COPPER WORLD SITE VISIT PRESENTATION

October 17-18, 2022

HUDBAY

CAUTIONARY INFORMATION

This presentation contains forward-looking information within the meaning of applicable Canadian and United States securities legislation. All information contained in this presentation, other than statements of current and historical fact, is forward-looking information. Often, but not always, forward-looking information can be identified by the use of words such as “plans”, “expects”, “budget”, “guidance”, “scheduled”, “estimates”, “forecasts”, “strategy”, “target”, “intends”, “objective”, “goal”, “understands”, “anticipates” and “believes” (and variations of these or similar words) and statements that certain actions, events or results “may”, “could”, “would”, “should”, “might” “occur” or “be achieved” or “will be taken” (and variations of these or similar expressions). All of the forward-looking information in this presentation is qualified by this cautionary note. Forward-looking information is not, and cannot be, a guarantee of future results or events. Forward-looking information is based on, among other things, opinions, assumptions, estimates and analyses that, while considered reasonable by the company at the date the forward-looking information is provided, inherently are subject to significant risks, uncertainties, contingencies and other factors that may cause actual results and events to be materially different from those expressed or implied by the forward-looking information. The risks, uncertainties, contingencies and other factors that may cause actual results to differ materially from those expressed or implied by the forward-looking information are described under the heading “Risk Factors” in our most recent annual information form for the year ended December 31, 2021, under the heading “Financial Risk Management” in our management’s discussion and analysis for the period ended June 30, 2022 and under the heading “Cautionary Note Regarding Forward Looking Information” in our news release dated June 8, 2022 available on SEDAR at www.sedar.com and EDGAR at www.sec.gov. Should one or more risk, uncertainty, contingency or other factor materialize or should any factor or assumption prove incorrect, actual results could vary materially from those expressed or implied in the forward-looking information. Accordingly, you should not place undue reliance on forward-looking information. Hudbay does not assume any obligation to update or revise any forward-looking information after the date of this presentation or to explain any material difference between subsequent actual events and any forward-looking information, except as required by applicable law.

Qualified Person and NI 43-101

The scientific and technical information contained in this presentation has been approved by Olivier Tavchandjian, P. Geo, Hudbay’s Vice-President, Exploration and Technical Services. Mr. Tavchandjian is a qualified person pursuant to Canadian Securities Administrators’ National Instrument 43-101 - Standards of Disclosure for Mineral Projects (“NI 43-101”).

The Copper World PEA is preliminary in nature, includes inferred resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves and there is no certainty the preliminary economic assessment will be realized. As a result of the Copper World PEA, the 2017 feasibility study and technical report in respect of the standalone Rosemont project (the “2017 Feasibility Study”), including the estimates of mineral reserves and mineral resources contained therein, is no longer current and should not be relied upon by investors.

With the completion of the PEA, the company has determined that the Copper World Complex is a material mineral project for purposes of NI 43-101 and a NI 43-101 technical report was filed on July 14, 2022. The new technical report is the current technical report in respect of all the mineral properties that form part of the Copper World Complex and shall supersede and replace the 2017 Feasibility Study.

Non-IFRS Financial Performance Measures

Cash cost and sustaining cash cost per pound of copper produced are shown because the company believes they help investors and management assess the performance of its operations, including the margin generated by the operations and the company. Unit operating costs are shown because these measures are used by the company as a key performance indicator to assess the performance of its mining and processing operations. EBITDA is shown to provide additional information about the cash generating potential in order to assess the company’s capacity to service and repay debt, carry out investments and cover working capital needs. These measures do not have a meaning prescribed by IFRS and are therefore unlikely to be comparable to similar measures presented by other issuers. These measures should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS and are not necessarily indicative of operating profit or cash flow from operations as determined under IFRS. Other companies may calculate these measures differently. For further details on these measures, please refer to Non-IFRS Financial Performance Measures of Hudbay’s management’s discussion and analysis for the period ended June 30, 2022 available on SEDAR at www.sedar.com and EDGAR at www.sec.gov.

All amounts in this presentation are in U.S. dollars unless otherwise noted.

SITE VISIT SCHEDULE

Monday, October 17th

- 3:00 pm — Hudbay management presentations at the JW Marriott Starr Pass
- 6:00 pm — Cocktail reception at the JW Marriott Starr Pass
- 7:00 pm — Dinner with Hudbay management at the JW Marriott Starr Pass

Tuesday, October 18th

GROUP A		GROUP B	
7:00 am	Depart JW Marriott for site tour	8:30 am	Depart JW Marriott for site tour
8:00 - 10:30 am	Copper World site tour	9:30 - 10:30 am	Core shack and regional exploration review
10:30 - 11:30 am	Core shack and regional exploration review	10:30 am - 1:00 pm	Copper World site tour
4:00 – 7:00pm	Group *Topgolf* social event (golf equipment and golf skills are ***not*** required)		

MANAGEMENT PRESENTATION

- Copper World Introduction – Peter K., Andre L.
- PEA Summary – Olivier T.
- Mine Plan – Olivier T. and Javier T.
- Processing – Matt T.
- Economics – Eugene L.
- Prefeasibility Study & Upside Opportunities – Javier D. R., Olivier T. and Matt T.
- Permitting – Javier D. R. and Matt B.
- Site Tour Agenda & Safety Orientation – Javier T.
- Regional Exploration – Olivier T.

HUDBAY SITE TOUR PARTICIPANTS

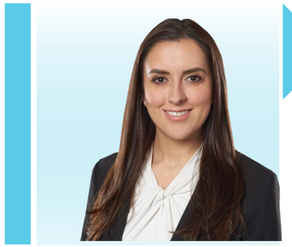
Peter Kukielski
President & CEO

Andre Lauzon
SVP & COO

Eugene Lei
SVP & CFO

Javier Del Río
VP South America and USA

Olivier Tavchandjian
VP Exploration & Technical Services

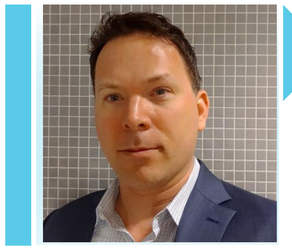


Candace Brûlé
VP Investor Relations

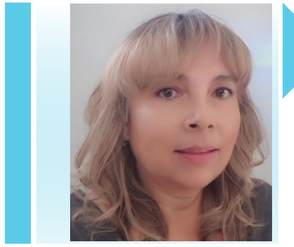
Matt Taylor
Executive Director, Metallurgy Technical Services

Javier Toro
Executive Director, Mining ABU

Matt Bingham
Executive Director, Legal & Public Affairs ABU



Craig Hallworth
CFO, ABU

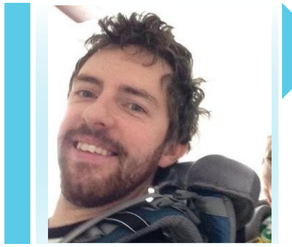


Clarissa Barraza
Director, Engineering ABU

Richard Laramie
Director, Corporate Development

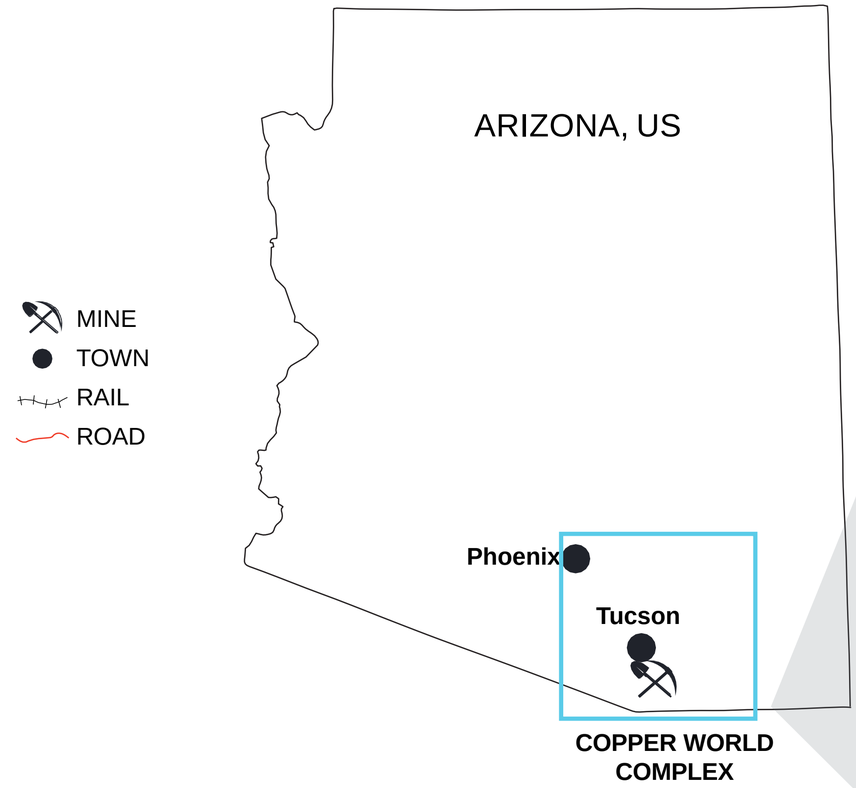
Jerry Bustamante
Manager, Community Relations ABU

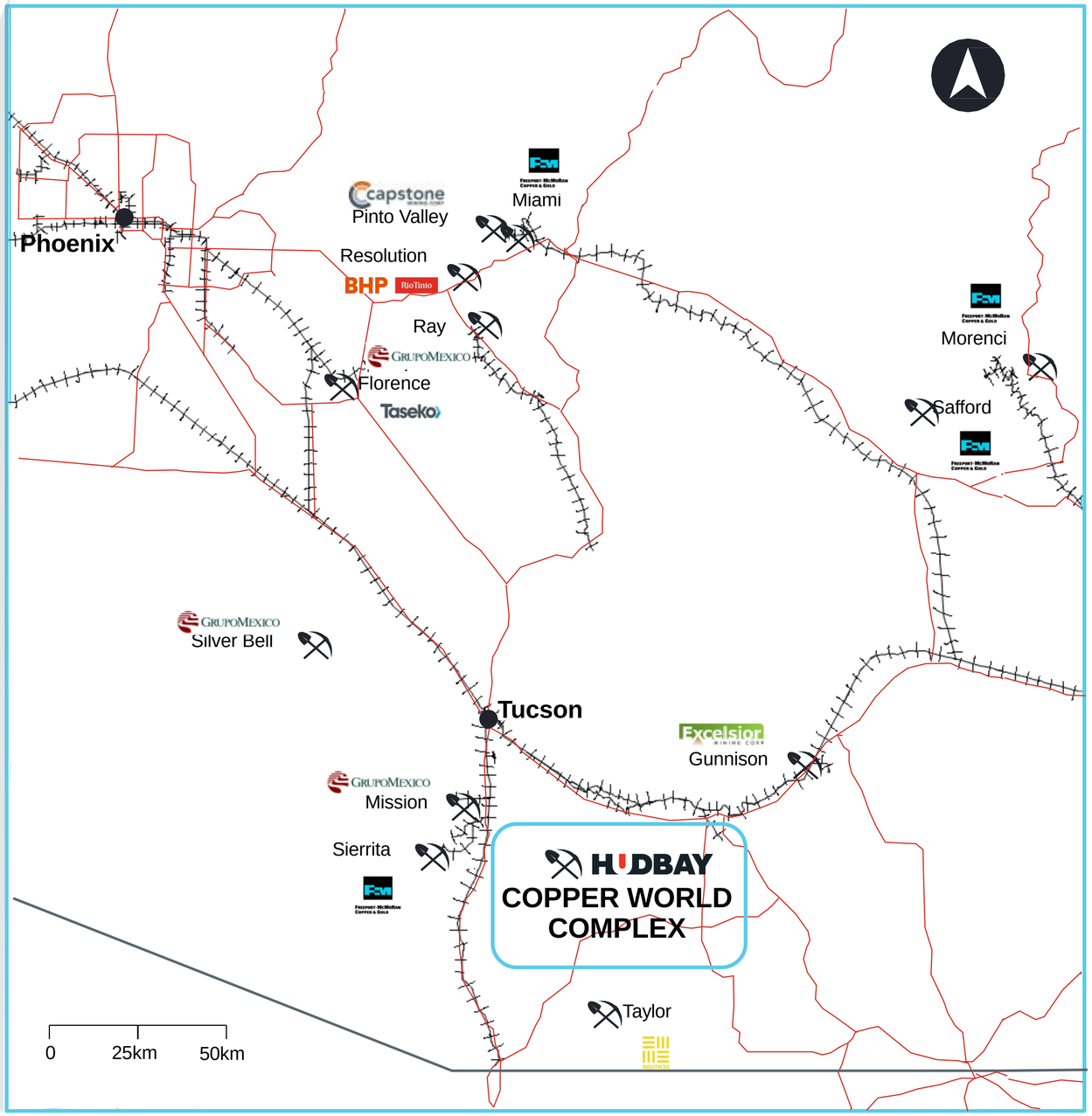
Tamara Cook
Manager, Investor Relations



Matt Cunningham
Senior Geologist ABU

ARIZONA BUSINESS UNIT





Maps are not to scale

United States

	Low Risk	Economic Risk	Business Environment Risk	Political Risk	Commercial Risk	Financing Risk
AA1						

PROJECT HISTORY

August 2019

AUGUSTA

(2007 – 2014)

- Approach to Rosemont development centered around pursuing a large NPV project with the federal permitting process
  - Private land ridgeline was unexplored

Permitting Progression

- 10 permits issued from a variety of federal/state agencies (ADWR, ADEQ,EPA etc.)
- 3 challenges/appeals won against both project opponents (SSSR, FICO) and local County
- U.S Forest Service Final Environmental Impact Statement Complete

HUDBAY

(2014 – 2019)

- Acquired Augusta in 2014 assuming ownership of the Rosemont project
  - Technical work adjusted and summarized in updated 2017 Feasibility Study
- Federal permitting process continued until unprecedented U.S. District Court ruling
  - Vacated USFS's issuance of the Final ROD, suspending construction at Rosemont

Permitting Progression

- Key federal permits obtained including Final ROD, 404 Water Permit & Mine Plan of Operations
- ADEQ 401 Certification issued
- All permits required to begin construction were issued before ROD was vacated

Construction suspended & appeal process initiated

Potential for continued federal (NEPA) permitting litigation even upon successful outcome

Private land development plan pursued for state permitting

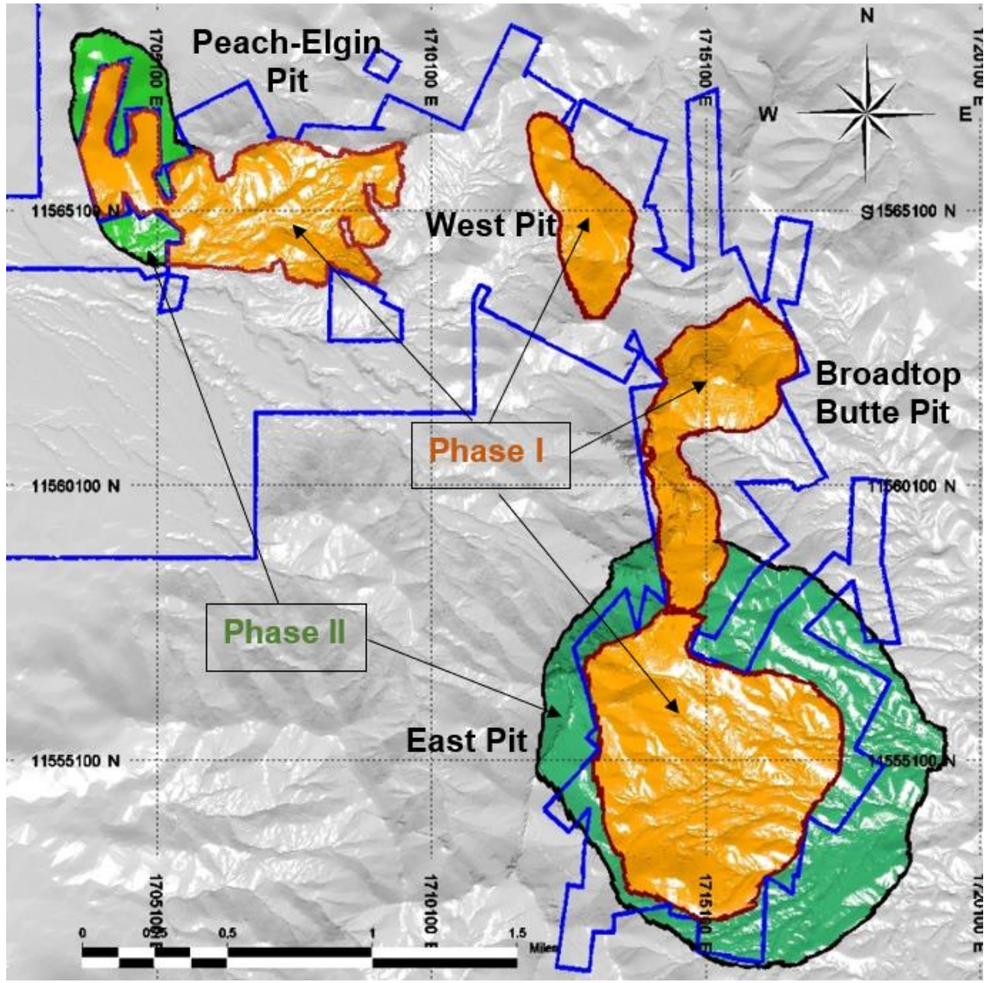
FEDERAL LAND ROSEMONT DEVELOPMENT STRATEGY

Note: ADWR = Arizona Department of Water Resources; ADEQ = Arizona Department of Environmental Quality; SSSR = Save the Scenic Santa Ritas; FICO = Farmers Investment Co.; USFS = United States Forest Service, ROD = Record of Decision, NEPA = National Environmental Policy Act

EXECUTION OF ALTERNATIVE STRATEGY

EVALUATING OPTIONS TO UNLOCK VALUE IN ARIZONA SINCE AUGUST 2019

- Conducted Internal Study on Private-only Plan in 2019
- Discovered New Mineralization on Patented Mining Claims
  - Initiated a drill program in 2020 in support of a private land development plan; subsequently expanded throughout 2021
  - Discovered oxide and sulfide mineralization in seven deposits over a 7km strike area
- Expanded Private Land Package
  - Acquired additional land in the area to support an operation entirely on private land
  - Total package includes 4,500 acres, enough to support the first 16 years of production on private land
- Advanced State-Level Permitting
  - Initiated in 2021 with MLRP application
  - Currently advancing aquifer protection permit (“APP”) and air quality permit (“AQP”), which are the remaining key state-level permits
- Unlocked District Potential
  - Remodeled 2017 mineral resource estimate, incorporated the new mineral resources discovered in 2021 and completed new metallurgical test work
  - 2022 PEA included a comprehensive review of the mine plan, process design, tailings deposition strategies and permitting requirements



DEVELOPMENT STRATEGY

(Completed)

(In Progress)

EXPLORATION DRILLING

- ✓ Identification of historic mineralization and deposits in the Copper World areas
- ✓ Exploration program initiated in October 2020
- ✓ 2021 exploration budget increased by +300% based on early results
- ✓ 7 deposits identified with over 200,000 feet drilled to-date and drilling continues at site

ADDITIONAL PRIVATE LAND PURCHASES

- ✓ Purchased +2400 acres of additional private land to host infrastructure and tailings

INITIAL COPPER WORLD RESOURCE

- ✓ 310 holes used to define initial resource at Copper World containing high-grade areas closer to surface than at East (formerly Rosemont)
- ✓ Drilling at Copper World continues to identify additional mineralization and to convert material to higher classifications
- ✓ Resource model for East (formerly Rosemont) redone following Constancia's approach results in lower tonnage at higher grade

PEA

- ✓ Combines initial resources from Copper World and new resource model for East (formerly Rosemont)
- ✓ Two phase development plan with first 16 years on private land
- ✓ Production of cathodes from leaching both concentrates and oxides
- ✓ Rosemont rebranded to East Deposit within Copper World

PFS COMPLETION

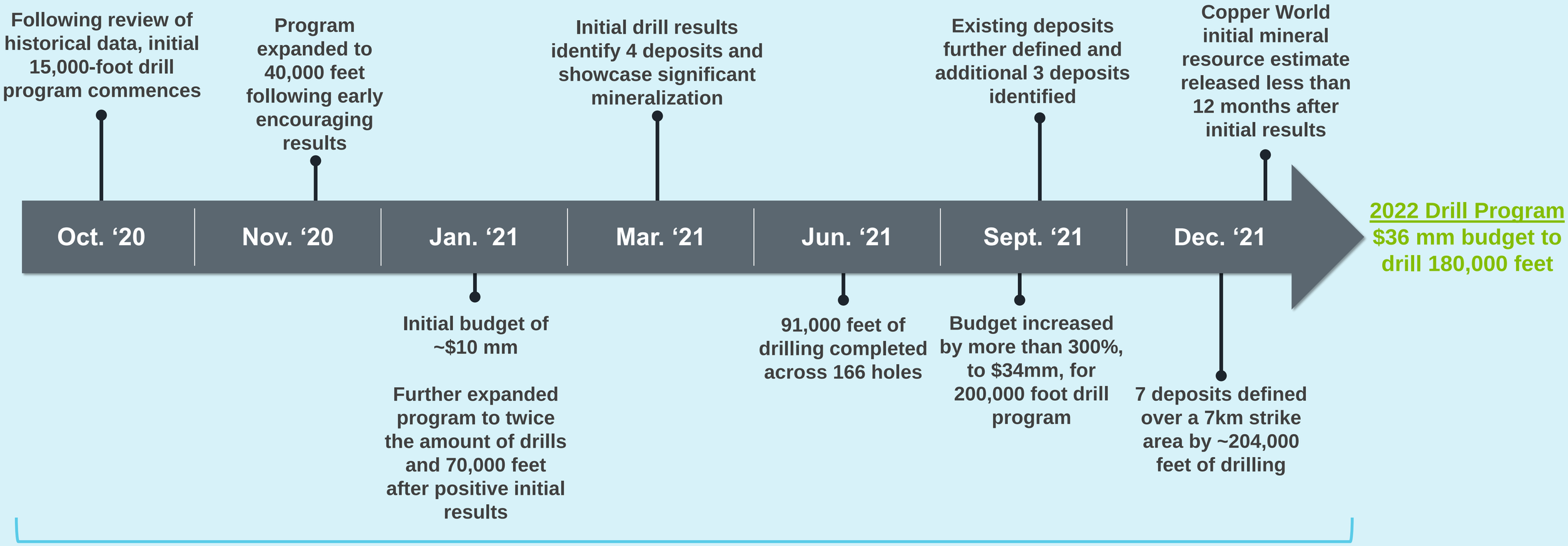
- PFS engineering work expected to be completed by end of 2022 (study released in H1 2023)
- Trade-off studies and opportunity evaluation continuing throughout feasibility studies

STATE PERMITTING

- ✓ Process initiated in 2021 with MLRP approved in October
- APP and AQP applications in Q3/Q4 2022
- Receipt of APP and AQP expected in 2023

APP = Aquifer Protection Permit AQP = Air Quality Permit

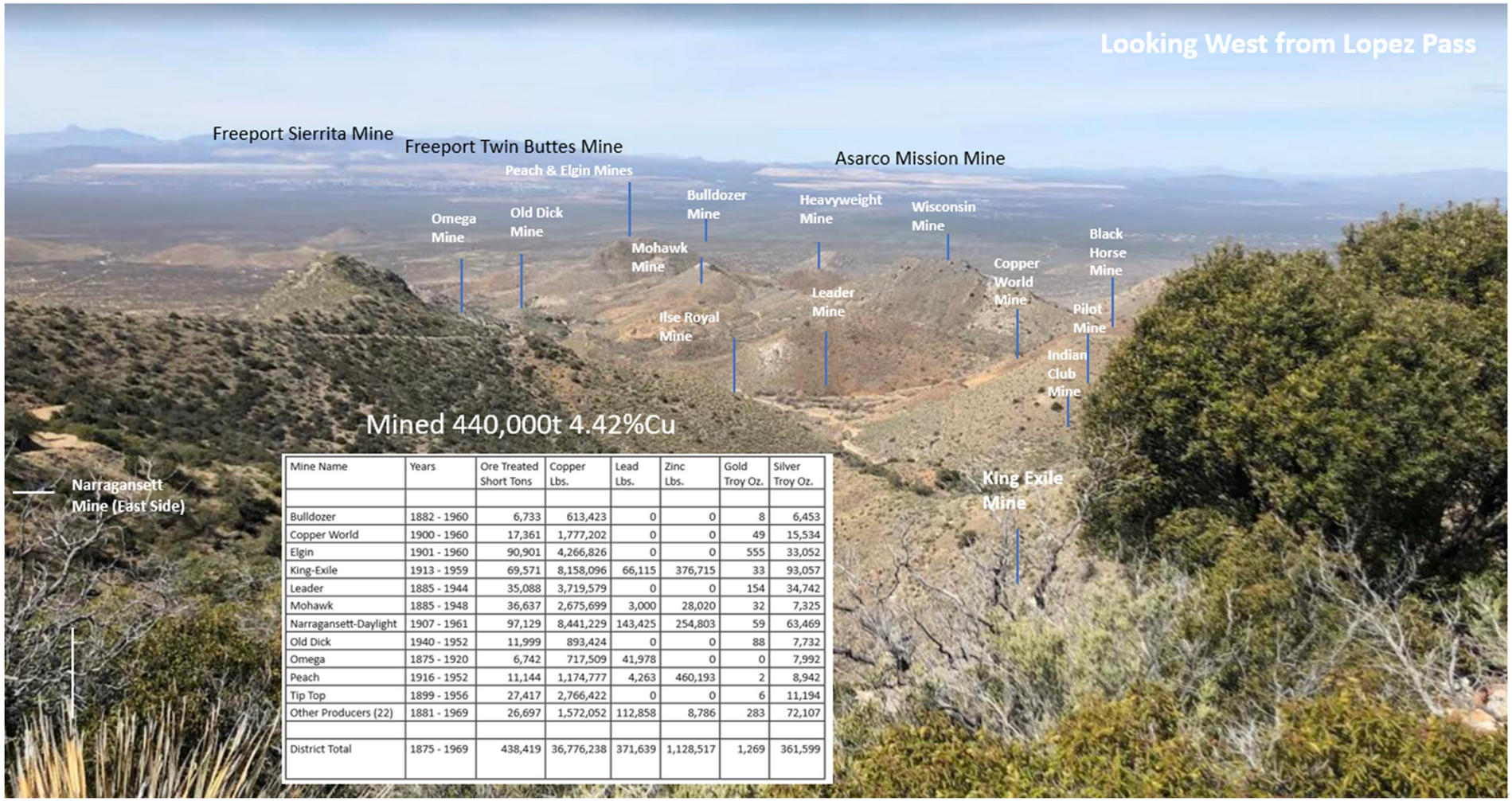
EXPLORATION TIMELINE TO INITIAL RESOURCE



~FOURTEEN MONTH DRILL PROGRAM IDENTIFED AND DEFINED 7 POTENTIALLY ECONOMIC DEPOSITS

HISTORIC COPPER MINING DISTRICT

RICH HISTORY OF MINING IN THE HELVETIA REGION 1874 - 1969

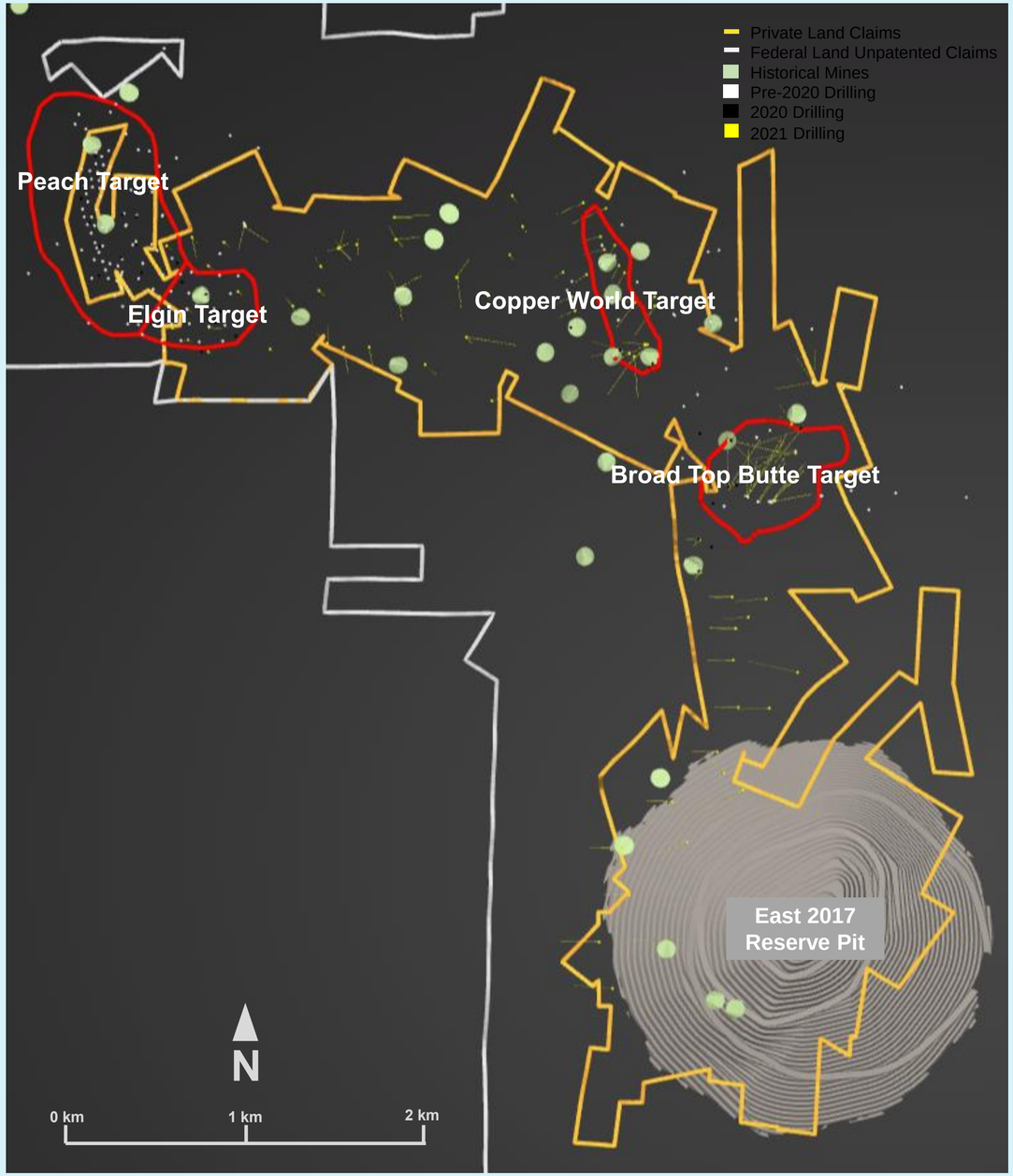


Mine Name	Years	Ore Treated Short Tons	Copper Lbs.	Lead Lbs.	Zinc Lbs.	Gold Troy Oz.	Silver Troy Oz.
Bulldozer	1882 - 1960	6,733	613,423	0	0	8	6,453
Copper World	1900 - 1960	17,361	1,777,202	0	0	49	15,534
Elgin	1901 - 1960	90,901	4,266,826	0	0	555	33,052
King-Exile	1913 - 1959	69,571	8,158,096	66,115	376,715	33	93,057
Leader	1885 - 1944	35,088	3,719,579	0	0	154	34,742
Mohawk	1885 - 1948	36,637	2,675,699	3,000	28,020	32	7,325
Narragansett-Daylight	1907 - 1961	97,129	8,441,229	143,425	254,803	59	63,469
Old Dick	1940 - 1952	11,999	893,424	0	0	88	7,732
Omega	1875 - 1920	6,742	717,509	41,978	0	0	7,992
Peach	1916 - 1952	11,144	1,174,777	4,263	460,193	2	8,942
Tip Top	1899 - 1956	27,417	2,766,422	0	0	6	11,194
Other Producers (22)	1881 - 1969	26,697	1,572,052	112,858	8,786	283	72,107
District Total	1875 - 1969	438,419	36,776,238	371,639	1,128,517	1,269	361,599

INITIAL DISCOVERY

FOUR DEPOSITS LOCATED CLOSE TO SURFACE

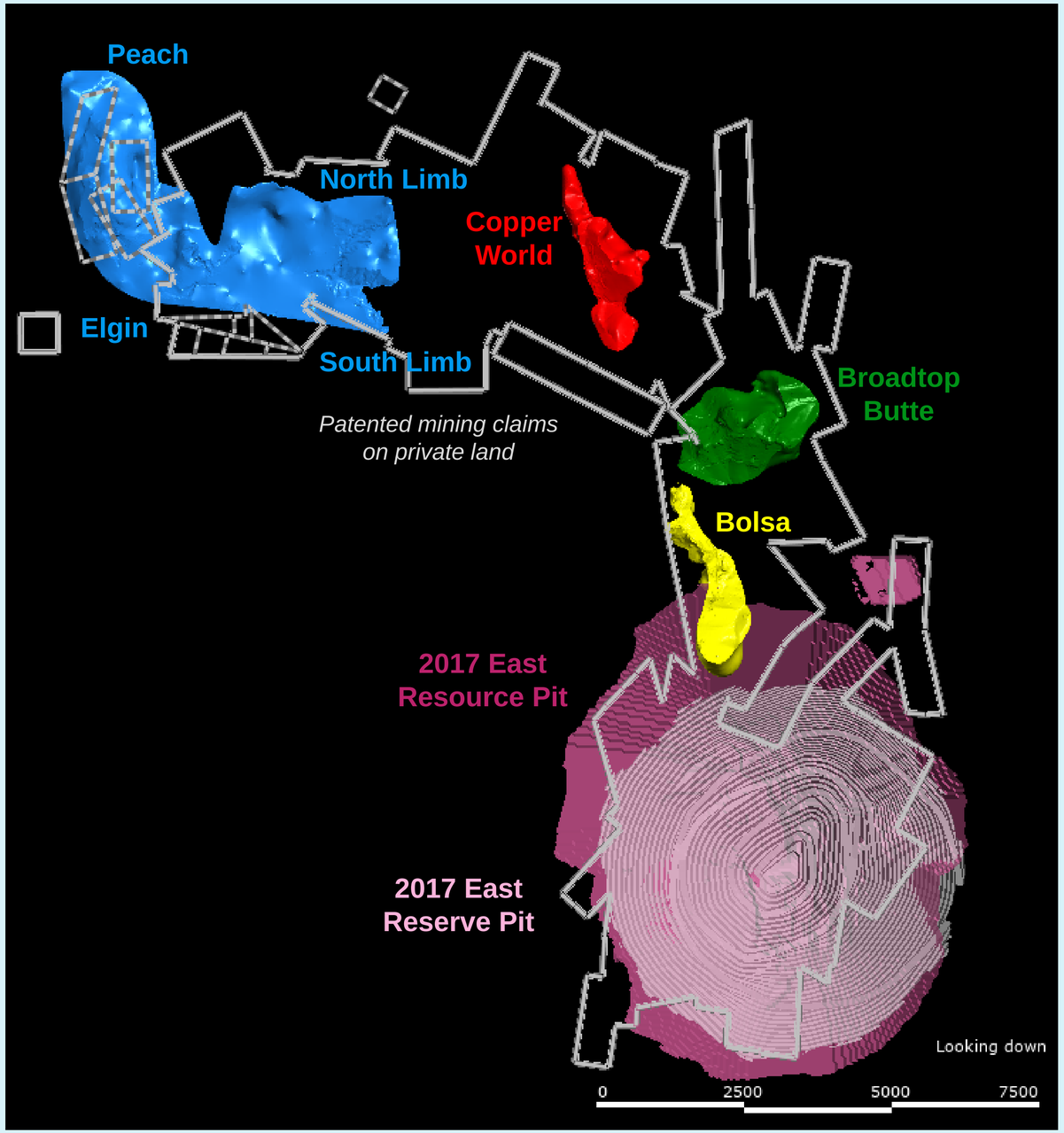
- ***March 2021*** – announced the discovery of four deposits at Copper World with combined strike length of over 5km
  - Peach, Elgin, Copper World and Broadtop Butte
- Presence of copper sulfide and oxide mineralization at shallow depths
- Located on wholly-owned patented mining claims adjacent to the East deposit
- Deposits remained open and exploration program was continuously expanded throughout 2021
  - Number of drill rigs doubled with initial exploration budget of $10M



