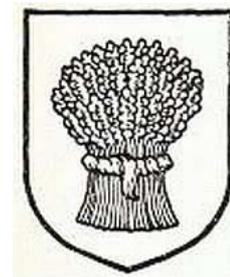


Monday, September 24<sup>th</sup>, 2018



# HALLGARTEN & COMPANY

Initiating Coverage

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## New Age Metals

(TSX-V: NAM, FSE: P7J, OTCQB: PAWEF)

Strategy: Long

Key Metrics	
Price (CAD)	\$0.055
12-Month Target Price (CAD)	\$0.18
Upside to Target	227%
12 mth high-low	\$0.045-\$0.185
Market Cap (CAD mn)	\$4.82
Shares Outstanding (millions)	87.72
Fully Diluted (millions)	150.03

# New Age Metals

## One of the Rare Breed of PGM Explorers

- + New Age with its unique exposure to Lithium and PGMs is betting upon both nascent automobile technologies and the long-established modes of car production
- + The River Valley project, North America's largest undeveloped PGM deposit, has a double advantage of being in an accessible location with good infrastructure while likely to have a reasonable CapEx
- + The project currently has a Preliminary Economic Assessment underway
- + Despite the perceived negative implications of the Dieselgate scandals, PGMs have soared over the two and half years
- + Recent resource estimate boosted substantially the *in situ* metals at River Valley
- + The acquisition of the Genesis project in Alaska represents a return to familiar territory for New Age
- + Lithium projects are being financed by the JV partner while New Age gets to manage the exploration and earn fees for doing so
- + Ultimately the Lithium assets could be hived off as a "bonus" to shareholders
- ✗ Palladium and Platinum have suffered a price swoon since the beginning of 2018 but Palladium in particular has started to climb again in recent weeks
- ✗ The EV revolution is perceived in some quarters as reducing the long-term usage of PGMs
- ✗ PGM mining/exploration stories face competition for investor attention from the physical ETFs
- ✗ Financing remains difficult

### **New Age – Hedging its Bets on Energy Minerals**

While Lithium sets the pulse racing of some investors, in the case of New Age Metals it is its PGM potential that is the standout feature for us. As primary PGM deposits are rather rare beasts in North America (indeed everywhere outside Russia and South Africa), the River Valley project of New Age deserves special attention as PGMs are likely to become a subject of much interest in the next few years and the alternatives in terms of developers are few and far between. In this initiation of coverage we shall look at what the New Age holds for investors.

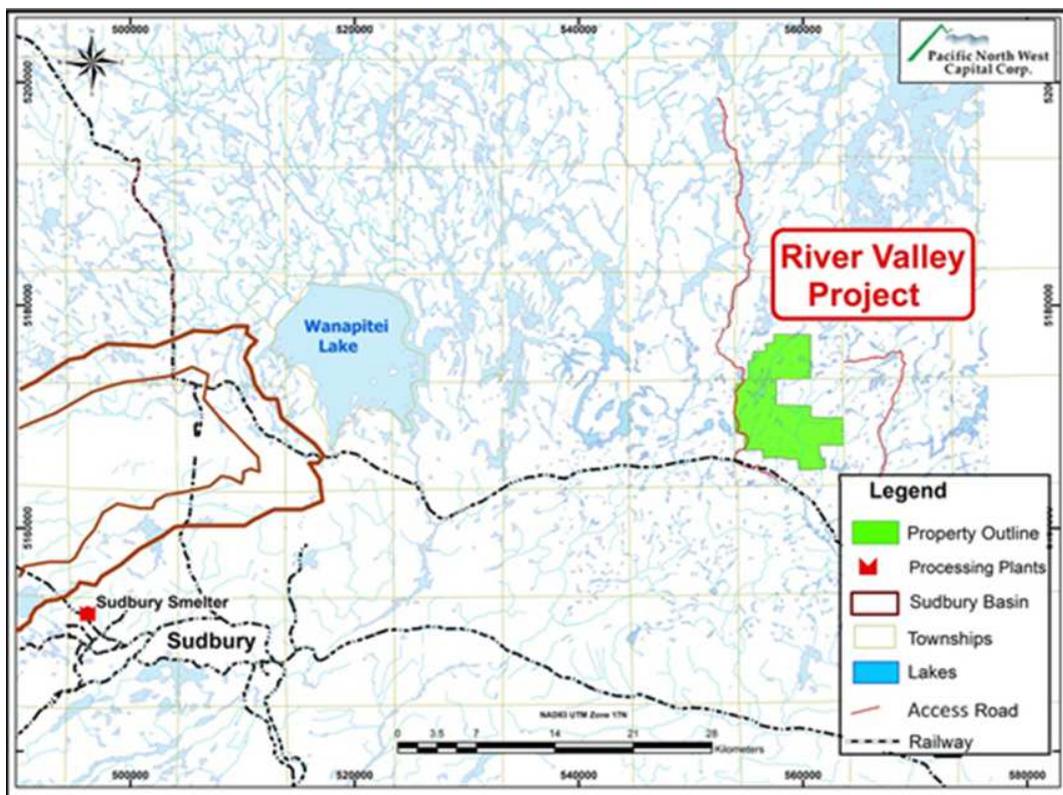
### **The River Valley Project**

The River Valley project has been New Age's principal focus for two decades now. The project is located in a road-accessible location in the Dana and Pardo townships of Northern Ontario, approximately 60km

east of Sudbury, Ontario. The area is part of Canada's prime Ni-Cu-PGM mining and smelting district with excellent infrastructure and community support for mining activities.

The fluctuating fortunes of PGMs and the mood swings of the financing markets have meant that the company has had to tailor its exploration efforts to these two shifting variables with the most prospective moments for advancing efforts occurring when the two factors coincide. This has meant that efforts have not been as extensive as it would like, particularly as significant new areas of mineralisation have become evident that would expand the resource potential even more.

We find the project particularly attractive as River Valley's Pd to Pt ratio is 2.5:1 and we are much more disposed to Palladium than Platinum at this time.

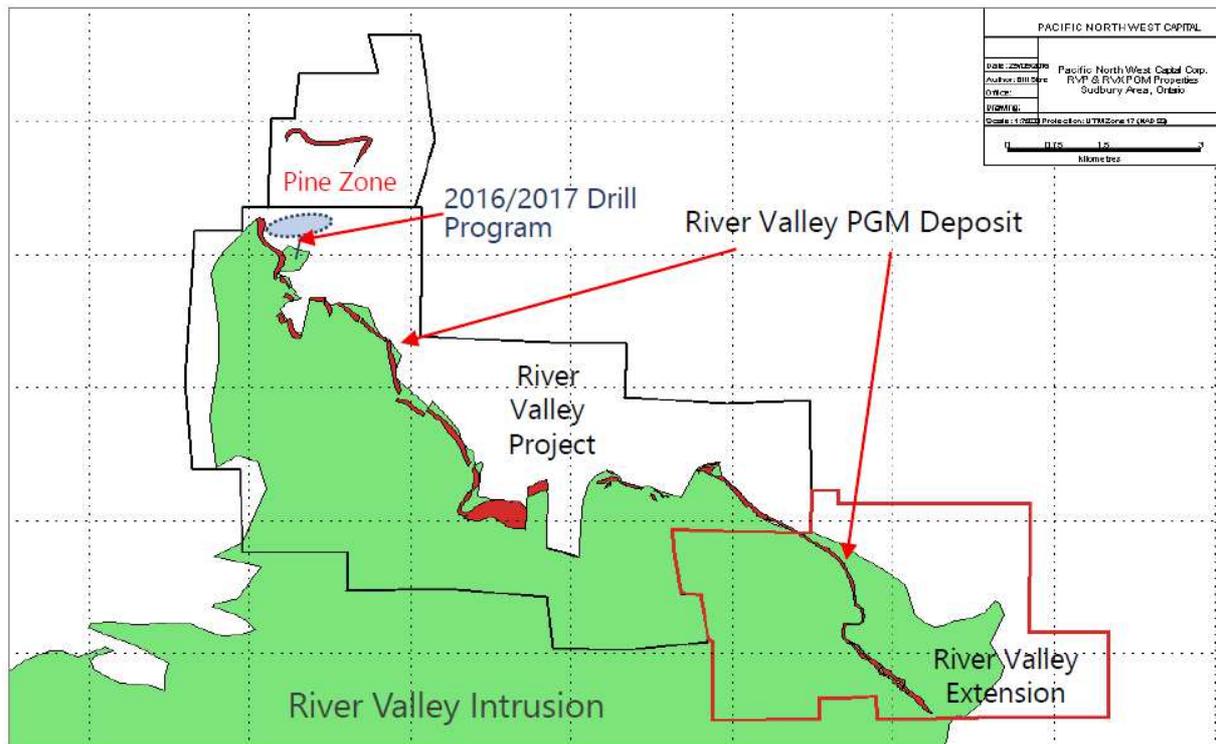


The River Valley PGM project became a target for Pacific North West Capital (as New Age was then called) in 1998.

