.78	0.50	0.84	0.49
Ni (AE)	2.95	1.91	2.06	1.57
P (AE)	0.28	1.70	-0.03	-0.17
Pb (AE)	1.46	4.82	0.33	-0.29
S (AE)	-0.49	1.14	-0.06	-0.42
Sr (AE)	#	#	#	#
Ti (AE)	#	#	#	#
V (AE)	0.70	1.86	0.68	0.72
Zn (AE)	0.38	1.64	0.90	0.73
pH - CaCl2 (SC)	1.23	1.44	2.09	2.26
TC=Total C (org.+inorg.) (SC)	-0.74	-1.50	-1.00	-0.93
TIC=Tot.Inorg C(CaCO3) (SC)	0.30	<	<	<
TOC=Total Org. C (SC)	0.27	-1.27	-0.60	-0.54
Ca (BC)	#	-	-	-
CEC (BC)	-0.66	-	-	-
Mg (BC)	#	-	-	-
Na (BC)	#	-	-	-
Al (AC)	-	#	#	#
Ca (AC)	-	#	#	#
CEC (AC)	-	#	#	#
Fe (AC)	-	<	<	#
H (AC)	-	#	<	#
K (AC)	-	#	#	#
Mg (AC)	-	#	#	#
Mn (AC)	-	#	#	#
Na (AC)	-	#	#	#
P-2000RG (334)				
N (AE)	-0.34	0.23	-1.21	-1.43
Mg (CC)	1.23	-1.72	2.59	0.62
Org.matter (L.O.I.) (SC)	0.32	-0.76	0.83	0.94
pH - KCl (SC)	-0.43	0.83	-0.35	1.81
K (DL)	4.53	-4.17	-0.43	1.53
P (DL)	-20.46	-34.70	-6.44	#
Cu (HCLPN)	-0.57	0.66	5.63	0.52
Fe (HCLPN)	1.79	-0.57	6.35	2.03
Mn (HCLPN)	4.27	-0.14	0.91	1.46
Zn (HCLPN)	0.93	1.19	4.46	0.65
OLESKA (335)				
Cd (AE)	1.08	-0.09	-1.03	0.11
Cu (AE)	0.43	-1.06	0.85	0.56
Fe (AE)	-0.24	1.14	0.49	-0.53

