



AURANIA

RESOURCES LTD.

Gold & Copper Exploration in Ecuador

# The LOST CITIES

CUTUCU PROJECT



TSX-V: ARU

OTCQB: AUIAF  
[www.aurania.com](http://www.aurania.com)

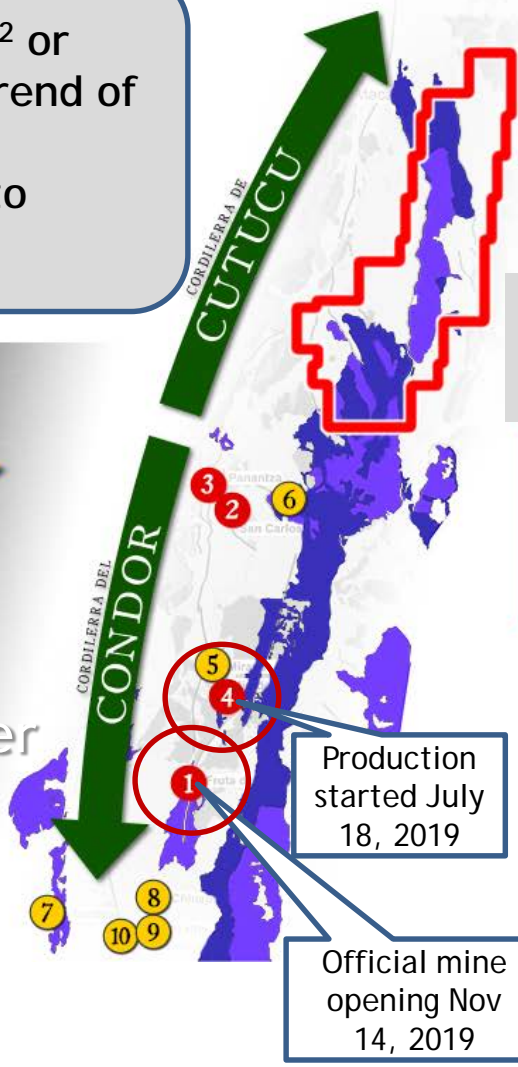
FRANKFURT: 20Q

November 2019

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## The Lost Cities - Cutucu Project

- Large 208,000 hectare (Ha), 2,080km<sup>2</sup> or ~500,000 acre property block along-trend of well-endowed mineral belt;
- Ecuador's two modern mines going into production in that mineral belt



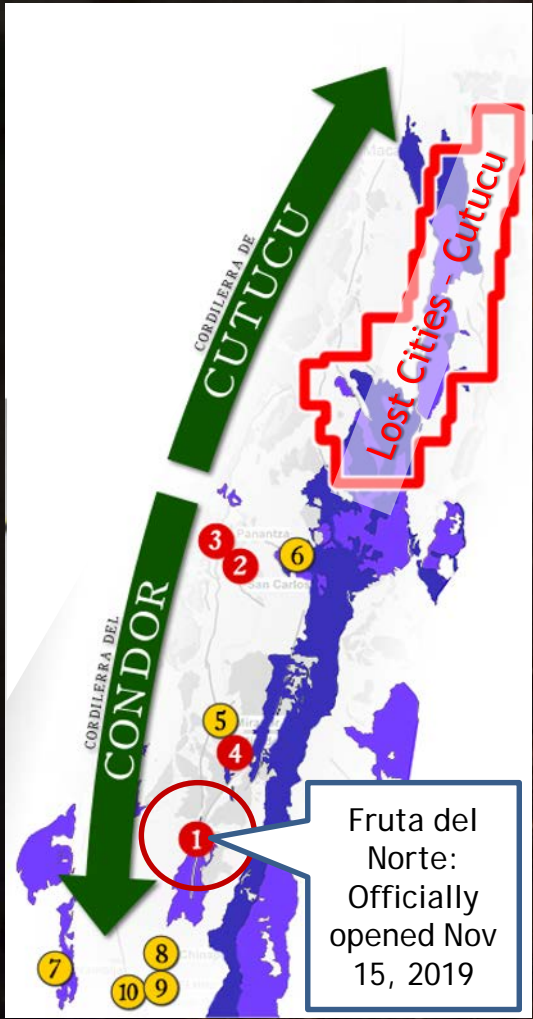
**Aurania's concession block**

ADJACENT DEPOSITS  
(Red box = Management involved in discoveries)

1. Fruta del Norte
2. San Carlos
3. Panantza
4. Mirador

5. Mirador Norte
6. Warintza
7. Nambija
8. Chinapintza
9. El Hito
10. Santa Barbara

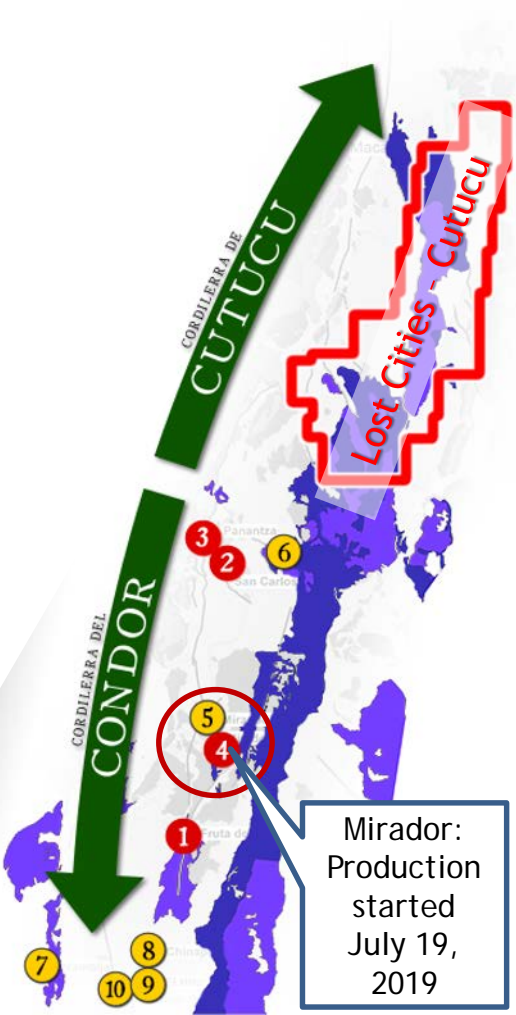
# Ecuador's New Underground Gold Mine



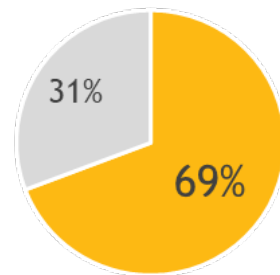
Lundin Gold's underground development at Fruta del Norte

# Ecuador's New Open-Pit Copper Mine

Tongling - China National Rail's Mirador open-pit copper mine

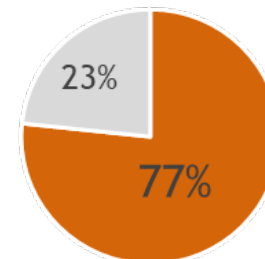


- Management was involved in the discovery of the majority of the NI 43-101 gold and copper resources in the adjacent Cordillera del Condor, that lies along-trend of Aurania's concession block in the Cordillera de Cutucu:
  - CEO, Keith Barron, co-founded Aurelian Resources Inc., an Ecuador gold explorer that discovered the Fruta del Norte gold deposit, currently being developed by Lundin Gold;
  - President, Richard Spencer, led teams responsible for San Carlos, Panantza and Mirador porphyry copper deposits.



