

## The Weekly Dig - November 16, 2018

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### Gold Explorers Continue to Struggle

- Precious Metals: Following last Friday's plunge in the price of gold, negativity against the yellow metal continued through the week, with gold prices testing the US\$1,200 level on Tuesday and Wednesday before paring some of those losses on Thursday to finish at US\$1,213 per ounce (down 1% for the week) at market close. Once again, the bearish sentiment towards gold correlates well with a rising U.S. Dollar Index; U.S. consumer prices for October increased MoM, pointing to steadily rising inflation that will likely see the Federal Reserve raise interest rates again next month. As expected, gold equities also had a rollercoaster week, with both the S&P Global Gold Index and VanEck Vectors Junior Gold Miners ETF falling sharply before gaining recovering later in the week. One highlight for the week was Tahoe Resources (THO-T, TENDER, \$4.00 Target) which rose 47% on the back of a proposed takeover by Pan American Silver (PAAS-T, Not Rated) in a stock and cash deal, while Roxgold Inc. (ROXG-T, BUY, \$1.50 Target) was up slightly in an otherwise disappointing week for gold equities. Meanwhile, the S&P/TSX Venture Index failed to recover after early week losses, falling 4% since last Friday, reflecting another disappointing week for junior gold explorers. Goldquest Mining (GQC-V, HOLD, \$0.20 Target) was one of a select few junior gold equities to register a positive week, up 5% since Friday. Silver followed gold's 1% fall this week, finishing at US\$14.29 per ounce, while platinum (down 2.6%) lost ground and palladium rose 2.8% to finish at US\$1,160 per ounce on Thursday.
- Base Metals: The base metals were mixed week over week (WoW). While LME nickel was down -4.5% to \$5.07/lb, LME zinc and copper were up +2.4% and +0.4% WoW at \$1.20/lb and \$2.81/lb, respectively. The LMEX Index was down -84 bps WoW at 2,899.4 at Thursdays close. The S&P Composite Diversified Metals & Mining Industry Index closed Thursday at 5,186.94, which was up 4.2% WoW. Metals are all down YoY with copper, zinc and nickel down -8.0%, -17.0% and -3.9%, respectively. LME inventories were also all down WoW with copper, zinc and nickel inventories were down -3.4%, -6.1% and -0.5% WoW, respectively. Excluding bonded warehouse inventories, we calculate the current days of consumption at 6.9 for copper and 4.5 for zinc. The U.S. Dollar Index was up +38bps this week, closing on Thursday at 97.1, having a slight negative impact on base metals prices. The most negatively impacted weekly performer in our coverage universe was Copper Mountain (CMMC-T, BUY, \$2.00 Target), down -5.1% WoW. The most positively impacted weekly performer in our coverage universe was Capstone Mining (CS-T, BUY, \$0.70 Target), which was up +20.0% WoW on Thursday.

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## Weekly Performance





Source: Bloomberg and Haywood Securities

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

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

- Trevali Mining Corp. (TV-T, C\$0.46): Q3/18 financial results
- Asanko Gold Inc. (AKG-T, \$1.02): Q3/18 financial results
- Lucara Diamond Corp. (LUC-T, \$2.21): Q3/18 financials and operations summary
- Lundin Gold Inc. (LUG-T, \$4.66): Construction update
- Superior Gold Inc. (SGI-V, C\$0.79): Q3/18 financial results
- Mountain Province Diamonds Inc. (MPVD-T, \$1.89): Q3/18 financial results
- RNC Minerals (RNX-T, C\$0.51): Q3/18 financial results
- Roxgold Inc. (ROXG-T, \$0.82): Q3/18 financial results
- Tahoe Resources Inc. (THO-T, TAHO-N; \$2.90): Acquired by Pan American Silver
- Troilus Gold Corp. (TLG-T, C\$0.49): Drilling results
- Liberty Gold Corp. (LGD-T, \$0.33): Drilling results
- Endeavour Mining Corp. (EDV-T, \$17.28): Maiden resource estimate

#### **Covered Name Reports:**

<u>Trevali Mining Corp. (TV-T, C\$0.46 [Buy Rating, C\$1.00 Target Price]) – Loss in 3Q18 on Lower Metals</u> Sales and Prices; Reducing Target Price

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

TV reported a Q3/18 EPS loss of (\$0.04) and negative CFPS of (\$0.02), compared to our estimates of \$0.01 for EPS and \$0.05 for CFPS, and consensus estimates of \$0.005 and \$0.044. In Q2/18, the Company reported EPS of \$0.03 and CFPS of \$0.06. The key drivers for the quarter were lower sales (zinc and lead sales were down 34% and 39%) and lower realized metals prices, due to negative provisional pricing adjustments. As a result, revenues were down 78% QoQ to just \$30.5M, EBITDA (\$22.4M) and cash flow (\$19.7M) were well off from 2Q18. Net debt increased to \$54M from \$30.2M in 2Q18.

See Haywood Securities for the full report

# Asanko Gold Inc. (AKG-T, \$1.02 [Hold Rating, \$1.65 Target Price]) – Q3/18 – AGM Evolves into Joint Venture

Geordie Mark, gmark@haywood.com; Alvin Islam, GIT, aislam@haywood.com

Asanko released Q3/18 financial results. Quarterly gold sales of 65,267 ounces at an average price of US\$1,198 per ounce yielded US\$78.4 million in revenues (100% attributable to JV). AGM reported total cash costs of US\$803/oz and AISC of \$971/oz gold, which were above our estimates of US\$777/oz gold and US\$878/oz respectively, with AISC decreasing 9% QoQ but still higher than our estimates on higher cash costs and capitalized stripping costs than expected. We highlight that processing unit costs (US\$11.26/t) were lower than our projections, however mining unit costs (US\$3.63/t), came in higher on the back of fuel cost inflation and the recent implementation (August 1st, 2018) of a 5% non-refundable Ghanaian state levy.

See Haywood Securities for the full report

11/16/18



# <u>Lucara Diamond Corp. (LUC-T, \$2.21 [Buy Rating, \$3.20 Target Price]) – Q3/18 - Operations</u> Performance a Bright Spot as Financials Miss on Carat Pricing

Geordie Mark, gmark@haywood.com; Alvin Islam, GIT, aislam@haywood.com

In Q3/18, Lucara recognized quarterly revenue of US\$45.7 million, which comprised of 89.5 kct from one blended sales tender in September yielding US\$41.8 million, and proceeds of US\$3.9 million received in July from the Company's June tender (12,129 carats). Average diamond pricing for proceeds received in the quarter was US\$450 per carat (Q2/18: US\$856/ct). Sales and pricing in Q3/18 compared to our estimates of 73.9 kct and US\$815 per carat respectively. Q3/18 financial results reported revenues of US\$45.7 million, EBITDA of US\$18 million, adjusted EPS of US\$0.01, and operating cash flow (before  $\triangle$  in WC) of US\$0.04/sh.

See Haywood Securities for the full report

# <u>Lundin Gold Inc. (LUG-T, \$4.66 [Buy Rating, \$7.75 Target Price]) – Fruta del Norte Construction Still on</u> Schedule for First Pour in Q4/19

Kerry Smith, MBA, Peng, ksmith@haywood.com; Danny Ochoa, PEng, CFA, dochoa@haywood.com

As of the end of September construction of the Fruta del Norte project was 34% complete, on budget, and engineering was 63% complete. Process plant foundations are well advanced and structural steel erection has started on the grinding mill. Fabrication of process plant equipment is on track and the flotations cells, mill, CIL tanks, and thickeners are expected to arrive this quarter. The North Access Road is essentially complete and is now being used by commercial vehicles. Powerline construction commenced in September, and the contractor is working on three fronts. The project remains on budget to deliver first gold in Q4/19 and commercial production in Q2/20.

See Haywood Securities for the full report

# Superior Gold Inc. (SGI-V, C\$0.79 [Buy Rating, C\$1.50 Target Price]) – Production on Target but Margins Tight in Q3/18; Reducing our Target

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

SGI reported a 3Q18 EPS loss of (\$0.02) and CFPS of \$0.02 (before WC changes), compared to our estimates of a loss of (\$0.03) for EPS and \$0.02 for CFPS, and to consensus estimates of a loss (\$0.02) and \$0.05, respectively. Revenues were down 7% QoQ to \$31.3M, EBITDA was down 66% QoQ to \$2.4M, and operating cash flow was down 66% QoQ to \$1.8M. Results were impacted by a lower realized gold price of \$1,211/oz v. \$1,303/oz in 2Q18.

See Haywood Securities for the full report

# Mountain Province Diamonds Inc. (MPVD-T, \$1.89 [Buy Rating, \$5.60 Target Price]) – Q3/18 Financials Maintain Operation Margin and Modestly Exceed Expectations

Geordie Mark, gmark@haywood.com; Alvin Islam, GIT, aislam@haywood.com

Q3/18 operations data for Gahcho Kué showed diamond production of 1.82 Mt carats (891 kct attributed to Mountain Province) via the processing of 759 kt tonnes of ore material grading 2.4 ct/t. Most recent available production data from July indicated that diamond production was 709 kct (or at an annualized rate of 8.35 Mct/yr, 16% higher than the average for the quarter and well above nameplate capacity) on the processing of 299 kt of ore material grading 2.37 ct/t, and highlights lower



average rates for the remainder of the period relating to a planned annual maintenance period, which given YoY data would indicate that maintenance may have taken longer than last year to complete.

See Haywood Securities for the full report

#### RNC Minerals (RNX-T, C\$0.51 [Hold Rating, C\$0.75 Target Price]) - Cashed Up and Drilling

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

RNC Minerals reported an EPS loss for 3Q18 of (\$0.02), and negative CFPS of (\$0.01), compared to Haywood estimates of \$(0.00) for EPS and \$0.08 for CFPS. RNC generated \$43.4M in revenue, which resulted in \$8.8M in Adjusted EBITDA. The results, which appear to have confused the market, are based on gold sales of 23.8koz, including only 6.2koz from the high-grade discovery at the Beta Hunt mine. Although cash and equivalents were only \$1M at quarter-end, they improved to \$18.8M as of November 12, including the value of unsold gold in specimen samples, valued at the spot gold price (\$1,187/oz at quarter end), that are expected to be sold for a premium in 4Q18 or later. All long term debt and convertible debt, totaling \$33.5M, was eliminated in 3Q18.

See Haywood Securities for the full report

# Roxgold Inc. (ROXG-T, \$0.82 [Buy Rating, \$1.90 Target Price]) – Q3/18 Financials Exceed Expectations on Consistent Margin Delivery

Geordie Mark, gmark@haywood.com; Alvin Islam, GIT, aislam@haywood.com

Q3/18 gold production of 30,532 oz and gold sales of 31,400 oz drove financials to modestly exceed our estimates and consensus on lower unit costs. Yaramoko continued to demonstrate robust gold production driven by elevated mill performance and deliverance of steadily increasing throughput rates over the last six quarters. At Yaramoko, underground mining extracted 87.96 kt of ore grading 10.74 g/t gold with 80% of ore sourced from mined stopes versus development. Elevated levels of ore extraction during the quarter contributed to the maintenance of a healthy ROM stockpile that is reported at 43,511 tonnes (~-5% QoQ) grading 11.59 g/t gold (~-5% QoQ).

See Haywood Securities for the full report

# <u>Tahoe Resources Inc. (THO-T, TAHO-N; \$2.90 [Tender Rating, \$4.00 Target Price]) – Pan American</u> Silver to Acquire Tahoe Resources Through Combined Cash and Stock Offer

Geordie Mark, gmark@haywood.com; Alvin Islam, GIT, aislam@haywood.com

A definitive agreement has been announced in which Pan American Silver (TSX:PAAS, Not Rated) intends to acquire all outstanding shares of Tahoe Resources. Pursuant to a plan of arrangement, the base and contingent purchase (contingent on Escobal restart) terms outline a 34.9% and 62.8% premium to Tahoe's 20-day VWAP (ending Nov 13th) respectively. The offering provides Tahoe shareholders with an avenue to realize the share price appreciation in absence of an immediate Escobal restart.

See Haywood Securities for the full report



#### Troilus Gold Corp. (TLG-T, C\$0.49 [Buy Rating, C\$2.00 Target Price]) - Cashed Up and Drilling

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

Troilus announced results from 16 drill holes completed on the southern half of the J4 Zone open pit target area. Drilling extended gold mineralization to depth, exhibiting a wide range of values. Compared to the resource at the underground J87 Zone, J4 exhibits higher deformation, mylonitization, and less copper mineralization. Highlights include 3.56 g/t AuEq over 19m, 3.6 g/t AuEq over 9m and 1.93g/t AuEq over 15m, at depths in excess of 200m, interspersed with lower grade material mostly ranging from 1-2g/t Au.

See Haywood Securities for the full report

# <u>Liberty Gold Corp. (LGD-T, \$0.33 [Buy Rating, \$1.00 Target Price]) – Step-out Drilling Extends Zones of Known Mineralization</u>

Mick Carew, mcarew@haywood.com; Emma Boggio, eboggio@haywood.com

Liberty Gold announced results from the ongoing Reverse Circulation drilling at its Goldstrike Project in southwestern Utah. The results continue to show the success of the Company's 25,000 metre drill program, with the highlight being the extension of the south Main Zone by ~150 metres. The western portion of this zone was subject to infill of a 150 by 75 metre inlier near the southern edge of the current PEA pit. Additionally, in this zone, step-out drilling extended the known mineralization to the west along the west edge of the PEA pit, as well as to depth. These results bode well for the anticipated resource update in Q1/19, which should build on the 1.1 million ounces grading 0.54 g/t gold (Indicated and Inferred) defined in the maiden resource estimate earlier this year that was incorporated into the maiden PEA published in July. While we remain buoyant by this continued growth, we are focused on the release of the PoO expected before the end of the year, which will open up highly prospective ground to the north and west that could see the current resource expand significantly.

See Haywood Securities for the full report

# Endeavour Mining Corp. (EDV-T, \$17.28 [Buy Rating, \$32.00 Target Price]) – Houndé Longevity Buoyed by Kari Pump Maiden Resource

Geordie Mark, gmark@haywood.com; Alvin Islam, GIT, aislam@haywood.com

Endeavour announced a maiden resource estimate for the Kari Pump target located 7 km west of the central processing plant at Houndé. The maiden resource at Kari Pump confirms the presence of a sizeable high-grade deposit and increases the Houndé M&I resource base by 40%, with the potential of the Kari gold mineralized footprint to be expanded upon completion of follow-up exploration. Future integration of Kari Area resources points towards impactful low-cost, life-of-mine expansion (life and or throughput rate) potential at Houndé, and highlights Endeavour's ability to achieve organic growth through the drill bit.

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:

• Azarga Uranium Corp. (AZZ-T, \$0.255): Resource update

#### **Mining Flashes:**

Azarga Uranium Corp. (AZZ-T, \$0.255 [Not Rated]) – Dewey Burdock M&I Resources ↑97% as Prelude to Revised PEA in 2019

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

Azarga Uranium announced a resource update for the Dewey Burdock ISR uranium project, South Dakota USA. Azarga has grown the ISR-amenable 'all-categories' resource 47% at its Dewey Burdock project, with over 95% of project resources reporting to higher-certainty Measured & Indicated categories:

- Measured ISR resources increase 234% to 13.8 Mlb U308 (5.2 Mt grading 0.132% U308)
- Measured and Indicated ISR resources increase 97% to 16.9 Mlb U308 (7.5 Mt grading 0.113% U308)
- Combined M,I,+Inf. Resources increase 47% to 17.75 Mlb U3O8 (grading 0.11% U3O8) from 12.1 Mlb U3O8 (grading 0.11% U3O8). The new resource at Dewey is substantially larger, while average grade fell to about half of the prior resource but remains at the high-end of the typical U.S. ISR asset range.

See Haywood Securities for the full report



## Weekly Commodities

				DDFCI	OUS MET	ΛΙς				
Name	Close	1Wk Δ	1 week %	1 Month %	3 Month %		12 Month %	5 Day Trend	52W H/L	1W H/L
Gold Spot	\$ 1,213	\$ (11.12)	(0.9%)	(1.2)%	3.2%	(6.0)%		5 Day Hellu	\$ 1,366	\$ 1,224
US\$/oz	ÿ 1,213	y (11.12)	(0.570)	(1.2)/0	3.270	(0.0)70	(3.1)/0		\$ 1,160	\$ 1,224
Silver Spot	\$ 14.29	\$ (0.15)	(1.1%)	(2.8)%	(1.1)%	(12.2)%	(15.9)%		\$ 17.70	\$ 14.44
US\$/oz	7	+ (0.20)	(===,=,	(=:-),	(=:=,,:	(==:=//:	(==:=),,=		\$ 13.90	\$ 14.00
Platinum Spot	\$ 842	\$ (22.26)	(2.6%)	(0.1)%	9.5%	(6.1)%	(9.6)%	$\overline{}$	\$ 1,029	\$ 864
US\$/oz		, , ,	` ′	` ,		` ,	` ′		\$ 756	\$ 835
Palladium Spot	\$ 1,160	\$ 32.12	2.8%	6.9%	37.3%	18.0%	17.6%		\$ 1,180	\$ 1,160
US\$/oz									\$ 834	\$ 1,098
				BAS	SE METAL	S				
Name										1W H/L
Copper Future	\$ 2.81 \$ 0.01   0.4%   (1.7)%   7.6%   (8.4)%   (8.0)%							\$ 3.32	\$ 2.81	
US\$/lb									\$ 2.64	\$ 2.76
Nickel Spot	\$ 5.07	\$ (0.24)	(4.5%)	(10.8)%	(12.3)%	(22.1)%	(3.9)%		\$ 7.14	\$ 5.31
US\$/lb									\$ 4.89	\$ 5.07
Zinc Spot	\$ 1.20	\$ 0.03	2.4%	0.9%	16.0%	(13.0)%	(17.0)%		\$ 1.64	\$ 1.20
US\$/lb									\$ 1.04	\$ 1.15
Aluminum Spot	\$ 0.87	\$ (0.03)	(3.6%)	(5.8)%	(4.5)%	(18.1)%	(8.6)%		\$ 1.18	\$ 0.90
US\$/lb									\$ 0.87	\$ 0.87
Iron Ore Spot	\$ 74.70	\$ (0.40)	(0.5%)	5.6%	11.0%	10.5%	22.3%		\$ 140.00	\$ 78.80
US\$/t									\$ 77.70	\$ 77.70
				E	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	\$ 102.30	\$ (3.35)	(3.2%)	(5.1)%	(7.5)%	(2.9)%	9.4%		\$ 115.30	\$ 107.50
US\$/t									\$ 89.50	\$ 102.30
Uranium Spot	\$ 29.15	\$ 0.10	0.3%	5.8%	10.0%	30.4%	15.7%		\$ 27.40	\$ 29.15
US\$/lb									\$ 23.80	\$ 29.05
WTI	\$ 56.55	\$ (4.12)	(6.8%)	(21.0)%	(11.6)%	(18.4)%	4.2%		\$ 76.72	\$ 60.67
US\$/bbl									\$ 53.84	\$ 55.69
Brent	\$ 66.67	\$ (3.98)	(5.6%)	(17.1)%	(6.5)%	(12.3)%	12.0%		\$ 86.27	\$ 70.65
US\$/bbl									\$ 58.93	\$ 65.47
Henry Hub	\$ 3.91	\$ 0.37	10.4%	18.2%	27.1%	30.9%	23.2%		\$ 4.93	\$ 4.84
US\$/MMBtu									\$ 2.82	\$ 3.54

Source: Haywood Securities and Bloomberg



### Commodities Prices and Inventories

## **Precious Metals**

		Spot Price		
Commodities	LME Spot Price	Weekly ∆	YTD Δ	1 Year ∆
Gold	US\$ 1,213 /oz	-0.9%	0.4%	0.4%
Silver	US\$ 14.29 /oz	-1.0%	-15.7%	-15.9%
Platinum	US\$ 842 /oz	-2.6%	-9.6%	-9.6%

### Precious Metals Weekly Change (12 weeks)



Source: Haywood Securities and Bloomberg

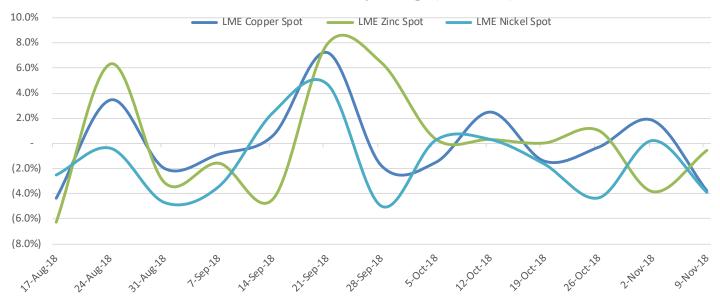


### **Base Metals**

		Spot Price		
Commodities	LME Spot Price	Weekly ∆	YTD Δ	1 Year ∆
Copper	US\$ 2.81 /lb	0.4%	-14.0%	-8.0%
Zinc	US\$ 1.20 /lb	2.4%	-20.6%	-17.0%
Nickel	US\$ 5.07 /lb	-4.5%	-12.0%	-3.9%

	LME Inv	entory	Total Inv	entory Excluding E	Bonded Warehouse Ir	nventory
Commodities	LME Inventory	Weekly ∆	Total (t)	YTD ∆	1 Year ∆	Days of Consumption
Copper	166,450	-3.4%	442,731	-19%	-25%	6.9
Zinc	125,400	-6.1%	162,778	-35%	-48%	4.5
Nickel	216,174	-0.5%	231,003	-44%	-46%	38.4

## Base Metals Weekly Change (12 weeks)



Source: Haywood Securities and Bloomberg



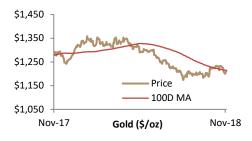


Source: Haywood Securities and Bloomberg



### Commodities and ETFs: A Week in Action

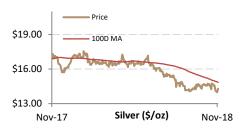
#### Gold – 1-Year US\$/oz (left) and Total ETF Holdings (right)





- Spot: Loss (-0.9%) for the week
- ETF Holdings: 68,647,014 ounces, up 111,634 ounces for the week

