

# MKANGO RESOURCES LTD.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

# For the three months ended March 31, 2018

This Management's Discussion and Analysis ("**MD&A**") provides a review of the operational performance of Mkango Resources Ltd. ("**Mkango**", and collectively with its subsidiaries, or the "**Company**"). The report was prepared in accordance with the requirements of National Instrument 51-102, Continuous Disclosure Obligations, and it should be read in conjunction with the condensed interim consolidated financial statements for the three months ended March 31, 2018 (the "**Financial Statements**") and the audited consolidated financial statements for the year ended December 31, 2017 and the accompanying Management's Discussion and Analysis for that fiscal year. The Financial Statements and the accompanying notes have been prepared in accordance with International Financial Reporting Standards ("**IFRS**") and are prepared in United States dollars unless otherwise stated. This document is dated May 29, 2018.

The Board of Directors of the Company have reviewed and approved the information contained in this MD&A and the Financial Statements.

Readers are cautioned that this MD&A contains certain forward-looking statements. Please see the section concerning "Forward Looking Statements" below.

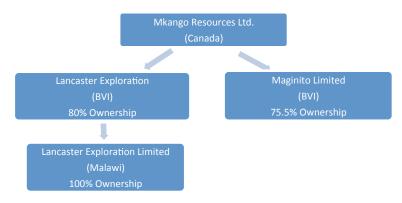
Additional information relating to the Company can be found on the Canadian System for Electronic Document Analysis and Retrieval ("SEDAR") at www.sedar.com. The Company is listed on the TSX Venture Exchange the "TSX-V") and holds an additional listing on the AIM Market of the London Stock Exchange ("AIM") under the symbol MKA.

# FORWARD LOOKING STATEMENTS

Certain disclosures set forth in this MD&A may constitute forward-looking statements concerning anticipated development of the Company's operations in future periods. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "anticipate", "believes", "budget", "continue", "could", "estimate", "forecast", "intends", "may", "plan", "predicts", "projects", should", "will" and other similar expressions. All estimates and statements that describe the Company's future, goals, or objectives, including management's assessment of future plans and operations, including statements regarding exploration results and budgets, mineral resource estimates, work programs, capital expenditures, timelines, strategic plans, market price of commodities or other statements that are not statement of fact may constitute forward-looking information under securities laws. Forward-looking information is based on reasonable assumptions that have been made by the Company as at the date of such information but, by their nature, forward-looking statements are subject to numerous risks and uncertainties, some of which are beyond the Company's control, including the impact of general economic and political conditions, industry conditions, volatility of commodity prices, currency fluctuations, accuracy of current drill and other exploration results, realization of mineral resource estimates, environmental risks, changes in environmental, tax and royalty legislation or other government regulation, the speculative nature of strategic metal exploration and development including the risks of contests over title to properties, the risks associated with obtaining necessary licences or permits, including and not limited to approval of any future mining licence applications and exploration licence extensions, operating or technical difficulties in connection with development activities; personnel relations, competition from other industry participants, the lack of availability of qualified personnel or management, availability of drilling equipment and access, stock market volatility, the ability to access sufficient capital from internal and external sources and the completion of the transaction involving Talaxis Limited ("Talaxis") pursuant to the Agreement (as defined below). The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues. Readers are cautioned that the assumptions used in the preparation of such information, although considered reasonable at the time of preparation, may prove to be imprecise and, as such, undue reliance should not be placed on forward-looking statements. Forward-looking statements are based on assumptions management believes to be reasonable, including but not limited to the price of rare earth elements ("REEs" or "rare earths"); the demand for REEs; the ability to carry on exploration and development activities; the timely receipt of any required approvals; the ability to obtain qualified personnel, equipment and services in a timely and cost-efficient manner; the ability to operate in a safe, efficient and effective manner; and the regulatory framework including and not limited to licence approvals, social and environmental matters, and such other assumptions and factors as set out herein. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. Mkango's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements or, if any of them do so, what benefits that the

Company will derive there from. Mkango disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

# **COMPANY OVERVIEW**



Mkango is an exploration and development company focused on rare earths and associated minerals with properties in the Republic of Malawi, Africa, specifically the Songwe Hill rare earths project ("**Songwe Hill**") within the Phalombe exploration licence (the "**Phalombe Licence**"), the Thambani exploration licence ("**Thambani Licence**") and the Chimimbe Hill exploration licence ("**Chimimbe Licence**"). The Company is incorporated in Canada. Its registered office is 706 27 Avenue NW, Calgary, Alberta, Canada.

The Phalombe Licence, the Thambani Licence and the Chimimbe Licence are held by Lancaster (BVI) ("Lancaster"), a company incorporated under the laws of the British Virgin Islands. Lancaster is 80% owned by Mkango and 20% owned by Talaxis, a wholly owned subsidiary of Noble Group Limited ("Talaxis"). The Thambani Licence and the Chimimbe Licence are held in trust for Mkango. The condensed interim consolidated financial statements include 100% of the assets and liabilities related to Lancaster and include a non-controlling interest representing 20% of Lancaster's assets and liabilities (other than the Thambani Licence and the Chimimbe licence, 100 % of which are held in trust for the Company) that are owned by Talaxis. Accounting policies are applied consistently throughout all consolidated entities.

On May 19, 2011, Lancaster Exploration Limited ("Lancaster Malawi") was incorporated under the laws of Blantyre, Malawi. Lancaster Malawi is a wholly owned subsidiary of Lancaster and as such, includes a non-controlling interest representing 20% of Lancaster Malawi's assets and liabilities that are owned by Talaxis. Accounting policies are applied consistently throughout all consolidated entities.

On January 3, 2018 Maginito Limited ("**Maginito**") was incorporated under the laws of the British Virgin Islands ("**BVI**"). Maginito is 75.5% owned by Mkango and 24.5% owned by Talaxis. Maginito is focused on downstream opportunities relating to the rare earths supply chain, in particular neodymium alloy powders, magnet and other technologies geared to accelerating growth in the electric vehicle market. This includes the collaboration with Metalysis Limited ("**Metalysis**") discussed below. The condensed interim consolidated financial statements include 100% of the assets and liabilities related to Maginito and include a non-controlling interest representing 24.5% of Maginito's assets and liabilities attributable to Talaxis. Accounting policies are applied consistently throughout all consolidated entities.

The Company's core strategy is to advance the Songwe Hill project (Phalombe Licence) through the feasibility and development phases whilst in parallel advancing complementary downstream opportunities in the rare earths supply chain through Maginito, both in partnership with Talaxis. The current work programme for Songwe Hill is focused on completing a feasibility study (the "**Feasibility Study**"), the initial phases of which include a major diamond drilling programme and publication of an updated mineral resource estimate, in addition to metallurgical optimisation and work in relation to the ongoing environmental, social and health impact assessment.

# **OVERALL PERFORMANCE AND OUTLOOK**

During 2017 and for the three months ended March 31, 2018, the Company was focused on advancing Songwe Hill in addition to its other projects in Malawi and downstream opportunities relating to the rare earth supply chain.

In March 2017, Mkango entered into a Memorandum of Understanding ("**MOU**") with Metalysis to jointly research, develop and commercialise novel rare earth metal alloys for use in permanent magnets. In September 2017, Mkango and Metalysis signed a joint venture principles and exclusivity agreement (the "**Metalysis Agreement**") for the development of advanced alloys using neodymium or praseodymium with other elements for use in permanent magnets. This includes joint venture principles for a joint venture (the "**Metalysis Joint Venture**") to commercialise intellectual property rights for the production of neodymium or praseodymium alloy powders. Under the Metalysis Agreement, Maginito will hold an 85% interest in the Metalysis Joint Venture and Metalysis will receive a 15% free carried interest.

At the same time, Mkango announced a transaction with Talaxis, whereby Talaxis invested £500,000 in Mkango by means of a placing. The placing closed in October 2017 which resulted in Talaxis holding a 14.5% interest in Mkango.

