Malaysia’s Decision is a Game Changer for Lynas Rare Earths

written by Tracy Weslosky | October 24, 2023
Lynas Rare Earths Ltd. (ASX: LYC), the Australian mining giant, recently breathed a sigh of relief. Malaysia’s government granted the firm a pivotal extension on their operating license, allowing them to continue importing and processing raw materials laden with naturally occurring radioactive elements until March 2026.

Donald Swartz on how ARR’s Halleck Creek Project could unlock America’s rare earths potential

written by InvestorNews | October 24, 2023
In a recent InvestorNews interview, Tracy Weslosky sat down with American Rare Earths Limited’s (ASX: ARR | OTCQB: ARRNF) CEO Donald Swartz to discuss the recent drilling results from their Halleck Creek Project in Wyoming, USA. Discussing the potential for a much larger, higher-grade rare earths resource, Donald explains how Halleck Creek signifies the largest rare earths opportunity in the USA.

Donald Swartz interview with Jack Lifton paints a bright future for American Rare Earths and Wyoming's mining landscape

written by InvestorNews | October 24, 2023

Jack Lifton, host of InvestorNews, recently sat down with Donald Swartz, the new CEO of American Rare Earths Limited (ASX: ARR | OTCQB: ARRNF), to delve deeper into the company's exciting developments in the rare earth sector. Here's a brief recap of their conversation:

Swartz shed light on the recent activity in the company's stock, attributing the upward momentum to the drilling results just released. Spotlighting the Halleck Creek project in Wyoming, Donald touted as the company's flagship project. Additionally, under Swartz's leadership and with CFO Jose Rico, the company has explored new prospects, most notably Beaver Creek, which has already yielded high-grade assay results of up to 13.9% TREO.

While the current work is based on grab samples, Swartz confirmed that drilling is next on the agenda. Engagements with service landowners are underway, with drilling scheduled to begin before winter.

Asked about the business's operating plan, Swartz revealed that results from the drilling at Halleck Creek will be available

around October-November, with additional resource exploration planned for both sites. A JORC report for Beaver Creek is anticipated this fall, and the drilling results from Halleck Creek will contribute to a PEA or PFS in early next year.

Neodymium and praseodymium, vital magnet metals, are the predominant rare earths in both deposits. Swartz aims to integrate these findings into a thorough economic analysis to determine the extent of metal concentration.

Swartz also addressed potential logistical challenges. Despite the high altitude of the deposits, Swartz remains optimistic. The advantageous location near major infrastructure—like power grids, water sources, and transport networks—positions American Rare Earths Limited for success. As the coal industry faces decline, Swartz hopes to leverage Wyoming's rich mining expertise for their projects.

This interview paints a bright future for American Rare Earths and Wyoming's mining landscape. As the company advances, all eyes will be on its promising developments in the rare earths sector.

To access the complete interview, click here

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About American Rare Earths Limited

American Rare Earths is committed to becoming a top supplier of critical minerals. The company is a leading explorer of rare earth projects, with a strong focus on developing sustainable and cost-effective extraction and processing methods. To meet the rapidly increasing demand for resources essential to the clean energy transition and US national security, American Rare

Earths is engaged in advanced study and continued exploration of its 100% owned rare earth element projects rich in the magnet elements of neodymium and praseodymium at Halleck Creek in Albany County, Wyoming and La Paz, Arizona. Both projects have the potential to be among North America's largest rare earth deposits. The Halleck Creek deposit was recently identified by Mining.com as fifth in the world's top rare earth projects. A recently released maiden JORC Resource report for Halleck Creek shows 1.43 billion tonnes of in-place TREO, 4.73 million tonnes TREO containing approximately 1.05 million tonnes of the highly desirable magnet metals neodymium and praseodymium. The Halleck Creek deposit is located approximately 70km north-east of Laramie encompassing portions of Albany and Platte Counties in Wyoming. The Company continues to evaluate other exploration opportunities and is collaborating with US Government-supported R&D to develop efficient processing and separation techniques of rare earth elements to help ensure a renewable future.

