

CONTENTS

04 CYPRESS REPORTS ON DEAN LITHIUM CLAYSTONE SOLUBILITY RESULTS

Cypress Development Corp. (CYP: TSX-V, CYDFV: OTCBB, C1Z1: FSE) has received its solubility study assay results from Cypress' 2,700 acre Dean Lithium Brine/Claystone Project [...]

06 TRUMP'S MERCANTILISM WILL BOLSTER THE PRECIOUS METALS

The voting booths hadn't cooled down last November before I was insisting that America was likely to see something rather different than what it thought it had voted for.

08 DON MCKINNON JR. FOLLOWS UP ON HIS FATHER'S PROMISING GOLD PROPERTY

When our Due Dili checklist keeps getting 'Excellent' ratings, it's time to tell Sunvest Minerals Corp.'s story... (SSS: TSX-V)

10 THE MISSING LINK

Pollution and climate change are key drivers for the global adoption of clean renewable energy – solar, wind and tidal [...]

14 SOUTHERN SILVER EXPANDS CERRO LAS MINITAS

Southern Silver Exploration has a lot of congruent factors going for them at their flagship Durango, Mexico project.

16 CRUZ COBALT CORP. NOTES THAT COBALT PRICES HAVE GONE PARABOLIC...

Cruz currently has seven cobalt projects located in Canada and one in Idaho.

18 PERSHING GOLD CORP. SOLIDIFIES NEVADA INTERESTS

Building on a solid foundation laid in 2016, Pershing Gold has maneuvered itself into a strong position for the coming year [...]

20 HIGH GRADE ZINC POURING OUT OF TURKEY

Zinc is a vital element for life: one of eight essential micronutrients, without which our bodies couldn't manufacture many enzymes and proteins, fight off bacteria [...]

22 BHT ACQUIRES ALPINE MINE GROUP

Braveheart Resources Inc. (BHT: TSX-V) is focused on building shareholder wealth through aggressive exploration in a favourable and proven mining jurisdiction - the West Kootenays in southeast British Columbia (Ag, Au).

24 HOW YOU CAN RECEIVE "FREE" STOCK IN A NEW GAME-CHANGING COMPANY!

[...] in the process of making an almost two year's long study, we featured a new technology company in the microcap category that could change the mining industry.

26 WHY LOW RISK, HIGH GRADE IS MORE IMPORTANT NOW THAN EVER

A lot of us have been trying to figure out what's going on in Trump's Whitehouse and what it means for us in the Canadian mining sector.

28 THE 46-YEAR RECORD OF PLATINUM-GOLD RATIOS

The gold to silver and platinum to gold price ratios determine the relative value of the precious metals and are useful parameters in deciding which metal to buy at any given time.

30 WHERE WILL ALL THE ELECTRIC CARS GO WHEN THEY END THEIR SERVICE LIFE?

Of all the hurdles that electric cars have had to overcome, one of the most annoying, and persistent, has been what to do with the batteries when the vehicles reach the end of their service life.

PUBLISHED BY

THE PROSPECTOR NEWS

www.theprospectornews.com

PUBLISHER:

Michael Fox editor@theprospectornews.com

CONTRIBUTORS:

Rick Mills, David O'Brien, David Smith, Chris Temple, Christian Vakenti

PRODUCTION:

George Pitaru george@pitaru.ca

THE PROSPECTOR NEWS

Telephone: 604-639-5495 sales@theprospectornews.com

All maps, borders and statistics appearing in this edition are compiled from information believed to be reliable but not certified. Companies listed herein do not constitute a recommendation for purchase by The Prospector Investment and Exploration News, and should not be construed as such. Principals or employees of The Prospector Investment and Exploration News may, from time to time, be the actual or beneficial possessors of issues herein reported. Opinions expressed herein are not necessarily those of THE PROSPECTOR NEWS. The Prospector Investment and Exploration News (ISSN 11816414) is a registered mark of K.W. Publishing Ltd. Reproduction in whole or in part without written permission from the publisher is strictly prohibited © 2016 THE PROSPECTOR NEWS. All rights reserved. The Prospector Investment and Exploration News is printed in Canada and published six times yearly by THE PROSPECTOR NEWS.

INVESTORS! FINANCIERS! MINERS!

Find out about breaking News from Explorationists, Developers and Producers utilizing a simple, intuitive reverse-search tool.

NOW 'MOBILE-FRIENDLY'!

Pre-Register to many world-class resource investment events, usually saving the entrance fee.



Mine Sneep per Com Investweb. CLUB Investment Webinser CLUB THE CSE & Stockhouse Brokerage Ferms & Ideal of Partners

HOT DIFFINE FRESSI COMPANIES STOCK QUIDTS COMMODITY PRICES HERSIETTER WRITERS

RESEARCH AMLYSTS ASSOCIATIONS & EVENTS HIVESTWEB. CLUB CONTACT US

HOME - COMMODITY PRICES

CONTROLL US

CONTROLL US

CONTROLL US

THE DAILY BARKERLETTER

For disjunger from 6 timp one or fine)

www.magsilver.com

http://www.minesnooper.com/Companies

Produced by International Mining Research CENTRE www.InternationalMiningResearch.com Regional • Resource • Research
"...the new 'three R's."



CYPRESS REPORTS ON DEAN LITHIUM

CLAYSTONE SOLUBILITY RESULTS IN CLAYTON VALLEY, NEVADA

By David O'Brien

Cypress Development Corp. (CYP: TSX-V, CYDFV: OTCBB, C1Z1: FSE) has received its solubility study assay results from Cypress' 2,700 acre Dean Lithium Brine/Claystone Project located in the heart of the Clayton Valley lithium exploration area of Esmeralda county, Nevada.

Latest News inserted below, with beneficial results from the Dean solubility tests.

Cypress Clayton Valley Lithium Project, Nevada location map: http://www.cypressdevelopmentcorp. com/i/maps/CYP-Clayton-toposatalite-small.jpg

The Dean Project is located adjacent to producing lithium brine wells belonging to the **Albemarle Silver Peak** mine on its west boundary, **Pure Energy**'s resource area on its southwest boundary and Cypress' **Glory Project**, optioned to Pure Energy, on its southern boundary.

Highlights:

- Cypress completes solubility studies on 48 previously assayed Dean claystone samples;
- A de-ionized water leach process returns 36.15% Li recovery on average;
- A modified dilute acid leach process returns 94.72% Li recovery on average;
- Permit application made to BLM, Nevada for a series of drill holes into new Frontera Verda Zone;
- Cypress anticipates drilling to begin at the end of January.

Cypress has now completed solubility studies with 48 previously assayed claystone samples from the Dean property. A modified dilute Aqua Regia (dilute acid) process (ME-MS41W) and a de-ionized water leach process (ME-MS03) has been carried out by ALS/Chemex lab in Reno, Nevada in order to provide Cypress with further data on the potential feasibility of a large-scale leach extraction method of lithium from the abundant mineralized claystone.

What's key about the data displayed from these solubility studies is the vast difference between the percentile range of the de-ionized water leach process (3040%) and the Aqua Regia results... in the 90-95 range. View the total chart of results in their recent News Release of January 12th, 2017 on their website at http://www.cypressdevelopmentcorp.com/s/NewsReleases.asp?ReportID=775481&_Type=News-Releases&_Title=Cypress-Reports-on-Dean-Lithium-Claystone-Solubility-Results-in-Clayton-Val...

Donald Huston, President Cypress Development, stated "the results generated from the most recent assays consisting of a highly dilute weak Aqua Regia solution and a de-ionized water solution on the Dean Project samples has returned very encouraging results relating to the lithium recovery from the claystone that is known to exist on the majority of the Dean Project in Clayton Valley, Nevada. It is evident that the use of differing solutions in the assay procedure, as noted above, that the abundant lithium-rich claystone could be amenable to an extraction methodology that could be cost effective with a very high recovery of lithium content expected from processing. Cypress' management are very encouraged with the progress seen to date and will continue with work on potential lithium extraction methods from the claystone".

Since these encouraging results, CYP has initiated a drill program and released another New Release about the targets.

Cypress Begins Drill Program at Dean Lithium Claystone Project in Clayton Valley, Nevada, Completes Water Solubility Study

Vancouver, BC - Cypress Development Corp. (TSX-V: CYP) (OTCBB: CYDVF) (Frankfurt: C1Z1) ("Cypress" or the "Company") is pleased to announce it has commenced mobilization of a drilling program to explore for depth extensions of outcropping lithium mineralization in uplifted basin evaporite bearing mudstone and claystone at its 2,700 acre "Dean" Project located in the central Clayton Valley of Nevada.

We'll be tracking CYP's results of course, as one of the differentiating features of these mineralized claystone deposits is that they are NOT 'encumbered' by hectorites, which practically prohibits extraction of lithium. Look forward to more news, especially in the Pure Energy partnership.

More News just in: February 14th News Release available here:

http://www.cypressdevelopmentcorp.com/s/NewsReleases.asp?ReportID=778436&_Type=News-Releases&_Title=Cypress-Begins-Drill-Program-at-Dean-Lithium-Claystone-Project-in-Clayton-V

In Conclusion, these first solubility tests immediately differentiate the Dean claystones, as indicated in the following [unedited] including Don Huston's comment following:

"The ratio data [in the chart in the above-mentioned News Release of February 14th] compares in an effective way the chemistries of a synthetic brine made from surface outcropping claystones on the Cypress Dean property with basin brines of the Clayton Valley. The ratios suggest that the synthetic brine is chemically very similar to the two selected basin brines. This is particular true in the critical magnesium/lithium (Mg/Li)

ratio where the total range of values for the three solutions falls within a narrow range.

The following points are apparent and supported by the mineral solubility data:

It appears that a lithium bearing

- mineral solution that is chemically similar to the production and resource brines of the Clayton valley can be produced by the leaching of surface exposed evaporate stratigraphy in water. Comparison of ratios with other important elements also shows the Dean "Synthetic Brine" to compare favorably with basin production brines. 3 The data provides further strong support for the idea that the production brines of the basin are being continuously recharged by leaching of lithium and other elements
- This recharge mechanism strongly supports the importance of the outcropping and buried claystones as a very significant lithium source rock. Our chemistry work-up as presented here shows how rain water would extract lithium and sodium from the

from the uplifted and exposed former

lake basin sediments that outcrop in a

wide belt along the east margin of the

Clayton Valley.

uplifted, mineralized basin sediments at much higher rates than the extraction of magnesium and calcium. This process would neatly account for the chemistry of basin production brines versus the chemistry of source rock claystones.

The potential for the existence of ground water mineral brines under and immediately adjacent to the exposed belt of lithium rich rocks is high as the water flow pathways for the recharge system are likely to be vertical as well as horizontal.

Don Huston, President of Cypress Development, stated: "Assays from surface sampling at the Dean Project have returned extremely encouraging results in the form of widespread high lithium mineralization hosted within highly reactive and soluble rock units. We have now completed detailed analysis of the results of several different assay methods as a first order study of potential extraction methods of the lithium from the host rock sequence. This study highlights the similarity of the solutions made from dissolving the surface claystone in water compared to production brines of the basin. The results of the study strongly indicate that recovery of lithium from a solution

from the outcropping evaporates and water could potential be done by methods currently being used in the Clayton Valley and by new methods under development by Pure Energy Minerals and others." [italics used for emphasis mine, Ed.]

Robert Marvin, PGeo, Exploration Manager for Cypress Development Corp., is the qualified person as defined by National Instrument 43-101 and has approved of the technical information in this release."

What appears to be a 'technical' argument is, in fact, REAL NEWS... and enhances our opinion of the Dean's viability as a source of lithium with the advantage of lesser quantities of magnesium and calcium

As always, do your Due Dili on these emerging scientific analyses.

