



INTERNATIONAL  
ACCREDITATION  
SERVICE®

# CERTIFICATE OF ACCREDITATION

*This is to attest that*

## **ALS LIFE SCIENCES CHILE S.A. – SANTIAGO**

AV. HERMANOS CARRERA PINTO 159, PARQUE INDUSTRIAL LOS LIBERTADORES COLINA  
SANTIAGO, 9340000, CHILE

### **Testing Laboratory TL-966**

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Expiry Date July 1, 2025

Effective Date December 12, 2024



*International Accreditation Service*

Issued under the authority of IAS management

Visit [www.iasonline.org](http://www.iasonline.org) for current accreditation information.

# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

## ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

[www.alsglobal.com](http://www.alsglobal.com)

**Contact Name** Roberto Gutierrez

**Contact Phone** +56 2 2654 6100

*Accredited to ISO/IEC 17025:2017*

*Effective Date December 12, 2024*

Test Method	Title	Determinant(s)/Analyte(s)
<b>PHYSICAL CHEMISTRY FOR WATERS AND SEDIMENTS</b>		
<b>Drinking Water and Sources of Uptake</b>		
ME-03-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Nephelometric method	Turbidity
ME-04-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Atomic absorption spectrophotometry method with direct aspiration	Total Copper
ME-05-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Atomic absorption spectrophotometry method with direct aspiration	Total Chrome
ME-06-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Specific electrode method	Fluoride
ME-07-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Atomic absorption spectrophotometric method with direct aspiration	Total Iron
ME-08-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Atomic absorption spectrophotometry method with direct aspiration	Total Manganese
ME-09-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Atomic absorption spectrophotometry method with direct aspiration	Total Magnesium

TL-966

**ALS LIFE SCIENCES CHILE S.A. – SANTIAGO**

Effective Date December 12, 2024

Page 2 of 45

IAS/TL/100-1



INTERNATIONAL  
ACCREDITATION  
SERVICE®

# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
ME-10-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Atomic absorption spectrophotometry method with hydride generation	Total Selenium
ME-11-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Atomic absorption spectrophotometry method with direct aspiration	Total Zinc
ME-12-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Atomic absorption spectrophotometry method with hydride generation	Total Arsenic
ME-13-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Atomic absorption spectrophotometry method with direct aspiration	Total Cadmium
ME-14-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Determination of Cyanide by UV-VIS molecular absorption spectrophotometry	Total Cyanide
ME-15-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Atomic absorption spectrophotometry method with mercury atomic vapor generation	Total Mercury
ME-16-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Nitrate Determination by Specific Electrode Method	Nitrate Nitrogen
ME-17-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Nitrite Determination by UV-VIS Molecular Absorption Spectrophotometry Method	Nitrite Nitrogen
ME-18-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Atomic absorption spectrophotometry method with direct aspiration	Total Lead



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
ME-20-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Gas chromatography method	Organochlorine Pesticides by gas chromatography: Lindane (BHC gamma isomer); Lindane; Methoxychlor; DDT; DDE; DDD.
ME-21-2024	Superintendency of Sanitary Services. Manual of Test Methods for Drinking Water by Gas Chromatography Method with Electronic Capture Detector	Herbicides by gas chromatography / ECD (GC / ECD): 2.4 D; Pentachlorophenol
ME-23-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Determination of Monochloramine by DPD Titrimetric Method with FAS	Monochloramine
ME-24-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Platinum-Cobalt Method	True Colour
ME-25-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Organoleptic Method	Odor
ME-26-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Organoleptic Method	Taste
ME-27-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Determination of Ammonia by Specific Electrode Method	Ammonia
ME-28-2024	Superintendency of Sanitary Services. Manual of Test Methods for Drinking Water. Argentometric method	Chloride
ME-29-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Electrometric method	pH
ME-30-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Gravimetric Waste Drying Method	Sulfate



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
ME-31-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Gravimetric method	Dissolved Solids
ME-32-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. UV-Visible Molecular Absorption Spectrophotometry	Phenolic compounds
ME-33-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Ferrous Titrimetric DPD Method (FAS)	Residual free chlorine
Determination: QWI-ORG-ANA-04 (Issue B Modification 6)  Preparation: QWI-ORG-EXT-04 (Issue B Modification 4)	Method based on EPA 8260 B Volatile Organic Compounds by gas chromatography / Mass Spectrometry (GC / MS)	Volatile Organic Compounds by gas chromatography / Mass Spectrometry (GC / MS): Benzene; Toluene; Xylenes; Dibromochloromethane; Bromodichloromethane; Tribromomethane; Trichloromethane; Tetrachloroethene
EPA 8260 D, 2017	Volatile organic compounds by gas chromatography/mass Spectrometry	Benzene Toluene Xylene
ME-22-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Determination of THM Trihalomethanes (dibromochloromethane, bromodichloromethane, tribromomethane, trichloromethane) and Tetrachloroethene by Gas Chromatography method with electronic capture detector.	Bromodichloromethane Dibromochloromethane Tetrachloroethene Tribromomethane Trichloromethane
PT-01-2024	Superintendency of Sanitary Services. Manual of test methods for drinking water. Technical Procedure – Part 01: Verification of Portable Field Equipment Used for Measuring Residual Chlorine, using the D.P.D. Ferrous Titrimetric Method (F.A.S.)	Residual Chlorine



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
<b>Drinking Water, Sources of Uptake, Wastewater, Surface Water, Sea Water, Water for Industrial Purposes and Groundwater</b>		
2150 B Threshold Odor Test	Standard Methods for the Examination Water and Water 24th Edition, 2023	Odor
2160 B Flavor Threshold Test (FTT)	Standard Methods for the Examination Water and Water 24th Edition, 2023	Taste
2310 B Titration Method	Standard Methods for Examination of Water and Wastewater 24th Edition, 2023	Acidity
4500- Cl-B Argentometric Method	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Chloride
4500-Cl F DPD Ferrous Titrimetric Method	Standards Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Monochloramine
4500-Cl G DPD Colorimetric Method	Standard Methods for the Examination Water and Water, 24th Edition, 2023	Residual Free Chlorine
4500 CO <sub>2</sub> B Nomographic Determination of Free Carbon Dioxide	Standard Methods for the Examination Water and Water, 24th Edition, 2023	Free Carbon Dioxide
4500-NO <sub>2</sub> <sup>-</sup> B Colorimetric Method	Standard Methods for the Examination Water and Water, 24th Edition, 2023	Nitrite Nitrogen, Nitrite
4500-NO <sub>3</sub> B Nitrate	Standard Methods for the Examination Water and Water, 24th Edition, 2023	Nitrate Nitrogen, Nitrate
5210 B 5 Day BOD Test	Standards Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Biochemical Oxygen Demand (BOD)
10150 B Spectrophotometric Determination of Chlorophyll a	Standards Methods for the Examination of Water and Wastewater 24th Edition, 2023	Chlorophyll-a, Pheophytin-a
QWI-IO-Acidez-01 (Issue B Modification 2)	Method based on Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023. 2310 A and B Heartburn	Acidity
QWI-IO-Cl-01 (Issue B Modification 4)	Method based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023, 4500-Cl-B	Chloride

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 6 of 45

IAS/TL/100-1





# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
QWI-IO-Clorofila-01 (Issue B Modification 6)	Determination of Chlorophyll-a Method based on Standards Methods for the Examination of Water and Wastewater 24th Edition, 2023, 10150-B	Chlorophyll-a
QWI-IO-Color-01 (Issue B Modification 3)	Method Based on Standard Methods for the Examination Water and Water 24th Edition, 2023, 2120-B	Colour
QWI-IO-COT-01 (Issue A Modification 1)	Method 10129 Test N Tube Vials; direct method US Patent 6,368,870	Total organic carbon, Dissolved Organic Carbon
QWI-IO-DBO5-01 (Issue A Modification 4)	Method based on Standards Methods for the Examination of Water and Wastewater, 24th Edition, 2023, 5210 B	Biochemical Oxygen Demand
QWI-IO-Density-02 (Issue A Modification 2)	Method based on Standard Test Methods for Specific Gravity of water and brine ASTM D1429-08 Test method D-Hydrometer	Density
QWI-IO-Monochloramine-01 (Issue A Modification 2)	Method based on Standards Methods for the Examination of Water and Wastewater, 4500-Cl-F, 24th Edition, 2023 Ferrous Titrimetric DPD Method (FAS)	Monochloramine
QWI-IO-N-NO2-01 (Issue A Modification 4)	Method based on Standard Methods for the Examination Water and Water, 24th Edition, 2023, r. 4500- NO2 - B	Nitrite, Nitrite Nitrogen
QWI-IO-N-NO3-02 (Issue A Modification 3)	Method based on Standard Methods for the Examination Water and Water, 24th Edition, 2023, 4500-NO3 B	Nitrate, Nitrate Nitrogen
QWI-IO-PE-01 (Issue A Modification 1)	Based on ISO 696:1975 Surface active agents Measurement of foaming power – Modified Ross – Miles method	Foam Power
4110 B Ion Chromatography with Chemical Suppression of Eluent Conductivity	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Bromide Chlorides Fluoride Phosphate Nitrate (NO3) Nitrite (NO2) Sulfate (SO4) Phosphate-P Nitrate-N Nitrite-N

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 7 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
4500 CN- F Cyanide-Ion Selective Electrode Method and 4500 CN- C Total Cyanide after Distillation.	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Cyanide
2120-C Spectrophotometric—Single-Wavelength Method.	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Colour
2510-B Laboratory Method.	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Conductivity
2340-B Hardness by Calculation.	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Calcium Hardness Magnesium Hardness Total Hardness
4.2 Langelier Saturation Index	The Metro Handbook of Water Treatment for HVAC Systems, Richard Blake by calculation	Langelier Index
4110-B Ion Chromatography with Chemical Suppression of Eluent Conductivity and 4500- Norg B Macro-Kjeldahl Method	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Nitrogen
4500-P C Vanadomolybdophosphoric Acid Colorimetric Method and 4500-P B Sample Preparation	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total reactive phosphorus Total phosphorus Total acid-hydrolysable phosphorus Total organic phosphorus Dissolved reactive phosphorus Total dissolved phosphorus Dissolved acid-hydrolysable phosphorus Dissolved organic phosphorus
2540-E Fixed and Volatile Solids Ignited at 550 °C	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Volatile Suspended Solid
4500-SO <sub>4</sub> <sup>2-</sup> E Turbidimetric Method	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Sulfate
4500-S <sup>2-</sup> F Iodometric Method	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Sulfide
4500-S <sup>2-</sup> G Ion-Selective Electrode Method	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Sulfide
EPA 200.7, Rev.4.4, 1994	Determination of metals and trace elements in water and wastes by inductively coupled plasma-atomic emission spectrometry	Dissolved and Total Aluminum Dissolved and Total Antimony Dissolved and Total Arsenic Dissolved and Total Barium Dissolved and Total Beryllium Dissolved and Total Boron

