



**Metates 2021 PEA  
Phase 1  
Financeable, Deliverable & Expandable**



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

**July 2021**

# 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: 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**



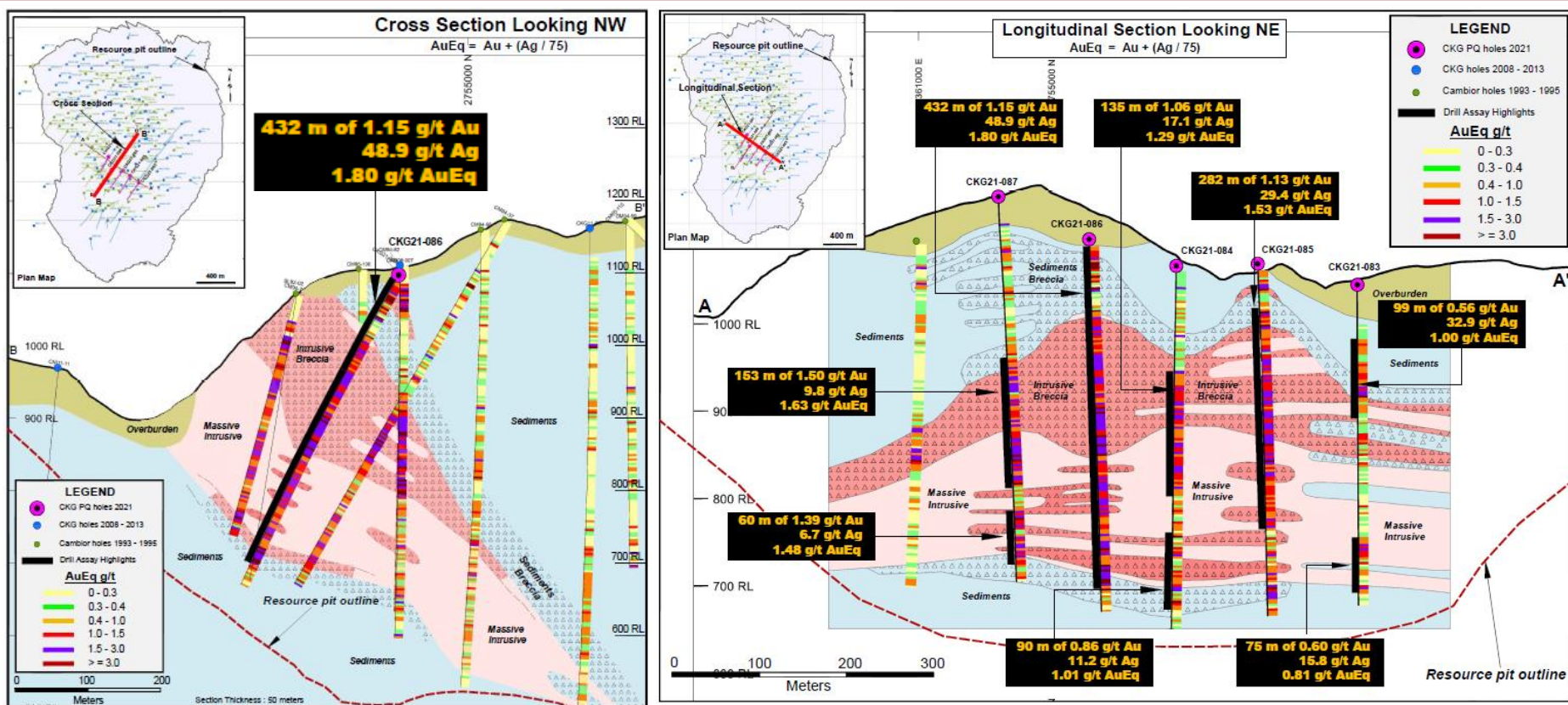
# Metates Resource Estimate

- The Metates project in Mexico is one of the largest, undeveloped disseminated gold and silver deposits in the world
- The PEA only focuses on the higher-grade intrusive portion of the Metates orebody, which represents <20% of the total mineral endowment.**

