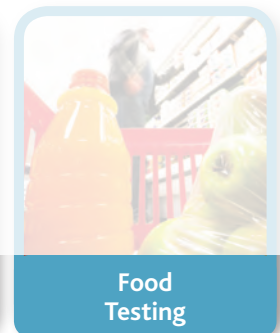


Laboratories and Analytical Services

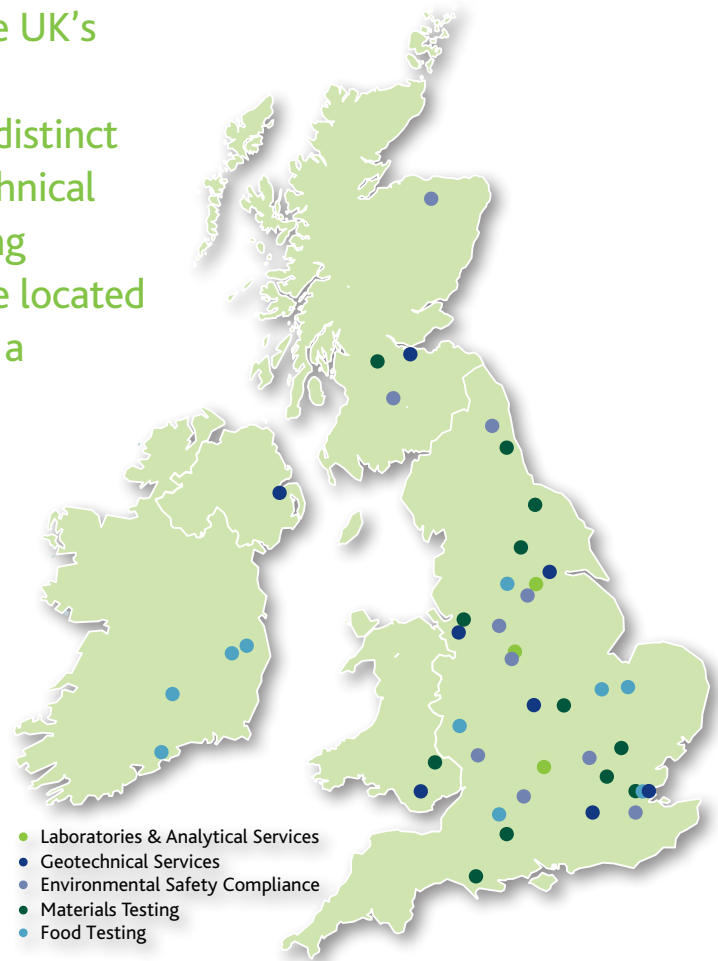


Environmental Scientifics Group (ESG) is the UK's leading provider of testing, inspection and compliance services. Operating across five distinct divisions we offer an unrivalled range of technical expertise and accredited services. Our strong network of UKAS accredited laboratories are located across the UK and Ireland and supported by a centralised head office.

With a history dating back more than 100 years, ESG prides itself on its innovative nature, customer focus and drive to continually improve. Our aim is to grow our capability and provide the most comprehensive range of environmental testing, inspection and consultancy services. Today, the business has more than 1,600 employees and serves over 7,000 customers.

Accredited Services

Quality is built-in to all our processes. We have a comprehensive range of accreditations covering all environmental compliance, quality and food safety issues and are particularly proud of our UKAS certificate numbered 0001.



Geotechnical Services

- Site Investigation
- Geotechnical Laboratory Testing
- Geotechnical and Environmental Consultancy
- Geophysical, Hydrographic and Topographic Surveys
- Structural Consultancy

Laboratories and Analytical Services

- Environmental Chemistry
- Oils, Fuels & Grease Analysis
- Speciality Chemistry
- Nuclear
- Paints & Coatings Consultancy
- Forensic Services

Environmental Safety Compliance

- Asbestos
- Stack Emissions
- Health and Safety
- Environmental Monitoring
- Occupational Hygiene
- Water Safety and Hygiene Services

Materials Testing

- Construction Materials Testing
- Demolition & Recycled Materials
- Energy Testing
- Foundation Testing
- Specialist Testing (e.g. metallurgy)
- Structural Investigations
- Pavement Assessments
- On-site Laboratories

Food & Drink Analysis

- Food & Drink Analysis
 - Microbiological
 - Nutritional
 - Vitamins/additives
 - Contaminants
- Dairy Testing
- Water Testing
- Pharmaceutical Testing

At ESG, we continually strive to improve everything we do. Our combined expertise enables us to deliver bespoke tailored solutions that meet each client's individual objectives whilst ensuring that quality and integrity is built-in as standard.