The company discovered significant PGM occurrences on the property and entered into a joint venture agreement with Anglo Platinum in 1999. New Age was the operator of the joint venture. The project consists of two Mining leases covering an area of 5,381 hectares, including 4,756 hectares of Surface and Mining Rights and an additional 624 hectares of Mining Rights. These Mining Leases cover all of the NI43-101 mineral resources of the River Valley PGM Project. In January 2011, the company completed

the terms for the acquisition of 100% of the project from Anglo Platinum Limited. The property remains subject to a 3% NSR, with options to buy down.

The map on the following page shows the concession and in dark red can be seen the main identified areas of PGM mineralisation.



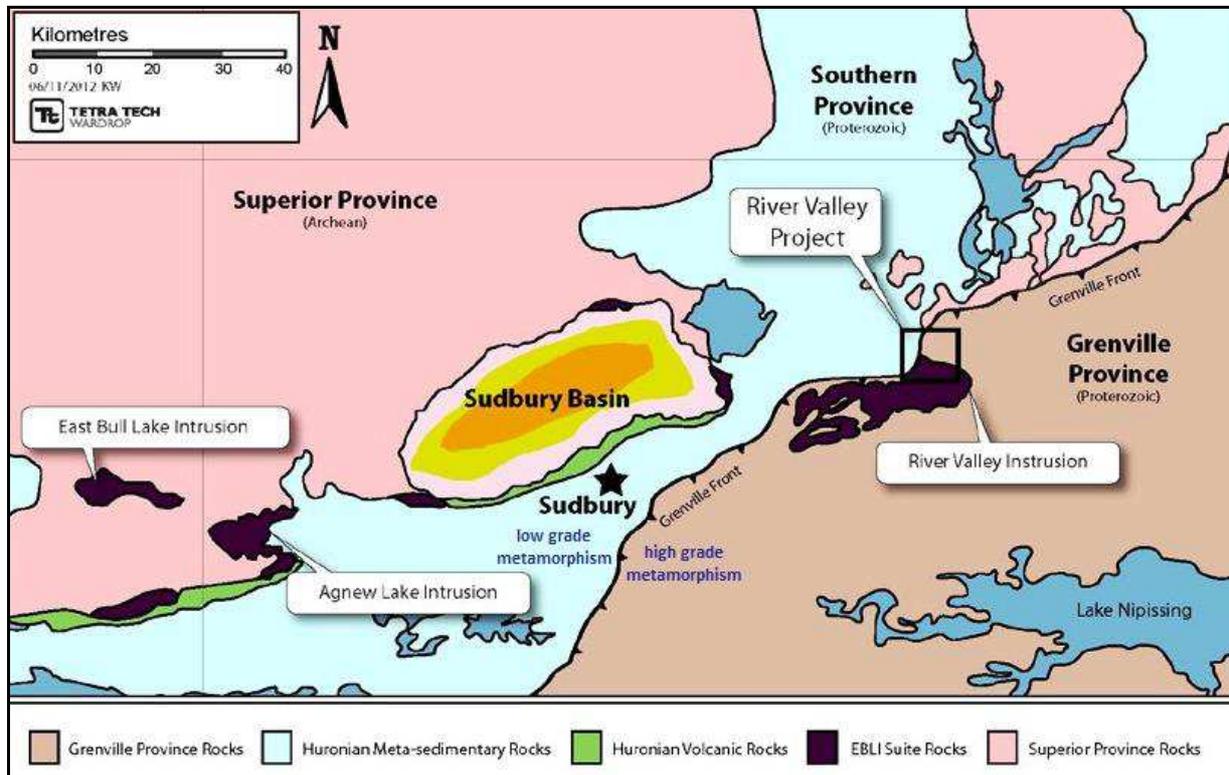
### Regional Geology

The dominant regional feature is the Paleoproterozoic East Bull Lake Intrusive Suite. The emplacement of the East Bull Lake Intrusive Suite bodies, the subsequent eruption of volcanic rocks belonging to the Huronian Supergroup, and the formation of the depositional basin filled by Huronian Supergroup sediments is attributed to a Paleoproterozoic intracontinental rifting event, which resulted from a mantle plume that was centered near Sudbury.

The three largest and most economically interesting bodies of the East Bull Lake Intrusive Suite are the East Bull Lake and Agnew Intrusions (situated within the Sudbury Province) and the River Valley Intrusion (situated in the Grenville Front Tectonic Zone). The most completely preserved of the three largest bodies is the Agnew Lake Intrusion with approximately 2 km of stratigraphy being preserved, while the East Bull Lake and River Valley Intrusions have roughly only 1 km preserved.

An economically important feature commonly shared by the Agnew Lake, East Bull Lake, and River Valley Intrusions is the occurrence of a copper-nickel-PGE-bearing breccia unit situated at the base of

the intrusions, where the footwall contact is preserved. Near the contact, marginal footwall breccias and zones of extensive footwall dykes may also be present. Sulphide mineralization commonly contains between 1 g/t and 5 g/t combined platinum-palladium-gold.

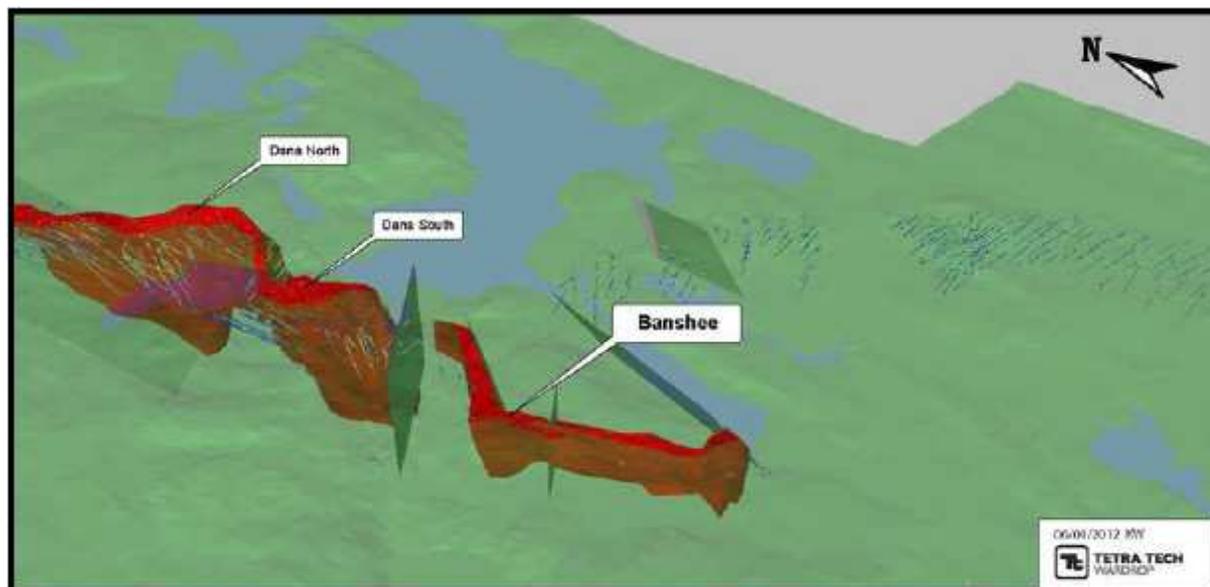


### The Geology of the RVI

The River Valley intrusion (RVI) is shallow-dipping, layered, and approximately 900 m thick. There is an increase in metamorphic grade from the northwest part of the intrusion (middle greenschist facies) to the southeast part (lower amphibolite). The dominant rock types are leucogabbro with gabbros and anorthosites. Along the Grenville Front, the RVI is either in thrust contact with quartzite of the Huronian Mississagi Formation or is in contact with mafic and felsic metavolcanic rocks of the lower Huronian Supergroup where the nature of the contact is unknown.

Two styles of mineralization have been observed at the Project; contact nickel-PGE and reef PGE mineralization. In the resource estimate Tetratech note that the presence of several highly anomalous assays from rocks lying within higher portions of the River Valley Intrusion's stratigraphy (i.e. Azen Creek Wonder Showing) suggests that there are opportunities for PGE mineralization such as reef or stratabound-type targets or, narrow, high-grade breccia zones.

The image on the following page shows an axiometric view of the Dana South and Dana North and Banshee segments of the deposit (which are located at the northern end thereof).



The contact between the River Valley Intrusion and the Archean basement trends southeasterly for a distance of approximately 16 km. On the basis of surface mapping and diamond drilling, the idealized sectional stratigraphy of the mineralized environment comprises five major units, from the layered rocks of the River Valley Intrusion in the west to the igneous basal contact of the intrusion to the east. The mineralized breccia unit occurring at the contact has been identified along most of this 16 km strike length. The contact is divided into several areas based on structural offsetting, alteration grades, and grade distribution.

### Exploration

The exploration history of the region dated back to the 1960s, with work on the property starting in earnest in 1999. Completed exploration and development programs on the River Valley property include more than 710 holes drilled since 2000 and several mineral resource estimates and metallurgical studies.

