

CASE STUDY - DUAL PHASE SCRUBBING

AMGAS DUAL PHASE SCRUBBING SYSTEM OFFERS SAVINGS UPWARDS OF 80% IN HIGH CO₂ ENVIRONMENTS

PROJECT HIGHLIGHTS

APPLICATION:
H₂S Scrubbing in a High CO₂ Environment

H₂S: 0.5%

CO₂: 5%

FLOWRATE: 0.19m³/min

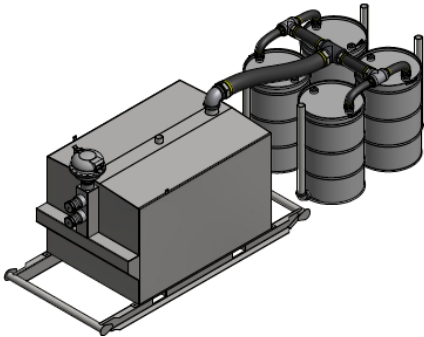
RECORDABLE EMISSIONS: 0

An AMGAS T Series Scrubber was on site in Northern Saskatchewan when our client discovered that the gas stream contained not only H₂S but a high level of CO₂. CO₂ can be naturally found in gas streams as well at artificially higher concentrations due to CO₂ flooding into reservoirs for enhanced oil and gas productions. This resulted in the original recommended scrubbing chemical to spend quicker than anticipated leading to chemical change outs every 4-7 days. Jointly realizing the requirement to find a more economical solution with a lower disposal footprint, AMGAS was able to help our client in adjusting their strategy.

Our excellent Technical and Operations team worked quickly in finding a solution that would satisfy the client's needs while avoiding the chance of an emission release. A **dual phase scrubbing system** was introduced and provided immediate results as it successfully handled both the H₂S and CO₂. The addition of the **dual phase scrubbing system** extended the chemical life drastically which eliminated weekly change outs and all associated disposal and change out costs. When sizing similar packages AMGAS has found great success with this system when the CO₂ level is greater than or equal to the H₂S level. It can also be sized to accommodate much higher flow rates as well as any level of H₂S and CO₂ making it a great solution in high CO₂ environments.

BENEFITS

- AMGAS spared 74,620L of chemical from disposal. This saved our client **\$215,473.20** in chemical as well as any costs that would have been required in disposal fees.
- AMGAS' industry leading ability to scientifically predict chemical fitness and lifespan contributes to successful project planning and budgeting.
- Cutting down on the frequency of change outs reduced corresponding costs such as travel and labor as Field Technicians were not required on site as often.
- Like all AMGAS results, readings and samplings are verified with the client to ensure we are providing the highest level of service possible.



SAVINGS

Dual Phase Scrubbing saved **81%** in Chemical and **85%** in Operating Costs when compared to the Traditional Treatment.

**Please note that all AMGAS projects are quoted individually and pricing may vary.

Dual Phase Scrubbing VS Traditional Treatment

