

Schedule

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LABORATORY LOCATION/ CENTRAL OFFICE:	Moyog Laboratory, Jetama Water Sdn. Bhd. Locked Bag No. 143 88741 Kota Kinabalu, Sabah , 88741, SABAH MALAYSIA
	
ACCREDITED SINCE :	25 MARCH 2025
FIELD(S) OF TESTING:	CHEMICAL MICROBIOLOGY

This laboratory has demonstrated its technical competence to operate in accordance with MS ISO/IEC 17025:2017 (ISO/IEC 17025:2017).

This laboratory's fulfillment of the requirements of ISO/IEC 17025 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025 are written in language relevant to laboratory operations and operate generally in accordance with the principles of ISO 9001 (see Joint ISO-ILAC-IAF Communiqué dated April 2017).

CENTRAL LOCATION:	Moyog Laboratory, Jetama Water Sdn. Bhd. Locked Bag No. 143 88741 Kota Kinabalu, Sabah , 88741, Sabah
FIELD(S) OF TESTING :	CHEMICAL, MICROBIOLOGICAL

SCOPE OF TESTING : CHEMICAL

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Surface Water (river/dam Water) Intermediate Water (from Different Stages Of Water Treatment In Plants)	Nitrate-Low Range	HACH 8192, 2015 (Spectrophotometer)
	Nitrate-Medium Range	HACH 8171, 2014 (Spectrophotometer)
	Nitrite-Low Range	HACH 8507, 2015 (Spectrophotometer)
	Total Dissolved Solids	In-house Method JW 01 (TDS Meter)
Surface Water (river/dam Water) Intermediate Water (from Different Stages Of Water Treatment In Plants) Treated Water / Drinking	Alkalinity	APHA 2320 B, 2017
	Aluminium	HACH 8012, 2018 (Spectrophotometer)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Water	Ammonia	HACH 8038, 2017 (Spectrophotometer)
	Chlorine a) Free b) Total	HACH 8021, 2014 (Spectrophotometer) HACH 8167, 2014 (Spectrophotometer)
	Turbidity	APHA 2130 B, 2017
	pH	APHA 4500-H* B, 2017
	Conductivity	APHA 2510 B, 2017
	Colour	APHA 2120 B, 2017
	Iron	HACH 8008, 2014 (Spectrophotometer)
	Manganese-Low Range	HACH 8149, 2017 (Spectrophotometer)
	Total Hardness	HMSO, 1981
	Calcium Hardness	APHA 3500-Ca B, 2017
	Magnesium Hardness	APHA 3500-Mg B, 2017
Chloride	HACH 8113, 2018 (Spectrophotometer)	
Treated Water / Drinking	None	None

SCOPE OF TESTING : MICROBIOLOGY

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
(river/dam Water)	None	None
Different Stages Of Water Treatment In Plants)	None	None
Intermediate Water (from Surface Water	None	None
Surface Water	Total Coliform	APHA 9222 B, 2017
	None	None
	Lead, Cadmium, Manganese,	AAS Direct Air -" Acetylene Flame
	None	Demand
	None	hardness
	None	None
	& Faecal Coliform	WHO Guideelines for Drinking Water
	None	ISO 7899-2: 2002 (E)
	Total Coliform & Escherichia	JKM M 2040, In-house Method based
	None	Turbidity Meter
	Sulphide (1)	APHA F
	Calcium as Ca	None
	Iron	None
Oil and Grease	APHA 5520B	

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Escherichia coli	MS ISO 9308-1:2011 (Membrane Filtration Technique)
	None	None
	Phosphate	APHA 4500-P Method D, Stannous Chloride Method, Edition
	None	APHA 4500-NOs E, 22 nd Edition,
	None	None
	None	None
	Chromium	None
	None	None
	pH Value	APHA 4500-H* (APHA Method 21*
	None	None
	e Arsenic	None
	None	None
	None	Technique
	None	None
	None	Method Edition (2005)
	Alkalinity	APHA 2320 B Titration Method 21s
	None	Method by Discrete Analyzer
	Caustic Alkalinity as CaCO ₃	APHA - 2320B
	Barium as Ba	None
	None	(MPN Technique)
	Conductivity	APHA 2510 B, 2017
	Chlorate	Metrohm IC Application, Note No.
	None	Metrohm Technical Note
	Hydrocarbon	APHA 5520 F 2017
	Vanadium (V)	APHA 3120 B, 2017
	Free Carbon Dioxide (by calculation)	APHA 4500 CO ₂ D, 2017
	None	None
	None	APHA 2550 B, 2017
	Chromium, Cr	None
VOCs	EPA Method 5030B: 1996; EPA	
None	None	
None	None	
None	(Membrane Filter Technique)	
None	None	
Treated Water / Drinking Water	Dissolved Oxygen	APHA 4500-0 G, 2017
	Phosphorus, Reactive	HACH 8048, 2017 (Spectrophotometer)
	Chlorine	APHA 2350 B, 2017
Water	None	None