18Moz of the belt's  
26Moz of Gold

■ Gold discoveries with which  
Management was involved



23Blbs of the belt's  
30Blbs of Copper

■ Copper discoveries with which  
Management was involved

- Aurania is a mineral exploration company with a focus on gold and copper in the Lost Cities - Cutucu Project in southeast Ecuador
- Aurania Resources Ltd. was founded in 2007
- Trades under the tickers: TSXV: ARU; OTCQB: AUIAF; Frankfurt: 20Q

## OVER 150 YEARS OF COMBINED MINING EXPERIENCE

**Keith Barron, PhD**  
*CEO & Chairman*

- Exploration geologist with over 36 years experience in the mining sector
- Co-founded Ecuador gold explorer Aurelian Resources Inc., which made the Fruta del Norte (FDN) gold discovery in 2006; FDN currently being developed by Lundin Gold

**Richard Spencer, PhD,  
PGeo, C.Geo**  
*President and Director*

- PhD geologist with 32 years of experience in mineral exploration with 10yrs living & working in Ecuador
- Led teams responsible for San Carlos, Panantza and Mirador porphyry copper and Loma Larga epithermal gold deposits

**Leanne Baker, PhD,  
MBA**  
*Director*

- PhD mineral economist and consultant to the metals/mining industry since 2002
- Director of Agnico Eagle Mines Ltd., Reunion Gold Corporation and McEwen Mining
- Former top-ranked mining sector equity analyst with Salomon Smith Barney in the US

**Warren Gilman, BSc  
MBA**  
*Director*

- Mining Engineer with more than 30 years experience as a deal maker in the mining sector
- Co-founder of CIBC's global mining group in 1988; former Chairman of CEF Holdings
- Responsible for some of the largest capital markets financings in Canadian mining history
- Served as advisor to some of the largest mining companies in the world
- Founder, Chairman & CEO of Hong Kong-based Queen's Road Central Capital Ltd.

**Jonathan Kagan, MA,  
AB**  
*Director*

- Former investment banker with 35 years+ experience
- Began career in 1980 at Lazard and became General Partner in 1987; helped head corporate finance and capital markets division
- Director of several private companies and has been a director of public companies
- Managing Principal of Corporate Partners in New York

**Alfred Lenarciak**  
*Director*

- Civil and Mining Engineer with 25 years+ of experience in financing and strategic development of resource companies in North and South America, Africa, Europe & Asia
- Served on the board of over a dozen TSX-listed companies
- Author of six published books; currently working on seventh book
- Cavaliere Member of the Order of Pope Saint Silvester; recipient of Silver Cross of Merit.

## Capitalization Table (TSX.V:ARU, OTCQB:AUIAF, Frankfurt:20Q)

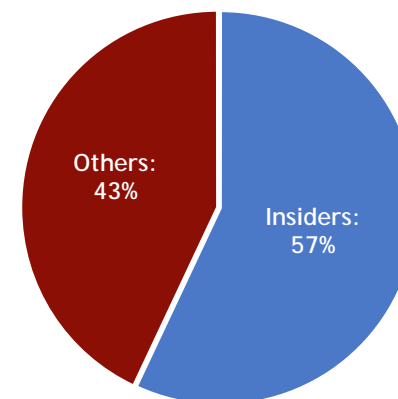
Share Price (11/27/2019)	(C\$)	\$3.02
Basic Shares Outstanding	(M)	36.6
Warrants	(M)	3.0
Options**	(M)	1.8
RSUs	(000's)	67
Debt***	(C\$M)	\$4.5
Fully Diluted Shares Outstanding	(M)	41
Market Cap (Basic)	(C\$M)	111



\*\*Weighted average strike price of C\$2.12

\*\*\*C\$582,775 Mineral Concession Loan 1 ("MCL1") (unsecured, promissory note loan, maturing May 29, 2020) and US\$3M unsecured loan, maturing April 22, 2021 with 2% per annum interest rate

## Shareholder Composition





## Progress to date:

- Heliborne geophysics program (magnetics & radiometrics) - 100% complete
- Stream sediment sampling: 50% complete
- Multiple targets identified:
  - “Epithermal” targets for gold-silver (Fruta del Norte is a classic epithermal deposit);
  - High-grade copper-silver in sedimentary layers;
  - Geophysics indicates many tens of “porphyry” targets for copper and copper-gold;
  - High-grade silver-lead-zinc in limestone layers
- Scout drilling:
  - Completed on Crunchy Hill epithermal target - 3,204m in 9 holes
  - Started at Yawi
- “Big data” analysis underway with Metron Inc.

## Going Forward:

- Complete blanket coverage of the concessions with stream sediment sampling - this area has never undergone modern mineral exploration
- Drill epithermal targets for gold-silver:
  - 20 targets identified, being ranked on their field and chemical characteristics;
  - 4 areas at Yawi, and 6 other targets, being prepped for drilling. Drilling on 1<sup>st</sup> target at Yawi started in October
- Sediment-hosted copper-silver:
  - Determine continuity of copper-silver through field work;
  - Once continuity demonstrated, scout drill Kirus - Tsenken - Jempe areas commencing January;
  - Capitalize on this unexpected copper-silver opportunity
- Working with Metron’s team:
  - Aim is to identify Spanish colonial-era gold mines (Sevilla & Logrono) from all exploration & historic data;
  - Apply Bayesian analysis to gold, silver, copper and zinc-lead exploration
- Start entertaining joint ventures on components of the Lost Cities - Cutucu Project

Selected on basis of two criteria:

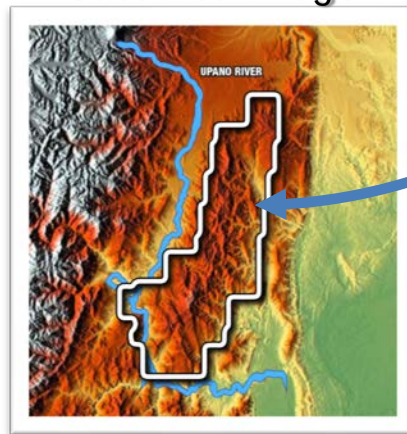
## 1. Historical

Location of two centres ("Lost Cities" - Logrono & Sevilla) where the Colonial Spanish mined gold from ~1565 to ~1600.