To know more about American Rare Earths Limited, click here

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Defense Metals’ Wicheeda Project: A Future Powerhouse in Rare Earth Production

written by InvestorNews | October 24, 2023
Defense Metals Corp. (TSXV: DEFN | OTCQB: DFMTF), known as ‘Defense Metals’, fully owns the Wicheeda Rare Earth Element Project, situated 80 km northeast of Prince George in British Columbia, Canada. This project is not only strategic but could emerge as a globally recognized hub for the production of critical magnet rare earths, specifically neodymium (Nd), praseodymium (Pd), cerium (Ce), and lanthanum (La). To put this into perspective, Defense Metals envisions that the Wicheeda Project might churn out 25,000tpa of REO, potentially accounting for roughly 10% of the world’s current output.

Analyzing Conflicting Reports of a Rare Earths Technology Ban by China

written by Steve Mackowski | October 24, 2023
Dynamic Reading – Is this the prodigy of today’s AI Report Writing phenomenon? I have been asked to write my thoughts on

the latest news about potential rare earths technology bans from China. The first reference I received was written by Shunsuke Tabeta, a staff writer for Nikkei Asia: China weighs export ban for rare-earth magnet tech

The second reference I received was written by Jingyue Hsiao of DIGITIMES Asia, Taipei. This was in response to the Nikkei Asia news: A rare earth war simmers as China reportedly to impose export ban

I then received the preparatory title of a response from one of the InvestorIntel journalists: "*What happens next if China bans rare earths technology needed to process rare earths and to make high-performance magnets*".

Lessons from the past

Got me thinking about how people's reading styles, capabilities, and mental processes appear to be controlling how they understand the reading matter and therefore influence the way they report or comment. Reminded me of a few years back when my granddaughter wasn't achieving at high school.

I purchased National Geographic subscriptions for us both and commenced a weekly telephone hook-up routine. We took turns investigating each article, with one being the interviewer developing the questions and the other, being the interviewee who had to answer the questions. Who, What, When, Where? With those satisfactorily answered you could then ask the key question: Why? Look at what this does. It focuses the mind to search for factual information BEFORE you look for answers that may be swayed by things such as bias, agendas, or less well-informed previous interactions. It also aids in memory retention.

Unpacking the articles

Look at the Nikkei headline: “export ban”. The DIGITIMES headline reads: “Rare earth war”. The InvestorIntel “What happens next”. These all point to and highlight the differences in the author’s history, experience, and understanding of the topic or their editorial bent.

I thought back and my favorite primary school teacher came to mind. She used these Who, What, When, Where, and Why prompts when I was learning to read. No, not read but understand. So Mrs. long-since-forgotten surname, thank you for your skills. But, I’ll lay claim to the Dynamic Reading title. BTW, it’s about now I’m expecting some hi-tech whiz kid to jump in and say that this tool is similar but opposite to the AI report writers that aggregate multi-article “Who, What, When, Where, and Why” information. Strange place the past!

So I’ll use Dynamic Reading to get to my response to the articles.

	Nikkei Asia (Japanese)	**DIGITIMES Asia (Taiwanese)**
Who	China. Un-named Beijing Officials	China
What	Considering prohibiting exports of certain rare earth magnet technology	China had updated a technology export restriction list which may ban the exports of certain rare earth elements
When	Later this year	Later this year
Where	Beijing	Beijing

What is really being written

Note already the difference in the What. Banning Rare earth magnet technology versus Rare earth elements. So, do I have enough to comment? To provide a Why? Well, not from that information, I need more.

The DIGITIMES Asia article cites Quartz as reporting that China is trying to defend its dominance in rare earths by increasing investments at home and abroad. This position is not supported by the Off-Market Sale of the East China Exploration (ECE) Group of their holdings in Arafura Resources Ltd. (ASX: ARU). Especially since Arafura is well progressed on its Nolans Project development schedule. And then Lynas Rare Earths Ltd. (ASX: LYC) is very well developed on their North American value-adding schedule.

