

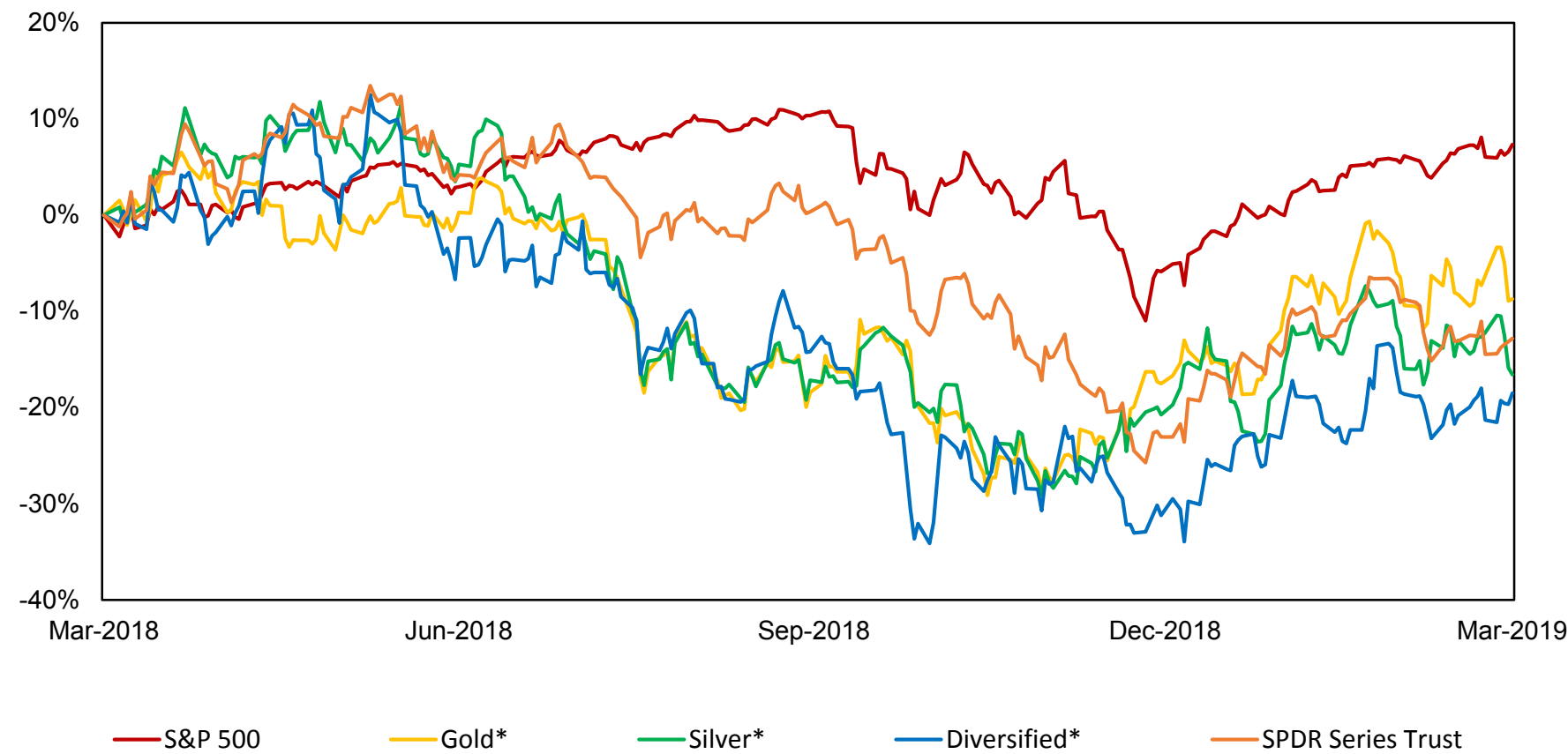


NOBLE CAPITAL MARKETS NEWSLETTER
METALS AND MINING
QUARTERLY REVIEW Q1 2019



MINING SECTOR NEWSLETTER

MINING SECTOR LTM EQUITY PERFORMANCE



* Noble Proprietary Sector (index composed of companies in the comparable table)
** MINING Select Sector SPDR ETF (refer to disclosure section for more information)

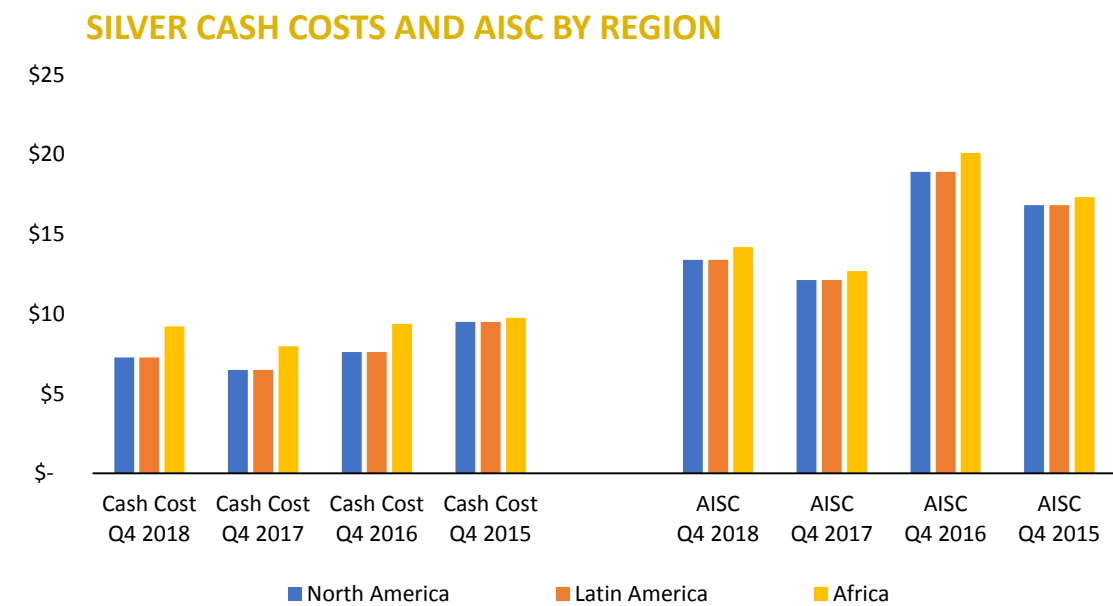
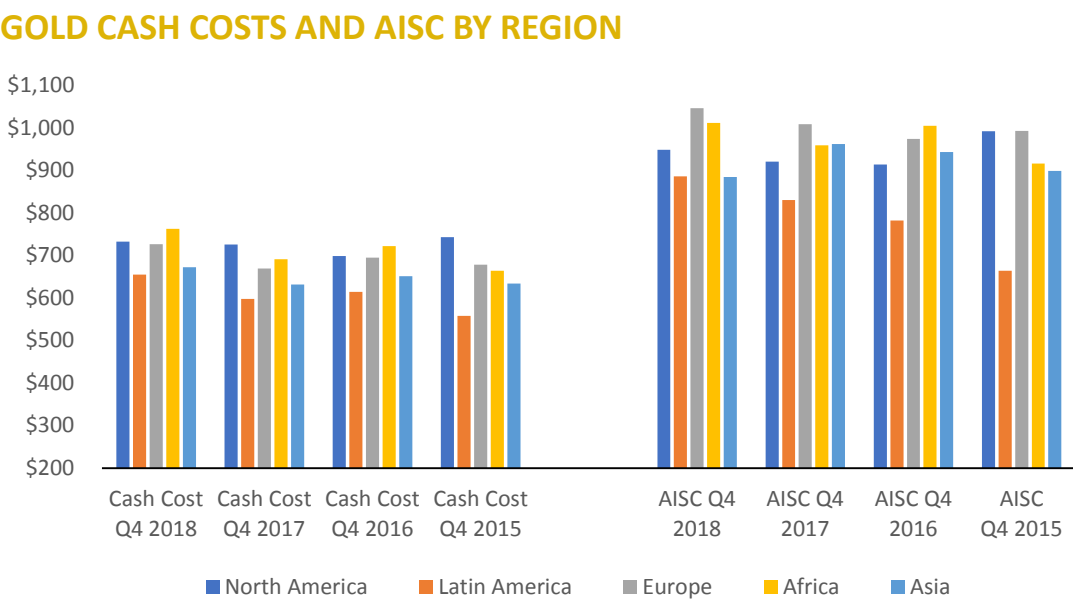
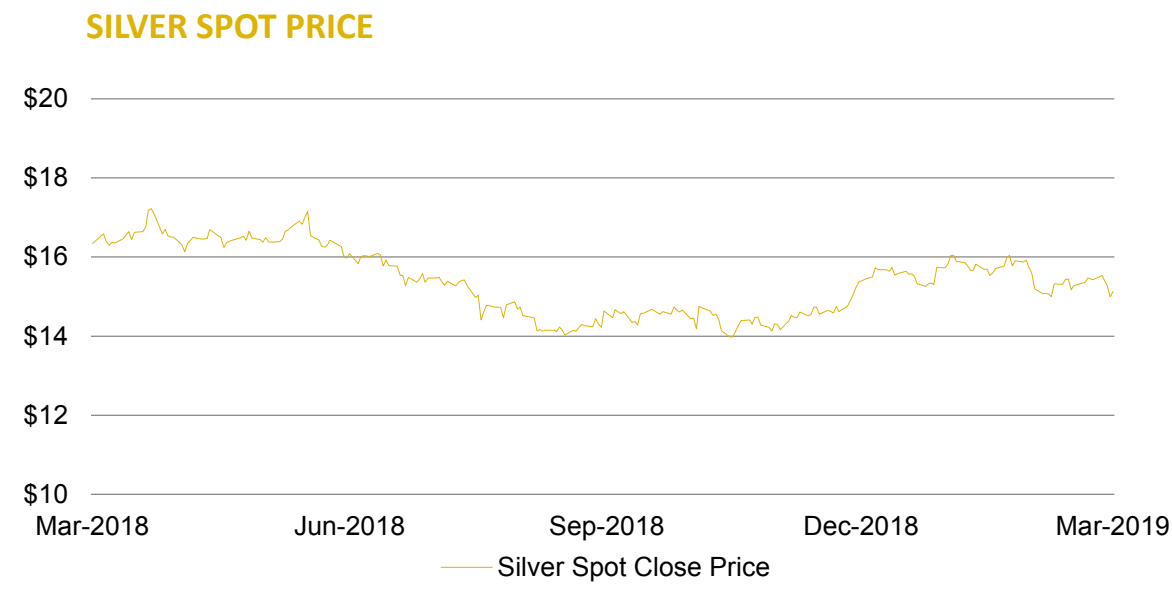
Source: Capital IQ as of 03/29/2019

