

CRITICAL MINERALS

SILVER, GOLD, COPPER & CRITICAL MINERALS

IN THE HIGH-GRADE KENO HILL AND
LA PLATA MINING DISTRICTS



**METALLIC
MINERALS**

APRIL 2023

TSX.V: MMG | OTCQB: MMNGF

Forward-looking statements and technical disclosure



Metallic Minerals:

Scott Petsel, P.Geol., is the Qualified Person under NI 43-101 who has reviewed and approved the technical information contained in this presentation

Stillwater Critical and Granite Creek Copper:

The Qualified Person under NI 43-101 who has reviewed and approved the technical information contained in this presentation are:

Mike Ostenson, P.Geol. (Montana)

Debbie James, P.Geol. (Yukon, Ontario, BC and Alaska projects)

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Some statements contained in this presentation are forward-looking and, therefore, involve uncertainties or risks that could cause actual results to differ materially. Such forward-looking statements include among other things, comments regarding mining and milling operations, mineral resource statements and exploration program performance. They may also include statements with respect to the Company's mineral discoveries, plans, outlook and business strategy. The words "may", "would", "could", "should", "will", "likely", "expect", "anticipate", "intend", "estimate", "plan", "forecast", "project" and "believe" or other similar words and phrases are intended to identify forward-looking information.

Factors that could cause actual results to differ materially include, but are not limited to, metal price volatility, economic and political events affecting metal supply and demand, fluctuations in mineralization grade, geological, technical, mining or processing problems, exploration programs and future results of exploration programs, future profitability and production, the ability to raise sufficient capital to fund exploration, litigation, legislative, environmental and other judicial, regulatory, political and competitive developments; technological or operational difficulties or inability to obtain permits encountered in connection with exploration activities; and labour relations matters.

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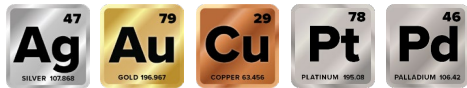
Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Resources: These tables use the terms "Measured", "Indicated" and "Inferred" Resources. United States investors are advised that while such terms are recognized and required by Canadian regulations, the United States Securities and Exchange Commission does not recognize them. "Inferred Mineral Resources" have a great amount of uncertainty as to their existence, and as to their economic and legal viability. It cannot be assumed that all or any part of an Inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian rules, estimates of Inferred Mineral Resources may not form the basis of a feasibility study. United States investors are cautioned not to assume that all or any part of Measured or Indicated Mineral Resources will ever be converted into Mineral Reserves.

The Metallic Group

Rapid Advancement from Exploration to Resource Stage



TSX.V: **MMG** | OTCQB: **MMNGF**



Silver, Gold, Copper

In the High-Grade Keno Hill and La Plata Mining Districts

15 Moz Ag
889 Mlbs Cu*

116 Mt 0.39% CuEq
0.35% Copper
Inaugural 43-101 Resource April 2022 4.02 g/t Silver

mmgsilver.com

*See NI 43-101 Report and Mineral Resource Estimate February 25, 2022



TSX.V: **PGE** | OTCQB: **PGEZFF**



Critical Minerals

In the Stillwater District
Montana, USA

1.6 Blbs Ni, Cu, Co*
3.8 Moz Pd, Pt, Au, Rh

255 Mt 0.39% NiEq (or 1.19 g/t PdEq)
43-101 Resource Update
January 2023

criticalminerals.com

*See NI 43-101 Report and Mineral Resource March 11, 2023



TSX.V: **GCX** | OTCQB: **GCXXF**



High-Grade Copper

In the Minto District
Yukon, Canada

650 Mlbs Cu
300,000 Oz Au
3.8 Million Oz Ag

36.2 Mt 1.1% CuEq (0.81% Cu,
43-101 PEA 0.31 g/t Au & 3.41 g/t Ag)
January 2023

gcxcopper.com

*See NI 43-101 Report and Mineral Resource Estimate April 29, 2022

Leadership

Building on a Proven Model for Value Creation



Building on a proven model for value creation



Board and Management with extensive experience in exploration and mining industry, raising over \$650 million in project financing



Awarded for excellence in environmental stewardship demonstrating commitment to responsible resource development and appropriate ESG practices



Putting together industry leading agreements with Alaska Native Corporations and First Nations

A Proven Track Record



Credited with the discovery and advancement of major precious and base metal deposits globally:

Donlin Creek, Alaska:
M&I 40 Moz Au¹

Galore Creek, British Columbia:
M&I 9.5 Blbs Cu, 8 Moz Au & 145 Moz Ag
Inf 3.2 Blbs Cu, 3 Moz Au & 50 Moz Ag²

Platreef, South Africa:
M&I 41.9 Moz PGE+Au & 3.7 Blbs Ni + Cu
Inf 52.8 Moz PGE+Au & 5.2 Blbs Ni + Cu³

Experience with leading explorers, developers and producers

NOVAGOLD

TRILOGY
metals inc

IVANHOE MINES
NEW HORIZONS

BARRICK

Newmont™

1) Donlin Gold Project NI 43-101 [Technical Report](#) — November 18, 2011:541 MT at 2.24 g/t Au; 2) Galore Creek Mining Corp [Mineral Resource Table](#): 1,103.5 MT at 0.47% Cu, 0.26 g/t Au, 4.2 g/t Ag; 3)- Ivanhoe Mines Ltd, Platreef [Feasibility Study](#), March 2022: Indicated Mineral Resources; 2 g/t Cut-off 3PE+Au 346 MT at 1.68 g/t Pt, 1.70 g/t Pd, 0.28 g/t Au, 0.11 g/t Rh, 0.16% Cu, 0.32% Ni Inferred Mineral Resources; 2 g/t Cut-off 3PE+Au 506 MT at 1.42 g/t Pt, 1.46 g/t Pd, 0.26 g/t Au, 0.10 g/t Rh, 0.16% Cu, 0.31% Ni

The Metallic Group

Strategy & Approach to Business



Leadership



Highly experienced leadership with a track record of major discoveries

Properties



Identify and acquire district-scale, brownfields properties next to high-grade mines

Acquisitions



Make acquisitions during the lows in metal price cycle in under-explored brownfields areas

Technology



Apply systematic exploration utilizing new technologies and exploration models

Value



Create long term value by making discoveries, growing resources and de-risking toward production

Infrastructure



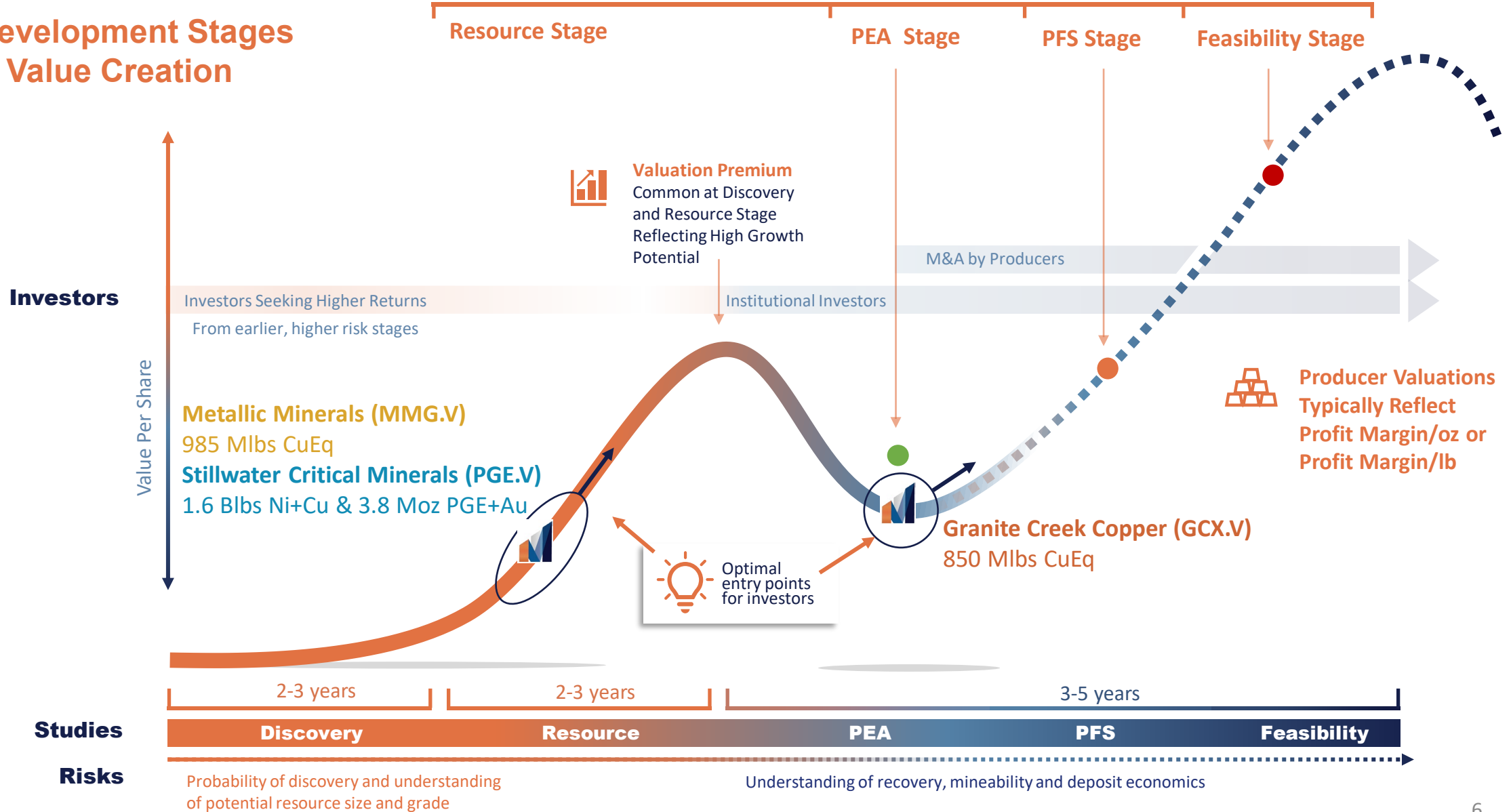
Existing infrastructure allows for rapid development timelines and reduced capital requirements

