



November 16, 2023

Tracking the Junior Golds

Catalysts and updated sector valuations

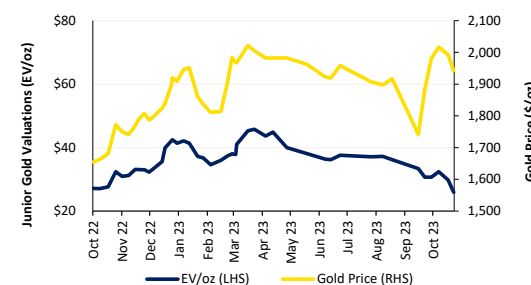
Our view: Gold has rebounded from six-month lows to once again test the \$2,000/oz level, but junior gold valuations have barely noticed and remain depressed vs. 2020/2021 levels. We continue to see significant value in the group, however realizing that value will depend on how the M&A market evolves, access to construction funding, and equity market support for ongoing exploration and development. **We highlight 2023/2024 exploration, study and construction catalysts for over 120 covered and uncovered companies starting on page 10.**

Key Takeaways:

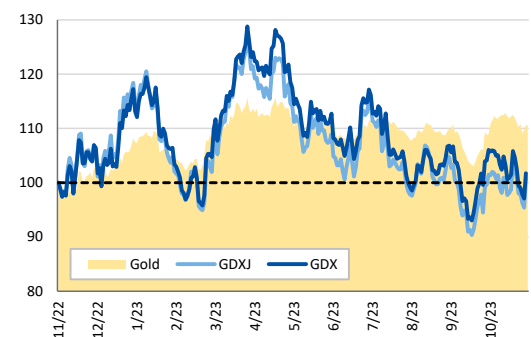
- **What rally?** While gold and silver have gained 7% / 12% since recent lows in early October, the precious metals explorers and developers we track **continue to trade lower, now at an average \$26/oz**, down ~40% from \$46/oz earlier in 2023 with gold at similar levels, and well off 2020 highs over \$80/oz. On a P/NAV basis, **we estimate a consensus average of ~0.32x NAV**, down ~40% from levels seen in summer 2022. The junior universe we follow has seen a ~5% average price decline over the last 12 months, underperforming gold by ~15%, in line with the performance of the GDXJ index.
- **Near-term studies and updates are expected** from **MFG (1H24), RGD (1Q24), PDI (4Q23), CKG (2H24), GGD (4Q23), RUP (2Q24), PRB (1H24), NUAG (1Q24), LGD (1H24), ITR (2024), TLG (1Q24), TAU (3Q24), ME (2H24), DSV (1H24), VZLA (2024)**
- **Significant resource updates are expected** from **AMX (1Q24), AZM (4Q23), DC (2024), TAU (2Q24), LR (4Q23), IAU (2024), ABRA (4Q23), WRLG (2024) ECR (2024), GTWO (4Q23)**
- **2024 graduates to production** include **BGL, ADT1, GMIN, ARTG, MOZ** (pending acquisition) and **AOT**. See our recent **ramp-up report** highlighting stock performance ahead of and during commissioning and early production.
- **The gap between early and late stage developers continues to grow.** **Valuations have held up best** for developers and explorers with higher quality projects, able to attract what we still see as limited available capital from public markets, which could continue to put pressure on **exploration/development budgets** in 2024. Companies we track in construction have outperformed earlier-stage peers YTD, especially those with production in 2024.
- **M&A continues to loom, waiting for direction.** The recent **MOZ takeout announcement** notwithstanding, producers in general have not (yet?) broadly taken advantage of lower developer valuations. If fund flows into the sector remain constrained, we believe that smaller-scale / earlier stage projects with limited (or expensive) access to capital could be increasingly targeted by relatively cash-rich producers to backfill portfolios.
- **We continue to focus on high-quality, advanced projects in good jurisdictions either in construction or getting close** and **highlight GMIN, ARTG, SKE and OSK** as favoured names on that basis.

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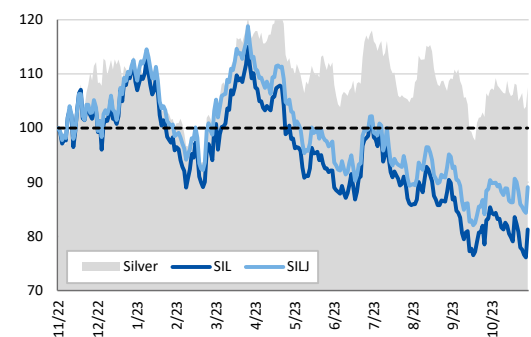
Junior gold valuations at \$26/oz