1584 MAP

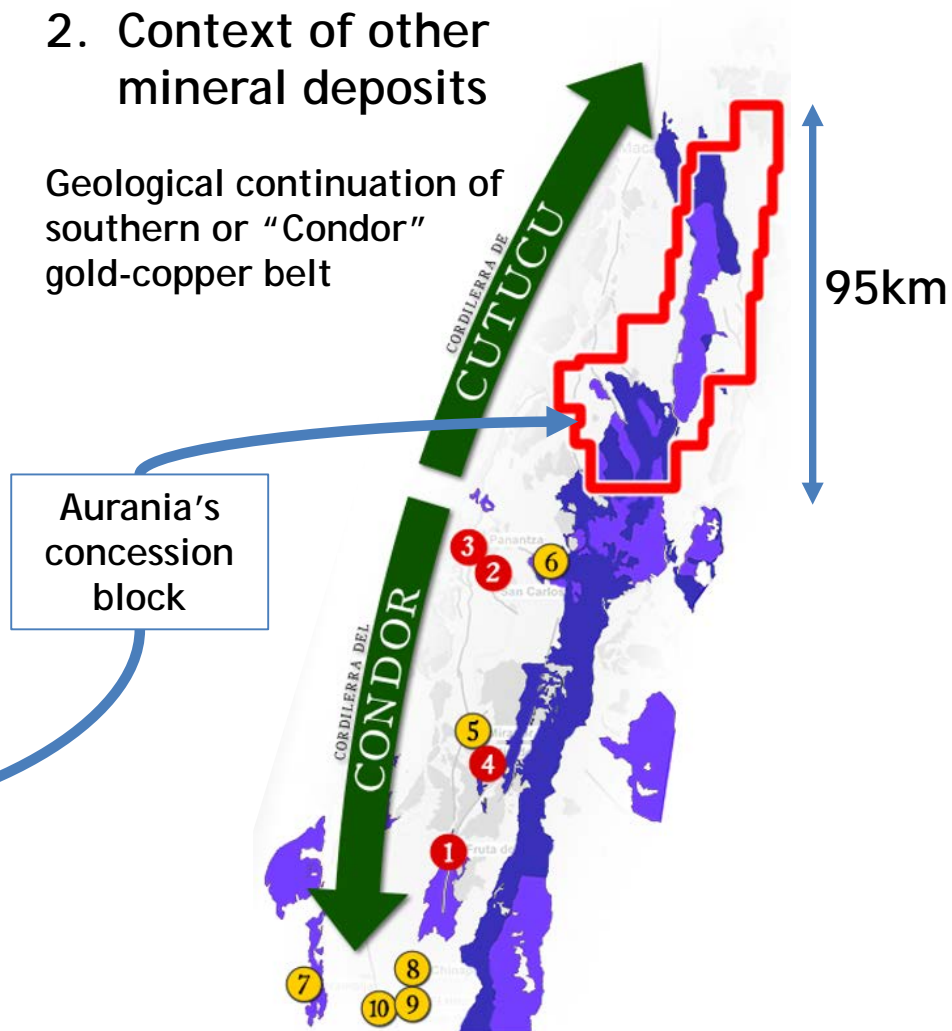


Satellite Image



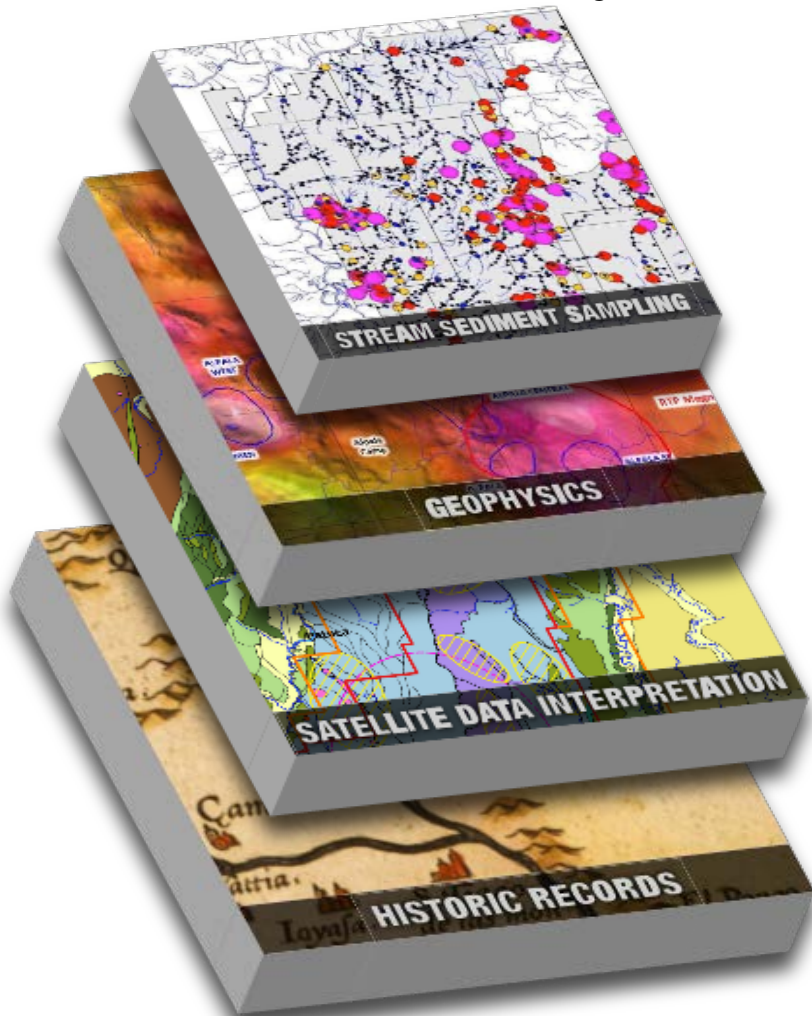
## 2. Context of other mineral deposits

Geological continuation of southern or "Condor" gold-copper belt



## Input

Plus additional data layers



## Output

"Conventional"  
Exploration data  
analysis:



Targets

Metron's Bayesian  
probability maps  
"Big data"  
analysis



Targets

Focused follow-up  
exploration



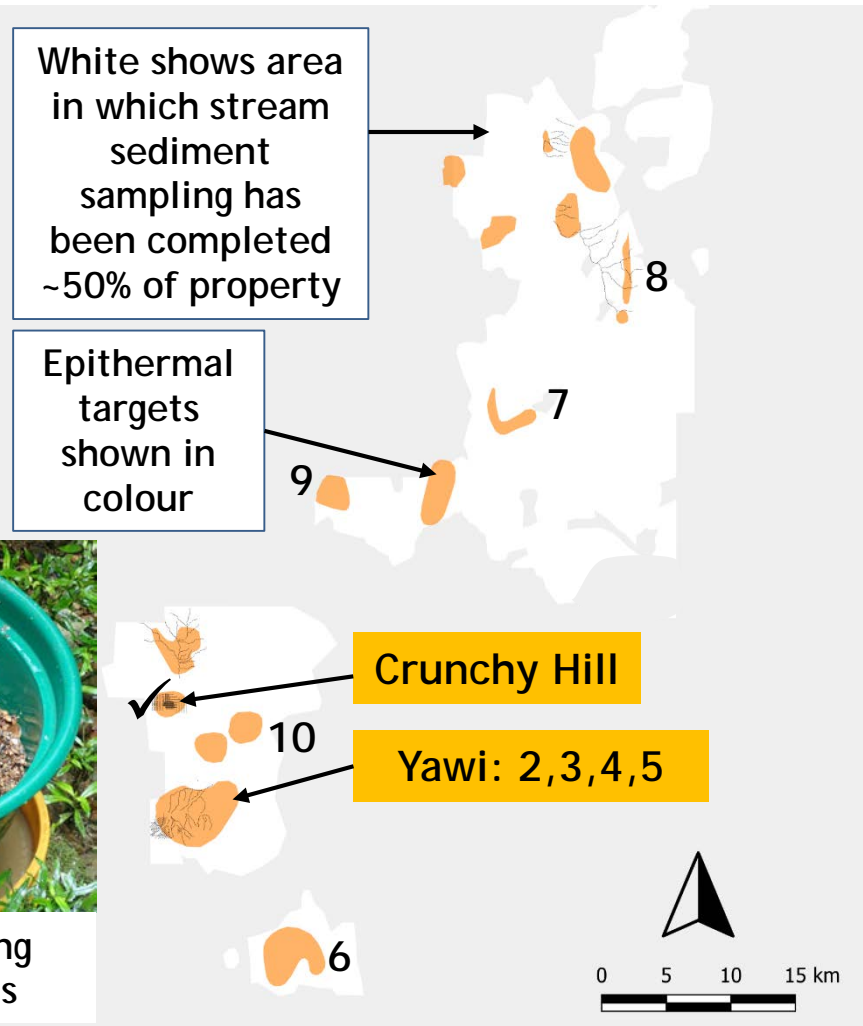
Discovery

- Geophysical survey 100% complete
- Regional exploration (stream sediment sampling) 50% complete
- Scout drilling of 1<sup>st</sup> epithermal target - complete; 2<sup>nd</sup> target drilling underway
- Target identification - current status:

Priority	Target-type	Target specifics	Number of targets	Target metal		
1	Epithermal	Historic mines	2	Gold		
		Targets from exploration	20	Gold	Silver	
2	Sediment-hosted		23km trend		Silver	Copper
Aim to Joint Venture	Manto		15km trend		Silver	Zinc-Lead
	Porphyry		4 field & many geophys targets			Copper

