

เอกสารแนบท้ายหนังสือรับต่ออายุขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน  
บริษัท ตรวจวัดสิ่งแวดล้อม จำกัด  
ที่ อก ๐๓๑๐(๑)/ ๒ ๖ ๔ ๓ ลงวันที่ ๓ ๑ มกราคม ๒๕๖๖

ขอขยายสารมลพิษที่ได้รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม จำนวน ๔ รายการ  
น้ำเสีย จำนวน 4 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Biochemical Oxygen Demand	5-Day BOD Test, Membrane Electrode Method
2	pH	Electrometric Method
3	Total Dissolved Solids	Dried at 180 °C
4	Total Suspended Solids	Dried at 103-105 °C

**เอกสารอ้างอิง**

APHA, AWWA, WEF. **Standard Methods for the Examination of Water and Wastewater**.  
23<sup>rd</sup> ed. Washington, DC: APHA, 2017.

กรมโรงงานอุตสาหกรรม  
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท  
เขตราชเทวี กรุงเทพฯ ๑๐๕๐๐

ที่ อก ๐๓๑๐(๑)/ ๒ ๖ ๔ ๓

๓ ๑ มกราคม ๒๕๖๖

เรื่อง ต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน  
เรียน กรรมการผู้จัดการ บริษัท ตรวจวัดสิ่งแวดล้อม จำกัด  
อ้างถึง คำขอขึ้นทะเบียน/ต่ออายุ/เปลี่ยนแปลงบุคลากร และชนิดสารมลพิษของห้องปฏิบัติการวิเคราะห์เอกชน  
ลงวันที่ ๘ ธันวาคม ๒๕๖๕

สิ่งที่ส่งมาด้วย เอกสารแนบท้ายหนังสือรับต่ออายุขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน  
บริษัท ตรวจวัดสิ่งแวดล้อม จำกัด จำนวน ๑ แผ่น

ตามหนังสือที่อ้างถึง บริษัท ตรวจวัดสิ่งแวดล้อม จำกัด ขอต่ออายุหนังสือรับขึ้นทะเบียน  
ห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖-๓๐๑๑ สถานที่ตั้งเลขที่ ๕/๔๕ หมู่บ้าน บ้านกลางกรุง ปทุมวัน  
ซอยศรีนครินทร์ ๔๖/๑ (ปราโมทย์) แขวงหนองบอน เขตประเวศ กรุงเทพมหานคร ต่อกรมโรงงานอุตสาหกรรม นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้บริษัท ตรวจวัดสิ่งแวดล้อม จำกัด ต่ออายุหนังสือรับขึ้น  
ทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน โดยมีองค์ประกอบดังนี้

ก. ผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์

ข. เ  
วิเคราะห์

ทะเบียนเลขที่ ๖-๓๐๑๑-๑-๐๐๐๑

ทะเบียนเลขที่ ๖-๓๐๑๑-๑-๐๐๐๑

ทะเบียนเลขที่ ๖-๓๐๑๑-๑-๐๐๐๑

ทะเบียนเลขที่ ๖-๓๐๑๑-๑-๐๐๐๑

ทะเบียนเลขที่ ๖-๓๐๑๑-๑-๐๐๐๑

ค. ขอขยายสารมลพิษที่ได้รับขึ้นทะเบียนไว้วิเคราะห์ในน้ำเสีย ตามสิ่งที่ส่งมาด้วย

หนังสือฉบับนี้จะหมดอายุในวันที่ ๓ มกราคม ๒๕๖๕ หากประสงค์จะต่ออายุหนังสือ  
รับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน ให้ยื่นคำขอต่ออายุพร้อมเอกสารประกอบคำขอต่อ  
กรมโรงงานอุตสาหกรรม ภายใน ๓๐ วัน ก่อนวันสิ้นสุดของหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน  
ทั้งนี้ สามารถยื่นคำขอผ่านระบบอิเล็กทรอนิกส์ได้ทั้งนี้เว็บไซต์กรมโรงงานอุตสาหกรรม ตาม QR Code  
ท้ายหนังสือฉบับนี้

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

ผู้ควบคุม  
ผู้รายงาน

กองวิจัยและเตือนภัยมลพิษโรงงาน  
กลุ่มมาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษและทะเบียนห้องปฏิบัติการ  
โทร. ๐ ๒๕๓๐ ๖๓๑๒ ต่อ ๒๑๐๓-๕  
โทรสาร ๐ ๒๕๓๐ ๖๓๑๒ ต่อ ๒๑๕๙  
ไปรษณีย์อิเล็กทรอนิกส์ saraban@dhw.mail.go.th

“อุตสาหกรรมก้าวหน้า ประเทศไทยก้าวหน้า ร่วมกันพัฒนา อุตสาหกรรมสีเขียว”

กลุ่มมาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษและทะเบียนห้องปฏิบัติการ กองวิจัยและเตือนภัยมลพิษโรงงาน กรมโรงงานอุตสาหกรรม โทร. ๐ ๒๕๓๐ ๖๓๑๒ ต่อ ๒๑๐๓-๕



**CALIBRATION LABORATORY CO., LTD.**  
2/10-11, 14, 55 Soi Prasert Manukit 29 Yaek 4, Prasert Manukit Rd., Ladphrao, Bangkok 10230  
Tel. 02-578-0353-4 Fax: 02-578-2672 www.cal-laboratory.com Email: sale@cal-laboratory.com



## REPORT OF CALIBRATION

### FOR

NOMENCLATURE : pH METER  
MANUFACTURER : APERA  
MODEL / TYPE : PH700/201T-F  
SERIAL NO. : PH700X1019061009/N/A [LA-008/PH-02]  
DATE OF CALIBRATION : 11 April 2025

#### ENVIRONMENT CONDITIONS :

Temperature :  $(25 \pm 2.5) ^\circ\text{C}$  Relative Humidity :  $(50 \pm 15) \% \text{ RH}$

#### PROCEDURE USED :

This instrument was calibrated under procedure No. WI-305-128, 238. The calibration was performed by direct measurement with Certified Reference Material (CRM) and comparison with Calibration Bath, Precision Thermometer and IPRT which maintained by the Calibration Laboratory Co., Ltd.

#### REFERENCE STANDARD USED :

1. pH Standard Solution, NIMT TRM CODE TRM-S-2003, TRM CODE TRM-S-2007.
2. pH Standard Solution, Control Company Catalog Number 06664260, 11754256, Lot Number CC787362.
3. Calibration Bath, Kambic Model OB-222 ULT S/N. 17115653.
4. Precision Thermometer, ASL Model F250 S/N. 1334023800.
5. IPRT, Wika Model CTP5000-250-D S/N. PO00043543-1-10-1.

Certificate No. Q25042961  
F3-011-05/12-23

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## CERTIFICATE OF CALIBRATION

### FOR

NOMENCLATURE : pH METER  
MANUFACTURER : APERA  
MODEL / TYPE : PH700/201T-F  
SERIAL NO. : PH700X1019061009/N/A [LA-008/PH-02]  
CLID. NO. : 272401000  
JOB CONTROL NO. : 250410042961  
CALIBRATION SERVICE : ☒ IN-LABORATORY ☐ ON-SITE

CUSTOMER : ENVIRONMENTAL MEASUREMENTS CO., LTD.

5/45 BAAN KLANG KRUNG BIZ TOWN, SOI SRINAGARINDRA 46/1 (PRAMOTE),  
NONG BON SUB-DISTRICT, PRAWET DISTRICT, BANGKOK 10250

DATE OF RECEIVED : 10 April 2025

DATE OF ISSUED : 18 April 2025

The report of calibration shall not be reproduced except in full without approval of the Calibration Laboratory Co., Ltd.

Calibrated By :



Approved By :

18 April 2025

This Calibration Certificate documents the traceability to national standards, which realize the units of measurement according to the International System of Units (SI)

Certificate No. Q25042961  
F3-011-05/12-23

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## CONDITION OF CALIBRATION ITEM : RECEIVED IN GOOD OPERATIONAL CONDITION

### MEASUREMENT RESULTS : ( X ) without adjustment ( ) adjustment

The table in the following gives the calibration results and associated measurement uncertainties of pH meter.

#### CALIBRATION DATA

##### 1. pH METER RESULT @ 25 °C

Standard pH Buffer Solution (pH)	pH Meter Reading (pH)	pH Meter Reading (mV)	Correction (pH)	Uncertainty of Measurement (± pH)	k Factor
4.003	4.01	134	-0.007	0.014	2.00
7.005	7.00	-43	+0.005	0.014	2.00
10.015	10.01	-208	+0.005	0.100	2.05

Technical Note. Setting function CAL 3 point ( 4,7,10 ).

Note. The Scope of Accredited TISI Certificate No. 23-LB0092 Issue 02 Page 91 of 138

##### \*2. TEMPERATURE RESULT

Immersion depth (mm)	Actual Temperature (°C)	DUC Reading (°C)	Correction (°C)	Uncertainty ± (°C)
100	25.01	24.9	+0.11	0.07

Technical Note. Type of sensor : pH Probe

Probe Ø 12 mm

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor of  $k = 2.00$ .

Note. \* means Calibrations marked " Not TISI Accredited " in this Certificate have been included for completeness.

This report is valid for the above stated instrument/s only.

### End of Certificate ###

Certificate No. Q25042961  
F3-011-05/12-23



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# CALIBRATION LABORATORY CO., LTD.

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## TRACEABILITY :

1. The measurements are traceable to International System of Units (SI), through National Institute of Metrology (Thailand).

Lot Number. 080124 , 120124. Due Date 23 January 2026.

2. The measurements are traceable to International System of Units (SI), through Control Company.

Certificate No. 4281-14495731 , Due Date 27 September 2025.

3. The measurements are traceable to International System of Units (SI), through Calibration Laboratory Co., Ltd.

Certificate No. Q24120999, Due Date 26 November 2025.

4. The measurements are traceable to International System of Units (SI), through Thailand Institute of Scientific and Technological Research (TISTR). Certificate No. PSL-T 1042/67, Due Date 16 October 2025.

5. The measurements are traceable to International System of Units (SI), through National Institute of Metrology (Thailand).

Certificate No. TT-0146-24, Due Date 28 October 2025.

## UNCERTAINTY :

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor complies with the table which for a normal distribution corresponds to a coverage probability of approximately 95 % .  
It has been evaluated according to the "Evaluation of the Uncertainty of Measurement in Calibration (EA-4/02 M:2022)"

Certificate No. Q25042961  
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## REPORT OF CALIBRATION

### FOR

NOMENCLATURE : DO METER  
MANUFACTURER : YSI  
MODEL / TYPE : 5000-230V/5010  
SERIAL NO. : 16D101626/19D100367/DOM-01]  
DATE OF CALIBRATION : 11 April 2025

#### ENVIRONMENT CONDITIONS :

Temperature :  $(25 \pm 2.5) ^\circ\text{C}$  Relative Humidity :  $(50 \pm 15) \% \text{RH}$

#### PROCEDURE USED :

This instrument was calibrated under procedure No. CLC-CPCH-06. The calibration was performed by direct measurement with Certified Reference Material (CRM).

#### REFERENCE STANDARD USED :

Dissolved Oxygen, Sigma-Aldrich Product ID QC3077-500ML.

#### TRACEABILITY :

The measurements are traceable to International System of Units (SI), through Merck Co., Ltd.  
Lot LRAD8571, Due Date April 2026.

#### UNCERTAINTY :

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k = 2,00$  which for a normal distribution corresponds to a coverage probability of approximately 95 %.  
It has been evaluated according to the "Evaluation of the Uncertainty of Measurement in Calibration (EA-4/02 M:2022)"

Certificate No. Q25042960  
F3-011-05/12-23

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## CERTIFICATE OF CALIBRATION

### FOR

NOMENCLATURE : DO METER  
MANUFACTURER : YSI  
MODEL / TYPE : 5000-230V/5010  
SERIAL NO. : 16D10162  
CLID. NO. : 272100329  
JOB CONTROL NO. : 250410042960  
CALIBRATION SERVICE : ☒ IN-LABORATORY ☐ ON-SITE

#### CUSTOMER :

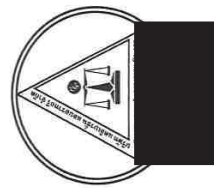
ENVIRONMENTAL MEASUREMENTS CO., LTD.  
5/45 BAAN KLANG KRUNG BIZ TOWN, SOI SRINAGARINDRA 46/1 (PRAMOTE),  
NONG BON SUB-DISTRICT, PRAWET DISTRICT, BANGKOK 10250

DATE OF RECEIVED : 10 April 2025

DATE OF ISSUED : 18 April 2025

The report of calibration shall not be reproduced except in full without approval of the Calibration Laboratory Co., Ltd.

