



# Developing the Lindi Jumbo Graphite Project

# **Grade is King**

**March 2019** 



### **Disclaimer**



#### **Securities Disclaimer**

This presentation is for informational purposes only and does not constitute an offer to sell, or solicit to purchase, any securities. Such offer can be made only through proper subscription documentation and only to investors meeting strict suitability requirements. Any failure to comply with these restrictions may constitute a violation of applicable securities laws.

#### **Forward looking Statements**

Various statements in this presentation constitute statements relating to intentions, future acts and events. Such statements are generally classified as "forward looking statements" and involve known and unknown risks, uncertainties and other important factors that could cause those future acts, events and circumstances to differ materially from what is presented or implicitly portrayed herein. The company gives no assurances that the anticipated results, performance or achievements expressed or implied in these forward looking statements will be achieved.

#### **Competent Persons**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Andrew Cunningham, who is a Member of The AIG included in a list promulgated by the ASX from time to time. Andrew Cunningham is a director of Walkabout Resources Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Andrew Cunningham consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Metallurgical test work and results is based on information compiled by Dr Evan Kirby, a Competent Person who is a member of Australian Institute of Mining and Metallurgy. Dr Kirby is a full time employee of Metallurgical Management Services, a specialist metallurgical consultancy and an independent consultant to Walkabout Resources Ltd. Dr Kirby has sufficient experience that is relevant to the style of mineralogy and type of deposit under consideration and the typical beneficiation thereof. Dr Evan Kirby consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### **Recent Investment Highlights**



# Updated Definitive Feasibility Study (DFS) confirms the quality of the Lindi Jumbo Graphite Project in southern Tanzania

- Life of Mine increased to 24 years based on producing 40,000 tpa of concentrate
- Robust economics of a post-tax NPV<sup>10</sup> of US\$197m, post-tax IRR<sup>10</sup> of 119% and less than 2 years payback
- Operating Costs FOB US\$347/t at the port of Mtwara
- Average free cash US\$28million p.a.
- Production profile to deliver an average EBITDA per year of US\$44.3m over a 24 year mine life.
- Flake size distribution in concentrate of 74% greater than 180 micron leading to a premium product pricing.
- Attention to reducing execution risk by reducing Capex to US\$27.8m
- Concentrate grading 95-97% TGC

### **Updated Ore Reserve delivers 17.9% graphite Grade for Life of Mine**

- Substantial upgrade to Ore Reserve to 5.5 mt @ 17.9% TGC using only measured and indicated resource calculation.
- Stand out position against peers in terms of grade and flake size distribution
- Pit Optimisation Study selected a cut-off grade of 10% TGC

### Resettlement Action Plan (RAP) Approved and Final Sign Off received

- Completion of extensive 2 year survey a major Development milestone
- Agreement as to Total Mining Area compensation of US\$2m

### Recently confirmed increase in Global Resource is significant

- 41% increase in resource from 29.6mt to 41.8mt;
- Trenches to north of current resource intersected spectacular high grade mineralisation, including 54m at 22.4% TGC from surface

# **Corporate Snapshot**



Capital Structure	
Share Price	14¢
Shares on Issue	304,249,748
Market Capitalisation*	~A\$42.6 million
Options**	40,664,321
Unlisted Options	7,000,000
Cash at Bank	~A\$5.0 million

Board and Management	
Trevor Benson Executive Chairman	Investment Banker, Global experience
Allan Mulligan Executive Director	Mining Engineer, extensive African project experience
Andrew Cunningham Technical Director	Geologist, extensive African experience
Thomas Murrell Non-Executive Director	Marketing specialist, independent
Mike Elliott Non-Executive Director	Global Accounting/Finance experience, independent



Top Shareholders	
1. Hong Kong Tiande Baorun	7.6%
2. BNP Paribas Nominees*	4.6%
3. Marcolongo Nominees*	4.2%
4. Michael Elliot*	4.0%
5. JR Turner*	3.0%
Top 20 Shareholders	37%

<sup>\*</sup> Consolidated

## **Grade is King - Updated Definitive Feasibility Study**



#### **Definitive Feasibility Study (DFS)**

Walkabout's DFS was recently updated based on a substantial upgrade to the Ore Reserve announced in Feb this year.

