



SAMPLE BOTTLE GUIDE

September 2025



Note: Android devices will require a PDF Reader App

- High quality analytical services
- Leading edge research
- Solving water quality issues

1300 653 366
awqc.com.au

Index

<u>Algal</u>	5
• Total Algae, Partial Algae, Cyanobacteria	
<u>Algal toxins</u>	6
• Anatoxin, Cylindrospermopsin, Deoxycylindrospermopsin, PSP/Saxitoxins, Microcystins, Nodularin	
<u>Amoebae</u>	7
<u>Campylobacter & Salmonella</u>	8
<u>Chemical Test in Sludges, Solids & Soils</u>	9
• Refer to page 8 for full listing	
<u>Chlorophyll</u>	10
<u>Cryptosporidium & Giardia</u>	11
<u>Cryptosporidium & Giardia (Wastewater)</u>	12
<u>Cyanide</u>	13
<u>CyanoDTec</u>	14
• Cyanobacteria & Toxin Producing Genes	
<u>Disinfection By-products</u>	15
• Chloroacetic Acids, DBP Analytes, Haloacetic Acids, THM, VCH	
<u>DOC/TOC/MIB/GEOSMIN/TCA/HAAFP/THMFP/ Glyphosate</u>	16
• DOC, TOC, MIB/Geosmin, Trichloroanisole, Formation Potential of THM & HAA, Glyphosate	
<u>E. coli Capsule</u>	17
<u>E. coli Phylogrouping</u>	18

Index

<u>E. coli Whole Genome Sequencing (WGS)</u>	19
<u>Faecal Source Tracking (FST)</u>	20
<u>General Water Quality - Chemical Analyses</u>	21
BOD, COD, Conductivity, pH, Solids - Suspended/Dissolved, Alkalinity, Colour, Turbidity	
<u>General Water Quality - Microbiological Analyses</u>	22
Bacteriophages/FRNA Phage, Coliforms, <i>E.coli</i>, <i>Enterococcus</i>, Iron Bacteria, HPC, <i>Pseudomonas</i>, Thermotolerant Coliforms	
<u>Grease</u>	23
<u>Helminth Ova</u>	24
<u>Ice - Microbiological Analyses</u>	25
<u>Legionella</u>	26
<u>Microbiological Test in Sludge & Sediments</u>	27
Amoebae, Coliforms, <i>E.coli</i>, Filamentous Bacteria	
<u>NDMA</u>	28
<u>NGS Analyses (bactDNA/vDNA)</u>	29
Bacterial Diversity Profiling, Vertebrate Diversity Profiling	
<u>Nutrients - Filterable (120mL)</u>	30
Ammonia, Nitrite, OXN/Filterable P, SKN, Soluble P, Bromide, Iodide	
<u>Nutrients - Total (120mL)</u>	31
TKN/TP	
<u>Odours</u>	32

Index

<u>Radioactivity</u>	33
• Gross Alpha & Beta, Radon 222	
<u>Pesticides, Hydrocarbons & Unknown Volatiles Scans</u>	34
• GCMS Scan, Organophosphorus & Triazine Pesticides, TPH/TRH	
<u>Sulphite & Sulphate Reducing Bacteria</u>	35
• <i>Clostridium perfringens</i> , Sulphate Reducing Bacteria	
<u>Trace Metals</u>	36
• Metals - Total/Soluble	
<u>Transmittance/Absorbance</u>	37
• UV Absorbance, UV Transmittance	
<u>Volatile Fatty Acids</u>	38
<u>Volatile Organic Compounds/BTEX</u>	39
• Acid Herbicides/Haloxypop, VOC/BTEX	

ALGAL



Sample container

250mL Plastic (PT250)

Label

PT250 - none, none - air gap, ice

Analytes and holding times

All water types

- *Total Algae (24 hours for live samples)
- *Partial Algae (24 hours for live samples)
- *Cyanobacteria (24 hours for live samples)

Preservation

Algae holding time increased to 28 days when preserved with Lugol's Iodine solution:

- Freshwater samples 1:100 by volume.
- Marine samples: 1:200 by volume.

Notes

No container preparation.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle, leaving an air gap to prevent spilling the preservative. Ensure the lid is screwed down firmly.

Safety

When sampling, wear appropriate PPE such as gloves/safety glasses. Lugol's Iodine is not considered a hazardous chemical, but caution should be exercised.