The 2015 drilling program carried out in the first two month of 2015. A total of two holes were drilled totalling 474 m. The 2015 drill program confirmed the new high-grade T2 discovery. Drill hole intercepts were much higher than the average grade of current mineral resource estimate.

The 2016 drilling program was carried out in the fall of 2016. A total of five holes were drilled totalling 1,267m.

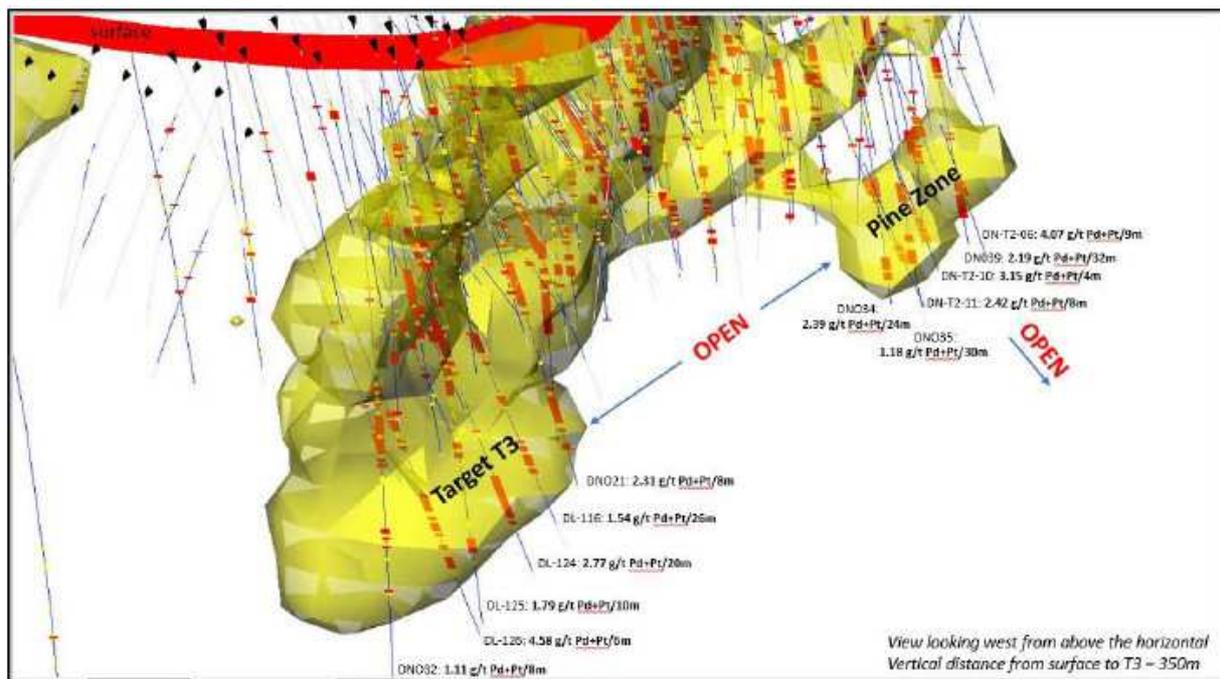
In 2015-16 seven drill holes at Pine Zone intersected high-grade PGM mineralization of:

- Hole 2015-DN002 intersected 9 m grading 3.909 g/t Pd+Pt from 145 m downhole
- Hole 2015-DN001 intersected 16 m grading 2.054 g/t Pd+Pt from 184 m downhole

- Hole 2016-DN-T2-06 intersected 9 m grading 4.065 g/t Pd+Pt from 178 m downhole
- Hole 2016-DN-T2-10 intersected 4m grading 3.093 g/t Pd+Pt from 202 m downhole

The 2017 drilling program commenced in June 2017 and was completed in September 2017. A total of 14 holes were drilled totalling 3,728 m.

The 3D visualization that follows shows the estimated form of the mineralisation below surface with the mineralisation being open to depth and between the T3 and Pine Zones.

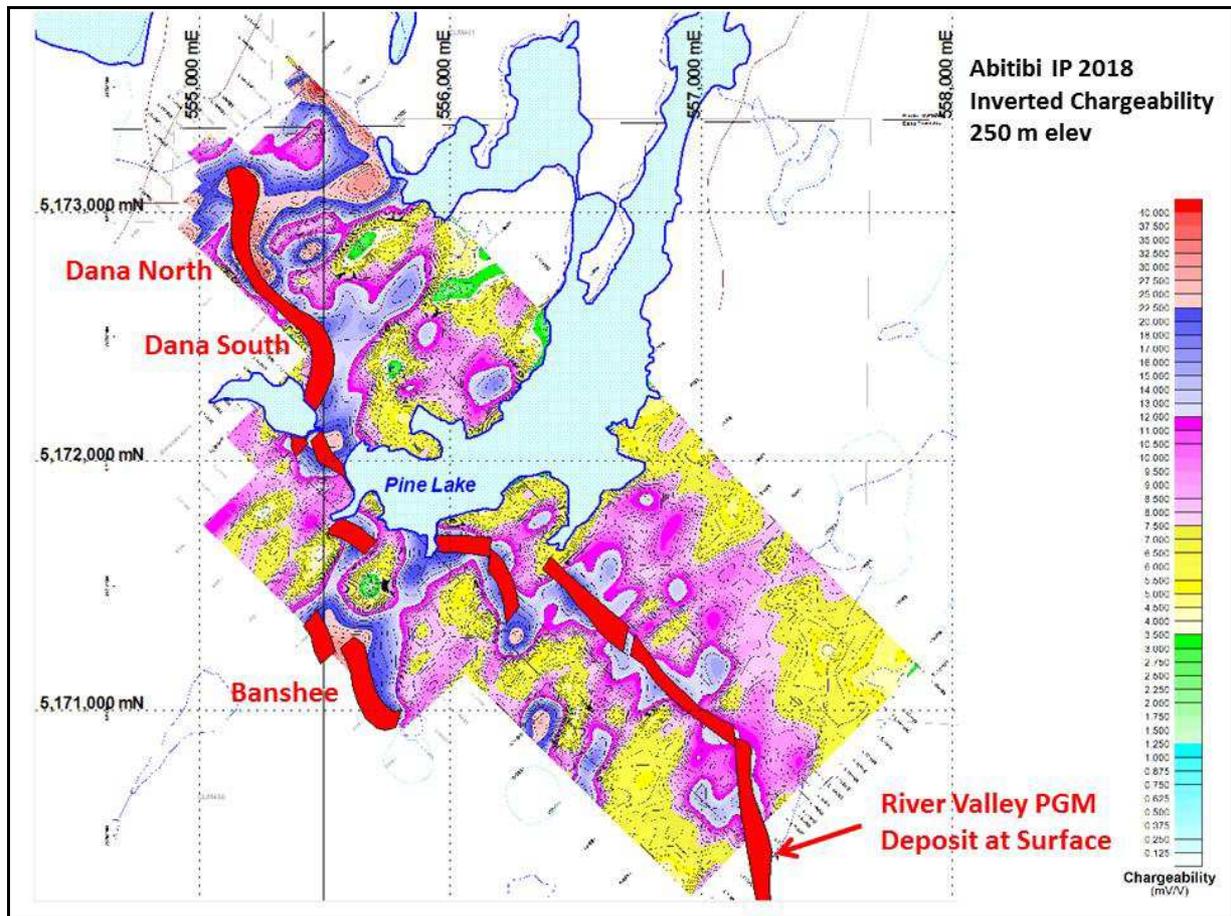


Approximately CAD\$40mn has been spent on the project by the company and its joint venture partner.

Surface mineralization has been identified for approximately 16 km of strike along a contact zone of the River Valley Intrusion. This includes four kms of the recently acquired River Valley Extension, where approximately \$5mn was expended and a previous 84 drillholes were completed. To date, eight mineralized zones have been diamond drill delineated along the 16 km of strike. The mineralization has been mainly drill tested to less than 300 m vertical in the Dana North / Dana South Zones and to less than 200 m vertical in the other mineralized zones.

Induced Polarization surveys were completed in the summer of 2017 and the winter of 2018 have identified numerous anomalies, including the recently discovered Pine Zone occurring in the footwall of the Dana North Zone.

On the following page can be seen the outcome of the Inverted Chargeability survey from 2018.



**Resource**

WSP Canada was commissioned to generate a new resource estimate and technical report for the River Valley deposit and this was published in May of 2018. This utilized a 0.4g/t PDeQ cut-off.

The previous resource estimate dated from May 2012 and was prepared by Tetrattech. That estimate utilized a Cut-Off Grade of 0.8 g/t PdEq.

