



TSX-V:HPY

**HAPPY CREEK**  
**MINERALS LTD.**

Corporate Update  
*July 2023*

# Forward Looking Statement

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Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this presentation.

This presentation may contain statements and projections such as plans, forecasts, prices, objectives, targets, resources, profits, value, scale, and others that are forward looking and subject to risks and uncertainties more fully described in the Company's Prospectus, Financial Statements and Public Filings located on SEDAR. \$ are CDN currency unless otherwise noted.

Resources reported herein conform to NI43-101 with a report filed on SEDAR and can also be viewed on the Company's website. Readers are cautioned that the quantity and grade of reported Inferred resource estimations are conceptual in nature, and there has been insufficient exploration to define these Inferred Resources as an Indicated or Measured Resource. It is uncertain if further exploration will result in upgrading them to an Indicated or Measured Resource category. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

The Qualified Person has not completed sufficient work to verify the historic information on the Property or adjacent properties, particularly in regard to historical drill results. However, the Qualified Person believes that drilling and analytical results were completed to industry standard practices. The information provides an indication of the exploration potential of the Property but may not be representative of expected results. Grab and chip samples are selective by nature and the values reported may not be representative of the entire mineralized zone. Results or information from an adjacent property does not infer or indicate similar results or information will or does occur on the subject property.

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David Blann, P.Eng., Director, is a Qualified Person as defined under NI-43-101 has approved the technical content of this presentation.



# Outline



- The Company
- Our Properties
- New Highland Valley Targets
- 2023 Plans
- Summary
- Contact



# Happy Creek Minerals Ltd.

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- Making new discoveries and building resources
- Multiple opportunities to create value on 100% owned projects with great infrastructure in a safe jurisdiction
- World-class, high-grade tungsten resource open for expansion
- Two porphyry copper deposits, open for expansion, plus multiple high priority targets, next to Canada's largest copper mine
- Exceptional team with solid technical and financial expertise
- Committed to building and sustaining mutually beneficial relationships with Indigenous Communities in the territories in which we explore



# Happy Creek Team

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## Many decades successful experience:

- ✓ Discovery and project development
- ✓ BC geology and mineral deposits
- ✓ Permitting
- ✓ Mine operations
- ✓ Community and Indigenous relations
- ✓ Financing and capital markets
- ✓ Public company governance

Walter Segsworth, P.Eng, Non-Executive Chair

David Blann, P.Eng, Director

Mike Cathro, President, CEO, Director

Rodger Gray, Director

Kent Pearson, P.Geo., Director

Sarah Weber, P.Geo, Director

Richard Lee, CPA, CMA, CFO

Kathy Love, Corporate Secretary

Charlie Greig, P.Geo., Technical Advisor

Finley Bakker, P.Geo., Technical Advisor

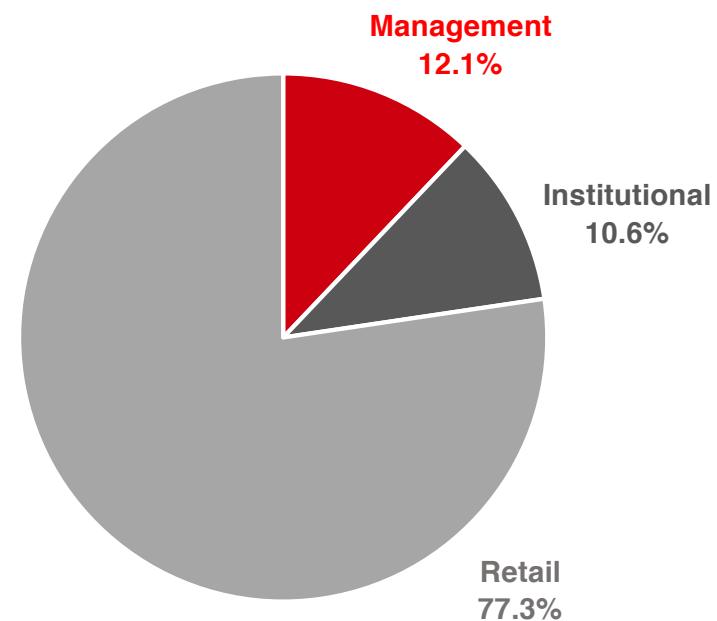


# Capital Structure

Management Aligned with Shareholders



Shares Issued	132.5 m
Warrants	22.7 m
Options	12.8 m
Fully Diluted Shares	168.0 m
Recent Share Price	CAD \$0.025
TSX:V symbol	HPY



# Committed to Community Engagement, Safety and Environmental Protection



- Communicate early and address concerns in planning
- Employment, training and contracting opportunities



Progressive reclamation



Reclaimed 2015 drill trail



Tracked drill minimizes trails and tree-cutting

- Heritage field reconnaissance surveys
- Archaeological Chance Find procedure
- Minimize disturbance and water use
- Reclaim disturbance ASAP
- Permits in place or pending

# Happy Creek's History of Significant Discoveries

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## Fox Tungsten District

- Discovered by prospecting
- Acquired entire district by claim staking
- Three high-grade deposits drilled to 43-101 resource stage, and wide open for expansion
- several other untested or partially defined targets



Original "Happy Creek" discovery at Fox Tungsten

## Highland Valley Zones 1 & 2 Copper

- Consolidation of large property over 17 years
- Discovered two buried copper deposits by drilling; open for expansion
- Several exciting new copper targets ready to drill



