Vendetta Mining Corp. (VTT-V)

Base Metals

Initiating Coverage

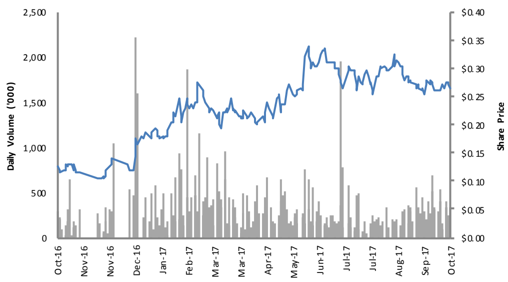
October 11, 2017

George Topping | george.topping@iagto.ca | 1.647.943.7617
Associate: Alex MacIsaac | alex.macisaac@iagto.ca | 1.647.943.7620

Rating: BUY
Price Target: C$0.60
Last Price: C$0.27
Ticker: VTT-V

Market Data

Target return (incl. dist.):	122.2%
Distribution/yield:	$0 / 0%
Units outstanding (M, FD):	114.2
Market capitalization (M C$):	31
Net Asset Value (NAV) (C$/sh):	0.59
52-week range (C$):	0.10 - 0.35
Last fiscal year ended:	May 31, 2017
Average weekly volume:	1,523,014
Debt/(Cash)(M C$):	(4.5)
Currency (unless otherwise indicated):	USD



Company Profile

Vendetta Mining is a junior lead-zinc exploration and development company, with its flagship asset, the Pegmont project, in the Mount Isa region in Queensland, Australia.

Don't Fear this Vendetta: Lead/Zinc in Prolific Mount Isa District

Event

We are initiating coverage on Vendetta Mining Corp. ("Vendetta" or "the Company") with a Buy rating and C$0.60/sh price target.

Highlights

- **Bullish on Lead & Zinc:** Lower prices in recent years, along with resource depletion, have led to several mine closures (including the 500Mlbs Brunswick mine in 2013 and the 880Mlbs Century mine in 2015). While the lead/zinc market is difficult to analyse (China is 35% of supply and 50% of demand), fundamentally, prices should rise much further (see Appendix 1).
- **Funds Flow:** There are limited opportunities for investors to gain exposure to the lead/zinc market. It has been 10 years since the last bull market, which saw lead prices above $1.75/lb and zinc prices above $2.00/lb. Consequently, there are few lead/zinc-focused investment vehicles left.
- **Experienced Management in Mining District:** Management has a successful track record. Mount Isa is one of Australia's top mining jurisdictions, with mining infrastructure, labour, concentrate transit logistics, smelters, and rational permitting process. The deposit is 28km from South32's (S32-A, Not Rated) Cannington Mine, 25km from the Osbourne Mine, 35km from the former Selwyn Mine, and 175km from the Mount Isa Pb and Cu Smelters.
- **Existing Resource Set to Increase: More Zinc at Depth:** The June 22 43-101 sulphide resource is 10.2Mt grading 2.9% Zn and 5% Pb with a 1.7Mt transition resource grading 2.6% Zn and 5.3% Pb. Recent drilling successfully tied together two separate zones across 300m laterally in the Bridge Zone. The eight holes returned 10.5% Pb+Zn over 6.2 metres. We see potential in this resource to reach 14-15Mt grading 9-10% Pb+Zn over the next 12-18 months with further drilling along strike in Zones 1-5 and the Burke Hinge Zone (BHZ). A PEA is expected in Q3-Q4/F18.
- **Substantial Mine Possible with Robust Economics**: While it is more likely a takeout candidate, we model an open-pit, followed by underground, $155M mine producing 37Mlbs Zn and 121Mlbs Pb p.a. at a cash cost of $0.42/lb PbEq. The mine would have a four-year payback period.

Valuation

We value Vendetta using 1.0x $NPV_{10\%}$ of our theoretical standalone mine, using the resource definition constraints as a rough guide and long-term lead-zinc prices of $1.15/lb and $1.30/lb (currently $1.14/lb and $1.46/lb), respectively.

Bottom Line

As per our model, Pegmont is robust enough to work very well as a standalone operation. While management could build the mine, the deposit, being well located in a mining district with several smelters, would make an outstanding satellite mine for a senior producing company with a mill and smelter nearby. We note that China owns 50% of Australia's current lead/zinc production, suggesting these are key metals for China. We recommend Vendetta with a Buy rating and C$0.60 target price.

Introduction

Vendetta Mining is a junior lead-zinc exploration and development company, with its flagship asset, the Pegmont project, in the Mount Isa region in Queensland, Australia. The Company is currently focused on building up its already sizeable, high-grade resource through step-out exploration, before progressing to PEA stage later next year.

Management

Michael Williams (President, CEO & Director): Has served as CEO since 2010, with over 20 years of experience in management roles in the mining industry. He currently also serves as the Chairman of the Board of Directors for Minaurum Gold Inc. (MGG-V, Not Rated), and has previously held the roles of Chairman at Revolution Resources (RV-T, Not Rated), Ximen Mining Corp. (XIM-V, Not Rated), Valhalla Resources Ltd., and Underworld Resources. Mr. Williams successfully sold Underworld for C$138M in April 2010.

Peter Voulgaris (Director & Qualified Person): Engineer with over 20 years of experience in exploration, development, and operations. He has served in various geology, engineering, and corporate development capacities, including stints at Placer Dome, Newmont Mines Ltd. (NEM-N, Not Rated), Ivanhoe Mines Ltd. (IVN-T, Not Rated), MMG (1208-HK, Not Rated), Minco Gold Corp. (MMM-V, Not Rated), and Minco Silver Corp. (MSV-T, Not Rated).

David Baker (Independent Director): Over 20 years of experience in mine operations and corporate development. His previous roles include Treasurer and VP at Turquoise Hill Resources Ltd. (TRQ-T, Not Rated), and Project Controller and Manager Corporate Development and Finance at the Ivanhoe group of companies, where he also managed the pre-feasibility study for the Oyu Tolgoi project in Mongolia.

Doug Flegg (Independent Director): Geologist with over 30 years of experience in mining and capital markets. His previous roles include Managing Director of Mining Sales at BMO Capital Markets, and Mining Portfolio Manager at UBS Global Asset Management. He currently serves as a Managing Partner at CAIRN Merchant Partners LLP.

Doug Ramshaw (Director): Geologist and current President and CEO of Corex Gold Corp. (CGE-V, Not Rated). He has previously held the roles of metals and mining analyst at C.M. Oliver & Co., VP Business Development at Valhalla Resources Ltd., and Assistant Editor of the *Mining Journal*.

