EARTH CORE ELEMENTS TECHNOLOGIES

REVOLUTIONIZING RARE EARTH RECOVERY

Recovering Strategic Minerals, Rare Earth Elements, and Battery Metals Through Patented Closed-Loop Processing Technology

INVESTOR WHITE PAPER

VERSION 2.0

2026

- PATENT PROTECTED TECHNOLOGY
- 250 MILLION TONNES OF CONTROLLED RESOURCE ASSETS
- STRATEGIC RARE EARTH & BATTERY METAL RECOVERY
- DOMESTIC SUPPLY CHAIN SECURITY
- ENVIRONMENTAL RECLAMATION & CIRCULAR ECONOMY MODEL
- INNOVATIVE TECHNOLOGY PLATFORM

SECURING AMERICA'S FUTURE THROUGH INNOVATION, SUSTAINABILITY & RESOURCE INDEPENDENCE.

Letter From The CEO

Dear Investors, Partners, and Stakeholders,

The global economy is entering a new era defined by strategic minerals, advanced manufacturing, artificial intelligence infrastructure, energy storage, and national supply-chain security. Rare earth elements and critical minerals have become essential components of modern economic growth, yet access to these materials remains concentrated in a limited number of jurisdictions worldwide.

At Earth Core Elements Technologies, we believe one of the greatest opportunities of the coming decade lies not only in discovering new mineral resources, but in recovering valuable materials from resources that already exist above ground.

Our mission is simple: transform legacy coal tailings into strategic economic assets.

For decades, coal tailings have been viewed primarily as waste. However, advances in analytical testing and material recovery technologies have revealed that many of these historic deposits contain valuable concentrations of rare earth elements, battery metals, strategic minerals, and specialty materials essential to modern industry.

Earth Core Elements Technologies was founded to capitalize on this opportunity through a patented material separation process designed to recover valuable mineral fractions while supporting environmental restoration and sustainable resource development.

Our approach combines three powerful themes:

• Domestic critical mineral production

• Environmental stewardship and reclamation

• Innovative capital formation through digital asset technology

The Company currently controls approximately 250 million tonnes of coal-tailing resources and continues to evaluate additional acquisition opportunities throughout the Appalachian region. Independent testing and analysis have identified concentrations of rare earth elements, battery metals, and strategic materials that support further commercial evaluation.

The importance of domestic mineral production has never been greater. As governments, manufacturers, and investors increasingly focus on supply-chain resilience and strategic resource security, we believe Earth Core Elements is positioned to become a meaningful participant in the growing market for critical mineral recovery.

Our technology platform is supported by U.S. Patent No. 12,179,216 B2, which protects key aspects of our material separation and recovery process. This patent represents years of research, engineering, and innovation aimed at creating a scalable pathway toward domestic mineral recovery while addressing historic environmental liabilities.

To support commercialization of our technology and expansion of our operations, we have developed the RAER1 digital asset platform. The purpose of RAER1 is not to replace the

Executive Summary

Earth Core Elements is deploying a patented mechanical and green solvent closed-loop extraction process to recover rare earth elements (REEs), battery metals, and precious metals from coal tailings. Unlike chemical leaching, Earth Core Elements 's process uses air-crushing, magnetic separation, and high-G centrifugation to isolate valuable metals while maintaining carbon content. Residual tailings are reprocessed into cement-grade pellets, displacing high-carbon clinker and achieving a zero-waste, circular-economy solution.

Problem:

The problem facing the recovery of rare earth materials from coal tailings is the use of harsh acids and chemicals during the process that defeat the purpose of a greener approach to this problem. Traditionally, recovering rare earth elements from coal tailings has been challenging due to their low natural concentrations, the high cost and energy demands of conventional extraction methods, and the presence of hazardous materials such as radioactive elements. Additionally, the process generates large volumes of waste that require complex chemical treatment, increasing both environmental and operational risks.
Continuing issues with China with regard to availability of rare earth minerals required for critical infrastructure, aerospace, defense and consumer goods in the United States have been further aggravated by recent and wide ranging restrictions on all elements, including lithium, a critical element for batteries. "With China accounting for roughly 70 percent of rare earth mining, 90 percent of separation and processing, and 93 percent of magnet manufacturing—these developments will have major national security implications." [1]

Earth Core Elements 's Solution:

Earth Core Elements has utilized a patented system that includes a novel green approach to achieving the goal of recovering rare earth elements from coal tailings already out of the ground.

EARTH CORE ELEMENTS TECHNOLOGIES

Technology Overview

Earth Core Elements Technologies has developed a proprietary mineral recovery platform designed to recover valuable mineral fractions from legacy coal-tailing resources through advanced mechanical separation and material classification processes.

Unlike traditional rare earth extraction methods that frequently rely upon aggressive chemical leaching systems, Earth Core Elements' approach emphasizes mechanical separation, density

[1] (https://short-url.org/1d3MI 10/19/25)

classification, magnetic recovery, and centrifugal processing technologies designed to maximize recovery efficiency while minimizing environmental impact.

The Company's recovery platform is intended to process existing above-ground coal-tailing resources that contain measurable concentrations of rare earth elements, battery metals, strategic minerals, and specialty materials.

