

They're back – The Rare Earths Sequel Returns with a Vengeance.

A tidal wave of performance in today's rare earths market reminded me of the release of JAWS in 1975 – no one really saw this coming.

Here's a snapshot for you:

◆ Name	◆ Last Price	◆ Change	◆ Volume	52 Week Range High [Low]	Market Cap
▶  LYSDY LYNAS CORPORATION LTD	\$2.145	+\$0.425 +24.71%	817.5k	\$1.92 [\$1.054]	\$1.43B
▶  ANLKY ALKANE RES LTD	\$2.20	+\$0.45 +25.71%	1.4k	\$2.23 [\$1.29]	\$111.34M
▶  AVL AVALON ADVANCED MATERIALS INC	\$0.125	+\$0.05 +66.67%	10.9M	\$0.115 [\$0.045]	\$34.79M
▶  AVLNF AVALON ADVANCED MATERIALS, INC	\$0.0925	+\$0.0307 +49.68%	2.6M	\$0.0927 [\$0.0287]	\$25.74M
▶  REEMF RARE ELEMENT RESOURCES LTD	\$0.599	+\$0.359 +149.58%	4.5M	\$0.265 [\$0.0301]	\$47.68M
▶  SMY SEARCH MINERALS INC	\$0.04	+\$0.005 +14.29%	77.7k	\$0.07 [\$0.03]	\$7.29M
▶  CRE CRITICAL ELEMENTS CORP	\$0.60	+\$0.13 +27.66%	841.6k	\$1.11 [\$0.39]	\$95.18M
▶  LL CANADA RARE EARTH CORP	\$0.095	+\$0.025 +35.71%	3.1M	\$0.09 [\$0.04]	\$16.85M
▶  UCU UCORE RARE METALS INC	\$0.23	+\$0.075 +48.39%	2.4M	\$0.25 [\$0.085]	\$65.11M
▶  NMI NAMIBIA CRITICAL METALS INC	\$0.24	+\$0.09 +60.00%	179.9k	\$0.46 [\$0.08]	\$43.28M

The Pentagon news conference told us nothing new. We know we are dependent on the Chinese for rare earths but for some reason today's news spurred undeniable action worthy of action.

If you missed the Bloomberg story that got the market running, [click here](#)

I asked leaders in the rare earths industry to respond to this Bloomberg article. This CEO asked for anonymity and wrote: *"The silliness drums are beating. On the article (WSJ?) suggesting that Apple will be crippled as a result of a rare earth embargo: How can these idiots write nonsense like this? i-Phones are made in Donguan (By Foxconn from Chinese and Japanese components, including vibration motors (made by Nidec in Shenzhen with magnets made by Daido in Suzhou with powders made by us in Tianjin) and capacitors made by Murata in Kyoto with Dysprosium made in Jianyin...So how will an embargo of RE exports to the US hurt Apple again?"*

Another CEO wrote: *I believe the article summarizes the situation quite well. The threat of disruption appears to be ever closer to becoming a reality...am wondering if only oxides will be subject to the restriction, if implemented."* – Tracy Moore, Canada Rare Earth Corporation

Not to be outdone, Reuters just added their illustrious sizzle on the Pentagon press conference an hour ago, [click here](#)

Arguably experts ourselves in that we owned watched these mysterious metals go from being the source of being for a dirty dozen in 2009 to nearly 700 companies in less than 12-months flat, and then back down – to the original players in less than 3 years, we have a particular soft spot for what one of our editors (Jack Lifton) renamed the Technology Metals.

One friend called me today and said: *"I cannot believe that Company X traded millions of shares today!"*

My response was: *"I can. Because I remember when that same stock, now less than a quarter skyrocketed to nearly \$10."*

During our decade of following rare earths, we have learned that no one can ever agree if there are 15 or 17 rare earths. We have also learned that the companies that have the magnet metals such as neodymium, dysprosium or praseodymium they have an industry cult following. And then there are those who enjoy

the discussion of rare earth separation processes as an unquestionable sign of intellectual superiority, and finally if you want to sound really cool you should be able to sound impressed when a company touts that their rare earths have more “heavies” (heavy rare earth elements or HREEs) than “lights”.

At the end of the day, the facts are simple – the investors are hoarding to the technology metals today. The real question now – is will this interest in sustainability return tomorrow? We will see.

Here are some charts, we were watching today...

Critical Elements Corp. (TSXV: CRE | OTCQX: CRECF)