Gold vs. GDX, GDXJ, TTM



Silver vs. SIL, SILJ, TTM

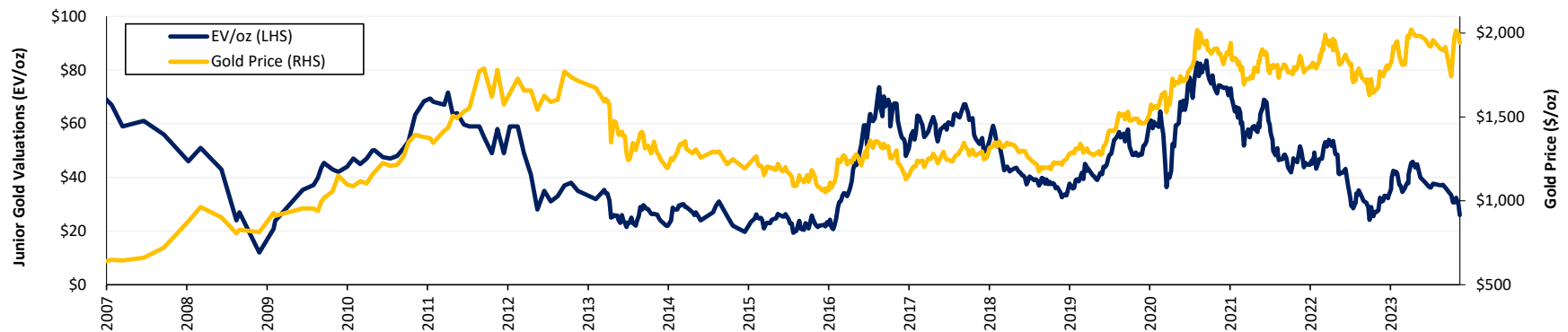


Source: FactSet, Company Reports, RBC Capital Markets



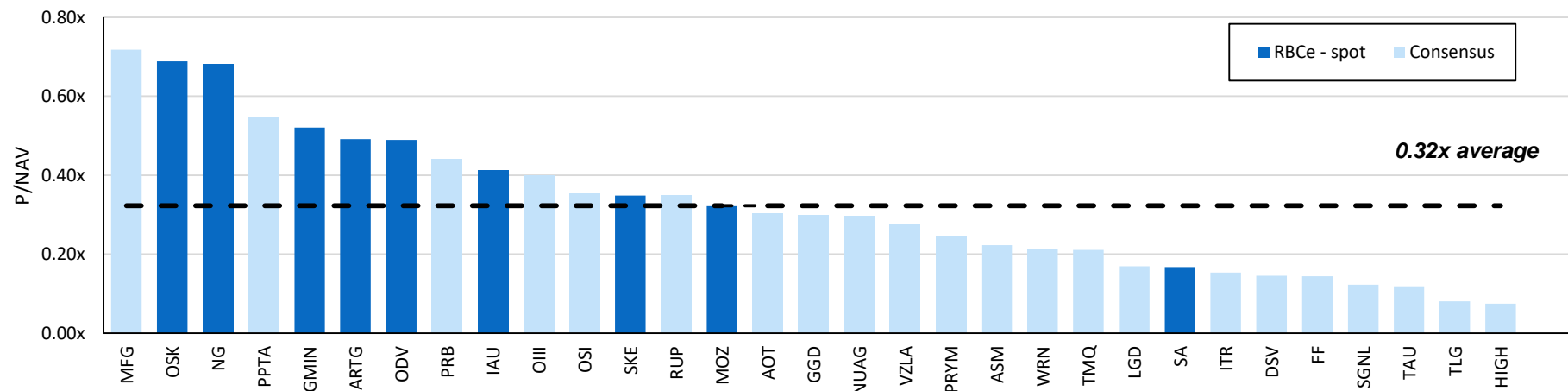
Key charts / relative valuation

Exhibit 1 - Junior gold valuations at \$26/oz, down ~40% from 2023 highs despite the stronger gold tape