This approach offers several potential advantages:

• Utilization of existing above-ground resources

• Reduced environmental disturbance compared to conventional mining

• Recovery of multiple mineral classes from a single feedstock

• Potential integration with environmental remediation initiatives

• Scalable deployment across multiple coal-tailing locations

The Company's objective is to establish a repeatable recovery model capable of transforming historic mining waste into commercially valuable mineral products.

Patent Protected Recovery Process

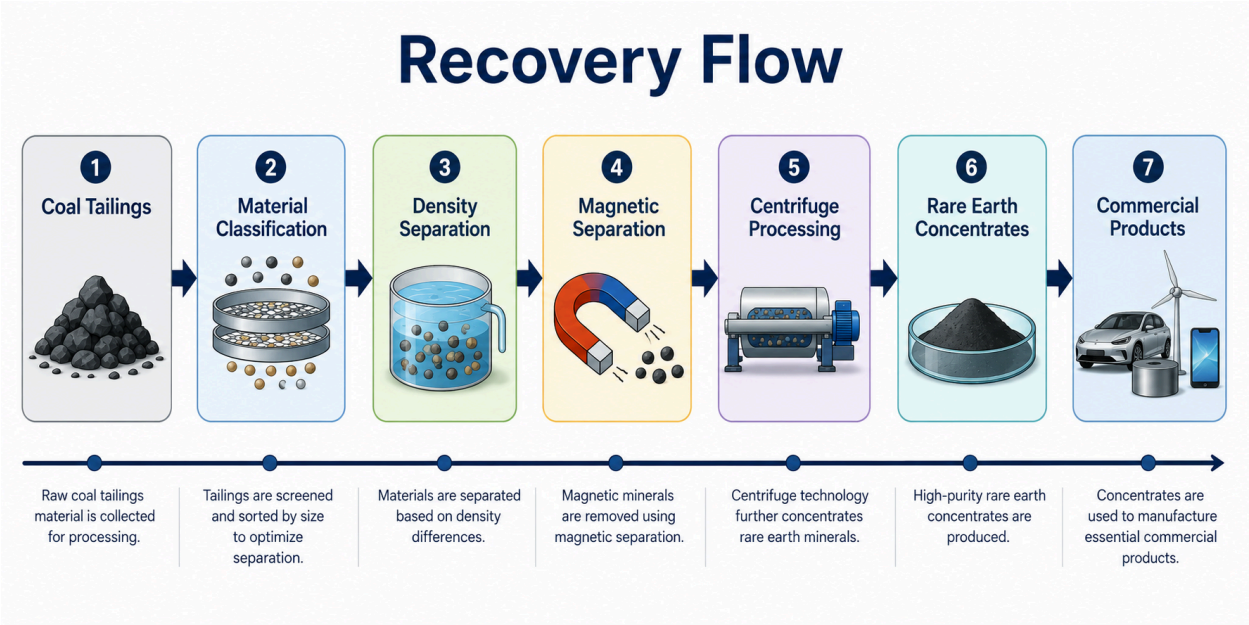
A significant component of Earth Core Elements' competitive advantage is its intellectual property portfolio.

The Company's recovery platform is supported by U.S. Patent No. 12,179,216 B2, issued on December 31, 2024, covering systems and methods for separating materials and recovering valuable fractions from raw feedstocks.

The patented process incorporates multiple stages of material classification and recovery designed to isolate valuable mineral fractions while reducing processing inefficiencies.

The process utilizes a combination of physical and mechanical separation technologies that enable selective concentration of target materials while minimizing waste generation.

Patent figures included in Appendix C illustrate the operational workflow and system architecture supporting the recovery platform.



Resource Assets

Earth Core Elements currently controls approximately 250 million tonnes of coal-tailing resources located throughout portions of the Appalachian Basin.

These resources represent historic byproducts of coal mining operations and contain measurable concentrations of rare earth elements, battery metals, specialty minerals, and other commercially valuable materials.

Current project focus areas include:

• Harlan County, Kentucky

• Letcher County, Kentucky

• McDowell County, West Virginia

These regions possess substantial historic coal production activity and corresponding tailing inventories suitable for evaluation under the Company's recovery methodology.

Because the material is already above ground, Earth Core Elements believes it may avoid certain development challenges commonly associated with traditional hard-rock mining projects.

Management continues to evaluate additional acquisition opportunities throughout Appalachia and believes significant expansion opportunities exist beyond currently controlled resources.

Independent Assay Analysis

Earth Core Elements has commissioned and reviewed independent analytical testing programs designed to evaluate the mineral composition of representative coal-tailing samples.

