



TSX-V:DSM

***Advancing a World Class Copper Project to Feasibility Studies***  
**December 2020**

# Disclaimer

Certain statements in this release constitute “forward-looking statements” or “forward-looking information” within the meaning of applicable securities laws.

Such statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the company, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified by the use of words such as “may”, “would”, “could”, “will”, “intend”, “expect”, “believe”, “plan”, “anticipate”, “estimate”, “scheduled”, “forecast”, “predict” and other similar terminology, or state that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved. These statements reflect the company’s current expectations regarding future events, performance and results and speak only as of the date of this presentation.

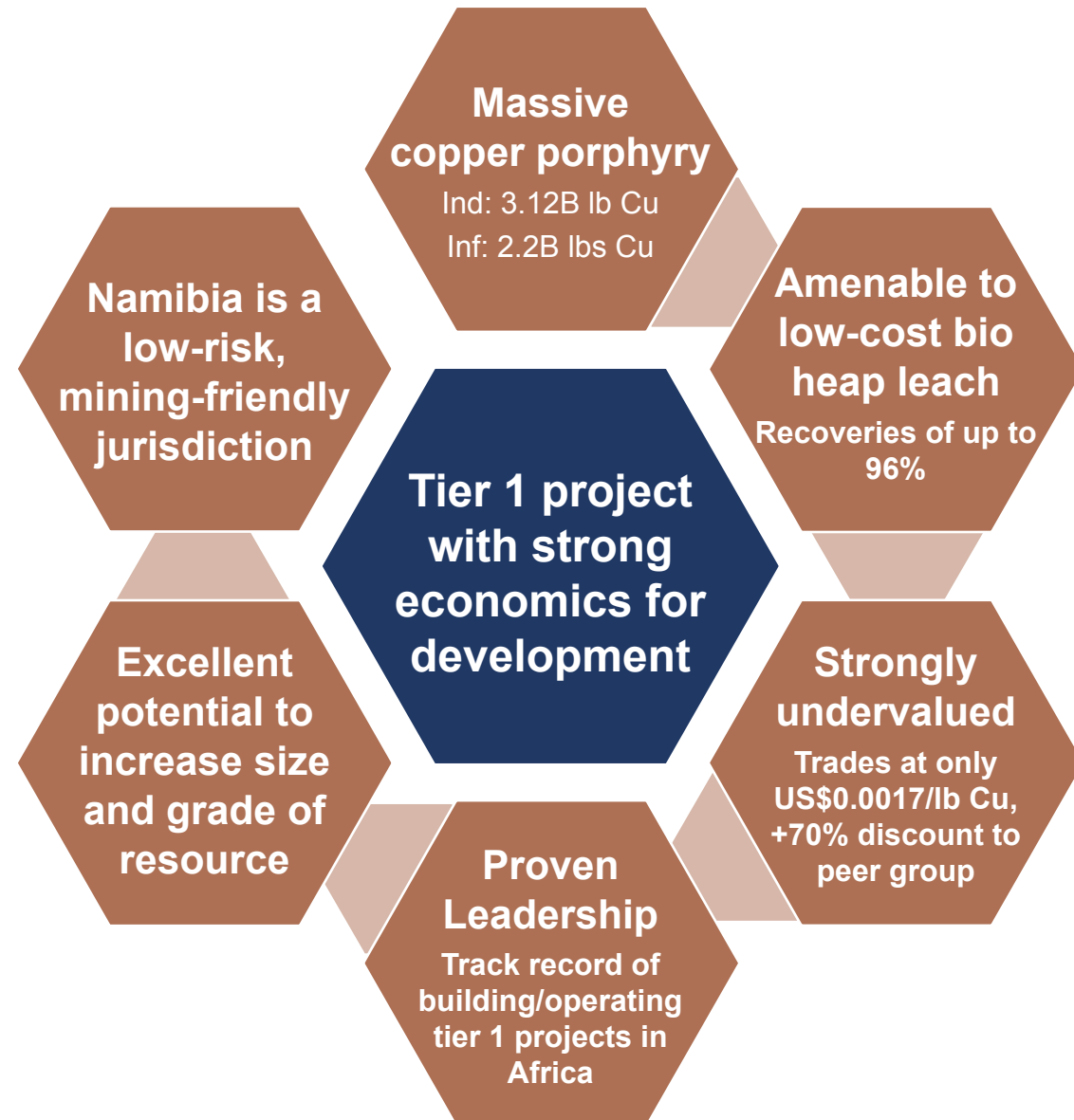
All such forward-looking information and statements are based on certain assumptions and analyses made by Deep-South’s management in light of their experience and perception of historical trends, current conditions and expected future developments, as well as other factors management believe are appropriate in the circumstances. These statements, however, are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking information or statements including, but not limited to, unexpected changes in laws, rules or regulations, or their enforcement by applicable authorities; the failure of parties to contracts to perform as agreed; social or labour unrest; changes in commodity prices, including the price of copper; unexpected failure or inadequacy of infrastructure, or delays in the development of infrastructure, the failure of exploration programs or other studies to deliver anticipated results or results that would justify and support continued studies, development or operations, and the results of economic studies and evaluations. Other important factors that could cause actual results to differ from these forward-looking statements also include those described under the heading “Risk Factors” in the company’s most recently filed MD&A filed by Deep-South. Readers are cautioned not to place undue reliance on forward-looking information or statements

These forward-looking statements are made as of the date of this news release and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this news release.

Vivian Suart-Williams MSc (Hons.) Pr.Sci.Nat., Vice-President Exploration of Deep-South Resources, has reviewed the technical content of this presentation, and is the designated Qualified Person under the terms of National Instrument 43-101.

# Why Invest in Deep-South?

- May 2020 PEA demonstrated the project's robust economics
  - 24-year open pit mine producing over 90M lbs CuEq per year at cash costs of US\$1.34/lb CuEq
  - After-tax NPV<sub>7.5%</sub> of US\$957M and IRR of 29.7% at US\$3.00/lb Cu
- Advancing towards a feasibility study
  - Up to 12,000 m infill drill program to expand high-grade zone (140M tonnes, with historical intercepts of up to 150 m with grades of 0.5% - 1.0% Cu)
  - Further metallurgical test-work expected to improve recoveries and reduce OPEX
  - To complete mining engineering design, Environmental Impact Assessment and base-line studies