- 20 targets identified from stream sediment sampling
- Scout drilling completed on 1<sup>st</sup> of 20 (Crunchy Hill)
- Scout drilling commenced at 2<sup>nd</sup> gold target area “Yawi” (4 targets)
- Of the 20 targets, ten have been ranked for scout drilling & more detailed exploration is being done on the others

## Epithermal Target Ranking



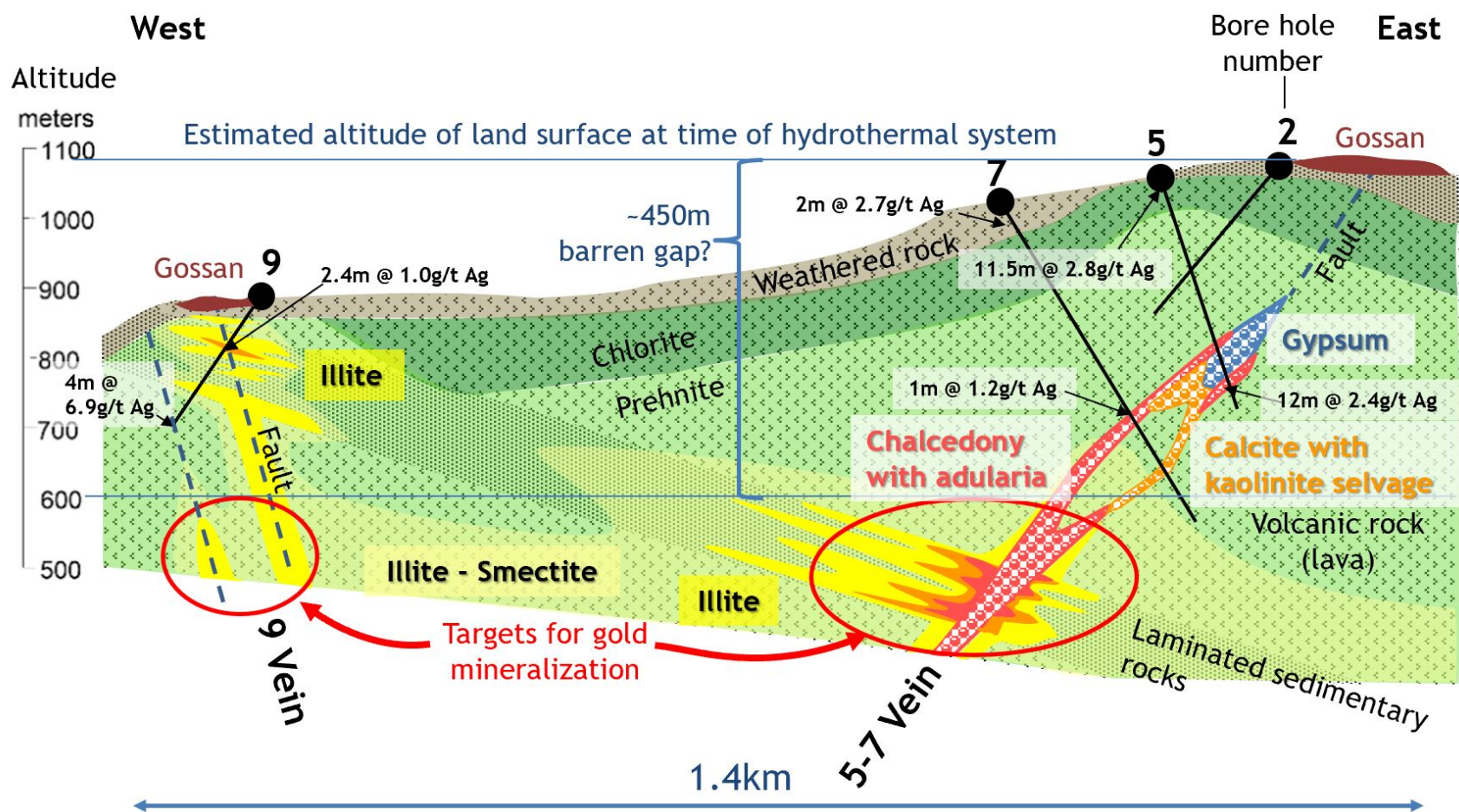
Stream sediment sampling - efficient way of identifying metal enrichment in the area that each stream drains

# Epithermal Targets: Crunchy Hill

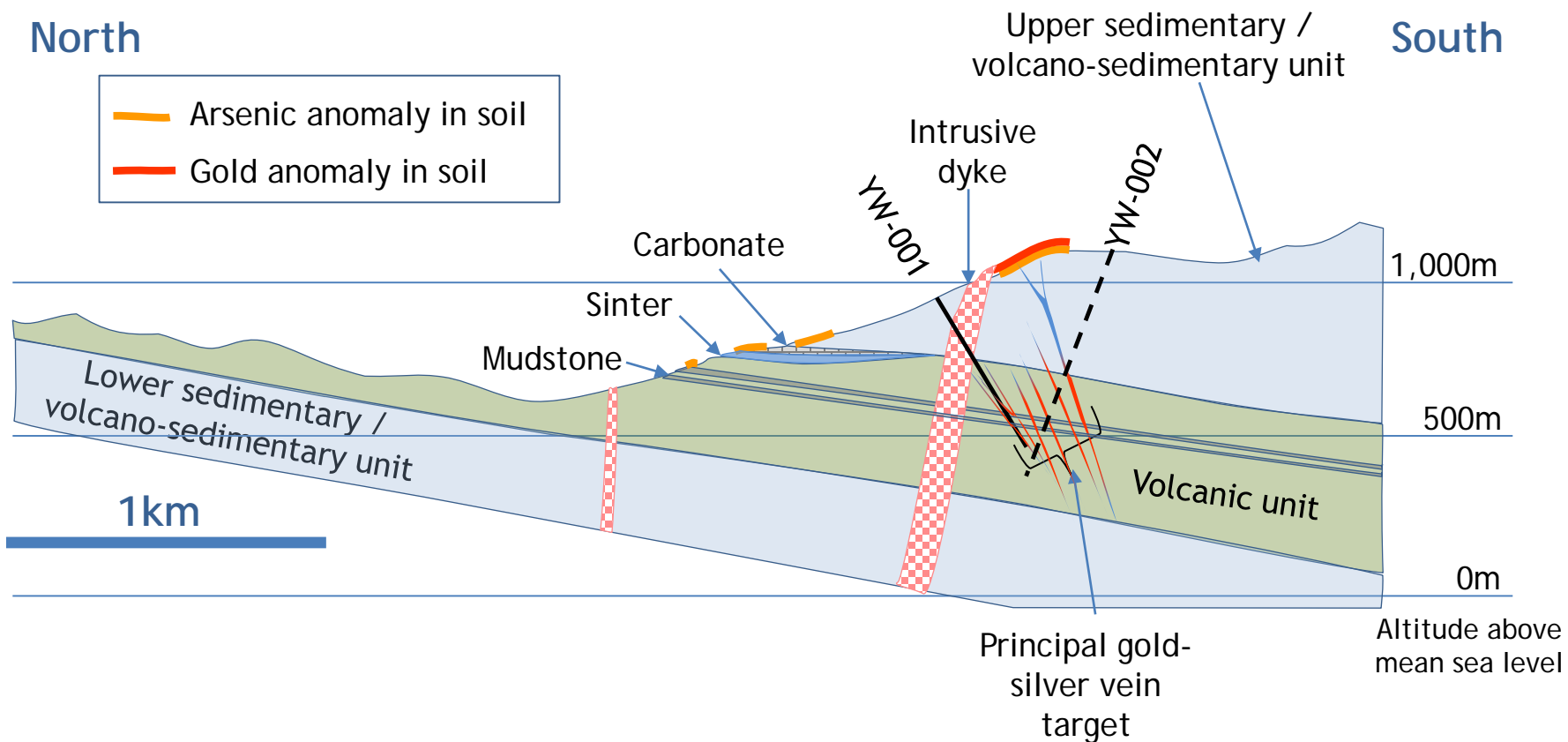
Vertical slice through the Crunchy Hill target after drilling

