



# KIHABE-NXUU Zinc Lead Project

BOTSWANA

April 2010

# Company Details

**Mount Burgess (Botswana) (Proprietary) Limited**

(CO.2007/375)

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Gabarone BOTSWANA



**MOUNT BURGESS MINING N.L.**

(ACN: 009 067 476)

Listed on the Australia Stock Exchange since 1985

Listing Code: MTB

Local Asset status in Botswana granted: 31.10.2007

Issued Share Capital: 320,257,000 shares

Email: [mtb@mountburgess.com](mailto:mtb@mountburgess.com)

Website: [www.mountburgess.com](http://www.mountburgess.com)

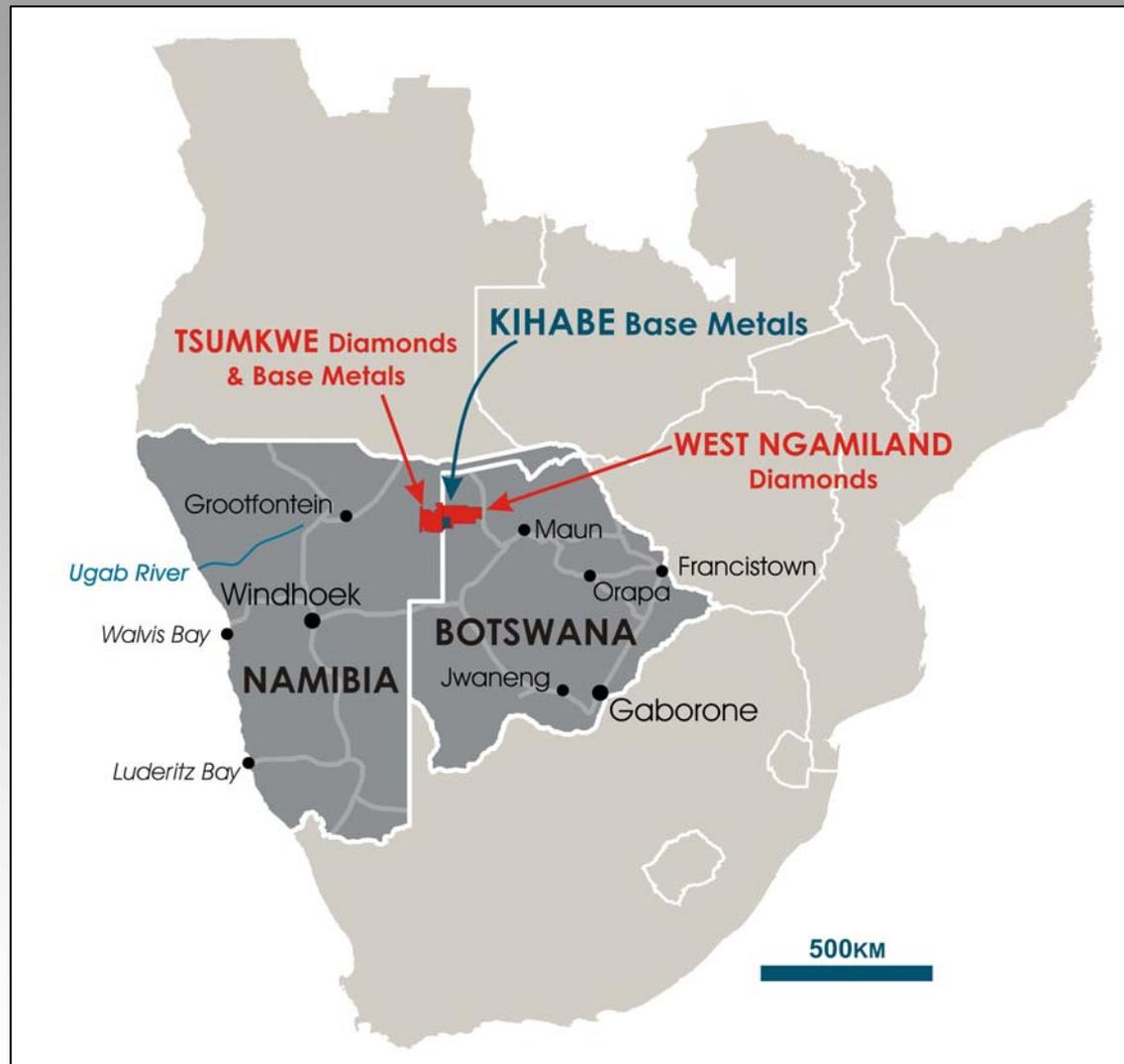
# Forward Looking Statement

This presentation contains forward looking statements in respect of the projects being reported on by the Company. Forward looking statements are based on beliefs, opinions, assessments and estimates based on facts and information available to management and/or professional consultants at the time they are formed or made and are, in the opinion of management and/or consultants, applied as reasonably and responsibly as possible as at the time that they are applied.

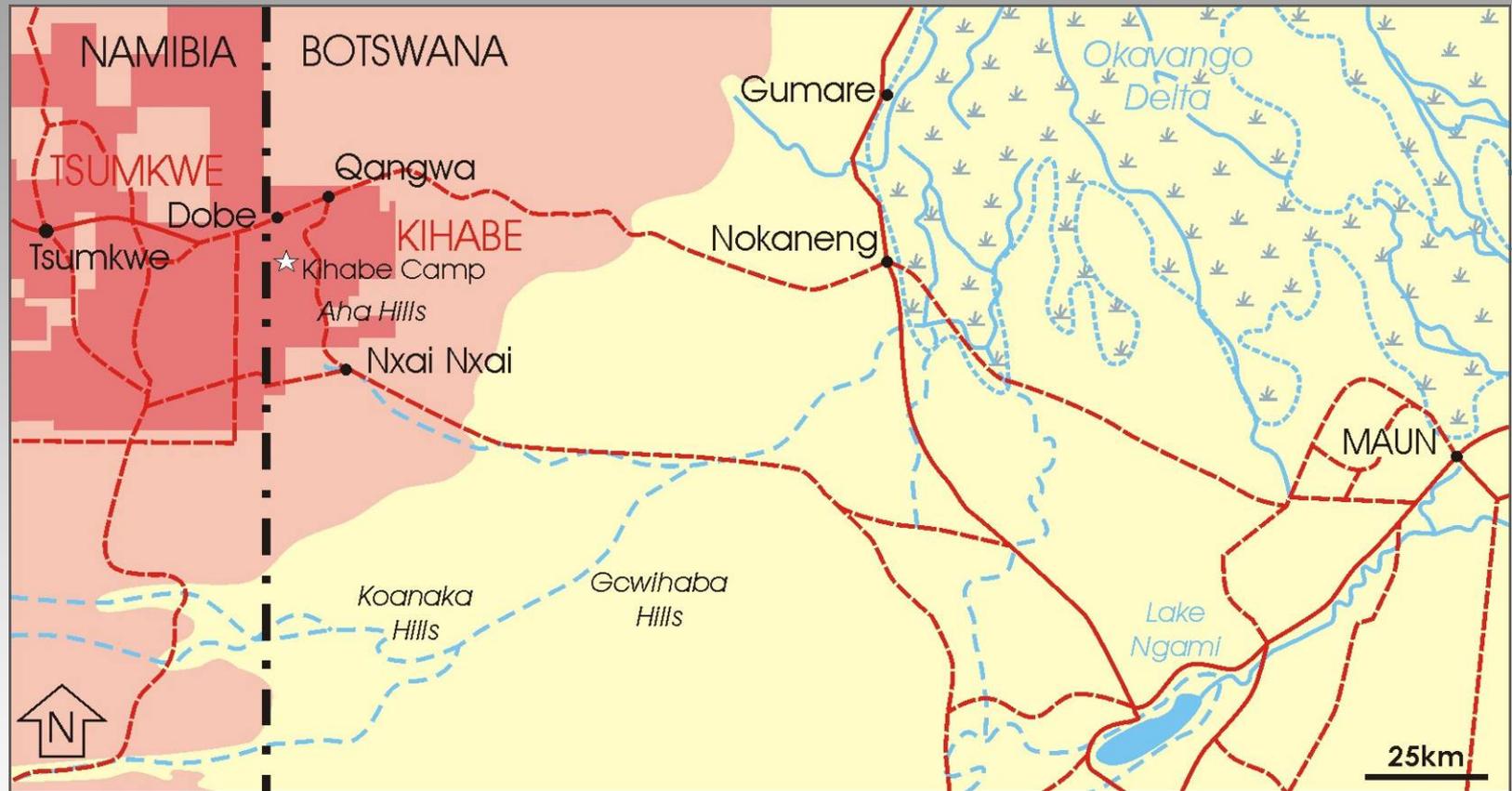
Any statements in respect of mineral reserves, resources and zones of mineralisation may also be deemed to be forward looking statements in that they contain estimates which the Company believes have been based on reasonably probable assumptions in respect of mineralisation that has been found. Exploration targets are conceptual in nature and are formed from projection of the known resource dimensions along strike. The quantity and grade of an exploration target is insufficient to define a Mineral Resource. Forward looking statements are not statements of historical fact, they are based on reasonable projections and calculations, the ultimate results or outcomes of which may differ materially from those described or incorporated in the forward looking statements. Such differences or changes in circumstances to those described or incorporated in the forward looking statements may arise as a consequence of the variety of risks, uncertainties and other factors relative to the exploration and mining industry and the particular properties in which the Company has an interest.

