

Member of the Canadian Investor Protection Fund

## Gold Strengthens as VIX Spikes 25% this Week

- Precious Metals:** After dropping to US\$1,185 per ounce on Monday, gold recovered and hit a high of US\$1,208 on Tuesday. The precious metal kept its traction to finish the week off at US\$1,204 per ounce Friday afternoon at the time of publication, a 1.1% gain compared to the start of the week. Following gold's upward trend, the S&P/TSX Global Gold Index hit a high of 160.28 Wednesday morning before finishing the week off at 157.21 (up 1.7% WoW), and the VanEck Vectors Junior Gold Miner ETF finished the week up 0.95% at 27.62 following a spike at 28.29 Thursday morning. Meanwhile, the Dow Jones Industrial Average opened flat Friday morning before falling 180 points to finish the day off at 26447. The US Dollar index also softened following Friday morning's release of weaker-than-expected jobs data where the U.S. Labor Department's Employment Situation Report for September released an increase of 134,000 jobs compared to an expected 180,000 for the key non-farm payrolls number. Some of the better performing equities this week included B2Gold Corp. (BTO-T, BUY rating, \$5.00 target) and Barrick Gold Corp (ABX-T, BUY rating, \$17.00 target) finishing up 7.5% and 3.8% this week, respectively. Meanwhile, Asanko Gold Inc. (AKG-T, HOLD rating, \$2.00 target) and Osisko Mining Inc. (OSK-T, BUY rating, \$4.50 target) were two of the better performing small cap companies this week, finishing up 13.7% and 14.0% respectively.
  - Base Metals:** Base metals were mixed week over week. While LME copper was down -1.5% WoW, LME zinc and nickel were both flat, up +0.3% WoW. The LMEX Index finished the week relatively flat up 12 bps WoW at 2,998.4. The S&P Composite Diversified Metals & Mining Industry Index finished the week at 5,441.05, which was down -1.20% WoW. YoY, metals have had a mixed performance: copper and zinc are down -7.4% and -20.5%, respectively while LME nickel is up +20.0% YoY. LME inventories were all down WoW, with copper, zinc, and nickel inventories down -7.7%, -0.9%, and -0.3% WoW, respectively. The US Dollar Index was up +59 bps this week finishing at 95.69, having a negative impact on base metals prices. The majority of the stocks in our coverage universe were down this week with the exception of Nevsun Resources Ltd. (NSU:TSX, TENDER, C\$6.00/sh target) which was up +1.0% WoW. The most negatively impacted weekly performers in our coverage universe were Lundin Mining Corporation (LUN-T, BUY, C\$9.00/sh target) and Hudbay Minerals (HBM:TSX, BUY, C\$9.00/sh target), which were down -7.3% and down -13.1%, respectively.
  - Week Ahead:** We are expecting production results from Barrick Gold (ABX:TSX, BUY, \$17.00/sh target) on Wednesday, October 10<sup>th</sup> after market close, Copper Mountain (CMMC:TSX, BUY, \$2.00/sh target) on Tuesday, October 9<sup>th</sup> before market open and Capstone Mining (CS:TSX, HOLD, C\$1.20/sh target) on Wednesday, October 10<sup>th</sup> before market open.
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## Weekly Performance



Source: Bloomberg and Haywood Securities



## Contents

<b>Haywood Research: The Week in Review .....</b>	<b>3</b>
<b>Weekly Commodities .....</b>	<b>6</b>
Commodities Prices and Inventories .....	7
Commodities and ETFs .....	10
Upcoming Macroeconomic News .....	12
<b>Weekly Indices .....</b>	<b>13</b>
<b>Weekly Equities.....</b>	<b>14</b>
Precious Metals Companies .....	14
Base Metals Companies .....	17
Major International Miners .....	18

## Tables

<b>Comparables Tables:</b> Consensus and Haywood Forecasts/Multiples, Plus Market Valuations for In Situ Resources .....	19
Precious Metals Companies .....	19
Base Metals Companies .....	27
Other Companies (Uranium, Diamond, Cobalt, Coal, Iron) .....	30
<b>Junior Exploration Companies Review:</b> Performance of Companies Included in Junior X and Upcoming Catalysts .....	33



## Haywood Research: The Week in Review – Covered Companies

Publications from the Haywood Research team for the week included the following for covered companies:

- **Precious Metals Sector:** Q3/18 Expectations and Focus Companies
- **Trevali Mining Corp. (TV-T, C\$0.78):** Site visit
- **Copper Mountain Mining Corp. (CMMC-T, C\$1.18):** Feasibility study highlights
- **Uranium Energy Corp. (UEC-NYSE.MKT, \$1.54):** Valuation review
- **Plateau Energy Metals Inc. (PLU-V, \$1.14):** Metallurgical test work update

### Industry Reports:

#### Precious Metals Sector: Q3/18 Expectations and Focus Companies

##### **Haywood Mining Team**

In the first nine months of 2018 the price of gold has declined 9%, while gold equities have declined about 20% (GDX and GDXJ), and we see the relative underperformance of the precious metals equities as an opportunity to build a position in undervalued names with upside potential. Gold has tested support in the US\$1,180/oz range several times over the last two years, and with the USD appearing overbought we expect gold is much closer to the bottom of the trading range. The appeal of gold as an investment vehicle has been held back by a strong US dollar, increasing interest rates, and strong equity market returns.

See Haywood Securities for the full report

### Covered Name Reports:

#### Trevali Mining Corp. (TV-T, C\$0.78 [Buy Rating, C\$1.75 Target Price]) – Site Visit: Caribou Coming Along

**Pierre Vaillancourt,** pvaillancourt@haywood.com; Douglas Ibbetson, CFA, dibbitson@haywood.com

We visited Trevali's Caribou mine and mill, as well as the Restigouche and Murray Brook deposits. Overall, there have been positive developments at the Caribou mine and the satellite deposits in the Bathurst camp since our last visit two years ago. The Caribou mine has been enhanced following the transition to owner-managed operations, and upgrades to the mine and mill have been positive. Satellite deposits have come into focus as future resources to keep the mill operational beyond the existing mine life of Caribou. We recognize Caribou has been challenging, but we credit management for adding value by improving the asset and developing a larger resource base.

See Haywood Securities for the full report

#### Copper Mountain Mining Corp. (CMMC-T, C\$1.18 [Buy Rating, C\$2.00 Target Price]) – Eva Study and Copper Mountain Reserve Increase Provide Path to Future

**Pierre Vaillancourt,** pvaillancourt@haywood.com; Douglas Ibbetson, CFA, dibbitson@haywood.com

Copper Mountain released highlights from the Eva Copper Project Feasibility Study (FS) and increased the mineral reserves at the Copper Mountain Mine. The Eva Feasibility Study has a higher capex than we had estimated but project economics remain positive; the increased mineral reserves at Copper Mountain are in line with our estimates. The Eva project has an after-tax NPV8% of \$256M and an IRR of 28% at \$3.08/lb copper, vs. our after-tax NPV8% of \$239M and an IRR of 29% at \$3.15/lb copper. We believe that the Eva Copper Project will require \$3.00/lb copper in order to be developed.

See Haywood Securities for the full report



## **Uranium Energy Corp. (UEC-NYSE.MKT, \$1.54 [Buy Rating, US\$2.90 Target Price]) – Strong Investor Appetite Leads to UEC Successfully Raising \$20 Million**

**Colin Healey, MBA,** chealey@haywood.com; Aazan Habib, ahabib@haywood.com

We have reviewed our formal valuation of UEC following the recently closed, up-sized \$20 million financing. UEC successfully raised \$20 million gross in an up-sized placement of units. The deal attracted significant investor interest, allowing for a doubling of the initial amount sought, placing UEC in an excellent financial position to advance its core projects and remain production-ready. The strong interest in the deal highlights the ongoing positive shift in investor sentiment on the uranium sector, particularly for U.S.-based producers/developers expected to benefit from a potential favourable outcome of the U.S. DOC investigation into uranium imports under Section 232 of the Trade Expansion Act (1962). UEC remains one of the best options to play the U.S. uranium space as an unhedged production-ready vehicle with maximum leverage to uranium price momentum.

See Haywood Securities for the full report

## **Plateau Energy Metals Inc. (PLU-V, \$1.14 [Buy Rating, C\$3.00 Target Price]) – Update on Preliminary Metallurgical Work and Processing Options for Falchani**

**Colin Healey, MBA,** chealey@haywood.com; Aazan Habib, ahabib@haywood.com

Plateau provided an update on its ongoing metallurgical test work pertaining to its potential options for lithium extraction and processing into a lithium carbonate product. Plateau summarized three alternative processes to its base-case sulfuric acid leach option, which will form the basis for future trade-off studies. As no cost or budget estimates have been provided yet at this preliminary stage, it is difficult to infer the economic impact of these processing options on PLU's valuation. Nevertheless, it is encouraging that the Company is making progress in its effort to build on its proof of concept for a lithium carbonate product. We expect further press releases that serve to shed light on the economic viability of these options will be a major catalyst for the stock price.

See Haywood Securities for the full report



## Haywood Research: The Week in Review – Uncovered Companies

News from the Junior sector this week included the following for uncovered companies:

- **Kutcho Copper Corp. (KC-V, \$0.34):** Drilling results
- **Fireweed Zinc Ltd. (FWZ-V, C\$1.01):** Site visit

### Mining Flashes:

#### Kutcho Copper Corp. (KC-V, \$0.34 [Not Rated]) – Final Results from Esso Deposit

**Mick Carew, PhD, mcarew@haywood.com;** Emma Boggio, MSA, CPA, CA, eboggio@haywood.com

Kutcho Copper announced its final drill results from the Esso deposit and its initial results from the Main deposit at its 100% owned Kutcho copper-zinc project in British Columbia. The property is located ~100 km east of Dease Lake in northern British Columbia and is ~17,060 hectares, consisting of one mining lease and 46 mineral exploration claims. The Kutcho project currently has a global resource (Measured-Indicated-Inferred) of 22.7 million tonnes grading 1.74% copper, 2.55% zinc, 0.32 g/t gold, and 30.34 g/t silver. Of this, the Kutcho deposit contains a Probable Reserve of 10.4 million tonnes grading 2.10% copper, 3.19% zinc, and 35.6 g/t silver, which was incorporated into a Preliminary Feasibility Study in 2017 that returned an after-tax NPV of C\$265 million and IRR of 27.6% over a 12-year mine life. Copper-zinc-gold-silver mineralization at Kutcho occurs in a series of three known VMS deposits that occur in a linear trend with a westerly plunge. Additionally, other VMS horizons are believed to occur within the Company's project area, as indicated by several electromagnetic (VTEM) conductors and zones of alteration.

See Haywood Securities for the full report

#### Fireweed Zinc Ltd. (FWZ-V, C\$1.01 [Not Rated]) – Site Visit: Thinking Big at Mac Pass

**Pierre Vaillancourt, pvaillancourt@haywood.com;** Douglas Ibbitson, CFA, dibbitson@haywood.com

We recently visited Fireweed's zinc-lead-silver project at Macmillan Pass, Yukon, where we met with management and geologists at site. This year, the Company has made progress with more drilling, a new resource estimate, positive metallurgical test results, and a Preliminary Economic Assessment (PEA). Fireweed Zinc is advancing the Macmillan Pass project, which hosts the Tom and Jason sedimentary-exhalative (SEDEX) style lead-zinc-silver deposits. The project contains a total resource of 50 Mt grading 6% zinc, 3.6% lead, and 34.4 g/t silver.

See Haywood Securities for the full report



## Weekly Commodities

PRECIOUS METALS										
Name	Close	1Wk Δ	1 week %	1 Month %	3 Month %	6 Month %	12 Month %	5 Day Trend	52W H/L	1W H/L
Gold Spot US\$/oz	\$ 1,204	\$ 12.79	1.1%	0.6%	(4.3)%	(9.3)%	(5.1)%	A brown line showing a slight upward trend with some fluctuations.	\$ 1,366	\$ 1,204
Silver Spot US\$/oz	\$ 14.64	\$ (0.02)	(0.1%)	3.2%	(8.8)%	(11.0)%	(11.8)%	A brown line showing a general downward trend with minor peaks.	\$ 17.70	\$ 14.69
Platinum Spot US\$/oz	\$ 823	\$ 6.72	0.8%	4.9%	(2.3)%	(9.8)%	(10.1)%	A brown line showing a steady decline with a slight dip at the end.	\$ 1,029	\$ 831
Palladium Spot US\$/oz	\$ 1,072	\$ (2.95)	(0.3%)	10.0%	12.8%	18.1%	13.7%	A brown line showing a significant dip followed by a recovery.	\$ 1,140	\$ 1,075

BASE METALS										
Name	Close	1Wk Δ	1 week %	1 Month %	3 Month %	6 Month %	12 Month %	5 Day Trend	52W H/L	1W H/L
Copper Future US\$/lb	\$ 2.80	\$ (0.04)	(1.5%)	5.3%	(2.8)%	(9.1)%	(7.4)%	A brown line showing a general downward trend with small peaks.	\$ 3.32	\$ 2.85
Nickel Spot US\$/lb	\$ 5.69	\$ 0.01	0.3%	1.5%	(11.1)%	(5.5)%	20.0%	A brown line showing a sharp dip followed by a recovery.	\$ 7.14	\$ 5.75
Zinc Spot US\$/lb	\$ 1.21	\$ 0.00	0.3%	9.9%	(2.6)%	(17.7)%	(20.5)%	A brown line showing a steady decline with a slight dip.	\$ 1.64	\$ 1.22
Aluminum Spot US\$/lb	\$ 0.97	\$ 0.04	3.9%	4.5%	1.2%	7.1%	(1.0)%	A brown line showing a general upward trend with some fluctuations.	\$ 1.18	\$ 1.00
Iron Ore Spot US\$/t	\$ 69.05	\$ 0.32	0.5%	3.3%	9.6%	10.1%	8.3%	A brown line showing a steady upward trend.	\$ 140.00	\$ 78.80

ENERGY										
Name	Close	1Wk Δ	1 week %	1 Month %	3 Month %	6 Month %	12 Month %	5 Day Trend	52W H/L	1W H/L
Newcastle Coal US\$/t	\$ 114.80	\$ 0.25	0.2%	1.7%	3.9%	23.9%	18.2%	A brown line showing a general upward trend with some fluctuations.	\$ 115.30	\$ 115.40
Uranium Spot US\$/lb	\$ 27.65	\$ 0.15	0.5%	4.3%	19.4%	28.3%	31.4%	A brown line showing a general upward trend with some fluctuations.	\$ 26.50	\$ 27.70
WTI US\$/bbl	\$ 74.34	\$ 1.09	1.5%	8.7%	9.4%	20.5%	44.5%	A brown line showing a general upward trend with some fluctuations.	\$ 76.90	\$ 76.41
Brent US\$/bbl	\$ 84.11	\$ 1.38	1.7%	9.4%	9.9%	27.5%	51.9%	A brown line showing a general upward trend with some fluctuations.	\$ 86.74	\$ 86.29
Henry Hub US\$/MMBtu	\$ 3.15	\$ 0.14	4.8%	12.1%	9.8%	10.0%	4.1%	A brown line showing a general upward trend with some fluctuations.	\$ 3.26	\$ 3.23

Source: Haywood Securities and Bloomberg

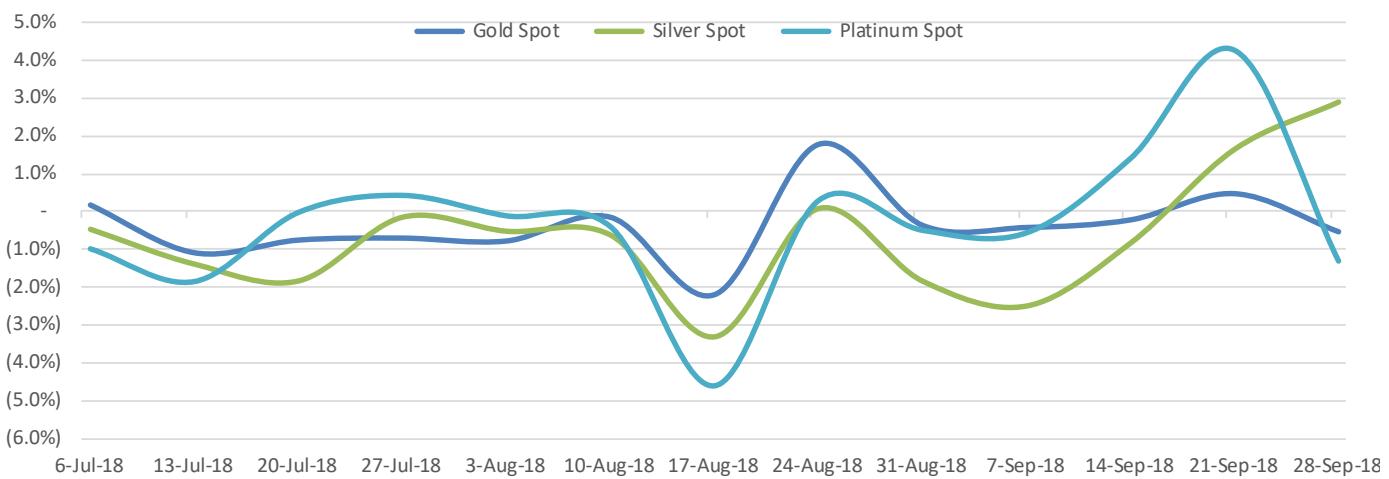


## Commodities Prices and Inventories

**Precious Metals**

Spot Price				
Commodities	LME Spot Price	Weekly Δ	YTD Δ	1 Year Δ
Gold	US\$ 1,204 /oz	0.9%	-1.5%	-1.5%
Silver	US\$ 14.64 /oz	-0.4%	-13.6%	-11.8%
Platinum	US\$ 823 /oz	0.7%	-11.6%	-10.1%

Precious Metals Weekly Change (12 weeks)



Source: Haywood Securities and Bloomberg



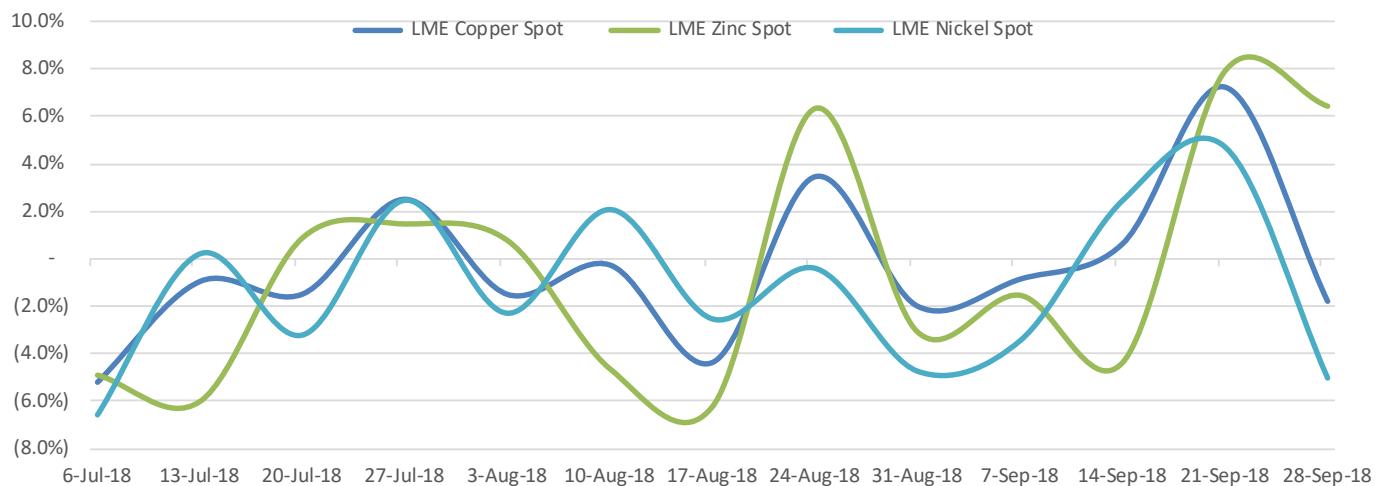
## Base Metals

Spot Price				
Commodities	LME Spot Price	Weekly Δ	YTD Δ	1 Year Δ
Copper	US\$ 2.80 /lb	-1.5%	-14.4%	-7.4%
Zinc	US\$ 1.21 /lb	0.3%	-20.1%	-20.5%
Nickel	US\$ 5.69 /lb	0.3%	-1.3%	20.0%

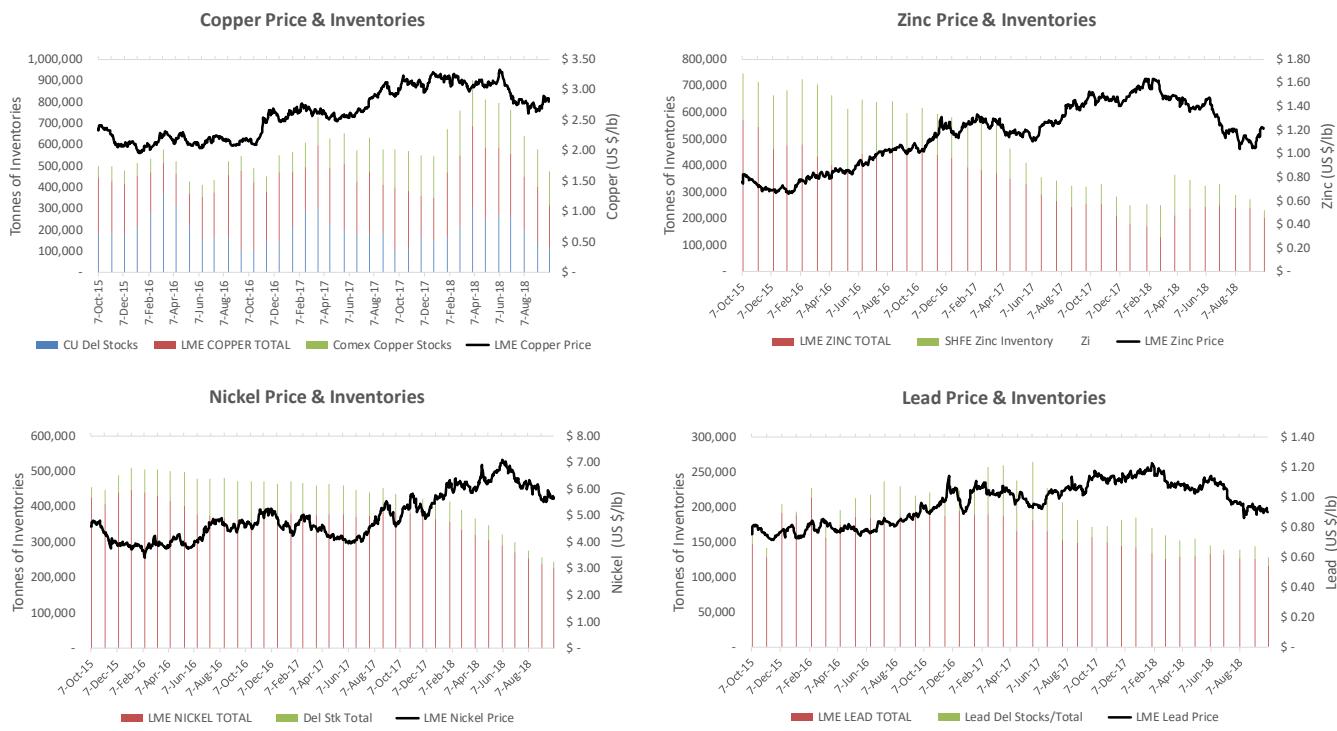
  

LME Inventory		Total Inventory Excluding Bonded Warehouse Inventory			
Commodities	LME Inventory	Weekly Δ	Total (t)	YTD Δ	1 Year Δ
Copper	186,800	-7.7%	453,299	-17%	-22%
Zinc	201,600	-0.9%	230,804	-8%	-27%
Nickel	227,802	-0.3%	244,834	-41%	-44%

### Base Metals Weekly Change (12 weeks)



Source: Haywood Securities and Bloomberg



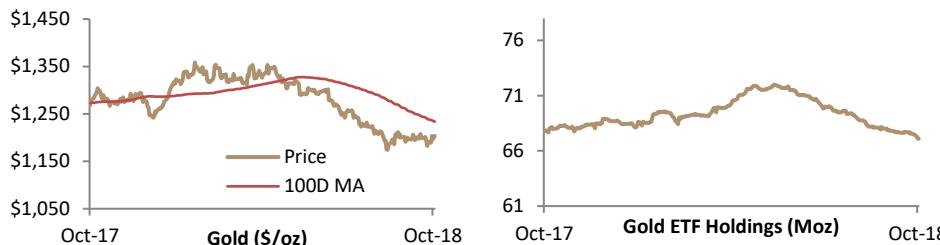
Note: Total Inventories exclude the bonded warehouse inventories

Source: Haywood Securities and Bloomberg



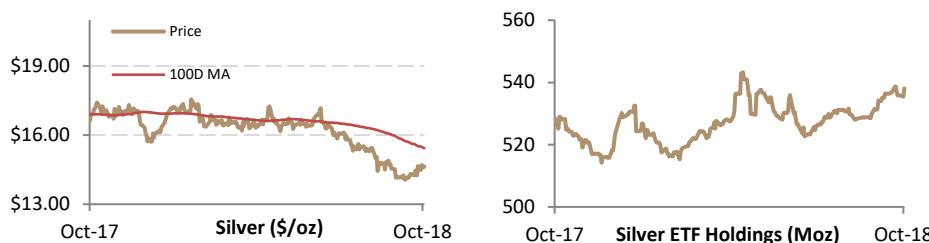
## Commodities and ETFs: A Week in Action

## Gold – 1-Year US\$/oz (left) and Total ETF Holdings (right)



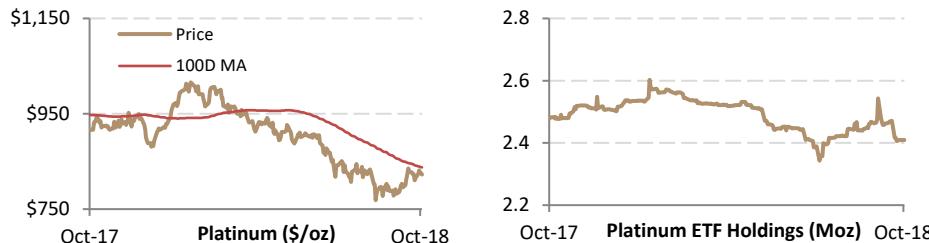
- Spot: Gain (+1.1%) for the week
- ETF Holdings: 67,118,510 ounces, down 447,196 ounces for the week

## Silver – 1-Year US\$/oz (left) and Total ETF Holdings (right)



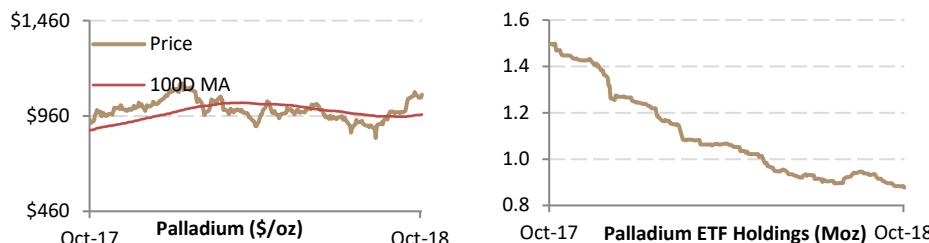
- Spot: Loss (-0.1%) for the week
- ETF Holdings: 538,150,478 ounces, up 2,354,974 ounces for the week

## Platinum – 1-Year US\$/oz (left) and Total ETF Holdings (right)



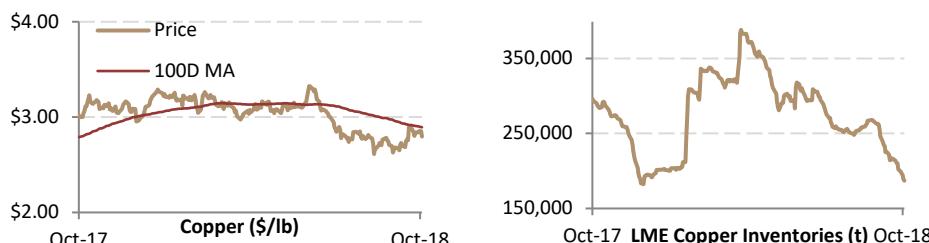
- Spot: Gain (+0.8%) for the week
- ETF Holdings: 2,408,969 ounces, up 2,378 ounces for the week

