



**Southern Cross
University**

EAL Environmental
Analysis
Laboratory



Analytical Services

Contamination assessment price list

Edition: 21.1.1

Refer to our website for additional section
Price Lists scu.edu.au/eal





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Contamination assessment price list

The Environmental Analysis Laboratory (EAL) is part of Southern Cross University and is set up as a commercial, teaching and research facility. EAL specialises in a range of environmental testing services for waters, acid sulfate soils, agricultural soils, composts, potting mixes, landscape soils, plants and for effluent monitoring.

EAL employs over 50 professional staff and utilises the following instruments: Perkin Elmer ICPOES 8300DV; Perkin Elmer ICPOES Avio500; NexION 2000B ICPMS; NexION 300D ICPMS; NexION 350D ICPMS with FLEXAR HPLC; LECO SC832 CS Analyser; LECO TruMac CNS Analyser; CRS Analysers; Lachat FIA Nutrient Analysers; Smartchem Nutrient Analyser; Soxtherm Oils and Grease Analysers;

Bruker XRD; Leica SEM with EDAX; Hitachi desktop SEM with EDAX; Pan-analytical XRF; Malvern Mastersizer 3000LV/SM Laser Diffraction Particle Size Analysers; Waters Ion Chromatography system; Shimadzu TOC/TN Analyser; Thermo-Finnigan IRMS; NewWave Laser Ablation System with Agilent ICPMS; Mantech AutoMax 197 pH/EC Analyser.

Specialists in the School of Environment, Science and Engineering, and Cooperative Research Centres, can also provide complete sampling, data interpretation and report production services. This includes specialists in soil science, geology, geochemistry, plant and fisheries biology, palaeontology, hydrology, marine biology and ecology.

Important notes on charges, turnaround times and results

The following points apply to sample analysis:

- Sample specific quotes can be negotiated and customised at competitive rates on request
- An admin batch charge of \$30 +GST applies per project/sample submission form
- Sub-contracted analyses are sent to approved laboratories
- On-site sample collection by qualified staff is available at a basic rate of \$110.00 +GST per hour
- Turn-around times for individual projects vary depending on the size and complexity of the task; most are completed within five to ten working days of receiving samples
- URGENT turn-around times (TAT) are available on request for selected tests. These incur 100% surcharge for one working day, 50% for two, 25% for three and 12.5% for four working days service (note samples must arrive at the laboratory by noon to ensure these TAT)
- Results are supplied in Excel and PDF report format. They detail the analytical results in relation to standard guidelines, where available
- Sample Receipt Notices, Results and Invoices are supplied by email and may be posted if requested.
- Payment is requested on delivery of samples (cash, eftpos, cheque). Invoices are available to regular clients. Minimum invoice amount is required

Confidentiality and quality assurance

Confidentiality is an integral part of our quality assurance certification. Results will not be released to a third party without written client consent.

Strict quality control procedures are applied to all chemical, physical and bacteriological analyses. This involves

frequent use of replicates to monitor precision, with standard reference materials and blanks to monitor accuracy.

The laboratory is also routinely involved in inter-laboratory comparisons and trials, including the Australian Standards National Low Level Nutrient Collaborative Trials (NLLNCT) program. EAL is a member of ASPAC (Australian Soil and Plant Analysis Council) which includes a regular Quality Assurance Program for soils and plants. EAL also assists in the formulation of suitable laboratory methods for acid sulfate soil analysis.

EAL is a NATA (National Association of Testing Authorities) accredited laboratory (Lab. Acc. No. 14960). Accreditation is on selected tests (refer to final page); EAL is continually updating the number of tests directly accredited by NATA.

EAL uses many industry accepted method references as the base for NATA, ASPAC and other in-house methods of testing. These references include Standard Methods for the Examination of Water and Wastewater (APHA), Australian Standards (AS), National Acid Sulfate Soils Guidance (Sullivan, Ward, Toppler and Lancaster, 2018) and Soils Chemistry Methods – Australasia (Rayment and Lyons, 2011).

Instructions for submitting samples

Sample collection and preservation for Liquid samples:

- Minimum of 1 L required in a glass bottle - contact EAL for specific bottle requirements, as volumes vary with test requests
- Thoroughly rinse the bottle with sample water before collecting a representative sample; fill bottle to the top
- Download [EAL Water Preservation Sampling Guide](#) for suggestions
- Label the bottle with site name and date of sampling.

Sample collection and preservation for Contamination Soil Assessment Samples

- Minimum of 200 g required (half a plastic lunch bag is most suitable)
- For ENM testing (SS-PACK-051) minimum of 1 kg in a sealed plastic bag and a 125 mL glass jar filled with sample
- Collect a representative soil sample - surface layer or 0-10 cm surface layer below grass
- Label with site and client name, as well as date of sampling
- If EAL is required to composite samples, note this on the [Sample Submission Form](#).

Complete EAL Sample Submission Form (SSF)

- Download [Sample Submission Form](#)
- Complete all relevant details on SSF, noting if EAL compositing is required
- Use Test Codes from the Price List e.g. SS-PACK-008
- Credit card and cheque are the preferred methods of payment.

