

# Van Dyke Copper Project



*Van Dyke Headframe*

*Miami East headframe*

*Van Dyke*

# Forward Looking Statements



This Power Point presentation contains certain forward-looking statements within the meaning of the Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, and forward-looking information within the meaning of the Canadian securities laws (collectively, “forward-looking information”). This forward-looking information includes statements relating to management’s expectations with respect to our projects based on the beliefs, estimates and opinions of the Company’s management or its independent professional consultants on the date the statements are made.

Forward-looking information in this presentation includes statements about the potential growth and exploration of Copper Fox’s investments; expected supply and demand for copper in the years to come; the copper refined balance forecast; potential economic enhancements to the Van Dyke project; the future activities of the Van Dyke project; and the interpretation of data from the Van Dyke project. Information concerning exploration results and mineral resource estimates may also be deemed to be forward-looking statements, as it constitutes a prediction of what might be found to be present when and if a project is actually developed.

With respect to the forward-looking statements contained in this presentation, Copper Fox has made numerous assumptions regarding, among other things: metal price assumptions used in mineral reserve estimates; the continued availability of project financing; the geological, metallurgical, engineering, financial, and economic advice that Copper Fox has received is reliable, and is based upon practices and methodologies which are consistent with industry standards; the availability of necessary permits; and the stability of environmental, economic, and market conditions. While Copper Fox considers these assumptions to be reasonable, these assumptions are inherently subject to significant business, economic, competitive, market and social uncertainties and contingencies.

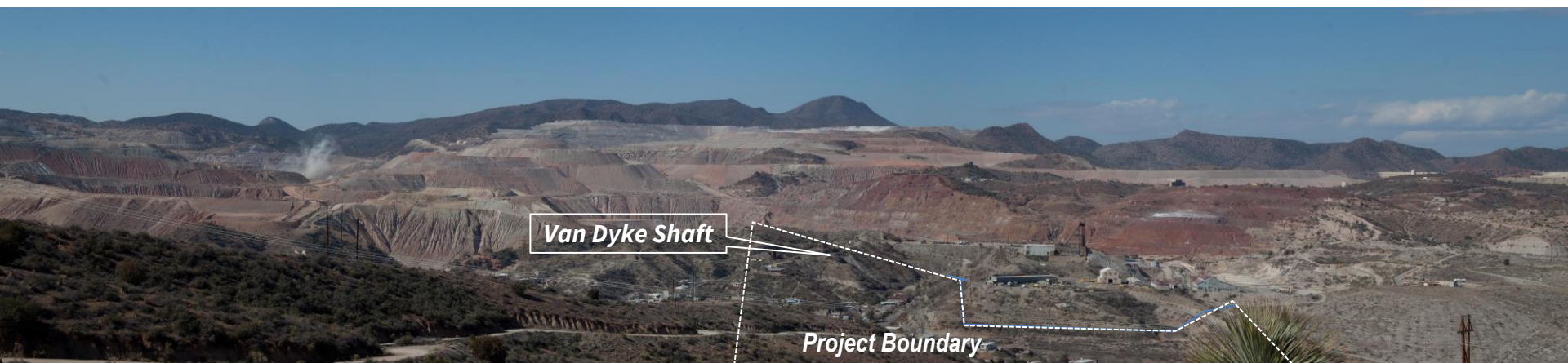
Additionally, there are known and unknown risk factors which could cause Copper Fox’s actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information contained herein. Known risk factors include, without limitation: uncertainties related to raising sufficient financing to fund the planned work in a timely manner and on acceptable terms; changes in planned work resulting from logistical, technical or other factors; the possibility that results of work will not fulfill projections/expectations and realize the perceived potential of Copper Fox’s; the Van Dyke project, may not result in a Production Decision being made, or the construction of a mine; financing commitments may not be sufficient to advance the Van Dyke project as expected, or at all; uncertainties involved in the interpretation of drilling results and other tests and the estimation of mineral resources; the possibility that there may be no economically viable mineral resources may be discovered; risk of accidents, labour disputes or other unanticipated difficulties or interruptions; the possibility of environmental issues at the Van Dyke project; the possibility of cost overruns or unanticipated expenses in work programs; the need to obtain permits and comply with environmental laws and regulations and other government; ongoing relations with our partners and joint ventures; performance by contractors of their contractual obligations; unanticipated developments in the supply, demand, and prices for metals; changes in interest or currency exchange rates; legal disputes; and changes in general economic conditions or conditions in the financial markets.

A more complete discussion of the risks and uncertainties facing Copper Fox is disclosed in Copper Fox's continuous disclosure filings with Canadian securities regulatory authorities at [www.sedar.com](http://www.sedar.com). All forward-looking information herein is qualified in its entirety by this cautionary statement, and Copper Fox disclaims any obligation to revise or update any such forward-looking information or to publicly announce the result of any revisions to any of the forward-looking information contained herein to reflect future results, events or developments, except as required by law except as may be required under applicable securities laws. All figures are in United States dollars unless otherwise indicated.

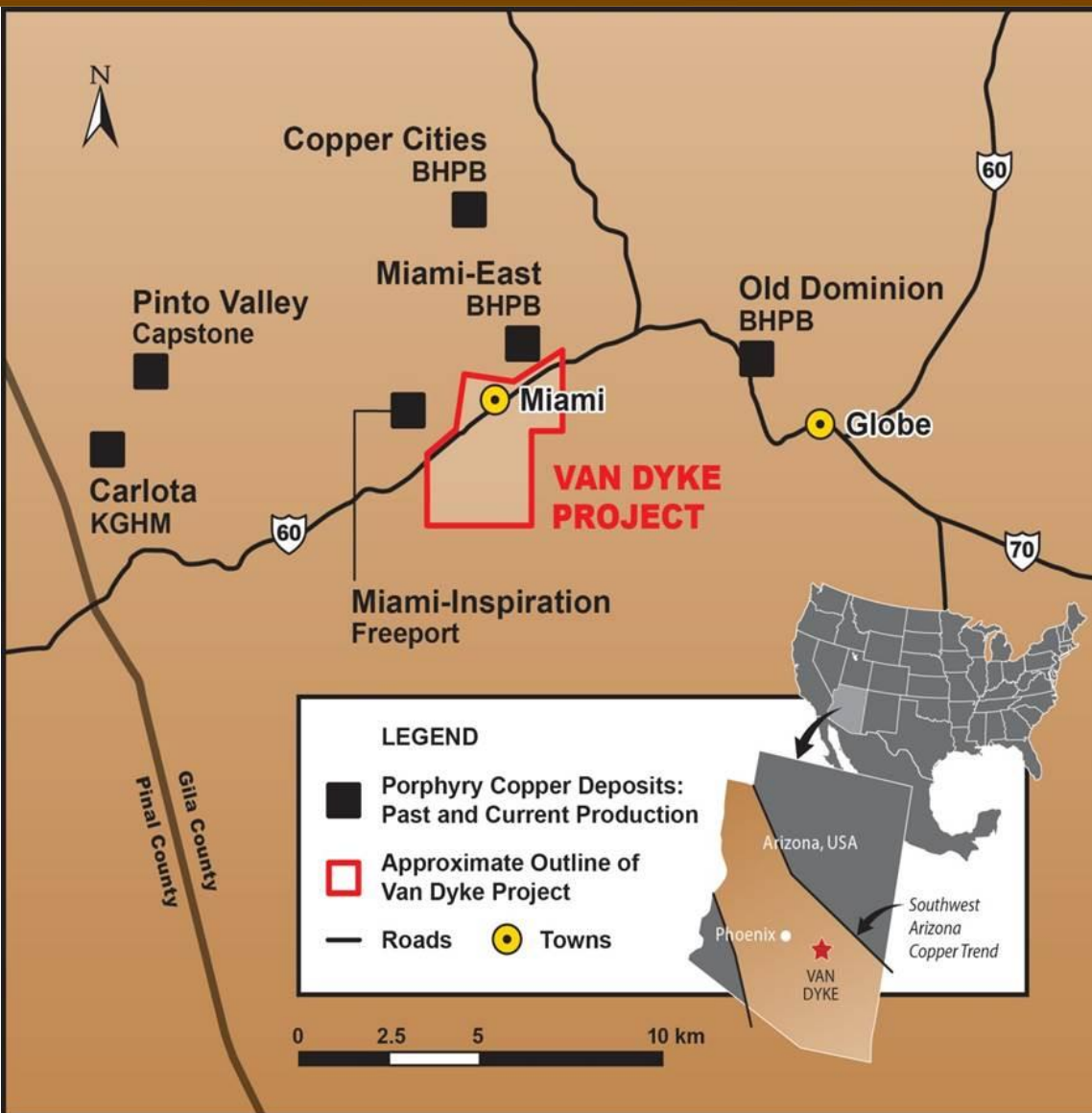
Elmer B. Stewart, MSc. P. Geol., President of Copper Fox, is the Company’s non-independent nominated Qualified Person pursuant to Section 3.1 of National Instrument 43-101, *Standards for Disclosure for Mineral Projects*, and has reviewed and approved the technical information disclosed in this presentation.

# Sustainability Policy

- Committed to sustainability best practices as a responsible mineral exploration and development company
- Work programs meet or exceed environmental regulations
- Early engagement with stakeholders is the best approach
- Preservation of wildlife and aquatic habitat fundamental to our philosophy
- Transparency, inclusivity, and respect, to enhance social and economic benefits for communities and stakeholders
- Corporate Governance Mandate and Corporate Management System in place



# Project Overview



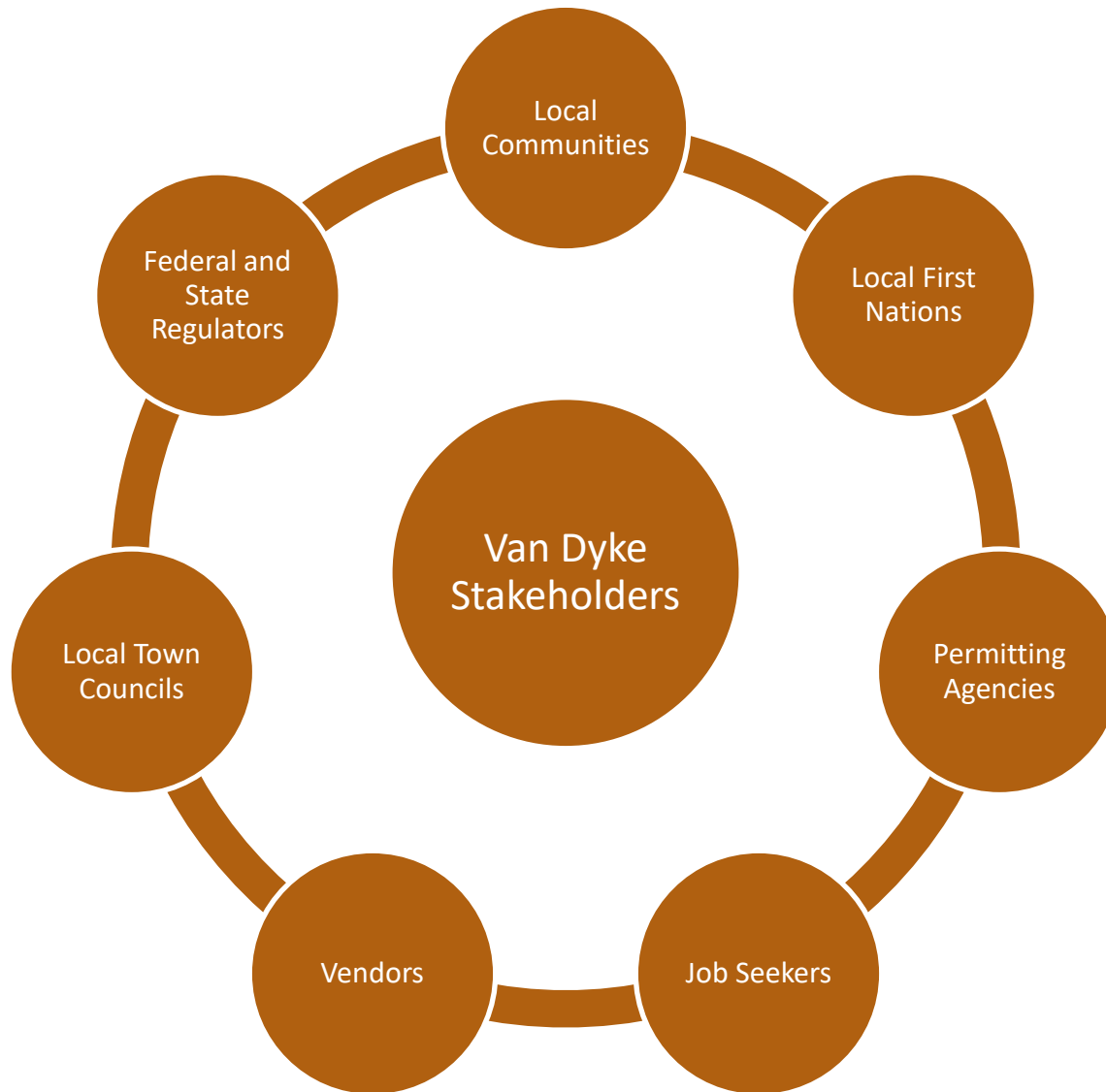
- Deposit located primarily beneath the town of Miami, Arizona
- 531 ha (1,312.18 acres) of Mineral Rights
- Potential mid-tier in-situ copper recovery ('ISCR') project – 85Mlb/year
- 100% owned (subject to NSR encumbrances)
- Access to highway infrastructure, water, and a “clean”, reliable hydro-electric power grid
- Mining-friendly jurisdiction with local community support
- Mineral resource expansion potential to the southwest

- Brownfield copper project with historical production from both underground and in-situ leaching (not mining) operations
- Objective is to revitalize the Van Dyke copper mine utilizing current in-situ copper recovery ('ISCR') technology and best practice operating principles
- Updated Mineral Resource Estimate and Preliminary Economic Assessment completed in 2020
- Deposit located primarily beneath the town of Miami, Arizona
- Underground access to the deposit provides most attractive path forward, reduces environmental/safety/noise/surface disturbance concerns, and avoids known aquifers
- Reduced surface "footprint"
- Preliminary archeological, botanical/fauna and impact assessment studies completed with minimal adverse effects related to future operations
- Similar to the Florence ISCR project located in Florence, Arizona, currently under construction with first copper production expected in Q4 of 2025