## Palladium – 1-Year US\$/oz (left) and Total ETF Holdings (right)

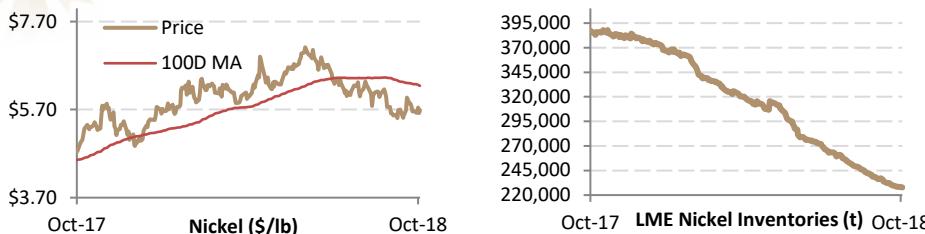


- Spot: Loss (-0.3%) for the week
- ETF Holdings: 877,178 ounces, down 6,585 ounces for the week

## Copper – 1-Year US\$/lb (left) and LME Inventory (right)



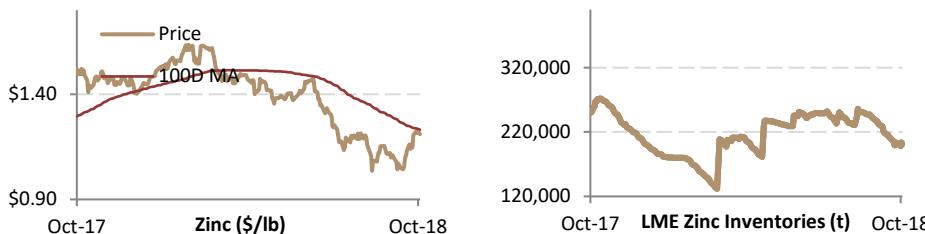
- Futures: Loss (-1.5%) for the week
- LME Copper: 186,800 tonnes, down 15,600 tonnes for the week

**Nickel – 1-Year US\$/lb (left) and LME Inventory (right)**

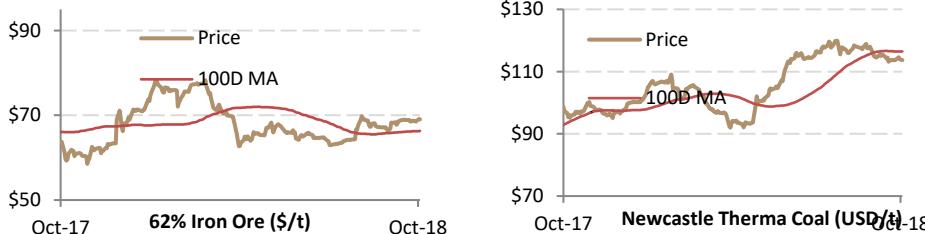
- Spot: Gain (+0.3%) for the week
- LME Nickel: 227,802 tonnes, down 762 tonnes for the week

**Lead – 1-Year US\$/lb (left) and LME Inventory (right)**

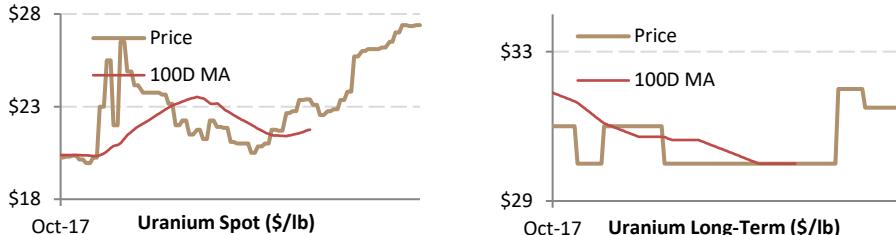
- Spot: Loss (-2.3%) for the week
- LME Lead: 114,275 tonnes, down 1,800 tonnes for the week

**Zinc – 1-Year US\$/lb (left) and LME Inventory (right)**

- Spot: Gain (+0.3%) for the week
- LME Zinc: 201,600 tonnes, down 1,875 tonnes for the week

**Iron – 1-Year US\$/t 62% Fe (left) and 1-Year US\$/t Newcastle (right)**

- Newcastle Thermal Futures: Loss (-0.2%) for the week
- 62% Fe Iron Ore: Gain (+0.5%) for the week

**Uranium – 1-Year US\$/lb Short Term (left) and Long-term (right)**

- Uranium Spot: Loss (-2.1%) for the week
- Uranium Long: Gain (+0.7%) for the week

Source: Bloomberg, UxC Consulting, and Haywood Securities



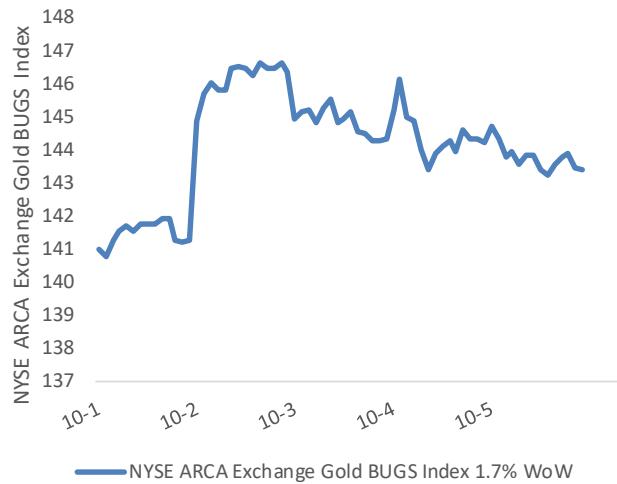
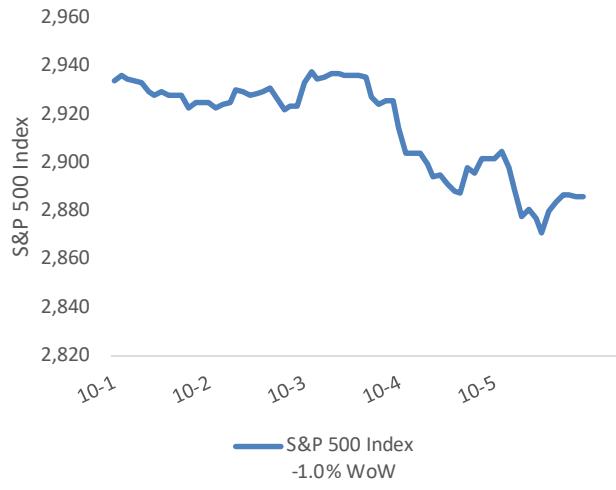
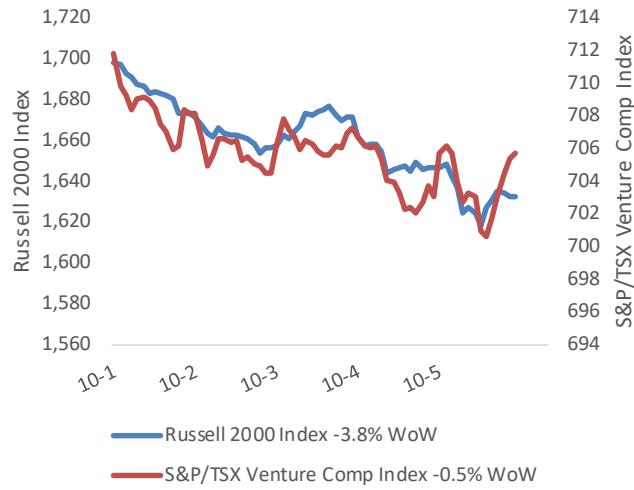
## Upcoming Macroeconomic News and Events

Date	Event	Period	Survey	Prior	Relevance
<b>United States</b>					
10/09/2018	NFIB Small Business Optimism	Sep	108.8	108.8	63
10/09/2018	MBA Mortgage Applications	5-Oct	--	0.00%	92
10/09/2018	PPI Final Demand MoM	Sep	0.20%	-0.10%	88
10/09/2018	PPI Ex Food and Energy MoM	Sep	0.20%	-0.10%	67
10/09/2018	PPI Final Demand YoY	Sep	2.80%	2.80%	69
10/09/2018	PPI Ex Food and Energy YoY	Sep	2.60%	2.30%	66
10/09/2018	Wholesale Inventories MoM	Aug F	0.80%	0.80%	81
10/09/2018	CPI MoM	Sep	0.20%	0.20%	96
10/09/2018	CPI Ex Food and Energy MoM	Sep	0.20%	0.10%	77
10/09/2018	CPI YoY	Sep	2.40%	2.70%	70
10/09/2018	Initial Jobless Claims	6-Oct	210k	207k	98
10/09/2018	Continuing Claims	29-Sep	--	1650k	69
10/09/2018	Bloomberg Consumer Comfort	7-Oct	--	61.6	68
10/09/2018	Monthly Budget Statement	Sep	--	-\$214.1b	77
10/09/2018	Import Price Index MoM	Sep	0.20%	-0.60%	79
10/09/2018	U. of Mich. Sentiment	Oct P	100.8	100.1	95
Date	Event	Period	Survey	Prior	Relevance
<b>Canada</b>					
10/09/2018	Housing Starts	Sep	--	201.0k	81
10/10/2018	Building Permits MoM	Aug	--	-0.10%	77
10/11/2018	New Housing Price Index MoM	Aug	--	0.10%	72
Date	Event	Period	Survey	Prior	Relevance
<b>China</b>					
10/09/2018	Money Supply M2 YoY	Sep	8.50%	8.20%	84
10/09/2018	New Yuan Loans CNY	Sep	1340.0b	1280.0b	68
10/11/2018	Trade Balance	Sep	\$24.55b	\$27.89b	79
10/11/2018	Imports YoY	Sep	14.50%	19.90%	71
10/11/2018	Exports YoY	Sep	8.70%	9.80%	76

Source: Bloomberg



## Weekly Indices

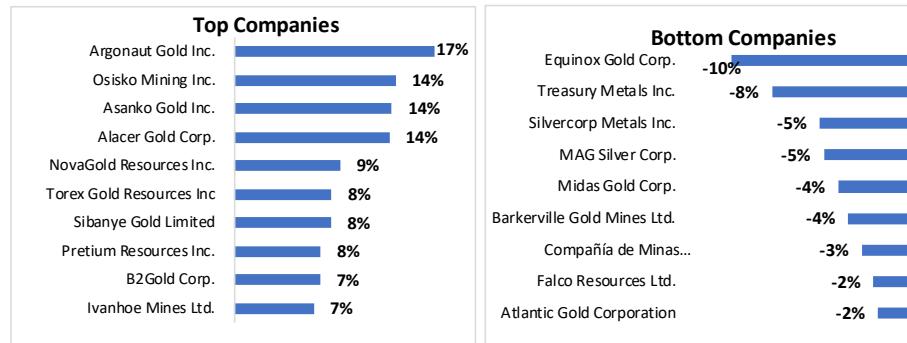


Source: Bloomberg and Haywood Securities



## Weekly Equities

### Equity Weekly Performance – Precious Metals Companies (S&P/TSX Global Mining Index and Haywood Covered Companies)



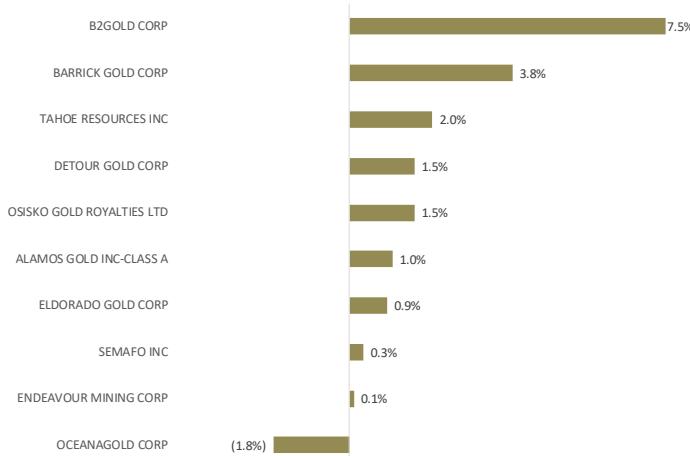
Ticker	Company	Close	1Wk		52Wk		Close	Company	1Wk		52Wk		
			\$	%	High	Low			\$	%	High	Low	
TSX:AEM	Agnico Eagle Mines Limited	45.45	1.33	3%	62.80	42.35	TSX:LGD	Liberty Gold Corp.	0.37	(0.01)	(1)%	0.50	0.36
TSX:ASR	Alacer Gold Corp.	2.27	0.27	14%	2.97	1.96	TSX:LUG	Lundin Gold Inc.	4.95	0.12	2%	5.56	4.07
TSX:AGI	Alamos Gold Inc.	5.99	0.06	1%	9.12	5.35	TSX:MAG	MAG Silver Corp.	9.90	(0.54)	(5)%	15.97	9.24
NYSE:AU	AngloGold Ashanti Limited	8.49	(0.09)	(1)%	12.00	7.08	TSX:MOZ	Marathon Gold Corporation	0.84	-	-	1.28	0.82
TSX:AR	Argonaut Gold Inc.	1.68	0.25	17%	2.87	1.40	NYSE:MUX	McEwen Mining Inc.	2.03	0.09	5%	2.55	1.82
TSX:AZ	Arizona Mining Inc.	6.19	-	-	6.20	2.60	TSX:MAX	Midas Gold Corp.	0.87	(0.04)	(4)%	1.21	0.55
TSX:AKG	Asanko Gold Inc.	1.16	0.14	14%	1.79	0.55	TSX:NGD	New Gold Inc.	1.01	(0.01)	(1)%	5.03	0.97
TSXV:AGB	Atlantic Gold Corporation	1.62	(0.03)	(2)%	1.99	1.30	NYSE:NEM	Newmont Mining Corporation	30.58	0.38	1%	42.04	29.16
TSX:BTO	B2Gold Corp.	3.16	0.22	7%	4.06	2.77	TSX:NHK	Nighthawk Gold Corp.	0.40	-	-	0.76	0.30
TSXV:BGM	Barkerville Gold Mines Ltd.	0.38	(0.02)	(4)%	0.85	0.35	TSX:NG	NovaGold Resources Inc.	5.21	0.44	9%	6.47	4.33
TSX:ABX	Barrick Gold Corporation	14.84	0.55	4%	21.03	12.54	TSX:OGC	OceanaGold Corporation	3.83	(0.07)	(2)%	4.19	2.92
TSX:CG	Centerra Gold Inc.	5.15	-	-	9.35	4.99	TSX:OR	Osisko Gold Royalties Ltd	9.95	0.15	2%	16.65	9.49
TSX:CGG	China Gold International Resources I	1.92	0.06	3%	3.19	1.75	TSX:OSK	Osisko Mining Inc.	2.68	0.33	14%	4.65	1.60
NYSE:CDE	Coeur Mining, Inc.	5.47	0.14	3%	9.67	5.04	TSX:PAAS	Pan American Silver Corp.	18.83	(0.21)	(1)%	24.22	18.00
NYSE:BVN	Compañía de Minas Buenaventura S.	12.99	(0.42)	(3)%	16.80	11.67	TSX:PG	Premier Gold Mines Limited	1.79	0.04	2%	3.96	1.69
TSX:CNL	Continental Gold Inc.	2.61	(0.02)	(1)%	4.13	2.45	TSX:PVG	Premtium Resources Inc.	10.56	0.74	8%	15.52	7.93
TSX:DGC	Detour Gold Corporation	10.60	0.16	2%	15.40	9.11	TSXV:PGM	Pure Gold Mining Inc.	0.54	(0.01)	(2)%	0.71	0.46
TSX:ELD	Eldorado Gold Corporation	1.14	0.01	1%	2.89	1.03	NasdaqGS:GOLD	Randgold Resources Limited	71.22	0.67	1%	104.05	59.90
TSX:EDV	Endeavour Mining Corporation	20.18	0.02	0%	26.86	18.09	TSX:ROXG	Roxgold Inc.	0.81	(0.01)	(1)%	1.44	0.79
TSX:EDR	Endeavour Silver Corp.	2.97	-	-	4.40	2.50	NasdaqGS:RGLD	Royal Gold, Inc.	76.37	(0.69)	(1)%	98.53	71.91
TSXV:EQX	Equinox Gold Corp.	0.98	(0.11)	(10)%	1.23	0.95	TSX:SBB	Sabina Gold & Silver Corp.	1.21	0.01	1%	2.62	1.11
TSXV:FFC	Falco Resources Ltd.	0.39	(0.01)	(3)%	1.25	0.36	TSX:SSL	Sandstorm Gold Ltd.	4.99	0.18	4%	6.95	4.62
TSX:FR	First Majestic Silver Corp.	7.33	-	-	11.09	6.24	NYSE:SA	Seabridge Gold Inc.	13.29	0.34	3%	13.80	9.80
TSX:FVI	Fortuna Silver Mines Inc.	5.55	(0.09)	(2)%	7.78	5.13	TSX:SMF	SEMAFO Inc.	3.05	0.01	0%	4.14	2.73
TSX:FNV	Franco-Nevada Corporation	81.79	0.99	1%	110.18	76.53	NYSE:SBGL	Sibanye Gold Limited	2.70	0.21	8%	5.44	2.02
NYSE:GFI	Gold Fields Limited	2.48	0.06	2%	4.54	2.20	TSX:SVM	Silvercorp Metals Inc.	2.99	(0.17)	(5)%	4.02	2.72
TSX:G	Goldcorp Inc.	12.95	(0.21)	(2)%	19.32	13.00	TSX:SSRM	SSR Mining Inc.	11.55	0.32	3%	14.62	9.66
TSX:GSC	Golden Star Resources Ltd.	0.96	0.01	1%	1.17	0.70	TSX:THO	Tahoe Resources Inc.	3.64	0.07	2%	7.27	3.36
TSX:GUY	Guyana Goldfields Inc.	3.00	0.15	5%	5.42	2.74	TSX:TMR	TMAC Resources Inc.	5.00	0.31	7%	11.50	3.95
NYSE:HMY	Harmony Gold Mining Company Limi	1.67	0.01	1%	2.53	1.43	TSX:TXG	Torex Gold Resources Inc	11.90	0.93	8%	20.93	7.29
TSX:HRT	Harte Gold Corp.	0.43	0.02	5%	0.59	0.29	TSX:TML	Treasury Metals Inc.	0.29	(0.03)	(8)%	0.70	0.27
NYSE:HL	Hecla Mining Company	2.88	0.09	3%	5.42	2.59	TSXV:TLG	Troilus Gold Corp.	0.95	-	-	2.25	0.85
TSX:IMG	IAMGOLD Corporation	4.85	0.10	2%	8.20	4.69	TSX:WDO	Wesdome Gold Mines Ltd.	3.57	0.03	1%	3.89	1.64
TSX:IVN	Ivanhoe Mines Ltd.	2.94	0.19	7%	5.01	2.00	TSX:WPM	Wheaton Precious Metals Corp.	22.09	(0.51)	(2)%	29.93	19.87
TSX:K	Kinross Gold Corporation	3.58	0.06	2%	5.90	3.42	TSX:YRI	Yamana Gold Inc.	3.22	-	-	4.69	3.03
TSX:KL	Kirkland Lake Gold Ltd.	24.93	0.45	2%	30.94	14.76							

