



**CHESAPEAKE**  
GOLD CORP.

# INVESTOR PRESENTATION

SEPTEMBER 2022

**CKG: TSX.V**  
**CHPGF: OTCQX**



# Cautionary Notes



## Cautionary Note Regarding Forward-Looking Statements

*This presentation contains “forward-looking statements” within the meaning of Canadian securities legislation. These include, without limitation, statements with respect to: the economic and project parameters presented in the PEA, including IRR, AISC, NPV, and other costs and economic information including the price of gold and silver, the strategic plans, timing and expectations for the Company’s exploration and drilling programs at the Metates Property, including metallurgical testing, mineralization estimates and grades for drill intercepts, permitting for various work, and optimizing and updating the Company’s resource model and preparing a pre-feasibility study; information with respect to high grade areas and size of veins projected from underground sampling results and drilling results; and the accessibility of future mining at the Metates Property. Such forward-looking statements or information are based on a number of assumptions, which may prove to be incorrect. Assumptions have been made regarding, among other things: the reliability of mineralization estimates, the conditions in general economic and financial markets; future price of gold and silver; availability and costs of mining equipment and skilled labour; timing and amount of expenditures related to drilling programs; and effects of regulation by governmental agencies. The actual results could differ materially from those anticipated in these forward-looking statements as a result of risk factors including: the timing and content of work programs; results of exploration activities; the interpretation of drilling results and other geological data; receipt, maintenance and security of permits and mineral property titles; environmental and other regulatory risks; project cost overruns or unanticipated costs and expenses; and general market and industry conditions. Forward-looking statements are based on the expectations and opinions of the Company’s management on the date the statements are made. The assumptions used in the preparation of such statements, although considered reasonable at the time of preparation, may prove to be imprecise and, as such, readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date the statements were made. The Company undertakes no obligation to update or revise any forward-looking statements included in this news release if these beliefs, estimates and opinions or other circumstances should change, except as otherwise required by applicable law.*

## Cautionary Note Regarding Mineral Reserves and Mineral Resources Estimates

*The Company cautions that the results of the PEA described in this presentation are preliminary in nature and include inferred mineral resources that are considered too speculative geologically to have economic considerations applied to them be classified as mineral reserves. There is no certainty that the results of the PEA will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.*

## Cautionary Note Regarding Non-GAAP Measures

*AISC is defined as all-in sustaining costs, NPV is defined as net present value and IRR is defined as internal rate of return and refer to Non-GAAP Financial Measures. AISC, NPV and IRR are all not measures recognized under IFRS and do not have a standardized meaning prescribed by IFRS on which the Company’s financial reports are based. As such, these Non-GAAP Measures do not have standardized meanings under IFRS, may differ from those used by other issuers.*

# Metates – A Re-Invented Story

## Not How You Remember It → Waking A Sleeping Giant



	PAST (2016 PFS)	CURRENT (2021 PEA)	
TOTAL RESOURCE	~18Moz Au Contained ~500Moz Ag Contained	~20Moz Au Contained ~560Moz Ag Contained	Maintains Enormous Resource
PROCESSING METHODOLOGY	Flotation / POX Autoclave	Sulphide Heap Leach	Heap Leach Unlocks True Mine Value
THROUGHPUT	Up to 90ktpd	15ktpd “Starter” Project	“Starter” with Expansion Potential
DEVELOPMENT CAPEX	US\$3,496M	US\$359M	90% Decrease to Capex
MINE LIFE	27 Years	31 Years	Stable, Long Life, Asset
AVERAGE ANNUAL PRODUCTION	~560Koz Au	~147Koz AuEq	Healthy Production Scale
PRE-TAX NPV (5% DCF)	US\$1.8B (Base Case)	C\$1.9B (Base Case)	Smaller Project with Robust Margins

We are re-inventing Metates as a low capital cost, sulfide heap leach project → Real path to production identified

Source: Metates Gold-Silver Project NI 43-101 Technical Report 2021 PEA.

# Metates

## Waking A Sleeping Giant



- **One of the world's largest undeveloped gold-silver deposits<sup>1</sup>**
  - Well defined orebody
    - 1,365 million tonne resource with **>20 million ozs gold** (0.5 g/t)
    - **>550 million ozs silver** (13 g/t)
    - **28.1 million ozs gold-silver equivalent**
- **Initially target higher grade portion of the Metates massive intrusive as sulfide heap leach mine**
  - 166mt @ 0.76 g/t Au, 15.7 g/t Ag (0.99 g/t AuEq)
  - 15k tpd starter project; expandable
- **Lower capital and processing costs from heap leach production returns superior project economics**