In November of 2017, Mkango announced a further transaction with Talaxis (the "**Talaxis Agreement**"), whereby Talaxis will make investments totalling  $\pounds 12$  million (US\$17 million) in Lancaster to fund a Feasibility Study for Songwe Hill, with an option to fund project development, and a further investment totalling  $\pounds 2$  million (US\$2.8 million) in Maginito to further advance its downstream strategy, including the collaboration with Metalysis.

On January 28, 2018, in accordance with the terms of the Talaxis Agreement, Talaxis invested an initial £5 million (US\$7 million) for a 20% interest in Lancaster and a further £1 million (US\$1.4 million) for a 24.5% interest in Maginito.

On May 18, 2018, Mkango signed the Songwe Joint Venture Agreement, the Talaxis Investment Agreement and the Cooperation Deed (the "**Definitive Agreements**") in relation to the Talaxis Agreement.

The funds invested in Lancaster will be used for the initial phase of the Feasibility Study comprising a major diamond drilling programme which will culminate in an updated 43-101 compliant mineral resource estimate for Songwe Hill, in addition to metallurgical optimisation and work in relation to the ongoing environmental, social and health impact assessment. Subject to publication of the updated mineral resource estimate, Talaxis will invest a further £7 million (US\$9.8 million) for an additional 29% interest in Lancaster to fully fund the completion of the Feasibility Study.

Following completion of the Feasibility Study, Talaxis will have an option to acquire a further 26% interest in Lancaster by arranging funding for project development including funding the equity component thereof. If Talaxis exercises its option, Mkango will retain a 25% interest in Lancaster which will be free carried to production.

The funds invested in Maginito by Talaxis will be used to advance complementary downstream opportunities in the rare earths supply chain in particular new rare earth alloy, magnet and other technologies geared to accelerating growth in the electric vehicle market, including the Metalysis Joint Venture.

Talaxis will invest a further £1 million in Maginito to acquire an additional 24.5% interest in Maginito conditional on successful completion of the second phase of the research and development programme with Metalysis. Upon completion of the investments, Mkango will hold a 51% interest in Maginito.

Following the Talaxis investments, Mkango is now well positioned to advance its projects through the feasibility and development phases against the backdrop of increasing demand for rare earths used in electric vehicles, direct drive wind turbines and other green technologies. The initial phases of the Feasibility Study are underway.

# SELECTED CONSOLIDATED FINANCIAL INFORMATION

During the three months ended March 31, 2018, the Company was focused on advancing Songwe Hill and downstream opportunities relating to the rare earth supply chain. Information discussed herein reflects the Company as a consolidated entity.

# FINANCIAL POSITION

The following financial data is derived from the Company's financial statements as at March 31, 2018, 2017 and 2016:

	Three months ended March 31,					
	2018	2017	2016			
Total assets	8,740,826	710,664	132,918			
Total non-current liabilities	1,371,341	1,590,952	697,061			
Shareholders' surplus/(deficiency)	9,365,424	(880,288)	(1,017,770)			

#### Total assets

The \$8,030,162 increase in total assets for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017 is primarily due to the increase in cash. The increase in cash was due to the October 26, 2017 close of a placement, the January 2018, receipt of the Talaxis net investment of \$8,284,027 and the \$864,317 cash received as a result of the exercise of warrants during November 2017, December 2017, January 2018 and March 2018.

The \$577,746 increase in total assets for the three months ended March 31, 2017 as compared to the three months ended March 31, 2016, is primarily due to the \$583,315 increase in cash. Cash increased as a result of the placements, which closed on June 15, 2016 and December 30, 2016.

#### Total non-current liabilities

The \$219,611 decrease for the period ended March 31, 2018 as compared to the three months ended March 31, 2017 in total non-current liabilities is due to the decrease in the valuation of the Company's outstanding warrants and the reclassification of the \$287,976 balance at March 31, 2017 of deferred management salaries from long term to short term liabilities at December 31, 2017. The change in the outstanding warrants valuation was due to a change in the Company's share price volatility, the Company's share price and the fact that the number of outstanding warrants held by common shareholders had decreased by 9,217,346, as warrants were exercised.

The \$893,891 increase for the three months ended March 31, 2017 as compared to the three months ended March 31, 2016 in total non-current liabilities is due to a \$485,505 increase in the valuation of the Company's outstanding warrants. The change in the outstanding warrants valuation was due to a change in the Company's share price volatility and the Company's share price. In addition, the Company recognized a \$287,976 non-current liability for deferred management salaries for the three months ended March 31, 2017, which was not a component in the March 31, 2016 value because the recognition of the deferred management salaries began in May 2016.

#### Total shareholders' surplus/(deficiency)

A \$9,365,424 surplus was recognized for the three months ended March 31, 2018 compared to a deficit of \$880,288 recognized for the three months ended March 31, 2017. The change is primarily due to the reduction in retained earnings due to the compensation received from Talaxis for its investment in Lancaster BVI and Maginito. A non-controlling interest balance was established at the date of the investment. The opening balance is based on the investor's proportionate share of the net assets held by the investee just prior to the date of the investment. Funds in excess of the net asset valuation were used to reduce the retained earnings of the parent company.

The deficiency decreased by \$137,482 for the period ended March 31, 2017 as compared to the three months ended March 31, 2016, which was primarily due to the change in accumulated deficit.

The following financial data is derived from the Company's financial statements as at March 31, 2018 and December 31, 2017:

Three months ended,	March 31, 2018	December 31, 2017
Total assets	8,740,826	997,869
Total non-current liabilities	1,371,341	1,698,267
Shareholders' surplus/(deficiency)	9,365,424	(1,253,363)

## Total assets

The \$7,742,957 increase in total assets for the three months ended March 31, 2018 as compared to the three months ended December 31, 2017 is primarily due to the increase in cash. The increase in cash was due to the January 2018, receipt of the Talaxis net investment of \$8,284,027 and the \$529,971 cash received as a result of the exercise of warrants during January 2018 and March 2018.

#### Total non-current liabilities

The \$326,926 decrease for the period ended March 31, 2018 as compared to the three months ended December 31, 2017 in total non-current liabilities is due to the decrease in the valuation of the Company's outstanding warrants. The change in the outstanding warrants valuation was due to a change in the Company's share price volatility, the Company's share price and the fact that the number of outstanding warrants held by common shareholders, had decreased by 9,217,346, as warrants were exercised.

#### Total shareholders' surplus/(deficiency)

A \$9,365,424 surplus was recognized for the three months ended March 31, 2018 compared to a deficit of \$1,253,363 recognized for the three months ended December 31, 2017. The change is primarily due to the reduction in retained earnings due to the funds received from Talaxis for its investment in Lancaster BVI and Maginito. A non-controlling interest balance was established at the date the investment was made.

# SUMMARY RESULTS OF OPERATIONS

The following financial data is derived from the Company's condensed interim consolidated financial statements as at March 31, 2018, 2017 and 2016:

	Three months ended March 31,					
	2018		2017		2016	
Revenue	\$ 766	\$	2	\$	2	
Mineral exploration	633,735		100,408		27,679	
Other expenditures*	521,848		313,662		78,435	
Net comprehensive loss	1,154,817		414,068	1	106,112	
Net comprehensive loss attributable to non-controlling interest	286,431		-		-	
Basic and diluted loss per share	\$ (0.0011)	\$	(0.010)	\$	0.000	
Weighted average number of common shares	103,145,847	83	3,912,472	40,4	418,985	
used in the calculation of loss per share (basic and diluted)						
Distributions or Dividends	\$ Nil	\$	Nil	\$	Nil	

\* Other expenditures represents all other expenditures, other than Mineral exploration expenditures, disclosed in the statement of operations and includes non-cash items.

