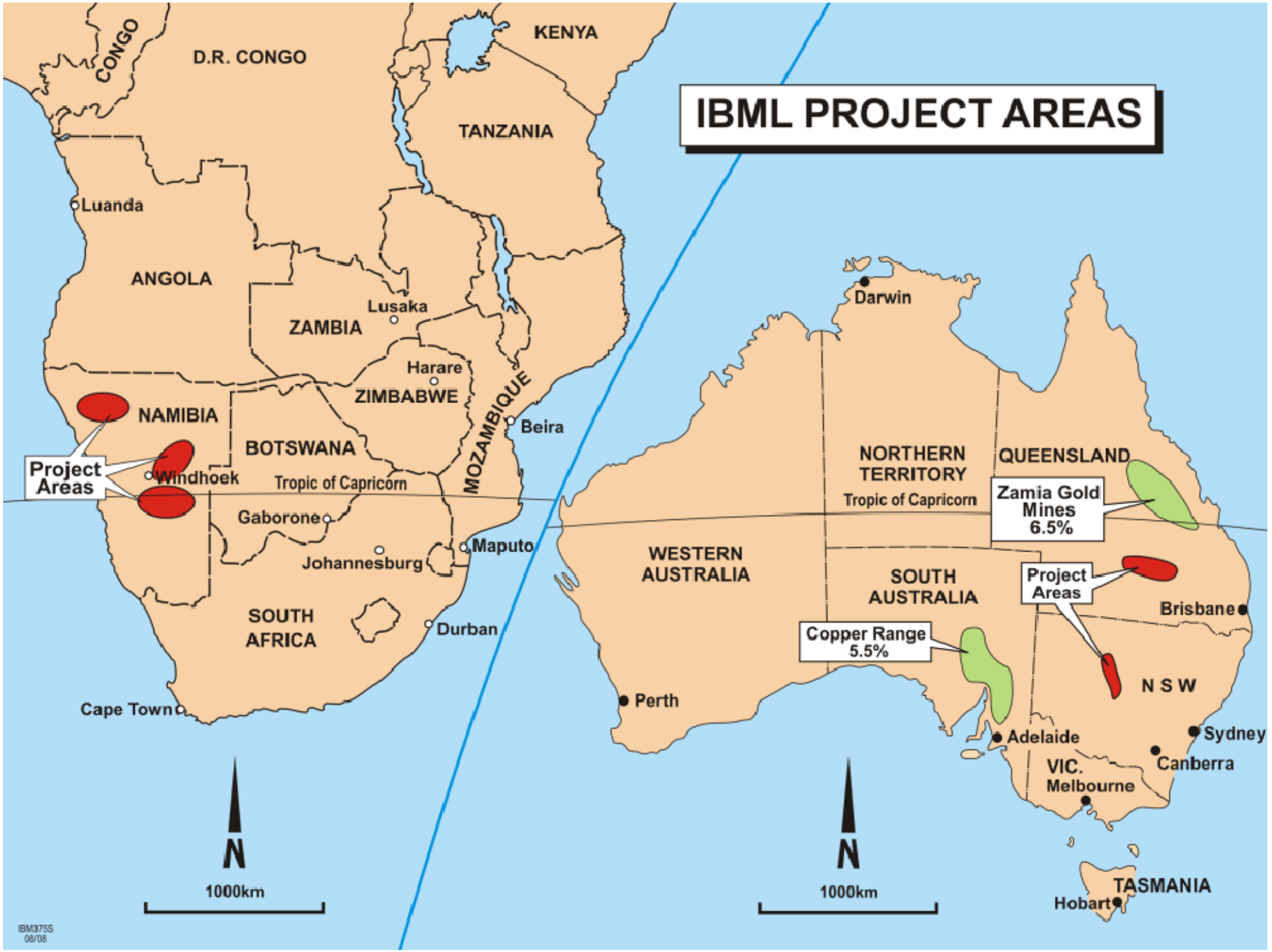
# Craton Mining & Exploration (Pty) Ltd

# OMITIOMIRE COPPER PROJECT, NAMIBIA

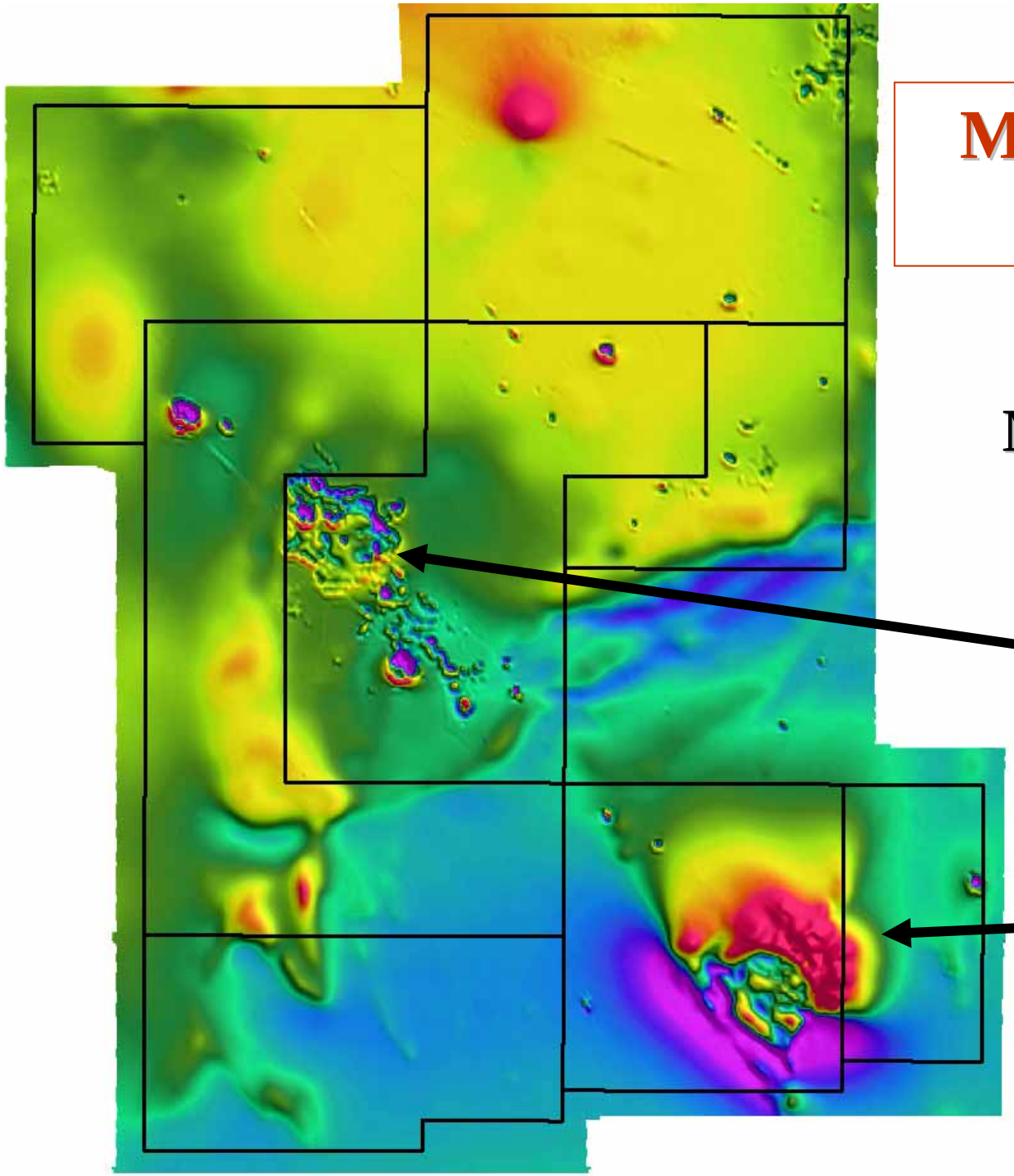
**September 2008**

# Competent Person's Statement

***The information in this presentation that relates to Mineral Resources is based on information compiled by Dr Phillip Hellman. Dr Hellman, FAIG, is a Director of Hellman & Schofield Pty Ltd ("H&S") and qualifies as a Competent Person under the meaning of the 2004 JORC Code. Dr Hellman consents to the inclusion of these estimates in the form and context in which they appear.***


IBML PROJECT AREAS
CONGO
D.R. CONGO
KENYA
TANZANIA
Luanda
ANGOLA
Lusaka
ZAMBIA
Harare
ZIMBABWE
MOZAMBIQUE
Beira
NAMIBIA
BOTSWANA
Project Areas
Windhoek
Tropic of Capricorn
Gaborone
Johannesburg
Maputo
SOUTH AFRICA
Durban
Cape Town
N
1000km
Darwin
NORTHERN TERRITORY
QUEENSLAND
Tropic of Capricorn
Zamia Gold Mines 6.5%
WESTERN AUSTRALIA
SOUTH AUSTRALIA
Project Areas
Brisbane
Copper Range 5.5%
N S W
Perth
Adelaide
Sydney
Canberra
VIC.
Melbourne
TASMANIA
Hobart
N
1000km
IBM375S
08/08