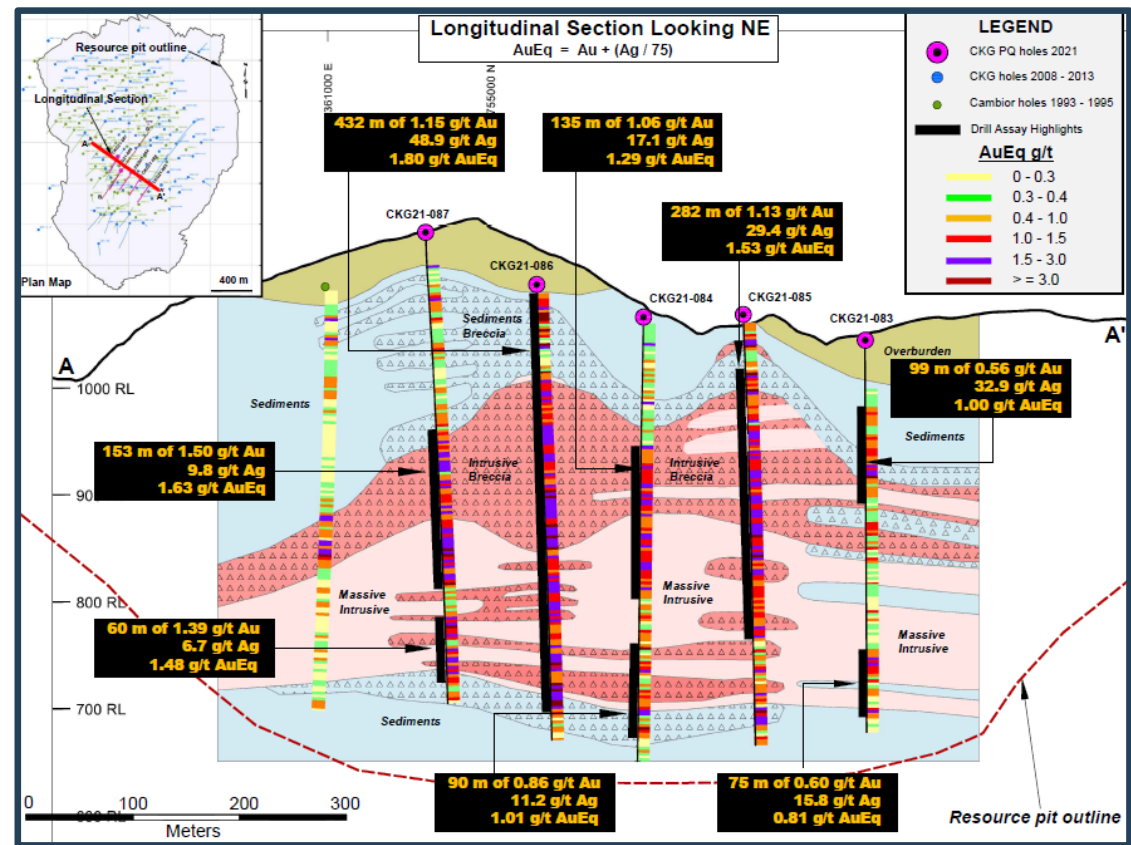
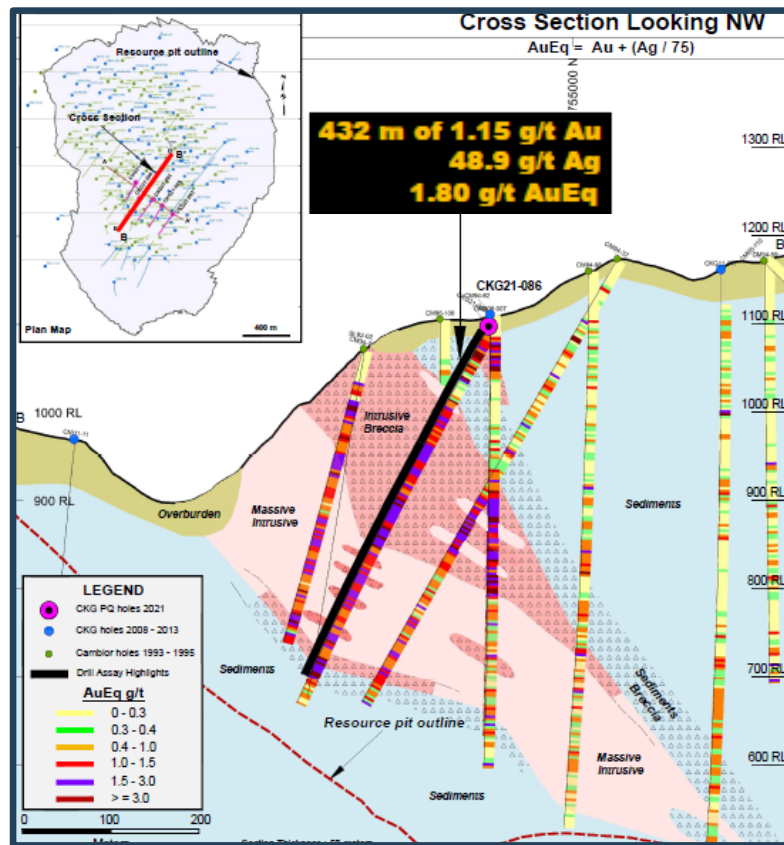
1. Metates Gold-Silver Project NI 43-101 Technical Report 2021 PEA. Gold-Silver Equivalent calculated at US\$1,600/oz Au, US\$22/oz Ag.



