Botswana Resource Conference

June 2016

Nigel Forrester - CEO

Disclaimer

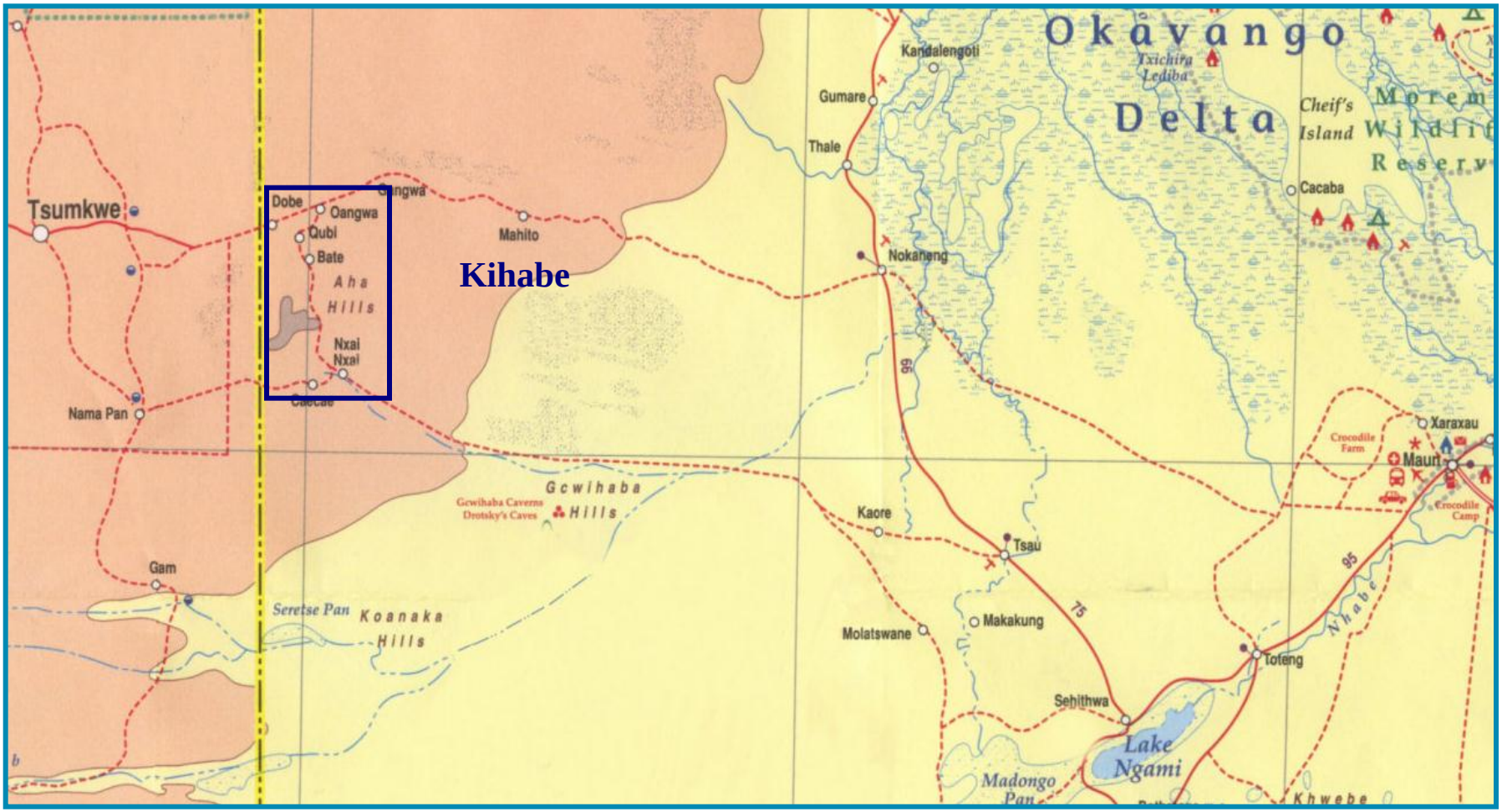
Forward Looking Statement

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 reasonable assumptions with respect to 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.

PL43/2016 – Location



50km

mount burgess mining

Kihabe-Nxuu Resource Statement

REPORTED 15 MAY 2013

Deposit	External Cut %	Indicated M Tonnes %	Inferred M Tonnes %	Total M Tonnes %
Kihabe	1.5%	11.4 @ 2.90%*	3.0 @ 2.60%*	14.4 @ 2.84%*
Nxuu	0.3%	-	10.9 @ 3.20%*	10.9 @ 3.20%*
		11.4 @ 2.90%*	**13.9 @ 3.07%***	**25.3 @ 3.00%***

*Zinc Equivalent Grade

Kihabe resource calculated on metal prices as at 17 July 2008:	Zn US$1,810/t	Pb US$1,955/t	Ag US$18.75/oz
Grades applied:	Zn 1.8%	Pb 0.8%	Ag 7.7 g/t
Nxuu resource calculated on zinc and lead at US$ par			
Grades applied:	Zn 1.8%	Pb 1.4%	

The information in the resource statement that relates to the Kihabe Resource is compiled by Byron Dumpleton, B.Sc., a member of the Australasian Institute of Geoscientists. The information that relates to the Nxuu Resource is compiled by Mr Ben Mosigi, M.Sc., (Leicester University – UK), B.Sc., (University of New Brunswick – Canada), Diploma Mining Tech (Haileybury School of Mines – Canada), a member of the Geological Society of South Africa.

Mr Dumpleton is an independent qualified person and Mr Mosigi is a Technical Director of the Company. Both Mr Dumpleton and Mr Mosigi have sufficient experience relevant to the style of mineralisation under consideration and to the activity to which they have undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code of Reporting of Mineral Resources and Ore Reserves". Both Mr Dumpleton and Mr Mosigi consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.

This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

mount burgess mining

Kihabe-Nxuu Metal Recoveries

Independent metallurgical testwork has confirmed the metal recoveries shown in the table below. Accordingly the Company believes these recoveries are achievable. Zinc recovered from acid leaching oxide zones will enable Zn metal to be recovered on site from electro-winning.

