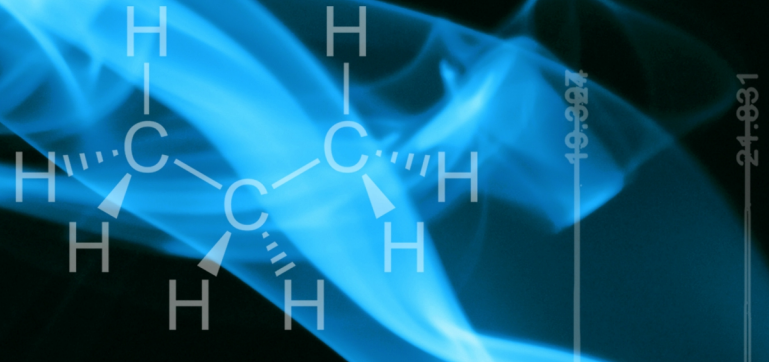
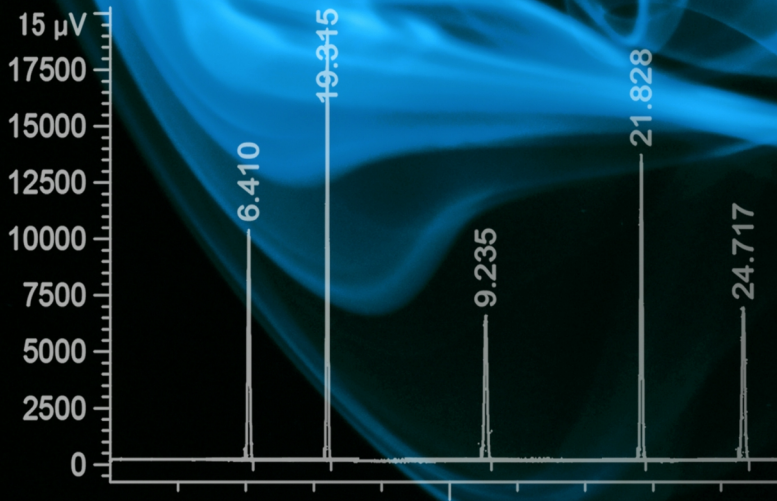


Method Info : Sulfur Analysis

AIB2 B, Back Signal (MERCAPTAN\_2\_005.D)



**Gas odorant testing backed  
by a full-service chemistry lab  
with forensic expertise  
and regulatory knowledge**

ESi provides timely and accurate testing results. Our ESi chemists and engineers are able to consult and assist with additional questions that may arise.

### Odorant Analysis and Sampling Services

ESi provides testing and on-site sampling services for odorization and composition of fuels such as:

- Mercaptan and total sulfur levels
- Propane total hydrocarbon composition analysis
- Further analysis using gas chromatography with mass spectrometry

### State-of-the-Art System

ESi employs purpose-built, state-of-the-art instrumentation that has been fine-tuned to sulfur-specific parameters. The equipment aligns and is in compliance with ASTM D6228 standards.

### Full-Service Chemistry Lab

If more analysis is needed, ESi can accommodate with the backing of full forensic chemistry labs. Analytical chemistry experts provide our clients with

specialized research and analysis. ESi has capabilities to support investigations and conduct specialized testing.

### Efficient Sampling and Shipping of Dangerous Goods

ESi offers on-site sampling services, sampling kits and shipping assistance to help save you time and effort in the field. The sampling kit includes the cylinders and valves needed for your test collection. ESi staff are available to assist to ensure samples are packed and shipped pursuant to applicable regulations. If you prefer, you can also drop off your samples at select ESi offices\*.

### Depth of Forensic Expertise

For over 30 years, ESi has leveraged its multidisciplinary team of engineers, chemists, scientists, and professional staff gaining a depth of forensic and regulatory knowledge and industry expertise.

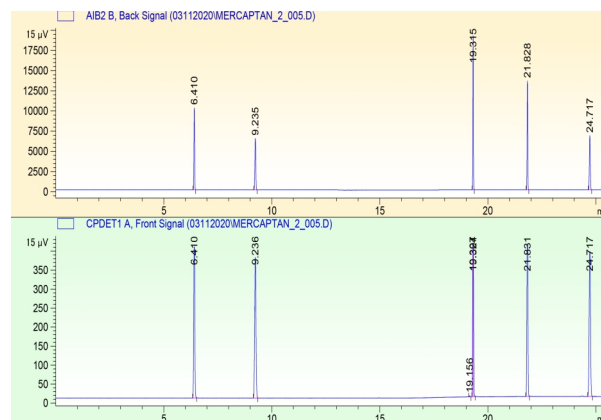
With hands-on experience, combined with diagnostic, analytical and physical testing capabilities, ESi has an ideal environment for quickly identifying and interpreting the facts in cases such as fires and explosions, pipelines, materials failures and more.



## Fuel gas odorant testing and reporting from a full-service forensic lab

### ESi Investigative Capabilities

- Propane and Natural Gas Composition Determination
- Odorant Analysis
- Liquid Propane Sampling
- Odorant Degradation and Fade
- Fuel-gas System Pressure and Leak Testing
- Appliance and Fuel-gas System Testing
- Fire & Explosion Origin and Cause Determination
- Gas Delivery System Evaluation
- Ignition Source Determination
- Gas Migration and Diffusion Modeling
- Vapor Cloud Modeling
- Computational Modeling
- Corrosion Evaluation
- Microscopic Evaluation
- Blast Effects Analysis
- CT and X-ray Services



### Contact ESi

Get in touch with ESi for your fuel gas and odorant analysis and composition testing. Call Lauren Munday, M.S. at 206.622.2007 or send an email to [lmunday@engsys.com](mailto:lmunday@engsys.com).

[www.engsys.com/mercaptans](http://www.engsys.com/mercaptans)



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