



**CRESCAT CAPITAL®**  
THE VALUE OF GLOBAL MACRO INVESTING

December 2022

# IMPORTANT DISCLOSURES

**Conflicts of Interest.** Crescat's private funds, separately managed accounts, principals, and employees are direct and/or indirect investors in many of the companies discussed by Crescat on its videos. In addition, Dr. Quinton Hennigh, Crescat's Geologic and Technical Director, serves on the Board of Directors of Eskay Mining Corporation and New Found Gold Corporation, and is co-chairman of Novo Resources Corporation. Therefore, Crescat's clients, principals and employees may stand to realize significant gains or losses if the price of the companies' securities move. After the publication or posting of any video, Crescat, its principals and employees will continue transacting in the securities discussed, and may be long, short or neutral at any time thereafter regardless of their initial position or recommendation.

**Forward Looking Statements.** Crescat's videos may include comments that could be deemed "forward looking statements." Forward looking statements are statements that are not historical facts and are generally, but not always, identified by the words "expects", "plans", "anticipates", "believes", "intends", "estimates", "projects", "potential," "targets," and similar expressions, or that events or conditions "will", "would", "may", "could" or "should" occur. Although Crescat believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results may differ materially from those in the forward-looking statements. Factors that could cause the actual results to differ materially from those in forward looking statements include market prices, exploration successes, and continued availability of capital and financing, and general economic, market or business conditions. You are cautioned that any such statements are not guarantees of future performance and actual results or developments may differ materially from those projected in the forward-looking statements. Forward looking statements are based on the beliefs, estimates and opinions of Crescat on the date the statements are made.

Crescat does not generally update or review previous forward-looking statements, whether because of new information, future developments or otherwise.

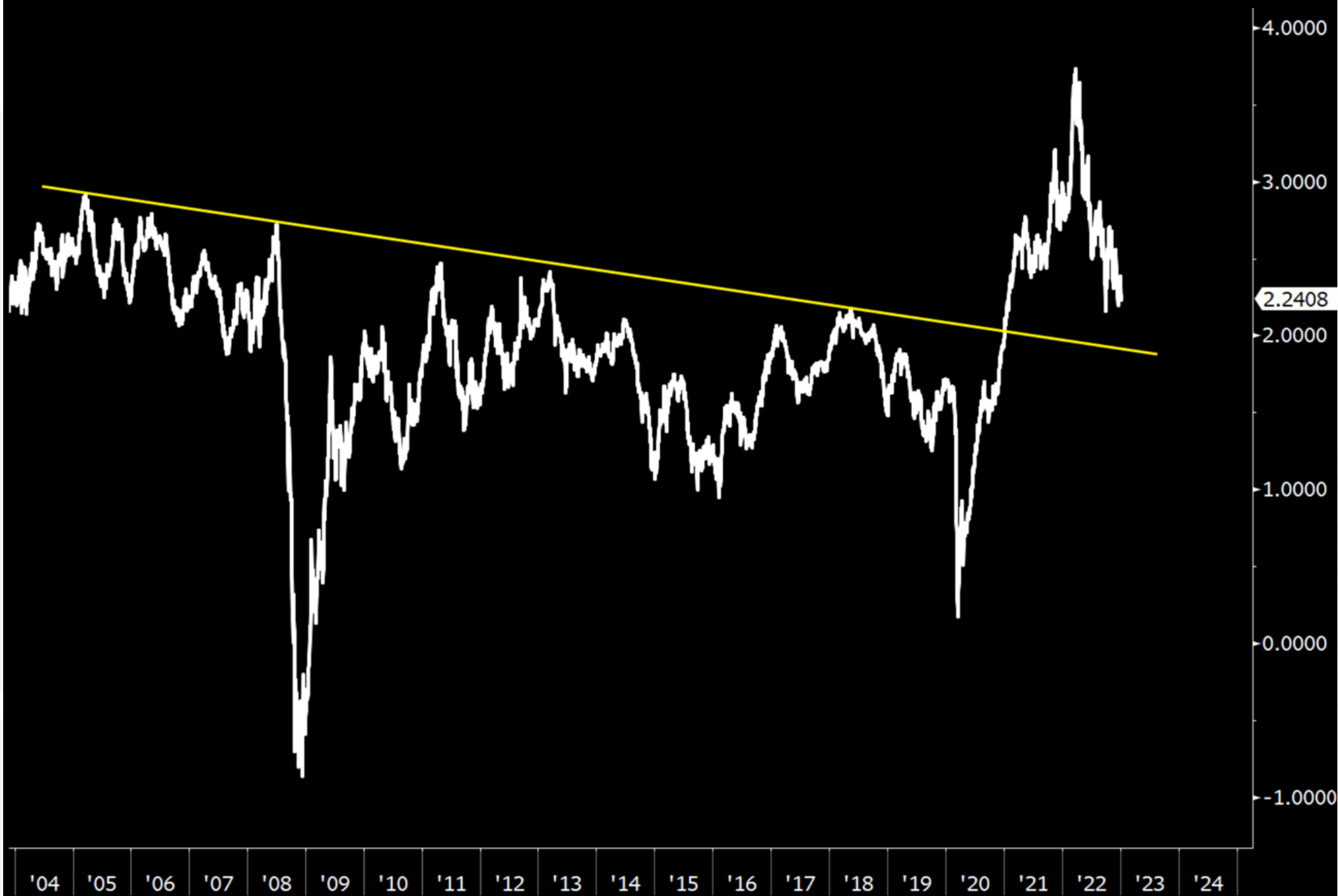
**Performance.** Performance data represents past performance, and past performance does not guarantee future results. Performance data is subject to revision following each monthly reconciliation and/or annual audit. Individual performance may be lower or higher than the performance data presented. Crescat is not required by law to follow any standard methodology when calculating and representing performance data. The performance of Crescat's private funds may not be directly comparable to the performance of other private or registered funds. Investors may obtain the most current performance data and private offering memorandum for Crescat's private funds by emailing a request to [info@crescat.net](mailto:info@crescat.net). Returns are presented net of management fees and performance fees. The currency used to express performance is U.S. dollars. Performance includes reinvestment of dividends and other earnings.

**Terms of Use.** By viewing Crescat's videos, you acknowledge Crescat is not utilizing these videos to provide investment or other advice. Nothing Crescat posts on these videos should be construed as personalized investment advice or a recommendation that you buy, sell, or hold any security or other investment or that you pursue any investment style or strategy. Case studies may be included for informational purposes only and are provided as a general overview of Crescat's investment process, and not as indicative of any investment experience. There is no guarantee that the case studies are completely representative of Crescat's strategies or of the entirety of its investments, and Crescat reserves the right to use or modify some or all the methodologies mentioned therein.

**Ownership.** All content posted on Crescat's videos including graphics, logos, articles, and other materials, is the property of Crescat or others and is protected by copyright and other laws. All trademarks and logos are the property of their respective owners, who may or may not be affiliated with Crescat. Nothing contained on Crescat's website or social media networks should be construed as granting, by implication, estoppel, or otherwise, any license or right to use any content or trademark displayed on any site without the written permission of Crescat or such other third party that may own the content or trademark displayed on any site.

**No Warranty.** Crescat compiles its research in good faith and while it uses reasonable efforts to include accurate and up-to-date information, Crescat's videos are provided on an "as is" basis with no warranties of any kind. Crescat does not warrant the information on its videos is accurate, reliable, up to date or correct. In no event shall Crescat be responsible or liable for the correctness of any such information or content, or for any damage or lost opportunity resulting from use of its videos. Crescat may share, comment on, etc., third-party content on its videos for informational purposes only. Crescat is not responsible for the content of such third-parties and Crescat does not endorse the products, services, or investment recommendations described or offered by third-parties.

For Crescat's full disclosures, including those related to its exempt fund offerings, please visit: <https://www.crescat.net/investor-resources/disclosures/>