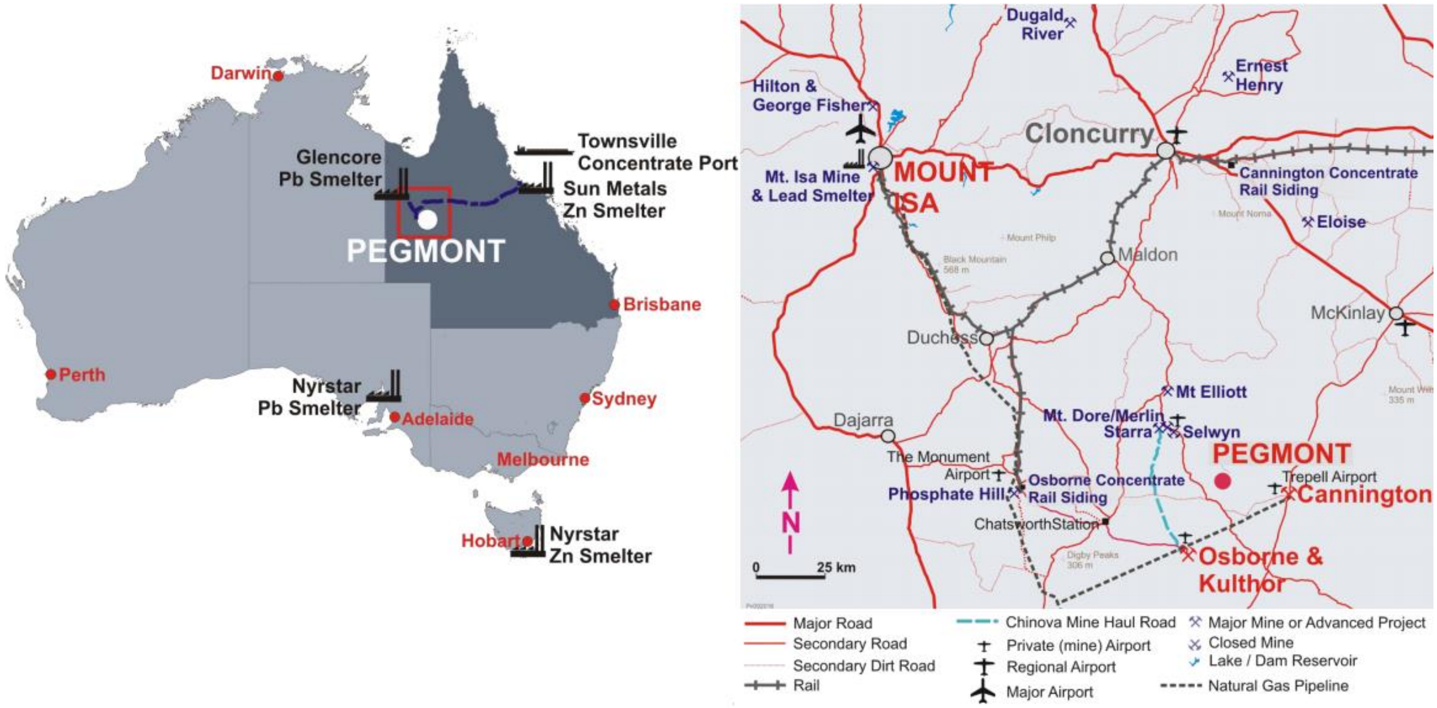
Location

Vendetta's Pegmont project is located in Northwest Queensland, Australia, within the Mount Isa Mineral Province. The land package has recently increased and includes three mining leases and one exploration permit. Approximately 75% of the current open-pit shell is located on existing mining leases (grandfathered pre-pastoral and pre-native titles), which has permitting advantages. There are several other producing mines in the immediate area (see Exhibit 1), including South32's Cannington lead/zinc mine, and Chinova's (Private) Osborne and former Starra copper/gold mines. As a result, the area is well served by infrastructure, with access to roads, railways, natural gas, and water. In an area where mining is such a significant part of the local economy, permitting is not an issue. Additionally, drilling in the area is made easy with very fast turnaround times from the assay labs (September drill results had a turnaround time of just one week).

Demand for new zinc projects in this area is also very high, with several area seniors looking for the next producing asset as their resources deplete. Glencore (GLEN-L, Not Rated) has cut production at its McArthur River and George Fisher mines, closed its Black Star open pit, and put its Lady Loretta and Handlebar Hill operations on care and maintenance. Additionally, MMG has closed its Century open pit and scaled back on its upcoming Dugald River project.

As per the asset purchase option agreement, Vendetta has two cash payments of A$500K and A$1M to Pegmont Mines Ltd., due February 2018 and November 2018, respectively. All exploration commitments have been completed.

Exhibit 1: Pegmont Location



Source: Vendetta Mining Corp.

Ore Resources

The current mineral resource is accurate as of June 22, 2017, and uses a 3% lead plus zinc cut-off grade for open-pit ore and 5% lead plus zinc for underground ore. Drilling results up to May 8, 2017, were compiled to arrive at the resource estimate, and lead and zinc prices of $0.90/lb and $0.95/lb, respectively, were assumed. The ore has been split into lower grade and lower recovery transition ore, which typically extends to 30 metres below surface, and higher grade, higher recovery sulphide ore underneath. The resource can be seen in Exhibit 2, along with our calculated zinc equivalent resource, using our long-term forecasted prices of $1.15/lb lead and $1.30/lb zinc. For added prudence, the silver resource was excluded from our calculation, as details are not yet available regarding the payability of silver from this operation. We note that Cannington has a 50g/t deduction on its silver-in-concentrate production and derives some undisclosed revenue from silver.

Exhibit 2: June 22 Resource Estimate

		Tonnes (Mt)	Zinc Grade (%)	Lead Grade (%)	Silver Grade (g/t)	Zinc (Mlbs)	Lead (Mlbs)	Silver (Moz)	ZnEq (Mlbs)
Measured & Indicated	Sulphide	1.6	2.70%	5.70%	10.0	92.8	196.0	0.5	314.4
	Transition	0.7	2.50%	5.20%	9.0	37.7	78.5	0.2	126.5
	Combined	**2.2**				**130.6**	**274.5**	**0.7**	**440.9**
Inferred	Sulphide	8.6	2.90%	4.90%	8.0	550.4	930.1	2.2	1,601.8
	Transition	1.0	2.60%	5.30%	8.0	59.3	120.9	0.3	196.0
	Combined	**9.6**				**609.8**	**1,051.0**	**2.5**	**1,797.8**
Total		**11.9**				**740.3**	**1,325.4**	**3.2**	**2,238.7**

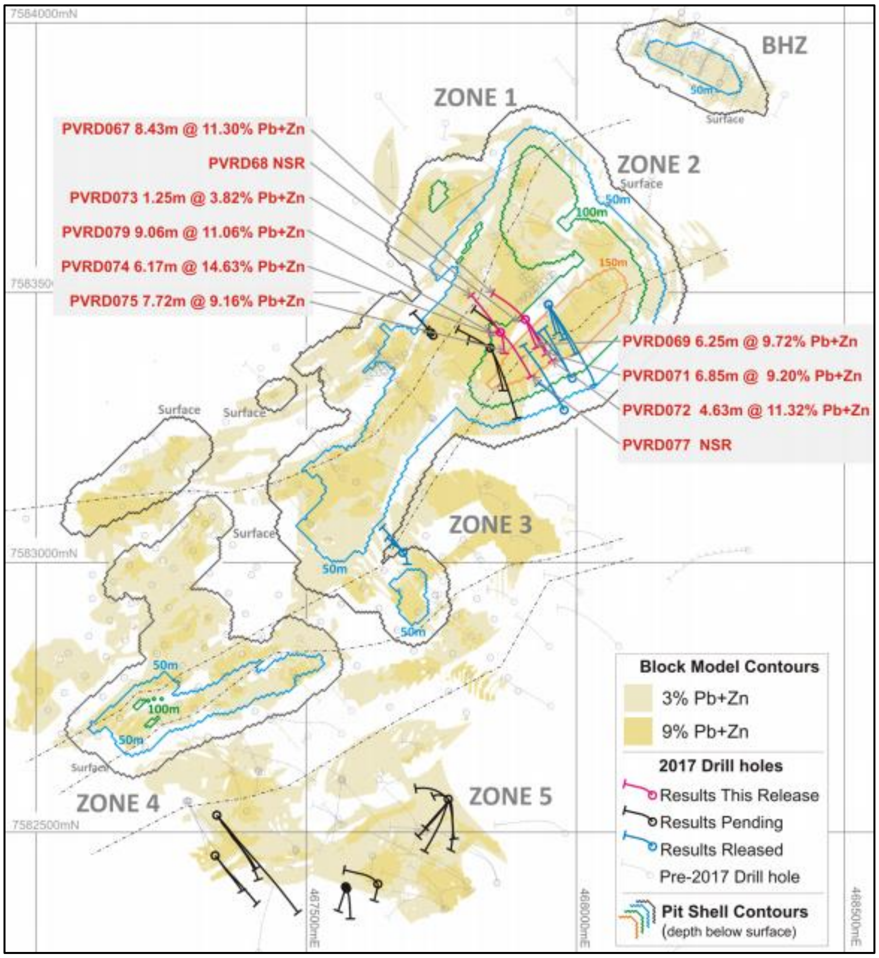
Source: Vendetta Mining Corp., iA Securities

