

Accreditation No: LAB 237

Awarded to

Soil & Water Testing Laboratory Four Brothers Chemicals (Pvt) Limited 2-KM, 21-KM Off Ferozpur Road, West Side Rohinala, Kahna, Lahore, 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 **29.01.2016** 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 27.01.2025.

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

25/01/2023

Date

<u>SD</u> Director General



Testing Laboratory.

Accreditation Scope of Quality Control Laboratory, Four Brothers Chemicals (Pvt) Limited, 2-KM, 21-KM Off Ferozpur Road, West Side Rohinala, Kahna, Lahore, Pakistan

Permanent laboratory premises X

Soil and Water Testing Laboratory Section

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
Total Alkalinity of Water	Chemical Testing	Determination of Alkalinity	4B-STM (S&W)-001 Ref: Method No Mt 18# 18.1.4 CIPAC Vol F
Total hardness of water	Chemical Testing	Determination of Total hardness in water	4B-STM (S&W)-009 Method # MT.18 CIPAC Vol. F
Bicarbonate determination in water sample	Chemical Testing	Determination of Bicarbonate in water sample	4B-STM (S&W)-006 Method No 9.10 Georage Estefan and CO 3 rd Ed. (ICARDA Manual)
Conductivity of water	Chemical Testing	Determination of conductivity of water	4B-STM (S&W)-004 Method No 9.2 Georage Estefan and CO 3 rd Ed. (ICARDA Manual)

25/01/2023 Date <u>Sd</u> Director



ACCREDITATION DOCUMENT

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
Nitrate Nitrogen determination in water	Chemical Testing	Determination of Nitrogen in water	4B-STM (S&W)-008 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 Official Methods of Analysis of AOAC International, 18 th Edition, 2005, Current through Revision, 4, 2011. Method No. 2.4.10 (AOAC Official Method 892.01), Fertilizers Chapter 2 Page 16. (Total Nitrogen)
pH determination in water	Chemical Testing	Determination of pH of Water	4B-STM (S&W)-007 E.George, S.Rolf, and R. John A manual for the West Asia and North Africa region (ICARDA)- Third Edition-Method No. 9.1



			4B-STM (S&W)-010
Determination of Magnesium in water	Chemical Testing	Determination of Magnesium contents in water	Food Safety and standards authority of India (Ministry of Health and family welfare) Government of India New Delhi 2015.Mannual of Methods of Analysis of Foods Water (Fssai)

<u>25/01/2023</u> Date <u>Sd</u> Director