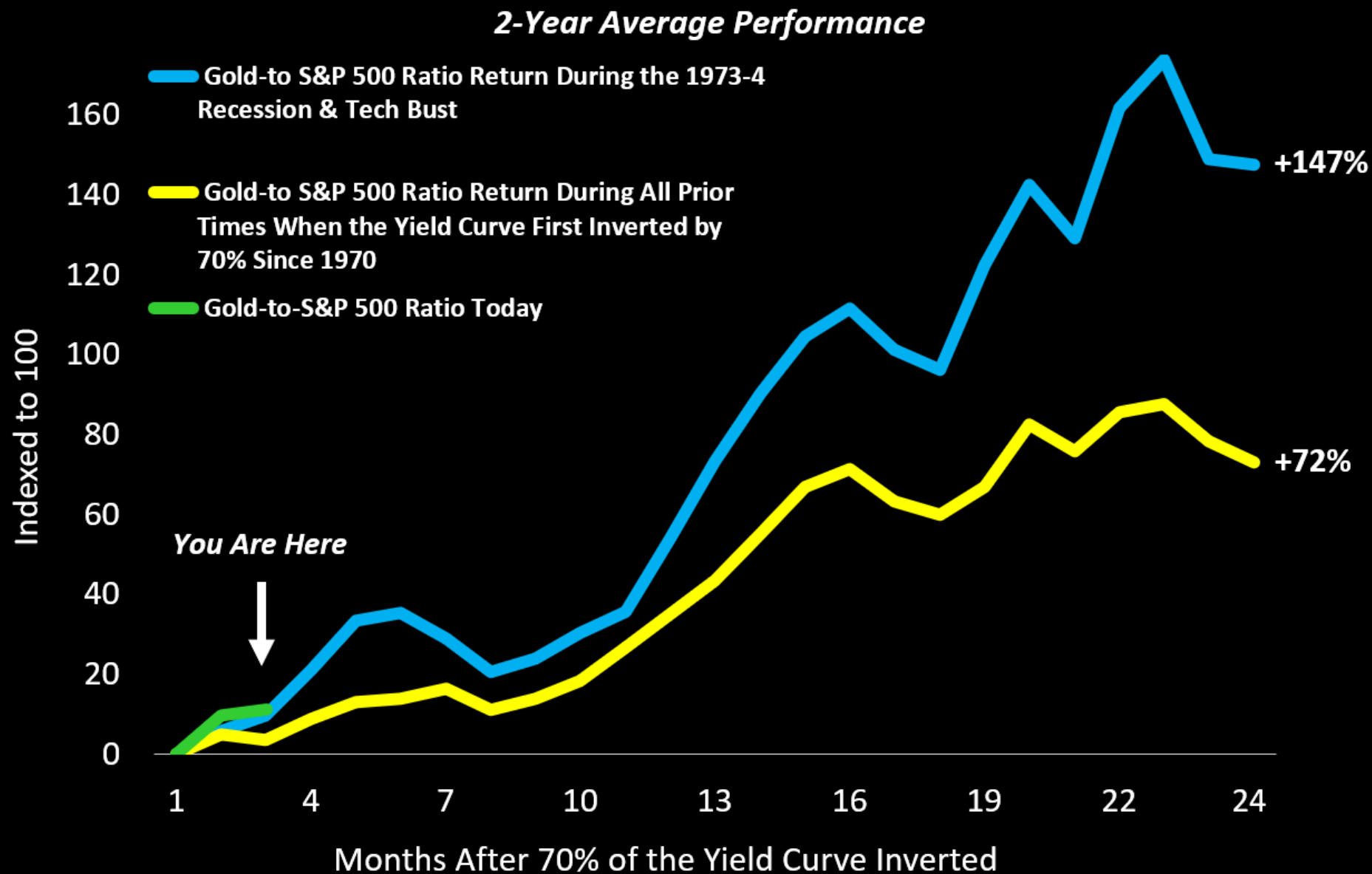
# US 5-Year Breakeven



Source: Bloomberg; Tavi Costa

©2023 Crescat Capital LLC

# Gold-to-S&P 500 After Yield Curve Inversions





# Gold & Silver Miners vs. S&P 500

*Calculation: GDX ETF / S&P 500 Index*



Source: Bloomberg; Tavi Costa

©2023 Crescat Capital LLC

# Gold Miners: Juniors vs. Seniors

*Calculation: \$GDXJ ETF / \$GDX ETF*

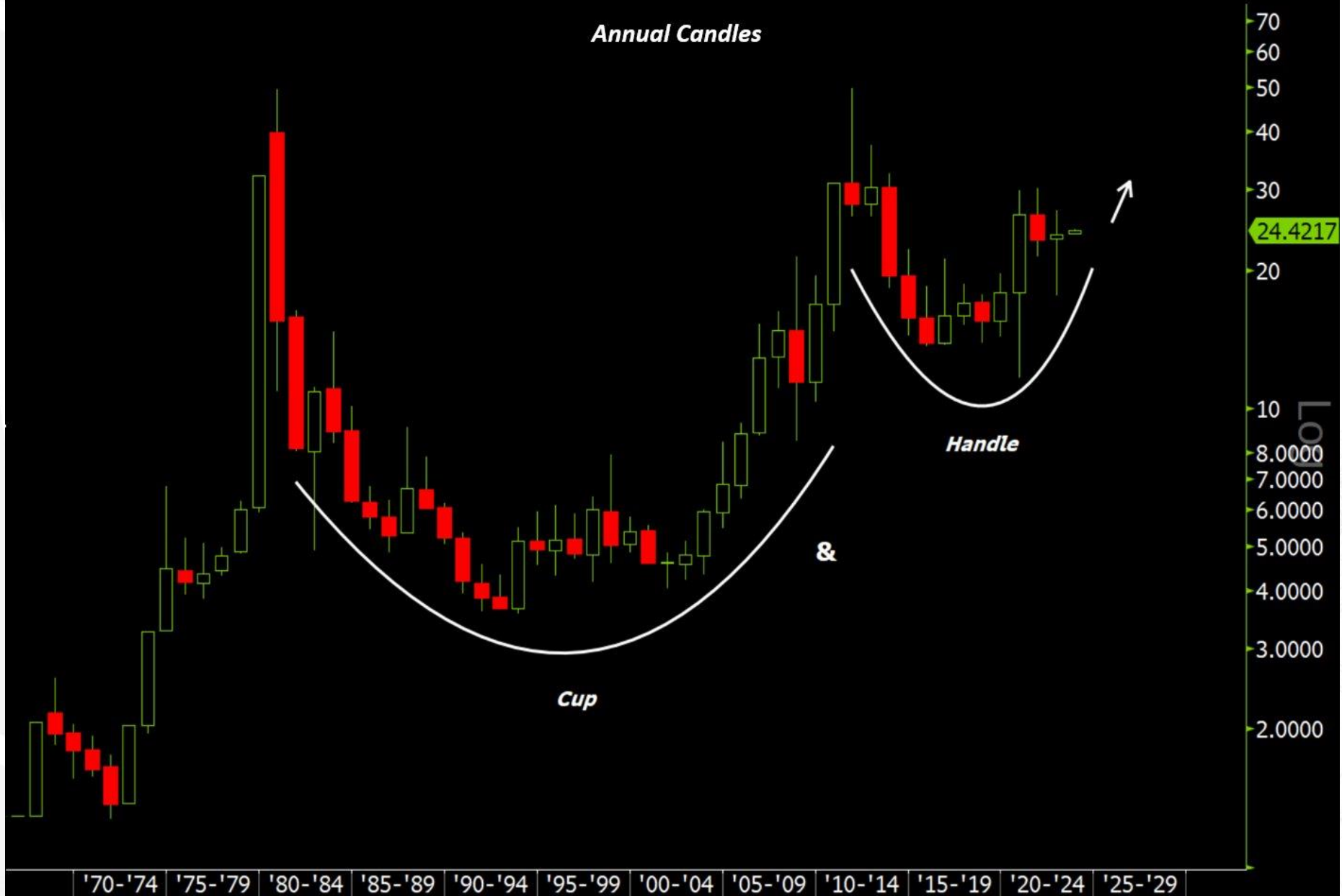


Source: Bloomberg; Tavi Costa

©2023 Crescat Capital LLC

# Silver

Annual Candles





# Tech Mega Cap Stocks: YoY Change (%)

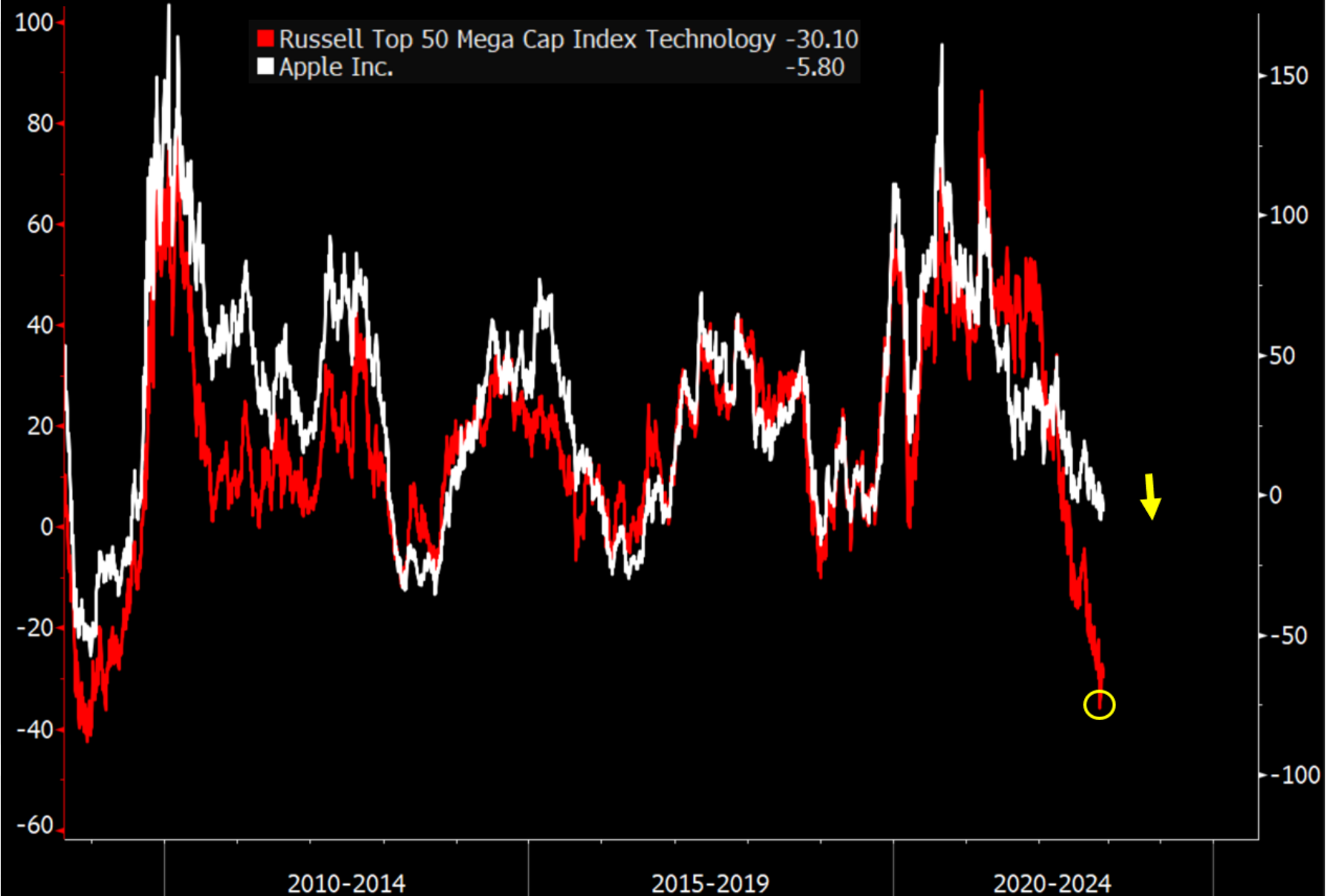
*Equal Weighted Basket of the 5 Largest US Tech Companies*