*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

ALGAL TOXINS



Sample container

600mL or 1.25L Plastic (PT600 or PT1250)

Label

PT600 or 1250 - none, none - no air gap, ice

Analytes and holding times

All water types

***Algal Toxins (ASAP)

PT600 bottle

Anatoxin

Cylindrospermopsin

Deoxycylindrospermopsin

Paralytic Shellfish Poison (PSP)/Saxitoxins

PT1250 bottle

Microcystins

Nodularin

Preservation

No preservation.

Notes

No container preparation.

Sampling information

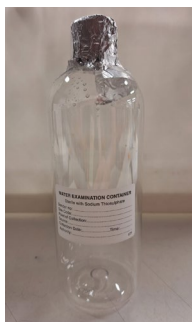
Do not rinse prior to collection. Fill to the top of the bottle. Ensure the lid is screwed down firmly and invert to check for air bubbles.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

AMOEBAE



Sample container

500mL Sterile Plastic (PT500)

Label

PT500 - sterile, Sodium Thio - air gap, no ice

Analytes and holding times

All water types

***Amoebae (96 hours)

Amoebae samples are not to be chilled

Preservation

Sodium Thiosulphate dosed.

Notes

Aseptic preparation is mandatory.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

Safety

Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse the affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

CAMPYLOBACTER & SALMONELLA



Sample container

2 x 500mL Sterile Plastic (PT500)

Label

PT500 - sterile, Sodium Thio - air gap, ice

Analytes and holding times

All water types

**Campylobacter* (*C. jejuni*, *C. coli*) (24 hours)

**Salmonella* spp. (24 hours)

Preservation

Sodium Thiosulphate dosed.

Notes

Aseptic preparation is mandatory.

Containers to be double bagged using zip lock bags for storage on ice.
2 x 500mL bottles to be used.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

Safety

Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse the affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

CHEMICAL TEST IN SLUDGES, SOLIDS & SOILS



Sample container

500mL Plastic Pot (PP500)

Label

PP500 - none, none - none

Analytes and holding times

Alkalinity (24 hours)	*Nitrate (28 days)
Ammonia (28 days)	*Nitrite (28 days)
Ash Volatile Matter & Fixed Solids (7 days)	*Organic Nitrogen (24 hours)
BOD (24 hours)	*pH (28 days)
*COD (7 days)	*Sodium Adsorption Ratio (28 days)
*Chlorides (28 days)	*TKN as N (28 days)
*Chlorine (1 hour)	*Total Nitrogen (24 hours)
*Conductivity (28 days)	*Total Phosphorus (28 days)
*Cyanide - Total (7 days)	*Total Solids (7 days)
*Fluoride (7 days)	
*Grease (7 days)	
*Iodide (28 days)	
*Metals - Total (28 days)	

Preservation

No preservation.

Notes

Take care not to overfill container.

Containers to be double bagged using zip lock bags.

Sampling information

Fill container ensuring an air gap/headspace is left at the top to ensure there is no cap or container failure due to internal pressure build up.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

CHLOROPHYLL



Sample container

1L Black Plastic (BLKPT1)

Label

BLKPT1 - none, none - air gap, ice

Analytes and holding times

All water types

*Chlorophyll (48 hours)

Preservation

No preservation

Notes

No container preparation.

Sampling information

Rinse prior to collection with sample water. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

CRYPTOSPORIDIUM & GIARDIA



Sample container

2 x 10L Plastic (JC1)

Label

JC1 - sterile, Sodium Thio - air gap, ice

Analytes and holding times

All water types

Cryptosporidium and *Giardia* (96 hours as per USEPA 1623)

Preservation

Sodium Thiosulphate dosed.

Notes

Aseptic preparation is mandatory.

2 x 10L Plastic Containers (jerry cans) to be used.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

Safety

Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse the affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

CRYPTOSPORIDIUM & GIARDIA (WASTEWATER ONLY)



Sample container

2 x 1.25L Plastic (PT1250)

Label

PT1250 - sterile, Sodium Thio - air gap, ice

Analytes and holding times

All water types

Cryptosporidium and *Giardia* (96 hours as per USEPA 1623)

Preservation

Sodium Thiosulphate dosed.

Notes

Samples to be taken in pre-dosed container.

Do not rinse.

