

HERBICIDES

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| Test Description | Determination of chlorinated acid herbicides in drinking water |
| Test Use | Useful for evaluating chlorinated acids in drinking water and other clean waters. |
| Test Department | Organic Chemistry: Phone 860-920-6581/6693 Fax 860-920-6703 |
| Methodology | EPA Method 515.3: Liquid-Liquid Extraction, Derivatization and Gas Chromatography |
| Availability | Year-round |
| Sample Requirements | Three (3) 60-mL samples Two (2) Field Blanks (containing lab-provided reagent water) per sampling trip. |
| Container type /Preservative | 60-mL amber glass vials with Teflon-lined screw caps. 4 mg Sodium Thiosulfate preservative added to vials prior to collection. |
| Collection Instructions (Note 1) | For taps, remove aerators and let water run 4-5 minutes. For outdoor locations, sampling location should be in accordance with a preapproved quality assurance project plan. |
| Sample Holding Time & Transport | Samples are iced or refrigerated and kept in the dark at 4°±2°C from time of collection until extraction. Samples must be extracted (i.e. lab initiates test) within 14 days of collection. |
| Unacceptable Conditions | Incomplete requisition form. Insufficient sample volume. Samples received beyond the 14-day holding time. Improper collection/container/preservative. |
| Requisition Form | Use the Organics/Radiation Water Examination request form. |
| Required Information | Fill out entire requisition form. |
| Limitations | Samples not held at 4°±2°C for more than 3 hours (from when samples are collected and received by the laboratory) will have qualified results. |
| Additional Comments | See Table 1 for list of compounds which the CT PHL can determine by this method. |

Note 1: See *New England States Environmental Sampling Guide*, latest edition.

<https://www.epa.gov/sites/production/files/2015-06/documents/NE-States-Sample-Collection-Manual.pdf>

Table 1. Compounds Determinable by EPA Method 515.3

| Analyte | Chemical Abstract Services Registry Number |
|-------------------|---|
| Acifluorfen | 50594-66-6 |
| 2,4-D | 94-75-7 |
| Dicamba | 1918-00-9 |
| Dinoseb | 88-85-7 |
| Pentachlorophenol | 87-86-5 |
| Picloram | 1918-02-1 |
| 2,4,5-TP (Silvex) | 93-72-1 |