

Preliminary results DW 08 / 2021

Interlaboratory Proficiency Test DW 08/2021

Drinking water analyses



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1 Introduction

Profest SYKE carried out the proficiency test (PT) for analysis of alkalinity, Ca, K, Mg, Na, chloride, sulphate, fluoride, Fe, Mn, NH₄, NO₂, NO₃, pH, turbidity, conductivity, and TOC in synthetic samples, domestic water and raw water in September 2021 (DW 08/2021). In this report the preliminary results for the proficiency test are delivered. This report is available for the participants also via Profest [WEB](#).

The preliminary results report is confidential, and its purpose is to ensure that the organizer has processed the participant results correctly as well as to give information about the participants' performance for commenting. The feedback given to the preliminary results report is taken into consideration case-specifically in the final report. The participant results are generally not corrected after the publication of the preliminary results report, but organizer errors will be corrected.

Your participant code for this proficiency test is available on Profest [WEB](#). Comments to the results should be sent at the latest on **21 October 2021** to proftest@syke.fi. The final report of the proficiency test will be published at the latest in January 2022 (Profest [WEB](#) and www.syke.fi/proftest/en).

The proficiency test was carried out in accordance with the international standard ISO/IEC 17043 [1] and applying ISO 13528 [2] and IUPAC Technical report [3]. Profest SYKE is accredited by the Finnish Accreditation Service as a proficiency testing provider (PT01, ISO/IEC 17043, www.finas.fi/sites/en). The organizing of this proficiency test is included in the accreditation scope.

2 Organizing the proficiency test

2.1 Responsibilities

Organizer

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The responsibilities in organizing the proficiency test

Päivi Grönroos	coordinator
Riitta Koivikko	substitute for coordinator
Keijo Tervonen	technical assistance
Markku Ilmakunnas	technical assistance
Sari Lanteri	technical assistance
Ritva Väisänen	technical assistance

Analytical experts

Teemu Näykki	Alkalinity, Cl, F, SO ₄ , pH, conductivity, NH ₄ , NO ₂ , NO ₃ , turbidity, TOC
Timo Sara-Aho	Fe, Mn, Ca, K, Mg, Na

Expert laboratory SYKE, Helsinki and Oulu (T003, www.finas.fi)

2.2 Participants

In total 39 laboratories participated in this proficiency test (Appendix 1).

2.3 Samples and delivery

The delivered samples included synthetic sample and domestic water as well as raw water samples.

The samples were delivered on 7 September 2021 to the participant abroad and mainly on 14 September 2021 to the national participants. The samples arrived to the participants mainly on 15 September 2021, one participants received the samples on 22 September 2021.

The samples were requested to be measured as follows:

Alkalinity, pH, conductivity, turbidity	16 September 2021
N compounds	at the latest on 17 September 2021
Ca, K, Mg, Na	at the latest on 24 September 2021
Cl, F, SO ₄	at the latest on 24 September 2021
Fe, Mn	at the latest on 24 September 2021
TOC	at the latest on 24 September 2021

The results were to be reported at the latest on 27 September 2021. Participants delivered the results accordingly. The preliminary results report was delivered to the participants via ProfTestWEB and email on 6 October 2021.

2.4 Processing the data

2.4.1 Pretesting the data

To test the normality of the data the Kolmogorov-Smirnov test was applied. The outliers were rejected according to the Grubbs or Hampel test before calculating the mean. The results, which differed from the data more than $5 \times s_{\text{rob}}$ or 50 % from the robust mean, were rejected before the statistical results handling.

More information about the statistical handling of the data is available from the Guide for participant [4].

2.4.2 Assigned values

The calculated values (NIST traceable) were used as the assigned values for measurements of alkalinity, Ca, Cl, F, Fe, K, Mg, Mn, Na, NH₄, SO₄ and TOC in the synthetic samples. For the other samples and measurements mainly the robust mean of the results reported by the participants was used as the assigned value. When the number of results in the statistical data processing was low ($n_{\text{stat}} < 12$) the mean of the results reported by the participants was used as the assigned value (G3T: TOC).

For the calculated assigned values the expanded uncertainty was evaluated using standard uncertainties associated with individual operations involved in the preparation of the sample. When the robust mean or the mean was used as the assigned value, the uncertainty was calculated using the robust standard deviation or the standard deviation.

2.4.3 Proficiency assessment procedure

The results of this proficiency test were evaluated with the z scores.

The standard deviation for proficiency assessment was estimated on the basis of the measurand concentration, the results of homogeneity and stability tests, the uncertainty of the assigned value, and the long-term variation in the former proficiency tests. The standard deviation for proficiency assessment ($2 \times s_{pt}$, at the 95 % confidence level) was set to 0.2 pH units and to 5–40 % for the other measurement.

When using the robust mean or the mean as the assigned value, the reliability was tested according to the criterion $u_{pt} / s_{pt} \leq 0.3$, where u_{pt} is the standard uncertainty of the assigned value and s_{pt} is the standard deviation for proficiency assessment [2, 3]. When testing the reliability of the assigned value the criterion was mainly fulfilled and the assigned values were considered reliable.

The reliability of the standard deviation for proficiency assessment (s_{pt}) and the corresponding z score was estimated by comparing s_{pt} with the robust standard deviation (s_{rob}) or standard deviation (s) of the reported results (the criterion) [3]. The uniformity criterion s_{rob} (or s) / $s_{pt} \leq 1.2$ was mainly fulfilled.

In the following cases, the criteria for the reliability of the assigned value¹ and for the reliability of the standard deviation² were not met and, therefore, the evaluation of the performance is weakened in this proficiency test:

Sample	Measurand
G3N	NO ₂ ¹
D2S, G3S	Turbidity ^{1,2}

3 Results and conclusions

The summary of the results of the proficiency test is shown in Table 1. The terms in the results table are explained in the Appendix 2, the results of each participant are given in the Appendix 3, and the summaries of the z scores are in the Appendix 4. The summary of the z and zeta scores is presented in the Appendix 5. The zeta scores (Appendix 5) could be calculated only for the results for which the uncertainty was reported.

The evaluation of the participants was based on the z scores, which were interpreted as follows:

Criteria	Performance
$|z| \leq 2$	Satisfactory
$2 < |z| < 3$	Questionable
$|z| \geq 3$	Unsatisfactory

In total, 89 % of the results were satisfactory when deviation of 5–40 % and 0.2 pH units from the assigned values were accepted (Appendix 4).

The comments and messages concerning the results of this proficiency test are asked to be delivered to the coordinator and to *proftest@syke.fi* and those concerning analytics are asked to be delivered to the analytical expert and to *proftest@syke.fi*. The additional samples are ordered via email *proftest@syke.fi*. The more detailed information of the statistical analysis as well as of the evaluation of the results will be given in the final report.

Table 1. The summary of the proficiency test DW 08/2021.

Measurand	Sample	Unit	Assigned value	Mean	Rob. mean	Median	S _{rob}	S _{rob} %	2 x S _{pt} %	n _{all}	Acc z %
Alkalinity	A1A	mmol/l	0.12	0.12	0.13	0.12	0.01	7.5	15	25	67
	D2A	mmol/l	0.76	0.75	0.76	0.75	0.02	2.9	10	24	100
	G3A	mmol/l	2.32	2.33	2.32	2.32	0.06	2.4	8	23	100
Ca	A1K	mg/l	5.01	4.90	4.91	4.94	0.22	4.6	10	17	82
	D2K	mg/l	19.8	19.8	19.8	20.1	1.0	4.9	10	16	94
	G3K	mg/l	28.1	28.2	28.1	28.1	1.4	5.0	10	16	88
Cl	A1CS	mg/l	10.8	10.7	10.8	10.7	0.4	3.5	10	26	96
	D2CS	mg/l	5.69	5.69	5.69	5.65	0.23	4.0	10	26	92
	G3CS	mg/l	39.6	39.6	39.6	39.6	0.8	2.1	8	23	100
Conductivity	A1J	µS/cm	328	328	328	328	4	1.2	5	33	100
	D2PJ	µS/cm	164	164	164	164	3	1.6	5	31	97
	G3PJ	µS/cm	443	443	443	444	6	1.3	5	30	93
F	A1F	mg/l	1.04	1.03	1.03	1.02	0.05	5.0	10	20	85
	D2F	mg/l	0.26	0.26	0.26	0.26	0.03	10.1	20	18	89
	G3F	mg/l	2.63	2.62	2.63	2.64	0.10	3.8	15	19	100
Fe	A1Fe	µg/l	47.6	45.9	45.4	45.8	3.1	6.8	15	22	64
	D2Fe	µg/l	25.4	25.8	25.4	25.8	2.4	9.6	25	22	77
	G3Fe	µg/l	57.2	56.8	57.2	57.1	4.9	8.5	15	20	80
K	A1K	mg/l	0.34	0.34	0.34	0.34	0.02	6.8	10	14	69
	D2K	mg/l	1.45	1.45	1.45	1.45	0.10	6.7	15	13	85
	G3K	mg/l	2.31	2.31	2.31	2.28	0.10	4.4	10	14	100
Mg	A1K	mg/l	0.80	0.79	0.79	0.80	0.05	5.9	10	16	88
	D2K	mg/l	1.67	1.67	1.67	1.70	0.07	4.1	10	15	87
	G3K	mg/l	4.43	4.43	4.43	4.42	0.16	3.6	10	16	94
Mn	A1Fe	µg/l	35.7	35.6	35.3	35.5	1.5	4.2	10	18	76
	D2Fe	µg/l	22.3	22.5	22.3	22.6	1.3	6.0	15	18	78
	G3Fe	µg/l	77.0	76.9	77.0	76.6	3.2	4.2	10	18	78
Na	A1K	mg/l	2.41	2.36	2.36	2.37	0.13	5.6	10	17	88
	D2K	mg/l	7.50	7.56	7.50	7.57	0.17	2.3	10	16	94
	G3K	mg/l	55.3	55.1	55.3	55.8	2.4	4.3	10	16	100
NH ₄	A1N	mg/l	0.18	0.19	0.19	0.19	0.01	4.8	10	23	73
	D2N	mg/l	0.072	0.072	0.072	0.072	0.005	6.5	15	23	91
	G3N	mg/l	0.056	0.056	0.056	0.056	0.005	8.7	15	23	91
NO ₂	A1N	mg/l	0.17	0.17	0.17	0.17	0.00	2.6	10	23	91
	D2N	mg/l	0.21	0.21	0.21	0.21	0.01	3.9	10	22	81
	G3N	mg/l	0.019	0.019	0.019	0.019	0.002	10.6	20	22	78
NO ₃	A1N	mg/l	4.24	4.23	4.24	4.24	0.14	3.2	10	23	91
	D2N	mg/l	2.15	2.16	2.15	2.17	0.09	4.2	10	22	82
	G3N	mg/l	1.01	1.01	1.01	1.02	0.05	4.9	10	23	78
pH	A1P		7.28	7.28	7.28	7.29	0.04	0.5	2.7	33	94
	D2PJ		8.02	8.01	8.02	8.02	0.09	1.2	2.5	31	94
	G3PJ		8.19	8.19	8.19	8.20	0.06	0.8	2.4	30	97
SO ₄	A1CS	mg/l	5.04	5.0	5.0	5.0	0.1	2.6	10	23	100
	D2CS	mg/l	27.2	27.3	27.2	27.4	0.5	1.7	10	22	100
	G3CS	mg/l	35.3	35.3	35.3	35.4	0.7	2.1	10	21	100
TOC	A1T	mg/l	3.02	3.04	3.04	3.01	0.11	3.6	10	16	88
	D2T	mg/l	1.77	1.77	1.77	1.75	0.12	7.0	20	16	81
	G3T	mg/l	0.98	0.98	1.02	0.97	0.11	11.1	20	15	64
Turbidity	A1S	FNU	0.25	0.25	0.25	0.25	0.04	14.5	25	23	83
	D2S	FNU	0.12	0.12	0.12	0.12	0.03	25.7	40	23	94
	G3S	FNU	0.22	0.23	0.22	0.23	0.05	24.3	35	23	87

Rob. mean: the robust mean, S_{rob}: the robust standard deviation, S_{rob} %: the robust standard deviation as percent, 2xS_{pt} %: the standard deviation for proficiency assessment at the 95 % confidence level, n_{all}: the total number of the participants, Acc z %: the results (%), where $|z| \leq 2$.

References

1. EN ISO 17043, 2010. Conformity assessment – General requirements for Proficiency Testing.
2. ISO 13528, 2015. Statistical methods for use in proficiency testing by interlaboratory comparisons.
3. Thompson, M., Ellison, S. L. R., Wood, R., 2006. The International Harmonized Protocol for the Proficiency Testing of Analytical Chemistry laboratories (IUPAC Technical report). Pure Appl. Chem. 78: 145-196, www.iupac.org.
4. Profest SYKE Guide for laboratories: www.syke.fi/proftest/en → Current proficiency tests (www.syke.fi/download/noname/%7B3FFB2F05-9363-4208-9265-1E2CE936D48C%7D/39886).

Appendix I. Participants in the proficiency test

Country	Participant	
Finland	Eurofins Ahma Oy Seinäjoki	
	Eurofins Ahma Oy, Oulu	
	Eurofins Ahma Oy, Rovaniemi	
	Eurofins Environment Testing Finland Oy, Lahti	
	Eurofins Environment Testing Oy Jyväskylä	
	Finnsementti Oy	
	Fortum Waste Solutions Oy, Riihimäki	
	Hortilab Ab Oy	
	HSY Käyttölaboratorio Pitkäkoski Helsinki	
	KVVY Tutkimus Oy, Tampere	
	KVVY-Botnialab, Vaasa	
	Kymen Ympäristölaboratorio Oy	
	Lounais-Suomen vesi- ja ympäristötutkimus Oy, Turku	
	LUVYLab Oy Ab	
	Neste Corporation, Technology Center, Kilpilahti	
	Neste Oyj, Tutkimus ja kehitys/Vesilaboratorio, Kulloo	
	Norilsk Nickel Harjavalta Oy	
	Oulun Vesi Liikelaitos	
	Saimaan Vesi- ja Ympäristötutkimus Oy, Lappeenranta	
	Savo-Karjalan Ympäristötutkimus Oy, Joensuu	
	Savo-Karjalan Ympäristötutkimus Oy, Kajaani	
	Savo-Karjalan Ympäristötutkimus Oy, Kuopio	
	ScanLab Oy	
	SeiLab Oy Haapaveden toimipiste	
	SeiLab Oy Seinäjoen toimipiste	
	SGS Analytics Finland Oy	
	SGS Finland Oy, Kotka	
	SSAB Europe Oy, Analyysilaboratorio, Hämeenlinna	
	SSAB Europe Raahe, Raahe	
	SYKE Oulun toimipaikka	
	SYKE, Helsingin toimipaikka	
	Tampereen Vesi/Viemärlaitoksen laboratorio	
	Teollisuuden Voima Oyj	
	UPM Oyj, Kymi	
	UPM Specialty Papers, Tervasaari	
	UPM Tutkimuskeskus, Lappeenranta	
	Yara Suomi Oy, Uusikaupunki	
	ÅMHM laboratoriet, Jomala, Åland	
	Kingdom of Saudi Arabia	Sedres Chemicals Solutions Company

Appendix 2. Terms and definitions used in performance evaluation

The information could be applied according to the PT.

Measurand	The tested parameter
Sample	The code of the sample
Assigned value	The value attributed to a particular property of a proficiency test item
Participant's result	The result reported by the participant (when replicate results are reported, the mean value)
$2 \times s_{pt}$ %	The standard deviation for proficiency assessment (s_{pt}) at the 95 % confidence level
z score	Used for the participant's performance evaluation in the PT. Calculated with formula:

$$z = (x_i - x_{pt})/s_{pt}, \text{ where}$$

x_i = the result of the individual participant

x_{pt} = the assigned value

s_{pt} = the standard deviation for proficiency assessment

Interpretation of the z scores

$|z| \leq 2$	Satisfactory
$2 < |z| < 3$	Questionable (warning signal), the result deviates more than $2 \times s_{pt}$ from the assigned value.
$|z| \geq 3$	Unsatisfactory (action signal), the result deviates more than $3 \times s_{pt}$ from the assigned value.

E_n score	Error, normalized – Used to evaluate the difference between the assigned value and participant's result within their claimed expanded uncertainty. Calculated with formula:
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$$(E_n)_i = \frac{x_i - x_{pt}}{\sqrt{U_i^2 + U_{pt}^2}}, \text{ where}$$

U_i = the expanded uncertainty of a participant's result

U_{pt} = the expanded uncertainty of the assigned value


















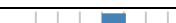

Interpretation of the E_n scores

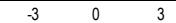





















$|E_n| \leq 1.0$	Satisfactory, should be taken as an indicator of successful performance when the uncertainties are valid.
$|E_n| > 1.0$	Unsatisfactory (action signal), could indicate a need to review the uncertainty estimates, or to correct a measurement issue.











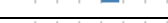



































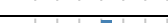


Md	Median
s	Standard deviation
s %	Standard deviation, %
n_{stat}	Number of results in statistical processing

More information of the statistical calculations in international standards ISO/IEC 17043 and ISO 13528 as well as in Profest SYKE Guide for participants [1, 2, 4].

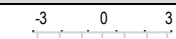













































Appendix 3. Results of each participant

Participant 1												
Measurand	Unit	Sample		z score	Assigned value	2×s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Cl	mg/l	A1CS		0.02	10.8	10	10.8	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		0.53	5.69	10	5.84	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		0.04	39.6	8	39.7	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		-0.06	328	5	328	328	328	4	1.3	33
	µS/cm	D2PJ		-0.45	164	5	162	164	164	3	1.9	30
	µS/cm	G3PJ		0.28	443	5	446	444	443	5	1.1	28
Fe	µg/l	A1Fe		-0.86	47.6	15	44.5	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		-0.07	25.4	25	25.2	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		-0.34	57.2	15	55.7	57.1	56.8	5.6	9.8	19
Mn	µg/l	A1Fe		-0.20	35.7	10	35.4	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		-0.23	22.3	15	21.9	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		-0.45	77.0	10	75.3	76.6	76.9	3.3	4.3	14
pH		A1P		1.42	7.28	2,7	7.42	7.29	7.28	0.04	0.5	31
		D2PJ		1.70	8.02	2,5	8.19	8.02	8.01	0.09	1.2	30
		G3PJ		0.20	8.19	2,4	8.21	8.20	8.19	0.08	1.0	30
TOC	mg/l	A1T		1.06	3.02	10	3.18	3.01	3.04	0.10	3.2	14
	mg/l	D2T		2.99	1.77	20	2.30	1.75	1.77	0.14	7.7	13
	mg/l	G3T		-1.02	0.98	20	0.88	0.97	0.98	0.06	6.1	9

Participant 2												
Measurand	Unit	Sample		z score	Assigned value	2×s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		2.67	0.12	15	0.14	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		1.05	0.76	10	0.80	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		0.86	2.32	8	2.40	2.32	2.33	0.06	2.7	23
Conductivity	µS/cm	A1J		-0.12	328	5	327	328	328	4	1.3	33
	µS/cm	D2PJ		0.00	164	5	164	164	164	3	1.9	30
	µS/cm	G3PJ		0.00	443	5	443	444	443	5	1.1	28
NH ₄	mg/l	A1N		1.67	0.18	10	0.20	0.19	0.19	0.01	4.4	19
	mg/l	D2N		0.93	0.072	15	0.077	0.072	0.072	0.005	7.2	21
	mg/l	G3N		1.67	0.056	15	0.063	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		0.12	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		-0.48	0.21	10	0.21	0.21	0.21	0.01	3.9	18
	mg/l	G3N		-0.53	0.019	20	0.018	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		7.17	4.24	10	5.76	4.24	4.23	0.15	3.6	21
	mg/l	D2N		6.79	2.15	10	2.88	2.17	2.16	0.10	4.5	20
	mg/l	G3N		6.34	1.01	10	1.33	1.02	1.01	0.04	4.0	20
pH		A1P		0.00	7.28	2,7	7.28	7.29	7.28	0.04	0.5	31
		D2PJ		0.30	8.02	2,5	8.05	8.02	8.01	0.09	1.2	30
		G3PJ		-0.41	8.19	2,4	8.15	8.20	8.19	0.08	1.0	30
Turbidity	FNU	A1S		1.09	0.25	25	0.28	0.25	0.25	0.03	14.0	21
	FNU	D2S		1.38	0.12	40	0.15	0.12	0.12	0.03	22.8	16
	FNU	G3S		2.13	0.22	35	0.30	0.23	0.23	0.05	22.0	22

Participant 3												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		-0.11	0.12	15	0.12	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		-0.34	0.76	10	0.75	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		0.00	2.32	8	2.32	2.32	2.33	0.06	2.7	23
Ca	mg/l	A1K		-1.04	5.01	10	4.75	4.94	4.90	0.23	4.7	15
	mg/l	D2K		-0.10	19.8	10	19.7	20.1	19.8	0.9	4.3	15
	mg/l	G3K		-0.28	28.1	10	27.7	28.1	28.2	1.4	4.9	14
Cl	mg/l	A1CS		0.19	10.8	10	10.9	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		-0.46	5.69	10	5.56	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		0.82	39.6	8	40.9	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		-0.24	328	5	326	328	328	4	1.3	33
	µS/cm	D2PJ		-0.49	164	5	162	164	164	3	1.9	30
	µS/cm	G3PJ		-0.72	443	5	435	444	443	5	1.1	28
F	mg/l	A1F		-1.58	1.04	10	0.96	1.02	1.03	0.06	5.7	19
	mg/l	D2F		-1.35	0.26	20	0.23	0.26	0.26	0.03	10.1	17
	mg/l	G3F		-0.46	2.63	15	2.54	2.64	2.62	0.04	1.7	19
Fe	µg/l	A1Fe		-0.39	47.6	15	46.2	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		0.22	25.4	25	26.1	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		0.47	57.2	15	59.2	57.1	56.8	5.6	9.8	19
K	mg/l	A1K		-0.82	0.34	10	0.33	0.34	0.34	0.02	6.1	10
	mg/l	D2K		-0.83	1.45	15	1.36	1.45	1.45	0.09	5.9	11
	mg/l	G3K		-0.43	2.31	10	2.26	2.28	2.31	0.09	4.1	14
Mg	mg/l	A1K		-1.40	0.80	10	0.74	0.80	0.79	0.04	5.6	14
	mg/l	D2K		-0.84	1.67	10	1.60	1.70	1.67	0.06	3.6	13
	mg/l	G3K		-0.41	4.43	10	4.34	4.42	4.43	0.14	3.2	15
Mn	µg/l	A1Fe		0.06	35.7	10	35.8	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		0.18	22.3	15	22.6	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		0.47	77.0	10	78.8	76.6	76.9	3.3	4.3	14
Na	mg/l	A1K		-0.58	2.41	10	2.34	2.37	2.36	0.12	5.1	16
	mg/l	D2K		0.03	7.50	10	7.51	7.57	7.56	0.09	1.2	16
	mg/l	G3K		0.14	55.3	10	55.7	55.8	55.1	2.4	4.3	16
NH ₄	mg/l	A1N		0.11	0.18	10	0.18	0.19	0.19	0.01	4.4	19
	mg/l	D2N		-0.72	0.072	15	0.068	0.072	0.072	0.005	7.2	21
	mg/l	G3N		-1.33	0.056	15	0.050	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		-0.24	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		0.19	0.21	10	0.21	0.21	0.21	0.01	3.9	18
	mg/l	G3N		2.21	0.019	20	0.023	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		-0.80	4.24	10	4.07	4.24	4.23	0.15	3.6	21
	mg/l	D2N		-1.30	2.15	10	2.01	2.17	2.16	0.10	4.5	20
	mg/l	G3N		-0.73	1.01	10	0.97	1.02	1.01	0.04	4.0	20
pH		A1P		0.00	7.28	2,7	7.28	7.29	7.28	0.04	0.5	31
		D2PJ		-1.30	8.02	2,5	7.89	8.02	8.01	0.09	1.2	30
		G3PJ		-0.41	8.19	2,4	8.15	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		0.48	5.04	10	5.2	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		0.29	27.2	10	27.6	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		0.45	35.3	10	36.1	35.4	35.3	0.7	2.0	21
Turbidity	FNU	A1S		0.38	0.25	25	0.26	0.25	0.25	0.03	14.0	21
	FNU	D2S		0.25	0.12	40	0.13	0.12	0.12	0.03	22.8	16
	FNU	G3S		1.77	0.22	35	0.29	0.23	0.23	0.05	22.0	22

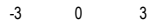

































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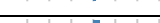








Participant 4													
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}	
Alkalinity	mmol/l	A1A		0.11	0.12	15	0.12	0.12	0.12	0.00	2.8	15	
	mmol/l	D2A		-0.34	0.76	10	0.75	0.75	0.75	0.01	1.6	22	
	mmol/l	G3A		-0.22	2.32	8	2.30	2.32	2.33	0.06	2.7	23	
Ca	mg/l	A1K		-0.84	5.01	10	4.80	4.94	4.90	0.23	4.7	15	
	mg/l	D2K		-0.81	19.8	10	19.0	20.1	19.8	0.9	4.3	15	
	mg/l	G3K		-0.78	28.1	10	27.0	28.1	28.2	1.4	4.9	14	
Cl	mg/l	A1CS		-0.37	10.8	10	10.6	10.7	10.7	0.2	1.9	19	
	mg/l	D2CS		-1.27	5.69	10	5.33	5.65	5.69	0.22	3.9	24	
	mg/l	G3CS		-0.32	39.6	8	39.1	39.6	39.6	0.8	1.9	23	
Conductivity	µS/cm	A1J		-0.30	328	5	326	328	328	4	1.3	33	
	µS/cm	D2PJ		-3.29	164	5	151	164	164	3	1.9	30	
	µS/cm	G3PJ		-2.62	443	5	414	444	443	5	1.1	28	
F	mg/l	A1F		-0.77	1.04	10	1.00	1.02	1.03	0.06	5.7	19	
	mg/l	D2F		0.38	0.26	20	0.27	0.26	0.26	0.03	10.1	17	
	mg/l	G3F		-0.25	2.63	15	2.58	2.64	2.62	0.04	1.7	19	
Fe	µg/l	A1Fe		-0.78	47.6	15	44.8	45.8	45.9	2.2	4.8	14	
	µg/l	D2Fe		1.29	25.4	25	29.5	25.8	25.8	2.3	9.1	18	
	µg/l	G3Fe		0.89	57.2	15	61.0	57.1	56.8	5.6	9.8	19	
K	mg/l	A1K		1.18	0.34	10	0.36	0.34	0.34	0.02	6.1	10	
	mg/l	D2K		0.46	1.45	15	1.50	1.45	1.45	0.09	5.9	11	
	mg/l	G3K		-0.95	2.31	10	2.20	2.28	2.31	0.09	4.1	14	
Mg	mg/l	A1K		-3.50	0.80	10	0.66	0.80	0.79	0.04	5.6	14	
	mg/l	D2K		-0.84	1.67	10	1.60	1.70	1.67	0.06	3.6	13	
	mg/l	G3K		-1.04	4.43	10	4.20	4.42	4.43	0.14	3.2	15	
Mn	µg/l	A1Fe		-0.17	35.7	10	35.4	35.5	35.6	1.4	4.0	13	
	µg/l	D2Fe		0.54	22.3	15	23.2	22.6	22.5	1.1	4.8	15	
	µg/l	G3Fe		1.19	77.0	10	81.6	76.6	76.9	3.3	4.3	14	
Na	mg/l	A1K		-0.08	2.41	10	2.40	2.37	2.36	0.12	5.1	16	
	mg/l	D2K		0.27	7.50	10	7.60	7.57	7.56	0.09	1.2	16	
	mg/l	G3K		0.61	55.3	10	57.0	55.8	55.1	2.4	4.3	16	
NH ₄	mg/l	A1N		-0.89	0.18	10	0.17	0.19	0.19	0.01	4.4	19	
	mg/l	D2N		-0.56	0.072	15	0.069	0.072	0.072	0.005	7.2	21	
	mg/l	G3N		-0.71	0.056	15	0.053	0.056	0.056	0.005	8.4	21	
NO ₂	mg/l	A1N		0.35	0.17	10	0.17	0.17	0.17	0.01	3.2	20	
	mg/l	D2N		-0.10	0.21	10	0.21	0.21	0.21	0.01	3.9	18	
	mg/l	G3N		0.53	0.019	20	0.020	0.019	0.019	0.002	10.4	15	
NO ₃	mg/l	A1N		0.00	4.24	10	4.24	4.24	4.23	0.15	3.6	21	
	mg/l	D2N		0.37	2.15	10	2.19	2.17	2.16	0.10	4.5	20	
	mg/l	G3N		-0.20	1.01	10	1.00	1.02	1.01	0.04	4.0	20	
pH		A1P		0.20	7.28	2,7	7.30	7.29	7.28	0.04	0.5	31	
		D2PJ		0.80	8.02	2,5	8.10	8.02	8.01	0.09	1.2	30	
		G3PJ		0.10	8.19	2,4	8.20	8.20	8.19	0.08	1.0	30	
SO ₄	mg/l	A1CS		-0.28	5.04	10	5.0	5.0	5.0	0.1	2.6	23	
	mg/l	D2CS		-0.07	27.2	10	27.1	27.4	27.3	0.4	1.4	22	
	mg/l	G3CS		-0.17	35.3	10	35.0	35.4	35.3	0.7	2.0	21	

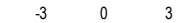









Participant 4												
Measurand	Unit	Sample		z score	Assigned value	2×s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
TOC	mg/l	A1T		16.23	3.02	10	5.47	3.01	3.04	0.10	3.2	14
	mg/l	D2T		6.95	1.77	20	3.00	1.75	1.77	0.14	7.7	13
	mg/l	G3T		5.31	0.98	20	1.50	0.97	0.98	0.06	6.1	9
Turbidity	FNU	A1S		2.56	0.25	25	0.33	0.25	0.25	0.03	14.0	21
	FNU	D2S		0.12	0.12	40	<0,2	0.12	0.12	0.03	22.8	16
	FNU	G3S		0.78	0.22	35	0.25	0.23	0.23	0.05	22.0	22






































Participant 5												
Measurand	Unit	Sample		z score	Assigned value	2×s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Ca	mg/l	A1K		0.04	5.01	10	5.02	4.94	4.90	0.23	4.7	15
	mg/l	D2K		0.47	19.8	10	20.3	20.1	19.8	0.9	4.3	15
	mg/l	G3K		0.06	28.1	10	28.2	28.1	28.2	1.4	4.9	14
Cl	mg/l	A1CS		-0.37	10.8	10	10.6	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		-0.32	5.69	10	5.60	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		-0.25	39.6	8	39.2	39.6	39.6	0.8	1.9	23
F	mg/l	A1F		-0.58	1.04	10	1.01	1.02	1.03	0.06	5.7	19
	mg/l	D2F		-0.77	0.26	20	0.24	0.26	0.26	0.03	10.1	17
	mg/l	G3F		0.20	2.63	15	2.67	2.64	2.62	0.04	1.7	19
Fe	µg/l	A1Fe		-0.62	47.6	15	45.4	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		0.47	25.4	25	26.9	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		1.25	57.2	15	62.6	57.1	56.8	5.6	9.8	19
K	mg/l	A1K		16.94	0.34	10	0.63	0.34	0.34	0.02	6.1	10
	mg/l	D2K		2.11	1.45	15	1.68	1.45	1.45	0.09	5.9	11
	mg/l	G3K		0.83	2.31	10	2.41	2.28	2.31	0.09	4.1	14
Mg	mg/l	A1K		-0.23	0.80	10	0.79	0.80	0.79	0.04	5.6	14
	mg/l	D2K		0.02	1.67	10	1.67	1.70	1.67	0.06	3.6	13
	mg/l	G3K		-0.07	4.43	10	4.41	4.42	4.43	0.14	3.2	15
Mn	µg/l	A1Fe		-0.13	35.7	10	35.5	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		0.13	22.3	15	22.5	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		-0.31	77.0	10	75.8	76.6	76.9	3.3	4.3	14
Na	mg/l	A1K		0.66	2.41	10	2.49	2.37	2.36	0.12	5.1	16
	mg/l	D2K		0.48	7.50	10	7.68	7.57	7.56	0.09	1.2	16
	mg/l	G3K		0.35	55.3	10	56.3	55.8	55.1	2.4	4.3	16
SO ₄	mg/l	A1CS		-0.16	5.04	10	5.0	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		0.44	27.2	10	27.8	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		-0.23	35.3	10	34.9	35.4	35.3	0.7	2.0	21
TOC	mg/l	A1T		-0.26	3.02	10	2.98	3.01	3.04	0.10	3.2	14
	mg/l	D2T		-0.51	1.77	20	1.68	1.75	1.77	0.14	7.7	13
	mg/l	G3T		-0.10	0.98	20	0.97	0.97	0.98	0.06	6.1	9

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Participant 6												
Measurand	Unit	Sample		z score	Assigned value	2×s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Ca	mg/l	A1K		-2.24	5.01	10	4.45	4.94	4.90	0.23	4.7	15
	mg/l	D2K		-1.27	19.8	10	18.5	20.1	19.8	0.9	4.3	15
	mg/l	G3K		-2.14	28.1	10	25.1	28.1	28.2	1.4	4.9	14
Cl	mg/l	A1CS		0.87	10.8	10	11.3	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		1.34	5.69	10	6.07	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		1.45	39.6	8	41.9	39.6	39.6	0.8	1.9	23
F	mg/l	A1F		4.29	1.04	10	1.26	1.02	1.03	0.06	5.7	19
	mg/l	D2F		4.15	0.26	20	0.37	0.26	0.26	0.03	10.1	17
	mg/l	G3F		1.86	2.63	15	3.00	2.64	2.62	0.04	1.7	19
Fe	µg/l	A1Fe		-3.81	47.6	15	34.0	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		-0.13	25.4	25	25.0	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		-0.51	57.2	15	55.0	57.1	56.8	5.6	9.8	19
K	mg/l	A1K		1.06	0.34	10	0.36	0.34	0.34	0.02	6.1	10
	mg/l	D2K		1.12	1.45	15	1.57	1.45	1.45	0.09	5.9	11
	mg/l	G3K		-0.49	2.31	10	2.25	2.28	2.31	0.09	4.1	14
Mg	mg/l	A1K		0.90	0.80	10	0.84	0.80	0.79	0.04	5.6	14
	mg/l	D2K		0.79	1.67	10	1.74	1.70	1.67	0.06	3.6	13
	mg/l	G3K		0.80	4.43	10	4.61	4.42	4.43	0.14	3.2	15
Mn	µg/l	A1Fe		4.65	35.7	10	44.0	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		-3.17	22.3	15	17.0	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		-2.86	77.0	10	66.0	76.6	76.9	3.3	4.3	14
Na	mg/l	A1K		3.52	2.41	10	2.83	2.37	2.36	0.12	5.1	16
	mg/l	D2K		-0.75	7.50	10	7.22	7.57	7.56	0.09	1.2	16
	mg/l	G3K		-1.15	55.3	10	52.1	55.8	55.1	2.4	4.3	16
NO ₂	mg/l	A1N		18.00	0.17	10	0.32	0.17	0.17	0.01	3.2	20
	mg/l	D2N		13.52	0.21	10	0.35	0.21	0.21	0.01	3.9	18
	mg/l	G3N		-10.00	0.019	20	0.000	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		1.52	4.24	10	4.56	4.24	4.23	0.15	3.6	21
	mg/l	D2N		0.85	2.15	10	2.24	2.17	2.16	0.10	4.5	20
	mg/l	G3N		1.52	1.01	10	1.09	1.02	1.01	0.04	4.0	20
SO ₄	mg/l	A1CS		0.57	5.04	10	5.2	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		1.68	27.2	10	29.5	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		1.28	35.3	10	37.6	35.4	35.3	0.7	2.0	21