Fill initially with small air gap, invert to mix pellets, squeeze out remaining air.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

Safety

Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse that affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

CYANIDE



Sample container

100mL Plastic HDPE (HDPE100)

Label

HDPE100 - none, NaOH - no air gap, ice

Analytes and holding times

All water types

*Cyanide (14 days)

Preservation

NaOH pellet dosed.

Notes

Samples to be taken in pre-dosed container.

Invert to mix pellets.

Sampling information

Do not rinse prior to collection. Fill to the top of the bottle. Ensure the lid is screwed down firmly and invert to check for air bubbles and to mix pellets.

Safety

When sampling, wear appropriate PPE such as gloves/ safety glasses. Sample bottle contains concentrated base. Ensure bottles are stored upright during transportation.

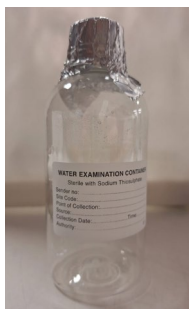


*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

CYANODTEC



Sample container

250mL Sterile Plastic (PT250)

Label

PT250 - sterile, Sodium Thio - air gap, ice

Analytes and holding times

All water types

*Cyanobacteria & toxin producing genes
(72 hours)

Preservation

Sodium Thiosulphate dosed.

Notes

Aseptic preparation is mandatory.

Containers to be double bagged using zip lock bags for storage on ice or chilled.

Sampling information

Do not rinse prior to collection. Fill to the top of the bottle. Ensure the lid is screwed down firmly and invert to check for air bubbles

Safety

Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse the affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

DISINFECTION BY-PRODUCTS



Sample container

250mL Plastic or 355mL Plastic
(PT250 or PT355)

Label

PT250 or PT355 - none, Ammonium Chloride -
no air gap, ice

Analytes and holding times

All water types

- **Chloroacetic Acids (ASAP)
- ***DBP Analytes (ASAP)
- ***Haloacetic Acids (ASAP)
- ***THM (ASAP)
- ***VCH (ASAP)

Preservation

100mg/L Ammonium Chloride dosed.

Notes

250mL bottle is sufficient for a single analysis. For ≥ 2 analyses,
355mL bottle required.

Sampling information

Do not rinse prior to collection. Fill to the top of the bottle. Ensure the
lid is screwed down firmly and invert to check for air bubbles.

Safety

When sampling, wear appropriate PPE such as gloves/
safety glasses. Ammonium Chloride is harmful if swallowed
and causes serious eye irritation.



*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon
as a possible (ASAP) or as stated.

DOC, TOC, MIB, GEOSMIN, TCA, HAAFP, THMFP, GLYPHOSATE



Sample container

355mL Plastic (PT355)

Label

PT355 - none, none - no air gap, ice

Analytes and holding times

All water types

- ***Dissolved Organic Carbon
- ***Formation Potential of THM & HAA (ASAP)
- ***Glyphosate (ASAP)
- ***MIB, Geosmin, Trichloroanisole (ASAP)
- ***Total Carbon (ASAP)
- ***Total Organic Carbon (ASAP)

Preservation

No preservation.

Notes

No container preparation.

Sampling information

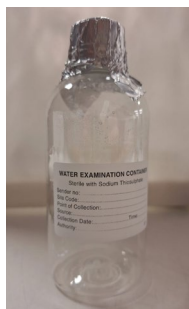
Do not rinse prior to collection. Fill to the top of the bottle. Ensure the lid is screwed down firmly and invert to check for air bubbles.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

E. COLI CAPSULE



Sample container

250mL Sterile Plastic (PT250)

Label

PT250 - sterile, Sodium Thio - air gap, ice

Analytes and holding times

All water types

**E.coli* capsule (72 hours)

Preservation

Sodium Thiosulphate dosed

Notes

Aseptic preparation is mandatory.

Containers to be double bagged using zip lock bags for storage on ice or chilled.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

Safety

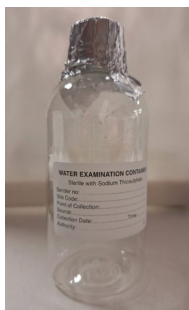
Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse the affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

E. COLI PHYLOGROUPING



Sample container

250mL Sterile Plastic (PT250)

Label

PT250 - sterile, Sodium Thio - air gap, ice

Analytes and holding times

All water types

**E.coli* Phylogrouping (72 hours)

Preservation

Sodium Thiosulphate dosed.