Calibrated By :



Approved By :

18 April 2025

This Calibration Certificate documents the traceability to national standards, which realize the units of measurement according to the International System of Units (SI)

Certificate No. Q25042960  
F3-011-05/12-23

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ANAB National Accreditation Board  
ACCREDITED  
CALIBRATION AND  
DIMENSIONAL MEASUREMENT  
ACDM-2814

## CERTIFICATE OF CALIBRATION

### FOR

NOMENCLATURE : DIGITAL THERMOMETER WITH PROBE  
MANUFACTURER : LUTRON  
MODEL / TYPE : MTM-380SD  
SERIAL NO. : I.570147/N/A[LA-0013/LA-0013/A]  
CLID. NO. : 232204019  
JOB CONTROL NO. : 250408041416  
CALIBRATION SERVICE : ☒ IN-LABORATORY ☐ ON-SITE

CUSTOMER : ENVIRONMENTAL MEASUREMENTS CO., LTD.  
5/45 BAAN KLANG KRUNG BIZ TOWN, SOI SRINAGARINDRA 46/1 (PRAMOTE),  
NONG BON SUB-DISTRICT, PRAWET DISTRICT, BANGKOK 10250

DATE OF RECEIVED : 08 April 2025 DATE OF ISSUED : 11 April 2025

The report of calibration shall not be reproduced except in full without approval of the Calibration Laboratory Co., Ltd.

Calibrated By :



Approved By :

11 April 2025

This Calibration Certificate documents the traceability to national standards, which realize the units of measurement according to the International System of Units (SI)

Certificate No. Q25041416  
F3-011-05/12-23

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DIMENSIONAL MEASUREMENT  
ACDM-2814

CONDITION OF CALIBRATION ITEM : RECEIVED IN GOOD OPERATIONAL CONDITION  
MEASUREMENT RESULTS : ( X ) without adjustment ( ) adjustment

The table in the following gives the calibration results and associated measurement uncertainties of Do Meter.

### CALIBRATION DATA

#### DO METER RESULT @ 20 °C

Nominal Value ( mg/L )	DUC Reading ( mg/L )	Correction ( mg/L )	Uncertainty ( mg/L )
8.18	8.2	-0.02	± 0.38

Note. The Scope of Accredited ANAB Certificate No. ACDM-2814 Version 015 Page 5 of 68

This report is valid for the above stated instrument/s only.

### End of Certificate ###

Certificate No. Q25042960  
F3-011-05/12-23

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**CONDITION OF CALIBRATION ITEM : RECEIVED IN GOOD OPERATIONAL CONDITION**  
**MEASUREMENT RESULTS : ( X ) without adjustment ( ) adjustment**

The DUC Reading were recorded and the means value were reported of five times measurement in the table below.

**CALIBRATION DATA**

**CORRECTION OF TEMPERATURE : T1**

Immersion depth (mm)	Actual Temperature ( °C )	DUC Reading ( °C )	Correction ( °C )	Uncertainty ± ( °C )
200	4.00	4.0	0.00	0.52
	20.02	20.1	-0.08	
	95.02	96.1	-1.08	
	104.02	105.1	-1.08	
	180.00	181.6	-1.60	

Technical Note. Type of sensor : Thermocouple Type K.

Note. The Scope of Accredited ANAB Certificate No. ACDM-2814 Version 01.5 Page 57 of 68

**This report is valid for the above stated instrument/s only.**

### End of Certificate ###

Certificate No. Q25041416  
F3-011-05/12-23

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**REPORT OF CALIBRATION**  
**FOR**

**NOMENCLATURE** : DIGITAL THERMOMETER WITH PROBE  
**MANUFACTURER** : LUTRON  
**MODEL / TYPE** : MTM-380SD  
**SERIAL NO.** : I.570147/N/A|LA-0013/LA-0013/A|  
**DATE OF CALIBRATION** : 10 April 2025

**ENVIRONMENT CONDITIONS :**

**Temperature** : (23 ± 2) °C

**Relative Humidity** : (55 ± 10) % RH

**PROCEDURE USED :**

This instrument was calibrated under procedure No. CLC-CPTH-06 based on ASTM E 220-86 as calibration guidelines.

The calibration was performed by using Calibration Bath, Precision Thermometer and IPRT

which maintained by the Calibration Laboratory Co., Ltd.

**REFERENCE STANDARD USED :**

1. Calibration Bath, Kambic Model OB-22/2 ULT, OB-22/2 S/N. I7115653, I7115654.
2. Precision Thermometer, ASL Model F250 S/N. 1334023800.
3. IPRT, Wika, ASL Model CTP5000-450-D, T100-250-ID S/N. PO00036374-1-10-12, PO106346-1-18.

**TRACEABILITY :**

1. The measurements are traceable to International System of Units (SI), through Calibration Laboratory Co., Ltd. Certificate No. Q24120999, Q24112862. Due Date 26 November 2025, 12 November 2025.
2. The measurements are traceable to International System of Units (SI), through Thailand Institute of Scientific and Technological Research (TISTR). Certificate No. PSL-T 1042/67, Due Date 16 October 2025.
3. The measurements are traceable to International System of Units (SI), through National Institute of Metrology (Thailand). Certificate No. TT-0147-24, TT-0110-24. Due Date 28 October 2025, 06 August 2025.

**UNCERTAINTY :**

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k = 2.00$  which for a normal distribution corresponds to a coverage probability of approximately 95 %. It has been evaluated according to the "Evaluation of the Uncertainty of Measurement in Calibration (EA-4/02 M:2022)"

Certificate No. Q25041416  
F3-011-05/12-23

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@clcalibration



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ACDM-2814

## REPORT OF CALIBRATION

### FOR

NOMENCLATURE : DIGITAL THERMOHYGRO METER  
MANUFACTURER : DIGICON  
MODEL / TYPE : TH-02A  
SERIAL NO. : 1919E0284991[DTH-01]  
DATE OF CALIBRATION : 10 April 2025

#### ENVIRONMENT CONDITIONS :

Temperature :  $(23 \pm 2) ^\circ\text{C}$  Relative Humidity :  $(55 \pm 10) \% \text{RH}$

#### PROCEDURE USED :

This instrument was calibrated under procedure No. CLC-CPTH-11. The calibration was performed by using Chilled Mirror Hygrometer which maintained by the Calibration Laboratory Co., Ltd.

#### REFERENCE STANDARD USED :

Chilled Mirror Hygrometer, Edgetech Model Dew Master S/N. 44602.  
Temperature & Humidity Chamber, PGC Model 9141-51116 S/N. 1304261.

#### TRACEABILITY :

The measurements are traceable to International System of Units (SI), through Thunder Scientific Corporation.  
Certificate No. 22724, Due Date 03 October 2025.

#### UNCERTAINTY :

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k = 2.00$  which for a normal distribution corresponds to a coverage probability of approximately 95 %.  
It has been evaluated according to the "Evaluation of the Uncertainty of Measurement in Calibration (EA-4/02 M:2022)"

Certificate No. Q25041414

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page 2 of 3



# CALIBRATION LABORATORY Co., LTD.

2/10-11,14,55 Soi Prasert Manukit 29 Yaek 4, Prasert Manukit Rd., Ladphrao, Bangkok 10230  
Tel. 02-578-0353-4 Fax. 02-578-2672 www.ccl-laboratory.com E-mail:sale@ccl-laboratory.com



ANAB  
ACCREDITED  
CALIBRATION AND  
DIMENSIONAL MEASUREMENT  
ACDM-2814

## CERTIFICATE OF CALIBRATION

### FOR

NOMENCLATURE : DIGITAL THERMOHYGRO METER  
MANUFACTURER : DIGICON  
MODEL / TYPE : TH-02A  
SERIAL NO. : 1919E0284991[DTH-01]  
CLID. NO. : 232100200  
JOB CONTROL NO. : 250408041414  
CALIBRATION SERVICE : ☒ IN-LABORATORY ☐ ON-SITE

CUSTOMER : ENVIRONMENTAL MEASUREMENTS CO., LTD.

5/45 BAAN KLANG KRUNG BIZ TOWN, SOI SRINAGARINDRA 46/1 (PRAMOTE),  
NONG BON SUB-DISTRICT, PRAWET DISTRICT, BANGKOK 10250

DATE OF RECEIVED : 08 April 2025

DATE OF ISSUED : 11 April 2025

The report of calibration shall not be reproduced except in full without approval of the Calibration Laboratory Co., Ltd.

Calibrated By :



Approved By :

11 April 2025

This Calibration Certificate documents the traceability to national standards, which realize the units of measurement according to the International System of Units (SI)

Certificate No. Q25041414

F3-011-05/12-23



page 1 of 3





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NSC-TISI-TIS 17025  
CALIBRATION 0659  
CLC



## CERTIFICATE OF CALIBRATION

### FOR

NOMENCLATURE : WATER BATH  
MANUFACTURER : M-LAB  
MODEL / TYPE : WBN 15  
SERIAL NO. : 0335[LA-007]  
CLID. NO. : 332300657  
JOB CONTROL NO. : 250215018258  
CALIBRATION SERVICE : ☐ IN-LABORATORY ☒ ON-SITE

CUSTOMER : ENVIRONMENTAL MEASUREMENTS CO., LTD.

5/45 BAAN KLANG KRUNG BIZ TOWN, SOI SRINAGARINDRA 46/1 (PRAMOTE),  
NONG BON SUB-DISTRICT, PRAWET DISTRICT, BANGKOK 10250

DATE OF RECEIVED : 15 February 2025

DATE OF ISSUED : 04 March 2025

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Calibrated By :



Approved By :

04 March 2025

This Calibration Certificate documents the traceability to national standards, which realize the units of measurement according to the International System of Units (SI)

Certificate No. Q25018258  
F3-011-05/12-23

page 1 of 4



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NSC-TISI-TIS 17025  
CALIBRATION 0659  
CLC

CONDITION OF CALIBRATION ITEM : RECEIVED IN GOOD OPERATIONAL CONDITION  
MEASUREMENT RESULTS : ( X ) without adjustment ( ) adjustment

The table in the following gives the calibration results and associated measurement uncertainties of the measuring digital thermohygro meter.

### CALIBRATION DATA

#### 1. CORRECTION OF TEMPERATURE

Test point ( ° C )	Actual Temperature ( ° C )	DUC Reading ( ° C )	Correction ( ° C )	Uncertainty ± ( ° C )
20.0	20.00	19.6	+0.40	0.27
25.0	25.00	24.5	+0.50	
30.0	30.00	29.5	+0.50	

#### 2. CORRECTION OF HUMIDITY

STD Temperature ( ° C )	STD Reading ( %RH )	DUC Reading ( %RH )	Correction ( %RH )	Uncertainty ± ( %RH )
25	40.0	30	+10.0	0.8
25	60.0	50	+10.0	0.8

Note. The Scope of Accredited ANAB Certificate No. ACDM-2814 Version 015 Page 60 of 68

This report is valid for the above stated instrument/s only.

### End of Certificate ###

Certificate No. Q25041414  
F3-011-05/12-23

page 3 of 3



@clcalibration



# REPORT OF CALIBRATION

**FOR**

NOMENCLATURE : WATER BATH  
 MANUFACTURER : M-LAB  
 MODEL / TYPE : WBN 15  
 SERIAL NO. : 0335[LA-007]  
 LOCATION SITE : LABORATORY - HOT ZONE  
 DATE OF CALIBRATION : 27 February 2025

**ENVIRONMENT CONDITIONS :**

Temperature : 24 °C to 25 °C  
 Relative Humidity : 49% to 51%

**PROCEDURE USED :**

This instrument was calibrated under procedure No. WI-305-135 based on ASTM E 715-80:2016 as calibration guidelines.  
 The calibration was performed by using Hydra Data Logger which maintained by the Calibration Laboratory Co., Ltd.

**REFERENCE STANDARD USED :**

Hydra Data Logger, Fluke Model 2620 S/N. 5592550.