<b>River Valley - Resource Estimate</b>									
	<b>Tonnes</b>	<b>Pd g/t</b>	<b>Pd oz</b>	<b>Pt g/t</b>	<b>Pt oz</b>	<b>Rh g/t</b>	<b>Rh oz</b>	<b>PdEq g/t</b>	<b>PGM+Au oz</b>
<b>Total Measured</b>	62,877,510	0.49	988,705	0.19	381,218	0.02	37,302	0.99	1,440,248
<b>Total Indicated</b>	97,855,200	0.40	1,270,407	0.16	500,960	0.02	47,230	0.83	1,856,925
<b>Total M + I</b>	160,732,710	0.44	2,259,112	0.17	882,178	0.02	84,532	0.66	3,297,173
<b>Inferred</b>	127,662,000	0.27	1,104,457	0.12	503,955	0.01	32,089	0.66	1,578,367

This represented a 70mn tonne increase in tonnage in the M&I and more than tripling of the Inferred tonnage. Meanwhile the PGM+Au ozs went up by over 800,000 ozs (previously 2.46mn) and the Inferred resource of PGM+Au rose by 250% or more than 900,000 ozs (previously 614k).

There are also showings of copper, nickel and silver but really this project will stand or fall on its PGM content and from the resource it is clear that these are starting to stack up as meaningful indeed.

Results for the most recent Metallurgical Testwork Study (prepared by Tetra Tech - Wardrop) are summarized below:

- High Confidence: Measured plus Indicated = 72% of total
- High Grade potential, particularly in the north part of River Valley deposit
- Resources under evaluation for development potential as open pit mining operation

### **Adding to the Patch**

In August 2016 PFN acquired what it calls the River Valley Extension Project (to the southeast of the existing claims) from Mustang Minerals Corp. With this transaction the area of the strategic land position at River Valley increased to 64 km<sup>2</sup> (15,800 acres). More importantly the strike length of River Valley deposit increased from 12 km to 16 km. Not much work has been done as yet but surface grab samples returned assays of up to 10 g/t of PGMs.

### **Current & Planned**

The work program for 2018, with an unchallenging budget of around CAD\$1mn, included:

- Three-dimensional Geological and Structural Modelling
- IP geophysical surveys over the new Pine Zone
- Phase 3 Drilling of Pine Zone
- Develop additional structural PGM targets for priority drill testing

As far as a mine plan is concerned that company plans to take the roughly 600,000 ounces it has in the Northern Portion of the Project up to one million ounces.

- Delineation and infill drilling of Pine Zone
- Updated Mineral Resource Estimate
- Phase 1 drill tests of other structural targets for higher grade mineralization (south from the Pine Zone in the area from T3 to T9)
- Carry out Phase 2 metallurgical testwork

### **The Preliminary Economic Assessment (PEA)**

In early August it was announced that the company had commissioned P&E Mining Consultants to lead

the first economic study on the River Valley PGM Project. Additionally DRA Americas will be collaborating with P&E assessing results from previous and ongoing mineralogical and metallurgical studies. DRA, a multidisciplinary global engineering group, has engineered and built a large majority of the PGM concentrators in the world.

The objective of the PEA would be to create a mine plan, mine schedule, a capital cost estimate, and operating cost estimate including a financial model. The PEA is scheduled to be completed on or before the end of the first half of 2019. This work has a provisional budget of CAD\$320 000.

NAM plans to initiate a 4<sup>th</sup> phase diamond drilling program on the Pine Zone, and is currently working on the detailed drill program.

### **PGMs – Usages**

Palladium's headline usage is in gasoline-powered vehicle autocatalysts, while platinum is used mainly in autocatalysts for diesel-powered vehicles. More than half the supply of palladium and platinum is used in catalytic converters, which convert as much as 90% of the harmful gases in automobile exhaust (hydrocarbons, carbon monoxide, and nitrogen dioxide) into less noxious substances (nitrogen, carbon dioxide and water vapor). The 2015 Volkswagen emissions-rigging scandal in 2015, involving diesel-powered vehicles, has led drivers in Europe to gravitate towards gasoline-powered vehicles thus favouring Palladium at Platinum's expense.

However, Thomson Reuters' GFMS Supply Chain & Commodities Research division have predicted that the market share of diesel vehicles in Europe will decline from around 45% at present to 35% in 2025, which is still a substantial share.

Increased demand from the auto sector was one factor that impacted palladium prices in 2017. The precious metals dealer Neptune Global Holdings indicated that palladium was taking some market share away from platinum in the world of catalytic converters.

A survey by Reuters found that analysts of the PGM space were predicting that automakers may start to substitute palladium for platinum in gasoline engines in 2018. Other opinions though have hinted at replacement in the other direction if Palladium is too high vis-à-vis Platinum.

In May, the leading trader and PGM recycler Johnson Matthey forecast that global auto demand for palladium would exceed eight million ounces for the first time in 2017.

Palladium is also used in electronics, dentistry, medicine, hydrogen purification, chemical applications, groundwater treatment, and jewelry. The upcoming usage for Palladium is due to it being a key component of fuel cells, which react hydrogen with oxygen to produce electricity, heat, and water. Opinions differ widely though as to whether fuel cells will potentially leapfrog LiBs in a further quantum leap in the evolution of EVs.

### Palladium – Trending Back Up

This metal may be Platinum’s less precious sister but it attracted more of the limelight in 2017. Despite substantial sell-offs from the South African-based ETFs (which was hoovered up by China apparently) the metal just kept bouncing back. In late September 2017, palladium reached price parity with platinum for the first time since 2001 and then surpassed it. In mid-October Palladium broke through the key \$1,000 per oz mark for the first time since 2001. Thus from the 2016 low the metal managed to more than double to a position around the beginning of this year when it hit a multi-year high of over \$1,100 per oz. It then started an extended slide from which it now seems to be recovering over the last month.

The company’s most recent low (and maybe a new floor) is similar to its previous 2014 high implying the metal’s price has created a new base. In recent weeks the metal has excelled against virtually all other leading metals and staged a rally that looks like it might soon challenge the highs of the last decade.



Source: Kitco

In late 2017 analysts polled by FocusEconomics estimated Palladium prices averaging \$920 in Q4 2018, with the lowest forecast provided being \$714 and the highest being \$1,050. Our estimate for Year end 2018 for Palladium is \$1,080 for 2019 it is \$1150 and the same for the end of 2020. For Platinum it is \$1,000 at the end of 2018, \$1,100 for end 2019 and \$950 for year-end 2020.

### Palladium outlook - Supply deficit

Johnson Matthey forecast the supply deficit in 2017 as 792,000 ounces. They attributed this to not only strong auto sales in the US and China but also industrial demand, especially from Chinese bulk chemicals producers. Johnson Matthey predicted that total gross demand will rise by more than 7% to exceed 10

million oz.

The Palladium market has been in physical deficits since 2012. The stocks of aboveground metal (mainly in Russia) have fallen from 18 million ounces at the end of 2010 to Metals Focus' forecast of 14 million ounces by the end of 2017. In November, HSBC said the palladium deficit is forecast to reach 680,000 ounces in 2017 and will increase to 1,151,000 ounces in 2018.

Norilsk Nickel uses official stockpiles in Russia as a sort of piggybank. In 2017 it indicated that it planned to increase its purchases of Palladium from Russian Central bank reserves due to concerns about a shortage. The company told Reuters late last year that Norilsk's 2017 purchases had increased to around 600,000 ounces compared to 160,764 ounces in 2016.

As long as auto sales continue around about their recent healthy levels then the prospect is for Palladium (and Platinum) to continue their gradual rise in demand.

### **Palladium – Production Trends**

New players in the PGM space are rare so the running is mainly left to well-known names with existing operations. The two most likely sources of new supply are Norilsk and Sibanye-Stillwater.

Norilsk, the world's top palladium producer, has completed a feasibility study for its South Cluster project. South Cluster has the potential to become one of the top five producers of platinum-group metals in six to seven years' time based on its reserve base. A final investment decision on South Cluster is expected in H1 2018.

In February of 2018 the FT reported that Norilsk had formed a joint venture with Russian Platinum to invest \$4.4bn to develop mining projects on the Taimyr Peninsula in Siberia. Together they will hold three mining licenses to deposits in the Norilsk Industrial District in the Krasnoyarsk region. The joint venture will start at the end of this year and is targeting eventual annual production of 70 to 100 tonnes of platinum and palladium starting in 2020. The deposits contain proven ore reserves of 4,300 tonnes of palladium and platinum.

The merger of Sibanye Gold with Stillwater Mining in May 2017 created one of the world's top four primary palladium producers, according to Johnson Matthey, on an attributable basis.

The restyled Sibanye-Stillwater announced first production from the Blitz project, a brownfields extension of the existing Stillwater mine, in October of 2017. A ramp up to full production is not expected until late 2021.

South Africa on the other hand is a case of some added production but also some production being shuttered due to technical difficulties, high costs or end of mine-life.

## Genesis in Alaska

In mid-April the company announced its signing of an agreement with Anglo Alaska Gold Corp to acquire a 100% interest in the Genesis project, covering 10,240 acres, consisting of 64 contiguous one hundred and sixty-acre claims. The Genesis project is a Ni-Cu-PGE property located in the northeastern Chugach Mountains, 75 road miles north of the city of Valdez, Alaska.