Such risks, uncertainties and other factors could include but would not necessarily be limited to fluctuations in metals and minerals prices, fluctuations in rates of exchange, changes in government policy and political instability in the countries in which the Company operates.

# Company Operations



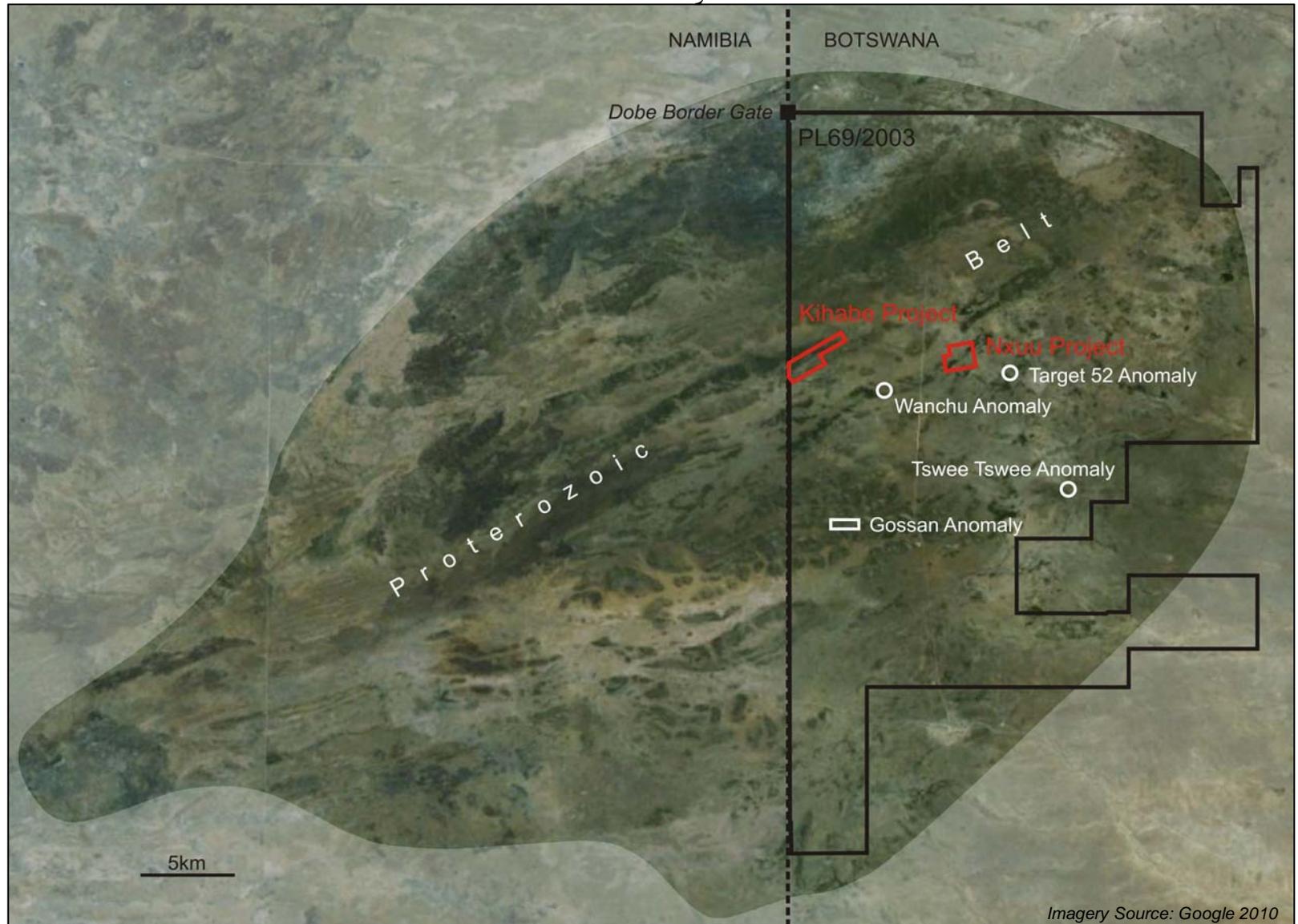
# Kihabe Project Area



# Kihabe-Nxuu Zn/Pb Project

- ❖ MTB has 100% of Proterozoic Belt of some 3000 km<sup>2</sup>, highly prospective for base metals, spanning border between Namibia and Botswana.
- ❖ Access to both sides of project through Dobe border gate, 15km due north of Kihabe camp
- ❖ In Botswana MTB currently has resources at both the Kihabe and Nxuu deposits, situated 7km apart.