Based on the Ore Reserve Upgrade Walkabout now has the highest Reserve Grade in Africa of 17.9% for LOM of 24 years.

### Highlights of DFS Upgrade

- Strong economics, Life of Mine revenue of US\$1.445B, a 21.6% increase.
- Very high cash margins of >US\$1000per tonne FOB.
- Post-tax NPV<sup>10</sup> of US\$197m, a 9.4% increase.
- Post-tax IRR<sup>10</sup> of 119%, a 23% increase.
- Low development capital cost of \$US\$27.8m, a 6% reduction.
- Operational costs remain very low, ~US\$347/tonne (FOB Mtwara Port).
- Long mine life of 24 years, an increase of 4 years at 40ktpa of concentrate production.
- Based on current sales assumptions, weighted average basket price has been reduced to US\$1,515/tonne.

DFS Outcomes	Annual Averages	LOM Total (2019 Base Case)	Units
Revenue		1445	US\$m
Operating Costs (FOB Mtwara)		347	US\$/t
Capital Cost (Initial)		27.8	US\$m
EBITDA	44.3	1070	US\$m
WKT Free Cash	26.5	610	US\$m
Pre-Tax NPV <sup>10</sup>		325	US\$m
Pre-Tax IRR		142	%
Post-Tax NPV <sup>10</sup>		197	US\$m
Post-Tax IRR		119	%
Payback Period		<24	Mths
Operating Margin		77	%
2017 Tanzanian	Legislative C	hanges factored into	o Model
Royalties		41	US\$m
Taxes Paid		312	US\$m
TZ Government Dividend		118	US\$m
Total to Tanzania		472	US\$m

## Location, Logistics and Infrastructure



#### **Roads, Transport and Ports**

200km from the container port of Mtwara.

The port is destined to be an alternative cargo gateway for cargo bound for southern Tanzania, Malawi, Eastern Zambia and Northern Mozambique.

460km from the deep-water port of Dar Es Salaam, 400km on bitumen. Dar Port to be used initially until Mtwara Port volumes increase.

40,000 tonne = 2,000 \* 20 tonne containers = ~40 containers/week

Mtwara Development Corridor - Region earmarked for rapid infrastructure improvements due to foreseen mine developments in the area. Recent Regional Infrastructure Developments:

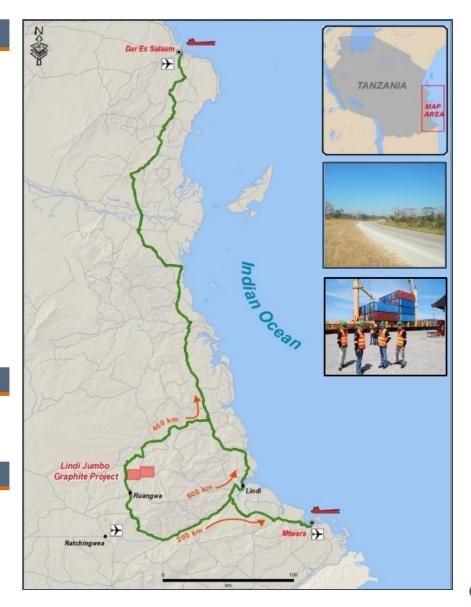
- Mnazi Bay gas fields,
- Dar es Salaam Natural Gas Pipeline (MDNGP),
- Mtwara Thermal Power Station (18MW),
- Mtwara Port Expansion Project doubling the current handling capacity.

#### **Power**

Initially diesel generated power 3MW with the potential to hook into the gas pipeline ~40km away. Power to be supplements with planned solar energy.

#### Water

Sufficient groundwater identified for plant and camp operations.



## **Simple Low-Cost Mining**



Mining graphic illustrates the progression of the pit by year. It demonstrates the focus on the shallower, high grade material in the early years with the deepening of the pit taking place later in the life of mine.