**TRACEABILITY :**

The measurements are traceable to International System of Units (SI) , through Calibration Laboratory Co., Ltd.  
 Certificate No. Q24120965, Due Date 13 May 2025.

**UNCERTAINTY :**

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k = 2.00$  which for a normal distribution corresponds to a coverage probability of approximately 95 %.  
 It has been evaluated according to the "Evaluation of the Uncertainty of Measurement in Calibration (EA-4/02:2022)"

Certificate No. Q25018258  
 F3-011-05/12-23



# CONDITION OF CALIBRATION ITEM : RECEIVED IN GOOD OPERATIONAL CONDITION

**MEASUREMENT RESULTS : ( X ) without adjustment ( ) adjustment**

The table in the following gives the calibration results and associated measurement uncertainties of the measuring water bath.

1. WATER BATH PERFORMANCE			
CALIBRATION DATA			
Test Point ( °C )	DUC Reading ( °C )	Uniformity ( °C )	Stability ( °C )
85.0	85.0	0.40	0.28

Certificate No. Q25018258  
 F3-011-05/12-23



CERTIFICATE OF CALIBRATION

FOR

NOMENCLATURE : WATER BATH  
MANUFACTURER : MEMMERT  
MODEL / TYPE : WNB14  
SERIAL NO. : L418.0758[LA-004]  
CLID. NO. : 332100157  
JOB CONTROL NO. : 250215018257  
CALIBRATION SERVICE : ☐ IN-LABORATORY ☒ ON-SITE

CUSTOMER : ENVIRONMENTAL MEASUREMENTS CO., LTD.  
5/45 BAAN KLANG KRUNG BIZ TOWN, SOI SRINAGARINDRA 46/1 (PRAMOTE),  
NONG BON SUB-DISTRICT, PRAWET DISTRICT, BANGKOK 10250

DATE OF RECEIVED : 15 February 2025      DATE OF ISSUED : 04 March 2025  
The report of calibration shall not be reproduced except in full without approval of the Calibration Laboratory Co., Ltd.

Calibrated By : 

Approved By : 

This Calibration Certificate documents the traceability to national standards, which realize the units of measurement according to the International System of Units (SI)

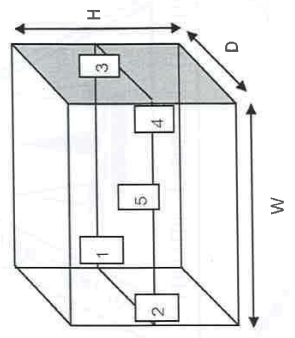
CALIBRATION DATA

2. TEMPERATURE DISTRIBUTION

Test Point ( ° C )	DUC Reading ( ° C )	STD Reading ( ° C )					Uncertainty ± ( ° C )
		Probe No. 1	Probe No. 2	Probe No. 3	Probe No. 4	Probe No. 5	
85.0	85.0	85.15	84.79	84.96	84.89	85.06	0.58

Technical Note : W = 35 cm, D = 30 cm, H = 15 cm.

The Scope of Accredited TISI Certificate No. 23-LB0092 Issue 02 Page 128 of 138



This report is valid for the above stated instrument/s only.

### End of Certificate ###



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**CONDITION OF CALIBRATION ITEM : RECEIVED IN GOOD OPERATIONAL CONDITION**

**MEASUREMENT RESULTS : ( X ) without adjustment ( ) adjustment**

The table in the following gives the calibration results and associated measurement uncertainties of the measuring water bath.

**CALIBRATION DATA**

**1. WATER BATH PERFORMANCE**

Test Point ( °C )	DUC Reading ( °C )	Uniformity ( °C )	Stability ( °C )
95.0	95.0	0.39	0.17

Certificate No. Q25018257

F3-011-05/12-23



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**REPORT OF CALIBRATION**

**FOR**

NOMENCLATURE : WATER BATH  
MANUFACTURER : MEMMERT  
MODEL / TYPE : WNB14  
SERIAL NO. : L418.0758[L4-004]  
LOCATION SITE : LABORATORY - HOT ZONE  
DATE OF CALIBRATION : 27 February 2025

**ENVIRONMENT CONDITIONS :**

Temperature : 24 °C to 25 °C  
Relative Humidity : 49% to 51%

**PROCEDURE USED :**

This instrument was calibrated under procedure No. W1-305-135 based on ASTM E 715-80:2016 as calibration guidelines.  
The calibration was performed by using Hydra Data Logger which maintained by the Calibration Laboratory Co., Ltd.

**REFERENCE STANDARD USED :**

Hydra Data Logger, Fluke Model 2620 S/N. 5592550.

**TRACEABILITY :**

The measurements are traceable to International System of Units (SI) , through Calibration Laboratory Co., Ltd.  
Certificate No. Q24120965, Due Date 13 May 2025.

**UNCERTAINTY :**

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k = 2.00$  which for a normal distribution corresponds to a coverage probability of approximately 95 %.  
It has been evaluated according to the "Evaluation of the Uncertainty of Measurement in Calibration (EA-4/02 M:2022)"

Certificate No. Q25018257

F3-011-05/12-23

page 2 of 4





## Certificate of Calibration

Certificate Number : SPR25050011-3 Page : 1 of 3

Customer : ENVIRONMENTAL MEASUREMENTS CO., LTD.  
5/45 Baan Klang Krung Biz Town, Soi Srinagarindra 46/1 (Pramote),  
Nongbon Sub-district, Prawet District, Bangkok 10250

Equipment Name : Refrigerator

Manufacturer : Medicoool

Model : BB-117

Serial Number : BB117-190725001

ID. Number : LA-003

Environmental Conditions

Ambient Temperature :  $25^{\circ}\text{C} \pm 10^{\circ}\text{C}$  Received Date : 02 May 2025

Relative Humidity :  $60\% \pm 20\%$  Calibration Date : 06 May 2025

Location of Calibration : On-Site Recommend Due Date : N/A

Calibration Procedure : SP-CPT-04-01 Date of Issue : 07 May 2025

## Method of Calibration

This certifies that the above instrument was calibrated in compliance with the calibration system requirement of ISO/IEC 17025:2017 in accordance with reference procedure. Standards used to perform this calibration are certified by NIST or equivalent, National metrology institute, Natural physical constants, consensus standards. The result reported herein apply only to the calibration of the item described above as received. Our decision rule is to contact the customer if the item pass and fail calibration when the results include the uncertainties and the customer must determine if the results meets their needs.

The calibration certificate shall not be reproduced except in full, without written approval of SP Metrology System (Thailand).

Calibrated by : Mr. Keerati Bunyawat

Calibration Officer

App



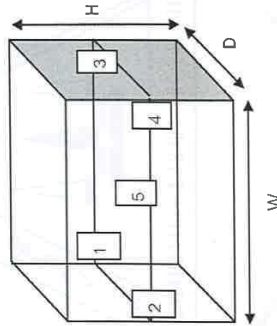
## CALIBRATION DATA

## 2. TEMPERATURE DISTRIBUTION

Test Point ( $^{\circ}\text{C}$ )	DUC Reading ( $^{\circ}\text{C}$ )	STD Reading ( $^{\circ}\text{C}$ )					Uncertainty $\pm (^{\circ}\text{C})$
		Probe No. 1	Probe No. 2	Probe No. 3	Probe No. 4	Probe No. 5	
95.0	95.0	96.45	96.30	96.22	96.04	96.26	0.51

Technical Note : W = 35 cm, D = 29 cm, H = 14 cm.

The Scope of Accredited TISI Certificate No. 23-LB0092 Issue 02 Page 128 of 138



This report is valid for the above stated instrument/s only.

### End of Certificate ###

Certificate No. Q25018257

F3-011-05/12-23





# Calibration Report

Certificate Number : SPR25050011-3      Page : 2 of 3

## Reference Standards

Equipment Name	Model	Serial No.	Certificate No.	Due. Date
Data Acquisition/Switch Unit	34970A	MY44074688	SPR24080102-24	07 Sep 2025

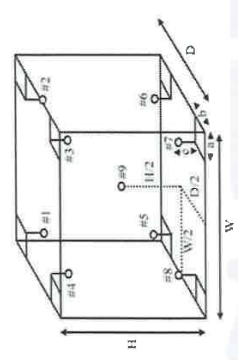
## Traceability

This certification is traceable to the International System of Unit maintained at :  
SP Metrology - SP Metrology system (Thailand) Co.Ltd.



# Result of Calibration

Certificate Number : SPR25050011-3      Page : 3 of 3



## Temperature Accuracy in the Measurement Zone.

Unit : °C

UUC Setting	Measured Temperature (°C) @ Probe No. 9 is REF.)									Uncertainty ( ± )
	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	
4.0	3.37	4.12	4.25	4.13	3.93	3.98	3.95	4.23	4.16	0.60

## Temperature Uniformity, Stability, Overall Variation

Unit : °C

UUC Setting	UUC Reading	Temperature Stability	Temperature Uniformity	Overall Variation
4.0	4.0	0.09	0.94	1.07

**Note :**  
The result of calibration was found accurate as show on date and place of calibration only.  
This Certificate is not certified for any commercial transaction.

## Measurement Uncertainty

The reported uncertainty of measurement is the expanded uncertainty obtained by multiplying the standard uncertainty with the coverage factor k = 2, providing a level of confidence approximately 95 %  
- End of Certificate -



# CALIBRATION LABORATORY Co., LTD.

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## REPORT OF CALIBRATION

### FOR

NOMENCLATURE : INCUBATOR  
MANUFACTURER : ACCUPLUS  
MODEL / TYPE : SMART i250  
SERIAL NO. : 2059-0718-0010[LA-002]  
LOCATION SITE : LABORATORY  
DATE OF CALIBRATION : 27 February 2025

#### ENVIRONMENT CONDITIONS :

Temperature : 24 °C to 25 °C

Relative Humidity : 49 % to 51 %

#### PROCEDURE USED :

This instrument was calibrated under procedure No. WI-305-165 based on TLAS G-20-1/02-08 as calibration guidelines.

The calibration was performed by using Hydra Series II which maintained by the Calibration Laboratory Co., Ltd.

#### REFERENCE STANDARD USED :

Hydra Series II, Fluke Model 2635A S/N: 8209003.

#### TRACEABILITY :

The measurements are traceable to International System of Units (SI), through Calibration Laboratory Co., Ltd.

Certificate No. Q24052151, Due Date 27 May 2025.

#### UNCERTAINTY :

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor complies with the table which for a normal distribution corresponds to a coverage probability of approximately 95 %.

It has been evaluated according to the "Evaluation of the Uncertainty of Measurement in Calibration (EA-4/02 M:2022)"

Certificate No. Q25018255

F3-011-05/12-23

page 2 of 4



@ckcalibration



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## CERTIFICATE OF CALIBRATION

### FOR

NOMENCLATURE : INCUBATOR  
MANUFACTURER : ACCUPLUS  
MODEL / TYPE : SMART i250  
SERIAL NO. : 2059-0718-0010[LA-002]  
CLID. NO. : 332100155  
JOB CONTROL NO. : 250215018255  
CALIBRATION SERVICE : ☐ IN-LABORATORY ☒ ON-SITE

CUSTOMER : ENVIRONMENTAL MEASUREMENTS CO., LTD.

5/45 BAAK KLANG KRUNG BIZ TOWN, SOI SRINAGARINDRA 46/1 (PRAMOTE),  
NONG BON SUB-DISTRICT, PRAWET DISTRICT, BANGKOK 10250

DATE OF RECEIVED : 15 February 2025

DATE OF ISSUED : 04 March 2025

The report of calibration shall not be reproduced except in full without approval of the Calibration Laboratory Co., Ltd.

Calibrated By :



Approved By :

04 March 2025

This Calibration Certificate documents the traceability to national standards, which realize the units of measurement according to the International System of Units (SI)

Certificate No. Q25018255

F3-011-05/12-23

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Accredited  
ISO/IEC 17025

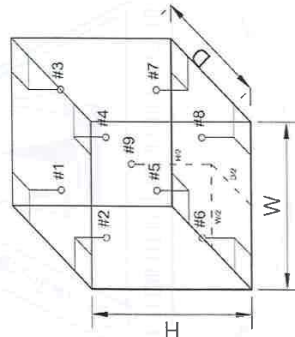
## CALIBRATION DATA

### 2. TEMPERATURE DISTRIBUTION

DUC		Measured Temperature ( °C )@Probe No.9 is Ref.								Uncertainty ± ( °C )	Coverage factor k
Setting ( °C )	Indicating ( °C )	1	2	3	4	5	6	7	8	9	
20.0	20.0	20.55	20.53	20.57	20.51	20.59	20.52	20.40	20.47	20.27	0.58
											2.00

Technical Note : W = 50 cm, D = 48 cm, H = 110 cm.