# Kihabe-Nxuu Zn/Pb Project



# Resources

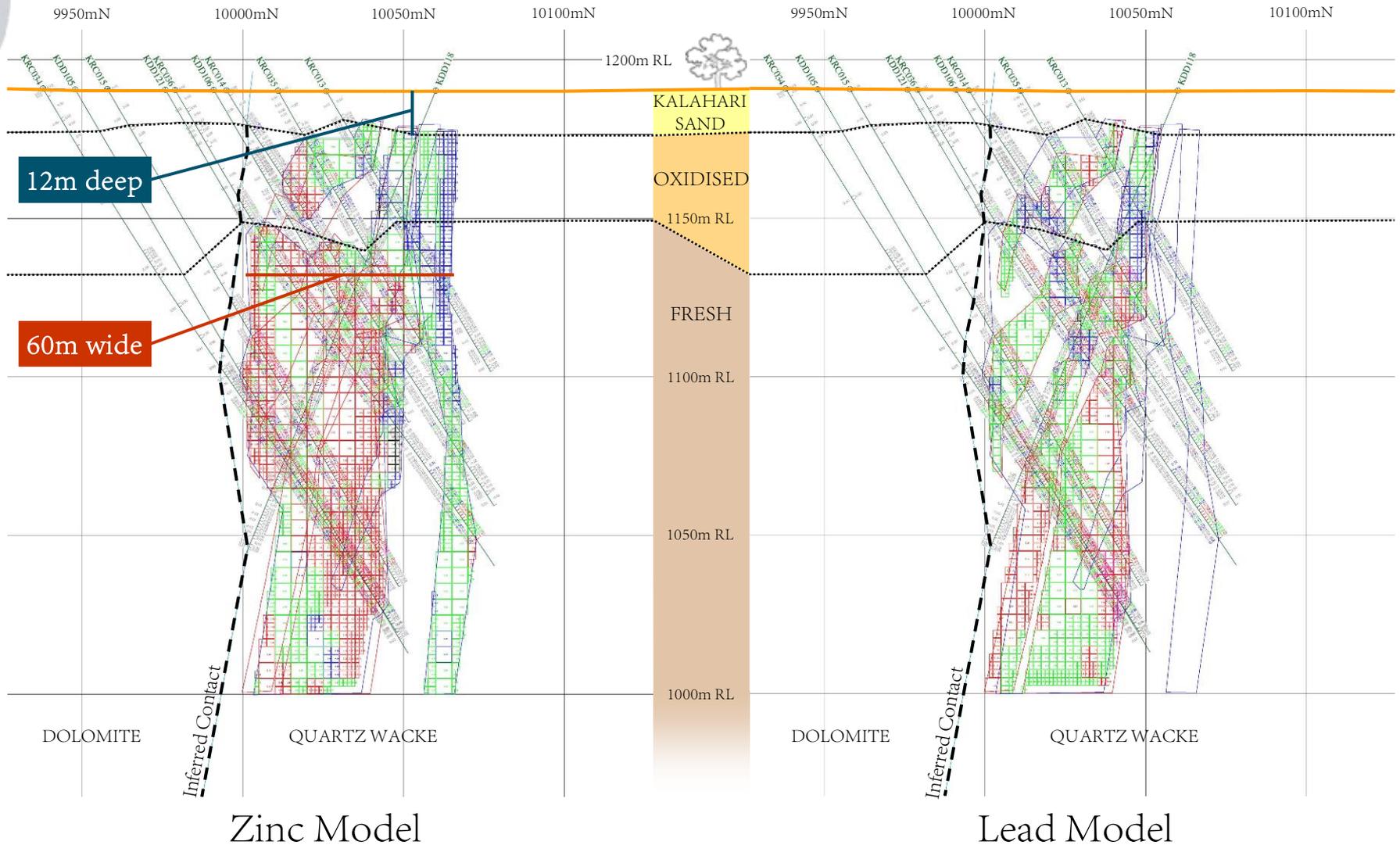
- ❖ Kihabe and Nxuu - SEDEX style deposits hosted within quartz wackes, on the contact with regional dolomite.
- ❖ 20,700m RC and diamond core drilling have to date defined combined resources of 29.9 million tonnes @ 2.62% Zn/Pb/Ag combined metal equivalent, applying 0.5% low cut.
- ❖ From the above, **25 million tonnes @ 3% Zn/Pb/Ag** will likely be selected for Scoping Study to provide for mining rate of 2.5 million tpa over 10 years.
- ❖ Resources contain zinc equivalent **metal content of some 741,000 tonnes.**
- ❖ 50% of above resources are oxide and 50% are sulphidic.

# Kihabe Resource Characteristics

- ❖ Mineralisation occurs in quartz wacke at an almost vertical contact with regional dolomite, commencing **5m -15m below surface** (Kalahari sand cover).
- ❖ **Average true width of 26m down to 175m** (extent of resource calculated to date). **Strike length of 1.8km.**
- ❖ **Many sections average 35m to 60m true widths**
- ❖ **5.5 - 1 waste to ore ratio** calculated from **conservatively designed pit slopes of 40°.**
- ❖ Geotechnical drilling required to confirm known competency of footwall dolomite and hanging wall quartz wacke for design of steeper pit slopes to **reduce waste to ore ratio to 4.5 - 1.**

