

## APPLICATION NOTE – REFINERY SECTOR RULE

### Measurement of Hydrogen (H<sub>2</sub>) & Lower Heating Value Refinery Flare Gas

The EPA Refinery Sector Rule (RSR) requires the monitoring of flare gas to maintain a minimum of 270 BTU/Scf (Lower Heating Value) to the flare and the requirement to have this monitoring in place by January 30th, 2019.

COSA Xentaur offers an integrated hydrogen measurement package with the 9600 & 9700 series calorimeters to allow for the reporting and obtaining credits for the percentage of hydrogen being combusted in your flare, thus lowering the required makeup/assist gas used to reach the 270 BTU/Scf minimum.

### Continuous Online Measurement

Cosa Xentaur is the only Residual Oxygen Measurement calorimeter that is able to offer a Zero Emission option that is continuously measuring the flare gas without the need for Gas Chromatograph like valves that have their own unique issues in these demanding applications. Cosa Xentaur manufactures the calorimeter and the hydrogen cell for reporting the **hydrogen** content from **400ppm to 100%**.

### USA MANUFACTURER COMPLIANCE STATEMENT

- EPA Refinery Sector Rule (RSR) 40 CFR 63.670 - Requirements for flare control devices
- EPA 40 CFR Part 60 Subpart 60.18 - General control device and work practice requirements
- ASTM D4891 - 13 Standard Test Method for Heating Value of Gases in Natural Gas and Flare Gases Range by Stoichiometric Combustion