Notes

Aseptic preparation is mandatory.

Containers to be double bagged using zip lock bags for storage on ice or chilled.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

Safety

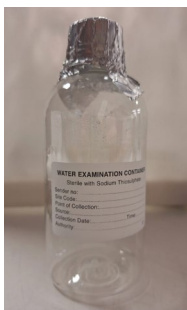
Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse the affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

E. COLI WHOLE GENOME SEQUENCING (WGS)



Sample container

250mL Sterile Plastic (PT250)

Label

PT250 - sterile, Sodium Thio - air gap, ice

Analytes and holding times

All water types

**E.coli* Whole Genome Sequencing (72 hours)

Preservation

Sodium Thiosulphate dosed.

Notes

Aseptic preparation is mandatory.

Containers to be double bagged using zip lock bags for storage on ice or chilled.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

Safety

Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse the affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

FAECAL SOURCE TRACKING (FST)



Sample container

1.25L DNA free Plastic

Label

PTDNA - bacto, none, sterile - air gap, ice

Analytes and holding times

All water types

*Faecal Source Tracking (72 hours)

Preservation

1.25L DNA free bottle.

Notes

Sampler must follow DNA sampling procedure WI-375.

Containers to be double bagged using zip lock bags for storage on ice or chilled.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

GENERAL WATER QUALITY - CHEMICAL ANALYSES



Sample container

Plastic (size dependent on test numbers)

Label

PT - none, none - no air gap, ice

Analytes and holding times

All water types

- *Alkalinity (24 hours)
- *Biochemical Oxygen Demand (48 hours)
- **Chemical Oxygen Demand (28 days)
- *Colour (48 hours)
- **Conductivity (28 days)
- *pH (6 hours)
- *Solids - suspended or dissolved (7 days)
- *Turbidity (24 hours)

Preservation

No preservative.

Notes

No container preparation.

Sampling information

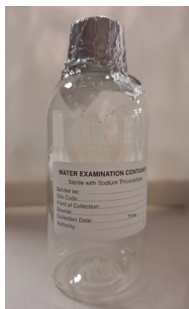
Rinse prior to collection with sample water. Fill to the top of the bottle. Ensure the lid is screwed down firmly and invert to check for are bubbles.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

GENERAL WATER QUALITY - MICROBIOLOGICAL ANALYSES



Sample container

250mL Sterile Plastic (PT250)

Label

PT250 - sterile, Sodium Thio - air gap, ice

Analytes and holding times

All water types

- *Bacteriophages and fRNA phage (24 hours)
- *Coliforms (24 hours)
- **E. coli* (24 hours)
- **Enterococcus* (24 hours)
- *Iron bacteria (24 hours)
- *Plate counts (24 hours)
- **Pseudomonas* (24 hours)
- *Thermotolerant coliforms (24 hours)

Preservation

Sodium Thiosulphate dosed.

Notes

Aseptic preparation is mandatory.

Containers to be double bagged using zip lock bags for storage on ice.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

Safety

Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse the affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

GREASE



Sample container

1L Glass (GL1000)

Label

GL1000 - solvent washed, none - air gap, ice

Analytes and holding times

All water types

*Grease (preserved on arrival, 28 days)

Preservation

No preservation

Notes

No container preparation

Sampling information

Do not rinse prior to collection. Fill to the top of the bottle. Ensure lid is screwed down firmly and invert to check for air bubbles

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

HELMINTH OVA



Sample container

2 x 1.25L Plastic (PT1250)

Label

PT1250 - sterile, Sodium Thio - air gap, no ice

Analytes and holding times

All water types

Helminth Ova (96 hours)

Preservation

Sodium Thiosulphate dosed.

Notes

Aseptic preparation is mandatory.

2 x 1.25L PET Bottles to be used.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

Safety

Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse the affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

ICE - MICROBIOLOGICAL ANALYSES



Sample container

Plastic Pot (PT600)

Label

PT600 - sterile, Sodium Thio - air gap, ice

Analytes and holding times

All water types

*Coliforms (24 hours)

**E. coli* (24 hours)

**Legionella* (24 hours)

Preservation

Sodium Thiosulphate dosed.

Notes

Aseptic preparation is mandatory.

Containers to be double bagged using zip lock bags for storage on ice.