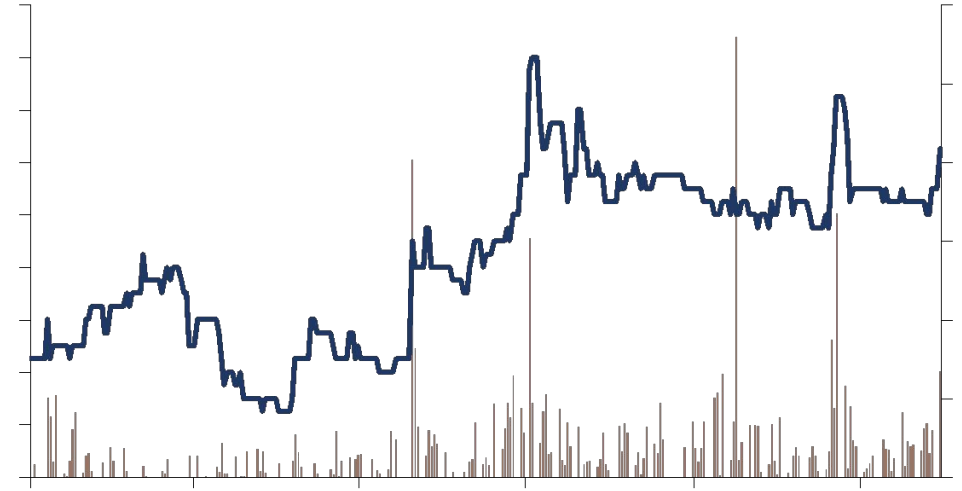
# Capital Markets Profile

## Capital Structure

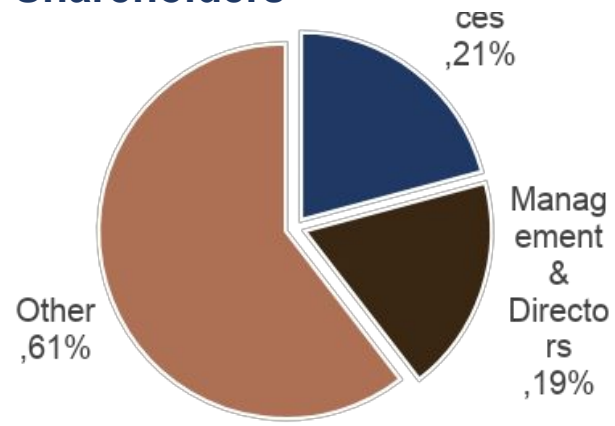
Ticker	TSX-V:DSM
Share Price (November 30, 2020)	C\$0.13
52-Week Trading Range	C\$0.03 – C\$0.16
Basic Shares Outstanding	108.3M
Options Outstanding	7.9M <sup>1</sup>
Warrants Outstanding	32.2M <sup>2</sup>
FD Shares Outstanding	152.6M
Market Capitalization (Basic)	C\$13.5M
Cash	C\$2.3M <sup>3</sup>
Debt	C\$0.4M <sup>4</sup>
Enterprise Value (Basic)	C\$11.6M

1. Includes 7,850,000 options outstanding with a weighted average exercise price of C\$0.10 and a weighted average life of 3.6 years
2. Includes 32,155,100 warrants outstanding with a weighted average exercise price of C\$0.14 and a weighted average life of 3.0 years
3. Includes C\$2.3 million in net proceeds following completion of the Company's recently closed non-brokered private placement
4. Includes C\$389,117 in principal value of convertible debt held by Teck Resources that matures on December 31, 2021, has a conversion price of C\$0.09/share and carries an annual interest rate of LIBOR plus 2%

## Share Price and Volume (Last 12 Months)



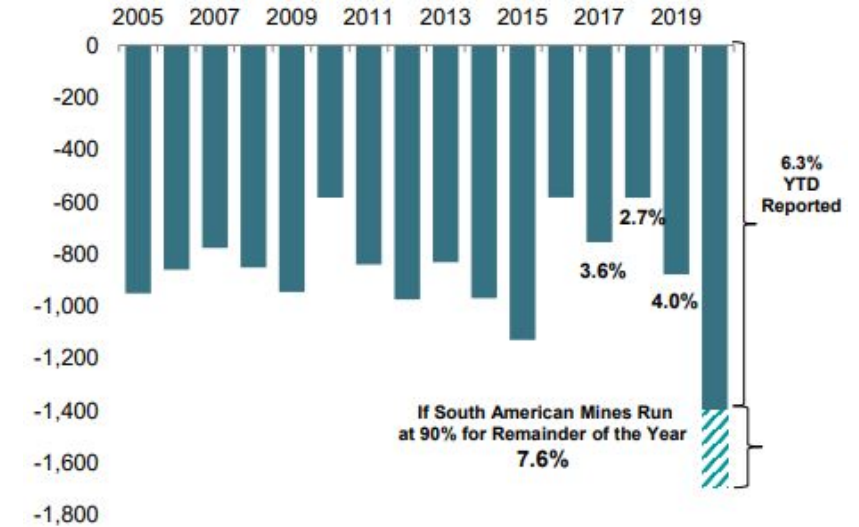
## Top Shareholders



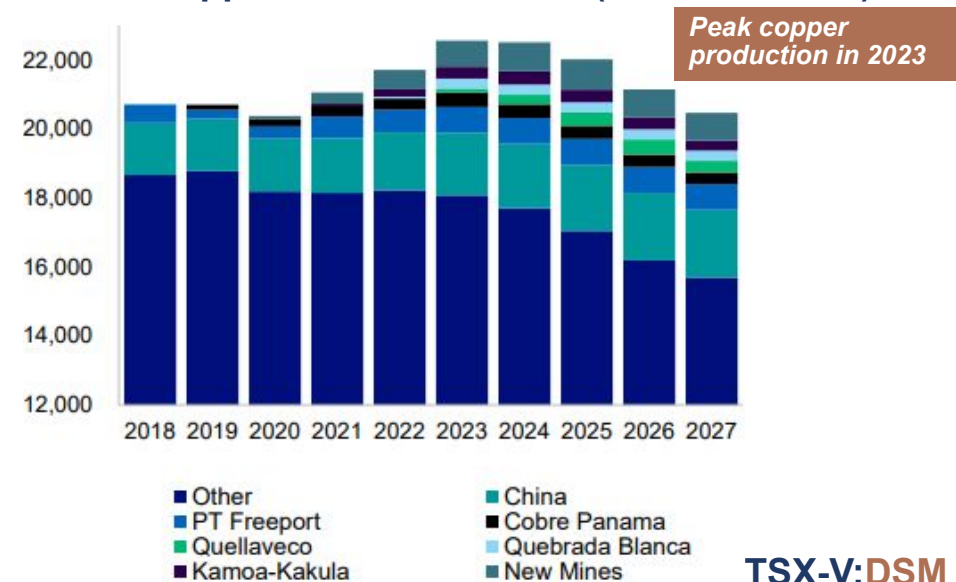
# Improving Copper Market

- Strong cathode demand in China putting upward pressure on copper prices
  - Cathode imports are up 47% YTD in China (↑900K tonnes)
- Global ex-China demand is slowly improving
- Government closures of mines, ports and distribution have kept the concentrate and cathode markets tight
- This tight copper market is expected to continue through 2021 due to COVID-19 restrictions
- Global mine growth is expected to resume in 2022 and peak in 2023
- Long-term production growth impaired due to deferral of projects following recent period of low prices
- Global copper cathode stocks are shrinking
  - Exchange stocks have fallen by 260K since March 2020. Now only 6.1 days of global consumption

Copper Supply Disruptions (000 tonnes)<sup>1</sup>



Global Copper Mine Production (000 tonnes Cu)<sup>2</sup>



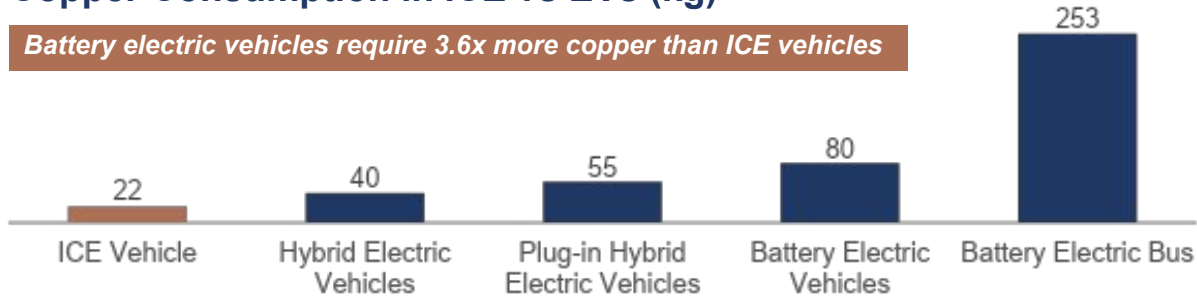
1. Source: Teck Resources based on information from Wood Mackenzie  
 2. Source: Wood Mackenzie

# Copper is a Cornerstone of the EV Revolution

- EVs need much larger amounts of copper compared to internal combustion engine (ICE) cars

