

CERTIFICATE OF ACCREDITATION

This is to attest that

QUIMPETROL PERU SAC

PARQUE 17-03 TALARA, 0073, PERU

Testing Laboratory TL-913

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.

Effective Date September 8, 2025



International Accreditation Service Issued under the authority of IAS management

IAS is an ILAC MRA Signatory

Visit www.iasonline.org for current accreditation information.

International Accreditation Service, Inc.
3060 Saturn Street, Suite 101, Brea, California 92821, U.S.A. | www.iasonline.org

QUIMPETROL PERU SAC

www.quimpetrolperu.pe

Contact Name Olga Perales

Contact Phone +51 961294600

Accredited to ISO/IEC 17025:2017

Effective Date September 8, 2025

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL CHEMISTRY (Field collection + Lab Testing)	Natural water, Drinking water, Saline water, Process water and	Phenois	SMEWW-APHA-AWWA-WEF Part 5530 B, C, 24th Ed. 2023 Phenols. Cleanup Procedure. Chloroform Extraction Method
	Wastewater	Phenols	SMEWW-APHA-AWWA-WEF Part 5530 B, D, 24th Ed. 2023 Phenols. Cleanup Procedure. Direct Photometric Method
		N-Nitrate / Nitrate	EPA Method 352.1 2017 Nitrogen, Nitrate (Colorimetric Brucine by Spectrophotometer)
		N- Nitrite / Nitrite	SMEWW-APHA-AWWA-WEF Part 4500-NO2- B, 24th Ed. 2023 Nitrogen (Nitrite). Colorimetric Method
		Ammonium / Ammonia / Ammoniacal Nitrogen	SMEWW-APHA-AWWA-WEF Part 4500- NH3-D, 24th Ed. 2023 Nitrogen (Ammonia). Ammonia Selective Electrode Method
		Total Hydrocarbons	SMEWW-APHA-AWWA-WEF Part 5520 F, 24th Ed. 2023 Hydrocarbons
		Biochemical Oxygen Demand	SMEWW-APHA-AWWA-WEF Part 5220 D, 24th, Ed. 2023 Chemical Oxygen Demand. Closed Reflux, Colorimetric Method
		Sulfides	SMEWW-APHA-AWWA-WEF Part 4500-S D, 24th, Ed. 2023 Sulfide. Methylene Blue Method



International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL CHEMISTRY (Field collection + Lab Testing)	Natural water, Drinking water, Saline water, Process water and Wastewater (continued)	Sulfates	SMEWW-APHA-AWWA-WEF Part 4500-SO4 E, 24th Ed. 2023 Sulfate. Turbidimetric Method
(continued)		Oil and Grease	SMEWW-APHA-AWWA-WEF Part 5520 B, 24th, Ed. 2023 Oil and Grease
		Settleable Solids	SMEWW-APHA-AWWA-WEF Part 2540 F, 24th Ed. 2023 Solids. Settleable Solids
		Total Solids	SMEWW-APHA-AWWA-WEF Part 2540 B, 24th Ed. 2023 Solids. Total Solids Dried at 103-105°C
		Total Suspended Solids	SMEWW-APHA-AWWA-WEF Part 2540 D, 24th Ed. 2023 Solids. Total Suspended Solids Dried at 103-105°C
		Total Dissolved Solids	SMEWW-APHA-AWWA-WEF Part 2540 C, 24th, Ed. 2023 Solids. Total Dissolved Solids Dried at 180°C
		Carbon Dioxide	SMEWW-APHA-AWWA-WEF Part 4500-CO2 C. 24th, Ed. 2023 Carbon Dioxide, Titrimetric Method
		Boro	SMEWW-APHA-AWWA-WEF Part 4500-B, 24th,Ed. 2023 Curcumin Method
	Chlorophyll A	SMEWW-APHA-AWWA-WEF Part 10150 A2, B. 24th. Ed.2023 Chlorophyll A. Spectrophotometric Determination of Chlorophyll A	
		Phosphates, Total Reactive Phosphorus, Dissolved Reactive Phosphorus	SMEWW-APHA-AWWA-WEF Part 4500-P, E, 24th, Ed. 2023 Ascorbic Acid Method
		Total Phosphorus	SMEWW-APHA-AWWA-WEF Part 4500-P, B (item 5) y E, 24th, Ed. 2023 Phosphorus. Ascorbic Acid Method