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MINING – FUNDAMENTAL DATA



Source: Capital IQ as of 03/29/2019



METALS AND MINING INDUSTRY OUTLOOK

METALS AND MINING INDUSTRY OUTLOOK

Mining companies (as measured by the XME) increased 13.2% during the March quarter versus a 13.1% increase in the S&P 500 index. While the broader index gained each quarter, the XME rose 17.3% during the month of January before giving up some of its gain in March. Gold experienced a 3% increase in price in January but finished the quarter up only 0.8%, while the price of silver declined 2.2%.

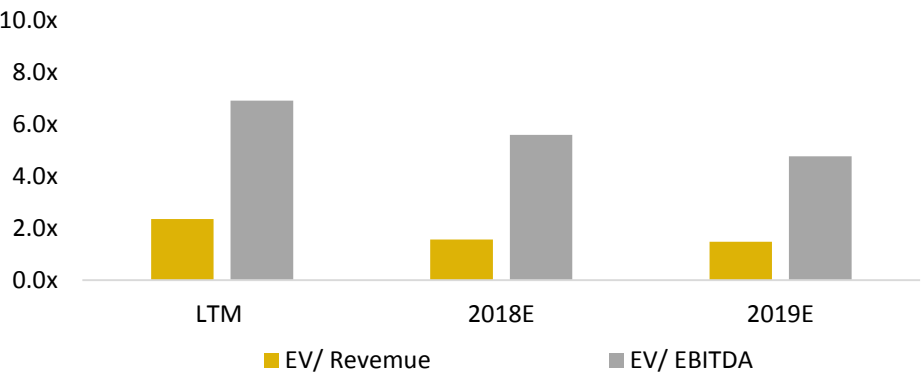
Softness in March may be attributed to dollar strength and optimism regarding resolution of trade and tariff issues with China. As concerns about a trade war with China ease, greater confidence in global markets has lifted the broader market and dimmed demand for gold as a safe-haven for investment. However, trade setbacks, poorer than expected economic numbers and greater market volatility could turn the tide back into gold’s favor.

Conversely to its impact on gold prices, optimism around trade with China may have had a positive impact on certain base metals, including copper and zinc. During the first quarter, the price of copper and zinc rose 11.8% and 17%, respectively, while the price of lead was flat. We are optimistic regarding the outlook for copper. For use in communication devices to electric vehicles, demand for copper is expected to grow.

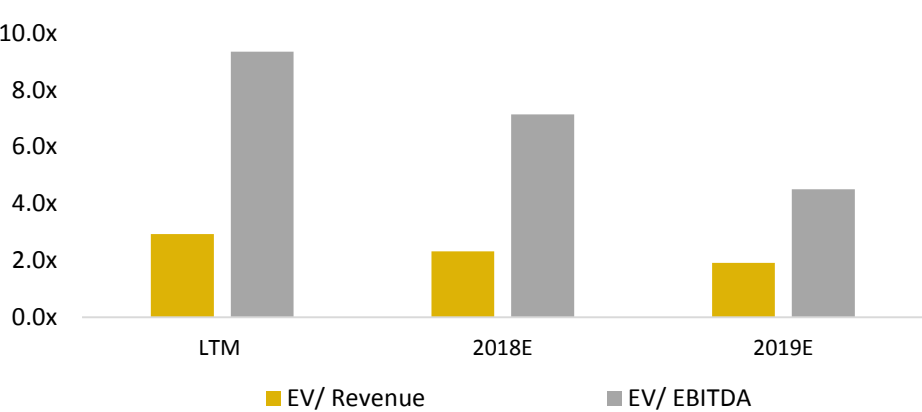
The current sentiment in the market right now seems to be near-term positive but intermediate-term wary. It is difficult to judge the trajectory and timing of the business cycle. However, investors may consider the inclusion of mining stocks as a way to participate in continued global economic growth or as a hedge against increased volatility.

Source: Capital IQ as of 03/29/2019, Mark Reichman

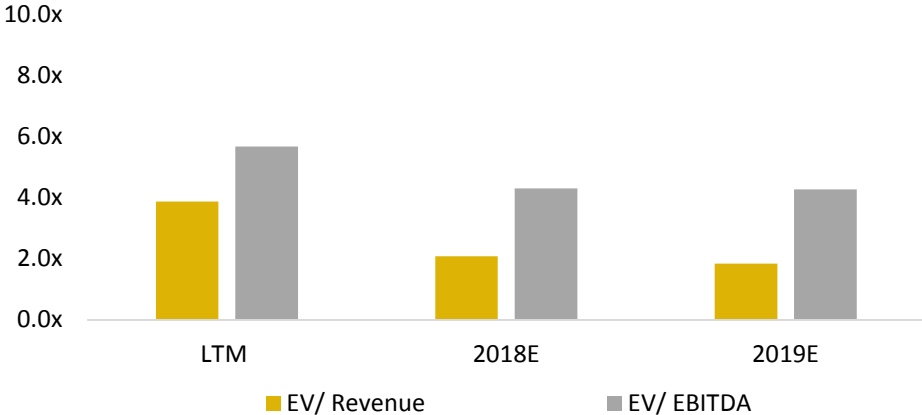
GOLD



SILVER



DIVERSIFIED



GOLD MINING

COMPARABLE TABLES

Major Gold Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Kinross Gold Corporation	TSX:K	(70%)	(13%)	\$3.44	64%	4,310	1,735	5,737	3,213	976	1.8x	1.8x	1.8x	5.9x	5.1x	4.8x	30%
B2Gold Corp.	TSX:BTO	9%	2%	\$2.80	64%	2,811	480	3,238	1,225	589	2.6x	2.6x	2.4x	5.5x	5.5x	5.0x	48%
Yamana Gold Inc.	TSX:YRI	26%	(6%)	\$2.60	62%	2,474	1,799	4,195	1,799	614	2.3x	2.4x	2.3x	6.8x	6.0x	5.2x	34%
Alamos Gold Inc.	TSX:AGI	(27%)	(2%)	\$5.07	64%	1,974	3	1,758	652	208	2.7x	2.7x	2.7x	8.5x	6.7x	5.9x	32%
Detour Gold Corporation	TSX:DGC	(2%)	(7%)	\$9.38	61%	1,649	249	1,768	776	282	2.3x	2.3x	2.2x	6.3x	6.7x	6.0x	36%
Eldorado Gold Corp	TSX:ELD	(43%)	10%	\$4.62	60%	731	603	1,109	459	83	2.4x	1.8x	1.4x	13.4x	5.0x	3.2x	18%