Source: Company reports, Bloomberg, FactSet, RBC Capital Markets

Exhibit 2 - Junior precious metal explorer/developer P/NAV valuations



Source: FactSet, RBC Capital Markets estimates

Exhibit 3 - Project NPV/Capex ratio at \$1,600, \$1,800 and \$2,000/oz Au

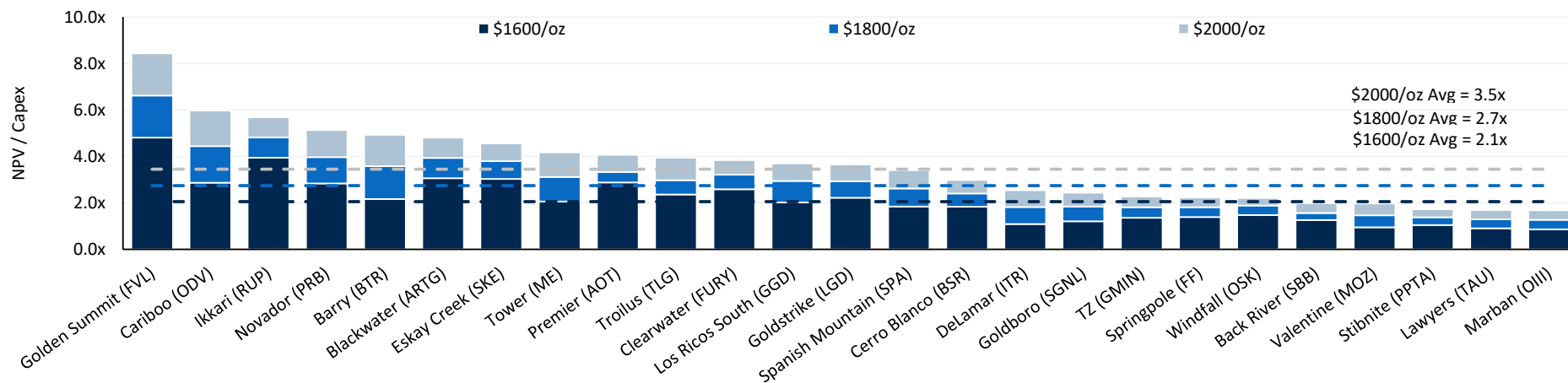


Exhibit 4 - Junior gold/silver exploration budgets by year

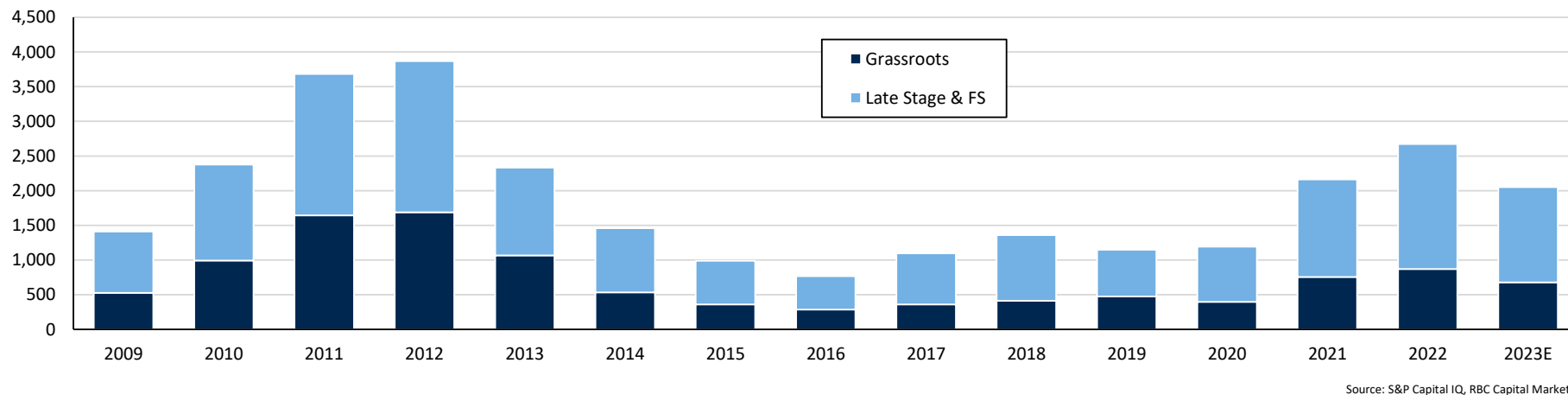
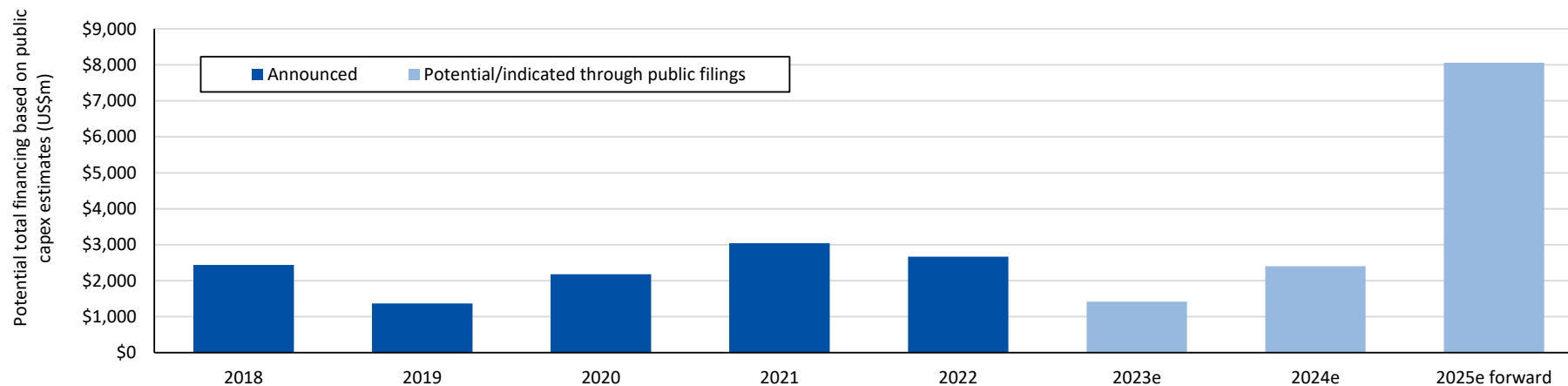
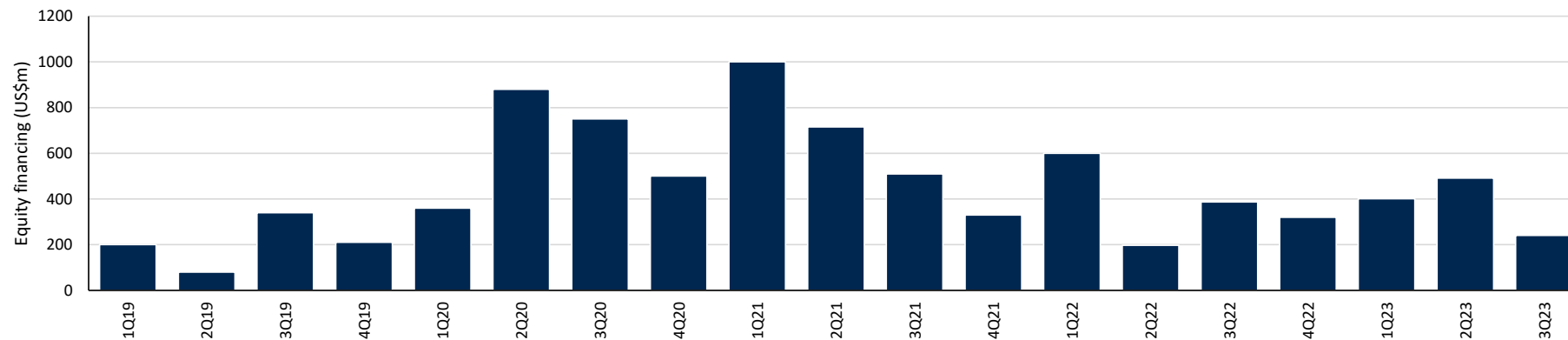


Exhibit 5 - Announced and potential future project financing



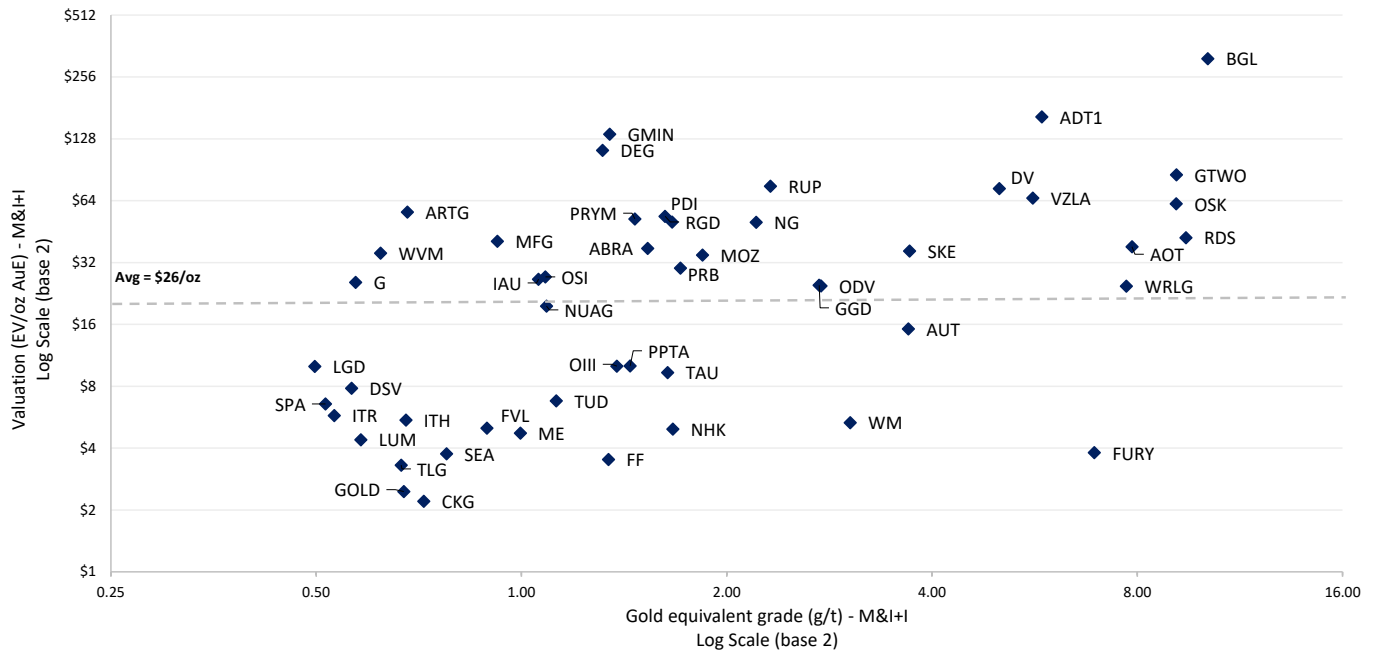
Source: Company Reports, S&P Capital IQ, Bloomberg, RBC Capital Markets

