

NationWide Laboratories is proud of it's commitment to laboratory quality

When you buy any product or service, it is always good to know that you are getting what you pay for and that the supplier cares about ensuring you have a high quality product.

At the turn of the 14th century, when base metals were being passed off as silver or other precious metal, a system of hallmarking was introduced to provide consumer protection. Over the centuries, consumer protection afforded by hallmarking precious metals has been adapted and applied in different ways to all kinds of consumer products and services.

Today's equivalent of a hallmark for laboratory testing services is an international standard, called ISO/IEC17025, awarded by national accreditation bodies around the world.

As a laboratory run by veterinary professionals, our ultimate concern is that the life and death decisions concerning animals are made on the basis of the most reliable laboratory results. NationWide Laboratories knows that it cares deeply about quality and about making sure our customers get the high quality results that they are paying for and should expect. The question is; how do we demonstrate our quality commitment to our customers without putting them to the trouble of hiring their own experts to come and inspect us? The best way is to be independently accredited by UKAS to the ISO/IEC17025 standard

In the UK, the accreditation body for ISO/IEC17025 is the United Kingdom Accreditation Service (UKAS; www.ukas.com). UKAS is a non-profit-distributing company, limited by guarantee, that operates under a Memorandum of Understanding with the Government through the Secretary of State for Trade and Industry.

UKAS employs laboratory professionals to annually inspect quality systems and facilities they have accredited to the ISO/IEC17025 standard.

NationWide Laboratories Poulton was the first commercial veterinary laboratory in the UK to be accredited to ISO/IEC17025 and although several laboratories have followed there remain unaccredited veterinary laboratories operating in the UK.

The OIE publication *Quality Standard and Guidelines for Veterinary Laboratories* is based on the same ISO/IEC 17025 standard. It clearly states that laboratories must use appropriate test methods and related procedures for their tests to be of any relevance. In other words, the assay must be fit for purpose.

What UKAS says

“Accreditation by UKAS means that laboratories have been assessed against internationally recognised standards to demonstrate their competence, impartiality and performance capability.

It is the ability to identify a proven, competent laboratory that ensures that the selection of a veterinary laboratory is an informed choice and not a gamble. UKAS accreditation means the veterinary laboratory can show to its customer that it has been successful at meeting the requirements of international accreditation standards.

This means that by choosing a UKAS accredited laboratory, the customer reduces the risk of selecting an incompetent laboratory and paying for, or more seriously acting upon, invalid results.”

What is the ISO17025 Standard

ISO/IEC 17025 is the international standard that covers the general requirements for the competence of testing and calibration laboratories. The standard provides defined requirements which must be met by the laboratory's quality management system. The effect of compliance to ISO/IEC 17025 by a laboratory can be summed up as providing assurance to the customer that:-

- Test work will be conducted using valid, recognised, technical methods suitable for the purpose required and of established performance characteristics.
- The work will be carried out by properly qualified and trained staff.
- The work will be carried out on equipment which is functioning properly and which is calibrated so as to provide traceability to international standards of measurement.
- Data will be subject to quality control, both from the point of view of accuracy and precision, by means which have been approved by independent technical assessors.

Why is it different from other quality systems and quality claims?

The only independent accreditation system relevant to veterinary diagnostic laboratory testing in the UK is ISO17025 administered by UKAS. However, some veterinary laboratories make claims about their quality that are not supported by an ISO 17025 accreditation, so what is the difference?

It may be that they have an accreditation to a quality standard but not one relevant to laboratory testing. An example of such a standard is ISO9001. This is an international management systems standard that is widely used in manufacturing and service organisations from cheese makers to car makers and even city councils and soccer teams. It is a necessarily generic standard and because it does not contain specific elements relating to laboratory testing, it is simply not a suitable tool for evaluating the technical competence of a testing laboratory. Within it, there are no requirements to ensure that the method used is technically valid, designed to meet the customer's needs, or has suitable controls in place. Conformity to ISO9001 does

not of itself demonstrate the competence of the laboratory to produce technically valid data and results¹. Accreditation to ISO/IEC 17025, means that the laboratories are inspected by laboratory experts who know what they are looking for rather than generic auditors.

Some laboratories have no independently inspected quality management system at all but instead they may only state that they participate in an external proficiency testing scheme (e.g. RIQAS, NEQAS, WEQAS etc.). Whilst commendable, and something that all responsible laboratories do, such participation is not the same as a functional quality system and not evidence of independent assessment of laboratory capabilities. Such schemes provide test materials and reports, they do not inspect facilities, nor ensure that appropriate action is taken when incorrect test results are obtained.

For full details of NationWide Laboratories test accreditation status please visit www.nwlabs.co.uk/ukas.

¹ BS EN ISO/IEC 17025:2005 General Requirements for the competence of testing and calibration laboratories (Introduction Page vi)