Mean	2.4x	2.2x	2.1x	7.7x	5.8x	5.0x	33%
Median	2.4x	2.3x	2.3x	6.6x	5.7x	5.1x	33%

Intermediate Gold Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Golden Star Resources Ltd.	TSX:GSC	33%	37%	\$4.04	69%	440	101	371	273	45	1.4x	1.3x	1.2x	8.3x	3.6x	2.9x	16%
Wesdome Gold Mines Ltd.	TSX:WDO	(2%)	108%	\$3.16	58%	429	7	416	85	31	4.9x	3.0x	1.9x	13.3x	6.8x	4.9x	37%
Teranga Gold Corporation	TSX:TGZ	(1%)	(17%)	\$2.88	51%	310	87	378	313	113	1.2x	NM	NM	3.4x	NM	NM	36%
Argonaut Gold Inc.	TSX:AR	28%	(26%)	\$1.41	53%	250	13	248	196	35	1.3x	0.9x	0.8x	7.1x	2.7x	2.1x	18%
Premier Gold Mines	TSX:PG	(4%)	(47%)	\$1.17	38%	246	-	201	114	3	1.8x	1.4x	1.2x	NM	11.0x	12.5x	3%
Corvus Gold Inc.	TSX:KOR	(22%)	(7%)	\$1.56	46%	173	-	169	-	(7)	NM	NM	NM	NM	NM	NM	NM

Mean	2.1x	1.7x	1.3x	8.0x	6.0x	5.6x	22%
Median	1.4x	1.4x	1.2x	7.7x	5.2x	3.9x	18%

Source: Capital IQ as of 03/29/2019



GOLD MINING

COMPARABLE TABLES

Junior Gold Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Asanko Gold Inc.	TSX:AKG	2%	(38%)	\$0.63	35%	142	-	131	162	50	0.8x	1.0x	0.7x	2.6x	5.1x	2.1x	31%
Guyana Goldfields Inc.	TSX:GUY	(28%)	(79%)	\$0.81	15%	140	40	97	188	49	0.5x	0.5x	0.4x	2.0x	3.4x	1.2x	26%
Contango Ore, Inc.	OTCPK:CTGO	13%	8%	\$20.04	63%	127	-	117	-	-	NM	NM	NM	NM	NM	NM	NM
Belo Sun Mining Corp	TSX:BSX	(24%)	(19%)	\$0.22	53%	94	-	68	0	(7)	NM	NM	NM	NM	NM	NM	NM
GoGold Resources Inc.	TSX:GGD	53%	(17%)	\$0.26	49%	44	-	27	19	(27)	1.4x	0.7x	NM	NM	NM	NM	NM
Mako Mining Corp.	TSXV:MKO	(17%)	(63%)	\$0.10	34%	30	-	32	4	(4)	7.9x	0.7x	0.5x	NM	NM	NM	NM

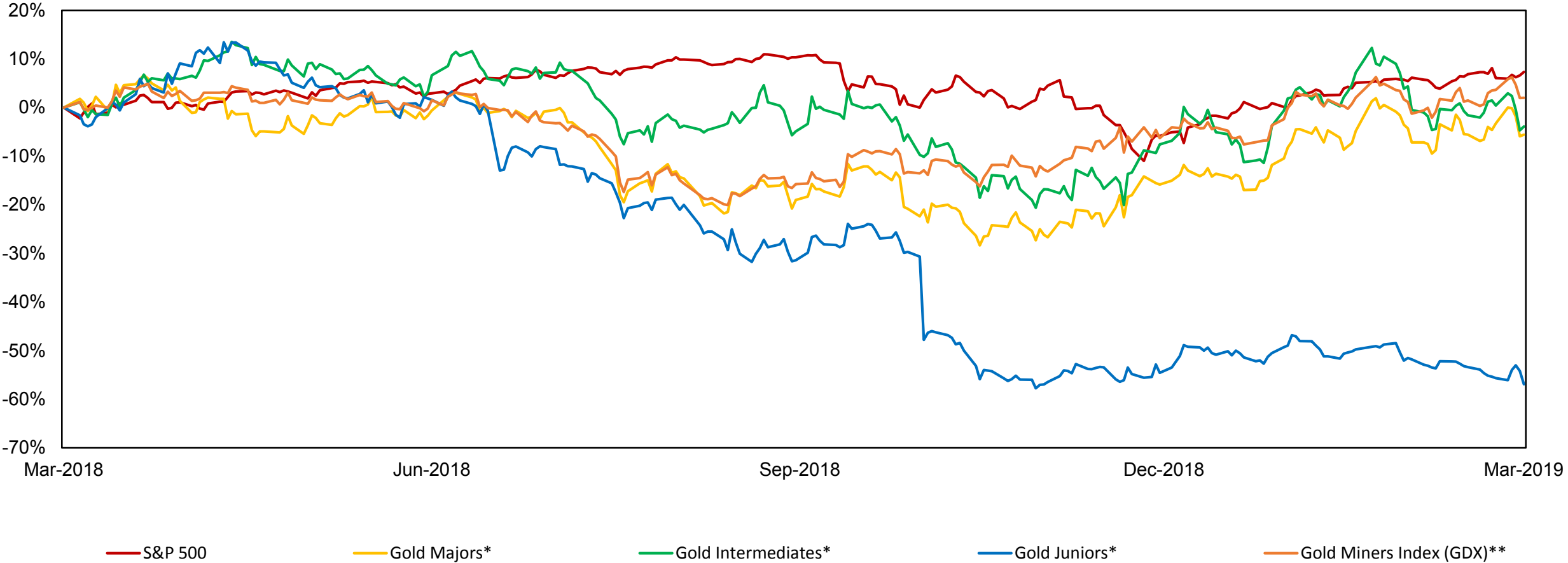
Mean	2.7x	0.7x	0.5x	2.3x	4.2x	1.7x	29%
Median	1.1x	0.7x	0.5x	2.3x	4.2x	1.7x	29%

Source: Capital IQ as of 03/29/2019



GOLD MINING LTM EQUITY PERFORMANCE

(NOBLE INDEX SELECTION)



* Noble Proprietary Sector (index composed of companies in the comparable table)
** SPDR Gold Shares (refer to disclosure section for more information)

Source: Capital IQ as of 03/29/2019



SILVER MINING

COMPARABLE TABLES

Major Silver Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Pan American Silver Corp.	TSX:PAAS	(9%)	(18%)	\$13.21	55%	2,767	27	2,584	784	222	3.3x	1.9x	1.6x	11.6x	6.6x	4.5x	28%
SSR Mining Inc.	TSX:SSRM	7%	31%	\$12.64	63%	1,532	248	1,359	421	127	3.2x	2.0x	1.7x	10.7x	5.2x	4.0x	30%
First Majestic Silver Corp.	TSX:FR	14%	8%	\$6.58	59%	1,293	155	1,387	301	52	4.6x	2.7x	2.1x	NM	8.9x	5.8x	17%
Hecla Mining Company	NYSE:HL	(1%)	(37%)	\$2.30	55%	1,111	546	1,629	567	173	2.9x	2.5x	2.0x	9.4x	9.8x	6.5x	31%
MAG Silver Corp.	TSX:MAG	46%	9%	\$10.68	68%	913	-	776	-	(8)	NM	NM	4.8x	NM	NM	NM	NM
Coeur Mining, Inc.	NYSE:CDE	(8%)	(49%)	\$4.08	46%	837	459	1,181	626	123	1.9x	1.6x	1.5x	9.6x	8.6x	4.9x	20%

