

Energy Fuels Produces First Rare Earth Element Concentrate on a Pilot Scale at its White Mesa Mill (Video Link Included)

written by Raj Shah | November 3, 2020

November 3, 2020 ([Source](#)) – **Energy Fuels Inc.** (NYSE American: UUUU;TSX: [EFR](#)) (“**Energy Fuels**” or the “**Company**”) is pleased to announce that the Company has produced a rare earth element (“REE”) carbonate concentrate (“REE Concentrate”) on a pilot scale at its 100% owned White Mesa Mill (the “Mill”), located near Blanding, Utah. This REE Concentrate was produced using existing infrastructure and technologies at the Mill from a sample of monazite sands from a North American source. Monazite sands are a valuable natural uranium ore, which also contain high concentrations of REEs. The Mill recovered the high concentrations of REEs in the monazite sands, in addition to the contained uranium which will be sold into the nuclear fuel industry. The REE Concentrate produced this weekend is of high purity and is ready to be sent to a separation plant and further downstream REE processing facility for final acceptance test work.



Pilot-Scale REE Carbonate Production at Energy Fuels' White Mesa Mill from One (1) Tonne of Monazite in October 2020.

To the Company's knowledge, ***this is the first REE Concentrate produced from monazite sands at any significant quantity in North America in over twenty (20) years.***

Highlights:

- The Company announced its plan to enter the REE Sector on April 13, 2020.
- In just over six (6) months, the Company has graduated from laboratory scale testing to producing pilot scale REE Concentrate from a one (1) tonne sample of monazite sands mined in North America.
- The Company possesses three (3) tonnes of additional samples of these monazite sands, which it intends to process in the next two months to further refine the process for recovering REEs and uranium from these types of ores.
- This pilot scale testing demonstrates the substantial steps the Company has taken in recent months to re-establish the ability of the U.S. to recover REEs from monazite sands using existing facilities and technologies.
- The Company continues negotiations with various parties to

procure sources of monazite sands that can potentially be processed on a commercial scale at the Mill for the recovery of REE Concentrate and uranium.

- The Company is also in ongoing discussions on the possible sale of REE Concentrate produced at the Mill to an REE separation facility.

Mark S. Chalmers, Energy Fuels' President and CEO, stated:

“This past weekend, Energy Fuels achieved a major milestone in U.S. rare earth element production, when we successfully produced a REE Concentrate from a sample of monazite sands at our White Mesa Mill. Our Company literally accomplished REE production in months, because we utilized existing resources, infrastructure and technologies.

“While it is still early days, and we still have a lot of work to do, this is a proud moment, not just for me, but for the entire Energy Fuels team who has diligently worked on making REE Concentrate production a reality.

“The White Mesa Mill has a long history of recovering other metals along with uranium from uranium ores. Many of our ores from the Colorado Plateau contain vanadium, and the Mill has recovered over 54,000,000 pounds of vanadium as a co-product with uranium from these ores over the life of the Mill, making Energy Fuels the largest conventional vanadium producer in the U.S in recent years. Similarly, the Mill has recovered tantalum and niobium from uranium ores in the past. The recovery of REE Concentrate from monazite sands is no different in concept than the recovery of these other metals. As a result, the Mill is able to recover REEs along with uranium from these monazite sands using existing infrastructure and technologies at the Mill, with only minor routine process adjustments.

“This is the reason we believe we have the potential to enter

commercial REE production more quickly and inexpensively than others. By using existing infrastructure and technologies at the Mill to recover the uranium and the REEs from monazite sands, we are able to avoid the years of permitting and development, along with the tens, or even hundreds, of millions of dollars of capital that others would be faced with. Assuming the Company is able to secure adequate quantities of monazite sands, we expect to be in a position to produce commercial quantities of REE Concentrate by early 2021.

“Successful testing at scale also demonstrates the importance of the White Mesa Mill in helping the U.S. re-establish its domestic REE supply chain. While the recovery and management of uranium and other radionuclides is a critical hurdle in REE production for most other facilities, it is a function the White Mesa Mill has performed successfully and responsibly for over 40 years.

We are particularly excited about the potential of our REE project in light of the President’s October 1, 2020 Executive Order on Critical Minerals, which declared a state of emergency to address America’s overreliance on critical minerals from foreign adversaries, including the REE’s, uranium and vanadium that we have the ability to produce at the White Mesa Mill. Furthermore, our work with the U.S. Department of Energy and Penn State on recovering REE’s from coal-based resources is complementary to the commercial REE initiatives discussed in this release.

“Energy Fuels will always, first and foremost, be a uranium producer. We have been the number one uranium miner in the U.S. since 2017, a position we intend to keep for many years to come. However, when other complementary business opportunities arise with the potential to create significant cash flow utilizing our existing facilities and workforce, we will always take a hard

look at them with an eye toward building shareholder value.

