



FOOD & **AGRICULTURAL** ANALYTICAL SERVICES

SGS AUSTRALIA - LABORATORY SERVICES - FOOD CAPABILITIES

WHEN YOU NEED TO BE SURE

SGS

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SGS is the world's leading inspection, verification, testing and certification company and is recognised as the global benchmark for quality and integrity. Providing services across a range of industries from agriculture to automotive, food to forestry our specialists are trained to deliver solutions to reduce risk and ensure the safety and compliance of our customer's products across supply and value chains.

Quality expectations and the range of legislative requirements that clients are facing and must satisfy are becoming more complex each day. To meet these needs SGS's Food & Agricultural testing laboratory can assist manufacturers, importers, exporters and retailers, as well as the rural sector by providing a comprehensive range of analytical testing services.

SOLUTIONS

This complete solution provides an unrivalled paddock to plate solution and can be tailored to meet your requirements.

OUR SERVICES

Our services as detailed include:

- Microbiological and Molecular Testing
- Food Allergens
- Mycotoxins
- Food Chemical Testing
- Heavy Metal and Toxic Elements
- Nutritional Testing / Food Composition
- Nutritional Panel Labelling and Advice
- Fat & Oil Testing
- Pesticide Residue Testing
- Plant Analysis
- Fertilizer and Biosolids Analysis
- Soil Analysis
- Stock Feed Analysis
- Water Analysis (domestic, agricultural and environmental)
- Sowing Seed & Sprouting
- Pulse and Oilseeds Analysis
- Qualitative and Quantitative GMO analysis

OUR LABORATORIES

Our laboratories are equipped with state of the art laboratory equipment including ICP/MS, HPLC, LC/MS, LC/MS/MS, GC/MS, RealTime PCR and other instrumentation that supports clients analytical testing requirements, whether they be raw inputs or finished products. SGS laboratories also focus on developing and maintaining Quality Assurance and Quality Control (QA/QC) as Good Professional Practice and have National Association of Testing Authority (NATA) accreditation to ISO 17025 and ISO 9001. SGS laboratories are always increasing the scope of their capabilities and accreditations, so if the test you require is not in the enclosed, please contact us to discuss your requirements. With sample delivery and despatch locations in strategic locations across the country SGS can provide the complete analytical testing package to meet your requirements.

Whilst SGS endeavours to meet or surpass its stated turn around times (TAT) situations may occur that may prevent these being met. Shorter TAT's can also be achieved through direct negotiations with the laboratory.

All analysis over \$500 is to be formulated in a quotation to ensure that customer expectations are clearly defined. SGS may also need to outsource specific tests on a needs basis. This will be communicated to the customer on the laboratory report as per the NATA out sourcing requirements.

DISCLAIMER

Whilst SGS in most cases meets or surpasses the stated TAT's situations may occur that may prevent these being met. SGS bears no liability for damages associated with the delay or inaccuracy associated with the reporting of results.



SAMPLE RECEIVING LOCATIONS

QUEENSLAND

Cairns

2/58 Comport St, Portsmith QLD 4870
P: +61 (07) 4035 5111
Hours: 9am - 5pm (dispatch by 2pm) Mon-Fri

Mackay

17 Chain St, Mackay QLD 4740
P: +61 (07) 4951 5414
Hours: 8.30am - 5pm (dispatch by 4.30pm) Mon-Fri

Toowoomba

214 McDougall St, Toowoomba 4350
Post: PO Box 549, Toowoomba QLD 4350
P: +61 (07) 4633 0599
Hours: 8.30am - 5pm Mon-Fri

Townsville

34 Hugh Ryan Drv, Townsville QLD 4814
P: +61 (07) 4725 3417
Hours: 7.30am - 5pm (dispatch by 4pm) Mon-Fri

NEW SOUTH WALES

Alexandria

Unit 16 33 Maddox St, Alexandria NSW 2015
Post: PO Box 6432 Bourke Rd Business Centre,
Alexandria NSW 2015
P: +61 (02) 8594 0400
Hours: 9am - 6pm Mon-Fri

VICTORIA

Coburg

32 Norfolk Ct, Coburg VIC 3058
P: +61 (03) 9350 4800
Hours: 8.30am - 5pm Mon-Fri

Noble Park

480 Princess Hwy, Noble Park VIC 3174
P: +61 (03) 5821 1708
Hours: 9am - 5pm (dispatch by 3.30pm) Mon-Fri

Shepparton

13C Callister St, Shepparton VIC 3630
P: +61 (03) 5172 1555
Hours: 8am - 5pm (dispatch by 3.30pm) Mon-Fri

SOUTH AUSTRALIA

Gillman

65 Kaparra Rd, Gillman SA 5013
Post: 65 Kaparra Rd, Gillman SA 5013
P: +61 (08) 8447 6833
Hours: 8.30am - 5pm Mon-Fri

WESTERN AUSTRALIA

Newburn

10 Reid Rd Perth International Airport WA 6105
Post: PO BOX 32, Welshpool DC WA 6986
P: +61 (08) 9373 3500
Hours: 8.30am - 5pm Mon-Fri

ABBREVIATIONS

AACC	American Association of Cereal Chemists
AFIA	Australian Fodder Industry Association
AMA	Australian Mung Bean Association
AOAC	American Organisation of Analytical Chemists
AOAC	Association of Official Agricultural Chemicals
AOCS	American Oil Chemist Society
APHA	American Public Health Association
AS	Australian Standards
BSES	Bureau of Sugar Experiment Stations
CSIRO	Commonwealth Scientific and Research Organization
DTPA	Diethylene Triamine Penta Aceticacid
ELISA	Enzyme Linked Immunosorbent Assay
GC/FID	Gas Chromatography Flame Ionization Detection-
GC/MS	Gas Chromatography Mass Spectrometry
GTA	Grain Trade Association
HPLC	High Performance Liquid Chromatography
IC/POES	Induction Coupled Plasma Optical Emission spectrometry
IOB	International Organization of Brewers
ISTA	International Seed Testing Association
LC	Liquid Chromatography
LC/MS	Liquid Chromatography-Mass Spectrometry
LC/MS/MS	Liquid Chromatography-Mass Spectrometry, Mass Spectrometry
PCR	Polymerase Chain Reaction
UV VIS	Ultra Violet Visible Spectroscopy

