

# Anthony Marchese of Texas Rare Earth presents at the Technology Metals Summit

Watch Anthony Marchese, Chairman of Texas Rare Earth Resources Corp. (OTCQX: TRER) present being one of the lowest cost technology metal projects in the world during the **InvestorIntel Technology Metals Summit** on October 14, 2015 in Toronto. Explaining how the Texas Rare Earth Resources' model is profitable "even today", using internal Chinese prices, he explains how the project risk is mitigated by non-REE by-product opportunities. Probably of greatest interest to our audience, Anthony describes how the DLA contract both validates the project and provides potential major offtake potential.

✘ **Anthony Marchese:** First of all, thank you Tracy for putting on the conference and allowing me to step in at the last second and describe Texas Rare Earth Resources. I'm going to go through this very quickly. It's a much longer presentation than 10 minutes, but in any case the story of Texas Rare Earth Resources is quite simple. We are a massive low-grade deposit, highly economic, multi polymetallic rather, about 80 miles southeast of El Paso, Texas. We are near a major metropolitan area. Easy extraction, I think, even at today's China economics. We're still a very profitable, potentially profitable enterprise. We have 41 million shares outstanding, market cap ridiculously low at \$9.1 million. We have a lot of skin in the game, insider ownership about 38%. Institutional ownership about 12% and a fair amount of float so there are plenty of shares to trade. Our PEA from several years ago, that will come down as a result of our association with K-Technologies and I'll let them talk about what they do. They'll be presenting I guess later on. Originally we thought

about \$290 million, incredible economics; IRR of 67%. That was based at the time on China internal prices. Substituting China internal prices today, that number probably is in the mid-teens. It shows you how much it's dropped, but still if you're showing positive economics, I believe, in today's environment then you have a reasonable chance of doing fairly well if you get into production. Enormous – That was based on a 20-year mine life. Realistically we have about 105-year mine life and that's only the first of three mountains in the area, I'll talk about that a little bit more, primarily heavy rare earths about 72%, in addition to a number of byproducts, which I'll describe in a moment. Board of directors, Amanda probably knows Eric Noyrez, former CEO of Lynas, is on our board. Jack Lifton who is one of the featured moderators joined our board a couple of years ago. I don't think there's a day that goes by that I don't speak to or email Jack several times a day. We have a working board. We are very active in managing the company. We have a lot of experience. Our project, again, 80 miles southeast of El Paso, Texas. I'll describe. This is the deposit. This is the mountain. There's no overburden. You come in, dig it out, we'll be heap leaching it. And I'll just talk about our contract with the Department of Defense in a moment, but we can sell our output 100 times over just to the defense industry. This is a very interesting study that no one ever mentions...to access the full presentation, [click here](#)

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**Texas Rare Earth Chairman on the recent contract with the**

# U.S. Defense Logistics Agency

October 11, 2015 – Tracy Weslosky, Editor-in-Chief and Publisher of InvestorIntel speaks to Anthony Marchese, Chairman of Texas Rare Earth Resources Corp. (OTCQX: TRER) about the recent announcement for the strategic materials research contract with the U.S. Defense Logistics Agency (DLA). Understanding the significance that “this is the first time the United States has ever given anybody a contract to produce anything”, Anthony goes onto to price point benefits of producing certain rare earths at ultra-high purity. Anthony will be on *The impact of China’s economic turmoil & challenges in today’s technology metals supply chain* panel at the upcoming Global Technology Metals Market summit on Wednesday, October 14<sup>th</sup> in Toronto, Canada.

**Tracy Weslosky:** I’m so delighted to be discussing your most recent news release – a substantial announcement for the overall industry. Are you not the first rare earth company to have a deal with the U.S. Defense Logistics or is this not the Department of Defense?

**Anthony Marchese:** As the press release pointed out, the deal is part of the Department of Defense. They are responsible for this particular division, which gave us the contract and is responsible for the stockpiling of rare earths. To the best of my knowledge this is the first time the United States has ever given anybody a contract to produce anything. I know in the past they’ve given small contracts for research into study of the market, but in terms of production, this is I believe the first of its kind.