Mean	3.2x	2.1x	2.3x	10.3x	7.8x	5.1x	25%
Median	3.2x	2.0x	1.9x	10.1x	8.6x	4.9x	28%

Intermediate Silver Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Fortuna Silver Mines Inc.	TSX:FVI	(8%)	(36%)	\$3.33	43%	533	78	446	263	113	1.7x	1.8x	1.1x	3.9x	4.8x	2.6x	43%
Silvercorp Metals Inc.	TSX:SVM	23%	(5%)	\$2.57	64%	435	4	375	174	83	2.2x	2.1x	NM	4.5x	4.9x	4.7x	48%
Endeavour Silver Corp.	TSX:EDR	17%	4%	\$2.52	57%	331	-	297	151	20	2.0x	1.6x	1.4x	14.5x	11.4x	7.2x	14%
Great Panther Mining	TSX:GPR	39%	(21%)	\$0.93	55%	254	-	202	59	(8)	3.4x	2.4x	2.1x	NM	NM	NM	NM

Mean	2.5x	2.0x	2.2x	8.8x	7.7x	4.9x	30%
Median	2.2x	2.0x	1.9x	9.9x	8.2x	4.9x	27%

Source: Capital IQ as of 03/29/2019

SILVER MINING

COMPARABLE TABLES

Junior Silver Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Alexco Resource Corp.	TSX:AXR	30%	(10%)	\$1.20	56%	131	-	124	15	(5)	8.5x	10.4x	1.7x	NM	NM	NM	NM
Bear Creek Mining	TSXV:BCM	41%	(40%)	\$1.08	41%	111	-	100	-	(12)	NM	NM	NM	NM	NM	NM	NM
Americas Silver Corp	TSX:USA	0%	(50%)	\$1.65	31%	75	14	86	68	5	1.3x	0.7x	0.4x	NM	2.8x	1.4x	7%
Excellon Resources Inc.	TSX:EXN	27%	(45%)	\$0.64	39%	63	1	57	24	(3)	2.3x	0.9x	0.8x	NM	NM	NM	NM
Avino Silver & Gold Mines	TSX:ASM	3%	(56%)	\$0.61	31%	39	10	46	34	5	1.3x	0.8x	0.7x	8.6x	3.4x	2.7x	16%
Kootenay Silver Inc	TSXV:KTN	(5%)	(30%)	\$0.10	53%	24	-	22	-	(2)	NM	NM	NM	NM	NM	NM	NM

Mean	3.4x	3.2x	0.9x	8.6x	3.1x	2.1x	11%
Median	1.8x	0.9x	0.8x	8.6x	3.1x	2.1x	11%

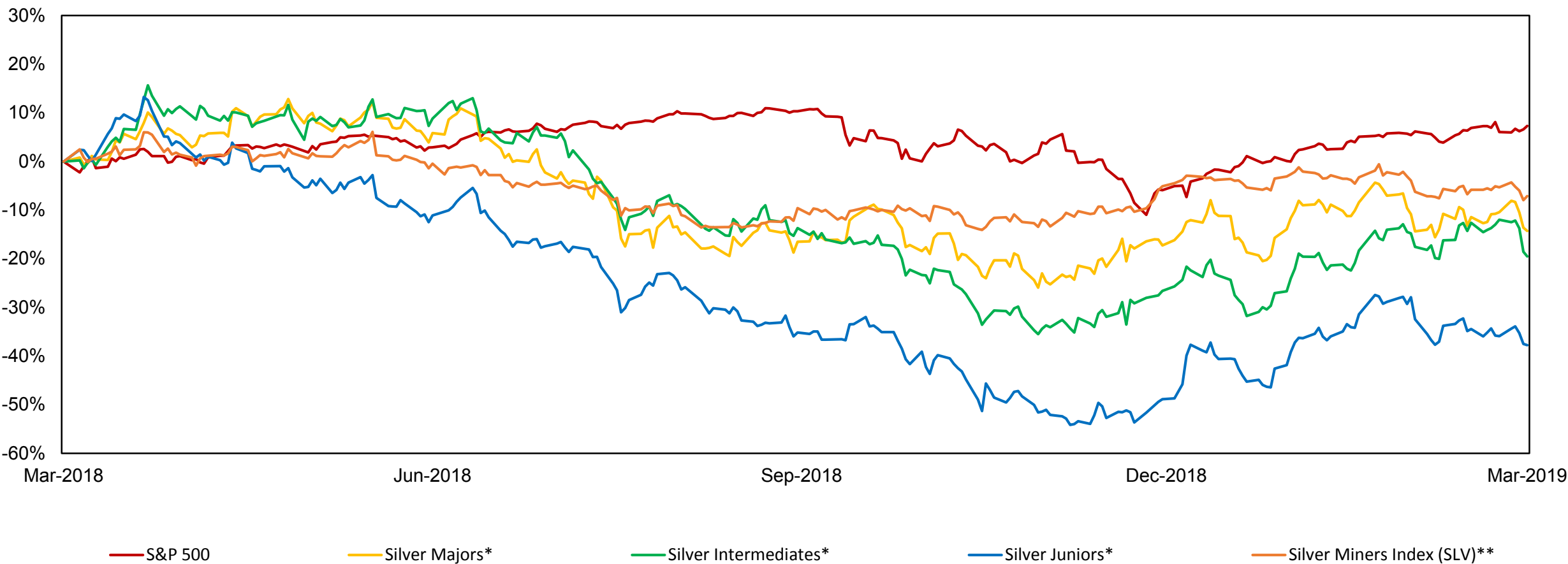
Source: Capital IQ as of 03/29/2019



SILVER MINING

LTM EQUITY PERFORMANCE

(NOBLE INDEX SELECTION)



* Noble Proprietary Sector (index composed of companies in the comparable table)
** SPDR Gold Shares (refer to disclosure section for more information)

Source: Capital IQ as of 03/29/2019

GOLD & SILVER LTM GLOBAL M&A ACTIVITY

Date	Buyer	Seller	Transaction Value	EV/Revenue	EV/EBITDA
02/25/2019	Evolution Mining Limited (ASX:EVN)	Tribune Resources Limited (ASX:TBR)	29.6	0.4x	0.4x
01/11/2019	Endeavour Mining Corporation (TSX:EDV)	Société des Mines d'Ity S.A.	17.6	-	-
01/07/2019	Ascot Resources Ltd. (TSXV:AOT)	IDM Mining Ltd.	33.5	-	-
12/04/2018	Combined Success Investments Limited	Tongguan Tongjin Mining Company Limited/Shaanxi Dujin Mining Company	45.5	-	-
11/22/2018	A.V.O.D. Kurutulmus Gida ve Tarim Urunleri A.S. (IBSE:AVOD)	Avod Altin Madencilik Enerji Ins.San.ve Tic. A.S.	10.4	-	-
11/14/2018	Pan American Silver Corp. (TSX:PAAS)	Tahoe Resources Inc.	1,390.9	2.7x	2.7x
11/14/2018	Silver Lake Resources Limited (ASX:SLR)	Doray Minerals Limited (ASX:DRM)	123.6	1.0x	1.0x
10/27/2018	PT Renuka Coalindo Tbk (IDX:SQMI)	PT Wilton Investment	248.0	-	-
10/25/2018	KG Mining (Bald Mountain) Inc.	The Bald Mountain Exploration Joint Venture	15.5	-	-
10/12/2018	OZD Asia Pte Ltd.	Boroo Gold LLC/Centerra Gold Mongolia LLC	35.0	-	-
09/30/2018	Americas Silver Corporation (TSX:USA)	Pershing Gold Corporation (NasdaqGM:PGLC)	65.9	-	-
09/24/2018	Barrick Gold Corporation (TSX:ABX)	Barrick Gold (Holdings) Limited	6,515.5	5.0x	5.0x
09/10/2018	Ramelius Resources Limited (ASX:RMS)	Explaurum Limited	47.4	-	-
09/04/2018	BHP Group (ASX:BHP)	SolGold plc (LSE:SOLG)	35.2	-	-
08/10/2018	-	Pretium Resources Inc. (TSX:PVG)	27.0	3.9x	3.9x
08/09/2018	PT Danusa Tambang Nusantara	PT Agincourt Resources	1,140.0	-	-
08/04/2018	Shengda Mining Co.Ltd. (SZSE:000603)	Inner Mongolia Jinshan Mining Co., Ltd.	181.7	-	-
08/02/2018	Coeur Mining, Inc. (NYSE:CDE)	Northern Empire Resources Corp. (TSXV:NM)	80.8	-	-
07/17/2018	Inca One Gold Corp. (TSXV:IO)	Anthem United Inc.	7.2	0.3x	0.3x
07/05/2018	Goldcorp Inc. (TSX:G)	Gold Standard Ventures Corp (TSX:GSV)	9.7	-	-
06/25/2018	Bardoc Gold Limited (ASX:BDC)	Excelsior Gold Limited	25.2	0.9x	0.9x
06/18/2018	Bonterra Resources Inc. (TSXV:BTR)	Metanor Resources Inc. (TSXV:MTO)	57.7	2.3x	2.3x
06/04/2018	Consolidated Mining & Civil Pty Ltd	Benagerie Gold Pty Ltd	10.3	-	-
05/15/2018	Mako Mining Corp. (TSXV:MKO)	Marlin Gold Mining Ltd. (TSXV:MLN)	80.1	2.1x	2.1x
05/14/2018	Rio2 Limited (TSXV:RIO)	Atacama Pacific Gold Corporation	63.8	-	-
05/10/2018	Kirkland Lake Gold Ltd. (TSX:KL)	Novo Resources Corp. (OTCPK:NSRP.F)	15.6	-	-
05/10/2018	Metalla Royalty & Streaming Ltd. (TSXV:MTA)	ValGold Resources Ltd. (TSXV:VAL)	6.5	-	-
05/05/2018	Joint-Stock Company AK Altynalmas	Aktogai Mys LLC	33.5	-	-
04/23/2018	-	Belo Sun Mining Corp (TSX:BSX)	11.6	-	-
04/23/2018	-	Belo Sun Mining Corp (TSX:BSX)	7.8	-	-
		Mean		2.0x	2.0x
		Median		2.1x	2.1x