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
OLESKA (335) (cont.)					
Hg (AE)	0.21	1.25	-0.03	-0.63	
Mn (AE)	-2.72	3.14	-0.05	0.43	
Ni (AE)	0.62	0.12	0.46	-0.05	
Pb (AE)	1.80	-	-0.32	0.06	
Zn (AE)	-0.17	-0.02	0.51	0.57	
Mg (CC)	-0.05	-1.22	-0.01	0.06	
Fraction < 16 µm (SC)	-0.76	-0.94	-0.88	-0.76	
Fraction < 63 µm (SC)	-7.02	-1.43	-16.60	-23.09	
Fraction > 63 µm (SC)	-0.91	1.55	3.88	1.03	
pH - KCl (SC)	0.88	-0.25	-0.35	0.69	
P (DL)	-0.07	-0.93	1.35	#	
Cu (HCLPN)	-1.08	-1.71	0.34	-1.10	
Fe (HCLPN)	0.01	-	0.47	-	
Mn (HCLPN)	0.59	0.62	0.74	-0.92	
Zn (HCLPN)	0.00	-1.24	1.96	-0.01	
SKRA (336)					
Hg (RT)	-0.75	0.60	-0.17	0.36	
As (AE)	-0.28	<	0.23	-0.09	
Cd (AE)	1.08	<	-0.62	<	
Cr (AE)	0.07	0.06	0.10	-0.79	
Cu (AE)	0.48	0.30	0.21	-0.02	
Fe (AE)	0.25	0.02	0.05	0.01	
Mn (AE)	-0.05	-0.13	-0.32	0.49	
N (AE)	0.29	0.76	-0.47	0.24	
Ni (AE)	0.14	0.18	-0.29	-0.12	
Pb (AE)	-0.01	0.14	0.28	0.05	
Zn (AE)	0.19	0.19	-0.05	-0.19	
Mg (CC)	0.16	-0.05	0.14	0.11	
C - org others (W&B a.o.) (SC)	0.13	-0.17	-0.09	-0.51	
pH - KCl (SC)	-0.36	-0.25	-0.35	0.35	
K (DL)	-0.76	-0.07	-0.43	-0.37	
P (DL)	0.67	0.57	-0.19	<	
Cu (HCLPN)	0.45	-0.27	0.34	1.01	
Fe (HCLPN)	-0.14	-0.64	0.23	0.37	
Mn (HCLPN)	0.38	-0.17	-0.22	0.01	
Zn (HCLPN)	-0.72	-0.06	0.81	0.04	
CHKS (337)					
Cd (AE)	0.05	<	-0.49	<	
Cr (AE)	0.02	0.06	-0.07	-0.28	
Cu (AE)	0.21	0.00	0.04	0.40	
Fe (AE)	0.25	0.08	0.00	0.79	
Hg (AE)	-0.32	-0.61	0.03	0.23	
Mn (AE)	0.28	0.72	-0.71	0.08	
N (AE)	-0.02	0.33	-0.21	-0.22	
Ni (AE)	-0.06	<	0.25	0.21	
Pb (AE)	0.22	0.00	-0.46	-0.13	
Zn (AE)	0.67	0.25	0.66	0.98	
Mg (CC)	<	0.03	<	<	
Org.matter (L.O.I.) (SC)	0.29	0.59	-0.51	-0.49	
pH - KCl (SC)	-0.04	0.62	0.69	0.47	
K (DL)	0.57	0.51	0.30	0.67	
P (DL)	-1.05	-0.47	0.01	<	
GDAGRO (338)					
As (AE)	-0.05	0.16	-0.10	1.70	
Cd (AE)	-0.29	0.16	-0.26	<	
Cr (AE)	-0.34	1.04	-0.15	-0.65	
Cu (AE)	0.21	0.34	-0.87	0.04	
Fe (AE)	-0.34	0.20	-0.32	0.40	
Hg (AE)	-0.30	3.76	-0.81	0.26	
Mn (AE)	-0.37	0.37	0.29	0.90	
Ni (AE)	-0.19	<	0.60	0.01	
Pb (AE)	-0.69	0.31	-0.08	-0.04	
Zn (AE)	0.04	-0.44	0.03	-0.14	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
GDAGRO (338) (cont.)					
Mg (CC)	-0.79	-0.05	-1.00	-	
Org.matter (L.O.I.) (SC)	-0.69	0.48	-0.51	0.19	
pH - H2O (SC)	-0.01	0.21	1.23	1.75	
pH - KCl (SC)	-0.30	0.08	-0.24	-0.09	
K (DL)	1.57	-2.34	1.03	-0.55	
P (DL)	0.67	-0.01	-1.47	<	
LABRES (339)					
As (AE)	-0.28	-0.69	0.09	1.25	
Cd (AE)	0.05	<	-0.49	<	
Cr (AE)	0.03	0.25	-0.16	-0.71	
Cu (AE)	0.85	0.46	0.04	0.22	
Fe (AE)	-0.34	0.83	-0.27	0.43	
Hg (AE)	-0.02	0.27	0.23	0.24	
Mn (AE)	0.42	0.55	-0.45	0.94	
N (AE)	-0.49	0.12	-0.37	-0.22	
Ni (AE)	0.61	0.18	-0.05	0.01	
Pb (AE)	0.44	0.36	0.26	0.23	
Zn (AE)	0.81	0.32	0.18	0.35	
Mg (CC)	-0.89	0.72	-0.24	-0.16	
Org.matter (L.O.I.) (SC)	0.29	0.59	-0.71	0.15	
pH - KCl (SC)	0.22	0.83	0.69	0.47	
K (DL)	0.57	0.51	0.30	-0.03	
P (DL)	0.67	1.73	-0.25	<	
Cu (HCLPN)	0.20	-0.78	-2.45	-1.80	
Fe (HCLPN)	-1.29	0.22	0.28	0.15	
Mn (HCLPN)	0.00	-1.67	0.08	-0.21	
Zn (HCLPN)	-0.23	-0.46	0.92	-0.14	
GLOBI (340)					
As (AE)	2.23	0.23	1.37	0.35	
Cd (AE)	1.67	0.26	0.22	0.03	
Cr (AE)	-0.35	2.44	-2.44	-0.76	
Cu (AE)	-0.26	0.09	-0.93	-0.08	
Fe (AE)	1.14	0.20	-0.41	1.14	
Mn (AE)	0.71	-0.20	0.85	-0.28	
Ni (AE)	1.73	0.18	-0.73	-0.75	
Pb (AE)	-0.58	-0.07	0.11	0.29	
Zn (AE)	-0.39	0.19	-0.08	-0.10	
Mg (CC)	0.69	0.72	0.14	-6.15	
pH - KCl (SC)	0.16	0.83	0.58	0.69	
K (DL)	-1.66	-0.07	-1.02	-2.90	
P (DL)	0.90	-21.01	-2.34	#	
B (HCLPN)	-0.47	1.15	-0.09	-0.97	
Cu (HCLPN)	0.45	-0.31	-0.35	0.31	
Fe (HCLPN)	-0.90	-3.21	-0.71	-0.23	
Mn (HCLPN)	1.10	-0.65	-0.59	-0.70	
Zn (HCLPN)	0.00	1.19	-0.23	0.92	
OSCHR-OL (341)					
TOC=Total Org. C (SC)	1.91	-0.59	0.91	1.30	
B (HCLPN)	0.80	-0.11	0.41	-	
Cu (HCLPN)	0.45	0.62	-1.05	0.31	
Fe (HCLPN)	0.99	0.22	0.66	1.47	
Mn (HCLPN)	-1.09	2.75	0.83	1.23	
Zn (HCLPN)	0.46	-0.93	-0.23	0.65	
SKLODPOL (342)					
Hg (RT)	-0.18	0.61	-0.08	0.33	
As (AR)	0.22	-3.83	-1.35	-2.71	
Cd (AR)	<	<	-1.93	<	
Cr (AR)	0.21	0.10	-0.83	-0.84	
Cu (AR)	0.12	0.87	-0.60	-0.47	
Fe (AR)	-1.22	0.08	-0.82	-0.99	
Mn (AR)	1.57	0.25	-0.12	1.87	
Ni (AR)	-0.11	0.20	-0.79	-0.58	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
SKLODPOL (342) (cont.)					
Pb (AR)	-0.62	0.47	-0.77	-0.91	
Zn (AR)	1.27	0.18	0.65	0.59	
Mg (CC)	0.79	0.45	2.11	0.72	
Fraction < 16 µm (SC)	-0.97	-0.38	-1.03	-1.16	
Fraction < 63 µm (SC)	-0.28	-0.28	-0.97	-0.83	
Fraction > 63 µm (SC)	0.79	0.57	2.07	0.88	
Org.matter (L.O.I.) (SC)	1.00	-1.93	0.43	-0.18	
pH - KCl (SC)	0.88	1.15	1.00	1.02	
K (DL)	0.90	1.10	-1.90	1.19	
P (DL)	11.01	0.22	1.83	#	
B (HCLPN)	-0.88	-2.24	-0.41	-0.08	
Cu (HCLPN)	-0.34	-0.08	2.27	-0.40	
Fe (HCLPN)	-0.46	-1.89	1.72	0.46	
Mn (HCLPN)	-0.55	-0.57	-0.81	-0.21	
Zn (HCLPN)	-1.85	-0.72	0.19	-1.76	
MALWA (343)					
As (AE)	-0.12	0.79	-0.10	-0.54	
Cd (AE)	0.05	<	-0.09	<	
Cr (AE)	-0.11	0.81	-0.57	-0.44	
Cu (AE)	0.02	0.34	-0.64	-0.61	
Fe (AE)	-0.14	0.14	-0.46	-1.01	
Mn (AE)	-0.51	-0.37	-0.58	-1.19	
N (AE)	-0.34	0.55	-0.37	-0.04	
Ni (AE)	0.88	<	-0.29	-0.15	
Pb (AE)	0.39	-0.03	-0.05	1.31	
Zn (AE)	0.14	0.25	-0.53	-1.17	
Mg (CC)	<	0.34	<	<	
Org.matter (L.O.I.) (SC)	0.22	0.42	-0.32	-0.54	
pH - H2O (SC)	-0.31	0.09	0.04	0.87	
pH - KCl (SC)	-0.30	0.29	0.38	0.91	