Exploration / Development Value Curve



Typical Enterprise Values by Stage

Development Stages & Value Creation

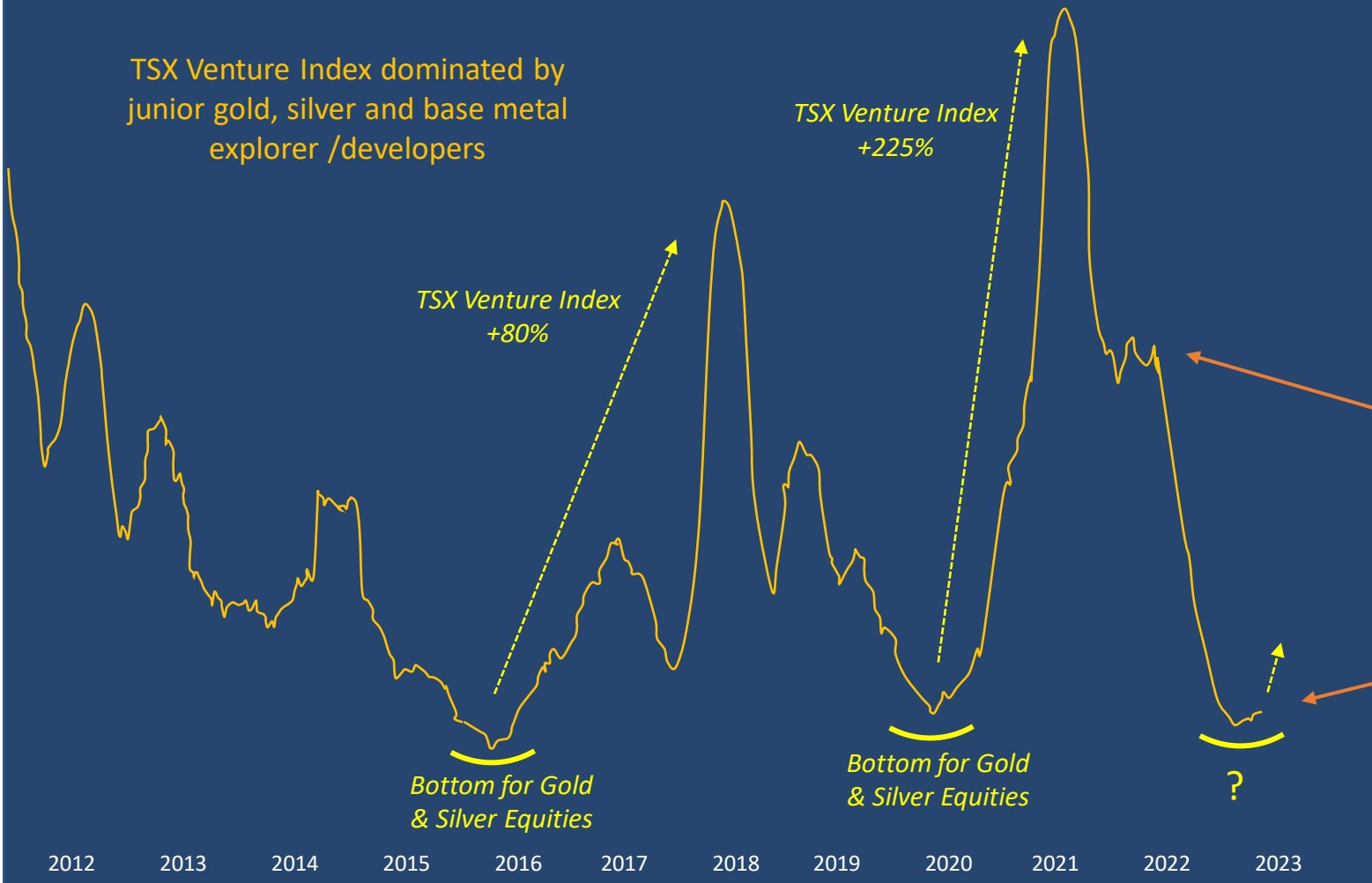


Exploration / Development Stage Value Opportunity



TSX Venture Exchange Turnover

50-Day Average Daily Value Traded in CAD Millions



Crescat Capital January 2023 Research Letter – Mispriced Inflation

Metal prices and large / mid cap mining shares (GDX, SIL and GDXJ, SILJ) have started to move

Small cap explorer / developers have historically lagged early then surpassed these benchmarks

Investment money flow into junior explorer/ developers has been falling for the past 2 years

Third major low in cycle for junior explorer / developers

Source: Bloomberg; Kevin Smith

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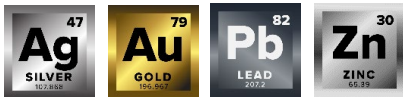
METALLIC MINERALS

TSX-V: **MMG**

OTCQB: **MMNGF**

Three key silver, gold and copper assets:

KENO SILVER PROJECT



High-Grade Silver (Ag-Pb-Zn)

- 100%** Owned project adjacent to Hecla Mining
- 171km²** 2nd Largest land position in Canada's historic Keno Silver district
- OVER 300M** Ozs of historic production and current resources in the district
- 5** Advanced stage "resource-ready" targets.
- 40+** High-grade and bulk tonnage targets

LA PLATA COPPER-SILVER-GOLD PROJECT



Precious Metals Rich Porphyry

World Class Metallogenic Province for Silver, Gold, Copper and Critical Minerals

- 985 Mlbs Cu Eq¹** Inaugural 43-101 Inferred mineral resource estimate
- 116 Mt** 0.39% CuEq
0.35% Copper
Inferred 43-101 Resource 4.02 g/t Silver

Resource defines a large-scale mineralized porphyry system 1 km in length, 400 m wide and 1 km in depth and open in all directions to significant expansion

KLONDIKE ALLUVIAL PRODUCTION



New Royalty Agreement

- \$\$\$** New royalty agreement with Little Flake Mining (Parker Schnabel) of hit Discovery Channel TV show "Gold Rush"
- 10-15%** Royalties to be received by Metallic from experienced mining operators
- 10+** Operations will potentially exist within our claims once fully developed
- 20M** Ounces have been produced from the Klondike since its discovery in 1898

LEADERSHIP

Building on a proven model for value creation



Board and Management with extensive experience in global exploration and mining industry, raising over \$650 million in project financing



Yukon Government award for excellence in environmental stewardship demonstrating commitment to responsible resource development and appropriate ESG practices



Credited with the discovery and advancement of a number of major precious and base metal deposits in North America:

- Donlin Creek, Alaska: M&I 40 Moz Au¹
- Galore Creek, BC: M&I 9.5 B lbs Cu, 9 Moz Au & 145 Moz Ag²
- Ambler, Alaska: 11 Blbs Cu, 6 Blbs Zn, 100 Moz Ag, 1.5 Moz Au
- Wellgreen, Yukon: M&I 6 Moz PGM+Au, 3 B lbs Ni+Cu³

TRACK RECORD OF SUCCESS

TSX-V: **MMG**

OTCQB: **MMNGF**

Greg Johnson

Chief Executive Officer & Board Chairman

30+ years experience in exploration and development of large-scale mining projects. Co-founder of NovaGold, former CEO of Wellgreen Platinum and South American Silver, exploration management at Barrick (Placer Dome). Recipient of Thayer Lindsley International Discovery Award.

Gregor Hamilton, BSc, MSc

Independent Director

25+ years of experience in mining sector as a geologist, investment banker and entrepreneur. Capital markets and global experience in M&A and structured finance.

Peter Harris, P.Eng

Independent Director

40+ years of global mining industry experience in project evaluation, development, mine construction and operations. Executive positions at Barrick (Placer Dome) and NovaGold.

Douglas Warkentin, BSc, P.Eng

Independent Director

30+ years experience in mining and mineral processing. Current Senior Metallurgist at Kemetco Research Inc. Co-founder of Stillwater Critical Minerals.

Scott Petsel, P.Geo, MBA

President

30+ years experience in global exploration, mine geology, project management and advancement. Senior roles with NovaGold, Trilogy Metals (NovaCopper), Barrick (Placer Dome) and Kinross (Echo Bay).

Jeff Cary, CPG, MSc

Senior Project Geologist

30+ years of experience in exploration for high-grade and bulk tonnage deposits for precious and base metals in the Yukon, Great Basin, Colorado Mineral Belt and Mexico including senior roles with Newmont (Battle Mountain Gold).

Jacob Longridge, Ph.D

Consulting Geologist

Mineral exploration experience from exploration stage to mine development in North and South America, including specific expertise in porphyry systems and remote sensing technologies.

Danie Grobler, Ph.D

Consulting Geologist

25+ years experience in global exploration, including Head of Geology and Exploration for Ivanhoe Mines. Expertise in base metal and platinum group elements within magmatic systems.

- Experience -

NOVAGOLD

TRIOLOGY
metals inc

IVANHOE MINES
NEW HORIZONS

BARRICK

Newmont™

METALLIC
MINERALS
CORP

1) Donlin Gold Project NI 43-101 [Technical Report](#) — November 18, 2011: 541 MT at 2.24 g/t Au; 2) Galore Creek Mining Corp [Mineral Resource Table](#): 1,103.5 MT at 0.47% Cu, 0.26 g/t Au, 4.2 g/t Ag; 3) Nickel Creek Platinum 2018 NI 43-101 [Resource Update](#): 323 MT at 0.26% Ni, 0.16% Cu, 0.015% Co, 0.253 g/t Pt, 0.255 g/t Pd, 0.046 g/t Au.

INDUSTRY PARTNERS

Leveraging geologic expertise and new technologies

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DISCOVERIES CORP

The U.S. Geological Survey (USGS) and the Colorado Geological Survey are mapping the historic La Plata mining district

USGS maintains lists of critical minerals for the US Government

Under their **Earth Mapping Resources Initiative (Earth MRI)** program the La Plata Mining district has been identified as an area with significant potential for developing critical minerals

The Colorado Geological Survey and USGS have identified the La Plata district as an area with significant potential for developing critical minerals

The new geologic maps will refine understanding of the geologic framework of mineral areas of interest.

The Colorado Geological Survey (CGS) is a state government agency situated within the Colorado School of Mines

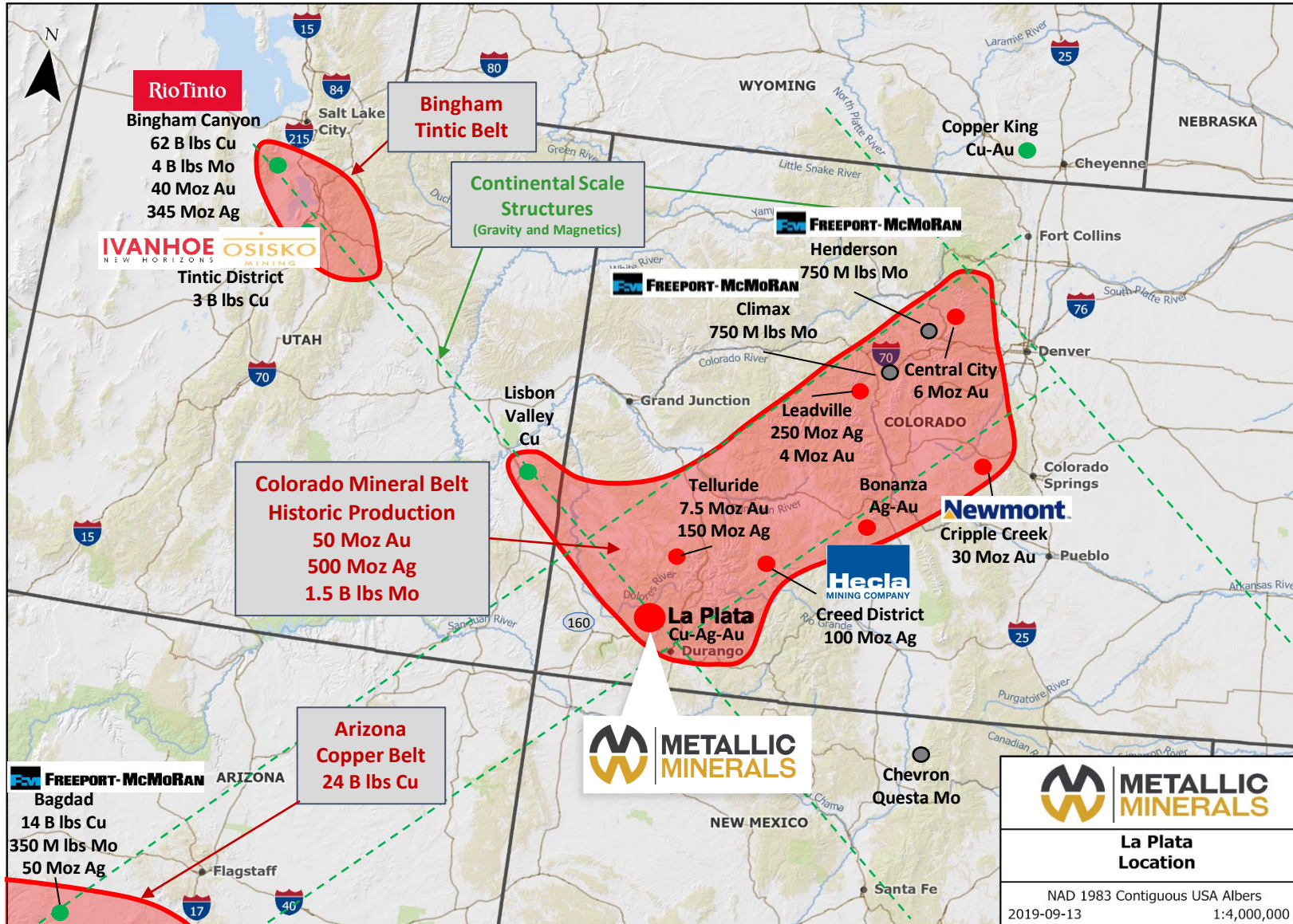
Goldspot uses AI to produce Smart Targets – drill holes based on the analysis of data layers.