Testing methodologies have included advanced analytical techniques such as:

• ICP-MS

• ICP-OES

• ICP-AES

• SEM-EDS

• XRF analysis

• Density separation characterization

These testing programs identified measurable concentrations of numerous commercially significant materials including:

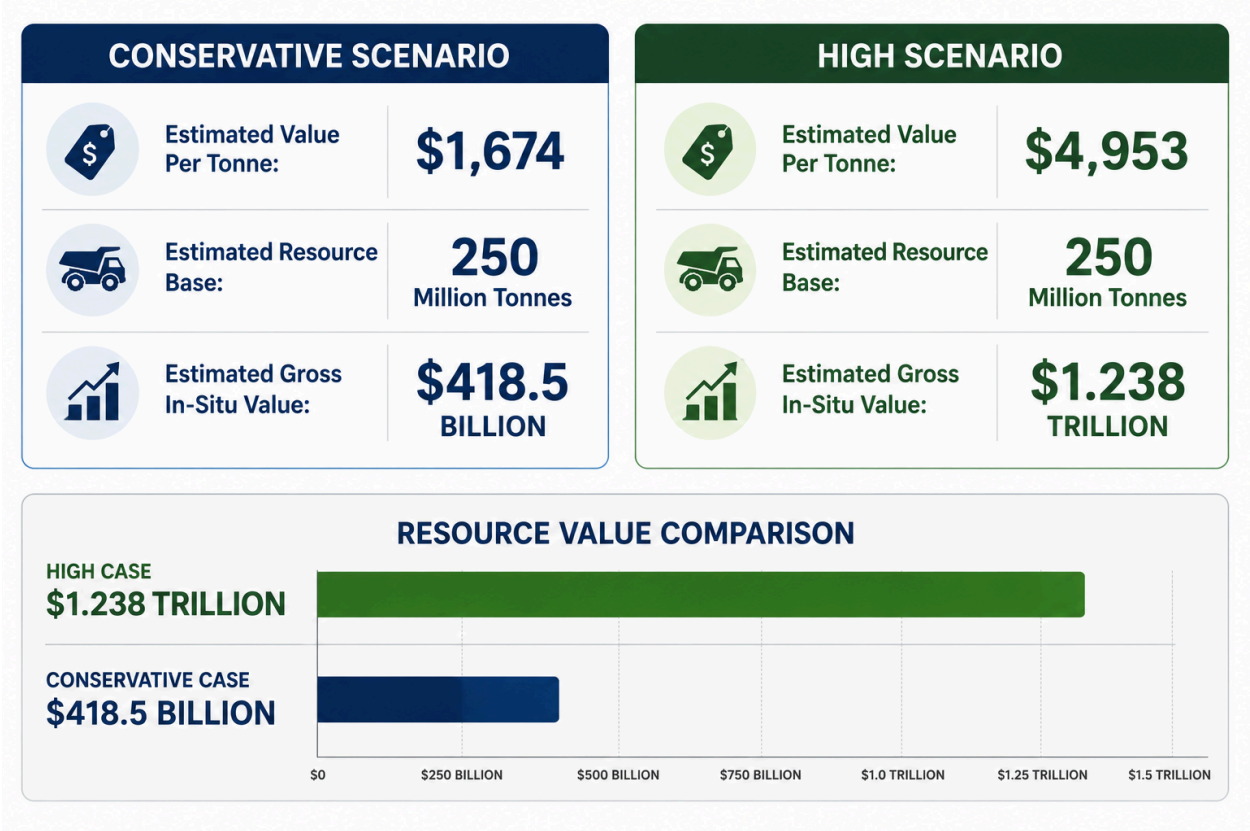
Rare Earth Elements

Independent laboratory results provide the foundation for the Company's ongoing evaluation of commercial recovery opportunities. Additional assay data and methodology summaries are included within the appendices of this document.

Gross In-Situ Mineral Value Analysis

Earth Core Elements has evaluated the potential contained mineral value of its controlled resource inventory using independent assay data and publicly available commodity pricing references.

Two primary assay scenarios were analyzed.



[redacted]

The value estimates above are derived from contained mineral concentrations identified through independent assay programs and corresponding commodity pricing assumptions.

These estimates represent contained mineral value only.

They should not be interpreted as:

• Proven reserves

• Probable reserves

• Recoverable reserves

• Economic reserves

• Enterprise value

• Market capitalization

Actual economic outcomes will depend upon recovery efficiencies, processing costs, commodity prices, capital expenditures, regulatory approvals, operating performance, and numerous additional factors.

Management believes these estimates demonstrate the scale of the underlying resource opportunity while recognizing that future commercial value will depend upon successful execution of the Company's commercialization strategy.

Competitive Advantages

Earth Core Elements believes it possesses several competitive advantages that differentiate the Company from both traditional mining operations and emerging mineral recovery technologies.

Patent Protection

Issued United States patent protection supporting the core recovery process.

Existing Resource Base

Approximately 250 million tonnes of material currently under control.

Domestic Supply Chain Relevance

Alignment with increasing demand for domestic production of strategic minerals and rare earth elements.

Environmental Benefits

Potential to support reclamation and beneficial reuse of historic mining waste.