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 8 of 45

IAS/TL/100-1





# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
EPA 200.7, Rev.4.4, 1994 (cont'd.)	Determination of metals and trace elements in water and wastes by inductively coupled plasma-atomic emission spectrometry (cont'd.)	Dissolved and Total Cadmium Dissolved and Total Calcium Dissolved and Total Chromium Dissolved and Total Cobalt Dissolved and Total Copper Dissolved and Total Iron Dissolved and Total Lead Dissolved and Total Lithium Dissolved and Total Magnesium Dissolved and Total Manganese Dissolved and Total Molybdenum Dissolved and Total Nickel Dissolved and Total Phosphorous Dissolved and Total Potassium Dissolved and Total Selenium Dissolved and Total Silica Dissolved and Total Silver Dissolved and Total Sodium Dissolved and Total Strontium Dissolved and Total Thallium Dissolved and Total Tin Dissolved and Total Titanium Dissolved and Total Vanadium Dissolved and Total Zinc
Determination: QWI-IO-ICP-OES-01 (Issue A Modification 4)  Preparation: QWI-IO-EXT-02 (Issue B Modification 7)	Based on EPA 200.7 (Rev.4.4, 1994) Determination of metals and trace elements in water and wastes by inductively coupled plasma-atomic emission spectrometry & EPA 6010D (Rev.5, 2018) Inductively coupled plasma-atomic emission spectrometry Based on EPA 200.2 (Rev.2.8, 1994) Sample Preparation Procedure for Spectrochemical Determination of Total Recoverable Element & EPA 3005.A (Rev.1, 1992) Acid digestion of waters for total recoverable or dissolved metals for analysis by FLAA or ICP spectroscopy	Dissolved and Total Gold Dissolved and Total Rhenium Dissolved and Total Rhodium
3120 B Inductively Coupled Plasma (ICP) Method and 3030 B Filtration for Dissolved and Suspended Metals	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Dissolved Aluminum Dissolved Antimony Dissolved Arsenic Dissolved Barium Dissolved Beryllium Dissolved Bismuth Dissolved Boron

# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
3120 B Inductively Coupled Plasma (ICP) Method and 3030 B Filtration for Dissolved and Suspended Metals (cont'd.)	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023 (cont'd.)	Dissolved Cadmium Dissolved Calcium Dissolved Chromium Dissolved Cobalt Dissolved Copper Dissolved Iron Dissolved Lead Dissolved Lithium Dissolved Magnesium Dissolved Manganese Dissolved Molybdenum Dissolved Nickel Dissolved Phosphorous Dissolved Potassium Dissolved Selenium Dissolved Silicon Dissolved Silver Dissolved Sodium Dissolved Strontium Dissolved Sulfur Dissolved Thallium Dissolved Tin Dissolved Titanium Dissolved Tungsten Dissolved Vanadium Dissolved Zinc Dissolved Zirconium
3120 B Inductively Coupled Plasma (ICP) Method	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Aluminum Total Antimony Total Arsenic Total Barium Total Beryllium Total Bismuth Total Boron Total Cadmium Total Calcium Total Chromium Total Cobalt Total Copper Total Iron Total Lead Total Lithium Total Magnesium Total Manganese Total Molybdenum Total Nickel Total Phosphorous Total Potassium Total Selenium Total Silicon Total Silver Total Sodium



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
3120 B Inductively Coupled Plasma (ICP) Method (cont'd.)	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023 (cont'd.)	Total Strontium Total Sulfur Total Thallium Total Tin Total Titanium Total Tungsten Total Vanadium Total Zinc Total Zirconium
3111 B Direct Air-Acetylene Flame Method and 3030 F Nitric Acid-Hydrochloric Acid Digestion	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Cadmium Total Calcium Total Chromium Total Cobalt Total Copper Total Iron Total Lead Total Lithium Total Magnesium Total Manganese Total Nickel Total Potassium Total Silver Total Sodium Total Tin Total Zinc
3111 D Direct Nitrous Oxide-Acetylene Flame Method and 3030 F Nitric Acid-Hydrochloric Acid Digestion	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Aluminum Total Barium Total Beryllium Total Molybdenum Total Vanadium
3030 B Filtration for Dissolved and Suspended Metals 3125 B Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) Method	Standard Methods for Examination of the Water and Wastewater, 24th Edition, 2023	Dissolved Aluminum Dissolved Antimony Dissolved Arsenic Dissolved Barium Dissolved Beryllium Dissolved Bismuth Dissolved Boron Dissolved Cadmium Dissolved Calcium Dissolved Chromium Dissolved Cobalt Dissolved Copper Dissolved Iron Dissolved Lead Dissolved Lithium Dissolved Magnesium Dissolved Manganese Dissolved Molybdenum Dissolved Nickel Dissolved Phosphorous Dissolved



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
3030 B Filtration for Dissolved and Suspended Metals 3125 B Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) Method (cont'd.)	Standard Methods for Examination of the Water and Wastewater, 24th Edition, 2023 (cont'd.)	Potassium Dissolved Selenium Dissolved Silicon Dissolved Silver Dissolved Sodium Dissolved Strontium Dissolved Sul- fur Dissolved Thallium Dissolved Tin Dissolved Titanium Dissolved Tungsten Dissolved Vanadium Dissolved Zinc Dissolved Zirconium
3125 B Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) Method	Standard Methods for Examination of the Water and Wastewater, 24th Edition, 2023	Total Aluminum Total Antimony Total Arsenic Total Barium Total Beryllium Total Bismuth Total Boron Total Cadmium Total Calcium Total Chromium Total Cobalt Total Copper Total Iron Total Lead Total Lithium Total Magnesium Total Manganese Total Molybdenum Total Nickel Total Phosphorous Total Potassium Total Selenium Total Silicon
3125 B Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) Method	Standard Methods for Examination of the Water and Wastewater, 24th Edition, 2023	Total Silver Total Sodium Total Strontium Total Thallium Total Tin Total Titanium Total Tungsten Total Vanadium Total Zinc Total Zirconium
3120 B Inductively Coupled Plasma (ICP) Method and 3030 E Nitric Acid Digestion	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Silica

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 12 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
6640 B Micro Liquid–Liquid Extraction Gas Chromatographic Method	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	2,4 Dichlorophenoxyacetic acid (2,4D) Pentachlorophenol
6630 C Liquid–Liquid Extraction Gas Chromatographic Method I	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	4,4'-DDD 4,4'-DDE 4,4'-DDT Aldrin Lindane Methoxychlor
6630 B Liquid–Liquid Extraction Gas Chromatographic Method I	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	4,4'-DDD 4,4'-DDE 4,4'-DDT Aldrin Lindane Methoxychlor
6232 B Liquid–Liquid Extraction Gas Chromatographic Method	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Bromodichloromethane Dibromochloromethane Tetrachloroethene Tribromomethane Trichloromethane Trihalomethanes
<b>Drinking Water, Sources of Uptake, Wastewater, Surface Water, Sea Water, Water for Industrial Purposes, Groundwater, Sediments (Aquatic Sediments, River Sediments, Estuarine Sediments, Lake Sediments, Marine Sediments)</b>		
2130 B Nephelometric Method	Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023	Turbidity
Method 2320 B Titration Method	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Alkalinity Bicarbonate, Alkalinity Carbonate, Alkalinity Hydroxide, Alkalinity Total
Part. 2520 B Electrical Conductivity Method	Standard Methods for Examination of Water and Wastewater 24th Edition, 2023	Salinity
2540 B Total Solids Dried from 103 °C a 105 °C	Standard Methods for the Examination Water and Water, 24th Edition, 2023	Solids Total
2540 C Total Dissolved Solids Dried at 180 °C	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total dissolved solids
2540-D Total Suspended Solids Dried From 103 °C to 105 °C	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Suspended solids Total
2540 E Fixed and Volatile Solids Ignited at 550 °C	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Fixed Solids, Volatile Solids

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 13 of 45

IAS/TL/100-1





# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
2540-F Settleable Solids	Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023	Settling solids
2540 G Total, Fixed and Volatile Solids in Solid and Semisolid Samples	Standard Methods for the Examination Water and Water, 24th Edition, 2023	Solids Total, Fixed Solids, Volatile Solids
2550 B Laboratory and Field Methods	Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023	Temperature
2580 B Oxidation Reduction Potential Measurement in Clean Water	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Potential Oxide Reduction (ORP)
3111 D Atomic Absorption Spectrophotometry; 3030 B Filtration	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Dissolved Silicon
3111 B Atomic Absorption Spectrophotometry; 3030 B Filtration	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Dissolved Metals: Antimony, Bismuth, Cesium, Gold, Iridium, Palladium, Rhodium, Thallium, Cadmium, Calcium, Zinc, Cobalt, Copper, Iron, Lithium, Magnesium, Manganese, Silver, Lead, Nickel
3111 D Atomic Absorption Spectrophotometry; 3030 B Filtration	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Dissolved Chromium
3111 D Atomic Absorption Spectrophotometry; 3030 B Filtration	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Dissolved Metals: Barium, Beryllium, Molybdenum, Vanadium, Calcium
3111 B Atomic Absorption Spectrophotometry; 3030 D Digestion	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Tin, Total Strontium, Total Magnesium
3111 B Atomic Absorption Spectrophotometry; 3030 B Filtration	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Dissolved Tin, Dissolved Strontium, Dissolved Magnesium
3112 B Mercury Cold-Vapor Atomic Absorption Spectrophotometry; 3030 B Filtration	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Dissolved Mercury
3112 B Mercury Cold-Vapor Atomic Absorption Spectrophotometry	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Mercury
3114 B Manual Hydride Generation Atomic Absorption Spectrophotometry.	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Arsenic, Total Selenium

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 14 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
3114 B Manual Hydride Generation Atomic Absorption Spectrophotometry; 3030 B Filtration	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Dissolved Arsenic, Dissolved Selenium
3114 C Continuous Hydride Generation Atomic Absorption Spectrophotometry	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Arsenic, Total Selenium
3114 C Continuous Hydride Generation Atomic Absorption Spectrophotometry; 3030 B Filtration	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Dissolved Arsenic, Dissolved Selenium
3500-K B Potassium by AAS Flame Emission; 3030 B Filtration	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Dissolved Potassium
3500-K B Potassium by AAS Flame Emission; 3030 D Digestion	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Potassium
3500-Li B Lithium by AAS Flame Emission; 3030 B Filtration	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Dissolved Lithium
3500-Li B Lithium by AAS Flame Emission; 3030 D Digestion	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Lithium
3500-Na B Sodium by AAS Flame Emission; 3030 B Filtration	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Dissolved Sodium
3500-Na B Sodium by AAS Flame Emission; 3030 D Digestion	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Sodium
3111 B Atomic Absorption Spectrophotometry; 3030 D Digestion	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Atomic Absorption Spectrophotometry (Total Metals): Antimony, Bismuth, Cesium, Gold, Iridium, Palladium, Rhodium, Thallium, Cadmium, Calcium, zinc, Cobalt, Copper, Iron, Lithium, Magnesium, Manganese, Silver, Lead, Nickel
3111 B Atomic Absorption Spectrophotometry; 3030 D Digestion	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Silicon
3111 D Atomic Absorption Spectrophotometry; 3030 D Digestion	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Atomic Absorption Spectrophotometry (Total Metals): Barium, Beryllium, Molybdenum, Vanadium, Calcium

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 15 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
3111 D Atomic Absorption Spectrophotometry; 3030 D Digestion	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Atomic Absorption Spectrophotometry (Total Metals): Chromium
4500-B C. Carmine Method	Standard Methods for the Examination water and wastewater, 24th Edition, 2023	Boron
3500-Cr B Colorimetric Method	Standard Methods for the Examination water and wastewater, 24th Edition, 2023	Hexavalent chromium
3500 Fe-B Phenanthroline Method	Standard Methods for Examination of Water and Wastewater 24th Edition, 2023	Ferrous Iron (Fe <sup>+2</sup> )
4500-Cl-F, 24th Edition, 2023 Ferrous Titrimetric DPD Method (FAS)	Standards Methods for the Examination of Water and Wastewater	Monochloramine
4500-Cl-G. DPD Colorimetric Method	Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023	Residual Free Chlorine
Determination: 4500-CN F Cyanide Ion Selective. Preparation: 4500-CN C Total cyanide	Standards Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Total Cyanide
4500 CO2 B. Nomographic Determination of Free CO2 and the Three Forms of Alkalinity	Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023	Carbon dioxide
4500-F Ion Selective Electrode Method	Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023	Fluoride
4500- H <sup>+</sup> B Electrometric Method	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	pH
4500-N <sub>org</sub> B Macro Kjeldahl Method	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Kjeldahl Nitrogen (Organic Nitrogen)
4500-NH3 D Ammonia Selective Electrode Method; 4500-NH3 B Preliminary Destillation Step	Standard Methods for the Examination Water and Water, 24th Edition, 2023	Ammonia Nitrogen, Ammonia
4500-P C Vanadomolybdophosphoric Acid Colorimetric Method; 4500-P B Sample Preparation	Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023	Total Phosphorus, Orthophosphate (Phosphate)
4500- S <sup>2-</sup> D Methylene Blue Method	Standard Methods for the Examination Water and Water, 24th Edition, 2023	Sulfide