# Technical Support Team



# Project Stakeholders



# Project History

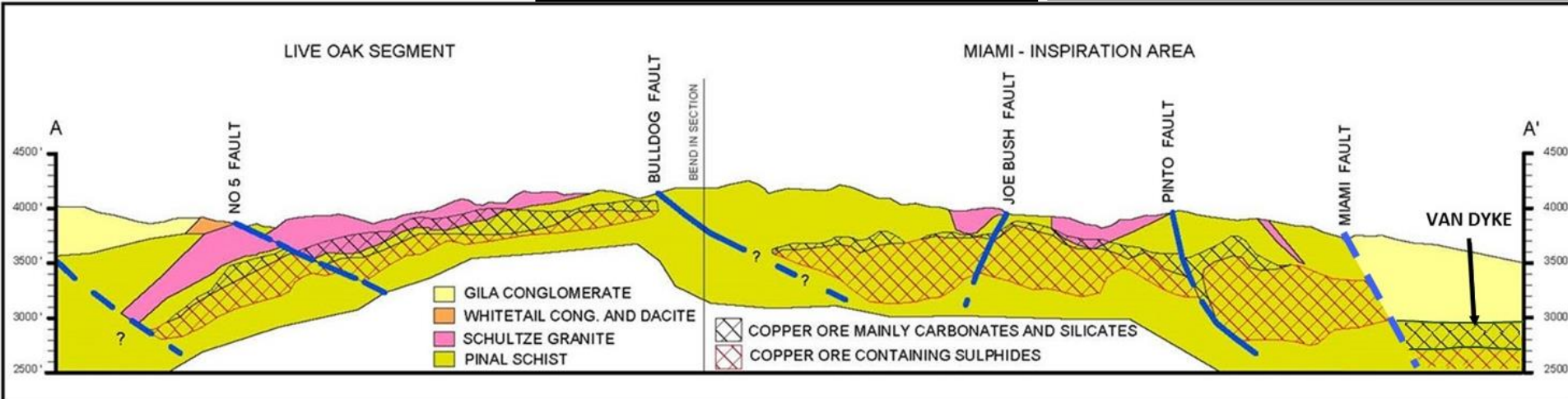
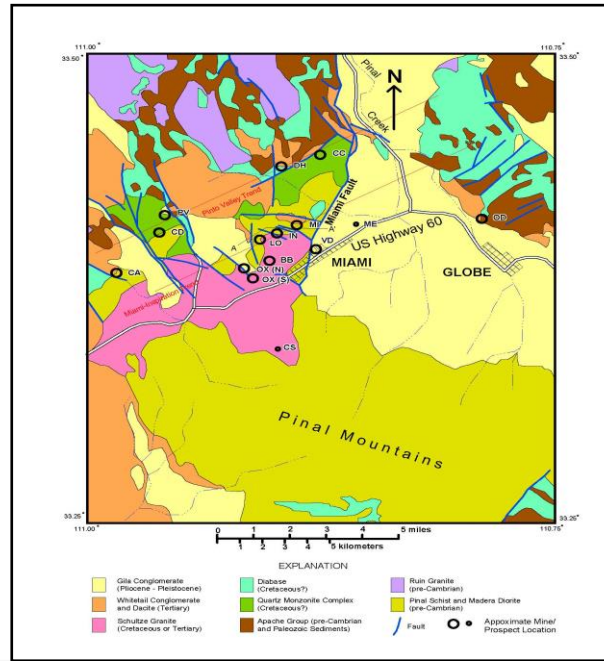


- 1916: Drilling intersected high-grade oxide copper mineralization at 1,200 feet
- 1919: Van Dyke shaft completed to a depth of 1,692 feet
- 1929-31 and 1943-45: 11.6 million pounds of copper produced
- 1940s to 1968: Inspiration Copper, Miami Copper, and Freeport Sulfur leased the property but did little work
- 1968: Occidental Minerals conducted exploration and pilot-scale ISCR programs in 1976-1977 and 1978-1980
- 1988-89: Kocide Chemicals ISCR operations produced 722,000 pounds of copper
  - Occidental and Kocide operated under permits from applicable state agencies
- 2013: Copper Fox purchases the Van Dyke project
- 2020: Updated Mineral Resource Estimate filed on SEDAR+
- 2021: Preliminary Economic Assessment filed on SEDAR+
- 2023: Solubility/geotechnical studies and drillhole rehabilitation
- 2024: Actively collecting hydrogeological data, geotechnical study completed

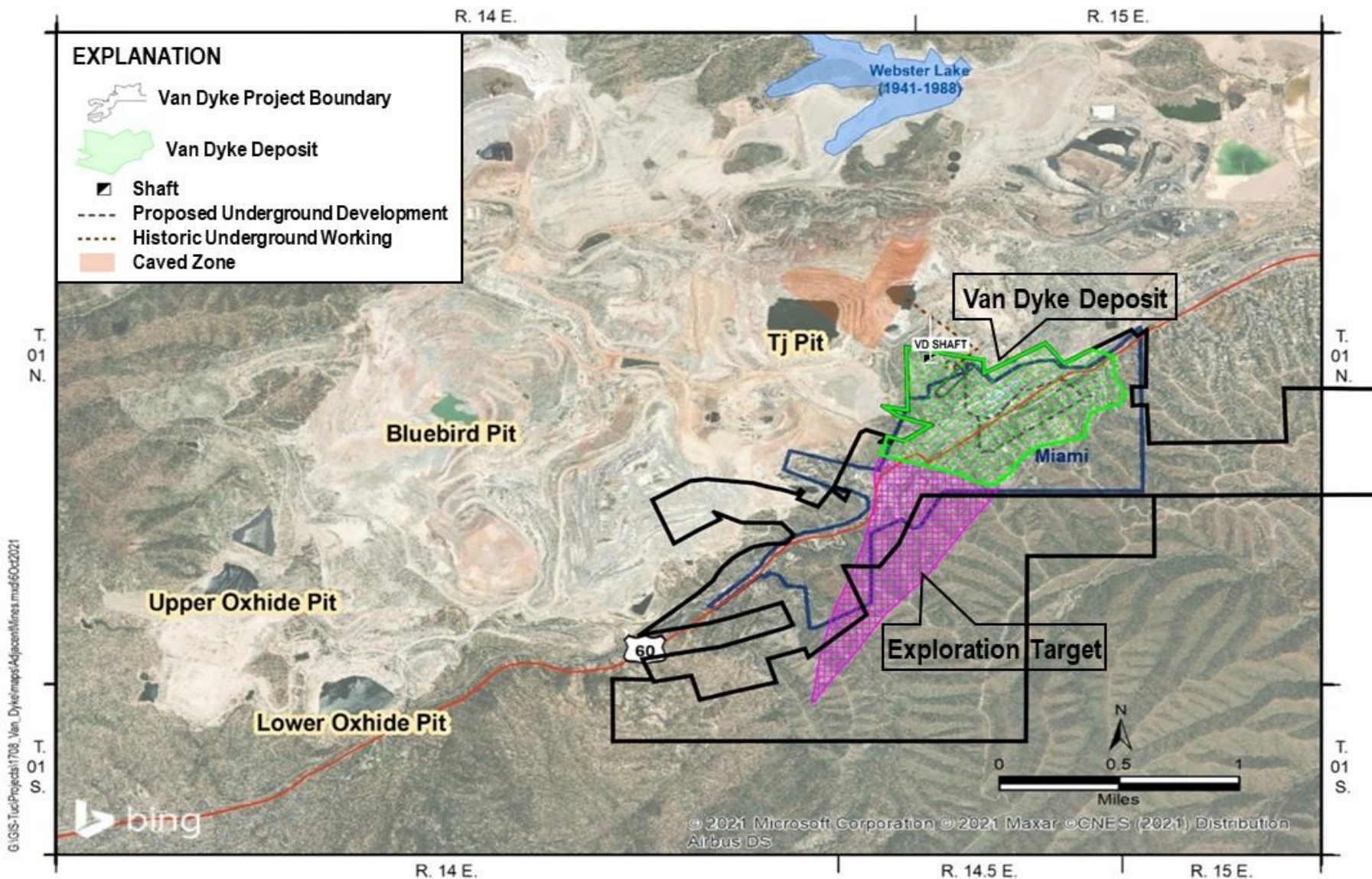


# Globe-Miami Mining District - Regional Setting

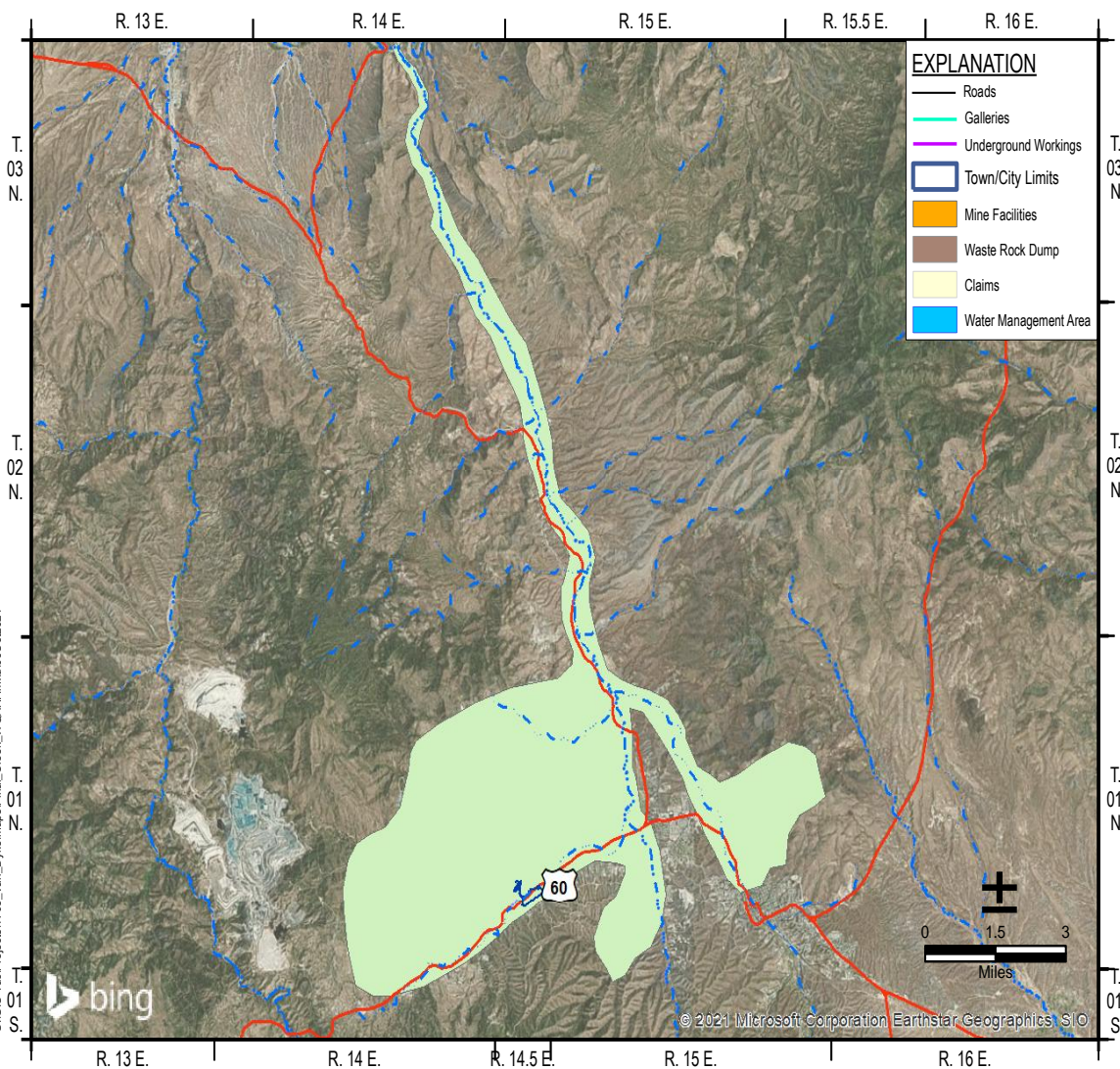
- Major porphyry copper mining district
- Production from open-pit mines over past 100 years
- Project buried under 900 to 1,700 feet of Gila Conglomerate
- Significant resource expansion potential



# Adjacent Mining Operations



# Pinal Creek WQARF Site

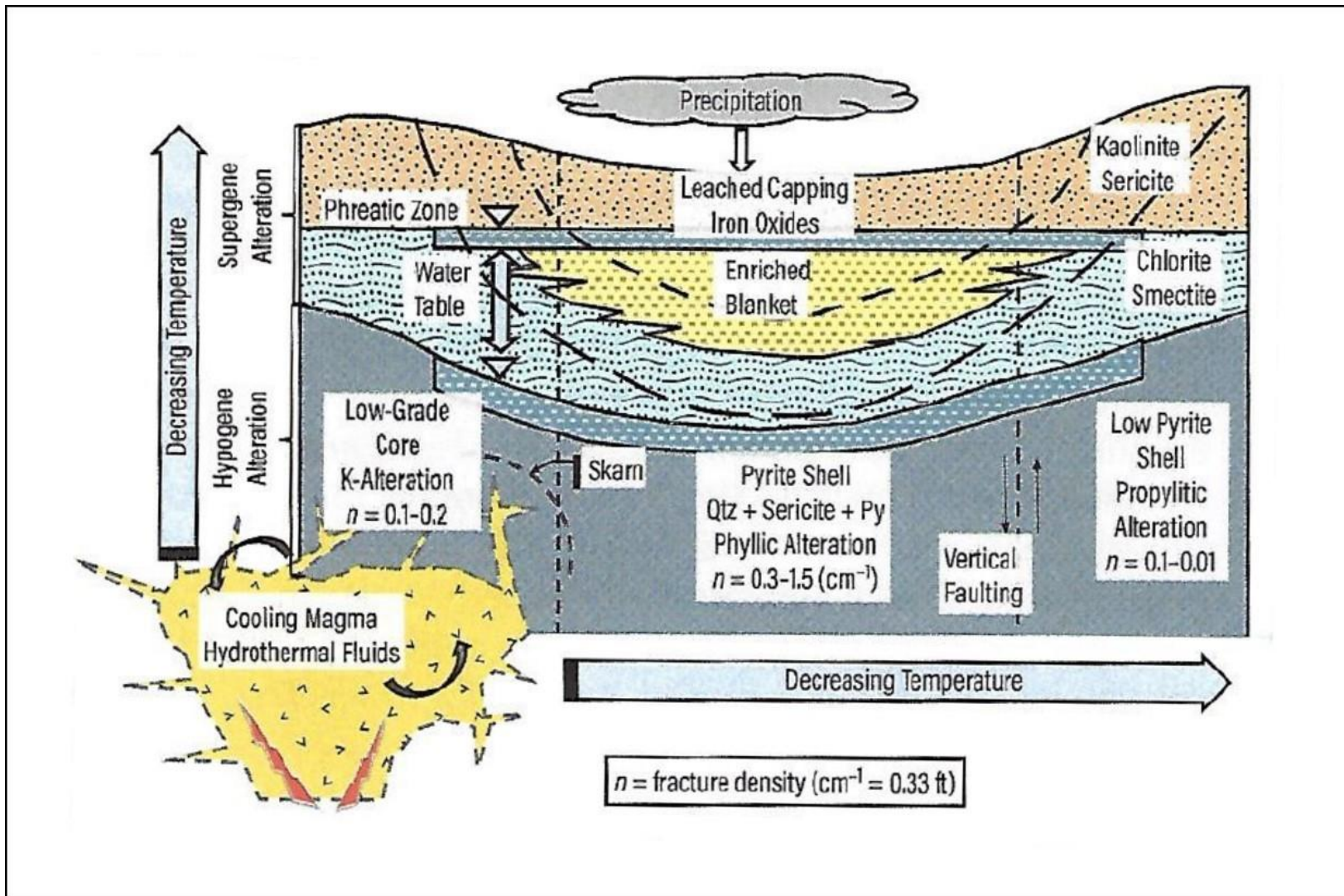


- Project located on south edge of WQARF site
- WQARF deal with clean up of SURFACE contamination related to historical mining activities
- Underground wellfield starts approximately 900 feet below surface at base of Gila Conglomerate
- Wellfield below known aquifers
- Minimizes surface disturbance (WQARF) related to construction and operation of process plant

