

US CRITICAL MATERIALS CORP.

BUSINESS SUMMARY



WINTER 2023





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Interested parties are urged to engage professional tax, legal, financial, and other advisors prior to making any investment or entering any transaction.

The mineral resource estimates contained herein are only estimates and

No assurance can be given that any particular level of recovery of minerals will be realized or that an identified resource will ever qualify as a commercially mineable or viable deposit which can be legally and economically exploited.

Statements relating to mineral reserves and resources are deemed to be forward looking statements, as they involve the implied assessment, based on certain estimates and assumptions, that the mineral reserves and resources described exist in the quantities predicted or estimated and may be profitably produced in the future.

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ABOUT US

US Critical Materials Corp. is a private rare earths exploration and development company with holdings in Montana and Idaho. The deposits at Sheep Creek, Montana are unique due to high grades of rare earths, low levels of thorium, large numbers of surface carbonatites, and confirmation of rare earths and other minerals at depth.

With a total rare-earth oxide content of almost 9 percent (89,932ppm), the Sheep Creek project is one of the richest mineralized properties in the United States. [REDACTED]

The deposit contains at least twelve of the “critical risk” minerals defined by the current administration.

PROJECT OVERVIEW

Sheep Creek is in Ravalli County, southwest Montana. The property encompasses 330 lode claims representing approximately 6,700 acres, or 10 square miles of total land package. The claims are on multiple-use ground administered by the U.S. Forest Service. Government maintenance fees are current for the 2022-2023 assessment year and the claims can be renewed annually. Exploration activities performed by US Critical Materials Corp. have identified more than 50 carbonatite dikes in the Sheep Creek district. **(See Exhibit 1)**

CARBONATITES

For nearly 50 years, *carbonatites (rare, mantle-derived, igneous rocks for the most part which are composed of carbonate minerals such as calcite and dolomite) have been the primary source of niobium and rare-earth elements (REEs), particularly the light REEs, including La, Ce, Pr, and Nd.

Over 50 surface carbonatite occurrences have been documented and sampled at Sheep Creek. This is an unusually high number. The Sheep Creek carbonatites are up to three meters wide and can be followed for more than 200 meters along strike. Important ore minerals identified include ancylite, allanite, low-thorium monazite, and columbite. The dikes are valuable for their contained light rare-earth elements and other strategic metals.

Most minerals are carbonates, fluorocarbonates, oxides, hydroxides, phosphates, and hydroxyl-silicates, which will be easy to get into solution with either a strong acid or base.

*** ROCKS HAVE BEEN IDENTIFIED AS CARBONATITE BASED UPON THESE KNOWN CRITERIA:**

1. Primarily >50 volume percent carbonate minerals, primarily calcite and/or dolomite, and containing <20 weight percent quartz.
2. Chondrite normalized enrichment in light rare-earth elements (LREE).
3. Chondrite normalized plot of the rare-earth elements (REE) shows no europium (Eu) depletion.
4. Barium (Ba) and Strontium (Sr) abundances are generally high.
5. Potassic (K) fensitization, alteration by relatively low-temperature metasomatic processes.

HIGH RARE-EARTH GRADES

The initial exploration programs were successful in identifying potentially economic grades of rare-earth elements. Grab and rock chip sampling of carbonatites indicate up to 18.0% total rare-earth elements ("REE"), including 2.4% (23,810ppm) combined neodymium and praseodymium, plus credits in niobium and other strategic metals. Of the 51 grab samples (the "Samples"), the average total rare-earth element content is 6.8%, including an average of 0.86% (8,640ppm) combined neodymium and praseodymium. Ten of the Samples were collected between 2009 and 2010 and 41 of the Samples were collected in 2021.

The US CRITICAL METATERIALS deposits contain at least twelve of the "critical risk" minerals defined by the current administration. These minerals include Cerium, Dysprosium, Europium, Gadolinium, Lanthanum, Neodymium, Niobium, Praseodymium, Scandium, Strontium, Yttrium, and Gallium.

LOW THORIUM

Generally speaking, the difficulty with mining for rare earths is the challenge of thorium. Unlike other U.S. deposits, US Critical Materials ore contains negligible amounts of thorium. Thorium, a radioactive compound, is not a rare-earth element, but is typically found with rare earths, especially in the United States. The unusually low thorium levels are expected to allow for easier environmental permitting, and safer, more economical mining. Thorium samples have consistently measured under 500 parts per million which negates the necessity of obtaining a Nuclear Regulatory Permit (NRC) permit.

FALL 2022-2023 EXPLORATION PROGRAM

The initial Fall 2023 exploration phase consisted of geologic mapping of the Project at a scale of 1:6,000. Drill sites will be mapped at the expanded scale of 1:1000. This scale will permit US Critical Materials geologists to define the surface extent of carbonatite dikes, which are known to contain the REEs. In addition to defining the orientation, length and width of the carbonatites, the fall program has facilitated the delineation of additional work, including more detailed sampling, drilling and geophysics. Mapping has served as the basis for the design of the rock and soil sampling programs along with the construction of geologic sections needed for the permitting and drilling program

The 2023 program included 21 underground rock-chip channel samples, 24 surface rock chip samples, 17 surface channel samples, 32 stream sediment samples and over 200 soil samples. Concurrent with geologic mapping of the Project, the Company is conducting geochemical sampling. In total, this phase of exploration will consist of collecting up to 500 rock and soil samples across the expanded Project. Sampling will focus on the carbonatite dikes. In addition, samples are being collected throughout the Project to fully characterize the lateral extent of REE mineralization and internal variations which possibly reflect light and heavy rare-earth element zonation. Results will be valuable in further examining the relative grade and distribution of mineralization across the Project and determining drilling targets.

SIGNIFICANT MINERALIZATION CONFIRMED AT DEPTH

One characteristic that sets Sheep Creek apart from most other rare earths projects in the U.S. is the fact that significant mineralization has been accessed and sampled underground via pre-existing mine workings.

US Critical Materials has recently confirmed mineralization at depth below high-grade surface samples of 17.05% TREO (**Total Rare-Earth Oxides**) and 16.44% TREO. Based on the presence of mineralization at depth, the technical team intends to focus exploration efforts on these promising zones. Two of three historic adits, Adit #3 and Adit #1, have been successfully opened and sampled. Samples have been sent for analysis at Activation Laboratories, a widely recognized leader in rare earths analyses located in Ancaster, Canada. Results from opening, mapping, and sampling of the underground workings will support the filing of a Plan of Operation with the U.S. Forest Service for summer 2024 drilling. **(See Exhibit 2)**

Horizontal tunnels excavated into the hillsides (also known as “adits”) on the property provide direct access to rare-earth mineralization, and continue underground approximately 400 feet. This is an extraordinary feature among current domestic rare earths projects. These adits were tunneled-in and developed during the late 1950's in pursuit of niobium (otherwise known as columbium), but had not been evaluated for rare-earth mineralization. These tunnels have been sealed since the 1960's. The companies exploring or mining in that area at the time had no use for the rare earths, which were first widely used in 1964 with the technological advent of Europium applications in color television. Today by contrast, these historic adits at the Sheep Creek property are of great benefit to US Critical Materials, as the carbonatite exposures afforded by the past underground workings greatly advance our understanding of this complex and unique geologic system. In October of 2022, US Critical Materials reopened two of these tunnels and found considerable banded carbonatite and rare-earth mineralization continuing from the same system as exposed at the surface.

The existence of accessible rare-earth mineralization in dikes and veins extending at least 400 feet below the surface is unique among existing domestic rare earths projects. To excavate and develop these adits today and replicate this type of confirmation of rare earths at that depth, a company would need a variety of permits and approvals, which in the current environment would be very difficult and expensive to obtain. Because of their historic status, the underground passages that US Critical Materials is exploring have not required these strict approvals, nor incurred the exorbitant costs which creating them would entail. US Critical Materials is a modern-day beneficiary of historical mining and exploration activities, as the adits are "grandfathered" and do not need further permitting. Being able to confirm significant mineralization underground has placed US Critical Materials far ahead of other rare earths projects, many of which are still waiting for permits and have spent huge sums of money to find out what is below the surface of their largely low-grade deposits. The benefits in terms of cost and time are incalculable.

