



Smart Exploration Research Center and Nordic Iron Ore AB teamed up for Targeting Promising Seismic Features Through Deep Drilling Program

Facilitated by Epiroc, a leader in the exploration drilling and manufacturing, we are excited to announce that Smart Exploration Research Center and Nordic Iron Ore AB (“NIO”) have teamed up for targeting promising seismic features through a deep drilling program aimed at exploring intriguing reflection seismic features identified in the Blötberget exploration permits and mining concession.

This strategic initiative follows an extensive seismic survey conducted in the area since 2014 and from the 3D seismic survey conducted in 2019 and reported in Malehmir et al. (2021), which confirmed earlier 2D surveys. The surveys have revealed several promising features with different characters and at different depths suggesting a good potential for additional reserves at depth and laterally from those known from the drilling work. A team from the Smart Exploration Research Center (SERC) and Nordic Iron Ore AB comprising geoscientists and engineers have meticulously analyzed the data and drilling plan to select optimal drilling positions that could lead to groundbreaking discoveries and improved geological understanding of the iron-oxide deposits and their enriched rare earth element (REE) parts.

"Commencing this drilling program represents a significant step in our exploration and mine planning efforts," said Ronne Hamerslag, CEO of Nordic Iron Ore AB. "We are committed to leveraging advanced technology and expert analysis to untap the resources hidden beneath the surface and bring value to our stakeholders and local communities."

"For over a decade, Blötberget and NIO have been a great host to new ideas and innovative technologies. The first ever 3D seismic survey for deep targeting in Sweden was conducted at Blötberget," said Alireza Malehmir, Research Director of SERC. "We are excited about the origin of those reflections and the synergy the drilling results and core samples would provide to the entire SERC geoscientists and engineers. We are kicking off 2025 with some thrilling initiatives".

"We are proud to play a vital role in the drilling industry, contributing our expertise and dedication to this work and the center. Together, we are unlocking new resources and paving the way for a sustainable and innovative future, said Anders Persson, Global Technology and Methods Manager at Epiroc."

The drilling operations are expected to begin on January 15, 2025, by Protek, and will continue until April 2025. It will be carried out with a strong emphasis on environmental stewardship and community engagement. NIO is dedicated to maintaining transparent communication with local communities and ensuring that all activities adhere to the highest safety and environmental standards. Dedicated site visits are planned during the drilling activities. Please follow www.smartexploration.se and its LinkedIn page for these opportunities.



Nordic
Iron OreTM

For more information on this exciting development, please contact:

Ronne Hamerslag (Nordic Iron Ore AB, ronne.hamerslag@nordicionore.se) ,
www.nordicionore.se