# Van Dyke Copper Deposit

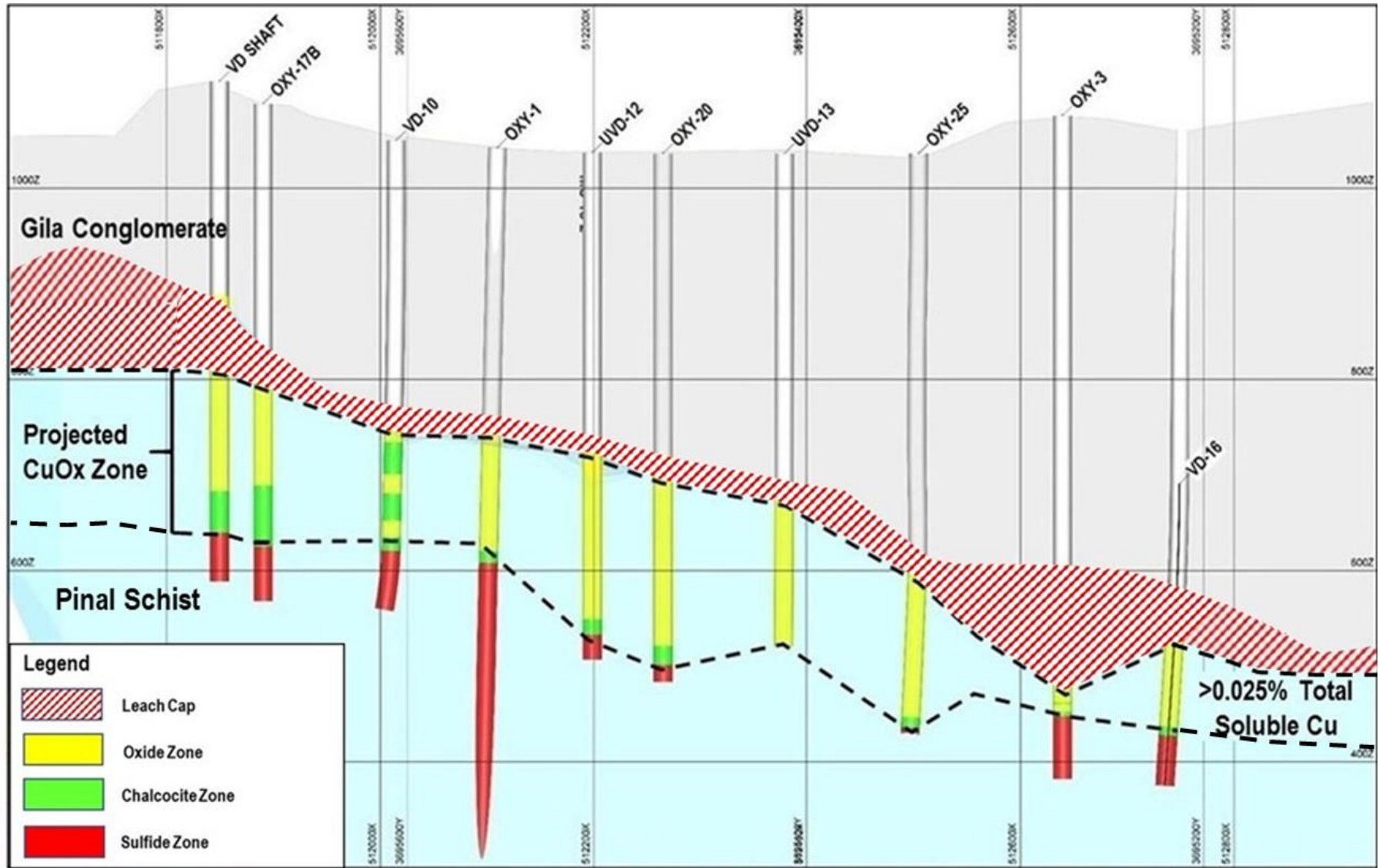
- Oxidized/supergene enriched portion of a Laramide age porphyry copper deposit emplaced approximately 70 Ma ago
- Classical supergene copper deposit consisting of:
  - Upper Leach Cap (clay, limonite, hematite, jarosite, goethite)
  - Oxide zone (malachite, azurite, chrysocolla, tenorite, neotocite, cuprite, native copper)
  - Transitional zone (mainly chalcocite with lesser concentrations of malachite, chrysocolla)
  - Primary copper sulphide mineralization (chalcopyrite, bornite, pyrite)
- Deposition of the Gila Conglomerate approximately 20 Ma ago covered the Leach Cap, preserving the deposit
- Located from 900 feet in the north to 2,000 feet in the south, below surface
- Mineralization ranges from 140 to 650 feet in thickness
- Deposit amenable to ISCR; simple geology, low concentrations of carbonate minerals, calcium bearing gangue minerals and iron oxides

# Supergene Process



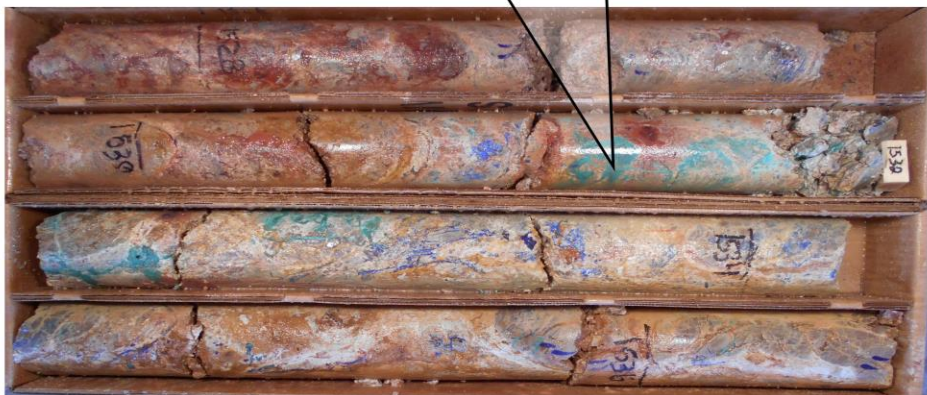
Source: In SITU Recovery & Remediation of Metals, Drummond Earley III, Society for Mining, Metallurgy & Exploration , 2020. Adapter from Tittley 1972

# Geology and Mineralization



# Copper Mineralization

VD 14-04  
6.571% AsCu;  
1.52m (from 466.5m to 468.02m)



Malachite, azurite and chrysocolla

VD 42 A  
0.1% AsCu;  
2.64m (from 353.87 to 356.62)



Malachite in quartz vein Pinal Schist, 354.3m

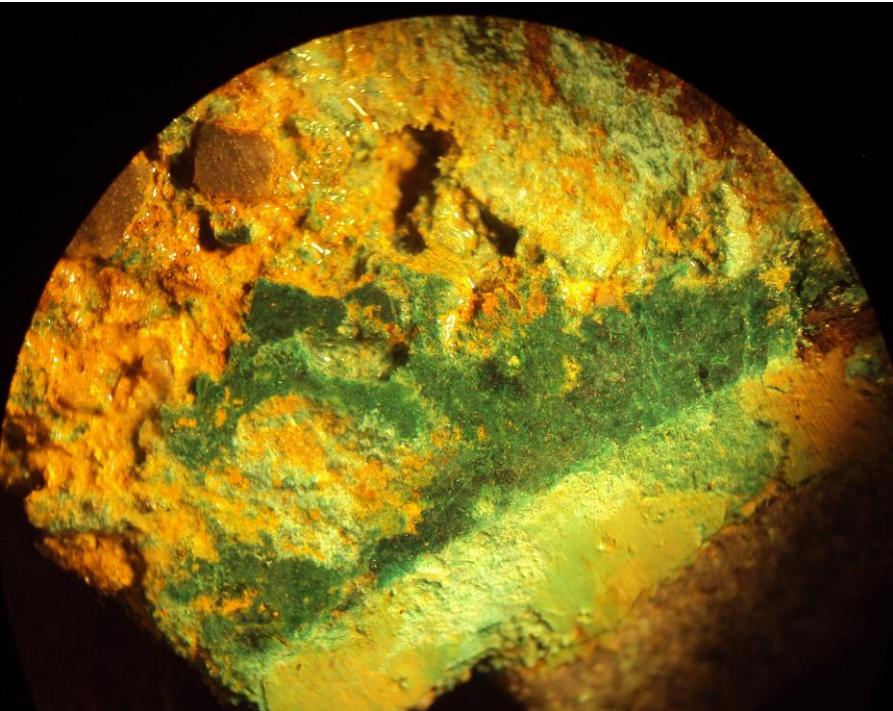


Malachite, azurite and chrysocolla in fractured Pinal Schist  
DDH M-3, 294.5m

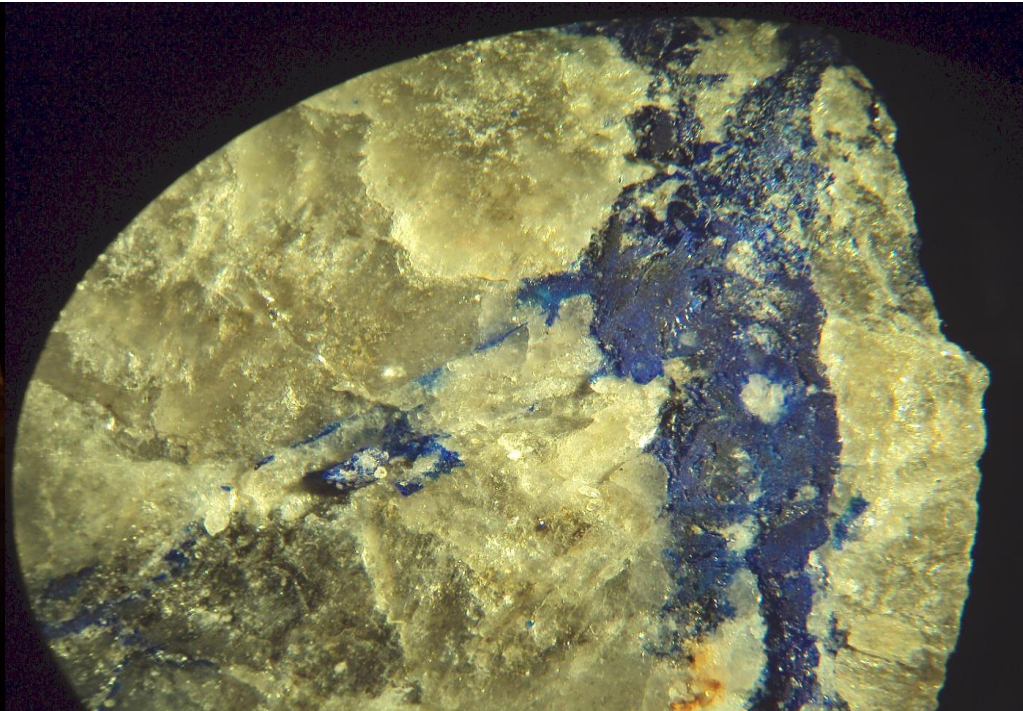


Malachite and chrysocolla in Pinal Schist,  
DDH VD14-06 (886.0 – 894.3ft) 3.29% AsCu

# Mineralized Structures



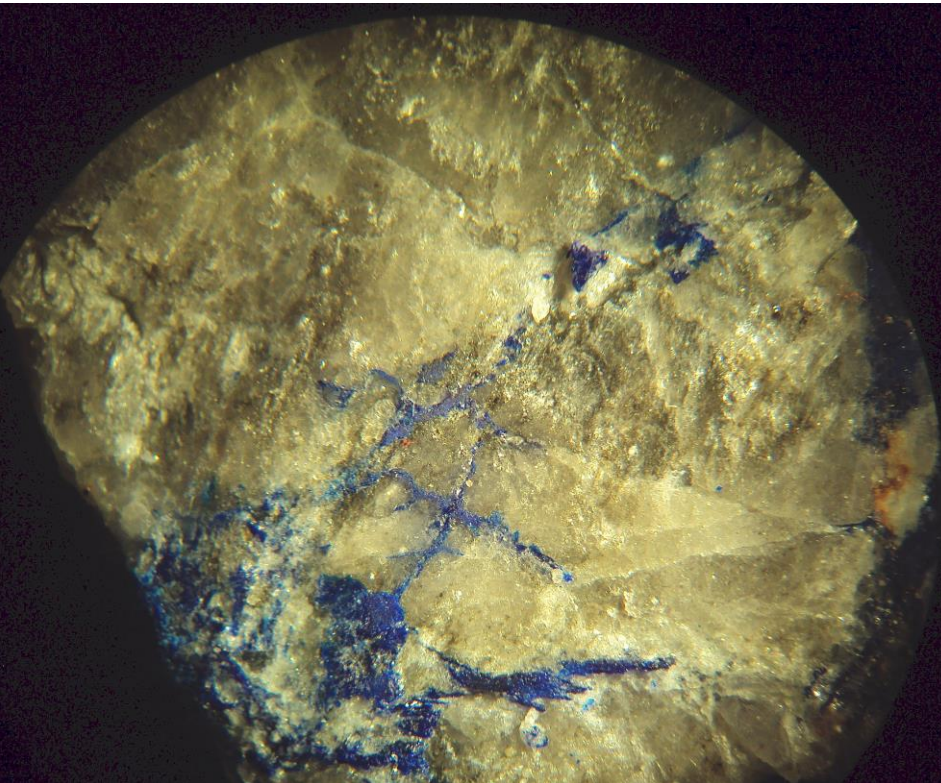
Fracture controlled malachite  
DDH OXY-27 1922'