“We look forward to providing further updates on our REE initiatives in the coming weeks and months as more milestones are reached.”

About Energy Fuels: Energy Fuels is a leading U.S.-based uranium mining company, supplying U_3O_8 to major nuclear utilities. The Company also produces vanadium from certain of its projects, as market conditions warrant, and is evaluating the potential to recover rare earth elements at its White Mesa Mill. Its corporate offices are in Lakewood, Colorado near Denver, and all of its assets and employees are in the United States. Energy Fuels holds three of America’s key uranium production centers: the White Mesa Mill in Utah, the Nichols Ranch in-situ recovery (“ISR”) Project in Wyoming, and the Alta Mesa ISR Project in Texas. The White Mesa Mill is the only conventional uranium mill operating in the U.S. today, has a licensed capacity of over 8 million pounds of U_3O_8 per year, and has the ability to produce vanadium when market conditions warrant. The Nichols Ranch ISR Project is on standby and has a licensed capacity of 2 million pounds of U_3O_8 per year. The Alta Mesa ISR Project is also on standby and has a licensed capacity of 1.5 million pounds of U_3O_8 per year. In addition to the above production facilities, Energy Fuels also has one of the largest NI 43-101 compliant uranium resource portfolios in the U.S. and several uranium and uranium/vanadium mining projects on standby and in various stages of permitting and development. The primary trading market for Energy Fuels’ common shares is the NYSE American under the trading symbol “UUUU,” and the Company’s common shares are also listed on the Toronto Stock Exchange under the trading symbol “EFR.” Energy Fuels’ website is www.energyfuels.com.

Cautionary Note: This news release contains certain “Forward

Looking Information” and “Forward Looking Statements” within the meaning of applicable United States and Canadian securities legislation, which may include, but are not limited to, statements with respect to: any expectation that the REE concentrate produced at the Mill under the pilot test will meet final acceptance criteria at an REE separation facility; any expectation that the Company will be able to recover uranium and REE concentrates from ores on a commercial basis; any expectation that the Company has the potential to enter commercial REE production more quickly and inexpensively than others; any expectation that the Company may be able to procure sources of monazite sand uranium ores that can be processed on a commercial scale; any expectation that the Company may enter into any commitments to sell REE concentrates to an REE separation facility on a commercial basis; any expectation that the White Mesa Mill may play a role in re-establishing the ability of the U.S. to recover both uranium and REE concentrates from natural uranium ores using existing facilities and technologies; and any expectations as to the outcome of the Company’s work with the U.S. Department of Energy and Penn State on recovering REE’s from coal-based resources. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as “plans,” “expects,” “does not expect,” “is expected,” “is likely,” “budgets,” “scheduled,” “estimates,” “forecasts,” “intends,” “anticipates,” “does not anticipate,” or “believes,” or variations of such words and phrases, or state that certain actions, events or results “may,” “could,” “would,” “might” or “will be taken,” “occur,” “be achieved” or “have the potential to.” All statements, other than statements of historical fact, herein are considered to be forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results,

performance or achievements express or implied by the forward-looking statements. Factors that could cause actual results to differ materially from those anticipated in these forward-looking statements include risks associated with any expectation that the REE concentrate produced at the Mill under the pilot test will meet final acceptance criteria at an REE separation facility; any expectation that the Company will be able to recover uranium and REE concentrates from ores on a commercial basis; any expectation that the Company has the potential to enter commercial REE production more quickly and inexpensively than others; any expectation that the Company may be able to procure sources of monazite sand uranium ores that can be processed on a commercial scale; any expectation that the Company may enter into any commitments to sell REE concentrates to an REE separation facility on a commercial basis; any expectation that the White Mesa Mill may play a role in re-establishing the ability of the U.S. to recover both uranium and REE concentrates from natural uranium ores using existing facilities and technologies; any expectations as to the outcome of the Company's work with the U.S. Department of Energy and Penn State on recovering REE's from coal-based resources; and the other factors described under the caption "Risk Factors" in the Company's most recently filed Annual Report on Form 10-K, which is available for review on EDGAR at www.sec.gov/edgar.shtml, on SEDAR at www.sedar.com, and on the Company's website at www.energyfuels.com. Forward-looking statements contained herein are made as of the date of this news release, and the Company disclaims, other than as required by law, any obligation to update any forward-looking statements whether as a result of new information, results, future events, circumstances, or if management's estimates or opinions should change, or otherwise. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated

in such statements. Accordingly, the reader is cautioned not to place undue reliance on forward-looking statements. The Company assumes no obligation to update the information in this communication, except as otherwise required by law.