

A yellow Howo truck with a crane attachment is parked on a dirt road in a rural setting. The truck is facing right, and its crane is extended upwards. The background shows trees and a cloudy sky. The text "GLOBAL MANGANESE" is overlaid in the center of the image.

# GLOBAL MANGANESE



# OVERVIEW

Mali has significant potential for manganese resources. Manganese is a crucial mineral used primarily in steel production and various industrial applications.



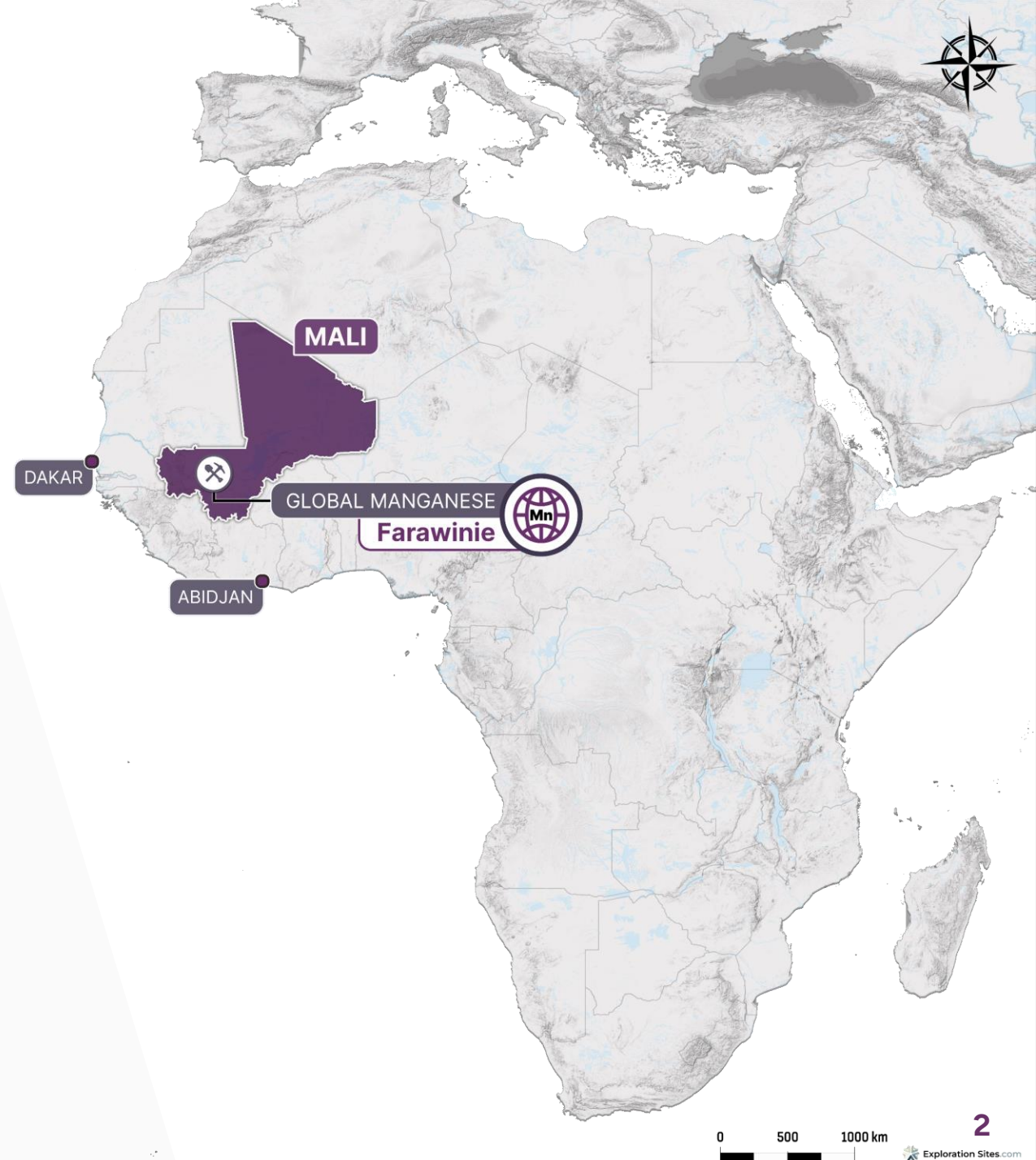
**Strategic manganese claim in Mali**



**Manganese is shipped from Dakar, Senegal to Portugal.**



**Manganese undergoes refining in Portugal.**



# ABOUT MALI

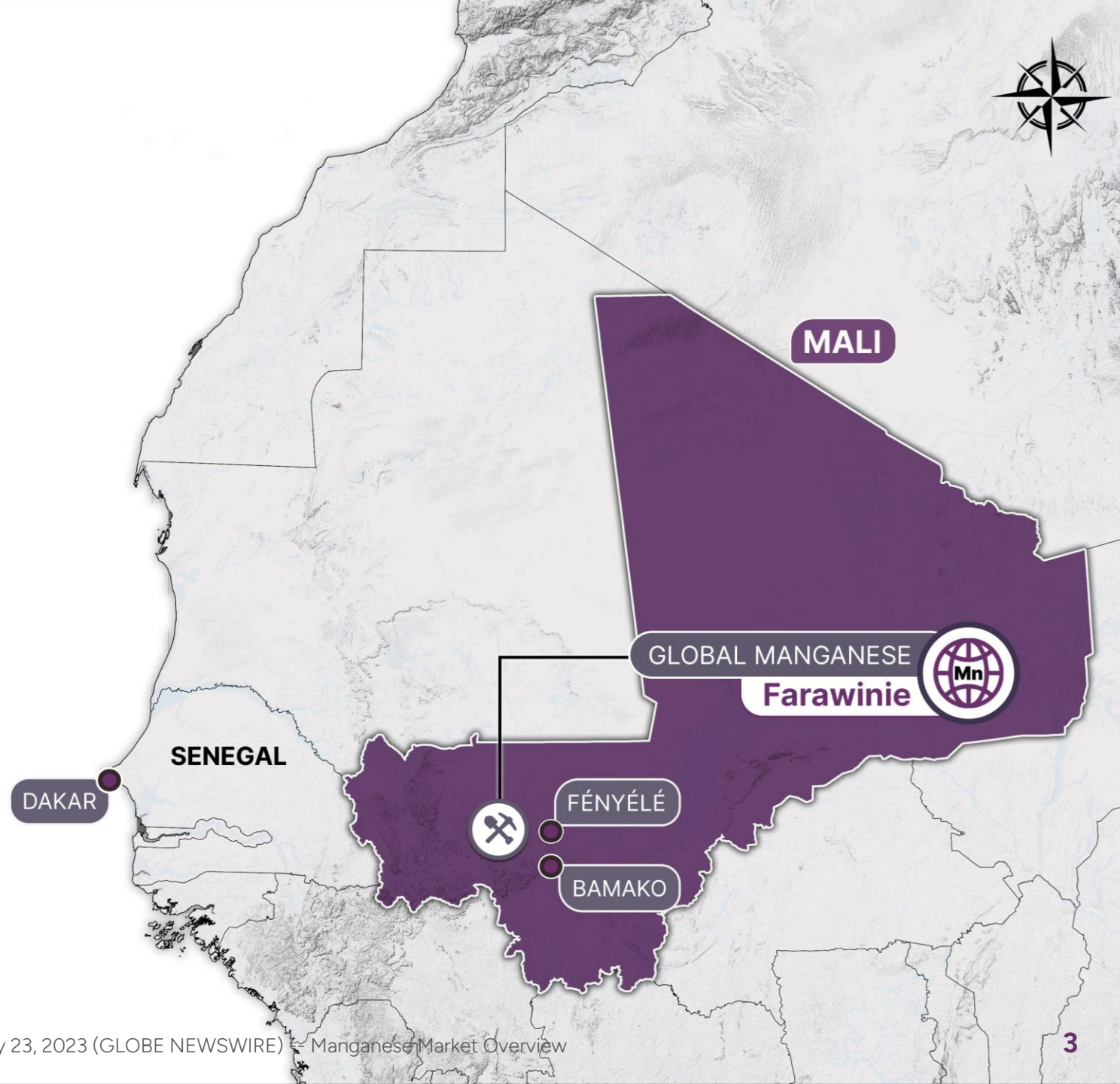
Mali has significant potential for manganese resources. Manganese is a crucial mineral used primarily in steel production and various industrial applications.