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 16 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
4500 SiO <sub>2</sub> C Colorimetric method	Standard Methods for the Examination water and wastewater 24th Edition, 2023	Silica (Reactive)
4500 SO <sub>4</sub> -2 D Gravimetric Method with Drying of Residue	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Sulfate
5220-D Closed Reflux, Colorimetric Method	Standard Methods for the Examination Water and wastewater, 24th Edition, 2023	Chemical Oxygen Demand (COD)
5520 B Liquid-Liquid Partition Gravimetric Method, 5520 D Soxhlet Extraction Method	Standard Methods for Examination of Water and Wastewater- 24th Edition, 2023.	Oils and Fats
5520 C Partition Infrared	Standard Methods for Examination of Water and Wastewater- 24th Edition, 2023	Oils and Fats (Infrared)
5520 F hydrocarbons 5520 D Soxhlet Extraction Method	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Fixed Hydrocarbons
5530 C Chloroform Extraction Method 5530 B Cleanup Procedure (Distillation)	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Phenols
5540 C Anionic Surfactants as MBAS 5540 B Surfactant Separation by Sublation	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Anionic surfactants
Determination: QWI-IO-ANA-01 (Issue B Modification 8)  Preparation: QWI-IO-EXT-01 (Issue B Modification 4)	Method based on: US EPA Method 300.1 Ion chromatography	Determination Ion Chromatography: Sulfate, Bromide, Chlorate, Chloride, Fluoride, Phosphate, Phosphate-P, Nitrate-N, Nitrate, Nitrite-N, Nitrite
Determination: QWI-IO-ANA-02 ICPMS (Issue B Modification 3)  Preparation: QWI-IO-EXT-02 (Issue B Modification 6)	Based on US EPA Method 6020 B / Method 3010 A Inductively coupled plasma mass spectrometry	Inductively coupled plasma mass spectrometry (dissolved Metals): Dissolved Aluminium (Al), Dissolved Antimony (Sb), Dissolved Arsenic (As), Dissolved Barium (Ba), Dissolved Beryllium (Be), Dissolved Bismuth (Bi), Dissolved Boron (B), Dissolved Cadmium (Cd), Dissolved Calcium (Ca), Dissolved Cesium (Cs), Dissolved Cobalt (Co), Dissolved Copper (Cu), Dissolved Chromium (Cr), Dissolved Gold (Au), Dissolved Tin (Sn), Dissolved Strontium (Sr), Dissolved Phosphorus (P), Dissolved Iron (Fe), Dissolved

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 17 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
Determination: QWI-IO-ANA-02 ICPMS (Issue B Modification 3)  Preparation: QWI-IO-EXT-02 (Issue B Modification 6) (cont'd.)	Based on US EPA Method 6020 B / Method 3010 A Inductively coupled plasma mass spectrometry (cont'd.)	Lithium (Li), Dissolved Magnesium (Mg), Dissolved Manganese (Mn), Dissolved Mercury (Hg), Dissolved Molybdenum (Mo), Dissolved Nickel (Ni), Dissolved Silver (Ag), Dissolved Lead (Pb), Dissolved Potassium (K), Dissolved Rubidium (Rb), Dissolved Selenium (Se), Dissolved Silicon (Si), Dissolved Sodium (Na), Dissolved Thallium (Tl), Dissolved Tellurium (Te), Dissolved Titanium (Ti), Dissolved Thorium (Th), Dissolved Tungsten (W), Dissolved Uranium (U), Dissolved Vanadium (V), Dissolved Yttrium (Y), Dissolved Zinc (Zn), Dissolved Zirconium (Zr)
Determination: QWI-IO-ANA-02 ICPMS (Issue B Modification 3)  Preparation: QWI-IO-EXT-02 (Issue B Modification 6)	Based on US EPA Method 6020 B / Method 3010 A Inductively coupled plasma mass spectrometry	Inductively coupled plasma mass spectrometry (Total Metals): Aluminium (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Bismuth (Bi), Boron (B), Cadmium (Cd), Calcium (Ca), Cesium (Cs), Cobalt (Co), Copper (Cu), Chromium (Cr), Gold (Au), Tin (Sn), Strontium (Sr), Phosphorus (P), Iron (Fe), Lithium (Li), Magnesium (Mg), Manganese (Mn), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Silver (Ag), Lead (Pb), Potassium (K), Rubidium (Rb), Selenium (Se), Silicon (Si), Sodium (Na), Thallium (Tl), Tellurium (Te), Titanium (Ti), Thorium (Th), Tungsten (W), Uranium (U), Vanadium (V), Yttrium (Y), Zinc (Zn), Zirconium (Zr)
QWI-IO-CE-01 (Issue B Modification 7)	Based on standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023, 2510-B	Conductivity
QWI-IO-CNT-02 (Issue A Modification 4)	Method based on Standards Methods for the Examination of Water and Wastewater, 24th Edition, 2023 4500-CN	Total Cyanide

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 18 of 45

IAS/TL/100-1





# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
QWI-SALIN-01 (Issue A Modification 1)	Method based Standard Methods for Examination of Water and Wastewater; 24th Edition, 2023, Part. 2520 B	Salinity
QWI-IO-DESTI-CNL-01 (Issue C Modification 1)	Method based on Standards Methods for the Examination of Water and Wastewater, 24th Edition, 2023 4500-CN	Free Cyanide
QWI-IO-DESTI-CNWAD-01 (Issue C Modification 1)	Method based on Standards Methods for the Examination of Water and Wastewater, Ed. 24th (2017) 4500-CN	Cyanide WAD
QWI-IO-DQO-01 (Issue A Modification 2)	Method based on Standard Methods for the Examination Water and Wastewater, 24th Edition, 2023, 5220-D	Chemical Oxygen Demand
QWI-IO-F-01 (Issue C Modification 1)	Method based on Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023, 4500-F	Fluoride
QWI-IO-Fe + 2-01 (Issue A Modification 1)	Method based on Standard Methods for Examination of Water and Wastewater 24th Edition, 2023 Part. 3500 - Fe B	Colorimetric Ferrous Ion (Fe+2)
Determination: QWI-IO-ICPOES-01 (Issue A Modification 3)  Preparation: QWI-IO-EXT-02 (Issue B Modification 6)	Based on US EPA Method 3005 A. Acid digestion of water for total recoverable or dissolved metals for analysis by FLAA or ICP spectroscopy, Standard Method for Examination of Water and Wastewater 3030B, 24th Edition, 2023, Method 200.2 Sample Preparation Procedure for Spectrochemical Determination of Total Recoverable Elements	Inductively coupled plasma optical spectrometry (dissolved Metals): Dissolved Aluminium (Al), Dissolved Antimony (Sb), Dissolved Arsenic (As), Dissolved Barium (Ba), Dissolved Beryllium (Be), Dissolved Bismuth (Bi), Dissolved Boron (B), Dissolved Cadmium (Cd), Dissolved Calcium (Ca), Dissolved Cesium (Cs), Dissolved Cobalt (Co), Dissolved Copper (Cu), Dissolved Chromium (Cr), Dissolved Tin (Sn), Dissolved Strontium (Sr), Dissolved Phosphorus (P), Dissolved Iron (Fe), Dissolved Lithium (Li), Dissolved Magnesium (Mg), Dissolved Manganese (Mn), Dissolved Mercury (Hg), Dissolved Molybdenum (Mo), Dissolved Nickel (Ni), Dissolved Silver (Ag), Lead (Pb), Dissolved Potassium (K), Dissolved Rubidium (Rb),

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 19 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
Determination: QWI-IO-ICPOES-01 (Issue A Modification 3)  Preparation: QWI-IO-EXT-02 (Issue B Modification 6) (cont'd.)	Based on US EPA Method 3005 A. Acid digestion of water for total recoverable or dissolved metals for analysis by FLAA or ICP spectroscopy, Standard Method for Examination of Water and Wastewater 3030B, 24th Edition, 2023, Method 200.2 Sample Preparation Procedure for Spectrochemical Determination of Total Recoverable Elements (cont'd.)	Dissolved Selenium (Se), Dissolved Silicon (Si), Dissolved Sodium (Na), Dissolved Sulfur (S), Dissolved Thallium (Tl), Dissolved Tellurium (Te), Dissolved Titanium (Ti), Dissolved Thorium (Th), Dissolved Tungsten (W), Dissolved Uranium (U), Dissolved Vanadium (V), Dissolved Yttrium (Y), Dissolved Zinc (Zn), Dissolved Zirconium (Zr)
Determination: QWI-IO-ICP-OES-01 (Issue A Modification 3)  Preparation: QWI-IO-EXT-02 (Issue B Modification 6)	Based on US EPA Method 3005 A. Acid digestion of water for total recoverable or dissolved metals for analysis by FLAA or ICP spectroscopy, Standard Method for Examination of Water and Wastewater 3030B, 24th Edition, 2023, Method 200.2 Sample Preparation Procedure for Spectrochemical Determination of Total Recoverable Elements	Inductively coupled plasma optical spectrometry (Total Metals): Aluminium (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Bismuth (Bi), Boron (B), Cadmium (Cd), Calcium (Ca), Cesium (Cs), Cobalt (Co), Copper (Cu), Chromium (Cr), Tin (Sn), Strontium (Sr), Phosphorus (P), Iron (Fe), Lithium (Li), Magnesium (Mg), Manganese (Mn), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Silver (Ag), Lead (Pb), Potassium (K), Rubidium (Rb), Selenium (Se), Silicon (Si), Sodium (Na), Sulfur (S), Thallium (Tl), Tellurium (Te), Titanium (Ti), Thorium (Th), Tungsten (W), Uranium (U), Vanadium (V), Yttrium (Y), Zinc (Zn), Zirconium (Zr)
QWI-IO-N-NH3-02 (Issue A Modification 3)	Method based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023, 4500-NH3-D	Ammonia Nitrogen
QWI-IO-pH-01 (Issue B Modification 4)	Method based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023. Method 4500-HB	pH
QWI-IO-PO4-02 (Issue A Modification 2)	Method based on Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023, 4500-PC	Phosphate
QWI-IO-P-Total-01 (Issue A Modification 2)	Method based on Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023, 4500-P B, C	Total Phosphorus

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 20 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
QWI-IO-SO4-03 (Issue B Modification 2)	Method based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023. Method 4500-SO4-D	Sulfate
QWI-IO-SSED-01 (Issue B Modification 5)	Method based on Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023, Part. 2540-F: Settleable Solids	Settling solids
QWI-IO-SST-01 (Issue B Modification 6)	Method based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023. Method 2540-D, E	Fixed suspended solids, Volatile Suspended Solids
QWI-IO-SST-01 (Issue B Modification 6)	Method based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023. Method 2540-D	Total suspended solids
QWI-IO-ST-01 (Issue B Modification 1)	Method based on Standard Methods for the Examination Water and Water, 24th Edition, 2023, Method 2540-B, E	Volatile Solids, Fixed Solid
QWI-IO-ST-01 (Issue B Modification 1)	Method based on Standard Methods for the Examination Water and Water, 24th Edition, 2023, Method 2540-B	Total solids
QWI-IO- SULFURO -01 (Issue C Modification 1)	Method based on Standard Methods for the Examination Water and Water, 24th Edition, 2023 4500- S2 D	Sulfide
QWI-IO-TEMP-01 (Issue B Modification 2)	Method based on Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023. Part 2550 Temperature	Temperature
QWI-IO-TKN-02 (Issue A Modification 5)	Method Based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023, 4500-NB	Kjeldahl Nitrogen
QWI-IO-TURB-01 (Issue B Modification 4)	Method based on Standard Methods for Examination of Water and Wastewater, 24th Edition, 2023 - 2130 B-Turbidity	Turbidity
QWI-IO-ALC-01 (Issue B Modification 5)	Method based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023. Method 2320-A and B alkalinity	Bicarbonate alkalinity