David O'Brien, is the owner of Int'l Mining Research Inc. which employs Media, Event and Online exposure, including **MineSnooper**. com. O'Brien also owns W.I.T. Marketing, an ad agency, and has been contributing articles to **TheProspectorNEWS.com**, on demand. He owns no shares in the above companies. dobrien@InternationalMiningResearch.com





TRUMP'S **MERCANTILISM** WILL BOLSTER THE PRECIOUS **METALS**

By Chris Temple

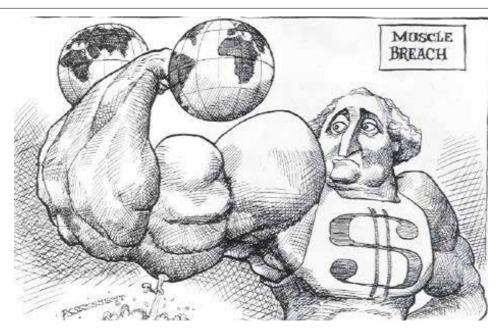
The voting booths hadn't cooled down last November before I was insisting that America was likely to see something rather different than what it thought it had voted for.

And that is more apparent than ever.

onald J. Trump is said by the media to have run on a "populist" platform. While a lot of his rhetoric sounds such, the FACT is that Trump and his team will be pushing something different as policy. Namely, they are in several ways returning the U.S. to the mercantilism of the late 19th and early 20th centuries.

In one of my thematic early 2017 issues on "all things Trump," I explained the difference.* Simply put, policy will be geared NOT with the primary interest of voters and workers, but in such a way that government and corporations will simply move their profits from one "pocket" of the Global Plantation's coffers to another.

That globalization will be replaced somewhat by more nationalist-oriented (for corporations and banks; not necessarily people) tax and government/fiscal policy might be less bad than globalization, which is under attack from multiple directions (and rightly so!) However, by definition, these policies are likely to further stifle global trade and-most important for precious metals specifically and commodities generally--renew a broader global currency war that will favor precious metals and other real assets in the end.



NO "KING DOLLAR" FOR TRUMP!

I opined in my first issue of this year on the likely path of the U.S. dollar under Trump, including my views on the likelihood that the strong dollar since Election Day would prove to be unwelcome.* We got to that point faster than I thought!

Once "Reaganomics" finally got cranked up a generation ago, U.S. financial assets and the greenback itself caught fire. The dollar's rise was so relentless that--early in The Gipper's second term--everyone cried "Uncle" and there was a coordinated effort (The Plaza Accord) to engineer a decline in the U.S. dollar's value to rectify the many imbalances it had caused.

We didn't even make it to the second month of the Trump presidency before the new president himself bluntly stated that—as an ostensible part of his program to recapture U.S. manufacturing and the rest – HE THINKS THAT AMERICA SHOULD CHEAPEN ITS CURRENCY LIKE EVERYONE ELSE TO GET A BETTER TRADE ADVANTAGE!

help with this task. The result after eight years, sadly, was an explosion in the size of government, its powers, the ever-growing police state, the national debt and the rest.

And another key thing here: The more than tripling of the S&P 500 since its early 2009 low, together with a rebound in housing prices has done about all the so-called

I have been predicting what I call a "Stagflation Lite" environment ahead of us; similar in most ways to the late 70's and early 80's. And with President Trump's stated policy intentions, I am more convinced of this scenario than ever.

The argument is really quite simple. At its core we have the old adage of too much

money chasing too few goods (and too little in the way of growth.) With price pressures and already-high valuations, stocks don't exactly look cheap. As for bonds, that most manipulated of markets (sorry, gold and silver bugs!) won't unravel as dramatically as it did in the 70's and early 80's; central bankers won't allow it. But nevertheless, there will be less investor demand for already-expensive sovereign debt.

By process of elimination, that leaves raw materials chiefly. And as was the case back in the stagflation of a generation ago, they will rise in price not so much because all of the monetary and fiscal measures have led to strong economic growth, but just as much because they have

With economic growth still slowing and so many simmering financial and banking issues in the world (Europe especially) gold appears ready to be the leader once again. For as long as the economy at least muddles along, other basic materials will do progressively better

failed.

*For a FREE copy of Chris' comprehensive Special Issue, "Your Guide to Trumponomics," e-mail him at chris@nationalinvestor.com

Reagan vs. Trump: the starting position could not be any more different!



	Beginning of era	End of era
Inflation (CPI):	14.8%	1.1%
Interest rate 10Y Treasury bonds:	10.7%	7%
S&P 500 P/E:	7,1x	22.4%
Government debt:	USD 800bn	USD 2,680bn
Government debt/GDP:	30.8%	49.8%



	Beginning of era	End of era
Inflation (CPI):	1.6%	7
Interest rate 10Y Treasury bonds:	2.1%	7
S&P 500 P/E:	20.4x	2
Government debt:	USD 19,800bn	7
Government debt/GDP:	105%	?

That set the stage for a technical breakout in gold days later; one that--as of this writing-remains in tact despite the continuing new highs in the stock market.

MORE HEADWINDS TO GROWTH AND "MAGA"

As the above comparison illustrates, those hoping for some kind of a repeat of the secular "Reaganomics" boom will likely be disappointed. Exponentially growing debt loads have so bogged down growth that even if the best of what Trump has promised takes place, there won't be nearly the impact on the overall economy as what we saw from the Reaganomics growth (and debt) binge.

So while the new president is promising massive increases in economic growth, jobs and the rest (so much so that—as I write this-he has already unveiled his 2020 reelection slogan "Keep America Great!") I have to believe that these lofty goals will not be met.

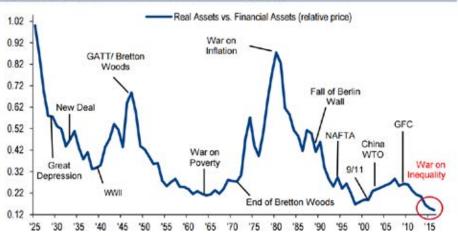
It's also dubious just how much Trumponomics will have any more success than did Reaganomics in limiting the size and scope of the federal government. Reagan appointed a high-profile group of industrial and other leaders--the Grace Commission as it came to be known--to

wealth effect is capable of. There is precious little organic economic growth right now; what there is is due largely to financial alchemy on the part of Corporate America and other accounting trickery to massage the official numbers.

Ben Bernanke and Janet Yellen have already "Made America (that is, the markets and renewed asset bubbles) Great Again." There's not much juice left.

A RETURN TO STAGFLATION – AND MORE GAINS FOR PRECIOUS METALS, ETC.

Real Assets at all-time lows relative to Financial Assets



DON MCKINNON JR.

FOLLOWS UP ON HIS FATHER'S PROMISINGGOLD PROPERTY RIGHT NEAR HEMLO

By David O'Brien

When our Due Dili checklist keeps getting 'Excellent' ratings, it's time to tell **Sunvest Minerals Corp**.'s story... (SSS: TSX-V)

e've been watching the development of **Mike England**'s company
Sunvest Minerals where he serves as CEO & Director; the Management and Board, the property itself, the Hemlo-like parallels, and the nearby infrastructure, all point to promising results to the upcoming drill program on the **McKinnon-Hawkins Gold Project** in Ontario.

Company Director Don McKinnon Jr.

comments: "We are very proud to be commencing drilling on this project which **Don McKinnon Sr.** (of Hemlo fame) had great hopes for."

As England points out another 'industry great' is the Chairman, **Victor Bradley** who was the **Osisko Gold** Chairman and founder of **Yamana Gold**. View their impressive bios here: http://www.sunvestminerals.com/management.

So, management... check.

If you'd like to view more about Hemlo itself, there's a short video on Sunvest's Home Page

SSS-TSXV

SUNVEST MINERALS CORP.

CONTACT INFORMATION: Mike England, CEO, 604-683-3995, email: mike@engcom.ca





MCKINNON-HAWKINS GOLD PROJECT - FINDING THE NEXT HEMLO

- Includes the McKinnon Property, staked by Don McKinnon Sr. of Hemlo fame, with a current, recent (May 2016) 43-101 compliant Inferred Resource, based on an open pit application, estimate of 4,957,000 tonnes at a grade of 1.50 g/t Au for a total of 239,100 ounces of gold
- Current team includes Don Mckinnon Jr., Robert Weicker, a past chief geologist at Hemlo (Williams Mine) and Mr. Victor Bradley – currently director of Osisko Gold Royalties Ltd., past Chairman of Osisko Mining and Founder of Yamana Gold Inc.
- · Excellent potential to grow the resource
- · Fully permitted drill targets
- Geologic model, "Hemlo-type" deposits. Hemlo camp (+ 20 million ounces, three mines) located 150 kms WSW.

EVENING STAR PROJECT - NEVADA PAST PRODUCER OF GOLD AND COPPER

- Property covers former historic gold and copper producer, with limited drilling
- Replacement style gold mineralization in carbonates is the principal target
- A historic drill hole returned strong lead, zinc and silver numbers over significant width; not assayed for gold

here: http://www.sunvestminerals.com/home From their January 27th, 2017 News Release: "The McKinnon-Hawkins project represents an advanced exploration gold project for the Company, with a maiden NI 43-101 resource estimate of 239,100 ounces of **gold** (4,957,000 tonnes at 1.50 grams per tonne gold (g/t Au), at a cut-off grade of 0.5 g/t Au), with excellent potential to grow resources and discover new zones of gold mineralization. Garry Clark, PGeo, is a qualified person as defined by National Instrument 43-101, is the independent qualified person responsible for reviewing and approving the technical contents of this press release as they pertain to the McKinnon-Hawkins Property."

This diamond drilling program will have two main focii: the main deposit for confirmation and at the Taylor showing area to expand the resource. Robert Weicker is SSS' Chief Geologist. Weicker's 5-year stint at Hemlo included the role of Chief Geologist at the Williams Mine (at the time, the largest gold mine in Canada) for **Lac Minerals Ltd.**, and was with the project from late exploration, through development and construction, to production at 6000 tonnes per day. Weicker also has extensive exploration experience in the Hemlo, Thunder Bay area, and Abitibi greenstone belts, for gold and VMS (Volcanogenic massive sulphide) deposits



as well as in the USA, South & Central America, Asia and Africa.

More information on the Technical Team is here: http://www.sunvestminerals.com/technical.

Location & Geology:

The McKinnon-Hawkins Gold Project is located in the Hawkins and Walls Townships, Sault Ste. Marie & Porcupine Mining Divisions, Ontario and covers three claim blocks comprising 5,824 hectares (58.24 sq km) featuring over 30 kilometres of favourable geology prospective to host gold mineralization.

The geologic model is a "Hemlo-type" deposit. The Hemlo camp (over 20 million ounces, three mines) is located 150 kms WSW.

Good infrastructure as a result... and logistics: logging road access is from Hornepayne. Ore could be loaded on nearby railway and railed to Hemlo for milling... SSS has fully permitted drill targets. Check, check, and check again.

Frankly, it really is time to tell **SSS**' story, as so far. I can't find any reason not to:={} Do your Due Dili, of course.

David O'Brien, is the owner of Int'l Mining Research Inc. which employs Media, Event and Online exposure, including MineSnooper. com. O'Brien also owns W.I.T. Marketing, an ad agency, and has been contributing articles to TheProspectorNEWS.com, on demand. He owns no shares in the above companies. dobrien@InternationalMiningResearch.com



Digital Phone System (PBX)

- Compact design operates quietly.
- Very low power consumption.
- 1-2-3 set-up & web configuration.
- Voicemail & Voicemail-to-Email
- Auto-Attendant & Off-Hours Menus
- Intelligent call forwarding.
- Uses analog or digital lines.
- ✓ Remote & on-site support available.