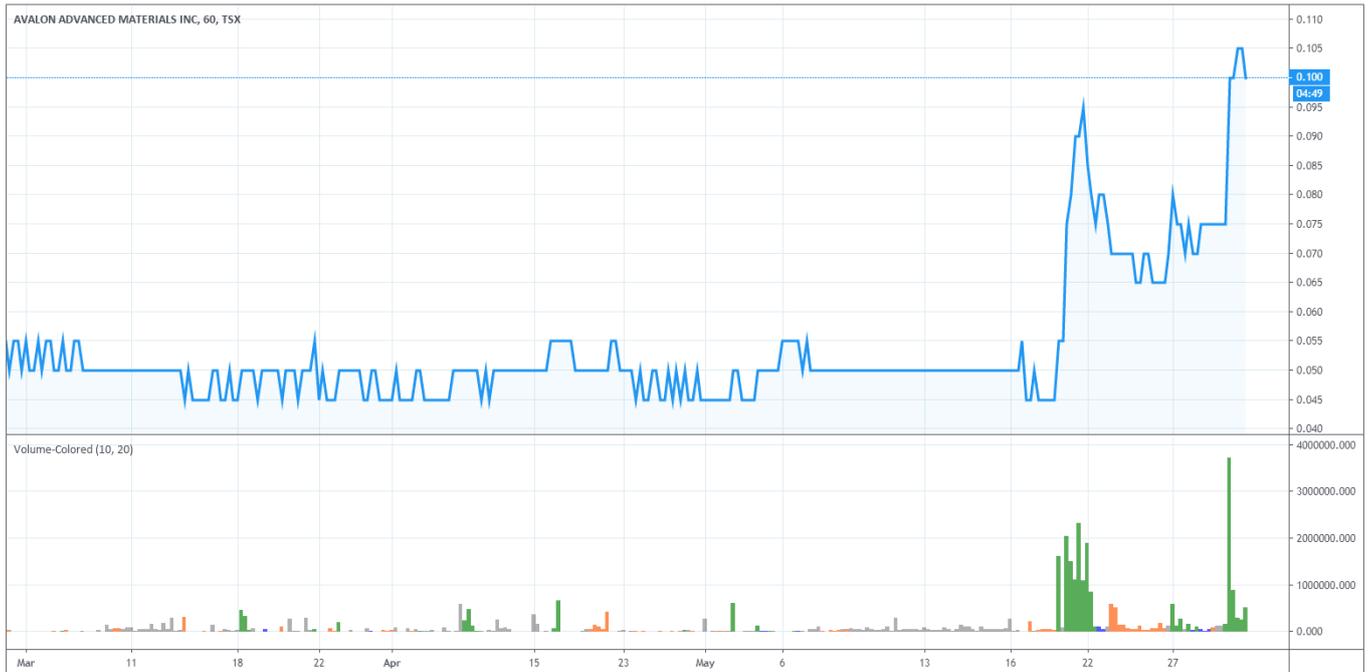
Sam_M published on TradingView.com, May 29, 2019 18:15:05 UTC
TSXV_DLY:CRE, 60 0.550 ▲ +0.080 (+17.02%) O:0.540 H:0.550 L:0.530 C:0.550



Created with TradingView

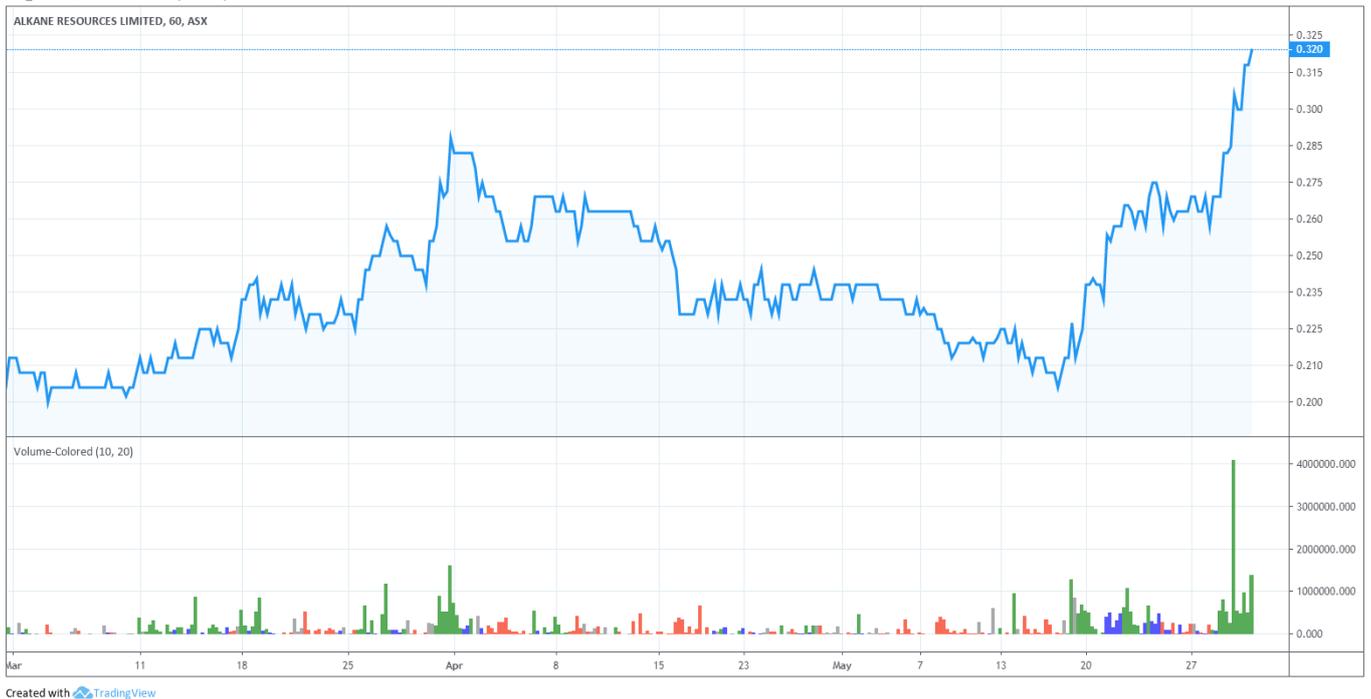
Avalon Advanced Materials Inc. (TSX: AVL | OTCQB: AVLNF)