Package and send samples

- Package fresh sealed or bottled sample(s) in a postpak, esky or insulated box for rapid delivery; keep water samples cold with freezer bricks
- Enclose the SSF in a sealed plastic sleeve along with any other instructions
- Samples can be dropped off in person at EAL. The university gatehouse will provide directions; follow the EAL signs posted around the university. Client parking is reserved in the lane way next to sample reception
- Samples can also be sent by post or courier. TNT or TOLL are our preferred couriers, they can be contacted on 131 150 or 131 531, respectively. Please use the following delivery labels below.

Courier address:

Southern Cross University
Environmental Analysis Laboratory (EAL)
Ground floor, N Block
Military Road East Lismore NSW 2480

EAL contact:

P: 02 6620 3678 or
Graham Lancaster M: 0419 984 088

NOTE: URGENT DELIVERY OF SAMPLES FOR TESTING

Postal address:

Southern Cross University
Environmental Analysis Laboratory (EAL)
PO Box 157
Lismore NSW 2480

EAL contact:

P: 02 6620 3678 or
Graham Lancaster M: 0419 984 088

NOTE: URGENT DELIVERY OF SAMPLES FOR TESTING

Contact details:

Laboratory position	Contact	Phone / Fax	Email
Administration	Reception	02 6620 3678 / 02 6620 3957	eal@scu.edu.au
Senior Manager	Graham Lancaster	0419 984 088	graham.lancaster@scu.edu.au
Laboratory Manager	Nadia Toppler	0447 011 070	nadia.toppler@scu.edu.au
Waters/ICP Co-ordinator	Matt Pocock	0400 767 139	matt.pocock@scu.edu.au
Soils Co-ordinator	Kris Saville	0437 016 017	kris.saville@scu.edu.au

CONTAMINATION ASSESSMENT ANALYTICAL SERVICES

SOLIDS ASSESSMENT TESTING

All suites have preparation and digest/extract charges included.

ITEM CODE	SPECIFIC SOLIDS SUITES	PRICE excl. GST	PRICE incl. GST
SS-PACK-015	Aggressivity Assessment Includes Moisture, Basic Texture; pH, EC, Resistivity (calculation), Soluble Chloride, Sulfate.	\$70.00	\$77.00
SS-PACK-151	Biochar PCB's (< 0.2 ppm) and PAH's (< 0.4 ppm)	\$110.00	\$121.00
SS-PACK-152	Biochar VOC and SVOC Scan	\$310.00	\$341.00
SS-PACK-154	Biochar Dioxin / Furans (< 17 ng/kg)	\$950.00	\$1,045.00
SS-PACK-148	Waste Material Biomethane Potential (BMP) Includes BMP analysis using COD, Total Solids, Volatile solids (VS) and methane production normalised on a VS basis (includes assessment report with cumulative gas production graphs). Note: typically an 8 week production trial and limited sample numbers of 4 per batch) (estimated 2kg of sample solids/ sludge required for analysis).	\$1,150.00	\$1,265.00
SS-PACK-053	Concrete Quality Analysis Includes concrete crushing, Chloride and Sulfate.	\$80.00	\$88.00
SS-PACK-005	Contaminated Site Assessment 1a Includes Basic Texture; Copper, Lead, Cadmium, Zinc, Arsenic, Selenium, Iron, Manganese, Silver, Chromium, Nickel, Aluminium, Mercury, Boron, Cobalt, Beryllium; Pesticides (Organo-chlorines (OC), Organo-phosphates (OP)).	\$130.00	\$143.00
SS-PACK-006	Contaminated Site Assessment 1b Includes Basic Texture; Copper, Lead, Cadmium, Zinc, Arsenic, Selenium, Iron, Manganese, Silver, Chromium, Nickel, Aluminium, Mercury, Boron, Cobalt, Beryllium; Pesticides (Organo-chlorines (OC), Organo-phosphates (OP), Polychlorinated Biphenyls (PCB)).	\$150.00	\$165.00
SS-PACK-007	Contaminated Site Assessment 2a Includes Basic Texture; Arsenic, Lead; Pesticides (Organo-chlorines (OC), Organo-phosphates (OP)).	\$110.00	\$121.00
SS-PACK-147	Contaminated Site Assessment 2b Includes Basic Texture; Arsenic, Lead; Pesticides (Organo-chlorines (OC)).	\$100.00	\$110.00
SS-PACK-008	Contaminated Site Assessment 3 Includes Basic Texture; Copper, Lead, Cadmium, Zinc, Arsenic, Selenium, Iron, Manganese, Silver, Chromium, Nickel, Aluminium, Mercury, Boron, Cobalt, Beryllium; Pesticides (Organo-chlorines (OC)).	\$120.00	\$132.00
SS-PACK-051	Excavated Natural Material (ENM) Classification 2014 Includes pH, EC (1:5 water); Foreign Material; Copper, Lead, Cadmium, Zinc, Arsenic, Chromium, Nickel, Mercury; Polycyclic Aromatic Hydrocarbons (PAH); Total Petroleum Hydrocarbons (C10-C40), BTEX (C6-C10).	\$260.00	\$286.00
SS-PACK-042	Health Investigation Level (HIL) Soil Assessment Includes Copper, Lead, Cadmium, Zinc, Arsenic, Chromium, Nickel, Mercury, Beryllium, Boron, Cobalt; Polycyclic Aromatic Hydrocarbons (PAH), Total Petroleum Hydrocarbons (TPH), BTEX Hydrocarbons; Pesticides (Organo-chlorines (OC)); Total Phenols; Total Cyanide.	\$320.00	\$352.00
SS-PACK-023	Recovered Aggregate Exemption 2014 Includes EC; Mercury, Cadmium, Lead, Arsenic, Chromium, Copper, Nickel, Zinc; Fraction % (metal, plaster, rubber, plastic, paper, cloth, paint, wood, other vegetable matter).	\$110.00	\$121.00
SS-PACK-065	Recovered Fines Order EPA 2014 Testing Includes pH, EC (1:5 water); Foreign Material; Particle Size; Total Organic Carbon; Copper, Lead, Cadmium, Zinc, Arsenic, Chromium, Nickel, Mercury; Polycyclic Aromatic Hydrocarbons (PAH); Total Petroleum Hydrocarbons (C10-C36), BTEX (C6-C9); Pesticides (Organochlorine Pesticides (OC)); Polychlorinated Biphenyls (PCB); Volatile Hydrocarbons (VHC).	\$500.00	\$550.00
SS-PACK-104	Resource Recovery Exemption Analysis EPA 2017 Includes Moisture Content; pH, EC; Total Organic Carbon, Total Nitrogen, C/N Ratio; Soluble Cations (Sodium, Potassium, Calcium, Magnesium), Soluble Anions (Chloride, Nitrate); Totals (Antimony, Arsenic, Beryllium, Boron, Cadmium, Cobalt, Copper, Chromium, Lead, Manganese, Mercury, Molybdenum, Nickel, Phosphorus, Selenium, Sulfur, Tin, Vanadium, Zinc).	\$270.00	\$297.00
SS-PACK-066	The Recovered Glass Sand Order 2014 Includes EC; Total Organic Carbon (TOC); Mercury, Cadmium, Lead, Arsenic, Chromium, Copper, Nickel, Zinc, Molybdenum; Fraction % (Plaster, clay lumps and other friable materials. Rubber, plastic, bitumen, paper, cloth, paint, wood and other vegetation matter).	\$135.00	\$148.50
SS-PACK-080	Treated Drilling Mud Exemption 2014 Includes pH, EC (1:5 water); Copper, Lead, Cadmium, Zinc, Arsenic, Chromium, Nickel, Mercury; Polycyclic Aromatic Hydrocarbons (PAH); Total Petroleum Hydrocarbons (C10-C36), BTEX (C6-C9), Total Chlorinated Hydrocarbons (TCH).	\$280.00	\$308.00
SS-PACK-105	Treated Grease Trap Waste Order EPA 2014 Includes Moisture Content; pH, EC; Oil and Grease; Total Nitrogen; Totals (Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium and Zinc); Available Boron.	\$180.00	\$198.00