Application of GoldSpot Discoveries' proprietary Artificial Intelligence and machine-learning analysis tools to Metallic's substantial database for **enhanced target development and further increased discovery rate**

LA PLATA COPPER-SILVER-GOLD-PGE PROJECT

TSX-V: **MMG**

OTCQB: **MMNGF**



World Class
Metallogenic Province
for Copper, Silver, Gold,
and Critical Minerals

Inaugural 43-101 Mineral
Resource Estimate
Announced April 2022







1. All figures represent historic production data from USGS reports and professional papers: 148, 378, 1112, 1666, 1926, 2008-1155



PRECIOUS METAL RICH PORPHYRY DEPOSITS

SOME OF THE WORLD'S LARGEST AND HIGHEST-GRADE COPPER PRODUCERS

Precious metal rich copper porphyries are cornerstone assets for the majors!

 <p>Grasberg (Indonesia) PP+MI 82 Blbs Cu, 94 Moz Au, 580 Moz Ag¹ Block Cave Mining (began Open Pit) <i>Produced 34 Blbs Cu and 54 Moz Au since 1990</i> <i>One of the worlds largest Cu and Au deposits²</i></p>	 <p>Oyu Tolgoi (Mongolia) PP+MI 41 Blbs Cu, 20 Moz Au, 140 Moz Ag³ Inf 48 Blbs Cu, 34 Moz Au, 205 Moz Ag Block Cave Mining First production 2012 Advanced by IVANHOE MINES <small>NEW HORIZONS</small></p>	 <p>Bingham Canyon (Utah, USA) PP+MI 24.6 Blbs Cu, 3.4 Moz Au & 40 Moz Ag⁵ Block Cave Mining (began Open Pit) <i>Produced 42 Blbs Cu, 36 Moz Au and 305 Moz Ag⁶</i> <i>over past 100 years as one of the worlds largest mines</i></p>
 <p>Cadia Ridgeway (Australia) PP+MI 24.3 Blbs Cu, 50 Moz Au, 87 Moz Ag⁸ Inf 1.9 Blbs Cu, 3.9 Moz Au, 8 Moz Ag Block Cave Mining <i>Produced 3 Blbs Cu and 12 Moz Au since 1998⁸</i></p>	<p>Development stage</p>  <p>Golpu (Papua New Guinea) PP+MI 27 Blbs Cu, 27 Moz Au, 49 Moz Ag⁸ Inf 2.6 Blbs Cu, 2.8 Moz Au, 5 Moz Ag Open Pit + Block Cave Mining <i>One of the largest high-grade Cu-Au porphyry discoveries in the past 20 years</i></p>	<p>Development stage</p>  <p>Galore Creek (BC, Canada) M&I 9.5 Blbs Cu, 8 Moz Au, 145 Moz Ag⁷ Inf 3.2 Blbs Cu, 3 Moz Au, 50 Moz Ag Open Pit (not explored below pit models) Advanced by NOVAGOLD</p>

LA PLATA COPPER-SILVER-GOLD-PGE PROJECT

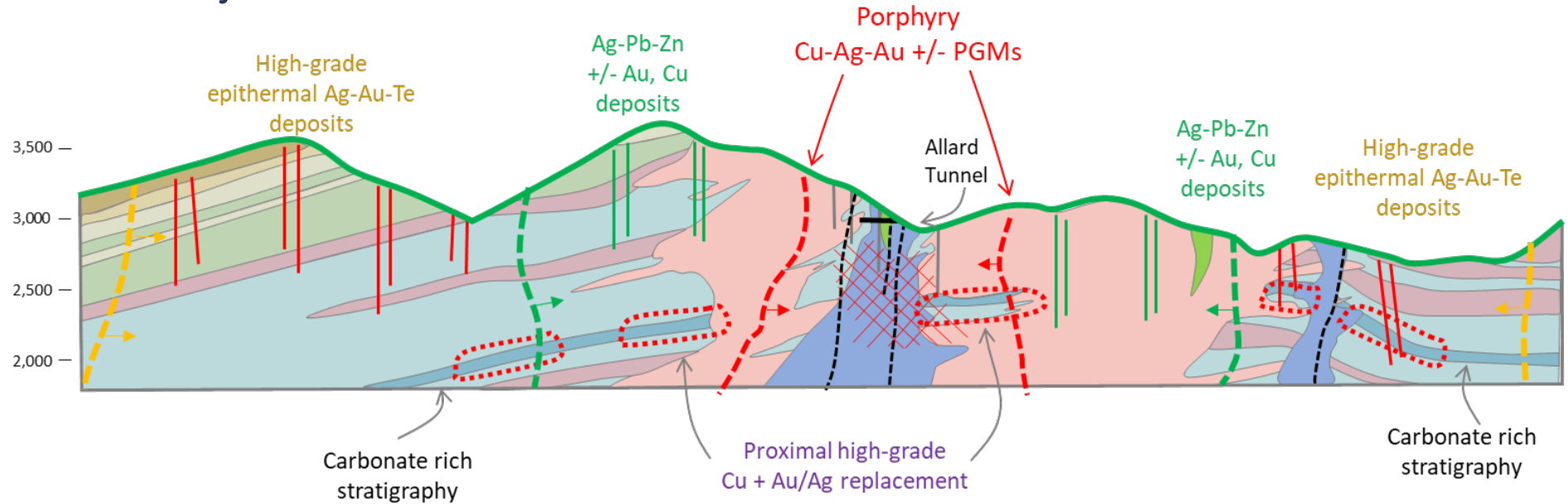
HISTORY AND TARGETS

TSX-V: **MMG**

OTCQB: **MMNGF**

La Plata Project Schematic Cross Section

Precious Metals Rich Porphyry and Associated High-Grade Epithermal Systems



Long history of mining in the La Plata district

High-grade silver and gold production from 90 different prospects and mines from 1870s to 1940s¹

- Exploration by Rio Tinto and Freeport-McMoRan (previously Phelps Dodge) in 1950s to 1970s
- 58 holes totaling 16,900 meters define a large-scale mineralized porphyry system with high-grade copper plus significant silver and gold
- SGS Geosciences completed NI 43-101 resource estimate in 2022

**Inaugural NI 43-101
resource estimate
announced April 2022**

**985 MLBS
CuEq**



Targets Allard copper-silver porphyry deposit which remains open to significant expansion



Envisions large-scale underground bulk mining method

16

Additional centers of potential porphyry mineralization and significant high-grade gold and silver targets

LA PLATA A NEW COPPER-SILVER RESOURCE

La Plata Inferred Mineral Resource Estimate

Cut-off Grade = 0.25% CuEq (Sensitivity Analysis Shown at Various CuEq Cut-off Grades)

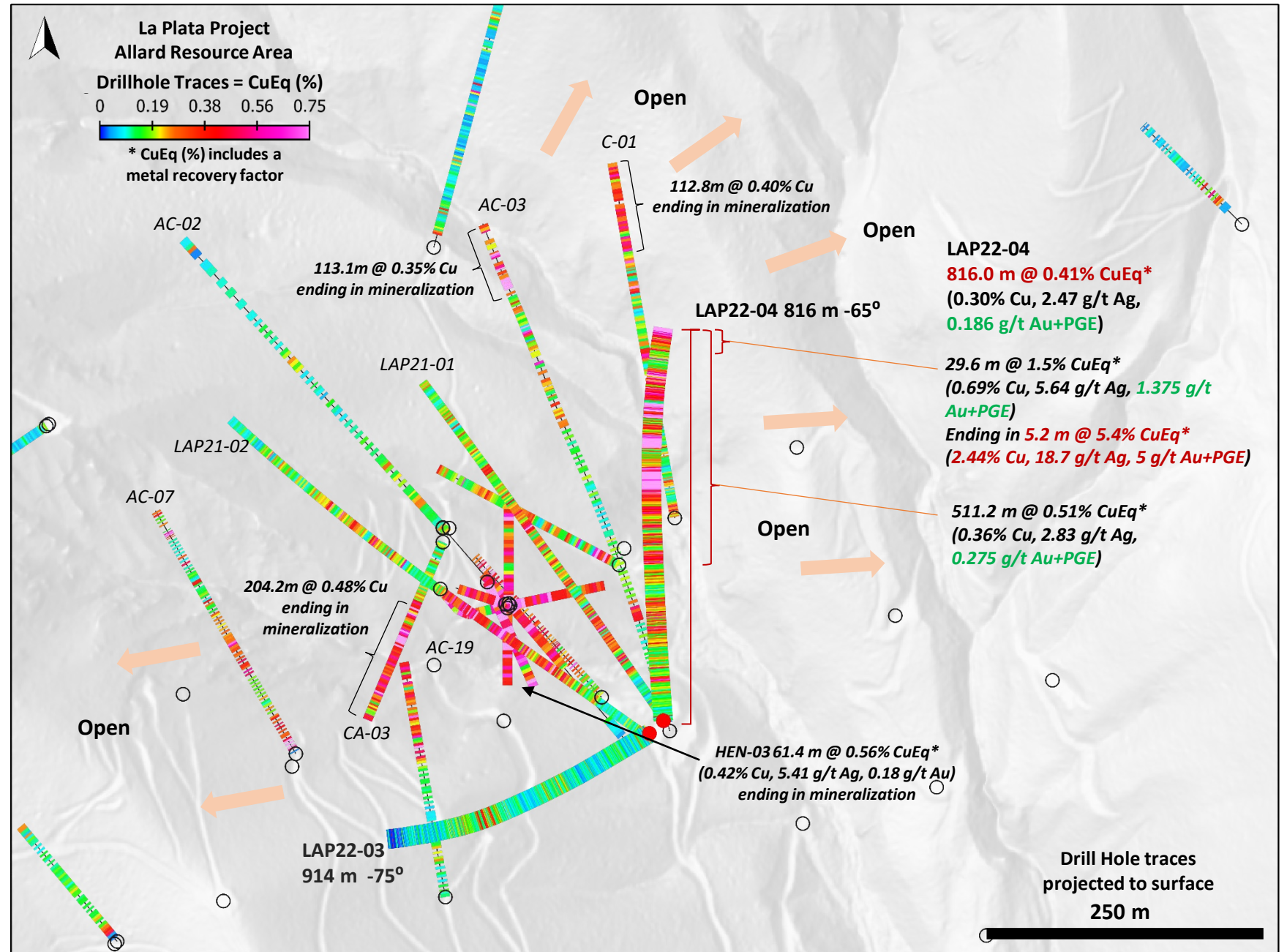
Class	CuEq (%)	Tonnes	Cu		Ag		CuEq*	
	Cut-off		Grade (%)	Mlbs	Grade (g/t)	Ounces	Grade (%)	Mlbs
Inferred	0.15	151,327,000	0.31	1,040	3.68	17,888,000	0.35	1,154
Inferred	0.2	142,378,000	0.32	1,008	3.77	17,273,000	0.36	1,118
Inferred	0.25	115,731,000	0.35	889	4.02	14,975,000	0.39	985
Inferred	0.3	86,986,000	0.38	733	4.31	12,056,000	0.42	810
Inferred	0.35	60,752,000	0.42	565	4.61	9,000,000	0.46	622

