

Jack Lifton with David Woodall on Alkane's rare earths demerger and ASM's 'game changer' technology for strategic minerals

"We had an AGM with Alkane where shareholders voted 99.95% in approval to de-merge. The rationale is very simple. The market likes to have pure plays. So, Alkane which went into rare earths and then into gold, will be purely a gold focused company and ASM will be purely a strategic minerals company." States David Woodall, Managing Director of Australian Strategic Materials Limited (ASX: ASM), in an interview with the InvestorIntel's Jack Lifton.

David went on to say that ASM will be producing key strategic minerals like neodymium, dysprosium, zirconium, hafnium and praseodymium at its Dubbo Project. He also said that ASM's strategy is to become a vertically integrated strategic materials company.

David also provided an update on ASM's joint venture with Korean R&D partner ZironTech which he said will be a "game changer for the rare earths and strategic minerals industry". ASM and ZironTech recently produced titanium metal alloy using 45% less energy. David continued, "The trade tensions and the COVID-19 impact on the supply chains has made people look at the modification of the global supply chain. I think ASM is well located to be able to go into that supply chain and work cooperatively with various companies."

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The Rare Earths Market in Review – June 2020

“I think Energy Fuels is serious about going into the rare earths business. What I was told is that they are going to begin by selecting a rare earths mineral produced in the United States...” States critical materials expert Jack Lifton, in an interview with the Technology Metals Show hostess Tracy Weslosky.

In the interview Tracy and Jack discussed some of the major news in the rare earths space for the month of June. Jack also commented on Lynas and shared his view on Alkane’s plan to demerge their poly-metallic and rare earths holding company Australian Strategic Materials Limited (ASM).

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As Chinese rare earths' stock prices rally, pressure rises for the rest of the world...

Rising US-China tension has resulted in some rare earths' stock prices rising sharply, particularly those in China. Given the recent US moves to introduce critical materials legislation it seems likely that the non-Chinese rare earth stocks will also rally strongly this year, particularly if the new bills and financial support are passed.

Let's start with a recap of the recent US support highlights for rare earths:

- May 18, 2018 – The US declared a list of 35 critical materials. A large part of the list includes rare earths.
- May 2, 2019 – U.S. Sen. Lisa Murkowski and others submitted the American Mineral Security Act
- In mid May, 2020, Senator Ted Cruz submitted the Onshoring Rare Earths Act – the 'ORE Act'
- On May 28, 2020 US Representative Michael Waltz submitted the American Critical Mineral Exploration and Innovation Act of 2020

The ORE Act focuses on six critical materials – **Rare earths**, scandium, lithium, cobalt, graphite, and manganese. The Critical Mineral Exploration and Innovation Act directs the U.S.G.S. to complete updated resource assessments for each

critical mineral. It has been reported that there will be a focus on **rare earths** and other so-called strategic minerals.

Then just last week rare earths expert and Technology Metals Show host Jack Lifton stated exclusively to InvestorIntel: "The US Defense Department has announced last week that it will seek \$1.7 billion for rare earths purchases in the 2021 National Defense Authorization Act that means the budget for fiscal 2021. In addition they will ask for another \$300 million (**a total of \$2 billion**), for rare earths for specialized weapons which they name as hypersonic missiles..."

Given all of the above proposed support to the rare earths sector, it is abundantly clear that the US is now finally moving rapidly to secure critical rare earths supply, particularly from US deposits, where possible. Current rare earths producers and listed rare earths stocks stand to be beneficiaries. Especially if they have US rare earths projects, but quite likely any non-Chinese rare earth juniors that can achieve funding and production should find very strong western demand for their products. Most of the western world is now looking to diversify their supply chains especially after the trade war and COVID-19 problems of the past 2 years.

Some rare earth miners with US projects include:

- MP Materials (private)
- Rare Element Resources Ltd. (OTCQB: REEMF)
- Texas Mineral Resources Corp. (OTCQB: TMRC)
- Ucore Rare Metals Inc. (TSXV: UCU | OTCQX: UURAF)

Some miners with US rare earth processing potential include:

- Energy Fuels Inc. (NYSE: UUUU | TSX: EFR) recently stated their White Mesa Mill in the USA could be used in future for rare earths processing.
- Lynas Corporation (ASX: LYC) has received US support for a planned US rare earths processing facility.