All suites have preparation and digest/extract charges included.

ITEM CODE	RESIDUE SOLIDS SUITES	PRICE excl. GST	PRICE incl. GST
SS-PACK-013	Pesticide Screen 1a Includes Organo-chlorines (OC), Organo-phosphates (OP).	\$80.00	\$88.00
SS-PACK-014	Pesticide Screen 1b Includes Organo-chlorines (OC), Organo-phosphates (OP), Polychlorinated Biphenyls (PCB).	\$100.00	\$110.00
SS-PACK-055	Pesticide Screen 2a - Low Level Includes Low Level Pesticide Analysis: Organo-chlorines (OC) and Polychlorinated Biphenyls (PCB).	\$120.00	\$132.00

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ITEM CODE	RESIDUE SOLIDS SUITES (Cont.)	PRICE excl. GST	PRICE incl. GST
SS-PACK-056	Pesticide Screen 2b - Low Level Includes Low Level Pesticide Analysis: Organo-chlorines (OC), Organo-phosphates (OP), Polychlorinated Biphenyls (PCB).	\$130.00	\$143.00
SS-PACK-017	Petroleum Compounds Assessment 1a Includes Total Petroleum Hydrocarbons (TPHC10-C40), BTEX (equivalent to TPHC6- C10).	\$90.00	\$99.00
SS-PACK-018	Petroleum Compounds Assessment 1b (Total and Speciated) Includes Total Petroleum Hydrocarbons (TPHC10-C40), BTEX (equivalent to TPHC6- C10), Speciated Total Petroleum Hydrocarbons (aromatic and aliphatic).	\$280.00	\$308.00
SS-PACK-118	Residue Screen - Complete Includes RS1 + RS2 (OCOP Pesticides + Synthetic Pyrethroids – 80+ Residues + Herbicide and Fungicide – 40+ Residue).	\$280.00	\$308.00
SS-PACK-119	Residue Screen - Complete + Glyphosate Includes RS1 + RS2 (OCOP Pesticides + Synthetic Pyrethroids – 80+ Residues + Herbicide and Fungicide – 40+ Residue) + Glyphosate Screens.	\$380.00	\$418.00

All suites have preparation and digest/extract charges included.