# Metates

## Targeting Higher Grade

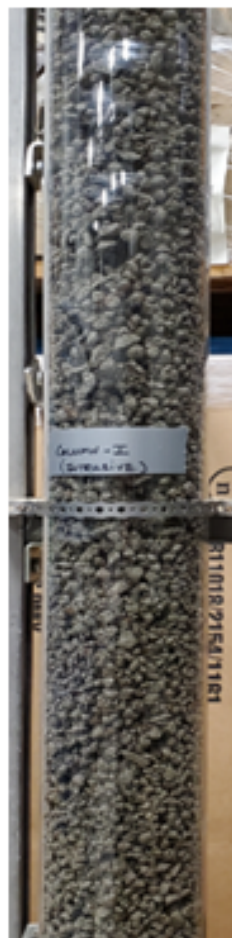
- 2021/22 drilling confirms higher grade intrusive
  - Assay grade and intercepts better than expected, >18% improvement in grade



# Metallurgical Testwork

## Initial Intrusive Test

- To prepare for a large and extensive metallurgical testwork program on recently drilled core, Chesapeake has set up a procedural trial on previous Metates core that had been held in storage
- The composite being tested was an intrusive ore sample crushed to a nominal size of P80 = 13 mm
- The column photos of the ore show a distinct change in colour, from gray to yellow-brown as it oxidizes from the heap leach technology