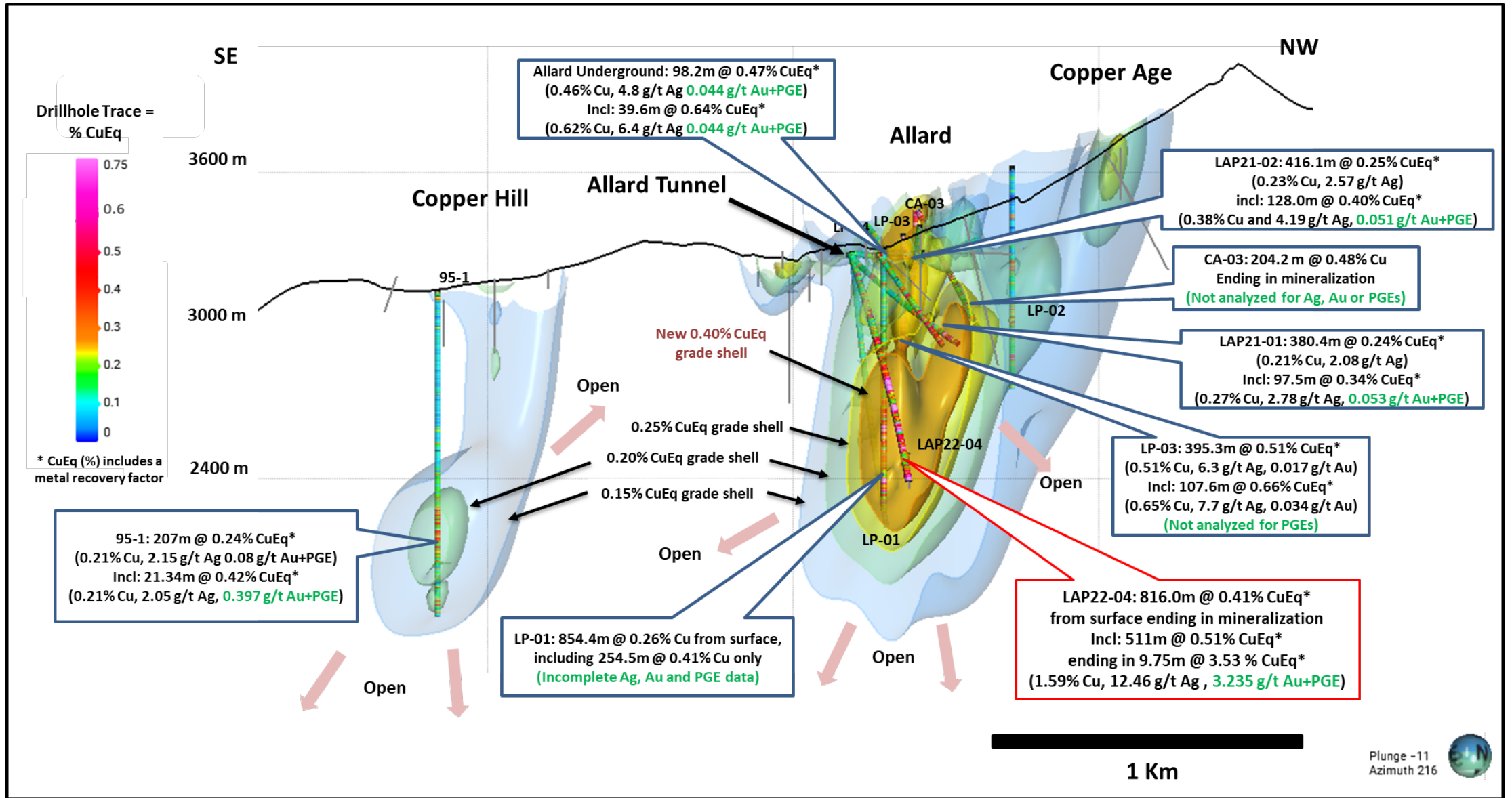
Gross NSR value at base case = \$32/tonne at \$3.60 lb copper and \$22.50/oz silver with mining and processing cost of \$16.80/tonne

The Mineral Resource has been estimated in conformity with CIM Estimation of Mineral Resource and Mineral Reserve Best Practices Guidelines (2019) and current CIM Definition Standards - For Mineral Resources and Mineral Reserves (2014). The constrained Mineral Resources are reported at a base case cut-off grade of 0.25% CuEq, based on metal prices of \$3.60/lb Cu and \$22.50/oz Ag, assumed metal recoveries of 90% for Cu and 65% for Ag, a mining cost of US\$5.30/t rock and processing and G&A cost of US\$11.50/t mineralized material. (1) Cu Eq calculations are based on 100% recovery of all metals using the same metal prices used for the resource calculation. All figures are rounded to reflect the relative accuracy of the estimate.*

The current Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred Resources in this Mineral Resource Estimate are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as Indicated or Measured. However, based on the current knowledge of the deposits, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

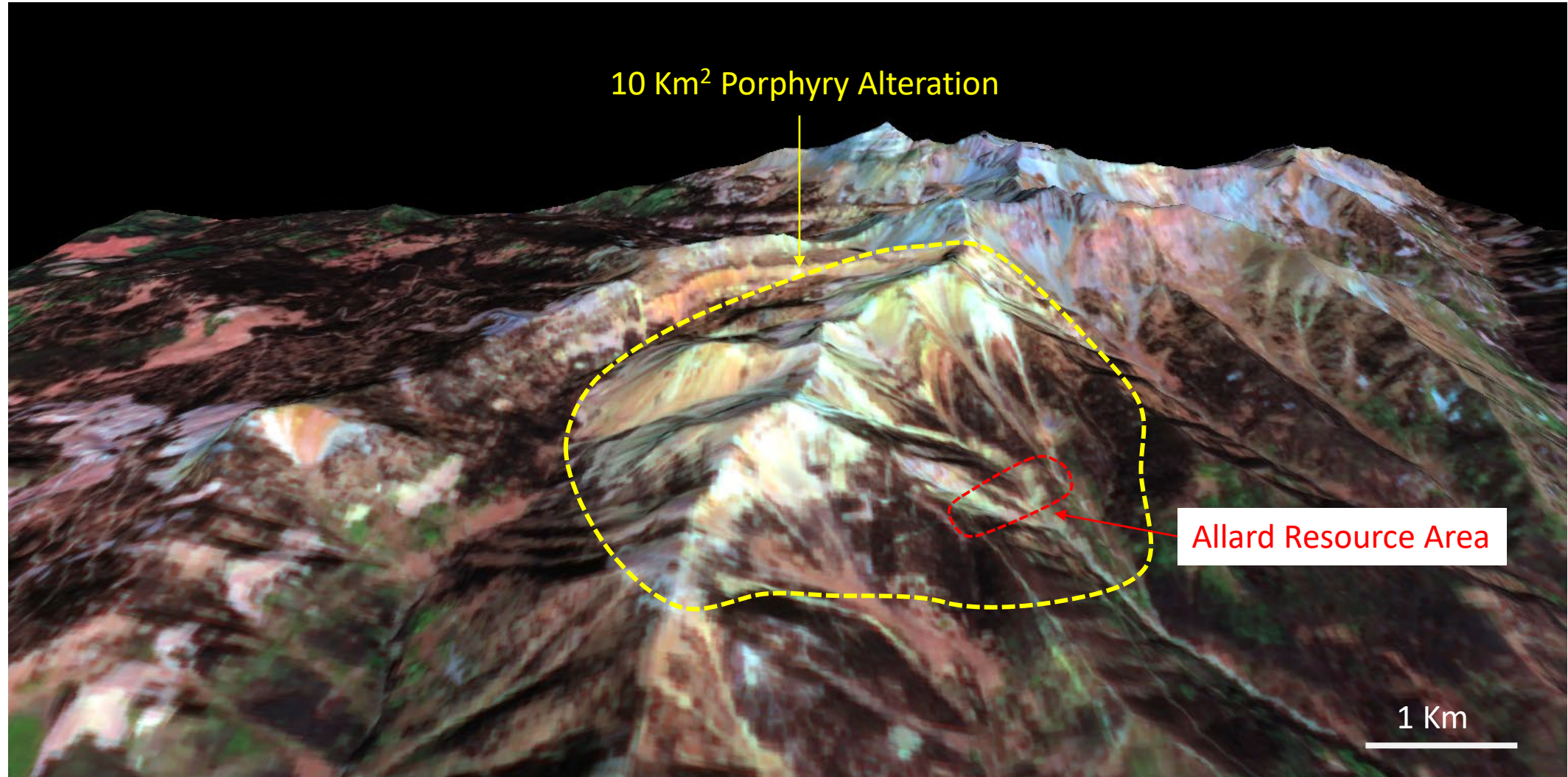
La Plata Project Plan Map with Significant Drill intervals





LA PLATA COPPER-SILVER-GOLD-PGE PROJECT

Remote Spectral Imagery – Looking North



YUKON MINING INDUSTRY

Excellent access & power infrastructure

TSX-V: **MMG**

OTCQB: **MMNGF**

-  Mining is the Yukon's #1 economic sector with a well-defined regulatory system
-  Existing road access along Yukon highway 11 and 2
-  Deep sea, year-round port and concentrate facilities in Skagway, Alaska
-  4-megawatt grid power at Keno Hill mill complex with 1-megawatt in use



ADJACENT KENO HILL MINE & ECONOMICS

TSX-V: **MMG**

OTCQB: **MMNGF**



- Hecla completed acquisition of Alexco Resources in September 2022
- The third largest primary silver producer in the world
- Keno Hill operations scheduled for restart in Q3 2023



Keno Hill Mill Complex

2021 Keno Hill Technical Report Update Highlights¹:

Mine Life	Avg. Silver Grade	Annual Silver Production	LOM AISC	Initial Capex	IRR
8 Years P&P Reserves	804 g/t Ag 1,035 g/t AgEq	4.4 Moz/yr Ag	USD \$11.59	USD \$23.2M	295% Post-tax



1) Source: Alexco Resource Technical Report, titled "NI 43-101 Technical Report on Updated Mineral Resource and Reserve Estimate of the Keno Hill Silver District" with an effective date of April 1, 2021 and dated May 26, 2021. References to adjoining properties are for illustrative purposes only and are not necessarily indicative of the exploration potential, extent or nature of mineralization or potential future results of the Company's projects. The Company does not have access to such project or underlying information and has not independently verified any of the scientific, technical or exploration information related to such third-party project.

KENO HILL SILVER DISTRICT

MMG CLAIMS

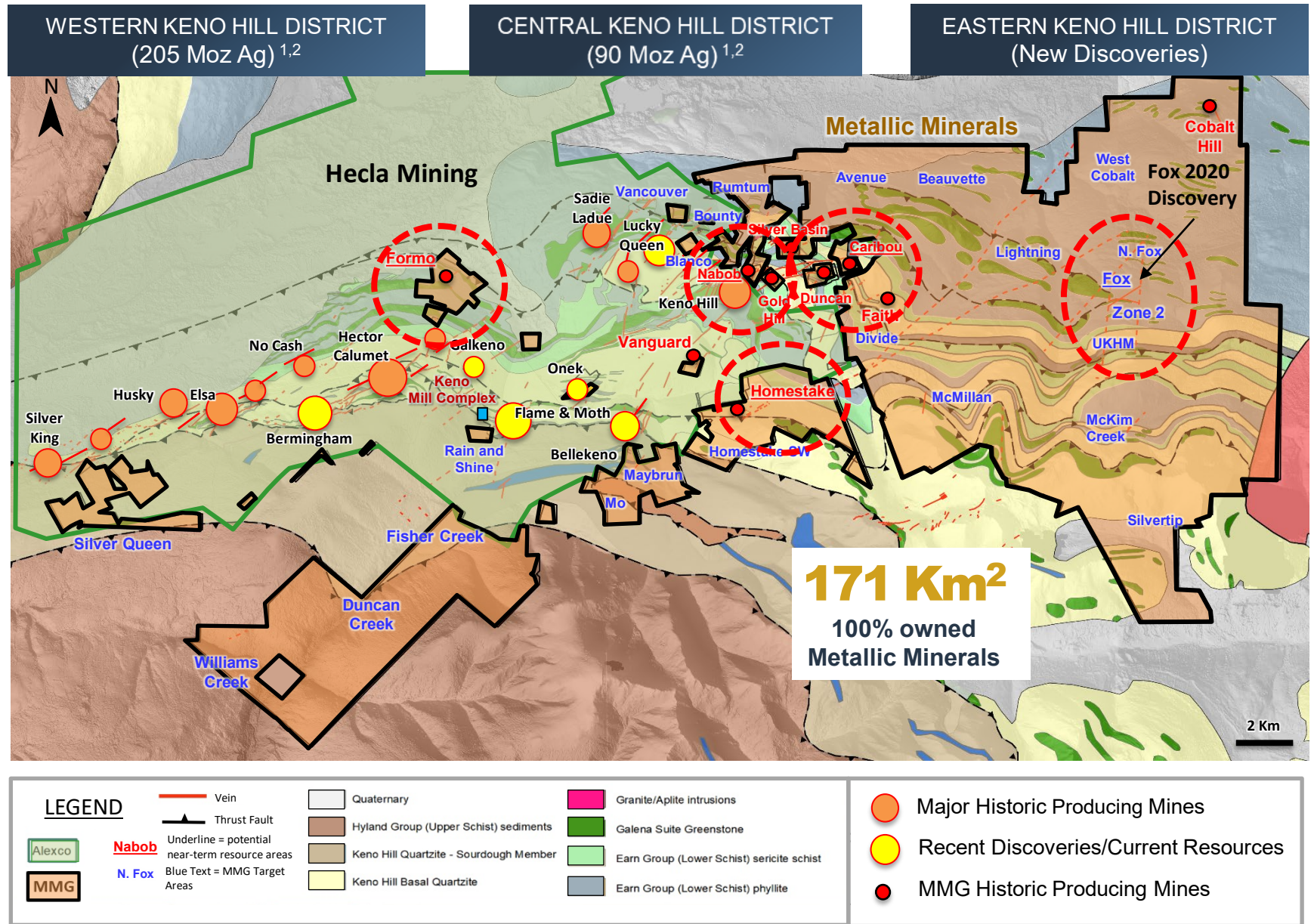
> **220 Moz Ag**
produced in district historically

> **120 Moz Ag**
in resources and reserves



Historic Mines on MMG Claims¹

Historic Mine Grade	Ag oz/t	Ag g/t
Duncan	744.3	25,455
Vanguard	305.8	10,458
Caribou Hill	177.1	6,057
Silver Basin	167.8	5,739
Formo (Yukeno)	148.9	5,092
Cobalt Hill	65	2,223



1) Historic production data from Cathro, R.J., 2006. Great Mining Camps of Canada - The History and Geology of the Keno Hill Silver Camp, Yukon Territory, Geoscience Canada Vol. 33;
2) Alexco public disclosure: <https://www.alexcoresource.com/operations/reserves-resources-table/> See Appendix for full Alexco Resource Corp. mineral reserves and resources. References to adjoining properties are for illustrative purposes only and are not necessarily indicative of the exploration potential, extent or nature of mineralization or potential future results of the Company's projects. See Page 2 regarding technical disclosure and third-party information.