**Tracy Weslosky:** Well, can you give us the ten-story vantage point on this deal? Because I know Jack was trying to explain how much bigger this is, but I’d like to hear it from you...

**Anthony Marchese:** Obviously the terms of the agreement are exactly what's in the press release. I have to be careful about what I say due to confidentiality, but as the press release stated the DLA is interested in bench scale quantities of certain rare earths. They've mentioned two, yttrium at an ultra-high purity level five nines or better and yttrium which they're looking for a standard four nines. They're also interested in a third, which at their request we're not disclosing and that's also an ultra-high purity. I don't think people quite take into account or appreciate the ultra-high purity nature of two of those three. Ultra-high purity products sell anywhere from three to five times the market price. So for example, yttrium today if you could produce it at a five or six nines would trade at roughly three to four times the market price. For us there's an opportunity not just to show the DLA, obviously the Defense Department by extension that we could do this – but secondly it adds a new dimension to our economics because we could go out and sell a certain portion of our output at a significantly higher price than that quoted in metalpages or the Chinese internal market. It's significant on two levels.

**Tracy Weslosky:** Anthony according to my conversation with Jack what he was really stressing about this new release was kind of like an acknowledgement from the government for your extraction technology. Can you talk to us just a little bit more and give the InvestorIntel audience an overview about the K-Technologies and Texas Rare Earth extraction technology process because Jack seems to be a very strong enthusiast and supporter of this...to access the complete interview, [click here](#)

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# Lifton on the “most interesting panel ever seen” at the Global Technology Metals Market summit

October 6, 2015 – In a special **InvestorIntel** interview, Publisher Tracy Weslosky speaks with Jack Lifton, Sr. Editor for **InvestorIntel** about the upcoming Global Technology Metals Market summit on Wednesday, October 14th he will be presenting his thoughts on how the financial world views the resource world. He then discusses the significance of the recent strategic materials research contract announced by Texas Rare Earth Resources with the U.S. Defense Logistics Agency. Jack also discusses the panel he describes as the “most interesting one he has ever seen” titled *Innovative processing for the technology metals market* that will be moderated by Dr. Luc Duchesne and Pol Le Roux at next week’s event and touches on his thoughts on Lynas.

**Tracy Weslosky:** I’m going to start with a, I can’t wait to see you this next week at the Technology Metals Summit. Can you give us a glimpse into what you’re going to be talking about?

**Jack Lifton:** I’ve decided to talk about how the financial world views the resource world. There’s isn’t very much understanding in finance. I’d like to make the point that the Chinese seem to understand this a lot better than we do, how to finance companies that make critical materials for our society. Never mind the share prices and the pumps and the promotion and all of that. We really need to get these companies financed. I’ve changed my mind now after 75 years. I’ve decided that national governments should indeed invest in these resources. I’m going to talk a little about that.

**Tracy Weslosky:** Okay. Speaking of governments, I want to ask you because I know you sit on the board, board of directors for Texas Rare Earth Resources, and they've just announced a deal with the U.S. Defense Logistics Agency. I understand that this is the first time they've ever awarded a contract like this before. Talk to me about this.

**Jack Lifton:** It's certainly the first one ever in the rare earths field. I wouldn't know about the actual history. The point of this contract is to determine whether or not continuous ion chromatography is an effective and economical means of recovering rare earths from deposits such as Texas Rare Earth's. To me it's the first I've ever heard of this although I understand in World War Two they might have awarded similar contracts to the ancestor of this agency. People have to understand this is not just an award to Texas Rare Earth's to supply a few grams of yttrium. This is in fact the agency determining whether or not Texas Rare Earth is on the right path to develop its project with the right non-traditional technology, which is continuous ion chromatography. I understand that the originator of that technology will be a panelist next week at the conference. Is that correct?