The comprehensive loss for the three months ended March 31, 2018 was \$740,749 higher compared to the comprehensive loss reported for the three months ended March 31, 2017. The significant items contributing to the increase were general and administrative expenses which increased by \$169,317 and mineral exploration expenditures which increased by \$533,327. These categories increased significantly for the three months ended March 31, 2018 because the Company commenced preparation for a major diamond drilling program for the Songwe Hill project, incurred additional expenditures relating to the environmental and social and health impact assessment and paid \$281,372 to advance the collaborative research and development programme with Metalysis. General and administrative costs were higher, primarily due to a \$77,329 increase in fees paid to Directors and Officers of the Company and a \$70,220 increase in travel expenses. The increase in these expenses was offset by a decrease in the share based compensation expense, accretion, foreign exchange and the unrealized loss on revaluation of warrants.

The comprehensive loss for the three months ended March 31, 2017 was \$307,956 higher compared to the comprehensive loss reported for the three months ended March 31, 2016. The significant items contributing to the increase were mineral exploration expenditures, which increased by \$72,729 and the \$185,168 increase of the loss on the revaluation of warrants.

# **DISCUSSION OF OPERATIONS**

Mkango holds an 80% interest in Lancaster, which holds a 100% interest in three exclusive prospecting licences in southern Malawi, the Phalombe Licence, the Thambani Licence and the Chimimbe Licence. 100% of the Thambani Licence and the Chimimbe Licence are held in trust for Mkango. Pursuant to the Songwe Agreement, Talaxis has agreed to fund the development of Songwe Hill, the main exploration target within the Phalombe Licence.

Songwe Hill, which features carbonatite hosted rare earth mineralisation, was subject to previous exploration in the late 1980s. Mkango completed an updated pre-feasibility study for the project in November 2015 and is currently undertaking the Feasibility Study.

The main exploration targets in the Thambani Licence are uranium, niobium and tantalum, and in the Chimimbe Licence, nickel and cobalt.

Mkango also holds a 75.5% interest in Maginito, as discussed above.

		Ν	March 31,
License	Project	2018	2017
Phalombe	Songwe Hill		
	Mineral extraction development	\$43,936	\$59,111
	Government fees	11,765	11,715
	ESHIA <sup>(1)</sup>	23,912	97
	Drilling programme <sup>(2)</sup>	170,922	-
	Consulting fees	53,303	11,425
	Malawi office and camp expenses	48,525	18,059
Total Malawi project expenditures		352,363	100,407
	Maginito <sup>(3)</sup>	281,372	_
Total mineral exploration expenses		\$633,735	\$100,407

## Mineral exploration expenses

 Environmental Social Health Impact Assessment and Corporate Social Responsibility expenditures.

(2) The Company is preparing for a major diamond drilling programme at Songwe Hill.

(3) Expenditures relating to the "Joint Ventures Binding Principles and Exclusivity Agreement" with Metalysis to advance a joint research and development programme.

Exploration and evaluation costs are recognized in the statement of comprehensive loss as mineral exploration expenditures pending determination of technical feasibility and commercial viability.

# **1. SONGWE HILL**

The Phalombe Licence covers an area of 849.1 square kilometers ("sq km") in southeast Malawi, within which the main development target is Songwe Hill. Songwe Hill features carbonatite hosted rare earth mineralization and was subject to previous exploration programs in the late 1980s. Lancaster was awarded the licence on January 21, 2010.

The licence was issued by the Malawi Government on a three-year basis, originally, and has subsequently been renewed with the most recent renewal on January 21, 2017 for a further 2 years to January 21, 2019. In connection with the January 21, 2017 renewal, the Company requested that the licence area be reduced to the current area of 849.1 sq km.

Management believes that all necessary permits for Lancaster's current phase of the exploration program have been obtained.

Drilling programs, completed in 2011 and 2012, focused on an area measuring approximately 350 by 100 meters comprising rare earth enriched carbonatite, carbonatite breccia and fenite lithologies, largely exposed at surface. A total of 25 holes were completed in the 2012 Stage 2 program for a total of approximately 4,860 meters to a

maximum vertical depth of approximately 350 meters. The Stage 2 program was designed to complement the 13-hole, 2,000 meter Stage 1 drilling program and systematic channel sampling completed in 2011.

On November 22, 2012, Mkango filed a Technical Report (the "Report") for its maiden NI 43-101 mineral resource estimate entitled, *NI 43-101 Technical Report and Mineral Resource Estimate for the Songwe Hill Rare Earth Element (REE) Project, Phalombe District, Republic of Malawi,* authored by Scott Swinden, PhD, PGeo and Michael Hall, Pr.Sci.Nat., MAusIMM. The Report's mineral resource estimates, as previously announced, are summarized below. For further details of the mineral resource estimates including breakdowns thereof, please refer to the Report, which is available at <u>www.sedar.com</u>.

Cut-off grade	In-situ Indicated Mineral	<i>In-situ</i> Inferred Mineral
	Resource estimate	Resource estimate
1.0% TREO	13.2 mt grading 1.62% TREO	18.6 mt grading 1.38% TREO
1.5% TREO	6.2 mt grading 2.05% TREO	5.1 mt grading 1.83% TREO

TREO – total rare earth oxides including yttrium. In-situ - no geological losses applied. mt - million tonnes

On July 10, 2013, the Company announced a base case metallurgical flow sheet for Songwe Hill and that proof of concept test work on a bench scale had demonstrated that the flow sheet has potential to produce a high grade mixed rare earth carbonate or hydroxide product.

During the year ending December 31, 2013, the Company was focused on scoping metallurgical test work, environmental studies and commencement of the pre-feasibility study, in addition to regional exploration.

During the year ended December 31, 2014, the Company continued to progress the environmental and social impact studies, flow sheet optimization and metallurgical test work, process plant engineering design work, mining studies and other activities related to the pre-feasibility study. This culminated in the Company announcing the results of the pre-feasibility study on September 23, 2014. The pre-feasibility study (as updated, the "**Pre-feasibility Study**") was subsequently updated on 1 December, 2015, with the results announced on November 9, 2015.

The Pre-feasibility Study indicates a US\$345 million after-tax net present value (NPV), using a 10% nominal discount rate, and 37% after-tax internal rate of return (IRR) for Songwe Hill, based on rare earth oxide (REO) prices equivalent to a total rare earth basket price of US\$59.8 per kg REO. The basket price reflects the selective removal of a large proportion of the cerium during the hydrometallurgical process, which enhances the value of the product mix. For further information, please refer to the study, which is available at <u>www.sedar.com</u>.

Initial capital expenditure (Capex) of US\$216m, including a contingency of US\$20m, is among the lowest in the rare earth sector.

Cash operating costs average US\$13.0 per kg REO for the first 5 years of production and US\$16.4 per kg REO for the life of mine. The Study assumes an additional cost of US\$10.0 per kg REO to account for the cost or discount associated with toll separation or the sale of a mixed chemical concentrate.

The Pre-feasibility Study is based on an open pit operation, using contract mining, with a mine life of 18 years commencing in 2018. There is potential to significantly expand production or the mine life and for a lower strip ratio given the large additional Inferred Resource and potential to expand the Mineral Resource.

This first phase of development envisages production of a high grade, cerium depleted, purified chemical concentrate for toll treatment or sale, with annual production of approximately 2,840 tonnes per year of REO in concentrate.

Based on the input parameters in the updated Pre-feasibility Study the Probable Mineral Reserve Estimate remained unchanged at 8.5 million tonnes grading 1.60% TREO using a cut-off grade of 1.0% TREO as reported in September 2014.

On July 26, 2016, Mkango announced that it has secured a two-year exclusive option and right to acquire, on commercially standard terms, the worldwide licence for a technology to produce high strength (up to 30%) hydrochloric acid ("HCL") from calcium chloride feed streams using sulphuric acid. The technology is applicable in rare earths processing and other potential industrial applications, and has been developed by Dr. Thomas Feldmann and Professor George Demopoulos of McGill University in Montreal, Canada.