To be honest, I have always had difficulty in developing an overview of how China aggregates and controls the Rare Earth business in China. Although the quotas and technology strategies appear to be working well on paper (their paper), it is not without some resistance from the regions that want more self-governance over their resources. Go no further than looking at the resource development battle between the light rare earths in Baotou, the heavy rare earths in Guangzhou, and the historic separation plants around Nanjing.

My conclusions

My take? Well, I would question: Is the news real or not? Is it part of a grander plan? I am sure that China can see the many developments occurring outside of China. And I am sure that China sees the projected growth in rare earths that are needed and coming from developing towards a Net Zero Carbon future. And I am sure that China must acknowledge that its pre-eminent

position is not so much as under threat but that it will lessen as the whole of the world looks to resource development for a global benefit.

So, my feelers are out for more information. Difficult though these days and especially now that TikTok bans are muddying the relationships. Let's just hope for everyone's future that China's People's Liberation Army ("PLA") venture into the Straights of Taiwan is not on, or part of, any strategic China agenda.

Oh, my granddaughter? She went from the bottom quartile of her class to be in the top 10%. And is now running her own business. Simply by being taught how to read.

Jack Lifton on Appia Rare Earths' Brazilian Acquisition and the Critical Minerals Institute Summit

written by InvestorNews | October 24, 2023

In this InvestorIntel interview, Tracy Weslosky talks with Critical Minerals Institute's (CMI) Co-Chairman Jack Lifton about why Appia Rare Earths & Uranium Corp.'s (CSE: API | OTCQX: APAAF) acquisition of a Brazilian rare earths ionic clay project, if finalized, will be an "intelligent vertical integration by Appia."

Speaking about Appia's Alces Lake Project as a "premier deposit

of neodymium-rich monazite in North America," Jack explains how the new Brazilian project will be synergistic with the Alces Lake Project. Jack discusses how the new Brazilian project can be a low radiation source of critical heavy rare earths such as dysprosium and terbium.

Speaking about the upcoming Critical Minerals Institute Summit II (CMI Summit II) to be held in Toronto on June 14-15, 2023, Jack discusses that he intends to address if the North American industry can become self-sufficient in critical minerals. He goes on to discuss how the shortage of experienced competent mining engineers, in some ways, is a bigger problem for the Western world than the supply of critical minerals.

To access the full episode, click here.

Subscribe to the InvestorIntel YouTube channel by clicking here.

About The Critical Minerals Institute

The **Critical Minerals Institute** or **CMI** is an international organization for critical mineral companies and professionals focused on battery and technology materials, defense metals, and ESG technologies in the EV market. Offering a wide range of B2B service solutions, the **Critical Minerals Institute** hosts both online and in-person events designed for education, collaboration, and service solutions that address critical mineral challenges for a decarbonized economy.

To learn more about The Critical Minerals Institute, click here.

Ucore’s rare earths processing technology facility offers Louisiana a blue ribbon opportunity for the critical minerals supply chain