EXPANDED MINERALIZATION

A TOTAL OF SEVEN DEPOSITS IDENTIFIED

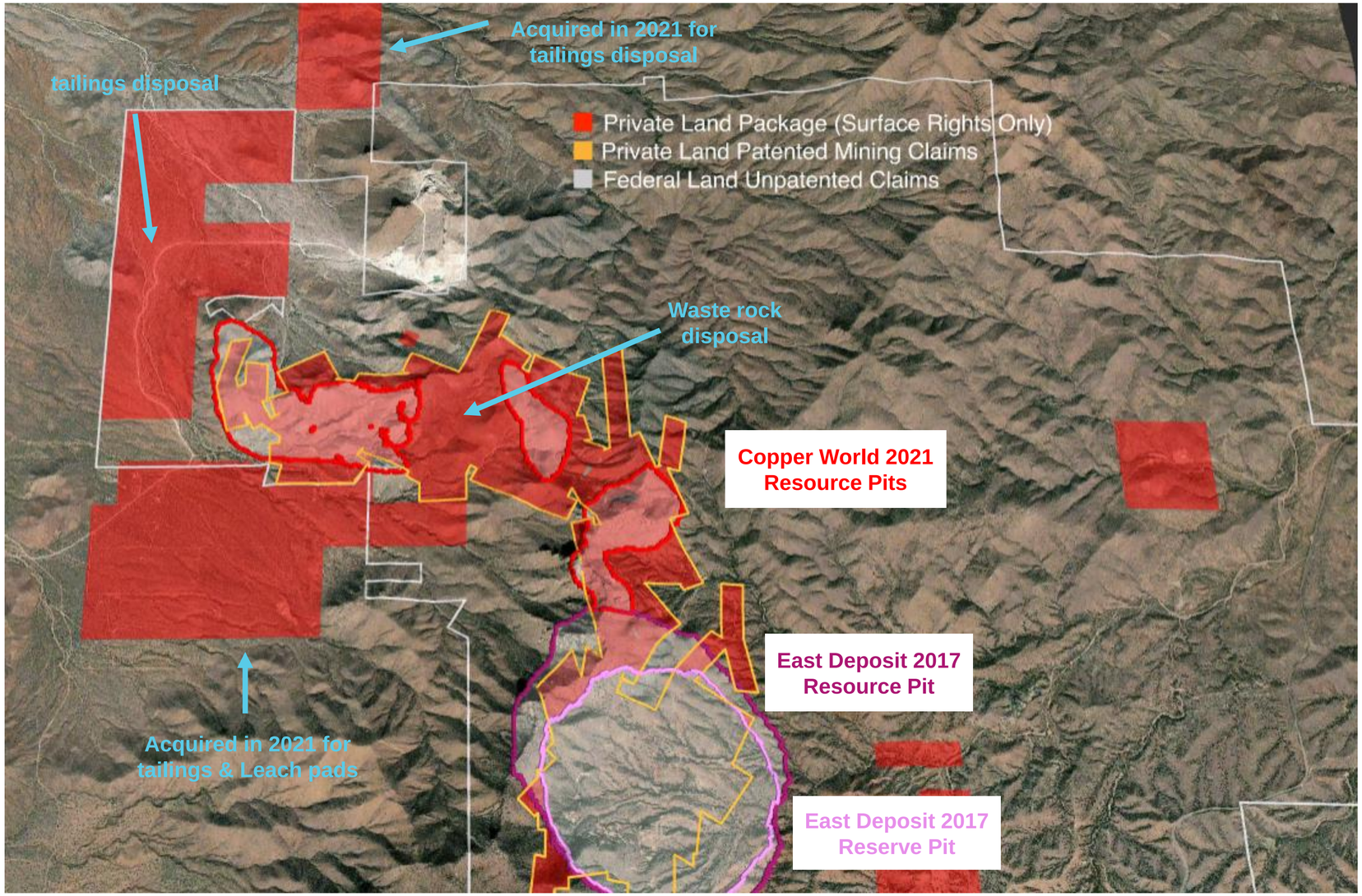
- ***September 2021*** – announced the discovery of three additional deposits for a total of seven deposits at Copper World
  - Bolsa, North Limb and South Limb
- Covers a combined 7km with mineral occurrences
- Expanded drilling program also confirmed the size and quality of the initial four deposits
- Potential remained for continuity between Bolsa and the East deposit in untested area
- 2021 exploration budget increased to more than $30M and more than 200,000 feet of drilling
- ***December 2021*** – initial mineral resource estimate completed
  - Larger and at a higher classification than expected



PRIVATE LAND ADDED TO SUPPORT INFRASTRUCTURE

PURCHASED +2400 ACRES OF ADDITIONAL PRIVATE LAND TO HOST INFRASTRUCTIRE AND TAILINGS

- Additional material could be mined within private land limits but room for waste, tailings and leach pads is a key constraint during Phase I
- 2,400 acres were acquired in 2021 north of the ‘F area” and south around the Helvetia Ranch
- Newly acquired areas will be used for tailings disposal and for ROM leach pads
- Waste rock will be disposed in the Copper World areas in between pits and within pits post mining
- Opportunities to acquire more surface rights could unlock significant additional value



2022 PEA HIGHLIGHTS

TWO-PHASED APPROACH WITH PRIVATE LAND FOR FIRST 16 YEARS

- Sulfide and oxide resources at low strip ratio were delineated in the Copper World areas (80% already in indicated category) with a large portion on private land
- The East deposit (formerly Rosemont) resource model was redone
- Sufficient land was acquired for 16 years of tailings, waste rock and leach pads disposal on private land
- Metallurgical studies and engineering were conducted to support several enhancements to the process flowsheet including:
  - Sulfuric acid plant producing power and acid
  - Leaching of oxides from the Copper World and East deposits, with internally produced acid
  - Atmospheric leaching of copper concentrates to produce copper cathodes with SX/EW plant
  - Precious metals recovered in doré from residue

Domestic US copper cathode production significantly reduces energy consumption, CO_2 and SO_2 emissions

EARLY SITE WORKS & EXPLORATION

PROJECT DE-RISKING ACTIVITIES

- Initial grading and clearing activities commenced in April 2022
- Drill rigs continue to turn at site conducting infill drilling in support of future feasibility studies

Phase I land clearing in proposed tailings areas, May 2022

Phase I land clearing in proposed tailings areas, May 2022

Drill rig at Bolsa deposit, May 2022

RECENT SITE ACTIVITY

VIDEO OF EQUIPMENT AT COPPER WORLD

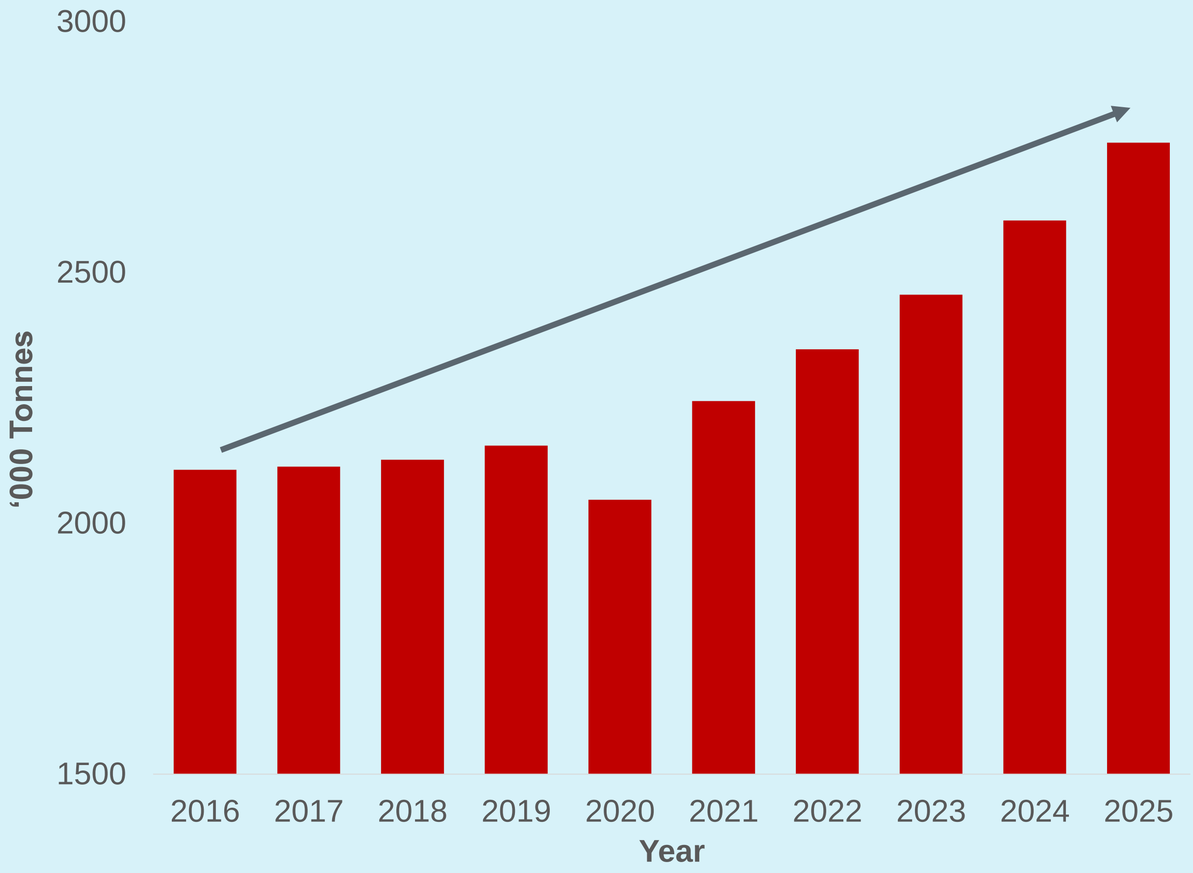
- To show short video of recent activity at Copper World site

SUPPORTING DOMESTIC U.S. COPPER SUPPLY CHAIN

GREEN TRANSITION AND DEMAND FOR COPPER IN THE U.S. IS ACCELERATING

- Copper cathodes produced at the Copper World Complex are expected to be sold entirely to U.S. domestic customers
- Global mine production, and ultimately smelter production, will struggle to keep pace with metal demand boosted by the green energy revolution
- The U.S. is expected to remain a net copper metal importer and domestic supply will be required to satisfy growing U.S. metal demand related to:
  - Increased manufacturing capacity
  - Infrastructure development
  - Bolstering the country's energy independence
  - Domestic EV battery supply chain and production needs

GROWING U.S COPPER CONSUMPTION



Source: Goldman Sachs Commodities Research, Metals: A New Supercycle, May 2022, pg. 29

ENVIRONMENTAL STEWARDSHIP

HUDBAY OPERATES IN A MANNER THAT DEMONSTRATES OUR COMMITMENT TO THE ENVIRONMENT

- Near-term GHG mitigation is focused on energy efficiency at our operations
- Over 50% of our total energy consumption is from renewable sources
  - All electricity at operations supplied by regional grids
  - Manitoba electricity source is nearly 100% renewable hydropower
- Hudbay made the strategic shift in the 1990s to improve emissions in the Manitoba operations by closing the legacy zinc smelter and opening the modern hydrometallurgical zinc plant
- In alignment with the Toward Sustainable Mining Energy and GHG Emissions Management Protocol
- Defining GHG Emissions reduction targets in 2022
- Examining the opportunity to reprocess tailings in Manitoba and potentially reduce environmental footprint

MSCI ESG RATINGS AA
CCC B BB BBB A AA AAA

TSM MEMBER

GRI

SASB STANDARDS BOARD

TCFD

CDP DISCLOSURE INSIGHT ACTION

LEADING EMISSIONS RANKING

	t CO2e/t CuEq	Rank
Boliden	0.9	1
Ero	1.4	2
Hudbay	**1.5**	**3**
Southern Copper	1.8	4
BHP	2.1	5
Lundin	2.1	6
Antofogasta	2.6	7
Vale	2.7	8
Teck	3.7	9
Anglo American	4.2	10
Glencore	4.2	11
Freeport-McMoRan	4.2	12
First Quantum	4.6	13
Rio Tinto	5.7	14
South32	16.9	15

Source: Barclays research report “Explaining Metals Emissions” dated January 13, 2022 using production emission intensity for diversified and copper mining companies.

DESIGNED TO REDUCE ENERGY & GHG EMISSIONS

“MADE IN AMERICA” COPPER TARGETS GHG EMISSION REDUCTIONS

- Copper World Complex copper cathode production is expected to be sold entirely to domestic U.S. customers
- Reduces the operation's total energy consumption, GHG emissions and sulfur (SO2) emissions by eliminating overseas shipping, smelting and refining
- Many local benefits, including $3.3B in U.S. taxes, more than 500 direct jobs and up to 3,000 indirect jobs in Arizona

↓10%

lower energy consumption, including 30% decline related to downstream processing by 2030 climate change goals

↓10-15%

reduction in overall GHG emissions

Targeting further GHG reductions as part of Hudbay’s reduction targets to

align with global ↓50% by 2030 climate change goal

PEA SUMMARY

HUDBAY

COPPER WORLD COMPLEX

ROBUST PEA DEMONSTRATES THE NEXT LEG OF MEANINGFUL COPPER PRODUCTION GROWTH AT HUDBAY

Phase I provides **attractive economics producing 100kt Cu p.a. at first quartile cash costs** over a 16-year mine life requiring state-level permits only

Designed to produce **“Made in America” copper** cathode to feed growing U.S. copper demand

Phase II provides **meaningful long-term growth** in copper production and **significant optionality** over the long mine life

Modern mine provides numerous **ESG benefits**, including lower energy consumption, GHG emissions and sulfur emissions

Many **de-risking, project funding and upside opportunities** exist to unlock further value in this attractive region for all stakeholders

2022 PEA TWO-PHASED APPROACH

PHASE I (PRIVATE LAND)

- 16 years with state permitting at 60 kstpd mill feed and additional 20 kstpd on average oxide leach
- When there is available concentrate leach capacity, as internal production varies year to year, external Cu concentrate would be purchased to fill Cu cathode production capacity
- When additional capacity exists in the sulfuric acid plant, external molten sulfur will be purchased to produce acid
- When sulfuric acid production exceeds oxide leaching needs, excess production is sold
- Excess power production is sold

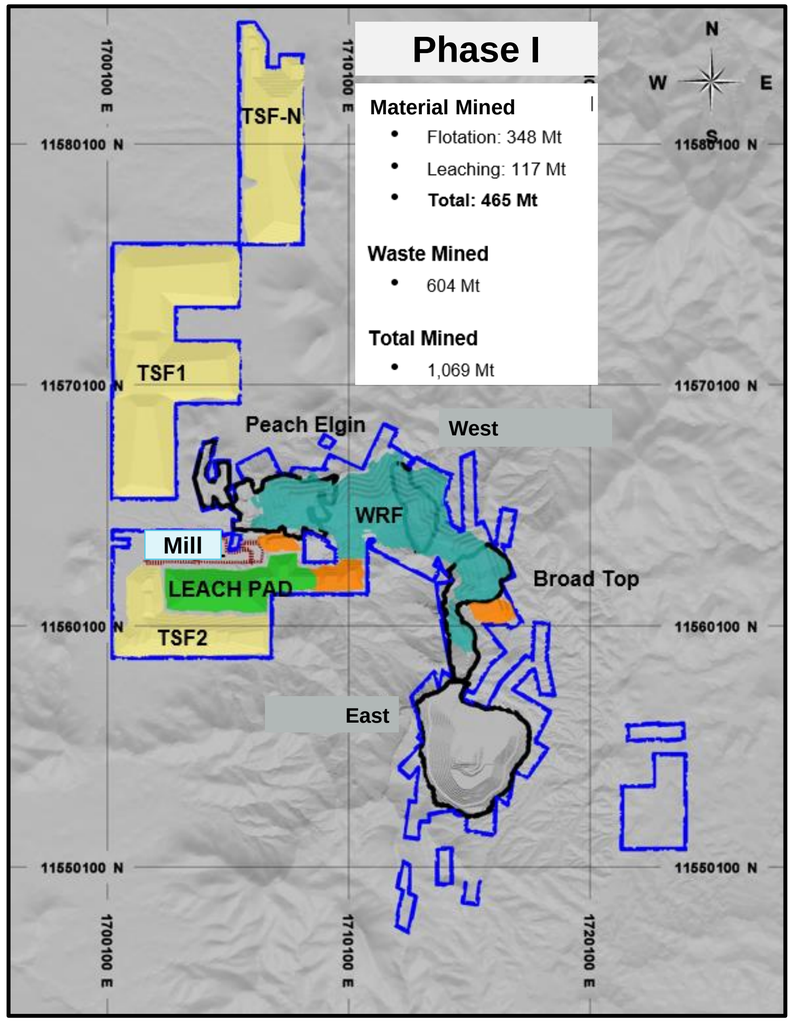
PHASE II (FEDERAL LAND)

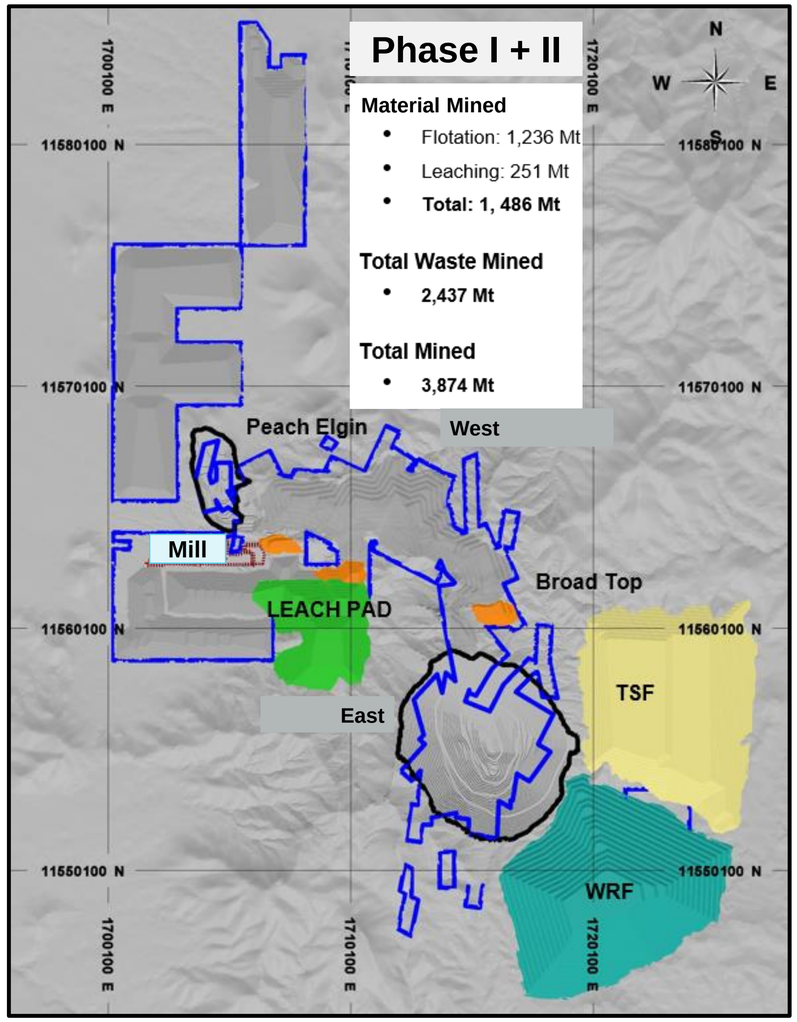
- All remaining economic sulfide and oxide resources are mined with federal permits (NEPA) in place
- Mill throughput increases to 90 kstpd with same locations for dry stack tailings and waste rock facility as per the 2017 Feasibility Study
- Continue to convert Cu concentrate to Cu cathodes and produce doré, power and sulfuric acid
- The 9th circuit decision in May 2022 clarified the permitting path for Phase II; Hudbay expects to pursue and obtain federal permits within the constraints imposed by the court's decision, which continues to allow the U.S. Forest Service to approve projects under existing mining regulations

LAND AVAILABILITY: KEY CONSTRAINT DURING PHASE I

LAND AVAILABLE TO OPERATE DURING PHASE I WITHOUT FEDERAL PERMIT REQUIREMENTS IS THE MAIN CONSTRAINT

- During Phase I, land available to dispose tailings (TSF), waste rocks (WRF) and heap leach pads (HLP) does not exceed 1,070Mt
- More resources could be mined within the limits of our private land tenements but cannot be disposed without a federal permit
  - Phase I is not the optimum mine plan on private land but one that can be executed with state level permits only
  - Phase II accesses 100% of the resource while disposing tailings and waste rock on federal land

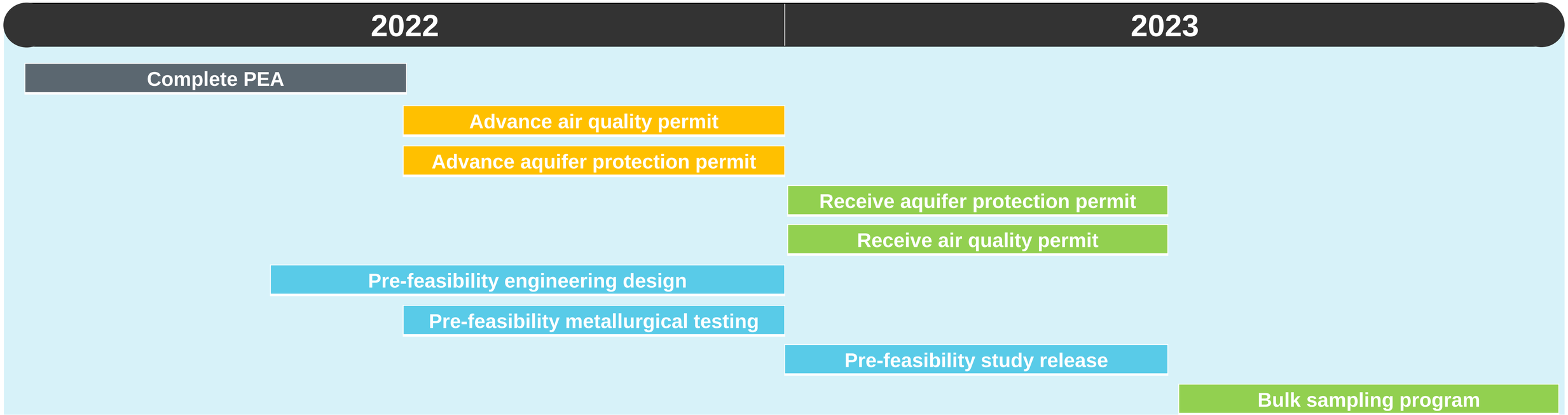




PHASE I PRE-FEASIBILITY STUDY AND PERMITS IN 2023

ALIGNMENT BETWEEN KEY STATE PERMITS & ENGINEERING STUDIES

- Received first state-level permit, Mined Land Reclamation Plan (MLRP), in October 2021, and subsequent amendment received in July 2022
- Advance pre-feasibility study and state-level permits for Phase I in H2 2022
- Publish pre-feasibility study in H1 2023
- Kick off feasibility study with bulk sampling program in H2 2023

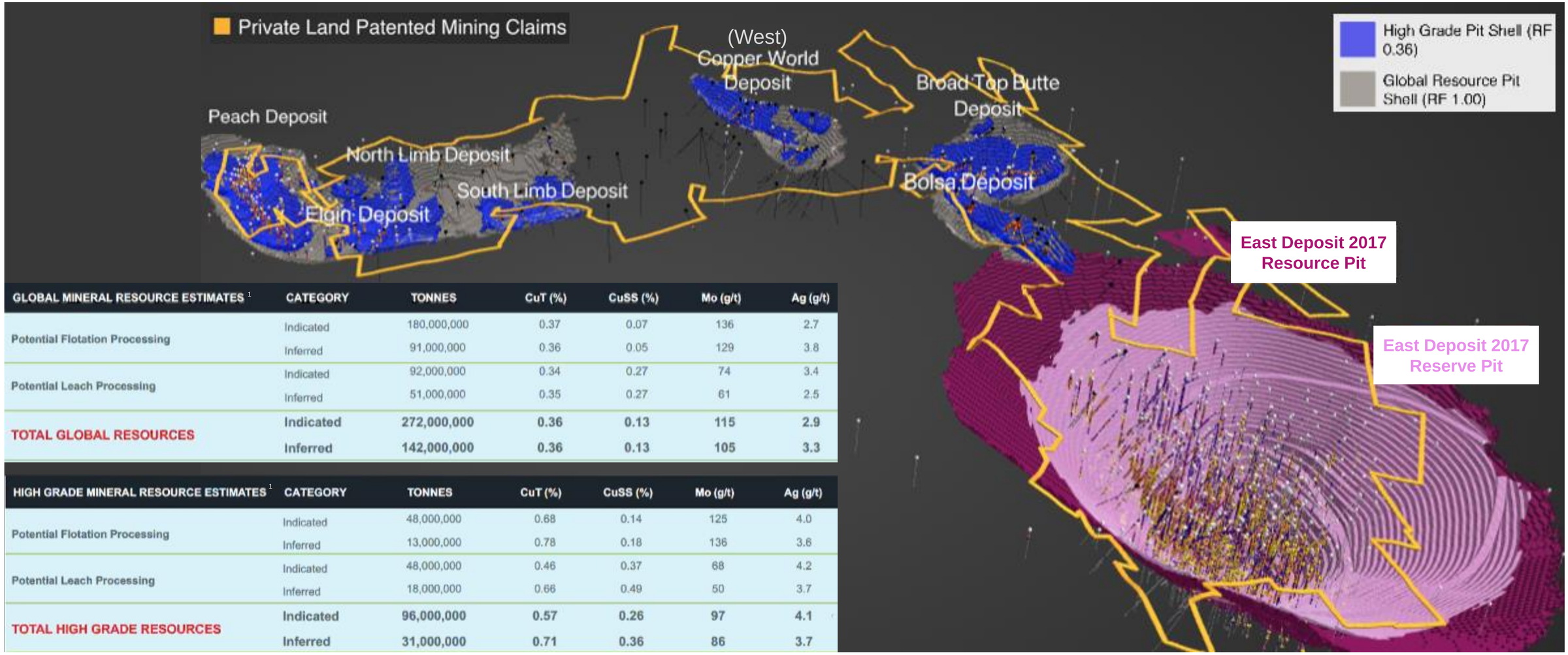


MINE PLAN

HUDBAY

2021 COPPER WORLD INITIAL RESOURCE ESTIMATES

SIGNIFICANT HIGH-GRADE PORTION CLOSE TO SURFACE – MAJORITY ON PRIVATE LAND



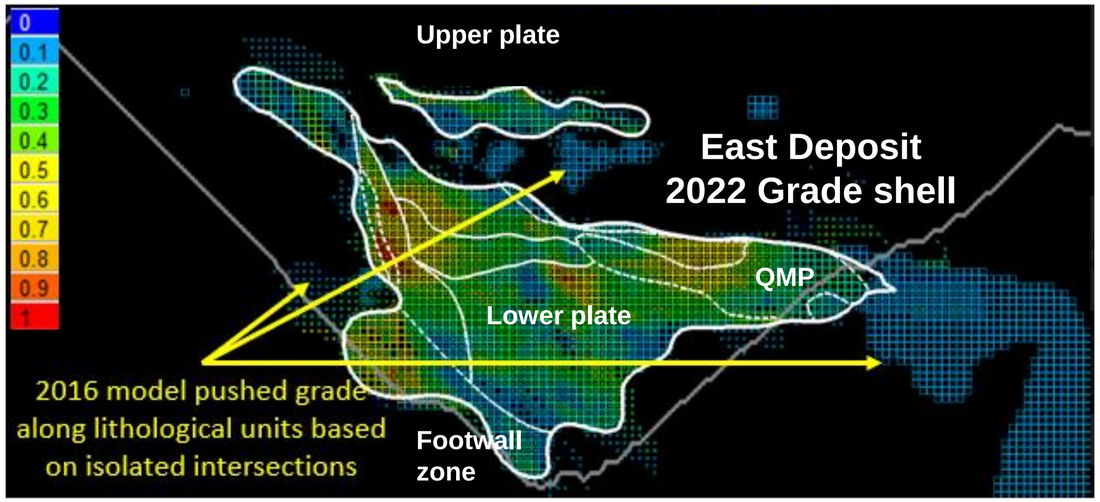
GLOBAL MINERAL RESOURCE ESTIMATES [1]	CATEGORY	TONNES	CuT (%)	CuSS (%)	Mo (g/t)	Ag (g/t)
Potential Flotation Processing	Indicated	180,000,000	0.37	0.07	136	2.7
	Inferred	91,000,000	0.36	0.05	129	3.8
Potential Leach Processing	Indicated	92,000,000	0.34	0.27	74	3.4
	Inferred	51,000,000	0.35	0.27	61	2.5
TOTAL GLOBAL RESOURCES	**Indicated**	**272,000,000**	**0.36**	**0.13**	**115**	**2.9**
	Inferred	**142,000,000**	**0.36**	**0.13**	**105**	**3.3**

HIGH GRADE MINERAL RESOURCE ESTIMATES [1]	CATEGORY	TONNES	CuT (%)	CuSS (%)	Mo (g/t)	Ag (g/t)
Potential Flotation Processing	Indicated	48,000,000	0.68	0.14	125	4.0
	Inferred	13,000,000	0.78	0.18	136	3.6
Potential Leach Processing	Indicated	48,000,000	0.46	0.37	68	4.2
	Inferred	18,000,000	0.66	0.49	50	3.7
TOTAL HIGH GRADE RESOURCES	**Indicated**	**96,000,000**	**0.57**	**0.26**	**97**	**4.1**
	Inferred	**31,000,000**	**0.71**	**0.36**	**86**	**3.7**

1. Mineral resources as of December 1, 2021

COPPER WORLD COMPLEX

EAST DEPOSIT 2022 REVISED RESOURCE ESTIMATES RESULT IN HIGHER GRADES



- East Deposit revised using Constancia's resource methodology
- East Deposit 2022 resource model based on same data as in 2017 but methodology differs on three aspects:
  - Honouring four structural domains (Footwall, Lower, Upper and QMP) within a 0.1% Cu grade shell
  - No capping on Cu grade
  - Over-smoothing corrected
- Results in lower tonnage but higher grade within the mineralized envelope (less dilution/grade smearing)
- Revised modeling approach independently reviewed and validated by Golder Associates

- Copper World discoveries and remodeling of the East deposit result in an enhanced resource basis to develop the mine plan with a **global increase in both tonnage and grade** in all resource categories compared to 2017

Total Copper World Complex – Comparison of Mineral Resource Estimates[1,2]

	2017			2022			% Change		
	Tonnes (millions)	Cu (%)	Cu (000 tonnes)	Tonnes (millions)	Cu (%)	Cu (000 tonnes)	Tonnes (millions)	Cu (%)	Cu (000 tonnes)
Measured and Indicated	1,147	0.36	4,129	1,173	0.41	4,829	***2%***	***14%***	***17%***
Inferred	75	0.30	224	262	0.37	957	***252%***	***22%***	***328%***

Note: totals may not add up correctly due to rounding.
1. 2017 mineral resource estimates are inclusive of mineral reserve estimates.
2. 2022 mineral resource estimates include both flotation and leach material.