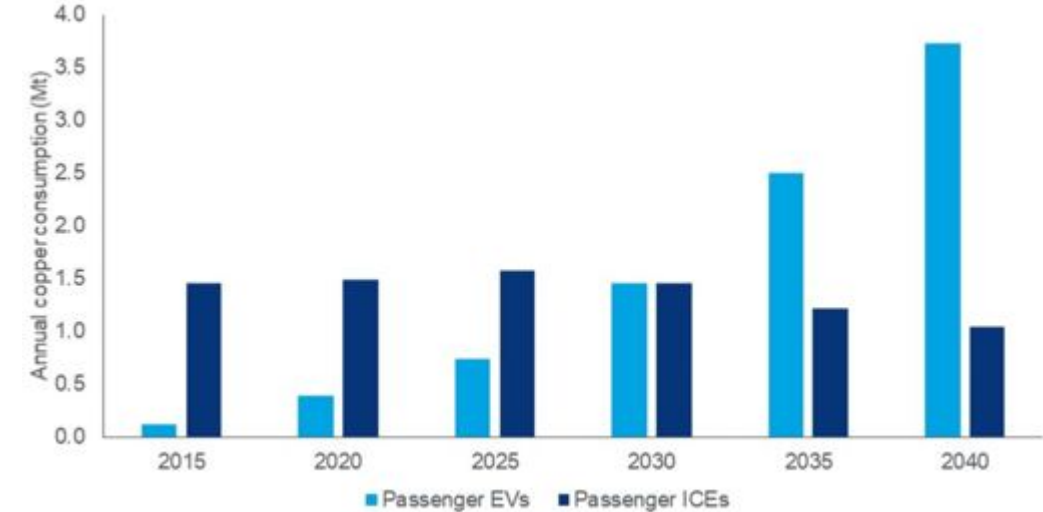
## Copper Consumption in ICE vs EVs (kg)<sup>1</sup>

Battery electric vehicles require 3.6x more copper than ICE vehicles

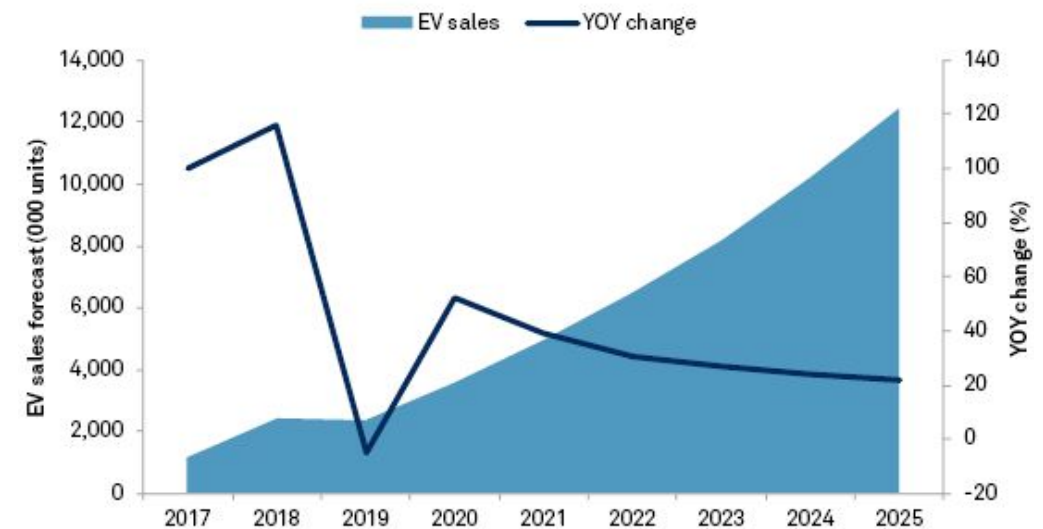


- There are limited alternatives to copper in EV adoption
- Copper is even more heavily used in charging stations and in supporting electric grid infrastructure
- By 2030, Wood Mackenzie expects over 20 million EV charging points will be deployed globally, consuming over 250% more copper than in 2019

## Annual Copper Consumption in EVs and ICE Vehicles<sup>1</sup>



## EV sales to increase more than fivefold from 2019 to 2025<sup>1</sup>



1. Source: Wood Mackenzie

2. Source: S&P Global Market Intelligence and LMC Automotive. Includes the sale of new battery electric and plug-in hybrid passenger vehicles

# Haib Project

## *Scratching the surface of a massive copper porphyry deposit*

- Massive property (370 km<sup>2</sup>) near highway, water at 15 km and could be pipelined
- Indicated: 3.1B lbs of copper
- Inferred: 2.2B lbs of copper
- 140M tonne high-grade zone (up to 150 m intercepts at 0.5%-1.0% Cu)
- Amenable to low-cost bio-heap leach
- Robust May 2020 PEA
- Substantial exploration upside
- Mining-friendly jurisdiction



# Namibia: Africa's Premier Mining Jurisdiction

## Low-Risk & Mining-Friendly

- Governed by stable parliamentary democracy with an independent judiciary
- Transparent system of mineral and surface title
- Ranked 1<sup>st</sup> in policy perception amongst African countries (14<sup>th</sup> globally) in the 2019 Fraser Institute Mining Survey
- Government and social support for mining with stated targets to better develop mining sector

## Excellent Infrastructure and Location

- Haib Project is in proximity of all essential utilities: paved roads/highway, national power grid, water supply & well-serviced local towns

## Well Established Mining Industry

- Cornerstone of Namibia's economy (~25% of GDP and >50% of exports)
- World's 4<sup>th</sup> largest producer of uranium (~6% of global output)
- World's 8<sup>th</sup> largest producer of diamonds (~2% of global output)
- Also a major producer of copper, gold zinc and lead



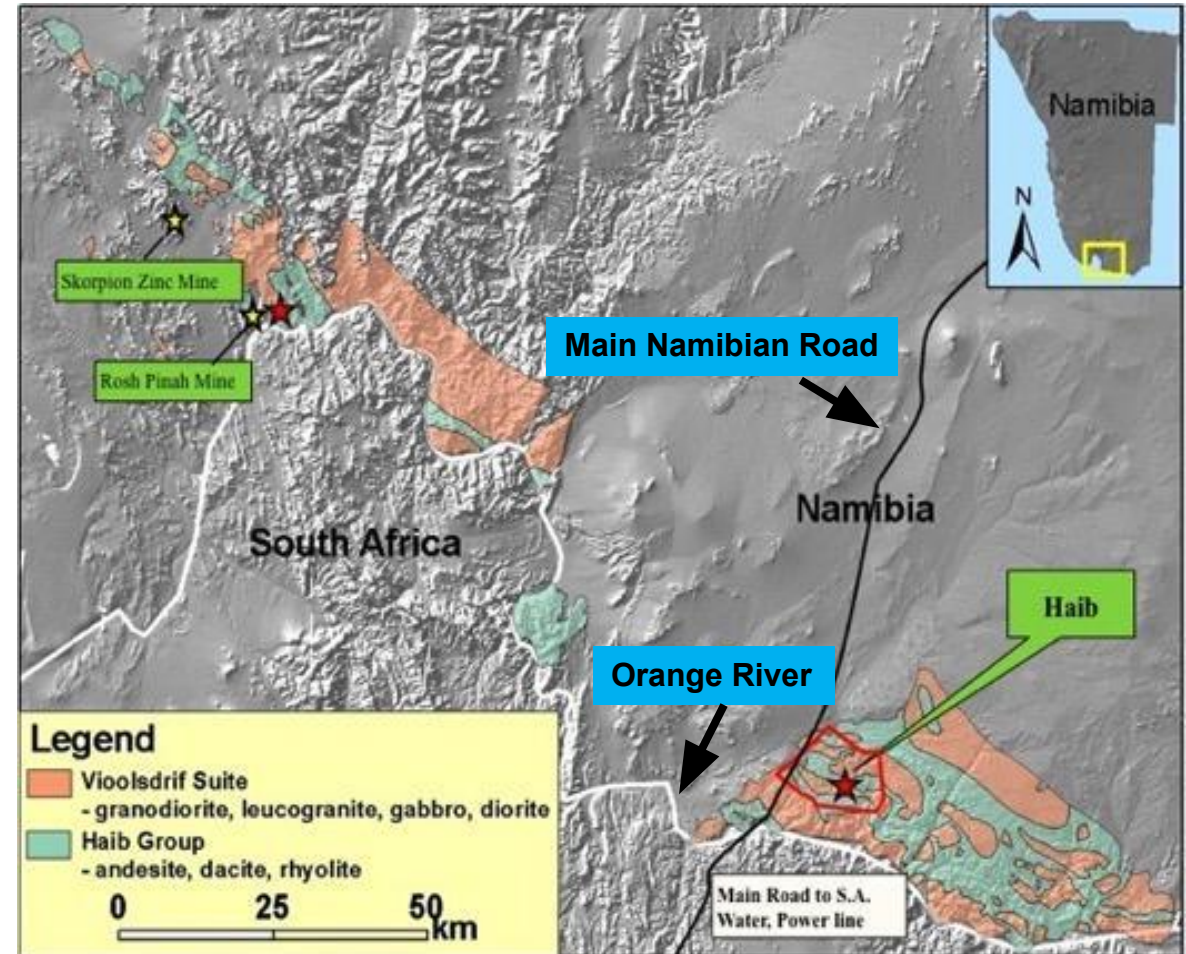
Current and past mineral producers in Namibia (diamonds, uranium, copper, gold and industrial metals)