May 18, 2021



June 18, 2021



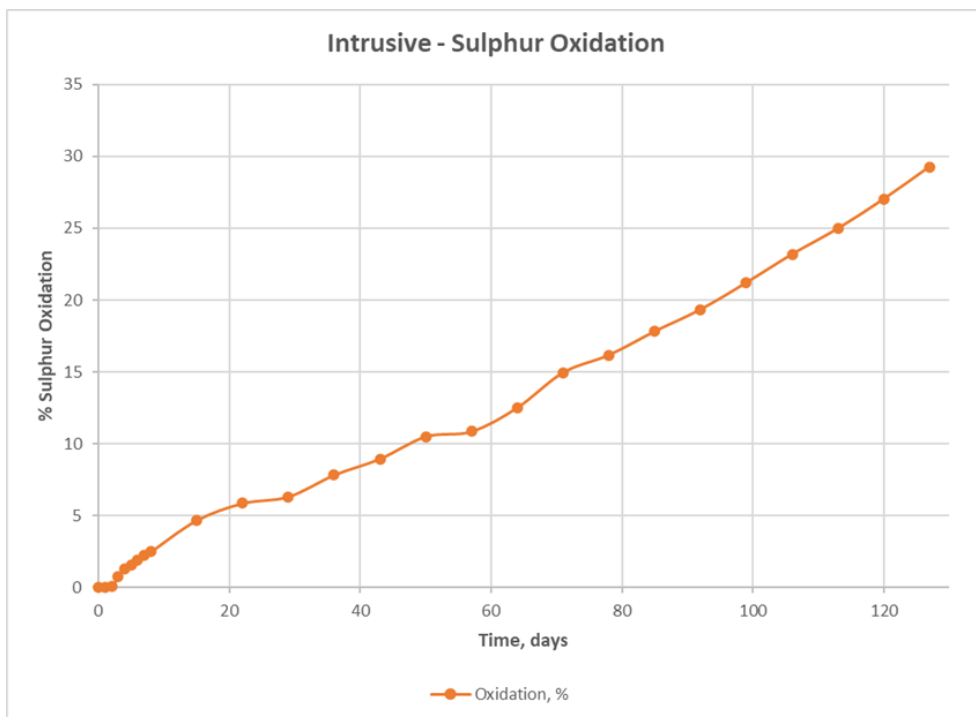
July 5, 2021



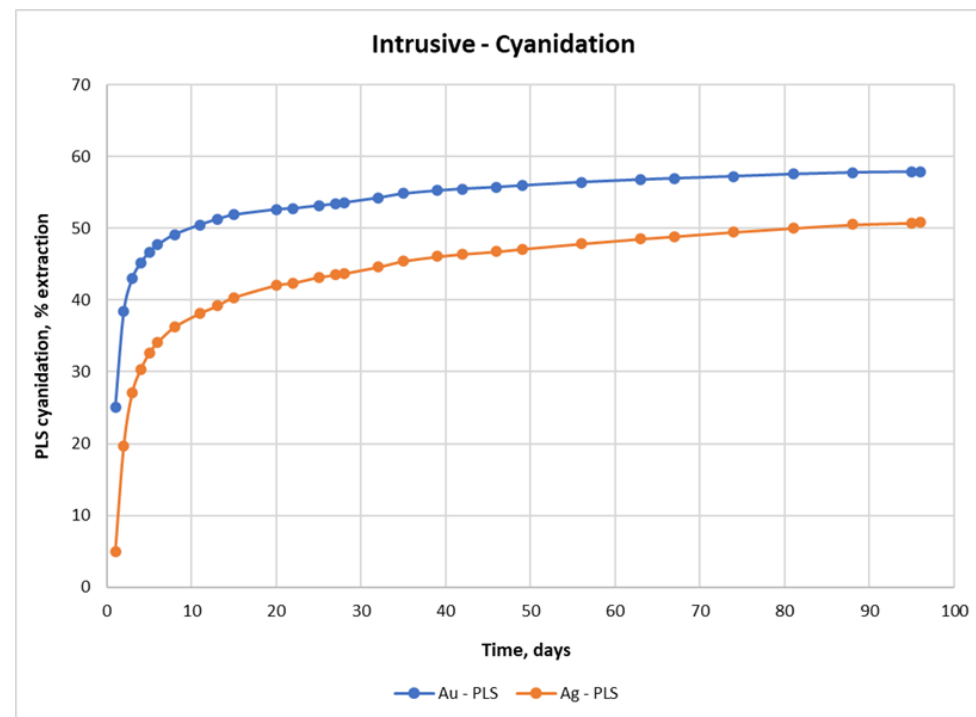
Aug 11, 2021



# Intrusive Column - Encouraging Initial Results

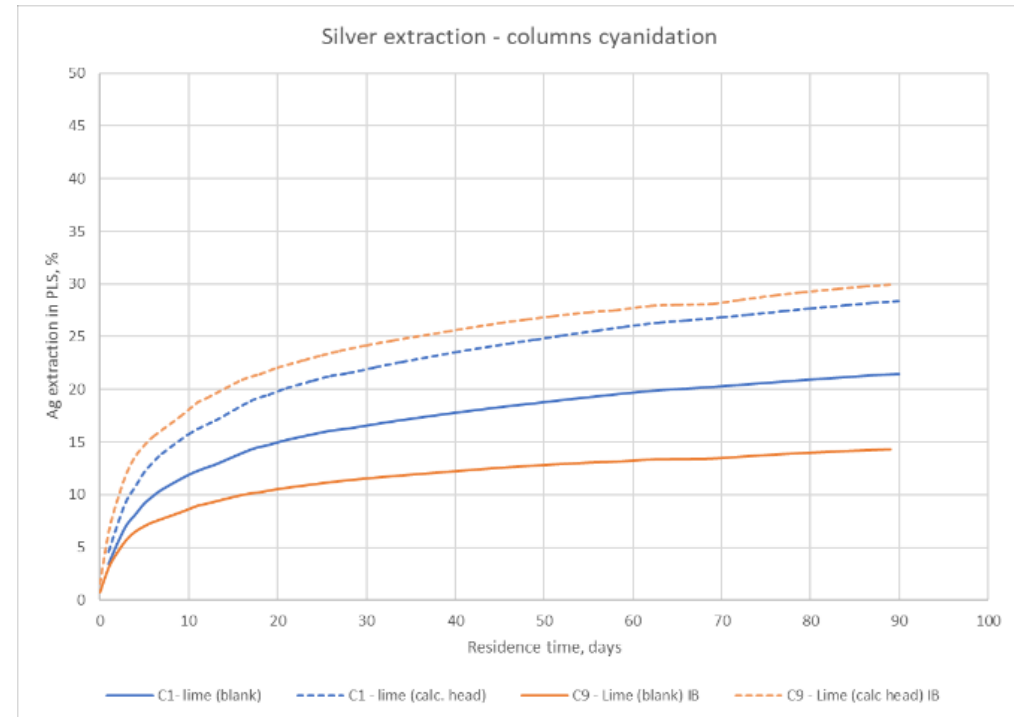
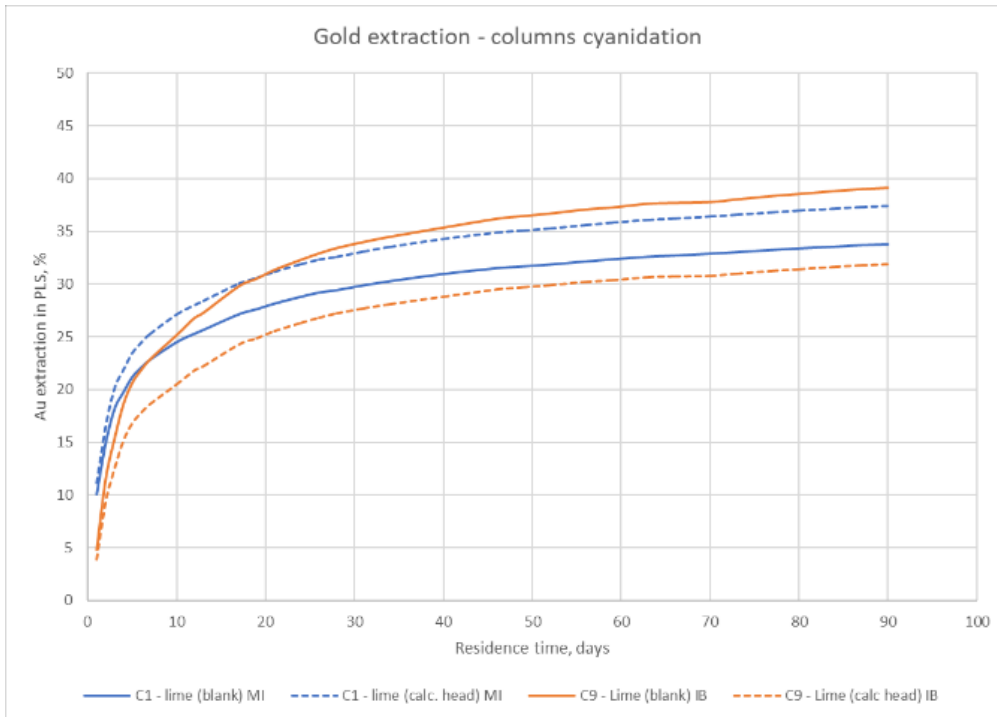