- Peak Resources (ASX: PEK) plan to have a US rare earths processing facility.

Some rare earth miners with Canadian projects include:

- Avalon Advanced Materials Inc. (TSX: AVL | OTCQB: AVLNF)
- Appia Energy Corp. (CSE: API | OTCQB: APAAF)
- Search Minerals Inc. (TSXV: SMY)

Some rare earth miners with Australian projects include:

- Alkane Resources Ltd. (ASX: ALK | OTCQX: ALKEF)
- Scandium International Mining Corp. (TSX: SCY)

Rare earths are vital ingredients for modern technology



Closing remarks

The massive recent news of two new rare earth/critical materials related Acts and a proposed “US\$2 billion towards rare earths in 2021”, appears to have been somewhat missed by the market. The Chinese rare earths stocks have already bounced leaving the potential rest of the world rare earth miners to play catch up.

News flow in future months should continue to be extremely promising for the rare earths sector following on from the

tremendous news from the last few weeks.

Investors should not wait too long as any further increased US-China tensions, threats of China supply loss, or passing of rare earths related Bills, will likely send non-Chinese rare earth miners stock prices higher.

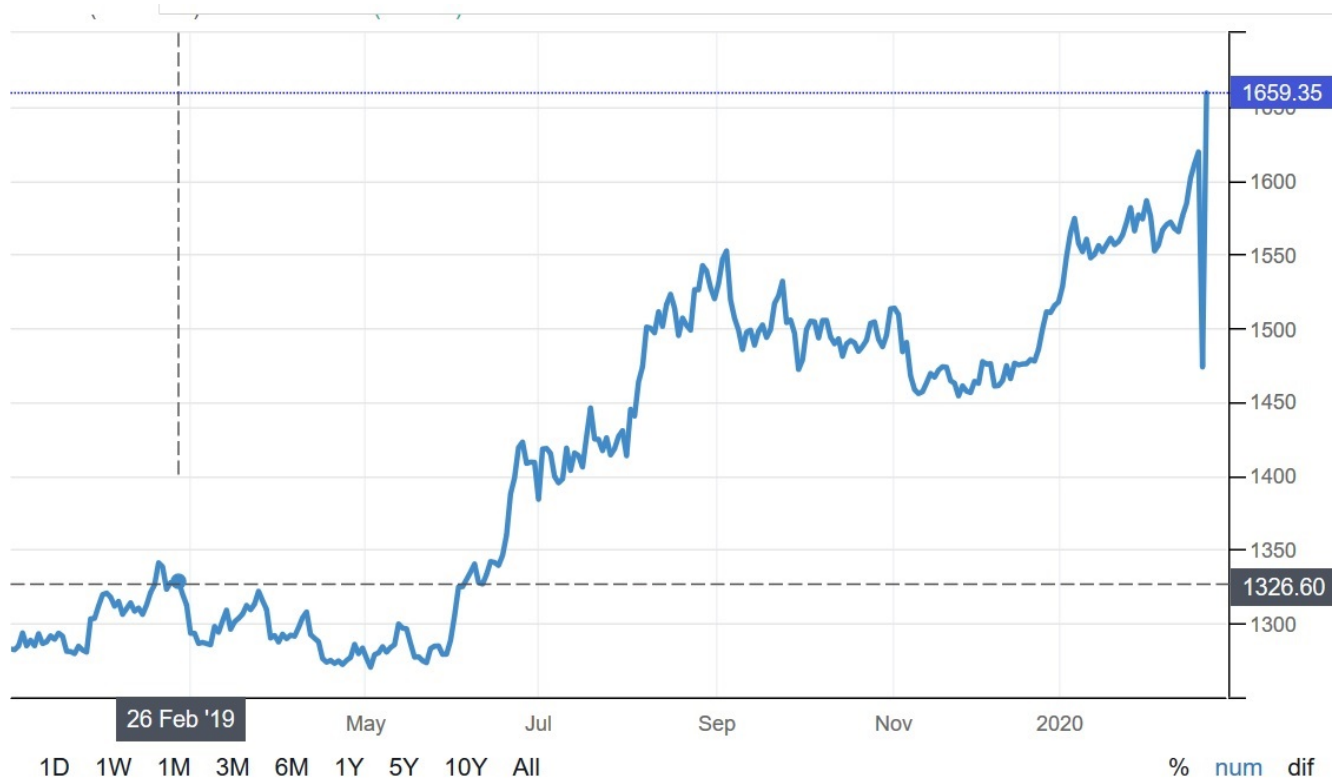
Gold rises as the coronavirus threatens to become a pandemic