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 21 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
QWI-IO-ALC-01 (Issue B Modification 5)	Method based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023. Method 2320-A and B alkalinity	Carbonate Alkalinity
QWI-IO-ALC-01 (Issue B Modification 5)	Method based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023. Method 2320-A and B alkalinity	Hydroxide Alkalinity
QWI-IO-ALC-01 (Issue B Modification 5)	Method based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023. Method 2320-A and B alkalinity	Total alkalinity
Determination: QWI-ORG-ANA-01 (Issue B Modification 3)  Preparation: QWI-ORG-EXT-01 (Issue B Modification 2)	Method based on EPA 8270E Semivolatile organic compounds by gas Chromatography / Mass Spectrometry, Method 3510C: Separatory Funnel Liquid-Liquid Extraction	Phenolic compounds by gas chromatography / Mass Spectrometry (GC / MS): Phenol; 2 - Methyl phenol; 3 - Methyl phenol; 4 - Methyl phenol; 2 - Chlorophenol; 3 - Chlorophenol; 4 - Chlorophenol; 2, 4 - Dimethylphenol; 2, 6 - Dichlorophenol; 4 - Chloro 3 - Methylphenol; 2, 5 - Dichlorophenol; 2, 4 - Dichlorophenol; 3, 5 - Dichlorophenol; 2, 3 - Dichlorophenol; 2 - Nitrophenol; 3, 4 - Dichlorophenol; 2, 4, 6 - Trichlorophenol; 4 - Nitrophenol; 2, 3, 6 - Trichlorophenol; 2, 3, 5 - Trichlorophenol; 2, 3, 4 - Trichlorophenol; 2, 4, 5 - Trichlorophenol; 3, 4, 5 - Trichlorophenol; 2, 3, 5, 6 - Tetrachlorophenol; 2, 3, 4, 6 - Tetrachlorophenol; 2,3,4,5 - Tetrachlorophenol; Pentaclorophenol
Determination: QWI-ORG-ANA-02 (Issue B Modification 3)  Preparation: QWI-ORG-EXT-02 (Issue B Modification 3)	Method based on EPA 8270E Semivolatile organic compounds by gas Chromatography / Mass Spectrometry, Method 3510C: Separatory Funnel Liquid-Liquid Extraction	Aromatic polycyclic hydrocarbons Compounds by gas chromatography / Mass Spectrometry (GC / MS): Naphthalene; Quinoline; 2 - Methyl naphthalene; Acenaphthylene; Acenaphthene; Fluorene; Phenanthrene;



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
Determination: QWI-ORG-ANA-02 (Issue B Modification 3)  Preparation: QWI-ORG-EXT-02 (Issue B Modification 3) (cont'd.)	Method based on EPA 8270E Semivolatile organic compounds by gas Chromatography / Mass Spectrometry, Method 3510C: Separatory Funnel Liquid-Liquid Extraction (cont'd.)	Anthracene; Acridine; Fluorantrene; Pyrene; Benzo (a) Anthracene; Chrysene; Benzo (b) Fluoranthene; Benzo (k) Fluoranthene; Benzo (a) Pyrene; Indeno (1,2,3 - CD) Pyrene; Dibenzo (a,h) Anthracene; Benzo (g , h, i ) Perylene
Determination: QWI-ORG-ANA-03 (Issue B Modification 5)  Preparation: QWI-ORG-EXT-03 (Issue B Modification 3)	Method based on EPA 8015D Nonhalogenated organics using GC / FID, Method 3510C: Separatory Funnel Liquid-Liquid Extraction	Total petroleum hydrocarbons (TPH's) (C10-C34)
Determination: QWI-ORG-ANA-04 (Issue B Modification 6)  Preparation: QWI-ORG-EXT-04 (Issue B Modification 4)	Method based on EPA 8260D Volatile Organic Compounds by gas chromatography / Mass Spectrometry (GC / MS)	Volatile hydrocarbons (C6-C10); (C5-C12)
Determination: QWI-ORG-ANA-04 (Issue B Modification 6)  Preparation: QWI-ORG-EXT-04 (Issue B Modification 4)	Method based on EPA 8260D Volatile Organic Compounds by gas chromatography / Mass Spectrometry (GC / MS)	Volatile Organic Compounds by gas chromatography / Mass Spectrometry (GC / MS) Benzene; Bromobenzene; Bromochloromethane; Bromodichloromethane; Bromoform; n - Butylbenzene; sec - Butylbenzene; tert - Butylbenzene; Carbon tetrachloride; Chlorobenzene; Chlorodibromomethane; Chloroethane; chloroform; 2 - Chlorotoluene; 4 - Chlorotoluene; 1,2 -Dibromo - 3 chloropropane; 1,2- Dibromomethane; Dibromomethane; 1,2 - Dichlorobenzene; 1 , 3 - Dichlorobenzene; 1,4 - Dichlorobenzene; Dichlorodifluoromethane; 1,1 - Dichloroethane; 1,2 - Dichloroethane; 1,1- Dichloroethene; cis - 1,2 - Dichloroethene; trans - 1,2 - Dichloroethene; 1,2 - Dichloropropane; 1,3 - Dichloropropane; 2,2 - Dichloropropane; 1,1 - Dichloropropene; cis - 1,3 - Dihloropropene; trans - 1,3 - Dihloropropene; Ethylbenzene;

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 23 of 45

IAS/TL/100-1



INTERNATIONAL  
ACCREDITATION  
SERVICE®



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
<p>Determination: QWI-ORG-ANA-04 (Issue B Modification 6)</p> <p>Preparation: QWI-ORG-EXT-04 (Issue B Modification 4) (cont'd.)</p>	<p>Method based on EPA 8260D Volatile Organic Compounds by gas chromatography / Mass Spectrometry (GC / MS) (cont'd.)</p>	<p>Hexachloro - 1,3 - butadiene; Isopropylbenzene; p - isopropyltoluene; Methyl bromide (Bromomethane); Methyl chloride (Chlormethane); Methylene chloride; Naphthalene; n - Propylbenzene; Styrene; 1,1,1,2 - Tetrachloroethane; 1,1,2,2 - Tetrachloroethane; Tetrachloroethene; Toluene; 1,2,3 - Trichlorobenzene; 1,2,4 - Trichlorobenzene; 1,1,1 - Trichloroethane; 1,1,2 - Trichloroethane; Trichloroethene; Trichlorofluoromethane; 1 , 2,3 - Trichloropropane; 1,2,4 - Trimethylbenzene; 1,3,5 - Trimethylbenzene; o - Xylene; m, p Xylene; Vinyl chloride, methylterbutylether, Ketone</p>
<p>Determination: QWI-ORG-ANA-05 (Issue B Modification 5)</p> <p>Preparation: QWI-ORG-EXT-05 (Issue B Modification 5)</p>	<p>Method based on EPA 8270E Semivolatile organic compounds by gas Chromatography / Mass Spectrometry, Method 3510C: Separatory Funnel Liquid-Liquid Extraction</p>	<p>Semivolatile organic compounds by gas Chromatography / Mass Spectrometry: 2,4,5-trichlorophenol; 2,4,6-trichlorophenol; 2,4- dinitrotoluene; Hexachlorobutadiene; Hexachloroethane; m-cresol; Nitrobenzene; o-cresol; Pyridine; p- cresol</p>
<p>Determination: QWI-ORG-ANA-07 (Issue B Modification 7)</p> <p>Preparation: QWI-ORG-EXT-07 (Issue B Modification 4)</p>	<p>Method based on EPA 8081B Organochlorine Pesticides by gas chromatography, method 3510C Separatory Funnel Liquid-Liquid Extraction</p>	<p>Organochlorine Pesticides by gas chromatography: Aldrin; BHC (alpha isomer); BHC (beta isomer); Lindane (BHC gamma isomer); BHC (delta isomer); 4 , 4' - DDD; 4 , 4' - DDE; 4 , 4' - DDT; Dieldrin; α - Endosulfan (Endosulfan I); β - Endosulfan (Endosulfan II); Enosulfan sulfato; Endrin; Endrin aldehyde; Heptachlor; Heptachlor epoxide (isomer B); Methoxychlor; Endrin Ketone; cis - Chlordane; trans - Chlordane; Hexachlorobenzene; 2 , 4' - DDD; 2 , 4' - DDE; 2 , 4' - DDT; cis - Nonachlor; trans - Nonachlor; Mirex; Clordane; Toxafene; Oxiciirdane</p>

# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
QWI-ORG-ANA-18 (Issue B Modification 5)	Method based on NCh2313-29.Of99 / Standard Methods of examination of water and wastewater 24th Edition, 2023. Method 6640 B	Herbicides by gas chromatography / ECD (GC / ECD): 2,4 – D; 2,4,5 - TP (Silvex); Pentachlorophenol
Method TNRCC 1005 (TPHTX 1005) Revision 2001	Total Petroleum Hydrocarbons TNRCC Method 1005 Revision 03 June 1, 2001	C6-C8; >C8-C10; >C10-C12; >C12-C16; >C16-C21; >C21-C35; Total Petroleum Hydrocarbon
Method TNRCC 1006 (TPHTX 1006) Revision 2001	Characterisation of C6 to C35 Petroleum Hydrocarbons in Environmental Sample. TNRCC Method 1006 Revision 2001	Aliphatics nC6; Aliphatics >nC6 to nC8; Aliphatics >nC8 to nC10; Aliphatics >nC10 to nC12; Aliphatics >nC12 to nC16; Aliphatics >nC16 to nC21; Aliphatics >nC21 to nC35; Total Aliphatic Fraction; Aliphatics Relative % Distribution; Aromatics >nC7 to nC8; Aromatics >nC8 to nC10; Aromatics >nC10 to nC12; Aromatics >nC12 to nC16; Aromatic >nC16 to nC21; Aromatics >nC21 to nC35; Total Aromatic Fraction; Aromatics Relative % Distribution; Total Petroleum Hydrocarbons
QWI-ORG-AyGIR-01 (Issue B Modification 6)	Method based on Standard Methods of examination of water and wastewater, 24th Edition, 2023. Method 5520 C Partition-Infrared	Oils and Fats
QWI-ORG-HC-01 (Issue B Modification 4)	Method based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023. Method 5520-F	Fixed Hydrocarbons
QWI-ORG-SAAM-01 (Issue B Modification 3)	Method based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023. Method 5540-B and C.	Anionic surfactants
QWI-IO-SDT-01 (Issue B Modification 6)	Method based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023. Method 2540-C	Total dissolved solids
QWI-IO-B-01 (Issue B Modification 2)	Method based on Standard Methods for the Examination water and wastewater, 24th Edition, 2023, 4500B C Carmine Method	Colorimetric boron