MICROBIAL

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
MICROBIOLOGICAL				
100	Aerobic Plate Count	AS/AOAC	200	5
101	<i>Bacillus cereus</i>	AOAC	200	7
102	<i>Clostridium perfringens</i>	AS/AOAC	200	7
103	<i>Clostridium spp.</i>	AS/AOAC	200	7
104	<i>E. coli</i>	AS/AOAC	200	7
105	<i>E. coli</i> for waters	SCA	600	5
106	<i>E. coli</i> O157:H7	AS/AOAC	200	10
107	Feacal coliforms	AS	200/600	7
108	<i>Listeria spp.</i> - food	AOAC	200	3
109	<i>Listeria monocytogenes</i> - food	AS	200	10
110	<i>Salmonella</i> - food & feed	AOAC	200	5
111	Standard plate count (waters)	APHA	600	5
112	<i>Staphylococci coagulase-positive</i>	AOAC	200	5
113	Total anaerobic plate count - food	AOAC	200	7
114	Total aerobic plate count - food	AOAC	200	7
115	Total coliforms	AS/AOAC	200/600	7
116	<i>Vibrio cholerae</i>	AS	200	10
117	Yeast & moulds	AOAC	200	7

MICRO WATER PACKAGE

130	<i>E. coli</i>	AOAC	200	10
	<i>Pseudomonas aeruginosa</i>			
	Total Coliforms			
	Thermo Tolerant Coliforms			

MOLECULAR TEST

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
MOLECULAR				
200	GMO Qualitative	Real-time PCR	2000	5
201	GMO Quantitative	Real-time PCR	2000	5

FOOD ALLERGENS

202	Almond	In House	500	7
203	Beta-lactoglobulin	In House	500	7
204	Casein	In House	500	7
205	Crustacea	In House	500	7
206	Egg	In House	500	7
207	Gluten	In House	500	7
208	Hazelnut	In House	500	7
207	Peanut	In House	500	7
208	Sesame	In House	500	7
209	Soy	In House	500	7

ANIMAL SPECIES IDENTIFICATION

210	Beef	ELISA	500	7
211	Chicken	ELISA	500	7
212	Lamb	ELISA	500	7
211	Pork	ELISA	500	7



MYCOTOXIN

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
MYCOTOXINS				
300	Alfatoxin (B1, B2, G1, G2)	HPLC	5000	5
301	Fumonisin	ELISA	5000	5
302	Ochratoxin	ELISA	5000	5
303	T-2 Toxin	ELISA	5000	5
304	Vomitoxin	ELISA	5000	5
305	Zearalenone	ELISA	5000	5

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
411	Cyanuric Acid	LCMS/MS	100	5
412	Melamine	LCMS/MS	100	5
413	Moisture	AOAC	100	5
414	Nitrogen	AOAC	100	5
415	Peroxide Value (in food)	AOAC	100	5
416	pH	Pearsons	500	5
417	Phosphate / P205	AOAC	100	5
418	Polyphosphate	LCMS		
419	Protein Dispersibility Index (Soy Industry)	AOCS	100	5
420	Salt as (NaCl)	AOAC	100	5
421	Sorbic Acid	AOAC		
422	Starch - Total	AOAC	500	5
423	Sucrose	AOAC	500	5
424	Sulphur Dioxide (SO ₂)	AOAC	200	10
425	Water Activity (Aw)	AOAC	500	10

FOOD CHEMICAL TESTING

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
FOOD CHEMICAL TESTING				
320	Acid Value	AOCS	100	5
321	Food Acidity	AACC	100	5
322	Amino Acid Profile	In House	100	5
323	Ash	AACC	100	5
324	Brix Liquid	AOAC	100	5
325	Calorific Value	AOAC	500	7
326	Chloride (Cl)	AOAC	200	5
327	Free Fatty Acid	AOCS	100	5
328	Gluten	ELISA	500	5
329	Histamine	In House	500	7
330	Hydrocyanic Acid	In House	500	5

HEAVY METAL & TOXIC ELEMENT

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
HEAVY METAL & TOXIC ELEMENT				
500	Aluminium (Al)	AACC/AOAC	100	5
501	Antimony (Sb)	AACC/AOAC	100	5
502	Arsenic (Inorganic) (As)	AACC/AOAC	100	5
503	Barium (Ba)	AACC/AOAC	100	5
504	Cadmium (Cd)	AACC/AOAC	100	5
505	Chromium (Cr)	AACC/AOAC	100	5
506	Cobalt (Co)	AACC/AOAC	100	5
507	Copper (Cu)	AACC/AOAC	100	5
508	Lead (Pb)	AACC/AOAC	100	5
509	Mercury (Hg)	AACC/AOAC	100	5
510	Nickel (Ni)	AACC/AOAC	100	5
511	Potassium (K)	AACC/AOAC	100	5
512	Selenium (Se)	AACC/AOAC	100	5
513	Tin (Sn)	AACC/AOAC	100	5
514	Zinc (Zn)	AACC/AOAC	100	5
HEAVY METAL PACKAGE IN WATER				
515	Heavy Metal in Water - As, Pb, Hg & Cd	APHA	500	5