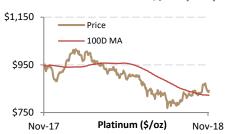
Silver – 1-Year US\$/oz (left) and Total ETF Holdings (right)





- Spot: Loss (-1.1%) for the week
- ETF Holdings: 531,343,109 ounces, up 3,831,077 ounces for the week

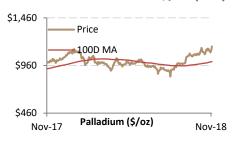
Platinum – 1-Year US\$/oz (left) and Total ETF Holdings (right)





- Spot: Loss (-2.6%) for the week
- ETF Holdings: 2,342,386 ounces, down 19,790 ounces for the week

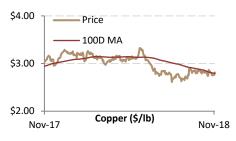
#### Palladium – 1-Year US\$/oz (left) and Total ETF Holdings (right)

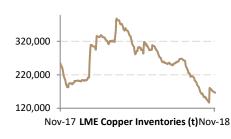




- Spot: Gain (+2.8%) for the week
- ETF Holdings: 761,709 ounces, down 1,926 ounces for the week

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



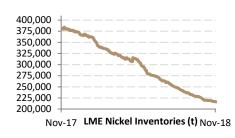


- Futures: Gain (+0.4%) for the week
- **LME Copper**: 166,450 tonnes, down 5,875 tonnes for the week



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





- Spot: Loss (-4.5%) for the week
- LME Nickel: 216,174 tonnes, down 1,140 tonnes for the week

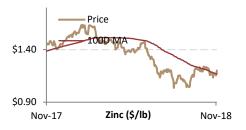
Lead - 1-Year US\$/lb (left) and LME Inventory (right)





- Spot: Loss (-3.7%) for the week
- LME Lead: 110,900 tonnes, down 975 tonnes for the week

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

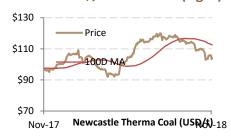




- Spot: Gain (+2.4%) for the week
- LME Zinc: 125,400 tonnes, down 8,200 tonnes for the week

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





- Newcastle Thermal Futures: Loss (-1.1%) for the week
- 62% Fe Iron Ore: Loss (-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 (+0.3%) for the week

Source: Bloomberg, UxC Consulting, and Haywood Securities



## Upcoming Macroeconomic News and Events

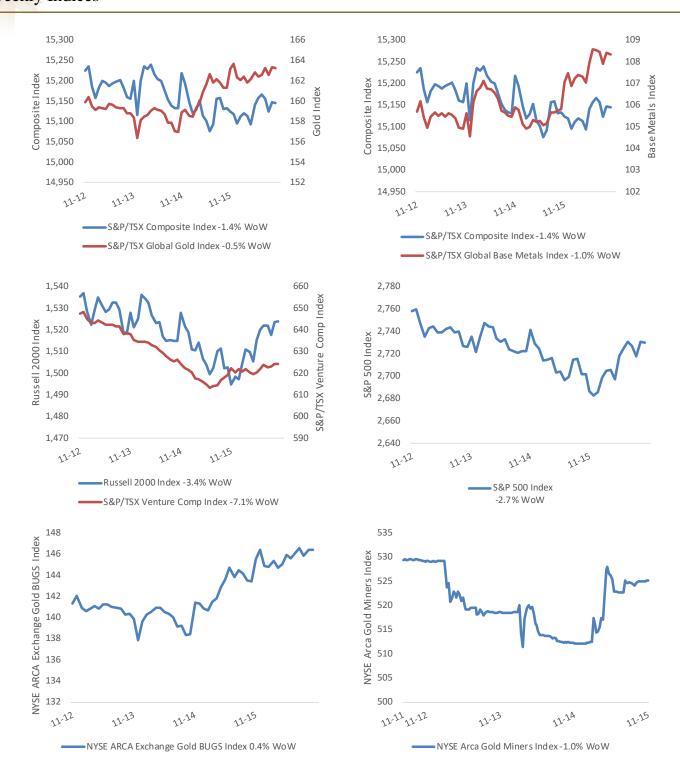
Date	Event	Period	Survey	Prior	Relevance
<b>United States</b>					
11/15/2018	Empire Manufacturing	Nov	20	21.1	83
11/15/2018	Philadelphia Fed Business Outlook	Nov	20	22.2	80
11/15/2018	Retail Sales Advance MoM	Oct	0.50%	0.10%	92
11/15/2018	Retail Sales Ex Auto MoM	Oct	0.50%	-0.10%	65
11/15/2018	Retail Sales Ex Auto and Gas	Oct	0.40%	0.00%	62
11/15/2018	Import Price Index MoM	Oct	0.10%	0.50%	79
11/15/2018	Initial Jobless Claims	43414	213k	214k	98
11/15/2018	Continuing Claims	43407	1625k	1623k	69
11/15/2018	Bloomberg Consumer Comfort	11-Nov		61.3	68
11/16/2018	Industrial Production MoM	Oct	0.20%	0.30%	89
11/16/2018	Capacity Utilization	Oct	78.20%	78.10%	62
11/16/2018	Total Net TIC Flows	Sep		\$108.2b	66
11/16/2018	Net Long-term TIC Flows	Sep		\$131.8b	74
11/20/2018	Housing Starts	Oct	1230k	1201k	90
11/20/2018	Building Permits	Oct	1260k	1241k	63
11/21/2018	MBA Mortgage Applications	43420		-3.20%	92
11/21/2018	Durable Goods Orders	Oct P	-2.10%	0.70%	93
11/21/2018	Durables Ex Transportation	Oct P	0.40%	0.00%	74
11/21/2018	Cap Goods Orders Nondef Ex Air	Oct P	0.00%	-0.10%	60
11/21/2018	Initial Jobless Claims	17-Nov		216k	98
11/21/2018	Continuing Claims	10-Nov		1676k	69
11/21/2018	Bloomberg Consumer Comfort	43422		60.5	68
11/21/2018	Leading Index	Oct	0.10%	0.50%	84
11/21/2018	Existing Home Sales	Oct	5.20m	5.15m	88
11/21/2018	U. of Mich. Sentiment	Nov F	98.3	98.3	95

Date	Event	Period	Survey	Prior	Relevance
Canada					
11/16/2018	Manufacturing Sales MoM	Sep	0.10%	-0.40%	70
11/21/2018	Wholesale Trade Sales MoM	Sep		-0.10%	63

Source: Bloomberg



## Weekly Indices

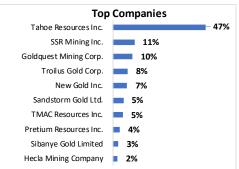


Source: Bloomberg and Haywood Securities



## Weekly Equities

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





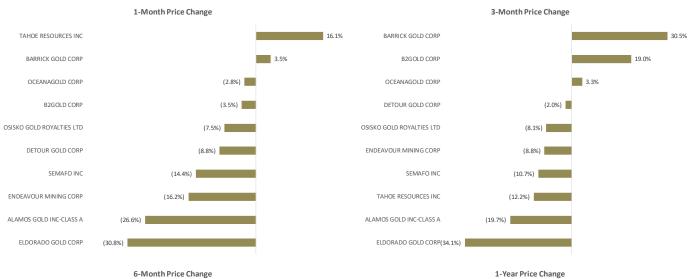
TSX:AEM AI TSX:ASR AI TSX:AGI AI NYSE:AU AI TSX:AR AI TSX:AKG AI TSX:AKG AI TSX:AKG AI TSX:BGM BI TSX:BGM BI TSX:BGM BI TSX:ABX BI TSX:CG CC	Agnico Eagle Mines Limited Alacer Gold Corp. Alamos Gold Inc. AngloGold Ashanti Limited Argonaut Gold Inc. Asanko Gold Inc. Atlantic Gold Corporation Barkerville Gold Mines Ltd. Barrick Gold Corporation Centerra Gold Inc.	Close 46.52 2.19 4.69 9.65 1.32 0.88 1.54 3.32 0.38 17.10	\$ (0.32) 0.01 (0.31) (0.29) - (0.14) (0.11) (0.08) (0.02)	% (1)% 0% (6)% (3)% - (14)% (7)% (2)%	High 62.80 2.97 8.94 12.00 2.87 1.79	42.35 1.97 4.41 7.08 1.24 0.55	Ticker TSX:LUG TSX:MAG TSX:MOZ NYSE:MUX TSX:MAX TSX:NGD	Company Lundin Gold Inc. MAG Silver Corp. Marathon Gold Corporation McEwen Mining Inc. Midas Gold Corp. New Gold Inc.	4.57 9.46 0.68 1.79 0.64 1.18	\$ (0.10) 0.18 (0.10) (0.08) (0.04)	% (2)% 2% (13)% (4)% (6)%	5.52 15.97 1.28 2.55 1.21	4.0 8.1 0.6 1.6
TSX:ASR AI TSX:AGI AI NYSE:AU AI TSX:AR AI TSX:AKG A: TSX:AKG B: TSXV:BGM B: TSXV:BGM B: TSX:ABX B: TSX:ABX CG CG	Alacer Gold Corp. Alamos Gold Inc. AngloGold Ashanti Limited Argonaut Gold Inc. Asanko Gold Inc. Asanko Gold Corporation Barkerville Gold Mines Ltd. Barrick Gold Corporation Centerra Gold Inc.	2.19 4.69 9.65 1.32 0.88 1.54 3.32 0.38 17.10	0.01 (0.31) (0.29) - (0.14) (0.11) (0.08) (0.02)	0% (6)% (3)% - (14)% (7)% (2)%	2.97 8.94 12.00 2.87 1.79 1.99	1.97 4.41 7.08 1.24 0.55	TSX:MAG TSX:MOZ NYSE:MUX TSX:MAX	MAG Silver Corp.  Marathon Gold Corporation  McEwen Mining Inc.  Midas Gold Corp.	9.46 0.68 1.79 0.64	0.18 (0.10) (0.08) (0.04)	2% (13)% (4)% (6)%	15.97 1.28 2.55 1.21	8.1 0.6 1.6
TSX:AGI AI NYSE:AU AI TSX:AR AI TSX:AKG AI TSX:ABG AI TSX:BTO BI TSX:BGM BI TSX:ABX BI TSX:ABX C	Alamos Gold Inc. AngloGold Ashanti Limited Argonaut Gold Inc. Asanko Gold Inc. Asanko Gold Corporation Baccorp. Barkerville Gold Mines Ltd. Barrick Gold Corporation Centerra Gold Inc.	4.69 9.65 1.32 0.88 1.54 3.32 0.38 17.10	(0.31) (0.29) - (0.14) (0.11) (0.08) (0.02)	(6)% (3)% - (14)% (7)% (2)%	8.94 12.00 2.87 1.79 1.99	4.41 7.08 1.24 0.55	TSX:MOZ NYSE:MUX TSX:MAX	Marathon Gold Corporation McEwen Mining Inc. Midas Gold Corp.	0.68 1.79 0.64	(0.10) (0.08) (0.04)	(13)% (4)% (6)%	1.28 2.55 1.21	0.6
NYSE:AU AI TSX:AR AI TSX:AKG A: TSXV:AGB AI TSX:BTO BI TSXV:BGM B: TSX:ABX B: TSX:CG CO	AngloGold Ashanti Limited Argonaut Gold Inc. Asanko Gold Inc. Atlantic Gold Corporation 32Gold Corp. Barkerville Gold Mines Ltd. Barrick Gold Corporation Centerra Gold Inc.	9.65 1.32 0.88 1.54 3.32 0.38 17.10	(0.29) - (0.14) (0.11) (0.08) (0.02)	(3)% - (14)% (7)% (2)%	12.00 2.87 1.79 1.99	7.08 1.24 0.55	NYSE:MUX TSX:MAX	McEwen Mining Inc. Midas Gold Corp.	1.79 0.64	(0.08)	(4)% (6)%	2.55 1.21	1.6
TSX:AR AI TSX:AKG A: TSXV:AGB AI TSX:BTO B: TSXV:BGM B: TSX:ABX B: TSX:CG CC	Argonaut Gold Inc. Asanko Gold Inc. Atlantic Gold Corporation Baggold Corp. Barkerville Gold Mines Ltd. Barrick Gold Corporation Centerra Gold Inc.	1.32 0.88 1.54 3.32 0.38 17.10	(0.14) (0.11) (0.08) (0.02)	- (14)% (7)% (2)%	2.87 1.79 1.99	1.24 0.55	TSX:MAX	Midas Gold Corp.	0.64	(0.04)	(6)%	1.21	
TSX:AKG A: TSXV:AGB A: TSX:BTO B: TSXV:BGM B: TSX:ABX B: TSX:CG C:	Asanko Gold Inc. Atlantic Gold Corporation Baggold Corp. Barkerville Gold Mines Ltd. Barrick Gold Corporation Centerra Gold Inc.	0.88 1.54 3.32 0.38 17.10	(0.14) (0.11) (0.08) (0.02)	(7)% (2)%	1.79 1.99	0.55		·					
TSXV:AGB AI TSX:BTO BI TSXV:BGM BI TSX:ABX BI TSX:CG CO	Atlantic Gold Corporation 32Gold Corp. Barkerville Gold Mines Ltd. Barrick Gold Corporation Centerra Gold Inc.	1.54 3.32 0.38 17.10	(0.11) (0.08) (0.02)	(7)% (2)%	1.99		TSX:NGD	Now Cold Inc	1 12				0.5
TSX:BTO BZ TSXV:BGM BZ TSX:ABX BZ TSX:CG CC	32Gold Corp. Barkerville Gold Mines Ltd. Barrick Gold Corporation Centerra Gold Inc.	3.32 0.38 17.10	(0.08)	(2)%				New Gold Ilic.	1.10	0.08	7%	4.45	0.9
TSXV:BGM Ba TSX:ABX Ba TSX:CG Co	Barkerville Gold Mines Ltd. Barrick Gold Corporation Centerra Gold Inc.	0.38 17.10	(0.02)			1.36	NYSE:NEM	Newmont Mining Corporation	32.86	0.44	1%	42.04	29.0
TSX:ABX Ba	Barrick Gold Corporation Centerra Gold Inc.	17.10			4.06	2.77	TSX:NHK	Nighthawk Gold Corp.	0.38	(0.02)	(5)%	0.76	0.3
TSX:CG Co	Centerra Gold Inc.			(4)%	0.78	0.35	TSX:NG	NovaGold Resources Inc.	5.08	(0.20)	(4)%	6.47	4.3
			(0.19)	(1)%	19.49	12.54	TSX:OGC	OceanaGold Corporation	3.75	(0.04)	(1)%	4.19	2.9
		4.99	(0.26)	(5)%	8.21	4.76	TSX:OR	Osisko Gold Royalties Ltd	9.82	0.08	1%	15.65	9.2
TSX:CGG CI	China Gold International Resources (	1.73	(0.05)	(3)%	3.19	1.59	TSX:OSK	Osisko Mining Inc.	2.52	(0.21)	(8)%	3.86	1.6
NYSE:CDE Co	Coeur Mining, Inc.	4.39	(0.60)	(12)%	8.94	4.09	TSX:PAAS	Pan American Silver Corp.	16.98	(1.92)	(10)%	24.22	16.0
NYSE:BVN Co	Compañía de Minas Buenaventura S.	14.33	0.32	2%	16.80	11.67	TSX:PG	Premier Gold Mines Limited	1.65	(0.04)	(2)%	3.94	1.6
TSX:CNL Co	Continental Gold Inc.	2.05	(0.19)	(8)%	4.13	1.98	TSX:PVG	Pretium Resources Inc.	9.97	0.34	4%	14.94	7.9
TSX:DGC D	Detour Gold Corporation	10.18	(0.59)	(5)%	15.40	9.11	TSXV:PGM	Pure Gold Mining Inc.	0.52	(0.03)	(5)%	0.71	0.4
TSX:ELD EI	Eldorado Gold Corporation	0.81	(0.10)	(11)%	1.85	0.79	NasdaqGS:GOLD	Randgold Resources Limited	81.21	(1.16)	(1)%	104.05	59.9
TSX:EDV Er	Endeavour Mining Corporation	17.81	(1.48)	(8)%	26.86	17.10	TSX:RNx	RNC Minerals	0.56	(0.18)	(24)%	1.18	0.0
TSX:EDR Er	Endeavour Silver Corp.	2.61	(0.09)	(3)%	4.40	2.36	TSX:ROXG	Roxgold Inc.	0.84	0.02	2%	1.44	0.7
TSXV:EQX Ed	Equinox Gold Corp.	0.98	(0.01)	(1)%	1.23	0.93	NasdaqGS:RGLD	Royal Gold, Inc.	74.43	0.06	0%	98.53	70.1
TSXV:FPC Fa	alco Resources Ltd.	0.31	(0.05)	(13)%	1.13	0.30	TSX:SBB	Sabina Gold & Silver Corp.	1.36	(0.07)	(5)%	2.62	1.1
TSX:FR Fi	First Majestic Silver Corp.	7.02	(0.28)	(4)%	11.09	6.24	TSX:SSL	Sandstorm Gold Ltd.	5.13	0.26	5%	6.95	4.6
TSX:FVI Fo	ortuna Silver Mines Inc.	4.53	(0.35)	(7)%	7.78	4.29	NYSE:SA	Seabridge Gold Inc.	12.04	(0.19)	(2)%	15.30	9.8
TSX:FNV Fr	ranco-Nevada Corporation	87.02	0.83	1%	110.18	76.53	TSX:SMF	SEMAFO Inc.	2.67	(0.15)	(5)%	4.14	2.6
NYSE:GFI G	Gold Fields Limited	2.88	(0.01)	(0)%	4.54	2.20	NYSE:SBGL	Sibanye Gold Limited	2.60	0.07	3%	5.44	2.0
TSX:G G	Goldcorp Inc.	12.18	(0.17)	(1)%	19.32	11.00	TSX:SVM	Silvercorp Metals Inc.	2.60	(0.28)	(10)%	4.02	2.4
TSX:GSC G	Golden Star Resources Ltd.	3.95	(0.04)	(1)%	5.85	3.35	TSX:SSRM	SSR Mining Inc.	14.34	1.42	11%	14.62	9.6
TSXV:GQC G	Goldquest Mining Corp.	0.11	0.01	10%	0.46	0.09	TSX:THO	Tahoe Resources Inc.	4.48	1.44	47%	7.27	2.8
TSX:GUY G	Guyana Goldfields Inc.	1.39	(0.27)	(16)%	5.42	1.29	TSX:TMR	TMAC Resources Inc.	5.57	0.27	5%	11.50	3.9
NYSE:HMY H	Harmony Gold Mining Company Limi	1.69	(0.06)	(3)%	2.53	1.43	TSX:TXG	Torex Gold Resources Inc	11.48	(0.36)	(3)%	14.58	7.2
TSX:HRT H	Harte Gold Corp.	0.40	(0.04)	(8)%	0.55	0.29	TSX:TML	Treasury Metals Inc.	0.23	(0.01)	(4)%	0.67	0.2
NYSE:HL H	Hecla Mining Company	2.51	0.06	2%	4.63	2.17	TSX:TLG	Troilus Gold Corp.	0.50	0.04	8%	2.25	0.4
TSX:IMG IA	AMGOLD Corporation	4.06	(0.25)	(6)%	8.20	3.64	TSX:WDO	Wesdome Gold Mines Ltd.	3.55	(0.28)	(7)%	4.18	1.6
TSX:IVN Iv	vanhoe Mines Ltd.	2.56	(0.01)	(0)%	4.82	2.00	TSX:WPM	Wheaton Precious Metals Corp.	20.28	(1.32)	(6)%	29.93	19.8
TSX:K Ki	(inross Gold Corporation	3.27	(0.25)	(7)%	5.90	3.15	TSX:YRI	Yamana Gold Inc.	2.83	(0.17)	(6)%	4.69	2.6
TSX:KL Ki	(irkland Lake Gold Ltd.	24.62	(0.96)	(4)%	30.94	16.54							
TSX:LGD Li	iberty Gold Corp.	0.30	(0.06)	(15)%	0.50	0.33							

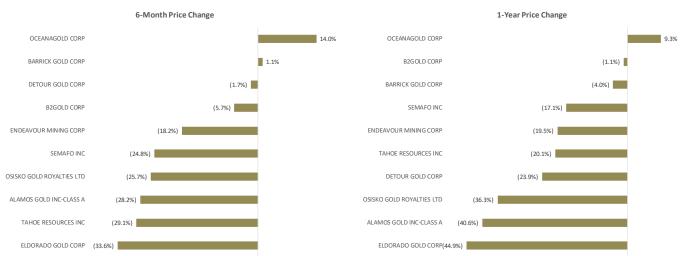
Source: Capital IQ and Haywood Securities