Exhibit 6 - Junior precious metal equity financing by quarter



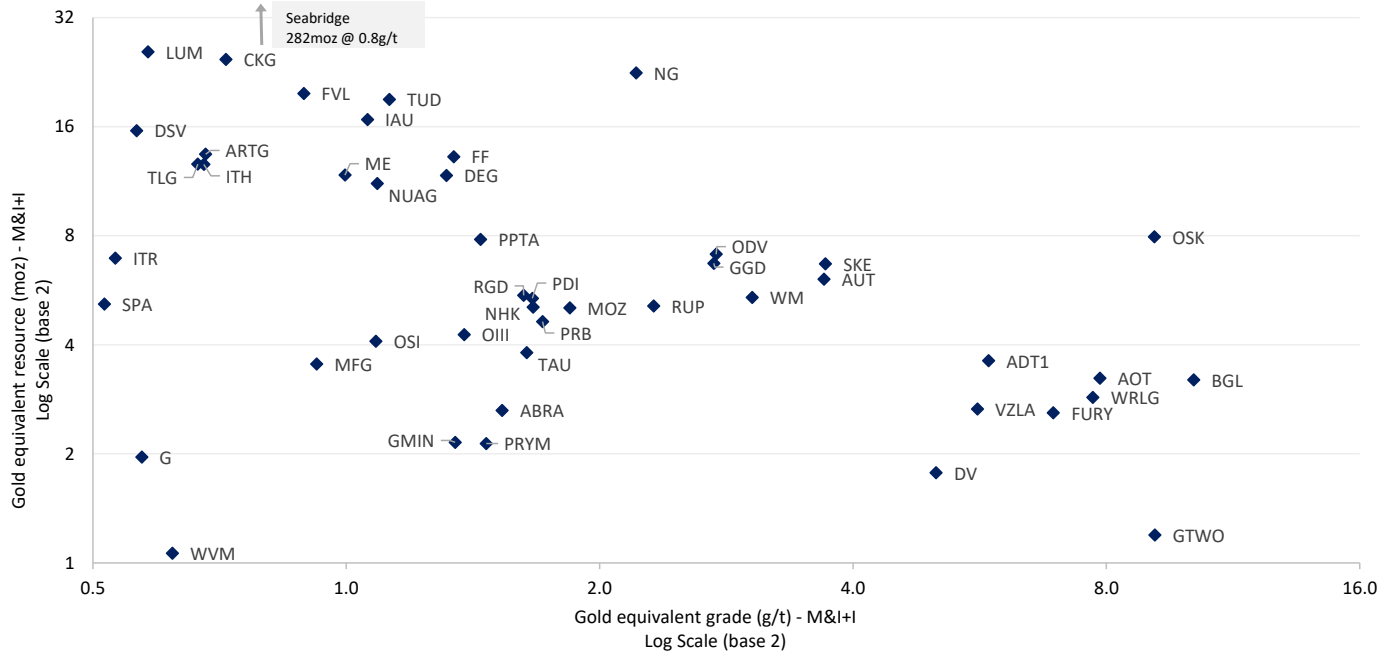
Source: Company Reports, Bloomberg, RBC Capital Markets

Exhibit 7 - Developer EV/oz valuations vs. AuEq Grade



Source: Company reports, FactSet, RBC Capital Markets

Exhibit 8 - Junior resources size vs. grade



Source: Company reports, FactSet, RBC Capital Markets

RBC Junior Mining Watch List – Pre-Resource Stage

Pre-Resource							
Company	Ticker - Exch	Price (\$/sh)	TTM Perf.	Mkt. Cap US\$m	EV US\$m	Working capital US\$m	Area of Major Exploration
Amex Exploration	AMX-CA	C\$1.20	(43%)	90	80	10	Quebec
Angus Gold	GUS-CA	C\$0.48	(25%)	17	13	4	Ontario
Aurion Resources	AU-CA	C\$0.42	(16%)	40	24	9	Finland
Azimut Exploration	AZM-CA	C\$0.82	38%	49	36	10	Quebec
Collective Mining	CNL-CA	C\$3.84	90%	152	137	14	Colombia
Dakota Gold	DC-US	\$2.41	(33%)	207	177	30	South Dakota
Eskay Mining	ESK-CA	C\$0.34	(73%)	45	37	3	British Columbia
Goliath Resources	GOT-CA	C\$0.76	(47%)	53	47	7	British Columbia
Great Pacific Gold	FSX-CA	C\$0.55	47%	34	23	10	British Columbia
Japan Gold	JG-CA	C\$0.08	(74%)	13	9	4	Japan
New Found Gold	NFG-CA	C\$4.79	1%	625	600	22	Newfoundland
Onyx Gold	ONYX-CA	C\$0.20	-	5	3	2	Yukon / Ontario
Puma Exploration	PUMA-CA	C\$0.12	(38%)	12	11	1	New Brunswick
Rackla Metals	RAK-CA	C\$0.13	(50%)	5	3	2	Yukon
Scottie Resources	SCOT-CA	C\$0.18	(26%)	35	31	4	British Columbia
Snowline Gold	SGD-CA	C\$4.00	44%	399	373	26	Yukon
U.S. GoldMining	USGO-US	\$6.10	-	76	62	14	Alaska
Western Alaska Minerals	WAM-CA	C\$0.96	(64%)	19	19	2	Alaska