Highland Valley Drilling, fall 2020

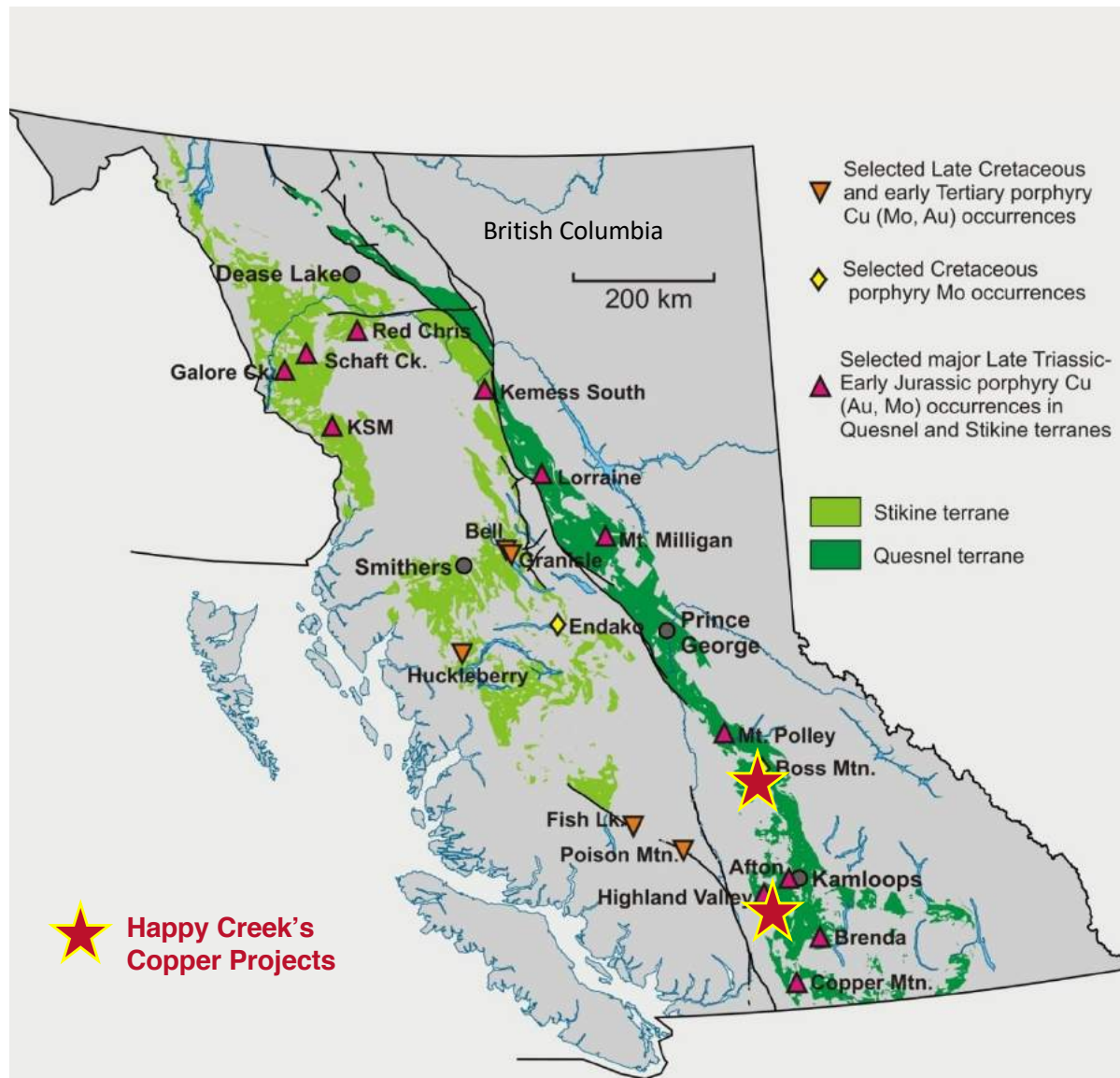




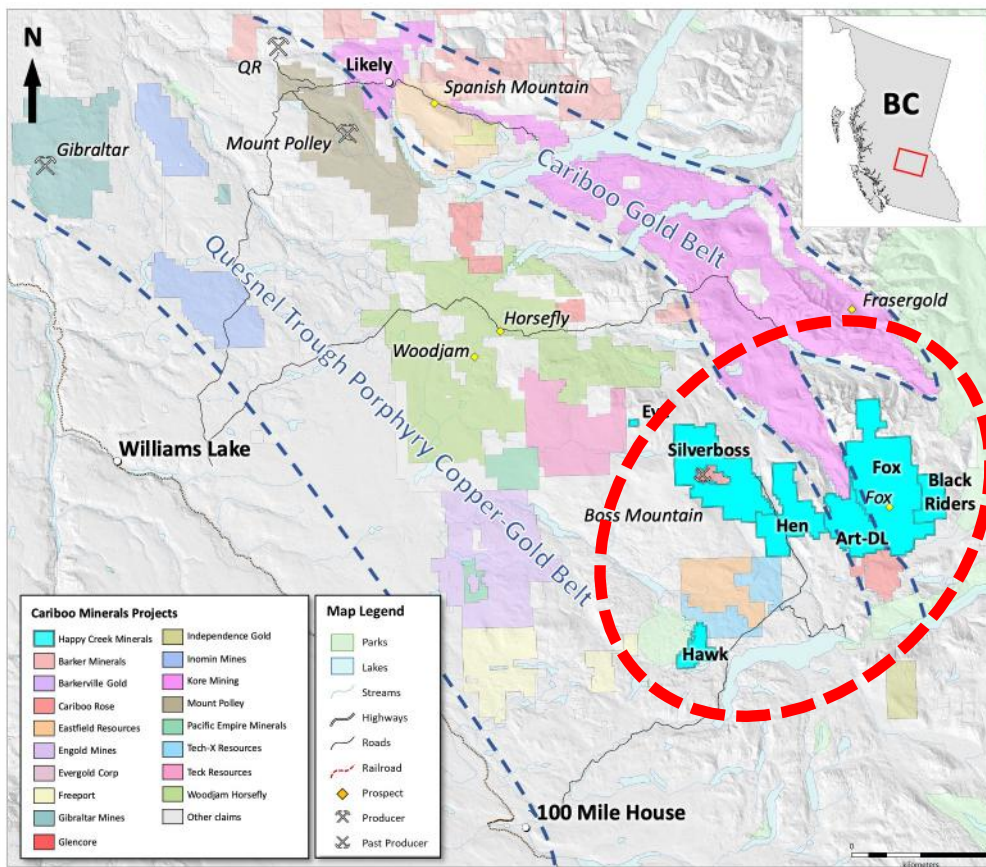
# Why British Columbia?



- Tier 1 mining jurisdiction, attractive to major mining companies
  - Low political risk
  - Robust permitting process
  - >\$5.5b in recent mining M&A
- World-class copper endowment: 57% of Canada's copper production in 2021
- Happy Creek's projects are in the heart of southern BC mining districts



# Cariboo Mining Belt



- Our properties transect the **Quesnel Trough Porphyry Belt** (Gibraltar mine, Mt. Polley mine, Woodjam deposits, Boss Mountain mine)
- Plus part of the **Cariboo Orogenic Gold Belt** which has 11.5 million ounces Au in resources (Barkerville, Spanish Mountain, Frasersgold)
- Exceptional infrastructure and supportive mining communities
- Happy Creek's Cariboo projects (in blue) include:
  - Fox Tungsten district
  - Silverboss Cu, Mo and Au-Ag prospects
  - Other porphyry/skarn Au-Cu, orogenic Au, and nickel prospects

# Fox Tungsten Project

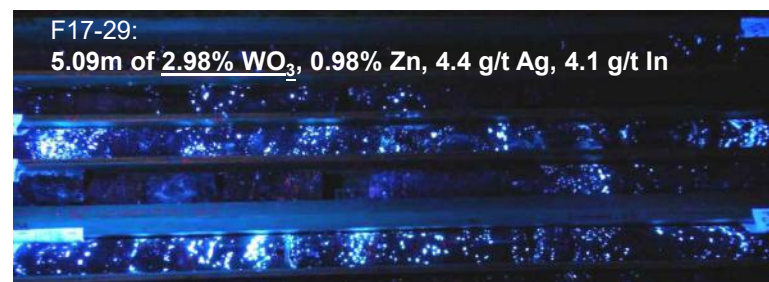
Road-Accessible Project with Exceptionally High Grade



- 100% control of entire 10 km-long district
- One of the world's **highest grade** tungsten resources:
  - **582,400 t @ 0.826% WO<sub>3</sub> (indicated)**
  - **565,400 t @ 1.231% WO<sub>3</sub> (inferred)<sup>1</sup>**
- Tungsten is deemed a **strategic & critical** element due to supply and geopolitical risk. Market dominated by China (85%). No mines in North America
- Focus is 2-km-long BN-RC-BK shallow resource trend: goal is to triple resource to ~3.5 mt at 1% WO<sub>3</sub>
- 5-year permit under review for 570 drill pads and trails
- Discussions ongoing with affected First Nations



Drilling at Fox - RC Zone



Fox - BN Zone high-grade scheelite in drill core (under UV light)

# Fox Tungsten Resource Detail



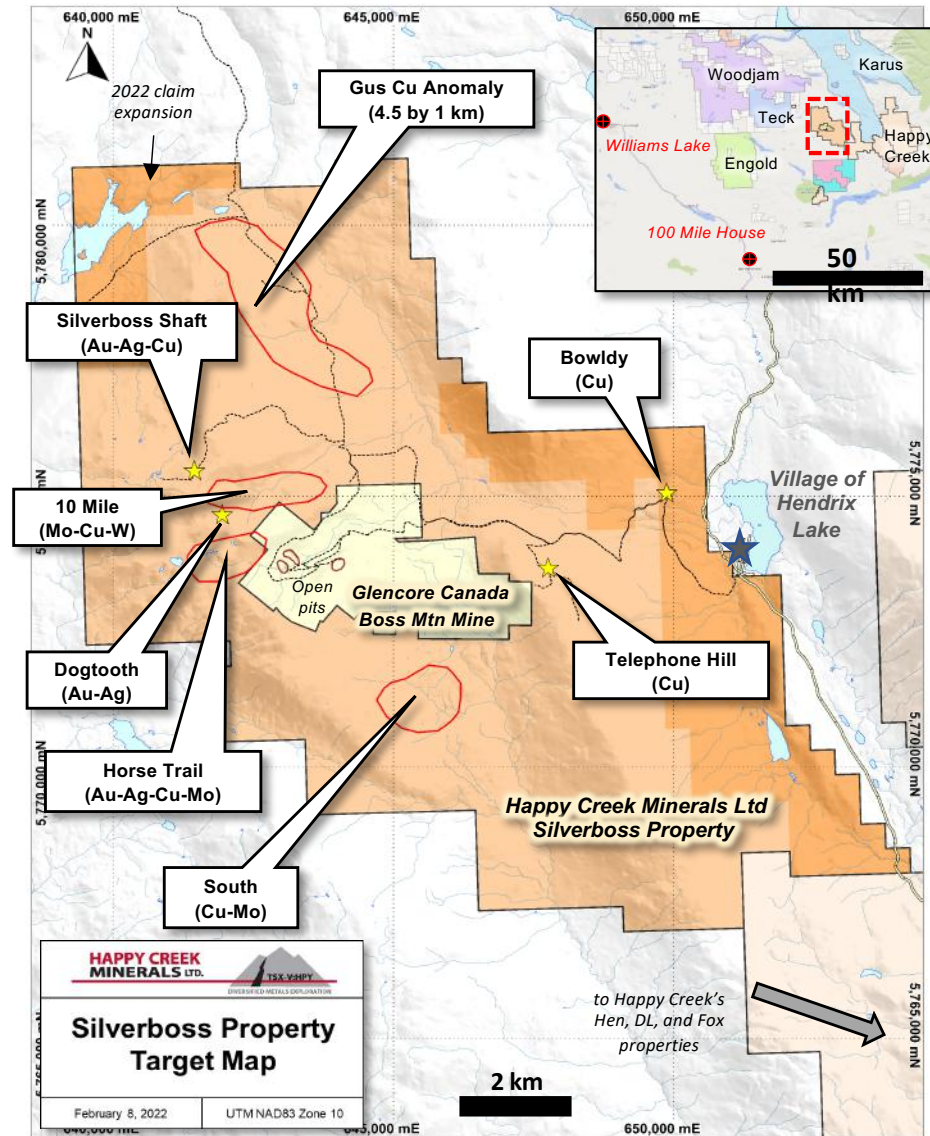
ZONE	CLASSIFICATION <sup>1</sup>	Cut-off WO <sub>3</sub> (%)	Tonnes (t)	WO <sub>3</sub> (%)	WO <sub>3</sub> MTU	WO <sub>3</sub> (kg) Contained
Ridley Creek	Indicated in-pit	>0.175	397,400	0.713	283,400	2,834,000
Ridley Creek	Indicated - underground	>0.45	185,000	1.067	197,100	1,971,000
Ridley Creek zone	<b>Indicated total</b>		<b>582,400</b>	<b>0.826</b>	<b>480,500</b>	<b>4,805,000</b>
Ridley Creek	Inferred in-pit	>0.175	14,700	0.662	9,700	97,000
Ridley Creek	Inferred - underground	>0.45	76,800	0.961	73,800	738,000
BN	Inferred - underground	>0.45	453,000	1.321	598,300	5,983,000
BK	Inferred in-pit	>0.175	20,900	0.672	14,000	140,000
Ridley Creek, BN, BK	<b>Inferred total</b>		<b>565,400</b>	<b>1.231</b>	<b>695,800</b>	<b>6,958,000</b>

# Silverboss Project

Multiple large targets surround Glencore's Past Producing Boss Mountain Molybdenum Mine (1963-1983)



