



HORTUS

Analytical Solutions

Providing reliable and timely agricultural analysis
to help you improve your farm's profitability.

Looking to submit more than
one sample? Make sure that
you secure your discount at
sample submission!



Service Guide & Price List

Prices valid from
July 2022

Version 2

Soil Testing

SOIL ANALYSIS

Nutrient	Soil 1	Soil 2	Soil 3	Soil 4	Sugar Soil 1	Sugar Soil 2
Nitrate-N	✓	✓	✓	✓		✓
Phosphorus (Colwell)	✓	✓	✓	✓	✓	✓
Phosphorus (BSES)		✓	✓	✓	✓	✓
Exchangeable Cations (Ca, Mg, Na, K)	✓	✓	✓	✓	✓	✓
Sulphate-S (MCP)		✓	✓	✓	✓	✓
pH (1:5 water)	✓	✓	✓	✓	✓	✓
EC (1:5 water)	✓	✓	✓	✓	✓	✓
Chloride	✓	✓	✓	✓		✓
Phosphorus Buffer Index (PBI)		✓	✓	✓	✓	✓
Organic Carbon (W&B)		✓	✓	✓	✓	✓
Organic Matter		✓	✓	✓	✓	✓
Ammonium-N		✓	✓	✓		✓
Cu, Fe, Mn, Zn (DTPA)		✓	✓	✓	✓	✓
Boron (hot CaCl ₂)		✓	✓	✓		
Aluminium (if pH is < 5.5)			✓	✓		
Solvita Respiration Test (Microbial Population Indicator)			✓	✓		
Silicon (BSES + CaCl ₂)			✓	✓	✓	✓
Potassium (Nitric)					✓	✓
Total: S, P, K, Ca, Mg, Cu, Zn, Mn, Fe, B, Na, Mo, Co, Se				✓		
Calculations: Ca Cat %, K Cat %, Mg Cat %, ESP, CEC	✓	✓	✓	✓	✓	✓
Optimal Levels and Traffic Light Charts on Report	✓	✓	✓	✓	✓	✓
Price (excl. GST)	63.64	108.18	153.64	199.09	114.55	136.36
Price (incl. GST)	70.00	119.00	169.00	219.00	126.00	150.00
Minimum sample volume required	500g	500g	500g	500g	500g	500g

Please go to our sampling guide: www.novumlifesciences.com.au/hortus-analytical/soil-testing/soil-sampling-quick-guide/ for full details on collecting samples.

Soil Testing

ADDITIONAL SINGLE ELEMENT (ASE) TESTS & TEST PACKAGES

Nutrient	Method Code	Sample Volume (Additional to 500g)	Price excl. GST	Price incl. GST
Soil Preparation fee for ASE samples only	N/A	N/A	18.18	20.00
Exchangeable Aluminium (KCl)	15G1	100g	15.91	17.50
pH (1:5 water)	4A1	100g	15.91	17.50
Electrical Conductivity (1:5 water)	3A1	100g	15.91	17.50
pH (CaCl ₂)	4B2	100g	15.91	17.50
Phosphorus (BSES)	9G2	100g	15.91	17.50
Phosphorus (Colwell)	9B1	100g	15.91	17.50
Total Nitrogen (Combustion)	7A5	100g	36.36	40.00
Exchangeable cations (Ca, Mg, Na, K)	15D3	200g	36.36	40.00
Organic Carbon (W&B)	6A1	100g	36.36	40.00
Micros: Cu, Fe, Mn, Zn (DTPA)	12A1	200g	36.36	40.00
N1: Nematode Count	Whitehead tray	500g	159.09	175.00
Solvita Respiration Test (Microbial Population Indicator)	SOL	200g	45.45	50.00
Mehlich III – Na, K, P, Ca, Mg, Na, S, Fe, Zn, Mn, Cu, B (min. 3 samples)	18F1	500g	54.55	60.00
pH, E.C., NO ₃ -N & Cl	4A1, 3A1, 15D3, 5A1	200g	45.00	49.50
CS1: Carbon Suite – Organic Carbon, Total Carbon, Labile Carbon, Total Nitrogen	6A1, 6B2, 6E1, 7A5	200g	81.81	90.00
Soil CMP: Compost / Manure / Peat / Potting Mix: pH, EC, Nitrate, OC, Colwell-P, K, Ca, Mg, Na, Cl, OM, CEC (No optimal levels available)	4A1, 3A1, 10B1, 6A1, 9B1, 15D3, 5A1	500g	108.18	119.00
CRS – Chemical Residue Screen (MRL) 67 compounds in total	USEPA	500g	281.82	310.00
HMS – 17 element screen	USEPA	500g	245.45	270.00
Total Elements: S, P, K, Ca, Mg, Cu, Zn, Mn, Fe, B, Na, Mo, Co, Se	17B2	500g	54.54	60.00
SM1: Total bacteria count, Total fungal count, Total yeast count, Total Active Population Count, F:B ratio	Petrifilm	500g	250.00	275.00