Source: Capital IQ and Haywood Securities

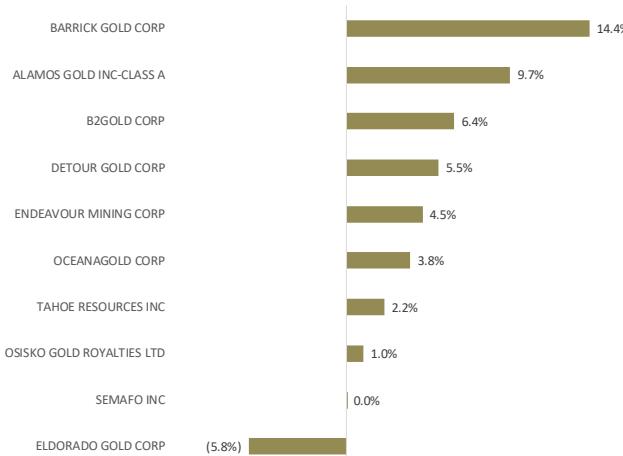


## Weekly Performance – Precious Metals Companies (Covered Large Cap)

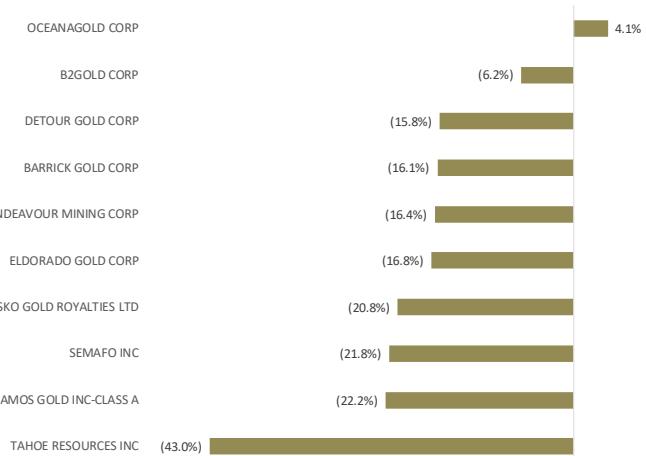
## Weekly Price Change



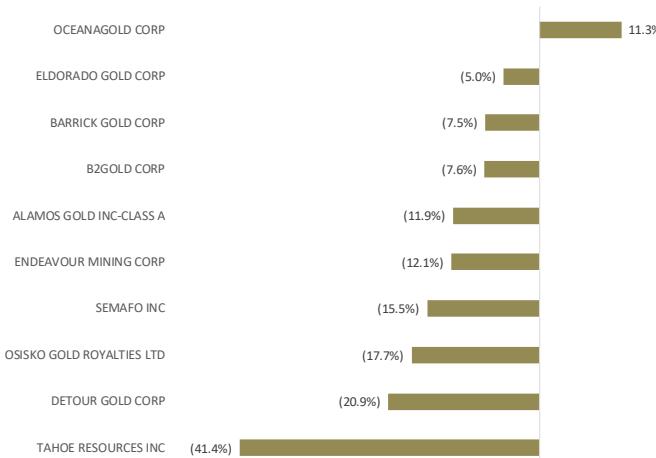
## 1-Month Price Change



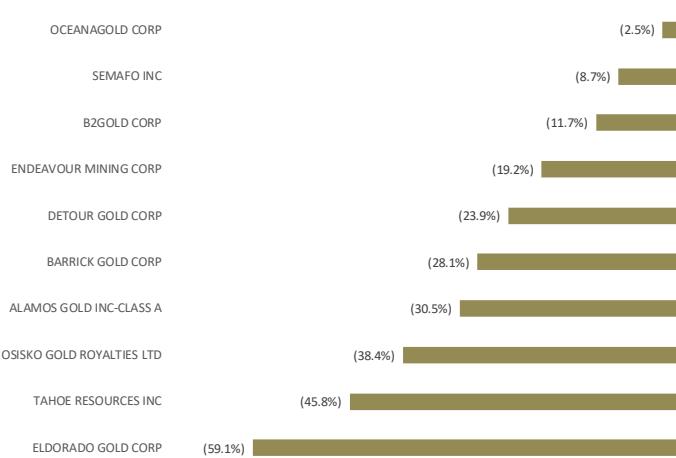
## 3-Month Price Change



## 6-Month Price Change



## 1-Year Price Change

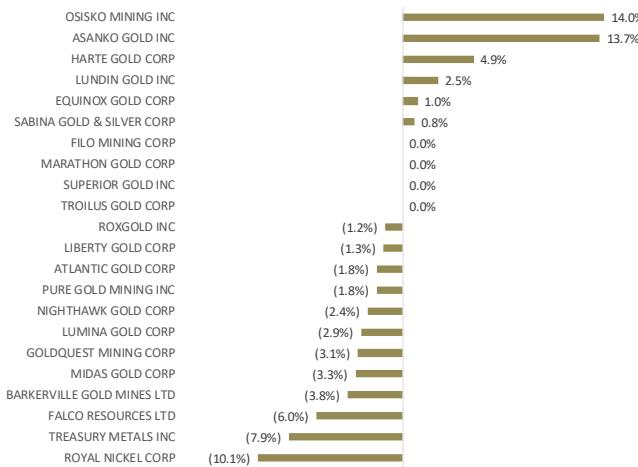


Source: Bloomberg and Haywood Securities

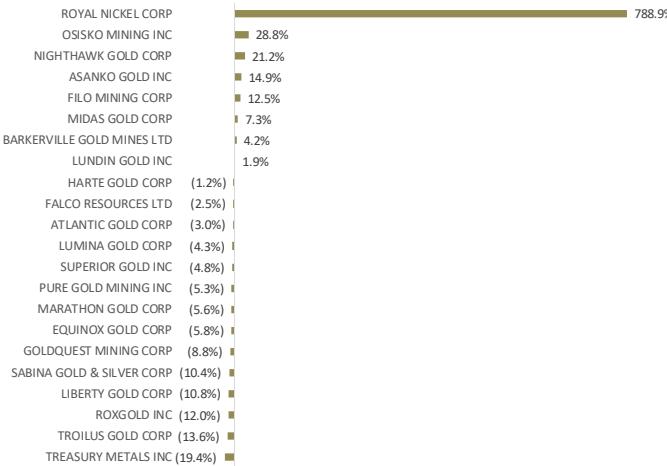


## Weekly Performance – Precious Metals Companies (Covered Small Cap)

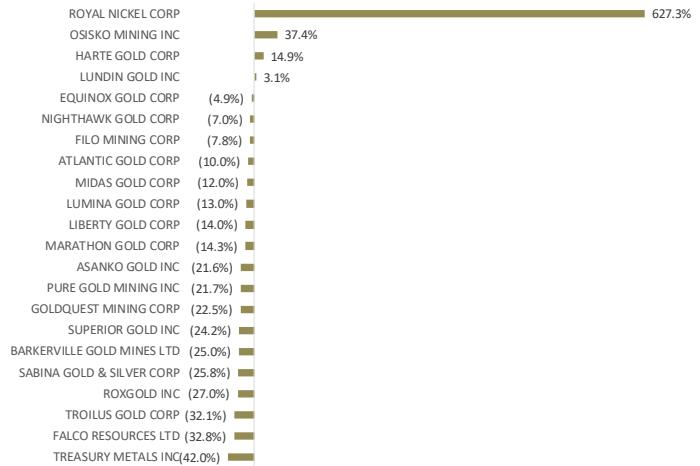
## Weekly Price Change



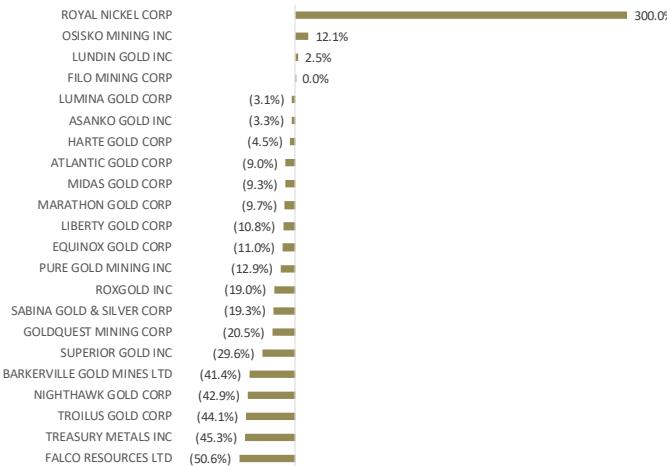
## 1-Month Price Change



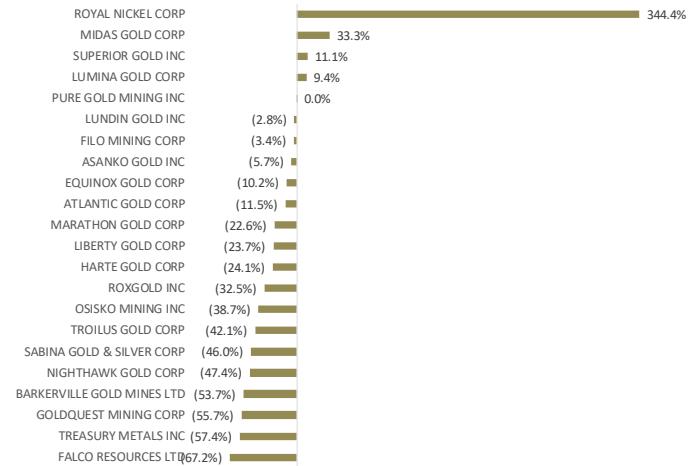
## 3-Month Price Change



## 6-Month Price Change



## 1-Year Price Change

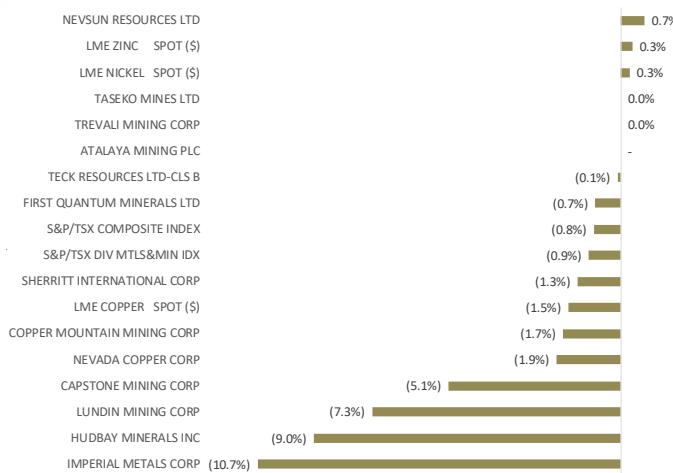


Source: Bloomberg and Haywood Securities

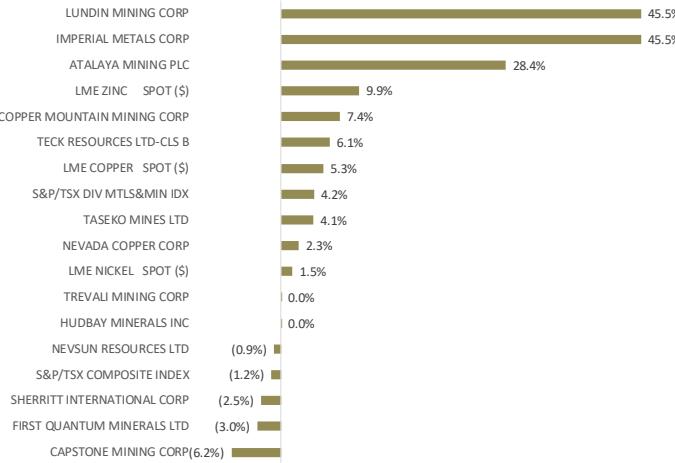


## Equity Weekly Performance – Base Metals Companies

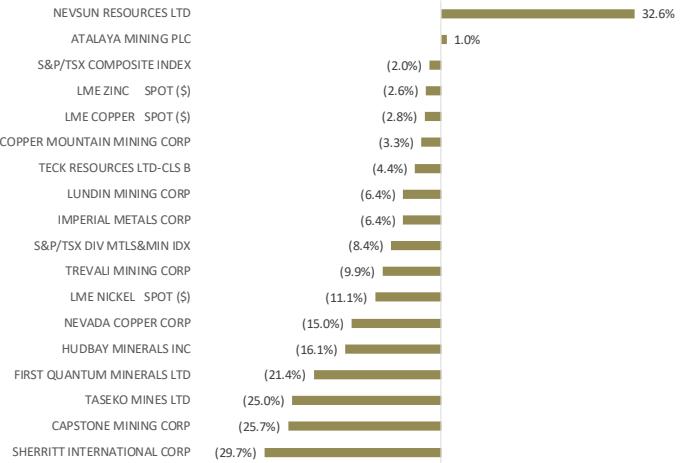
## Weekly Price Change



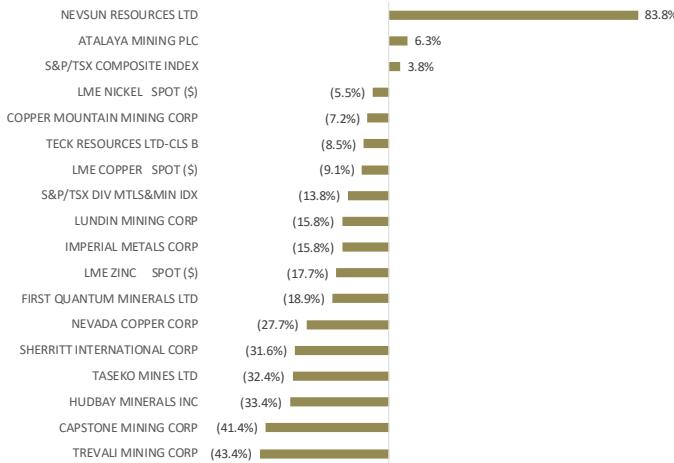
## 1-Month Price Change



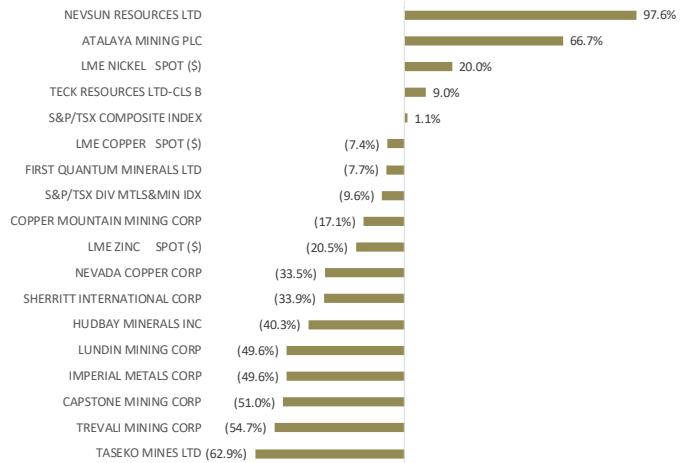
## 3-Month Price Change



## 6-Month Price Change



## 1-Year Price Change

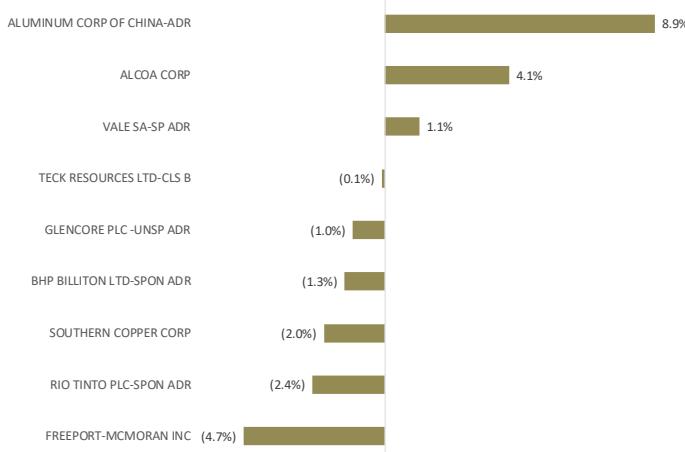


Source: Bloomberg and Haywood Securities

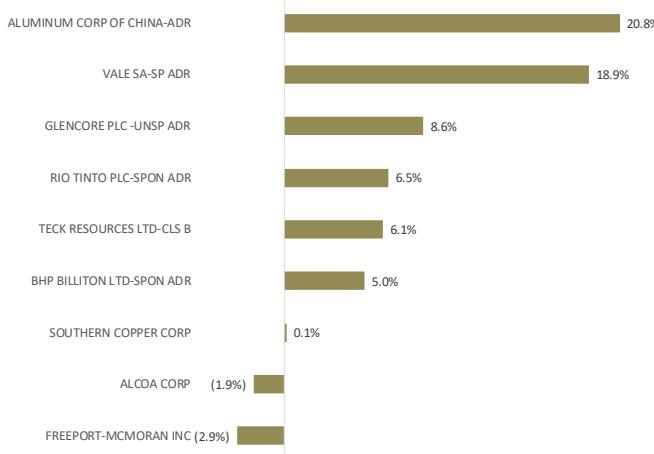


## Equity Weekly Performance – Major International Miners

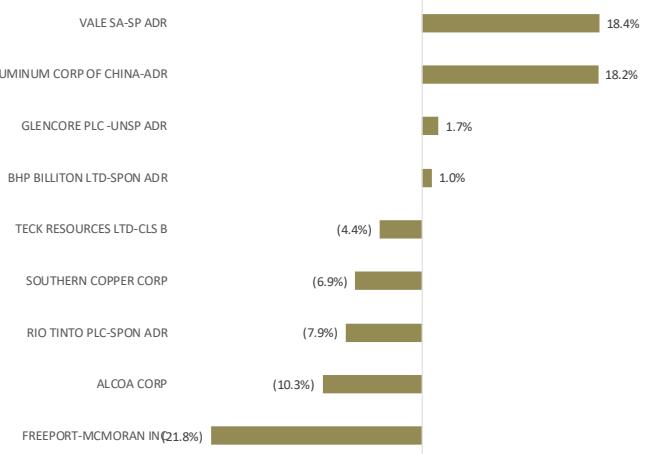
## Weekly Price Change



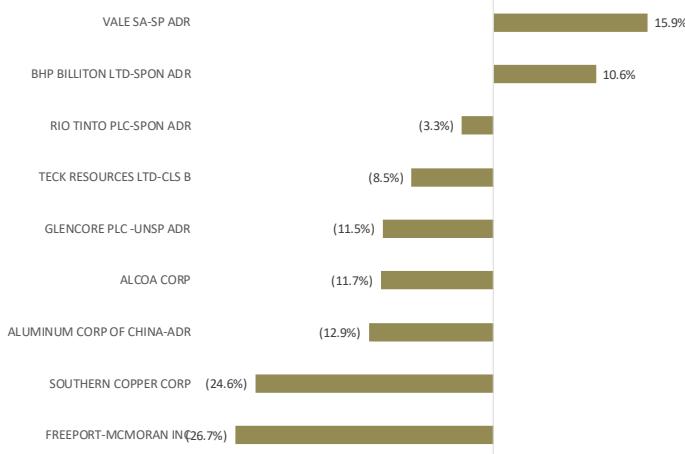
## 1-Month Price Change



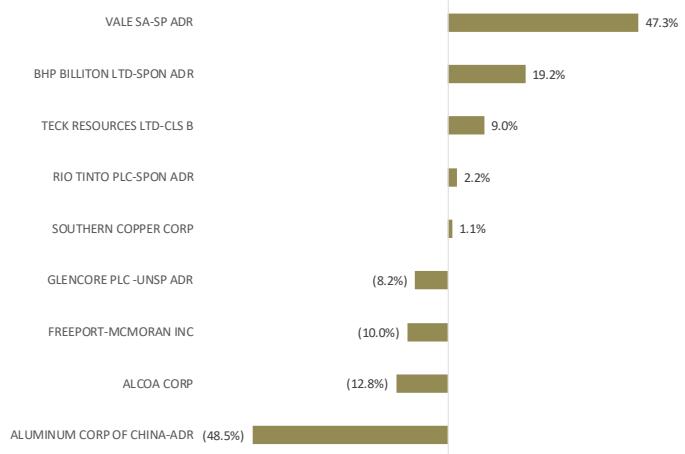
## 3-Month Price Change



## 6-Month Price Change



## 1-Year Price Change



Source: Bloomberg and Haywood Securities



## Comparables Tables – Precious Metals

## Precious Metals Companies – Market and Valuation Statistics (Consensus Estimates)

Company	Symbol	Price	Shares O/S	Market Capitalization	Cash	Working Capital	Debt	Enterprise Value	2018E	2019E	Number of Estimates	P/CF Ratio	E/CF Ratio	E/EBITDA Ratio	P/NAV								
			(millions)	(millions)	(millions)	(millions)	(millions)	(millions)	CFPS	CFPS		2018E	2019E	2018E	2019E	2018E							
<b>Senior Precious Metals Producers</b>																							
Agnico Eagle Mines Limited	NYSE:AEM	C\$45.40	231.6	US\$ 8,128	US\$ 794	US\$ 1,116	US\$ 1,721	US\$ 6,732	US\$ 2.87	US\$ 3.47	13	12.2x	10.1x	13.1x	10.9x	11.1x	9.0x	1.3x					
Alamos Gold Inc.	TSX:AGI	C\$ 5.99	389.8	US\$ 1,805	US\$ 244	US\$ 322	US\$ 3	US\$ 1,486	US\$ 0.59	US\$ 0.73	12	7.8x	6.3x	6.5x	5.2x	6.4x	4.9x	0.6x					
AngloGold Ashanti Limited	JSE:ANG	C\$ 10.87	412.1	US\$ 3,461	US\$ 221	US\$ 519	US\$ 2,004	US\$ 4,946	US\$ 2.32	US\$ 3.02	5	3.6x	2.8x	5.2x	4.0x	3.8x	3.2x	0.9x					
B2Gold Corp.	TSX:BTG	C\$ 3.16	989.3	US\$ 2,416	US\$ 107	(US\$ 111)	US\$ 288	US\$ 2,816	US\$ 0.45	US\$ 0.52	12	5.4x	4.7x	6.3x	5.5x	4.6x	4.4x	1.0x					
Barrick Gold Corporation	TSX:ABX	C\$ 14.84	1167.2	US\$ 13,388	US\$ 2,085	US\$ 2,415	US\$ 5,702	US\$ 16,675	US\$ 1.71	US\$ 1.88	8	6.7x	6.1x	8.3x	7.6x	5.2x	5.0x	1.2x					
Centamin plc	LSE:CEY	C\$ 1.55	1153.9	US\$ 1,388	US\$ 283	US\$ 376	-	US\$ 1,003	US\$ 0.22	US\$ 0.25	3	5.5x	4.8x	4.0x	3.5x	3.4x	2.8x	0.7x					
Compania de Minas Buenaventura S.A.A.	NYSE:BVA	C\$ 16.81	254.0	US\$ 3,299	US\$ 359	US\$ 410	US\$ 321	US\$ 3,210	US\$ 1.64	US\$ 1.67	2	7.9x	7.8x	7.7x	6.4x	5.9x	0.8x						
Endeavour Mining Corporation	TSX:EDV	C\$ 20.18	107.7	US\$ 1,680	US\$ 85	US\$ 176	US\$ 410	US\$ 1,915	US\$ 2.38	US\$ 3.04	8	6.6x	5.1x	7.5x	5.8x	6.3x	4.9x	0.8x					
Evolution Mining Limited	ASX:EVN	C\$ 2.49	1697.0	US\$ 3,259	US\$ 239	US\$ 247	US\$ 216	US\$ 3,229	US\$ 0.31	US\$ 0.28	5	6.2x	6.9x	6.2x	6.8x	5.8x	6.0x	1.1x					
Fressnillo PLC	LSE:FRES	C\$ 13.45	736.9	US\$ 7,663	US\$ 689	US\$ 1,240	US\$ 799	US\$ 7,223	US\$ 1.08	US\$ 1.20	4	9.7x	8.7x	9.1x	8.2x	6.5x	5.9x	0.9x					
Gold Fields Limited	JSE:GFI	C\$ 3.12	821.5	US\$ 1,984	US\$ 498	US\$ 86	US\$ 1,463	US\$ 3,360	US\$ 0.95	US\$ 1.14	5	2.5x	2.1x	4.3x	3.6x	3.3x	3.1x	0.9x					
Goldcorp Inc.	TSX:G	C\$ 12.95	869.3	US\$ 8,701	US\$ 159	US\$ 7	US\$ 2,175	US\$ 10,669	US\$ 1.38	US\$ 1.95	14	7.2x	5.1x	9.0x	6.4x	7.4x	5.1x	0.9x					
JAMGOLD Corporation	TSX:JMG	C\$ 4.85	466.6	US\$ 1,749	US\$ 775	US\$ 921	US\$ 394	US\$ 1,222	US\$ 0.74	US\$ 0.83	15	5.1x	4.5x	3.5x	3.2x	2.9x	0.6x						
Kinross Gold Corporation	TSX:K	C\$ 3.58	1250.2	US\$ 3,466	US\$ 969	US\$ 1,590	US\$ 1,734	US\$ 3,604	US\$ 0.78	US\$ 0.79	16	3.5x	3.5x	3.7x	3.1x	3.1x	0.7x						
Kirkland Lake Gold Ltd.	TSX:KGL	C\$ 24.93	209.9	US\$ 4,044	US\$ 318	US\$ 235	-	US\$ 3,808	US\$ 1.98	US\$ 2.37	12	9.7x	8.1x	9.1x	7.6x	8.3x	6.5x	1.3x					
Newcrest Mining Limited	ASX:NCM	C\$ 17.90	766.6	US\$ 10,606	US\$ 953	US\$ 1,021	US\$ 1,993	US\$ 11,577	US\$ 1.67	US\$ 1.81	7	8.3x	7.6x	9.0x	8.3x	7.9x	6.7x	0.9x					
Newmont Mining Corporation	NYSE:NEM	C\$ 39.56	533.4	US\$ 16,311	US\$ 3,183	US\$ 3,887	US\$ 4,101	US\$ 16,525	US\$ 3.72	US\$ 4.15	10	8.2x	7.4x	8.3x	7.5x	6.9x	6.2x	1.2x					
Northern Star Resources Limited	ASX:NST	C\$ 7.89	639.4	US\$ 3,901	US\$ 328	US\$ 265	-	US\$ 3,637	US\$ 0.40	US\$ 0.62	6	15.1x	9.9x	14.1x	9.2x	11.5x	7.2x	1.3x					
OceanaGold Corporation	TSX:OGC	C\$ 3.83	618.4	US\$ 1,831	US\$ 129	US\$ 150	US\$ 200	US\$ 1,881	US\$ 0.56	US\$ 0.50	14	5.3x	5.9x	5.4x	6.1x	5.0x	5.2x	1.1x					
Randgold Resources Limited	NYSE:RRS	C\$ 91.32	94.4	US\$ 6,664	US\$ 604	US\$ 808	US\$ 3	US\$ 5,859	US\$ 5.11	US\$ 6.61	4	13.8x	10.7x	12.2x	9.4x	10.5x	8.4x	1.3x					
Yamana Gold Inc.	TSX:YRI	C\$ 3.22	949.1	US\$ 2,362	US\$ 123	US\$ 27	US\$ 1,697	US\$ 4,032	US\$ 0.63	US\$ 0.64	15	4.0x	3.9x	6.8x	6.6x	5.7x	4.9x	0.8x					
<b>Group Average - Senior Producers</b>																	7.4x	6.3x	7.6x	6.3x	5.3x	1.0x	
<b>Group Average - Senior Producers (excluding high/low)</b>																	7.2x	6.3x	7.5x	6.4x	6.2x	1.0x	
<b>Intermediate Precious Metals Producers</b>																	5.1x	2.3x	4.4x	2.0x	3.0x	2.2x	0.8x
Acacia Mining plc	LSE:ACA	C\$ 2.44	410.1	US\$ 774	US\$ 121	US\$ 131	US\$ 28	US\$ 671	US\$ 0.37	US\$ 0.82	7	3.8x	3.1x	2.9x	2.3x	2.2x	1.9x	0.5x					
Centerra Gold Inc.	TSX:CG	C\$ 5.15	291.9	US\$ 1,162	US\$ 187.9	US\$ 547.7	US\$ 255.9	US\$ 870.3	US\$ 1.04	US\$ 1.29	10	5.1x	5.8x	5.2x	5.0x	5.6x	0.6x						
Detour Gold Corporation	TSX:DGC	C\$ 10.60	175.3	US\$ 1,436	US\$ 150	US\$ 225	US\$ 249	US\$ 1,460	US\$ 1.59	US\$ 1.42	18	5.1x	7.0x	5.1x	5.3x	5.4x	4.4x	0.4x					
Eldorado Gold Corporation	TSX:ELD	C\$ 1.14	791.5	US\$ 697	US\$ 433.5	US\$ 572.9	US\$ 594.9	US\$ 719.4	US\$ 0.13	US\$ 0.17	12	7.0x	7.2x	8.5x	9.6x	7.4x	1.1x						
Hecla Mining Company	NYSE:HLC	C\$ 3.73	477.0	US\$ 1,374	US\$ 245	US\$ 247	US\$ 533	US\$ 1,660	US\$ 0.28	US\$ 0.41	8	10.2x	7.0x	12.3x	8.5x	10.0x	6.7x	0.6x					
Highland Gold Mining Limited	AIM:HGM	C\$ 2.44	325.2	US\$ 614	US\$ 11	US\$ 44	US\$ 170	US\$ 740	US\$ 0.42	US\$ 0.37	1	4.5x	5.1x	5.4x	6.1x	4.5x	0.8x						
Pretium Resources Inc.	TSX:PVG	C\$ 10.56	183.3	US\$ 1,496	US\$ 142	US\$ 266	US\$ 372	US\$ 2,134	US\$ 1.10	US\$ 1.54	6	7.4x	5.3x	10.5x	7.6x	10.0x	6.7x	0.6x					
Regis Resources Limited	ASX:RRL	C\$ 3.54	507.1	US\$ 1,390	US\$ 134	US\$ 138	-	US\$ 1,125	US\$ 0.35	US\$ 0.31	6	7.8x	8.9x	7.0x	8.0x	6.0x	6.2x	1.0x					
Resolute Mining Limited	ASX:RSG	C\$ 0.99	757.5	US\$ 578	US\$ 48	US\$ 156	-	US\$ 422	US\$ 0.08	US\$ 0.14	3	9.3x	5.6x	6.8x	4.1x	9.0x	3.4x	0.6x					
SEMAFO Inc.	TSX:SMF	C\$ 3.05	325.6	US\$ 768	US\$ 109	US\$ 92	US\$ 86	US\$ 762	US\$ 0.35	US\$ 0.77	8	6.7x	3.1x	6.7x	3.0x	5.9x	2.7x	0.8x					
Tahoe Resources Inc.	TSX:THO	C\$ 3.64	313.2	US\$ 881	US\$ 70	US\$ 121	US\$ 75	US\$ 835	US\$ 0.32	US\$ 0.80	12	8.7x	3.5x	8.2x	3.3x	5.4x	2.6x	0.5x					
Torex Gold Resources Inc.	TSX:TGX	C\$ 11.90	84.9	US\$ 781	US\$ 91	US\$ 59	US\$ 289	US\$ 1,010	US\$ 1.90	US\$ 2.51	6	4.9x	3.7x	6.3x	4.7x	5.2x	3.8x	0.7x					
<b>Group Average - Intermediate Producers</b>																	6.7x	4.9x	6.9x	5.1x	5.9x	4.3x	0.7x
<b>Group Average - Intermediate Producers (excluding high/low)</b>																	6.7x	4.7x	6.8x	5.0x	5.9x	4.2x	0.7x
<b>Junior Precious Metals Producers</b>																	9.2x	2.6x	11.7x	3.3x	16.3x	3.4x	0.5x
Alacer Gold Corp.	TSX:ASR	C\$ 2.27	293.8	US\$ 516	US\$ 163	US\$ 167	US\$ 305	US\$ 653	US\$ 0.19	US\$ 0.67	6	3.8x	1.2x	-	-	-	-	-	-	-	0.2x		
Alio Gold Inc.	TSX:ALO	C\$ 0.95	83.8	US\$ 62	US\$ 297	US\$ 78.2	US\$ 16.6	US\$ 0.1(0.1)	US\$ 0.19	US\$ 0.59	7	3.4x	2.5x	2.1x	1.5x	1.7x	1.1x	-	-	-	-		
Argonaut Gold Inc.	TSX:XR	C\$ 1.68	177.8	US\$ 231	US\$ 23	US\$ 100	US\$ 8	US\$ 139	US\$ 0.38	US\$ 0.51	7	3.4x	2.4x	2.2x	1.5x	1.7x	1.1x	-	-	-	-		
Asanko Gold Inc.	TSX:AKG	C\$ 1.16	225.8	US\$ 202	US\$ 18.8	US\$ 311.5	US\$ 0.0	US\$ 109.0	US\$ 0.41	US\$ 0.31	6	2.2x	2.9x	-	-	-	-	-	-	-	0.5x		
Atlantic Gold Corporation	TSX:AGB	C\$ 1.62	236.6	US\$ 296	US\$ 12	US\$ 25	US\$ 49	US\$ 371	US\$ 0.21	US\$ 0.25	8	6.0x	5.0x	7.6x	6.3x	7.1x	5.1x	0.8x					
Brid Gold Corp.	TSX:BRD	C\$ 2.78	177.6	US\$ 253	US\$ 17.5	US\$ 26.8	US\$ 47.8	US\$ 4.78	US\$ 0.32	US\$ 0.32	0	-	-	-	-	-	-	-	-	-			
Dundee Precious Metals Inc.	TSX:DPM	C\$ 3.24	178.5	US\$ 447	US\$ 14	US\$ 24	US\$ 39	US\$ 462	US\$ 0.49	US\$ 0.73	4	5.1x	3.5x	5.3x	3.6x	4.9x	2.7x	0.5x					
Golden Star Resources Ltd.	TSX:GSC	C\$ 0.96	544.0	US\$ 404	US\$ 219	US\$ 61.3	US\$ 81.3	US\$ 866.3	US\$ 0.07	US\$ 0.22	5	10.7x	3.4x	15.0x	4.8x	10.4x	4.7x	0.7x					
Guyana Goldfields Inc.	TSX:GUY	C\$ 3.00	173.5	US\$ 402	US\$ 63	US\$ 89	US\$ 30	US\$ 343	US\$ 0.49	US\$ 0.82	6	4.7x	2.8x	4.0x	2.4x	3.8x	2.3x	0.4x					
Jaguar Mining Inc.	TSX:JAG	C\$ 0.20	325.1	US\$ 50	US\$ 9.2	US\$ 4.0	US\$ 6.69	US\$ 0.08	US\$ 0.12	1	1.9x	1.3x	1.8x	1.2x	1.6x	1.2x	0.2x						
Leagold Mining Corporation	TSX:LMC	C\$ 1.89	284.7	US\$ 416	US\$ 69	US\$ 72	US\$ 220	US\$ 564	US\$ 0.37	US\$ 0.69	8	3.9x	2.1x	5.3x	2.9x	4.5x	2.4x	0.4x					
New Gold Inc.	TSX:NGD	C\$ 1.01	578.7	US\$ 452	US\$ 167.4	US\$ 269.7	US\$ 959.1	US\$ 1,141.2	US\$ 0.46	US\$ 0.43	12	1.7x	1.8x	4.3x	4.6x	3.8x	3.9x	0.5x					
Persicus Mining Limited	ASX:PRU	C\$ 0.34	1034.9	US\$ 274	US\$ 23	US\$ 48	US\$ 39	US\$ 265	US\$ 0.05	US\$ 0.10	5	4.9x	2.8x	4.7x	2.7x	4.1x	2.8x	0.6x					
Premier Gold Mines Limited	TSX:PG	C\$ 1.20	203.0	US\$ 281	US\$ 67.9</td																		