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 25 of 45

IAS/TL/100-1



INTERNATIONAL  
ACCREDITATION  
SERVICE®

# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
QWI-IO-Cr + 6-01 (Issue B Modification 5)	Method based on: Standard Methods for the Examination Water and Water, 3500-Cr-B 24th Edition, 2023	Hexavalent chromium
QWI-IO-SiO2-02 (Issue B Modification 3)	Method based on: Standard Methods for the Examination water and wastewater 24th Edition, 2023, 4500 SiO2 C Colorimetric method	Reactive silica
QWI-ORG-AyG-01(Issue B Modification 5)	Method based on: Standard Methods for Examination of Water and Wastewater 2530C, 5520 B, D – 24th Edition, 2023	Floating Oils and Fats
QWI-ORG-AyG-01(Issue B Modification 5)	Method based on: Standard Methods for Examination of Water and Wastewater 5520 B, D, G - 24th Edition, 2023	Emulsified Oils and Fats
QWI-ORG-AyG-01(Issue B Modification 4)	Method based on: Standard Methods for Examination of Water and Wastewater 5520 B, D - 24th Edition, 2023	Oils and Fats Partition Method
QWI-IO-REDOX-01 (Issue B Modification 2)	Method based on: Standard Methods for Examination of Water and Wastewater 2580B - 24th Edition, 2023	Potential Oxide Reduction
<b>Wastewater</b>		
NCh2313 / 15-2009	Determination of total phosphorus	Total Phosphorus
NCh2313 / 16-2010	Determination of ammoniacal nitrogen - Potentiometric method	Ammonia Nitrogen
NCh2313 / 19.Of.2001	Determination of phenol number - Spectrometric method of 4-aminoantipyrine after distillation	Phenol Index
NCh2313 / 21-2010	Determination of foaming power	Foam Power
NCh2313 / 24.Of.1997	Determination of chemical oxygen demand (COD)	Chemical Oxygen Demand
NCh2313 / 25.Of97	Determination of metals - Inductively coupled plasma optical (ICP-OES) method	Inductively coupled plasma optical spectrometry (Total Metals): Aluminium (Al), Antimony (Sb), Arsenic (As), Sulfur (S), Barium (Ba), Beryllium (Be), Bismuth (Bi), Boron (B), Cadmium (Cd), Calcium (Ca), Cobalt (Co), Copper (Cu), Chromium (Cr), Tin (Sn), Strontium (Sr), Phosphorus (P), Iron (Fe), Lithium (Li), Magnesium (Mg),

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 26 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
NCh2313 / 25.Of97 (cont'd.)	Determination of metals - Inductively coupled plasma optical (ICP-OES) method (cont'd.)	Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Silver (Ag), Lead (Pb), Potassium (K), Selenium (Se), Silicon (Si), Sodium (Na), Thallium (Tl), Titanium (Ti), Tungsten (W), Vanadium (V), Zinc (Zn), Zirconium (Zr)
NCh2313/9.Of96	Atomic Absorption Spectrophotometry Method by continuous generation of hydrides	Total Arsenic (As)
NCh2313/10.Of20	Flame Atomic Absorption Spectrophotometry Method	Atomic Absorption Spectrophotometry (Total Heavy Metals): Cadmium (Cd), Copper (Cu), Chromium (Cr), Iron (Fe), Manganese (Mn), Nickel (Ni), Lead (Pb), Zinc (Zn)
NCh2313/10.Of20	Flame Atomic Absorption Spectrophotometry Method	Atomic Absorption Spectrophotometry (Heavy dissolved Metals): Cadmium (Cd), Copper (Cu), Chromium (Cr), Iron (Fe), Manganese (Mn), Nickel (Ni), Lead (Pb), Zinc (Zn)
NCh 2313/11, Of 96	Atomic Absorption Spectrophotometry Method	Hexavalent Chromium (Cr VI)
NCh 2313/12, Of 96	Atomic Absorption Spectrophotometry Method by continuous generation of hydrides	Total Mercury (Hg)
NCh 2313/30, Of.99	Atomic Absorption Spectrophotometry Method by continuous generation of hydrides	Total Selenium (Se)
NCh 2313/13, Of 98	Atomic Absorption Spectrophotometry Method	Total Molybdenum (Mo)
NCh2313 / 27.Of1998	Determination of anionic surfactants - Method for active substances of methylene blue (SAAM)	Anionic Surfactants
NCh2313 / 28-2009	Determination of kjeldahl nitrogen - Potentiometric method with previous digestion	Total Kjeldahl Nitrogen
NCh2313/1:2021	Determination of pH	pH
NCh2313-02.Of95	Determination of temperature	Temperature
NCh2313-03.Of95	Determination of total suspended solids dried at 103-105 °C	Total Suspended Solids
NCh2313-04.Of95	Determination of Settling Solids - Volumetric Method	Settling Solids

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 27 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
NCh2313-05.Of2005	Determination of Biochemical Oxygen Demand (BOD5)	Biochemical Oxygen Demand
NCh2313-06.2015	Determination of Oils and Fats - Infrared partition method	Oils and fats
NCh2313/7:2021	Part A Determination of Fixed Hydrocarbons	Fixed Hydrocarbons
NCh2313/7:2021	Part B Determination of Total Hydrocarbons	Total, Hydrocarbons
NCh2313-14.Of97	Determination of total cyanide	Total Cyanide
NCh2313-17.Of97	Total Sulfide Determination	Total Sulfide
NCh2313-18.Of97	Determination of dissolved sulfate by residue calcination	Dissolved Sulfate
NCh2313-29.Of99	Determination of pentachlorophenol and the g each organochlorine herbicides - Method by gas chromatography with electron capture detector (ECD)	Herbicides by gas chromatography / ECD (GC / ECD): 2,4 – D; 2,4,5 - TP (Silvex); Pentachlorophenol
NCh2313-32.Of99	Determination of chloride - Mohr's Argentometric method	Chloride
NCh2313-33.Of99	Determination of fluoride - Potentiometric method after distillation	Fluoride
Determination: NCh 2313/25 Of.1997 3030 B Filtration	Determination of metals - Inductively coupled plasma optical (ICP-OES) method.	Dissolved Aluminum Dissolved Antimony Dissolved Arsenic Dissolved Barium Dissolved Beryllium Dissolved Bismuth Dissolved Boron Dissolved Cadmium Dissolved Calcium Dissolved Chromium Dissolved Cobalt Dissolved Copper Dissolved Iron Dissolved Lead Dissolved Lithium Dissolved Magnesium Dissolved Manganese Dissolved Molybdenum Dissolved Nickel Dissolved Phosphorous Dissolved Potassium Dissolved Selenium Dissolved Silicon

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 28 of 45

IAS/TL/100-1



INTERNATIONAL  
ACCREDITATION  
SERVICE®



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
Determination: NCh 2313/25 Of.1997 3030 B Filtration (cont'd.)	Determination of metals - Inductively coupled plasma optical (ICP-OES) method. (cont'd.)	Dissolved Silver Dissolved Sodium Dissolved Strontium Dissolved Sulfur Dissolved Thallium Dissolved Tin Dissolved Titanium Dissolved Tungsten Dissolved Vanadium Dissolved Zinc Dissolved Zirconium
NCh 2313/20 Of.1998	Determination of trihalomethanes (THM) - Method by gas chromatography with electronic capture detector (ECD)	Bromodichloromethane Dibromochloromethane Tetrachloroethene Tribromomethane Trichloromethane
NCh 2313/31 Of.1999	Determination of benzene and some derivatives - Gas chromatography method using head-space	Benzene Toluene o-Xylene m, p-Xylene Xylene
<b>Sediments (Aquatic Sediments, River Sediments, Estuarine Sediments, Lake Sediments, Marine Sediments)</b>		
Res. Ex. N°3612/2009 SERNAPESCA Numeral 26	Aprueba resolución que fija las metodologías para elaborar la caracterización preliminar de sitio (cps) y la información ambiental (infa)	Organic Matter
QWI-IO-ANA-03 (Issue A Modification 0)	Based on 4110 B Ion Chromatography with Chemical Suppression of Eluent Conductivity, Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Bromide Chlorides Fluoride Phosphate Nitrate (NO <sub>3</sub> ) Nitrite (NO <sub>2</sub> ) Sulfate (SO <sub>4</sub> )
QWI-IO-GRANULO-01 (Issue A Modification 4)	Based on ASTM C136-06 (2014) Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates	Granulometry
<b>PHYSICAL CHEMISTRY FOR SOLIS AND WASTES</b>		
<b>Sludges, Soils, Industrial Solid Waste, Hazardous Waste</b>		
QWI-IO-Rises-02 (Issue B Modification 4)	Method Based on US EPA SW-846 Test methods For Evaluation Solid Waste Physically Chemical Methods, v2 Revision 0, December 1996. EPA 1030 Method	Inflammability

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 29 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
QWI-IO-Rises-04 (Issue B Modification 2); QWI-IO-Sulfuro-01 (Issue C Modification 1); QWI-IO-CNT-02 (Issue A Modification 4)	Method based on US EPA SW-846 Test methods For Evaluation Solid waste Physically Chemical Methods. Chap. 7 Revision 3 December 1996	Reactivity (Hydrogen cyanide, Hydrogen sulfide)
QWI-IO-pH Paste-01 (Issue B Modification 2)	Method based on Sobek, AA, Schuller, WA, Freeman, JR, & Smith, RM, 1978 Field and Laboratory Methods Applicable to Overburdens and Minesoils, EPA 600 / 2-78-054	pH
<b>Industrial Solid Waste, Hazardous Waste, Solid Waste</b>		
QWI-IO-RISES-03 (Issue B Modification 6)	Method Based on Method to determine flash point EPA 1010A Closed Cup Method	Inflammability
QWI-IO-RISES-05 (Issue B Modification 2)	Based on Method to determine the Corrosivity of Residues (Corrosion Rate Method) MINSAL and EPA Method 1110 Corrosivity Toward Steel	Corrosivity
Determination: QWI-IO-TCLPINO-01 (Issue B Modification 2)  Preparation: QWI-IO-RISES-01 (Issue B Modification 3)	Method based on: Method 1311, EPA Fed. Register vol.55 N° 61 and Standards Methods for the examination of water and wastewater 24th Edition, 2023 Atomic Absorption Spectrophotometry Method	Arsenic, Barium, Cadmium, Chromium, Mercury, Silver, Lead, Selenium
Determination: QWI-IO-ICPOES-01 (Issue A Modification 3)  Preparation: QWI-IO-RISES-01 (Issue B Modification 3)	Method based on: Method 1311, EPA Fed. Register vol.55 N° 61 Standards Methods for the examination of water and wastewater 24th Edition, 2023 Atomic Absorption Spectrophotometry Method (por ICP-OES)	Inductively coupled plasma optical spectrometry (Total Metals): Aluminium (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Bismuth (Bi), Boron (B), Cadmium (Cd), Calcium (Ca), Cesium (Cs), Cobalt (Co), Copper (Cu), Chromium (Cr), Tin (Sn), Strontium (Sr), Phosphorus (P), Iron (Fe), Lithium (Li), Magnesium (Mg), Manganese (Mn), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Silver (Ag), Lead (Pb), Potassium (K), Rubidium (Rb), Selenium (Se), Silicon (Si), Sodium (Na), Sulfur (S), Thallium (Tl), Tellurium (Te), Titanium (Ti), Uranium (U), Vanadium (V), Zinc (Zn), Zirconium (Zr)