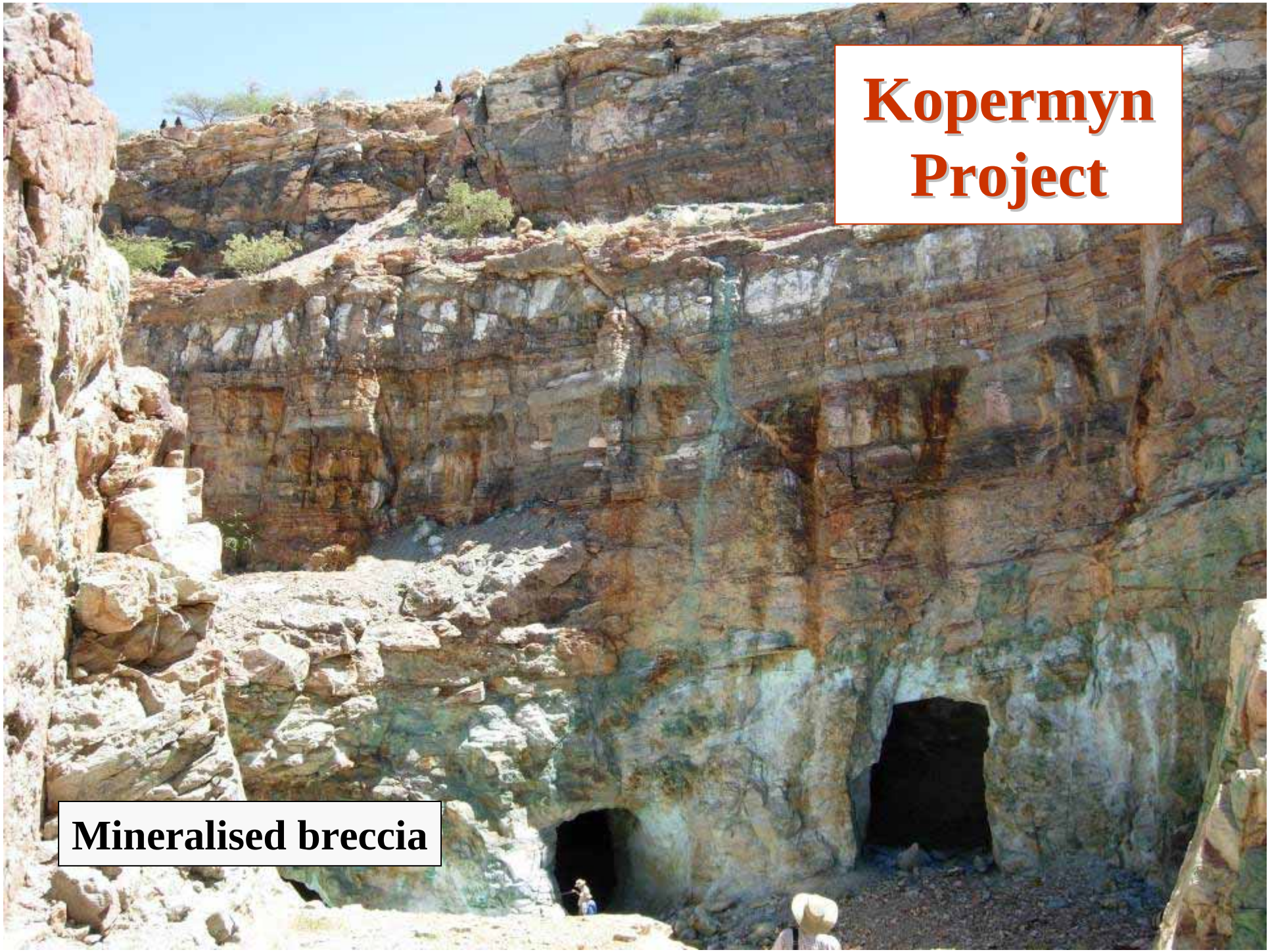
# Maranoa Project
# Queensland



## Magnetic Image

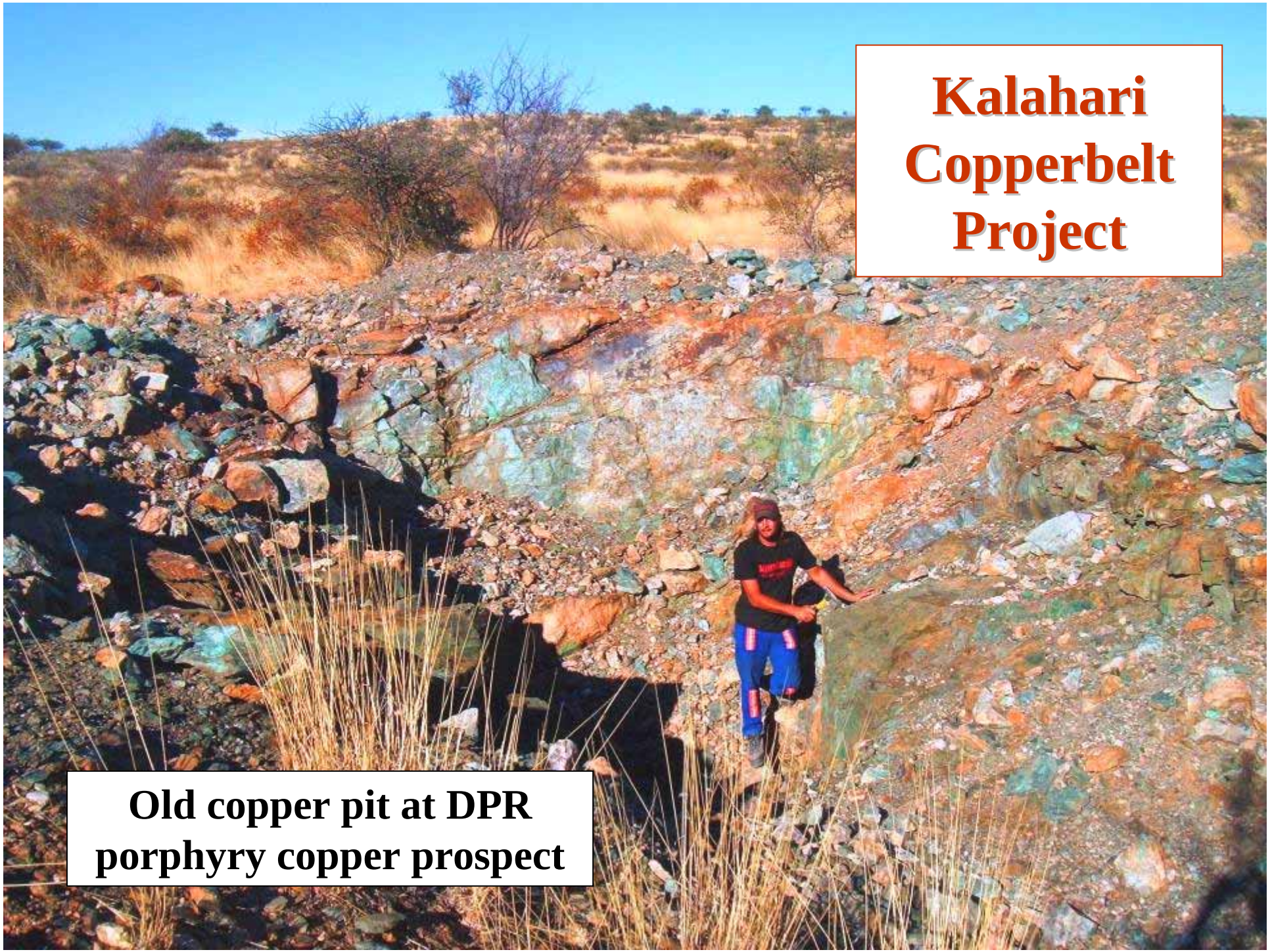
Gabbro bodies

Darkwater intrusive complex

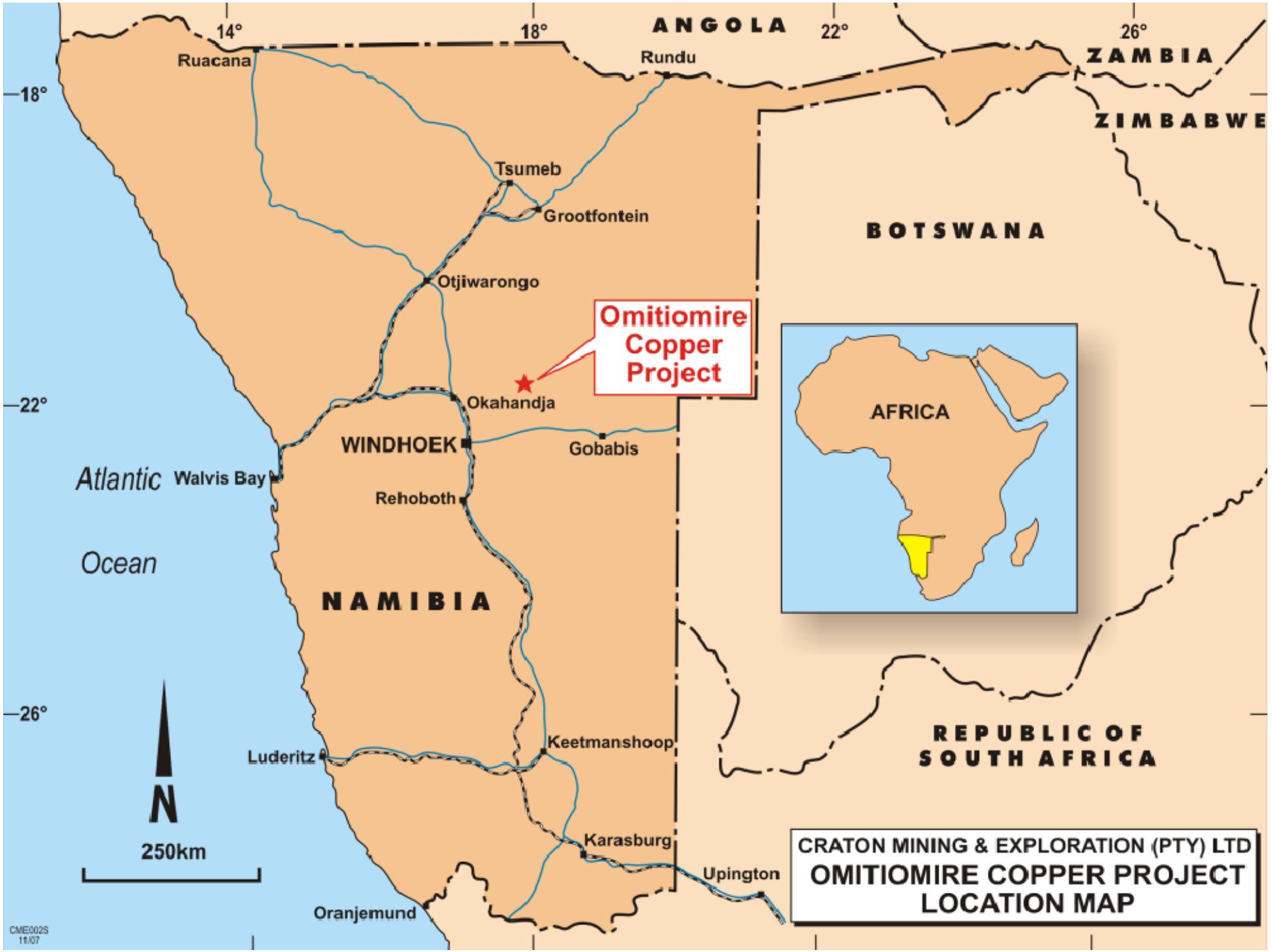

Kopermyn
Project
Mineralised breccia


Kalahari
Copperbelt
Project
Kojeka - Mineralised phyllite

# Kalahari Copperbelt Project



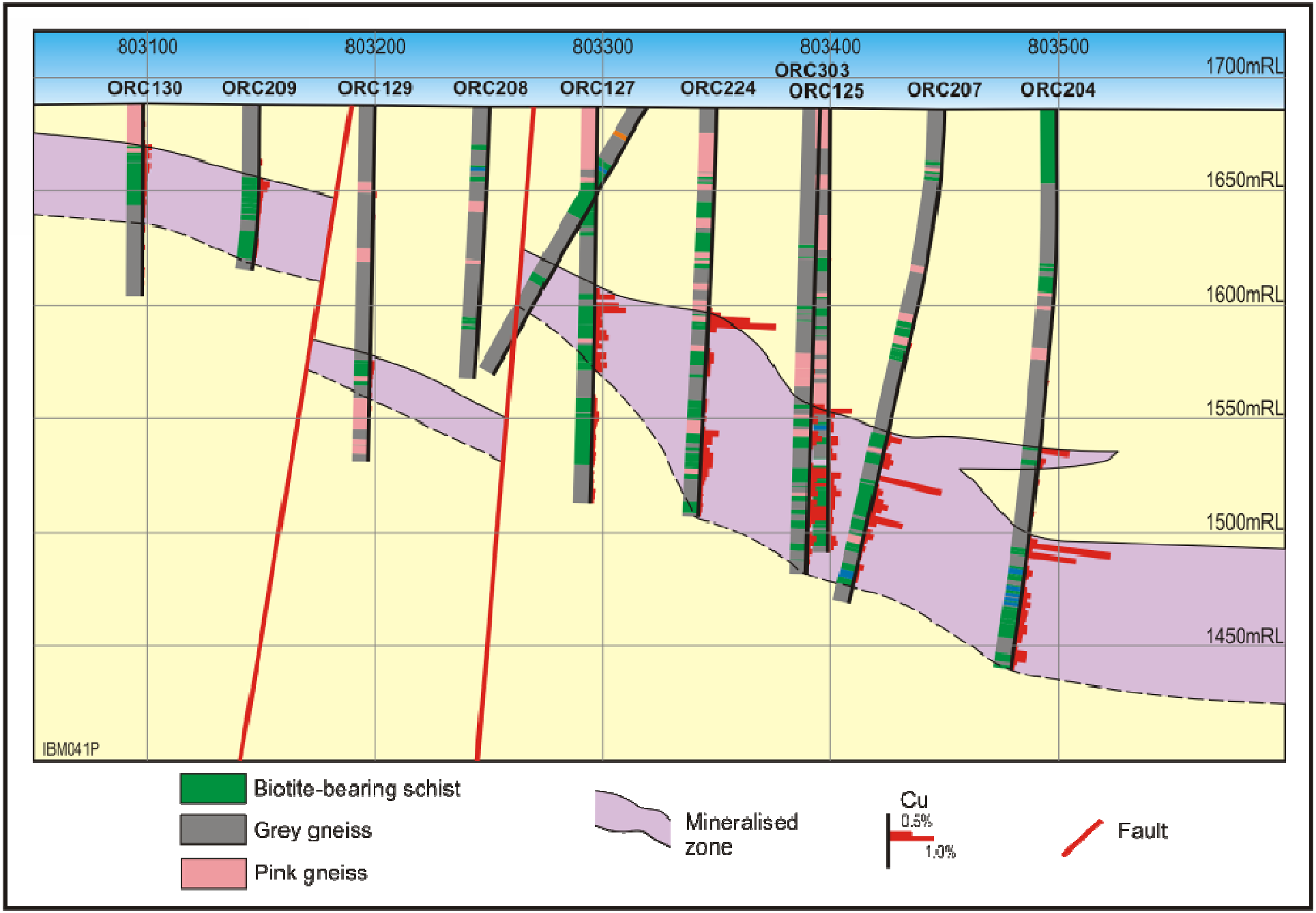
**Old copper pit at DPR porphyry copper prospect**


14°
18°
22°
26°
ANGOLA
ZAMBIA
ZIMBABWE
BOTSWANA
Ruacana
Rundu
Tsumeb
Grootfontein
Otjiwarongo
Omitiomire Copper Project
Okahandja
WINDHOEK
Gobabis
Walvis Bay
Rehoboth
Atlantic Ocean
NAMIBIA
AFRICA
Keetmanshoop
Luderitz
REPUBLIC OF SOUTH AFRICA
Karasburg
Upington
Oranjemund
N
250km
CRATON MINING & EXPLORATION (PTY) LTD
OMITIOMIRE COPPER PROJECT
LOCATION MAP
CME002S
11/07