### **Low Cost Mining**

Shallow Mining from surface.

The pit has been divided into 5 stages.

The high grade means reduced plant throughput per tonne of graphite produced.

Mining contractor is to be paid according to graphite mined – not tonnage or volume.

#### **High Grade Mining**

Average grade in the pit is 17.9%

High-grade zones above 20% TGC in early years.

Opportunity to further high-grade the mining during the initial years.

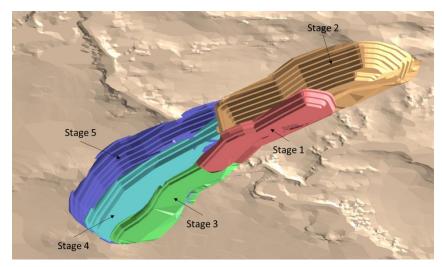
#### **Low Risk Mining**

Surface mining at reasonable quantities is easy to manage. Only 240,000 tonnes per annum milled.

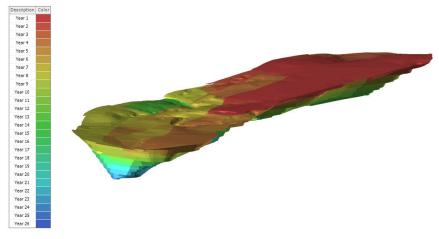
High grade is visually distinct and easy to see.

Very modest mining fleet required.

Easy to increase without compromising planning or grade.



Stage Design for Open Pit

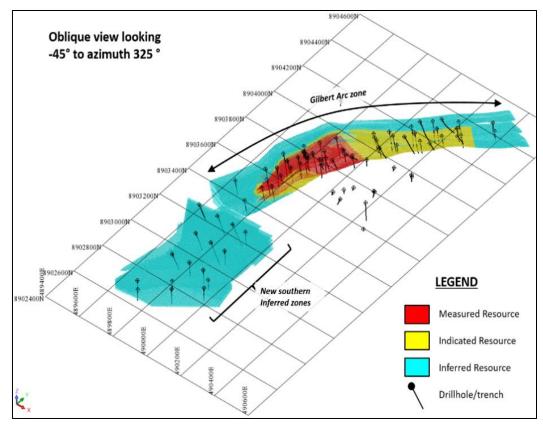


### **Mineral Resource and Reserve**



- High grade Mineral Resource: 41.8Mt at an estimated grade of 10.8% TGC. Contains a super high grade core of 5.0 million tonnes (Mt) at 22.5% TGC for 1.1Mt of contained graphite.
- Ore Reserve (Highest grade in Tanzania): The Proven and Probable Ore Reserve of 5.51 Mt at 17.9% TGC and based on 37% of the 2018
   Measured and Indicated Resource.
- The Ore Reserve is based only on the Measured and Indicated Mineral Resources in the current mining schedule: will be used in an updated DFS to be released Q1 2019. The Inferred Resource zone to the south of the mining pit is not currently included in the mine design reserves and remains available for further consideration or potential expansion opportunities.

Category	Tonnes (million)	TGC %	TGC (t)
Proven Ore Reserves	2.5	19.3	489,000
Probable Ore Reserves	1.8	16.7	498,000
Total Ore Reserves	5.5	17.9	987,000
Category	Tonnes (million)	TGC %	TGC (t)
Measured	6.5	12.1	781,800
Indicated	8.4	10.5	887,300
Inferred	26.9	10.5	2,837,600
Total Resource	41.8	10.8	4,506,700



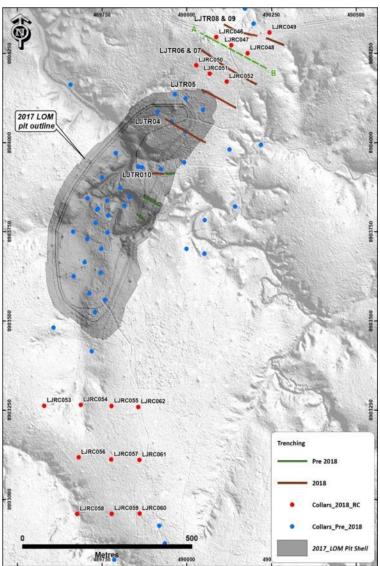
### **Recent Exploration and Resource Upgrade**



