

# Rare Earths developer Search Minerals charging towards a 2022 PEA

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[Search Minerals Inc.](#) (TSXV: SMY | OTCQB: SHCMF) (“Search”) is an emerging rare earths developer with three properties in Labrador, Canada. The three are:

1. The Port Hope Simpson (PHS) property (flagship) – Includes Foxtrot, Deep Fox, Silver Fox, Awesome Fox, and Fox Meadow deposits.
2. The Henley Harbour Area in Southern Labrador, and
3. The Red Wine Complex located in Central Labrador, plus some newer [acquisitions](#).

**Search Minerals has a rare earths district scale opportunity in Labrador, Canada**



Source: [June 2021 corporate presentation](#)

At the Port Hope Simpson (PHS) property, Search is currently working on advancing its Direct Extraction Process test work, a resource upgrade, a Preliminary Economic Assessment (“PEA”) completed in Q1 2022 (fully funded), and a [demonstration plant](#) (subject to funding) to be operational in 2022. Search targets being ready to build its full-scale rare earths processing plant by the end of 2023 (subject to funding) and once complete to become a North American rare earths producer by about 2025 or shortly thereafter.

**The Direct Extraction Process test work – Bulk sample magnetic**

## **separation testing**

Current work at the flagship PHS Project consists of taking an ~80 tonnes bulk sample from the Deep Fox and the Foxtrot resources for the testing of the Magnetic Pilot Plant. Search [states](#): “The bulk sample will be used to scale up our successful bench scale results using Low Intensity Magnetic Separation (“LIMS”) along with Wet High Intensity Magnetic Separation process (“WHIMS”) to produce a Rare Earth Element concentrate for further testing of the Direct Extraction Process. The use of magnetic separation for rare earth ore processing is uniquely suited to our deposits in SE Labrador. The 80 tonnes bulk sample is expected to demonstrate that a continuous process involving crushing, grinding, and magnetic separation (LIMS and WHIMS) can treat large samples of mineralization from Foxtrot and Deep Fox and achieve the potential recoveries and quality of concentrates suggested by the small scale testing.”

## **PHS Project – Foxtrot/Deep Fox Resource PEA 2022 commencing and for completion in Q1 2022.**

Search recently [announced](#) the commissioning of a Preliminary Economic Assessment (“PEA”), for the combined Foxtrot/Deep Fox Resource, due for completion in Q1 2022, and called “PEA 2022”. Search is already [fully funded](#) to achieve PEA 2022.

This PEA is an expansion of the [2016 PEA](#) which included only the Foxtrot Resource and was based on a 1,000 tons per day processing rate. The post-tax NPV8% was C\$48 million with an IRR of 16.7%, an initial CapEx of C\$152 million, and a mine life of 14 years (8 years open pit, 6 years underground).

Search [states](#) that there are multiple improvements in the upcoming 2022 PEA including:

- PEA 2022 will incorporate the results of the 7000 m

drilling program completed at Deep Fox in 2021.

- The combination of the Deep Fox and Foxtrot resources will potentially allow for an increase in production rate to 2,000 tons per day compared to the 2016 PEA (1,000 tons/day).
- Assays from Deep Fox have shown higher grades of the key rare earth elements used in the permanent magnet market (neodymium, praseodymium, dysprosium and terbium) than those in Foxtrot.
- The optimization of the Direct Extraction Process in two pilot plant programs has resulted in increased recoveries of key elements (Nd, Pr, Dy, Tb).
- Magnetic separation in the mineral processing flowsheet results in multiple improvements such as production of an iron ore concentrate by-product and concentration of the rare earths to 15-27% of the ore mass resulting in a smaller extraction plant, and it opens the possibility of making a zirconium/hafnium by-product.
- The company will produce a mixed rare earth carbonate to supply the separation facility.
- New grinding and magnetic beneficiation added to the flowsheet to optimize capital and operating costs.
- Rare earth prices have increased significantly over the past year.

## **Catalysts**

Assay results from the recent 7,000 m drilling program completed at Deep Fox will be reported very soon once all the results have been received and interpreted. Following this investors can expect an updated resource estimation by October 31, 2021 and the 2022 PEA in Q1, 2022

There will also be news regarding early stage exploration at the company's Red Wine Complex located in Central Labrador and of

other possible district exploration in the following months.

Greg Andrews, President/CEO [stated](#) recently: “Our immediate goal is to advance our Critical Rare Earth Element District to production. This will require (a) advancing our **DEEP FOX** project to a measured and indicated resource, (b) providing engineering and economic studies such as Preliminary Economic Assessments and Feasibility Studies and (c) developing and submitting an Environmental Assessment report to initiate the environmental and permitting process for **DEEP FOX**. Our goal is to have the updated Preliminary Economic Assessment report by January 2022. Also, we will continue our exploration work in the District to advance some of our other prospects to be drill ready for 2022.”

**Search Minerals’ strategic plan and potential catalysts (PEA is now expected in Q1 2022)**



Source: [June 2021 corporate presentation](#)

### **Closing remarks**

Search is making steady progress on their milestones towards production, as they charge towards PEA results in the New Year. Investors can also look forward to assay results, a resource upgrade, direct extraction process test work results, and the 2022 PEA. The 2022 Foxtrot/Deep Fox PEA has potential to improve significantly on the 2016 Foxtrot PEA.

Search Minerals trades on a market cap of C\$52 million.