By 2030, the manganese market is projected to grow by:

**5.02%**

(From USD 23.21 billion in 2022 to USD 32.70 billion)





# OUR CLAIM

Saprolitic Manganese rich duricrust type orebodies often overlay enriched host rocks.

**A total of 107 holes were drilled, totaling 2,539m in depth. (PHASES 1 & 2)**

**Current area is 4km x 2km - 47mt**

## Expanded Target Areas Within Concession

**Area 1 = 4km x 1.5km**

**Area 2 = 3km x 2km**

**Area 3 = 9km x 3km**

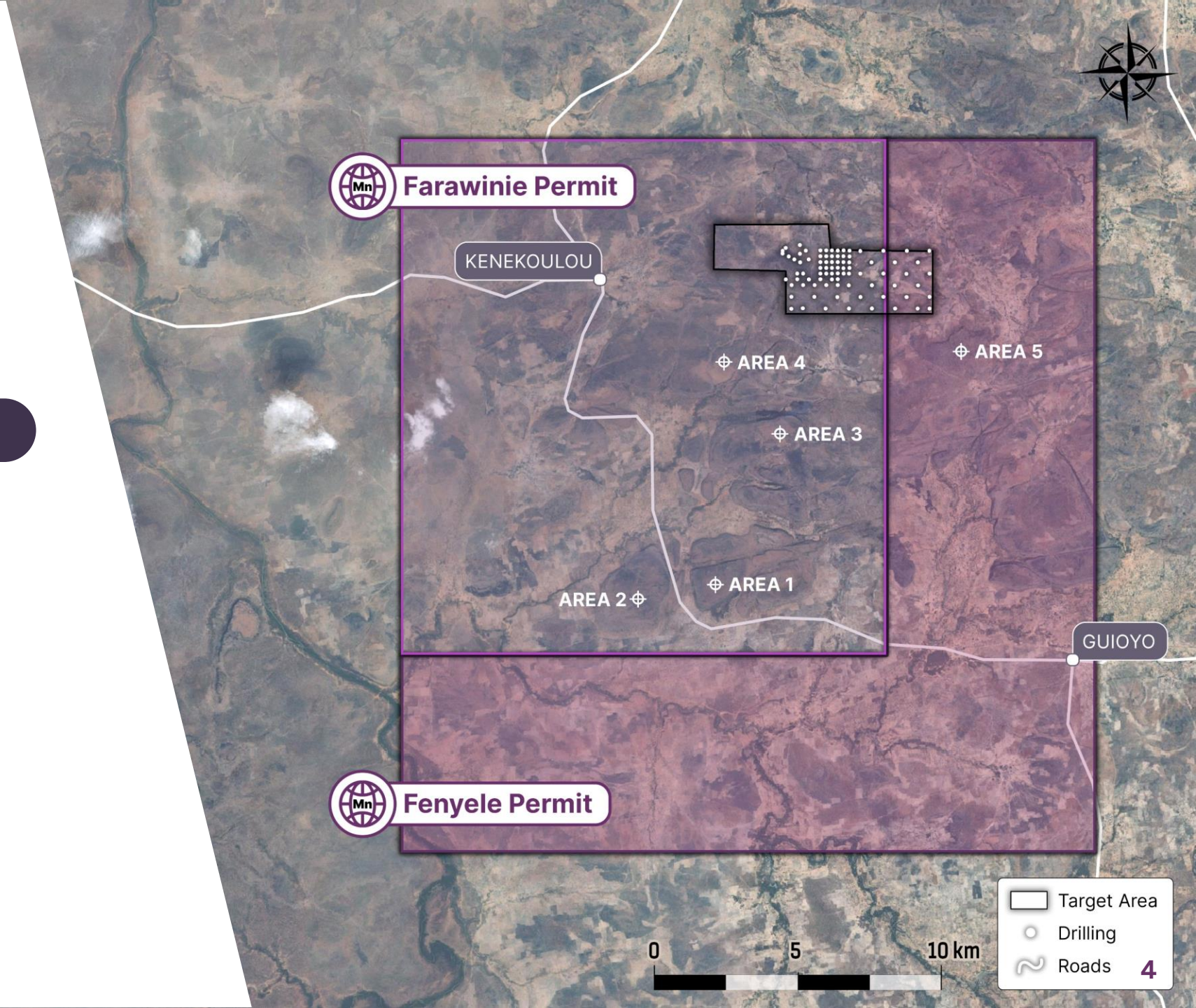
**Area 4 = 6km x 2km**

**Area 5 = 4km x 1.5km**

The area could potentially host another 7x the 47mt – equates to another >300mt of ore.



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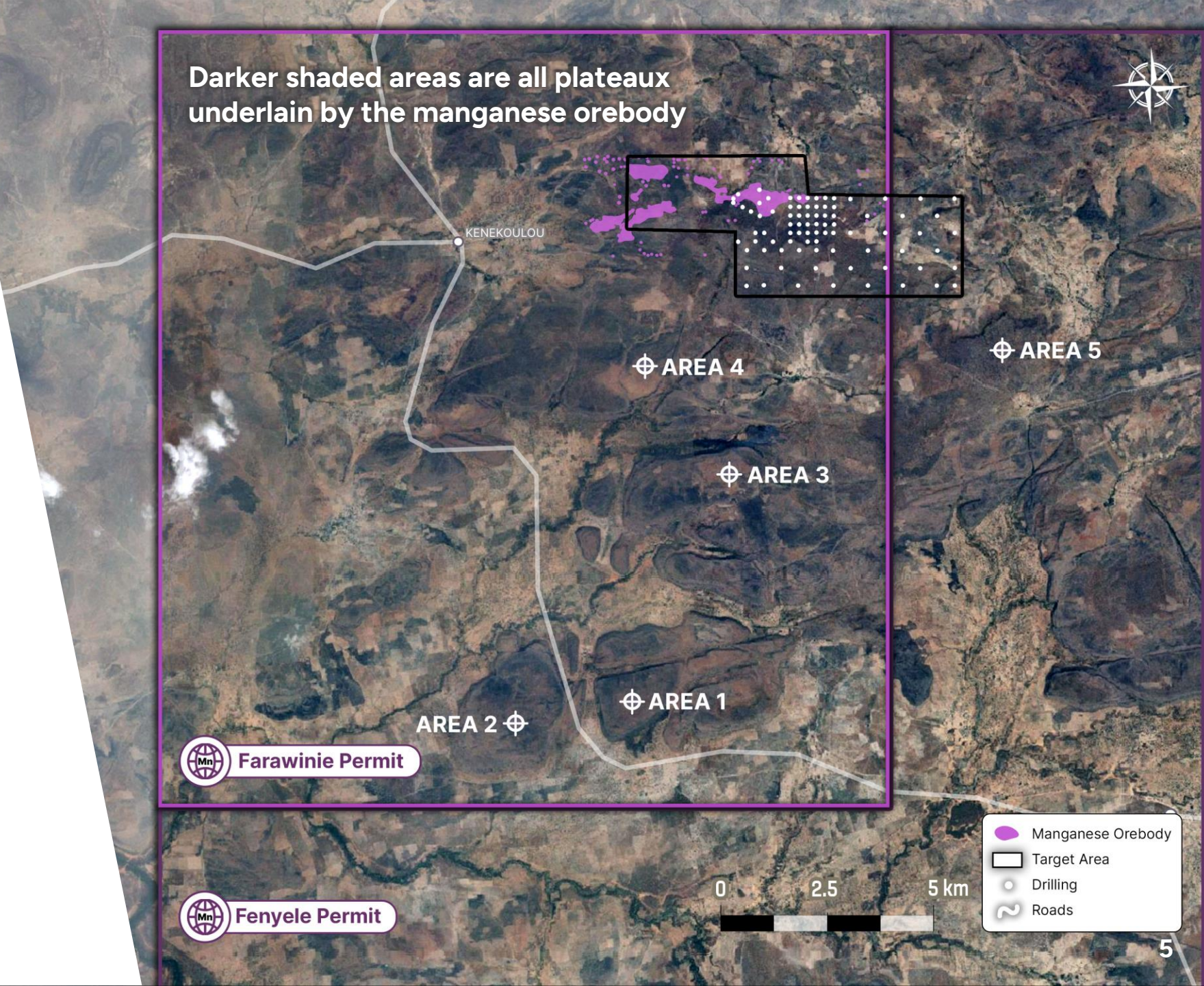
# CLAIM UPSIDE