Sampling information

Fill container leaving approximately 120mL to the top of container.

Ensure the lid is screwed down firmly.

Safety

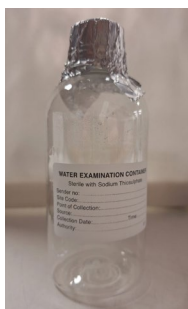
Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse the affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

LEGIONELLA



Sample container

250mL Sterile Plastic (PT250)

Label

PT250 - sterile, Sodium Thio - air gap, ice

Analytes and holding times

All water types

**Legionella* (24 hours)

Samples from warm or hot water systems require NO FLUSHING or flame sterilisation of sample tap prior to sampling

Preservation

Sodium Thiosulphate dosed.

Notes

Aseptic preparation is mandatory.

Containers to be double bagged using zip lock bags for storage on ice.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

Safety

Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse the affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

MICROBIOLOGICAL TEST IN SLUDGE & SEDIMENTS



Sample container

Plastic Pot (PT600)

Label

PT600 - sterile, Sodium Thio - air gap, no ice

Analytes and holding times

All water types

Amoebae - *Naegleria fowleri* (96 hours)

*Coliforms (24 hours)

**E. coli* (24 hours)

Filamentous bacteria

Preservation

Sodium Thiosulphate dosed.

Notes

Aseptic preparation is mandatory.

Containers to be double bagged using zip lock bags for storage on ice, or chilled.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

Safety

Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse that affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

NDMA



Sample container

1L Black Plastic (APT)

Label

APT1000 - none - Sodium Thio - no air gap, ice

Analytes and holding times

All water types

***NDMA (ASAP)

Preservation

150mg/L Sodium Sulphite or Chloramine
<4.0mg/L.

Notes

Wrap entire bottle in foil if amber glass bottles or black plastic bottles are not used.

Sampling information

Do not rinse prior to collection. Fill to the top of the bottle. Ensure the lid is screwed down firmly and invert to check for air bubbles.

Safety

Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse that affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

NGS ANALYSES (bactDNA/vDNA)



Sample container

1.25L DNA free Plastic

Label

PTDNA - bacto, none, sterile - air gap, ice

Analytes and holding times

All water types

*Bacterial Diversity Profiling; bactDNA
(72 hours)

*Vertebrate Diversity Profiling; vDNA
(72 hours)

Preservation

1.25L DNA free bottle.

Notes

Containers to be double bagged using zip lock bags for storage on ice or chilled.

Sampling information

Do not rinse prior to collection. Fill to the neck of the bottle. Ensure the lid is screwed down firmly.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

NUTRIENTS - FILTERABLE (120mL)



Sample container

120mL Plastic (PT120)

Label

PT120 - none, none - filtered - air gap, ice

Analytes and holding times

All water types

- **Ammonia (24 hours filtered or 28 days filtered and frozen)
- *Nitrite (48 hours)
- *OXN/Filterable P (48 hours filtered or 28 days filtered and frozen)
- **SKN (24 hours filtered or 28 days filtered and frozen)
- *Soluble P (24 hours filtered or 28 days filtered and frozen)
- **Bromide (28 days)
- **Iodide (28 days)

Preservation

No preservation. Containers to be double bagged using zip-lock bags.

Notes

Filtration equipment is required to filter the sample in the field.

Sampling information

Refer to detailed instructions at back of guide. Ensure the lid is screwed down firmly.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

NUTRIENTS - TOTAL (120mL)



Sample container

120mL Plastic (PT120)

Label

PT120 - none, none - air gap, ice

Analytes and holding times

All water types

****TKN (28 days frozen)**

****Total P (28 days frozen)**

Preservation

No preservation.

Notes

No container preparation.

Sampling information

Fill container leaving approximately 20mL to the top of container. Ensure the lid is screwed down firmly.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

ODOURS



Sample container

355mL Plastic (PT355)

Label

PT355 - none, none - no air gap, ice

Analytes and holding times

All water types

*Odour test (24 hours)

Preservation

No preservation

Notes

No container preparation.

Sampling information

Rinse prior to collection with sample water. Fill to the top of the bottle. Leave no air gap. Ensure the lid is screwed down firmly.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

RADIOACTIVITY



Sample container

1L HDPE (HDPE)

100mL Amber Glass (GLBB)

Label

HDPE - none, none - no air gap, ice

GLBB - none, none - no air gap, ice

Analytes and holding times

All water types

HDPE bottle

**Gross Alpha & Beta (28 days)

GLBB bottle

**Radon 222 (96 hours)

Preservation

No preservation.