K (DL)	0.57	-0.73	0.30	-0.89	
P (DL)	-0.47	-4.77	-0.59	#	
B (HCLPN)	0.86	-0.36	0.65	0.89	
Cu (HCLPN)	-0.57	0.15	0.34	-1.10	
Fe (HCLPN)	0.08	0.61	0.65	-0.33	
Mn (HCLPN)	-0.27	1.13	-1.19	0.01	
Zn (HCLPN)	-0.23	0.01	-0.02	-1.21	
LVDC (344)					
N (AE)	0.22	-0.41	0.48	0.06	
P (CC)	#	#	#	#	
Org.matter (L.O.I.) (SC)	-0.55	0.18	-0.14	-0.18	
pH - KCl (SC)	1.59	-0.14	0.48	0.35	
SEEDLING (346)					
C - org others (W&B a.o.) (SC)	0.04	-0.04	0.63	0.96	
pH - CaCl2 (SC)	-4.10	-0.77	-1.37	-1.32	
pH - H2O (SC)	-2.01	0.33	-1.21	-0.56	
Al (BB)	#	#	#	#	
Ca (BB)	#	#	#	#	
CEC (BB)	#	#	#	#	
Fe (BB)	#	#	#	#	
K (BB)	#	#	#	#	
Mg (BB)	#	#	#	#	
Na (BB)	#	#	#	#	
Mn (CH)	#	#	#	#	
VILJAVUUSP (419)					
N - elementary (RT)	1.81	2.98	1.07	1.08	
As (AE)	-3.86	4.98	0.74	0.56	
Al (AR)	-0.66	-1.16	-0.85	-0.71	
B (AR)	#	#	#	#	
Ca (AR)	-0.43	-0.20	0.50	0.25	
Cd (AR)	2.54	3.50	4.89	1.41	
Co (AR)	-1.75	-0.16	-0.14	-0.35	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
VILJAVUUSP (419) (cont.)					
Cr (AR)	2.41	0.78	1.34	2.78	
Cu (AR)	0.41	3.17	0.50	0.58	
Hg (AR)	0.00	-0.35	0.93	0.72	
K (AR)	-0.24	-0.34	-0.08	-0.02	
Mg (AR)	-0.66	-0.94	-0.05	-6.77	
Mn (AR)	-1.51	-0.61	-1.77	-1.09	
Mo (AR)	-0.72	-2.20	<	<	
Ni (AR)	0.21	3.39	0.10	-1.12	
P (AR)	-1.28	-0.38	-0.67	-1.11	
Pb (AR)	-1.03	-1.03	0.14	-1.87	
V (AR)	0.75	1.02	0.54	0.45	
Zn (AR)	-0.60	-0.43	0.09	-0.16	
N total soluble (CC)	#	#	#	#	
EC-SC (ISO 11265) (SC)	1.25	1.55	0.08	-2.74	
pH - H2O (SC)	-0.39	1.63	-0.17	3.41	
CEC (AA)	-2.42	-0.92	-1.76	-2.28	
ADE (424)					
As (AE)	-4.11	-1.46	-2.80	-2.68	
Cd (AE)	4.86	-0.59	5.42	4.98	
Cr (AE)	-1.43	-1.06	-2.34	-1.19	
Cu (AE)	-1.09	1.20	-1.67	-1.15	
Hg (AE)	-2.76	-0.06	-4.58	-3.97	
N (AE)	-2.30	-1.70	-1.26	-3.48	
Ni (AE)	-5.41	0.18	-3.56	-1.75	
Pb (AE)	-1.26	-3.04	-3.23	-1.05	
Se (AE)	#	#	#	#	
Zn (AE)	-2.32	-0.79	-2.63	-1.78	
pH - CaCl2 (SC)	0.26	-1.05	0.17	-0.55	
pH - H2O (SC)	0.03	-3.30	-0.69	0.03	
TC=Total C (org.+inorg.) (SC)	0.52	-0.06	-0.40	-0.09	
TOC=Total Org. C (SC)	2.89	0.31	-0.04	0.33	
B (M3)	#	#	#	#	
Ca (M3)	0.85	1.40	-4.47	-1.19	
Fe (M3)	0.96	1.21	0.21	0.57	
K (M3)	0.28	0.68	-2.10	-1.31	
Mg (M3)	2.57	5.99	-1.48	-2.02	
Mn (M3)	0.28	1.47	-1.80	-1.89	
Na (M3)	#	#	#	#	
P (M3)	0.19	1.39	0.16	0.59	
Zn (M3)	0.26	1.10	-0.90	-1.18	
P - Olsen (as P) (PHOS)	-0.57	-0.55	-2.91	-0.27	
PLZMBZEM (806)					
N (AE)	-0.02	0.44	0.22	0.24	
Mg (CC)	1.11	7.87	2.71	0.27	
N - NH4 (as N) (CC)	-0.16	1.37	0.21	0.84	
N - NO3 (as N) (CC)	-0.49	0.07	-0.11	-0.09	
IRRI (843)					
N - elementary (RT)	-0.18	-0.59	-0.16	0.09	
N (AE)	-0.81	-1.80	-0.10	-1.34	
C - org others (W&B a.o.) (SC)	-0.97	-0.80	-0.72	-0.90	
EC-SC (ISO 11265) (SC)	-0.31	0.34	0.45	0.63	
Fraction < 2 µm (SC)	-0.15	-0.83	0.12	-0.07	
Fraction < 63 µm (SC)	0.17	0.25	0.42	0.50	
Fraction > 63 µm (SC)	0.09	-0.16	-0.48	-0.62	
pH - CaCl2 (SC)	0.35	-1.32	0.81	-0.30	
pH - H2O (SC)	-0.82	-1.54	-2.77	-1.30	
pH - KCl (SC)	-1.73	-2.40	-2.41	-2.66	
TC=Total C (org.+inorg.) (SC)	0.10	-0.38	-0.36	-0.81	
Ca (AA)	0.93	-1.17	0.35	-0.14	
CEC (AA)	-0.08	-0.59	-0.36	-0.57	
K (AA)	1.34	-0.43	1.43	2.07	
Mg (AA)	1.11	-0.70	0.16	0.27	
Na (AA)	-0.08	-0.46	-0.10	-0.31	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
IRRI (843) (cont.)				
P - Bray (as P) (PHOS)	4.12	-0.25	-0.46	1.76
P - Olsen (as P) (PHOS)	-0.01	-1.43	-3.19	-0.68
LABFOR (846)				
Cu (AE)	-4.83	-1.57	-8.26	-2.75
Fe (AE)	0.43	2.08	1.08	1.40
Org.matter (L.O.I.) (SC)	-7.37	-5.99	-13.11	-11.78
pH - H2O (SC)	1.43	2.20	0.77	-0.02
SPASL (855)				
Al (RT)	-0.98	-1.49	-0.38	-0.14
As (RT)	0.29	-2.25	-2.50	-1.10
Ca (RT)	0.62	-1.41	-0.07	0.58
Cd (RT)	54.59	#	37.64	83.26
Co (RT)	2.81	2.65	1.16	1.36
Cr (RT)	-3.61	-1.10	-1.78	-0.85
Cu (RT)	0.85	3.18	1.02	8.60
Fe (RT)	-2.06	-1.54	0.64	0.87
K (RT)	2.23	-3.11	3.70	3.20
Mg (RT)	-0.82	-0.64	-1.21	-1.15
Mn (RT)	-2.55	-1.97	-1.75	-0.60
Mo (RT)	0.47	#	#	-0.13
N - elementary (RT)	2.49	4.43	1.91	3.60
Na (RT)	-2.70	-1.83	-0.98	-2.14
Ni (RT)	-0.61	-0.36	-0.58	-0.70
P (RT)	-0.21	-0.70	-0.03	0.06
Pb (RT)	-1.94	-1.11	-1.22	-2.47
S (RT)	0.33	-0.36	-0.22	-0.16
Se (RT)	#	#	#	#
Si (RT)	-27.63	-73.11	-22.75	-18.81
Sr (RT)	-3.63	-1.53	-0.44	-0.90
Zn (RT)	-1.52	-4.00	-0.55	0.00
Fraction < 2 µm (SC)	4.02	8.64	0.82	1.12
Fraction < 63 µm (SC)	1.40	2.07	0.66	0.80
Fraction > 63 µm (SC)	-1.83	-2.73	-	-
Org.matter (L.O.I.) (SC)	-2.35	-0.95	-5.12	-6.34
pH - CaCl2 (SC)	0.54	0.84	0.33	0.34
pH - H2O (SC)	-0.43	-0.81	-0.67	-0.99
TC=Total C (org.+inorg.) (SC)	0.89	0.13	0.85	0.79
Al (AC)	#	#	-	#
Ca (AC)	#	#	#	#
Fe (AC)	-	#	-	#
K (AC)	#	#	#	#
Mg (AC)	#	#	#	#
Mn (AC)	#	#	#	#
Na (AC)	#	#	#	#
P - Bray (as P) (PHOS)	-2.61	-5.01	29.95	31.51
VBBH (859)				
C - org others (W&B a.o.) (SC)	0.57	1.03	1.19	0.26
EC-SC (ISO 11265) (SC)	-0.60	-0.52	0.07	-0.39
Fraction < 2 µm (SC)	0.28	-0.55	1.23	0.87
pH - KCl (SC)	1.07	-0.78	-0.35	1.69
TC=Total C (org.+inorg.) (SC)	-1.16	-1.18	-0.75	-1.41
TIC=Tot.Inorg C(CaCO3) (SC)	0.83	-	-	-
TOC=Total Org. C (SC)	0.10	-0.88	-0.34	-0.73
WBT (866)				
Al (RT)	-0.92	0.13	-0.80	-0.62
Ba (RT)	-5.52	-3.27	-6.83	-8.80
Ca (RT)	0.78	-0.52	0.96	-0.16
Cr (RT)	-4.45	0.83	-2.58	-0.58
Cu (RT)	-1.32	0.09	-0.48	-0.70
Fe (RT)	0.47	-1.30	0.73	0.82
K (RT)	0.08	1.30	-0.12	0.34
Li (RT)	-0.28	#	0.83	0.60