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 30 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
<p>Determination: QWI-IO-ANA-02 (Issue B Modification 3)</p> <p>Preparation: QWI-IO-RISES-01 (Issue B Modification 3)</p>	US EPA Method 6020 B / Method 3010 A Inductively coupled plasma mass spectrometry	Inductively coupled plasma mass spectrometry (Total Metals): Aluminium (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Bismuth (Bi), Boron (B), Cadmium (Cd), Calcium (Ca), Cesium (Cs), Cobalt (Co), Copper (Cu), Chromium (Cr), Tin (Sn), Strontium (Sr), Phosphorus (P), Iron (Fe), Lithium (Li), Magnesium (Mg), Manganese (Mn), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Silver (Ag), Lead (Pb), Potassium (K), Rubidium (Rb), Selenium (Se), Silicon (Si), Sodium (Na), Thallium (Tl), Tellurium (Te), Titanium (Ti), Uranium (U), Vanadium (V), Zinc (Zn), Zirconium (Zr)
<p>Determination: QWI-IO-ANA-02 (Issue B Modification 3)</p> <p>Preparation: QWI-IO-RISES-01 (Issue B Modification 3)</p>	US EPA Method 6020 A / Method 3010 A Inductively coupled plasma mass spectrometry	Inductively coupled plasma mass spectrometry (Total Metals): Aluminium (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Bismuth (Bi), Boron (B), Cadmium (Cd), Calcium (Ca), Cesium (Cs), Cobalt (Co), Copper (Cu), Chromium (Cr), Tin (Sn), Strontium (Sr), Phosphorus (P), Iron (Fe), Lithium (Li), Magnesium (Mg), Manganese (Mn), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Silver (Ag), Lead (Pb), Potassium (K), Rubidium (Rb), Selenium (Se), Silicon (Si), Sodium (Na), Thallium (Tl), Tellurium (Te), Titanium (Ti), Uranium (U), Vanadium (V), Zinc (Zn), Zirconium (Zr)
QWI-IO-GRANULO-01 (Issue A Modification 3)	Method based ASTM D422-63 Standard Test Method for Particle-Size Analysis of Soils; Res. Ex. No. 3612/2009- Numeral 25 and the modifications indicated in Res. Ex. No. 660/2018 and Res. Ex. No. 3002/2018 of the Undersecretary of Fisheries and Aquaculture. (Res. Ex. N° 3612/2009- Numeral 25 y las modificaciones indicadas en	Granulometry

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 31 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
QWI-IO-GRANULO-01 (Issue A Modification 3) (cont'd.)	Res. Ex. N° 660/2018 y Res. Ex. N° 3002/2018 de la Subsecretaría de Pesca y Acuicultura.)	Granulometry (cont'd.)
QWI-IO-TEXT-01 (Issue A Modification 0)	Method based NOM-021-SEMARNAT-2000 (2002)	Texture
<b>Sludge, Industrial Solid Waste, Soils, Compost, Sediments.</b>		
Determination: QWI-IO-ICP-OES-01 (Issue A Modification 3) Preparation: QWI-IO-EXT-02 (Issue B Modification 6)	Method based on EPA method 3050 B Acid Digestion of Sediments, Sludges and soils. Inductively Coupled Plasma Spectrometry ICPOES	Inductively coupled plasma optical spectrometry (Metals): Aluminium (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Bismuth (Bi), Boron (B), Cadmium (Cd), Calcium (Ca), Cesium (Cs), Cobalt (Co), Copper (Cu), Chromium (Cr), Gold (Au), Tin (Sn), Strontium (Sr), Phosphorus (P), Iron (Fe), Lithium (Li), Magnesium (Mg), Manganese (Mn), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Silver (Ag), Lead (Pb), Potassium (K), Rubidium (Rb), Selenium (Se), Silicon (Si), Sodium (Na), Thallium (Tl), Tellurium (Te), Titanium (Ti), Thorium (Th), Tungsten (W), Uranium (U), Vanadium (V), Yttrium (Y), Zinc (Zn), Zirconium (Zr)
Determination: QWI-IO-ANA- 02 ICPMS (Issue B Modification 3) Preparation: QWI-IO-EXT-02 (Issue B Modification 6)	Method based on EPA method 3050 B Acid Digestion of Sediments, Sludges and soils. Inductively coupled plasma mass spectrometry ICPMS	Inductively coupled plasma mass spectrometry (Metals): Aluminium (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Bismuth (Bi), Boron (B), Cadmium (Cd), Calcium (Ca), Cesium (Cs), Cobalt (Co), Copper (Cu), Chromium (Cr), Gold (Au), Tin (Sn), Strontium (Sr), Phosphorus (P), Iron (Fe), Lithium (Li), Magnesium (Mg), Manganese (Mn), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Silver (Ag), Lead (Pb), Potassium (K), Rubidium (Rb), Selenium (Se), Silicon (Si), Sodium (Na), Thallium (Tl), Tellurium (Te), Titanium (Ti), Thorium (Th), Tungsten (W), Uranium (U), Vanadium (V), Yttrium (Y), Zinc (Zn), Zirconium (Zr)



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
QWI-IO-CO-02 (Issue A Modification 0)	Method based on INIA Recommended analysis methods for Chilean soils, II Edition 2006 item 7.1	Colorimetric Organic Carbon
QWI-IO-CO-02 (Issue A Modification 0)	Method based on INIA Recommended analysis methods for Chilean soils, II Edition 2006 item 7.1	Colorimetric Organic Matter
QWI-IO-ST-01 (Issue B Modification 1)	Method based on Standard Methods for the Examination Water and Water, 24th Edition, 2023, Method 2540-B, G	Solid Total
QWI-IO-ST-01 (Issue B Modification 1)	Method based on Standard Methods for the Examination Water and Water, 24th Edition, 2023, Method 2540-B, G	Solid Total Fixed
QWI-IO-ST-01 (Issue B Modification 1)	Method based on Standard Methods for the Examination Water and Water, 24th Edition, 2023, Method 2540-B, G	Solids Total Volatile
Determination: QWI-IO-pH-01 (Issue B Modification 4) Preparation: QWI-IO-LIXI-01 (Issue B Modification 4)	Based Method Handbook of Soil and Land Survey Handbook, Method 3A 1 soil pH, 1992; Method based on INIA Recommended analysis methods for soils of Chile, Edition 2006 item 1.1	pH
Determination: QWI-IO-ANA-01 (Issue B Modification 8) Preparation: QWI-IO-LIXI-01 (Issue B Modification 4)	Method based on US EPA Method 300.1 Determination of inorganic anion in US EPA Method 300.1 Determination of inorganic anion in drinking water by ion. Revision 1, 1997 Ion Chromatography	Determination Ion Chromatography: Sulfate, Bromide, Chlorate, Chloride, Fluoride, Phosphate, Phosphate-P, Bromide, Nitrate-N, Nitrate, Nitrite-N, Nitrite
QWI-IO-NT-02 (Issue A Modification 2)	Method Based on Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023, 4500-NB; US EPA Method 300.1 Ion Chromatography	Total Nitrogen
QWI-ORG-MORG-01 (Issue A Modification 2)	Method based on ASTM D2974	Organic Matter (Loss on Calcination)
Determination: QWI-IO-CE-01 (Issue B Modification 7) Preparation: QWI-IO-LIXI-01 (Issue B Modification 4)	Method based on Handbook of Soil and Land Survey Handbook, Method 4A 1 Electrical Conductivity, 1992	Conductivity

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 33 of 45

IAS/TL/100-1





# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
QWI-IO-Humedad-01 (Issue B Modification 5)	Recommended Analysis Methods for Soils of Chile – 2.1 Revision 2, 2006.	Humidity
<b>Sludge, Sediments (Aquatic Sediments, River Sediments, Estuarine Sediments, Lake Sediments, Marine Sediments), Soils, Industrial Solid Waste, Hazardous Waste, Solid Waste, Compost</b>		
3540C: Soxhlet Extraction	Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846 Test Method	Hydrocarbons Fixes
9071B n-Hexane Extractable Material (HEM)	Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846 Test Method	Oils and Fats
Determination: QWI-ORG-ANA-02 (Issue B Modification 3) Preparation: QWI-ORG-EXT-09 (Issue B Modification 4)	Based method US EPA SW-846. Test methods for Evaluation solid Waste Physically / Chemicals Methods. Version 2, 1997 and version 3, 1995. Adaptation of the US EPA method 8270E, 3510C, 3570. Gas Chromatography (GC-mass)	Aromatic polycyclics hydrocarbons Compounds by gas chromatography / Mass Spectrometry (GC / MS): Naphthalene; Quinoline; 2 – Methyl naphthalene; Acenaphthylene; Acenaphthene; Fluorene; Phenanthrene; Anthracene; Acridine; Fluoranthene; Pyrene; Benzo (a) Anthracene; Chrysine; Benzo (b) Fluoranthene; Benzo (k) Fluoranthene; Benzo (a) Pyrene; Indeno (1 , 2 , 3 - CD) Pyrene; Dibenzo (a , h) Anthracene; Benzo (g , h , i ) Perylene
Determination: QWI-ORG-ANA-04 (Issue B Modification 6); Preparation: QWI-ORG-EXT-04 (Issue B Modification 4)	Method based on US EPA SW-846. Test methods for Evaluation solid Waste Physically / Chemicals Methods. Version 2, 1997. Adaptation of the US EPA 8260 D method. Gas Chromatography (GC-mass)	Volatile Organic Compounds by gas chromatography / Mass Spectrometry (GC / MS): Benzene; Bromobenzene; Bromochloromethane; Bromodichloromethane; Bromoform; n - Butylbenzene; sec - Butylbenzene; tert - Butylbenzene; Carbon tetrachloride; Chlorobenzene; Chlorodibromomethane; Chloroethane; chloroform; 2 – Chlorotoluene; 4 – Chlorotoluene; 1 , 2 -Dibromo - 3 chloropropane; 1 , 2- Dibromomethane; Dibromomethane; 1 , 2 – Dichlorobenzene; 1 , 3 – Dichlorobenzene; 1 , 4 – Dichlorobenzene; Dichlorodifluoromethane; 1 , 1 – Dichloroethane;

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 34 of 45

IAS/TL/100-1



INTERNATIONAL  
ACCREDITATION  
SERVICE®

# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
Determination: QWI-ORG-ANA-04 (Issue B Modification 6); Preparation: QWI-ORG-EXT-04 (Issue B Modification 4) (cont'd.)	Method based on US EPA SW-846. Test methods for Evaluation solid Waste Physically / Chemicals Methods. Version 2, 1997. Adaptation of the US EPA 8260 D method. Gas Chromatography (GC-mass) (cont'd.)	1, 2 – Dichloroethane; 1, 1-Dichloroethene; cis - 1, 2 – Dichloroethene; trans - 1, 2 – Dichloroethene; 1, 2 – Dichloropropane; 1, 3 – Dichloropropane; 2, 2 – Dichloropropane; 1, 1 - Dichloropropene; cis - 1, 3 – Dichloropropene; trans - 1, 3 – Dichloropropene; Ethylbenzene; Hexachloro - 1, 3 - butadiene; Isopropylbenzene; p – isopropyltoluene; Methyl bromide; Methyl chloride; Methylene chloride; Naphthalene; n – Propylbenzene; Styrene; 1, 1, 1, 2 – Tetrachloroethane; 1, 1, 2, 2 – Tetrachloroethane; Tetrachloroethene; Toluene; 1, 2, 3 – Trichlorobenzene; 1, 2, 4 – Trichlorobenzene; 1, 1, 1 – Trichloroethane; 1, 1, 2 – Trichloroethane; Trichloroethene; Trichlorofluoromethane; 1, 2, 3 – Trichloropropane; 1, 2, 4 – Trimethylbenzene; 1, 3, 5 – Trimethylbenzene; o – Xylene; m,p – xylene; Vinyl chloride, methylterbutylether
Determination: QWI-ORG-ANA-04 (Issue B Modification 6) Preparation: QWI-IO-RISES-01 (Issue B Modification 3)	Method based on US EPA. Method 1311 US EPA SW-846. Test methods for Evaluation solid Waste Physically / Chemicals Methods. Version 2, 1997. Adaptation of the US EPA 8260 D method. Gas Chromatography (GC-mass)	Volatile Organic Compounds by gas chromatography / Mass Spectrometry (GC / MS): Vinyl chloride; 1,1 -Dichloroethylene; methyleltylketone; Chloroform; 1,2 - Dichloroethane; Carbon tetrachloride; Benzene; Trichloroethylene; Tetrachloroethylene; Chlorobenzene; 1,4 – Dichlorobenzene
Determination: QWI-ORG-ANA-18 (Issue B Modification 6) Preparation: QWI-IO-RISES-01 (Issue B Modification 3)	Methods based on US EPA. Method 1311 and Standard Methods for the Examination of water and wastewater, 24th Edition, 2023. Part 6640-B Gas Chromatography with electron capture detector (CG-ECD)	Herbicides by gas chromatography / ECD (GC / ECD): 2,4 – D; 2,4,5 - TP (Silvex); Pentachlorophenol