The Scope of Accredited TISI Certificate No. 23-LB0092 Issue 02 Page 129 of 138



This report is valid for the above stated instrument/s only.

### End of Certificate ###

Certificate No. Q25018255  
F3-011-05/12-23

page 4 of 4



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Accredited  
ISO/IEC 17025

## CONDITION OF CALIBRATION ITEM : RECEIVED IN GOOD OPERATIONAL CONDITION

### MEASUREMENT RESULTS : ( X ) without adjustment ( ) adjustment

The table in the following gives the calibration results and associated measurement uncertainties of the measuring incubator.

## CALIBRATION DATA

### 1. INCUBATOR PERFORMANCE

DUC		Measured Uniformity ( °C )		Measured Stability ( °C )		Measured Overall Variation ( °C )	
Setting ( °C )	Indicating ( °C )						
20.0	20.0	0.43		0.34		0.98	

Certificate No. Q25018255  
F3-011-05/12-23

page 3 of 4



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Tel. 02-578-0353-4 Fax: 02-578-2672 www.cal-laboratory.com E-mail:sale@cal-laboratory.com



## REPORT OF CALIBRATION

### FOR

NOMENCLATURE : HOT AIR OVEN  
MANUFACTURER : MEMMERT  
MODEL / TYPE : UF110  
SERIAL NO. : B422.0026[LA-0012]  
LOCATION SITE : LABORATORY-HOT ZONE  
DATE OF CALIBRATION : 19 March 2025

#### ENVIRONMENT CONDITIONS :

Temperature : 24 °C to 25 °C  
Relative Humidity : 49% to 51 %

#### PROCEDURE USED :

This instrument was calibrated under procedure No. CLC-CPTH-07 based on TLAS G-20 as calibration guidelines.  
The calibration was performed by using Hydra Data Logger which maintained by the Calibration Laboratory Co., Ltd.

#### REFERENCE STANDARD USED :

Hydra Data Logger, Fluke Model 2620 S/N: 5592550.

#### TRACEABILITY :

The measurements are traceable to International System of Units (SI), through Calibration Laboratory Co., Ltd.  
Certificate No. Q24052150, Due Date 27 May 2025.

#### UNCERTAINTY :

The reported expanded uncertainty of measurement is stated as the standard uncertainty multiplied by the coverage factor complies with the table which for a normal distribution corresponds to a coverage probability of approximately 95 %.  
It has been evaluated according to the "Evaluation of the Uncertainty of Measurement in Calibration (EA-4/02 M:2022)"

Certificate No. Q25027140  
F3-011-05/12-23



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## CERTIFICATE OF CALIBRATION

### FOR

NOMENCLATURE : HOT AIR OVEN  
MANUFACTURER : MEMMERT  
MODEL / TYPE : UF110  
SERIAL NO. : B422.0026[LA-0012]  
CLID. NO. : 332202464  
JOB CONTROL NO. : 250306027140  
CALIBRATION SERVICE : ☐ IN-LABORATORY ☒ ON-SITE

CUSTOMER : ENVIRONMENTAL MEASUREMENTS CO., LTD.

5/45 BAAN KLANG KRUNG BIZ TOWN, SOI SRINAGARINDRA 46/1 (PRAMOTE),  
NONG BON SUB-DISTRICT, PRAWET DISTRICT, BANGKOK 10250

DATE OF RECEIVED : 06 March 2025

DATE OF ISSUED : 25 March 2025

The report of calibration shall not be reproduced except in full without approval of the Calibration Laboratory Co., Ltd.

Calibrated By :



Approved By :

25 MARCH 2025

This Calibration Certificate documents the traceability to national standards, which realize the units of measurement according to the International System of Units (SI)

Certificate No. Q25027140  
F3-011-05/12-23

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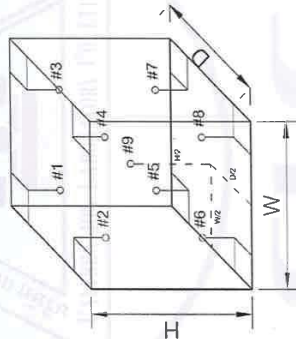
**CALIBRATION DATA**

**2. TEMPERATURE DISTRIBUTION**

DUC		Measured Temperature ( °C )@Probe No.9 is Ref.									Uncertainty ± ( °C )	Coverage factor <i>k</i>
Setting ( °C )	Indicating ( °C )	1	2	3	4	5	6	7	8	9		
104.0	104.0	103.64	103.91	103.49	103.54	103.67	103.61	103.47	103.96	103.72	0.43	2.00
180.0	180.0	179.19	179.91	178.87	179.17	179.38	179.38	178.90	179.22	179.63	0.51	2.00

Technical Note : W = 56 cm, D = 40 cm, H = 48 cm.

Note. The Scope of Accredited ANAB Certificate No. ACDM-2814 Version 015 Page 59 of 68



This report is valid for the above stated instrument/s only.

### End of Certificate ###



**CONDITION OF CALIBRATION ITEM : RECEIVED IN GOOD OPERATIONAL CONDITION**

**MEASUREMENT RESULTS : (X) without adjustment ( ) adjustment**

The table in the following gives the calibration results and associated measurement uncertainties of the measuring hot air oven.

**CALIBRATION DATA**

**1. HOT AIR OVEN PERFORMANCE**

Setting (°C)	DUC		Measured Uniformity (°C)	Measured Stability (°C)	Measured Overall Variation (°C)
	Setting (°C)	Indicating (°C)			
104.0	104.0	104.0	0.29	0.11	0.68
180.0	180.0	180.0	0.83	0.22	1.40





CALIBRATION LABORATORY CO., LTD.

2/10-11, 14, 55 Soi Prasert Manukit 29 Yaek 4, Prasert Manukit Rd., Ladphrao, Bangkok 10230  
Tel. 02-578-0353-4 Fax: 02-578-2672 www.cal-laboratory.com E-mail: sale@cal-laboratory.com



NSC-TISI-TIS 17025  
CALIBRATION 0059  
CLC

## REPORT OF CALIBRATION

### FOR

NOMENCLATURE : BALANCE  
MANUFACTURER : SHIMADZU  
MODEL / TYPE : AP225WD  
SERIAL NO. : D316300692[L/A-001]  
LOCATION SITE : LABORATORY-BALANCE ROOM  
DATE OF CALIBRATION : 27 February 2025

#### ENVIRONMENT CONDITIONS :

Temperature : 23 °C to 24 °C  
Relative Humidity : 49 % to 51 %

#### PROCEDURE USED :

This instrument was calibrated under procedure No. WI-305-46 based on EURAMET/eg-18/Version 4.0 (11/2015).  
The calibration was performed by Comparison with Weight Set which maintained by the Calibration Laboratory Co., Ltd.

#### REFERENCE STANDARD USED :

Weight Set, Mettler Toledo Class E2 S/N. 158850.

#### TRACEABILITY :

The measurements are traceable to International System of Units (SI), through National Institute of Metrology (Thailand).  
Certificate No. MM-0165-23, Due Date 21 December 2025.

#### UNCERTAINTY :

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor complies with the table which for a normal distribution corresponds to a coverage probability of approximately 95%. It has been evaluated according to the "Evaluation of the Uncertainty of Measurement in Calibration (EA-4/02 M:2022)"

Certificate No. Q25018253

F3-011-05/12-23

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@clcalibration



CALIBRATION LABORATORY CO., LTD.

2/10-11, 14, 55 Soi Prasert Manukit 29 Yaek 4, Prasert Manukit Rd., Ladphrao, Bangkok 10230  
Tel. 02-578-0353-4 Fax: 02-578-2672 www.cal-laboratory.com E-mail: sale@cal-laboratory.com



NSC-TISI-TIS 17025  
CALIBRATION 0059  
CLC

## CERTIFICATE OF CALIBRATION

### FOR

NOMENCLATURE : BALANCE  
MANUFACTURER : SHIMADZU  
MODEL / TYPE : AP225WD  
SERIAL NO. : D316300692[L/A-001]  
CLID. NO. : 362100172  
JOB CONTROL NO. : 250215018253  
CALIBRATION SERVICE : ☐ IN-LABORATORY ☒ ON-SITE

CUSTOMER : ENVIRONMENTAL MEASUREMENTS CO., LTD.

5/45 BAAN KLANG KRUNG BIZ TOWN, SOI SRINAGARINDRA 46/1 (PRAMOTE),  
NONG BON SUB-DISTRICT, PRAWET DISTRICT, BANGKOK 10250

DATE OF RECEIVED : 15 February 2025

DATE OF ISSUED : 04 March 2025

The report of calibration shall not be reproduced except in full without approval of the Calibration Laboratory Co., Ltd.

Calibrated By :



Approved By :

04 March 2025

This Calibration Certificate documents the traceability to national standards, which realize the units of measurement according to the International System of Units (SI)

Certificate No. Q25018253

F3-011-05/12-23

page 1 of 3



@clcalibration



# CALIBRATION LABORATORY Co., LTD.

2/10-11, 14, 55 Soi Prasert Manukit 29 Yaek 4, Prasert Manukit Rd., Ladphrao, Bangkok 10230  
Tel. 02-578-0353-4 Fax: 02-578-2672 www.cal-laboratory.com E-mail: sale@cal-laboratory.com



NSC-TISI-TIS 17025  
CALIBRATION 0059  
CLC

## CERTIFICATE OF CALIBRATION

### FOR

NOMENCLATURE : BALANCE  
MANUFACTURER : METTLER TOLEDO  
MODEL / TYPE : MS204TS/00  
SERIAL NO. : B935191252[LA-002]  
CLID. NO. : 362200356  
JOB CONTROL NO. : 250215018254  
CALIBRATION SERVICE : ☐ IN-LABORATORY ☒ ON-SITE  
CUSTOMER : ENVIRONMENTAL MEASUREMENTS CO., LTD.  
5/45 BAAAN KLANG KRUNG BIZ TOWN, SOI SRINAGARINDRA 46/1 (PRAMOTE),  
NONG BON SUB-DISTRICT, PRAWET DISTRICT, BANGKOK 10250

DATE OF RECEIVED : 15 February 2025

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Certificate No. Q25018254

F3-011-05/12-23

page 1 of 3



@clcalibration



# CALIBRATION LABORATORY Co., LTD.

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Tel. 02-578-0353-4 Fax: 02-578-2672 www.cal-laboratory.com E-mail: sale@cal-laboratory.com



NSC-TISI-TIS 17025  
CALIBRATION 0059  
CLC

CONDITION OF CALIBRATION ITEM : RECEIVED IN GOOD OPERATIONAL CONDITION

MEASUREMENT RESULTS : (X) without adjustment ( ) adjustment

### CALIBRATION DATA

#### 1. Error of indications

Nominal Test Value (g)	Conventional mass (g)	Display Value (g)	Error of Balance (g)	Uncertainty $\pm$ (mg)	Coverage factor k
Unload	0.0000	0.0000	0.0000	0.07	2.00
5.0000	5.0000	5.0001	+0.0001	0.11	2.00
10.0000	10.0000	10.0000	0.0000	0.11	2.00
20.0000	20.0000	20.0000	0.0000	0.12	2.00
40.0000	40.0000	39.9999	-0.0001	0.14	2.00
60.0000	59.9999	59.9999	0.0000	0.15	2.00
80.0000	79.9999	80.0000	+0.0001	0.19	2.00
100.0000	99.9999	100.0000	+0.0001	0.17	2.00
120.0000	119.9999	120.0000	+0.0001	0.21	2.00
140.0000	139.9999	139.9999	0.0000	0.25	2.00
160.0000	159.9998	159.9998	0.0000	0.26	2.00
180.0000	179.9998	179.9998	0.0000	0.30	2.00
200.0000	199.9997	199.9996	-0.0001	0.26	2.00

#### 2. Repeatability of indications

Nominal Test Value (g)	Standard Deviation of Reading (g)
200.0000	0.00006

#### 3. Effect of eccentric application of a load on the indication

<input type="checkbox"/>	<input checked="" type="checkbox"/>
Display Value (g)	
Nominal Test Value (g)	Maximum Difference of Center Value (g)
100.0000	0.0001

Note. The Scope of Accredited TISI Certificate No. 23-LB0092 Issue 02 Page 116,117 of 138

This report is valid for the above stated instrument/s only.

