

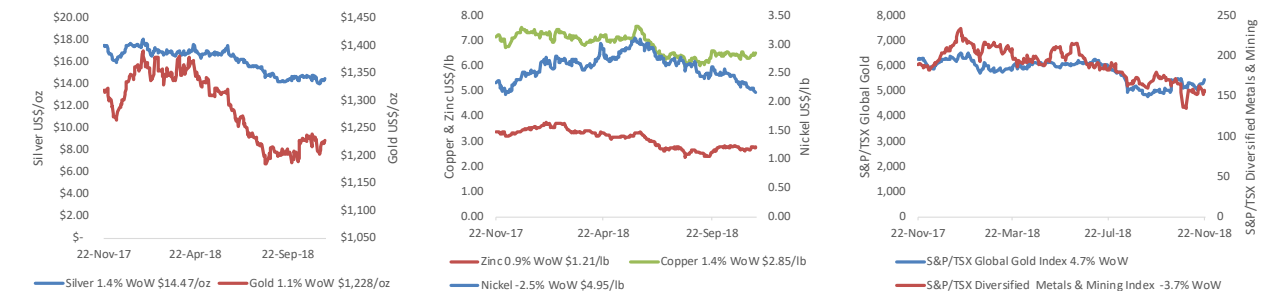
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Gold Rises Steadily amid Weak U.S. Economic Data and Trade Tensions

- Precious Metals:** After falling to a low of US\$1,200 per ounce ten days ago, the price of gold has risen steadily as recent U.S. economic data suggests capital spending may be slowing down due to the continued trade war between the U.S. and China. This week, Durable Good's Orders for October hit a 15-month low (down \$11.7 billion to \$248 billion), while recent manufacturing and housing reports also came in weaker. With this backdrop in disappointing economic data, the U.S. Dollar Index remains where it was one week ago, while the price of gold has risen 2% since mid November. Gold equity indexes for larger cap companies have followed this positive trend; both the S&P Global Gold Index and VanEck Vectors Junior Gold Miners ETF are up this week. Some of the better performing gold equities in our coverage universe included B2Gold (BTO-T, BUY rating, \$5.00 target; up 9.5%), Oceanagold (OGC-T, HOLD rating, \$4.20 target; up 7.7%) and Endeavour Mining (EDV-T, BUY rating, \$32.00 target, up 6.1%). However, it continues to be a tough period for the junior exploration sector, as reflected by the S&P/TSX Venture Index which fell just above 600 points as of Thursday close. Whilst the malaise in the junior sector continues, there were some positive performers in the space this week, headlined by Superior Gold (SGI-V, BUY rating, \$1.50 target) which registered a 18.4% gain this week, while Liberty Gold (LGD-T, BUY rating, \$1.00 target) and Marathon Gold (MOZ, BUY rating, \$1.80 target) were both up 8.3% and 2.9%, respectively. Finally, while we saw gold rise 1.2% this week, silver also gained ground (up 1.4%), while platinum and palladium saw little change since last Thursday.
- Base Metals:** Were all down week over week (WoW). LME nickel was the most negatively impacted metal down -3.4% to \$4.95/lb, followed by LME zinc and copper were down -0.5% and -0.2% WoW at \$1.21/lb and \$2.82/lb, respectively. The LMEX Index was up 93 bps WoW at 2,926.4 at Thursdays close. The S&P Composite Diversified Metals & Mining Industry Index closed Thursday at 4,985.88, which was down -3.88% WoW. Metals are all down YoY with copper, zinc and nickel down -10.5%, -18.2% and -8.2%, respectively. LME inventories were all down WoW with copper, zinc and nickel inventories were down -13.3%, -2.3% and -0.6% WoW, respectively. Excluding bonded warehouse inventories, we calculate the current days of consumption at 6.2 for copper and 4.3 for zinc. The US Dollar Index was down -22 bps this week, closing on Thursday at 96.7, having a slight positive impact on base metals prices. The majority of base metals equities in our coverage were down WoW. The most negatively impacted weekly performer in our coverage universe was Capstone Mining (CS:TSX, BUY, C\$0.70 target), down -4.8% WoW. The most positively impacted weekly performer in our coverage universe was Nevsun Resources Ltd. (NSU-T, TENDER, C\$6.00 target), which was up +1.2% 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:

- **Atlantic Gold Corp. (AGB-V, \$1.54):** Q3/18 financial results
- **Plateau Energy Metals Inc. (PLU-V, \$0.83):** Corporate update
- **Harte Gold Corp. (HRT-T, C\$0.395):** Q3/18 results
- **Nighthawk Gold Corp. (NHK-T; \$0.38):** Drilling results
- **Plateau Energy Metals Inc. (PLU-V, \$0.83):** Drilling results
- **Troilus Gold Corp. (TLG-V, C\$0.60):** Updated resource estimate
- **Marathon Gold Corp. (MOZ-T, \$0.70):** Drilling results

Covered Name Reports:

Atlantic Gold Corp. (AGB-V, \$1.54 [Hold Rating, \$1.80 Target Price]) – Q3/18 Financials Deliver a Lower Cost Quarter: In-line with Estimates

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

Overall operating costs and AISC contributed to low-cost quarter that was predominantly in-line with our estimates and resultant financials. Operations delivered 27,570 ounces via the processing of 581.1 kt of ore material grading 1.54 g/t gold with gold recoveries reported at 95.5%. A total of ~1,051 kt of ore material was mined in the quarter, at a strip ratio of 0.65:1 (w:o), which was below the year-to-date average of 0.75:1 (w:o) with 49% of the ytd mined ore (grading 0.52 g/t gold) now stockpiled for future processing.

See Haywood Securities for the full report

Plateau Energy Metals Inc. (PLU-V, \$0.83 [Buy Rating, \$3.00 Target Price]) – Corporate Update: Catalyst Rich Heading into 2019

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

Exploration and development work at Plateau's Falchani Lithium and Macusani Uranium projects is progressing in-line with our expectations. The Company has an exciting pipeline of catalysts that could drive share price outperformance in an environment of improving sentiment for lithium and uranium equities. Note that its recent \$5M equity financing is expected to fund exploration and development work at both projects for the rest of 2018 and H1/19.

See Haywood Securities for the full report

Harte Gold Corp. (HRT-T, C\$0.395 [Buy Rating, C\$0.80 Target Price]) – Commercial Production in Sight

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

Harte Gold released 3Q18 results, expecting to reach commercial production at the Sugar Zone mine in December. Following the first gold pour in October, HRT expects to reach commercial mill throughput in December, defined as 75% of permitted capacity of 575tpd. Stope production underground has started, and the tailings management facility and the paste fill plant will be complete in 4Q18. We expect the mine to reach full permitted capacity of 575tpd in 1Q19, which would put the Sugar Zone mine on track for production of approximately 40koz Au in 2019. In 2019, the Company will apply to increase mill throughput to 800tpd, which could lead to annual gold production of 75koz in 2020.

See Haywood Securities for the full report



Nighthawk Gold Corp. (NHK-T; \$0.38 [Buy Rating, \$0.90 Target Price]) – New High-Grade Zones Discovered at Colomac

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

The latest drilling results have successfully identified shallow (100 to 200 metres), higher-grade gold mineralization within previously untested areas along the Colomac trend. Grade is key at Colomac, given the CAPEX hurdle required to build a mine and processing facility in the northern Northwest Territories. We feel that today's results highlight the potential for higher-grade gold mineralization similar to Zone 1.5, although more drilling is required to determine width and continuity. Today's drilling results (19 holes in total) represent the last from Colomac for 2018, although investors can expect additional news flow from a maiden resource estimate for Damoti and results from metallurgical testwork and regional prospecting.

See Haywood Securities for the full report

Plateau Energy Metals Inc. (PLU-V, \$0.83 [Buy Rating, \$3.00 Target Price]) – Drilling from Falchani West Supports our Thesis of Large Resource Upside Potential

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

PLU has released new drill results from platforms 12-14 on the western side of the Falchani Lithium Project. Results include a very thick intersection from platform 14 of over 330 metres grading ~2,900 ppm Li (~277m true thickness), which is above the all-categories average resource grade to the east. Mineralization starts near surface at 7 metres depth in Hole PLAT 14-W and no uranium mineralization was present in the 7 metres of barren rhyolite overburden which supports the potential for an environmentally simple approach to permitting in this area.

See Haywood Securities for the full report

Troilus Gold Corp. (TLG-V, C\$0.60 [Buy Rating, C\$2.00 Target Price]) – New Resource, New Plan

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

TLG released an updated resource for the Troilus Deposit. The resource has increased by 90% since 2016, with considerably more open pit ounces. The total open pit and underground resource is 5.1Moz, with 3.9M oz Indicated and 1.2Moz Inferred, at an overall AuEq grade of 1g/t. The focus is now on open pit resources, representing 62% of total resources, compared to 20% in 2016.

See Haywood Securities for the full report

Marathon Gold Corp. (MOZ-T, \$0.70 [Buy Rating, \$1.80 Target Price]) – Drilling Continues to De-Risk Marathon Deposit

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

Marathon Gold announced infill drill results from its 100% owned Valentine Lake Gold Camp in central Newfoundland. Results demonstrate continued progress towards the Company's goal of converting Inferred resources to Indicated and Measured at Marathon and Sprite, as well as the further delineation of shallow, high-grade gold mineralization along the margins of the conceptual open pit used for the recent PEA update (after-tax NPV (5%) of \$493 million and an IRR of 30% over a 12-year mine life) to reduce the strip-ratio. Today's results also demonstrate continuity within the southwestern extent of the Marathon deposit, along the footwall contact where higher-grade gold mineralization is associated with a steeply dipping structure to the northeast.

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:

- **GT Gold Corp. (GTT-V, \$1.61):** Drilling results

Mining Flashes:

GT Gold Corp. (GTT-V, \$1.61 [Not Rated]) – Porphyry Cu-Au Mineralization Expanded at Saddle North

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

GT Gold announced drilling results from its Saddle North target, located approximately 500 metres north of the Saddle South target on the Company's Tatogga property within the Golden Triangle in northwestern British Columbia. The recent release is comprised of two drill holes (TTD098 and 102); a total of seven holes have been released to date (including 98 and 102) and results of an additional 5 holes are pending. Holes 102 and 98 represent ~500 metre step-outs from previous drilling, with both successfully intersecting wide zones of porphyry copper-gold mineralization, and returning results showing copper and gold grades increasing with depth. Porphyry-style mineralization has now been intersected along a strike length of approximately 600 metres, and to a depth of approximately 900 vertical metres from surface.

See Haywood Securities for the full report



Weekly Commodities

PRECIOUS METALS

Name	Close	1Wk Δ	1 week %	1 Month %	3 Month %	6 Month %	12 Month %	5 Day Trend	52W H/L	1W H/L
Gold Spot	\$ 1,227	\$ 14.02	1.2%	0.4%	2.6%	(4.9)%	(5.0)%		\$ 1,366	\$ 1,227
US\$/oz									\$ 1,160	\$ 1,213
Silver Spot	\$ 14.50	\$ 0.20	1.4%	(0.4)%	(1.7)%	(12.3)%	(15.4)%		\$ 17.70	\$ 14.50
US\$/oz									\$ 13.90	\$ 14.30
Platinum Spot	\$ 847	\$ 5.28	0.6%	3.0%	6.7%	(6.6)%	(9.7)%		\$ 1,029	\$ 854
US\$/oz									\$ 756	\$ 842
Palladium Spot	\$ 1,155	\$ (2.78)	(0.2)%	2.8%	24.7%	16.4%	14.8%		\$ 1,187	\$ 1,177
US\$/oz									\$ 834	\$ 1,145

BASE METALS

Name	Close	1Wk Δ	1 week %	1 Month %	3 Month %	6 Month %	12 Month %	5 Day Trend	52W H/L	1W H/L
Copper Future	\$ 2.85	\$ 0.04	1.4%	0.7%	5.1%	(9.6)%	(9.2)%		\$ 3.32	\$ 2.85
US\$/lb									\$ 2.64	\$ 2.81
Nickel Spot	\$ 4.95	\$ (0.13)	(2.5)%	(12.4)%	(18.9)%	(25.9)%	(7.5)%		\$ 7.14	\$ 5.12
US\$/lb									\$ 4.89	\$ 4.95
Zinc Spot	\$ 1.21	\$ 0.01	0.9%	(1.7)%	8.2%	(12.4)%	(18.0)%		\$ 1.64	\$ 1.22
US\$/lb									\$ 1.04	\$ 1.20
Aluminum Spot	\$ 0.88	\$ 0.01	1.5%	(2.9)%	(5.1)%	(14.3)%	(7.3)%		\$ 1.18	\$ 0.88
US\$/lb									\$ 0.87	\$ 0.87
Iron Ore Spot	\$ 74.07	\$ (0.63)	(0.8)%	2.4%	9.8%	12.3%	17.2%		\$ 140.00	\$ 78.80
US\$/t									\$ 77.70	\$ 77.70

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	\$ 98.40	\$ (3.90)	(3.8)%	(12.3)%	(9.5)%	(4.9)%	7.8%		\$ 115.30	\$ 102.30
US\$/t									\$ 89.50	\$ 98.35
Uranium Spot	\$ 29.00	\$ (0.15)	(0.5)%	4.9%	9.8%	24.7%	5.6%		\$ 27.40	\$ 29.15
US\$/lb									\$ 23.80	\$ 29.00
WTI	\$ 53.85	\$ (2.83)	(5.0)%	(22.5)%	(19.5)%	(22.6)%	(1.8)%		\$ 76.55	\$ 57.20
US\$/bbl									\$ 52.77	\$ 53.43
Brent	\$ 62.60	\$ (4.02)	(6.0)%	(21.2)%	(16.5)%	(19.3)%	4.4%		\$ 86.27	\$ 66.79
US\$/bbl									\$ 59.17	\$ 62.53
Henry Hub	\$ 4.24	\$ 0.20	4.9%	31.8%	38.0%	37.8%	33.9%		\$ 4.93	\$ 4.70
US\$/MMBtu									\$ 2.82	\$ 4.04

Source: Haywood Securities and Bloomberg

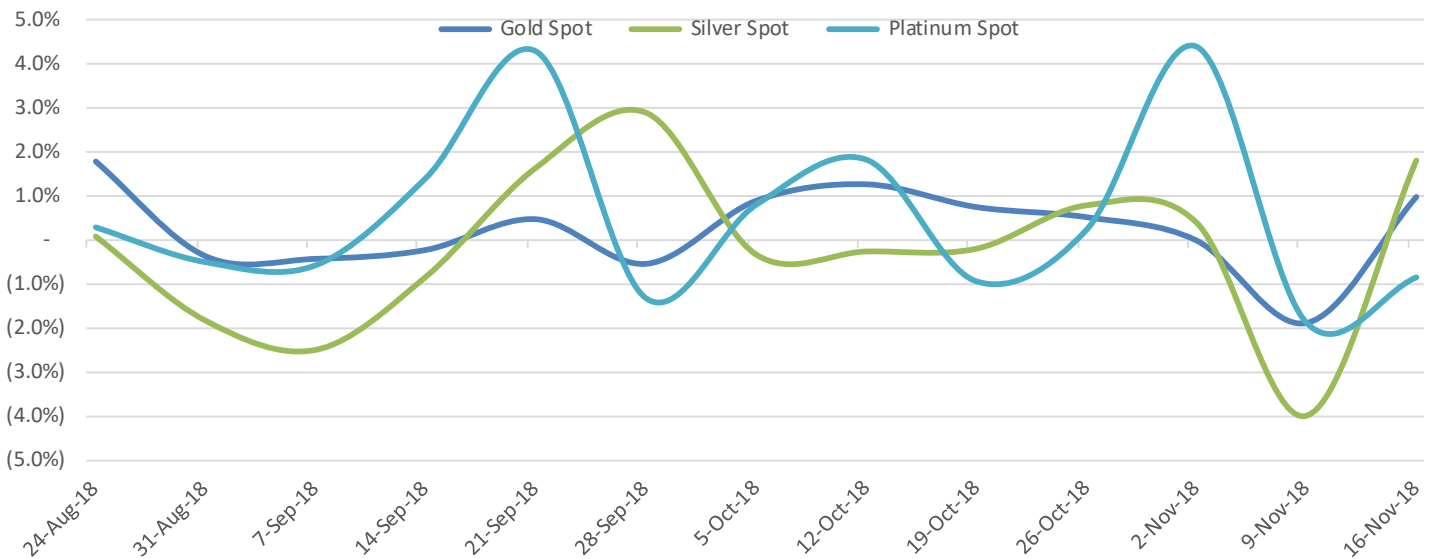


Commodities Prices and Inventories

Precious Metals

Spot Price				
Commodities	LME Spot Price	Weekly Δ	YTD Δ	1 Year Δ
Gold	US\$ 1,228 /oz	1.2%	1.4%	1.4%
Silver	US\$ 14.49 /oz	1.4%	-14.5%	-15.5%
Platinum	US\$ 849 /oz	0.7%	-8.9%	-9.6%

Precious Metals Weekly Change (12 weeks)



Source: Haywood Securities and Bloomberg

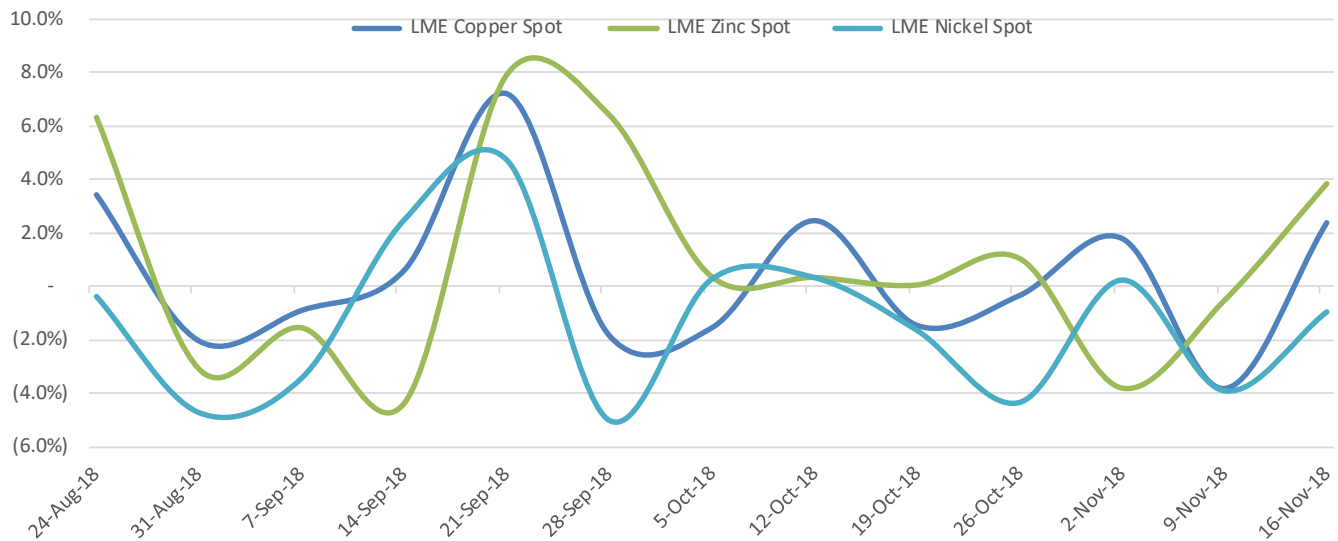


Base Metals

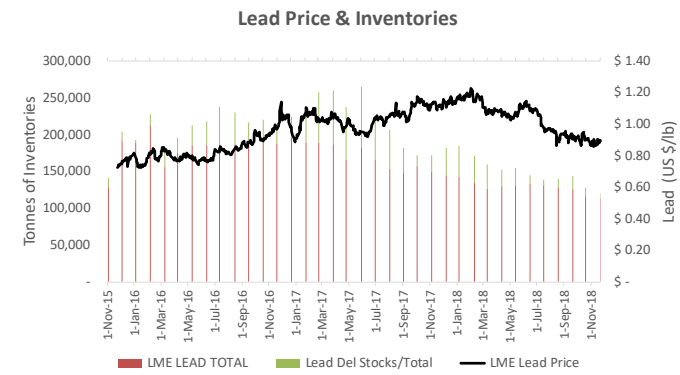
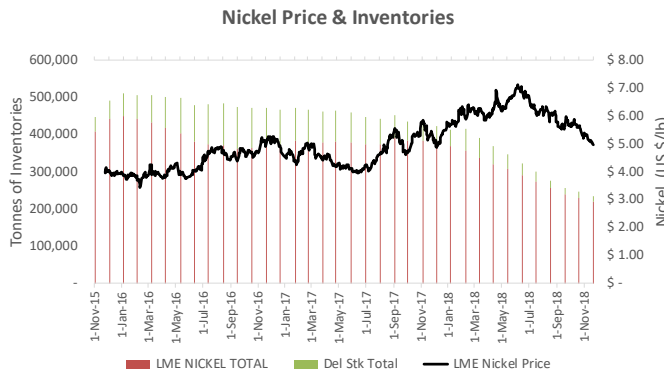
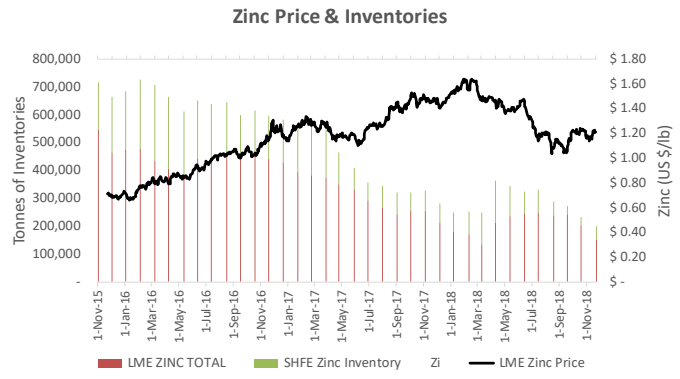
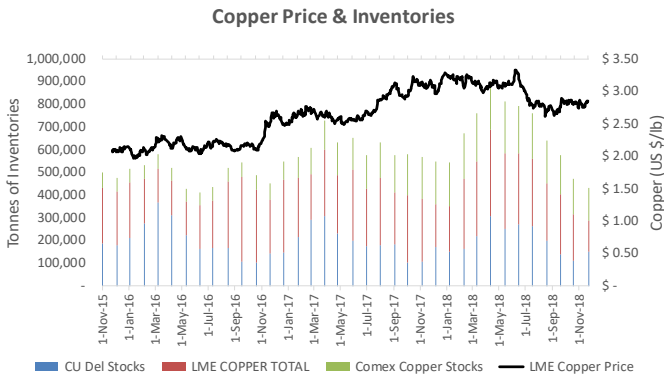
Spot Price				
Commodities	LME Spot Price	Weekly Δ	YTD Δ	1 Year Δ
Copper	US\$ 2.85 /lb	1.4%	-12.8%	-9.2%
Zinc	US\$ 1.21 /lb	0.9%	-19.9%	-18.0%
Nickel	US\$ 4.95 /lb	-2.5%	-14.2%	-7.5%