Mkango's processing flowsheet for Songwe Hill incorporates a HCL gangue leach step, producing calcium chloride in solution. The HCL will be regenerated using the calcium chloride feed stream, supplemented with additional calcium chloride, together with sulphuric acid produced from sulphur at a plant on-site. This means that the import of large quantities of liquid HCL will not be required, effectively being replaced by the import of solid sulphur and calcium chloride, therefore bringing significant potential cost and logistical benefits. The production of a gypsum by-product for sale in Malawi and elsewhere will also be investigated.

On August 9, 2016, Mkango announced the results of the airborne geophysical survey (the "**Survey**") covering approximately two thirds of its Phalombe licence. The Survey was part of a US\$25 million World Bank funded nationwide airborne geophysical programme. The airborne radiometric survey highlights a number of exploration targets within the Phalombe licence. Songwe Hill was not covered by the Survey.

Apart from Songwe Hill, there are two other identified vent systems in the Phalombe Licence, Nkalonje and Namangale. In both cases, the Survey indicates strong thorium radiometric anomalies coincident with the vents, which, similar to Songwe Hill, are expressed as steep hills rising above the surrounding plain. Thorium radiometrics are known as a highly effective tool for rare earths exploration and the carbonatite at Songwe Hill is also characterized by a thorium radiometric anomaly, identified through previous geophysical surveys. Unlike Songwe Hill, the Nkalonje and Namangale vent systems do not feature large areas of outcropping carbonatite, the host rock for rare earths at Songwe Hill. However, both contain outcrops of carbonatite veins and dykes suggesting that there may be potential for a carbonatite body below surface. Other prospects within the Phalombe Licence include the Mantrap and Knoll prospects.

A map showing the thorium radiometric anomalies superimposed on a topographic map, indicating local infrastructure, and the locations of Nkalonje and Namangale can be accessed via the following link: http://www.mkango.ca/i/maps/Results-of-Airborne-Radiometric-Survey-(Th)-on-Topo-Aug.jpg.

In 2016, Songwe Hill and the Nkalonje, Mantrap and Knoll prospects were visited by a large delegation of international and Malawian geology and geophysics experts in connection with the  $\notin$ 5.4 million HiTech AlkCarb research project led by the Camborne School of Mines, University of Exeter and funded under the European Union's Horizon 2020 Research and Innovation program in which the Company (through Lancaster) is an industry partner. The scope of the research project encompasses building exploration expertise in hi-tech raw materials as well as improving and developing interpretation of geophysical and downhole data. Of particular relevance to Mkango is the opportunity to better understand the potential for large but unexposed mineralised bodies of carbonatite (the host rock for rare earth mineralisation) on either a prospect or regional scale.

Based on work to date, the highest priority of such targets within the Phalombe Licence include the summit of Songwe Hill (which lies outside and to the south of the Indicated and Inferred Mineral Resource Estimate at Songwe Hill) and the abovementioned Nkalonje vent system, where, in both cases, outcrop is largely fenite (altered country rock) with occasional carbonatite. but where there may also be potential for underlying and larger zones of mineralised carbonatite. Rare earth mineralisation and mineral assemblages for both the fenite and carbonatite are currently being evaluated in the context of the geophysics covering the areas, to further assess their potential as future drill targets.

Following receipt of £5 million (US\$7 million) by Lancaster on January 24, 2018 pursuant to the transaction with Talaxis, Mkango commenced the Feasibility Study, the initial phases of which comprise an extensive diamond drilling programme, metallurgical optimisation and work in relation to the ongoing environmental, social and health impact assessment.

Preparation is well advanced for the largest diamond drilling programme to date at Songwe Hill. The programme is for a minimum of 5,000 metres and will be focused on infill, step-out and geotechnical drilling, the latter for the purposes of mine design. The drill plan is based on a refined geological model developed in-house by Mkango's technical team in consultation with The MSA Group and Bara Consulting, who have been appointed resource and mining consultants, respectively. Cartwright Drilling has been appointed as drilling contractor, with a combined Canadian and Malawian drilling team to operate two diamond drill rigs both running 24 hours.

Over 50 drill pads and all drill roads have been constructed for the drill programme, as well as an enlarged camp to accommodate the larger team versus previous drill programmes.

Mkango ran two successful drill programmes at Songwe Hill, in 2011 and 2012, culminating in a maiden Mineral Resource Estimate. Mkango is targeting completion of an updated Mineral Resource Estimate by the end of 2018.

In terms of other aspects of the Feasibility Study, metallurgical optimisation is underway at laboratories in Australia and Canada. The work programme has been scaled up following receipt of the Talaxis funding and is focused on flotation, hydrometallurgy and acid regeneration.

The Environmental, Social and Health Impact Assessment is underway and being completed in accordance with World Bank Standards and Equator Principles. As noted above, Mkango retains an 80% interest in the Phalombe Licence.

# 2. THAMBANI, MWANZA DISTRICT

Lancaster was granted the Thambani Licence by the Malawi Minister of Natural Resources, Energy and Environment on September 10, 2010 in respect of an area, which was originally 468 sq km<sup>2</sup> in Thambani, Mwanza District, Malawi. Exploration has identified a number of areas with potential for uranium, tantalum, niobium, zircon and corundum.

The licence was originally issued by the Malawi Government on a three-year basis and was subsequently renewed on September 10, 2015 for an additional two year term when the Company requested a reduction in the licence area to the current 136.9 sq km. The licence has subsequently renewed for a further 2 years to September 8, 2019.

The exploration activities conducted during 2011 and 2012 included acquisition of Landsat7 and ASTER satellite imagery for the licence area, systematic ground radiometric surveys to confirm and detail previously-known airborne anomalies, reconnaissance geological mapping and litho-geochemical sampling programs. The work has identified a number of potential uranium targets over the Thambani Massif, which is mainly composed of nepheline syenite gneiss, forming two prominent ridges known as Thambani East Ridge and West Ridge. Historical airborne radiometric surveys and ground radiometric survey programs carried out by Mkango have revealed two distinct uranium anomalies occurring along the two ridges: A strong uranium anomaly, measuring approximately 3 km by 1.5 km, occurs along the length of the Thambani East Ridge with a north-south trend and a second uranium anomaly, measuring approximately 1.5 km by 0.4 km occurs on the West Ridge along the western contact of the nepheline syenite body with the eastern biotite-hornblende gneisses.

Initial results from follow up reconnaissance geochemical sampling conducted in 2013 returned locally anomalous uranium values, ranging up to 1,545 ppm U3O8, on both Thambani East Ridge and West Ridge. During the year ended December 31, 2014, the Company continued to progress the geological exploration studies on the Thambani project area, data analysis and geological modeling.

Mkango completed a trenching program across the Thambani Massif primarily focused on two sites of historical uranium exploration, known as the Chikoleka and Little Ngona targets. An initial set of 9 trenches, selected on the basis of anomalous ground radiometric results, have been re-examined and geochemically sampled across profiles from soil/overburden into bedrock.

The first set of assay results of 142 soil and rock chip samples returned variably anomalous U, Nb and Ta values in most trenches, ranging up to 4.70 % U3O8, 3.25 % Nb2O5 in soil and up to 0.42 % U3O8, 0.78 % Nb2O5 and 972 ppm Ta2O5 in rock chips, notably higher than results from the 2013 reconnaissance surface geochemical sampling program. Results associated with the 10 best U3O8 assays are summarized in the table below.

Preliminary mineralogical studies carried out on six rock samples from the Little Ngona River and Chikoleka targets, using Scanning Electron Microscopy ("SEM") at the Natural History Museum (NHM) London, indicate that pyrochlore group minerals, mainly betafite, are the principal carriers of U, Nb and Ta for these samples.