# Excellent Access to Infrastructure

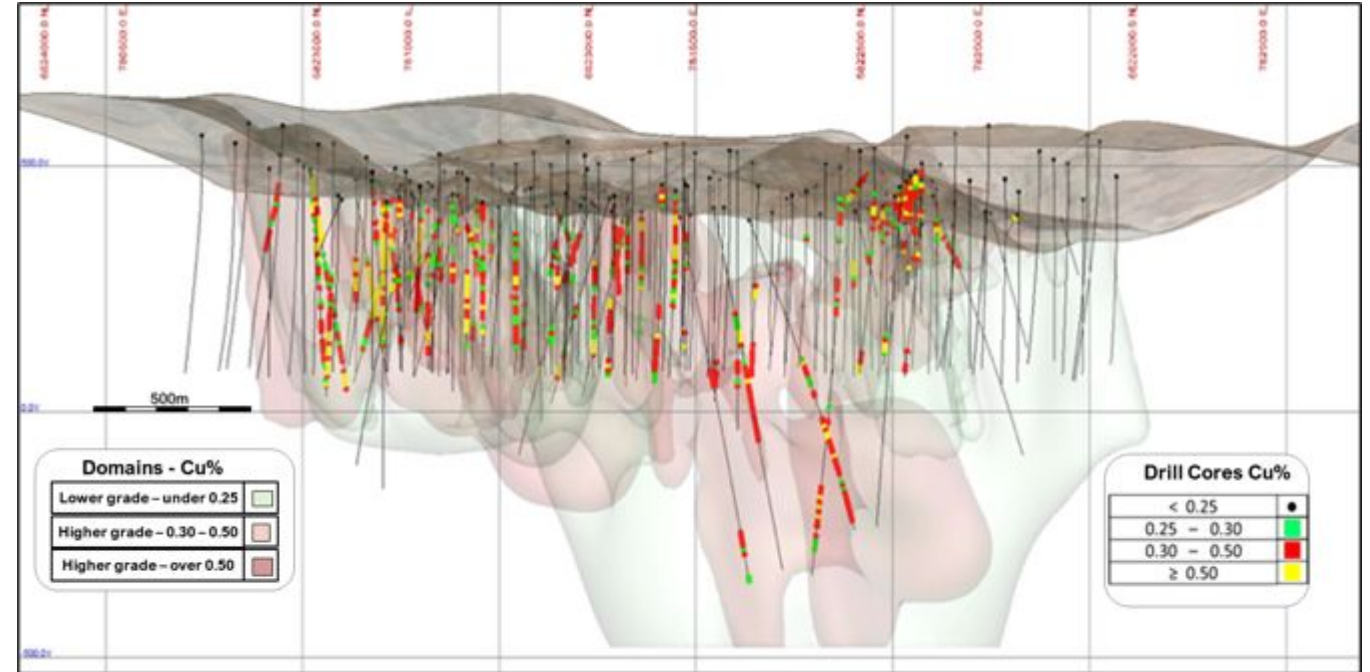
- 37,000 ha property located in southern Namibia near the border of South Africa
- Closest town is Noordoeweris (25 km west of deposit)
- Accessible through gravel roads 10 km from the main interstate highway that connects South Africa and Namibia
- 15 km from Orange River, where water can be pumped via pipeline
- 85 km from a major power line
- 100 km from the major rail system, which connects to the port of Luderitz, Walvis Bay and to South African ports



# Massive Porphyry Deposit with a High-Grade Zone

- Quality resource based on substantial drilling and exploration since the 1970s drilling to date
  - Includes 66,000 m of drilling, metallurgical tests, geophysical surveys, geo-chemical sampling, mapping, modelling, resource estimates and a feasibility study
  - Historical exploration work valued at US\$35 million
- Deposit is defined by diamond core drilling covering a surface area of 2.6 km<sup>2</sup> (roughly 2 km x 1 km) to a depth of ~350 m
- High-grade area containing 140M tonnes
  - Many long drills intercepts of up to 150 m with grades between 0.50% Cu and 1.00% Cu
- Known molybdenum is not included in the resource estimate
- Potential to expand resource at surface and at depth
  - Several historical drill holes show copper mineralization to depths of at least 850 m
- Strong potential to increase grade

## 3D model with transparent resource domains



Based on 196 historical drill holes totaling 66,000 meters drilled by Rio Tinto, Falconbridge, Namibian Copper, Teck and Deep-South. Current drilling spaced by 150 meters.

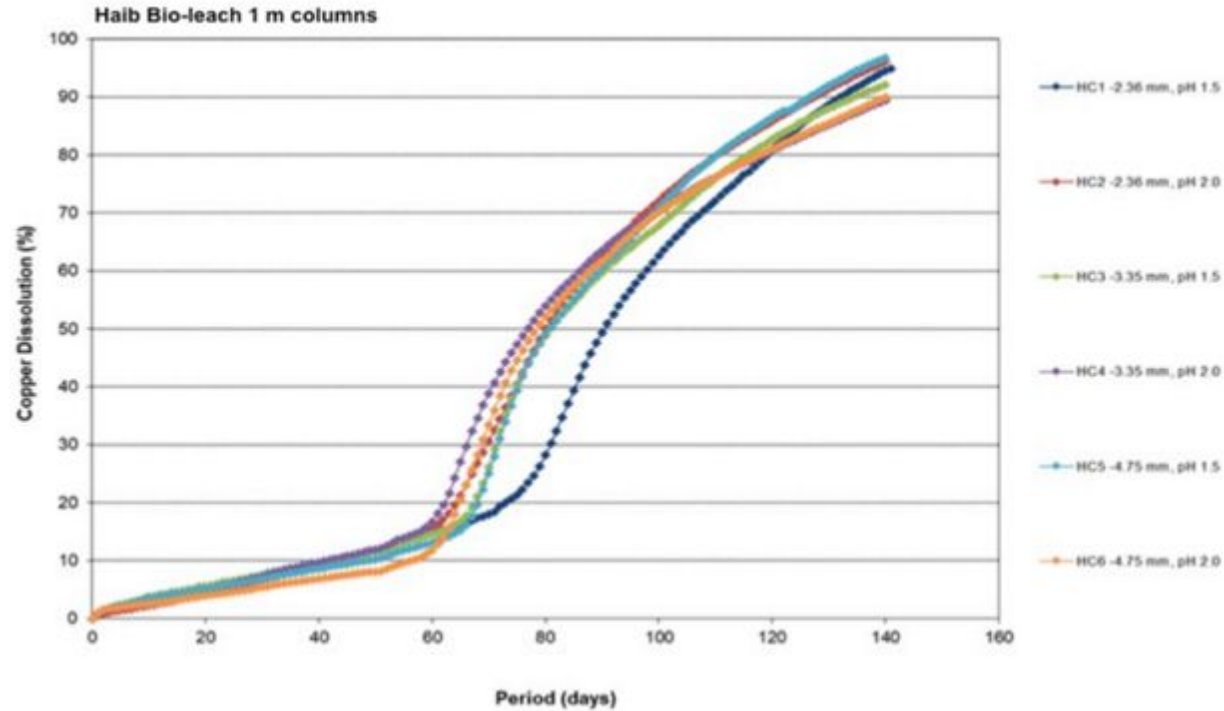
Cut-off	Indicated Resources			Inferred Resources		
	Tonnage	Grade	Contained	Tonnage	Grade	Contained
% Cu	million tonnes	% Cu	billion lbs Cu	million tonnes	% Cu	billion lbs Cu
0.20	904.8	0.27	5.39	686.2	0.26	3.93
<b>0.25</b>	<b>456.9</b>	<b>0.31</b>	<b>3.12</b>	<b>342.4</b>	<b>0.29</b>	<b>2.19</b>
0.30	219.8	0.36	1.74	109.8	0.34	0.82