LME Inventory			Total Inventory Excluding Bonded Warehouse Inventory			
Commodities	LME Inventory	Weekly Δ	Total (t)	YTD Δ	1 Year Δ	Days of Consumption
Copper	143,325	-13.9%	407,113	-26%	-30%	6.3
Zinc	123,500	-1.5%	163,175	-35%	-47%	4.5
Nickel	214,962	-0.6%	231,349	-44%	-46%	38.5

Base Metals Weekly Change (12 weeks)



Source: Haywood Securities and Bloomberg



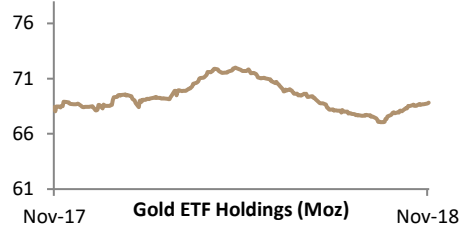
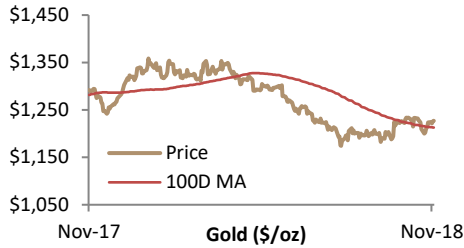
Note: Total Inventories exclude the bonded warehouse inventories

Source: Haywood Securities and Bloomberg



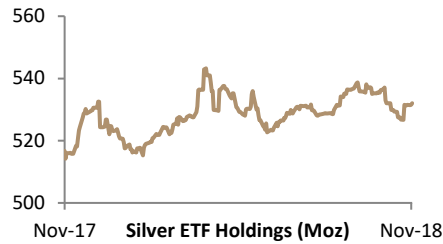
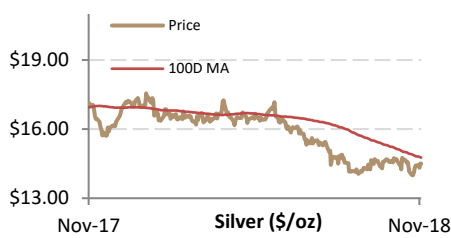
Commodities and ETFs: A Week in Action

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



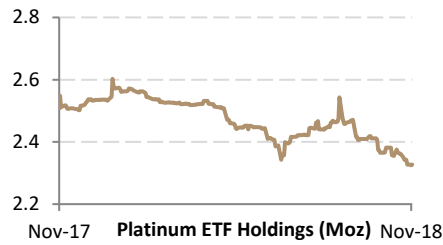
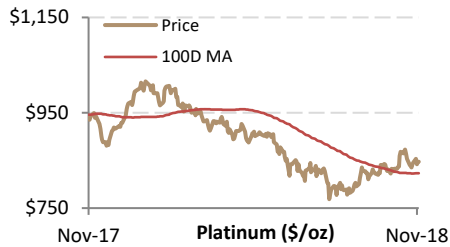
- Spot: Gain (+1.2%) for the week
- ETF Holdings: 68,837,463 ounces, up 190,449 ounces for the week

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



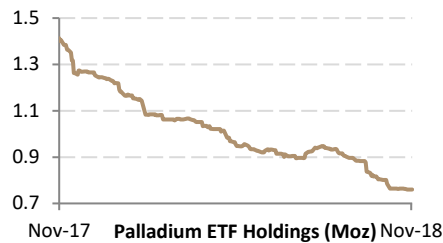
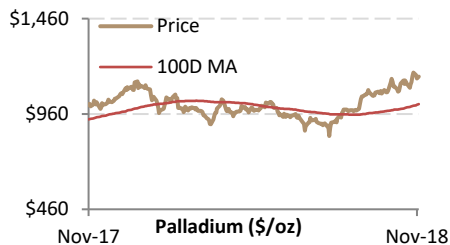
- Spot: Gain (+1.4%) for the week
- ETF Holdings: 532,076,216 ounces, up 762,404 ounces for the week

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



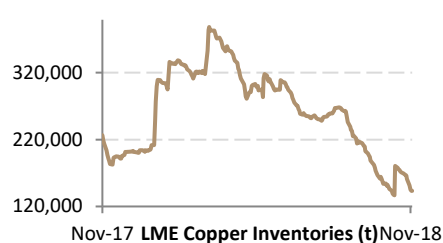
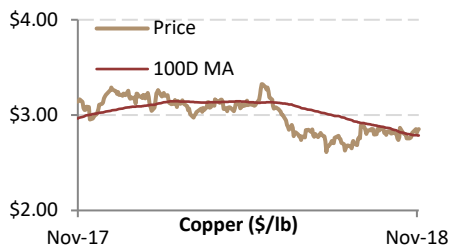
- Spot: Gain (+0.6%) for the week
- ETF Holdings: 2,326,675 ounces, down 15,640 ounces for the week

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



- Spot: Loss (-0.2%) for the week
- ETF Holdings: 759,996 ounces, down 2,655 ounces for the week

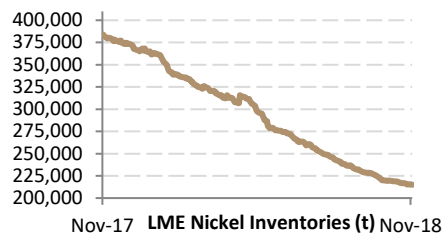
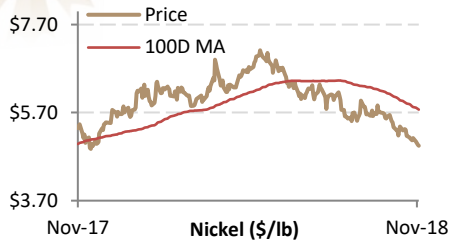
Copper – 1-Year US\$/lb (left) and LME Inventory (right)



- Futures: Gain (+1.4%) for the week
- **LME Copper:** 143,325 tonnes, down 23,125 tonnes for the week

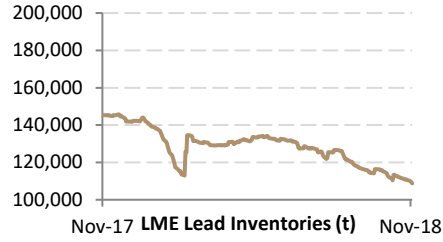
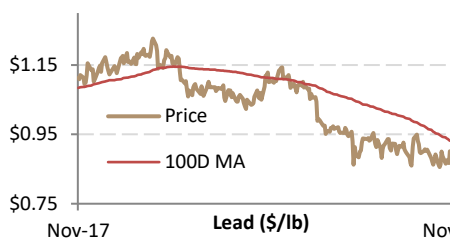


Nickel – 1-Year US\$/lb (left) and LME Inventory (right)



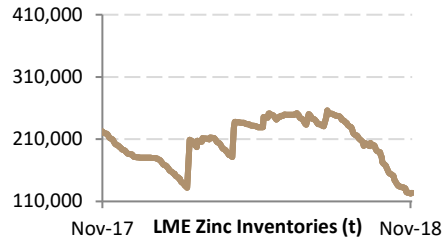
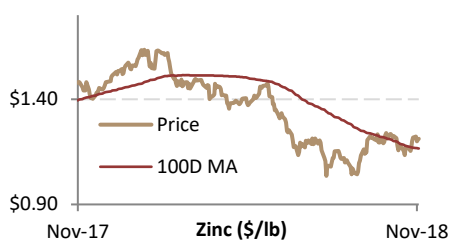
- Spot: Loss (-2.5%) for the week
- LME Nickel: 214,962 tonnes, down 1,212 tonnes for the week

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



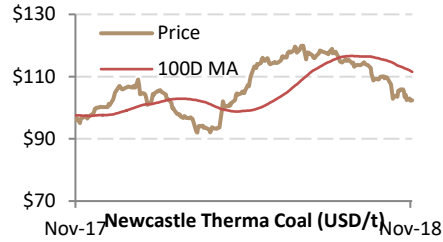
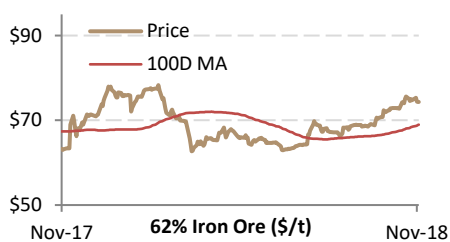
- Spot: Gain (+3.0%) for the week
- LME Lead: 108,775 tonnes, down 2,125 tonnes for the week

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



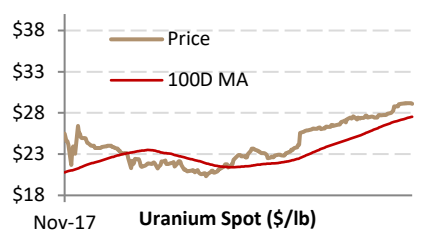
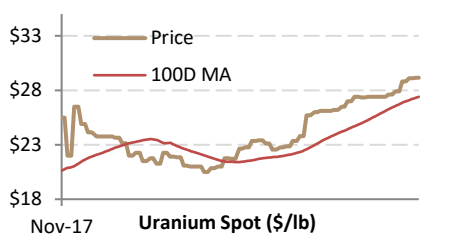
- Spot: Gain (+0.9%) for the week
- LME Zinc: 123,500 tonnes, down 1,900 tonnes for the week

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



- Newcastle Thermal Futures: Loss (-1.7%) for the week
- 62% Fe Iron Ore: Loss (-0.8%) 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: Loss (-0.5%) for the week

Source: Bloomberg, UxC Consulting, and Haywood Securities



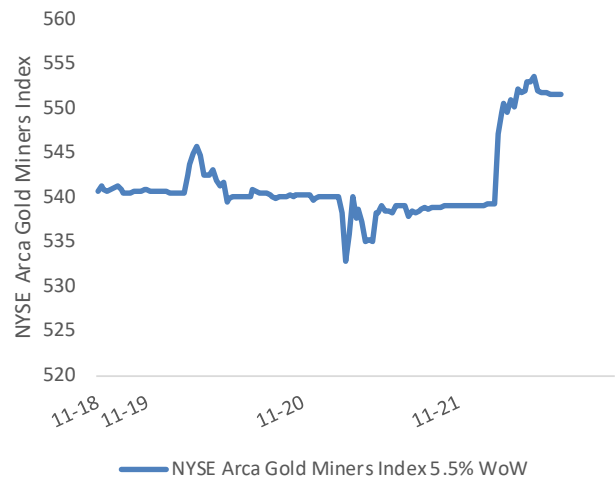
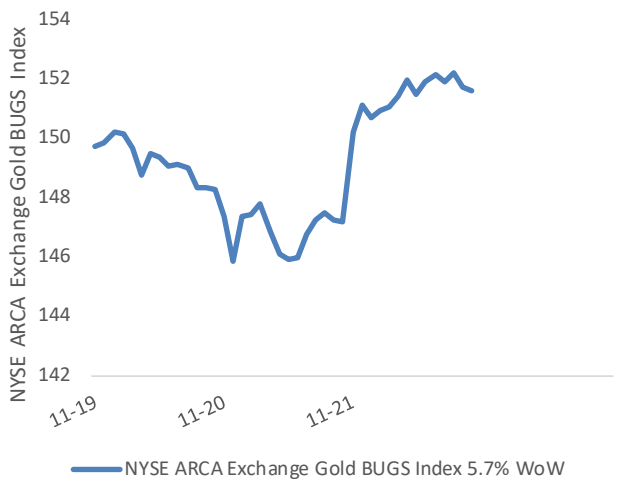
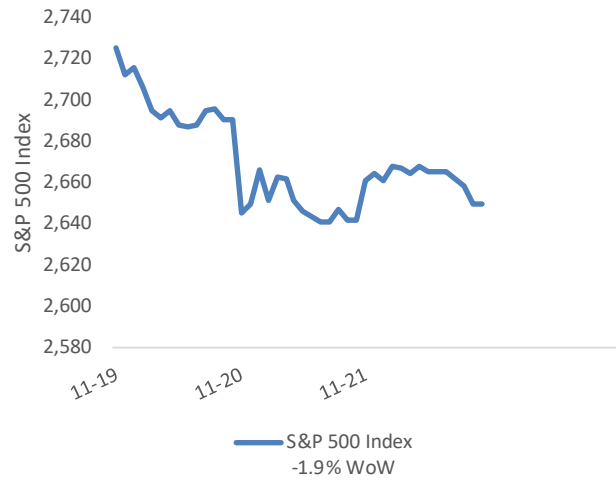
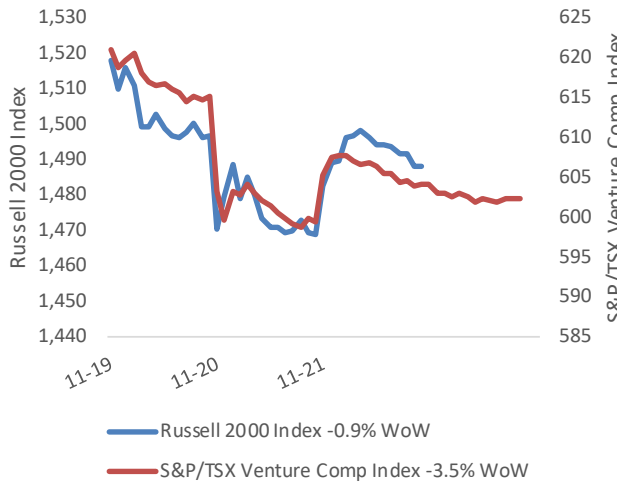
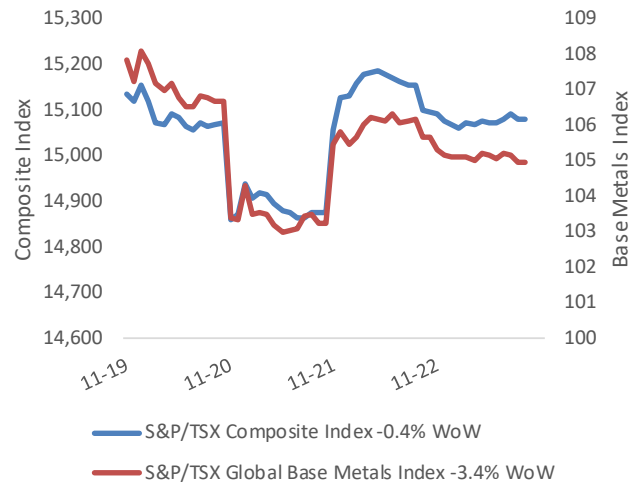
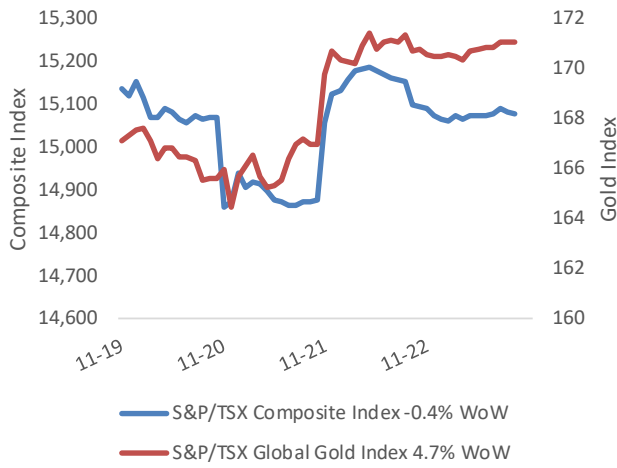
Upcoming Macroeconomic News and Events

Date	Event	Period	Survey	Prior	Relevance
United States					
11/23/2018	Markit US Manufacturing PMI	Nov P	55.7	55.7	90
11/23/2018	Markit US Services PMI	Nov P	55	54.8	70
11/23/2018	Markit US Composite PMI	Nov P	--	54.9	70
11/26/2018	Chicago Fed Nat Activity Index	Oct	--	0.17	64
11/26/2018	Dallas Fed Manf. Activity	Nov	25	29.4	65
11/27/2018	FHFA House Price Index MoM	Sep	0.40%	0.30%	70
11/27/2018	Conf. Board Consumer Confidence	Nov	136	137.9	94
11/28/2018	MBA Mortgage Applications	23-Nov	--	-0.10%	92
11/28/2018	Wholesale Inventories MoM	Oct P	0.50%	0.40%	81
11/28/2018	GDP Annualized QoQ	3Q S	3.60%	3.50%	97
11/28/2018	Personal Consumption	3Q S	3.50%	4.00%	68
11/28/2018	GDP Price Index	3Q S	1.70%	1.70%	78
11/28/2018	Core PCE QoQ	3Q S	--	1.60%	68
11/28/2018	New Home Sales	Oct	582k	553k	91
11/28/2018	Richmond Fed Manufact. Index	Nov	16	15	72
11/29/2018	Personal Income	Oct	0.40%	0.20%	85
11/29/2018	Personal Spending	Oct	0.40%	0.40%	85
11/29/2018	PCE Core MoM	Oct	0.20%	0.20%	60
11/29/2018	Initial Jobless Claims	24-Nov	--	224k	98
11/29/2018	Continuing Claims	17-Nov	--	1668k	69
11/29/2018	Bloomberg Consumer Comfort	25-Nov	--	61.3	68
11/29/2018	Pending Home Sales MoM	Oct	0.80%	0.50%	77
Canada					
11/23/2018	Retail Sales MoM	Sep	0.00%	-0.10%	79
11/23/2018	Retail Sales Ex Auto MoM	Sep	0.30%	-0.40%	74
11/23/2018	CPI NSA MoM	Oct	0.10%	-0.40%	88
11/23/2018	CPI YoY	Oct	2.20%	2.20%	95
China					
11/29/2018	Non-manufacturing PMI	Nov	--	53.9	65
11/29/2018	Manufacturing PMI	Nov	--	50.2	88