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

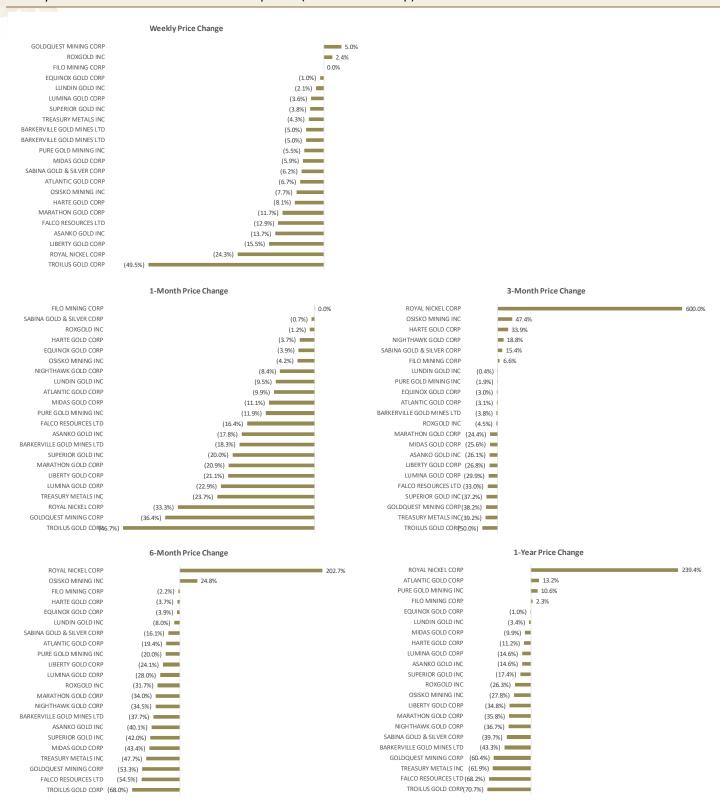






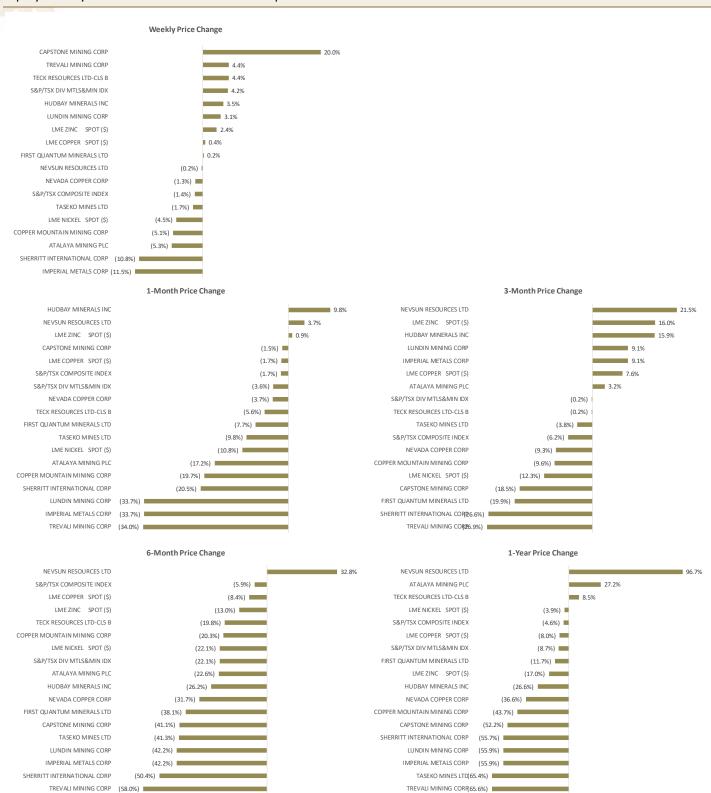


#### Weekly Performance - Precious Metals Companies (Covered Small Cap)



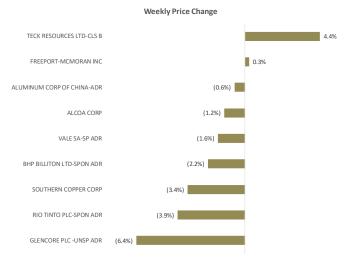


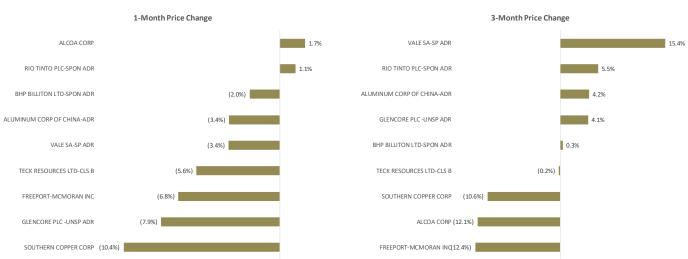
#### Equity Weekly Performance - Base Metals Companies

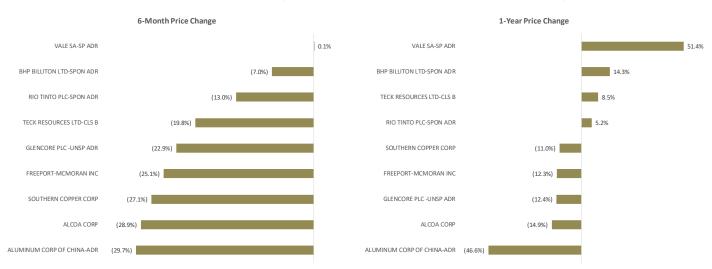




#### Equity Weekly Performance – Major International Miners









## 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	P/CF	Ratio	EV/CF	Ratio	EV/EBIT	DA Ratio	P/N
			(millions)	(millions)	(millions)	(millions)	(millions)	(millions)	CFPS	CFPS	Estimates	2018E	2019E	2018E	2019E	2018E	2019E	201
enior Precious Metals Producers																		
gnico Eagle Mines Limited	NYSE:AEM	C\$ 46.64	232.0	US\$ 8,191	US\$ 610	US\$ 896	US\$ 1,722	US\$ 9,016	US\$ 2.68	US\$ 3.25	12	13.2x	10.9x	14.5x	11.9x	11.8x	9.8x	1.
lamos Gold Inc.	TSX:AGI	C\$ 4.69	390.4	US\$ 1,386	US\$ 230	US\$ 301	US\$ 2	US\$ 1,087	US\$ 0.53	US\$ 0.65	12	6.7x	5.5x	5.3x	4.3x	5.3x	4.1x	0.
ingloGold Ashant Limited	JSE:ANG	C\$ 12.85	412.2	US\$ 4,009	US\$ 221	US\$ 519	US\$ 2,004	US\$ 5,494	US\$ 2.23	US\$ 2.77	5	4.4x	3.5x	6.0x	4.8x	4.2x	3.6x	1.
2Gold Corp.	TSX:BTO	C\$ 3.32	990.4	US\$ 2,488	US\$ 355	US\$ 132	US\$ 458	US\$ 2,814	US\$ 0.46	US\$ 0.51	11	5.4x	4.9x	6.1x	5.6x	4.6x	4.6x	1
Sarrick Gold Corporation	TSX:ABX	C\$ 17.10	1167.6	US\$ 15,111	US\$ 1,697	US\$ 2,554	US\$ 5,687	US\$ 18,244	US\$ 1.76	US\$ 1.78	9	7.4x	7.3x	8.9x	8.8x	6.2x	6.0x	1.
entamin plc	LSE:CEY	C\$ 1.66	1153.9	US\$ 1,447	US\$ 254	US\$ 337		US\$ 1,109	US\$ 0.15	US\$ 0.24	2	8.5x	5.3x	6.5x	4.1x	4.1x	3.3x	0
compañía de Minas Buenaventura S.A.A.	NYSE:BVN	C\$ 18.93	254.0	US\$ 3,640	US\$ 355	US\$ 358	US\$ 271	US\$ 3,553	US\$ 1.31	US\$ 1.57	1	10.9x	9.1x	10.7x	8.9x	8.0x	6.3x	0
ndeavour Mining Corporation	TSX:EDV	C\$ 17.81	107.8	US\$ 1,452	US\$ 43	US\$ 146	US\$ 474	US\$ 1,781	US\$ 2.15	US\$ 2.93	11	6.3x	4.6x	7.7x	5.6x	6.2x	4.7x	0
volution Mining Limited	ASX:EVN	C\$ 3.00	1697.0	US\$ 3,856	US\$ 239	US\$ 247	US\$ 216	US\$ 3,826	US\$ 0.31	US\$ 0.28	5	7.4x	8.2x	7.3x	8.1x	6.7x	7.0x	1
resnillo PLC iold Fields Limited	LSE:FRES JSE:GFI	C\$ 14.34	736.9 821.5	US\$ 7,995 US\$ 2.307	US\$ 689 US\$ 498	US\$ 1,240 US\$ 86	US\$ 799	US\$ 7,555 US\$ 3.684	US\$ 1.06	US\$ 1.16 US\$ 1.12	4	10.3x 2.9x	9.3x	9.7x 4.6x	8.8x	7.2x 3.6x	6.5x	1
Goldcoro Inc.		C\$ 3.71					US\$ 1,463		US\$ 0.98		5		2.5x		4.0x		3.3x	
	TSX:G	C\$ 12.18	869.5	US\$ 8,015	US\$ 166	(US\$ 190)	US\$ 2,336	US\$ 10,541	US\$ 1.21	US\$ 1.80	14	7.6x	5.1x	10.0x	6.7x	9.2x	5.6x	0
MGOLD Corporation	TSX:IMG	C\$ 4.06	466.6	US\$ 1,434	US\$ 716	US\$ 873	US\$ 396	US\$ 956	US\$ 0.65	US\$ 0.77	13	4.8x	4.0x	3.2x	2.7x	2.9x	2.6x	0
inross Gold Corporation	TSX:K	C\$ 3.27	1250.2	US\$ 3,094	US\$ 566	US\$ 1,197	US\$ 1,734	US\$ 3,632	US\$ 0.69	US\$ 0.74	14	3.6x	3.3x	4.2x	3.9x	3.5x	3.4x	0
irkland Lake Gold Ltd.	TSX:KL	C\$ 24.62 C\$ 19.78	209.7	US\$ 3,907	US\$ 257 US\$ 953	US\$ 162	US\$ 1.993	US\$ 3,745 US\$ 12,457	US\$ 2.06	US\$ 2.19	11 7	9.1x	8.5x	8.7x	8.1x	8.3x	6.7x 7.8x	1
lewcrest Mining Limited	ASX:NCM		767.1	US\$ 11,485		US\$ 1,021			US\$ 1.67	US\$ 1.75		8.9x	8.6x	9.7x	9.3x	8.5x		
lewmont Mining Corporation	NYSE:NEM	C\$ 43.42	532.7	US\$ 17,503	US\$ 3,126	US\$ 3,884	US\$ 4,163	US\$ 17,782	US\$ 3.66	US\$ 4.01	10	9.0x	8.2x	9.1x	8.3x	7.8x	7.0x	1
Jorthern Star Resources Limited	ASX:NST	C\$ 7.94	639.5	US\$ 3,844	US\$ 328	US\$ 265	LICE 150	US\$ 3,579	US\$ 0.40	US\$ 0.60		14.9x	10.0x	13.9x	9.3x	11.0x	7.4x	1
OceanaGold Corporation	TSX:OGC	C\$ 3.75	618.4 94.4	US\$ 1,755	US\$ 70	US\$ 93	US\$ 150 US\$ 3	US\$ 1,812	US\$ 0.56	US\$ 0.49	14	5.1x	5.8x	5.2x	6.0x	4.8x	5.0x	1
andgold Resources Limited	LSE:RRS	C\$ 106.26		US\$ 7,593	US\$ 654	US\$ 906		US\$ 6,689	US\$ 5.03	US\$ 6.57		16.0x	12.2x	14.1x	10.8x	12.7x	9.9x	1
amana Gold Inc.	TSX:YRI	C\$ 2.83	949.3	US\$ 2,033	US\$ 125	US\$ 7	US\$ 1,776	US\$ 3,803	US\$ 0.55	US\$ 0.58	16	3.9x	3.7x	7.3x	6.9x	6.3x	5.1x	0
Group Average - Senior Producers												7.9x	6.7x	8.2x	7.0x	6.8x	5.7x	1
Group Average - Senior Producers (exclud	ling high/low)											7.7x	6.6x	8.2x	7.0x	6.7x	5.6x	1
termediate Precious Metals Producers																		4
cacia Mining plc	LSE:ACA	C\$ 2.89	410.1	US\$ 897	US\$ 121	US\$ 131		US\$ 766	US\$ 0.32	US\$ 0.62	5	6.8x	3.6x	5.8x	3.0x	3.8x	3.0x	1
Centerra Gold Inc.	TSX:CG	C\$ 4.99	292.0	US\$ 1,103	US\$ 195	US\$ 635	US\$ 292	US\$ 759	US\$ 1.02	US\$ 1.21	9	3.7x	3.1x	2.6x	2.2x	1.8x	1.7x	0
letour Gold Corporation	TSX:DGC	C\$ 10.18	175.3	US\$ 1,351	US\$ 156	US\$ 198	US\$ 249	US\$ 1,402	US\$ 1.53	US\$ 1.40	16	5.0x	5.5x	5.2x	5.7x	5.2x	5.6x	0
Idorado Gold Corporation	TSX:ELD	C\$ 0.81	791.5	US\$ 485	US\$ 388	US\$ 500	US\$ 595	US\$ 581	US\$ 0.11	US\$ 0.16	13	5.7x	4.0x	6.8x	4.7x	4.7x	3.6x	0
lecla Mining Company	NYSE:HL	C\$ 3.32	480.2	US\$ 1,205	US\$ 61	US\$ 66	US\$ 534	US\$ 1,673	US\$ 0.25	US\$ 0.39	6	10.0x	6.4x	13.9x	9.0x	10.9x	8.1x	0
lighland Gold Mining Limited	AIM:HGM	C\$ 2.49	325.2	US\$ 613	US\$ 11	US\$ 44	US\$ 170	US\$ 739	US\$ 0.42	US\$ 0.37	1	4.5x	5.0x	5.4x	6.1x	4.5x	4.6x	0
refum Resources Inc.	TSX:PVG	C\$ 9.97	183.5	US\$ 1,384	US\$ 190	(US\$ 468)	US\$ 140	US\$ 1,993	US\$ 1.19	US\$ 1.65	4	6.4x	4.6x	9.1x	6.6x	9.5x	6.1x	0
Regis Resources Limited	ASX:RRL	C\$ 4.18	507.2	US\$ 1,606	US\$ 134	US\$ 138		US\$ 1,468	US\$ 0.35	US\$ 0.31	6	9.0x	10.1x	8.2x	9.3x	6.8x	7.0x	1.
Resolute Mining Limited	ASX:RSG	C\$ 0.93	757.5	US\$ 531	US\$ 48	US\$ 156		US\$ 375	US\$ 0.08	US\$ 0.11	3	8.6x	6.2x	6.1x	4.4x	7.8x	3.3x	0
SEMAFO Inc.	TSX:SMF	C\$ 2.67	325.6	US\$ 658	US\$ 86	US\$ 83	US\$ 72	US\$ 647	US\$ 0.40	US\$ 0.76	9	5.1x	2.6x	5.0x	2.6x	5.6x	2.4x	0
ahoe Resources Inc.	TSX:THO	C\$ 4.48	313.3	US\$ 1,062	US\$ 48	US\$ 103	US\$ 100	US\$ 1,060	US\$ 0.29	US\$ 0.63	12	11.7x	5.4x	11.6x	5.4x	8.1x	3.7x	0
orex Gold Resources Inc	TSX:TXG	C\$ 11.48	84.9	US\$ 738	US\$ 122	US\$ 57	US\$ 269	US\$ 950	US\$ 2.02	US\$ 2.63	2	4.3x	3.3x 5.0x	5.5x 7.1x	4.3x 5.3x	5.4x	3.6x 4.4x	0.
Group Average - Intermediate Producers Group Average - Intermediate Producers (	eveluding high/low	١										6.7x 6.5x	5.0x 4.7x	6.9x	5.3x 5.2x	6.2x 6.1x	4.4x 4.3x	0.
	exciduling mighnow	,										0.5x	4.7A	0.7X	J.ZX	0.11	ч.эх	
unior Precious Metals Producers	TOV ACD	06.0.10	202.0	LIC¢ 407	LICE 11/	LICE 102	LICE 200	LICE (72)	LICE 0.22	LICE O / F	7	7.0	2.5	0.0	2 5	70.7	2 2	
lacer Gold Corp. Jio Gold Inc.	TSX:ASR TSX:ALO	C\$ 2.19 C\$ 0.87	293.8 84.7	US\$ 487 US\$ 56	US\$ 116 US\$ 24	US\$ 103 US\$ 92	US\$ 288 US\$ 15	US\$ 672 (US\$ 21)	US\$ 0.23 US\$ 0.16	US\$ 0.65 US\$ 0.33	6	7.2x 4.1x	2.5x 2.0x	9.9x	3.5x	70.7x	3.3x	0.
rgonaut Gold Inc.	TSX:AR	C\$ 1.32	177.8	US\$ 178	US\$ 21	US\$ 96	US\$ 8	US\$ 90	US\$ 0.37	US\$ 0.49	6	2.7x	2.0x	1.4x	1.0x	1.2x	0.8x	0.
sanko Gold Inc.	TSX:AKG	C\$ 0.88	225.8	US\$ 150	US\$ 14	US\$ 11	0.500	US\$ 139	US\$ 0.33	US\$ 0.20	4	2.0x	3.3x	1.9x	3.1x	1.9x	3.0x	0
flantic Gold Corporation	TSXV:AGB	C\$ 1.54	236.8	US\$ 276	US\$ 31	US\$ 27	US\$ 85	US\$ 335	US\$ 0.26	US\$ 0.25	2	4.5x	4.6x	5.5x	5.6x	5.4x	4.5x	ő
trio Gold Inc.	TSX:BRIO	C\$ 2.78	117.6	US\$ 247	US\$ 18	(US\$ 27)	US\$ 48	US\$ 322			0		-					
lundee Precious Metals Inc.	TSX:DPM	C\$ 3.25	178.5	US\$ 439	US\$ 23	US\$ 35	US\$ 39	US\$ 443	US\$ 0.59	US\$ 0.67	1	4.2x	3.7x	4.2x	3.7x	4.0x	2.9x	0
olden Star Resources Ltd.	TSX:GSC	C\$ 3.95	108.8	US\$ 325	US\$ 18	(US\$ 91)	US\$ 77	US\$ 493	US\$ 0.33	US\$ 0.74	7	8.9x	4.1x	13.5x	6.1x	9.7x	4.4x	0
uyana Goldfields Inc.	TSX:GUY	C\$ 1.39	173.5	US\$ 183	US\$ 93	US\$ 116	US\$ 25	US\$ 92	US\$ 0.33	US\$ 0.72	6	3.2x	1.5x	1.6x	0.7x	1.6x	0.7x	0
aguar Mining Inc.	TSX:JAG	C\$ 0.20	325.6	US\$ 49	US\$ 7	US\$ 2	US\$ 1	US\$ 48	US\$ 0.08	US\$ 0.12	2	1.9x	1.3x	1.9x	1.3x	1.6x	1.2x	0
eagold Mining Corporation	TSX:LMC	C\$ 1.40	284.7	US\$ 302	US\$ 47	US\$ 48	US\$ 209	US\$ 463	US\$ 0.35	US\$ 0.60	5	3.0x	1.8x	4.6x	2.7x	4.1x	1.9x	(
ew Gold Inc.	TSX:NGD	C\$ 1.18	578.7	US\$ 517	US\$ 129	US\$ 362	US\$ 940	US\$ 1,095	US\$ 0.47	US\$ 0.37	13	1.9x	2.4x	4.1x	5.2x	3.9x	4.3x	(
erseus Mining Limited	ASX:PRU	C\$ 0.35	1034.9	US\$ 271	US\$ 23	US\$ 48	US\$ 39	US\$ 261	US\$ 0.05	US\$ 0.11	5	4.8x	2.4x	4.7x	2.3x	4.0x	2.7x	(
remier Gold Mines Limited	TSX:PG	C\$ 1.65	203.1	US\$ 254	US\$ 57	US\$ 63		US\$ 191	US\$ 0.03	US\$ 0.20	3	41.6x	6.2x	31.3x	4.7x	18.7x	8.1x	0
imero Mining Corp.	TSX:P	C\$ 0.31	193.0	US\$ 45	US\$ 16	US\$ 25	US\$ 74	US\$ 94			0							
NC Minerals	TSX:RNX	C\$ 0.56	446.0	US\$ 189	US\$ 5	(US\$ 26)	1104.07	US\$ 215	US\$ 0.02	US\$ 0.06	1	18.7x	7.0x	21.2x	7.9x	8.9x	6.3x	0
oxgold Inc.	TSX:ROXG	C\$ 0.84	374.2	US\$ 238	US\$ 71	US\$ 69	US\$ 27	US\$ 196	US\$ 0.21	US\$ 0.26	5	3.1x	2.4x	2.5x	2.0x	2.2x	1.7x	(
uperior Gold Inc.	TSXV:SGI	C\$ 0.76	95.8	US\$ 55	US\$ 22	US\$ 19		US\$ 36	US\$ 0.11	US\$ 0.28	7	5.1x	2.1x	3.3x	1.3x	5.6x	1.1x	(
eranga Gold Corporation	TSX:TGZ	C\$ 3.44	107.6	US\$ 280	US\$ 80	US\$ 92	US\$ 76	US\$ 264	US\$ 0.75	US\$ 0.61	2	3.5x	4.3x	3.3x	4.0x	2.3x	2.7x	(
MAC Resources Inc.	TSX:TMR	C\$ 5.57	112.4	US\$ 474	US\$ 11	(US\$ 17)	US\$ 98	US\$ 589	US\$ 0.23	US\$ 1.00	5	18.2x	4.2x	22.6x	5.3x	17.5x	4.6x	0
	TSX:WDO	C\$ 3.55	134.8	US\$ 362	US\$ 24	US\$ 12		US\$ 350	US\$ 0.25	US\$ 0.27	9	10.6x	10.0x	10.3x	9.7x	9.2x	9.6x	0
esdome Gold Mines Ltd.	10,1,1100																	
/esdome Gold Mines Ltd. Group Average - Junior Producers Group Average - Junior Producers (exclud												7.9x 6.2x	3.6x 3.3x	8.2x 6.8x	3.9x 3.6x	9.6x 6.0x	3.5x 3.2x	0