NUTRIENT TESTING / FOOD COMPOSITION

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
NUTRIENT TESTING / FOOD COMPOSITION				
600	Amino Acid Profile	GC/MS	500	7
601	Available Carbohydrate (by calculation)	By calculation	N/A	5
602	Calories/Energy	By calculation	N/A	5
603	Carbohydrate (by difference)	By calculation	500	5
604	Cholesterol	AOAC	500	7
605	Crude Fibre	AOAC	N/A	5
606	Dietary Fibre	AOAC	N/A	5
607	Insoluble dietary fibre	AOAC	500	7
608	Iodine	HPLC	500	5
609	Omega 3 (DHA, EPA, ALA)	GCFID	500	5
610	Omega 6	GCFID	500	5
611	Protein	AOAC	500	5
612	Saturated Fat	AOAC	500	5
613	Soluble Carbohydrate	AFIA	500	5
614	Soluble dietary fibre	AOAC	500	7
615	Starch - Total	AOAC	500	5
616	Total fat	AOAC	500	5
617	Trans fat	AOAC	500	5
UNSATURATED FAT				
618	Mono unsaturated fat	AOAC	500	5
619	Poly unsaturated fat	AOAC	500	5

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
SUGAR PROFILE				
620	Sucrose	HPLC	500	7
621	Fructose	HPLC	500	7
622	Glucose	HPLC	500	7
623	Maltose	HPLC	500	7
624	Lactose/lactose monohydrate	HPLC	500	7
ORGANIC ACID				
625	Citric Acid	AOAC	500	7
626	Malic Acid	AOAC	500	7
627	Quinic Acid	AOAC	500	7
TRACE ELEMENTS				
628	Calcium (Ca)	AOAC	100	5
629	Chloride (Cl)	AOAC	100	5
630	Chromium (Cr)	AOAC	100	5
631	Copper (Cu)	AOAC	100	5
632	Iron (Fe)	AOAC	100	5
633	Magnesium (Mg)	AOAC	100	5
634	Manganese (Mn)	AOAC	100	5
635	Phosphorus (P)	AOAC	100	5
636	Potassium (K)	AOAC	100	5
637	Selenium (Se)	AOAC	100	5
638	Sodium (Na)	AOAC	100	5
639	Zinc (Zn)	AOAC	100	5

NUTRITION PANEL LABELING

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
AUSTRALIAN NUTRITIONAL LABELING				
701	Energy (Kj) (Cal)	Food Standards Australia	500	5
702	Protein (g)	AOAC	500	
703	Fat - Total (g)	AOAC	500	5
704	Fat - Saturated (g)	AOAC	500	5
705	Carbohydrate - Total (g)	Food Standards Australia	500	5
706	Sugars (monosaccharides & disaccharides) (g)	AOAC	500	7
707	Sodium (mg or mmol)	AOAC	500	5
ADDITIONAL				
708	Cholesterol (mg)	AOAC	500	7
709	Dietary Fibre Total (g)	AOAC	500	7
710	Iron (Fe)	AOAC	500	5
711	Total Calories	Food Standards Australia	500	5
712	Fat - trans (g)	AOAC	500	5
712	Fat - polyunsaturated (g)	AOAC	500	5
714	Fat - monounsaturated (g)	AOAC	500	5
OMEGA FATTY ACID CONTENT				
715	Omega-3	GCFID	500	5
716	Omega-6	GCFID	500	5
717	Omega-9	GCFID	500	5

FATS & OILS

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
800	Acid Value (KOH, mg/kg)	AOCS	1000	7
801	Fatty Acid Profile	AOCS	1000	7
802	Free Fatty Acid (FFA)	AOCS	1000	7
803	Heavy Metal (Fe, Pb, As, Cu)	AOCA	1000	7
804	Insoluble Impurities	AOCS	1000	7
805	Iodine Value	AOCS	1000	7
806	Methyl Chloride Content	In house	1000	10
807	Moisture & Volatiles	AOCS	1000	7
808	Odour, Flavour, Transparency	AOCS	1000	10
809	Peroxide Value (mmol/kg)	AOCS	1000	7
810	Saponification Value	AOCS	1000	7
811	Tocopherols	LU CV Vis	1000	10
812	Unsaponifiable matter	AOCS	100	7



PESTICIDE RESIDUES

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME
ORGANOCHLORINES				
900	Aldrin	GC/MS	500	5
901	BHC-alpha	GC/MS	500	5
902	BHC-beta	GC/MS	500	5
903	BHC-delta	GC/MS	500	5
904	BHC-Total	GC/MS	500	5
905	DDD-p.p.	GC/MS	500	5
906	DDE-p.p.	GC/MS	500	5
907	DDT-p.p.	GC/MS	500	5
908	Dicofol	GC/MS	500	5
909	Dieldrin	GC/MS	500	5
910	Endosulfan-a.	GC/MS	500	5
911	Endosulfan-b	GC/MS	500	5
912	Endosulfan-Sulphate	GC/MS	500	5
913	Endosulfan-Total	GC/MS	500	5
914	HCB	GC/MS	500	5
915	Lindane	GC/MS	500	5

ORGANOPHOSPHATES				
916	Acephate	GC/MS	500	5
917	Azinphos methyl	GC/MS	500	5
918	Chlorpyrifos	GC/MS	500	5
919	Chlorpyrifos methyl	GC/MS	500	5
920	Diazinon	GC/MS	500	5
921	Dichlorvos	GC/MS	500	5
922	Dimethoate	GC/MS	500	5
923	Fenamiphos	GC/MS	500	5

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME
ORGANOPHOSPHATES				
924	Fenitrothion	GC/MS	500	5
925	Malathion	GC/MS	500	5
926	Methamidophos	GC/MS	500	5
927	Methidathion	GC/MS	500	5
928	Mevinphos	GC/MS	500	5
929	Monocrotophos	GC/MS	500	5
930	Omethoate	GC/MS	500	5
931	Parathion ethyl	GC/MS	500	5
932	Parathion methyl	GC/MS	500	5
933	Phorate	GC/MS	500	5
934	Phosmet	GC/MS	500	5
935	Pirimiphos methyl	GC/MS	500	5
936	Profenofos	GC/MS	500	5
937	Prothiofos	GC/MS	500	5
938	Tebufofos	GC/MS	500	5