- 9 bore holes completed totaling 3,204m
- Presence of epithermal system confirmed

⇒ Gold-zone likely to lie at greater depth - red-circled target areas



# Yawi: Cross Section Through Target A



# Sediment-hosted Copper Target

## Value-driver in short-term

### Reconnaissance sampling *Sediment-hosted copper over 23km*

- **Outcrop**
  - 18 samples >1% copper
  - Average grade:
    - 4.4% copper
    - 51g/t silver
- **Boulders in streams**
  - 53 samples
  - 3.9% copper
  - 48g/t silver



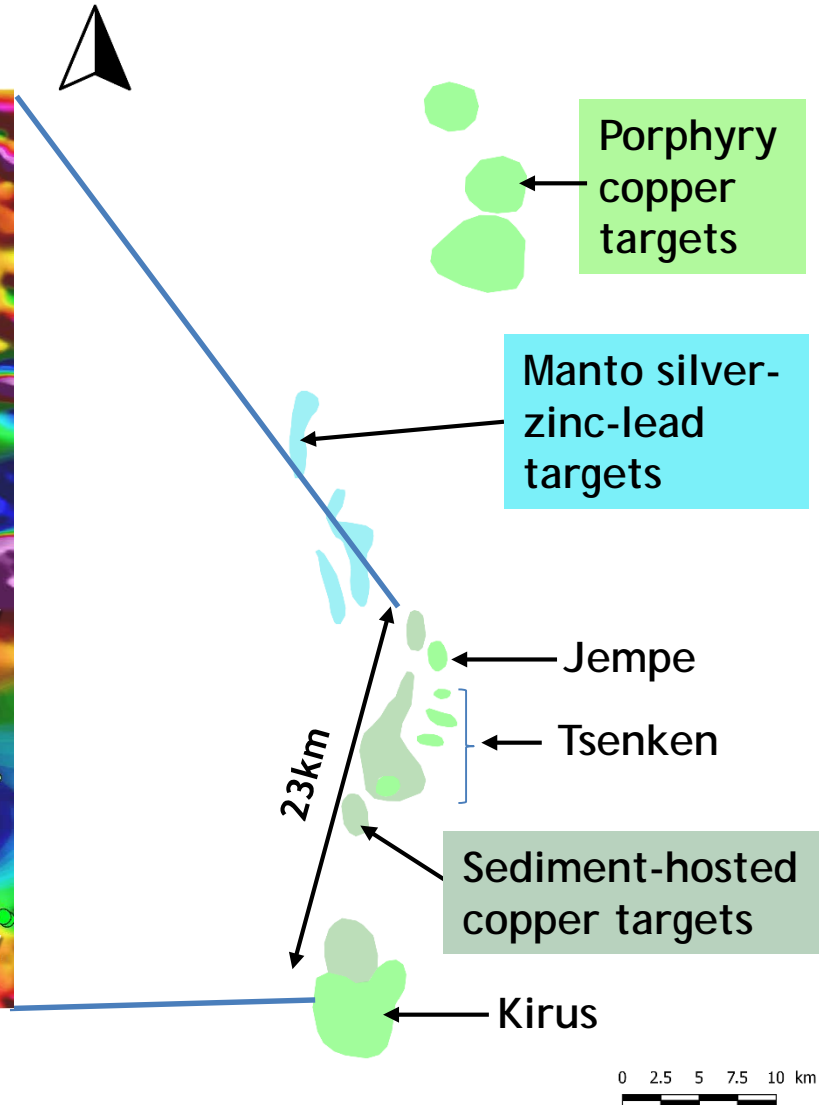
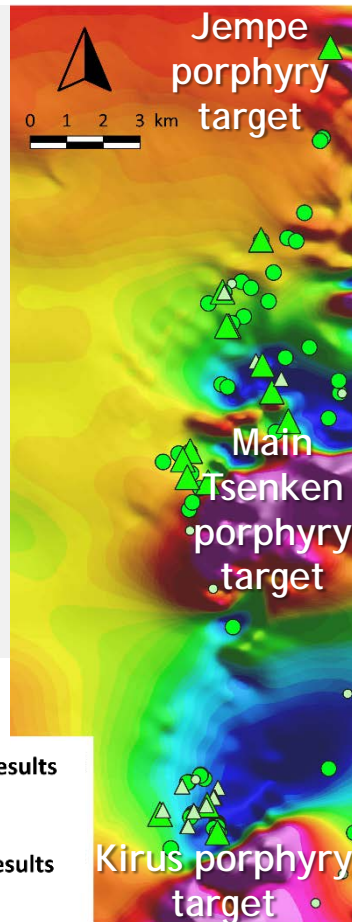
4.3% copper, 48g/t silver in sandstone