Sam_M published on TradingView.com, May 29, 2019 18:25:11 UTC
TSX_DLY:AVI, 60 0.100 ▲ +0.025 (+33.33%) O:0.100 H:0.105 L:0.100 C:0.100



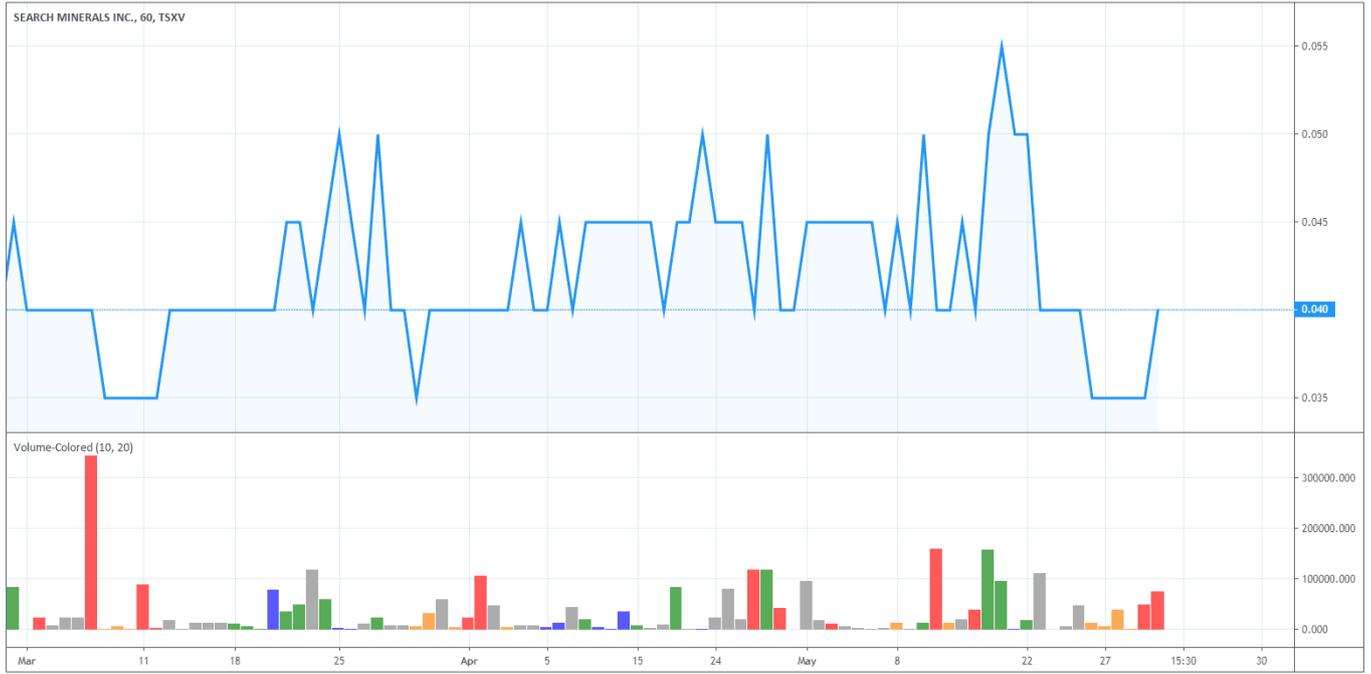
Alkane Resources Limited (ASX: ALK | OTCQX: ANLKY)

Sam_M published on TradingView.com, May 29, 2019 18:37:18 UTC
ASX_DLY:ALK, 60 0.320 ▲ +0.035 (+12.28%) O:0.315 H:0.330 L:0.305 C:0.320



Search Minerals Inc. (TSXV: SMY)

Sam_M published on TradingView.com, May 29, 2019 18:32:43 UTC
TSXV_DLY:SMY, 60 0.040 ▲ +0.005 (+14.29%) O:0.040 H:0.040 L:0.040 C:0.040