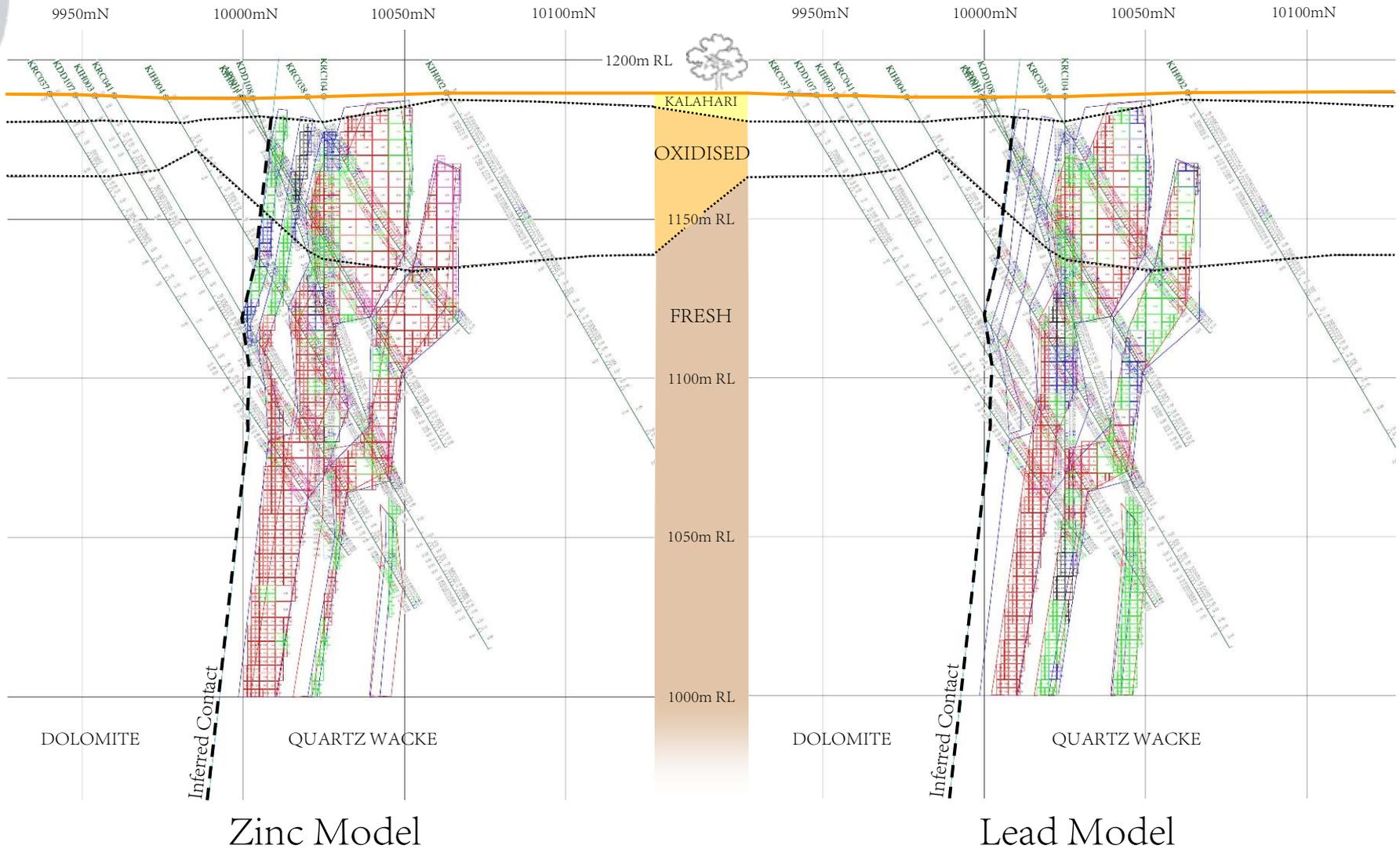
# Kihabe Resource Sections

Looking East



# Kihabe Resource Sections

Looking East

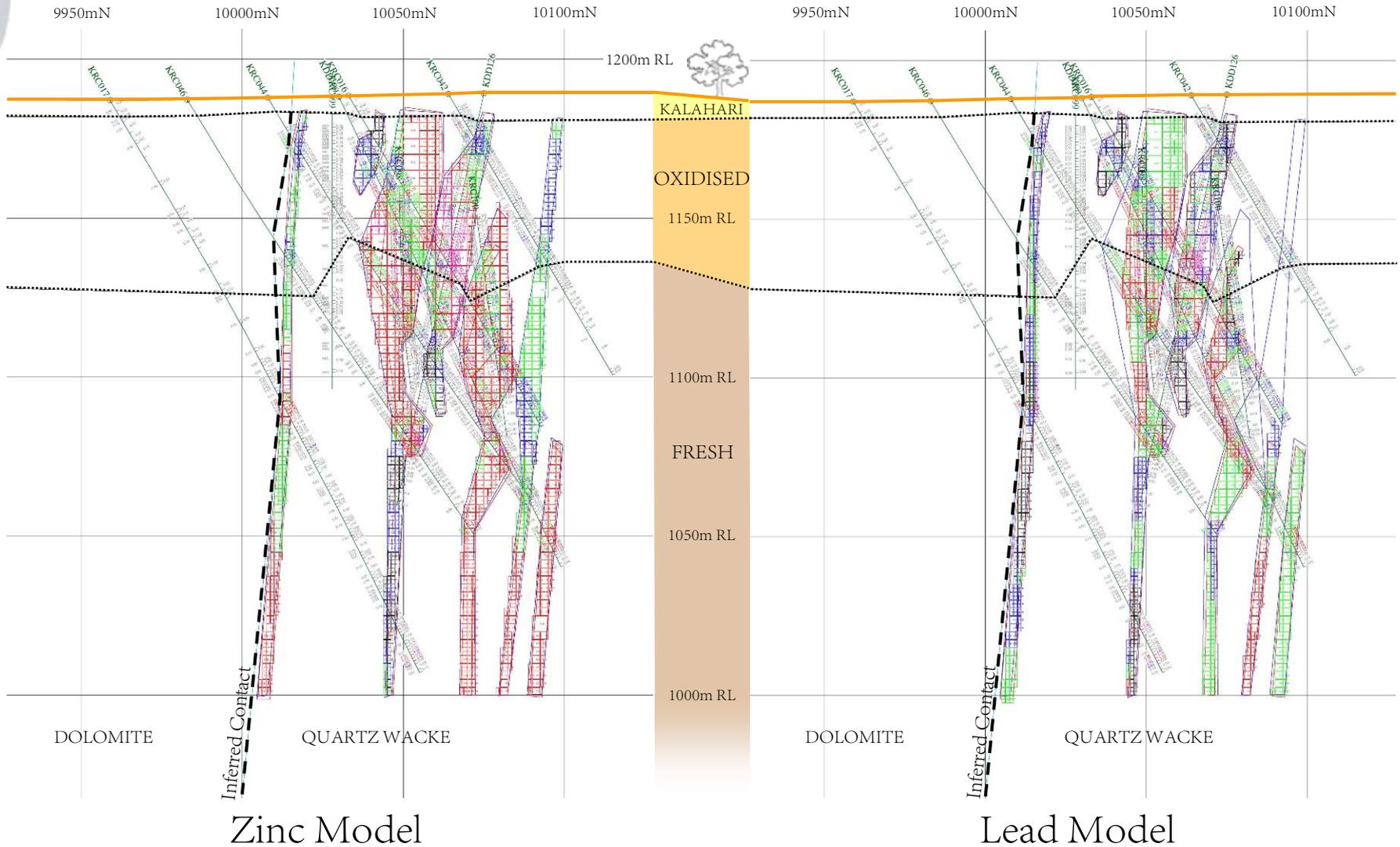


Zinc Model

Lead Model

# Kihabe Resource Sections

Looking East

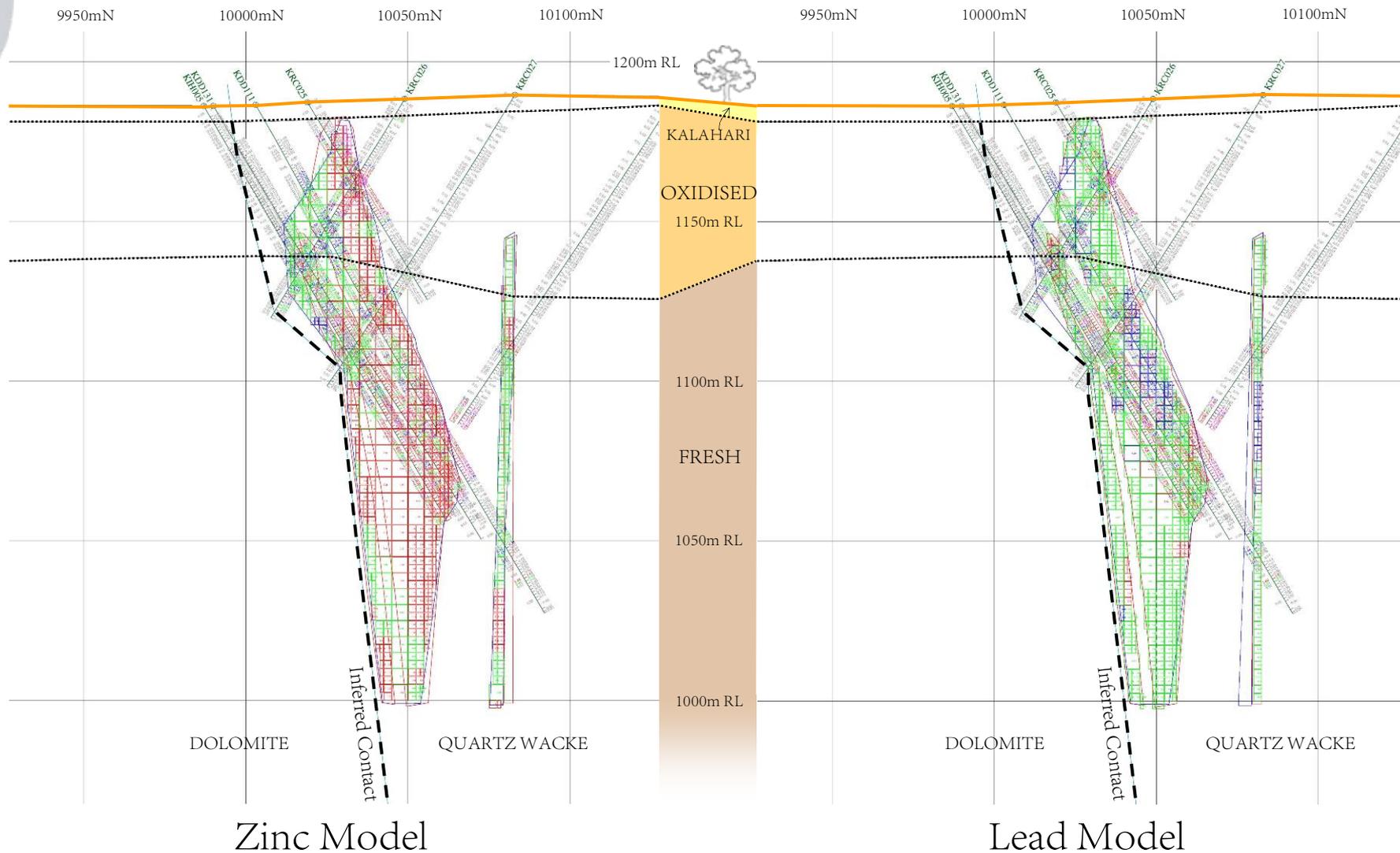