Source: Capital IQ and Haywood Securities



## 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 2018E	Ratio 2019E	EV/CF 2018E	Ratio 2019E	EV/EBITI 2018E	DA Ratio 2019E	P/NAV 2018E
PGM Producers																		
Anglo American Platinum Limited	JSE:AMS	C\$ 41.71	262.2	US\$ 8,277	US\$ 675	US\$ 847	US\$ 609	US\$ 8,039	US\$ 2.82	US\$ 3.15	3	11.2x	10.0x	10.9x	9.7x	8.4x	7.4x	1.6x
Impala Platinum Holdings Limited	JSE:IMP	C\$ 2.69	702.3	US\$ 1,432	US\$ 270	US\$ 655	US\$ 487	US\$ 1,265	US\$ 0.20	US\$ 0.39	3	10.3x	5.2x	9.1x	4.6x	4.6x	3.4x	1.0x
Lonmin Plc	LSE:LMI	C\$ 0.67	282.7	US\$ 144	US\$ 167	US\$ 179	-	(US\$ 35)	US\$ 0.19	US\$ 0.25	1	2.7x	2.0x	-	-	-	-	0.4x
Group Average - PGM Produce	rs											8.0x	5.7x	10.0x	7.1x	6.5x	5.4x	1.0x
Silver Producers											Į.							
Americas Silver Corporation	TSX:USA	C\$ 2.02	43.1	US\$ 66	US\$ 3	US\$ 3	US\$ 7	US\$ 69	US\$ 0.34	US\$ 0.34	2	4.5x	4.5x	4.8x	4.7x	11.5x	3.6x	0.3x
Coeur Mining, Inc.	NYSE:CDE	C\$ 5.80	199.1	US\$ 874	US\$ 105	US\$ 140	US\$ 366	US\$ 1,099	US\$ 0.59	US\$ 0.96	4	7.5x	4.6x	9.4x	5.7x	8.0x	5.1x	0.9x
Endeavour Silver Corp.	TSX:EDR	C\$ 2.61	130.6	US\$ 258	US\$ 29	US\$ 57	-	US\$ 200	US\$ 0.23	US\$ 0.25	5	8.7x	7.8x	6.8x	6.1x	6.4x	5.2x	0.8x
First Majestic Silver Corp.	TSX:FR	C\$ 7.02	193.6	US\$ 1,028	US\$ 80	US\$ 128	US\$ 150	US\$ 1,050	US\$ 0.36	US\$ 0.65	3	14.9x	8.2x	15.2x	8.4x	21.1x	7.7x	1.0x
Fortuna Silver Mines Inc.	TSX:FVI	C\$ 4.53	159.9	US\$ 548	US\$ 177	US\$ 183	US\$ 40	US\$ 405	US\$ 0.50	US\$ 0.67	6	6.8x	5.1x	5.0x	3.8x	3.5x	2.8x	0.9x
Fresnillo PLC	LSE:FRES	C\$ 14.34	736.9	US\$ 7,995	US\$ 689	US\$ 1,240	US\$ 799	US\$ 7,555	US\$ 1.06	US\$ 1.16	4	10.3x	9.3x	9.7x	8.8x	7.2x	6.5x	0.9x
Hecla Mining Company	NYSE:HL	C\$ 3.32	480.2	US\$ 1,205	US\$ 61	US\$ 66	US\$ 534	US\$ 1,673	US\$ 0.25	US\$ 0.39	6	10.0x	6.4x	13.9x	9.0x	10.9x	8.1x	0.9x
Mandalay Resources Corporation	TSX:MND	C\$ 0.06	451.6	US\$ 19	US\$ 27	US\$ 5	US\$ 32	US\$ 46	US\$ 0.05	US\$ 0.07	1	0.8x	0.6x	2.0x	1.5x	-	1.3x	0.1x
Pan American Silver Corp.	TSX:PAAS	C\$ 16.98	153.3	US\$ 1,970	US\$ 253	US\$ 444	US\$ 21	US\$ 1,547	US\$ 1.26	US\$ 1.62	7	10.2x	7.9x	8.0x	6.2x	6.4x	5.4x	1.0x
	TSX:SSRM	C\$ 14.34	120.2	US\$ 1,305	US\$ 481	US\$ 649	US\$ 244	US\$ 899	US\$ 0.88	US\$ 1.34	5	12.4x	8.1x	8.5x	5.6x	6.7x	5.3x	1.0x
Silvercorp Metals Inc.	TSX:SVM	C\$ 2.60	168.7	US\$ 332	US\$ 124	US\$ 99	-	US\$ 233	US\$ 0.46	US\$ 0.45	1	4.3x	4.4x	3.0x	3.1x	2.8x	2.9x	0.6x
Group Average - Silver Produce	ers											8.2x	6.1x	7.9x	5.7x	8.4x	4.9x	0.8x
Group Average - Silver Produce		g high/low)										8.3x	6.3x	7.7x	5.8x	7.0x	4.9x	0.8x
Diamond Producers																		
Lucara Diamond Corp.	TSX:LUC	C\$ 2.00	396.5	US\$ 600	US\$ 31	US\$ 70	-	US\$ 530	US\$ 0.14	US\$ 0.20	4	10.6x	7.7x	9.3x	6.8x	7.2x	4.4x	0.9x
Mountain Province Diamonds Inc.	TSX:MPVD	C\$ 1.63	210.0	US\$ 259	US\$ 22	US\$ 71	US\$ 303	US\$ 491	US\$ 0.54	US\$ 0.51	3	2.3x	2.4x	4.3x	4.6x	4.0x	3.4x	0.5x
Petra Diamonds Limited	LSE:PDL	C\$ 0.71	865.3	US\$ 464	US\$ 222	US\$ 148	US\$ 712	US\$ 1,028	US\$ 0.18	US\$ 0.20	3	3.0x	2.7x	6.6x	6.0x	5.0x	4.5x	0.8x
Stornoway Diamond Corporation	TSX:SWY	C\$ 0.23	894.0	US\$ 156	US\$ 5	(US\$ 75)	US\$ 181	US\$ 411	(US\$ 0.02)	US\$ 0.06	2	-	3.1x	-	8.1x	13.4x	6.1x	0.4x
Group Average - Diamond Prod	lucers								· · · · · · · · · · · · · · · · · · ·			5.3x	4.0x	6.7x	6.4x	7.4x	4.6x	0.6x
Royalty Companies																		
Anglo Pacific Group plc	LSE:APF	C\$ 2.28	180.1	US\$ 310	US\$ 15	US\$ 22	US\$ 8	US\$ 296	US\$ 0.27	US\$ 0.27	3	6.4x	6.5x	6.1x	6.2x	5.4x	5.6x	0.8x
Altius Minerals Corporation	TSX:ALS	C\$ 13.07	43.0	US\$ 425	US\$ 36	US\$ 22	US\$ 78	US\$ 480	US\$ 0.66	US\$ 0.72	4	14.9x	13.7x	16.9x	15.5x	11.7x	10.8x	1.2x
Franco-Nevada Corporation	TSX:FNV	C\$ 87.02	186.4	US\$ 12,274	US\$ 77	US\$ 150	-	US\$ 12,124	US\$ 2.59	US\$ 2.95	16	25.4x	22.3x	25.1x	22.1x	23.3x	20.8x	1.8x
Maverix Metals Inc.	TSXV:MMX	C\$ 2.41	215.4	US\$ 393	US\$ 7	US\$ 28	US\$ 20	US\$ 384	US\$ 0.09	US\$ 0.10	5	21.1x	19.1x	20.7x	18.7x	20.9x	15.6x	1.6x
Osisko Gold Royalties Ltd	TSX:OR	C\$ 9.82	156.4	US\$ 1,163	US\$ 114	US\$ 218	US\$ 325	US\$ 1,269	US\$ 0.40	US\$ 0.45	13	18.6x	16.4x	20.3x	17.9x	17.7x	16.4x	0.9x
Royal Gold, Inc.	US:RGLD	C\$ 98.35	65.5	US\$ 4,876	US\$ 117	US\$ 122	US\$ 355	US\$ 5,109	US\$ 4.37	US\$ 4.54	12	17.0x	16.4x	17.8x	17.2x	14.9x	15.4x	1.6x
Sandstorm Gold Ltd.	TSX:SSL	C\$ 5.13	182.6	US\$ 709	US\$ 20	US\$ 21	-	US\$ 688	US\$ 0.25	US\$ 0.29	4	15.4x	13.4x	15.0x	13.0x	14.4x	12.0x	0.9x
Wheaton Precious Metals Corp.	TSX:WPM	C\$ 20.28	444.0	US\$ 6,815	US\$ 119	US\$ 108	US\$ 1,381	US\$ 8,087	US\$ 1.09	US\$ 1.19	11	14.1x	12.9x	16.8x	15.3x	16.2x	14.4x	1.1x
Group Average - Royalty Comp	anies											16.6x	15.1x	17.3x	15.7x	15.6x	13.9x	1.2x
Group Average - Royalty Comp	anies (exclud	ing high/low)										16.9x	15.3x	17.9x	16.3x	16.0x	14.1x	1.2x

All data sourced from Capital IQ

Source: Capital IQ and Haywood Securities



## Senior Gold Producers - Reserves and Resources

	Symbol Market Working Enterprise erves & Resources Re								Reserves (M&I and Inferred)											Global				
	o jiii boi	Murket	Morking	Litterprise	Au	Au		AuEq		Au	Au	AuEq	AuEq	% Au	EV/oz	Au	Au	AuEq	AuEq	% Au	% Au	% AuEq	EV/oz	EV/oz
Agnico Eagle Mines Limited	NYSE:AEM	US \$8,191	US \$896	US \$9,019	62.2	2.02	68.1	2.21	91%	21.3	2.54	22.5	2.68	94%	US \$424	40.9	1.83	45.6	2.03	90%	52%	54%	US \$145	US \$132
Alamos Gold Inc.	TSX:AGI	US \$1,386	US \$301	US \$1,087	22.3	1.28	23.0	1.32	97%	9.8	1.50	10.2	1.56	96%	US \$111	12.4	1.15	12.8	1.18	97%	40%	39%	US \$49	US \$47
AngloGold Ashanti Limited	JSE:ANG	US \$4,009	US \$519	US \$5,494	192.5	1.56	218.7	1.77	88%	45.1	1.20	47.1	1.25	96%	US \$122	147.4	1.81	171.6	2.11	86%	33%	37%	US \$29	US \$25
B2Gold Corp.	TSX:BTO	US \$2,488	US \$132	US \$2,814	24.4	0.86	30.3	1.07	80%	8.2	1.21	8.2	1.21	100%	US \$343	16.2	0.75	22.1	1.02	73%	53%	63%	US \$115	US \$93
Barrick Gold Corporation	TSX:ABX	US \$15,111	US \$2,554	US \$18,269	191.0	0.76	319.6	1.27	60%	77.4	1.11	105.1	1.50	74%	US \$236	113.6	0.62	214.4	1.17	53%	30%	30%	US \$96	US \$57
Centamin plc	LSE:CEY	US \$1,447	US \$337	US \$1,109	11.4	1.12	11.4	1.12	100%	4.0	1.02	4.0	1.02	100%	US \$277	7.4	1.18	7.4	1.18	100%	33%	33%	US \$98	US \$98
Compañía de Minas Buenaventura S.A.A.	NYSE:BVN	US \$3,640	US \$358	US \$3,930	23.7	0.31	82.9	1.08	29%	6.0	0.20	27.5	0.91	22%	US \$653	17.6	0.38	55.2	1.19	32%	23%	16%	US \$165	US \$47
Endeavour Mining Corporation	TSX:EDV	US \$1,452	US \$146	US \$1,850	15.1	1.84	15.1	1.84	100%	7.6	1.77	7.6	1.77	100%	US \$243	7.5	1.91	7.5	1.91	100%	35%	35%	US \$122	US \$122
Evolution Mining Limited	ASX:EVN	US \$3,856	US \$242	US \$3,831	13.8	0.91	16.9	1.12	81%	6.6	0.88	8.6	1.15	76%	US \$584	7.1	1.24	8.2	1.44	86%	36%	32%	US \$278	US \$226
Fresnillo PLC	LSE:FRES	US \$7,995	US \$1,240	US \$7,555	38.0	0.79	80.0	1.67	48%	9.6	0.76	20.3	1.62	47%	US \$791	28.1	0.79	59.3	1.67	47%	33%	48%	US \$199	US \$94
Gold Fields Limited	JSE:GFI	US \$2,307	US \$86	US \$4,112	108.2	2.27	124.7	2.61	87%	48.6	2.66	50.4	2.76	96%	US \$85	59.6	2.02	74.3	2.53	80%	42%	53%	US \$38	US \$33
Goldcorp Inc.	TSX:G	US \$8,015	US (\$190)	US \$11,174	113.3	0.65	197.8	1.14	57%	53.2	0.65	101.8	1.24	52%	US \$210	60.1	0.66	95.9	1.05	63%	37%	39%	US \$99	US \$56
IAMGOLD Corporation	TSX:IMG	US \$1,434	US \$873	US \$957	37.3	1.19	38.1	1.22	98%	16.6	1.17	16.6	1.17	100%	US \$58	20.7	1.21	21.5	1.26	97%	50%	51%	US \$26	US \$25
Kinross Gold Corporation	TSX:K	US \$3,094	US \$1,197	US \$3,632	64.0	0.67	65.1	0.68	98%	28.1	0.67	28.7	0.69	98%	US \$129	35.9	0.67	36.4	0.67	99%	20%	20%	US \$57	US \$56
Kirkland Lake Gold Ltd.	TSX:KL	US \$3,907	US \$162	US \$3,772	20.6	4.82	20.6	4.82	100%	4.8	10.93	4.8	10.93	100%	US \$785	15.8	4.12	15.8	4.12	100%	44%	44%	US \$183	US \$183
Newcrest Mining Limited	ASX:NCM	US \$11,485	US \$1,021	US \$12,457	123.4	0.58	223.8	1.04	55%	62.3	0.60	118.0	1.14	53%	US \$200	61.1	0.55	105.8	0.95	58%	17%	20%	US \$101	US \$56
Newmont Mining Corporation	NYSE:NEM	US \$17,503	US \$3,884	US \$17,790	111.5	0.80	149.8	1.08	74%	68.8	0.93	76.1	1.03	91%	US \$258	42.6	0.65	73.7	1.13	58%	32%	20%	US \$160	US \$119
Northern Star Resources Limited	ASX:NST	US \$3,844	US \$260	US \$3,597	16.1	2.94	29.1	5.34	55%	4.1	3.62	4.1	3.62	100%	US \$887	12.0	2.83	25.0	5.91	48%	53%	78%	US \$224	US \$124
OceanaGold Corporation	TSX:OGC	US \$1,755	US \$93	US \$1,843	13.0	1.60	14.2	1.74	92%	5.9	1.42	6.6	1.60	89%	US \$313	7.1	1.78	7.5	1.88	95%	43%	43%	US \$141	US \$130
Randgold Resources Limited	LSE:RRS	US \$7,593	US \$906	US \$6,689	24.1	3.37	24.1	3.37	100%	13.9	3.83	13.9	3.83	100%	US \$482	10.2	2.90	10.2	2.90	100%	45%	45%	US \$278	US \$278
Yamana Gold Inc.	TSX:YRI	US \$2,033	US \$7	US \$3,843	55.5	0.49	119.1	1.06	47%	19.3	0.35	56.7	1.04	34%	US \$199	36.2	0.63	62.3	1.08	58%	45%	53%	US \$69	US \$32
Group Average - Total	up Average - Total # Companies: 21														US \$352								US \$127	US \$97

Equivalency assumptions (US\$ / 11-15-18): \$1,213/oz Au, \$14.29/oz Ag, \$842/oz Pt, \$1,160/oz Pd, \$2.81/lb Cu, \$1.20/lb Zn, \$0.87/lb Pb, \$5.07/lb Ni, \$11.29/lb Mo, \$24.95/lb Co, \$0/l Sb, \$27.50/lb U3O8, \$8.80/lb Sn, \$93.00/l HCC, \$74.95/l 62% Fe Source: SNL Financial retrieved on November 15, 2018



## **Intermediate Gold Producers - Reserves and Resources**

		Market	Working	Enterprise	o Au Au AuEa AuEa							Reserve	es .		Reserves		Resou	irces (Ma	&I and I	nferred)		Glo	obal
Company	Symbol	Capitalization	Capital	Value	Au	Au	AuEq	AuEq	% Au	Au	Au	AuEq	AuEq	% Au	EV/oz	Au	Au	AuEq	AuEq	% Au	% Au	EV/oz	EV/oz
		(millions)	(millions)	(millions)	(Moz)	(g/t)	(Moz)	(g/t)	/0 Au	(Moz)	(g/t)	(Moz)	(g/t)	/0 Au	Au	(Moz)	(g/t)	(Moz)	(g/t)	70 Au	Inferred	Au	AuEq
Acacia Mining plc	LSE:ACA	US \$897	US \$0	US \$954	25.7	3.66	27.9	3.99	92%	7.5	3.83	7.9	4.06	94%	US \$128	18.2	3.60	20.0	3.96	91%	63%	US \$37	US \$34
Centerra Gold Inc.	TSX:CG	US \$1,103	US \$635	US \$796	33.5	0.43	64.1	0.82	52%	16.5	0.67	22.7	0.92	73%	US \$48	17.0	0.32	41.4	0.78	41%	40%	US \$24	US \$12
China Gold International Resources Corp. Ltd.	TSX:CGG	US \$519	US \$87	US \$1,560	10.5	0.16	67.9	1.01	16%	4.6	0.27	24.3	1.44	19%	US \$340	6.0	0.12	43.5	0.86	14%	44%	US \$148	US \$23
Detour Gold Corporation	TSX:DGC	US \$1,351	US \$198	US \$1,402	20.8	0.96	20.8	0.96	100%	16.0	0.97	16.0	0.97	100%	US \$87	4.8	0.96	4.8	0.96	100%	23%	US \$67	US \$67
Eldorado Gold Corporation	TSX:ELD	US \$485	US \$500	US \$587	39.6	0.87	54.9	1.21	72%	16.5	1.37	23.7	1.96	70%	US \$36	23.1	0.69	31.2	0.93	74%	51%	US \$15	US \$11
Harmony Gold Mining Company Limited	JSE:HAR	US \$870	US \$41	US \$1,188	95.8	1.21	129.8	1.64	74%	24.5	0.68	37.7	1.05	65%	US \$48	71.3	1.65	92.2	2.13	77%	36%	US \$12	US \$9
Highland Gold Mining Limited	AIM:HGM	US \$613	US \$44	US \$741	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 \$604	US \$38	US \$619	13.2	0.11	87.1	0.72	15%	0.8	1.46	0.9	1.69	86%	US \$824	12.5	0.10	86.2	0.71	14%	46%	US \$47	US \$7
Pretium Resources Inc.	TSX:PVG	US \$1,384	US (\$468)	US \$1,993	48.8	0.68	64.1	0.89	76%	8.7	14.63	9.1	15.26	96%	US \$229	40.1	0.56	55.1	0.77	73%	32%	US \$41	US \$31
Regis Resources Limited	ASX:RRL	US \$1,606	US \$135	US \$1,471	8.4	0.90	8.4	0.90	100%	3.8	1.07	3.8	1.07	100%	US \$390	4.6	0.79	4.6	0.79	100%	44%	US \$175	US \$175
Resolute Mining Limited	ASX:RSG	US \$531	US \$153	US \$413	12.6	1.55	12.6	1.55	100%	4.8	1.41	4.8	1.41	100%	US \$87	7.8	1.64	7.8	1.64	100%	41%	US \$33	US \$33
SEMAFO Inc.	TSX:SMF	US \$658	US \$83	US \$674	7.0	2.70	7.0	2.70	100%	2.9	3.37	2.9	3.37	100%	US \$235	4.2	2.37	4.2	2.37	100%	33%	US \$96	US \$96
Tahoe Resources Inc.	TSX:THO	US \$1,062	US \$103	US \$1,062	22.6	0.50	43.7	0.96	52%	3.7	0.56	8.1	1.23	46%	US \$285	18.9	0.49	35.6	0.92	53%	46%	US \$47	US \$24
Torex Gold Resources Inc	TSX:TXG	US \$738	US \$57	US \$950	8.4	2.67	11.7	3.71	72%	3.3	2.74	3.3	2.80	98%	US \$291	5.1	2.63	8.3	4.26	62%	85%	US \$113	US \$81
Group Average - Total					# Comp	anies: 1	14								US \$227							US \$64	US \$46

Equivalency assumptions (US\$ / 11-15-18): \$1,213/oz Au, \$14.29/oz Ag, \$842/oz Pt, \$1,160/oz Pd, \$2.81/lb Cu, \$1.20/lb Zn, \$0.87/lb Pb, \$5.07/lb Ni, \$11.29/lb Mo, \$24.95/lb Co, \$0/t Sb, \$27.50/lb U3O8, \$8.80/lb Sn, \$93.00/t HCC, \$74.95/t 62% Fe Source: SNL Financial retrieved on November 15, 2018