## Other Precious Metals Companies – Market and Valuation Statistics (Consensus Estimates)

Company	Symbol	Price	Shares O/S (millions)	Market Capitalization (millions)	Cash (millions)	Working Capital (millions)	Debt (millions)	Enterprise Value (millions)	2018E CFPS	2019E CFPS	Number of Estimates	P/CF Ratio 2018E	P/CF Ratio 2019E	EV/CF Ratio 2018E	EV/CF Ratio 2019E	EV/EBITDA Ratio 2018E	P/NAV 2018E	
<b>PGM Producers</b>																		
Anglo American Platinum Limited	JSE:AMS	C\$ 42.25	262.2	US\$ 8,563	US\$ 675	US\$ 847	US\$ 609	US\$ 8,325	US\$ 2.52	US\$ 2.82	2	13.0x	11.6x	12.6x	11.3x	9.5x	8.9x	1.6x
Impala Platinum Holdings Limited	JSE:IMP	C\$ 2.32	702.3	US\$ 1,258	US\$ 270	US\$ 655	US\$ 578	US\$ 1,181	US\$ 0.20	US\$ 0.35	3	9.0x	5.2x	8.5x	4.8x	4.5x	3.6x	1.1x
Lonmin Plc	LSE:LMI	C\$ 0.79	282.7	US\$ 172	US\$ 167	US\$ 179	-	(US\$ 7)	US\$ 0.16	US\$ 0.23	1	3.9x	2.7x	-	-	0.1x	-	0.4x
<b>Group Average - PGM Producers</b>												8.6x	6.5x	10.5x	8.0x	4.7x	6.2x	1.1x
<b>Silver Producers</b>																		
Americas Silver Corporation	TSX:USA	C\$ 2.81	43.0	US\$ 93	US\$ 8	US\$ 12	US\$ 8	US\$ 89	US\$ 0.46	US\$ 0.41	3	4.8x	5.3x	4.6x	5.0x	5.5x	3.1x	0.5x
Coeur Mining, Inc.	NYSE:CDE	C\$ 7.08	199.2	US\$ 1,090	US\$ 124	US\$ 173	US\$ 360	US\$ 1,277	US\$ 0.66	US\$ 1.01	4	8.3x	5.4x	9.7x	6.3x	6.7x	5.7x	1.0x
Endeavour Silver Corp.	TSX:EDR	C\$ 2.97	129.0	US\$ 296	US\$ 31	US\$ 59	-	US\$ 237	US\$ 0.26	US\$ 0.29	5	8.9x	7.9x	7.2x	6.3x	6.6x	4.9x	0.8x
First Majestic Silver Corp.	TSX:FR	C\$ 7.33	193.6	US\$ 1,097	US\$ 118	US\$ 141	US\$ 149	US\$ 1,105	US\$ 0.41	US\$ 0.72	5	14.0x	7.8x	14.1x	7.9x	15.4x	6.2x	1.1x
Fortuna Silver Mines Inc.	TSX:FVI	C\$ 5.55	159.9	US\$ 686	US\$ 198	US\$ 203	US\$ 40	US\$ 522	US\$ 0.51	US\$ 0.67	6	8.5x	6.4x	6.4x	4.9x	4.7x	3.4x	1.1x
Fresnillo PLC	LSE:FRES	C\$ 13.45	736.9	US\$ 7,663	US\$ 689	US\$ 1,240	US\$ 799	US\$ 7,223	US\$ 1.08	US\$ 1.20	4	9.7x	8.7x	9.1x	8.2x	6.5x	5.9x	1.0x
Hecla Mining Company	NYSE:HL	C\$ 3.73	477.0	US\$ 1,374	US\$ 245	US\$ 247	US\$ 533	US\$ 1,660	US\$ 0.28	US\$ 0.41	8	10.2x	7.0x	12.3x	8.5x	9.6x	7.4x	1.1x
Mandalay Resources Corporation	TSX:MND	C\$ 0.14	451.6	US\$ 47	US\$ 15	(US\$ 16)	US\$ 2	US\$ 65	US\$ 0.06	US\$ 0.06	1	1.7x	1.7x	2.4x	2.4x	-	2.1x	0.3x
Pan American Silver Corp.	TSX:PAAS	C\$ 18.83	153.3	US\$ 2,231	US\$ 250	US\$ 463	US\$ 21	US\$ 1,789	US\$ 1.40	US\$ 1.70	9	10.4x	8.6x	8.4x	6.9x	6.4x	5.8x	1.1x
SSR Mining Inc.	TSX:SSRM	C\$ 11.55	120.2	US\$ 1,073	US\$ 502	US\$ 672	US\$ 240	US\$ 642	US\$ 0.94	US\$ 1.36	6	9.5x	6.6x	5.7x	3.9x	4.5x	3.7x	0.8x
Silvercorp Metals Inc.	TSX:SVM	C\$ 2.99	168.4	US\$ 389	US\$ 115	US\$ 94	-	US\$ 295	US\$ 0.46	US\$ 0.43	1	5.0x	5.4x	3.8x	4.1x	3.6x	4.0x	0.7x
<b>Group Average - Silver Producers</b>												8.3x	6.4x	7.6x	5.9x	6.9x	4.8x	0.9x
<b>Group Average - Silver Producers (excluding high/low)</b>												8.4x	6.7x	7.5x	5.9x	6.3x	4.8x	0.9x
<b>Diamond Producers</b>																		
Lucara Diamond Corp.	TSX:LUC	C\$ 2.17	396.5	US\$ 665	US\$ 50	US\$ 73	-	US\$ 592	US\$ 0.15	US\$ 0.20	6	10.9x	8.5x	9.7x	7.6x	7.4x	4.9x	0.9x
Mountain Province Diamonds Inc.	TSX:MPVD	C\$ 2.57	210.0	US\$ 417	US\$ 25	US\$ 76	US\$ 317	US\$ 658	US\$ 0.63	US\$ 0.62	3	3.2x	3.2x	5.0x	5.1x	4.3x	3.7x	0.7x
Petra Diamonds Limited	LSE:PDL	C\$ 0.61	865.3	US\$ 406	US\$ 222	US\$ 148	US\$ 712	US\$ 970	US\$ 0.18	US\$ 0.20	3	2.6x	2.4x	6.2x	5.7x	4.7x	4.2x	0.6x
Stornoway Diamond Corporation	TSX:SWY	C\$ 0.37	836.3	US\$ 236	US\$ 24	(US\$ 47)	US\$ 178	US\$ 461	US\$ 0.02	US\$ 0.07	1	12.2x	4.3x	23.8x	8.4x	13.8x	6.0x	0.6x
<b>Group Average - Diamond Producers</b>												7.2x	4.6x	11.1x	6.7x	7.5x	4.7x	0.7x
<b>Royalty Companies</b>																		
Anglo Pacific Group plc	LSE:APF	C\$ 2.49	180.0	US\$ 346	US\$ 15	US\$ 22	US\$ 8	US\$ 332	US\$ 0.23	US\$ 0.26	3	8.4x	7.4x	8.1x	7.1x	5.8x	6.3x	0.9x
Allius Minerals Corporation	TSX:ALS	C\$ 12.80	43.1	US\$ 426	US\$ 50	US\$ 35	US\$ 78	US\$ 470	US\$ 0.68	US\$ 0.75	4	14.5x	13.2x	15.9x	14.5x	11.5x	11.0x	1.2x
Franco-Nevada Corporation	TSX:FNV	C\$ 81.79	186.2	US\$ 11,770	US\$ 72	US\$ 158	-	US\$ 11,611	US\$ 2.64	US\$ 3.01	16	24.0x	21.0x	23.7x	20.7x	22.3x	19.4x	1.7x
Maverix Metals Inc.	TSXV:MMX	C\$ 2.25	215.4	US\$ 375	US\$ 7	US\$ 28	US\$ 20	US\$ 366	US\$ 0.09	US\$ 0.11	4	18.4x	16.4x	17.9x	16.0x	17.6x	13.4x	1.6x
Osisko Gold Royalties Ltd	TSX:OR	C\$ 9.95	156.3	US\$ 1,202	US\$ 144	US\$ 137	US\$ 319	US\$ 1,383	US\$ 0.41	US\$ 0.47	14	18.7x	16.3x	21.5x	18.8x	19.4x	16.5x	0.9x
Royal Gold, Inc.	US:RGD	C\$ 98.81	65.5	US\$ 5,003	US\$ 89	US\$ 74	US\$ 351	US\$ 5,280	US\$ 4.37	US\$ 4.70	12	17.5x	16.3x	18.4x	17.2x	15.4x	15.2x	1.7x
Sandstorm Gold Ltd.	TSX:SSL	C\$ 4.99	183.7	US\$ 709	US\$ 13	US\$ 11	-	US\$ 698	US\$ 0.26	US\$ 0.31	9	15.0x	12.6x	14.8x	12.4x	15.5x	11.7x	0.9x
Wheaton Precious Metals Corp.	TSX:WPM	C\$ 22.09	443.6	US\$ 7,573	US\$ 93	US\$ 81	US\$ 957	US\$ 8,448	US\$ 1.15	US\$ 1.32	16	14.8x	13.0x	16.5x	14.5x	15.3x	13.9x	1.2x
<b>Group Average - Royalty Companies</b>												16.6x	14.7x	17.2x	15.2x	15.4x	13.4x	1.3x
<b>Group Average - Royalty Companies (excluding high/low)</b>												16.8x	14.9x	17.7x	15.8x	15.9x	13.6x	1.3x

All data sourced from Capital IQ

Source: Capital IQ and Haywood Securities



## Senior Gold Producers - Reserves and Resources

	Symbol	Market	Working	Enterprise	Global Reserves & Resources					Reserves				Resources (M&I and Inferred)						Global				
		Capitalization (millions)	Capital (millions)	Value (millions)	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	EV/oz Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Inferred	Inferred	EV/oz Au	EV/oz AuEq
Agnico Eagle Mines Limited	NYSE:AEM	US \$8,114	US \$1,116	US \$8,721	62.2	2.02	68.2	2.22	91%	21.3	2.54	22.5	2.69	94%	US \$410	40.9	1.83	45.7	2.04	90%	52%	54%	US \$140	US \$128
Alamos Gold Inc.	TSX:AGI	US \$1,817	US \$322	US \$1,498	22.3	1.28	23.0	1.32	97%	9.8	1.50	10.2	1.56	96%	US \$152	12.4	1.15	12.8	1.18	97%	40%	39%	US \$67	US \$65
AngloGold Ashanti Limited	JSE:ANG	US \$3,461	US \$519	US \$4,946	192.5	1.56	218.9	1.77	88%	45.1	1.20	47.1	1.25	96%	US \$110	147.4	1.81	171.7	2.11	86%	33%	37%	US \$26	US \$23
B2Gold Corp.	TSX:BTO	US \$2,416	US \$(111)	US \$2,816	24.4	0.86	30.4	1.07	80%	8.2	1.21	8.2	1.21	100%	US \$343	16.2	0.75	22.2	1.02	73%	53%	63%	US \$116	US \$93
B2Gold Corp.	TSX:BTO	US \$2,416	US \$(111)	US \$2,816	24.4	0.86	30.4	1.07	80%	8.2	1.21	8.2	1.21	100%	US \$343	16.2	0.75	22.2	1.02	73%	53%	63%	US \$116	US \$93
Barrick Gold Corporation	TSX:ABX	US \$13,586	US \$2,415	US \$16,904	191.0	0.76	321.4	1.27	59%	77.4	1.11	105.3	1.50	73%	US \$219	113.6	0.62	216.0	1.18	53%	30%	30%	US \$88	US \$53
Centamin plc	LSE:CEY	US \$1,380	US \$376	US \$1,003	11.4	1.12	11.4	1.12	100%	4.0	1.02	4.0	1.02	100%	US \$251	7.4	1.18	7.4	1.18	100%	33%	33%	US \$88	US \$88
Compania de Minas Buenaventura S.A.A.	NYSE:BVN	US \$3,360	US \$410	US \$3,608	23.7	0.31	83.3	1.08	28%	6.0	0.20	27.7	0.92	22%	US \$600	17.6	0.38	55.5	1.19	32%	23%	16%	US \$152	US \$43
Endeavour Mining Corporation	TSX:EDV	US \$1,675	US \$176	US \$1,979	15.1	1.84	15.1	1.84	100%	7.6	1.77	7.6	1.77	100%	US \$260	7.5	1.91	7.5	1.91	100%	35%	35%	US \$131	US \$131
Evolution Mining Limited	ASX:EVN	US \$3,259	US \$235	US \$3,240	13.8	0.91	17.0	1.12	81%	6.6	0.88	8.6	1.15	76%	US \$494	7.1	1.24	8.2	1.44	86%	36%	32%	US \$235	US \$191
Fresnillo PLC	LSE:FRES	US \$7,663	US \$1,240	US \$7,223	38.0	0.79	81.2	1.69	47%	9.6	0.76	20.7	1.65	46%	US \$756	28.1	0.79	60.2	1.70	47%	33%	49%	US \$190	US \$89
Gold Fields Limited	JSE:GFI	US \$1,984	US \$86	US \$3,789	108.2	2.27	124.8	2.62	87%	48.6	2.66	50.4	2.76	96%	US \$78	59.6	2.02	74.4	2.53	80%	42%	53%	US \$35	US \$30
Goldcorp Inc.	TSX:G	US \$8,862	US \$7	US \$11,267	113.3	0.65	198.7	1.14	57%	53.2	0.65	102.3	1.25	52%	US \$212	60.1	0.66	96.2	1.05	63%	37%	39%	US \$99	US \$57
IAMGOLD Corporation	TSX:IMG	US \$1,749	US \$921	US \$1,222	37.3	1.19	38.1	1.22	98%	16.6	1.17	16.6	1.17	100%	US \$73	20.7	1.21	21.5	1.26	96%	50%	51%	US \$33	US \$32
Kinross Gold Corporation	TSX:K	US \$3,450	US \$1,590	US \$3,594	64.0	0.67	65.1	0.68	98%	28.1	0.67	28.7	0.69	98%	US \$128	35.9	0.67	36.4	0.67	99%	20%	20%	US \$56	US \$55
Kirkland Lake Gold Ltd.	TSX:KL	US \$4,037	US \$235	US \$3,833	20.6	4.82	20.6	4.82	100%	4.8	10.93	4.8	10.93	100%	US \$798	15.8	4.12	15.8	4.12	100%	44%	44%	US \$186	US \$186
Newcrest Mining Limited	ASX:NCM	US \$10,605	US \$1,021	US \$11,577	123.4	0.58	224.2	1.05	55%	62.3	0.60	118.2	1.15	53%	US \$186	61.1	0.55	106.0	0.95	58%	17%	20%	US \$94	US \$52
Newmont Mining Corporation	NYSE:NEM	US \$16,199	US \$3,887	US \$16,422	111.5	0.80	148.3	1.07	75%	68.8	0.93	76.1	1.03	90%	US \$239	42.6	0.65	72.2	1.11	59%	32%	20%	US \$147	US \$111
Northern Star Resources Limited	ASX:NST	US \$3,901	US \$253	US \$3,661	16.1	2.94	29.2	5.36	55%	4.1	3.62	4.1	3.62	100%	US \$902	12.0	2.83	25.2	5.94	48%	53%	78%	US \$228	US \$125
OceanaGold Corporation	TSX:OGC	US \$1,836	US \$150	US \$1,919	13.0	1.60	14.2	1.74	92%	5.9	1.42	6.6	1.61	89%	US \$326	7.1	1.78	7.5	1.88	95%	43%	43%	US \$147	US \$135
Randgold Resources Limited	LSE:RRS	US \$6,664	US \$808	US \$5,859	24.1	3.37	24.1	3.37	100%	13.9	3.83	13.9	3.83	100%	US \$422	10.2	2.90	10.2	2.90	100%	45%	45%	US \$244	US \$244
Yamana Gold Inc.	TSX:YRI	US \$2,355	US \$27	US \$4,065	55.5	0.49	119.5	1.06	46%	19.3	0.35	56.9	1.04	34%	US \$211	36.2	0.63	62.5	1.08	58%	45%	53%	US \$73	US \$34
Group Average - Total		# Companies: 22										US \$341								US \$122		US \$93		

Equivalency assumptions (US\$ / 10-05-18): \$1,203/oz Au, \$14.64/oz Ag, \$823/oz Pt, \$1,071/oz Pd, \$2.80/lb Cu, \$1.21/lb Zn, \$0.90/lb Pb, \$5.69/lb Ni, \$11.29/lb Mo, \$25.74/lb Co, \$0/lb Sb, \$27.50/lb U3O8, \$8.60/lb Sn, \$93.00/lb HCC, \$69.24/lb 62% Fe

Source: SNL Financial retrieved on October 5, 2018



## Intermediate Gold Producers – Reserves and Resources

Company	Symbol	Market	Working	Enterprise	Global Reserves & Resources						Reserves			Resources (M&I and Inferred)						Global			
		Capitalization (millions)	Capital (millions)	Value (millions)	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	EV/oz Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Inferred	EV/oz Au	EV/oz AuEq
Acacia Mining plc	LSE:ACA	US \$774	US \$131	US \$671	25.7	3.66	27.9	3.99	92%	7.5	3.83	7.9	4.06	94%	US \$90	18.2	3.60	20.0	3.96	91%	63%	US \$26	US \$24
Centerra Gold Inc.	TSX:CG	US \$1,203	US \$548	US \$945	33.5	0.43	64.2	0.82	52%	16.5	0.67	22.7	0.92	73%	US \$57	17.0	0.32	41.5	0.78	41%	40%	US \$28	US \$15
China Gold International Resources Corp. Ltd.	TSX:CGG	US \$573	US \$67	US \$1,634	10.5	0.16	68.3	1.01	15%	4.6	0.27	24.5	1.45	19%	US \$356	6.0	0.12	43.8	0.87	14%	44%	US \$155	US \$24
Detour Gold Corporation	TSX:DGC	US \$1,466	US \$225	US \$1,489	20.8	0.96	20.8	0.96	100%	16.0	0.97	16.0	0.97	100%	US \$93	4.8	0.96	4.8	0.96	100%	23%	US \$71	US \$71
Eldorado Gold Corporation	TSX:ELD	US \$697	US \$573	US \$719	39.6	0.87	55.0	1.21	72%	16.5	1.37	23.8	1.97	69%	US \$44	23.1	0.69	31.2	0.93	74%	51%	US \$18	US \$13
Harmony Gold Mining Company Limited	JSE:HAR	US \$840	US \$39	US \$1,160	95.8	1.21	130.0	1.65	74%	24.5	0.68	37.7	1.05	65%	US \$47	71.3	1.65	92.3	2.14	77%	36%	US \$12	US \$9
Highland Gold Mining Limited	AIM:HGM	US \$614	US \$44	US \$742	17.2	2.99	17.2	2.99	100%	5.1	3.26	5.1	3.26	100%	US \$145	12.1	3.04	12.1	3.04	100%	19%	US \$43	US \$43
McEwen Mining Inc.	NYSE:MUX	US \$685	US \$19	US \$666	13.2	0.11	87.4	0.72	15%	0.8	1.46	0.9	1.70	86%	US \$886	12.5	0.10	86.6	0.72	14%	46%	US \$50	US \$8
Premtium Resources Inc.	TSX:PVG	US \$1,542	US \$(266)	US \$2,180	48.8	0.68	64.3	0.90	76%	8.7	14.63	9.1	15.28	96%	US \$251	40.1	0.56	55.2	0.78	73%	32%	US \$45	US \$34
Regis Resources Limited	ASX:RRL	US \$1,390	US \$132	US \$1,259	8.4	0.90	8.4	0.90	100%	3.8	1.07	3.8	1.07	100%	US \$334	4.6	0.79	4.6	0.79	100%	44%	US \$150	US \$150
Resolute Mining Limited	ASX:RSG	US \$578	US \$148	US \$464	12.6	1.55	12.6	1.55	100%	4.8	1.41	4.8	1.41	100%	US \$97	7.8	1.64	7.8	1.64	100%	41%	US \$37	US \$37
SEMAFO Inc.	TSX:SMF	US \$795	US \$92	US \$814	7.0	2.70	7.0	2.70	100%	2.9	3.37	2.9	3.37	100%	US \$284	4.2	2.37	4.2	2.37	100%	33%	US \$116	US \$116
Tahoe Resources Inc.	TSX:THO	US \$881	US \$121	US \$839	22.6	0.50	43.9	0.97	52%	3.7	0.56	8.3	1.25	45%	US \$225	18.9	0.49	35.7	0.92	53%	46%	US \$37	US \$19
Torex Gold Resources Inc	TSX:TXG	US \$753	US \$59	US \$983	8.4	2.67	11.7	3.72	72%	3.3	2.74	3.3	2.80	98%	US \$301	5.1	2.63	8.4	4.28	61%	85%	US \$117	US \$84
Torex Gold Resources Inc	TSX:TXG	US \$753	US \$59	US \$983	8.4	2.67	11.7	3.72	72%	3.3	2.74	3.3	2.80	98%	US \$301	5.1	2.63	8.4	4.28	61%	85%	US \$117	US \$84
<b>Group Average - Total</b>		# Companies: 15										<b>US \$234</b>			<b>US \$68</b>			<b>US \$49</b>					

*Equivalency assumptions (US\$ / 10-05-18): \$1,203/oz Au, \$14.64/oz Ag, \$823/oz Pt, \$1,071/oz Pd, \$2.80/lb Cu, \$1.21/lb Zn, \$0.90/lb Pb, \$5.69/lb Ni, \$11.29/lb Mo, \$25.74/lb Co, \$0/lb Sb, \$27.50/lb U3O8, \$8.60/lb Sn, \$93.00/lb HCC, \$69.24/lb 62% Fe*

*Source: SNL Financial retrieved on October 5, 2018*



## Junior Gold Producers – Reserves and Resources

Company	Symbol	Market Capitalization	Working Capital	Enterprise Value	Global Reserves & Resources						Reserves			Resources (M&I and Inferred)						Global			
		(millions)	(millions)	(millions)	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	EV/oz Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	EV/oz Au	EV/oz AuEq	
Alacer Gold Corp.	TSX:ASR	US \$509	US \$167	US \$647	7.3	0.66	14.0	1.27	52%	3.7	2.17	5.1	3.02	72%	US \$177	3.6	0.39	8.9	0.96	40%	54%	US \$89	US \$46
Alio Gold Inc.	TSX:ALO	US \$65	US \$78	US \$3	7.4	0.53	7.9	0.57	93%	1.9	0.89	2.0	0.90	99%	US \$2	5.4	0.46	5.9	0.51	91%	25%	US \$0	US \$0
Argonaut Gold Inc.	TSX:AR	US \$230	US \$100	US \$138	12.6	0.57	15.4	0.70	82%	4.5	0.62	5.2	0.72	86%	US \$31	8.1	0.55	10.2	0.69	80%	16%	US \$11	US \$9
Asanko Gold Inc.	TSX:AKG	US \$201	US \$311	US \$(111)	6.2	1.46	6.2	1.46	100%	4.7	1.57	4.7	1.57	100%	-	1.6	1.22	1.6	1.22	100%	15%	-	-
Azumah Resources Limited	ASX:AZM	US \$12	US \$2	US \$10	0.9	1.55	0.9	1.55	100%	0.3	2.14	0.3	2.14	100%	US \$37	0.6	1.38	0.6	1.38	100%	47%	US \$11	US \$11
Beadell Resources Limited	ASX:BDR	US \$71	US \$(10)	US \$127	3.7	0.43	15.8	1.80	24%	1.5	1.83	1.5	1.83	100%	US \$87	2.3	0.28	14.3	1.80	16%	66%	US \$34	US \$8
Dundee Precious Metals Inc.	TSX:DPM	US \$464	US \$24	US \$496	9.7	0.39	19.6	0.79	50%	2.7	3.35	3.6	4.51	74%	US \$184	7.0	0.29	16.0	0.67	44%	55%	US \$51	US \$25
Fiore Gold Ltd.	TSXV:F	US \$24	US \$17	US \$7	3.8	0.93	3.8	0.93	100%	0.3	0.52	0.3	0.52	100%	US \$21	3.5	1.00	3.5	1.00	100%	26%	US \$2	US \$2
Golden Star Resources Ltd.	TSX:GSC	US \$404	US \$(81)	US \$569	10.9	3.21	10.9	3.21	100%	1.5	2.55	1.5	2.55	100%	US \$373	7.6	3.58	7.6	3.58	100%	72%	US \$52	US \$52
Goldgroup Mining Inc.	TSX:GGA	US \$7	US \$(2)	US \$9	0.3	0.96	0.7	2.09	46%	-	-	-	-	-	-	0.3	0.96	0.7	2.09	46%	35%	US \$28	US \$13
Guyana Goldfields Inc.	TSX:GUY	US \$404	US \$89	US \$344	8.4	2.95	8.4	2.95	100%	4.0	2.87	4.0	2.87	100%	US \$87	4.4	3.03	4.4	3.03	100%	47%	US \$41	US \$41
Jaguar Mining Inc.	TSX:JAG	US \$49	US \$4	US \$55	3.3	4.22	3.3	4.22	100%	0.3	3.94	0.3	3.94	100%	US \$170	3.0	4.25	3.0	4.25	100%	52%	US \$17	US \$17
Leagold Mining Corporation	TSX:LMC	US \$418	US \$72	US \$579	25.5	1.04	27.8	1.14	92%	5.6	1.34	5.9	1.40	96%	US \$103	19.9	8.75	21.9	9.67	91%	45%	US \$23	US \$21
Medusa Mining Limited	ASX:MML	US \$52	US \$12	US \$40	1.3	3.83	1.3	3.83	100%	0.3	6.69	0.3	6.69	100%	US \$123	1.0	4.07	1.0	4.07	100%	41%	US \$30	US \$30
Melanor Resources Inc.	TSXV:MTO	US \$46	US \$(6)	US \$53	1.7	1.54	1.7	1.54	100%	0.2	7.38	0.2	7.38	100%	US \$266	1.5	1.40	1.5	1.40	100%	79%	US \$31	US \$31
Minera IRL Limited	BVL:MIRL	US \$9	US \$(0)	US \$10	2.5	2.17	2.5	2.17	100%	1.1	1.87	1.1	1.87	100%	US \$9	1.4	2.43	1.4	2.43	100%	76%	US \$4	US \$4
New Gold Inc.	TSX:NGD	US \$474	US \$270	US \$1,164	22.2	0.72	28.9	0.94	77%	14.8	0.79	17.9	0.95	83%	US \$79	7.4	0.62	11.0	0.92	67%	20%	US \$52	US \$40
Orosur Mining Inc.	TSX:OMI	US \$16	US \$(11)	US \$27	0.6	0.65	1.4	1.56	42%	0.1	1.42	0.1	1.42	100%	US \$217	0.5	0.57	1.3	1.57	36%	17%	US \$46	US \$19
Orvana Minerals Corp.	TSX:ORV	US \$17	US \$(6)	US \$32	2.2	3.90	2.9	5.18	75%	0.3	3.50	0.4	4.29	82%	US \$92	1.8	3.99	2.5	5.37	74%	47%	US \$15	US \$11
Perseus Mining Limited	ASX:PRU	US \$274	US \$46	US \$267	12.5	1.14	12.5	1.14	100%	4.7	1.45	4.7	1.45	100%	US \$57	7.8	1.02	7.8	1.02	100%	38%	US \$21	US \$21
Premier Gold Mines Limited	TSX:PG	US \$279	US \$72	US \$207	10.7	1.59	11.0	1.62	98%	3.0	1.22	3.1	1.24	99%	US \$69	7.7	1.80	7.9	1.84	98%	52%	US \$19	US \$19
Roxgold Inc.	TSX:ROXG	US \$229	US \$72	US \$188	1.2	16.71	1.2	16.71	100%	0.7	11.48	0.7	11.48	100%	US \$252	0.5	-	0.5	-	100%	80%	US \$155	US \$155
Shanta Gold Limited	AIM:SHG	US \$48	US \$20	US \$60	2.8	2.46	2.8	2.46	100%	0.5	4.40	0.5	4.40	100%	US \$116	2.3	2.24	2.3	2.24	100%	60%	US \$21	US \$21
TMAC Resources Inc.	TSX:TMR	US \$430	US \$(4)	US \$539	6.6	8.12	6.6	8.12	100%	3.6	7.72	3.6	7.72	100%	US \$149	3.0	8.66	3.0	8.66	100%	57%	US \$82	US \$82
<b>Group Average - Total</b>		# Companies: 24												<b>US \$123</b>						<b>US \$36</b>			

Equivalency assumptions (US\$ / 10-05-18): \$1,203/oz Au, \$14.64/oz Ag, \$823/oz Pt, \$1,071/oz Pd, \$2.80/lb Cu, \$1.21/lb Zn, \$0.90/lb Pb, \$5.69/lb Ni, \$11.29/lb Mo, \$25.74/lb Co, \$0/lb Sb, \$27.50/lb U3O8, \$8.60/lb Sn, \$93.00/lb HCC, \$69.24/lb 62% Fe

