

I. Preface

This booklet has been compiled in order to assist the individual who deals with analytical laboratories on a regular basis yet is unfamiliar with the procedures involved. In an attempt to provide insight into the analytical processes, this outline will highlight required sample volumes, detection levels, sample containers, preservatives, sample handling and analytical techniques used by the laboratory.

ENCO Laboratories hopes that this information streamlines your dealings with our company by addressing many of the issues that arise in dealing with laboratories. Please feel free to contact us with any additional questions or comments.

And now for the disclaimers:

- 1) Throughout this text, target detection limits have been listed. These limits are based on those levels that are obtained while processing relatively clean samples. When a sample matrix contains background levels of a contaminant that interferes with the analysis, detection levels will be higher than those listed.
- 2) The sample volume requirements contained throughout this text are based on standard operating procedures. In most cases it is possible to use less sample than that listed, but the detection levels are usually affected; i.e., if only one-tenth of the required volume is provided then normally the detection level will be increased ten-fold.
- 3) Most organic methods require that residual chlorine be neutralized at the time of sampling. This statement refers primarily to those water supplies that have been chlorinated. Groundwater and soil samples typically do not require neutralization.
- 4) In several areas of the text, regulatory levels have been indicated. Due to the nature of the regulations, these levels may not be current, depending upon the relative age of this document at the time you are reading this. In no instance will Environmental Conservation Laboratories, Inc. be responsible for decisions made based upon the levels indicated in this manual. Should you have questions regarding current regulatory levels, please contact either the appropriate regulatory agency (EPA, etc.) or our laboratory.
- 5) Although many methods of analysis are included in this text, not all are available from Environmental Conservation Laboratories. This document is meant as a guide to environmental chemistry, not a marketing brochure. However, it should be noted that the component lists shown for the various organic procedures do reflect our implementation (Example: although EPA Method 625 lists pesticides as target components, most environmental labs do not analyze for them. As such, the list shown with the 625 method description reflects the "ENCO" 625 component list).