

ISO 11352:2012-07 (E)

Water quality - Estimation of measurement uncertainty based on validation and quality control data

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols	4
5	Principle	5
6	Procedure	5
7	Preparative considerations for the estimation of measurement uncertainty	6
7.1	Specification of the measurement	6
7.2	Specification of the parametric form in which the measurement uncertainty is reported	6
8	Evaluation of available precision and bias data	7
8.1	Approach and criteria	7
8.2	Within-laboratory reproducibility	8
8.3	Method and laboratory bias	10
9	Calculation of the combined standard uncertainty	14
10	Calculation of the expanded uncertainty	15
11	Estimation of measurement uncertainty from reproducibility standard deviation	15
12	Report	15
Annex A (normative) Estimation of the standard uncertainty from range control charts		16
Annex B (informative) Examples of the estimation of measurement uncertainty		17
Bibliography		26