KLONDIKE GOLD DISTRICT

TSX-V: **MMG**

OTCQB: **MMNGF**

PRODUCTION ROYALTIES

Revenue Generating Production Royalties in Place

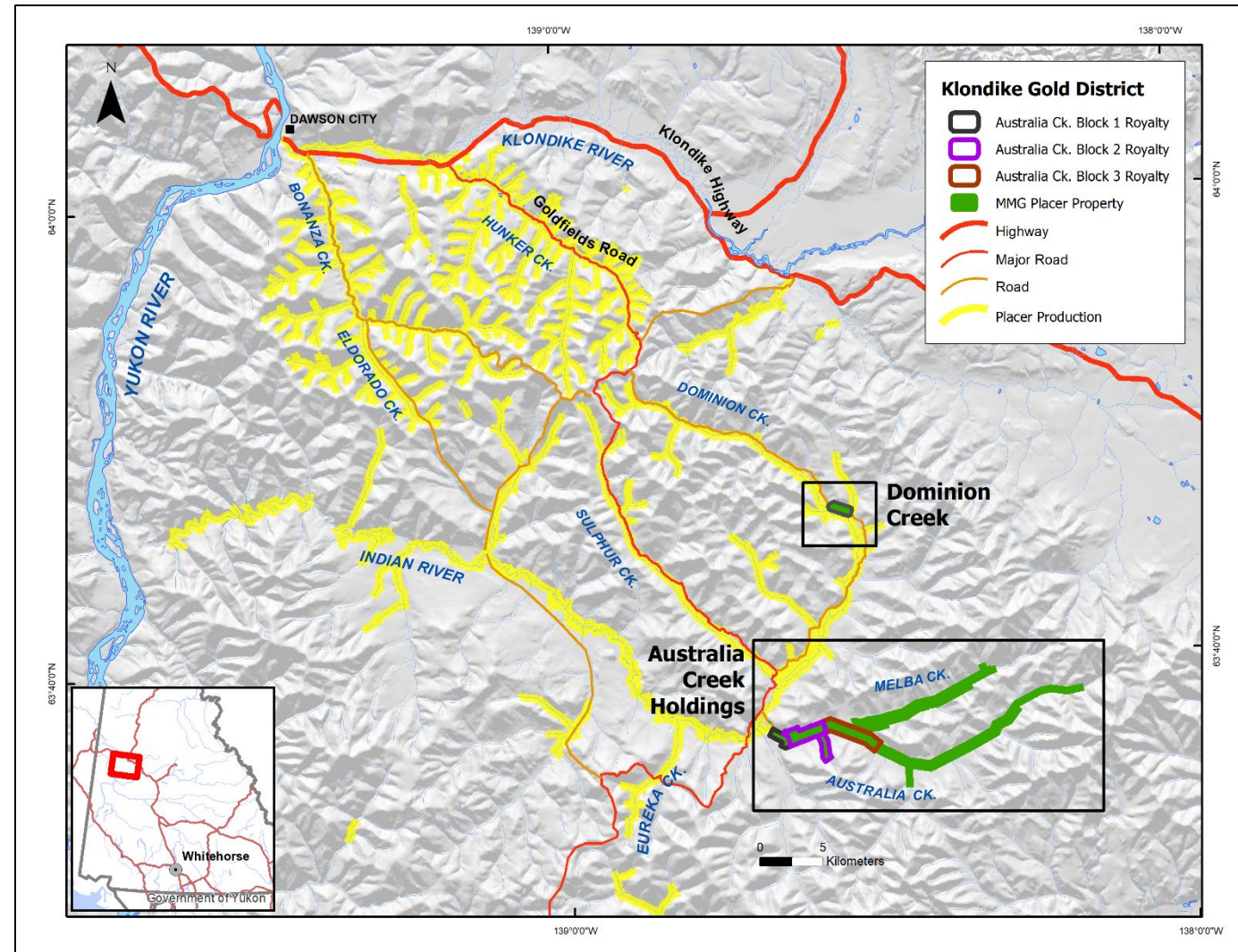
2023/01/24



Signed production royalty agreement on alluvial gold claims at its Australia Creek property in the Klondike Gold District, with Little Flake mining, a company owned and operated by Parker Schnabel of Discovery Channel's "Gold Rush".

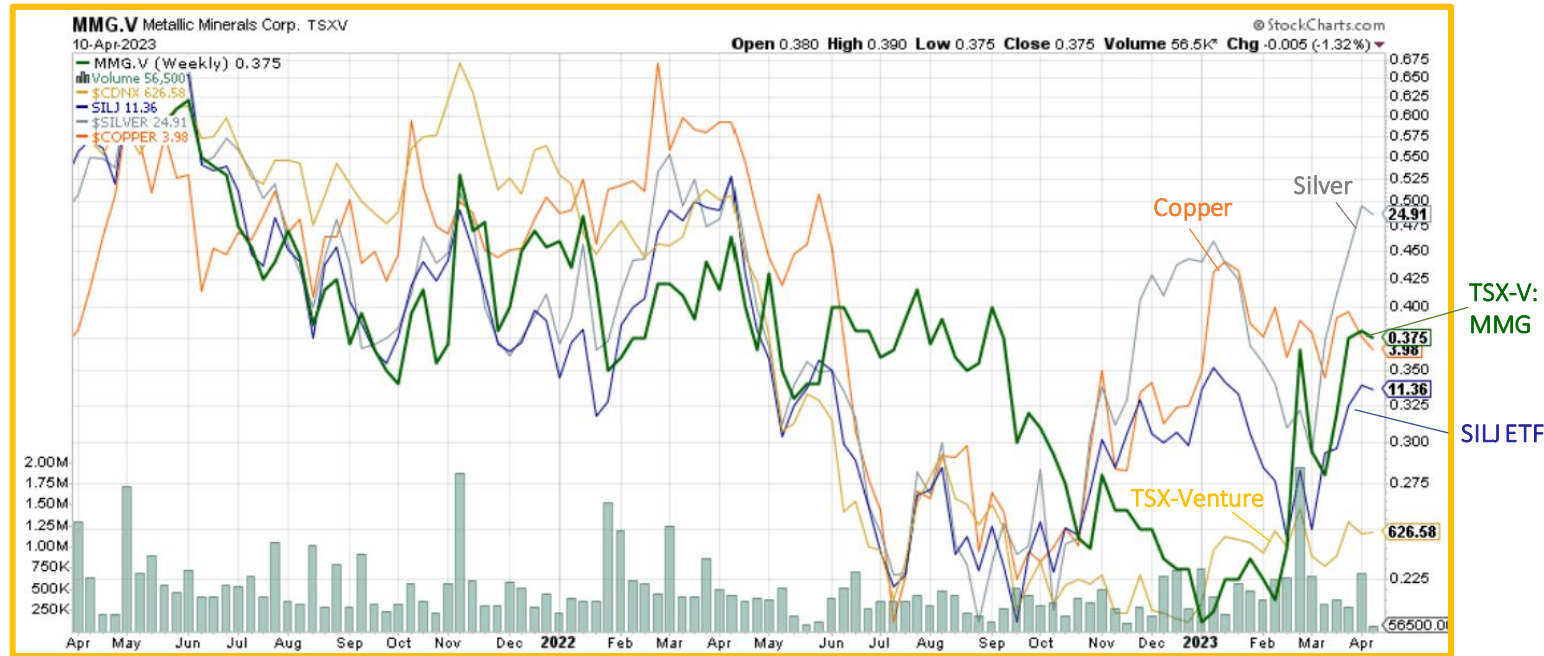
- Over 20 million ounces have been produced from the Klondike since its discovery in 1898¹
- Australia Creek and Dominion Creek are the upstream continuation of the largest alluvial producers in the Yukon
- These are large-scale, open-pit operations producing 50% of the gold in the Yukon
- Metallic will receive a 10-15% production royalty from experienced mining operators
- There is potential for up to 10 or 15 operations once fully developed

1) Yukon Geological Survey ("YGS") Yukon Placer Mining Industry Report 2010-2014



CAPITAL STRUCTURE

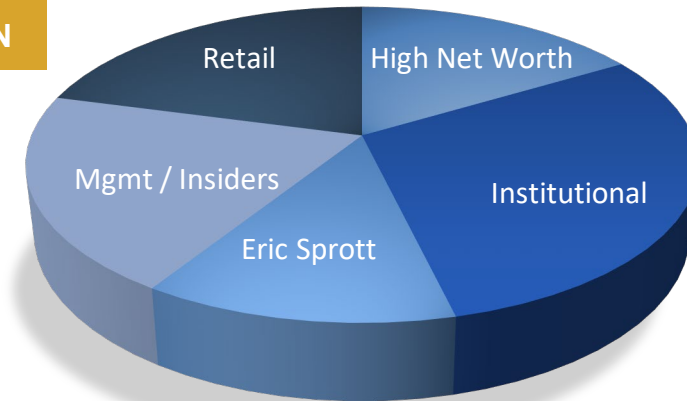
& RELATIVE PERFORMANCE



Recent Share Price (as of Apr 10, 2023)	C\$0.38
Shares Issued & Outstanding	150.9M
Options (average exercise price: \$0.37)	12.9M
Warrants (average exercise price: \$0.52)	8.6M
Fully Diluted Shares	172.4M
Market Capitalization	~C\$57M
Cash & Cash equivalents (no debt)	~C\$2M

SHAREHOLDER COMPOSITION

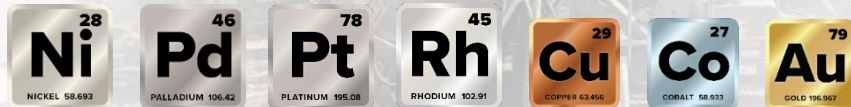
- 19%** Management & Associates
- 14%** Eric Sprott
- 29%** Institutional
- 16%** High Net Worth
- 22%** Retail



INSTITUTIONS

- US Global
- OTP Funds
- MMcap Asset Mgmt

The Future of Critical Minerals Supply



Project Portfolio & Strategy

Three District-Scale Assets

TSX-V: **PGE**

OTCQB: **PGEZF**

FSE: **5D32**

- District-scale assets
- Adjacent to world-class mines/deposits
- 100% ownership on all projects
- Substantial databases, new geologic models, world-class teams
- Focus on advancing Stillwater West as a primary source of low-carbon critical minerals in the USA