ITEM CODE	METAL SOLIDS SUITES	PRICE excl. GST	PRICE incl. GST
SS-PACK-004	Basic Metals Scan - Total Acid Extractable (ICPMS) Includes Aluminium, Arsenic, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Mercury, Nickel, Selenium, Silver and Zinc.	\$70.00	\$77.00
SS-PACK-043	Extra Metals Scan - Total Acid Extractable (ICPMS) Includes Antimony, Barium, Bismuth, Lithium, Molybdenum, Silicon, Strontium, Thallium, Thorium, Uranium and Vanadium.	\$70.00	\$77.00
SS-PACK-046	Special - Metals and Salts Combo - Total Acid Extractable (ICPMS) Includes Basic (Aluminium, Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Selenium, Silver and Zinc); Extra (Antimony, Barium, Beryllium, Bismuth, Boron, Cobalt, Lithium, Molybdenum, Silicon, Strontium, Thallium, Thorium, Uranium and Vanadium) and Salts (Calcium, Magnesium, Potassium, Sodium and Sulfur).	\$120.00	\$132.00
SS-PACK-045	Total Acid Extractable - Heavy Metals (ICPMS) Includes Lead, Cadmium, Arsenic, Nickel, Aluminium, Mercury, Chromium, Silver, Selenium.	\$50.00	\$55.00
SS-PACK-153	Biochar Heavy Metals Includes Pb, Cd, Hg, As, Cu, Ni, Zn and Cr.	\$80.00	\$88.00
SS-PACK-161	Specific - ASLP Extractable (ICPMS) Includes Sodium, Potassium, Calcium, Magnesium, Sulfur, Chloride, Copper, Lead, Cadmium, Zinc, Arsenic, Selenium, Iron, Manganese, Silver, Chromium, Nickel, Aluminium, Mercury.	\$90.00	\$99.00
SS-PACK-032	Specific - TCLP Extractable (ICPMS) Includes Copper, Lead, Cadmium, Zinc, Arsenic, Selenium, Iron, Manganese, Silver, Chromium, Nickel, Aluminium, Mercury.	\$90.00	\$99.00
SS-PACK-162	Specific - SPLP Extractable (ICPMS) Includes Sodium, Potassium, Calcium, Magnesium, Sulfur, Chloride, Copper, Lead, Cadmium, Zinc, Arsenic, Selenium, Iron, Manganese, Silver, Chromium, Nickel, Aluminium, Mercury.	\$90.00	\$99.00
SS-PACK-069	Speciated Arsenic Includes toxic arsenic species AsV and AsIII determination using HPLC-ICPMS (Total Arsenic analysis also included).	\$300.00	\$330.00
SS-PACK-070	Speciated Chromium Includes toxic hexavalent chromium species CrVI and CrIII determination using HPLC-ICPMS (Total Chromium analysis also included).	\$300.00	\$330.00
SS-PACK-068	Speciated Mercury Includes toxic mercury species Methyl Mercury and Hg2+ determination using HPLC-ICPMS. (Total Mercury analysis also included).	\$300.00	\$330.00

ITEM CODE	SOLIDS PREPARATIONS	PRICE excl. GST	PRICE incl. GST
SS-PREP-002	Hotblock Digest Includes total Aqua-Regia or Nitric Acid digestion of solid samples.	\$12.00	\$13.20
SS-PREP-001	Sample Preparation Includes drying and ring mill grinding.	\$10.00	\$11.00
SS-PREP-005	TCLP Extractions Toxicity Characteristic Leaching Procedure.	\$45.00	\$49.50

Sample Preparation may be required unless a Discounted Testing Suite is selected.

ITEM CODE	INDIVIDUAL SOLIDS TESTS	PRICE excl. GST	PRICE incl. GST
SS-SING-149	Arsenic - Total Includes sample preparation / acid digest and analysis by ICPMS.	\$30.00	\$33.00
SS-SING-063	Asbestos Identification (Not Quantifiable) Identification in building material, soil, compost and dust.	\$70.00	\$77.00
SS-SING-161	Asbestos Identification and Quantification in Soil Identification and quantification in soil (using AS4964-2004 or WA/NEPM) (% ACM, % Friable).	\$80.00	\$88.00
SS-SING-162	Chromium VI - Hexavalent Speciation by a screening colourimetric technique which may be subject to matrix interference. Refer to separate analysis codes for speciation using HPLC-ICPMS analysis.	\$36.00	\$39.60
SS-SING-127	Contamination Foreign Material Fraction Percentage Includes Fraction % (metal, plaster, rubber, plastic, paper, cloth, paint, wood, other vegetable matter).	\$40.00	\$44.00
SS-SING-153	Cyanide - Free	\$45.00	\$49.50