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
WBT (866) (cont.)				
Mn (RT)	-7.09	-2.14	-6.40	-5.91
Na (RT)	-12.11	-6.34	-6.46	-11.74
Ni (RT)	-4.36	0.87	-3.33	-3.06
Rb (RT)	3.75	-1.04	7.37	6.15
S (RT)	3.06	1.39	-1.37	1.30
Si (RT)	-0.18	1.80	-0.38	0.03
Sr (RT)	-9.95	-2.59	-7.34	-6.99
Ti (RT)	0.53	-0.72	0.12	0.71
V (RT)	5.39	0.59	5.90	8.18
Zn (RT)	-6.55	-3.54	-4.01	-5.18
C - org others (W&B a.o.) (SC)	0.79	0.02	2.21	0.51
Fraction < 2 µm (SC)	-0.85	-	-2.27	-1.11
Fraction > 63 µm (SC)	0.09	-0.28	-0.15	-0.92
TC=Total C (org.+inorg.) (SC)	0.24	-1.61	-1.00	0.15
CUP Analab (870)				
C - org others (W&B a.o.) (SC)	0.72	0.99	0.69	0.25
Org.matter (L.O.I.) (SC)	1.02	2.29	-0.61	-0.78
pH - H2O (SC)	-0.54	-1.39	-0.62	-1.41
Ca (AA)	0.42	0.70	0.62	0.70
K (AA)	1.18	3.43	1.12	1.42
Mg (AA)	0.75	1.52	0.61	0.29
Na (AA)	-0.29	-0.43	-0.53	1.38
Cu (M3)	0.52	1.45	-1.89	-0.31
Fe (M3)	6.70	2.87	0.69	0.63
Mn (M3)	3.63	1.57	1.26	-0.26
Zn (M3)	1.99	1.23	1.14	3.76
P - Olsen (as P) (PHOS)	0.99	0.99	0.56	1.17
ARA SUE (872)				
C - org others (W&B a.o.) (SC)	1.02	1.66	1.59	0.91
EC-SC (ISO 11265) (SC)	0.00	0.34	-0.09	0.29
Fraction < 2 µm (SC)	1.97	1.26	0.38	-2.03
Fraction < 63 µm (SC)	-8.23	-1.39	-16.15	-16.13
Fraction > 63 µm (SC)	3.25	0.60	3.50	1.78
pH - H2O (SC)	1.73	0.27	-0.69	-0.81
Ca (AA)	0.32	-0.52	0.87	1.32
CEC (AA)	2.68	2.96	1.45	1.61
K (AA)	-0.83	-2.41	-0.73	-0.34
Mg (AA)	-0.33	-0.70	-1.67	0.08
Na (AA)	-0.50	-0.74	-0.43	0.06
P - Olsen (as P) (PHOS)	-0.94	0.01	-0.77	-
GUA SUE (873)				
EC-SC (ISO 11265) (SC)	-2.22	-1.57	-2.50	0.11
pH - H2O (SC)	-2.52	-0.34	-2.25	-1.79
P - Olsen (as P) (PHOS)	0.60	1.33	0.41	-0.04
BAR SUE (874)				
EC-SC (ISO 11265) (SC)	0.47	0.56	0.02	0.12
pH - H2O (SC)	-0.65	2.08	-0.38	-0.51
P - Olsen (as P) (PHOS)	1.19	1.17	1.50	1.04
CHEMHAL (877)				
As (AR)	-0.66	0.70	-0.01	-0.69
Cd (AR)	1.95	2.78	1.22	5.96
Cr (AR)	-1.54	-0.47	-1.34	-0.94
Cu (AR)	-1.25	-1.62	-0.72	-0.28
Hg (AR)	<	<	0.68	<
Ni (AR)	-1.22	4.21	-1.46	0.08
Pb (AR)	-0.68	-0.47	-1.04	-0.49
Zn (AR)	-1.12	0.97	-1.52	-1.09
pH - CaCl2 (SC)	-0.61	1.16	0.55	1.49
TC=Total C (org.+inorg.) (SC)	0.71	0.93	0.30	0.83
TOC=Total Org. C (SC)	-0.28	0.76	-0.25	-0.35