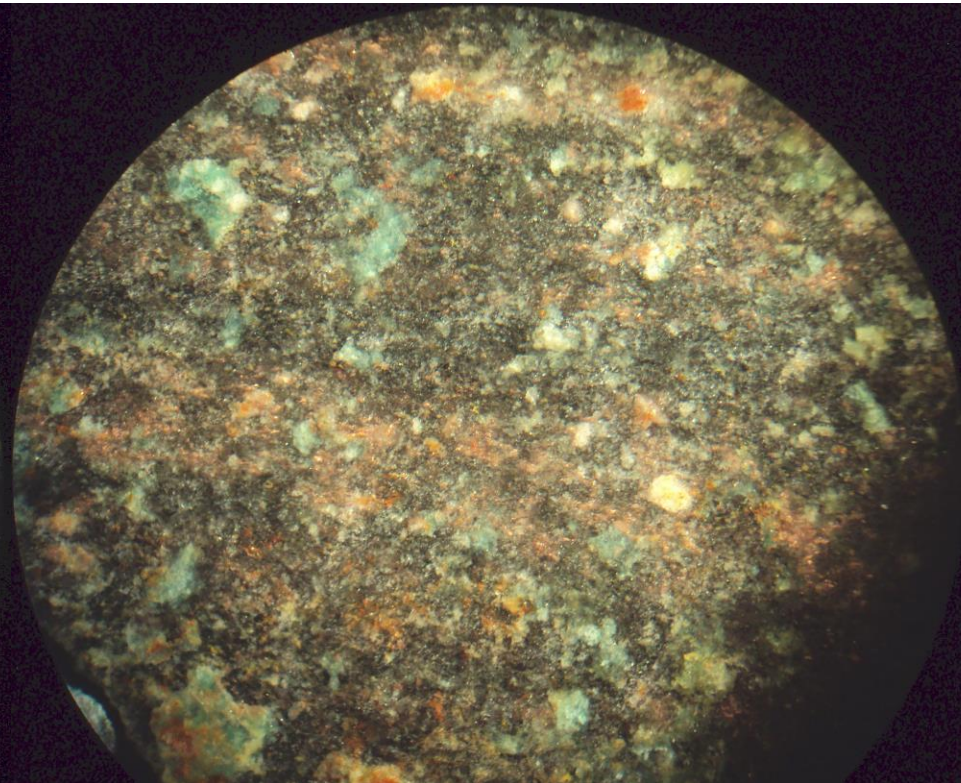
Fracture controlled Azurite  
DDH OXY-27 1736'



# Mineralized Structures



Fracture controlled Azurite  
DDH OXY-27 1736'



Chrysocolla  
DDH OXY-27 1806'

# In-Situ Copper Recovery (ISCR)

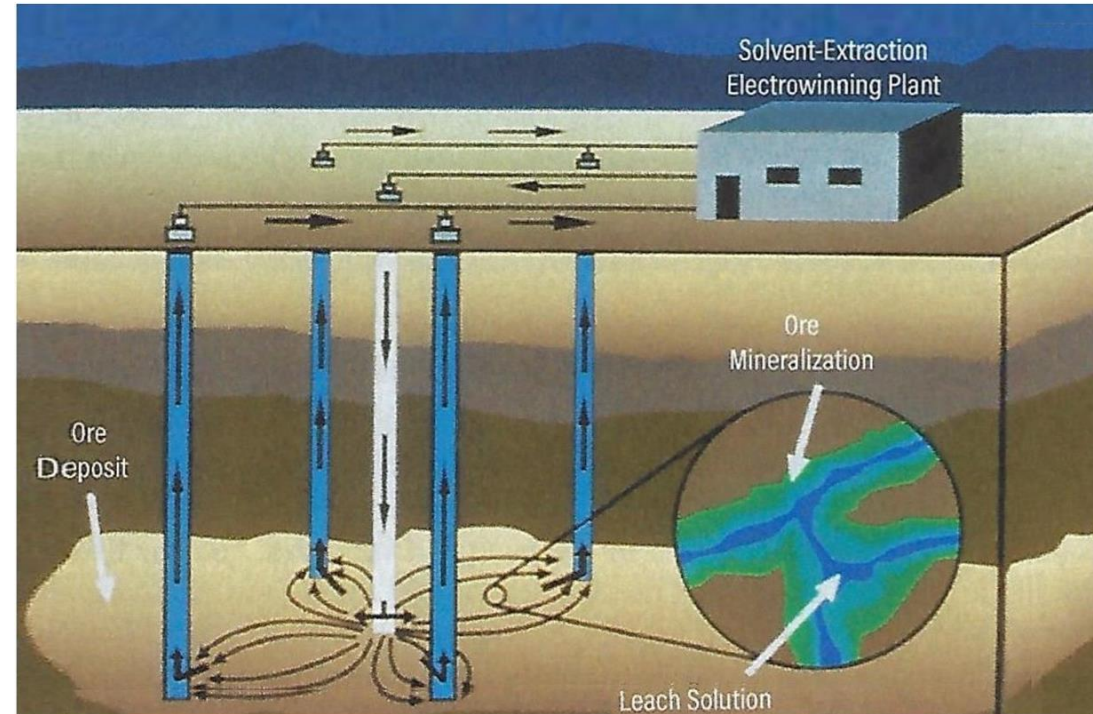
## ISCR Advantages

- Lower carbon & energy intensity
- Lower water consumption
- Reduces environmental impact
- Less social disturbance
- Safer working environment
- Fewer permits required

## Van Dyke ISCR Advantages

- Underground wellfield reduces environmental/safety/noise/surface disturbance concerns
- Underground infrastructure below known aquifers, no interference
- “Leach Cap” potential aquitard, restricts flow of solutions
- Previously permitted for ISCR in late 1970’s and late 1980’s

## Leaching not Mining



Source: In Situ Recovery & Remediation of Metals, Drummond Earley III

# Metallurgical Study

Preliminary In-Situ Leach Study  
Van Dyke Project  
SGS E&S Engineering Solutions Inc.

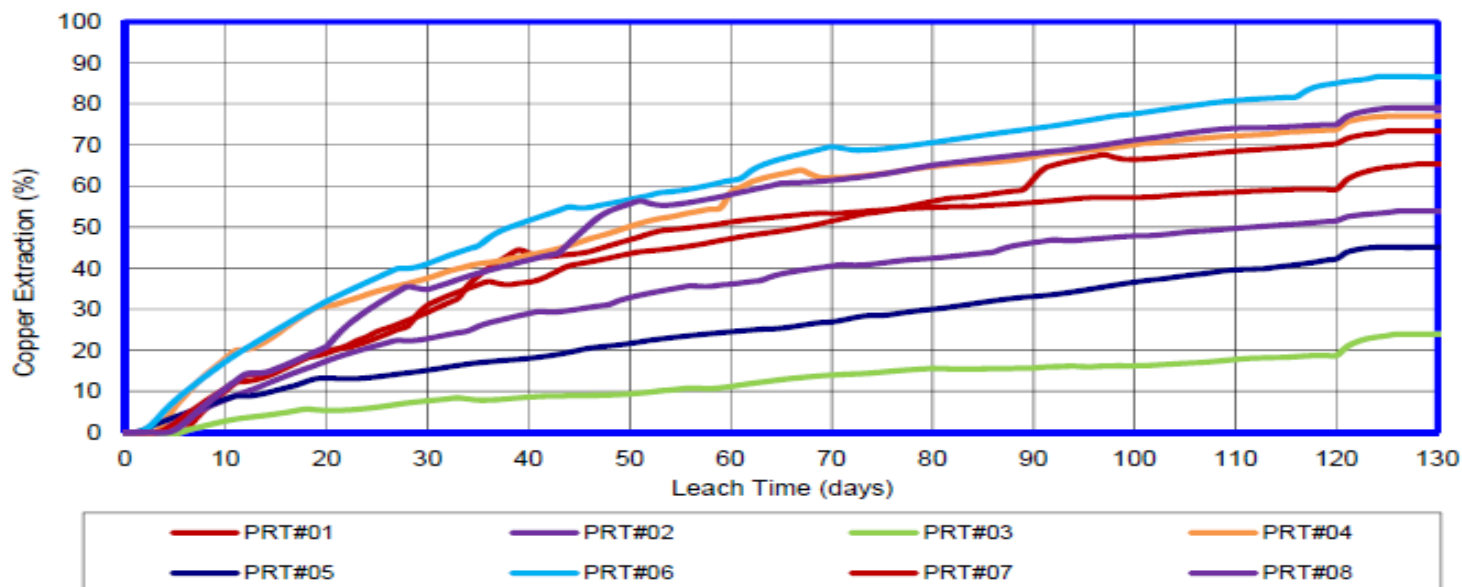
Pressure Leach Test (PRT)  
Eight drill core samples  
120-day leaching period at 120psi



## Pressure Leach Test Summary of Results

Test No.	Sample ID	Leach Cycle (Days)	kl/t	Calculated Head Assays		Cumulative Extraction		Gangue Acid Consumption (kg/kg Cu)
				Cu (%)	Fe (%)	Cu (%)	Fe (%)	
PRT 01	VD14-02 (1801.9-1805.3)	126	10.95	0.47	2.23	65.37	6.23	8.64
PRT 02	VD14-02 (1266.6-1270.6)	125	10.73	2.03	0.46	53.88	1.61	0.72
PRT 03	VD14-03 (1161.5-1165.4)	124	10.28	0.35	2.20	23.93	5.70	23.69
PRT 04	VD14-04 (1682.0-1686.7)	124	9.81	0.38	2.16	77.01	2.88	5.13
PRT 05	VD14-05 (1437.0-1440.7)	124	9.79	0.42	2.88	45.09	4.95	12.24
PRT 06	VD14-06 (896.0-900.5)	124	10.56	1.04	0.22	86.63	20.32	1.12
PRT 07	VD14-06 (1021.0-1025.5)	124	11.02	0.69	0.33	73.37	10.05	2.01
PRT 08	VD14-06 (1231.0-1234.5)	124	11.54	0.76	0.74	78.96	14.36	4.20

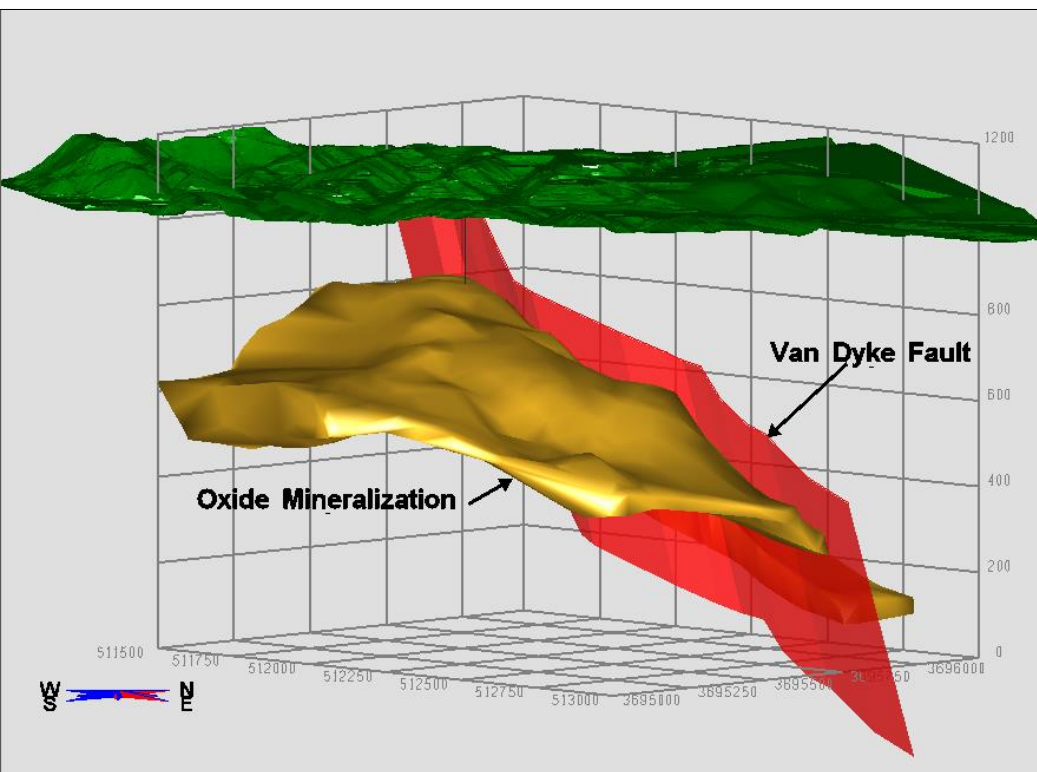
## Summary of Cumulative Copper Extractions



# Mineral Resource Estimate

Class	KTonnes (000)	Rec Cu (%)	TCu (%)	ASCu (%)	CNCu (%)	Recovery (%)	Soluble Cu (Mlbs)	Total Cu (Mlbs)
Indicated	97,637	0.24	0.33	0.23	0.04	90	517	717
Inferred	168,026	0.19	0.27	0.17	0.04	90	699	1,007