The manganese ore shows a transition from deeper sea environments through to the transgression/regression environment of a shallow coastline.

**The presence of a duricrust layer of low grade in-situ manganese was found as a result of the drilling.**

## Main Manganese Minerals Present

- |              |               |
|--------------|---------------|
| Cryptomelane | Pyrochroite   |
| Birnessite   | Lithiophorite |
| Pyrolusite   | Akhtenskite   |

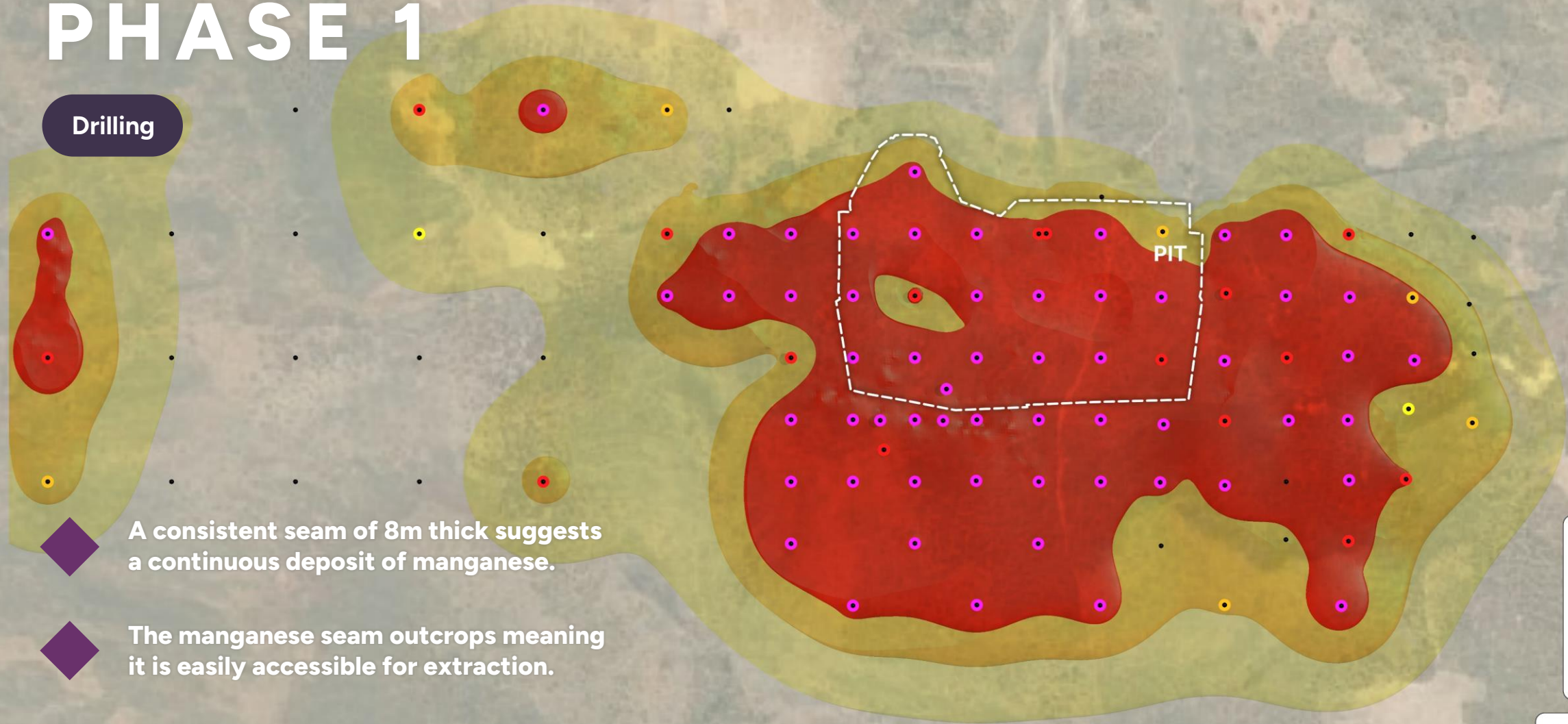




# PHASE 1



Drilling

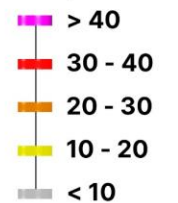


◆ A consistent seam of 8m thick suggests a continuous deposit of manganese.

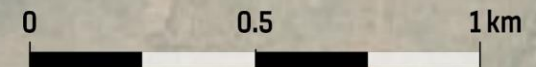
◆ The manganese seam outcrops meaning it is easily accessible for extraction.

◆ The outcrop dips in under the slight rise of elevation, presenting an opportunity for further exploration & expansion.

Assays - Mn %



Gradeshell - Mn %





# PHASE 1

Drilling

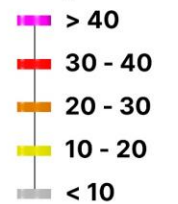
PIT

A consistent seam of 8m thick suggests a continuous deposit of manganese.