		Gold Eq.	Gold	Silver	Gold	Silver
Resource Category	Mtonnes	(g/t)	(g/t)	(g/t)	(Moz)	(Moz)
<b>Measured Mineral Resource</b>	395.4	0.79	0.59	15.5	7.44	197.3
Intrusive	103.1	0.98	0.76	16.5	2.52	54.6
Sediment	292.4	0.73	0.52	15.2	4.92	142.7
<b>Indicated Mineral Resource</b>	907.0	0.58	0.42	11.8	12.36	344.7
Intrusive	146.0	0.76	0.60	11.9	2.79	55.9
Sediment	761.1	0.55	0.39	11.8	9.57	288.7
<b>M&amp;I Mineral Resource</b>	<b>1,302.4</b>	<b>0.65</b>	<b>0.47</b>	<b>12.9</b>	<b>19.80</b>	<b>542.0</b>
Intrusive	249.0	0.85	0.66	13.8	5.32	110.6
Sediment	1,053.4	0.60	0.43	12.7	14.48	431.4
<b>Inferred Mineral Resource</b>	<b>62.2</b>	<b>0.44</b>	<b>0.32</b>	<b>9.0</b>	<b>0.64</b>	<b>18.0</b>
Intrusive	3.4	0.51	0.43	6.0	0.05	0.7
Sediment	58.8	0.44	0.32	9.2	0.60	17.3