Source: Company reports, FactSet, Bloomberg, RBC Capital Markets, priced at market close 15 Nov. AuEq based on spot metals prices; working capital adj. for subsequent capital raises

RBC Junior Mining Watch List – Resource Stage

Completed Resource												
Company	Ticker	Price (\$/sh)	TTM Perf.	Mkt. Cap US\$m	EV US\$m	Contained (000 oz) - AuEq		Grade (AuEq g/t)	Valuation (AuEq EV/oz)		Working capital US\$m	Area of Major Exploration
						M&I	M&I+I	M&I+I	M&I	M&I+I		
Augusta Gold	G-CA	C\$0.64	(66%)	26	49	1,670	1,961	0.57	29	25	(24)	Nevada
Auteco Minerals	AUT-AU	A\$0.03	(40%)	111	96	2,349	6,163	3.75	41	16	15	Ontario
Aftermath Silver	AAG-CA	C\$0.21	(32%)	31	36	2,987	4,061	1.76	12	9	0	Chile/Peru
Cartier Resources	ECR-CA	C\$0.08	(17%)	17	15	750	2,553	2.93	20	6	2	Quebec
Cassiar Gold	GLDC-CA	C\$0.26	(55%)	18	11	-	1,390	1.14	n.a.	8	7	Guyana
Defiance Silver	DEF-CA	C\$0.10	(41%)	16	12	3,452	4,099	0.57	4	3	4	Mexico
Dolly Varden Silver	DV-CA	C\$0.83	38%	154	137	587	1,793	5.08	234	77	16	British Columbia
G2 Goldfields	GTWO-CA	C\$0.78	23%	114	95	220	1,194	9.13	431	79	19	Guyana
Galway Metals	GWM-CA	C\$0.25	(75%)	14	9	1,386	3,159	3.06	6	3	5	New Brunswick / Quebec
Gold Terra Resource	YGT-CA	C\$0.07	(59%)	14	8	109	1,748	2.00	71	4	6	NWT
GoldMining	GOLD-CA	C\$1.15	(9%)	148	88	15,869	32,630	0.68	6	3	15	South America / Alaska
HighGold Mining	HIGH-CA	C\$0.28	(46%)	18	6	961	1,054	7.82	7	6	12	Alaska
Klondike Gold	KG-CA	C\$0.08	(35%)	10	10	468	580	0.64	21	17	1	Yukon
Maple Gold Mines	MGM-CA	C\$0.05	(70%)	11	7	256	1,518	1.09	26	4	5	Quebec
Mayfair Gold	MFG-CA	C\$2.25	79%	161	153	3,383	3,540	0.92	45	43	8	Ontario
Nighthawk Gold	NHK-CA	C\$0.38	7%	48	27	3,388	5,079	1.67	8	5	18	NWT
Predictive Discovery	PDI-AU	A\$0.23	0%	297	297	4,144	5,375	1.66	72	55	--	Guinea
Prime Mining	PRYM-CA	C\$1.56	5%	179	134	1,435	2,151	1.48	94	62	44	Mexico
Radisson Mining Resources	RDS-CA	C\$0.21	62%	43	39	501	950	9.43	78	41	3	Quebec
Reunion Gold	RGD-CA	C\$0.41	2%	313	294	3,007	5,475	1.62	98	54	19	French Guiana / Guyana
RosCan Gold	ROS-CA	C\$0.11	(39%)	30	30	923	1,104	1.05	32	27	0	Mali
Talisker Resources	TSK-CA	C\$0.26	(68%)	15	9	33	1,666	6.36	270	5	5	British Columbia
Tudor Gold	TUD-CA	C\$0.86	(25%)	137	128	14,531	19,138	1.13	9	7	9	British Columbia
Vanstar Mining Resources	VSR-CA	C\$0.37	13%	15	14	493	1,302	0.87	28	10	2	Quebec
Vizsla Silver	VZLA-CA	C\$1.39	(11%)	210	180	1,297	2,707	5.73	139	66	30	Mexico
West Red Lake Gold Mines	WRLG-CA	C\$0.52	10%	70	64	1,653	2,864	7.71	38	22	7	Ontario
Westhaven Gold	WHN-CA	C\$0.20	(49%)	20	17	651	826	5.95	26	20	3	British Columbia
White Gold	WGO-CA	C\$0.21	(42%)	25	22	1,153	2,095	1.86	19	10	3	Yukon
Average									69	25		
Median									29	13		

Source: Company reports, FactSet, Bloomberg, RBC Capital Markets, priced at market close 15 Nov. AuEq based on spot metals prices; working capital adj. for subsequent capital raises