Source: Bloomberg; Tavi Costa

©2023 Crescat Capital LLC

# Apple vs. Other Mega Cap Stocks



# Apple vs. Amazon

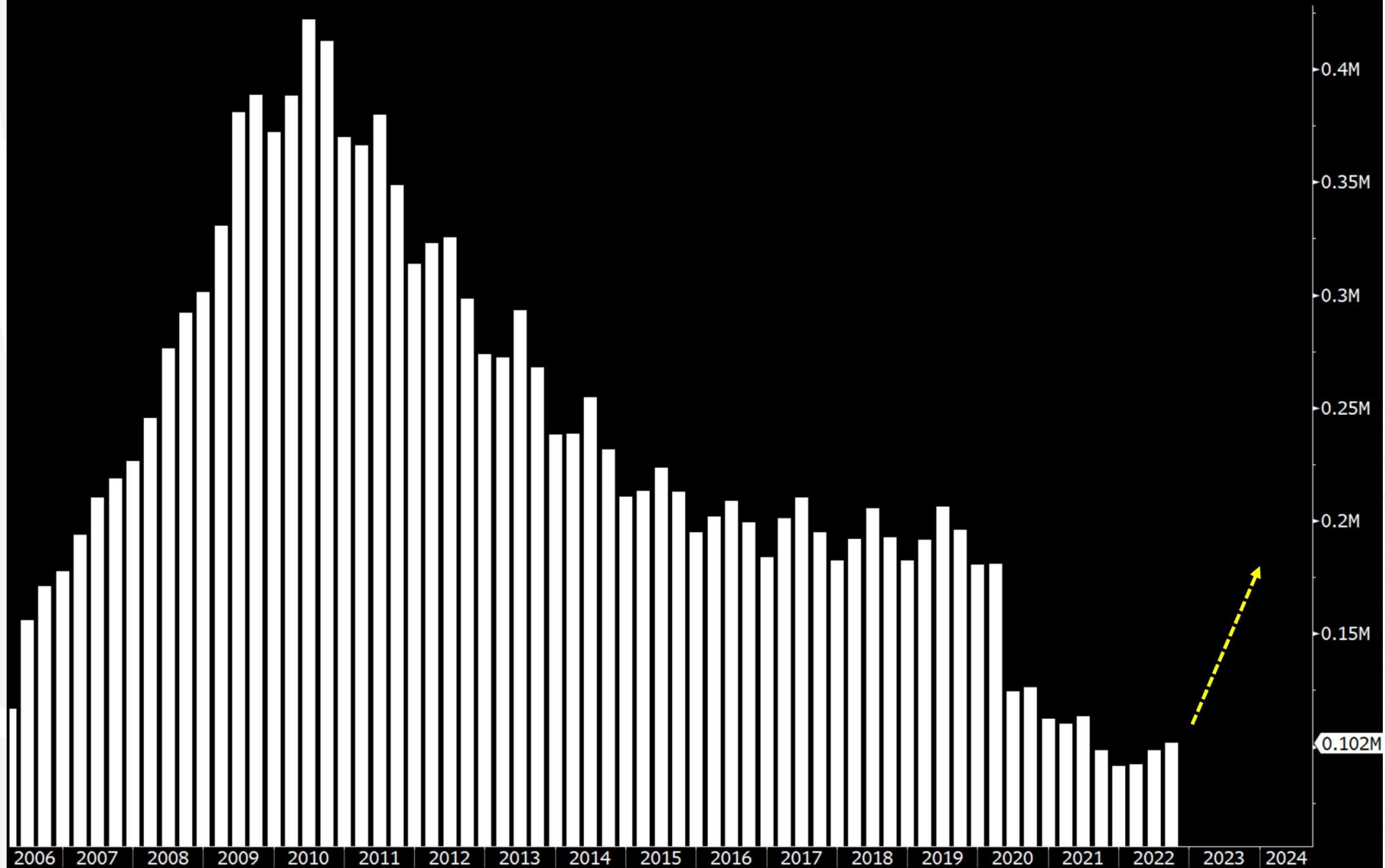
*\$AAPL*



*\$AMZN*



# US New Number of Bankruptcy Filings



Source: Bloomberg; Tavi Costa

©2022 Crescat Capital LLC

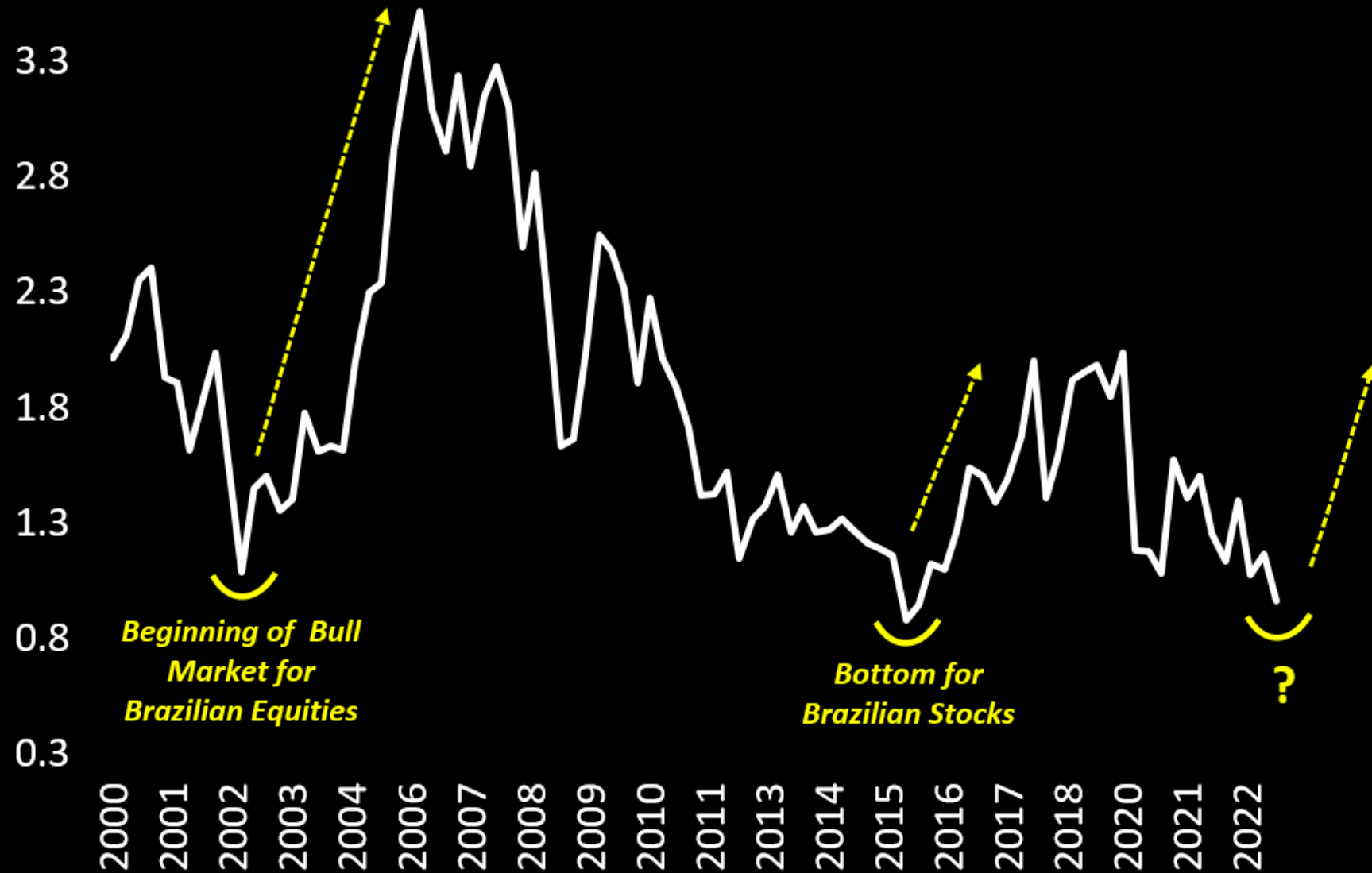
# Brazilian Stocks vs. The Rest of the World

*Performance in 2022 - All Indices in USD Terms*





# Top Brazilian Banks: Median Price to Book



Source: Bloomberg; Tavi Costa

©2023 Crescat Capital LLC

## Biden Has Not Spoken With US Oil and Gas CEOs, Pioneer Boss Says

- First US president to stiff oil leaders, Pioneer CEO says
- Biden administration had called for increased oil output

By Mitchell Ferman

(Bloomberg) -- President Joe Biden has not talked with US oil and gas CEOs even as his administration had called for increased output in recent months, said the boss of Pioneer Natural Resources Co., one of the biggest producers in the Permian Basin.

While Biden's team has spoken with oil and gas leaders, the president himself has not, Chief Executive Officer Scott Sheffield said, "the first US president that I know of that has not talked to anybody from our industry." Sheffield spoke on a panel at the Goldman Sachs Global Energy and Clean Technology Conference in Miami.

Sheffield added that the Biden administration doesn't understand oil and gas inventory and inflationary pressures on the industry, and he predicted a stalemate between the sector and the White House until 2024.

**LIVE Event**

Biden Holds  
Meeting



01/05 12:50





# OUTLOOK 2023

## Here's (Almost) Everything Wall Street Expects in 2023

By [Sam Potter](#) for **Bloomberg Markets**  
January 2, 2023

It may be one of the most anticipated recessions of all time, but that doesn't mean it won't hurt.

Barclays Capital Inc. says 2023 will go down as one of the worst for the world economy in four decades. Ned Davis Research Inc. puts the odds of a severe global downturn at 65%. Fidelity International reckons a hard landing looks unavoidable.

To kickstart the new year, Bloomberg News has gathered more than 500 calls from Wall Street's army of strategists to paint the investing landscape ahead. And upbeat forecasts are hard to find, threatening fresh pain for investors who've just endured the great crash of 2022.

As the Federal Reserve ramps up its most aggressive tightening campaign in decades, the consensus view is that a recession, albeit mild, will hit both sides of the Atlantic with a high bar for any dovish policy pivot, even if inflation has peaked.

Still, humility is the order of the day for prognosticators who largely failed to predict the 2022 cost-of-living crisis and double-digit market losses. This time around, the consensus could prove badly wrong once again, delivering a host of positive surprises. Goldman Sachs Group Inc., JPMorgan Chase & Co. and UBS Asset Management, for their part, see the economy defying the bearish consensus as price growth eases – signaling big gains for investors if they get the market right.