Geology & Exploration

Pegmont consists of a stratiform of lead-zinc sulphides within a metamorphosed silicate facies banded iron formation with two stacked lenses. Mineralization has been compared to the Broken Hill lead-zinc-silver deposit (also in Australia), the largest deposit of its type on earth, with over 280Mt of ore. Other similar deposits include Zinkgruvan and Cannington. The Pegmont Beds are made up of a series of schists (sedimentary rocks altered by pressure and heat) and quartzite. These schists have advanced foliage and crenulation cleavage. The quartzite is massive, providing excellent ground conditions. The shallow orebody dips 45^0 to fairly flat towards the East down ~1km and occurs over a 2km strike length. Known mineralization extends to 350m depth in thicknesses ranging between 2m and 6m, averaging ~5m.

Vendetta is currently exploring the Pegmont project with two diamond drills as part of its 2017 exploration program, one in Zone 2, and one in the Bridge Zone (see Exhibit 3). To date, 62 holes have been completed (over a total 14,000m), with results still pending on 5 holes, which are expected by the end of October. Next steps include exploration of a copper target explored, and metallurgical test work on Zones 1, 2, and 3 samples. Another phase of drilling is planned for Q2/F18, followed by a PEA in mid 2018.

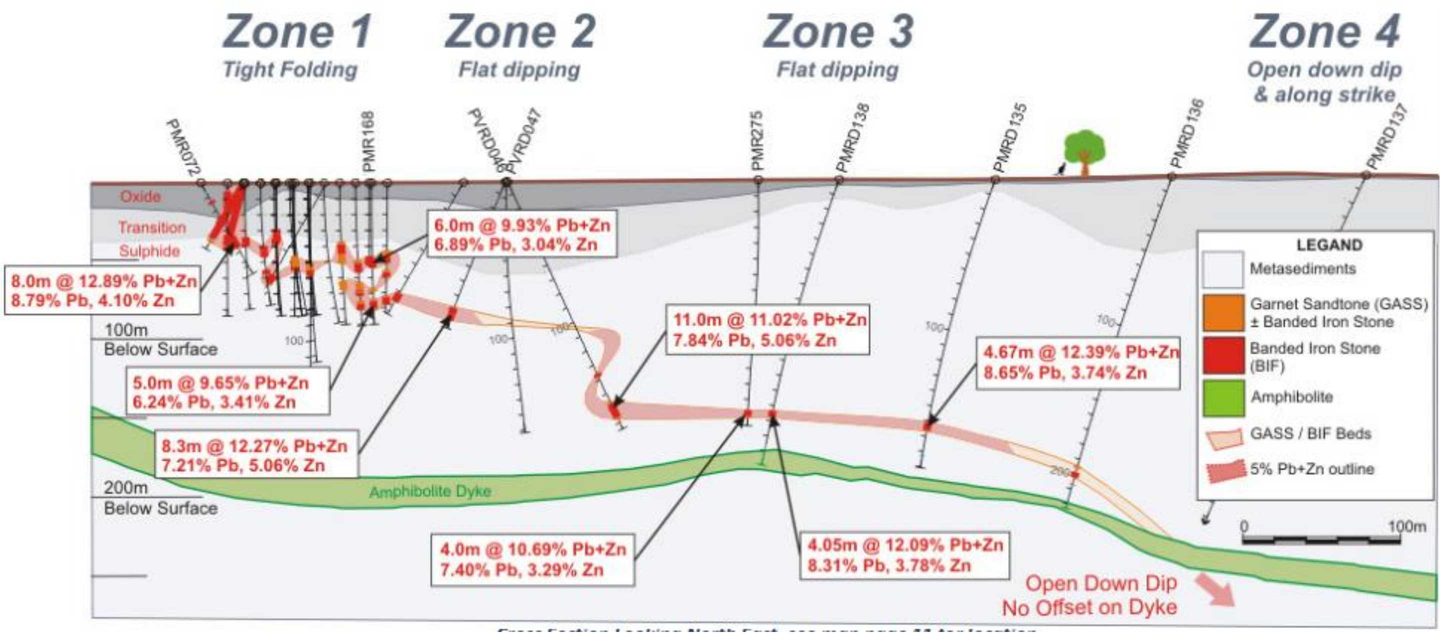
Exhibit 3: Plan View of Pegmont with Mineralised Zones



Source: Vendetta Mining Corp.

Results, year to date, average 3.1% Zn, 6.8% Pb over 6.1m at depth of 114m in **Zone 2**; 2.7% Zn, 6.9% Pb over 6.3m at depth of 175m in **Zone 3**; 4.7% Zn, 4.8% Pb over 3.9m at depth of 244m in **Zone 5**; 2.8% Zn, 5.1% Pb over 4.7m at depth of 48m in **BHZ**; and 2.3% Zn, 8.3% Pb over 6.2m at depth of 237m in the **Bridge Zone**. Of significance is that the zinc/lead ratio declines to 1:1 in Zone 5. Management is looking at scenarios to advance the higher-grade underground zinc to the plant sooner. The drilling has been taking large step-outs to expand the resource, with a 70% success rate at finding mineralization (at 25% higher Zn grade and 17% higher Pb grade than the current resource estimate). As the mineralization in the deeper zones is flat lying (see Exhibit 4), no geological signature is available through magnetic or gravity surveys. However, drilling has encountered repetition of grades along strike, even at the current wide spacing.

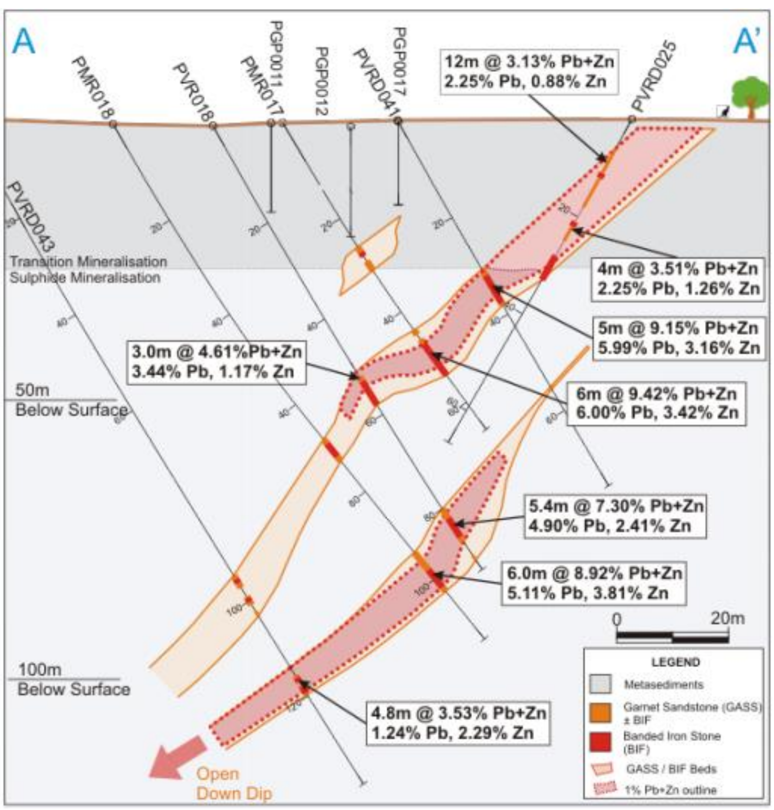
Exhibit 4: Cross Section Zones 1 Through 4



Source: Vendetta Mining Corp.