Source: Capital IQ as of 03/29/2019



DIVERSIFIED MINING

COMPARABLE TABLES

Major Diversified Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Teck Resources Limited	TSX:TECK.B	10%	(10%)	\$23.13	59%	13,116	4,045	16,048	9,207	3,548	1.7x	1.3x	1.4x	4.5x	3.1x	3.4x	39%
First Quantum Minerals	TSX:FM	43%	(19%)	\$11.34	49%	7,767	8,698	16,606	3,966	1,723	4.2x	3.8x	2.9x	9.6x	8.5x	5.9x	43%
Lundin Mining	TSX:LUN	15%	(29%)	\$4.64	52%	3,416	11	3,107	1,726	621	1.8x	1.7x	1.4x	5.0x	4.4x	3.0x	36%
Turquoise Hill Resources	TSX:TRQ	6%	(46%)	\$1.65	39%	3,312	4,187	5,021	1,180	370	4.3x	4.8x	3.7x	13.6x	NM	10.2x	31%
Hudbay Minerals Inc.	TSX:HBM	52%	1%	\$7.15	73%	1,867	1,055	2,418	1,472	630	1.6x	1.8x	1.8x	3.8x	4.8x	4.1x	43%
										Mean	2.7x	2.7x	2.2x	7.3x	5.2x	5.3x	38%
										Median	1.8x	1.8x	1.8x	5.0x	4.6x	4.1x	39%

Intermediate Diversified Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN	
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E		
Energy Fuels Inc.	TSX:EFR	21%	97%	\$3.31	62%	303	16	281	32	(16)	8.9x	3.8x	1.8x	NM	NM	6.2x	NM	
Imperial Metals Corp	TSX:III	103%	30%	\$2.15	62%	274	639	911	264	22	3.5x	4.2x	6.1x	NM	NM	NM	8%	
Sierra Metals Inc.	AMEX:SMTS	(6%)	(36%)	\$1.63	56%	264	56	330	232	87	1.4x	0.9x	0.7x	3.8x	2.0x	1.6x	38%	
Capstone Mining Corp.	TSX:CS	13%	(49%)	\$0.48	37%	191	217	458	416	124	1.1x	1.1x	1.0x	3.7x	4.0x	3.2x	30%	
Panoramic Resources	ASX:PAN	18%	(15%)	\$0.30	45%	151	30	171	1	(5)	NM	1.4x	0.8x	NM	4.1x	2.0x	NM	
											Mean	3.7x	2.3x	2.1x	3.7x	3.3x	3.3x	25%
											Median	2.4x	1.4x	1.0x	3.7x	4.0x	2.6x	30%

Source: Capital IQ as of 03/29/2019

DIVERSIFIED MINING

COMPARABLE TABLES

Junior Diversified Miner Index

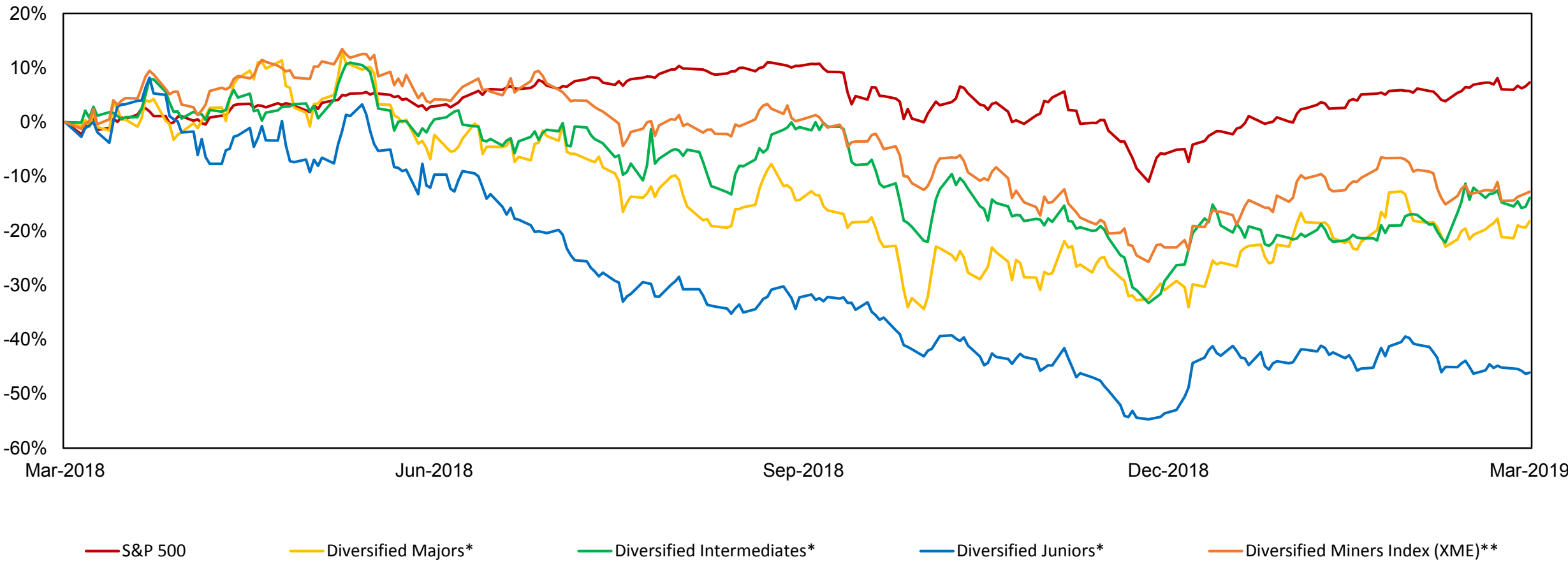
	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Taseko Mines Limited	TSX:TKO	24%	(50%)	\$0.58	32%	144	261	373	252	67	1.5x	1.0x	1.0x	5.6x	3.6x	3.0x	26%
Tinka Resources Limited	TSXV:TK	7%	(27%)	\$0.26	45%	68	-	59	-	(2)	NM	NM	NM	NM	NM	NM	NM
Western Copper and Gold	TSX:WRN	36%	(28%)	\$0.57	44%	57	-	54	-	-	NM	NM	NM	NM	NM	NM	NM
Falco Resources Ltd.	TSXV:FPC	11%	(61%)	\$0.24	30%	50	15	64	-	(4)	NM	NM	NM	NM	NM	NM	NM
Atico Mining Corporation	TSXV:ATY	13%	(51%)	\$0.24	36%	24	5	29	56	20	0.5x	NM	NM	1.4x	NM	NM	35%
Tasman Resources Ltd	ASX:TAS	(32%)	(37%)	\$0.03	28%	14	1	21	1	(6)	15.6x	NM	NM	NM	NM	NM	NM