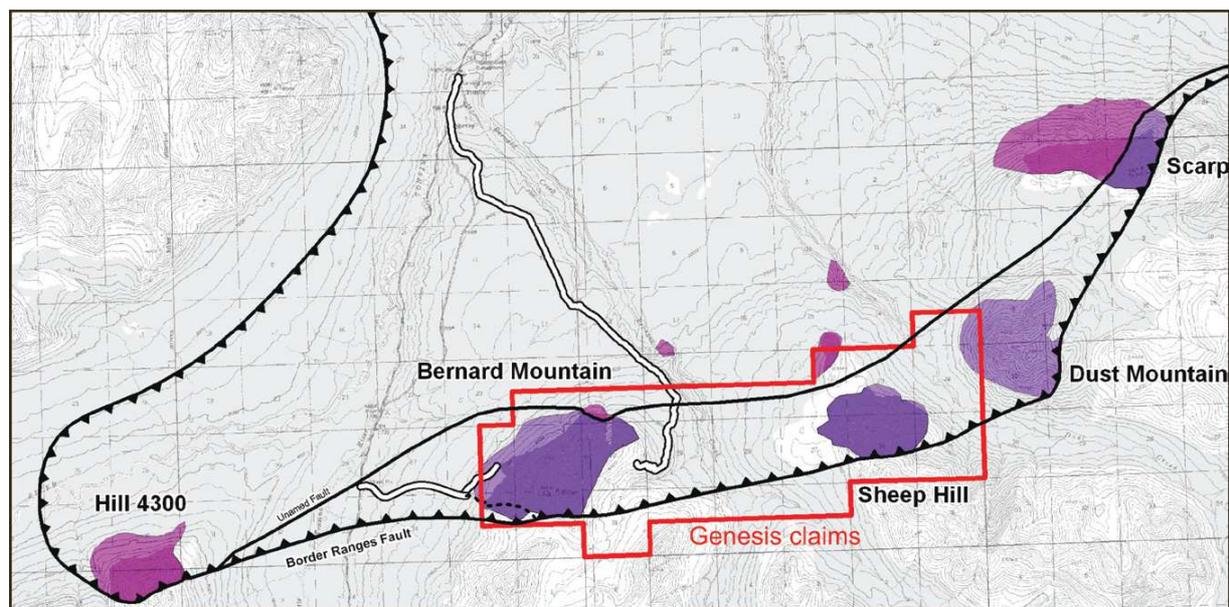


One of the attractions, besides the potential mineral endowment, being that the property is within 3 km of the paved Richardson highway and high-capacity electricity transmission line.

## Geology

The Genesis project lies within the Tonsina Ultramafic Complex (TUC) of the Peninsular Terrane, which

consists of Jurassic ultramafic and mafic rocks ranging from dunite to gabbro. Major exposures of the TUC are located on five massifs, including (from west to east) Hill 4300, Bernard Mountain, Sheep Hill, Dust Mountain, and Scarp. The five exposures are shown on the map below with their relationship to the Genesis claims block.



Past exploration has revealed the presence of chromite-associated platinum and palladium mineralization and stratabound Ni-Cu-PGE mineralization within steeply dipping magmatic layers of the Sheep Hill portion of the Tonsina Ultramafic Complex. Pyrrhotite, pentlandite, and chalcopyrite occur in disseminations and net textured segregations associated with disseminated to banded chromite within a 150 meter thick steeply north dipping layer of dunite and lherzolite just north of the Border Ranges Fault zone. The mineralized horizon has been identified in outcrop sampling for 850 m along strike and a 40 m true thickness.

PGE values at Genesis are strongly correlated with the chromite rich portions of the mineralized horizon, while Ni and Cu are strongly correlated with sulfide rich portions of the mineralized horizon. Metal grades are regular over multiple meter intervals, including 6m grading 804 ppb platinum and 1,018 ppb palladium, and 12 meters grading 5,938 ppm nickel.

Additionally, two areas of banded chromite hosted in dunite and harzburgite on the Bernard Mountain portion of the Tonsina Ultramafic Complex host multiple ppm PGE and a sample of chromite hosted in the olivine websterite unit contains the high values for both Pt and Pd for a combined 5,340 ppb PGE. Outcrop sampling has returned values of 16-9,660 ppm Ni, 0.5-5,800 ppm Cu, 0-2,800 ppb Pt, 0-2,540 ppb Pd.

The property is classified as PGM-Ni-Cu reef-style target with past sampling showing grades of 2.4 g/t

Pd, 2.4 g/t Pt, 0.96% N), and 0.58% Cu. The reef mineralization, identified in outcrop for 850 m along strike and a 40 m true thickness, is open to the west, east, north, and at depth. There is a separate style of chromite mineralization containing up to 2.5 g/t Pd and 2.8 g/t Pt. The known PGM mineralization covers a distance of 9 km across the prospect.

### **Exploration**

It is interesting to note that this deposit first came to attention due to mapping activities by the US army at the beginning of last century. As a result most of Bernard Mountain was staked for chromite from 1932 until the early 1960's, when it was referred to as the Tonsina chromite prospect.

The project is underexplored with no historic drilling having been undertaken on the project. Limited geochemical sampling and geologic mapping has been conducted over the two mafic-ultramafic massifs. The strategy with this property is to undertake follow-up drilling, additional surface mapping, sampling to expand the known footprint of mineralization and to determine the ultimate size and grade of the layered mineralization outlined to date.

A fall 2018 program will entail the current surface mapping on the project and help identify a detailed drill program.

We have written in the past of Alaska's attractions, particularly in relation to the work done there by Ucore Rare Metals. Fraser Institute's 2017 survey of mining companies has Alaska ranked as the 10th best jurisdiction in the world for mining.

### **The Genesis Deal**

New Age will make the following cash payments to Anglo Alaska of:

- \$30,000 on the Closing Date
- \$30,000 on or before the one (1) year anniversary of the Closing Date;
- \$30,000 on or before the two (2) year anniversary of the Closing Date; and
- \$30,000 on or before the three (3) year anniversary from the Closing Date;

And then stock payments to Anglo Alaska of:

- 200,000 Consideration Shares on the Closing Date
- 200,000 Consideration Shares on or before the first anniversary of the Closing Date
- 200,000 Consideration Shares on or before the second year anniversary of the Closing Date
- 200,000 Consideration Shares on or before the third year anniversary of the Closing Date

In the event the project goes into production, New Age has agreed to pay Anglo Alaska a 3% NSR on the project. New Age may buy down the 3% royalty by paying \$500,000 for each one-half percentage point for a total of \$1,500,000, leaving Anglo Alaska with a one-point five percent (1.5%) net smelter return production royalty in the event that NAM exercises all of its buydown rights.

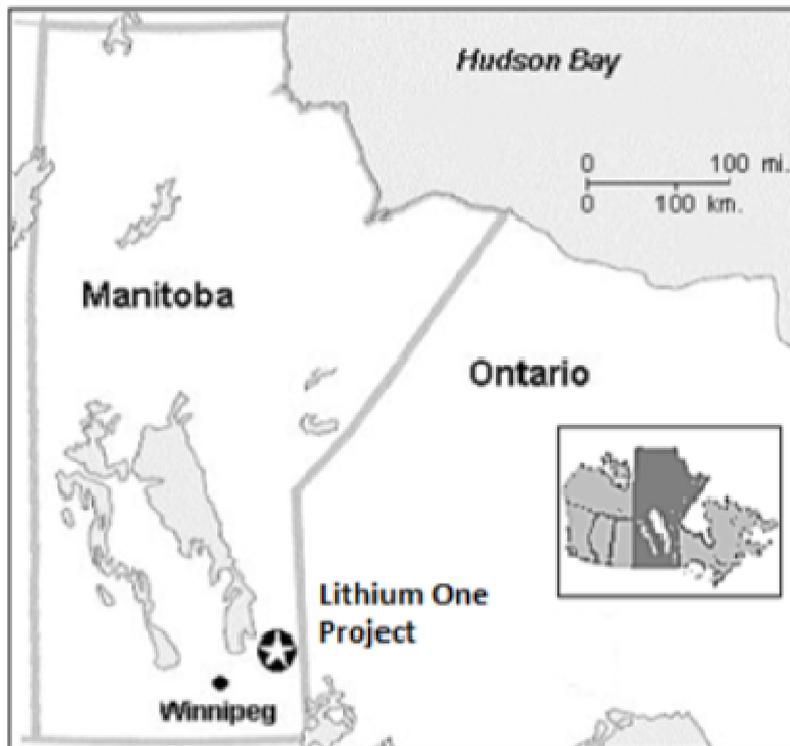
The agreement between New Age and Anglo Alaska calls for NAM to pay the minimum State of Alaska mining claim rentals and annual labor on a yearly basis.

The goal with Genesis at this time is to JV it out to a partner to undertake an extensive exploration program.

### Lithium

Up until recently the Lithium assets of New Age consisted of the Lithium One, Lithium Two, Lithman West, Lithman East and Lithman North projects. In a deal at the beginning of this year with earlier this year with Azincourt Energy (TSX-V: AAZ) these assets became subject to a joint venture. The land package included in this agreement represents one of the largest mineral claim holdings for Lithium projects in the Winnipeg River Pegmatite Field, with claims covering over 6000 hectares. This represents

approximately 64 square kilometres of mineral claim coverage.