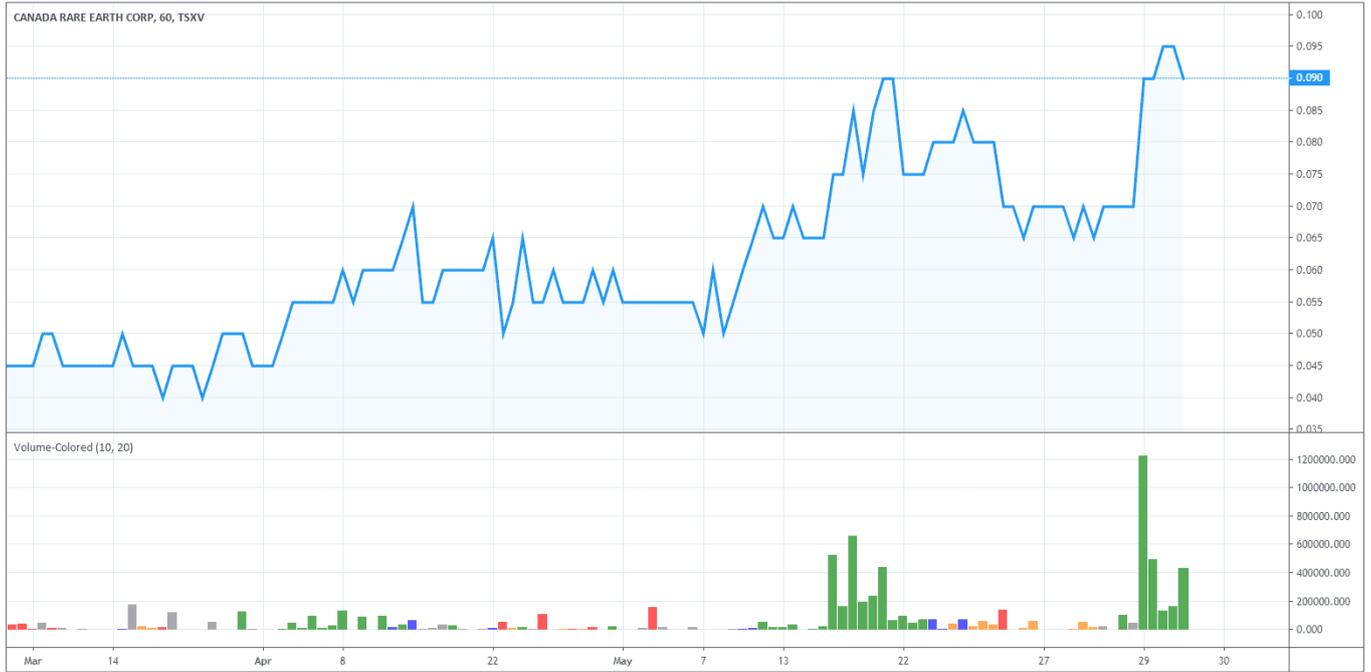
Lynas Corporation Limited. (ASX: LYC)

Sam_M published on TradingView.com, May 29, 2019 18:42:19 UTC
ASX_DLY:LYC, 60 2.76 ▲ +0.37 (+15.48%) O:2.72 H:2.78 L:2.71 C:2.77



Canada Rare Earth Corp. (TSXV: LL)

Sam M published on TradingView.com, May 29, 2019 18:46:50 UTC
TSXV_DLY:LL, 60 0.090 ▲ +0.020 (+28.57%) O:0.095 H:0.095 L:0.085 C:0.090



Ucore Rare Metals Inc. (TSXV: UCU)

Sam M published on TradingView.com, May 29, 2019 18:55:30 UTC
TSXV_DLY:UCU, 60 0.235 ▲ +0.080 (+51.61%) O:0.240 H:0.240 L:0.230 C:0.235



Created with TradingView

Northern Minerals Ltd. (ASX: NTU)

Sam: M published on TradingView.com, May 29, 2019 18:59:19 UTC
ASX_DLY:NTU, 60 0.073 ▲ +0.006 (+8.96%) O:0.071 H:0.073 L:0.071 C:0.073



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Arafura Resources Limited. (ASX: ARU)

Sam, M published on TradingView.com, May 29, 2019 19:02:31 UTC
ASX_DLY:ARU, 60 0.086 ▲+0.016 (+22.86%) O:0.082 H:0.087 L:0.080 C:0.086



Texas Minerals Resources Corp. (OTCQB: TMRC)

Sam, M published on TradingView.com, May 29, 2019 19:20:31 UTC
OTC_DLY:TMRC, 60 0.3510 ▲+0.1010 (+40.4%) O:0.3650 H:0.3750 L:0.3510 C:0.3510



Core Consultants' Rare Earth Report: SRB stockpiling ends in stalemate

Core Consultants has published its July issue of the Monthly Rare Earth Report. The main topics discussed in this feature include:

- Potential for new round of stockpiling
- SuperLig®-One plant successful
- India to develop rare earth to further defence industry

The last round of stockpiling ended in a stalemate. The SRB were unable to procure material at their target price owing to artificially inflated offer prices. The expectations are that the SRB will try again to purchase the remaining material in July. We understand that there are roughly 1,270 tonnes that

remains to be bought in order for the state reserve to fulfil its target of 3,870 tonnes. Prices have now begun to normalise and, given that the SRB has now established a reputation that it refuses to overpay for stock, prices are unlikely to increase during the next round of purchases.

Outside of China, Ucore has been working on a pilot plant to separate rare earths using Molecular Recognition Technology (MRT). During the month, the pilot test successfully separated a rare earth mixture into heavy and light material with over a 99.99% purity. The next phase will determine whether the technology is able to separate the heavy rare earths into its individual constituents, starting with dysprosium. If successful, this would represent a breakthrough in rare earth smelting. The potential for this technology could be to offer a cost-effective alternative to separating these materials in China.