Expect an uneven year in trading. Deutsche Bank AG sees the S&P 500 Index rising to 4,500 in the first half, before falling 25% in the third quarter as a downturn bites – only to bounce back to 4,500 by end-2023 as investors front-run a recovery.

Our ship...



...has arrived!



CFDs on Gold (US\$ / OZ) · 1W · TVC

O 1823.58 H 1867.67 L 1823.53 C 1867.56 +44.77 (+2.46%)

Vol 0

MA 200 close 0 SMA 5 1712.39



**GOLDPRICE**  
EST. 2002



CFDs on Silver (US\$ / OZ) · 1W · TVC

O 23.951 H 24.541 L 23.124 C 23.882 -0.050 (-0.21%)

Vol 0

MA 200 close 0 SMA 5 21.176



SILVER 23.882  
21.176

Boing!!!

MACD 12 26 close 9 EMA EMA 0.535 0.784 0.249



0.784  
0.535  
0.249

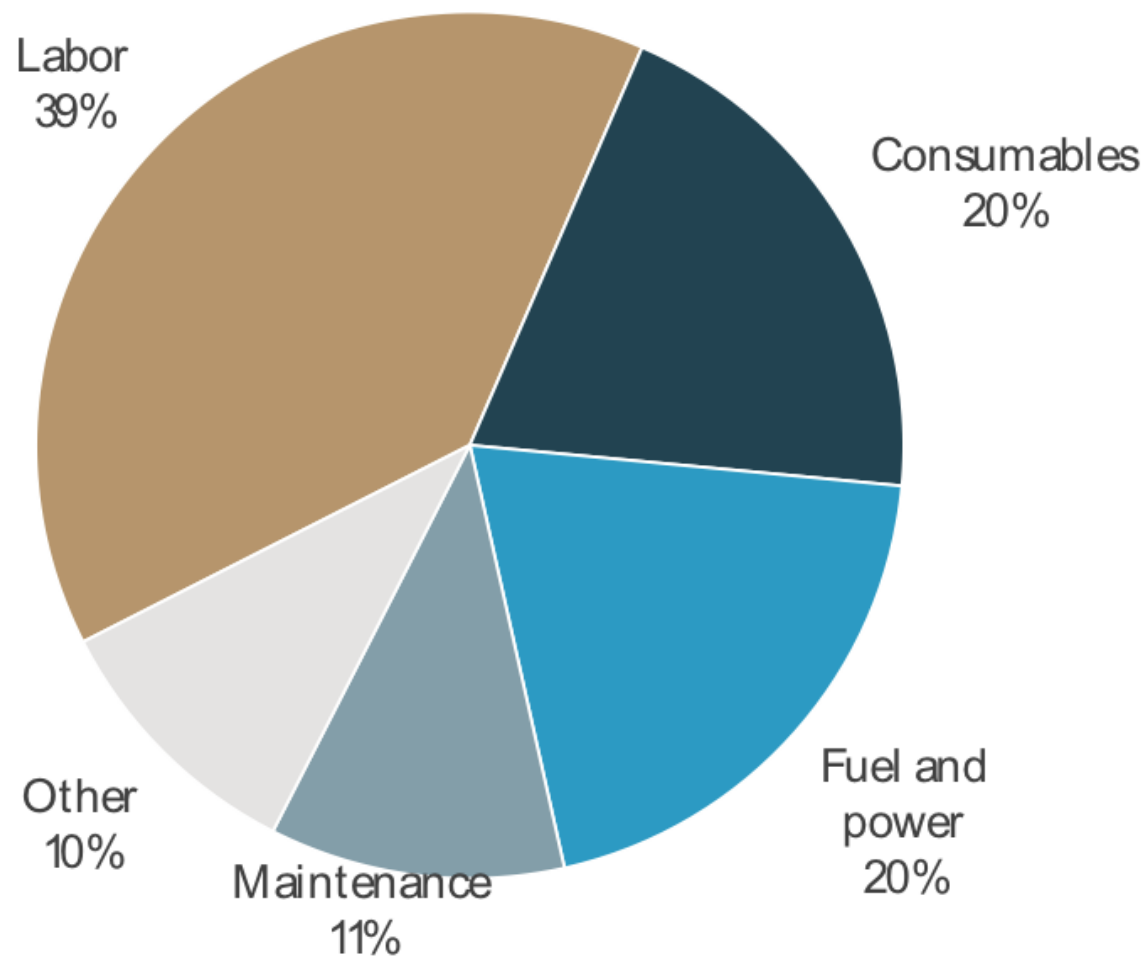
!!!

# Costs of Mining



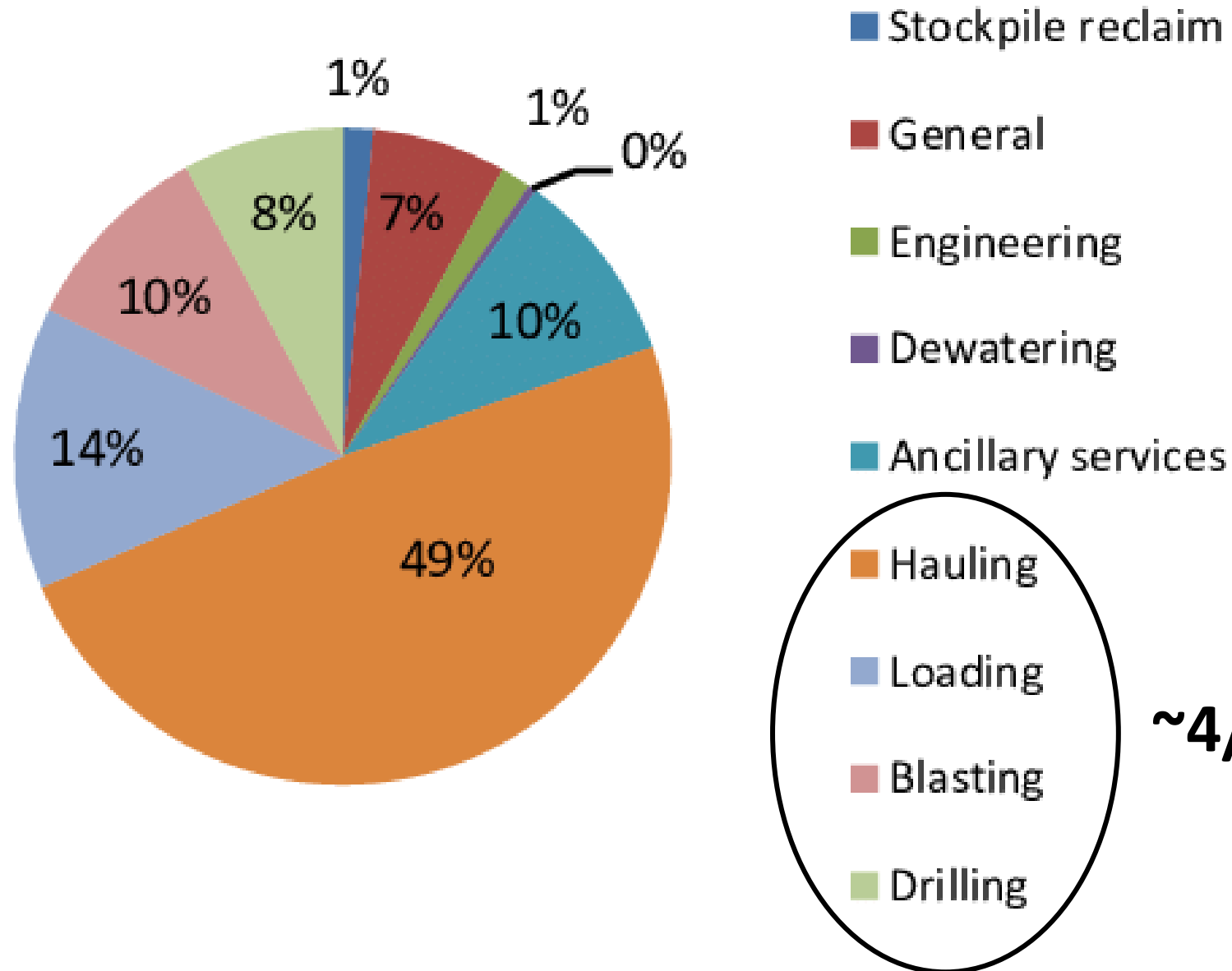
**Figure 5: Breakdown of operating cash costs of the top 5 gold producers**  
Average %