Trench No.	Profile	Sample No	From (m)	To (m)	Rock type	U308 Ppm	Nb2O5 ppm	Ta2O5 ppm
C3	А	U3622	0.5	1	Soil	47,094	32,462	45
C3	А	U3623	1	1.5	Soil	1,057	735	59
T11	С	U3508	0.5	1	Decomposed Feldspathic	4,231	7,805	743
T11	С	U3509	1	1.5	Decomposed Feldspathic	2,539	6,619	911
T11	В	U3505	0.5	1	Decomposed Feldspathic	2,369	5,424	972
T15	А	U3554	1	1.5	Feldspathic rock	1,657	4,346	67
T15	А	U3553	0.5	1	Feldspathic rock	1,616	3,754	431
T15	Е	U3565	0.5	1	Feldspathic rock	1,553	3,525	41
T14	D	U3549	1.5	2	Feldspathic rock	1,432	3,034	434
T19	С	U3604	1	1.5	Feldspathic rock	1,367	5,525	675

Assays from the 10 highest- U3O8 samples from the Thambani trenching program

On July 12, 2016, Mkango announced results of a new airborne geophysical survey covering approximately two thirds of its Thambani Licence. As with the Phalombe Licence, the survey was part of a US\$25 million World Bank funded nationwide airborne geophysical programme flown at 250 metre spacing.

The new airborne survey confirms the presence of the previously-identified uranium radiometric anomaly referred to above along the western flank of the Thambani East Ridge. The Little Ngona prospect, which previously yielded very encouraging uranium, niobium and tantalum values from geochemical sampling, is located at the northern end of this anomaly.

A further discrete uranium anomaly, orientated approximately east-west, is located to the south of this anomaly and has yet to be investigated in detail. The previously-identified uranium radiometric anomaly on the West Ridge and Chikoleka prospect in the north-west of the licence area, which also yielded very encouraging results from previous geochemical sampling, were not covered by this Survey.

A map showing the uranium radiometric anomalies superimposed on a topographic map, indicating local infrastructure, and a digital elevation model can be accessed via the following link: http://www.mkango.ca/i/maps/Results\_of\_Airborne\_radiometric\_survey\_on\_topo\_U\_July.jpg

The airborne survey also highlighted a number of magnetic anomalies not previously identified, including a 2.3 km linear magnetic high anomaly along the Thambani East Ridge, a further 1 km by 0.5 km magnetic high anomaly located to the north along the Thambani East Ridge, a magnetic low anomaly approximately co-incident with the abovementioned east–west orientated uranium anomaly and anomalies in a number of other locations. These areas require further investigation to determine the significance of the magnetic anomalies and whether they are related to mineralisation or geological features.

A map showing the magnetic anomalies superimposed on a topographic map, indicating local infrastructure, and a digital elevation model can be accessed via the following link: http://www.mkango.ca/i/maps/Results of Airborne magnetic survey on topo July 2016.jpg

In May 2017, Mkango announced the results of the latest work program on the Thambani Licence. Assay results from 85 rock grab samples returned high grade uranium, tantalum and niobium values, ranging up to  $3.3 \% U_3O_8$ ,  $1.9 \% Ta_2O_5$  and  $6.0 \% Nb_2O_5$ . 35 of the samples graded above 500ppm  $U_3O_8$  and 24 graded above 1,000ppm  $U_3O_8$ . Results associated with the twenty best  $U_3O_8$  assays are summarised in the table below. Grab samples are selective samples and are not necessarily representative of the mineralization hosted on the property

Sample no.	U <sub>3</sub> O <sub>8</sub> ppm	U <sub>3</sub> O <sub>8</sub> %	Ta <sub>2</sub> O <sub>5</sub> ppm	Ta <sub>2</sub> O <sub>5</sub> %	Nb <sub>2</sub> O <sub>5</sub> ppm	Nb <sub>2</sub> O <sub>5</sub> %
U3141	32590	3.26	19029	1.9	59200	5.92
U3183	31812	3.18	15224	1.52	60055	6.01
U3136	10131	1.01	4845	0.48	32478	3.25
U3111	8826	0.88	4191	0.42	14871	1.49
U3127	5468	0.55	3084	0.31	15138	1.51
U3135	5265	0.53	2747	0.27	13183	1.32
U3122	5250	0.52	2431	0.24	10820	1.08
U3125	4518	0.45	2028	0.2	8461	0.85
U3115	4352	0.44	2221	0.22	9789	0.98
U3121	4191	0.42	2390	0.24	13585	1.36
U3137	3988	0.4	1896	0.19	8707	0.87
U3124	3952	0.4	2100	0.21	9600	0.96
U3168	3664	0.37	2022	0.2	7137	0.71
U3129	3562	0.36	1625	0.16	6469	0.65
U3176	3264	0.33	1905	0.19	5864	0.59
U3131	2768	0.28	1293	0.13	5314	0.53
U3133	2231	0.22	1235	0.12	5971	0.6
U3118	2163	0.22	1330	0.13	3838	0.38
U3172	1749	0.17	1351	0.14	3924	0.39
U3119	1741	0.17	916	0.09	4592	0.46

Assays from the 20 highest grade U<sub>3</sub>O<sub>8</sub> samples from the 2017 Thambani sampling programme

The main objectives of the programme were to confirm previously identified high-grade mineralisation at the Little Ngona target, ground-truth new geophysical targets and complete further reconnaissance sampling along the East and West Ridges. New areas of high grade uranium, tantalum and niobium mineralisation were identified at the foot of the West Ridge and on the East Ridge. Most significantly, a radiometric high at the foot of the West Ridge yielded two of four highest grade samples of this phase of exploration.. The average grades for the 85 samples were 1,892 ppm U<sub>3</sub>O<sub>8</sub>, 1,029 ppm Ta<sub>2</sub>O<sub>5</sub> and 4,562 ppm Nb<sub>2</sub>O<sub>5</sub>. The median grades for the 85 samples were 343 ppm U<sub>3</sub>O<sub>8</sub>, 222 ppm Ta<sub>2</sub>O<sub>5</sub> and 958 ppm Nb<sub>2</sub>O<sub>5</sub>. The ranges of grades for the 85 samples were 1 – 32,590 ppm U<sub>3</sub>O<sub>8</sub>, 2 – 19,029 ppm Ta<sub>2</sub>O<sub>5</sub> and 0 – 60,055 ppm Nb<sub>2</sub>O<sub>5</sub>.

Mkango is currently evaluating strategic options for the Thambani Licence, including opportunities to joint venture or spin-off the project or other potential avenues to create value.

As noted above, Mkango retains a 100% interest in the Thambani Licence.

# 3. CHIMIMBE HILLS, MCHINJI DISTRICT

On November 14, 2017, Lancaster was granted the Chimimbe Licence by the Malawi Minister of Natural Resources, Energy and Environment in respect of an area of 98.48 km2 in Chimimbe Hills, Mchinji district, Malawi. Exploration has identified a number of areas with potential for laterite and saprolite hosted nickel, cobalt, chrome and other mineralization.

The Chimimbe Licence runs for a period of three years and is renewable for further periods of two years and two years thereafter if the terms and conditions of the licence have been met.

Mkango will re-evaluate the Chimimbe Hill deposit in the context of geophysical data produced by the recent World Bank airborne geophysical survey of Malawi, recent infrastructure developments in the region, potential synergies

with Songwe Hill and the Thambani uranium-tantalum-niobium project, options relating to sulphuric acid and/or alternative reagents supply and potential by-products, as well as opportunities to produce nickel and cobalt products for the battery electric vehicle market.

As noted above, Mkango retains a 100% interest in the Chimimbe Licence.

## 4. MAGINITO

Maginito is a new venture, incorporated on January 3, 2018 in the BVI, which is focused on downstream opportunities in the rare earths supply chain, in particular rare earth alloy, magnet and other technologies geared to accelerating growth in the electric vehicle market, including the Metalysis Joint Venture. On January 24, 2018, Talaxis invested £1 million (US\$1.4 million) for a 24.5% interest in Maginito. Mkango holds a 75.5% interest in Maginito. Permanent magnets are critical components for most electric vehicles; direct drive wind turbines and many other high growth applications. The research and development programme with Metalysis is underway focused on the development of advanced alloys using neodymium or praseodymium with other elements for use in permanent magnets. Neodymium is a key rare earth component at Songwe Hill.