**Tracy Weslosky:** It is correct. I was just about to say, I'm kind of putting you in the hot seat here Jack because what we have next week is we're going to have a number of the top disruptive, innovative and revolutionary and ground-breaking rare earth extraction technology representatives all on the same panel.

**Jack Lifton:** Right.

**Tracy Weslosky:** Now, can I get you to comment on how you think that's going to go down?

**Jack Lifton:** It's all a matter of economics. The three technologies I'm looking at are MRT, the technology being developed for Ucore Rare Metals, the continuous ion

chromatography that's being developed for Texas Rare Earth and what I call targeted solvent extraction, which is the very modern variation of solvent extraction that has been developed by Rare Element Resources...to access the complete interview click [here](#) or for more information on the Global Technology Metals Summit, go to [TechnologyMetals.com](http://TechnologyMetals.com)

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## **Lifton on asteroid mining rare earths and Molycorp's Mountain Pass**

**Some rules don't change.** But that doesn't mean that our poorly educated journalists have to know of them or even have to understand them, when they are described or applied. One rule, frequently swept under the rug by junior mining promoters eager to take advantage of journalistic ignorance can be stated as:

**"In order for any deposit to be developed into a profitable mine the infrastructure to access it must already exist, or, if not, then its costs must be included in the feasibility study."**

Trivially this means for example no commercial mining until I can get to the deposit and either process the material to a commercial form at the site or move it to a processing site without logistics' costs destroying the project economics.

A corollary of the above "rule" is that the cost of infrastructure must be quantified and covered before the project enters development.

Now, the above rules of economics having been stated let's get to what I am talking about today.

Mining carried out at the margins of contemporary engineering and process technology has always been a science fiction theme. This idea either directly as a driver or indirectly as a justification, in fact, has served to advance the idea of extraterrestrial exploration and as a reason to survey the sediments of the ocean's bottom. Neither the immense pressures of the deep ocean or the hard vacuum of outer space has thus been a barrier to the imagination, but in the real world of diesel-powered machinery using air as a source of oxidizer and of people who can only operate at all under narrow conditions of standard pressure and temperature-i.e., those that obtain on average at sea level on the surface of the earth-such mining has always faced not only the limitations of the human body but also infrastructure barriers.

Human adaptability and engineering have recently (in my lifetime) provided suits, in which, or machines, through or in which, people can operate under immense pressure or no pressure environments. However, so far, artificial intelligence (AI), AI has not progressed to the point where it can substitute at the drill point for an old man with an eye for minerals and a nose for grade. Remotely operated spectrographic equipment (sea-bed exploration) or gross long rang spectroscopy (astronomy) cannot yet even begin to substitute for hands on analysis.

Notwithstanding the fact that we (the human race) aren't ready nonetheless we are regaled this week with a stupid article about a "3 trillion GBP asteroid" passing by our planet. The promoter's universe in which we are presumed to live assumes that without exception none of us understand the law of supply and demand. Alas most of us do in fact understand this law, and so we are mostly not at all impressed by the truly dumb journalists who do not and never will understand the limits of science and engineering.

This week's treasure laden asteroid is fantasized, with no direct evidence whatsoever, to contain a million tons of platinum in its "core." The article's author and his/her editor simply multiply this number by the USD\$1500/troy ounce price for 99.99% metal that they find on the business page of *the Garbage Gazette* for which they work and the asteroid's fantasy deposit is "worth" 3.5 trillion GBP.

Let's assume for the sake of argument that we had access to up to a million tons of 99.99% platinum in the global 2015 marketplace of the planet Earth. The current world industrial demand for platinum mostly for automotive exhaust catalyst, but with a significant portion of demand for jewelry and some chemical engineering uses, is between 350 and 400 tons per year. Perhaps 60% of this demand is satisfied by new production from mines almost entirely in southern Africa. The rest comes from recycling of the scraps from the principle uses.