Multi-Mineral Recovery Potential

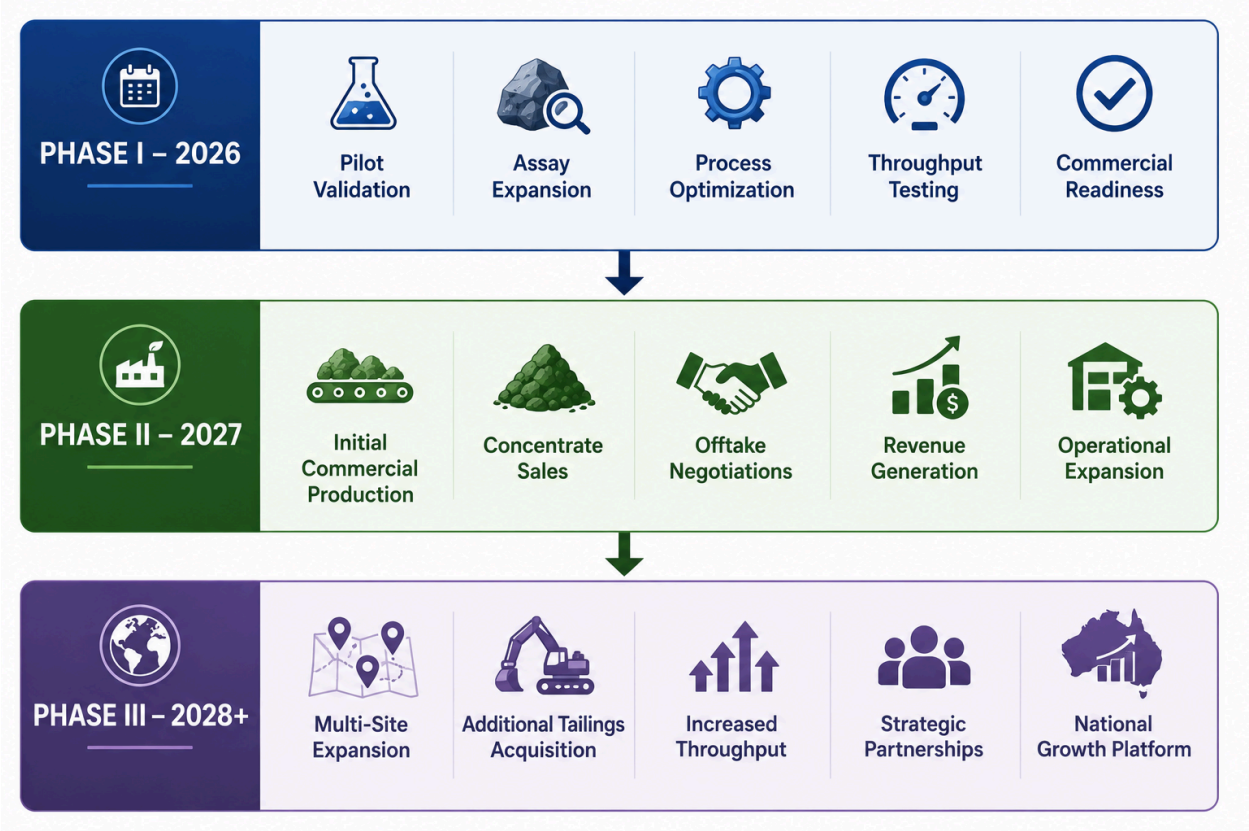
Ability to target multiple mineral categories from a single feedstock source.

Scalable Deployment Model

Potential expansion through acquisition of additional tailing resources and development of multiple processing facilities.

Commercialization Strategy

Earth Core Elements intends to transition from resource validation to commercial production through a phased development approach.



The Company believes this phased approach balances technical validation, operational execution, and financial discipline while supporting long-term growth objectives.

The ultimate goal is the development of a scalable domestic critical-mineral recovery platform capable of serving industrial, energy, technology, and defense-related supply chains.

The Project:

1. Recover REEs and critical minerals through 100% mechanical (zero-chemical) processes.

2. Quantify and verify greenhouse gas (GHG) reductions under ISO-compliant methodologies.
3. Demonstrate circular-economy principles in the Appalachian region.

4. Tokenize certified carbon and mineral credits via blockchain for transparent trading.

Earth Core Elements ' projects support the push for mineral and rare earth independence is evident in the US Government's legislation designed to strengthen the U.S. [2]

The Company Assets and Project Boundaries:

Geographic location: Coal-tailing impoundments in Harlan County (KY), Letcher County (KY),and McDowell County (WV).

Market Trends:

Key Facts

JPMorgan announced a new "Security and Resilience Initiative" aimed at investing in industries it deems vital to U.S. national security, including taking $10 billion in direct stakes in select companies.

The company says the initiative will focus on four key industries: Supply chain and advanced manufacturing, defense and aerospace, energy independence and resilience and frontier and strategic technologies, which are then further broken down into 27 sub-industries.

Shares of companies producing rare earths surged following the announcement – USA Rare Earth Inc. spiked 32%, MP Materials Corp. rose 24% and Lithium Americas Corp climbed 11%.

The announcement adds another $500 million to the $1 trillion JPMorgan said it had already set aside to support clients in areas like aerospace, energy and defense.

The Trump administration has been increasing its efforts to strengthen its stake in sectors like critical minerals as it continues to lock horns with China in trade negotiations.