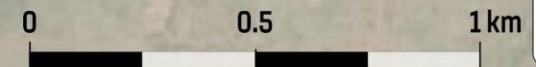
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Assays - Yield %



Gradeshell - Yield %



# Choose between Yield or Mn?

## Interpretation

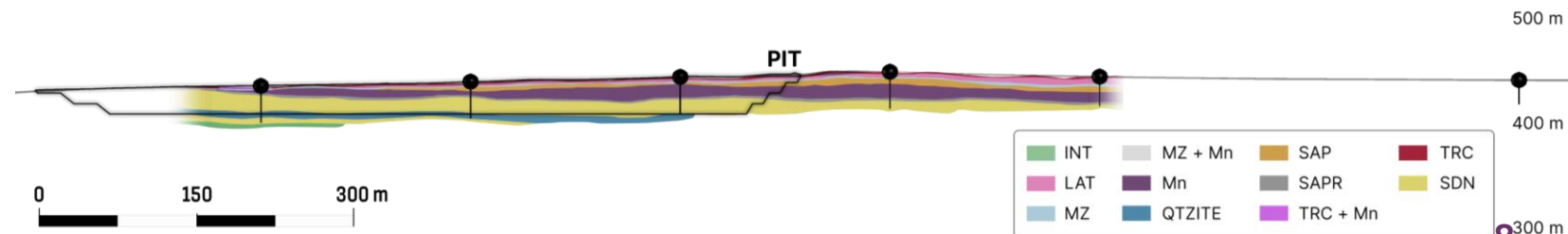
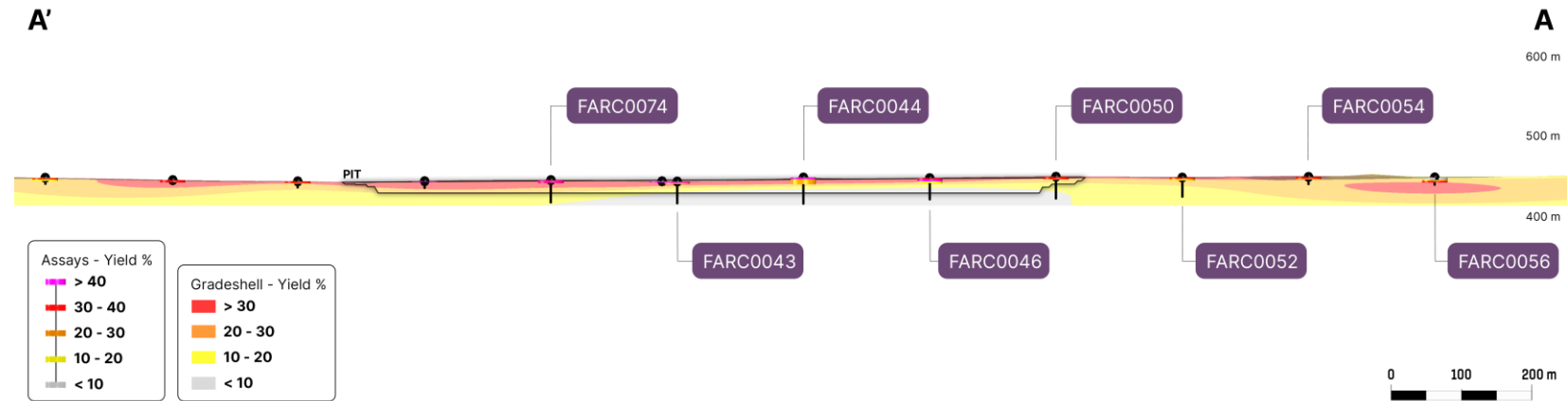
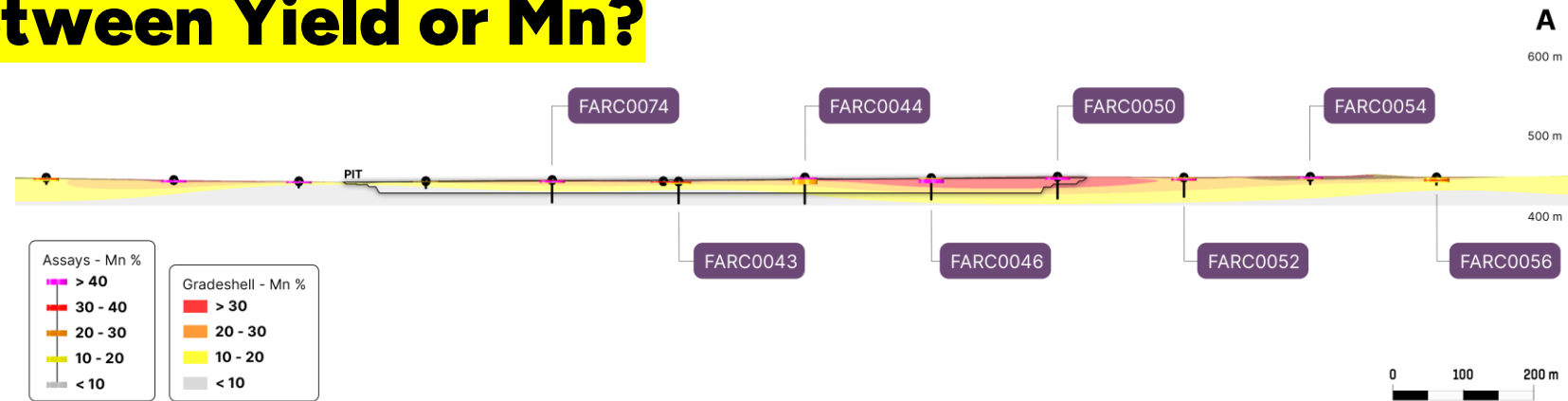
# PHASE 1

Manganese readings ranged from 1.8% to 37%, averaging 15.7%.

61 holes were drilled, totaling 1,435 meters (completed). Tonnes and grades are considered inferred

Sampling is ongoing in parallel with metallurgical work to identify the most efficient processes required to beneficiate the ore

A proposed method is scrubbing, followed by a simple crush and screen process that may elevate the grade into the low to mid 40%'s





# V1 PHASE 1 INTERPRETATION

Our **current focus** includes expanding the **drill grid** westwards for improved ore continuity, **enhancing** the recovered grade of **manganese**, operating according to **international standards**, and **prioritizing** the expansion of **survey topography**.

Infill To 100m Grid In High-Grade Areas

46

Additional  
RC Holes

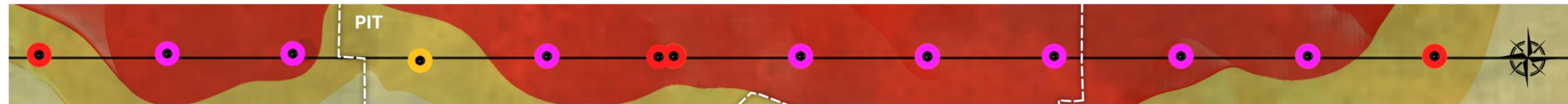
4

Cored Diamond  
Drill Holes

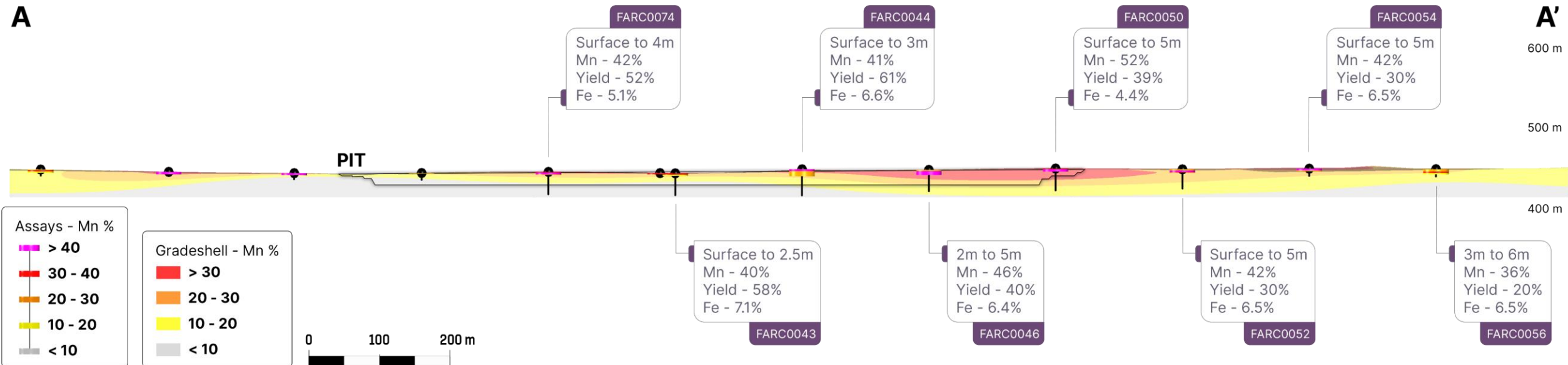
100M

Tonnes

PLAN



A



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**Choose between Yield or Mn?**



# V2 PHASE 1 INTERPRETATION

Our **current focus** includes expanding the **drill grid** westwards for improved ore continuity, **enhancing** the recovered grade of **manganese**, operating according to **international standards**, and **prioritizing** the expansion of **survey topography**.