In recent weeks the company has added an extra project called Cat Lake, which is also included with the joint venture. All of the properties have been put into a lithium-specific vehicle called Lithium Canada Development, which, we would not be surprised to see, could be spun out to shareholders at some point. A map of the lithium prospects is shown on the following page.

We shall look firstly at the deal and then at the main properties that will receive the focus of exploration attention.

## The Deal

The terms of the deal were announced in mid-January upon the signing of the final agreement with Azincourt Energy. The new JV partner is a resource company styling itself as specializing in the strategic acquisition, exploration and development of alternative energy/fuel projects, focusing on uranium, lithium, cobalt, and other critical energy & fuel elements.

The agreement allows for Azincourt to acquire up to a 50%, 60%, and or 100% interest in the five lithium projects, three of which are ready to be drilled. The agreement is subject to NAMs 90-day option which allows New Age to enter into a Joint Venture agreement once Azincourt has reached 60%. If New Age exercises its option it would be required to fund a 40% interest in the joint venture.

Under the terms of the agreement, Azincourt paid New Age \$10,000 and agreed to pay the following to NAM for a 50% interest in the five projects:

### Cash Payments to New Age

- ✓ \$50,000 on the closing date
- ✓ \$50,000 on or before 6 months from the closing date
- ✓ \$50,000 on or before the first anniversary of the closing date; and
- ✓ \$50,000 on or before 18 months from the closing date

### Stock Payments to New Age

- ✓ 250,000 shares of Azincourt within 10 days of the closing date
- ✓ 250,000 shares of Azincourt on or before the first anniversary of the closing date
- ✓ 250,000 shares of Azincourt on or before the second anniversary of the closing date
- ✓ 250,000 shares of Azincourt on or before the third anniversary of the closing date

### Project Exploration Expenditures

- ✓ \$500,000 in year one
- ✓ \$600,000 on or before year two
- ✓ \$1mn on or before year three

Thus the total expenditures to earn 50% is \$2.1 million.

At any time following the initial option being exercised Azincourt has the right to acquire an additional 10% in the properties via the issuance of one million shares of Azincourt delivered to New Age within 10

business days of committing to earn the additional 10% (for a total of 60%).

To bump the stake up to 60% Azincourt must expend a further \$750,000 in exploration on or before October 31st 2021 (ergo, the total expenditure of CAD\$2.85mn).

Once Azincourt has earned its 60% it will provide a 90-day notice to New Age in regards to New Age's option to enter a joint venture agreement to fund 40% of the project. In the event New Age declines to exercise this option Azincourt has a final opportunity to acquire 100% interest in the project by Azincourt paying one million shares of Azincourt delivered to New Age within 10 business days.

The total expenditures to earn 100% is CAD\$3.85mn, requiring an additional \$1mn to be spent before the 31<sup>st</sup> of October 2022.

### **Royalties**

Under the terms of the agreement Azincourt has agreed to pay New Age a 2% NSR on each of the five properties. The companies acknowledge the existing 1% royalty on Lithium One to a cap of CAD\$250,000.

### **Lithium One**

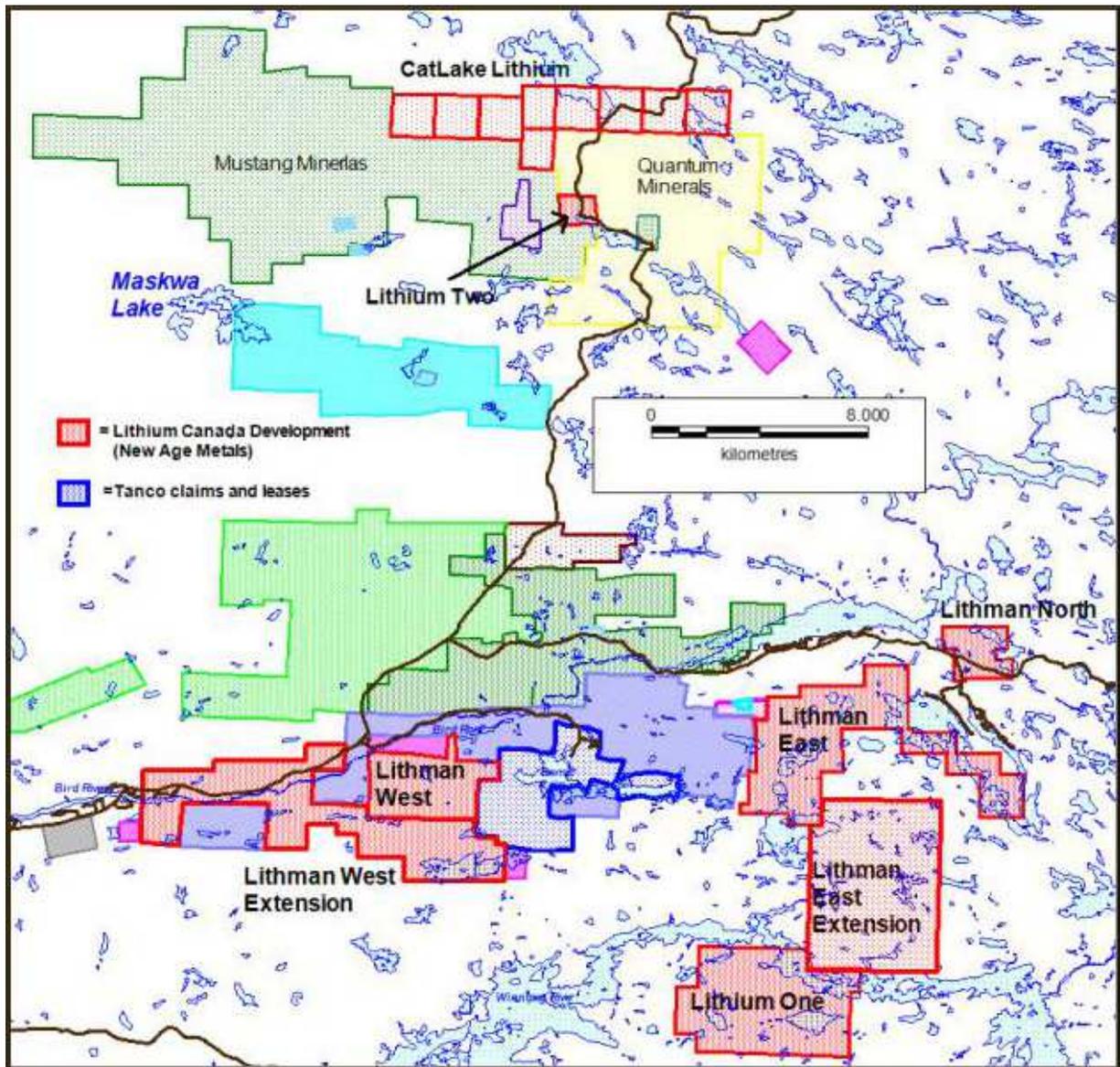
The company's 100% owned Lithium One Project is a known for being a pegmatite-rich area. The project contains several lepidolite and spodumene bearing pegmatites in southeast Manitoba. The area was discovered in the 1920's and was the first spodumene production in Canada. Small tonnages of spodumene were hand mined during the late 1920's from the Silverleaf Pegmatite.

The Lithium One Project is located approximately 125 kilometres (78 miles) northeast of Winnipeg, Manitoba, Canada and 8.5 kilometres southeast of the Tanco Mine Site. The project is situated south of the Winnipeg River. The project is one of five lithium pegmatite projects that the Company has in the region. It is located in the southern portion of the Cat Lake – Winnipeg River Pegmatite Field as part of the Greer Lake Pegmatite Group. Southeast Manitoba has several active mining camps.

### **Lithium Two**

The company's 100% owned Lithium Two Project is a historical known spodumene (a lithium-rich mineral) bearing pegmatite deposit in southeast Manitoba that was discovered and explored in the late 1940's. Two main pegmatite bodies exist on the property, the Eagle and the FD No. 5 Pegmatite. In 2016 the company carried out a small ground proofing program to confirm the historic lithium assays. Field surface sampling yielded assays for the Eagle Pegmatite up to 2.44% Li<sub>2</sub>O and assays up to 3.04% Li<sub>2</sub>O for the FD No. 5 Pegmatite. In 1947, drilling of the Eagle Pegmatite estimated that there was 544,460 tonnes (600,000 tons) of Spodumene with an average content of 1.4% Li<sub>2</sub>O to a depth of 61 metres (200 feet). This is a historic estimation and is non-NI 43-101 compliant. It was also reported at that time, that the Eagle Pegmatite continued to depth.

The Lithium Two Project is located approximately 145 kilometres (90 miles) northeast of Winnipeg, Manitoba, Canada and 22 kilometres north of the Tanco Mine Site. The project has good access with an all-season gravel road crossing through the project area. The project is one of five lithium projects that the company has in the region. It is located in the northern portion of the Cat Lake – Winnipeg River Pegmatite Field. The southeast area of Manitoba has several active mining camps.