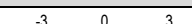






Participant 7												
Measurand	Unit	Sample		z score	Assigned value	2×s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		0.11	0.12	15	0.12	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		-0.29	0.76	10	0.75	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		0.11	2.32	8	2.33	2.32	2.33	0.06	2.7	23
Conductivity	µS/cm	A1J		0.24	328	5	330	328	328	4	1.3	33
	µS/cm	D2PJ		0.24	164	5	165	164	164	3	1.9	30
	µS/cm	G3PJ		0.45	443	5	448	444	443	5	1.1	28
NH ₄	mg/l	A1N		2.22	0.18	10	0.20	0.19	0.19	0.01	4.4	19
	mg/l	D2N		1.48	0.072	15	0.080	0.072	0.072	0.005	7.2	21
	mg/l	G3N		0.24	0.056	15	0.057	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		0.47	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		0.10	0.21	10	0.21	0.21	0.21	0.01	3.9	18
	mg/l	G3N		0.89	0.019	20	0.021	0.019	0.019	0.002	10.4	15

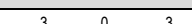








Participant 7												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
NO ₃	mg/l	A1N		-1.32	4.24	10	3.96	4.24	4.23	0.15	3.6	21
	mg/l	D2N		-1.12	2.15	10	2.03	2.17	2.16	0.10	4.5	20
	mg/l	G3N		-1.19	1.01	10	0.95	1.02	1.01	0.04	4.0	20
pH		A1P		-0.20	7.28	2,7	7.26	7.29	7.28	0.04	0.5	31
		D2PJ		-0.60	8.02	2,5	7.96	8.02	8.01	0.09	1.2	30
		G3PJ		-0.20	8.19	2,4	8.17	8.20	8.19	0.08	1.0	30
Turbidity	FNU	A1S		0.45	0.25	25	0.26	0.25	0.25	0.03	14.0	21
	FNU	D2S			0.12	40	<0,15	0.12	0.12	0.03	22.8	16
	FNU	G3S		-0.65	0.22	35	0.20	0.23	0.23	0.05	22.0	22

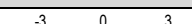









Participant 8												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		3.67	0.12	15	0.15	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		0.03	0.76	10	0.76	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		-1.24	2.32	8	2.21	2.32	2.33	0.06	2.7	23
Ca	mg/l	A1K		-0.26	5.01	10	4.94	4.94	4.90	0.23	4.7	15
	mg/l	D2K		0.63	19.8	10	20.4	20.1	19.8	0.9	4.3	15
	mg/l	G3K		0.59	28.1	10	28.9	28.1	28.2	1.4	4.9	14
Cl	mg/l	A1CS		-0.56	10.8	10	10.5	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		-0.77	5.69	10	5.47	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		0.00	39.6	8	39.6	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		0.04	328	5	328	328	328	4	1.3	33
	µS/cm	D2PJ		-0.29	164	5	163	164	164	3	1.9	30
	µS/cm	G3PJ		-0.36	443	5	439	444	443	5	1.1	28
F	mg/l	A1F		0.58	1.04	10	1.07	1.02	1.03	0.06	5.7	19
	mg/l	D2F		1.23	0.26	20	0.29	0.26	0.26	0.03	10.1	17
	mg/l	G3F		-0.05	2.63	15	2.62	2.64	2.62	0.04	1.7	19
Fe	µg/l	A1Fe		1.01	47.6	15	51.2	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		0.16	25.4	25	25.9	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		-0.84	57.2	15	53.6	57.1	56.8	5.6	9.8	19
K	mg/l	A1K		0.24	0.34	10	0.34	0.34	0.34	0.02	6.1	10
	mg/l	D2K		0.04	1.45	15	1.45	1.45	1.45	0.09	5.9	11
	mg/l	G3K		0.35	2.31	10	2.35	2.28	2.31	0.09	4.1	14
Mg	mg/l	A1K		-1.53	0.80	10	0.74	0.80	0.79	0.04	5.6	14
	mg/l	D2K		-0.80	1.67	10	1.60	1.70	1.67	0.06	3.6	13
	mg/l	G3K		-0.20	4.43	10	4.39	4.42	4.43	0.14	3.2	15
Mn	µg/l	A1Fe		-1.18	35.7	10	33.6	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		-4.13	22.3	15	15.4	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		-1.87	77.0	10	69.8	76.6	76.9	3.3	4.3	14
Na	mg/l	A1K		-0.69	2.41	10	2.33	2.37	2.36	0.12	5.1	16
	mg/l	D2K		-0.38	7.50	10	7.36	7.57	7.56	0.09	1.2	16
	mg/l	G3K		0.37	55.3	10	56.3	55.8	55.1	2.4	4.3	16
NH ₄	mg/l	A1N		-0.33	0.18	10	0.18	0.19	0.19	0.01	4.4	19
	mg/l	D2N		-0.22	0.072	15	0.071	0.072	0.072	0.005	7.2	21
	mg/l	G3N		-0.26	0.056	15	0.055	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		-0.38	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		-2.06	0.21	10	0.19	0.21	0.21	0.01	3.9	18
	mg/l	G3N		-0.16	0.019	20	0.019	0.019	0.019	0.002	10.4	15








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Participant 8												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
NO ₃	mg/l	A1N		-0.52	4.24	10	4.13	4.24	4.23	0.15	3.6	21
	mg/l	D2N		-0.37	2.15	10	2.11	2.17	2.16	0.10	4.5	20
	mg/l	G3N		0.00	1.01	10	1.01	1.02	1.01	0.04	4.0	20
pH		A1P		-0.10	7.28	2,7	7.27	7.29	7.28	0.04	0.5	31
		D2PJ		-0.21	8.02	2,5	8.00	8.02	8.01	0.09	1.2	30
		G3PJ		0.13	8.19	2,4	8.20	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		-0.56	5.04	10	4.9	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		0.15	27.2	10	27.4	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		0.28	35.3	10	35.8	35.4	35.3	0.7	2.0	21
TOC	mg/l	A1T		-0.33	3.02	10	2.97	3.01	3.04	0.10	3.2	14
	mg/l	D2T		-0.11	1.77	20	1.75	1.75	1.77	0.14	7.7	13
	mg/l	G3T		-0.18	0.98	20	0.96	0.97	0.98	0.06	6.1	9
Turbidity	FNU	A1S		0.64	0.25	25	0.27	0.25	0.25	0.03	14.0	21
	FNU	D2S		1.54	0.12	40	0.16	0.12	0.12	0.03	22.8	16
	FNU	G3S		2.73	0.22	35	0.33	0.23	0.23	0.05	22.0	22

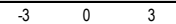

















Participant 9												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		1.10	0.12	15	0.13	0.12	0.12	0.00	2.8	15
	mmol/l	G3A		0.34	2.32	8	2.35	2.32	2.33	0.06	2.7	23
Conductivity	μS/cm	A1J		-0.08	328	5	327	328	328	4	1.3	33
	μS/cm	G3PJ		0.41	443	5	448	444	443	5	1.1	28
pH		A1P		-0.51	7.28	2,7	7.23	7.29	7.28	0.04	0.5	31
		G3PJ		-0.23	8.19	2,4	8.17	8.20	8.19	0.08	1.0	30

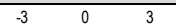


Participant 10												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Cl	mg/l	A1CS		7.59	10.8	10	14.9	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		4.25	5.69	10	6.90	5.65	5.69	0.22	3.9	24
Conductivity	μS/cm	A1J		0.00	328	5	328	328	328	4	1.3	33
	μS/cm	D2PJ		1.22	164	5	169	164	164	3	1.9	30
Fe	μg/l	A1Fe		-6.33	47.6	15	25.0	45.8	45.9	2.2	4.8	14
	μg/l	D2Fe		3.65	25.4	25	37.0	25.8	25.8	2.3	9.1	18
pH		A1P		0.20	7.28	2,7	7.30	7.29	7.28	0.04	0.5	31
		D2PJ		0.80	8.02	2,5	8.10	8.02	8.01	0.09	1.2	30

Participant 11												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		2.56	0.12	15	0.14	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		-0.45	0.76	10	0.74	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		-0.51	2.32	8	2.27	2.32	2.33	0.06	2.7	23
Conductivity	μS/cm	A1J		-0.12	328	5	327	328	328	4	1.3	33
	μS/cm	D2PJ		-0.24	164	5	163	164	164	3	1.9	30
	μS/cm	G3PJ		0.00	443	5	443	444	443	5	1.1	28
pH		A1P		0.20	7.28	2,7	7.30	7.29	7.28	0.04	0.5	31
		D2PJ		0.50	8.02	2,5	8.07	8.02	8.01	0.09	1.2	30
		G3PJ		0.10	8.19	2,4	8.20	8.20	8.19	0.08	1.0	30

Participant 11												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
TOC	mg/l	A1T		0.60	3.02	10	3.11	3.01	3.04	0.10	3.2	14
	mg/l	D2T		-0.06	1.77	20	1.76	1.75	1.77	0.14	7.7	13
	mg/l	G3T		0.51	0.98	20	1.03	0.97	0.98	0.06	6.1	9
Turbidity	FNU	A1S		-2.21	0.25	25	0.18	0.25	0.25	0.03	14.0	21
	FNU	D2S		-0.17	0.12	40	0.12	0.12	0.12	0.03	22.8	16
	FNU	G3S		-0.60	0.22	35	0.20	0.23	0.23	0.05	22.0	22

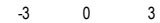





















Participant 12												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		-0.33	0.12	15	0.12	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		0.32	0.76	10	0.77	0.75	0.75	0.01	1.6	22
Ca	mg/l	A1K		4.23	5.01	10	6.07	4.94	4.90	0.23	4.7	15
	mg/l	D2K		-1.31	19.8	10	18.5	20.1	19.8	0.9	4.3	15
Cl	mg/l	A1CS		-0.67	10.8	10	10.4	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		1.37	5.69	10	6.08	5.65	5.69	0.22	3.9	24
Conductivity	µS/cm	A1J		-0.49	328	5	324	328	328	4	1.3	33
	µS/cm	D2PJ		-0.49	164	5	162	164	164	3	1.9	30
Na	mg/l	A1K		-0.58	2.41	10	2.34	2.37	2.36	0.12	5.1	16
	mg/l	D2K		0.48	7.50	10	7.68	7.57	7.56	0.09	1.2	16
pH		A1P		-0.92	7.28	2,7	7.19	7.29	7.28	0.04	0.5	31
		D2PJ		-1.50	8.02	2,5	7.87	8.02	8.01	0.09	1.2	30












Participant 13												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Ca	mg/l	A1K		1.40	5.01	10	5.36	4.94	4.90	0.23	4.7	15
	mg/l	G3K		2.17	28.1	10	31.2	28.1	28.2	1.4	4.9	14
Cl	mg/l	A1CS		-0.30	10.8	10	10.6	10.7	10.7	0.2	1.9	19
	mg/l	G3CS		-1.01	39.6	8	38.0	39.6	39.6	0.8	1.9	23
F	mg/l	A1F		-0.77	1.04	10	1.00	1.02	1.03	0.06	5.7	19
	mg/l	G3F		0.10	2.63	15	2.65	2.64	2.62	0.04	1.7	19
K	mg/l	A1K		-0.18	0.34	10	0.34	0.34	0.34	0.02	6.1	10
	mg/l	G3K		-0.33	2.31	10	2.27	2.28	2.31	0.09	4.1	14
Mg	mg/l	A1K		0.28	0.80	10	0.81	0.80	0.79	0.04	5.6	14
	mg/l	G3K		0.56	4.43	10	4.55	4.42	4.43	0.14	3.2	15
Na	mg/l	A1K		0.07	2.41	10	2.42	2.37	2.36	0.12	5.1	16
	mg/l	G3K		0.91	55.3	10	57.8	55.8	55.1	2.4	4.3	16
NO ₂	mg/l	A1N		1.29	0.17	10	0.18	0.17	0.17	0.01	3.2	20
NO ₃	mg/l	A1N		-0.24	4.24	10	4.19	4.24	4.23	0.15	3.6	21
	mg/l	G3N		0.79	1.01	10	1.05	1.02	1.01	0.04	4.0	20
SO ₄	mg/l	A1CS		-0.60	5.04	10	4.9	5.0	5.0	0.1	2.6	23
	mg/l	G3CS		-0.17	35.3	10	35.0	35.4	35.3	0.7	2.0	21











Participant 14												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
F	mg/l	D2F		2.31	0.26	20	0.32	0.26	0.26	0.03	10.1	17
	mg/l	G3F		1.83	2.63	15	2.99	2.64	2.62	0.04	1.7	19

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Participant 15												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		3.33	0.12	15	0.15	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		0.95	0.76	10	0.80	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		0.65	2.32	8	2.38	2.32	2.33	0.06	2.7	23
Ca	mg/l	A1K		-0.12	5.01	10	4.98	4.94	4.90	0.23	4.7	15
	mg/l	D2K		1.01	19.8	10	20.8	20.1	19.8	0.9	4.3	15
	mg/l	G3K		0.07	28.1	10	28.2	28.1	28.2	1.4	4.9	14
Cl	mg/l	A1CS		0.00	10.8	10	10.8	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		1.12	5.69	10	6.01	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		0.32	39.6	8	40.1	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		0.61	328	5	333	328	328	4	1.3	33
	µS/cm	D2PJ		0.66	164	5	167	164	164	3	1.9	30
	µS/cm	G3PJ		0.45	443	5	448	444	443	5	1.1	28
F	mg/l	A1F		0.00	1.04	10	1.04	1.02	1.03	0.06	5.7	19
	mg/l	D2F		0.96	0.26	20	0.29	0.26	0.26	0.03	10.1	17
	mg/l	G3F		0.10	2.63	15	2.65	2.64	2.62	0.04	1.7	19
Fe	µg/l	A1Fe		-1.18	47.6	15	43.4	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		-0.82	25.4	25	22.8	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		-0.12	57.2	15	56.7	57.1	56.8	5.6	9.8	19
Mg	mg/l	A1K		2.00	0.80	10	0.88	0.80	0.79	0.04	5.6	14
	mg/l	D2K		-2.40	1.67	10	1.47	1.70	1.67	0.06	3.6	13
	mg/l	G3K		-0.54	4.43	10	4.31	4.42	4.43	0.14	3.2	15
Mn	µg/l	A1Fe		-0.90	35.7	10	34.1	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		1.02	22.3	15	24.0	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		0.52	77.0	10	79.0	76.6	76.9	3.3	4.3	14
NH ₄	mg/l	A1N		0.00	0.18	10	0.18	0.19	0.19	0.01	4.4	19
	mg/l	D2N		-1.28	0.072	15	0.065	0.072	0.072	0.005	7.2	21
	mg/l	G3N		0.07	0.056	15	0.056	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		-0.47	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		-1.05	0.21	10	0.20	0.21	0.21	0.01	3.9	18
	mg/l	G3N		-0.53	0.019	20	0.018	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		0.24	4.24	10	4.29	4.24	4.23	0.15	3.6	21
	mg/l	D2N		0.65	2.15	10	2.22	2.17	2.16	0.10	4.5	20
	mg/l	G3N		0.59	1.01	10	1.04	1.02	1.01	0.04	4.0	20
pH		A1P		0.41	7.28	2,7	7.32	7.29	7.28	0.04	0.5	31
		D2PJ		0.10	8.02	2,5	8.03	8.02	8.01	0.09	1.2	30
		G3PJ		1.12	8.19	2,4	8.30	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		0.48	5.04	10	5.2	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		0.15	27.2	10	27.4	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		0.17	35.3	10	35.6	35.4	35.3	0.7	2.0	21
Turbidity	FNU	A1S		-2.21	0.25	25	0.18	0.25	0.25	0.03	14.0	21
	FNU	D2S		-2.00	0.12	40	0.07	0.12	0.12	0.03	22.8	16
	FNU	G3S		-1.87	0.22	35	0.15	0.23	0.23	0.05	22.0	22























Participant 17												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Ca	mg/l	A1K		-0.20	5.01	10	4.96	4.94	4.90	0.23	4.7	15
	mg/l	D2K		0.30	19.8	10	20.1	20.1	19.8	0.9	4.3	15
	mg/l	G3K		-0.28	28.1	10	27.7	28.1	28.2	1.4	4.9	14
Fe	µg/l	A1Fe		-0.28	47.6	15	46.6	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		0.13	25.4	25	25.8	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		0.00	57.2	15	57.2	57.1	56.8	5.6	9.8	19
K	mg/l	A1K		0.65	0.34	10	0.35	0.34	0.34	0.02	6.1	10
	mg/l	D2K		1.01	1.45	15	1.56	1.45	1.45	0.09	5.9	11
	mg/l	G3K		1.65	2.31	10	2.50	2.28	2.31	0.09	4.1	14
Mg	mg/l	A1K		0.35	0.80	10	0.81	0.80	0.79	0.04	5.6	14
	mg/l	D2K		0.36	1.67	10	1.70	1.70	1.67	0.06	3.6	13
	mg/l	G3K		0.09	4.43	10	4.45	4.42	4.43	0.14	3.2	15
Mn	µg/l	A1Fe		0.39	35.7	10	36.4	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		0.06	22.3	15	22.4	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		0.08	77.0	10	77.3	76.6	76.9	3.3	4.3	14
Na	mg/l	A1K		0.58	2.41	10	2.48	2.37	2.36	0.12	5.1	16
	mg/l	D2K		0.29	7.50	10	7.61	7.57	7.56	0.09	1.2	16
	mg/l	G3K		-0.54	55.3	10	53.8	55.8	55.1	2.4	4.3	16
SO ₄	mg/l	A1CS		-0.16	5.04	10	5.0	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		0.29	27.2	10	27.6	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		0.85	35.3	10	36.8	35.4	35.3	0.7	2.0	21

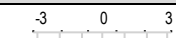













































Participant 18												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Cl	mg/l	A1CS		1.11	10.8	10	11.4	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		1.23	5.69	10	6.04	5.65	5.69	0.22	3.9	24
Conductivity	µS/cm	A1J		-1.46	328	5	316	328	328	4	1.3	33
	µS/cm	G3PJ		-0.54	443	5	437	444	443	5	1.1	28
F	mg/l	A1F		2.12	1.04	10	1.15	1.02	1.03	0.06	5.7	19
	mg/l	G3F		-0.20	2.63	15	2.59	2.64	2.62	0.04	1.7	19
pH		A1P		-3.97	7.28	2,7	6.89	7.29	7.28	0.04	0.5	31
		G3PJ		-1.73	8.19	2,4	8.02	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		-0.16	5.04	10	5.0	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		-0.22	27.2	10	26.9	27.4	27.3	0.4	1.4	22

Participant 19												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		0.41	0.12	15	0.12	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		0.60	0.76	10	0.78	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		1.31	2.32	8	2.44	2.32	2.33	0.06	2.7	23
Cl	mg/l	A1CS		-0.19	10.8	10	10.7	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		-0.25	5.69	10	5.62	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		-0.06	39.6	8	39.5	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		-0.07	328	5	327	328	328	4	1.3	33
	µS/cm	D2PJ		-0.12	164	5	164	164	164	3	1.9	30
	µS/cm	G3PJ		-0.67	443	5	436	444	443	5	1.1	28

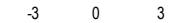






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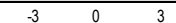





















Participant 19												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
F	mg/l	A1F		-0.75	1.04	10	1.00	1.02	1.03	0.06	5.7	19
	mg/l	D2F		-1.46	0.26	20	0.22	0.26	0.26	0.03	10.1	17
	mg/l	G3F		-1.06	2.63	15	2.42	2.64	2.62	0.04	1.7	19
NH ₄	mg/l	A1N		-3.56	0.18	10	0.15	0.19	0.19	0.01	4.4	19
	mg/l	D2N		-2.72	0.072	15	0.057	0.072	0.072	0.005	7.2	21
	mg/l	G3N		-2.57	0.056	15	0.045	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		-14.14	0.17	10	0.05	0.17	0.17	0.01	3.2	20
	mg/l	D2N		-14.09	0.21	10	0.06	0.21	0.21	0.01	3.9	18
	mg/l	G3N		-7.16	0.019	20	0.005	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		-15.59	4.24	10	0.94	4.24	4.23	0.15	3.6	21
	mg/l	D2N		-15.43	2.15	10	0.49	2.17	2.16	0.10	4.5	20
	mg/l	G3N		-15.49	1.01	10	0.23	1.02	1.01	0.04	4.0	20
pH		A1P		-0.10	7.28	2,7	7.27	7.29	7.28	0.04	0.5	31
		D2PJ		-0.40	8.02	2,5	7.98	8.02	8.01	0.09	1.2	30
		G3PJ		0.20	8.19	2,4	8.21	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		-0.99	5.04	10	4.8	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		-1.03	27.2	10	25.8	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		-1.25	35.3	10	33.1	35.4	35.3	0.7	2.0	21
TOC	mg/l	A1T		0.00	3.02	10	3.02	3.01	3.04	0.10	3.2	14
	mg/l	D2T		0.33	1.77	20	1.83	1.75	1.77	0.14	7.7	13
	mg/l	G3T		3.63	0.98	20	1.34	0.97	0.98	0.06	6.1	9
Turbidity	FNU	A1S		-1.28	0.25	25	0.21	0.25	0.25	0.03	14.0	21
	FNU	D2S		0.54	0.12	40	0.13	0.12	0.12	0.03	22.8	16
	FNU	G3S		-1.84	0.22	35	0.15	0.23	0.23	0.05	22.0	22

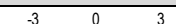
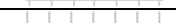














Participant 20												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		0.11	0.12	15	0.12	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		-0.45	0.76	10	0.74	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		-0.32	2.32	8	2.29	2.32	2.33	0.06	2.7	23
Conductivity	μS/cm	A1J		0.12	328	5	329	328	328	4	1.3	33
	μS/cm	D2PJ		0.05	164	5	164	164	164	3	1.9	30
	μS/cm	G3PJ		0.27	443	5	446	444	443	5	1.1	28
Fe	μg/l	A1Fe		-0.22	47.6	15	46.8	45.8	45.9	2.2	4.8	14
	μg/l	D2Fe		0.41	25.4	25	26.7	25.8	25.8	2.3	9.1	18
	μg/l	G3Fe		0.75	57.2	15	60.4	57.1	56.8	5.6	9.8	19
NH ₄	mg/l	A1N		0.78	0.18	10	0.19	0.19	0.19	0.01	4.4	19
	mg/l	D2N		0.00	0.072	15	0.072	0.072	0.072	0.005	7.2	21
	mg/l	G3N		0.00	0.056	15	0.056	0.056	0.056	0.005	8.4	21
pH		A1P		0.51	7.28	2,7	7.33	7.29	7.28	0.04	0.5	31
		D2PJ		1.30	8.02	2,5	8.15	8.02	8.01	0.09	1.2	30
		G3PJ		0.61	8.19	2,4	8.25	8.20	8.19	0.08	1.0	30
TOC	mg/l	A1T		-0.60	3.02	10	2.93	3.01	3.04	0.10	3.2	14
	mg/l	D2T		0.00	1.77	20	1.77	1.75	1.77	0.14	7.7	13
	mg/l	G3T		0.31	0.98	20	1.01	0.97	0.98	0.06	6.1	9
Turbidity	FNU	A1S		-0.13	0.25	25	0.25	0.25	0.25	0.03	14.0	21
	FNU	D2S		-0.46	0.12	40	0.11	0.12	0.12	0.03	22.8	16
	FNU	G3S		1.58	0.22	35	0.28	0.23	0.23	0.05	22.0	22

Participant 21													
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}	
Alkalinity	mmol/l	A1A		0.14	0.12	15	0.12	0.12	0.12	0.00	2.8	15	
	mmol/l	D2A		-0.50	0.76	10	0.74	0.75	0.75	0.01	1.6	22	
	mmol/l	G3A		-0.41	2.32	8	2.28	2.32	2.33	0.06	2.7	23	
Ca	mg/l	A1K		-0.80	5.01	10	4.81	4.94	4.90	0.23	4.7	15	
	mg/l	D2K		0.30	19.8	10	20.1	20.1	19.8	0.9	4.3	15	
	mg/l	G3K		0.28	28.1	10	28.5	28.1	28.2	1.4	4.9	14	
Cl	mg/l	A1CS		-0.24	10.8	10	10.7	10.7	10.7	0.2	1.9	19	
	mg/l	D2CS		-0.13	5.69	10	5.65	5.65	5.69	0.22	3.9	24	
	mg/l	G3CS		-0.04	39.6	8	39.5	39.6	39.6	0.8	1.9	23	
Conductivity	µS/cm	A1J		0.07	328	5	329	328	328	4	1.3	33	
	µS/cm	D2PJ		0.10	164	5	164	164	164	3	1.9	30	
	µS/cm	G3PJ		-0.12	443	5	442	444	443	5	1.1	28	
F	mg/l	A1F		0.46	1.04	10	1.06	1.02	1.03	0.06	5.7	19	
	mg/l	D2F		-0.88	0.26	20	0.24	0.26	0.26	0.03	10.1	17	
	mg/l	G3F		0.06	2.63	15	2.64	2.64	2.62	0.04	1.7	19	
Fe	µg/l	A1Fe		-1.34	47.6	15	42.8	45.8	45.9	2.2	4.8	14	
	µg/l	D2Fe		-0.03	25.4	25	25.3	25.8	25.8	2.3	9.1	18	
	µg/l	G3Fe		-0.12	57.2	15	56.7	57.1	56.8	5.6	9.8	19	
K	mg/l	A1K		-1.29	0.34	10	0.32	0.34	0.34	0.02	6.1	10	
	mg/l	D2K		0.55	1.45	15	1.51	1.45	1.45	0.09	5.9	11	
	mg/l	G3K		-0.43	2.31	10	2.26	2.28	2.31	0.09	4.1	14	
Mg	mg/l	A1K		-1.75	0.80	10	0.73	0.80	0.79	0.04	5.6	14	
	mg/l	D2K		-0.60	1.67	10	1.62	1.70	1.67	0.06	3.6	13	
	mg/l	G3K		-0.50	4.43	10	4.32	4.42	4.43	0.14	3.2	15	
Mn	µg/l	A1Fe		-1.06	35.7	10	33.8	35.5	35.6	1.4	4.0	13	
	µg/l	D2Fe		-0.36	22.3	15	21.7	22.6	22.5	1.1	4.8	15	
	µg/l	G3Fe		-0.03	77.0	10	76.9	76.6	76.9	3.3	4.3	14	
Na	mg/l	A1K		-1.74	2.41	10	2.20	2.37	2.36	0.12	5.1	16	
	mg/l	D2K		-0.03	7.50	10	7.49	7.57	7.56	0.09	1.2	16	
	mg/l	G3K		-0.80	55.3	10	53.1	55.8	55.1	2.4	4.3	16	
NH ₄	mg/l	A1N		0.33	0.18	10	0.18	0.19	0.19	0.01	4.4	19	
	mg/l	D2N		-0.02	0.072	15	0.072	0.072	0.072	0.005	7.2	21	
	mg/l	G3N		0.10	0.056	15	0.056	0.056	0.056	0.005	8.4	21	
NO ₂	mg/l	A1N		-0.35	0.17	10	0.17	0.17	0.17	0.01	3.2	20	
	mg/l	D2N		-0.48	0.21	10	0.21	0.21	0.21	0.01	3.9	18	
	mg/l	G3N		0.37	0.019	20	0.020	0.019	0.019	0.002	10.4	15	
NO ₃	mg/l	A1N		1.13	4.24	10	4.48	4.24	4.23	0.15	3.6	21	
	mg/l	D2N		2.37	2.15	10	2.41	2.17	2.16	0.10	4.5	20	
	mg/l	G3N		-0.02	1.01	10	1.01	1.02	1.01	0.04	4.0	20	
pH		A1P		-1.14	7.28	2,7	7.17	7.29	7.28	0.04	0.5	31	
		D2PJ		-1.81	8.02	2,5	7.84	8.02	8.01	0.09	1.2	30	
		G3PJ		-1.56	8.19	2,4	8.04	8.20	8.19	0.08	1.0	30	
SO ₄	mg/l	A1CS		-0.27	5.04	10	5.0	5.0	5.0	0.1	2.6	23	
	mg/l	D2CS		-0.01	27.2	10	27.2	27.4	27.3	0.4	1.4	22	
	mg/l	G3CS		-0.03	35.3	10	35.3	35.4	35.3	0.7	2.0	21	

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Participant 21												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
TOC	mg/l	A1T		-0.26	3.02	10	2.98	3.01	3.04	0.10	3.2	14
	mg/l	D2T		0.74	1.77	20	1.90	1.75	1.77	0.14	7.7	13
	mg/l	G3T		2.76	0.98	20	1.25	0.97	0.98	0.06	6.1	9
Turbidity	FNU	A1S		-1.47	0.25	25	0.20	0.25	0.25	0.03	14.0	21
	FNU	D2S		0.21	0.12	40	0.13	0.12	0.12	0.03	22.8	16
	FNU	G3S		-0.86	0.22	35	0.19	0.23	0.23	0.05	22.0	22

Participant 22												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		0.00	0.12	15	0.12	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		-0.26	0.76	10	0.75	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		-0.22	2.32	8	2.30	2.32	2.33	0.06	2.7	23
Conductivity	µS/cm	A1J		0.24	328	5	330	328	328	4	1.3	33
	µS/cm	D2PJ		1.46	164	5	170	164	164	3	1.9	30
	µS/cm	G3PJ		0.63	443	5	450	444	443	5	1.1	28
NH ₄	mg/l	A1N		2.22	0.18	10	0.20	0.19	0.19	0.01	4.4	19
	mg/l	D2N		0.37	0.072	15	0.074	0.072	0.072	0.005	7.2	21
	mg/l	G3N		0.71	0.056	15	0.059	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		1.18	0.17	10	0.18	0.17	0.17	0.01	3.2	20
	mg/l	D2N		0.95	0.21	10	0.22	0.21	0.21	0.01	3.9	18
	mg/l	G3N		-0.53	0.019	20	0.018	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		0.75	4.24	10	4.40	4.24	4.23	0.15	3.6	21
	mg/l	D2N		0.47	2.15	10	2.20	2.17	2.16	0.10	4.5	20
	mg/l	G3N		-0.20	1.01	10	1.00	1.02	1.01	0.04	4.0	20
pH		A1P		0.20	7.28	2,7	7.30	7.29	7.28	0.04	0.5	31
		D2PJ		0.80	8.02	2,5	8.10	8.02	8.01	0.09	1.2	30
		G3PJ		0.10	8.19	2,4	8.20	8.20	8.19	0.08	1.0	30
Turbidity	FNU	A1S		0.64	0.25	25	0.27	0.25	0.25	0.03	14.0	21
	FNU	D2S		1.67	0.12	40	0.16	0.12	0.12	0.03	22.8	16
	FNU	G3S		0.78	0.22	35	0.25	0.23	0.23	0.05	22.0	22

Participant 23												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Cl	mg/l	A1CS		0.00	10.8	10	10.8	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		-0.14	5.69	10	5.65	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		0.00	39.6	8	39.6	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		-0.24	328	5	326	328	328	4	1.3	33
	µS/cm	D2PJ		-0.49	164	5	162	164	164	3	1.9	30
	µS/cm	G3PJ		-0.36	443	5	439	444	443	5	1.1	28
NH ₄	mg/l	A1N		0.44	0.18	10	0.18	0.19	0.19	0.01	4.4	19
	mg/l	D2N		-0.37	0.072	15	0.070	0.072	0.072	0.005	7.2	21
	mg/l	G3N		-1.43	0.056	15	0.050	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		0.00	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		7.62	0.21	10	0.29	0.21	0.21	0.01	3.9	18
	mg/l	G3N		0.019	20	<0,1	0.019	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		0.38	4.24	10	4.32	4.24	4.23	0.15	3.6	21
	mg/l	D2N		0.74	2.15	10	2.23	2.17	2.16	0.10	4.5	20
	mg/l	G3N		3.17	1.01	10	1.17	1.02	1.01	0.04	4.0	20

Participant 23												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
pH		A1P		0.41	7.28	2,7	7.32	7.29	7.28	0.04	0.5	31
		D2PJ		-2.19	8.02	2,5	7.80	8.02	8.01	0.09	1.2	30
		G3PJ		-0.51	8.19	2,4	8.14	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		-0.20	5.04	10	5.0	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		-0.22	27.2	10	26.9	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		-0.51	35.3	10	34.4	35.4	35.3	0.7	2.0	21

Participant 24												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		6.33	0.12	15	0.18	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		1.53	0.76	10	0.82	0.75	0.75	0.01	1.6	22
Cl	mg/l	A1CS		-0.68	10.8	10	10.4	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		-0.61	5.69	10	5.52	5.65	5.69	0.22	3.9	24
Conductivity	μS/cm	A1J		0.49	328	5	332	328	328	4	1.3	33
	μS/cm	D2PJ		0.37	164	5	166	164	164	3	1.9	30
F	mg/l	A1F		-0.62	1.04	10	1.01	1.02	1.03	0.06	5.7	19
	mg/l	D2F		0.12	0.26	20	0.26	0.26	0.26	0.03	10.1	17
Fe	μg/l	A1Fe		14.26	47.6	15	98.5	45.8	45.9	2.2	4.8	14
	μg/l	D2Fe		10.58	25.4	25	59.0	25.8	25.8	2.3	9.1	18
pH		A1P		0.20	7.28	2,7	7.30	7.29	7.28	0.04	0.5	31
		D2PJ		0.40	8.02	2,5	8.06	8.02	8.01	0.09	1.2	30
SO ₄	mg/l	A1CS		-0.60	5.04	10	4.9	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		-1.05	27.2	10	25.8	27.4	27.3	0.4	1.4	22