### End of Certificate ###

Certificate No. Q25018253

F3-011-05/12-23

page 3 of 3



@clcalibration



# CALIBRATION LABORATORY CO., LTD.

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CLC  
Accredited  
ISO/IEC 17025  
CALIBRATION 0059

CONDITION OF CALIBRATION ITEM : RECEIVED IN GOOD OPERATIONAL CONDITION

MEASUREMENT RESULTS : ( X ) without adjustment ( ) adjustment

## CALIBRATION DATA

### 1. Error of indications

Nominal Test Value ( g )	Conventional mass ( g )	Display Value ( g )	Error of Balance ( g )	Uncertainty $\pm$ ( mg )	Coverage factor <i>k</i>
Unload	0.0000	0.0000	0.0000	0.06	2.00
0.1000	0.1000	0.1000	0.0000	0.14	2.00
0.5000	0.5000	0.5000	0.0000	0.15	2.00
1.0000	1.0000	1.0001	+0.0001	0.15	2.00
2.0000	2.0000	2.0001	+0.0001	0.15	2.00
5.0000	5.0000	5.0000	0.0000	0.15	2.00
10.0000	10.0000	10.0001	+0.0001	0.15	2.00

### 2. Repeatability of indications

Nominal Test Value ( g )	Standard Deviation of Reading ( g )
200.0000	0.00004

### 3. Effect of eccentric application of a load on the indication

	<input checked="" type="checkbox"/>				
Nominal Test Value ( g )	Display Value ( g )				
	Position 1	Position 2	Position 3	Position 4	Position 5
100.0000	99.9999	100.0001	99.9999	99.9998	99.9998
Maximum Difference of Center Value ( g )					0.0002

Note. The Scope of Accredited TISI Certificate No. 23-LB0092 Issue 02 Page 116 of 138

This report is valid for the above stated instrument/s only.

### End of Certificate ###

Certificate No. Q25018254

F3-011-05/12-23

page 3 of 3



@clcalibration



# CALIBRATION LABORATORY CO., LTD.

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CLC  
Accredited  
ISO/IEC 17025  
CALIBRATION 0059

## REPORT OF CALIBRATION

### FOR

NOMENCLATURE : BALANCE  
MANUFACTURER : METTLER TOLEDO  
MODEL / TYPE : MS204TS/00  
SERIAL NO. : B935191252[LA-002]  
LOCATION SITE : LABORATORY - BALANCE ROOM  
DATE OF CALIBRATION : 27 February 2025

### ENVIRONMENT CONDITIONS :

Temperature : 23 °C to 24 °C

Relative Humidity : 49 % to 51 %

### PROCEDURE USED :

This instrument was calibrated under procedure No. W1-305-46 based on EURAMET cg-18 Version 4.0 (11/2015).

The calibration was performed by Comparison with Weight Set which maintained by the Calibration Laboratory Co., Ltd.

### REFERENCE STANDARD USED :

Weight Set, Mettler Toledo Class E2 S/N. 158850.

### TRACEABILITY :

The measurements are traceable to International System of Units (SI), through National Institute of Metrology (Thailand).

Certificate No. MM-0165-23, Due Date 21 December 2025.

### UNCERTAINTY :

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor complies with the table which for a normal distribution corresponds to a coverage probability of approximately 95%. It has been evaluated according to the "Evaluation of the Uncertainty of Measurement in Calibration (EA-4/02 M:2022)"

Certificate No. Q25018254

F3-011-05/12-23

page 2 of 3



@clcalibration





## Certificate of Calibration

Certificate Number : SPR25050011-1      Page : 1 of 3  
Customer : ENVIRONMENTAL MEASUREMENTS CO., LTD.  
5/45 Baan Klang Krung Biz Town, Soi Srinagarindra 46/1 (Pramote),  
Nongbon Sub-district, Prawet District, Bangkok 10250

Equipment Name : Soil Hydrometer  
Manufacturer : Precision  
Model : ASTM 152H  
Serial Number : 061  
ID. Number : N/A  
Environmental Conditions  
Ambient Temperature : 23 °C ± 2 °C      Received Date : 02 May 2025  
Relative Humidity : 50 % ± 15 %      Calibration Date : 10 May 2025  
Location of Calibration : In-Lab      Recommend Due Date : N/A  
Calibration Procedure : SP-CPM-04-14      Date of Issue : 11 May 2025

### Method of Calibration

This certifies that the above instrument was calibrated in compliance with the calibration system requirement of ISO/IEC 17025:2017 in accordance with reference procedure. Standards used to perform this calibration are certified by to NIST or equivalent, National metrology institute, Natural physical constants, consensus standards. The result reported herein apply only to the calibration of the item described above as received. Our decision rule is to contact the customer if the item pass and fail calibration when the results include the uncertainties and the customer must determine if the results meets their needs.  
The calibration certificate shall not be reproduced except in full, without written approval of SP Metrology System (Thailand).

Calibrated by :



## Calibration Report

Certificate Number : SPR25050011-1      Page : 2 of 3

### Reference Standards

Equipment Name	Model	Serial No.	Certificate No.	Due. Date
Digital Micrometer	293-821-30	45121126	SPR25020035-6	22 Feb 2026
Electronic Balance	N/A	14246789	SPR24090254-10	02 Oct 2025
Barometer	MHB-382SD	AJ.52188	SPR25020035-8	26 Feb 2026
Standard Weight Ring	N/A	N/A	SPR24110445-33	26 Dec 2025
Digital Thermometer With PRT	GT11/3850-40-392	08000098/100288	SPR24060233-5	27 Jun 2025

### Traceability

This certification is traceable to the International System of Unit maintained at :  
SP Metrology - SP Metrology system (Thailand) Co.Ltd.



## Result of Calibration

Certificate Number : SPR25050011-1 Page : 3 of 3

Range : -5 to 60 g/ml Resolution : 1 g/ml Accuracy (±) : 1 g/ml

Hydrometer Measurement @ 20 °C Unit : g/ml

Standard Value	UUC Reading	Error	Uncertainty ( ± )
0.3380	0	-0.3380	0.23
30.1943	30	-0.1943	0.23
60.1249	60	-0.1249	0.23

### Note:

The result of calibration was found accurate as show on date and place of calibration only.  
This Certificate is not certified for any commercial transaction.

### Measurement Uncertainty

The reported uncertainty of measurement is the expanded uncertainty obtained by multiplying the standard uncertainty with the coverage factor  $k = 2$ , providing a level of confidence approximately 95%.  
- End of Certificate -

69/29 Moo 1 Klongsi Klongluang Pathumthani 12120 ( Thailand ) Tel: (662) 193-2220 5 คลุส่าย www.สอบเทียบเครื่องมือวัด.com



ที่ อ ก ๐๑๑๐(๑)/ ๑ ๕ ๙ ๑

กรมโรงงานอุตสาหกรรม  
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท  
เขตราชเทวี กรุงเทพฯ ๑๐๔๐๐

๒๕ กุมภาพันธ์ ๒๕๖๔

เรื่อง ยกเลิกบุคลากรของห้องปฏิบัติการวิเคราะห์

เรียน กรรมการผู้จัดการ บริษัท ยูนิค แอนาไลสต์ แอนด์ เอ็นจิเนียริง คอนซัลแตนท์ จำกัด  
อ้างถึง คำขอขึ้นทะเบียน/ด้อยค่า/เปลี่ยนแปลงบุคลากร และขอคืนสารมลพิษของห้องปฏิบัติการวิเคราะห์เอกชน  
ลงวันที่ ๑๘ กุมภาพันธ์ ๒๕๖๔

ตามคำขอที่อ้างถึง บริษัท ยูนิค แอนาไลสต์ แอนด์ เอ็นจิเนียริง คอนซัลแตนท์ จำกัด  
ห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖-๑๔๕ สถานที่ตั้งเลขที่ ๓ ซอยอุดมสุข ๔๑ ถนนสุขุมวิท  
แขวงบางจาก เขตพระโขนง กรุงเทพมหานคร ขอยกเลิกบุคลากร ความละเอียดแจ้งแล้ว นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้ยกเลิกเจ้าหน้าที่ห้องปฏิบัติการวิเคราะห์เอกชน  
จำนวน ๓ ราย ได้แก่

ทะเบียนเลขที่ ๖-๑๔๕-จ-๐๐๕๘  
ทะเบียนเลขที่ ๖-๑๔๕-จ-๐๑๗๐  
ทะเบียนเลขที่ ๖-๑๔๕-จ-๐๑๔๘

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ



อธิบดีกรมโรงงานอุตสาหกรรม

กองวิจัยและพัฒนายุทธศาสตร์โรงงาน

กลุ่มมาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษและทะเบียนห้องปฏิบัติการ

โทร. ๐ ๒๔๓๐ ๖๓๑๒ ต่อ ๒๑๐๓-๕

โทรสาร ๐ ๒๔๓๐ ๖๓๑๒ ต่อ ๒๑๔๙

ไปรษณีย์อิเล็กทรอนิกส์ saraban@dlw.mail.go.th



UNITED ANALYST AND ENGINEERING  
CONSULTANT COMPANY LIMITED



“อุตสาหกรรมก้าวไกล ประเทศไทยก้าวหน้า ร่วมกันพัฒนา อุตสาหกรรมสีเขียว”



สิ่งที่ส่งมาด้วย ๑

เอกสารแนบท้ายหนังสือต่ออายุรั้งขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

บริษัท ยูไนเต็ด แอนนาลิสต์ แอนด์ เอ็นจิเนียริง คอมพิวเตอร์ จำกัด เลขทะเบียน ๖-๑๔๔

ที่ อภ ๐๓๑๐(๑)/ ๑ ๐ ๘ ๙ ลงวันที่ ๐๗ กุมภาพันธ์ ๒๕๖๕

๓. ผู้ควบคุมห้องปฏิบัติการวิเคราะห์เอกชน จำนวน ๔๐ ราย

๑	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๐๑	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๓๓
๒	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๐๒	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๓๔
๓	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๐๓	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๓๕
๔	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๐๔	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๓๖
๕	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๐๕	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๓๗
๖	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๐๖	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๓๘
๗	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๐๗	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๓๙
๘	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๐๘	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๔๐
๙	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๐๙	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๔๑
๑๐	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๑๐	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๔๒
๑๑	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๑๑	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๔๓
๑๒	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๑๒	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๔๔
๑๓	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๑๓	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๔๕
๑๔	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๑๔	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๔๖
๑๕	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๑๕	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๔๗
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๓๓	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๓๓	ทะเบียนเลขที่ ๖-๑๔๔-ค-๐๐๖๕

๓๖) นายนาเคนทร์...

๓๖) นายนาเคนทร์...