## Operating Costs



Source: Company reports, Goldmoney Research

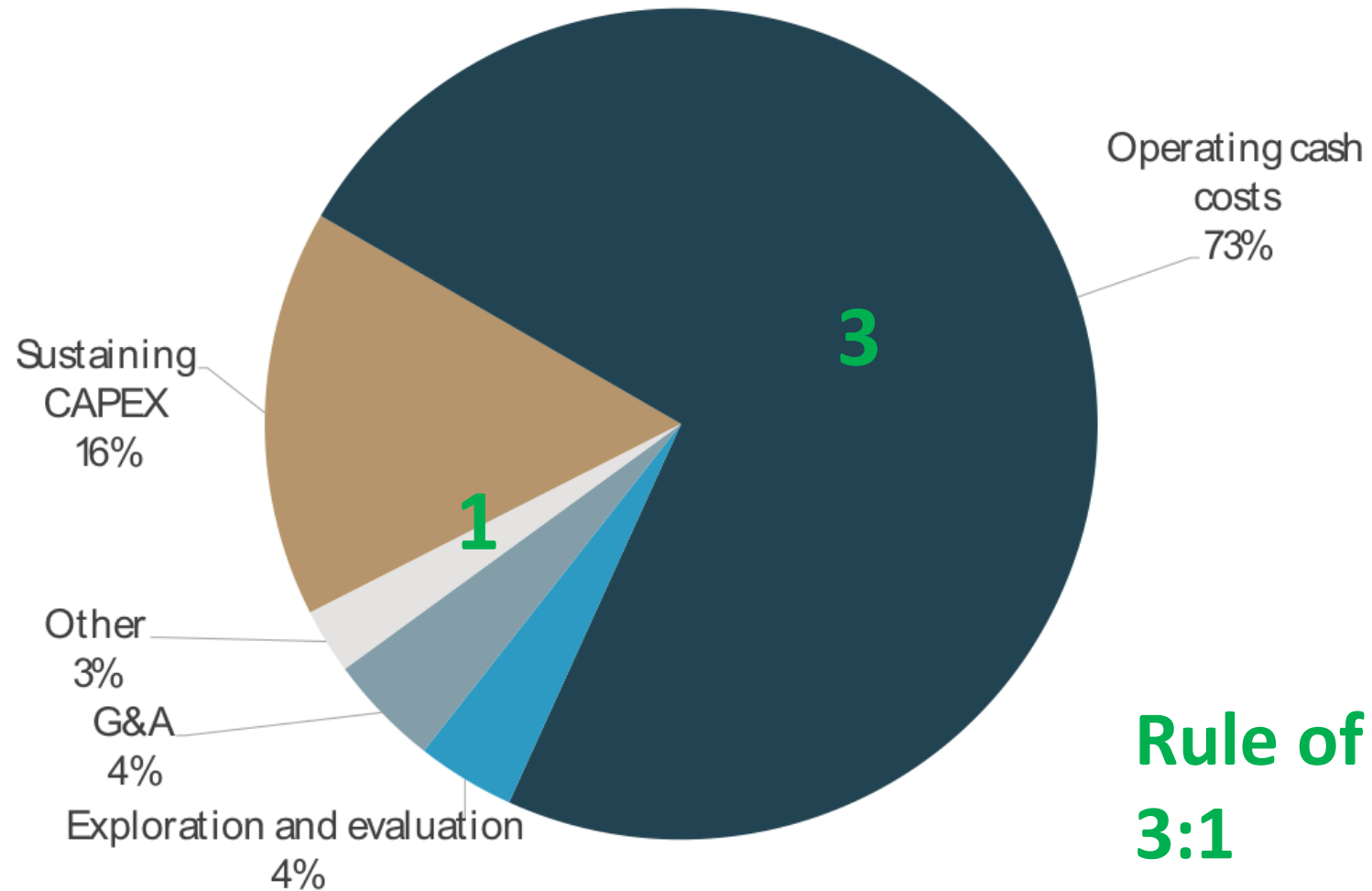
# Typical Distribution of Costs in an Open Pit Mine



**~4/5 of costs**

**Figure 4: Breakdown of AISC of the top publicly traded gold producers**  
Average %

AISC



**Rule of thumb:  
3:1**

Source: Company reports, Goldmoney Research

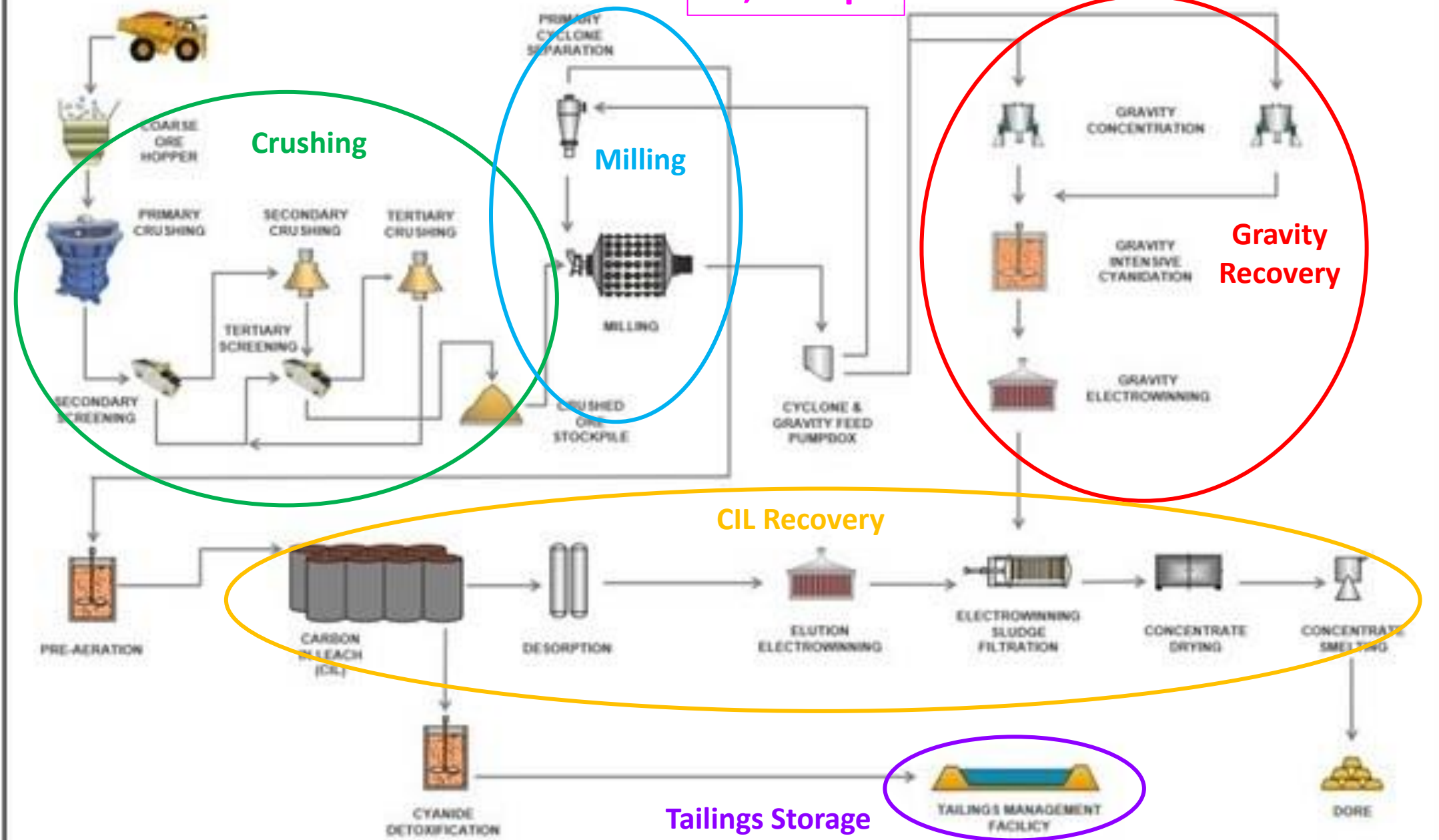


# Costs of Building a Mine



### Process Flow Sheet - Blackwater Project

**16,500 tpd**





# Artemis Gold – Blackwater Project

Description	(C\$ 000)
Mining	\$64,455
Process Plant 16,500 tpd	\$197,314
Tailings	\$73,141
On Site Infrastructure	\$30,546
Off Site Infrastructure	\$100,701
<b>Total Direct Costs</b>	<b>\$466,156</b>
Indirects & EPC	\$77,359
Owners Costs & Other	\$45,638
<b>Total Indirect Costs</b>	<b>\$122,997</b>
Total Directs & Indirects	\$589,154
Contingency	\$56,015
<b>Total Initial Development Capital</b>	<b>\$645,168</b>

~US\$146M ~US\$9K/process tonne per day

3.2X

~US\$470M

# Marathon Gold – Valentine Project

~US\$17K/process tonne per day

Item <i>note 1,2</i>	Cost (C\$M)
Mining Capex	\$67
Process Plant ~6,900 tpd	\$162 ~US\$119M
Infrastructure	\$120
Offsite Infrastructure	\$22
Contractor Indirects	\$34
Project Delivery	\$21
Owners Cost	\$71
Contingency	\$39
<b>Sunk Capital <i>note 3</i></b>	<b>\$ 71</b>
<b>Remaining Initial Capital <i>note4</i></b>	<b>\$ 463 ~US\$340M</b>

2.9X

# Marathon Gold – Valentine Project

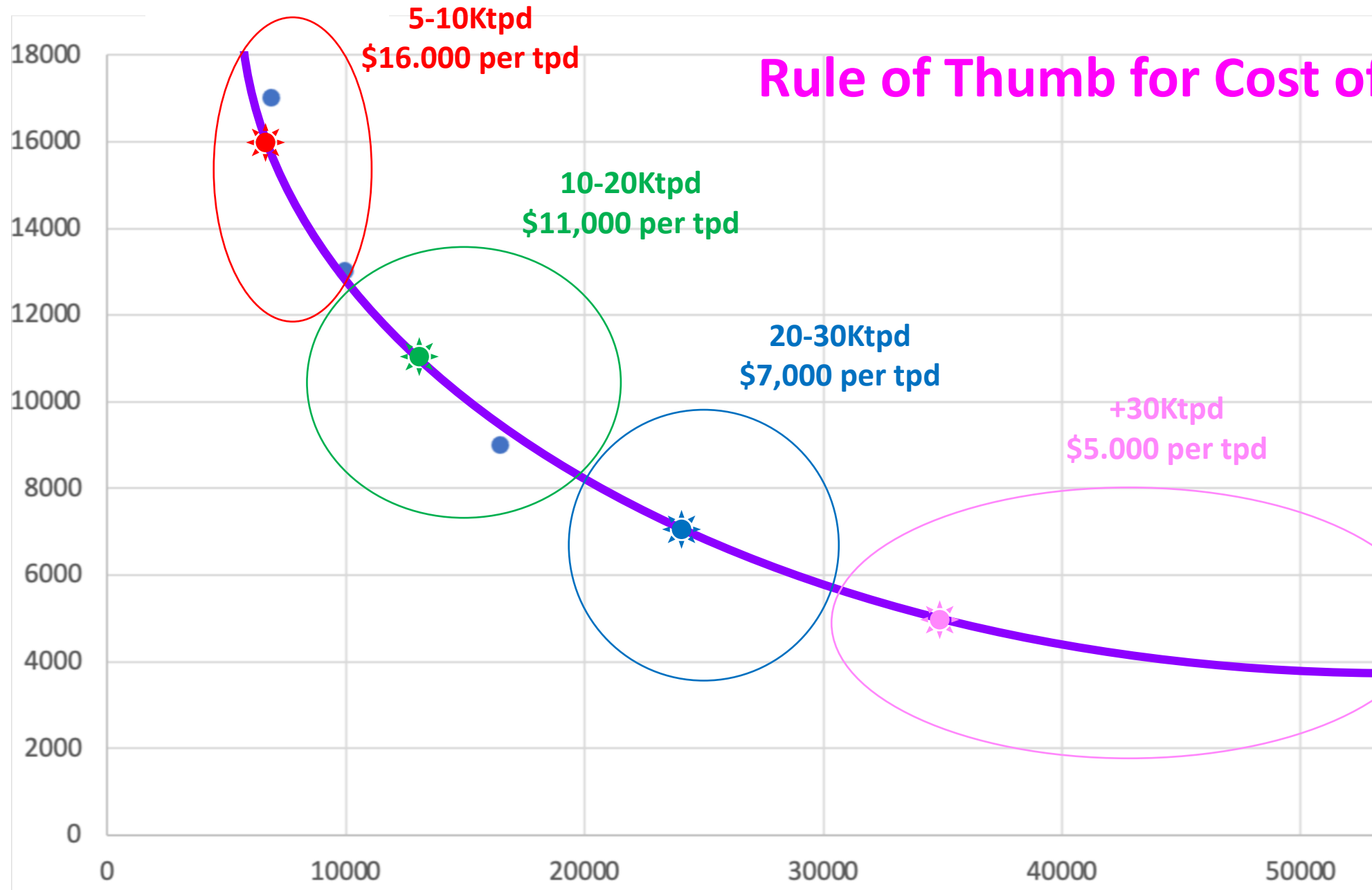
Initial capex	USD millions
Mining o/p pre-production	16.6
Process Plant ~10,000 tpd	131.0
Civils and infrastructure	29.5
Water treatment	96.4
Tailings	20.4
First fills & spares	10.0
Owner's Costs	20.0
Closure bond	37.2
Contingency	43.5
<b>Total initial capex</b>	<b>404.6</b>