# Excellent Metallurgical Results

- Simple ore that is highly amenable to bio heap leaching
- Results indicate copper recoveries of up to 96%, while overall recoveries of 80% to 82% are very achievable

<b>Bioleach Testing</b>	<ul style="list-style-type: none"> <li>▪ Performed by Mintek, a world leader in bio-leaching technologies</li> <li>▪ Tested 2 tonnes with an average grade of 0.76% Cu</li> <li>▪ Ore contains over 98.5% Chalcopyrite, 1% Bornite and less than 1% of Chalcocite, Covellite, Malachite and Chrysocola. It does not contain any deleterious elements</li> <li>▪ Very low acid consumption – well below 10 kg/tonne</li> <li>▪ Ore agglomerates very well without any issues</li> </ul>
<b>HPGR Testing</b>	<ul style="list-style-type: none"> <li>▪ Demonstrated that Haib ore is amenable to HPGR</li> <li>▪ A pressure of 60 bar is deemed suitable as the particle size distribution was not reduced once the pressure exceeded this value</li> </ul>
<b>Ore Sorting</b> Not included In the PEA	<ul style="list-style-type: none"> <li>▪ Not included in the PEA, lined up for future test work</li> <li>▪ METS Engineering tested a Steinert sensor x-ray transmission sorter on a 20 kg sample</li> <li>▪ System recovered 71.94% of the copper in 41.8% of the mass, resulted in an <b>upgraded copper grade of 1.36% (upgrade factor of 1.73x)</b></li> </ul>

*Six 1 m bioleach amenability columns on -4.75 mm, -3.35 mm and -2.36 mm material show 89% to 96% copper dissolution after 140 days*



*“Bio-assisted leaching results combined with grade upgrading mineral sorting results, HPGR and agglomeration are highly promising and demonstrate that we are on the right path to develop the project” – John Akwenye, Chairman*

# May 2020 PEA Demonstrates Robust Economics

## Many opportunities for optimizations and improvement

- Infill drilling expected to expand high grade zone and increase LOM head grades
- Refining and optimizing process flowsheet expected to improve recoveries and reduce costs
- Ore sorting can significantly reduce processing costs
- Vast resource supportive of a phased expansion
- Solar power generation to reduce power costs
- Addition of a sulphur burning plant to reduce costs

### Project Economics

Copper Price (US\$/lb)	\$2.25	\$2.50	\$3.00	\$3.50
After-Tax NPV <sub>7.5%</sub> (US\$M)	\$439	\$611	\$957	1,300
After-Tax IRR	18.9%	22.7%	29.7%	42.1%
Payback Period (years)	6.94	5.71	4.23	3.4

### Summary of Base Case under the May 2020 PEA

Mine Life	24 years
LOM Ore (M tonnes)	403.5
LOM Average Grade	0.31%
Throughput (tonnes/day)	20M tpy (~55K tpd)
Strip Ratio (waste:ore)	1.41:1
Copper Recovery	80%
Average Annual Production	77.9M lbs (35K tpy) copper cathode 112.6M lbs (51K tpy) of copper sulphates
LOM Production	2.19B lbs CuEq
Operating Costs (US\$/tonne)	\$7.64
Cash Costs (US\$/lb CuEq)	\$1.34/lb
Initial Capex (US\$M)	\$341

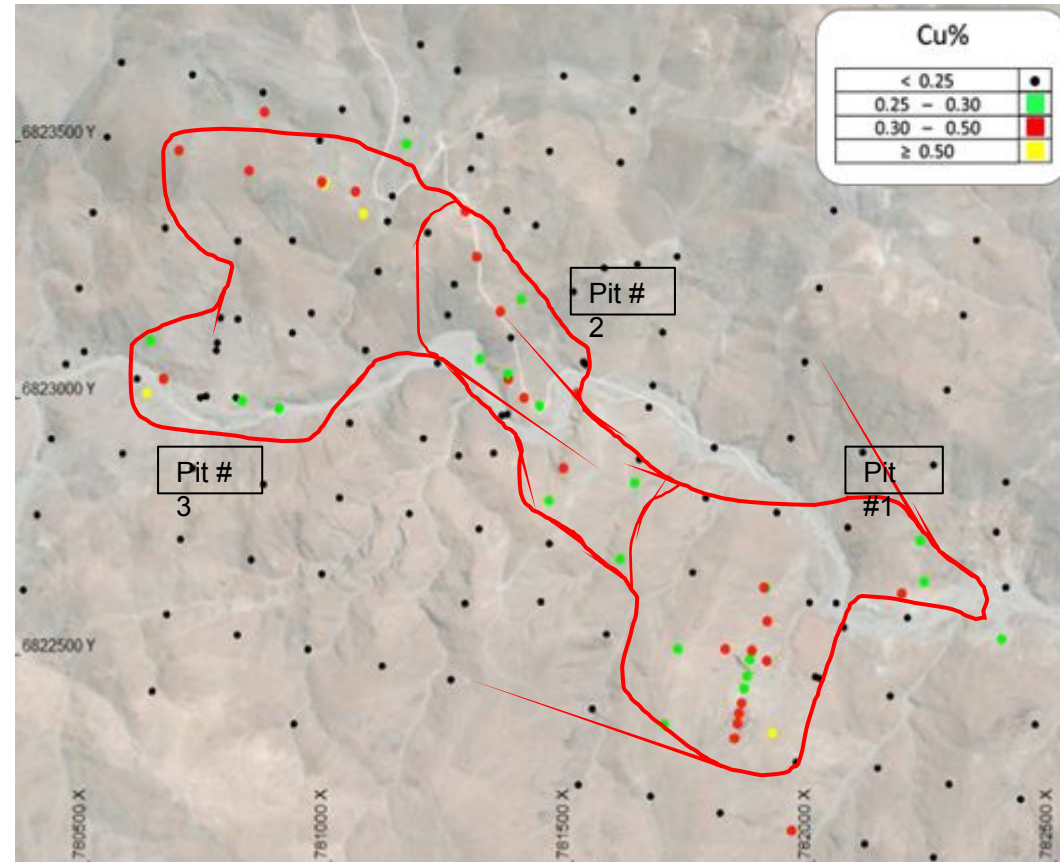
*This robust PEA positions Deep-South to move towards the feasibility stage with improving economics. Haib is rapidly becoming a tier 1 copper project with the right economics for development*

# Large High-Grade Zone with Room to Grow

## Many wide, high grade intercepts in the center of the Haib deposit

- 150 m at 0.68% Cu, including 30 m at 0.94% Cu
- 121 m at 0.50% Cu and 0.027% Mo
- 100 m at 0.72% Cu, including 10 m at 1.04% Cu
- 90 m at 0.74% Cu, including 10 m at 1.01% Cu
- 39 m at 0.53% Cu and 0.02% Mo
- 45 m at 0.53% Cu and 0.002% Mo
- 32 m at 0.79% Cu and 0.01% Mo
- 149 m at 0.57% Cu and 0.004% Mo, including 30 m at 0.81% Cu and 0.007% Mo
- 20 m at 0.88% Cu, including 12 m at 1.25% Cu
- 20 m at 0.94% Cu, including 11 m at 1.25% Cu
- 21 m at 0.81% Cu
- 20 m at 0.77% Cu
- 11 m at 1.14% Cu
- 10 m at 1.28% Cu
- 10 m at 0.95% Cu