Carbon Testing

SOIL CARBON ANALYSIS

Nutrient	Topsoil CFI 2018 (0-30cm) CAR 1	Subsoil CFI 2018 (30-100cm) CAR 1
Gravel Content	✓	✓
Air-dry mass	✓	✓
Gravimetric water content	✓	✓
Total Organic Carbon	✓	✓
Bulk Density	✓	✓
	Price (excl. GST)	113.64
	Price (incl. GST)	125.00

All sample collection must be performed according to the Australian Government Clean Energy Regulator Guidelines & Carbon Farm Initiative (CFI) Requirements found at:

<https://www.industry.gov.au/policies-and-initiatives/emissions-reduction-fund>
<http://www.cleanenergyregulator.gov.au>

ADDITIONAL TESTING & CHARGES

Nutrient	Price (excl. GST)	Price (inc. GST)
Labile Carbon (min. 10 samples for processing)	45.45	50.00
Organic Carbon (W&B)	36.36	40.00
Total Organic Carbon (Combustion)	50.00	55.00
Sample Compositing for Soil Carbon Topsoils (0 – 30cm)	20.00	22.00
Sample Compositing for Soil Carbon Subsoils (30 – 100cm)	40.00	44.00

Bulk discounts are available. Please contact us via email at techservices@novumlifesciences.com.au for project pricing.

Plant Testing

Includes Preparation and digestion costs

DRY TISSUE ANALYSIS

Nutrient	DT1	DT2	DT3	DT4	
Total Nitrogen	✓	✓	✓	✓	
Sulfur, Phosphorus, Potassium, Calcium, Magnesium, Copper, Zinc, Manganese, Iron, Boron, Sodium, Molybdenum	✓	✓	✓	✓	
Nitrate-N, Chloride		✓	✓	✓	
Cobalt + Selenium			✓	✓	
Moisture (As received + Oven Dry)				✓	
Optimal Levels and Traffic Light Charts on Reports	✓	✓	✓	✓	
	Price (excl. GST)	65.00	75.91	90.00	99.09
	Price (incl. GST)	71.50	83.50	99.00	109.00

INDIVIDUAL DRY TISSUE TESTS

Nutrient	Price (excl. GST)	Price (incl. GST)
Total Nitrogen	36.36	40.00
Nitrate + Chloride	36.36	40.00
Nitrate-N Only	27.27	30.00
Chloride Only	27.27	30.00
Selenium + Cobalt	45.45	50.00
Molybdenum Only	36.36	40.00
Silicon Only	68.18	75.00
Dry Tissue Preparation fee for ASE samples only	18.18	20.00
Dry Tissue Digestion fee for ASE samples only	9.09	10.00
Leaf Washing is an additional charge. See page 14 for details.		
No additional prep charges on individual tests if a suite is also selected		

Sample volumes required for dry tissue testing vary according to crop type and test. Please refer to our Sampling Guide for full details:

www.novumlifesciences.com.au/sampling

QuickSoil Testing

QUICKSOIL ANALYSIS (Soil solution test)