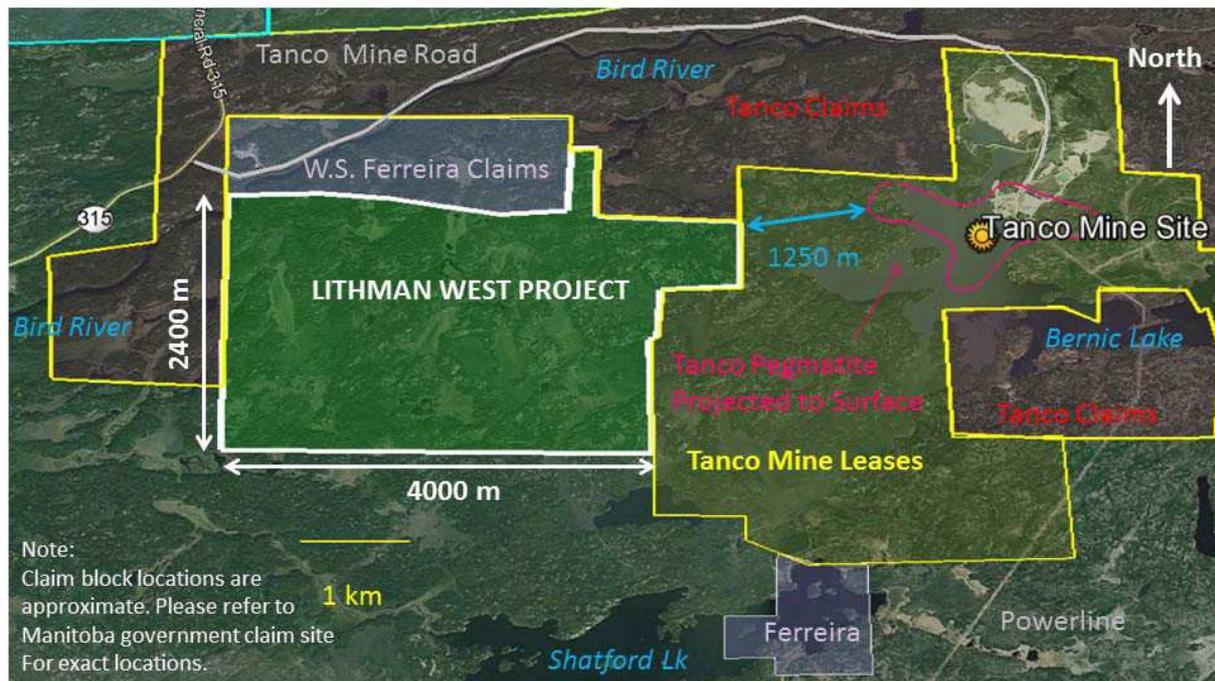


### Lithman West

This project was picked up by the company in May 2016 by staking. It is situated to the west of the present day Tanco Mine, which currently is producing cesium formate, a completion fluid for the

petroleum industry. The Tanco Mine, was previously stated as North America's largest producer of spodumene, tantalum and cesium.

The 100% owned project consists of 7 claims for a total area of 1,047 hectares (2,587 acres). The project is situated to the west and adjacent to the Tanco Mine Leases.



LITHMAN WEST Project – Location Map – Southeast Manitoba

The project area is situated in the Bird River Greenstone Belt and was staked to cover the gabbro intrusive unit that hosts the Tanco Mine. The Tanco Mine is situated at the eastern edge of the gabbro intrusion and this rock unit extends to the west, across the Lithman West project area. The project is located approximately 1250 meters west from the known extent of the Tanco Pegmatite and approximately 140 kilometers northeast of Winnipeg, the capital of the province of Manitoba.

The Tanco Pegmatite was discovered on the west side of Bernic Lake from surface drilling in the 1920's. The mine went into production in 1969 and has produced over the years, in varying capacity, and is still producing today. It is a buried pegmatite and not exposed at surface, except for under Bernic Lake. It is an extremely fractionated, rare-metal, complex type-petalite subgroup, LCT (Lithium-cesium-tantalum) pegmatite and is hosted by a late stage, subvolcanic gabbro. The total tonnage of the Tanco pegmatite has been calculated to be approximately 25 million tons. It is a part of the Bernic Lake Pegmatite Group of the Winnipeg River Pegmatite Field. A western extrapolation of the pegmatite group would extend it onto the Lithman West Project area.

## **Cat Lake**

The new Cat Lake lithium project consists of nine claims for a total of approximately 2,000 hectares located directly north of the company's Lithium 2 project. The Lithium 2 project contains several lithium-bearing pegmatites with a historic non-National Instrument 43-101-compliant drilled resource on the Eagle pegmatite of 545,000 tonnes of 1.4 per cent lithium dioxide to a depth of 60 metres. Historical reports have suggested that the Eagle pegmatite is open to depth and along strike.

The new acquisition increases the company's presence in the Cat Lake area which has seen a rise in recent exploration activity from companies such as Quantum Minerals, Mustang Minerals and Equitorial Exploration. The new claims are situated north of Quantum Minerals' recent claim acquisition. They are staked over portions of the greenstone belt at Cat Lake and along the trend that hosts the Irgon pegmatite (Quantum Minerals), both of which host lithium-bearing pegmatites.

The acquisition of this new project and other recent acquisitions have made the New Age Metals/Azincourt Energy joint venture the largest claim holder for lithium projects in the Winnipeg River pegmatite field. At present, the joint venture has eight projects totalling over 14,000 hectares in the Winnipeg River pegmatite field.

## **Geology**

The pegmatites in this region of southeast Manitoba are described as being a part of the Winnipeg River pegmatite field. Several large lithium-bearing pegmatites exist in this region and exploration activity in the region is increasing. This pegmatite field is host to the world-class Tanco pegmatite, which is a highly fractionated lithium-cesium-tantalum (LCT type) pegmatite and has been mined in varying capacities since 1969. The LCT-type pegmatites can contain large amounts of spodumene (one of the primary ores used in hard-rock lithium extraction) and are a primary geological target in hard-rock lithium exploration. They also can contain economic quantities of tantalum and cesium as well as other lithium-bearing minerals such as mica.

## **The JV Terms**

This addition to the original JV agreement with New Age Metals commits Azincourt to an additional \$250,000 worth of exploration spend over the life of the partnership and has increased the 2018 exploration budget by \$100,000. New Age Metals will also receive an additional 250,000 shares of Azincourt as part of the terms of the deal.

## **Recent Progress on the Lithium Exploration**

Fieldwork on all of the targeted projects, consists of prospecting, mapping and sampling that will generate data on the lithium-bearing properties of the pegmatites contained in the New Age/Azincourt project portfolio.

Preliminary fieldwork and additional ground proofing are currently under way on the Lithium 2 project. A primary objective of this work at Lithium 2 is to finalize drill plans and initiate the 2018 drill program. A 3,000-metre preliminary drill program is scheduled to commence this fall/winter at both the Lithium 1 and Lithium 2 projects, and the drill permits have been submitted to the Manitoba Government.

### **Board & Management Team**

**Harry Barr**, the Chairman, CEO and a director. He has over 30 years of experience in the mining industry, founding Freegold Ventures Limited (retired Oct 2007), Canalaska Uranium Ltd. (retired June 2007), New Age Metals, and Fire River Gold Corp. (from which he retired March 2011). Over the last 15 years, he has acted in various management capacities for El Nino Ventures Inc. (currently Chairman, a director and CEO). Former president/CEO of Next Gen Metals, which merged with Namaste Technologies in February 2016. Southern Sun became Nevada Energy Metals in February 2016. His team has raised approximately \$300mn in non-broker private placements, other equity arrangements and option joint venture agreements. He has signed over 300 Option/Joint Venture agreements with many mid-tier and junior mining companies.

**John Londry** is a non-executive Director. He received his B.Sc. and M.Sc. degrees in Geology from the University of Windsor. For the past 30 years he has been active in the mineral exploration and mining industry. His considerable experience encompasses both grass roots and advanced stage exploration projects throughout Canada, the United States and South America. He has held senior positions with Camflo, Noranda Exploration, Hemlo Gold Mines, and Battle Mountain Gold.

**Michael Neumann** is a non-executive director. He has significant experience in the mining arena and has been proprietor of Neumann Engineering and Mining Services, Inc. since 1993 providing international engineering services focusing primarily on underground hard rock engineering facets such as mine design, productivity improvements, rock mechanics, second opinions, peer reviews and other types of studies. He is a graduate of Haileybury School of Mines and Michigan Technological University (Mining Engineering Degree) a member of the Canadian Institute of Mining, the International Society of Rock Mechanics and the Association of Professional Engineers of Ontario. Concurrent with his current position, from 2003 to 2006, He was Director and Chief Operating Officer of Silver Eagle Mines Inc., (now Excellon Resources Inc.) a TSX-listed Canadian-based silver exploration and development company focused on acquiring, exploring and developing high grade silver deposits among the silver mines in Mexico. Prior to this he was Co- Founder and Director of the Engineering Seismology Group Inc. based in Kingston, Ontario. His early industry experience includes positions of Chief Engineer at Campbell Red Lake Mines and Underground Superintendent at Barrick's Holt McDermott Mine.

