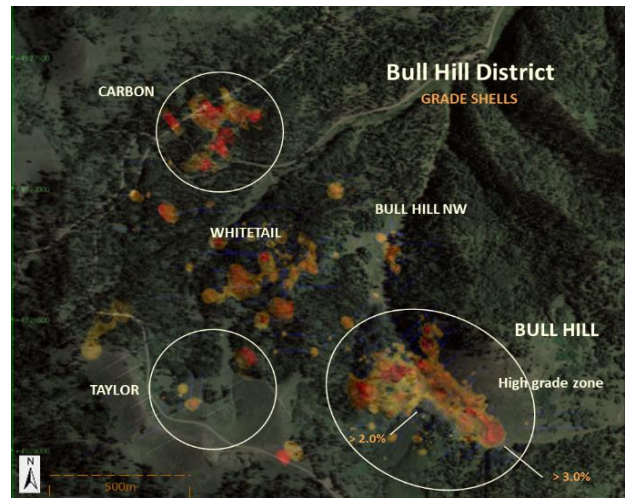


Bear Lodge Rare Earth Deposit

Excellent Distribution of Critical Rare Earth Elements (REE)

One of the highest-grade domestic deposits for critical magnet materials



LeapFrog image with distribution of the +2% (orange) and +3% TREO (red) grade shells based on RER's historical technical report filed in 2014

Premier Wyoming Location

- Pro-business focus
- Excellent infrastructure
- Easily accessible, low-cost power
- Skilled workforce and industry incentives
- Most-business-friendly tax climate

Well-Defined Mineral Asset

- Excellent distribution of magnet materials
- Near-surface, high-grade zone
- Additional targets identified and drilled



Demonstration Plant to Advance Innovative REE Recovery & Separation Process

RER and its partners are advancing a proprietary, high-efficiency REE recovery and separation technology and have successfully recovered >99.5% pure Nd/Pr oxide in pilot-plant testing.

In late 2022, the development team, which includes affiliates of General Atomics, one of the largest and most advanced technology companies in the world, and the U.S. Department of Energy (DoE), completed design of a rare earth demonstration plant to be built in Upton, WY. The Nuclear Regulatory Commission (NRC) license is expected in summer 2023, and construction is expected to commence in the second half of 2023. The DoE and Wyoming Energy Authority will provide over half of the estimated \$44M in costs.