RBC Junior Mining Watch List – PEA/PFS stage

Completed PEA/Pre-Feasibility Study												
Company	Ticker	Price (\$/sh)	TTM Perf.	Mkt. Cap US\$m	EV US\$m	Contained (000 oz) - AuEq		Grade (AuEq g/t)	Valuation (AuEq EV/oz)		Working capital US\$m	Area of Major Exploration
	0					M&I	M&I+I	M&I+I	M&I	M&I+I		
AbraSilver Resource	ABRA-CA	C\$0.28	(36%)	113	105	2,605	2,667	1.55	40	39	8	Argentina
Bonterra Resources	BTR-CA	C\$0.18	(45%)	17	14	1,240	3,022	5.67	11	5	2	Quebec
Chesapeake Gold	CKG-CA	C\$1.55	(22%)	68	52	21,831	24,667	0.72	2	2	16	Mexico
Discovery Silver	DSV-CA	C\$0.66	(56%)	190	145	14,427	16,474	0.60	10	9	44	Mexico
Excellon Resources	EXN-CA	C\$0.10	(81%)	6	15	3,057	3,853	1.97	5	4	(9)	Mexico/USA
First Mining Gold	FF-CA	C\$0.13	(43%)	75	50	9,378	13,222	1.34	5	4	5	Ontario / Quebec / Newfoundland
Freegold Ventures	FVL-CA	C\$0.36	(32%)	109	103	12,011	19,747	0.89	9	5	6	Alaska
Fury Gold Mines	FURY-CA	C\$0.48	(2%)	50	13	1,377	2,597	6.92	9	5	8	Quebec / Nunavut
Gogold Resources	GGD-CA	C\$1.25	(35%)	297	200	2,923	6,802	2.77	68	29	98	
i-80 Gold	IAU-CA	C\$1.84	(34%)	418	452	7,712	16,775	1.06	59	27	75	Nevada
Integra Resources	ITR-CA	C\$0.99	(58%)	50	47	6,084	6,988	0.54	8	7	3	Idaho
International Tower Hill	ITH-CA	C\$0.52	(30%)	74	72	11,461	12,588	0.68	6	6	2	Alaska
Liberty Gold	LGD-CA	C\$0.25	(41%)	61	42	3,538	4,317	0.50	12	10	17	Utah / Idaho
Lumina Gold	LUM-CA	C\$0.37	16%	102	110	21,187	25,885	0.59	5	4	(8)	Ecuador
Luminex Resources	LR-CA	C\$0.17	(17%)	22	16	2,474	7,004	0.65	6	2	3	Ecuador
Moneta Gold	ME-CA	C\$0.84	(50%)	75	61	4,265	11,761	1.00	14	5	13	Ontario
New Pacific Metals	NUAG-CA	C\$2.14	(30%)	287	232	9,052	11,527	1.13	26	20	54	Bolivia
O3 Mining	OIII-CA	C\$1.59	10%	86	42	2,808	4,269	1.38	15	10	13	Quebec
Probe Gold	PRB-CA	C\$1.31	1%	156	142	3,547	4,636	1.71	40	31	14	Quebec
Revival Gold	RVG-CA	C\$0.33	(45%)	27	20	2,423	4,613	1.05	8	4	8	Idaho
Rupert Resources	RUP-CA	C\$3.01	(31%)	443	402	3,860	5,120	2.32	104	78	40	Finland
Seabridge Gold	SEA-CA	C\$15.95	(3%)	970	1,214	144,957	287,905	0.79	8	4	96	British Columbia / NWT
Spanish Mountain Gold	SPA-CA	C\$0.13	(24%)	34	29	4,781	5,186	0.52	6	6	5	British Columbia
Thesis Gold	TAU-CA	C\$0.42	(60%)	57	36	3,371	3,823	1.65	11	9	19	British Columbia
Treasury Metals	TML-CA	C\$0.14	(63%)	15	21	2,181	2,965	0.92	10	7	5	Ontario
Troilus Gold	TLG-CA	C\$0.33	(31%)	55	42	10,913	12,666	0.67	4	3	13	Quebec
Wallbridge Mining	WM-CA	C\$0.09	(60%)	58	24	3,053	5,404	3.03	8	4	29	Quebec
West Vault Mining	WVM-CA	C\$0.88	(3%)	37	33	981	1,066	0.62	34	31	4	Nevada
Average									19	13		
Median									9	6		

Source: Company reports, FactSet, Bloomberg, RBC Capital Markets, priced at market close 15 Nov. AuEq based on spot metals prices; working capital adj. for subsequent capital raises

RBC Junior Mining Watch List – FS Stage/construction

Completed Feasibility/In Construction												
Company	Ticker	Price	TTM	Mkt. Cap	EV	Contained (000 oz) - AuEq		Grade (AuEq g/t)	Valuation (AuEq EV/oz)		Working capital	Area of
		(\$/sh)	Perf.	US\$m	US\$m	M&I	M&I+I	M&I+I	M&I	M&I+I	US\$m	Major Exploration
Artemis Gold	ARTG-CA	C\$5.96	34%	859	802	13,136	13,465	0.68	61	60	52	British Columbia
Ascot Resources	AOT-CA	C\$0.40	0%	162	115	1,930	3,237	7.87	60	36	58	British Columbia
Adriatic Metals	ADT1-GB	\$1.69	2%	602	589	3,580	3,783	6.07	164	156	--	Bosnia / Serbia
Bellevue Gold	BGL-AU	A\$1.44	54%	1,057	1,057	1,700	3,200	10.16	622	330	0	Western Australia
Bluestone Resources	BSR-CA	C\$0.18	(75%)	20	16	3,250	3,282	1.57	5	5	2	Guatemala
De Grey Mining	DEG-AU	A\$1.24	(9%)	1,645	1,448	8,055	11,727	1.31	180	123	192	Western Australia
G Mining Ventures	GMIN-CA	C\$1.17	76%	381	280	2,102	2,152	1.35	133	130	97	Brazil
Marathon Gold	MOZ-CA	C\$0.70	(18%)	208	231	3,960	5,060	1.84	58	46	53	Newfoundland
NovaGold Resources	NG-CA	C\$5.29	(27%)	1,287	1,203	19,504	22,500	2.21	62	53	130	Alaska
Osisko Development	ODV-CA	C\$3.85	(39%)	236	173	4,425	7,151	2.77	39	24	43	Canada / Mexico / US
Osisko Mining	OSK-CA	C\$2.59	(29%)	710	485	4,076	7,946	9.12	119	61	282	Quebec
Osino Resources	OSI-CA	C\$0.94	8%	107	113	2,940	4,090	1.08	38	28	2	Namibia
Paramount Gold Nevada	PZG-US	\$0.33	(9%)	20	25	28,760	36,906	1.04	1	1	(5)	Idaho
Perpetua Resources	PPTA-CA	C\$4.35	39%	86	76	6,507	7,827	1.45	12	10	7	Idaho
Rio2	RIO-CA	C\$0.17	21%	32	19	4,757	9,514	0.62	4	2	5	Chile
Signal Gold	SGNL-CA	C\$0.14	(53%)	22	32	2,581	3,065	3.86	12	10	7	Nova Scotia
Skeena Resources	SKE-CA	C\$5.06	(33%)	325	296	6,136	6,327	3.63	48	47	29	British Columbia
Average									95	66		
Median									58	46		

Source: Company reports, FactSet, Bloomberg, RBC Capital Markets, priced at market close 15 Nov. AuEq based on spot metals prices; working capital adj. for subsequent capital raises