International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL CHEMISTRY (Field collection + Lab Testing)	Natural water, Drinking water, Saline water, Process water and	Hydrogen sulfide indissociable	SMEWW-APHA-AWWA-WEF Part 4500-S2 H. 24th,Ed. 2023 Calculation of Un-ionized Hydrogen Sulfide
(continued)	Wastewater (continued)	Detergents (SAAM)	SMEWW-APHA-AWWA-WEF Part 5540 C, 24th, Ed. 2023 Anionic Surfactants as MBA
		Color (True Color, Apparent Color)	SMEWW-APHA-AWWA-WEF. Part 2120 C. Color. 24th, Ed. 2023 Spectrophotometric Single- Wavelength Method (Proposed). Color
		Hexavalent Chromium (VI)	SMEWW-APHA-AWWA-WEF Part 3500 Cr-B, 24th, Ed. 2023 Colorimetric Method
	Natural water, Drinking water, Water for Human use and consumption, Saline water, Process water and Wastewater	Acidity	SMEWW-APHA-AWWA-WEF Part 2310 B. 24th Ed. 2023 Acidity Titration Method
	Soil, Mud, Sediment, underground water	Soil and waste pH	NTP 339.176 2002 (revised 2015) SOILS. Standard test method for the determination of the pH value in soil and underground water.
		Chlorides	NTP 339.177 2002 (revised 2015) SOILS. Standard test method for the determination of the soluble chlorides in soil and underground water.
		Sulfates	NTP 339.178 2002 (revised 2015) SOILS. Standard test method for the determination of the soluble sulfates in soil and underground water.



International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL CHEMISTRY (Field collection + Lab Testing) (continued)	Soil, Mud and Sediment	Conductivity	Official Mexican Standard NOM-021-RECNAT-2000, that establishes the specifications of fertility, salinity and classification of soils. Studies, sampling and analysis. AS 18. Measurement of Electrical Conductivity.
		Organic Matter	Official Mexican Standard NOM-021-RECNAT-2000, that establishes the specifications of fertility, salinity and classification of soils. Studies, sampling and analysis AS 07. Organic Matter.
		Sulfides or Total Sulfides	EPA METHOD 9031, Rev. 0 1992 Extractable Sulfides in soils
		Hexavalent Chromium	EPA Method 3060 Rev.1 (1996) / EPA Method 7196 Rev.1 (1992)
			Alkaline Digestion for Hexavalent Chromium / Chromium, Hexavalent (Colorimetric)
	Soils, Sediments and Sludges	Oil & Grease	EPA Method 9071B: n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples (1998)
	Emission / Stationary Sources	Particulate Matter (PM)	EPA CFR Title 40, Chapter I, Subchapter C, Part 60, Appendix A-3 to Part 60, Method 5 (2025). Determination of Particulate Matter Emissions from Stationary Sources
			NTP 900.005 (2021) Determination of emissions of particulate matter from stationary sources
		Sulfur Dioxide	EPA CFR Title 40, Chapter I, Subchapter C, Part 60, Appendix A-4 to Part 60, Method 6 (2025). – Determination of Sulfur Dioxide Emissions from Stationary Sources.





