

The Customer

The Company is an exploration and production company that builds natural gas reserves through the acquisition and development of oil and gas assets across the U.S. They are one of the largest producers of natural gas in the Nation.

The Process

The Company uses multiple scrubbers to clean out the impurities of the natural gas that they receive. The impurities consist of hydrogen sulfide and amines. They dump this waste into their flare stack and then sell the cleaned natural gas.



The Problem

The Company wanted to use their waste gas stream to supplement the fuel supply that operates their flare stack. The heating value of the waste gas stream varied over a wide range, very lean at some times and very rich at others. They needed to identify the heating value of the waste stream to determine whether it could be used as a standalone fuel source. The heating value of the waste stream had to be at least 200-250 BTU/scf for complete combustion to occur otherwise assist gas would have been added to the flare. They decided to add an analyzer that would provide a continuous heating value measurement of the varying waste stream. The analyzer also had to be able to handle the high level of corrosives and water vapor in the waste stream.

The Solution

The Company did a thorough investigation of the BTU monitoring technologies available before purchasing the CalorVal BTU Calorific Analyzer. They chose the CalorVal because of its ability to accurately and continuously measure over a wide measurement range the heating value of the corrosive waste stream. All sample-wetted parts of the CalorVal are constructed of materials (series 300 stainless steel and hard-coated aluminum) that are compatible with hydrogen sulfide and amines. The analyzer completely incinerates the sample including the water vapor. It is heated to 120°C and can handle saturated water vapor at this temperature. In addition to its rugged industrial design, the CalorVal offers fast response, operating simplicity and universal response to any gaseous fuels.

SIC Code

- 1311: Crude Petroleum & Natural Gas

NAICS

- 211111: Crude Petroleum & Natural Gas Extraction

