

# Voyageur's quest to become the only fully integrated company in the radiographic contrast media field accelerates timeline with design of a carbon neutral pharmaceutical plant

written by Tracy Weslosky | November 1, 2022

Did you know that when you go to the doctor and require an X-Ray or scan in many cases they use what's known as 'contrast media' to help diagnose the problem? Today's company is working to become the [only fully integrated company](#) in the radiographic contrast media field, by developing barium and iodine generic radiographic contrast media.

The company is [Voyageur Pharmaceuticals Ltd.](#) (TSXV: VM) (Voyageur). Voyageur's long-term vision is to serve both the barium and iodine contrast media markets, from a fully integrated supply chain: "From The Earth To The Bottle". Voyageur also has potential with 'fullerene-based' contrast agents with Voyageur recently [signing an MOU with Rain Cage Carbon Inc.](#) to develop the product.

Voyageur owns the mineral projects and is now building out the next steps towards the commercialization of their barium and iodine products.

Voyageur [state](#):

*“We have assembled a team of contrast media experts and world leading radiologists to drive our decision making for this important patient-led initiative, the starting point being several Health Canada licenses already approved for barium contrast media. Voyageur is now working with the FDA to register our products in the US market, whilst creating a drug dossier for the European and International markets. ”*

Voyageur previously [guided](#) that U.S FDA approval could potentially come about 120 days after a June FDA meeting, effectively by October to November 2022, which would be right about now. Of course, this is subject to delay or change.

**Voyageur is building a fully integrated supply chain, delivering high quality products to the market**



Source: [Voyageur Pharmaceuticals website](#)

### **Voyageur's roadmap towards barite start of production in 2024**

In a significant step forward towards achieving their vertical integration goal, Voyageur [announced](#) on September 22, 2022, that they have submitted a 'notice of work' with the BC Ministry of Mines for the removal of 2,000 tonnes of barite in 2023 from their Frances Creek Project. Upon approval, Voyageur intends to use the 2,000 tonne barite sample for testing on a new active pharmaceutical plant, tentatively scheduled to begin construction in 2023.

As [announced](#) on October 31, 2022 Voyageur has now completed the design of its carbon neutral pharmaceutical plant, with the total capital cost to be C\$30M (excluding land). Voyageur [states](#):

*“The manufacturing facility is designed to produce revenue*

*streams from pharmaceutical barium and iodine contrast media products for the radiology drug market. The plant is expected to produce additional revenue stream from industrial barite sales and produce carbon fullerene allotropes for the new drug development program. Voyageur has chosen to set up operations in Alberta, Canada.....The added benefit of de-carbonizing our customer base by utilizing our carbon credits will make our product line unique and attractive to ensure potential high growth.....The timeline for construction of the pharmaceutical manufacturing and R&D facility will take an estimated 18 months to complete, subject to financing. Upon completion of the facility, the processing of Frances Creek barium will commence.”*

Once the Frances Creek Project pilot plant is completed Voyageur will then submit a new ‘notice of work’ for a Small Quarry to the BC Ministry of Mines, with plans for full production in 2024.

By 2025 Voyageur plans to achieve ‘full’ vertical integration of barium and iodine contrast media products.

### **Voyageur’s timeline to achieve revenues and vertical integration**



Source: [Voyageur company presentation](#)

### **Voyageur’s business strategy**

Voyageur intends to initially generate positive cash flow from operations using third party contract pharmaceutical manufacturers in Canada and internationally. Next Voyageur has plans to build all the required infrastructure to become 100% self-sufficient with all manufacturing.

**Voyageur Pharmaceuticals aims to be the only company in the world to develop barium sulfate & iodine contrast products from**

**100% natural resource**



Source: [Voyageur company presentation](#)

Certainly, if Voyageur can pull off their ambitious plans to become a vertically integrated barium and iodine manufacturer then there is potentially good money to be made. The global addressable market for contrast media is forecast to grow from US\$4.7 billion in 2021 [to US\\$7 billion by 2028, at a CAGR of 7.7%](#).

Based on the PEA, the Frances Creek Project has [a NPV of \\$344 million with an IRR of 137%](#).

Voyageur Pharmaceuticals trades on a market cap of only ~[C\\$10M](#).