International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL CHEMISTRY (Field collection + Lab Testing) (continued)	Emission / Stationary Sources (continued)	Gas Velocity and Volumetric Flow	NTP 900.002:2021 / EPA METHOD 2C. (2017) MONITORING OF ATMOSPHERIC EMISSIONS. Determination of velocity and volumetric flow in flue gasses (Pitot tube type S). 2nd Edition. / Determination of gas velocity and volumetric flow rate in small stacks or ducts (standard Pitot tube)
		Compilation of Air Emissions Factors (Determination of Particulate Matter (PM))	EPA Method AP-42: Compilation of Air Emissions Factors (2011)
	Atmosphere – Ambient (Air)	Particulate Matter PM2.5. (High Volume)	EPA CFR title 40, Chapter I, Sub Chapter C, Part 50, Appendix J to part 50: Reference method for the determination of particulate matter as PM10 in the atmosphere. (Validated) (2024)
		Carbon Monoxide (CO)	Peter O. Warner "Analysis of Air Pollutants", Wiley- Inter science, New York 1976. (Validated) (2024)
			AEN-PO-017 Determination of Carbon Monoxide in the atmosphere. Method 4: Carboxybenzene sulfonamide.
		Hydrogen Sulfide (H ₂ S)	Norma COVENIN 3571:2000 (Validated) (2024)
			AEN-PO-018 Determination of the concentration of hydrogen sulfide (H ₂ S) in the atmosphere
	Atmosphere – Ambient (Air)	Ozone (O ₃)	"Methods of Air Sampling and Analysis"; 411: Determination of Oxidizing Substances in the Atmosphere. Intersociety Committee, James P. Lodge (Editor) Third edition (Validated) (2024) AEN-PO-019 Ozone
ENVIRONMENTAL	(continued)		Determination Method in the Atmosphere





International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
CHEMISTRY (Field collection + Lab Testing) (continued)		Particulate Matter PM2.5. (Low Volume).	EPA CFR Title 40, Chapter I, Subchapter C, Part 50, Appendix L to part 50. Reference Method for the Determination of Fine Particulate Matter as PM2.5 in the Atmosphere
		Particulate Matter PM10. (High Volume)	EPA Compendium Method IO- 2.1 (2019) Sampling of Ambient Air for Total Suspended Particulate Matter (SMP) and PM10 Using High Volume (HV) Sampler.
		Particulate Matter PM10. (Low Volume)	EPA Compendium Method IO- 2.3 (2019.) Sampling of Ambient Air for PM10 Concentration Using the Rupprecht and Patashnick (R&P). Low Volume Partisol Sampler
		Sulfur Dioxide (SO ₂)	EPA CFR Title 40, Chapter I, Subchapter C, Part 50, Appendix A-2 to part 50. Reference method for the determination of sulfur dioxide in the atmosphere. (Pararosaniline method).
		Nitrogen Dioxide (NO ₂)	ASTM D1607-91(2018)e1 Standard test method for nitrogen dioxide content of the atmosphere. (Griess- Saltzman reaction).
	Air	Total suspended particulate matter (PTS)	EPA CFR Title 40, Chapter I, Subchapter C, Part 50, Appendix B to part 50, (2025) Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method)
ENVIRONMENTAL CHEMISTRY (Field Measurement)	Natural water, Drinking water, Saline water, Process water and Wastewater	Salinity	SMEWW-APHA-AWWA WEF Part 2520 B, 24th Ed. 2023 Salinity Electrical Conductivity Method





International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL CHEMISTRY (Lab testing)	Air – Environmental Filters	Weight Determination. Filters PM10 (High Volume).	EPA CFR Title 40, Chapter I, Sub Chapter C, Part 50, Appendix J to part 50 Reference method for the de termination of particulate matter as PM10 in the atmosphere. (Validated) (2024)
		Weight Determination. Filters PM10 (Low Volume).	EPA-Compendium Method IO- 2.3. Sampling of ambient air for pm10 concentration using the Rupprecht and Patashnick (r&p) Low Volume Partisol® Sampler (2024) (Validated).
	Weight Determination. Filters PM2.5 (High Volume)	EPA CFR Title 40, Chapter I, Sub Chapter C, Part 50, Appendix J to part 50 Reference method for the de termination of particulate matter as PM10 in the atmosphere. (2024) (Validated) AEN-PO-014 Weight Determination PM2.5 Filters (High Volume)	
	Air – Environmental Collector Solution	Sulphur dioxide (SO ₂)	EPA CFR Title 40, Chapter I, Subchapter C, Part 50, Appendix A-2 to part 50. Reference method for the determination of sulfur dioxide in the atmosphere. (Pararosaniline method). (2024) (Validated)
		Nitrogen dioxide (NO ₂)	ASTM D1607-91 (2018) e1: Standard test method for nitrogen dioxide content of the atmosphere. (Griess-Saltzman reaction). (2024) (Validated)