ADIT #1

The carbonatite exposed in Adit #1 is up to 3 feet in width and can be followed for 270 feet along the drift. Ancylyte is present throughout the underground workings. Rock-chip channel samples were collected across the mineralized zone and will be analyzed for rare earths and other critical metals. 12 rock-chip channel samples were collected from Adit #1. A grab sample of ancylyte-bearing carbonatite analyzed in 2021 from a surface outcropping of the dike, about 50 feet above Adit #1 contained 16.44 % total rare-earth oxides, including: 16,563 ppm (1.66%) neodymium oxide; and 6,261 ppm (0.63%) praseodymium oxide.

ADIT #3

The carbonatite exposed in Adit #3 is accessed by a crosscut approximately 400 feet long at which point it intersects a northwest-southeast trending carbonatite that is developed over approximately 120 feet. The carbonatite in the mine workings correlate to carbonatites exposed in a trench cut 125 vertical feet above the adit. The carbonatite in Adit #3 has been measured in places at over 4 feet in width and is strongly banded with ancylyte, allanite and monazite. Nine rock-chip channel samples were collected from Adit #3. A grab sample of ancylyte-bearing carbonatite analyzed in 2021 from the trench above the adit contained 17.05% total rare-earth oxides, including: 15,746 ppm (1.57%) neodymium oxide; and 6,249 ppm (0.62%) praseodymium oxide.

A grab sample of carbonatite from the mine dump of Adit #3 (sample 21004) contained 7.26% total rare-earth oxides, including: 8,398 ppm (0.84%) neodymium oxide; and 3,101 ppm (0.31%) praseodymium oxide.

An XRF scan of the carbonatite underground in Adit #3 showed 8.7% cerium, 6.9% lanthanum, and 2.8% strontium.

POTENTIAL FOR BURIED DEPOSIT

In addition to rare-earth elements, Sheep Creek likely contains buried mineral deposits. The property is believed to have similar mineralogy (Gammons, 2020) to significant rare earths deposits around the world.

Mineralogically-speaking, the Sheep Creek area has similar characteristics to both the Mountain Pass rare earths deposit along the California-Nevada border, and the largest REE deposit in the world, the Bayan-Obo mine in China. This characterization is based on the initial 51 samples, regional studies (Gammons, 2019) and style of mineralization.

Specifically, the fenitization and associated minerals (i.e., phlogopite) observed at Sheep Creek are believed by US Critical Materials to be a signature of a potential larger body of carbonate magma of sufficient size and heat to cause alteration, which can also indicate a buried mineral deposit. Fenitization is a unique process of alkali metasomatism that is related to carbonatites or alkaline igneous rocks. **(See Exhibit 3)**

RESEARCH AT MONTANA TECH

Laboratory studies at Montana Tech include preparation of rock thin-sections, polished sections for SEM-EDS review and carbon and oxygen isotope determinations. Field activities include geologic mapping; collecting samples for laboratory mineral identification; developing deposit petrology; written reports of findings; and general assistance for exploration program when needed. Generative findings are ongoing.

(See Exhibit 4)

PERMITTING

US Critical Materials is in the process of assembling the information needed to submit a Plan of Operation for the 2024 summer drilling season. The exploration plan for Sheep Creek, 2022 and 2023, was granted by the US Forest Service.

SPRING 2024 FIELD WORK

- Property Exploration

The field geologists will begin further exploration, testing, and identifying carbonatites in the Spring 2024

- Exploratory Tunnels

The Company expects much activity at the newly opened mine workings 1 and 3, and intends to have its team open adit #2 as soon as possible.

- Exploratory Drilling

The geologists are also preparing for drilling in September 2024.

STRATEGIES FOR GROWTH 2023-2024

US Critical Materials strategy for growth includes development of our current properties, the continuing acquisition of new critical mineral properties within the U.S., creation of proprietary processing methods, commencement of a public relations campaign, the implementation of a government outreach program, and exploring financing options; including negotiating off take contracts and seeking end user investments, or possibly weighing a public / private sale of US Critical Materials.

- **ACQUISITION OF ADDITIONAL PROPERTIES**

US Critical Materials is aware that there are certain high quality critical mineral properties in the U.S. that have not been identified and are available for acquisition. Management, along with the Company geologists, have been in the mineral space for many years and have identified certain promising targets. US Critical Materials plans to acquire several of these properties in 2023 and 2024.

- **2023 METALLURGICAL AND PROCESSING STUDIES**

Idaho National Laboratories, Idaho Falls, Idaho, a division of the U.S. Department of Energy, has expressed an interest in examining rock from the Sheep Creek property to serve as a test-ore to develop improved methods for recovering rare-earth elements and other critical metals. Work has included mineral identification, distribution of elements in ore, and evaluating processing pathways including separation by gravity, separation by flotation, determining optimum grind-size, recovery through leaching, fractionation of elements, and flow-charts for multiple elements.

- **PUBLIC RELATIONS 2023 - 2024**


US Critical Materials has instituted a comprehensive public relations campaign to create awareness of the Sheep Creek deposit and the potential to have domestic rare earths production to reduce dependence on Chinese production and imports. The company has retained a well-respected and highly regarded public relations firm with whom it has formulated its PR campaign which is being executed in newsprint, digital media, and on TV.

This media campaign and exposure has created awareness for US Critical Materials in both the government and commercial sectors.

(See Exhibit 5)

- **GOVERNMENT RELATIONS 2023-2024**

US Critical Materials has retained experienced and well-established government relations firms to seek funding from DOD, DOE, and other federal agencies. **See Exhibit 6**



- **CAPITAL MARKETS FUNDING**

Based on the unprecedented demand, and limited supply of critical minerals, the Company is currently exploring many options regarding funding, and sale of mineral rights. US Critical Materials has been approached by funding sources and continues to seek the best scenario for the Company and its shareholders.

- **OFFTAKE CONTRACTS**

The Company is confident that it will be able to execute forward offtake contracts based on the imbalance in the marketplace, and activity of competitors. The contracts could be broad or targeted to each of the Company's many critical minerals. Rare earths projects with significantly lower critical mineral levels are currently negotiating and signing contracts with major end users. The contracts are long term, and do not require production for a few years.

- **END USER INVESTMENTS**

Due to the shortage of critical minerals, end users are investing at the beginning of the supply chain so they will not be shut out. Auto companies have recently been entering into contracts with, and have even been purchasing outright, mining companies with a focus on critical minerals. With the expected continuation of geopolitical volatility around the globe, and the ever-increasing need for a secure supply, we believe US Critical Materials will become an acquisition, joint venture or other target for not only auto companies, but a variety of other end users.

- **SALE OF US CRITICAL MATERIALS**

Based on the ever-increasing need for rare earths, US Critical Materials believes that it will become a desirable takeover target for the end users of critical minerals. At some point in the foreseeable future, a possible sale of the Company may be up for consideration.

INVESTMENT CONSIDERATIONS FOR US CRITICAL MATERIALS

There is a global rush to secure critical minerals, many of which are vital for consumers, industry, and military applications. The demand for these metals will accelerate sharply in the coming years as the world continues its transition to electric vehicles and more renewable energy sources. Critical minerals are important for electronics such as semiconductors, batteries, magnets, and electric vehicle motors. Unprecedented amounts of capital are entering the critical minerals sector, with many believing the world is entering a “super cycle.”

- **COMMODITY SUPER CYCLE**

Goldman Sachs recently released a report calling commodity outlook “An Underinvested Super Cycle.” Goldman forecasts raw materials will be the best performing asset class in 2023 with a return of 43 %. Many believe that some of the billions invested in cryptocurrencies will be redeployed in areas that forecast high returns and have underlying physical assets.