~US\$13K/process tonne per day

3.1X



# Rule of Thumb for Cost of Mill



# Rule of Thumb for Project Build Cost

Avg from three examples

**3.2X**

**2.9X**

**3.1X**

**Avg = ~3X**

# First Order Approximation

Example:

Project: “Goldbug,” MI&I 100,000,000 tonnes grading 1.5 gpt

Pick an appropriate mine life: 12 yrs

Calculate tonnes per day:  $100,000,000 \div 12 \div 350 = \sim 24,000$  tpd

Use rule of thumb for cost of mill and multiply by tpd (\$7K here):  $24,000 \times \$7K = \$168M$

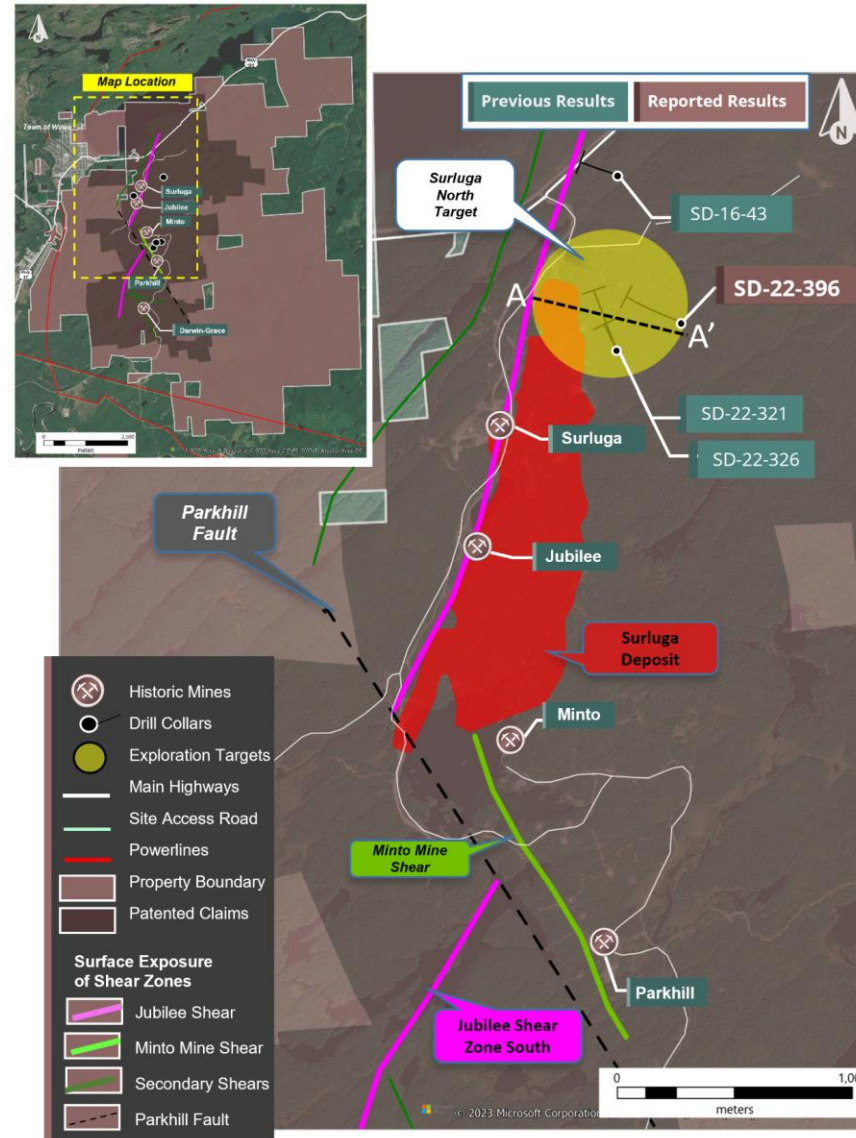
Total cost (mill cost X3):  $3 \times \$168M = \$504M$  

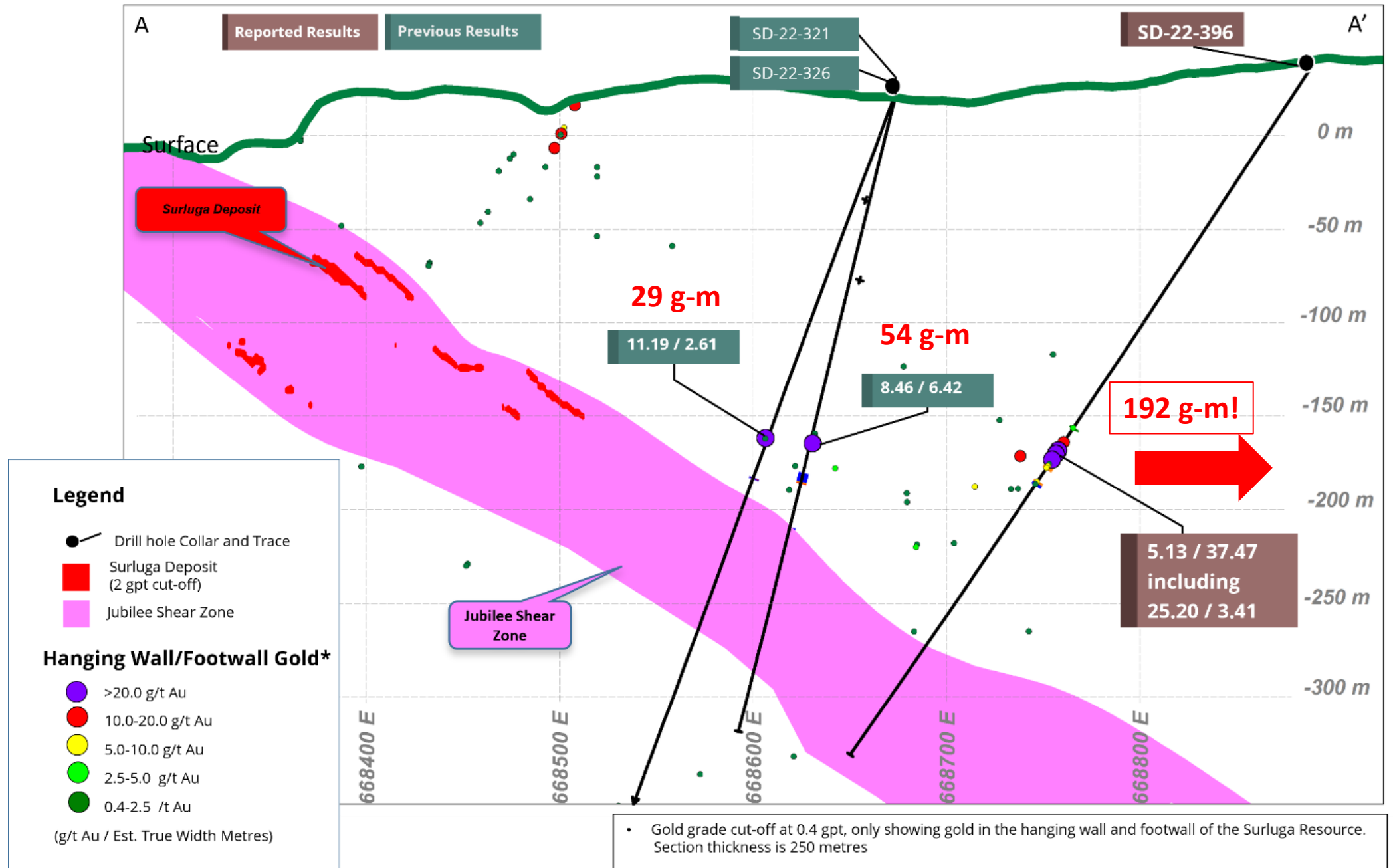
Gold production (assume 90% rec):  $24Kt/d \times 350d/yr \times 90\% \times 1.5gpt Au \div 31.1g/oz = 365Koz/yr$  



# UPDATE: Red Pine Reports its Thickest High Grade Intersection in the Hanging Wall of the Jubilee Shear Zone: 5.13 g/t gold over 37.47m, including 25.20 g/t gold over 3.41m