Nutrient	QS1 (Includes prep. charges)
pH	✓
Electrical Conductivity (EC)	✓
Nitrate-N	✓
K, Ca, Mg, Na	✓
Chloride (Cl)	✓
Optimal Levels and Traffic Light Charts on Reports	✓
	Price (excl. GST) 54.55
	Price (incl. GST) 60.00
Minimum sample volume required	300g

INDIVIDUAL QUICKSOIL TESTS

Nutrient	no additional prep charges if a suite is selected	Price (excl. GST)	Price (incl. GST)
Ammonium-N (NH ₄ -N) Only		20.45	22.50
pH + EC Only		36.36	40.00
Nitrate-N Only		27.27	30.00
Chloride Only		27.27	30.00
Nitrate-N + Chloride		36.36	40.00
QS Preparation fee for ASE samples only		18.18	20.00
No additional charges if a suite is selected			

QuickSoil testing is a fast and effective option for small crop farmers to use during the growing season, with results available within 48 hours. The best insights are achieved when combining a QuickSoil test with Sap or Dry Tissue testing.



Plant Testing

SAP ANALYSIS

Nutrient	Sap 1	Sap 2	Sap 3	Sap 4	
Sulfur, Phosphorus, Potassium, Calcium, Magnesium, Copper, Zinc, Manganese, Iron, Boron, Sodium	✓	✓	✓	✓	
Nitrate	✓	✓	✓	✓	
Chloride		✓	✓	✓	
Ammonium			✓	✓	
Molybdenum + Cobalt + Selenium			✓	✓	
pH + Electrical Conductivity + Brix				✓	
Optimal levels and Traffic Light Charts on Report	✓	✓	✓	✓	
	Price (excl. GST)	65.00	75.91	90.00	99.09
	Price (incl. GST)	71.50	83.50	99.00	109.00

INDIVIDUAL SAP TESTS

Nutrient	Price (excl. GST)	Price (incl. GST)
no additional charges if a suite is selected (Standard Samples Only)		
Brix Only	10.00	11.00
Ammonium Only	27.27	30.00
Molybdenum Only	36.36	40.00
Cobalt + Selenium	45.45	50.00
Silicon Only	27.27	30.00
Sap Preparation fee for ASE samples only (Standard Samples)	18.18	20.00
Additional Sap Preparation Fee for hard to process samples (per 15-minute increments)	13.63	15.00

Please note:

Sample volumes required for sap testing varies according to crop type and testing performed. **Sap 3 + Sap 4 tests require 2 – 3 times larger samples than other sap tests.** Please refer to our Sap Sampling Manual for details by crop: www.novumlifesciences.com.au/hortus-analytical/sap-testing/

*** The Sap 4 test is not available for all crops.** Please check the list of excluded crops at www.novumlifesciences.com.au/hortus-analytical/sap-testing/

Irrigation Water Testing

Includes Preparation and digestion costs

IRRIGATION WATER ANALYSIS

Nutrient	IW1	Hydro Water (Drip & Drain samples only)
Sulfur, Phosphorus, Potassium, Calcium, Magnesium, Copper, Zinc, Manganese, Iron, Boron, Sodium, Molybdenum	✓	✓
Nitrate-N, Chloride	✓	✓
pH, Electrical Conductivity	✓	✓
Ammonium-N		✓
Calculations: Sodium Adsorption Ratio, Total Dissolved Solids, Hardness	✓	✓
Optimal Levels and Traffic Light Charts on Reports	✓	✓
	Price (excl. GST)	54.55
	Price (incl. GST)	60.00
		75.45
		83.00
Minimum sample volume required	500mL	500mL

INDIVIDUAL WATER TESTS

Nutrient	no additional prep charges if a suite is selected	Price (excl. GST)	Price (incl. GST)
Ammonium-N		20.91	23.00
Nitrate-N + Chloride		36.36	40.00
Nitrate-N Only		27.27	30.00
Chloride Only		27.27	30.00
Selenium + Cobalt		45.45	50.00
Molybdenum Only		36.36	40.00
Water Preparation fee for ASE samples only		18.18	20.00
No additional charges if a suite is selected			

Is my water safe to drink?
See our potable water packages on page 11.