KLUANE PGE-NI-CU PROJECT

Adjoins Nickel Creek Platinum
255 km² land position



DRAYTON-BLACK LAKE PROJECT

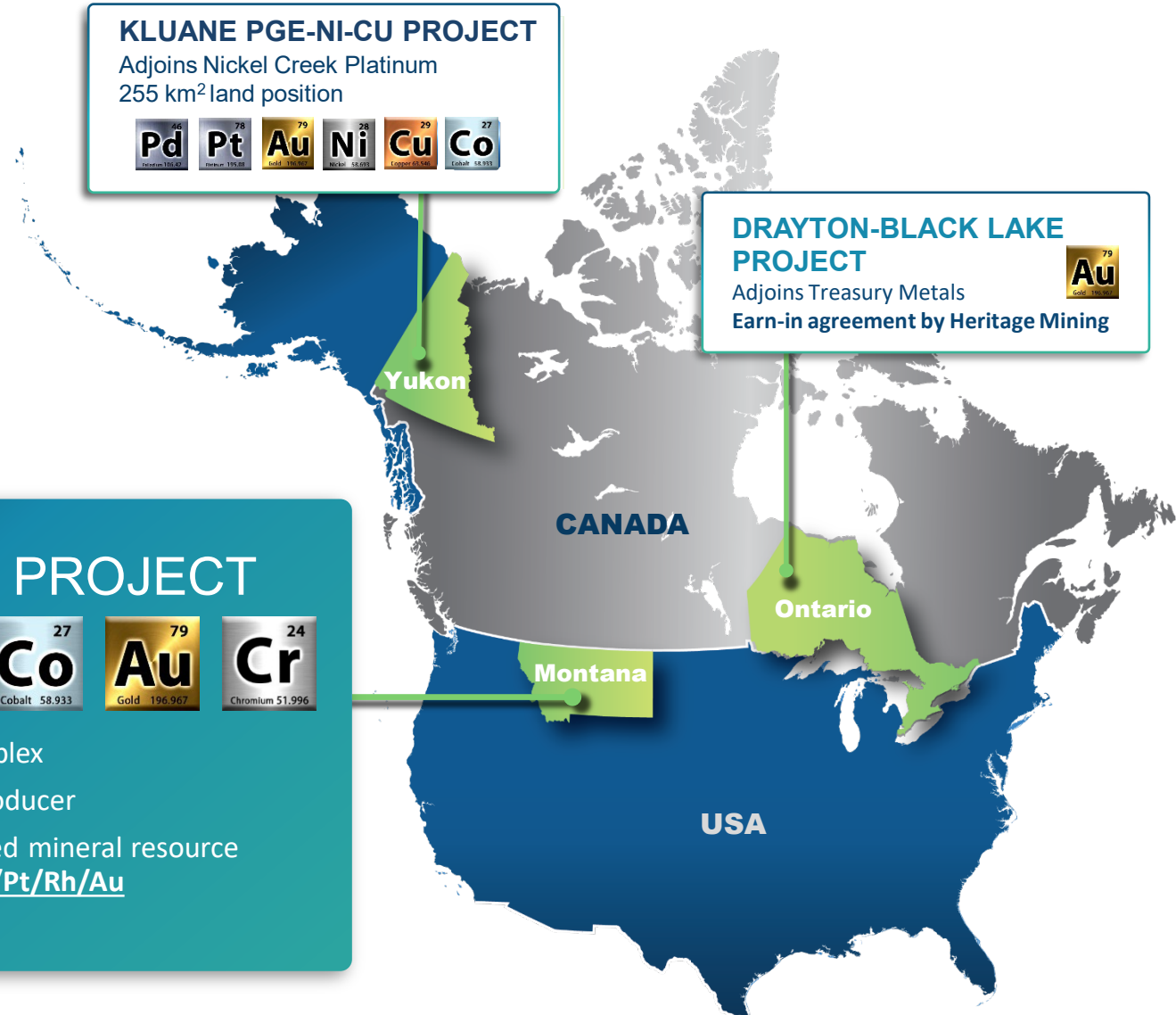
Adjoins Treasury Metals
Earn-in agreement by Heritage Mining



STILLWATER WEST PROJECT



- Adjacent to Sibanye-Stillwater's mine complex
- Share world-class geology with a major producer
- January 2023 NI43-101-compliant expanded mineral resource estimate: **1.6B lbs Ni/Cu/Co + 3.8Moz Pd/Pt/Rh/Au**
- Exceptional expansion potential



Management & Directors

A Proven Track Record

Team history of success in discovering and advancing large mines

TSX-V: **PGE**

OTCQB: **PGEZF**

FSE: **5D32**

Michael Rowley

President & CEO, Director

Co-founder of Stillwater Critical Minerals with 30 years executive experience in the exploration, mineral processing, and mine environmental industries

Greg Johnson

Executive Chairman

30 years in exploration, development of large-scale mining projects raising over \$650 million in project financing. Co-founder of NovaGold Resources

Danie Grobler, Ph.D.

Vice-President, Exploration

World-recognized expert in the discovery and mining of battery and platinum group metals. 25+ years experience in global exploration, including Head of Geology and Exploration for Ivanhoe Mines

Albie Brits, P.Geo.

Senior Geologist

28 years focused on the advancement of projects from grassroots to production. Former Senior Geologist and Manager Project Geology for Ivanhoe Mines

Mike Ostenson, P.Geo.

Managing Geologist, Qualified Person

20 years experience in the Stillwater district. Senior technical roles for Beartooth Platinum, Stillwater Mining Co. and AngloGold

Justin Modroo, P.Geo.

Project Geophysicist

20 years industry experience, including Stillwater Complex work with Premium Exploration and Beartooth Platinum

Gregor Hamilton

Director

24 years experience in mining sector as a geologist, investment banker and entrepreneur. Capital markets and global experience in M&A and structured finance

Gordon Toll

Independent Director

Over \$5B raised in the resource industry with 50+ years experience. Past senior roles with Ivanhoe Mines and Fortescue Minerals, with BHP Billiton and Rio Tinto

Experience

NOVAGOLD

IVANHOE MINES
NEW HORIZONS

STILLWATER
MINING COMPANY



Technical Team

Industry Partners

TSX-V: **PGE**

OTCQB: **PGEZF**

FSE: **5D32**



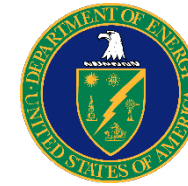
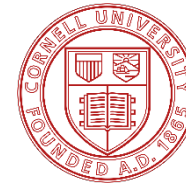
United States Geological Survey has decades of experience in the Stillwater complex

- **USGS maintains lists of critical minerals for the US Government and plays a central role in vetting projects under the Earth MRI program that is now funding exploration-stage projects in the US**
- **Data sharing agreement** with the USGS brings access to a broader database, substantial expertise, and cutting edge analytical techniques



Arca is working to stop – and reverse – climate change by capturing carbon dioxide and transforming it into rock

- Examination of the **potential for carbon sequestration as part of a potential mining operation at Stillwater West**
- Work to date has confirmed the potential to react carbon dioxide with ultramafic rocks at Stillwater West in a process known as mineral carbonation
- **Potential to further reduce or completely offset the carbon footprint** of critical minerals at Stillwater West, in addition to possible tax credits during production



Cornell University is tackling climate change and critical mineral recovery with ARPA-E (DoE) funding

- Stillwater is the mining industry partner for Cornell University's work under funding via ARPA-E (Department of Energy) **for carbon sequestration and hydrometallurgical recovery of critical minerals as part of a potential mining operation at Stillwater West**



Goldspot uses AI to produce Smart Targets – drill holes based on the analysis of data layers.

- Application of GoldSpot Discoveries' proprietary Artificial Intelligence and machine-learning analysis tools to Stillwater West's substantial database for **enhanced target development and further increased discovery rate**



Professor Wolfgang Maier from Cardiff University's School of Earth Sciences is collaborating on Stillwater West

Stillwater West

TSX-V: **PGE**

OTCQB: **PGEZF**

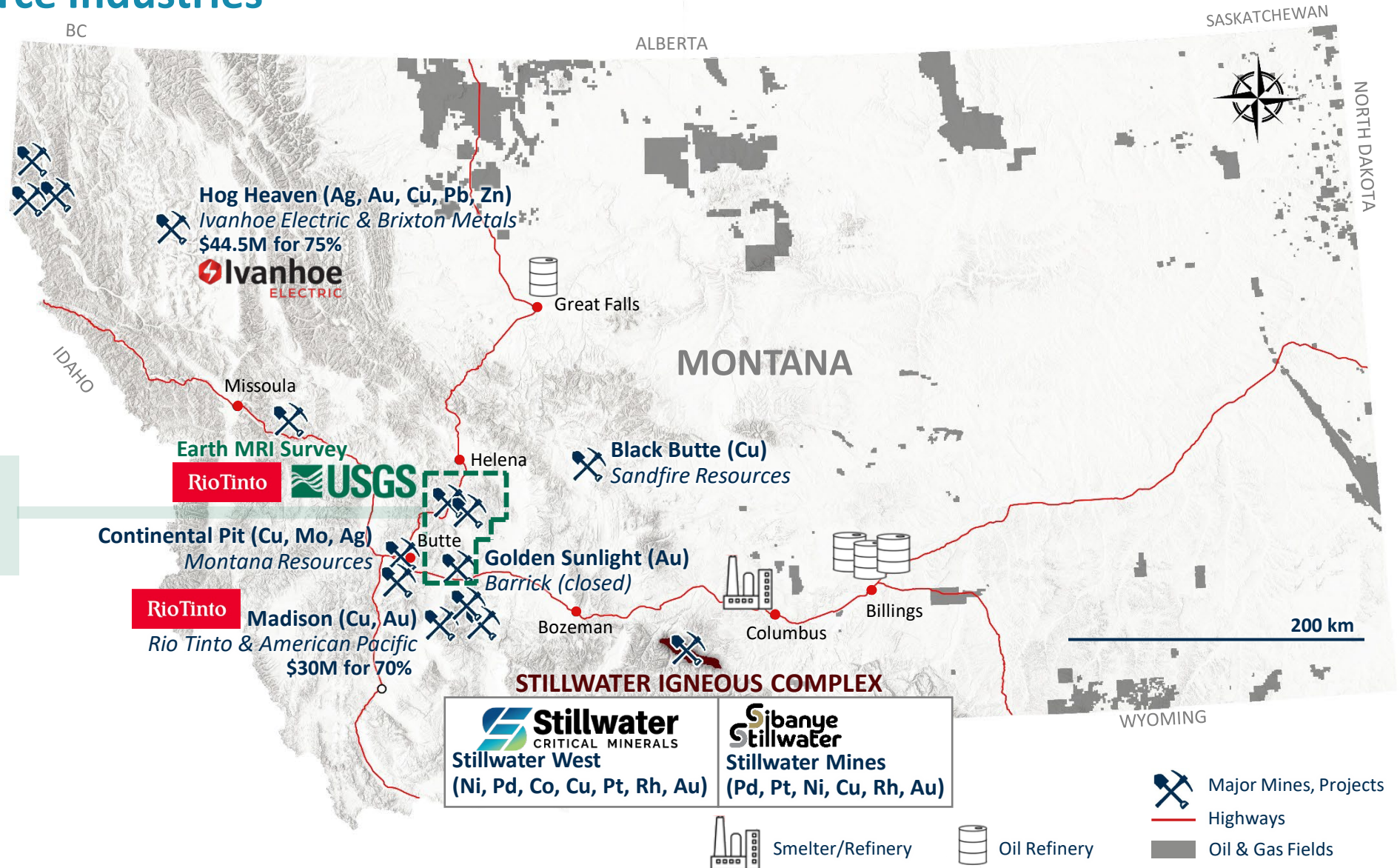
FSE: **5D32**

Montana - Resource Industries

Montana has a long history of mineral wealth in

- Base metals (especially copper)
- Precious metals
- Chromium
- Oil, gas, coal
- Platinum Group Elements

Rio Tinto partnered with the US Geological Survey for a large geophysical survey targeting critical minerals



<p>Stillwater CRITICAL MINERALS</p> <p>Stillwater West (Ni, Pd, Co, Cu, Pt, Rh, Au)</p>	<p>Sibanye Stillwater</p> <p>Stillwater Mines (Pd, Pt, Ni, Cu, Rh, Au)</p>
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Smelter/Refinery