Mean	5.9x	1.0x	1.0x	3.5x	3.6x	3.0x	31%
Median	1.5x	1.0x	1.0x	3.5x	3.6x	3.0x	31%

Source: Capital IQ as of 03/29/2019



DIVERSIFIED MINING LTM EQUITY PERFORMANCE
(NOBLE INDEX SELECTION)



* Noble Proprietary Sector (index composed of companies in the comparable table)
** SPDR Gold Shares (refer to disclosure section for more information)
Source: Capital IQ as of 03/29/2019

DIVERSIFIED MINING LTM GLOBAL M&A ACTIVITY

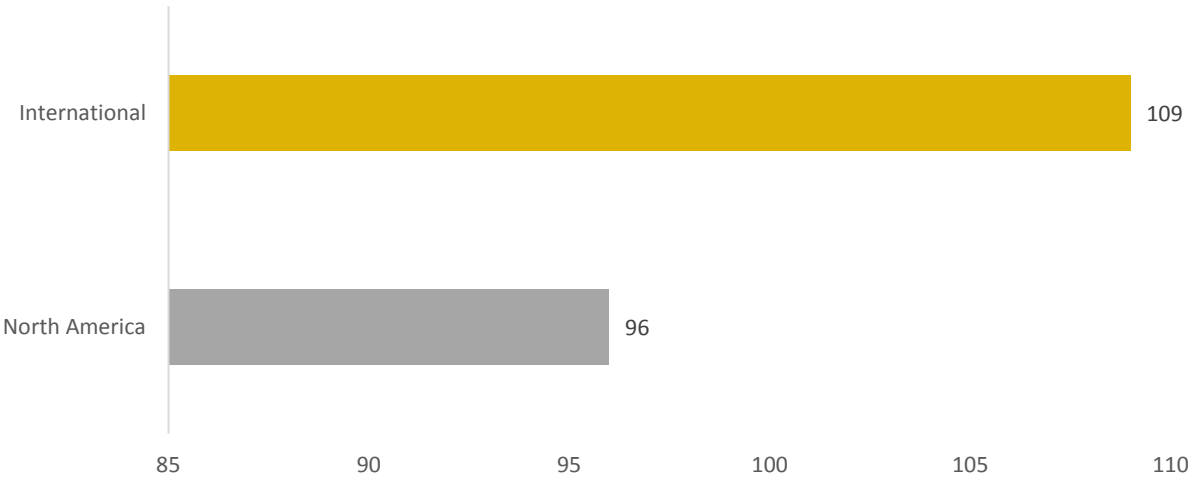
Date	Buyer	Seller	Transaction Value	EV/Revenue	EV/EBITDA
04/01/2019	Jervois Mining Limited (ASX:JRV)	eCobalt Solutions Inc. (TSX:ECS)	41.5	-	-
03/26/2019	Wesfarmers Limited (ASX:WES)	Lynas Corporation Limited (ASX:LYC)	1,304.3	5.0x	31.9x
03/15/2019	Sichuan Jiangxi Copper Rare Earth Co., Ltd.	Liangshan Mining & Smelting Investment Holding Co., Ltd.	11.2	-	-
03/11/2019	CD Capital Asset Management Ltd,	Verdant Minerals Ltd (ASX:VRM)	17.2	-	-
03/09/2019	Puyang Refractories Group Co., Ltd. (SZSE:002225)	Tibet Changdu Xiangchen Magnesium Industry Co., Ltd.	89.4	-	-
03/08/2019	Phoenix Bridge International Holdings Group Investment Company, Limited	Anchor Resources Limited (ASX:AHR)	12.8	-	-
02/27/2019	Xuchen International Co., Ltd.	Nzuri Copper Limited (ASX:NZC)	82.8	-	-
01/29/2019	Chengyu Vanadium Titano Technology Ltd	Huili County Caitong Iron and Titanium Co., Ltd.	81.7	-	-
01/22/2019	Jervois Mining Limited (ASX:JRV)	M2 Cobalt Corp. (TSXV:MC)	12.6	-	-
01/15/2019	Pluspetrol Resources Corporation B.V.	LSC Lithium Corporation (TSXV:LSC)	85.1	-	-
01/01/2019	Cobalt 27 Capital Corp. (TSXV:KBLT)	Highlands Pacific Limited (ASX:HIG)	201.4	-	26.7x
11/12/2018	Tantalex Resources Corporation (CNSX:TTX)	International Cobalt Corp. (CNSX:CO)	11.6	-	-
11/11/2018	Tiger Resort Asia Limited	Asiabest Group International, Inc. (PSE:ABG)	6.1	-	-
11/08/2018	Yongxing Special Stainless Steel Co., Ltd. (SZSE:002756)	Jiangxi Xuli Mining Co., Ltd.	28.4	7.0x	-
10/10/2018	-	Largo Resources Ltd. (TSX:LGO)	28.8	3.7x	5.2x
09/26/2018	Chengtun Mining Group Co., Ltd. (SHSE:600711)	Sihuan Zinc & Germanium Technology Co., Ltd.	446.8	1.3x	15.7x
09/24/2018	Great Panther Mining Limited (TSX:GPR)	Great Panther Mining Limited	182.7	1.1x	-
09/13/2018	Bushveld Minerals Limited (AIM:BMN)	Strategic Minerals Corporation	17.5	-	-
09/13/2018	Ramelius Resources Limited (ASX:RMS)	Black Oak Minerals Limited	8.0	-	-
08/28/2018	Virtus Mining Ltd.	Aldridge Minerals Inc. (TSXV:AGM)	45.1	-	-
08/14/2018	Osisko Mining Inc. (TSX:OSK)	Beaufield Resources Inc. (TSXV:BFD)	9.6	-	-
07/26/2018	-	Advantage Lithium Corp. (TSXV:AAL)	5.1	-	-
07/05/2018	Tuochuan Capital Limited	Hanking (Indonesia) Mining Limited	52.7	-	-
07/02/2018	-	Vedanta Resources Limited	1,011.1	1.3x	4.8x
06/29/2018	Sims Metal Management Limited (ASX:SGM)	Sims Pacific Metals Limited	28.5	-	-
06/27/2018	Public Joint Stock Company Dorogobuzh	CJSC Verkhnekamsk Potash Company	250.5	-	-
06/18/2018	South32 Limited (ASX:S32)	Arizona Mining Inc.	1,341.8	-	-
05/17/2018	Greyhorse Mining (Pty) Ltd.	Dundee Precious Metals Tsumeb (Pty) Ltd.	20.0	-	-
04/27/2018	ERAMET S.A. (ENXTPA:ERA)	Mineral Deposits Limited	245.2	-	-
04/24/2018	The Electrum Group LLC	Trilogy Metals Inc. (TSX:TMQ)	5.8	-	-
		Mean		3.2x	16.9x
		Median		2.5x	15.7x