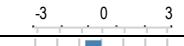






































Participant 25												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		0.56	0.12	15	0.13	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		-0.26	0.76	10	0.75	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		0.11	2.32	8	2.33	2.32	2.33	0.06	2.7	23
Cl	mg/l	D2CS		0.14	5.69	10	5.73	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		0.44	39.6	8	40.3	39.6	39.6	0.8	1.9	23
Conductivity	μS/cm	A1J		0.11	328	5	329	328	328	4	1.3	33
	μS/cm	D2PJ		0.07	164	5	164	164	164	3	1.9	30
	μS/cm	G3PJ		0.11	443	5	444	444	443	5	1.1	28
F	mg/l	A1F		0.58	1.04	10	1.07	1.02	1.03	0.06	5.7	19
	mg/l	D2F		0.04	0.26	20	0.26	0.26	0.26	0.03	10.1	17
	mg/l	G3F		0.10	2.63	15	2.65	2.64	2.62	0.04	1.7	19
Fe	μg/l	A1Fe		0.22	47.6	15	48.4	45.8	45.9	2.2	4.8	14
	μg/l	D2Fe		1.89	25.4	25	31.4	25.8	25.8	2.3	9.1	18
	μg/l	G3Fe		0.56	57.2	15	59.6	57.1	56.8	5.6	9.8	19
K	mg/l	A1K		-1.76	0.34	10	0.31	0.34	0.34	0.02	6.1	10
	mg/l	D2K		-0.74	1.45	15	1.37	1.45	1.45	0.09	5.9	11
	mg/l	G3K		0.43	2.31	10	2.36	2.28	2.31	0.09	4.1	14
Mn	μg/l	A1Fe		-2.97	35.7	10	30.4	35.5	35.6	1.4	4.0	13
	μg/l	D2Fe		-2.51	22.3	15	18.1	22.6	22.5	1.1	4.8	15
	μg/l	G3Fe		-0.83	77.0	10	73.8	76.6	76.9	3.3	4.3	14

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Participant 25												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Na	mg/l	A1K		-1.16	2.41	10	2.27	2.37	2.36	0.12	5.1	16
	mg/l	D2K		0.00	7.50	10	7.50	7.57	7.56	0.09	1.2	16
	mg/l	G3K		0.69	55.3	10	57.2	55.8	55.1	2.4	4.3	16
NH ₄	mg/l	A1N		0.44	0.18	10	0.18	0.19	0.19	0.01	4.4	19
	mg/l	D2N		0.07	0.072	15	0.072	0.072	0.072	0.005	7.2	21
	mg/l	G3N		-0.45	0.056	15	0.054	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		-0.47	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		-0.86	0.21	10	0.20	0.21	0.21	0.01	3.9	18
	mg/l	G3N		-1.21	0.019	20	0.017	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		0.38	4.24	10	4.32	4.24	4.23	0.15	3.6	21
	mg/l	D2N		0.19	2.15	10	2.17	2.17	2.16	0.10	4.5	20
	mg/l	G3N		0.20	1.01	10	1.02	1.02	1.01	0.04	4.0	20
pH		A1P		-0.20	7.28	2,7	7.26	7.29	7.28	0.04	0.5	31
		D2PJ		-1.10	8.02	2,5	7.91	8.02	8.01	0.09	1.2	30
		G3PJ		-0.31	8.19	2,4	8.16	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		-0.12	5.04	10	5.0	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		0.22	27.2	10	27.5	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		0.23	35.3	10	35.7	35.4	35.3	0.7	2.0	21
Turbidity	FNU	A1S		0.03	0.25	25	0.25	0.25	0.25	0.03	14.0	21
	FNU	D2S		-0.42	0.12	40	0.11	0.12	0.12	0.03	22.8	16
	FNU	G3S		0.60	0.22	35	0.24	0.23	0.23	0.05	22.0	22

Participant 26												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Conductivity	μS/cm	A1J		-0.98	328	5	320	328	328	4	1.3	33
	μS/cm	D2PJ		1.46	164	5	170	164	164	3	1.9	30
	μS/cm	G3PJ		-0.27	443	5	440	444	443	5	1.1	28
pH		A1P		0.20	7.28	2,7	7.30	7.29	7.28	0.04	0.5	31
		D2PJ		0.80	8.02	2,5	8.10	8.02	8.01	0.09	1.2	30
		G3PJ		1.12	8.19	2,4	8.30	8.20	8.19	0.08	1.0	30
Turbidity	FNU	A1S		0.00	0.25	25	0.25	0.25	0.25	0.03	14.0	21
	FNU	D2S		0.12	0.12	40	<0,2	0.12	0.12	0.03	22.8	16
	FNU	G3S		1.30	0.22	35	0.27	0.23	0.23	0.05	22.0	22

Participant 27												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		0.22	0.12	15	0.12	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		-0.14	0.76	10	0.75	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		0.09	2.32	8	2.33	2.32	2.33	0.06	2.7	23
Ca	mg/l	A1K		0.32	5.01	10	5.09	4.94	4.90	0.23	4.7	15
	mg/l	D2K		0.40	19.8	10	20.2	20.1	19.8	0.9	4.3	15
	mg/l	G3K		0.00	28.1	10	28.1	28.1	28.2	1.4	4.9	14
Cl	mg/l	A1CS		-0.37	10.8	10	10.6	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		-0.77	5.69	10	5.47	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		-0.13	39.6	8	39.4	39.6	39.6	0.8	1.9	23
Conductivity	μS/cm	A1J		-1.59	328	5	315	328	328	4	1.3	33
	μS/cm	D2PJ		-1.22	164	5	159	164	164	3	1.9	30
	μS/cm	G3PJ		-1.72	443	5	424	444	443	5	1.1	28

Participant 27												
Measurand	Unit	Sample		z score	Assigned value	2* _s pt %	Participant's result	Md	Mean	s	s %	n _{stat}
F	mg/l	A1F		-0.77	1.04	10	1.00	1.02	1.03	0.06	5.7	19
	mg/l	D2F		-1.04	0.26	20	0.23	0.26	0.26	0.03	10.1	17
	mg/l	G3F		0.15	2.63	15	2.66	2.64	2.62	0.04	1.7	19
Fe	µg/l	A1Fe		-0.78	47.6	15	44.8	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		-0.22	25.4	25	24.7	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		0.65	57.2	15	60.0	57.1	56.8	5.6	9.8	19
K	mg/l	A1K		-0.24	0.34	10	0.34	0.34	0.34	0.02	6.1	10
	mg/l	D2K		-0.37	1.45	15	1.41	1.45	1.45	0.09	5.9	11
	mg/l	G3K		1.04	2.31	10	2.43	2.28	2.31	0.09	4.1	14
Mg	mg/l	A1K		0.00	0.80	10	0.80	0.80	0.79	0.04	5.6	14
	mg/l	D2K		0.48	1.67	10	1.71	1.70	1.67	0.06	3.6	13
	mg/l	G3K		-0.05	4.43	10	4.42	4.42	4.43	0.14	3.2	15
Mn	µg/l	A1Fe		-0.11	35.7	10	35.5	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		-0.90	22.3	15	20.8	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		-0.70	77.0	10	74.3	76.6	76.9	3.3	4.3	14
Na	mg/l	A1K		0.08	2.41	10	2.42	2.37	2.36	0.12	5.1	16
	mg/l	D2K		0.05	7.50	10	7.52	7.57	7.56	0.09	1.2	16
	mg/l	G3K		0.18	55.3	10	55.8	55.8	55.1	2.4	4.3	16
NH ₄	mg/l	A1N		0.44	0.18	10	0.18	0.19	0.19	0.01	4.4	19
	mg/l	D2N		-0.02	0.072	15	0.072	0.072	0.072	0.005	7.2	21
	mg/l	G3N		-0.26	0.056	15	0.055	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		-0.12	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		-0.57	0.21	10	0.20	0.21	0.21	0.01	3.9	18
	mg/l	G3N		-0.74	0.019	20	0.018	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		0.14	4.24	10	4.27	4.24	4.23	0.15	3.6	21
	mg/l	D2N		0.09	2.15	10	2.16	2.17	2.16	0.10	4.5	20
	mg/l	G3N		0.40	1.01	10	1.03	1.02	1.01	0.04	4.0	20
pH		A1P		0.41	7.28	2,7	7.32	7.29	7.28	0.04	0.5	31
		D2PJ		1.20	8.02	2,5	8.14	8.02	8.01	0.09	1.2	30
		G3PJ		1.42	8.19	2,4	8.33	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		-0.52	5.04	10	4.9	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		0.15	27.2	10	27.4	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		0.06	35.3	10	35.4	35.4	35.3	0.7	2.0	21
TOC	mg/l	A1T		-0.66	3.02	10	2.92	3.01	3.04	0.10	3.2	14
	mg/l	D2T		-1.36	1.77	20	1.53	1.75	1.77	0.14	7.7	13
Turbidity	FNU	A1S		0.32	0.25	25	0.26	0.25	0.25	0.03	14.0	21
	FNU	D2S			0.12	40	<0,2	0.12	0.12	0.03	22.8	16
	FNU	G3S		0.52	0.22	35	0.24	0.23	0.23	0.05	22.0	22

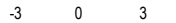









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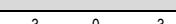

































Participant 28												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Conductivity	μS/cm	A1J		-0.37	328	5	325	328	328	4	1.3	33
	μS/cm	D2PJ		-0.63	164	5	161	164	164	3	1.9	30
	μS/cm	G3PJ		-0.27	443	5	440	444	443	5	1.1	28
pH		A1P		-0.20	7.28	2,7	7.26	7.29	7.28	0.04	0.5	31
		D2PJ		-0.30	8.02	2,5	7.99	8.02	8.01	0.09	1.2	30
		G3PJ		-0.61	8.19	2,4	8.13	8.20	8.19	0.08	1.0	30
Turbidity	FNU	A1S		-0.32	0.25	25	0.24	0.25	0.25	0.03	14.0	21
	FNU	D2S		2.83	0.12	40	0.19	0.12	0.12	0.03	22.8	16
	FNU	G3S		-0.52	0.22	35	0.20	0.23	0.23	0.05	22.0	22

Participant 29												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Conductivity	μS/cm	A1J		0.37	328	5	331	328	328	4	1.3	33
	μS/cm	D2PJ		-0.24	164	5	163	164	164	3	1.9	30
	μS/cm	G3PJ		0.00	443	5	443	444	443	5	1.1	28
pH		A1P		0.51	7.28	2,7	7.33	7.29	7.28	0.04	0.5	31
		D2PJ		-0.50	8.02	2,5	7.97	8.02	8.01	0.09	1.2	30
		G3PJ		-0.10	8.19	2,4	8.18	8.20	8.19	0.08	1.0	30
Turbidity	FNU	A1S		-1.57	0.25	25	0.20	0.25	0.25	0.03	14.0	21
	FNU	D2S		-0.88	0.12	40	0.10	0.12	0.12	0.03	22.8	16
	FNU	G3S		-0.55	0.22	35	0.20	0.23	0.23	0.05	22.0	22

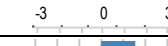











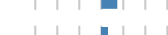
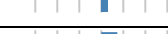






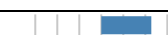





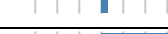









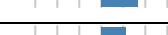
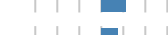





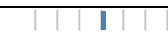





Participant 30												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Cl	mg/l	A1CS		1.48	10.8	10	11.6	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		0.25	5.69	10	5.76	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		0.88	39.6	8	41.0	39.6	39.6	0.8	1.9	23
Conductivity	μS/cm	A1J		0.46	328	5	332	328	328	4	1.3	33
	μS/cm	D2PJ		0.41	164	5	166	164	164	3	1.9	30
	μS/cm	G3PJ		0.54	443	5	449	444	443	5	1.1	28
Fe	μg/l	A1Fe		5.15	47.6	15	66.0	45.8	45.9	2.2	4.8	14
	μg/l	D2Fe		6.17	25.4	25	45.0	25.8	25.8	2.3	9.1	18
	μg/l	G3Fe		2.17	57.2	15	66.5	57.1	56.8	5.6	9.8	19
pH		A1P		-0.41	7.28	2,7	7.24	7.29	7.28	0.04	0.5	31
		D2PJ		-4.09	8.02	2,5	7.61	8.02	8.01	0.09	1.2	30
		G3PJ		-2.24	8.19	2,4	7.97	8.20	8.19	0.08	1.0	30

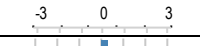



Participant 31												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Cl	mg/l	A1CS		1.11	10.8	10	11.4	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		-0.18	5.69	10	5.64	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		0.13	39.6	8	39.8	39.6	39.6	0.8	1.9	23
F	mg/l	A1F		-0.38	1.04	10	1.02	1.02	1.03	0.06	5.7	19
NH ₄	mg/l	A1N		1.00	0.18	10	0.19	0.19	0.19	0.01	4.4	19
	mg/l	D2N		-0.56	0.072	15	0.069	0.072	0.072	0.005	7.2	21
	mg/l	G3N		1.90	0.056	15	0.064	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		-1.41	0.17	10	0.16	0.17	0.17	0.01	3.2	20
	mg/l	D2N		-1.71	0.21	10	0.19	0.21	0.21	0.01	3.9	18
	mg/l	G3N		0.019	0.019	20	<0,05	0.019	0.019	0.002	10.4	15












































Participant 31												
Measurand	Unit	Sample		z score	Assigned value	2×s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
NO ₃	mg/l	A1N		-0.19	4.24	10	4.20	4.24	4.23	0.15	3.6	21
	mg/l	D2N		0.19	2.15	10	2.17	2.17	2.16	0.10	4.5	20
	mg/l	G3N		0.00	1.01	10	1.01	1.02	1.01	0.04	4.0	20
SO ₄	mg/l	A1CS		0.16	5.04	10	5.1	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		0.07	27.2	10	27.3	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		0.11	35.3	10	35.5	35.4	35.3	0.7	2.0	21
TOC	mg/l	A1T		-0.40	3.02	10	2.96	3.01	3.04	0.10	3.2	14
	mg/l	D2T		0.85	1.77	20	1.92	1.75	1.77	0.14	7.7	13
	mg/l	G3T		1.12	0.98	20	1.09	0.97	0.98	0.06	6.1	9

Participant 32												
Measurand	Unit	Sample		z score	Assigned value	2×s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		4.44	0.12	15	0.16	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		1.84	0.76	10	0.83	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		1.62	2.32	8	2.47	2.32	2.33	0.06	2.7	23
Cl	mg/l	A1CS		-0.19	10.8	10	10.7	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		0.42	5.69	10	5.81	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		-0.19	39.6	8	39.3	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		0.00	328	5	328	328	328	4	1.3	33
	µS/cm	D2PJ		0.00	164	5	164	164	164	3	1.9	30
	µS/cm	G3PJ		0.00	443	5	443	444	443	5	1.1	28
F	mg/l	A1F		-1.15	1.04	10	0.98	1.02	1.03	0.06	5.7	19
	mg/l	D2F		-0.38	0.26	20	0.25	0.26	0.26	0.03	10.1	17
	mg/l	G3F		-0.46	2.63	15	2.54	2.64	2.62	0.04	1.7	19
Fe	µg/l	A1Fe		-0.17	47.6	15	47.0	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		-2.02	25.4	25	19.0	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		1.35	57.2	15	63.0	57.1	56.8	5.6	9.8	19
Mn	µg/l	A1Fe		1.85	35.7	10	39.0	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		5.20	22.3	15	31.0	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		2.86	77.0	10	88.0	76.6	76.9	3.3	4.3	14
NH ₄	mg/l	A1N		1.56	0.18	10	0.19	0.19	0.19	0.01	4.4	19
	mg/l	D2N		0.56	0.072	15	0.075	0.072	0.072	0.005	7.2	21
	mg/l	G3N		0.48	0.056	15	0.058	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		-0.24	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		-0.95	0.21	10	0.20	0.21	0.21	0.01	3.9	18
	mg/l	G3N		-1.58	0.019	20	0.016	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		-0.38	4.24	10	4.16	4.24	4.23	0.15	3.6	21
	mg/l	D2N		0.07	2.15	10	2.16	2.17	2.16	0.10	4.5	20
	mg/l	G3N		-1.72	1.01	10	0.92	1.02	1.01	0.04	4.0	20
pH		A1P		-0.10	7.28	2,7	7.27	7.29	7.28	0.04	0.5	31
		D2PJ		-0.10	8.02	2,5	8.01	8.02	8.01	0.09	1.2	30
		G3PJ		0.51	8.19	2,4	8.24	8.20	8.19	0.08	1.0	30
Turbidity	FNU	A1S		2.27	0.25	25	0.32	0.25	0.25	0.03	14.0	21
	FNU	D2S		1.29	0.12	40	0.15	0.12	0.12	0.03	22.8	16
	FNU	G3S		0.68	0.22	35	0.25	0.23	0.23	0.05	22.0	22

Appendix 3 (19/26)

Participant 33												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		1.56	0.12	15	0.13	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		-0.08	0.76	10	0.76	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		-0.22	2.32	8	2.30	2.32	2.33	0.06	2.7	23
Ca	mg/l	A1K		-0.80	5.01	10	4.81	4.94	4.90	0.23	4.7	15
	mg/l	D2K		-0.71	19.8	10	19.1	20.1	19.8	0.9	4.3	15
	mg/l	G3K		-1.35	28.1	10	26.2	28.1	28.2	1.4	4.9	14
Cl	mg/l	A1CS		0.56	10.8	10	11.1	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		-0.25	5.69	10	5.62	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		0.13	39.6	8	39.8	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		0.49	328	5	332	328	328	4	1.3	33
	µS/cm	D2PJ		0.73	164	5	167	164	164	3	1.9	30
	µS/cm	G3PJ		0.27	443	5	446	444	443	5	1.1	28
F	mg/l	A1F		0.77	1.04	10	1.08	1.02	1.03	0.06	5.7	19
	mg/l	D2F		0.19	0.26	20	0.27	0.26	0.26	0.03	10.1	17
	mg/l	G3F		0.00	2.63	15	2.63	2.64	2.62	0.04	1.7	19
Fe	µg/l	A1Fe		3.36	47.6	15	59.6	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		0.82	25.4	25	28.0	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		-2.61	57.2	15	46.0	57.1	56.8	5.6	9.8	19
K	mg/l	A1K		2.29	0.34	10	0.38	0.34	0.34	0.02	6.1	10
	mg/l	D2K		-1.20	1.45	15	1.32	1.45	1.45	0.09	5.9	11
	mg/l	G3K		-0.35	2.31	10	2.27	2.28	2.31	0.09	4.1	14
Mg	mg/l	A1K		-0.10	0.80	10	0.80	0.80	0.79	0.04	5.6	14
	mg/l	D2K		0.60	1.67	10	1.72	1.70	1.67	0.06	3.6	13
	mg/l	G3K		0.32	4.43	10	4.50	4.42	4.43	0.14	3.2	15
Mn	µg/l	A1Fe		24.87	35.7	10	80.1	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		0.30	22.3	15	22.8	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		-10.57	77.0	10	36.3	76.6	76.9	3.3	4.3	14
Na	mg/l	A1K		-1.99	2.41	10	2.17	2.37	2.36	0.12	5.1	16
	mg/l	D2K		-1.49	7.50	10	6.94	7.57	7.56	0.09	1.2	16
	mg/l	G3K		-1.27	55.3	10	51.8	55.8	55.1	2.4	4.3	16
NH ₄	mg/l	A1N		1.56	0.18	10	0.19	0.19	0.19	0.01	4.4	19
	mg/l	D2N		0.07	0.072	15	0.072	0.072	0.072	0.005	7.2	21
	mg/l	G3N		1.62	0.056	15	0.063	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		1.06	0.17	10	0.18	0.17	0.17	0.01	3.2	20
	mg/l	D2N		0.76	0.21	10	0.22	0.21	0.21	0.01	3.9	18
	mg/l	G3N		0.42	0.019	20	0.020	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		-0.14	4.24	10	4.21	4.24	4.23	0.15	3.6	21
	mg/l	D2N		0.28	2.15	10	2.18	2.17	2.16	0.10	4.5	20
	mg/l	G3N		0.20	1.01	10	1.02	1.02	1.01	0.04	4.0	20
pH		A1P		0.20	7.28	2,7	7.30	7.29	7.28	0.04	0.5	31
		D2PJ		0.60	8.02	2,5	8.08	8.02	8.01	0.09	1.2	30
		G3PJ		0.51	8.19	2,4	8.24	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		-0.28	5.04	10	5.0	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		0.22	27.2	10	27.5	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		0.23	35.3	10	35.7	35.4	35.3	0.7	2.0	21
TOC	mg/l	A1T		0.60	3.02	10	3.11	3.01	3.04	0.10	3.2	14
	mg/l	D2T		-0.17	1.77	20	1.74	1.75	1.77	0.14	7.7	13
	mg/l	G3T		-0.45	0.98	20	0.94	0.97	0.98	0.06	6.1	9

Participant 33												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Turbidity	FNU	A1S		0.29	0.25	25	0.26	0.25	0.25	0.03	14.0	21
	FNU	D2S		0.21	0.12	40	0.13	0.12	0.12	0.03	22.8	16
	FNU	G3S		-0.83	0.22	35	0.19	0.23	0.23	0.05	22.0	22

Participant 34												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		0.11	0.12	15	0.12	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		0.18	0.76	10	0.77	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		0.22	2.32	8	2.34	2.32	2.33	0.06	2.7	23
Ca	mg/l	A1K		-1.80	5.01	10	4.56	4.94	4.90	0.23	4.7	15
	mg/l	D2K		-1.21	19.8	10	18.6	20.1	19.8	0.9	4.3	15
	mg/l	G3K		-1.71	28.1	10	25.7	28.1	28.2	1.4	4.9	14
Cl	mg/l	A1CS		-0.19	10.8	10	10.7	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		-0.18	5.69	10	5.64	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		-0.06	39.6	8	39.5	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		-1.95	328	5	312	328	328	4	1.3	33
	µS/cm	D2PJ		-1.95	164	5	156	164	164	3	1.9	30
	µS/cm	G3PJ		-3.16	443	5	408	444	443	5	1.1	28
F	mg/l	A1F		-0.19	1.04	10	1.03	1.02	1.03	0.06	5.7	19
	mg/l	D2F		0.00	0.26	20	0.26	0.26	0.26	0.03	10.1	17
	mg/l	G3F		0.05	2.63	15	2.64	2.64	2.62	0.04	1.7	19
Fe	µg/l	A1Fe		-1.18	47.6	15	43.4	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		-0.82	25.4	25	22.8	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		-1.19	57.2	15	52.1	57.1	56.8	5.6	9.8	19
Mg	mg/l	A1K		-1.50	0.80	10	0.74	0.80	0.79	0.04	5.6	14
	mg/l	D2K		-0.96	1.67	10	1.59	1.70	1.67	0.06	3.6	13
	mg/l	G3K		-0.99	4.43	10	4.21	4.42	4.43	0.14	3.2	15
Mn	µg/l	A1Fe		-0.34	35.7	10	35.1	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		-0.24	22.3	15	21.9	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		-0.21	77.0	10	76.2	76.6	76.9	3.3	4.3	14
Na	mg/l	A1K		-2.24	2.41	10	2.14	2.37	2.36	0.12	5.1	16
	mg/l	D2K		-2.16	7.50	10	6.69	7.57	7.56	0.09	1.2	16
	mg/l	G3K		-1.99	55.3	10	49.8	55.8	55.1	2.4	4.3	16
NH ₄	mg/l	A1N		1.56	0.18	10	0.19	0.19	0.19	0.01	4.4	19
	mg/l	D2N		0.56	0.072	15	0.075	0.072	0.072	0.005	7.2	21
	mg/l	G3N		0.95	0.056	15	0.060	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		0.12	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		-0.57	0.21	10	0.20	0.21	0.21	0.01	3.9	18
	mg/l	G3N		0.00	0.019	20	0.019	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		-0.57	4.24	10	4.12	4.24	4.23	0.15	3.6	21
	mg/l	D2N		-4.84	2.15	10	1.63	2.17	2.16	0.10	4.5	20
	mg/l	G3N		-6.73	1.01	10	0.67	1.02	1.01	0.04	4.0	20
pH		A1P		9.87	7.28	2,7	8.25	7.29	7.28	0.04	0.5	31
		D2PJ		0.60	8.02	2,5	8.08	8.02	8.01	0.09	1.2	30
		G3PJ		1.53	8.19	2,4	8.34	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		-1.55	5.04	10	4.7	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		0.00	27.2	10	27.2	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		-0.11	35.3	10	35.1	35.4	35.3	0.7	2.0	21

Appendix 3 (21/26)

Participant 34												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
TOC	mg/l	A1T		0.99	3.02	10	3.17	3.01	3.04	0.10	3.2	14
	mg/l	D2T		-0.45	1.77	20	1.69	1.75	1.77	0.14	7.7	13
	mg/l	G3T		0.00	0.98	20	0.98	0.97	0.98	0.06	6.1	9
Turbidity	FNU	A1S		-1.47	0.25	25	0.20	0.25	0.25	0.03	14.0	21
	FNU	D2S		-1.17	0.12	40	0.09	0.12	0.12	0.03	22.8	16
	FNU	G3S		-1.74	0.22	35	0.15	0.23	0.23	0.05	22.0	22















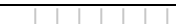
















Participant 35												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		-0.44	0.12	15	0.12	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		-0.55	0.76	10	0.74	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		-0.22	2.32	8	2.30	2.32	2.33	0.06	2.7	23
Ca	mg/l	A1K		-0.72	5.01	10	4.83	4.94	4.90	0.23	4.7	15
	mg/l	D2K		1.01	19.8	10	20.8	20.1	19.8	0.9	4.3	15
	mg/l	G3K		0.64	28.1	10	29.0	28.1	28.2	1.4	4.9	14
Cl	mg/l	A1CS		0.00	10.8	10	10.8	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		0.11	5.69	10	5.72	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		0.06	39.6	8	39.7	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		0.37	328	5	331	328	328	4	1.3	33
	µS/cm	D2PJ		-0.24	164	5	163	164	164	3	1.9	30
	µS/cm	G3PJ		0.36	443	5	447	444	443	5	1.1	28
Fe	µg/l	A1Fe		3.39	47.6	15	59.7	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		4.98	25.4	25	41.2	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		3.54	57.2	15	72.4	57.1	56.8	5.6	9.8	19
Mg	mg/l	A1K		-1.15	0.80	10	0.75	0.80	0.79	0.04	5.6	14
	mg/l	D2K		0.36	1.67	10	1.70	1.70	1.67	0.06	3.6	13
	mg/l	G3K		0.95	4.43	10	4.64	4.42	4.43	0.14	3.2	15
Mn	µg/l	A1Fe			35.7	10	<20	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		-1.08	22.3	15	20.5	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		-3.14	77.0	10	64.9	76.6	76.9	3.3	4.3	14
Na	mg/l	A1K		-0.08	2.41	10	2.40	2.37	2.36	0.12	5.1	16
	mg/l	D2K		0.13	7.50	10	7.55	7.57	7.56	0.09	1.2	16
	mg/l	G3K		0.36	55.3	10	56.3	55.8	55.1	2.4	4.3	16
NH ₄	mg/l	A1N		2.11	0.18	10	0.20	0.19	0.19	0.01	4.4	19
	mg/l	D2N		0.74	0.072	15	0.076	0.072	0.072	0.005	7.2	21
	mg/l	G3N		0.71	0.056	15	0.059	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		-0.24	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		-0.10	0.21	10	0.21	0.21	0.21	0.01	3.9	18
	mg/l	G3N		11.58	0.019	20	0.041	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		0.09	4.24	10	4.26	4.24	4.23	0.15	3.6	21
	mg/l	D2N		-0.19	2.15	10	2.13	2.17	2.16	0.10	4.5	20
	mg/l	G3N		0.40	1.01	10	1.03	1.02	1.01	0.04	4.0	20
pH		A1P		0.00	7.28	2,7	7.28	7.29	7.28	0.04	0.5	31
		D2PJ		-0.60	8.02	2,5	7.96	8.02	8.01	0.09	1.2	30
		G3PJ		-0.31	8.19	2,4	8.16	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		0.12	5.04	10	5.1	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		0.15	27.2	10	27.4	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		0.23	35.3	10	35.7	35.4	35.3	0.7	2.0	21


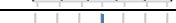














Participant 35												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
TOC	mg/l	A1T		1.26	3.02	10	3.21	3.01	3.04	0.10	3.2	14
	mg/l	D2T		1.69	1.77	20	2.07	1.75	1.77	0.14	7.7	13
	mg/l	G3T		6.84	0.98	20	1.65	0.97	0.98	0.06	6.1	9
Turbidity	FNU	A1S		-1.09	0.25	25	0.22	0.25	0.25	0.03	14.0	21
	FNU	D2S		-1.92	0.12	40	0.07	0.12	0.12	0.03	22.8	16
	FNU	G3S		-0.86	0.22	35	0.19	0.23	0.23	0.05	22.0	22

Participant 36												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		-0.22	0.12	15	0.12	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		-0.45	0.76	10	0.74	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		-0.32	2.32	8	2.29	2.32	2.33	0.06	2.7	23
Conductivity	µS/cm	A1J		0.49	328	5	332	328	328	4	1.3	33
	µS/cm	D2PJ		-0.24	164	5	163	164	164	3	1.9	30
	µS/cm	G3PJ		0.18	443	5	445	444	443	5	1.1	28
NH ₄	mg/l	A1N		4.44	0.18	10	0.22	0.19	0.19	0.01	4.4	19
	mg/l	D2N		1.48	0.072	15	0.080	0.072	0.072	0.005	7.2	21
	mg/l	G3N		-1.43	0.056	15	0.050	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		0.00	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		0.00	0.21	10	0.21	0.21	0.21	0.01	3.9	18
	mg/l	G3N		0.00	0.019	20	<0,03	0.019	0.019	0.002	10.4	15
pH		A1P		-0.41	7.28	2,7	7.24	7.29	7.28	0.04	0.5	31
		D2PJ		-0.40	8.02	2,5	7.98	8.02	8.01	0.09	1.2	30
		G3PJ		0.00	8.19	2,4	8.19	8.20	8.19	0.08	1.0	30
Turbidity	FNU	A1S		0.77	0.25	25	0.27	0.25	0.25	0.03	14.0	21
	FNU	D2S		0.12	0.12	40	<0,15	0.12	0.12	0.03	22.8	16
	FNU	G3S		0.05	0.22	35	0.22	0.23	0.23	0.05	22.0	22

Participant 37												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		1.11	0.12	15	<0,30	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		0.75	0.76	10	0.80	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		0.75	2.32	8	2.39	2.32	2.33	0.06	2.7	23
Ca	mg/l	A1K		0.08	5.01	10	5.03	4.94	4.90	0.23	4.7	15
	mg/l	D2K		0.20	19.8	10	20.0	20.1	19.8	0.9	4.3	15
	mg/l	G3K		-0.14	28.1	10	27.9	28.1	28.2	1.4	4.9	14
Cl	mg/l	A1CS		-0.19	10.8	10	10.7	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		-0.18	5.69	10	5.64	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		-0.82	39.6	8	38.3	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		1.10	328	5	337	328	328	4	1.3	33
	µS/cm	D2PJ		-0.49	164	5	162	164	164	3	1.9	30
	µS/cm	G3PJ		0.72	443	5	451	444	443	5	1.1	28
F	mg/l	A1F		0.19	1.04	10	1.05	1.02	1.03	0.06	5.7	19
	mg/l	D2F		-0.04	0.26	20	0.26	0.26	0.26	0.03	10.1	17
	mg/l	G3F		0.20	2.63	15	2.67	2.64	2.62	0.04	1.7	19
Fe	µg/l	A1Fe		-0.28	47.6	15	46.6	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		0.28	25.4	25	26.3	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		-0.02	57.2	15	57.1	57.1	56.8	5.6	9.8	19

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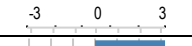












Participant 37												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
K	mg/l	A1K		0.34	0.34	10	<1,0	0.34	0.34	0.02	6.1	10
	mg/l	D2K		-0.64	1.45	15	1.38	1.45	1.45	0.09	5.9	11
	mg/l	G3K		-0.26	2.31	10	2.28	2.28	2.31	0.09	4.1	14
Mg	mg/l	A1K		0.42	0.80	10	0.82	0.80	0.79	0.04	5.6	14
	mg/l	D2K		0.72	1.67	10	1.73	1.70	1.67	0.06	3.6	13
	mg/l	G3K		0.45	4.43	10	4.53	4.42	4.43	0.14	3.2	15
Mn	µg/l	A1Fe		0.34	35.7	10	36.3	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		0.72	22.3	15	23.5	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		0.57	77.0	10	79.2	76.6	76.9	3.3	4.3	14
Na	mg/l	A1K		0.50	2.41	10	2.47	2.37	2.36	0.12	5.1	16
	mg/l	D2K		0.27	7.50	10	7.60	7.57	7.56	0.09	1.2	16
	mg/l	G3K		0.14	55.3	10	55.7	55.8	55.1	2.4	4.3	16
NH ₄	mg/l	A1N		0.18	0.18	10	<0,50	0.19	0.19	0.01	4.4	19
	mg/l	D2N		0.072	0.072	15	<0,50	0.072	0.072	0.005	7.2	21
	mg/l	G3N		0.056	0.056	15	<0,50	0.056	0.056	0.005	8.4	21
NO ₂	mg/l	A1N		0.17	0.17	10	<0,50	0.17	0.17	0.01	3.2	20
	mg/l	D2N		0.21	0.21	10	<0,50	0.21	0.21	0.01	3.9	18
	mg/l	G3N		0.019	0.019	20	<0,50	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		-0.19	4.24	10	4.20	4.24	4.23	0.15	3.6	21
	mg/l	D2N		0.00	2.15	10	2.15	2.17	2.16	0.10	4.5	20
	mg/l	G3N		0.20	1.01	10	1.02	1.02	1.01	0.04	4.0	20
pH		A1P		0.51	7.28	2,7	7.33	7.29	7.28	0.04	0.5	31
		D2PJ		-0.40	8.02	2,5	7.98	8.02	8.01	0.09	1.2	30
		G3PJ		-0.41	8.19	2,4	8.15	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		-0.08	5.04	10	5.0	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		0.15	27.2	10	27.4	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		-0.28	35.3	10	34.8	35.4	35.3	0.7	2.0	21
TOC	mg/l	A1T		-0.13	3.02	10	3.00	3.01	3.04	0.10	3.2	14
	mg/l	D2T		-0.23	1.77	20	1.73	1.75	1.77	0.14	7.7	13
	mg/l	G3T		0.98	0.98	20	<1,00	0.97	0.98	0.06	6.1	9

