



H₂S and CO₂ emissions from Cerro Prieto geothermal power plant, Mexico

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Cerro Prieto geothermal power plant has an operation capacity of 570 MW distributed in four powerhouses being the largest geothermal plant in Mexico. The geothermal field has 149 production wells. It is located in Cerro Prieto, Baja California, 30 km to the south of the Mexico-US border. Two sampling campaigns were performed in December 2012 and May 2013 where geothermal fluids from 46 production wells and 10 venting stacks were obtained and analyzed by gas chromatography coupled to mass spectrometry. Average CO₂ and H₂S composition of samples from venting stacks were 49.4% and 4.79%, respectively.

Based on the chemical composition of samples, the geothermal power plant emits every day from venting stacks 869 tons of CO₂, plus 68 tons of H₂S, among other non-condensable gases.