#### **Recent Resource Upgrade**

- Recently announced an upgraded JORC 2012 Mineral Resource
- Global resource tonnage increased from 29.6 million tonnes to 41.8 million tonnes (an increase of 41.3%).
- 51% of the resource that will form part of the initial mining area in the Measured (6.5 million tonnes at 12.1% TGC) and Indicated (8.4 million tonnes @ 10.5% TGC) categories for 1.67 million tonnes of contained flake graphite.
- Northern area of the resource is now upgraded to the Indicated category and will form part of new mining studies.
- Resource includes 5.0 million tonnes of high grade material @ 22.5% TGC.
- Trench results include LJTR04 54m @ 22.4% TGC from surface including 10m @ 32.9% TGC from 28m and LJTR06 55 @ 14.9% TGC from 12.5m including 17.5m @ 22.3% TGC from 34m.
- Amended Definitive Feasibility Study (DFS) expected to be announced Q1 2019.

Resource Category	Tonnes (million)	TGC %	Contained Graphite (tonnes)
Measured	6.5	12.1	781,800
(Including High Grade)	1.7	23.4	393,200
Indicated	8.4	10.5	887,300
(Including High Grade)	1.5	21.2	325,300
Inferred	26.9	10.5	2,837,600
(Including High Grade)	1.8	22.7	411,900
Total	41.8	10.8	4,506,700
High Grade Domains	5.0	22.5	1,130,400



Drillhole and trench location plan.

### **Simple Processing**



#### **High Grade = Small Processing Facility = Improved Control and Management = Low Capex**

#### **Proprietary Flowsheet Design**

Flowsheet designed to protect and retain large flake sizes.

Particular care taken not to "damage or break" large flakes liberated in subsequent process stages.

Innovative process to increase product grade above 95% TGC while preserving and maintaining exceptional large flake size distribution.

#### **Process Integrity**

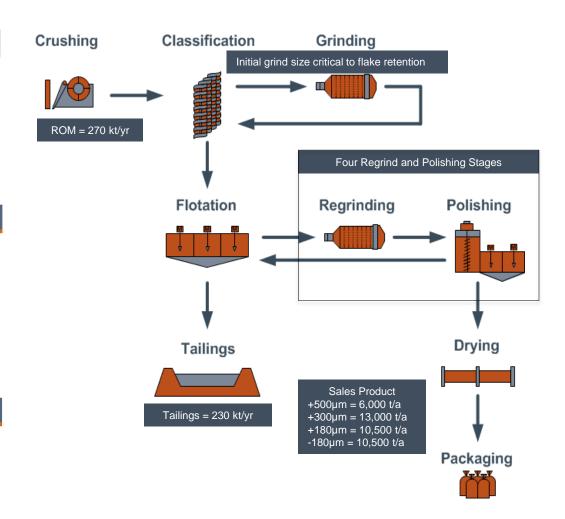
Flow Sheet tested in Australia and independently in China with Beijing graphite process experts.

Nature of the ore results in simple process to liberate and upgrade graphitic flakes in concentration.

Normal graphite processing in China requires up to 12 regrind stages. At Lindi Jumbo there are only 4 regrind and polish stages.

#### **Advantages of Grade**

High grade ROM feed assists process efficiency and upgrades.



### **Exceptional Flakes and Product**



#### **Extensive Metallurgical Test Work**

- Nagrom in Perth Metallurgical flowsheet testwork across all ore types.
- BGRIMM in Beijing Bulk test with validation of flowsheet across high grade and surface material.
- Bureau Veritas Perth Metallurgical sighting and process testwork.
- NGS in Leinburg Germany Floatation tests, expandability and purification testwork.

#### **Validation**

This testwork completed by industry specialists labs in Australia, China and Germany validate that the Lindi Jumbo Project can produce a final product that contains an exceptional flake distribution of up to 75% above 180 microns (µm) of at a high purity (>95% TGC) through an industry standard but innovative floatation process.