## Historical drilling footprint with the selected high-grade drill holes down to 200 m

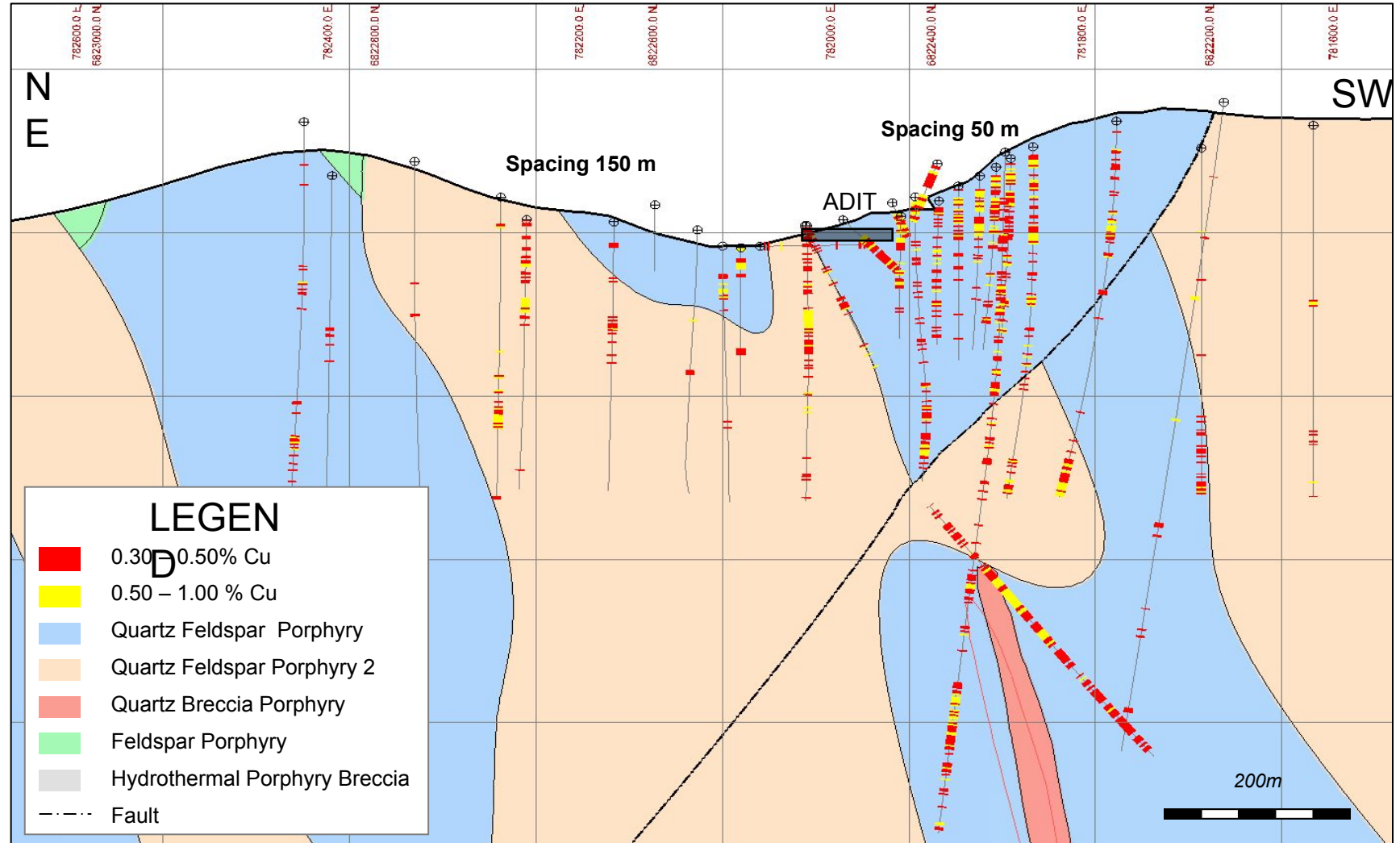


- High-grade area (red contour) contains 140M tonnes of resources with expansion potential
- Planning to infill drill up to 110 holes in the high-grade area to define the average grade and delineate a measured resource over the area
- The high-grade area is open to the east and west and contains two other pits to be defined by further drilling

# Infill Drilling Expected to Expand High-Grade Zone

- Drilling spaced by 150 m missed most of the high-grade zones
- 50 m drill spacing has historically been very successful in intercepting the high-grade area
- Infill drilling provides exciting opportunity to substantially expand the high-grade zone

**Pit #1: example of wide spaced drilling versus tighter spaced drilling**

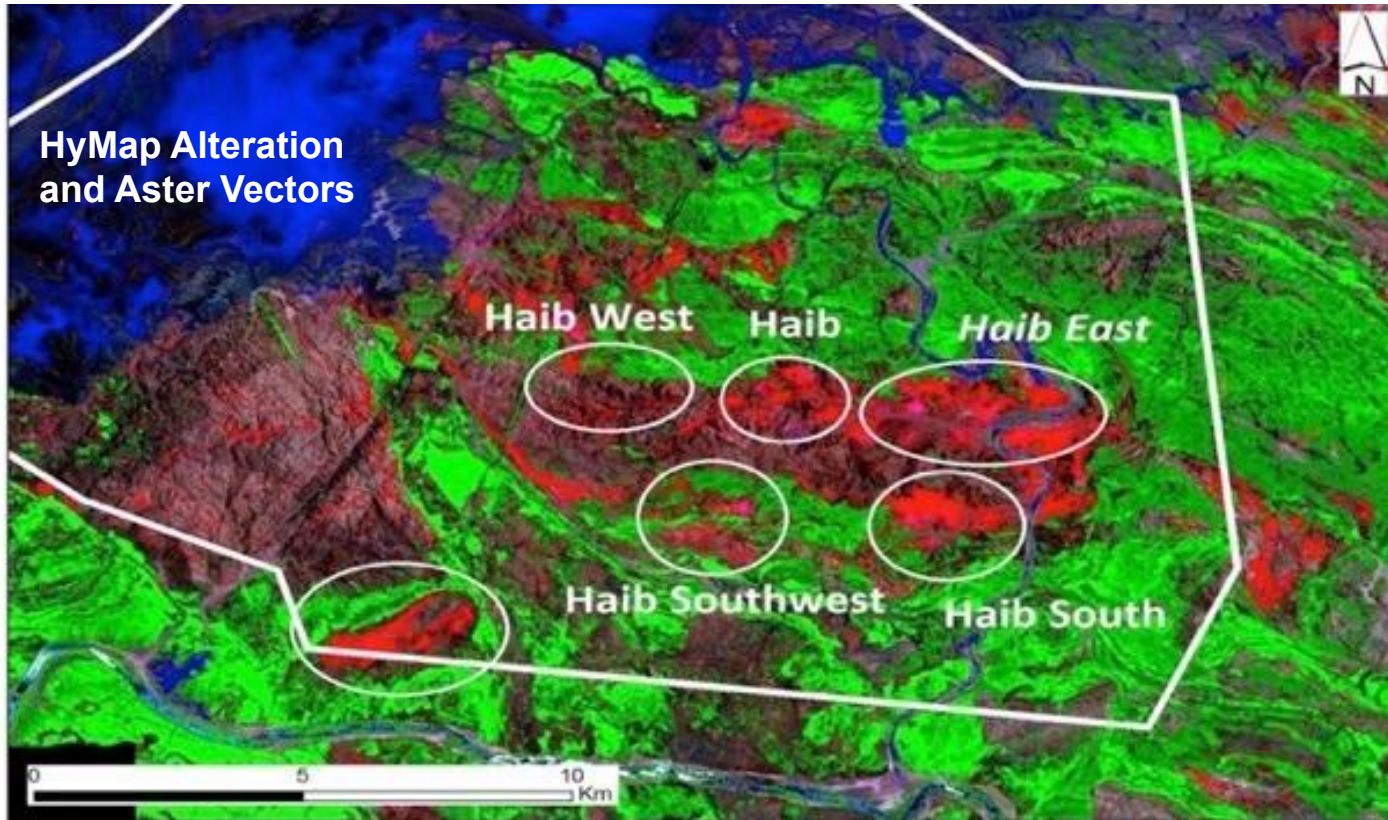


# Future Exploration Targets

- 5 satellites new targets identified using IP and coincident copper geochemistry
- Future tonnage expansion plan:
  - Drill deeper in the main body, which is mineralized to at least 800 meter deep
  - Drill the satellites

