

BIOPROCESSING RESEARCH UNIT

CENTRE FOR AQUACULTURE AND SEAFOOD DEVELOPMENT

ANALYTICAL SERVICES

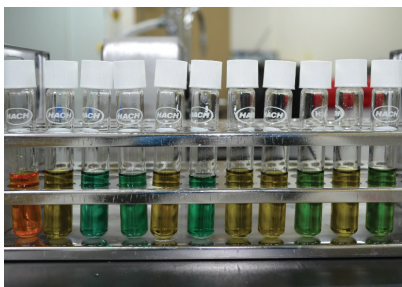
Please contact us to inquire about pricing, technical information and for any analysis not listed below.

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FOOD ANALYSIS

Test	Reference Method
Total Nitrogen	AOAC 954.01/988.05 (Kjeldahl)
Protein	AOAC 954.01/988.05 (Kjeldahl)
Fat	AOAC 920.39 (Soxhlet)
Moisture	AOAC 950.46B/AOAC 930.15
Ash	AOAC 938.08
Salinity	Dept. of Fisheries and Oceans (1986)
Color	Colorimetric
TVBN (Total Volatile Basic Nitrogen)	Abelti (2013)
pH	AOAC 973.41/Dept. of Fisheries and Oceans (1986)
Amino Acid Profile	Otter (2012, Gas Chromatography, Silylation derivatization)
Polyphenol Oxidase	Spectrophotometric



PLEASE NOTE: Standard methods are used for analytical work and sample collection whenever possible. The Bioprocessing Laboratory is not an accredited laboratory.

OIL/BIODIESEL ANALYSIS

Test	Reference Method
Fatty Acid Profile	AOAC 991.39 (Gas Chromatography)
Specific Gravity	AOCS To 1a-64
Kinematic Viscosity	ASTM D93-12
Refractive Index	Refractometer (optical measurement)
Phosphorous analysis	Spectrophotometric
Water content	Sandy Brae Test Kit
Saponification value	ASTM D5558-95
Iodine value	AOAC 993.20
Free Fatty Acids and Acid number	AOCS Ca 5A-40 (Colorimetric)
Peroxide Value (PV)	AOCS Cd 8b-90
P-Anisidine Value (AV)	AOCS Cd 18-90 (Spectrophotometric)
TOTOX value	(calculated from PV and AV)
Flash point	ASTM D93-12
Ash content	BS ISO 6884:2008
pH	AOAC 973.41

WATER ANALYSIS

Test	Reference Method
pH	APHA #4500-H+ (2011)
Temperature	APHA #2550 (2011)
Conductivity	Dept. of Fisheries and Oceans (1986)
Salinity	Dept. of Fisheries and Oceans (1986)
Total Solids, TS (mg/L)	APHA #2540 (2011)
- Fixed Solids	
- Volatile Solids	
- % Volatile Solids	
Total Suspended Solids, TSS (mg/L)	APHA #2540 (2011)
- Fixed Suspended Solids	
- Volatile Suspended Solids	
- % Volatile Suspended Solids	
Total Dissolved Solids, TDS (mg/L)	APHA #2540 (2011)
- Fixed Dissolved Solids	
- Volatile Dissolved Solids	
- % Volatile Dissolved Solids	
Ash content (mg/L)	AOAC 938.08 (2003)
Ammonical Nitrogen (mg/L)	ASTM D1426-08
Organic Nitrogen	APHA #4500-Norg (2011)
% Crude Protein (Wet basis)	AOAC 988.05 (2003)
Carbonaceous BOD (mg/L)	APHA #5210 (2011)
Total COD (mg/L)	APHA #5220 (2011)
Oil and Grease (mg/L)	AOAC 920.39 (Soxhlet)