This would mean that the asteroid "deposit" would/could satisfy the needs of our society for platinum for some 2,500 years. Again assuming this is truly accessible the consequences would be economic chaos for the platinum markets. Such an immediate "supply" would collapse the price of the commodity essentially to ZERO, unless it could be economically produced at a slow enough rate. But even so that rate would have to be still at a cost low enough to compete with and replace the current supply marketed at (for argument's sake) USD\$1500/troy ounce. Even then it, the supply from the asteroid could only be increased so long as the increase did not distort the market and reduce the selling price due to overabundance.

But even if the "core" of the asteroid consisted of London Platinum and Palladium Market certified bars of pure platinum there will be logistics and engineering costs arising from such necessary engineering aspects as the following:

1. The asteroid will have to be put into an accessible orbit-it is now shortly just passing the earth. Its orbit could theoretically be adjusted to one either circling the earth or circling the moon. The moon would be better so that if there were an accident the asteroid would impact the moon rather than the earth, where a couple of million tons might be just enough for an extinction level event. However I note that the tonnage all of the warships of all of the combatant's in World War II was probably less than the total mass of this asteroid, so we are faced with the question of just how much energy it would take to capture this asteroid (i.e., control its orbit). Thank goodness we don't have to lift two million tons into orbit from the earth's surface, since this would mean accelerating the two millions tons to some 14,400 miles per hour just to get it into earth orbit. Let's see what the back of my envelope says: Oh yeah, it would take all of the energy the human race has produced so far converted into liquid oxygen and hydrogen. Then, let's see we would have to build a fleet of spaceships, launch facilities, and so forth that would take the industrial and economic output of the USA for several years.
2. Wait, you say, you would only have to produce enough fuel and rocket engines for the rocket engines to be implanted in the asteroid to change its course. You're right and this would only take a few trillion dollars and I'll bet less than a generation. But wait, Oh darn, the asteroid is just passing the earth we may never see it again even if it's in orbit around the sun, so we have to do all the calculations, build the ships, build the engines, and produce the fuel for both the ships and the orbital transfer in a couple of months. Uh Oh - that's going to be tough for a world whose attention span is taken up by an immature "entertainer" licking donuts.
3. The recruiting, education, and training of thousands of

- engineers and astronauts who contribute nothing to our earth bound economy until the mine is producing,
4. The planning, design, manufacturing, and testing of "space suits" for humans and mining equipment for use in hard vacuum,
  5. The design of transport vessels to carry the ore concentrates back to the earth,
  6. Facilities to process and refine the ore concentrates, and
  7. A political solution to the twin problems of who pays for all of this and what do they get out of it?

Funny I didn't see anything about any of the above things in the newspaper story.

But since we would have to in any case restrict the supply in order not to distort the market let's look a little further to see if this problem has arisen before.

Gee whiz we only have to look at the rare earths markets right now today on terra firma to see what happens to price when supply exceeds demand. But even here there is a further complication: **The supply of all of the rare earths is not in surplus**; it is just the supply of the lower atomic numbered rare earths, lanthanum and cerium, that is in oversupply. *So why are the prices of all of the market critical rare earths trending downward rather than firming?*

One answer would be that the production of the KEY rare earths, neodymium and praseodymium, is determined by the production of lanthanum and cerium, because the overwhelming majority of Nd and Pr is and must always be co-produced with La and Ce. This is how these elements are nearly always found in nature. Whenever anyone presents you with an elemental analysis of a "rare earths deposit" always look at the key ratios:

1. Nd and Pr/TRE0

2. Nd/Pr
3. SEG/TREO, and
4. HRE/TREO
5. HRE + Y

I was present in the Spring of 2013 in Ganzhou at a CSRE/ACREI joint conference where the General Manager of the world's largest vertically integrated producer of light rare earths located in Bayan Obo, Inner Mongolia, said that he was now forced to overproduce La and Ce in order to keep up with the demand for Nd and Pr.

