Special Application Requirements

The table below summarizes the analytes, technologies, and matrices for which laboratories are required to submit either MDL, IDC, or both along with their application.

Technology	Analyte (or Analyte Group)	Required Data
Gravimetric (HEM)	Hexane Extractable Materials (HEM)	LOD and IPR as specified in EPA Method 1664
IC (Ion Chromatography)	Any Anions	LODs for each analyte under application
HPLC and LC/MS	All analytes and analyte groups	LODs and IDCs for each technology and analyte under application
GC and GC/MS	VOCs, BNA, Acid Herbicides; Organophosphorus Pesticides; Nitrogen, Triazine and Metabolite Pesticides, Organochlorine Pesticides; Polychlorinated Biphenyls	LODs and IDCs for each technology and analyte under application
GC, Class; Petroleum Hydrocarbons	Gasoline Range Organics (GRO); Diesel Range Organics (DRO); Petroleum Volatile Organics (PVOC)	LODs and IDCs by the Wisconsin methods are required in both soil and water matrices. Calibration information (including standards used, peak areas, and linear regression data) and sample chromatograms for all parameters
Drinking Water matrix	All analytes and methods covered under the Drinking Water test category	LODs are required for all inorganic and organic analytes for each combination of analyte and method. IDCs are required only for each combination of **organic** analyte and method.

Per s. NR 149.14 (1)(e), Wis. Adm. Code, the Department may request, on a case-by-case basis, any additional information necessary to demonstrate a laboratory's compliance with the requirements of this chapter.

Applying for Petroleum Hydrocarbons Certification or Registration

Wisconsin has a unique Underground Storage Tank (UST) program. The Department has developed its own sampling and analytical methods for gasoline range organics (GRO) [WI-PUBL- SW-140] and diesel range organics (DRO) [WI-PUBL-SW-141].

Listed below are common problems that the Department finds with Petroleum Hydrocarbon Analyses. Please make sure that your lab corrects these problems BEFORE you apply.

- Using internal standards and the "average response factor".
- Forcing the Y-intercept through the origin.
- Using unknown or non-linear regressions.
- Contaminant peaks in component standards.
- Calibrating over an inappropriate range.
- Using GC/MS rather than GC with FID.
- 25 mL purge instead of 5 mLs.
- Incorrect purge time.
- Subtracting blanks.
- Including peaks outside the window.
- Not resolving first peak from solvent.
- Integrating valley to valley, should be baseline to baseline.
- Subtracting surrogate/internal standard from the window
- Soil sample weights exceeding 35 g for 60 ml vial