- All the exploration data and technical reports are held by Deep-South
- 164 of the 196 drill cores are still well preserved on site

## IP survey showing the Haib deposit and 5 potential targets



Feasibility Study program will include:

- Up to 12,000 m of HQ (large core) infill drilling in the high-grade area to define the average grade of the area, to estimate a measured resource and to increase the grade of the overall deposit
- Further metallurgical test-work (bio assisted heap leaching)
- Mining Engineering design for the feasibility study
- Environmental Impact Assessment (EIA) and base-line studies





# Proven Management Team

## **Pierre Léveillé, President, CEO and Director**

- Over 28 years of experience in the international financial sector and 20 years of experience in the mining exploration industry
- Started his career as an Investment Advisor and an Investment Banker with a large Canadian Securities brokerage firm
- From the mid 1990's to today, he has been Executive and Director of several exploration companies active in Africa
- Financed and managed exploration projects in Namibia since 1996 including the acquisition and operation of a diamond mine
- Realized over US\$75 million in transactions and financings for Namibian and African mining exploration projects

## **Jean-Luc Roy, COO & Director**

- Mr. Roy has been a major contributor to the development of several important corporations in Africa during the last 30 years
- Worked for majors, mid-tiers and junior exploration companies such as First Quantum Minerals, Resolute Mining and Ampella Mining
- Brings to Deep-South, as an Independent Director, a wealth of experience in all aspects of exploration from generating, negotiating, funding and managing projects, to corporate, community and governmental relations
- Director for Can Alaska Uranium (TSX:CVV)

## **Chantelle Collins, CFO**

- Bachelor's degree in Accounting and is a member of the Chartered Professional Accountants Association of BC (CPA, CGA)
- 12 years of experience working in the public sector and is well versed in the financial reporting requirements of public companies and serves as an officer in three other public companies

## **Vivian Stuart-Williams, Vice President Exploration**

- Geologist with 46 years of experience in the mining and exploration industry, principally in the southern African region. He has been involved in base metals, gold, coal, and industrial mineral projects
- Has worked with larger corporations such as JCI Ltd
- Has a worldwide exposure, including Liberia, Philippines, Afghanistan, Canada, Uzbekistan, Australia, Uganda, Mauritania and all of the Southern African countries
- He has been involved with the Haib project from the mid-1990s

## **Taryn Downing, Corporate Secretary**

- Has held the position of officer and director for several public companies on the TSX Venture Exchange and the TSX Exchange
- Over 25 years of experience in corporate compliance and public company management

*Assembled a talented project management team in Namibia and South Africa with a track record of developing and operating tier one projects in Africa*

# Effective Corporate Governance

## **John H. Akwenye, Chairman**

- Namibian retired lawyer with over 30 years of experience in business development in Namibia
- From 1994 to 2008, he was Chairman of Guinas Investents (PTY) Ltd, a Swapo owned investment company
- Has been chairman of the Namibian Airports Company from 2001 to 2004
- Director of corporations such as Areva Resources Namibia and PE Minerals, which holds the mining rights over the Rosh Pinah zinc mine

## **Chad Williams, Director**

- Mr. Williams has an extensive background in capital markets and business management
- He is the founder and Chairman of Red Cloud Securities Inc
- He serves on the Board of Blue Thunder Mining, Golden Tag Resources, Karora Resources and Honey Badger Silver
- He was previously CEO of Victoria Gold, Head of Mining Investment Banking at Blackmont Capital and was a top ranked mining analyst at TD Bank and other Canadian brokerage firms and was one of the founders of Agilith Capital and Westwind Capital
- He holds a P. Eng. And an MBA from McGill University, Montreal

## **Tim Fernback, Director**

- Over 20 years of experience in the venture capital and investment banking industries
- Holds an Honours B.Sc. from McMaster University and a MBA with a concentration in Finance from the University of British Columbia
- Holds a Certified Professional Accounting (CPA) designation in Canada
- Director of several publicly traded companies in Canada

## **Sadike Nepela, Director**

- Served as General Manager of Kalahari Minerals PLC
- For a number of years, Mr. Nepela also served as Personal Assistant to the Minister in the Ministry of Mines and Energy of Namibia
- Most recently, he has been General Manager of Westport Resources, a subsidiary of Forsys Metals Corp. (TSX:FSY)
- Fellow of the International Centre for Research and Training in Major Projects Management, Montreal, Canada
- Graduate of the University of Witwatersrand, Johannesburg and has also studied at the University of Connecticut, West Hartford, USA.

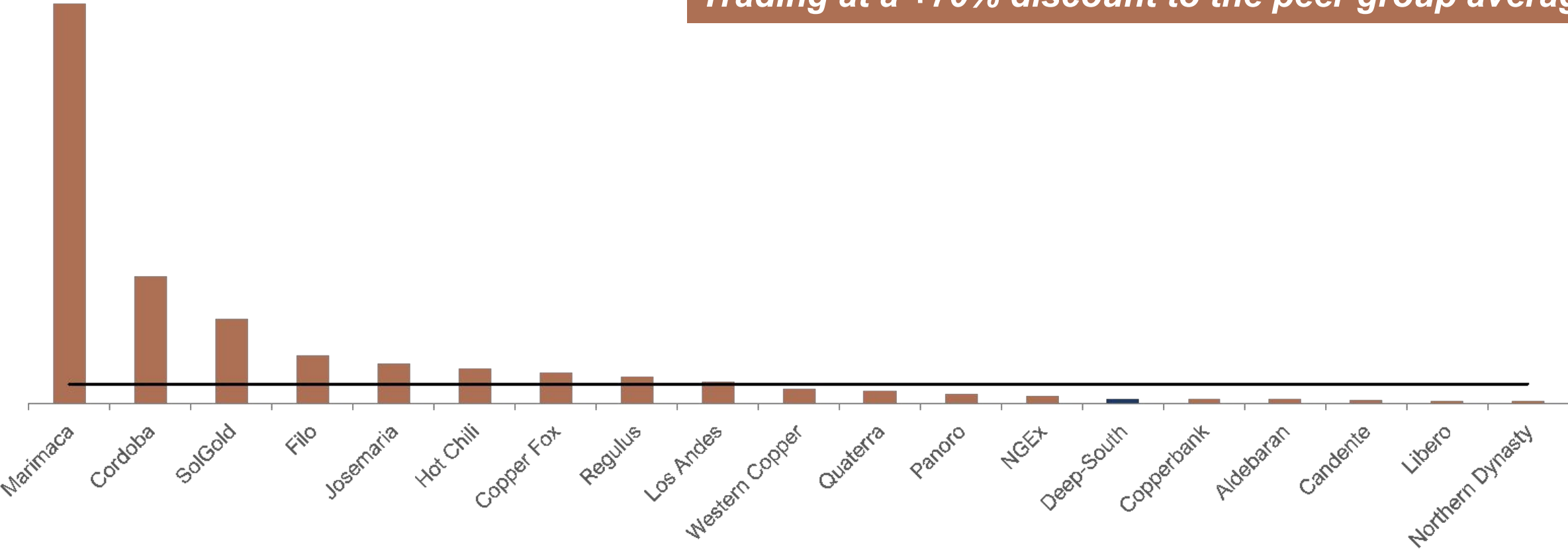
## **Thomas Tumoscheit, Director**

- Over 28 years of experience in commodities sales, procurement, trading and manufacturing
- His career started as a sales engineer with GFE and since then he had roles in a number of mining and trading companies, including Frank & Schulte, Alcoa and Gerald Metals
- Currently, Head of Projects for Euro Alloys Ltd
- Holds a Ph.D in Electrometallurgy from the National University of Science and Technology MISiS Moscow