DEPOSIT	Zone	Time	Zinc	Lead	Silver
Kihabe					
Oxide Zone					
Acid leaching @40°C 30 kg/t acid	Oxide *	24 hrs	96.9%	91.9%	n/a
Sulphide Zone					
Rougher flot	Sulphide	90 seconds	91.9%	84.8%	94%
	Sulphide	15.5 mins	93.8%	88.1%	96.4%
Nxuu					
All Oxide					
Acid leaching @25°C 30 kg/t acid	Oxide *	12 hrs	93%	93%	n/a

** Note: Zn mineralisation in the oxidised zones is hosted within Smithsonite and Baileychlore and independent test work has confirmed both of these are amenable to acid leaching.*

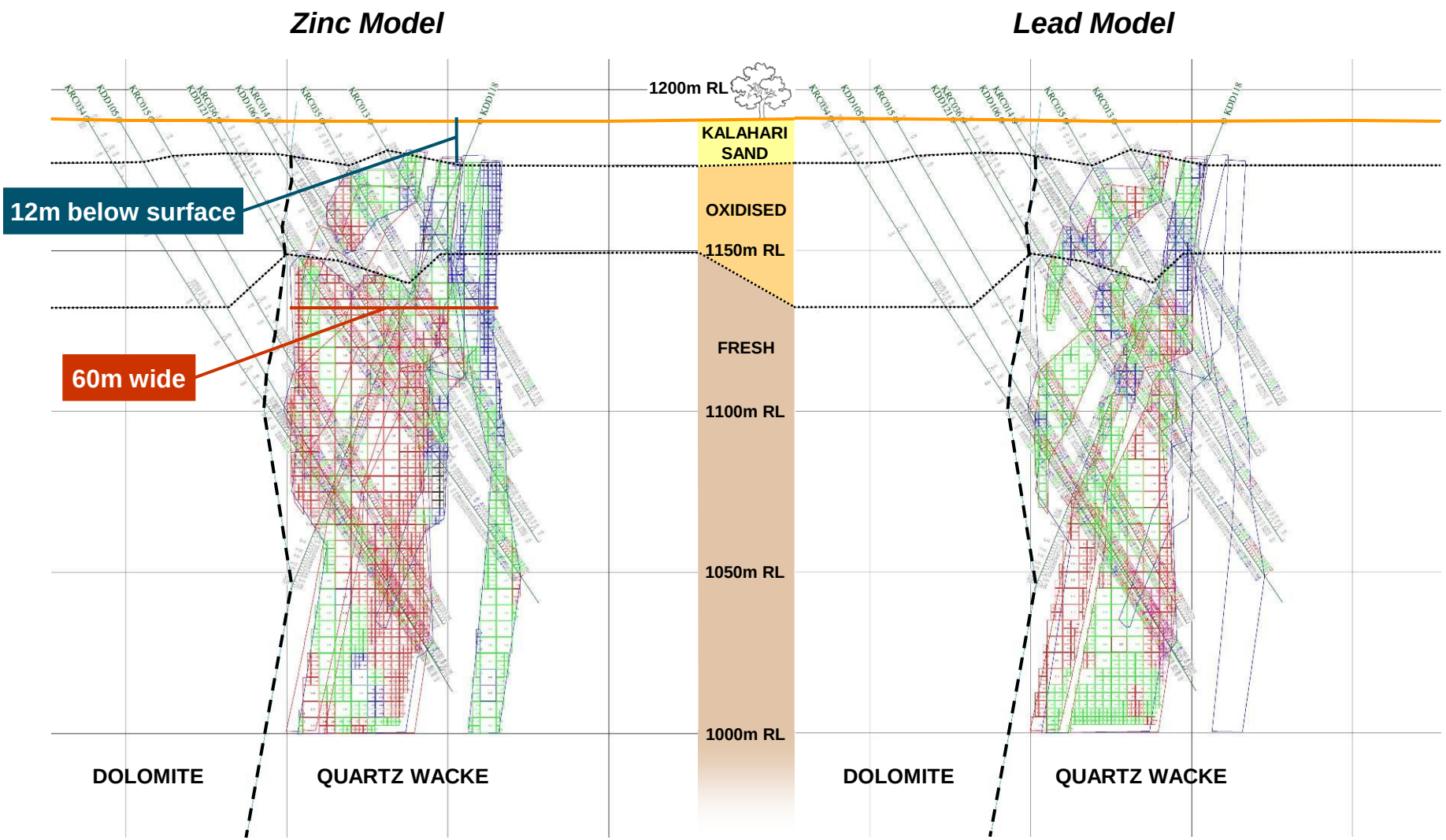
This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

mount burgess mining

Kihabe Resource

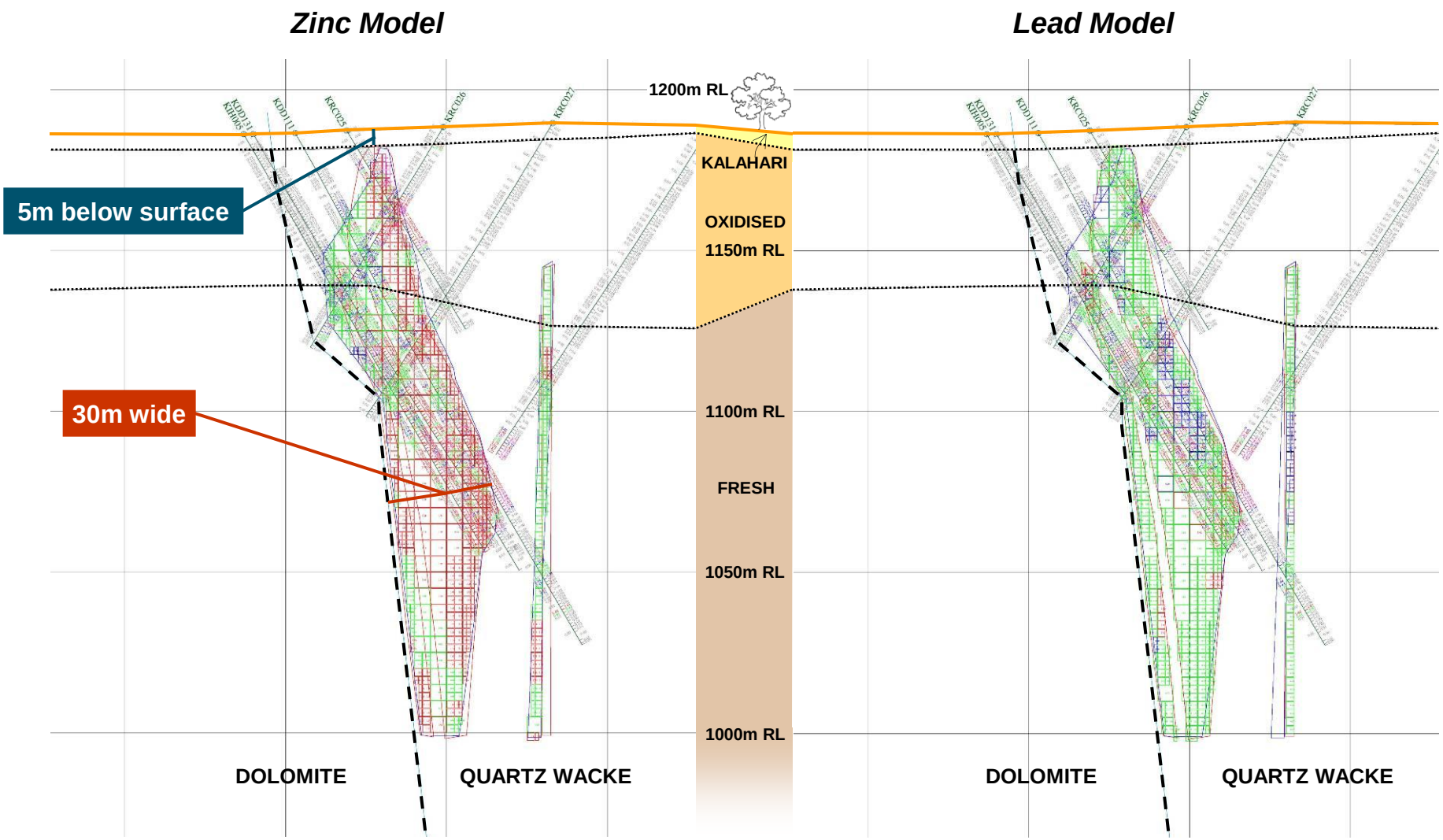
- **Location** – Western Ngamiland, Botswana, within 500m of the Namibian border fence, 15km south of the Dobe border gate and 21km north of Xai Xai.
- **Strike Length** - **2.4km**. Within this 2.4km, there are two proposed pits, which **combined cover a strike length of 1.8km.**
- **Width** - The average width of the resource is **27m down to 175m**. Some sections are up to 60m wide.
- **Depth** – From 5 to 15m below surface (Kalahari sand cover) the resource is estimated to **175m depth.**
- **Waste to Ore Ratio** - The open cut waste to ore ratio estimated at **4.5 to 1**. Geotechnical drilling could improve estimated 40 deg pit wall slopes.
- **Additional Resources** – Resource only estimated to 175m depth. **Potential to increase resource at depth** in this synclinal fold structure.
- **Mineralisation** – **Zn/Pb/Ag mineralisation occurs in a quartz wacke** right at the near vertical contact with the regional dolomite. No mineralisation in the dolomite.
- **Host Minerals** – In the oxide zone **Zn hosted in smithsonite and baileychlore, Pb hosted in galena**. In the sulphide zone **Zn hosted in sphalerite and Pb hosted in galena.**
- **Metal Recoveries Oxide Zone** – At 30 micron grind size, **97% Zn is recovered in 24 hours** through tank acid leaching @ 40 deg C using 30kg/t acid (bench scale test work – AMMTEC). **Zn metal can be recovered on site** through SXEW. **92% Pb recovered** through flotation/concentration and **76% Pb concentrate** can be transported from site (bench scale test work AMMTEC).
- **Metal Recoveries Sulphide Zone** – At 75 micron grind size **94% Zn, 88% Pb and 96% Ag recovered in 15 minutes** through flotation/concentration, **58% Zn and 76% Pb concentrate** can be transported from site (bench scale test work AMMTEC).