## **RESULTS OF OPERATIONS**

The selected period information and summary of financial results below is derived from and should be read in conjunction with the Company's condensed interim consolidated financial statements for the three months ended March 31, 2018 and 2017:

# SUMMARY OF QUARTERLY FINANCIAL RESULTS

The following is selected financial data from the company's quarterly financial statements for the last eight quarters ending with the most recently completed quarter, being the three months ended March 31, 2018:

Total Operations Attributable To	2018		2017	1	2016			
Common Shareholders	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2
Interest income	\$613	(105)	\$225	(113)	\$2	\$2	\$3	\$-
Expenses	720,723	556,759	254,259	264,783	318,050	407,685	305,701	224,235
Other items	9,027	315,206	(61,723)	(120,327)	65,698	183,580	(92,390)	199,117
Warrant fair value loss (gain)	139,255	769,745	(136,752)	118,324	185,168	(1,119,538)	178,006	275,861
Net income (loss) for period	(899,439)	(1,641,815)	(55,559)	(262,893)	(568,914)	528,275	(391,314)	(699,213)
Loss per share - basic and diluted	\$(0.008)	\$(0.018)	\$(0.003)	\$(0.003)	\$(0.010)	\$0.020	\$(0.010)	\$(0.020)

The financial data for the eight periods reported have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB) and interpretations issued by the International Financial Reporting Interpretations Committee ("IFRIC"), in effect on March 31, 2018. The financial data is presented in US dollars.

The Company's principal activities require expenditures which include both exploration and general and administrative expenses.

## FIRST QUARTER 2018 COMPARED TO FIRST QUARTER 2017

The Company recognized a net loss attributable to common shareholders of \$899,439 and \$568,914 for the three months ended March 31, 2018 and 2017, respectively. The \$330,525 increase in net loss attributable to common shareholders was comprised of \$52,623 for general and administrative expenses and \$393,918 for mineral exploration expenditures offset by a decrease in the warrant revaluation expense of \$45,913 and a reduction in accretion expense of \$18,026 and a decrease in the foreign exchange loss of \$116,737. Mineral exploration expenditures increased by \$393,918 as a result of the activities underway at the Songwe Hill project area in Malawi and costs associated to advance the collaborative research and development programme with Metalysis. The Company is preparing for the diamond drilling program on Songwe Hill which is expected to commence in the second quarter of 2018. There was also a \$52,623 increase in general and administrative expenditures which was primarily due to a \$32,239 increase in fees paid to Directors and Officers of the Company, a \$10,990 increase in

legal fees, a \$21,824 increase in travel related expenses and a \$5,853 increase in costs associated with maintaining a dual listed public company offset by a decrease in audit and office costs. The increase in the general and administrative costs was the result of the work in relation to the Talaxis Agreement and increased activities in Malawi.

## FIRST QUARTER 2018 COMPARED TO FOURTH QUARTER 2017

The Company recognized a net loss attributable to common shareholders of \$899,439 for the three months ended March 31, 2018 compared to a net loss attributable to common shareholders of \$1,641,815 for the three months ended December 31, 2017. The \$742,376 decrease in net loss attributable to common shareholders was comprised of an decrease of \$630,354 for the warrant fair value expense, a \$65,252 decrease general and administrative costs, a decrease of \$302,797 for foreign exchange loss and a \$264,039 decrease in other expenses (share-based payments, accretion, depreciation, AIM listing expense and loss on deferral of related party consulting fees) offset by a \$490,493 increase in mineral exploration expenditures.

- General and administrative costs were lower for the three months ended March 31, 2018 due to lower office expenses and shareholder compliance expenses.
- The mineral exploration expenditures were higher for the three months ended March 31, 2018 as compared to the three months ended December 31, 2017 because the Company is preparing for the diamond drilling program expected to commence in the second quarter of 2018 and for expenses incurred to advance the collaborative research and development programme with Metalysis.
- Share based payments were \$230,964 lower for the three months ended March 31, 2018 as compared to the three months ended December 31, 2017 as a result of the \$259,896 one-time revaluation expense of the warrants issued to Noble and Zenith on December 30, 2016, whereby the expiry date was extended by 2 years to December 31, 2020 in October 2017. In comparison, for the three months ended March 31, 2018 there were no exceptional expenses.

# **RELATED PARTY TRANSACTIONS AND BALANCES**

- a) Leo Mining Exploration Ltd. ("Leo Mining") is considered related by virtue of common directors and officers who have an ownership in and exercise significant influence over both companies. The Company and Leo Mining have formalized their relationship with respect to services provided by Leo Mining. A written agreement sets out the types of services which may be provided and the costs associated with such services. Generally, the Company repays the disbursements made by Leo Mining on its behalf. During three months ended March 31, 2018, the Company had incurred costs of \$31,980 (March 31, 2017 \$12,096) for administrative services. As of March 31, 2018 the Company has an outstanding payable to Leo Mining in the amount of \$14,880 (March 31, 2017 \$14,681). The amount is unsecured and due on demand. Interest of 2% may be incurred on the outstanding amount annually; however, this has been waived since 2013.
- b) Talaxis is considered a as its percentage of actual voting interests in combination with potential voting interests exceeded 20% giving it significant influence over the Company. Transactions and balances with Talaxis are disclosed throughout the consolidated financial statements.
- c) The Company incurred costs of \$136,930 (2016 \$63,086) for key management and director fees and related costs for the three months ended March 31, 2018. Included in current liabilities due to related parties at March 31, 2018 was \$37,271 (2017 \$8,301). The current liabilities due to related parties are unsecured, due on demand and non-interest bearing.
- d) On April 25, 2018, the Board of Directors resolved that three of the directors will be entitled to a payment of \$16,000 per year while the Chairman of the Board is entitled to a payment of \$40,000 per year. The compensation will be paid quarterly. An accrual of \$15,797 is reported in the condensed interim consolidated financial statements for the three months ended March 31, 2018.
- e) On May 12, 2016, the Company entered into new consulting agreements (the "Consulting Agreements") with its Chief Executive Officer and President (the "Executive Directors") whereby a total of £145,619 (\$204,129), comprising deferred consulting fees payable to the Executive Directors were accrued between March 2015 and May 12, 2016. Additional consulting fees were accrued from May 12, 2016 until July 31, 2017, which increased the accrual by £210,000 (\$289,332). On March 2, 2018, £177,810 (\$212,764) was paid to the Executive Directors. Under the terms of the Consulting Agreements, the deferred consulting fees in addition to

the balance of unpaid and accrued consulting fees subsequent to May 12, 2016 (£32,190 (\$45,124)) are now payable.

The Company recorded a gain on deferral of related party consulting fees at the time of initial deferral and upon deferral of each monthly amount. Accretion is recorded at an effective interest rate of 20% up to the estimated maturity date, May 12, 2018, based on the consulting fees payable under the Agreement. The following table provides a reconciliation of amounts reflected in the condensed interim consolidated financial statements for the three months ended March 31, 2018:

		March 31, 2018	December 31, 2017
Balance, beginning of year		\$ 448,380	\$ 243,097
Consulting fees deferred (paid) during the year	(e)	(244,969)	125,989
Loss (gain) on deferral of consulting fees		-	(20,307)
Accretion		19,363	68,271
Foreign exchange loss/(gain)		12,842	31,330
Balance, end of year		\$ 235,616	\$ 448,380
Due to related parties with common directors	(a)	14,880	12,686
Due to key management and directors	(c) (d)	53,068	17,743
Total due to related parties		\$ 303,564	\$ 478,809