#### **Premium**

- This product mix leads to a higher than average basket price realisation.
- Low ash content in final product.

#### **Downstream Product Suitability**

- Further independent testwork indicates that the flakes of all four product categories are highly suitable for the production of expandable graphite and graphite foils.
- Expansion ratios of up 590 times achieved vs China average of 250.
- Client based testwork in Japan indicates that the -150 micron product (100 mesh) is suitable for battery anode production.

Product Type	Mesh	Mass Dist. (%)	Grade %TGC	Sales Price (US\$/t)	Annual Sales (t)
Super Jumbo (+500µm)	+35	14.8%	>95	2350	6,000
Jumbo (+300µm)	+50	34.5%	>95	1850	13,000
Large(+180µm)	+80	25.0%	>95	1200	10,500
Rest (-180µm)	-80	25.7%	>95	890	10,500
Total		100%	>95	1,515	40,000

<sup>\*</sup> Source: Stormcrow, Benchmark Mineral Intelligence, Industrial Minerals and Market Sources.

Flake size		+ 500 µm	+ 300 µm	+ 180 μm
Tomporatura	800 °C	590 cm³/g	485 cm³/g	410 cm³/g
Temperature	1000 °C	500 cm³/g	500 cm³/g	475 cm <sup>3</sup> /

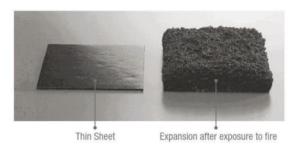
### **Markets and the Lindi Jumbo Premium Product**



The range of markets for which Lindi Jumbo graphite is suitable by production size fraction. The premium products deliver a higher sales revenue.

Lindi Jumbo	Expan	dable	Extruded Products			Sphericalised and Coated Material	Purified
Product	Fire Retardants	Foils	Electrodes	Electrodes Powders Specialty shapes			Other
+35 Mesh - 15% 6,000 t/yr	<b>&gt;</b>	>			~		>
+50 Mesh - 35% 13,000 t/yr	<	V			V		<b>&gt;</b>
+80 Mesh - 25% 10,500 t/yr	V	V			V	~	
- 80 Mesh - 25% 10,500 t/yr			V	•		~	











### **Fully Permitted**



- Full Environmental Certificate and monitoring compliance.
- Unconstrained Mining Licence granted for full development.
- Relocation Assistance Plan (RAP) finalised and ready for implementation.



## **Exemplary Social and Community Relationships**



#### **Tanzanian Economy**

- Direct contribution to the economy of over \$400m in 20 years
- Estimated flow through contribution to economy of \$800m over LOM



#### **Employment**

- More than 200 construction jobs immediately
- More than 100 permanent jobs for 20 years



#### **Health and Community**

- Local health programs
- Advanced skills training
- English language development



# **Current Offtake Arrangements**



	Up to 6,000 tpa of >80% +35 mesh graphite concentrate at 95%-97% TGC.
Four	Up to 13,000 tpa of >80% +50 mesh graphite concentrate at 95%-97% TGC.
Products	Up to 10,500 tpa of >80% +80 mesh graphite concentrate at 95%-97% TGC.
	Up to 10,500 tpa of -80 mesh graphite concentrate at 95%-97% TGC.
Sales into	Heads of Agreement for 7,500 tpa to Jixi Puxiang New material Co. Ltd.
China	Heads of Agreement for 10,000 tpa Qingdao Adtech Technical Engineering Co. Ltd.
Sales into Germany	Memorandum of Understanding for 12,500 tpa to trading house George H. LUH GmbH.
Other	Concentrate tested for battery anode material with large Japanese Company and currently under further detailed discussions.
Opportunities	Binding Offtake Agreements to be finalised early 2019 for around 75% of product.
	Lindi Jumbo branded graphite premium product.



