



Ref No. : 0303/3472

CERTIFICATE OF TESTING LABORATORY ACCREDITATION

This is to certify that

*Laboratory of The Center for Scientific and Technological Equipment,
Suranaree University of Technology
111 University Avenue, Tambon Suranaree, Amphoe Mueang,
Changwat Nakhon Ratchasima 30000*

has successfully undergone assessment according to ISO/IEC 17025 : 2017
and under the Bureau of Laboratory Accreditation, Department of Science Service
for the requirements, regulations and criteria for the competence of testing laboratories

Accreditation Number TESTING - 0023

The scope of accreditation is as annexed hereto

Issue date : 7th March 2024

Expired date : 6th March 2028

Signature : *Chantararat Vorasapavit*
(Mrs. Chantararat Vorasapavit)

Director of Bureau of Laboratory Accreditation

Bureau of Laboratory Accreditation, Department of Science Service,
Ministry of Higher Education, Science, Research and Innovation

Scope of Laboratory Accreditation

Laboratory Name : Laboratory of The Center for Scientific and Technological Equipment,
Suranaree University of Technology

Address : 111 University Avenue, Tambon Suranaree, Amphoe Mueang,
Changwat Nakhon Ratchasima 30000

Accreditation Number : Testing - 0023

Laboratory Status : ☒ Permanent ☐ Site ☐ Temporary ☐ Mobile

Item Number	Test Material / Product	Test Item / Range of Testing	Test Method / Technique Used
1	Water	- Total hardness (Calculated as CaCO_3) 5 mg/L to 1 000 mg/L - pH 6.0 to 10.0 - COD 5 mg/L to 500 mg/L	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24 th ed., 2023, part 2340 C In - house method : TE-504-01-08 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24 th ed., 2023, part 4500- H^+ B In - house method : TE-504-01-11 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24 th ed., 2023, part 5220 B

Initial Issue Date 10th July 2008

Issue Number 13

Bureau of Laboratory Accreditation, Department of Science Service, Ministry of Higher Education, Science, Research and Innovation

Scope of Laboratory Accreditation

Laboratory Name : Laboratory of The Center for Scientific and Technological Equipment,
Suranaree University of Technology

Address : 111 University Avenue, Tambon Suranaree, Amphoe Mueang,
Changwat Nakhon Ratchasima 30000

Accreditation Number : Testing - 0023

Laboratory Status : ☒ Permanent ☐ Site ☐ Temporary ☐ Mobile

Item Number	Test Material / Product	Test Item / Range of Testing	Test Method / Technique Used
1 (cont.)	Water	- Arsenic 0.001 mg/L to 0.050 mg/L - Cadmium 0.001 mg/L to 0.050 mg/L - Lead 0.004 mg/L to 0.050 mg/L - Manganese 0.004 mg/L to 0.050 mg/L - Total coliforms MPN/100 mL - <i>E. coli</i> MPN/100 mL - <i>Salmonella</i> spp. Detected or not detected/100 mL	In - house method : TE-504-01-02 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24 th ed., 2023, part 3125 B Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24 th ed., 2023, part 9223 B AOAC Official Methods of Analysis, 22 nd ed., 2023, method 2016.01

Initial Issue Date 10th July 2008

Issue Number 13

Bureau of Laboratory Accreditation, Department of Science Service, Ministry of Higher Education, Science, Research and Innovation

Scope of Laboratory Accreditation

Laboratory Name : Laboratory of The Center for Scientific and Technological Equipment,
Suranaree University of Technology

Address : 111 University Avenue, Tambon Suranaree, Amphoe Mueang,
Changwat Nakhon Ratchasima 30000

Accreditation Number : Testing - 0023

Laboratory Status : ☒ Permanent ☐ Site ☐ Temporary ☐ Mobile

Item Number	Test Material / Product	Test Item / Range of Testing	Test Method / Technique Used
2	Wastewater	- pH 4.0 to 10.0 - COD 50 mg/L to 500 mg/L	In - house method : TE-504-01-08 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24 th ed., 2023, part 4500-H ⁺ B In - house method : TE-504-01-11 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24 th ed., 2023, part 5220 B
3	Concrete - Cube concrete specimens	- Compressive strength Load range 200 kN to 1 800 kN	TIS 409 : 2019 exclude item 2.1, 3.2, 3.3 and 3.4