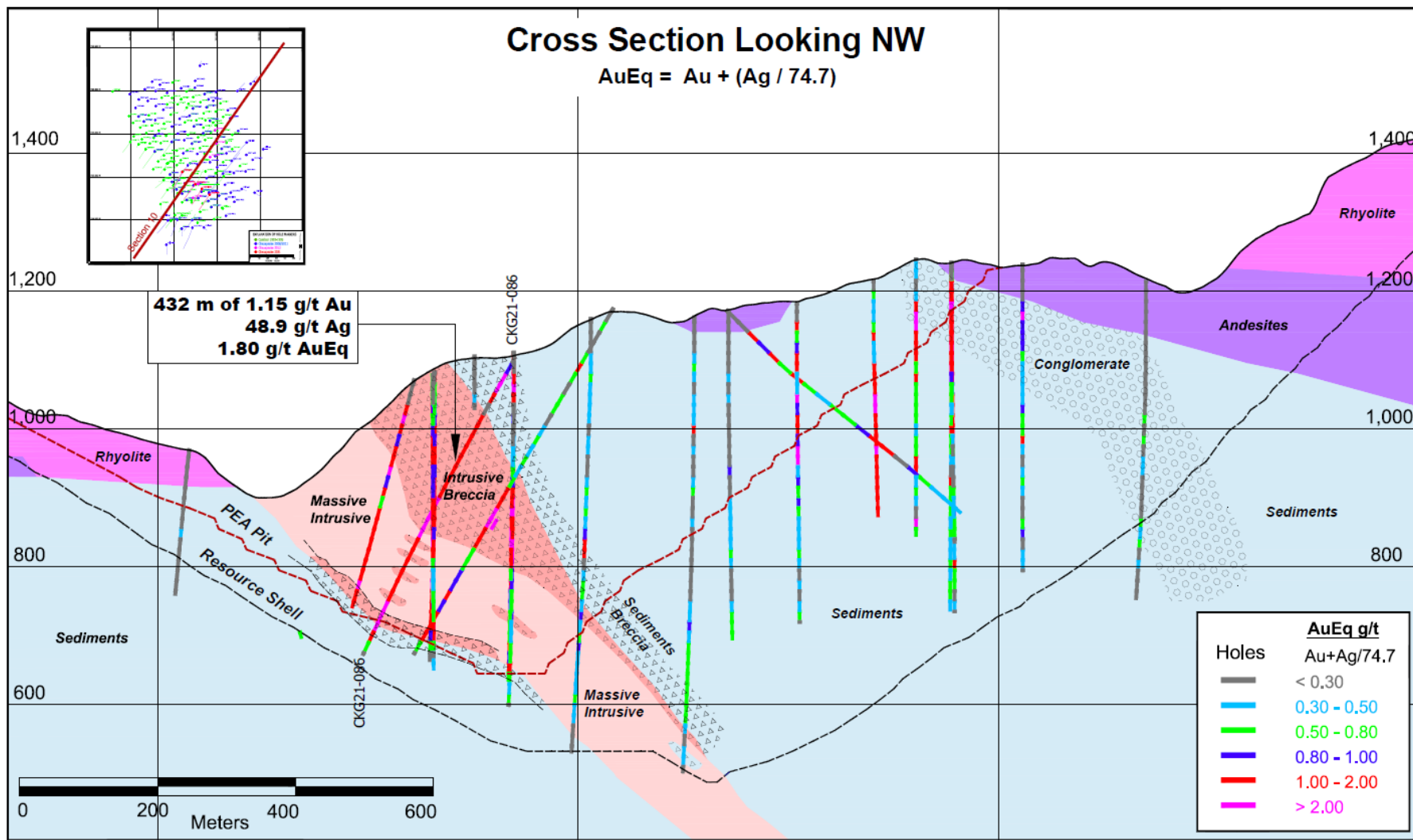


# Targeting Higher Grade<sup>1</sup>



- 2021 drilling confirms higher grade intrusive
  - 5 hole fence over 500m confirms general geology and mineralization
  - Assay grade and intercepts better than expected, >18% improvement in grade, 2 of the best holes ever drilled at Metates