Kihabe Section 9900mE



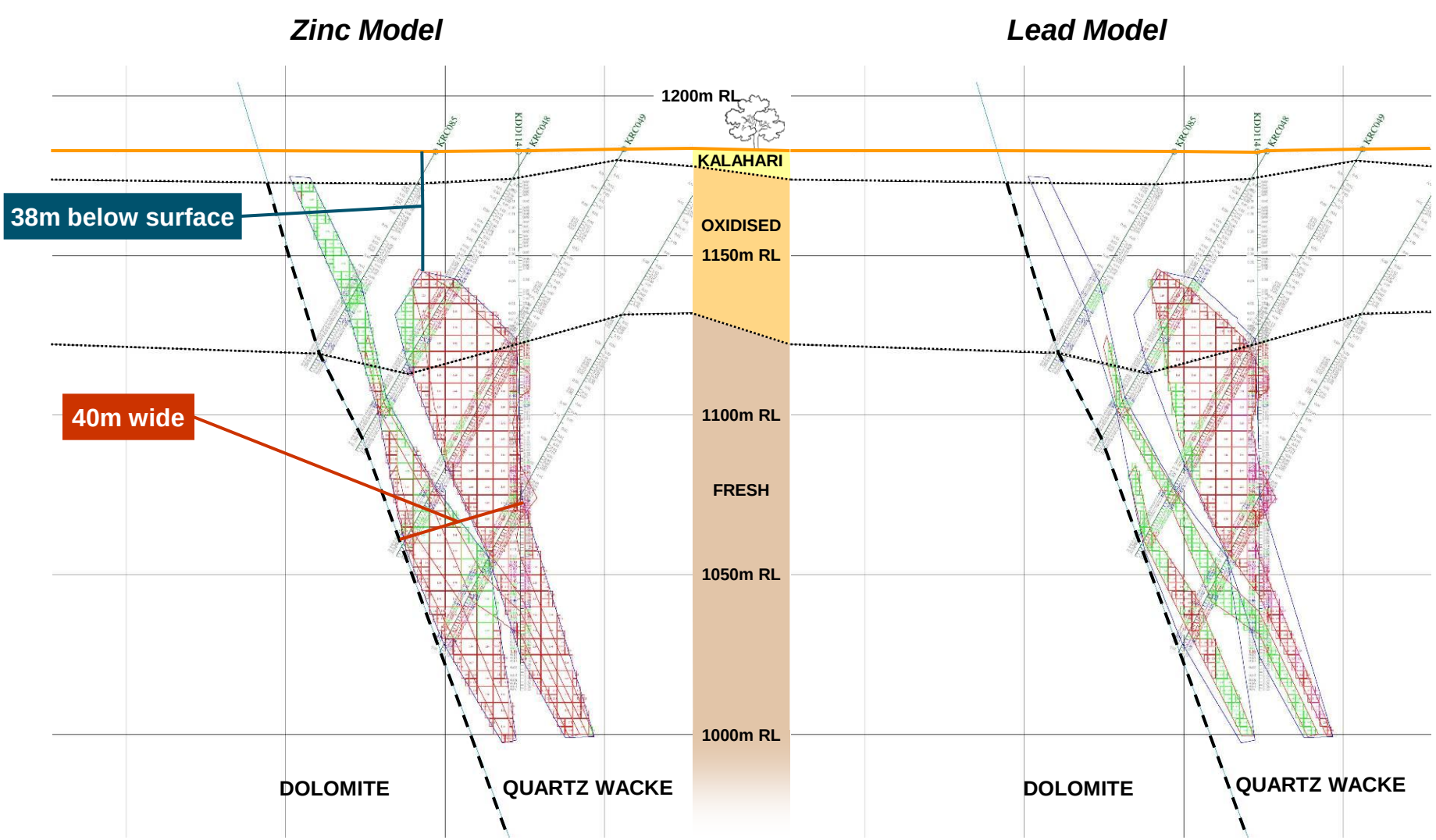
mount burgess mining

Kihabe Section 10400mE



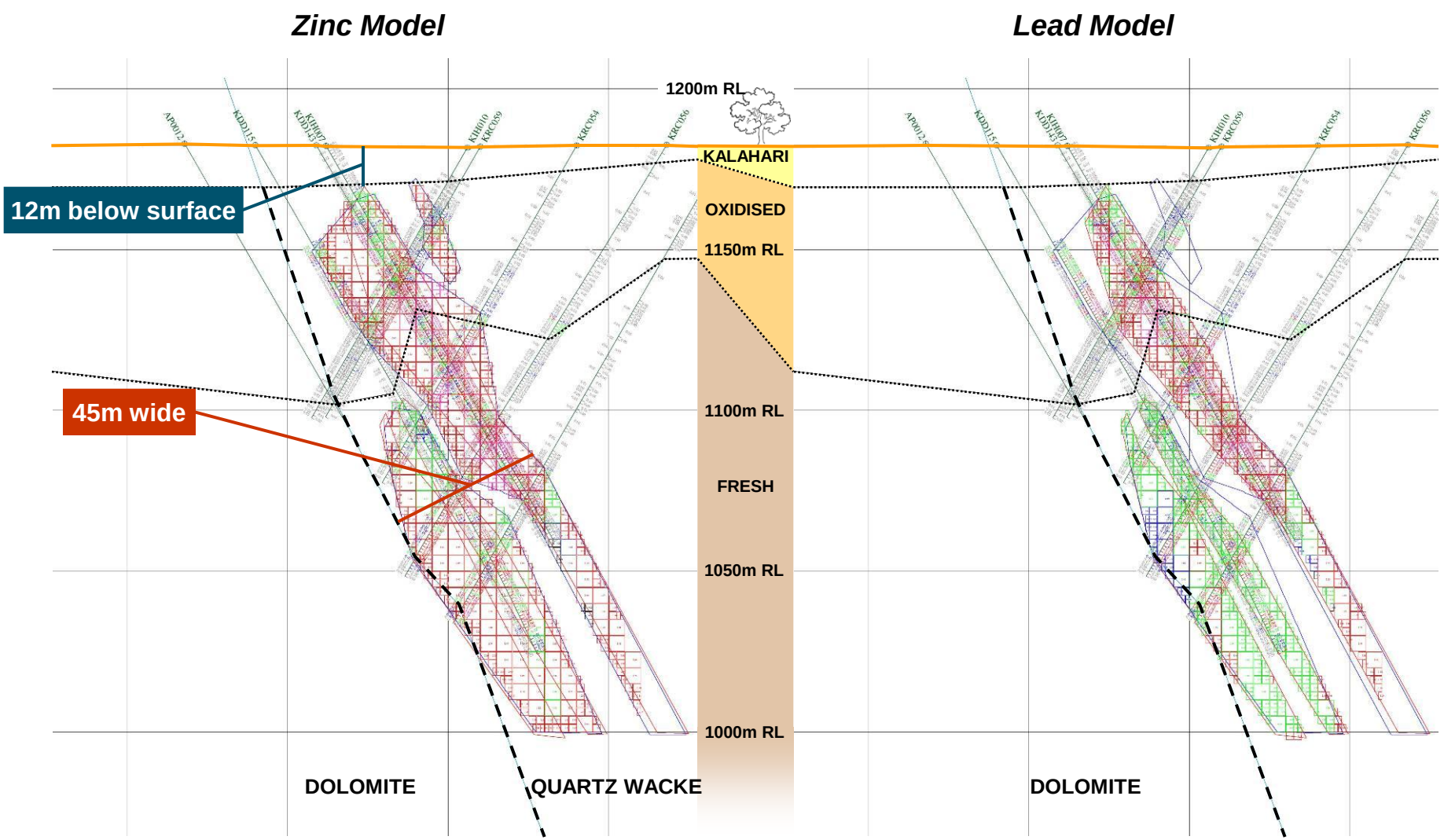
mount burgess mining

Kihabe Section 11500mE



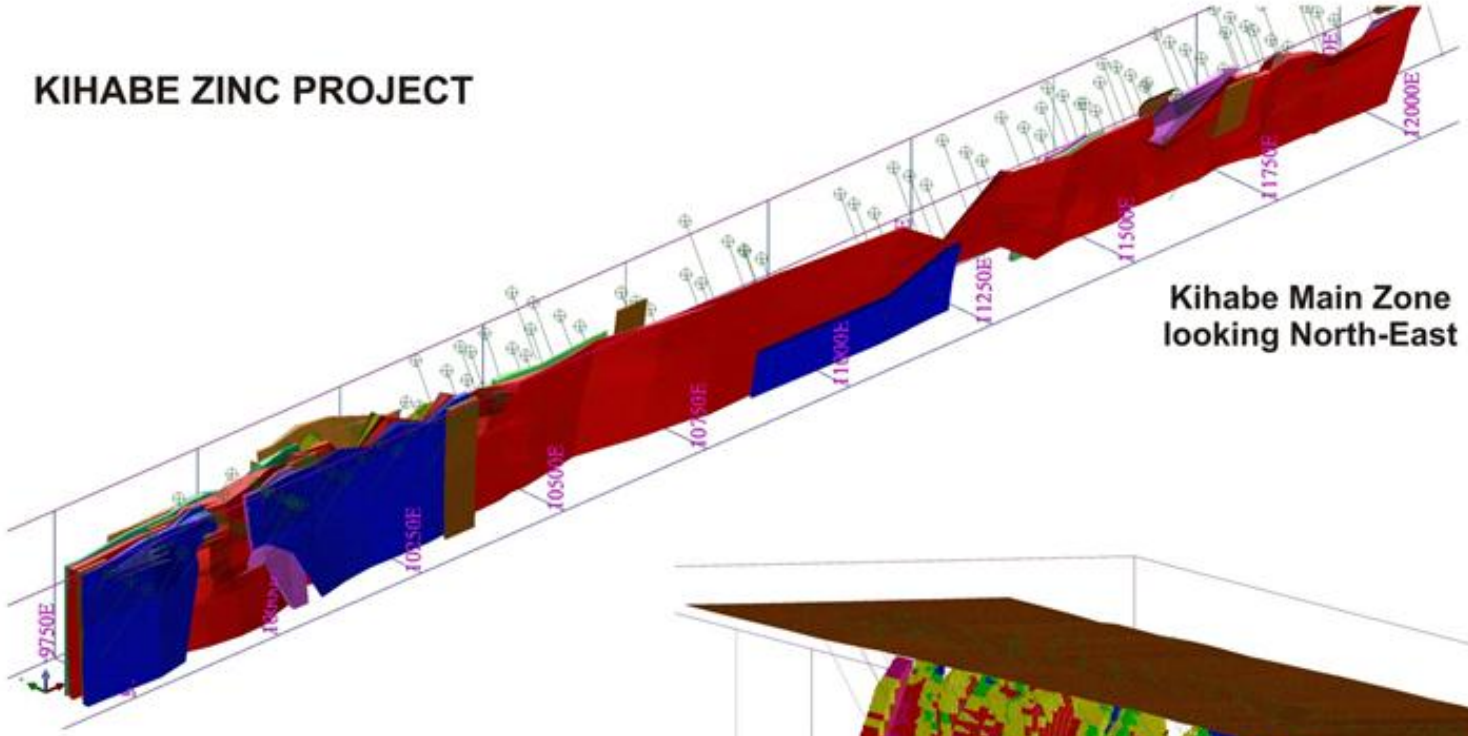
mount burgess mining

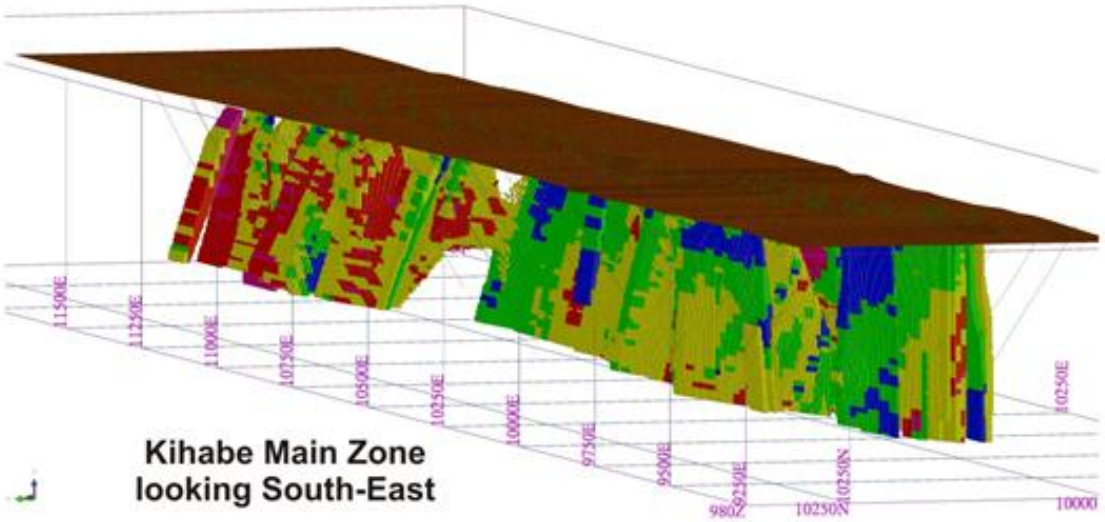
Kihabe Section 11600mE



mount burgess mining

Mineralised Wireframes





mount burgess mining

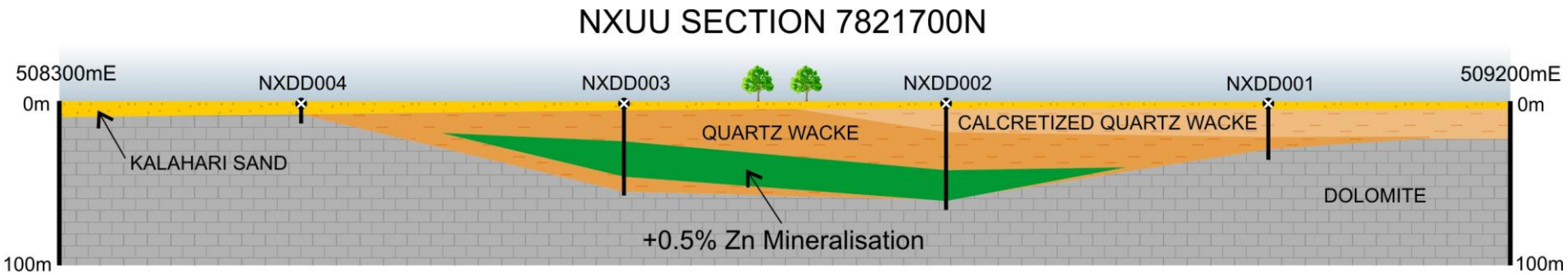
Nxuu Resource

- **Location** – 7km east of the Kihabe resource.
- **Area** – Resource covers an area roughly 550m x 250m.
- **Depth** – From around 10m below surface (Kalahari sand cover) the resource extends **to 60m depth**.
- **Waste to Ore Ratio** – The open cut waste to ore ratio estimated at **3 to 1** as this deposit is basin shaped with a **maximum depth of 60m.**
- **Mineralisation** – **Zn/Pb mineralisation occurs in a quartz wacke** right at the contact with a dolomitic basin.
- **Host Minerals** – **Zn hosted in smithsonite, Pb hosted in cerrusite.**
- **Metal Recoveries** – At 75 micron grind size **93% Zn and 93% Pb recovered in 12 hours** through tank acid leaching at 25 deg C using 30kg/t acid (bench scale test work - AMMTEC). **Zn metal can be recovered on site** through SXEW. **Pb compound** can be transported from site.