Infill To 100m Grid In High-Grade Areas

46

Additional  
RC Holes

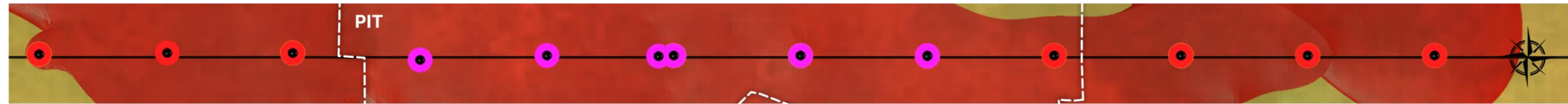
4

Cored Diamond  
Drill Holes

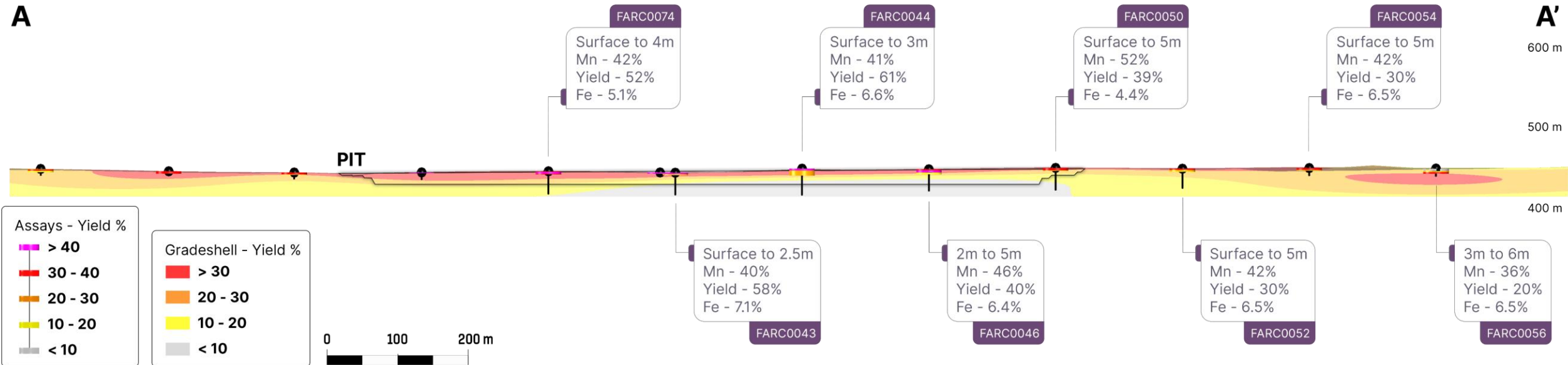
100M

Tonnes

PLAN



A



**Choose between Yield or Mn?**



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# V1 Choose between Yield or Mn?

## PHASE 2

46 holes – 1,104m (completed)



### Testing

Samples sent for assay in South Africa.



### Sampling

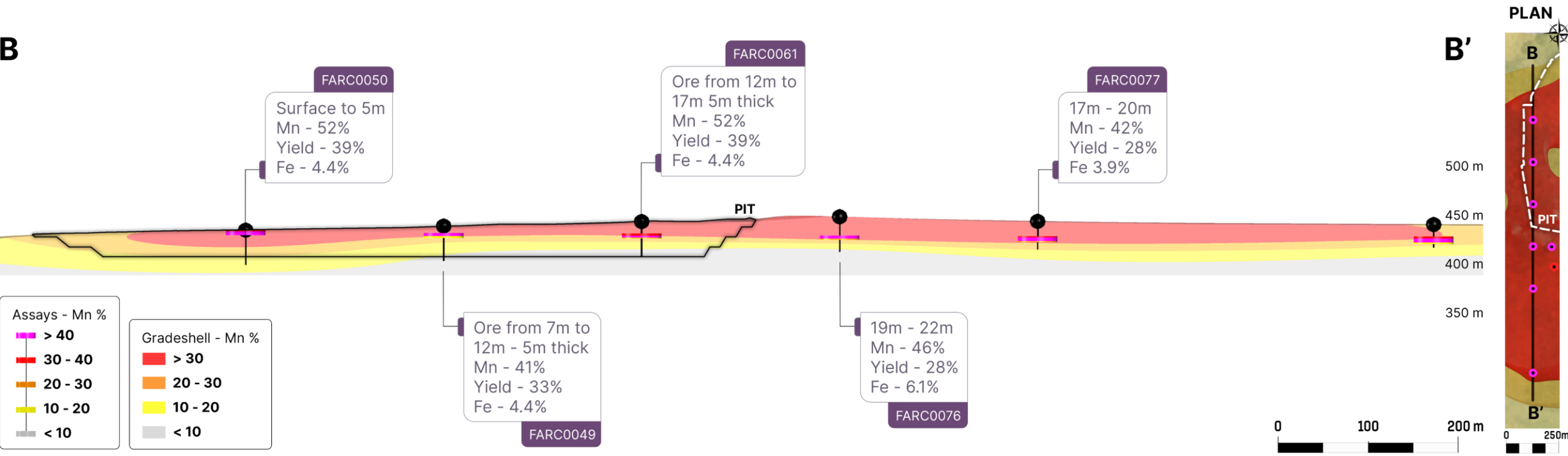
Site selected for extracting a bulk sample for metallurgical testing.



### Transitioning

Manganese shows a transition from deep sea to shallow coastal environments.

B





# V2 Choose between Yield or Mn?

## PHASE 2

46 holes – 1,104m (completed)



### Testing

Samples sent for assay in South Africa.



### Sampling

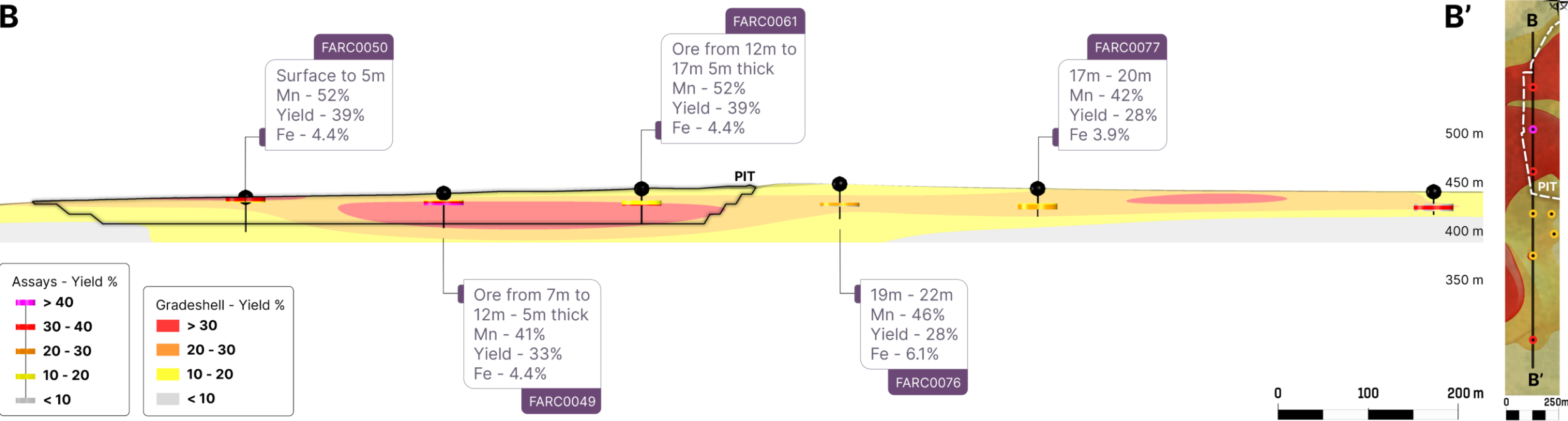
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### Transitioning

Manganese shows a transition from deep sea to shallow coastal environments.