- **NATIONAL SECURITY**

There is limited supply of critical minerals globally. China controls 80-90 % of rare earths in the world. The U.S. is dependent on China for many of the elements necessary for not only consumer uses, but critical military and industrial applications as well, and is not permitted to buy and import these raw materials from China, but rather only to buy fully processed rare-earth-containing products and product components manufactured within China itself, under CCP rule. Thus in summary, the Chinese Communist Party in China has essentially weaponized its global rare earths domination.

US CRITICAL MATERIALS

- US Critical Materials is private and does not have to make decisions based on public markets or public stockholders.
- Ongoing exploration continues to make promising discoveries that increase the valuation of the Company.
- United States Geological Survey, Montana Bureau of Mines, Montana Technologic Institute (through a grant from US Army Research Lab), and The Boeing Corporation, have all documented the rare earths potential at Sheep Creek.
- Investments by Principals of US Critical Materials total well over 3 million dollars.
- US Critical Materials holds the mining rights to 336 claims at its Sheep Creek property, covering 6700 acres, which is approximately 10 square miles.
- The property holds at least 12 of the minerals deemed critical by the U.S. Government. These include **Cerium, Dysprosium, Europium, Gadolinium, Lanthanum, Neodymium, Niobium, Praseodymium, Scandium, Strontium, Yttrium, and Gallium.**
- High grades of rare earths set Sheep Creek apart from other U.S. rare earths projects.
- Sheep Creek TREO (**Total Rare-Earth Oxides**) grade is 90,000 parts per million, or 9.0%, based on samples collected from mineralized locations. The average grade of the five comparable US projects is 3,100 ppm, or 0.31%. **(See Exhibit 7)**
- Sheep Creek has thorium levels below 500 parts per million, which negates the necessity of an NRC permit. Higher levels of thorium can be a considerable detriment to processing and reclamation and its considerable presence in certain target areas could represent a “fatal flaw” for many mineral exploration projects.
- The Sheep Creek claims cover a district which has proven to have an unusually high number of surface carbonatites.
- US Critical Materials has only explored approximately 35% of its property. Mineralization is open along-trend.
- Only one company in the U.S. is currently producing rare earths. A market niche is open for rare-earth elements in general and the US Critical Materials project in particular.

MINERALIZATION AT DEPTH

- US Critical Materials has the advantage of having pre-existing, historic tunnels on-site that would require extensive permitting and would incur significant expenditures if they were to be excavated today.
- The on-site adits to which US Critical Materials has access provide a unique “window” into the wider extent of underground mineralization at Sheep Creek.
- These historic tunnels intersect mineralization at depth, demonstrating continuity of mineralization.
- US Critical Materials stands out as rare earths project in the U.S. that clearly demonstrates credible and significant underground mineralization that is directly accessible.
- Present day replacement cost of underground adits:
 - Difficult with today’s costs to replicate the underground workings that were developed in the 1950’s.
 - Uncertainty of obtaining regulatory approvals, which were unnecessary in the 1950’s.

GEOGRAPHIC LOCATION

- Montana is a mining-friendly state, with politicians who are friendly and encouraging to US Critical Materials.
- The Sheep Creek project boasts good access to highways, power, and water.

EXIT STRATEGY

- Public Offering
- Sale of Company

METHODOLOGY FOR DETERMINING VALUATION

Method for Inferred Resources

1. Inferred Resource as identified by the U.S. Geological Survey.
2. The minerals were identified as carbonatite based on the known definition:
 - a. Primarily > 50 volume percent carbonate minerals, primarily calcite and/or dolomite, and containing < 20 weight percent quartz.
 - b. Chondrite normalized enrichment in light rare-earth elements (LREE).
 - c. Chondrite normalized plot of the rare-earth elements (REE) shows no europium (Eu) depletion.
 - d. Barium (Ba) and Strontium (Sr) abundances are generally high.
 - e. Potassic (K) fenitization, alteration by relatively low-temperature metasomatic processes.
3. Have identified 50 surface carbonatites on the original 40 claim blocks.
4. Sample 50 surface samples at the carbonatites and send for analysis.
5. Identify locations of 3 adits (portals) excavated in the late 1950s and early 1960s in search of niobium. (No uses for REE existed at the time)
6. Three adits were located and two were safely excavated for access.
7. Adits #1 and #3 were entered and samples were collected for analysis at Activation Laboratories Inc. in Ancaster, Ontario, Canada (pending).
8. Adits #1 and #3 confirmed and 21 underground rock-chip samples, 24 surface rock-chip samples, and 17 surface channel samples were collected and sent for analysis. (pending)
9. A hand-held X-ray Fluorescence (XRF) scan of the carbonatite in adit #3 showed 8.7% cerium, 6.9% lanthanum, and 2.8% strontium.
10. Collected surface samples of carbonatite which were sent to be made into a ore concentrate
11. Surface concentrates sent to Activation Laboratories Inc. for analysis (pending)
12. Contact Harmen J. Keyser at Precision GeoSurveys Inc. in Canada to reserve a helicopter to fly a geophysical survey that commences after the snow melts in 2023.
13. Survey additional 183 claim blocks to surround the original 40 claim blocks to secure exploration target.
14. Plan to explore the 183 claim blocks to look for additional carbonatites.
15. The latest 2022 sampling included 32 sites of which 4 have a pan-concentrate and more than 200 soil samples sent for analysis. (pending)
16. Adit #2 is planned for excavation and access in 2023.
17. Drilling targets are needed to be selected and roads developed to access those sites in 2023.
18. Drilling is planned to commence once permits are submitted and approved.
19. Drill core will be logged on-site and carbonatite sections sent for elemental analysis.

Pending: Samples sent to analytical laboratory and awaiting report.

Based on the information collected to date, it is estimated that an underground buried carbonatite extends beneath the original 40 claim blocks (20 acres x 40 claim blocks=800 acres)

VALUATION

Total of 40 claims x 20 acres = 800 acres

1 acre = 43,560 square feet

800 acres = 34,848,000 square feet

34,840,000 square feet x 1 foot deep = 34,840,000 cubic feet

34,840,000 cubic feet / 27 cubic yard = 1,290,370.37 cubic yards

1,290,370 cubic yards x 0.765 mt per cubic yard = 987,133 mt

987,133 cubic yards x 4.0 g/cm³ (~ancylite) = 3,948,532 mt

Volume x Density = Mass (Vp=m)

Total Inferred Resource Value:

3,948,532 mt x \$11,000 mt = \$43,433,852,000

Mass x Inferred Value per metric ton = Total Inferred Value

Rare-Earth mineral densities:

Ancylite 3.95 g/cm³

Allanite 3.53 g/cm³

Bastnäsite 4.97 g/cm³

Monazite-(Ce) 5.15 g/cm³

US CRITICAL MATERIALS TEAM OF GEOLOGISTS

Peter Meistrick – Chief Geologist

Peter Meistrick is a senior geologist with more than thirty-five years of experience in property acquisition and project development. He has been a senior geologist with major companies such as Echo Bay Mining, Meridian Gold, and Agnico-Eagle. He received his Ph.D. in Geology from University of British Columbia, a M.S. from University of Montana and a B.A. from Bowdoin College.

Christopher H. Gammons – Geologist

Chris Gammons is a Professor in the Department of Geological Engineering at Montana Tech and a Professional Geologist in the State of Wyoming. He has over 20 years of experience in the classroom and almost 40 years of experience in the field. He has over 80 publications outlining research conducted on a spectrum of geological specializations. He received his Ph.D. in Geochemistry and Minerology from Penn State University and his B.Sc. from Bates College.

Virginia S. Gillerman – Geologist

Virginia Gillerman is an adjunct Professor at Boise State University and Associate Research Geologist with Idaho Geological Survey. Her research focuses on economic geology, mining and exploration, hydrothermal alteration and regional geology of Idaho. She received her Ph.D. and M.S. from the University of California, Berkeley and her B.S. from Carleton College.

US CRITICAL MATERIALS SENIOR DEVELOPMENT TEAM

James Hedrick – President & Director

James Hedrick was the rare-earth commodity specialist at the U.S. Geological Survey in Reston, Virginia (USGS) and a government employee in related fields for 32 years until his retirement. He is an expert on a variety of rare earths, minerals, and metal, including scandium, yttrium, zirconium, hafnium, thorium, and the mica group minerals. He has published over 300 articles and professional papers on mineral commodities, including over 100 publications at the USGS.

