



# Environmental Forensics

**Oil spills and contaminations can lead to disastrous environmental damage and have a significant economic impact.**

Lawsuits surrounding such incidents require the use of environmental forensics to assist in identifying the nature of the contamination and to correlate the spills to possible sources.

SOCOTEC's Specialist Chemistry team has over 20 years of experience in environmental forensic analysis, which encompasses fuel identification, determining levels of degradation and correlating fuel contamination to source.

## DUAL LEVEL INVESTIGATION

A dual level investigation approach is used to offer clients the most suitable and cost effective investigation:

### Level One – Evaluation

- Chromatographic evaluation
- Basic fuel characterisation (including Gasoline, Kerosene, Diesel and Lubricating oil)
- Quantification

### Level Two – Chemical fingerprinting

A range of compounds are reviewed to assess identification, degradation and fuel matching:

- Alkane distribution
- Biomarkers (including Hopane and Sterane diagnostic ratios)
- Polycyclic Aromatic Hydrocarbons (PAHs) including ratios and source identification
  - Petrogenic, Pyrogenic, Phytogenic
- Euromarker fuel dyes
- Levels of biodegradation/weathering
- Compound library search
- Detailed report

## MORE ABOUT OUR SERVICES

For more information about SOCOTEC's environmental forensics capabilities, please call us on 0845 603 2112 or email [salesuk@socotec.com](mailto:salesuk@socotec.com)