Crucial Quote

"It has become painfully clear that the United States has allowed itself to become too reliant on unreliable sources of critical minerals, products and manufacturing—all of which are essential for our national security," said Jamie Dimon, Chairman and CEO of JPMorganChase.[3]

Mining Tailings Management Market Trends

Adoption of Advanced Tailings Storage and Recycling Technologies

- The increasing adoption of advanced tailings storage solutions, such as dry stacking, filtered tailings, and thickened tailings, is transforming the mining tailings management landscape by improving safety and reducing environmental impact. These technologies enable more efficient waste handling and minimize the risk of tailings dam failures, enhancing operational reliability

[2] https://www.congress.gov/bill/119th-congress/senate-bill/789

[3] https://www.forbes.com/sites/kirkogunrinde/2025/10/13/rare-earth-stocks-surge-on-jpmorgans-15-trillion-us-investment-pledge/

- Growing demand for sustainable and environmentally responsible mining practices is driving investment in tailings recycling and reuse methods. These approaches help recover valuable minerals from waste, reduce disposal volumes, and lower operational costs, creating both economic and ecological benefits
- The integration of digital monitoring systems and remote sensing technologies allows for real-time tailings dam monitoring, predictive maintenance, and early detection of structural issues. This leads to improved risk management and regulatory compliance for mining operators
    - For instance, in 2023, several copper and gold mines in Chile implemented filtered tailings systems, which reduced water usage, minimized environmental footprint, and improved overall safety, setting benchmarks for responsible tailings management
- While advanced technologies are driving efficiency and sustainability, their widespread adoption depends on cost-effectiveness, regulatory support, and workforce training. Companies must focus on scalable, locally adaptable solutions to fully capitalize on this market trend[4]

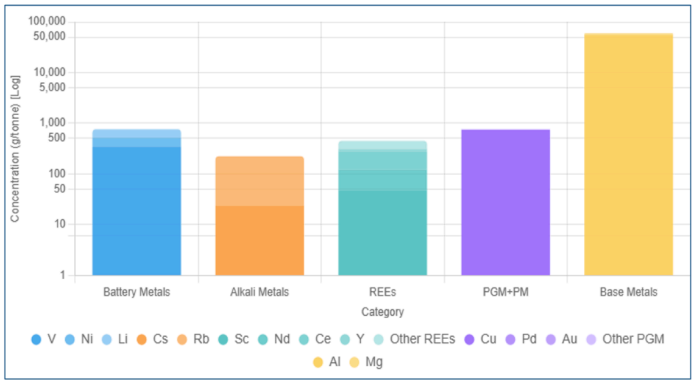
The System:

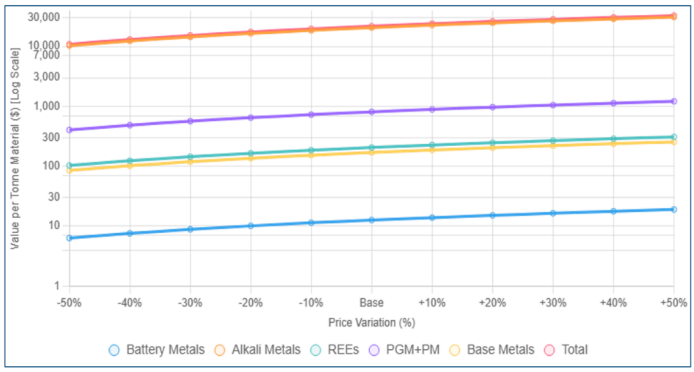
Tailings → Mechanical Processing → REE Concentrates + Cement Pellets.Timeline: 18-month commissioning; 20-year operational lifetime.

The assets owned are coal tailings, a byproduct of coal processing, containing 25 USGS designated critical transition metals, post-transition metals, rare earth and alkali metals, with . The material origin and holding location is an underground thermal coal mine located near the town of Roxana in Letcher County, Kentucky, Electric Mine Consortium (EMC) No. 9, Elkhorn Coal Seam No. 2. ICP-MS, ICP-OES, ICP-AES, SEM-EDS, XRF and fractional density measurements have been used to estimate the total metal fractions, waste rock attachment and density-based separation characteristics. Sampling was conducted from five locations and three depths throughout the pile, then homogenized to create a representative sample for characterization. The tailings exhibit a polymodal particle size distribution, comprising a mixture with a D_{95} of 250-µm, D_{50} of 36-µm and D_{10} of 3.7-µm. Density studies show that gangue reports to <2.4 g/cm^3 and high-density sulfides are assigned >2.7 g/cm^3; the middlings range of 2.4 to 2.7 g/cm^3 is the primary density from which the metals of value are concentrated. The majority constituents are aluminum (80,000 ppm), iron (29,000 ppm) and potassium (25,000 ppm), with magnesium (6,500 ppm), sulfur (4,500 ppm) and titanium (2,000 ppm) reporting as the middle concentration. Total Rare Earth Oxide (TREO) concentration is 234 ppm, with the majority as LREE. Rubidium is consistently found at 150 ppm. The host for the minor fractions are likely potassium-bearing aluminosilicate, pyrite, and fluorine bearing micas (e.g., fluorophlogopite). Concentrations of other critical elements, including Li (80 ppm), V (110 ppm), and Ga (26 ppm) were also confirmed, underscoring the potential for co-recovery. While there are hotspots of platinum-group-metals, the average is too low for economically viable recovery; however, palladium stands out as one in that group that may be viable and requires additional study. Given the X million tons of available tailings and samples measured, one can infer a marginal resource whose refined value is $X.