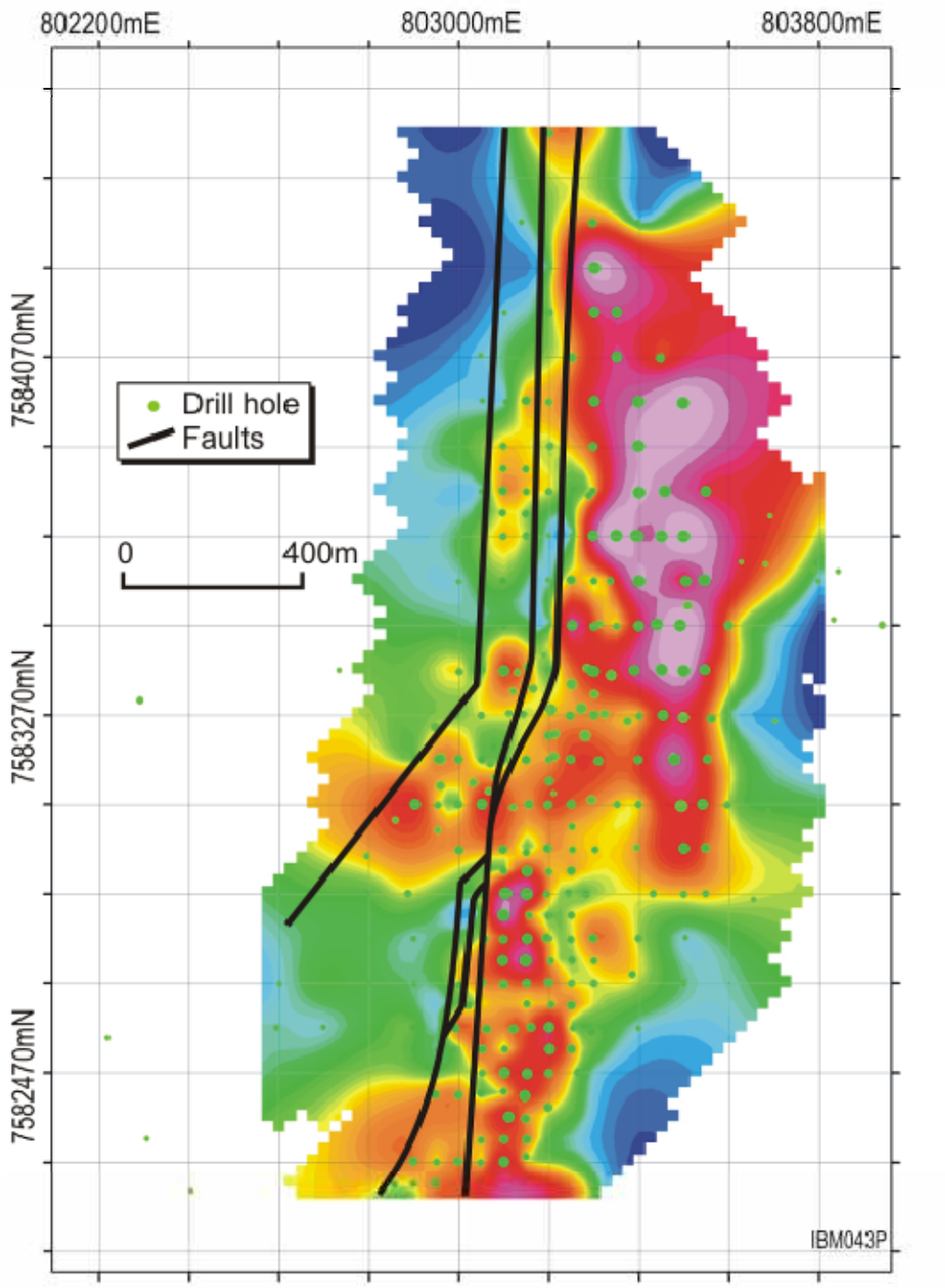

Omitiomire Project Area

# Geology of the Omitiomire Deposit

**Bands of copper-bearing biotite schist alternate with bands of barren quartz-feldspar gneiss**




**Omitiomire Section 3670**

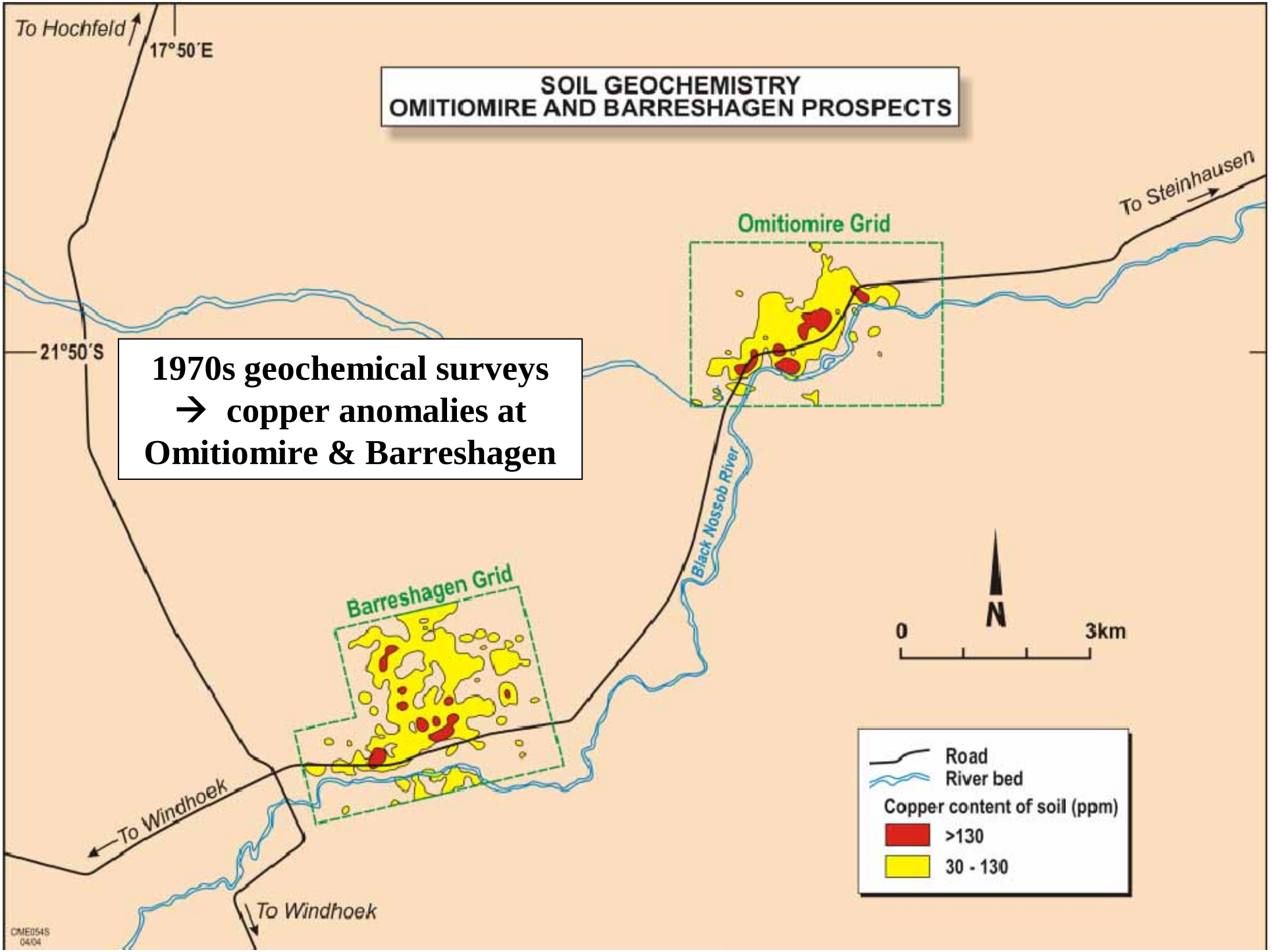


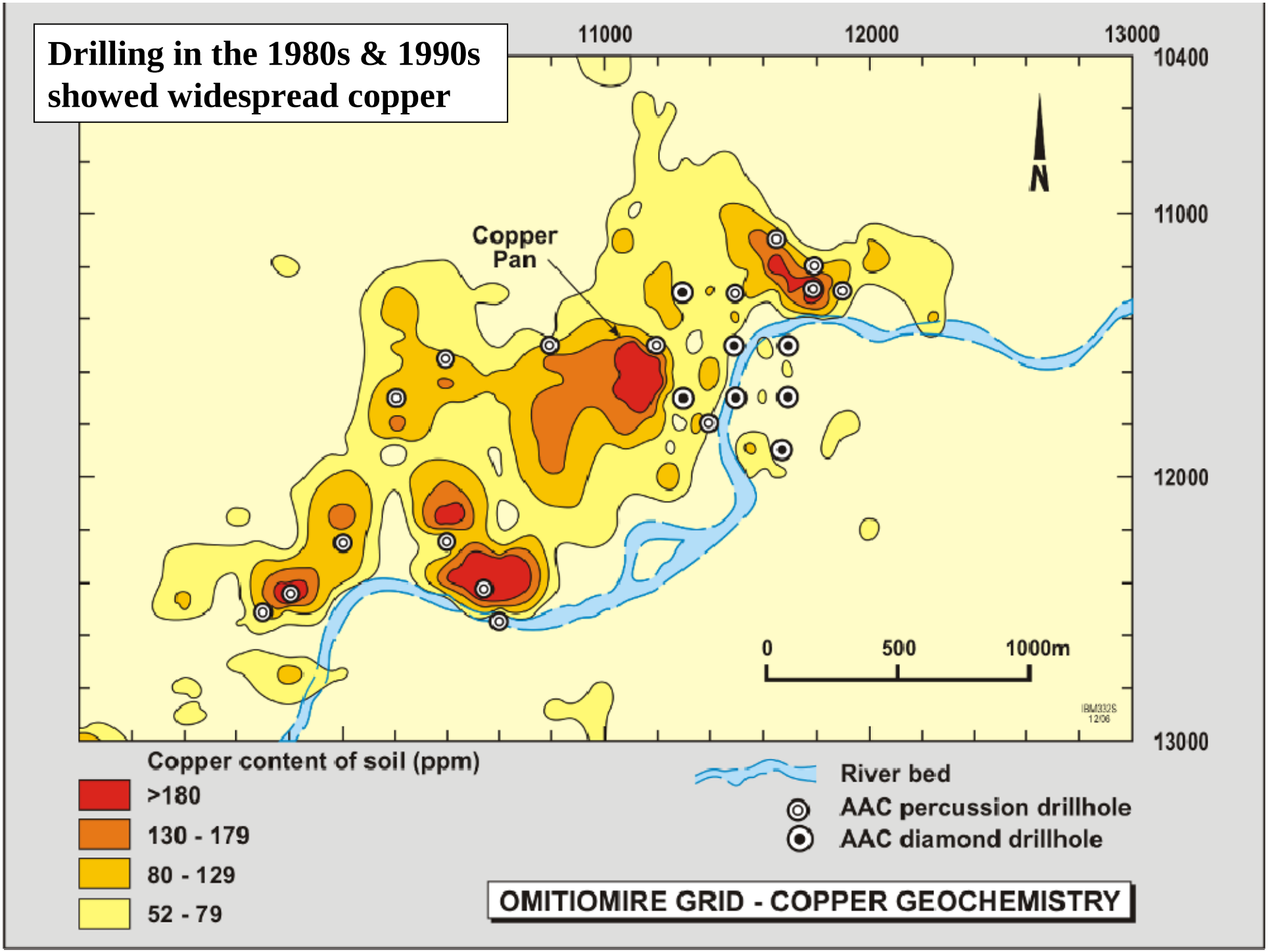

# Omitiomire Deposit

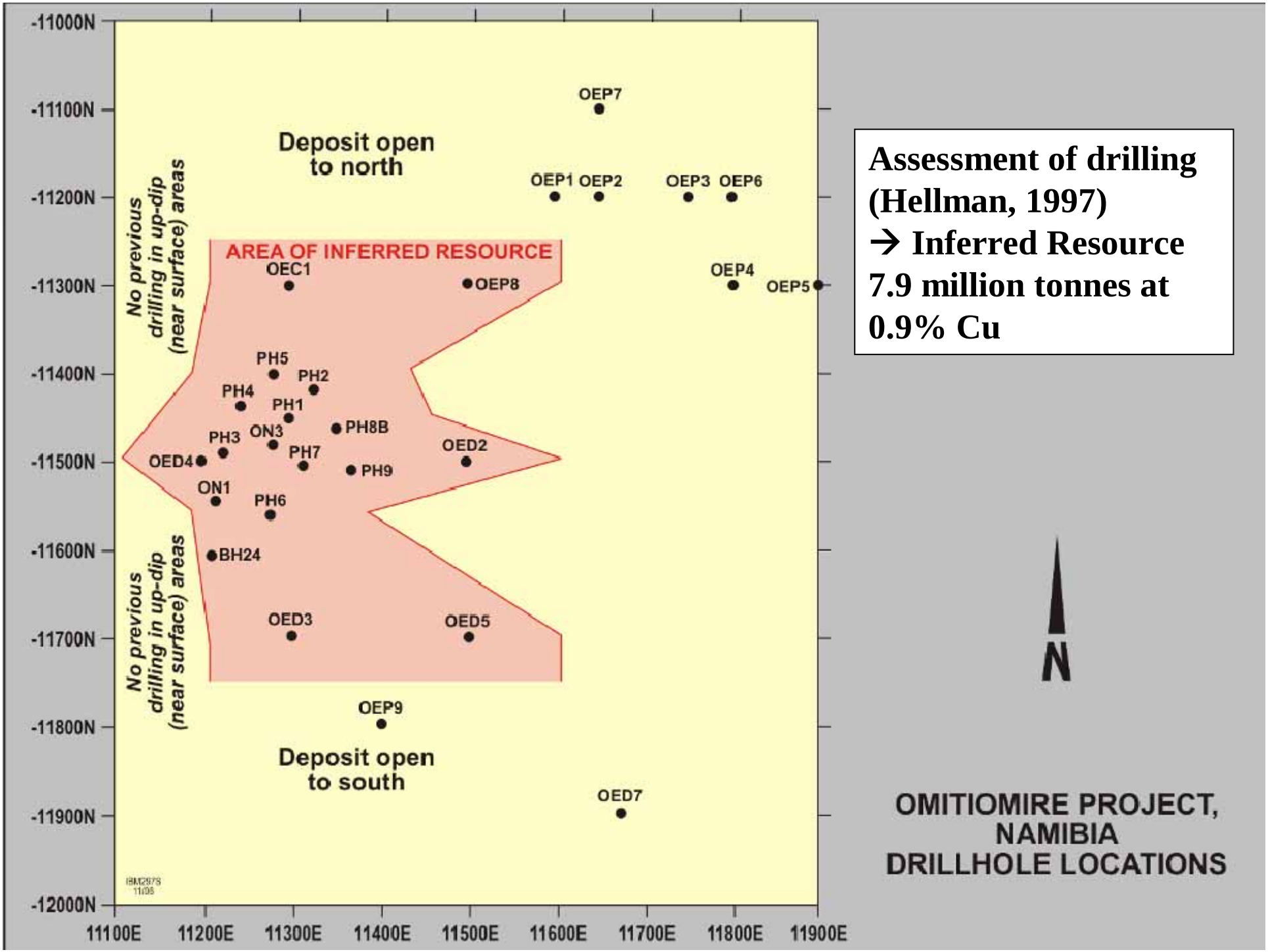
**Grade x thickness contours**

**The deposit extends over 2,300 m x 800 m and remains open in most directions**


Malachite in outcrop


SOIL GEOCHEMISTRY
OMITIOMIRE AND BARRESHAGEN PROSPECTS
To Hochfeld