- 100% owned drill-ready project surrounding brownfield mine site
- Numerous targets with only 5 historic holes
- **Silverboss Shaft, Dogtooth and Horse Trail:** high-grade gold-silver (-copper) veins
- **Gus:** >4.5 km long copper soil anomaly with local values of silver, palladium & nickel
- **10 Mile Creek molybdenum target:** +3 km-long molybdenum soil anomaly adjacent to high-grade Boss Mountain moly deposits
- 5-year permit for 30 drill pads under review

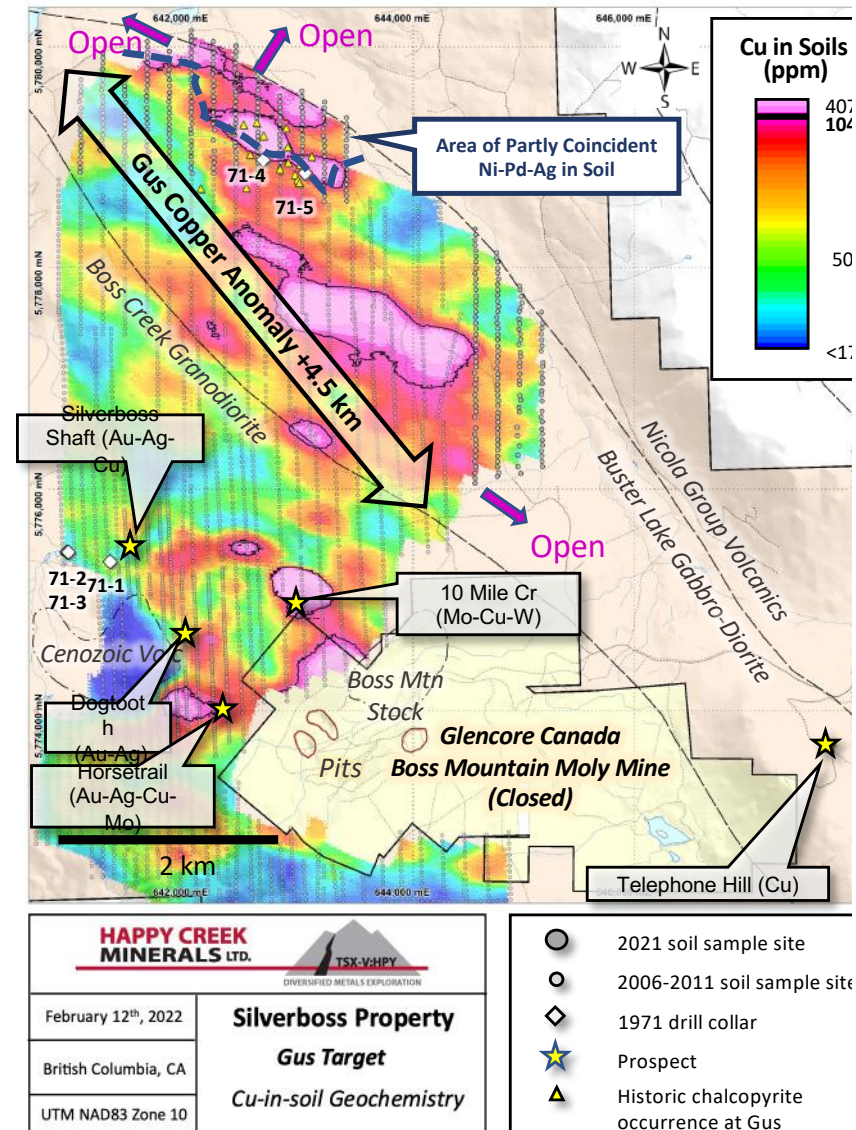


# Silverboss: Gus Copper Target

Bulk-Tonnage Porphyry or Magmatic Style

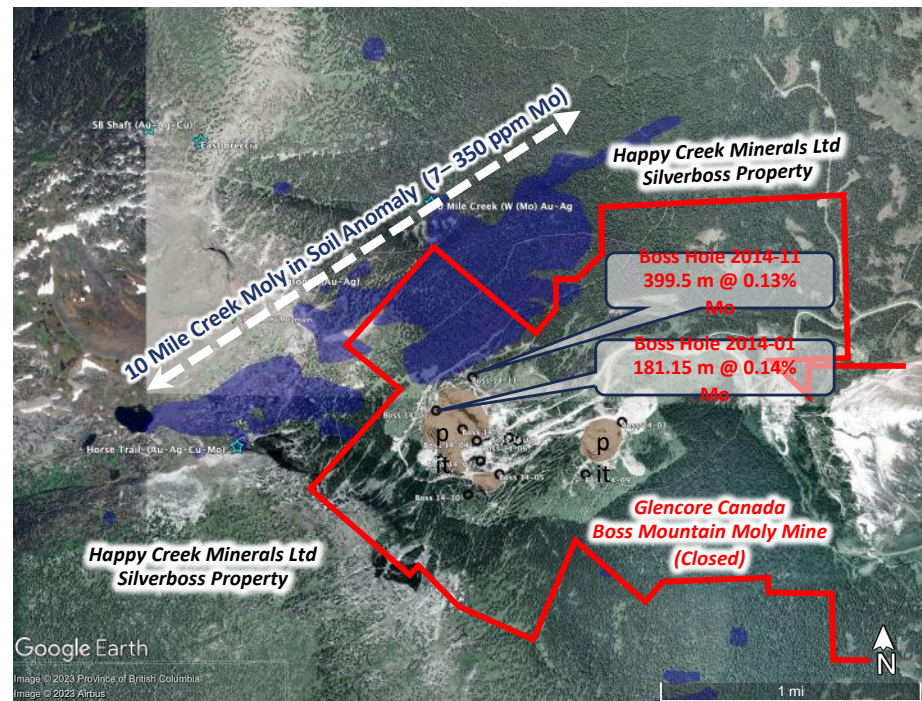


- Very large Gus copper-in-soil anomaly expanded to 4.5 km in length in 2021, and is still open
- Newly recognized anomalous soil values for palladium (to 22 ppb), silver (to 4.9 ppm) and nickel (to 137 ppm)
- Hosted by Jurassic gabbro (Takomkane batholith)
- Two historic drill holes (1971) but no assays available. Limited re-sampling in 2021 confirmed anomalous copper and palladium values
- Future plans: expand soils, geology, prospecting, geophysics, and drilling



# Silverboss: 10 Mile Creek Molybdenum Target

- Boss Moly: a high-grade past producer (7.59 mt @ 0.205% Mo recovered from 1965-1983<sup>1</sup>)
- 10 Mile Creek Moly Target is a +3 km-long Mo-(Cu-W-Bi) soil anomaly that straddles the Glencore / Happy Creek claim line
- Two 2014 holes on Boss Mine site cut exceptional molybdenum grades within 300 m of Happy Creek claim boundary<sup>3</sup>
- Boss mine moly deposits are open
- Undrilled potential for large, high-grade molybdenum deposit



References: <sup>1</sup>BC MINFILE and <sup>2</sup>BC Assessment Report #35522

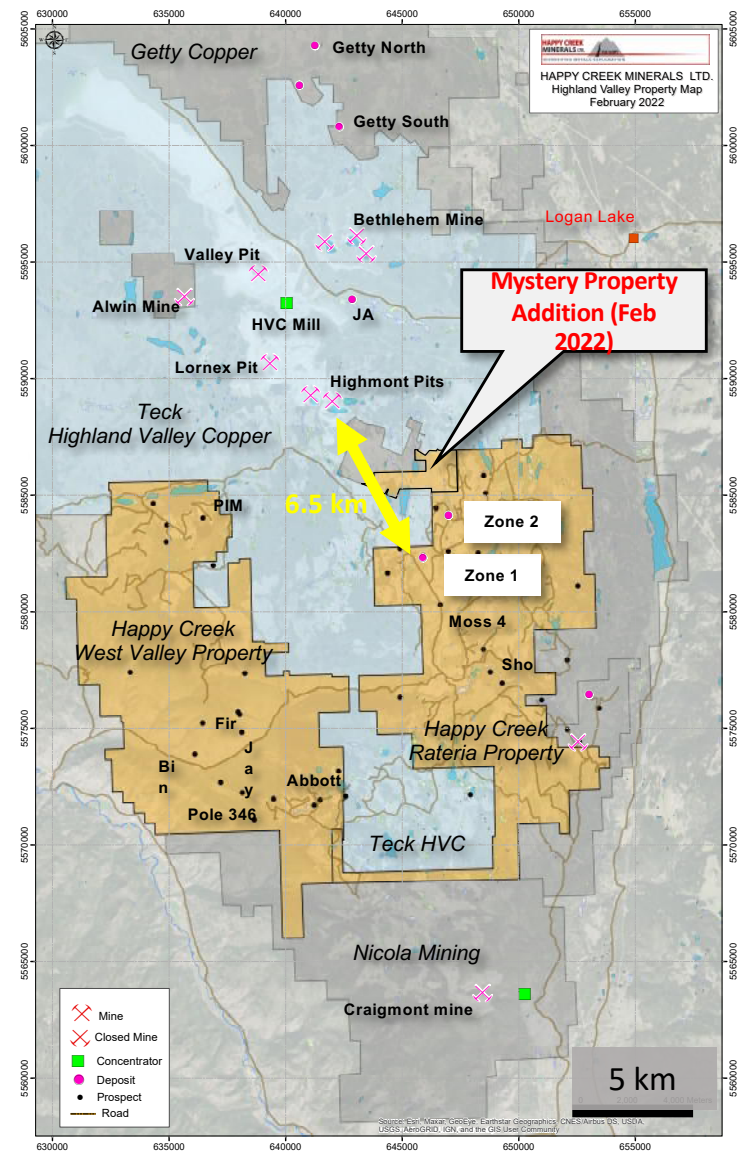
<sup>3</sup>Happy Creek cautions that mineralization hosted on adjacent or nearby properties is not necessarily indicative of the mineralization hosted on its properties