mount burgess mining

Nxuu Resource Section

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



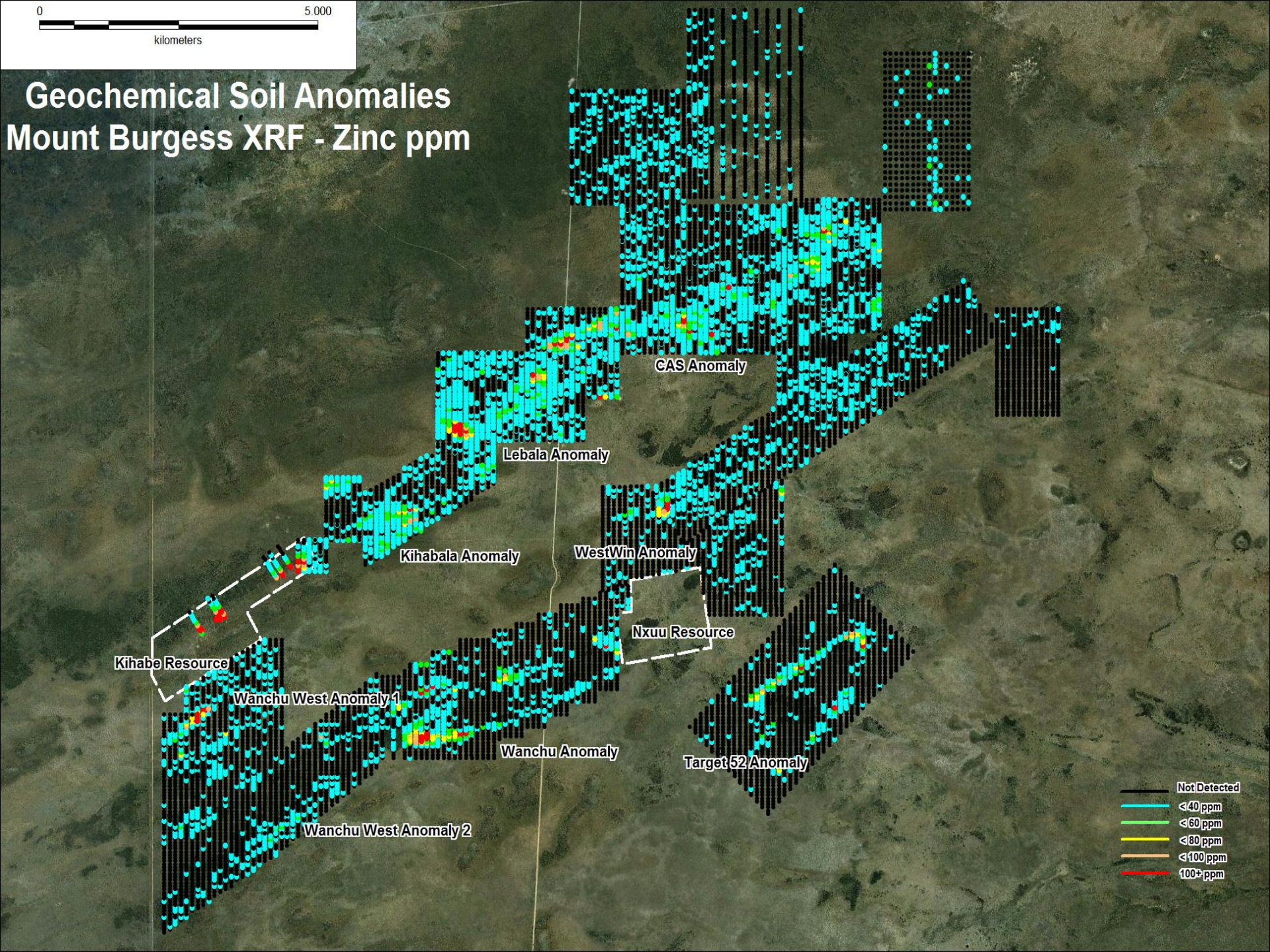
mount burgess mining

The Way Forward

Potential to Increase the Resource Base in this Sedex System

- Mineralisation at Kihabe and Nxuu interpreted as stratabound SEDEX ("sedimentary exhalative") within a Neoproterozoic sedimentary basin.
- Mineralisation occurs within a quartz wacke at a stratigraphic contact between the quartz wacke unit and a dolostone unit.
- Kihabe and Nxuu Resources developed over 2.3km of strike.
- Potential to significantly increase resource base from six Zn/ Pb/ Ag anomalies and one Cu/ Co anomaly with combined strike lengths of over 12 kms.
- Four of the seven geochemical soil anomalies ready for drill testing are known to exist over quartz wacke/ dolostone contacts beneath Kalahari sand cover.

mount burgess mining


0
5.000
kilometers
Geochemical Soil Anomalies
Mount Burgess XRF - Zinc ppm
CAS Anomaly
Lebala Anomaly
Kihabala Anomaly
WestWin Anomaly
Nxuu Resource
Kihabe Resource
Wanchu West Anomaly 1
Wanchu Anomaly
Target 52 Anomaly
Wanchu West Anomaly 2
Not Detected
< 40 ppm
< 60 ppm
< 80 ppm
< 100 ppm
100+ ppm

The Way Forward

Potential to Increase the Resource Grades

- Kihabe and Nxuu resources calculated on 127 reverse circulation (RC) drill holes and 36 diamond drill (DD) holes.
- Twinning of RC drill holes with DD holes has shown an **increment of close to 60% in grade from the DD results**.

Potential to Recover Additional Metal Credits

- Kihabe and Nxuu resources show potential to recover additional credits such as Copper, Vanadium and Germanium.
- Recent assays for Germanium have returned grades of up to 12.1 g/t with an average value of 7.3g/t for the 24 samples assayed.
- **At US $2.35/g this represents a value of US $17.16/tonne.**

mount burgess mining

The Way Forward

Increase in Diamond Core Grade

A comparison of diamond core zinc assay results with RC zinc assay results is summarised below, showing the increase in grades returned from diamond core which intersected the same mineralised zones previously intersected in RC drilling used for the initial resource calculation and previously released to the market.

	Results from previous RC Drilling		Results from DD	DD % Increase
Section 9,900mE	**KRC015 (-60° inc)**	**KRC034 (-60° inc)**	**KDD105 (-60° inc)**	
Zone from 127mRL	28m @ 1.62% Zn	28m @ 1.61% Zn	28m @ 3.24% Zn	**101%**