HERBICIDES				
939	Linuron	LC/MS	500	5
940	Metribuzin	LC/MS	500	5
941	Oxyfluorfen	LC/MS	500	5
942	Pendimethalin	GC/MS	500	5



PESTICIDE RESIDUES

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
ACARICIDES				
943	Buprofezin	GC/MS	500	5
944	Propargite	GC/MS	500	5
945	Tebufenpyrad	GC/MS	500	5
944	Tetradifon	GC/MS	500	5

FUNGICIDES				
945	Benalaxyl	LC/MS	500	5
946	Chlorothalonil	GC/MS	500	5
947	Cyprodinil	GC/MS	500	5
948	Dicloran	GC/MS	500	5
949	Difenoconazole	GC/MS	500	5
950	Dimethomorph	GC/MS	500	5
951	Diphenylamine	GC/MS	500	5
952	Fenarimol	GC/MS	500	5
953	Flusilazole	GC/MS	500	5
954	Hexaconazole	GC/MS	500	5
955	Imazalil	GC/MS	500	5
956	Iprodione	GC/MS	500	5
957	Metalaxyl	GC/MS	500	5
958	Myclobutanil	GC/MS	500	5
959	Penconazole	GC/MS	500	5
960	Piperonyl butoxide	GC/MS	500	5
961	Prochloraz	GC/MS	500	5
962	Procymidone	GC/MS	500	5
963	Propiconazole	GC/MS	500	5
964	Quintozene	GC/MS	500	5
965	Tebuconazole	GC/MS	500	5

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
966	Triadimefon	GC/MS	500	5
967	Triadimenol	GC/MS	500	5
968	Vinclozolin	GC/MS	500	5

OTHERS				
969	Chlorfenapyr	GC/MS	500	5
970	Fenoxycarb	GC/MS	500	5
971	Fipronil	LC/MS	500	5
972	Indoxacarb	LC/MS	500	5

CARBAMATES				
973	Carbaryl	LC/MS	500	5
974	Pirimicarb	LC/MS	500	5



NOTE: OTHER NOT LISTED PESTICIDES ARE AVAILABLE UPON REQUEST. CONTACT THE LABORATORY FOR FURTHER INFORMATION.

PESTICIDE RESIDUES

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
SYNTHETIC PYRETHROIDS				
975	Bifenthrin	GC/MS	500	5
976	Bioresmethrin	GC/MS	500	5
977	Cyfluthrin-b	GC/MS	500	5
978	Cyfluthrin	GC/MS	500	5
979	Cyhalothrin-l	GC/MS	500	5
980	Cyhalothrin	GC/MS	500	5
981	Cypermethrin-a	GC/MS	500	5
982	Cypermethrin	GC/MS	500	5
983	Deltamethrin	GC/MS	500	5
984	Esfenvalerate	GC/MS	500	5
985	Fenvelarate	GC/MS	500	5
986	Fluvalinate	GC/MS	500	5
987	tau-Fluvalinate	GC/MS	500	5
988	Permethrin	GC/MS	500	5
989	Phenothrin	GC/MS	500	5
990	Pyrethrins	GC/MS	500	5

DITHIOCARBAMATES

991	Mancozeb/Maneb	GC/MS	500	5
992	Ferbam	GC/MS	500	5
993	Metiram	GC/MS	500	5
994	Propineb	GC/MS	500	5
995	Thiram	GC/MS	500	5
996	Zineb	GC/MS	500	5
997	Ziram	GC/MS	500	5

PESTICIDE GROUPS (INCLUDES FRESHCARE)

NO	CATEGORY	GROUP	SAMPLE SIZE (G)	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
998	C4	Organochlorines Organophosphates Herbicides Fungicides Others Phenols Carbamates Synthetic Pyrethroids	500	5	5
999	C4	Dithiocarbamates	500	5	5
1000	C4		500	5	5
1001	C7	Test code C3+C5	500	5	5
1002	C8	Grain Products	500	5	5
1003	C9	Meat & Milk Products	500	5	5

CONTACT THE LABORATORY FOR SPECIFIC CHEMICALS IN EACH GROUP



PLANT ANALYSIS

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
PLANT ANALYSIS				
1051	Acid wash plant tissue - preparation	Reuter & Robinson	Please contact Laboratory	3
1052	Nitrate	HPLC	Please contact Laboratory	3
1053	Silicon	BSES	Please contact Laboratory	3
1054	Phosphorus	HPLC	Please contact Laboratory	3
1055	Chloride	UV Vis	Please contact Laboratory	3
1056	Recommendations - Plant Tissue	Consultant	Please contact Laboratory	3

MINERALS P, K, Ca, Mg, Na, S, Cu, Zn, Mn, Mo, B, Fe (INCLUDES SAMPLE DIGEST)				
1057	Minerals-1 Element	ICP OES	Please contact Laboratory	3
1058	Minerals-2 Element	ICP OES	Please contact Laboratory	3
1059	Minerals-3 Element	ICP OES	Please contact Laboratory	3
1060	Minerals-4 Element	ICP OES	Please contact Laboratory	3
1061	Minerals-5 Element	ICP OES	Please contact Laboratory	3
1062	Minerals-6 Element	ICP OES	Please contact Laboratory	3
1063	Minerals-7 Element	ICP OES	Please contact Laboratory	3