# Highland Valley Project

## In Canada's Most Prolific Copper Mining District



- 100% ownership of very large (240 km<sup>2</sup>) property adjoining the Highland Valley Copper (HVC) mine of Teck
- Happy Creek's claim consolidation of took >17 years; latest addition is Mystery property (February 2022)
- We discovered and partially drilled the **Zone 1 and 2 deposits**, 6.5 km from Highmont pit
- Dry upland plateau with extensive infrastructure including roads, powerlines and nearby rail, pipelines and highways
- 3-hour drive to Vancouver
- Supportive communities with 60 years of mining history
- Drill-ready with multi-year permits and archaeology clearances in place





# Our Target is a Giant Porphyry Copper Deposit



- The Highland Valley Copper mine is the largest base-metal mine in Canada with 60 years of mining, and +2 billion tonnes of production from 7 pits<sup>3</sup>
- Low-grade; large throughput; low-strip ratio; good metallurgy; clean concentrate
- Excellent infrastructure, climate and terrain for large-scale mining

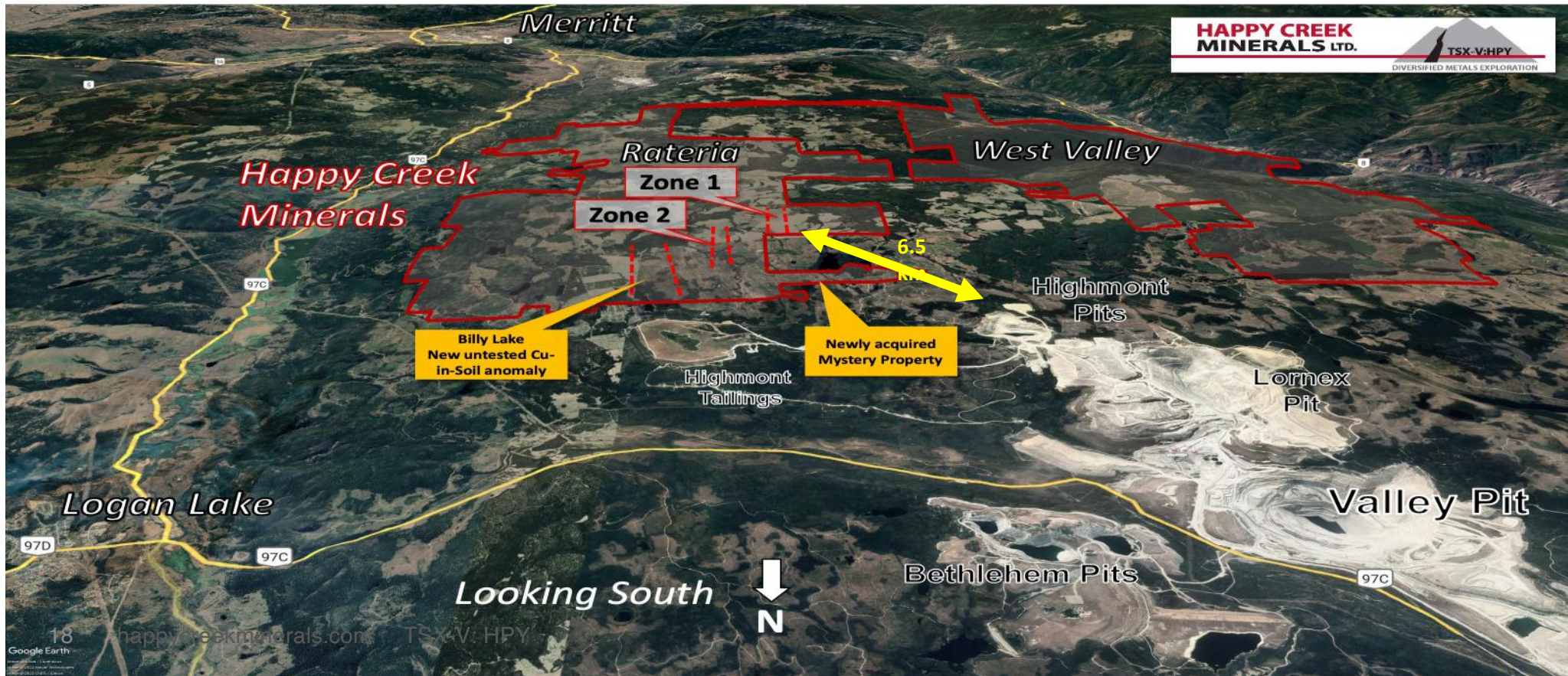
Happy Creek's goal is a major discovery that can support a stand-alone operation, or be sold to a neighbour



<sup>3</sup>Happy Creek cautions that mineralization hosted on adjacent or nearby properties is not necessarily indicative of the mineralization hosted on its properties

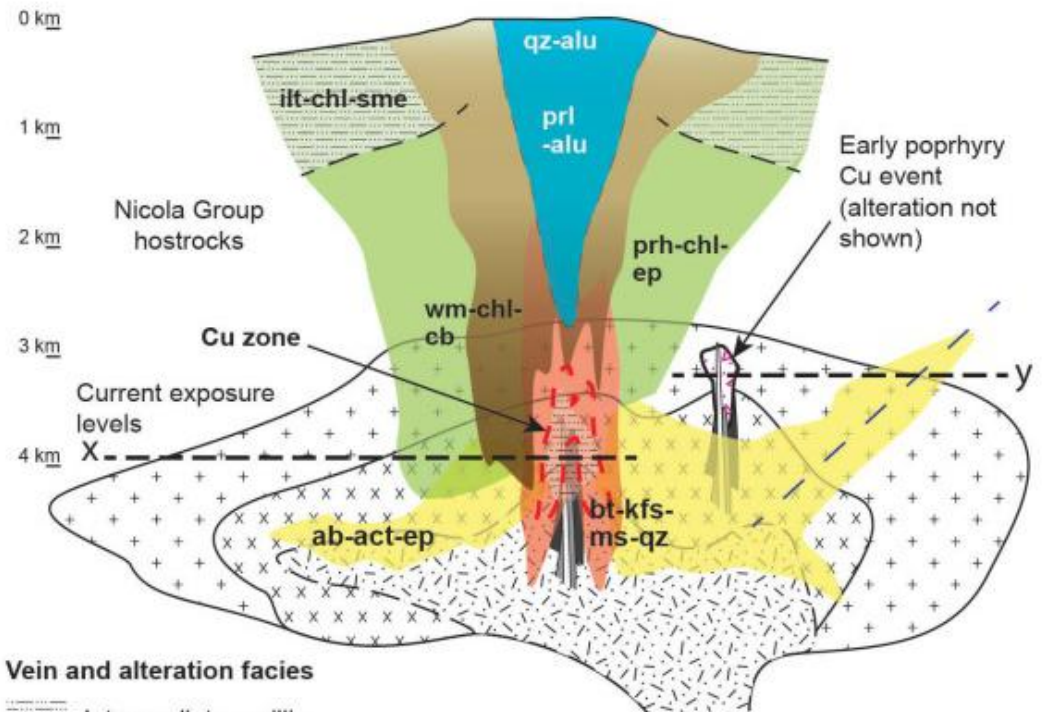
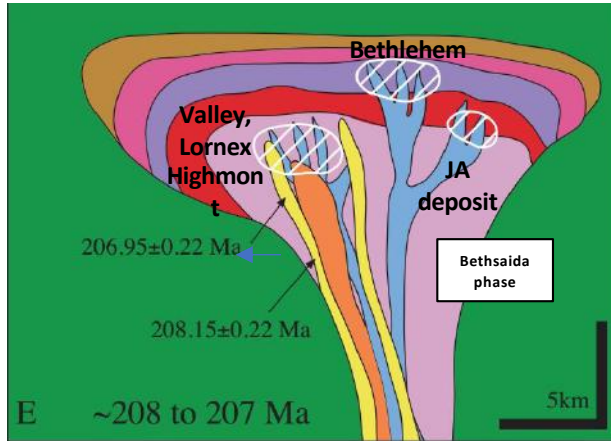
# Happy Creek's Highland Valley Project