17°50'E
21°50'S
To Steinhausen
Omitiomire Grid
Barreshagen Grid
Black Nossob River
1970s geochemical surveys
→ copper anomalies at
Omitiomire & Barreshagen
N
0
3km
To Windhoek
To Windhoek
Road
River bed
Copper content of soil (ppm)
>130
30 - 130
CME054S
04/04

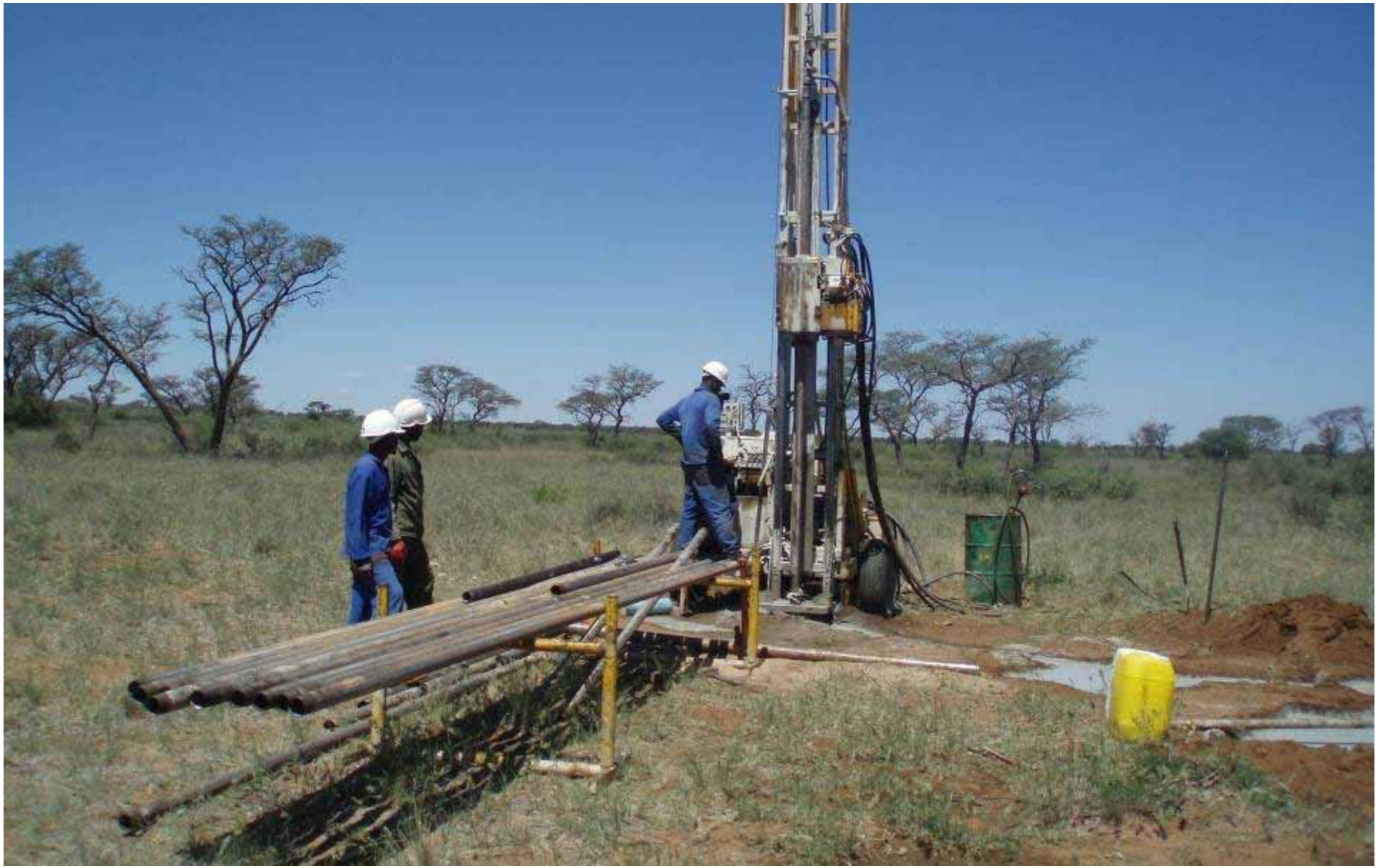

Drilling in the 1980s & 1990s showed widespread copper
11000
12000
13000
10400
11000
12000
13000
N
Copper Pan
0
500
1000m
Copper content of soil (ppm)
>180
130 - 179
80 - 129
52 - 79
River bed
AAC percussion drillhole
AAC diamond drillhole
OMITIOMIRE GRID - COPPER GEOCHEMISTRY