Section 10,000mE	**KIH001 (-60° inc)**	**KIH004 (-60° inc)**	**KDD108 (-70° inc)**	
Zone 1 from 60mRL	12m @ 4.31% Zn	12m @ 2.66% Zn	12m @ 4.36% Zn	**Avg 25% 64% (KIH004)**
Zone 2 from 102mRL		14m @ 1.75% Zn	14m @ 4.18% Zn	**139%**
Section 10,200mE	**KRC019 (-60° inc)**		**KDD110 (Vertical)**	
Zone from 125mRL	13m @ 3.22% Zn		13m @ 4.05% Zn	**26%**
Section 11,500mE	**KRC049 (-60° inc)**	**KRC052 (-60° inc)**	**KDD114 (Vertical)**	
Zone from 60-98mRL	45m @ 2.36% Zn		11m @ 3.54% Zn	**50.21%**
Zone from 98-141mRL		20m @ 2.36% Zn	18m @ 2.89% Zn 14m @ 4.15% Zn	**22.46% 75.85%**
Section 11,600mE	**KRC056 (-60° inc)**		**KDD115 (-60° inc)**	
Zone from 110mRL	13m @ 2.07% Zn		7m @ 2.85% Zn	**37.7%**
Section 11,800mE	**KRC076 (-60° inc)**	**KRC067 (-60° inc)**	**KDD116 (-60° inc)**	
Zone from 55mRL	32m @ 2.83% Zn	37m @ 2.34% Zn	24m @ 4.37% Zn	**Avg 70.0%**
Overall Average Grade of above results	**RC Results 2.35% Zn**		**DD Results 3.74% Zn ****	**59.1% ****

*** The above increase in zinc grades from diamond drilling results is indicative only, at this stage.*

mount burgess mining

Latest Kihabe Oxide Assays

Assay Results – April 2016 Submission (Kihabe-Nxuu 100% MTB)

Hole ID	Depth	Ag	Pb	V	Zn	Ga	Ge	In	Zn
		PPM	%	PPM	%	PPM	PPM	PPM	Equiv.
KDD115	53-54m	80	2.42	42	1.45	0.9	5.4	<0.5	
KDD115	54-55m	27	1.18	31	1.24	1.1	5.5	<0.5	
KDD115	55-56m	17	0.96	45	2.18	1.3	6.7	<0.5	
KDD115	56-57m	9	0.56	103	1.95	1.4	8.0	<0.5	8M @
KDD115	57-58m	34	2.43	127	3.28	1.5	9.8	<0.5	6.3% Zn
KDD115	58-59m	59	1.98	64	7.51	2.6	10.0	<0.5	
KDD115	59-60m	19	1.32	32	4.08	1.8	9.1	<0.5	
KDD115	60-61m	19	0.80	38	2.81	1.7	4.6	<0.5	
KDD125	56-57m	27	1.51	23	3.82	0.6	5.5	<0.5	
KDD125	57-58m	30	1.72	30	2.23	0.7	6.0	<0.5	5M @
KDD125	58-59m	30	2.65	31	5.25	0.8	5.3	<0.5	5.9% Zn
KDD125	59-60m	19	1.07	25	1.48	0.7	6.5	<0.5	
KDD125	60-61m	21	1.46	23	1.69	0.9	5.9	<0.5	
KDD143	49-50m	23	1.32	75	3.54	0.6	6.6	<0.5	
KDD143	50-51m	19	1.17	54	3.13	0.9	6.5	<0.5	
KDD143	51-52m	14	0.79	28	4.27	1.0	5.8	<0.5	
KDD143	52-53m	82	3.05	27	7.73	1.2	6.3	<0.5	
KDD143	53-54m	26	0.64	27	2.03	0.9	5.4	<0.5	11M @
KDD143	54-55m	82	1.80	21	2.10	0.7	6.0	<0.5	
KDD143	55-56m	257	6.86	23	0.81	0.5	7.6	<0.5	10.4% Zn
KDD143	56-57m	437	6.64	28	4.50	1.2	9.8	<0.5	
KDD143	57-58m	106	3.64	27	2.55	0.8	12.0	<0.5	
KDD143	58-59m	82	2.84	38	6.03	1.5	12.1	<0.5	
KDD143	59-60m	44	1.07	37	4.42	1.5	9.0	<0.5	
Average		**65**	**2.08**	**42**	**3.34**	**1.1**	**7.3**	**<0.5**	**24M @ 8.1% Zn**

