

## Garrett Gas Train Kit

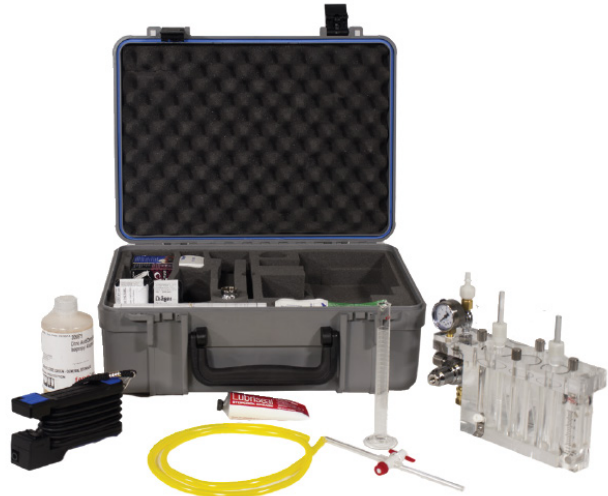
*Measuring Soluble Sulfides and Carbonates*

### Description

The Fann® Garrett Gas Train Kit contains the essential equipment and reagents for measuring sulfides and carbonates by the Garrett Gas Train method. This procedure follows API Recommended Practices.

This kit includes the following:

- Garrett Gas Train
- Draeger Tubes (H<sub>2</sub>S & CO<sub>2</sub>)
- CO<sub>2</sub> Cartridges
- Reagents
- Pressure Regulator



### Application

Hydrogen sulfide (H<sub>2</sub>S) and carbon dioxide (CO<sub>2</sub>) are undesirable gases that can be detected and quantitatively measured using the Garrett Gas Train method.

The Garrett Gas Train has three chambers. Sample is added to the first chamber where it is mixed with acid. An inert carrier gas carries hydrogen sulfide or carbon dioxide that is released through the chambers.

### Sulfides

When the drilling fluid filtrate is acidified, the sulfide and bisulfide ions are converted to H<sub>2</sub>S. The carrier gas transports H<sub>2</sub>S through the chamber to a Draeger tube that darkens along its length proportionally to the sulfide in the drilling fluid filtrate. The low-range tube changes color from white to brownish-black. The high-range tube changes from pale blue to jet black.

### Carbonates

When the drilling fluid filtrate is acidified, carbonate and bicarbonate are converted to CO<sub>2</sub>. The carrier gas transports CO<sub>2</sub> to a 1 liter gas bag where the gases are mixed and then the gases are drawn through a Draeger tube at a fixed flow rate. The tube progressively stains purple along its length proportionally to the carbonate in the drilling fluid filtrate.

## Advantages

- Reliable, quantitative results
- Proven method that complies with API Recommended Practices
- Wide measurement ranges for sulfide and carbonate
- Portable kit packaged in durable plastic carrying case

## Ordering Information

Item	Part No.
Garrett Gas Train Kit in Plastic Case	209961

*Fann Instrument Company offers a complete line of equipment, materials, and supplies for analyzing various drilling fluids and oil well cements in accordance with API Specifications and API Recommended Practices.*