## **Project Development Ready**



Project is shovel ready and capable of being in production in first half of 2020 to take advantage of the anticipated high demand for premium flake graphite concentrate.

tion of the d class
ngineer,
as
bo
t

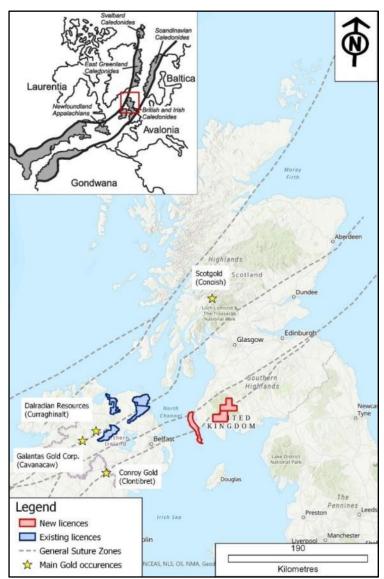
# Other Projects



### Other Projects – UK (Gold and Base Metals)



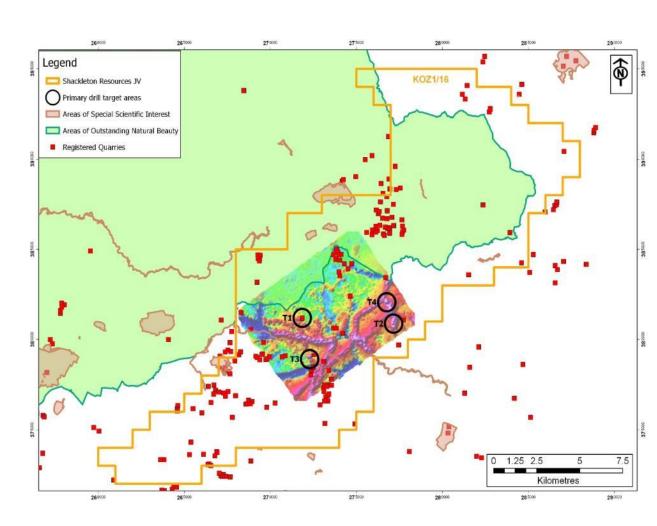
- Acquired 100% of Lonmin PLC's Northern Ireland exploration portfolio Multicommodity targets - gold, base metals.
- Extensive exploration databases including drill core.
- A 50% interest in an active gold Joint Venture targeting the northern extension of the highly prospective Dalradian Gold Belt and with gold mining company Koza (UK) Limited.
- An additional Joint Venture at the Tyrone Licence with Koza (UK) Limited.
   Cobalt, base metals silver and gold.
- The Company has finalised a Farm In Agreement over three highly prospective exploration licences comprising 746km<sup>2</sup> in south west Scotland.
- The licences are located along the Southern Uplands fault which has a long history of base metal and gold mining and exploration.
- Licences include several historic high-grade lead-zinc (silver) mines and gold and copper targets.
- Through the acquisition of the British Geological Survey (BGS) datasets and work completed by others, numerous exploration targets have already been identified.
- Mineralisation styles within the licences include:
  - Quartz vein-hosted gold occurrences within metasediments
  - Pb-Zn + Ag + Au in veins related to intrusions
  - Mafic intrusion related Ni-Cu + Ag + Au + PGE mineralisation
  - Porphyry Cu + Ag + Au related to intrusions



## Tyrone License – UK (Ag, Au, Co and Base Metals)



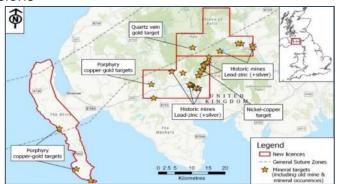
- Up to 0.13% Co, 50.3 g/t Ag, 2.7% Cu and 58.5g/t Au in individual rock chips.
- SkyTEM survey successfully delineates highly prospective targets overlapping with geochem soil anomalies
- Final list of targets prioritised according to their electromagnetic signature, interpreted geology, structural setting and proximity to the geochemical soil anomalies.
- This delineation of prospective targets involved an extensive regional soil sampling program completed in June 18.
- Four of the targets were recommended for high priority modelling.
- Based on results of the plate modelling and their proximity to geochemical soil anomalies as well as previously reported high-grade base metal occurrences in the area, drillhole positions have been calculated.
- Verification and general planning permissions to proceed to enable a drill campaign.