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ITEM CODE	INDIVIDUAL SOLIDS TESTS (Cont.)	PRICE excl. GST	PRICE incl. GST
SS-SING-148	Cyanide - Total	\$60.00	\$66.00
SS-SING-239	Cyanide (Total Prussic Acid in Plant/Feed samples) Includes sample preparation and Total Cyanide.	\$100.00	\$110.00
SS-SING-147	Fluoride - Total by fusion	\$70.00	\$77.00
SS-SING-132	General Metals - ICPMS Price per element Aluminium, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Thorium, Uranium, Vanadium or Zinc.	\$10.00	\$11.00
SS-SING-157	Glyphosate (Round Up) + AMPA Screen	\$210.00	\$231.00
SS-SING-158	Herbicides Phenoxy Acid	\$200.00	\$220.00
SS-SING-051	Hydrocarbons - BTEX - equivalent to TPH(C6-C10)	\$50.00	\$55.00
SS-SING-020	Hydrocarbons - Polycyclic Aromatic (PAH)	\$65.00	\$71.50
SS-SING-192	Hydrocarbons - Polycyclic Aromatic (PAH) by TCLP Includes PAH by TCLP extraction.	\$115.00	\$126.50
SS-SING-115	Hydrocarbons Includes Hydrocarbons (C1-C5). Cost per analyte.	\$40.00	\$44.00
SS-SING-023	Hydrocarbons - Total Petroleum - Speciated Includes Speciated TPH (aromatic or aliphatic).	\$200.00	\$220.00
SS-SING-052	Hydrocarbons - Total Petroleum - TPH (C10-C40)	\$50.00	\$55.00
SS-SING-150	Lead - Total Includes sample preparation, acid digest and analysis by ICPMS.	\$30.00	\$33.00
SS-SING-024	Specific Metals - TCLP Extractable ICPMS Price per element Aluminium, Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Silver or Zinc.	\$15.00	\$16.50
SS-SING-133	Non-Standard Metals - ICPMS Price per element Cerium, Dysprosium, Erbium, Europium, Gadolinium, Gallium, Gold, Holmium, Lanthanum, Lutetium, Neodymium, Praseodymium, Rubidium, Samarium, Scandium, Terbium, Thulium, Tin, Titanium, Tungsten, Ytterbium or Yttrium.	\$15.00	\$16.50
SS-SING-053	Organo-chlorines (OC) (Detection Limit - 0.1 ppm)	\$65.00	\$71.50
SS-SING-056	Organo-chlorines (OC) - Low Level (Detection Limit - 0.01 ppm)	\$100.00	\$110.00
SS-SING-054	Organo-phosphates (OP) (Detection Limit - 0.1 ppm)	\$65.00	\$71.50
SS-SING-057	Organo-phosphates (OP) - Low Level (Detection Limit - 0.01 ppm)	\$100.00	\$110.00
SS-SING-159	Organotins (MBT, TBT, DBT)	\$260.00	\$286.00
SS-SING-070	Paint Analysis for Lead	\$30.00	\$33.00
SS-SING-224	PFAS in ASLP leachate – standard level 28 suite with detection to 0.01 µg/L Includes the analysis of per- and poly-fluoroalkyl substances (PFAS) in ASLP (Australian Standard Leachate Procedure) leachate.	\$210.00	\$231.00
SS-SING-216	PFAS in solid – standard level 28 suite with detection 0.01 mg/kg Includes the analysis of per- and poly-fluoroalkyl substances (PFAS) in soil.	\$170.00	\$187.00
SS-SING-253	PFAS in solid – low level 28 suite with detection 0.0008-0.0016 mg/kg Includes the analysis of per- and poly-fluoroalkyl substances (PFAS) in soil.	\$190.00	\$209.00
SS-SING-065	pH (1:5 water)	\$15.00	\$16.50
SS-SING-142	Phenol - Total	\$60.00	\$66.00
SS-SING-029	Phenolics - speciated phenols	\$90.00	\$99.00
SS-SING-055	Polychlorinated Biphenyls (PCB) (Detection Limit - 0.1 ppm)	\$65.00	\$71.50
SS-SING-058	Polychlorinated Biphenyls (PCB) - Low Level (Detection Limit - 0.01 ppm)	\$100.00	\$110.00
SS-SING-217	Semi-Volatile Organic Compounds (SVOC) SVOC includes Phenols.	\$260.00	\$286.00
SS-SING-027	Silica - Total Includes specialised NaOH high temperature fusion extraction of silicon.	\$120.00	\$132.00
SS-SING-223	Silica Gel Clean-up TRH Includes TRH C9-C40 Natural/ Petroleum differentiation – silica gel cleanup (removes all of the biogenic, more polar material leaving just the petrogenic based TRH).	\$110.00	\$121.00
SS-SING-140	Synthetic Pyrethroids	\$120.00	\$132.00
SS-SING-255	Total Oils and Grease (TOG) - Hexane extractable gravimetric analysis of solids	\$50.00	\$55.00
SS-SING-126	Volatile Halogenated Compounds (VHC)	\$80.00	\$88.00
SS-SING-026	Volatile Organic Compounds (VOC)	\$115.00	\$126.50

WATER ASSESSMENT TESTING

All suites have preparation and digest/extract charges included.