Source: SNL Financial retrieved on October 5, 2018



## Gold Development-Stage Companies (Engineering Study Complete) – Enterprise Value per Ounce

Company	Symbol	Market	Working	Enterprise	Global Reserves & Resources						Reserves			Resources (M&I and Inferred)						Global				
		Capitalization	Capital	Value	Au	Au	AuEq	AuEq	% Au	Au	Au	AuEq	AuEq	% Au	EV/oz	Au	Au	AuEq	AuEq	% Au	% Au	EV/oz	Au	EV/oz
African Gold Group, Inc.	TSXV-AGG	US \$7	US \$(0)	US \$7	2.0	1.01	2.0	1.01	100%	0.5	1.25	0.5	1.25	100%	US \$16	1.5	0.96	1.5	0.96	100%	59%	US \$4	US \$4	
Almaden Minerals Ltd.	TSXV:AMM	US \$66	US \$9	US \$57	2.4	0.42	4.8	0.83	51%	1.3	0.62	2.3	1.08	57%	US \$44	1.1	0.31	2.5	0.69	46%	40%	US \$23	US \$12	
Amarillo Gold Corporation	TSXV-AGC	US \$24	US \$2	US \$23	2.1	1.22	2.1	1.22	100%	1.0	1.63	1.0	1.63	100%	US \$23	1.1	0.99	1.1	0.99	100%	57%	US \$11	US \$11	
ATAC Resources Ltd.	TSXV-ATC	US \$52	US \$12	US \$40	2.4	3.45	2.4	3.46	100%	-	-	-	-	-	-	2.4	3.45	2.4	3.46	100%	79%	US \$17	US \$17	
Atlantic Gold Corporation	TSXV-AGB	US \$289	US \$(25)	US \$371	1.4	1.32	1.4	1.32	100%	1.0	1.28	1.0	1.28	100%	US \$369	0.4	1.43	0.4	1.43	100%	73%	US \$263	US \$263	
Avesoro Resources Inc.	TSX:ASO	US \$182	US \$(2)	US \$293	3.9	2.00	3.9	2.00	100%	1.2	2.24	1.2	2.24	100%	US \$247	2.7	1.91	2.7	1.91	100%	67%	US \$76	US \$76	
Barkerville Gold Mines Ltd.	TSXV-BGM	US \$131	US \$3	US \$129	3.8	5.60	3.8	3.75	100%	-	-	-	-	-	-	3.8	5.60	3.8	5.60	100%	57%	US \$34	US \$34	
Belo Sun Mining Corp	TSX:BSX	US \$69	US \$27	US \$42	6.8	1.04	6.8	1.04	100%	3.8	1.02	3.8	1.02	100%	US \$11	3.0	1.07	3.0	1.07	100%	52%	US \$6	US \$6	
Bluestone Resources Inc.	TSXV:BSR	US \$65	US \$29	US \$36	1.3	10.09	1.3	10.52	96%	-	-	-	-	-	-	1.3	10.09	1.3	10.52	96%	4%	US \$28	US \$27	
California Gold Mining Inc.	TSXV-CGM	US \$12	US \$0	US \$12	1.3	1.31	1.3	1.31	100%	-	-	-	-	-	-	1.3	1.31	1.3	1.31	100%	32%	US \$9	US \$9	
Chaarat Gold Holdings Limited	AIM:CGH	US \$117	US \$(16)	US \$155	7.9	2.66	8.1	2.71	98%	0.5	0.91	0.5	0.93	99%	US \$330	7.5	3.02	7.6	3.08	98%	14%	US \$20	US \$19	
Chalice Gold Mines Limited	ASX:CHN	US \$29	US \$29	US \$1	0.5	1.21	1.1	2.98	41%	-	-	-	-	-	-	0.5	1.21	1.1	2.98	41%	38%	US \$1	US \$1	
Chesapeake Gold Corp.	TSXV-CKG	US \$65	US \$13	US \$52	19.5	0.51	30.0	0.79	65%	18.3	0.52	28.4	0.80	64%	US \$3	1.2	0.45	1.6	0.61	74%	53%	US \$3	US \$2	
Columbus Gold Corp.	TSX:CGT	US \$31	US \$4	US \$27	2.2	1.42	2.2	1.42	100%	1.2	1.58	1.2	1.58	100%	US \$22	0.9	1.25	0.9	1.25	100%	47%	US \$12	US \$12	
Confidental Gold Inc.	TSX:CNL	US \$367	US \$41	US \$447	9.1	9.91	9.6	10.53	94%	3.7	8.41	3.8	8.71	97%	US \$120	5.4	-	5.8	-	92%	86%	US \$49	US \$46	
Dacian Gold Limited	ASX:DCN	US \$358	US \$(34)	US \$460	3.3	2.31	3.3	2.31	100%	1.2	2.01	1.2	2.01	100%	US \$383	2.1	2.52	2.1	2.52	100%	53%	US \$139	US \$139	
Dalradian Resources Inc.	TSX:DNA	US \$401	US \$88	US \$313	6.1	13.49	6.1	13.49	100%	-	-	-	-	-	-	6.1	13.49	6.1	13.49	100%	50%	US \$51	US \$51	
Equinox Gold Corp.	TSXV:EQX	US \$338	US \$60	US \$337	9.5	0.24	27.8	0.72	34%	4.5	0.65	4.5	0.65	100%	US \$74	4.9	0.16	23.3	0.73	21%	64%	US \$36	US \$12	
Euro Sun Mining Inc.	TSX:ESM	US \$27	US \$0	US \$27	7.5	0.54	11.1	0.80	68%	-	-	-	-	-	-	7.5	0.54	11.1	0.80	68%	5%	US \$4	US \$2	
Falco Resources Ltd.	TSXV:FPC	US \$53	US \$(17)	US \$77	5.9	1.60	9.9	2.68	59%	3.7	1.44	6.3	2.42	59%	US \$21	2.2	1.98	3.6	3.32	59%	47%	US \$13	US \$8	
First Mining Gold Corp.	TSX:FF	US \$142	US \$10	US \$133	11.8	1.48	12.1	1.53	97%	-	-	-	-	-	-	11.8	1.48	12.1	1.53	97%	38%	US \$11	US \$11	
Gabriel Resources Ltd.	TSXV:GBU	US \$103	US \$19	US \$135	16.4	1.05	17.3	1.11	95%	8.1	1.46	8.6	1.55	95%	US \$17	8.3	0.83	8.7	0.87	95%	27%	US \$8	US \$8	
Gold Road Resources Limited	ASX:GOR	US \$431	US \$168	US \$262	3.3	1.07	3.4	1.12	96%	1.9	1.20	1.9	1.20	100%	US \$140	1.4	0.94	1.5	1.03	91%	67%	US \$81	US \$77	
Golden Queen Mining Co. Ltd.	TSX:GQM	US \$37	US \$(10)	US \$55	0.9	0.53	1.1	0.64	83%	0.5	0.66	0.6	0.80	83%	US \$112	0.4	0.43	0.5	0.52	83%	30%	US \$62	US \$51	
Goldquest Mining Corp.	TSXV:GQC	US \$30	US \$15	US \$16	2.2	2.60	3.4	4.00	65%	0.8	3.72	1.2	5.17	72%	US \$18	1.4	2.19	2.1	3.32	66%	16%	US \$7	US \$5	
Harte Gold Corp.	TSX:HRT	US \$186	US \$(9)	US \$233	1.5	7.40	1.5	7.40	100%	-	-	-	-	-	-	1.5	7.40	1.5	7.40	100%	52%	US \$58	US \$158	
Hummingbird Resources PLC	AIM:HUM	US \$120	US \$(0)	US \$163	5.6	1.56	5.6	1.56	100%	0.6	3.14	0.6	3.14	100%	US \$288	5.1	1.48	5.1	1.48	100%	48%	US \$29	US \$29	
IDM Mining Ltd.	TSXV:IDM	US \$23	US \$1	US \$21	0.8	7.72	0.8	7.98	97%	-	-	-	-	-	-	0.8	7.72	0.8	7.98	97%	8%	US \$28	US \$27	
International Tower Hill Mines Ltd.	TSXV:ITH	US \$87	US \$12	US \$75	12.6	0.68	12.6	0.68	100%	9.0	0.71	9.0	0.71	100%	US \$8	3.6	0.60	3.6	0.60	100%	31%	US \$6	US \$6	
INV Metals Inc.	TSXV:INV	US \$26	US \$8	US \$18	3.1	3.34	3.9	4.19	80%	1.9	4.98	2.2	5.77	86%	US \$9	1.2	2.23	1.7	3.12	72%	44%	US \$6	US \$5	
K92 Mining Inc.	TSXV:KNT	US \$125	US \$(0)	US \$127	2.2	9.59	2.9	12.56	76%	-	-	-	-	-	-	2.2	9.59	2.9	12.56	76%	77%	US \$57	US \$43	
KEFI Minerals Plc	AIM:KEFI	US \$15	US \$(5)	US \$21	0.4	3.56	0.4	3.56	100%	-	-	-	-	-	-	0.4	3.56	0.4	3.56	100%	92%	US \$53	US \$53	
Lumina Gold Corp.	TSXV:LUM	US \$148	US \$(5)	US \$143	12.5	0.64	16.1	0.82	78%	-	-	-	-	-	-	12.5	0.64	16.1	0.82	78%	90%	US \$11	US \$9	
Lundin Gold Inc.	TSX:LUG	US \$807	US \$377	US \$779	9.5	8.33	9.6	8.48	98%	4.9	9.16	4.9	9.16	100%	US \$158	4.5	7.58	4.5	7.58	100%	47%	US \$82	US \$81	
Lupaka Gold Corp.	TSXV:LPK	US \$17	US \$0	US \$16	0.5	4.20	0.7	5.72	73%	-	-	-	-	-	-	0.5	4.20	0.7	5.72	73%	19%	US \$34	US \$25	
Lydian International Limited	TSX:LYD	US \$120	US \$(35)	US \$379	4.8	0.69	5.1	0.73	94%	2.6	0.79	2.8	0.84	94%	US \$146	2.1	0.60	2.3	0.64	93%	60%	US \$80	US \$75	
Metals Exploration plc	AIM:MTL	US \$47	US \$(58)	US \$147	1.7	1.62	2.2	2.02	80%	0.9	1.86	1.1	2.21	84%	US \$164	0.8	1.43	1.1	1.86	77%	82%	US \$85	US \$68	
Midas Gold Corp.	TSX:MAX	US \$156	US \$(41)	US \$138	6.6	1.60	6.7	1.62	98%	-	-	-	-	-	-	6.6	1.60	6.7	1.62	98%	15%	US \$21	US \$21	
Minera Alamos Inc.	TSXV:MAI	US \$30	US \$2	US \$29	0.8	1.64	1.0	2.00	82%	-	-	-	-	-	-	0.8	1.64	1.0	2.00	82%	18%	US \$34	US \$28	
Monela Porcupine Mines Inc.	TSX:ME	US \$19	US \$(2)	US \$17	4.3	1.17	4.3	1.17	100%	-	-	-	-	-	-	4.3	1.17	4.3	1.17	100%	75%	US \$4	US \$4	
NovaGold Resources Inc.	TSX:NG	US \$1,277	US \$169	US \$1,203	28.7	0.96	45.1	1.50	64%	19.7	1.18	28.2	1.70	70%	US \$61	9.1	0.67	16.8	1.25	54%	58%	US \$42	US \$27	
Orcia Gold Inc.	TSXV:ORG	US \$71	US \$7	US \$64	2.7	1.28	2.7	1.30	98%	-	-	-	-	-	-	2.7	1.28	2.7	1.30	98%	20%	US \$24	US \$24	
Or ozone Gold Corporation	TSXV:ORE	US \$106	US \$39	US \$67	5.2	0.67	5.2	0.67	100%	1.0	0.64	1.0	0.64	100%	US \$65	4.2	0.68	4.2	0.68	100%	22%	US \$13	US \$13	
Orla Mining Ltd.	TSXV:OLA	US \$202	US \$20	US \$184	12.2	0.83	17.2	1.17	71%	0.5	0.77	0.5	0.83	93%	US \$378	11.7	0.84	16.7	1.19	70%	16%	US \$15	US \$11	
Red Eagle Mining Corporation	TSX:R	US \$29	US \$129	US \$(100)	0.6	3.35	0.6	3.35	100%	0.4	5.19	0.4	5.19	100%	US \$318	0.2	1.98	0.2	1.98	100%	64%	US \$211	US \$211	
RTG Mining Inc.	TSX:RTG	US \$37	US \$(27)	US \$10	0.4	1.64	0.9	3.78	44%	0.2	2.04	0.5	5.26	39%	US \$49	0.2	1.34	0.3	2.62	51%	84%	US \$26	US \$12	
Rubicon Minerals Corporation	TSX:RMX	US \$68	US \$12	US \$66	1.0	6.09	1.0	6.09	100%	-	-	-	-	-	-	1.0	6.09	1.0	6.09	100%	73%	US \$64	US \$64	
Sabrina Gold & Silver Corp.	TSX:SSB	US \$243	US \$(45)	US \$198	7.2	6.21	7.2	6.21	100%	2.5	6.30	2.5	6.30	100%	US \$79	4.7	6.16	4.7	6.16	100%	40%	US \$28	US \$28	
Sandspring Resources Ltd.	TSXV:SSP	US \$41	US \$(2)	US \$42	10.4	0.85	11.8	0.96	88%	4.1	1.00	4.6	1.13	89%	US \$10	6.3	0.77	7.1	0.87	88%	53%	US \$4	US \$4	
Seabridge Gold Inc.	TSX:SEA	US \$784	US \$(18)	US \$766	112.2	0.48	23.0	0.96	50%	45.3	0.61	73.0	0.99	62%	US \$17	66.9	0.42	149.9	0.94	45%	79%	US \$7	US \$3	
Sihayo Gold Limited	ASX:SIH	US \$18	US \$(2)</																					



## Gold Exploration-Stage Companies (Resource Only) - Enterprise Value per Ounce of Gold

Company	Symbol	Market Capitalization (millions)	Working Capital (millions)	Enterprise Value (millions)	Global Reserves & Resources						Reserves						Resources (M&I and Inferred)						Global	
					Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Inferred	EV/oz Au	EV/oz AuEq							
Alexandria Minerals Corporation	TSXV:AZX	US \$14	US \$(1)	US \$14	1.3	2.34	1.9	3.31	71%	-	-	-	-	-	-	1.3	2.34	1.9	3.31	71%	44%	US \$11	US \$8	
Rio2 Limited	TSXV:RIO	US \$59	US \$1	US \$58	5.9	0.37	5.9	0.37	100%	3.7	0.40	3.7	0.40	100%	-	2.1	0.33	2.1	0.33	100%	29%	US \$10	US \$10	
Aurion Resources Ltd.	TSXV:AU	US \$102	US \$13	US \$89	0.8	0.70	0.8	0.70	100%	0.0	5.20	0.0	5.20	100%	0.8	0.70	0.8	0.70	100%	-	US \$109	US \$109		
Auryn Resources Inc.	TSXV:AUG	US \$110	US \$4	US \$106	2.3	5.56	2.6	6.32	88%	-	-	-	-	-	-	2.3	5.56	2.6	6.32	88%	72%	US \$46	US \$40	
Balmoral Resources Ltd	TSX:BAR	US \$17	US \$5	US \$12	1.2	1.20	1.9	1.86	65%	-	-	-	-	-	-	1.2	1.20	1.9	1.86	65%	36%	US \$10	US \$6	
Calibre Mining Corp.	TSXV:CXB	US \$13	US \$1	US \$12	2.3	1.18	3.1	1.61	73%	-	-	-	-	-	-	2.3	1.18	3.1	1.61	73%	99%	US \$5	US \$4	
Cardinal Resources Limited	ASX:CDV	US \$120	US \$3	US \$115	7.0	1.13	7.0	1.13	100%	-	-	-	-	-	-	7.0	1.13	7.0	1.13	100%	7%	US \$16	US \$16	
Condor Gold Plc	AIM:CNR	US \$30	US \$2	US \$28	3.1	3.68	3.1	3.74	98%	0.7	3.04	0.7	3.11	98%	-	2.4	3.91	2.4	3.97	98%	55%	US \$9	US \$9	
Corvus Gold Inc.	TSX:KOR	US \$262	US \$2	US \$260	2.2	0.30	2.3	0.32	95%	-	-	-	-	-	-	2.2	0.30	2.3	0.32	95%	19%	US \$119	US \$113	
Eastmain Resources Inc.	TSX:ER	US \$28	US \$5	US \$23	1.7	6.59	1.7	6.65	99%	-	-	-	-	-	-	1.7	6.59	1.7	6.65	99%	37%	US \$13	US \$13	
Eco Oro Minerals Corp	CNSX:EOM	US \$17	US \$(16)	US \$29	3.5	4.38	3.7	4.60	95%	-	-	-	-	-	-	3.5	4.38	3.7	4.60	95%	37%	US \$8	US \$8	
GobiMin Inc.	TSXV:GMN	US \$13	US \$19	US \$(6)	2.9	1.50	2.9	1.50	100%	-	-	-	-	-	-	2.9	1.50	2.9	1.50	100%	63%	-	-	
Gold Standard Ventures Corp	TSX:GSV	US \$448	US \$24	US \$422	3.6	0.80	3.7	0.84	96%	-	-	-	-	-	-	3.6	0.80	3.7	0.84	96%	73%	US \$117	US \$113	
Golden Reign Resources Ltd.	TSXV:GRR	US \$27	US \$(1)	US \$27	0.9	7.81	1.0	7.97	98%	-	-	-	-	-	-	0.9	7.81	1.0	7.97	98%	84%	US \$28	US \$28	
Granada Gold Mine Inc.	TSXV:GGM	US \$6	US \$(3)	US \$7	5.0	1.23	5.1	1.24	99%	-	-	-	-	-	-	5.0	1.23	5.1	1.24	99%	69%	US \$1	US \$1	
Integra Resources Corp.	TSXV:ITR	US \$37	US \$0	US \$34	2.3	0.46	3.6	0.72	63%	-	-	-	-	-	-	2.3	0.46	3.6	0.72	63%	100%	US \$15	US \$9	
Karsbah Resources Limited	ASX:KAS	US \$7	US \$(1)	US \$7	0.2	0.55	1.7	4.18	13%	-	-	0.7	4.06	-	-	0.2	0.93	1.0	4.26	22%	-	US \$30	US \$4	
Liberty Gold Corp.	TSX:LGD	US \$61	US \$4	US \$64	1.6*	0.66	1.6	0.66	100%	-	-	-	-	-	-	1.6*	0.66	1.6	0.66	100%	24%	US \$41	US \$41	
Lincoln Mining Corporation	TSXV:LMG	US \$1	US \$(1)	US \$2	0.1	1.91	0.1	1.91	100%	-	-	-	-	-	-	0.1	1.91	0.1	1.91	100%	5%	US \$20	US \$20	
Lion One Metals Limited	TSXV:LIO	US \$42	US \$15	US \$27	0.7	0.09	14.5	1.87	5%	-	-	-	-	-	-	0.7	0.09	14.5	1.87	5%	60%	US \$36	US \$2	
Marathon Gold Corporation	TSX MOZ	US \$102	US \$2	US \$100	3.2	1.99	3.2	1.99	100%	-	-	-	-	-	-	3.2	1.99	3.2	1.99	100%	34%	US \$31	US \$31	
Monarques Gold Corporation	TSXV:MQR	US \$31	US \$9	US \$17	3.8	2.93	3.8	2.93	100%	0.2	6.70	0.2	6.70	100%	-	3.6	2.89	3.6	2.89	100%	16%	US \$5	US \$5	
New Pacific Metals Corp.	TSXV:NJAG	US \$158	US \$24	US \$133	0.5	6.12	0.6	7.23	85%	-	-	-	-	-	-	0.5	6.12	0.6	7.23	85%	45%	US \$261	US \$221	
Nighthawk Gold Corp.	TSX:NHK	US \$60	US \$14	US \$45	2.9	1.70	2.9	1.70	100%	-	-	-	-	-	-	2.9	1.70	2.9	1.70	100%	90%	US \$16	US \$16	
Northern Empire Resources Corp.	TSXV:NM	US \$68	US \$8	US \$59	1.0	1.26	1.0	1.26	100%	-	-	-	-	-	-	1.0	1.26	1.0	1.26	100%	3%	US \$62	US \$62	
Novo Resources Corp.	TSXV:NVO	US \$348	US \$47	US \$299	0.9	2.83	1.0	3.21	88%	-	-	-	-	-	-	0.9	2.83	1.0	3.21	88%	52%	US \$332	US \$292	
Orex Minerals Inc.	TSXV:REX	US \$11	US \$2	US \$9	0.1	0.33	0.6	2.92	11%	-	-	-	-	-	-	0.1	0.33	0.6	2.92	11%	47%	US \$146	US \$17	
Osisko Mining Inc.	TSX:OSK	US \$500	US \$49	US \$454	7.6	2.40	7.6	2.40	100%	-	-	-	-	-	-	7.6	2.40	7.6	2.40	100%	53%	US \$60	US \$60	
Osprey Gold Development Ltd.	TSXV:OS	US \$2	US \$1	US \$1	0.4	3.56	0.4	3.56	100%	-	-	-	-	-	-	0.4	3.56	0.4	3.56	100%	92%	US \$3	US \$3	
Puma Exploration Inc.	TSXV:PUMA	US \$9	US \$0	US \$9	0.0	0.27	0.8	4.97	5%	-	-	-	-	-	-	0.0	0.27	0.8	4.97	5%	12%	US \$219	US \$12	
Pure Gold Mining Inc.	TSXV:PGM	US \$99	US \$13	US \$84	2.0	8.57	2.0	8.57	100%	-	-	-	-	-	-	2.0	8.57	2.0	8.57	100%	15%	US \$41	US \$41	
Red Pine Exploration Inc.	TSXV:RPX	US \$10	US \$2	US \$8	0.7	1.75	0.7	1.75	100%	-	-	-	-	-	-	0.7	1.75	0.7	1.75	100%	96%	US \$12	US \$12	
Redstar Gold Corp.	TSXV:RGC	US \$7	US \$2	US \$5	0.5	2.94	0.7	3.77	78%	-	-	-	-	-	-	0.5	2.94	0.7	3.77	78%	7%	US \$9	US \$7	
Regulus Resources Inc.	TSXV:REG	US \$120	US \$(2)	US \$119	5.7	0.37	19.1	1.23	30%	-	-	-	-	-	-	5.7	0.37	19.1	1.23	30%	89%	US \$21	US \$6	
Reunion Gold Corporation	TSXV:RGD	US \$48	US \$9	US \$39	0.7	2.10	0.7	2.10	100%	-	-	-	-	-	-	0.7	2.10	0.7	2.10	100%	-	US \$56	US \$56	
Revival Gold Inc.	TSXV:RVG	US \$22	US \$5	US \$17	2.0	0.62	2.0	0.62	100%	-	-	-	-	-	-	2.0	0.62	2.0	0.62	100%	39%	US \$9	US \$9	
Rupert Resources Ltd.	TSXV:RUP	US \$85	US \$4	US \$86	1.1	2.16	1.1	2.16	100%	-	-	-	-	-	-	1.1	2.16	1.1	2.16	100%	83%	US \$80	US \$80	
Sarama Resources Ltd	TSXV:SWA	US \$9	US \$2	US \$7	1.1	1.75	1.1	1.75	100%	-	-	-	-	-	-	1.1	1.75	1.1	1.75	100%	78%	US \$6	US \$6	
SolGold plc	TSX:SOGL	US \$823	US \$54	US \$763	10.7	0.36	33.5	1.12	32%	-	-	-	-	-	-	10.7	0.36	33.5	1.12	32%	52%	US \$71	US \$23	
Spanish Mountain Gold Ltd.	TSXV:SPA	US \$12	US \$2	US \$10	8.0	0.33	8.2	0.34	98%	-	-	-	-	-	-	8.0	0.33	8.2	0.34	98%	51%	US \$1	US \$1	
Teras Resources Inc.	TSXV:TRA	US \$6	US \$0	US \$6	1.1	0.48	1.3	0.55	88%	-	-	-	-	-	-	1.1	0.48	1.3	0.55	88%	10%	US \$5	US \$4	
TrilMetals Mining Inc.	TSX:TM1	US \$12	US \$(1)	US \$14	1.9	0.07	16.3	0.63	12%	-	-	-	-	-	-	1.9	0.07	16.3	0.63	12%	40%	US \$7	US \$1	
Vendetta Mining Corp.	TSXV:VTT	US \$22	US \$1	US \$21	-	-	1.8	4.64	-	-	-	-	-	-	-	-	-	1.0	2.69	-	-	US \$12	US \$12	
West Kirkland Mining Inc.	TSXV:WKM	US \$16	US \$0	US \$16	0.8	0.46	0.9	0.54	84%	0.6	0.58	0.7	0.68	86%	0.2	0.30	0.3	0.37	81%	45%	US \$20	US \$17		
<b>Group Average - Total</b>		# Companies: 44																				<b>US \$50</b>	<b>US \$35</b>	

Equivalency assumptions (US\$ / 10-05-18): \$1,203/oz Au, \$14.64/oz Ag, \$823/oz Pt, \$1,071/oz Pd, \$2.80/lb Cu, \$1.21/lb Zn, \$0.90/lb Pb, \$5.69/lb Ni, \$11.29/lb Mo, \$25.74/lb Co, \$0/lb Sb, \$27.50/lb U3O8, \$8.60/lb Sn, \$93.00/lb HCC, \$69.24/lb Fe

Source: SNL Financial retrieved on October 5, 2018

\*Includes only Liberty's Goldstrike and Kinsley Mountain Projects



## Silver – Enterprise Value per Ounce of Silver

Company	Symbol	Market	Working	Enterprise	Global Reserves & Resources						Reserves				Resources (M&I and Inferred)						Global		
		Capitalization (millions)	Capital (millions)	Value (millions)	Ag (Moz)	Ag (g/t)	AgEq (Moz)	AgEq (g/t)	% Ag	Ag (Moz)	Ag (g/t)	AgEq (Moz)	AgEq (g/t)	% Ag	EV/oz Ag	Ag (Moz)	Ag (g/t)	AgEq (Moz)	AgEq (g/t)	% Ag	EV/oz Ag	EV/oz AgEq	
Alexco Resource Corp.	TSX:AXR	US \$112	US \$16	US \$96	86	357	158	654	54%	-	-	-	-	-	-	86	357	158	654	54%	21%	US \$1.11	US \$0.61
Americas Silver Corporation	TSX:USA	US \$93	US \$12	US \$89	136	151	354	392	38%	28	164	78	451	36%	US \$3.16	108	148	276	378	39%	37%	US \$0.66	US \$0.25
Arizona Mining Inc.	TSX:AZ	US \$1,498	US \$33	US \$1,466	507	83	2,501	409	20%	-	-	-	-	-	-	507	83	2,501	409	20%	30%	US \$2.89	US \$0.59
Athena Silver Corporation	OTCPK:AHNR	US \$1	US \$(3)	US \$4	43	67	43	67	100%	-	-	-	-	-	-	43	67	43	67	100%	-	US \$0.09	US \$0.09
Aurcana Corporation	TSXV:AUN	US \$19	US \$2	US \$17	18	290	18	290	100%	-	-	-	-	-	-	18	290	18	290	100%	37%	US \$0.95	US \$0.95
Bear Creek Mining Corporation	TSXV:BCM	US \$105	US \$44	US \$62	496	42	1,139	97	44%	288	51	662	117	44%	US \$0.21	208	34	477	78	44%	33%	US \$0.12	US \$0.05
Coeur Mining, Inc.	NYSE:CDE	US \$1,099	US \$173	US \$1,346	673	26	1,435	56	47%	165	18	407	43	40%	US \$8.18	509	31	1,029	63	49%	21%	US \$2.00	US \$0.94
Defiance Silver Corp.	TSXV:DEF	US \$20	US \$(1)	US \$21	17	182	18	193	94%	-	-	-	-	-	-	17	182	18	193	94%	100%	US \$1.25	US \$1.18
Dolly Varden Silver Corporation	TSXV:DV	US \$16	US \$3	US \$13	43	333	43	333	100%	-	-	-	-	-	-	43	333	43	333	100%	25%	US \$0.32	US \$0.32
Endeavour Silver Corp.	TSX:EDR	US \$299	US \$59	US \$240	156	193	270	333	58%	33	198	59	351	56%	US \$7.17	123	192	210	329	58%	70%	US \$1.54	US \$0.89
First Majestic Silver Corp.	TSX:FR	US \$1,106	US \$141	US \$1,114	401	161	744	299	54%	133	180	226	307	59%	US \$8.40	263	153	506	293	52%	77%	US \$2.78	US \$1.50
Fortuna Silver Mines Inc.	TSX:FVI	US \$688	US \$203	US \$525	90	15	508	87	18%	45	15	267	88	17%	US \$11.71	46	16	241	86	19%	87%	US \$5.81	US \$1.03
Golden Minerals Company	AMEX:AUMN	US \$21	US \$2	US \$19	68	372	98	538	69%	-	-	-	-	-	-	68	372	98	538	69%	8%	US \$0.27	US \$0.19
Hecla Mining Company	NYSE:HL	US \$1,383	US \$247	US \$1,684	751	68	2,599	235	29%	177	221	592	740	30%	US \$9.52	574	56	2,007	195	29%	78%	US \$2.24	US \$0.65
Investigator Resources Limited	ASX:IVR	US \$6	US \$2	US \$4	42	140	49	165	85%	-	-	-	-	-	-	42	140	49	165	85%	45%	US \$0.09	US \$0.07
Kootenay Silver Inc	TSXV:KTN	US \$18	US \$3	US \$15	76	62	124	102	61%	-	-	-	-	-	-	76	62	124	102	61%	19%	US \$0.20	US \$0.12
MacPhersons Resources Limited	ASX:MRP	US \$21	US \$2	US \$19	20	22	87	95	23%	8	178	17	358	50%	US \$2.33	12	14	71	81	17%	29%	US \$0.95	US \$0.22
MAG Silver Corp.	TSX:MAG	US \$663	US \$152	US \$511	170	70	694	285	25%	-	-	-	-	-	-	170	70	694	285	25%	55%	US \$3.00	US \$0.74
Mandalay Resources Corporation	TSX:MND	US \$47	US \$(16)	US \$81	63	31	311	152	20%	8	19	71	172	11%	US \$10.34	56	39	239	168	23%	19%	US \$1.27	US \$0.26
Minco Silver Corporation	TSX:MSV	US \$26	US \$36	US \$(11)	162	158	268	262	61%	50	189	64	241	78%	-	112	148	204	269	55%	52%	-	-
Mineworx Technologies Ltd.	TSXV:MWX	US \$42	US \$3	US \$39	22	9	412	164	5%	-	-	-	-	-	-	22	9	412	164	5%	-	US \$1.73	US \$0.09
Pan American Silver Corp.	TSX:PAAS	US \$2,233	US \$463	US \$1,800	1,446	91	2,255	142	64%	291	93	503	161	58%	US \$6.18	1,157	90	1,758	137	66%	24%	US \$1.24	US \$0.80
Silver Bear Resources Plc	TSX:SBR	US \$91	US \$17	US \$185	60	704	61	710	99%	22	809	22	809	100%	US \$8.29	38	655	39	664	99%	63%	US \$3.06	US \$3.03
Silver Bull Resources, Inc.	OTCPK:SVBL	US \$23	US \$3	US \$20	27	48	155	272	18%	-	-	-	-	-	-	27	48	155	272	18%	0%	US \$0.75	US \$0.13
SilverCrest Metals Inc.	TSXV:SIL	US \$194	US \$13	US \$181	38	257	71	486	53%	-	-	-	-	-	-	38	257	71	486	53%	90%	US \$4.80	US \$2.54
Silvercorp Metals Inc.	TSX:SVM	US \$397	US \$94	US \$307	213	121	591	338	36%	84	202	181	437	46%	US \$3.65	129	96	410	307	31%	66%	US \$1.45	US \$0.52
<b>Group Average - Total</b>		# Companies: 25														<b>US \$6.86</b>				<b>US \$1.63</b>		<b>US \$0.72</b>	