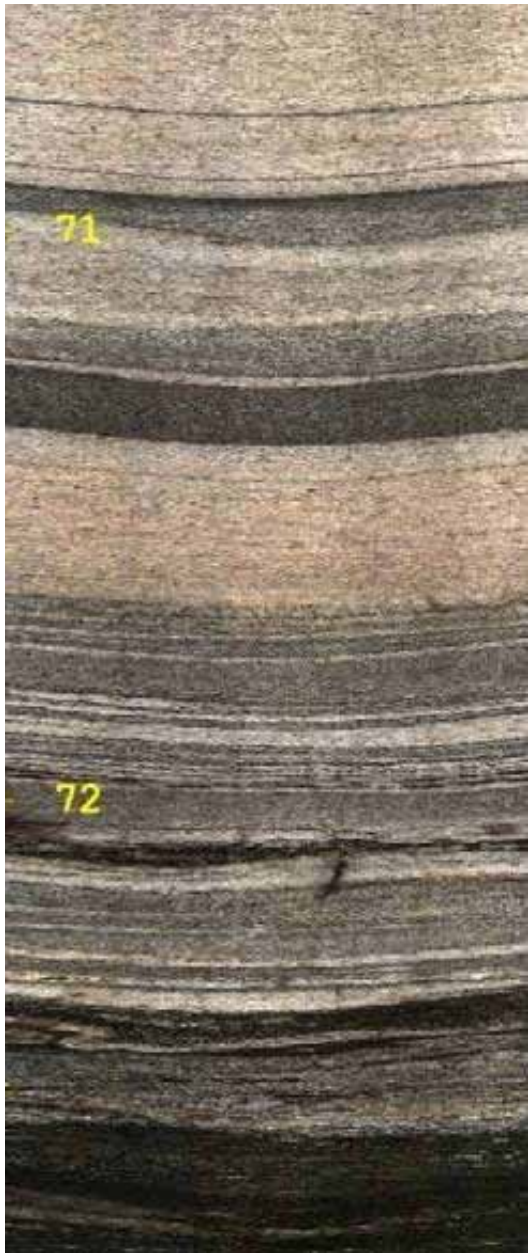

**Assessment of drilling (Hellman, 1997)**
**→ Inferred Resource**
**7.9 million tonnes at 0.9% Cu**

**Namibian cell phone tower**

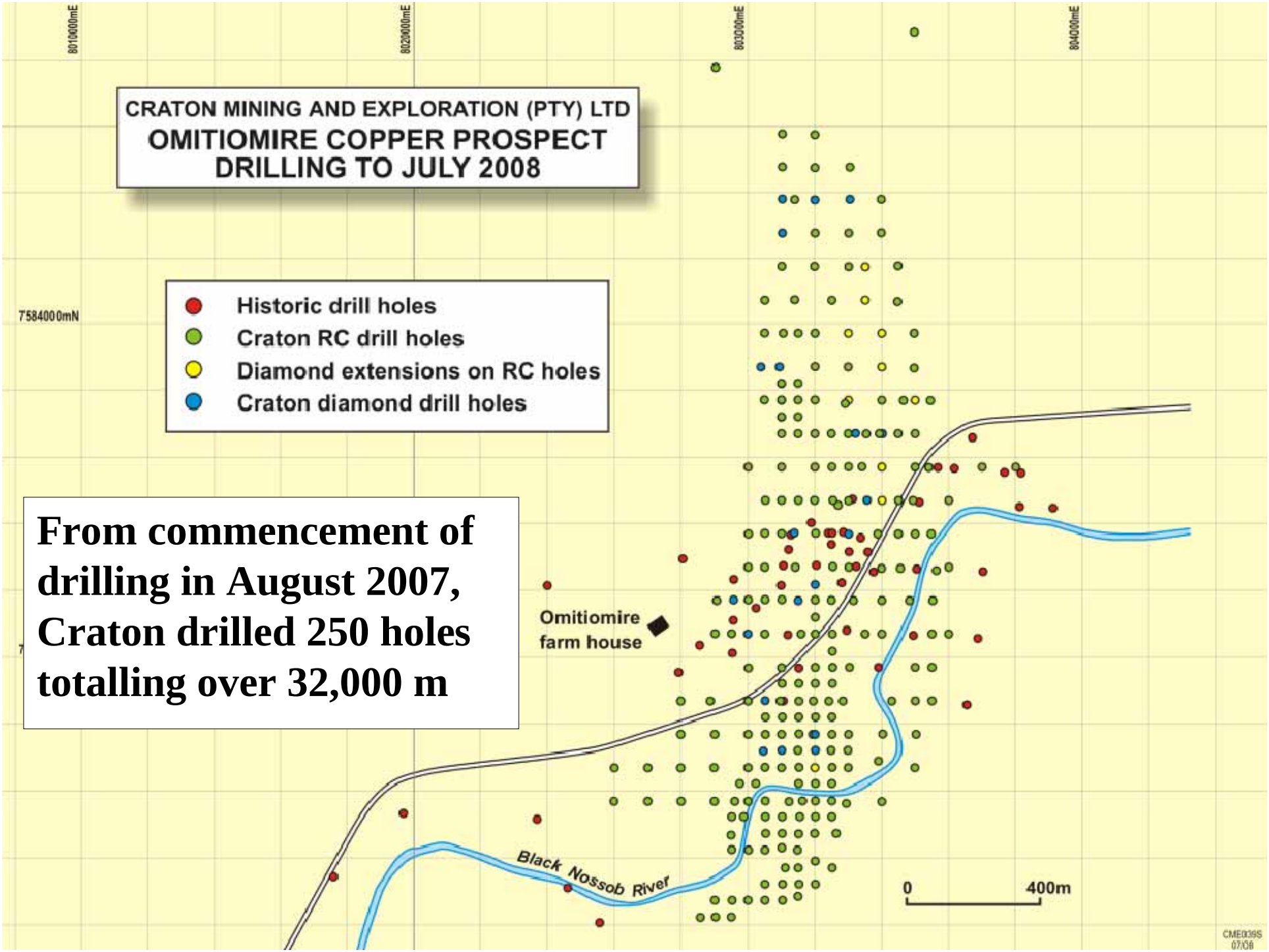

**Omitiomire - first drill hole, August 2007**



**Diamond drilling, Omitiomire**




**Down-hole photography assists in determining geological structure**


CRATON MINING AND EXPLORATION (PTY) LTD
OMITIOMIRE COPPER PROSPECT
DRILLING TO JULY 2008
Historic drill holes
Craton RC drill holes
Diamond extensions on RC holes
Craton diamond drill holes
From commencement of drilling in August 2007, Craton drilled 250 holes totalling over 32,000 m
Omitiomire farm house
Black Nossob River
0
400m
8019000mE
8029000mE
8039000mE
8049000mE
7584000mN

# Omitiomire - Resource

**Resource - Hellman 1997**

- **8 million tonnes at 0.9% Cu**

**IBML's target Aug 2007**

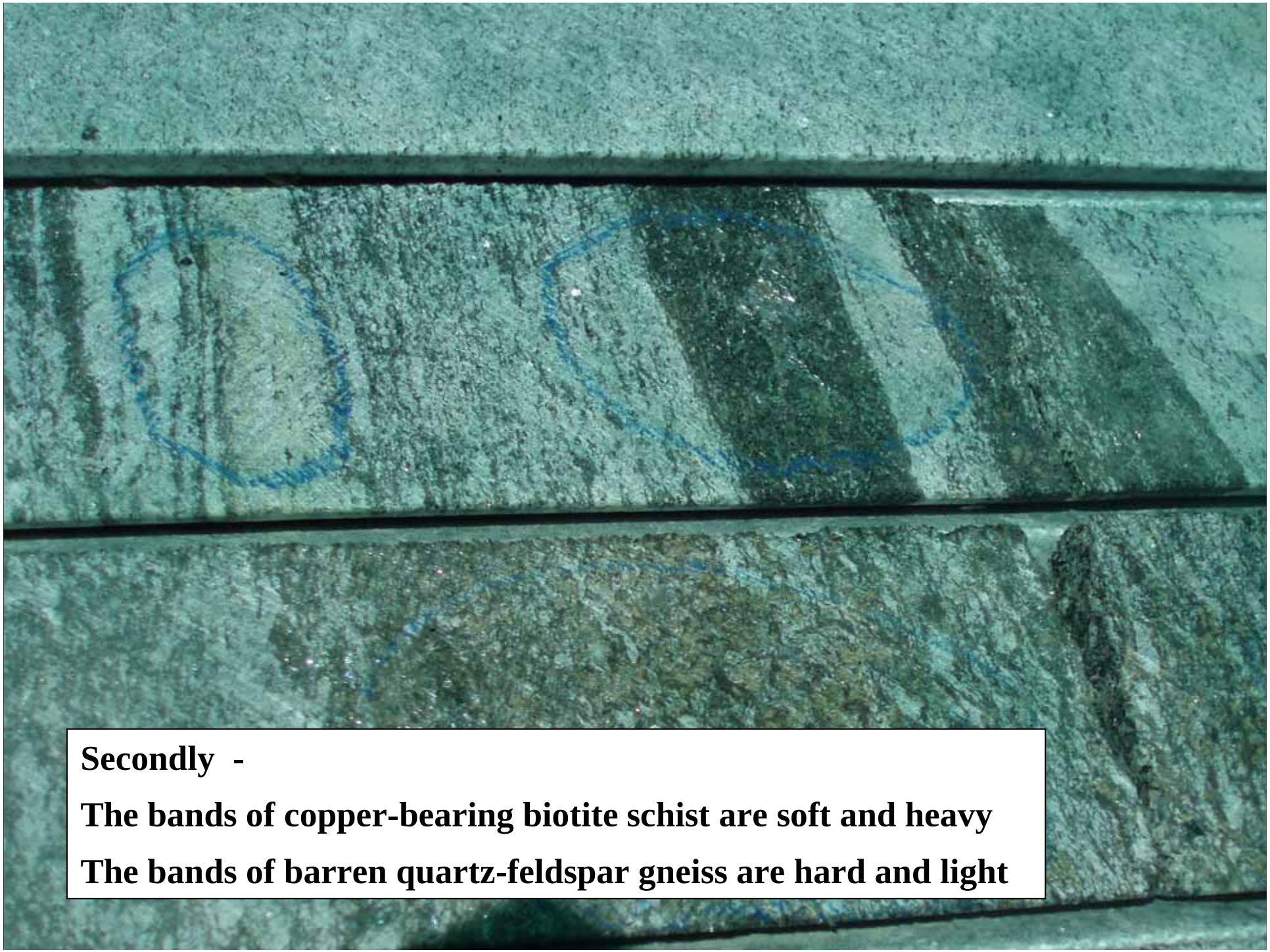
- **30 million tonnes at 0.7% Cu**

**Resource - Hellman Aug 2008 - at 0.45% Cu cut-off:**

- **45 million tonnes at 0.72% Cu (323,000 tonnes contained copper)**

  **(Indicated: 7.8 Mt at 0.69% Cu Inferred: 37.2 Mt at 0.72% Cu)**


Here's the really good bit …
Firstly, most of the copper occurs as coarse-grained chalcocite – $Cu_2S$ – 80% Cu
500 µm



**Secondly -**

**The bands of copper-bearing biotite schist are soft and heavy**

**The bands of barren quartz-feldspar gneiss are hard and light**

# Metallurgical Testwork

**Expected Key Process Outcomes -**

- **Dense medium separation of crushed ore (at 2.7 g/cc):**
  - **Doubles run-of-mine grade at 95% copper recovery**
- **Flotation of sulphide ore**
  - **Concentrate grade exceeds 55% Cu at 95% recovery**

# Possible Scenario

**We could lower the cut-off grade … and double the tonnes -**

- **At 0.25% Cu cut-off: Resource 98 million tonnes at 0.51% Cu (500,000 tonnes contained copper)**