India is looking to develop its rare earth industry in order to support its growing defence sector. Last month we reported that the Indian Government was seeking to amend its Atomic Mineral Concession Rules to enable private investors to develop the country's monazite resources. The areas for development have now been reserved.

The Indian defence budget is set to increase by 8% y.o.y and the Modi plan is to develop India as a manufacturing hub for missile guidance systems and other optical instruments. As such the development of its rare earth reserves, along with its thorium and uranium deposits is regarded as an integral part of the country's plan.

With respect to the end user market, the International Energy Agency (IEA) released its report revealing that electric cars now stand at 1 million vehicles and is expected to reach 1.26 million (+26% y.o.y) by the end of the year. While the penetration rates of electric vehicles are still relatively small, below 0.1% in most countries, incentives are expected

to expand, which should see upward pressure on demand.

Last month we discussed that the EU was focused on recycling permanent magnets from hard discs. This trend towards supporting recycling projects is expected to continue as the European Commission has stressed the importance of developing their 'closed loop' business models. To this end, the Prius hybrid vehicle is now reaching the ten year mark and the end of its useful life. Around 1kg of rare earth magnets is contained in each of these vehicles and we expect that recycling HEV's will be the next round of recycling firms to receive grants and funding.

Looking at prices, we expect that prices across the board (heavy, light, FOB, domestic) will remain more or less stable, with a slight downward bias (-1%) between now and the end of the summer period. In so far as the export market is concerned, we do not expect much in the way of buying activity until the end of the summer period in late August/September.

Izatt on how the SuperLig technology (and molecular recognition) is critical to green technology in the mining industry

✘ *May 24, 2016 – Ucore Rare Metals Inc. (TSXV: UCU | OTCQX: UURAF) partner IBC Advanced Technologies, Inc. is a privately held corporation headquartered near Salt Lake City in American Fork, Utah. IBC was founded in 1988 by, and named*

after, three distinguished professors, Reed M. Izatt, Jerald S. Bradshaw, and the late James J. Christensen who possess prominent international reputations and experience in macrocyclic chemistry, selective metal ion separations, and Molecular Recognition Technology (MRT).

Large-scale MRT separation systems incorporate SuperLig® solid phase particles (~0.5mm) such as silica gel or polymer substrates to which the selective ligand has been chemically attached. The SuperLig® beads are packed into fixed-bed columns that are built in skid-mounted modular form, and are fully automated for continuous operation. The feed solution is passed through the column and the target specie is removed selectively from the solution.

In this presentation at the CleanTech and Technology Metals Summit, held in Toronto on May 10-11th, Steven R. Izatt of IBC outlined

- Development and use of molecules with structure-specific interactions of high selectivity.
- How these can strip off selected elements, e.g. dysprosium, and then the rare earth elements go to another column where another element is selected
- Why this science is critical to green technology
- And IBC's relationship with Ucore Rare Metals Inc. (TSXV: UCU | OTCQX: UURAF)

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Lifton says Ucore's rare earth technology will be innovative and disruptive

Ucore Rare Metals Inc. (TSXV: UCU | OTCQX: UURAF | FSE: U9U) is a development-phase company focused on rare metals resources, extraction and beneficiation technologies. On March 3, 2015, Ucore announced the right to acquire a controlling ownership interest in the exclusive rights to IBC SuperLig® technology for rare earths and multi-metallic tailings processing applications in North America and associated world markets. The company has a 100% ownership stake in Bokan-Dotson Ridge, the highest-grade heavy rare earth project within the United States, and with the emphasis being on the dysprosium, terbium and yttrium content.

April 26, 2016 – Last week, in Part 1 of a special interview, InvestorIntel spoke with technology metals advisor Jack Lifton, who explained how SuperLig® technology made Ucore “the company to beat” in the non-Chinese tech metals refining space. Now, in this second part, Jack elaborates on those points and talks about

- The “culling of the herd” – how only the real REE companies are left
- How it will be possible to recycle rare metals just as we do copper, lead and platinum
- How Ucore can make Western industrial nations competitive in the rare earth sector

Jack Lifton: Ucore's output product in the rare earth area is immediately of great interest to the great industrial nations; the United States, Germany, Japan, Korea. None of them is currently producing rare earths from mines or processing rare earths in any way. Every one of them – added together 50% at

least of the world's rare earths go to those four nations. That's your market. The industrialized nations for – majority of course for consumer devices, but a significant minority for military.

There are two ways to look at the demand for rare earth permanent magnets or the materials to make them and we're – the reason I mention we're at permanent magnets, they're the overwhelming majority of end use of rare earths. There are two reasons to be optimistic. One is that China is using more and more of these materials every year and simply cannot produce enough to meet its own demand. But better than that is that there is no source of these materials for the rest of the world, none.

What's the demand? The demand is will people continue to buy cell phones? Will people continue to buy automobiles, washing machines, vacuum cleaners? Every one of them uses rare earth permanent magnets. They're manufactured in the United States, Germany, Japan, Korea. That's where they're really manufactured. Those nations produce most of them. Those nations do not have domestic supply or domestic self sufficiency.