Source: Bloomberg



Weekly Indices

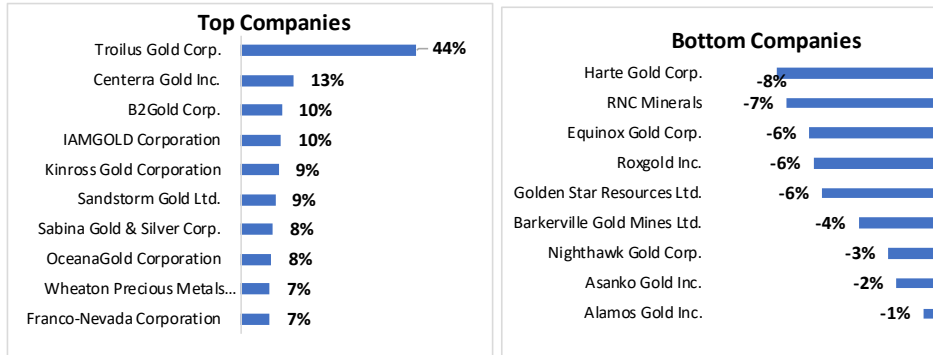


Source: Bloomberg and Haywood Securities



Weekly Equities

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



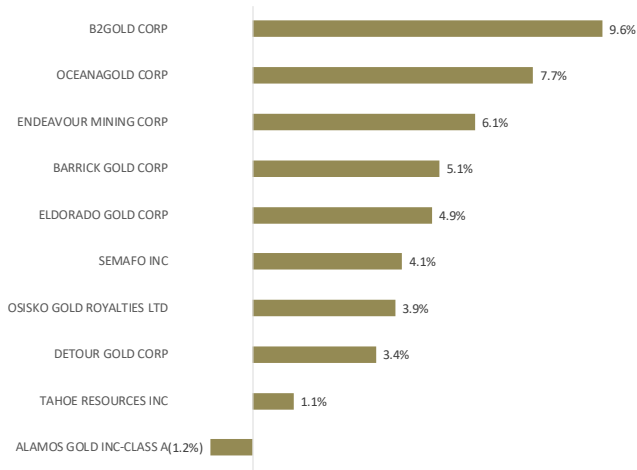
Ticker	Company	Close	1Wk \$	1Wk %	52Wk High	52Wk Low	Ticker	Company	Close	1Wk \$	1Wk %	52Wk High	52Wk Low
TSX:AEM	Agnico Eagle Mines Limited	49.87	3.35	7%	62.80	42.35	TSX:LGD	Liberty Gold Corp.	0.32	0.02	7%	0.50	0.30
TSX:ASR	Alacer Gold Corp.	2.22	0.02	1%	2.97	1.97	TSX:LUG	Lundin Gold Inc.	4.63	0.06	1%	5.52	4.07
TSX:AGI	Alamos Gold Inc.	4.64	(0.05)	(1)%	8.91	4.41	TSX:MAG	MAG Silver Corp.	9.45	(0.01)	(0)%	15.97	8.10
NYSE:AU	AngloGold Ashanti Limited	10.25	0.60	6%	12.00	7.08	TSX:MOZ	Marathon Gold Corporation	0.70	0.02	3%	1.28	0.65
TSX:AR	Argonaut Gold Inc.	1.34	0.02	2%	2.87	1.24	NYSE:MUX	McEwen Mining Inc.	1.83	0.04	2%	2.55	1.68
TSX:AKG	Asanko Gold Inc.	0.86	(0.02)	(2)%	1.79	0.55	TSX:MAX	Midas Gold Corp.	0.66	0.02	3%	1.21	0.55
TSXV:AGB	Atlantic Gold Corporation	1.57	0.03	2%	1.99	1.40	TSX:NGD	New Gold Inc.	1.18	-	-	4.45	0.90
TSX:BTO	B2Gold Corp.	3.66	0.34	10%	4.06	2.77	NYSE:NEM	Newmont Mining Corporation	33.59	0.73	2%	42.04	29.06
TSXV:BGM	Barkerville Gold Mines Ltd.	0.37	(0.02)	(4)%	0.78	0.35	TSX:NHK	Nighthawk Gold Corp.	0.37	(0.01)	(3)%	0.76	0.30
TSX:ABX	Barrick Gold Corporation	18.07	0.97	6%	19.49	12.54	TSX:NG	NovaGold Resources Inc.	5.29	0.21	4%	6.47	4.33
TSX:CG	Centerra Gold Inc.	5.65	0.66	13%	8.21	4.76	TSX:OGC	OceanaGold Corporation	4.04	0.29	8%	4.19	2.92
TSX:CGG	China Gold International Resources I	1.78	0.05	3%	3.19	1.59	TSX:OR	Osisko Gold Royalties Ltd	10.25	0.43	4%	15.52	9.27
NYSE:CDE	Coeur Mining, Inc.	4.35	(0.04)	(1)%	8.94	4.08	TSX:OSK	Osisko Mining Inc.	2.56	0.04	2%	3.86	1.60
NYSE:BVN	Compañía de Minas Buenaventura S.	14.30	(0.03)	(0)%	16.80	11.67	TSX:PAAS	Pan American Silver Corp.	17.80	0.82	5%	24.22	16.05
TSX:CNL	Continental Gold Inc.	2.08	0.03	1%	4.13	1.98	TSX:PG	Premier Gold Mines Limited	1.64	(0.01)	(1)%	3.94	1.59
TSX:DGC	Detour Gold Corporation	10.56	0.38	4%	15.40	9.11	TSX:PVG	Pretium Resources Inc.	10.48	0.51	5%	14.94	7.93
TSX:ELD	Eldorado Gold Corporation	0.85	0.04	5%	1.85	0.79	TSXV:PGM	Pure Gold Mining Inc.	0.53	0.01	2%	0.71	0.46
TSX:EDV	Endeavour Mining Corporation	18.91	1.10	6%	26.86	17.10	NasdaqGS:GOLD	Randgold Resources Limited	84.20	2.99	4%	104.05	59.90
TSX:EDR	Endeavour Silver Corp.	2.67	0.06	2%	4.40	2.36	TSX:RNx	RNC Minerals	0.52	(0.04)	(7)%	1.18	0.07
TSXV:EQX	Equinox Gold Corp.	0.92	(0.06)	(6)%	1.23	0.92	TSX:ROXG	Roxgold Inc.	0.79	(0.05)	(6)%	1.44	0.78
TSXV:FPC	Falco Resources Ltd.	0.32	0.02	5%	1.13	0.29	NasdaqGS:RGLD	Royal Gold, Inc.	75.73	1.30	2%	98.53	70.16
TSX:FR	First Majestic Silver Corp.	7.17	0.15	2%	11.09	6.24	TSX:SBB	Sabina Gold & Silver Corp.	1.47	0.11	8%	2.62	1.11
TSX:FVI	Fortuna Silver Mines Inc.	4.61	0.08	2%	7.78	4.29	TSX:SSL	Sandstorm Gold Ltd.	5.57	0.44	9%	6.95	4.60
TSX:FNV	Franco-Nevada Corporation	93.34	6.32	7%	110.18	76.53	NYSE:SA	Seabridge Gold Inc.	11.91	(0.13)	(1)%	15.30	9.80
NYSE:GFI	Gold Fields Limited	3.06	0.18	6%	4.54	2.20	TSX:SMF	SEMAFO Inc.	2.79	0.12	4%	4.14	2.58
TSX:G	Goldcorp Inc.	13.01	0.83	7%	19.32	11.00	NYSE:SBGL	Sibanye Gold Limited	2.70	0.10	4%	5.44	2.02
TSX:GSC	Golden Star Resources Ltd.	3.73	(0.22)	(6)%	5.85	3.35	TSX:SVM	Silvercorp Metals Inc.	2.67	0.07	3%	4.02	2.48
TSXV:GQC	Goldquest Mining Corp.	0.11	-	-	0.46	0.09	TSX:SSRM	SSR Mining Inc.	14.91	0.57	4%	14.96	9.66
TSX:GUY	Guyana Goldfields Inc.	1.41	0.02	1%	5.42	1.28	TSX:THO	Tahoe Resources Inc.	4.53	0.04	1%	7.27	2.88
NYSE:HMV	Harmony Gold Mining Company Limi	1.68	(0.01)	(1)%	2.53	1.43	TSX:TMR	TMAC Resources Inc.	5.73	0.16	3%	11.50	3.95
TSX:HRT	Harte Gold Corp.	0.37	(0.03)	(8)%	0.55	0.29	TSX:TXG	Torex Gold Resources Inc	11.55	0.07	1%	14.58	7.29
NYSE:HL	Hecla Mining Company	2.59	0.08	3%	4.63	2.17	TSX:TML	Treasury Metals Inc.	0.24	0.01	4%	0.67	0.21
TSX:IMG	IAMGOLD Corporation	4.47	0.41	10%	8.20	3.64	TSX:TLG	Troilus Gold Corp.	0.72	0.22	44%	2.25	0.40
TSX:IVN	Ivanhoe Mines Ltd.	2.64	0.08	3%	4.82	2.00	TSX:WDO	Wesdome Gold Mines Ltd.	3.78	0.23	6%	4.18	1.64
TSX:K	Kinross Gold Corporation	3.58	0.31	9%	5.90	3.15	TSX:WPM	Wheaton Precious Metals Corp.	21.76	1.48	7%	29.93	19.87
TSX:KL	Kirkland Lake Gold Ltd.	26.40	1.78	7%	30.94	16.54							

Source: Capital IQ and Haywood Securities

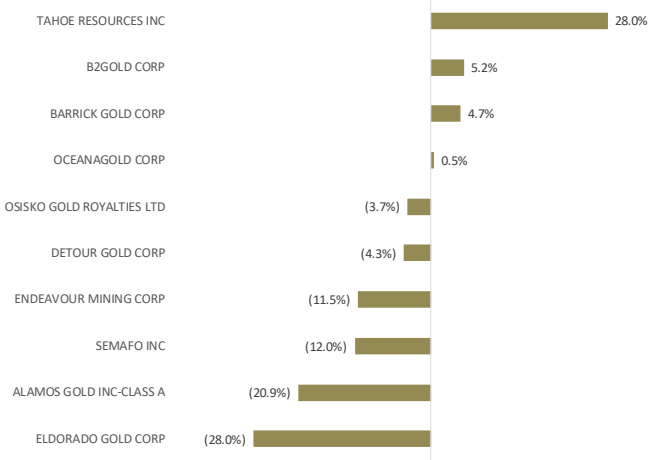


Weekly Performance – Precious Metals Companies (Covered Large Cap)

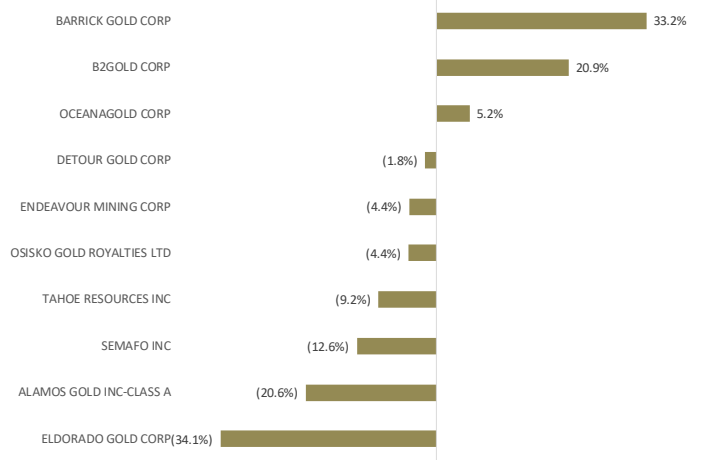
Weekly Price Change



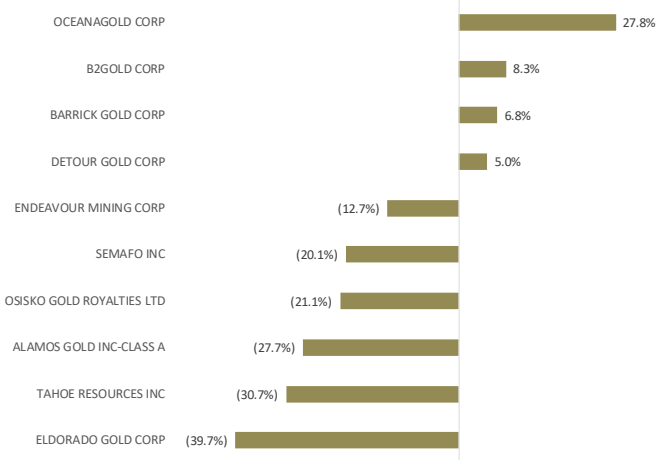
1-Month Price Change



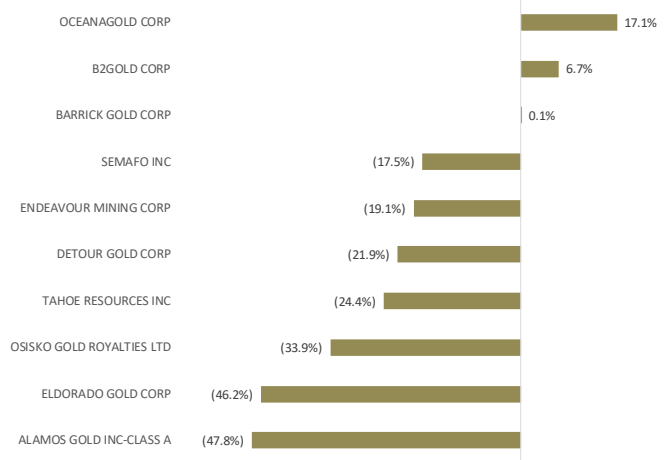
3-Month Price Change



6-Month Price Change



1-Year Price Change

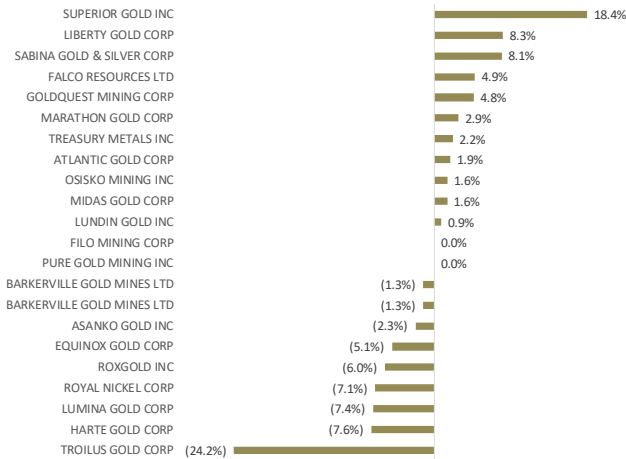


Source: Bloomberg and Haywood Securities

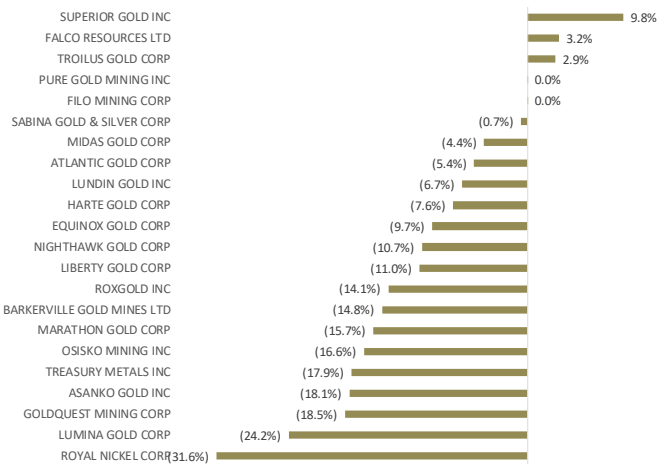


Weekly Performance – Precious Metals Companies (Covered Small Cap)