Zinc Model

Lead Model

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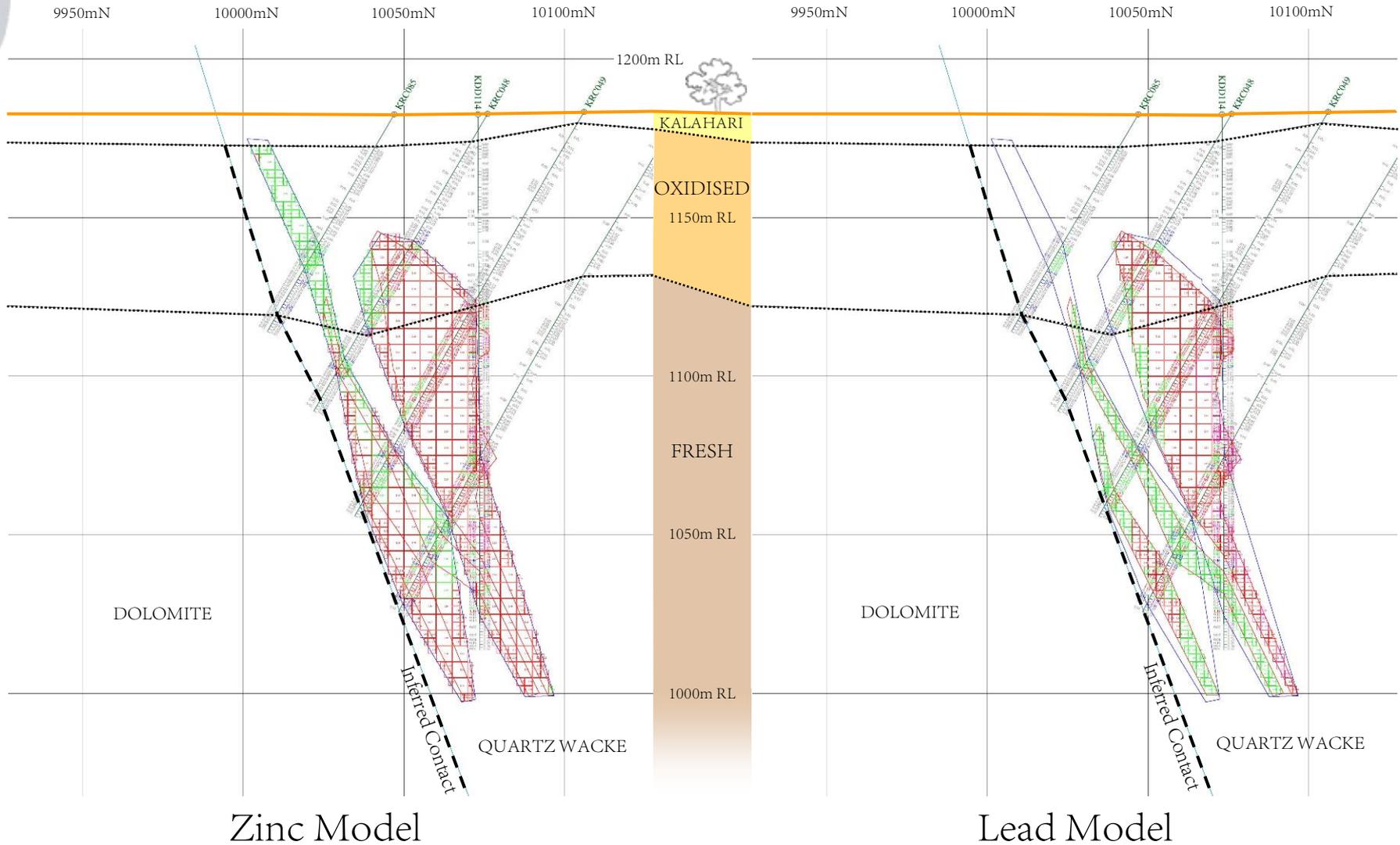


Zinc Model

Lead Model

# Kihabe Resource Sections

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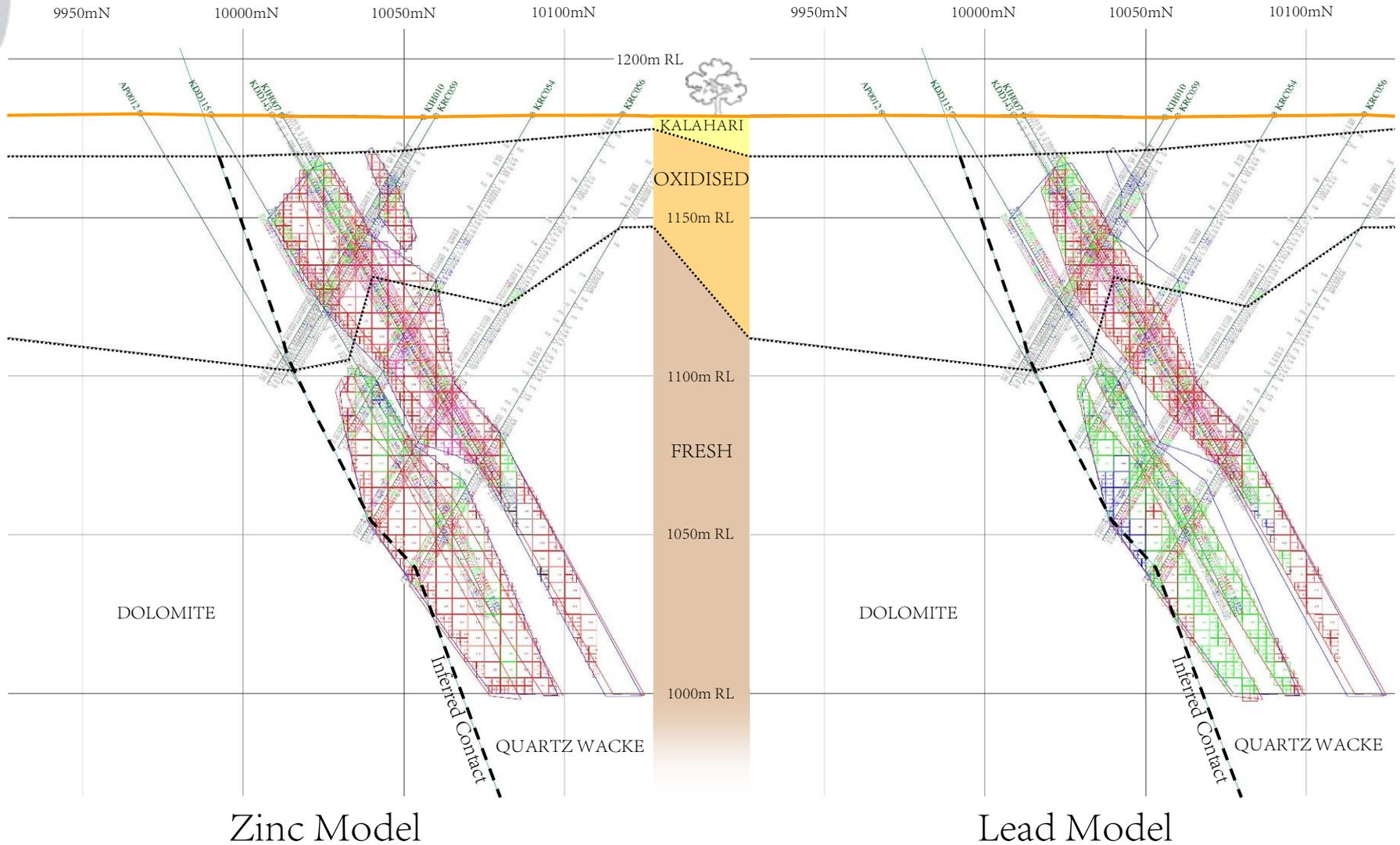