ITEM CODE	SPECIFIC WATER SUITES	PRICE excl. GST	PRICE incl. GST
SW-PACK-018	Effluent Monitoring Includes pH, Total Suspended Solids (TSS); Biochemical Oxygen Demand (BOD); Total Oils and Grease (TOG); Total Nitrogen (TN), Total Phosphorus (TP); Nitrate, Nitrite, Phosphate, Ammonium; Faecal Coliforms.	\$190.00	\$209.00
SW-PACK-058	Gas Contamination Monitoring for Dissolved Gases Includes Acetylene, Butane, Ethane, Ethene, Methane and Propane.	\$140.00	\$154.00

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ITEM CODE	SPECIFIC WATER SUITES (Cont.)	PRICE excl. GST	PRICE incl. GST
SW-PACK-056	Gas Contamination Water Quality Monitoring Includes pH, EC, Total Dissolved Salts (TDS) (calculation), Total Alkalinity, Total Suspended Solids (TSS); Total Petroleum Hydrocarbons (TPH C10-C40), BTEX (Equivalent TPH C6-C10); Aluminium, Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Selenium, Silver and Zinc.	\$160.00	\$176.00
SW-PACK-015	Wastewater Monitoring Includes pH, Total Suspended Solids (TSS); Biochemical Oxygen Demand (BOD); Total Oils and Grease (TOG).	\$95.00	\$104.50
SW-PACK-071	Water quality for concrete mixes under AS1379 Includes pH, EC, TDS (by calc), Total Suspended Solids, Total Oils and Grease, Sugars (Biological Oxygen Demand), Chloride, Sodium and Sulfate.	\$140.00	\$154.00

All suites have preparation and digest/extract charges included.

ITEM CODE	RESIDUE WATER SUITES	PRICE excl. GST	PRICE incl. GST
SW-PACK-072	Complete Waters Residue Screen Includes RS1 + RS2 (OCOP Pesticides + Synthetic Pyrethroids – 80+ Residues + Herbicide and Fungicide – 40+ Residue).	\$220.00	\$242.00
SW-PACK-009	Pesticide Screen 1a Includes Organo-chlorines (OC), Organo-phosphates (OP).	\$70.00	\$77.00
SW-PACK-010	Pesticide Screen 1b Includes Organo-chlorines (OC), Organo-phosphates (OP) and Polychlorinated biphenyls (PCB).	\$90.00	\$99.00
SW-PACK-024	Pesticide Screen 2a - Low Level Includes Low Level Pesticide Analysis: Organo-chlorines (OC) and Organo-phosphates (OP).	\$130.00	\$143.00
SW-PACK-027	Pesticide Screen 2b - Low Level Includes Low Level Pesticide Analysis: Organo-chlorines (OC), Organo-phosphates (OP), Polychlorinated Biphenyls (PCB).	\$140.00	\$154.00
SW-PACK-059	Pesticide Screen 3 - In Oil (Detection est. <10 ppm) Includes Organo-chlorines (OC), Organo-phosphates (OP). Note: 25 mL required.	\$150.00	\$165.00
SW-PACK-075	Pesticides/ Residue Screen – In Oil (Detection 0.1 ppm) Includes Organo-chlorines (OC), Organo-phosphates (OP) and a Multi-residue scan. Note: 25 mL required.	\$180.00	\$198.00

All suites have preparation and digest/extract charges included.

ITEM CODE	METAL WATER SUITES	PRICE excl. GST	PRICE incl. GST
SW-PACK-030	Basic Metals Scan - Total Recoverable (digested with nitric acid) (ICPMS) Includes Aluminium, Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Selenium, Silver and Zinc.	\$65.00	\$71.50
SW-PACK-029	Basic Metals Scan - Total Available / Acid Soluble (acidified) (ICPMS) Includes Aluminium, Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Selenium, Silver and Zinc.	\$60.00	\$66.00
SW-PACK-045	Extra Metals Scan - Total Available/Acid Soluble (acidified) (ICPMS) Includes Antimony, Barium, Beryllium, Bismuth, Boron, Bromide, Cobalt, Lithium, Molybdenum, Silicon, Strontium, Thallium, Thorium, Uranium and Vanadium.	\$60.00	\$66.00
SW-PACK-060	Saline Water Metals (Low Level) > 20 mS/cm (As Supplied) (ICPMS) Includes Basic (Aluminium, Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Selenium, Silver and Zinc); Extra (Barium, Beryllium, Bismuth, Cobalt, Molybdenum, Thallium, Uranium and Vanadium).	\$80.00	\$88.00
SW-PACK-051	Special - Metals and Salts Combo - As Supplied (ICPMS) Includes Basic (Aluminium, Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Selenium, Silver and Zinc); Extra (Antimony, Barium, Beryllium, Bismuth, Boron, Bromide, Cobalt, Lithium, Molybdenum, Silicon, Strontium, Thallium, Thorium, Uranium and Vanadium) and Salts (Calcium, Chloride, Magnesium, Potassium, Sodium and Sulfur).	\$110.00	\$121.00
SW-PACK-067	Speciated Arsenic Includes toxic arsenic species AsV determination using HPLC-ICPMS (Total Arsenic analysis also included to determine As III) 1% of volume HCl preservation in PP.	\$350.00	\$385.00
SW-PACK-068	Speciated Chromium Includes toxic hexavalent chromium species CrVI determination using HPLC-ICPMS (Total Chromium analysis also included to determine CrIII) 1 M NaOH preservation (approx.3 drops/30ml to adjust pH to 8-9.5) in PP.	\$350.00	\$385.00
SW-PACK-066	Speciated Mercury Includes toxic mercury species Methyl Mercury determination using HPLC-ICPMS (Total Mercury analysis also included to determine HgII) 1% of volume HCl preservation in glass jar.	\$350.00	\$385.00
SW-PACK-074	Metals Screen in Oil - Total Acid Digestable (ICPMS) Includes Aluminium, Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Selenium, Silver and Zinc. Note: 25 mL required to complete testing.	\$90.00	\$99.00