At shallower depths, drilling in the BHZ (see Exhibit 5) has intersected sulphide mineralization grading 7.9% Pb and 3.3% Zn over 7.0m at depth of 54m. Further targets will be explored near the BHZ to add to the open-pit resource.

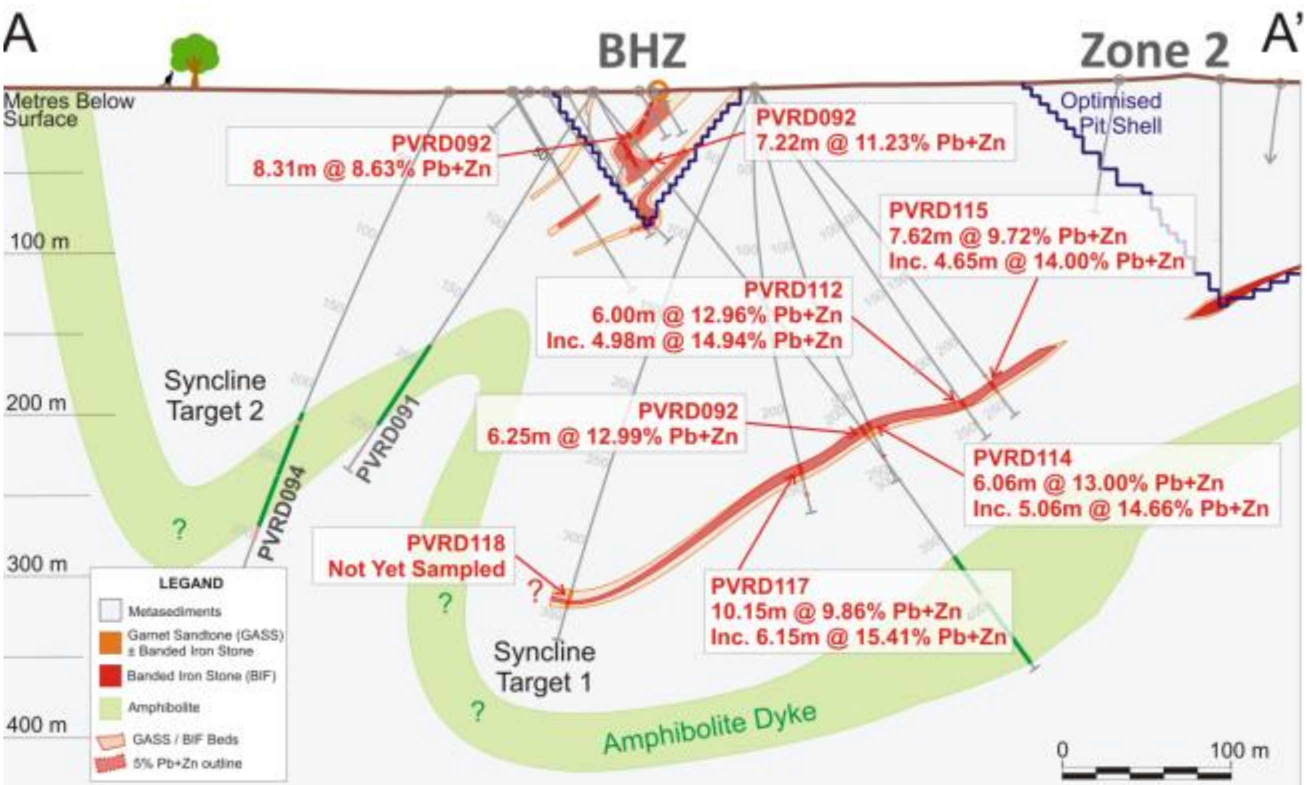
Exhibit 5: Cross Section through BHZ



Source: Vendetta Mining Corp.

Exploration of the Bridge Zone (likely an underground target, connecting the BHZ open pit with the Zone 2 open pit) has intersected high-grade lead, including 10.6% Pb and 2.4% Zn over 5.9m at depth of 232m (see Exhibit 6).

Exhibit 6: BHZ Drilling



Source: Vendetta Mining Corp.

Theoretical Mine Plan

We model production at the Pegmont mine over a 16-year mine life (see Exhibit 7). The \$155M project starts production in 2020, first stripping the lower recovery transition ore for the first year and stockpiling for later processing. There may be an option to produce a bulk concentrate from the transition ore depending on plant timing and metallurgical testwork. The open pit should be in the higher recovery sulphide ore in year 2. Over the open-pit life, our conceptual mine extracts 1.2Mt p.a. of ore at an average 9:1 strip ratio, starting at 5:1 in the early years, and gradually increasing. After 10 years of open-pit production, underground room and pillar mining will begin through a portal built into the pitwall at 1.2Mt p.a. We assume long-term lead-zinc prices of \$1.15/lb and \$1.30/lb, respectively.

Early underground mining will extract ore from lead-rich zones, including the Bridge Zone, and later moving to more zinc-rich deposits further down-dip. For both open-pit and underground mining, we use the zinc and lead grades from the current resource estimate, with 15% dilution assumed for added prudence.

Operating costs were estimated using the costs assumed in the resource estimate, and adjusted based on costs of similar operations (South32's Cannington, etc.) to reach an LOM average cash cost of \$0.42/lb PbEq and AISC of \$0.48/lb PbEq. We based our project capital expenditures for building the mine on the July 2016 technical report for Heron Resource's (HER-T, Not Rated) Woodlawn project in New South Wales, Australia (A\$163M in start-up capex). The operation will produce zinc concentrates and lead concentrates, with several regional smelter options nearby, including Osbourne, Glencore, Sun Metals, and Nystar.