written by InvestorNews | October 24, 2023

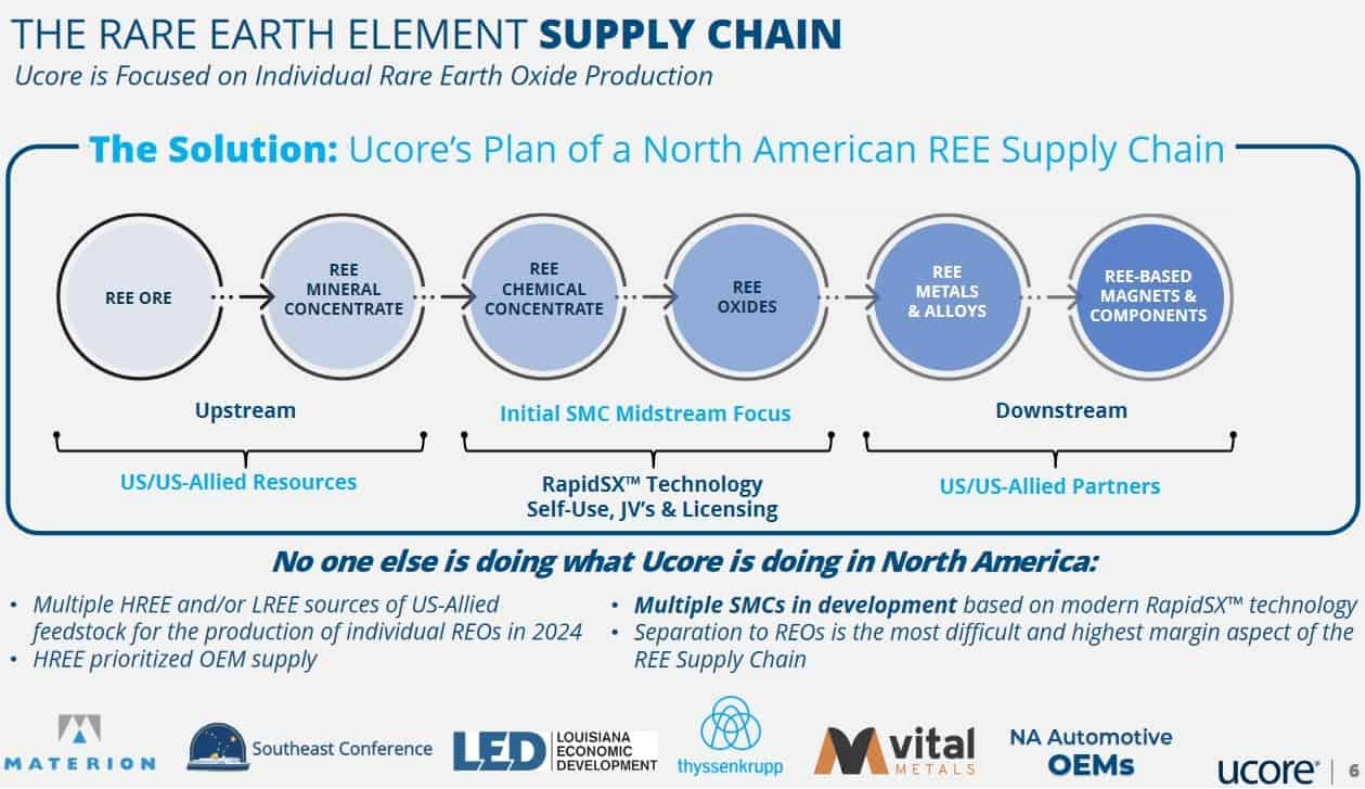
As most readers of InvestorIntel know by now, demand for the magnet rare earths is set to surge this decade as the EV and renewable energy booms takes off. Electric vehicles require the magnet rare earths in their electric motors as do many of the most powerful wind turbines.

The problem right now is that there are no rare earths separation facilities of scale in the USA, meaning the market is reliant on China.

Today’s company is one of very few western companies that is making big moves to change that. Notably to develop rare earths separation facilities in North America.

Ucore Rare Metals Inc. (TSXV: UCU | OTCQX: UURAF) (“Ucore”) 100% own the Bokan-Dotson Ridge REE Project (contains Dysprosium (Dy), Terbium (Tb) & Yttrium (Y)) in Alaska and has plans to build a rare earth separation facility in Louisiana, USA.