  **(Indicated: 19 Mt at 0.48% Cu Inferred: 79 Mt at 0.52% Cu)**

→ **Crush & screen**

→ **Dense medium separation (95% recovery)**

→ **~ 50 million tonnes at 1% Cu**

→ **Grinding circuit**

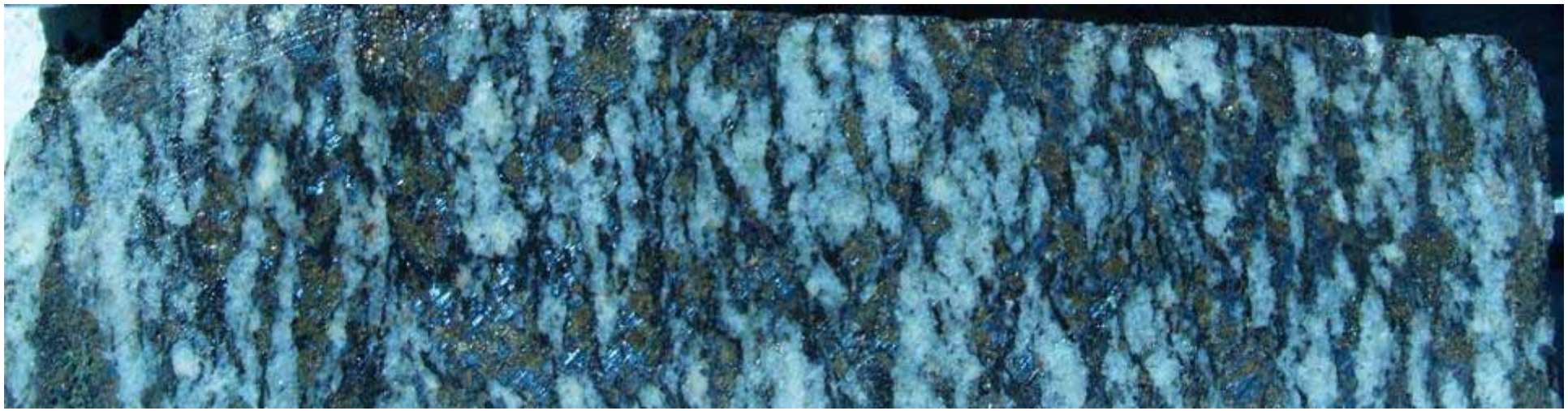
→ **Flotation**

→ **Chalcocite concentrate + 55% Cu**

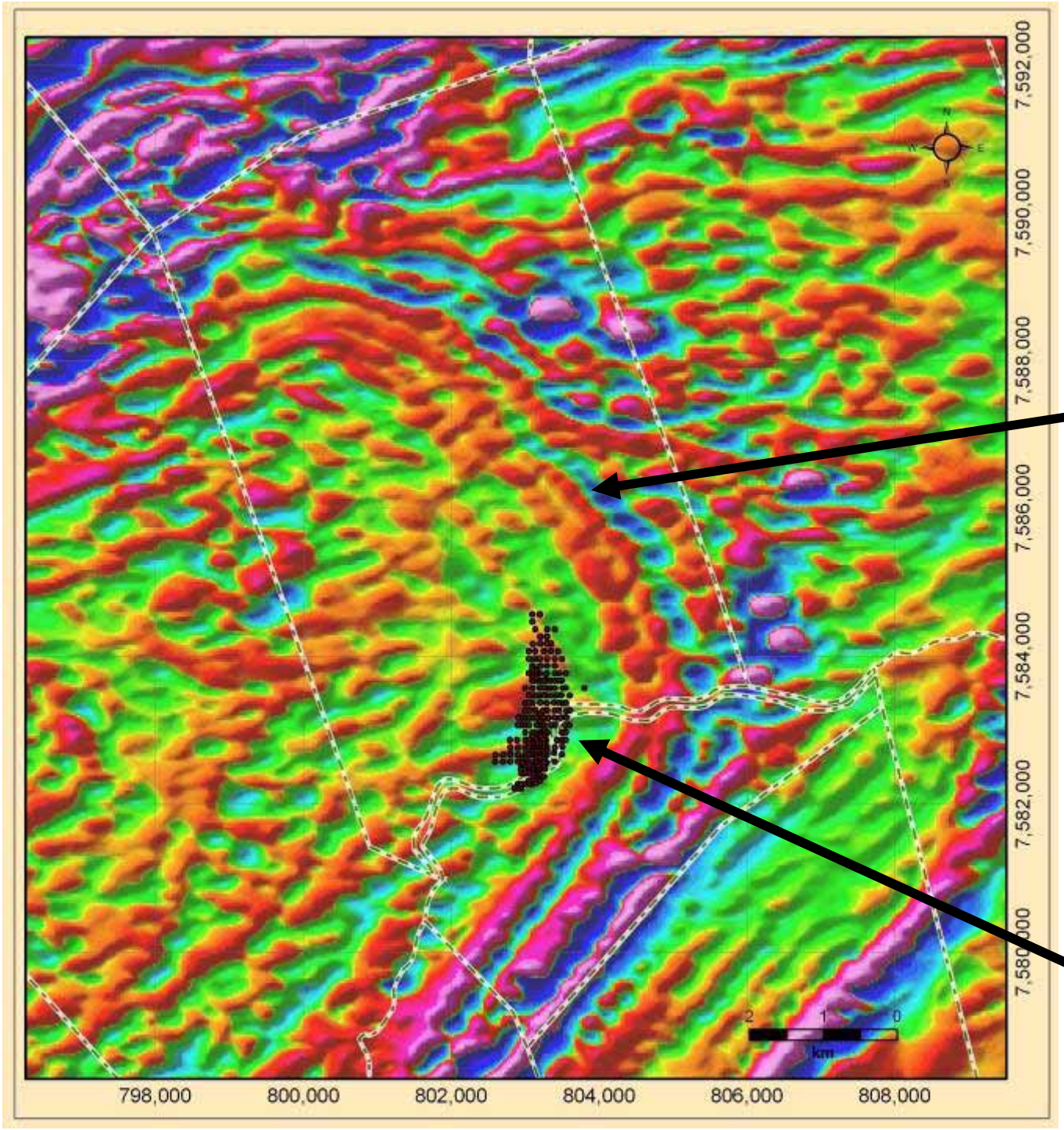
**WE'RE STILL WORKING ON THIS.**
**PRELIMINARY FINANCIALS STILL TO COME**

# Metallurgy is Important!

- **In-ground grade and tonnes are not the only key resource valuation parameters …..**
- **A simple upgrade process can really make the difference!**
- **Dense medium separation does just that at Omitiomire**