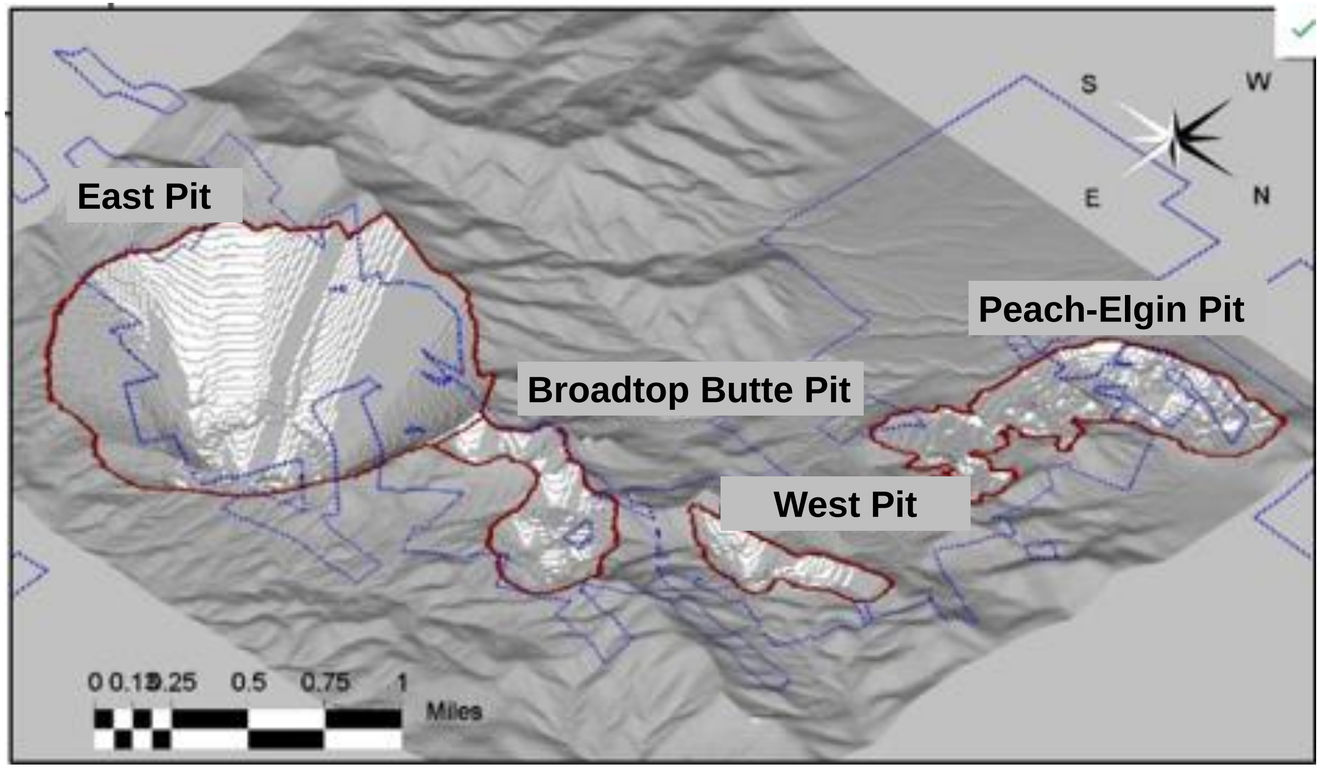
PIT OPTIMIZATION COMBINES FLOTATION AND LEACHING

INITIAL STEP: OVERALL PIT OPTIMIZATION IGNORES LAND AND FEDERAL PERMITTING CONSTRAINTS

- A revenue factor of 1.0 was used for mineral resource estimates (break-even economics at $3.45/lb Cu):

	Short Tons (millions)	Metric Tonnes (millions)	Cu (%)
Measured + Indicated	1,293	1,173	0.41
Inferred	289	262	0.37

- A revenue factor of 0.85 was selected as the optimum pit shell to guide the mine design for the PEA with the maximum NPV
- The PEA final pit shell selected for the mine design utilizes ~93% of the mineral resource estimate



Class	Short tons	TCu%	SCu%	CuSS%	Ox (CuSS/TCu)	Mo%	Ag_g/t	Au_g/t
Measured	842,865,540	0.44	0.36	0.08	0.18	0.013	4.924	0.001
Indicated	392,734,876	0.36	0.25	0.11	0.31	0.012	3.673	0.007
Inferred	250,853,891	0.36	0.26	0.10	0.28	0.011	3.744	0.006
Grand Total	**1,486,454,307**	**0.41**	**0.32**	**0.09**	**0.23**	**0.012**	**4.394**	**0.003**

Pit shell for mine design using a revenue factor of 0.85.

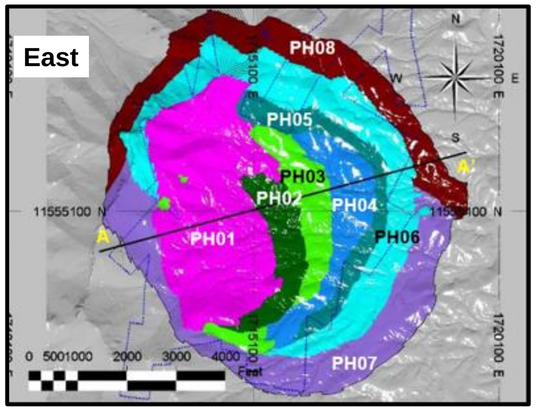
PIT OPTIMIZATION MINING PHASES

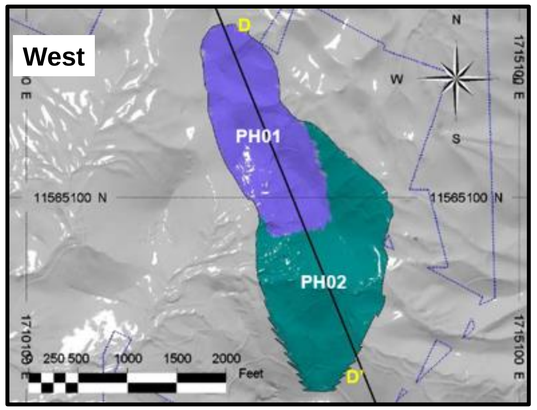
PIT SHELLS USED AS A BASIS TO DESIGN MINING PHASES FOR EACH PIT, WHILE ALSO CONSIDERING PERMITTING CONSTRAINTS

Phase I Mining

Phase II Mining

RO_PH04 is in both Phase I & Phase II



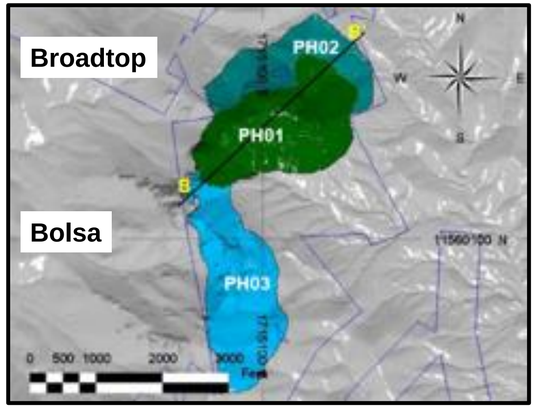


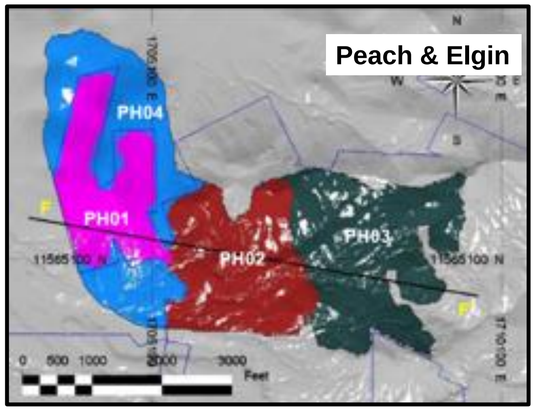
East	Short tons	TCu%	SCu%	CuSS%	Ox (CuSS/TCu)	Mo%	Ag_g/t	Au_g/t
RO_PH01	68,373,931	0.52	0.37	0.14	0.28	0.009	6.052	0.000
RO_PH02	57,934,733	0.52	0.44	0.08	0.16	0.010	6.272	0.000
RO_PH03	59,598,138	0.41	0.31	0.10	0.24	0.007	5.493	0.000
RO_PH04	128,691,810	0.49	0.39	0.10	0.20	0.009	5.711	0.000
RO_PH05	135,918,116	0.51	0.42	0.09	0.18	0.013	5.040	0.000
RO_PH06	276,287,280	0.39	0.30	0.09	0.24	0.012	3.565	0.000
RO_PH07	162,304,349	0.40	0.36	0.03	0.08	0.015	5.931	0.000
RO_PH08	222,151,105	0.33	0.29	0.05	0.14	0.014	4.402	0.002
Grand Total	**1,111,259,461**	**0.42**	**0.34**	**0.08**	**0.19**	**0.012**	**4.904**	**0.000**

BTB	Short tons	TCu %	SCu %	CuSS %	Ox (CuSS/TCu)	Mo%	Ag_g/t	Au_g/t
BT_PH01	46,714,119	0.36	0.25	0.11	0.30	0.014	3.209	0.014
BT_PH02	40,371,844	0.30	0.27	0.03	0.10	0.014	2.319	0.008
BT_PH03	32,073,237	0.64	0.24	0.41	0.64	0.006	2.781	0.011
Grand Total	**119,159,200**	**0.41**	**0.25**	**0.16**	**0.39**	**0.012**	**2.792**	**0.011**

West	Short tons	TCu %	SCu %	CuSS %	Ox (CuSS/TCu)	Mo%	Ag_g/t	Au_g/t
CW_PH01	16,160,093	0.55	0.39	0.16	0.29	0.011	3.414	0.010
CW_PH02	30,200,297	0.31	0.19	0.12	0.39	0.010	4.032	0.017
Grand Total	**46,360,390**	**0.40**	**0.26**	**0.14**	**0.34**	**0.011**	**3.817**	**0.014**

P&E	Short tons	TCu %	SCu %	CuSS %	Ox (CuSS/TCu)	Mo%	Ag_g/t	Au_g/t
PE_PH01	15,178,530	0.43	0.19	0.25	0.58	0.005	4.161	0.023
PE_PH02	26,612,848	0.43	0.33	0.11	0.26	0.013	3.326	0.015
PE_PH03	30,997,498	0.29	0.21	0.09	0.31	0.013	2.305	0.019
PE_PH04	136,886,382	0.31	0.21	0.10	0.33	0.012	2.555	0.009
Grand Total	**209,675,257**	**0.33**	**0.22**	**0.11**	**0.34**	**0.012**	**2.732**	**0.012**

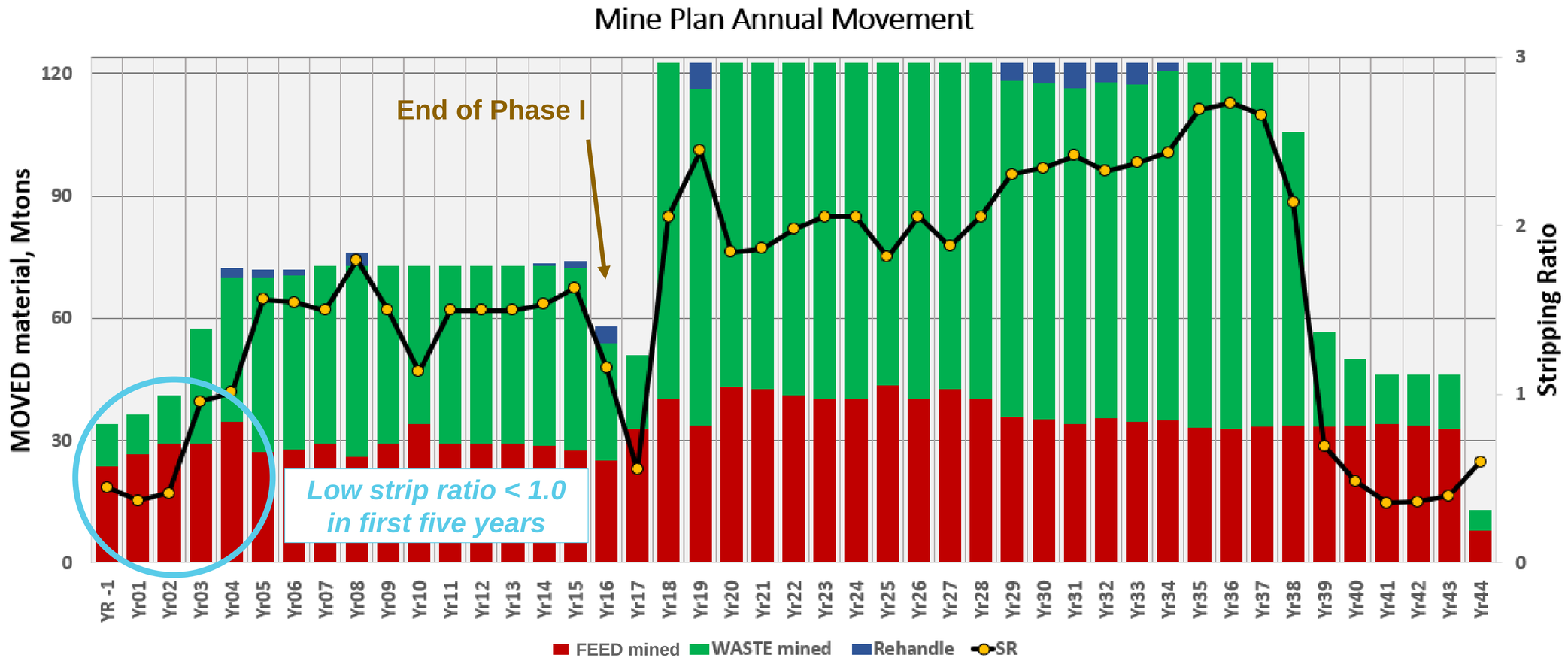




LIFE OF MINE PRODUCTION SCHEDULE

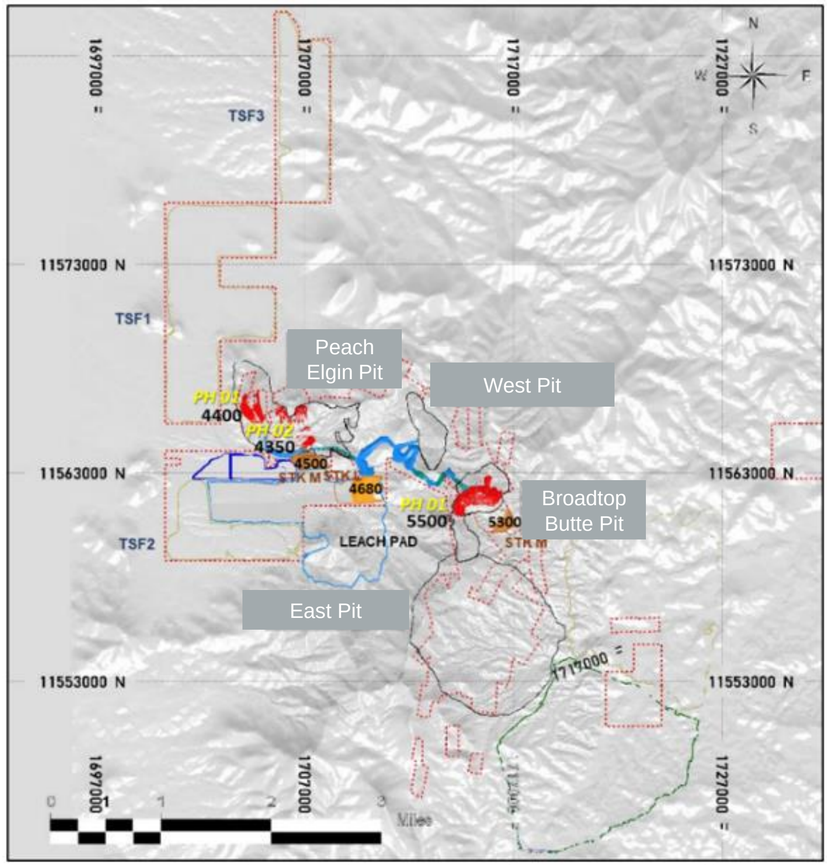
MINE PRODUCTION SCHEDULE SMOOTHED TO MATCH MILL CAPACITY, FLEET SIZE AND TO MINIMIZE RE-HANDLING

- Significantly lower strip ratio of less than 1.0 in first five years



MINIMUM PRE-STRIPPING AT PEACH-ELGIN & BROADTOP

EARLY MATERIAL FROM PEACH-ELGIN AND BROADTOP – LOW STRIP AND PROVIDES ROOM FOR FUTURE WASTE DISPOSAL



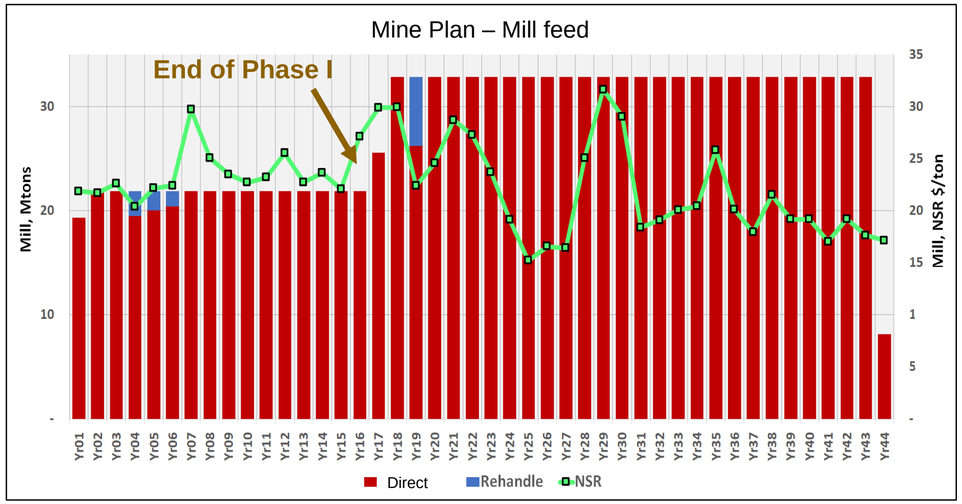
- 34MT moved in year of pre-stripping includes:
  - 10.6MT of waste
  - 6.8MT of flotation feed processed in year 1
  - 3.5MT of high grade ROM leach feed
  - 13.2MT of low grade ROM leach feed
- ROM leach feed mined during year of pre-stripping represents an opportunity for early revenue not considered in the PEA
  - Would require early completion of leach pads and SX/EW associated infrastructure
  - High probability to realize this opportunity during the PFS

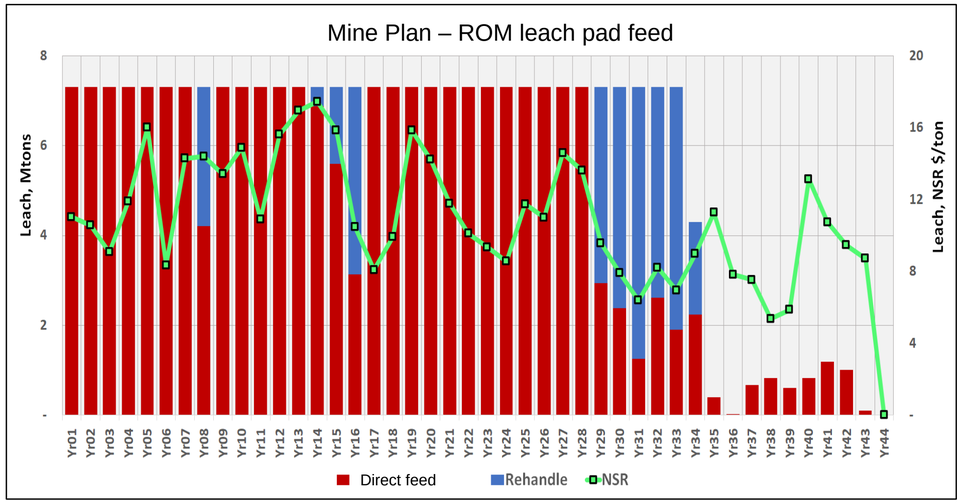
~17MT of heap leach oxides stockpiled in year -1

			Stocks Mill						Stocks Rom Leach					
	DUMP	Total Short Tons	STK_Mill_STP+			STK_Mill_LTP+			STK_Leach_STP+			STK_Leach_LTP+		
Period	Short Tons	moved	Short Tons	Cu %	CuSS%	Short Tons	Cu %	CuSS%	Short Tons	Cu %	CuSS%		Cu %	CuSS%
YR_PP	10,581,924	34,137,219	5,777,636	0.837	0.231	1,037,563	0.213	0.079	3,516,283	0.516	0.407	13,223,812	0.197	0.160

PRODUCTION SCHEDULE BASED ON MILLING CAPACITY

MINE PRODUCTION WAS CLASSIFIED AS FLOTATION OR LEACH FEED DEPENDING ON HIGHEST NSR

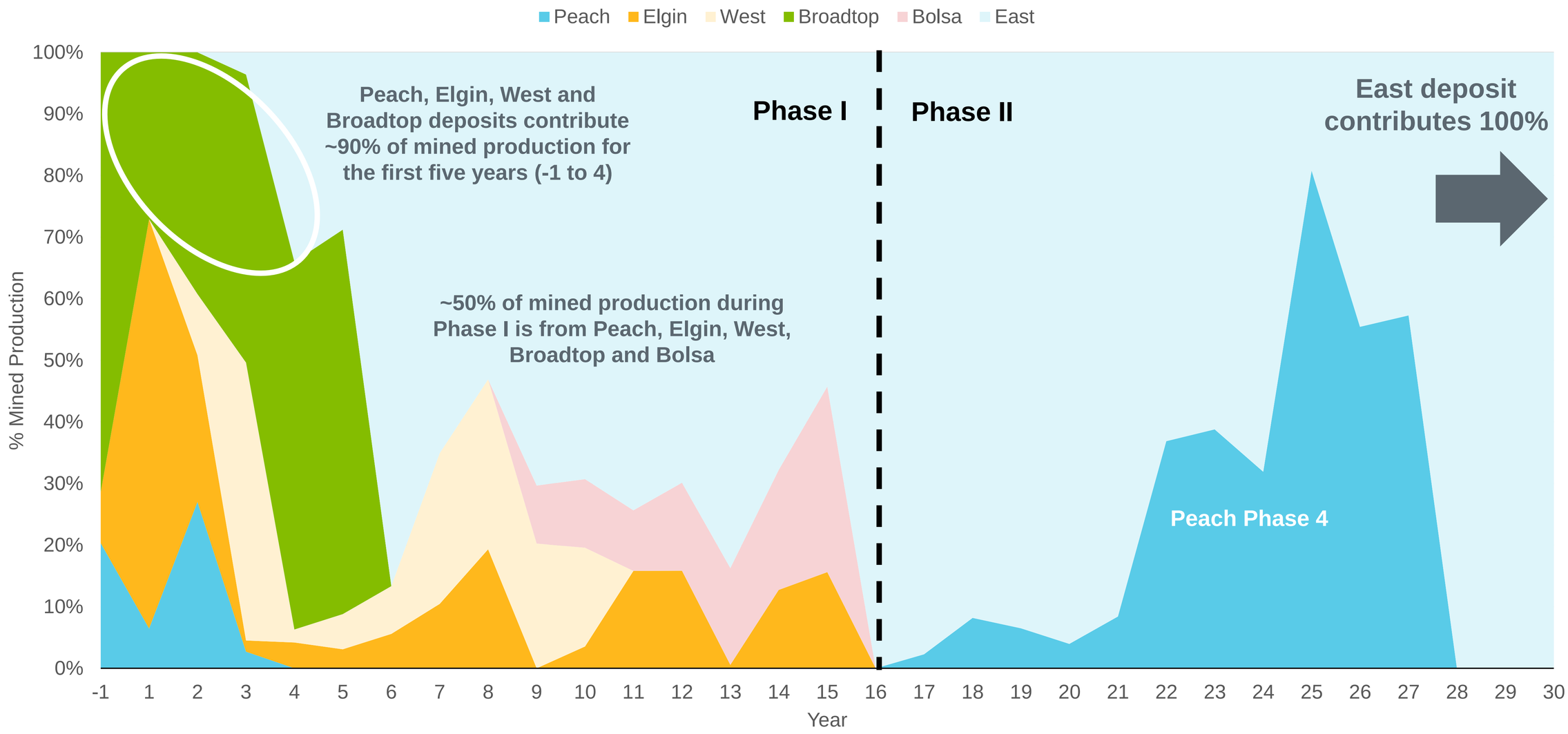




- Mine production was optimized based on milling capacity of 60kstpd during Phase I and expanded to 90kstpd during Phase II
- Drivers:
  - Maintain mill feed at capacity
  - Minimize stripping and stockpiling/re-handling
  - Honour mining phases and sequencing of waste disposal and TSF construction

- Mining of leachable material is opportunistic
- Meet SX/EW capacity
- Feed higher grade material first
- Low grade stockpiles reclaimed in years of lower oxide availability, i.e. years 8,16 and post 28
- Less leachable material towards the end of Phase II when mining deeper portion of the East pit

COPPER WORLD COMPLEX BY DEPOSIT



PROCESSING

PEA PROCESSING DESIGN OBJECTIVES

PROCESSING DESIGN TARGETED SEVERAL ENHANCEMENTS OVER 2017 FEASIBILITY STUDY

OBJECTIVES

- Process the oxides at Copper World and East deposits
- Produce a finished product on site to supply the U.S. domestic copper market
- Align with overall global climate change objectives to target GHG emission reduction of 50% by 2030

Cost Effective

Safe to Operate

Efficient Energy & Emissions

CHOSEN DESIGN ELEMENTS

- Oxide ROM heap leach
- Concentrate leach facility
- SX/EW plant
- Sulfur burner
- Acid plant

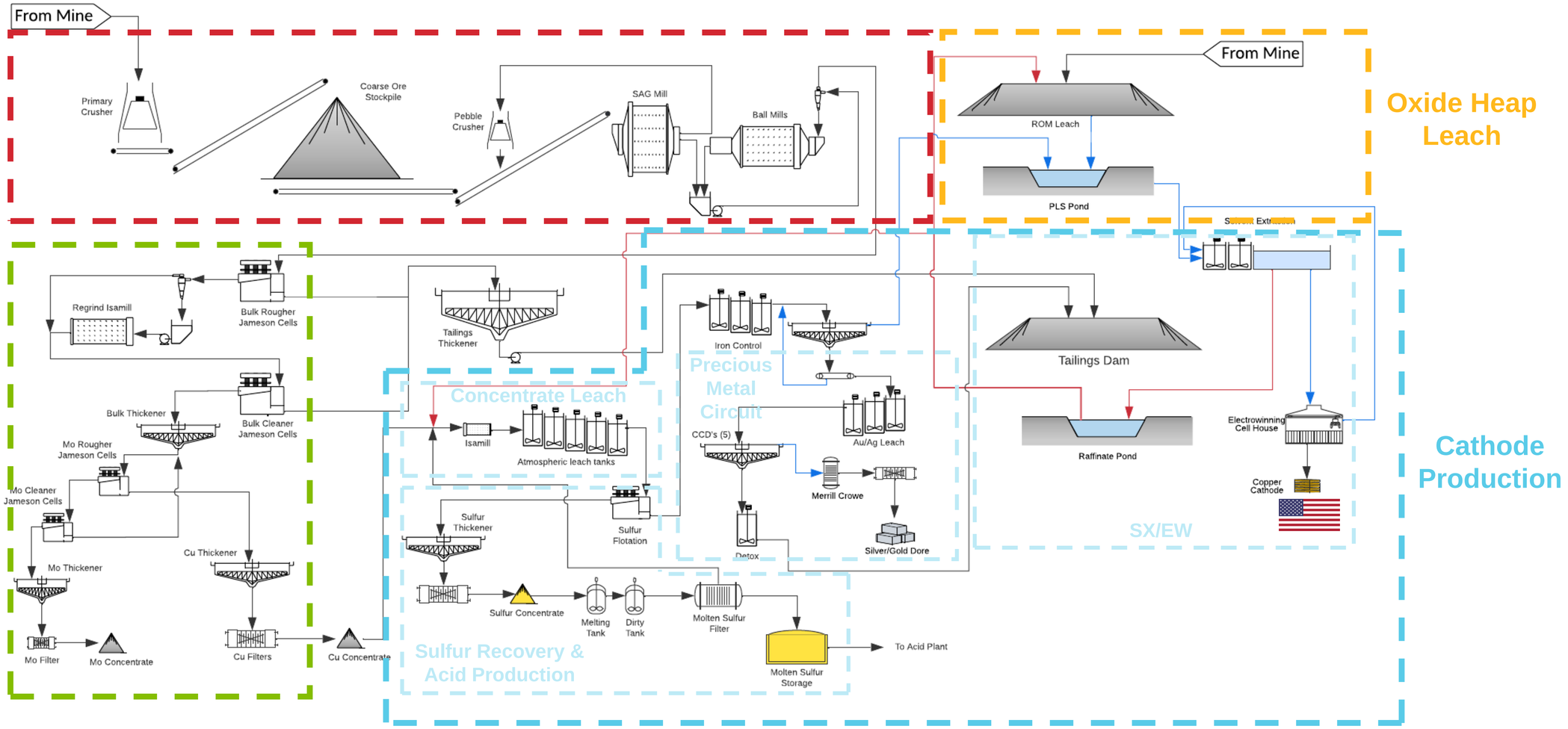
Sulfide & Oxide Synergies

Domestic Copper Cathode Production

Low Pressure & Temperature

PROCESSING FLOWSHEET

STANDARD SULFIDE AND OXIDE PROCESSING FLOWSHEET TO PRODUCE CATHODE



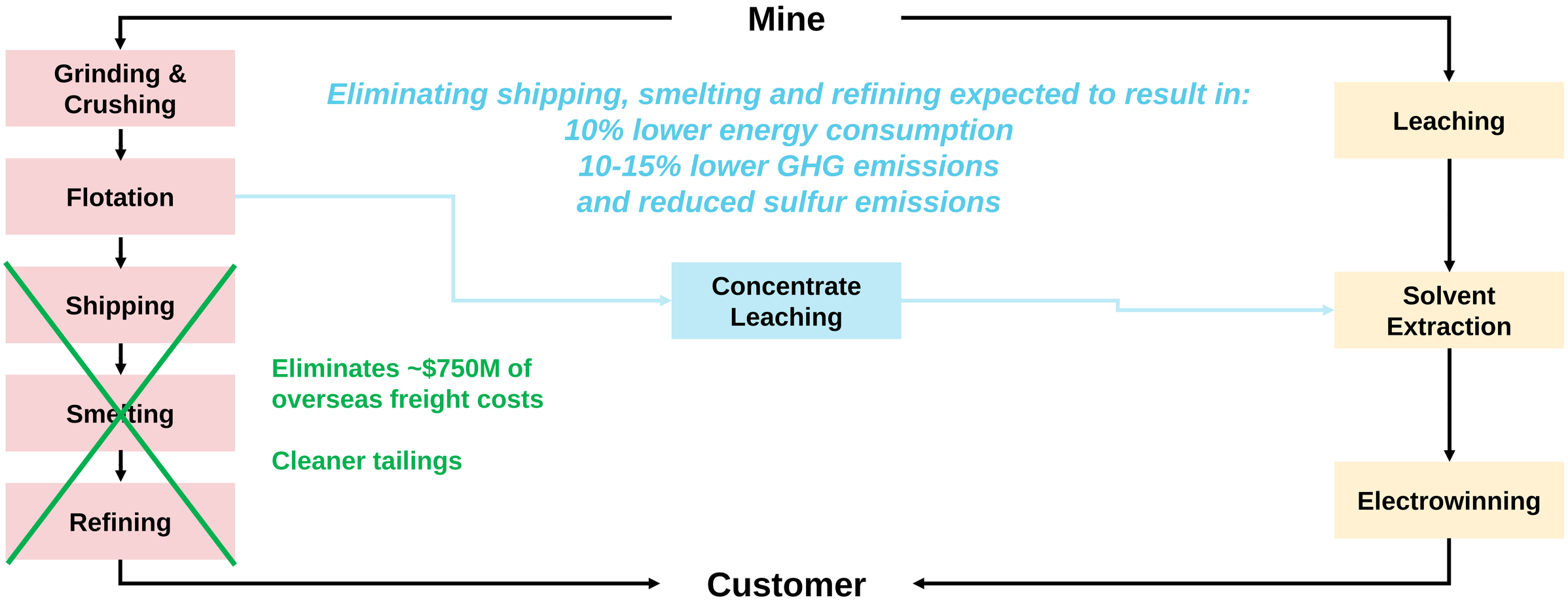
CHOSEN PROCESSING DESIGN REALIZES SYNERGIES

MAXIMIZING ECONOMIC AND ENVIRONMENTAL BENEFITS

- Maximizing project economics by capturing synergies between oxides and sulfides
  - Standard flowsheet for concentrating sulfides and leaching oxides
  - Sulfide concentrate leaching process connects sulfides and oxides – sulfuric acid by-product is used on the oxide heap leach
  - Maintains low cash cost position over the life of the operation – low cost heap leach and SX/EW facility, eliminates the need to source external acid, providing stability in operating costs and optionality depending on the copper-to-acid price ratio
  - Sulfur burner generates power during the production of sulfuric acid, resulting in an electricity credit
- Creating value from oxides at the East deposit
  - ~100Mt of oxides at the East deposit were previously classified as waste and now can be processed at the heap leach and SX/EW facility
- Reducing carbon footprint
  - Production of copper cathode at site has many environmental benefits, including lower energy consumption and reducing GHG and sulfur emissions

MODERN MINE DESIGN REDUCES ENERGY CONSUMPTION & EMISSIONS

COPPER CATHODE PRODUCTION ELIMINATES THE NEED FOR OVERSEAS SMELTING AND REFINING



PROCESS PLANT VIDEO

3D VISUALIZATION OF PROCESS DESIGN

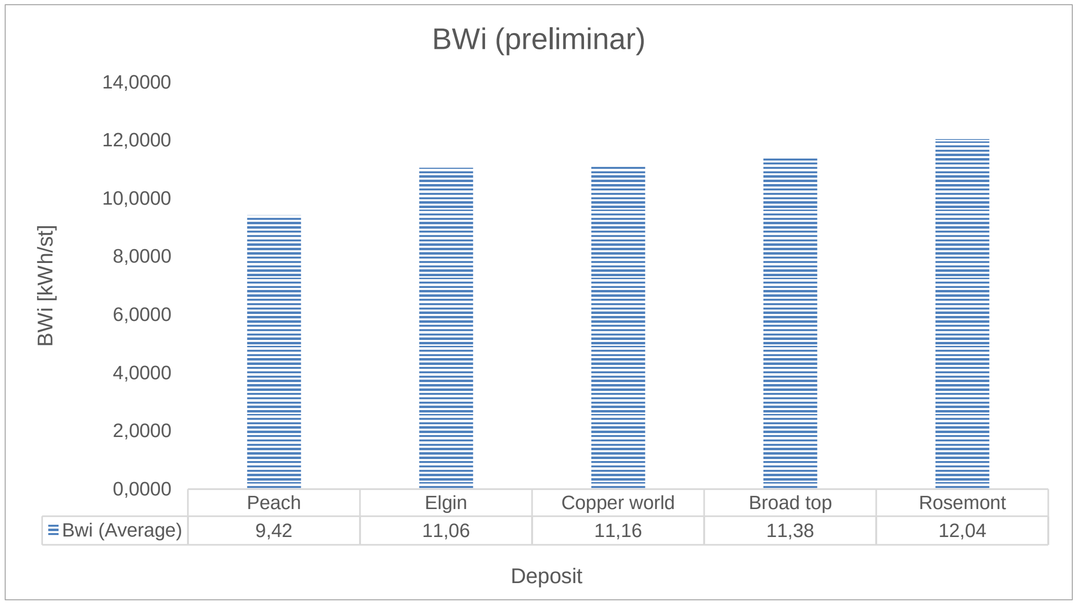
- To show Copper World processing plant video