Upland Plateau with Extensive Industrial Logging, Grid Power and Road Access



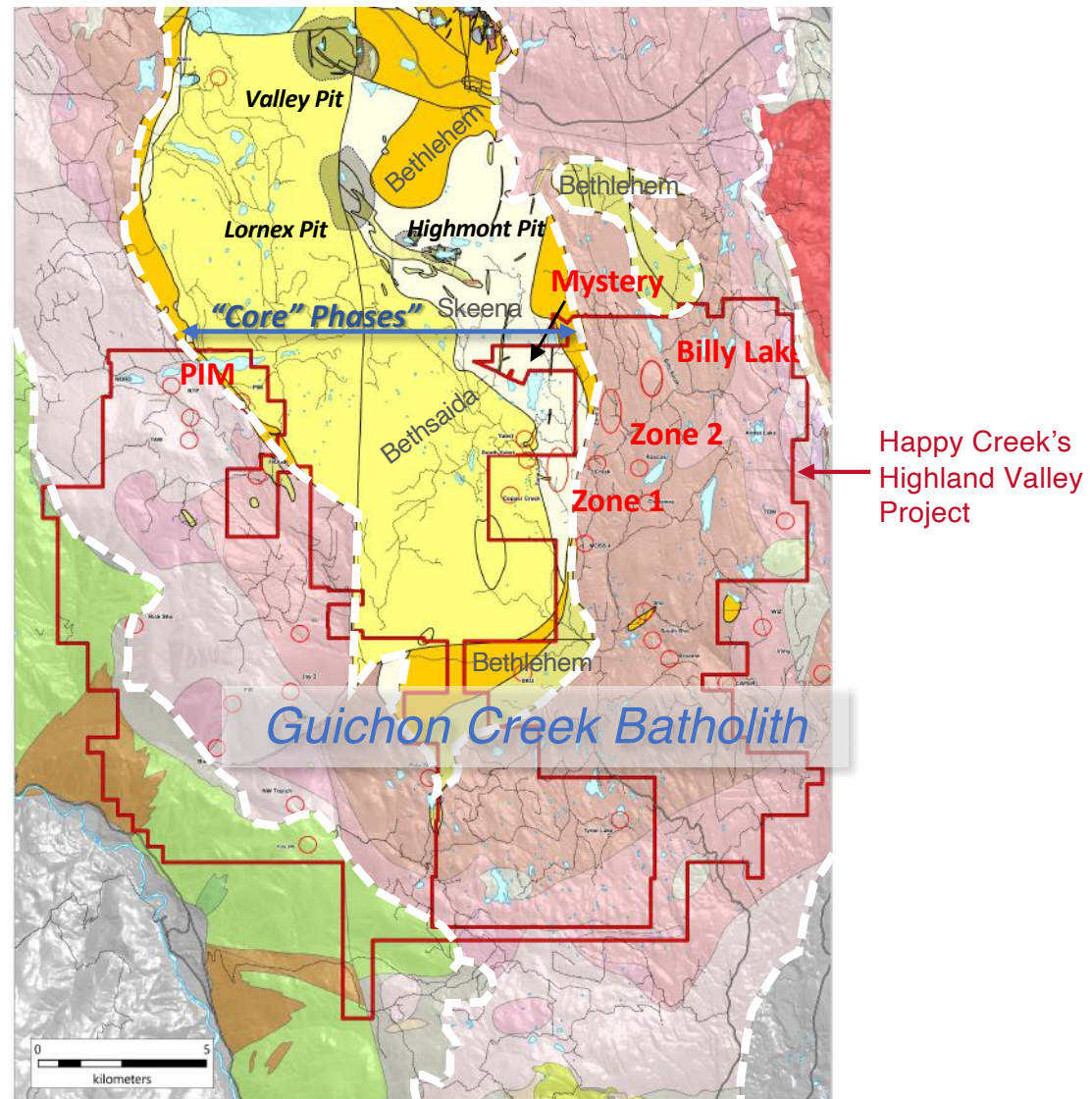
# Applying the Highland Valley Deposit Model

- Studies by UBC, Teck and others continue to refine the model and exploration tools
- Happy Creek is applying these new tools to our very large property



# Highland Valley Geology

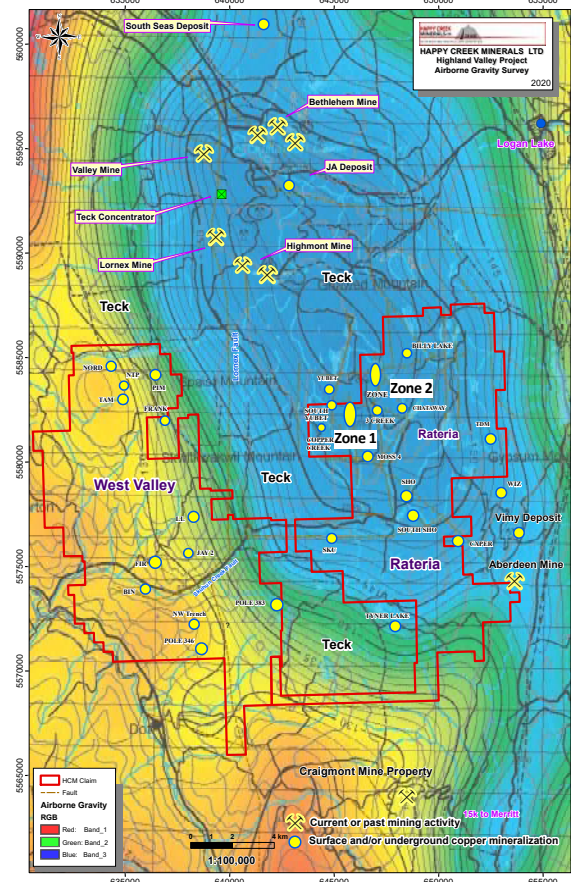
- Our Highland Valley Project covers the southern third of the Guichon Creek batholith
- Key Highland Valley mines and deposits are in the younger, more felsic, “core” phases (Bethsaida, Skeena, Bethlehem), which also host our **Zone 1**, **Zone 2**, **Pim**, **Mystery** and other prospects
- Very close association of mineralization with porphyry dikes, faults and breccia
- Many undrilled targets are prospective for discovery of a major new porphyry copper deposit



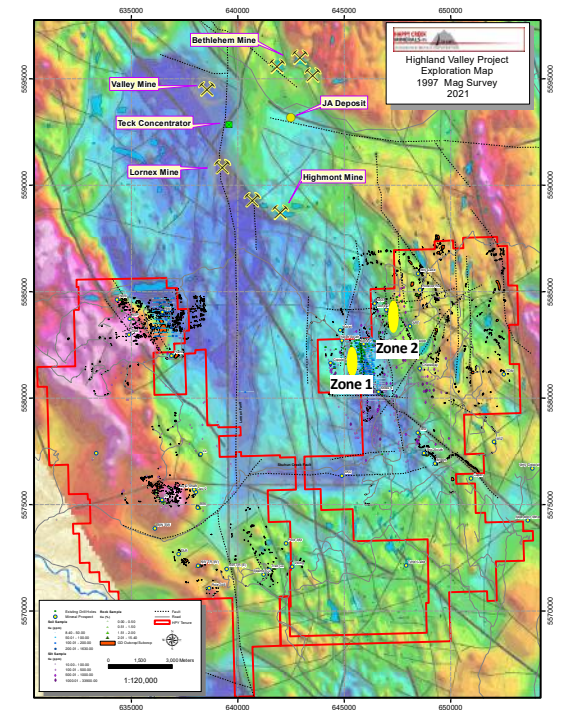
# Regional Geophysics

- Key deposits found so far in Guichon Creek batholith, including Happy Creek's targets, are in:
  - Regional gravity low
  - Magnetic lows
- Major faults are mag lows
- Deposits often have weak IP chargeability response

## GRAVITY



## MAGNETIC TOTAL FIELD



10 km

Images at same scale

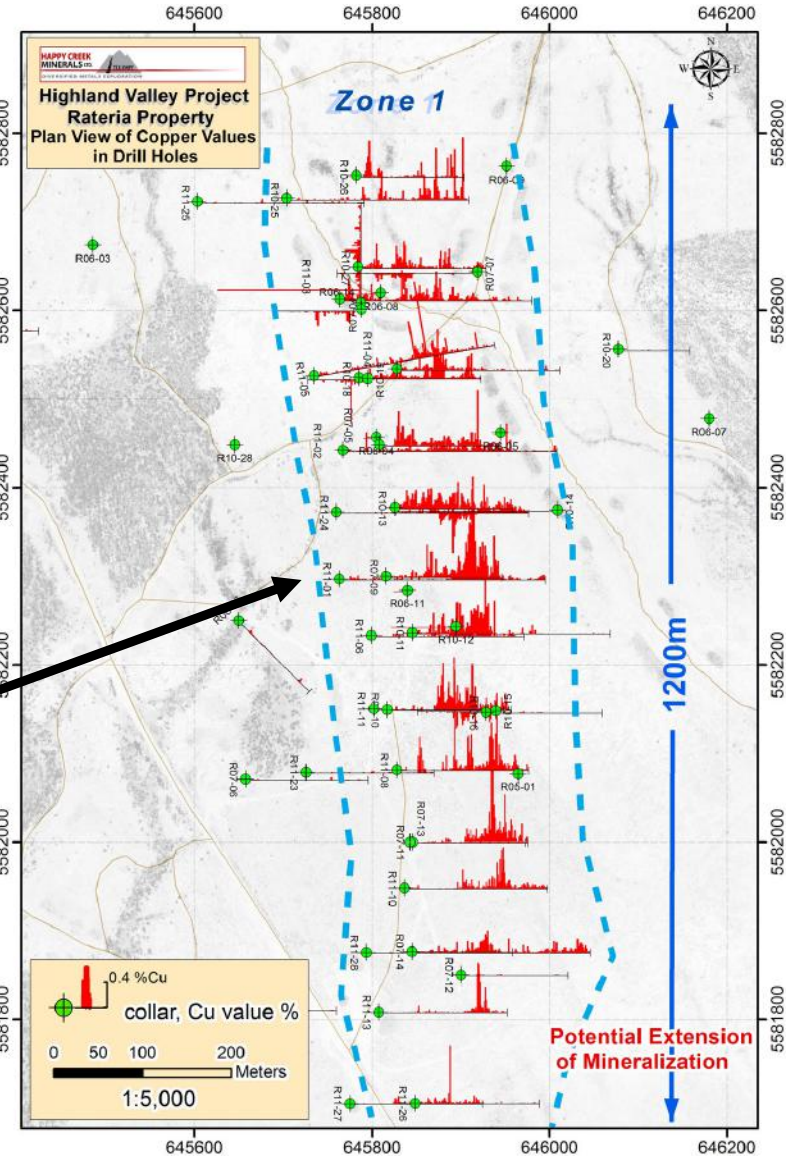
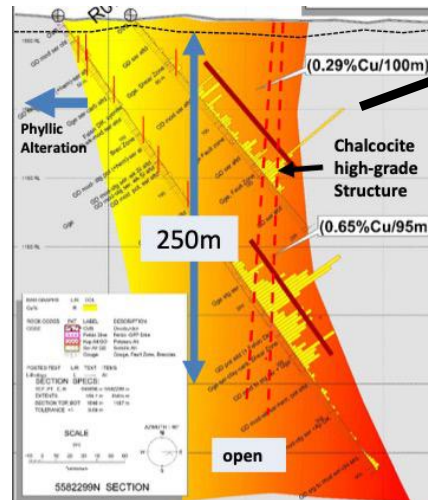
# Zone 1 Cu-Ag-Mo Deposit