Geoffrey Williams – Chief Executive Officer & Director

Geoffrey Williams is an entrepreneur and principal investor, with extensive experience in corporate finance, mineral exploration, claim staking, mapping, assaying, and evaluating rare-earth properties. He has been chiefly responsible for identifying, amassing, and maintaining the company's current claims over the past 20 years.

Edward Cowle – Executive Chairman & Director

Edward Cowle is a Wall Street veteran and has been starting, financing, and advising companies for more than 20 years. He was the CEO of US CRITICAL MATERIALS's predecessor-company and has worked closely with senior management to identify and amass high-quality properties and claims. He is the founder, and currently a member of the Board of Laser Technology Inc., a world leader in laser-based law enforcement speed guns.

Deworth Williams –Senior Advisor & Director

Mr. Williams, a Senior Advisor to the Company, is a Founder and director of U.S. Critical Materials. He is the owner of Williams Investment Company and was the Founder of U.S. Rare Earths, Inc. (formerly Thorium Energy, Inc.) which owned the mineral rights to several rare earth properties within the United States. Mr. Williams is also a Founder, Director and Principal of Laser Technology, Inc., a private company established in 1984 that designs, manufactures and markets laser-measuring devices for use in recreation, and professional measurement, and is a world leader in laser-based speed detection guns for use in law enforcement.

Harvey Kaye – Executive V.P. Corporate Finance / Planning & Director

Mr. Kaye has more than 45 years of experience in providing financing, strategic planning and administrative leadership to large and small companies, both public and private, as an entrepreneur, investment banker, chairman, chief executive officer and director. Mr. Kaye was founder and Chairman of Board for Zero Gravity Solutions, Inc., an agricultural biotechnology company, where he currently serves as Director. Mr. Kaye was formerly founder, chairman, chief executive officer and president and CEO of Latitude Solutions, Inc. Latitude Solutions, Inc., a publicly traded holding company for several subsidiaries which provided products, processes, and services for contaminated water applications. Mr. Kaye has a BS in business from Temple University.



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT101824865	MT101824865	SHEEP CREEK 1	20 0040S 0220W 004
MT101824866	MT101824866	SHEEP CREEK 2	20 0040S 0220W 003
MT101824867	MT101824867	SHEEP CREEK 3	20 0040S 0220W 003
MT101824868	MT101824868	SHEEP CREEK 4	20 0040S 0220W 003
MT101824869	MT101824869	SHEEP CREEK 5	20 0040S 0220W 003
MT105254511	MT105254511	SC 6	20 0040S 0220W 009
MT101824870	MT101824870	SHEEP CREEK 7	20 0040S 0220W 003
MT101824871	MT101824871	SHEEP CREEK 8	20 0040S 0220W 003
MT101824872	MT101824872	SHEEP CREEK 9	20 0040S 0220W 003
MT101824873	MT101824873	SHEEP CREEK 10	20 0040S 0220W 004
MT101824874	MT101824874	SHEEP CREEK 11	20 0040S 0220W 003
MT101824875	MT101824875	SHEEP CREEK 12	20 0040S 0220W 003
MT105273114	MT105273114	SC 13	20 0040S 0220W 003
MT105273115	MT105273114	SC 14	20 0040S 0220W 004
MT105273116	MT105273114	SC 15	20 0040S 0220W 003
MT105273117	MT105273114	SC 16	20 0040S 0220W 003



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT105273118	MT105273114	SC 17	20 0040S 0220W 010
MT105273119	MT105273114	SC 18	20 0040S 0220W 010
MT105273120	MT105273114	SC 19	20 0040S 0220W 010
MT105273121	MT105273114	SC 20	20 0040S 0220W 010
MT105273122	MT105273114	SC 21	20 0040S 0220W 010
MT105273123	MT105273114	SC 22	20 0040S 0220W 010
MT105273124	MT105273114	SC 23	20 0040S 0220W 010
MT105273125	MT105273114	SC 24	20 0040S 0220W 010
MT105273126	MT105273114	SC 25	20 0040S 0220W 010
MT105273127	MT105273114	SC26	20 0040S 0220W 010
MT105273128	MT105273114	SC 27	20 0040S 0220W 010
MT105273129	MT105273114	SC 28	20 0040S 0220W 010
MT105273130	MT105273114	SC 29	20 0040S 0220W 010
MT105273131	MT105273114	SC 30	20 0040S 0220W 010
MT105273132	MT105273114	SC 31	20 0040S 0220W 010
MT105273133	MT105273114	SC 32	20 0040S 0220W 010



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT105273134	MT105273114	SC 33	20 0040S 0220W 010
MT105273135	MT105273114	SC 34	20 0040S 0220W 010
MT105273136	MT105273114	SC 35	20 0040S 0220W 010
MT105770942	MT105770942	SC 36	20 0040S 0220W 004
MT105770943	MT105770942	SC 37	20 0040S 0220W 004
MT105770944	MT105770942	SC 38	20 0040S 0220W 004
MT105770945	MT105770942	SC 39	20 0040S 0220W 004
MT105770946	MT105770942	SC 40	20 0040S 0220W 004
MT105770947	MT105770942	SC 41	20 0040S 0220W 004
MT105770948	MT105770942	SC 42	20 0040S 0220W 004
MT105774235	MT105774235	SC 43	20 0040S 0220W 011
MT105774189	MT105774189	SC 44	20 0040S 0220W 011
MT105774190	MT105774189	SC 45	20 0040S 0220W 010
MT105774191	MT105774189	SC 46	20 0040S 0220W 011
MT105774192	MT105774189	SC 47	20 0040S 0220W 011
MT105774193	MT105774189	SC 48	20 0040S 0220W 011



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT105774195	MT105774189	SC 50	20 0040S 0220W 010
MT105774196	MT105774189	SC 51	20 0040S 0220W 015
MT105774197	MT105774189	SC 52	20 0040S 0220W 014
MT105774198	MT105774189	SC 53	20 0040S 0220W 014
MT105774199	MT105774189	SC 54	20 0040S 0220W 014
MT105780609	MT105780609	SC 55	20 0040S 0220W 015
MT105780610	MT105780609	SC 56	20 0040S 0220W 003
MT105780611	MT105780609	SC 57	20 0040S 0220W 003
MT105780612	MT105780609	SC 58	20 0040S 0220W 003
MT105780613	MT105780609	SC 59	20 0040S 0220W 003
MT105780614	MT105780609	SC 60	20 0040S 0220W 002
MT105780615	MT105780609	SC 61	20 0040S 0220W 002
MT105780616	MT105780609	SC 62	20 0040S 0220W 010
MT105780617	MT105780609	SC 63	20 0040S 0220W 003
MT105780618	MT105780609	SC 64	20 0040S 0220W 011
MT105780619	MT105780609	SC 65	20 0040S 0220W 002



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT105780621	MT105780609	SC 67	20 0040S 0220W 011
MT105780622	MT105780609	SC 68	20 0040S 0220W 011
MT105780623	MT105780609	SC 69	20 0040S 0220W 011
MT105780624	MT105780609	SC 70	20 0040S 0220W 010
MT105780625	MT105780609	SC 71	20 0040S 0220W 011
MT105780626	MT105780609	SC 72	20 0040S 0220W 004
MT105780627	MT105780609	SC 73	20 0040S 0220W 009
MT105780628	MT105780609	SC 74	20 0040S 0220W 003
MT105780629	MT105780609	SC 75	20 0040S 0220W 009
MT105780630	MT105780609	SC 76	20 0040S 0220W 009
MT105780631	MT105780609	SC 77	20 0040S 0220W 009
MT105780632	MT105780609	SC 78	20 0040S 0220W 009
MT105780633	MT105780609	SC 79	20 0040S 0220W 009
MT105780634	MT105780609	SC 80	20 0040S 0220W 009
MT105780635	MT105780609	SC 81	20 0040S 0220W 010
MT105780636	MT105780609	SC 82	20 0040S 0220W 009