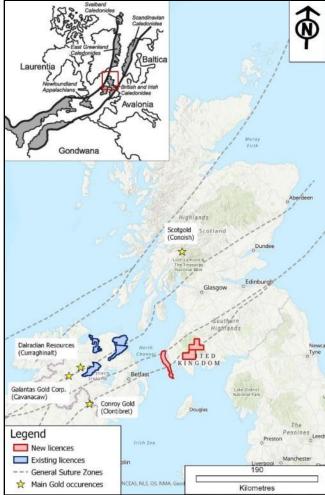


## Other Projects – UK (Gold and Base Metals)



- The Company has finalised a Farm In Agreement over three highly prospective exploration licences comprising 746km2 in south west Scotland.
- The licences are located along the Southern Uplands fault which has a long history of base metal and gold mining and exploration.
- Licences include several historic high-grade lead-zinc (silver) mines and gold and copper targets.
- The Company's exploration strategy in this region is to assemble a compelling portfolio of prospective exploration titles over prospective geological trends.
- Through the acquisition of the British Geological Survey (BGS) datasets and work completed by others, numerous exploration targets have already been identified.
- Mineralisation styles within the licences include:
  - Quartz vein-hosted gold occurrences within metasediments
  - Pb-Zn + Ag + Au in veins related to intrusions
  - Mafic intrusion related Ni-Cu + Ag + Au + PGE mineralisation
  - Porphyry Cu + Ag + Au related to intrusions



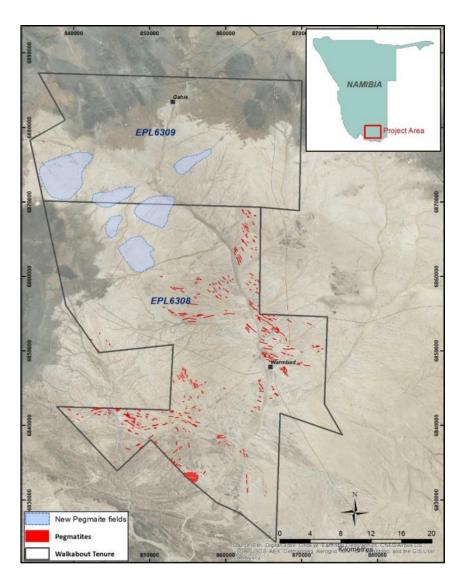


## Other Projects - Namibia (Lithium)



- Large tenement holding. Over 1500km<sup>2</sup> 100% WKT.
- > 600 pegmatite bodies identified additional pegmatite swarms identified
- Numerous historical references to Lithium mineralisation in the region.
- Grades of up to 1.6% Li2O5 reported from neighbouring properties
- Structural control identified over LCT-type enriched pegmatites.
- Large areas undercover.
- Mapping and reconnaissance sampling ongoing.





## Why invest in Walkabout?



#### Walkabout is Development ready subject to finalising a total funding package.

#### The standout attributes include:

- Lindi Jumbo Graphite project is shovel ready
- Granted environmental certificate and Mining Licence
- Excellent infrastructure and located only 200km from Port
- High grade from surface simple open pit mining- first 5 years will mine +20% TGC from surface
- Life of Mine reserve grade of 17.9% TGC for 24 years
- High flake size distribution with 75% of product above 180 micron
- Manageable size of operation: producing 40,000 tpa of concentrate at 95-97% TGC, and scalable
- Very low Capex of US\$27.8m and very low Opex of US\$347/t FOB
- Strong EPC partner with all plant engineering and design work costed and completed
- Offtake partners geographically spread in Germany and China
- Diversified growth strategy
- Strong Balance Sheet with A\$5.5m cash







## Registered Office

Level 3, 681 Murray Street West Perth 6005 Western Australia

www.wkt.com.au

Email: admin@wkt.com.au

Telephone: +61 8 6298 7500

