

## **45-8 ENERGY REPORTS HELIUM DISCOVERY ON ITS AVANT-MONTS FRANC-COMTOIS EXPLORATION LICENSE (FRANCE)**

*Building on the recently announced successful drilling campaign results in the Fonts-Bouillants license, this latest success further underscores the helium potential in France.*

**45-8 ENERGY** announces the results of its first exploratory well drilled in the Franche-Comté region, within the Avant-Monts franc-comtois exploration license. Drilling operations, carried out between August and November 2025, identified helium-rich gas accumulations within two major geological formations, with measured flow rates far exceeding initial expectations.

---

### **THIS SUCCESSFUL FIRST EXPLORATION WELL CONFIRMS THE HELIUM POTENTIAL OF THE LICENSE**

Following the granting of the license in September 2022, multiple geological and geophysical acquisition campaigns have been conducted, including gravimetry, electrical resistivity tomography (ERT), magnetotellurics, passive seismic, and 2D seismic reflection surveys. These campaigns were carried out in collaboration with key academic partners, such as the French Geological Survey (BRGM) and the University of Franche-Comté (Chrono-Environnement).

In summer 2025, 45-8 ENERGY drilled an exploration well to assess the helium potential associated with nitrogen-rich, non-combustible gas identified in historical drilling conducted in the 1950s and 1960s. However, these early operations were later abandoned due to a lack of economic viability, and helium concentrations were not measured at the time, as helium was not considered strategic at the time.

The well, located in the municipality of Mazerolles-le-Salin, reached a total depth of approximately 517 meters. It encountered significant helium shows within two major regional stratigraphic formations: the Muschelkalk and the Buntsandstein. Wireline logging data confirmed the presence of free gas in both reservoirs, leading to the execution of selective production tests immediately after drilling.

Test results confirm the presence of significant helium-rich gas accumulations in each formation. Beyond helium concentrations in line with pre-drill expectations, measured flow rates in both levels far exceed initial assumptions based on historical data. Moreover, the pressure build-up recorded over several months demonstrates a significant extension of the accumulation beyond the tested area.

### **KEY NEXT STEPS FOR THE FUTURE OF THE PROJECT**

The results of this first exploration well confirm the potential of the project for industrial-scale development. They also support the strategic rationale to expand exploration across the entire license area through additional drilling, notably:

- on structures historically drilled where gas presence has already been demonstrated,
- on prospective structures identified by 45-8 ENERGY through recent geophysical surveys but never tested to date.

Following these additional exploration efforts, the development of an industrial helium project could be envisaged, representing a major step toward securing the supply of this strategic resource on European territory.

## DETAILED TECHNICAL DATA

- **Avant-Monts franc-comtois exploration license:** 306 km<sup>2</sup> - Doubs (France)
- **Operator:** 45-8 Avant-Monts, a 100% subsidiary of 45-8 ENERGY
- **Well:** “La Vèze 1B” (“VEZ-1B”)
- **Drilling depth:** 517 meters (total depth) ; 258-322 meters (Muschelkalk) | 422-474 meters (Buntsandstein)
- **Well Testing:** conducted in cemented and perforated casing
  - Measured flow rates: up to 330,000 Nm<sup>3</sup>/day (Muschelkalk) / up to 334,000 Nm<sup>3</sup>/day (Buntsandstein)
  - Potential significantly exceeds current results (constrained by equipment)
  - No water production
- **Measured helium concentration:** 0.15% (Buntsandstein) | 0.31% (Muschelkalk) - *Analyses performed by 45-8 ENERGY and validated by an independent external laboratory*
- **Technical Partners:**
  - SMP Energies (drilling rig)
  - Elyteq (mud logging)
  - Gexplore / PetroLS / Weatherford (wireline logging, perforation)
  - Well Service Group (well testing)

## ABOUT 45-8 ENERGY

45-8 ENERGY, an Ad Terra company, is a pioneering European player in the short-cycle supply chain of strategic industrial gases, including helium and natural hydrogen, producing these critical resources as close as possible to consumption areas to reduce imports and carbon footprint.

Active across the entire helium value chain, from exploration and production to distribution and recycling, the company also developed RECYCL'He, the first helium recovery and recycling service in Europe. In natural hydrogen, 45-8 ENERGY combines geosciences expertise with operational innovation to advance the understanding and future production of this low-carbon resource.

Present in France, Germany, the Balkans, and the United States, 45-8 ENERGY launched the first helium production in France and Western Europe (Nièvre) in 2024, with additional projects underway to strengthen European sovereignty over strategic resources.

## PRESS CONTACT

Lola RICHIR



[communication@458energy.com](mailto:communication@458energy.com)



[www.458energy.com](http://www.458energy.com)