[4] https://www.databridgemarketresearch.com/reports/global-mining-tailings-management-market

Mineral Concentrations:

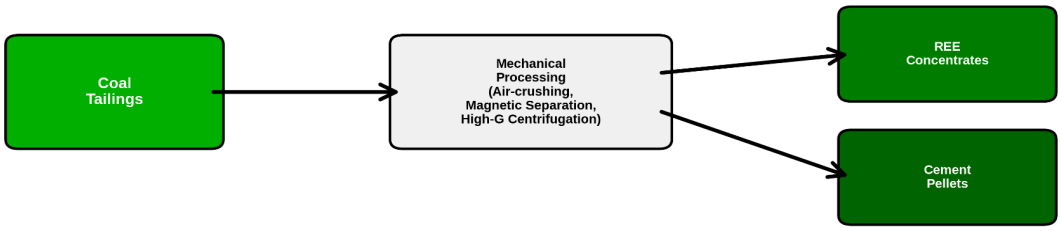




Average metal concentration from five grab samples of an 8.9 million tonne coal tailings pile located near Roxana in Letcher County, KY, originating from the Electric Mine Consortium No. 9, Elkhorn No. 2 coal seam. The samples were measured in triplicate using a 6-hr hydrofluoric acid digestion for ICP-MS. Additional measurements from ICP-OES, XRF and ICP-MS confirm the average values are within ±10%. The measurements do not qualify as a reserve base and any translation to the 106 million tonnes of available tailings is inferred and speculative.

The pile measured is 96% aluminum and magnesium by total mass. The value is tied up in the alkali metals, rubidium and cesium, at 86% and 8% respectively, yielding $20,600/tonne. Rare earth elements make up 0.73% of the mass and 0.94% of the value at an average of $206/tonne. The remaining platinum group metals and base metals represent 3.7% and 0.8% of the value at $809/ton and $170/ton. However, the global market for rubidium is no more than 7 tonnes; a low efficiency, high margin co-product process would be required to achieve an economically feasible position.

Renergy Closed-Loop Extraction Process



Tokenomics & Capital Raise Structure

Earth Core Elements is conducting a two-phase token offering designed to fund expansion, commercialization, and deployment of its patented closed-loop rare earth extraction process. The total target raise is USD $75,000,000, distributed across two strategic rounds.

The Seed Round focuses on early investors, strategic partners, and technology adopters, providing a low entry price to reward early participation. The Pre-ICO Round broadens access to institutional and accredited investors at a higher valuation, supporting Earth Core Elements ’s expansion into production and commercialization.

Funding Rounds

1. Capital Raise Structure

Round 1 (Seed / Early Adoptor):
• Remaining Raise Amount: $500,000
• Price: $0.63 per share/token equivalent
• Committed: $350,000
• Subscription Window: 10 days

•Total Seed Raise $850,000

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Gross In-Situ Mineral Value Analysis

Earth Core Elements Technologies currently controls approximately 250 million tonnes of coal-tailing resources located within the Appalachian Basin. Independent assay programs have identified concentrations of rare earth elements, battery metals, strategic minerals, and specialty metals within representative samples of these resources.

Based on independent assay analyses and commodity pricing assumptions available at the time of this report, Earth Core Elements estimates that the gross in-situ mineral value of its controlled resource inventory may range up to approximately $1.238 trillion under the higher-value assay scenario.

These estimates represent the theoretical contained value of minerals present within the resource base and are derived from projected mineral concentrations, estimated recoverable material content, and prevailing market prices for identified commodities.

The gross in-situ mineral value estimate should not be interpreted as:

• Enterprise value

• Market capitalization

• Fair market value of the Company

• Proven reserves

• Probable reserves

• Recoverable reserves

• Economic reserves

Actual economic value will depend upon numerous factors, including recovery efficiencies, processing costs, capital expenditures, operating expenses, permitting requirements, commodity prices, commercial-scale performance, and market conditions.

Management believes these estimates demonstrate the significant scale of the underlying resource opportunity and provide context regarding the potential economic importance of the Company's controlled tailing assets.

Following completion of the proposed $75 million capital raise, Earth Core Elements intends to accelerate commercialization of its patented recovery technology, expand operational capabilities, and further validate the economic potential of its resource inventory.

The Company's long-term value proposition is based upon the successful conversion of these resources into commercially recoverable mineral products through the deployment of its patented separation and recovery platform.

Tomer Vardi: President/CEO
Technology Entrepreneur and Sustainability Leader

Profile
Israeli-born, U.S.-trained computer science AI expert with 22+ years building and scaling enterprises in fintech, healthcare, real estate, and blockchain. Former NYC-based founder; now Chairman of Envision Holdings in Uvita, Costa Rica.
Key Ventures:
• Globecash, Interactive Clearing House, Delnorte, Constellation Healthcare, Envision Festival
—
• Introduced Costa Rica's first Bitcoin ATM; holds blockchain equity.
• Board member, Delnorte: Pioneers RWA tokenization for governments (e.g., El Salvador) and institutional clients.
Technical & Strategic Expertise
• AI systems, blockchain security, payment infrastructure, coding
• Healthcare clearinghouses, data center operations
• Tokenized asset platforms, regulatory-compliant admin systems
• Advises Fortune 100 on digital transformation and capital strategy
Sustainability Leadership

• Envision Festival (11th year): 10,000+ attendees; drives reforestation, permaculture, wellness
• Develops regenerative, solar-powered communities integrating biodiversity and local inclusion
Impact
Global board service; bridges institutional capital to high-growth, mission-driven ventures internationally

Dr David Martin

- Dr. Martin is the developer of several innovation-based quantitative indices of public equities and is the Founder of the Purple Bridge Funds.
- He managed the Innovation Alpha ETFs (NYSE:INAU; NYSE:INAG; and NYSE:TWAR).
- He is the creator of the public equity index – the CNBC IQ100 powered by M·CAM® which now is reported as a leading economic indicator for the U.S. and Global Innovation Economy published by The Conference Board.