You are bringing to the market a competitive edge for the western industrial nations. As an American, I'm proud to say you're going to be in Utah and it's going to help us get back to being self sufficient in production of consumer goods which we cannot be without plants like yours...to access the complete video, [click here](#)

Disclaimer: Ucore Rare Metals Inc. is an advertorial member of InvestorIntel.

Lifton on Liberating Global Markets from Chinese Dependence

nonApril 20, 2016 – In a special interview, InvestorIntel speaks with technology metals advisor Jack Lifton, about his insights on Ucore's SuperLig®-One rare earth separation pilot plant and its implications for the future of tech metals processing. Jack explains how SuperLig® technology make Ucore **"the company to beat"** in the non-Chinese tech metals refining space. Jack also touches on the broad capabilities of the technology to separate not only the rare earth elements (REE's, rare earths), but cleantech metals such as lithium, cobalt, tungsten, and many more. He qualifies the scale of the opportunity as global: "I'm sure that it won't be very long before there are these types of plants operated by your company around the world. Where the feed stock is, quite frankly, available in – from India, southeast Asia, Africa, South America and North America and Australia. In other words, the entire world."

Excerpt from interview with Jack Lifton: "This pilot plan puts the U.S. and the rest of the non-Chinese world back on the scoreboard because what we have here is for the first time a new, much more efficient, more economic system of producing very high purity technology materials, metals and materials. And the reason the Chinese have dominated this field for so long is because they have the entire supply chain. And so we can, quite frankly, dig all the holes we want. It doesn't do any good because we can't process material.

✘ What this brings back to the market, American, domestic, whatever you want to call it, is the ability to be competitive. And so companies here, for example, that don't

want to make products with technology metals and materials because the only source is foreign and typically China and they can't get them except at the behest of the Chinese, now they have an option. They have an alternative. And I guarantee you this is going to create a great deal of investment in high tech because high tech is based on technology, metals and materials and that's what you're going to be producing.

At the moment there is no other place in the world outside of China that is capable of producing heavy rare earth metals in high purity form or midrange metals for that matter, rare earths. So you're adding value to the entire technology world outside of China. We're never going to be competitive unless people like you bring businesses like this into existence...to access the complete interview, [click here](#)

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Ucore COO on the SuperLig®-One separation pilot plant for rare earths



April 7, 2016 – In a special InvestorIntel interview, Publisher Tracy Weslosky speaks with Ken Collison, COO for Ucore Rare Metals, Inc. (TSXV:UCU | OTCQX:UURAF) on the commissioning of the SuperLig®-One rare earth element separation pilot plant. They also discuss Ucore's Molecular Recognition Technology (MRT) and both the product and green competitive advantage of MRT. Ucore will be presenting at the

upcoming Cleantech & Technology Metals Summit on May 10-11th.

Tracy Weslosky: I'd like to start by congratulating you. You just recently announced the completion of construction of SuperLig® pilot plant number one.

Ken Collison: Yeah. It's been a real milestone for us. We did all the lab work for separating rare earths and scandium and made the announcement I guess about a year ago and so the next step was to build our pilot plant, SuperLig®-One. We're now well along the way. We're starting to commission it with water and then we're preparing pregnant solution right now from sorted ore from Bokan. SGS Lakefield is doing that in Ontario. Then we'll start commissioning it on PLS from Bokan and then we'll run it continuously for 2 or 3 weeks on PLS so big step for us.

Tracy Weslosky: And of course, Ucore Rare Metals is one of the few companies that have actually been doing very well in the rare earth sector. Your stock has moved very nicely. With the SuperLig®-One pilot plant you have a very exciting technology that you have the exclusive rights to worldwide. Is that correct?

Ken Collison: Yes we have and the nice thing about it's green. There's been a number of papers written on molecular recognition technology and the fact that it's green chemistry. You recycle the things you use and it's quite different than SX. You don't have to build a football field size plant and you don't have to spend \$200 or \$300 million dollars to do it and it's green.

Tracy Weslosky: Okay. So for everybody out there in InvestorIntel just in case you don't necessarily understand the molecular recognition technology process, would you mind just giving us a quick overview of why this will basically revolutionize the extraction of rare earths, is that correct and other technology metals?

Ken Collison: Yeah, other technology metals and other metals as well. One of the big reasons is it recovers 99% of them and it's clean and it produces very high-grade concentrates. It's a small unit so low capital costs, low operating costs compared to existing technology. That applies to rare earths, but also other metals and so there's real opportunity to, sort of, modernize the mining industry cause it really hasn't changed much in 100 years when it comes to separation of metals. That makes it exciting.

Tracy Weslosky: So Ken, of course, Ucore is going to be presenting at the Cleantech and Technology Metals Summit because of this cleantech revolution and you're a participant because of this technology. I think I'd like you to explain a little bit more about why this technology is green.