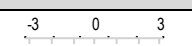

































Participant 38												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		0.11	0.12	15	0.12	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		-0.47	0.76	10	0.74	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		-0.22	2.32	8	2.30	2.32	2.33	0.06	2.7	23
Cl	mg/l	A1CS		-1.30	10.8	10	10.1	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		-1.65	5.69	10	5.22	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		-0.63	39.6	8	38.6	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		-1.10	328	5	319	328	328	4	1.3	33
	µS/cm	D2PJ		-1.22	164	5	159	164	164	3	1.9	30
	µS/cm	G3PJ		-1.08	443	5	431	444	443	5	1.1	28
F	mg/l	A1F		-2.83	1.04	10	0.89	1.02	1.03	0.06	5.7	19
	mg/l	D2F		-1.35	0.26	20	0.23	0.26	0.26	0.03	10.1	17
	mg/l	G3F		-1.72	2.63	15	2.29	2.64	2.62	0.04	1.7	19
NH ₄	mg/l	A1N		0.78	0.18	10	0.19	0.19	0.19	0.01	4.4	19
	mg/l	D2N		-1.11	0.072	15	0.066	0.072	0.072	0.005	7.2	21
	mg/l	G3N		-0.64	0.056	15	0.053	0.056	0.056	0.005	8.4	21

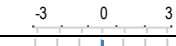


















Participant 38												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
NO ₂	mg/l	A1N		-0.59	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		-0.95	0.21	10	0.20	0.21	0.21	0.01	3.9	18
	mg/l	G3N		1.00	0.019	20	0.021	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		-1.56	4.24	10	3.91	4.24	4.23	0.15	3.6	21
	mg/l	D2N		-0.37	2.15	10	2.11	2.17	2.16	0.10	4.5	20
	mg/l	G3N		-1.39	1.01	10	0.94	1.02	1.01	0.04	4.0	20
pH		A1P		0.10	7.28	2,7	7.29	7.29	7.28	0.04	0.5	31
		D2PJ		0.10	8.02	2,5	8.03	8.02	8.01	0.09	1.2	30
		G3PJ		0.20	8.19	2,4	8.21	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		-0.95	5.04	10	4.8	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		-0.66	27.2	10	26.3	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		-0.40	35.3	10	34.6	35.4	35.3	0.7	2.0	21
TOC	mg/l	A1T		0.33	3.02	10	3.07	3.01	3.04	0.10	3.2	14
	mg/l	D2T		-0.68	1.77	20	1.65	1.75	1.77	0.14	7.7	13
	mg/l	G3T		-0.31	0.98	20	0.95	0.97	0.98	0.06	6.1	9
Turbidity	FNU	A1S		-0.99	0.25	25	0.22	0.25	0.25	0.03	14.0	21
	FNU	D2S		-0.25	0.12	40	0.11	0.12	0.12	0.03	22.8	16
	FNU	G3S		0.73	0.22	35	0.25	0.23	0.23	0.05	22.0	22

Participant 39												
Measurand	Unit	Sample	-3 0 3	z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		2.44	0.12	15	0.14	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		-0.55	0.76	10	0.74	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		-1.08	2.32	8	2.22	2.32	2.33	0.06	2.7	23
Ca	mg/l	A1K		3.99	5.01	10	6.01	4.94	4.90	0.23	4.7	15
	mg/l	D2K		3.64	19.8	10	23.4	20.1	19.8	0.9	4.3	15
	mg/l	G3K		1.99	28.1	10	30.9	28.1	28.2	1.4	4.9	14
Cl	mg/l	A1CS		-1.30	10.8	10	10.1	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		-2.85	5.69	10	4.88	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		-0.38	39.6	8	39.0	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		0.24	328	5	330	328	328	4	1.3	33
	µS/cm	D2PJ		0.24	164	5	165	164	164	3	1.9	30
	µS/cm	G3PJ		0.09	443	5	444	444	443	5	1.1	28
Fe	µg/l	A1Fe		-3.08	47.6	15	36.6	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		-0.94	25.4	25	22.4	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		-1.07	57.2	15	52.6	57.1	56.8	5.6	9.8	19
K	mg/l	A1K		-12.35	0.34	10	0.13	0.34	0.34	0.02	6.1	10
	mg/l	D2K		-2.21	1.45	15	1.21	1.45	1.45	0.09	5.9	11
	mg/l	G3K		-1.30	2.31	10	2.16	2.28	2.31	0.09	4.1	14
Mg	mg/l	A1K		0.50	0.80	10	0.82	0.80	0.79	0.04	5.6	14
	mg/l	D2K		0.96	1.67	10	1.75	1.70	1.67	0.06	3.6	13
	mg/l	G3K		0.81	4.43	10	4.61	4.42	4.43	0.14	3.2	15
Mn	µg/l	A1Fe		0.78	35.7	10	37.1	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		1.14	22.3	15	24.2	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		1.48	77.0	10	82.7	76.6	76.9	3.3	4.3	14
Na	mg/l	A1K		-0.58	2.41	10	2.34	2.37	2.36	0.12	5.1	16
	mg/l	D2K		0.45	7.50	10	7.67	7.57	7.56	0.09	1.2	16
	mg/l	G3K		1.01	55.3	10	58.1	55.8	55.1	2.4	4.3	16

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Participant 39												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
NH ₄	mg/l	A1N		4.44	0.18	10	0.22	0.19	0.19	0.01	4.4	19
	mg/l	D2N		8.89	0.072	15	0.120	0.072	0.072	0.005	7.2	21
	mg/l	G3N		8.10	0.056	15	0.090	0.056	0.056	0.005	8.4	21
NO ₃	mg/l	A1N		0.47	4.24	10	4.34	4.24	4.23	0.15	3.6	21
	mg/l	D2N		-1.86	2.15	10	1.95	2.17	2.16	0.10	4.5	20
	mg/l	G3N		-3.56	1.01	10	0.83	1.02	1.01	0.04	4.0	20
pH		A1P		0.20	7.28	2,7	7.30	7.29	7.28	0.04	0.5	31
		D2PJ		0.30	8.02	2,5	8.05	8.02	8.01	0.09	1.2	30
		G3PJ		0.41	8.19	2,4	8.23	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		0.28	5.04	10	5.1	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		-0.44	27.2	10	26.6	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		-0.96	35.3	10	33.6	35.4	35.3	0.7	2.0	21

Participant 40												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
Alkalinity	mmol/l	A1A		3.33	0.12	15	0.15	0.12	0.12	0.00	2.8	15
	mmol/l	D2A		1.05	0.76	10	0.80	0.75	0.75	0.01	1.6	22
	mmol/l	G3A		0.54	2.32	8	2.37	2.32	2.33	0.06	2.7	23
Ca	mg/l	A1K		0.68	5.01	10	5.18	4.94	4.90	0.23	4.7	15
	mg/l	D2K		1.25	19.8	10	21.0	20.1	19.8	0.9	4.3	15
	mg/l	G3K		1.48	28.1	10	30.2	28.1	28.2	1.4	4.9	14
Cl	mg/l	A1CS		0.83	10.8	10	11.3	10.7	10.7	0.2	1.9	19
	mg/l	D2CS		0.53	5.69	10	5.84	5.65	5.69	0.22	3.9	24
	mg/l	G3CS		0.69	39.6	8	40.7	39.6	39.6	0.8	1.9	23
Conductivity	µS/cm	A1J		0.49	328	5	332	328	328	4	1.3	33
	µS/cm	D2PJ		0.49	164	5	166	164	164	3	1.9	30
	µS/cm	G3PJ		0.63	443	5	450	444	443	5	1.1	28
F	mg/l	A1F		1.54	1.04	10	1.12	1.02	1.03	0.06	5.7	19
	mg/l	D2F		-0.08	0.26	20	0.26	0.26	0.26	0.03	10.1	17
	mg/l	G3F		1.01	2.63	15	2.83	2.64	2.62	0.04	1.7	19
Fe	µg/l	A1Fe		-3.25	47.6	15	36.0	45.8	45.9	2.2	4.8	14
	µg/l	D2Fe		-0.50	25.4	25	23.8	25.8	25.8	2.3	9.1	18
	µg/l	G3Fe		-3.10	57.2	15	43.9	57.1	56.8	5.6	9.8	19
K	mg/l	A1K		14.65	0.34	10	0.59	0.34	0.34	0.02	6.1	10
	mg/l	D2K		0.45	1.45	15	1.50	1.45	1.45	0.09	5.9	11
	mg/l	G3K		0.68	2.31	10	2.39	2.28	2.31	0.09	4.1	14
Mg	mg/l	A1K		3.35	0.80	10	0.93	0.80	0.79	0.04	5.6	14
	mg/l	D2K		4.23	1.67	10	2.02	1.70	1.67	0.06	3.6	13
	mg/l	G3K		4.18	4.43	10	5.36	4.42	4.43	0.14	3.2	15
Mn	µg/l	A1Fe		-4.54	35.7	10	27.6	35.5	35.6	1.4	4.0	13
	µg/l	D2Fe		0.24	22.3	15	22.7	22.6	22.5	1.1	4.8	15
	µg/l	G3Fe		-0.34	77.0	10	75.7	76.6	76.9	3.3	4.3	14
Na	mg/l	A1K		1.38	2.41	10	2.58	2.37	2.36	0.12	5.1	16
	mg/l	D2K		0.18	7.50	10	7.57	7.57	7.56	0.09	1.2	16
	mg/l	G3K		0.01	55.3	10	55.3	55.8	55.1	2.4	4.3	16
NH ₄	mg/l	A1N		-0.11	0.18	10	0.18	0.19	0.19	0.01	4.4	19
	mg/l	D2N		0.56	0.072	15	0.075	0.072	0.072	0.005	7.2	21
	mg/l	G3N		-0.24	0.056	15	0.055	0.056	0.056	0.005	8.4	21

Participant 40												
Measurand	Unit	Sample		z score	Assigned value	2*s _{pt} %	Participant's result	Md	Mean	s	s %	n _{stat}
NO ₂	mg/l	A1N		0.12	0.17	10	0.17	0.17	0.17	0.01	3.2	20
	mg/l	D2N		0.00	0.21	10	0.21	0.21	0.21	0.01	3.9	18
	mg/l	G3N		-1.58	0.019	20	0.016	0.019	0.019	0.002	10.4	15
NO ₃	mg/l	A1N		0.24	4.24	10	4.29	4.24	4.23	0.15	3.6	21
	mg/l	D2N		0.42	2.15	10	2.20	2.17	2.16	0.10	4.5	20
	mg/l	G3N		0.40	1.01	10	1.03	1.02	1.01	0.04	4.0	20
pH		A1P		-0.41	7.28	2,7	7.24	7.29	7.28	0.04	0.5	31
		D2PJ		-0.60	8.02	2,5	7.96	8.02	8.01	0.09	1.2	30
		G3PJ		-0.41	8.19	2,4	8.15	8.20	8.19	0.08	1.0	30
SO ₄	mg/l	A1CS		0.24	5.04	10	5.1	5.0	5.0	0.1	2.6	23
	mg/l	D2CS		0.25	27.2	10	27.5	27.4	27.3	0.4	1.4	22
	mg/l	G3CS		0.03	35.3	10	35.4	35.4	35.3	0.7	2.0	21
TOC	mg/l	A1T		204.70	3.02	10	33.93	3.01	3.04	0.10	3.2	14
	mg/l	D2T		100.45	1.77	20	19.55	1.75	1.77	0.14	7.7	13
	mg/l	G3T		100.92	0.98	20	10.87	0.97	0.98	0.06	6.1	9
Turbidity	FNU	A1S		0.96	0.25	25	0.28	0.25	0.25	0.03	14.0	21
	FNU	D2S		0.12	0.12	40	< 0,2	0.12	0.12	0.03	22.8	16
	FNU	G3S		3.64	0.22	35	0.36	0.23	0.23	0.05	22.0	22

Appendix 4. Summary of the z scores

Measurand	Sample	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	%
Alkalinity	A1A	.	Q	S	S	.	.	S	U	S	.	Q	S	.	.	U	.	.	.	S	S	S	S	.	66.7
	D2A	.	S	S	S	.	.	S	S	.	.	S	S	.	.	S	.	.	.	S	S	S	S	.	100
	G3A	.	S	S	S	.	.	S	S	S	.	S	.	.	.	S	.	.	.	S	S	S	S	.	100
Ca	A1K	.	.	S	S	S	q	.	S	.	.	.	U	S	.	S	.	S	.	.	.	S	.	.	82.4
	D2K	.	.	S	S	S	S	.	S	.	.	.	S	.	.	S	.	S	.	.	.	S	.	.	93.8
	G3K	.	.	S	S	S	q	.	S	.	.	.	.	Q	.	S	.	S	.	.	.	S	.	.	87.5
Cl	A1CS	S	.	S	S	S	S	.	S	.	U	.	S	S	.	S	.	.	S	S	.	S	.	S	96.2
	D2CS	S	.	S	S	S	S	.	S	.	U	.	S	.	.	S	.	.	S	S	.	S	.	S	92.3
	G3CS	S	.	S	S	S	S	.	S	.	.	.	.	S	.	S	.	.	.	S	.	S	.	S	100
Conductivity	A1J	S	S	S	S	.	.	S	S	S	S	S	S	.	.	S	.	.	S	S	S	S	S	S	100
	D2PJ	S	S	S	u	.	.	S	S	.	S	S	S	.	.	S	.	.	.	S	S	S	S	S	96.8
	G3PJ	S	S	S	q	.	.	S	S	S	.	S	.	.	.	S	.	.	S	S	S	S	S	S	93.3
F	A1F	.	.	S	S	S	U	.	S	.	.	.	.	S	.	S	.	.	Q	S	.	S	.	.	85.0
	D2F	.	.	S	S	S	U	.	S	.	.	.	.	.	Q	S	.	.	.	S	.	S	.	.	88.9
	G3F	.	.	S	S	S	S	.	S	.	.	.	.	S	S	S	.	.	S	S	.	S	.	.	100
Fe	A1Fe	S	.	S	S	S	u	.	S	.	u	.	.	.	.	S	.	S	.	.	S	S	.	.	63.6
	D2Fe	S	.	S	S	S	S	.	S	.	U	.	.	.	.	S	.	S	.	.	S	S	.	.	77.3
	G3Fe	S	.	S	S	S	S	.	S	.	.	.	.	.	.	S	.	S	.	.	S	S	.	.	80.0
K	A1K	.	.	S	S	U	S	.	S	.	.	.	.	S	.	.	.	.	S	.	.	S	.	.	69.2
	D2K	.	.	S	S	Q	S	.	S	.	.	.	.	.	.	.	.	.	S	.	.	S	.	.	84.6
	G3K	.	.	S	S	S	S	.	S	.	.	.	.	S	.	.	.	.	S	.	.	S	.	.	100
Mg	A1K	.	.	S	u	S	S	.	S	.	.	.	.	S	.	S	.	.	S	.	.	S	.	.	87.5
	D2K	.	.	S	S	S	S	.	S	.	.	.	.	.	.	q	.	.	S	.	.	S	.	.	86.7
	G3K	.	.	S	S	S	S	.	S	.	.	.	.	S	.	S	.	.	S	.	.	S	.	.	93.8
Mn	A1Fe	S	.	S	S	S	U	.	S	.	.	.	.	.	.	S	.	S	.	.	S	.	.	.	76.5
	D2Fe	S	.	S	S	S	u	.	u	.	.	.	.	.	.	S	.	S	.	.	S	.	.	.	77.8
	G3Fe	S	.	S	S	S	q	.	S	.	.	.	.	.	.	S	.	S	.	.	S	.	.	.	77.8
Na	A1K	.	.	S	S	S	U	.	S	.	.	.	S	S	.	.	.	.	S	.	.	S	.	.	88.2
	D2K	.	.	S	S	S	S	.	S	.	.	.	S	.	.	.	.	.	S	.	.	S	.	.	93.8
	G3K	.	.	S	S	S	S	.	S	.	.	.	.	S	.	.	.	.	S	.	.	S	.	.	100
NH ₄	A1N	.	S	S	S	.	.	Q	S	.	.	.	.	.	.	S	.	.	.	u	S	S	Q	S	72.7
	D2N	.	S	S	S	.	.	S	S	.	.	.	.	.	.	S	.	.	.	q	S	S	S	S	90.9
	G3N	.	S	S	S	.	.	S	S	.	.	.	.	.	.	S	.	.	.	q	S	S	S	S	90.9
NO ₂	A1N	.	S	S	S	.	U	S	S	.	.	.	.	S	.	S	.	.	.	u	.	S	S	S	90.9
	D2N	.	S	S	S	.	U	S	q	.	.	.	.	.	.	S	.	.	.	u	.	S	S	U	81.0
	G3N	.	S	Q	S	.	u	S	S	.	.	.	.	.	.	S	.	.	.	u	.	S	S	.	77.8
NO ₃	A1N	.	U	S	S	.	S	S	S	.	.	.	.	S	.	S	.	.	.	u	.	S	S	S	91.3
	D2N	.	U	S	S	.	S	S	S	.	.	.	.	.	.	S	.	.	.	u	.	Q	S	S	81.8
	G3N	.	U	S	S	.	S	S	S	.	.	.	.	S	.	S	.	.	.	u	.	S	S	U	78.3
pH	A1P	S	S	S	S	.	.	S	S	S	S	S	S	.	.	S	.	.	u	S	S	S	S	S	93.9
	D2PJ	S	S	S	S	.	.	S	S	.	S	S	S	.	.	S	.	.	.	S	S	S	S	q	93.5
	G3PJ	S	S	S	S	.	.	S	S	S	.	S	.	.	.	S	.	.	S	S	S	S	S	S	96.7
SO ₄	A1CS	.	.	S	S	S	S	.	S	.	.	.	.	S	.	S	.	S	S	S	.	S	.	S	100
	D2CS	.	.	S	S	S	S	.	S	.	.	.	.	.	.	S	.	S	S	S	.	S	.	S	100
	G3CS	.	.	S	S	S	S	.	S	.	.	.	.	S	.	S	.	S	.	S	.	S	.	S	100

Measurand	Sample	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	%	
TOC	A1T	S	.	.	U	S	.	.	S	.	.	S	.	.	.	.	.	.	.	.	S	S	S	.	.	87.5
	D2T	Q	.	.	U	S	.	.	S	.	.	S	.	.	.	.	.	.	.	.	S	S	S	.	.	81.3
	G3T	S	.	.	U	S	.	.	S	.	.	S	.	.	.	.	.	.	.	.	U	S	Q	.	.	64.3
Turbidity	A1S	.	S	S	Q	.	.	S	S	.	.	q	.	.	.	q	.	.	.	S	S	S	S	.	.	82.6
	D2S	.	S	S	.	.	.	.	S	.	.	S	.	.	.	S	.	.	.	S	S	S	S	.	.	94.1
	G3S	.	Q	S	S	.	.	S	Q	.	.	S	.	.	.	S	.	.	.	S	S	S	S	.	.	87.0
%		94	76	98	86	93	64	95	92	100	50	87	92	94	50	93	100	80	70	100	96	95	85			
accredited			21	48	45	21		20	50	4						2	36	21		29	21	51	21			

Measurand	Sample	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	%	
Alkalinity	A1A	U	S	.	S	.	.	.	.	U	S	S	S	S	S	Q	U	.	.	.	.	.	.	.	.	66.7
	D2A	S	S	.	S	.	.	.	.	S	S	S	S	S	S	S	S	S	.	.	.	.	.	.	.	100
	G3A	.	S	.	S	.	.	.	.	S	S	S	S	S	S	S	S	S	.	.	.	.	.	.	.	100
Ca	A1K	.	.	.	S	.	.	.	.	S	S	S	.	S	.	U	S	.	.	.	.	.	.	.	.	82.4
	D2K	.	.	.	S	.	.	.	.	S	S	S	.	S	.	U	S	.	.	.	.	.	.	.	.	93.8
	G3K	.	.	.	S	.	.	.	.	S	S	S	.	S	.	S	S	.	.	.	.	.	.	.	.	87.5
Cl	A1CS	S	.	.	S	.	.	S	S	S	S	S	S	S	S	S	S	S	.	.	.	.	.	.	.	96.2
	D2CS	S	S	.	S	.	.	S	S	S	S	S	S	S	S	q	S	.	.	.	.	.	.	.	.	92.3
	G3CS	.	S	.	S	.	.	S	S	S	S	S	S	S	S	S	S	S	.	.	.	.	.	.	.	100
Conductivity	A1J	S	S	S	S	S	S	S	.	S	S	S	S	S	S	S	S	S	.	.	.	.	.	.	.	100
	D2PJ	S	S	S	S	S	S	S	.	S	S	S	S	S	S	S	S	S	.	.	.	.	.	.	.	96.8
	G3PJ	.	S	S	S	S	S	S	.	S	S	u	S	S	S	S	S	S	.	.	.	.	.	.	.	93.3
F	A1F	S	S	.	S	.	.	.	S	S	S	S	.	S	q	.	S	.	.	.	.	.	.	.	.	85.0
	D2F	S	S	.	S	.	.	.	.	S	S	S	.	S	S	.	S	.	.	.	.	.	.	.	.	88.9
	G3F	.	S	.	S	.	.	.	.	S	S	S	.	S	S	.	S	.	.	.	.	.	.	.	.	100
Fe	A1Fe	U	S	.	S	.	.	U	.	S	U	S	U	.	S	.	u	u	.	.	.	.	.	.	.	63.6
	D2Fe	U	S	.	S	.	.	U	.	q	S	S	U	.	S	.	S	S	.	.	.	.	.	.	.	77.3
	G3Fe	.	S	.	S	.	.	Q	.	S	q	S	U	.	S	.	S	u	.	.	.	.	.	.	.	80.0
K	A1K	.	S	.	S	.	.	.	.	Q	.	.	.	.	.	.	u	U	.	.	.	.	.	.	.	69.2
	D2K	.	S	.	S	.	.	.	.	S	.	.	.	S	.	q	S	.	.	.	.	.	.	.	.	84.6
	G3K	.	S	.	S	.	.	.	.	S	.	.	.	S	.	S	S	.	.	.	.	.	.	.	.	100
Mg	A1K	.	.	.	S	.	.	.	.	S	S	S	.	S	.	S	U	.	.	.	.	.	.	.	.	87.5
	D2K	.	.	.	S	.	.	.	.	S	S	S	.	S	.	S	U	.	.	.	.	.	.	.	.	86.7
	G3K	.	.	.	S	.	.	.	.	S	S	S	.	S	.	S	U	.	.	.	.	.	.	.	.	93.8
Mn	A1Fe	.	q	.	S	.	.	.	.	S	U	S	.	S	.	S	u	.	.	.	.	.	.	.	.	76.5
	D2Fe	.	q	.	S	.	.	.	.	U	S	S	S	.	S	.	S	S	.	.	.	.	.	.	.	77.8
	G3Fe	.	S	.	S	.	.	.	.	Q	u	S	u	.	S	.	S	S	.	.	.	.	.	.	.	77.8
Na	A1K	.	S	.	S	.	.	.	.	S	q	S	.	S	.	S	S	.	.	.	.	.	.	.	.	88.2
	D2K	.	S	.	S	.	.	.	.	S	q	S	.	S	.	S	S	.	.	.	.	.	.	.	.	93.8
	G3K	.	S	.	S	.	.	.	.	S	S	S	.	S	.	S	S	.	.	.	.	.	.	.	.	100
NH ₄	A1N	.	S	.	S	.	.	.	S	S	S	S	Q	U	.	S	U	S	.	.	.	.	.	.	.	72.7
	D2N	.	S	.	S	.	.	.	S	S	S	S	S	S	.	S	U	S	.	.	.	.	.	.	.	90.9
	G3N	.	S	.	S	.	.	.	S	S	S	S	S	S	.	S	U	S	.	.	.	.	.	.	.	90.9
NO ₂	A1N	.	S	.	S	.	.	.	S	S	S	S	S	S	.	S	.	S	.	.	.	.	.	.	.	90.9
	D2N	.	S	.	S	.	.	.	S	S	S	S	S	S	.	S	.	S	.	.	.	.	.	.	.	81.0
	G3N	.	S	.	S	.	.	.	S	S	S	S	U	.	S	.	S	.	.	.	.	.	.	.	.	77.8

Appendix 4 (3/3)

Measurand	Sample	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	%
NO ₃	A1N	.	S	.	S	.	.	.	<i>S</i>	S	S	S	<i>S</i>	.	S	S	<i>S</i>	<i>S</i>	.	.	.	.	.	.	91.3
	D2N	.	S	.	S	.	.	.	<i>S</i>	S	S	u	<i>S</i>	.	S	S	<i>S</i>	S	.	.	.	.	.	.	81.8
	G3N	.	S	.	S	.	.	.	<i>S</i>	S	S	u	<i>S</i>	.	S	S	<i>u</i>	S	.	.	.	.	.	.	78.3
pH	A1P	<i>S</i>	S	S	S	S	S	<i>S</i>	.	S	S	U	<i>S</i>	S	S	S	S	S	.	.	.	.	.	.	93.9
	D2PJ	<i>S</i>	S	S	S	S	S	<i>u</i>	.	S	S	S	<i>S</i>	S	S	S	<i>S</i>	S	.	.	.	.	.	.	93.5
	G3PJ	.	S	S	S	S	S	<i>q</i>	.	S	S	S	<i>S</i>	S	S	S	S	S	.	.	.	.	.	.	96.7
SO ₄	A1CS	<i>S</i>	S	.	S	.	.	.	<i>S</i>	.	S	S	<i>S</i>	.	S	S	<i>S</i>	S	.	.	.	.	.	.	100
	D2CS	<i>S</i>	S	.	S	.	.	.	<i>S</i>	.	S	S	<i>S</i>	.	S	S	<i>S</i>	S	.	.	.	.	.	.	100
	G3CS	.	S	.	S	.	.	.	<i>S</i>	.	S	S	<i>S</i>	.	S	S	<i>S</i>	S	.	.	.	.	.	.	100
TOC	A1T	.	.	.	S	.	.	.	<i>S</i>	.	S	S	<i>S</i>	.	S	S	.	U	.	.	.	.	.	.	87.5
	D2T	.	.	.	S	.	.	.	<i>S</i>	.	S	S	<i>S</i>	.	S	S	.	U	.	.	.	.	.	.	81.3
	G3T	.	.	.	.	.	.	.	<i>S</i>	.	<i>S</i>	S	<i>U</i>	.	.	S	.	U	.	.	.	.	.	.	64.3
Turbidity	A1S	.	S	S	S	S	S	.	.	Q	S	S	<i>S</i>	S	.	S	.	S	.	.	.	.	.	.	82.6
	D2S	.	S	.	.	Q	S	.	.	S	S	S	<i>S</i>	.	.	S	.	.	.	.	.	.	.	.	94.1
	G3S	.	S	S	S	S	S	.	.	S	S	S	<i>S</i>	S	.	S	.	U	.	.	.	.	.	.	87.0
%		79	95	100	100	89	100	58	100	85	90	88	84	94	100	97	72	76							
accredited			41	7	49	8	9			33	50	45		16	32	33	18	49							

S - satisfactory ($-2 \leq z \leq 2$), Q - questionable ($2 < z < 3$), q - questionable ($-3 < z < -2$),
U - unsatisfactory ($z \geq 3$), and u - unsatisfactory ($z \leq -3$), respectively
bold - accredited, italics - non-accredited, normal - unknown
% - percentage of satisfactory results

Totally satisfactory, % in all: 89 % in accredited: 91 % in non-accredited: 81

Appendix 5. Summary of the z and zeta scores

Enclosed you will find the calculated z and zeta scores of the reported results. Zeta scores are not used for the evaluation of the performance of the participants. This information is however very useful when you re-evaluate the measurement uncertainties for your own laboratory (see below).

Explanations for the z and zeta score sheet

$U_{pt} \%$ = the expanded uncertainty of the assigned value ($\%, 2 \times u_{pt}$)

U_i = the expanded uncertainty of the participant's result ($\%, 2 \times u_i$)

$2 \times s_{pt} \%$ = the standard deviation for proficiency assessment at 95 % confidence level

$z = (x_i - x_{pt})/s_{pt}$, where

x_i = the result of the individual participant

x_{pt} = the assigned value

s_{pt} = the standard deviation for proficiency assessment

$zeta = (x_i - x_{pt})/\sqrt{u_i^2 + u_{pt}^2}$, where

x_i = the result of the individual participant

x_{pt} = the assigned value

u_i = the standard uncertainty of the participant's result

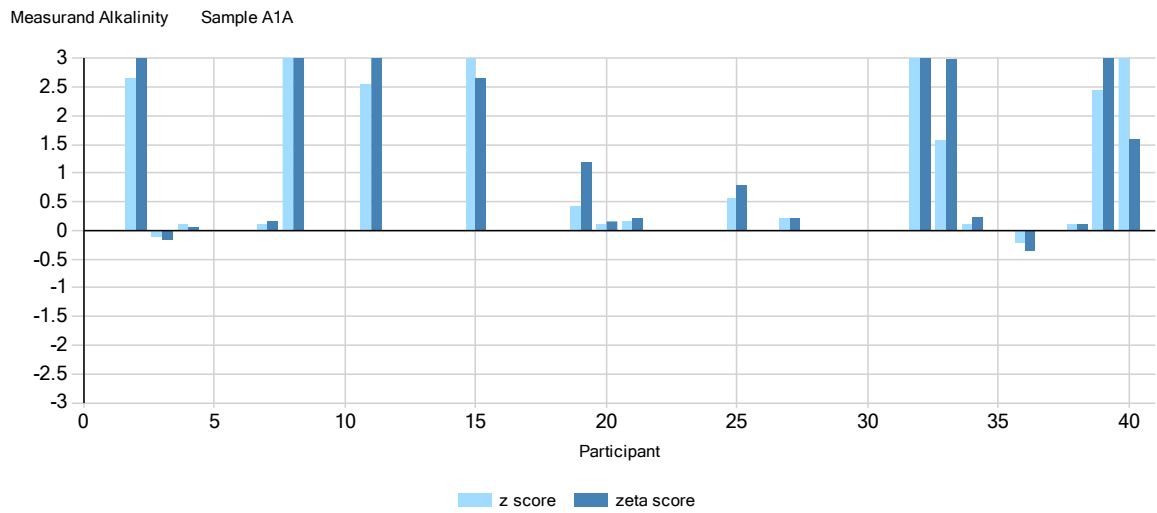
u_{pt} = the standard uncertainty of the assigned value

Criterion	Performance
$|\text{zeta}| \leq 2$	Satisfactory
$2 < |\text{zeta}| < 3$	Questionable
$|\text{zeta}| \geq 3$	Unsatisfactory

How to interpret these results?

z score	zeta score	Action to take:
Satisfactory	Satisfactory	No action; the result is good!
Satisfactory	Not satisfactory	The claimed uncertainty is too low, but it fills the requirement of the proficiency test.
Not satisfactory	Satisfactory	The result is within your claimed uncertainty, but not within the limits of proficiency test. The uncertainty might therefore be too high and should be checked against the uncertainty requirement of your client.
Not satisfactory	Not satisfactory	The result is too much biased and the reason should be clarified.