Ucore is focused on Rare Earth Oxide separation (production) in North America for both heavy (HREE) and light (LREE) rare earth elements



Source: Ucore company presentation

As announced on November 22, 2022, Ucore is in the process of selecting a site for their Louisiana facility and is choosing between three existing brownfield facilities in Southwest and Central Louisiana. Ucore states that they intend "to select a location in Q1-2023 to maintain the development schedule required by prospective OEM partners." Ucore indicated that they hope to have the facility in operation by end-2024 (Phase 1 – 2,000 tpa TREO) and Phase 2 (5,000 tpa TREO) by 2026 (see chart on page 11).

Ucore states that the Louisiana separation facility (known as the Louisiana Strategic Metals Complex ("**LSMC**")) is being designed to:

- "process 2,000 tonnes of TREO from mixed rare earth concentrates on a per annum basis ("**tpa**") in the first and second year of operation, after that, expanding to 5,000 tpa:

- from multiple US-friendly sources, including heavy REE ("**HREE**") and light REE ("**LREE**") feedstocks.

- initially be capable of processing all RapidSX™ splits required to produce individual praseodymium, neodymium, terbium, and dysprosium from each applicable feedstock source. The product line will expand to other individual rare earth elements as the Western REE market develops."

The four primary rare earth oxides used to produce NdFeB permanent magnet motors are neodymium, praseodymium, dysprosium, and terbium.

Rapid SX™ technology and demonstration plant commissioning

The LSMC will use Ucore's 100%-owned Innovation Metals Inc. Rapid SX™ technology which has already been successfully piloted. Ucore states that "RapidSX™ is a transformative REE Separation Technology" that is faster and has a lower CapEx and OpEx than conventional separation technologies. It is also very scalable.

The longer term Ucore plan is to develop several Strategic Metals Complex Facilities (separation facilities) across North America.

The demonstration plant work is a focus for early 2023. Last month Ucore announced that:

"Commissioning will take place over the next several months. A program designed to demonstrate the significant advantages of utilizing its RapidSX™ technology platform for separating light and heavy rare earth elements into high-purity individual elements/compounds……..The Demo Plant is designed to process tens of tonnes of HREE and LREE feedstock annually. Once the

commissioning trials are completed, the Company is planning two additional 10-ton processing campaigns for the commercial demonstration and products qualification program."

Usually, once potential off-take partners have qualified the material, it can lead to off-take agreements. This then typically lends support for potential project funding.

Ucore's next steps and master plan

Source: Ucore company presentation

Project funding – U.S desperately needs to develop rare earths separation facilities

According to Ucore, there is currently no rare earths separation facilities of scale in North America. This would suggest that Ucore may receive some assistance from the U.S. government to get their Louisiana facility funded. Alastair Neill recently pointed out in an InvestorIntel article: "MP received US$35 million and Lynas US$120 million. This begs the question of whether or not the DoD will support Ucore with this plan of action." Syrah Resources Limited (ASX: SYR), Talon Metals Corp. (TSX: TLO) and Piedmont Lithium Inc. (Nasdaq: PLL | ASX: PLL)

are others that have recently received U.S. grants for their spherical graphite processing, nickel processing, and lithium chemical processing plans respectively. There is also the U.S. loans program office that is looking to support critical metals projects in the USA.

The Louisiana Economic Development ("LED") organization has already stepped up to support Ucore with a non-binding Letter of Intent ("LOI") for a 10-year US$9.6 million plus tax incentives package (over the first ten years of operation) in consideration for Ucore's projected investment of US$55 million for the Louisiana facility. There is also an expedited process for all required state permits.

Closing remarks

Ucore still has several hurdles ahead to achieve their goals, but management appears to be laser focused on the task. With some support already from LED and hopefully from the U.S Federal government the future for Ucore is starting to shape up nicely.

Ucore Rare Metals Inc. trades on a market cap of C$53 million and is cashed up after a recent ~C$4.59 million raise in December, 2022. Stay tuned.

