Torrent LABORATORY, INC.

TO-15 or TO-17?

Discussion of pros and cons of two seemingly equivalent methods!

Parameters	TO-15	TO-17
Scope of Testing	VOCs up to C10 or C12 Covers light gaseous compounds such as vinyl chloride to Gasoline range organics and full list of VOCs	VOCs covering C5 to C26 or higher Does not cover early eluting light gaseous compounds such as vinyl chloride; however covers broad range of VOCs and SVOcs, such as GRO and Diesel range organics and beyond.
Media	Canisters, 6L, 1L, 500 ml etc. Canister sampling is mainly passive sampling. Very limited scope of customizing rate and time.	Thermal Desorption Tube (TD tube) TD sampling is active sampling through sampling pump. Rate and duration can be customized.
Ease of Use	Requires skills to set up and operate. Many fittings come into play and can cause leaks.	Relatively easy to set up and sample
Reporting Limits	Lower reporting limits are achieved through SIM (selective ion monitoring) analysis.	Low reporting limits can be achieved primarily through running higher sampling volume. SIM analysis is also an additional option
Major Advantage	Testing of Full VOC list with GRO including all standard light end gaseous compounds Passive Sampling	Testing of VOCs (w/o several light end gases)+ GRO + DRO Equipment handling is very easy and occupies very small space Opportunity for customizing TD tubes per project requirement
Major Disadvantage	Equipment handling is cumbersome and occupies larger space. Little scope of customizing media (other than using different sizes)	Yields poor response for light end gaseous compounds. Active Sampling