Exhibit 7: Abridged Model

	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Zinc Price ($/lb)	1.25	1.40	1.60	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Lead Price ($/lb)	1.15	1.20	1.30	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Exchange Rate ($/A$)	0.75	0.78	0.80	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Production														
Sulphide Tonnes Milled (Mt)	-	-	-	-	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.0
Transition Stockpiled (Mt)	-	-	-	1.7	-	-	-	-	-	-	-	-	-	-
Zinc Grade (%)	-	-	-	2.1%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.0%	2.3%
Lead Grade (%)	-	-	-	4.4%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	7.0%	6.0%
Zinc Recovery (%)	-	-	-	19.3%	61.8%	61.8%	61.8%	61.8%	61.8%	61.8%	61.8%	61.8%	61.8%	61.8%
Lead Recovery (%)	-	-	-	80.6%	91.5%	91.5%	91.5%	91.5%	91.5%	91.5%	91.5%	91.5%	91.5%	91.5%
Zinc Produced (Mlbs)	-	-	-	**0.0**	**37.5**	**37.5**	**37.5**	**37.5**	**37.5**	**37.5**	**37.5**	**37.5**	**32.7**	**31.3**
Lead Produced (Mlbs)	-	-	-	**0.0**	**117.2**	**117.2**	**117.2**	**117.2**	**117.2**	**117.2**	**117.2**	**117.2**	**169.4**	**121.0**
Operating Costs ($/t)	-	-	-	10	43	45	47	50	52	54	57	59	22	61
Cash Costs ($/lb PbEq)	-	-	-	-	0.35	0.37	0.39	0.40	0.42	0.44	0.46	0.48	0.14	0.42
AISC ($/lb PbEq)	**-**	**-**	**-**	**-**	**0.40**	**0.42**	**0.44**	**0.47**	**0.49**	**0.51**	**0.53**	**0.55**	**0.16**	**0.49**
Sustaining Capex ($M)	-	-	-	2.6	7.7	8.1	8.5	8.9	9.4	9.8	10.2	10.6	3.9	9.2
Project Capex ($M)	-	-	55.0	100.0	-	-	-	-	-	-	-	-	-	-
Financials														
Revenue ($M)	**-**	**-**	**-**	**-**	**125.3**	**125.3**	**125.3**	**125.3**	**125.3**	**125.3**	**125.3**	**125.3**	**163.5**	**123.2**
Lead Revenue ($M)	-	-	-	-	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	135.7	96.7
Zinc Revenue ($M)	-	-	-	-	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	27.8	26.6
Operating Costs ($M)	-	-	-	17.5	51.4	54.2	56.9	59.7	62.4	65.2	67.9	70.7	26.1	61.2
Royalties ($M)	-	-	-	-	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.5	1.8
EBITDA ($M)	**-**	**-**	**-**	**-17.5**	**73.9**	**69.3**	**66.5**	**63.8**	**61.0**	**58.3**	**55.5**	**52.8**	**134.9**	**60.2**
Exploration ($M)	2.0	5.0	2.0	-	-	-	-	-	-	-	-	-	-	-
G&A ($M)	4.0	4.0	4.0	-	-	-	-	-	-	-	-	-	-	-
Depreciation ($M)	-	-	-	-	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	17.0
Tax Payable ($M)	-	-	-	-	18.7	17.1	16.2	15.2	14.2	13.3	12.3	11.3	40.1	15.1
Net Income ($M)	**-6.0**	**-9.0**	**-6.0**	**-17.5**	**34.8**	**31.8**	**30.0**	**28.2**	**26.4**	**24.6**	**22.8**	**21.1**	**74.5**	**28.1**
Per Share	-$0.05	-$0.05	-$0.03	-$0.09	$0.17	$0.15	$0.14	$0.13	$0.13	$0.12	$0.11	$0.10	$0.35	$0.13
Operating Cash Flow ($M)	**-6.0**	**-9.0**	**-6.0**	**-17.5**	**55.2**	**52.2**	**50.4**	**48.6**	**46.8**	**45.0**	**43.2**	**41.4**	**94.8**	**45.1**
Per Share	-$0.05	-$0.05	-$0.03	-$0.09	$0.26	$0.25	$0.24	$0.23	$0.22	$0.21	$0.21	$0.20	$0.45	$0.21
Combined Capex ($M)	-	-	55.0	102.6	7.7	8.1	8.5	8.9	9.4	9.8	10.2	10.6	3.9	9.2
Free Cash Flow ($M)	**-6.0**	**-9.0**	**-61.0**	**-120.1**	**47.5**	**44.0**	**41.8**	**39.6**	**37.4**	**35.2**	**33.0**	**30.8**	**90.9**	**35.9**

Source: iA Securities

We have used an EV/In-situ metal value (using our long-term metal prices and expressed as a percentage) to compare against its peer group. The peer comparison in Exhibit 8 shows that producers enjoy a minimum two- to fourfold valuation pick-up on resources.

The property has an A$1.05/t royalty which applies after the recovery of previous payments. On a source of LOM revenue basis, 76% comes from lead and 24% from zinc at our metal prices.

Exhibit 8: Peer Valuations at Spot Zinc

Company Name	Ticker	Mine	% In-Situ Value	2016 Production (Mlbs ZnEq)	AISC (US$/lb ZnEq)
Vendetta Mining	**VTT-V**	**Pegmont**	**0.66%**	**-**	**-**
Heron Resources	HER-T	Woodlawn	1.48%	-	-
Foran Mining	FOM-V	McIlvenna Bay	0.20%	-	-
InZinc Mining	IZN-V	West Desert	0.07%	-	-
Arizona Mining	AZ-T	Hermosa-Taylor	2.04%	-	-
Tinka Resources	TK-V	Ayawilca	1.81%	-	-
Canada Zinc	CZX-V	Akie	0.40%	-	-
Canadian Zinc	CZN-T	Prairie Creek	0.24%	-	-
Trevali Mining	TV-T	Combined	4.29%	145.2	$0.47

Source: iA Securities

Balance Sheet

As of May 31, 2017 (the Company's fiscal year-end), Vendetta has C$4.5M in cash and no debt. In April of this year, Vendetta completed a private placement, issuing 21.2M units for gross proceeds of C$4.2M (at an effective per share price of C$0.20). Additionally, the Company completed a private placement in May 2016 for 50M units at C$0.05/sh for gross proceeds of C$2.5M. Several institutions were participants in the deal, as were numerous directors and company management.

Corporate

The Company has strong institutional ownership, including Resource Capital Fund (18%), Elysium Mining Ltd., Octavian Capital, and Solitario Zinc Corp. (SLR-T, Not Rated). Elysium and Octavian are private companies owned by Peter Voulgaris and Michael Williams.

Insider Ownership

Exhibit 9: Insider Transactions

Insider Name	Position	Holdings	Recent Transactions
Michael Williams	President & CEO	2.7M shs	Feb 15, 2017: Bought 50K shs @ $0.24
Doug Flegg	Director	-	No recent transactions
Peter Voulgaris	Director	3.0M shs	No recent transactions
David Baker	Director	-	No recent transactions
Doug Ramshaw	Director	1.6M shs	Mar 13, 2017: Bought 20K shs @ $0.20
Sheryl Elsdon	Corporate Secretary	150K shs	May 6, 2016: Bought 150K shs @ $0.05

Source: iA Securities, SEDI

Peter Voulgaris, a director, owns 3.0M shares (2.8% of shares outstanding), while the CEO, Michael Williams, owns 2.7M shares (2.5% of shares outstanding), with combined management ownership of 7.0%. Insider buying within the last year has been strong (see Exhibit 9). There are now less than 30M warrants (strike C$0.10/sh, May 2018 expiry) and 6.2M options outstanding. All options are in-the-money, striking between C$0.15 and C$0.25. The warrants are held by Resource Capital Fund, Zijin Global Fund, Tera Capital, Solitario Zinc Corp., Octavian Capital, and insiders, and are therefore unlikely to be sold into the market.

Valuation

We value Vendetta using the NPV of our theoretical mine (see Exhibit 10), using the previous resource definition constraints as a rough guide. For added prudence, we have included C$10M of external financing at C$0.25/sh in addition to internally sourced funding from in-the-money options and warrants, to calculate a fully diluted value.

We have assumed a late 2018/early 2019 takeover at our NAV10% valuation.

Exhibit 10: NPV Valuation

NPV	$M	/Share
5%	233.2	$1.38
7%	169.0	$1.00
10%	**99.2**	**$0.59**

Source: iA Securities

Sensitivity

Exhibit 11 illustrates the project's sensitivity to metals prices, with the lead price having a much greater effect on the value.