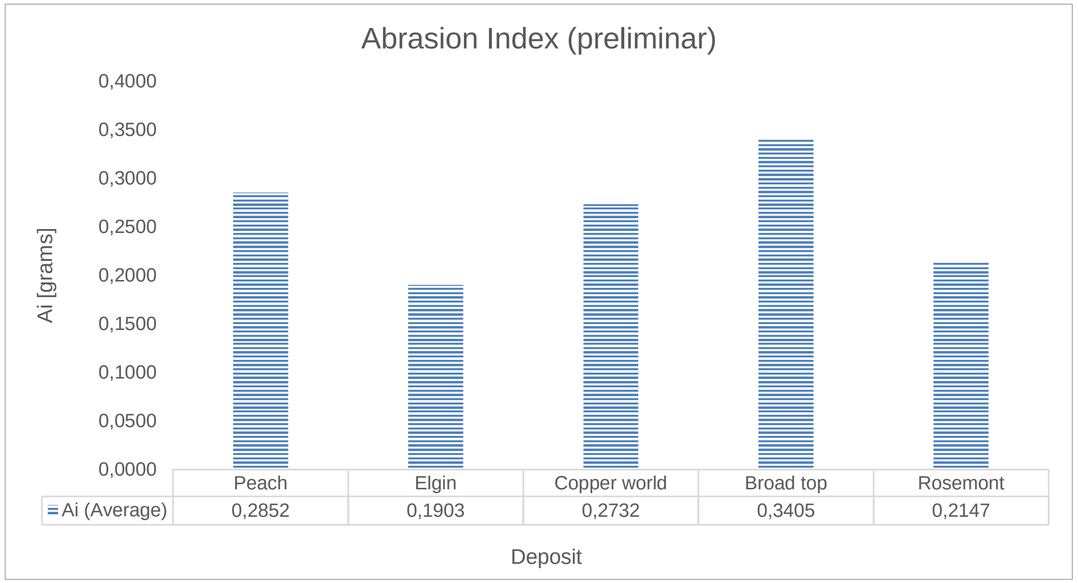
HARDNESS TESTWORK

SPI & BBWI

- Western pit material is measurably softer than the East pit material. Allows for deferral of pebble crusher and operation with low media charge levels
- Additional Peach, Elgin and West samples are in process to increase the coverage of those deposits

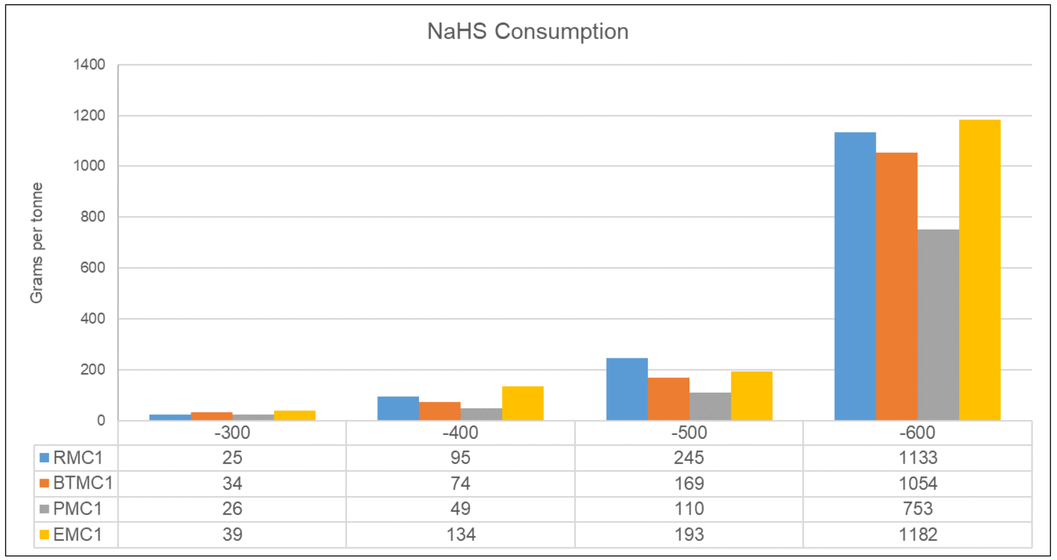
Mine	# of samples	Distribution	SGI (Average)
Peach	2	1%	33,5
Elgin	15	7%	48,7
West (Copper World)	21	10%	43,0
East (Rosemont)	84	39%	116,3
Broad Top	95	44%	72,8
Total	**217**	**100%**	62,9





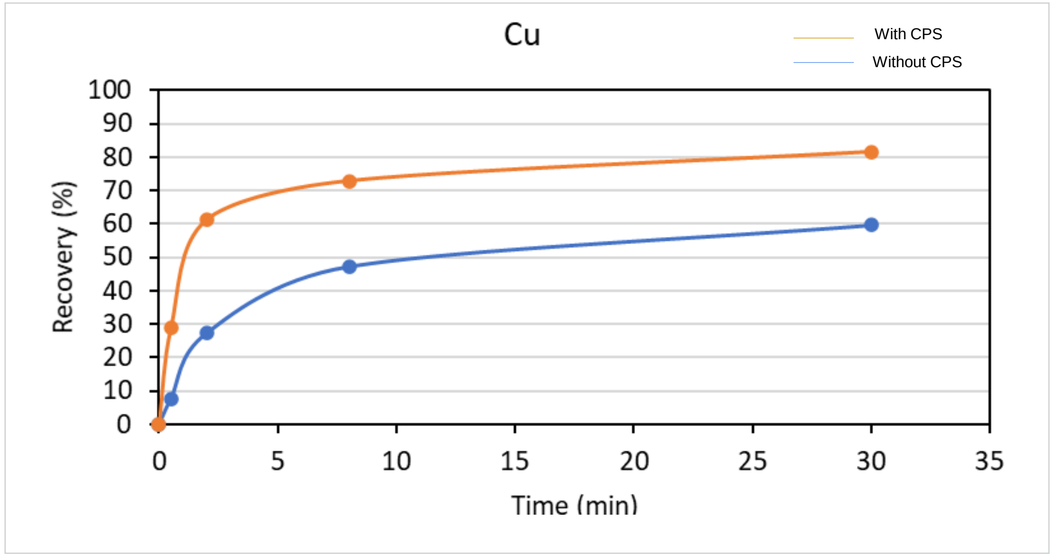
FLOTATION TESTWORK

- Controlled Potential Sulfidization (CPS) has been employed on whole of ore to improve the recovery of copper oxides (up to 58% rougher recovery) and tarnished/oxidized copper sulfides.
- High realized recoveries from oxides and secondary copper due to change in tested reagent scheme



	-300	-400	-500	-600
RMC1	25	95	245	1133
BTMC1	34	74	169	1054
PMC1	26	49	110	753
EMC1	39	134	193	1182

Deposit	Recovery (%)	
	SCu	CuSS
East	90	58
Peach	79	15
Elgin	86	39
Broadtop	82	39



OXIDE LEACHING TESTWORK

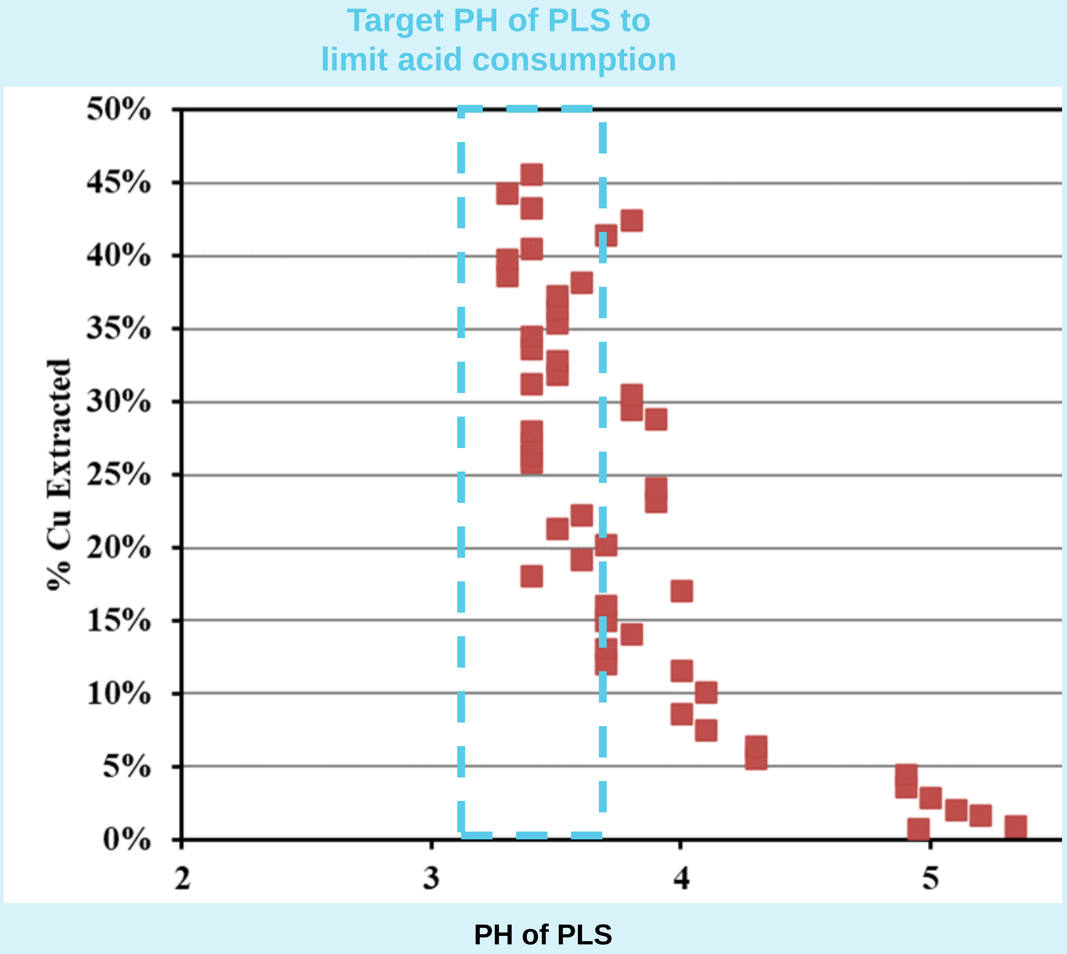
COLUMN LEACH TEST WORK

- Preliminary column leach test work ongoing
  - Data modelled to obtain preliminary acid consumption

$$Acid\ Consumption\ \left(\frac{lb}{t}\right) = 6.08 * Ca + 3.99$$

- Variability mini columns set up to develop more detailed mineralogy-based model
- Additional columns required to determine lift height + optimum acid concentration
  - Lift Height 5 – 15 m
  - Acid to achieve PLS pH of 3 – 3.5 to limit acid consumption
  - Expected to be completed end of 2022

ELGIN – CU EXTRACTION VS PH OF PLS



CONCENTRATE LEACH TESTWORK

PROVEN AND COMMERCIALIZED TECHNOLOGY

- Concentrate leaching has been around since the 1980s
  - More than 25 operations have concentrate leach facilities
    - Hudbay's hydrometallurgical zinc plant in Flin Flon
    - Freeport's Morenci and Bagdad copper mines in Arizona
    - First Quantum's Las Cruces copper mine in Spain (atmospheric leach)
    - Glencore MCM zinc-lead operation in Australia (atmospheric leach)
- Plant capacity: 1,700 tpd concentrate and 98% Cu recovery
  - Chosen atmospheric leach method was preferred for the PEA as it is easier to operate and safer
  - Method has been proven with mineralogy similar to Copper World
  - Testwork supported by Glencore Technologies benchmark testing on similar concentrates
- Sulfur burner capacity: 1,100 tpd H_2SO_4
  - 53% of H_2SO_4 produced is from internal feed
- Next steps to be evaluated through 2022 and 2023
  - Test programs and trade-off studies to assess a broad range of concentrates (Hudbay's Stall and Constancia Cu concentrate, regional Arizona/US operations)
  - Confirm preferred method of concentrate leaching (Albion vs HT or LT POX or combination) and scale/timing of implementation

ECONOMICS

ROBUST PROJECT ECONOMICS

- Phase I - 16 year mine life
  - Cu production up to 100kt p.a., including 86kt p.a. from mined resources
  - Cash costs of $1.15/lb and sustaining cash cost of $1.44/lb
  - NPV10% of $741M and IRR of 17%
- Phase II – 28 year mine life
  - Cu production up to 125kt p.a., including 101kt p.a. from mined resources
  - Cash costs of $1.11/lb and sustaining cash cost of $1.42/lb
  - NPV10% of $555M and IRR of 49% (NPV10% of $2.8B at time of sanction)
- LOM total – 44 year mine life
  - ~$500M annual EBITDA
  - NPV10% of $1.3B and IRR of 18%

SUMMARY OF KEY METRICS (at $3.50lb Cu)

METRIC	UNIT	Phase I	Phase II	LOM
Valuation Metrics (Unlevered)[1]				
Net present value @ 8% (after-tax)	$ millions	$1,097	$947	$2,044
Net present value @ 10% (after-tax)	$ millions	$741	$555	$1,296
Internal rate of return (after-tax)	%	17%	49%	18%
Payback period	# years	5.3	1.7	-
EBITDA (annual avg.)[2]	$ millions	$438	$530	$497
Project Metrics				
Growth capital	$ millions	$1,917	$885	$2,802
Construction length	# years	3.0	2.0	-
Operating Metrics				
Mine life	# years	16.0	28.0	44.0
Cu cathode - mined resources (annual avg.)[3]	000 tonnes	86.4	101.3	95.9
Cu cathode - total (annual avg.)[3]	000 tonnes	98.7	123.3	114.3
Copper recovery - sulfide to cathode	%	77.3	80.1	79.2
Copper recovery - oxide to cathode	%	59.0	58.7	58.9
Sustaining capital (annual avg.)	$ millions	$33	$35	$34
Cash cost[4]	$/lb Cu	$1.15	$1.11	$1.12
Sustaining cash cost[4]	$/lb Cu	$1.44	$1.42	$1.43

Note: “LOM” refers to life-of-mine total or average.

[1] Calculated assuming the following commodity prices: copper price of $3.50 per pound, copper cathode premium of $0.01 per pound (net of cathode transport charges), silver stream price of $3.90 per ounce and molybdenum price of $11.00 per pound. Reflects the terms of the existing Wheaton Precious Metals stream, including an upfront deposit of $230 million in the first year of Phase I construction in exchange for the delivery of 100% of silver produced.

[2] EBITDA is a non-IFRS financial performance measure with no standardized definition under IFRS. For further information, please refer to the company's most recent Management's Discussion and Analysis for the three and six months ended June 30, 2022.

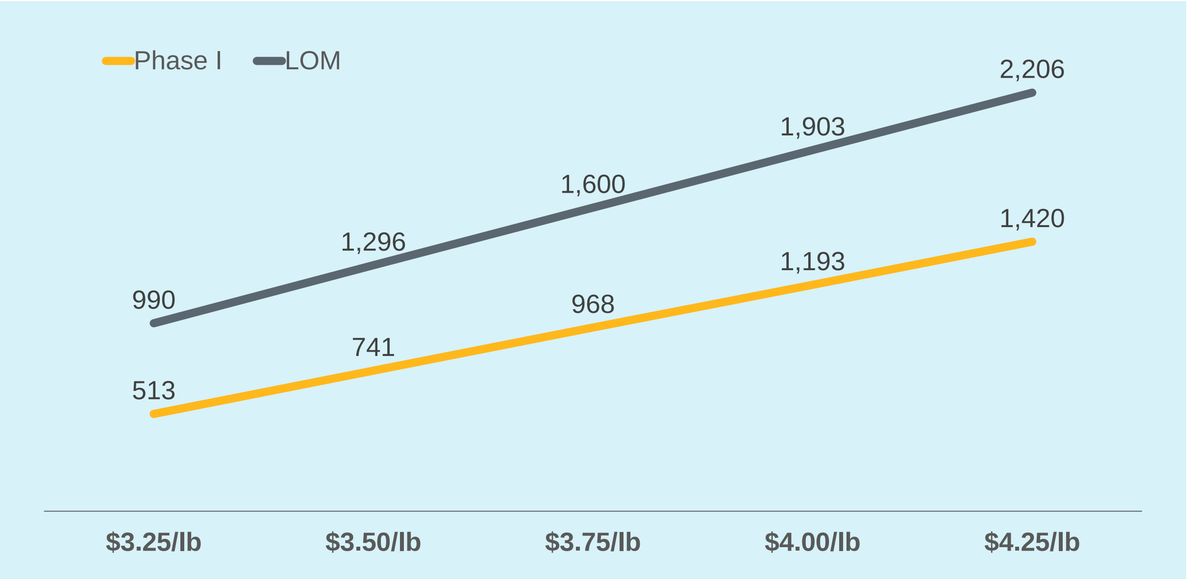
[3] The mine plan assumes external concentrate is sourced in years when spare capacity exists at the SX/EW facility in order to maximize the full utilization of the facility. Copper cathode production from mined resources excludes the production from external concentrate. Average annual copper cathode production from external concentrates is approximately 12,000 tonnes in Phase I and 22,000 tonnes in Phase II. There remains the potential to replace external copper concentrate with additional internal feed.

[4] Cash cost and sustaining cash cost, net of by-product credits, per pound of copper produced from internally sourced feed and excludes the cost of purchasing external copper concentrate, which may vary in price or potentially be replaced with additional internal feed. By-product credits calculated using the following commodity prices: molybdenum price of $11.00 per pound, silver stream price of $3.90 per ounce and amortization of deferred revenue as per the company's approach in its quarterly financial reporting. By-product credits also include the revenue from the sale of excess acid produced at a price of $145 per tonne. Sustaining cash cost includes sustaining capital expenditures and royalties. Cash cost and sustaining cash cost are non-IFRS financial performance measures with no standardized definition under IFRS. For further details on why Hudbay believes cash costs are a useful performance indicator, please refer to the company's most recent Management's Discussion and Analysis for the three and six months ended June 30, 2022.

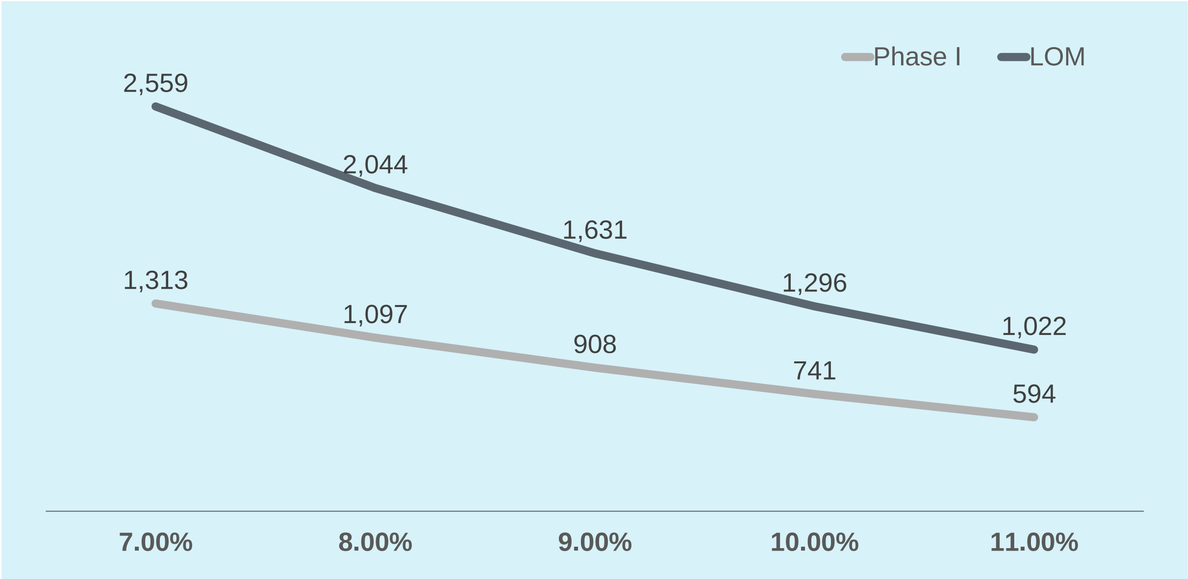
HIGHLY SENSITIVE TO THE COPPER PRICE

- At $4.00/lb Cu, the Phase I NPV10% increases to $1.2B and IRR increases to 21%
- At $4.00/lb Cu, the LOM NPV10% increases to $1.9B and IRR increases to 22%

COPPER PRICE ($ MILLONS NPV10%)



DISCOUNT RATE ($ MILLIONS NPV)



CAPITAL COSTS

- Phase I Growth Capital: $1.9B
  - Bottom-up approach
  - 20% contingency applied to direct capital costs; many components at advanced level of engineering
  - $100M of equipment savings due to utilization of a crusher, SAG and two ball mills purchased by previous owner
- Phase II Growth Capital: $885M
  - Expansion of crushing facility and flotation plant
  - Construction of new tailings facility
  - 40% contingency due to long lead time

CAPITAL COST SUMMARY				
METRIC	UNIT	Phase I	Phase II	LOM
Growth - EPCM	$M	$1,345	$621	$1,966
Growth - owner's costs	$M	$572	$264	$836
Growth - subtotal	$M	$1,917	$885	$2,802
Sustaining	$M	$531	$967	$1,498
Deferred stripping	$M	$111	$456	$567
Total	**$M**	**$2,559**	**$2,308**	**$4,867**

Includes Concentrate Leach

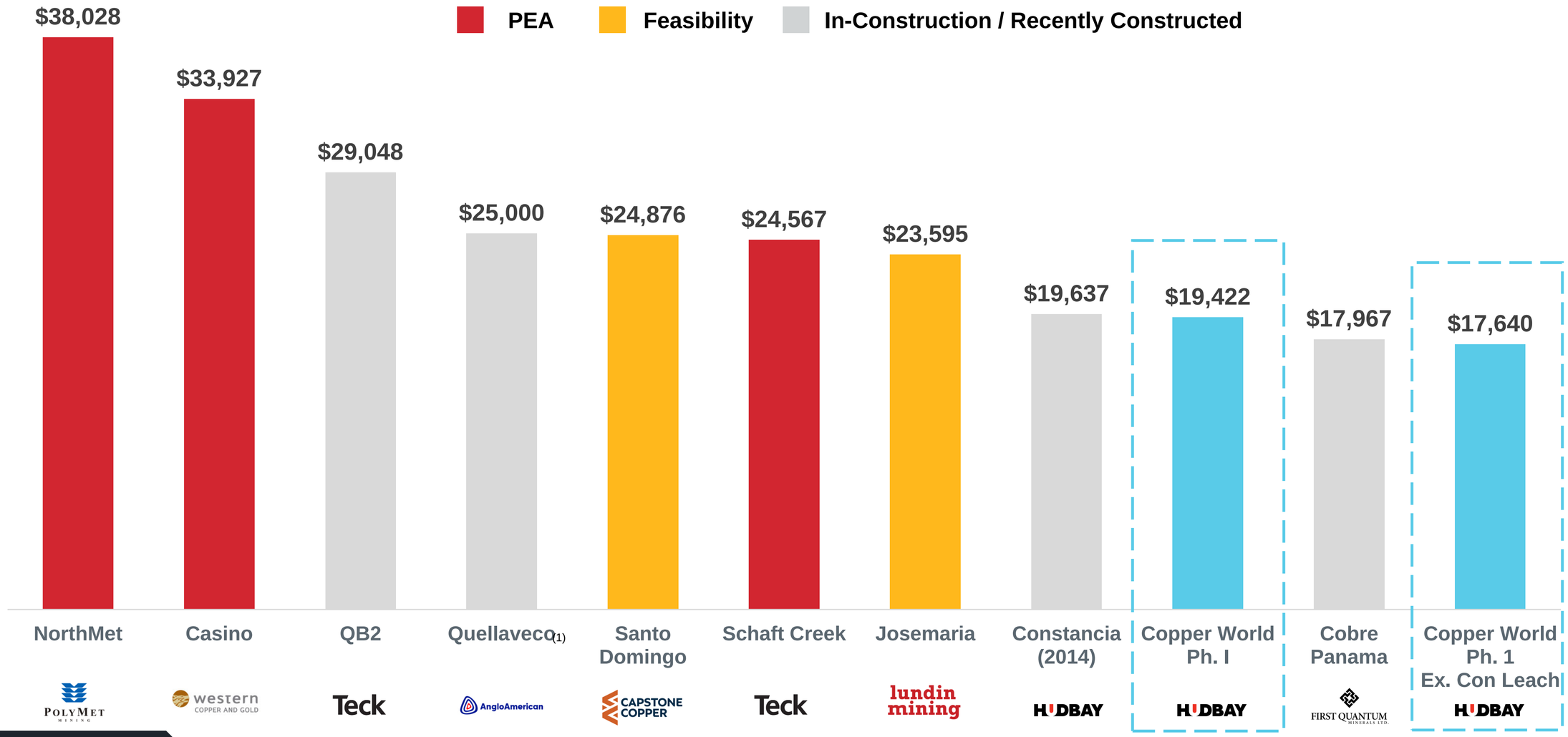
GROWTH CAPITAL DETAILS - EPCM				
METRIC	UNIT	Phase I	Phase II	LOM
Sitewide	$M	$15	$5	$20
Mining	$M	$38	$0	$38
Primary crushing	$M	$31	$33	$64
Sulfide plant	$M	$227	$144	$371
Molybdenum plant	$M	$15	$0	$15
Reagents	$M	$9	$5	$13
Plant services	$M	$29	$14	$43
SX/EW plant	$M	$190	$60	$250
Concentrate leach plant	$M	$88	$0	$88
Acid plant	$M	$77	$0	$77
Doré plant	$M	$20	$0	$20
Site services and utilities	$M	$3	$3	$5
Internal infrastructure	$M	$19	$10	$29
External infrastructure	$M	$102	$0	$102
Common construction	$M	$84	$54	$138
Other	$M	$173	$118	$291
Contingency	$M	$224	$177	$401
Total	**$M**	**$1,345**	**$621**	**$1,966**

GROWTH CAPITAL DETAILS - OWNER'S COSTS				
METRIC	UNIT	Phase I	Phase II	LOM
Pre-stripping	$M	$57	$0	$57
Mining fleet and equipment	$M	$186	$0	$186
Tailings storage	$M	$20	$264	$284
Heap leach pad	$M	$45	$0	$45
Earthworks and roads	$M	$28	$0	$28
G&A and other	$M	$156	$0	$156
Indirects and contingency	$M	$79	$0	$79
Total	**$M**	**$572**	**$264**	**$836**

SUSTAINING CAPITAL DETAILS				
METRIC	UNIT	Phase I	Phase II	LOM
Mining	$M	$305	$439	$744
Processing	$M	$163	$365	$528
Admin	$M	$63	$163	$226
Deferred stripping	$M	$111	$456	$567
Total	**$M**	**$642**	**$1,423**	**$2,065**

CAPITAL INTENSITY

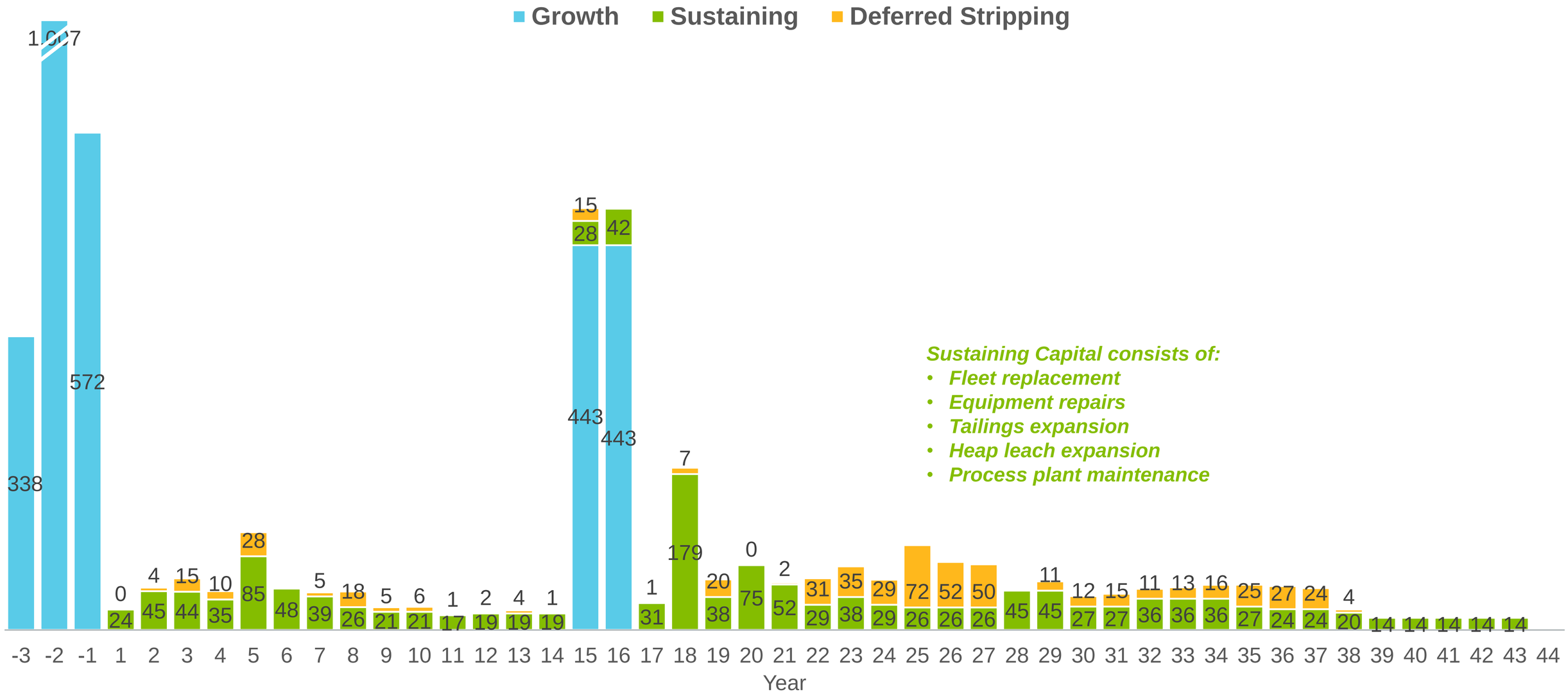
OPEN PIT COPPER PROJECTS IN THE AMERICAS ($/TONNE CU)



Source: Company filings. Includes recent North and South America open pit copper development projects and brownfield expansions that add more than 100kt Cu p.a.

