



# COAL MINE METHANE SUCCESS STORY MIMOSA CMM Project and VAM Destruction Minera del Norte, S.A. de C.V. Sabinas Basin, Coahuila, Mexico

#### **OVERVIEW OF COAL MINE METHANE PROJECT:**

Minera Del Norte S.A. de C.V. (Minosa) is the largest coal producer in Mexico. The company's mining area is situated in Coahuila State, mainly over the Sabinas and Saltillito Basins, across 3 operational mines. The coal production in 2010 was 4.5 million tonnes and 5.1 million in 2011. The mined coal is entirely used by Altos Hornos de Mexico for the production of steel. The three mines for this project activity are Mine 5 'La Esmeralda', Mine 6 and Mine 7. Mine 5 and 6 are situated in Sabinas Basin and mine 7 is situated in Saltillito Basin, all in Coahuila State.

The coal mined is used entirely by Altos Hornos de Mexico for the production of steel. Mimosa also has a VAM project, which involves four active mines and will involve an additional four in the future. Two of the mines are in Micare and the remaining at Mimosa.

ACTUAL ANNUAL EMISSION REDUCTIONS: 52.5 MMTCO<sub>2</sub>E

### PROJECT DETAILS

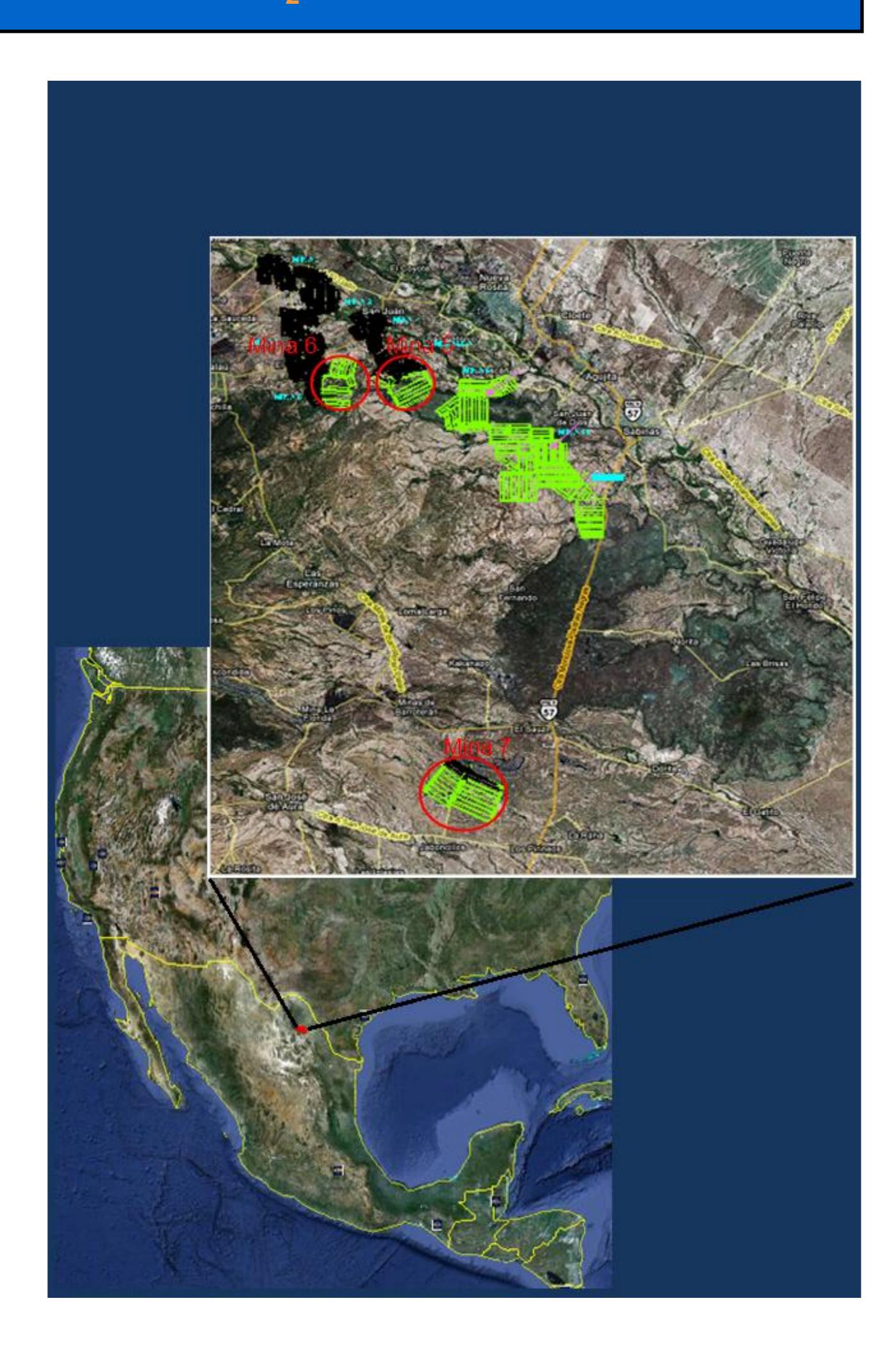
- Name of Project: MIMOSA COAL MINE METHANE PROJECT & VAM DESTRUCTION
- Name of Mine: MINERA DEL NORTE, S.A. DE C.V. –
   Mine La Esmeralda, Mine 6 and Mine 7
- Type of Ownership: Private
- Project stakeholder(s) involved in project's design, development, and implementation: MIMOSA; Minera del Norte, S.A. de C.V.

#### MINE INFORMATION

- Mine owner: MINERA DEL NORTE, S.A. DE C.V.
- Parent company: 100 %
- Status and type of mine: Underground mine (active)
- Mining Method: Longwall

#### PROJECT FINANCES

- Actual capital costs: US\$ 981,543
- Actual operation and maintenance (O&M) costs for fully implemented project: US\$ 817,000
- Projected Return on Investment (ROI): 2 years



## **INSTALLED TECHNOLOGIES**

Proven technology installed at the MIMOSA mines





## HIGHLIGHTS / LESSONS LEARNED

The principal lesson learned is that the flares are insufficient for the large amount of gas in the mines, so we have to acquire the equipment to generate electricity (VAM technology). The project has achieved a reduction of greenhouse gas emissions up to 52.5 million metric tons of CO<sub>2</sub> equivalent per year.

# FOR MORE INFORMATION, CONTACT:

#### Mario Alberto Santillan Gonzalez

Project Manager
Carretera Palau-Nueva Rosita Km 22.4
Palau City, Coahuila State
Mexico, 26350
+52 (864) 611 6600 ext: 6622

msantillang@gan.com.mx