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## **Voyageur Pharmaceuticals' X-Ray Contrast Media Provides a Dramatic Increase in Valuation**

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Assuming you aren't a meme stock or an equity driven by the Reddit army, then you know you've told the market something it really wanted to hear when your stock is up 80% in one day. Even great news might get you a 5-10% bump so it has to be pretty exceptional to attract this kind of attention. Another indication of excitement is when this move occurs on volume that is 32x your average daily trading activity. If you didn't have

[Voyageur Pharmaceuticals Ltd.](#) (TSXV: VM) on your watchlist (or in your portfolio) prior to today, you might want to put it on your radar now.

So, what was the news that drove this bullish rally? We'll get to that in a moment as a little background may be required unless you are up to speed on the uses and importance of barium sulfate. Barium sulfate ( $\text{BaSO}_4$ ) is a naturally occurring environmentally friendly mineral with a high specific gravity (4.5) and very low solubility. Barium sulfate is used in many industrial applications and is in high demand. Voyageur is pursuing production into the highest margin market worldwide, having developed nine barium products for sale into the radiology pharmaceutical market for MRI, X-ray and CT scan applications.

Now that we've established that Voyageur is a drug manufacturing company focused on radiographic contrast media products for the healthcare market, we need to understand what separates it from most other companies. Voyageur is sourcing its own main ingredients from its own mineral deposits, building a business model that will allow it to be a fully integrated company in the radiographic marketplace. Voyageur is implementing a strategy to control its own supply chain and all input costs, leading to the Company motto "From the Earth to the Bottle". Which is where yesterday's news becomes important. The Company announced the results of its [Preliminary Economic Assessment](#) (PEA) for the development of its Frances Creek pharmaceutical barium sulfate project, located 40km from Radium Hot Springs in British Columbia. The base case economics for the project indicate a pre-tax net present value (NPV) of C\$464 million and internal rate of return (IRR) of 168%, while the post tax NPV is C\$344 million with an IRR of 137% at a discount rate of 8%. The project assumes a pre-production period of 2 years for equipment delivery and installation, and mine permitting with a payback

period of 11 months.

At present, Voyageur's Frances Creek project is the only natural pharmaceutical grade barium sulfate project outside of China. Most companies use high-cost synthetically made barium due to supply and quality constraints. Which is why current pricing of 97.5% BaSO<sub>4</sub> available from China has a delivered price (to Calgary) of US\$4,760 per tonne, or C\$5,960 per tonne. This project is very convenient for Voyageur given its proximity to Calgary where the corporate head office and manufacturing facilities are located. It's less than a 2 hour drive and although I don't know exactly where their asset is situated I'm pretty sure I've either fished or hiked within 5 kms of the project.

Another reason for the robust PEA economics is a function of the resource being a mere 2 meters below surface. I've said it before, and I'll say it again, any resource that can be accessed by someone with a good shovel has to have advantageous economics. The total capital cost estimate for the project is a miserly C\$36.4 million including a 15% contingency on process capital costs, which also contributes to the outstanding PEA economics.

And the best part is, Voyageur expects to be generating its own cash flow using third party barium active pharmaceutical ingredients and manufacturing in 2022. With its manufacturing partner Alberta Veterinarian Laboratories/Solvat it has [completed its first test batch of barium contrast media](#) and is working on clinical testing of this first batch to ensure quality and performance. Voyageur's goal is to complete testing for the Canadian product launch by February followed by a marketing campaign for sales into the Canadian radiology market. Ultimately, Voyageur has plans to build all the required infrastructure to become 100% self-sufficient with all

manufacturing but for now, one step at a time.

This isn't the first time Voyageur has seen a massive one day move on enormous trading volume. On February 12, 2021, following news of [Health Canada approval for SmoothX](#), a barium radiographic contrast suspension that is specifically formulated for computer tomography procedures (CT Scans), the stock was up 228% on 7 million shares. You could say Voyageur has a flare for the dramatic and perhaps there is still opportunity for lightning to strike a third time. With roughly 101 million shares outstanding, the market cap was roughly C\$18.2 million based on yesterday's close of \$0.18 versus the PEA NPV after tax of \$3.38 per share. Obviously, there is some work to be done before the Frances Creek project becomes a reality, but there's also a pretty big gap between yesterday's price and what could be.