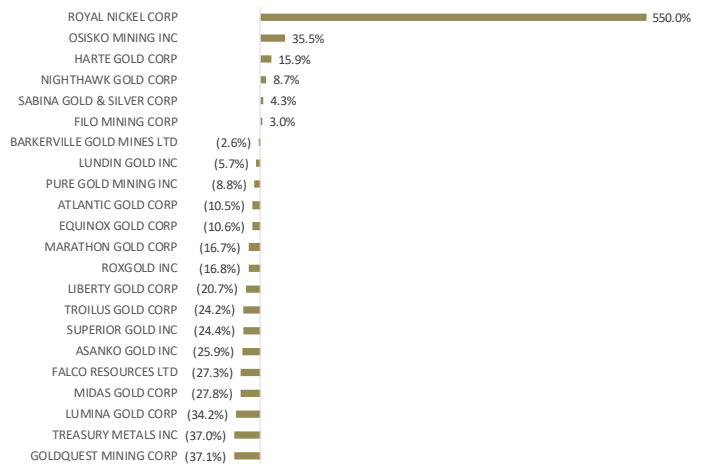
Weekly Price Change



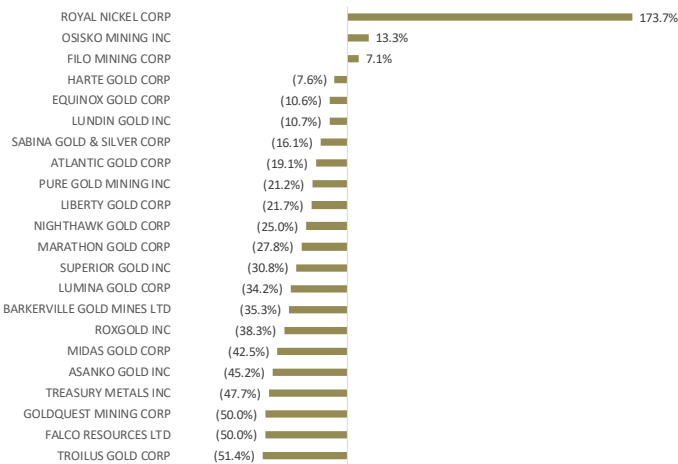
1-Month Price Change



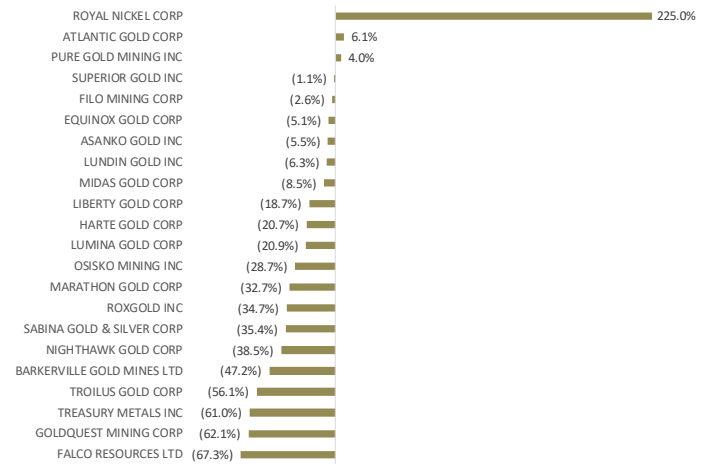
3-Month Price Change



6-Month Price Change



1-Year Price Change

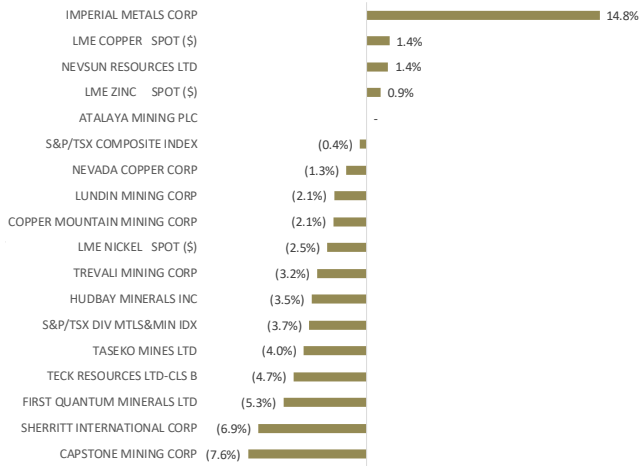


Source: Bloomberg and Haywood Securities

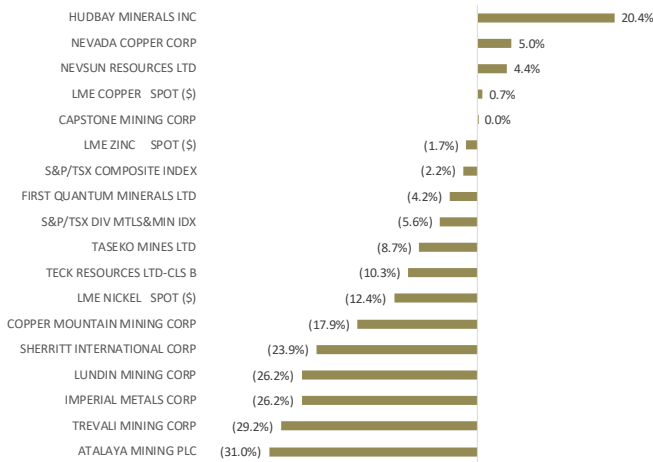


Equity Weekly Performance – Base Metals Companies

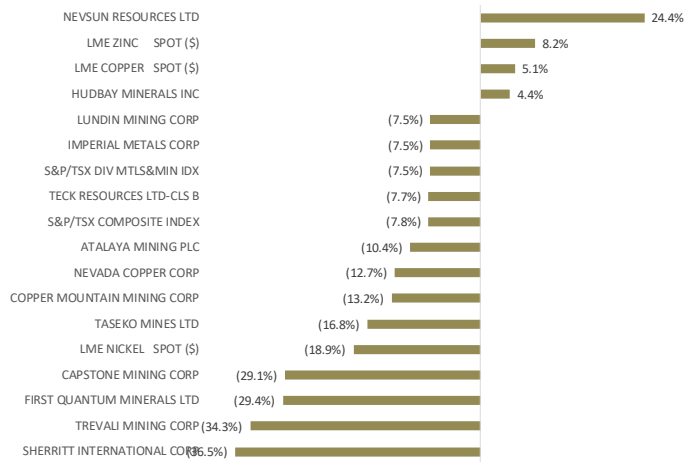
Weekly Price Change



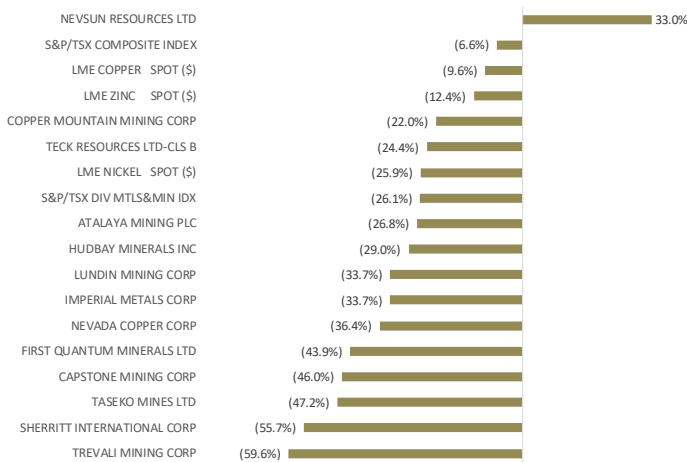
1-Month Price Change



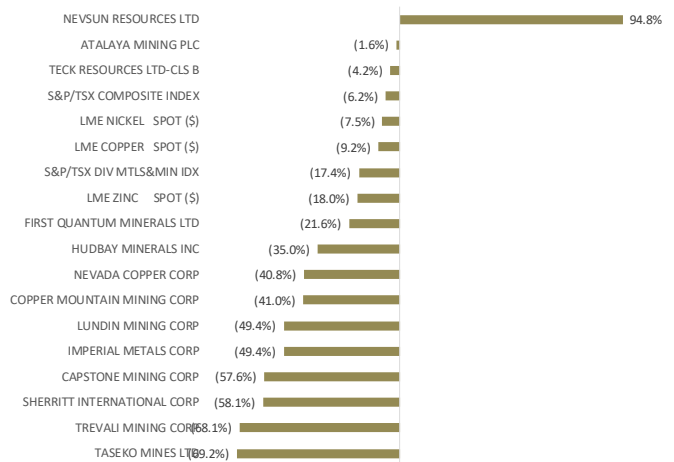
3-Month Price Change



6-Month Price Change



1-Year Price Change

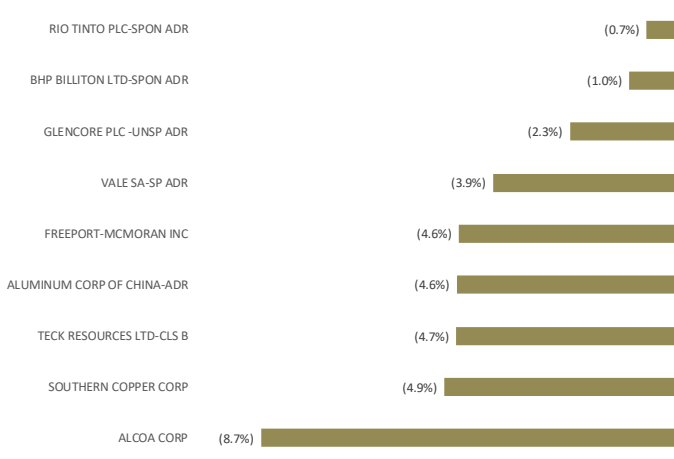


Source: Bloomberg and Haywood Securities

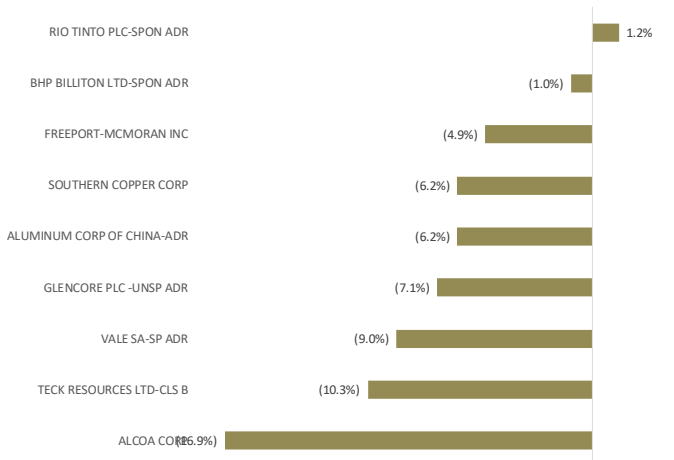


Equity Weekly Performance – Major International Miners

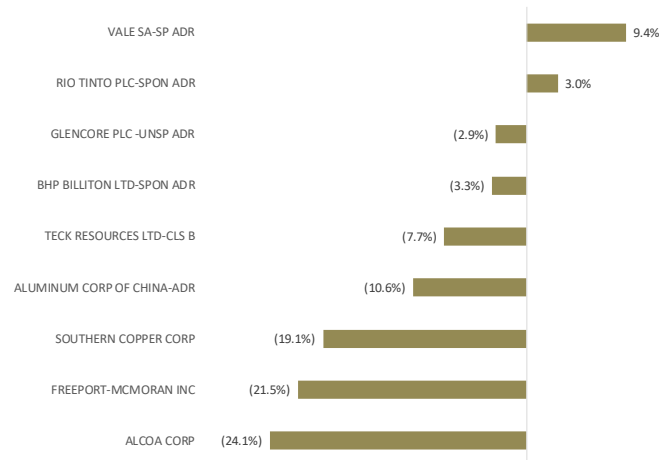
Weekly Price Change



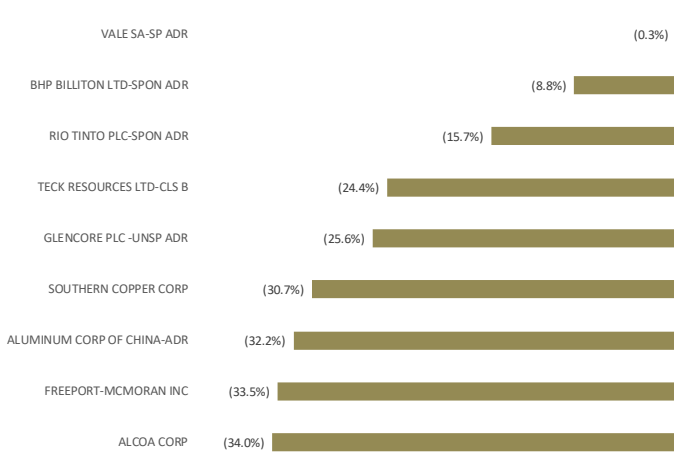
1-Month Price Change



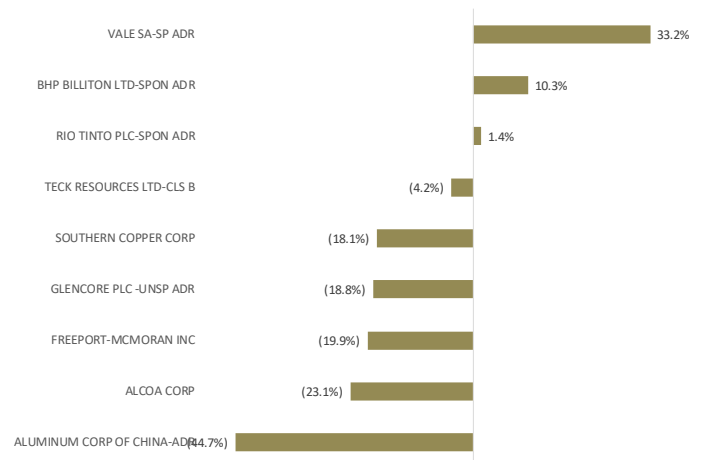
3-Month Price Change



6-Month Price Change



1-Year Price Change



Source: Bloomberg and Haywood Securities



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

Company	Symbol	Price	Shares O/S (millions)	Market Capitalization (millions)	Cash (millions)	Working Capital (millions)	Debt (millions)	Enterprise Value (millions)	2018E CFPS	2019E CFPS	Number of Estimates	P/CF Ratio 2018E 2019E	EV/CF Ratio 2018E 2019E	EV/EBITDA Ratio 2018E 2019E	P/NAV 2018E			
PGM Producers																		
Anglo American Platinum Limited	JSE:AMS	C\$ 45.12	262.2	US\$ 8,953	US\$ 675	US\$ 847	US\$ 609	US\$ 8,715	US\$ 2.94	US\$ 3.59	3	11.6x 9.5x	11.3x 9.3x	8.8x 7.8x	1.6x			
Impala Platinum Holdings Limited	JSE:IMP	C\$ 3.17	702.3	US\$ 1,682	US\$ 270	US\$ 655	US\$ 487	US\$ 1,514	US\$ 0.20	US\$ 0.41	3	12.0x 5.8x	10.8x 5.3x	5.4x 4.0x	1.2x			
Lonmin Plc	LSE:LMI	C\$ 0.81	282.7	US\$ 173	US\$ 167	US\$ 179	-	(US\$ 6)	US\$ 0.19	US\$ 0.38	1	3.2x 1.6x	- -	- -	0.4x			
Group Average - PGM Producers												9.0x	5.7x	11.1x	7.3x	7.1x	5.9x	1.0x
Silver Producers																		
Americas Silver Corporation	TSX:USA	C\$ 2.00	43.1	US\$ 65	US\$ 3	US\$ 3	US\$ 7	US\$ 69	US\$ 0.34	US\$ 0.30	2	4.5x 5.1x	4.7x 5.4x	11.4x 3.6x	0.3x			
Coeur Mining, Inc.	NYSE:CDE	C\$ 5.75	203.3	US\$ 884	US\$ 105	US\$ 140	US\$ 366	US\$ 1,109	US\$ 0.59	US\$ 0.96	4	7.4x 4.5x	9.3x 5.7x	8.0x 5.1x	0.9x			
Endeavour Silver Corp.	TSX:EDR	C\$ 2.67	130.6	US\$ 264	US\$ 29	US\$ 57	-	US\$ 206	US\$ 0.23	US\$ 0.25	5	8.9x 8.0x	7.0x 6.3x	6.6x 5.4x	0.8x			
First Majestic Silver Corp.	TSX:FR	C\$ 7.17	193.6	US\$ 1,050	US\$ 80	US\$ 128	US\$ 150	US\$ 1,072	US\$ 0.36	US\$ 0.65	3	15.2x 8.4x	15.5x 8.6x	21.6x 7.9x	1.1x			
Fortuna Silver Mines Inc.	TSX:FVI	C\$ 4.61	159.9	US\$ 558	US\$ 177	US\$ 183	US\$ 40	US\$ 414	US\$ 0.50	US\$ 0.67	6	7.0x 5.2x	5.2x 3.8x	3.6x 2.9x	0.9x			
Fresnillo PLC	LSE:FRES	C\$ 13.65	736.9	US\$ 7,610	US\$ 689	US\$ 1,240	US\$ 799	US\$ 7,170	US\$ 1.09	US\$ 1.17	5	9.5x 8.8x	9.0x 8.3x	6.9x 6.2x	0.9x			
Hecla Mining Company	NYSE:HL	C\$ 3.42	480.2	US\$ 1,244	US\$ 61	US\$ 66	US\$ 534	US\$ 1,712	US\$ 0.25	US\$ 0.39	6	10.3x 6.6x	14.2x 9.1x	11.1x 8.2x	1.1x			
Mandalay Resources Corporation	TSX:MND	C\$ 0.07	451.6	US\$ 22	US\$ 27	US\$ 5	US\$ 32	US\$ 49	US\$ 0.05	US\$ 0.07	1	1.0x 0.7x	2.2x 1.6x	- 1.4x	0.1x			
Pan American Silver Corp.	TSX:PAAS	C\$ 17.80	153.3	US\$ 2,065	US\$ 253	US\$ 444	US\$ 21	US\$ 1,642	US\$ 1.25	US\$ 1.70	8	10.8x 7.9x	8.6x 6.3x	6.8x 5.3x	1.0x			
SSR Mining Inc.	TSX:SSRM	C\$ 14.91	120.2	US\$ 1,357	US\$ 481	US\$ 649	US\$ 244	US\$ 951	US\$ 0.88	US\$ 1.34	5	12.9x 8.4x	9.0x 5.9x	7.1x 5.6x	1.0x			
Silvercorp Metals Inc.	TSX:SVM	C\$ 2.67	168.7	US\$ 341	US\$ 124	US\$ 99	-	US\$ 242	US\$ 0.46	US\$ 0.45	1	4.4x 4.5x	3.1x 3.2x	2.9x 3.0x	0.6x			
Group Average - Silver Producers												8.3x	6.2x	8.0x	5.8x	8.6x	4.9x	0.8x
Group Average - Silver Producers (excluding high/low)												8.4x	6.5x	7.8x	5.9x	7.1x	5.0x	0.8x
Diamond Producers																		
Lucara Diamond Corp.	TSX:LUC	C\$ 1.94	396.5	US\$ 582	US\$ 31	US\$ 70	-	US\$ 512	US\$ 0.15	US\$ 0.20	6	10.1x 7.4x	8.9x 6.5x	6.9x 4.2x	0.8x			
Mountain Province Diamonds Inc.	TSX:MPVD	C\$ 1.79	210.0	US\$ 284	US\$ 22	US\$ 71	US\$ 303	US\$ 516	US\$ 0.54	US\$ 0.51	3	2.5x 2.7x	4.5x 4.8x	4.2x 3.6x	0.5x			
Petra Diamonds Limited	LSE:PDL	C\$ 0.70	865.3	US\$ 456	US\$ 222	US\$ 148	US\$ 712	US\$ 1,020	US\$ 0.18	US\$ 0.20	3	2.9x 2.7x	6.5x 6.0x	4.9x 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\$ 0.01)	US\$ 0.05	3	- 3.4x	- 9.0x	13.4x 6.3x	0.5x			
Group Average - Diamond Producers												5.2x	4.0x	6.6x	6.6x	7.4x	4.7x	0.6x
Royalty Companies																		
Anglo Pacific Group plc	LSE:APF	C\$ 2.28	180.1	US\$ 311	US\$ 15	US\$ 22	US\$ 8	US\$ 296	US\$ 0.27	US\$ 0.27	3	6.3x 6.4x	6.0x 6.1x	5.2x 5.5x	0.8x			
Allius Minerals Corporation	TSX:ALS	C\$ 12.98	43.0	US\$ 422	US\$ 36	US\$ 22	US\$ 78	US\$ 477	US\$ 0.66	US\$ 0.72	4	14.8x 13.6x	16.8x 15.4x	11.6x 10.7x	1.2x			
Franco-Nevada Corporation	TSX:FNV	C\$ 93.34	186.4	US\$ 13,163	US\$ 77	US\$ 150	-	US\$ 13,013	US\$ 2.60	US\$ 2.95	16	27.2x 24.0x	26.9x 23.7x	25.0x 22.3x	1.9x			
Maverix Metals Inc.	TSXV:MMX	C\$ 2.50	215.4	US\$ 408	US\$ 15	US\$ 21	US\$ 6	US\$ 392	US\$ 0.09	US\$ 0.10	4	20.0x 18.9x	19.2x 18.2x	19.5x 15.0x	1.5x			
Osisko Gold Royalties Ltd	TSX:OR	C\$ 10.25	156.4	US\$ 1,213	US\$ 114	US\$ 218	US\$ 325	US\$ 1,320	US\$ 0.40	US\$ 0.45	14	19.4x 17.2x	21.1x 18.7x	18.5x 16.5x	1.0x			
Royal Gold, Inc.	US:RGLD	C\$ 100.08	65.5	US\$ 4,961	US\$ 117	US\$ 122	US\$ 355	US\$ 5,194	US\$ 4.37	US\$ 4.47	12	17.3x 17.0x	18.1x 17.8x	15.2x 15.7x	1.6x			
Sandstorm Gold Ltd.	TSX:SSL	C\$ 5.57	182.6	US\$ 770	US\$ 20	US\$ 21	-	US\$ 748	US\$ 0.25	US\$ 0.29	6	16.6x 14.4x	16.2x 14.0x	17.1x 12.9x	1.0x			
Wheaton Precious Metals Corp.	TSX:WPM	C\$ 21.76	444.0	US\$ 7,311	US\$ 119	US\$ 108	US\$ 1,381	US\$ 8,583	US\$ 1.09	US\$ 1.19	15	15.1x 13.8x	17.7x 16.2x	16.9x 15.2x	1.2x			
Group Average - Royalty Companies												17.1x	15.7x	17.8x	16.3x	16.1x	14.2x	1.3x
Group Average - Royalty Companies (excluding high/low)												17.2x	15.8x	18.2x	16.7x	16.5x	14.3x	1.2x

All data sourced from Capital IQ

Source: Capital IQ and Haywood Securities



Senior Gold Producers – Reserves and Resources

Symbol	Market	Working	Enterprise	Reserves & Resources					Reserves					Reserves (M&I and Inferred)					Global					
				Au	Au	AuEq	AuEq	% Au	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 \$8,651	US \$896	US \$9,479	62.2	2.02	68.1	2.21	91%	21.3	2.54	22.5	2.68	94%	US \$446	40.9	1.83	45.6	2.03	90%	52%	54%	US \$152	US \$139
Alamos Gold Inc.	TSX:AGI	US \$1,368	US \$301	US \$1,069	22.3	1.28	23.0	1.32	97%	9.8	1.50	10.2	1.56	96%	US \$109	12.4	1.15	12.8	1.18	97%	40%	39%	US \$48	US \$47
AngloGold Ashanti Limited	JSE:ANG	US \$4,299	US \$519	US \$5,784	192.5	1.56	218.9	1.77	88%	45.1	1.20	47.2	1.25	96%	US \$128	147.4	1.81	171.7	2.11	86%	33%	37%	US \$30	US \$26
B2Gold Corp.	TSX:BTO	US \$2,750	US \$132	US \$3,076	24.4	0.86	30.4	1.07	80%	8.2	1.21	8.2	1.21	100%	US \$375	16.2	0.75	22.2	1.02	73%	53%	63%	US \$126	US \$101
Barrick Gold Corporation	TSX:ABX	US \$15,983	US \$2,554	US \$19,141	191.0	0.76	319.6	1.27	60%	77.4	1.11	105.2	1.50	74%	US \$247	113.6	0.62	214.3	1.17	53%	30%	30%	US \$100	US \$60
Centamin plc	LSE:CEY	US \$1,625	US \$337	US \$1,287	11.4	1.12	11.4	1.12	100%	4.0	1.02	4.0	1.02	100%	US \$322	7.4	1.18	7.4	1.18	100%	33%	33%	US \$113	US \$113
Compañía de Minas Buenaventura S.A.A.	NYSE:BVN	US \$3,632	US \$358	US \$3,922	23.7	0.31	82.9	1.08	29%	6.0	0.20	27.5	0.91	22%	US \$652	17.6	0.38	55.2	1.19	32%	23%	16%	US \$165	US \$47
Endeavour Mining Corporation	TSX:EDV	US \$1,539	US \$146	US \$1,937	15.1	1.84	15.1	1.84	100%	7.6	1.77	7.6	1.77	100%	US \$254	7.5	1.91	7.5	1.91	100%	35%	35%	US \$128	US \$128
Evolution Mining Limited	ASX:EVN	US \$3,911	US \$242	US \$3,885	13.8	0.91	17.0	1.12	81%	6.6	0.88	8.6	1.15	76%	US \$592	7.1	1.24	8.2	1.44	86%	36%	32%	US \$282	US \$229
Fresnillo PLC	LSE:FRES	US \$7,610	US \$1,240	US \$7,170	38.0	0.79	80.1	1.67	47%	9.6	0.76	20.4	1.62	47%	US \$751	28.1	0.79	59.3	1.67	47%	33%	49%	US \$189	US \$90
Gold Fields Limited	JSE:GFI	US \$2,514	US \$86	US \$4,319	108.2	2.27	124.7	2.62	87%	48.6	2.66	50.4	2.76	96%	US \$89	59.6	2.02	74.3	2.53	80%	42%	53%	US \$40	US \$35
Goldcorp Inc.	TSX:G	US \$8,567	US (\$190)	US \$11,726	113.3	0.65	198.0	1.14	57%	53.2	0.65	101.8	1.24	52%	US \$220	60.1	0.66	95.9	1.05	63%	37%	39%	US \$103	US \$59
IAMGOLD Corporation	TSX:IMG	US \$1,582	US \$873	US \$1,105	37.3	1.19	38.1	1.22	98%	16.6	1.17	16.6	1.17	100%	US \$66	20.7	1.21	21.5	1.26	97%	50%	51%	US \$30	US \$29
Kinross Gold Corporation	TSX:K	US \$3,387	US \$1,197	US \$3,924	64.0	0.67	65.1	0.68	98%	28.1	0.67	28.7	0.69	98%	US \$140	35.9	0.67	36.4	0.67	99%	20%	20%	US \$61	US \$60
Kirkland Lake Gold Ltd.	TSX:KL	US \$4,193	US \$162	US \$4,058	20.6	4.82	20.6	4.82	100%	4.8	10.93	4.8	10.93	100%	US \$845	15.8	4.12	15.8	4.12	100%	44%	44%	US \$197	US \$197
Newcrest Mining Limited	ASX:NCM	US \$11,719	US \$1,021	US \$12,691	123.4	0.58	224.0	1.05	55%	62.3	0.60	118.1	1.15	53%	US \$204	61.1	0.55	105.9	0.95	58%	17%	20%	US \$103	US \$57
Newmont Mining Corporation	NYSE:NEM	US \$17,892	US \$3,884	US \$18,179	111.5	0.80	149.5	1.07	75%	68.8	0.93	76.1	1.03	90%	US \$264	42.6	0.65	73.4	1.13	58%	32%	20%	US \$163	US \$122
Northern Star Resources Limited	ASX:NST	US \$3,786	US \$259	US \$3,539	16.1	2.94	28.9	5.31	55%	4.1	3.62	4.1	3.62	100%	US \$872	12.0	2.83	24.9	5.88	48%	53%	77%	US \$220	US \$122
OceanaGold Corporation	TSX:OGC	US \$1,891	US \$93	US \$1,978	13.0	1.60	14.2	1.74	92%	5.9	1.42	6.6	1.60	89%	US \$336	7.1	1.78	7.5	1.88	95%	43%	43%	US \$152	US \$140
Randgold Resources Limited	LSE:RRS	US \$7,891	US \$906	US \$6,988	24.1	3.37	24.1	3.37	100%	13.9	3.83	13.9	3.83	100%	US \$503	10.2	2.90	10.2	2.90	100%	45%	45%	US \$290	US \$290
Yamana Gold Inc.	TSX:YRI	US \$2,134	US \$7	US \$3,944	55.5	0.49	119.1	1.06	47%	19.3	0.35	56.7	1.04	34%	US \$205	36.2	0.63	62.3	1.08	58%	45%	53%	US \$71	US \$33
Group Average - Total					# Companies: 21										US \$363							US \$132	US \$101	

Equivalency assumptions (US\$ / 11-22-18): \$1,227/oz Au, \$14.50/oz Ag, \$847/oz Pt, \$1,155/oz Pd, \$2.85/lb Cu, \$1.21/lb Zn, \$0.89/lb Pb, \$4.95/lb Ni, \$11.29/lb Mo, \$24.95/lb Co, \$0/lb Sb, \$29.09/lb U3O8, \$8.74/lb Sn, \$93.00/lb HCC, \$74.86/lb 62% Fe

Source: SNL Financial retrieved on November 22, 2018



Intermediate Gold Producers – Reserves and Resources

Company	Symbol	Market Capitalization (millions)	Working Capital (millions)	Enterprise Value (millions)	Global Reserves & Resources					Reserves					Reserves EV/oz Au	Resources (M&I and Inferred)					Global		
					Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au		Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	% Au Inferred	EV/oz Au	EV/oz AuEq
Acacia Mining plc	LSE:ACA	US \$999	US \$0	US \$1,056	25.7	3.66	27.9	3.99	92%	7.5	3.83	7.9	4.06	94%	US \$142	18.2	3.60	20.0	3.96	91%	63%	US \$41	US \$38
Centerra Gold Inc.	TSX:CG	US \$1,248	US \$635	US \$942	33.5	0.43	64.0	0.82	52%	16.5	0.67	22.7	0.92	73%	US \$57	17.0	0.32	41.3	0.77	41%	40%	US \$28	US \$15
China Gold International Resources Corp. Ltd.	TSX:CGG	US \$534	US \$87	US \$1,575	10.5	0.16	67.8	1.01	16%	4.6	0.27	24.3	1.44	19%	US \$343	6.0	0.12	43.5	0.86	14%	44%	US \$149	US \$23
Detour Gold Corporation	TSX:DGC	US \$1,402	US \$198	US \$1,453	20.8	0.96	20.8	0.96	100%	16.0	0.97	16.0	0.97	100%	US \$91	4.8	0.96	4.8	0.96	100%	23%	US \$70	US \$70
Eldorado Gold Corporation	TSX:ELD	US \$509	US \$500	US \$611	39.6	0.87	55.0	1.21	72%	16.5	1.37	23.7	1.96	70%	US \$37	23.1	0.69	31.2	0.93	74%	51%	US \$15	US \$11
Harmony Gold Mining Company Limited	JSE:HAR	US \$874	US \$42	US \$1,191	95.8	1.21	130.1	1.65	74%	24.5	0.68	37.7	1.05	65%	US \$49	71.3	1.65	92.4	2.14	77%	36%	US \$12	US \$9
Highland Gold Mining Limited	AIM:HGM	US \$624	US \$44	US \$752	17.2	2.99	17.2	2.99	100%	5.1	3.26	5.1	3.26	100%	US \$147	12.1	3.04	12.1	3.04	100%	19%	US \$44	US \$44
McEwen Mining Inc.	NYSE:MUX	US \$617	US \$38	US \$633	13.2	0.11	87.2	0.72	15%	0.8	1.46	0.9	1.69	86%	US \$842	12.5	0.10	86.3	0.71	14%	46%	US \$48	US \$7
Pretium Resources Inc.	TSX:PVG	US \$1,458	US (\$468)	US \$2,067	48.8	0.68	64.1	0.89	76%	8.7	14.63	9.1	15.26	96%	US \$238	40.1	0.56	55.1	0.77	73%	32%	US \$42	US \$32
Regis Resources Limited	ASX:RRL	US \$1,639	US \$135	US \$1,505	8.4	0.90	8.4	0.90	100%	3.8	1.07	3.8	1.07	100%	US \$399	4.6	0.79	4.6	0.79	100%	44%	US \$179	US \$179
Resolute Mining Limited	ASX:RSG	US \$527	US \$152	US \$410	12.6	1.55	12.6	1.55	100%	4.8	1.41	4.8	1.41	100%	US \$86	7.8	1.64	7.8	1.64	100%	41%	US \$32	US \$32
SEMAFO Inc.	TSX:SMF	US \$687	US \$83	US \$704	7.0	2.70	7.0	2.70	100%	2.9	3.37	2.9	3.37	100%	US \$245	4.2	2.37	4.2	2.37	100%	33%	US \$100	US \$100
Tahoe Resources Inc.	TSX:THO	US \$1,083	US \$103	US \$1,083	22.6	0.50	43.7	0.96	52%	3.7	0.56	8.1	1.23	46%	US \$291	18.9	0.49	35.6	0.92	53%	46%	US \$48	US \$25
Torex Gold Resources Inc	TSX:TXG	US \$738	US \$57	US \$951	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	4.27	62%	85%	US \$113	US \$81
Group Average - Total					# Companies: 14					US \$233					US \$66		US \$48						

Equivalency assumptions (US\$ / 11-22-18): \$1,227/oz Au, \$14.50/oz Ag, \$847/oz Pt, \$1,155/oz Pd, \$2.85/lb Cu, \$1.21/lb Zn, \$0.89/lb Pb, \$4.95/lb Ni, \$11.29/lb Mo, \$24.95/lb Co, \$0/lb Sb, \$29.09/lb U3O8, \$8.74/lb Sn, \$93.00/lb HCC, \$74.86/lb 62% Fe