Exhibit 11: Sensitivity to Lead and Zinc Prices

		Zn Price		
		$1.00	**$1.30**	$1.60
Pb Price	$0.90	-0.43	-0.24	-0.08
	$1.15	0.40	**0.59**	0.77
	$1.40	1.19	1.39	1.59

Source: iA Securities

Resource Multiple

On a resource multiple basis, Vendetta is valued at $0.013/lb PbEq and 1.1% of in-situ value at our forecasted lead price of $1.15/lb (see Exhibit 12), suggesting a highly undervalued resource. Using 5% of the current PbEq resource, the Company is valued at C$0.79/sh.

Exhibit 12: Resource Multiple Valuation

	Mlbs	Value ($M)	5%	Per Share (C$)	$/lb PbEq	% In Situ Value
MI&I Zn	740.3	962.4	48.1	$0.34	-	-
MI&I Pb	1,325.4	1,524.3	76.2	$0.53	-	-
M&I PbEq	**1,980**	**2,277.4**	**113.9**	**$0.79**	$0.013	1.11%

Source: iA Securities

Conclusion

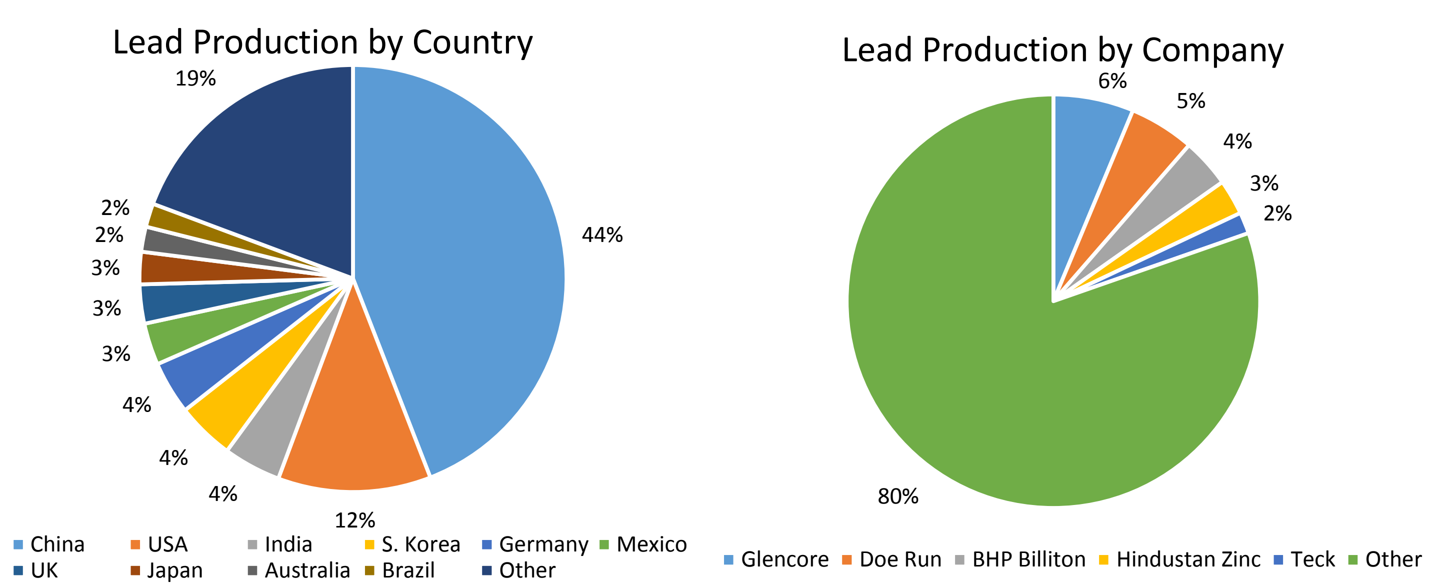
As per our model, Pegmont is robust enough to work very well as a standalone operation. While management could build the mine, the deposit, being well located in a mining district with several smelters, would make an outstanding satellite mine for a senior producing company with a mill and smelter nearby. We note that China owns 50% of Australia's current lead/zinc production, suggesting this is a key metal for China.

Appendix 1

Supply — Lead and Zinc Typically Mined Together

In our valuation, we use a long-term $1.30/lb zinc price and $1.15/lb lead price. Our thesis for our zinc price can be seen in our previous research. Lead commonly occurs as a by-product to zinc and therefore follows a similar trajectory from the supply side. Zinc mines have been closing in the past five years with little new meaningful mines opening in the next two years.

Exhibit 13: Lead Production by Country and by Company

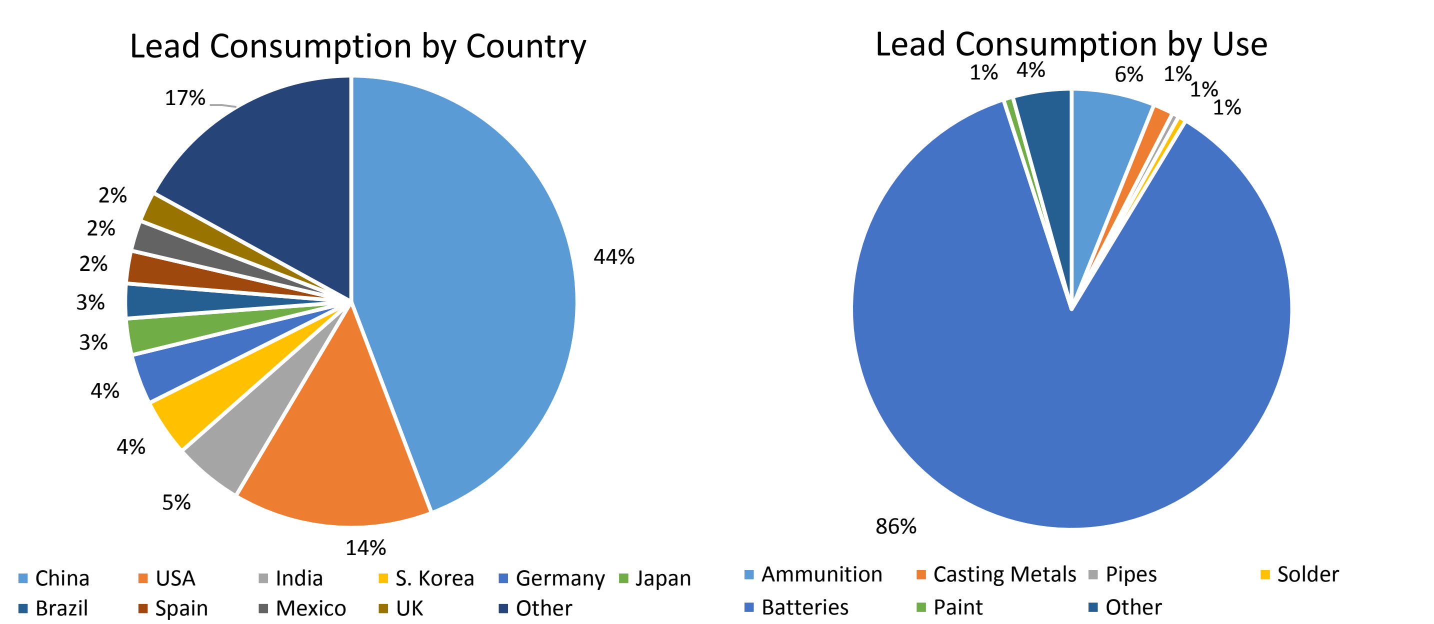


Source: iA Securities, US Geological Survey

Demand is Almost All Batteries

Lead demand is virtually all batteries, and over half is recycled. We believe that steadily increasing non-recyclable, demand from the developing countries will continue to keep lead prices afloat.