Catalyst Tracker - Pre-resource and resource stage

Pre-Resource				
Company	Ticker - Exch	Resource Update	Economic Study	Upcoming Catalysts
Amex Exploration	AMX-CA	1Q24		Ongoing drill results; Initial Perron resource estimate (1Q24)
Angus Gold	GUS-CA			Ongoing drilling and regional prospecting
Aurion Resources	AU-CA			Ongoing drill results via 100% owned and JV properties
Azimut Exploration	AZM-CA	2023		Ongoing drilling; Initial resource at Elmer (2023); Exploration and advancement of lithium partnerships (ongoing)
Collective Mining	CNL-CA			Assays from ME (4Q23); Drilling at Trap and between Olympus/Apollo (4Q23); Drilling at Plutus (1Q24)
Dakota Gold	DC-US	1Q24		Ongoing drilling; Compliant resource at Richmond Hill (1Q24)
EsKay Mining	ESK-CA			Results from 6,500m 2023 drilling program (ongoing)
Goliath Resources	GOT-CA			Ongoing exploration
Great Pacific Gold	FSX-CA			Drilling/exploration across recently acquired projects (ongoing)
Japan Gold	JG-CA			Ongoing exploration and project evaluation
New Found Gold	NFG-CA			Results from 500,000m drilling program (ongoing); start of geological/metallurgical studies (4Q23)
Onyx Gold	ONYX-CA			Ongoing exploration
Puma Exploration	PUMA-CA			6,000m in 2023 drilling, 50,000m planned from 2024-2026, ongoing prospecting and trenching
Rackla Metals	RAK-CA			Assays pending from 3,000m 2023 drill program, initial drilling on the SER property in 2024
Snowline Gold	SGD-CA			Outstanding 2023 drilling results from 22,000m program (ongoing)
U.S. GoldMining	USGO-US			Ongoing exploration

Completed Resource				
Company	Ticker - Exch	Resource Update	Economic Study	Upcoming Catalysts
Augusta Gold	G-CA		4Q23	Reward project FS (4Q23); Ongoing drilling; Bullfrog permitting and studies
Auteco Minerals	AUT-AU	✓	4Q23	Drill results from acquired Green Bay project (~40,000m); Updated resource/studies (3Q24)
Aftermath Silver	AAG-CA	✓	4Q23	Challacollo PEA(4Q23); Ongoing Met/PEA work at Berenguela (2024); ongoing exploration
Cartier Resources	ECR-CA		✓	Ongoing exploration; Updated resource estimate and PEA
Cassiar Gold	GLDC-CA			Ongoing exploration results, potential resource update (1H24), new 2024 exploration program (2Q24)
Defiance Silver	DEF-CA			Updated resource for San Acacio; further drilling at Lucita; Tepal trial date and conclusion (4Q23)
Dolly Varden Silver	DV-CA			~55,000m of drilling (ongoing); metallurgical testing at Dolly Varden and Homestake ridge (ongoing)
G2 Goldfields	GTWO-CA		4Q23	Updated Oko resource (4Q23); Ongoing drilling
Galway Metals	GWM-CA	2024	2024	Resource expansion drilling at Clarence Stream; PEA and resource update (2024)
Gold Terra Resource	YGT-CA			+10,000m drill program at the Con Mine property with focus on the Campbell Shear
GoldMining	GOLD-CA	✓	✓	Advancement of La Mina (ongoing)
HighGold Mining	HIGH-CA	4Q23		Results from the 8,000m drill program; Resource update for Ellis Zone of JT project (2023)
Klondike Gold	KG-CA			Ongoing exploration
Maple Gold Mines	MGM-CA			Model updates and target prioritization at Douay & Joutel; 5,000m drill program at Eagle (4Q23)
Mayfair Gold	MFG-CA	✓	1H24	Updated resource/initial footwall resource and PFS planned (1H24); Ongoing regional exploration
Nighthawk Gold	NHK-CA	✓	✓	Ongoing drilling and permitting
Predictive Discovery	PDI-AU	✓	4Q23	Ongoing drilling at Bankan; ESIA and scoping study (4Q23); Permitting (1H24)
Prime Mining	PRYM-CA	✓		Ongoing drill results at Los Reyes via 60,000m program (2023)
Radisson Mining Resources	RDS-CA	✓		Results from Phase I 10,000m drill program; Till sampling results; Upcoming studies
Reunion Gold	RGD-CA	✓	YE23/1Q24	PEA for the Oko West Project (YE23/1Q24); Ongoing drilling
RosCan Gold	ROS-CA			20,000m drilling program
Talisker Resources	TSK-CA	✓		Start of test production at Bralorne (2Q24); Ore sale and trucking agreement (4Q23); Ongoing exploration
Tudor Gold	TUD-CA	✓		Ongoing exploration, advancement towards a PEA
Vanstar Mining Resources	VSR-CA	✓		Drilling results from the completed 10,000m Nelligan drill program
Vizsla Silver	VZLA-CA	4Q23	2024	90,000m drill program (ongoing), Panuco resource update (4Q23); Panuco PEA (2024)
West Red Lake Gold Mines	WRLG-CA			Infill and regional drilling, leading to re-started studies, and an eventual re-start decision for Madsen
Westhaven Gold	WHN-CA	✓	✓	Completion of 25,000m drill program; Resource update (2024)
White Gold	WGO-CA	✓		Ongoing drilling across the property and regional exploration work

Source: Company reports, RBC Capital Markets, check denotes recent update/release