## Junior Gold Producers - Reserves and Resources

		Market	Working	Enterprise	Glo	bal Res	erves &	Resour	ces			Reserve			Reserves		Resou	irces (Ma	&I and I	nferred)		Glo	obal
Company	Symbol	Capitalization	Capital	Value	Au	Au	AuEq	AuEq	% Au	Au	Au	AuEq	AuEq	% Au	EV/oz	Au	Au	AuEq	AuEq	% Au	% Au	EV/oz	EV/oz
		(millions)	(millions)	(millions)	(Moz)	(g/t)	(Moz)	(g/t)	/0 Au	(Moz)	(g/t)	(Moz)	(g/t)	/0 Au	Au	(Moz)	(g/t)	(Moz)	(g/t)	70 Au	Inferred	Au	AuEq
Alacer Gold Corp.	TSX:ASR	US \$487	US \$103	US \$672	7.3	0.66	14.0	1.27	52%	3.7	2.17	5.1	3.01	72%	US \$184	3.6	0.39	8.9	0.96	41%	54%	US \$93	US \$48
Alio Gold Inc.	TSX:ALO	US \$56	US \$92	US (\$21)	7.4	0.53	7.9	0.57	93%	1.9	0.89	2.0	0.90	99%	-	5.4	0.46	5.9	0.51	91%	25%	-	-
Argonaut Gold Inc.	TSX:AR	US \$178	US \$96	US \$90	12.6	0.57	15.4	0.70	82%	4.5	0.62	5.2	0.72	87%	US \$20	8.1	0.55	10.2	0.69	80%	16%	US \$7	US \$6
Asanko Gold Inc.	TSX:AKG	US \$150	US \$11	US \$139	6.2	1.46	6.2	1.46	100%	4.7	1.57	4.7	1.57	100%	US \$30	1.6	1.22	1.6	1.22	100%	15%	US \$22	US \$22
Azumah Resources Limited	ASX:AZM	US \$11	US \$2	US \$10	0.9	1.55	0.9	1.55	100%	0.3	2.14	0.3	2.14	100%	US \$36	0.6	1.38	0.6	1.38	100%	47%	US \$11	US \$11
Beadell Resources Limited	ASX:BDR	US \$61	US (\$11)	US \$118	3.7	0.43	16.7	1.90	22%	1.5	1.83	1.5	1.83	100%	US \$80	2.3	0.28	15.2	1.91	15%	66%	US \$32	US \$7
Dundee Precious Metals Inc.	TSX:DPM	US \$439	US \$35	US \$443	9.7	0.39	19.6	0.79	50%	2.7	3.35	3.6	4.50	74%	US \$164	7.0	0.29	15.9	0.67	44%	55%	US \$46	US \$23
Fiore Gold Ltd.	TSXV:F	US \$17	US \$17	US (\$1)	3.8	0.93	3.8	0.93	100%	0.3	0.52	0.3	0.52	100%	-	3.5	1.00	3.5	1.00	100%	26%		-
Golden Star Resources Ltd.	TSX:GSC	US \$325	US (\$91)	US \$495	10.9	3.21	10.9	3.21	100%	1.5	2.55	1.5	2.55	100%	US \$325	7.6	3.58	7.6	3.58	100%	72%	US \$45	US \$45
Goldgroup Mining Inc.	TSX:GGA	US \$8	US (\$2)	US \$11	0.3	0.96	0.7	2.07	46%	-	-	-	-	-	-	0.3	0.96	0.7	2.07	46%	35%	US \$31	US \$14
Guyana Goldfields Inc.	TSX:GUY	US \$183	US \$116	US \$92	8.4	2.95	8.4	2.95	100%	4.0	2.87	4.0	2.87	100%	US \$23	4.4	3.03	4.4	3.03	100%	47%	US \$11	US \$11
Jaguar Mining Inc.	TSX:JAG	US \$49	US \$2	US \$56	3.3	4.22	3.3	4.22	100%	0.3	3.94	0.3	3.94	100%	US \$174	3.0	4.25	3.0	4.25	100%	52%	US \$17	US \$17
Leagold Mining Corporation	TSX:LMC	US \$302	US \$48	US \$463	25.5	1.04	27.7	1.13	92%	5.6	1.34	5.9	1.40	96%	US \$82	19.9	8.75	21.9	9.64	91%	45%	US \$18	US \$17
Medusa Mining Limited	ASX:MML	US \$47	US \$12	US \$35	1.3	3.83	1.3	3.83	100%	0.3	6.69	0.3	6.69	100%	US \$106	1.0	4.07	1.0	4.07	100%	41%	US \$26	US \$26
Metanor Resources Inc.	TSXV:MTO	US \$45	US (\$6)	US \$52	1.7	1.54	1.7	1.54	100%	0.2	7.38	0.2	7.38	100%	US \$261	1.5	1.40	1.5	1.40	100%	79%	US \$31	US \$31
Minera IRL Limited	BVL:MIRL	US \$8	US (\$79)	US \$168	2.5	2.17	2.5	2.17	100%	1.1	1.87	1.1	1.87	100%	US \$156	1.4	2.43	1.4	2.43	100%	76%	US \$67	US \$67
New Gold Inc.	TSX:NGD	US \$517	US \$362	US \$1,095	22.2	0.72	28.8	0.94	77%	14.8	0.79	17.9	0.95	83%	US \$74	7.4	0.62	11.0	0.92	67%	20%	US \$49	US \$38
Orosur Mining Inc.	TSX:OMI	US \$14	US (\$15)	US \$29	0.6	0.65	1.4	1.62	40%	0.1	1.42	0.1	1.42	100%	US \$236	0.5	0.57	1.3	1.64	35%	17%	US \$50	US \$20
Orvana Minerals Corp.	TSX:ORV	US \$14	US (\$6)	US \$30	2.2	3.90	2.9	5.17	75%	0.3	3.50	0.4	4.29	82%	US \$85	1.8	3.99	2.5	5.36	74%	47%	US \$14	US \$10
Perseus Mining Limited	ASX:PRU	US \$271	US \$47	US \$262	12.5	1.14	12.5	1.14	100%	4.7	1.45	4.7	1.45	100%	US \$56	7.8	1.02	7.8	1.02	100%	38%	US \$21	US \$21
Premier Gold Mines Limited	TSX:PG	US \$254	US \$63	US \$191	10.7	1.59	11.0	1.62	98%	3.0	1.22	3.1	1.24	99%	US \$63	7.7	1.80	7.9	1.84	98%	52%	US \$18	US \$17
Roxgold Inc.	TSX:ROXG	US \$238	US \$69	US \$206	1.2	16.71	1.2	16.71	100%	0.7	11.48	0.7	11.48	100%	US \$275	0.5	-	0.5	-	100%	80%	US \$169	US \$169
Shanta Gold Limited	AIM:SHG	US \$43	US \$20	US \$55	2.8	2.46	2.8	2.46	100%	0.5	4.40	0.5	4.40	100%	US \$106	2.3	2.24	2.3	2.24	100%	60%	US \$19	US \$19
TMAC Resources Inc.	TSX:TMR	US \$474	US (\$17)	US \$589	6.6	8.12	6.6	8.12	100%	3.6	7.72	3.6	7.72	100%	US \$163	3.0	8.66	3.0	8.66	100%	57%	US \$89	US \$89
Group Average - Total					# Comp	anies: 2	4								US \$129							US \$40	US \$33

Equivalency assumptions (US\$ / 11-15-18): \$1,213/oz Au, \$14.29/oz Ag, \$842/oz Pt, \$1,160/oz Pd, \$2.81/lb Cu, \$1.20/lb Zn, \$0.87/lb Pb, \$5.07/lb Ni, \$11.29/lb Mo, \$24.95/lb Co, \$0/t Sb, \$27.50/lb U3O8, \$8.80/lb Sn, \$93.00/t HCC, \$74.95/t 62% Fe Source: SNL Financial retrieved on November 15, 2018



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

Part	dola Devel	орш	cht bi	uge	Comp					CII	ing 5	tut		OIII	pici	ic,	LIIC	-1 P	1130		iuc	PCI		nec
Companies   Comp	Company	Cumbal									۸.,					Reserves	Λ.,					0/ A		
Mile   Control Cong   No.   No.   No.   1.0		Symbol								% Au					% Au						% Au			
Second   S	African Cald Cassas Inc.	TC\4/ 400		(/						1000/				(3.7	1000/					(3)	1000/			
Mare the Confoundame of Semant Semant Confoundame of Semant Seman				( ,																				
TWAN PROGRESSIAN STAN AND STAN AGE   15.41   15.37   15.57   15.42   13.41   10.57   10.12   1																								
Marker Conformation   Staving   US\$770   US\$78   US\$35   US\$1   US\$15   US\$1											1.0	1.63	1.0	1.63		US \$20								
Newton Resource No.   TSACAS   U.S.S.H.   U.S.H.											1.0	1.28	1.0	1.20		116 6555								
Selective field Mines Lim Selective field Mi	· · · · · · · · · · · · · · · · · · ·																							
Seles Sam Minning Corp    Seles Sam Minning Corp   Seles Sam Minning Co											1.2	2.24	1.2	2.24		03 \$237								
Seminant Cool Many (1974)  Seminant Cool Many (1											3.8	1.02	3.8	1.02	100%	IIS \$17								
Sample Color Manage   Part Color Manage   Pa	9 1										-	-	-	-										
December (1944) September (1944) Cell   1941   1942   1942   1942   1944											-	-			-									
Descapeache Cold Corp  Text Cold	Chaarat Gold Holdings Limited										0.5	0.91	0.5	0.93	99%	US \$324					98%			
Commission of Commission	Chalice Gold Mines Limited	ASX:CHN	US \$29	US \$29	US (\$0)	0.5	1.21	1.1	2.97	41%	-	-	-	-	-		0.5	1.21	1.1	2.97	41%	38%	-	-
Combinented clad Inc.  TSCACU US 5299 US 5173 US 5414 91 991 96 1052 948 37 841 38 870 978 US 5170 54 - 58 9 938 885 US 548 US 548 Delated cold Eliminal ASSCACU US 5393 US 5391 US 5391 US 5390 105 5391 US 5	Chesapeake Gold Corp.	TSXV:CKG	US \$61	US \$13	US \$48	19.5	0.51	29.8	0.78	65%	18.3	0.52	28.1	0.79	65%	US \$3	1.2	0.45	1.6	0.61	75%	53%	US \$2	US \$2
Descend Call Builded M. S.	Columbus Gold Corp.	TSX:CGT	US \$24	US \$4	US \$20	2.2	1.42	2.2	1.42	100%	1.2	1.58	1.2	1.58	100%	US \$16	0.9	1.25	0.9	1.25	100%	47%	US \$9	US \$9
Definition flower forms (1997) and the fine sources from (1997) an	Continental Gold Inc.	TSX:CNL	US \$293	US \$73	US \$434	9.1	9.91	9.6	10.52	94%	3.7	8.41	3.8	8.70	97%	US \$117	5.4	-	5.8	-	93%	86%	US \$48	US \$45
Sepanos Goldone Sepanos Coldone Sepanos Coldone Sepanos Coldone Sepanos Coldone Sepanos Coldone Sepanos Sepano	Dacian Gold Limited										1.2	2.01	1.2	2.01	100%	US \$388								
Early Sampling No. 1985 1985 1985 1985 1985 1985 1985 1985	Dalradian Resources Inc.					_					-	-	-	-										
Take Descoves Limit   NSW/FPC   US-\$44   US-\$177   US-\$86   S-9   Lot   9-8   2-6   69/8   3.7   Lat   6-2   2-40   69/8   S-75	Equinox Gold Corp.										4.5	0.65	4.5	0.65		US \$104								
First Mining Gold Corp.   TSKFF   US \$112   US \$7   US \$105   11.8   1.48   12.1   1.25   97%	Euro Sun Mining Inc.										-	-	-	-										
Salerie Resources Limited ASK-CoR U S \$49 U S \$19 U S \$126	Falco Resources Ltd.										3.7	1.44	6.2	2.40	60%	US \$18								
Gold Road Resources Limited ASK-COR U SAIG US \$173 US \$231 33 107 34 112 96% 19 120 19 120 100% US\$124 14 0.04 15 103 91% 67% 05\$17 US \$180 1000 1000 1000 1000 1000 1000 1000											-	-	-	-	-									
Colden Colden Mingo Co. Ltd T.SK-COLM   U.S.S.2   U.S.\$11   U.S.\$550   0.9   0.52   1.1   0.64   8.3%   0.5   0.55   0.56   0.6   0.0   0.7   0.7   0.83%   U.S.S.0   U.S.\$2   U.S.\$2   0.5											-													
Seldyses Mining Corp. ISSN/ COC. US\$21 US\$15 US\$7 22 260 34 3.99 65% 08 3.72 12 5.16 72% US\$8 1.4 2.19 2.1 3.31 66% 16% 16% 15% 15% 16% 16% 16% 16% 16% 16% 16% 16% 16% 16																								
Hame Gold Corp.  TSK-HRT US \$174 US \$182 US \$292 US \$22 US \$22 US \$22 US \$27 UM Mining Ltd  TSK-MT US \$174 US \$172 US \$182 US																								
											0.8	3.12	1.2	5.16		US \$8								
DM Mining Ltd. TSX/IDM US\$18 US\$1 US\$1 US\$1 US\$1 US\$1 US\$1 US\$1 US\$1											- 0 /	2.14	- 0 /	2.14										
International Tower Hill Mines Ltd. TSXLTH   US \$72   US \$11   US \$61   12.6   0.68   0.68											0.0	3.14	0.0	3.14		US \$219								
NV Metals inc											9.0	0.71	9.0	0.71		IIC ¢7								
Vision   V																								
EEF Minerals Pic.  AMK-KEFI  US \$11  US \$55  US \$107  12.5  O.4  3.56  O.4  O.4  S.T.											- 1.7			3.70		05412								
Lumina Gold Inc.  ISSYLUM  US \$172  US \$290  US \$797  SSYRUM  US \$173  US \$290  US \$798  9.5  8.33  9.6  8.47  9.87  9.5  8.49  9.7  9.5  8.33  9.6  8.47  9.87  9											-	-	-	-										
Lundin Gold Inc.  TSX-LUG US \$737 US \$290 US \$798 9,5 8,33 9,6 8,47 98% 4,9 9,16 4,9 9,16 4,9 9,16 10% US \$162 0,5 10% US \$162												-												
Lupaka Colid Corp.  TSXVLPK US \$13 US \$20 US \$125 US \$265 US \$125 US \$365 US \$125 US \$365 US \$125 US \$145 US \$			US \$737	US \$290						98%	4.9	9.16	4.9	9.16	100%	US \$162		7.58		7.58	100%	47%	US \$84	
Melals Exploration pic   AM-MATL   US \$43   US \$589   US \$143   1.7   1.62   2.2   2.0   80%   0.9   1.86   1.1   2.21   84%   US \$199   0.8   1.43   1.1   1.86   77%   82%   US \$22   US \$23   US \$23   US \$23   US \$24	Lupaka Gold Corp.										-	-	-	-										
Midlas Gold Corp.  TSX:MMA  US \$114  US \$24  US \$22  US \$22  US \$125  US \$126  US \$22  US \$126  US \$126  US \$22  US \$126  US \$126  US \$21  US \$126	Lydian International Limited	TSX:LYD	US \$86	US (\$296)	US \$665	4.8	0.69	5.0	0.73	94%	2.6	0.79	2.8	0.84	95%	US \$255	2.1	0.60	2.3	0.64	94%	60%	US \$140	US \$132
Minera Alamos Inc. TSXV:MAI US \$24 US \$2 US \$22 0.8 1.64 1.0 1.99 82% 0.8 1.64 1.0 1.99 82% 18% US \$22 US \$22 US \$24 US \$3.1 US \$3	Metals Exploration plc	AIM:MTL	US \$43	US (\$58)	US \$143	1.7	1.62	2.2	2.02	80%	0.9	1.86	1.1	2.21	84%	US \$159	0.8	1.43	1.1	1.86	77%	82%	US \$82	US \$66
Moneta Porcupine Mines Inc. TSX:ME US \$16 US \$2 US \$14 4.3 1.17 4.3 1.17 100% 75% US \$3 US \$3 US \$3 OvasGold Resources Inc. TSX:MG US \$1,241 US \$169 US \$1,166 28.7 0.96 45.0 1.50 64% 19.7 1.18 28.1 1.70 70% US \$59 9.1 0.67 16.8 1.25 54% 55% US \$41 US \$2.6 0.67 10.0 64% 10.0 0.64 10.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Midas Gold Corp.	TSX:MAX	US \$114	US \$34	US \$103	6.6	1.60	6.7	1.62		-	-	-	-	-		6.6	1.60	6.7	1.62			US \$16	
NovaGold Resources Inc. TSX:NG US \$1,241 US \$169 US \$1,166 28.7 0.96 45.0 1.50 64% 19.7 1.18 28.1 1.70 70% US \$59 9.1 0.67 16.8 1.25 54% 58% US \$41 US \$26 Drca Gold Inc. TSX:ORA US \$57 5.2 0.67 5.2 0.67 10.8 2.7 1.30 98%	Minera Alamos Inc.										-	-	-	-	-		0.8							
Orca Gold Inc.    TSXV:ORE   US \$64   US \$7   US \$57   2.7   1.28   2.7   1.30   98%   1.0   0.64   0.64	Moneta Porcupine Mines Inc.										-	-		-										
Crezone Gold Corporation TSXY:ORE US \$96 US \$39 US \$57 5.2 0.67 5.2 0.67 100% 1.0 0.64 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											19.7	1.18	28.1	1.70		US \$59								
Orla Mining Ltd. TSX:OLA US \$179 US \$162 12.2 0.83 17.1 1.17 71% 0.5 0.77 0.5 0.83 93% US \$331 11.7 0.84 16.6 1.18 71% 16% US \$13 US \$97 Ped Eagle Mining Corporation TSX:RTG US \$5 US \$(100) US \$105 0.6 3.35 0.6 3.35 10.0% 0.4 5.19 10.0% US \$259 0.2 1.98 0.2 1.98 10.0% 0.4 5.19 10.0% US \$259 0.2 1.98 0.2 1.98 10.0% 0.4 5.19 10.0% US \$259 0.2 1.98 0.2 1.98 10.0% 0.4 US \$17 US \$171 US \$171 US \$171 US \$172 US \$243 US \$244 0.96 5.0% 0.4 5.19 0.0% 0.5 5.24 39% US \$331 US \$27 US \$24 0.96 5.0% 0.2 1.38 10.8 \$97 US \$340 U											-	-	-	-		-								
Red Eagle Mining Corporation TSX:RT US \$5 US (\$100) US \$105 O.6 3.35 O.6 3.35 O.6 3.35 100% O.4 5.19 O.4 5.19 O.4 5.19 100% US \$259 O.2 1.98 O.2 1.98 100% O.4 US \$171																								
RTG Mining Inc. TSX:RTG US \$43 US \$27 US \$16 0.4 1.64 0.9 3.77 44% 0.2 2.04 0.5 5.24 39% US \$80 0.2 1.34 0.3 2.62 51% 84% US \$45 US \$68 US \$67 1.0 6.09 1.0 6.0 1.0 6.09 1.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6																								
Rubicon Minerals Corporation TSX:RMX US \$65 US \$8 US \$67																								
Sabina Gold & Silver Corp. TSX:SBB US \$272 US \$24 US \$248 7.2 6.21 7.2 6.21 100% 2.5 6.30 2.5 6.30 100% US \$99 4.7 6.16 4.7 6.16 100% 40% US \$34 US \$34 Sandspring Resources Ltd. TSXV:SSP US \$30 US \$(\$2) US \$32 10.4 0.85 11.8 0.96 88% 4.1 1.00 4.6 1.12 88% US \$8 6.3 0.77 7.1 0.87 89% 53% US \$3 US \$4 US \$3 US \$4 US \$3 US \$4 US \$3 US \$4	J .										0.2	2.04	0.5	5.24		02 \$80	-							
Sandspring Resources Ltd. TSXV:SSP US \$30 US (\$2) US \$32 US \$32 10.4 0.85 11.8 0.96 88% 4.1 1.00 4.6 1.12 89% US \$8 US \$8 0.3 0.77 7.1 0.87 89% 53% US \$3 US \$3 Seabridge Gold Inc.  TSX:SSEA US \$715 US \$5 US \$710 US \$2 US \$22 11.1 2.62 11.1 2.62 10.8 222.4 0.96 50% 45.3 0.61 72.9 0.99 62% US \$16 66.9 0.42 149.5 0.94 45% 07.9 US \$6 US \$15 US \$2 US \$2.7 US \$19 US \$2.2 11.1 2.62 11.1 2.62 10.8 222.4 0.96 50% 45.3 0.61 72.9 0.99 62% US \$16 66.9 0.42 149.5 0.7 2.78 10.0% 42.9 US \$2.2 US \$2.7 US											2 5	4 20	2 F	4 20		LIC ¢00								
Seabridge Gold Inc. TSX:SEA US \$715 US \$5 US \$710 112 0.48 222.4 0.96 50% 45.3 0.61 72.9 0.99 6.2% US \$16 66.9 0.42 149.5 0.94 45% 79% US \$6 US \$3 Sihayo Gold Limited ASX:SIH US \$19 US \$(\$2) US \$22 1.1 0.62 1.1 0.62 1.00% 0.4 2.41 10.8 0.4 2.41 10.8 US \$5 4 0.7 2.78 0.7 2.78 10.7 42% US \$21 US \$21 US \$21 US \$25 US \$																								
Sihayo Gold Limited ASX:SIH US \$19 US \$22 US \$22 1.1 2.62 1.1 2.62 1.0 0.0 0.4 2.41 0.0 0.5 0.4 2.41 10.0 0.5 0.5 0.7 2.78 0.7 2.78 10.0 4.2 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5																								
Solidario Zinc Corp. AMEX.XPL US \$18 US \$13 US \$5 - 3.8 7.61																								
Ferraco Gold Corp. TSXV:TEN US \$9 US \$0 US \$17 1.0 0.70 1.0 0.70 1.0 0.70 100% 87 US \$17 US \$17 US \$17 US \$17 US \$17 US \$18 US \$23 US \$25 US \$25 1.6 1.88 1.9 2.24 84% 1.6 1.88 1.9 2.24 84% 24% US \$18 US \$24 US \$25						1.1	2.02			100/0	0.4	2.41	0.4	2.41		U3 934	0.7	2.10				42 /0		
Freasury Metals Inc. TSX:TML US \$23 US \$2 US \$25 I.6 I.88 I.9 2.24 84% I.6 I.88 I.9 2.24 84% US \$14 US \$14 US \$14 US \$14 US \$14 US \$14 US \$15 US \$15 US \$18 US \$15 US						1.0	0.70			100%	-		-				1.0	0.70				8%		
Vast Resources plc AIM:VAST US \$35 US \$0 US \$62 2.5 1.53 3.5 2.11 72% 0.6 1.83 1.0 3.19 57% US \$10 US \$10 US \$10 US \$10 US \$10 US \$2.4 1.94 79% 49% US \$2.5 US \$18 US \$2.14 4.5 0.65 4.6 0.66 99% 2.7 0.67 0.7 0.7 0.67 0.7 0.7 0.67 0.7 0.7 0.67 0.7 0.7 0.67 0.7 0.7 0.67 0.7 0.7 0.67 0.7 0.7 0.7 0.67 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.											-		-	-	-									
//ictoria Gold Corp. TSXV:VIT US \$215 US \$8 US \$214 4.5 0.65 4.6 0.66 99% 2.7 0.67 2.7 0.67 100% US \$80 1.9 0.61 1.9 0.63 97% 30% US \$47 US \$47 Group Average - 0 - 20 million ounces # Companies: 51 US \$39 US \$35 Group Average - 0 - 50 million ounces # Companies: 1 US \$48 US	,										0.6	1.83	1.0	3.19		US \$107								
Group Average - Total         # Companies: 55         US \$113         US \$39         US \$35           Group Average - 0 - 20 million ounces         # Companies: 53         US \$37         US \$37         US \$37           Group Average - 20 - 50 million ounces         # Companies: 1         US \$15         US \$15         US \$15	Victoria Gold Corp.																							
Group Average - 0 - 20 million ounces         # Companies: 53         US \$39         US \$37           Group Average - 20 - 50 million ounces         # Companies: 1         US \$11         US \$15	Group Average - Total																· · · ·							
Group Average - 20 - 50 million ounces # Companies: 1 US \$15 US \$15		n ounces																						
•	, ,																						US \$41	US \$15
	, ,					•																		