Multi-line **Business Phones**

- Individual staff phone extensions.
- Support for on-site and remote phones.
- ✓ Call Hold, Transfer & 3-Way Conferencing.
- ✓ Advanced Text & Number Call Display
- ✓ Do-Not-Disturb & Call Forward.
- ✓ Staff Directory & Speed-dial.

usines

phones from

\$155.00

- √ Conferencing rooms & Call Agent Queues.
- √ Uses Existing PC Ethernet Wiring



www.telephonic.ca

40% Savings* On Monthly Phone Bill

- Access discounted long-distance rates.
- Reduce your line cost to \$32/month.
- ✓ Keep your existing telephone number.
- Auto-forward calls to mobile staff.
- No need for longterm contracts.
- XLS call records available for easy accounting.
- Simple PDF invoicing.
- Free quotation & savings assessment.



business lines \$32/month

telephonic

Call 604.638.3848

systems from 875.00

09 / MAR 2017 <u>■ PROSPECTOR</u>



Pollution and climate change are key drivers for the global adoption of clean renewable energy - solar, wind and tidal - but the high cost of solar installations and the lack of economically efficient storage batteries has held back widespread adoption of clean renewable energy.

CLIMATE CHANGE

n the past million years, the Earth has experienced a major ice age about every 100,000 years.

This temporary reprieve from the ice we are now experiencing is called an interglacial period - the respite from the cold locker began as the earth started heating up and warming its way out of the Pleistocene Ice Age (began about 1.8 million years ago and lasted until about 11,700 years ago). At one point during the Pleistocene Ice Age vast incredibly thick sheets of ice stretched over Greenland, Canada and parts of the northern United States.

The close of the Pleistocene Ice Age started when a shift in sunlight caused a slight rise in temperature - this raised gas levels over the next few hundred years and the resultant greenhouse effect drove the planet's temperature higher, which drives a further rise in the gas levels and so on.

The exact opposite happens when sunlight weakens, we get a shift from emission to absorption of gases which causes a further fall in temperature... and so forth.

According to NASA's Goddard Institute for Space Studies (GISS), the average global temperature on Earth has increased by about 0.8° Celsius (1.4° Fahrenheit) since 1880. Small rises or falls in temperature - more, or less sunlight - causes a rise, or fall, in gas levels. Changing atmospheric CO2 and methane levels physically linked the Northern and Southern hemispheres, warming or cooling the planet as a whole.

Many scientists say it's very likely that most of the warming since the mid-1900s is because our burning of fossil fuels for energy production and transportation adds heat-trapping greenhouse gases into the air. Climate models predict that Earth's average temperature will keep rising.

CONSEQUENCES

According to science the world is going to continue to get warmer, polar ice caps will melt, so will the Greenland ice sheet and most glaciers. More sunlight will be absorbed by the Earth's oceans, causing increased evaporation. Water vapor is a greenhouse gas and amplifies twofold the effects of other greenhouse gases. With Earth's ice gone there will be significantly less sunlight reflected back into space, vast expanses of Arctic tundra will thaw releasing unbelievable amounts of methane, a greenhouse gas twenty times more potent then CO2.

The polar jet stream has already been altered, wide swinging north-south deviations (meanders) have become the norm - deviating far from its normal path and meandering north into Canada, the

jet stream brings warm air while dipping far south over Europe, the polar jet stream brings record cold and snow.

Ocean currents will be altered further impacting our climate and sea levels will rise. Freshwater aquifers will suffer from saltwater intrusion, once habitable zones will become uninhabitable.

Because of increased ave rage global temperatures the tropical rain belt will have widened considerably and the subtropical dry zones will have pushed pole-ward, crawling deep into regions such as the American Southwest and southern Australia, which will be increasingly susceptible to prolonged and intense droughts.

A report by the Intergovernmental Panel on Climate Change (IPCC) concluded that climate change will amplify extreme heat, heavy precipitation, and the highest wind speeds of tropical storms. Extreme weather events are going to happen with increasing frequency, the climate for the area you live in is, if it hasn't started already, going to change. We are all watching and experiencing these events and changes in real time because changes that use to take tens and tens of thousands of years are now happening in decades.

Earth's average temperature is expected to continue to rise even if the amount of human caused greenhouse gases in the atmosphere decreases. But the rise would

be less than if greenhouse gas amounts remain the same or increases.

SOLAR GOOD NEWS

The average price of a solar module was \$76.67/watt in 1977, \$4 per watt in 2008, \$0.74/watt in 2013 and according to PVinsights \$0.49/watt on July 15, 2016. Oxford University researchers say solar's share of global electricity will grow from roughly 1.5% today, to as much as 20% by 2027.

The U.S. solar industry expects to have installed 14.5 gigawatts of solar power in 2016, a 94% increase over the record 7.5 gigawatts in 2015.

For the first time, more solar systems came online in 2016 than natural gas power plants - the top source of electricity in the US in 2015 - as measured in megawatts

Solar capacity is irrefutably going up, and prices are collapsing.

WIND GOOD NEWS

Lawrence Berkeley National Laboratory says technological advancements are expected to continue reducing the cost of wind energy. Surveyed experts anticipate minimum wind energy cost reductions of 24% with 30% reductions possible by 2030, and 35% to 41% by 2050 due to larger and more efficient wind turbines, lower capital and operating costs, and other advancements.

The capacity-weighted average installed project costwas \$1,690/kW, down \$640/kW or 27% from average reported costs in 2009 and 2010

EFFICIENT STORAGE BATTERIES

You can't control the supply of solar, or wind. Sometimes it's cloudy or it's nighttime, sometimes the wind isn't blowing. Other times conditions are excellent, the sun is shining and the wind is blowing. There has to be a way of balancing renewable energy output.

"One of the distinctive characteristics of the electric power sector is that the amount of electricity that can be generated is relatively fixed over short periods of time, although demand for electricity fluctuates throughout the day. Developing technology to store electrical energy so it can be available to meet demand whenever needed would represent a major breakthrough in electricity distribution. Helping to try and meet this goal, electricity storage devices can manage the amount of power required to supply customers at times when need is greatest, which

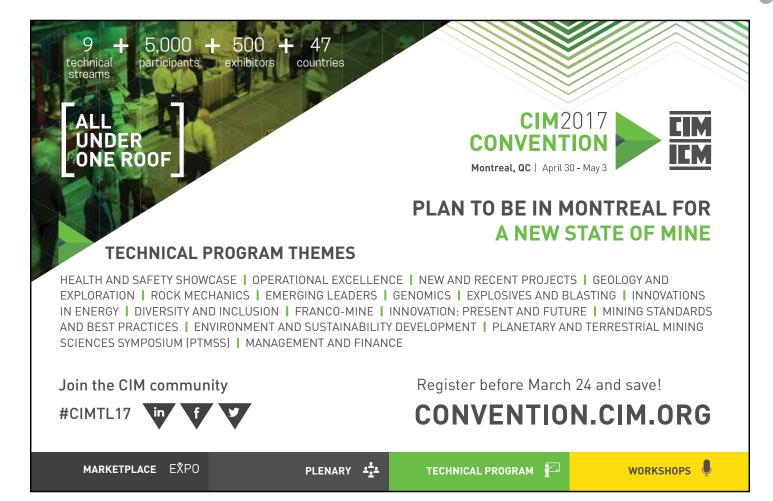
is during peak load. These devices can also help make renewable energy, whose power output cannot be controlled by grid operators, smooth and dispatchable." **ENERGY.GOV**

ELECTRIC VEHICLES

Electric vehicles (EVs) have far fewer moving parts than Internal Combustion Engine (ICE) gasoline-powered cars - they don't have mufflers, gas tanks, catalytic converters or ignition systems, there's also never an oil change or tune-up to worry about getting done.

Electric drives are more efficient then the drives on ICE powered cars. They are able to convert more of the available energy to propel the car therefore using less energy to go the same distance. EVs convert about 59%-62% of electrical energy, ICE vehicles convert about 17%-21% of the energy stored in gasoline to power at the wheels. And applying the brakes in an EV converts what was wasted energy in the form of heat to useful energy in the form of electricity to help recharge the car's batteries.

But the real story behind all electric vehicles is that they are totally emission free.



- If all that sounds too good to be true that's because it is. EVs face significant batteryrelated challenges:
 - Driving range is typically limited to 60 to 120 miles on a full charge although a few models can go 200 to 300 miles.
 - Fully recharging the battery pack can take 4 to 8 hours. Even a "fast charge" to 80% capacity can take 30 min.
 - Besides being heavy and taking up a lot of space battery packs are expensive and may need to be replaced one or more times.

THE MISSING LINK

Unlike other forms of energy, electricity cannot be easily stored in large quantities. The one thing holding EV's, solar and other renewable energy sources from complete videspread adoption is a reductions possible by 2030, lack of energy storage.

The ability to store large amounts of electricity over longer periods of time can be beneficial in the following ways:

With new more cost-effective energy storage technologies electricity could be captured and dispatched to the grid whenever required

- Brings added stability to the electricity system by smoothing out fluctuations in solar and wind resources output
- Temporarily absorbs surges and excess power flow eases points of congestion in transmission and distribution networks
- Absorbs surplus base load generation when the output is higher than minimum demands

I wrote the following early in 2009;

[...]experts anticipate

minimum wind energy cost

reductions of 24% with 30%

"Lithium battery technology is absolutely critical to President Obama's energy plan. Lithium-ion is the leading battery technology and a hugely

important first step towards transforming electric cars from a niche curiosity into a major clean energy revolution for the transportation sector.

batteries

Lithium and 35% to 41% by 2050 be part could the answer increasingly to

expensive oil, energy dependence on foreign suppliers and global warming. Now, with the big push to renewable energy and far less reliance on fossil fuels, a market is starting to develop in the United States for more advanced batteries."

ELECTROLYTIC MANGANESE

The US government has classified manganese as a strategic metal. This is not hard to understand when manganese has no substitute metals in its many steel applications and has itself (EMM) become a substitute for other more expensive metals in certain alloys.

Electrolytic manganese metal (EMM) is a refined manganese product produced through electrolysis of a manganese rich solution. Today there are no domestic suppliers of electrolytic manganese metal (EMM) in North America and China controls 97% of the world trade in EMM.

Various refined forms of manganese such as EMD (electrolytic manganese dioxide) can be made from the same circuits and process as electrolytic manganese metal. EMD is a key ingredient in the production of batteries, including conventional alkaline cells and lithium-ion batteries. The USA is the largest consumer of EMD worldwide.

Battery consumption of Electrolytic Manganese Dioxide (EMD) has been predicted to be the fastest growing segment of manganese production with a CAGR of 5.1% from 2015 to 2022. EMD demand will rise in lockstep with the rise in the use rechargeable batteries used to power consumer electronics, electric and hybrid electric vehicles and the energy storage systems that store electricity harvested from clean energy produced by solar, wind and tidal systems.



newvork.minesandmonev.com

Another application for EMD is in electrodes for water treatment plants as it separates out the waste from the water. A growing water treatment industry, particularly in Asia Pacific, is anticipated to drive demand over the foreseeable future.

Both Canada and the United States have numerous and vast iron ore deposits, yet neither country produces manganese.

Fact - Manganese is a strategic mineral essential for the economy and defense of the United States.

Fact - Manganese cannot be sourced in adequate quantities from reliable and secure domestic suppliers.

Fact - There is no substitute for manganese, as a matter of fact manganese has itself become a substitute in certain alloy applications.

MANGANESE X ENERGY CORP.

Energy storage is the last vital piece, the still missing third link needed to wean the global economy off fossil fuels and enable widespread adoption of renewable clean energy.