Notes

No container preparation.

Sampling information

Do not rinse prior to collection. Fill to the top of the bottle. Ensure the lid is screwed down firmly and invert to check for air bubbles.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

PESTICIDES, HYDROCARBONS & UNKNOWN VOLATILES SCANS



Sample container

500mL Glass (GL500)

Label

GL500 - none, none - no air gap, ice

Analytes and holding times

All water types

***GCMS SCAN (ASAP)

***Organophosphates & Triazine Pesticides (ASAP)

***TPH/TRH (ASAP)

Preservation

No preservation.

Notes

No container preparation.

Amber glass bottle can also be used.

Sampling information

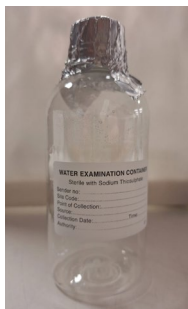
Rinse prior to collection with sample water. Fill to the top of the bottle. Ensure the lid is screwed down firmly and invert to check for air bubbles.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

SULPHITE & SULPHATE REDUCING BACTERIA



Sample container

250mL Sterile Plastic (PT250)

Label

PT250 - sterile, Sodium Thio - no air gap, ice

Analytes and holding times

All water types

*Spore of sulphite-reducing clostridia including *Clostridium perfringens* (24 hours)

*Sulphate reducing bacteria (24 hours)

Preservation

Sodium Thiosulphate dosed

Notes

Aseptic preparation is mandatory.

Containers to be double bagged using zip lock bags for storage on ice.

Sampling information

Do not rinse prior to collection. Fill to the top of the bottle. Ensure the lid is screwed down firmly and invert to check for air bubbles.

Safety

Sodium Thiosulphate is not a hazardous substance or mixture. In case of contact, rinse the affected area.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

TRACE METALS



Sample container

250mL HDPE (HDPE1)

Label

HDPE1 - RO rinsed, none - no air gap, ice

Analytes and holding times

All water types

** Metals - Total/Soluble (28 days)

Includes cations calcium, magnesium, sodium and potassium

Preservation

No preservation.

Notes

Container is pre-rinsed with RO water.

Sampling information

Do not rinse prior to collection. Fill to the top of the bottle. Ensure the lid is screwed down firmly and invert to check for air bubbles.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

TRANSMITTANCE/ABSORBANCE



Sample container

250mL Plastic (PT250)

Label

PT250 - none, none - no air gap, ice

Analytes and holding times

All water types

***UV Absorbance (3 days)

***UV Transmittance (3 days)

Preservation

No preservation.

Notes

No container preparation.

Sampling information

Do not rinse prior to collection. Fill to the top of the bottle. Ensure the lid is screwed down firmly.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

VOLATILE FATTY ACIDS



Sample container

120mL Plastic (PT120)

Label

PT120 - none, none - air gap, ice

Analytes and holding times

All water types

***VFA (ASAP)

Preservation

No preservation.

Notes

No container preparation.

Sampling information

Fill container leaving approximately 2cm gap to the top of container. Ensure the lid is screwed down firmly.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

VOLATILE ORGANIC COMPOUNDS/BTEX



Sample container

2 x 40mL Amber Glass (AG40)

Label

AG40 - none, none - no air gap, ice

Analytes and holding times

All water types

*** Acid Herbicides / Haloxyfop (ASAP)

*** VOC/BTEX (ASAP)

Preservation

No preservation.

Notes

No container preparation.

Sampling information

Rinse prior to collection with sample water. Fill to the top of the bottle. Ensure the lid is screwed down firmly and invert to check for air bubbles.

*Holding times as per Standard Methods, 24th Edition, 2023

**Holding times as per AS/NZS 5667.1:1998

***No stated holding time in Standard Methods or AS/NZS 5667.1:1998, deliver to lab as soon as a possible (ASAP) or as stated.

Sampling kit - containers and bottles

Fill all provided bottles for each sample point to ensure sufficient sample is collected. Some bottles have special preservatives added. It is important to collect samples correctly using the sampling containers we provide. Other containers can affect the validity of scientific test results. Fill the bottles according to the analytes over the page.