Gold is up ~25% over the past year and is up ~12% in 2020 outperforming almost all commodities so far this year. Of course, I should mention the emissions metals palladium and rhodium which were up 75% and 366% over the past year respectively.

Gold rises as coronavirus threaten to cause a pandemic

The coronavirus and the threat of a pandemic are driving gold prices higher in 2020. A pandemic is defined as “an epidemic of disease that has spread across a large region; for instance multiple continents, or even worldwide.....” It also needs to be unstable, that is, new cases rising significantly.

Gold is up ~25% over the past 1 year – Now at US\$ 1,659



Some history of flu virus pandemics

Some recent flu pandemics include: HIV, Spanish flu, and the 2009 swine flu.

- **The Swine flu pandemic (2009/10)** was an influenza pandemic that killed ~201,200 people worldwide. It ran for about 16 months from April 2009 – 10 August 2010.
- **The Spanish flu pandemic (1918-20)** infected 500 million people around the world, or about 27% of the then world's population at the time. The death toll is estimated to have been 40-50 million, and possibly as high as 100 million, making it one of the deadliest epidemics in human history. It should be noted that World War I was a factor.

Gaining some perspective

It is estimated that the seasonal flu kills between 291,000 to 646,000 people worldwide each year, mostly the very old or the very young, or those with weakened immune systems.

To date, the coronavirus has caused 2,619 deaths.

Coronavirus cases, deaths, and recovered cases as of February 23, 2020

Coronavirus Cases:

79,561

[view by country](#)

Deaths:

2,619

Recovered:

25,076

Coronavirus deaths versus seasonal flu deaths so far in 2020

2,619 Coronavirus deaths this year

72,721 Seasonal flu deaths [this year](#)

Source

What this means is that currently, the coronavirus is not yet a huge concern, even if we assume China's statistics are not accurate and that global cases were in fact 10x worse at 26,190 deaths. That would still only be 36% of the seasonal flu death toll. My conclusion, for now, is that the coronavirus 'at this stage' is still only a 'potential' significant threat to the global population and economy.

Economic disruption has been greater so far due to China's measures to try to contain the virus; however recent numbers in China suggest new cases are falling and workers are returning to work.

However given what we know from history that pandemics can cause millions of deaths then it would be very wise for

investors to add some insurance to their portfolios, just in case, the coronavirus does become a severe pandemic. Two ways to do that are to build up your cash levels and buy some gold or quality gold stocks.

10 gold stocks we are following at InvestorIntel

Alkane Resources Ltd. (ASX: ALK | OTCQX: ANLKY)

Alkane Resources is a gold production company with multi-commodity exploration and development projects predominantly in the Central West region of NSW, Australia. The Tomingley Project is expected to produce about 30,000 to 35,000 ounces of gold for FY20 at an AISC of A\$1,250 to A\$1,400 per ounce, in line with the recent move to underground mining. Alkane is also ramping up nearby regional gold exploration to help support the feed at the Tomingley Mill. The Company is also well known for its rare earths project known as the Dubbo Project which has a potential mine life of 70+ years. You can read more here.

Angkor Resources Corp. (TSXV: ANK)

Angkor Resources (formerly Angkor Gold) is the first North American publicly-traded mineral exploration company in Cambodia. Angkor Gold is a project generator with a focus on gold exploration, and in more recent times oil and gas exploration. They have a huge land package (983 km²) in Cambodia with multiple prospects focused on gold, silver and base metals. Their oil and gas exploration license is known as Block VIII (7,300 km² concession). You can read more here.