Manganese is NOT mined in North America despite being considered a strategic/critical metal by the U.S. (for over a 100 years) and despite being seen as the potential star of new energy storage technology. There is no North American security of supply for this energy critical metal.

Manganese X Energy Corp. (TSXV: MN) (FSE: 9SC2) (OTC: SNCGF) has recognized this and is seeking to create a secure North American source of concentrated manganese ore while striving to achieve green/zero emissions processing.

The company has signed an agreement with Kingston Process Metallurgy Inc. to investigate all options of enhancing manganese for the purposes of Lithium-ion battery use to maximize the value added potential of the Company's Battery Hill manganese property. Manganese X has also assembled a very strong Technical and Marketing Advisory Board focused on the energy storage market.

BATTERY HILL

Manganese X Energy Corp.'s Battery Hill property (Globex Mining's Houlton Woodstock Manganese Property) is approximately 6 km long on a north-south axis and approximately 1.7 km wide, east-west. The property (Exploration Licence 5816) is located beside the hamlet of Jacksonville and 5 km northwest of Woodstock, New Brunswick.

Three main historic manganese carbonate zones plus at least two additional showings identified in historic exploration are located on MN's Battery Hill property (these are all historical figures and are not 43-101 compliant):

- The Moody Hill zone with the potential to contain an estimated 10,000,000 tons (9,072,000 tonnes)
- The Sharpe Farm zone with the potential to contain 8,000,000 tons (7,257,000 tonnes)
- The Iron Ore Hill zone with the potential to contain 25,000,000 tons (22,680,000 tonnes)

These three zones have a range of grades from 7.5% to 10% Mn carbonate with an overall estimated average grade of 9% Mn carbonate.

Further showings of manganese carbonate have been identified on MN's Battery Hill property north of the Iron Ore Hill occurrence. The Maple Hill showing is reported to have grades of 6.97% manganese carbonate and the Wakefield showing, at the far northern end of licence 5816, is reported to have yielded 8.86% manganese carbonate in sampling.

Manganese X optioned the Battery Hill property in June, 2016 from project generator, Globex Mining (TSX: GMX). MN may acquire 100% interest in the property from Globex Mining, subject to a 3% Gross Metal Royalty, by:

- Over a two-year period, making \$200,000 in cash payments (\$100,000 already paid)
- Issuing 4,000,000 post-consolidation shares (2,000,000 obligatory)
- Undertaking an aggregate of at least \$1mn in exploration expenditures
- Delivering a Preliminary Economic Assessment to Globex Mining on or before the fourth anniversary of the option agreement

Manganese X is moving quickly. On Dec. 21, the company announced that it completed its initial diamond drill program. The drilling program consisted of 16 holes totaling 3,589 meters, and was completed as an initial test of three primary areas on the property, the Iron Ore Hill, Sharpe Farm and Moody Hill manganese carbonate occurrences. The drill targets were based on the results derived from gravity and magnetometer surveys completed in October, 2016.

A second drill program, for which the company is financed, will be needed to complete a 43-101 compliant resource report.

CONCLUSION

The main issue with renewable energy is its fleeting nature. When the wind is blowing or the sun is shining, the electricity that is produced must either be used or lost. On the other hand, when it's cloudy or the wind isn't blowing, power may not be available to meet demand. Energy storage addresses this problem by capturing excess energy during productive times and releasing it during leaner times.

Widespread adoption of clean renewable energy has been held back because of two major factors: the high cost of solar installations and the lack of economically efficient storage batteries. Solar and wind costs have fallen drastically. Because 52% of battery cost is in raw materials, using manganese can significantly bring down the manufacturing cost of lithium ion batteries - nickel and cobalt are much more expensive then manganese.

China controls the electrolytic manganese metal market. North America currently has zero domestic mines producing manganese.

According to Tesla CEO Elon Musk, energy storage is the last vital piece, the missing link needed to wean the global economy off fossil fuels and enable widespread adoption of renewable clean energy and electric cars.

But to get there we need a long term 'domestic' supply chain of manganese - from mine to battery - our supply of EMM and more advanced products such as EMD can no longer be based on the goodwill of China.

Manganese X Energy Corp. (TSX.V - MN) has identified a niche in supplying a strategic and energy critical mineral to help solve the last piece of the puzzle presented by renewable energy's electrification of transportation and power generation systems.

And for that reason Manganese X Energy Corp., and it's Battery hill manganese project, should be on all our radar screens. Is MN on your screen?

If not, it should be.

Legal Notice / Disclaimer

<u>This document is not and should not be construed</u> as an offer to sell or the solicitation of an offer to purchase or subscribe for any investment.

Richard Mills has based this document on information which has not been independently verified.

Richard Mills makes no guarantee, representation or warranty and accepts no responsibility or liability as to its accuracy or completeness. Expressions of opinion are those of Richard Mills only and are subject to change without notice.

Richard Mills assumes no warranty, liability or guarantee for the current relevance, correctness or completeness of any information provided within this Report and will not be held liable for the consequence of reliance upon any opinion or statement contained herein or any omission.

Furthermore, I, Richard Mills, assume no liability for any direct or indirect loss or damage or, in particular, for lost profit, which you may incur as a result of the use and existence of the information provided within this Report.

Richard owns shares of Manganese X Energy Corp. (TSX.V - MN). Manganese X Energy is an advertiser on Richard's site - aheadoftheherd.com.

SOUTHERN SILVER EXPANDS CERRO LAS MINITAS

MEXICO'S 'BELT OF SILVER' TARGETED AT 'THE HILL OF MANY MINES'

Southern Silver Exploration has a lot of congruent factors going for them at their flagship Durango, Mexico project.

By Christian Vakenti

On one side of the equation we have a soaring zinc price (at \$1.30US/lb, it's up 90% over last year). Increased global demand for zinc is outpacing world supply by a wide margin, only exacerbated by the recent closures of two of the world's largest zinc mines in Ireland and Australia.

On the other side of the equation we have Cerro Las Minitas ('The Hill of Many Mines'). An otherwise unassuming hill rising gently out of the surrounding fields 70 km northeast of the city of Durango and in the heart of Faja de Plata ('The Belt of Silver'). This polymetallic skarn, dotted with the occasional remnant of artisinal mining, has been the subject of great interest from several companies in the past, but it is Southern Silver who appears poised to reap the

potential whirlwind of zinc, silver and lead that lies beneath.

With two drill rigs currently at full operation on the property, the 2016/2017 combined drill program is aggressively targeting and further delineating high-grade mineralizations across 16 drill holes, comprising 10,000 metres. Since 2011, the site has been the target of 93 separate drill holes, totalling a whopping 37,255 metres.

Initial results continue to affirm the geologic concept at Cerro Las Minitas and extend the high-grade mineralization. With a newly discovered target, called Blind Shoulder, results show14.8m grading 39.4g/t Ag, 0.1% Pb, and 10.2% Zn (410g/t AgEq; 11.6% ZnEq).

It is because of similar results from 2016 that Southern Silver's partner, Electrum Global



Alternative Clean-Tech Power Sources Investigate · Invest



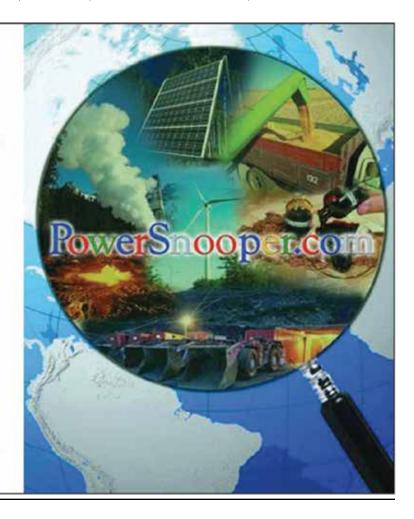
from the creators of



Batteries · Biofuels · 'Clean Coal' Geothermals • Run-of-River Hydro Solar • Uranium • Waste • Wave • Wind

Coming Soon ...

DOBrien@InternationalMiningResearch.com



Holdings LP, has committed a further \$2 million US to the project. Now totaling \$5 million US, Electrum's investment gives them a 60% indirect interest.

If Electrum sounds familiar, it's probably due to their billionaire founder Thomas Kaplan. The so-called renaissance man of mining investment, Kaplan's successes are many; most recently including the Los Gatos project, also located in northern Mexico. Measured and Inferred Resources at Los Gatos show 9.2 million tonnes at

289 grams silver, 5.7% zinc and 2.8% lead. Cerro Las Minitas bears a similar geology to Los Gatos, and clearly Kaplan believes it is worthy of his interest.

As the current drill program heads towards completion in mid-May,we expect to see Southern Silver issue a revised Mineral Resource Estimate by the end of July, but the current one is good enough to see what kind of value they're holding in the 130 square km site.

Indicated Resources of 10.8 million ounces of silver (with 36.5 million ounces of silver equivalent), 189 million pounds of lead, and 207 million pounds of that sweet, indemand, soaring-commodity-price zinc.

Inferred Resources show 17.5 million ounces Ag, 77.3 million ounces AgEq, 37 million pounds lead and 626 million pounds zinc.

If the revised estimates don't raise the current numbers by a single ounce, Cerro Las Minitas is worth drilling. If, as the company expects, revised estimates show even stronger numbers, then Kaplan, Electrum and the team at Southern Silver have scored another home-run hitter.

"Our focus will remain to establish this rapidly evolving district into one of the most significant economic polymetallic discoveries in our industry."

-Lawrence Page, President of Southern Silver Exploration

"Our goal, by following the Blind Shoulder zone and with continued drill success is to significantly increase the existing resource. Maybe double, maybe more." said General Manager of Exploration, Robert Macdonald. Bold statements, but not without backing.

Drilling at Blind Shoulder has met with continued success, and it does appear likely that further efforts will indeed greatly increase the cumulative mineral resources at the project.

The most recent press release (Jan. 19Th, 2017) clearly demonstrates that they are on the right track:

"...a thick interval of semi-massive and massive sulphide mineralization in drill hole 16CLM-091. Highlights include:

a 15.1m down hole interval (14.8m est. True Thickness) averaging 39.4g/t Ag, 0.1% Pb and 10.2% Zn (410.7g/t AgEq; 11.6% ZnEq) including a higher grade 4.8m interval (4.7m est. TT) averaging 38.7g/t Ag, 0.12% Cu, 0.1% Pb and 23.2% Zn (877g/t AgEq; 24.8% ZnEq)"

President and Director of Southern Silver, Lawrence Page sums it up, "The recent set of drill results has yielded further improvement in potential size, quality and scope of the Cerro Las Minitas project. Our focus will remain to establish this rapidly evolving district into one of the most significant economic polymetallic discoveries in our industry."





THE RIGHT PEOPLE, THE RIGHT METALS, THE RIGHT PROJECT, THE RIGHT TIME

Southern Silver Exploration Corp. (SSV-TSX.V; SEG1-Frankfurt; SSVCL-SSEV; SSVFF-OTCQB), a Canadian-based precious/base-metal exploration company focused on the acquisition, exploration and responsible mining development in Mexico and New Mexico.

In the Faja de Plata (The Belt of Silver) in north-central Mexico, 70 km by road from the city of Durango, exploration on the Cerro Las Minitas property from 2011-2016 has led to identification and delineation of three mineral deposits (the Blind, the El Sol and the Santo Nino) as well as a new discovery at the Mina La Bocona Zone. Recently announced NI-43- 101, with Mineral Resources at a 150g/t AgEq cut-off equal: Indicated Resource of 36.5Mozs AgEq: 10.8Mozs Ag, 189Mlbs Pb and 207Mlbs Zn; and Inferred Resource of 77.3Mozs AgEq: 17.5Mozs Ag, 237Mlbs Pb and 626Mlbs Zn.(1-6) (See News Release dated 03/18/16).