Exhibit 14: Lead Producers and Consumers



Source: iA Securities, US Geological Survey

In the first five months of 2017, US demand for refined lead increased 23.3% YoY, Chinese demand increased 13.7%, while European demand growth was almost stagnant at 1.7%. By far, the biggest demand for lead stems from its use in batteries (at ~80% of all refined lead), most notably in cars. As seen in Exhibit 15, over half of lead produced is recycled. However, recent technological developments in cars are pushing demand higher. Stop-start battery technology (16kg+ Pb/battery, 28% more than a normal car) is a feature now implemented in many modern cars, making its way into an estimated 35M vehicles worldwide (~40% of all auto sales in 2016 included stop-start batteries). These new lead batteries need to handle heavier loads than the standard car battery, and therefore require more lead. As this technology is adopted across the automotive industry, and as the car market grows in developing countries like China (see Exhibit 14), we predict that the lead deficit will deepen over the next few years. Johnson Controls (JCI-N, Not Rated) expects to make 50M stop-start batteries by 2020, from 17M in 2016.

The burgeoning lithium-based electric car technology does not pose an immediate threat to the lead market. Wider adoption of electric cars is still a slow process while hybrids will still use lead batteries for starting and stopping the combustion engine. Stop-start battery technology is most certainly being adopted as a cost-effective way for automakers to meet modern emission standards. Additionally, the gradual implementation of infrastructure for electric cars provides an opportunity for lead batteries as well. Lead batteries are used in grid storage using advanced lead-acid battery technology, like the Kaheawa Wind Power project in Hawaii, one of the largest grid storage systems on earth. Solar charge controllers available for use today are also intended for use with lead batteries.

Electric bikes in developing countries use lead batteries (cost ~$200/bike) compared to lithium in developed countries (cost $1,500/bike). This is a large market with an estimated 200M bikes on the road in China, almost all of which have small lead batteries (containing ~6kg Pb/battery) with the largest battery producer, Tianneng Power International Ltd. (0819-HK, Not Rated), showing sales growth of 21% last year.

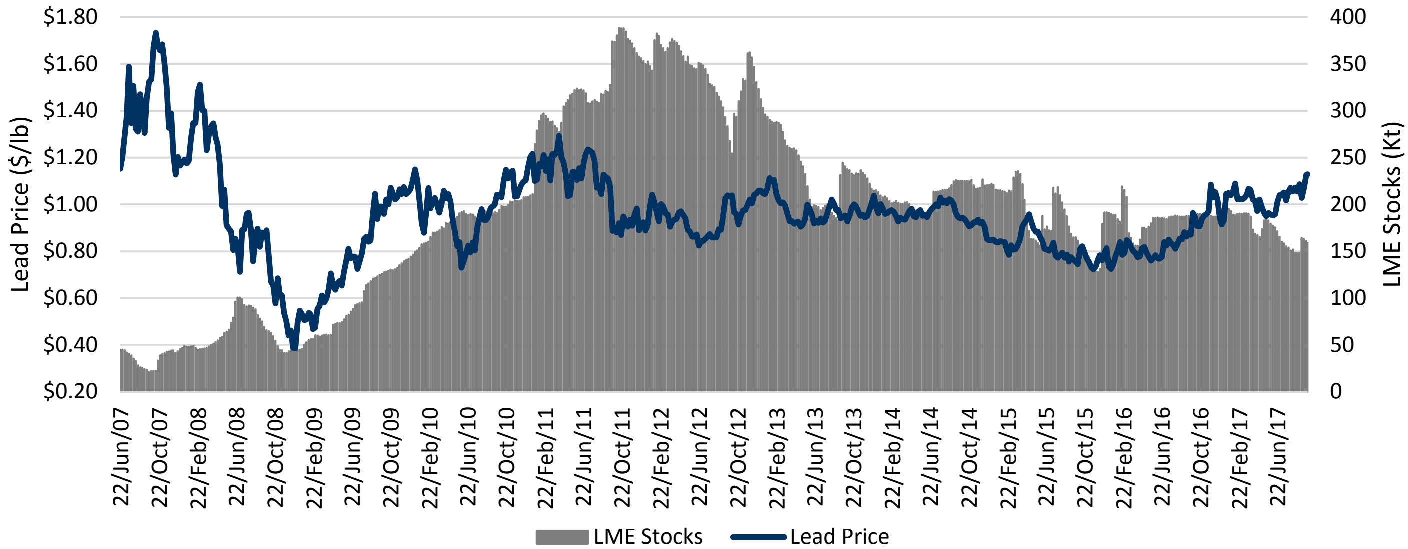
Exhibit 15: Lead Supply and Demand

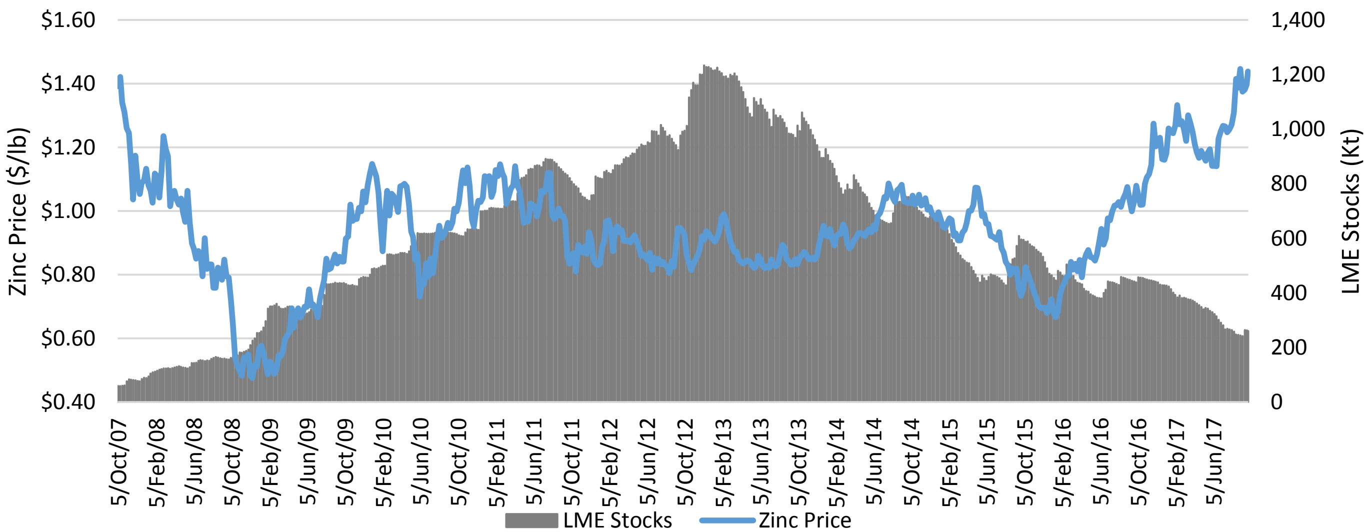
('000 tonnes)	2012	2013	2014	2015	2016	2017YTD	2017E	2018E	2019E	2020E
Lead Mined	4,905	5,247	4,933	4,772	4,717	3,000	5,143	5,099	5,150	5,201
% change		*7.0%*	*-6.0%*	*-3.3%*	*-1.2%*		*14.2%*	*-0.9%*	*1.0%*	*1.0%*
Lead Production	10,649	11,161	10,963	10,862	11,183	6,922	11,804	11,962	12,201	12,445
% change		*4.8%*	*-1.8%*	*-0.9%*	*3.0%*		*9.0%*	*1.3%*	*2.0%*	*2.0%*
Lead Demand	10,583	11,149	10,945	10,881	11,150	7,031	11,540	11,956	12,374	12,807
% change		*5.3%*	*-1.8%*	*-0.6%*	*2.5%*		*5.6%*	*3.6%*	*3.5%*	*3.5%*
Surplus/(Deficit)	**66**	**12**	**18**	**-19**	**33**	**-109**	**264**	**6**	**-173**	**-362**
LME Stocks	340	239	210	185	185	174	150	128	110	94

Source: iA Securities, ILZSG, IMF

Lead mined supplies 42% of demand with recycling accounting for the remainder.