ที่ อภ ๐๓๑๐(๑)/ ๑ ๐ ๘ ๙

กรมโรงงานอุตสาหกรรม

ถนนพหลโยธิน แขวงทุ่งพญาไท

เขตราชเทวี กรุงเทพฯ ๑๐๔๐๐

๐๗ กุมภาพันธ์ ๒๕๖๕

เรื่อง ต่ออายุหนังสือรั้งขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

เรียน กรรมการผู้จัดการ บริษัท ยูไนเต็ด แอนนาลิสต์ แอนด์ เอ็นจิเนียริง คอมพิวเตอร์ จำกัด

อ้างถึง คำขอขึ้นทะเบียน/ต่ออายุ/เปลี่ยนแปลงบุคลากร และชนิดสารเคมีของห้องปฏิบัติการวิเคราะห์เอกชน

ลงวันที่ ๓ ธันวาคม ๒๕๖๔

สิ่งที่ส่งมาด้วย ๑. รายชื่อผู้ควบคุมห้องปฏิบัติการวิเคราะห์เอกชน จำนวน ๔๐ ราย

๒. รายชื่อเจ้าหน้าที่ห้องปฏิบัติการวิเคราะห์เอกชน จำนวน ๑๔๑ ราย

๓. ขอบข่ายสารเคมีที่ได้รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม

ตามคำขอที่อ้างถึง บริษัท ยูไนเต็ด แอนนาลิสต์ แอนด์ เอ็นจิเนียริง คอมพิวเตอร์ จำกัด ขอต่ออายุหนังสือรั้งขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖-๑๔๔ สถานที่ตั้งเลขที่ ๓ ซอยอุดมสุข ๔๑ ถนนสุขุมวิท แขวงบางจาก เขตพระโขนง กรุงเทพมหานคร ต่อกรมโรงงานอุตสาหกรรม นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้บริษัท ยูไนเต็ด แอนนาลิสต์ แอนด์ เอ็นจิเนียริง คอมพิวเตอร์ จำกัด ต่ออายุหนังสือรั้งขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน โดยมีองค์ประกอบดังนี้

ก. ผู้ควบคุมห้องปฏิบัติการวิเคราะห์เอกชน จำนวน ๔๐ ราย ตามสิ่งที่ส่งมาด้วย ๑

ข. เจ้าหน้าที่ห้องปฏิบัติการวิเคราะห์เอกชน จำนวน ๑๔๑ ราย ตามสิ่งที่ส่งมาด้วย ๒

ค. ขอบข่ายสารเคมีที่ได้รับขึ้นทะเบียนให้วิเคราะห์ในน้ำ/น้ำเสีย น้ำใต้ดิน อากาศเสีย สิ่งปฏิกูลหรือวัสดุที่ไม่ใช้แล้ว และดิน ตามสิ่งที่ส่งมาด้วย ๓

หนังสือฉบับนี้จะหมดอายุในวันที่ ๒ กุมภาพันธ์ ๒๕๖๕ หากประสงค์จะต่ออายุหนังสือรั้งขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน ให้ยื่นคำขอต่ออายุพร้อมเอกสารประกอบคำขอต่อกรมโรงงานอุตสาหกรรมภายใน ๖๐ วัน ก่อนวันสิ้นอายุของหนังสือรั้งขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ



ANALYST AND ENGINEERING  
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COMPANY LIMITED

กองวิจัยและเตือนภัยมลพิษโรงงาน

กลุ่มมาตรฐานวิธีการวิเคราะห์ทดสอบมลพิษและทางพิษวิทยาของผลิตภัณฑ์อุตสาหกรรม

โทร. ๐ ๒๕๓๐ ๖๓๑๒ ต่อ ๒๑๐๓-๕

โทรสาร ๐ ๒๕๓๐ ๖๓๑๒ ต่อ ๒๑๔๙

ไปรษณีย์อิเล็กทรอนิกส์ saraban@diw.mail.go.th



“อุตสาหกรรมก้าวหน้า ร่วมกันพัฒนา อุตสาหกรรมสีเขียว”

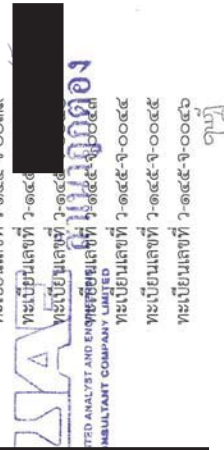


สิ่งที่ส่งมาด้วย ๒

เอกสารแนบท้ายหนังสืออยู่รับทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน  
บริษัท ยูนิเค็ด เอ็นนาทิสต์ แอนด์ เอ็นจิเนียริง คอนซัลแตนท์ จำกัด เลขทะเบียน ๖๑๔๔  
ที่ อก ๐๓๑๐(๑)/ ๑ ๐ ๘ ๙ ลงวันที่ ๐๗ กุมภาพันธ์ ๒๕๖๕

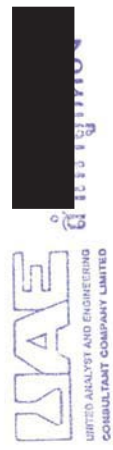
ข. เจ้าหน้าที่ห้องปฏิบัติการวิเคราะห์เอกชน จำนวน ๑๔๑ ราย

๑	๑	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๐๑
๒	๒	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๐๓
๓	๓	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๐๔
๔	๔	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๐๕
๕	๕	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๐๖
๖	๖	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๐๗
๗	๗	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๑๐
๘	๘	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๑๑
๙	๙	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๑๒
๑๐	๑๐	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๑๓
๑๑	๑๑	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๑๔
๑๒	๑๒	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๑๕
๑๓	๑๓	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๑๗
๑๔	๑๔	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๑๘
๑๕	๑๕	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๑๙
๑๖	๑๖	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๒๐
๑๗	๑๗	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๒๑
๑๘	๑๘	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๒๒
๑๙	๑๙	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๒๓
๒๐	๒๐	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๒๔
๒๑	๒๑	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๒๕
๒๒	๒๒	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๒๖
๒๓	๒๓	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๒๗
๒๔	๒๔	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๒๘
๒๕	๒๕	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๒๙
๒๖	๒๖	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๓๐
๒๗	๒๗	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๓๑
๒๘	๒๘	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๓๒
๒๙	๒๙	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๓๓
๓๐	๓๐	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๓๔
๓๑	๓๑	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๓๕
๓๒	๓๒	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๓๖
๓๓	๓๓	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๓๗
๓๔	๓๔	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๓๘
๓๕	๓๕	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๓๙
๓๖	๓๖	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๔๐
๓๗	๓๗	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๔๑
๓๘	๓๘	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๔๒
๓๙	๓๙	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๔๓
๔๐	๔๐	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๔๔



๓๒	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๔๐
๓๓	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๔๑
๓๔	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๔๒
๓๕	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๔๓
๓๖	ทะเบียนเลขที่ ๖-๑๔๔๕-จ-๐๐๔๔

นางสาวนิภาพร...



๓๖) นางสาวนิภาพร...



[illegible][illegible]

เอกสารแนบท้ายหนังสือออายูรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน  
บริษัท ปูนินเต็ด แอมโมลิสแอส แอนด์ เอ็นจิเนียริง คอนซัลแตนท์ จำกัด เลขทะเบียน ๖-๑๕๕  
ที่ อก ๐๓๑๐(๖) ๑ ๐ ๘ ๘ ๘ ลงวันที่ ๐๗ กุมภาพันธ์ ๒๕๖๕

ขอประชาสัมพันธ์ที่รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม จำนวน ๓๕๗ รายการ

แนบท้าย จำนวน 46 รายการ

ลำดับ	สารเคมี	วิธีวิเคราะห์
1	Aldrin	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
2	Arsenic	1) Digestion, Hydride Generation/Atomic Absorption Spectrometric Method <sup>(4)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
3	Barium	Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
4	$\alpha$ -BHC	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
5	$\beta$ -BHC	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
6	$\delta$ -BHC	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
7	$\gamma$ -BHC	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
8	Biochemical Oxygen Demand	1) 5-Day BOD Test, Azide Modification Method <sup>(4)</sup> 2) 5-Day BOD Test, Membrane Electrode Method <sup>(4)</sup>
9	Cadmium	1) Digestion, Direct Air-Acetylene Flame Method <sup>(4)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
10	Chemical Oxygen Demand	1) Closed Reflux, Titrimetric Method <sup>(4)</sup> 2) Closed Reflux, Colorimetric Method <sup>(4)</sup> 3) Open Reflux, Titrimetric Method <sup>(4)</sup>
11	Chlordane	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
12	Chromium	1) Digestion, Direct Air-Acetylene Flame Method <sup>(4)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
13	Color	ADMI Weighted-Ordinate Spectrophotometric Method <sup>(4)</sup>
14	Copper	1) Digestion, Direct Air-Acetylene Flame Method <sup>(4)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
15	Cyanide	1) Distillation, Colorimetric Method <sup>(4)</sup> 2) Total Cyanide after Distillation, by Flow Injection Analysis Method <sup>(4)</sup>
16	o,p'-DDT	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
17	4,4'-DDD	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
18	4,4'-DDE	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
19	4,4'-DDT	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
20	Dieldrin	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
21	Endosulfan I	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
22	Endosulfan II	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
23	Endosulfan sulfate	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
24	Endrin	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>

25 Endrin aldehyde...

๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๑๖๐
๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๑๖๑
๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๑๖๒
๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๑๖๓
๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๑๖๔
๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๑๖๕
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๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๑๖๗
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๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๑๗๙
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๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๑๘๘
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๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๑๙๖
๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๑๙๗
๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๑๙๘
๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๑๙๙
๑๑๑	ทะเบียนเลขที่ ๖-๑๕๕-จ-๐๒๐๐

- ๒ -

ลำดับ	สารเคมี	วิธีการหา
25	Endrin aldehyde	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
26	Formaldehyde	Distillation, Colorimetric Method <sup>(2)</sup>
27	Free Chlorine	1) Iodometric Method <sup>(4)</sup> 2) DPD Ferrous Titrimetric Method <sup>(4)</sup>
28	Heptachlor	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
29	Heptachlor Epoxide	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
30	Hexavalent Chromium	Colorimetric Method <sup>(4)</sup>
31	Lead	1) Digestion, Direct Air-Acetylene Flame Method <sup>(4)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
32	Manganese	1) Digestion, Direct Air-Acetylene Flame Method <sup>(4)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
33	Mercury	Digestion, Cold-Vapor Atomic Absorption Spectrometric Method <sup>(4)</sup>
34	Methoxychlor	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup>
35	Nickel	1) Digestion, Direct Air-Acetylene Flame Method <sup>(4)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
36	Oil & Grease	1) Liquid-Liquid, Partition-Gravimetric Method <sup>(4)</sup> 2) Soxhlet Extraction Method <sup>(4)</sup>
37	pH	Electrometric Method <sup>(4)</sup>
38	Phenols	1) Distillation, Chloroform Extraction Method <sup>(4)</sup> 2) Distillation, Direct Photometric Method <sup>(4)</sup>
39	Selenium	1) Digestion, Hydride Generation/Atomic Absorption Spectrometric Method <sup>(4)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
40	Sulfide	1) Iodometric Method <sup>(4)</sup> 2) Methylene Blue Method <sup>(4)</sup>
41	Temperature	Laboratory and Field Methods <sup>(4)</sup>
42	Total Dissolved Solids	Dried at 180 °C <sup>(4)</sup>
43	Total Kjeldahl Nitrogen	Semi-Micro-Kjeldahl Method <sup>(4)</sup>
44	Total Suspended Solids	Dried from 103 to 105 °C <sup>(4)</sup>
45	Trivalent Chromium	1) Digestion, Direct Air-Acetylene Flame Method <sup>(4)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
46	Zinc	1) Digestion, Direct Air-Acetylene Flame Method <sup>(4)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>

น้ำเต้าน...

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## น้ำเต้าน จำนวน 126 รายการ

ลำดับ	สารเคมี	วิธีการหา
1	Acenaphthene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
2	Acetone	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
3	Aldrin	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
4	Anthracene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
5	Antimony	Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
6	Arsenic	1) Digestion, Hydride Generation/Atomic Absorption Spectrometric Method <sup>(4)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
7	Atrazine	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
8	Barium	Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
9	Benz(a)anthracene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
10	Benzene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
11	Benzo(b)fluoranthene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
12	Benzo(k)fluoranthene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
13	Benzoic acid	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>

14 Benzo(a)pyrene...



ลำดับ	สารมลพิษ	วิธีวิเคราะห์
29	Chlorobenzene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
30	Chlorodibromomethane	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
31	Chloroform	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
32	2-Chlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
33	Chromium	1) Digestion, Direct Air-Acetylene Flame Method <sup>(a)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(a)</sup>
34	Chromium (III)	1) Digestion, Direct Air-Acetylene Flame Method; Colorimetric Method; Calculation <sup>(a)</sup> 2) Digestion, Inductively Coupled Plasma Method; Colorimetric Method; Calculation <sup>(a)</sup>
35	Chromium (VI)	Colorimetric Method <sup>(a)</sup>
36	Chrysene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
37	Cyanide	Distillation, Colorimetric Method <sup>(a)</sup>
38	2,4-D	Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup>
39	DDD	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
40	DDE	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
41	DDT	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
42	Dibenz(a,h)anthracene	1) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>

43 Di-n-butyl phthalate...

ลำดับ	สารมลพิษ	วิธีวิเคราะห์
14	Benzo(a)pyrene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
15	Benzo(g,h,i)perylene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
16	Beryllium	Digestion, Inductively Coupled Plasma Method <sup>(a)</sup>
17	Bis(2-chloroethyl)ether	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
18	Bis(2-ethylhexyl)phthalate	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
19	Bromodichloromethane	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
20	Bromoform	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
21	Butanol	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
22	Butyl benzyl phthalate	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
23	Cadmium	1) Digestion, Direct Air-Acetylene Flame Method <sup>(a)</sup> 2) Digestion, Electrothermal Atomic Absorption Spectrometric Method <sup>(a)</sup>
24	Carbazole	3) Digestion, Inductively Coupled Plasma Method <sup>(a)</sup> Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
25	Carbon disulfide	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
26	Carbon tetrachloride	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
27	Chlordane	1) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
28	p-Chloroaniline	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>

29 Chlorobenzene...



ลำดับ	สารเคมี	วิธีวิเคราะห์
61	2,4-Dinitrotoluene	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
62	2,6-Dinitrotoluene	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
63	Di-n-Octyl phthalate	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
64	Endosulfan	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
65	Endrin	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
66	Ethylbenzene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
67	Fluoranthene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
68	Fluorene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
69	Heptachlor	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
70	Heptachlor epoxide	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
71	Hexachlorobenzene	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
72	Hexachloro-1,3-butadiene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
73	n-Hexane	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>

74  $\alpha$ -HCH...