A USS2.omillion, 2016 17 exploration program on the Cerro Las Minitas Project, comprising 16 holes and approximately 10,000 metres of core drilling is underway with completion in Q2, 2017. Drilling is focused on expansion of known mineral resources and new discoveries throughout the 13,640ha (130 sq. km) property. Electrum Global Holdings L.P. headed by Thomas Kaplan, provides stable funding, and in committing a total of US\$5 million upon completion of the above program will have earned in for 60% of the project. Additionally, the current drill program on the Oro (Cu. Au-polymetallic), "Stock Pond" gold property in New Mexico identified a widespread gold system. Highlight: 9.1 metres averaging 0.75g/t Au, contained within 41.2 metres averaging 0.42g/t Au from hole SP16 004.

SSV: TSX.V | SEG1: FRANKFURT | SSVCL: SANTIAGO | SSVFF: OTCQB

WEBSITE: www.southernsilverexploration.com

EMAIL: ir@mnxltd.com

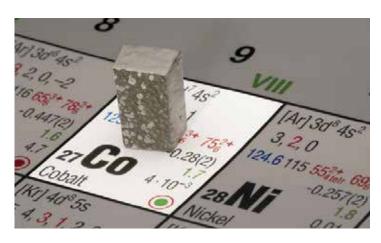
CRUZ COBALT CORP.

(FORMERLY CRUZ CAPITAL CORP.)

(CUZ: TSX-V, BKTPF: OTCBB, A2AG5M: FSE)

NOTES THAT COBALT PRICES HAVE GONE PARABOLIC...

By David O'Brien



Not usually one to start an article about a company by using it's own copy, dear reader/viewer, however this quote from **Jim Nelson**, President, says the main selling points about this **Cobalt Prospect Generator** quite effectively:"Cruz employed early-mover advantage as Cruz has been able to acquire what we feel is one of the best collections of cobalt prospects in North America before the majority of the recent cobalt entrants were in the space.

ruz currently has seven cobalt projects located in Canada and one in Idaho.

Cruz's four separate Ontario cobalt prospects, according to government mineral files, returned cobalt grades of 13% on the 900 acre Coleman Cobalt Prospect and 10.5% cobalt on the 900 acre Johnson Cobalt Prospect. The 5,500 acre Hector Cobalt Prospect was a past-producing cobalt mine and the 1,480 acre Bucke Cobalt Prospect returned cobalt grades of 13%.

Our **War Eagle Cobalt Prospect** in British Columbia covers a past-producing mine as well and returned assays of 6.5% Cobalt.

Based on these projects, management feels that Cruz has amassed a quality portfolio of cobalt assets that have some of the highest historic cobalt grades in North America, which sets Cruz apart from most cobalt companies in the junior space.

We feel that 2017 will be a break-out year for cobalt prices and Cruz is well positioned to take full advantage of this.

We plan to commence full operations on these projects with our goal to make Cruz the "go-to" North American Cobalt Project Generator and developer. The first half of 2017 will be an extremely active period for Cruz and management is optimistic about what will be discovered by Cruz on our cobalt properties," states President Jim Nelson.

Cobalt is a very important part of the battery because it helps increase the amount of energy the battery can contain. The metal is also used extensively in the manufacturing of smart phones, jet engines and wind turbines. Most industry experts are predicting cobalt demand to exceed supply and already cobalt prices are reflecting this pressure, **recently continually setting all-time highs**.

PROPERTIES OVERVIEW:

HECTOR, ON: The Hector Cobalt Prospect now consists of approximately 5,500 acres in the Larder Lake mining division of



Ontario. The property was mined for cobalt and is a past-producer of cobalt. This new expansion also covers multiple other cobalt showings based on Province of Ontario minfiles.

"We look forward to commencing operations on this prospect to evaluate and follow up on the historic data gathered," said Nelson. "We continue to expand our cobalt projects. The Hector Cobalt Prospect, according to the Government minfile, was a past-producer of cobalt which complements the stable of highquality cobalt prospects Cruz currently has. This new addition also covers multiple other cobalt showings based on Province of Ontario data."

BUCKE, ON: The Bucke Cobalt Prospect consists of approximately 1,480 acres in the Larder Lake mining division of Ontario. The property returned assays grading 13% cobalt and 240 g/t silver on this cobaltfocused prospect. Management expects to commence exploration on this property shortly, utilizing the Flow-Through funds already on hand to fully assess this property.

COLEMAN, ON: The Coleman Cobalt Prospect is located in the Larder Lake mining division of Ontario. According to the Province of Ontario minfile the property

returned grades of up to 13% cobalt and appears to be an extension of the Tretheway veins.

JOHNSON, ON: The Johnson Cobalt Prospect consists of approximately 900 acres in the Kirkland Lake mining district of Ontario. According to a Province of Ontario minfile from 1980, grab assays over 300 metres returned up to 10.5% Co, 69 g/t Ag, 12% Ni and 0.4% Cu. The company plans to commence work to fully assess this property shortly.

WAR EAGLE, BC: There is a minfile on the War Eagle Cobalt Prospect citing a report from 1948 showing surface samples of 6.41% Co, 3.59% Ni and 7.25% Cu. It reports, 'Old workings include a tunnel and some test pits, and the character of the orebody is in a fissure vein which outcrops almost continuously for 3,000 feet. "These numbers cannot be verified or relied upon at this time and we plan to dispatch crews to the property shortly to start operations on the prospect. This property was acquired via staking," said Nelson.

IDAHO STAR, NV: Cruz has acquired the Idaho Star Cobalt Prospect in Idaho, USA. This prospect is located approximately 9 miles SW of Saltese, Montana, and 19 miles SE of Wallace, Idaho. This new prospect consists of 44 contiguous claims within

the Idaho Cobalt Belt. Nelson states, "We are very pleased to acquire the Idaho Star Cobalt Prospect, strengthening our presence in the prolific Idaho Cobalt Belt. Geological data was gathered showing this prospect area to have been active for mining of cobalt, silver and copper in the past, which was the reason for the immediate acquisition. Recently, we were able to sell a different Idaho Cobalt asset in exchange for shares in the acquiring company. This sale enables Cruz to create added capital to the company with no dilution to the shareholders, thus following through on our goal of being North America's foremost Cobalt **Project Generato**r and developer. We are very bullish on the cobalt sector as the dynamics for the upward trend in cobalt prices appear to be building momentum."

(mmmhhh, start with a quote and end with one, too... he encapsulates well.) Do your Due Dili, of course.

David O'Brien, is the owner of Int'l Mining Research Inc. which employs Media, Event and Online exposure, including MineSnooper. com. O'Brien also owns W.I.T. Marketing, an ad agency, and has been contributing articles to TheProspectorNEWS.com, on demand. He owns no shares in the above companies. dobrien@InternationalMiningResearch.com





By Christian Vakenti

Building on a solid foundation laid in 2016, Pershing Gold has maneuvered itself into a strong position for the coming year; as a Pre-Feasability Study nears completion, the Nevada-based operation is getting closer to beginning production.



ith 25,000 acres of land to it's name, Pershing's focus is targeted squarely on it's Relief Canyon property. Located roughly 95 miles north of Reno, Relief Canyon reads like the prototypical cautious investor's dream: low risk, with potentially high yields.

Nevada is known as one the lowest risk mining jurisdictions in the world. The Relief Canyon site is close to town, as well as road and rail. Electricity and water are available onsite. A heap leach processing facility is already in place. The existing leach pad will hold 21 million tons and can easily be expanded to meet future demands. The company is fully permitted to start construction, and only has air quality permits remaining to allow it to start production. These are expected to be received this quarter.

Historically, the Pershing Gold and Silver Trend has produced over 5.7 million gold equivalent ounces. The company's Resource Estimate from 2016 shows Measured and Indicated levels at 778,000 Au and Inferred 47,500 Au. While the focus for now is clearly on Relief Canyon, it's worth noting that of the total 25,000 acres only roughly 10% has been explored. Once Relief Canyon proves it's viability and creates positive cash flow for the company, Pershing is free to exploit it's vast licenses on the surrounding area.

One of the most interesting factors that brings Pershing into the spotlight is it's enviable position when compared to it's peers. Recent market trends make

"With the recent volatility in the gold price, the economics for Relief Canyon remain strong as a low cost, low CAPEX (capital expenditure) project in comparison with our North American peers," states Stephen D. Alfers, Pershing Gold President, CEO, and Executive Chairman.

While Stephen hasn't promised exactly when the Pre-Feasability Study will be released he has said it will be soon.

"Early this year the company plans to publish a third-party Pre-Feasibility Study on Relief Canyon," says Stephen. "This study is expected to continue to bolster the confidence in the Relief Canyon project."

The Study comes on the heels of a previously published Preliminary Economic Assessment, completed in 2016. All of these facts and figures are available for review at ww.pershinggold.com

Additionally, we have completed the 2016 Phase 1 Drilling Program at Relief Canyon, which successfully extended high-grade mineralization with step-out drilling to the west. We also report promising results with our Phase 2 drilling, south of Relief Canyon. We are currently evaluating the results of this drilling in consideration of follow up drilling programs. That said, our main focus will be re-starting the Relief Canyon mine,

said Stephen.



Pershing completed Phase 2 of its Drilling Program in 2016, which focused on extending mineralization south of the South Pit and the Lightbulb Pit, as well as on discovering satellite deposits that could be processed at the existing heap leach and ADR facilities at Relief Canyon.

As an emerging producer in the comparatively stable mining environment that is Nevada, Pershing Gold has all the appearances of a strong, yet relatively safe investment at a time when many investors are eyeing cross-border markets and deciding where the smart money will be.

The blend of historic mines coupled with state-of-the-art, fully permitted facilities already in place make Pershing one to watch as they work towards bringing Relief Canyon online.

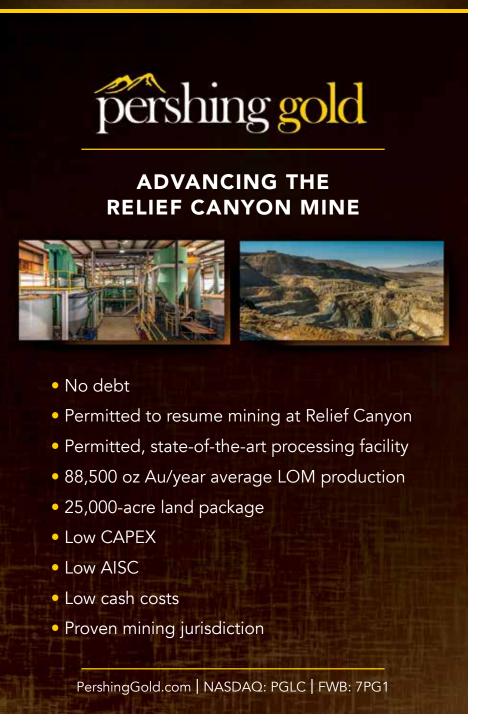
Under NI 43-101, the Study is a key step in allowing the company to define it's reserves and thereby solidify a higher degree of confidence in the project. It also serves to provide refined costs for all capital and operating expenses for the restart of Relief Canyon. The key points of the study are as follows:

- Incorporation of a geotechnical pit slope evaluation completed by Golder Associates of Reno, NV.
- Evaluation of an updated resource model incorporating new exploration drilling.
- Detailed capital and operating cost comparison of contract versus self-mining.
- Detailed capital and operating cost comparison of truck stacking versus conveyor stacking of crushed and agglomerated ore on the leach pad.
- Incorporation of additional metallurgical testing to establish ore agglomeration parameters.
- Trade-off study of line versus generated electrical power.