29/4/2016 prices used to calculate Zinc equivalent grades

- Zn USD 1943/tonne (LME)
- Pb USD 1795/tonner (LME)
- Ag USD 17.82/Oz (Ag spot price)
- Ga USD 0.34/gram (Roto Metals)
- Ge USD 2.35/gram (Roto Metals)

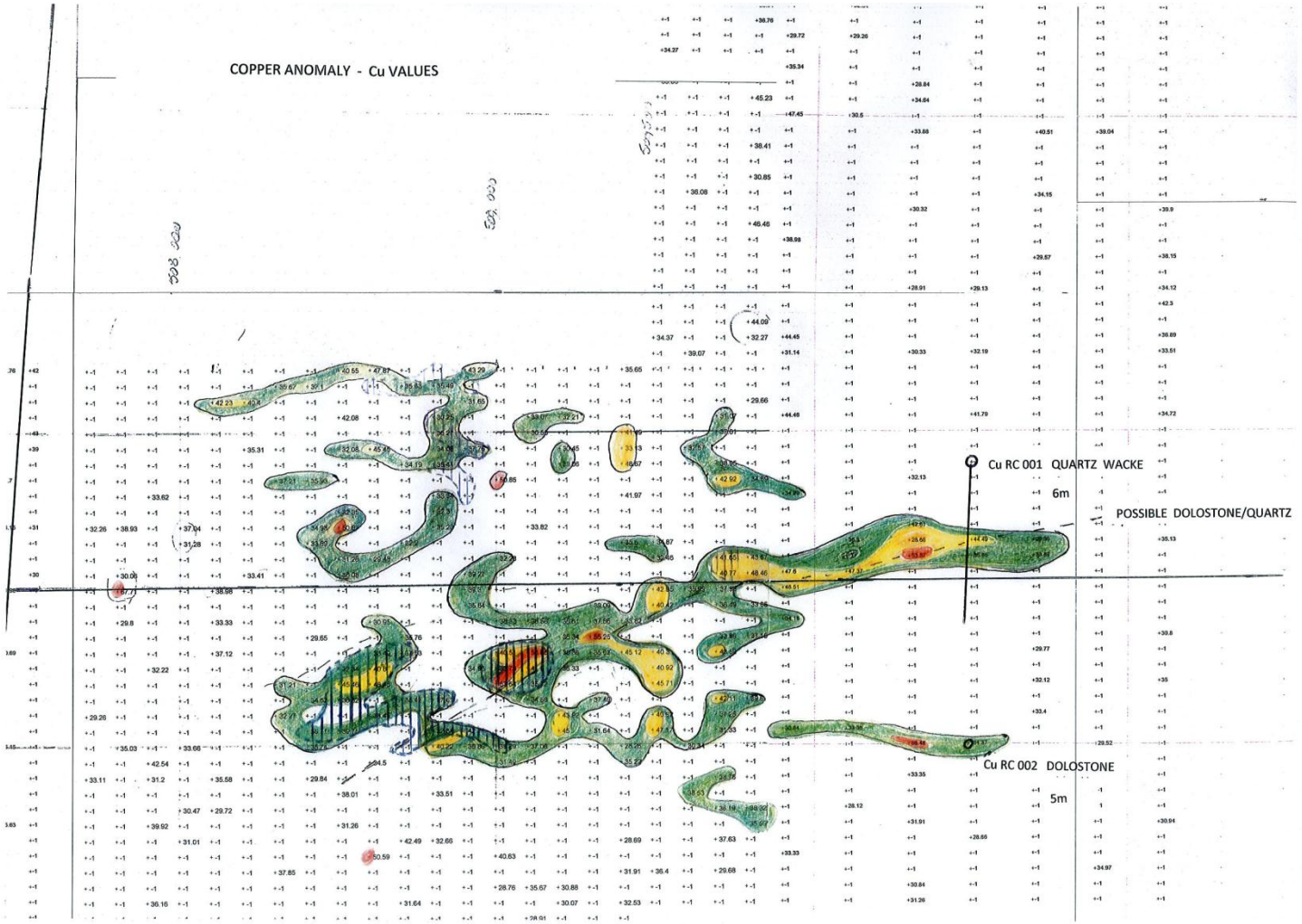
mount burgess mining

Copper and Cobalt

- **A strong copper (Cu) and cobalt (Co) anomaly has also been identified, on PL 43/2016.**
- This will require follow up drill testing. Whether the mineralisation occurs as oxidised material or fresh sulphide, both Cu and Co are traditionally amenable to the same processing pathways as intended for the Kihabe-Nxuu Zn/Pb/Ag Project.

mount burgess mining

Copper/Cobalt Anomaly



mount burgess mining

Sulphide Leaching

- For treatment of the zinc and lead sulphides it had always been Mount Burgess intention to produce separate lead and zinc sulphide concentrates when the oxide mineralisation becomes depleted or exhausted and mining proceeds to depth.
- More recently however Outotec, in conjunction with a Chinese client Zhuzhou Smelter Group, has developed an alternative direct leach process pathway for zinc sulphide **(Outotec direct leaching application in China – SAIMM Symposium, Lead and Zinc 2008, 25-29 February).**
- As this process is also followed by SX/EW, that will already be in operation at Kihabe, this option will be actively pursued by MTB.

mount burgess mining

Metallurgical test work

Metallurgical Test Work

- Further metallurgical test work planned to trial potential to recover Ag on site.
- Alternative recovery processes to be trialed to reduce potential power consumption.
- Further follow up testwork will also be carried out to determine the **Control Potential Sulphidisation (CPS)** requirements for optimal flotation recovery of fully oxidised and transitional mineralisation as part of a mineral variability testwork program.