Catalyst Tracker - PEA/PFS/FS/Construction stage

Completed PEA/Pre-Feasibility Study				Upcoming Catalysts
Company	Ticker - Exch	Resource Update	Economic Study	
AbrSilver Resource	ABRA-CA	4Q23	1Q24	Updated Diablos resource and JAC initial resource(4Q23); PFS (1Q24); Ongoing drilling/optimization work
Bonterra Resources	BTR-CA			~10,000m of regional exploration results; Partnership with Osisko Mining; Permitting of Bachelor Mill to 1,800tpd
Chesapeake Gold	CKG-CA	✓	2H24	Completion of Phase 3 met work (1H24); Metates PFS (2H24); Submission of permitting (2H24)
Discovery Silver	DSV-CA	✓	1H24	Cordero FS and potential project financing (1H24); Construction permits and decision (2H24)
Excellon Resources	EXN-CA			Ongoing exploration at Silver City, and Kilgore, Strategic analysis of Platosa (ongoing)
First Mining Gold	FF-CA	✓	✓	Submission of final EA and EIS for Springpole (1H24); Optimization of Duparquet project post PEA (ongoing)
Freegold Ventures	FVL-CA	✓	2024	Ongoing drilling; updated Golden Summit PEA (2024)
Fury Gold Mines	FURY-CA			Drilling at Eau Claire, Percival Prospect; ESJV geochemical studies
Gogold Resources	GGD-CA	✓	4Q23	Los Ricos South PFS (4Q23);Project advancement at Los Ricos North post PEA
i-80 Gold	IAU-CA	4Q23	4Q23	Gold only updated resource and economic analysis for Ruby Deep (2023); Ruby Hill resource update (2024);
Integra Resources	ITR-CA	✓	✓	DeLamar Plan of Operations (4Q23); DeLamar FS (2024); Wildcat engineering studies (2024); ongoing drilling
International Tower Hill	ITH-CA			Ongoing advancement of Livengood
Liberty Gold	LGD-CA	4Q23	1H24	Updated Black Pine and Goldstrike resource (2023); Ongoing metallurgy testing; Black Pine PFS (1H24)
Lion One Metals	LIO-CA			Mill ramp up to 300tpd (4Q23); expansion to 500tpd (mid-2024); ongoing drilling results
Lumina Gold	LUM-CA	✓	✓	Resource definition and geotechnical drilling (1Q24)
Luminex Resources	LR-CA	4Q23		Ongoing drilling at Cuyes West (ongoing); Updated resource from Condor North (4Q23)
Moneta Gold	ME-CA	2024	2024	35,000m infill/exploration drilling (ongoing); OP PFS and UG PEA (2H24); Initial Project Description (4Q23)
New Pacific Metals	NUAG-CA	✓	1Q24	Silver Sands PFS (1Q24); Carangas PEA (1Q24); ongoing exploration
O3 Mining	OIII-CA	✓		Optimization studies and decision on Malartic H resource conversion (3Q23); Marban FS commencement (1H24)
Probe Gold	PRB-CA	✓	1H24	Updated Novador PEA (1H24); ongoing drilling
Revival Gold	RVG-CA	✓	✓	Drilling results; Ongoing advancement of Beartrack-Arnett; FS (mid-2025)
Rupert Resources	RUP-CA	4Q23	2Q24	Resource update (4Q23); PFS (2Q24); EIA report (2024); Ongoing project optimization; Ongoing drilling
Spanish Mountain Gold	SPA-CA			Ongoing drilling; Environmental assessment (ongoing)
Seabridge Gold	SEA-CA		1Q24	JV partnership (2024); Drilling across project portfolio (2023); Courageous Lake updated technical report (1Q24)
Thesis Gold	TAU-CA	2Q24	3Q24	50,000m drilling (ongoing); Updated Lawyers resource and initial Ranch resource (2Q24); Updated PEA (3Q24)
Treasury Metals	TML-CA			Ongoing exploration; Project optimization and feasibility study (ongoing)
Troilus Gold	TLG-CA	1Q24	1Q24	Open pit only feasibility study and mineral reserves (1Q24)
Wallbridge Mining	WM-CA	✓	✓	Resource expansion drilling at Fenelon & Martiniere (2023)
West Vault Mining	WVM-CA		✓	Ongoing advancement of Hasbrouck

Completed Feasibility/In Construction				Upcoming Catalysts
Company	Ticker - Exch	Resource Update	Economic Study	
Artemis Gold	ARTG-CA		2H24	Construction updates (ongoing); commissioning (2Q24); First gold (2H24); Phase II study (early-2024)
Ascot Resources	AOT-CA			First gold (1Q24); commercial production (2H24); 14,000m exploration drilling (2023)
Adriatic Metals	ADT1-GB	✓		First concentrate production (4Q23), ramp up (2024)
Bellevue Gold	BGL-AU			Production ramp up (ongoing); 2H24 production and cost guidance (post-commissioning)
Bluestone Resources	BSR-CA			Outcome of strategic review process (ongoing); Advancement of the Cerro Blanco (ongoing)
De Grey Mining	DEG-AU	✓	✓	Completion of financing (2H24); Project approval (2H24)
G Mining Ventures	GMIN-CA			Plant commissioning and first gold (2Q24); Commercial production (2H24); potential M&A (ongoing)
Marathon Gold	MOZ-CA			Ongoing construction; pending acquisition by Caibre (CXB CN)
NovaGold Resources	NG-CA			Updates from Donlin partnership (ongoing); Results from trade-off studies (ongoing)
Osino Resources	OSI-CA	✓	✓	Project financing (4Q23); front-end engineering, long lead orders (1Q24); Construction start 1Q24
Osisko Mining	OSK-CA			Finalization of IBA (2023); Restart of regional drilling (2024); infill drilling at Windfall (ongoing)
Osisko Development	ODV-CA	✓	✓	Processing ramp up at Trixie (ongoing); Drilling at Big Hill (ongoing); Permitting at Cariboo (1Q24)
Paramount Gold Nevada	PZG-US			Advancing permitting (ongoing) expecting final permits by YE24
Perpetua Resources	PPTA-CA			Final EIS and draft ROD (4Q23); Final ROD (1Q24); Financing and ancillary permits (mid-2024); Construction (2H24)
Rio2	RIO-CA	✓	✓	EIA appeal (2023); Project financing (ongoing); Fenix project construction start (4Q23)
Signal Gold	SGNL-CA			Permitting and exploration ongoing at Goldboro
Skeena Resources	SKE-CA			Project financing (2024), Snip resource update (2024), ongoing exploration

Source: Company reports, RBC Capital Markets, check denotes recent update/release



Companies mentioned

Artemis Gold Inc. (TSXV: ARTG CN; C\$5.96; Outperform; Speculative Risk)
G Mining Ventures Corp. (TSXV: GMIN CN; C\$1.19; Outperform; Speculative Risk)
Marathon Gold Corporation (TSX: MOZ CN; C\$0.70; Outperform; Speculative Risk)
Osisko Development Corp. (TSXV: ODV CN; C\$3.86; Sector Perform; Speculative Risk)
Osisko Mining Inc. (TSX: OSK CN; C\$2.59; Outperform; Speculative Risk)
Skeena Resources Limited (TSX: SKE CN; C\$5.06; Outperform; Speculative Risk)

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