RPX TSX.V  
RDEXF







NKG TSX.V  
NKGFF

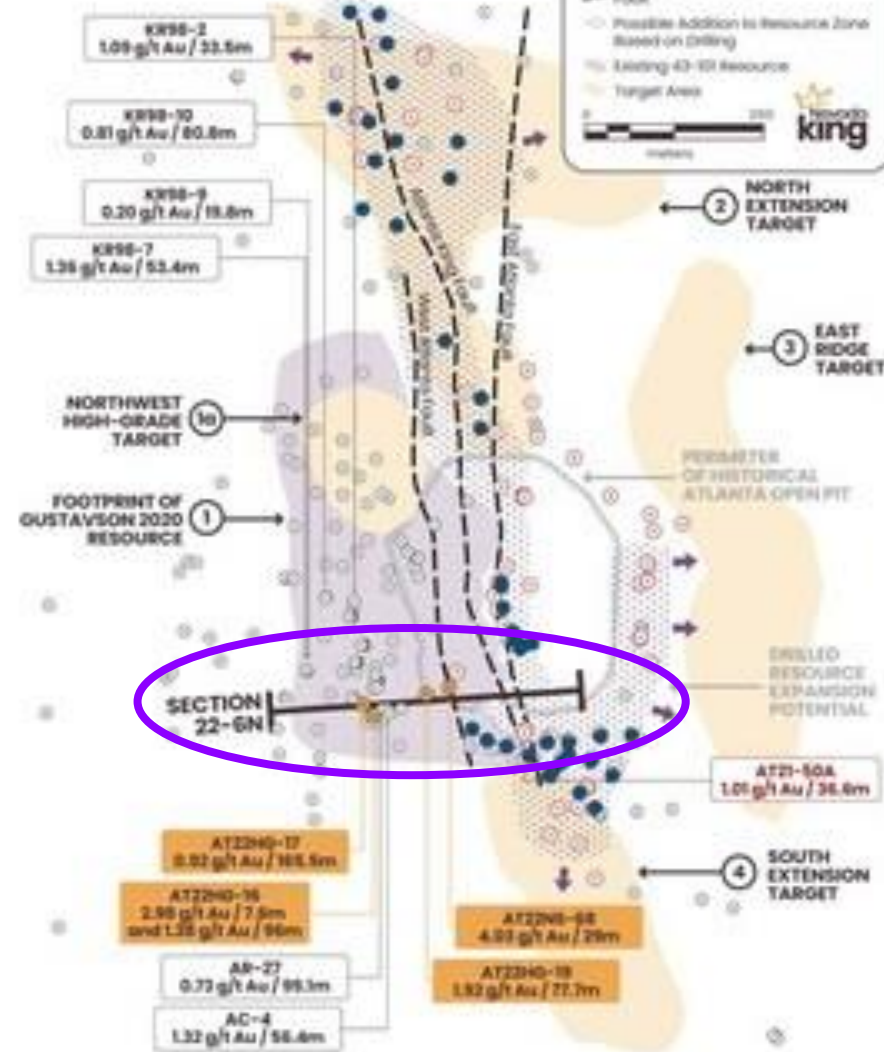
# NEVADA KING INTERCEPTS HIGH-GRADE OXIDE GOLD WEST OF ATLANTA PIT INCLUDING 4.0 G/T AU OVER 29M & 1.9 G/T AU OVER 78M; DRILLS INTO GOLD MINERALIZED INTRUSIVE ROCK AT DEPTH

Hole No.	From (m)	To (m)	Interval (m)	Au (g/t)	Ag (g/t)	Notes
AT22HG-16 *	163.1	170.7	7.6	2.98	7.5	* Bottomed in mineralization
			23 g-m			
And	196.6	292.7	96.0	1.38	3.1	* Bottomed in mineralization
			132 g-m			
Including *	289.6	292.7	3.0	9.16	39.2	* Bottomed in mineralization
AT22HG-17 *	146.3	311.0	165.5	0.92	3.0	* Bottomed in mineralization
			152 g-m			
AT22HG-19 *	155.5	233.2	77.7	1.92	28.1	* Bottomed in mineralization
			149 g-m			
Including	207.3	224.1	16.8	4.76	86.8	
AT22NS-68	134.1	163.1	29.0	4.03	21.2	
			117 g-m			
Including	157.0	160.1	3.1	10.03	18.5	



# 2022 DRILL MAP-PIT AREA ATLANTA PROJECT

- 2023 Assay Released Today
- 2022 Previously Released Assay
- 2021 NK Drilled Hole
- Historical Drill Hole
- Fault
- Possible Addition to Resource Zone Based on Drilling
- Existing 43-101 Resource
- Target Area



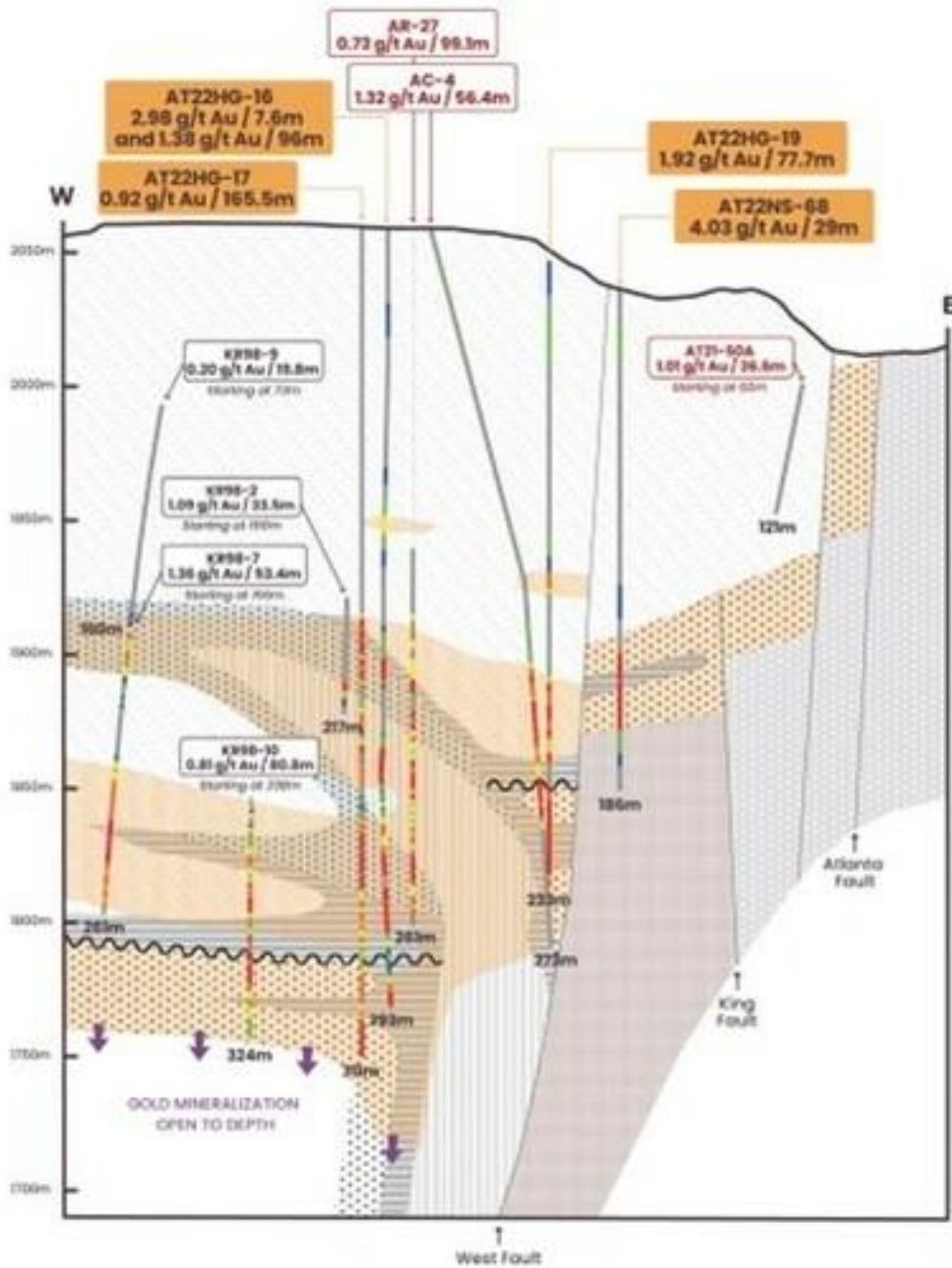
# CROSS SECTION 22-6N

## ATLANTA GOLD PROJECT LINCOLN COUNTY, NV

- Gold Mineralization >0.30 g/t Au
- Silica breccia
- Rhyolite and tuff dike breccia
- Dacite porphyry fragmental carapace
- Dacite porphyry intrusive
- Tertiary volcanics and sediments
- Unconformity
- Ordovician Ely Springs Dolomite
- Ordovician Eureka Quartzite
- Fault

- Au > 1 g/t
- Au 0.5-1 g/t
- Au 0.3-0.5 g/t
- Au 0.1-0.3 g/t
- Au 0.05-0.3 g/t
- Au < 0.05 g/t