Anthony Caruso

Ph.D., Physics and Astronomy, University of Nebraska, 2004

- **Education:** Ph.D. in Physics and Astronomy from the University of Nebraska-Lincoln in 2004, following an M.S. from the same institution in 2003.
- **Career:** Holds a professorship at the University of Missouri-Kansas City. Previously worked as a research scientist at the Center for Nanoscale.
- **Current Roles:** Serves as an Assistant Vice Chancellor for the University of Nebraska–Lincoln.

underlying business, but rather to provide a transparent and efficient mechanism through which participants may support the Company's growth and development.

We recognize that long-term value creation is built upon execution, discipline, and transparency. Our focus remains on advancing our patented technology, validating commercial-scale operations, expanding resource development opportunities, and building a sustainable business capable of generating meaningful long-term economic value.

On behalf of our management team, advisors, and partners, thank you for taking the time to review this opportunity.

We invite you to join us as we work to transform legacy resources into strategic assets and help strengthen the future of domestic critical mineral production.

Tomer Vardi
Chief Executive Officer
Earth Core Elements Technologies

Vesta Minerals Inc.

6126 S. Sandhill Road
Suite 100
Las Vegas, Nevada 89120
USA Telephone 702-716-0534

October 31, 2024

Re: **VESTA'S SAMPLE ROCEDURES**

Mr. Queener:

Each of your samples (Sample ID: #1 – 400440, Sample ID: #2 – 400441, Sample ID: #3 – 400442, Sample ID: #4 – 400443 and Sample ID: #5 – 400444) has undergone a series of steps to accomplish the best analysis possible.

1. Each sample is converted into a representative sample from the material received. The representative sample is then reduced by one or more mechanical methods to <100 mesh minus.

2. A large aliquot sample of the representative samples is created.
   - Approximately 2000mg or 5000mg of this sample is utilized when excess organics are present. The sample is then used in the production of the digested sample which is introduced to ICP-Mass Spectrometer.
   - Many other laboratories utilize only 100mg or 250mg of aliquot samples.

3. Certified high purity acids of Hydrochloric, Nitric, Sulfuric and Hydrofluoric with very low certified impurities are utilized to digest the aliquot sample.
   - Many other laboratories do not utilize Hydrofluoric Acid, which can and do increase errors in the final assays.

4. A Microwave Digester utilizing high pressure and temperature is applied to each sample.
   - Upon completion of each digestion, the samples are inspected.
   - When samples are not completely digested, Microwave Digestion is repeated up to 3 times.
   - We are not aware of any other laboratories that repeat the Microwave Digestion process beyond one time.