Eastmain Resources Inc. (TSX: ER | OTCQX: EANRF)

Eastmain is a Canadian gold exploration and development company focused on the James Bay area, Quebec, Canada. Eastmain has several gold projects; however, their flagship is the advanced Eau Claire Project with an open pit and underground M&I Resource estimate of 853,000 oz Au, grading

6.18 g/t. In total, Eastmain has a pipeline of 11 exploration projects ranging from early exploration to pre-development. You can read more here.

Euro Sun Mining Inc. (TSX: ESM)

Euro Sun Mining is advancing its 100%-owned Rovina Valley Project, located in west-central Romania. It is the second-largest undeveloped gold deposit in Europe. Euro Sun has an M&I resource of 7.05 million gold ounces and 1.39 billion copper pounds at their Rovina Valley Project. In addition, Euro Sun has discovered four new gold-copper porphyry targets, with a cluster of three porphyry targets just 1.5 km apart from each other, only 6 km east from their existing Project. Grades are lower however that is normal in large size copper-gold porphyries. You can read more here.

Granada Gold Mine Inc. (TSXV: GGM)

Granada Gold is a Canadian junior mining and exploration company with gold and silver properties in Quebec and Ontario. The Company's current focus is directed towards the development and continued exploration of the Granada Property situated in the heart of the famous Abitibi Greenstone Belt and along the prolific "Cadillac Trend". Drill results have been promising including from surface 7.67 g/t over 15 metres. You can read more here.

Harte Gold Corp. (TSX: HRT)

Harte Gold Corp. commenced gold production in early 2019 at their wholly owned Sugar Zone underground mine in White River Ontario, Canada. The current Resource estimate is 1,108,000 contained gold ounces @8.12g/t Indicated and 558,00 contained gold ounces @5.88g/t Inferred. There is also excellent exploration upside with a 30 km strike potential with only 5km so far explored, over a massive 79,335 hectares land package. Full-year 2020 guidance is 42,000–48,000 ounces of gold production at an AISC estimate of US\$1,475–US\$1,650 per ounce.

Costs are expected to fall in subsequent years as the mine gets deeper and reaches higher grades. The mine is planned to ramp up to 61,000 Au ounces pa over an initial 14 year mine life. You can read more [here](#).

Quebec Precious Metals Corp. (TSXV: CJC | OTCBB: CJCFF | FSE: YXEP)

Quebec Precious Metals (QPM) is a new gold explorer with a large 874 square kilometre land position in the highly-prospective Eeyou Istchee James Bay region, Quebec, Canada (not far from Newmont Goldcorp Corporation's Éléonore gold mine). QPM's flagship project is the 100% owned Sakami Project with well defined drill ready targets. Sakami has already had some great drill results including 26.35g/t over 11 metres. In 2020 QPM plans to drill 25,000 meters at Sakami. The drill program is fully-funded. You can read more [here](#).

Signature Resources Ltd. (TSXV: SGU | OTCQB: SGGTF)

Signature Resources is a Canadian gold exploration company with advanced and early exploration assets. Their core asset encompasses the Lingman Lake Gold Mine in northwestern Ontario, Canada. Signature Resources has a historic resource estimate of 234,648 oz of contained gold, grading 6.86 g/t, over an area of 9,896.8 hectares. The Company's other assets include two new early exploration projects: Lingside West and Lingside East. All three projects are located within the Lingman Lake greenstone belt. Signature plans to advance and expand these projects centering on targeted diamond drilling of the high-grade gold zones. Some good airborne geophysical surveys results in 2019 are also positive for further exploration in a new area "known to host over 40 mineral occurrences, reported to contain gold, copper and molybdenum mineralization." This area is situated 12.5-kilometers west of the Lingman Lake gold mine. You can read more [here](#).

TNR Gold Corp. (TSXV: TNR)

TNR is a project generator that focuses on gold and the key energy metals, copper and lithium. TNR Gold's current three main projects involve gold in Alaska, copper and gold in Argentina, and lithium in Argentina. A 2013 resource estimate at their Shotgun Gold Project in Alaska resulted in an Inferred Resource of 20,734,313 tonnes at 1.06 grams per tonne (g/t) gold for a total of 705,960 ounces gold (Au). TNR holds a 0.36% net smelter return royalty on the 100% owned McEwen Mining Los Azules Project, and a 1.8% NSR royalty on the Mariana Lithium Project in Argentina which is being developed by a JV with Ganfeng Lithium and International Lithium (ILC). You can read more here.