In-house production key to making Energy Fuels the

world’s lowest cost producer of rare earth metals

written by Jack Lifton | October 24, 2023

Energy Fuels takes giant step towards complete, in-house, vertical integration in the production of rare earth permanent magnet alloys

Energy Fuels Inc. (NYSE American: UUUU | TSX: EFR) has just this week announced that it will buy, subject to due diligence, a huge Brazilian deposit of heavy mineral sands, which it will mine to produce a concentrated mineral mix that will contain zircon, ilmenite (titanium), and monazite. This concentrate is expected to be sold to partner companies, which will extract the zircon and ilmenite as payables, and the residual monazite, a waste product in zircon/ilmenite processing, will be conveyed at a nominal cost (as part of the arrangement to supply the heavy mineral sands to partners) to Energy Fuels’ White Mesa, Utah, where the monazite will be cracked and leached to extract a clean rare earth content as a mixed carbonate and to extract and sell or legally dispose of its uranium and thorium content.

Energy Fuels is already buying, and processing monazite produced in the above way from the zircon/ilmenite operations of Chemours in Georgia, but the Brazilian purchase will allow Energy Fuels to diversify and lower its cost of monazite concentrates.

The in-house production of monazite rich heavy mineral sands by Energy Fuels will be the foundation of its program for the vertically integrated (in-house) production of rare earth metals and alloys from (in-house) separated and purified individual and

blended rare earth salts.

Energy Fuels operates the only operating uranium processing “mill” in the United States and the only facility in the United States in the U.S. capable of processing monazite for the recovery of uranium for sale to nuclear power plants, and the recovery or legal disposal of the thorium and other radionuclides associated with monazite.

The company has already begun processing purchased monazite into a mixed rare earth carbonate, and currently has the capacity to produce thousands of tons of such mixed rare earth carbonates per year. Energy Fuels’ mixed carbonate is the most advanced rare earth product being produced at a commercial scale in the U.S. today. The company is also making major strides in producing separated and refined individual and blended rare earth products at its mill.

Comparatively, monazite contains up to 50% more of the recoverable core magnet metals, neodymium and praseodymium than the bastnaesite mined at Mountain Pass, California.

Energy Fuels is finalizing a scoping study for a dedicated, rare earths, solvent extraction separation system and is finalizing the commercialization of a new rare earth metals and alloys production process demonstration.

Within 24-36 months Energy Fuels has the potential to be the world’s lowest-cost producer of separated individual rare earths and will therefore the lowest cost producer of rare earth metals and alloys. No government subsidies have been needed. Just managerial knowledge, experience, and skill.

Energy Fuels already is a major domestic supplier of uranium and vanadium In fact, the company announced at its AGM, earlier this week, that it has signed a decade long supply deal with two

American utilities to provide them with more than 4,000,000 lbs of uranium. This contract will bring in more than USD$200,000,000 over its life.

Energy Fuels is a producing and growing domestic American critical metals processing hub.

Disclosure: Jack Lifton is a member of the Advisory Board for Energy Fuels Inc., and may hold securities or options in some of the companies mentioned in the above article.

Hastings Technology Metals secures Australian Government Funding for Yangibana, World's Richest NdPr Deposit

written by InvestorNews | October 24, 2023
Many are now asking will Hastings Technology Metals Ltd. (ASX: HAS) ("Hastings") be Australia's next rare earths producer?

The answer is 'maybe yes' after the Company announced on February 2, 2022: "NAIF approves $140 million loan for Yangibana Rare Earths Project……NAIF loan forms part of A$300-400 million of total debt financing required for Yangibana."

Yangibana is the first Australian rare earths project to receive NAIF funding. The above mentioned Northern Australia Infrastructure Facility (NAIF) loan has a 12½-year tenure and is subject to pre-completion conditions.

Hastings stated: “Yangibana early works construction and design for long-lead items underway in anticipation of plant construction commencing in September 2022 Quarter.” The NAIF loan first drawdown is expected to occur in early 2023, aligned to the Yangibana funding schedule.

