

# VERA Abbreviations



Abbreviations from all VERA test protocols

Abbreviation	Definition
<b>a</b>	Annus, Latin for year
<b>A</b>	Animal
<b>AP</b>	animal place
<b>C</b>	Carbon
<b>CF</b>	Crude fibre
<b>CH<sub>4</sub></b>	Methane
<b>CIGR</b>	International Commission of Agricultural and Biosystems Engineering
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>COD</b>	Chemical oxygen demand
<b>CP</b>	Crude protein
<b>DM</b>	Dry matter
<b>FPCM</b>	fat and protein corrected milk
<b>FTIR</b>	Fourier transform infrared spectroscopy
<b>GC</b>	Gas chromatography
<b>GC-ECD</b>	Gas chromatography – electron capture detector
<b>GC-FID</b>	Gas chromatography - flame ionisation detector
<b>GC-HWD</b>	Gas chromatography - hot wire detector
<b>GC-TCD</b>	Gas chromatography - thermoconductivity detector
<b>GHG</b>	Greenhouse gases
<b>GLP</b>	Good Laboratory Practice
<b>IVB</b>	International VERA Board
<b>IVC</b>	International VERA Committee
<b>K</b>	Potassium
<b>LU</b>	Livestock unit
<b>ME</b>	Metabolic energy
<b>N</b>	Nitrogen
<b>N<sub>2</sub>O</b>	Nitrous oxide
<b>NDIR</b>	Non dispersive infrared sensor
<b>NH<sub>3</sub></b>	Ammonia
<b>NO<sub>x</sub></b>	Refers to NO (nitric oxide) and NO <sub>2</sub> (nitrogen dioxide)
<b>OU<sub>E</sub></b>	European odour units
<b>P</b>	Phosphorus
<b>PM</b>	Particulate matter
<b>PO<sub>4</sub><sup>3-</sup></b>	Phosphate
<b>ppm</b>	Parts per million
<b>ppmv</b>	Parts per million by volume
<b>TAN</b>	Total ammoniacal nitrogen (TAN=NH <sub>3</sub> +NH <sub>4</sub> <sup>+</sup> )
<b>TDL</b>	Tunable diode laser
<b>TS</b>	Total solids = Total dry matter
<b>VERA</b>	Verification of Environmental Technologies for Agricultural Production
<b>VS</b>	Volatile solids = Organic dry matter