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 35 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
Determination: QWI-ORG-ANA-07 (Issue B Modification 7) Preparation: QWI-IO-RISES-01 (Issue B Modification 3)	Method based on US EPA 1311 and US EPA method 8081B, 3510 C, 3570. Gas Chromatography with ECD detector (CG-ECD)	Organochlorine Pesticides by gas chromatography: Lindane (BHC gamma isomer); Hexachlorobenzene; Heptachlor; Heptachlor epoxide (isomer B); Endrin; Methoxychlor; Clordane; Toxafene
Determination: QWI-ORG-ANA-05 (Issue B Modification 5) Preparation: QWI-IO-RISES-01 (Issue B Modification 3)	Method based on US EPA 1311; Based Methods for Evaluating Solid Waste Physical/Chemical methods. US EPA SW-846. Version 3, 1995. Method 8270 E	Semivolatile organic compounds by gas Chromatography / Mass Spectrometry: 2,4 – Dinitrotoluene; Hexachloro - 1 , 3 – butadiene; Hexachloroethane; Nitrobenzene; Pentachlorophenol; Pyridine; 2,4,5 – Trichlorophenol; 2,4,6 – Trichlorophenol; o- cresol; m/p- cresol
Determination: QWI-ORG-ANA-01 (Issue B Modification 3) Preparation: QWI-ORG-EXT-09 (Issue B Modification 4)	Method based on US EPA SW-846. Test methods for Evaluation Solid Waste Physically / Chemicals Methods. Version 2, 1997 and version 3, 1995. Adaptation of US EPA Method 8270D, 3510C, 3570. - Gas Chromatography (GC-mass)	Phenolic compounds by gas chromatography / Mass Spectrometry (GC / MS): Phenol; 2 - Methyl phenol; 3 - Methyl phenol; 4 - Methyl phenol; 2 – Chlorophenol; 3 – Chlorophenol; 4 – Chlorophenol; 2 , 4 – Dimethylphenol; 2 , 6 – Dichlorophenol; 4 - Chloro 3 – Methylphenol; 2 , 5 – Dichlorophenol; 2 , 4 – Dichlorophenol; 3 , 5 – Dichlorophenol; 2 , 3 – Dichlorophenol; 2 – Nitrophenol; 3 , 4 – Dichlorophenol; 2 , 4 , 6 – Trichlorophenol; 4 – Nitrophenol; 2 , 3 , 6 – Trichlorophenol; 2 , 3 , 5 – Trichlorophenol; 2 , 3 , 4 – Trichlorophenol; 2 , 4 , 5 – Trichlorophenol; 3 , 4 , 5 – Trichlorophenol; 2 , 3 , 5 , 6 – Tetrachlorophenol; 2 , 3 , 4 , 6 – Tetrachlorophenol; 2 , 3 , 4 , 5 – Tetrachlorophenol; Pentachlorophenol
QWI-ORG-ANA-18 (Issue B Modification 5)	Method based on US EPA 1311 SW 846 Manual of Test methods for Evaluation Solid Waste Physically / Chemicals Methods. Version 2, 1997. and Standard Methods for the Examination of water and wastewater, 24th	Herbicides by gas chromatography / ECD (GC / ECD): 2,4 – D; 2,4,5 - TP (Silvex); Pentachlorophenol

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 36 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
QWI-ORG-ANA-18 (Issue B Modification 5) (cont'd.)	Edition, 2023. Part 6640-B Gas Chromatography with electron capture detector (CG-ECD)	Herbicides by gas chromatography / ECD (GC / ECD): 2,4 – D; 2,4,5 – TP (Silvex); Pentachlorophenol (cont'd.)
Determination: QWI-ORG-ANA-07 (Issue B Modification 7) Preparation: QWI-ORG-EXT-09 (Issue B Modification 4)	Method based on US EPA SW-846. Test methods for Evaluation solid Waste Physically / Chemicals Methods. Version 2, 1997 and version 3, 1995. Adaptation of the US EPA method 8081B, 3510 C, 3570. Gas Chromatography with ECD detector (CG-ECD)	Organochlorine Pesticides by gas chromatography: Aldrin; BHC (alpha isomer); BHC (beta isomer); Lindane (BHC gamma isomer); BHC (delta isomer); 4 , 4' - DDD; 4 , 4' - DDE; 4 , 4' - DDT; Dieldrin; α – Endosulfan (Endosulfan I); β – Endosulfan (Endosulfan II); Endosulfan sulfato; Endrin; Endrin aldehyde; Heptachlor; Heptachlor epoxide (isomer B); Methoxychlor; Endrin Ketone; cis – Chlordane; trans – Chlordane; Hexachlorobenzene; 2 , 4' - DDD; 2 , 4' - DDE; 2 , 4' - DDT; cis – Nonachlor; trans – Nonachlor; Mirex; Clordane; Toxafene; Oxicirdane
QWI-ORG- ANA-14 (Issue B Modification 5)	Method based on Method for the Canada-Wide Standard for petroleum Hydrocarbons in Soil- Tier 1 Method, Canadian Council of Ministers of the Environment 2001. (GC-MSD) QWI-ORG-ANA-03 Emission B Mod .3 Method based on test Methods for Evaluating solid waste Physical / Chemical methods. USEPA SW 846. Revision 4, 2003. Method 8015 D. Gas Chromatography with FID Detector (GC-FID)	Total Petroleum Hydrocarbons (TPH's) (F1 (C6-C10) - F2 (C10-C16) - F3 (C16-C34)
QWI-ORG-ANA-05 (Issue B Modification 5)	Based Methods for Evaluating Solid Waste Physical/Chemical methods. US EPA SW-846. Version 3, 1995. Method 8270 E	Semivolatile organic compounds by gas Chromatography / Mass Spectrometry: 3 – Methylphenol; 1 , 4 – Dichlorobenzene; 2 , 4 – Dinitrotoluene; Hexachlorobenzene; Hexachloro - 1 , 3 – butadiene; Hexachloroethane; 2 – methylphenol; 4 – methylphenol; Nitrobenzene; Pentachlorophenol; Pyridine; 2 , 4 , 5 – Trichlorophenol; 2 , 4 , 6 – Trichlorophenol

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 37 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
Method TNRCC 1005 (TPHTX 1005), Revision 2001	TOTAL PETROLEUM HYDROCARBONS TNRCC Method 1005 Revision 03 June 1, 2001	C6-C8; >C8-C10; >C10-C12; >C12-C16; >C16-C21; >C21-C35; Total Petroleum Hydrocarbon
Method TNRCC 1006 (TPHTX 1006), Revision 2001	Characterisation of C6 to C35 Petroleum Hydrocarbons in Environmental Sample. TNRCC Method 1006 Revision 2001	Aliphatics nC6; Aliphatics >nC6 to nC8; Aliphatics >nC8 to nC10; Aliphatics >nC10 to nC12; Aliphatics >nC12 to nC16; Aliphatics >nC16 to nC21; Aliphatics >nC21 to nC35; Total Aliphatic Fraction; Aliphatics Relative % Distribution; Aromatics > to nC8; Aromatics >nC8 to nC10; Aromatics >nC10 to nC12; Aromatics >nC12 to nC16; Aromatics >nC16 to nC21; Aromatics >nC21 to nC35; Total Aromatic Fraction; Aromatics Relative % Distribution; Total Petroleum Hydrocarbons
QWI-ORG-ANA-14 (Issue B Modification 5)	Based method Method for the Canada-Wide Standard for petroleum Hydrocarbons in Soil-Tier 1 Method, Canadian Council of Ministers of the Environment 2001. Gravimetric	Total Petroleum Hydrocarbons (TPH's) (F4G-SG)
QWI-ORG-ANA-04 (Issue B Modification 6)	Method based on US EPA SW-846. Test methods for Evaluation solid Waste Physically / Chemicals Methods. Version 2, 1997. Adaptation of the US EPA 8260D method. Gas Chromatography (GC-mass)	Volatile Hydrocarbons (C5-C12), Volatile Hydrocarbons (C6-C10)
QWI-IO-RISES-01 (Issue B Modification 3)	Method based on US EPA 1311; QWI-ORG-ANA-04 Method based on US EPA SW-846. Test methods for Evaluation solid Waste Physically / Chemicals Methods. Version 2, 1997. Adaptation of the US EPA 8260D method. Gas Chromatography (GC-mass)	Leaching Toxicity (TCLP)
<b>Soils, Hazardous Waste</b>		
QWI-IO-Sulfato-04 (Issue B Modification 2)	Method based on Standard Methods for the Examination of Water and Wastewater. APHA AWWA WEF 22ND Part.4500-	Sulfate leached into carbonate

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 38 of 45

IAS/TL/100-1





# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
QWI-IO-Sulfato-04 (Issue B Modification 2) (cont'd.)	SO42- -D Gravimetric Method with Drying of Residue; Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials MEND Report 1.20.1 December 2009	Sulfate leached into carbonate (cont'd.)
QWI-IO-ABA-01 (Issue B Modification 2)	Method based on Sobek, AA, Schuller, WA, Freeman, JR, & Smith, RM, 1978 Field and Laboratory Methods Applicable to Overburdens and Mines oils, EPA 600 / 2-78-054; Acid Rock Drainage Prediction Manual - A Manual of Chemical Evaluation Procedures for the Prediction of Acid Generation from Mine Wastes. CANMET MSL Division, Coastech Research Inc. 1990 Lawrence & Marchant	Determination of neutralization potential (ABA)
QWI-IO-NAG-01 (Issue B Modification 1)	Static net acid generation test procedure (NAG test) Revision May 1986 – EGI – Stuart D Miller	Determination of net acid generation (NAG)
<b>Sludge, Soils</b>		
QWI-IO-ANA-03 (Issue A Modification 0)	Based on 4110 B Ion Chromatography with Chemical Suppression of Eluent Conductivity, Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Bromide Chlorides Fluoride Phosphate Nitrate (NO3) Nitrite (NO2) Sulfate (SO4)
Método INIA 1.1 Secado al aire, fracción < 2mm Método INIA 9.2 Extracto 1:5 y Determinación por conductimetría	Métodos de análisis recomendados para los suelos de Chile. Revisión 2006. Santiago, Chile: Serie Actas - Instituto de Investigaciones Agropecuarias no. 34.	Conductivity
Método INIA 1.1 Secado al aire, fracción < 2mm Método INIA 3.1 Suspensión y determinación potenciométrica	Métodos de análisis recomendados para los suelos de Chile. Revisión 2006. Santiago, Chile: Serie Actas - Instituto de Investigaciones Agropecuarias no. 34.	pH
SM 5520 E Extraction Method for Sludge Samples and F Hydrocarbons	Standard Methods for the Examination of Water and Wastewater, 24th Edition, 2023	Oils and fats Hydrocarbons