# Compelling Valuation and Re-Rating Opportunity

## EV/Resource Multiples of Companies with Advanced Stage Copper Porphyry Projects (US\$/lb CuEq)

*Trading at a +70% discount to the peer group average*



Source: company reports. Reflects market prices as of November 30, 2020



TSX-V:DSM

[www.deepsouthresources.com](http://www.deepsouthresources.com)

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### *Corporate Office*

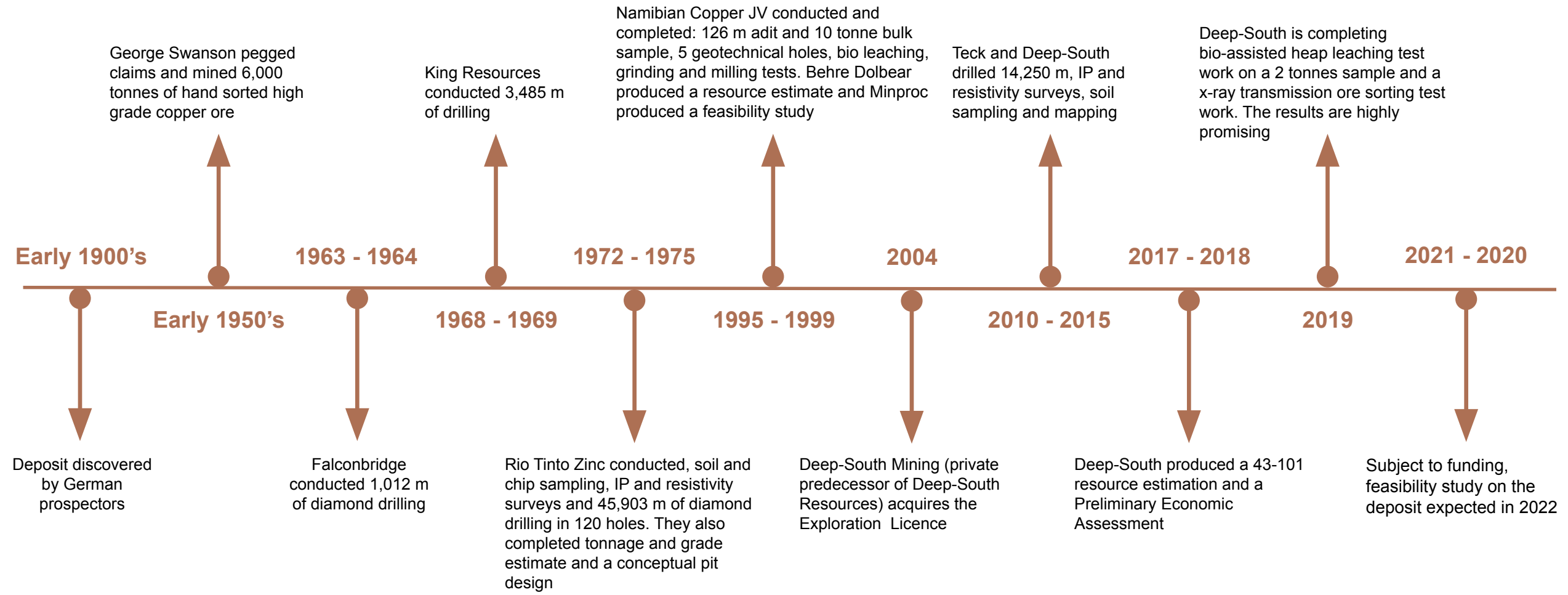
3<sup>rd</sup> Floor, Maerua Mall Office Tower

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Windhoek, Namibia

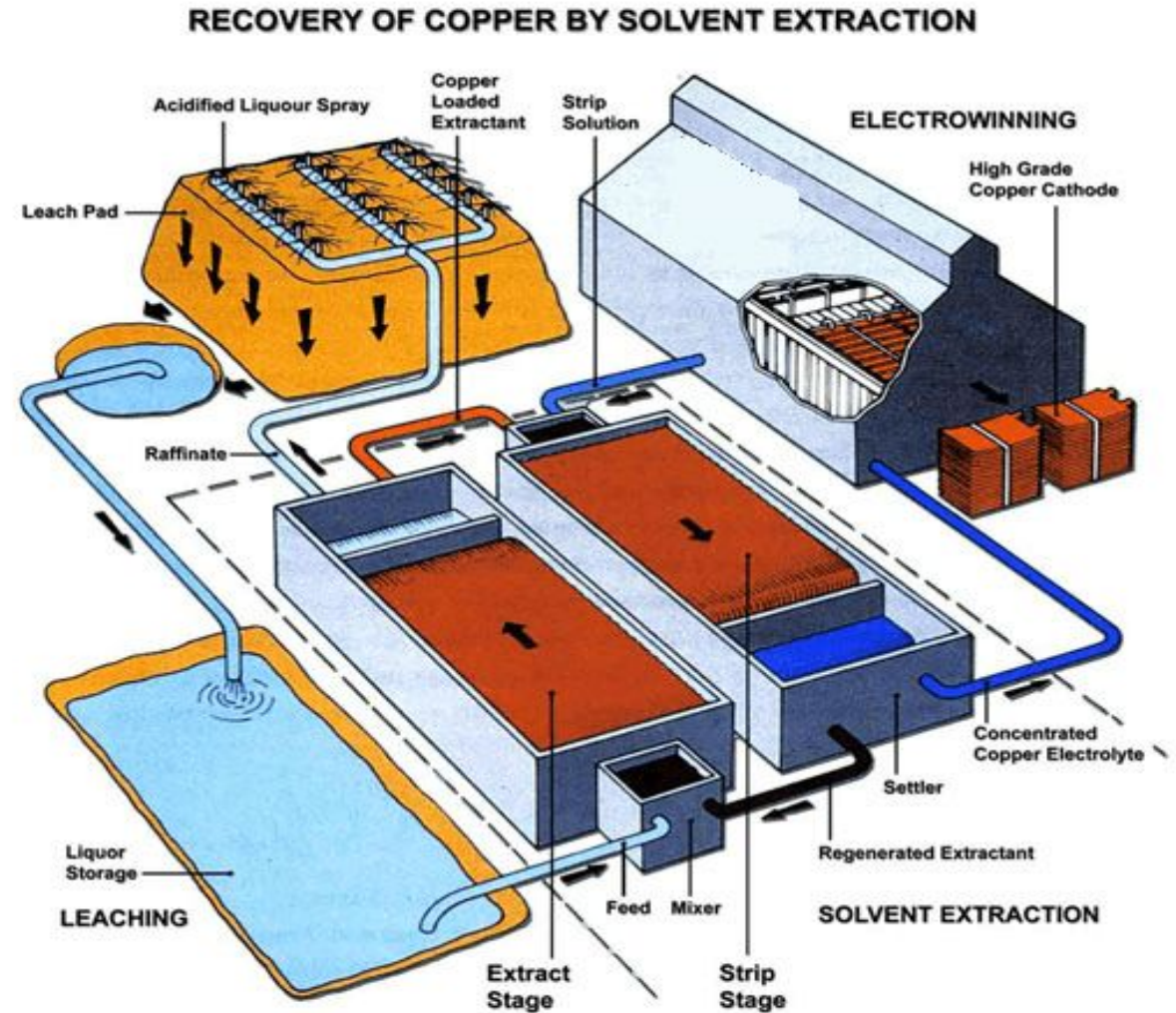
Tel: +264-(0)61-435-8267

# History of the Haib Copper Deposit



# Proposed Heap Leach Flowsheet

1. Ore goes through two crushing sequences and high pressure grinding rollers (HPGR) to reduce the size under 6 mm
2. The finer material is agglomerated and placed on the leach pad
3. Bacteria are added to the sulphuric acid in the leach pad to accelerate the oxidation process of the ore
4. Oxidized ore interact with acid and produce copper loaded extractant
5. Produce copper cathodes from an Electrowinning plant



*Conventional bio-heap leach processing using proven technologies*

# Haib Project: Initial Mine Site Layout

- Processing plant to be located 4 km from the mine site
- Utilizes the projects excellent access to regional infrastructure includes highways, power and water