Laboratories and Analytical Services

Introduction

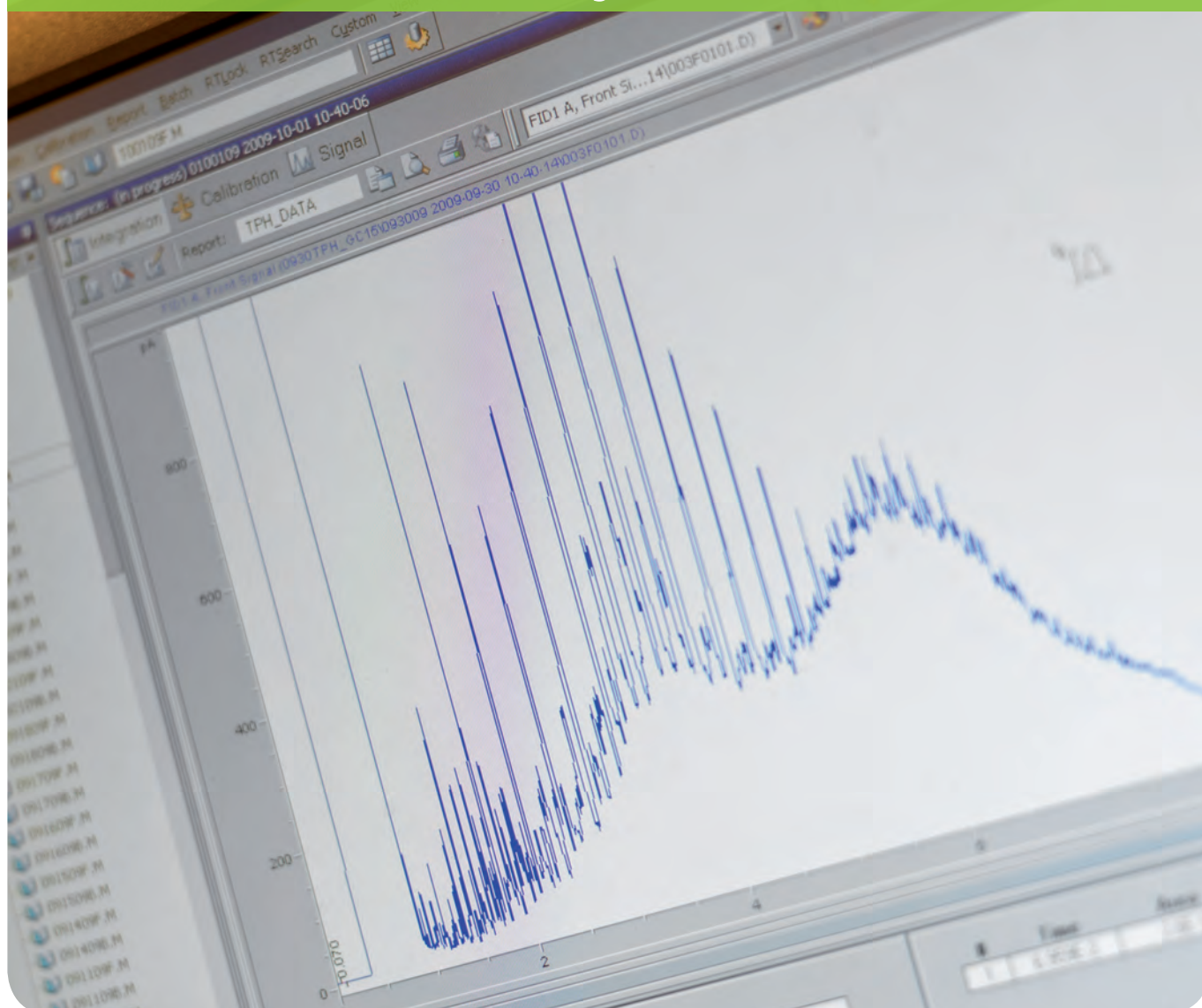
Environmental Scientifics Group's (ESG) Laboratories and Analytical Services division offers independent laboratory and analytical testing services to a wide range of industries. These include environmental and speciality chemistry, nuclear and forensic scientific services and oils, fuel and grease analysis.

Choosing ESG laboratories means benefitting from unrivalled turnaround times, extensive scope of accreditation as well as technical expertise, data integrity and support from a team of highly qualified professionals.

Our services include:

- Environmental chemistry
- Speciality chemistry
- Nuclear
- Forensic services
- Oils, fuels and grease analysis
- Paint and coatings consultancy

Environmental Chemistry



Operating from state-of-the-art laboratories, we provide comprehensive testing and analysis for the environmental industry. Specialising in the analysis of soils, waters, leachates, effluents, industrial wastes, marine sediments and waters, our services are accredited by UKAS to ISO 17025 and MCERTS standards. We also participate in several external quality assurance schemes, including CONTEST and AQUACHECK.

Our skills are founded on generating robust, high volume analytical measurements to strict standards and deadlines. Our methods are developed from published standard procedures and fully documented. In addition we offer flexible operating systems tailored to client requirements. This explains why ESG Environmental Chemistry has become the laboratory of choice for organisations that need quality environmental data, supplied to a defined programme.