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
LABAMB (878)					
Hg (AE)	1.64	2.67	0.72	1.27	
N (AE)	3.76	5.46	-0.42	2.94	
P (AE)	-0.82	0.78	0.17	5.20	
Ag (AR)	<	<	<	<	
Al (AR)	-1.68	-1.20	-1.73	-1.63	
As (AR)	0.41	2.83	0.50	0.15	
B (AR)	#	#	#	#	
Ba (AR)	-0.94	#	-2.04	-2.34	
Be (AR)	-1.73	<	-1.86	-2.06	
Ca (AR)	-0.69	1.18	-0.41	0.96	
Cd (AR)	1.34	4.38	0.49	2.11	
Co (AR)	-0.24	-0.72	-1.16	-2.09	
Cr (AR)	-1.74	-0.67	-1.84	-2.34	
Cu (AR)	-1.05	-0.56	-0.60	-1.04	
Fe (AR)	-0.85	-5.02	-1.24	-1.39	
Hg (AR)	<	<	6.41	<	
K (AR)	-3.72	-1.60	-2.14	-2.09	
Li (AR)	#	#	#	#	
Mg (AR)	-2.64	-1.54	-2.33	-1.92	
Mn (AR)	-0.21	0.35	0.02	-0.80	
Mo (AR)	-2.16	1.02	-0.89	-0.10	
Na (AR)	0.47	1.52	-0.71	-0.06	
Ni (AR)	-0.06	-1.14	-1.26	-1.23	
P (AR)	1.76	2.02	0.84	0.09	
Pb (AR)	0.25	0.88	0.11	-0.41	
Sb (AR)	#	#	#	#	
Se (AR)	#	#	1.51	#	
Sn (AR)	#	#	#	#	
Sr (AR)	#	#	#	#	
Ti (AR)	#	#	#	#	
Tl (AR)	#	<	#	#	
V (AR)	-1.17	0.11	-1.36	-1.93	
Zn (AR)	-0.63	-0.34	-0.68	-2.14	
C - org others (W&B a.o.) (SC)	-1.38	-0.80	-1.47	-1.08	
EC-SC (ISO 11265) (SC)	23.31	13.42	23.27	60.32	
Fraction < 16 µm (SC)	0.27	2.47	-0.11	-0.37	
Fraction < 2 µm (SC)	-3.28	2.37	-2.54	-2.04	
Fraction < 63 µm (SC)	0.42	0.38	0.01	0.26	
Fraction > 63 µm (SC)	-0.30	-0.35	0.27	-0.35	
pH - H2O (SC)	0.88	-0.04	-0.12	-0.12	
Al (BC)	#	#	#	#	
Ca (BC)	#	#	#	#	
CEC (BC)	2.16	#	1.73	#	
K (BC)	#	#	#	#	
Mg (BC)	#	#	#	#	
Na (BC)	#	#	#	#	
Cl (WS)	#	#	#	#	
F (WS)	#	#	#	#	
N - NO3 (as N) (WS)	#	#	#	#	
P - Olsen (as P) (PHOS)	3.92	0.70	2.59	23.10	
CRC (884)					
Al (AR)	2.04	0.57	2.15	0.53	
As (AR)	-1.23	-0.01	-2.39	-1.48	
B (AR)	#	#	#	#	
Ba (AR)	4.31	#	4.31	0.85	
Be (AR)	2.59	-	3.29	-	
Co (AR)	2.78	14.29	1.37	1.56	
Cr (AR)	1.86	1.47	1.53	0.26	
Cu (AR)	0.27	-0.02	0.86	1.08	
Fe (AR)	1.04	0.08	0.81	0.79	
K (AR)	5.22	-0.15	4.41	0.90	
Mg (AR)	1.93	0.91	2.53	1.46	
Mn (AR)	-1.66	3.52	-0.17	0.04	
Ni (AR)	0.09	0.53	1.71	0.88	
P (AR)	2.44	2.88	5.24	0.68	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
CRC (884) (cont.)				
Pb (AR)	4.65	4.21	2.56	4.66
Se (AR)	-	-	-0.89	-
Si (AR)	#	#	#	#
Sn (AR)	#	#	#	#
V (AR)	0.99	4.27	1.47	0.41
Zn (AR)	0.15	-0.22	0.20	0.22
Fraction < 16 µm (SC)	1.34	5.38	0.78	0.83
Fraction < 2 µm (SC)	-4.37	3.62	-2.95	-1.87
Fraction < 63 µm (SC)	-2.67	-0.24	-0.30	-0.44
Fraction > 63 µm (SC)	4.48	0.53	0.85	0.44
pH - H2O (SC)	0.33	1.05	0.35	1.26
pH - KCl (SC)	0.03	2.12	1.41	2.59
CEC (BC)	-0.63	#	-0.41	#
CAC (885)				
As (AR)	-0.27	<	0.18	0.61
Be (AR)	1.55	<	-0.47	-0.60
Cd (AR)	3.38	<	3.57	<
Co (AR)	-0.10	<	-0.14	-1.45
Cr (AR)	-1.92	-0.12	-1.85	-1.66
Cu (AR)	0.31	-0.27	-0.55	-0.70
Mn (AR)	-0.66	1.54	-0.88	-0.73
Ni (AR)	0.37	0.20	-0.54	-1.04
P (AR)	0.44	1.28	0.57	-0.33
Pb (AR)	1.94	3.27	1.35	1.65
V (AR)	-0.88	-0.44	-1.43	-1.82
Zn (AR)	-5.12	-3.26	-1.41	-2.77
C - org others (W&B a.o.) (SC)	-0.44	-0.32	1.39	5.63
pH - H2O (SC)	-0.61	-1.61	-1.84	-1.55
CEC (BC)	-1.00	#	-1.00	#
ALTAVILLA (888)				
Cd (AR)	4.19	6.77	1.00	0.76
Cr (AR)	1.38	0.86	1.80	2.41
Cu (AR)	-1.89	-2.70	-1.30	-0.87
Hg (AR)	<	<	<	<
Ni (AR)	-0.78	-1.07	0.22	1.07
Pb (AR)	0.49	1.98	3.59	0.66
Zn (AR)	0.50	-0.64	0.66	1.46
Fraction < 16 µm (SC)	-1.10	-1.85	-2.59	-2.44
Fraction < 2 µm (SC)	-5.58	0.55	-6.01	-4.18
Fraction < 63 µm (SC)	-11.05	-2.04	-19.34	-26.85
Fraction > 63 µm (SC)	3.75	1.71	15.71	1.84
pH - H2O (SC)	0.41	-0.10	0.24	-0.22
pH - KCl (SC)	0.03	-0.68	-0.86	-1.10
CEC (BC)	0.79	#	0.99	#
LSF (895)				
Ca (M3)	-0.01	-0.34	0.94	0.16
Cu (M3)	-1.47	-1.68	-0.95	2.14
Fe (M3)	0.26	0.19	-0.48	-0.21
K (M3)	-1.93	-2.57	-2.82	-1.37
Mg (M3)	-0.18	-0.22	0.24	-0.16
Mn (M3)	0.84	0.00	0.30	-0.04
P (M3)	0.85	0.11	0.53	0.04
Zn (M3)	0.03	-0.35	-0.46	-0.38
P - Olsen (as P) (PHOS)	0.74	-0.88	-3.52	-2.02
MICHAEL (904)				
N (AE)	-	0.55	-	-
P (AE)	-	0.34	-	-
As (AR)	-	-1.28	-	-
Ca (AR)	-	0.41	-	-
Cd (AR)	-	<	-	-
Co (AR)	-	<	-	-
Cr (AR)	-	<	-	-