Source: Capital IQ as of 03/29/2019

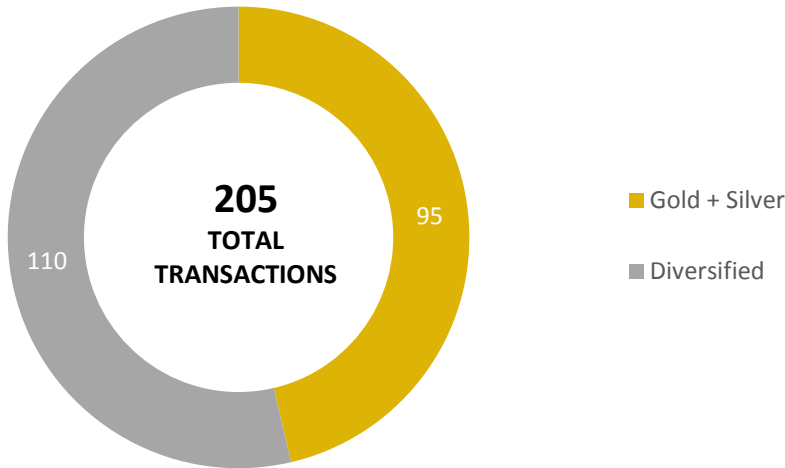


LTM MINING INDUSTRY M&A SUMMARY

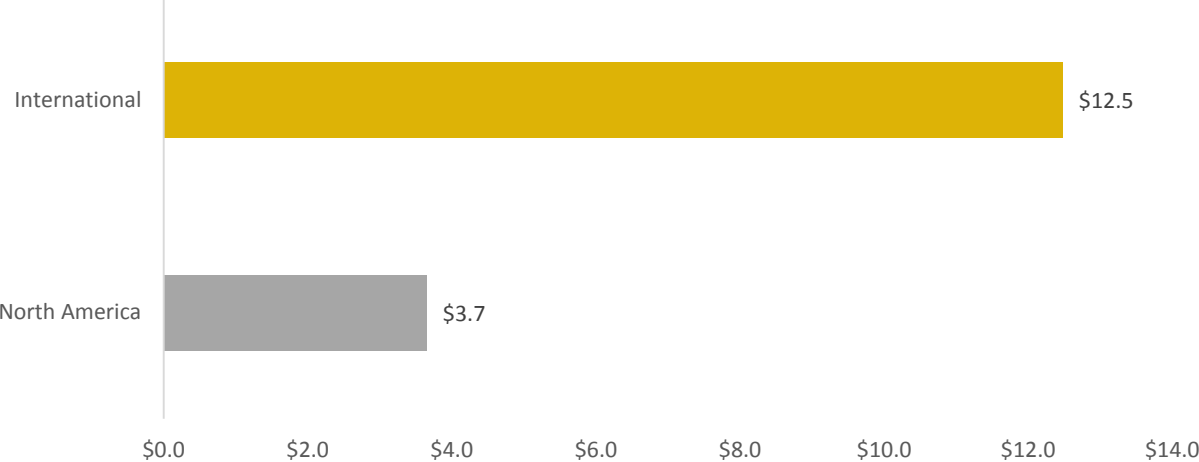
NORTH AMERICA VS INTERNATIONAL
TOTAL TRANSACTIONS *(Number of transactions)*



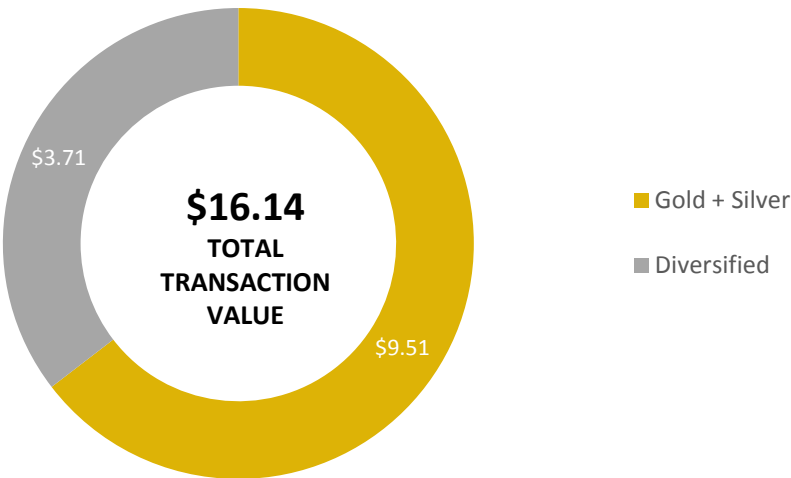
DEAL VALUE PER SECTOR
(Number of transactions)



NORTH AMERICA VS INTERNATIONAL
TOTAL TRANSACTIONS *(Values in \$B)*



TOTAL TRANSACTION VALUE
(Values in \$B)



Source: Capital IQ as of 03/29/2019



NOBLE QUARTERLY HIGHLIGHTS

Jupiter Gold Corporation (OTC: JUPGF)

Industry: Metals and Mining - Gold

Jupiter Gold Corporation is a exploration stage mining company with a focus on gold projects in Brazil. The company owns 6 mining projects, 11 mineral rights and about 98,000 acres across Brazil. Jupiter Gold also owns a fully operational gold recovery plant in Brazil, recently placed in a mining concession. The plant utilizes centrifugation for recovery of particulate gold. Jupiter Gold Corporation is a subsidiary of Brazil Minerals Inc. (OTCPK:BMIX), a exploration company with a diversified portfolio of projects focusing on gold, diamond, cobalt, copper, iron, lithium, manganese and nickel.

1st Quarter News Highlight:

On February 22, 2019 Jupiter Gold announced the addition of a primary gold project to its asset base. The property consists of more than 4,750 acres in the direct continuation of a gold trend with settler activity. Samples collected by the Company from a trench opened by such settlers and analyzed in a SGS-Geosol laboratory showed results as high as 71 grams of gold per ton in quartz veins hosted in amphibolites, phyllites, and granodiorites.



BeMetals Corp. (TSXV:BMET)

Industry: Metals and Mining – Precious Metals and Minerals

BeMetals Corp. is an exploration and development mining company focusing on acquiring base metal projects. The company founders are well known executives in the industry. BeMetals Corp.'s current project portfolio includes the Pangen Copper Project, an exploration copper project in Zambia, and South Mountain Project, a newly acquired zinc-silver exploration project in Idaho.

1st Quarter News Highlight:

On February 28, 2019, BeMetals Corp. entered into an option agreement with Thunder Mountain Gold, Inc. to acquire up to 100% interest in the South Mountain Project, in southwest Idaho. The South Mountain Project is a zinc-silver focused polymetallic development project located primarily on private property, which was the subject of high-grade historic mining up until the 1960's. The company later announced a \$5 million financing on April 4, 2019. The proceeds of this raise will go to development on the South Mountain Project.



Rise Gold Corp. (OTCPK:RYES)

Industry: Metals and Mining – Precious Metals and Minerals

Rise Gold is an exploration-stage mining company. The Company's principal asset is the historic past-producing Idaho-Maryland Gold Mine located in Nevada County, California. The Idaho-Maryland Gold Mine is a past producing gold mine with total past production of 2,414,000 oz of gold at an average mill head grade of 17 gpt gold from 1866-1955. Historic production at the Idaho-Maryland Mine is disclosed in the Technical Report on the Idaho-Maryland Project dated.

1st Quarter News Highlight:

On March 19, 2019, Rise Gold Corp. announced additional assay results from on-going diamond core drilling at the Idaho-Maryland Gold Project. The company believes the drill program continued to be successful showing high grade mineralization. Drill hole 19-13A assayed 90.4 gpt gold over 4.27 m (2.6 oz per ton / 14 feet). Additional drilling targeting Idaho #1 Vein is currently in progress.



Source: Company Press Releases

$$R + (e^2 + p^2) = \text{NF}$$

NOBLE CAPITAL MARKETS

NOBLE CAPITAL MARKETS

NOBLE CAPITAL MARKETS is a research-driven investment and merchant bank focused on small cap, emerging growth companies in the healthcare, technology, media and natural resources sectors. That's what we are. Who we are is what makes us different.

Our people are talented, dedicated, experienced professionals who come together with a common cause; advising on long-term client solutions by employing innovative, collaborative and responsive strategies. We're passionate and personable. We approach things from our clients' perspective.

We know that developing lasting relationships is reliant upon putting our clients' interests before ours. We understand the impact of our services. Insightful advisory and effective capital procurement can change lives. Empowering our clients to create employment, engineer technological and medical breakthroughs, producing products and services that lay the foundation for the future. For more than 30 years these have been our guiding principles. While much has changed over the three decades since we began, these core values and our reputation have not. Our clients must know what to expect from us. Then we can strive to exceed expectations.

A SIMPLE FORMULA

OUR VALUE PROPOSITION.

It starts with research with a fundamental belief that information guides the management process, NOBLE understands that there is no short-path to success. With this as a solid foundation, apply experience and execution delivered by people with passion. This is our formula to add value to your creation.

Research + Experience & Execution + People with Passion = Value

FULL-SERVICE INVESTMENT BANK

- Established 1984.
- Private firm, employee owned.
- Built on commitment to provide value and support for our clients.

FOCUSED INSTITUTIONAL SALES AND TRADING

- Seasoned sales and sales trading team.
- Long standing relationships with premier growth- focused investors.