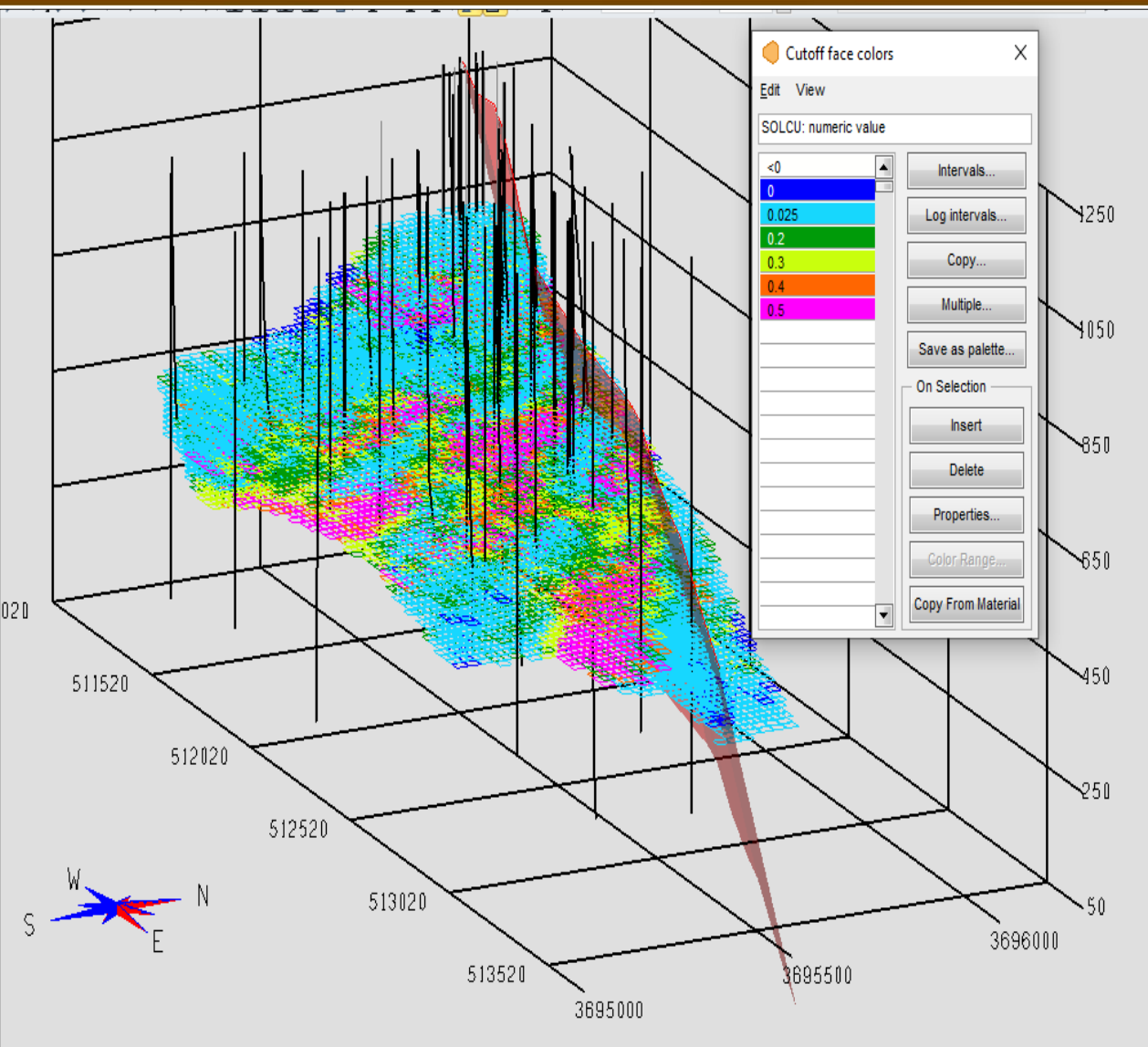
Resource Estimate for the Van Dyke Deposit, effective date January 9, 2020, prepared by MMTS, S. Bird, PEng. Qualified Person.



## Notes:

- Mineral resources that include Inferred resources cannot be converted to mineral reserves
- The “reasonable prospects for eventual economic extraction” shape has been created based on a copper price of US\$2.80/lb, employment of in-situ leach extraction methods, processing costs of US\$0.60/lb copper, and all in operating and sustaining costs of \$US 1.25/tonne, a recovery of 90% for total soluble copper and an average Specific Gravity of 2.6t/m<sup>3</sup>
- Approximate drill-hole spacing is 80m for Indicated Mineral Resources
- The average dip of the deposit within the Indicated and Inferred Mineral Resource outlines is 20 degrees. Vertical thickness of the mineralized envelope ranges from 40m to over 200m
- Numbers may not add due to rounding

# Deposit Block Model



- Based on acid soluble copper (“ASCu”) analyses using a 0.025% cut-off
- Multiple higher-grade zones
- Resource Block Model demonstrates potential for significant increase in resource base to the southwest
- Deposit cut by post mineralization Van Dyke fault

# 2020 PEA Economic Forecast



Base Case	2015 PEA	2020 PEA	Base Case	2015 PEA	2020 PEA
Life of Mine (LOM)	11 years	<b>17 years</b>	Discount Rate	8.00%	<b>7.50%</b>
Copper Cathode Sold	456.9M lbs	<b>1,101.0M lbs</b>	Pre-tax Net Free Cash Flow	\$453.1M	<b>\$1.76B</b>
Copper Price	\$3.00/lb	<b>\$3.15/lb</b>	Pre-tax NPV	\$213.1M	<b>\$798.6M</b>
Gross Revenue	\$1.37B	<b>\$3.47B</b>	Pre-tax IRR	35.5%	<b>48.4%</b>
Total Cash Costs	\$550.2M	<b>\$1.08B</b>	Pre-tax Payback	2.3 years	<b>2 years</b>
Total Cash Costs (\$/lb recovered copper)	\$1.20/lb	<b>\$0.98/lb</b>	<b>Post-tax Net Free Cash Flow</b>	\$342.2M	<b>\$1.44B</b>
C1 Cash Costs (\$/lb recovered copper)*	\$1.08/lb	<b>\$0.86/lb</b>	<b>Post-tax NPV</b>	\$149.5M	<b>\$644.7M</b>
Sustaining Costs (\$/lb recovered copper)	\$0.15/lb	<b>\$0.07/lb</b>	<b>Post-tax IRR</b>	27.9%	<b>43.4%</b>
All In Sustaining Cost (AISC)**	\$1.36/lb	<b>\$1.14/lb</b>	<b>Post-tax Payback</b>	2.9 years	<b>2.1 years</b>
Initial Capital Costs (includes contingency)	\$204.4M	<b>\$290.5M</b>	NI 43-101 Preliminary Economic Assessment Technical Report for the Van Dyke Copper Project, Gila County, Arizona. Effective date: December 30, 2020.		
Taxes	\$110.9M	<b>\$321M</b>			

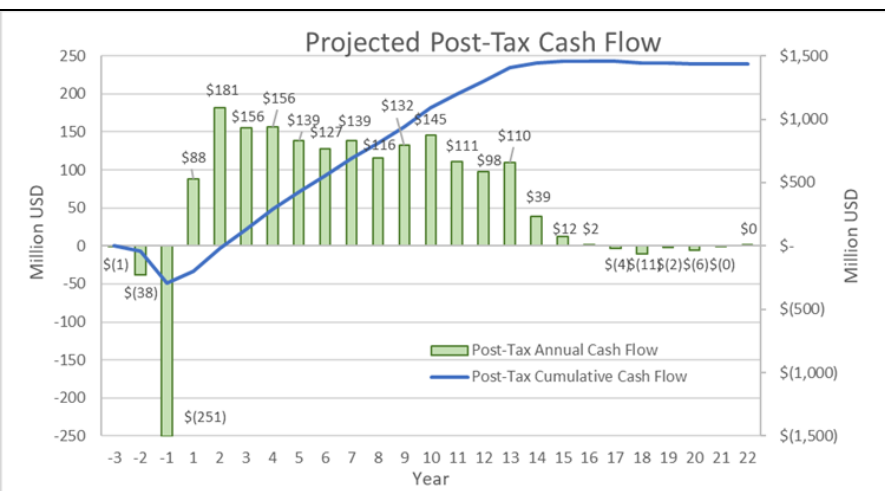
\* includes Mining, Processing, Site Services, G&A, Transportation, and Royalty Costs

\*\* includes Total Cash Cost, Sustaining Capital, Severance Taxes

Metal Price Sensitivities (US\$/lb)	2.65	2.90	3.15	3.40	3.65
EBITDA (US\$B)	1.77	2.04	<b>2.31</b>	2.58	2.85
Free Cash Flow (after-tax US\$B)	1.05	1.25	<b>1.44</b>	1.63	1.82
NPV (after-tax US\$B)	0.45	0.55	<b>0.65</b>	0.74	0.83

**\$0.25/lb** increase in copper price  
 Increases EBITDA by **US\$270M**  
 Increases after-tax Free Cash Flow by **US\$190M**  
 Increases after-tax NPV by **US\$90M**

The PEA is preliminary in nature, it includes indicated & inferred mineral 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 that the results of the PEA will be realized.



# Conceptual Project Schedule



Task Description	Duration (Years)	Start Year	End Year	Mine Life Year																													
				Year - 5	Year - 4	Year - 3	Year - 2	Year - 1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21				
Environmental Permitting	3	-5	-3	■	■	■																											
General Site Development	4	-3	1			■	■	■	■																								
Buildings and Facilities	1	-2	-1				■	■	■																								
Surface Mobile Fleet	1	-2	-1				■	■	■																								
Underground Development Phase 1	1	-2	-1				■	■	■																								
Solvent Extraction Plant	18	-1	17					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Waste Rock Water Management	21	-1	20					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Underground Development Phase 2	1	7	8																														
Injection Well - ramp up	6	-1	4					■	■	■	■	■	■																				
Injection Well - full production	9	5	13																														
Injection Well - ramp down	4	14	17																														
Well Drilling	14	-1	12					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rinsing	14	5	18																														
Reclamation and Closure	5	17	21																														

NI 43-101 Preliminary Economic Assessment Technical Report for the Van Dyke Copper Project, Gila County, Arizona. Effective date: December 30, 2020.



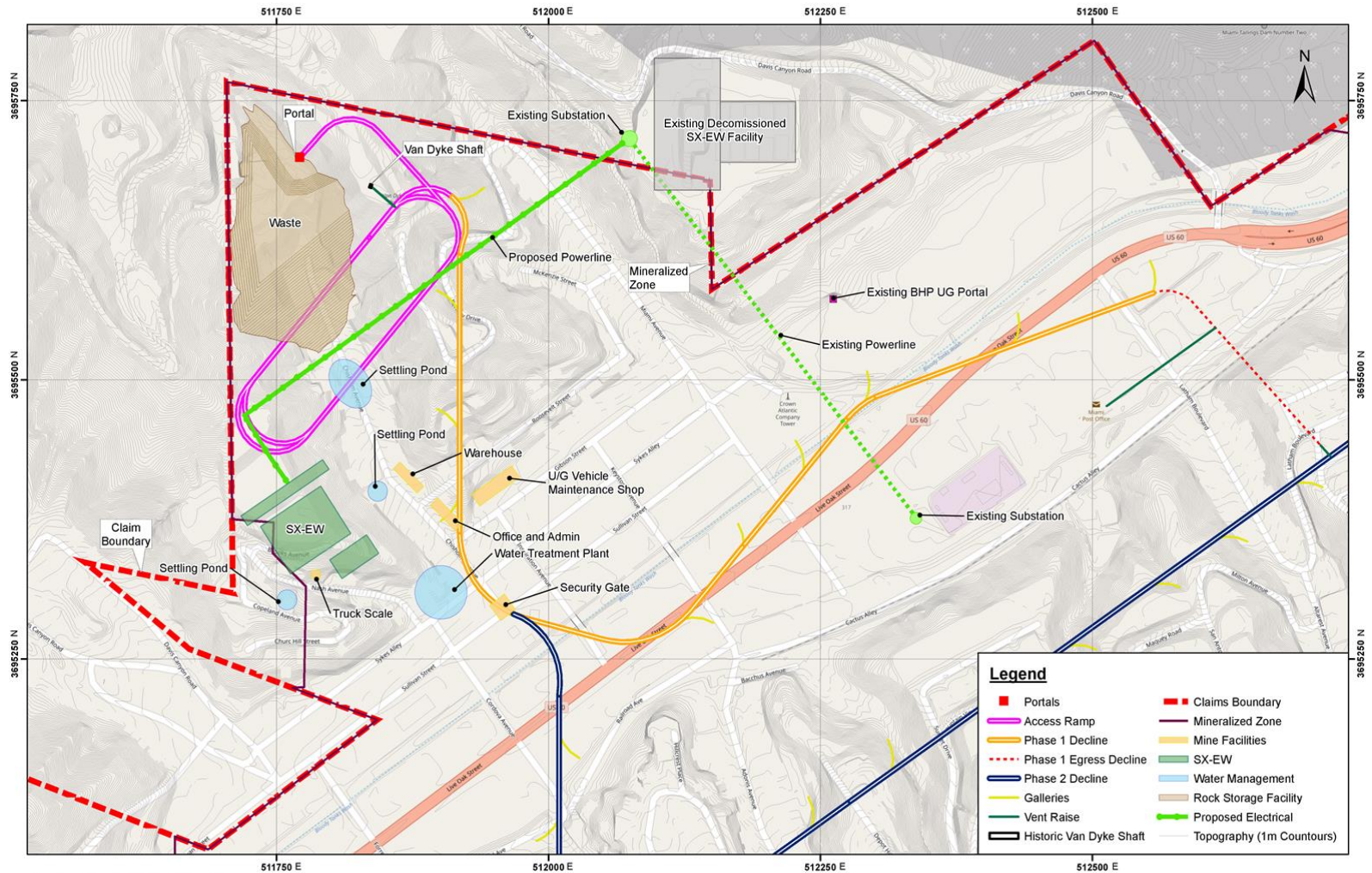
# Underground Development

- Modern tunneling methodologies
- Minimized dimensions of underground working mitigates surface disturbance
- Life of mine ('LOM') underground voidage roughly 190,000 m<sup>3</sup> of waste rock
- Waste rock dump 120 meters ('m) x 200 m
- ~87,000 m<sup>3</sup> of rock extracted in pre-production
- Minimal water inflow expected in pre-production period
- Water pumped to Water Management Pond to settle and evaporate

Excavation Type	Qty	Length (m)	Dimensions	Shape	Total Length (m)
Main Access Ramp to Portal	1	1,456	4.6m W x 4.6m H	Arch (wall 3.1m)	1,456
Vents/ Access from Ramp to Van Dyke shaft	2	15	3.6m W x 3.6 m H	Flat	30
Phase 1 Decline	1	1,141	4.6m W x 4.6m H	Arch (wall 3.1m)	1,141
Phase 1 Vent/Egress Decline	1	216	3.6m W x 3.6 m H	Flat	216
Vent/Egress Raise	1	401	3.0m dia	Bore	401
Galleries	10	74	6.1m W x 6.1m H	Arch (wall 4.6m)	740
<b>Phase 1 Total Excavation</b>					<b>3,984</b>
Phase 2 Decline	1	1,173	4.6m W x 4.6m H	Arch (wall 3.1m)	1,173
Phase 2 Vent/Egress way	1	23	2.0 m x 2.0 m	Flat	23
Galleries	14	54	6.1m W x 6.1m H	Arch (wall 4.6m)	756
<b>Phase 2 Total Excavation</b>					<b>1,952</b>
<b>Combined Total Excavation</b>					<b>5,936</b>

NI 43-101 Preliminary Economic Assessment Technical Report for the Van Dyke Copper Project, Gila County, Arizona. Effective date: December 30, 2020.