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 39 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
Método INIA 14.1 Digestión Kjeldahl	Métodos de análisis recomendados para los suelos de Chile. Revisión 2006. Santiago, Chile: Serie Actas - Instituto de Investigaciones Agropecuarias No. 34.	Total Nitrogen Total Kjeldahl Nitrogen
Método INIA 7.1 Oxidación con dicromato en medio ácido y determinación colorimétrica del cromato reducido	Métodos de análisis recomendados para los suelos de Chile. Revisión 2006. Santiago, Chile: Serie Actas - Instituto de Investigaciones Agropecuarias No. 34.	Organic Carbon
Método INIA 7.2 Pérdida por calcinación	Métodos de análisis recomendados para los suelos de Chile. Revisión 2006. Santiago, Chile: Serie Actas - Instituto de Investigaciones Agropecuarias No. 34.	Organic Matter
QWI-IO-GRANULO-01 (Issue A Modification 4)	Based on NCh3236.Of2010 Mecánica de suelos - Tamizado y determinación de la granulometría	Granulometry
Determination: QWI-IO-ICP-OES-01 (Issue A Modification 4) Preparation: QWI-IO-EXT-02 (Issue B Modification 7)	Based on EPA 200.7 (Rev.4.4, 1994) Determination of metals and trace elements in water and wastes by inductively coupled plasma-atomic emission spectrometry & EPA 6010D (Rev.5, 2018) Inductively coupled plasma-atomic emission spectrometry Based on EPA 200.2 (Rev.2.8, 1994) Sample Preparation Procedure for Spectrochemical Determination of Total Recoverable Element & EPA 3005.A (Rev.1, 1992) Acid digestion of waters for total recoverable or dissolved metals for analysis by FLAA or ICP spectroscopy	Arsenic Barium Cadmium Zinc Copper Chromium Iron Magnesium Manganese Mercury Molybdenum Nickel Silver Lead Potassium Selenium Vanadium
<b>CHEMISTRY FOR TISSUES (ANIMAL, PLANT) AND BIOTA</b>		
<b>Animal Tissue, Biotas</b>		
Determination: QWI-IO-ANA-02 ICPMS (Issue B Modification 3) Preparation: QWI-IO-Biotas-01 (Issue A Modification 1)	Method based on EPA 200.3 Rev 1 April 1991, EPA 245.7 / EPA 6010D / EPA 6020 B Inductively coupled plasma mass spectrometry ICP-MS	Inductively coupled plasma mass spectrometry(Total Metals): Aluminium (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Bismuth (Bi), Boron

TL-966

ALS LIFE SCIENCES CHILE S.A. – SANTIAGO

Effective Date December 12, 2024

Page 40 of 45

IAS/TL/100-1



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
Determination: QWI-IO-ANA-02 ICPMS (Issue B Modification 3) Preparation: QWI-IO-Biotas-01 (Issue A Modification 1) (cont'd.)	Method based on EPA 200.3 Rev 1 April 1991, EPA 245.7 / EPA 6010D / EPA 6020 B Inductively coupled plasma mass spectrometry ICP-MS (cont'd.)	(B), Cadmium (Cd), Calcium (Ca), Cobalt (Co), Copper (Cu), Chromium (Cr), Tin (Sn), Strontium (Sr), Phosphorus (P), Iron (Fe), Lithium (Li), Magnesium (Mg), Manganese (Mn), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Silver (Ag), Lead (Pb), Potassium (K), Rubidium (Rb), Selenium (Se), Sodium (Na), Thallium (Tl), Tellurium (Te), Uranium (U), Vanadium (V), Zinc (Zn), Zirconium (Zr)
<b>Plant Tissue</b>		
Determination: QWI-IO-ANA-02 ICPMS (Issue B Modification 3) Preparation: QWI-IO-Tejidos-01 (Issue A Modification 0)	Method based on EPA 200.3 / EPA 245.7 / EPA 6010D and Methods of Analysis of Plant Tissues 2 Ed Instituto de Investigaciones Agropecuarias	Inductively coupled plasma mass spectrometry (Total Metals): Aluminium (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Bismuth (Bi), Boron (B), Cadmium (Cd), Calcium (Ca), Cobalt (Co), Copper (Cu), Chromium (Cr), Tin (Sn), Strontium (Sr), Phosphorus (P), Iron (Fe), Lithium (Li), Magnesium (Mg), Manganese (Mn), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Silver (Ag), Lead (Pb), Potassium (K), Rubidium (Rb), Selenium (Se), Sodium (Na), Thallium (Tl), Tellurium (Te), Uranium (U), Vanadium (V), Zinc (Zn), Zirconium (Zr)
<b>Personal Filters, Particulate Matter, Gases</b>		
NIOSH 7300	Based on NIOSH 7300 Manual of Analytical Methods (NMAM) 5th Edition (2022), U.S. EPA. 2014. "Method 6020B (SW-846): Inductively Coupled Plasma-Mass Spectrometry," Revision 2. Washington, DC.	Inductively coupled plasma mass spectrometry (Total Metals): Aluminium (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Bismuth (Bi), Boron (B), Cadmium (Cd), Calcium (Ca), Cesium (Cs), Cobalt (Co), Copper (Cu), Chromium (Cr), Tin (Sn), Strontium (Sr), Phosphorus (P), Iron (Fe), Lithium (Li),



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
NIOSH 7300 (cont'd.)	Based on NIOSH 7300 Manual of Analytical Methods (NMAM) 5th Edition (2022), U.S. EPA. 2014. "Method 6020B (SW-846): Inductively Coupled Plasma-Mass Spectrometry," Revision 2. Washington, DC. (cont'd.)	Magnesium (Mg), Manganese (Mn), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Silver (Ag), Lead (Pb), Potassium (K), Rubidium (Rb), Selenium (Se), Silicon (Si), Sodium (Na), Thallium (Tl), Tellurium (Te), Titanium (Ti), Uranium (U), Vanadium (V), Yttrium (Y), Zinc (Zn), Zirconium (Zr).
Methods CH-29	Determination of metal emission from stationary sources.	metal emission; Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Cobalt (Co), Copper (Cu), Chromium (Cr), Phosphorus (P), Manganese (Mn), Mercury (Hg), Nickel (Ni), Silver (Ag), Lead (Pb), Selenium (Se), Thallium (Tl), Zinc (Zn)
<b>MICROBIOLOGY</b>		
<b>Wastewater</b>		
NCh2313 / 22.Of 95	Part 22: Determination of fecal coliforms in EC medium (Thermotolerant)	Fecal Coliforms
NCh2313 / 23.Of 95	Part 23: Determination of fecal coliforms in A-1 medium (Thermotolerant)	Fecal Coliforms
<b>Drinking Water, Surface Water, Ground Water, Wastewater, Sea Water</b>		
9221 E Multiple-Tube Fermentation Technique for Members of The Coliform Group	Standard Methods for Examination of the Water and Wastewater, 24th Edition, 2023	Fecal Coliforms
9221 F Multiple-Tube Fermentation Technique for Members of The Coliform Group	Standard Methods for Examination of the Water and Wastewater, 24th Edition, 2023	<i>E. coli</i>
9221 B Multiple-Tube Fermentation Technique for Members of The Coliform Group	Standard Methods for Examination of the Water and Wastewater, 24th Edition, 2023	Total Coliforms
QWI-MB Heterotrophs UFC ML (Issue A Modification 3)	based on Standard Methods for Examination of the Water and Wastewater, Chapter 9215B, 24th Edition, 2023	Heterotrophs



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
<b>Drinking Water and Sources of Uptake</b>		
NCh1620 / 1: 2020 Water - Determination of Total Coliform Bacteria and Escherichia coli	Part 1: Multiple Tube Method (MPN)	Total Coliforms
ME-01-2007: Determination of Escherichia coli	EC-MUG, as a complement to the determination of total coliforms by the Multiple Tube Method (MPN)	Escherichia coli
NCh1620 / 2: 2020 Water - Determination of Total Coliform Bacteria and Escherichia coli	Part 2: Membrane Filtration Method	Total Coliforms
ME-02-2007: Determination of Escherichia coli	EC-MUG, as a complement to the determination of total coliforms by Membrane Filtration Method (FM)	Escherichia coli
NCh2043.Of1998 Chromogenic substrate method	Chromogenic substrate method	Determination of E. coli
NCh2043.Of1998 Chromogenic substrate method	Chromogenic substrate method	Determination of total coliforms
<b>Sludge and Soils</b>		
QWI-MB Ct / F / E. coli-LODO-NMP (Issue A, Modification 3)	Method Based on: - Test Methods for the Examination of Composting and Compost, edition 2001, chapter 7.01 .A - NCh1620 / 1.0f84	Determination of total coliforms
QWI-MB CT / F / E. coli-LODO-NMP (Issue A, Modification 3)	Method Based on: Test Methods for the Examination of Composting and Compost, edition 2001, chapter 7.01. 3	Determination of fecal coliforms
QWI-MB CT / F / E. coli-LODO-NMP (Issue A, Modification 3)	Method Based on: Test Methods for the Examination of Composting and Compost, edition 2001, chapter 7.01. C	Determination of E. coli
<b>CHEMISTRY FOR AIR, GASES AND PARTICULATE MATTER</b>		
<b>Filters Impacted with Particulate Matter (PM10, PM2.5), Personal Filters and Gases</b>		
<b>Stationary Sources: Isokinetic Filters and Recovered - Physical-Chemical Tests.</b>		
EPA Method 16A, 2017	Determination of total reduced sulfur emissions from stationary sources (Impinger Technique)	Total Reduced Sulfur Emissions (TRS) with Impinger: Sulfur Dioxide, Carbon Disulfide, Methyl Disulfide, Methyl mercaptan, Carbonyl Sulfide, Dimethyl Sulfide, Hydrogen Sulfide
EPA Method 8, 2019	Determination of sulfuric acid and sulfur dioxide emissions from stationary sources	Sulfuric Acid, Sulfur Dioxide





# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
NIOSH Method 7907, Issue 1. 20 May 2014	Volatile acids by ion chromatography (Hydrogen chloride, hydrogen bromide, nitric acid)	HBr HCl/Cl HNO <sub>3</sub>
NIOSH Method 7908, Issue 1. 10 May 2014	Non-volatile acids (Sulfuric acid and phosphoric acid)	H <sub>2</sub> SO <sub>4</sub> /SO <sub>4</sub> -2 H <sub>3</sub> PO <sub>4</sub> /PO <sub>4</sub> (-3)
EPA Method 26 A. 2023	Determination of hydrogen halide and halogen emissions from stationary sources isokinetic method	Hydrogen Bromide, Hydrogen Chloride, Hydrogen Fluoride, Total Bromine, Total Chlorine
EPA Method 29, 2017	Determination of metal emission from stationary sources.	Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Lead Manganese Mercury Nickel Phosphorous Selenium Silver Thallium Zinc
QWI-IO-Metales-03 (Issue A Modification 0)	Based on EPA Method 29 and Method CH-29, 2010 Determination of metal emission from stationary sources.	Aluminum Tellurium Vanadium Zirconium
NIOSH 7301. Issue 1. 15 March 2003	Elements by ICP (Aqua regia ashing)	Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Gold, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorous, Potassium, Rhenium, Rhodium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Tellurium, Titanium, Tungsten, Uranium, Vanadium, Zinc, Zirconium



# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

Test Method	Title	Determinant(s)/Analyte(s)
Determination: QWI-IO-ICP-OES-01 (Issue A Modification 4) Preparation: QWI-IO-EXT-03 (Issue A Modification 0)	Based on EPA 200.7 (Rev.4.4, 1994) Determination of metals and trace elements in water and wastes by inductively coupled plasma-atomic emission spectrometry & EPA 6010D (Rev.5, 2018) Inductively coupled plasma-atomic emission spectrometry. EPA 3050  Based on NIOSH 7301, Issue 1. 15 March 2003. Elements by ICP (Aqua regia ashing)	Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Gold, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorous, Potassium, Rhenium, Rhodium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Tellurium, Titanium, Tungsten, Uranium, Vanadium, Zinc, Zirconium