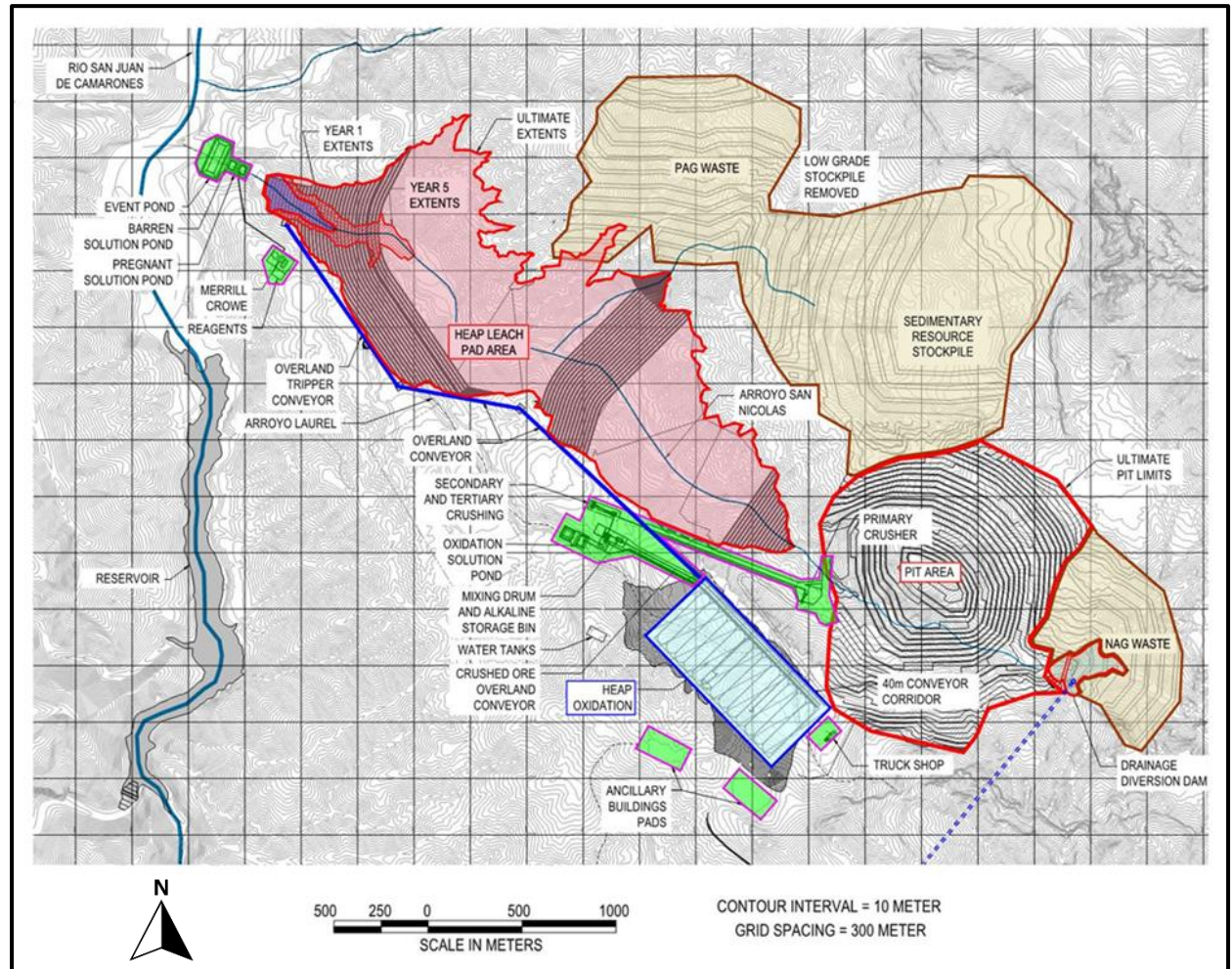
# Phase 1 Metates Cross Section



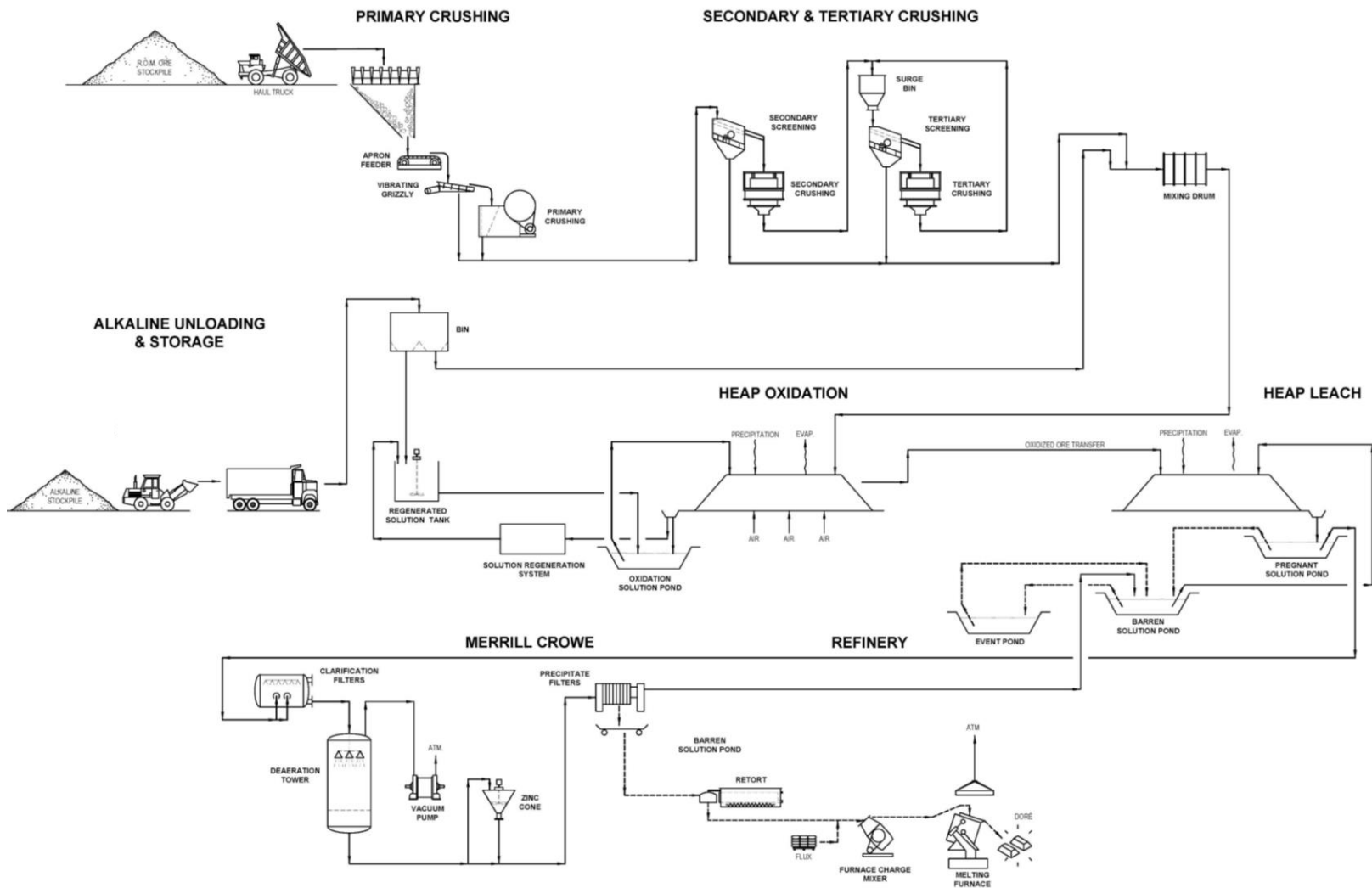


# Site Layout

- Compact Layout
- All Infrastructure onsite
- Location identified for Ph 2 oxidation pad
- Final Pad Sized for 100% of Intrusive



# PEA Flowsheet

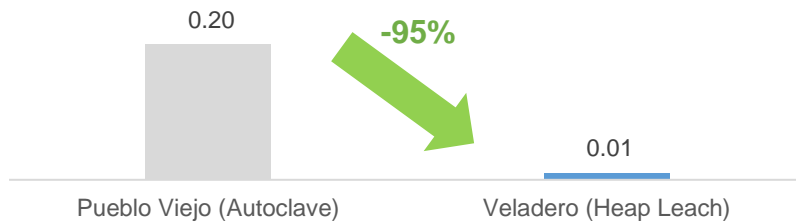




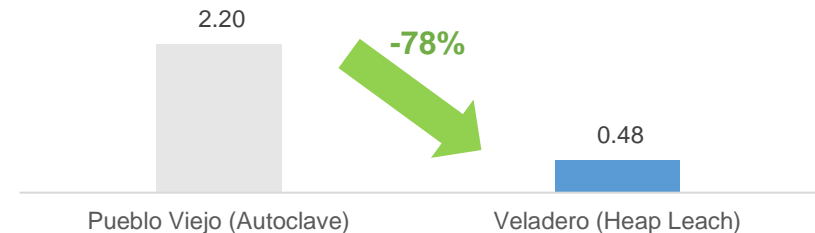
# Reduced GHG Emissions & Water Consumption

- For Metates, the shift away from an autoclave process towards a heap leach operation means an order of magnitude reduction in future CO<sub>2</sub> emissions and water consumption
  - To illustrate these environmental benefits, we can observe Barrick Gold's reported 2019 sustainability figures for its Pueblo Viejo (Autoclave) and Veladero (Heap Leach) operations