Exhibit 16: Lead and Zinc Price and LME Inventory





Source: iA Securities, Bloomberg

Investment Recommendation Rating System

Strong Buy:	Expected to provide a substantial return over the next 12 months, with a lower level of risk than comparable investments.
Buy:	Expected to provide a reasonably positive return over the next 12 months.
Speculative Buy:	Expected to provide a positive return over the next 12 months, but with a high level of risk, or based on a future uncertain event.
Hold:	Expected to remain in a trading range near the current share price for the next 12 months.
Sell:	Expected to deliver a negative return over the next 12 months.
Under Review:	Currently available information is inadequate to provide an investment rating.
Tender:	Investors should tender their shares to the current offer.

Company related disclosures:

Issuer Company	**Ticker**	**Applicable Disclosures**
Vendetta Mining Corp.	VTT-V	9

See legend of Disclosures on next page.

General Disclosures

Please note that Industrial Alliance Securities Inc. ('iA Securities') merged with MGI Securities Inc. on April 1, 2014 and continued their operations as Industrial Alliance Securities Inc. As a result, the enclosed disclosures may relate to either Industrial Alliance Securities Inc. or to MGI Securities Inc. for the period prior to April 1, 2014. All appropriate disclosure will be included until no longer needed.

The information and opinions contained in this report were prepared by iA Securities. iA Securities is controlled by Industrial Alliance Insurance & Financial Services Inc. ('Industrial'). Industrial is a TSX Exchange listed company (IAG-T) and as such, iA Securities is an affiliate of Industrial. The opinions, estimates and projections contained in this report are those of iA Securities as of the date of this report and are subject to change without notice. iA Securities endeavours to ensure that the contents have been compiled or derived from sources that we believe to be reliable and contain information and opinions that are accurate and complete. However, iA Securities makes no representations or warranty, express or implied, in respect thereof, takes no responsibility for any errors and omissions contained herein and accepts no liability whatsoever for any loss arising from any use of, or reliance on, this report or its contents. Information may be available to iA Securities that is not reflected in this report. This report is not to be construed as an offer or solicitation to buy or sell any security. The reader should not rely solely on this report in evaluating whether or not to buy or sell securities of the subject company.

Definitions

"Research Analyst" means any partner, director, officer, employee or agent of iA Securities who is held out to the public as a research analyst or whose responsibilities to iA Securities include the preparation of any written report for distribution to clients or prospective clients of iA Securities which includes a recommendation with respect to a security.

"Research Report" means any written or electronic communication that iA Securities has distributed or will distribute to its clients or the general public, which contains an analyst's recommendation concerning the purchase, sale or holding of a security (but shall exclude all government debt and government guaranteed debt).

Conflicts of Interest

The research analyst and or associates who prepared this report are compensated based upon (among other factors) the overall profitability of iA Securities, which may include the profitability of investment banking and related services. In the normal course of its business, iA Securities may provide financial advisory services for the issuers mentioned in this report. iA Securities may buy from or sell to customers the securities of issuers mentioned in this report on a principal basis.

Analyst's Certification

Each iA Securities research analyst whose name appears on the front page of this research report hereby certifies that (i) the recommendations and opinions expressed in the research report accurately reflect the research analyst's personal views about the issuer and securities that are the subject of this report and all other companies and securities mentioned in this report that are covered by such research analyst and (ii) no part of the research analyst's compensation was, is, or will be directly or indirectly, related to the specific recommendations or views expressed by such research analyst in this report.

Analyst's Ethics

As a condition of employment, analysts are required to adhere to the Code of Ethics and Standards of Professional Conduct of the CFA Institute (formerly Association for Investment Management and Research 'AIMR').

Analyst Trading

iA Securities permits analysts to own and trade in the securities and or the derivatives of the issuer under their research coverage, subject to the following restrictions. No trades can be executed in anticipation of coverage for a period of 30 days prior to the issuance of the report and 5 days after the dissemination of the report to our clients. For a change in recommendation, no trading is allowed for a period of 24 hours after the dissemination of such information to our clients. A transaction against an analyst's recommendation can only be executed for a reason unrelated to the outlook of the stock for the issuer and with the prior approval of the Director of Research and the Chief Compliance Officer.

Research Dissemination Policy

iA Securities makes its research available in electronic and printed formats and makes every effort to disseminate research simultaneously to all eligible clients. Research is available to our institutional clients via Bloomberg and First Call as well as through our sales representatives via email, fax or regular mail. Electronic versions are distributed in PDF format. Additionally, the research is only intended to be distributed in jurisdictions where iA Securities is licensed.

For Canadian Residents: This report has been approved by iA Securities which accepts responsibility for this report and its dissemination in Canada. Canadian clients wishing to effect transactions in any such issuer discussed should do so through a qualified salesperson of iA Securities in their particular jurisdiction.

For US Residents: iA Securities is not a U.S. broker-dealer and therefore is not governed by U.S. laws, rules or regulations applicable to U.S. broker-dealers. Consequently, the persons responsible for the content of this publication are not licensed in the U.S. as research analysts in accordance with applicable rules promulgated by the U.S. self-regulatory organizations. Any U.S. institutional investor wishing to effect trades in any security referred to herein should contact iA Securities (USA) Inc., a U.S. broker-dealer affiliate of iA Securities.

Disclosure Legend

1. Within the last 12 months, iA Securities has received compensation for investment banking services or has provided investment banking services with respect to the securities of the issuer.
2. iA Securities expects to receive or intends to seek compensation for investment banking services from the issuer covered in this report within the next three months.
3. In the past 12 months, iA Securities has managed or co-managed a public offering of securities for the issuer.
4. iA Securities makes a market in the securities of the issuer.
5. iA Securities beneficially owned 1% or more of the common equity (including derivatives exercisable or convertible within 60 days) of the issuer as of the month end preceding this report.
6. The iA Securities research analyst(s), who cover the issuer discussed, members of the research analyst's household, research associate(s) or other individual(s) involved directly or indirectly in producing this report:
   a. have a long position in its common equity securities.
   b. have a short position in its common equity securities.
7. The analyst has visited the issuer's head office in Vancouver, BC. No payment or reimbursement was received from the issuer for the associated travel costs.
8. In the past 12 months, the issuer is (or has been) a client of iA Securities and received non-banking and non-securities related services for which iA Securities received or expects to receive compensation.
9. In the past 12 months, neither iA Securities, its officers or directors, nor any analyst involved in the preparation of this report have provided services to the issuer for remuneration other than normal course investment advisory or trade execution services.
10. An officer or director of iA Securities, outside of the Equity Research Department, or a member of his/her household is an officer or director of the issuer or acts in an advisory capacity to the issuer.
11. The analyst has relied in the preparation of the recommendation on material provided by a third party which will be disclosed on request.

iA Securities is a member of the Investment Industry Regulatory Organization of Canada ('IIROC') and the Canadian Investor Protection Fund ('CIPF').

iA Securities is a business name and trademark of Industrial Alliance Securities Inc.