Source: SNL Financial retrieved on November 22, 2018



Junior Gold Producers – Reserves and Resources

Company	Symbol	Market Capitalization (millions)	Working Capital (millions)	Enterprise Value (millions)	Global Reserves & Resources					Reserves					Reserves EV/oz Au	Resources (M&I and Inferred)					Global		
					Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au		Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	% Au Inferred	EV/oz Au	EV/oz AuEq
Alacer Gold Corp.	TSX:ASR	US \$491	US \$103	US \$676	7.3	0.66	14.0	1.27	52%	3.7	2.17	5.1	3.01	72%	US \$185	3.6	0.39	8.9	0.96	41%	54%	US \$93	US \$48
Alio Gold Inc.	TSX:ALO	US \$64	US \$92	US (\$13)	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 \$180	US \$96	US \$92	12.6	0.57	15.4	0.70	82%	4.5	0.62	5.2	0.72	87%	US \$21	8.1	0.55	10.2	0.69	80%	16%	US \$7	US \$6
Asanko Gold Inc.	TSX:AKG	US \$147	US \$11	US \$136	6.2	1.46	6.2	1.46	100%	4.7	1.57	4.7	1.57	100%	US \$29	1.6	1.22	1.6	1.22	100%	15%	US \$22	US \$22
Azumah Resources Limited	ASX:AZM	US \$12	US \$2	US \$11	0.9	1.55	0.9	1.55	100%	0.3	2.14	0.3	2.14	100%	US \$41	0.6	1.38	0.6	1.38	100%	47%	US \$12	US \$12
Beadell Resources Limited	ASX:BDR	US \$59	US (\$11)	US \$116	3.7	0.43	16.5	1.88	23%	1.5	1.83	1.5	1.83	100%	US \$79	2.3	0.28	15.0	1.89	15%	66%	US \$31	US \$7
Dundee Precious Metals Inc.	TSX:DPM	US \$448	US \$35	US \$452	9.7	0.39	19.6	0.79	50%	2.7	3.35	3.6	4.51	74%	US \$168	7.0	0.29	15.9	0.67	44%	55%	US \$47	US \$23
Fiore Gold Ltd.	TSX:VFX	US \$22	US \$17	US \$5	3.8	0.93	3.8	0.93	100%	0.3	0.52	0.3	0.52	100%	US \$15	3.5	1.00	3.5	1.00	100%	26%	US \$1	US \$1
Golden Star Resources Ltd.	TSX:GSC	US \$307	US (\$91)	US \$477	10.9	3.21	10.9	3.21	100%	1.5	2.55	1.5	2.55	100%	US \$313	7.6	3.58	7.6	3.58	100%	72%	US \$44	US \$44
Goldgroup Mining Inc.	TSX:GGA	US \$6	US (\$3)	US \$10	0.3	0.96	0.7	2.07	46%	-	-	-	-	-	-	0.3	0.96	0.7	2.07	46%	35%	US \$29	US \$14
Guyana Goldfields Inc.	TSX:GUY	US \$181	US \$116	US \$90	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 \$51	US \$2	US \$59	3.3	4.22	3.3	4.22	100%	0.3	3.94	0.3	3.94	100%	US \$183	3.0	4.25	3.0	4.25	100%	52%	US \$18	US \$18
Leagold Mining Corporation	TSX:LMC	US \$319	US \$48	US \$480	25.5	1.04	27.7	1.13	92%	5.6	1.34	5.9	1.40	96%	US \$86	19.9	8.75	21.9	9.64	91%	45%	US \$19	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 \$108	1.0	4.07	1.0	4.07	100%	41%	US \$26	US \$26
Metanor Resources Inc.	TSX:VMT	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 \$88	2.5	2.17	2.5	2.17	100%	1.1	1.87	1.1	1.87	100%	US \$82	1.4	2.43	1.4	2.43	100%	76%	US \$35	US \$35
New Gold Inc.	TSX:NGD	US \$526	US \$362	US \$1,103	22.2	0.72	28.9	0.94	77%	14.8	0.79	17.9	0.95	83%	US \$75	7.4	0.62	11.0	0.92	67%	20%	US \$50	US \$38
Orosur Mining Inc.	TSX:OMI	US \$13	US (\$15)	US \$27	0.6	0.65	1.4	1.61	41%	0.1	1.42	0.1	1.42	100%	US \$222	0.5	0.57	1.3	1.63	35%	17%	US \$47	US \$19
Orvana Minerals Corp.	TSX:ORV	US \$14	US (\$6)	US \$29	2.2	3.90	2.9	5.18	75%	0.3	3.50	0.4	4.29	82%	US \$83	1.8	3.99	2.5	5.36	74%	47%	US \$13	US \$10
Perseus Mining Limited	ASX:PRU	US \$281	US \$47	US \$273	12.5	1.14	12.5	1.14	100%	4.7	1.45	4.7	1.45	100%	US \$58	7.8	1.02	7.8	1.02	100%	38%	US \$22	US \$22
Premier Gold Mines Limited	TSX:PG	US \$250	US \$63	US \$188	10.7	1.59	11.0	1.62	98%	3.0	1.22	3.1	1.24	99%	US \$62	7.7	1.80	7.9	1.84	98%	52%	US \$17	US \$17
Roxgold Inc.	TSX:ROXG	US \$221	US \$69	US \$189	1.2	16.71	1.2	16.71	100%	0.7	11.48	0.7	11.48	100%	US \$253	0.5	-	0.5	-	100%	80%	US \$155	US \$155
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 \$107	2.3	2.24	2.3	2.24	100%	60%	US \$20	US \$20
TMAC Resources Inc.	TSX:TMR	US \$487	US (\$17)	US \$602	6.6	8.12	6.6	8.12	100%	3.6	7.72	3.6	7.72	100%	US \$167	3.0	8.66	3.0	8.66	100%	57%	US \$91	US \$91
Group Average - Total					# Companies: 24										US \$119					US \$37	US \$30		

Equivalency assumptions (US\$ / 11-22-18): \$1,227/oz Au, \$14.50/oz Ag, \$847/oz Pt, \$1,155/oz Pd, \$2.85/lb Cu, \$1.21/lb Zn, \$0.89/lb Pb, \$4.95/lb Ni, \$11.29/lb Mo, \$24.95/lb Co, \$0/lb Sb, \$29.09/lb U3O8, \$8.74/lb Sn, \$93.00/t HCC, \$74.86/t 62% Fe

Source: SNL Financial retrieved on November 22, 2018



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

Company	Symbol	Market Capitalization (millions)	Working Capital (millions)	Enterprise Value (millions)	Global Reserves & Resources					Reserves					Resources (M&I and Inferred)					Global		
					Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Inferred	EV/oz Au	EV/oz AuEq
Alexandria Minerals Corporation	TSXV:AZX	US \$10	US (\$1)	US \$10	1.3	2.34	1.9	3.31	71%	-	-	-	-	-	1.3	2.34	1.9	3.31	71%	44%	US \$7	US \$5
Rio2 Limited	TSXV:RIO	US \$46	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 \$60	US \$13	US \$47	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 \$58	US \$58
Auryn Resources Inc.	TSX:AUG	US \$84	US \$3	US \$80	2.3	5.56	2.6	6.30	88%	-	-	-	-	-	2.3	5.56	2.6	6.30	88%	72%	US \$35	US \$31
Balmoral Resources Ltd	TSX:BAR	US \$16	US \$4	US \$12	1.2	1.20	1.8	1.77	68%	-	-	-	-	-	1.2	1.20	1.8	1.77	68%	36%	US \$10	US \$7
Calibre Mining Corp.	TSXV:CXB	US \$13	US \$0	US \$12	2.3	1.18	3.1	1.60	74%	-	-	-	-	-	2.3	1.18	3.1	1.60	74%	99%	US \$5	US \$4
Cardinal Resources Limited	ASX:CDV	US \$110	US \$25	US \$108	7.0	1.13	7.0	1.13	100%	-	-	-	-	-	7.0	1.13	7.0	1.13	100%	7%	US \$15	US \$15
Condor Gold Plc	AIM:CNR	US \$24	US \$1	US \$23	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 \$7	US \$7
Corvus Gold Inc.	TSX:KOR	US \$205	US \$4	US \$202	2.2	0.30	2.3	0.32	95%	-	-	-	-	-	2.2	0.30	2.3	0.32	95%	19%	US \$92	US \$88
Eastmain Resources Inc.	TSX:ER	US \$39	US \$5	US \$34	1.7	6.59	1.7	6.65	99%	-	-	-	-	-	1.7	6.59	1.7	6.65	99%	37%	US \$20	US \$20
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%	-	-
Gold Standard Ventures Corp	TSX:GSV	US \$332	US \$22	US \$309	3.6	0.80	3.7	0.84	96%	-	-	-	-	-	3.6	0.80	3.7	0.84	96%	73%	US \$86	US \$83
Mako Mining Corp.	TSXV:MKO	US \$39	US (\$1)	US \$39	0.9	7.81	1.0	7.96	98%	-	-	-	-	-	0.9	7.81	1.0	7.96	98%	84%	US \$41	US \$40
Granada Gold Mine Inc.	TSXV:GGM	US \$8	US (\$4)	US \$9	5.0	1.23	5.1	1.24	99%	-	-	-	-	-	5.0	1.23	5.1	1.24	99%	69%	US \$2	US \$2
Integra Resources Corp.	TSX:ITR	US \$43	US \$0	US \$40	2.3	0.46	3.5	0.71	64%	-	-	-	-	-	2.3	0.46	3.5	0.71	64%	100%	US \$17	US \$11
Kasbah Resources Limited	ASX:KAS	US \$7	US (\$1)	US \$7	0.2	0.55	1.7	4.17	13%	-	-	0.7	4.05	-	0.2	0.93	1.0	4.25	22%	-	US \$30	US \$4
Liberty Gold Corp.	TSX:LGD	US \$50	US \$1	US \$56	1.6*	0.66	1.6	0.66	100%	-	-	-	-	-	1.6*	0.66	1.6	0.66	100%	24%	US \$36	US \$36
Lincoln Mining Corporation	TSXV:LMG	US \$1	US (\$1)	US \$2	0.1	1.91	0.1	1.91	100%	-	-	-	-	-	0.1	1.91	0.1	1.91	100%	5%	US \$20	US \$20
Lion One Metals Limited	TSXV:LIO	US \$33	US \$13	US \$21	0.7	0.09	15.4	1.97	5%	-	-	-	-	-	0.7	0.09	15.4	1.97	5%	60%	US \$29	US \$1
Marathon Gold Corporation	TSX:MOZ	US \$85	US \$4	US \$80	3.2	1.99	3.2	1.99	100%	-	-	-	-	-	3.2	1.99	3.2	1.99	100%	34%	US \$25	US \$25
Monarques Gold Corporation	TSX:MQR	US \$47	US \$5	US \$41	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 \$11	US \$11
New Pacific Metals Corp.	TSXV:NUAG	US \$136	US \$20	US \$115	0.5	6.12	0.6	7.20	85%	-	-	-	-	-	0.5	6.12	0.6	7.20	85%	45%	US \$227	US \$193
Nighthawk Gold Corp.	TSX:NHK	US \$54	US \$12	US \$42	2.9	1.70	2.9	1.70	100%	-	-	-	-	-	2.9	1.70	2.9	1.70	100%	90%	US \$14	US \$14
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 \$309	US \$46	US \$260	0.9	2.83	1.0	3.20	88%	-	-	-	-	-	0.9	2.83	1.0	3.20	88%	52%	US \$289	US \$256
Orex Minerals Inc.	TSXV:REX	US \$8	US \$2	US \$6	0.1	0.33	0.6	2.87	12%	-	-	-	-	-	0.1	0.33	0.6	2.87	12%	47%	US \$96	US \$11
Osisko Mining Inc.	TSX:OSK	US \$496	US \$82	US \$419	7.6	2.40	7.6	2.40	100%	-	-	-	-	-	7.6	2.40	7.6	2.40	100%	53%	US \$55	US \$55
Osprey Gold Development Ltd.	TSXV:OS	US \$2	US \$0	US \$1	0.4	3.56	0.4	3.56	100%	-	-	-	-	-	0.4	3.56	0.4	3.56	100%	92%	US \$3	US \$3
Puma Exploration Inc.	TSXV:PUMA	US \$7	US (\$0)	US \$7	0.0	0.27	0.7	4.91	5%	-	-	-	-	-	0.0	0.27	0.7	4.91	5%	12%	US \$181	US \$10
Pure Gold Mining Inc.	TSXV:PGM	US \$103	US \$7	US \$94	2.0	8.57	2.0	8.57	100%	-	-	-	-	-	2.0	8.57	2.0	8.57	100%	15%	US \$46	US \$46
Red Pine Exploration Inc.	TSXV:RPX	US \$11	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 \$9	US \$7
Regulus Resources Inc.	TSXV:REG	US \$100	US (\$2)	US \$100	5.7	0.37	19.0	1.23	30%	-	-	-	-	-	5.7	0.37	19.0	1.23	30%	89%	US \$17	US \$5
Reunion Gold Corporation	TSXV:RGD	US \$45	US \$4	US \$40	0.7	2.10	0.7	2.10	100%	-	-	-	-	-	0.7	2.10	0.7	2.10	100%	-	US \$57	US \$57
Revival Gold Inc.	TSXV:RVG	US \$21	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 \$68	US \$2	US \$70	1.1	2.16	1.1	2.16	100%	-	-	-	-	-	1.1	2.16	1.1	2.16	100%	83%	US \$65	US \$65
Sarama Resources Ltd	TSXV:SWA	US \$9	US \$2	US \$7	1.1	1.75	1.1	1.75	100%	-	-	-	-	-	1.1	1.75	1.1	1.75	100%	78%	US \$6	US \$6
SolGold plc	TSX:SOLG	US \$883	US \$36	US \$845	10.7	0.36	33.4	1.12	32%	-	-	-	-	-	10.7	0.36	33.4	1.12	32%	52%	US \$79	US \$25
Spanish Mountain Gold Ltd.	TSXV:SPA	US \$9	US \$2	US \$7	8.0	0.33	8.2	0.34	98%	-	-	-	-	-	8.0	0.33	8.2	0.34	98%	51%	US \$1	US \$1
Teras Resources Inc.	TSXV:TRA	US \$8	US \$0	US \$8	1.1	0.48	1.3	0.55	88%	-	-	-	-	-	1.1	0.48	1.3	0.55	88%	10%	US \$7	US \$6
TriMetals Mining Inc.	TSX:TMI	US \$12	US (\$0)	US \$13	1.9	0.07	16.2	0.63	12%	-	-	-	-	-	1.9	0.07	16.2	0.63	12%	40%	US \$7	US \$1
Vendetta Mining Corp.	TSXV:VIT	US \$18	US (\$0)	US \$18	-	-	1.7	4.54	-	-	-	-	-	-	-	1.0	2.62	-	-	-	US \$11	US \$11
West Kirkland Mining Inc.	TSXV:WKM	US \$15	US (\$0)	US \$16	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	81%	45%	US \$20	US \$17
Group Average - Total					# Companies: 44																US \$43	US \$31

Equivalency assumptions (US\$ / 11-22-18): \$1,227/oz Au, \$14.50/oz Ag, \$847/oz Pt, \$1,155/oz Pd, \$2.85/lb Cu, \$1.21/lb Zn, \$0.89/lb Pb, \$4.95/lb Ni, \$11.29/lb Mo, \$24.95/lb Co, \$0/lb Sb, \$29.09/lb U3O8, \$8.74/lb Sn, \$93.00/lb HCC, \$74.86/lb 62% Fe

Source: SNL Financial retrieved on November 22, 2018

*Includes only Liberty's Goldstrike and Kinsley Mountain Projects



Silver – Enterprise Value per Ounce of Silver

Company	Symbol	Market Capitalization (millions)	Working Capital (millions)	Enterprise Value (millions)	Global Reserves & Resources					Reserves					Reserves					Resources (M&I and Inferred)					Global	
					Ag (Moz)	Ag (g/t)	AgEq (Moz)	AgEq (g/t)	% Ag	Ag (Moz)	Ag (g/t)	AgEq (Moz)	AgEq (g/t)	% Ag	EV/oz Ag	Ag (Moz)	Ag (g/t)	AgEq (Moz)	AgEq (g/t)	% Ag	% Ag Inferred	EV/oz Ag	EV/oz AgEq			
Alexco Resource Corp.	TSX:AXR	US \$83	US \$10	US \$73	86	357	158	658	54%	-	-	-	-	-	-	-	86	357	158	658	54%	21%	US \$0.85	US \$0.46		
Americas Silver Corporation	TSX:USA	US \$65	US \$3	US \$69	136	151	356	395	38%	28	164	78	454	36%	US \$2.43	108	148	278	381	39%	37%	US \$0.51	US \$0.19			
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 \$104	US \$41	US \$62	496	42	1,145	97	43%	288	51	665	117	43%	US \$0.22	208	34	480	79	43%	33%	US \$0.13	US \$0.05			
Coeur Mining, Inc.	NYSE:CDE	US \$884	US \$140	US \$1,173	673	26	1,456	57	46%	165	18	415	44	40%	US \$7.12	509	31	1,043	64	49%	21%	US \$1.74	US \$0.81			
Defiance Silver Corp.	TSXV:DEF	US \$18	US (\$1)	US \$19	17	182	18	193	94%	-	-	-	-	-	-	17	182	18	193	94%	100%	US \$1.10	US \$1.04			
Dolly Varden Silver Corporation	TSXV:DV	US \$14	US \$3	US \$11	43	333	43	333	100%	-	-	-	-	-	-	43	333	43	333	100%	25%	US \$0.26	US \$0.26			
Endeavour Silver Corp.	TSX:EDR	US \$264	US \$57	US \$206	156	193	272	337	57%	33	198	60	355	56%	US \$6.16	123	192	212	332	58%	70%	US \$1.32	US \$0.76			
First Majestic Silver Corp.	TSX:FR	US \$1,055	US \$128	US \$1,077	401	161	752	303	53%	133	180	229	310	58%	US \$8.12	263	153	512	297	51%	77%	US \$2.68	US \$1.43			
Fortuna Silver Mines Inc.	TSX:FVI	US \$559	US \$183	US \$418	90	15	519	89	17%	45	15	273	90	16%	US \$9.32	46	16	245	88	19%	87%	US \$4.62	US \$0.81			
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 \$1,244	US \$66	US \$1,727	751	68	2,643	239	28%	177	221	600	749	30%	US \$9.75	574	56	2,043	199	28%	78%	US \$2.30	US \$0.65			
Investigator Resources Limited	ASX:IVR	US \$5	US \$2	US \$3	42	140	49	165	85%	-	-	-	-	-	-	42	140	49	165	85%	45%	US \$0.06	US \$0.05			
Kootenay Silver Inc	TSXV:KTN	US \$19	US \$2	US \$17	76	62	125	102	61%	-	-	-	-	-	-	76	62	125	102	61%	19%	US \$0.22	US \$0.13			
MacPhersons Resources Limited	ASX:MRP	US \$21	US \$2	US \$20	20	22	89	97	23%	8	178	17	360	49%	US \$2.36	12	14	72	83	17%	29%	US \$0.96	US \$0.22			
MAG Silver Corp.	TSX:MAG	US \$610	US \$142	US \$469	170	70	701	287	24%	-	-	-	-	-	-	170	70	701	287	24%	55%	US \$2.75	US \$0.67			
Mandalay Resources Corporation	TSX:MND	US \$22	US \$5	US \$51	63	31	318	155	20%	8	19	73	177	11%	US \$6.50	56	39	245	171	23%	19%	US \$0.80	US \$0.16			
Minco Silver Corporation	TSX:MSV	US \$21	US \$24	US (\$3)	162	158	270	264	60%	50	189	64	242	78%	-	112	148	206	271	54%	52%	-	-			
Mineworx Technologies Ltd.	TSXV:MWX	US \$32	US \$3	US \$29	22	9	445	177	5%	-	-	-	-	-	-	22	9	445	177	5%	-	US \$1.29	US \$0.06			
Pan American Silver Corp.	TSX:PAAS	US \$2,082	US \$444	US \$1,668	1,446	91	2,270	143	64%	291	93	508	163	57%	US \$5.73	1,157	90	1,768	138	65%	24%	US \$1.15	US \$0.73			
Silver Bear Resources Plc	TSX:SBR	US \$84	US \$16	US \$185	60	704	61	710	99%	22	809	22	809	100%	US \$8.30	38	655	39	664	99%	63%	US \$3.06	US \$3.04			
Silver Bull Resources, Inc.	OTCPK:SVBL	US \$23	US \$3	US \$21	27	48	156	274	17%	-	-	-	-	-	-	27	48	156	274	17%	0%	US \$0.76	US \$0.13			
SilverCrest Metals Inc.	TSXV:SIL	US \$173	US \$10	US \$163	38	257	72	493	52%	-	-	-	-	-	-	38	257	72	493	52%	90%	US \$4.32	US \$2.25			
Silvercorp Metals Inc.	TSX:SVM	US \$341	US \$99	US \$247	213	121	595	340	36%	84	202	182	439	46%	US \$2.93	129	96	413	309	31%	66%	US \$1.16	US \$0.41			
Group Average - Total					# Companies: 25					US \$5.75										US \$1.39	US \$0.65					

Equivalency assumptions (US\$ / 11-22-18): \$1,227/oz Au, \$14.50/oz Ag, \$847/oz Pt, \$1,155/oz Pd, \$2.85/lb Cu, \$1.21/lb Zn, \$0.89/lb Pb, \$4.95/lb Ni, \$11.29/lb Mo, \$24.95/lb Co, \$0/lb Sb, \$29.09/lb U3O8, \$8.74/lb Sn, \$93.00/lb HCC, \$74.86/lb 62% Fe

Source: SNL Financial retrieved on November 22, 2018



Comparables Tables – Base Metals

Base Metal Companies – Market and Valuation Statistics (Consensus Estimates)