International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL CHEMISTRY (Lab testing) (continued)	Air – Environmental Collector Solution (continued)	Carbon monoxide (CO)	Peter O. Warner "Analysis of Air Pollutants", Wiley- Interscience, New York 1976. (2024) (Validated).
			AEN-PO-020 Determination of Carbon Monoxide in the atmosphere. Method 4: Carboxybenzene sulfonamide.
		Hydrogen sulfide (H ₂ S)	Norma COVENIN 3571:2000 (2024) (Validated)
			AEN-PO-021 Determination of the concentration of hydrogen sulfide (H ₂ S) in the atmosphere
		Ozone (O₃)	Methods of Air Sampling and Analysis"; 411: Determination of Oxidizing Substances in the Atmosphere. Intersociety Committee, James P. Lodge (Editor) Third edition (2024) (Validated)
			AEN-PO-022 Method of Determination of Ozone in the Atmosphere
ENVIRONMENTAL MICROBIOLOGY (Field collection + Lab Testing)	MICROBIOLOGY (Field collection + Lab for Human	Thermotolerant coliforms (faecal)	SMEWW-APHA-AWWA-WEF. 9221 B.2,3, E.1, 24th Ed. 2023 Multiple-Tube Fermentation Technique for Members of the Coliform Group. Thermotolerant (Fecal) Coliform Procedure.
and Wastewater	and Wastewater	Total coliforms	SMEWW-APHA-AWWA-WEF. 9221 B. 2,3,4,5a (1,3,4), 5b. 24th Ed. 2023 Multiple-Tube Fermentation Technique for Members of the Coli-form Group. Standard Total Coliform Fermentation technique.
		Escherichia coli	SMEWW-APHA-AWWA WEF. 9221 B.2,3, F.1. 24th Ed. 2023 Multiple-Tube Fermentation Technique for Members of the Coliform Group. Escherichia Coli Procedure Using Fluorogenic Substrate (EC MUG Medium).



International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL MICROBIOLOGY (Field collection + Lab Testing)	Natural water, Drinking water, Water for Human use and consumption, Saline water, Process water and Wastewater (continued)	Heterotrophic Bacteria	SMEWW-APHA-AWWA-WEF Part 9215 B. 24th Ed. 2023 Heterotrophic Plate Count. Pour Plate Procedure
(continued)		Fecal Enterococcus /Streptococcus Groups (Intestinal Enterococci)	SMEWW-APHA-AWWA-WEF Part 9230 B. 24th Ed. 2023 Fecal Enterococcus /Streptococcus Groups. Multiple-Tube Technique
		Vibrio Cholerae	SMEWW-APHA-AWWA-WEF Part 9278 A.2; B.1, 2.d (1.a, 1.b), 4, 5, 6 (No serogroup identification O139). 24th Ed. 2023
		Salmonella	SMEWW-APHA-AWWA-WEF Part 9274 A.2; B.1d,2,3,5,6 (except bacteriophage O1 test) y 7, 24th Ed. 2023 (Includes sampling)
		Helminth eggs Nematodes Ascaris sp. Uncinarias (Ancylostoma, Strongylus, Necator) Enterobius vermicularis Trichuris sp. Toxocara sp. Capillaria sp. Trichostrongylus sp. Cestodes Dyphylidium sp. Taenia sp. Hymenolepis diminuta Hymenolepis nana Hymenolepis sp. Trematodes Fasciola hepatica Paragonimus sp. Schistosoma sp. Acantocephalus Macracanthorhynchus sp.	Analysis of Wastewater for Use in Agriculture - A Laboratory Manual of Parasitological and Bacterio-logical Techniques. Rachel M. Ayres & D. Duncan Mara. World Health Organization. 1996 Modified Bailenger Method
		Nematodes Ascaris sp. Uncinarias (Ancylostoma, Strongylus, Necator) Enterobius vermicularis Trichuris sp. Toxocara sp. Capillaria sp. Trichostrongylus sp. Cestodes Dyphylidium sp. Taenia sp. Hymenolepis	Mexican Standard NMX-AA- 113-SCFI 2012 Analysis of water – Determination of number Helminth Eggs in wastewaters and treated wastewaters by Microscopic Examination-Test Method