  - Heap Leach operations greatly reduce air pollution and consume a fraction of the water

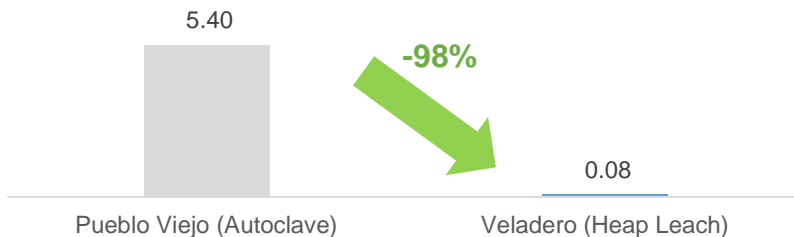
**Tonnes CO<sub>2</sub>e / t of Ore Processed<sup>1</sup>**



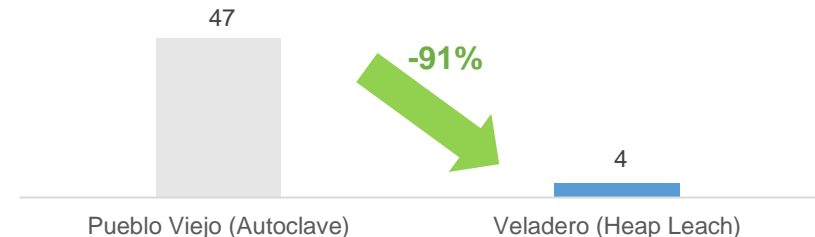
**Tonnes CO<sub>2</sub>e / Au Oz Produced<sup>1</sup>**



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



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



# Capital Cost Improvements

- **Dramatically Lower Capital Cost:**

- A ~90% reduction in capex when compared to the 2016 PFS
- A smaller expandable 15k tpd 'starter'
- Compact site focused layout
- Power from nearby powerline
- Local water source