Phase 1 of the Drilling Program did produce some results worth mentioning, most notably being hole RC16-490, which include:

- 24.1 ft (7.3 m), 1.830 gpt, 0.053 oz/ton Au
- 5.0 ft (1.5 m), 13.933 gpt, 0.407 oz/ton Au

RC16-490 continues to confirm that significant portions of the western margin of the mineral zones remain open to the west. The Phase 1 drilling successfully expanded the north target area resource to the west and southwest where it remains open. This drilling continued to support the dominance of relatively low angle structural controls and continuity of mineralization and grade down dip. The Lower and Jasperoid Zones continue to produce high grades of gold with very good cyanide soluble results at depths to >900 ft (274 m).



HIGH GRADE ZINC POURING OUT OF TURKEY PASINEX RESOURCES LTD

PASINEX RESOURCES LTD. TO SELL 40 MILLION POUNDS IN 2017

By Christian Vakenti

Zinc is a vital element for life: one of eight essential micro-nutrients, without which our bodies couldn't manufacture many enzymes and proteins, fight off bacteria, experience proper taste and smell, or make the DNA in our cells.

lso necessary as a coating to prevent iron and steel from corrosion (which consumes about 3/4 of the world market), zinc plays a key role in global manufacturing. It is the number four metal in world production, out-produced only by iron, aluminum and copper.

Since February of last year, world zinc prices have gone from about 5.76 US/Ib to \$1.29 US/Ib. Analysts suggest that trend is sustainable.

World demand is increasing. Where are we going to get our zinc from and who will supply it?

"Pasinex Resources Limited," says Steve Williams, President and CEO, "is projected to sell 40 million pounds of zinc this year."

Listed on the CSE in Toronto (PSE) and Frankfurt 2nd tier (PNX), Pasinex Resources is focused on zinc mining and exploration in Turkey. Their flagship project is the Pinargozu zinc mine in the south of Turkey (province of Adana). The mine is a 50 / 50 joint venture between Pasinex and a Turkish mining company called Akmetal AS.

William's projections are bolstered in part by the recent completion (Feb 2017) of a sale of high grade zinc to an international trading house.

"A total of just over 1,359 tonnes with an average material assaying of 46.1% Zn sold for over \$900 per tonne," says Steve.

The production cost to sale price ratio is very good.

"Our production costs for this material is approximately \$308.80 US per tonne," states Williams.

Pinargozu is an underground operation with three adits going in through the side of the mountain. A larger third adit was added in August 2016 which enabled Pasinex to significantly increase production to the current rate.

"We are at the moment in the oxide zone of the deposit," explains Steve. "It is predominantly a zinc oxide material called smithsonite. The mine is very high grade ore with an average grade of 33%."

A huge bonus for Pasinex lies in the ability to direct ship their mined material with no further onsite refinement processing needed. Meaning no extra equipment costs, labour, machinery maintenance or supplies.

"Yes," agrees Williams, "we simply crush it and sell it to the global zinc market. There is no added processing required."

Transport is simple and cost effective.





"The port of Mersin is located just two and a half hours down the road from the mine," says Steve.

Production numbers are impressive.

"This year we expect to produce and sell somewhere above 50,000 tonnes of this material," Steve says.

However, it is the next level down that makes Pinargozu a truly interesting, remarkable mine.

"It is expected as we go deeper that Pinargozu will become a sulphide type mineralization," explains Steve.

Zinc sulphide in crystalline form, known as sphalerite, is a mineral that is the chief ore of zinc.

"Recent drilling (reported in 2016) has started to intersect sulphide mineralization with some very high grade mineral intercepts seen in the drilling," says Williams. "Greater than 60% Zn grade drill intercepts are seen - recent mining has also started to produce high grade sulphide mineralization."

Steve and the rest of his team at Pasinex believe that there is much more opportunity for further mineralization at and around Pinargozu.

"Current drilling is focused on deeper sulphide mineral targets and step out targets," mineral says Steve. "We're completing 12,000 meters of drilling each year and we expect to do that amount in 2017.

The site has proven itself as a profitable venture with low overhead and continues to improve on expectations. Moreover, Turkey itself is very under-explored, particularly for base metals. As the world zinc prices continue to rise and demand increases commensurately, Pasinex appears poised to take advantage of it's well-positioned foothold in the zinc market.

"We also have a 100% owned copper exploration property in the north of Turkey (province of Sivas) called Golcuk," reveals Steve. "Pasinex Resources expects to drill on that property in 2017. We'll keep you posted."





CSE: PSE | FSE: PNX

Producing High Grade Zinc from Pinargozu Mine with Turkish mining house partner, Akmetal Madencilik San ve Tic. AS.

Pasinex's Golcuk Copper Project occupies a 40 square kilometre exploration license in the Sivas Province of central north-east Turkey.













Contact

Canada Main Office 82 Richmond Street East Toronto, ON M5C 1P1 T: +1 416 861 9659 E: info@pasinex.com

CHF Investor Relations Cathy Hume, CEO **E:** cathy@chfir.com

BHT ACQUIRES ALPINE MINE GROUP

ADDING TO THEIR HIGHLY-PROSPECTIVE WEST KOOTENAYS PORTFOLIO

By David O'Brien





Braveheart Resources Inc. (BHT: TSX-V) is focused on building shareholder wealth through aggressive exploration in a favourable and proven mining jurisdiction - the West Kootenays in southeast British Columbia (Ag, Au).

raveheart has only 27,614,505 common shares issued and outstanding. The company is currently raising funds by issuing one unit at \$0.075 with a full warrant for \$0.15 for 18 months, plus one Flow Through unit at \$0.10 with a full warrant for \$0.15 for 18 months. A couple of checkmarks for us already, considering both jurisdiction and share structure.

Although the company has six highly prospective groups of properties already assembled and referred to collectively as the Big Strike Gold Silver Project (see www. braveheartresourcesinc.com/big-strike-goldsilver-project/), their most recent acquisition, the Alpine Group, is their key focus in the near future, as it includes the past-producing Alpine Mine. On trend with Kenville (Au) and Silverton (Ag, Pb, Zn) and on the same side of Lemon Creek as Chapleau and Golden Wedge which have similar rock. Braveheart's Option Agreement requires an expenditure of \$1,600,000 in exploration on the property over the first three years with a minimum of \$400,000 in 2017. The 2,177 Ha property has historical production of material containing 356,360 g Au, 222,044 g Ag, 49,329 Kg Pb and 17,167 Kg Zn. (~ 1938 to 1948)

"The Alpine Mine property is located in a highly favorable geological environment and is an ideal fit for Braveheart as we continue our strategy of developing high grade gold targets," explained C.O.O. **Aaron Matlock**. "Our prospecting and geological team will be considering fresh interpretations and potential new exploration opportunities with regard to this important Property."

The property is only 18 Km N of Nelson, 70 Km from the Trail smelter, and 200 Km from the Republic mill which enables production for self-financing. BHT now has over 12,000 Ha under administration. So, infrastructure and proven production: check, check.

David W. Johnston, CEO, President & Director, is the founder of BHT. A former

miner with Hudson Bay Mining and Smelting, he also has considerable public company experienc e as a director. Johnston is a director of the Chamber of Mines for Eastern British Columbia. R. Brian Murray, M.B.A., C.A., Chairman & Director, has over 17 years of experience in both the resource and investment markets. Mr. Murray is the President of Nebu Resources Inc. and a director of several other TSX-Vlisted companies. Jim Decker, P.Eng., VP Ops & Director, has 43 years of experience in senior management, mine operations and engineering. Mr. Decker's principal activities recently included due diligence exercises for acquisitions and sales of mining properties for **Antioquia Gold Inc.** (AGD: TSX-V), operating audits of surface mining operations and supervisory training for large mining companies such as Barrick Gold Corp. (ABX: TSX & NYSE) and Teck Resources Ltd. (TCK: NYSE). An impressive BoD includes Alex Falconer and Aaron Matlock (see www.braveheartresourcesinc. com/management/). Management: check.

Braveheart recently completed a short diamond drill program on their 100%-owned Whitewater Property, designed and



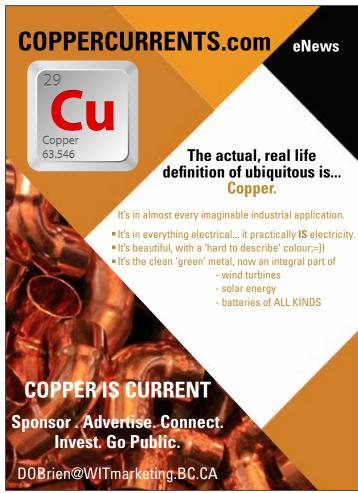
managed by Bernhardt Augsten, P. Geo. A total of 582.8 m of core were drilled in ten holes. The purpose of this drill program was to test for grade, width and continuity of the Whitewater vein system. The program was successful in intersecting mineralized quartz veining in several holes. Highlights of the drill program are on "Table 1 SIGNIFICANT DRILL RESULTS" (see www. braveheartresourcesinc.com/2016/ results). Mr. Decker serves as the company's Qualified Person under the NI 43-101.

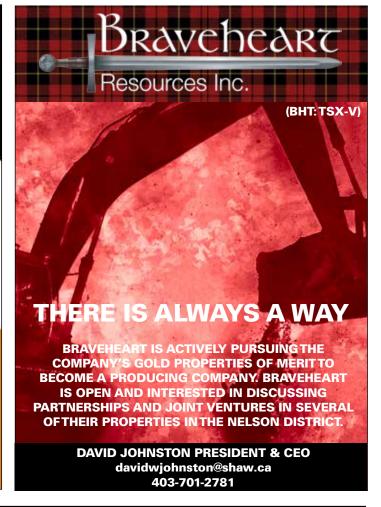
Always important is agreements for development with indigenous bands and the most recent and relevant are with the Pentiction/ West Bank First Nations. Check.

Johnston can be reached davidwjohnston@shaw.ca.

As always, do your Due Dili.

David O'Brien, is the owner of Int'l Mining Research Inc. which employs Media, Event and Online exposure, including MineSnooper. com. O'Brien also owns W.I.T. Marketing, an ad agency, and has been contributing articles to TheProspectorNEWS.com, on demand. He owns no shares in the above companies. dobrien@InternationalMiningResearch.com





HOW YOU CAN RECEIVE "FREE" STOCK **IN A NEW GAME-CHANGING COMPANY!**

By David Morgan

As publisher of The Morgan Report, in the process of making an almost two year's long study, we featured a new technology company in the microcap category that could change the mining industry.

irst and foremost, we usually don't spend much time in this part of the Resource Sector, because frankly, the risk tends to be significant, without a commensurate ability to define a company's potential. In other words, reaching a point where we have arrived at a realistic reward-to-risk metric.

However, we do keep an open mind. So when an intriguing story came our way, we spent serious time investigating, and finally recommending it to our subscribers, as a speculative investment... with unusual potential.

The company carried out its stated plan, but due to a "fly in the ointment" beyond its control - having nothing to do with its technological progress - the stock itself did poorly. In fact, it sat out last year's January - August, 2016 barn-burner rally, during which most other resource sector stocks moved sharply higher. It even managed to trade at less than half the price that I, David Morgan, had paid for what I was judging as a ground-level opportunity.

Nevertheless, I have learned to leave room for a reappraisal, if and when new information comes my way. This trait - developed from many years of balancing skepticism with curiosity...and common sense may have presented my subscribers - and perhaps you - with a situation that contradicts the old saw which says "it's too good to be true."

Here's where the story gets interesting. In performing the final phase of our due diligence on the project, and with the TMR team visiting their lab at our expense - the CEO told me about another aspect of his work. It was so intriguing that, even though prohibited from taking pictures or notes, and being sworn to secrecy, I stayed an extra day to meet with the chemist.