5. Each sample is directly compared element by element to a certified standard for each element.

6. All samples, acids and procedures are protected from contamination to minimize any potential calculation error.

Classification	Abbrev.	Element	Price/gram ($)	Vesta Concentration (PPM, g/tonne)	Vesta Price/Tonne Material ($)	REOTW Concentration (PPM, g/tonne)	REOTW Price/Tonne Material ($)	SK Concentration (PPM, g/tonne)	SK Price/Tonne Material ($)
BM	Al	Aluminum	0.0026	55194.0071	143.50	63208.0054	164.34	0	0
BM	Cd	Cadmium	0.0041	0.0820	0.00	0.2372	0.00	0	0
REE	Ce	Cerium	0.0054	154.0359	0.83	88.3491	0.48	0	0
BM	Cs	Cesium	2.0720	23.4334	48.55	7.1962	14.91	0	0
	Cr	Chromium	0.0122	0.9430	0.01	54.3171	0.66	0	0
BM	Co	Cobalt	0.0243	1.0735	0.03	14.4460	0.35	0	0
PM	Cu	Copper	0.0196	741.0907	14.53	47.2374	0.93	0	0
REE	Dy	Dysprosium	0.4080	8.8389	3.61	4.0989	1.67	0	0
REE	Er	Erbium	0.0280	4.6824	0.13	1.9349	0.05	0	0
REE	Eu	Europium	0.0320	2.7568	0.09	1.3901	0.04	0	0
REE	Gd	Gadolinium	0.0255	12.0880	0.31	5.9599	0.15	0	0
PM	Au	Gold	86.0300	1.4962	128.72	0.1260	10.84	0	0
REE	Ho	Holmium	0.0590	1.6097	0.09	0.7331	0.04	0	0
PGM+PM	Ir	Iridium	170.0000	0.0030	0.51	0.0311	5.28	0	0
	Fe	Iron	0.0091	14629.9090	133.13	29850.9196	271.64	0	0
REE	La	Lanthanum	0.0053	71.5314	0.38	43.5282	0.23	0	0
BM	Pb	Lead	0.0021	256.0714	0.54	30.3432	0.06	0	0
BM	Li	Lithium	0.0100	243.1432	2.43	70.1765	0.70	0	0
REE	Lu	Lutetium	0.6100	0.7680	0.47	0.2201	0.13	0	0
BM	Mg	Magnesium	0.0110	4130.8939	45.44	6242.8442	68.67	0	0
BM	Mn	Manganese	0.0027	600.9142	1.62	345.9916	0.93	0	0
REE	Nd	Neodymium	0.0830	73.1905	6.07	40.1043	3.33	0	0
BM	Ni	Nickel	0.0174	173.9320	3.03	36.5791	0.64	0	0
PGM+PM	Pd	Palladium	32.6200	12.1989	397.93	0.0924	3.02	0	0
PGM+PM	Pt	Platinum	31.9100	0.0150	0.48	0.0058	0.18	0	0
REE	Pr	Praseodymium	0.0830	20.1089	1.67	10.6819	0.89	0	0
PGM+PM	Rh	Rhodium	169.9600	0.1682	28.58	0.0042	0.71	0	0
	Rb	Rubidium	5.7000	242.8497	1384.24	94.3592	537.85	0	0
PGM+PM	Ru	Ruthenium	17.1100	0.0713	1.22	0.0022	0.04	0	0
REE	Sm	Samarium	0.0140	13.9290	0.20	7.6724	0.11	0	0
REE	Sc	Scandium	38.0000	48.4064	1839.44	10.4325	396.43	0	0
PM	Ag	Silver	1.0220	0.0000	0.00	0.1177	0.12	0	0
	Te	Tellurium	0.0989	0.0000	0.00	0.7086	0.07	0	0
REE	Tb	Terbium	1.5443	1.8803	2.90	0.7773	1.20	0	0
Radioactive	Tl	Thallium	1.0000	5.9162	5.92	1.2274	1.23	0	0
Radioactive	Th	Thorium	0.1830	22.8059	4.17	12.9090	2.36	0	0
REE	Tm	Thulium	5.0000	0.7242	3.62	0.2556	1.28	0	0
Radioactive	U	Uranium	0.1705	0.0000	0.00	2.6683	0.45	0	0
BM	V	Vanadium	2.2000	340.3418	748.75	82.1429	180.71	0	0
REE	Yb	Ytterbium	0.0034	4.6106	0.02	1.5645	0.01	0	0
REE	Yb	Yttrium	0.0003	30.7264	0.01	18.7884	0.01	0	0
BM	Zn	Zinc	0.0030	0.0000	0.00	440.5719	1.32	0	0

Vesta Total Value/Tonne Material ($)		4953.17	REOTW Total Value/Tonne Material ($)		1674.08	SK Total Value/Tonne Material ($)		
	Qty. (g/tonne)	Value ($)		Qty. (g/tonne)	Value ($)		Qty. (g/tonne)	Value ($)
Battery Metals	60963.8924	993.89	Battery Metals	70478.5343	432.65	Battery Metals	0.0000	0.0000
REEs	449.8873	1859.84	REEs	236.4911	406.06	REEs	0.0000	0.0000
PGM+PM	755.0431	571.96	PGM+PM	47.6167	21.11	PGM+PM	0.0000	0.0000
Radioactive	28.7221	10.09	Radioactive	16.8047	4.04	Radioactive	0.0000	0.0000
Rubidium	242.8497	1384.24	Rubidium	94.3592	537.85	Rubidium	0.0000	0.0000
Iron	14629.9090	133.13	Iron	29850.9196	271.64	Iron	0	0
TOTAL	77070.3037	4953.16	TOTAL	100724.7256	1673.35	TOTAL	0.0000	0.0000
Oz. / tonne	2718.5292		Oz. / tonne	3552.9004		Oz. / tonne	0.0000	
Lbs. / tonne	169.9081		Lbs. / tonne	222.0563		Lbs. / tonne	0.0000	

value on 250m tonnes:
$1,238,292,500,000 high end $418,520,000,000 low end

*we have 250m tonnes under our control however we can easily pick up another 500m

This 8.9m tons is $44b high end and $15b low end

To better understand your assays, please review the information below on how to read your assays.

Re: **Understanding Negative Numbers in Vesta's Assay**

Typically, assay analyses containing zero values indicate that these values are less than the detection limits of the Analytical Equipment, but this is incomplete information about the tested elements.

Stable Element and Positive Value:

1. When any element is stable and exists in the sample, it will carry a positive number.

Stable Element and Negative Value:

2. When any element is stable but has a negative value, it is an indicator that some of that element's isotopes exist but are unstable. Vesta Minerals programs the equipment to look for various isotopes of that element, and it will carry a negative number to identify the difference. These negative numbers are not a parts per million calculations. It is utilized to identify the presents of that element but in an unstable isotope which could be potentially stabilized.

Isotopic Element and Positive Value:

3. When testing an element's isotope and it exists in the sample, it will carry a positive number.

Isotopic Element and Negative Value:

4. When testing an element's isotope and it exists in the sample but is unstable, the isotopes are indicated by a negative number. These negative numbers are not a parts per million calculations. It is utilized to identify the presents of that element but in an unstable isotope which could be potentially stabilized.

I remain,

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