- 2006 discovery by Happy Creek
- Hosted by Skeena granodiorite cut by feldspar porphyry dikes
- 1200 m long by 50-150 m wide and 250 m deep
- Open to south and to depth
- Mainly chalcocite-bornite with low pyrite
- Metallurgical testing found high recoveries, clean concentrate with 39.6% copper 398.6 g/t silver

Some DDH Highlights			
Hole	Interval (metres)	Cu %	Ag g/t
R07-9	100.0	0.29	1.0
R07-13	189.3	0.22	1.3
R10-12	236.2	0.27	1.0
R10-13	145.3	0.25	1.3
R10-18	250.6	0.18	1.3
R10-25	77.5	0.31	3.3
R11-1	95.0	0.65	3.6
R11-2	157.5	0.19	1.1
R11-3	257.8	0.15	1.3
R11-6	100.0	0.35	2.2
R11-8	250.0	0.25	1.6
R11-11	242.5	0.25	1.6
<b>includes</b>	<b>102.5</b>	<b>0.43</b>	<b>2.9</b>

Cross-Section Looking North



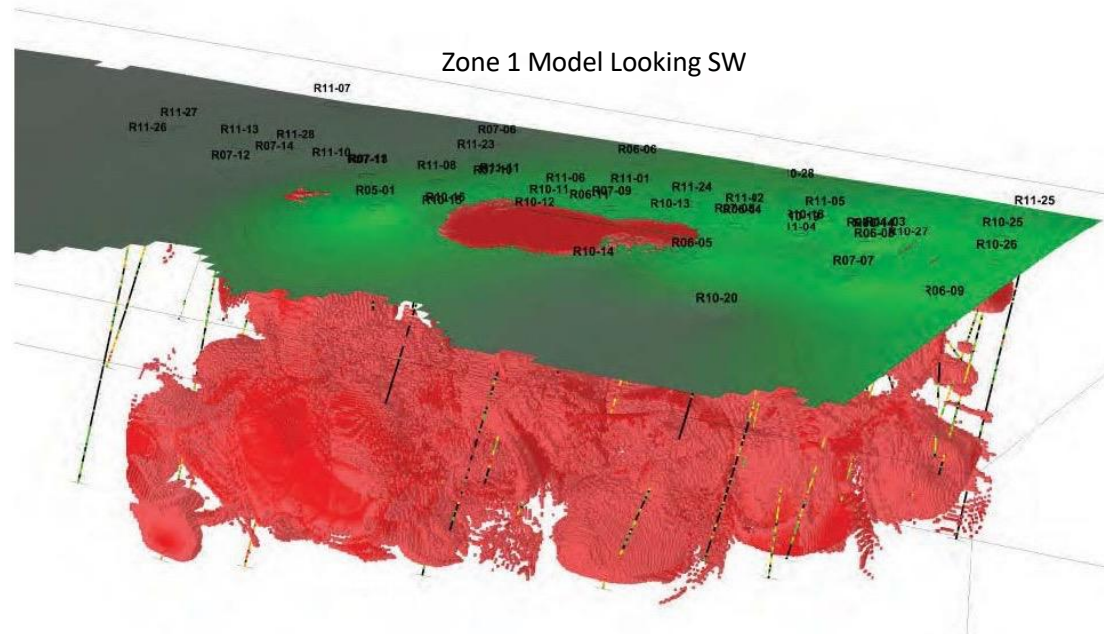
# Zone 1 Cu-Ag-Mo Deposit - Zoning



- Near-surface: argillic-phyllitic alteration with mainly chalcocite
- Deeper: quartz-muscovite-K-spar with bornite-chalcocite and molybdenite
- Alteration extends well beyond mineralized zones, suggesting additional discovery potential



Chalcocite-moly mineralization at 423 m, Hole R11-01



Chalcocite with quartz-muscovite-sericite-kaolinite



Bornite with quartz-sericite-muscovite

# Zone 2 Cu-Au-Mo-Ag deposit

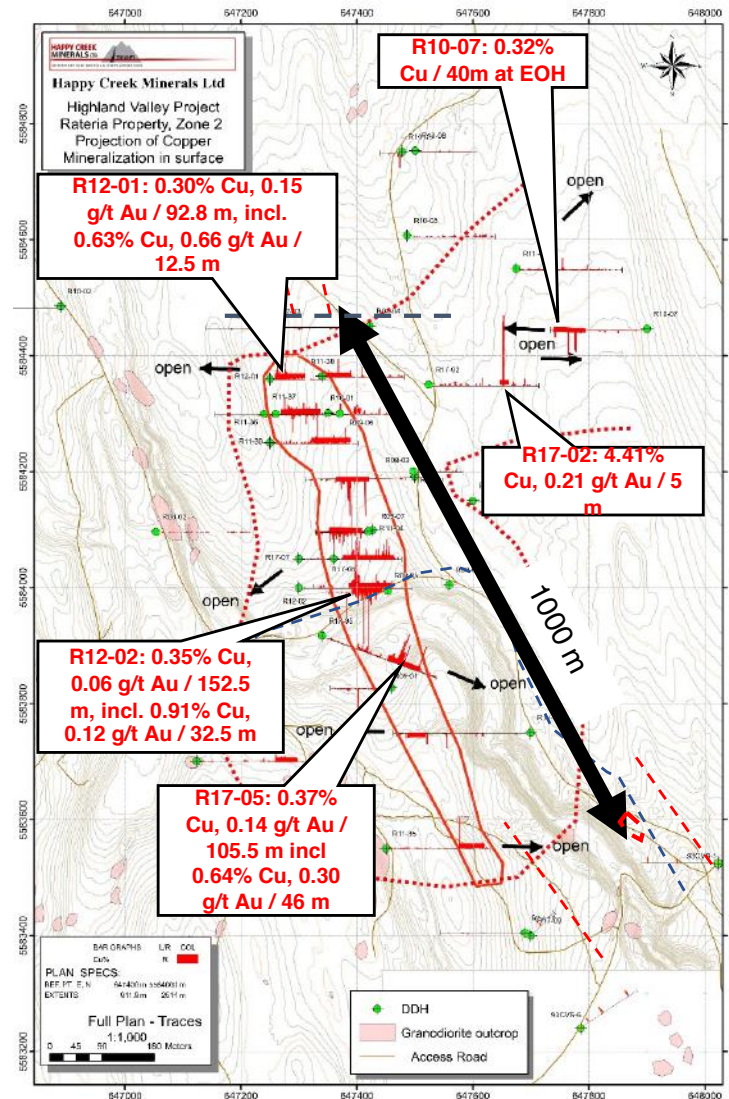


- 2008 discovery by Happy Creek
- Hosted by Bethlehem & Skeena phase granodiorite cut by aplite, qtz-feldspar porphyry dikes
- Quartz, sericite, k-spar alteration
- >1000 m x 100 m x 350 m deep and open in several directions
- Bornite and chalcocite mineralization; low in pyrite
- High-grade zones and locally enriched in **gold, silver and moly and rhenium**

ZONE 2 DDH Highlights						
Zone 2 Hole	Interval (m)	Cu %	Ag g/t	Mo %	Au g/t	Re g/t
R08-01	113.0	0.33	1.48	0.002	0.05	N/A
R08-05	126.0	0.46	1.71	0.008	0.10	N/A
R09-06	92.4	0.12	1.23	0.011		0.76
includes	20.2	0.18	0.80	0.048	0.04	3.45
R09-07	48.0	0.30	1.60	0.002	0.07	0.26
R12-01	92.81	0.30	1.50	0.005	0.15	0.02
includes	12.5	0.63	3.2	0.001	0.66	0.01
R12-02	152.5	0.35	1.70	0.004	0.06	0.57
includes	32.5	0.91	4.0	0.011	0.12	1.83
R17-02	5.0	4.41	20.0	0.031	0.21	6.86
R17-05	105.5	0.37	1.90	0.005	0.14	0.63
R17-08	82.5	0.29	1.25	0.003	0.06	0.17
and	66.0	0.35	1.64	0.002	0.02	0.23



R17-02 chalcocite veining: Portion of 5.0m grading 4.41% Cu, 20.0 g/t Ag, 0.21 g/t Au, 0.031% Mo, 6.86 g/t Re