ลำดับ	สารเคมี	วิธีวิเคราะห์
43	Di-n-butyl phthalate	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
44	1,2-Dichlorobenzene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
45	1,3-Dichlorobenzene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
46	1,4-Dichlorobenzene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
47	3,3'-Dichlorobenzidine	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
48	1,1-Dichloroethane	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
49	1,2-Dichloroethane	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
50	1,1-Dichloroethylene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
51	cis-1,2-Dichloroethylene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
52	trans-1,2-Dichloroethylene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
53	2,4-Dichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
54	1,2-Dichloropropane	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
55	1,3-Dichloropropane	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
56	1,3-Dichloropropene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
57	Dieldrin	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
58	Diethyl phthalate	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
59	2,4-Dimethylphenol	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
60	2,4-Dinitrophenol	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>

61 2,4-Dinitrotoluene...

ลำดับ	สารเคมี	วิธีวิเคราะห์
87	Methylene chloride	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
88	2-Methylphenol	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
89	2-Methylnaphthalene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
90	Methyl tert-butyl ether	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
91	Naphthalene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
92	Nickel	1) Digestion, Direct Air-Acetylene Flame Method <sup>(a)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(a)</sup>
93	Nitrobenzene	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
94	N-Nitrosodiphenylamine	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
95	N-Nitrosodi-n-propylamine	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
96	Polychlorinated Biphenyls - PCB 1016 - PCB 1221 - PCB 1232 - PCB-1242 - PCB-1248 - PCB-1254 - PCB-1260	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
97	Pentachlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
98	pH	Electrometric Method <sup>(a)</sup>
99	Phenanthrene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>

ลำดับ	สารเคมี	วิธีวิเคราะห์
74	$\alpha$ -HCH	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
75	$\beta$ -HCH	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
76	$\gamma$ -HCH	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
77	Hexachlorocyclopentadiene	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
78	Hexachloroethane	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
79	Indeno(1,2,3-cd)pyrene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
80	Isophorone	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
81	Lead	1) Digestion, Direct Air-Acetylene Flame Method <sup>(a)</sup> 2) Digestion, Electrothermal Atomic Absorption Spectrometric Method <sup>(a)</sup>
82	Manganese	3) Digestion, Inductively Coupled Plasma Method <sup>(a)</sup> 1) Digestion, Direct Air-Acetylene Flame Method <sup>(a)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(a)</sup>
83	Mercury	Digestion, Cold-Vapor Atomic Absorption Spectrometric Method <sup>(a)</sup>
84	Methanol	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
85	Methoxychlor	1) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>
86	Methyl bromide	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(a)</sup>

ลำดับ	สารมลพิษ	วิธีวิเคราะห์
116	2,4,5-Trichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
117	2,4,6-Trichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
118	1,3,5-Trimethylbenzene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
119	Vanadium	Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
120	Vinyl acetate	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
121	Vinyl chloride	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
122	m-Xylene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
123	o-Xylene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
124	p-Xylene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
125	Xylene (Total)	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
126	Zinc	1) Digestion, Direct Air-Acetylene Flame Method <sup>(4)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>

อากาศเสีย (ปล่อยระบาย) จำนวน 25 รายการ

ลำดับ	สารมลพิษ	วิธีวิเคราะห์
1	Antimony	Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method <sup>(5)</sup>
2	Arsenic	1) Isokinetic Sampling, Digestion, Hydride Generation/Atomic Absorption Spectrometric Method <sup>(5)</sup> 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method <sup>(5)</sup>
3	Cadmium	1) Isokinetic Sampling, Digestion, Direct Air-Acetylene Flame Method <sup>(5)</sup> 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method <sup>(5)</sup>
4	Carbon Monoxide	Instrumental Analyzer Method <sup>(5)</sup>
5	Chlorine	Isokinetic Sampling, Ion Chromatographic Method <sup>(5)</sup>
6	Chromium	1) Isokinetic Sampling, Digestion, Direct Air-Acetylene Flame Method <sup>(5)</sup>

ตาม

Chromium (ต่อ)...

ลำดับ	สารมลพิษ	วิธีวิเคราะห์
100	Phenol	1) Distillation, Chloroform Extraction Method <sup>(4)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
101	Pyrene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
102	Selenium	1) Digestion, Hydride Generation/Atomic Absorption Spectrometric Method <sup>(4)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
103	Silver	Digestion, Inductively Coupled Plasma Method <sup>(4)</sup>
104	Styrene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
105	1,1,2,2-Tetrachloroethane	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
106	Tetrachloroethylene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
107	Toluene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
108	Toxaphene	1) Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(4)</sup> 2) Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
109	TPH (C <sub>5</sub> - C <sub>6</sub> )	1) Purge and Trap, Gas Chromatographic Method <sup>(12,22)</sup> 2) Purge and Trap, Gas Chromatographic/Mass spectrometric Method <sup>(12,27)</sup>
110	TPH (C <sub>5,8</sub> - C <sub>6</sub> )	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(9,22)</sup>
111	TPH (C <sub>5,16</sub> - C <sub>35</sub> )	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(9,22)</sup>
112	1,2,4-Trichlorobenzene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
113	1,1,1-Trichloroethane	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
114	1,1,2-Trichloroethane	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>
115	Trichloroethylene	Purge and Trap Gas Chromatographic/Mass Spectrometric Method <sup>(4)</sup>

ตาม

116 2,4,5-Trichlorophenol...



ลำดับ	สารมลพิษ	วิธีวิเคราะห์
23	Total Suspended Particulate	Isokinetic Sampling, Gravimetric Method <sup>[5]</sup>
24	Vanadium	Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method <sup>[5]</sup>
25	Xylene	1) Bag Sampling, Gas Chromatographic Method <sup>[5]</sup> 2) Adsorption Sampling, Gas Chromatographic Method <sup>[5]</sup>

สิ่งปลูกสรหรือวัตถุที่ไม่ใช่แล้ว จำนวน 35 รายการ

ลำดับ	สารมลพิษ	วิธีวิเคราะห์
1	Aldrin	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>[3,9,23]</sup> 2) Ultrasonic Extraction, Gas Chromatographic Method <sup>[10,23]</sup>
2	Antimony	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>[3,6,14]</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>[7,14]</sup>
3	Arsenic	1) Waste Extraction, Digestion, Hydride Generation/Atomic Absorption Spectrometric Method <sup>[3,6,14]</sup> 2) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>[3,6,14]</sup> 3) Digestion, Hydride Generation/Atomic Absorption Spectrometric Method <sup>[7,14]</sup>
4	Barium	4) Digestion, Inductively Coupled Plasma Method <sup>[7,14]</sup> 1) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>[3,6,14]</sup>
5	Beryllium	2) Digestion, Inductively Coupled Plasma Method <sup>[7,14]</sup> 1) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>[3,6,14]</sup>
6	Cadmium	2) Digestion, Inductively Coupled Plasma Method <sup>[7,14]</sup> 1) Waste Extraction, Digestion, Flame Atomic Absorption Spectrometric Method <sup>[3,6,15]</sup> 2) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>[3,6,14]</sup>
7	Chlordane	3) Digestion, Flame Atomic Absorption Spectrometric Method <sup>[7,15]</sup> 4) Digestion, Inductively Coupled Plasma Method <sup>[7,14]</sup> 1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>[3,9,23]</sup> 2) Ultrasonic Extraction, Gas Chromatographic Method <sup>[10,23]</sup>

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8 Chromium...

ลำดับ	สารมลพิษ	วิธีวิเคราะห์
6	Chromium (๖๖)	2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method <sup>[5]</sup>
7	Cobalt	Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method <sup>[5]</sup>
8	Copper	1) Isokinetic Sampling, Digestion, Direct Air-Acetylene Flame Method <sup>[5]</sup> 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method <sup>[5]</sup>
9	Cresol	Absorption Sampling, Gas Chromatographic Method <sup>[5]</sup>
10	Dioxins/Furans	Isokinetic Sampling <sup>[5]</sup>
11	Hydrogen Chloride	Isokinetic Sampling, Ion Chromatographic Method <sup>[5]</sup>
12	Hydrogen Fluoride	Isokinetic Sampling, Ion Chromatographic Method <sup>[5]</sup>
13	Hydrogen Sulfide	Absorption Sampling, Iodometric Method <sup>[5]</sup>
14	Lead	1) Isokinetic Sampling, Digestion, Direct Air-Acetylene Flame Method <sup>[5]</sup> 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method <sup>[5]</sup>
15	Manganese	1) Isokinetic Sampling, Digestion, Direct Air-Acetylene Flame Method <sup>[5]</sup> 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method <sup>[5]</sup>
16	Mercury	Isokinetic Sampling, Digestion, Cold-Vapor Atomic Absorption Spectrometric Method <sup>[5]</sup>
17	Nickel	1) Isokinetic Sampling, Digestion, Direct Air-Acetylene Flame Method <sup>[5]</sup> 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method <sup>[5]</sup>
18	Opacity	Ringelmann's Method <sup>[1]</sup>
19	Oxides of Nitrogen	1) Absorption Sampling, Phenoldisulfonic acid Method <sup>[5]</sup> 2) Instrumental Analyzer Method <sup>[5]</sup>
20	Selenium	1) Isokinetic Sampling, Digestion, Hydride Generation/Atomic Absorption Spectrometric Method <sup>[5]</sup> 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method <sup>[5]</sup>
21	Sulfur Dioxide	1) Absorption Sampling, Barium-Thorin Titrimetric Method <sup>[5]</sup> 2) Instrumental Analyzer Method <sup>[5]</sup>
22	Sulfuric Acid	Isokinetic Sampling, Barium-Thorin Titrimetric Method <sup>[5]</sup>

๒๓/๒๕  
23 Total Suspended Particulate...



ลำดับ	สารมลพิษ	วิธีวิเคราะห์
15	DDE	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(3,9,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup>
16	DDT	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(3,9,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup>
17	Dieldrin	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(3,9,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup>
18	Endrin	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(3,9,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup>
19	Heptachlor	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(3,9,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup>
20	Lead	1) Waste Extraction, Digestion, Flame Atomic Absorption Spectrometric Method <sup>(3,6,15)</sup> 2) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>(3,6,14)</sup>
21	Lindane	3) Digestion, Flame Atomic Absorption Spectrometric Method <sup>(7,15)</sup> 4) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup> 1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(3,9,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup>
22	Mercury	1) Waste Extraction, Digestion, Cold-Vapor Atomic Absorption Spectrometric Method <sup>(3,19)</sup> 2) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>(3,6,14)</sup> 3) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method <sup>(19)</sup> 4) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup>

๑๖  
Mercury (ค่า)

ลำดับ	สารมลพิษ	วิธีวิเคราะห์
8	Chromium	1) Waste Extraction, Digestion, Flame Atomic Absorption Spectrometric Method <sup>(3,6,15)</sup> 2) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>(3,6,14)</sup> 3) Digestion, Flame Atomic Absorption Spectrometric Method <sup>(7,15)</sup> 4) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup>
9	Chromium (III)	1) Waste Extraction, Digestion, Flame Atomic Absorption Spectrometric Method; Waste Extraction, Colorimetric Method; Calculation <sup>(3,6,15,17)</sup> 2) Waste Extraction, Digestion, Inductively Coupled Plasma Method; Waste Extraction, Colorimetric Method; Calculation <sup>(3,6,14,17)</sup> 3) Digestion, Flame Atomic Absorption Spectrometric Method; Alkaline Digestion, Colorimetric Method; Calculation <sup>(7,8,15,17)</sup> 4) Digestion, Inductively Coupled Plasma Method; Alkaline Digestion, Colorimetric Method; Calculation <sup>(7,8,14,17)</sup>
10	Chromium (VI)	1) Waste Extraction, Colorimetric Method <sup>(3,17)</sup> 2) Alkaline Digestion, Colorimetric Method <sup>(8,17)</sup>
11	Cobalt	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>(3,6,14)</sup>
12	Copper	2) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup> 1) Waste Extraction, Digestion, Flame Atomic Absorption Spectrometric Method <sup>(3,6,15)</sup> 2) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>(3,6,14)</sup> 3) Digestion, Flame Atomic Absorption Spectrometric Method <sup>(7,15)</sup> 4) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup>
13	2,4-D	1) Waste Extraction, Gas Chromatographic Method <sup>(3,19)</sup> 2) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup>
14	DDD	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(3,9,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup>

๑๖  
15 DDE...