1. Quellaveco capital intensity based on copper equivalent production.

CAPITAL COST PROFILE ($M)



OPERATING COSTS

- Opex estimates were developed utilizing budget quotes from different suppliers, experience at Hudbay's operations, and regional labor costs
- Site visits were conducted to other similar facilities in Arizona to better understand the operations and maintenance requirements
- Opex estimates were validated against actual costs at Constancia and with other similar projects/operations in Arizona
- Leaching cost per lb of Cu produced benefit from high grade feed, electricity credits and production of acid at site

OPERATING COST DETAILS - MINING				
METRIC	**UNIT**	**Phase I**	**Phase II**	**LOM**
Labor	$M	$340	$858	$1,198
Maintenance	$M	$398	$910	$1,307
Fuel	$M	$264	$623	$887
Blasting	$M	$166	$473	$639
Indirect	$M	$175	$554	$729
Other	$M	$35	$86	$121
Subtotal*	$M	$1,378	$3,504	$4,882
Deferred stripping	$M	($111)	($456)	($567)
Total*	**$M**	**$1,266**	**$3,048**	**$4,314**

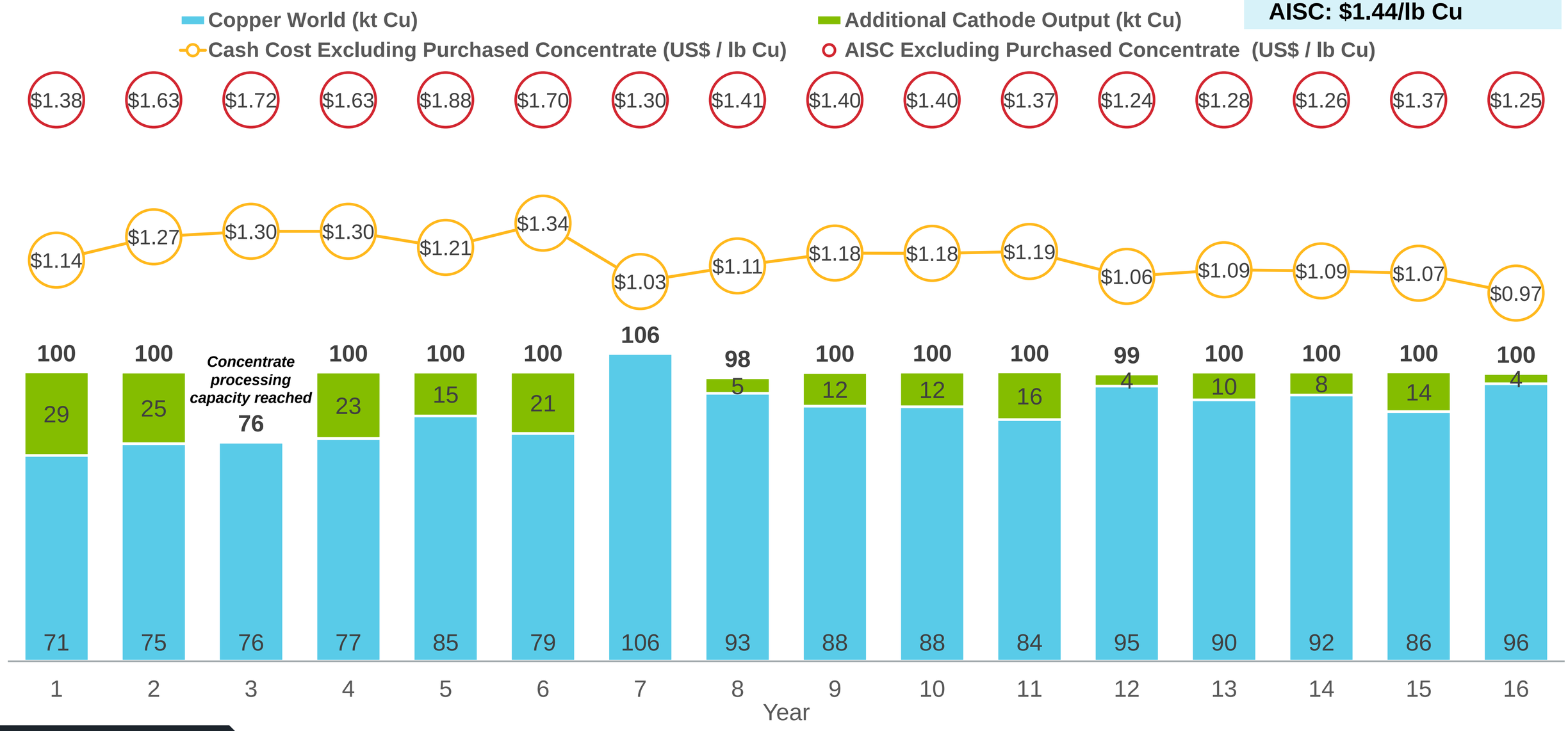
*Excludes pre-stripping costs

OPERATING COST DETAILS - PROCESSING				
METRIC	**UNIT**	**Phase I**	**Phase II**	**LOM**
Sulfide flotation	$M	$1,502	$3,749	$5,251
Molybdenum flotation	$M	$39	$106	$145
Leach plant	$M	$179	$450	$630
Acid plant	$M	$295	$245	$540
Acid plant (electricity credit)	$M	($92)	($161)	($254)
Leach pad	$M	$6	$7	$13
Doré plant	$M	$54	$135	$190
SX/EW	$M	$362	$775	$1,137
Total	**$M**	**$2,346**	**$5,307**	**$7,653**

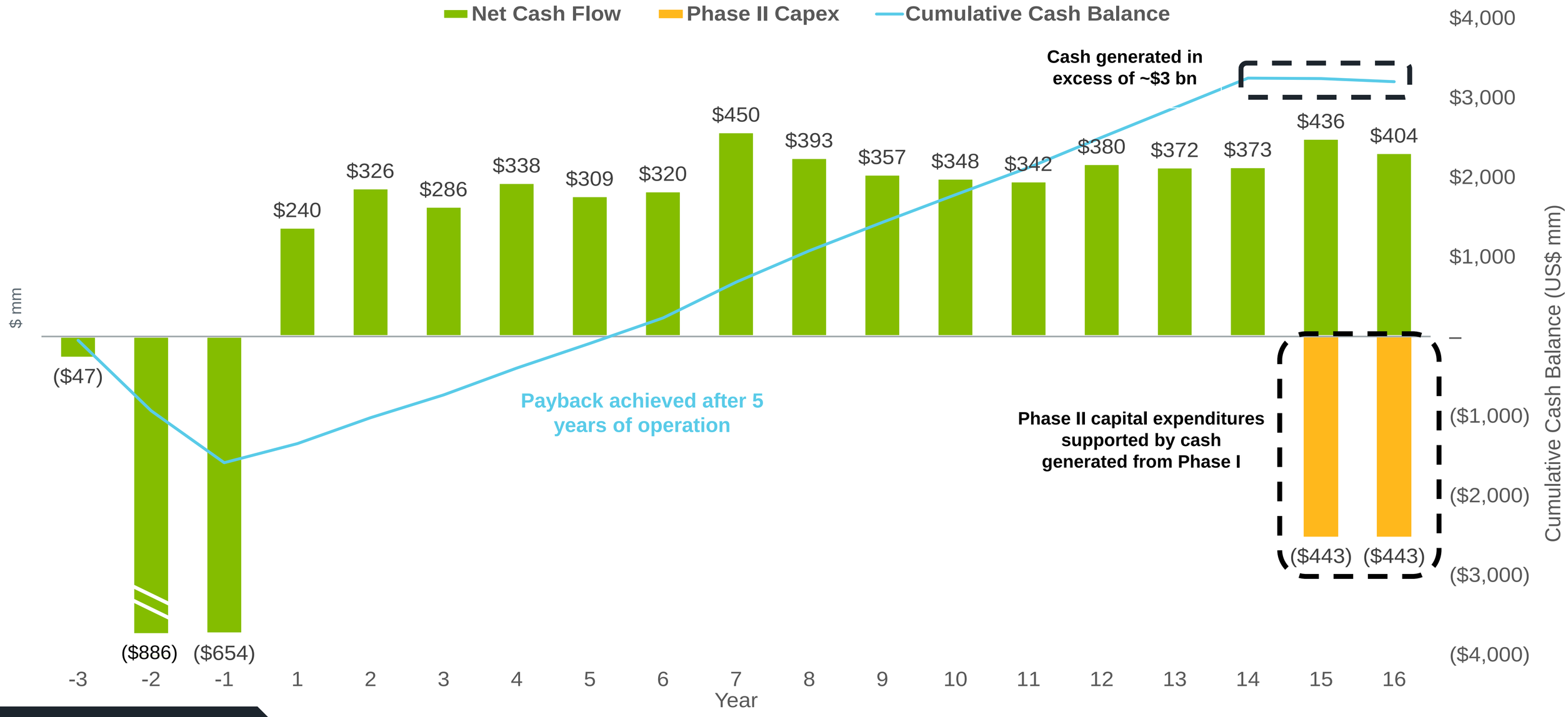
UNIT OPERATING COST SUMMARY				
METRIC	**UNIT**	**Phase I**	**Phase II**	**LOM**
Mining excl. def stripping	$/t material moved	$1.30	$1.17	$1.21
Concentrator	$/t processed	$4.88	$4.79	$4.81
Sulfide leach	$/lb Cu prod	$0.13	$0.07	$0.09
Oxide heap leach	$/lb Cu prod	$0.01	$0.01	$0.01
SX/EW	$/lb Cu prod	$0.10	$0.10	$0.10
Onsite G&A	$/t processed	$0.89	$0.95	$0.93

PHASE I PRODUCTION PROFILE

Phase I Average Annual
Production: 98.7kt Cu
Cash Costs: $1.15/lb Cu
AISC: $1.44/lb Cu

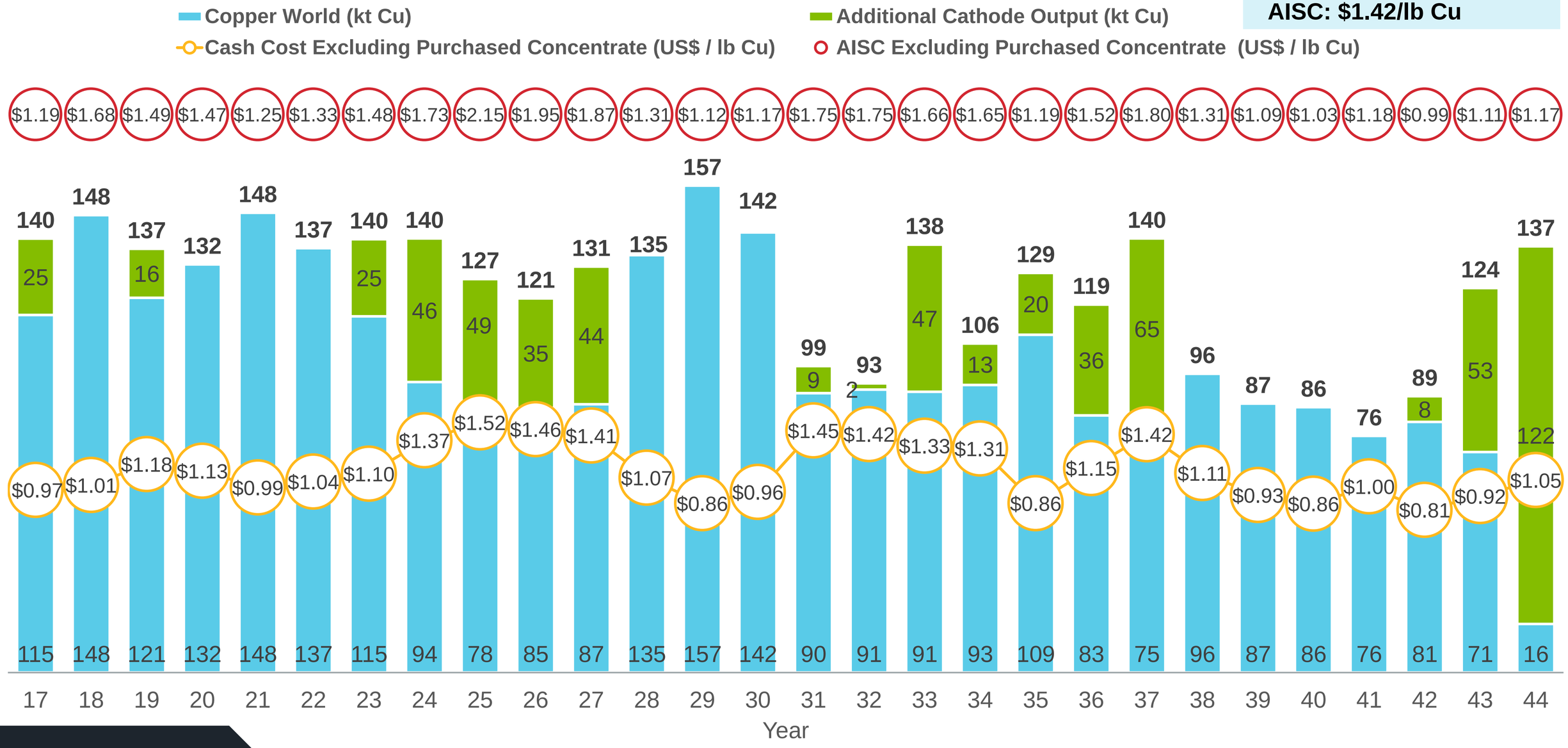


PHASE I CASH FLOW PROFILE

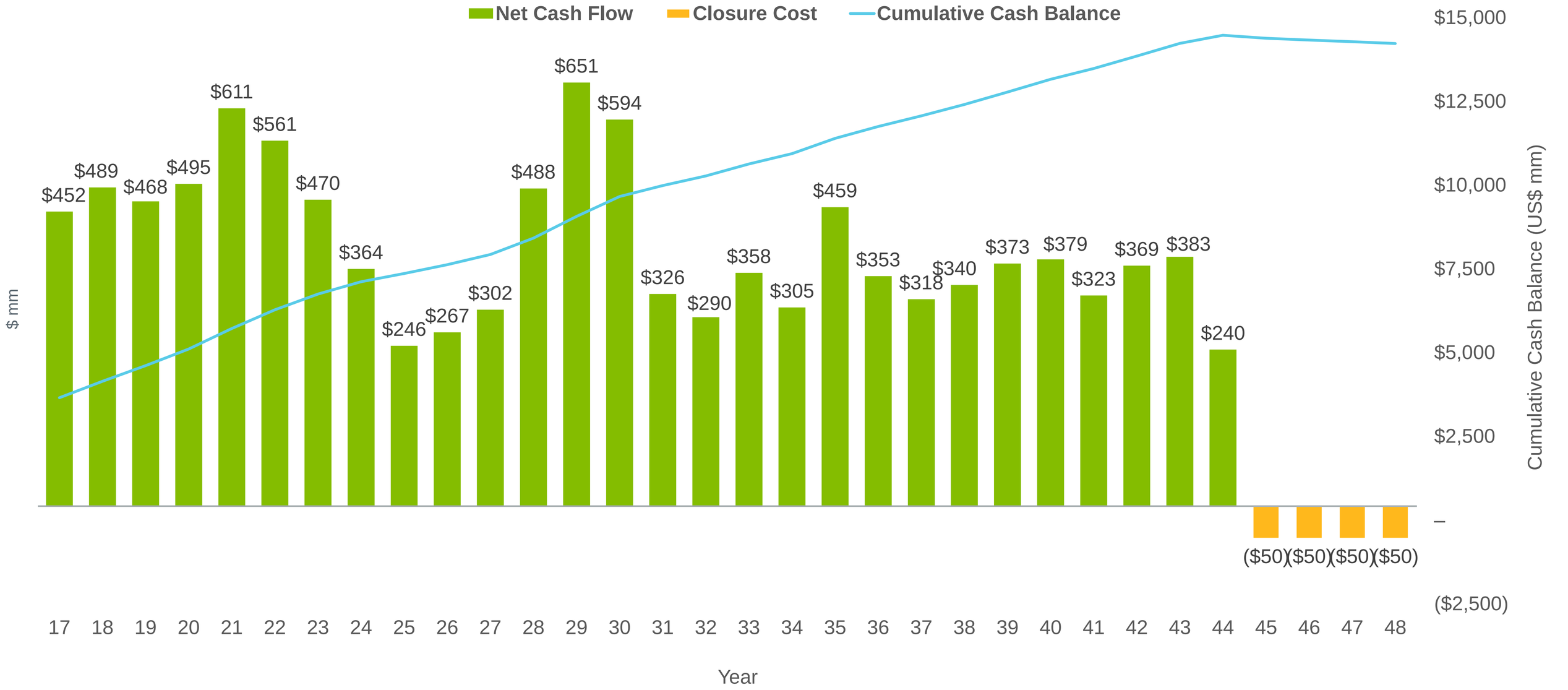


PHASE II PRODUCTION PROFILE

Phase II Average Annual
Production: 123.3kt Cu
Cash Costs: $1.11/lb Cu
AISC: $1.42/lb Cu



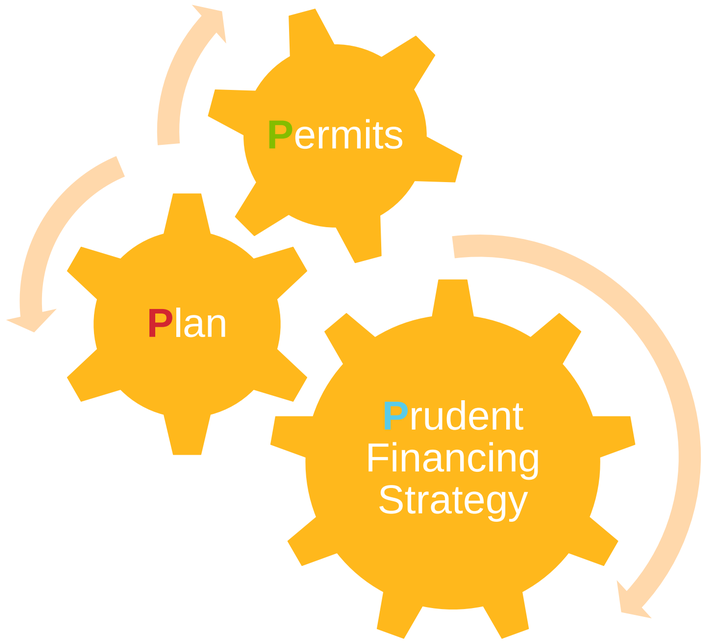
PHASE II CASH FLOW PROFILE



THREE PREREQUISITES FOR COPPER WORLD SANCTIONING

3Ps – PRUDENT FINANCING STRATEGY TO DRIVE INVESTMENT DECISION TO PROJECT SANCTION

- Hudbay is entering a period of significant near-term free cash flow generation over the next several years after the completion of our brownfields reinvestments program in Peru and Manitoba
- The opportunity to sanction Copper World is no expected to be until late 2024 at the earliest
  - Copper World will be evaluated against other investment opportunities in Hudbay's capital allocation process at that time
- Hudbay is committed to disciplined financial planning and leverage targets prior to greenlighting Copper World



Permits	Receipt of all state level permits required for Phase I	
Plan	Definitive feasibility study complete with an IRR of greater than 15%	
Prudent Financing Strategy	Joint Venture Partner	Committed minority JV partner
	Stream Partner	Renegotiated precious metals stream agreement with Wheaton
	Leverage	Net debt / EBITDA ratio of less than 1.2x
	Cash	Minimum cash balance of $600M
	Project-level Debt	Limited (up to $500M) non-recourse project level debt

PERMITTING

PHASE I & PHASE II PERMITS

PHASE I (PRIVATE LAND)

- Air Quality Control Permit (ADEQ)
  - Required before beginning construction of any emissions unit
  - Must model compliance with standards at property boundaries
- Aquifer Protection Permit (ADEQ)
  - Required before operating any facility with potential to discharge
  - Requires monitoring wells and reporting
- Mined Land Reclamation Plan (ASMI)
  - Bonding for reclamation costs
- Groundwater Withdrawal Permit (ADWR)
  - Current permit for 6,000 acre-ft/year
- Floodplain Use Permit (Pima County)
  - Required for construction of pits, plant and buildings in regulated floodplains

PHASE II (FEDERAL LAND)

- Mine Plan of Operations (USFS and BLM)
  - NEPA – required for any major federal action that could have significant environmental impacts
    - Agency must (1) analyze impacts and (2) solicit public input
    - No substantive standards
  - National Historic Preservation Act, Sect. 106 – Consultation with Tribes
  - Endangered Species Act, Sect. 7 – Consultation with Fish & Wildlife Service on endangered species and critical habitat
- Update to select Phase I permits

Note: ADEQ = Arizona Department of Environmental Quality; ASMI = Arizona State Mine Inspector; ADWR = Arizona Department of Water Resources; USFS = United States Forest Service; BLM = Bureau of Land Management; NEPA = National Environmental Policy Act

NINTH CIRCUIT COURT OF APPEALS DECISION

NET IMPACT IS FAVOURABLE FOR COPPER WORLD PHASE II

- The 9th Circuit Court of Appeals 2-1 split decision issued in May 2022 did not agree with a key part of the July 2019 District Court's decision – that the U.S. Forest Service (USFS) must review off-claim mining activities under its Part 251 regulations
  - The majority concluded that the USFS had relied on two errors in its approval of the Rosemont project relating to claim validity assumptions and rights under the mining law
  - The majority did not state that the USFS could not approve Rosemont under its Part 228A mining regulations
  - The dissent concluded that the Part 228A mining regulations are legally applicable to all legitimate mining activities regardless of whether they are on a valid claim or not:

    "The regulations that the USFS has adopted to fill in the gaps left by the Mining Law make two things clear: (1) the lawfulness of waste-rock disposal does not depend on whether the mine operator has valid mining claims to the disposal area, and (2) it was not arbitrary and capricious for the USFS to apply Part 228A to Rosemont's proposed deposit of waste rock because on their express terms they apply to this activity as a matter of law."

- The net impact of the 9th Circuit decision is favourable for Copper World Phase II compared to the District Court's opinion

WATERS OF THE UNITED STATES (WOTUS)

- Permit under Sect. 404 of the Clean Water Act is required prior to filling or disturbing WOTUS
  - If a 404 Permit is required, NEPA, Sect. 106 consultation & Sect. 7 consultation will also be required
- Current test for WOTUS is “significant nexus” to a “traditionally navigable water” (TNW) (Rapanos)
  - Agencies currently working on a new rule that will expand WOTUS
  - Supreme Court deciding a case this term that could restrict WOTUS

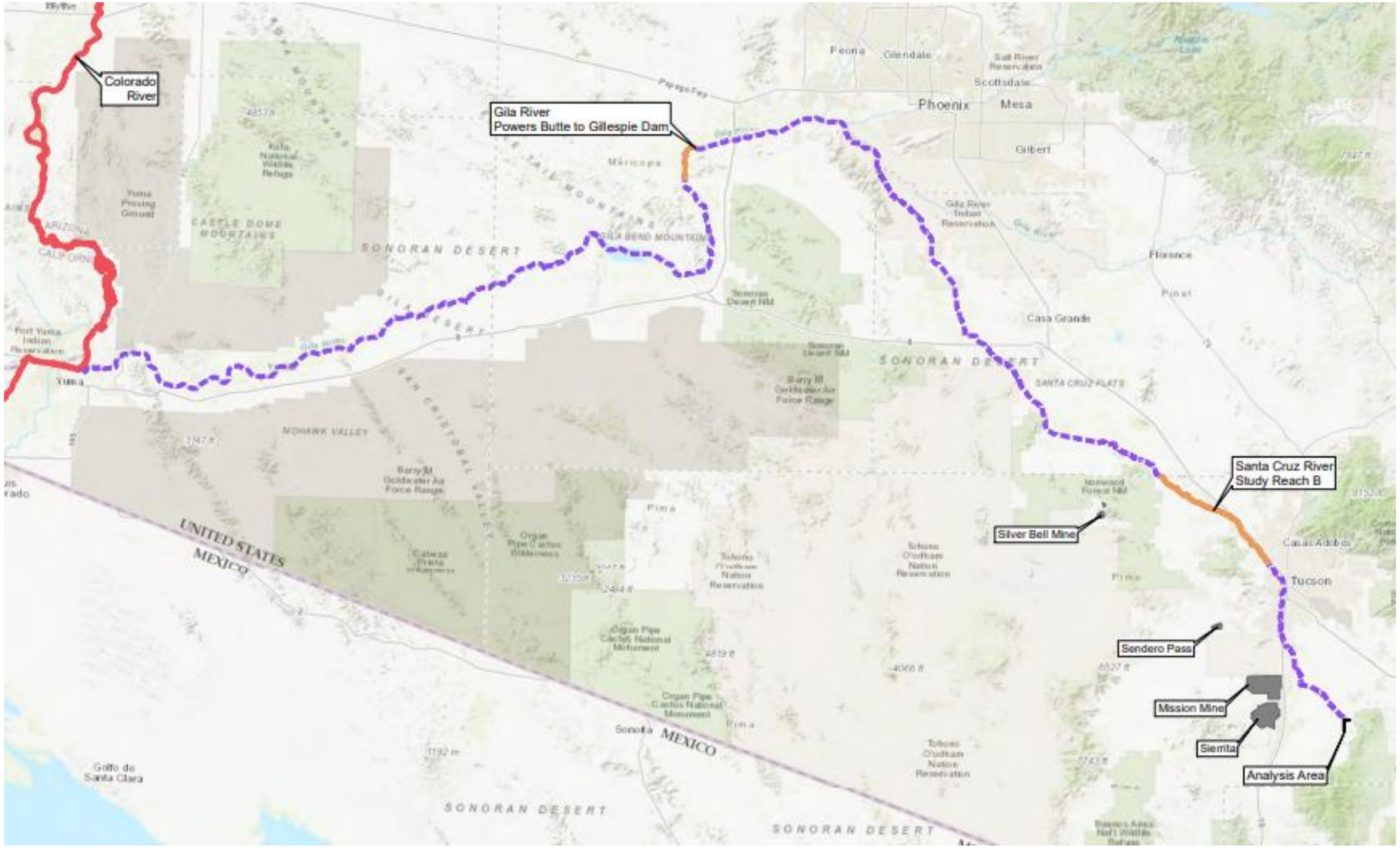
WEST SIDE OF RIDGELINE

- In 2021, capacity of washes to transmit contamination and biological matter downstream was studied
  - Studies showed that transmission stayed close to property and did not approach nearest waterway - the Santa Cruz River roughly 23 “river miles” downstream

EAST SIDE OF RIDGELINE

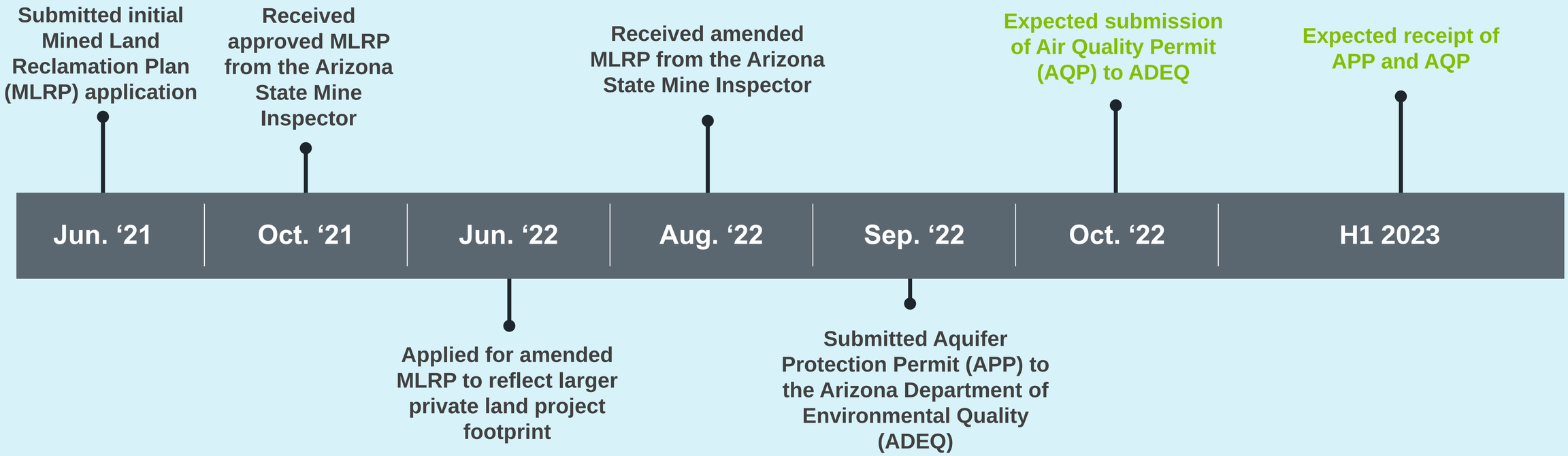
- March 2021 approved jurisdictional determination (AJD) from ACOE stating no WOTUS

TRADITIONALLY NAVIGABLE WATERS



STATE LEVEL PERMITTING TIMELINE

EXPECT TO RECEIVE ALL KEY STATE LEVEL PERMITS BY MID-2023



Hudbay has had significant engagement with the ADEQ over the past few months

PREFEASIBILITY STUDY AND UPSIDE OPPORTUNITIES

HUDBAY

UPDATES TO PEA TECHNICAL WORK

GEOLOGY & MINE PLAN

- Geological envelopes and block model updated for infill drilling
  - Results compared with the PEA study monitoring tonnage, grade, volume, and resource classifications
  - Gold to be incorporated in new resource model and mine plan
    - Additional value with potential stream renegotiation with Wheaton
- PFS pit optimization with new block model and pit shells compared with the PEA
  - TSF and WRF facilities updated, if needed, based on the PFS pit shells

FACILITIES & INFRASTRUCTURE

- Progression of designs for PFS facilities with consultants
  - Wood Group
    - Open Pits
    - Water Balance & Management
    - Waste Rock Facility (WRF)
    - Geotechnical designs
  - Piteau Associates
    - Groundwater & Hydrology model
    - Geochemistry study and Pit Dewatering
  - Paterson & Cook
    - Tailings Transportation
  - Ausenco
    - Process Plant
    - Power & Water Infrastructure

INFILL DRILLING AND FIELD WORKS

- Infill drilling to convert inferred to indicated resources in the private land pits and to maximize proven reserves in the PFS; completed 89,501 ft of drilling in Q2 (total first 6 months: 166,413 ft)
  - Assay results received by end of July have confirmed the tonnage and grade in the PEA mine plan with a potential increase in metal contained of about 5% due to successes in the Bolsa area
  - Conversion from indicated to measured exceeded expectations (drilling initial planned as part of a later FS program)
  - 7 drill rigs were used in the first half of 2022 and reduced to 3 by the end of July. 5 earthworks crews (excavator, dozer, and water truck per crew) have been working on roads and pads for this infill drilling
  - Continue infill drilling to convert some remaining inferred resources due to change in location and local increases from the PEA mine plan
- Geotechnical & Hydrogeological Investigation; Water Resources and Pit Dewatering (PFS)
  - Drilling and testpit site investigation started on August
  - The work will be focused on the future tailings and process plant potential areas
  - Around 15 drill holes are planned and 20 test pits to be excavated
  - In-situ water pump testing will be carried out as part of the water sources study and also as part of pit dewatering analysis

PROCESSING TRADE-OFF & MODULARIZATION

CONCENTRATE LEACHING TECHNOLOGY PRESSURE OXIDATION (“POX”) OR ALBION

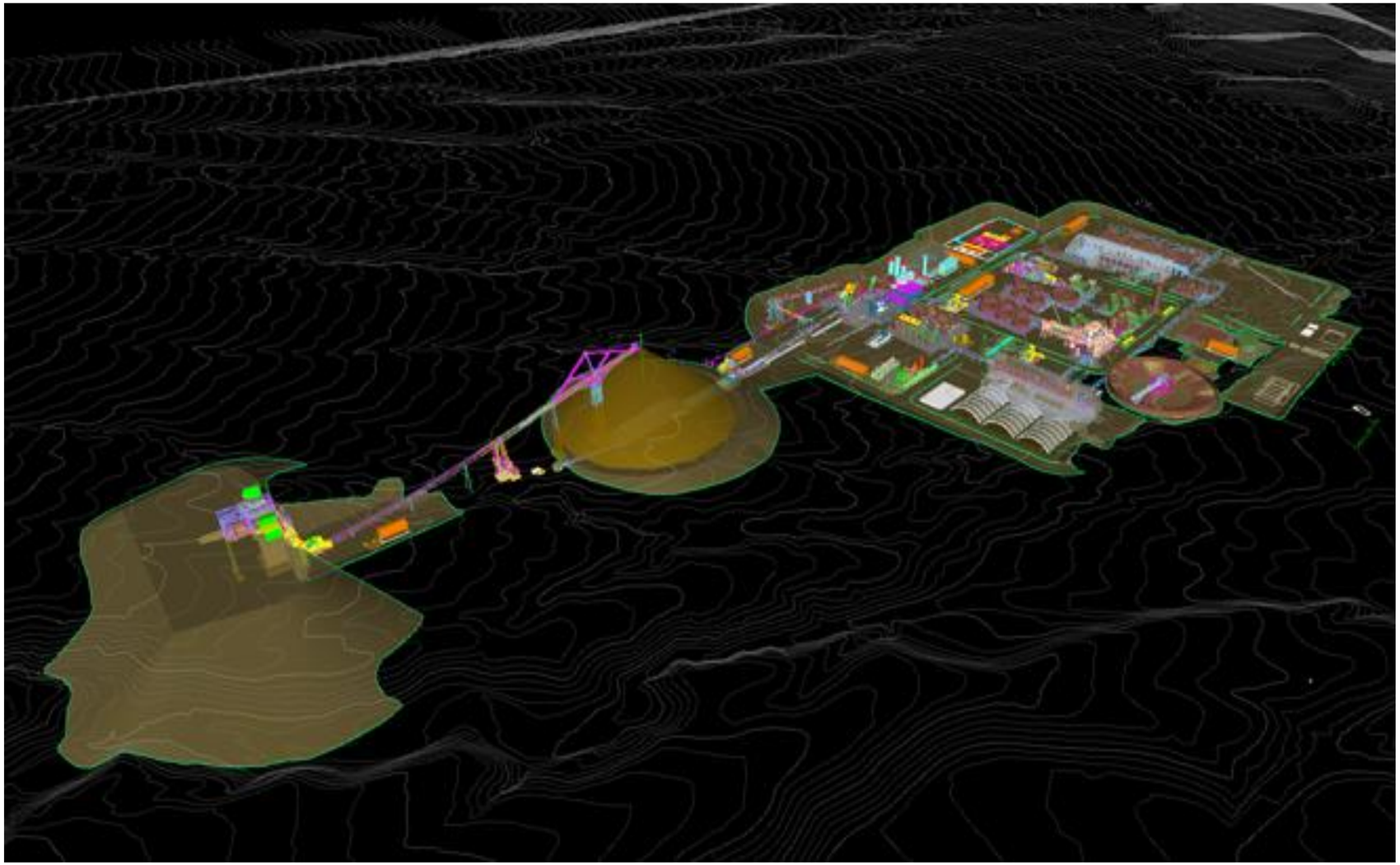
- Scenarios run using various POx pressures and temperatures / Albion
- Preliminary NPV outcomes for all cases similar within a small margin
- Albion provides additional flexibility with the ability to scale up as needed but also requires an acid plant

TIMING OF CONCENTRATE LEACHING & OXIDE PROCESSING

- Exploring the potential to decrease upfront capital while preserving NPV
- Evaluating multiple scenarios for timing of concentrate leach and oxide processing
  - Modular nature of the concentrate leach facility may allow for a gradual ramp-up of copper cathode production

PFS UPDATE – LAYOUT OPTIMIZATION

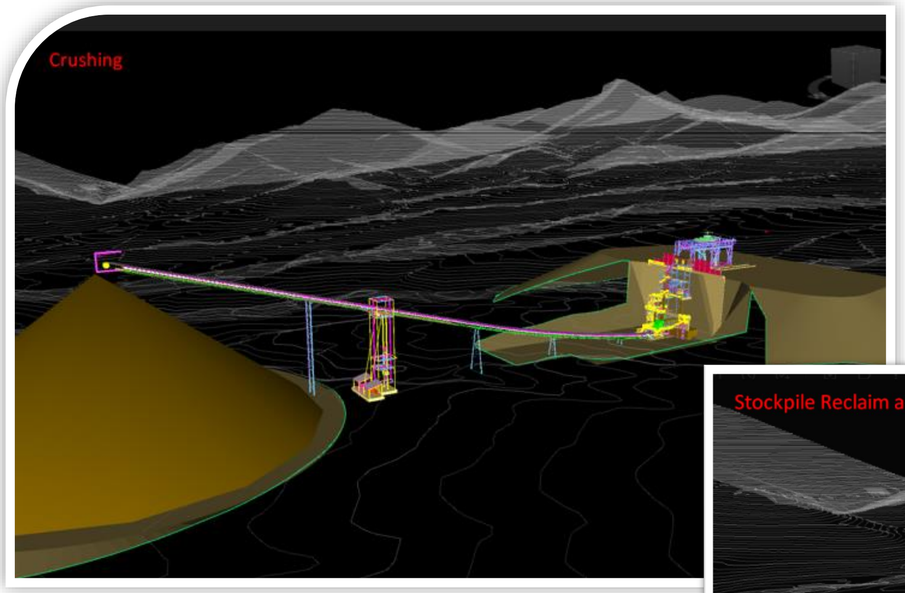
PROCESS PLANT



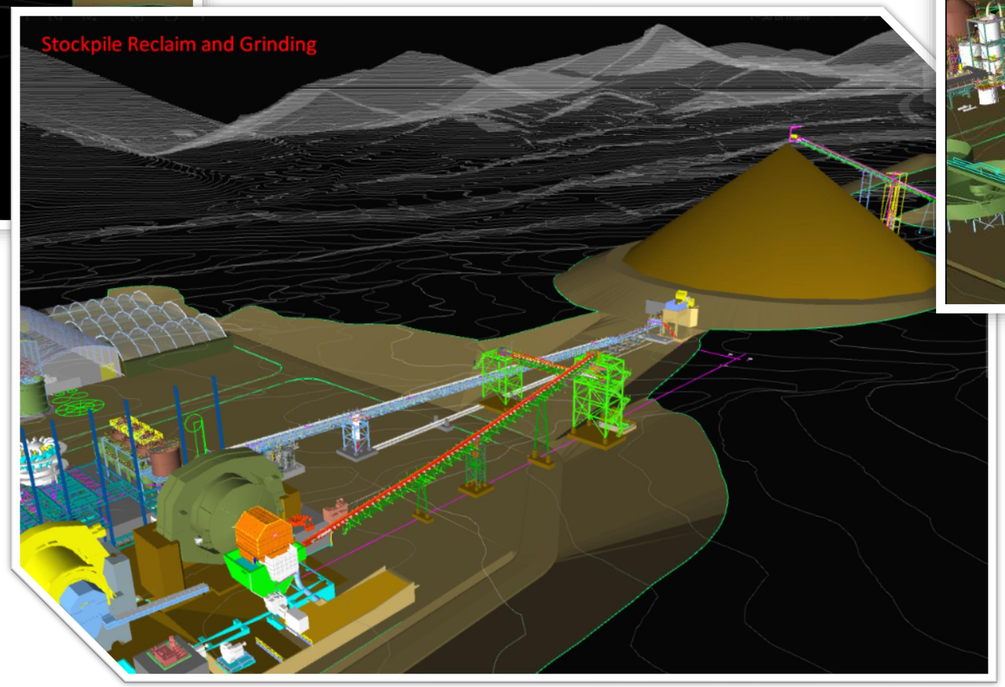
- Optimized Layout for both Albion and POx
  - Use of natural topography
  - Minimize cut/fill
  - Fit for purpose plant
  - Improved process flow
- Next Steps
  - Work with Mining for Haul Road Optimization
  - Building and infrastructure layout