International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL MICROBIOLOGY (Field collection + Lab Testing) (continued)	for Human use and consumption, Saline water, Process water	diminuta Hymenolepis nana Hymenolepis sp. Trematodes Fasciola hepatica Paragonimus sp. Schistosoma sp. Acantocephalus Macracanthorhynchus sp	
	(continued)	Virus	SMEWW-APHA-AWWA-WEF Part 9224 B, Virus (Somatic Coliphages) 23rd Ed. 2017 Detection of Coliphages. Somatic Coliphages Assay
	Natural water, Drinking water, Water for Human use and consumption	Staphylococcus aureus	SMEWW-APHA-AWWA-WEF Part 9213 B (Item 6 a.), 24th Ed. 2023. Recreational Waters. Swimming Pools. Test for Staphylococci or Staphylococcus.
		Detection of Pseudomonas aeruginosa	ISO 16266:2006. Water quality Detection and enumeration of Pseudomonas aeruginosa (only the detection)-Method by membrane filtration. 2006 Detection of Pseudomonas aeruginosa
	Soils, Sediments, Sludges and Biosolids	Escherichia coli	SMEWW-APHA-AWWA-WEF. Part 9221G(Item2), 23rd Ed. 2017 Multiple-Tube Fermentation. Technique for Members of the Coliform Group. Other Escherichia coli Procedures (PROPOSED), 2017. / EPA-821-R-14-009. Method 1680: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation using Lauril Tryptose Broth (LTB) and EC Medium, September 2014, Items: 11, 12.4 and 14
		Total coliforms	SMEWW-APHA-AWWA-WEF. Part 9221B, 23rd Ed. 2017 Multiple-Tube Fermentation. Technique for Members of the Coliform Group. Standard Total Coli-form Fermentation Technique. /



International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
MICROBIOLOGY	Soils, Sediments, Sludges and Biosolids (continued)	Total coliforms (continued)	EPA-821-R-14-009. Method 1680: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation using Lauril Tryptose Broth (LTB) and EC Medium, September 2014, Items: 11, 12.4 and 14
		Fecal Coliforms	SMEWW-APHA-AWWA-WEF. Part 9221B, 23rd Ed. 2017 Multiple-Tube Fermentation. Technique for Members of the Coliform Group. Standard Total Coli-form Fermentation Technique. / EPA-821-R-14-009. Method 1680: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation using Lauril Tryptose Broth (LTB) and EC Medium, September 2014, Items: 11, 12.4 and 14
		Viable helminth eggs	Standard Methods for the Recovery and Enumeration of Moodley et al. Helminth Ova in Wastewater, Sludge, compost and UrineDiversion Waste in South Africa (Moodley, Archer, Hawksworth, & Lei-bach,2008)
	Sludges and Biosolids	Salmonella sp	EPA-821-R-06-14. Method 1682: Salmonella in Sew-age Sludge (Biosolids) by Modified Semisolid RappaportVassiliadis (MSRV) Medum. July 2006
ENVIRONMENTAL HIDROBIOLOGY (Field collection + Lab Testing)	Epicontinental Sediments	Macrozobentos / Macroinvertebrados	SMEWW-APHA-AWWA-WEF Part 10500 C. 24th Ed. 2023 Macrozoobenthos / Macroinvertebrates