Produce Testing

PRODUCE TESTS

Nutrient	Price (excl. GST)	Price (incl. GST)
CRP – Chemical Residue Screen (MRL) – 480 compounds in total	281.82	310.00
HMP - Heavy Metal Test – Lead & Cadmium only	136.36	150.00
F1 – Microbial Test – <i>E.coli</i> and <i>Salmonella</i>	140.91	155.00
F2 – Microbial Test – <i>E.coli</i> , <i>Salmonella</i> & <i>Listeria</i>	204.55	225.00
F3 – Microbial test – <i>E.coli</i> , <i>Salmonella</i> , <i>Listeria</i> , Total Coliforms & Thermotolerant Coliforms	250.00	275.00
F4 – Microbial Test - <i>E.coli</i> , <i>Salmonella</i> , <i>Listeria</i> , Total Coliforms, Thermotolerant Coliforms & Plate Count	286.36	315.00

1kg produce is required for all chemical residue, heavy metal and microbial testing

AVOCADO MATURITY INDICATOR

Avocado Maturity Indicator	AM1 (21%)	AM2 (22%)	AM3 (23%)
21% (e.g. Shepherd)	✓		
22% (e.g. Maluma)		✓	
23% (e.g. Hass)			✓
Price (excl. GST)	68.18	68.18	68.18
Price (incl. GST)	75.00	75.00	75.00

Please provide a minimum of 5 whole avocado for testing



MRTS Testing

MAIN ROAD & TRANSPORT SOILS (MRTS 16 Landscape and Revegetation Works)

	MRTS 1	MRTS 2	MRTS 3
Form C – Topsoil Testing	✓		
Form E – Subsoil Testing		✓	
Form D – Manufactured Site Topsoil Compliance Testing			✓
Price (excl. GST)	563.64	500.00	450.00
Price (incl. GST)	620.00	550.00	495.00
Minimum sample volume required	5kg	3kg	2kg

MAIN ROAD & TRANSPORT SOILS RECOMMENDATIONS

	MRTS 1	MRTS 2	MRTS 3
Form B – Soil Assessment Report	Price (excl. GST)	154.55	154.55
	Price (incl. GST)	170.00	170.00



Livestock Testing

SOIL MINERAL ANALYSIS

TEST SUITE	DESCRIPTION	PRICE (incl. GST)
Soil 4	pH, E.C., Ammonium, Nitrate, Phosphorus, PBI, Calcium, Magnesium, Sodium, Potassium, Zinc, Copper, Iron, Manganese, Sulfur, Chloride, Boron, Organic Carbon, Organic Matter, Silicon (BSES + CaCl ₂), Solvita Respiration Test, Total: Selenium, Cobalt, Molybdenum, Sulfur, Phosphorus, Potassium, Calcium, Magnesium, Iron, Boron, Sodium	\$219.00

PASTURE/ FEED MINERAL ANALYSIS

TEST SUITE	DESCRIPTION	PRICE (incl. GST)
DT4	Dry Matter, Moisture, Nitrogen, Phosphorus, Calcium, Magnesium, Sodium, Potassium, Zinc, Copper, Iron, Manganese, Sulfur, Chloride, Boron, Nitrate-N, Cobalt, Selenium, Molybdenum	\$109.00

WATER MINERAL ANALYSIS

TEST SUITE	DESCRIPTION	PRICE (incl. GST)
PW2	pH, E.C., Nitrate-N, Phosphorus, Calcium, Magnesium, Sodium, Potassium, Zinc, Copper, Iron, Manganese, Sulfur, Chloride, Boron, TDS. Molybdenum, Selenium, Cobalt, Alkalinity, Langeleir Saturation Index (LSI)	\$139.00