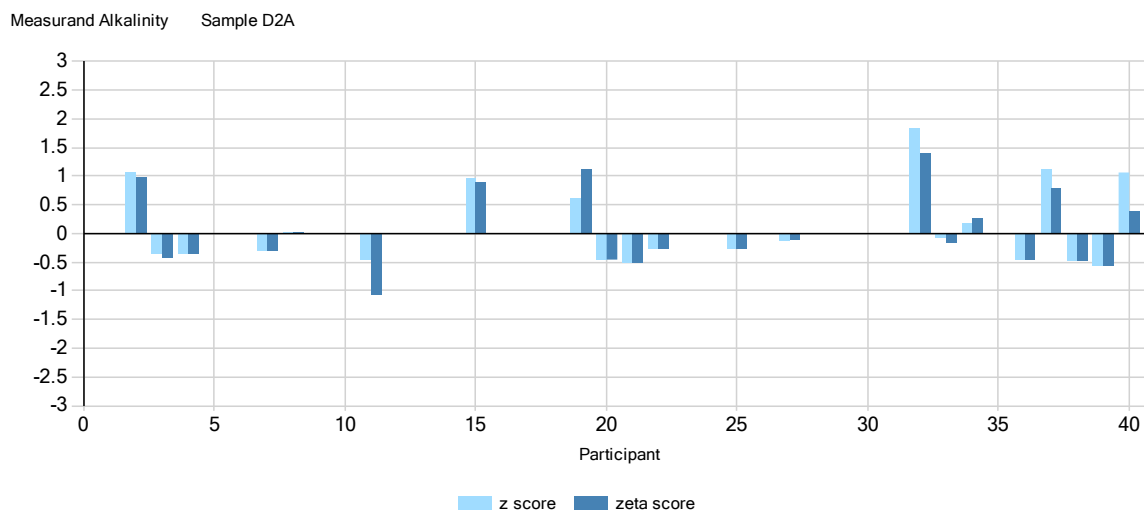
Alkalinity, A1A, mmol/l



Assigned value U_{pl} % $2 \times s_{pl}$ %		
0.12	0.4	15.0

Participant	Mean U_i %	z	zeta
2	10.0	2.67	3.33
3	10.0	-0.11	-0.17
4	41.0	0.11	0.04
7	10.0	0.11	0.17
8	10.0	3.67	4.31
11	4.0	2.56	8.01
15	15.0	3.33	2.67
19	5.0	0.41	1.19
20	10.0	0.11	0.17
21	10.0	0.14	0.21
22	10.0	0.00	0.00
25	10.0	0.56	0.80
27	15.0	0.22	0.22
32	12.0	4.44	4.17
33	7.0	1.56	2.98
34	7.0	0.11	0.24
36	10.0	-0.22	-0.34
38	17.0	0.11	0.10
39	10.0	2.44	3.10
40	25.0	3.33	1.60

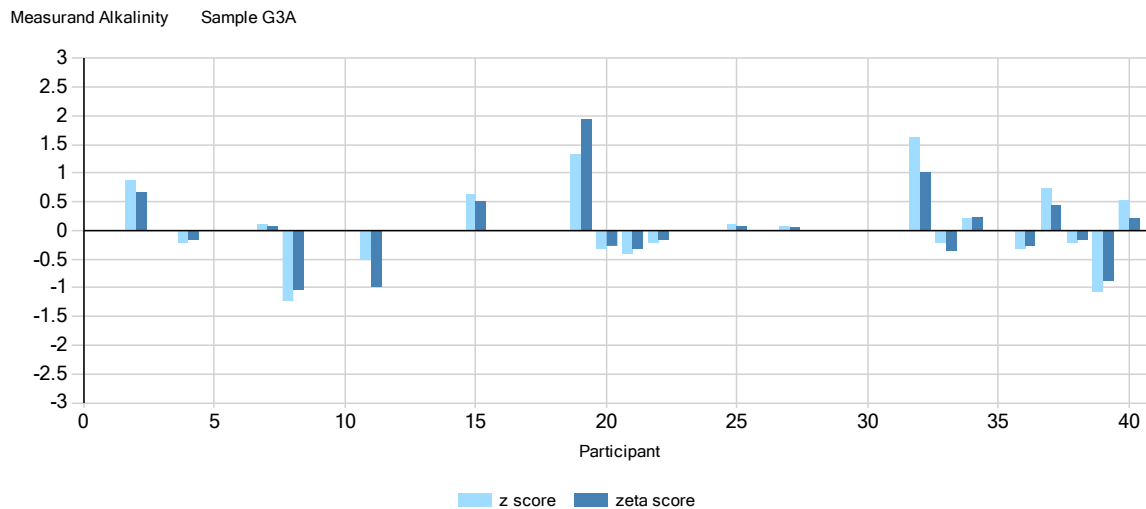
Alkalinity, D2A, mmol/l



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
0.76	1.5	10.0

Participant	Mean $U_i \%$	z	zeta
2	0.80	10.0	1.05 0.99
3	0.75	8.0	-0.34 -0.43
4	0.75	10.0	-0.34 -0.34
7	0.75	10.0	-0.29 -0.29
8	0.76	10.0	0.03 0.03
11	0.74	4.0	-0.45 -1.07
15	0.80	10.0	0.95 0.90
19	0.78	5.0	0.60 1.11
20	0.74	10.0	-0.45 -0.45
21	0.74	10.0	-0.50 -0.51
22	0.75	10.0	-0.26 -0.26
25	0.75	10.0	-0.26 -0.26
27	0.75	12.0	-0.14 -0.11
32	0.83	12.0	1.84 1.40
33	0.76	5.0	-0.08 -0.15
34	0.77	7.0	0.18 0.26
36	0.74	10.0	-0.45 -0.45
37	0.80	13.0	1.11 0.80
38	0.74	10.0	-0.47 -0.48
39	0.74	10.0	-0.55 -0.56
40	0.80	25.0	1.05 0.40

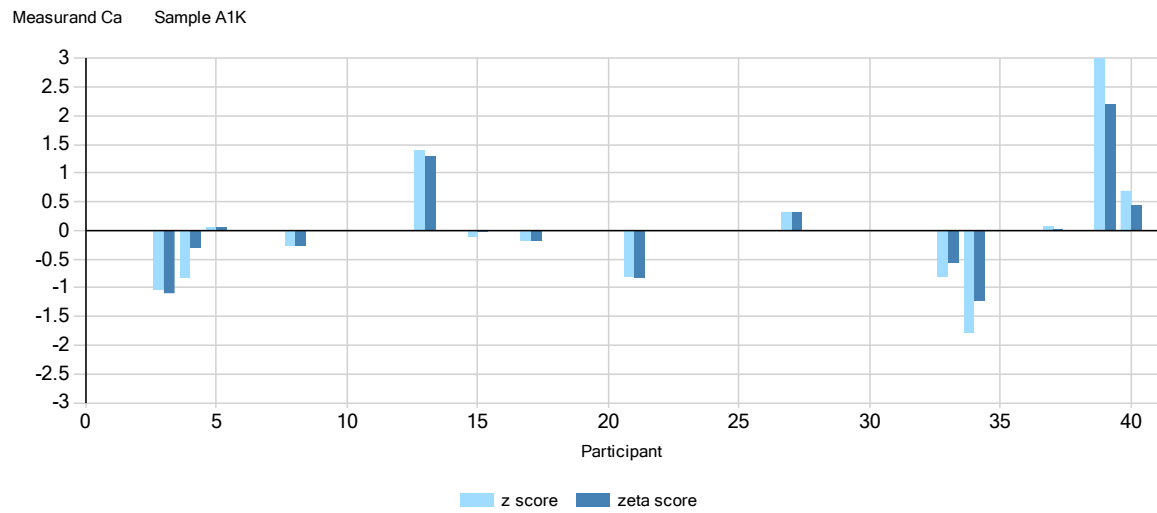
Alkalinity, G3A, mmol/l



Assigned value U_{pt} % $2 \times s_{pt}$ %		
2.32	1.3	8.0

Participant	Mean U_i %	z	$zeta$
2	2.40	10.0	0.86 0.66
3	2.32	8.0	0.00 0.00
4	2.30	10.0	-0.22 -0.17
7	2.33	10.0	0.11 0.09
8	2.21	10.0	-1.24 -1.03
11	2.27	4.0	-0.51 -0.98
15	2.38	10.0	0.65 0.50
19	2.44	5.0	1.31 1.94
20	2.29	10.0	-0.32 -0.26
21	2.28	10.0	-0.41 -0.33
22	2.30	10.0	-0.22 -0.17
25	2.33	10.0	0.11 0.09
27	2.33	15.0	0.09 0.05
32	2.47	12.0	1.62 1.01
33	2.30	5.0	-0.22 -0.34
34	2.34	7.0	0.22 0.24
36	2.29	10.0	-0.32 -0.26
37	2.39	13.0	0.75 0.45
38	2.30	10.0	-0.22 -0.17
39	2.22	10.0	-1.08 -0.89
40	2.37	20.0	0.54 0.21

Ca, A1K, mg/l

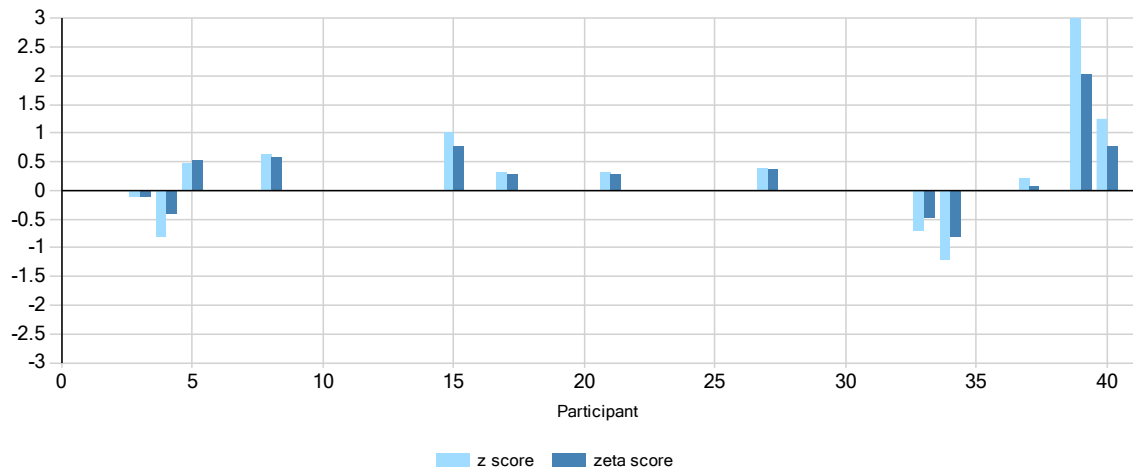


Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
5.01	0.6	10.0

Participant	Mean $U_i \%$	z	$zeta$
3	4.75	10.0	-1.04 -1.09
4	4.80	30.0	-0.84 -0.29
5	5.02	8.0	0.04 0.05
8	4.94	10.0	-0.26 -0.27
13	5.36	10.0	1.40 1.30
15	4.98	32.0	-0.12 -0.04
17	4.96	10.0	-0.20 -0.20
21	4.81	10.0	-0.80 -0.83
27	5.09	10.0	0.32 0.31
33	4.81	15.0	-0.80 -0.55
34	4.56	16.0	-1.80 -1.23
37	5.03	25.0	0.08 0.03
39	6.01	15.0	3.99 2.22
40	5.18	15.0	0.68 0.44

Ca, D2K, mg/l

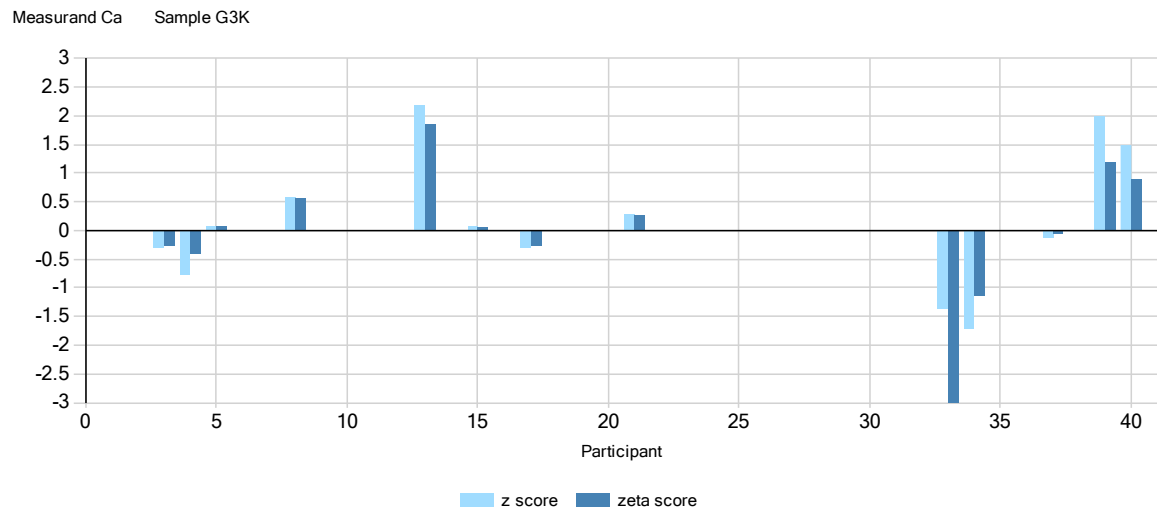
Measurand Ca Sample D2K



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
19.8	3.2	10.0

Participant	Mean $U_i \%$	z	$zeta$
3	19.7	10.0	-0.10
4	19.0	20.0	-0.81
5	20.3	8.0	0.47
8	20.4	10.0	0.63
15	20.8	12.0	1.01
17	20.1	10.0	0.30
21	20.1	10.0	0.30
27	20.2	10.0	0.40
33	19.1	15.0	-0.71
34	18.6	16.0	-1.21
37	20.0	25.0	0.20
39	23.4	15.0	3.64
40	21.0	15.0	1.25

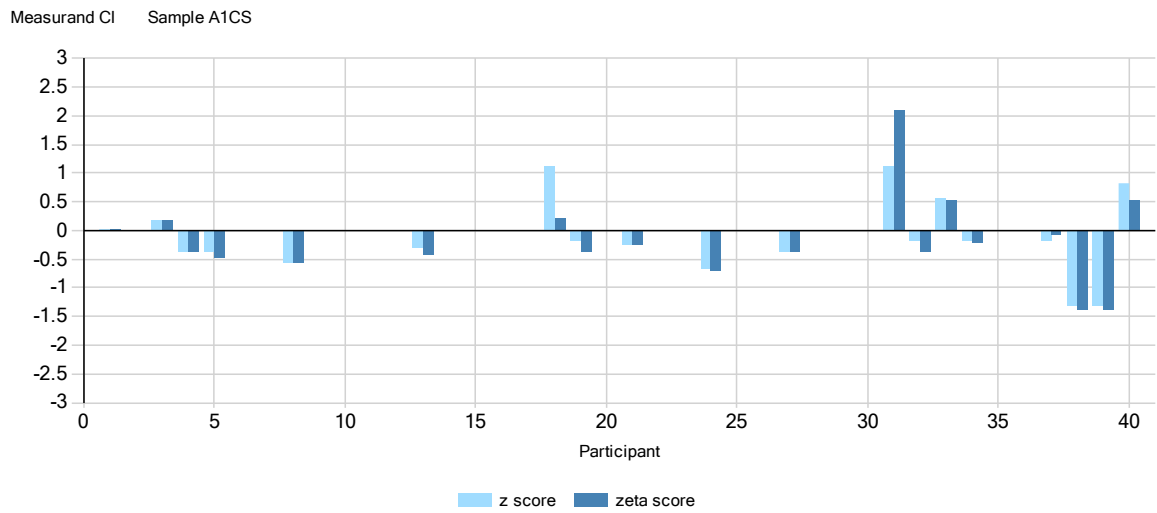
Ca, G3K, mg/l



Assigned value $U_{pt} \% 2 \times s_{pt} \%$		
28.1	3.4	10.0

Participant	Mean $U_i \%$	z	$zeta$
3	27.7	10.0	-0.28 -0.27
4	27.0	20.0	-0.78 -0.40
5	28.2	8.0	0.06 0.07
8	28.9	10.0	0.59 0.54
13	31.2	10.0	2.17 1.87
15	28.2	12.0	0.07 0.06
17	27.7	10.0	-0.28 -0.27
21	28.5	10.0	0.28 0.27
27	28.1	10.0	0.00 0.00
33	26.2	1.0	-1.35 -3.84
34	25.7	16.0	-1.71 -1.14
37	27.9	25.0	-0.14 -0.06
39	30.9	15.0	1.99 1.18
40	30.2	15.0	1.48 0.90

Cl, A1CS, mg/l

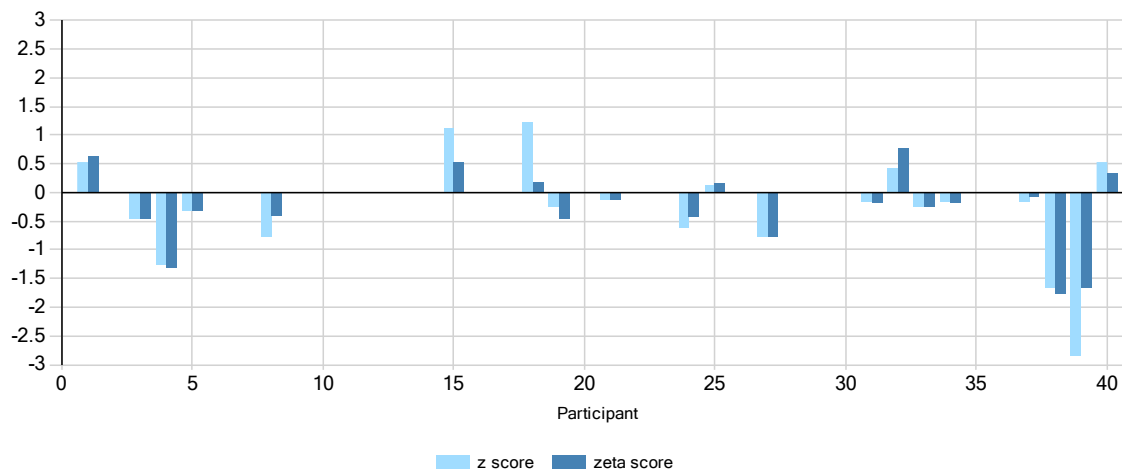


Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
10.8	0.5	10.0

Participant	Mean $U_i \%$	z	z	$zeta$
1	10.8	8.0	0.02	0.02
3	10.9	10.0	0.19	0.18
4	10.6	10.0	-0.37	-0.38
5	10.6	8.0	-0.37	-0.47
8	10.5	10.0	-0.56	-0.57
13	10.6	7.0	-0.30	-0.43
15	10.8	12.0	0.00	0.00
18	11.4	50.0	1.11	0.21
19	10.7	5.0	-0.19	-0.37
21	10.7	10.0	-0.24	-0.25
24	10.4	10.0	-0.68	-0.70
27	10.6	10.0	-0.37	-0.38
31	11.4	5.0	1.11	2.10
32	10.7	5.0	-0.19	-0.37
33	11.1	10.0	0.56	0.54
34	10.7	9.0	-0.19	-0.21
37	10.7	25.0	-0.19	-0.07
38	10.1	10.0	-1.30	-1.38
39	10.1	10.0	-1.30	-1.38
40	11.3	15.0	0.83	0.53

Cl, D2CS, mg/l

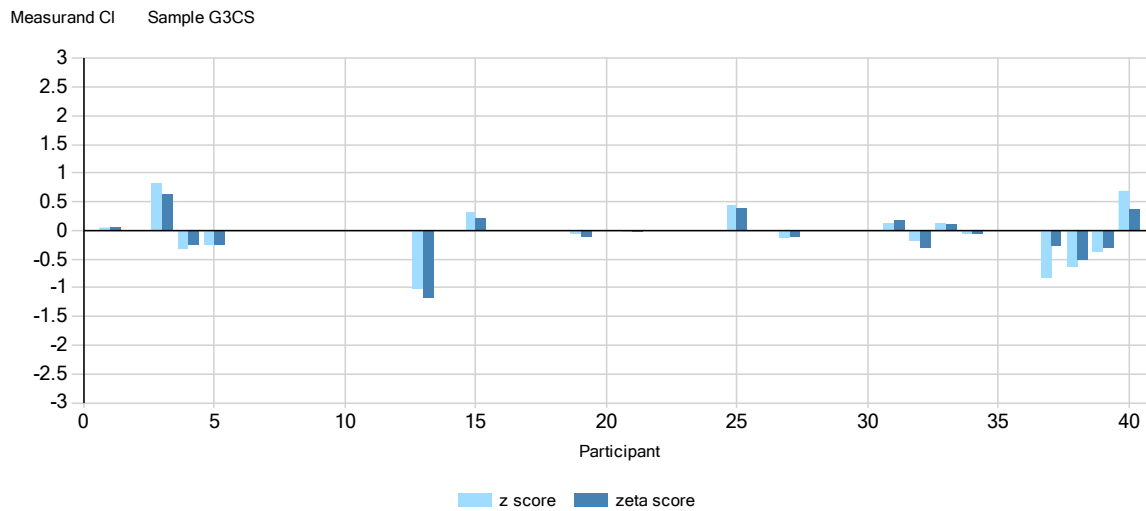
Measurand Cl Sample D2CS



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
5.69	2.0	10.0

Participant	Mean $U_i \%$	z	$zeta$
1	5.84	8.0	0.53 0.62
3	5.56	10.0	-0.46 -0.46
4	5.33	10.0	-1.27 -1.32
5	5.60	10.0	-0.32 -0.31
8	5.47	20.0	-0.77 -0.40
15	6.01	20.0	1.12 0.53
18	6.04	60.0	1.23 0.19
19	5.62	5.0	-0.25 -0.46
21	5.65	10.0	-0.13 -0.13
24	5.52	15.0	-0.61 -0.42
25	5.73	9.0	0.14 0.15
27	5.47	10.0	-0.77 -0.79
31	5.64	9.0	-0.18 -0.19
32	5.81	5.0	0.42 0.77
33	5.62	10.0	-0.25 -0.24
34	5.64	9.0	-0.18 -0.19
37	5.64	25.0	-0.18 -0.07
38	5.22	10.0	-1.65 -1.76
39	4.88	20.0	-2.85 -1.65
40	5.84	15.0	0.53 0.34

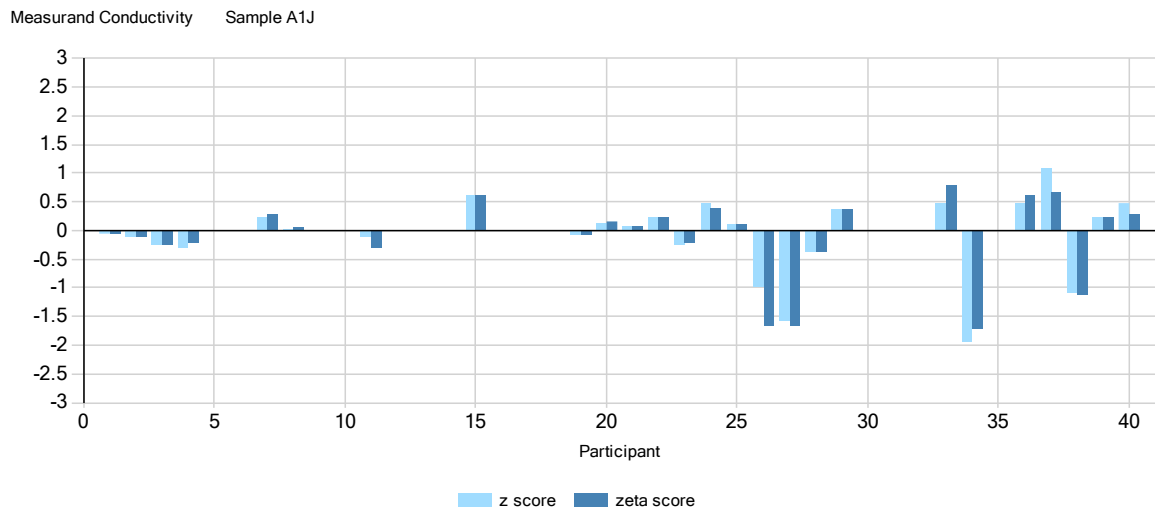
Cl, G3CS, mg/l



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
39.6	1.1	8.0

Participant	Mean $U_i \%$	z	$zeta$	
1	39.7	8.0	0.04	0.04
3	40.9	10.0	0.82	0.63
4	39.1	10.0	-0.32	-0.25
5	39.2	8.0	-0.25	-0.25
8	39.6	10.0	0.00	0.00
13	38.0	7.0	-1.01	-1.19
15	40.1	12.0	0.32	0.21
19	39.5	5.0	-0.06	-0.10
21	39.5	10.0	-0.04	-0.03
25	40.3	9.0	0.44	0.38
27	39.4	10.0	-0.13	-0.10
31	39.8	5.0	0.13	0.20
32	39.3	5.0	-0.19	-0.30
33	39.8	10.0	0.13	0.10
34	39.5	9.0	-0.06	-0.06
37	38.3	25.0	-0.82	-0.27
38	38.6	10.0	-0.63	-0.51
39	39.0	10.0	-0.38	-0.31
40	40.7	15.0	0.69	0.36

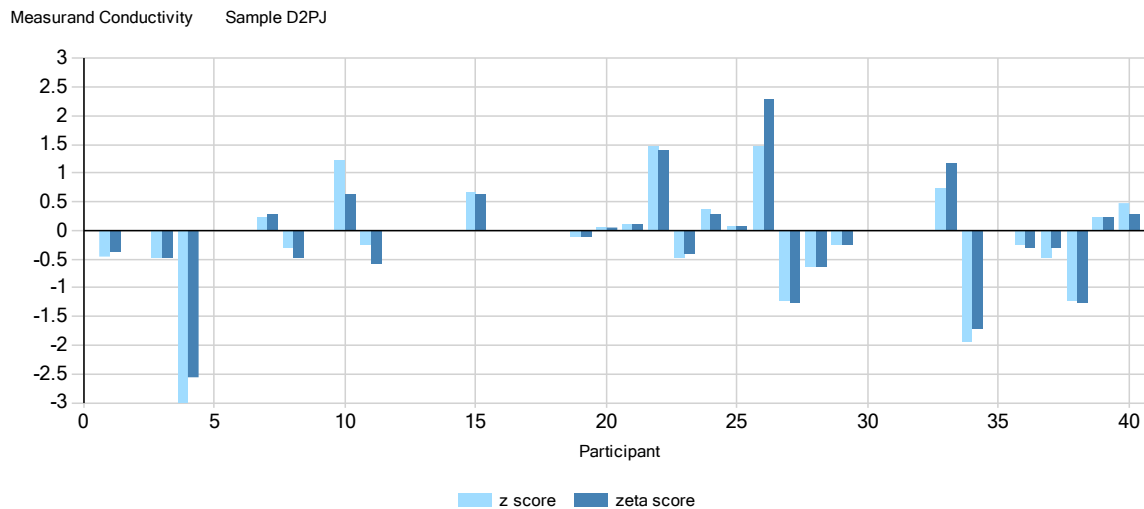
Conductivity, A1J, $\mu\text{S}/\text{cm}$



Assigned value $U_{pt} \% 2 \times s_{pt} \%$		
328	0.5	5.0

Participant	Mean U_i %	z	zeta	
1	328	6.0	-0.06	-0.05
2	327	6.0	-0.12	-0.10
3	326	5.0	-0.24	-0.24
4	326	7.0	-0.30	-0.22
7	330	4.0	0.24	0.30
8	328	3.0	0.04	0.06
10	328	9.1	0.00	0.00
11	327	2.0	-0.12	-0.30
15	333	5.0	0.61	0.60
19	327	5.0	-0.07	-0.07
20	329	4.0	0.12	0.15
21	329	5.0	0.07	0.07
22	330	5.0	0.24	0.24
23	326	6.0	-0.24	-0.20
24	332	6.0	0.49	0.40
25	329	5.0	0.11	0.11
26	320	3.0	-0.98	-1.64
27	315	5.0	-1.59	-1.64
28	325	5.0	-0.37	-0.37
29	331	5.0	0.37	0.36
32	328	3.0	0.00	0.00
33	332	3.0	0.49	0.79
34	312	6.0	-1.95	-1.70
36	332	4.0	0.49	0.60
37	337	8.0	1.10	0.67
38	319	5.0	-1.10	-1.12
39	330	5.0	0.24	0.24
40	332	8.0	0.49	0.30

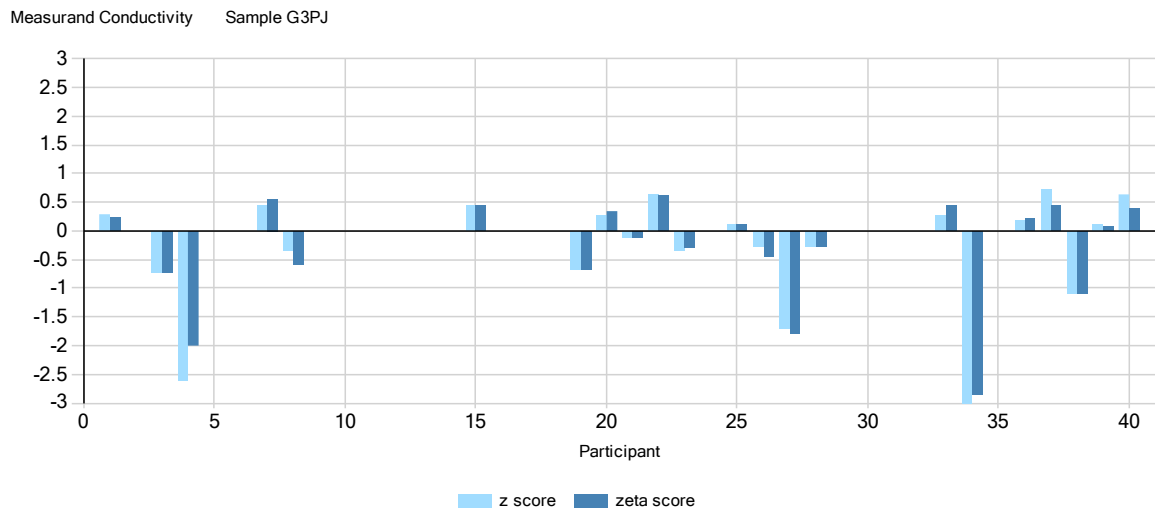
Conductivity, D2PJ, $\mu\text{S}/\text{cm}$



Assigned value $U_{pt} \% 2 \times s_{pt} \%$		
164	0.7	5.0

Participant	Mean $U_i \%$	z	zeta	
1	162	6.0	-0.45	-0.37
2	164	6.0	0.00	0.00
3	162	5.0	-0.49	-0.49
4	151	7.0	-3.29	-2.55
7	165	4.0	0.24	0.30
8	163	3.0	-0.29	-0.48
10	169	9.1	1.22	0.65
11	163	2.0	-0.24	-0.58
15	167	5.0	0.66	0.64
19	164	5.0	-0.12	-0.12
20	164	4.0	0.05	0.06
21	164	5.0	0.10	0.10
22	170	5.0	1.46	1.40
23	162	6.0	-0.49	-0.41
24	166	6.0	0.37	0.30
25	164	5.0	0.07	0.07
26	170	3.0	1.46	2.30
27	159	5.0	-1.22	-1.24
28	161	5.0	-0.63	-0.64
29	163	5.0	-0.24	-0.24
32	164	3.0	0.00	0.00
33	167	3.0	0.73	1.17
34	156	6.0	-1.95	-1.70
36	163	4.0	-0.24	-0.30
37	162	8.0	-0.49	-0.31
38	159	5.0	-1.22	-1.24
39	165	5.0	0.24	0.24
40	166	8.0	0.49	0.30

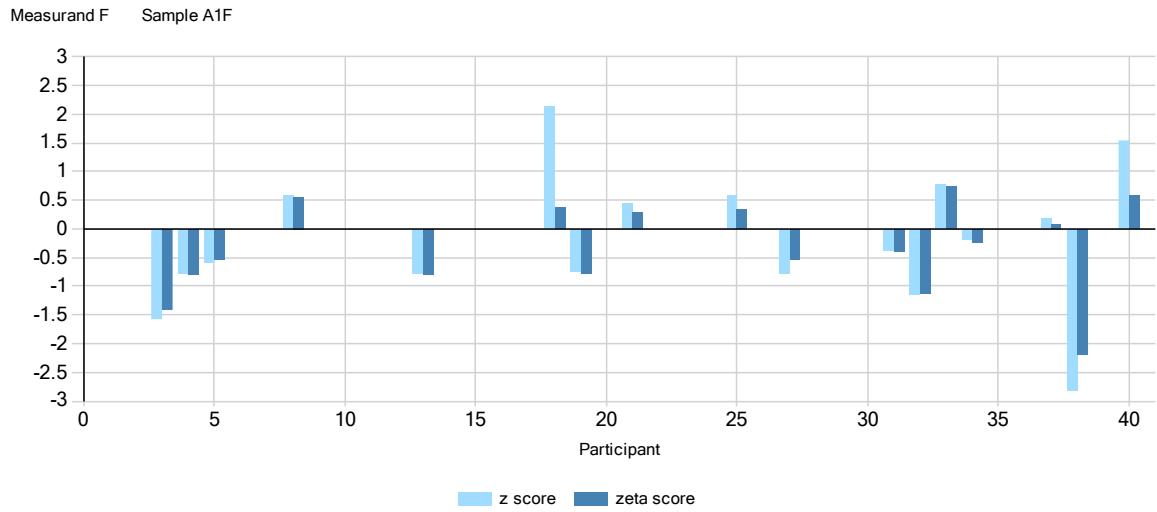
Conductivity, G3PJ, $\mu\text{S}/\text{cm}$



Assigned value $U_{pt} \% 2 \times s_{pt} \%$		
443	0.6	5.0

Participant	Mean U_i	s_i	z	zeta
1	446	6.0	0.28	0.23
2	443	6.0	0.00	0.00
3	435	5.0	-0.72	-0.73
4	414	7.0	-2.62	-1.99
7	448	4.0	0.45	0.55
8	439	3.0	-0.36	-0.60
11	443	2.0	0.00	0.00
15	448	5.0	0.45	0.44
19	436	5.0	-0.67	-0.67
20	446	4.0	0.27	0.33
21	442	5.0	-0.12	-0.12
22	450	5.0	0.63	0.62
23	439	6.0	-0.36	-0.30
25	444	5.0	0.11	0.11
26	440	3.0	-0.27	-0.45
27	424	5.0	-1.72	-1.78
28	440	5.0	-0.27	-0.27
29	443	5.0	0.00	0.00
32	443	3.0	0.00	0.00
33	446	3.0	0.27	0.44
34	408	6.0	-3.16	-2.84
36	445	4.0	0.18	0.22
37	451	8.0	0.72	0.44
38	431	5.0	-1.08	-1.11
39	444	5.0	0.09	0.09
40	450	8.0	0.63	0.39

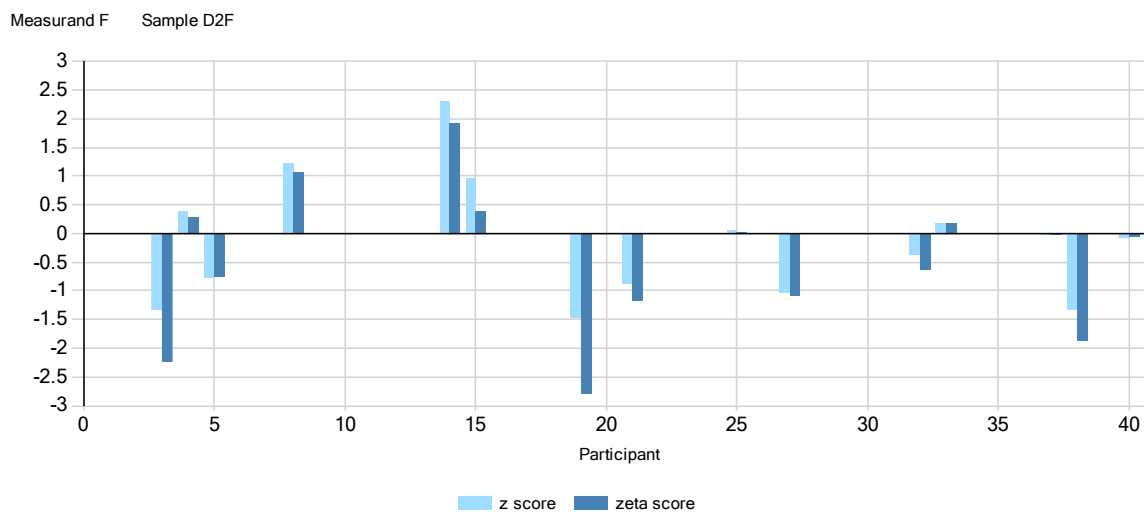
F, A1F, mg/l



Assigned value $U_{pt} \% \cdot 2 \times s_{pt} \%$		
1.04	0.4	10.0

Participant	Mean $U_i \%$	z	zeta	
3	0.96	12.0	-1.58	-1.43
4	1.00	10.0	-0.77	-0.80
5	1.01	11.0	-0.58	-0.54
8	1.07	10.0	0.58	0.56
13	1.00	10.0	-0.77	-0.80
15	1.04	16.0	0.00	0.00
18	1.15	50.0	2.12	0.38
19	1.00	10.0	-0.75	-0.78
21	1.06	15.0	0.46	0.30
25	1.07	17.0	0.58	0.33
27	1.00	15.0	-0.77	-0.53
31	1.02	10.0	-0.38	-0.39
32	0.98	11.0	-1.15	-1.11
33	1.08	10.0	0.77	0.74
34	1.03	8.0	-0.19	-0.24
37	1.05	25.0	0.19	0.08
38	0.89	15.0	-2.83	-2.19
40	1.12	25.0	1.54	0.57