As of November 22, 2018																					
Company	Symbol	Price	1-Day %	7-Day %	YTD (%)	Shares O/S (millions)	Market Capitalization (US\$ millions)	Cash (US\$ millions)	Working Capital (US\$ millions)	Debt (US\$ millions)	Enterprise Value (US\$ millions)	2017 CFPS	2018E CFPS	2019E CFPS	PICF Ratio 2018E	PICF Ratio 2019E	EV/CF Ratio 2018E	EV/CF Ratio 2019E	EV/EBITDA Ratio 2018E	EV/EBITDA Ratio 2019E	P / NAV
Large-Cap Base Metals Producers																					
ANGLO AMERICAN PLC	LSE:AAL	GBp 1643.2	(3.3)	(2.4)	6.0	1292	\$27,340	\$7,800	\$7,382	\$11,971	\$36,351	\$6.02	\$5.06	\$5.25	4.2x	4.0x	5.6x	5.4x	4.2x	4.3x	-
ANTOFAGASTA PLC	LSE:ANTO	GBp 809.2	(1.8)	1.7	(19.5)	986	\$10,270	\$1,084	\$2,068	\$2,709	\$13,000	\$2.23	\$1.54	\$1.74	6.8x	6.0x	8.6x	7.6x	6.0x	5.0x	-
BHP BILLITON LIMITED	ASX:BHP	AUD 31.78	0.6	(0.8)	7.5	3212	\$116,826	\$15,871	\$21,141	\$26,805	\$132,810	\$3.47	\$3.36	\$3.36	6.9x	6.9x	12.3x	12.3x	5.5x	5.9x	-
FIRST QUANTUM MINERALS LTD	TSX:FM	CAD 12.29	(4.1)	(5.3)	(30.2)	689	\$6,419	\$1,296	\$1,121	\$6,871	\$13,742	\$1.34	\$2.42	\$2.45	3.8x	3.8x	8.2x	8.2x	7.9x	5.9x	-
FREEMPORT-MCMORAN INC	NYSE:FCX	USD 11.41	4.9	(1.1)	(39.8)	1449	\$16,533	\$4,447	\$5,741	\$13,117	\$26,581	\$3.24	\$3.18	\$2.12	3.6x	5.4x	5.8x	8.7x	3.9x	6.0x	-
GLENCORE PLC	LSE:GLEN	GBp 290.65	(1.8)	(2.4)	(22.1)	14086	\$52,703	\$2,124	\$5,312	\$33,934	\$83,933	\$0.41	\$0.89	\$0.92	4.2x	4.1x	6.7x	6.5x	4.8x	4.6x	-
KGHM POLSKA MIEDZ SA	WSE:KGH	PLN 91.18	0.6	1.3	(18.0)	200	\$4,844	\$169	\$618	\$2,060	\$6,811	\$3.85	\$4.82	\$6.37	5.0x	3.8x	7.1x	5.3x	5.0x	4.5x	0.9x
RIO TINTO PLC	LSE:RIO	GBp 376.8	(2.1)	(0.9)	(4.4)	1285	\$85,372	\$10,550	\$7,823	\$15,176	\$97,276	\$7.77	\$7.11	\$7.45	6.8x	6.5x	10.6x	10.2x	5.4x	5.8x	-
TECK RESOURCES LTD-CLS B	TSX:TCK.B	CAD 27.66	(0.4)	(4.7)	(15.9)	567	\$12,049	\$760	\$1,706	\$5,084	\$15,060	\$6.15	\$6.08	\$6.15	3.4x	3.4x	4.4x	4.3x	3.4x	3.8x	-
TUROUOISE HILL RESOURCES LTD	TSX:TRO	CAD 2.54	(1.9)	(1.6)	(40.8)	2012	\$3,872	\$1,445	\$2,662	\$4,159	\$5,626	\$0.06	\$0.09	\$0.11	20.5x	17.5x	29.7x	25.4x	16.3x	13.5x	-
VALE SA-SP ADR	NYSE:VALE	USD 14.35	2.0	(1.2)	17.3	5284	\$75,832	\$4,323	\$5,840	\$22,460	\$87,350	-	\$2.22	\$2.30	6.6x	6.3x	7.5x	7.2x	5.4x	5.3x	1.8x
BOLIDEN AB	SSE:BOL	SEK 200.8	(0.3)	0.0	(27.1)	274	\$6,078	\$307	\$728	\$653	\$6,395	\$5.46	\$4.60	\$4.44	4.8x	4.9x	5.1x	5.3x	4.1x	4.5x	1.4x
SOUTHERN COPPER CORP	NYSE:SCCO	USD 35.89	0.8	(3.1)	(24.4)	773	\$27,745	\$1,005	\$2,002	\$5,957	\$32,544	\$2.56	\$3.10	\$3.34	11.6x	10.7x	13.6x	12.6x	8.8x	7.9x	-
Group Average - Large-Cap Producers															6.5x	6.2x	9.7x	9.2x	6.2x	5.9x	1.3x
Group Average - Large-Cap Producers (excluding high/low)															5.3x	5.2x	8.0x	7.9x	5.3x	5.3x	-
Mid Tier Base Metals Producers																					
HUDBAY MINERALS INC	TSX:HBM	CAD 6.62	1.2	(3.5)	(40.5)	261	\$1,310	\$356	\$251	\$1,064	\$1,907	\$2.00	\$1.66	\$1.62	3.0x	3.1x	4.4x	4.5x	3.3x	3.6x	-
IVANHOE MINES LTD-CL A	TSX:IVN	CAD 2.64	1.1	3.1	(37.7)	1010	\$2,020	\$181	\$179	\$32	\$1,325	(\$0.05)	(\$0.02)	(\$0.01)	-	-	-	-	-	-	-
KAZ MINERALS PLC	LSE:KAZ	GBp 543	(0.3)	6.1	(39.3)	448	\$3,132	\$1,821	\$1,400	\$3,877	\$5,187	\$1.72	\$1.42	\$1.60	4.9x	4.4x	8.2x	7.2x	4.3x	4.3x	-
LUNDIN MINING CORP	TSX:LUN	CAD 5.62	0.7	(2.1)	(32.8)	733	\$3,123	\$1,567	\$1,708	\$450	\$2,538	\$1.15	\$0.68	\$0.83	6.2x	5.1x	5.1x	4.2x	3.8x	3.4x	-
MMG LTD	SEHK:1208	HKD 3.64	3.1	4.9	(6.2)	8051	\$3,743	\$936	\$194	\$9,193	\$13,042	\$0.25	\$0.20	\$0.23	2.3x	2.0x	8.2x	7.0x	7.0x	5.9x	-
OZ MINERALS LTD	ASX:OZL	AUD 8.81	(0.6)	(1.3)	(3.8)	323	\$2,064	\$570	\$720	\$0	\$1,728	\$0.88	\$0.75	\$0.86	8.6x	7.5x	7.1x	6.2x	4.8x	5.1x	-
VEDANTA 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	4.5x	-
Group Average - Mid Tier Producers (excluding high/low)															4.7x	4.2x	6.2x	5.5x	4.3x	4.3x	-
Small Cap Base Metals Producers																					
AMERIGO RESOURCES LTD	TSX:ARG	CAD 0.94	1.1	(1.1)	(14.5)	177	\$126	\$28	(\$5)	\$63	\$174	\$0.19	\$0.13	\$0.26	5.5x	2.7x	7.6x	3.8x	-	-	-
ATALAYA MINING PLC	TSX:AYM	CAD 3	0.0	(16.7)	19.0	137	\$312	\$52	\$27	\$0	\$264	-	\$0.14	\$0.17	15.9x	13.3x	13.4x	11.2x	4.2x	3.5x	-
CAPSTONE MINING CORP	TSX:CS	CAD 0.61	1.7	(7.6)	(57.6)	399	\$185	\$116	\$189	\$271	\$473	\$0.26	\$0.27	\$0.29	1.7x	1.6x	4.3x	4.1x	3.5x	3.3x	-
COPPER MOUNTAIN MINING CORP	TSX:CMC	CAD 0.92	(2.1)	(2.1)	(39.9)	188	\$131	\$36	\$6	\$245	\$374	\$0.26	\$0.28	\$0.32	2.5x	2.1x	7.1x	6.1x	7.4x	4.7x	-
IMPERIAL METALS CORP	TSX:III	CAD 1.24	5.1	14.8	(63.3)	121	\$113	\$41	(\$190)	\$713	\$810	\$0.21	(\$0.11)	\$0.23	-	4.1x	-	29.2x	33.5x	8.8x	-
WESTERN AREAS LTD	AU:WSA	AUD 2.17	2.4	(3.1)	(33.0)	273	\$430	\$112	\$119	\$1	\$319	\$0.22	\$0.21	\$0.29	7.6x	5.5x	5.6x	4.0x	5.3x	3.6x	-
SHERRITT INTERNATIONAL CORP	TSX:S	CAD 0.54	0.0	(6.9)	(68.6)	397	\$163	\$148	\$268	\$658	\$541	(\$0.04)	(\$0.02)	\$0.05	-	8.7x	-	29.0x	4.2x	3.6x	-
NEVSUN RESOURCES LTD	TSX:NSU	CAD 5.96	(0.2)	1.4	94.8	303	\$1,366	\$125	\$162	\$0	\$1,419	(\$0.07)	\$0.21	\$0.31	21.8x	14.6x	22.6x	15.1x	16.8x	12.4x	-
TASEKO MINES LTD	TSX:TKO	CAD 0.84	(1.2)	(4.0)	(71.4)	228	\$145	\$64	\$67	\$263	\$374	\$0.57	\$0.29	\$0.40	2.2x	1.6x	5.7x	4.1x	5.0x	3.6x	-
TREVALMINING CORP	TSX:TV	CAD 0.46	2.2	(3.2)	(69.7)	831	\$290	\$94	\$144	\$161	\$357	\$0.21	\$0.17	\$0.20	2.1x	1.7x	2.6x	2.1x	2.0x	1.6x	-
Group Average - Small Cap Producers															7.4x	5.6x	-	10.9x	9.1x	5.0x	-
Group Average - Small Cap Producers (excluding high/low)															6.0x	5.0x	-	9.7x	6.6x	4.4x	-

CS/US\$ FX Rate: \$1.32

Source: Bloomberg and Haywood Securities



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

Company	Symbol	Price	Shares	Market	Working	LTD	Enterprise	Primary /	Copper	Reserves & Resources* - Attributable			EV/lb CuEq** (US\$)	
			O/S (million)	Capitalization (million)	Capital (million)	Value (million)	Value (million)	Secondary Metal	Ratio*** (% Contained)	Reserve (CuEq** Mlb)	R&R (Total) (CuEq** Mlb)	Reserve	Total	
Abacus Mining & Exploration Corporation	TSXV:AME	C\$ 0.10	43.4	US\$ 3	US\$ 0.1	US\$ 11.5	US\$ 14	Cu / Au	70%	763	953	\$0.019	\$0.015	
Candente Copper Corp.	TSX:DNT	C\$ 0.06	180.6	US\$ 8	US\$ (1.0)	US\$ 0.0	US\$ 9	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\$ 32	US\$ 3.8	US\$ 0.0	US\$ 28	Cu / Zn	44%	-	1,842	-	\$0.015	
Getty Copper Inc.	TSXV:GTC	C\$ 0.04	108.4	US\$ 3	US\$ (0.6)	US\$ 0.8	US\$ 4	Cu / Mo	98%	776	1,216	\$0.006	\$0.004	
Highland Copper Company Inc.	TSXV:HI	C\$ 0.09	472.9	US\$ 32	US\$ (3.0)	US\$ 6.7	US\$ 42	Cu / Ag	99%	1,680	4,490	\$0.025	\$0.009	
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\$ 0.22	271.7	US\$ 45	US\$ 5.5	US\$ 0.0	US\$ 40	Cu / Mo	93%	-	11,818	-	\$0.003	
Nevada Copper Corp.	TSX:NCU	C\$ 0.38	661.9	US\$ 190	US\$ 133.8	US\$ 86.6	US\$ 143	Cu / Au	91%	5,529	7,742	\$0.026	\$0.018	
NGEx Resources Inc.	TSX:NGQ	C\$ 1.01	227.7	US\$ 174	US\$ 2.2	US\$ 0.0	US\$ 172	Cu / Au	76%	-	26,471	-	\$0.006	
Northern Dynasty Minerals Ltd.	TSX:NDM	C\$ 1.02	312.7	US\$ 240	US\$ 10.4	US\$ 0.0	US\$ 230	Cu / Au	57%	-	142,498	-	\$0.002	
NorthIsle Copper and Gold Inc.	TSXV:NCX	C\$ 0.08	117.2	US\$ 7	US\$ 0.3	US\$ 0.0	US\$ 7	Cu / Au	53%	-	4,633	-	\$0.001	
Osisko Metals Incorporated	TSXV:OM	C\$ 0.53	136.3	US\$ 55	US\$ 12.8	US\$ 0.0	US\$ 42	Zn / Pb	3%	-	146	-	\$0.288	
Panoro Minerals Ltd.	TSXV:PML	C\$ 0.22	263.8	US\$ 44	US\$ (2.2)	US\$ 2.0	US\$ 48	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\$ 1.06	321.2	US\$ 258	US\$ (185.3)	US\$ 0.0	US\$ 443	Cu / Ni	46%	3,415	10,789	\$0.130	\$0.041	
Quaterra Resources Inc.	TSXV:QTA	C\$ 0.05	201.0	US\$ 8	US\$ (0.2)	US\$ 0.7	US\$ 8	Cu / -	100%	-	3,894	-	\$0.002	
Regulus Resources Inc.	TSXV:REG	C\$ 1.50	88.5	US\$ 100	US\$ (2.4)	US\$ 0.0	US\$ 103	Cu / Au	51%	-	8,308	-	\$0.012	
Serengeti Resources Inc.	TSXV:SIR	C\$ 0.26	91.8	US\$ 18	US\$ 0.5	US\$ 0.0	US\$ 18	Cu / Au	63%	-	1,311	-	\$0.013	
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:TMO	C\$ 2.88	131.6	US\$ 287	US\$ 6.4	US\$ 0.0	US\$ 280	Cu / Zn	77%	-	5,776	-	\$0.049	
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												\$0.028	\$0.027	

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

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

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



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

Company	Symbol	Price	Shares O/S (million)	Market Capitalization (million)	Working Capital (million)	LTD Value (million)	Enterprise Value (million)	Primary / Secondary Metal	Nickel Ratio*** (% Contained)	Reserves & Resources* - Attributable		EV/lb NiEq** (US\$)	
										Reserve (NiEq** Mlb)	R&R (Total) (NiEq** Mlb)	Reserve	Total
Asian Mineral Resources Limited	TSXV:ASN	C\$ 0.30	8.7	US\$ 2	US\$ (8.3)	US\$ 0.4	US\$ 11	Ni / Cu	76%	92	92	\$0.116	\$0.116
CaNickel Mining Limited	TSXV:CML	C\$ 0.08	37.5	US\$ 2	US\$ (80.2)	US\$ 0.0	US\$ 83	Ni / -	100%	83	397	\$1.000	\$0.208
FPX Nickel Corp.	TSXV:FPX	C\$ 0.12	146.0	US\$ 13	US\$ 1.2	US\$ 5.6	US\$ 17	Ni / -	100%	-	5,569	-	\$0.003
Giga Metals Corporation	TSXV:GIGA	C\$ 0.20	43.1	US\$ 6	US\$ 2.6	US\$ 0.0	US\$ 4	Ni / Co	85%	-	6,890	-	\$0.001
Gossan Resources Limited	TSXV:GSS	C\$ 0.07	33.6	US\$ 2	US\$ 0.1	US\$ 0.0	US\$ 2	Ni / Cu	54%	-	73	-	\$0.023
Hannan Metals Ltd.	TSXV:HAN	C\$ 0.07	47.7	US\$ 3	US\$ 0.7	US\$ 0.3	US\$ 2	Ni / Cu	78%	-	2,539	-	\$0.001
Nautilus Minerals Inc.	TSX:NUS	C\$ 0.07	683.0	US\$ 36	US\$ (56.7)	US\$ 0.0	US\$ 93	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	-	\$0.006
RNC Minerals	TSX:RXN	C\$ 0.52	446.0	US\$ 175	US\$ (21.2)	US\$ 0.3	US\$ 197	Ni / Co	87%	3,855	7,143	\$0.051	\$0.028
Sama Resources Inc.	TSXV:SME	C\$ 0.33	188.4	US\$ 46	US\$ 6.5	US\$ 0.0	US\$ 40	Ni / Cu	49%	-	286	-	\$0.139
Strongbow Exploration Inc.	TSXV:SBW	C\$ 0.20	86.6	US\$ 13	US\$ 2.7	US\$ 4.3	US\$ 15	Ni / Sn	53%	-	678	-	\$0.022
Group Average - Total												\$0.389	\$0.047

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

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

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

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

Company	Symbol	Price	Shares O/S (million)	Market Capitalization (million)	Working Capital (million)	LTD Value (million)	Enterprise Value (million)	Primary / Secondary Metal	Zinc Ratio*** (% Contained)	Reserves & Resources* - Attributable		EV/lb ZnEq** (US\$)	
										Reserve (ZnEq** Mlb)	R&R (Total) (ZnEq** Mlb)	Reserve	Total
Ascendant Resources Inc.	TSX:ASND	C\$ 0.63	77.1	US\$ 37	US\$ 0.8	US\$ 0.0	US\$ 36	Zn / Pb	72%	320	1,405	\$0.112	\$0.026
Commander Resources Ltd.	TSXV:CMD	C\$ 0.09	35.3	US\$ 2	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\$ 0.89	34.6	US\$ 23	US\$ 6.1	US\$ 0.0	US\$ 17	Zn / Pb	65%	-	6,988	-	\$0.002
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\$ 0.75	77.0	US\$ 44	US\$ (1.7)	US\$ 0.0	US\$ 45	Zn / Pb	54%	-	2,430	-	\$0.019
Osisko Metals Incorporated	TSXV:OM	C\$ 0.53	136.3	US\$ 55	US\$ 12.8	US\$ 0.0	US\$ 42	Zn / Pb	71%	-	301	-	\$0.139
Rathdowney Resources Ltd.	TSXV:RTH	C\$ 0.10	161.7	US\$ 12	US\$ (3.4)	US\$ 0.0	US\$ 16	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\$ 1.16	102.0	US\$ 90	US\$ (7.8)	US\$ 0.0	US\$ 97	Zn / -	100%	-	1,182	-	\$0.082
Trevali Mining Corporation	TSX:TV	C\$ 0.47	831.2	US\$ 292	US\$ 175.4	US\$ 144.7	US\$ 262	Zn / Pb	69%	1,667	14,479	\$0.157	\$0.018
Wolfden Resources Corporation	TSXV:WLF	C\$ 0.22	114.1	US\$ 19	US\$ 1.4	US\$ 0.0	US\$ 17	Zn / Au	37%	-	3,242	-	\$0.005
Group Average - Total												\$0.135	\$0.025

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

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

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



Comparables Tables – Other (Uranium)

Uranium Comparables – Consensus Estimates

Company (Ticker)	Share	Consensus Targets		Shares	Market Capitalization	In-Situ Comps - EMib U3O8			NAV Comps		Cash Flow Comps						Earnings Comps					
		Price	Implied			Enterprise Value (USD)	Total Reserves & Resources	USD EMib Resource	IBES NAV	Price / Nav	CFPS (LoC)			PICFPS			EPS (LoC)			P/EPS		
Haywood Covered Names bold		Consensus	Return	Outst. (millions)	(millions)	(millions)	(M lb)				2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Cameco Corporation (CCO-T)	\$15.59	\$17.44	12%	396	\$6,170	\$4,972	1,046	\$4.75	\$15.17	1.03x	\$1.25	\$1.73	\$0.76	12.4x	9.0x	20.6x	\$0.04	\$0.27	\$0.10	425.1x	58.7x	154.4x
Energy Fuels (UUUU-US)	\$3.25	\$4.38	35%	91	\$295.9	\$273.0	131.0	\$2.08	\$4.32	0.75x	(\$0.10)	(\$0.08)	(\$0.15)				(\$0.23)	(\$0.29)	(\$0.11)			
Uranium Energy (UEC-US)	\$1.29	\$3.03	134%	176	\$227.2	\$239.8	112.0	\$2.14	\$2.91	0.44x	(\$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	\$0.00	42.2x		380.0x
Peninsula Energy (PEN-AU)	\$0.21	\$0.79	284%	242	\$49.7	\$39.3	87.1	\$0.45	\$0.59	0.35x	(\$0.02)	(\$0.01)	\$0.01				(\$0.03)	(\$0.05)	\$0.02			9.8x
Energy Resources (ERA-AU)	\$0.31			518	\$160.5	(\$162.7)	436.6	\$2.45	\$0.49	0.63x	(\$0.02)	(\$0.01)	\$0.01				(\$0.05)	(\$0.06)	(\$0.06)			
Group Average - Producers														14.1x	24.9x	24.4x				233.7x	58.7x	181.4x
NexGen Energy (NXE-T)	\$2.87	\$5.51	92%	349	\$1,003	\$791.6	348.8	\$2.27	\$5.34	0.54x	(\$0.02)	(\$0.01)	(\$0.06)				(\$0.05)	(\$0.16)	(\$0.10)			
Denison Mines (DML-T)	\$0.72	\$1.17	62%	584	\$420.6	\$302.0	177.7	\$1.70	\$1.25	0.58x	\$0.02	(\$0.03)	(\$0.02)	32.0x			(\$0.03)	(\$0.03)	(\$0.02)			
Fission Uranium (FCU-T)	\$0.62	\$2.10	239%	486	\$301.2	\$210.1	140.6	\$1.49	\$1.32	0.47x	(\$0.02)	(\$0.01)	(\$0.01)				(\$0.02)	(\$0.01)	(\$0.01)			
Berkeley Energia (BKY-AU)	\$0.22	\$1.18	450%	258	\$55.6	\$17.5	89.4	\$0.20	\$1.10	0.20x	(\$0.06)	(\$0.09)	(\$0.04)				(\$0.05)	(\$0.09)	(\$0.05)			
GovEx Uranium (GXU-V)	\$0.18			395	\$71.1	\$52.6	229.4	\$0.23														
Plateau Energy (PLU-V)	\$0.80	\$2.85	256%	77	\$61.5	\$44.9	123.4	\$0.36	\$3.78	0.21x	(\$0.06)	(\$0.07)						(\$0.02)	(\$0.02)			
UEX Corporation (UEX-T)	\$0.17	\$0.50	194%	381	\$64.8	\$44.5	86.4	\$0.52										(\$0.02)				
Toro Energy (TOE-AU)	\$0.03			2,161	\$69.2	\$58.5	63.7	\$0.92														
Deep Yellow (DYL-AU)	\$0.43			201	\$85.5	\$54.2	126.5	\$0.43														
Bannerman Resources (BMN-AU)	\$0.05			1,042	\$47.9	\$28.5	257.2	\$0.11														
Laramide Resources (LAM-T)	\$0.38	\$0.60	58%	133	\$50.5	\$44.5	129.3	\$0.34			(\$0.02)									(\$0.01)		
Azarga Uranium (AZZ-T)	\$0.24	\$0.30	26%	170	\$40.8	\$29.5	47.8	\$0.62	\$0.34	0.70x	(\$0.03)	(\$0.02)								(\$0.03)		
Forsys Metals (FSY-T)	\$0.25			157	\$38.4	\$28.4	127.0	\$0.22														
Western Uranium (WUC-L)	\$2.65			26	\$68.8	\$50.9	99.2	\$0.51														
A-Cap Resources (ACB-AU)	\$0.04			872	\$35.7	\$25.1	190.6	\$0.13														
Vimy Resources (VMY-AU)	\$0.06	\$0.39	519%	417	\$26.3	\$14.1	109.5	\$0.13	\$0.43	0.15x	(\$0.02)	(\$0.02)	(\$0.01)				(\$0.02)	(\$0.02)	(\$0.01)			
Energy Metals (EME-AU)	\$0.10			210	\$21.0	\$1.6	57.1	\$0.03														
U3O8 Corp. (UWE-T)	\$0.29			23	\$6.7	\$5.3	47.7	\$0.11														
Group Average - Developers								\$0.57		0.41x				32.0x								
Aurania Resources (ARU-V)	\$2.45			32	\$78.2	\$58.4																
Mega Uranium (MGA-T)	\$0.13			309	\$38.7	\$28.8	17.0	\$1.69														
Global Atomic (GLO-V)	\$0.30			137	\$41.0	\$29.5	111.0	\$0.27														
Skyharbour Resources (SYH-V)	\$0.46	\$1.01	122%	62	\$28.4	\$20.8	7.0	\$2.99														
Anfield Energy (AEC-V)	\$0.23			44	\$10.0	\$7.4	22.0	\$0.34														
IsoEnergy Ltd. (ISO-V)	\$0.40			55	\$22.1	\$15.3	8.2	\$1.87														
Globex Mining (GMX-T)	\$0.29			52	\$15.2	\$9.1																
Blue Sky (BSK-V)	\$0.13			110	\$14.3	\$8.7	19.1	\$0.45														
Purepoint Uranium (PTU-V)	\$0.07			205	\$14.3	\$10.3																
ValOre Metals (VO-V)	\$0.21			25	\$5.2	\$3.1	43.5	\$0.07														
Azimut Exploration (AZM-V)	\$0.26			49	\$12.6	\$7.9																
enCore Energy (ECU-V)	\$0.10			114	\$11.4	\$7.7	56.4	\$0.14														
Marenica Energy (MEY-AU)	\$0.10			73	\$7.0	\$5.7	46.0	\$0.12														
CanAlaska Uranium (CWV-V)	\$0.30			31	\$9.3	\$5.8																
Aurupa Minerals (AUU-V)	\$0.05			104	\$5.2	\$3.9																
Fission 3.0 (FUU-V)	\$0.19			135	\$25.6	\$19.3																
Zadar Ventures (ZAD-V)	\$0.04			100	\$3.5	\$2.4																
Eros Resources (ERC-V)	\$0.08			48	\$3.9	\$2.0																
X-Terra Resources (XTT-V)	\$0.13			32	\$4.1	\$3.0																
Forum Energy (FMC-V)	\$0.05			96	\$4.3	\$2.9	0.6	\$4.65														
Cauldron Energy (CXU-AU)	\$0.03			329	\$8.2	\$2.6	30.9	\$0.08														
Uravan Minerals (UVN-V)	\$0.03			42	\$1.3	\$0.9																
Tarku Resources (TKU-V)	\$0.02			63	\$1.3	\$0.9																
Roughrider Exploration (REL-V)	\$0.11			14	\$1.5	\$1.1																
Group Average - Explorers								\$1.15														
INVENTORY FUNDS																						
Yellow Cake (YCALN)	\$2.45	\$2.77	13%	76	\$186.6		8.4															
Uranium Participation (U-T)	\$4.98	\$5.74	15%	138	\$687.5	\$513.4	17.0	\$30.24	\$5.44	0.92x												