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT105780638	MT105780609	SC 84	20 0040S 0220W 009
MT105780639	MT105780609	SC 85	20 0040S 0220W 009
MT105780640	MT105780609	SC 86	20 0040S 0220W 009
MT105780641	MT105780609	SC 87	20 0040S 0220W 010
MT105780642	MT105780609	SC 88	20 0040S 0220W 010
MT105780643	MT105780609	SC 89	20 0040S 0220W 010
MT105780644	MT105780609	SC 90	20 0040S 0220W 009
MT105780645	MT105780609	SC 91	20 0040S 0220W 009
MT105780646	MT105780609	SC 92	20 0040S 0220W 009
MT105780647	MT105780609	SC 93	20 0040S 0220W 009
MT105780648	MT105780609	SC 94	20 0040S 0220W 009
MT105780649	MT105780609	SC 95	20 0040S 0220W 009
MT105780650	MT105780609	SC 96	20 0040S 0220W 009
MT105780651	MT105780609	SC 97	20 0040S 0220W 016
MT105780652	MT105780609	SC 98	20 0040S 0220W 016
MT105780653	MT105780609	SC 99	20 0040S 0220W 016



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT105780655	MT105780609	SC 101	20 0040S 0220W 016
MT105780656	MT105780609	SC 102	20 0040S 0220W 010
MT105780657	MT105780609	SC 103	20 0040S 0220W 010
MT105780658	MT105780609	SC 104	20 0040S 0220W 010
MT105780659	MT105780609	SC 105	20 0040S 0220W 010
MT105780660	MT105780609	SC 106	20 0040S 0220W 015
MT105780661	MT105780609	SC 107	20 0040S 0220W 009
MT105780662	MT105780609	SC 108	20 0040S 0220W 015
MT105780663	MT105780609	SC 109	20 0040S 0220W 016
MT105780664	MT105780609	SC 110	20 0040S 0220W 016
MT105780665	MT105780609	SC 111	20 0040S 0220W 016
MT105780666	MT105780609	SC 112	20 0040S 0220W 016
MT105780667	MT105780609	SC 113	20 0040S 0220W 016
MT105780668	MT105780609	SC 114	20 0040S 0220W 016
MT105780669	MT105780609	SC 115	20 0040S 0220W 016
MT105780670	MT105780609	SC 116	20 0040S 0220W 010



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT105780672	MT105780609	SC 118	20 0040S 0220W 010
MT105780673	MT105780609	SC 119	20 0040S 0220W 010
MT105780674	MT105780609	SC 120	20 0040S 0220W 010
MT105780675	MT105780609	SC 121	20 0040S 0220W 015
MT105780676	MT105780609	SC 122	20 0040S 0220W 015
MT105780677	MT105780609	SC 123	20 0040S 0220W 015
MT105780678	MT105780609	SC 124	20 0040S 0220W 016
MT105780679	MT105780609	SC 125	20 0040S 0220W 016
MT105780680	MT105780609	SC 126	20 0040S 0220W 016
MT105780681	MT105780609	SC 127	20 0040S 0220W 014
MT105780682	MT105780609	SC 128	20 0040S 0220W 014
MT105780683	MT105780609	SC 129	20 0040S 0220W 014
MT105780684	MT105780609	SC 130	20 0040S 0220W 015
MT105780685	MT105780609	SC 131	20 0040S 0220W 014
MT105780686	MT105780609	SC 132	20 0040S 0220W 014
MT105780687	MT105780609	SC 133	20 0040S 0220W 015



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT105780689	MT105780609	SC 135	20 0040S 0220W 015
MT105780690	MT105780609	SC 136	20 0040S 0220W 015
MT105780691	MT105780609	SC 137	20 0040S 0220W 015
MT105780692	MT105780609	SC 138	20 0040S 0220W 015
MT105780693	MT105780609	SC 139	20 0040S 0220W 014
MT105780694	MT105780609	SC 140	20 0040S 0220W 015
MT105780695	MT105780609	SC 141	20 0040S 0220W 015
MT105780696	MT105780609	SC 142	20 0040S 0220W 015
MT105780697	MT105780609	SC 143	20 0040S 0220W 015
MT105780698	MT105780609	SC 144	20 0040S 0220W 015
MT105780699	MT105780609	SC 145	20 0040S 0220W 015
MT105780700	MT105780609	SC 146	20 0040S 0220W 015
MT105780701	MT105780609	SC 147	20 0040S 0220W 015
MT105780702	MT105780609	SC 149	20 0040S 0220W 015
MT105780703	MT105780609	SC 149	20 0040S 0220W 015
MT105780704	MT105780609	SC 150	20 0040S 0220W 015



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT105780706	MT105780609	SC 152	20 0040S 0220W 015
MT105780707	MT105780609	SC 153	20 0040S 0220W 015
MT105780708	MT105780609	SC 154	20 0040S 0220W 015
MT105780709	MT105780609	SC 155	20 0040S 0220W 015
MT105780710	MT105780609	SC 156	20 0040S 0220W 022
MT105780711	MT105780609	SC 157	20 0040S 0220W 011
MT105780712	MT105780609	SC 158	20 0040S 0220W 011
MT105780713	MT105780609	SC 159	20 0040S 0220W 011
MT105780714	MT105780609	SC 160	20 0040S 0220W 011
MT105780715	MT105780609	SC 161	20 0040S 0220W 011
MT105780716	MT105780609	SC 162	20 0040S 0220W 011
MT105780717	MT105780609	SC 163	20 0040S 0220W 011
MT105780718	MT105780609	SC 164	20 0040S 0220W 011
MT105780719	MT105780609	SC 165	20 0040S 0220W 011
MT105780720	MT105780609	SC 166	20 0040S 0220W 011
MT105780721	MT105780609	SC 167	20 0040S 0220W 014



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT105780723	MT105780609	SC 169	20 0040S 0220W 014
MT105780724	MT105780609	SC 170	20 0040S 0220W 014
MT105780725	MT105780609	SC 171	20 0040S 0220W 014
MT105780726	MT105780609	SC 172	20 0040S 0220W 014
MT105780727	MT105780609	SC 173	20 0040S 0220W 014
MT105780728	MT105780609	SC 174	20 0040S 0220W 014
MT105780729	MT105780609	SC 175	20 0040S 0220W 014
MT105780730	MT105780609	SC 176	20 0040S 0220W 014
MT105780731	MT105780609	SC 177	20 0040S 0220W 009
MT105780734	MT105780609	SC 180	20 0040S 0220W 022
MT105780735	MT105780609	SC 181	20 0040S 0220W 009
MT105780736	MT105780609	SC 182	20 0040S 0220W 009
ID105781203	ID105781203	SC 183	20 0040S 0220W 024
ID105781204	ID105781203	SC 184	20 0040S 0220W 024
ID105781205	ID105781203	SC 185	08 0250N 0180E 025
ID105781206	ID105781203	SC 186	08 0250N 0180E 025



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Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT105780737	MT105780609	SC 188	20 0040S 0220W 004
MT105780738	MT105780609	SC 189	20 0040S 0220W 003
MT105780739	MT105780609	SC 190	20 0040S 0220W 003
MT105780740	MT105780609	SC 191	20 0040S 0220W 003
MT105780741	MT105780609	SC 192	20 0040S 0220W 003
MT105780742	MT105780609	SC 193	20 0040S 0220W 002
MT105780743	MT105780609	SC 194	20 0040S 0220W 003
MT105780744	MT105780609	SC 195	20 0040S 0220W 002
MT105780745	MT105780609	SC 196	20 0040S 0220W 002
MT105780746	MT105780609	SC 197	20 0040S 0220W 002
MT105780747	MT105780609	SC 198	20 0040S 0220W 002
MT105780748	MT105780609	SC 199	20 0040S 0220W 011
MT105780749	MT105780609	SC 200	20 0040S 0220W 011
MT105780750	MT105780609	SC 201	20 0040S 0220W 009
MT105780751	MT105780609	SC 202	20 0040S 0220W 009
MT105780752	MT105780609	SC 203	20 0040S 0220W 009
MT105780753	MT105780609	SC 204	20 0040S 0220W 009