# **EXPENDITURES**

	For the thr			For the three	For the three months ended	
	March 31,			March 31,	December	
	2018	2017	Change	2018	31, 2017	Change
General and administrative						
Audit and tax management	-	11,906	(11,906)	-	10,191	(10,191)
Legal fees	35,361	-	35,361	35,361	4,491	30,870
Director and Officer salaries	129,891	52,562	77,329	129,891	56,218	73,673
Salaries and consulting fees	21,195	25,057	(3,862)	21,195	34,936	(13,741)
Office	26,094	42,752	(16,658)	26,094	71,928	(45,834)
Travel	79,227	9,007	70,220	79,227	17,814	61,413
Shareholder compliance & investor relations	39,124	20,291	18,833	39,124	83,873	(44,749)
Sub total - General and administrative	330,892	161,575	169,317	330,892	279,451	51,442
Malawi exploration expenditures						
Songwe Hill						
Mineral extraction development	43,935	59,111	(15,176)	43,935	-	43,935
Government fees	11,765	11,715	50	11,765	-	11,765
ESHIA	23,912	97	23,815	23,912	3,609	20,303
Drilling programme	170,922	-	170,922	170,922	326	170,596
Consulting fees	53,303	11,425	41,878	53,303	2,288	51,015
Grant refund	-	-	-	-	(18,824)	18,824
Malawi office and camp expenses	48,526	18,060	30,466	48,526	16,434	32,092
Maginito research & development				-	-	-
Research & development	281,372	-	281,372	281,372	-	281,372
Sub total - Mineral exploration	633,735	100,408	533,327	633,735	3,833	629,902
Other Expenses						
Share-based payments	39,723	53,279	(13,556)	39,723	270,687	(230,964)
Accretion	19,363	37,389	(18,026)	19,363	21,178	(1,815)
Depreciation	2,951	2,788	163	2,951	2,788	163
AIM listing expense	16,972	-	16,972	16,972	48,308	(31,336)
Loss (gain) on deferral of related party fees	-	(30,982)	30,982	-	116	(116)
Foreign exchange (gain) loss	(28,475)	59,291	(87,766)	(28,475)	245,603	(274,078)
Warrant revaluation	139,255	185,168	(45,913)	139,255	769,745	(630,490)
Total Expenses	\$1,154,416	\$568,916	\$585,500	\$1,154,416	\$1,641,709	\$(487,293)

## Three months ended March 31, 2018 compared to March 31, 2017

Total expenses include those attributable to common shareholders and to the NCI. Total expenses increased by \$585,500 from \$568,916 for the three months ended March 31, 2017 to \$1,154,416 for the three months ended March 31, 2018, as a result of the following factors:

a) <u>General and administrative</u>: General and administrative expenses for the three months ended March 31, 2018 were \$169,317 higher than expenses recognized for the three months ended December 31, 2017. General and administrative expenses were higher due to a \$70,220 increase in travel and \$35,361 increase in legal costs as management focused their efforts on advancing the exploration program for Songwe Hill. In addition, consulting fees were \$77,329 higher for the three months ended March 31, 2018 due to an increase in compensation paid to two key officers and the first payment of compensation to Directors.

- b) <u>Mineral Exploration</u>: Mineral exploration expenses were \$533,327 higher for the three months ended March 31, 2018 compared to the same period in 2017. There was a \$170,922 increase in drilling costs due to the preparation which is underway on Songwe Hill to undertake a diamond drilling programme. Consulting fees were \$41,878 higher and general camp expenses were \$30,466 higher for the three months ended March 31, 2018 which were also due to the work that is underway to prepare for the diamond drilling programme. Songwe Hill environmental and social and health impact assessment costs were \$23,815 higher for the three months ended March 31, 2018 compared to the same period in 2017. In addition, a \$281,372 payment was made to Metalysis to advance the collaborative research and development programme being undertaken through Maginito.
- c) <u>AIM Listing Expense</u>: The AIM listing expense resulted in a \$16,972 increase in expenses for the three months ended March 31, 2018 compared to the same period in 2017. These costs were incurred in payments to the nominated advisor which is a requirement of maintaining the AIM listing.
- d) <u>Warrant Revaluation</u>: The warrant revaluation resulted in a \$45,913 decrease in expenses for the three months ended March 31, 2018 compared to the same period in 2017. The valuation of the warrants decreased primarily as a result of 9,217,346 warrants held by common shareholders being exercised between November 2017 and March 2018 and thus were removed from the valuation calculation.
- e) <u>Other Expenses</u>: The foreign exchange expense for the three months ended March 31, 2018 was \$87,766 lower than the expense recognized during the same period in 2017 due to fluctuations in the Euro, Canadian dollar and UK Sterling exchange rates, relative to the US reporting currency. The remaining differences for the three months ended March 31, 2018 compared to the three months ended March 31, 2017, are related to changes in accretion, loss on deferral of related party fees and depreciation.

## Three months ended March 31, 2018 compared to the three months ended December 31, 2017

Total expenses include those attributable to common shareholders and to the NCI. Total expenses decreased by \$487,293 from \$1,641,709 for the three months ended December 31, 2017 to \$1,154,416 for the three months ended March 31, 2018, as a result of the following factors:

- a) <u>Warrant Revaluation</u>: The warrant revaluation resulted in a \$630,490 decrease in expenses for the three months ended March 31, 2018 compared to the three months ended December 31, 2017. The valuation of the warrants decreased as a result of 5,620,831 warrants being exercised between January 1, 2018 and March 31, 2018 and thus being removed from the valuation calculation. In addition, some of the key inputs for the Black-Scholes model calculation, namely volatility and the closing share price, changed at March 31, 2018 when compared to December 31, 2017 values which decreased the expense.
- b) General and administrative: General and administrative expenses for the three months ended March 31, 2018 were \$51,441 higher than expenses recognized for the same period in 2017. General and administrative expenses were higher due to a \$61,413 increase in travel and \$30,870 increase in legal costs as management focused their efforts on advancing the exploration program for Songwe Hill. In addition, consulting fees were \$73,673 higher for the three months ended March 31, 2018 due to an increase in compensation paid to Director's and the Executive Officers. The increase to expenses was offset by a reduction in audit fees (\$10,191), salaries and consulting fees (\$13,741), office costs (\$45,834) and shareholder compliance costs (\$44,749). These costs were lower for the three months ended March 31, 2018 because additional expenses are generally incurred at year end and were reflected in the costs reported at December 31, 2017.
- c) <u>Mineral Exploration</u>: Mineral exploration expenses were \$629,902 higher for the three months ended March 31, 2018 compared to the three months ended December 31, 2017 due to the preparation which is underway on Songwe Hill to undertake a diamond drilling programme. In addition, a \$281,372 payment was made to Metalysis to advance the collaborative research and development programme during the three months ended March 31, 2018.
- d) <u>Other Expenses:</u> Share based compensation costs were \$230,964 lower for the three months ended March 31, 2018 as compared to the three months ended December 31, 2017. During the three months ended December 31, 2017 expiry date on the warrants issued to Noble and Zenith were extended. The additional costs associated with this change were reflected in the share based compensation costs. In addition, there was a \$274,078 decrease in foreign exchange expenses. The change was primarily due to the gain

recognized on the receipt of the investment funds from Talaxis during the three months ended March 31, 2018.

# **DISCLOSURE CONTROLS AND PROCEDURES**

In connection with National Instrument 52-109 (Certificate of Disclosure in Issuer's Annual and Interim Filings) ("NI 52-109"), the Chief Executive Officer and Chief Financial Officer of the Company have filed a Venture Issuer Basic Certificate with respect to the financial information contained in the condensed interim consolidated financial statements for the three months ended March 31, 2018 and this accompanying MD&A (together, the "Interim Filings").

In contrast to the full certificate under NI 52-109, the Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures and internal control over financial reporting, as defined in NI 52-109. For further information the reader should refer to the Venture Issuer Basic Certificates filed by the Company with the Interim Filings on SEDAR at www.sedar.com.

# COMMITMENTS

The Company holds three licenses in Malawi with commitments to pay annual licensing fees and to meet spending commitments for exploration expenses every two years. On January 5, 2018, the Company paid \$11,765, for the annual fees due on the Phalombe license for 2018.