(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
MICHAEL (904) (cont.)					
Cu (AR)	-	0.01	-	-	
Fe (AR)	-	0.57	-	-	
Hg (AR)	-	<	-	-	
K (AR)	-	0.24	-	-	
Mg (AR)	-	0.77	-	-	
Mn (AR)	-	-0.27	-	-	
Na (AR)	-	0.06	-	-	
Ni (AR)	-	<	-	-	
Pb (AR)	-	<	-	-	
V (AR)	-	-0.30	-	-	
Zn (AR)	-	0.26	-	-	
C - org others (W&B a.o.) (SC)	0.70	0.12	-0.29	0.05	
EC-SC (ISO 11265) (SC)	-	0.13	-	-	
Fraction < 16 µm (SC)	-	0.77	-	-	
Fraction < 2 µm (SC)	-	0.02	-	-	
Fraction < 63 µm (SC)	-	0.35	-	-	
Fraction > 63 µm (SC)	-	-0.31	-	-	
pH - H2O (SC)	0.46	-0.34	-0.69	-0.81	
CEC (BC)	1.13	#	0.66	#	
RF-R&D (905)					
Al (AE)	-2.39	-2.51	-1.43	-0.85	
Ca (AE)	0.35	0.05	-0.26	-1.32	
Cr (AE)	0.10	-0.12	0.03	0.57	
Cu (AE)	-0.68	3.19	-4.24	-0.96	
Fe (AE)	-1.97	-0.36	-	-	
K (AE)	-0.81	-1.85	0.13	0.33	
Mg (AE)	-1.70	3.27	0.19	0.32	
Mn (AE)	0.68	4.44	-1.17	-0.08	
Na (AE)	4.02	-	7.28	1.99	
P (AE)	0.04	0.79	-1.39	-0.93	
Zn (AE)	-0.93	-0.59	0.00	0.68	
C - org others (W&B a.o.) (SC)	0.84	0.53	0.69	1.04	
Moisture-content (OD)	-0.07	-0.09	-1.31	-4.34	
P - Bray (as P) (PHOS)	0.01	-0.39	0.08	-0.49	
SEELABO25 (918)					
Cd (NA)	0.59	0.89	1.23	3.17	
Co (NA)	-4.16	-0.40	-1.03	-0.82	
Cr (NA)	-1.69	-0.64	-3.23	-1.44	
Cu (NA)	-2.89	0.42	-3.03	-1.30	
Hg (NA)	4.24	1.91	0.36	0.24	
Mo (NA)	-1.41	-1.80	-1.88	-0.81	
Ni (NA)	-1.15	0.17	-1.69	-0.97	
Pb (NA)	-2.43	1.22	-2.92	-1.31	
Tl (NA)	#	<	<	<	
Zn (NA)	-2.45	-0.16	-2.96	-1.33	
Cd (SN)	<	<	0.64	<	
Cu (SN)	0.56	7.26	2.91	#	
Ni (SN)	10.19	#	3.96	10.62	
Pb (SN)	<	<	<	<	
Zn (SN)	#	6.05	14.63	34.93	
F (WS)	#	<	#	<	
FRESHERTEN (920)					
Cd (NA)	0.11	0.19	-1.12	0.93	
Co (NA)	0.03	0.39	0.80	3.01	
Cr (NA)	1.10	1.53	1.36	2.17	
Cu (NA)	0.63	1.59	-0.72	0.04	
Hg (NA)	0.78	1.30	0.87	3.96	
Mo (NA)	0.91	0.85	1.30	1.05	
Ni (NA)	0.63	7.75	1.36	2.91	
Pb (NA)	0.58	0.54	-0.62	0.84	
Tl (NA)	#	#	#	#	
Zn (NA)	1.51	1.50	1.17	1.62	
Cd (SN)	<	<	-0.72	<	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
FRESHERTEN (920) (cont.)					
Cu (SN)	2.20	-0.02	0.18	#	
Ni (SN)	0.60	#	0.14	0.31	
Pb (SN)	<	<	<	<	
Zn (SN)	<	-0.17	-0.72	-0.41	
F - Total (F)	#	#	#	#	
F (WS)	#	#	#	#	
LABGLEB (922)					
N (AE)	0.69	-0.52	-0.05	0.15	
pH - H2O (SC)	-	-	0.97	0.92	
pH - KCl (SC)	-	-	-0.24	-0.54	
TC=Total C (org.+inorg.) (SC)	-0.22	-	-0.41	-0.34	
Ca (AA)	1.40	-	-	-	
K (AA)	0.75	-	-	-	
Mg (AA)	1.33	-	-	-	
Na (AA)	0.26	-	-	-	
RIDIK (926)					
Ag (RT)	<	<	<	<	
Al (RT)	-0.07	0.94	-1.39	-0.62	
As (RT)	-0.54	0.10	-0.51	-0.85	
Ba (RT)	0.38	0.44	-0.55	-0.01	
Br (RT)	-0.09	-0.51	-0.67	-0.69	
Ca (RT)	0.56	0.85	-0.60	0.52	
Cd (RT)	<	<	<	<	
Co (RT)	-0.12	<	-0.25	-0.30	
Cr (RT)	-0.18	-0.23	0.44	0.54	
Cu (RT)	-0.13	0.86	-0.33	-0.30	
Fe (RT)	-0.32	0.47	0.18	-2.28	
Ga (RT)	-0.11	0.57	0.43	0.15	
Hg (RT)	<	<	<	<	
I (RT)	#	<	<	-	
K (RT)	0.08	0.51	-0.26	-0.90	
La (RT)	3.97	-	-0.98	-	
Mg (RT)	1.85	0.15	-1.22	-1.09	
Mn (RT)	0.02	-0.08	-0.11	-0.79	
Mo (RT)	0.44	<	-	-1.64	
Na (RT)	-0.82	1.88	-0.31	-0.15	
Nb (RT)	0.11	-0.02	-0.38	0.50	
Ni (RT)	-0.13	0.01	0.01	-0.38	
P (RT)	2.93	3.02	-2.62	-1.28	
Pb (RT)	-0.70	0.55	-0.23	-0.51	
Rb (RT)	-0.09	0.75	-0.02	0.08	
S (RT)	-0.70	0.47	-0.07	-0.23	
Sb (RT)	-	-	0.46	#	
Se (RT)	#	-	#	#	
Si (RT)	-0.06	0.52	0.53	1.85	
Sn (RT)	-0.75	#	-1.07	-2.24	
Sr (RT)	-0.78	0.53	-0.38	0.20	
Th (RT)	0.19	0.30	0.74	0.11	
Ti (RT)	0.42	0.71	-0.56	0.05	
Tl (RT)	#	<	#	#	
U (RT)	0.58	<	-0.75	-0.41	
V (RT)	0.25	0.68	-0.40	-0.22	
W (RT)	#	#	#	#	
Y (RT)	2.34	4.00	-1.93	0.24	
Zn (RT)	0.28	0.46	-0.16	4.07	
Zr (RT)	2.21	-	-0.22	0.90	
MCA (970)					
pH - H2O (SC)	1.13	2.62	0.30	1.21	
pH - KCl (SC)	0.42	0.40	0.27	-0.43	
Ca (AA)	-1.88	-2.99	-4.17	-0.52	
CEC (AA)	-0.28	-2.04	-2.27	-4.14	
K (AA)	0.11	-0.08	0.31	0.83	
Mg (AA)	-3.28	-0.50	-3.39	-3.18	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
MCA (970) (cont.)					
Na (AA)	0.63	0.66	-0.50	1.09	
P - Bray (as P) (PHOS)	-2.43	-5.34	-1.96	-1.14	
AGROADGAZA (971)					
N - NO3 (as N) (CC)	-0.90	-2.86	-0.88	-0.80	