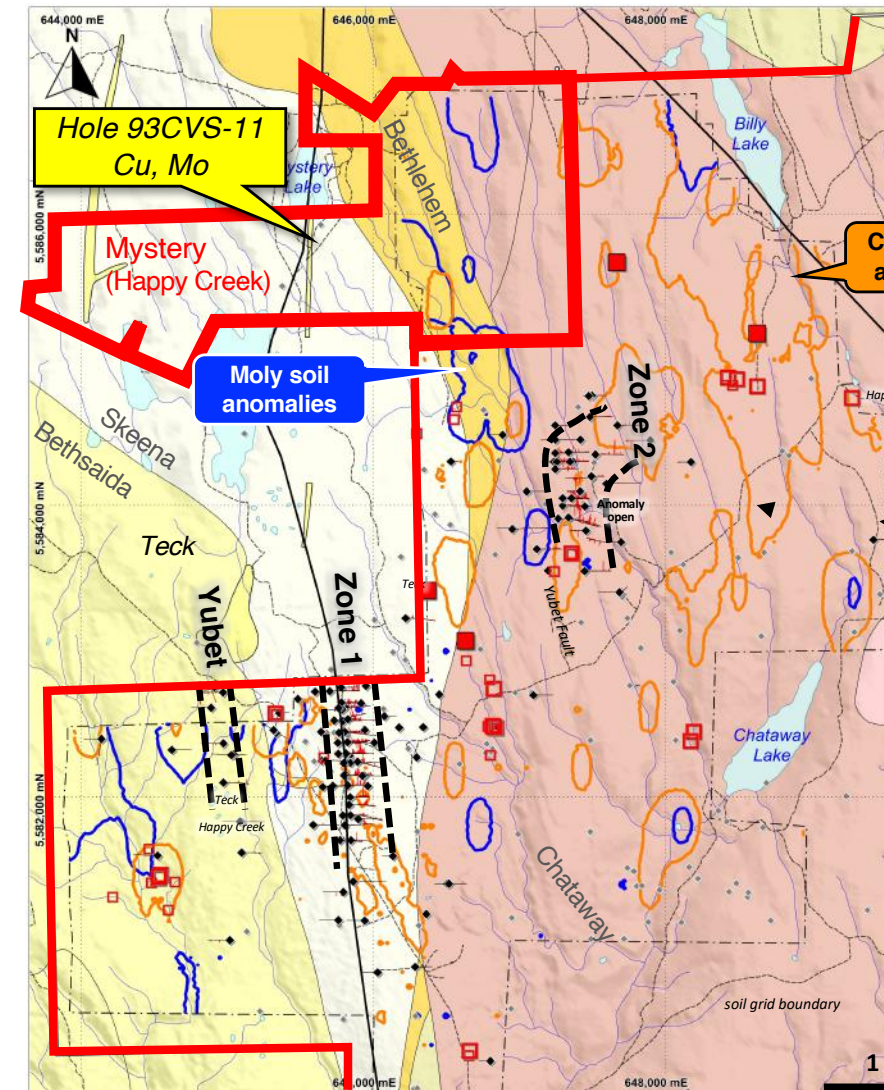




# Mystery Property

Acquired December 2021

- Key 438 hectare property, on trend with Zone 2
- Underlain by prospective core Guichon phases, and cut by porphyry dikes
- 3 holes by Hudson Bay in 1993; Hole 93CVS-11 cut a 230 m width of intense sericite and k-spar alteration with bornite-chalcocite veining:
  - 3 m @ 1.36% Cu, 11.8 g/t Ag
  - 12 m @ 0.27% Cu
  - 21 m @ 0.07% Cu to within 1.5 m of EOH @ 300.5 m)
- Only partially sampled and no gold assays
- 22 historic trenches to NE with no drilling
- Strong mag low and deep IP chargeability

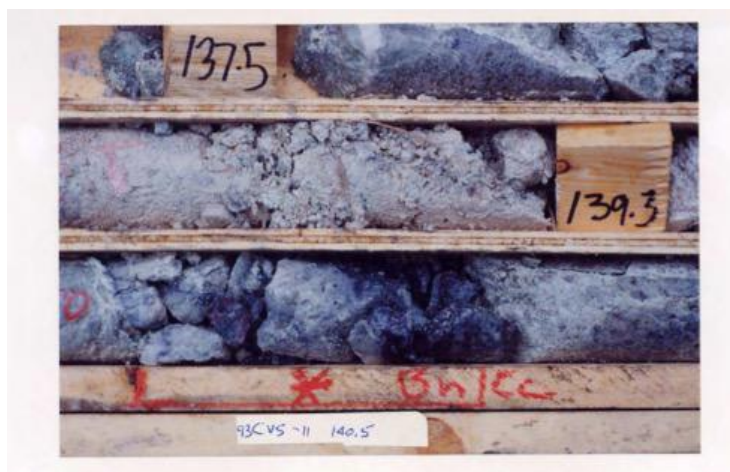


# Mystery - Hole 93CVS-11

(Hudbay, 1993)



Bornite-chalcocite-quartz veins with sericite-kspars alteration similar to Zone 2



High grade bornite-chalcocite-quartz vein. Note intense, pervasive sericite II alteration in adjacent core rows.

Core photos from Hudson Bay Report by S.G Enns, 1993 (PF804381)



Quartz stockwork zone with bornite-chalcocite-quartz veins. Note sericite II overprint on pink K-spar alteration, which displays specks of martitized magnetite altered to hematite.

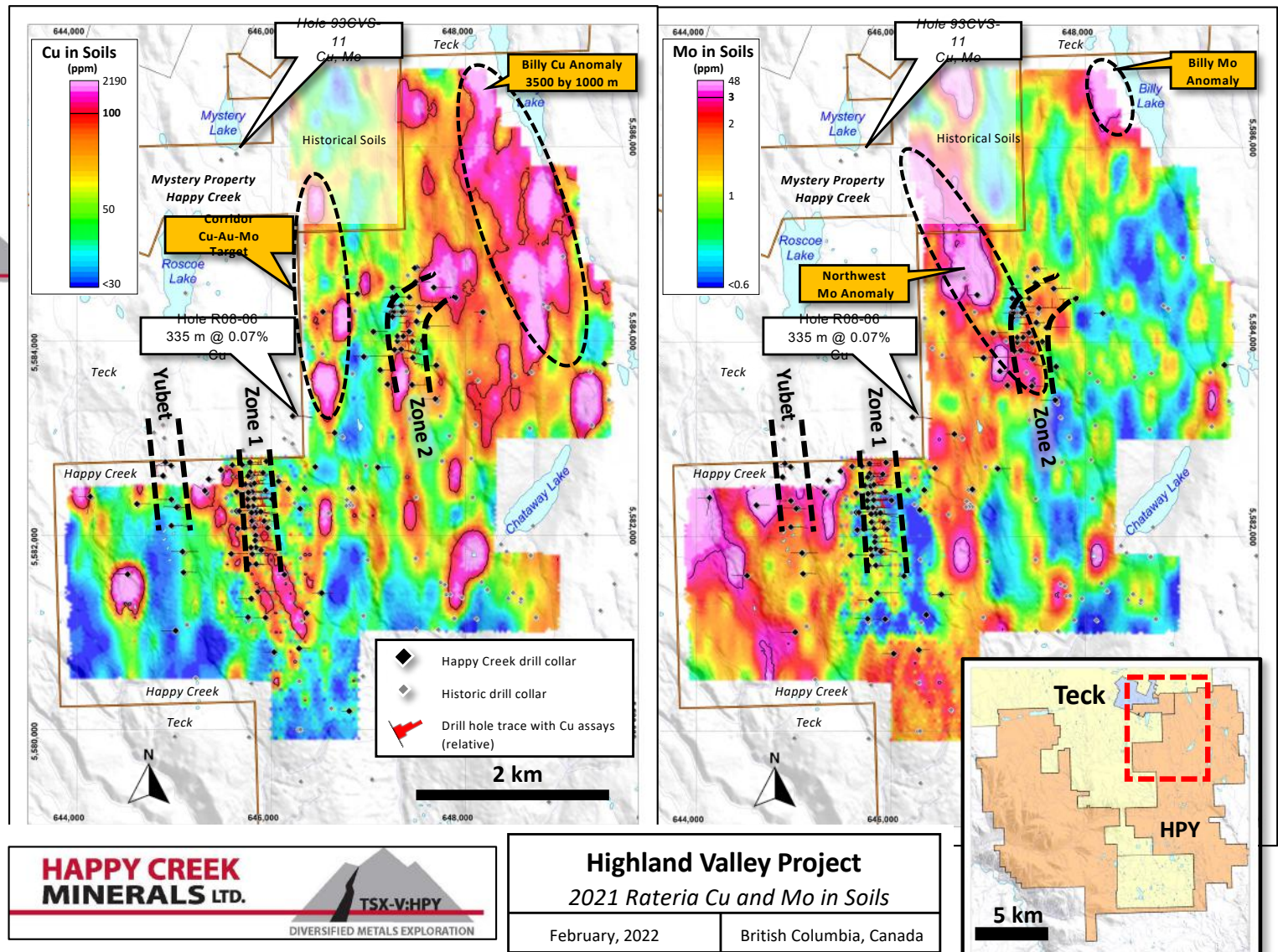


High grade bornite-chalcocite-quartz vein in pervasive sericite II altered quartz diorite.