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

		Market	Working	Enterprise	Glo	bal Res	erves & l	Resource	es		R	eserve	S			Reso	urces (N	// &I and Ir	nferred)		Glo	obal
Company	Symbol	Capitalization	Capital	Value	Au	Au	AuEq	AuEq	% Au	Au		AuEq		% Au	Au	Au	AuEq	AuEq	% Au	% Au	EV/oz	EV/oz
		(millions)	(millions)	(millions)	(Moz)	(g/t)	(Moz)	(g/t)	/0 Au	(Moz)	(g/t)	(Moz)	(g/t)	/0 Au	(Moz)	(g/t)	(Moz)	(g/t)	∕₀ Au	Inferred	Au	AuEq
Alexandria Minerals Corporation	TSXV:AZX	US \$10	US (\$1)	US \$10	1.3	2.34	1.9	3.30	71%		-	-	-		1.3	2.34	1.9	3.30	71%	44%	US \$7	US \$5
Rio2 Limited	TSXV:RIO	US \$47	US \$0	US \$46	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 \$8	US \$8
Aurion Resources Ltd.	TSXV:AU	US \$55	US \$13	US \$42	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 \$52	US \$52
Auryn Resources Inc.	TSX:AUG	US \$90	US \$3	US \$86	2.3	5.56	2.6	6.30	88%		-			-	2.3	5.56	2.6	6.30	88%	72%	US \$37	US \$33
Balmoral Resources Ltd	TSX:BAR	US \$17	US \$4	US \$13	1.2	1.20	1.8	1.79	67%	-	-	-		-	1.2	1.20	1.8	1.79	67%	36%	US \$11	US \$8
Calibre Mining Corp.	TSXV:CXB	US \$12	US \$1	US \$11	2.3	1.18	3.1	1.60	74%		-	-		-	2.3	1.18	3.1	1.60	74%	99%	US \$5	US \$3
Cardinal Resources Limited	ASX:CDV	US \$116	US \$25	US \$113	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 \$20	US \$1	US \$19	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 \$6	US \$6
Corvus Gold Inc.	TSX:KOR	US \$160	US \$4	US \$157	2.2	0.30	2.3	0.32	95%		-	-		-	2.2	0.30	2.3	0.32	95%	19%	US \$72	US \$68
Eastmain Resources Inc.	TSX:ER	US \$34	US \$5	US \$29	1.7	6.59	1.7	6.65	99%			-		•	1.7	6.59	1.7	6.65	99%	37%	US \$17	US \$17
Eco Oro Minerals Corp	CNSX:EOM	US \$16	US (\$15)	US \$28	3.5	4.38	3.7	4.59	96%				-	-	3.5	4.38	3.7	4.59	96%	37%	US \$8	US \$8
GobiMin Inc.	TSXV:GMN	US \$12	US \$19	US (\$5)	2.9	1.50	2.9	1.50	100%		•	•	•	-	2.9	1.50	2.9	1.50	100%	63%	-	- LIC 677
Gold Standard Ventures Corp	TSX:GSV	US \$311	US \$22	US \$287	3.6	0.80 7.81	3.7	0.84 7.96	96% 98%				-	-	3.6	0.80	3.7	0.84	96% 98%	73% 84%	US \$80	US \$77
Mako Mining Corp.	TSXV:MKO	US \$26	US (\$1)	US \$26	0.9		1.0		98%	•	-	-		-	0.9	7.81	1.0 5.1	7.96			US \$28	US \$27
Granada Gold Mine Inc.	TSXV:GGM	US \$8	US (\$4)	US \$9	5.0	1.23	5.1 3.5	1.24 0.71				-		-	5.0	1.23	3.5	1.24	99% 64%	69% 100%	US \$2	US \$2
Integra Resources Corp.	TSXV:ITR	US \$33	US \$0	US \$30	2.3	0.46			64%		-	- 0.7	4.10	-	2.3	0.46		0.71			US \$13	US \$8
Kasbah Resources Limited	ASX:KAS	US \$8	US (\$1)	US \$9	0.2	0.55	1.8	4.24	13%			0.7	4.12		0.2	0.93	1.1	4.31	22%	- 0.40/	US \$37	US \$5
Liberty Gold Corp.	TSX:LGD	US \$47	US \$4	US \$51	1.6 *	0.66	1.6	0.66	100%		•	•	•	-	1.6 *	0.66	1.6 0.1	0.66	100%	24%	US \$33	US \$33
Lincoln Mining Corporation	TSXV:LMG	US \$1	US (\$1)	US \$1	0.1	1.91	0.1	1.91	100%				-		0.1	1.91		1.91	100%	5%	US \$16	US \$16
Lion One Metals Limited Marathon Gold Corporation	TSXV:LIO TSX:MOZ	US \$36 US \$82	US \$15 US \$0	US \$22 US \$80	0.7 3.2	1.99	15.6 3.2	2.00 1.99	5% 100%	•	-	-		-	0.7 3.2	1.99	15.6 3.2	2.00 1.99	5% 100%	60% 34%	US \$29 US \$25	US \$1 US \$25
Monarques Gold Corporation	TSXV:MQR	US \$44	US \$5	US \$39	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 \$10	US \$10
New Pacific Metals Corp.	TSXV:NUAG	US \$139	US \$24	US \$114	0.5	6.12	0.6	7.19	85%	0.2	0.70	0.2	0.70	10070	0.5	6.12	0.6	7.19	85%	45%	US \$225	US \$191
Nighthawk Gold Corp.	TSX:NHK	US \$56	US \$12	US \$43	2.9	1.70	2.9	1.70	100%					-	2.9	1.70	2.9	1.70	100%	90%	US \$15	US \$15
Northern Empire Resources Corp.	TSXV:NM	US \$66	US \$8	US \$58	1.0	1.26	1.0	1.26	100%					-	1.0	1.26	1.0	1.26	100%	3%	US \$61	US \$61
Novo Resources Corp.	TSXV:NVO	US \$238	US \$46	US \$189	0.9	2.83	1.0	3.20	88%						0.9	2.83	1.0	3.20	88%	52%	US \$210	US \$185
Orex Minerals Inc.	TSXV:REX	US \$7	US \$2	US \$5	0.1	0.33	0.6	2.86	12%						0.1	0.33	0.6	2.86	12%	47%	US \$83	US \$103
Osisko Mining Inc.	TSX:OSK	US \$491	US \$82	US \$414	7.6	2.40	7.6	2.40	100%						7.6	2.40	7.6	2.40	100%	53%	US \$54	US \$54
Osprey Gold Development Ltd.		US \$1	US \$0	US \$1	0.4	3.56	0.4	3.56	100%			-			0.4	3.56	0.4	3.56	100%	92%	US \$2	US \$2
Puma Exploration Inc.	TSXV:PUMA	US \$7	US (\$0)	US \$6	0.0	0.27	0.7	4.91	5%					_	0.0	0.27	0.7	4.91	5%	12%	US \$160	US \$9
Pure Gold Mining Inc.	TSXV:PGM	US \$101	US \$13	US \$86	2.0	8.57	2.0	8.57	100%			-		-	2.0	8.57	2.0	8.57	100%	15%	US \$42	US \$42
Red Pine Exploration Inc.	TSXV:RPX	US \$101	US \$2	US \$9	0.7	1.75	0.7	1.75	100%					-	0.7	1.75	0.7	1.75	100%	96%	US \$14	US \$14
Redstar Gold Corp.	TSXV:RGC	US \$7	US \$2	US \$5	0.5	2.94	0.7	3.75	78%						0.5	2.94	0.7	3.75	78%	7%	US \$8	US \$7
Regulus Resources Inc.	TSXV:REG	US \$104	US (\$2)	US \$103	5.7	0.37	19.0	1.22	30%						5.7	0.37	19.0	1.22	30%	89%	US \$18	US \$5
Reunion Gold Corporation	TSXV:RGD	US \$45	US \$9	US \$36	0.7	2.10	0.7	2.10	100%						0.7	2.10	0.7	2.10	100%	-	US \$51	US \$51
Revival Gold Inc.	TSXV:RVG	US \$22	US \$4	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 \$63	US \$2	US \$66	1.1	2.16	1.1	2.16	100%			-		-	1.1	2.16	1.1	2.16	100%	83%	US \$61	US \$61
Sarama Resources Ltd	TSXV:ROI	US \$8	US \$2	US \$6	1.1	1.75	1.1	1.75	100%						1.1	1.75	1.1	1.75	100%	78%	US \$5	US \$5
SolGold plc	TSX:SOLG	US \$822	US \$36	US \$784	10.7	0.36	33.4	1.12	32%	•		•		-	10.7	0.36	33.4	1.12	32%	52%	US \$73	US \$23
Spanish Mountain Gold Ltd.	TSXV:SPA	US \$10	US \$2	US \$8	8.0	0.30	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 \$8	US \$0	US \$8	1.1	0.33	1.3	0.55	88%						1.1	0.33	1.3	0.55	88%	10%	US \$7	US \$6
TriMetals Mining Inc.	TSX:TMI	US \$12	US (\$0)	US \$13	1.9	0.48	16.2	0.53	12%						1.9	0.40	16.2	0.63	12%	40%	US \$7	US \$1
Vendetta Mining Corp.	TSXV:VTT	US \$19	US (\$0)	US \$19	1.7	0.07	1.7	4.50	12/0						1.7	0.07	1.0	2.58	1270	4070	US \$11	US \$11
West Kirkland Mining Inc.	TSXV:WKM	US \$14	US \$0	US \$14	0.8	0.46	0.9	0.54	85%	0.6	0.58	0.7	0.67	86%	0.2	0.30	0.3	0.37	82%	45%	US \$18	US \$15
Group Average - Total	I JAV. WINIVI	05 914	33 90	JJ #14	# Compa			0.54	0370	0.0	0.00	0.7	0.07	0070	0.2	0.50	0.3	0.37	UZ /0	4370	US \$38	US \$27
		#1.010/ A #1			# Compa	iiics. 44									F/II. O.						0.2 \$20	03 \$21

Equivalency assumptions (US\$ / 11-15-18): \$1,213/oz Au, \$14.29/oz Ag, \$842/oz Pt, \$1,160/oz Pd, \$2.81/lb Cu, \$1.20/lb Zn, \$0.87/lb Pb, \$5.07/lb Ni, \$11.29/lb Mo, \$24.95/lb Co, \$0/t Sb, \$27.50/lb U308, \$8.80/lb Sn, \$93.00/t HCC, \$74.95/t 62% Fe Source: SNL Financial retrieved on November 15, 2018
\*Includes only Liberty's Goldstrike and Kinsley Mountain Projects



## Silver - Enterprise Value per Ounce of Silver

		Market	Working	Enterprise	Glo	bal Res	serves &	Resour	ces			Reserve	S		Reserves		Resou	rces (M	&I and I	nferred)		Glo	obal
Company	Symbol	Capitalization	Capital	Value	Ag	Ag	AgEq	AgEq	% Ag	Ag	Ag	AgEq	AgEq	% Ag	EV/oz	Ag	Ag	AgEq	AgEq	% Aa	% Ag	EV/oz	EV/oz
		(millions)	(millions)	(millions)	(Moz)	(g/t)	(Moz)	(g/t)	70 Ay	(Moz)	(g/t)	(Moz)	(g/t)	∕₀ Ay	Ag	(Moz)	(g/t)	(Moz)	(g/t)	/6 Ay	Inferred	Ag	AgEq
Alexco Resource Corp.	TSX:AXR	US \$88	US \$10	US \$78	86	357	159	658	54%	-	-	-	-	-	-	86	357	159	658	54%	21%	US \$0.91	US \$0.49
Americas Silver Corporation	TSX:USA	US \$66	US \$3	US \$69	136	151	356	394	38%	28	164	78	453	36%	US \$2.46	108	148	278	381	39%	37%	US \$0.51	US \$0.20
Arizona Mining Inc.	TSX:AZ	US \$1,467	US \$33	US \$1,434	507	83	2,515	411	20%	-	-	-	-	-	-	507	83	2,515	411	20%	30%	US \$2.83	US \$0.57
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 \$16	18	290	18	290	100%	-	-	-	-	-	-	18	290	18	290	100%	37%	US \$0.93	US \$0.93
Bear Creek Mining Corporation	TSXV:BCM	US \$103	US \$44	US \$59	496	42	1,143	97	43%	288	51	664	117	43%	US \$0.21	208	34	479	79	43%	33%	US \$0.12	US \$0.05
Coeur Mining, Inc.	NYSE:CDE	US \$874	US \$140	US \$1,163	673	26	1,458	57	46%	165	18	415	44	40%	US \$7.06	509	31	1,045	64	49%	21%	US \$1.73	US \$0.80
Defiance Silver Corp.	TSXV:DEF	US \$16	US (\$1)	US \$17	17	182	18	193	94%	-	-	-	-	-	-	17	182	18	193	94%	100%	US \$1.01	US \$0.95
Dolly Varden Silver Corporation	TSXV:DV	US \$14	US \$3	US \$11	43	333	43	333	100%	-	-	-	-	-	-	43	333	43	333	100%	25%	US \$0.25	US \$0.25
Endeavour Silver Corp.	TSX:EDR	US \$258	US \$57	US \$200	156	193	273	337	57%	33	198	60	356	56%	US \$5.99	123	192	212	332	58%	70%	US \$1.28	US \$0.74
First Majestic Silver Corp.	TSX:FR	US \$1,028	US \$128	US \$1,051	401	161	753	303	53%	133	180	229	310	58%	US \$7.92	263	153	512	297	51%	77%	US \$2.62	US \$1.40
Fortuna Silver Mines Inc.	TSX:FVI	US \$548	US \$183	US \$407	90	15	519	89	17%	45	15	274	90	16%	US \$9.08	46	16	245	88	19%	87%	US \$4.50	US \$0.78
Golden Minerals Company	AMEX:AUMN	US \$23	US \$4	US \$19	68	372	98	542	69%	-	-	-	-	-	-	68	372	98	542	69%	8%	US \$0.27	US \$0.19
Hecla Mining Company	NYSE:HL	US \$1,205	US \$66	US \$1,688	751	68	2,644	239	28%	177	221	600	749	30%	US \$9.54	574	56	2,044	199	28%	78%	US \$2.25	US \$0.64
Investigator Resources Limited	ASX:IVR	US \$5	US \$2	US \$3	42	140	49	165	85%	-	-	-	-	-	-	42	140	49	165	85%	45%	US \$0.08	US \$0.06
Kootenay Silver Inc	TSXV:KTN	US \$17	US \$3	US \$14	76	62	125	102	61%	-	-	-	-	-	-	76	62	125	102	61%	19%	US \$0.19	US \$0.11
MacPhersons Resources Limited	ASX:MRP	US \$22	US \$2	US \$20	20	22	89	97	23%	8	178	17	361	49%	US \$2.39	12	14	72	83	17%	29%	US \$0.98	US \$0.22
MAG Silver Corp.	TSX:MAG	US \$612	US \$142	US \$471	170	70	703	288	24%	-	-	-	-	-	-	170	70	703	288	24%	55%	US \$2.76	US \$0.67
Mandalay Resources Corporation	TSX:MND	US \$19	US \$5	US \$47	63	31	319	156	20%	8	19	73	177	11%	US \$6.07	56	39	245	172	23%	19%	US \$0.75	US \$0.15
Minco Silver Corporation	TSX:MSV	US \$21	US \$36	US (\$14)	162	158	270	264	60%	50	189	64	242	78%	-	112	148	206	272	54%	52%	-	-
Mineworx Technologies Ltd.	TSXV:MWX	US \$34	US \$3	US \$31	22	9	452	180	5%	-	-	-	-	-	-	22	9	452	180	5%	-	US \$1.39	US \$0.07
Pan American Silver Corp.	TSX:PAAS	US \$1,970	US \$444	US \$1,556	1,446	91	2,268	142	64%	291	93	508	163	57%	US \$5.34	1,157	90	1,765	138	66%	24%	US \$1.08	US \$0.69
Silver Bear Resources Plc	TSX:SBR	US \$89	US \$17	US \$183	60	704	61	710	99%	22	809	22	809	100%	US \$8.22	38	655	39	664	99%	63%	US \$3.04	US \$3.01
Silver Bull Resources, Inc.	OTCPK:SVBL	US \$23	US \$3	US \$21	27	48	157	275	17%	-	-	-	-	-	-	27	48	157	275	17%	0%	US \$0.75	US \$0.13
SilverCrest Metals Inc.	TSXV:SIL	US \$185	US \$10	US \$175	38	257	72	494	52%	-	-	-	-	-	-	38	257	72	494	52%	90%	US \$4.64	US \$2.41
Silvercorp Metals Inc.	TSX:SVM	US \$332	US \$99	US \$238	213	121	594	339	36%	84	202	182	437	46%	US \$2.83	129	96	413	309	31%	66%	US \$1.12	US \$0.40
Group Average - Total					# Comp	anies:	25								US \$5.84							US \$1.46	US \$0.65

Equivalency assumptions (US\$ / 11-15-18): \$1,213/oz Au, \$14.29/oz Ag, \$842/oz Pt, \$1,160/oz Pd, \$2.81/lb Cu, \$1.20/lb Zn, \$0.87/lb Pb, \$5.07/lb Ni, \$11.29/lb Mo, \$24.95/lb Co, \$0/t Sb, \$27.50/lb U3O8, \$8.80/lb Sn, \$93.00/t HCC, \$74.95/t 62% Fe Source: SNL Financial retrieved on November 15, 2018



