

Lilac Announces Successful Completion of Lithium Pilot with Neptune Energy in Germany

Pilot demonstrates Lilac IX technology on oil and gas brine with on-site production of battery-grade lithium carbonate

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EINPresswire.com/ -- [Lilac Solutions](#), a leading provider of direct lithium extraction (DLE) technology, today announced the successful completion of its first European lithium pilot in partnership with [Neptune Energy](#).

Located at Neptune's facility in the Altmark region of Saxony-Anhalt, Germany, the pilot achieved strong lithium recovery and impurity rejection using Lilac's proprietary ion exchange (IX) technology. The pilot processed brine from Neptune's existing gas-associated wells through to battery-grade lithium carbonate onsite.



Lilac Lithium Pilot with Neptune Energy

The campaign, which ran from May through August, operated 24/7 and processed brine from multiple natural gas wells. Lilac's IX technology demonstrated stable performance across three distinct flowsheets, validating commercial design parameters and marking the first successful field deployment of Lilac IX on oil and gas brine. Lilac tested both hydrochloric and sulfuric acid flowsheets, providing data to support Neptune's ongoing engineering studies for demonstration and commercial production in the Altmark.

The successful Neptune pilot demonstrates the versatility of Lilac's DLE technology across brine types. By showing consistent performance on oil and gas brine, Lilac has expanded its track record of delivering reliable, high-purity lithium products under real-world field conditions.

The project illustrates how existing energy infrastructure can be repurposed to support Europe's transition to clean energy and supports Germany's efforts to develop a domestic lithium supply chain. With the Altmark resource base confirmed as one of the world's largest at 43 million tonnes of lithium carbonate equivalent, Lilac's technology can support Neptune as a key player in Europe's critical minerals ambitions.

“We are proud to partner with Neptune Energy to demonstrate how DLE can produce lithium from their resource,” said Raef Sully, chief executive officer of Lilac Solutions. “By producing battery-grade lithium carbonate directly from Altmark brine, we’ve shown that our ion exchange technology works across yet another brine type and is ready to support commercial projects in Europe.”

Pilot results will support Neptune Energy’s engineering studies as the company advances toward demonstration-scale operations and eventual commercial production. The Neptune pilot marks Lilac’s seventh successful field deployment, and the company has recently completed its eighth project, also in Europe.

About Lilac

Lilac delivers modern direct lithium extraction technology that unlocks brine resources to scale supply for global electrification. Lilac's ion exchange technology enables high lithium recovery with minimal water use and no evaporation ponds, providing a sustainable alternative to conventional extraction methods. Lilac's technology has been proven through multiple pilot and demonstration plants globally and is now advancing to commercial scale. Lilac is headquartered in Oakland, California, with manufacturing in Fernley, Nevada. Learn more at lilacsolutions.com.

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