Ken Collison: Well, one of the main reasons is if you look at the traditional way of separating rare earths is solvent extraction. It uses a lot of solvents. There's a lot of potential environmental issues and existing environmental issues where with this it's designed so that it doesn't use a lot of solvents...to access the complete interview, [click here](#)

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The Opportunity Cost of Mining Fads & Boomlets

☒ Harking back to my days studying economics, one of the concepts that has most stuck with me and indeed has almost become a guiding principle is that of "opportunity cost". In microeconomic theory, the opportunity cost of a choice is the

value of the best alternative forgone, where a choice needs to be made between several mutually exclusive alternatives given limited resources. Assuming the best choice is made, it is the “cost” incurred by not enjoying the benefit that would be had by taking the second best choice available.

The New Oxford American Dictionary defines it as “the loss of potential gain from other alternatives when one alternative is chosen.” Opportunity cost is a key concept in economics, and has been described as expressing “the basic relationship between scarcity and choice.” The notion of opportunity cost plays a crucial part in ensuring that scarce resources are used efficiently.

When we apply it to mining we are thinking that one dollar given to a no-hope story is one dollar less for a “serious” story. While that misallocated dollar may seem immaterial in the easy money days like 2007 or 2010, in the lean times it can be the difference between a worthy project, run by determined people, surviving or not. There has been a massive misallocation of funds in the mining space and some of the most egregious examples have been in the specialty metals that have been subject to boomlets and fads over the last decade. In the final wash the unworthy have ended up ultimately disappearing no matter how much money was thrown at them and the collateral damage has been the starvation to death (or near-death) of those with projects that might have made a realistic contribution to global supply in their respective metals.

Here we shall review the scope of this opportunity cost and the price that was “paid” by choosing the path less travelled of seriousness and gravitas.

Rare Earths

Has there ever been such a great destruction of value, by so few, in the mining space, in so short a time, as the Rare

Earth boom of 2009-12? By our estimate around \$8-10bn of value was “destroyed” in the process with, so far, the only thing to show for it being the production flows from Lynas.

Past estimates have claimed that the REE surge involved over 300 companies. This still challenges our imagination and we suspect it includes any party that even muttered “rare earths” under their breath at a cocktail party. By our count there was one in London, one in Germany, one in South Africa, between 10-15 in Australia, two in the US and somewhere between 60-100 in Canada.

How does one measure the destruction of value? Is it the amount of capital raised that now no longer exists in balance sheets with an asset of the same value? We would frankly prefer the change from peak market cap (no matter how realistic that might have been in most cases).

Molycorp was of course the biggest black hole but like any universe there is always more than one black hole. Using change from peak market cap (and excluding Molycorp) one can see that billions have been wiped out by just tallying up Avalon, Rare Element Resources and Lynas. Hundreds of millions more in market cap were wiped out by the retreat from peak values at Great Western, Frontier and Arafura. To these must be added the total peak market caps of the “rest”. Some never got more than \$2-3mn market caps, but quite a lot could manage several tens of millions in valuation, albeit briefly. Thus we would be looking at \$1-1.5bn lost in the “rest”. Some have salvaged value like Ucore by going into technology/patents and Quantum Rare Earths preserved its market cap by becoming Niocorp and shifting metal. Medallion morphed from a wannabe miner, to a wannabe processor and now is neither.

As part of another exercise, we totted up the number of companies we now think will (maybe) make it to production, or are in production, and it came to a mere seven. Rare Earths have become the mining space’s equivalent of the dot-com bust.

However, one can draw hope that Facebook, Twitter, LinkedIn and Google were not even around (in public markets) during that bust and maybe the Rare Earth giant of 2025 is a company not yet even formed. Though Lynas looks well-positioned to take that title.

Lithium

This was the first boomlet off the taxi-rank after the shock and awe of the global financial slump of 2008. However, it was built upon an already established though admittedly small group of very large producers (i.e. the cartel). That universe burgeoned to around 20-30 wannabes pretty fast but some never found roots and went away rather quickly. In any case the Vancouver promo-listing machine had scarcely started to crank its gears before the REE boom came along and stole Lithium's thunder. There was also a perception that two or three of the projects coming on stream would satisfy mid-decade demand so this calmed some of the more fevered claims that could be made.

By late 2010 the focus was elsewhere and the sector was left to get on with business. Galaxy was added to the ranks of producers, while others like Orocobre and Neometals (back then Reed) worked away on their projects which are now coming to fruition. Quebec Lithium managed to go all the way to production then stumbled. Talison made it to production and was snapped up. Nemaska proved to be the most durable Canadian player. In Australia, General Mining has been added to the producer mix via their earn-in to Galaxy's Mt Cattlin.

This group of lithium companies now have a powerful lead. The latest price uplift in the metal has drawn a number of new players into the fray. Most will be years away from production, even with the best will in the world. It will be interesting to see if the market disciplines itself and keeps the number of entrants down.

The opportunity cost of this space has been much less than in others. The takeover of Talison for over \$700mn made investors way more money (net/net) than was lost from the few juniors that expired or the other players that lost market value.