ITEM CODE	WATER PREPARATIONS	PRICE excl. GST	PRICE incl. GST
SW-PREP-003	Filtered/Dissolved Metals Immediate filtration through 0.45 µm filter followed by acidification with Nitric acid. It is particularly important where waters are high in suspended clay matter, where Iron and Aluminium may be present.	\$5.00	\$5.50
SW-PREP-006	Saline Waters Instrument Setup (per batch)	\$100.00	\$110.00

Contamination Assessment Price List - Edition: 21.1.1

ITEM CODE	WATER PREPARATIONS (Cont.)	PRICE excl. GST	PRICE incl. GST
SW-PREP-002	Total Available/Acid Soluble Metals Acidification with Nitric acid. Used on nearly all environmental waters, acid sulfate waters, groundwater and surfacewaters (According to ANZECC guidelines). Also used for clean waters, drinking waters, when acidified in the field and when requested.	\$5.00	\$5.50
SW-PREP-001	Total Recoverable Metals Nitric Acid digest. Used on high sludge/solid waters and when requested.	\$15.00	\$16.50

Sample Preparation may be required unless a Discounted Testing Suite is selected.

ITEM CODE	INDIVIDUAL WATER TESTS	PRICE excl. GST	PRICE incl. GST
SW-SING-012	Biochemical Oxygen Demand (BOD) - Total	\$45.00	\$49.50
SW-SING-013	Chemical Oxygen Demand (COD)	\$45.00	\$49.50
SW-SING-030	Chromium VI - Hexavalent Speciation by a screening colourimetric technique which may be subject to matrix interference. Refer to separate analysis codes for speciation using HPLC-ICPMS analysis.	\$36.00	\$39.60
SW-SING-056	Conductivity - Electrical	\$10.00	\$11.00
SW-SING-029	Cyanide - Total	\$50.00	\$55.00
SW-SING-104	General Metals - Total Available/Acid Soluble Price per element Aluminium, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Bromide, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Thorium, Uranium, Vanadium or Zinc.	\$10.00	\$11.00
SW-SING-133	General Metals - Total Acid Digestible Price per element Aluminium, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Bromide, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Thorium, Uranium, Vanadium or Zinc.	\$10.00	\$11.00
SW-SING-116	Glyphosate (Round Up)	\$170.00	\$187.00
SW-SING-098	Herbicides Phenoxy Acid	\$170.00	\$187.00
SW-SING-062	Hydrocarbons - BTEX (Equivalent to TPH C6-C10)	\$50.00	\$55.00
SW-SING-008	Hydrocarbons - Polycyclic Aromatic Hydrocarbons (PAH)	\$65.00	\$71.50
SW-SING-063	Hydrocarbons - Total Petroleum (TPH C10-C40)	\$50.00	\$55.00
SW-SING-112	Methane	\$110.00	\$121.00
SW-SING-108	Non-Standard Metals - Total Available/Acid Soluble Price per element Cerium, Dysprosium, Erbium, Europium, Gadolinium, Gallium, Gold, Holmium, Lanthanum, Lutetium, Neodymium, Praseodymium, Rubidium, Samarium, Scandium, Terbium, Thulium, Tin, Titanium, Tungsten, Ytterbium or Yttrium.	\$15.00	\$16.50
SW-SING-064	Organo-chlorines (OC)	\$65.00	\$71.50
SW-SING-113	Organo-chlorines (OC) - In Oil Note: 25 mL required.	\$120.00	\$132.00
SW-SING-096	Organo-chlorines (OC) - Low Level	\$90.00	\$99.00
SW-SING-065	Organo-phosphates (OP)	\$65.00	\$71.50
SW-SING-114	Organo-phosphates (OP) - In Oil Note: 25 mL required.	\$120.00	\$132.00
SW-SING-097	Organo-phosphates (OP) - Low Level	\$90.00	\$99.00
SW-SING-117	Organotins (MBT, TBT, DBT)	\$260.00	\$286.00
SW-SING-058	Oxygen - Dissolved (DO)	\$10.00	\$11.00
SW-SING-121	PFAS in water – standard level 28 suite with detection 0.01 - 0.05 µg/L Includes the analysis of per- and poly-fluoroalkyl substances (PFAS) in water.	\$150.00	\$165.00
SW-SING-134	PFAS in water – low level 28 suite with detection 0.0002 µg/L Includes the analysis of per- and poly-fluoroalkyl substances (PFAS) in water.	\$150.00	\$165.00
SW-SING-055	pH	\$10.00	\$11.00
SW-SING-038	Phenol - Total	\$60.00	\$66.00
SW-SING-026	Phenolics - Speciated Phenols	\$90.00	\$99.00
SW-SING-066	Polychlorinated Biphenyls (PCB)	\$65.00	\$71.50
SW-SING-099	Polychlorinated Biphenyls (PCB) - Low Level	\$90.00	\$99.00
SW-SING-057	Salinity	\$10.00	\$11.00
SW-SING-111	Semi-Volatile Organic Compounds (SVOC) SVOC includes Phenols.	\$220.00	\$242.00
SW-SING-122	Silica - Total Includes specialised NaOH high temperature fusion extraction of silicon as per dry weight.	\$150.00	\$165.00
SW-SING-011	Total Oils and Grease (TOG) - Hexane extractable	\$50.00	\$55.00
SW-SING-003	Total Suspended Solids (TSS)	\$20.00	\$22.00
SW-SING-037	Trihalomethanes (THM)	\$60.00	\$66.00
SW-SING-095	Volatile Halogenated Compounds (VHC)	\$90.00	\$99.00
SW-SING-094	Volatile Organic Compounds (VOC) VOC includes BTEX.	\$115.00	\$126.50