C - org others (W&B a.o.) (SC)	1.11	5.08	1.18	0.85	
EC-SC (ISO 11265) (SC)	-1.26	-0.23	-0.64	-0.39	
Fraction < 16 µm (SC)	0.94	3.77	-0.20	0.31	
Fraction < 2 µm (SC)	-0.74	-0.41	-3.52	-0.70	
Fraction < 63 µm (SC)	0.53	1.20	-3.35	-1.04	
Fraction > 63 µm (SC)	-0.47	-1.50	6.47	1.12	
pH - H2O (SC)	-5.36	5.76	-5.17	12.69	
TIC=Tot.Inorg C(CaCO3) (SC)	2.41	#	4.44	4.45	
K (AA)	2.61	9.97	2.20	2.53	
Mg (AA)	-1.19	-0.09	-1.32	-1.09	
Cu (CAT)	#	#	#	#	
Fe (CAT)	#	#	#	#	
Mn (CAT)	#	#	#	#	
Zn (CAT)	#	#	#	#	
P - Olsen (as P) (PHOS)	-0.35	0.50	-1.75	-0.90	
SAC-CAL (973)					
As (AR)	-1.24	-0.43	-4.35	-0.66	
Ca (AR)	-1.39	0.18	-1.94	-0.29	
Cd (AR)	-0.91	0.39	-1.05	<	
Cr (AR)	-1.77	-1.17	-0.92	-1.66	
Cu (AR)	-0.66	0.38	-1.33	-0.08	
Fe (AR)	-1.46	-0.16	-1.59	-0.72	
Hg (AR)	2.54	<	-0.44	-0.66	
K (AR)	-0.60	0.20	-0.43	0.49	
Mo (AR)	-1.37	-0.67	<	<	
Na (AR)	-0.58	-1.20	-0.59	0.74	
Ni (AR)	-1.34	<	-0.85	-1.52	
P (AR)	-2.38	0.06	-2.42	-1.06	
Pb (AR)	-1.35	0.06	-1.78	-0.91	
Se (AR)	#	#	-1.01	#	
Zn (AR)	-2.45	0.41	-1.14	-1.06	
EC-SC (ISO 11265) (SC)	1.14	3.79	0.60	0.93	
Org.matter (L.O.I.) (SC)	-1.35	0.89	-1.31	-0.76	
pH - CaCl2 (SC)	-1.39	0.06	-0.48	-0.30	
B - Hot water (OD)	#	<	#	#	
Moisture-content (OD)	-0.47	-0.88	-2.51	-7.05	
P - Olsen (as P) (PHOS)	-1.56	1.01	-1.40	0.43	
OPBLab (975)					
C - elementary (RT)	0.70	0.74	0.80	0.46	
N - elementary (RT)	0.65	0.84	0.37	0.54	
S (RT)	16.04	10.03	7.12	4.13	
AZBY (976)					
N (AE)	-1.12	-0.09	-1.63	-3.30	
C - org others (W&B a.o.) (SC)	-1.45	-0.32	-1.32	-0.97	
pH - H2O (SC)	1.30	0.87	0.87	0.67	
Ca (AA)	-0.37	0.52	-0.65	0.30	
CEC (AA)	-0.98	-0.14	-0.37	-0.36	
K (AA)	0.19	0.07	0.03	0.93	
Mg (AA)	0.53	1.52	0.24	1.53	
Na (AA)	-0.08	-0.46	-0.60	-0.76	
P - Bray (as P) (PHOS)	0.08	-0.10	-0.83	-0.51	
P - Olsen (as P) (PHOS)	0.33	1.09	0.25	-0.15	
AGROLAB (977)					
N - elementary (RT)	0.42	-0.20	0.47	0.15	
S (RT)	0.22	1.18	0.02	2.00	
Ba (AR)	4.80	#	8.14	16.20	
Cd (AR)	-0.05	0.07	0.49	-0.28	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882	
AGROLAB (977) (cont.)					
Co (AR)	-0.81	1.76	-1.07	-0.51	
Cr (AR)	2.70	2.13	1.94	3.93	
Cu (AR)	1.44	-0.93	0.96	2.19	
Hg (AR)	2.46	1.82	6.07	6.86	
Ni (AR)	-0.71	-1.74	-0.78	0.41	
Pb (AR)	-0.51	-2.48	-1.36	-0.56	
Sr (AR)	#	#	#	#	
Zn (AR)	0.13	-1.56	-1.21	0.50	
Al (CC)	#	#	#	#	
pH - CaCl2 (SC)	-0.87	-2.01	-0.86	-3.37	
TC=Total C (org.+inorg.) (SC)	-1.74	-1.12	-1.73	-2.63	
TOC=Total Org. C (SC)	-1.70	-0.81	-1.81	-2.47	
Moisture-content (OD)	0.29	-0.73	0.57	-0.18	
P - AL (as P) (PHOS)	#	#	#	#	
LS-MRC (978)					
C - org others (W&B a.o.) (SC)	0.96	0.09	-0.64	62.51	
pH - H2O (SC)	-1.03	-0.34	-1.94	-1.35	
pH - KCl (SC)	0.75	6.21	5.43	5.71	
Ca (AA)	0.27	0.10	-0.77	-0.69	
K (AA)	0.06	12.95	0.67	-0.91	
Mg (AA)	-1.87	4.73	-2.92	-4.61	
Na (AA)	61.65	30.10	6.93	2.86	
P - Bray (as P) (PHOS)	-1.42	-3.68	-1.51	0.81	
ELEMENT (980)					
Cd (NA)	-2.15	-4.48	-0.47	<	
Co (NA)	-4.68	-5.92	-1.23	-1.45	
Cr (NA)	-0.82	2.63	-0.33	0.42	
Cu (NA)	-7.92	-24.99	-6.43	-9.07	
Hg (NA)	1.00	0.08	-1.02	-0.13	
Mo (NA)	1176.13	1277.24	1347.77	1173.18	
Ni (NA)	-0.86	-5.90	-2.35	0.21	
Pb (NA)	0.26	3.90	-1.32	1.28	
Zn (NA)	0.30	5.80	-1.55	0.56	
EALG (981)					
EC-SC (ISO 11265) (SC)	2.84	2.04	6.97	10.49	
Org.matter (L.O.I.) (SC)	-3.74	-1.35	-8.30	-8.00	
pH - H2O (SC)	-1.24	-1.18	-1.58	-1.30	
B - Hot water (OD)	#	#	#	#	
Ca (AA)	-1.79	-1.87	-1.03	-1.14	
K (AA)	-1.39	-0.97	-0.48	-0.18	
Mg (AA)	-1.94	-1.24	-0.55	-0.57	
Na (AA)	-0.83	-0.54	-0.10	0.26	
Cu (CAT)	#	#	#	#	
Fe (CAT)	#	#	#	#	
Mn (CAT)	#	#	#	#	
Zn (CAT)	#	#	#	#	
P - Olsen (as P) (PHOS)	-1.21	-1.53	-0.92	-0.20	
H62B12 (983)					
Cd (NA)	0.39	-0.74	-0.14	-0.48	
Cr (NA)	-1.38	<	-2.67	-1.03	
Cu (NA)	0.52	8.59	0.86	2.86	
Hg (NA)	<	<	5.44	<	
Mo (NA)	<	<	<	<	
Ni (NA)	3.42	<	6.65	6.17	
Pb (NA)	-0.26	2.66	0.44	0.00	
Zn (NA)	-0.34	1.50	-0.42	-0.17	
LDAR02 (984)					
Al (RT)	-40.66	25.40	-0.24	-1.14	
Co (RT)	-7.67	30.51	1.16	1.17	
Mo (RT)	<	<	<	<	
Pb (RT)	-7.77	17.52	0.74	-0.37	(cont)