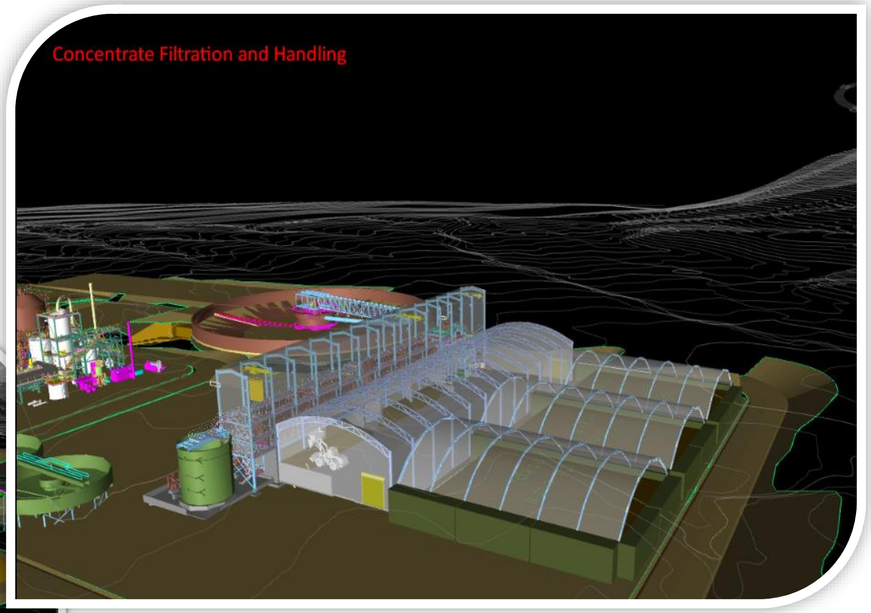
PFS UPDATE – LAYOUT OPTIMIZATION

PROCESS PLANT



- Crushing Plant
  - Open MSE Wall Construction
  - Existing Sandvick
  - Open Stockpile





- Grinding
  - Open Mill Building
  - Space consideration for pebble crusher

- Conc Filtration and Handling
  - CW Conc Filter Building and Storage
  - Third Party Conc Receipt

PROJECT UPSIDE OPPORTUNITIES

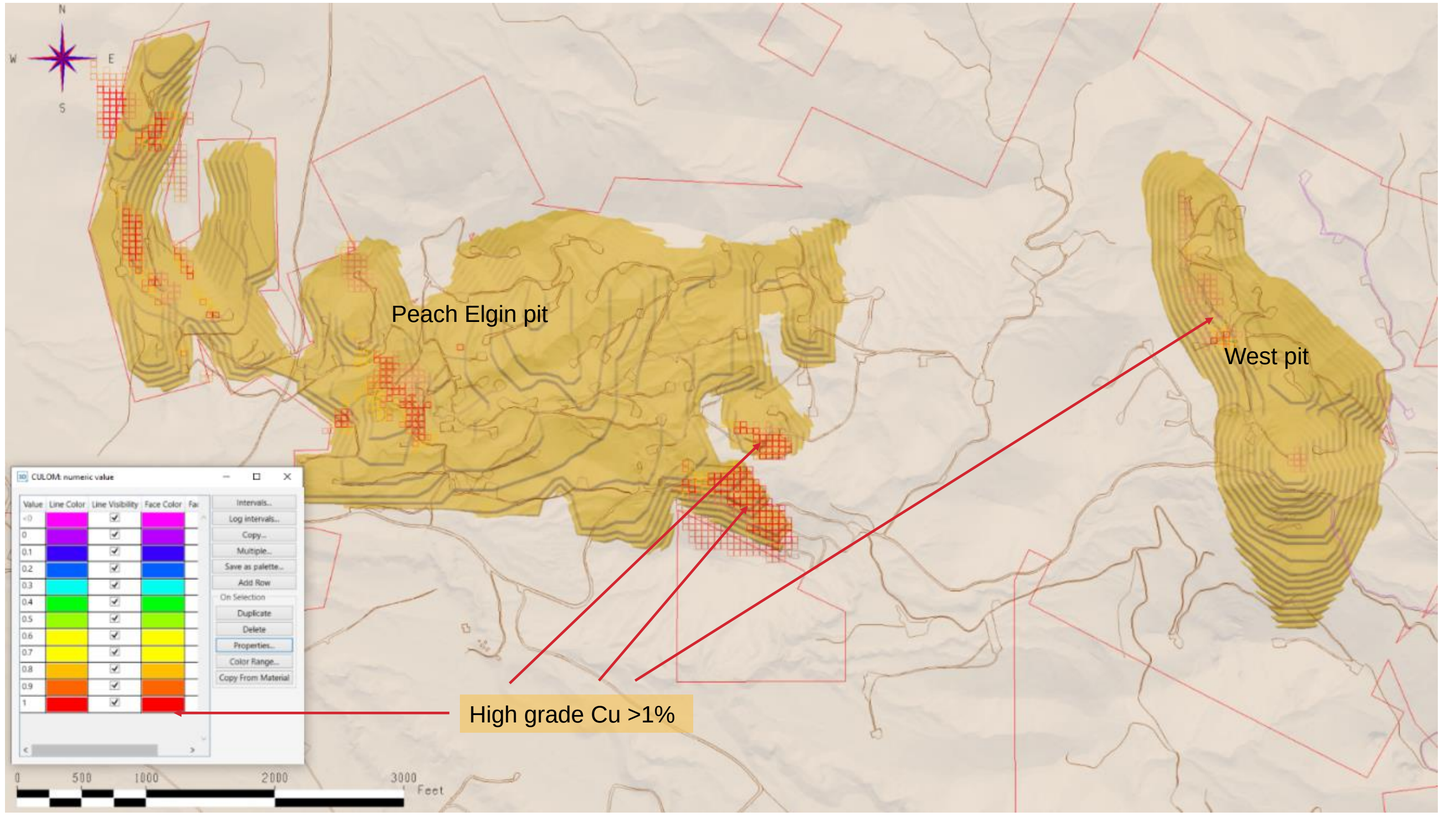
EVALUATING MANY OPPORTUNITIES TO FLEX THE SCOPE & TIMING OF THE PROJECT

- **Expanding private land Phase I**
  - Acquire additional private land to unlock the full potential of mining on private land / extend beyond 16 years
- **Optimization opportunities** to further enhance project economics
  - Flexible start-up timing and staged ramp-up of the concentrate leach facility
    - 100% modular - easy to flex size and timing of the concentrate leach, acid plant and SX/EW facilities
    - Could be financed separately as an industrial complex, further de-risking project development
  - Early start of production – processing of ore mined during pre-stripping (e.g., early heap leach) or bulk sampling to de-risk the project
  - Send copper concentrates from Hudbay's other operations (Snow Lake, Constancia, etc.) to our Arizona processing plant
- **Green opportunities** to further reduce energy consumption, water consumption and emissions
  - Use of autonomous or electric haul trucks and various post-reclamation land uses (e.g., solar energy site)
  - Potential water conservation opportunities such as advancing dry stack tailings into Phase I if additional private land is acquired
- **Early receipt of permits for Phase II**
  - Resolve federal permitting faster and for a larger project

BULK SAMPLING

OPPORTUNITY TO COMPLETE BULK SAMPLING AS DE-RISKING MEASURE

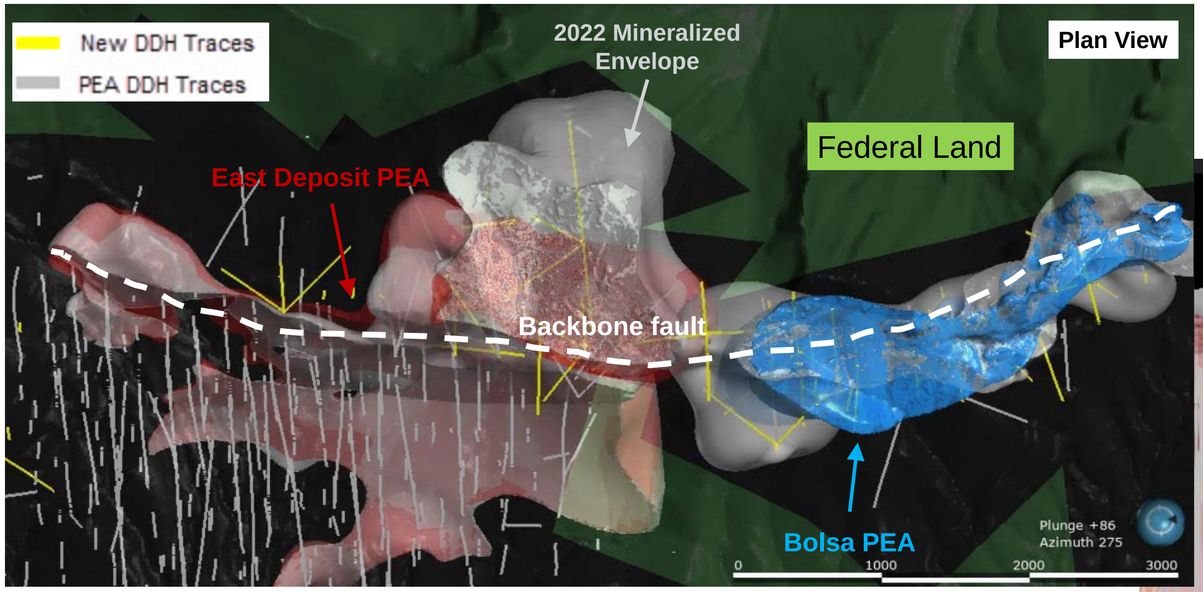
- Evaluate the potential for early bulk sampling in high grade, near surface areas of the West and Peach-Elgin pits
- De-risking measure to test grade continuity, variable cut-off effectiveness and metallurgical strategies



RECENT EXPLORATION SUCCESS

BOLSA DEPOSIT GROWS AND CONNECTS WITH THE EAST DEPOSIT

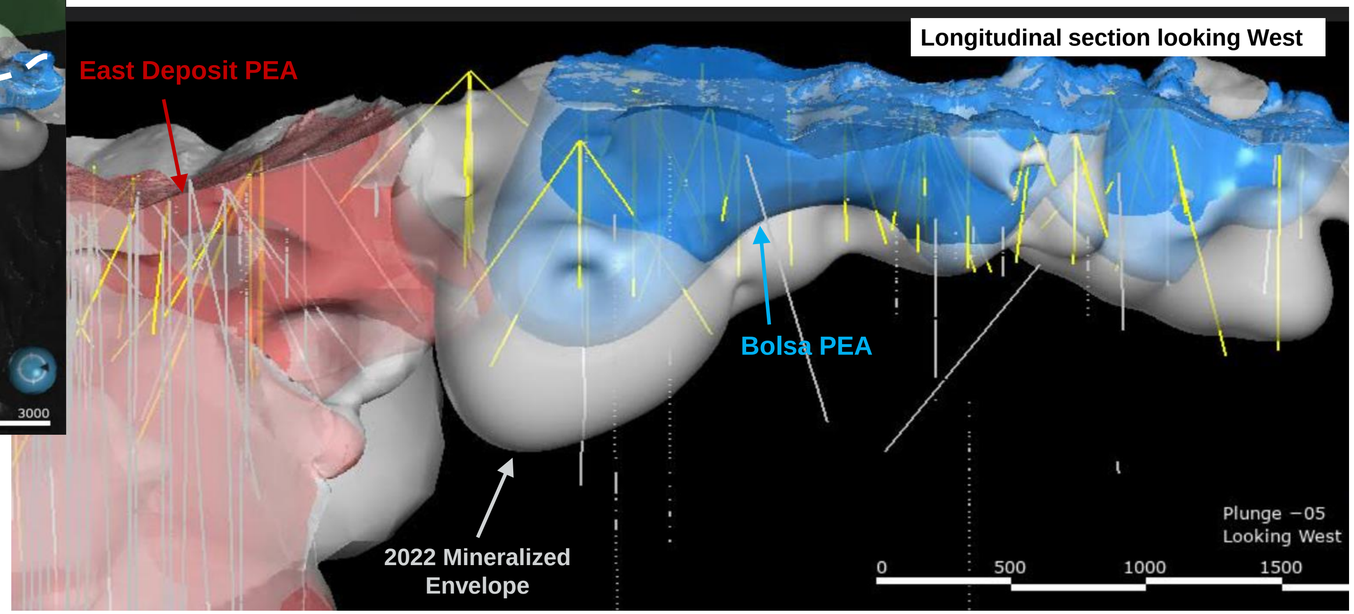
- 2022 drilling has confirmed the continuity of mineralization between the Bolsa and East deposits along the backbone fault and extended the width and depth of the mineralized envelope
  - The gain in volume has the potential to more than double the volume of the Bolsa deposit and to improve the overall life of mine plan for the project (most of this potential won't be included in the next update of Phase I due to private land constraints for both mining and tailings/waste disposal)
- The combined mineralized zone remains open in several directions and at depth



New Combined Grade Shell

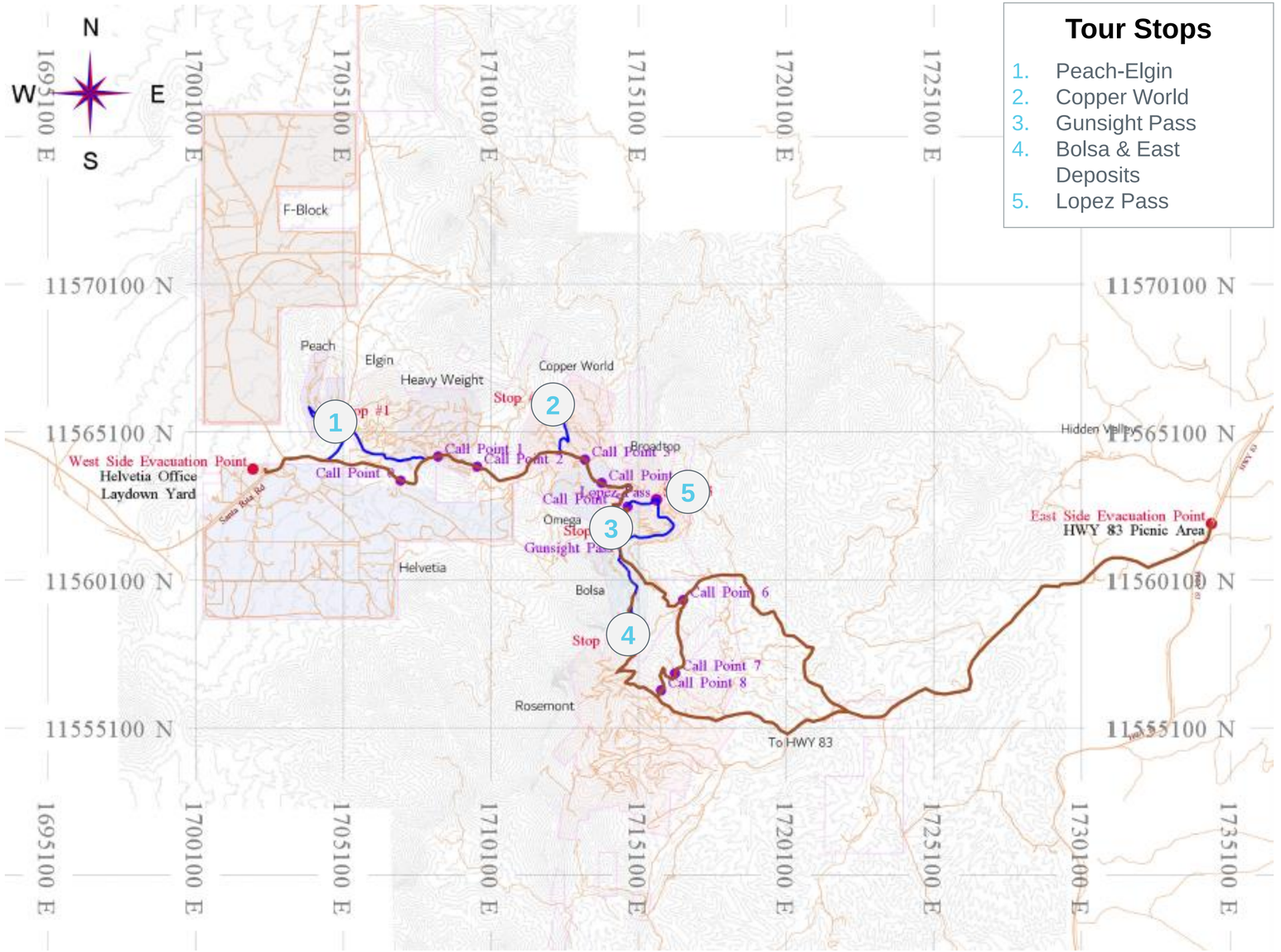
PEA East Deposit Grade Shell

PEA Bolsa Deposit Grade Shell



SITE TOUR AGENDA

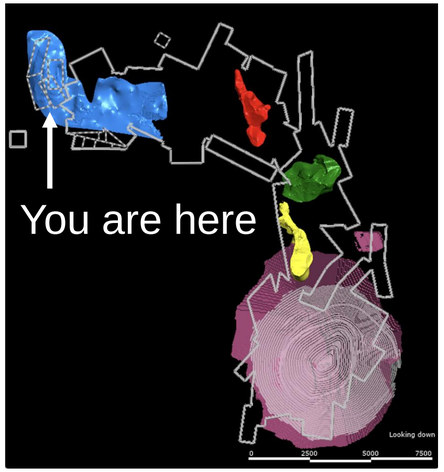
TOUR STOPS

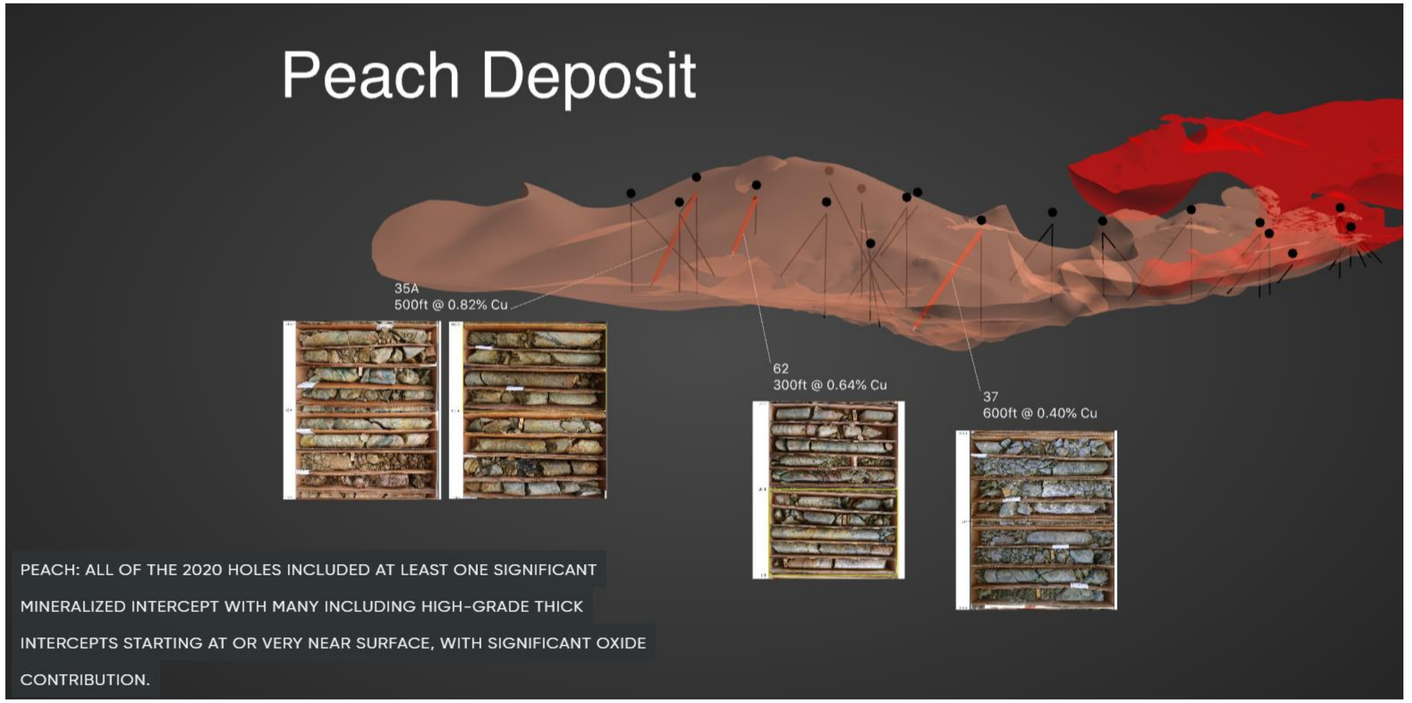


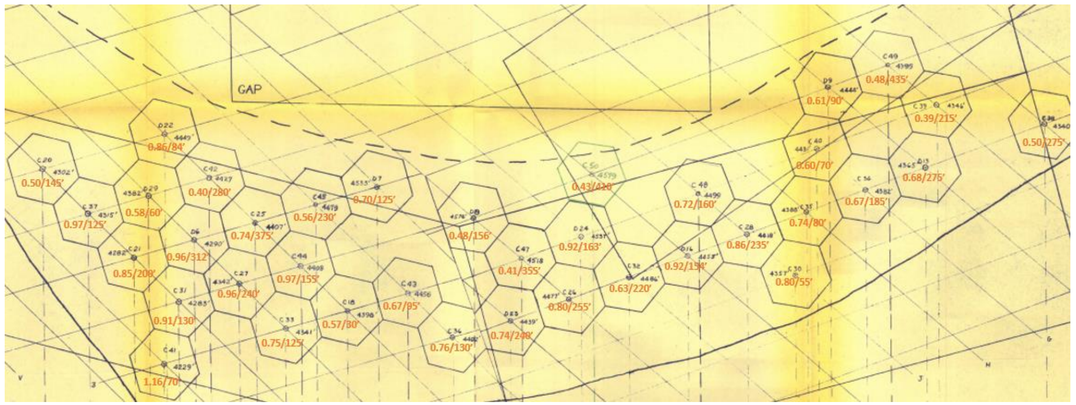
Tour Stops

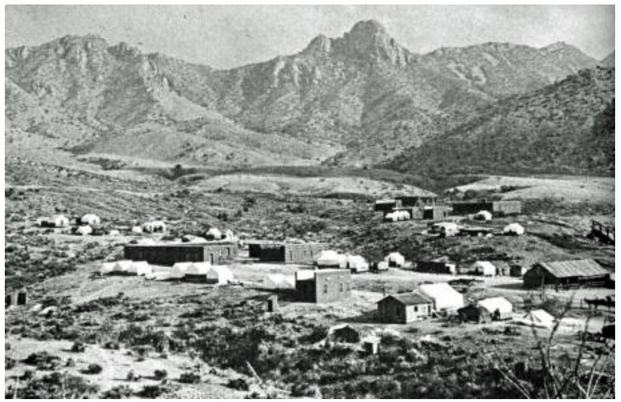
1. Peach-Elgin
2. Copper World
3. Gunsight Pass
4. Bolsa & East Deposits
5. Lopez Pass