NATA ACCREDITED TESTS (Lab Acc. No. 14960)



ID	Tests	Reference
S1	Soil pH and Electrical Conductivity	In-house (re R&L 3A1, 4A1)
S4a	Total Carbon, Nitrogen, Sulfur by Combustion in Soil and Plant	In-house (re R&L 6B2b, 7AS)
S8	DTPA – Cu, Zn, Mn, Fe	In-house (re R&L 12A1)
S9c	Exchangeable bases and CEC-1M Ammonium Acetate	In-house (re R&L 15D3)
S14	Acid Neutralising Capacity	In-house (re National Guidance NLM-5.2)
S15b	Total Organic Carbon in Soil by Combustion	In-house (re R&L 6B3)
S16b	Titrateable Actual Acidity	In-house (re National Guidance NLM-3.2)
S20	Chromium Reducible Sulfur	In-house (re National Guidance NLM-2.1)
S21	Acid Sulfate Soil pH-F and pH-FOX Testing	In-house (re National Guidance)
S38	Lead in Paint	In-house
W1	Turbidity	In-house
W4	Total Nitrogen/Total Phosphorous (Lachat)	In-house (re APHA 4500 P-H N-C)
W6	Nitrite in Waters (Lachat)	APHA 4500 NO3-I
W7	Nitrate in Waters (Lachat)	APHA 4500 NO3-F
W8	Ortho-Phosphate in Waters (Lachat)	APHA 4500 P-G
W9	Ammonia in Waters (Lachat)	APHA 4500 NH3-H
W25	Total Suspended Solids	APHA 2540-D
W26	BOD in Waters and Wastewaters	APHA 5210-B
W28a	Total Oils and Grease Automated	APHA 5520-D
W31	Water pH and Conductivity	APHA 4500-H & 2510-B
W32	ICPMS Metals Analysis in Soils and Waters (Al, Sb, As, Ba, Be, Bi, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Hg, Mo, Ni, P, K, Se, Ag, Na, Sr, S, Ti, Th, Sn, U, V, Zn)	In-house (re APHA 3125)
W32a	Trace Metals in Saline Water (Al, As, Ba, Be, Bi, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Ag, Ti, U, V, Zn)	In-house (re APHA 3125)
W33	Soluble Chlorine as Chloride in Waters	In-house (by ICPMS)

ASPAC TESTS (for Plant and Soil materials)



Soil tests	Reference
pH	R&L 4A1, 4B1, 4B2
Electrical Conductivity	R&L 3A1
Bray 1, Colwell, Olsen Phosphorus	R&L 9E2, 9B2, 9C2
Total Phosphorus	R&L 17C1
Exchangeable Cations – Ca, Mg, K, Na	R&L 15D3
Exchangeable Cations – H, Al	R&L 15G1
DTPA - Fe, Cu, Zn, Mn	R&L 12A1
Total Carbon & Nitrogen	R&L 6B2b, 7A5
Nitrate & Ammonium Nitrogen	R&L 7C2
Soluble Chloride	R&L 5A2
Extractable Boron	R&L 12C2
Extractable Sulfur	R&L 10D1
Phosphorus Buffer Index	R&L 9I2b
Mehlich – Ca, Mg, K, Na, Fe, Cu, Zn, Mn, P, S, Al, B	R&L 18F1

Acid Sulfate Soil Tests	Reference
Chromium Reducible Sulfur	NLM-2.1
Potassium Chloride pH	NLM-3.1
Titrateable Actual Acidity	NLM-3.2
Potassium Chloride Extractable Sulfur	NLM-4.1
Peroxide Sulfur	NLM-2.2
4 M Hydrochloric Acid Extractable Sulfur	NLM-4.1
Acid Neutralising Capacity (BT)	NLM-5.1

Plant Tissue Tests	Reference
Total Nutrients (Ca, Mg, P, K, Na, Si, B, S, Cd, Co, Fe, Pb, Mn, Mo, Se, Zn)	AE-24
LECO – C, N, S	CA-37
Soluble Chloride	BB-32

Notes: R&L methods from Rayment & Lyons (2011). NLM methods from National Acid Sulfate Soils Guidance (2018). APHA methods from American Public Health Association (2017). See EAL website under 'About' for current scope of accreditation for NATA and ASPAC.