With that in mind look at the above ratios for the three highest grade light rare earth projects in production today:

	<b>Molycorp Mountain Pass</b>	<b>Lynas Mt. Weld</b>	<b>Baotou</b>
Nd and Pr/TREO	16.3	23.4	21
Nd/Pr	3	3.6	4
SEG/TREO	1.1	4.1	2.1
HRE/TREO	0.2	0.47	0.25
HRE + Y	0.3	1.23	0.55

Note that outside of China not only does Mt Weld have the best distribution going for a large high grade accessible deposit but it is in fact better in SEG and HREEs than Baotou by a factor of two.

But as we know the established rare earth markets and the demand geography for the rare earths overwhelmingly favors China.

Humor me and let's look at the above metrics for my favorite three US deposits:

	<b>Bear Lodge</b>	<b>Bokan Mountain</b>	<b>Round Top</b>
Nd and Pr/TREO	23	16	7.2
Nd/Pr	3.6	4.3	2.7
SEG/TREO	5.15	7.7	3.8
HRE/TREO	0.74	10.1	26.7
<i>With Y added to the HREs for HRE/TREO one gets:</i>			
HRE + Y	2	36	70.1

- Bear Lodge – Rare Element Resources Ltd. (TSX: RES | NYSE MKT: REE)
- Bokan Mountain – Ucore Rare Metals Inc. (TSXV: UCU | OTCQX: UURAF)
- Round Top – Texas Rare Earth Resources Corp. (OTCQX: TRER)

Clearly (with Thorium and Uranium content eliminated) the USA deposits above are far better balanced in market critical rare earths than all the current producers outside of China but Lynas.

**It is clear that the total demand for rare earths for the manufacturing of rare earth permanent magnets is limited by how much neodymium or didymium (neodymium plus praseodymium) is produced.** It may well be that there is not enough new Nd + Pr being produced to allow any substantial increase in the production of rare earth permanent magnets even though there is enough being produced to satisfy the current demand. Therefore the prices of the magnet critical HREs are depressed as demand for them is lessened. But as the markets move to support high Nd+Pr producers such as Lynas the demand for the magnet rare earths, Tb and Dy, will once again increase and prices will go up.

China has and has been producing from HRE dominant deposits.

To be charitable the original investors in the revival of Molycorp did not understand that the market critical rare earths are more important than lanthanum and cerium. Nor did they understand, or know of, or use the 5 metrics above.

The continuation of Lynas is by no means assured, but support for its existence by Japanese investments in off-takes and even in facilities finance indicates that the Japanese have learned a lot more about the rare earth markets than many who invested in Molycorp.

Events are moving rapidly. If the world's economy, and, in

particular, that of the USA and/or Europe resumes a 4% growth rate then the end-use markets for the market critical rare earths will resume its steady growth. Then and only then will commodity prices rebound. China probably today has the power to create the necessary uptick in the growth of global GDP. And, in fact, this is the probable result of the new goal of re-setting the Chinese domestic economy away from one that is export-led to one that is domestic consumption-led.

The world's economy is struggling to resume steady growth. Asteroids will come and go, and in fact there will be asteroid mining one day, but it will be for local use and the most precious of all mined goods will be ICE (water). Think about that. What else can you use to produce fuel (hydrogen and oxygen), atmosphere, and a medium in which to grow plants?

[Disclaimer: Please review Jack Lifton's bio below where he lists his clients and Board positions.]

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## Texas Rare Earth Resources – The Ant and the Grasshopper

✘ Distant memories of my High School French brings back a few stanzas of the Marseillaise, the opening line of Baudelaire's poem *Recueillement*, "*Sois sage, O ma douleur*" (great advice for all those angsting in the mining space) and the beginning of Jean de La Fontaine's *La Cigale et la Fourmi* (the Grasshopper and the Ant) which goes "*La Cigale, ayant chanté, Tout l'été,*".. The grasshopper, having sung, all the summer..." and then goes on to relate how this feckless insect is outcompeted by the ant that spent the summer collecting food for the winter.