B





# RESOURCE DEFINITION

The preliminary in-house resource statement has been validated by an internal competent person. The resource calculation was conducted using a conservative density of 3.5t/m<sup>3</sup>.

**42.40**

In-Situ Mn %

**47.61 M**

Tonnes

**6,780,359**

Contained Metal (Tonnes)

**33.59**

Yield %

**In situ tonnages of the duricrust orebody estimated to exceed 40 million tonnes**

## PHASE 1

**Inferred**

Tonnes and Grade

## PHASE 2

**Indicated**

Tonnes and Grade

## PHASE 3 - PROPOSED

Resource Estimate to be Upgraded to **Measured** Tonnes and Grade





Proposed Program

# PHASE 3

78

Diamond drillholes totaling 1,342m

500m

Of additional RC drilling

This program is **aimed to expand the known resource** and upgrade it from the **current inferred status to "measured"**.



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# Choose between Yield or Mn?

## PHASE 3

### Mineral Resource Definition

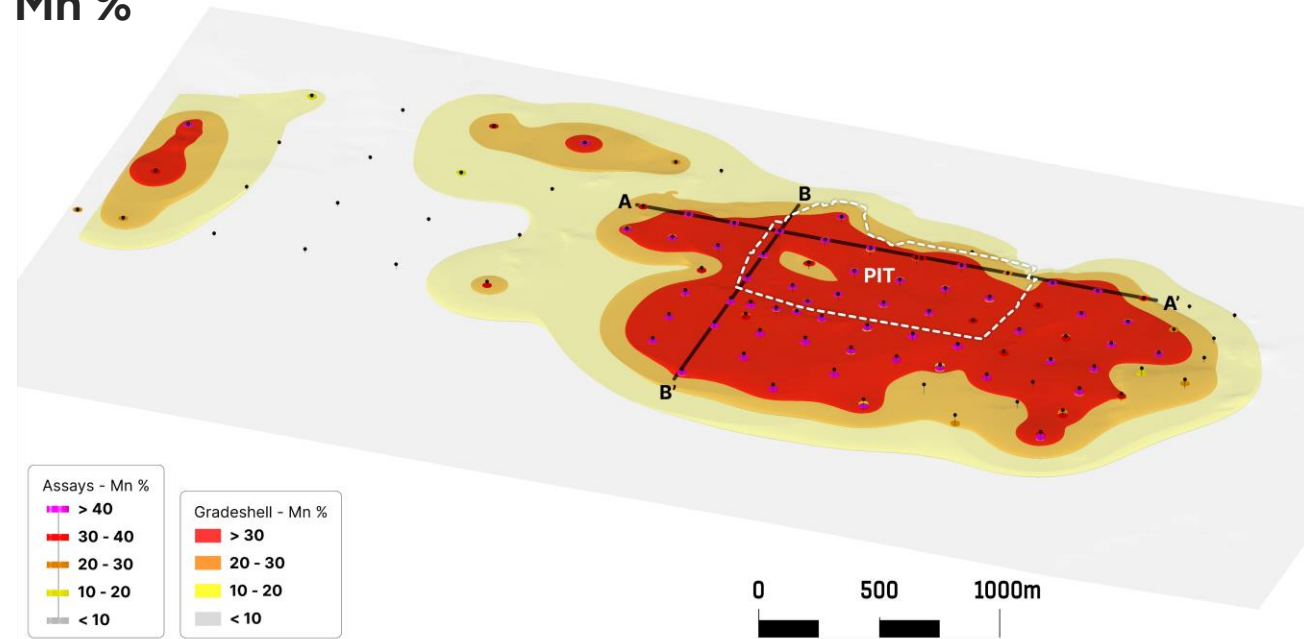
Drilling is focused on:

- ◆ Providing accurate density of the ore zone
- ◆ Upper/lower contacts of the ore zone

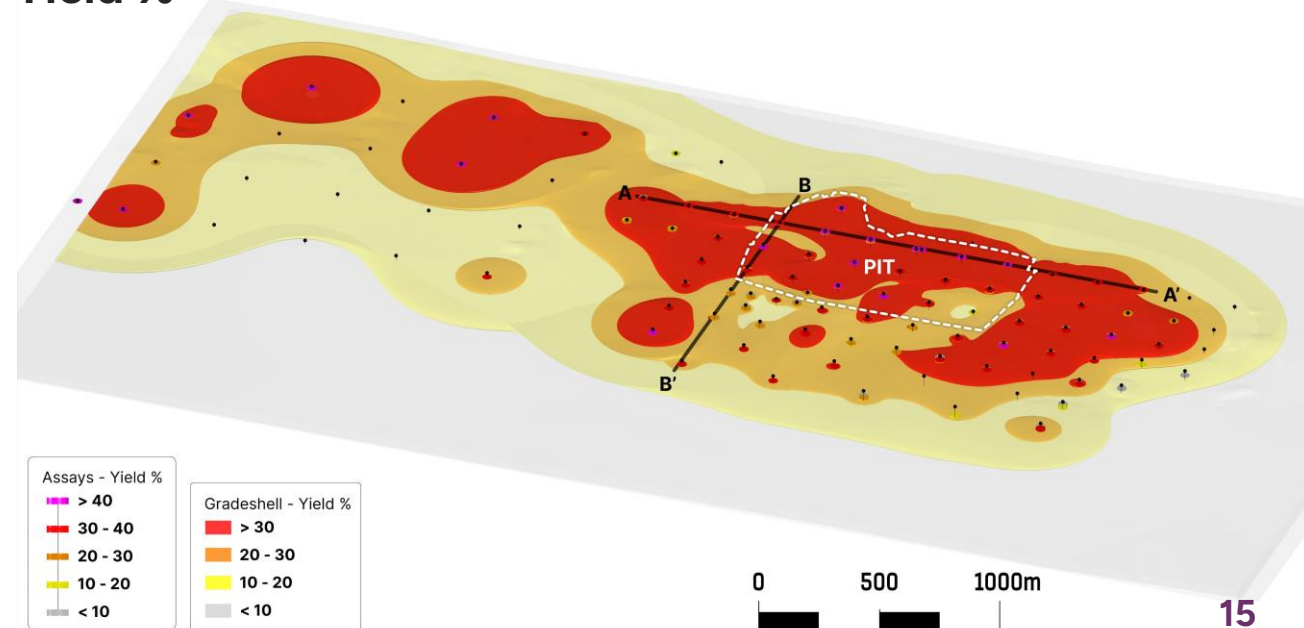
Both of these parameters are **expected to contribute** towards an estimated **20% increase in ore tonnes**