Hastings states about its planned project: “The Yangibana project, which comprises a mine and beneficiation plant at the Yangibana site and a hydrometallurgical plant at the Ashburton North Strategic Industrial Area (ANSIA) near Onslow, will become Australia’s second rare earths producer and expands the country’s strategic capability in downstream processing of rare earths minerals.”

More about Hastings Technology Metals Ltd.

Hastings controls two rare earth projects in Western Australia. They are the Yangibana and Brockman Projects. The more advanced Yangibana Project contains a predominance of neodymium, praseodymium, dysprosium and europium.

The Yangibana Project (mine, beneficiation plant, and hydrometallurgical plant) – Western Australia

Hastings state: “Yangibana has the world’s highest composition of neodymium and praseodymium and is located in the Tier 1 mining jurisdiction in Western Australia.” The significance here is that neodymium and praseodymium (NdPr) are the highly valued magnet metals.

The Yangibana Project Proven & Probable Reserve is 16.7Mt at 0.95% TREO (0.35% NdPr oxide) for a total contained 158,419 t TREO. The Total Mineral Resource has a contained TREO of 266,417 t (at 0.97% TREO).

Yangibana Project has great metrics – Has a 37% NdPr content –

double the world average

Source: Company presentation

The Yangibana Project's CapEx is estimated at A$516 million (A$67 million contingency) but is currently being revised. The Project's November 2019 NPV was A$549 million (IRR 21.1%). NdPr prices have increased significantly since then, so updated Project economics are expected soon.

The Yangibana Project is planned to have a 1.2Mtpa ore throughput, a 15 year mine life, ~15,000 tpa of MREC production, ~8,500 tpa TREO production and 3,400tpa NdPr production. Commissioning is targeted for 2024, subject to final project funding.

Hastings' Yangibana Rare Earths Project and their planned Onslow hydromet plant in Western Australia

Source: Company presentation

Hastings has commenced early site works at Yangibana (Mining Proposal has been approved) and recently received Commonwealth environmental approvals to develop the hydrometallurgical plant site at ANSIA near Onslow. Subject to funding, Hastings intends to then commence construction of the beneficiation plant and the hydrometallurgical plant.

On February 2, 2022, Hastings Executive Chairman Charles Lew, stated

"The commitment by NAIF will enable Hastings to finalise the funding requirements for Yangibana's development and move into

full-scale construction throughout 2022, with the objective of delivering first production by 2024. Yangibana is an amazing, rare earths, opportunity that will supply the world's highest composition neodymium and praseodymium concentrate to Tier 1 customers in Europe and Asia. This is an exciting time not just for Hastings but for Australia's emerging rare earths sector. We look forward to finalizing the funding arrangements that will enable the Hastings' Board to make a final investment decision in the coming months."

Hastings Technology Metals investment highlights (as of November 25, 2021)

Source: Company presentation

Note: The 52% NdPr to TREO ratio refers to the highest-grade deposit within Yangibana called Simon's Find, which contains 52% of rare earths as NdPr. It potentially provides strong early cash flows to the Project.

Closing remarks

Hastings Technology Metals certainly looks well on the way to becoming Australia's next rare earths producer, and only the second one following on from the very successful Lynas Rare Earths Limited (ASX: LYC) (market cap ~A$8 billion).

Hastings ticks all the right boxes in terms of a great resource, high NdPr content, location, integrated project, off-take contracts signed, and now is getting closer to achieving project funding (awaiting final credit-approved commitments from lenders' consortium) with only minor regulatory approvals remaining. Executive Chairman Charles Lew owns 7.1% of the Company so that is also a great endorsement.

All going well Hastings could begin Yangibana Project construction in 2022 (September Quarter 2022) and commercial production in 2024. Hastings Technology Metals trades on a market cap of A$516 million and looks set to have a very big 2022.

Search Minerals is coming off a great 2021 but 2022 promises to be even better

written by InvestorNews | October 24, 2023
Search Minerals Inc. (TSXV: SMY | OTCQB: SHCMF) (Search) stock price rose an impressive 223% in 2021 and looks set for another strong year in 2022.