STOP 1 – PEACH-EGLIN OVERLOOK

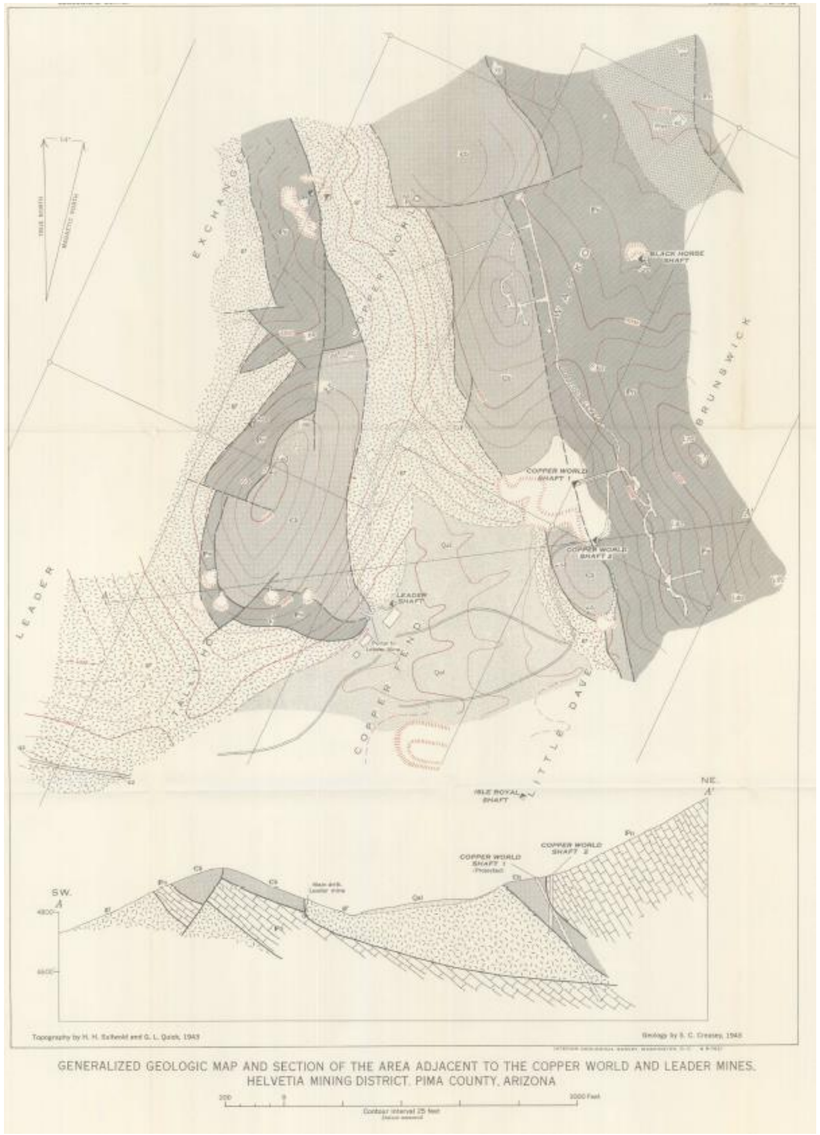


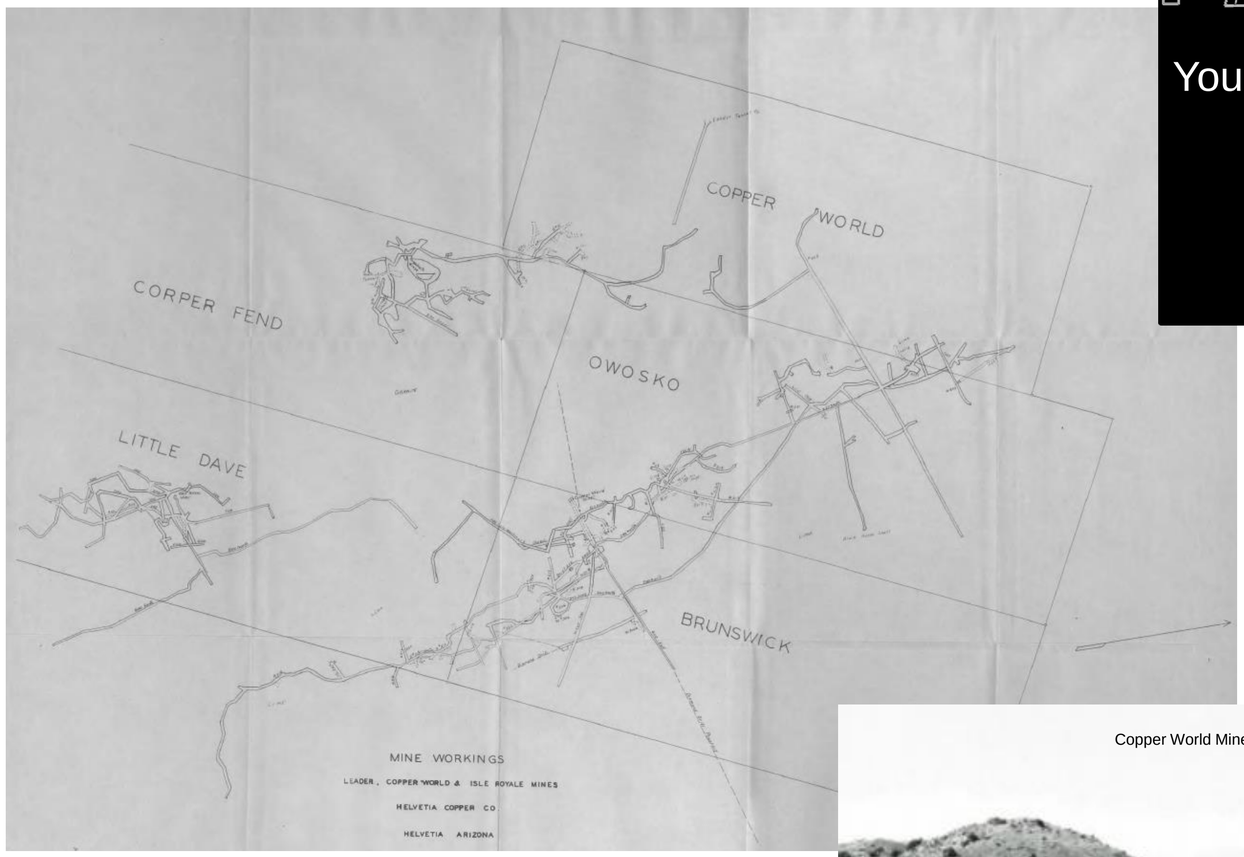


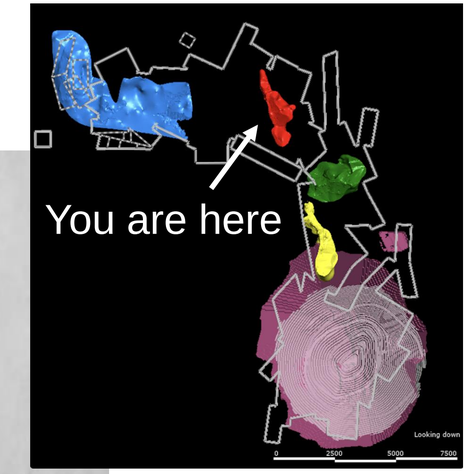




STOP 2 – COPPER WORLD

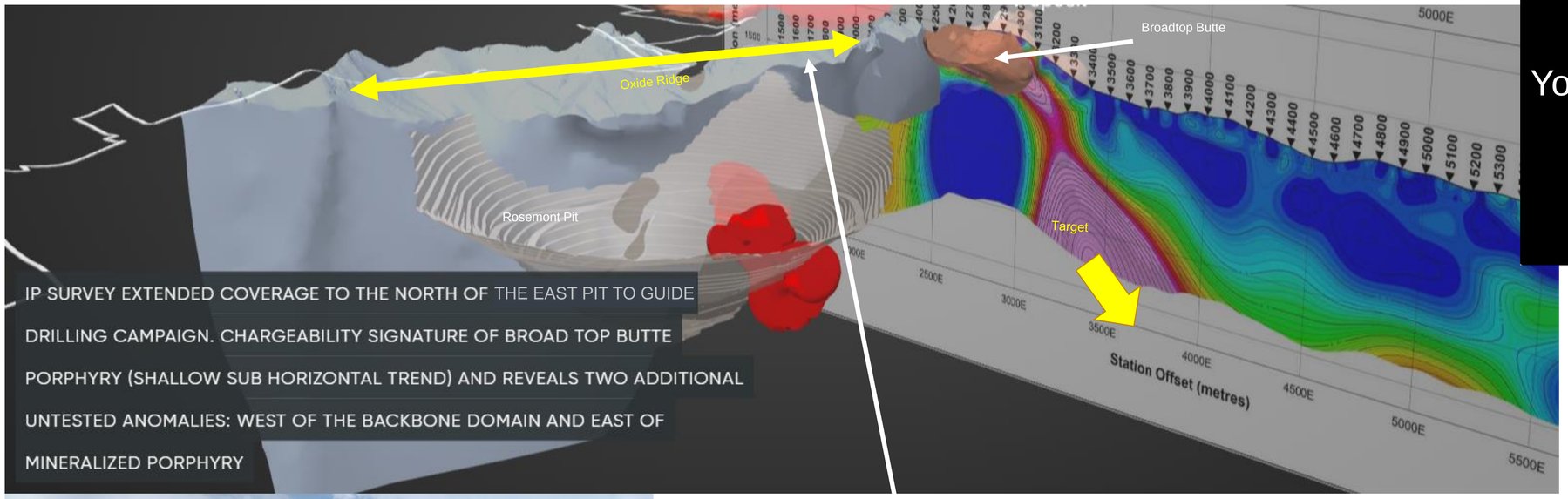


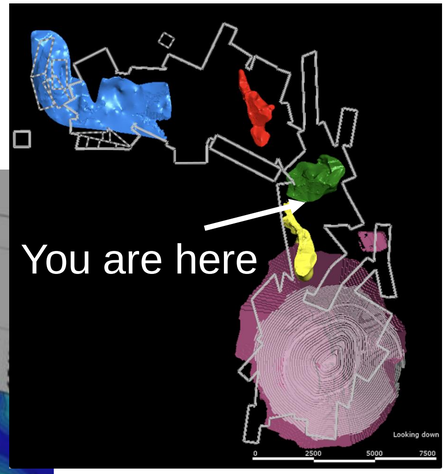


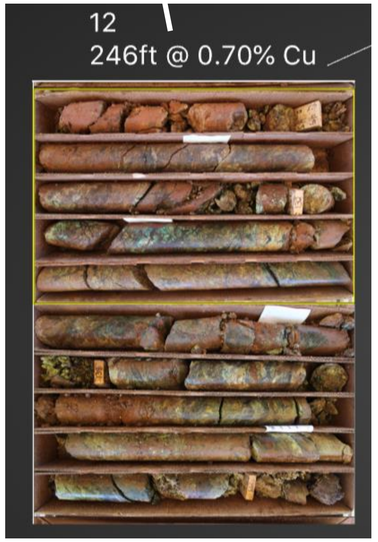


Copper World Mine Shaft

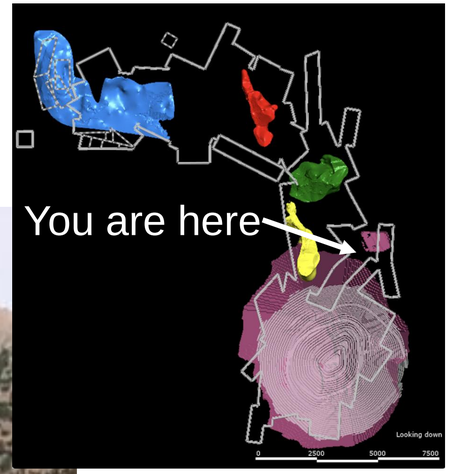
STOP 3 – GUNSIGHT PASS



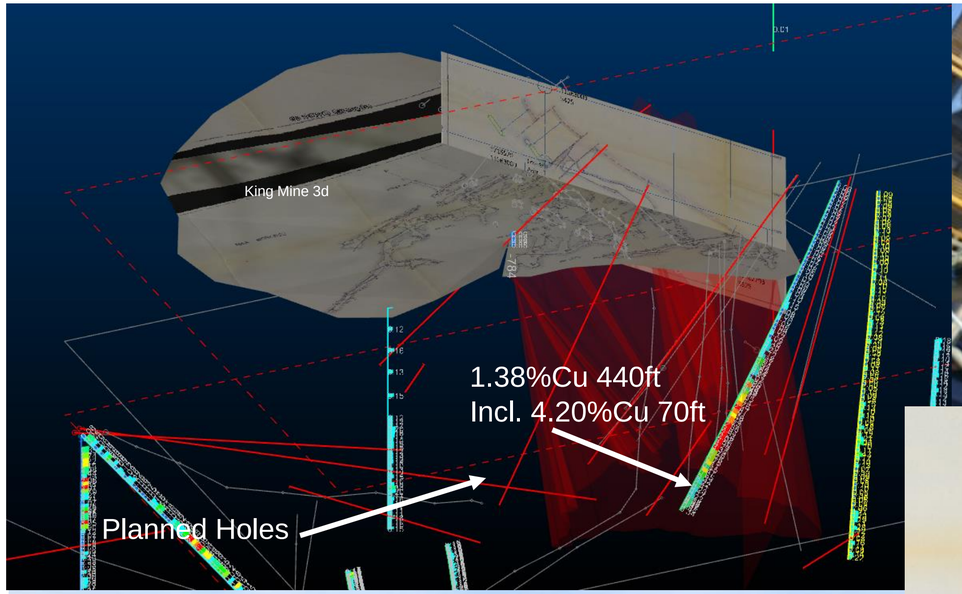


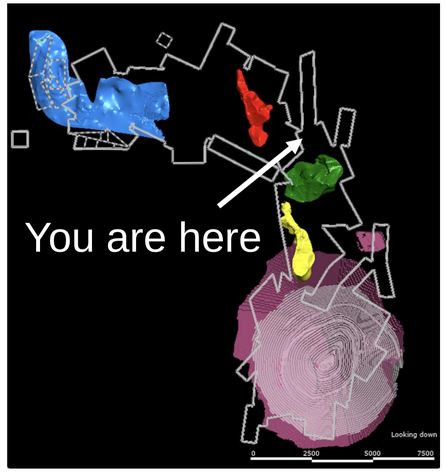


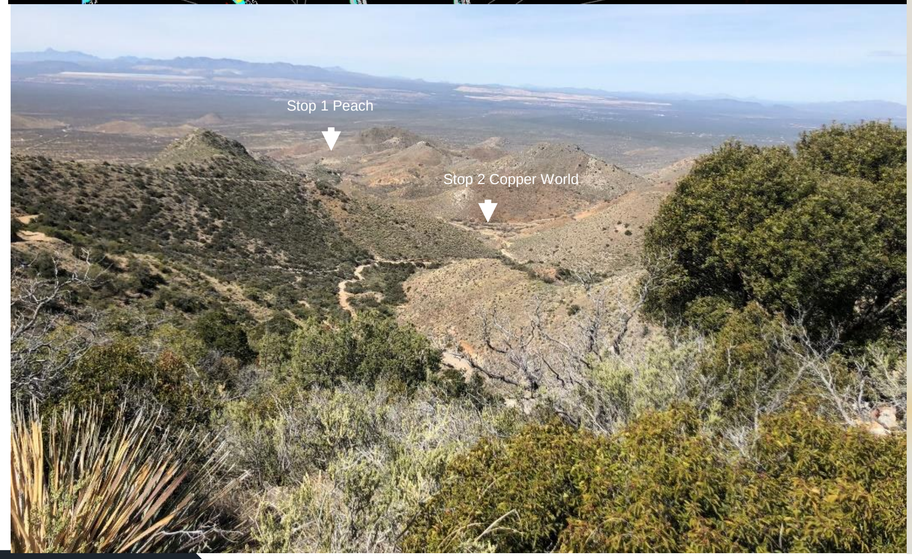
STOP 4 – BOLSA AND EAST DEPOSITS

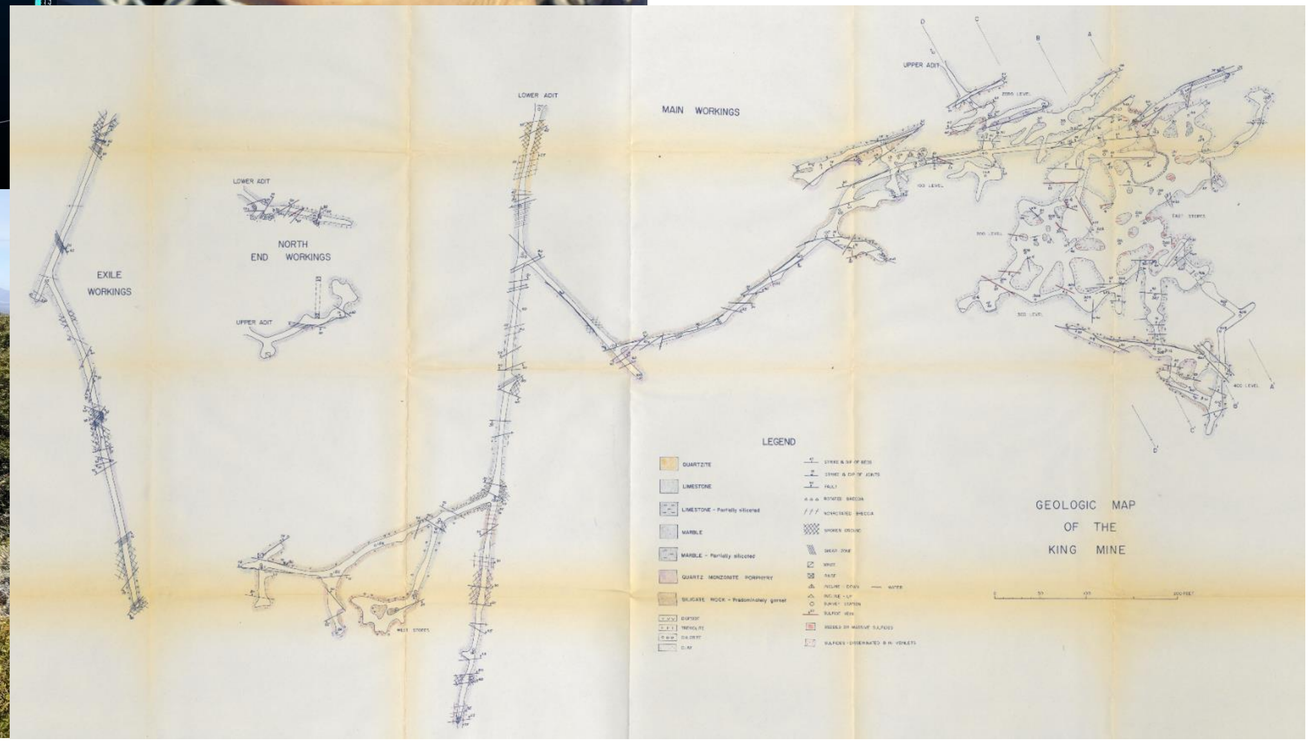


STOP 5 – LOPEZ PASS









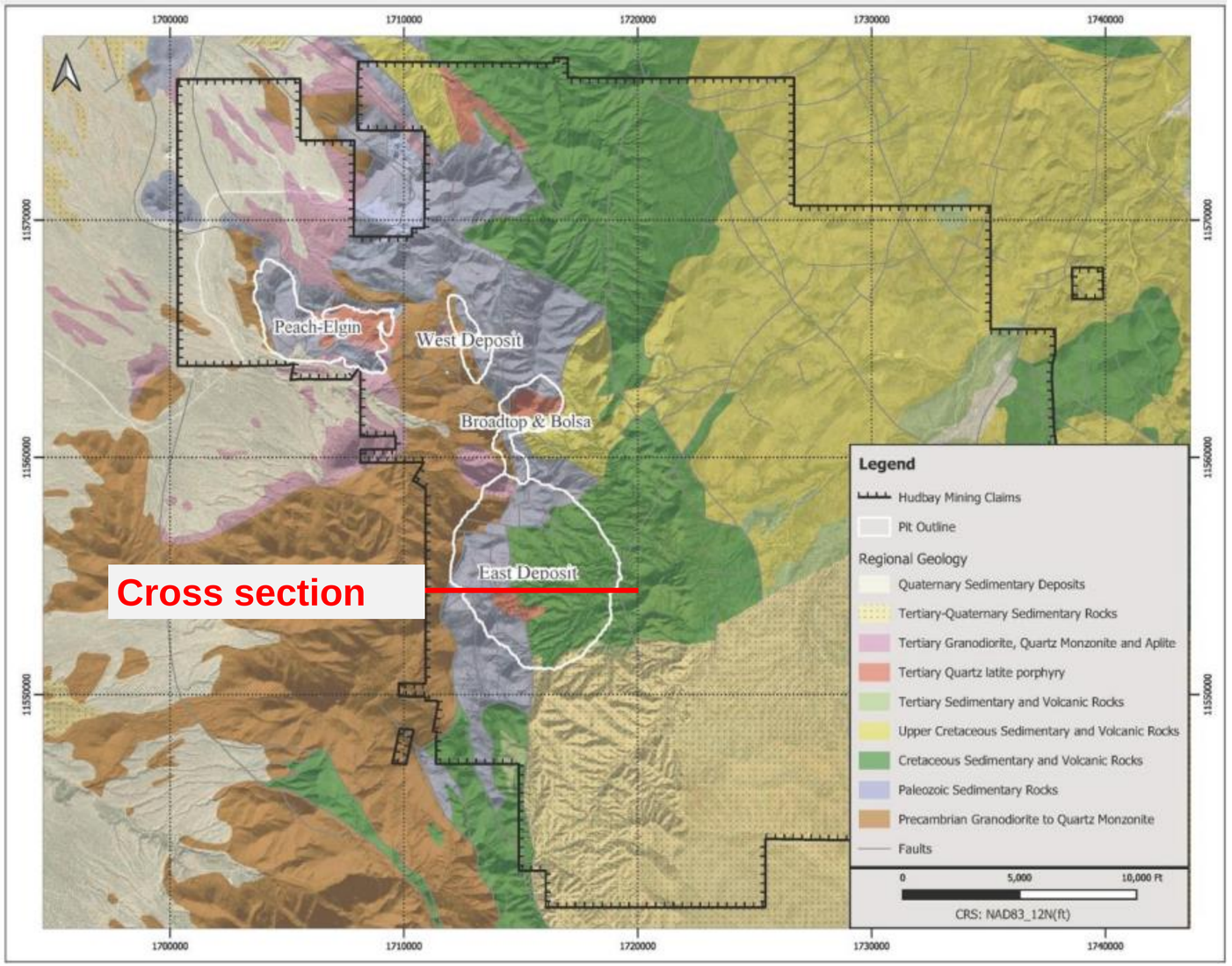
SAFETY ORIENTATION

IMPORTANT SITE SAFETY INFORMATION

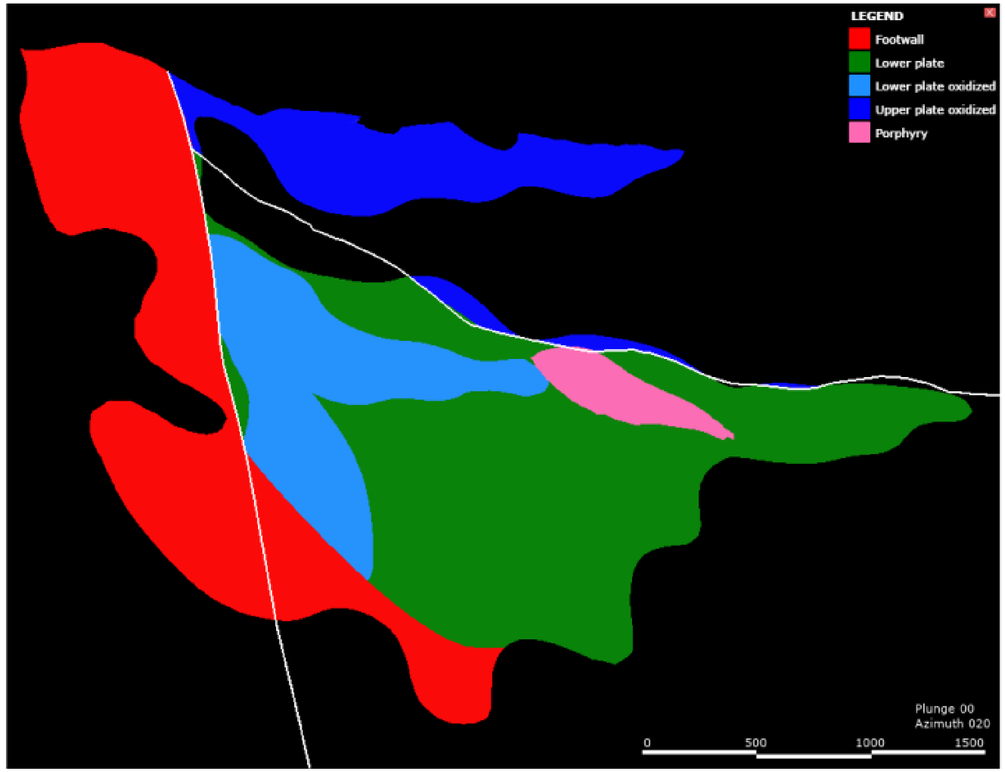
- To show site safety video

REGIONAL EXPLORATION

REGIONAL GEOLOGY



- Hudbay's land position extends far beyond the deposits defined so far and included in the PEA
- Mineralization usually occurs where we have the combination of porphyry intrusives, sedimentary rocks and regional faults
- See typical cross section below:



: Backbone fault trace = steeply dipping white line and Low Angle fault = shallow dipping white line

CU MINERALIZATION IN BOTH SULFIDES AND OXIDES

Oxides in sandstone unit (Bolsa)

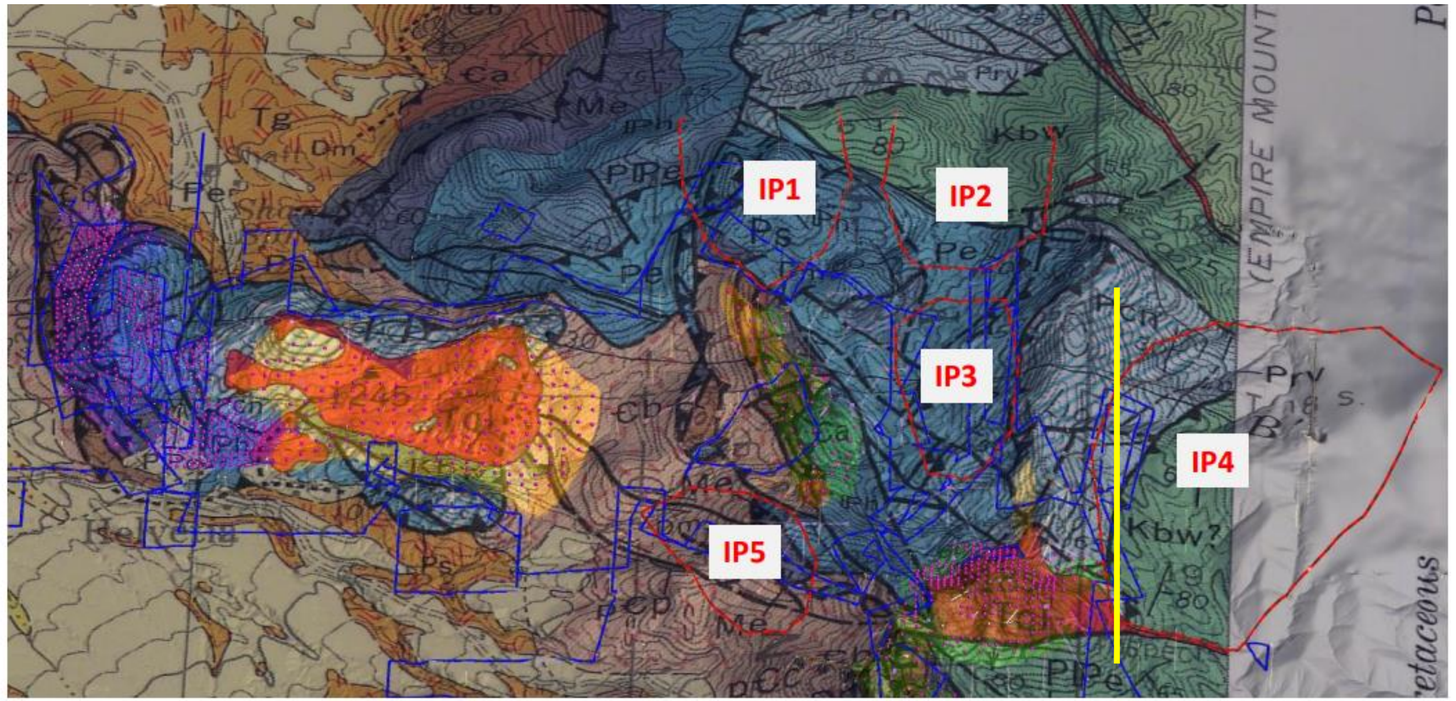
Sulfides in limestone hosted skarn (Broadtop Butte)

- Copper mineralization occurs as both sulfides and oxides in a variety of settings:
  - Dominant high-grade mineralization is copper sulfides (chalcopyrite) in skarn hosted by the limestone units of the lower sequence of Paleozoic sedimentary formations
  - Skarn alteration was the result of the interaction of the porphyry intrusives also hosting lower grade mineralization with the limestones.
  - Oxidation occurs along regional faults and in the upper portion of the profile.
  - High grade Cu oxides associated to rocks with low calcium content in brecciated porphyry and in the sandstone Bolsa unit along the regional Backbone and low angle faults

FIVE GEOPHYSICAL TARGETS

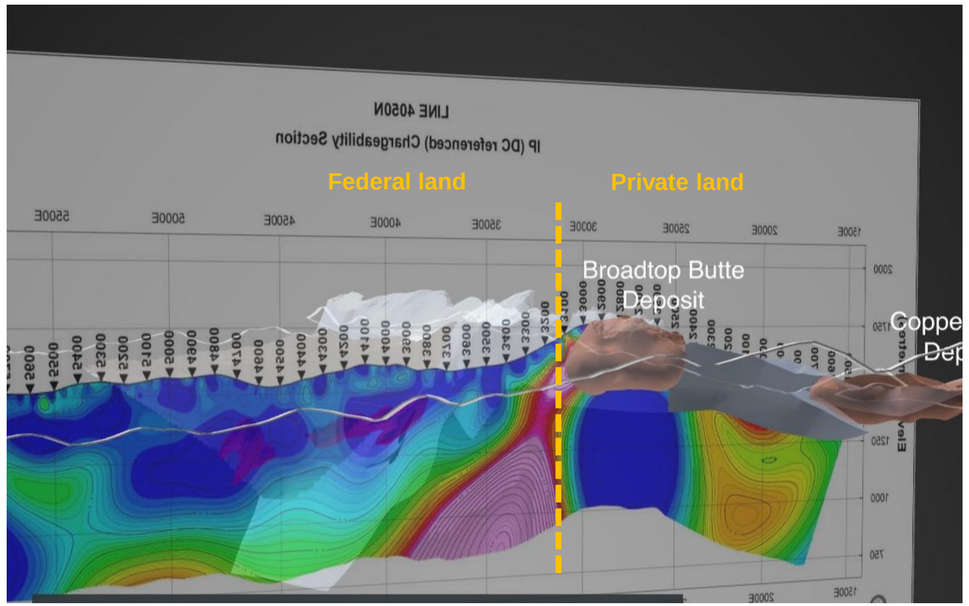
IDENTIFIED FROM IP SURVEYS IN THE IMMEDIATE VICINITY OF KNOWN DEPOSITS

- These targets are on federal lands and have not yet been tested; drill permitting process could take ~12 months



Cross-section through anomaly IP4

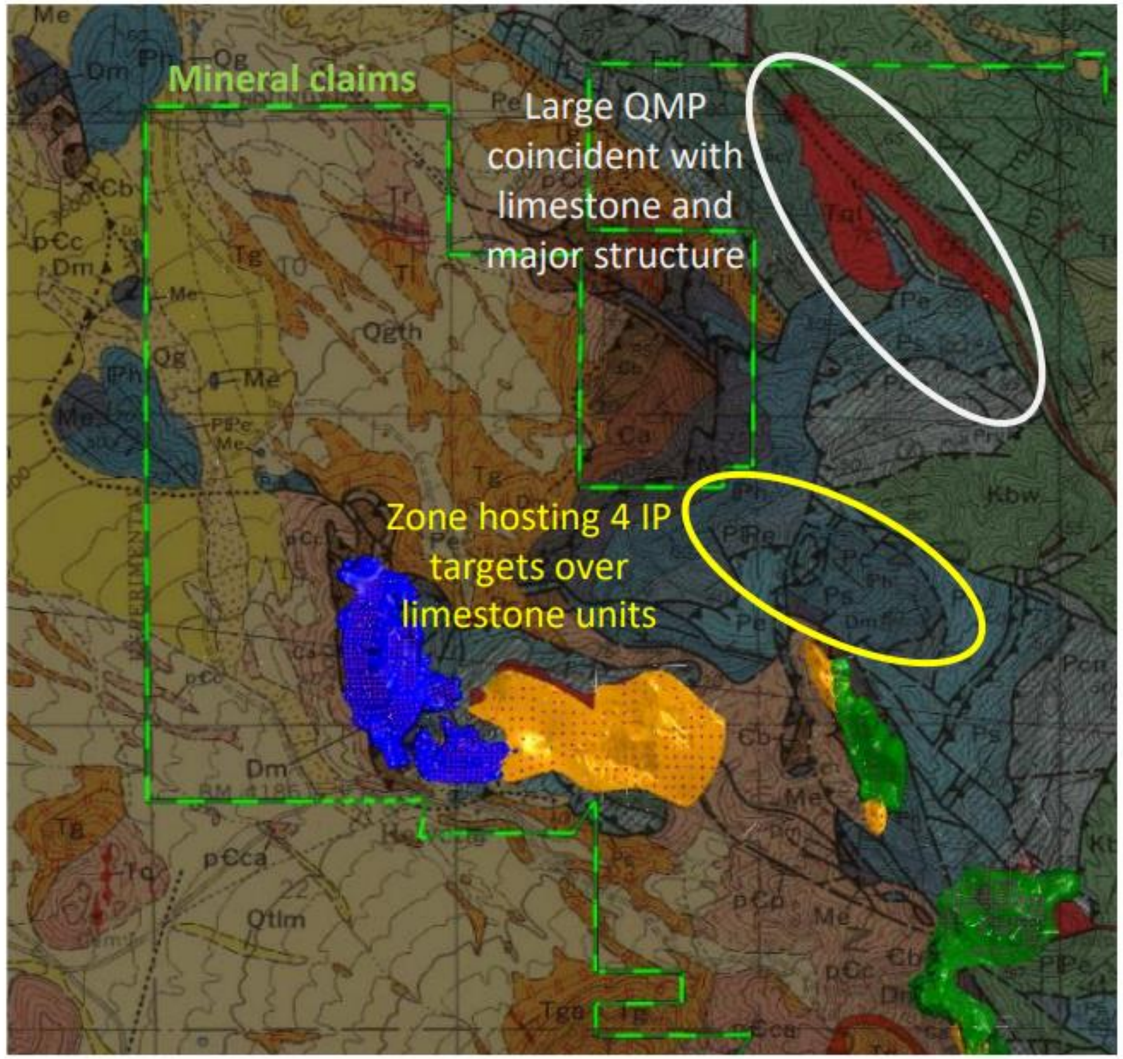
(Looking West)



UNTESTED EXPLORATION UPSIDE

PROSPECTIVITY OF ENTIRE UNPATENTED MINERAL CLAIM PACKAGE YET TO BE FULLY EXPLORED

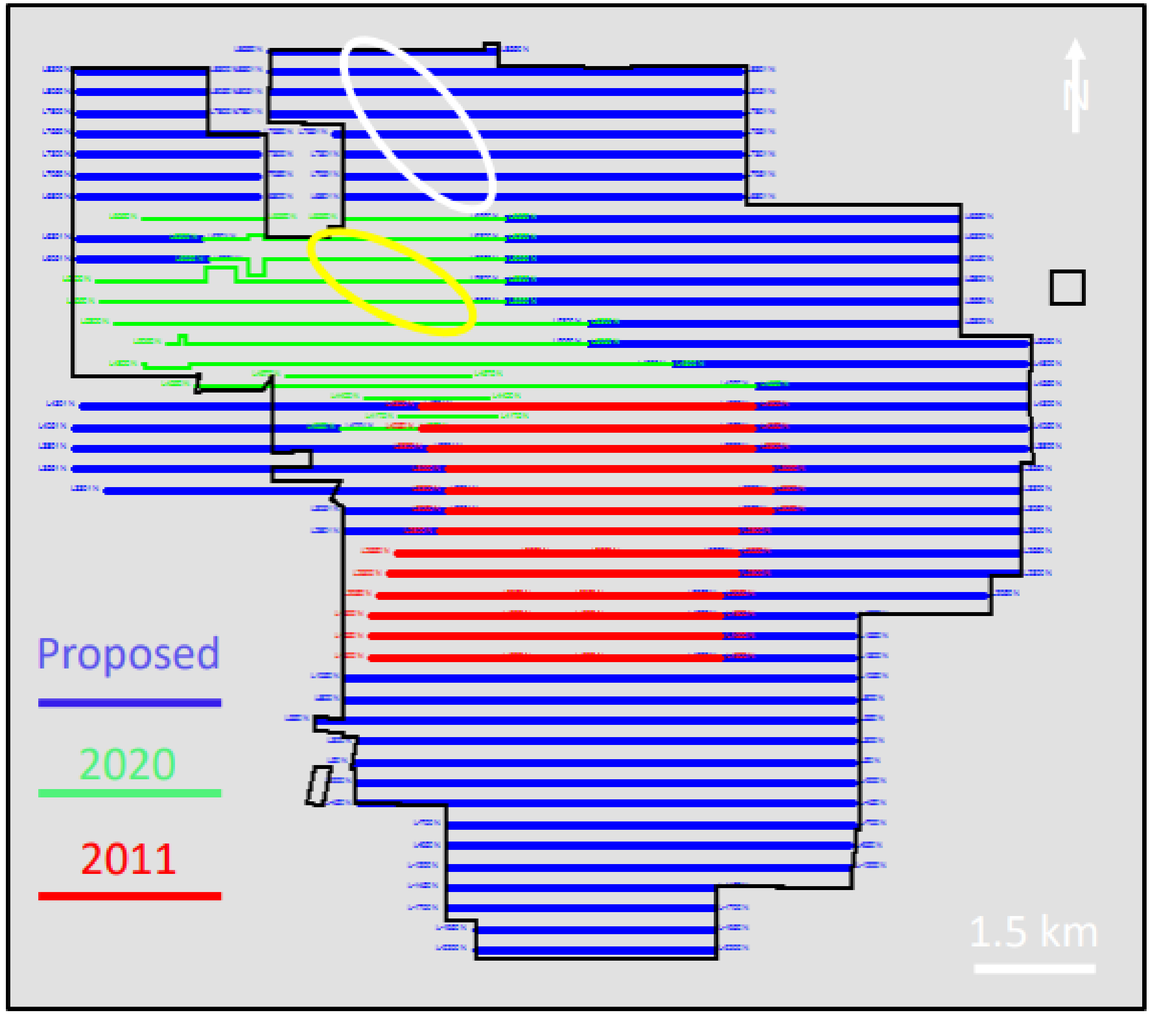
- IP coverage to be expanded (currently covers only 25% of the entire footprint of the mineral claims)
- Other prospective areas based on USGS surface geological maps have not been considered in the past as they were located outside of the private claim boundary
- A large QMP occurrence in the north of the property coincides with thick limestone package and regional structures (i.e. northwest trending zone and northern continuation of the backbone fault)

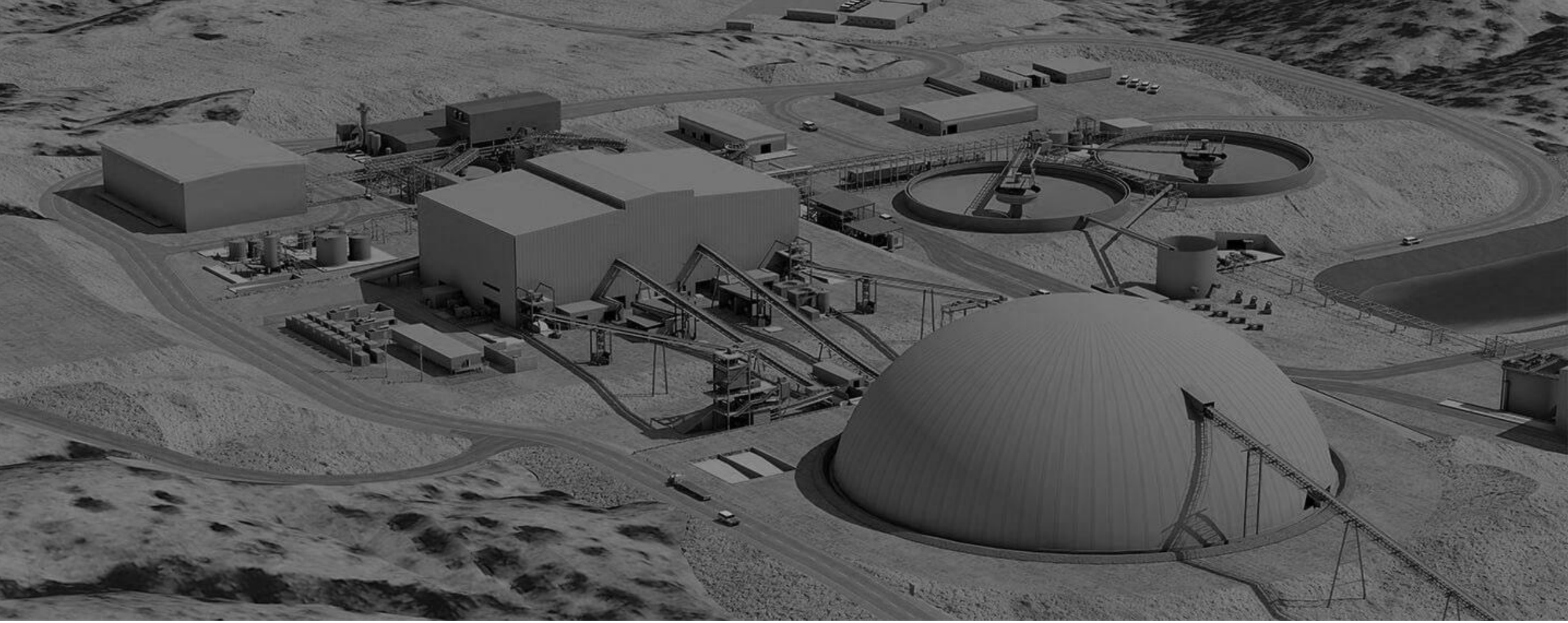


ADDITIONAL PLANNED GEOPHYSICS

POTENTIAL TO IDENTIFY ADDITIONAL PORPHYRY AND SKARN MINERALIZATION

- Direct Current Induced Polarization (DCIP) technology can help identify porphyry and skarn mineralization
- 230 line kilometres of proposed coverage would be required to explore the remaining claims and planned leach areas recently acquired at Helvetia
- The white circled area hosts a large QMP coincident with limestones and two favourable regional structures should be prioritized for IP surveys
- Drill permit applications should include the white circled area with allowance for a first stage of exploration of 20,000 feet