Equivalency assumptions (US\$ / 10-05-18): \$1,203/oz Au, \$14.64/oz Ag, \$823/oz Pt, \$1,071/oz Pd, \$2.80/lb Cu, \$1.21/lb Zn, \$0.90/lb Pb, \$5.69/lb Ni, \$11.29/lb Mo, \$25.74/lb Co, \$0/lb Sb, \$27.50/lb U3O8, \$8.60/lb Sn, \$93.00/lb HCC, \$69.24/lb 62% Fe

Source: SNL Financial retrieved on October 5, 2018



## Comparables Tables – Base Metals

## Base Metal Companies - Market and Valuation Statistics (Consensus Estimates)

As of October 5, 2018 Company	Symbol	Price	1-Day %	7-Day %	YTD (%)	Shares O/S (millions)	Market Capitalization (US\$ millions)	Cash (US\$ millions)	Working Capital (US\$ millions)	Debt (US\$millions)	Enterprise Value (US\$millions)	2017 CFPS	2018E CFPS	2019E CFPS	P/CF Ratio 2018E	P/CF Ratio 2019E	EV/CF Ratio 2018E	EV/CF Ratio 2019E	EV/EBITDA Ratio 2018E	EV/EBITDA Ratio 2019E	P / NAV
<b>Large-Cap Base Metals Producers</b>																					
ANGLO AMERICAN PLC	LSE:AAL	GBp 1669.2	(4.2)	(3.1)	7.7	1292	\$28,249	\$7,800	\$7,382	\$11,971	\$37,296	\$6.02	\$5.14	\$5.25	4.3x	4.2x	5.6x	5.5x	4.3x	4.4x	-
ANTOFAGASTA PLC	LSE:ANTO	GBp 827	(5.4)	(3.3)	(17.7)	986	\$10,676	\$1,084	\$2,068	\$2,709	\$13,419	\$2.23	\$1.49	\$1.80	7.3x	6.0x	9.2x	7.6x	5.7x	4.8x	-
BHP BILLITON LIMITED	ASX:BHP	AUD 35.5	0.3	2.5	20.1	3212	\$125,632	\$15,871	\$21,141	\$26,805	\$141,682	\$3.47	\$3.36	\$3.31	7.4x	7.6x	13.1x	13.3x	5.8x	6.3x	-
FIRST QUANTUM MINERALS LTD	TSX:FM	CAD 14.6	(2.1)	(0.7)	(17.1)	689	\$7,778	\$1,296	\$1,121	\$6,871	\$14,751	\$1.34	\$2.44	\$2.53	4.6x	4.5x	8.8x	8.5x	8.2x	6.1x	-
FREEPORT-MCMORAN INC	NYSE:FCX	USD 13.27	(2.6)	(4.7)	(30.0)	1449	\$19,228	\$4,447	\$5,741	\$13,117	\$29,864	\$3.24	\$3.48	\$2.20	3.8x	6.0x	5.9x	9.4x	4.1x	6.4x	-
GLENCORE PLC	LSE:GLEN	GBp 325	(2.4)	(2.0)	(12.9)	14180	\$60,343	\$2,124	\$5,312	\$33,934	\$91,651	\$0.41	\$0.89	\$0.88	4.8x	4.8x	7.3x	7.4x	5.2x	5.2x	-
KGHM POLSKA MIEDZ SA	WSE:KGH	PLN 86.88	(1.9)	(2.5)	(21.9)	200	\$4,640	\$169	\$618	\$2,060	\$6,731	\$3.85	\$4.75	\$6.83	5.0x	3.5x	7.1x	4.9x	4.7x	4.4x	0.9x
RIO TINTO PLC	LSE:RIO	GBp 3744.5	(4.0)	(3.5)	(5.0)	1296	\$86,777	\$10,550	\$7,823	\$15,176	\$98,790	\$7.77	\$7.07	\$7.50	6.9x	6.5x	10.8x	10.2x	5.6x	6.0x	-
TECK RESOURCES LTD-CLS B	TSX:TCB	CAD 31.1	2.1	(0.1)	(5.4)	567	\$13,809	\$760	\$1,706	\$5,084	\$17,690	\$6.15	\$6.25	\$6.11	3.8x	3.9x	5.0x	5.1x	3.9x	4.4x	-
TUROUQISE HILL RESOURCES LTD	TSX:TRO	CAD 2.61	(2.6)	(5.1)	(39.2)	2012	\$4,059	\$1,445	\$2,662	\$4,159	\$5,897	\$0.06	\$0.12	\$0.10	16.7x	19.6x	24.2x	28.4x	13.2x	12.6x	-
VALE SA-SP ADR	NYSE:VALE	USD 15.01	(0.6)	1.1	22.7	5284	\$79,320	\$4,323	\$5,840	\$22,460	\$91,772	-	\$2.19	\$2.34	6.6x	6.2x	7.9x	7.4x	5.7x	5.8x	1.9x
BOLIDEN AB	SSE:BOL	SEK 247.75	(1.9)	(0.1)	(10.1)	274	\$7,465	\$307	\$728	\$653	\$7,983	\$5.46	\$4.86	\$4.71	5.7x	5.9x	5.9x	6.1x	5.0x	5.3x	1.7x
SOUTHERN COPPER CORP	NYSE:SCCO	USD 42.27	(0.9)	(2.0)	(10.9)	773	\$32,677	\$1,005	\$2,002	\$5,957	\$37,595	\$2.56	\$3.09	\$3.35	13.7x	12.6x	15.7x	14.5x	9.7x	8.6x	-
Group Average - Large-Cap Producers																					1.4x
Group Average - Large-Cap Producers (excluding high/low)																					-
<b>Mid Tier Base Metals Producers</b>																					-
HUDBAY MINERALS INC	TSX:HBM	CAD 5.95	(3.7)	(9.0)	(46.5)	261	\$1,201	\$356	\$251	\$1,064	\$1,818	\$2.00	\$1.63	\$1.66	2.8x	2.8x	4.3x	4.2x	3.2x	3.3x	-
MANHOLE MINES LTD-CL A	TSX:VN	CAD 2.94	0.0	6.9	(30.7)	1010	\$2,295	\$181	\$179	\$32	\$2,165	(\$0.05)	(\$0.03)	(\$0.01)	-	-	-	-	-	-	-
KAZ MINERALS PLC	LSE:KAZ	GBp 526	(4.6)	(4.3)	(41.2)	448	\$3,086	\$1,821	\$1,400	\$3,877	\$5,145	\$1.72	\$1.58	\$1.65	4.4x	4.2x	7.3x	7.0x	4.2x	4.1x	-
LUNDIN MINING CORP	TSX:LUN	CAD 6.34	(2.8)	(3.3)	(24.2)	732	\$3,586	\$1,567	\$1,708	\$450	\$2,959	\$1.15	\$0.75	\$0.83	6.5x	5.9x	5.4x	4.8x	4.1x	3.8x	-
MMG LTD	SEHK:1208	HKD 3.63	(8.1)	(5.5)	(6.4)	8051	\$3,730	\$936	\$194	\$9,193	\$13,028	\$0.25	\$0.21	\$0.25	2.2x	1.9x	7.6x	6.6x	5.9x	5.4x	-
OZ MINERALS LTD	ASX:OZL	AUD 9.44	(2.2)	1.2	3.1	323	\$2,148	\$570	\$720	\$0	\$1,814	\$0.88	\$0.71	\$0.86	9.5x	7.9x	7.9x	6.5x	5.2x	5.5x	-
VEDANTA RESOURCES PLC	LSE:VED	GBp 832.6	#N/A	N/A	0.0	3.5	\$3,104	\$1,281	(\$2,457)	\$15,194	\$19,556	\$5.97	\$9.98	\$15.37	1.1x	0.7x	6.9x	4.5x	5.0x	4.1x	-
Group Average - Mid Tier Producers																					-
Group Average - Mid Tier Producers (excluding high/low)																					-
<b>Small Cap Base Metals Producers</b>																					-
AMERIGO RESOURCES LTD	TSX:ARG	CAD 0.82	2.5	6.5	(25.5)	177	\$112	\$28	(\$5)	\$63	\$156	\$0.19	\$0.14	-	4.5x	-	6.3x	-	-	-	-
ATALAYA MINING PLC	TSX:AYM	CAD 4.25	0.0	3.7	68.7	137	\$451	\$52	\$27	\$0	\$395	-	\$0.40	\$0.59	8.4x	5.6x	7.3x	4.9x	6.7x	5.1x	-
CAPSTONE MINING CORP	TSX:CS	CDN 0.75	0.0	(5.1)	(47.9)	399	\$232	\$116	\$189	\$271	\$511	\$0.26	\$0.30	\$0.30	1.9x	1.9x	4.2x	4.3x	3.3x	3.1x	-
COPPER MOUNTAIN MINING CORP	TSX:CCMC	CAD 1.16	0.9	(1.7)	(24.2)	188	\$169	\$36	\$6	\$245	\$399	\$0.26	\$0.35	\$0.36	2.6x	2.5x	6.1x	5.9x	6.0x	4.8x	-
IMPERIAL METALS CORP	TSX:III	CAD 1.76	(1.1)	(10.7)	(47.9)	121	\$164	\$41	(\$190)	\$713	\$844	\$0.21	\$0.25	\$0.54	5.5x	2.5x	28.2x	13.0x	13.1x	8.1x	-
WESTERN AREAS LTD	AU:WSA	AUD 2.75	(2.5)	3.4	(15.1)	273	\$530	\$112	\$119	\$1	\$419	\$0.22	\$0.21	\$0.30	9.6x	6.5x	7.3x	5.1x	7.1x	5.0x	-
SHERRITT INTERNATIONAL CORP	TSX:S	CAD 0.78	(1.3)	(1.3)	(54.7)	397	\$239	\$148	\$268	\$658	\$615	(\$0.04)	\$0.06	\$0.13	10.8x	4.7x	27.6x	12.1x	4.0x	3.4x	-
NEVJUN RESOURCES LTD	TSX:NJSU	CAD 5.77	(0.2)	0.7	88.6	303	\$1,349	\$125	\$162	\$0	\$1,362	(\$0.07)	\$0.25	\$0.28	18.1x	15.9x	18.2x	16.0x	13.3x	12.2x	-
TASEKO MINES LTD	TSX:TKO	CAD 1.02	1.0	(0.0)	(65.3)	228	\$180	\$64	\$67	\$263	\$406	\$0.57	\$0.27	\$0.37	2.9x	2.1x	6.5x	4.8x	5.4x	3.9x	-
TREVALI MINING CORP	TSX:TV	CAD 0.73	(2.7)	0.0	(52.0)	831	\$469	\$94	\$144	\$161	\$516	\$0.21	\$0.24	\$0.23	2.3x	2.5x	2.6x	2.7x	2.0x	2.0x	-
Group Average - Small Cap Producers																					-
Group Average - Small Cap Producers (excluding high/low)																					-

C\$/US\$ FX Rate: \$1.30

Source: Bloomberg and Haywood Securities



## Copper Non-Producers – Enterprise Value per Pound of Copper Equivalent

Company	Symbol	Price	Shares O/S (million)	Market Capitalization (million)	Working Capital (million)	LTD Value (million)	Enterprise Value (million)	Primary / Secondary Metal	Copper Ratio*** (% Contained)	Reserves & Resources* - Attributable Reserve (CuEq** Mlb)	R&R (Total) (CuEq** Mlb)	EV/lb CuEq** (US\$) Reserve	EV/lb CuEq** (US\$) Total
Abacus Mining & Exploration Corporation	TSXV:AME	C\$ 0.16	43.4	US\$ 5	US\$ 0.1	US\$ 11.5	US\$ 17	Cu / Au	70%	763	953	\$0.022	\$0.017
Candente Copper Corp.	TSX:DNT	C\$ 0.07	180.6	US\$ 9	US\$ (1.0)	US\$ 0.0	US\$ 10	Cu / Au	89%	-	12,547	-	\$0.001
Copper Fox Metals Inc.	TSXV:CUU	C\$ 0.10	449.0	US\$ 35	US\$ 1.2	US\$ 0.0	US\$ 33	Cu / Au	70%	2,307	5,478	\$0.015	\$0.006
Coro Mining Corp.	TSX:COP	C\$ 0.06	1455.4	US\$ 68	US\$ (17.8)	US\$ 0.9	US\$ 86	Cu / -	100%	-	590	-	\$0.146
Excelsior Mining Corp.	TSX:MIN	C\$ 1.00	207.7	US\$ 161	US\$ 21.7	US\$ 0.0	US\$ 139	Cu / -	100%	5,128	8,016	\$0.027	\$0.017
Filo Mining Corp.	TSXV:FIL	C\$ 2.25	72.5	US\$ 126	US\$ 5.7	US\$ 0.0	US\$ 120	Cu / Au	53%	-	7,913	-	\$0.015
Foran Mining Corporation	TSXV:FOM	C\$ 0.30	134.3	US\$ 31	US\$ 4.5	US\$ 0.0	US\$ 27	Cu / Zn	44%	-	1,842	-	\$0.014
Getty Copper Inc.	TSXV:GTC	C\$ 0.04	108.4	US\$ 3	US\$ (0.6)	US\$ 0.8	US\$ 5	Cu / Mo	98%	776	1,216	\$0.006	\$0.004
Highland Copper Company Inc.	TSXV:HI	C\$ 0.12	472.9	US\$ 44	US\$ (1.2)	US\$ 6.4	US\$ 52	Cu / Ag	99%	1,680	4,490	\$0.031	\$0.011
Indico Resources Ltd.	TSXV:IDI	C\$ 0.02	147.0	US\$ 2	US\$ (4.2)	US\$ 0.0	US\$ 6	Cu / -	100%	-	122	-	\$0.048
Los Andes Copper Ltd.	TSXV:LA	C\$ 0.27	271.7	US\$ 57	US\$ 5.5	US\$ 0.0	US\$ 51	Cu / Mo	93%	-	11,818	-	\$0.004
Nevada Copper Corp.	TSX:NCU	C\$ 0.52	661.9	US\$ 266	US\$ 29.3	US\$ 99.5	US\$ 336	Cu / Au	91%	5,529	7,742	\$0.061	\$0.043
NGEx Resources Inc.	TSX:NGQ	C\$ 1.00	227.6	US\$ 176	US\$ 4.0	US\$ 0.0	US\$ 172	Cu / Au	76%	-	26,471	-	\$0.006
Northern Dynasty Minerals Ltd.	TSX:NDM	C\$ 0.70	312.7	US\$ 169	US\$ 24.8	US\$ 0.0	US\$ 144	Cu / Au	57%	-	142,498	-	\$0.001
NorthIsle Copper and Gold Inc.	TSXV:NCX	C\$ 0.11	117.2	US\$ 10	US\$ 0.3	US\$ 0.0	US\$ 10	Cu / Au	53%	-	4,633	-	\$0.002
Osisko Metals Incorporated	TSXV:OM	C\$ 0.65	126.3	US\$ 63	US\$ 17.4	US\$ 0.0	US\$ 46	Zn / Pb	3%	-	146	-	\$0.316
Panoro Minerals Ltd.	TSXV:PML	C\$ 0.28	263.8	US\$ 57	US\$ (2.2)	US\$ 2.0	US\$ 61	Cu / Au	77%	-	10,306	-	\$0.006
Philippine Metals Inc.	TSXV:PHI	C\$ 0.08	16.4	US\$ 1	US\$ (0.2)	US\$ 0.0	US\$ 1	Cu / -	100%	-	331	-	\$0.004
PolyMet Mining Corp.	TSX:POM	C\$ 1.20	320.7	US\$ 297	US\$ (167.3)	US\$ 0.0	US\$ 465	Cu / Ni	46%	3,415	10,789	\$0.136	\$0.043
Quaterra Resources Inc.	TSXV:QTA	C\$ 0.06	201.0	US\$ 9	US\$ (0.5)	US\$ 0.0	US\$ 9	Cu / -	100%	-	3,894	-	\$0.002
Regulus Resources Inc.	TSXV:REG	C\$ 1.72	89.9	US\$ 120	US\$ (2.4)	US\$ 0.0	US\$ 122	Cu / Au	51%	-	8,308	-	\$0.015
Serengeli Resources Inc.	TSXV:SIR	C\$ 0.14	90.8	US\$ 10	US\$ 0.2	US\$ 0.0	US\$ 10	Cu / Au	63%	-	1,311	-	\$0.007
St. Augustine Gold and Copper Limited	TSX:SAU	C\$ 0.02	726.8	US\$ 11	US\$ (4.0)	US\$ 0.0	US\$ 15	Cu / Au	56%	4,437	6,842	\$0.003	\$0.002
Trilogy Metals Inc.	AMEX:TMQ	C\$ 2.51	131.5	US\$ 255	US\$ 6.4	US\$ 0.0	US\$ 249	Cu / Zn	77%	-	5,776	-	\$0.043
Western Copper and Gold Corporation	TSX:WRN	C\$ 0.89	100.8	US\$ 69	US\$ 4.1	US\$ 0.0	US\$ 65	Cu / Au	57%	8,232	17,606	\$0.008	\$0.004
<b>Group Average - Total</b>												\$0.034	\$0.031

\*All reserve and resource data sourced from SNL, additional data sourced from Capital IQ.

\*\*CuEq = copper equivalent. Calculated based on Haywood's formal long-term metal price forecasts.

\*\*\*Copper Ratio = value of in situ copper / total value of in situ metals.



## Nickel Non-Producers – Enterprise Value per Pound of Nickel Equivalent

Company	Symbol	Price	Shares O/S (million)	Market Capitalization (million)	Working Capital (million)	LTD Value (million)	Enterprise Value (million)	Primary / Secondary Metal	Nickel Ratio*** (% Contained)	Reserves & Resources* - Attributable Reserve (NiEq** Mlb)	R&R (Total) (NiEq** Mlb)	EV/lb NiEq** (US\$) Reserve	EV/lb NiEq** (US\$) Total
Asian Mineral Resources Limited	TSXV:ASN	C\$ 0.80	4.0	US\$ 2	US\$ (8.3)	US\$ 0.4	US\$ 11	Ni / Cu	76%	92	92	\$0.122	\$0.122
CaNickel Mining Limited	TSXV:CML	C\$ 0.10	37.5	US\$ 3	US\$ (77.9)	US\$ 0.0	US\$ 81	Ni / -	100%	83	397	\$0.978	\$0.203
FPX Nickel Corp.	TSXV:FPX	C\$ 0.09	146.0	US\$ 10	US\$ 1.3	US\$ 5.6	US\$ 14	Ni / -	100%	-	5,569	-	\$0.003
Giga Metals Corporation	TSXV:GIGA	C\$ 0.20	42.3	US\$ 7	US\$ 2.6	US\$ 0.0	US\$ 4	Ni / Co	85%	-	6,890	-	\$0.001
Gossan Resources Limited	TSXV:GSS	C\$ 0.07	33.6	US\$ 2	US\$ 0.1	US\$ 0.0	US\$ 2	Ni / Cu	54%	-	73	-	\$0.024
Hannan Metals Ltd.	TSXV:HAN	C\$ 0.19	47.7	US\$ 7	US\$ 0.1	US\$ 0.2	US\$ 7	Ni / Cu	78%	-	2,539	-	\$0.003
Nautilus Minerals Inc.	TSX:NUIS	C\$ 0.09	683.0	US\$ 45	US\$ (48.6)	US\$ 0.0	US\$ 93	Ni / Cu	52%	-	41,741	-	\$0.002
New Era Minerals Inc.	TSXV:NEM	C\$ 0.05	89.2	US\$ 3	US\$ (1.4)	US\$ 0.0	US\$ 4	Ni / -	100%	-	454	-	\$0.010
Pure Nickel Inc.	TSXV:NIC	C\$ 0.01	68.1	US\$ 1	US\$ (0.3)	US\$ 0.0	US\$ 1	Ni / Cu	59%	-	173	-	\$0.005
RNC Minerals	TSX:RNX	C\$ 0.80	377.8	US\$ 234	US\$ (25.5)	US\$ 0.3	US\$ 259	Ni / Co	87%	3,855	7,143	\$0.067	\$0.036
Sama Resources Inc.	TSXV:SME	C\$ 0.31	188.4	US\$ 45	US\$ 6.5	US\$ 0.0	US\$ 39	Ni / Cu	49%	-	286	-	\$0.135
Strongbow Exploration Inc.	TSXV:SBW	C\$ 0.13	86.6	US\$ 8	US\$ 2.7	US\$ 4.3	US\$ 10	Ni / Sn	53%	-	678	-	\$0.015
<b>Group Average - Total</b>												<b>\$0.389</b>	<b>\$0.046</b>

\*All reserve and resource data sourced from SNL, additional data sourced from Capital IQ.

\*\*NiEq = nickel equivalent. Calculated based on Haywood's formal long-term metal price forecasts.

\*\*\*Nickel Ratio = value of in situ nickel / total value of in situ metals.

## Zinc Non-Producers – Enterprise Value per Pound of Zinc Equivalent

Company	Symbol	Price	Shares O/S (million)	Market Capitalization (million)	Working Capital (million)	LTD Value (million)	Enterprise Value (million)	Primary / Secondary Metal	Zinc Ratio*** (% Contained)	Reserves & Resources* - Attributable Reserve (ZnEq** Mlb)	R&R (Total) (ZnEq** Mlb)	EV/lb ZnEq** (US\$) Reserve	EV/lb ZnEq** (US\$) Total
Ascendant Resources Inc.	TSX:ASND	C\$ 0.76	76.6	US\$ 45	US\$ 9.0	US\$ 0.0	US\$ 36	Zn / Pb	72%	320	1,405	\$0.113	\$0.026
Commander Resources Ltd.	TSXV:CMD	C\$ 0.14	35.3	US\$ 4	US\$ 3.4	US\$ 0.0	US\$ 0	Zn / Cu	56%	-	25	-	\$0.011
EI Nino Ventures Inc.	TSXV:ELN	C\$ 0.05	61.6	US\$ 2	US\$ 1.3	US\$ 0.0	US\$ 1	Zn / Cu	60%	-	530	-	\$0.002
Firestone Ventures Inc.	TSXV:FV	C\$ 0.08	53.7	US\$ 3	US\$ (0.2)	US\$ 0.0	US\$ 3	Zn / Pb	77%	-	428	-	\$0.008
Fireweed Zinc Ltd.	TSXV:FWZ	C\$ 1.10	34.6	US\$ 29	US\$ 6.1	US\$ 0.0	US\$ 23	Zn / Pb	65%	-	6,988	-	\$0.003
InZinc Mining Ltd.	TSXV:IZN	C\$ 0.06	108.9	US\$ 5	US\$ 1.2	US\$ 0.0	US\$ 4	Zn / Cu	71%	-	4,098	-	\$0.001
Karmin Exploration Inc.	TSXV:KAR	C\$ 0.70	77.0	US\$ 42	US\$ (1.7)	US\$ 0.0	US\$ 43	Zn / Pb	54%	-	2,430	-	\$0.018
Osisko Metals Incorporated	TSXV:OM	C\$ 0.65	126.3	US\$ 63	US\$ 17.4	US\$ 0.0	US\$ 46	Zn / Pb	71%	-	301	-	\$0.153
Rathdowney Resources Ltd.	TSXV:RTH	C\$ 0.11	161.7	US\$ 13	US\$ (3.4)	US\$ 0.0	US\$ 16	Zn / Pb	83%	-	3,590	-	\$0.005
ScoZinc Mining Ltd.	TSXV:SZM	C\$ 0.79	5.3	US\$ 3	US\$ 0.2	US\$ 0.0	US\$ 3	Zn / Pb	68%	-	1,485	-	\$0.002
Titan Mining Corporation	TSX:TI	C\$ 1.19	102.0	US\$ 94	US\$ 1.3	US\$ 0.0	US\$ 92	Zn / -	100%	-	1,182	-	\$0.078
Trevali Mining Corporation	TSX:TV	C\$ 0.73	831.2	US\$ 469	US\$ 159.8	US\$ 94.7	US\$ 404	Zn / Pb	69%	1,667	14,479	\$0.242	\$0.028
Wolfden Resources Corporation	TSXV:WLF	C\$ 0.31	114.1	US\$ 27	US\$ 1.4	US\$ 0.0	US\$ 26	Zn / Au	37%	-	3,242	-	\$0.008
<b>Group Average - Total</b>												<b>\$0.177</b>	<b>\$0.026</b>

\*All reserve and resource data sourced from SNL, additional data sourced from Capital IQ.

\*\*ZnEq = Zinc equivalent. Calculated based on Haywood's formal long-term metal price forecasts.

\*\*\*Zinc Ratio = value of in situ zinc / total value of in situ metals.