#### Outcrop copper results

- △ 0.1 - 1.0 %
- ▲ 1.0 - 38.7 %

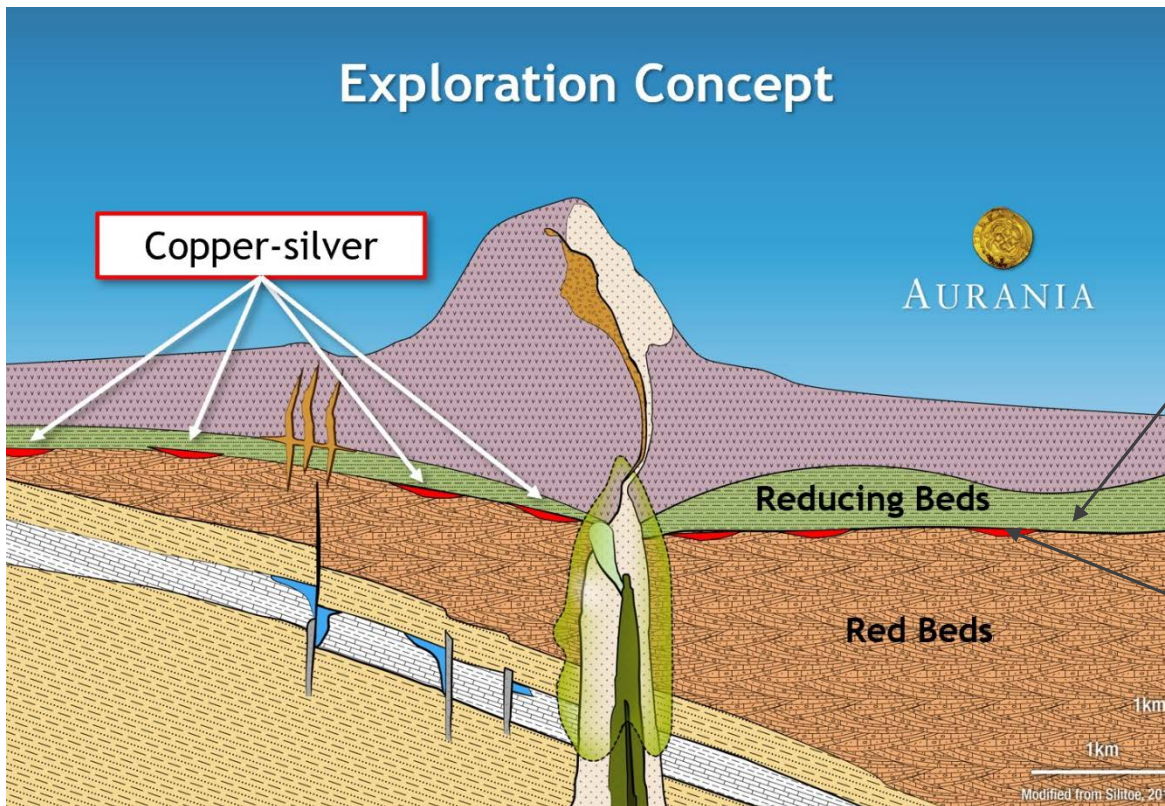
#### Boulder copper results

- 0.1 - 1.0 %
- 1.0 - 11.9 %

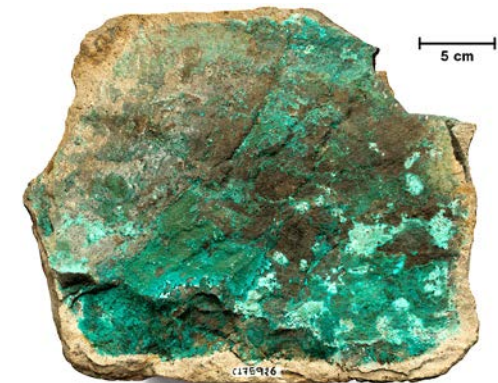




## Exploration Concept



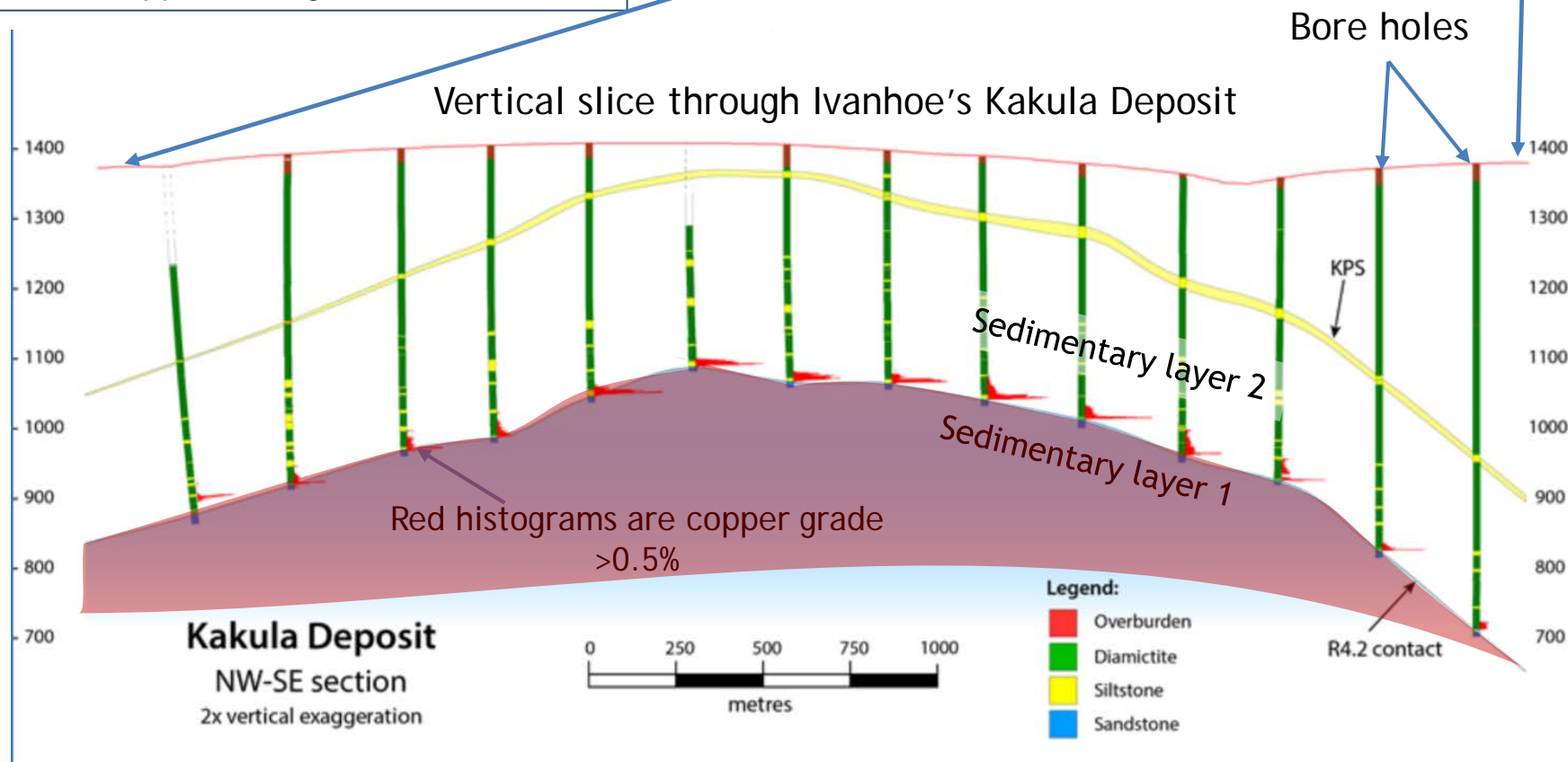
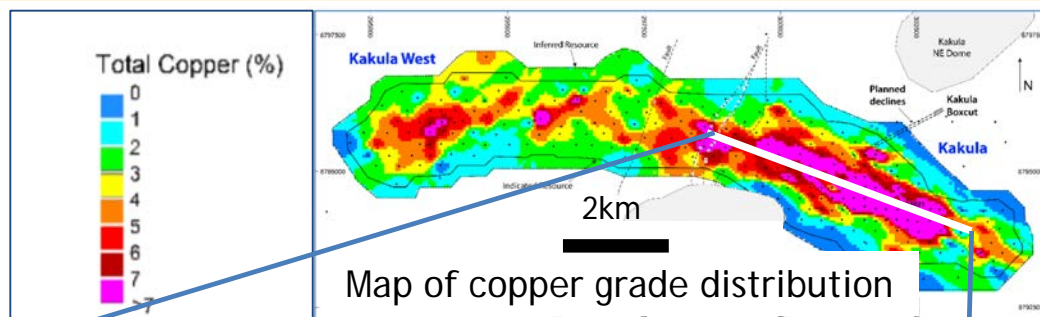
6.4% copper, 48g/t silver in sandstone with carbonized plant fragments