APPENDIX

PHASE I

PHASE I: PHYSICALS	Unit	PHASE I	Y-03	Y-02	Y-01	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y10	Y11	Y12	Y13	Y14	Y15	Y16
Resources Mined					*Pre-strip*																
Copper World deposits	Mt	216.2	-	-	21.4	24.2	26.5	25.7	20.8	17.6	3.3	9.3	11.1	7.9	9.5	6.8	8.0	4.3	8.4	11.4	0.0
East deposit	Mt	224.9	-	-	-	-	-	1.0	10.7	7.1	21.8	17.2	12.6	18.6	21.5	19.7	18.5	22.2	17.7	13.5	22.7
Total resources mined	Mt	441.1	-	-	21.4	24.2	26.5	26.7	31.6	24.8	25.1	26.5	23.7	26.5	31.0	26.5	26.5	26.5	26.1	24.9	22.7
Waste Mined					*Pre-strip*																
Copper World deposits	Mt	117.8	-	-	9.6	9.0	11.0	15.2	18.5	6.3	0.8	8.9	3.6	12.5	7.8	2.3	0.6	4.2	4.9	2.5	-
East deposit	Mt	430.3	-	-	-	-	-	10.3	13.4	32.5	38.0	30.8	38.9	27.2	27.4	37.4	39.1	35.6	35.3	38.1	26.3
Total waste mined	Mt	548.1	-	-	9.6	9.0	11.0	25.6	31.9	38.7	38.8	39.7	42.5	39.7	35.2	39.7	39.7	39.7	40.1	40.7	26.3
Material Moved					*Pre-strip*																
Rehandle	Mt	13.8	-	-	-	-	-	-	2.2	1.7	1.4	-	2.8	-	-	-	-	-	0.4	1.5	3.8
Total material moved	Mt	1,003.0	-	-	31.0	33.2	37.5	52.2	65.7	65.2	65.3	66.2	69.0	66.2	66.2	66.2	66.2	66.2	66.6	67.2	52.8
Strip Ratio					*Pre-strip*																
Copper World deposits	X:X	0.54	-	-	0.45	0.37	0.41	0.59	0.89	0.35	0.23	0.97	0.33	1.60	0.82	0.34	0.08	0.97	0.58	0.22	-
East deposit	X:X	1.91	-	-	-	-	-	10.77	1.25	4.55	1.75	1.79	3.09	1.46	1.27	1.90	2.11	1.60	1.99	2.82	1.16
Total strip ratio	X:X	1.24	-	-	0.45	0.37	0.41	0.96	1.01	1.56	1.54	1.50	1.80	1.50	1.13	1.50	1.50	1.50	1.54	1.63	1.16
Mill																					
Tonnes milled	Mt	315.6	-	-	-	17.5	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
Headgrade - Cu	%	0.47%	-	-	-	0.47%	0.45%	0.45%	0.45%	0.45%	0.45%	0.56%	0.48%	0.45%	0.45%	0.45%	0.49%	0.45%	0.45%	0.45%	0.51%
Headgrade - Ag	g/tonne	5.13	-	-	-	3.82	3.84	4.08	3.10	4.26	7.02	7.36	5.94	4.44	4.52	6.39	7.27	4.30	6.00	4.42	5.17
Headgrade - Mo	%	0.01%	-	-	-	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
Leach																					
Tonnes leached	Mt	106.0	-	-	-	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
Headgrade - CuSS	%	0.29%	-	-	-	0.24%	0.24%	0.20%	0.26%	0.36%	0.19%	0.32%	0.32%	0.30%	0.33%	0.24%	0.35%	0.38%	0.39%	0.35%	0.23%
Headgrade - Cu	%	0.39%	-	-	-	0.34%	0.31%	0.27%	0.36%	0.47%	0.25%	0.40%	0.42%	0.39%	0.44%	0.32%	0.46%	0.50%	0.52%	0.48%	0.31%
Purchased Cu Conc																					
Cu Concentrate	Kt	807.6	-	-	-	119.8	101.1	-	94.2	61.9	86.6	-	21.9	47.5	49.0	67.0	16.9	39.0	32.5	55.8	14.4
Grade - Cu	%	25.00%	-	-	-	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
Grade - Au	g/tonne	0.50	-	-	-	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Grade - Ag	g/tonne	15.00	-	-	-	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Recovery to Cu Cathode																					
From Mill	%	77.3%	-	-	-	71.2%	70.5%	72.9%	70.9%	74.2%	77.4%	80.3%	79.9%	80.6%	79.2%	79.4%	79.9%	79.2%	80.4%	76.1%	82.0%
From Leach	%	59.0%	-	-	-	55.9%	59.9%	59.5%	56.8%	59.7%	58.5%	62.2%	60.6%	60.2%	59.0%	58.8%	59.8%	59.0%	58.3%	57.6%	58.5%
From Purchased	%	97.7%	-	-	-	96.2%	97.9%	-	97.4%	97.9%	98.0%	-	98.2%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%
Cu Cathode Produced																					
From Mill	Kt	1,137.9	-	-	-	58.7	63.0	65.2	63.4	66.3	69.2	89.9	76.0	72.8	70.8	71.0	77.1	70.8	71.9	68.0	83.9
From Leach	Kt	243.7	-	-	-	12.5	12.2	10.5	13.7	18.5	9.6	16.5	16.7	15.5	17.2	12.6	18.0	19.6	20.2	18.3	12.1
From Purchased	Kt	197.2	-	-	-	28.8	24.7	-	22.9	15.1	21.2	-	5.4	11.6	12.0	16.4	4.1	9.6	8.0	13.7	3.5
Total Cu cathode	Kt	1,578.8	-	-	-	100.0	100.0	75.8	100.0	100.0	100.0	106.4	98.0	99.9	100.0	100.0	99.3	100.0	100.0	100.0	99.5
Mo Conc Produced																					
Mo Concentrate	Kt	34.3	-	-	-	2.5	1.9	2.2	1.4	1.4	1.8	3.1	2.2	2.0	2.0	2.0	2.3	2.5	2.3	2.1	2.6
Grade - Mo	%	51.13%	-	-	-	54.33%	50.39%	43.17%	48.04%	45.92%	51.67%	53.88%	51.87%	50.71%	50.47%	51.24%	51.98%	52.39%	52.34%	51.61%	52.96%
Mo in concentrate	Kt	17.6	-	-	-	1.3	1.0	1.0	0.7	0.6	0.9	1.6	1.2	1.0	1.0	1.0	1.2	1.3	1.2	1.1	1.4
Doré Produced																					
Ag in Doré - internal feed	000 oz	26,808	-	-	-	1,102	1,155	1,214	928	1,290	2,357	2,478	1,989	1,485	1,503	2,157	2,454	1,449	2,026	1,472	1,749
Ag in Doré - purchased conc	000 oz	349	-	-	-	28.8	24.7	-	22.9	15.1	21.2	-	5.4	11.6	12.0	16.4	4.1	9.6	8.0	13.7	3.5
Au in Doré - purchased conc	000 oz	12	-	-	-	1.7	1.5	-	1.4	0.9	1.3	-	0.3	0.7	0.7	1.0	0.2	0.6	0.5	0.8	0.2
Acid Plant																					
Purchased sulfur	Kt	1,097.1	-	-	-	76.4	55.7	-	37.2	62.4	86.7	90.7	79.9	73.0	66.0	74.0	81.2	69.6	81.1	75.1	88.0
Excess acid produced/sold	Kt	1,570.9	-	-	-	118.4	59.4	77.2	115.2	60.4	152.3	25.8	52.1	118.8	97.5	161.5	111.1	85.6	83.1	111.2	141.2
Total Production																					
Cu Eq Produced	Kt	1,739.9	-	-	-	109.6	107.5	83.7	107.0	106.7	112.5	119.1	108.3	109.5	109.4	112.4	112.2	109.9	111.1	109.7	111.4

PHASE I

PHASE I: UNIT COSTS	Unit	PHASE I	Y-03	Y-02	Y-01	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y10	Y11	Y12	Y13	Y14	Y15	Y16
Mining ($/t materials moved excluding pre-strip)																					
Mining	$/tonne	1.42	-	-	-	1.47	1.53	1.38	1.18	1.36	1.43	1.42	1.38	1.44	1.44	1.44	1.44	1.44	1.43	1.42	1.62
Deferred Stripping	$/tonne	(0.11)	-	-	-	(0.01)	(0.11)	(0.29)	(0.15)	(0.42)	-	(0.07)	(0.26)	(0.08)	(0.09)	(0.01)	(0.02)	(0.05)	(0.01)	(0.22)	-
Mining ex def stripping	$/tonne	1.30	-	-	-	1.46	1.42	1.09	1.03	0.93	1.43	1.35	1.12	1.36	1.35	1.43	1.41	1.38	1.42	1.20	1.62
Processing ($/t processed (tonnes milled + tonnes leached))																					
Sulfide flotation	$/tonne	3.56	-	-	-	3.37	3.57	3.61	3.58	3.57	3.56	3.57	3.58	3.57	3.57	3.57	3.58	3.57	3.57	3.57	3.58
Molybdenum flotation	$/tonne	0.09	-	-	-	0.08	0.09	0.18	0.08	0.09	0.07	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Leach Plant	$/tonne	0.43	-	-	-	0.42	0.45	0.67	0.42	0.43	0.38	0.39	0.39	0.41	0.43	0.41	0.40	0.42	0.39	0.40	0.38
Acid Plant	$/tonne	0.70	-	-	-	0.83	0.59	0.14	0.44	0.65	0.84	0.88	0.79	0.73	0.68	0.74	0.80	0.71	0.80	0.75	0.85
Acid Plant (electricity credit)	$/tonne	(0.22)	-	-	-	(0.24)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)
Leach pad	$/tonne	0.01	-	-	-	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Doré plant	$/tonne	0.13	-	-	-	0.10	0.09	0.10	0.08	0.10	0.18	0.18	0.15	0.12	0.12	0.16	0.18	0.11	0.15	0.11	0.13
SXEW	$/tonne	0.86	-	-	-	0.94	0.87	0.70	0.86	0.86	0.86	0.91	0.85	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Total	$/tonne	5.57	-	-	-	5.52	5.46	5.20	5.27	5.50	5.70	5.81	5.64	5.58	5.55	5.63	5.70	5.56	5.65	5.58	5.69
Other Unit Costs ($/t processed (tonnes milled + tonnes leached))																					
Onsite G&A	$/tonne	0.89	-	-	-	0.97	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Sustaining cash cost ($/lb Cu)																					
Cash cost[1]	$/lb	1.15	-	-	-	1.14	1.27	1.30	1.30	1.21	1.34	1.03	1.11	1.18	1.18	1.19	1.06	1.09	1.09	1.07	0.97
Sustaining cash cost[1]	$/lb	1.44	-	-	-	1.38	1.63	1.72	1.63	1.88	1.70	1.30	1.41	1.40	1.40	1.37	1.24	1.28	1.26	1.37	1.25
Total cash cost[2]	$/lb	1.41	-	-	-	1.75	1.75	1.30	1.73	1.52	1.72	1.03	1.23	1.41	1.42	1.51	1.15	1.29	1.26	1.36	1.05
Total sustaining cash cost[2]	$/lb	1.66	-	-	-	1.92	2.03	1.72	1.99	2.09	2.01	1.30	1.51	1.61	1.61	1.66	1.32	1.47	1.42	1.62	1.32

[1] Internal feed only; [2] Includes purchased concentrate

PHASE I: CASH FLOWS	Unit	PHASE I	Y-03	Y-02	Y-01	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y10	Y11	Y12	Y13	Y14	Y15	Y16
Cash Flows																					
Gross rev - internal	$M	11,475	-	-	-	606	620	626	635	686	666	877	761	732	728	706	794	751	763	718	806
Gross rev - purchased	$M	1,552	-	-	-	227	195	-	180	119	167	-	42	92	94	129	33	75	63	108	28
TC/RC	$M	(75)	-	-	-	(6)	(5)	(5)	(3)	(3)	(3)	(7)	(5)	(4)	(5)	(4)	(5)	(6)	(5)	(5)	(6)
Freight	$M	(43)	-	-	-	(2)	(2)	(2)	(2)	(2)	(4)	(4)	(3)	(2)	(2)	(3)	(4)	(2)	(3)	(2)	(3)
Royalty	$M	(253)	-	-	-	(14)	(14)	(12)	(14)	(14)	(16)	(21)	(17)	(16)	(16)	(16)	(18)	(16)	(16)	(15)	(19)
Opex - Mining	$M	(1,266)	-	-	-	(48)	(53)	(57)	(68)	(61)	(93)	(90)	(77)	(90)	(89)	(95)	(94)	(92)	(95)	(81)	(86)
Opex - Processing	$M	(2,346)	-	-	-	(133)	(145)	(138)	(140)	(146)	(151)	(154)	(150)	(148)	(147)	(149)	(151)	(147)	(150)	(148)	(151)
Opex - Purch Cu Conc	$M	(1,332)	-	-	-	(198)	(167)	-	(155)	(102)	(143)	-	(36)	(78)	(81)	(111)	(28)	(64)	(54)	(92)	(24)
Opex - Onsite G&A	$M	(376)	-	-	-	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)
Opex - Property tax	$M	(296)	-	-	-	(35)	(33)	(33)	(32)	(30)	(24)	(22)	(20)	(18)	(16)	(13)	(9)	(5)	(3)	(3)	(3)
Opex - Surety bond fees	$M	(34)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Closure Costs	$M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tax - Federal income	$M	(494)	-	-	-	-	-	-	-	(3)	(2)	(26)	(34)	(51)	(51)	(48)	(64)	(60)	(63)	(48)	(46)
Tax - State income	$M	(98)	-	-	-	-	-	-	-	-	(1)	(6)	(7)	(10)	(10)	(9)	(13)	(12)	(12)	(9)	(9)
Tax - State severance	$M	(62)	-	-	-	-	-	(1)	(2)	(2)	(2)	(4)	(4)	(6)	(6)	(6)	(7)	(6)	(7)	(6)	(5)
Cash From Ops before WC	**$M**	**6,351**	**(2)**	**(2)**	**(2)**	**372**	**372**	**354**	**375**	**418**	**368**	**519**	**426**	**376**	**374**	**357**	**411**	**391**	**394**	**393**	**458**
WC Changes - AR	$M	(91)	-	-	-	(91)	2	21	(21)	1	(3)	(4)	8	(2)	0	(2)	1	0	(0)	(0)	(1)
WC Changes - AP	$M	76	62	123	(80)	(17)	1	(30)	28	3	2	(21)	4	10	(0)	4	(11)	4	(1)	5	(11)
WC Changes - Stream	$M	230	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash From Operations	**$M**	**6,565**	**291**	**121**	**(82)**	**264**	**375**	**345**	**383**	**422**	**368**	**493**	**438**	**383**	**375**	**359**	**401**	**395**	**393**	**397**	**446**
Growth - EPCM	$M	(1,177)	(239)	(635)	(303)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth - Owners Costs	$M	(475)	(48)	(223)	(205)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth - Contingency	$M	(265)	(51)	(149)	(64)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sustaining capital	$M	(531)	-	-	-	(24)	(45)	(44)	(35)	(85)	(48)	(39)	(26)	(21)	(21)	(17)	(19)	(19)	(19)	(28)	(42)
Deferred stripping	$M	(111)	-	-	-	(0)	(4)	(15)	(10)	(28)	-	(5)	(18)	(5)	(6)	(1)	(2)	(4)	(1)	(15)	-
Cash From Investing	**$M**	**(2,559)**	**(338)**	**(1,007)**	**(572)**	**(24)**	**(49)**	**(59)**	**(45)**	**(112)**	**(48)**	**(43)**	**(44)**	**(26)**	**(27)**	**(18)**	**(21)**	**(23)**	**(20)**	**(43)**	**(42)**
Net cash flow	**$M**	**4,007**	**(47)**	**(886)**	**(654)**	**240**	**326**	**286**	**338**	**309**	**320**	**450**	**393**	**357**	**348**	**342**	**380**	**372**	**373**	**354**	**404**

NPV @ 8%	**$M**	**1,097**
NPV @ 10%	**$M**	**741**
IRR	**%**	**17%**
PAYBACK	**# years**	**5.3**

PHASE II

PHASE II: PHYSICALS	Unit	PHASE II	LOM	Y15	Y16	Y17	Y18	Y19	Y20	Y21	Y22	Y23	Y24	Y25-29	Y30-34	Y35-39	Y40-44	Y45-49
Resources Mined																		
Copper World deposits	Mt	124.2	340.4	-	-	0.7	3.0	2.0	1.5	3.3	13.8	14.1	11.6	74.2	0.0	-	-	-
East deposit	Mt	783.2	1,008.1	-	-	29.1	33.4	28.6	37.6	35.6	23.6	22.3	24.8	109.2	158.4	151.3	129.4	-
Total resources mined	Mt	907.4	1,348.5	-	-	29.8	36.4	30.5	39.1	38.8	37.3	36.4	36.4	183.4	158.4	151.3	129.4	-
Waste Mined																		
Copper World deposits	Mt	19.3	137.1	-	-	0.8	0.2	0.1	0.3	2.2	3.9	4.3	2.5	5.0	-	-	-	-
East deposit	Mt	1,643.2	2,073.5	-	-	15.7	74.6	74.6	71.9	70.2	70.0	70.5	72.2	363.7	376.7	329.7	53.4	-
Total waste mined	Mt	1,662.5	2,210.6	-	-	16.5	74.8	74.7	72.1	72.4	73.9	74.8	74.8	368.7	376.7	329.7	53.4	-
Material Moved																		
Rehandle	Mt	30.9	44.7	-	-	-	-	6.0	-	-	-	-	-	4.0	21.0	-	-	-
Total material moved	Mt	2,600.8	3,603.8	-	-	46.3	111.2	111.2	111.2	111.2	111.2	111.2	111.2	556.1	556.1	481.0	182.8	-
Strip Ratio																		
Copper World deposits	X:X	0.16	0.40	-	-	1.15	0.08	0.04	0.18	0.67	0.28	0.30	0.22	0.07	-	-	-	-
East deposit	X:X	2.10	2.06	-	-	0.54	2.23	2.61	1.91	1.98	2.97	3.16	2.91	3.33	2.38	2.18	0.41	-
Total strip ratio	X:X	1.83	1.64	-	-	0.55	2.05	2.45	1.84	1.87	1.98	2.05	2.05	2.01	2.38	2.18	0.41	-
Mill																		
Tonnes milled	Mt	805.4	1,120.9	-	-	23.2	29.8	29.8	29.8	29.8	29.8	29.8	29.8	149.0	149.0	149.0	126.6	-
Headgrade - Cu	%	0.41%	0.42%	-	-	0.56%	0.56%	0.43%	0.48%	0.56%	0.55%	0.46%	0.37%	0.41%	0.38%	0.37%	0.31%	-
Headgrade - Ag	g/tonne	5.06	5.08	-	-	6.75	8.21	5.66	4.56	4.85	5.41	5.30	4.22	3.60	5.33	5.26	5.27	-
Headgrade - Mo	%	0.01%	0.01%	-	-	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.02%	-
Leach																		
Tonnes leached	Mt	121.6	227.6	-	-	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	33.1	30.4	2.3	2.8	-
Headgrade - CuSS	%	0.23%	0.26%	-	-	0.18%	0.22%	0.35%	0.32%	0.26%	0.23%	0.21%	0.19%	0.27%	0.17%	0.15%	0.25%	-
Headgrade - Cu	%	0.31%	0.35%	-	-	0.24%	0.28%	0.47%	0.42%	0.35%	0.30%	0.29%	0.27%	0.36%	0.22%	0.22%	0.30%	-
Purchased Cu Conc																		
Cu Concentrate	Kt	2,534.0	3,341.6	-	-	101.0	-	64.5	-	-	-	101.7	189.1	525.9	293.6	499.7	758.5	-
Grade - Cu	%	25.00%	25.00%	-	-	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	-
Grade - Au	g/tonne	0.50	0.50	-	-	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	-
Grade - Ag	g/tonne	15.00	15.00	-	-	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	-
Recovery to Cu Cathode																		
From Mill	%	80.1%	79.2%	-	-	81.5%	81.3%	79.8%	80.0%	80.3%	76.6%	76.6%	75.1%	76.9%	83.0%	82.1%	81.4%	-
From Leach	%	58.7%	58.9%	-	-	58.9%	61.5%	59.2%	58.6%	58.7%	58.6%	56.3%	56.1%	58.6%	59.1%	54.7%	61.8%	-
From Purchased	%	97.1%	97.3%	-	-	97.5%	-	98.1%	-	-	-	97.8%	97.8%	97.8%	97.4%	96.7%	96.5%	-
Cu Cathode Produced																		
From Mill	Kt	2,617.5	3,755.4	-	-	106.1	136.1	102.5	115.2	134.7	125.2	104.1	83.9	471.8	466.6	447.1	324.2	-
From Leach	Kt	219.4	463.1	-	-	9.3	11.4	18.3	16.4	13.6	11.7	10.8	9.9	69.8	40.1	2.8	5.3	-
From Purchased	Kt	615.4	812.6	-	-	24.6	-	15.8	-	-	-	24.9	46.3	128.6	71.5	120.8	182.9	-
Total Cu cathode	Kt	3,452.3	5,031.1	-	-	140.0	147.5	136.7	131.6	148.3	136.9	139.8	140.0	670.2	578.2	570.7	512.5	-
Mo Conc Produced																		
Mo Concentrate	Kt	116.6	150.9	-	-	2.8	3.2	3.1	4.0	4.5	3.4	4.5	4.0	16.6	24.1	24.4	21.9	-
Grade - Mo	%	52.96%	52.54%	-	-	51.07%	51.14%	52.89%	51.34%	51.68%	50.85%	54.45%	54.43%	51.54%	53.31%	53.48%	53.88%	-
Mo in concentrate	Kt	61.7	79.3	-	-	1.4	1.6	1.7	2.1	2.3	1.7	2.5	2.2	8.6	12.8	13.0	11.8	-
Doré Produced																		
Ag in Doré - internal feed	000 oz	68,539	95,347	-	-	2,657	4,165	2,853	2,295	2,443	2,659	2,591	2,032	8,624	13,528	13,333	11,359	-
Ag in Doré - purchased conc	000 oz	1,094	1,443	-	-	44	-	28	-	-	-	44	82	227	127	216	328	-
Au in Doré - purchased conc	000 oz	37	48	-	-	1	-	1	-	-	-	1	3	8	4	7	11	-
Acid Plant																		
Purchased sulfur	Kt	655.2	1,752.3	-	-	45.9	71.5	76.2	22.4	18.3	48.5	51.6	42.0	140.5	59.8	78.6	-	-
Excess acid produced/sold	Kt	5,733.3	7,304.3	-	-	187.7	78.3	44.8	106.7	96.9	71.7	99.5	103.9	725.8	711.5	1,827.6	1,678.9	-
Total Production																		
Cu Eq Produced	Kt	3,949.5	5,689.4	-	-	155.6	166.0	150.8	146.7	164.4	151.2	156.8	154.5	735.4	670.4	684.0	613.5	-

PHASE II

PHASE II: UNIT COSTS	Unit	PHASE II	LOM	Y15	Y16	Y17	Y18	Y19	Y19	Y19	Y19	Y19	Y19	Y25-29	Y30-34	Y35-39	Y40-44	Y45-49
Mining ($/t materials moved excluding pre-strip)																		
Mining	$/tonne	1.35	1.37	-	-	1.85	1.27	1.27	1.31	1.32	1.32	1.32	1.32	1.32	1.32	1.35	1.56	-
Deferred Stripping	$/tonne	(0.18)	(0.16)	-	-	(0.03)	(0.07)	(0.18)	(0.00)	(0.02)	(0.27)	(0.32)	(0.26)	(0.33)	(0.12)	(0.17)	-	-
Mining ex def stripping	$/tonne	1.17	1.21	-	-	1.83	1.21	1.09	1.31	1.30	1.05	1.01	1.06	0.99	1.20	1.18	1.56	-
Processing ($/t processed (tonnes milled + tonnes leached))																		
Sulfide flotation	$/tonne	4.04	3.89	-	-	4.43	3.78	3.77	3.80	3.79	3.78	3.77	3.78	3.78	3.84	4.56	4.53	-
Molybdenum flotation	$/tonne	0.11	0.11	-	-	0.11	0.10	0.08	0.12	0.13	0.11	0.09	0.08	0.10	0.12	0.13	0.13	-
Leach Plant	$/tonne	0.49	0.47	-	-	0.49	0.39	0.35	0.46	0.49	0.42	0.40	0.41	0.44	0.47	0.57	0.62	-
Acid Plant	$/tonne	0.26	0.40	-	-	0.46	0.52	0.55	0.23	0.21	0.39	0.41	0.35	0.27	0.18	0.23	0.14	-
Acid Plant (electricity credit)	$/tonne	(0.17)	(0.19)	-	-	(0.19)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)	(0.19)	(0.22)	-
Leach pad	$/tonne	0.01	0.01	-	-	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	-
Doré plant	$/tonne	0.15	0.14	-	-	0.17	0.22	0.15	0.12	0.13	0.14	0.14	0.11	0.10	0.15	0.17	0.18	-
SXEW	$/tonne	0.84	0.84	-	-	1.05	0.90	0.84	0.82	0.90	0.84	0.86	0.86	0.83	0.74	0.83	0.88	-
Total	$/tonne	5.72	5.68	-	-	6.53	5.75	5.60	5.41	5.51	5.53	5.52	5.44	5.36	5.34	6.31	6.27	-
Other Unit Costs ($/t processed (tonnes milled + tonnes leached))																		
Onsite G&A	$/tonne	0.95	0.93	-	-	1.01	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	0.78	0.79	-
Sustaining cash cost ($/lb Cu)																		
Cash cost[1]	$/lb	1.11	1.12	-	-	0.97	1.01	1.18	1.13	0.99	1.04	1.10	1.37	1.19	1.26	1.07	0.90	-
Sustaining cash cost[1]	$/lb	1.42	1.43	-	-	1.19	1.68	1.49	1.47	1.25	1.33	1.48	1.73	1.57	1.55	1.36	1.08	-
Total cash cost[2]	$/lb	1.46	1.44	-	-	1.35	1.01	1.42	1.13	0.99	1.04	1.47	1.97	1.56	1.49	1.49	1.64	-
Total sustaining cash cost[2]	$/lb	1.73	1.71	-	-	1.53	1.68	1.69	1.47	1.25	1.33	1.79	2.22	1.87	1.75	1.72	1.75	-

[1] Internal feed only; [2] Includes purchased concentrate

PHASE II: CASH FLOWS	Unit	PHASE II	LOM	Y15	Y16	Y17	Y18	Y19	Y19	Y19	Y19	Y19	Y19	Y25-29	Y30-34	Y35-39	Y40-44	Y45-49
Cash Flows																		
Gross rev - internal	$M	24,722	36,197	-	-	969	1,212	995	1,096	1,230	1,125	977	804	4,556	4,413	4,159	3,186	-
Gross rev - purchased	$M	4,845	6,397	-	-	194	-	124	-	-	-	196	364	1,012	563	951	1,440	-
TC/RC	$M	(280)	(355)	-	-	(6)	(6)	(7)	(10)	(11)	(8)	(11)	(10)	(41)	(58)	(60)	(54)	-
Freight	$M	(111)	(154)	-	-	(4)	(7)	(5)	(4)	(4)	(4)	(4)	(3)	(14)	(22)	(22)	(19)	-
Royalty	$M	(587)	(841)	-	-	(24)	(32)	(24)	(25)	(30)	(28)	(24)	(19)	(103)	(104)	(101)	(74)	-
Opex - Mining	$M	(3,048)	(4,314)	-	-	(84)	(134)	(121)	(146)	(145)	(116)	(112)	(118)	(551)	(668)	(568)	(285)	-
Opex - Processing	$M	(5,307)	(7,653)	-	-	(195)	(209)	(204)	(197)	(201)	(201)	(201)	(198)	(977)	(958)	(955)	(811)	-
Opex - Purch Cu Conc	$M	(4,180)	(5,512)	-	-	(167)	-	(106)	-	-	-	(168)	(312)	(867)	(484)	(824)	(1,251)	-
Opex - Onsite G&A	$M	(877)	(1,253)	-	-	(30)	(37)	(37)	(37)	(37)	(37)	(37)	(37)	(185)	(183)	(118)	(102)	-
Opex - Property tax	$M	(292)	(588)	-	-	(16)	(15)	(15)	(15)	(14)	(17)	(16)	(16)	(68)	(53)	(40)	(6)	-
Opex - Surety bond fees	$M	(55)	(89)	-	-	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(9)	(9)	(9)	(9)	(5)
Closure Costs	$M	(200)	(200)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(200)
Tax - Federal income	$M	(1,616)	(2,110)	-	-	(55)	(83)	(50)	(65)	(84)	(73)	(59)	(36)	(304)	(281)	(276)	(249)	-
Tax - State income	$M	(317)	(415)	-	-	(11)	(16)	(10)	(13)	(16)	(14)	(12)	(7)	(60)	(55)	(54)	(49)	-
Tax - State severance	$M	(190)	(252)	-	-	(7)	(9)	(6)	(7)	(9)	(8)	(7)	(5)	(36)	(33)	(33)	(29)	-
Cash From Ops before WC	**$M**	**12,509**	**18,859**	**-**	**-**	**562**	**662**	**533**	**577**	**678**	**616**	**520**	**404**	**2,353**	**2,068**	**2,051**	**1,690**	**(205)**
WC Changes - AR	$M	91	-	-	-	(36)	(5)	10	3	(15)	11	(5)	0	(16)	42	15	(44)	130
WC Changes - AP	$M	(76)	-	81	-	(42)	19	(17)	(10)	2	(6)	28	18	(31)	(9)	(35)	105	(179)
WC Changes - Stream	$M	-	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash From Operations	**$M**	**12,524**	**19,089**	**81**	**-**	**484**	**676**	**526**	**570**	**665**	**621**	**544**	**422**	**2,306**	**2,102**	**2,031**	**1,751**	**(254)**
Growth - EPCM	$M	(444)	(1,621)	(222)	(222)	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth - Owners Costs	$M	(264)	(739)	(132)	(132)	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth - Contingency	$M	(177)	(442)	(89)	(89)	-	-	-	-	-	-	-	-	-	-	-	-	-
Sustaining capital	$M	(967)	(1,498)	-	-	(31)	(179)	(38)	(75)	(52)	(29)	(38)	(29)	(169)	(162)	(109)	(56)	-
Deferred stripping	$M	(456)	(567)	-	-	(1)	(7)	(20)	(0)	(2)	(31)	(35)	(29)	(184)	(67)	(79)	-	-
Cash From Investing	**$M**	**(2,308)**	**(4,867)**	**(443)**	**(443)**	**(32)**	**(187)**	**(58)**	**(75)**	**(55)**	**(60)**	**(73)**	**(58)**	**(353)**	**(229)**	**(188)**	**(56)**	**-**
Net cash flow	**$M**	**10,216**	**14,222**	**(361)**	**(443)**	**452**	**489**	**468**	**495**	**611**	**561**	**470**	**364**	**1,953**	**1,873**	**1,842**	**1,695**	**(254)**
NPV @ 8%	**$M**	**947**	**2,044**															
NPV @ 10%	**$M**	**555**	**1,296**															
IRR	**%**	**49%**	**18%**															
PAYBACK	**# years**	**1.7**	**-**															

PRICE DECK AND MARKETING ASSUMPTIONS

PRICE DECK		
PRICE / RATE	**UNIT**	**LONG TERM**
Metals		
Copper	$/lb	3.50
Copper net premium[1]	$/lb	0.01
Molybdenum	$/lb	11.00
Gold - offtaker	$/oz	1,600.00
Silver - offtaker	$/oz	22.00
Silver - stream	$/oz	3.90
Stream contracted escalator[2]	% per year	1.00
Other		
Molten sulfur - purchases	$/tonne	215.00
Molten sulfur - sales	$/tonne	195.00
Acid - sales	$/tonne	145.00
Electricity	$/kWh	0.075
NSR royalty	%	3.00

[1] *Copper cathode premium net of cathode transport charge*

[2] *Annual escalator begins in Year 4*

MARKETING ASSUMPTIONS		
PRICE / RATE	**UNIT**	**LONG TERM**
Molybdenum Concentrate		
Treatment charge	$/lb	1.30
Payable % - Mo	%	99.00
Freight	$/wmt	20.00
Moisture	%	6.00
Dorė		
Refining charge - doré bar	$/oz	0.40
Refining charge - Au	$/oz	0.55
Payable % - Au	%	99.90
Payable % - Ag	%	99.90
Freight	$/oz	1.40
Purchased Copper Concentrate		
Purchase price	$/dmt	1,649.55
Cu grade	%	25.00
Mo grade	%	0.01
Au grade	g/dmt	0.50
Ag grade	g/dmt	15.00
Zn grade	%	0.20
S grade	%	35.00
Treatment charge	$/dmt	80.00
Refining charge - Cu	$/lb	0.08
Payable % - Cu	%	96.50
Payable % - Au	%	90.00
Payable % - Ag	%	90.00
Min deduction - Cu	%	1.00
Min grade - Au	g/dmt	1.00
Min grade - Ag	g/dmt	30.00
Freight capture	$/dmt	80.00

TAX ASSUMPTIONS

TAX ASSUMPTIONS		
METRIC	UNIT	Phase I
Federal Income Tax		
Income tax rate	%	21.00%
Depletion - Federal rate	%	15.00%
Depletion - net income limitation	%	50.00%
State Income Tax		
Income tax rate	%	3.87%
Basis rate	%	50.00%
Severance tax rate	%	3.00%
Property Tax		
Discount rate	%	12.30%
Assessment ratio	%	16.00%
Estimated primary tax rate	%	14.43%
Income taxes allowed	%	21.00%
Capex deduction per year	%	10.00%
Opening Balance - NOLs		
Federal	$ millions	$112
State	$ millions	$95
Opening Balance - Tax Pools		
Mine development	$ millions	$277
Capitalized Exploration	$ millions	$27
Mineral Property	$ millions	$168

INCOME TAX DEPRECIATION RATES					
YEAR	MINE DEV	PROJECT	SUSTAINING	CAPITAL EXPLOR	INFRASTRUCTURE
1	73.00%	10.71%	7.14%	5.00%	5.00%
2	6.00%	19.13%	14.29%	10.00%	9.50%
3	6.00%	15.03%	14.29%	10.00%	8.55%
4	6.00%	12.25%	14.29%	10.00%	7.70%
5	6.00%	12.25%	14.29%	10.00%	6.93%
6	3.00%	12.25%	14.29%	10.00%	6.23%
7	-	12.25%	14.29%	10.00%	5.90%
8	-	6.13%	7.14%	10.00%	5.90%
9	-	-	-	10.00%	5.91%
10	-	-	-	10.00%	5.90%
11	-	-	-	5.00%	5.91%
12	-	-	-	-	5.90%
13	-	-	-	-	5.91%
14	-	-	-	-	5.90%
15	-	-	-	-	5.91%
16	-	-	-	-	2.95%

TECHNOLOGY TRADE-OFFS

CONCENTRATE LEACH PLANT

ATMOSPHERIC CONCENTRATE LEACH (ALBION)

- Benefits
  - Low mech. complexity
  - Higher flexibility in feed material composition
  - More flexibility with acid production, low oxygen consumption
- Risk
  - Requires acid plant to convert sulfur to acid
  - Low conversion of pyrite to acid (increase acid usage)
  - More unit operations

PRESSURE OXIDATION (HIGH TEMP / LOW TEMP POX)

- Benefits
  - High conversion of pyrite to acid
  - Acid production in the autoclave (no sulfur or acid plant required)
  - Less unit operations
- Risks
  - More challenging to operate and commission
  - Less flexibility in feed composition
  - Higher oxygen consumption, least flexible acid balance

NEXT STEPS

- Evaluate different optimization scenarios for the PFS
  - Albion or POx technology (both taken to the end of PFS evaluation)
  - Timing and size of concentrate leach to be flexed to optimize project economics and upfront capex

COPPER WORLD COMPLEX MINERAL RESOURCE ESTIMATES

(AS AT MAY 1, 2022)

COPPER WORLD COMPLEX MINERAL RESOURCE ESTIMATES	CATEGORY	Tonnes (Millions)	Cu Grade (%)	Soluble Cu Grade (%)	Mo (g/t)	Ag (g/t)
Flotation	Measured	687	0.45	0.05	138	5.1
	Indicated	287	0.36	0.06	134	3.6
	Total M&I	**973**	**0.42**	**0.05**	**137**	**4.6**
	Inferred	210	0.36	0.05	119	3.9
Leach	Measured	105	0.37	0.26	-	-
	Indicated	94	0.35	0.26	-	-
	Total M&I	**200**	**0.36**	**0.26**	**-**	**-**
	Inferred	52	0.40	0.29	-	-

Note: totals may not add up correctly due to rounding.
1 Mineral resource estimates that are not mineral reserves do not have demonstrated economic viability. Mineral resource estimates do not include factors for mining recovery or dilution.
2 Mineral resource estimates constrained to a Lerch Grossman pit shell with a revenue factor of 1.0 using a copper price of $3.45 per pound.
3 Using a 0.1% copper cut-off grade and an oxidation ratio lower than 50% for flotation material, and a 0.1% soluble copper cut-off grade and an oxidation ratio higher than 50% for leach material.

The reserve and resource estimates included in this presentation were prepared in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) and the Canadian Institute of Mining, Metallurgy and Petroleum Standards on Mineral Resources and Reserves: Definitions and Guidelines.

This presentation has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ from the requirements of United States securities laws. Canadian reporting requirements for disclosure of mineral properties are governed by NI 43-101. For this reason, information contained in this presentation containing descriptions of the Company’s mineral deposits may not be comparable to similar information made public by United States companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.