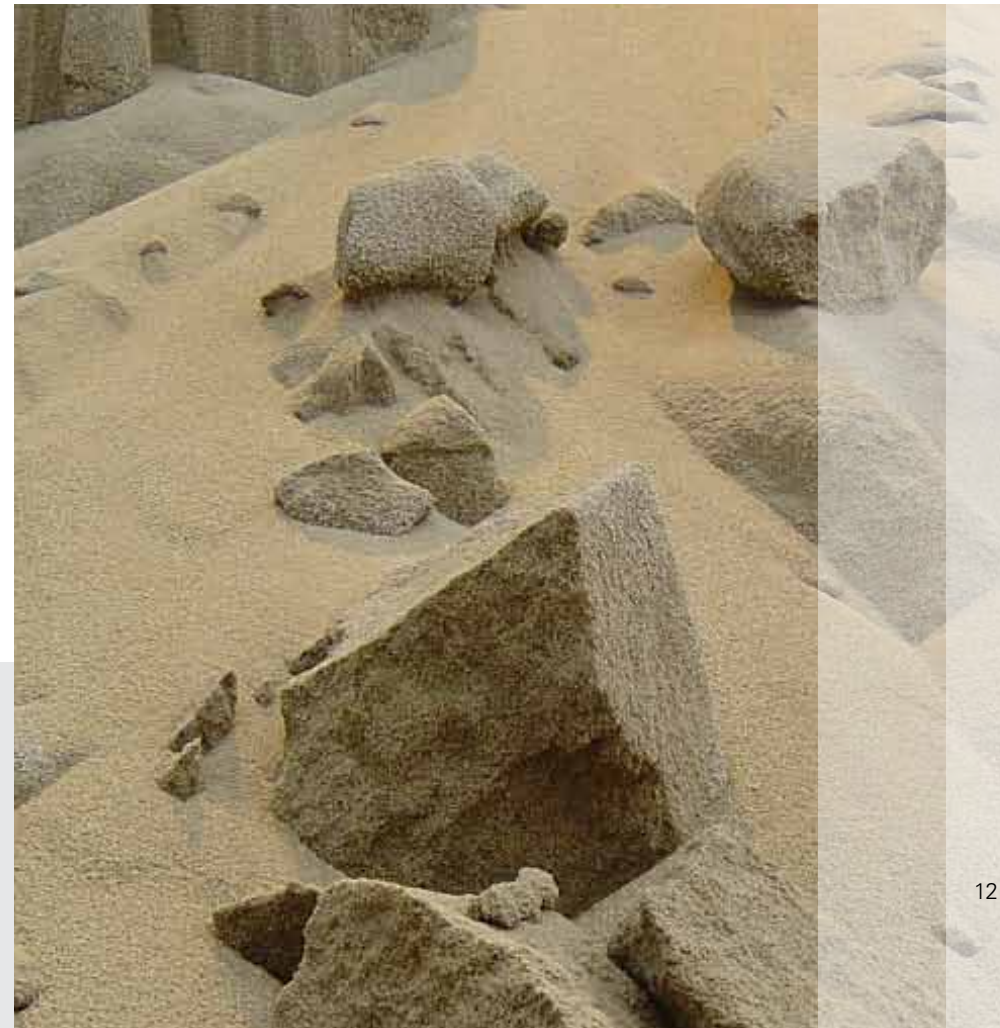
NO	TESTING ITEMS	METHOD/TECHNIQUE	TURN AROUND TIME (WORKING DAYS)
PACKAGES			
1064	Plant Tissue Monitor - NPK	Includes: Water soluble Nitrate, Phosphorus, Potassium	3
1065	Agronomic Plant	Includes: Nitrogen, Phosphorus, Potassium, Calcium, Magnesium, Sodium, Sulphur, Copper, Zinc, Manganese, Molybdenum, Boron, Iron	3



FERTILISER & BIOSOLIDS ANALYSIS

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
FERTILISER & BIOSOLIDS				
2000	Gypsum purity	AOAC	Please contact Laboratory	3
2001	pH	Rayment & Higginson	Please contact Laboratory	3
2002	Phosphorus - Citrate, H ₂ O & Available	AOAC	Please contact Laboratory	3
2004	Moisture	Rayment & Higginson	Please contact Laboratory	3
2005	Electrical Conductivity	Rayment & Higginson	Please contact Laboratory	3
2006	Macro / Micro Elements	AOAC		
2007	Nitrogen	AOAC	Please contact Laboratory	3
2008	Nitrate	Rayment & Higginson	Please contact Laboratory	3
2009	Ammonia	In House	Please contact Laboratory	3
2010	Chloride	Rayment & Higginson	Please contact Laboratory	3
2011	Phosphate	In House	Please contact Laboratory	3
2012	Organic Carbon / Matter	AOAC	Please contact Laboratory	3
2013	Carbon Nitrogen Ratio	AOAC	Please contact Laboratory	3

NO	TESTING ITEMS	METHOD/TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
PACKAGES				
2022	Manure for Fertilizer	Total Nitrogen, Complete Minerals, Nitrate Nitrogen, Ammonia Nitrogen, Orthophosphate, OC, pH & EC.		5
2023	Potting Mix	AS 3743 Standard	20 litres	28
2024	Compost	AS 4454 Standard	20 litres	28



SOIL ANALYSIS

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
SOIL ANALYSIS				
3000	Aluminium - Potassium Chloride	Rayment & Higginson	1000	5-7
3002	Ammonium Nitrogen	Rayment & Higginson	1000	5-7
3003	Ammonium Nitrogen - Potassium Chloride	Rayment & Higginson	1000	5-7
3004	Boron	Rayment & Higginson	1000	5-7
3005	Calcium Carbonate	Rayment & Higginson	1000	5-7
3006	Chloride	Rayment & Higginson	1000	5-7
3007	Colour by Munsell Chart	Munsell Chart	1000	5-7
3009	Dispersion Index	Rayment & Higginson	1000	5-7
3010	Electrical Conductivity	Rayment & Higginson	1000	5-7
3011	Exchangeable Cations	Rayment & Higginson	1000	5-7
3012	Nitrate Nitrogen - soil or solid	Rayment & Higginson	1000	5-7
3013	Organic Matter - Walkley-Black	Rayment & Higginson	1000	5-7
3014	P Buffer Index	Rayment & Higginson	1000	5-7
3015	P Isotherm	Rayment & Higginson	1000	5-7
3016	P Sorption Index	Rayment & Higginson	1000	5-7
3017	pH	Rayment & Higginson	1000	5-7
3018	pH - Calcium Chloride	Rayment & Higginson	1000	5-7
3019	Phosphorus - Bray	Rayment & Higginson	1000	5-7
3020	Phosphorus - Olsen	Rayment & Higginson	1000	5-7
3021	Phosphorus BSES	Rayment & Higginson	1000	5-7
3022	Phosphorus - Colwell	Rayment & Higginson	1000	5-7
3023	Potassium - BSES	BSES	1000	5-7