# Exciting New Soil Anomalies

Copper (left) and Moly (right)

- Several new untested multi-km anomalies with Cu-Mo values stronger than soils at Zones 1 and 2
- Billy Cu-Mo anomaly is 3500 x 1000 m
- Ice-flow to SSE



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**Highland Valley Project**

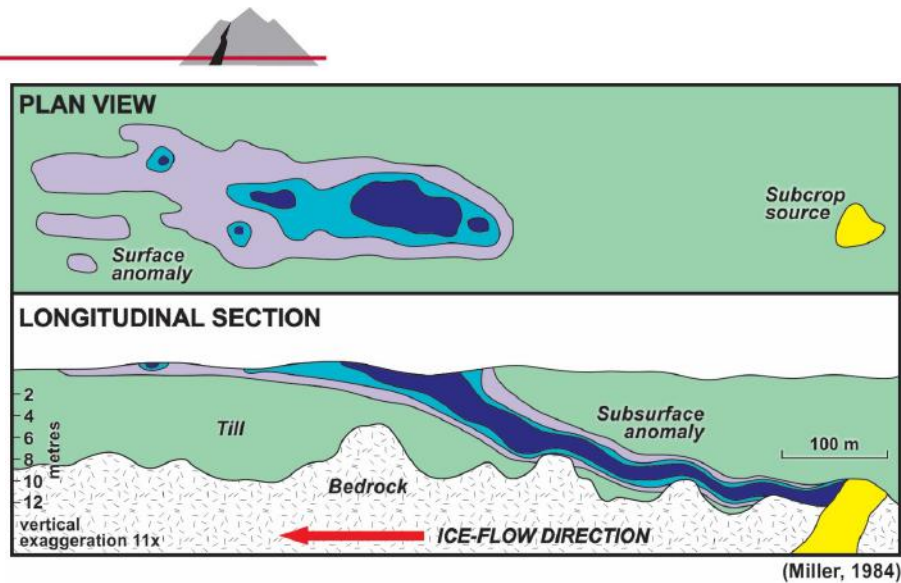
2021 Rateria Cu and Mo in Soils

February, 2022

British Columbia, Canada

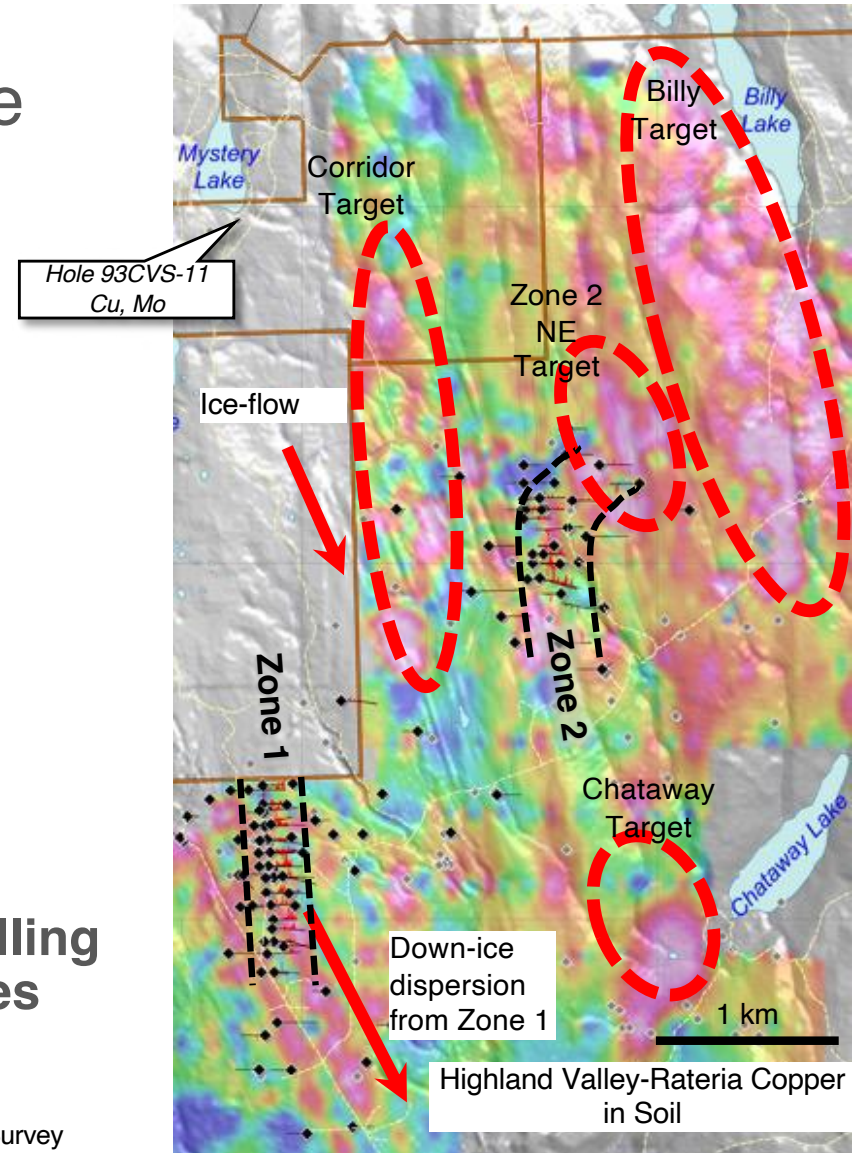
5 km

# Copper-in-Soil (Till) Points to Multiple Large New Targets for Follow-up



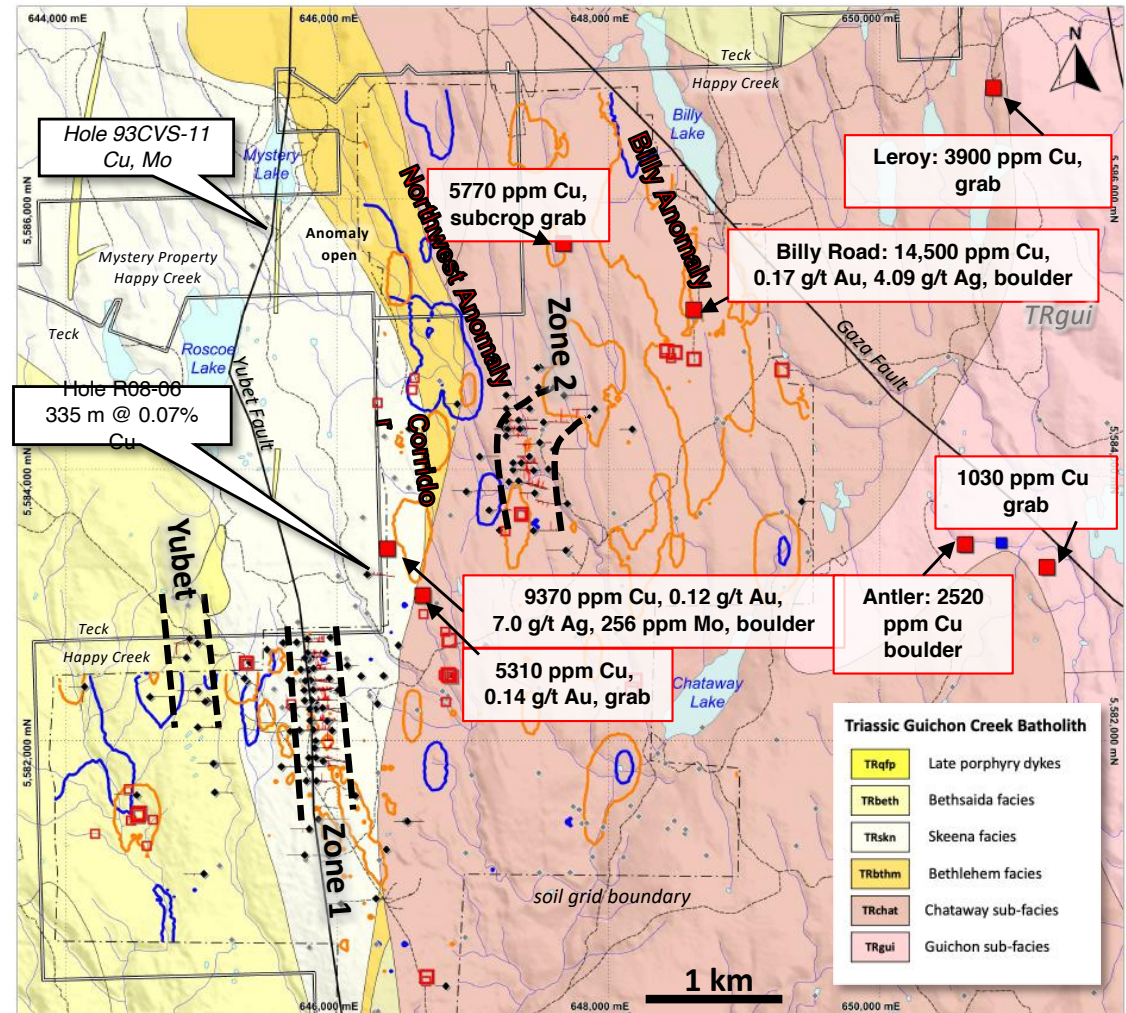
Simple model of down-ice transport of a till anomaly

- Next steps are prospecting, geophysics & drilling along trend and at up-ice end of soil anomalies



# Prospecting Follow-Up Confirms New Targets

- Exciting new Highland Valley prospecting discoveries made within soil anomalies, despite till cover
- 1.45% Cu, 0.7% g/t Au in grab at Billy Road prospect within 3.5 km-long Billy Cu-in-soil anomaly
- Grabs with 0.93% Cu, 0.12 g/t Au and 0.53% Cu, 0.14% Au within Corridor soil anomaly
- Several others from 0.1% to 0.58% Cu



# 2023 Plans



- **Highland Valley:**
  - Phase 1: Additional refinement of drill targets with prospecting, geology, geochem, and geophysics
  - Permits in place; additional archaeology clearance in August 2023
  - Phase 2: Trenching / drilling in fall 2023
- **Silverboss: Drill permit under review.** Extend and refine Gus Cu-Pd-Ag-Ni target to drilling stage through prospecting, geochem and geology
- **Fox Tungsten:** Permit under review for 5-km access trail and large drill program

# Summary

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- Proven, invested team with record of successful discovery, development and mining
- Multiple opportunities to create value, with permits in place or pending for large drill programs
- Targeting giant copper, gold, molybdenum discoveries on 100%-owned properties in established mining districts
- Fox Tungsten: trail and resource expansion drilling planned
- Highland Valley: drilling planned for exciting new copper targets





# Thank you

For more information please contact:

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