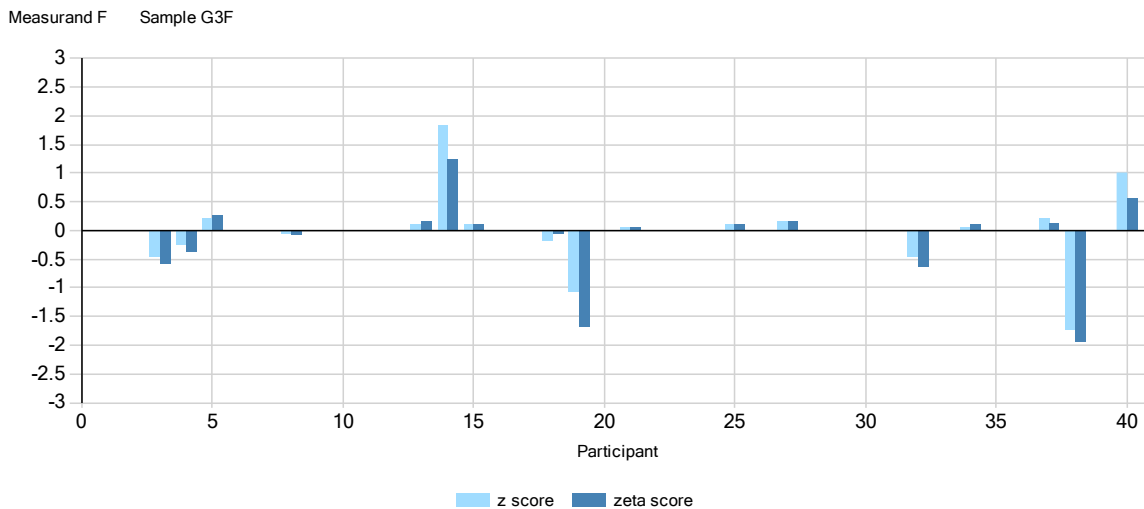
F, D2F, mg/l



Assigned value U_{pt} % $2 \times s_{pt}$ %		
0.26	6.1	20.0

Participant	Mean U_i %	z	zeta
3	0.23	12.0	-1.35 -2.24
4	0.27	25.0	0.38 0.29
5	0.24	21.0	-0.77 -0.76
8	0.29	20.0	1.23 1.06
14	0.32	19.0	2.31 1.91
15	0.29	45.0	0.96 0.39
19	0.22	10.0	-1.46 -2.79
21	0.24	15.0	-0.88 -1.18
25	0.26	25.0	0.04 0.03
27	0.23	20.0	-1.04 -1.10
32	0.25	11.0	-0.38 -0.63
33	0.27	19.0	0.19 0.19
34	0.26	13.0	0.00 0.00
37	0.26	25.0	-0.04 -0.03
38	0.23	15.0	-1.35 -1.88
40	0.26	25.0	-0.08 -0.06

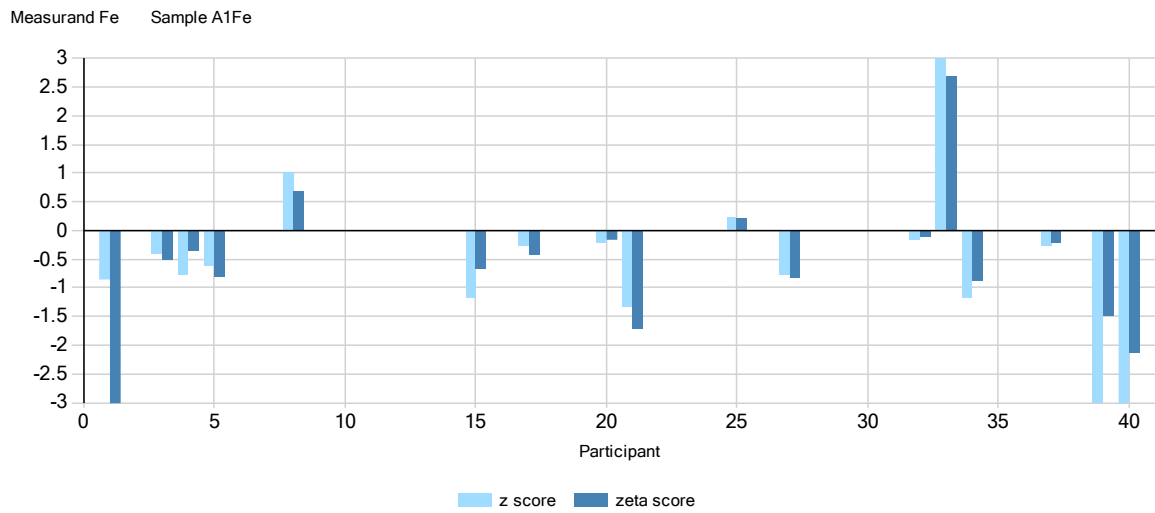
F, G3F, mg/l



Assigned value U_{pt} % $2 \times s_{pt}$ %		
2.63	2.2	15.0

Participant	Mean U_i %	z	$zeta$
3	2.54	12.0	-0.46 -0.58
4	2.58	10.0	-0.25 -0.38
5	2.67	11.0	0.20 0.27
8	2.62	10.0	-0.05 -0.07
13	2.65	10.0	0.10 0.15
14	2.99	19.0	1.83 1.26
15	2.65	16.0	0.10 0.09
18	2.59	50.0	-0.20 -0.06
19	2.42	10.0	-1.06 -1.69
21	2.64	15.0	0.06 0.05
25	2.65	16.0	0.10 0.09
27	2.66	15.0	0.15 0.15
32	2.54	11.0	-0.46 -0.63
33	2.63	10.0	0.00 0.00
34	2.64	8.0	0.05 0.09
37	2.67	25.0	0.20 0.12
38	2.29	15.0	-1.72 -1.95
40	2.83	25.0	1.01 0.56

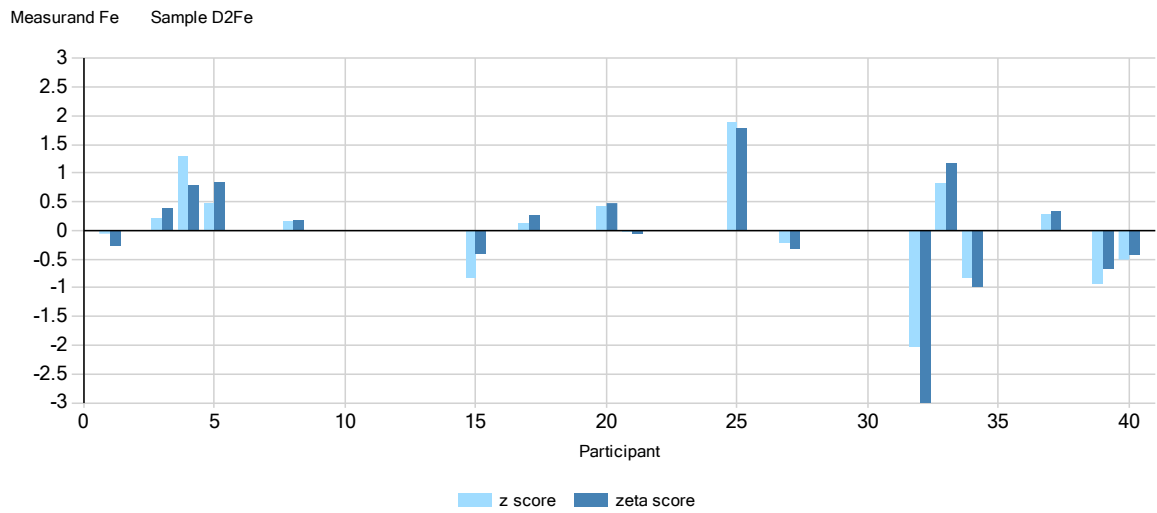
Fe, A1Fe, µg/l



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
47.6	1.3	15.0

Participant	Mean $U_i \%$	z	zeta	
1	44.5	2.0	-0.86	-5.64
3	46.2	12.0	-0.39	-0.50
4	44.8	35.0	-0.78	-0.36
5	45.4	12.0	-0.62	-0.81
8	51.2	20.0	1.01	0.70
15	43.4	29.0	-1.18	-0.67
17	46.6	10.0	-0.28	-0.43
20	46.8	20.0	-0.22	-0.17
21	42.8	13.0	-1.34	-1.71
25	48.4	16.0	0.22	0.21
27	44.8	15.0	-0.78	-0.83
32	47.0	21.0	-0.17	-0.12
33	59.6	15.0	3.36	2.68
34	43.4	22.0	-1.18	-0.88
37	46.6	20.0	-0.28	-0.21
39	36.6	40.0	-3.08	-1.50
40	36.0	30.0	-3.25	-2.14

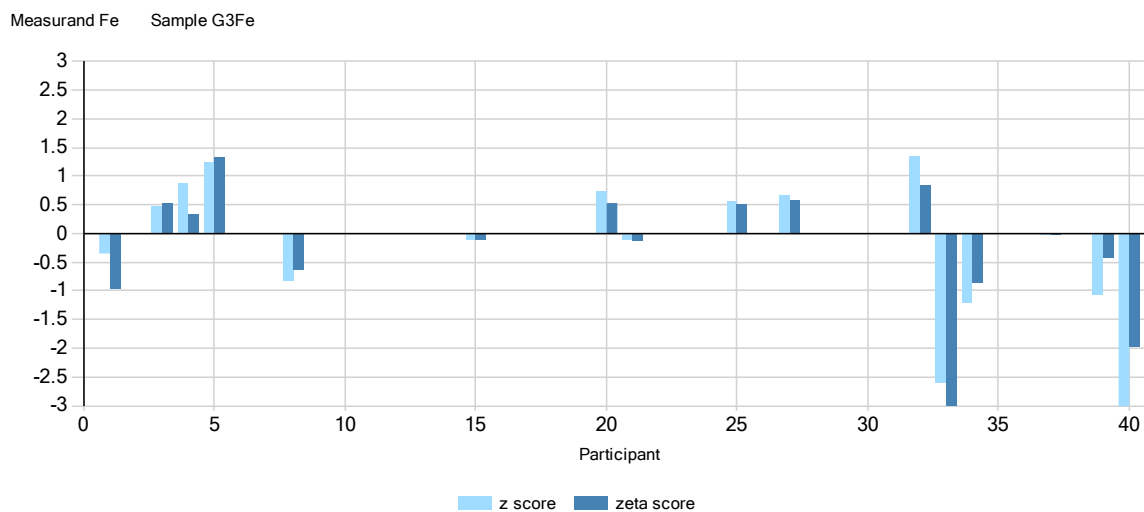
Fe, D2Fe, µg/l



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
25.4	5.6	25.0

Participant	Mean $U_i \%$	z	zeta
1	25.2	2.0	-0.07 -0.28
3	26.1	12.0	0.22 0.41
4	29.5	35.0	1.29 0.79
5	26.9	12.0	0.47 0.84
8	25.9	20.0	0.16 0.19
15	22.8	55.0	-0.82 -0.41
17	25.8	10.0	0.13 0.27
20	26.7	20.0	0.41 0.47
21	25.3	13.0	-0.03 -0.06
25	31.4	21.0	1.89 1.78
27	24.7	16.0	-0.22 -0.33
32	19.0	21.0	-2.02 -3.02
33	28.0	15.0	0.82 1.17
34	22.8	22.0	-0.82 -1.00
37	26.3	20.0	0.28 0.33
39	22.4	40.0	-0.94 -0.66
40	23.8	30.0	-0.50 -0.44

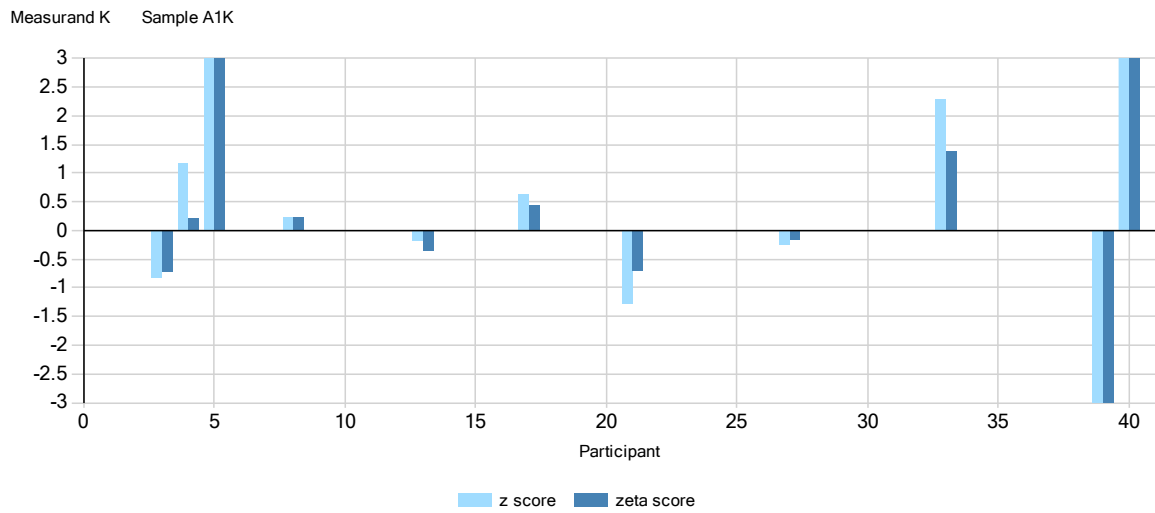
Fe, G3Fe, µg/l



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
57.2	4.9	15.0

Participant	Mean $U_i \%$	z	zeta
1	55.7	2.0	-0.34 -0.97
3	59.2	12.0	0.47 0.52
4	61.0	35.0	0.89 0.35
5	62.6	12.0	1.25 1.34
8	53.6	20.0	-0.84 -0.65
15	56.7	15.0	-0.12 -0.11
17	57.2	10.0	0.00 0.00
20	60.4	20.0	0.75 0.52
21	56.7	13.0	-0.12 -0.13
25	59.6	15.0	0.56 0.51
27	60.0	15.0	0.65 0.59
32	63.0	21.0	1.35 0.86
33	46.0	15.0	-2.61 -3.01
34	52.1	22.0	-1.19 -0.86
37	57.1	20.0	-0.02 -0.02
39	52.6	40.0	-1.07 -0.43
40	43.9	30.0	-3.10 -1.98

K, A1K, mg/l

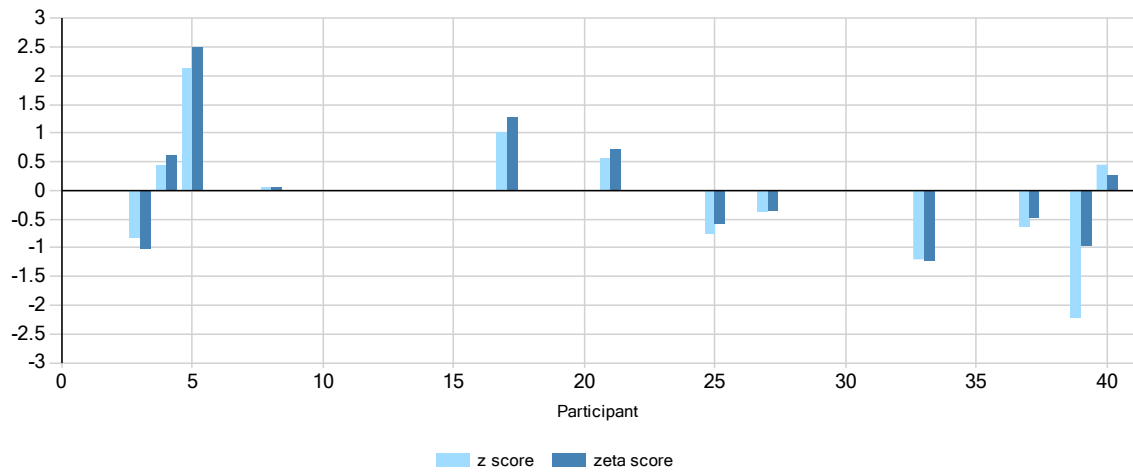


Assigned value $U_{pt} \% 2 \times s_{pt} \%$		
0.34	0.7	10.0

Participant	Mean $U_i \%$	z	$zeta$
3	0.33	12.0	-0.82 -0.71
4	0.36	50.0	1.18 0.22
5	0.63	16.0	16.94 5.73
8	0.34	10.0	0.24 0.23
13	0.34	5.0	-0.18 -0.35
17	0.35	14.0	0.65 0.45
21	0.32	20.0	-1.29 -0.69
27	0.34	15.0	-0.24 -0.16
33	0.38	15.0	2.29 1.37
39	0.13	60.0	-12.35 -5.38
40	0.59	25.0	14.65 3.38

K, D2K, mg/l

Measurand K Sample D2K

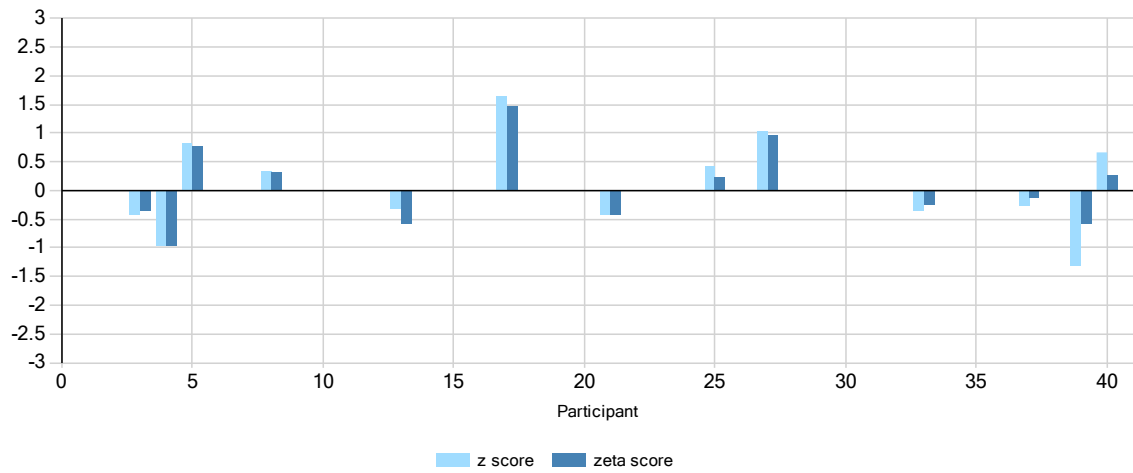


Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
1.45	5.1	15.0

Participant	Mean $U_i \%$	z	$zeta$
3	1.36	12.0	-0.83 -1.00
4	1.50	10.0	0.46 0.60
5	1.68	10.0	2.11 2.51
8	1.45	10.0	0.04 0.05
17	1.56	10.0	1.01 1.27
21	1.51	10.0	0.55 0.71
25	1.37	19.0	-0.74 -0.59
27	1.41	15.0	-0.37 -0.36
33	1.32	15.0	-1.20 -1.23
37	1.38	20.0	-0.64 -0.49
39	1.21	41.0	-2.21 -0.96
40	1.50	25.0	0.45 0.26

K, G3K, mg/l

Measurand K Sample G3K

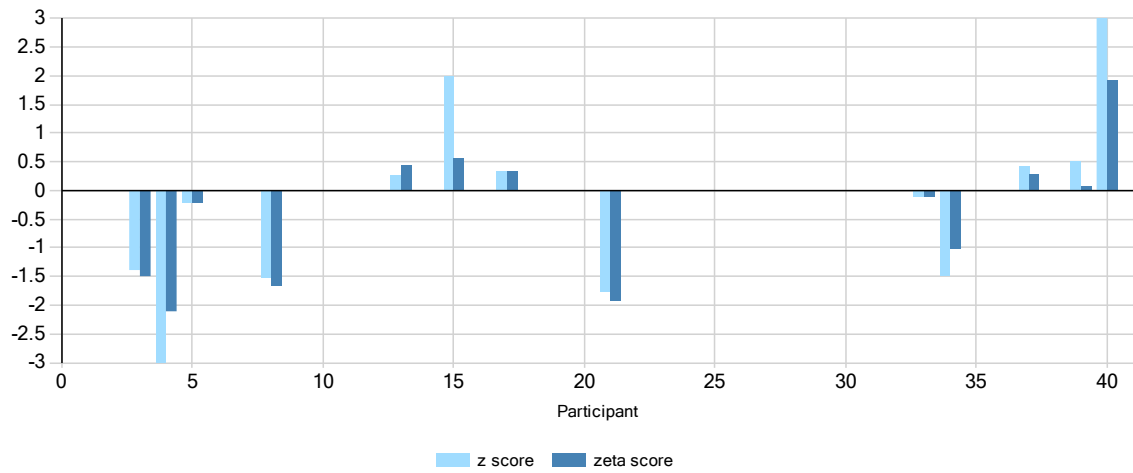


Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
2.31	2.9	10.0

Participant	Mean $U_i \%$	z	$zeta$
3	2.26	12.0	-0.43 -0.36
4	2.20	10.0	-0.95 -0.96
5	2.41	10.0	0.83 0.77
8	2.35	10.0	0.35 0.33
13	2.27	5.0	-0.33 -0.58
17	2.50	10.0	1.65 1.47
21	2.26	10.0	-0.43 -0.42
25	2.36	17.0	0.43 0.25
27	2.43	10.0	1.04 0.95
33	2.27	15.0	-0.35 -0.23
37	2.28	20.0	-0.26 -0.13
39	2.16	23.0	-1.30 -0.60
40	2.39	25.0	0.68 0.26

Mg, A1K, mg/l

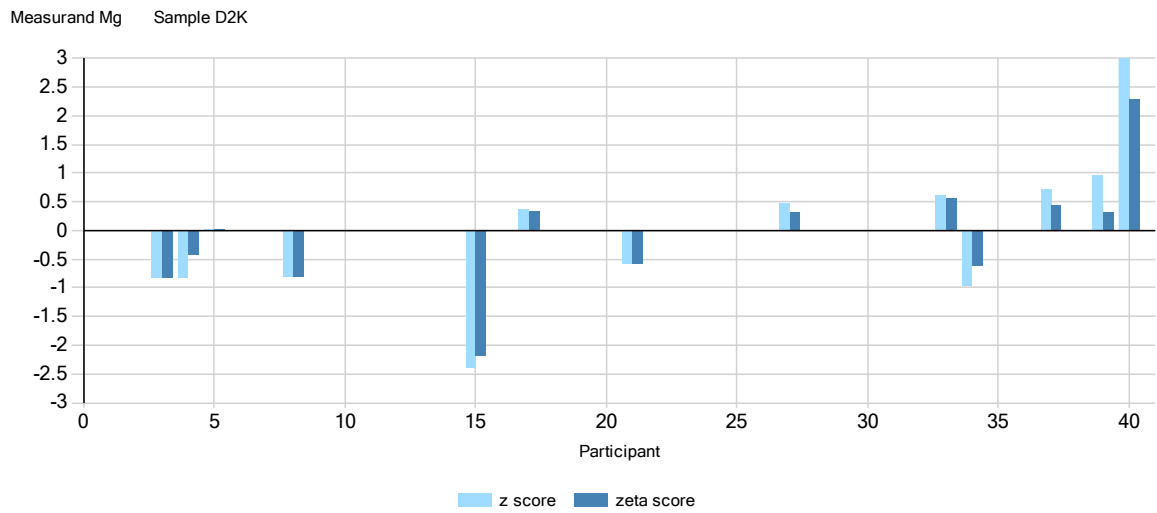
Measurand Mg Sample A1K



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
0.80	0.6	10.0

Participant	Mean $U_i \%$	z	$zeta$
3	0.74	10.0	-1.40 -1.50
4	0.66	20.0	-3.50 -2.12
5	0.79	10.0	-0.23 -0.23
8	0.74	10.0	-1.53 -1.65
13	0.81	6.0	0.28 0.45
15	0.88	32.0	2.00 0.57
17	0.81	10.0	0.35 0.34
21	0.73	10.0	-1.75 -1.91
27	0.80	15.0	0.00 0.00
33	0.80	10.0	-0.10 -0.10
34	0.74	16.0	-1.50 -1.01
37	0.82	15.0	0.42 0.28
39	0.82	60.0	0.50 0.08
40	0.93	15.0	3.35 1.91

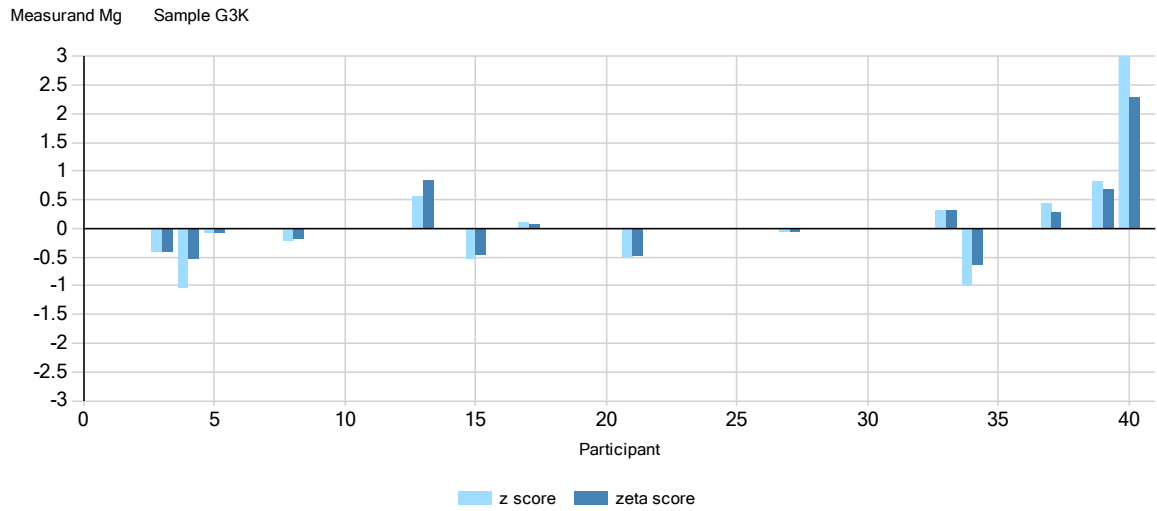
Mg, D2K, mg/l



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
1.67	2.8	10.0

Participant	Mean $U_i \%$	z	$zeta$
3	1.60	10.0	-0.84
4	1.60	20.0	-0.84
5	1.67	10.0	0.02
8	1.60	10.0	-0.80
15	1.47	12.0	-2.40
17	1.70	10.0	0.36
21	1.62	10.0	-0.60
27	1.71	15.0	0.48
33	1.72	10.0	0.60
34	1.59	16.0	-0.96
37	1.73	15.0	0.72
39	1.75	28.0	0.96
40	2.02	15.0	4.23

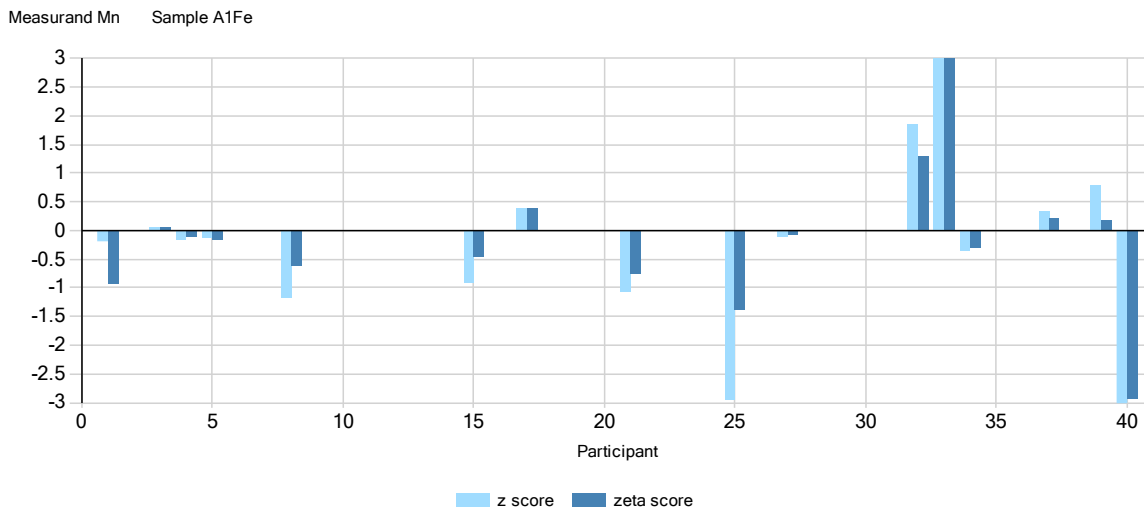
Mg, G3K, mg/l



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
4.43	2.3	10.0

Participant	Mean $U_i \%$	z	$zeta$
3	4.34	10.0	-0.41 -0.40
4	4.20	20.0	-1.04 -0.54
5	4.41	10.0	-0.07 -0.07
8	4.39	10.0	-0.20 -0.20
13	4.55	6.0	0.56 0.85
15	4.31	12.0	-0.54 -0.46
17	4.45	10.0	0.09 0.09
21	4.32	10.0	-0.50 -0.50
27	4.42	10.0	-0.05 -0.04
33	4.50	10.0	0.32 0.30
34	4.21	16.0	-0.99 -0.65
37	4.53	15.0	0.45 0.29
39	4.61	11.0	0.81 0.70
40	5.36	15.0	4.18 2.28

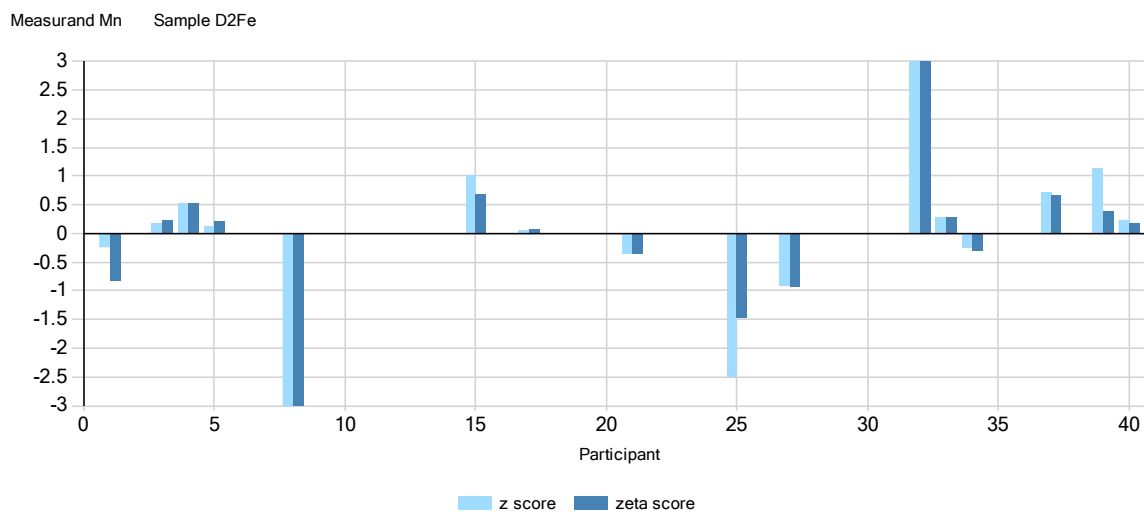
Mn, A1Fe, µg/l



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
35.7	0.7	10.0

Participant	Mean $U_i \%$	z	zeta
1	35.4	2.0	-0.20 -0.93
3	35.8	10.0	0.06 0.06
4	35.4	14.0	-0.17 -0.12
5	35.5	8.0	-0.13 -0.16
8	33.6	20.0	-1.18 -0.62
15	34.1	20.0	-0.90 -0.47
17	36.4	10.0	0.39 0.38
21	33.8	15.0	-1.06 -0.75
25	30.4	25.0	-2.97 -1.39
27	35.5	15.0	-0.11 -0.08
32	39.0	13.0	1.85 1.30
33	80.1	15.0	24.87 7.39
34	35.1	12.0	-0.34 -0.28
37	36.3	15.0	0.34 0.22
39	37.1	40.0	0.78 0.19
40	27.6	20.0	-4.54 -2.93

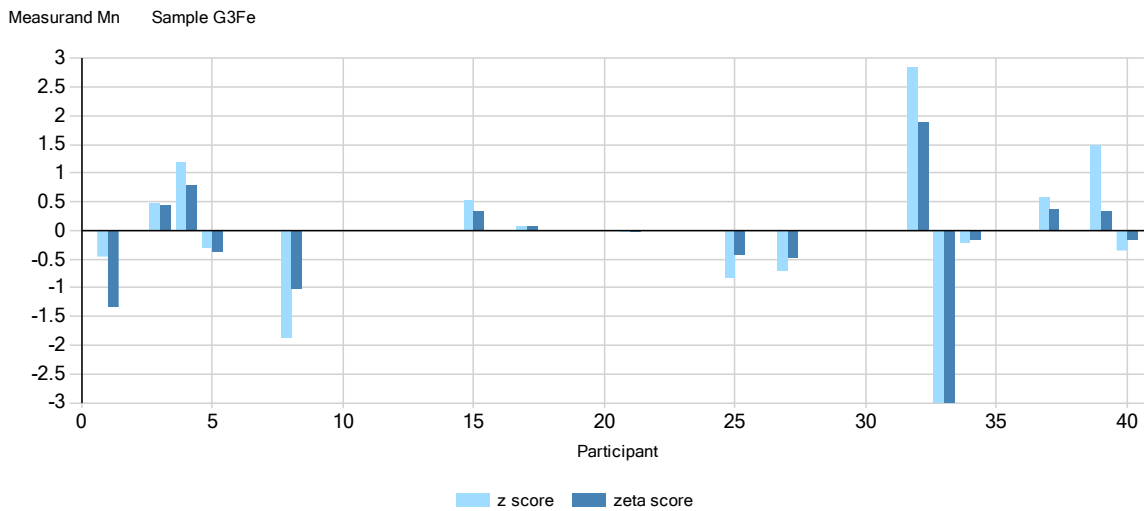
Mn, D2Fe, µg/l



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
22.3	3.8	15.0

Participant	Mean $U_i \%$	z	zeta
1	21.9	2.0	-0.23 -0.82
3	22.6	10.0	0.18 0.25
4	23.2	14.0	0.54 0.54
5	22.5	8.0	0.13 0.21
8	15.4	20.0	-4.13 -4.32
15	24.0	20.0	1.02 0.70
17	22.4	10.0	0.06 0.08
21	21.7	15.0	-0.36 -0.36
25	18.1	31.0	-2.51 -1.48
27	20.8	15.0	-0.90 -0.93
32	31.0	13.0	5.20 4.23
33	22.8	15.0	0.30 0.28
34	21.9	12.0	-0.24 -0.29
37	23.5	15.0	0.72 0.66
39	24.2	40.0	1.14 0.39
40	22.7	20.0	0.24 0.17