- Oxidation – 30% in 128 Days



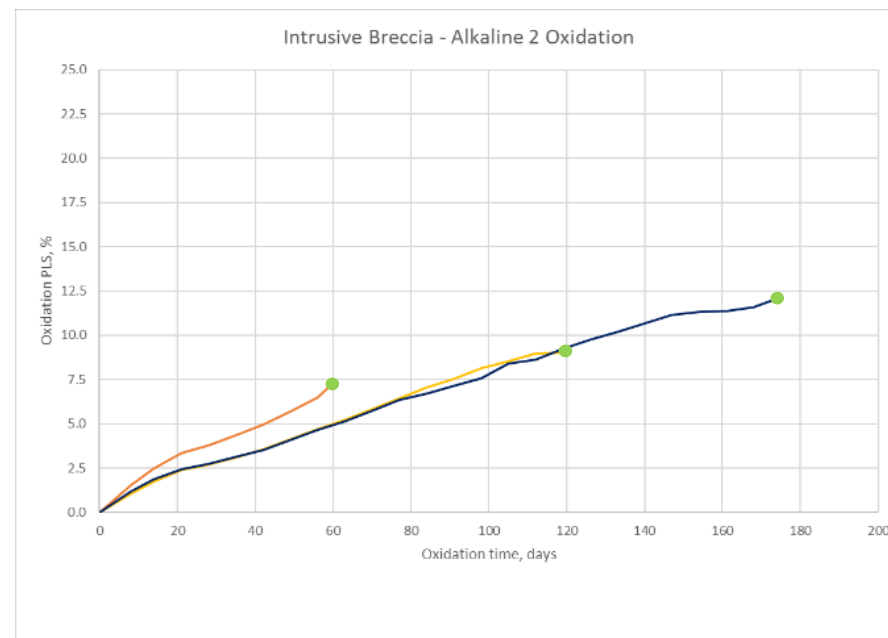
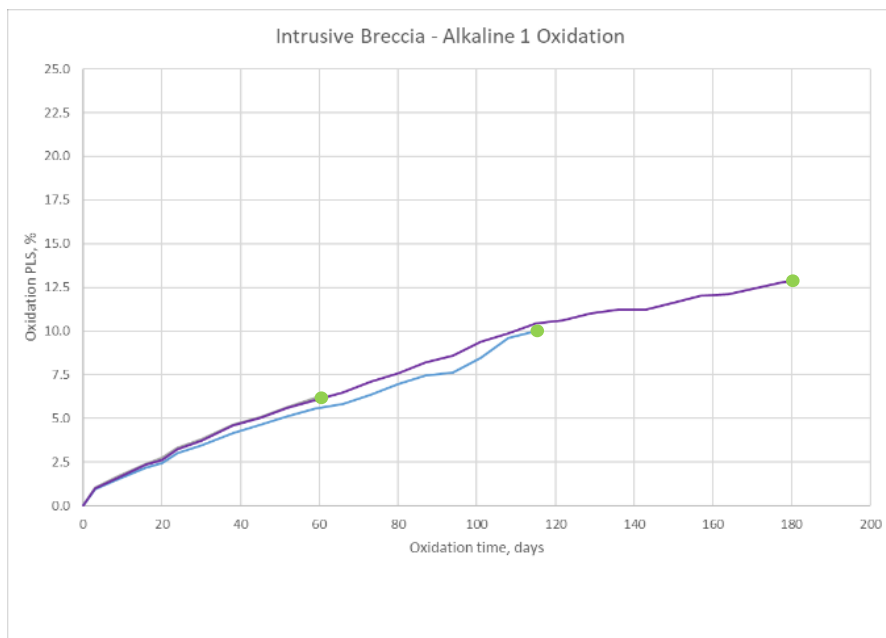
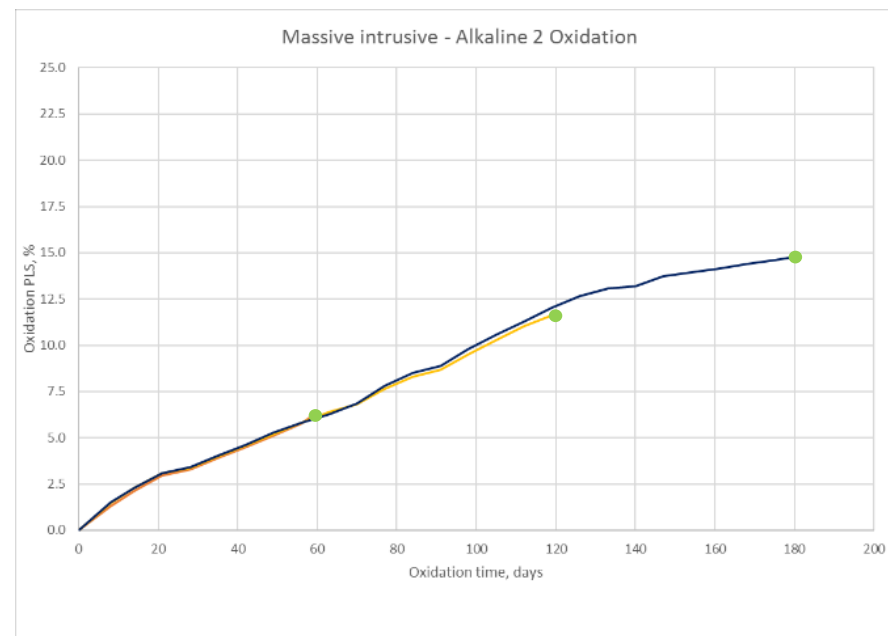
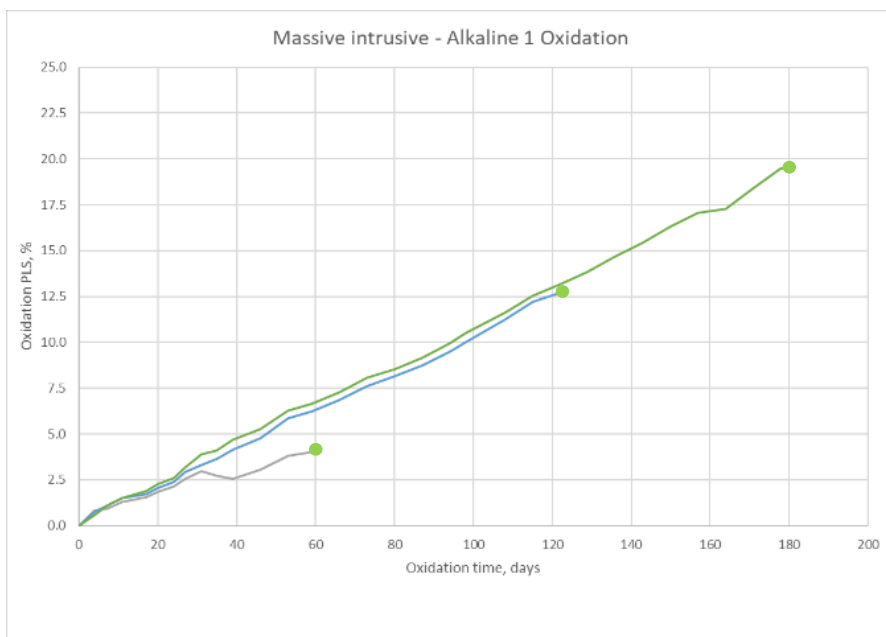
- Fast initial gold and silver extraction
  - Gold Recovery almost 60%
  - Silver Recovery over 50%