Oil Refinery



Major Mines, Projects

Highways

Oil & Gas Fields

Stillwater Complex

A Rich History of Critical Mineral Production

- **1880s** – High-grade Ni, Cu mining
- **1940s/50s** – High-grade Cr production
- **Starting 1986** – Production of high-grade Pt, Pd, other metals from select underground mining
- **2021** – Inaugural Stillwater West resource (Ni, Cu, Co, Pd, Pt, Rh and Au)
- **2023** – Expanded Stillwater West resource

Sibanye-Stillwater production (2021):

- Mining: 570,400 oz Pt+Pd, plus Ni, Cu, Rh, Au, Ag
- Recycling: 755,000 oz Pt+Pd+Rh

→ **Total: +15Moz total 2E since 1986, plus Ni, Cu, Rh**

→ **Stillwater West's Platreef-style deposit model brings scale, and battery metals**

TSX-V: **PGE**

OTCQB: **PGEZF**

FSE: **5D32**

STILLWATER MINE (Sibanye-Stillwater)



EAST BOULDER MINE (Sibanye-Stillwater)

Stillwater West

District – Mines, Infrastructure and Land Status

TSX-V: **PGE**

OTCQB: **PGEZF**

FSE: **5D32**

The Stillwater Igneous Complex

- Similar to South Africa's Bushveld Complex
- Third largest layered magmatic complex in the world, largest in western hemisphere
- World-class mineral endowment
- 40km x 8km on surface, open at depth
- Highly prospective for Ni, Cu, Pd, Pt, Au, Cr, Rh
- Over a century of critical minerals production

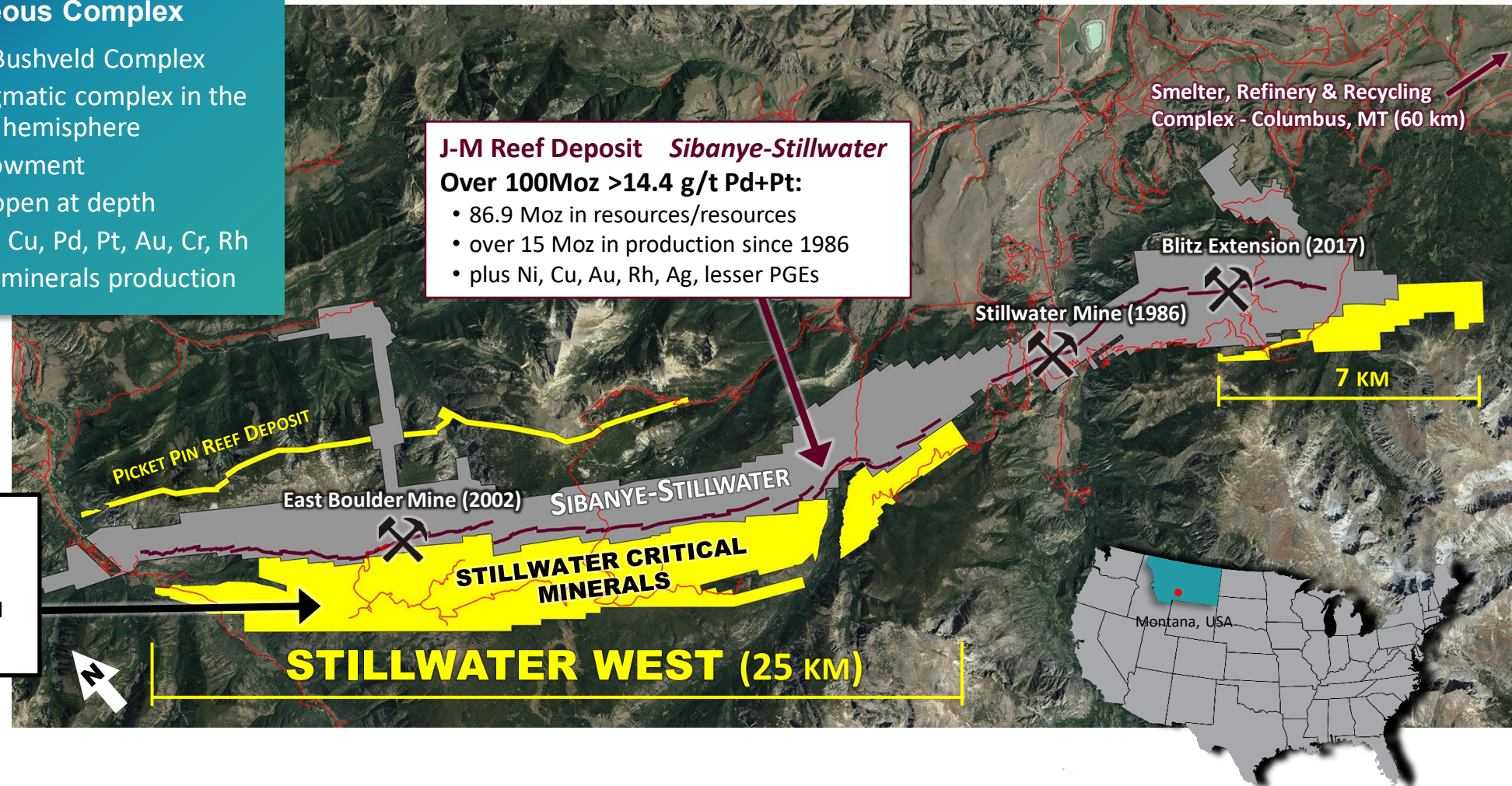
J-M Reef Deposit *Sibanye-Stillwater*

Over 100Moz >14.4 g/t Pd+Pt:

- 86.9 Moz in resources/resources
- over 15 Moz in production since 1986
- plus Ni, Cu, Au, Rh, Ag, lesser PGEs

Stillwater West

1.6 Blbs Ni+Cu+Co
+3.8 Moz Pd+Pt+Rh+Au
in a Platreef setting



Layered Mafic-Ultramafic Magmatic Deposits

TSX-V: **PGE**

OTCQB: **PGEZF**

FSE: **5D32**

The World's "Porphyry-Scale" Nickel and PGE deposits

Platreef-style deposits are some of the largest and most profitable nickel and PGE mines in the world

The Stillwater Layered Mafic-Ultramafic Complex shares many similarities with the South Africa's Bushveld Complex

- Continuous Ni-PGE sulphide mineralization over 700m in drilling with high-grade intercepts over 30-100m
- Resource area shows potential for multiple Platreef-scale systems in drilling, geophysics, and surface geochemistry

Ivanhoe Mines Platreef Deposit **8 Blbs Ni+Cu & 95 Moz PGEs¹**



IVANHOE MINES
NEW HORIZONS

Mogalakwena "Platreef" Deposit (Anglo American) **15 Blbs Ni+Cu & 152 Moz PGEs²**



 **Anglo American**

 **Stillwater**
CRITICAL MINERALS

References: 1 - Ivanhoe Mines Ltd, Platreef Feasibility Study, March 2022: Indicated Mineral Resources; 2 g/t Cut-off 3PE+Au 346 MT at 1.68 g/t Pt, 1.70 g/t Pd, 0.28 g/t Au, 0.11 g/t Rh, 0.16% Cu, 0.32% Ni Inferred Mineral Resources; 2 g/t Cut-off 3PE+Au 506 MT at 1.42 g/t Pt, 1.46 g/t Pd, 0.26 g/t Au, 0.10 g/t Rh, 0.16% Cu, 0.31% Ni 2) Anglo American Mineral Resources and Reserves Report 2022: Measured and Indicated Mineral Resources: 1,665.40 MT at 2.29 4E g/t, Inferred Mineral Resources: 423.8 MT at 2.18 4E g/t

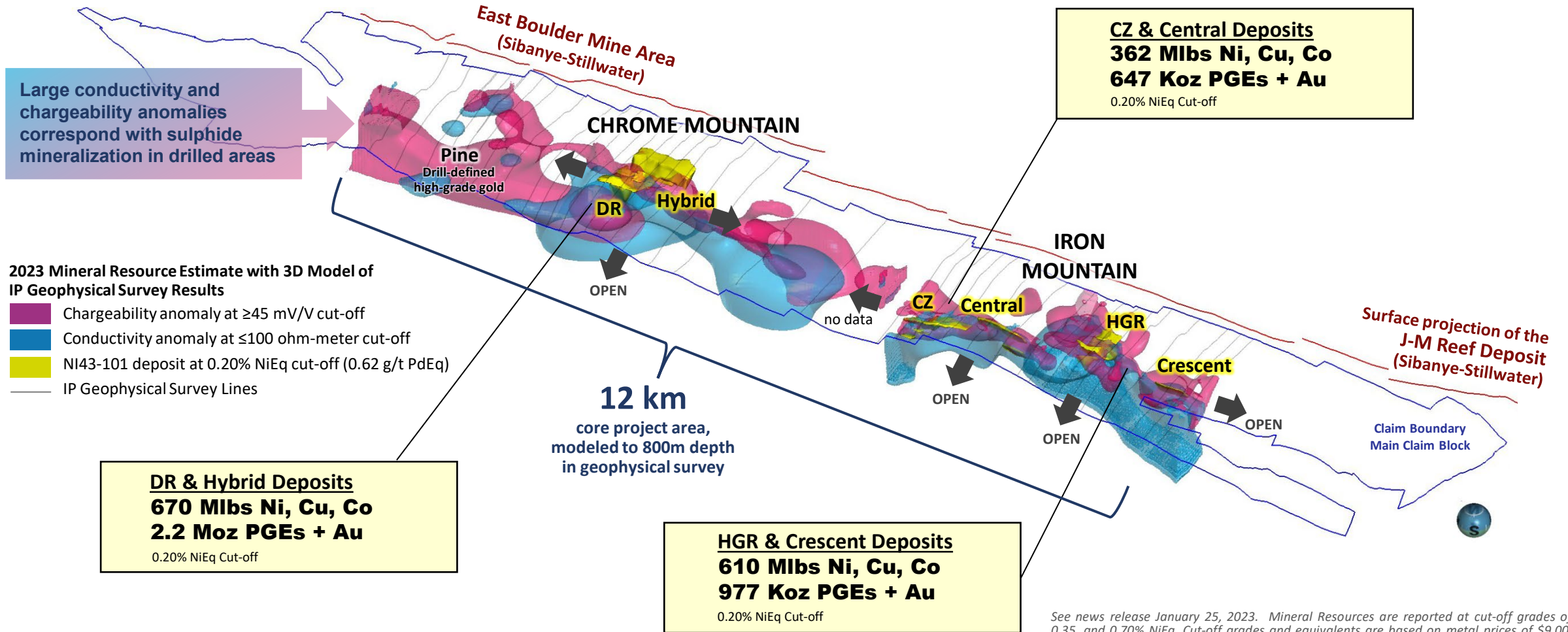
Stillwater West

Five Deposits with Kilometer-Scale Expansion Potential

TSX-V: **PGE**

OTCQB: **PGEZF**

FSE: **5D32**



See news release January 25, 2023. Mineral Resources are reported at cut-off grades of 0.20, 0.35, and 0.70% NiEq. Cut-off grades and equivalents are based on metal prices of \$9.00/lb Ni, \$3.75/lb Cu, \$24.00/lb Co, \$1,000/oz Pt, \$2,000/oz Pd and \$1,800/oz Au, with assumed metal recoveries of 80% for Ni, 85% for copper, 80% for Co, Pt, Pd and Au, a mining cost of US\$2.50/t rock and processing and G&A cost of US\$18.00/t mineralized material. Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred Resources are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as Indicated or Measured. However, based on the current knowledge of the deposits, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