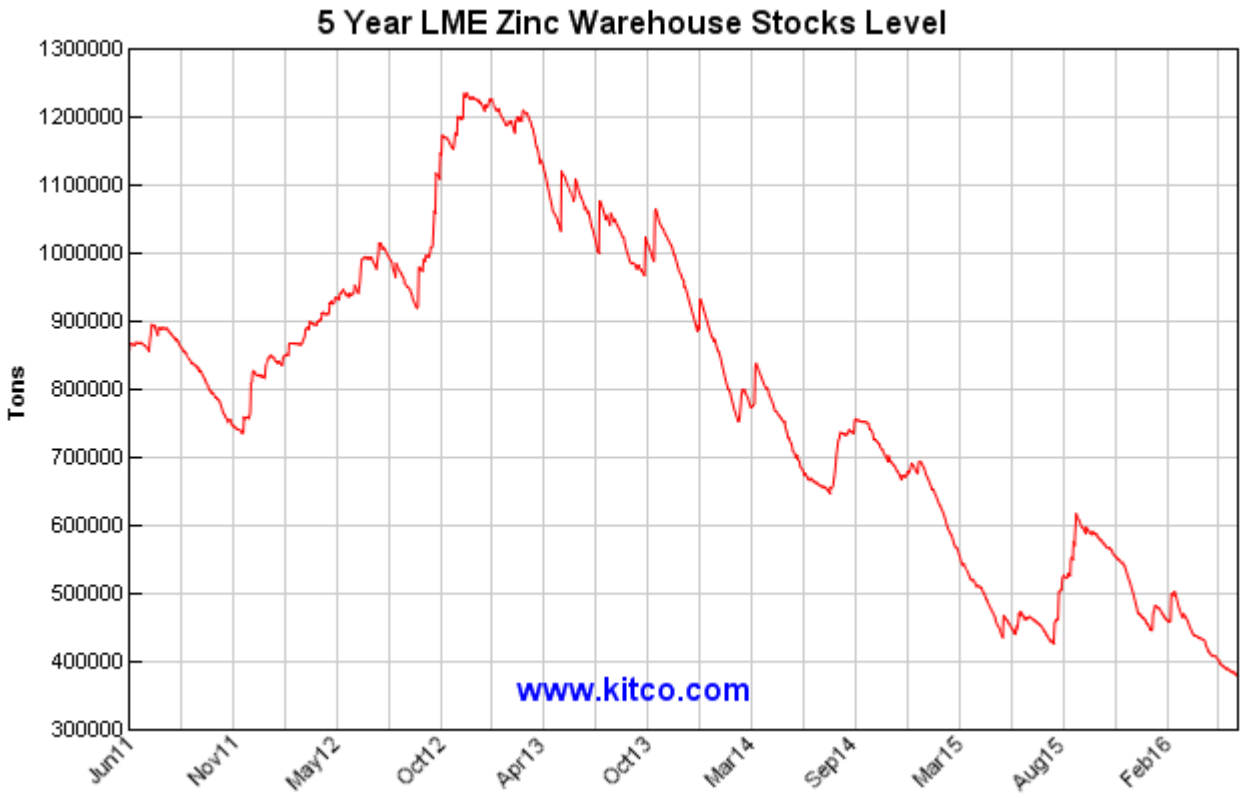
mount burgess mining

Project Power Requirements

- No mining project is feasible without an economic power supply.
- To maximise beneficiation within Botswana, Mount Burgess intends to produce zinc metal on site
- On site Solvent Extraction/Electro-winning process required for this is energy intensive
- Diesel or Heavy Fuel Oil (HFO) fired generators are cost prohibitive for this project.
- Low-carbon emission power options such as geothermal, LNG, coal gasification and solar are being investigated which could attract Green Climate Funding.
- Short term power supply options are also being investigated for project start up.
- However, to maximise life of mine project returns, grid power is an essential requirement.

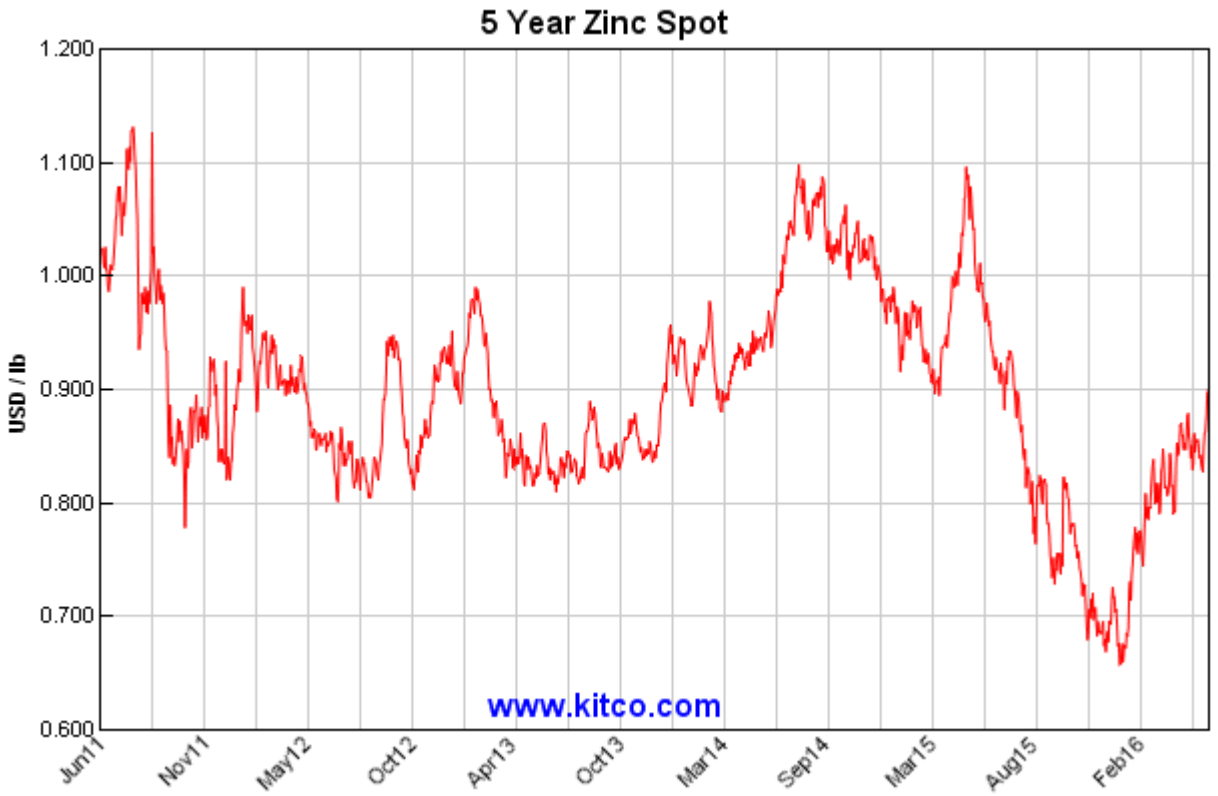
mount burgess mining

LME 5 Year Zinc Stock Levels



mount burgess mining

LME 5 Year Zinc Spot per lb



mount burgess mining