All data sourced from S&P Capital IQ, SNL Financial, Bloomberg



Performance of Companies from the last Junior Exploration Report

Company	Ticker	Close Price (C\$)	Market Capitalization (C\$M)	Cash as of Sept. Junior X Report (C\$M)	Weekly Performance	QTD Performance	QTD Performance vs. TSXV Index
Junior Exploration Names							
Ascot Resources Ltd.	TSXV:AOT	0.89	155.09	14.17	0.0%	(23.9)%	(5.6)%
Aurion Resources Ltd.	TSXV:AU	1.15	79.79	19.00	7.5%	27.8%	46.1%
Chakana Copper Corp.	TSXV:PERU	0.28	22.57	11.00	(15.2)%	(50.9)%	(32.5)%
Evrin Resources Corp.	TSXV:EVM	1.26	106.39	15.60	(8.0)%	15.6%	34.0%
Fireweed Zinc Ltd.	TSXV:FWZ	0.89	30.76	3.00	(9.2)%	(36.4)%	(18.1)%
Juggernaut Exploration Ltd.	TSXV:JUGR	0.14	11.33	2.80	(3.6)%	(64.5)%	(46.1)%
Kutcho Copper Corp.	TSXV:KC	0.32	18.29	13.24	12.3%	(25.6)%	(7.2)%
Oklo Resources Limited	ASX:OKU	0.26	91.87	17.10	(5.5)%	(13.3)%	5.0%
Osisko Metals Incorporated	TSXV:OM	0.53	72.22	30.00	(1.9)%	(8.6)%	9.7%
Pan Global Resources Inc.	TSXV:PGZ	0.17	16.03	3.40	17.2%	(29.2)%	(10.8)%
Reunion Gold Corporation	TSXV:RGD	0.19	59.30	8.00	0.0%	15.6%	34.0%
Sable Resources Ltd.	TSXV:SAE	0.26	36.31	2.80	6.1%	(7.1)%	11.2%
Skeena Resources Limited	TSXV:SKE	0.33	31.80	2.52	4.8%	(16.7)%	1.7%
Other Companies in the News							
No other news for the week							

Source: Haywood Securities



Key Catalysts for Companies Featured in the Last Junior Exploration Report

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

Source: Haywood Securities



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

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



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

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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.

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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.

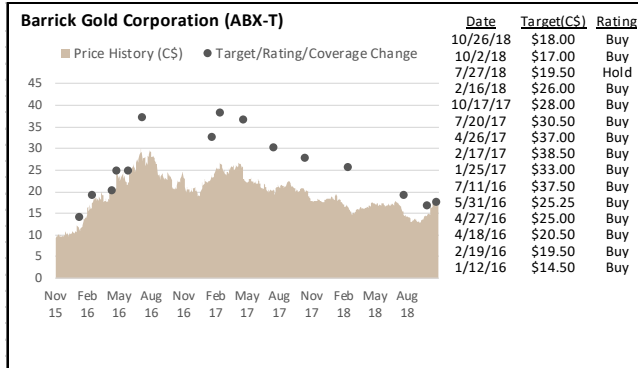
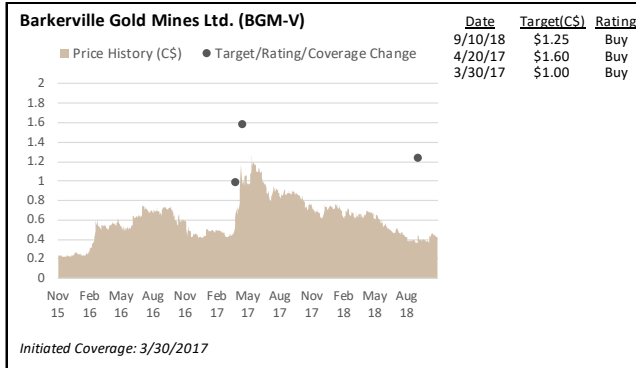
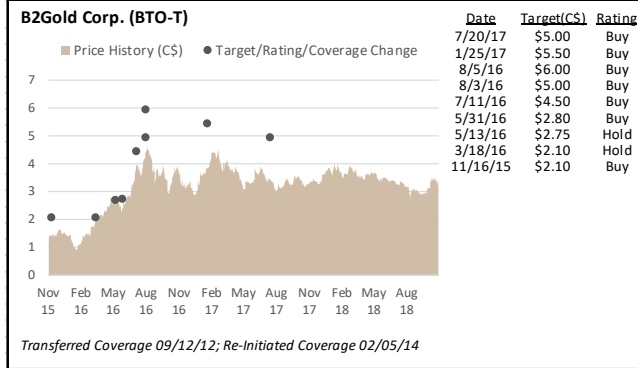
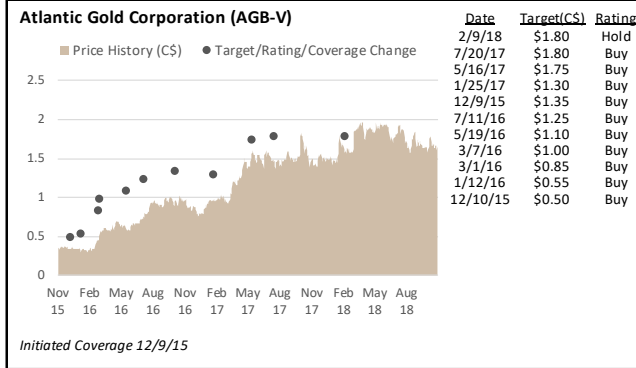
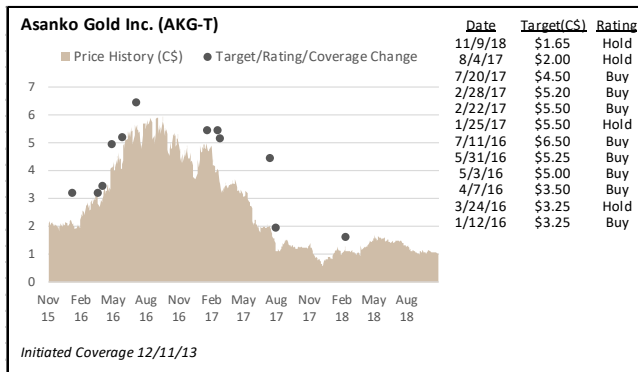
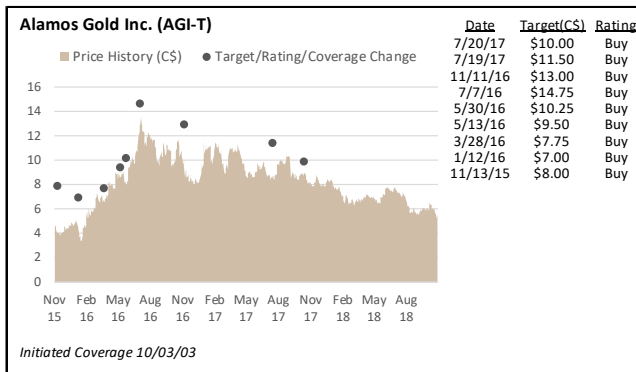
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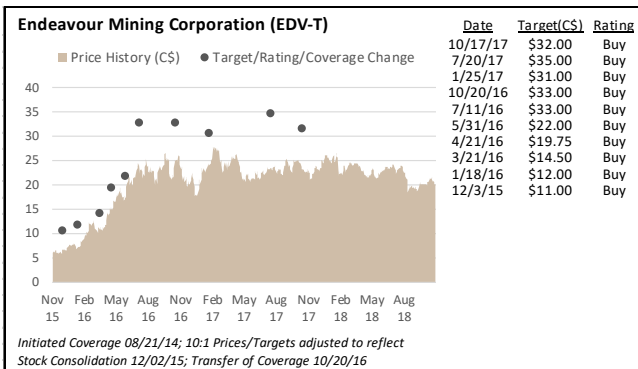
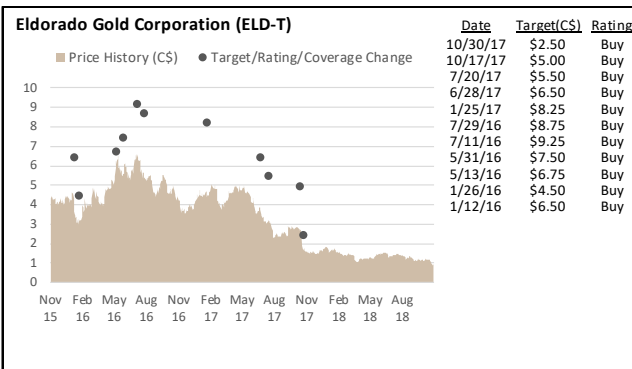
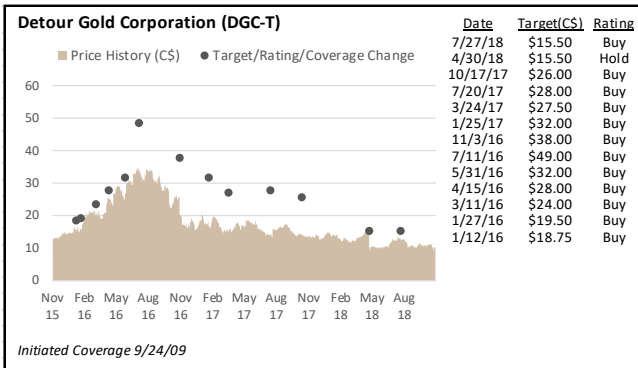
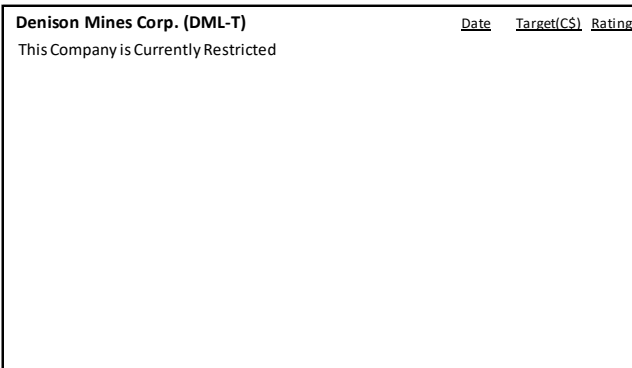
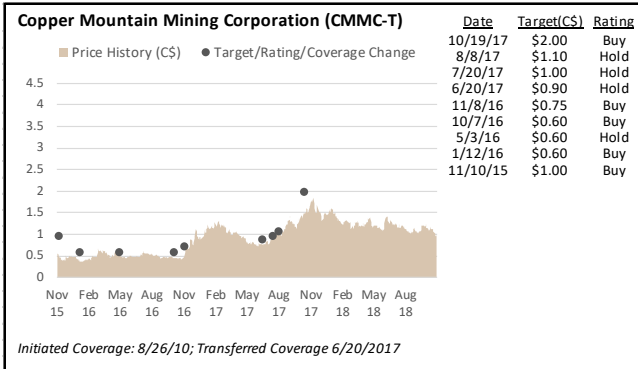
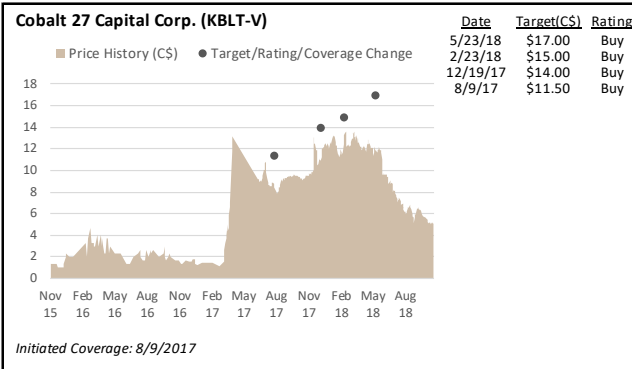
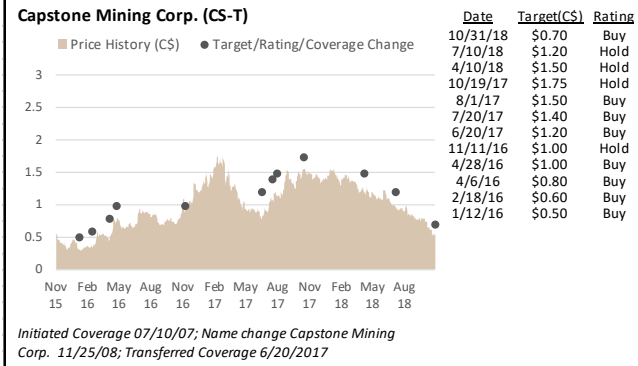
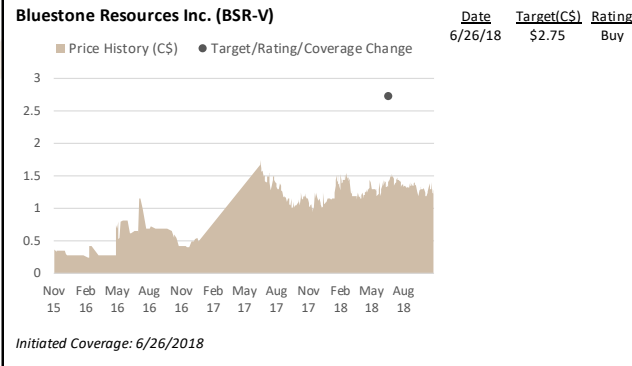


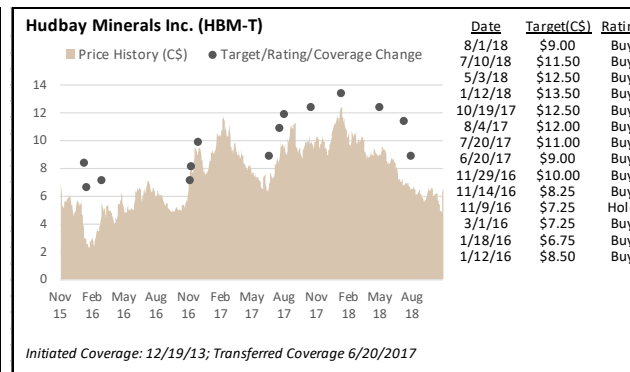
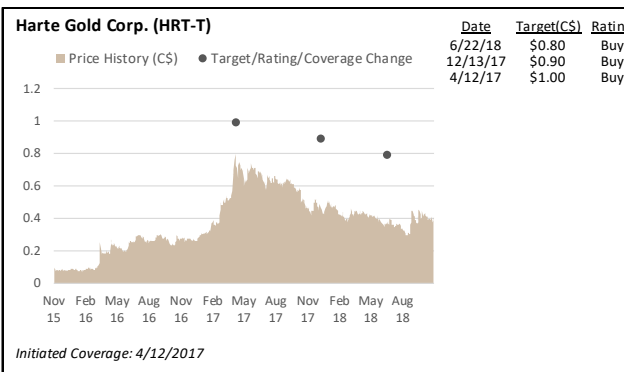
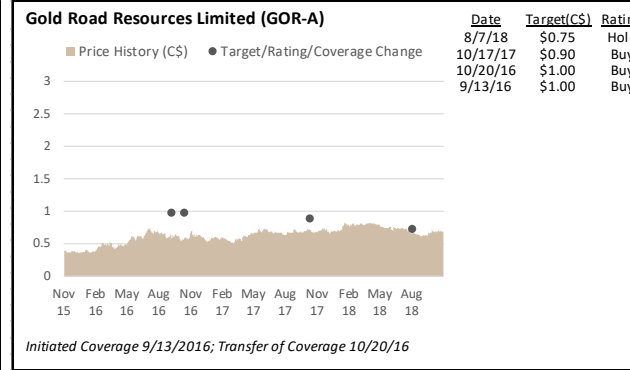
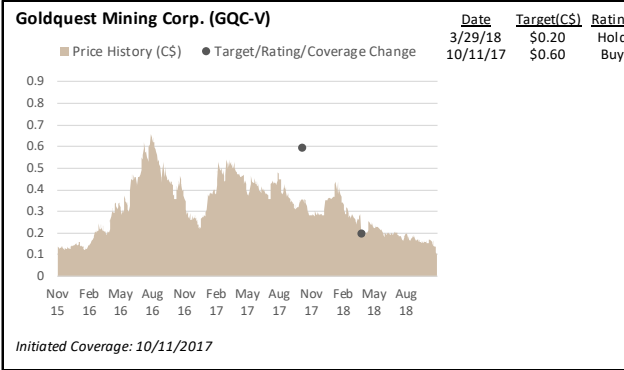
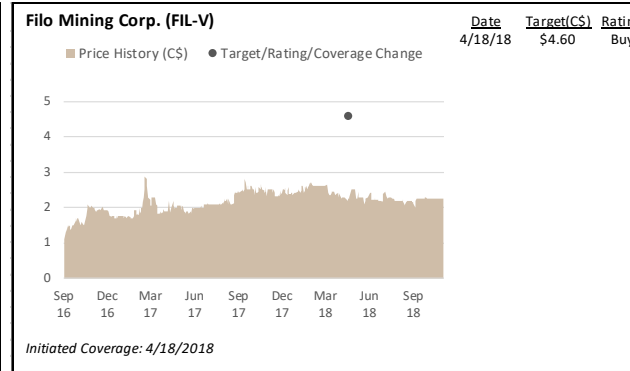
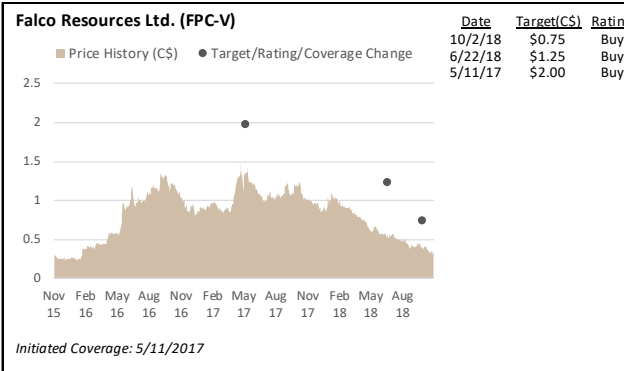
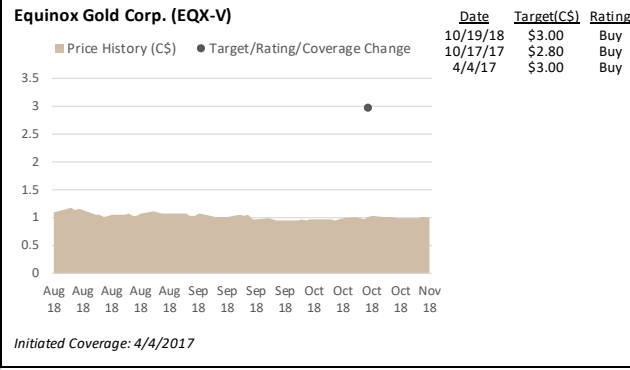
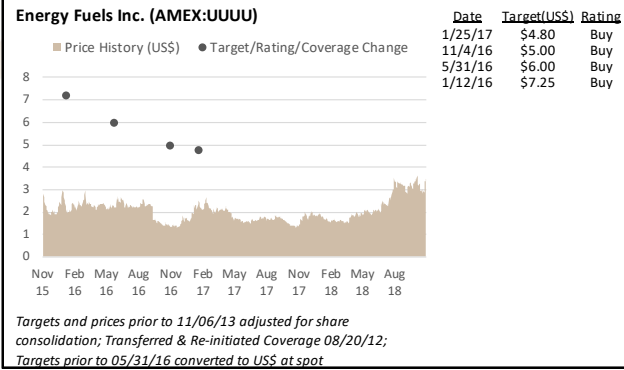
Distribution of Ratings (as of November 23, 2018)

