

DIN ISO 5667-14:2013-09 (E)

Water quality - Sampling - Part 14: Guidance on quality assurance of environmental water sampling and handling (ISO 5667 -14:1998)

Contents		Page
National foreword		3
National Annex NA (informative) Bibliography		5
Introduction		6
1	Scope	7
2	Normative references	7
3	Definitions	7
4	Sources of sampling error	10
5	Sampling quality control techniques	11
5.1	General	11
5.2	Replicate quality control samples	11
5.3	Field blank samples	13
5.4	Rinsing of equipment (sampling containers)	14
5.5	Filtration recovery	15
5.6	Spiked samples	16
6	Transport, stabilization and storage of samples	18
7	Analysis and interpretation of quality control data	19
7.1	Shewhart control charts	19
7.2	Construction of duplicate control charts	19
8	Sample identification and records	19
Annex A (informative) Control charts		20
A.1	Example of a control chart for duplicate data (Figure A.1)	20
A.2	Example of a control chart for recovery (Figure A.2)	21
Annex B (informative) Bibliography		24
Figures Figure 1 -- Relationship between different sampling variances		12
Figure 2 -- Field blank samples using deionized water		13
Figure 3 -- Rinsing using deionized water blank		14
Figure 4 -- Filtering of deionized water blank		15
Figure 5 -- Filtering of spiked quality assurance sample		16
Figure 6 -- Spiked deionized water samples		17
Figure 7 -- Spiked environmental samples		17

Figure A.1 -- Shewhart chart for duplicate control samples	20
Figure A.2 -- Shewhart control chart for recovery	23
Tables Table 1 -- Analytical variance	12
Table 2 -- Analytical + subsampling/transport variance	13
Table A.1 -- Suspended solids data for quality control duplicate samples	21
Table A.2 -- Data from spiking recovery test	22