# Project Infrastructure



Legend	
	Portals
	Access Ramp
	Phase 1 Decline
	Phase 1 Egress Decline
	Phase 2 Decline
	Galleries
	Vent Raise
	Historic Van Dyke Shaft
	Claims Boundary
	Mineralized Zone
	Mine Facilities
	SX-EW
	Water Management
	Rock Storage Facility
	Proposed Electrical
	Topography (1m Countours)

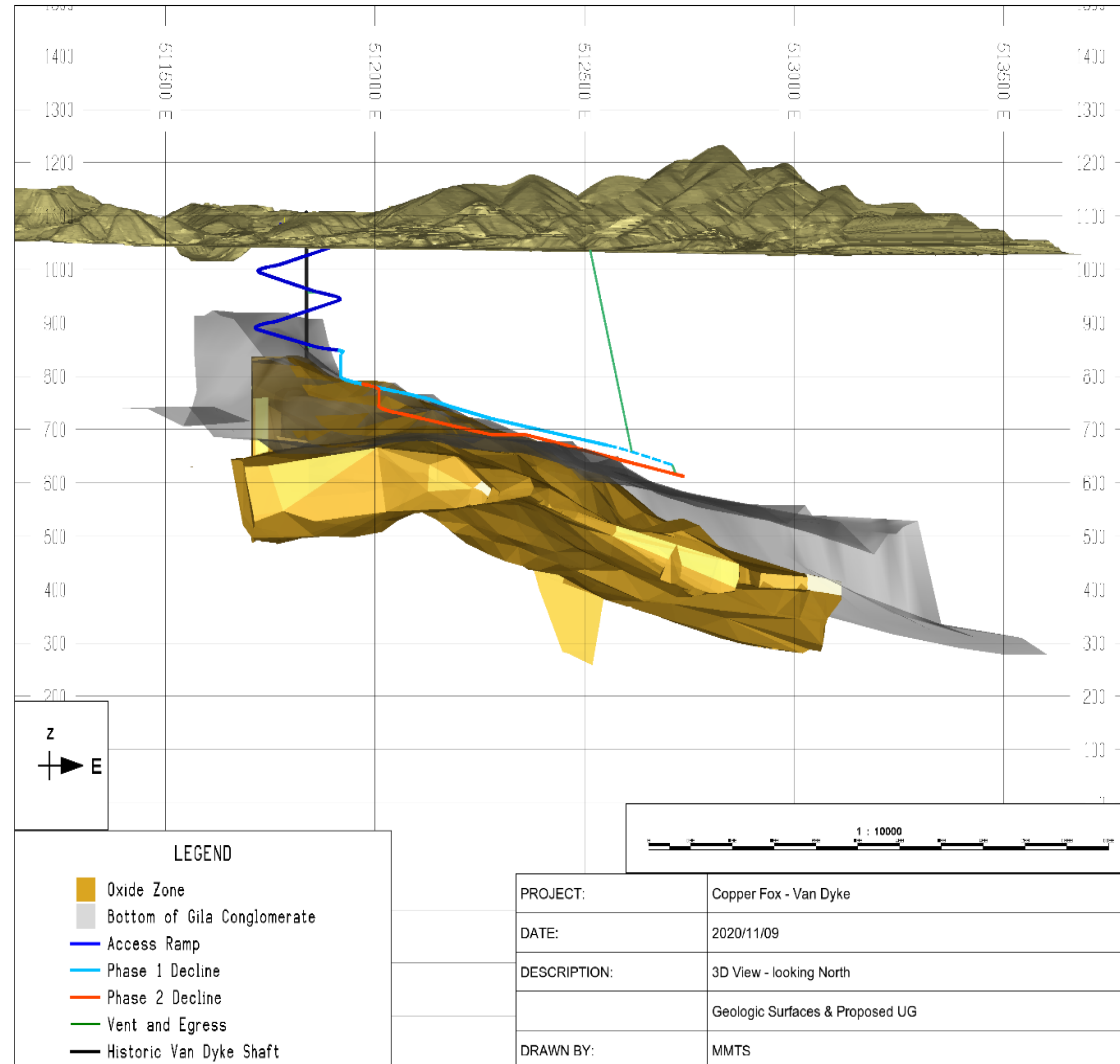
Coordinate System: NAD 1927 UTM Zone 12N  
 Projection: Transverse Mercator  
 Datum: North American 1927

**Van Dyke Project**  
 PEA 2020 - General Arrangement  
 Date: 2021-01-07  
 Drawn By: DH



# Proposed Underground Development

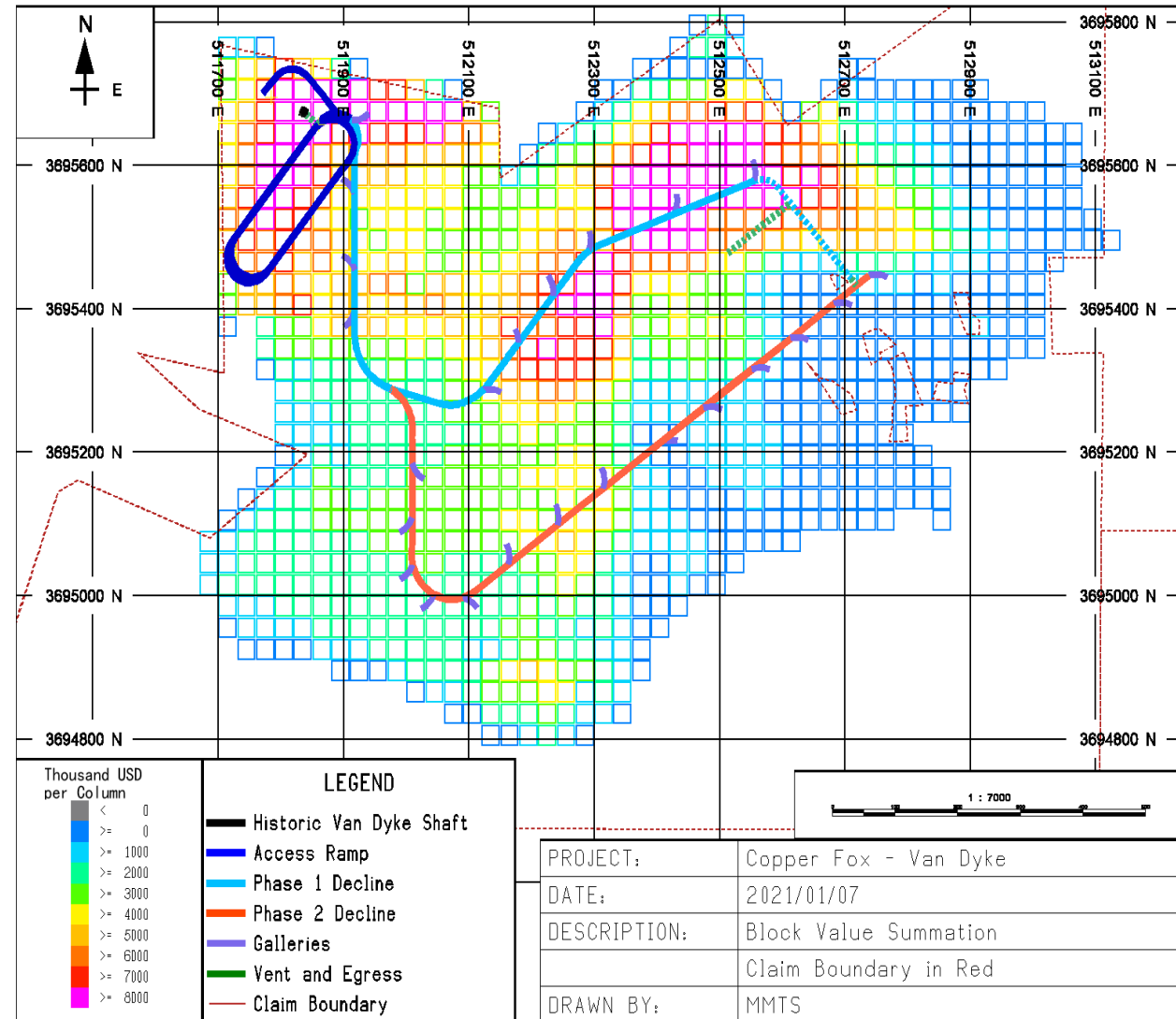
- Decline to approximately 900 feet below surface
- Lateral ramp advanced +/- 50 meters above Gila Conglomerate/Leach Cap contact
- Install injection and recovery well stations and other infrastructure along underground ramp



NI 43-101 Preliminary Economic Assessment Technical Report for the Van Dyke Copper Project, Gila County, Arizona. Effective date: December 30, 2020.

# Proposed Ramp Layout

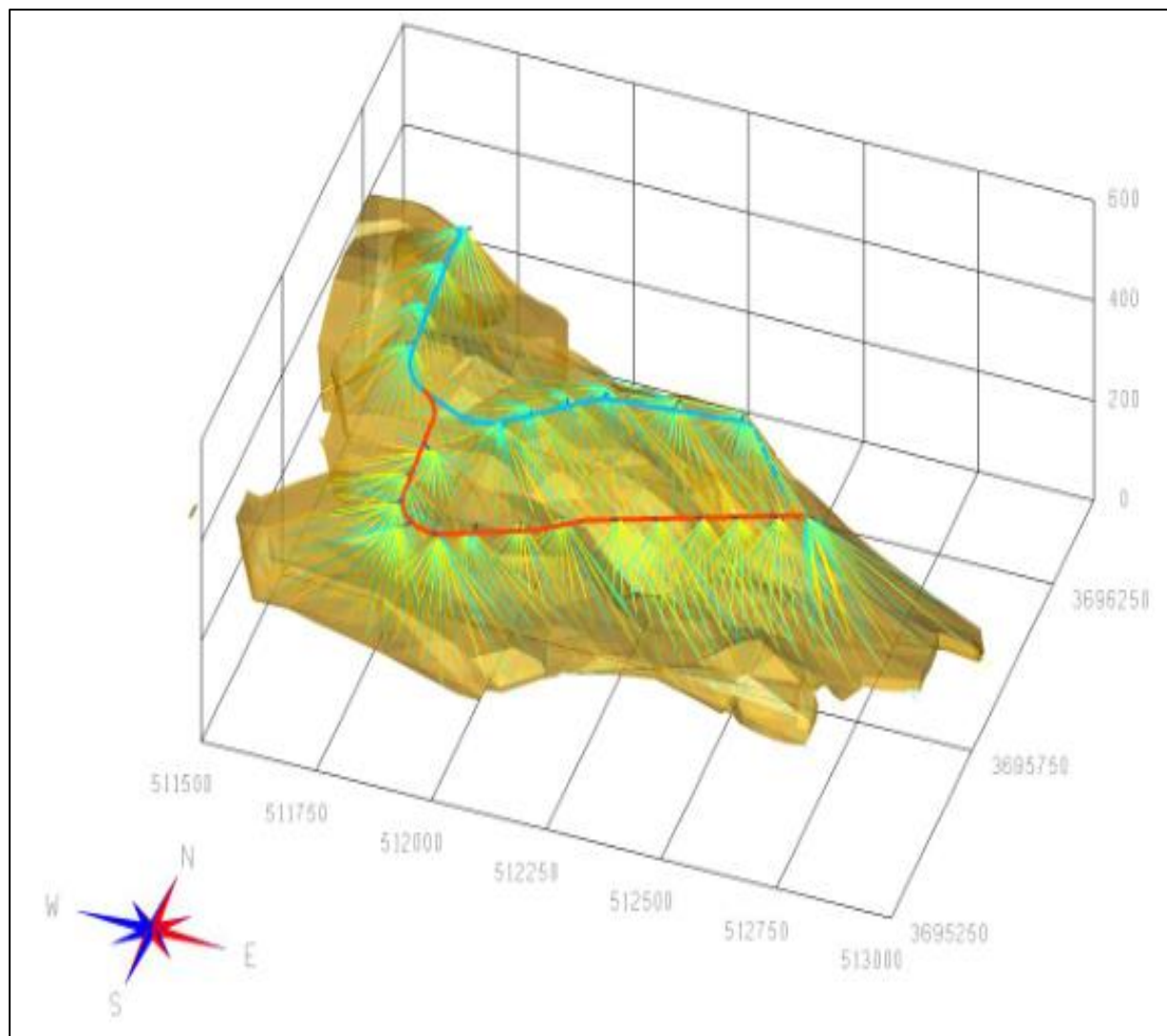
- Two higher grade areas within the deposit
- Phase I (year 1-7) focused on higher grade zone to increase copper production/reduces payout and financial risks
- Phase II (year 8-17) extraction of lower grade portion of deposit



NI 43-101 Preliminary Economic Assessment  
 Technical Report for the Van Dyke Copper Project,  
 Gila County, Arizona. Effective date: December 30,  
 2020.