HAIR/ FAECES MINERAL ANALYSIS

TEST SUITE	DESCRIPTION	PRICE (incl. GST)
FA1– Faeces Minerals	Dry Matter, Moisture, Nitrogen, Phosphorus, Calcium, Magnesium, Sodium, Potassium, Zinc, Copper, Iron, Manganese, Sulfur, Boron, Selenium, Cobalt, Molybdenum	\$109.00
H1 – Hair Minerals	Dry Matter, Moisture, Nitrogen, Phosphorus, Calcium, Magnesium, Sodium, Potassium, Zinc, Copper, Iron, Manganese, Sulfur, Boron, Selenium, Cobalt, Molybdenum	\$109.00



Potable Water Testing

Includes Preparation and digestion costs

POTABLE WATER ANALYSIS

Nutrient	PW1	PW2
Sulfur, Phosphorus, Potassium, Calcium, Magnesium, Copper, Zinc, Manganese, Iron, Boron, Sodium, Molybdenum	✓	✓
Nitrate-N, Chloride	✓	✓
pH, Electrical Conductivity	✓	✓
Cobalt, Selenium	✓	✓
Alkalinity		✓
Langeleir Saturation Index (LSI)		✓
Calculations: Sodium Adsorption Ratio, Total Dissolved Solids, Hardness	✓	✓
Optimal Levels and Traffic Light Charts on Reports	✓	✓
	Price (excl. GST)	90.00
	Price (incl. GST)	99.00
		126.36
		139.00
Minimum sample volume required	500mL	500mL

ADDITIONAL & INDIVIDUAL WATER TESTS

Nutrient	no additional charges if a suite is selected	Price (excl. GST)	Price (incl. GST)
Ammonium-N		20.91	23.00
Nitrate-N + Chloride		36.36	40.00
Nitrate-N Only		27.27	30.00
Chloride Only		27.27	30.00
Selenium + Cobalt		45.45	50.00
Molybdenum Only		36.36	40.00
Carbonate, Bicarbonate & Total Alkalinity		50.00	55.00
Water Preparation fee for ASE samples only		18.18	20.00
CRW – Chemical Residue Screen (MRL) 67 compounds in total		281.82	310.00
HMW – Heavy Metal Screen – 17 elements		159.09	175.00

Microbial Testing

MICROBIAL WATER

ORGANISM	MA1	MA2	MA3	MA4	MA5
E. Coli	✓	✓	✓	✓	
Thermotolerant (faecal) coliforms	✓	✓			
Total Coliforms	✓	✓			
Plate Count	✓	✓		✓	
Salmonella spp.		✓			
Listeria spp.		✓			
Yeast & Mould					✓
Price (ex. GST)	\$159.09	\$204.55	\$81.82	\$140.91	\$81.82
Price (incl. GST)	\$175.00	\$225.00	\$90.00	\$155.00	\$90.00

MICROBIAL FOOD

ORGANISM	F1	F2	F3	F4	F10	F11	F12	F13	F14	F15	F16	F17	F18
E. Coli	✓	✓	✓	✓				✓					
Thermotolerant (faecal) Coliforms			✓	✓								✓	
Total Coliforms			✓	✓							✓		
Plate Count				✓					✓				
Salmonella spp.	✓	✓	✓	✓	✓								
Listeria spp.		✓	✓	✓			✓						
Yeast & Mould										✓			
Listeria monocytogenes						✓							
Enterobacteriaceae													✓
Price (ex. GST)	\$140.91	\$204.55	\$250.00	\$286.36	\$81.82	\$159.09	\$87.27	\$86.36	\$53.64	\$70.00	\$86.36	\$64.55	\$64.55
Price (incl. GST)	\$155.00	\$225.00	\$275.00	\$315.00	\$90.00	\$175.00	\$96.00	\$95.00	\$59.00	\$77.00	\$95.00	\$71.00	\$71.00