Our services include:

- MCERTS soil analysis
- Marine sediment and waters analysis
- Waste acceptance criteria (WAC)
- Petroleum hydrocarbon analysis including TPH CWG
- Polycyclic aromatic hydrocarbons (PAHs)
- Pesticides and herbicides
- Metals and anions
- Sample preservation

Specialist Chemistry



Our services include:

- GLP/GCP/CMP and non-GxP analysis
- Determination of residual catalyst in pharmaceutical and healthcare samples
- QC analysis of medical devices
- Trace contaminants in drugs and drug delivery systems
- Air analysis using ATD and other diffusion tubes
- Dioxins and furans analysis
- Incinerator and stack gas filters and impinger solutions analysis

As a niche provider of high quality, yet complex analytical solutions, we offer the assurance that testing is carried out with the utmost integrity. The majority of our laboratory procedures are accredited by UKAS to ISO 17025 and our new facility is certified by the MHRA for GLP, GCP and GMP.

Our highly skilled and experienced analysts support a diverse range of industries. In the pharmaceutical and healthcare sector, we can test suites of up to 70 elements in starting materials, intermediates, final product, syringes, intravenous and dialysis solutions. For emissions monitoring, we have MCERTS capability and the necessary proficiency schemes to meet the stringent requirements demanded by the Environment Agency for industrial chimney stacks, power stations and incinerators. We also provide top quality investigative chemical analysis for the rail and nuclear sectors, to support environmental, health, safety and development projects.

Nuclear



Our services include:

- Radiochemical analysis
- HSE approved bioassay service
- Decommissioning characterisation
- Nuclear fingerprinting
- Analysis of drinking water, crops and food
- Monitoring, testing and analysis of effluents and groundwaters

Working within private, public and highly regulated organisations, our experienced and skilled teams monitor, test and analyse for radioactivity in the nuclear sector and across a range of other markets. Food, water, nuclear and power generation sites in the nuclear industries are all monitored and tested by scientists based at our Didcot laboratory. ESG is also one of the few HSE approved providers of bioassay services, that can monitor the safety of workers within the UK nuclear industry.

Our services cover the full nuclear cycle, from the planning and design stages through to construction, the built environment and to decommissioning. We measure radiation levels in water, soil and vegetation, as well as in foodstuffs. The majority of our laboratory procedures are accredited by UKAS to ISO 17025.

Forensic Services



Our services include:

○ Drug analysis

- Identification and quantification of solid drugs
- Examination of drug-taking paraphernalia
- Supply chain investigation, including comparison of drug wraps and packaging
- Crime scene investigation

○ Scene of crime evidence

- Rapid review of scientific evidence
- Toolmark and shoemark comparisons
- Examination of contact transfer evidence such as glass, paint, fibres

○ Drug and alcohol screening

- Urine screening for drugs of abuse and alcohol
- Pre-employment screening
- Random testing
- Policy development

○ Fire and arson investigation

- Arson accelerant identification
- Spread of flames assessment
- Fire scene examination

Our Forensic Services operate from a state-of-the-art laboratory that is licensed by the Home Office. Using the latest techniques, we provide an extensive range of services and consultancy.

We can examine evidence in criminal and civil court cases; provide court-ready reports and statements, and if required, the services of trained court reporting officers. Data integrity is key to everything we do and so we rigorously apply the principals of forensic examination and chain of custody to all aspects of our work. This means our uncompromising standards and UKAS accreditation ensures results are fully defensible in a court of law or industrial tribunal.

Oils, Fuels and Grease Analysis



Our services include:

- Chemical, physical and microbiological analysis of hydraulic, engine and gearbox oil
- Grease analysis – chemical and physical tests
- Full electrical oils and analysis including Physical tests, dissolved gas analysis, PCB and FFA
- Analysis of fuels to ensure compliance to Industry Standards
- Analysis of wear, additive and contaminant elements with expert interpretation of results
- Interpretation of results against International Standards
- Provision of sample collection kits
- Web-based Management Systems with 24/7 access and email alerts on critical samples
- Fast turnaround of testing and reporting results

Our UKAS accredited laboratories staffed by highly experienced specialists, provide a complete analytical package to all industries covering gearbox and hydraulic oils, greases, transformer oils and fuels. With access to a wide range of laboratory instrumentation, we can also provide investigative and fault diagnosis as well as project development support.

This in turn, prevents in-service failures, minimises long-term maintenance costs, increases component life, reduces material costs and maximises safety of equipment.

Paints and Coatings Consultancy



Our services include:

- Inspection and testing of metal structures
- Expert advice and consultancy
- Accelerated weathering, durability and environmental testing
- Failure investigations
- Corrosion rate measurement
- Highways Agency, Network Rail and Link-up approved

Our approach to assessing decorative and protective coating systems uses an in-depth understanding of the key elements involved in both the cause and the prevention of corrosion, combined with leading-edge scientific testing.

Our experience stems from extensive research and development, laboratory testing of materials, quality assurance and on-site practical work. Testing is carried out to BS, ISO, ASTM standards by ICORR qualified paint inspectors from our UKAS accredited laboratory.



ESG House
Bretby Business Park
Ashby Road, Bretby, Burton upon Trent
Derbyshire DE15 0YZ

Tel 0845 6032112
sales@esg.co.uk



1252
1015



Link-up ID
5584