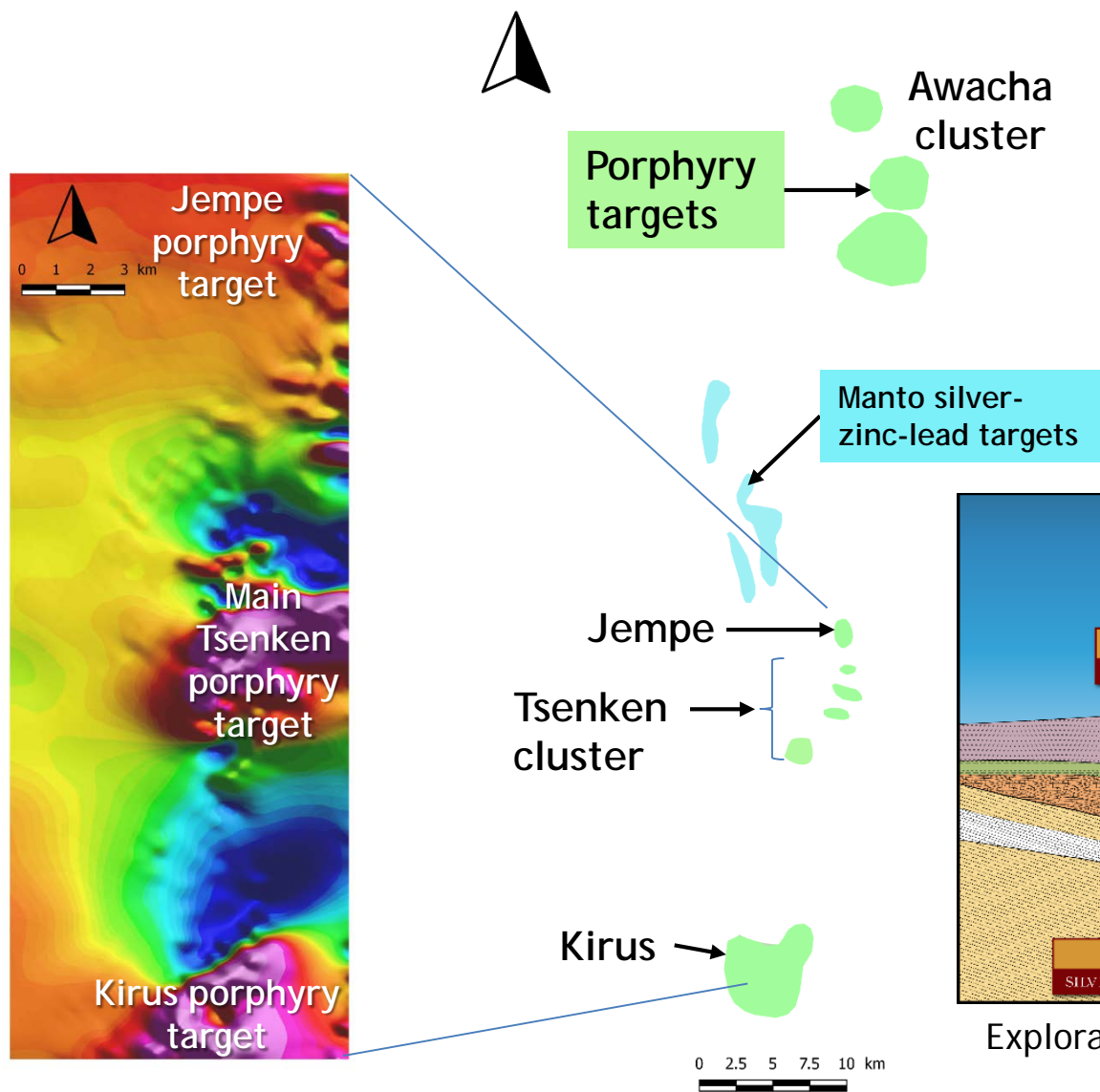


4.3% copper, 48g/t silver in sandstone

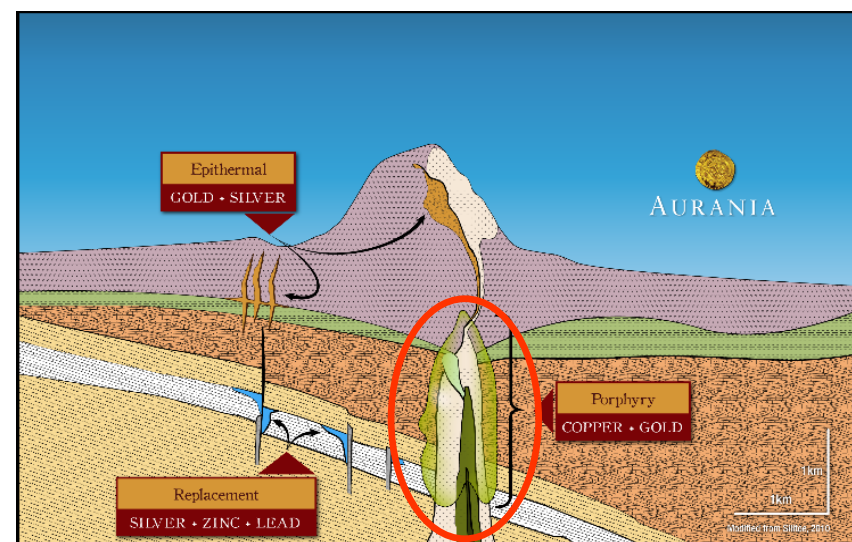
## Ivanhoe's Kakula Deposit in Democratic Republic of Congo

Indicated Resource at Kakula: 38 billion pounds at 2.9% copper. World's average copper mine grade is 0.7%



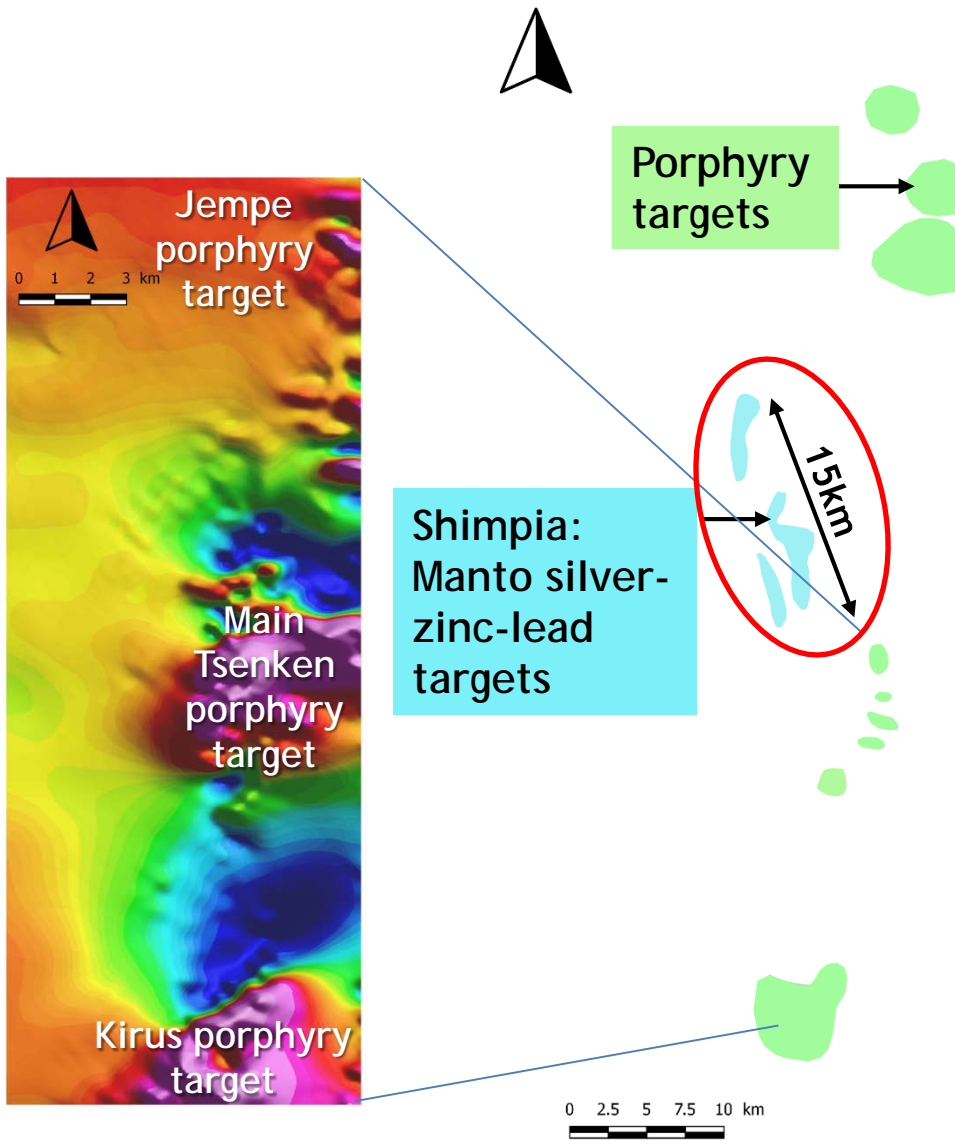


- Many tens of targets identified in airborne geophysics (magnetics)
- Four potential porphyry clusters prioritized for more detailed exploration because of proximity to sediment-hosted copper