Zinc Model

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Looking East

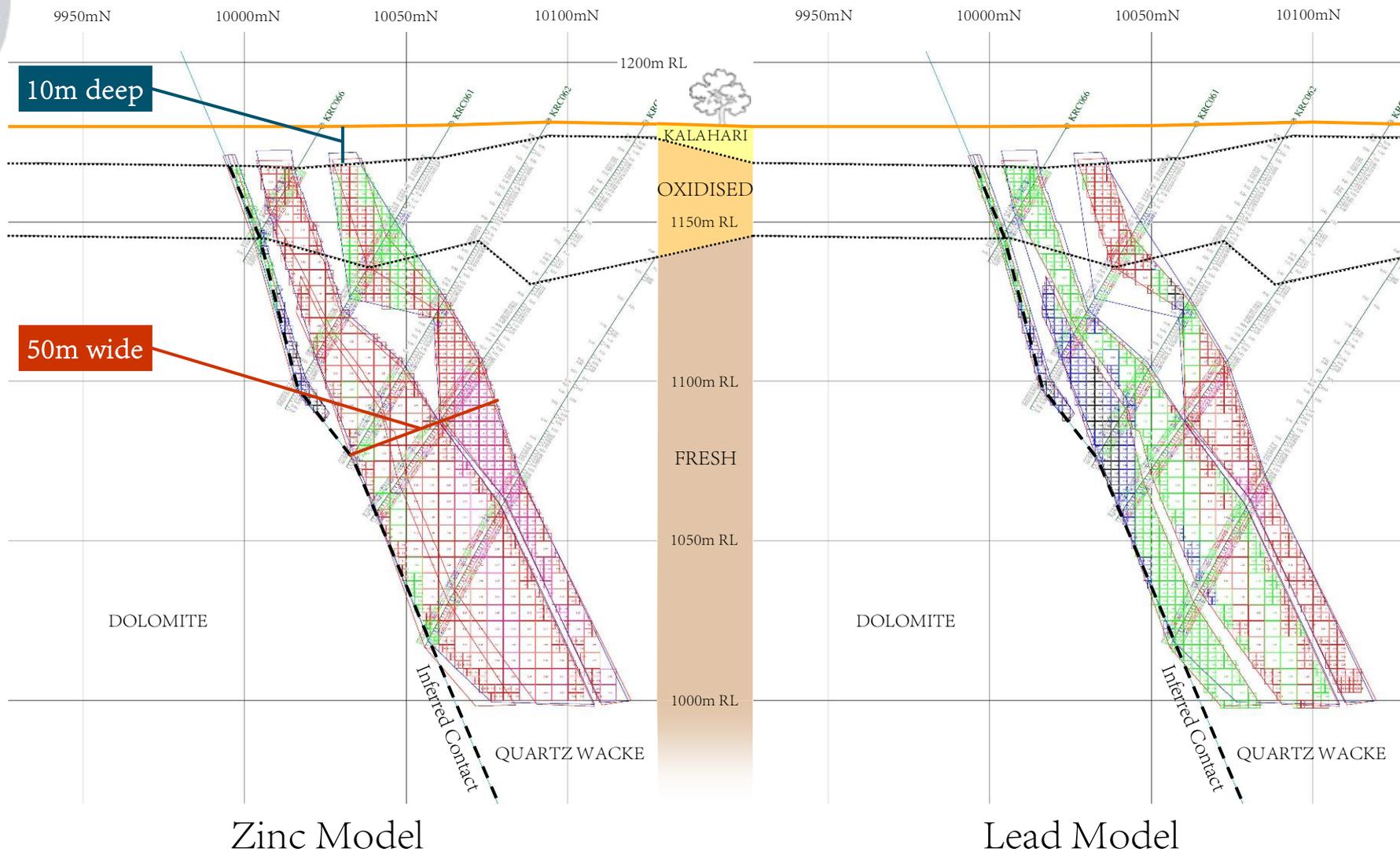


Zinc Model

Lead Model

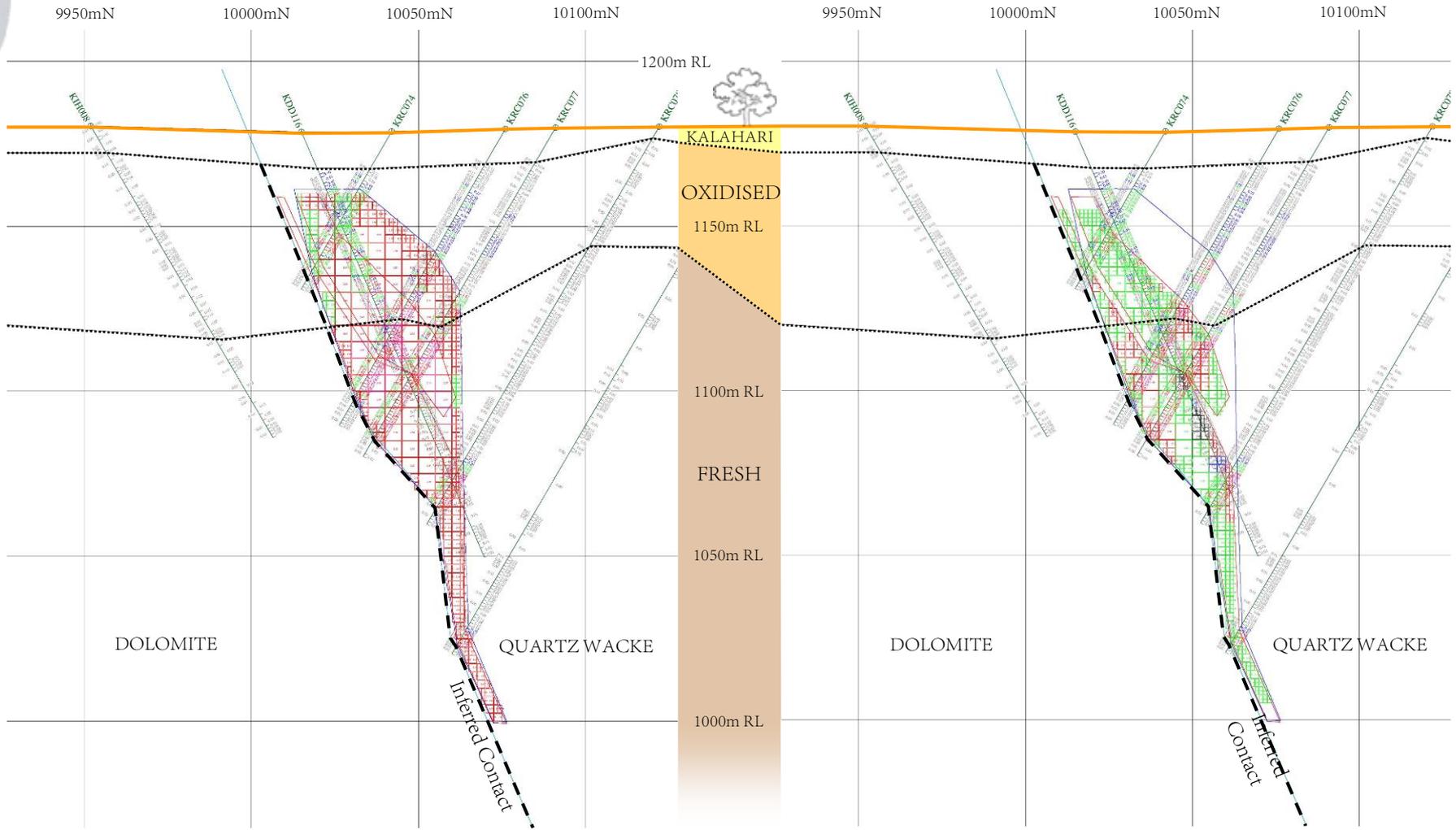
# Kihabe Resource Sections

Looking East



# Kihabe Resource Sections

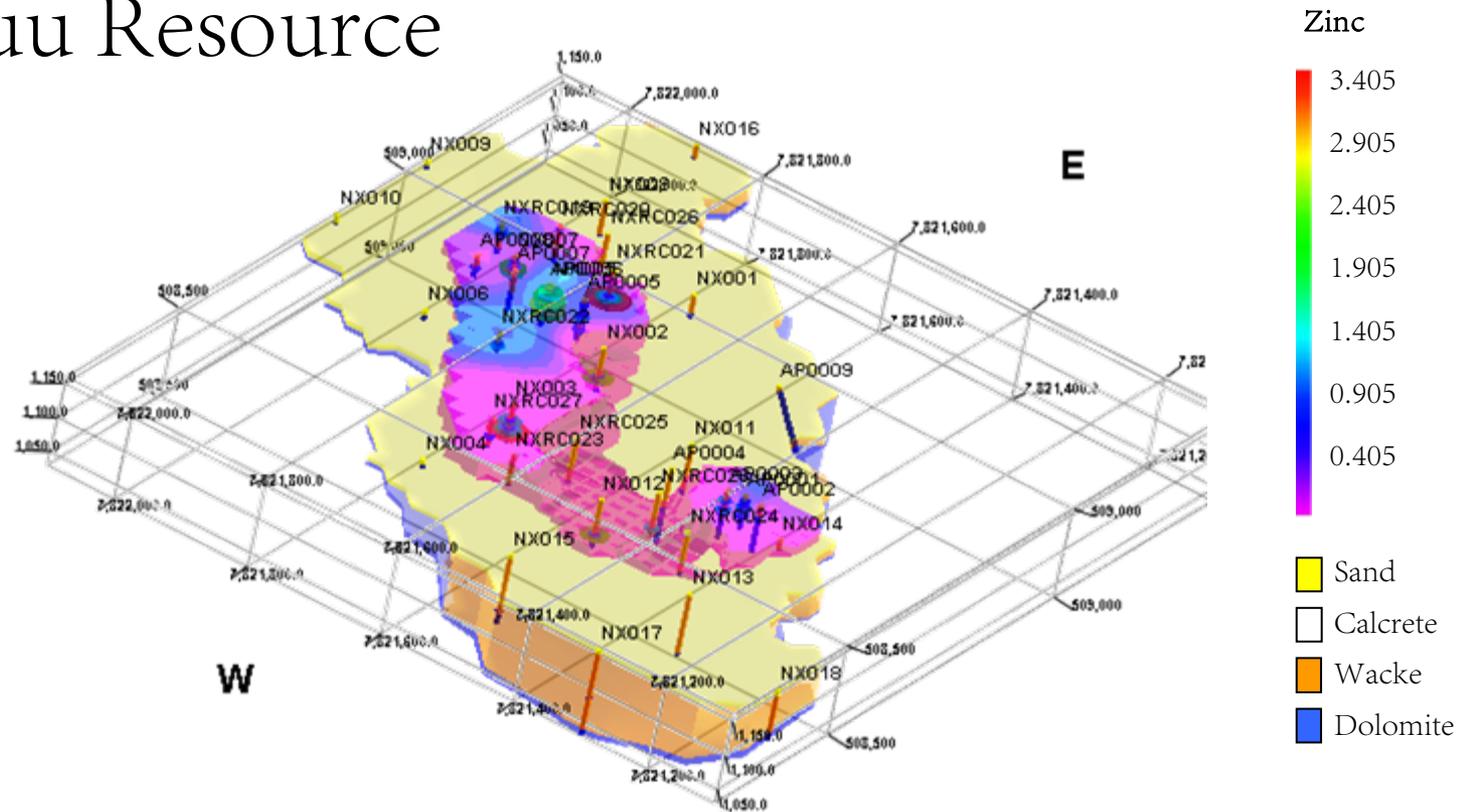
Looking East



Zinc Model

Lead Model

# Nxuu Resource



- ❖ Mineralisation occurs within flat lying quartz wacke, bounded by regional dolomitic basin.
- ❖ Resource covers an area 550m long, 250m wide and only 60m deep.
- ❖ Requires pit design - waste to ore ratio estimated to be low because of shallow basinal shape of deposit.



# Project Cost Estimates – ProMet Scoping Study, May 2009

- ❖ **US\$ 20/t** estimated total costs to generate 60% concentrate to mine gate, based on mine throughput of 2.5 million tpa.
- ❖ **US\$ 217 million** estimated total Project Capital costs
- ❖ Both above cost estimates will change by incorporating electrowinning on site

# Update of May 2009 Scoping Study

May 2009 Scoping Study based on:

- ❖ Metal prices of US\$1,200/t
- ❖ Zinc recoveries of 63%, Zn and Pb recoveries of 68%
- ❖ Only concentrate to be produced on site

ProMet Engineering estimated if metal prices doubled, project would have IRR of 26.6% @30% equity.

Project Scoping Study to be updated to incorporate:

- ❖ Increase in metal prices from US\$1,200/t to **current prices around US\$ 2,200/2,300/t**
- ❖ Increase in metal recoveries from 63% Zn and 68% Pb to **93% for both Zn and Pb**
- ❖ Production of **zinc metal on site** through electro winning.