I witnessed their patent-pending "chemical solution" which can be used in the extraction of gold from certain types of ore bodies, functioning exactly as designed, without causing ANY harmful effects. The solution is inert - the ingredients are actually classed food grade quality! The process is similar to a cyanide circuit, but simpler and safer. It involves partitioning precious metals into an aqueous solution followed by extraction, using conventional methods like electrowinning, carbon absorption or precipitation.

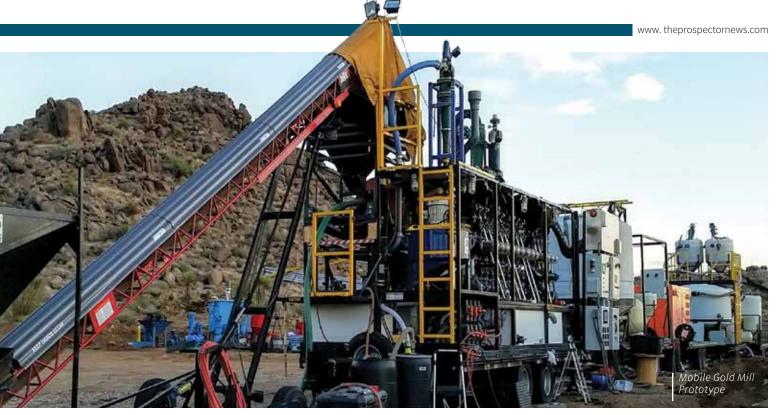
Some of the benefits to operators include: reduced environmental impact, a broad applicability spectrum, an accelerated permitting process, access to deposits in cyanide-prohibited mining jurisdictions, reduced operational cost, not to mention improved occupational safety and reduced tailings emissions.



But for now, the most exciting potential may be in the Electronic Waste (E-Waste) sector, where gold (as well as silver, platinum and palladium) recoveries, classified in grams per tonne of processed material are far superior to the best gold mines on the planet. Ongoing E-Waste testing, using the reagent, is verifying and enhancing throughput yields. In fact our Senior Analyst, David Smith and I recently made a flight to Vancouver, B.C. to meet directly with the company chemist, and watched precious metals literally "fall" out of the solution.



Here's the Bottom Line, with two caveats. First, this opportunity is for aggressive accounts who understand what we teach - which means that it is highly speculative, best approached with money you can afford to lose. Second, the analysts at The Morgan Report and I already own stock in the parent company, and at some point may buy more.



The "core" details: You must be a shareholder of record by around the first week or so of March 2017. For every TEN shares owned in the parent company, you receive approximately ONE share in the new (spinoff). We're all on the same playing field, because just like you, I myself can buy into the parent company in the open market, at the same share price.

You may be wondering...So, how good is the parent company? The exact details can be found in the February Issue of The Morgan Report, modified here—

Question to the Editor: David, after the spinout takes place, do you still have high hopes for the parent company? Could its stock suffer if people buy the original operation just to get shares in the new one and then sell? - Thanks, Greg

My response: We agree that some may choose to sell parent company shares after obtaining the new spinout. And yes, the mobile mill concept's development has been slower than anticipated. However, when we made that special trip to Vancouver to witness the new chemical process, we also took time to see what improvements were being made with the parent company's unique, mobile ore-refining platform. I met with a UK engineer who has an impressive patent-pending process that virtually eliminates the need for expensive and space-consuming ball mills (ore crushers).

Personally, I view the parent company favorably. How well its share price continues to be received by the market as the new one goes public is anyone's guess. But as things currently stand, I intend to hold onto my shares. After all, the company will be using the new reagent in its own gold-refining process. This could turn out to be a case where the whole (both companies) - "is greater than the sum of its parts".

The Wrap So, how does the value proposition for this "outside the box" mining sector company story strike you? Don't let indecision or the fear of taking action keep you from doing further research while "the price is right". This kind of "plan your work; then work your plan" behavior is one of the main themes in our new book Second Chance: How to Make and Keep Big Money during the Coming Gold and Silver Shock-Wave. In fact the company we're discussing is just one of seven that we profile! We're here for you, through our books, our interviews, consultations and especially, our monthly letter.

David Morgan is a widely recognized analyst in the precious metals industry; he consults for hedge funds, high net-worth investors, mining companies, depositories and individual investors. He is the publisher of <u>The Morgan Report, and a featured speaker at investment conferences in </u> North America, Europe and Asia.

Free Report Riches In Resources

THERE IS A 100% FAILURE RATE OF ALL FIAT MONEY THROUGHOUT HISTORY. LEARN WHAT TO DO BY **OBTAINING YOUR FREE REPORT TODAY!**



Weekly Updates Weekly Updates For Your Economic Sanity...

Receive your free Riches In Resources report by signing up to for our E-Newsletter. We will keep YOU in the Informed, the awake, and the aware. Each week you'll receive David Morgan's exclusive analysis of the markets. Join today and we'll throw in the special bonuses listed below. It's all yours just for signing up!



- ✓ Special Report: The Mobile Mill
 - Argentina Financial Meltdown documentary
- Selling Precious Metals on the Internet
- Silver Fundamentals
- Riding The Silver Bull

www.TheMorganReport.com



BALMORAL RESOURCES EMPHASIZES IMPORTANCE OF RESOURCES IN LOW RISK DISTRICTS

By Christian Vakenti

A lot of us have been trying to figure out what's going on in Trump's Whitehouse and what it means for us in the Canadian mining sector. Seemingly random Tweets and unorthodox press conferences aside, here's what we appear to know.

here is a pull-back coming from the United States in regards to existing trade relationships. President Trump has repeatedly called for trade deals to be renegotiated, with the US likely to become more protectionist under his regime. As a result and until we see how this plays out global trade alliances and the governments behind them, particularly in the third world, that relied on their relationships with America to maintain the status quo must be viewed with increasing caution.

As a result, prudent investors and indeed global mining producers need to be more cognizant than ever with regards to jurisdictional issues as these relationships are redrafted. Thus it's time to take a hard, soul-searching look at Canadianbased projects and the relative security they provide to your portfolio. We start by examining one of the best established exploration companies in Canada who has had a Canadian focus since it was founded.

From the province of Ouebec comes Balmoral Resources, whose current, singular focus is in the Abitibi belt. Outside of South Africa, no other area on Earth has generated as much wealth from the extraction of gold ores as has the Abitibi.

With historic production now exceeding 130 million ounces of gold the Abitibi is renowned for high-grade gold deposits which exhibit tremendous vertical continuity and, frequently, high profit margins making them highly sought after in today's profit conscious mining world.

The team behind Balmoral would argue that low risk, high yield has always been the way to go, and now more than ever.

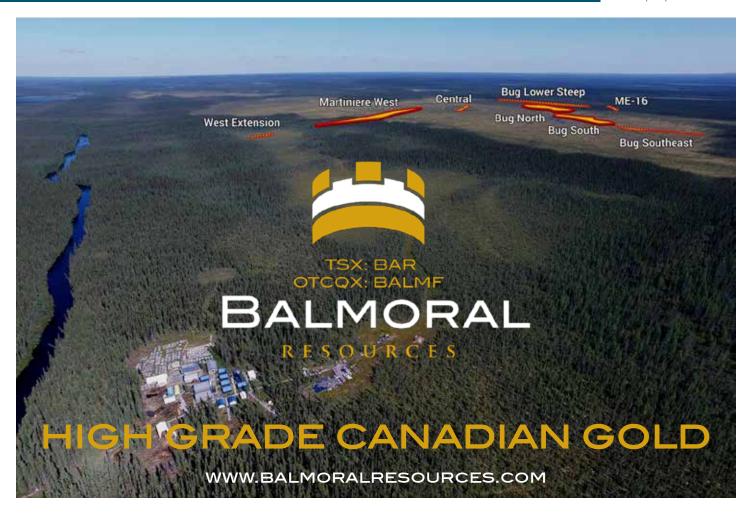
For several years now the mineral exploration and development business, along with the mining sector as a whole, has faced difficult headwinds brought on, in part, by the excesses of the lofty heights reached between 2005 and 2010, says Darin Wagner, President and CEO.

"In the gold sector the rapid increase in gold prices led to a focus on 'ounces produced' vs. profits produced. This resulted in the exposure of investors to poorer quality (typically lower grade), but frequently higher ounce count assets, often in higher risk jurisdictions."

Changes in global growth patterns and politics continue to challenge the mining industry and it's investors. While metal prices have stabilized the global political climate is more volatile than ever. This brings with it both challenges and opportunities. For Canadian operators, in addition to the bonus of tenure security and a very skilled work force the weaker Canadian dollar has been a significant benefit - simply put: mine in Canadian dollars and sell in the stronger US dollar. However a now expanding global economy could signal an increase in the Canadian dollar which means the focus has to remain in higher margin assets.

Balmoral, like its predecessor companies, is focused on the discovery and delineation of high quality (read higher grade, higher potential margin) assets in proven, low political risk mining districts. It is these two factors, combined with the experience and success of their team, which makes the Company so attractive in the current investment climate.

"We focus solely in jurisdictions where there is a district premium, rather than a jurisdictional discount to valuation, places where producing companies want to operate as is evident by the M&A activity



in the sector," says Mr. Wagner. "Our board and management have a strong bias to those mining districts which have an extensive history of producing high-margin/ profit assets, regions on the low end of the exploration and development cost spectrum and where larger, 'district scale' exploration opportunities can be assembled."

Based on the results of their fall 2016 drill program Balmoral's appears approach appears to right on the money.

The Company's recent results have confirmed the discovery of four near surface gold deposits on its Detour Gold Trend Project in Quebec as well as several new nearby occurrences. The known scale of these deposits effectively doubled during the summer/fall of 2016 and a multi-rig drill program continues. Recent highlights include intercepts of 115 metres grading 1.40 g/t gold including 18.26 metres grading 5.41 g/t gold, 41.95 meters grading 3.41 g/t gold including 11.58 metres grading 6.30 g/t gold and 12.56 metres grading 14.08 g/t gold (press the Company's press releases at www.balmoralresources.com).

Currently, the winter drill program on Balmoral's Martiniere Property, home to the Bug Lake and Martiniere West gold deposits, is in full swing with two drills active on the Bug South gold deposit. This phase of drilling is anticipated to continue through the end of March.

"We are in the now entering the delineation stage of our drill program," John Foulkes, VP Corporate Development told The Prospector by phone. "This means the project has moved from exploration into resource delineation and expansion, from 'prospective' to 'bona fide'."

Our plans call for drilling throughout the year, with frequent results reported to our shareholders and exciting opportunities to continue to grow this system on multiple fronts explained Foulkes.

John spoke at length and with some animation of the coming year.

"The summer/fall program yielded five new discoveries. We expanded three of the four known deposits and drilled our deepest hole ever along the Bug Lake Trend intersecting high grade mineralization to 745 metres depth," stated Foulkes. "This opens the entire system to deep testing over the months ahead and if as successful could lead to a three-fold increase in the size of the deposits, since the majority of our drilling is above 250 vertical metres."

"And speaking of deposits," continued John, "Don't forget that we also own a deposit containing 136 million pounds of nickel nearby at Grasset."

What happened to your '100% focus on gold' we asked?

"Our focus on gold is 100%" he said, "Martiniere is a low jurisdictional risk, high grade project in a region that is the focus of on-going M&A in the gold sector – so the core of Balmoral's business plan. But Grasset provides our investors with leverage to the nickel price and a storehouse of value in addition to the evolving treasure at Martiniere."

And where's all of this located?

"Canada. Of course," we could hear John smiling

THE **46-YEAR RECORD** (

PLATINUM-

By Mickey Fulp

\$0

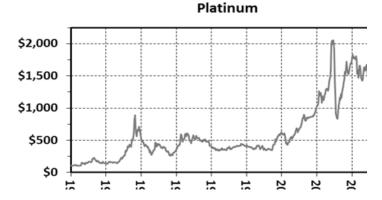
The gold to silver and platinum to gold price ratios determine the relative value of the precious metals and are useful parameters in deciding which metal to buy at any given time.