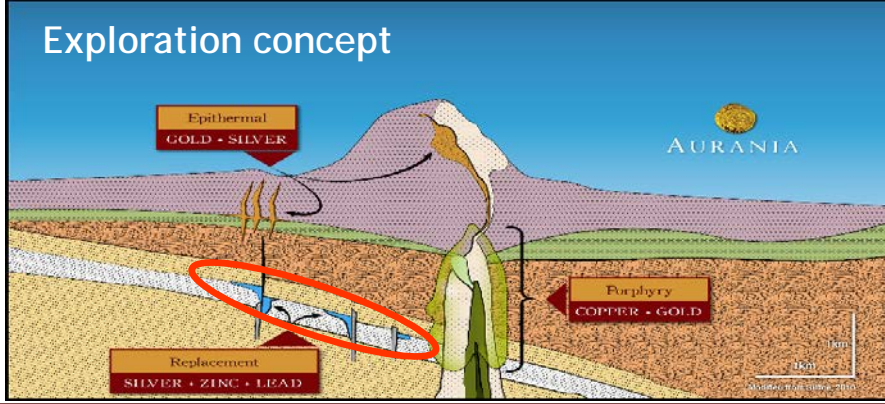
Exploration concept - porphyry is root of eroded extinct volcano

# "Manto" Silver-Zinc-Lead Targets



## Reconnaissance sampling Limestone-hosted silver-lead-zinc

Nature of Sample	Sample Number	Silver (g/t)	Zinc (%)	Lead (%)
Outcrop	Y003607	356.0	12.7	11.0
	Y991404	20.6	3.3	0.8
	Y991413	17.2	5.0	<0.1
	Y991415	12.5	1.7	0.3
	Y003452	3.0	2.7	<0.1
Boulders in streams	Y003604	710.0	42.1	9.2
	E797985	325.0	0.4	39.0
	Y003610	34.7	7.9	0.7
	E797979	28.7	2.0	3.6
	Y003815	25.8	<0.1	<0.1
	Y003609	22.9	0.1	0.2
	E797988	21.1	29.3	0.1
	Y003814	20.1	<0.1	<0.1
	E797989	16.7	47.9	0.1
	Y003453	15.7	0.6	<0.1
	Y003454	11.9	1.3	0.3
	E797987	10.7	<0.1	0.2
	E 797971	6.3	25.9	<0.1





- Complete blanket coverage of the concession area with stream sediment sampling:
  - Maintain concessions that contain prime targets;
  - Drop low-potential parts of concessions to reduce annual concession fee to govt (US\$10/hectare)
- Drill epithermal targets for gold-silver:
  - One rig to remain focused on scout drilling of gold targets;
  - 20 targets identified so far:
    - Drill mobilized on first of 4 target areas at Yawi;
    - Drilling started last week October;
    - The other 15 targets are being ranked on their field and chemical characteristics
- Sediment-hosted copper-silver:
  - Determine continuity of copper-silver through field work;
  - Once continuity demonstrated, scout drill Kirus - Tsenken - Jempe areas commencing January;
  - Capitalize on this unexpected copper-silver opportunity
- Working with Metron's team:
  - Aim is to identify Spanish colonial-era gold mines (Sevilla & Logrono) from all exploration & historic data;
  - Apply Bayesian analysis to gold, silver, copper and zinc-lead exploration
- LiDAR: Survey to focus on key area
- Start entertaining joint ventures on components of the Lost Cities - Cutucu Project

**Anglo American - Luminex**  
(Pegasus, 63,400Ha)

- Grassroots exploration
- US\$57MM over 7 years for 60% (incl. US\$7.3MM in staged cash payments)

**BHP - Luminex**  
(Tarqui, 4,800Ha)

- Copper (>1%) at surface
- US\$42MM over 6 years for 60% (incl. US\$7MM in cash;
- US\$40MM for an additional 10%

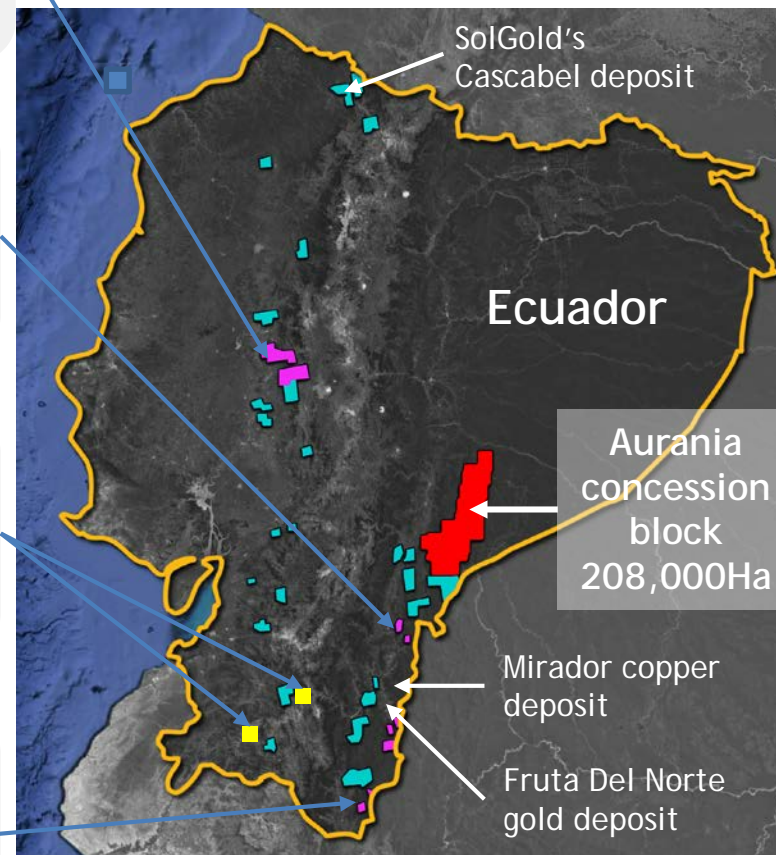
**Newcrest-Cornerstone**  
(Cana Brava & Tioloma, 6,000Ha)

- Grassroots exploration
- US\$100MM or Bankable Feasibility Study in 8 years for 75% (incl. in cash)

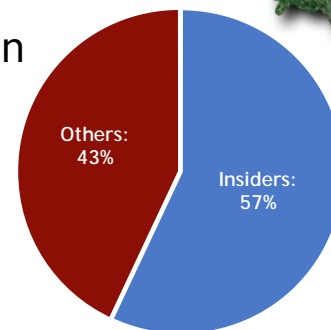
**First Quantum - Luminex**  
(Orquideas & Cascadas, 14,700Ha)

- Copper-molybdenum porphyry target
- US\$38.5MM over 5 years for 51% (incl. US\$7MM in cash);
- US\$10MM for an additional 10%

## Terms of Majors' Joint Ventures in Ecuador



- Ecuador:
  - Open for business
  - Exploration hotspot
  - Aurania's concession block hasn't been explored in modern times
- Strong Board
- Management team: gold & copper discoveries along trend in southern Ecuador
- Management & Board aligned with shareholders
- Clear strategy:



## Strategy per commodity & deposit-type

Gold		Accelerate search for Lost Cities	
Gold	Silver	Systematically drill epithermal targets	
Copper	Silver	Determine continuity of mineral showings & then drill	
Copper		Seek Joint Ventures	Porphyry copper
Zinc-Lead	Silver	Seek Joint Ventures	Manto-style deposits in limestone

## COMMITTED TO WORKING WITH OUR HOST COMMUNITIES

- Request permission from local communities to explore their land
- Supporting Community-Govt Initiatives

### Ministry of Environment

Outlining conservation corridors

### Ministry of Health

Potable water

Providing link between Foundations & local medical centers

### Ministry of Education

Supporting link between Foundations & kids' education

### Ministry of Agriculture

Model produce farms to integrate traditional & modern food crops; goal is to improve nutrition and provide source of income





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