- 2023 Assay Released Today
- 2021 NK Drill Hole
- Historical Drill Hole

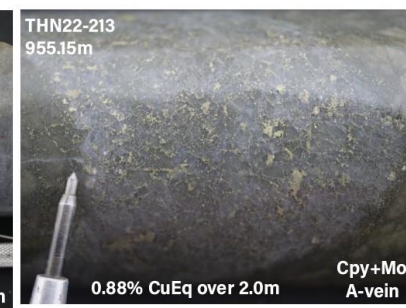
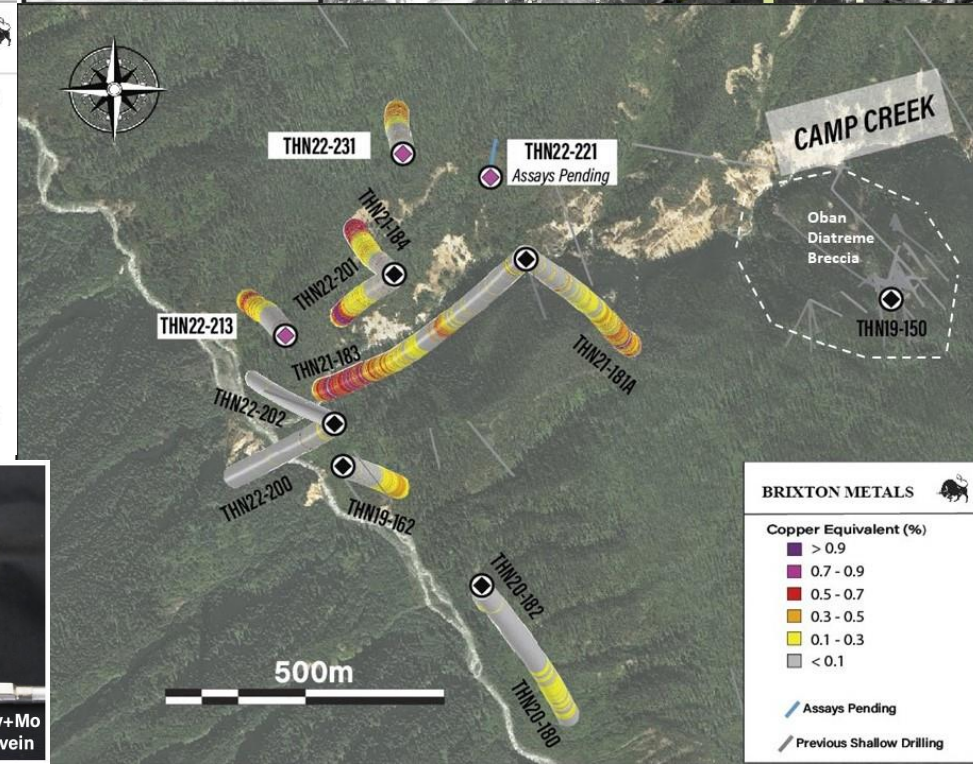
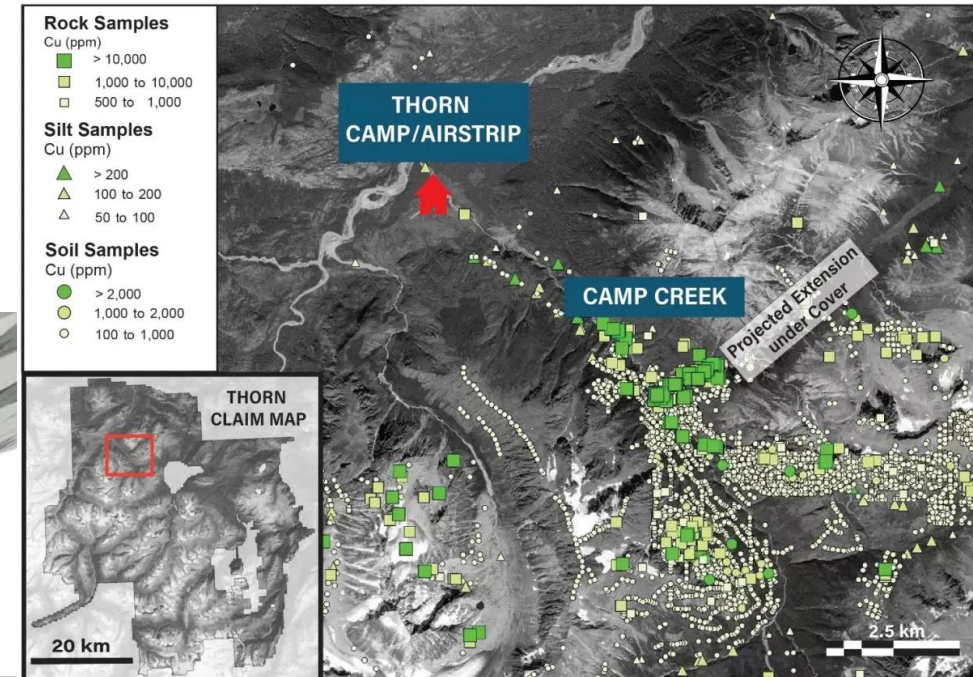
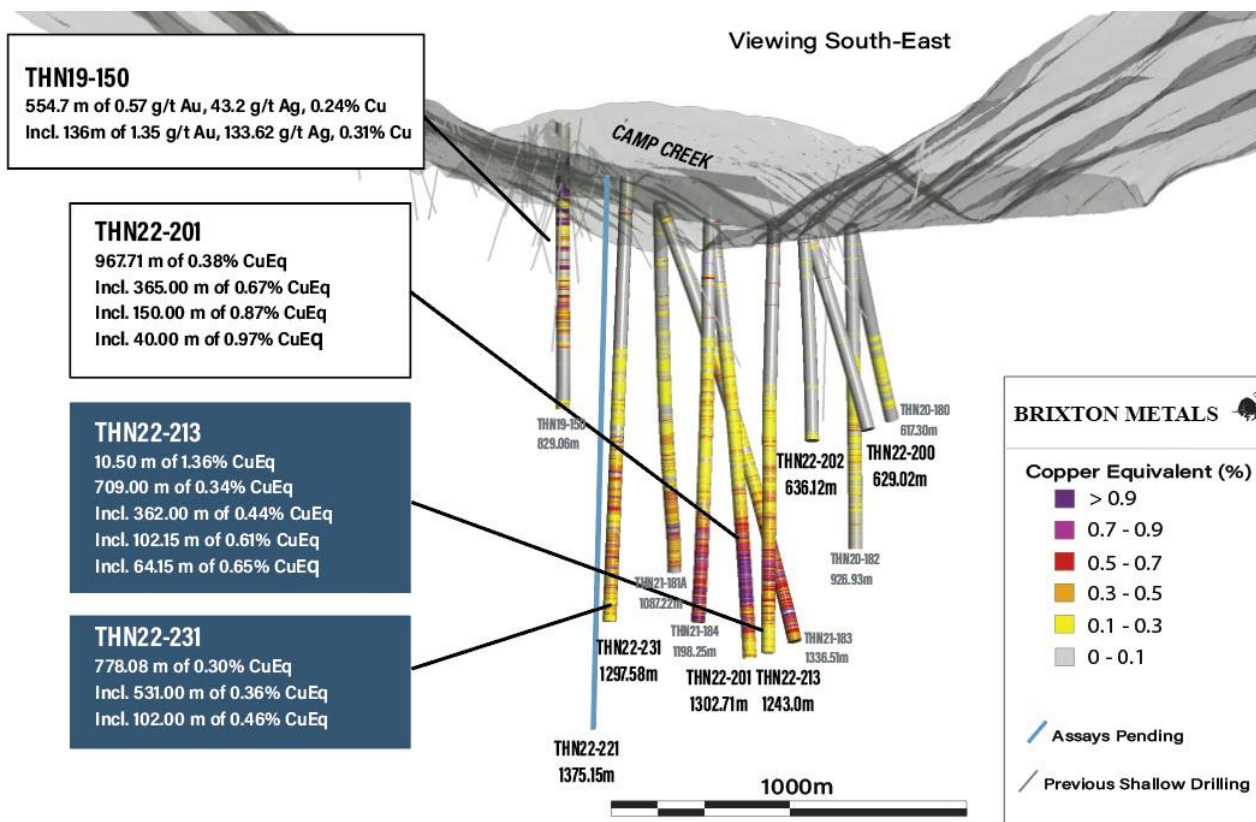




# Brixton Metals Drills 709m of 0.34% CuEq Including 362m of 0.44% CuEq including 102.15m of 0.61% CuEq at its Camp Creek Porphyry Target, Thorn Project



BBB TSX.V  
BBBXF







# Blue Lagoon Resources Announces Results of 2022 Ground IP and CSAMT Survey on Its Dome Mountain Gold Project

Hole DM-22-273 was drilled into the steeply dipping Resistivity anomaly to test for deep mineralization on the Boulder Vein at least 200 meters below the current resource level of the Boulder Vein resource (see press release February 10, 2022). The hole was successful in hitting the deeper and untested portion of the Boulder Vein and included a pyrite mineralized quartz breccia zone at 290 meters depth (7-10% pyrite with trace bornite and chalcopyrite). Between 295 m - 308 m a series of quartz veins were intercepted containing pyrite (13-20%), chalcopyrite (5-7%) and sphalerite (0.5 -3%). This is a significant mineralized zone (over 16 m thick) in the deeper Boulder Vein and sits in strong correlation to the modeled Ground IP section in Figure 4.

This mineralization sits within an overall steeply dipping structure at least 20 meters thick.

Results are pending for samples submitted from hole DM-22-273 however, a diamond drill rig is sitting at this collar location now and follow up drilling of this intercept (down dip and along strike) will be the first priority for the 2023 drilling program expected to begin mid-January.

# New Found Gold Increases Queensway Drill Program to 500,000 Meters

## Highlights

- During 2022, New Found drilled 184,911m of core, employing an average of fourteen drill rigs. This equates to 3,555m of core production per week, with significant operating efficiencies experienced in the second half of the year.
- Following the Holiday break, New Found has restarted drilling and moving forward, the Company intends to use an average of 12 drill rigs, including a maximum ramp-up to 14 drill rigs throughout 2023 as it continues its aggressive exploration program. As a result, **New Found is now planning to drill a total of 500,000m** as part of its ongoing drilling program at the Queensway Project by the end of 2023.
- With 319,000m of drilling completed to date, the Company is forecasting 181,000m of core production during 2023. This expanded drill program is fully funded out of the Company's current cash and marketable securities balance of \$90 million.
- Exploration drilling will include a hybrid of targeted drilling, aimed at expanding existing zones and identifying new zones in highly prospective areas, as well as grid drilling aimed at testing open swaths of prospective strike along main fault structures, with a strong emphasis on the west side of the Appleton Fault Zone ("AFZ"). Drilling is also planned for the parallel JBP Fault Zone ("JBP") at Queensway North, the newly optioned VOA ground to the north, and at Queensway South.







# CRESCAT CAPITAL<sup>®</sup>

The Value of Global Macro Investing

---

**Marek Iwahashi**

Client Service Specialist

(303) 271-9997 | [miwahashi@crescat.net](mailto:miwahashi@crescat.net)