## Summary of Capital Costs (US\$000's)

### Metates Site:

Mining Equipment & Mine Development	\$18,713
Crushing & Conveying	\$36,104
Ponds & Pads	\$28,404
Reagent/Regeneration System	\$11,677
Merrill-Crowe & Refinery	\$9,124

**Subtotal** **\$104,022**

### Infrastructure:

General Site/Earthworks/Access Roads	\$106,069
Electric Power	\$7,851
Water Supply	\$7,380
Ancillaries & Buildings	\$11,121

**Subtotal** **\$132,421**

Freight, Taxes & Duties \$4,060

**Total Direct Field Cost** **\$240,503**

Indirects-EPCM, Commissioning & Spares \$32,047

**Total On Site Constructed Cost** **\$272,550**

Contingency \$63,459

First Fills \$6,000

Owner's Cost \$17,200

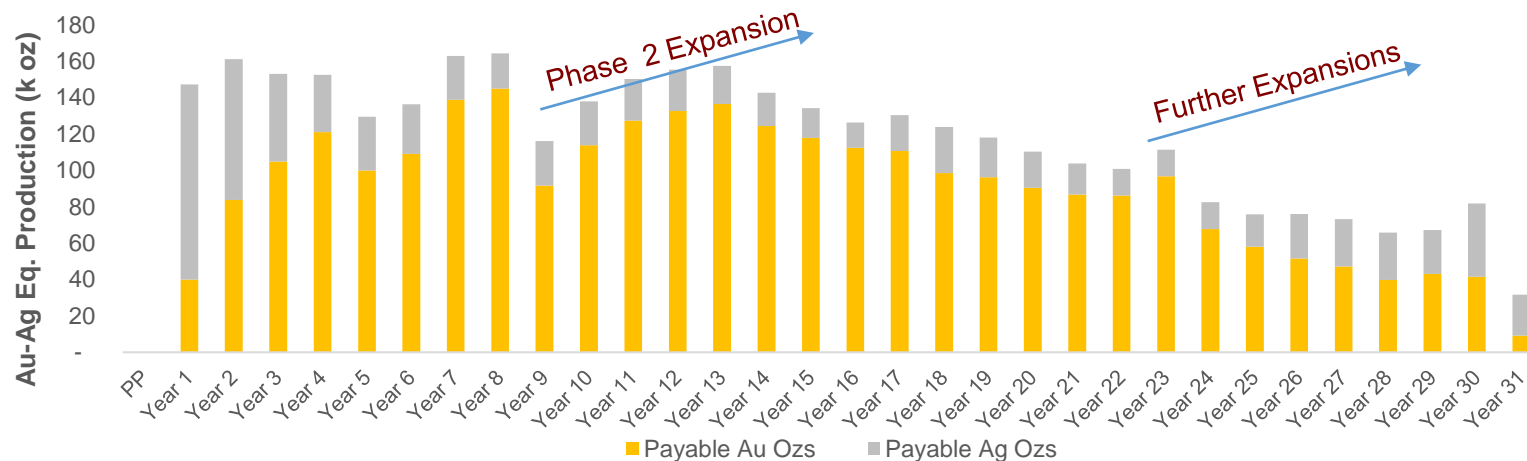
**Total Capital Cost** **\$359,209**

# Summary Operating Cost

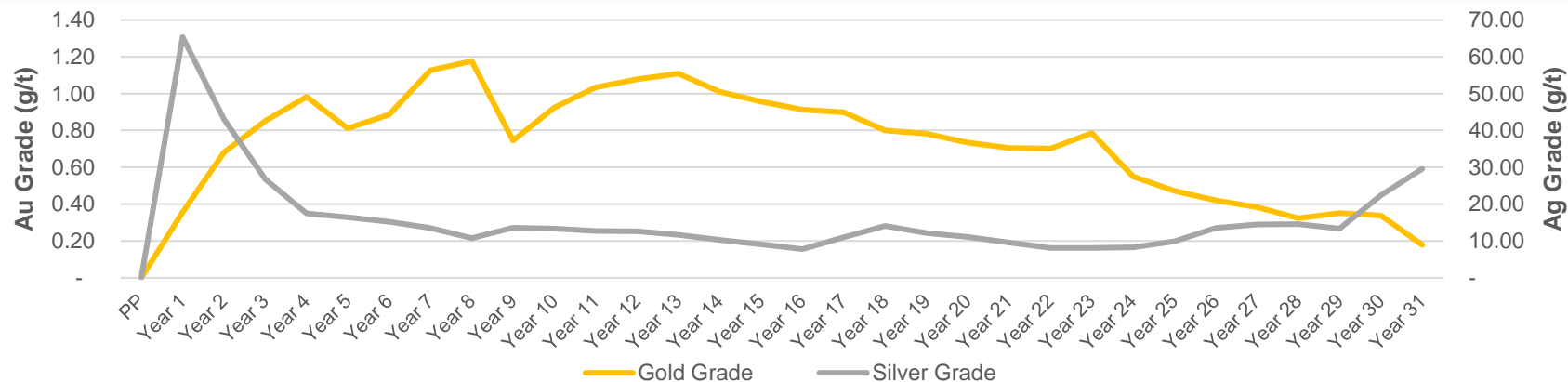
	LOM Average Cost US\$/t processed	LOM US\$/Au Oz.
<b>Metates Site</b>		
Mining (including rehandle and equipment lease costs)	\$7.51	\$441.70
Processing (Crushing, Stacking, Oxidation, Leach, Merrill-Crowe)	\$8.05	\$473.65
Site Support	\$1.41	\$82.69
Profit Sharing	\$1.32	\$77.74
<b>Total Operating Cost</b>	<b>\$18.29</b>	<b>\$1,075.78</b>
Royalties (0.5% NSR & 7.5% Gov't EBITDA Royalty)	\$1.45	\$85.35
Doré Treatment Charges	\$0.17	\$10.15
By-Product Credit (Silver)	(\$8.25)	(\$485.31)
<b>Total Cash Cost</b>	<b>\$11.66</b>	<b>\$685.97</b>
Sustaining Capital, Reclamation & Closure	\$1.06	\$62.49
<b>All-In Sustaining Cost ("AISC")</b>	<b>\$12.72</b>	<b>\$748.46</b>

# Phase 1 Production Profile

## Gold-Silver Equivalent Production Profile



## Gold-Silver Grade Profile





# Phase 1 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	Recent Spot
Gold (US\$/oz.)	\$1,600	\$1,786
Silver (US\$/oz.)	\$22	\$26
NPV @ 5% (C\$mm) <sup>1</sup>	C\$1,427	C\$1,906
IRR (%)	35%	45%
Payback (years)	2.5	2.0