Collect and submit samples

Follow the sampling instructions and collect the sample in bottles provided – note holding times for specific analyses. Deliver within 24 hours to our Adelaide laboratory. Samples for bacteriological testing ie *E. coli*, must be delivered within 24 hours of collection. Fill in the chain of custody form clearly and accurately including date and time of sampling (otherwise your order may be rejected). Place samples in esky with ice brick (excluding Amoeba) ready for transportation. Do not freeze the samples. Keep samples clean, upright to prevent leakage, and protect them from excessive heat, cold or physical damage.

Secure container lid so it does not come loose in transit. Some containers may need to be sealed with packing tape. Paperwork packed within the transport container should be sealed in a plastic bag to prevent water damage.

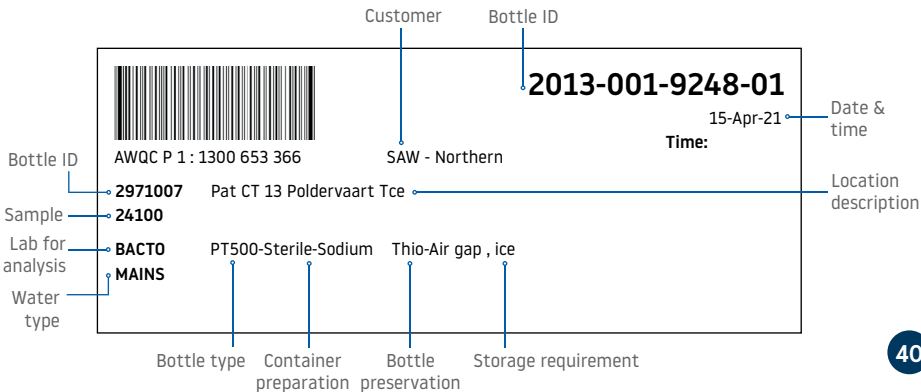
Holding times and standards

Holding times are based on best practice (including legislative requirements) to allow for the analysis to be carried out properly and with assurance. Submit samples to the laboratory well within the holding time to ensure compliance. Samples that exceed the maximum holding times are usually deemed unsuitable for testing.

Quality control

Our quality control (QC) program includes a range of different checks at regular intervals that are method specific and comprise blanks, checks, secondary reference materials, certified reference materials, spikes, Analytical Quality Control samples, replicate analysis and duplicates.

Sample bottle label information



Sampling tips

- Ensure the sample is representative of the source and always collect from the same location.
- If sampling from a tap, minimum flush of 2 minutes prior to collection (unless specified otherwise).
- Collection of microbiological samples should be immediately after sample point disinfection.
- All microbiological samples should be double bagged using zip-lock bags for transportation to AWQC.
- Sample bottles should be adequately filled. If an air gap is required, fill to base of neck.
- Ensure all sample bottles are labelled. If you are not using an AWQC label, provide sample location description and time/date collected as a minimum.
- Samples should be immediately chilled, preferably use ice. In the case of ice bricks, please attempt to pre-chill samples prior to transport to AWQC with ice bricks.
- Samples for Amoeba analysis must **NOT** be chilled or placed on ice.
- Pre-dosed bottles must never be rinsed.
- Surface sampling should always occur, if possible, at a minimum of 30cm below the surface to avoid any surface scums.

Field filtering directions

- Avoid contamination by not touching tips of filters and syringe internals.
- Pre-rinse syringe with sample water.
- Add 50-60ml of sample, invert and expel air.
- Screw on a white GF filter first, followed by a 0.45µm yellow filter.
- Samples low in suspended material can be filtered with only a 0.45µm yellow filter.
- Commence filtering until sample is dispensed or filters are blocked. Replace filters if necessary.
- Ensure a minimum of 60ml is collected.
- **DO NOT** completely fill container, an air gap is required for sample freezing at AWQC.
- Discard filters after use.
- **NOTE:** when collecting a filtered and unfiltered sample from the same location, filter water from the unfiltered container to ensure the samples are comparable with each other.

Laboratory location



Australian Water Quality Centre

Angas Street entry

250 Victoria Square/Tarntanyangga, Adelaide, SA 5000

Phone: 1300 653 366

Email: customerservice@awqc.com.au

Website: www.awqc.com.au



1300 653 366
awqc.com.au