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	None	None
	None	None
	None	None
	pH value Chloride	APHA 4500-H+, 21st Edition APHA 4500-Cl-, 21st Edition
	Nickel	None
	Strontium	None
	Fluoride	None
	None	None
	Metals	None
	None	None
	None	None
	None	None
	COD	JKM E 0019 based on APHA 5220 Open
	Calcium/Calcium Hardness	JKM E 0015 based on APHA 3500 -"
	Chemical Oxygen Demand	JKM W 0401 based on HACH Method
	Coliform (MPN/100 ml)	ISO 9308 -" 2 (2012)
	E. coli (MPN/100 ml)	ISO 9308 -" 2 (2012)
	None	None
	None	None
	the Spores of Sulfite-Reducing Anaerobes (Clostridia) -" Part 2:	ISO 6461/2-1986 (E)
	E. Coli and Coliform	Water Quality-Enumeration of E.coli
	Intestinal enterococci	MOH (2)
	None	None
	None	None
	Coliform Count	APHA 9221 B
	E.Coli Count	APHA 9221 B, 9225
	Total Aerobic Plate Count	APHA 9215 B
	Total Fecal Coliform Count	APHA 9221 E
	Heterotrophic Plate Count	AS/NZS 4276.3.1 (2007)
	pH	APHA 4500 - H* B, 21% Edition
	Chlorine - Free	HACH 8021 and HACH 10069,
	Fluoride	APHA-4110 B, 215 Edition
	Biological Oxygen Demand, 5	APHA-5210 B, 215 Edition
	Free Chlorine MR	HACH method 10245, 5* Edition,
	Heterotrophic Colony Count	AS 4276.3.1-1995
	Zinc Manganese	APHA 3030E, 3120B Edition 2012
	None	None
	None	None
	Determination of Organochlorine	None
	Bacillus cereus	In-house method 21BAMC-B036
	None	None
	Pseudomonas aeruginosa	In-house method 21BAMC-B064

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Total Coliforms	In-house method 21BMPN-B075
	Bacillus cereus	In-house method 21BAMC-B036
	Pseudomonas aeruginosa	In-house method 21BAMC-B064
	Total Coliforms	In-house method
	None	PCL)
	Acute Hepatopancreatic	In-house method SD?QC-WI-305 :
	None	None
	Pathogen	, , , APHA 9222A,
	None	None
	Temperature	APHA 2550 B
	Phosphorus	APHA 4500 P C
	Bromodichloromethane,	In-house Method, CL/WT/008 based
	Metals by ICP	APHA 3120 B
	Mercury	APHA 3112 B
	Chlorpyrifos	In-house Method, CL/WT/011,
	Aluminium	APHA 3125 B (ICP-MS)
	Gross Alpha, Gross Beta	ISO 11704:2018
	Heterotrophic Plate Count	APHA 9215 B (Pour Plate Method)
	pH	APHA - 4500-H B
	None	ASTM D 1293-18
	None	None
	None	None
	None	ASTM D 1293-18
	None	None
	Turbidity	APHA 2130 B
	pH	APHA 4500 H* B 23rd Edition
	Total solid dried at 103°C -" 105 °C	APHA 2540 B (2005)
	Enumeration of Plankton	Marine Water (PBPKL-STP-PP-1)
	None	APHA 4500 Norg B (2017) and
	None	USP Chapter Bacterial
	Coliform, Fecal Coliform &	APHA 9222 B.G.H.D
	None	APHA 3111 B, 2017
	None	APHA 3111 B, 2017
	None	None
	None	from HACH Method 8023, DR3900
	PH test	APHA 4500 H*B Edition 2017)
	Total suspended solids	APHA 2540 D Edition 2017)
	Turbidity Test	APHA 2130 B Edition 2017)
	None	None
	MLSS	None

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Hydrocarbon, PAH	None
	None	None
	Selenium (Se) Chromium (Cr)	None
	None	None
	Ammonical Nitrogen	APHA 4500-NH3
	None	None
	Lead	APHA 3120 B
	Tin	None
	Iron	None
	Heterotropic plate count	APHA 9215 D
	Standard total coliform	APHA 9222 B
	None	None
	None	None
	pH	APHA - B
	Escherichia coli and Coliform	ISO 9308-1:2014 (E) / Enumeration by
	Bisphenol A	In-house test method MKA TMO6 based
	Total Hardness	HACH Method 8226, 8 th Edition, 2015
	Hardness by Calculation	APHA 2340 B & In-house test method
	Color	HACH Method 8025, Edition, 2014
	None	None
	Determination of pH	APHA 4500-H* B, 2005
	Determination of chloride	APHA 4500-CI B, 2005
	Determination of sulphate	APHA B, 2005
	Determination of alkalinity	APHA 2320 B, 2005
	Determination of total solids	APHA 2540 B, 2005