International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL SOIL MECHANICS ELECTROMETRIC INSTRUMENTATION (Field collection + Lab Testing)	Soil, Mud and Sediment	Soil Resistivity	ASTM G57-06. (2012.) Standard Test Methods for Field Measurement of Soil Resistivity using the Werner Four-Electrode Methods
MECHANICS OF SOILS, CONCRETE AND PAVEMENTS PHYSICAL AND MECHANICAL (Field Measurement)	Soil	Soil Density	NTP 339.143:1999 (revised in 2019) SOILS. Standard test method for the density and unit weight of the soil in situ using the sand cone method. 1st Edition
	Soil, Mud and Sediment	Granulometry	ASTM D6913/D6913M-17 (2021.) Standard Test Methods For Particle-Size Distribution (Gradation) Of Soils Using Sieve Analysis
MECHANICS OF SOILS, CONCRETE AND PAVEMENTS PHYSICAL AND	Soil, Sediments, Sludges and Concrete	Moisture	ASTM D2216-19 (2019.) Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
MECHANICAL (Field collection + Lab Testing)	Soil	Atterberger Limits (Liquid Limit, Plastic Limit and Soil Plasticity Index)	ASTM D4318-17 (2018.) Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
		Specific Weight of Coarse Aggregate	ASTM C127-24 (2024) Standard Test Method for Relative Density (Specific Gravity) and Absorption of Coarse Aggregate
		Proctor Standard	ASTM D698-12 (2021) Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12 400 ft-lbf/ft 3 (600 kN-m/m 3))



International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
MECHANICS OF SOILS, CONCRETE AND PAVEMENTS PHYSICAL AND MECHANICAL (Field collection + Lab Testing) (continued)	Soil (continued)	Modified Proctor	ASTM D1557-12 (2021) Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft lbf/ft3 (2,700 kN-m/m3))
		Soil Classification – SUCS	NTP 339.134:1999 (revised 2019) SOILS. Method for soil classification for engineering purposes (Unified Soil Classification System, SUCS). 1st Edition
		Soil Classification –AASHTO	ASTM D2487-17 (2025) Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
	Concrete	Compressive Strength of Concrete Cylindrical Specimens	ASTM C39/C39M-21 (2023) Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
ENVIRONMENTAL SOIL MECHANICS CHEMISTRY (Field collection + Lab Testing)	Soils, Sediments and Sludges	Sulfates	Methods of analysis recommended for the soils of Chile. Method 8.2 Revision 2006
			Saturation extract and determination by colorimetry with barium chromate
ENVIRONMENTAL CLIMATOLOGY (Field Measurement)	Atmosphere	Meteorological Parameters: Environmental Temperature, Relative Humidity, Environmental Pressure, UV radiation, Wind Speed, Wind Direction (Wind Rose)	ASTM D5741-96 (2017) Standard Practice for Characterizing Surface Wind Using a Wind Vane and Rotating Anemometer
OCCUPATOINAL HEALTH & SAFETY – ACOUSTICS (Field Measurement)	Occupational Noise	Occupational noise - Dosimetry	UNE – EN ISO 9612 (2009) / DS 024-2016-EM modified as per D.S. N° 023-2017-EM Determination of occupational noise exposure - Engineering method (ISO 9612:2009)



International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
OCCUPATOINAL HEALTH & SAFETY – ACOUSTICS (Field Measurement) (continued)	Occupational Noise (continued)	Occupational noise - Sonometry	UNE – EN ISO 9612 (2009) / DS 024-2016-EM modified as per D.S. N° 023-2017-EM Determination of occupational noise exposure - Engineering method (ISO 9612:2009)
OCCUPATOINAL HEALTH & SAFETY (Field Measurement)	Ergonomic of the thermal environment	Ergonomics of thermal stress in hot environments	ISO 7243:2017(E) Ergonomics of the thermal environment — Assessment of heat stress using the WBGT (wet bulb globe temperature) index
	Lighting of workplaces	Lighting	UNE-EN 12464-1(2022). Lighting of workplaces. Part 1: Workplaces indoors. UNE-EN 12464-2 (2016). Lighting of workplaces. Part 2: External workplaces
OCCUPATOINAL HEALTH & SAFETY CHEMISTRY (Field collection + Lab Testing)	Air – Atmosphere/ Environment	Respirable particles	NIOSH 0600. Issue 3. (1998) Particulates not otherwise regulated, Respirable.
		Total or Inhalable Particles.	NIOSH 0500. Issue 2. (1994) Particulates not otherwise regulated, Total.
ENVIRONMENTAL BIOLOGY (Field collection + Lab Testing)	Natural water, Drinking water, Water for Human use and consumption	Phytoplankton Qualitative	SMEWW-APHA-AWWA-WEF Part 10200 C.1, F.2.a, F.2.c.1 // Part 10900, 24th Ed. 2023 Plankton Concentration Techniques. Phytoplankton Counting Techniques. // Identification of Aquatic Organisms
		Phytoplankton Quantitative	SMEWW-APHA-AWWA-WEF Part 10200 C.1, F.1, F.2.a, F.2.c.1, 24th Ed. 2023 Plankton Concentration Techniques. Phytoplankton Counting Techniques
		Zooplankton Qualitative	SMEWW-APHAAWWA-WEF Part 10200 G.1, // Part 10900, 24th Ed. 2023 Plankton. Zooplankton Counting Techniques. Subsampling. // Identification of Aquatic Organisms





