



Version No: 01 Issue Date: 08/07/2021 Portfolio: Discrete Water Quality	Horizons Regional Council	Section No: 15.6 Appendix: 1 Page: 1 of 1
horizons regional council 	Hydrology Operations Manual	

Discrete Water Quality – Hydrocarbon Sampling

1. Overview:

The Discrete Water Quality Program may require the sampling and analysis of hydrocarbons as part of catchment specific targeted routine sampling, compliance sampling or project work. This is typically in addition to regular water quality samples (i.e. State of Environment (SoE) sampling).

This SOP should be read in conjunction with [Section 15.6 of the Hydrology Operations Manual](#). Undertaking sampling work in a safe manner, adhering to good sampling practices and aseptic techniques are to be applied.

2. Hydrocarbon Test Suites:

Eurofins –ELS provide analysis for

- (i) Partially Aromatic Hydrocarbons (PAH) suite of tests (Acenaphthene, Acenaphthylene, Anthracene, Benz(a)anthracene, Benzo(a)pyrene, Total Benzo(b) and Benzo(k) fluoranthrene, Benzo(g,h,i)perylene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, and Pyrene).
- (ii) Total Petroleum Hydrocarbons (TPH) suite of tests (TPH C7 - C9, TPH C10 - C12, TPH C13 - C19, TPH C20 - C26, TPH C27 - C37, Maximum TPH Content).

3. Sample Bottles:

Each test suite requires a minimum of 250ml sample volume collected in an amber/brown glass bottle. The bottle does not contain preservative but has sterilised by Eurofins –ELS (do not use if the lid is missing).

The WQ lab has sufficient stock of 250ml amber glass bottles labelled Organic Carbon Analysis (used as part of Groundwater SoE), use one bottle for PAH and one bottle for TPH analysis. Additionally there may be a limited quantity of 500ml amber bottles if needed.



4. Sampling Procedure:

Follow good sampling practices as 15.6 App 1 of the Hydrology Operations Manual:

- Sample first.
- Unscrew the bottle cap and hold inverted above the water's surface.
- Immerse the bottle partially (i.e. halfway across the bottle rim) into the water body to allow the surface water/contaminates to be collected.
- Fill the bottle until there is zero headspace (i.e. no air inside when capped)
- Repack using the supplied bubble wrap and keep chilled with other samples.