Initial Issue Date 10th July 2008

Issue Number 13

Bureau of Laboratory Accreditation, Department of Science Service, Ministry of Higher Education, Science, Research and Innovation

Scope of Laboratory Accreditation

Laboratory Name : Laboratory of The Center for Scientific and Technological Equipment,
Suranaree University of Technology

Address : 111 University Avenue, Tambon Suranaree, Amphoe Mueang,
Changwat Nakhon Ratchasima 30000

Accreditation Number : Testing - 0023

Laboratory Status : ☒ Permanent ☐ Site ☐ Temporary ☐ Mobile

Item Number	Test Material / Product	Test item / Range of Testing	Test Method / Technique Used
4	Steel bars for reinforced concrete - Round bars	- Tensile strength - Yield strength - Elongation Load range 40 kN to 220 kN	TIS 20-2016 Refer to TIS 244 part 4-1982
	- Deformed bars	- Tensile strength - Yield strength - Elongation Load range 40 kN to 220 kN	TIS 24-2016 Refer to TIS 244 part 4-1982

Initial Issue Date 10th July 2008

Issue Number 13

Bureau of Laboratory Accreditation, Department of Science Service, Ministry of Higher Education, Science, Research and Innovation

Scope of Laboratory Accreditation

Laboratory Name : Laboratory of The Center for Scientific and Technological Equipment,
Suranaree University of Technology

Address : 111 University Avenue, Tambon Suranaree, Amphoe Mueang,
Changwat Nakhon Ratchasima 30000

Accreditation Number : Testing - 0023

Laboratory Status : ☒ Permanent ☐ Site ☐ Temporary ☐ Mobile

Item Number	Test Material / Product	Test item / Range of Testing	Test Method / Technique Used
5	Aquatic animals and products - Freshwater fish - Freshwater shrimp - Seawater fish - Canned products	- Arsenic 0.10 mg/kg to 6.25 mg/kg - Lead 0.10 mg/kg to 6.25 mg/kg - Copper 0.30 mg/kg to 6.25 mg/kg - Mercury 0.03 mg/kg to 6.25 mg/kg	In - house method : TE-504-01-06 based on AOAC Official Methods of Analysis, 22 nd ed., 2023, method 2013.06
6	Feed	- Moisture 3.0 g/100 g to 23.0 g/100 g - Ash 6.5 g/100 g to 18.0 g/100 g	AOAC Methods of Analysis, 22 nd ed., 2023, method 930.15 AOAC Methods of Analysis, 22 nd ed., 2023, method 942.05

Initial Issue Date 10th July 2008

Issue Number 13

Bureau of Laboratory Accreditation, Department of Science Service, Ministry of Higher Education, Science, Research and Innovation

Scope of Laboratory Accreditation

Laboratory Name : Laboratory of The Center for Scientific and Technological Equipment,
Suranaree University of Technology

Address : 111 University Avenue, Tambon Suranaree, Amphoe Mueang,
Changwat Nakhon Ratchasima 30000

Accreditation Number : Testing - 0023

Laboratory Status : ☒ Permanent ☐ Site ☐ Temporary ☐ Mobile

Item Number	Test Material / Product	Test item / Range of Testing	Test Method / Technique Used
7	Foods - Starch and products - Instant noodle - Instant rice porridge - Powdered chlorophyll - Powdered milk - Starch - Chilli paste - Dipping sauce	- Moisture 2.5 g/100 g to 18.7 g/100 g - Water activity 0.30 to 0.90	In - house method : TE-504-01-57 based on AOAC Methods of Analysis, 22 nd ed., 2023, method 925.10 In - house method : TE-504-01-56 based on AOAC Methods of Analysis, 22 nd ed., 2023, method 978.18

Issue Date : 7th March 2024

Signature : 
(Mrs. Chantarat Vorasapavit)

Director of Bureau of Laboratory Accreditation

Initial Issue Date 10th July 2008

Issue Number 13

Bureau of Laboratory Accreditation, Department of Science Service, Ministry of Higher Education, Science, Research and Innovation