



# Hanby Environmental

*"For Accurate Field Analysis."*

## Hanby Field Test Kits are:

A uniquely designed "mobile lab" that test for TPH in water & soil by using a precise scientific method to produce colors to identify contaminants, both qualitatively and quantitatively. Hanby test kits are designed to save time and money by significantly reducing the dependence on off-site lab analysis.



## Uses for kits:

The kits can be used for many various applications, for instance in phase 2 site assessments, to monitor the operating conditions of a remediation system, or to confirm that contaminated soils and/or groundwater has been or needs to be removed. And to monitor locations to ensure continued compliance within approved guidelines.

## Who uses the kits:

Environmental contractors and consultants, HazMat teams, remediation specialists, and even oil exploration geologists have been utilizing Hanby products at spill sites, underground storage tanks, pipeline leaks, remediation sites and Superfund sites.



## Advantages of our kit:

- **Speed** (takes 5-10 min for a result)
- **Portability** (lightweight & rugged case can travel in back of truck & not be damaged)
- **Easy to use** (color is developed in response to the presence of a contaminant and the resulting color is matched to a color chart supplied in the kit)
- **Low cost per sample** (15 test in one kit & 15 tests per refill order)
- **Wide Range** (test for a broad range of petroleum related chemicals)
- **Accurate Results** (results are scaled down in PPM – Parts per million)

# Save Time & Money!

## TECHNICAL PUBLICATIONS & CITATIONS

### **Books:**

1. Hydrocarbon Contaminated Soils and Groundwater, Chap. 9, "A New Method for the Detection and Measurement of Aromatic Compounds in Water", Lewis Publ., 1991.
2. Chemistry for the Protection of the Environment 1, Chap.13, "A New Method for the Detection and Measurement of Aromatic Compounds in Water", Plenum, 1991.
3. Chemistry for the Protection of the Environment 2, Chap. 43, "Use of a Portable, Fiber-Optics, CCD Spectrophotometer to Measure Friedel-Crafts Products in the Detection of Crude Oil, Fuel, and Solvent Contamination of Soil.", Plenum, 1996.
4. Monitoring and Remediation Technologies for Solid Wastes, Chap. 5.3, "Innovative, Field-Portable, Optical Fiber-Based Spectrophotometer for Detection and Monitoring Aromatics and Alkyl Halides", Plenum (in publ.)
5. Current Protocols in Field Analytical Chemistry, Chap.1, Volatile Organic Compounds, Unit 1J Reagent Chemistry, "The Hanby Method for Aromatic compounds", John Wiley, 1998, 1999.

### **U. S. EPA Publications:**

1. Field Measurements: Dependable Data When You Need It, EPA/530/UST-90-003, Sept. 1990.
2. Subsurface Characterization and Monitoring Techniques, EPA/625/R-93/003, May, 1993.
3. HNU-Hanby Environmental Test Kit, EPA/540/R-95/515, August, 1995
4. Superfund Innovative Technology Evaluation Program (SITE) Technology Profile, 9th ed. EPA/540/R-97/502, "Characterization and Monitoring Program", Hanby Environmental Laboratory Procedures, Inc. (Test Kits for Organic Contaminants in Soil and Water), pp.392-3, Dec., 1996.
5. Expedited Site Assessment Tools for Underground Storage Tank Sites, EPA 510-B-97-001, Chap.VI, "Field Analytical Methods for Petroleum Hydrocarbons; Colorimetric (Hanby) Test Kits, pps.VI 13-17, March, 1997.

## Petroleum Detection Specifications

The Hanby test kits provide analytical results for petroleum fuels and constituents, such as gasoline, diesel fuel, jet fuel, crude oil, motor oil, BTEX, and PAHs, as well as PCBs in soil and water samples.

<b>Petroleum Substance</b>	<b>Soil (ppm)</b>	<b>Water (ppm)</b>
Unleaded gasoline	1	0.1
Diesel fuel	1	0.1
Crude oil	1	0.1
Heating oil	1	0.1
PCB's	0.5	0.05
Jet fuel	1	0.1
Fuel oil	1	0.1
Motor oil	1	0.1
Waste oil	1	0.1
Transformer oil	1	0.1
Lubricating oil	1	0.1