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
3024	Potassium - Colwell	Rayment & Higginson	1000	5-7
3025	Reactive Iron	Rayment & Higginson	1000	5-7
3026	Silicon - BSES	Rayment & Higginson	1000	5-7
3027	Silicon - Calcium Chloride	BSES	1000	5-7
3028	Silicon - Plant Available	BSES	1000	5-7
3029	Sulphate	BSES	1000	5-7
3030	Sulphur - Calcium Phosphate	Rayment & Higginson	1000	5-7
3031	Sulphur - Potassium Chloride	KC140	1000	5-7
3032	Texture	Northcote	1000	5-7
3033	Total Phosphorus	USEPA - 3051A	1000	5-7
3034	Traces	Rayment & Higginson	1000	5-7
3035	Zinc - Hydrochloric Extraction	BSES	1000	5-7

PACKAGES

3500	Agronomic Soil Analysis	EC, pH, Cation Exchanges (Ca, K, Na, Mg), P Colwell, Organic Matter, Nitrate Nitrogen, Sulphur, Boron, Trace Elements (Zn, Mn, Fe, Cu), Chloride		5
3501	Soils for landscaping and gardens	AS4419 Standard	1000	10



FEED ANALYSIS

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
FEED, HAY & SILAGE ANALYSIS				
4000	Ash	AOAC	500	5
4001	Acid Detergent Insoluble Nitrogen	AOAC	500	5
4002	Crude Fibre	AOAC	500	5
4003	Dry Matter	AOAC	500	5
4004	Fat Ag Products	AOAC	500	5
4005	Lignin	FOSS	500	5
4006	Lysine - Available	In House	500	5
4007	Metabolisable Energy (NIR)	NRC	500	5
4008	Metabolisable Energy (Wet Chem)	NRC	500	5
4009	Neutral Detergent Fibre and Acid Detergent Fibre	AOAC	500	5
4010	Neutral Detergent Fibre	AOAC	500	5
4011	Non-Protein Nitrogen	AOAC	500	10
4012	Pepsin Digestibility	ANPQM	500	5
4013	Protein Dispersability Index	AACC	500	5
4014	Prussic Acid	In House	500	5
4015	Prussic Acid & Nitrate	In House	500	5
4016	Relative Feed Value (NIR)	In House	500	5
4017	Relative Feed Value (Wet Chem)	In House	500	5
4018	Protein Soluble	AOCS	500	5
4019	Urease Activity	AACC	500	5
4020	Volatile Fatty Acids	AOAC	500	5
4021	Water Soluble Carbohydrate	AFIA	500	5
4022	Weed Seed Search - Quarantine Requirements	GTA	1000	5

NO	TESTING ITEMS	METHOD/TECH- NIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
ANTIBIOTICS & DRUGS				
4023	Robenidine	HPLC	500	10
4024	Salinomycin	HPLC	500	10
4025	Monensin	HPLC	500	10
4026	Nicarbazin	HPLC	500	10
MINERALS E.G, Na, Cl, Ca, P, Mg, Mn, Fe, Zn, Se, Cu, I, Cr (INCLUDES SAMPLE DIGEST)				
4027	Minerals-1 Element	AOAC	500	5
4028	Minerals-2 Element	AOAC	500	5
4029	Minerals-3 Element	AOAC	500	5
4030	Minerals-4 Element	AOAC	500	5
4031	Minerals-5 Element	AOAC	500	5
4032	Minerals-6 Element	AOAC	500	5
4033	Minerals-7 Element	AOAC	500	5
PACKAGES				
4034	Relative Feed Value - Silages, Hay, Straw, Pasture mixes, Native grasses, Sugarcane, Pulse Hay/Straw	Includes: Protein, Moisture, ADF, NDF, ME, RFV, and Calculations		5



WATER ANALYSIS

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
WATER ANALYSIS				
5000	Alkalinity	APHA	250	5
5001	Ammonia	APHA	250	5
5002	Ammonia Nitrogen	APHA	250	5
5003	Anions	APHA	250	5
5004	Biological Oxygen Demand (BOD)	APHA	2000	7
5005	Chemical Oxygen Demand	APHA	250	5
5006	Dissolved Oxygen	APHA	250	5
5007	Hardness	APHA	250	5
5008	pH	APHA	250	5
5009	Saturation Index	APHA	250	5
5010	Sodium Adsorption Ratio	APHA	250	5
5011	Suspended Solids	APHA	1000	5
5012	Total Dissolved Solids	APHA	1000	5
5013	Total Nitrogen - Water	APHA	250	5
5014	Total Phosphorus	APHA	250	5
5015	Turbidity	APHA	250	5



PACKAGES

5016	Water - Irrigation Profile	Includes: pH, EC, TDI, Total Alkalinity, Total hardness, RA, SAR, Complete minerals, Salt for Cl, Effective Conductivity and corrected SAR.	5
5017	Water - Stock Profile	Includes: pH, EC, Total Alkalinity, Nitrate, Nitrite, Sulphate, Fluoride, Complete minerals, Salt from Cl, Cl.	5
5018	Water - Domestic Profile	Includes: Irrigation + Stock Profiles + Saturation Index	5
5019		Option 1: Includes: Analysis under Domestic Profile	5
5020		Option 2: Includes: Option 1 + E coli, Total Plate Count	5
5021	Water Drinking Profile	Option 3: Includes: Option 1 + Mercury, Arsenic, Lead and Chromium	5
5022		Option 4: Includes: Options 1,2 & 3 with Pesticides	5