Mn %



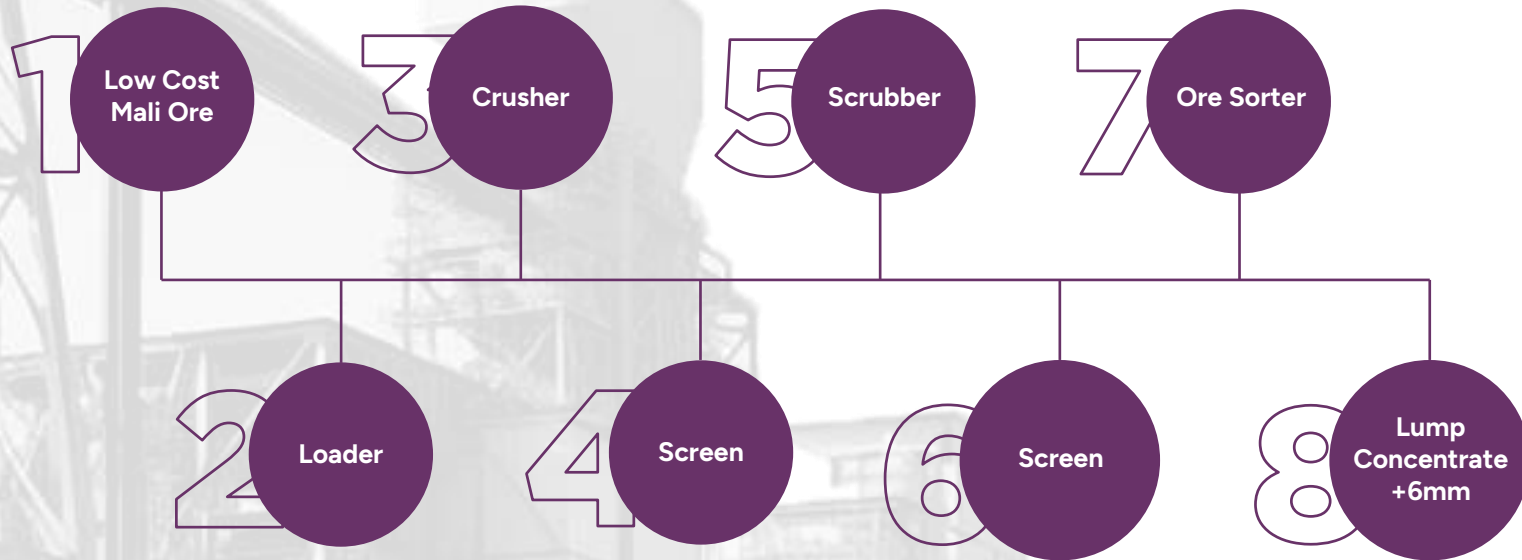
Yield %



# PROCESSING

120kt per annum mining rate - **stage 1**

Simplistic Mining Method



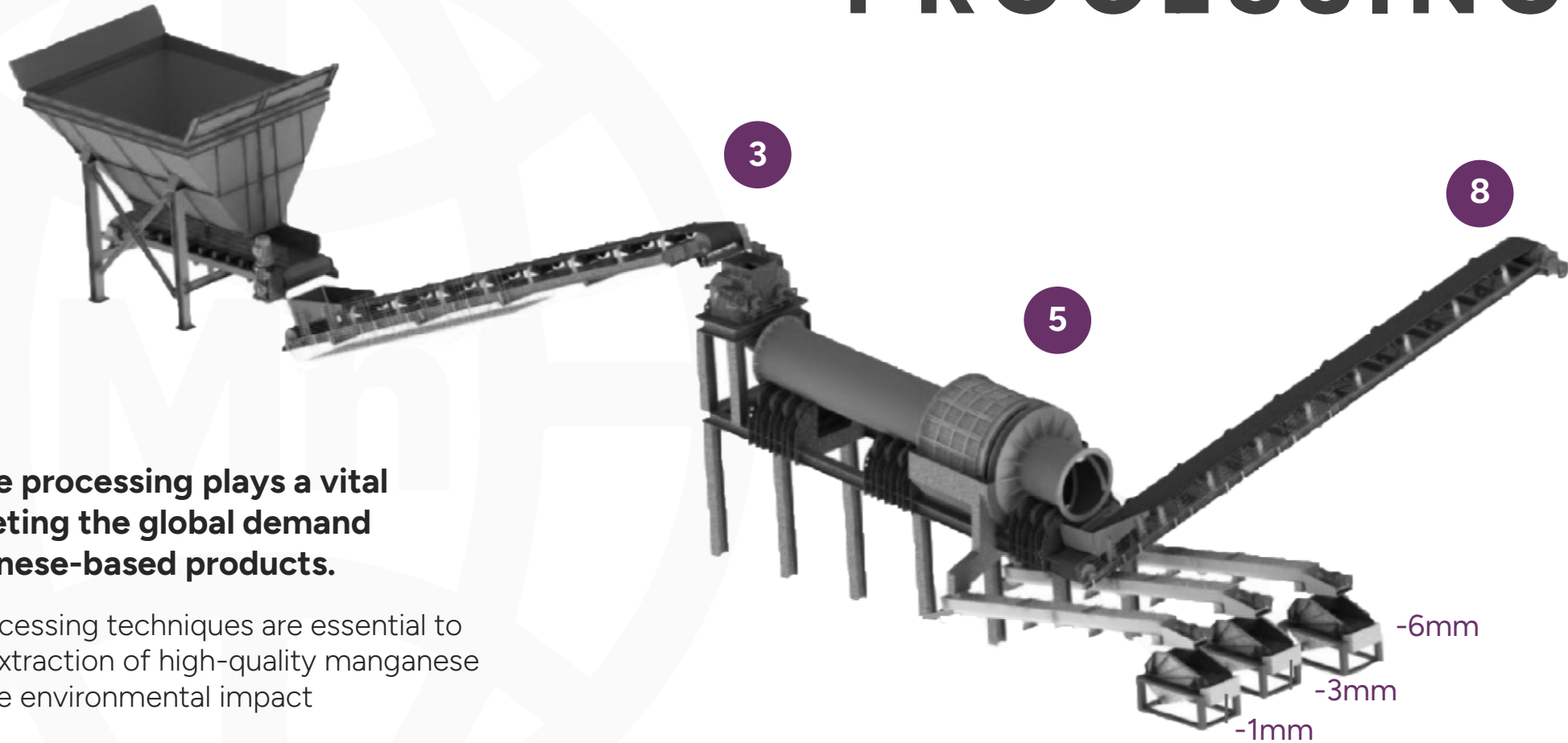


# PROCESSING

**Manganese processing plays a vital role in meeting the global demand for manganese-based products.**

Efficient processing techniques are essential to ensure the extraction of high-quality manganese and minimize environmental impact

**Conceptual Plant Design**





100% owned by Global Manganese.

# TRANSPORTATION

**A logistics company, with its headquarters in Dakar, Senegal, specializes in transporting normal bulks from both Dakar and Abidjan to Mali.**

They offer dedicated backhaul services specifically for manganese transport to Dakar and Abidjan. The company is managed by African logistics experts, and they have an initial capacity of 120ktpa. As the mine grows, their capacity will be scaled accordingly.



40 Trucks in Fleet





# SHIPPING

The transportation process typically involves loading the manganese onto cargo ships at the Port of Dakar. These ships are specifically designed to transport bulk commodities, including minerals like manganese.