In a previous musing, I documented the history of gold and silver prices and gold-silver ratios from the United States' abandonment of the gold standard in August 1971 to present.

In today's precious metals analysis, I focus on the distribution of platinum-gold ratios over the past 46 years.



he monthly average price charts for each metal from January 1971 to present are shown below: Gold \$2,000 \$1,500 \$1,000 \$500



The price charts show similar patterns and a general correlation of gold and platinum prices. However, platinum is more volatile than gold and subject to parabolic spikes.

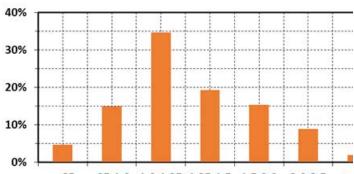
Platinum to gold ratios show wide variance over the 46 year period ranging from highs above 2.5 before and soon after Nixon began taking the United States off the gold standard to periodic lows below 1.0:



Our data set covers 553 months beginning in January 1971. The distribution of ratios in both tabular and chart format follows:

% of Months	
4.7	
15.0	
34.7	
19.3	
15.4	
8.9	
2.0	

Pt: Au Ratio Distribution



From our data set and the distributions of monthly average platinum-gold ratios from January 1971 thru January 2017, I glean the following:

- A ratio of less than 0.75 is a single outlier that occurred once during the second half of 1982 when overall ratios averaged 0.81.
- Ratios < 0.85 are quite unusual at 4.7%. They occurred for two months in the first quarter of 1975, the aforementioned six months in 1982, in June-July of 1985, and for an ongoing run of 16 months that commenced in October 2015.
- Ratios from 0.85 to 1.0 constitute 15.0% of the record.
- Pt:Au from 1.0 to 1.25 is the most common range and comprises 34.7% of ratios since 1971.
- The ratios between 1.25 and 1.5 occur 19.3% of the time.
- Ratios from 1.5 to 2.0 make up 15.4% of the record.
- The 2.0-2.5 interval covers 8.9% of the months in our compendium.
- The 11 monthly outliers at >2.5 comprise 2.0% of the total record and have not occurred since 1971.

From a compendium of sources, the average crustal abundance of both metals is around 4 ppb. Based solely on this fact, platinum and gold should trade at about the same price.

And indeed, our compilation shows that for nearly 50% of the time since gold was decoupled from the world's reserve currency and allowed to trade freely on exchanges, the price ratio has ranged from 0.85 to 1.25. That said, since January 1971, the average price of platinum has been \$637/oz and gold has been \$518/oz for an overall ratio of 1.23:1. Clearly there are other factors other than the nearly equal crustal abundances that account for this historic price relationship.

A variety of supply and demand factors cause platinum to trade at a premium to gold:

- Platinum is a much smaller market. Cumulative world production of platinum is estimated to be about 5% of gold (9400 tonnes versus 182,000 tonnes). From 1994-2014, 3700 tonnes of platinum were mined versus 52,600 tonnes of gold or about 7% (source: USGS).
- Platinum is largely an industrial metal. Catalytic converters, electronics, petroleum and chemical catalysts, medical technologies, and many minor uses constitute over 60% of its annual demand. Around 30% is used in jewelry and 10% for investment demand. Also, 30% of the annual platinum supply now comes from recycling, mostly from catalytic converters. Some demand is consumed and lost to the marketplace.
- Gold is overwhelmingly a precious metal; 90% is used in jewelry and investments and only 10% in industrial applications. An estimated 98% of all the gold ever mined in the world remains available and held in jewelry, by central banks, in private hoards, and as fabricated products (source: USGS).
- About 70% of yearly platinum mine supply comes from South Africa, a geopolitically risky country. Much new platinum is a by-product of nickel-copper mining and smelting; therefore, annual platinum production is dependent on the supplydemand fundamentals and prices of these primary metals.

Fluctuations in the relative prices of platinum and gold are largely driven by:

- The overall growth and health of the world's economy and in the case of platinum, the automotive industry;
- Labor, power, currency, and political issues in South Africa that cause major perturbations in the platinum supply;
- Safe haven hoarding of gold and to a much lesser extent, platinum, in times of economic uncertainty and major geopolitical events;
- Speculators moving in and out of paper markets of both metals (bullion exchanges, ETFs, and derivatives) and to a lesser extent, central bank trading of physical gold.
- In my opinion, gold is the only real money. Thus it is my safe haven of choice and insurance policy against financial calamity.

Platinum functions both as a precious and industrial metal. It is usually tied to the price of gold in both short- and long-term trading patterns. In times of financial distress and economic turmoil, platinum tends to behave more like gold with widespread hoarding.

The platinum-gold ratio can be used to ascertain whether one metal is over- or undervalued with respect to the other. The current monthly average ratio below 0.85 is unusual and indicates that platinum is severely undervalued with respect to gold.

When ratios are very low, I choose to buy platinum instead of gold. Note that the mark-up to buy or sell platinum is two to three times higher than for gold; that additional cost becomes a factor in my evaluation process.

I strive to maintain 10-20% of my net worth in physical bullion. Most is in gold but I always have a portion in platinum and silver.

As a hoarder, my basic strategy for accumulating gold or other precious metals is to buy during downticks in price regardless of a bull or bear market cycle. In a previous musing, I showed that there is seasonality to the gold price and that the best time to buy is from mid-June to mid-August of any given year. The same strategy can be applied to platinum.

Once again folks, that is the way I see it.

And the way I do it.

Disclaimer and Notice: I am not a certified financial analyst, broker, or professional qualified to offer investment advice. Nothing in any report, commentary, this website, interview, and other content constitutes or <u>can be construed as investment advice or an offer or solicitation or advice</u> to buy or sell stock or any asset or investment. All of my presentations <u>should be considered an opinion and my opinions may be based upon</u> information obtained from research of public documents and content available on the company's website, regulatory filings, various stock exchange websites, and stock information services, through discussions with company representatives, agents, other professionals and investors, and field visits. My opinions are based upon information believed to be accurate and reliable, but my opinions are not guaranteed or implied to be <u>so. The opinions presented may not be complete or correct; all information</u> is provided without any legal responsibility or obligation to provide future updates. I accept no responsibility and no liability, whatsoever, for any <u>direct, indirect, special, punitive, or consequential damages or loss arising</u> <u>from the use of my opinions or information. The information contained</u> in a report, commentary, this website, interview, and other content is subject to change without notice, may become outdated, and may not be updated. A report, commentary, this website, interview, and other content reflect my personal opinions and views and nothing more. All content of this website is subject to international copyright protection and no part or portion of this website, report, commentary, interview, and other content may be altered, reproduced, copied, emailed, faxed, or distributed in any form without the express written consent of Michael S. (Mickey) Fulp, MercenaryGeologist.com LLC.

WHERE WILL ALL THE **ELECTRIC CARS GO**

WHEN THEY END THEIR SFRVICE HEF?

AMERICAN **MANGANESE** INC. HAS THE **ANSWER: "WE'LL RECYCLE THEM"**

Of all the hurdles that electric cars have had to overcome, one of the most annoying, and persistent, has been what to do with the batteries when the vehicles reach the end of their service life.

By Christian Vakenti

he shell of an electric vehicle (EV) is much the same as that of any gas-powered automobile: a mix of metal, plastics and some fabric. Comprehensive recycling programs exist to deal with most of those components. But the batteries pose a different, and heretofore perplexing problem.

Enter American Manganese Inc. (AMI), who say they have the answer to the world's emerging EV market disposal problems. When it comes time to replace the massive lithium batteries required to power say, a Tesla S model or a Chevy Volt, American Manganese will utilize their patented process to recycle them.

Previously, lithium ion batteries were either shredded or smelted down, which wasted the vast majority of metals that make up the powerful batteries. These materials would then end up either in expensive long term storage (not ideal) or a land fill (an ecological and marketing disaster).

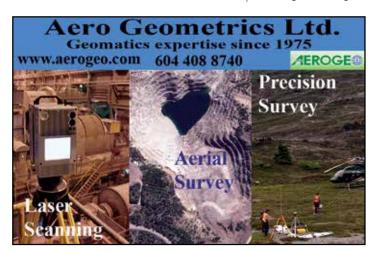
This has been a major sticking point in the argument against electric vehicles, as both regulators and potential buyers of the product have realized that the current practice is far from sustainable. It is largely due to this lack of proper recycling methods that has made EV's actually worse for the environment than buying and running a similar-sized gasoline engine. A fact not lost on the Prius-minded crowd.

All of that is about to change, however.

upon AMI's ground-breaking Based technology, a new process allows the recovery of cathode materials from spent Li-ion batteries.

Having successfully completed proof of concept testing, AMI is working with Kemetco Research Inc. to complete recycling bench tests on nickel, aluminum and manganese cathode chemistries and cobalt ores. Work to date suggests high recovery rates (approaching 100%) of materials at industry-standard purity levels, ready for reuse.

These recycled materials can and have been used to make more Li-ion batteries, vastly increasing the profitability of EV





manufacture while at the same time massively decreasing the environmental impacts of creating a new battery.

For EV marketers, this is a technological dream come true: finally they can honestly say to potential buyers that by purchasing their product they will substantially lower that consumer's global footprint and in doing so, make the world a better place to drive and to live.

So, where's the downside?

According to Larry Reaugh, CEO of AMI, there isn't one.

"We put our focus on recycling, or what we call the mining of batteries," Larry said in an article published by The Financial Post.

The dramatic shift in focus has completely changed how, and where AMI does business. Mining exploration in Arizona and northern BC has put on hold, perhaps indefinitely, while the company re-tools and and re-gears to get the new technology off the ground.

This kind of dramatic sea-change usually spells at least a temporary dip in stock price and often an outright revolt in consumer confidence as investors question exactly what kind of company they've parked their funds in. But AMI has no regrets.

"Since our refocus on lithium-ion battery recycling technology, the company traded an astounding quarter of a billion shares in just four months and has increased market capital by 25 times since the beginning of this year (2016). Clearly we have hit on a popular concept that is very marketable," says Reaugh.

At least some of the praise belongs to Kemetco Research Inc. (KMI), one of Canada's largest research companies. From their state of the art, 18,000 square foot research lab in Richmond, BC, KMI provide scientific expertise in the fields of Specialty Analytical Chemistry, Chemical Process and Extractive Metallurgy.

"The key to the technology is a processing loop that deals with the reagent by-products, water recycling in an energy efficient manner, and maximizing recovery of cathode material which could not be achieved in a single pass," says Norman Chow, president and CEO of KMI. "The process eliminates the need for heat and furnaces, as the recovery of the metals take place at ambient temperatures. The result is a cleaner, environmentally sustainable recycling alternative to current disposal methods."

Where do we go next?

The world market for EV batteries in 2015 was \$7.8 billion. It's expected to hit \$30 billion in seven years. The cathode component is the most expensive (25%) part of a battery due to the cost of cobalt, nickel and lithium.

AMI's process slashes those costs, while easing the material demands from the quickly growing EV battery market.

"As a recycler, AMI has the potential to become a primary producer and help reduce the reliance on less-than-friendly jurisdictions in Africa, South America and elsewhere in the world," says Reaugh.

If Li-ion batteries was the best thing to happen to electric vehicles, then American Manganese is the best thing to happen to Li-ion batteries. And that's a loop that just makes environmental, and financial sense.





MAY 28 & 29, 2017

VANCOUVER CONVENTION CENTRE EAST

The **largest gathering** of investment newsletter writers from **around the world**



www.metalwriters.com