West Red Lake Gold Mines Inc. (CSE: RLG | OTCQB: RLGMF)

West Red Lake Gold Mines is focused on gold exploration and development in the prolific Red Lake Gold District of Northwestern Ontario, Canada. The district is host to some of the richest gold deposits in the world and has produced 30 million ounces of gold from high grade zones. West Red Lake's 3,100 hectare property has a 12 km strike length and 3 former gold mines (Rowan Mine, Red Summit Mine, Mount Jamie Mine), and contains 1.1 million inferred ounces of high grade gold (7.57g/t) which remain open at depth. You can read more here.

Pay attention to the media flag on a play for the rare earths market field

"Is Teenage Head still around?" I asked the doorman incredulously on Saturday evening, as I entered the Rockpile to see a tribute band for The Who that a family member had

insisted I attend last night. “Teenage Head?” she started, “are you kidding – we have the Killer Dwarfs returning next month!” she finished enthusiastically. How can early eighties bands survive and just stay the same when so much of the rest of our lives is so very different, I wondered.

Having invested part of my Saturday looking at family photos from the late seventies, early eighties, I was considering how news stories in the seventies arrived only three ways: telephone, mail and the newspaper. Siphoned through media sieves, public perception was easily manipulated – we believed the news. Today, with endless data outlets and media streams than ever imagined, at moments I feel as if I know less, and trust nothing.

So yesterday, when I examined our Top 10 columns in our Trending section (listed below), I paused as this is a highly unusual week and am calling a flag on a play for the rare earths market field! **With 7 out of the 10 columns that are presently most read on InvestorIntel.com being about rare earths this is indeed a rare readership trend indeed.** So I text messaged an associate in the industry in NYC this morning who is also following this trend – and he text messaged me back an interview with a CNN story on Hong Kong enters 11th consecutive weekend, a piece on how rare earths are China’s nuclear option in trade war with U.S. and a headline story on how Beijing warns US ‘will bear all consequences’ after \$8billion jet deal. In doing my own search, I see that the only non-Chinese producing rare earths public company Lynas is headlining with its own issues with Hundreds of protesters gather to slam Malaysia’s decision on Lynas.

My point? The news feed flow suggests we have another rare earths and critical materials bubble preparing to start. This said, with gold +\$1500, I do not see this translating to the exploration market (yet), is there any reason to believe we are going to see any immediate action in the rare earths

market? My answer is – it seems likely.

Let's consider this angle. In my experience investors that play the market need an ability to invest on what's happening geopolitically, and with few rare earths' companies in existence outside of China this should be a bonanza for any shareholder lucky enough to have picked one of the rising stars. And yes, I will publish a list for you of who the front runners are, as there are simply not many to pick from, but let's start by reviewing what the InvestorIntel was reading over the last week -- as its going to be an exciting week it seems from our Trending indicators.

1. #TrendingNow #1 on @Investor_Intel – Read: The U.S. #rareearths saga continues... bit.ly/2XV72wR
2. #TrendingNow #2 on @Investor_Intel – Read: #Trump amends #Defense Production Act for #RareEarths bit.ly/2Z64ete #DoD #POTUS #Rareearths #DOD
3. #TrendingNow #3 on @Investor_Intel – Read: Scandium International soars 41.67% last week on positive news from its Nyngan Scandium Project <http://bit.ly/2Yb27YF>
4. #TrendingNow #4 on @Investor_Intel – Read: The #cobalt market prepares for another ride <http://bit.ly/2MjpNUu> #battery #ElectricVehicle #EV
5. #TrendingNow #5 on @Investor_Intel – Read: #Avalon on #rareearths and #criticalmaterials in North America <http://bit.ly/2y9X8Ih> @AvalonAdvanced \$AVL \$AVLNF
6. #TrendingNow #6 on @Investor_Intel – Watch: Don Bubar on the renewed concern about the security of supply of #rareearths in the global markets https://youtu.be/0_XkB-H020g @AvalonAdvanced \$AVL \$AVLNF
7. #TrendingNow #7 #AlkaneResources' disruptive technology to reduce metallization costs by +50% <https://youtu.be/1cZPdQCA0vY> #RareEarths #zirconium #hafnium #neodymium #praseodymium @AlkaneResources \$ALK.A \$ANLKY
8. #TrendingNow #8 on @Investor_Intel – Read: The