Mn, G3Fe, µg/l

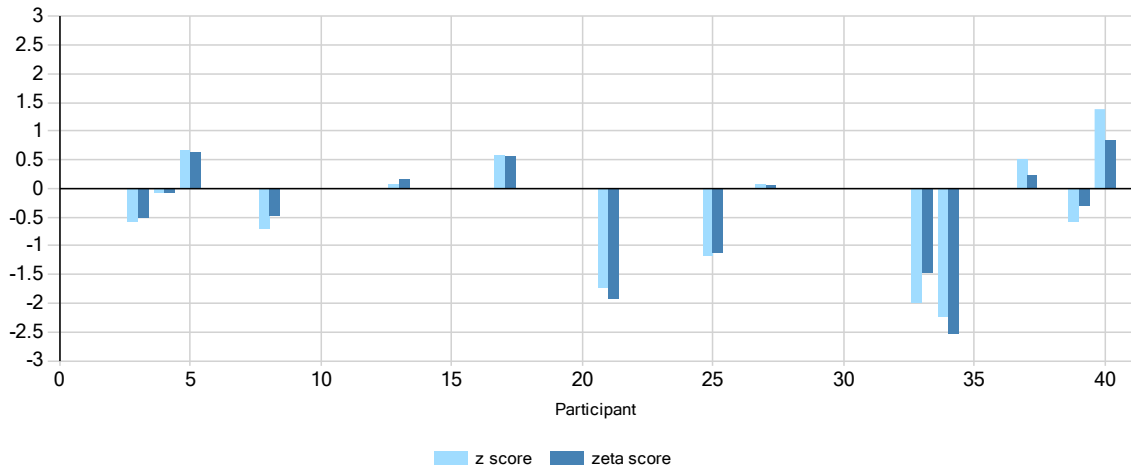


Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
77.0	2.8	10.0

Participant	Mean $U_i \%$	z	$zeta$	
1	75.3	2.0	-0.45	-1.33
3	78.8	10.0	0.47	0.44
4	81.6	14.0	1.19	0.79
5	75.8	8.0	-0.31	-0.37
8	69.8	20.0	-1.87	-1.02
15	79.0	14.0	0.52	0.35
17	77.3	10.0	0.08	0.07
21	76.9	15.0	-0.03	-0.02
25	73.8	20.0	-0.83	-0.43
27	74.3	15.0	-0.70	-0.48
32	88.0	13.0	2.86	1.89
33	36.3	15.0	-10.57	-13.90
34	76.2	12.0	-0.21	-0.17
37	79.2	15.0	0.57	0.36
39	82.7	40.0	1.48	0.34
40	75.7	20.0	-0.34	-0.17

Na, A1K, mg/l

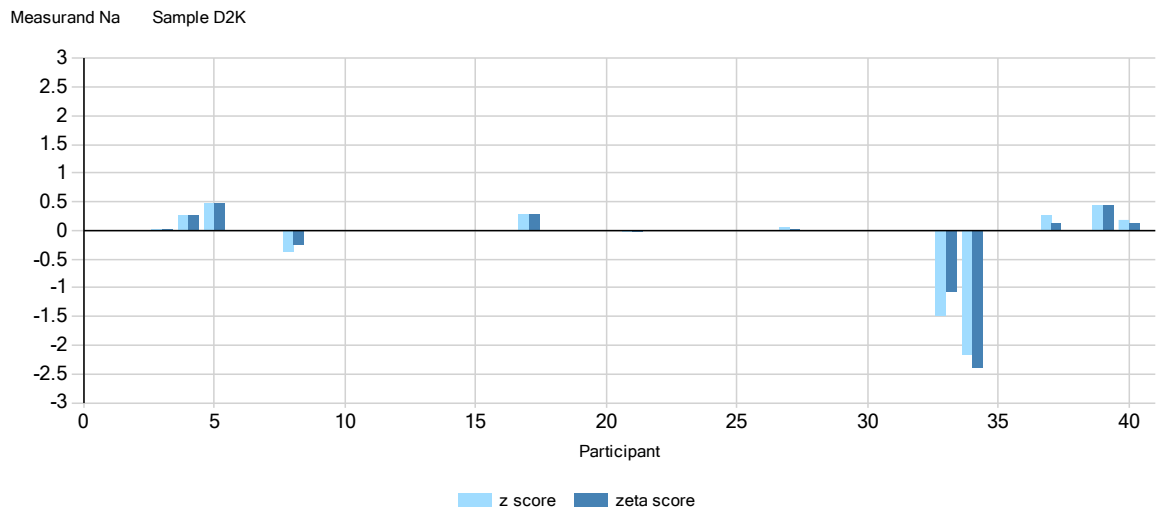
Measurand Na Sample A1K



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
2.41	0.3	10.0

Participant	Mean $U_i \%$	z	zeta
3	2.34	12.0	-0.58 -0.50
4	2.40	10.0	-0.08 -0.08
5	2.49	10.0	0.66 0.64
8	2.33	15.0	-0.69 -0.48
13	2.42	5.0	0.07 0.15
17	2.48	10.0	0.58 0.56
21	2.20	10.0	-1.74 -1.91
25	2.27	11.0	-1.16 -1.12
27	2.42	15.0	0.08 0.06
33	2.17	15.0	-1.99 -1.47
34	2.14	10.0	-2.24 -2.52
37	2.47	20.0	0.50 0.24
39	2.34	21.0	-0.58 -0.28
40	2.58	15.0	1.38 0.86

Na, D2K, mg/l

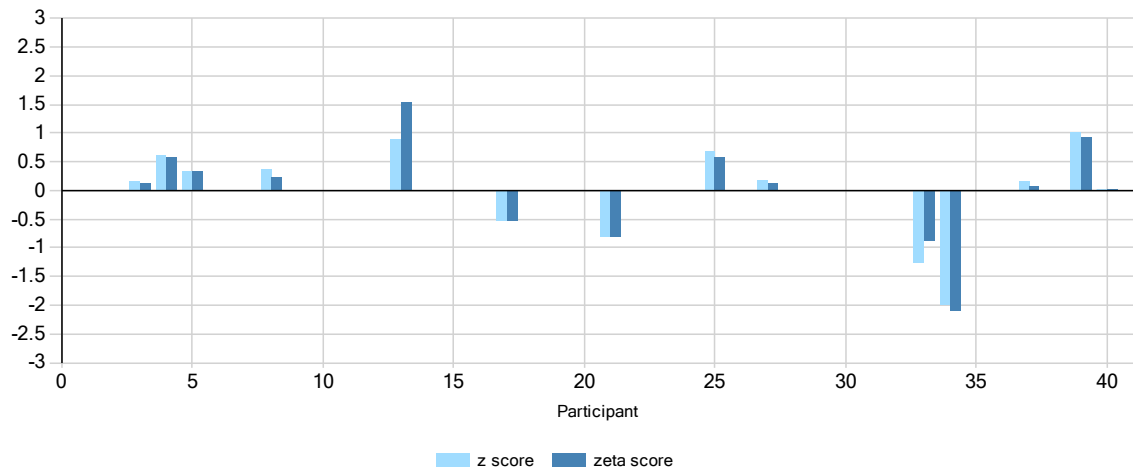


Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
7.50	1.4	10.0

Participant	Mean $U_i \%$	z	$zeta$	
3	7.51	12.0	0.03	0.02
4	7.60	10.0	0.27	0.26
5	7.68	10.0	0.48	0.46
8	7.36	15.0	-0.38	-0.26
17	7.61	10.0	0.29	0.29
21	7.49	10.0	-0.03	-0.03
25	7.50	11.0	0.00	0.00
27	7.52	15.0	0.05	0.04
33	6.94	15.0	-1.49	-1.07
34	6.69	10.0	-2.16	-2.39
37	7.60	20.0	0.27	0.13
39	7.67	10.0	0.45	0.44
40	7.57	15.0	0.18	0.12

Na, G3K, mg/l

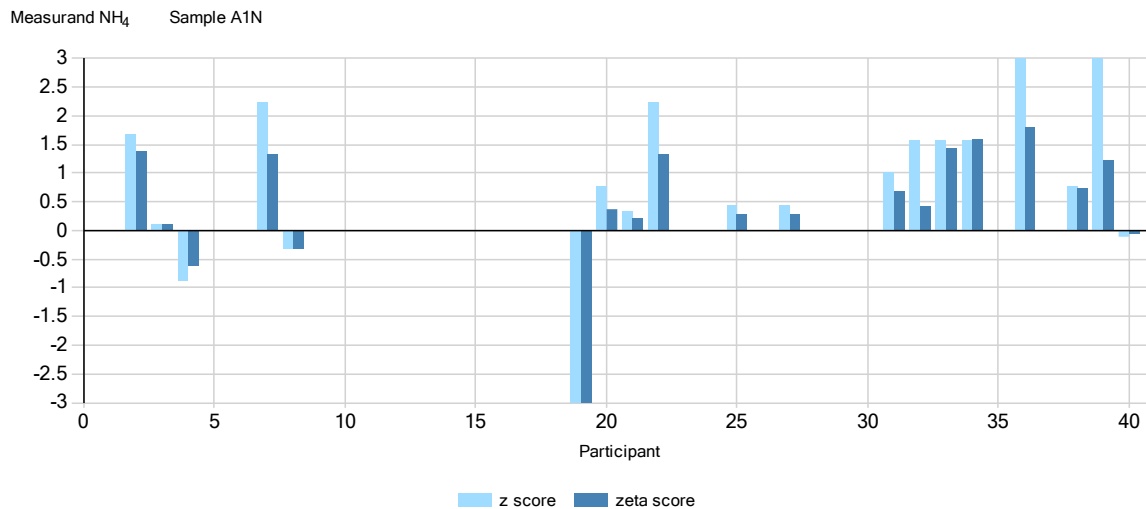
Measurand Na Sample G3K



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
55.3	2.7	10.0

Participant	Mean $U_i \%$	z	$zeta$
3	55.7	12.0	0.14 0.12
4	57.0	10.0	0.61 0.58
5	56.3	10.0	0.35 0.33
8	56.3	15.0	0.37 0.24
13	57.8	5.0	0.91 1.55
17	53.8	10.0	-0.54 -0.54
21	53.1	10.0	-0.80 -0.80
25	57.2	11.0	0.69 0.59
27	55.8	15.0	0.18 0.12
33	51.8	15.0	-1.27 -0.88
34	49.8	10.0	-1.99 -2.12
37	55.7	20.0	0.14 0.07
39	58.1	10.0	1.01 0.93
40	55.3	15.0	0.01 0.01

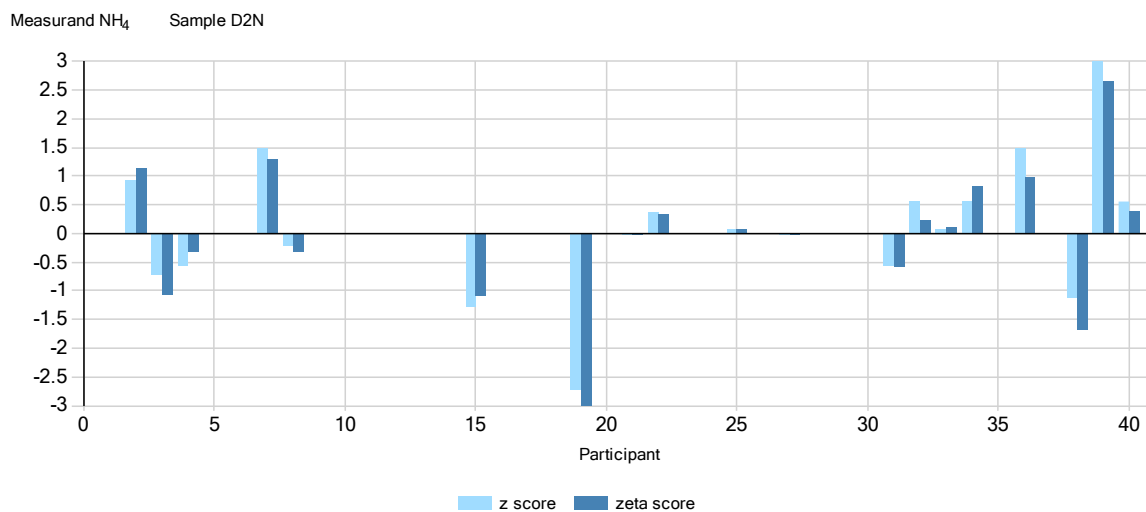
NH₄, A1N, mg/l



Assigned value U _{pl} % 2 x s _{pl} %		
0.18	1.4	10.0

Participant	Mean U _i %	z	zeta	
2	0.20	11.0	1.67	1.39
3	0.18	10.0	0.11	0.11
4	0.17	15.0	-0.89	-0.62
7	0.20	15.0	2.22	1.33
8	0.18	10.0	-0.33	-0.34
15	0.18	19.0	0.00	0.00
19	0.15	6.0	-3.56	-6.93
20	0.19	20.0	0.78	0.37
21	0.18	15.0	0.33	0.22
22	0.20	15.0	2.22	1.33
25	0.18	15.0	0.44	0.29
27	0.18	15.0	0.44	0.29
31	0.19	14.0	1.00	0.68
32	0.19	34.0	1.56	0.42
33	0.19	10.0	1.56	1.43
34	0.19	9.0	1.56	1.59
36	0.22	20.0	4.44	1.82
38	0.19	10.0	0.78	0.74
39	0.22	30.0	4.44	1.21
40	0.18	20.0	-0.11	-0.06

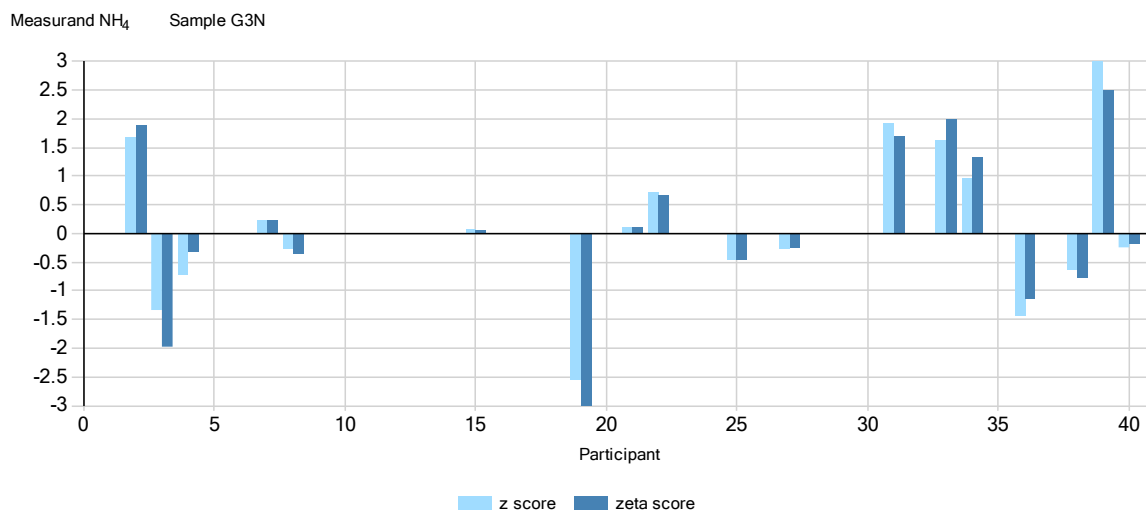
NH₄, D2N, mg/l



Assigned value U _{pl} % 2 x s _{pl} %		
0.072	3.6	15.0

Participant	Mean U _i %	z	zeta	
2	0.077	11.0	0.93	1.13
3	0.068	10.0	-0.72	-1.07
4	0.069	26.0	-0.56	-0.33
7	0.080	15.0	1.48	1.30
8	0.071	10.0	-0.22	-0.32
15	0.065	19.0	-1.28	-1.09
19	0.057	6.0	-2.72	-6.83
20	0.072	20.0	0.00	0.00
21	0.072	15.0	-0.02	-0.02
22	0.074	15.0	0.37	0.35
25	0.072	15.0	0.07	0.07
27	0.072	15.0	-0.02	-0.02
31	0.069	14.0	-0.56	-0.60
32	0.075	34.0	0.56	0.23
33	0.072	10.0	0.07	0.10
34	0.075	9.0	0.56	0.83
36	0.080	20.0	1.48	0.99
38	0.066	10.0	-1.11	-1.69
39	0.120	30.0	8.89	2.66
40	0.075	20.0	0.56	0.39

NH₄, G3N, mg/l

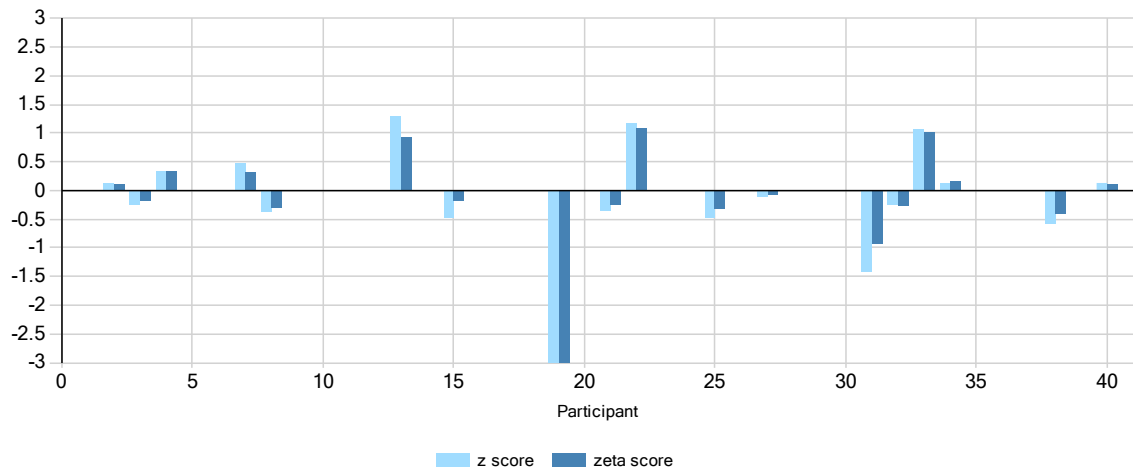


Assigned value U _{pl} % 2 x s _{pl} %		
0.056	4.7	15.0

Participant	Mean U _i %	z	zeta
2	0.063	11.0	1.67 1.89
3	0.050	10.0	-1.33 -1.97
4	0.053	34.0	-0.71 -0.33
7	0.057	15.0	0.24 0.22
8	0.055	10.0	-0.26 -0.36
15	0.056	19.0	0.07 0.05
19	0.045	6.0	-2.57 -5.72
20	0.056	20.0	0.00 0.00
21	0.056	15.0	0.10 0.09
22	0.059	15.0	0.71 0.65
25	0.054	15.0	-0.45 -0.45
27	0.055	15.0	-0.26 -0.25
31	0.064	14.0	1.90 1.71
33	0.063	10.0	1.62 2.00
34	0.060	9.0	0.95 1.33
36	0.050	20.0	-1.43 -1.16
38	0.053	12.0	-0.64 -0.78
39	0.090	30.0	8.10 2.51
40	0.055	20.0	-0.24 -0.18

NO₂, A1N, mg/l

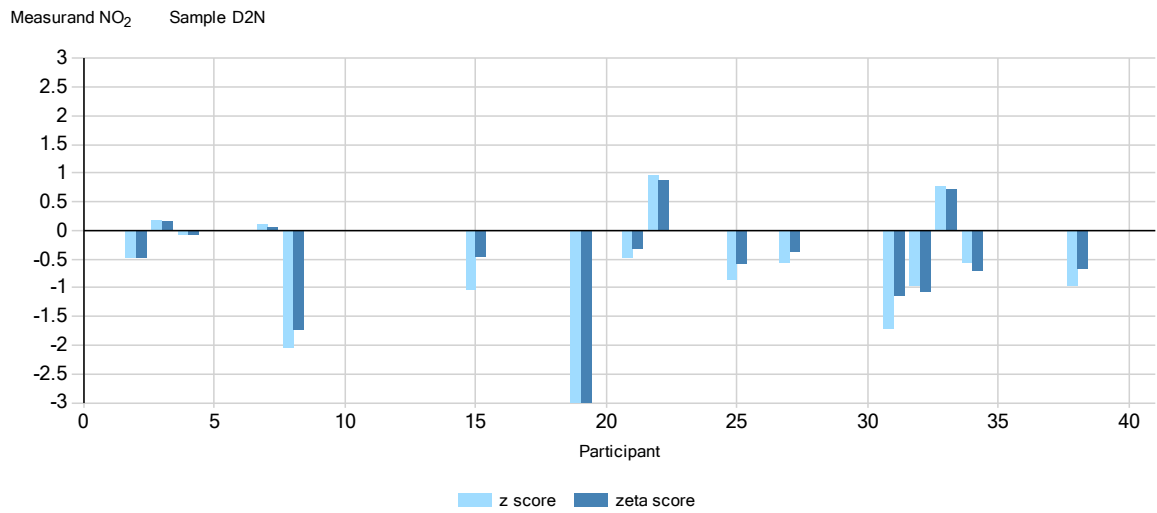
Measurand NO₂ Sample A1N



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
0.17	1.4	10.0

Participant	Mean $U_i \%$	z	$zeta$	
2	0.17	10.0	0.12	0.12
3	0.17	12.0	-0.24	-0.20
4	0.17	10.0	0.35	0.34
7	0.17	15.0	0.47	0.31
8	0.17	13.0	-0.38	-0.29
13	0.18	13.0	1.29	0.93
15	0.17	24.0	-0.47	-0.20
19	0.05	9.0	-14.14	-47.37
21	0.17	15.0	-0.35	-0.24
22	0.18	10.0	1.18	1.10
25	0.17	15.0	-0.47	-0.32
27	0.17	15.0	-0.12	-0.08
31	0.16	16.0	-1.41	-0.95
32	0.17	9.0	-0.24	-0.26
33	0.18	10.0	1.06	1.00
34	0.17	8.0	0.12	0.14
36	0.17	10.0	0.00	0.00
38	0.17	15.0	-0.59	-0.40
40	0.17	10.0	0.12	0.12

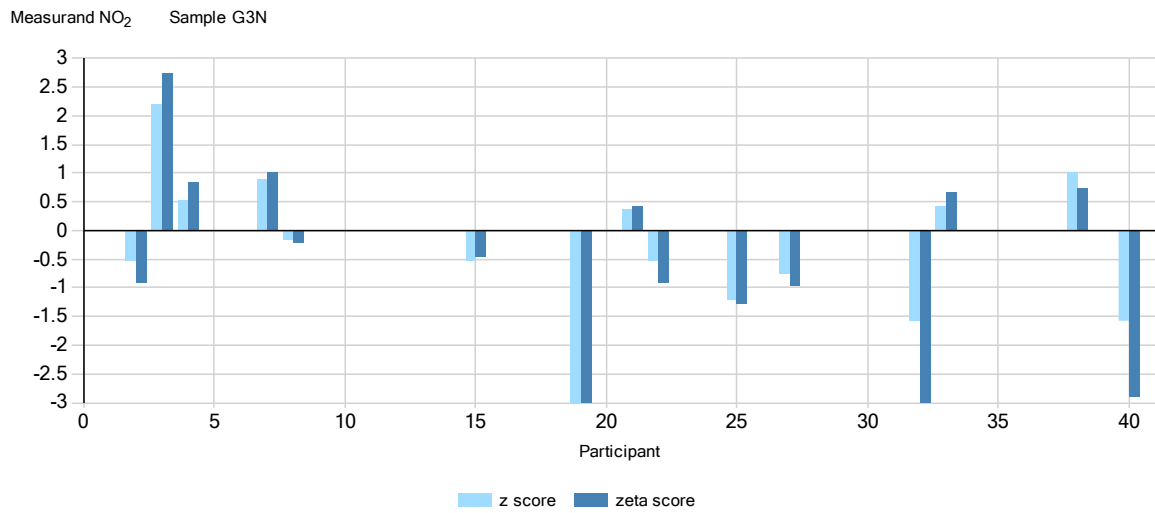
NO₂, D2N, mg/l



Assigned value U _{pl} % 2 x s _{pl} %		
0.21	2.3	10.0

Participant	Mean U _i %	z	zeta	
2	0.21	10.0	-0.48	-0.47
3	0.21	12.0	0.19	0.15
4	0.21	10.0	-0.10	-0.09
7	0.21	15.0	0.10	0.06
8	0.19	13.0	-2.06	-1.73
15	0.20	24.0	-1.05	-0.46
19	0.06	9.0	-14.09	-40.04
21	0.21	15.0	-0.48	-0.32
22	0.22	10.0	0.95	0.89
25	0.20	15.0	-0.86	-0.59
27	0.20	15.0	-0.57	-0.39
31	0.19	16.0	-1.71	-1.16
32	0.20	9.0	-0.95	-1.07
33	0.22	10.0	0.76	0.72
34	0.20	8.0	-0.57	-0.71
36	0.21	10.0	0.00	0.00
38	0.20	15.0	-0.95	-0.66
40	0.21	10.0	0.00	0.00

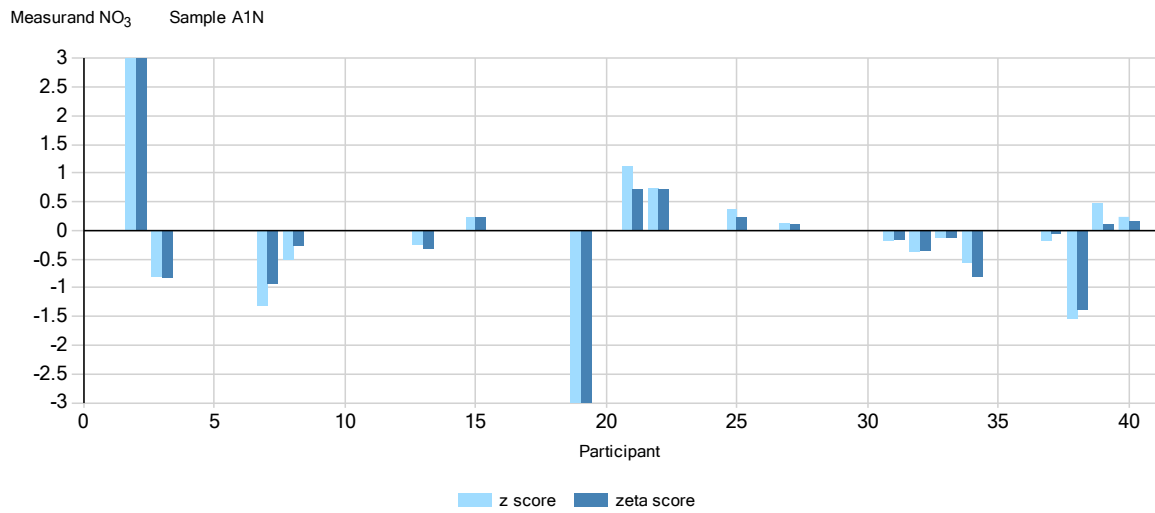
NO₂, G3N, mg/l



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
0.019	6.9	20.0

Participant	Mean	$U_i \%$	z	zeta
2	0.018	10.0	-0.53	-0.90
3	0.023	12.0	2.21	2.73
4	0.020	10.0	0.53	0.84
7	0.021	15.0	0.89	1.01
8	0.019	13.0	-0.16	-0.22
15	0.018	24.0	-0.53	-0.44
19	0.005	19.0	-7.16	-16.34
21	0.020	15.0	0.37	0.43
22	0.018	10.0	-0.53	-0.90
25	0.017	20.0	-1.21	-1.28
27	0.018	15.0	-0.74	-0.95
32	0.016	9.0	-1.58	-3.08
33	0.020	10.0	0.42	0.67
34	0.019	8.0	0.00	0.00
38	0.021	24.0	1.00	0.73
40	0.016	10.0	-1.58	-2.90

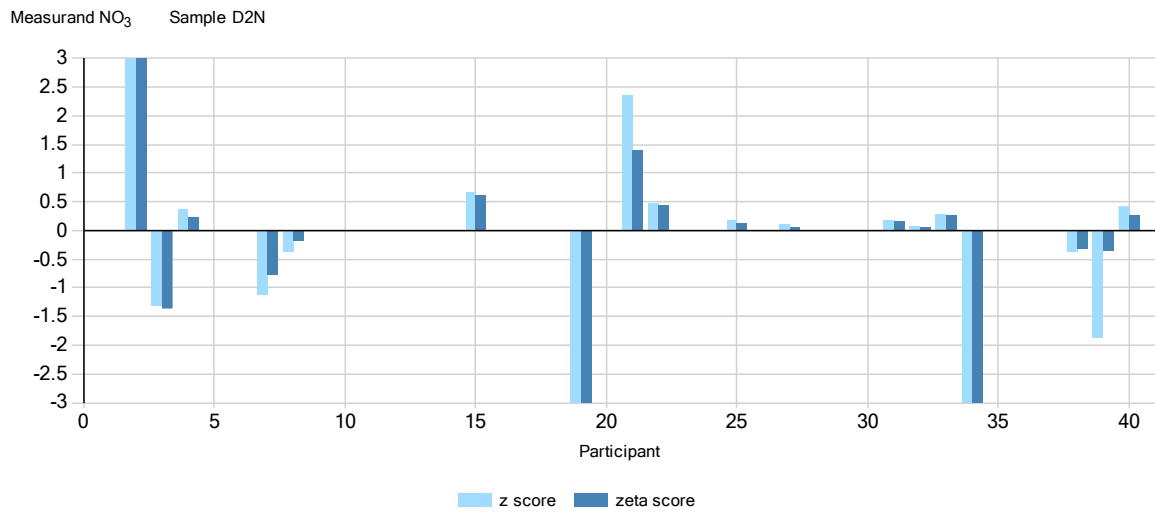
NO₃, A1N, mg/l



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
4.24	1.8	10.0

Participant	Mean $U_i \%$	z	$zeta$
2	5.76	12.0	7.17
3	4.07	10.0	-0.80
4	4.24	15.0	0.00
7	3.96	15.0	-1.32
8	4.13	20.0	-0.52
13	4.19	7.0	-0.24
15	4.29	10.0	0.24
19	0.94	11.0	-15.59
21	4.48	15.0	1.13
22	4.40	10.0	0.75
25	4.32	15.0	0.38
27	4.27	15.0	0.14
31	4.20	12.0	-0.19
32	4.16	11.0	-0.38
33	4.21	10.0	-0.14
34	4.12	7.0	-0.57
37	4.20	35.0	-0.19
38	3.91	12.0	-1.56
39	4.34	40.0	0.47
40	4.29	15.0	0.24

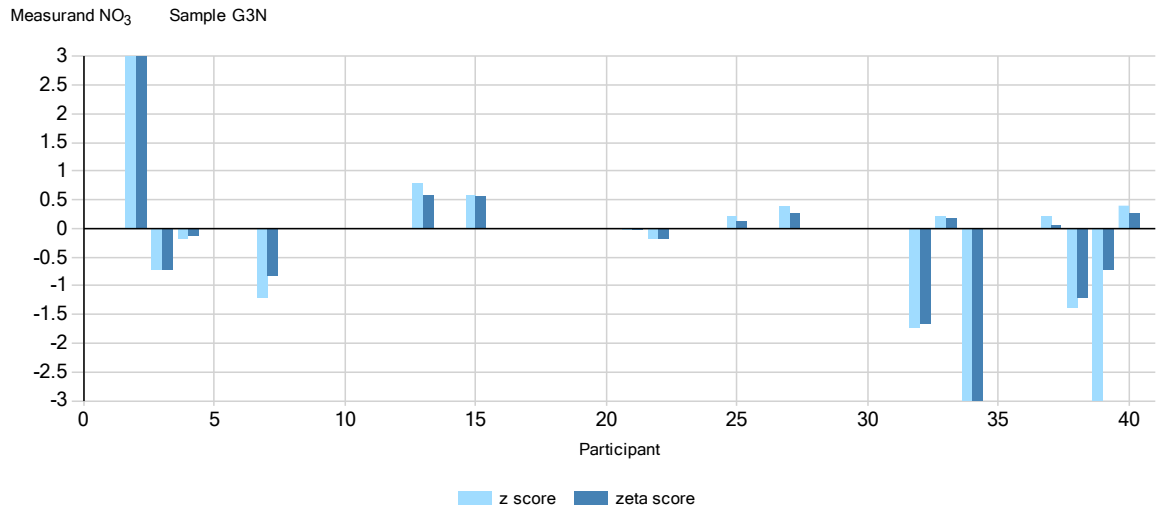
NO₃, D2N, mg/l



Assigned value U _{pl} % 2 x s _{pl} %		
2.15	2.3	10.0

Participant	Mean U _i %	z	zeta
2	2.88	12.0	6.79
3	2.01	10.0	-1.30
4	2.19	15.0	0.37
7	2.03	15.0	-1.12
8	2.11	20.0	-0.37
15	2.22	10.0	0.65
19	0.49	11.0	-15.43
21	2.41	15.0	2.37
22	2.20	10.0	0.47
25	2.17	15.0	0.19
27	2.16	15.0	0.09
31	2.17	12.0	0.19
32	2.16	11.0	0.07
33	2.18	10.0	0.28
34	1.63	7.0	-8.36
37	2.15	35.0	0.00
38	2.11	12.0	-0.37
39	1.95	60.0	-1.86
40	2.20	15.0	0.42