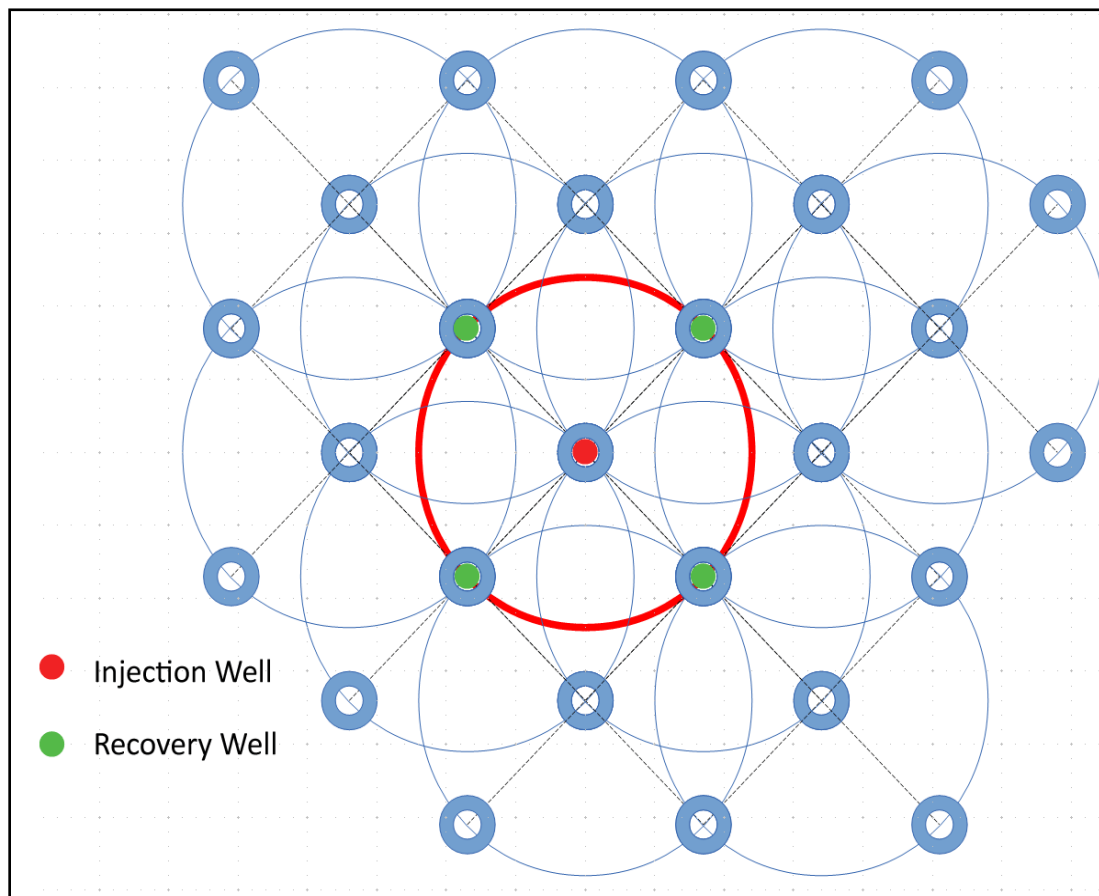
# Proposed Wellfield Layout

- Gently dipping mineralized envelope
- Phase I and Phase II ramps (blue & red)
- Injection and recovery wells (yellow & blue)
- Total of ~1925 sub-horizontal wells
- Observation and perimeter monitoring wells not shown
- Final well arrangement depends on Underground Injection and Control permit requirements
- Establish workings above base of Gila Conglomerate to preserve hydrogeological integrity of Leach Cap

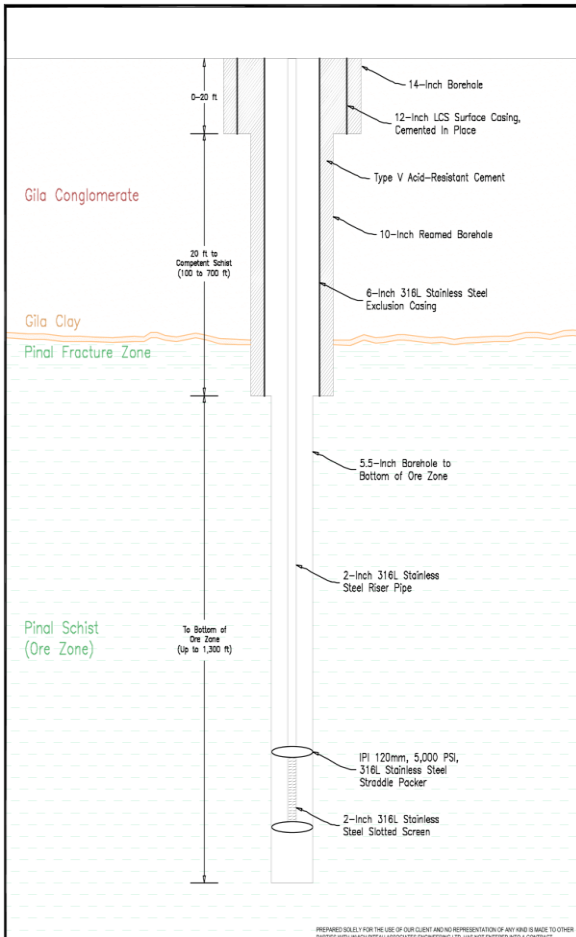


# Conceptual Wellfield Design

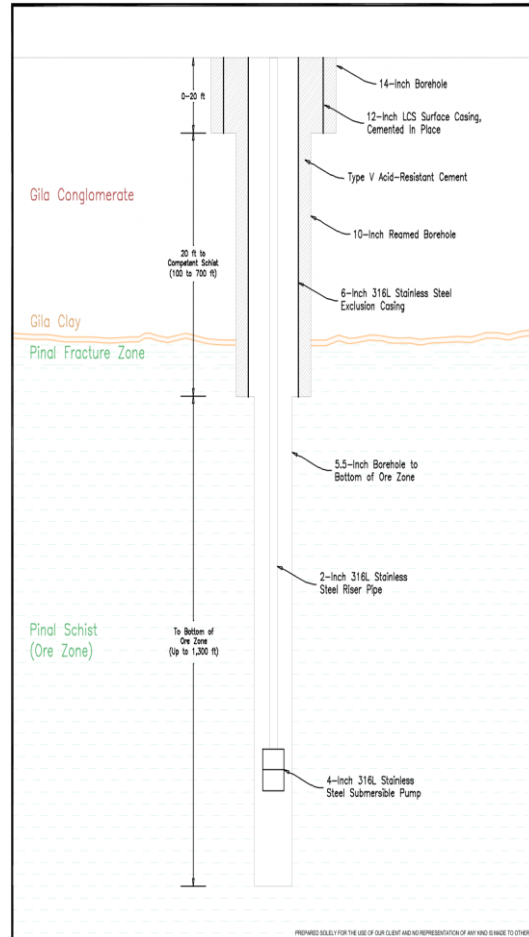
- Wellfield design similar to the Florence ISCR project currently under construction
- Design creates “cone of depression” for solution to flow from injection to recovery wells
- Need to achieve “connectivity” between injection and recovery wells to establish solution flow



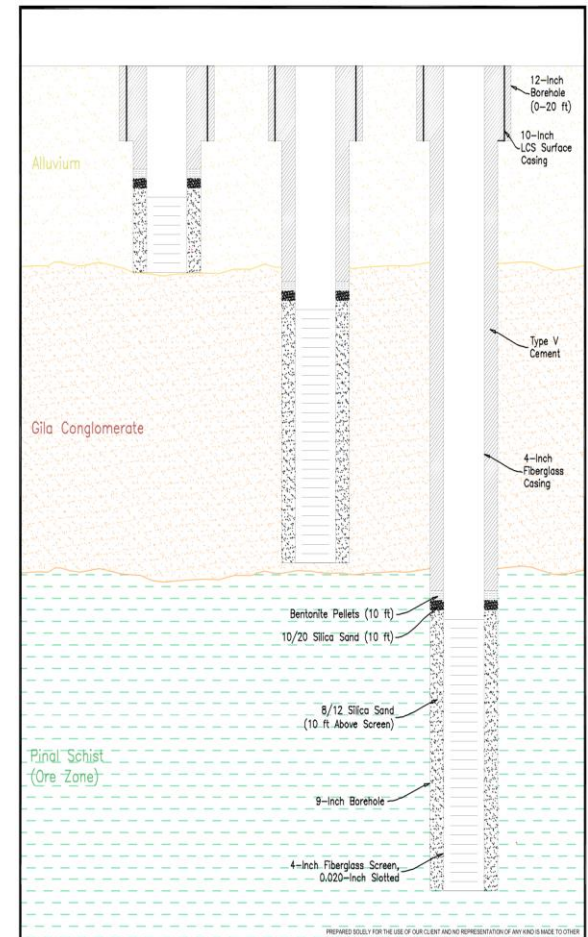
# Conceptual Well Designs



VAN DYKE IN-SITU LEACH PROJECT		<b>PITEAU ASSOCIATES</b> GEOTECHNICAL AND WATER MANAGEMENT CONSULTANTS	
2020 PRELIMINARY ECONOMIC ASSESSMENT UPDATE	CONCEPTUAL INJECTION WELL DESIGN	BY: BZ APPROVED: JD	DATE: OCT20 FIG: 2



VAN DYKE IN-SITU LEACH PROJECT		<b>PITEAU ASSOCIATES</b> GEOTECHNICAL AND WATER MANAGEMENT CONSULTANTS	
2020 PRELIMINARY ECONOMIC ASSESSMENT UPDATE	CONCEPTUAL RECOVERY WELL DESIGN	BY: BZ APPROVED: JD	DATE: OCT20 FIG: 3

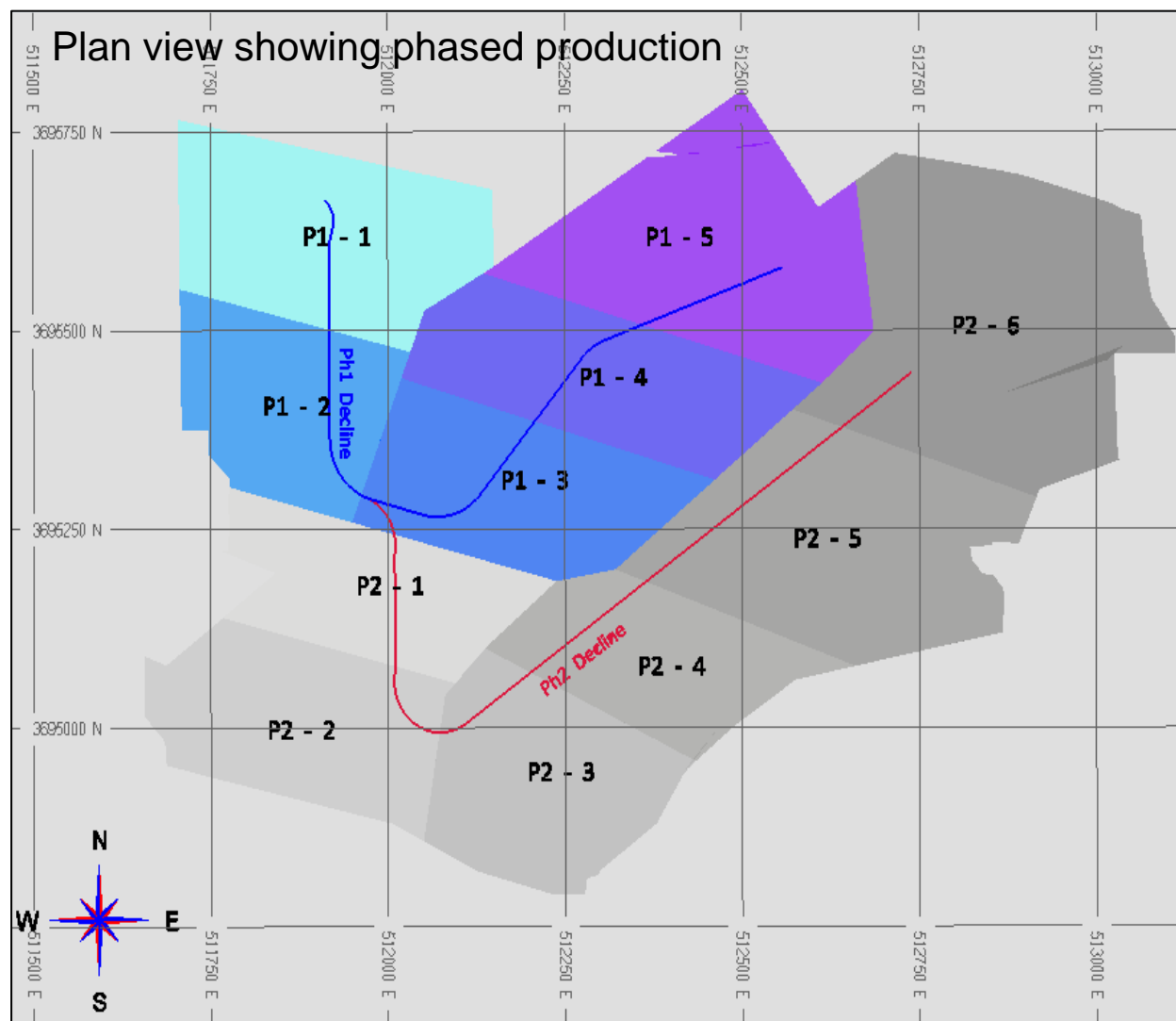


VAN DYKE IN-SITU LEACH PROJECT		<b>PITEAU ASSOCIATES</b> GEOTECHNICAL AND WATER MANAGEMENT CONSULTANTS	
2020 PRELIMINARY ECONOMIC ASSESSMENT UPDATE	CONCEPTUAL MONITORING WELL DESIGN	BY: BZ APPROVED: JD	DATE: OCT20 FIG: 4

NI 43-101 Preliminary Economic Assessment Technical Report for the Van Dyke Copper Project, Gila County, Arizona. Effective date: December 30, 2020.