**Colin Bird** is a non-executive director. He is a chartered mining engineer and Fellow of the Institute of Materials, Minerals and Mining. He has spent over 20 years in operational mine management. He has extensive international experience in developing, financing and managing mines. He has been involved in the management of Nickel, Copper, Gold and other diverse mineral operations. He is responsible for listing several resource companies and has been the founder of a number successful companies

significantly Kiwara Resources Plc and Pan African Resources Plc. He has served on resource company boards in the UK, Canada and South Africa. He has specific PGM industry knowledge generally gained in South Africa where he is the Chairman of Jubilee Platinum Plc an emerging platinum focused junior.

**Ron Hieber** is a non-executive director. He is an expert, in Platinum Group Metals, and was Head of Worldwide Exploration, for Anglo Platinum, the world's largest Platinum producer. He is a geology graduate of Rhodes University, South Africa, with high school education having been completed in Zimbabwe, in 1968. He began his career with Anglo American Platinum, on the company's Platinum mines in Rustenburg, followed by service on the mines in other Bushveld Complex areas, becoming Chief Geologist at Rustenburg in 1981.

In 1986 he was appointed to the corporate office as head of all Anglo Platinum's mining geology and exploration functions, which remained part of his responsibilities until he retired from Anglo Platinum at 58, in 2009. During his service with Anglo, Ron was made a Divisional Director and the Group's Survey, Ventilation, Rock Engineering and Strategic Planning functions were added to his Geological responsibilities. From the time of his appointment at Corporate, he contributed significantly to the accumulation, retention and management of Anglo Platinum's mineral rights portfolio, on the Bushveld Complex and Great Dyke, whilst also directing worldwide PGM Exploration programs for Anglo Platinum, in Australia, China, Canada, Russia and Brazil. This included heading-up the River Valley Option/Joint Venture for Anglo Platinum, from Discovery, in 2000, with Pacific North West Capital. At the time he retired, he was a Director of several Anglo Platinum subsidiaries, including Unki Platinum Ltd. (Zimbabwe) and Rustenburg Platinum Mines Ltd. From 2009, Ron worked as Executive Director: Business Development for Kameni Ltd., which had PGM interests, in the Eastern Bushveld and Zimbabwe. After selling its projects, Kameni closed and he now runs his own company, with interests in South African and Zimbabwean Gold projects.

## **Risks**

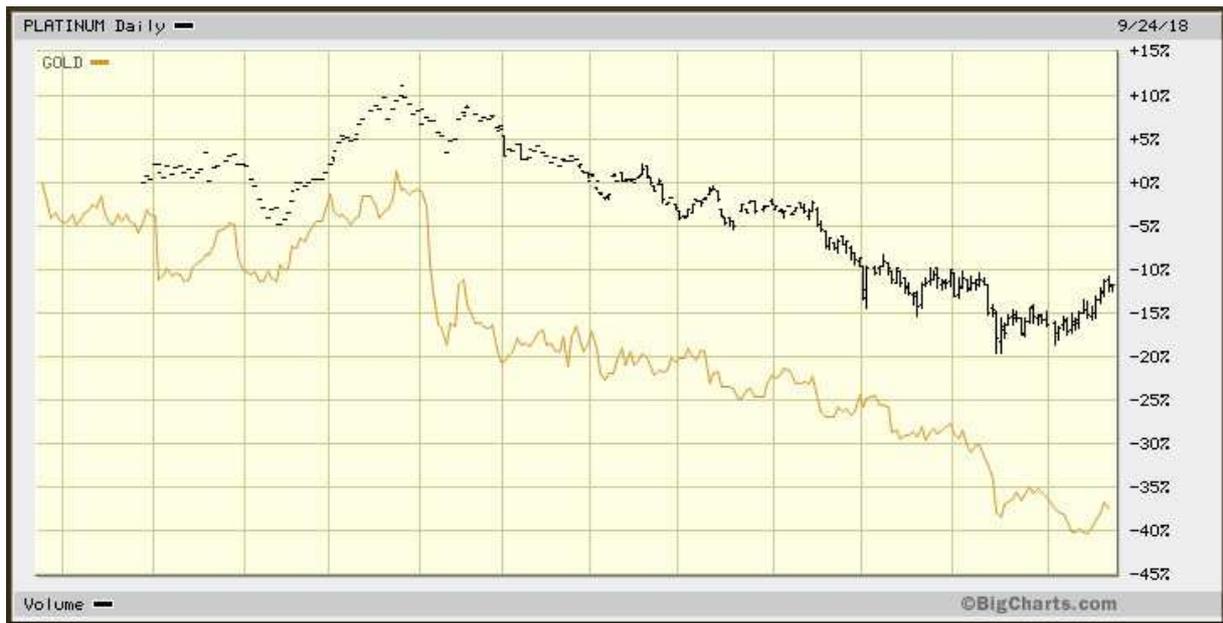
Amongst the risks at the current time are:

- ✘ PGM price risk
- ✘ Lithium "boom" goes off the boil either because of pricing or because there is a perception that supply pipeline is adequate for demand
- ✘ Faster adoption of EVs technology effecting catalyst demand
- ✘ Financing problems
- ✘ Non-appearance of a JV partner for River Valley

Like death and taxes, price risk will always be with us. PGM prices usually march to two different beats. One is general precious metals sentiment (though that beat has been weaker in recent years) and the other is the health of the auto industry with its ever-present (until now) demand for PGMs in catalytic converters. Occasionally political risk also intrudes with the main sources of supply being Russia, South Africa and to a lesser extent Zimbabwe.

While Dieseltgate sent a frisson through PGM prices that was eventually shaken off for auto demand proved to be unfazed, and even diesel vehicle sales had a short swoon. Ultimately the writing is on the wall for diesel in automobiles and buyers are staying away in droves. The commercial vehicle market is a different kettle of fish though and seems to be impervious to not only diesel scares but also the allures of the EV “revolution”.

We might note in passing that Platinum and Palladium have both outperformed gold in recent times.



As for Lithium, this mineral has been in a swoon since a Wall Street investment bank that had previously scarcely ever darkened the door of the element, made earth-shattering revelations that supply might actually satisfy demand briefly in the next decade. Never has there been a case of the “blind leading the blind” since the same investment bank enthused about the prospects of Molycorp. Sigh...

Having said that all is not necessarily roses in the Lithium garden as there are way too many players and the confusion as to which ones are worthwhile and which ones are merely promoters “passing through” to the next big promote has left many of the names in the space disoriented and unloved in recent months. In New Age’s defence we would note that Lithium is a sideline and that the main risk is being taken by its JV partner and that New Age manages the project(s) receiving a fee for doing so.

Financing is the perpetual challenge for miners. It should be easier at this stage into the mining recovery and with PGM prices looking firm but the Canadian market has become besotted with “bud & blockchain” stories and miners of real substance have to fight harder to get noticed amongst the smoke and mirrors. However, New Age managed a financing in the summer and as one of the few PGM plays in the TSX firmament they have less problems getting noticed than amongst the “me-tooism” of the gold or lithium spaces, for example.

## Conclusion

The heralded demise of PGMs is stock-in-trade for the EV boosters in the equity markets. Their theory goes that EVs will conquer the world and they cannot foresee that there may be pushback against this, or logistical issues to mass switchover or consumer resistance. There can be no remnant ICE market in their tunnel-vision of the future. There will be no survivors and there will be no demand for metals associated with the old technology, only for the new. The only problem with this scenario is that, except for China, this revolution has not even made a dent in ICE consumption or production. Moreover the construct for the future is built upon the shaky ground

The main priority for New Age now is its ongoing search for a strategic partner for the River Valley project. While the company has diversified its interests into Lithium, it's more PGM projects that the market needs at this juncture. With the prices for this rarified group of metals having shown a healthy rebound in 2018, those investors in search of the next companies to move towards (non-African) production have little beyond New Age and Nickel Creek Platinum (the former Wellgreen) to conjure with.

Considering that the recovery in PGM prices is now no longer in question we must wonder why the market seems to have missed the intrinsic virtues of the River Valley Project. We suspect it is more a case of the Canadian investor community still being in thrall to the gold price even when the gold price is quite patently not delivering. When one overlays the industrial necessity for PGMs and the fact that the two largest producer nations are somewhat erratic there would appear to be space for the two challenger companies to join the two existing plays (North American Palladium and Sibanye-Stillwater) in the universe for consideration. At its current market capitalization New Age is patently undervalued on the basis of its sizeable *in situ* resource of PGMs.

Therefore, we are rating New Age Metals as a **Long** call and our twelve-month target price of \$0.18.



## Important disclosures

I, Christopher Ecclestone, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers.

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