## Comparables Tables – Base Metals

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

<b>As of November 15, 2018</b> 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 2018E	Ratio 2019E	EV/CF 2018E	Ratio 2019E	EV/EBI1 2018E	DA Ratio 2019E	P/NAV
Large-Cap Base Metals Producers					. ,	,	,	,,,,	, , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
ANGLO AMERICAN PLC	LSE:AAL	GBp 1683.6	2.6	(3.9)	8.7	1292	\$27.738	\$7.800	\$7.382	\$11.971	\$36,798	\$6.02	\$5.04	\$5.25	4.3x	4.1x	5.7x	5.4x	4.2x	4.4x	1.1x
ANTOFAGASTA PLC	LSE:ANTO	GBp 796	4.5	(2.7)	(20.8)	986	\$10.003	\$1.084	\$2.068	\$2,709	\$12.751	\$2.23	\$1.54	\$1.75	6.6x	5.8x	8.4x	7.4x	5.8x	4.9x	1.1x
BHP BILLITON LIMITED	ASX:BHP	AUD 32.04	(0.2)	(3.9)	8.4	3212	\$117.557	\$15,871	\$21,141	\$26.805	\$133,721	\$3.47	\$3.36	\$3.28	6.9x	7.1x	12.4x	12.7x	5.5x	5.9x	
FIRST QUANTUM MINERALS LTD	TSX:FM	CAD 12.98	7.9	0.2	(26.3)	689	\$6.777	\$1,296	\$1.121	\$6.871	\$14.106	\$1.34	\$2.42	\$2.45	4.1x	4.0x	8.5x	8.3x	8.1x	6.1x	
REEPORT-MCMORAN INC	NYSE:FCX	USD 11.96	3.6	0.3	(36.9)	1449	\$17.330	\$4,447	\$5,741	\$13,117	\$27,378	\$3.24	\$3.17	\$2.09	3.8x	5.7x	6.0x	9.0x	4.0x	6.2x	
GLENCORE PLC	LSE:GLEN	GBp 297.85	2.1	(6.3)	(20.2)	14102	\$53.541	\$2.124	\$5,312	\$33.934	\$84.867	\$0.41	\$0.89	\$0.89	4.3x	4.3x	6.8x	6.8x	4.9x	4.8x	
(GHM POLSKA MIEDZ SA	WSE:KGH	PLN 90	(1.3)	(0.9)	(19.1)	200	\$4,752	\$169	\$618	\$2,060	\$6,724	\$3.85	\$4.70	\$6.34	5.0x	3.7x	7.2x	5.3x	5.0x	4.4x	0.9x
RIO TINTO PLC	LSE:RIO	GBp 3800.5	2.4	(4.5)	(3.6)	1287	\$85.655	\$10.550	\$7.823	\$15.176	\$97.710	\$7.77	\$7.09	\$7.45	6.8x	6.5x	10.7x	10.2x	5.5x	5.9x	0.7%
FECK RESOURCES LTD-CLS B	TSX:TCK.B	CAD 29.01	3.6	4.4	(11.7)	567	\$12,632	\$760	\$1,706	\$5,084	\$15,652	\$6.15	\$5.87	\$5.79	3.7x	3.8x	4.7x	4.8x	3.5x	3.9x	
TUROUOISE HILL RESOURCES LTD	TSX:TRQ	CAD 2.58	4.5	6.6	(39.9)	2012	\$3,932	\$1.445	\$2.662	\$4.159	\$5.689	\$0.06	\$0.11	\$0.12	17.9x	16.8x	25.9x	24.4x	15.7x	13.8x	
/ALE SA-SP ADR	NYSE:VALE	USD 14.93	2.8	(1.6)	22.1	5284	\$78.897	\$4,323	\$5.840	\$22.460	\$90,415	\$0.00	\$2.28	\$2.66	6.6x	5.7x	7.5x	6.4x	5.5x	5.4x	1.8x
BOLIDEN AB	SSE:BOL	SEK 200.7	0.9	(3.3)	(27.2)	274	\$6.051	\$4,323	\$728	\$653	\$6,373	\$5.46	\$4.54	\$4.44	4.8x	4.9x	5.1x	5.2x	4.1x	3.4x 4.5x	1.0X
SOUTHERN COPPER CORP	NYXE:SCCO	USD 37.74	1.9	(3.4)	(20.5)	773	\$29.175	\$1.005	\$2.002	\$5.957	\$33.975	\$2.56	\$3.05	\$3.24	12.4x	11.7x	14.4x	13.6x	9.2x	4.3x 8.2x	1.48
		USD 37.74	1.9	(3.4)	(20.5)	113	\$29,175	\$1,005	\$2,002	\$5,957	\$33,975	\$2.50	\$3.05	\$3.24							-
Group Average - Large-Cap Producers Group Average - Large-Cap Producers		n/low)													6.4x 5.4x	6.1x 5.2x	9.4x 8.1x	9.2x 8.0x	6.2x 5.4x	6.0x 5.3x	1.2x 1.1x
Mid Tier Base Metals Producers																					
HUDBAY MINERALS INC	TSX:HBM	CAD 6.86	7.2	3.5	(38.4)	261	\$1,358	\$356	\$251	\$1,064	\$1,955	\$2.00	\$1.65	\$1.65	3.1x	3.1x	4.5x	4.5x	3.3x	3.6x	
/ANHOE MINES LTD-CL A	TSX:IVN	CAD 2.56	(2.3)	(0.4)	(39.6)	1010	\$1,959	\$181	\$179	\$32	\$1,264	(\$0.05)	(\$0.02)	(\$0.01)	-		-	-	-		-
AZ MINERALS PLC	LSE:KAZ	GBp 511.8	2.6	(5.6)	(42.8)	448	\$2,923	\$1,821	\$1,400	\$3,877	\$4,984	\$1.72	\$1.39	\$1.63	4.7x	4.0x	8.0x	6.8x	4.1x	4.1x	-
UNDIN MINING CORP	TSX: LUN	CAD 5.74	3.4	3.1	(31.3)	733	\$3,189	\$1,567	\$1,708	\$450	\$2,606	\$1.15	\$0.68	\$0.82	6.4x	5.3x	5.2x	4.3x	3.9x	3.5x	
MMG LTD	SEHK:1208	HKD 3.47	2.4	2.1	(10.6)	8051	\$3,568	\$936	\$194	\$9,193	\$12,867	\$0.25	\$0.20	\$0.23	2.2x	1.9x	8.1x	6.9x	6.9x	5.7x	1.5x
DZ MINERALS LTD	ASX:OZL	AUD 8.93	0.1	(6.2)	(2.5)	323	\$2.095	\$570	\$720	\$0	\$1,763	\$0.88	\$0.74	\$0.85	8.7x	7.6x	7.4x	6.4x	4.9x	5.3x	1.0x
/EDANTA RESOURCES PLC	LSE:VED	GBp #N/A N/A	#N/A N/A	#N/A N/A	#N/A N/A	285	#N/A N/A	\$1,281	(\$2.457)	\$15,194	#N/A N/A	\$5.97	\$9.98	\$15.37							-
Group Average - Mid Tier Producers									, , , , ,						5.0x	4.4x			4.6x	4.4x	1.2x
Group Average - Mid Tier Producers (e	veludina hiah/lo	and a													4.7x	4.1x	6.3x	5.5x	4.3x	4.3x	1.24
	xcluding mgm/o	iw)													4./X	4.1X	0.3X	3.3X	4.3X	4.3X	_
mall Cap Base Metals Producers																					
MERIGO RESOURCES LTD	TSX:ARG	CAD 0.95	4.4	3.3	(13.6)	177	\$128	\$28	(\$5)	\$63	\$176	\$0.19	\$0.13	\$0.26	5.5x	2.8x	7.6x	3.8x			
TALAYA MINING PLC	TSX:AYM	CAD 3.6	0.0	(5.3)	42.9	137	\$374	\$52	\$27	\$0	\$320		\$0.14	\$0.17	19.3x	16.1x	16.2x	13.5x	5.4x	4.3x	
APSTONE MINING CORP	TSX:CS	CAD 0.66	13.8	20.0	(54.2)	399	\$200	\$116	\$189	\$271	\$489	\$0.26	\$0.27	\$0.28	1.8x	1.8x	4.5x	4.3x	3.6x	3.4x	
OPPER MOUNTAIN MINING CORP	TSX:CMMC	CAD 0.94	2.2	(5.1)	(38.6)	188	\$134	\$36	\$6	\$245	\$377	\$0.26	\$0.27	\$0.37	2.6x	1.9x	7.4x	5.4x	7.5x	4.5x	
MPERIAL METALS CORP	TSX:III	CAD 1.08	1.9	(11.5)	(68.0)	121	\$99	\$41	(\$190)	\$713	\$795	\$0.21	(\$0.05)	\$0.19	-	4.2x	-	33.9x	30.4x	8.1x	
/ESTERN AREAS LTD	AU:WSA	AUD 2.24	(2.2)	(8.9)	(30.9)	273	\$445	\$112	\$119	\$1	\$334	\$0.22	\$0.21	\$0.29	7.9x	5.6x	5.8x	4.2x	5.5x	3.8x	1.2x
HERRITT INTERNATIONAL CORP	TSX:S	CAD 0.58	0.0	(10.8)	(66.3)	397	\$175	\$148	\$268	\$658	\$553	(\$0.04)	(\$0.02)	\$0.05	-	9.1x	-	29.0x	4.3x	3.6x	
EVSUN RESOURCES LTD	TSX:NSU	CAD 5.88	(0.3)	(0.2)	92.2	303	\$1,348	\$125	\$162	\$0	\$1,401	(\$0.07)	\$0.21	\$0.32	21.3x	13.9x	22.2x	14.5x	16.9x	12.0x	-
ASEKO MINES LTD	TSX:TKO	CAD 0.875	4.2	(1.7)	(70.2)	228	\$151	\$64	\$67	\$263	\$380	\$0.57	\$0.27	\$0.38	2.4x	1.7x	6.1x	4.4x	5.5x	3.9x	
REVALI MINING CORP	TSX:TV	CAD 0.475	9.2	4.4	(68.8)	831	\$299	\$94	\$144	\$161	\$347	\$0.21	\$0.16	\$0.21	2.2x	1.7x	2.6x	2.0x	1.9x	1.5x	
Group Average - Small Cap Producers											-				7.9x	5.9x		11.5x	9.0x	5.0x	1.2x
Group Average - Small Cap Producers Group Average - Small Cap Producers		n													7.9X 6.7X	5.9x 5.1x		9.9x	7.0x	5.0x 4.5x	1.2X



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

			Shares	Market	Working	LTD	Enterprise	Primary /	Copper	Reserves & Resou	rces* - Attributable		
Company	Symbol	Price	O/S	Capitalization	Capital	Value	Value	Secondary	Ratio***	Reserve	R&R (Total)	EV/lb Cul	Eq** (US\$)
			(million)	(million)	(million)	(million)	(million)	Metal	(% Contained)	(CuEq** Mlb)	(CuEq** Mlb)	Reserve	Total
Abacus Mining & Exploration Corporation	TSXV:AME	C\$ 0.12	43.4	US\$ 4	US\$ 0.1	US\$ 11.5	US\$ 15	Cu / Au	70%	763	953	\$0.020	\$0.016
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\$ 0.09	449.0	US\$ 31	US\$ 1.2	US\$ 0.0	US\$ 29	Cu / Au	70%	2,307	5,478	\$0.013	\$0.005
Coro Mining Corp.	TSX:COP	C\$ 0.06	1455.4	US\$ 61	US\$ 4.9	US\$ 0.8	US\$ 56	Cu / -	100%	-	590	-	\$0.096
Excelsior Mining Corp.	TSX:MIN	C\$ 0.99	207.7	US\$ 156	US\$ 18.2	US\$ 0.0	US\$ 137	Cu / -	100%	5,128	8,016	\$0.027	\$0.017
Filo Mining Corp.	TSXV:FIL	C\$ 2.25	72.6	US\$ 124	US\$ 3.8	US\$ 0.0	US\$ 120	Cu / Au	53%	-	7,913	-	\$0.015
Foran Mining Corporation	TSXV:FOM	C\$ 0.32	134.3	US\$ 33	US\$ 4.5	US\$ 0.0	US\$ 28	Cu / Zn	44%	-	1,842	-	\$0.015
Getty Copper Inc.	TSXV:GTC	C\$ 0.03	108.4	US\$ 2	US\$ (0.6)	US\$ 0.8	US\$ 3	Cu / Mo	98%	776	1,216	\$0.004	\$0.003
Highland Copper Company Inc.	TSXV:HI	C\$ 0.10	472.9	US\$ 36	US\$ (1.2)	US\$ 6.4	US\$ 43	Cu / Ag	99%	1,680	4,490	\$0.026	\$0.010
Indico Resources Ltd.	TSXV:IDI	C\$ 0.01	147.0	US\$ 1	US\$ (4.2)	US\$ 0.0	US\$ 5	Cu / -	100%	-	122	-	\$0.043
Los Andes Copper Ltd.	TSXV:LA	C\$ 0.24	271.7	US\$ 48	US\$ 5.5	US\$ 0.0	US\$ 43	Cu / Mo	93%	-	11,818	-	\$0.004
Nevada Copper Corp.	TSX:NCU	C\$ 0.39	661.9	US\$ 195	US\$ 133.8	US\$ 86.6	US\$ 148	Cu / Au	91%	5,529	7,742	\$0.027	\$0.019
NGEx Resources Inc.	TSX:NGQ	C\$ 1.00	227.7	US\$ 172	US\$ 2.2	US\$ 0.0	US\$ 170	Cu / Au	76%	-	26,471	-	\$0.006
Northern Dynasty Minerals Ltd.	TSX:NDM	C\$ 0.88	312.7	US\$ 208	US\$ 10.4	US\$ 0.0	US\$ 198	Cu / Au	57%	-	142,498	-	\$0.001
Northisle Copper and Gold Inc.	TSXV:NCX	C\$ 0.09	117.2	US\$ 8	US\$ 0.3	US\$ 0.0	US\$ 8	Cu / Au	53%	-	4,633	-	\$0.002
Osisko Metals Incorporated	TSXV:OM	C\$ 0.55	126.3	US\$ 53	US\$ 17.4	US\$ 0.0	US\$ 35	Zn / Pb	3%	-	146	-	\$0.242
Panoro Minerals Ltd.	TSXV:PML	C\$ 0.24	263.8	US\$ 48	US\$ (2.2)	US\$ 2.0	US\$ 52	Cu / Au	77%	-	10,306	-	\$0.005
Philippine Metals Inc.	TSXV:PHI	C\$ 0.06	16.4	US\$ 1	US\$ (0.2)	US\$ 0.0	US\$ 1	Cu / -	100%	-	331	-	\$0.003
PolyMet Mining Corp.	TSX:POM	C\$ 1.10	321.2	US\$ 267	US\$ (185.3)	US\$ 0.0	US\$ 453	Cu / Ni	46%	3,415	10,789	\$0.133	\$0.042
Quaterra Resources Inc.	TSXV:QTA	C\$ 0.06	201.0	US\$ 9	US\$ (0.2)	US\$ 0.7	US\$ 10	Cu / -	100%	-	3,894	-	\$0.003
Regulus Resources Inc.	TSXV:REG	C\$ 1.55	88.5	US\$ 104	US\$ (2.4)	US\$ 0.0	US\$ 106	Cu / Au	51%	-	8,308	-	\$0.013
Serengeti Resources Inc.	TSXV:SIR	C\$ 0.27	91.8	US\$ 18	US\$ 0.5	US\$ 0.0	US\$ 18	Cu / Au	63%	-	1,311	-	\$0.014
St. Augustine Gold and Copper Limited	TSX:SAU	C\$ 0.02	726.8	US\$ 11	US\$ (4.4)	US\$ 0.0	US\$ 15	Cu / Au	56%	4,437	6,842	\$0.003	\$0.002
Trilogy Metals Inc.	AMEX:TMQ	C\$ 2.87	131.6	US\$ 285	US\$ 6.4	US\$ 0.0	US\$ 279	Cu / Zn	77%	=	5,776	-	\$0.048
Western Copper and Gold Corporation	TSX:WRN	C\$ 0.75	100.8	US\$ 57	US\$ 3.9	US\$ 0.0	US\$ 53	Cu / Au	57%	8,232	17,606	\$0.006	\$0.003
Group Average - Total												\$0.029	\$0.025

<sup>\*</sup>All reserve and resource data sourced from SNL, additional data sourced from Capital IQ.

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

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



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

			Shares	Market	Working	LTD	Enterprise	Primary /	Nickel	Reserves & Resou	rces* - Attributable		
Company	Symbol	Price	O/S (million)	Capitalization (million)	Capital (million)	Value (million)	Value (million)	Secondary Metal	Ratio*** (% Contained)	Reserve (NiEg** MIb)	R&R (Total) (NiEq** MIb)	EV/lb NiE Reserve	Eq** (US\$) Total
Asian Mineral Resources Limited	TSXV:ASN	C\$ 0.35	8.7	US\$ 2	US\$ (8.3)	US\$ 0.4	US\$ 11	Ni / Cu	76%	92	92	\$0.120	\$0.120
CaNickel Mining Limited	TSXV:CML	C\$ 0.08	37.5	US\$ 2	US\$ (77.9)	US\$ 0.0	US\$ 80	Ni / -	100%	83	397	\$0.970	\$0.201
FPX Nickel Corp.	TSXV:FPX	C\$ 0.10	146.0	US\$ 10	US\$ 1.3	US\$ 5.6	US\$ 15	Ni / -	100%		5,569	-	\$0.003
Giga Metals Corporation	TSXV:GIGA	C\$ 0.17	43.1	US\$ 6	US\$ 2.6	US\$ 0.0	US\$ 3	Ni / Co	85%	-	6,890	-	\$0.000
Gossan Resources Limited	TSXV:GSS	C\$ 0.07	33.6	US\$ 2	US\$ 0.1	US\$ 0.0	US\$ 2	Ni / Cu	54%		73	-	\$0.023
Hannan Metals Ltd.	TSXV:HAN	C\$ 0.09	47.7	US\$ 3	US\$ 0.7	US\$ 0.3	US\$ 3	Ni / Cu	78%	-	2,539	-	\$0.001
Nautilus Minerals Inc.	TSX:NUS	C\$ 0.08	683.0	US\$ 39	US\$ (56.7)	US\$ 0.0	US\$ 95	Ni / Cu	52%		41,741	-	\$0.002
New Era Minerals Inc.	TSXV:NEM	C\$ 0.04	100.8	US\$ 3	US\$ (1.4)	US\$ 0.0	US\$ 4	Ni / -	100%		454	-	\$0.010
Pure Nickel Inc.	TSXV:NIC	C\$ 0.02	68.1	US\$ 1	US\$ (0.3)	US\$ 0.0	US\$ 1	Ni / Cu	59%		173	-	\$0.008
RNC Minerals	TSX:RNX	C\$ 0.56	446.0	US\$ 189	US\$ 0.0	US\$ 0.0	US\$ 189	Ni / Co	87%	3,855	7,143	\$0.049	\$0.026
Sama Resources Inc.	TSXV:SME	C\$ 0.32	188.4	US\$ 46	US\$ 6.5	US\$ 0.0	US\$ 39	Ni / Cu	49%		286	-	\$0.137
Strongbow Exploration Inc.	TSXV:SBW	C\$ 0.18	86.6	US\$ 12	US\$ 2.7	US\$ 4.3	US\$ 13	Ni / Sn	53%		678	-	\$0.020
Group Average - Total												\$0.380	\$0.046

<sup>\*</sup>All reserve and resource data sourced from SNL, additional data sourced from Capital IQ.

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

			Shares	Market	Working	LTD	Enterprise	Primary /	Zinc	Reserves & Resou	rces* - Attributable		
Company	Symbol	Price	O/S	Capitalization	Capital	Value	Value	Secondary	Ratio***	Reserve	R&R (Total)	EV/lb Znf	Eq** (US\$)
			(million)	(million)	(million)	(million)	(million)	Metal	(% Contained)	(ZnEq** MIb)	(ZnEq** MIb)	Reserve	Total
Ascendant Resources Inc.	TSX:ASND	C\$ 0.61	77.1	US\$ 36	US\$ 0.8	US\$ 0.0	US\$ 35	Zn / Pb	72%	320	1,405	\$0.109	\$0.025
Commander Resources Ltd.	TSXV:CMD	C\$ 0.11	35.3	US\$ 3	US\$ 3.4	US\$ 0.0	US\$ (1)	Zn / Cu	56%		25		-
El Nino Ventures Inc.	TSXV:ELN	C\$ 0.04	61.6	US\$ 2	US\$ 1.3	US\$ 0.0	US\$ 0	Zn / Cu	60%	-	530	-	\$0.001
Firestone Ventures Inc.	TSXV:FV	C\$ 0.07	53.7	US\$ 3	US\$ (0.2)	US\$ 0.0	US\$ 3	Zn / Pb	77%		428	-	\$0.007
Fireweed Zinc Ltd.	TSXV:FWZ	C\$ 0.92	34.6	US\$ 24	US\$ 6.1	US\$ 0.0	US\$ 18	Zn / Pb	65%	-	6,988	-	\$0.003
InZinc Mining Ltd.	TSXV:IZN	C\$ 0.05	108.9	US\$ 4	US\$ 1.2	US\$ 0.0	US\$ 3	Zn / Cu	71%	-	4,098	-	\$0.001
Karmin Exploration Inc.	TSXV:KAR	C\$ 0.66	77.0	US\$ 38	US\$ (1.7)	US\$ 0.0	US\$ 40	Zn / Pb	54%	-	2,430	-	\$0.017
Osisko Metals Incorporated	TSXV:OM	C\$ 0.55	126.3	US\$ 53	US\$ 17.4	US\$ 0.0	US\$ 35	Zn / Pb	71%	-	301	-	\$0.117
Rathdowney Resources Ltd.	TSXV:RTH	C\$ 0.09	161.7	US\$ 11	US\$ (3.4)	US\$ 0.0	US\$ 14	Zn / Pb	83%	-	3,590	-	\$0.004
ScoZinc Mining Ltd.	TSXV:SZM	C\$ 0.65	5.3	US\$ 3	US\$ 0.2	US\$ 0.0	US\$ 2	Zn / Pb	68%	-	1,485	-	\$0.002
Titan Mining Corporation	TSX:TI	C\$ 1.19	102.0	US\$ 92	US\$ (7.8)	US\$ 0.0	US\$ 100	Zn / -	100%	-	1,182	-	\$0.084
Trevali Mining Corporation	TSX:TV	C\$ 0.48	831.2	US\$ 299	US\$ 175.4	US\$ 144.7	US\$ 268	Zn / Pb	69%	1,667	14,479	\$0.161	\$0.019
Wolfden Resources Corporation	TSXV:WLF	C\$ 0.19	114.1	US\$ 16	US\$ 1.4	US\$ 0.0	US\$ 15	Zn / Au	37%	-	3,242	-	\$0.005
Group Average - Total	•		,	•		•			•	•	•	\$0.135	\$0.024

<sup>\*</sup>All reserve and resource data sourced from SNL, additional data sourced from Capital IQ.