# Phase 1 Sensitivities

- 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%

# Optimization Opportunities & Next Steps

- **Opportunities:**

- **Expandable 'starter' operation:** The smaller 15k tpd starter operation conservatively excludes opportunities to scale beyond the 'starter case' and bring future production forward, shortening the initial 31-year mine life
- **Potential For Higher Grades:** Recent drill results suggest potential for an even higher-grade core within the Metates intrusive. Chesapeake is reviewing plans to conduct further drilling in H2 2021, with results to be potentially incorporated in the planned 2022 pre-feasibility study
- **Optimize pad layout:** Potential to start the heaps higher up the valley – reducing pumping and conveying

- **Next Steps:**

- **Column Testwork:**
  - Expect initial results late Q4 early Q1 2022
- **Restart Environmental Monitoring:**
  - Q4 2021 onwards to support PFS & MIA
- **Possible Infill Drilling:**
  - Given recent drilling results we are evaluating the need for an infill drilling program

# Chesapeake: Significantly Undervalued

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





# Chesapeake Investment Highlights

- **Size & Leverage:** One of the world's largest undeveloped gold-silver deposits
  - >20mm oz Au and >550mm oz Ag
- **Higher Grade Core Identified in 2021**
- **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
- **Favorable Jurisdiction:** Mexican team in place for decades with strong community relations
- **Well Funded:** ~C\$35mm in treasury, low burn rate
- **Large Supportive Shareholders:** Eric Sprott, Sun Valley and Management own >40% equity interest
- **Compelling Valuation:** Trading at ~85% discount to development peers on an EV/oz basis (see page 16)



## 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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