Alireza Malehmir (SERC, alireza.malehmir@geo.uu.se), www.smartexploration.se

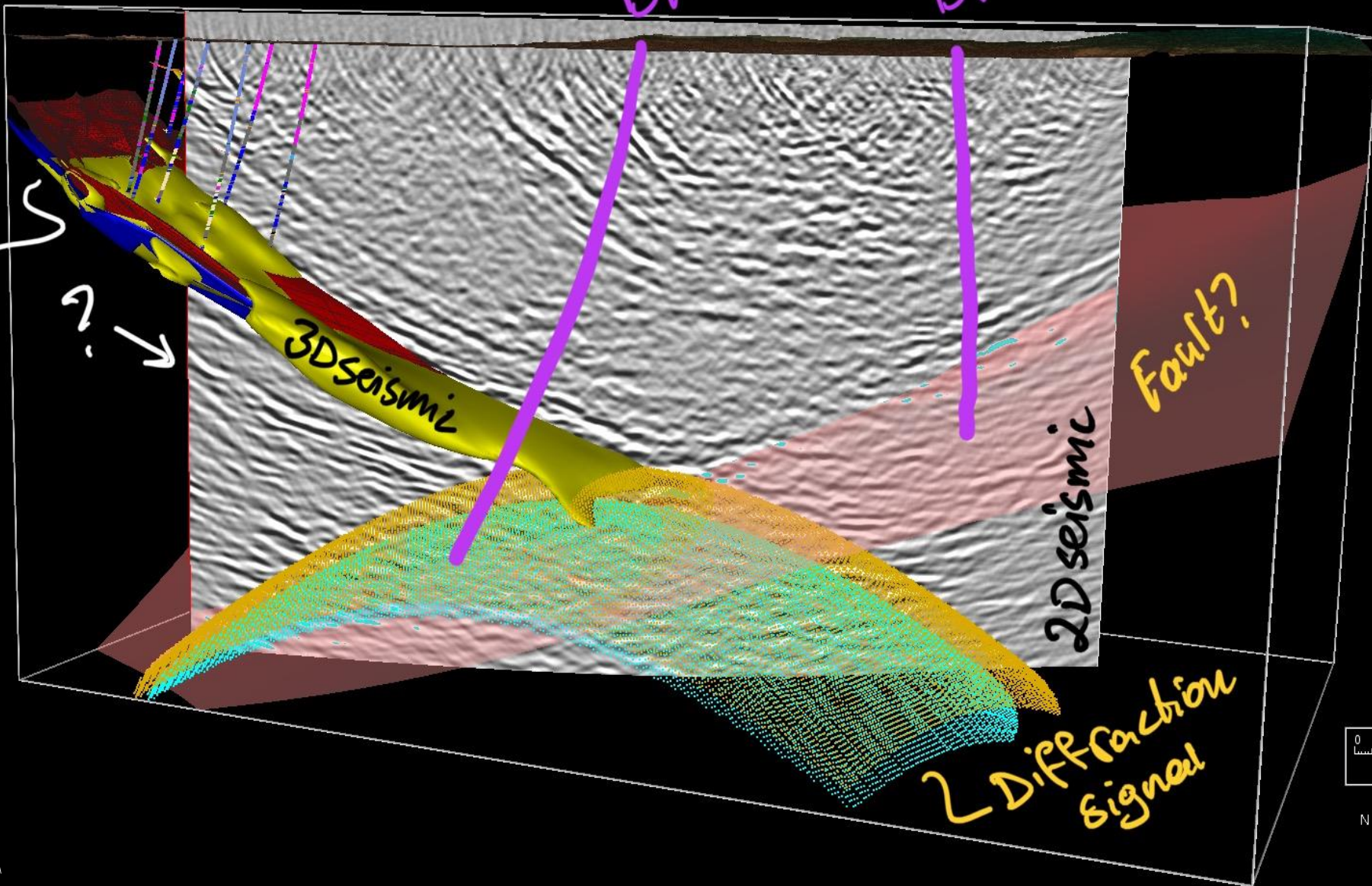
This synergy work is supported by Smart Exploration Research Centre. The center has received funding from the Swedish Foundation for Strategic Research (SSF) under grant agreement no. CMM22-0003.

Key references:

- Gyger, L., Malehmir, A., Manzi, M., Vivin, L., Lépine, J., Kaslilar, A., Valishin, O., Marsden, P., and Hamerslag, R., 2025. Broadband seismic data acquisition and processing of iron-oxide deposits in Blötberget, Sweden. *Geophysical Prospecting*, 73, 80–95.
- Pertuz, T., Malehmir, A., Bos, J., Brodic, B., Ding, Y., de Kunder, R., and Marsden, P., 2022. Broadband seismic source data acquisition and processing to delineate iron oxide deposits in the Blötberget mine-central Sweden. *Geophysical Prospecting*, 70, 79–94.
- Malehmir, A., Markovic, M., Marsden, P., Gil, A., Buske, S., Sito, L., Bäckström, E., Sadeghi, M., and Luth, S., 2021. Sparse 3D reflection seismic survey for deep-targeting iron oxide deposits and their host rocks, Ludvika Mines, Sweden. *Solid Earth*, 12, 483–502.
- Markovic, M., Maries, G., Malehmir, A., von Ketelholdt, J., Bäckström, E., Schön, M., and Marsden, P., 2020. Deep reflection seismic imaging of iron-oxide deposits in the Ludvika mining area of central Sweden. *Geophysical Prospecting*, 68, 7–23.
- Maries, G., Malehmir, A., Bäckström, E., Schön, M., and Marsden, P., 2017. Downhole physical property logging for iron-oxide exploration, rock quality, and mining: An example from central Sweden. *Ore Geology Reviews*, 90, 1–13.
- Malehmir, A., Maries, G., Bäckström, E., Schön, M., and Marsden, P., 2017. Developing cost-effective seismic mineral exploration methods using a landstreamer and a drophammer. *Nature Scientific Reports*, 7, 10325.