ลำดับ	สารเคมี	วิธีวิเคราะห์
27	Polychlorinated Biphenyls (ดอ) - 2,2',3,4,4',5'-Hexachlorobiphenyl - 2,2',3,4,5,5'-Hexachlorobiphenyl - 2,2',3,5,5',6'-Hexachlorobiphenyl - 2,2',4,4',5,5'-Hexachlorobiphenyl - 2,2',3,3',4,4',5'-Heptachlorobiphenyl - 2,2',3,4,4',5,5'-Heptachlorobiphenyl - 2,2',3,4,4',5',6'-Heptachlorobiphenyl - 2,2',3,4',5,5',6'-Heptachlorobiphenyl - 2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl Pentachlorophenol	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(3.9,28)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup> Electrometric Method <sup>(31,32)</sup> 1) Waste Extraction, Digestion, Hydride Generation/Atomic Absorption Spectrometric Method <sup>(3.6,21)</sup> 2) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>(3.6,14)</sup> 3) Digestion, Hydride Generation/Atomic Absorption Spectrometric Method <sup>(7,21)</sup> 4) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup> 1) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup> 1) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>(3.6,14)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup>
28	pH	
29	Selenium	
30	Silver	
31	Thallium	

32 Toxaphene...

ลำดับ	สารเคมี	วิธีวิเคราะห์
22	Mercury (ดอ)	5) Thermal Decomposition Amalgamation and Atomic Absorption Spectrometric Method <sup>(20)</sup>
23	Methoxychlor	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(3.9,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup>
24	Molybdenum	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>(3.6,14)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup>
25	Nickel	1) Waste Extraction, Digestion, Flame Atomic Absorption Spectrometric Method <sup>(3.6,15)</sup> 2) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>(3.6,14)</sup> 3) Digestion, Flame Atomic Absorption Spectrometric Method <sup>(7,15)</sup> 4) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup>
26	Polychlorinated Biphenyls - Aroclor 1016 - Aroclor 1221 - Aroclor 1232 - Aroclor 1242 - Aroclor 1248 - Aroclor 1254 - Aroclor 1260 - 2-Chlorobiphenyl - 2,3-Dichlorobiphenyl - 2,2',5-Trichlorobiphenyl - 2,4',5-Trichlorobiphenyl - 2,2',3,5'-Tetrachlorobiphenyl - 2,2',5,5'-Tetrachlorobiphenyl - 2,3',4,4'-Tetrachlorobiphenyl - 2,2',3,4,5'-Pentachlorobiphenyl - 2,2',4,5,5'-Pentachlorobiphenyl - 2,3',4',6'-Pentachlorobiphenyl	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(3.9,24)</sup> 2) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,24)</sup>



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Polychlorinated Biphenyls (ดอ)...

ลำดับ	สารเคมี	วิธีวิเคราะห์
4	Anthracene (ตบ)	2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10.28)</sup>
5	Antimony	Digestion, Inductively Coupled Plasma Method <sup>(7.14)</sup>
6	Arsenic	1) Digestion, Hydride Generation/Atomic Absorption Spectrometric Method <sup>(7.16)</sup>
7	Atrazine	2) Digestion, Inductively Coupled Plasma Method <sup>(7.14)</sup>
8	Barium	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10.28)</sup>
9	Benz(a)anthracene	Digestion, Inductively Coupled Plasma Method <sup>(7.14)</sup>
10	Benzene	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10.25)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10.28)</sup>
11	Benzo(b)fluoranthene	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11.27)</sup>
12	Benzo(k)fluoranthene	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10.25)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10.28)</sup>
13	Benzoic acid	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10.25)</sup>
14	Benzo(a)pyrene	2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10.28)</sup>
15	Benzo(g,h,i)perylene	1) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10.28)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10.28)</sup>
16	Beryllium	Digestion, Inductively Coupled Plasma Method <sup>(7.14)</sup>

17 Bis(2-chloroethyl)ether...

ลำดับ	สารเคมี	วิธีวิเคราะห์
32	Toxaphene	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method <sup>(3.23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10.23)</sup>
33	Trichloroethylene	1) Waste Extraction, Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(3.12.27)</sup> 2) Waste Extraction, Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(3.11.27)</sup> 3) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup> 4) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11.27)</sup>
34	Vanadium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>(3.6.14)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(7.14)</sup>
35	Zinc	1) Waste Extraction, Digestion, Flame Atomic Absorption Spectrometric Method <sup>(3.6.15)</sup> 2) Waste Extraction, Digestion, Inductively Coupled Plasma Method <sup>(3.6.14)</sup> 3) Digestion, Flame Atomic Absorption Spectrometric Method <sup>(7.15)</sup> 4) Digestion, Inductively Coupled Plasma Method <sup>(7.14)</sup>

ดิบ จำนวน 125 รายการ

ลำดับ	สารเคมี	วิธีวิเคราะห์
1	Acenaphthene	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10.25)</sup>
2	Acetone	2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10.28)</sup> Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup>
3	Aldrin	1) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10.23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10.28)</sup>
4	Anthracene	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10.25)</sup>

Anthracene (ตบ)...



ลำดับ	สารเคมี	วิธีวิเคราะห์
33	Chromium	1) Digestion, Flame Atomic Absorption Spectrometric Method <sup>(7,15)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup>
34	Chromium (III)	1) Digestion, Flame Atomic Absorption Spectrometric Method; Alkaline Digestion, Colorimetric Method; Calculation <sup>(7,8,13,17)</sup> 2) Digestion, Inductively Coupled Plasma Method; Alkaline Digestion, Colorimetric Method; Calculation <sup>(7,8,14,17)</sup> Alkaline Digestion, Colorimetric Method <sup>(8,17)</sup>
35	Chromium (VI)	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,25)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
36	Chrysene	Extraction, Distillation, Colorimetric Method <sup>(29,30)</sup> Ultrasonic Extraction, Gas Chromatographic Method <sup>(26)</sup>
37	Cyanide	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
38	2,4-D	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
39	DDD	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
40	DDE	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
41	DDT	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
42	Dibenz(a,h)anthracene	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,25)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
43	Di-n-butyl phthalate	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
44	1,2-Dichlorobenzene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>

45 1,3-Dichlorobenzene...

ลำดับ	สารเคมี	วิธีวิเคราะห์
17	Bis(2-chloroethyl)ether	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
18	Bis(2-ethylhexyl)phthalate	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
19	Bromodichloromethane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
20	Bromoform	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
21	Butanol	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
22	Butyl benzyl phthalate	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
23	Cadmium	1) Digestion, Flame Atomic Absorption Spectrometric Method <sup>(7,15)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup>
24	Carbazole	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
25	Carbon disulfide	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
26	Carbon tetrachloride	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11,27)</sup>
27	Chlordane	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
28	p-Chloroaniline	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
29	Chlorobenzene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
30	Chlorodibromomethane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
31	Chloroform	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
32	2-Chlorophenol	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>

33 Chromium...



ลำดับ	สารเคมี	วิธีวิเคราะห์
58	Diethyl phthalate	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
59	2,4-Dimethylphenol	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
60	2,4-Dinitrophenol	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
61	2,4-Dinitrotoluene	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
62	2,6-Dinitrotoluene	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
63	Di-n-Octyl phthalate	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
64	Endosulfan	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
65	Endrin	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
66	Ethylbenzene	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11,27)</sup>
67	Fluoranthene	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
68	Fluorene	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
69	Heptachlor	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
70	Heptachlor epoxide	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup>

Heptachlor epoxide (คต)...  
ตาม

ลำดับ	สารเคมี	วิธีวิเคราะห์
45	1,3-Dichlorobenzene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
46	1,4-Dichlorobenzene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
47	3,3'-Dichlorobenzidine	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
48	1,1-Dichloroethane	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11,27)</sup>
49	1,2-Dichloroethane	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11,27)</sup>
50	1,1-Dichloroethylene	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11,27)</sup>
51	cis-1,2-Dichloroethylene	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11,27)</sup>
52	trans-1,2-Dichloroethylene	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11,27)</sup>
53	2,4-Dichlorophenol	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
54	1,2-Dichloropropane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
55	1,3-Dichloropropane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
56	1,3-Dichloropropene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
57	Dieldrin	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>

58 Diethyl phthalate...  
ตาม

ลำดับ	สารเคมี	วิธีวิเคราะห์
83	Mercury	1) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method <sup>(19)</sup> 2) Thermal Decomposition Amalgamation and Atomic Absorption Spectrometric Method <sup>(20)</sup>
84	Methanol	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
85	Methoxychlor	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
86	Methyl bromide	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
87	Methylene chloride	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11,27)</sup>
88	2-Methylphenol	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
89	2-Methylnaphthalene	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
90	Methyl tert-butyl ether	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
91	Naphthalene	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
92	Nickel	1) Digestion, Flame Atomic Absorption Spectrometric Method <sup>(7,15)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup>
93	Nitrobenzene	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
94	N-Nitrosodiphenylamine	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
95	N-Nitrosodi-n-propylamine	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
96	Polychlorinated Biphenyls - Aroclor 1016	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,24)</sup>

Polychlorinated Biphenyls(ต่อ)...

ลำดับ	สารเคมี	วิธีวิเคราะห์
70	Heptachlor epoxide (ต่อ)	2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
71	Hexachlorobenzene	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
72	Hexachloro-1,3-butadiene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
73	n-Hexane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13,27)</sup>
74	α-HCH	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
75	β-HCH	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
76	γ-HCH	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
77	Hexachlorocyclopentadiene	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
78	Hexachloroethane	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
79	Indeno(1,2,3-cd)pyrene	1) Ultrasonic Extraction, Gas Chromatographic Method <sup>(10,23)</sup> 2) Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
80	Isophorone	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10,28)</sup>
81	Lead	1) Digestion, Flame Atomic Absorption Spectrometric Method <sup>(7,15)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup>
82	Manganese	1) Digestion, Flame Atomic Absorption Spectrometric Method <sup>(7,15)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(7,14)</sup>

83 Mercury...

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111 1,2,4-Trichlorobenzene...

97 Pentachlorophenol...



ลำดับ	สารมลพิษ	วิธีวิเคราะห์
125	Zinc	1) Digestion, Flame Atomic Absorption Spectrometric Method <sup>(7.15)</sup> 2) Digestion, Inductively Coupled Plasma Method <sup>(7.14)</sup>

**เอกสารอ้างอิง**

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111	1,2,4-Trichlorobenzene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup>
112	1,1,1-Trichloroethane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup>
113	1,1,2-Trichloroethane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup>
114	Trichloroethylene	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11.27)</sup>
115	2,4,5-Trichlorophenol	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10.28)</sup>
116	2,4,6-Trichlorophenol	Ultrasonic Extraction, Gas Chromatographic/Mass Spectrometric Method <sup>(10.28)</sup>
117	1,3,5-Trimethylbenzene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup>
118	Vanadium	Digestion, Inductively Coupled Plasma Method <sup>(7.14)</sup>
119	Vinyl acetate	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup>
120	Vinyl chloride	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup>
121	m-Xylene	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11.27)</sup>
122	o-Xylene	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11.27)</sup>
123	p-Xylene	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11.27)</sup>
124	Xylene (Total)	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method <sup>(13.27)</sup> 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method <sup>(11.27)</sup>



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