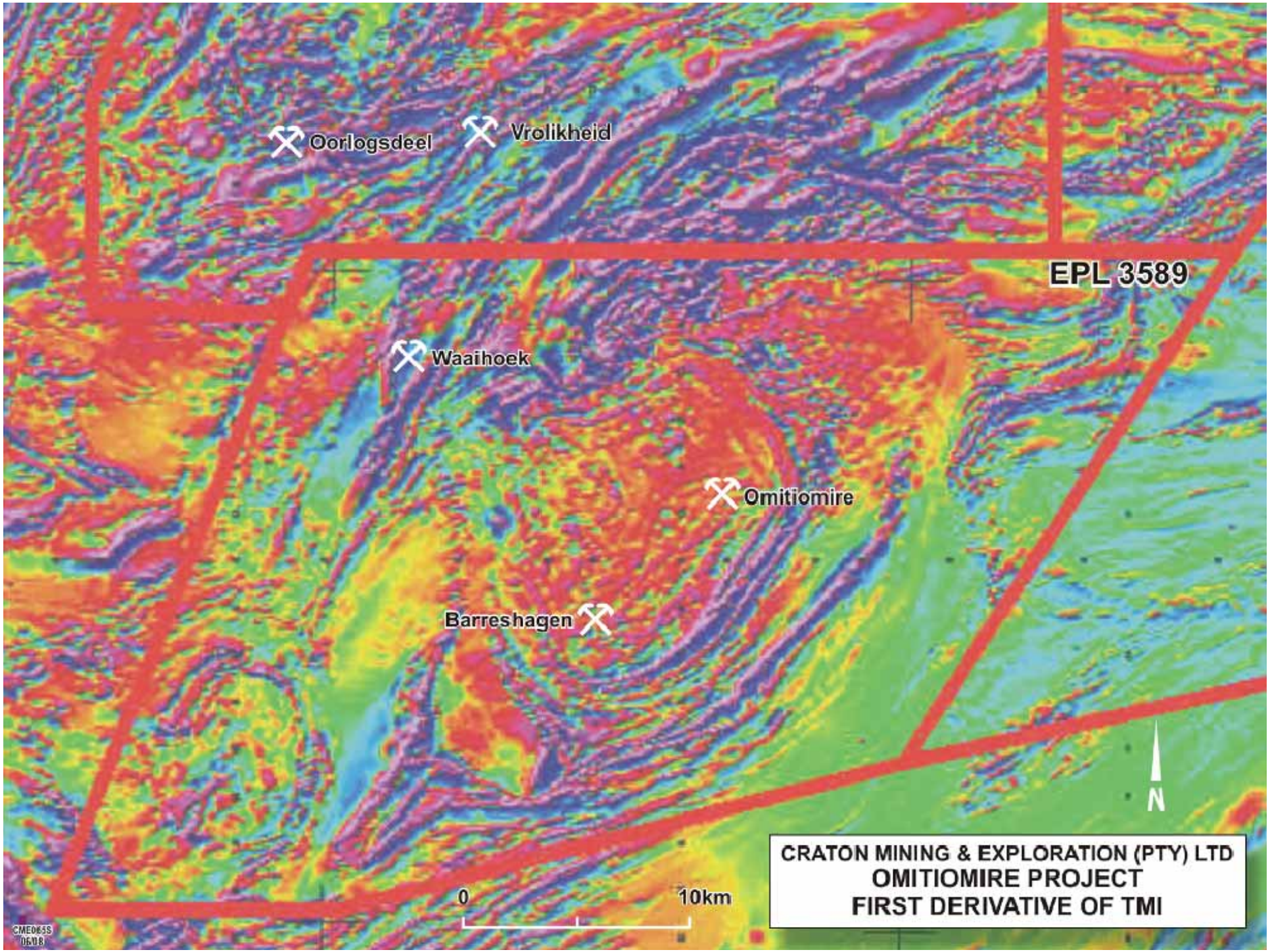
# Discovery Potential

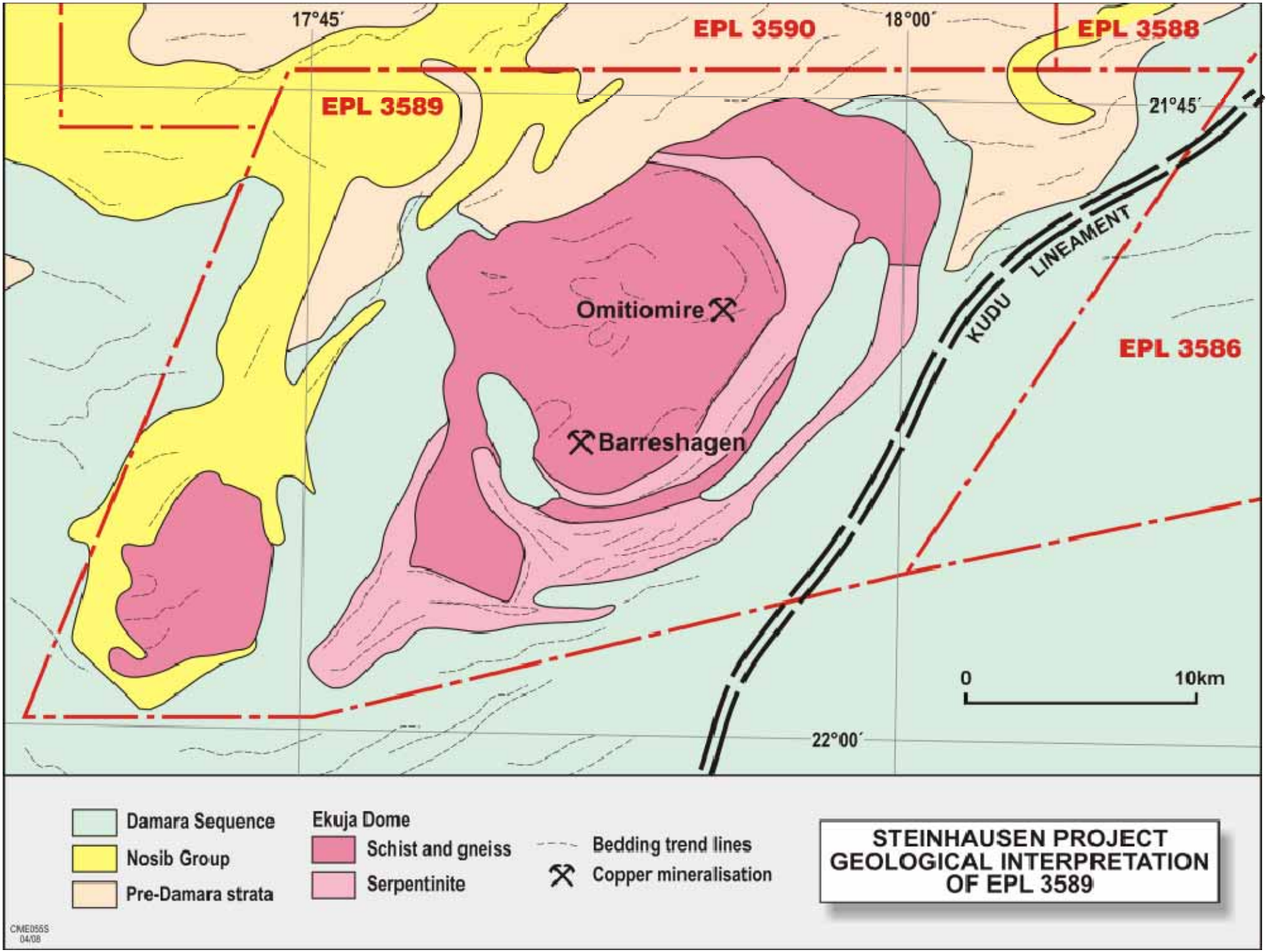


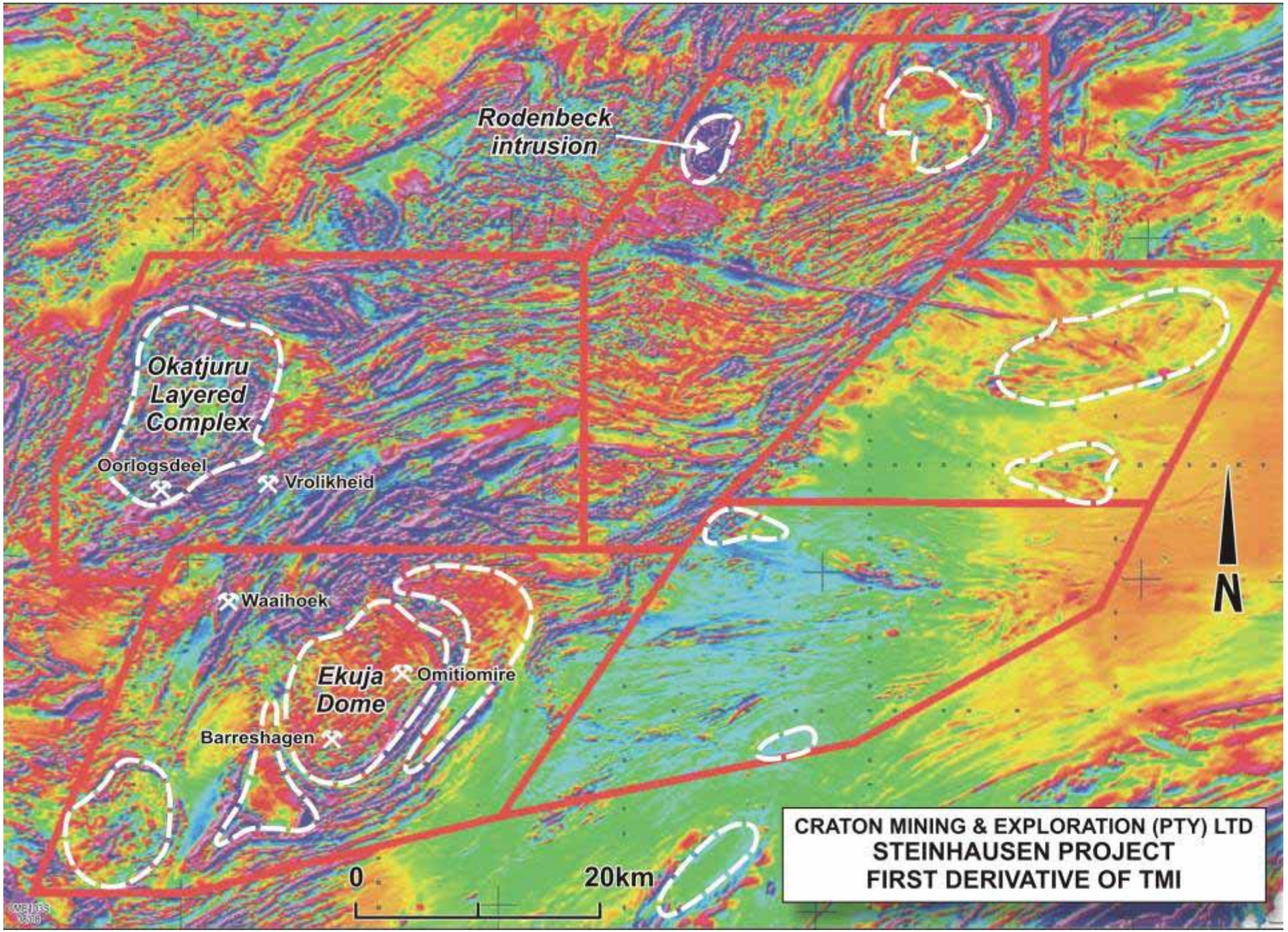

**Margin of basement dome**

**Deposit extends for 2,300 m x 800 m - open on all sides**

**Drill holes**


Oorlogsdeel
Vrolikheid
EPL 3589
Waaihoek
Omitiomire
Barreshagen
N
0
10km
CRATON MINING & EXPLORATION (PTY) LTD
OMITIOMIRE PROJECT
FIRST DERIVATIVE OF TMI
CMED65S
0608


17°45´
18°00´
21°45´
22°00´
EPL 3590
EPL 3588
EPL 3589
EPL 3586
Omitiomire
Barreshagen
KUDU LINEAMENT
0
10km
Damara Sequence
Nosib Group
Pre-Damara strata
Ekuja Dome
Schist and gneiss
Serpentinite
Bedding trend lines
Copper mineralisation
STEINHAUSEN PROJECT
GEOLOGICAL INTERPRETATION
OF EPL 3589
CMED55S
04/08


Rodenbeck intrusion
Okatjuru Layered Complex
Oorlogsdeel
Vrolikheid
Waaihoek
Ekuja Dome
Omitiomire
Barreshagen
N
0
20km
CRATON MINING & EXPLORATION (PTY) LTD
STEINHAUSEN PROJECT
FIRST DERIVATIVE OF TMI

# Omitiomire Summary

- **Resource 45 million tonnes at 0.72% Cu (cut-off 0.45% Cu)**
- **Lower cut-off grade → Expanded resource -**
  **98 million tonnes at 0.51% Cu (cut-off 0.25% Cu)**
- **After DMS → 50 million tonnes at ~ 1% Cu (95% recovery)**
- **Flotation → chalcocite concentrate + 55% Cu**
- **Excellent potential to expand the resource**
- **Excellent potential for other discoveries**

**DEFINITIVE FEASIBILITY STUDY STARTING SOON**

# Namibia

## A GREAT COUNTRY TO OPERATE IN