


# Schedule of Accreditation

issued by

## United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

 <p><b>UKAS</b> CALIBRATION</p> <p>4301</p> <p>Accredited to ISO/IEC 17025:2017</p>	<p><b>Cardiff and Vale University Health Board, operating as WEQAS</b></p> <p>Issue No: 007 Issue date: 11 November 2021</p>	
	<p><b>Unit 6</b> Parc Ty Glas Llanishen Cardiff United Kingdom CF14 5DU</p>	<p><b>Contact: Mr D Ducroq</b> Tel: +44 (0)29 20 314750 Fax: +44 (0)29 20 314760 E-Mail: office@weqas.com David.Ducroq@wales.nhs.uk Website: www.weqas.com</p>
<p><b>Calibration performed at the above address only</b></p>		

### Calibration and Measurement Capability (CMC)

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ( $k = 2$ )	Remarks
<p><b>Provision of Laboratory Medicine Reference Measurements Services in accordance with the requirements of ISO 15195:2018</b></p> <p><b>HUMAN BODY FLUIDS</b> Clinical analysis</p> <p><b>Electrolytes in blood serum:</b></p> <p>Calcium</p> <p>Lithium</p> <p>Magnesium</p> <p>Potassium</p> <p>Sodium</p> <p><b>Enzymes in blood serum:</b></p> <p>Lactate dehydrogenase</p> <p>Gamma Glutamyl Transferase</p> <p><b>Enzymes in blood serum or plasma:</b></p> <p>Aspartate Aminotransferase</p> <p>Alanine Aminotransferase</p>	<p>1.6-4 mmol/L</p> <p>0.2-2 mmol/l</p> <p>0.4-2 mmol/l</p> <p>1.8-7.5 mmol/l</p> <p>105-160 mmol/l</p> <p>100-500 IU/L</p> <p>20-400 IU/L</p> <p>5-600 IU/L</p> <p>5-300 IU/L</p>	<p>2.0 %</p> <p>2.7 %</p> <p>1.34 %</p> <p>1.39 %</p> <p>1.14 %</p> <p>2.4 %</p> <p>2.4 %</p> <p>2.5 %</p> <p>2.75 %</p>	<p>Documented In-House Methods in accordance to JCTLM requirements. The JCTLM reference method are included in parenthesis</p> <p>using Flame Atomic Absorption Spectrometry (FAAS) (NRMeth 20)</p> <p>using FAAS (C1RMP_EI1)</p> <p>using FAAS (C1RMP_EI4)</p> <p>using Flame Atomic Emission Spectrometry (FAES), (NRMeth 25)</p> <p>using FAES (NRMeth 24)</p> <p>using UV-Vis Spectrometry (IFCC 37°C method) (NRMeth 66)</p> <p>using UV-Vis Spectrometry(IFCC 37°C method ) (NRMeth 69)</p> <p>using UV-Vis Spectrometry (IFCC 37°C method) (NRMeth 68)</p> <p>using UV-Vis Spectrometry (IFCC 37°C method) (NRMeth 67)</p>



4301

Accredited to  
ISO/IEC 17025:2017

## Schedule of Accreditation

issued by

### United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

### Cardiff and Vale University Health Board, operating as WEQAS

Issue No: 007 Issue date: 11 November 2021

Calibration performed at main address only

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ( $k = 2$ )	Remarks
<b>HUMAN BODY FLUIDS Clinical analysis (cont'd)</b>			
<b>Hormones in blood serum and urine:</b>			
Cortisol	100-1500 nmol/L	2.44 %	Documented In-House Methods in accordance to JCTLM requirements. The JCTLM reference method are included in parenthesis (cont'd)  using Isotope dilution Gas Chromatography Mass Spectrometry (ID- GCMS ), (NRMeth 8)
Cortisol	25 – 2000 nmol/L	2.13 %	Using isotope dilution liquid chromatography tandem mass spectrometry (LC-MS/MS). Method LP-QL3-LC-MS/MSCORT
<b>Hormones in blood serum:</b>			
Testosterone	1-35 nmol/L	3.1 %	using ID-GCMS (NRMeth 60)
Testosterone	0.5 – 40 nmol/L	2.74 %	Using isotope dilution liquid chromatography tandem mass spectrometry (LC-MS/MS). Method LP-QL3-LC-MS/MSTEST
<b>Metabolites and substrates in blood: serum:</b>			
Cholesterol	1-10 mmol/l	2.2 %	using ID-GCMS (NRMeth 2)
Creatinine	25-600 µmol/l	1.24 %	using ID-GCMS (NRMeth 1)
Glucose	1-25 mmol/L	1.72 %	using ID-GCMS (NRMeth 4)
Uric acid	0.1-1.2 mmol/L	1.7 %	using ID-GCMS (NRMeth 3)
Triglyceride	0.6-8 mmol/L	1.9 %	using ID-GCM (NRMeth 5)
END			



4301

Accredited to  
ISO/IEC 17025:2017

## Schedule of Accreditation

issued by

**United Kingdom Accreditation Service**

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

**Cardiff and Vale University Health Board, operating as WEQAS**

**Issue No: 007 Issue date: 11 November 2021**

Calibration performed at main address only

### Appendix - Calibration and Measurement Capabilities

#### Introduction

The definitive statement of the accreditation status of a calibration laboratory is the Accreditation Certificate and the associated Schedule of Accreditation. This Schedule of Accreditation is a critical document, as it defines the measurement capabilities, ranges and boundaries of the calibration activities for which the organisation holds accreditation.

#### Calibration and Measurement Capabilities (CMCs)

The capabilities provided by accredited calibration laboratories are described by the Calibration and Measurement Capability (CMC), which expresses the lowest measurement uncertainty that can be achieved during a calibration. If a particular device under calibration itself contributes significantly to the uncertainty (for example, if it has limited resolution or exhibits significant non-repeatability) then the uncertainty quoted on a calibration certificate will be increased to account for such factors.

The CMC is normally used to describe the uncertainty that appears in an accredited calibration laboratory's schedule of accreditation and is the uncertainty for which the laboratory has been accredited using the procedure that was the subject of assessment. The measurement uncertainty is calculated according to the procedures given in the GUM and is normally stated as an expanded uncertainty at a coverage probability of 95 %, which usually requires the use of a coverage factor of  $k = 2$ . An accredited laboratory is not permitted to quote an uncertainty that is smaller than the published measurement uncertainty in certificates issued under its accreditation.

#### Expression of CMCs - symbols and units

It should be noted that the percentage symbol (%) represents the number 0.01. In cases where the measurement uncertainty is stated as a percentage, this is to be interpreted as meaning percentage of the measurand. Thus, for example, a measurement uncertainty of 1.5 % means  $1.5 \times 0.01 \times q$ , where  $q$  is the quantity value.

The notation  $Q[a, b]$  stands for the root-sum-square of the terms between brackets:  $Q[a, b] = [a^2 + b^2]^{1/2}$