

Case Story



Casing Gas Vents from Oil Wells

Client:

The client is a Canadian energy producer with a diversified asset portfolio focused on creating both short and long-term value through oil and gas-based exploration, development, production and marketing.

Challenge:

In 2021, the company faced the challenge of managing casing gas emissions from their heavy oil wells while striving to comply with Alberta's regulations on allowable vent volumes. Previously, the company had been venting the gas, but they sought an environmentally friendly and economically viable alternative for their facilities and gas plants. Despite evaluating options such as tying the casing gas to nearby gas gathering systems or implementing other conservation measures, the economic analysis did not support these approaches. Additionally, they discovered that existing technologies to mitigate flaring issues were often costly and ineffective. Therefore, the client needed a robust solution to address the casing gas emissions and achieve regulatory compliance in Alberta.

TCI Solution:

Upon engaging with the energy company, TCI set out to engineer and design a solution that would perfectly align with the specific requirements of the client's site. Thorough assessments were conducted to gather crucial site conditions, including the gas composition, flow rate, pressure, gas temperature, and above sea level elevation. Armed with this information, TCI engineered the TCI 2000 incinerator unit, capable of reducing greenhouse gas (GHG) emissions by 1770 tons of CO₂e per day, boasting a combustion efficiency of over 99%. By opting to utilize the TCI incinerator, the client not only achieved compliance with Alberta's regulations but also surpassed them. This decision has enabled them to continue their operations while effectively mitigating their environmental impact.



**ELIMINATED CASING
GAS VENT**



**EXCEEDED
REGULATION**



Total Combustion Inc.



Engineered Simplicity

- Simple, straightforward & painless.
- Highly effective >99.9% combustion efficiency.
- 365 days of reliable uptime.
- Manufactured for longevity & dependability.

57 Belich Crescent,
Red Deer County,
Alberta, Canada T4S 2K5

 www.tciburners.com
 (403) 309-7731 main office
 info@tciburners.com