Blötberget

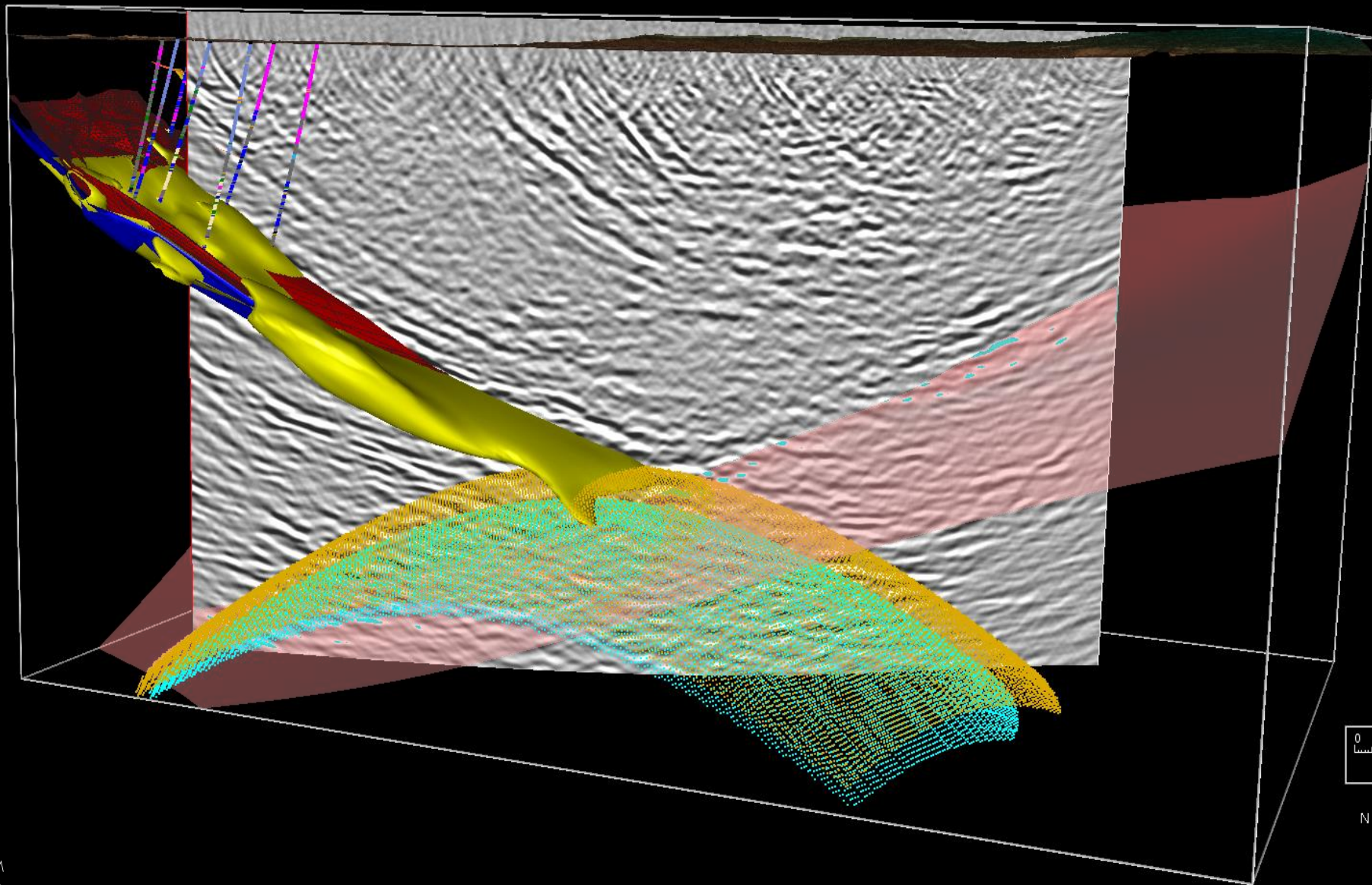
Known deposits



SMART
EXPLORATION
RESEARCH CENTER

Nordic
Iron Ore™





SMART
EXPLORATION
RESEARCH CENTER

Nordic
Iron OreTM