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT105780755	MT105780609	SC 206	20 0040S 0220W 009
MT105780757	MT105780609	SC 208	20 0040S 0220W 009
MT105780767	MT105780609	SC 218	20 0040S 0220W 004
MT105780771	MT105780609	SC 222	20 0040S 0220W 004
MT106301178	MT106301178	SC 224	20 0030S 0220W 034
MT106301179	MT106301178	SC 225	20 0030S 0220W 034
MT106301180	MT106301178	SC 226	20 0030S 0220W 034
MT106301181	MT106301178	SC 227	20 0040S 0220W 003
MT106301182	MT106301178	SC 228	20 0030S 0220W 033
MT106301183	MT106301178	SC 229	20 0030S 0220W 033
MT106301184	MT106301178	SC 230	20 0030S 0220W 034
MT106301185	MT106301178	SC 231	20 0030S 0220W 034
MT106308115	MT106308115	SC 232	20 0030S 0220W 034
MT106308116	MT106308115	SC 233	20 0030S 0220W 034
MT106308117	MT106308115	SC 234	20 0030S 0220W 034
MT106308118	MT106308115	SC 235	20 0030S 0220W 034



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT106308120	MT106308115	SC 237	20 0040S 0220W 003
MT106308121	MT106308115	SC 238	20 0040S 0220W 003
MT106308122	MT106308115	SC 239	20 0030S 0220W 034
MT106308123	MT106308115	SC 240	20 0030S 0220W 034
MT106308124	MT106308115	SC 241	20 0030S 0220W 035
MT106308125	MT106308115	SC 242	20 0030S 0220W 035
MT106308126	MT106308115	SC 243	20 0030S 0220W 035
MT106308127	MT106308115	SC 244	20 0030S 0220W 034
MT106308128	MT106308115	SC 245	20 0040S 0220W 003
MT106308129	MT106308115	SC 246	20 0040S 0220W 002
MT106308130	MT106308115	SC 247	20 0030S 0220W 035
MT106308131	MT106308115	SC 248	20 0030S 0220W 035
MT106308132	MT106308115	SC 249	20 0030S 0220W 035
MT106308133	MT106308115	SC 250	20 0030S 0220W 035
MT106308134	MT106308115	SC 251	20 0030S 0220W 035
MT106308135	MT106308115	SC 252	20 0040S 0220W 002



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT106308137	MT106308115	SC 254	20 0030S 0220W 035
MT106308138	MT106308115	SC 255	20 0030S 0220W 035
MT106308139	MT106308115	SC 256	20 0030S 0220W 035
MT106308140	MT106308115	SC 257	20 0040S 0220W 002
MT106308141	MT106308115	SC 258	20 0030S 0220W 035
MT106308142	MT106308115	SC 259	20 0040S 0220W 002
MT106308143	MT106308115	SC 260	20 0040S 0220W 002
MT106308144	MT106308115	SC 261	20 0040S 0220W 011
MT106308145	MT106308115	SC 262	20 0040S 0220W 011
MT106308146	MT106308115	SC 263	20 0040S 0220W 001
MT106308147	MT106308115	SC 264	20 0040S 0220W 001
MT106308148	MT106308115	SC 265	20 0040S 0220W 001
MT106308149	MT106308115	SC 266	20 0040S 0220W 001
MT106308150	MT106308115	SC 267	20 0040S 0220W 001
MT106308151	MT106308115	SC 268	20 0040S 0220W 001
MT106308152	MT106308115	SC 270	20 0040S 0220W 001



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT106308154	MT106308115	SC 272	20 0040S 0220W 001
MT106308155	MT106308115	SC 273	20 0040S 0220W 001
MT106308156	MT106308115	SC 274	20 0040S 0220W 001
MT106308157	MT106308115	SC 275	20 0040S 0220W 001
MT106308158	MT106308115	SC 277	20 0040S 0220W 002
MT106308159	MT106308115	SC 278	20 0040S 0220W 001
MT106308160	MT106308115	SC 279	20 0040S 0220W 001
MT106308161	MT106308115	SC 280	20 0040S 0220W 012
MT106308162	MT106308115	SC 281	20 0040S 0220W 001
MT106308163	MT106308115	SC 282	20 0040S 0220W 012
MT106308164	MT106308115	SC 283	20 0040S 0220W 012
MT106308165	MT106308115	SC 284	20 0040S 0220W 002
MT106308166	MT106308115	SC 290	20 0040S 0220W 002
MT106308167	MT106308115	SC 291	20 0040S 0220W 011
MT106308168	MT106308115	SC 292	20 0040S 0220W 002
MT106308169	MT106308115	SC 293	20 0040S 0220W 002



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT106308171	MT106308115	SC 295	20 0040S 0220W 012
MT106308172	MT106308115	SC 296	20 0040S 0220W 011
MT106308173	MT106308115	SC 297	20 0040S 0220W 011
MT106308174	MT106308115	SC 303	20 0040S 0220W 011
MT106308175	MT106308115	SC 304	20 0040S 0220W 011
MT106308176	MT106308115	SC 305	20 0040S 0220W 011
MT106308177	MT106308115	SC 306	20 0040S 0220W 012
MT106308178	MT106308115	SC 307	20 0040S 0220W 012
MT106308179	MT106308115	SC 308	20 0040S 0220W 011
MT106308180	MT106308115	SC 309	20 0040S 0220W 011
MT106308181	MT106308115	SC 310	20 0040S 0220W 012
MT106308182	MT106308115	SC 311	20 0040S 0220W 012
MT106308183	MT106308115	SC 312	20 0040S 0220W 012
MT106308184	MT106308115	SC 313	20 0040S 0220W 013
MT106308185	MT106308115	SC 314	20 0040S 0220W 011
MT106308186	MT106308115	SC 316	20 0040S 0220W 011



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT106308188	MT106308115	SC 318	20 0040S 0220W 012
MT106308189	MT106308115	SC 319	20 0040S 0220W 012
MT106308190	MT106308115	SC 320	20 0040S 0220W 012
MT106308191	MT106308115	SC 321	20 0040S 0220W 012
MT106308192	MT106308115	SC 322	20 0040S 0220W 012
MT106308193	MT106308115	SC 323	20 0040S 0220W 011
ID106307135	ID106307122	SC 324	08 0250N 0190E 018
MT106308194	MT106308115	SC 325	20 0040S 0220W 014
MT106308195	MT106308115	SC 326	20 0040S 0220W 014
MT106308196	MT106308115	SC 327	20 0040S 0220W 013
MT106308197	MT106308115	SC 328	20 0040S 0220W 014
MT106308198	MT106308115	SC 331	20 0040S 0220W 014
MT106308199	MT106308115	SC 332	20 0040S 0220W 014
MT106308200	MT106308115	SC 335	20 0040S 0220W 014



US CRITICAL MATERIALS MONTANA MINING CLAIMS DECEMBER 2023

Serial Number	Lead File Number	Claim Name	Meridian Township Range Section
MT105824819	MT105824819	RE 1	20 0040S 0220W 004
MT105824820	MT105824819	RE 2	20 0040S 0220W 003
MT105824821	MT105824819	RE 3	20 0040S 0220W 003
MT105824822	MT105824819	RE 4	20 0040S 0220W 003
MT105824823	MT105824819	RE 5	20 0040S 0220W 003
MT105824824	MT105824819	RE 7	20 0040S 0220W 003
MT105824825	MT105824819	RE 8	20 0040S 0220W 003
			20 0040S 0220W 004
MT105824826	MT105824819	RE 9	20 0040S 0220W 003
			20 0040S 0220W 004
MT105824827	MT105824819	RE 10	20 0040S 0220W 004
MT105824828	MT105824819	RE 11	20 0040S 0220W 003
MT105824829	MT105824819	RE 12	20 0040S 0220W 003
MT105824830	MT105824819	RE 12F	20 0040S 0220W 003