Search Minerals 2021 in review

There were several reasons for the rise including positive sentiment towards the rare earths miners, particularly those with projects containing the valuable magnet metals Neodymium (Nd), Praseodymium (Pr) and Dysprosium (Dy) used in powerful electric motors. All three rare earth metals prices have been rising strongly the past year on the back of surging demand from electric vehicle manufacturers as we saw EV sales rise about 100% in 2021. Search's flagship Port Hope Simpson ("PHS") property has many key rare earth elements including Nd, Pr, Dy, and Tb (Terbium).

Another key factor for Search's success in 2021 was that management delivered strong progress. This included a non-

binding MOU with USA Rare Earth LLC for the future delivery of a rare earth mineral concentrate supply containing 500 tpa of NdPr. The MOU is part of a joint development plan to expand the collaboration to include discussions regarding separation, marketing and offtake of a portion of the future production at Search's Deep Fox and Foxtrot deposits. During 2021 Search was able to purchase back a 2.5% Net Smelter Royalty (NSR) from B&A Minerals Limited in return for 15 million common shares of Search Minerals, leaving just an outstanding royalty now of 0.5%. Other progress in 2021 included a successful 7,000m drilling program completed at Deep Fox as well as several successful capital raises including the most recent C$15 million and C$5.3 million equity raises. This leaves Search very well-funded to advance its plans in 2022.

Search Minerals has district scale rare earth deposits at Port Hope Simpson (PHS) property (flagship) (includes Foxtrot, Deep Fox, Silver Fox, Awesome Fox, and Fox Meadow deposits)

Source: Search Minerals company presentation

Search Minerals in 2022 and beyond

Q1 2022 should see Search deliver an updated Preliminary Economic Assessment ("PEA") for the combined Deep Fox and Foxtrot deposits at their PHS Property. It is anticipated that this will potentially be a very significant improvement of the 2016 PEA, which only included the Foxtrot deposit. It resulted in a post-tax NPV10% of C$48 million and post-tax IRR of 16.7% over a 14 year mine life. The initial CapEx was C$152 million, and a further C$57 million in year 8 for the underground stage of the Project.

Search quotes some of the reasons why the 2022 PEA should be

better:

- Increase production rate from 1000 tonnes per day to 2000 tonnes per day
- Increase recoveries from optimized pilot plant process
- Increase revenue from higher grades at Deep Fox
- Extend mine life with material from both Deep Fox and Foxtrot for a central processing facility
- Decrease costs with reduced capital and operating costs
- Upward trending price escalations for permanent magnet material.

In Q2, 2022, Search plans to submit an updated Environmental Impact statement based on the updated PEA.

In Q3 and Q4, 2022 Search will continue to drill Deep Fox to potentially further grow the Resource as well as drill Fox Meadow and Silver Fox and commence a Bankable Feasibility Study (BFS).

All going well Search hopes to make a Final Investment Decision (FID) in 2023 and commence production in 2025.

Search Minerals 2022 catalysts

Source: Search Minerals company presentation

More about Search Minerals

Search Minerals Inc. is an emerging rare earths developer with three properties in Labrador, Canada. The three are:

- The Port Hope Simpson (“PHS”) property (flagship) – Includes Foxtrot, Deep Fox, Silver Fox, Awesome Fox, and Fox Meadow deposits. PEA due in Q1 2022.

- The Henley Harbour Area in Southern Labrador.
- The Red Wine Complex located in Central Labrador.

Closing remarks

Search Minerals is coming off a great 2021 but 2022 promises to be even better. Certainly, it looks like Search can deliver an impressive 2022 PEA at PHS, given that the project economics will have potentially improved significantly. The PHS Project also has significant exploration upside and potential to further grow the Resource in 2022.

Search Minerals trades on a market cap of C$74 million. The next 3-4 years could be game changing for Search Minerals, if they can make it to production in 2025, or 2026.