## Comparables Tables – Other (Uranium, Lithium, Diamond, Cobalt, Coal, Iron)

### Uranium Comparables - Consensus Estimates

	Consensus Targets				In-Situ Comps - EVlb U308			NAV Comps			Cash Flow Comps						Earnings Comps								
	Company (Ticker)	Share Price	IBES Consensus	Implied Return	Shares Outst.	Market Capitalization (millions)	Value (USD) & Resources (millions)	Total Reserves (M lb)	USD EVlb Resource	IBES Consensus	Price / NAV	2017	2018	2019	2017	2018	2019	EPS (LoC)	2017	2018	2019	P/EPS			
PRODUCERS	Haywood Covered Names bold	\$15.66	\$16.40	5%	396	\$6,198	\$5,299	1,046	\$5.07	\$14.94	1.05x	\$1.25	\$1.32	\$0.74	12.5x	11.8x	21.1x	\$0.04	\$0.21	\$0.05	427.1x	76.1x	319.6x		
	Cameco Corporation (CCO-T)	\$3.34	\$4.13	24%	89	\$297.7	\$281.4	131.6	\$2.14	\$4.10	0.82x	(\$0.10)	(\$0.09)	(\$0.12)				(\$0.23)	(\$0.15)	(\$0.23)					
	Energy Fuels (UUUU-US)	\$1.55	\$3.30	113%	176	\$272.9	\$279.9	112.4	\$2.49	\$3.23	0.48x	(\$0.08)	(\$0.10)	(\$0.03)				(\$0.10)	(\$0.10)	(\$0.03)					
	Ur-Energy Inc. (URE-T)	\$1.00	\$1.17	17%	159	\$159.1	\$132.7	41.9	\$3.17	\$1.25	0.80x	\$0.06	\$0.02	\$0.05	16.7x	50.0x	18.8x	\$0.02	\$0.01		44.4x	133.3x			
	Peninsula Energy (PEN-AU)	\$0.27	\$0.79	192%	234	\$63.1	\$47.7	87.1	\$0.55	\$0.59	0.46x	(\$0.02)	(\$0.01)	\$0.01				(\$0.03)	(\$0.05)	(\$0.01)					
	Energy Resources (ERA-AU)	\$0.37			518	\$189.0	(\$138.5)	436.6		\$0.49	0.74x	(\$0.02)	(\$0.01)	\$0.01				(\$0.05)	(\$0.06)	(\$0.06)					
Group Average - Producers									\$2.68		0.72x							14.6x	30.9x	23.9x			235.7x 104.7x 319.6x		
DEVELOPERS	NexGen Energy (NXE-T)	\$2.89	\$5.33	84%	347	\$1,003	\$792.5	302.1	\$2.62	\$5.50	0.53x	(\$0.02)	(\$0.04)	(\$0.06)				(\$0.05)	(\$0.08)	(\$0.07)					
	Denison Mines (DML-T)	\$0.85	\$1.17	37%	559	\$475.3	\$344.5	177.7	\$1.94	\$1.24	0.69x	\$0.02	(\$0.03)	(\$0.02)				37.8x	(\$0.03)	(\$0.03)	(\$0.02)				
	Fission Uranium (FCU-T)	\$0.73	\$2.10	188%	486	\$354.7	\$251.4	140.6	\$1.79	\$1.33	0.55x	(\$0.02)	(\$0.01)	(\$0.01)				(\$0.02)	(\$0.01)	(\$0.01)					
	Berkeley Energia (BKY-AU)	\$0.59	\$1.18	101%	258	\$152.5	\$85.5	89.4	\$0.96	\$1.10	0.54x	(\$0.06)	(\$0.09)	(\$0.04)				(\$0.05)	\$0.03	(\$0.05)			18.7x		
	GovEx Uranium (GXU-V)	\$0.23			395	\$90.9	\$65.3	229.4	\$0.28																
	Plateau Energy (PLU-V)	\$1.12	\$2.85	154%	72	\$80.2	\$60.3	123.4	\$0.49	\$3.83	0.29x														
Group Average - Developers					348	\$73.1	\$51.3	86.4	\$0.59	\$0.60	0.35x													18.7x	
EXPLORERS	Toro Energy (TOE-AU)	\$0.03			2,161	\$69.2	\$57.0	63.7	\$0.89																
	Deep Yellow (DYL-AU)	\$0.53			195	\$102.3	\$64.7	126.5	\$0.51																
	Bannerman Resources (BMN-AU)	\$0.05			1,031	\$55.7	\$33.2	257.2	\$0.13																
	Laramide Resources (LAM-T)	\$0.47	\$0.60	29%	132	\$61.6	\$52.4	129.3	\$0.40																
	Azarga Uranium (AZZ-T)	\$0.29	\$0.31	7%	170	\$48.3	\$39.5	47.8	\$0.83	\$0.34	0.83x	(\$0.03)	(\$0.02)												
	Summit Resources (SMM-AU)	\$0.20			218	\$43.6	\$30.5	84.3	\$0.36																
Group Average - Developers					157	\$45.5	\$34.4	127.0	\$0.27																
EXPLORERS	Forsys Metals (FSY-T)	\$0.29			26	\$84.7	\$65.7	99.2	\$0.66																
	Western Uranium (WUC-L)	\$3.27			872	\$56.7	\$39.3	190.6	\$0.21																
	A-Cap Resources (ACB-AU)	\$0.07			416	\$39.5	\$23.1	116.0	\$0.20	\$0.42	0.23x	(\$0.02)	(\$0.02)	(\$0.01)				(\$0.02)	(\$0.02)	(\$0.01)					
	Miny Resources (MYV-AU)	\$0.10	\$0.39	311%	210	\$32.5	\$9.8	57.1	\$0.17																
	Energy Metals (EME-AU)	\$0.16			20	\$6.5	\$5.2	47.7	\$0.11																
	U308 Corp. (UVE-T)	\$0.32							\$0.71		0.50x														
Group Average - Explorers									\$1.31																
INVENTORY FUNDS					32	\$88.1	\$67.3																		
Yellow Cake (YCA-LN)					309	\$41.8	\$31.8	17.0	\$1.87																
Uranium Participation (U-T)					107	\$44.9	\$33.2	111.0	\$0.30																
All data sourced from S&P Capital IQ, SNL Financial, Bloomberg					62	\$34.9	\$26.2	7.0	\$3.77																
					44	\$17.6	\$13.4	22.0	\$0.61																
					55	\$24.8	\$16.6	8.2	\$2.02																
					53	\$16.9	\$10.3																		
					110	\$21.4	\$14.4	19.1	\$0.75																
					205	\$15.4	\$11.4																		
					25	\$10.4	\$7.2	43.5	\$0.16																
					49	\$11.7	\$7.3																		
					114	\$11.4	\$7.9	56.4	\$0.14																
					66	\$6.0	\$4.9	46.0	\$0.11																
					31	\$11.5	\$7.6																		
					94	\$4.2	\$3.2																		
					119	\$18.5	\$13.9																		
					99	\$4.4	\$3.2																		
					48	\$4.8	\$2.8																		
					32	\$4.0	\$3.0																		
					86	\$4.3	\$2.8	0.6	\$4.48																
					329	\$13.2	\$6.0	30.9	\$0.19																
					42	\$1.1	\$0.8																		
					63	\$1.3	\$0.9																		
					14	\$1.6	\$1.2																		



## Coal Comparables – Consensus Estimates

Company (Ticker)	Bloomberg	Consensus	Implied	Shares Outstanding	Market Capitalization (millions)	Daily Volume (millions)	Weekly Liquidity	WACC	Debt (millions)	Enterprise Value (millions)	CFPS (LoC)			P/CFPS			P/EPS						
	Share Price										2018	2019	2020	2018	2019	2020	2018	2019	2020				
<b>Large Cap USA</b>																							
CNX RESOURCES (CNX-US)	US\$ 14.01	US\$ 20.01	42.9%	1.07	213	US\$ 2,984	2.3	7.3%	8.4%	US\$ 2,214	US\$ 6,014	3.50	3.94	4.85	4.0x	3.6x	2.9x	16.2x	19.0x	15.3x			
FORESIGHT ENERGY (FELP-US)	US\$ 3.93	US\$ 4.00	1.8%	0.49	81	US\$ 572	0.0	0.0%	6.0%	US\$ 1,315	US\$ 1,805	1.12	1.34		0.8x	0.7x		1.0x	0.9x				
CORSACOA (CSO-V)	C\$ 1.20	C\$ 2.50	108.3%	0.89	95	C\$ 114	0.0	0.0%	8.7%	C\$ 36	C\$ 163												
WALTER ENERGY (WLT-US)	US\$ 0.01			40.92	81	US\$ 0	0.0	0.1%	273.1%	US\$ 3,136	US\$- 182												
CLOUD PEAK (CLD-US)	US\$ 2.45	US\$ 2.58	5.7%	0.61	76	US\$ 185	0.5	2.7%	5.6%	US\$ 410	US\$ 500	0.47		0.53	5.2x		4.6x		7.2x	6.6x	7.9x		
<b>Group Average - Large Cap USA</b>													Avg. ->		2.9x	2.2x	3.4x	8.8x	11.3x	18.4x	5.6x	5.8x	6.0x
<b>Limited Partnerships</b>																							
ALLIANCE RESOURCE (ARLP-US)	US\$ 20.86	US\$ 26.50	27.0%	0.92	131	US\$ 2,740	0.4	1.9%	8.6%	US\$ 574	US\$ 3,215							6.9x	8.5x	9.1x	4.8x	5.0x	5.1x
NATURAL RESOURCE (NRP-US)	US\$ 32.93	US\$ 33.00	0.2%	1.33	12	US\$ 403	0.0	2.2%	6.3%	US\$ 809	US\$ 1,396							6.3x	6.7x	6.6x	6.2x	6.6x	6.6x
<b>Group Average - Limited Partnerships</b>													Avg. ->					6.6x	7.6x	7.9x	5.5x	5.8x	5.9x
<b>Large Cap Non-North America</b>																							
NEW HOPE (NHC-AU)	A\$ 3.99	A\$ 3.62	(9.4)%	0.91	831	A\$ 3,317	0.9	1.1%	8.5%		A\$ 3,052	0.59	0.44	0.38	6.8x	9.2x	10.5x	8.2x	12.1x	20.6x	4.3x	5.7x	8.5x
WHITE HAVEN COAL (WHC-AU)	A\$ 5.66	A\$ 5.54	(2.1)%	0.94	1,026	A\$ 5,807	7.3	3.4%	8.3%	A\$ 382	A\$ 6,078	0.97	0.59	0.59	5.8x	9.5x	9.7x	8.7x	14.0x	15.3x	5.4x	8.1x	8.6x
BANPU PUBLIC (BANPU-SET)	B 18.90	B 26.15	38.4%	1.31	5,162	B 97,560	53.1	5.2%	5.9%	B 126,066	B 233,427	3.46	3.84	3.26	5.5x	4.9x	5.8x	8.0x	8.2x	9.0x	8.5x	8.6x	9.4x
CHINA COAL (1898-HK)	HK\$ 3.46	HK\$ 4.24	22.5%	1.18	4,107	HK\$ 69,342	8.0	1.1%	6.3%	HK\$ 96,534	HK\$ 157,445	1.01	1.34	1.30	3.0x	2.3x	2.3x	7.8x	8.4x	7.9x	7.5x	7.8x	7.5x
CHINA SHENHUA (1088-HK)	HK\$ 17.44	HK\$ 22.86	31.1%	1.31	3,399	HK\$ 442,912	19.7	1.6%	12.1%	HK\$ 95,198	HK\$ 469,088	3.88	4.06	4.09	3.9x	3.8x	3.7x	6.7x	6.9x	6.8x	4.7x	4.8x	4.7x
NINE ENTERTAINMENT (NEC-AU)	A\$ 2.27	A\$ 2.31	1.7%	1.11	871	A\$ 1,978	5.2	2.5%	9.3%	A\$ 158	A\$ 2,099	0.24	0.25	0.23	9.6x	9.1x	9.9x	11.0x	11.6x	12.8x	7.0x	7.3x	7.9x
YANZHOU COAL (1171-HK)	HK\$ 8.92	HK\$ 11.27	26.4%	1.84	1,952	HK\$ 56,317	17.7	2.0%	8.8%	HK\$ 70,361	HK\$ 124,686	2.86	2.85	2.70	2.7x	2.7x	2.9x	4.6x	5.2x	5.2x	6.5x	7.1x	7.2x
<b>Group Average - Large Cap Non-North America</b>													Avg. ->		5.3x	5.9x	6.4x	7.8x	9.5x	11.1x	6.1x	7.0x	7.7x
<b>Developer/Explorers</b>																							
FORTUNE MINERALS (FT-T)	C\$ 0.11	C\$ 0.40	263.6%	0.76	339	C\$ 37.2	0.6	1.0%	8.8%	C\$ 6	C\$ 39												
JAMESON RESOURCES (JAL-AU)	A\$ 0.19			1.62	264	A\$ 50.1	0.1	0.0%	13.0%	A\$ 0	A\$ 48												
<b>Group Average - Developers / Explorers</b>													Avg. ->										
<b>Sundry Companies</b>																							
ADARO ENERGY (ADRO-JKSE)	¥ 1,810	¥ 2,578	42.4%	1.15	31,986	¥ 57,894,591	55.9	0.6%	9.5%	¥ 1,377	¥ 4,627	0.03	0.03	0.03	4.4x	4.2x	4.4x	7.9x	7.4x	7.4x	3.5x	3.4x	3.4x
NLC INDIA (NEYELILIG-NSEI)	₹ 72.20			0.84	1,529	₹ 110,363	0.3	0.2%	10.0%	₹ 115,109	₹ 228,643												
SOUTH GOBI RESOURCES (SGQ-T)	C\$ 0.12		(1.11)	273	C\$ 33	0.0	0.0%	4.5%	C\$ 124	C\$ 161													
BUKIT ASAM (PTBA-JKSE)	¥ 4,740	¥ 4,844	2.2%	1.10	11,521	¥ 54,607,925	38.3	1.7%	10.1%	¥ 973,503	¥ 50,621,164	525.09	506.62	492.55	9.0x	9.4x	9.6x	10.2x	9.8x	10.0x	6.7x	6.4x	6.7x
<b>Group Average - Sundry Companies</b>													Avg. ->		6.7x	6.8x	7.0x	6.8x	6.5x	6.4x	4.6x	4.5x	4.7x

All data sourced from Bloomberg



## Iron Comparables - Consensus Estimates

Company (Ticker)	Bloomberg				Shares Outstanding (millions)	Market Capitalization (millions)	Daily Volume (millions)	Enterprise Value (millions)	CFPS (LoC)			P/CFPS			P/EPS			EV/EBITDA						
	Consensus Share Price	Target	Implied Return	β					Weekly Liquidity	WACC	Debt (millions)	2018	2019	2020	2018	2019	2020	2018	2019	2020				
<b>Diversified Mining Houses</b>																								
VALE SA (VALE3-BZ)	R\$ 57.73	R\$ 65.63	13.7%	0.77	5,284	R\$ 305,020	15.7	1.6%	14.3%	R\$ 74,392	R\$ 353,128	8.79	9.40	9.04	6.6x	6.1x	6.4x	10.7x	10.0x	9.8x	5.7x	5.8x	5.9x	
BHP BILLITON (BHP-AU)	A\$ 35.50	A\$ 34.96	(1.5)%	1.16	3,212	A\$ 178,276	8.2	1.1%	8.7%	A\$ 26,805	A\$ 141,664	4.59	4.68	4.49	7.7x	7.6x	7.9x	15.2x	14.3x	15.6x	5.8x	6.3x	6.6x	
RIO TINTO (RIO-AU)	A\$ 80.06	A\$ 82.00	2.4%	1.03	412	A\$ 123,304	2.4	2.1%	8.5%	A\$ 15,176	A\$ 100,940	10.00	10.60	11.16	8.0x	7.6x	7.2x	11.5x	12.7x	13.3x	5.7x	6.1x	6.3x	
<b>Group Average - Diversified Mining</b>															<b>Avg. -&gt;</b>	<b>7.4x</b>	<b>7.1x</b>	<b>7.2x</b>	<b>12.5x</b>	<b>12.3x</b>	<b>12.9x</b>	<b>5.7x</b>	<b>6.1x</b>	<b>6.3x</b>
<b>Producers</b>																								
KUMBA IRON (KIO-SJE)	ZAR 30,764	ZAR 23,575	(23.4)%	0.98	322	ZAR 99,087	0.4	0.6%	11.7%	ZAR 0	ZAR 97,710	3665	3852	4226	8.4x	8.0x	7.3x	13.5x	13.9x	13.9x	5.9x	6.2x	5.9x	
FORTESCUE METALS (FMG-AU)	A\$ 3.77	A\$ 4.59	21.9%	0.99	3,114	A\$ 11,739	17.6	3.0%	7.2%	A\$ 4,038	A\$ 11,463	0.72	0.95	0.97	5.2x	4.0x	3.9x	8.4x	9.4x	9.6x	3.5x	4.1x	4.0x	
CLEVELAND CLIFFS INC (CLF-US)	US\$ 12.30	US\$ 11.92	(3.1)%	1.69	298	US\$ 3,666	11.5	13.5%	10.3%	US\$ 2,352	US\$ 5,169	2.19	2.17	2.11	5.6x	5.7x	5.8x	6.2x	7.8x	9.7x	6.5x	7.3x	8.3x	
MMX MINERACAO (MMXM3-BRZ)	R\$ 2.23		0.55	6		R\$ 14	0.0	0.3%	11.8%	R\$ 142	R\$ 183													
FERREXPO PLC (FXPO-LSE)	GBp 217	GBp 218.35	0.5%	1.47	589	GBp 1,279	2.9	2.8%	8.1%	GBp 501	GBp 2,047	50.94	43.27	32.51	4.3x	5.0x	6.7x	5.4x	5.9x	7.5x	4.3x	5.2x	7.2x	
MOUNT GIBSON (MGX-AU)	A\$ 0.47	A\$ 0.39	(15.1)%	1.00	1,100	A\$ 511	1.1	0.5%	9.1%	A\$ 0	A\$ 54										17.9x	24.5x		
GRANGE RESOURCES (GRR-AU)	A\$ 0.23		1.28	1,157	A\$ 260	1.6	0.6%	10.7%	A\$ 5	A\$ 69														
BCI MINERALS (BCI-AU)	A\$ 0.13		1.16	398	A\$ 52	0.3	0.2%	10.1%	A\$ 0	A\$ 39														
<b>Group Average - Producers</b>															<b>Avg. -&gt;</b>	<b>5.9x</b>	<b>5.7x</b>	<b>5.9x</b>	<b>10.3x</b>	<b>12.3x</b>	<b>10.2x</b>	<b>5.1x</b>	<b>5.7x</b>	<b>6.3x</b>
<b>Advanced Development / Exploration (Select Group)</b>																								
SUNDANCE RESOURCES (SDL-AU)	A\$ 0.01		1.57	8,313	A\$ 45.7	6.9	0.0%	6.1%	A\$ 100	A\$ 122														
NEW MILLENNIUM (NML-T)	C\$ 0.06		1.37	181	C\$ 10.0	0.1	0.4%	15.3%	C\$ 0	C\$(4)														
ZANAGAIRON (ZIOC-LSE)	GBp 14		0.74	283	GBp 38.2	1.4	1.6%	10.1%	GBp 0	GBp 47														
CENTURY GLOBAL (CNT-T)	C\$ 0.20		99	C\$ 19.7	0.0	0.0%	11.9%	C\$ 0	C\$ 13															
CHAMPION IRON (CIA-T)	C\$ 1.18		1.19	419	C\$ 494.8	0.3	0.2%	10.8%	C\$ 60	C\$ 479														
BLACK IRON (BKI-T)	C\$ 0.09		2.26	160	C\$ 13.6	0.1	0.3%	23.5%	C\$ 0	C\$ 8														
OCEANIC IRON (FEQ-T)	C\$ 0.05		1.20	68	C\$ 3.4	0.1	0.2%	11.8%	C\$ 1	C\$ 4														
MACARTHUR MINERALS (MMS-T)	C\$ 0.03		2.57	242	C\$ 6.1	0.3	0.7%	8.5%	C\$ 0	C\$ 6														
<b>Group Average - Developers / Explorers</b>															<b>Avg. -&gt;</b>									

All data sourced from Bloomberg



## Performance of Companies from the last Junior Exploration Report

Company Junior Exploration Names	Ticker	Close Price (C\$)	Market Capitalization (C\$M)	Cash as of Sept. Junior X Report (C\$M)	Weekly Performance	QTD Performance	QTD Performance vs. TSXV Index
Ascot Resources Ltd.	TSXV:AOT	0.83	128.88	14.17	(8.8)%	(29.1)%	(24.1)%
Aurion Resources Ltd.	TSXV:AU	1.90	131.83	19.00	11.8%	111.1%	116.1%
Chakana Copper Corp.	TSXV:PERU	0.51	41.11	11.00	12.1%	(10.5)%	(5.5)%
Evrilm Resources Corp.	TSXV:EVM	1.49	125.55	15.60	4.9%	36.7%	41.7%
Fireweed Zinc Ltd.	TSXV:FWZ	1.10	38.01	3.00	2.8%	(21.4)%	(16.4)%
Juggernaut Exploration Ltd.	TSXV:JUGR	0.31	26.03	2.80	29.2%	(18.4)%	(13.4)%
Kutcho Copper Corp.	TSXV:KC	0.33	18.46	13.24	6.5%	(23.3)%	(18.3)%
Oklo Resources Limited	ASX:OKU	0.27	93.47	17.10	0.0%	(11.7)%	(6.7)%
Osisko Metals Incorporated	TSXV:OM	0.65	82.08	30.00	4.8%	12.1%	17.1%
Pan Global Resources Inc.	TSXV:PGZ	0.20	18.86	3.40	2.6%	(16.7)%	(11.7)%
Reunion Gold Corporation	TSXV:RGD	0.20	63.98	8.00	2.6%	25.0%	30.0%
Sable Resources Ltd.	TSXV:SAE	0.24	30.38	2.80	6.8%	(16.1)%	(11.1)%
Skeena Resources Limited	TSXV:SKE	0.47	47.18	2.52	2.2%	20.5%	25.5%

## Other Companies in the News

No other news for the week

Source: Haywood Securities



## Key Catalysts for Companies Featured in the Last Junior Exploration Report

Company Junior Exploration Names	Ticker	Catalysts
Ascot Resources Ltd.	TSXV:AOT	<ul style="list-style-type: none"><li>Following Q1/18's NI 43-101 resource, drilling is underway for a follow up resource estimate with additional targets between Premier and Big Missouri planned</li><li>Engineering studies underway</li></ul>
Aurion Resources Ltd.	TSXV:AU	<ul style="list-style-type: none"><li>15,000 metre drill program to commence H2/18</li></ul>
Chakana Copper Corp.	TSXV:PERU	<ul style="list-style-type: none"><li>Results from Phase 2 - 20,000 metre drill program – ongoing</li><li>Awaiting approval of Semi-detailed Environmental Impact Study that will allow an additional 160 platforms throughout the original Condor option area – H2/18</li><li>Initial mineral resource estimate – Q1/19</li></ul>
Evrin Resources Corp.	TSXV:EVM	<ul style="list-style-type: none"><li>Phase 3 Mapping, trenching, soil and rock chip sampling, and ground geophysics work at Cuale – Q3/18</li><li>Receipt of drilling permits – Q4/18 (mid-October)</li><li>3,000 metre (~20 hole) drilling program – Q4/18</li></ul>
Fireweed Zinc Ltd.	TSXV:FWZ	<ul style="list-style-type: none"><li>In 2019, the company plans to advance the district potential and de-risk the project with more drilling. Key targets include Jason South zone and the End Zone area. Gravity surveys will also be undertaken.</li></ul>
Juggernaut Exploration Ltd.	TSXV:JUGR	<ul style="list-style-type: none"><li>Results from inaugural drill program started on Midas at the 2.1 by 1.6 km King Solomon Gold Zone- ongoing</li><li>Results from inaugural drill program started on Empire Property- ongoing</li><li>Results from an ongoing, extensive, systematic sampling program, which includes grab, chip, and channel samples - ongoing</li></ul>
Kutcho Copper Corp.	TSXV:KC	<ul style="list-style-type: none"><li>Results from 12,000 metre expansion drill program at Kutcho-anticipated completion mid-October 2018</li><li>Delivery of feasibility study anticipated Q2-Q3 2019</li><li>Construction decision estimated Q1-Q3 2021</li></ul>
Oklo Resources Limited	ASX:OKU	<ul style="list-style-type: none"><li>Phase 2 results and follow-up AC, DD and RC drilling program at Seko – Q3/18</li><li>Dandoko Gold Corridor metallurgical test work, AC, RC and DD drilling – H2/18</li><li>South and West Mali regional targets geochemistry, auger and AC drilling program – H2/18</li></ul>
Osisko Metals Incorporated	TSXV:OM	<ul style="list-style-type: none"><li>Updated open-pit resource for Pine Point - H2 2018</li><li>Economic study on Pine Point - mid-2019</li></ul>
Pan Global Resources Inc.	TSXV:PGZ	<ul style="list-style-type: none"><li>Results from Phase 1 ~14 drill holes (3,000 m) testing Cu and Pb-Zn-Ag targets- Started late Q2</li><li>Phase 2 follow-up drilling Q3-Q4 2018</li></ul>
Reunion Gold Corporation	TSXV:RGD	<ul style="list-style-type: none"><li>Boulanger drill program to follow up on historically drilled mineralization – H2/18</li><li>Start of drilling and geophysics at Dorlin – Q3/18</li><li>Start of drilling at Waiamu – Q3/18</li><li>Dorlin resource update– end of Q3/18</li></ul>
Sable Resources Ltd.	TSXV:SAE	<ul style="list-style-type: none"><li>Results from further drilling of 12 hole program at Margarita Project- ongoing</li><li>Results from drilling at its Don Julio project in Argentina - Q4/18</li></ul>
Skeena Resources Limited	TSXV:SKE	<ul style="list-style-type: none"><li>Maiden resource estimate for Eskay Creek -Sept. 2018</li><li>Maiden resource estimate for Snip -Q1/19</li><li>Results from 5,000 metres of surface drilling at Eskay Creek- ongoing</li></ul>

Source: Haywood Securities



## Dissemination of Research

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We, Mick Carew, Geordie Mark, Colin Healey, Pierre Vaillancourt, and Kerry Smith, hereby certify that the views expressed in this report (which includes the rating assigned to the issuer's shares as well as the analytical substance and tone of the report) accurately reflect my/our personal views about the subject securities and the issuer. No part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendations.

## Important Disclosures

Of the companies included in the report the following Important Disclosures apply:

	Ticker	Company	1	2	3	4	5	6	7	8
	TSX:AGI	Alamos Gold Inc.			X					
	TSX:AKG	Asanko Gold Inc.			X					
	TSXV:AGB	Atlantic Gold Corp.			X					
	TSX:BTO	B2Gold Corp.	X		X					
	TSXV:BGM	Barkerville Gold Mines Ltd.			X	X				
	TSX:ABX	Barrick Gold Corporation			X					
	TSXV:BSR	Bluestone Resources Inc.	X	X	X			X		
	TSX:CS	Capstone Mining Corp.			X					
	TSXV:KBLT	Cobalt 27 Capital Corp.	X			X	X			
	TSX:CMMC	Copper Mountain Mining Corp.			X		X	X		
	TSX:DML	Denison Mines Corp.			X			X		
	TSX:DGC	Detour Gold Corporation	X		X					
	TSX:ELD	Eldorado Gold Corporation	X		X					
	TSX:EDV	Endeavour Mining Corp.	X		X					
	TSX:EFR	Energy Fuels Inc.			X					



	TSXV:EQX	Equinox Gold Corp.	X	X	X	X			X	
	TSXV:FPC	Falco Resources Ltd.			X					
	TSXV:FIL	Filo Mining Corp.			X	X	X			
	TSXV:FWZ	Fireweed Zinc Ltd.	X	X	X	X				
	TSXV:GQC	GoldQuest Mining Corp.	X							
	ASX:GOR	Gold Road Resources Limited			X					
	TSX:HRT	Harte Gold Corp.				X	X			
	TSX:HBM	Hudbay Minerals, Inc.			X					
	TSXV:KC	Kutcho Copper Corp.		X		X				
	TSX:LGD	Liberty Gold Corp.	X		X	X				
	TSX:LUC	Lucara Diamond Corp.		X	X					
	TSXV:LUM	Lumina Gold Corp.		X	X	X	X			
	TSX:LUG	Lundin Gold Inc.			X					
	TSX:LUN	Lundin Mining Corporation			X					
	TSX:MOZ	Marathon Gold Corp.	X		X	X				
	TSX:MAX	Midas Gold Corp.		X	X					
	TSX:MPVD	Mountain Province Diamonds Inc.	X	X	X					
	TSX:NXE	NexGen Energy Ltd.	X		X			X		
	TSX:NCU	Nevada Copper Corp.			X	X				
	TSX:NSU	Nevsun Resources Ltd.			X					
	TSX:NHK	Nighthawk Gold Corp.	X		X					
	TSX:OGC	OceanaGold Corporation			X					
	TSX:OR	Osisko Gold Royalties Ltd.			X	X				
	TSX:OSK	Osisko Mining Corp.			X	X				
	TSXV:PLU	Plateau Energy Metals Inc.		X	X		X	X		
	TSXV:PGM	Pure Gold Mining Inc.	X	X	X	X				
	TSXV:ROG	Roxgold Inc.	X		X					
	TSX:RNX	RNC Minerals			X			X		
	TSX:SBB	Sabina Gold and Silver Corp.			X					
	TSXV:SGI	Superior Gold Inc.								
	TSX:SMF	SEMAFO Inc.			X					
	TSX:STGO	Steppe Gold Ltd.		X	X	X				
	TSX:THO	Tahoe Resources Inc.			X					
	TSX:TML	Treasury Metals Inc.			X	X				
	TSX:TV	Trevali Mining Corp.	X		X					
	TSXV:TLG	Troilus Gold Corp.			X	X				
	AMEX:UEC	Uranium Energy Corp.			X	X				
	TSX:U	Uranium Participation Corporation	X			X				
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## Recommendation Rating

**BUY** – The analyst believes that the security will outperform other companies in their sector on a risk adjusted basis or for the reasons stated in the research report the analyst believes that the security is deserving of a (continued) BUY rating.

**HOLD** – The analyst believes that the security is expected to perform in line with other companies in their sector on a risk adjusted basis or for the reasons stated in the research report the analyst believes that the security is deserving of a (continued) HOLD rating.

**SELL** – Investors are advised to sell the security or hold alternative securities within the sector. Stocks in this category are expected to under-perform other companies on a risk adjusted basis or for the reasons stated in the research report the analyst believes that the security is deserving of a (continued) SELL rating.

**TENDER** – The analyst is recommending that investors tender to a specific offering for the company's stock.

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## Overall Risk Rating

**Very High Risk:** Venture type companies or more established micro, small, mid or large cap companies whose risk profile parameters and/or lack of liquidity warrant such a designation. These companies are only appropriate for investors who have a very high tolerance for risk and volatility and who are capable of incurring temporary or permanent loss of a very significant portion of their investment capital.

**High Risk:** Typically micro or small cap companies which have an above average investment risk relative to more established or mid to large cap companies. These companies will generally not form part of the broad senior stock market indices and often will have less liquidity than more established mid and large cap companies. These companies are only appropriate for investors who have a high tolerance for risk and volatility and who are capable of incurring a temporary or permanent loss of a significant loss of their investment capital.