EXHIBIT 2

(1 of 2)

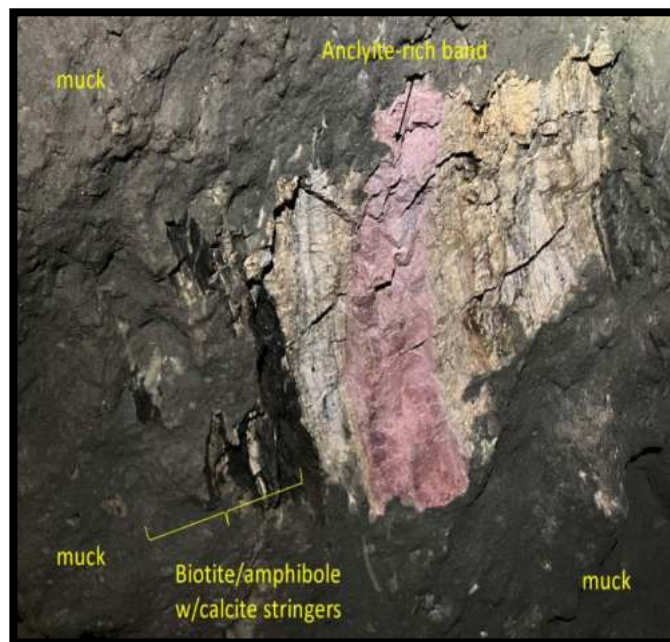
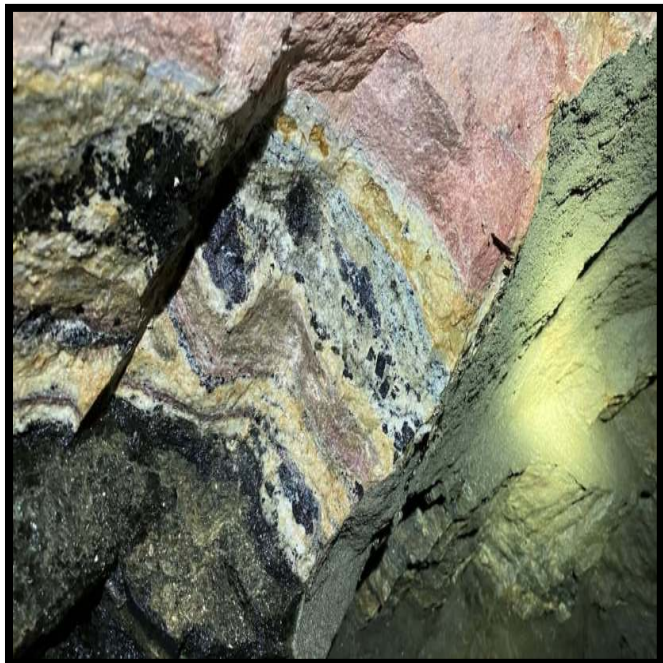
Sheep Creek Adits



EXHIBIT

(2 of 2)

Sheep Creek Adits



EXHIBIT

Fenitization as an indicator of a buried carbonatite at Sheep Creek, Montana

By James B. Hedrick President of US Critical Materials

The fenitization and associated minerals observed in the Sheep Creek is a signature of a potential larger body of carbonate magma of sufficient size and heat to cause alteration (Hedrick, 2011).

Fenitization is a unique process of alkali metasomatism (alters the rock that involves high heat and pressure) that is related to a carbonatite or alkaline igneous rocks. It is widely seen in the Mesoproterozoic carbonatite dykes in the Bayan Obo giant REE-Nb-Fe deposit in China. Fenitization associated with a carbonatite is an indicator of a REE mineralizing process (Shang, Hong-Rui, Kui-Feng, and others, 2018). Alkali silicate minerals, such as sodic amphibole, aegirine, and phlogopite is found in the two main orebodies of the Bayan Obo mine, the East and Main open pits, Inner Mongolia, China.

Chemically, fenitization removes Si and increases the alkalic elements such as Na, K, Mg, and Fe. There is a close relationship between fenitization and REE-Nb mineralization. This is demonstrated in several mineral districts including Rodeo de Los Molles, Argentina (Lira and Ripley, 1992), Fen complex, Norway (Brøgger, 1920), Strange Lake, Canada (Gysi and Williams-Jones, 2013), Bayan Obo, China (Shang, Hong-Rui, Kui-Feng, and others, 2018), Mianning-Dechang REE belt, China (Xie et al., 2014). Whether derived from the carbonatite or alkaline silicate magma, the alkali and REE-rich fenitizing fluids penetrate and interact with wallrock to form fenites, leading to the precipitation of REE-bearing minerals with a temperature decrease (Trofanenko et. al., 2016). As in the largest REE deposit in the world, the Bayan-Obo in China, the Sheep Creek area, Montana, USA, area has similar mineralogy with various REE minerals (allanite, ancylite, bastnäsite, monazite, parasite, synchysite, chevkinite, and Nb-aeschynite), Nb minerals (fersmite, baotite, columbite, pyrochlore, Nb-rutile) and Fe minerals (pyrite, marcasite, chalcopyrite, pyrrhotite, siderite, hematite, magnetite).

Based on the indicators, Montana may be renamed from “Big Sky Country” to “Big Rare Earth Country.”

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EXHIBIT



New investigations of the REE-Nb carbonatite deposits of southern Ravalli County, Montana, USA

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MINERALS FOR OUR FUTURE
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Purpose of Study

Domestic sources of REE's and critical metals are needed to support U.S. energy independence and the transition to a green economy. This study is looking in more detail at carbonatite-associated REE-niobium deposits in the Sheep Creek area of SW Montana. These deposits have been known since the 1960s (Crowley, 1960; Heinrich and Levinson, 1961), but very little modern work has been conducted since.

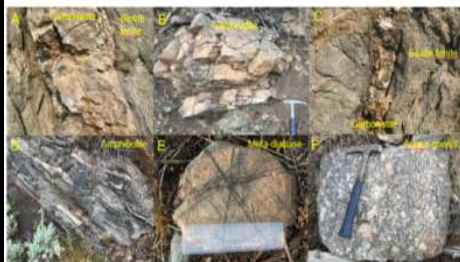
Location and Geology



Sheep Creek (circled) is located within the Montana-Idaho Alkaline Belt (MIAB). The MIAB contains several alkaline igneous complexes and REE-Th-rich mineral deposits.

Dozens of small carbonatite occurrences exist in the district. They are located within a 1.37 Ga meta-igneous complex consisting of amphibolite, biotite-hornblende gneiss, diabase, and augen gneiss. This suite of rocks extends to the SE into Idaho where similar REE-Nb-rich carbonatites exist. Meta-sedimentary rocks of the Belt Supergroup and Tertiary volcanic rocks to the north are unmineralized. The age of the carbonatites is up for debate, and will be addressed in further work.

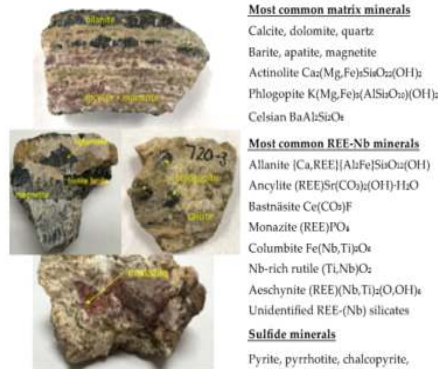
Rock types



Photos A, B, and C show how the carbonatites crop out in the field. The rusty weathering, dike-like carbonatites are often flanked by a biotite-rich fenite envelope (labeled above). Photos D, E and F are three distinct rocks of the meta-igneous complex. Veinlets cutting diabase in E are actinolite rich. Photo G (right) shows strong deformation of a carbonatite body along with fenitized (biotite-rich) wallrock.