GRAINS, PULSES & OIL SEEDS

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
GRAIN & PULSE TESTING				
6000	Admixture	GTA	Contact Laboratory	3
6001	Ash	AACC	100	3
6002	Cereal Receival Standards (Basic 6)	GTA	1000	3
6003	Falling Number	Perten	500	3
6004	Gluten - Dry (Gluten and Dry Gluten reported)	AACC	500	3
6005	Gluten - Wet	AACC	500	3
6006	Gluten Index (Gluten and Index reported)	AACC	500	3
6007	Moisture - TGA	AOAC	200	3
6008	Moisture (NIR)	In House	200	3
6009	Non viable Germination	In House	500	10
6010	Oil - Std Ref (Wet Chem)	AOF	200	5
6011	Protein - Dumas	AOAC	200	3
6012	Protein - NIR (Wheat, Barley, Sorghum)	In House	200	3
6013	Pulse Export Purity	GTA	1000	3
6014	Screenings	GTA	1000	3
6015	Test Weight	GTA	1000	3

SEED FOR SOWING & PROCESSING

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
SEED FOR FOR SOWING & PROCESSING				
7000	1000 Seed Weight - Cereals	ISTA	Contact Laboratory	3
7001	Admixture	GTA	1000	3
7002	Barley Germinative Energy	IOB	100	5
7003	Ergot Search of Grain - Visual	In House	1000	3

NO	TESTING ITEMS	METHOD/ TECHNIQUE	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
SOWING & SEED SPROUTING				
7004	Endophyte	In House	100	10
7005	Ergotamine	HPLC	100	10
7006	Ergonovine	HPLC	100	10
7007	Ergocryptine	HPLC	100	10
7008	Ergovaline	HPLC	100	10
7009	Lolitrum B	HPLC	100	10
7010	Peramine	HPLC	100	10
7011	Export Purity - Soyabean	In House	1500	3
7012	Fluorescence Test	ISTA	Contact Laboratory	Contact Laboratory
7013	Germination	ISTA	Contact Laboratory	Contact Laboratory
7014	Germination Group 5 (Native Species)	In House	Contact Laboratory	Contact Laboratory
7015	Mung Bean - Appearance	AMA	1000	3
7016	Mung Bean - Charcoal Rot Test	AMA	1000	10
7017	Mung Bean - Group Test as above	AMA	1000	10
7018	Mung Bean - Hard Seed Test	AMA	1000	5
7019	Mung Bean - Oversoak Test	AMA	1000	3
7020	Mung Bean - Size Test	AMA	1000	3
7021	Mung Bean - Sprout Test	AMA	2500	10
7022	Non viable Germination	In House	500	10
7023	Popcorn Test	In House	500	3
7024	Purity	ISTA	Contact Laboratory	3
7025	Purity Group 5 - Native Species	ISTA	Contact Laboratory	3
7026	Seed count No/Kg	ISTA	Contact Laboratory	3
7027	Tetrazolium	ISTA	Contact Laboratory	3
7028	Variety Identification - Electrophoresis	CSIRO	100 grains	5
7029	Vigour Aged Acceleration	ISTA	Contact Laboratory	15
7030	Vigour (% Emergence in soil)	ISTA	Contact Laboratory	Contact Laboratory
7031	Visual Mould Examination to detect for the presence of smut, bunt and ascochyta	In House	100-1000	3
7032	Weed Seed Count	ISTA	Contact Laboratory	2
7033	Weed Seed Search	ISTA	Contact Laboratory	2
7034	Weed Seed Search Export (NZ & WA)	ISTA	Contact Laboratory	2
7035	Weed Seed Search Export Tasmania	DPIPWE	2000	2