The grasshopper sounds depressingly like many in the REE (rare earth elements) space while the simile of the ant came back to us recently (in the dead of winter) with the latest news from Texas Rare Earth Resources Corp. (OTCQX: TRER).

### **Catching one of the Big Stars of the Rare Earth Firmament**

Anthony Marchese at Texas Rare Earth Resources reminds us of a general marshalling his troops for battle. He has resolved not to sally forth into the corpse-strewn REE no-man's-land until he has all his heavy artillery aligned. The latest addition to the Texas Rare Earth Resources board is somewhat akin to the Germans' introduction of "Big Bertha" to World War One battlefields.. a key change in the balance of firepower.



I have got to say that Texas Rare Earth Resources sounds like a step up from his previous position as Eric Noyrez was, until June of this year, the Chief Executive Officer of Lynas Corporation. He had been appointed to the Lynas board in late March 2013. He had joined Lynas as President & Chief Operating Officer in February 2010. He had previously been the President of Rhodia SILCEA (its rare earths, silicas and diphenols division) with annual sales volumes over US\$1 billion. He spent 11 years with the Shell group of companies, managing chemical and industrial businesses.

He began his career designing automobiles for the Peugeot / Citroen group. He holds a Masters degree in Engineering and Mechanicals from ENSM (Ecole Nationale Superieure des Mines) in France, where he studied Mechanics and Robotization, specializing in Polymer processing.

### **Object Lessons**

Having Molycorp and Lynas move into production so far ahead of the rest of the REE pack initially seemed like it put the junior players at a disadvantage. However, perversely, the

larger the time gap the more lessons that have been learnt about “what not to do” in the Rare Earths space. In the case of Molycorp the errors are multiple but the gravest was to start with an initial pit that was not the best deposit that could have been exploited. In the case of Lynas the error was to chase after the elusive tax benefits of a Banana (well, palm-oil) Republic which ended up with complications that were legion, more than negating whatever the supposed economic benefits might have been. Noyrez, having to untie the Gordian knot made by the board’s feckless decision back in 2008 to go to Malaysia in the first place, is uniquely positioned to know the pitfalls and steer Texas Rare Earth Resources clear of those that he has previously had to grapple with at Lynas.

## **Brains Trust**

The board Noyrez is joining is already freighted with intellectual (and practical) heavyweights from the REE and specialty metals space, our colleague, Jack Lifton, being prominent amongst them. Though the others are no lightweights either:

- Dan Gorski – a veteran geologist (who just happens to have also worked as a cryptographer for the US Army)
- Nicholas Pingitore – a geochemist of renown
- James Wolfe – a metallurgist with deep experience of dealing with China is matters of REEs and specialty metals

Then the Advisory Board has:

- Charles Groat – former head of the USGS
- Dan McGroarty – a Washington mover and shaker of the first water
- Phillip Goodell – a geology professor at University of Texas
- Jim Hedrick – former rare-earth commodity specialist at the U.S. Geological Survey

The days of putting together dream boards are long past for most REE companies and in any case they were largely an exercise in “collecting the set” with their members treated like Cigar Store Indians to be seen and not heard. That Texas Rare Earth Resources is still putting together its team and paying attention to what they say shows a different level of seriousness altogether from the Vancouver promoters. Then again Anthony Marchese is most definitely not a product of the Vancouver sausage machine school of mining promotion.

## **Conclusion**

Ironically there are a number of Rare Earth companies that style themselves as rare metals companies, and yet Texas Rare Earth Resources’ name implies only Rare Earths where it is in fact a whole array of metals in such quantities that Round Top could be a mine dedicated to any one of them in their own right rather than just by-product credits. To give just a reminder, Texas Rare Earth Resources has independently mineable resources in:

- Rare Earths
- Fluorite (including Yttrio-fluorite)
- Beryllium
- Lithium
- Uranium

With such a multifaceted deposit we would not be surprised to see the Chinese interest perking up. It should be noted then that Noyrez has extensive experience in the Chinese natural resources and chemical processing sectors, where he is well regarded. However if the powers that be in Washington want to keep the Chinese at bay from getting their hands on the Beryllium at Round Top then they might designate some party to take Texas Rare Earth Resources out of temptation’s way.