Gold recoveries around 35% and Silver recoveries around 20%





# Fresh Intrusive & Breccia - Oxidation



# Recent Drill Core



Figure 1 - Fresh core from the 2021 drilling



Figure 2- Same core 5 to 6 months later



Figure 3- Core broken open after 5 -6 months



# Recent Drill Core & XRD



Mineral	Ideal Formula
Copiapite	$\text{Fe}^{2+}\text{Fe}^{3+}_4(\text{SO}_4)_6(\text{OH})_2 \cdot 20\text{H}_2\text{O}$
Coquimbite	$\text{AlFe}_3(\text{SO}_4)_6(\text{H}_2\text{O})_{12} \cdot 6\text{H}_2\text{O}$
Illite/Muscovite 2M1	$\sim \text{K}_{0.65}\text{Al}_{2.0}(\text{Al}_{0.65}\text{Si}_{3.35}\text{O}_{10})(\text{OH})_2 / \text{KAl}_2(\text{AlSi}_3\text{O}_{10})(\text{OH})_2$
Marcasite	$\text{FeS}_2$
Pyrite	$\text{FeS}_2$
Quartz	$\text{SiO}_2$
Rhomboclase	$(\text{H}_5\text{O}_2)\text{Fe}^{3+}(\text{SO}_4)_2 \cdot 2\text{H}_2\text{O}$
Römerite	$\text{Fe}^{2+}\text{Fe}^{3+}_2(\text{SO}_4)_4 \cdot 14\text{H}_2\text{O}$
Rozenite	$\text{FeSO}_4 \cdot 4\text{H}_2\text{O}$
Siderite	$\text{Fe}^{2+}\text{CO}_3$
Sulfur	$\text{S}_8$

# Old Cambior Core

Metates mineralization will oxidize – How long, not if

- Cambior 1990's Core
  - Significantly Degraded
  - Similar XRD results





# Acquisition of Alderley Gold Corp.

## Sulphide Oxidation: Copper vs. Gold/Silver



### Copper Sulphide Oxidation

- Crushing to ½"
- Mixing/agglomeration drum
  - Ensures controlled reagent addition & effective mixing – acidic system
- Single lift on/off leach pad
  - Eliminates solution mixing and cross over
  - Stops reaction after a fixed time period
- Forced Air Injection
  - Controls oxygen levels
- Oxidises Chalcocite, Covellite & Pyrite
  - Achieves 80%+ oxidation
  - Achieves 80%+ copper recovery
- >30 years of commercial adoption

### Gold / Silver Pyrite Oxidation

- Crushing to ½"
- Mixing/agglomeration drum
  - Ensures controlled reagent addition & effective mixing – alkaline system
- Single lift on/off oxidation pad
  - Eliminates solution mixing and cross over
  - Stops oxidation after a fixed time period
- Forced Air Injection
  - Controls oxygen levels
- Oxidises Pyrite & other sulphides
  - Releases the Au/Ag for second stage leaching with CN

# 2021 PEA

## Financial Summary



- **2021 PEA: Smaller expandable 'starter' project**
  - **LOM Operating Cash Flow:** C\$3.5bn
  - **Avg. Operating Cash Flow:** C\$110mm
- **Highlight's sulphide heap-leach economic potential**
  - Significant opportunity for Chesapeake to disrupt the precious metals industry and enhance the project economics of additional sulphide orebodies globally

<u>LOM Metrics (Base Case)</u>		
Initial Capex	US\$mm	359
Sustaining (incl. Closure) Capex	US\$mm	176
Throughput	K tpd	15
Gold Grade	g/t	0.76
Silver Grade	g/t	15.71
Gold Recovery	%	70
Silver Recovery	%	75
Mine Life	(years)	31
Avg. Gold Production (Yr. 1-15)	K oz	112
Avg. Silver Production (Yr. 1-15)	K oz	2,493
Avg. Au-Ag Eq. Production (Yr. 1-15)	K oz	147
LOM Operating Strip Ratio	W:O	2.22
LOM Cash Costs	US\$/oz Au	686
LOM AISC	US\$/oz Au	749
<u>Pre-Tax Economic Indicators</u>		
Metal Price Assumptions		Base Case
Gold (US\$/oz.)		\$1,600
Silver (US\$/oz.)		\$22
NPV @ 5% (C\$mm) <sup>1</sup>		C\$1,427
IRR (%)		35%
Payback (years)		2.5

Source: Metates Gold-Silver Project NI 43-101 Technical Report 2021 PEA. 1 USD = 1.25 CAD.

