

## Inorganic Chemistry tests – St Lucia and Gatton

### Inorganic analyses offered: AGFS ASU St Lucia and AGFS CAL Gatton

#### Instrument Analysis - commonly used procedures

#### Instrument analysis (samples received prepared extracted/digested)

ICPOES - analysis, single element

ICPOES - analysis for common 10 element suite in simple matrix – Ca, Mg, K, Na, P, S, Cu, Mn, Fe, Zn

ICPOES - analysis for common elements and heavy metals suite in simple matrix (20 elements)

Phosphate, ammonia, nitrate, nitrite, chloride - first test analysis/test

Phosphate, ammonia, nitrate, nitrite, chloride - additional test on above samples

LECO combustion total C, Total N, protein

#### Other analysis - Gravimetric / Colorimetric /Titrimetric

Gravimetric Moisture/moisture content

Gravimetric - Ash content only

ANKOM NDF Fibre, ash

ANKOM ADF Fibre, cellulose, lignin, ash

Crude Fibre

ANKOM Crude Fats

Ammonia in Rumen Fluid (Gatton CAL)

Colorimetric - basic UV/Vis reading (wavelength scans)

Colorimetric Soil Microbial Biomass

Colorimetric Soluble Carbohydrates

Colorimetric Starch

Amylose Analysis (Gatton CAL)

Colorimetric Sol Carbs & Starch

Colorimetric Polyphenols

Soil pH-EC

Solution pH-EC

TOC/TN liquid analyser/test (TOC or TN)

TOC/TN liquid analyser (TOC and TN)

Use of Bomb calorimeter (Gatton 8103-133)

Use of Freeze Drier (Gatton 8103-133)

Please note: requests will be provided with quotation.

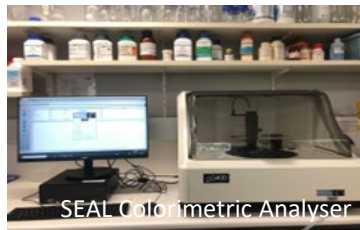
Incremental discounts may be applied based on number of samples submitted for analysis.



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<b>Inorganic analyses offered: AGFS ASU St Lucia and AGFS CAL Gatton</b>
<b>Sample Preparation - commonly used procedures</b>
<b>Sample preparation</b>
Sample drying/ batch (20)
Plant grinding
Soil grinding (from 2mm to <0.5mm particle size)
Small sample grinding
Solution filtering
Grinding room use
Muffle Furnace use (Gatton 8103-133)
<b>Extractions and digestions (sample preparation only)</b>
Plant nitric-perchloric digestion
Plant hot block (nitric only) digestion
Soil/other substrates digestion microwave (HF)
Soil/other substrates digestion microwave (HF) and ICP-OES analysis
Soil/other substrates acid digestion - microwave, <u>non</u> HF
Plant/soil extraction (for nitrate/ammonium, chloride)
Soil extraction - Colwell Phosphorus
Soil extraction - KCl Nitrate-N/Ammonium-N
Soil extraction - KCl Nitrate-N/Ammonium-N and colorimetric analysis SEAL
Soil extraction - KCl Nitrate-N/Ammonium-N and colorimetric analysis SEAL (pre-weighed)
Soil extraction - NH <sub>4</sub> Cl or Ammonium Acetate Exchangeable Cations
Soil extraction - Other Extractants Exchangeable Cations
Soil Extraction - Silver-Thiourea CEC
Soil Extraction - DTPA
Soil Extraction - CMP Sulphur
Soil Extraction - CaCl <sub>2</sub> Boron
Soil Extraction - Mehlich-3 multi-element composition

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