ISE 2009.1 Z - Scores - Per Participant

Sample	900	986	910	882
LDAR02 (984) (cont.)				
As (AR)	-6.97	112.04	0.37	-0.25
Co (AR)	-10.61	86.23	0.37	0.28
Mo (AR)	<	253911.02	52064.97	<
Se (AR)	<	<	-0.44	#
EC-SC (ISO 11265) (SC)	-3.78	5.97	-0.36	-0.63
Moisture-content (OD)	-2.31	6.41	0.16	-0.18
Ca (CH)	#	#	#	#
CEC (CH)	#	#	#	#
K (CH)	#	#	#	#
Mg (CH)	#	#	#	#
Na (CH)	#	#	#	#
Cu (CAT)	#	#	#	#
Fe (CAT)	#	#	#	#
Mn (CAT)	#	#	#	#
Zn (CAT)	#	#	#	#

Errors and Corrections
ISE 2008 Period 4

Errors and Corrections ISE 2008 Period 4 -

Sample		961	989	872	909	Code
Extraction with boiling 2M HNO3						
Ni (mg/kg)						
MIRES	(224)	13.0	47.0	65.0	28.0	E, M
NDA mean		13.83	47.92	67.25	28.54	
NDA st dev		0.94	2.40	5.19	0.88	
NDA N		16	16	16	16	
	Old statistics					
Median		13.74 (3)	47.71 (3)	67.35 (3)	28.50 (3)	
MAD		0.65	1.55	3.60	0.30	
Mean		13.91	48.01	67.30	28.54	
St Dev		0.86	2.67	4.48	0.35	
N		16	16	16	9	

CONTINUOUS LABORATORY-PERFORMANCE STUDIES ORGANIZED BY

International Soil-Analytical Exchange
Fee € 525,- (EUR) per year
In this period 265 participants

International Plant-Analytical Exchange
Fee € 525,- (EUR) per year
In this period 227 participants

International Sediment Exchange for Tests on Organic Contaminants
Fee € 870,- (EUR) per year
In this period 86 participants

International Manure and Refuse Sample Exchange Program
Fee € 715,- (EUR) per year
In this period 43 participants

International Biomass Exchange Program
Fee € 600,- (EUR) per year
In this period 13 participants

For more information and application, please contact:
WEPAL
PO BOX 8005
6700 EC WAGENINGEN
THE NETHERLANDS
Tel. : +31 317 48 23 37 no reply : +31 317 48 23 49
Fax. : +31 317 48 56 66
E-mail : Info.Wepal@wur.nl
Internet: www.wepal.nl