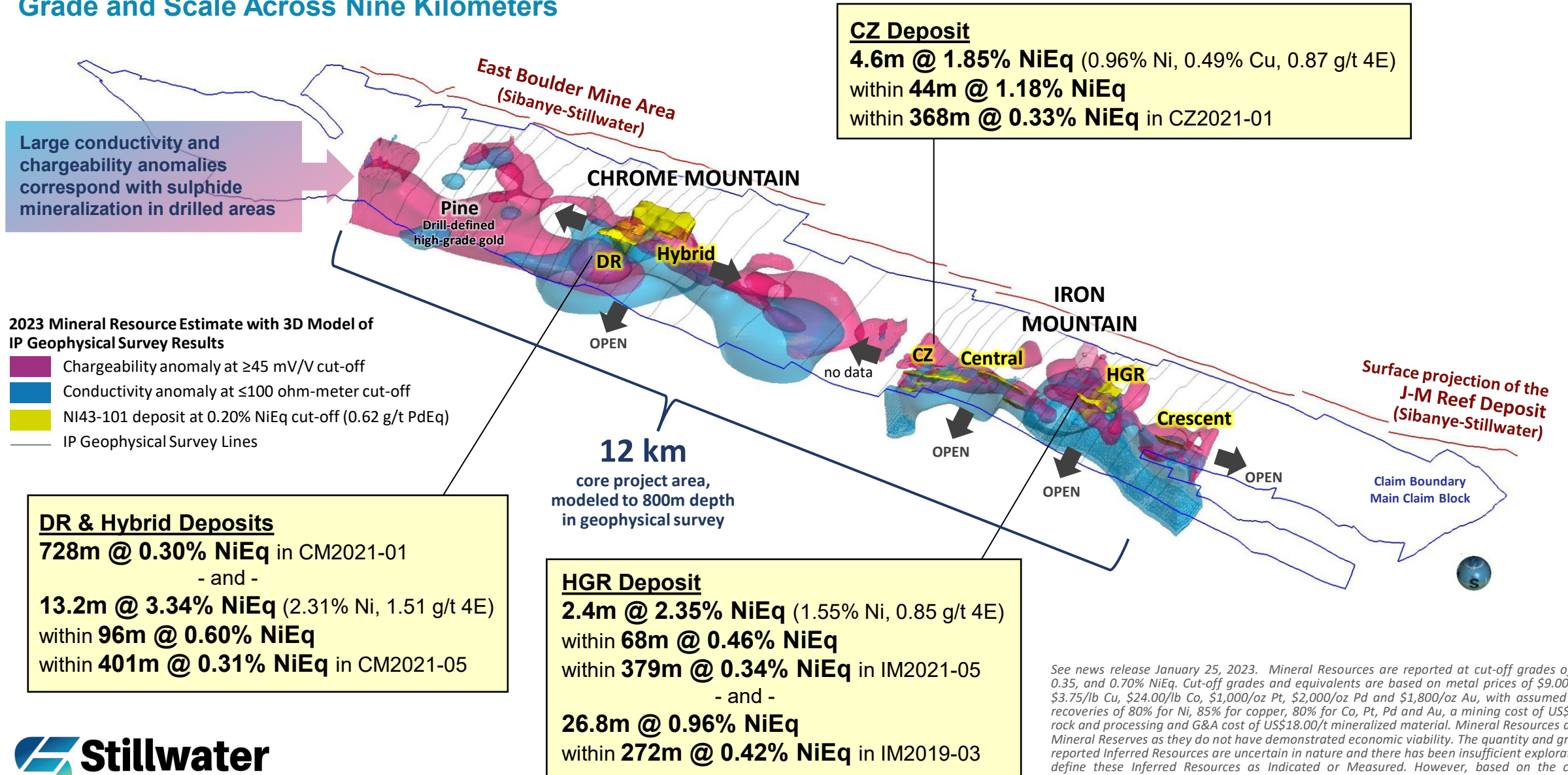
Stillwater West

Grade and Scale Across Nine Kilometers

TSX-V: **PGE**

OTCQB: **PGEZF**

FSE: **5D32**



See news release January 25, 2023. Mineral Resources are reported at cut-off grades of 0.20, 0.35, and 0.70% NiEq. Cut-off grades and equivalents are based on metal prices of \$9.00/lb Ni, \$3.75/lb Cu, \$24.00/lb Co, \$1,000/oz Pt, \$2,000/oz Pd and \$1,800/oz Au, with assumed metal recoveries of 80% for Ni, 85% for copper, 80% for Co, Pt, Pd and Au, a mining cost of US\$2.50/t rock and processing and G&A cost of US\$18.00/t mineralized material. Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred Resources are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as Indicated or Measured. However, based on the current knowledge of the deposits, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Resource Estimate

Stillwater West NI 43-101 January 2023

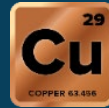
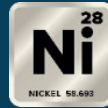
TSX-V: **PGE**

OTCQB: **PGEZF**

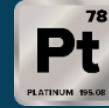
FSE: **5D32**

WORLD-CLASS GRADE AND
SCALE IN A PRODUCING
AMERICAN DISTRICT

BATTERY METALS



PGE + GOLD (4E)



BASE CASE

0.20% NiEq cut-off

255 MT at 0.39% NiEq

(or 1.19 g/t PdEq)

1.64 Blbs

@ 0.27% NiEq

3.81 Moz

@ 0.47 g/t 4E

Equals 2.18 Blbs NiEq (or 9.79 Moz PdEq)

1.13% Sulphur

HIGHER GRADE

0.35% NiEq cut-off

120 MT at 0.51% NiEq

(or 1.58 g/t PdEq)

1.05 Blbs

@ 0.35% NiEq

2.35 Moz

@ 0.61 g/t 4E

Equals 1.35 Blbs NiEq or (6.07 Moz PdEq)

1.79% Sulphur

HIGH-GRADE

0.70% NiEq cut-off

11.6 MT at 1.05% NiEq

(or 3.24 g/t PdEq)

235 Mlbs

@ 0.79% NiEq

363 Koz

@ 0.98 g/t 4E

Equals 268 Mlbs NiEq or (1.21 Moz PdEq)

6.16% Sulphur



62%

Resource
expansion
announced
Jan 2023

Low
discovery
costs



Resource Estimate

Stillwater West NI 43-101 January 2023

TSX-V: **PGE**

OTCQB: **PGEZF**

FSE: **5D32**

<p>WORLD-CLASS GRADE AND SCALE IN A PRODUCING AMERICAN DISTRICT</p>	<p>BATTERY METALS</p> 	<p>PGE + GOLD (4E)</p> 	<p>NSR VALUE at \$9/lb Ni (USD, Gross)</p>
<p>BASE CASE 0.20% NiEq cut-off</p> <p>255 MT at 0.39% NiEq (or 1.19 g/t PdEq)</p>	<p>1.64 Blbs @ 0.27% NiEq</p> <p><i>Equals 2.18 Blbs NiEq (or 9.79 Moz PdEq)</i></p>	<p>3.81 Moz @ 0.47 g/t 4E</p> <p><i>1.13% Sulphur</i></p>	<p>255 MT at \$77/T 0.20% NiEq cut-off = \$40/T</p>
<p>HIGHER GRADE 0.35% NiEq cut-off</p> <p>120 MT at 0.51% NiEq (or 1.58 g/t PdEq)</p>	<p>1.05 Blbs @ 0.35% NiEq</p> <p><i>Equals 1.35 Blbs NiEq or (6.07 Moz PdEq)</i></p>	<p>2.35 Moz @ 0.61 g/t 4E</p> <p><i>1.79% Sulphur</i></p>	<p>120 MT at \$101/T 0.35% NiEq cut-off = \$69/T</p>
<p>HIGH-GRADE 0.70% NiEq cut-off</p> <p>11.6 MT at 1.05% NiEq (or 3.24 g/t PdEq)</p>	<p>235 Mlbs @ 0.79% NiEq</p> <p><i>Equals 268 Mlbs NiEq or (1.21 Moz PdEq)</i></p>	<p>363 Koz @ 0.98 g/t 4E</p> <p><i>6.16% Sulphur</i></p>	<p>11.6 MT at \$208/T 0.70% NiEq cut-off = \$139/T</p>

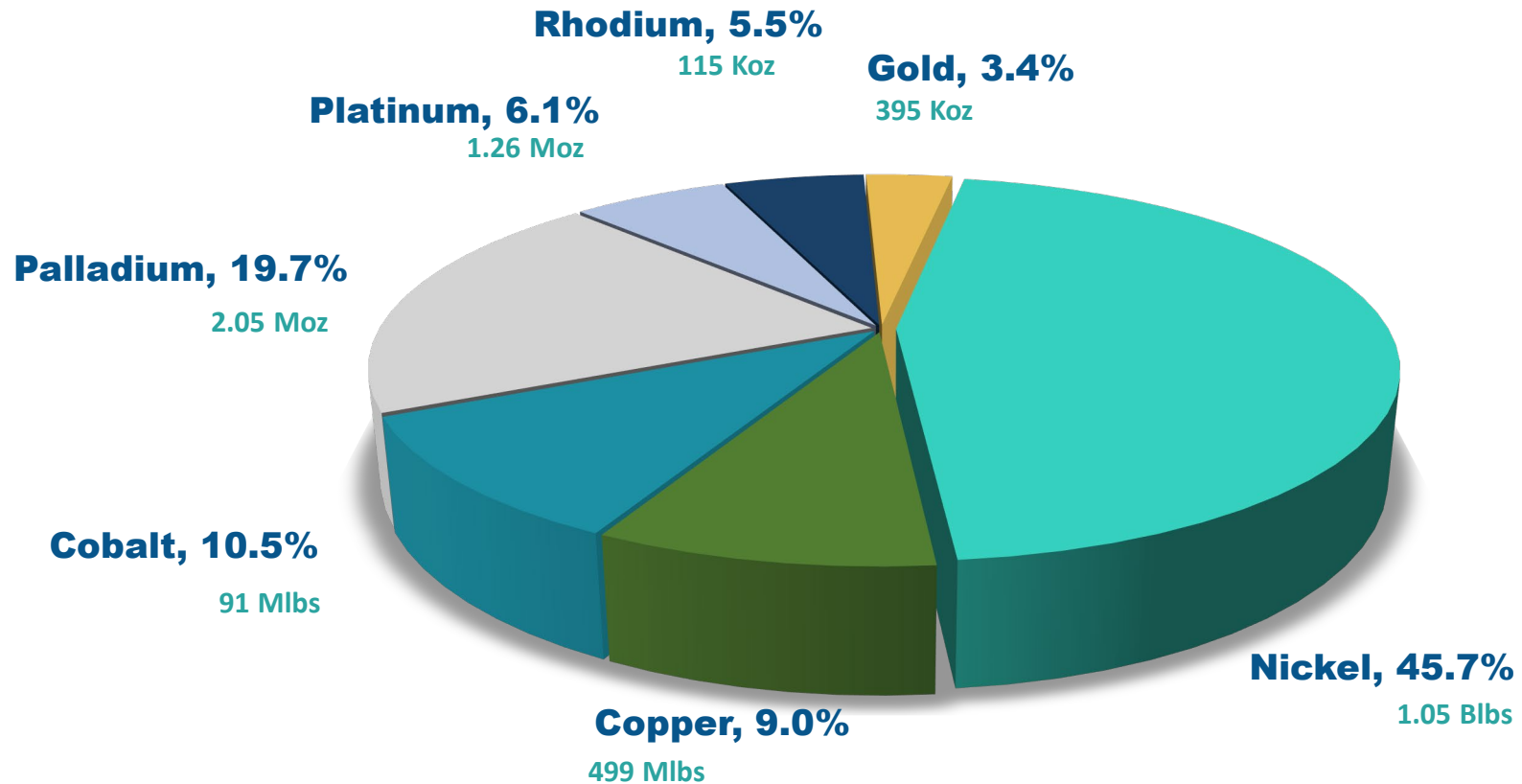
High-Demand Commodities

TSX-V: **PGE**

OTCQB: **PGEZF**

FSE: **5D32**

Commodities by Value at Stillwater West - An Attractive and 'Internally Hedged' Blend¹



Capital structure

TSX-V: **PGE**

OTCQB: **PGEZF**

FSE: **5D32**

& Relative Share Performance

Visibility to over \$3.5M:

- Approx. \$2.2M cash and equivalents
- ~\$1.3M in-the-money warrants and options

Securities:

- 3.9M Heritage Mining shares (HML)

Share price (as of April 10, 2023)

Shares issued & outstanding

Options (average exercise price: \$0.27)

Warrants (average exercise price: \$0.32)

Fully diluted shares

Market capitalization (basic)

Cash & cash equivalents

In-the-money options & warrants