# Proposed Leach Plan

- 11 panels in 2 phases planned LOM
- Saturation of panels in phase 1 (1 - 5) consumes most of water requirements
- During operations only make up water required (est. 5-7% annually)
- On completion of leaching, panel will be rinsed using local water source
- Rinsed solution will be sent to water treatment plant
- Further studies
  - geotechnical
  - geochemical
  - metallurgical
  - porosity
  - fracture frequency

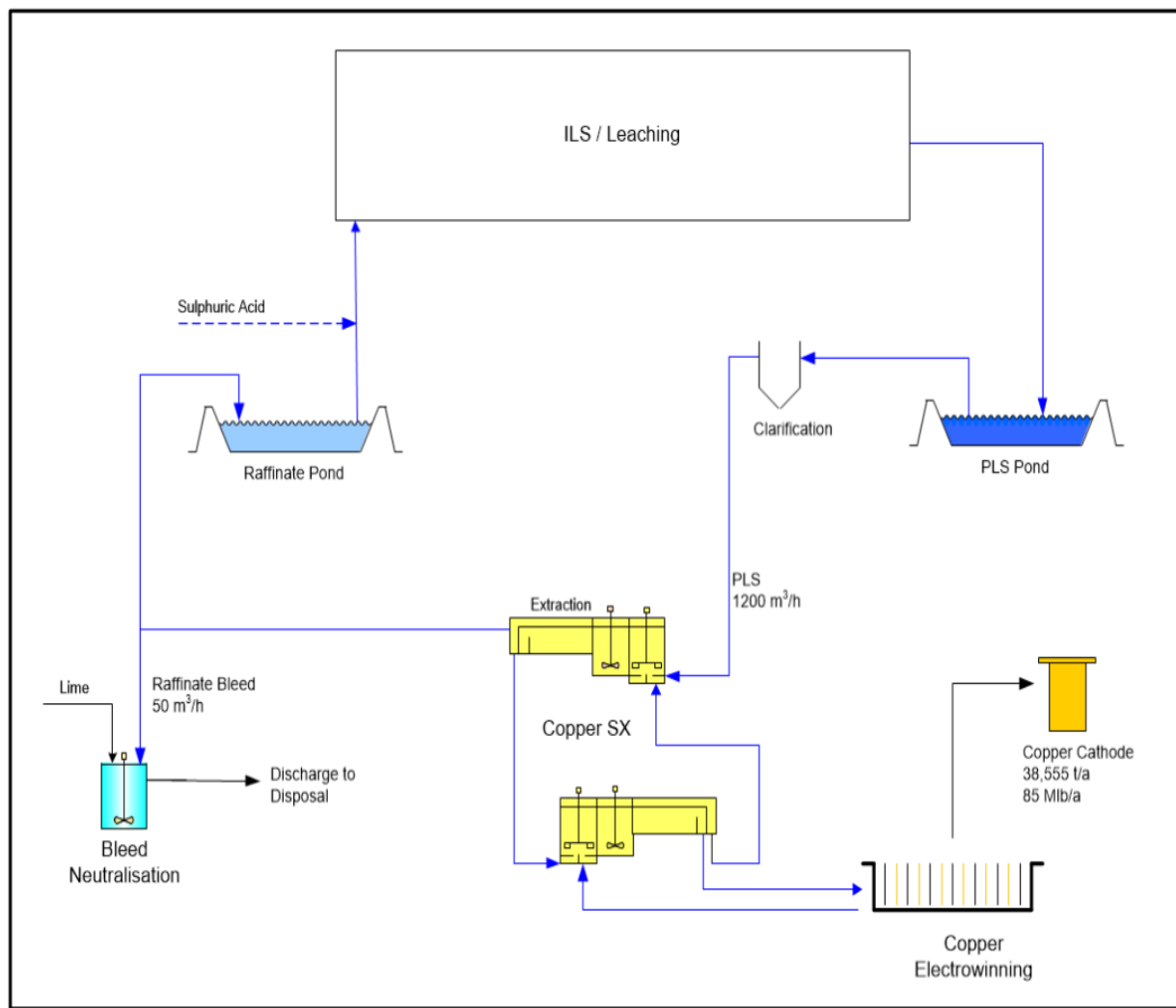


NI 43-101 Preliminary Economic Assessment Technical Report for the Van Dyke Copper Project, Gila County, Arizona. Effective date: December 30, 2020.



# Process Flowsheet

- ISCR preferred methodology
- ISCR is a leach extraction process where a reagent is injected into the deposit via injection wells to dissolve soluble copper minerals
- ISCR is essentially a “closed circuit” that consumes very little water after leaching begins
- Copper bearing solution (‘PLS’) is extracted using recovery wells
- Grade A copper cathode is produced onsite using conventional solvent extraction and electrowinning processes (SX/EW)

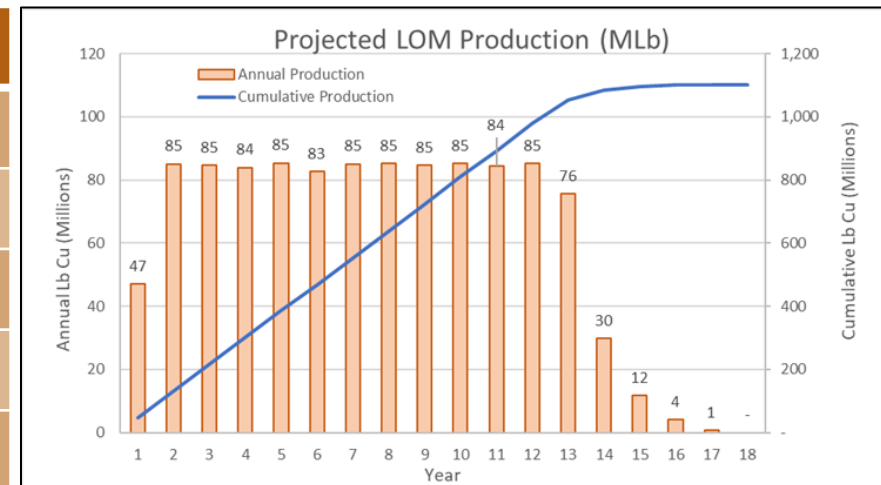


NI 43-101 Preliminary Economic Assessment Technical Report for the Van Dyke Copper Project, Gila County, Arizona. Effective date: December 30, 2020.

# Closure

- Completed to ADEQ and EPA requirements
- Rinse wellfield to restore water quality
- Decommission and remove all buildings and process infrastructure
- Earth structure reshaped and revegetated to maintain stability and minimize erosion
- Treat rinse water for ~2 years (or permit requirements)
- Decommission water management and treatment facilities
- Estimated cost for closure activities in table below from Van Dyke 2020 PEA

Reclamation and Closure	(000's)
Wellfield Decommissioning	\$4,800
Infrastructure Decommissioning	\$4,400
SX-EW Decommissioning	\$5,400
Water Treatment Plant Decommissioning	\$4,600
<b>Total Reclamation and Closure Costs</b>	<b>\$19,200</b>



# Solubility/Mineralogical Testwork

- Mineral solubility (bottle roll) testwork on Oxide and Transitional (chalcocite) mineralogical zones
- Testwork results
  - Primary gangue minerals all low acid consuming minerals
  - Carbonate concentration averaged 0.013%
  - Iron Oxide concentration (jarosite/goethite/hematite) averaged 0.96%
  - Silicate and oxide copper minerals all 100% soluble in leaching solutions
- Testwork indicated low potential for generation of carbon dioxide gas and precipitation of gypsum during leaching operations
- Copper recoveries ranged from 8.6% to 96.5% (average 65.1%) in the Oxide zone and from 11.7% to 72.2% (average 30.4%) in the Transition zone within the 72-hour leach period
- Pregnant leach solution ('PLS') grades at the end of the 72-hour leach period ranged from 0.19 g/l to 15.30 g/l copper

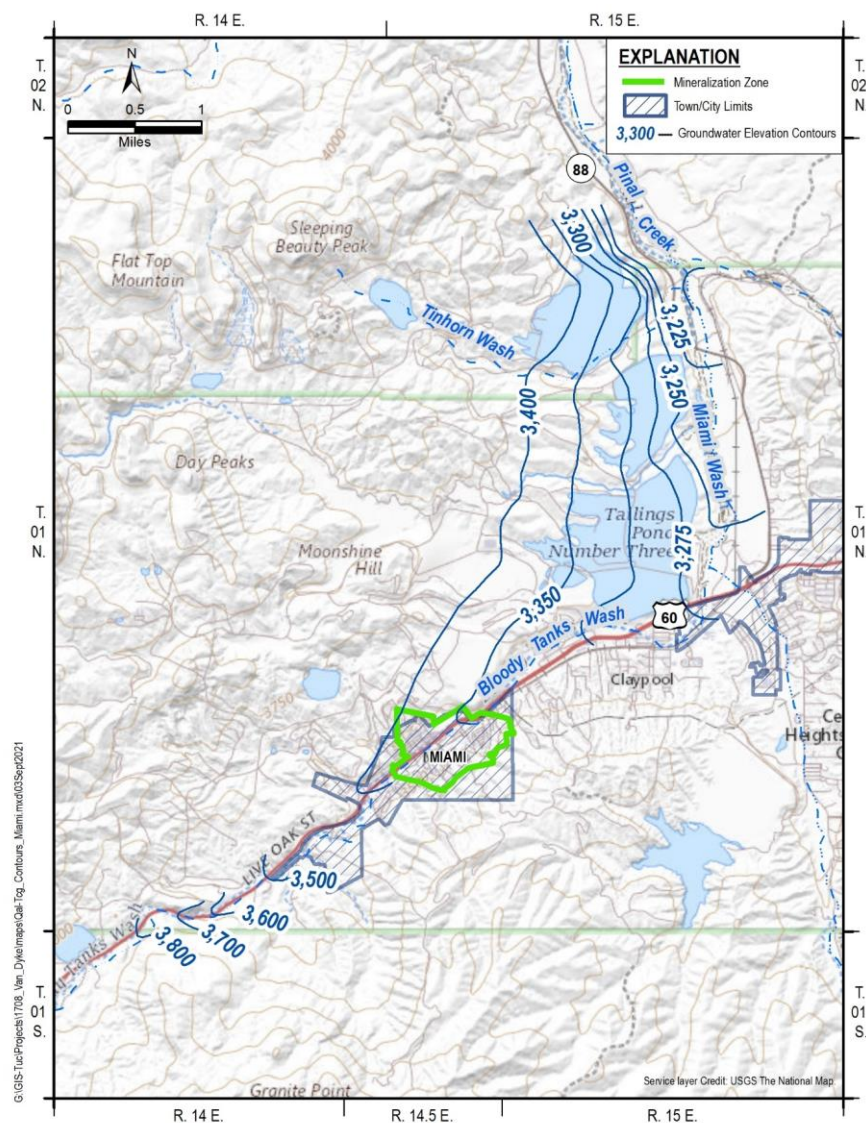
# Regional Hydrogeology

- Quaternary alluvium and Tertiary Gila Conglomerate are hydraulically connected
- Flow to the northeast, along Bloody Tanks Wash toward Pinal Creek

## Hydrogeology Objectives

- Understand groundwater levels, flow rate and flow direction(s)
- Measure hydrogeology changes over time, if any
- Determine range of hydraulic properties of the Tcg, pCpi, and faults
- Establish baseline for water levels and water quality
- Develop a strong hydrogeology model to be used in the permitting process

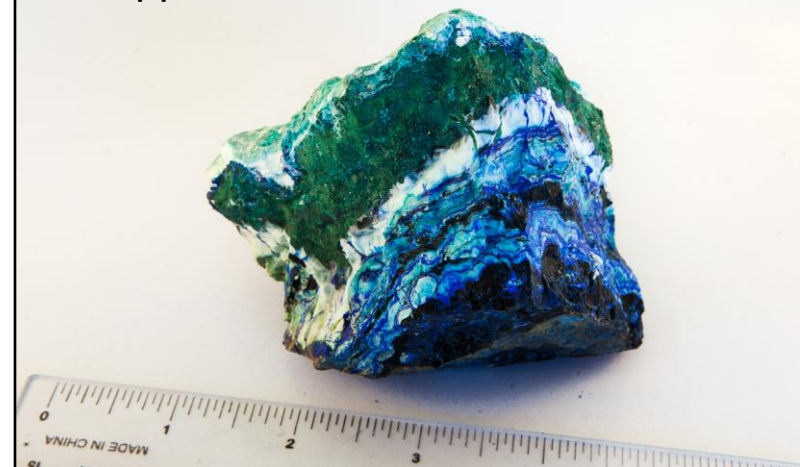
Source: ESI (1983)



# Potential Socio-Economic Benefit

- Long life project, mine life of 17 years with potential extension to 21 years and beyond
- Significant tax base/job creation for Miami and surrounding area, providing funding for schools, infrastructure, etc.
  - Direct jobs 134
  - Indirect jobs 402
- Total operating costs of US\$1.07B, a large portion stays in the Miami-Globe area and Arizona
- Severance Tax estimated at US\$24M
- Arizona State Tax estimated at US\$64M
- Federal Income Tax estimated at US\$257M

Copper mineralization from 1300 ft



NI 43-101 Preliminary Economic Assessment Technical Report for the Van Dyke Copper Project, Gila County, Arizona. Effective date: December 30, 2020.

# Activities

## Completed Activities

- Biological Assessment of Wildlife and Wildlife Habitat
- Impacts Assessment
- Archeological Assessment
- Stakeholder Engagement – local communities, US EPA and ADEQ ongoing
- Mineral solubility testwork – yielded positive results
- Geotechnical study of the Gila Conglomerate



## Current Activities

- Hydrogeology
  - Four hydrogeological monitoring stations established – data collection ongoing (see image to the right)
  - Analysis of the formational waters from the Gila Conglomerate collected during the 2023-2024 drillhole rehabilitation program returned concentrations of metals, anions, and cations well below acceptable limits established by the US EPA
- Advancing to the Prefeasibility Study ('PFS') stage



# Selected References

- Dowling, J. and Zimmerlund, B. (2020), Technical Memorandum Van Dyke ISL – PEA Update, Piteau Associates, Tucson, AZ.
- Golder Associates, 1997, Cyprus Miami Mining Corporation. Aquifer Protection Permit Application Volume 2 Site Overview, dated April 1997.
- Harshbarger & Associates (Harshbarger), 1971. Review of Geophysical Logs and Cores RE Hydrogeological Conditions, Miami Project. Memo to R. Haxby and T. Clary, dated December 16, 1971.
- Harshbarger, 1975. Review of Hydrogeological Conditions of Shallow Aquifer Along Bloody Tanks Wash and Proposed Mine Model for In-Situ Leach Operations dated December 29, 1975.
- Knight Piésold and Co., 2020. Van Dyke Permit Requirements Review, Rev0 letter report to Cindy Starzyk at Knight Piésold Ltd. September 17, 2020.
- Moon, P. and Axen S. 1980. Van Dyke Project M-2 Deepening and Conversion dated December 3, 1980
- MMTS, 2021. NI 43-101 Preliminary Economic Assessment Technical Report for the Van Dyke Copper Project, Gila County, Arizona. Effective date: December 30, 2020.
- MMTS, 2015. NI 43-101 Preliminary Economic Assessment Technical Report for the Van Dyke Copper Project, Gila County, Arizona.
- Neaville, C.C. and Brown, J. G., 1994. Hydrogeology and Hydrologic System of Pinal Creek Basin, Gila County, Arizona. U.S. Geological Survey Water-Resources Investigations Report 93-4212, 1994.
- Starzyk, C. and Friedman, D. (2020): Update on Conceptual Hydrogeologic Model and Well Design Recommendations for the Van Dyke Project, Knight Piésold, Vancouver, British Columbia.

# Corporate Information



## Corporate Office

Suite 650, 340 – 12 Ave SW  
Calgary, AB T2R 1L5 Canada  
1-403-264-2820

## Executive & Management

**Elmer B. Stewart**, MSc., P.Geo.

President & CEO

**Mark T. Brown**, B.Comm, CPA, CA

CFO

**Lynn Ball**

VP Corporate Affairs

## Desert Fox Office

3445 E Highway 60,  
Miami, AZ 85539-1353 USA



## Investor Relations

1-844-464-2820

[Investor@copperfoxmetals.com](mailto:Investor@copperfoxmetals.com)