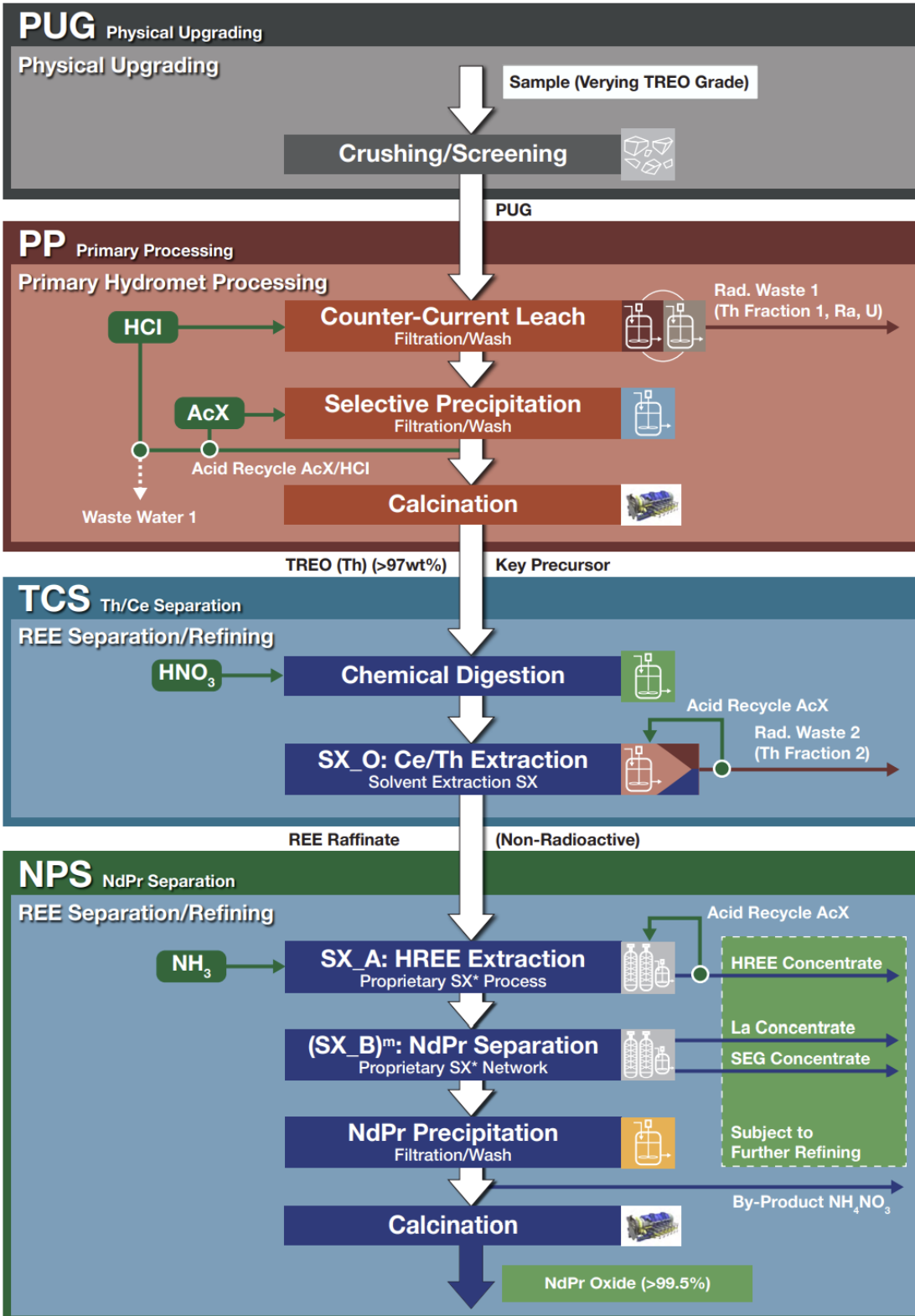
Rare Element Resources and its partners, through development of the Bear Lodge Project, are striving to become the cornerstone of a domestic REE supply chain, providing a consistent, high-quality source of critical components to advanced technology applications.

Rare Element Resources

720-278-2460

PO Box 271049, Littleton, CO 80127

Innovative REE Recovery & Separation



Crushes feed sample to 1-3mm sizing for further processing

Produces a 92-97% pure concentrate, separating the waste and a majority of the normally occurring radioactive material from the REE

Reduces remaining radioactive waste to desired end-product and regulatory requirements, as well as removes the cerium

Refines REEs into product groups, including a >99.5% pure Nd/Pr, a La product, as well as Sm/Eu/Gd (SEG) and heavy REEs concentrates amenable to further processing

Innovation leader, General Atomics, and its affiliates continue to advance the technology and will use the data generated from the planned demonstration plant as the framework for development of a commercial plant.

This document contains forward-looking statements within the meaning of U.S. and Canada securities legislation. Except for historical fact, certain information constitutes forward-looking statements, and are based on assumptions and analyses made by us in light of our experience and perception of historical trends, current conditions, expected future developments, and other factors that we believe are appropriate. Such forward-looking statements involve risks, uncertainties and other factors which may cause actual results or achievements to be materially different from future results or achievements expressed or implied. These risks and uncertainties include those described in the "Risk Factors" section of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, and our quarterly and other filings with the Securities and Exchange Commission, which are incorporated by reference in this presentation. Certain information herein has been obtained by us from our own records and from other sources deemed reliable, however no representation or warranty is made as to its accuracy or completeness. Mineralized asset information is derived from our historical 43-101 and must be updated to be deemed reliable.