NO₃, G3N, mg/l

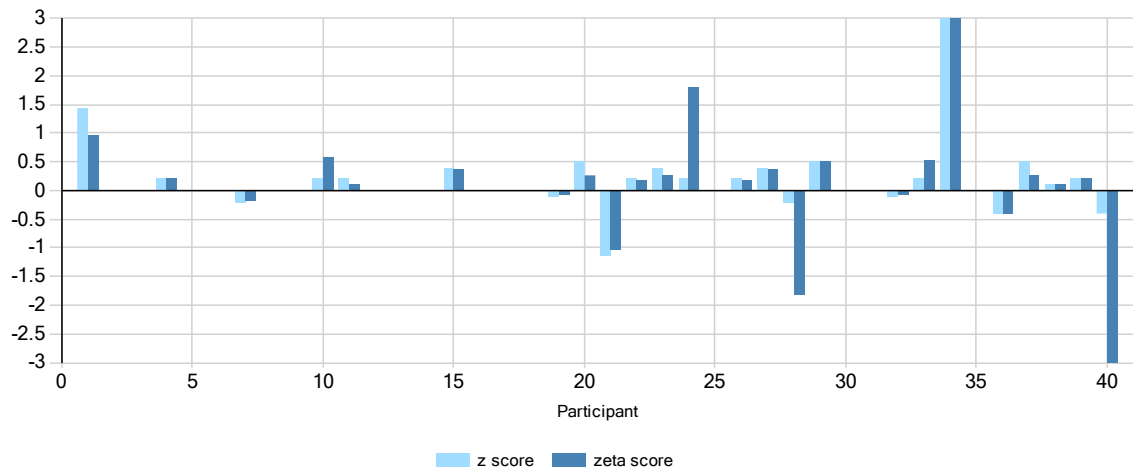


Assigned value U _{pl} % 2 x s _{pl} %		
1.01	2.7	10.0

Participant	Mean U _i %	z	zeta	
2	1.33	12.0	6.34	3.95
3	0.97	10.0	-0.73	-0.73
4	1.00	15.0	-0.20	-0.13
7	0.95	15.0	-1.19	-0.83
8	1.01	20.0	0.00	0.00
13	1.05	13.0	0.79	0.57
15	1.04	10.0	0.59	0.56
21	1.01	15.0	-0.02	-0.01
22	1.00	10.0	-0.20	-0.19
25	1.02	15.0	0.20	0.13
27	1.03	15.0	0.40	0.25
31	1.01	12.0	0.00	0.00
32	0.92	11.0	-1.72	-1.66
33	1.02	10.0	0.20	0.19
34	0.67	7.0	-6.73	-12.53
37	1.02	35.0	0.20	0.06
38	0.94	12.0	-1.39	-1.21
39	0.83	60.0	-3.56	-0.72
40	1.03	15.0	0.40	0.25

pH, A1P

Measurand pH Sample A1P

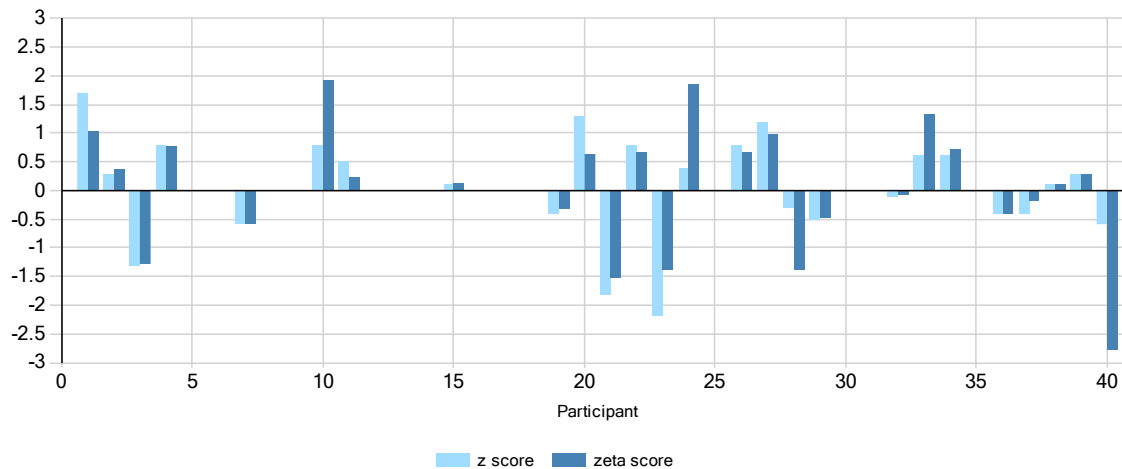


Assigned value $U_{pt} \% 2 \times s_{pt} \%$		
7.28	0.2	2.7

Participant	Mean $U_i \%$	z	zeta
1	7.42	4.0	1.42
2	7.28	2.0	0.00
3	7.28	2.7	0.00
4	7.30	2.7	0.20
7	7.26	2.8	-0.20
10	7.30	0.9	0.59
11	7.30	5.0	0.11
15	7.32	3.0	0.41
19	7.27	3.0	-0.10
20	7.33	5.0	0.51
21	7.17	3.0	-1.14
22	7.30	3.0	0.20
23	7.32	4.0	0.41
24	7.30	0.2	1.80
26	7.30	3.0	0.20
27	7.32	3.0	0.41
28	7.26	0.2	-1.80
29	7.33	2.7	0.51
32	7.27	3.0	-0.10
33	7.30	1.0	0.20
34	8.25	2.0	9.87
36	7.24	2.8	-0.41
37	7.33	5.0	0.51
38	7.29	2.7	0.10
39	7.30	2.7	0.20
40	7.24	0.2	-3.61

pH, D2PJ

Measurand pH Sample D2PJ

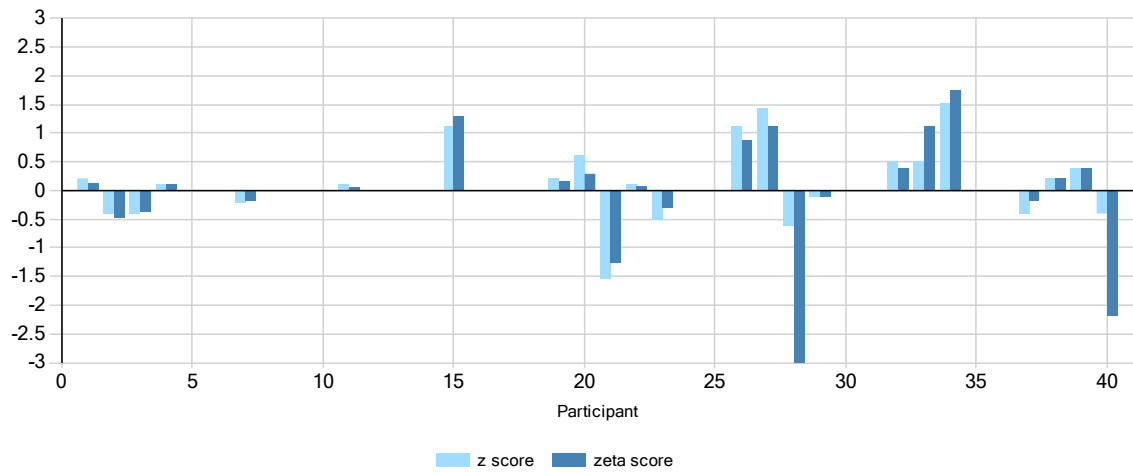


Assigned value $U_{pt} \% 2 \times s_{pt} \%$		
8.02	0.5	2.5

Participant	Mean $U_i \%$	z	zeta	
1	8.19	4.0	1.70	1.03
2	8.05	2.0	0.30	0.36
3	7.89	2.5	-1.30	-1.29
4	8.10	2.5	0.80	0.78
7	7.96	2.5	-0.60	-0.59
10	8.10	0.9	0.80	1.92
11	8.07	5.0	0.50	0.25
15	8.03	2.0	0.10	0.12
19	7.98	3.0	-0.40	-0.33
20	8.15	5.0	1.30	0.63
21	7.84	3.0	-1.81	-1.52
22	8.10	3.0	0.80	0.65
23	7.80	4.0	-2.19	-1.40
24	8.06	0.2	0.40	1.85
26	8.10	3.0	0.80	0.65
27	8.14	3.0	1.20	0.97
28	7.99	0.2	-0.30	-1.39
29	7.97	2.5	-0.50	-0.49
32	8.01	3.0	-0.10	-0.08
33	8.08	1.0	0.60	1.33
34	8.08	2.0	0.60	0.72
36	7.98	2.5	-0.40	-0.39
37	7.98	5.0	-0.40	-0.20
38	8.03	2.5	0.10	0.10
39	8.05	2.5	0.30	0.29
40	7.96	0.2	-0.60	-2.78

pH, G3PJ

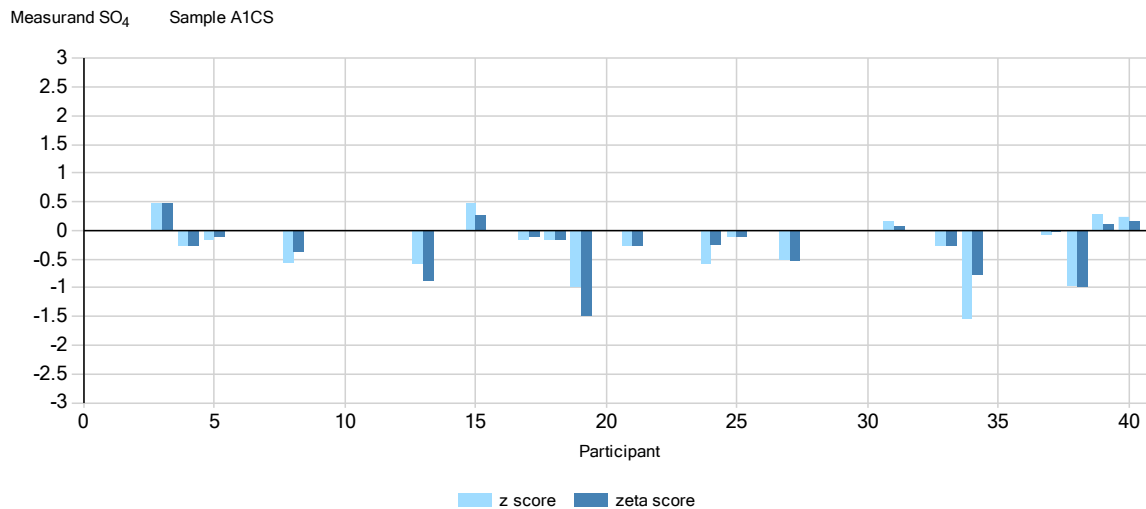
Measurand pH Sample G3PJ



Assigned value $U_{pt} \% 2 \times s_{pt} \%$		
8.19	0.4	2.4

Participant	Mean $U_i \%$	z	zeta
1	8.21	4.0	0.12
2	8.15	2.0	-0.41
3	8.15	2.5	-0.41
4	8.20	2.4	0.10
7	8.17	2.5	-0.20
11	8.20	5.0	0.10
15	8.30	2.0	1.12
19	8.21	3.0	0.20
20	8.25	5.0	0.61
21	8.04	3.0	-1.56
22	8.20	3.0	0.10
23	8.14	4.0	-0.51
26	8.30	3.0	1.12
27	8.33	3.0	1.42
28	8.13	0.2	-0.61
29	8.18	2.4	-0.10
32	8.24	3.0	0.51
33	8.24	1.0	0.51
34	8.34	2.0	1.53
36	8.19	2.4	0.00
37	8.15	5.0	-0.41
38	8.21	2.4	0.20
39	8.23	2.4	0.41
40	8.15	0.2	-0.41

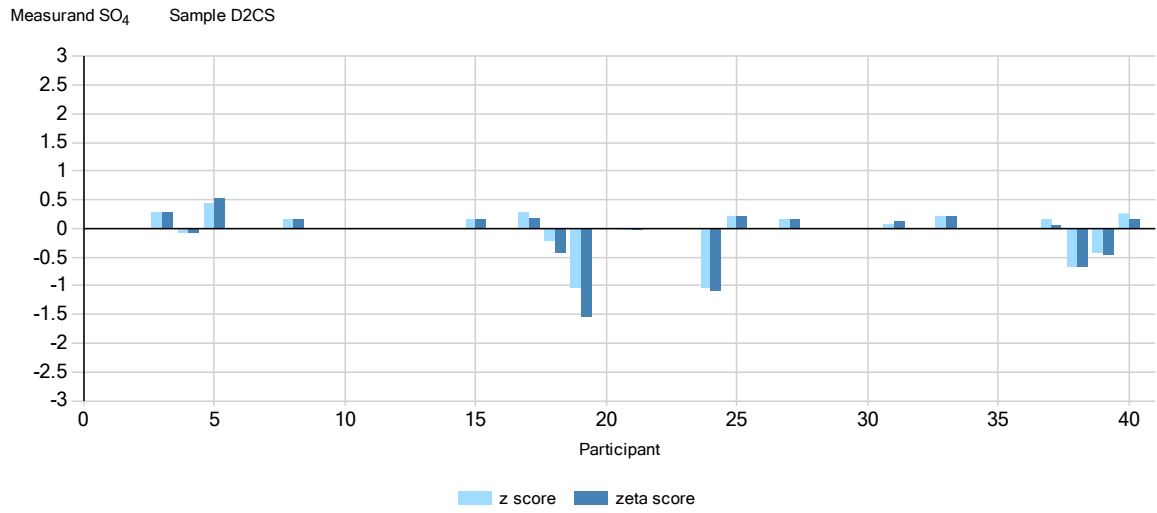
SO₄, A1CS, mg/l



Assigned value U _{pl} % 2 x s _{pl} %		
5.04	0.5	10.0

Participant	Mean U _i %	z	zeta	
3	5.2	10.0	0.48	0.46
4	5.0	10.0	-0.28	-0.28
5	5.0	16.0	-0.16	-0.10
8	4.9	15.0	-0.56	-0.38
13	4.9	7.0	-0.60	-0.87
15	5.2	17.0	0.48	0.27
17	5.0	15.0	-0.16	-0.11
18	5.0	10.0	-0.16	-0.16
19	4.8	7.0	-0.99	-1.49
21	5.0	10.0	-0.27	-0.28
24	4.9	25.0	-0.60	-0.25
25	5.0	10.0	-0.12	-0.12
27	4.9	10.0	-0.52	-0.53
31	5.1	18.0	0.16	0.09
33	5.0	10.0	-0.28	-0.28
34	4.7	22.0	-1.55	-0.76
37	5.0	25.0	-0.08	-0.03
38	4.8	10.0	-0.95	-1.00
39	5.1	29.0	0.28	0.09
40	5.1	15.0	0.24	0.16

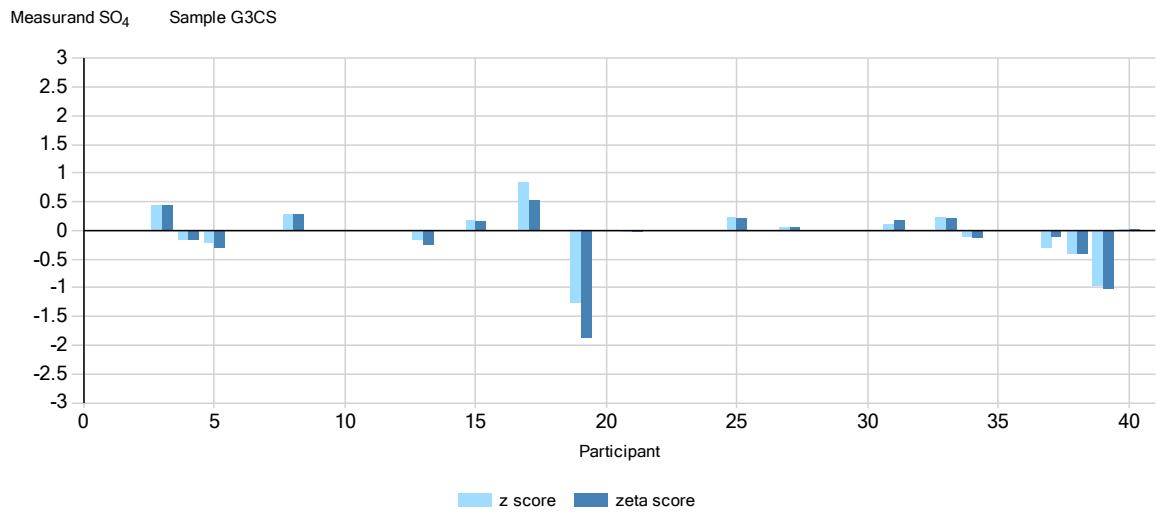
SO₄, D2CS, mg/l



Assigned value U _{pl} % 2 x s _{pl} %		
27.2	0.9	10.0

Participant	Mean U _i %	z	zeta	
3	27.6	10.0	0.29	0.29
4	27.1	10.0	-0.07	-0.07
5	27.8	8.0	0.44	0.54
8	27.4	10.0	0.15	0.15
15	27.4	10.0	0.15	0.15
17	27.6	15.0	0.29	0.19
18	26.9	5.0	-0.22	-0.44
19	25.8	7.0	-1.03	-1.54
21	27.2	10.0	-0.01	-0.01
24	25.8	10.0	-1.05	-1.10
25	27.5	10.0	0.22	0.22
27	27.4	10.0	0.15	0.15
31	27.3	6.0	0.07	0.12
33	27.5	10.0	0.22	0.22
34	27.2	8.0	0.00	0.00
37	27.4	25.0	0.15	0.06
38	26.3	10.0	-0.66	-0.68
39	26.6	10.0	-0.44	-0.45
40	27.5	15.0	0.25	0.16

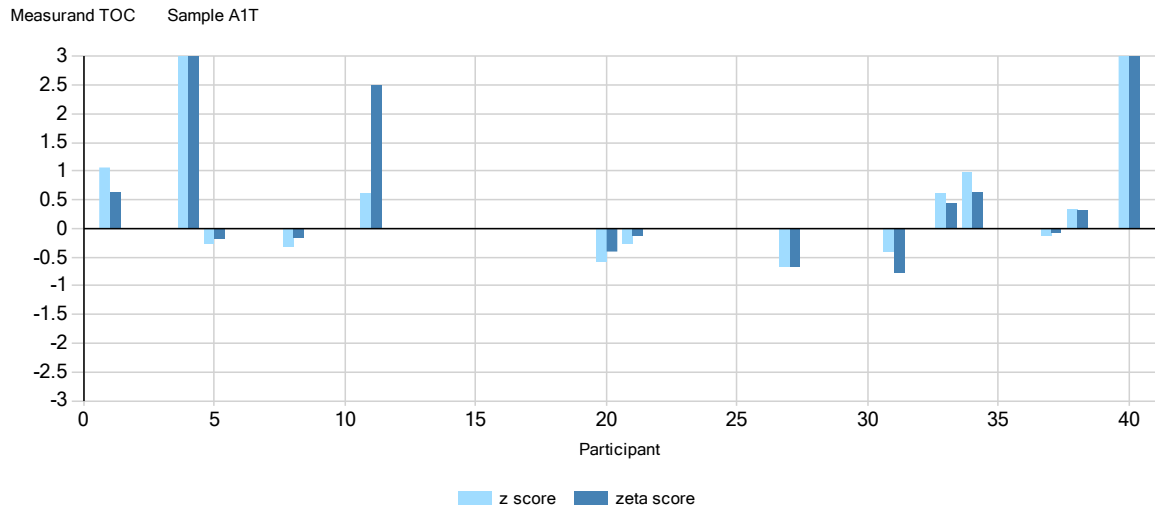
SO₄, G3CS, mg/l



Assigned value U _{pl} % 2 x s _{pl} %		
35.3	1.1	10.0

Participant	Mean U _i %	z	zeta
3	36.1	10.0	0.45 0.44
4	35.0	10.0	-0.17 -0.17
5	34.9	8.0	-0.23 -0.28
8	35.8	10.0	0.28 0.28
13	35.0	7.0	-0.17 -0.24
15	35.6	10.0	0.17 0.17
17	36.8	15.0	0.85 0.54
19	33.1	7.0	-1.25 -1.87
21	35.3	10.0	-0.03 -0.03
25	35.7	10.0	0.23 0.22
27	35.4	10.0	0.06 0.06
31	35.5	6.0	0.11 0.18
33	35.7	10.0	0.23 0.22
34	35.1	8.0	-0.11 -0.14
37	34.8	25.0	-0.28 -0.11
38	34.6	10.0	-0.40 -0.40
39	33.6	10.0	-0.96 -1.01
40	35.4	15.0	0.03 0.02

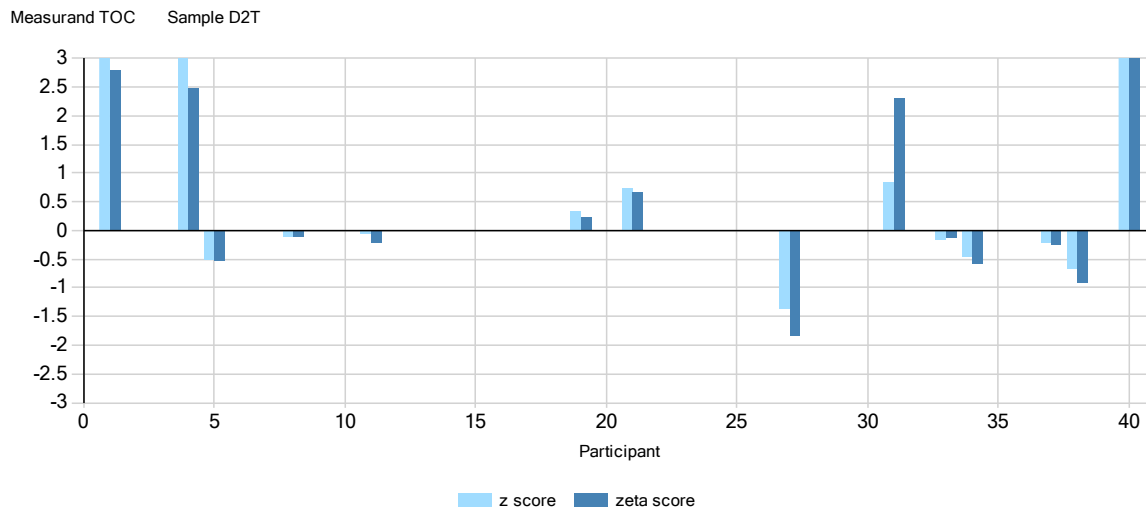
TOC, A1T, mg/l



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
3.02	1.2	10.0

Participant	Mean $U_i \%$	z	zeta
1	3.18	16.0	1.06 0.63
4	5.47	20.0	16.23 4.48
5	2.98	15.0	-0.26 -0.18
8	2.97	20.0	-0.33 -0.17
11	3.11	2.0	0.60 2.50
19	3.02	17.0	0.00 0.00
20	2.93	15.0	-0.60 -0.41
21	2.98	20.0	-0.26 -0.13
27	2.92	10.0	-0.66 -0.68
31	2.96	5.0	-0.40 -0.79
33	3.11	13.0	0.60 0.44
34	3.17	15.0	0.99 0.63
37	3.00	18.0	-0.13 -0.07
38	3.07	10.0	0.33 0.32
40	33.93	30.0	204.70 6.07

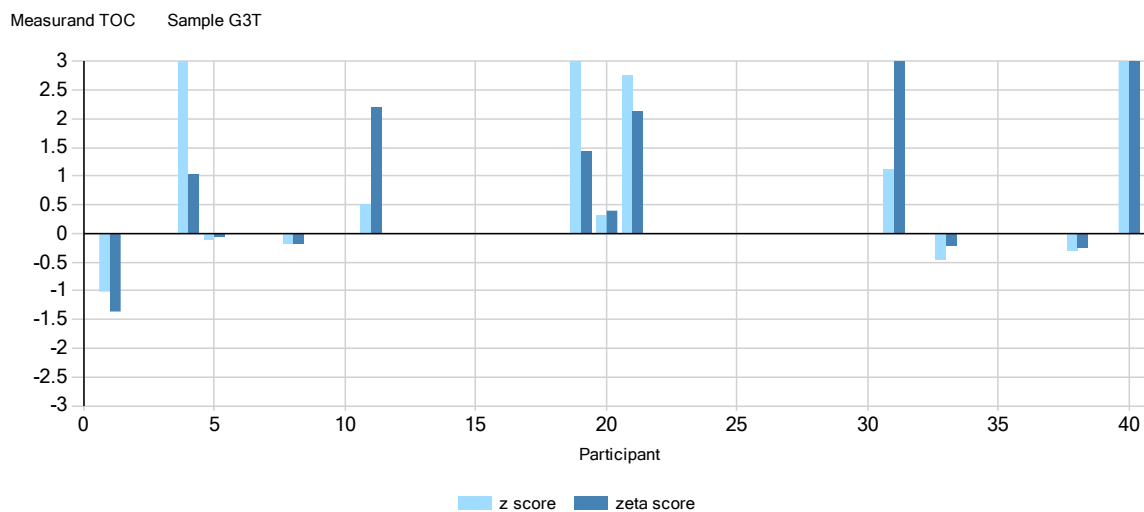
TOC, D2T, mg/l



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
1.77	4.9	20.0

Participant	Mean $U_i \%$	z	$zeta$
1	2.30	16.0	2.99 2.80
4	3.00	33.0	6.95 2.48
5	1.68	19.0	-0.51 -0.54
8	1.75	20.0	-0.11 -0.11
11	1.76	2.0	-0.06 -0.21
19	1.83	27.0	0.33 0.24
20	1.77	15.0	0.00 0.00
21	1.90	20.0	0.74 0.67
27	1.53	16.0	-1.36 -1.85
31	1.92	5.0	0.85 2.32
33	1.74	23.0	-0.17 -0.15
34	1.69	15.0	-0.45 -0.60
37	1.73	18.0	-0.23 -0.25
38	1.65	15.0	-0.68 -0.92
40	19.55	30.0	100.45 6.06

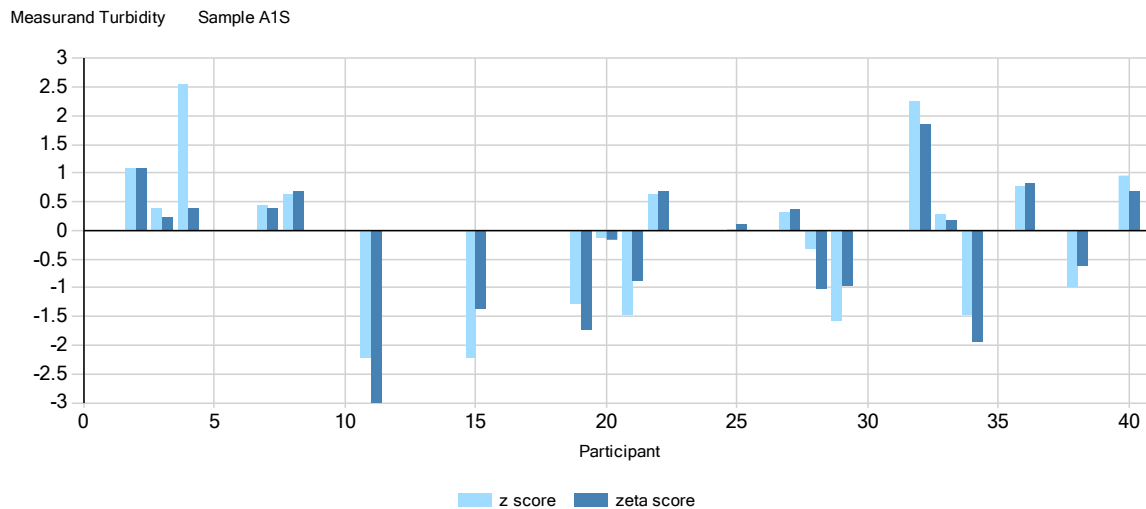
TOC, G3T, mg/l



Assigned value $U_{pt} \% 2 \times s_{pt} \%$		
0.98	4.1	20.0

Participant	Mean	$U_i \%$	z	zeta
1	0.88	16.0	-1.02	-1.37
4	1.50	67.0	5.31	1.03
5	0.97	31.0	-0.10	-0.07
8	0.96	20.0	-0.18	-0.18
11	1.03	2.0	0.51	2.21
19	1.34	37.0	3.63	1.44
20	1.01	15.0	0.31	0.38
21	1.25	20.0	2.76	2.13
31	1.09	5.0	1.12	3.25
33	0.94	43.0	-0.45	-0.22
34	0.98	15.0	0.00	0.00
38	0.95	26.0	-0.31	-0.24
40	10.87	30.0	100.92	6.07

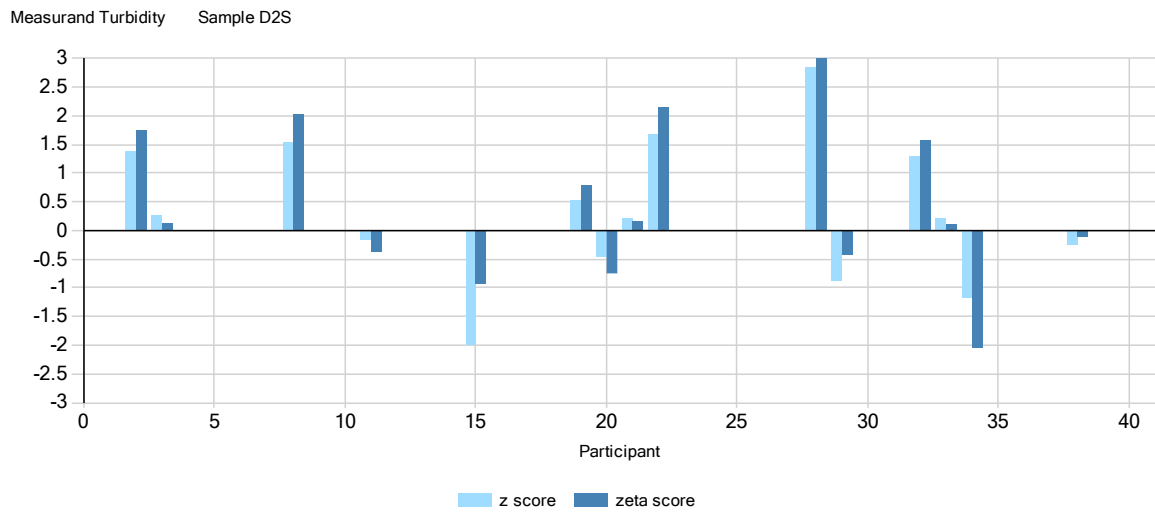
Turbidity, A1S, FNU



Assigned value $U_{pt} \% 2 \times s_{pt} \%$		
0.25	7.9	25.0

Participant	Mean	$U_i \%$	z	zeta
2	0.28	21.0	1.09	1.08
3	0.26	38.0	0.38	0.24
4	0.33	120.0	2.56	0.40
7	0.26	25.0	0.45	0.41
8	0.27	20.0	0.64	0.70
11	0.18	8.0	-2.21	-5.64
15	0.18	55.0	-2.21	-1.36
19	0.21	20.0	-1.28	-1.72
20	0.25	20.0	-0.13	-0.15
21	0.20	50.0	-1.47	-0.89
22	0.27	20.0	0.64	0.70
25	0.25	0.1	0.03	0.10
26	0.25	17.0	0.00	0.00
27	0.26	20.0	0.32	0.36
28	0.24	0.1	-0.32	-1.01
29	0.20	50.0	-1.57	-0.96
32	0.32	23.0	2.27	1.86
33	0.26	39.0	0.29	0.17
34	0.20	21.0	-1.47	-1.95
36	0.27	20.0	0.77	0.82
38	0.22	46.0	-0.99	-0.60
40	0.28	30.0	0.96	0.70

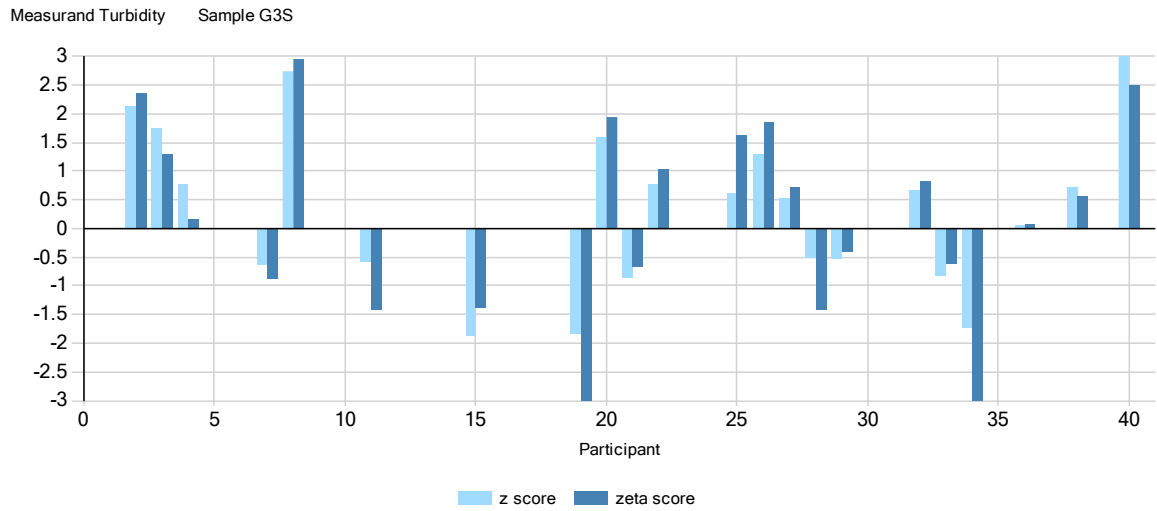
Turbidity, D2S, FNU



Assigned value $U_{pl} \% 2 \times s_{pl} \%$		
0.12	16.0	40.0

Participant	Mean	$U_i \%$	z	zeta
2	0.15	21.0	1.38	1.76
3	0.13	79.0	0.25	0.12
8	0.16	20.0	1.54	2.01
11	0.12	8.0	-0.17	-0.38
15	0.07	140.0	-2.00	-0.94
19	0.13	20.0	0.54	0.79
20	0.11	20.0	-0.46	-0.76
21	0.13	50.0	0.21	0.15
22	0.16	20.0	1.67	2.14
28	0.19	0.1	2.83	7.08
29	0.10	100.0	-0.88	-0.42
32	0.15	23.0	1.29	1.56
33	0.13	80.0	0.21	0.10
34	0.09	21.0	-1.17	-2.06
38	0.11	88.0	-0.25	-0.12

Turbidity, G3S, FNU



Assigned value $U_{pt} \% 2 \times s_{pt} \%$		
0.22	12.9	35.0

Participant	Mean	$U_i \%$	z	zeta
2	0.30	21.0	2.13	2.36
3	0.29	35.0	1.77	1.30
4	0.25	160.0	0.78	0.15
7	0.20	25.0	-0.65	-0.89
8	0.33	20.0	2.73	2.96
11	0.20	8.0	-0.60	-1.42
15	0.15	68.0	-1.87	-1.38
19	0.15	20.0	-1.84	-3.45
20	0.28	20.0	1.58	1.94
21	0.19	50.0	-0.86	-0.68
22	0.25	20.0	0.78	1.04
25	0.24	0.1	0.60	1.62
26	0.27	17.0	1.30	1.85
27	0.24	20.0	0.52	0.72
28	0.20	0.1	-0.52	-1.41
29	0.20	50.0	-0.55	-0.41
32	0.25	23.0	0.68	0.82
33	0.19	53.0	-0.83	-0.62
34	0.15	21.0	-1.74	-3.13
36	0.22	20.0	0.05	0.08
38	0.25	40.0	0.73	0.54
40	0.36	30.0	3.64	2.51