PACKAGES

NO	TESTING ITEMS	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
8000	Standard Agronomic Soil Analysis SGS-001 EC, pH, Cation Exchanges (Ca,K,Na,Mg), P Colwell, Organic Matter, Nitrate Nitrogen, Sulphur, Boron, Trace Elements (Zn,Mn,Fe,Cu), Chloride	500g	5
8001	Agronomic Soil Analysis with Recommendations	500g	5
8002	Southern Cereals SGS-002 pH (H ² O), pH (CaCl ₂), Nitrate- N (H ² O), Ammonium - N (H ² O), Sulfate - S (KCl ⁴⁰), Phosphorus (Colwell), Potassium (Colwell), Calcium (Amm Ac), Magnesium (Amm Ac), Sodium (Amm Ac), Chloride (H ² O), Electrical Conductivity (H ² O), Zinc (DTPA), Copper (DTPA), Iron (DTPA), Manganese (DTPA), Organic Carbon (Walkley Black), Phosphorus Buffer Index, Aluminium (KCl), Texture, Dispersion, Calcium Carbonate, Boron (CaCl ₂)	500g	5
8003	Northern Cereals SGS-003 pH (H ² O), pH (CaCl ₂), Nitrate- N (H ² O), Ammonium - N (H ² O), Sulfate - S (KCl ⁴⁰), Phosphorus (Colwell), Potassium (Amm Ac), Calcium (Amm Ac), Magnesium (Amm Ac), Sodium (Amm Ac), Chloride (H ² O), Electrical Conductivity (H ² O), Zinc (DTPA), Copper (DTPA), Iron (DTPA), Manganese (DTPA), Boron (CaCl ₂), Phosphorus Buffer Index, Aluminium (KCl), Texture, Dispersion, Soil moisture, Organic Carbon (Walkley Black)	500g	5
8004	Soil Deep SGS-004 Nitrate- N (KCl), Ammonium - N (KCl), Sulfate - S (KCl ⁴⁰), Chloride (H ² O), Electrical Conductivity (H ² O), Soil moisture	500g	5
8005	Soil N SGS-005 Nitrate- N (H ² O), Ammonium - N (H ² O), Soil moisture	200g	5
8006	Subsoil BSESP SGS-006 pH (H ² O), pH (CaCl ₂), Nitrate- N (H ² O), Ammonium - N (H ² O), Sulfate - S (KCl ⁴⁰), Phosphorus (Colwell), Phosphorus (BSES), Potassium (Amm Ac), Calcium (Amm Ac), Magnesium (Amm Ac), Sodium (Amm Ac), Chloride (H ² O), Electrical Conductivity (H ² O), Boron (CaCl ₂), Phosphorus Buffer Index, Aluminium (KCl)	500g	5
8007	Sugar Soils SGS-007 pH (H ² O), pH (CaCl ₂), Nitrate- N (H ² O), Ammonium - N (H ² O), Sulfate - S (KCl ⁴⁰), Phosphorus (Colwell), Phosphorus (BSES), Potassium (Amm Ac), Calcium (Amm Ac), Magnesium (Amm Ac), Sodium (Amm Ac), Chloride (H ² O), Electrical Conductivity (H ² O), Zinc (DTPA), Copper (DTPA), Iron (DTPA), Manganese (DTPA), Organic Carbon (Walkley Black), Phosphorus Buffer Index, Aluminium (KCl), Texture, Dispersion, Calcium Carbonate, Boron (CaCl ₂)	500g	5
8008	Plant Standard SGS-101 Plant N, Sulfur, Phosphorus, Potassium, Calcium, Magnesium, Chloride, Copper, Zinc, Manganese, Iron, Boron, Molybdenum, Sodium	200g	3
8009	Plant Complete SGS-102 Nitrogen Total, Nitrate N, Sulfur, Phosphorus, Potassium, Calcium, Magnesium, Chloride, Copper, Zinc, Manganese, Iron, Boron, Cobalt, Sodium	200g	3
8010	Plant Standard Tissue Analysis with Recommendations	200g	5
8011	Plant Tissue Monitor SGS-103 Water Soluble N, P & K	200g	3
8012	Rootlet Testing SGS-104 Phosphorous Acid Testing	200g	3
8013	Water - Irrigation Profile SGS-201 pH, Electrical Conductivity, TDI, Total Alkalinity, Total Hardness, RA, SAR, Complete Minerals, Salt from Chloride and Chloride	1000ml	7

NO	TESTING ITEMS	MIN SAMPLE SIZE REQUIRED (g/ml)	TURN AROUND TIME (WORKING DAYS)
8014	Water - Stock Profile SGS-202 pH, Electrical Conductivity, TDI, Total Alkalinity, Bicarbonate Alkalinity, Nitrate, Nitrite, Sulphate, Fluoride, Complete Minerals, Salt from Chloride and Chloride	1000ml	7
8015	Water - Irrigation and Stock Profile Combined SGS-203	1000ml	7
8016	Water - Domestic Profile SGS-204 Analysis in Irrigation and Stock Profile with Saturation Index	1000ml	7
8017	Water - Drinking Profile SGS-205 Option 1 includes Analysis under Domestic Profile Option 2 includes Option 1 with E.Coli, Total Plate Count and Coliforms Option 3 includes Option 1 with Cadmium, Mercury, Arsenic and Lead Option 4 includes Options 1,2,& 3 with Pesticides Option 5 includes Options 1, 2 & 3 only	1000ml	7
8018	Relative Feed Value by NIR SGS-301 - Silages, Hay/Straws, Pasture Grasses Protein, Moisture, ADF, NDF, ME, RFV and Calculations	500g	5
8019	Relative Feed Value by Wet Chemistry Techniques SGS-302 - Native Grasses, Sugarcane, Pulse Hay/Straws Protein, Moisture, ADF, NDF, ME, RFV and Calculations	500g	5
8020	Metabolisable Energy by NIR SGS-303 - Ruminant, Poultry, Swine, Equine and Human Metabolisable Energy - Grains, Grain Rations Protein, Moisture, Fat, Fibre, Ash, NFE, ME	500g	5
8021	Metabolisable Energy by Wet Chemistry Techniques SGS-304 - Pellets, Meals, Canola, Pulse Seeds, Molasses, Liquid Supplements, Oat Seed Protein, Moisture, Fat, Fibre, Ash, NFE, ME	500g	5
8022	Manure (for Fertilizer) SGS-401 Total Nitrogen, Complete Minerals, Nitrate Nitrogen, Ammonia Nitrogen, Orthophosphate, OC, pH and EC	500g	5
8023	Effluent SGS-402 Ammonia Nitrogen, EC, pH, Total Nitrogen in Water, Nitrate Nitrogen, Phosphate Phosphorous, SAR and Complete Minerals	500g	5
8024	Potting Mix to AS3743-2003 SGS-501 Air Filled Porosity, Wettability, pH, EC, NH ₄ , PO ₄ , NO ₃ , Mn, Cl, NDI, Toxicity and DTPA Extractable Nutrients Note: A minimum sample of 10L is required	10L	10
8025	Compost to AS4454-2003 SGS-502 pH, EC, NH ₄ , PO ₄ , Carbon & Nitrogen, Total P, B, Ca, Mg & Na, Wettability, Toxicity, Particle Size Grading, Carbonate, Moisture & Contamination, Volume, Self Heating, Plant Propagules, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn Note: A minimum sample of 20L is required	20L	10
8026	Garden Soil to AS4419-2003 SGS-503 Bulk Density, Organic Matter, Wettability, pH, EC, NH ₄ , PO ₄ , NDI, Toxicity, Dispersibility, Permeability, Texture, Plant Propagules, Large Particles, Volume Note: A minimum sample of 20L is required	20L	10

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