Disease Identification

DISEASE IDENTIFICATION – FOR PLANTS ONLY

TEST	Price (excl. GST)	Price (incl. GST)
Basic Plant Disease Identification (BID). Identification of disease via observation of symptoms by agronomist.	\$90.00	\$99.00
Laboratory Disease Identification (LID) – min. 300g plant material required Laboratory based isolation and identification of disease pathogen to genus level (e.g. Fusarium sp., Alternaria sp.) for plant samples only Timing: 2-3 weeks	\$227.27	\$250.00
DNA Identification – Only available in addition to LID Disease DNA ID. Identification of pathogens using gene sequencing (per isolate). Timing 1-2 weeks from completion of LID	\$275.00	\$302.50
Challenge Plate (CP). Assessment of control afforded by either chemical or biological agents against known pathogen. Timing: 2-3 weeks from initiation	\$527.73	\$580.50
Laboratory Disease Identification and Challenge Plating Combination Combination package of laboratory disease identification and challenge plating. Timing: 3-4 weeks	\$659.09	\$725.00



Other Services



ADDITIONAL FEES

ITEM	Price (excl. GST)	Price (incl. GST)
Sample Preparation – charged on samples outside the regular testing suites	18.18	20.00
Sample Handling – Additional Sap Preparation Fee for hard to process samples (per 15-minute increments) (Example Rocket, Lychee, Herbs)	13.63	15.00
Data Entry Fee – charged on samples that are submitted without an electronic ARF (\$10 for the first sample PLUS \$3 per additional sample in the submission)	9.09	10.00
Sample Washing – DI wash of sample prior to preparation (per sample)	4.55	5.00
Sample Washing – Detergent wash of sample prior to preparation (per sample)	9.09	10.00
Sample Washing – Acid wash of sample prior to preparation (per sample)	18.18	20.00

Accelerated testing times may be available on request. Please call the office on (07) 4132 5000 for more information.

Other Services

ADDITIONAL SERVICES		
ITEM	Price (excl. GST)	Price (incl. GST)
Complete soil fertiliser recommendation - including Total element requirement, product selection and rates (for Soil, QS & Combo samples only)	60.00	66.00
Water interpretation – Comments regarding suitability / water quality	30.00	33.00
Hydroponic recipe – development of a recipe of nutritional inputs for hydroponic systems	150.00	165.00
Sugarcane Recommendation – Based on Six Easy Steps	34.54	38.00
Crop Fertiliser Plan – includes the fertiliser development and plans per block	280.00	308.00
Talk to an agronomist – 15 minutes	30.00	33.00
Sample collection per hour	131.82	145.00
Consulting/ Monitoring by agronomist (per hour) including travel	131.82	145.00
Travel – return travel from Novum office (per hour)	90.91	100.00

PRODUCTS		
ITEM	Price (excl. GST)	Price (incl. GST)
Hand lenses	40.00	44.00
Digital LCD Meter pH Pen	36.36	40.00
Sticky traps	4.55	5.00
pH buffers (4.0 or 7.0) 500mL	20.00	22.00
EC Solution (1.41) 500mL	25.00	27.50

Do you need soil or plant tissue sampling bags or water sampling bottles?

Please contact our office

techservices@novumlifesciences.com.au

to have them sent out or drop into 1/5 Scotland St, Bundaberg East to collect them.

Did you know? Microbial tests must be submitted in a sterile container to ensure an accurate result.

Sample Submission

1. Complete a sample submission, including payment, online via AgPro
Go to: <https://au.agpro.technology>
2. Ensure your sample has been collected in accordance with the sample requirements including containing the correct weight or volume of sample materials.
3. Package your sample according to the sampling guidelines. ALL samples must have the ARF reference code written clearly on them.
4. Microbial testing samples must be sent within 24 hours of collection and packaged to ensure temperature control. Send sensitive samples at the start of the week to avoid delays at postal or courier sorting facilities.

5. Send samples via

Australia Post:

Locked Bag 3901
Bundaberg, QLD 4670

Courier:

Unit 1 / 5 Scotland St
Bundaberg East, QLD 4670

Samples can also be dropped in our contactless submission box at:

Unit 1 / 5 Scotland Street,
Bundaberg East QLD 4670

Please note: Samples which do not meet our sampling requirements or which are received in poor condition or inappropriately packaged, may cause delays in testing or may not be acceptable for testing. While we do everything we can to ensure accurate and timely results, we highly recommend checking our Sampling Guides to ensure the best chance of success with your samples.

www.novumlifesciences.com.au/hortus-analytical/