Pikhuutaau Agreement marks a key milestone for Critical Elements Lithium <http://bit.ly/2Z610G7> cc: @investor_Intel #rareearths

9. #TrendingNow #9 on @Investor_Intel – Watch: Vance White on the next boom in the commodity cycle <http://bit.ly/20gTBCV> cc: @investor_Intel #gold
10. #TrendingNow #10 on @Investor_Intel – Watch: If you want to find out what is REAL in the #graphene market versus all of the ‘hype’ as @TracyWeslosky interviews Dr. Ian Flint on the ‘real’ graphene market <https://youtu.be/zfQ74JM-iYI>

Alkane’s disruptive technology to reduce metallization costs by +50%

[Note from the Publisher: This InvestorIntel interview is about the Alkane Resources Limited: Investment in Clean Metal Processing Technology news release put out on June 6, 2019 that starts: “Alkane Resources Ltd (ASX: ALK) (Alkane) through its wholly owned subsidiary Australian Strategic Materials Limited (ASM) has executed a binding agreement with Zirconium Technology Corporation (a South Korean company) (Ziron Tech) to fund the final stage research and feasibility in relation to a clean metal process to convert metal oxide – including key Dubbo Project metals – to metals of high marketable purity (Technology).”

InvestorIntel did a follow-up column titled Alkane deal with Ziron Tech to reduce metallization costs in excess of 50% for

zirconium, hafnium, and titanium metals on July 15, 2019 as we deem this news to be disruptive for the overall critical materials sector.]

“It is an electrolysis process. So it uses standard electrolysis but through a solid oxide membrane rather than a carbon electrode. That is a big step because it takes carbon out of the equation. The really exciting thing for us was, the solid oxide membrane that they use is a yttria stabilized zirconia. Here are two products that we will produce from Dubbo, we can actually produce yttria stabilized zirconia used in the process, so there was an added bonus for us. The beautiful thing about the process is that it generates only oxygen as waste material and produces high purity metals” States Ian Chalmers, Technical Director of Alkane Resources Ltd. (ASX: ALK | OTCQX: ANLKY), in an interview with InvestorIntel’s Tracy Weslosky.

Ian went on to say that the Ziron Tech Electrolysis Process is estimated to reduce metallisation costs by in excess of 50% and is applicable to the majority of Dubbo Project products, including zirconium, hafnium, titanium, neodymium and praseodymium. Ian also said that the process doesn’t add much to the capital and operating cost of the Dubbo Project and expects that by the end of 2020 this technology will be available to the global critical material market.

To access the complete interview, [click here](#)

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Alkane's Nic Earner on the Australian gold bull market

Recently during PDAC 2019, Nic Earner, Managing Director of Alkane Resources Ltd. (ASX: ALK | OTCQX: ANLKY), shared an update on Alkane's Tomingley Gold Operations with InvestorIntel's Tracy Weslosky.

Nic said: "Australian gold right now is \$1800 an ounce. With most Australian gold mines, for instance our forecast on production this year is between \$1,050 and \$1,150. Think about those margins. Its really purple patch for Australian gold at the moment."

Alkane Resources Inc. is a multi-commodity company mainly focused in the Central West region of NSW, Australia. Currently Alkane has two advanced projects – the Tomingley Gold Operations and the nearby Dubbo Project. Tomingley commenced production in early 2014. Cash flow from Tomingley Gold Operations has provided the funding to maintain the project development pipeline and has assisted with the pre-construction development of the Dubbo Project.

The Dubbo Project is a large in-ground resource of zirconium, hafnium, niobium, yttrium and rare earth elements. As it is an advanced poly-metallic project outside China, it is a potential strategic and independent supply of critical minerals for a range of sustainable technologies and future industries. It has a potential mine life of 75+ years. The Dubbo Project is development ready, subject to financing, with the mineral deposit and surrounding land acquired and all major State and Federal approvals in place.

To access the complete interview, [click here](#)

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