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# **Texas Rare Earth Resources targets lower than \$100 Million CAPEX at Round Top Heavy Rare Earths project**

Texas Rare Earth Resources Corp. ('TRER', OTCQX: TRER) has updated its operational strategy earlier this week in order to reduce operational costs, potentially lowering the initial CAPEX for the Round Top heavy rare earth project to USD\$ 60-90 Million. The improved project economics rely on shifting the focus on the production of "a selected group of separated REE products in the range of 350-450 tonnes/year," based on a mining rate of 2,500-3,500 tons of ore/day. The remaining rare earth elements that will not be separated immediately, according to the scalability based strategy, would be stored on site as a mixed REE product for future separation, based on demand. The idea is to allow the market to absorb the lower initial production rate and to establish TRER as a credible and alternative supplier to critical US industry sectors such as defense where reliable supply chains are essential.



TRER has targeted CAPEX costs ever since the publication of the Preliminary Economic Assessment (PEA) for Round Top. In late 2013, the Company announced that it revised CAPEX from \$2.1 billion to under \$300 million for its NI 43-101-compliant resource with a net present value (NPV) of over \$1 billion and a speculative mine life for Texas Rare Earths is 100-plus years for the sole Round Top Mountain (TRER's flagship project in Hudspeth, Texas; TRER also has three other mountains, which

have not yet been fully developed). One of the reasons for the low CAPEX, apart from production scalability strategies, is that the host rock at Round Top is yttrifluorite, which yields yttrium and high rare earths content. TRER may be the only known deposit based on yttrifluorite host rock. This has processing advantages, because TRER will be able to use sulfuric acid to heap leach the deposit. Heap leaching is among the lowest cost processing methods available and they have been used widely in China for processing its famous clay deposits. Not all deposits are amenable to heap leaching, but the fineness and evenness of the materials in the Round Top deposit lend themselves to this method.

TRER's resource consists largely of what is now referred to as "critical" rare earths such as dysprosium and holmium along with related critical elements such as yttrium (which is not technically a rare earth). While dysprosium and neodymium have received much market attention lately due to their magnetic properties, holmium is one of the more interesting rare elements. TRER has the largest deposit potential resource for holmium in the US and probably the world. Holmium is an interesting element; it is used to generate the most intense artificial magnetic fields and thanks to its ability to absorb neutrons produced by nuclear fission, is also used to make control rods for nuclear reactors. Holmium is also needed to make microwave lasers, which have found important applications in medicine. Holmium lasers are used as an endoscopic technique to remove prostatic adenomas, avoiding any skin incisions. Holmium is also being investigated as a material to build magnetic databases for quantum computers. Certainly, the US federal government has an interest in what TRER is doing.

TRER also presents non-mineral advantages, the main one of which is that the resource is located in Texas. Texas legislation is mining friendly and because the State makes money only if the mine reaches production stage, it has a stake in seeing projects through to completion. TRER's deposit

is based exclusively on non-federal property, which means it is not subject to Bureau of Land Management (BLM) or Forest Service management. TRER's lower projected CAPEX render it one of the contenders to become a major US domestic rare earths supplier. It has a world class deposit (including beryllium and a 70% heavy rare earth concentration) with outstanding infrastructure. TRER's deposit presents a clear mineralogical pattern which lends itself to heap leaching. As a result, TRER is working on a special metallurgical process to deliver looking for a strategic partner in its next phase of development. TRER's focus on lowering CAPEX aims at maximizing profitability, boosted by the fact that it can offer products based on at least 25 elements, 15 of which rare earths along with thorium and uranium. TRER can also capitalize on its beryllium (298,000 ton historical resource estimate) and niobium resources.