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	pH	APHA 4500 H*B
	Color	APHA 2120 C (2017)
	Heterotrophic Plate Count	APHA 9215 B (2017)
	Standard Total Coliform	APHA 9221 B (2017)
	Escherichia coli	APHA 9221 F (2017)
	Examination for Legionella spp. pneumophila	AS/NZS 3896:2008 None
	Staphylococcus aureus count	APHA 9213 B (2017)
	Fecal Streptococcus	APHA 9230 C (2017)
	Pseudomonas aeruginosa	APHA 9213 F (2017)
	Identification of Escherichia coli	In-house Method GPS/QA/TM/001
	Identification of Shiga-toxigenic	In-house Method GPS/QA/TM/004
	None	None
	Ammonia	ASTM D1293
	None	None
	and Escherichia coli	None
	None	filtration)
	Clostridium perfringens	ISO 14189: 2013 (E)
	None	None
	None	None
	None	None
	None	(2005)
	None	21% Edition (2005)
	Colour	APHA 2120 C 2005
	Determination of Volatile	Method EPA 524.2 By Purge & Trap
	Oxygen Demand (COD) for High	APHA Method 5220D
	None	In-house Method JKM W 0502,
	None	on APHA 4110 B-"Ion
	Colony Count at 36°C	JKM M 2038, ISO 6222:1999 (E)
	Intestinal Enterococci	i) WI 16 -" Sample Preparation for
	Enumeration of Clostridium	JKM M 2035
	Detection of pathogenic	JKM B 0201 Detection of pathogenic
	Identification and Quantification	JKM B 0406

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	None	None
	Aluminium	None
	None	None
	Organochlorine Pesticide	APHA 6630 B, Edition
	Ammoniacal Nitrogen	APHA F, 24" Edition
	Arsenic	APHA 3125 B, Edition
	Mercury	In-house method, SGS-TM-ENVI-003, based on APHA 3125 B
	2,4-dichlorophenoxyacetic acid (2,4-D)	In-house method, SGS-TM-02-045, based on Agilent Application Note 5991-5731 EN (LCMSMS)
	Heavy Metals by ICP-MS	None
	Endotoxin	Test for Bacterial Endotoxin, BP 2022
	pH	APHA 4500 H*B
	Oil & Grease	APHA 5520 B
	Color	APHA 2120 B
	Color	APHA 2120 F
	pH	APHA 4500 H* B
	Turbidity	APHA 2130 B
	Conductivity	APHA 2510 B
	None	None
	None	None
	None	None
	Escherichia coli and coliform	ISO 9308-1: 2014 (E) / Enumeration
	Pseudomonas aeruginosa	ISO 16266:2006 (E) / Detection and
	Ammonium nitrogen	BS 6068: Section 2.7:1984 ISO 5664:1984
	Chemical Oxygen Demand	BS 6068: Section 2.34:1988
	Suspended solids	BS 2690-Part 120:1981
	Dissolved solids	BS 2690-Part 121:1981
	None	ASTM D 523-82
	COD	APHA 5220 D
	None	None
	Free Chlorine	APHA' 4500 -" CI G
	Count	(Pour Plate, Spread Plate and
	Anaerobes (Clostridia)	BS 6068-4:9: 1993
	Gross Alpha & Gross Beta	None
	Arsenic as As	None
	Antimony as Sb	None
	Aluminium as Al	None
	Beryllium as Be	None
	Cadmium as Cd	None
	Chromium as Cr	None
	Lead as Pb	None

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Silver as Ag	None
	Selenium as Se	None
	Thallium as Tl	None
	Mercury as Hg	In-house Method LWI-MWE 037 based on APHA 3112 B by
	Mercury as Hg	Mercury Analyser
	Nitrate	In-house Method LWI-MWE 032 based on HACH Nitrate
	Nitrate	Test Comparator
	Sulfide	HACH Method 8131
	Chlorine, Free Residual	In-house Method LWI-MWE
	Chlorine, Free Residual	034 based on DPD-Palintest
	Chlorine, Free Residual	Test Comparator
	Total Chlorine	In-house Method LWI-MWE
	Total Chlorine	035 based on DPD-Palintest
	Total Chlorine	Test Comparator
	Colour (ADMI)	APHA 2120 F
	Heterotrophic Plate Count	None
	Pseudomonas aeruginosa	In-house Method LWI-MME (APHA) 007
	Pseudomonas aeruginosa	based on APHA 9213 E, 2020
	Escherichia coli and Coliform	Escherichia coli and Coliform Bacteria. Part 1: Membrane filtration
	Escherichia coli and Coliform	method
	Escherichia coli and Coliform	Method No: MOH (1)
	Escherichia coli and Coliform	ISO 29981 : 2010 (E), IDF 220 :
	Escherichia coli and Coliform	2010 (E) Milk Products -
	None	None

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