- Compelling project economics & significant leverage to gold and silver prices

**Table 1: C\$mm Pre-Tax NPV<sub>(5%)</sub> Sensitivity Analysis: Au & Ag Prices**

		Gold Price (US\$/oz)				
		1,400	1,600	1,800	2,000	2,200
Silver Price (US\$/oz)	20	\$1,005	\$1,345	\$1,685	\$2,025	\$2,365
	22	\$1,087	\$1,427	\$1,767	\$2,107	\$2,447
	24	\$1,169	\$1,509	\$1,848	\$2,188	\$2,528
	26	\$1,250	\$1,590	\$1,930	\$2,270	\$2,610
	28	\$1,332	\$1,672	\$2,012	\$2,352	\$2,691

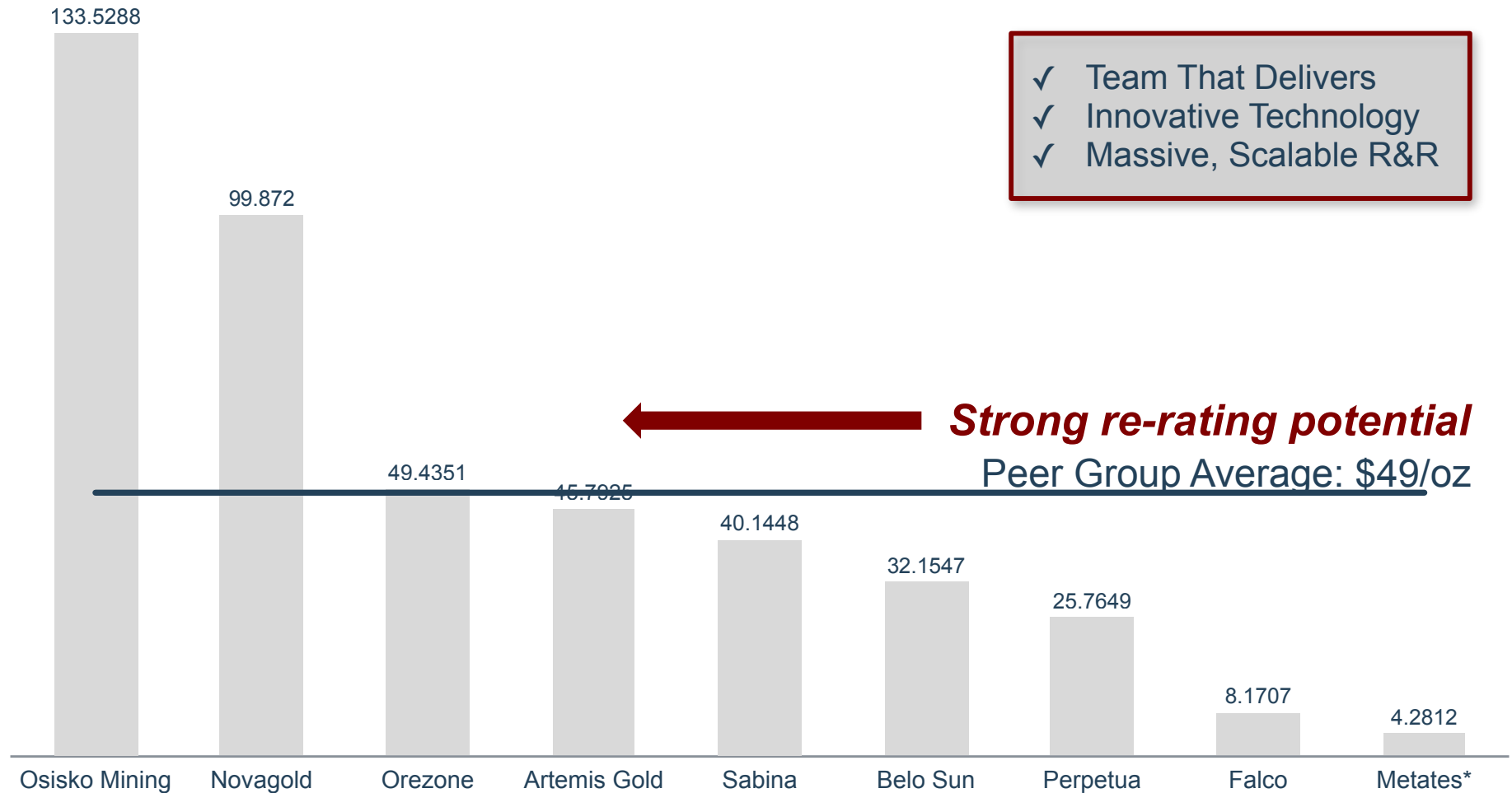
**Table 2: Pre-Tax IRR Sensitivity Analysis: Au & Ag Prices**

		Gold Price (US\$/oz)				
		1,400	1,600	1,800	2,000	2,200
Silver Price (US\$/oz)	20	28%	33%	38%	42%	47%
	22	30%	35%	40%	45%	49%
	24	33%	38%	43%	47%	52%
	26	35%	41%	46%	50%	55%
	28	38%	43%	48%	53%	57%

Source: Metates Gold-Silver Project NI 43-101 Technical Report 2021 PEA. 1 USD = 1.25 CAD.