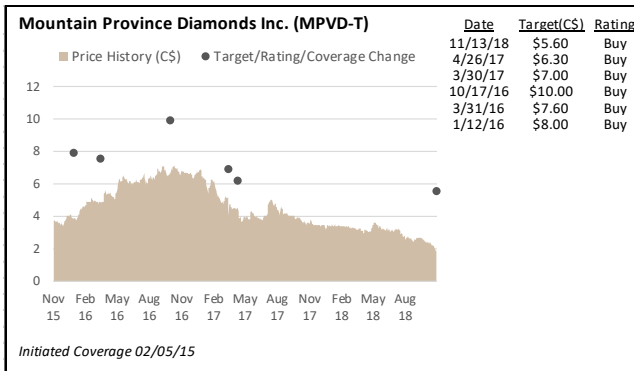
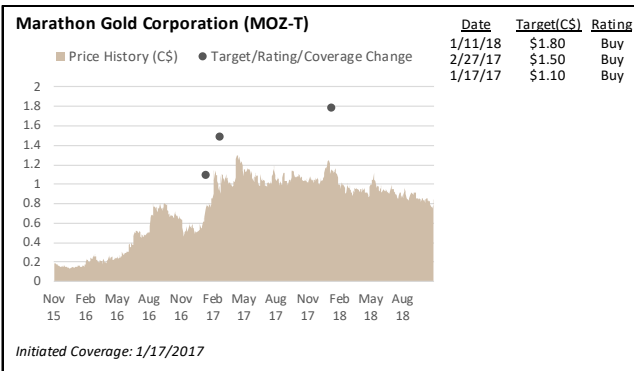
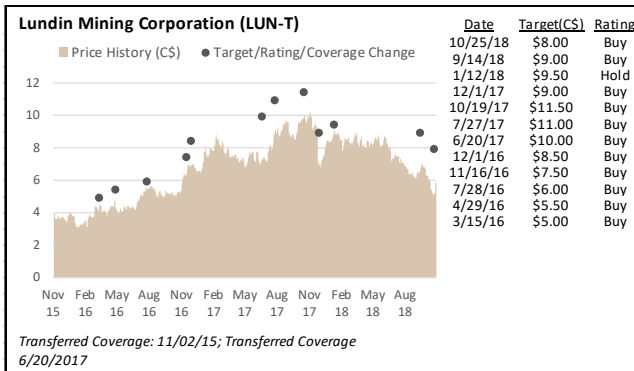
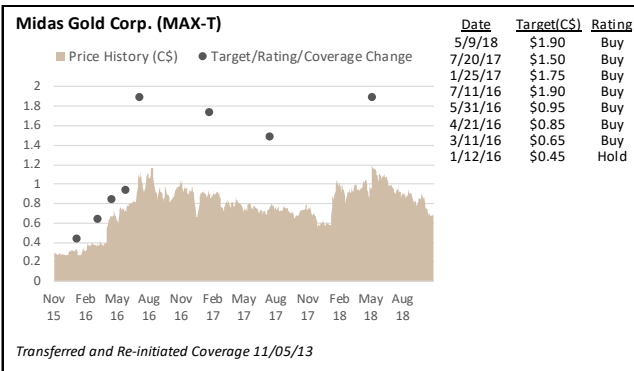
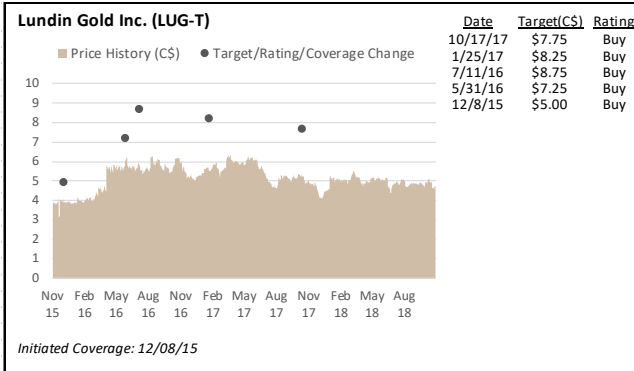
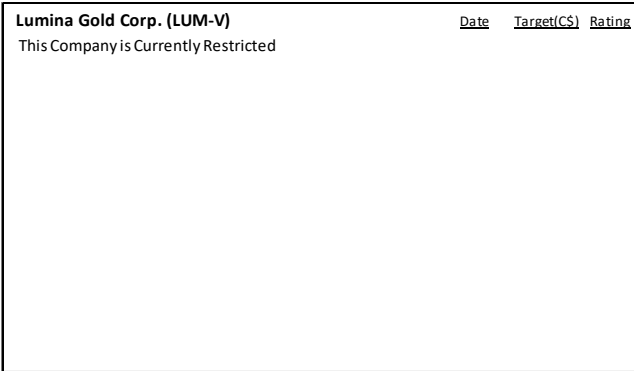
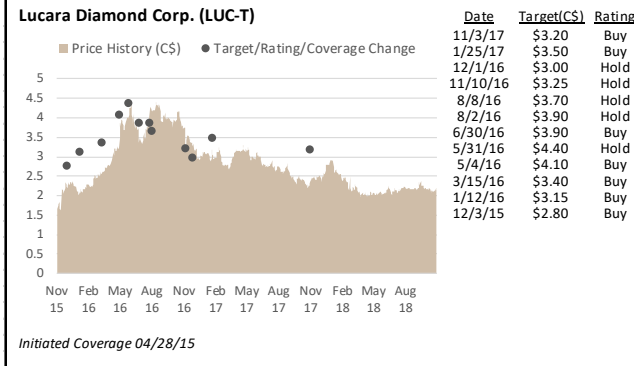
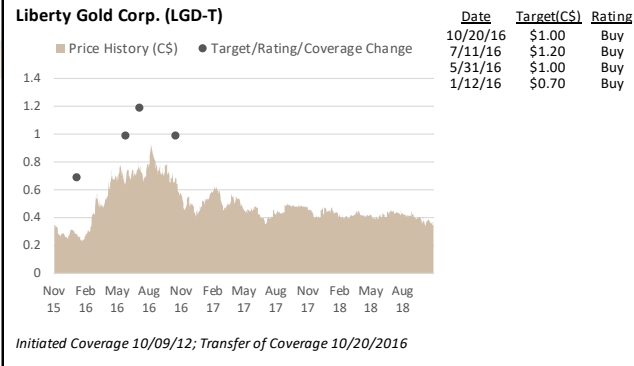
	%	#	IB Clients (TTM)
Buy	76.8%	73	96.4%
Hold	10.5%	10	0.0%
Sell	0.0%	0	0.0%
Tender	3.2%	3	0.0%
UR (Buy)	0.0%	0	0.0%
UR (Hold)	0.0%	0	0.0%
UR (Sell)	0.0%	0	0.0%
Dropped (TTM)	9.5%	9	3.6%

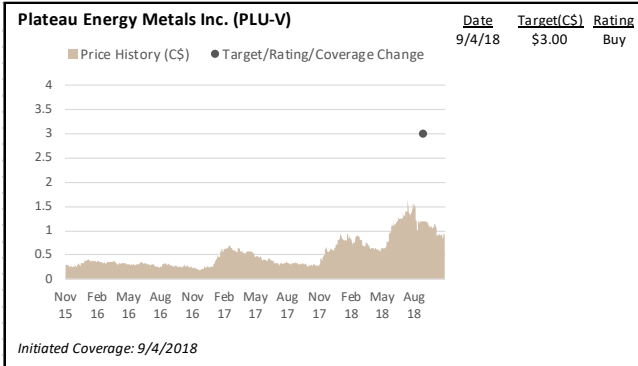
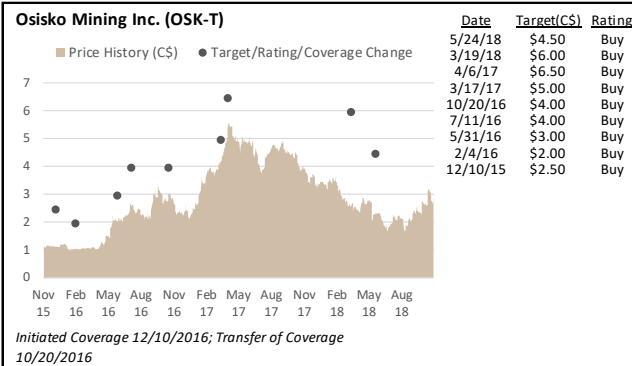
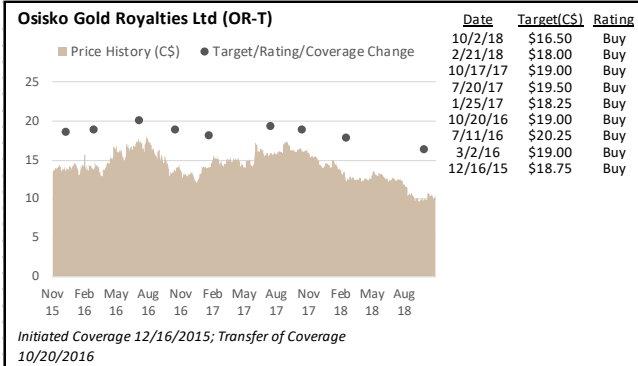
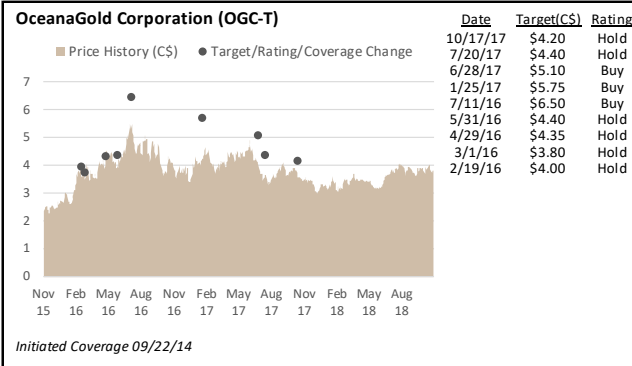
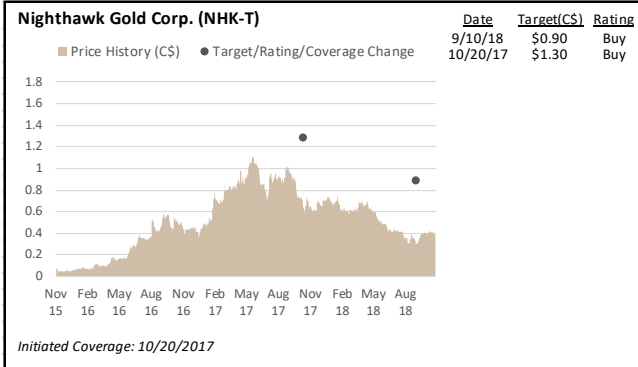
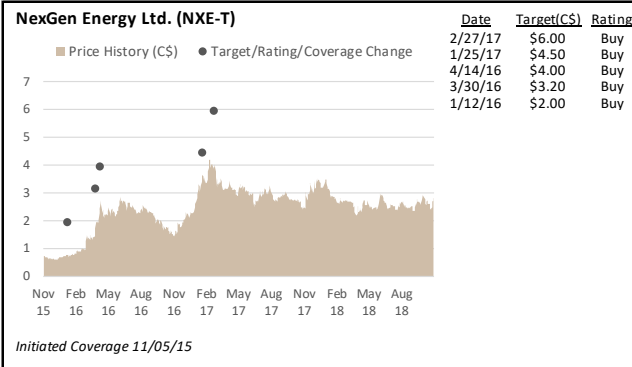
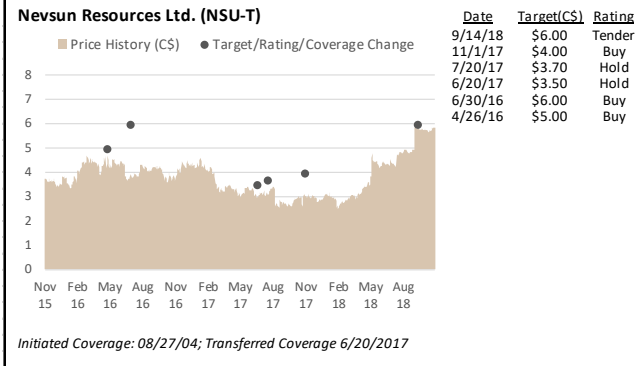
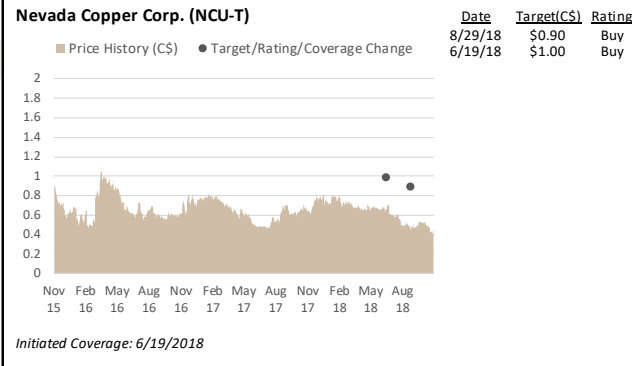
Price Chart, Rating and Target Price History (as of November 23, 2018)

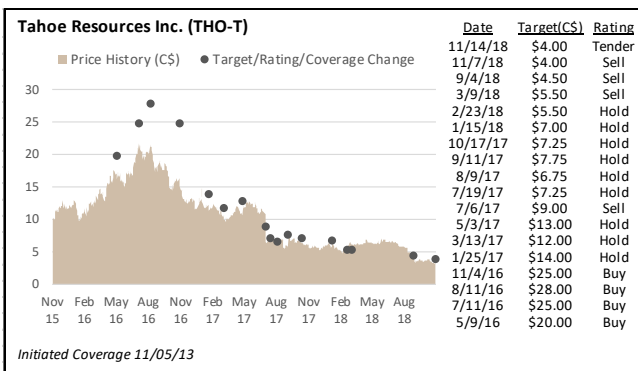
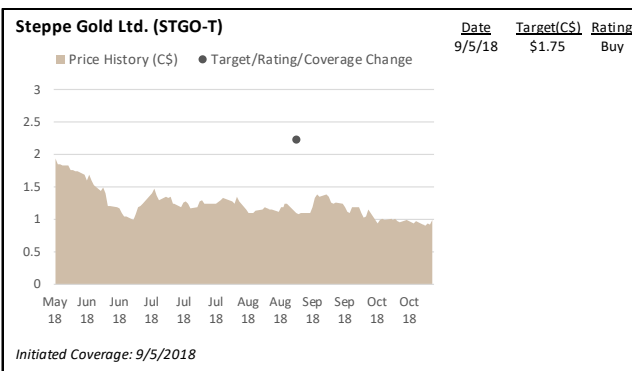
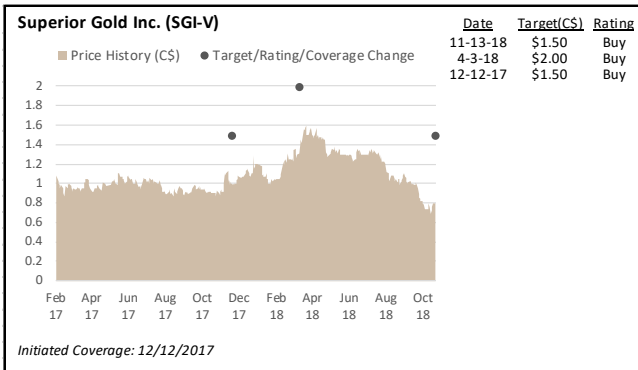
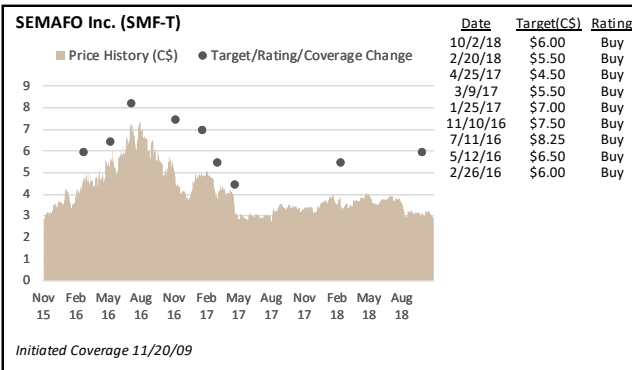
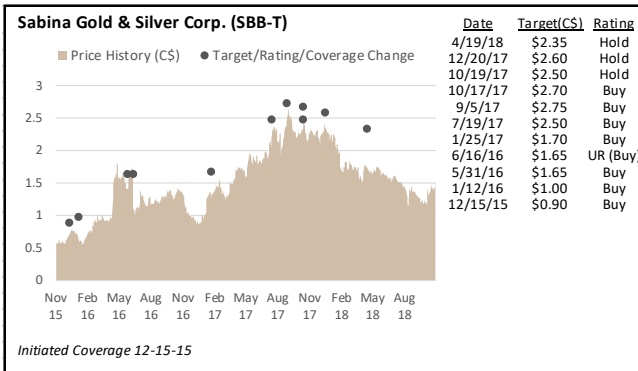
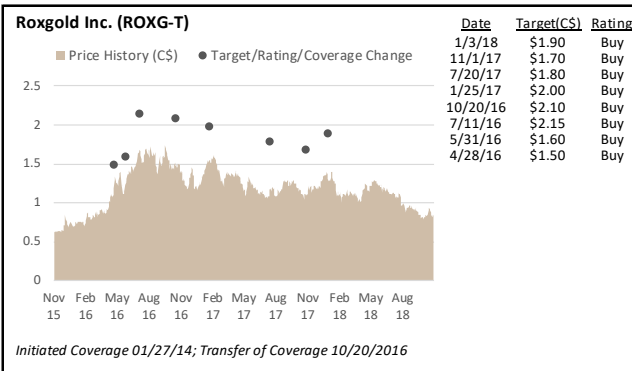
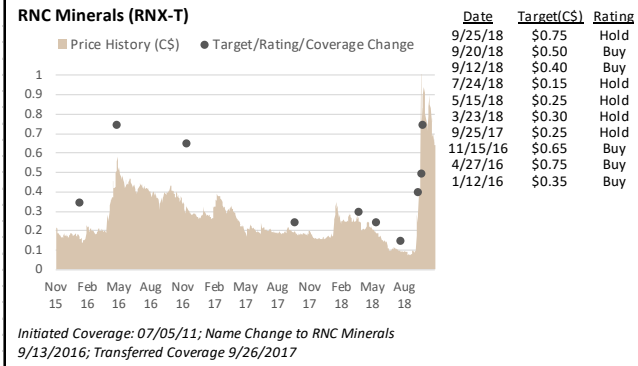
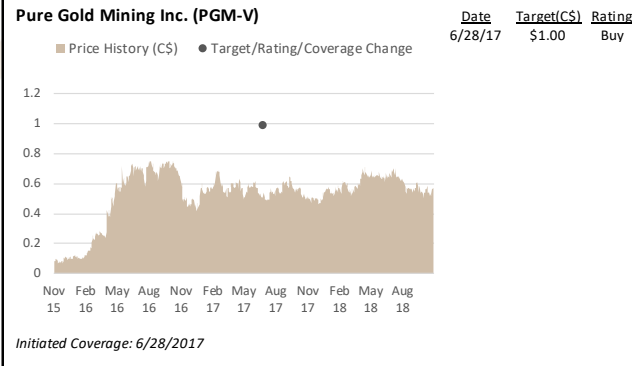


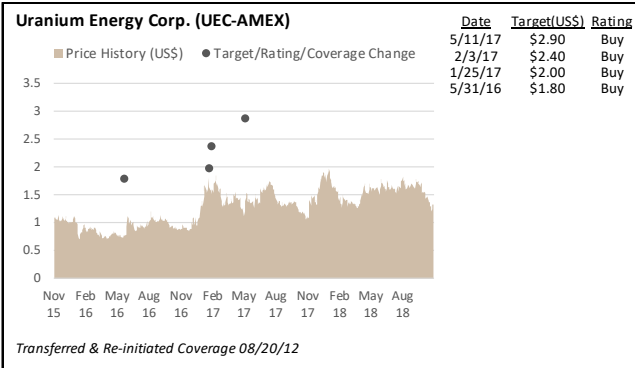
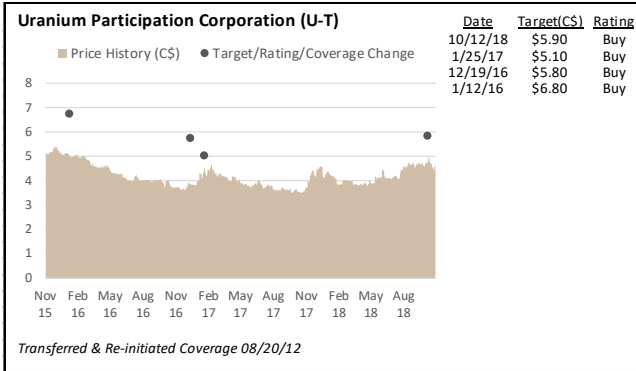
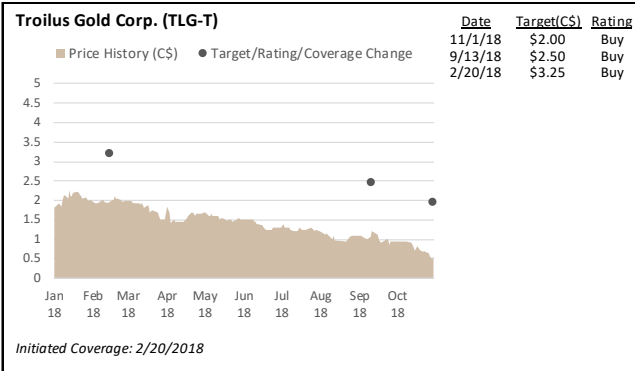
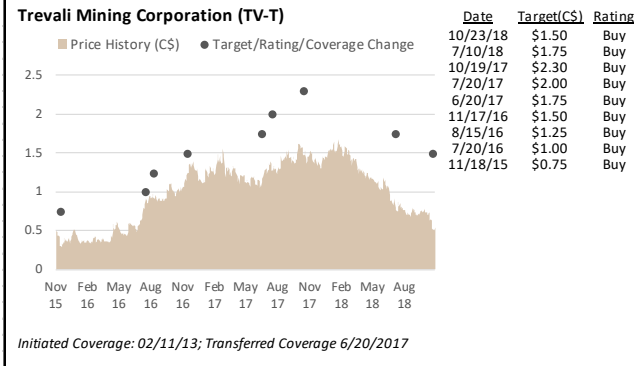
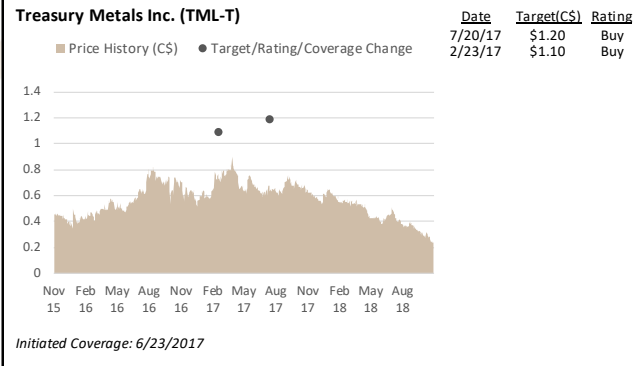












B: Buy; H: Hold; S: Sell; T: Tender; UR: Under Review

Source: Capital IQ and Haywood Securities