## Route

Dakar to Portugal

**5,556 km**

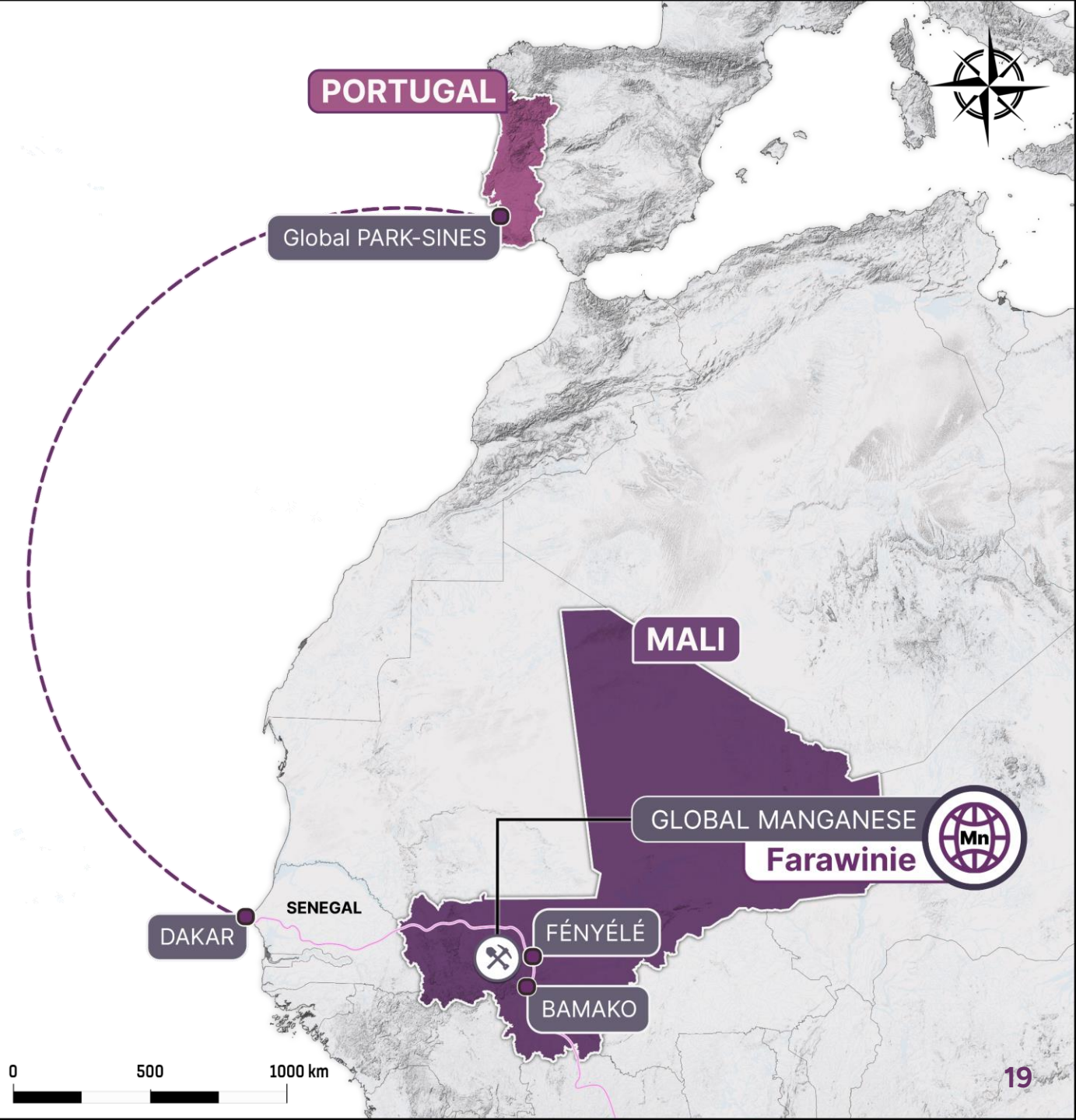
Distance between locations

**100,000 mt**

Of transporting capacity



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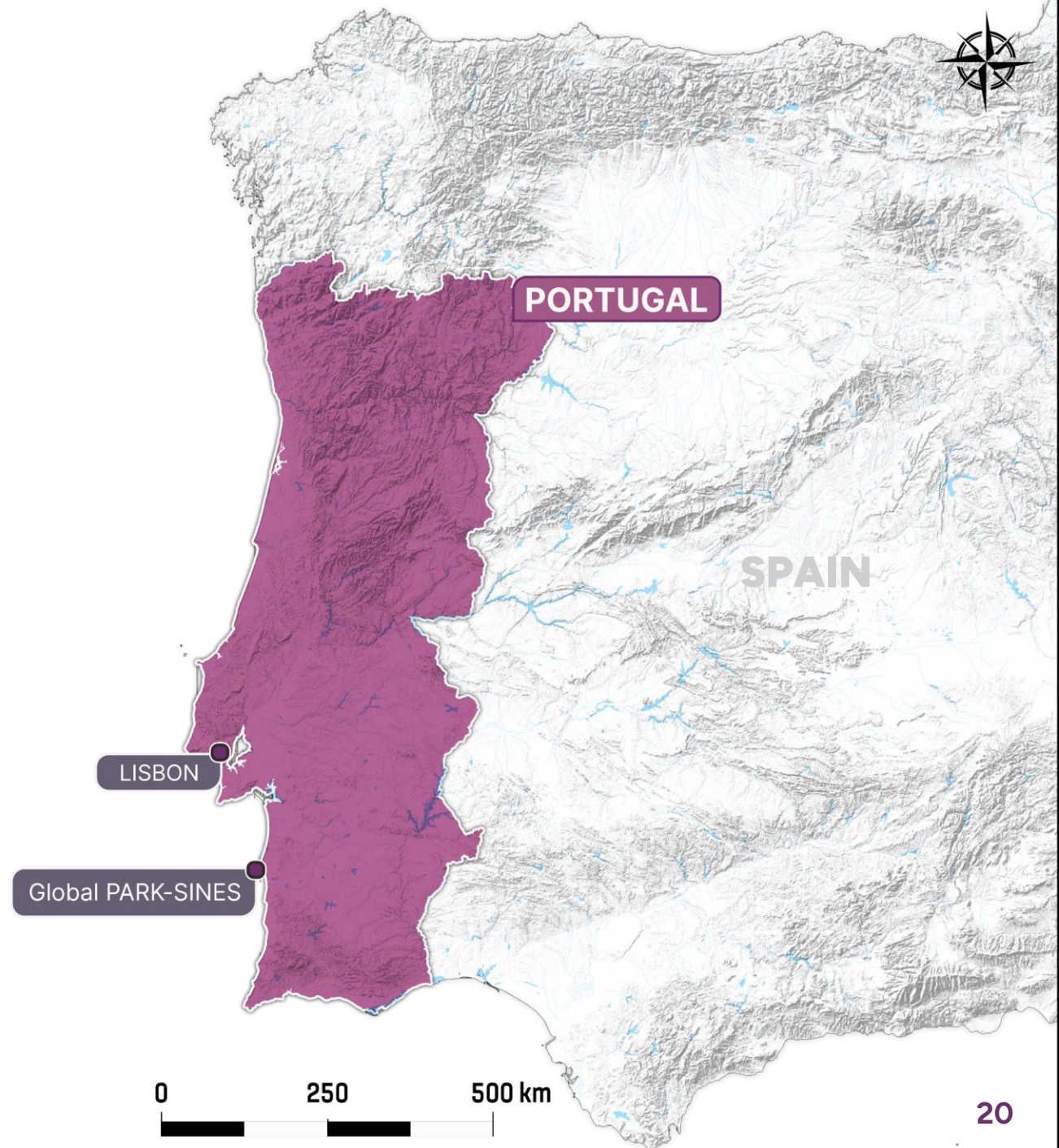
# PORTUGAL

The plant location is situated with prime access to Europe. The complex has a deep-water port with specialized handling for all types of cargo. There are also rail and road connections to Europe.

**33% of all Mali trade is passed through the Ivory Coast - 1100 km**



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# GLOBAL MANGANESE

Contact Information



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