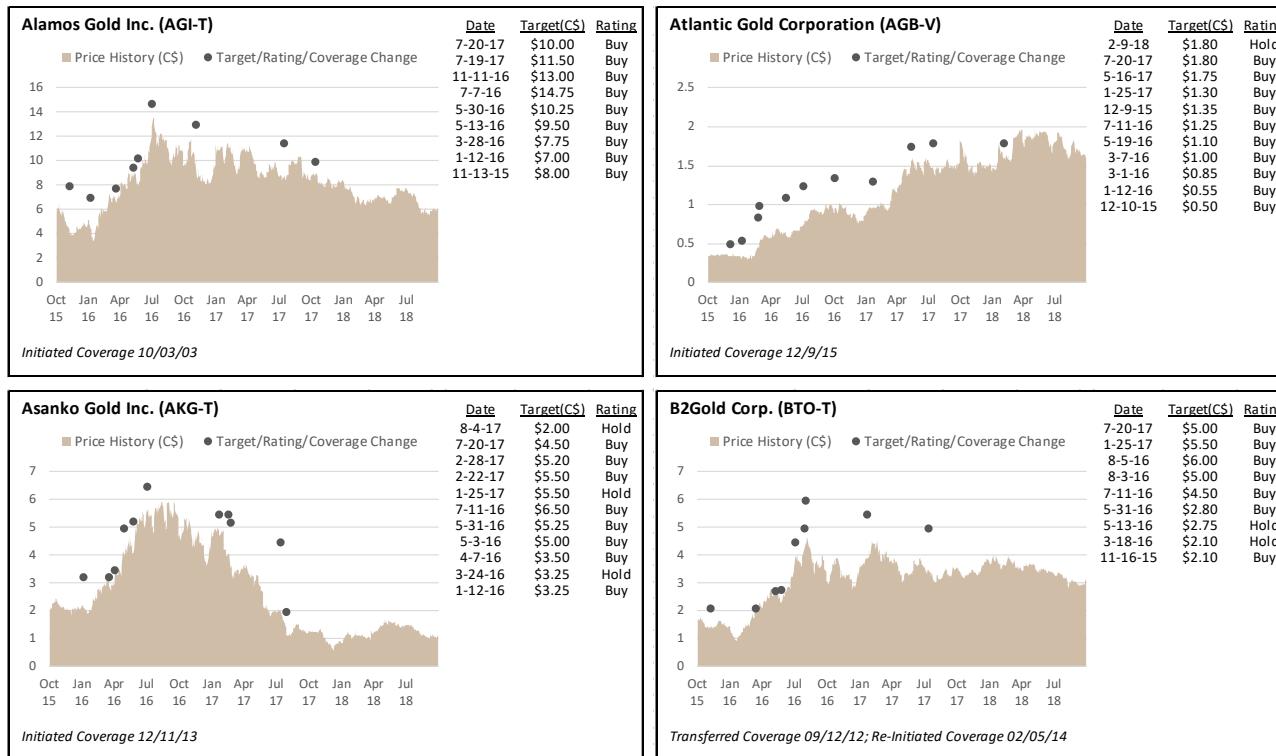
**Medium-High Risk:** Typically mid to large cap companies that have a medium to high investment risk. These companies will often form part of the broader senior stock market indices or sector specific indices. These companies are only appropriate for investors who have a medium to high tolerance for risk and volatility and who are prepared to accept general stock market risk including the risk of a temporary or permanent loss of some of their investment capital.

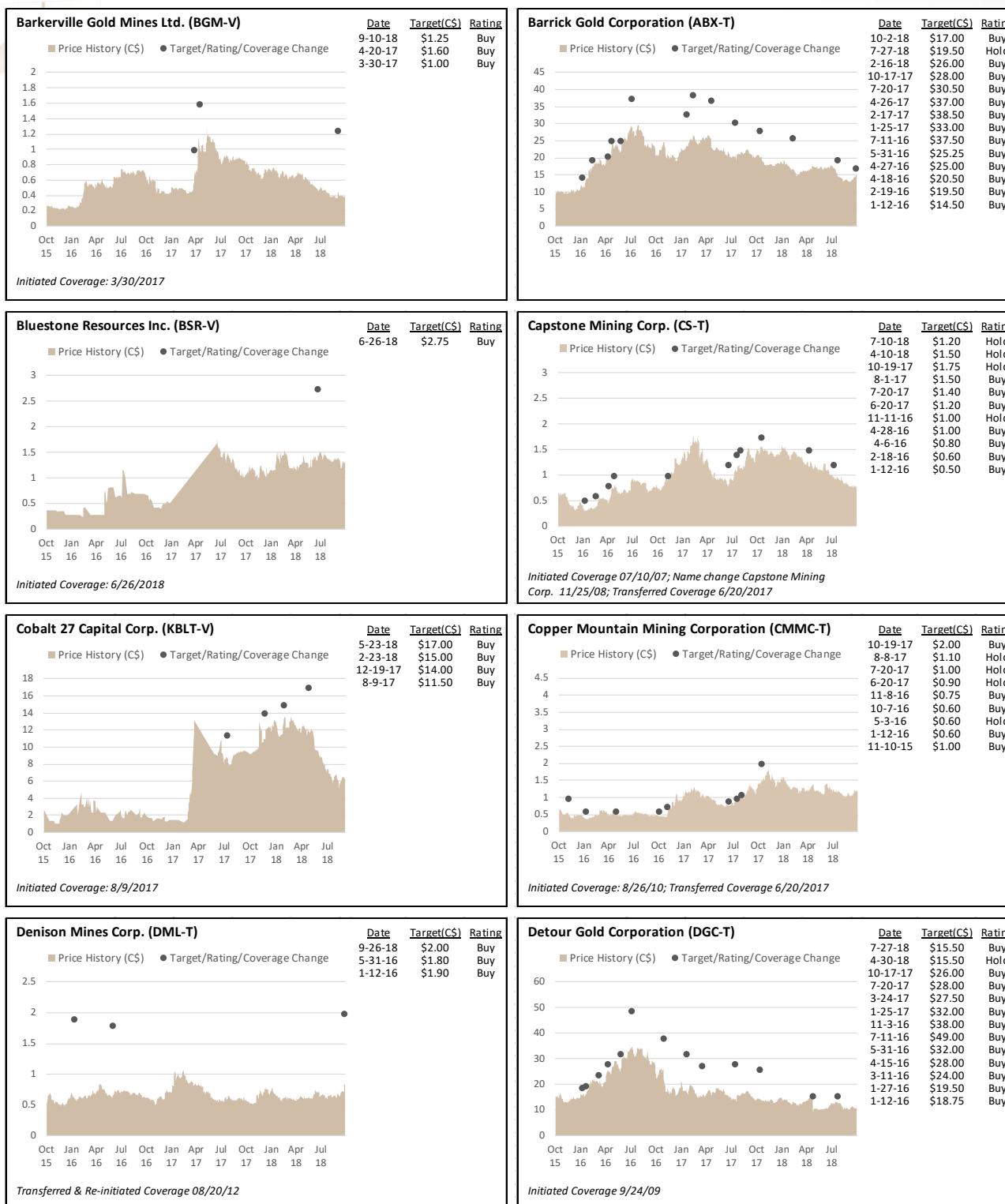
**Moderate Risk:** Large to very large cap companies with established earnings who have a track record of lower volatility when compared against the broad senior stock market indices. These companies are only appropriate for investors who have a medium tolerance for risk and volatility and who are prepared to accept general stock market risk including the risk of a temporary or permanent loss of some of their investment capital.

## Distribution of Ratings (as of October 5, 2018)

	%	#	IB Clients (TTM)
<b>Buy</b>	76.0%	73	89.7%
<b>Hold</b>	11.5%	11	3.4%
<b>Sell</b>	1.0%	1	0.0%
<b>Tender</b>	2.1%	2	3.4%
<b>UR (Buy)</b>	0.0%	0	0.0%
<b>UR (Hold)</b>	0.0%	0	0.0%
<b>UR (Sell)</b>	0.0%	0	0.0%
<b>Dropped (TTM)</b>	9.4%	9	3.4%

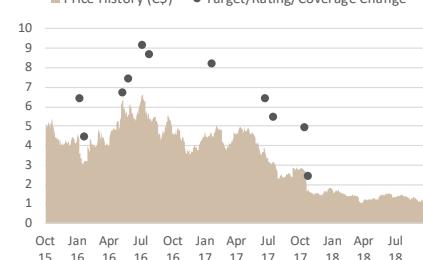
## Price Chart, Rating and Target Price History (as of October 5, 2018)



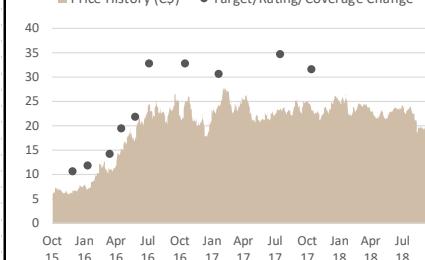


**Eldorado Gold Corporation (ELD-T)**

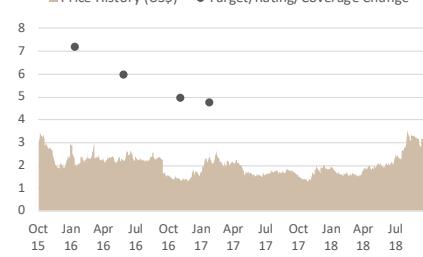
■ Price History (C\$) ● Target/Rating/Coverage Change

**Endeavour Mining Corporation (EDV-T)**

■ Price History (C\$) ● Target/Rating/Coverage Change

**Energy Fuels Inc. (AMEX:UUUU)**

■ Price History (US\$) ● Target/Rating/Coverage Change



Targets and prices prior to 11/06/13 adjusted for share consolidation; Transferred & Re-Initiated Coverage 08/20/12;  
Targets prior to 05/31/16 converted to US\$ at spot

**Equinox Gold Corp. (EQX-V)**

This Company is Currently Restricted

**Falco Resources Ltd. (FPC-V)**

■ Price History (C\$) ● Target/Rating/Coverage Change



Initiated Coverage: 5/11/2017

**Falco Resources Ltd. (FPC-V)**

■ Price History (C\$) ● Target/Rating/Coverage Change



Initiated Coverage: 5/11/2017

**Filo Mining Corp. (FIL-V)**

■ Price History (C\$) ● Target/Rating/Coverage Change



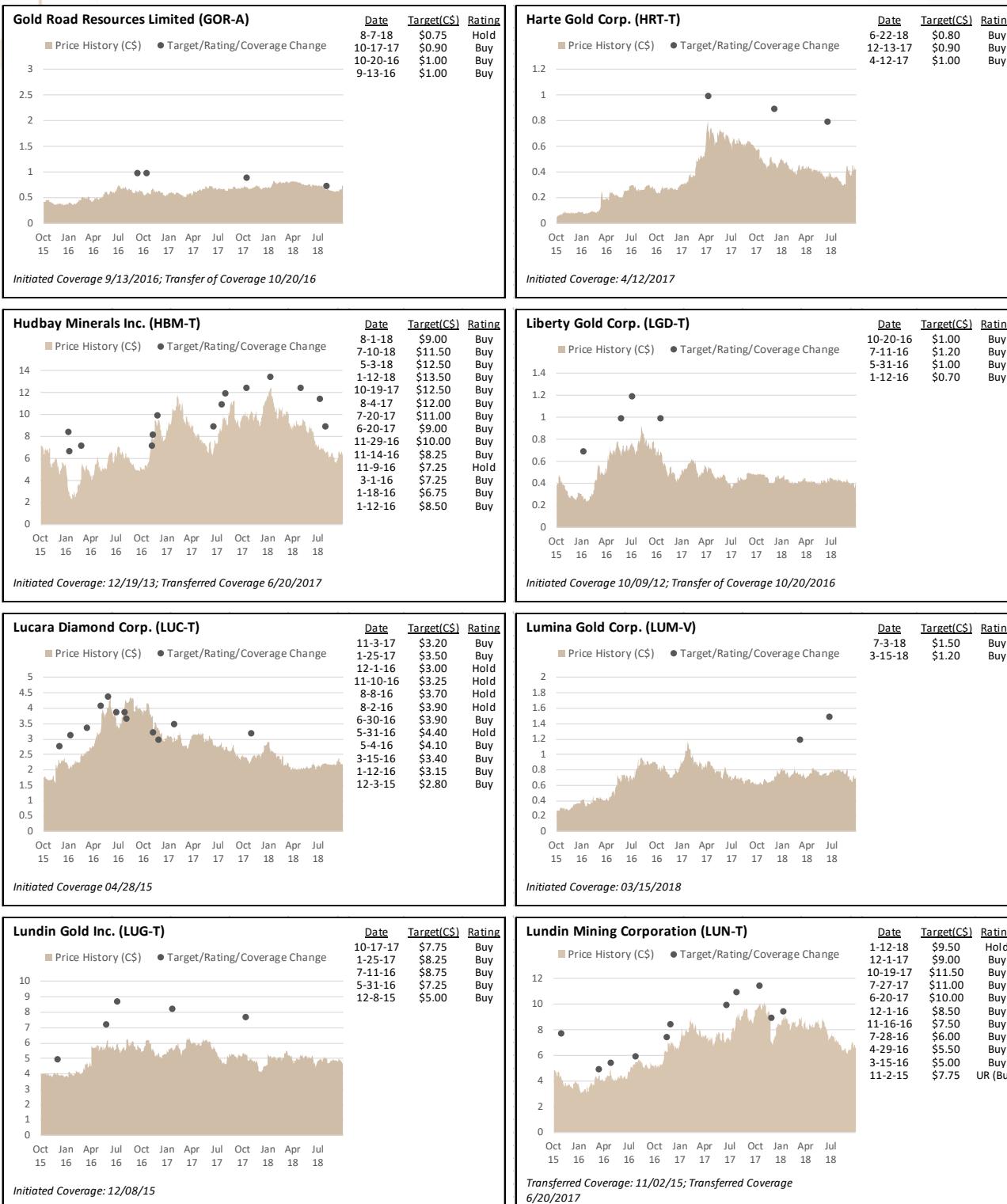
Initiated Coverage: 4/18/2018

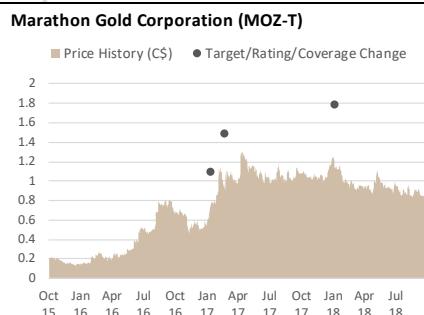
**Goldquest Mining Corp. (GQC-V)**

■ Price History (C\$) ● Target/Rating/Coverage Change

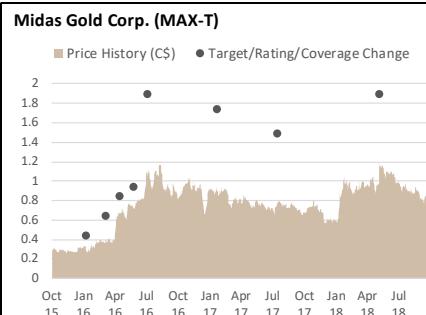


Initiated Coverage: 10/11/2017

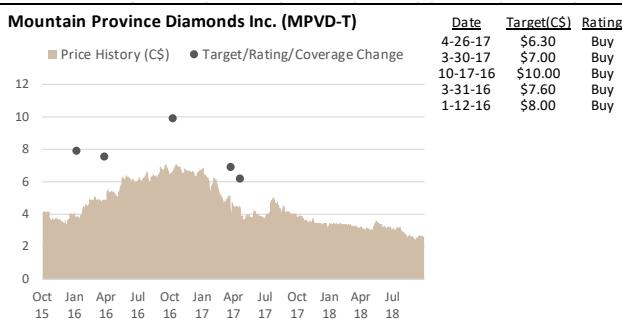




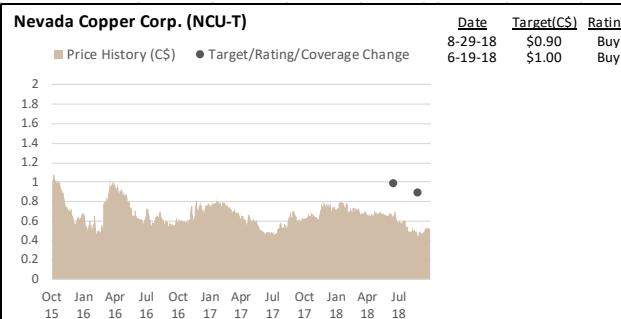
Initiated Coverage: 1/17/2017



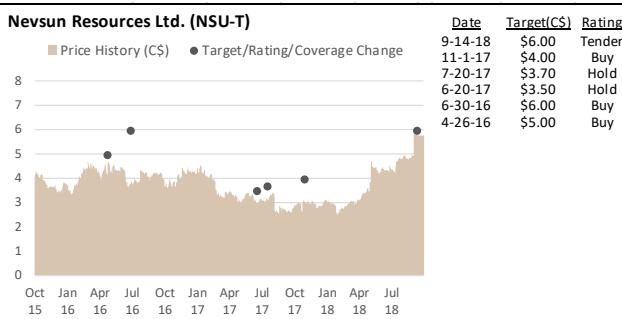
Transferred and Re-initiated Coverage 11/05/13



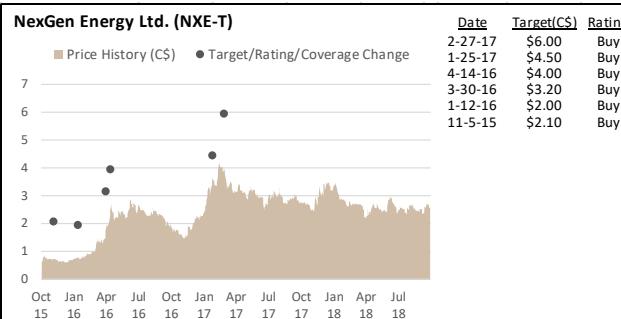
Initiated Coverage 02/05/15



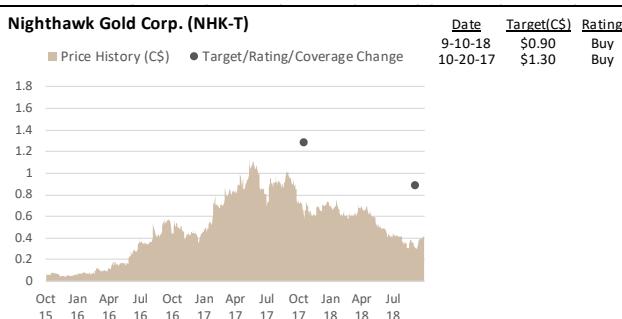
Initiated Coverage: 6/19/2018



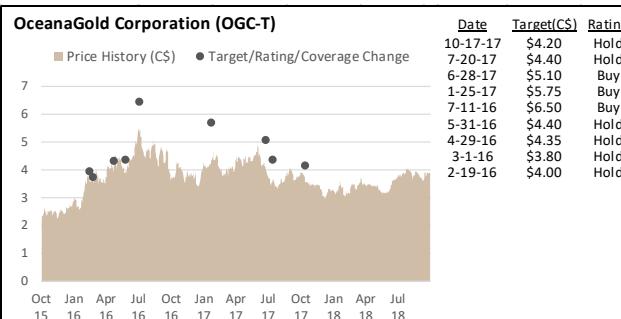
Initiated Coverage: 08/27/04; Transferred Coverage 6/20/2017



Initiated Coverage 11/05/15



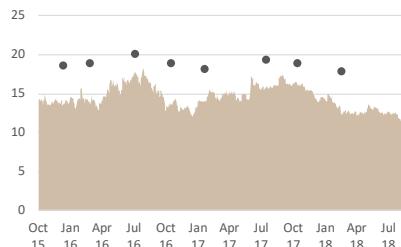
Initiated Coverage: 10/20/2017



Initiated Coverage 09/22/14

**Osisko Gold Royalties Ltd (OR-T)**

■ Price History (C\$) ● Target/Rating/Coverage Change



Date Target(C\$) Rating

10-2-18	\$16.50	Buy
2-21-18	\$18.00	Buy
10-17-17	\$19.00	Buy
7-20-17	\$19.50	Buy
1-25-17	\$18.25	Buy
10-20-16	\$19.00	Buy
7-11-16	\$20.25	Buy
3-2-16	\$19.00	Buy
12-16-15	\$18.75	Buy

Initiated Coverage 12/16/2015; Transfer of Coverage

10/20/2016

**Osisko Mining Inc. (OSK-T)**

■ Price History (C\$) ● Target/Rating/Coverage Change



Date Target(C\$) Rating

5-24-18	\$4.50	Buy
3-19-18	\$6.00	Buy
4-6-17	\$6.50	Buy
3-17-17	\$5.00	Buy
10-20-16	\$4.00	Buy
7-11-16	\$4.00	Buy
5-31-16	\$3.00	Buy
2-4-16	\$2.00	Buy
12-10-15	\$2.50	Buy

Initiated Coverage 12/10/2016; Transfer of Coverage

10/20/2016

**Plateau Energy Metals Inc. (PLU-V)**

■ Price History (C\$) ● Target/Rating/Coverage Change



Date Target(C\$) Rating

9-4-18 \$3.00 Buy

Initiated Coverage: 9/4/2018

**Pure Gold Mining Inc. (PGM-V)**

■ Price History (C\$) ● Target/Rating/Coverage Change



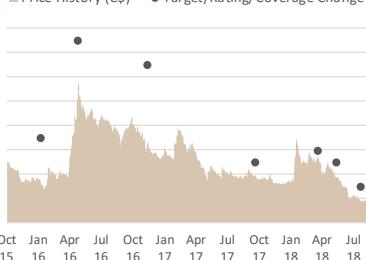
Date Target(C\$) Rating

6-28-17 \$1.00 Buy

Initiated Coverage: 6/28/2017

**RNC Minerals (RNX-T)**

■ Price History (C\$) ● Target/Rating/Coverage Change



Date Target(C\$) Rating

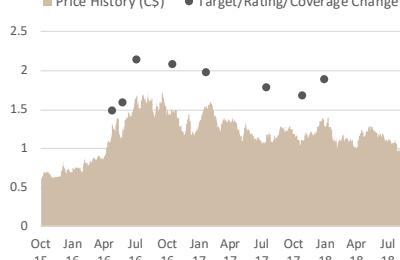
9-25-18	\$0.75	Hold
9-20-18	\$0.50	Buy
9-12-18	\$0.40	Buy
5-15-18	\$0.25	Hold
3-23-18	\$0.30	Hold
9-25-17	\$0.25	Hold
11-15-16	\$0.65	Buy
4-27-16	\$0.75	Buy
1-12-16	\$0.35	Buy

Initiated Coverage: 07/05/11; Name Change to RNC Minerals

9/13/2016; Transferred Coverage 9/26/2017

**Roxgold Inc. (ROXG-T)**

■ Price History (C\$) ● Target/Rating/Coverage Change



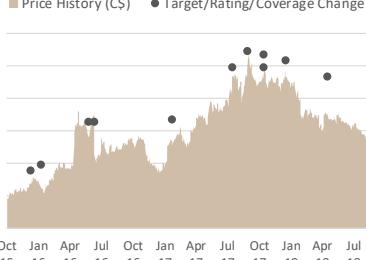
Date Target(C\$) Rating

1-3-18	\$1.90	Buy
11-1-17	\$1.70	Buy
7-20-17	\$1.80	Buy
1-25-17	\$2.00	Buy
10-20-16	\$2.10	Buy
7-11-16	\$2.15	Buy
5-31-16	\$1.60	Buy
4-28-16	\$1.50	Buy

Initiated Coverage 01/27/14; Transfer of Coverage 10/20/2016

**Sabina Gold & Silver Corp. (SBB-T)**

■ Price History (C\$) ● Target/Rating/Coverage Change



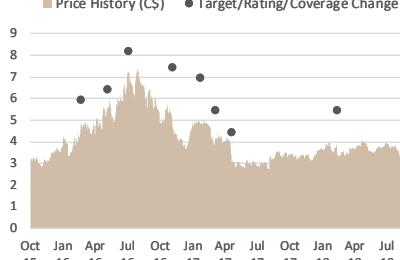
Date Target(C\$) Rating

4-19-18	\$2.35	Buy
12-20-17	\$2.60	Hold
10-19-17	\$2.50	Hold
10-17-17	\$2.70	Buy
9-5-17	\$2.75	Buy
7-19-17	\$2.50	Buy
1-25-17	\$1.70	Buy
6-16-16	\$1.65	UR(Buy)
5-31-16	\$1.65	Buy
1-12-16	\$1.00	Buy
12-15-15	\$0.90	Buy

Initiated Coverage 12-15-15

**SEMAFO Inc. (SMF-T)**

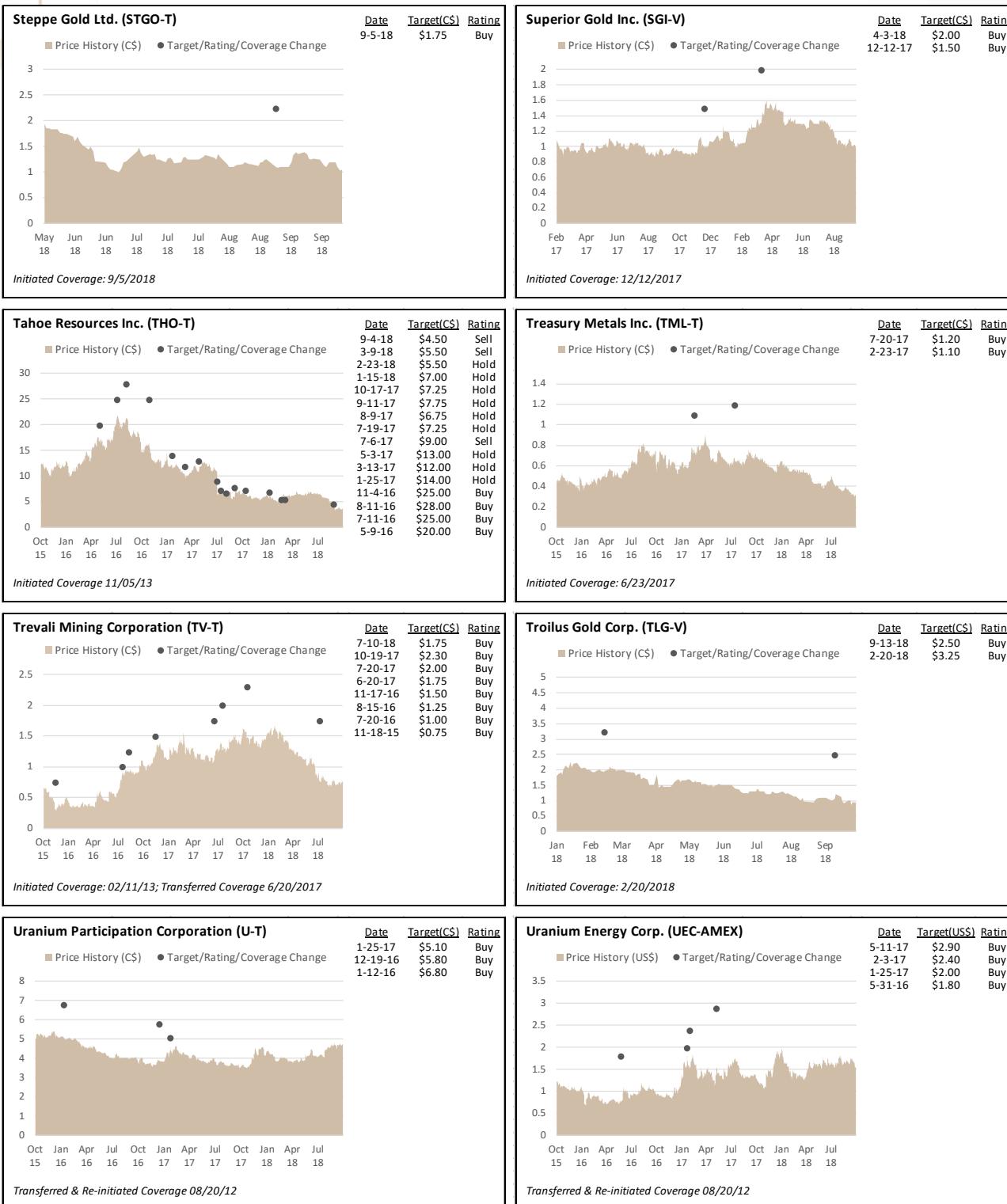
■ Price History (C\$) ● Target/Rating/Coverage Change



Date Target(C\$) Rating

10-2-18	\$6.00	Buy
2-20-18	\$5.50	Buy
4-25-17	\$4.50	Buy
3-9-17	\$5.50	Buy
1-25-17	\$7.00	Buy
11-10-16	\$7.50	Buy
7-11-16	\$8.25	Buy
5-12-16	\$6.50	Buy
2-26-16	\$6.00	Buy

Initiated Coverage 11/20/09



B: Buy; H: Hold; S: Sell; T: Tender; UR: Under Review

Source: Capital IQ and Haywood Securities