Above increments should show significant positive impact on project returns

# Potential for Further Resource Generation

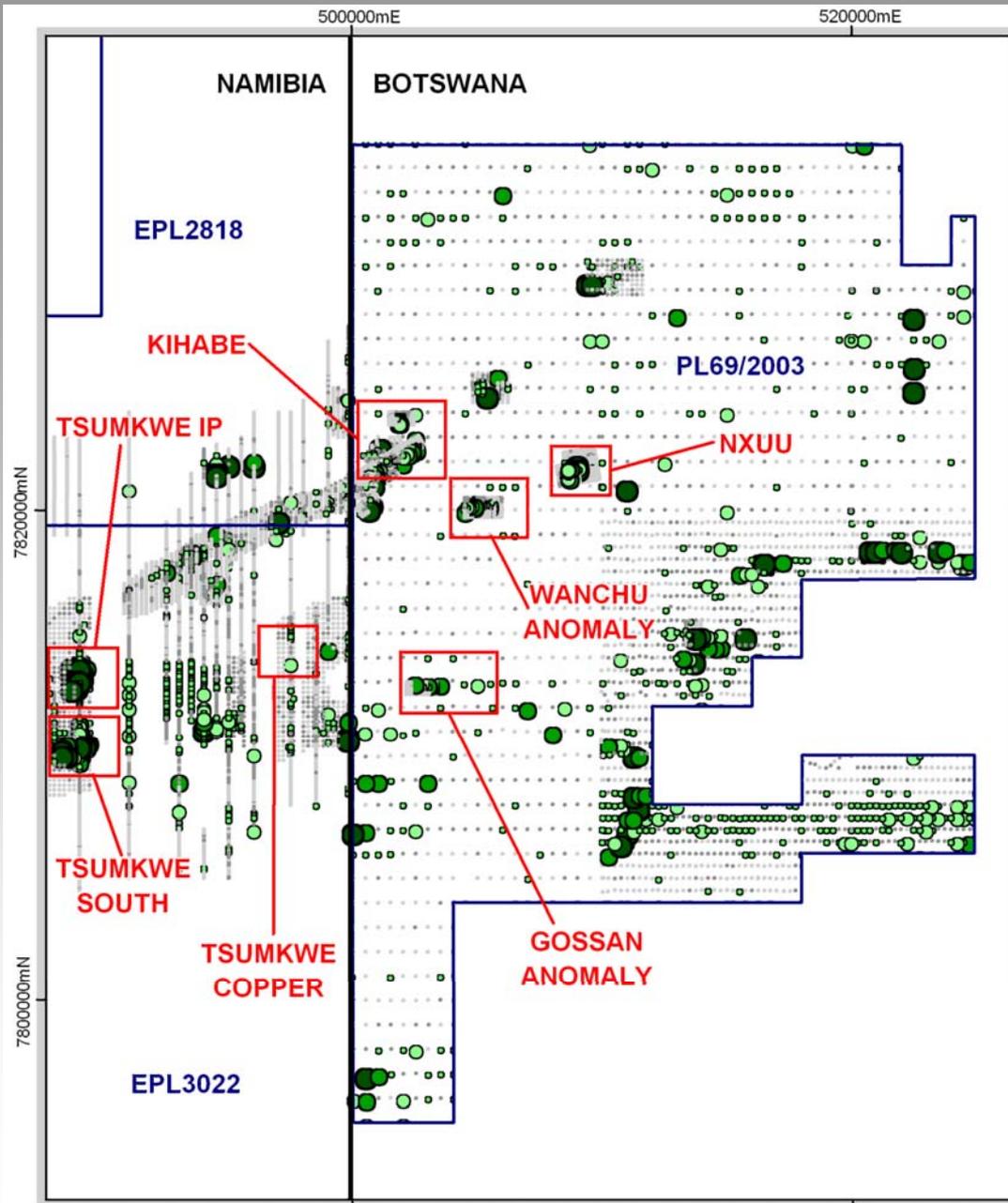
- ❖ Kihabe drilling to date shows **potential to increase resource at depth** below current 175m resource depth limit
- ❖ **Two new quartz wackes** (host to mineralisation in this area) **have recently been discovered**, now subject to geochemical sampling.

# New Discoveries

- ❖ Further discovery potential exists in both Namibia and Botswana to drill test known anomalies generated from recent regional geochemical sampling

## Adjusted Zn Z-Score

●	3 to 8	(109)
●	2.5 to 3	(120)
○	2 to 2.5	(221)
◦	1 to 2	(1464)
·	0 to 1	(3666)
·	-4.4 to 0	(7024)



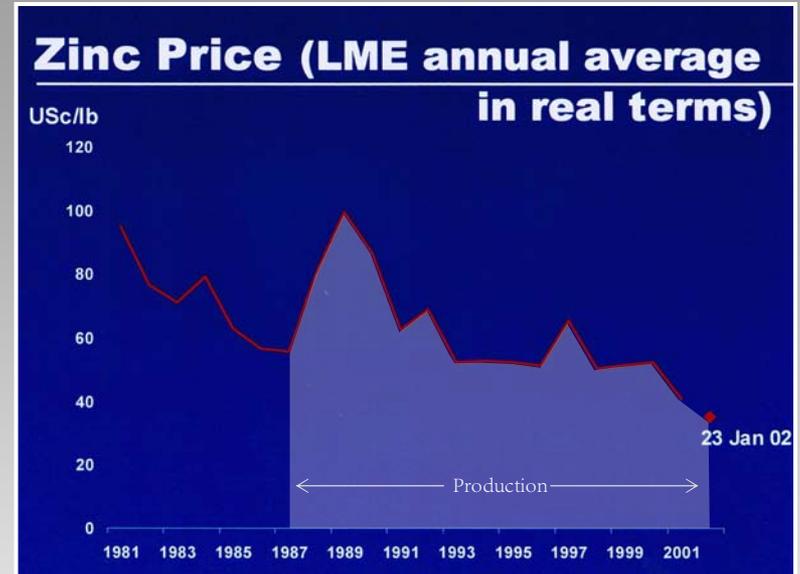
# Kihabe/Nxuu Project Summary

- ❖ 10 year mine life resource grade - 3% Zn/Pb/Ag combined metals.
- ❖ Project has potential to develop into a mining operation
- ❖ Project Attributes:
  - **Wide shallow deposits** sitting just below 5m to 15m of Kalahari sand cover.
  - **Low waste to ore ratios.** Low cost mining by open cut methods.
  - Hosts to Zn/Pb/Ag mineralisation **amenable to treatments yielding high metal recoveries - 93%.**
  - High average daily Botswana temperatures contribute significantly to 93% acid leach Zn recoveries.
  - **Zinc metal** (60% of projects metal content) **can be produced on site** by electro winning for half of estimated 10 year mine life.

# Kihabe/Nxuu Comparison - Pering Zinc Lead Mine, South Africa



Photo courtesy of Allan Fraser - [www.onlineminerals.com](http://www.onlineminerals.com)



- ❖ Operated very profitably by BHP Billiton from 1987 to 2002
- ❖ Mined 20.4 Mt @ 2.58% Zn and 0.58% Pb, giving a combined grade of 3.16% Zn/Pb. Metal recoveries 2.19% Zn and 0.39% Pb, total 2.58%.
- ❖ Mining commenced in 1987 with a Zinc price around US\$1350/t, reached US\$2200/t in early 1989, then steadily fell to US\$880/t in 2002.

# Botswana

- ❖ Stable democracy - population of 1.9 million people
- ❖ Ranked 4th in WORLD TOP 10, for mining investment/sovereign risk (Resource Stocks, September 2009)
- ❖ Zinc/Lead royalty - 3%
- ❖ Silver royalty - 5%
- ❖ 100% Project Capital Expenditure and Pre-Production Expenditure deductible before tax payable
- ❖ Company Tax - 25% as of 1st July 2010
- ❖ No foreign exchange controls
- ❖ Most transparent country in Africa (Transparency International)

# Zinc Lead Price Forecasts

	2010 av	2011 av	2012 av	2013 av	2014 av
<b>LEAD \$/t</b>	2161	2463	2142	1825	1820
<b>ZINC \$/t</b>	2278	2825	3575	3483	3321

*Source: VM Group*

# Zinc Supply/Demand Balance

		2007	2008	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E
<b>ZINC CONSUMPTION</b>	kt	11,437	11,207	10,852	11,612	12,557	13,367	14,134	14,902	15,733	16,633
<b>MINE PROD CAPACITY</b> Brooke Hunt base case	kt	10,902	11,444	10,953	12,047	12,101	12,572	12,305	11,554	10,956	10,244
<b>SURPLUS CAPACITY</b> / implied production cuts	kt	-535	237	101	435	-456	-795	-1,829	-3,348	-4,777	-6,389

Source: Brook Hunt, Worldsteel, CRU, Credit Suisse estimates

Demand inferred from steel demand

# Kihabe Camp



The Office



Kitchen and Dining



Sleeping Quarters