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

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

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

<sup>\*\*\*</sup>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**

	1	Consensus	Targets			In-Situ (	Comps - EV/II	U3O8	NAVC	Comps			Cash Flo	w Comps					Earnings	Comps		
		IBES		Shares	Market	Enterprise 1			IBES			CFPS (LoC)	)		P/CFPS			EPS (LoC	)		P/EPS	
Company (Ticker)		Consensus			Capitalization	Value (USD)			Consensus													
Haywood Covered Names bold	Price	Target	Return	(millions)		(millions)	(M lb)	Resource	NAV	Nav	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Cameco Corporation (CCO-T)	\$15.65	\$16.65	6%	396	\$6,194	\$4,991	1,046	\$4.77	\$15.18	1.03x	\$1.25	\$1.40	\$0.72	12.5x	11.2x	21.8x	\$0.04	\$0.27	\$0.06	426.8x	59.1x	260.8x
Energy Fuels (UUUU-US)	\$3.30	\$4.38	33%	91	\$300.4	\$277.9	131.0	\$2.12	\$4.32	0.76x	(\$0.10)	(\$0.08)	(\$0.15)				(\$0.23)	(\$0.29)	(\$0.23)			
Uranium Energy (UEC-US)	\$1.30	\$3.03	133%	176	\$229.0	\$241.6	112.0	\$2.16	\$2.91	0.45x	(\$0.08)	(\$0.10)					(\$0.10)	(\$0.10)	(\$0.10)			
Ur-Energy Inc. (URE-T)	\$0.95	\$1.16	22%	159	\$151.2	\$118.6	41.9	\$2.83	\$1.23	0.77x	\$0.06	\$0.02	\$0.06	15.8x	40.7x	16.8x	\$0.02		\$0.00	42.2x		380.0x
Peninsula Energy (PEN-AU)	\$0.22	\$0.79	266%	242	\$52.1	\$41.1	87.1	\$0.47	\$0.59	0.37x	(\$0.02)	(\$0.01)	\$0.01			30.7x	(\$0.03)	(\$0.05)	\$0.02			10.2x
Energy Resources (ERA-AU) Group Average - Producers	\$0.32			518	\$165.7	(\$159.3)	436.6	\$2.47	\$0.49	0.65x 0.67x	(\$0.02)	(\$0.01)	\$0.01	14.2x	25.9x	32.0x 25.3x	(\$0.05)	(\$0.06)	(\$0.06)	2245	59.1x	217.0x
Group Average - Producers								\$2.47		U.6/X				14.2X	25.9X	25.3X				234.5X	59.IX	217.UX
NexGen Energy (NXE-T)	\$2.91	\$5.51	89%	349	\$1,017	\$802.4	348.8	\$2.30	\$5.34	0.54x	(\$0.02)	(\$0.01)	(\$0.06)				(\$0.05)	(\$0.16)	(\$0.10)			
Denison Mines (DML-T)	\$0.74	\$1.17	58%	584	\$432.3	\$310.9	173.1	\$1.80	\$1.25	0.59x	\$0.02	(\$0.03)	(\$0.02)	32.9x			(\$0.03)	(\$0.03)	(\$0.02)			
Fission Uranium (FCU-T)	\$0.66	\$2.10	218%	486	\$320.6	\$224.9	140.6	\$1.60	\$1.32	0.50x	(\$0.02)	(\$0.01)	(\$0.01)				(\$0.02)	(\$0.01)	(\$0.01)			
Berkeley Energia (BKY-AU)	\$0.24	\$1.18	404%	258	\$60.7	\$21.3	89.4	\$0.24	\$1.10	0.21x	(\$0.06)	(\$0.09)	(\$0.04)				(\$0.05)	(\$0.09)	(\$0.05)			
GoviEx Uranium (GXU-V)	\$0.19			395	\$73.1	\$50.4	229.4	\$0.22														
Plateau Energy (PLU-V)	\$0.89	\$2.85	220%	77	\$68.4	\$50.1	123.4	\$0.41	\$3.83	0.23x		(\$0.06)	(\$0.07)				IL	(\$0.02)	(\$0.02)			
UEX Corporation (UEX-T)	\$0.20	\$0.50	156%	381	\$74.4	\$51.8	86.4	\$0.60									(\$0.02)					
	\$0.03			2,161	\$67.0	\$57.0	63.7	\$0.90									II					
Deep Yellow (DYL-AU)	\$0.48			195	\$92.5	\$59.4	126.5	\$0.47														
Bannerman Resources (BMN-AU)	\$0.05			1,035	\$48.6	\$29.1	257.2	\$0.11														
Laramide Resources (LAM-T)	\$0.42	\$0.60	43%	132	\$55.6	\$46.8	129.3	\$0.36			(\$0.02)	(00.05)					(\$0.01)					
Azarga Uranium (AZZ-T) Forsys Metals (FSY-T)	\$0.26	\$0.30	19%	170	\$43.2 \$42.4	\$31.4	47.8 127.0	\$0.66	\$0.34	0.74x	(\$0.03)	(\$0.02)					(\$0.03)					
Western Uranium (WUC-L)	\$0.27 \$2.80			157 26	\$42.4 \$72.6	\$31.4 \$55.1	99.2	\$0.25 \$0.56														
A-Cap Resources (ACB-AU)	\$0.04			872	\$35.7	\$24.9	190.6	\$0.30														
Vimy Resources (VMY-AU)	\$0.04	\$0.39	500%	417	\$27.1	\$14.8	109.5	\$0.13	\$0.43	0.15x	(\$0.02)	(\$0.02)	(\$0.01)				(\$0.02)	(\$0.02)	(\$0.01)			
Energy Metals (EME-AU)	\$0.07	\$0.37	30076	210	\$27.3	\$6.1	57.1	\$0.13	\$0.43	0.138	(30.02)	(\$0.02)	(30.01)				(\$0.02)	(\$0.02)	(\$0.01)			
U308 Corp. (UWE-T)	\$0.13			23	\$6.5	\$5.1	47.7	\$0.11														
Group Average - Developers	\$0.20			2.0	\$0.0	<b>\$5.1</b>	17.7	\$0.61		0.43x				32.9x								
4 1 5 (4011)4	****				470.4	4510																
Aurania Resources (ARU-V) Mega Uranium (MGA-T)	\$2.30 \$0.13			32 309	\$73.4 \$40.2	\$54.8 \$29.9	17.0	\$1.76														
Global Atomic (GLO-V)	\$0.13			107	\$32.6	\$23.2	111.0	\$0.21														
Skyharbour Resources (SYH-V)	\$0.48	\$1.01	113%	62	\$29.7	\$23.2	7.0	\$3.12														
Anfield Energy (AEC-V)	\$0.48	\$1.01	11370	44	\$12.5	\$9.3	22.0	\$0.42														
IsoEnergy Ltd. (ISO-V)	\$0.40			55	\$22.1	\$14.1	8.2	\$1.72														
Globex Mining (GMX-T)	\$0.28			53	\$14.8	\$8.5	0.2	V1.72														
Blue Sky (BSK-V)	\$0.14			110	\$14.8	\$9.1	19.1	\$0.48														
Purepoint Uranium (PT U-V)	\$0.07			205	\$14.3	\$10.4																
ValOre Metals (VO-V)	\$0.27			25	\$6.7	\$4.2	43.5	\$0.10														
Azimut Exploration (AZM-V)	\$0.23			49	\$10.9	\$6.6																
enCore Energy (:EU-V)	\$0.10			114	\$11.4	\$7.7	56.4	\$0.14														
Marenica Energy (MEY-AU)	\$0.08			66	\$5.2	\$4.4	46.0	\$0.10														
CanAlaska Uranium (CVV-V)	\$0.36			31	\$11.0	\$7.1																
Avrupa Minerals (AVU-V)	\$0.05			94	\$4.7	\$3.5																
Fission 3.0 (FUU-V)	\$0.19			135	\$25.0	\$18.8																
Zadar Ventures (ZAD-V)	\$0.03			100	\$3.0	\$2.0																
Eros Resources (ERC-V)	\$0.08			48	\$3.9	\$2.0																
X-Terra Resources (XTT-V)	\$0.12			32	\$3.8	\$2.8																
Forum Energy (FMC-V)	\$0.05			96	\$4.8	\$3.3	0.6	\$5.23														
Cauldron Energy (CXU-AU)	\$0.04			329	\$13.2	\$6.1	30.9	\$0.20														
Uravan Minerals (UVN-V)	\$0.03			42	\$1.1	\$0.7																
Tarku Resources (TKU-V)	\$0.02			63	\$1.3	\$0.9																
Roughrider Exploration (REL-V)	\$0.12			14	\$1.6	\$1.2		61 22	_		.											
Group Average - Explorers								\$1.22			-											
INVENTORY FUNDS																						
Yellow Cake (YCA-LN)	\$2.45	\$2.77	13%	76	\$186.8		8.4															
Uranium Participation (U-T)	\$4.90	\$5.68	16%	138	\$676.5	\$505.1	17.0	\$29.75	\$5.44	0.90x												
All data sourced from S&P Capital IQ, SI	NL Financial,	, Bloomberg																				



## Performance of Companies from the last Junior Exploration Report

		Close Price	M arket Capitalization	Cash as of Sept. Junior X Report	Weekly Performance	QTD Performance	QTD Performance
Company	Ticker	(C\$)	(C\$M)	(C\$M)			vs. TSXV
Junior Exploration Names							Index
Ascot Resources Ltd.	TSXV:AOT	0.86	149.86	14.17	0.0%	(26.5)%	(10.2)%
Aurion Resources Ltd.	TSXV:AU	1.05	72.85	19.00	(16.0)%	16.7%	33.0%
Chakana Copper Corp.	TSXV:PERU	0.33	26.60	11.00	3.1%	(42.1)%	(25.8)%
Evrim Resources Corp.	TSXV:EVM	1.33	112.30	15.60	(11.3)%	22.0%	38.3%
Fireweed Zinc Ltd.	TSXV:FWZ	0.92	31.79	3.00	7.0%	(34.3)%	(18.0)%
Juggernaut Exploration Ltd.	TSXV:JUGR	0.14	11.75	2.80	(9.7)%	(63.2)%	(46.8)%
Kutcho Copper Corp.	TSXV:KC	0.31	17.72	13.24	6.9%	(27.9)%	(11.6)%
Oklo Resources Limited	ASX:OKU	0.28	97.17	17.10	7.8%	(8.3)%	8.0%
Osisko Metals Incorporated	TSXV:OM	0.55	69.45	30.00	(5.2)%	(5.2)%	11.1%
Pan Global Resources Inc.	TSXV:PGZ	0.15	14.14	3.40	(6.3)%	(37.5)%	(21.2)%
Reunion Gold Corporation	TSXV:RGD	0.19	59.30	8.00	(2.6)%	15.6%	31.9%
Sable Resources Ltd.	TSXV:SAE	0.25	32.42	2.80	2.0%	(10.7)%	5.6%
Skeena Resources Limited	TSXV:SKE	0.32	31.31	2.52	(1.5)%	(17.9)%	(1.6)%
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	• 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 • Engineering studies underway
Aurion Resources Ltd.	TSXV:AU	• 15,000 metre drill program to commence H2/18
Chakana Copper Corp.	TSXV:PERU	<ul> <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>
Evrim Resources Corp.	TSXV:EVM	<ul> <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	• 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.
Juggernaut Exploration Ltd.	TSXV:JUGR	<ul> <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>
Kulcho Copper Corp.	TSXV:KC	<ul> <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> <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> <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> <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> <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> <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> <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



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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.	1		X	4	3	U	,	_
TSX:AG	Asanko Gold Inc.			X					
TSX:AZZ	Azzarga Uranium Corp.	Х	Х	X		Х			
TSXV:AGB	Atlantic Gold Corp.	^	^	X		^			-
TSX:BTO	B2Gold Corp.	Х		X					
TSXV:BGM	Barkerville Gold Mines Ltd.	^		X	Х				
TSX:ABX	Barrick Gold Corporation			X	^				-
TSXV:BSR	Bluestone Resources Inc.	Х	Х	X			Х		
TSX:CS	Capstone Mining Corp.	^	^	X			^		
TSXV:KBLT	Cobalt 27 Capital Corp.	Х		^	Х	Х			-
TSX:CMMC	Copper Mountain Mining Corp.	^		Х	^	X	V		_
TSX:DML				X	Х	^	X	Х	<u> </u>
TSX:DIVIL	Denison Mines Corp.  Detour Gold Corporation	Х		X	^				-
	Eldorado Gold Corporation	X		X					-
TSX:ELD	·								-
TSX:EDV	Endeavour Mining Corp.	Х		X					
TSX:EFR	Energy Fuels Inc.	- V		X	· · ·				<u> </u>
TSXV:EQX	Equinox Gold Corp.	Х		X	Х				<u> </u>
TSXV:FPC	Falco Resources Ltd.			X	· · ·				
TSXV:FIL	Filo Mining Corp.		Х	Х	Х				<u> </u>
TSXV:GQC	GoldQuest Mining Corp.	X							
ASX:GOR	Gold Road Resources Limited			X	.,				<u> </u>
TSX:HRT	Harte Gold Corp.			X	Х				<u> </u>
TSX:HBM	Hudbay Minerals, Inc.			X					<u> </u>
TSX:LGD	Liberty Gold Corp.	X		Х	Х				
TSX:LUC	Lucara Diamond Corp.		Х	Х					
TSXV:LUM	Lumina Gold Corp.		Х	Х	Х	Χ		Х	<u> </u>
TSX:LUG	Lundin Gold Inc.			Х					
TSX:LUN	Lundin Mining Corporation			Х					
TSX:MOZ	Marathon Gold Corp.	Х		Х	Х				
TSX:MAX	Midas Gold Corp.		Х	Χ					
TSX:MPVD	Mountain Province Diamonds Inc.	Х	Χ	Χ					
TSX:NXE	NexGen Energy Ltd.	X		Χ			Χ		
TSX:NCU	Nevada Copper Corp.			Χ	Χ				
TSX:NSU	Nevsun Resources Ltd.			Х					
TSX:NHK	Nighthawk Gold Corp.	Х		Χ					
TSX:OGC	OceanaGold Corporation			Χ					
TSX:OR	Osisko Gold Royalties Ltd.			Χ					
TSX:OSK	Osisko Mining Corp.			Χ	Х				
TSXV:PLU	Plateau Energy Metals Inc.		Х	Х	Х	Х	Х		
TSXV:PGM	Pure Gold Mining Inc.	Х	Χ	Χ	Χ				



	TSXV:ROG	Roxgold Inc.	Х		Х					
	TSX:RNX	RNC Minerals			Х			Х		
	TSX:SBB	Sabina Gold and Silver Corp.			Х					
	TSXV:SGI	Superior Gold Inc.								
	TSX:SMF	SEMAFO Inc.			Х					
	TSX:STGO	Steppe Gold Ltd.		Χ	Х	Х				
	TSX:THO	Tahoe Resources Inc.			Х					
	TSX:TML	Treasury Metals Inc.			Χ	Χ				
	TSX:TV	Trevali Mining Corp.	Х		Χ					
	TSXV:TLG	Trolius Gold Corp.			Χ	Χ				
	AMEX:UEC	Uranium Energy Corp.			Χ	Χ				
	TSX:U	Uranium Participation Corporation	Х			Χ				
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1	in this company.									
2	As of the end of the month immediately preceding this publication either Haywood Securities, Inc., one									
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3	Haywood Securities, Inc. has reviewed lead projects of this company and a portion of the expenses for									
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7	Haywood Securities, Inc. or one of its subsidiaries is restricted on this company at the time of publication									
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Other material conflict of interest of the research analyst of which the research analyst or Haywood Securities Inc. knows or has reason to know at the time of publication or at the time of public appearance:

n/a

## **Rating Structure**

Each company within an analyst's universe, or group of companies covered, is assigned: (i) a recommendation or rating, usually BUY, HOLD, or SELL; (ii) a 12 month target price, which represents an analyst's current assessment of a company's potential stock price over the next year; (iii) an overall risk rating which represents an analyst's assessment of the company's overall investment risk; and (iv) specific risk ratings or risk profile parameters which in their aggregate support an analyst's overall risk rating. These ratings are more fully explained below. Before acting on our recommendation we caution you to confer with your Haywood investment advisor to determine the suitability of our recommendation for your specific investment objectives, risk tolerance and investment time horizon.

## **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.

**RESEARCH COMMENT** – An analyst comment about an issuer event that does not include a rating or recommendation.



**UNDER REVIEW** – Placing a stock Under Review does not revise the current rating or recommendation of the analyst. A stock will be placed Under Review when the relevant company has a significant material event with further information pending or to be announced. An analyst will place a stock Under Review while he/she awaits sufficient information to re-evaluate the company's financial situation.

**COVERAGE DROPPED** – Haywood Securities will no longer cover the issuer. Haywood will provide notice to clients whenever coverage of an issuer is discontinued.

Haywood's focus is to search for undervalued companies which analysts believe may achieve attractive risk-adjusted returns. This research coverage on potentially undervalued companies may result in an outweighed percentage of companies rated as BUY. Management regularly reviews rating and targets in all sectors to ensure fairness and accuracy.

For further information on Haywood Securities' research dissemination policies, please visit: <a href="http://haywood.com/what-we-offer/research/research-policy">http://haywood.com/what-we-offer/research/research-policy</a>

### **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 November 16, 2018)

			IB Clients
	%	#	(TTM)
Buy	76.8%	73	96.4%
Hold	10.5%	10	0.0%
Sell	0.0%	0	0.0%
Tender	3.2%	3	0.0%
UR (Buy)	0.0%	0	0.0%
UR (Hold)	0.0%	0	0.0%
UR (Sell)	0.0%	0	0.0%
Dropped (TTM)	9.5%	9	3.6%

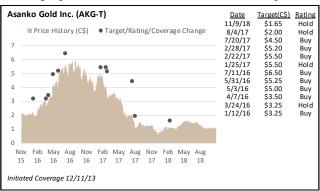


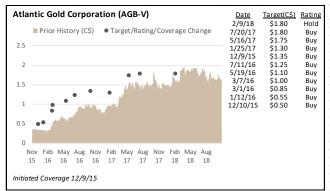
## Price Chart, Rating and Target Price History (as of November 16, 2018)

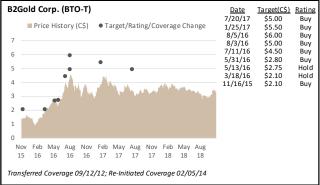
\$1.25

\$1.60 \$1.00 Buv

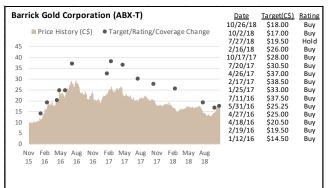




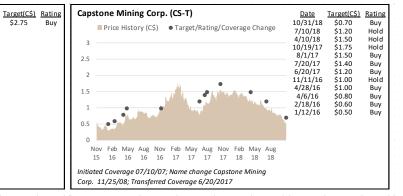




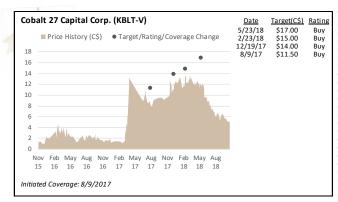


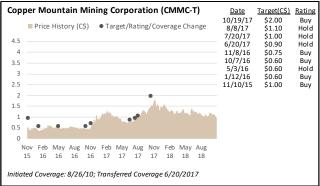






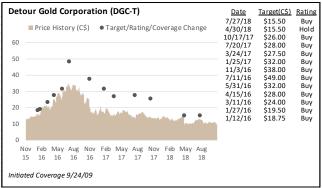




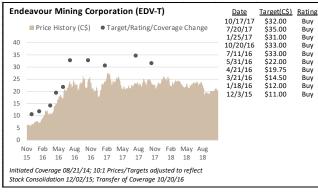


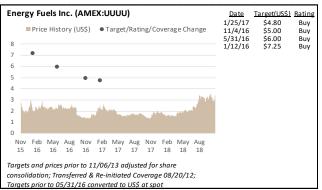
Denison Mines Corp. (DML-T)

This Company is Currently Restricted



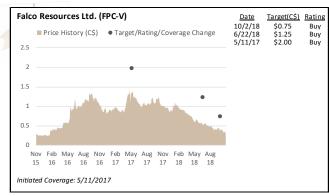






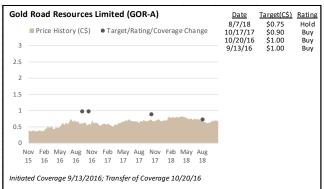


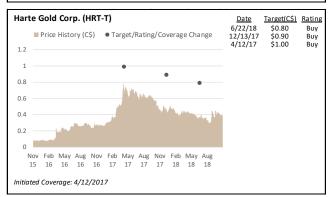






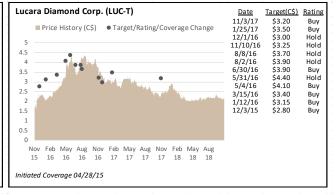




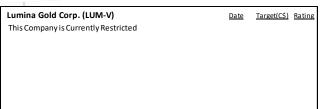


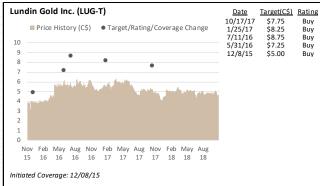


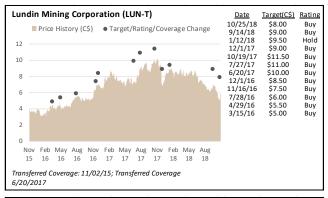


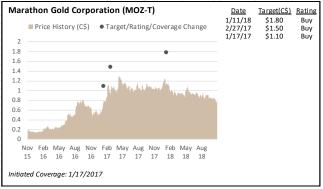


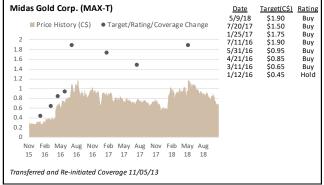


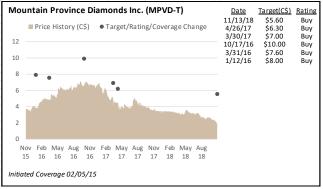




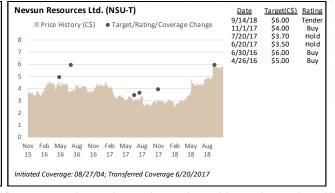




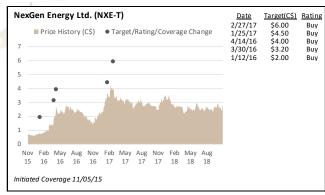


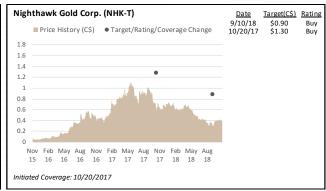


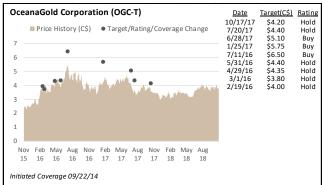


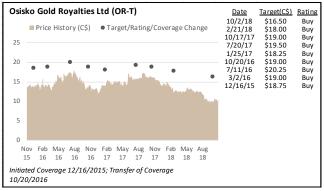


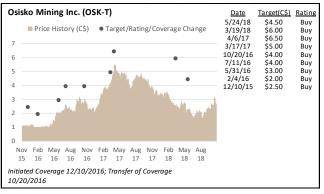


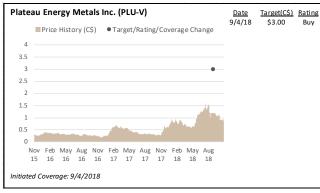




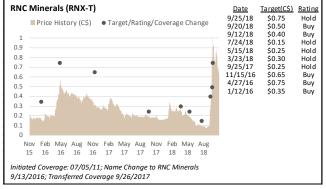




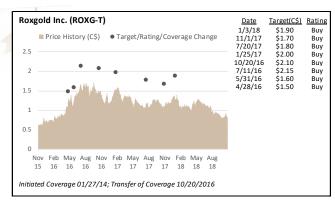


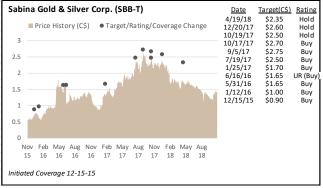


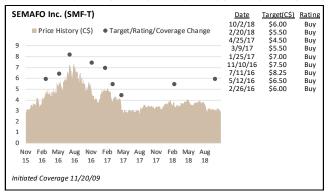




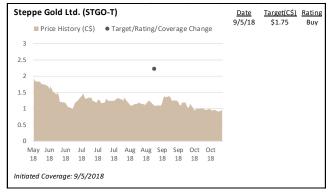


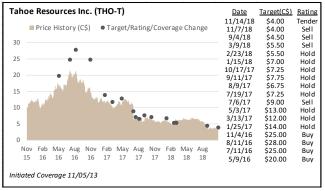


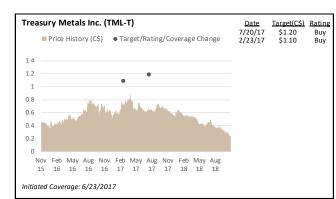


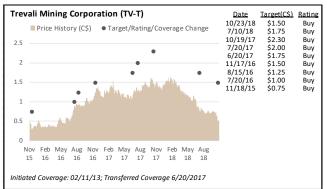




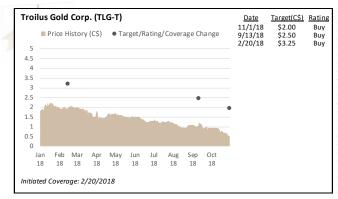


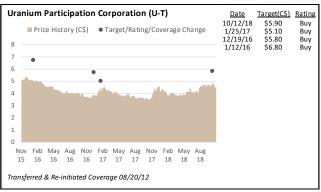


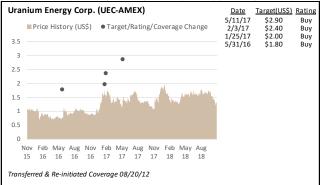












B: Buy; H: Hold; S: Sell; T: Tender; UR: Under Review

Source: Capital IQ and Haywood Securities