Graphite

While we encountered Northern Graphite as far back as 2009, the investor enthusiasm for graphite did manifest itself broadly until 2013-14 and peaked rather swiftly. The dizzying array of flake types boggled an audience that had only just got their brains around the many Lanthanide elements. The fact that some of the graphite stories were rehashed REE vehicles also gave investors a sense of caution. Our antennas started waving when we met a company called Canada Rare Earths that had the powerpoint in its new name as Canada Graphite but still was registered as the old name. It now is called something totally different and is reporting gold sampling results.

The universe of graphite players was never much more than 25 in number. Most are still around, some still have sizeable market caps. Most are probably going nowhere and will be repurposed as gold or something else. Value destruction here has been limited to maybe a few hundred millions. The potential for more to be lost exists though if some of the big players do not deliver and instead wither on the vine. The “serious” players may very well be below the radar still.

Uranium

This space might be nuanced as a recurring fad with an overlay of seriousness and production. In this category it is now being joined by Lithium. Like the others it revives or retreats on price trends but it is not driven by technological advances because in its big picture not much has changed since the 1960s.



Pay Day?

The ultimate payday for any mining story is a takeover. Also good is an ongoing flow of dividends, but that is a rare thing indeed, particularly in Canada, where executives dangle the prospect of a takeover as an excuse to not pay a dividend. However when it comes to the types of stocks we are talking about in this research note, dividends are unlikely as so few of the contenders have even got within spitting distance of having earnings from which to pay a dividend.

So what of takeovers? In the graphite space we can think of none. In the Rare Earth, the shocking thing is that could have been so many players and yet so little action. The only transactions we can recall involving publicly listed targets was the merger between Molycorp and Neomaterials and the takeover by Great Western of the JSE-listed RareCo. The latter was a transaction not many noticed and even we are not too sure if RareCo was delisted or in administration at the time that it succumbed to GWG's charms.

Lithium stands out as a space that had transactions right from the get-go. Literally the ink was not dry on our research piece on Admiralty Resources' Rincon deposit when that asset was taken over by the Sentient funds. A little while later, Salares Lithium absorbed the unlisted Talison Lithium (controlled by Resource Capital) and created a vehicle that was then a target for a Chinese buyer with an outsized \$738mn offer, from which it later resold part to cartel-member Rockwood, which was itself recently taken over by the chemical company Albemarle. Other transactions have included Galazy exiting its Chinese processing plant by selling out to its Chinese partner and now Neometals cashing out (partially) from its Mt Marion deposit to Ganfeng. Another merger in the space was the recent combination of Western Lithium with Lithium Americas. If the measure of a real "boom" over a fad is corporate actions (and no, a press release of surface samples is NOT a corporate action) then Lithium definitely qualifies

over the other two mining sub-spaces.

Conclusion

What constitutes a “serious” story? If we wind back to 2010, the “serious” stories in Rare Earths were those with the biggest market caps, enormous ambitions and large resources (invariably in very challenged locations) and advisory boards freighted with a slew of academics and boffins that had not seen daylight since the 1950s. Almost all of these have not stood the test of time and their demise is now mentioned with guffaws and titters of laughter rather than reverential sighs with their fatal flaws (literally and in the scientific sense) being all too obvious in retrospect. One in particular that had the word “lake” in its project name (mainly because it was under one!) thought it would escape geographical destiny by going aboriginal in a name change. Not unsurprisingly that did not work.

The ancient Egyptians believed they could weigh goodness in the afterlife, and often pictured a god with some scales with a feather in one side and a soul of the dead in the other. The mining sector felt that “seriousness” could be weighed with a project in one side of the balance and a stack of Resource Estimates, PEAs, PFSs and BFS’s on the other side. As destiny has shown these products of the consultants might have been the Book(s) of the Dead.

Looking back to the graphite space, the company that struck me as the most serious from the get-go was Elcora with its dinky little mine revival story in Sri Lanka. Less than 18mths later it’s in production and they are working towards a processing plant in Europe. Its price is on the up while everyone else’s is sagging. It ticked none of Toronto investment bankers’ boxes of “seriousness” and yet is now maybe the most serious of the whole lot.

Then there is Lithium. In the beginning there were Lithium

producers that really doubled as chemical companies (or vice versa). They were big, they were dominant and they had been around for decades. Then appeared the baby-boomers of the space and these transitioned into producers, Talison, Orocobre, Galaxy, Neometals and Nemaska. Several others will follow. The first batch were winnowed out by the long drought of investor interest now there is a second phase, largely price driven that has brought in new names. Some of these are real (dare we say serious) while others are carpetbaggers. Time will tell.

In the Darwinian world of mining it seems that the loudest inherit the earth (for a short while at least) until the more persistent and nimble start to pull ahead of the pack. The greatest problem is that the loudest (like any squeaky wheel) get the grease and indeed hog the grease to the detriment of everyone else. The opportunity cost of the failure of bankers, analysts, consultants and investors to discriminate between the real and the surreal is that enormous amounts of money are squandered on transient companies, projects and managements while the worthier projects, maybe run by managements without a bullhorn are the victims of the misallocation of funds. It is the task for all those in the industry to redefine "serious" and spy out and weed out those that fail that test before they have consumed what we now know to our grief are ultimately finite funding resources.