Mineralogy



Most common matrix minerals

Calcite, dolomite, quartz
Barite, apatite, magnetite
Actinolite $\text{Ca}(\text{Mg}, \text{Fe})_3\text{Si}_2\text{O}_{10}(\text{OH})$
Phlogopite $\text{K}(\text{Mg}, \text{Fe})_3(\text{AlSi}_3\text{O}_{10})(\text{OH})$
Celsian $\text{BaAl}_2\text{Si}_2\text{O}_8$

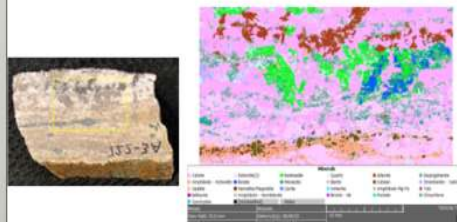
Most common REE-Nb minerals

Allanite $[\text{Ca}, \text{REE}][\text{AlFe}]\text{Si}_2\text{O}_7(\text{OH})$
Aegirine $(\text{REE})\text{Sr}(\text{CO}_3)_2(\text{OH}) \cdot \text{H}_2\text{O}$
Bastnaesite $\text{Ce}(\text{CO}_3)_3$
Monazite $(\text{REE})\text{PO}_4$
Columbite $\text{Fe}(\text{Nb}, \text{Ta})_2\text{O}_6$
Nb-rich rutile $(\text{Ti}, \text{Nb})\text{O}_2$
Aeschynite $(\text{REE})(\text{Nb}, \text{Ta})_2(\text{O}, \text{OH})_6$
Unidentified REE-(Nb) silicates

Sulfide minerals

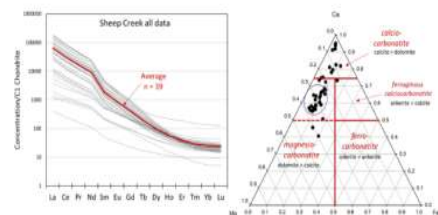
Pyrite, pyrrhotite, chalcopyrite, molybdenite, siegenite, cobaltite

Scanning Electron Microscopy



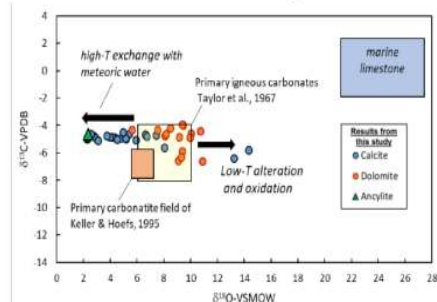
Automated SEM-EDS data are being collected using TIMA. In this thin section, 24 minerals were identified, although some of the rare minerals need confirmation with EPMA. The main REE minerals in this sample are allanite (red), bastnaesite (bright green), monazite (dark green), and a REE-(Nb)-silicate (blue), possibly birrite or chevkinite.

Geochemistry



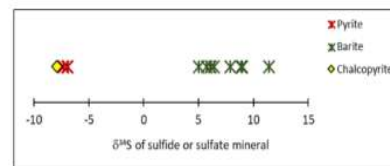
During the 2021 field campaign, 40 bulk samples of different outcrops of carbonatite and altered wallrock were sent to Activation Laboratories (Actlabs) for major and trace element analyses. The left diagram shows a very strong enrichment in the light REE (La through Eu), with no obvious Ce or Eu anomalies. In terms of their bulk chemistry, the samples show a cluster of dolomite-rich compositions (purple circle, right diagram) with a trend towards the calcite endmember that corresponds to higher REE concentrations.

Carbonate Isotopes



Most dolomite-rich carbonatite samples at Sheep Creek have C- and O-isotope values that plot near or within the primary igneous carbonatite field of Taylor et al. (1967). The calcite-carbonatites, as well as one anhydrite-rich sample, have similar $\delta^{13}\text{C}$ values as the dolomites, but are depleted in $\delta^{18}\text{O}$. This type of pattern could be explained by high-temperature (> 200°C) interaction with meteoric water (see Andersen et al., 2019). Carbonatites that have been strongly weathered and oxidized have heavier $\delta^{18}\text{O}$ values due to low temperature isotopic exchange with groundwater.

Sulfur Isotopes



The S-isotopic composition of barite (n = 8) range from +5 to +11.4 ‰, as compared to 1 chalcopyrite and 3 pyrite samples, which range from -6.9 to -7.9 ‰. The isotopic separation between coexisting sulfide and sulfate minerals is consistent with equilibration at temperatures between 400 and 550°C. This temperature range may represent the magmatic/hydrothermal transition for the cooling carbonatite magmas at Sheep Creek.

Further Work

With funding from an Army Research Lab grant to MTU, I hope to complete the following tasks in Year 2:

- More automated SEM-EDS (CAMP lab, MTU)
- LA-ICP-MS and electron microprobe analysis (USGS lab, Denver)
- Geochronology, including Re-Os of molybdenite and ⁴⁰Ar-³⁹Ar of biotite.

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EXHIBIT

Rubenstein Public Relations, Inc.



(www.rubensteinpr.com)

EXHIBIT 6

ThinkPolicy, LC



(www.thinkpolicy.org)

COMPARISON OF U.S. RARE EARTH PROJECTS

U.S. Rare Earth Projects	Company	La2O3	CeO2	Pr6O11	Nd2O3	Sm2O3	Eu2O3	Gd2O3	Tb2O3	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	Y2O3	Sc2O3	Other REO	Total REO	Nb2O3		
Sheep Creek, MT 1	U.S. Critical Materials	32434.8	43835.7	3399.1	9132.7	565.7	89.4	173.5	11.5	40.7	5.2	11.5	3.4	4.6	3.3	146.6	74.6		89932.3	1078.3	05 billion lbs. REO	
Elk Creek, NE	NioCorp Developments Ltd.	19.8	77.8	10.3	28.3	10.3	0.1	10.1	3.5	31.1	7.9	33.1	7.2	57.4	9.0	221.9	0.8		528.6			
Bokan Mountain, AK	Ucore Rare Metals, Inc.	300.0	400.0	100.0	200.0	50.0	10.0	100.0	50.0	100.0	50.0	50.0	10.0	50.0	10.0	300.0			1780.0			
La Paz Rare Earth and Scandium Project, AZ	American Rare Earths .	56.6	120.4	14.0	54.4	10.4	2.6	9.1	1.3	7.0	1.4	3.8	0.5	3.0	0.4	36.1	14.4		335.4			
Bear Lodge Project, WY	Rare Element Resources .	7450.0	11940.0	1360.0	4960.0	830.0	190.0	450.0	40.0	120.0		20.0				360.0		30.0	27750.0			
Round Top, TX	Texas Mineral Resources .	23.2	95.1	12.0	32.5	11.7	NA	11.6	4.0	34.8	9.0	37.8	8.1	65.4	10.0	271.7	1.0		627.9	164.58		
Mountain Pass, CA	MP Materials								ND	ND	ND	ND	ND	ND	ND				381002	2.94 billion lbs. REO		
Pea Ridge, MO Tailings Apatite		0.250	0.340		0.320	0.120		0.160		Tr	17			Tr		Tr			18.2			
Pea Ridge, MO Tailings Xenotime, Outer Zone		ND	ND		ND			1.7		3.4				2.3		57.0			64.4			
Pea Ridge, MO Tailings Monazite		28.9	34.6	18.0	11.9	2.2	Tr	1.1											96.7			
Total Pea Ridge Tailings (Apatite+Xenotime+Monazite)		29.2	34.9	18.0	12.2	2.3	0.0	3.0	0.0	3.4	17.0	0.0	0.0	2.3	0.0	57.0			179.3			
Rare Earth Element to Oxide conversion		1.1728	1.2284	1.2082	1.1664	1.1596	1.1579	1.1526	1.1510	1.1477	1.1455	1.1435	1.1421	1.1387	1.1371	1.2699	1.5338			1.4305		
ND Not Detected Tr Trace																						
1 Based on 31 samples from 31 carbonatites																						
2 MP Materials Annual Report, Mineral Resources, Inferred Resources within Pit,, As of 30 Dec 2022, p. 29.																						