

ACCREDITATION DOCUMENT

F-06/02

Issue Date: 10/08/15

Rev. No: 07 LAB 151

Accreditation No: LAB 151

Awarded to

Soil & Water Testing Laboratory,

For Research, Near Dar-ul-Aman, Dear Ghazi Khan, **Pakistan.**

The scope of accreditation is in accordance with the standard specifications outlined in the following page(s) of this document. The accredited scope shall be visible and legible in areas such as customer service, sample-receiving section etc and shall not mislead its users.

The accreditation was first time granted on **09-07-2018** by Pakistan National Accreditation Council.

The laboratory complies with the requirements of **ISO/IEC 17025:2017.**

The accreditation requires regular surveillance, and is valid until 08-07-2021.

The decision of accreditation made by Pakistan National Accreditation Council implies that the organization has been found to fulfill the requirements for accreditation within the scope.

The organization however, itself is responsible for the results of performed measurements/tests.

PAKISTAN NATIONAL ACCREDITATION COUNCIL

<u>27-02-2020</u>	
Date	Director General



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Testing Laboratory.

Accreditation Scope of **Soil and Water Testing Laboratory**, For Research, Near Dar-ul-Aman, **Dera Ghazi Khan, Pakistan.**

Permanent laboratory premises



Materials/Products tested	Testing field (e.g. environmental testing or mechanical testing)	Types of test/ Properties measured	Reference to standardized method (e.g. ISO 14577- 1:2003)/ Internal method reference
Organic Matter Solid	Fertilizer Testing	Organic matter estimation	Official Methods of Analysis of AOAC International, 18 th Edition, 2005, Current Through Revision, 4, 2011. Method No. 2.7.08 (AOAC Official Method 967.05), Fertilizers Chapter 2, Subchapter 6 Page 54
Organic Matter solid	Fertilizer Testing	Cation exchange capacity estimation	Official Methods of Analysis of AOAC International, 18 th Edition, 2005, Current Through Revision, 4, 2011. Method No. 2.7.13 (AOAC Official Method 973.09), Fertilizers Chapter 2, Subchapter 6 Page 56
Humic acid Liquid and Solids	Fertilizer Testing	Humic acid estimation	International Organization for Standardization. "Fertilizers and Soil Conditioners –Determination of Humic and Hydrophobic Fulvic Acids Concentrations in Fertilizer Materials." ISO 19822, 2018. Geneva, Switzerland.
Phosphate fertilizer solid & Liquid	Fertilizer Testing	Citrate soluble phosphorus estimation	Pakistan standard for Single Super Phosphate (2 nd edition) PS: 67-1996. PSQCA. Karachi
Phosphate fertilizer mixed Liquid & mixed solid	Fertilizer Testing	Total phosphorus estimation	Pakistan standard for Single Super Phosphate (2nd edition) PS: 67- 1996. PSQCA. Karachi

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Potassium Fertilizer Solid, Solid Mixed, Liquid, Liquid Mixed	Fertilizer Testing	Water soluble potassium estimation	SWT-DGK/SOP-MACRO/01 Sr. 8.0 Modified Official Method of Analysis of AOAC International 18th Edition 2005 Method No. 983.02 Chapter 2, p 23.
Nitrogen fertilizers Liquid, Liquid mix, Solid, Solid mix	Fertilizer Testing	Ammonical, nitrate and urical Nitrogen estimation	 i. Tandon HLS (Ed.) 2009. Methods of Analysis of Soils, Plants, Waters, Fertilizer and Organic Manures Fertilizer Development and Consultation Organization, New Delhi. Pp 161-162 ii. Official Methods of Analysis of AOAC International, 18th Edition, 2005, Current through Revision, 4, 2011. Method No. 2.4.10 (AOAC Official Method 892.01), Fertilizers Chapter 2 Page 16
Boron liquid and Solid	Fertilizer Testing	Water soluble boron estimation	Official Methods of Analysis of AOAC International, 18 th Edition, 2005, Current Through Revision, 4, 2011. Method No. 2.6.04 (AOAC Official Method 982.01), Fertilizers Chapter 2, Subchapter 6, Page 28

27-02-2020

Date Director