International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL BIOLOGY (Field collection + Lab Testing) (continued)	Natural water, Drinking water, Water for Human use and consumption (continued)	Zooplankton Quantitative	SMEWW-APHA-AWWA-WEF. Part 10200 B. 2. b. C. 1, G. 24th Ed. 2023 Plankton. Sample collection. Concentration Techniques. Zooplankton Counting Techniques
HYDROCARBONS AND OILS CHEMISTRY AND PHYSICS (Field collection + Lab Testing)	Petroleum Products, Mixtures of Petroleum and Non- Petroleum Products	Density, Relative Density, or API Gravity	ASTM D1298 - 12b (reapproved 2017) Standard Test Method for Density, Relative Density, or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method
	Crude and Oil	Salts	ASTM D3230-19 (2019) Standard Test Method for Salts in Crude Oil (Electrometric Method)
		Water and Sediment	ASTM D4007 – 22(2022) Standard test Method for water and sediment in fuel oils by the centrifuge Method (Laboratory Procedure)
	Fuel oils counts as distilled fuels, diesel fuels and biodiesel blends up to 5%, petroleum residual, residual n°4, residual n°5, residual 500, residual n°6, intermediate combustible oils	Water and Sediment	ASTM D1796 -11(2016) Standard test Method for water and sediment in crude oil by the centrifuge Method (Laboratory Procedure)
ENVIRONMENTAL ELECTROCHEMIST (Field Measurement)	Emission from Natural Gas-Fired Engines, Boilers and Process Heaters	Nitrogen Dioxide, Carbon Monoxide, Nitric Oxide, Nitrous Oxides, Oxygen	CTM-022 /CTM-030 Determination of Nitric Oxide, Nitrogen Dioxide and NOx Emissions from Stationary Combustion Sources by Electrochemical Analyzer. /Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions using Portable Analyzers



International Accreditation Service, Inc.

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL ELECTROCHEMIST (Field Measurement) (continued)	Emission / Stationary Sources	Sulfur Dioxide	EPA CFR Title 40, Chapter I, Sub chapter C, Part 60, Appendix A-4 to Part 60. Method 6C Determination of sulfur dioxide emissions from stationary
ENVIRONMENTAL CHEMISTRY AND PHYSICS	Natural water, Drinking water, Saline Water, and Wastewater	Particulate Floatable	SMEWW-APHA-AWWA-WEF Part 2530 B. 24th Ed. 2023 Particulate Floatable
(Field Measurement)	Natural water, Process water and Wastewater	Flow	UNE-EN ISO 748:2023 Measurement of liquid flow in open channels-Velocity area methods using point velocity measurements
ENVIRONMENTAL ACOUSTICS (Field Measurement)	Environmental Noise	Noise	NTP-ISO 1996-1:2020 Acoustics. Description, measurement and evaluation of environmental noise. Part 1: Basic Indices and Evaluation Procedure 2nd Edition
			NTP-ISO 1996-2:2023 Acoustics. Description, measurement and evaluation of environmental noise. Part 2: Determination of sound pressure levels. 3rd Edition

