

AMGAS CLEAR Creates Savings While Being An Environmentally Responsible Choice in Sour Water Treatment

PROJECT HIGHLIGHTS

APPLICATION:

Coil Tubing Sour Water Treatment

PROJECT LENGTH:

14 days

NUMBER OF WELL PADS: 3

BASE FRESH

WATER VOLUME: 500m³

H₂S: >1%

pH: 7

FLOWBACK RATE:

0.3m³/min

TREATMENT RATE:

27-30m³/hour

RECORDABLE

EMISSIONS: 0

While working with our client in Northern Alberta, AMGAS was asked to treat 4000m³ of sour water for coil milling operations. The expected level of H₂S was at least 1%. A base of 500m³ of fresh water was available for use on site. The required solution needed to allow the recycled water to be reused on site and for the equipment to be easily moved between well pads.

AMGAS' expertly trained Field Operations team had the support of our world class Technical group while employing the AMGAS CLEAR. AMGAS CLEAR is a chemical free H₂S removal treatment, meaning the produced water never comes into contact with any chemistry, lessening the impact and risk on any downstream/upstream processes. **AMGAS was successful in removing 100% of the H₂S from the fluid and 0ppm was released to atmosphere.**

For this project one CLEAR unit was sufficient in handling all load volumes and H₂S levels. However, the AMGAS CLEAR has modular capabilities that can handle any flow rate and H₂S concentrations, making it a viable option for all onsite water treatment scenarios. As volumes and H₂S levels increase the projected per cube savings and benefits rise dramatically.

- Approximately 3,500,000L of fresh water was spared. These water savings added to the over 1 billion litres AMGAS CLEAR has prevented from being removed from the water cycle and out of deep well disposal.
- Disposal costs associated with this project were significantly reduced as the client was able to utilize the same 500m³ of water. The requirement for costly scavengers prior to disposal was also eliminated.
- AMGAS' accurate testing and record keeping, which includes detailed activity and data tracking, provides reliable, verified support to clients reporting objectives. Like all AMGAS service offerings, Area Regulators verified test methods are used to forecast and identify any opportunity for a harmful H₂S release to atmosphere before it happens.
- AMGAS CLEAR eliminated the need for fresh water, and water destined for disposal, to be trucked to and from site throughout the project.

SAVINGS

AMGAS CLEAR offered a **57%** savings when compared to traditional treatments options.

87.5% of the traditional treatment fresh water requirement was eliminated.

AMGAS CLEAR		Traditional Treatment	
Rig In	\$6,000	Trucking	\$126,000
CLEAR unit	\$85,694	Fresh Water	\$44,000
Rig Out	\$6,000	Disposal	\$66,000
Disposal	\$10,000	Scavenger	\$12,000
Total	\$107,694	Total	\$248,000

**AMGAS CLEAR unit pricing includes 24 hour Operations Staff and AMGAS HGR scrubber with associated scrubbing chemical.

**All savings were calculated with assumptions of the fresh water and disposal locations.

**Please note that AMGAS CLEAR pricing is based on project specific information and will be reviewed on a per job basis.