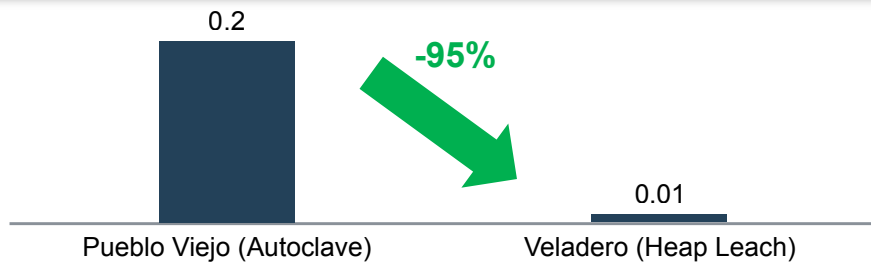
### Enterprise Value / Au-Ag Equivalent oz (US\$)



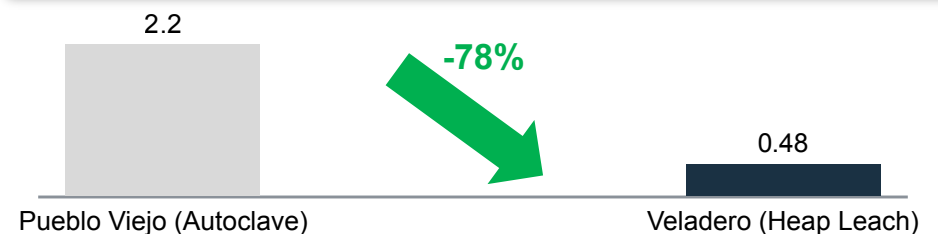
Source: Company Disclosures  
 Gold-Silver Equivalent calculated at US\$1,600/oz Au, US\$22/oz Ag.  
 \* Subject to offer from AngloGold Ashanti  
 \*\* Excludes Talapoosa resource.

- Will produce ‘**green gold**’ as when compared to conventional processes:
  - Utilizes less water;
  - Reduces power consumption and pollution; and,
  - Eliminates the need for a tailings dam
- Leading to a simplified permitting process

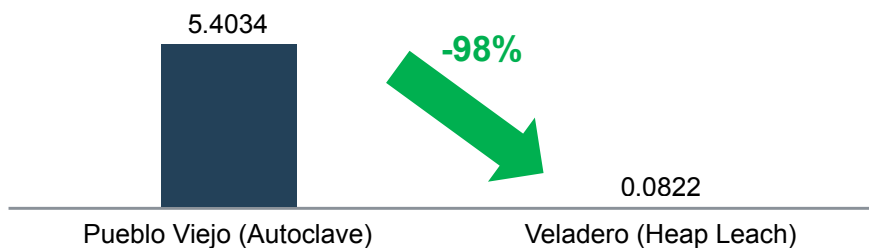
### Tonnes CO<sub>2</sub>e / t of Ore Processed<sup>1</sup>



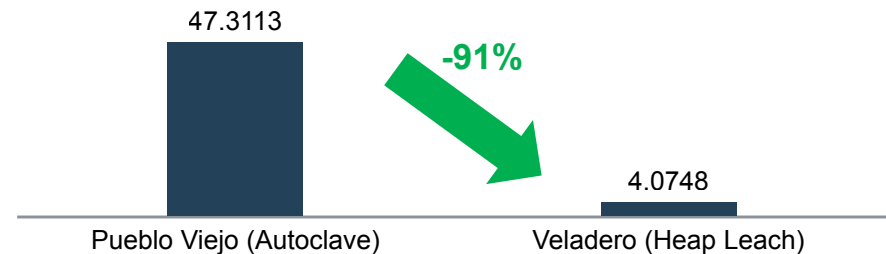
### Tonnes CO<sub>2</sub>e / Au Oz Produced<sup>1</sup>



### Water Consumption (t) / t of Ore Processed<sup>1</sup>



### Water Consumption (t) / Au Oz Produced<sup>1</sup>



1. Barrick Gold 2019 Sustainability Report. Water consumption on net basis.

- **Size & Leverage:** One of the world's largest undeveloped gold-silver deposits
  - 20.4mm oz Au and 560mm oz Ag
- **Higher Grade Core Confirmed in 2022**
- **Innovative & Tested Technology:** Dramatically lowers capital outlay and greatly reduces environment footprint, producing '*green gold*'
- **PEA Demonstrates Alternative Development**
  - Financeable, deliverable & expandable
  - Phase 1 heap leach has robust project economics; owner operated
- **Favorable Jurisdiction:** Mexican team in place for decades with strong community relations
- **Well Funded:** ~C\$30mm in treasury, low burn rate
- **Large Supportive Shareholders:** Eric Sprott, Sun Valley and Management own >40% equity interest
- **Compelling Valuation:** Trading at >90% discount to development peers on an EV/oz basis (see page 22)



### Perfect Asset at the Perfect Time

- ✓ Gold price reaching all-time highs
- ✓ Heap leach approach unlocks true mine value and maximizes development approach
- ✓ A large platform for future growth





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