INVESTMENT BANKING COMMITMENT

- Proven track record.
- Senior level attention to every client and transaction.
- Ability to deliver complete "mind share" of NOBLE on all transactions.

RESEARCH DRIVEN CAPITAL MARKETS PLATFORM

- Experience team of Research Analysts covering approximately 100 companies.
- Focus on Technology, Media, Healthcare and Natural Resources.
- Strong Institutional Sponsorship.

$$R + (e^2 + p^2) = \pi$$

INVESTMENT BANKING

Our investment banking team, together with our well-recognized equity research analysts and the equity capital markets group, provide our clients with fundamental capital markets advisory and support - prior, during and most importantly, after a transaction. NOBLE's investment banking team works closely with the management and Board of our corporate clients in order to fully understand operational and financial objectives. With this knowledge our banking team will develop an efficient and effective advisory program which offers a variety of services including:

EQUITY CAPITAL MARKETS

- Secondary and Follow-on Offerings
- Registered Direct Offerings
- Initial Public Offerings
- At the market Offerings (ATM's)
- PIPEs/Private Sale Offerings

DEBT CAPITAL MARKETS

- Senior Debt
- Mezzanine
- Convertible Debt
- Bridge Financings

ADVISORY SERVICES

- Merger & Acquisitions
- Fairness Opinions
- Valuation Services

SELECT NATURAL RESOURCES TRANSACTIONS

 <p>Gravitas Resources Corporation (PRIVATE)</p> <p>\$4,200,000</p> <p>Private Placement Placement Agent</p>  <p>February 2019</p>	 <p>SAILFISH ROYALTY CORP. (TSX-V: FISH)</p> <p>Restructuring Advisory</p> <p>Fairness Opinion</p>  <p>August 2018</p>	 <p>ORCHLIGHT ENERGY (TRCH)</p> <p>Advisory</p> <p>Corporate Advisory</p>  <p>March 2018</p>	 <p>SIERRA METALS</p> <p>\$55,000,000</p> <p>At-The-Market Offering (ATM) Agent</p>  <p>October 2017</p>	 <p>MARLIN GOLD MINING LTD. (MLN)</p> <p>Advisory</p> <p>Corporate Advisory</p>  <p>February 2017</p>	 <p>SES SYNTHESIS ENERGY SYSTEMS (SYMx)</p> <p>Advisory</p> <p>Corporate Advisory</p>  <p>January 2017</p>	 <p>AVINO SILVER & GOLD MINES LTD. (ASM)</p> <p>\$800,000</p> <p>Private Placement of Registered Securities Sole Placement Agent</p>  <p>March 2016</p>
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$$R + (e^2 + p^2) = \pi$$

VALUATION SERVICES

NOBLE's Valuation and Advisory Services team specializes in providing business and intangible asset valuations, fairness opinions, financial and strategic analysis, and transaction support services covering a broad spectrum of industries and situations from early stage, middle market and Fortune 500 companies and capital market constituents. NOBLE's team is made up of professionals with numerous accreditations and bring excellence in accounting, taxation, and financial due diligence to provide companies with valuation advice for a multitude of purposes.

Valuation – NOBLE's professionals have significant experience in the valuation of privately owned and public businesses across a wide range of industries. We perform an extensive analysis of the business as well as evaluate industry trends and various other factors in order to inform our clients as to the likely range of value they can expect. Our services are characterized by intellectual and analytical rigor and our conclusions are backed by thorough documentation.

Chief Accounting Officers, Corporate Controllers, CFOs, and Corporate Boards rely on Noble's experienced valuation professionals to produce sophisticated, supportable, and timely valuations to assist in complying with financial reporting requirements, including:

- Purchase price allocation and fresh start accounting
- Goodwill and long-lived asset impairment testing
- Tangible asset valuation
- Fair Value measurement of financial assets & liabilities

Opinions - Whether our clients are looking to fulfill their fiduciary duties, mitigate risk or determine corporate value, we are there throughout the transaction process to offer objective advice based on rigorous analysis. We work on behalf of boards of directors, investors, trustees and other corporate leaders to advise and provide opinions on a wide range of transactions.

We have advised Corporate Boards, special transaction committees, independent trustees, management and other fiduciaries of middle market public and private companies on the financial aspects of a transaction. Our independent advice withstands scrutiny from shareholders, bondholders, the SEC, IRS, or counterparties to a transaction

MERCHANT BANKING

Our Principal Investment focus is primarily on private and small-cap public (\$10mill to \$50mill market caps) companies in industries within NOBLE's research verticals. Investments are made directly by NOBLE and its affiliates and may also involve syndicate participants. We work to identify those companies with game-changing or superior products and technologies that have management teams with proven track-records of success. NOBLE structures investments to meet a company's capital needs whether its growth capital, liquidity or debt repayment. Capital commitment ranges from \$200k to \$2million principal and \$2million above with syndicate.

The scope of our Merchant Banking activities includes:

- Targeting domestic companies within our areas of focus and expertise
- Analyzing a company's opportunities and assessing its risks within their respective industry
- Structuring, negotiating and executing the transaction
- Work in assessing the appropriate time and manner in which to harvest the investment

NOBLE's Merchant Banking Team works continuously with our portfolio companies to assist the management team and Board of Directors to create value and grow their businesses to facilitate long-term shareholder value. Through our extensive sector research coverage, institutional investor non-deal road shows, equity conferences and market making, we blend a powerful mix of capital markets acumen to procure success.

$$R + (e^2 + p^2) = \gamma f$$

INVESTMENT BANKING TEAM

Richard Giles, Managing Director

rgiles@noblecapitalmarkets.com – 617.692.9346

- Joined NOBLE in 2010 as Head of the Technology, Media & Telecommunications Investment Banking Group
- 25 years of investment banking experience.
- Executed more than 100 M&A and capital raising transactions totaling \$10+ billion
- Former head of Stifel Nicolaus' Technology Group.
- Former head of A.G. Edwards' Emerging Growth Group and member of Investment Committee for A.G. Edwards Capital
- A.B. Harvard College; M.B.A., Harvard Business School

Francisco Penafiel, Managing Director

fpenafiel@noblecapitalmarkets.com – 561.994.5740

- Executed M&A and capital raising transactions totaling over \$1 billion dollars in value
- 7 years of sell side equity research experience, covering enterprise & infrastructure software, business services, media, communications, and banks
- 6 years of portfolio managing experience
- Manage the business development efforts in LATAM for NOBLE
- Engineering, IT & Statistics, Escuela Superior Politecnica (Guayaquil, Ecuador); M.S. Economics, Florida Atlantic University

Juan Arvelo, Director

jarvelo@noblecapitalmarkets.com – 561.994.5731

- More than 18 years of corporate finance and capital markets experience, with a special focus on M&A, restructuring and capital raising transactions.
- Previous Director at Enkeros Investments and Activa Capital Markets
- Former CFO of LS Energia
- Main focus in the QSR, financial institutions and energy sectors
- Managed corporate finance and recoveries division at PricewaterhouseCoopers (PwC)
- B.S. Economics UCAB; M.S. Finance IESA; MBA Babson College

Joseph Hain - Director

jhain@noblecapitalmarkets.com – 561.999.2265

- Prior experience holding senior positions at Robotti & Company, Wynston Hill Capital, SternAegis Ventures, WestPark Capital, and Tejas Securities
- Experience working with institutional, retail and HNW clients
- B.S. SUNY Albany with concentration in Biology, Chemistry, and Physics
- Holds various FINRA licenses

Brittnee Fatigate, Analyst

bfatigate@noblecapitalmarkets.com – 561.999.2264

- Joined Noble Capital Markets in January 2017
- Has completed multiple M&A and capital raising assignments, accounting for nearly \$150 million+ of transaction value
- Held previous position as an accounting assistant at a privately held manufacturing company
- B.S. Finance, Florida Atlantic University

Adam Carey, Analyst

acarey@noblecapitalmarkets.com – 561.998.5482

- Joined Noble Capital Markets in October 2018
- Previously worked as a private equity analyst at Northern Capital Partners
- B.S. Finance and Applied Economics, University of Minnesota, Twin Cities

$$R + (e^2 + p^2) = \pi$$

SALES & TRADING

Dan Pollitt

Head of Institutional Equity Trading

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Vincent Gioeni

Director of Institutional Sales

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