The Company is continuing to meet the terms and conditions of its three exploration licences and provides updates to Malawi's Ministry of Mining on a regular basis regarding progress of its work programs.

## **ISSUED AND OUTSTANDING SHARE INFORMATION**

As at the date of this report, the Company has 108,650,055 Common Shares and 50,404,080 warrants issued. The Company has 9,840,000 stock options issued.

# **OFF BALANCE SHEET ARRANGEMENTS**

The Company is not party to any off balance sheet arrangements or transactions.

# **ACCOUNTING POLICIES AND ESTIMATES**

Management is required to make judgments, assumptions and estimates in the application of IFRS that have a significant impact on the financial results of the Company. Details outlining Mkango's accounting policies are contained in the notes to the consolidated audited financial statements for the year ended December 31, 2017.

# **RISK FACTORS**

#### Environmental Risk

The Company is subject to substantial environmental requirements. The current and anticipated future operations and exploration activities of the Company in Malawi require permits from various governmental authorities and such operations and exploration activities are and will be governed by local laws and regulations governing various elements of the mining industry including, without limitation, land use, the protection of the environment, prospecting, development, production, exports, taxes, labour standards, occupational health, waste disposal, toxic substances, and other matters. Globally, environmental legislation is evolving towards stricter standards and enforcement, more stringent environmental impact assessments of new mining projects and increasing liability exposure for companies and their directors and officers. There is no assurance that future environmental regulations will not adversely affect the Company's operations.

#### Exploration and Commercial Viability Risk

The Company does not currently produce rare earth elements from Songwe Hill where the Company is currently about to commence the Feasibility Study. While the Company has produced the Pre-feasibility Study, there is no assurance that the Feasibility Study will demonstrate the commercial viability of the project. Some of the factors that affect the financial viability of a given mineral deposit include its size, grade and proximity to infrastructure and the realizable value of the minerals extracted. These factors include, but are not limited to, government approval for mining licences and exploration licence extensions applications, government regulations, taxes, royalties, land

tenure, land use, environmental protection and reclamation and closure obligations. All or some of these factors may have an impact on the economic viability of Songwe Hill.

#### Macroeconomic Risk

From a macroeconomic perspective, ongoing global market uncertainty has led to a significant reduction in risk appetite with respect to funding investment into mining companies. The ability for mining companies to access capital through traditional means may be significantly diminished, with the possible long-term result that projects may take longer to develop or may not be developed at all.

### Foreign Countries and Political Policy Risk

The Company has interests in properties that are located in the developing country of Malawi. The Company's mineral exploration may be affected in varying degrees by political instability and government regulations relating to foreign investment and the mining industry. Changes, if any, in mining or investment policies or shifts in political attitude in Malawi may adversely affect the Company's operations. Operations may be affected in varying degrees by government regulations with respect to, but not limited to, restrictions on production, price controls, export controls, currency remittance, direct and indirect taxes, tax assessments, royalties, expropriation of property, foreign investment, maintenance of claims, environmental legislation, land use, land claims of local people, water use and mine safety. Failure to comply with applicable laws, regulations, and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory of judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions.

## Resource and Reserve Risk

Estimates of reserves and resources are inherently uncertain. There is a degree of uncertainty attributable to the calculation of reserves, resources and corresponding grades being mined or dedicated to future production. Until reserves or resources are actually mined and processed, the quantity of reserves or resources and grades must be considered as estimates only. In addition, the quantity of reserves or resources may vary depending on rare earth prices, operating costs and mining efficiency. Any material change in the quantity of reserves, resources or grade may affect the economic viability of Songwe Hill.

#### Mining Risks

The mining industry has been subject to considerable price volatility, over which companies have little control, and a material decline in the price of rare earth elements could result in a significant decrease in the Company's future anticipated revenues. The mining industry has inherent business risks and there is no assurance that products can continue to be produced at economical rates or that produced reserves will be replaced.

Readers are cautioned that the foregoing is a summary only of certain risk factors and is not exhaustive and is qualified in its entirety by reference to, and must be read in conjunction with the additional information on these and other factors that could affect Mkango's operations and financial results that are included in reports on file with Canadian securities regulatory authorities and may be accessed through the SEDAR website (www.sedar.com).

# FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

All financial instruments are initially recognized at fair value on initial recognition of the instrument. Measurement in subsequent periods depends on whether the financial instrument has been classified as fair value through profit or loss ("FVTPL"), held for trading, loans and receivables, financial assets available-for-sale, financial assets held-to-maturity, and other financial liabilities.

Financial assets and financial liabilities classified as FVTPL are measured at fair value with changes in fair value recognized in net earnings or loss. Financial assets available-for-sale are measured at fair value, with changes in fair value recognized in other comprehensive income. Financial assets held-to-maturity, loans and receivables and other financial liabilities are measured at amortized cost using the effective interest method of amortization.

Cash and cash equivalents are designated as FVTPL and are measured at carrying value, which approximates fair value due to the short-term nature of these instruments. Accounts receivable are designated as loans and receivables. Accounts payable and accrued liabilities and due to related parties are designated as other financial liabilities.

The fair value of cash and cash equivalents, accounts receivable, accounts payable and amounts due to related party approximates the carrying value. Financial instruments and share-based payment transactions are measured at fair value. The main financial risks affecting the Company are discussed below:

## Fair values

Financial assets and liabilities have been classified into categories that determine their basis of measurement and for items measured at fair value, whether changes in fair value are recognized in the consolidated statement of comprehensive loss. Those categories are fair value through profit or loss; loans and receivables; and, for most liabilities, other financial liabilities.

In establishing fair value, the Company used a fair value hierarchy based on levels defined below:

- Level 1 quoted prices in active markets for identical assets or liabilities;
- Level 2 inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs for the asset or liability that are not based on observable market data.

Cash and cash equivalents are measured at level 1; warrant derivative financial instruments are measured at level 2.

The carrying value of accounts receivable, subscriptions receivable, accounts payable and accrued liabilities and current liabilities due to related parties, approximates the fair value due to their short-term nature and maturity. Warrants with an exercise price in a currency other than the functional currency are recorded as a derivative liability and carried at fair value.

The Company has issued share purchase warrants to common shareholders, exercisable for common shares. The exercise price of the share purchase warrants is fixed in Canadian dollars or British Pounds Sterling and the functional currency of the Company is the US dollar. Therefore, warrants are considered a derivative, as a variable amount of cash in the Company's functional currency will be received on exercise. The category "Warrants issued" below does not include warrants issued to brokers and agents since they fall under the scope of IFRS 2, share-based payments.

	A	eighted verage xercise Price (CAD)	1	Veighted Average Exercise Price (GBP)	Weighted Average Years Remaining	Number of Warrants	Amount
Balance at December 31, 2016	\$	0.39	£	0.066	1.46	45,372,314	\$ 1,009,367
Warrants exercised		-		-	-	(3,596,515)	(364,385)
Foreign exchange effect		-		-	-	-	116,800
Fair value change at December 31, 2017		-		-	-	-	936,485
Balance at December 31, 2017	\$	0.39	£	0.066	1.27	41,775,799	\$ 1,698,267
Warrants exercised		-		-	-	(5,620,831)	(430,669)
Foreign exchange effect		-		-	-	-	(35,512)
Fair value change at March 31, 2018		-		-	-	-	139,255
Balance at March 31, 2018	\$	0.39	£	0.066	1.02	36,154,968	\$ 1,371,341

The fair value of each warrant issued is determined at each reporting period using the Black-Scholes pricing model.

In order to determine the fair value of the Company's outstanding warrants, assumptions are made with regards to the future value of the risk free interest rate, the Company's share price volatility, the Company's share price and the foreign exchange rate. Therefore, the fair value of the outstanding warrants is an estimate.

Non-current and current liabilities due to related parties that constitute a deferred payment are initially recorded at fair value, which is determined by discounting the liability using an applicable market rate.

#### Credit risk

Credit risk is the risk of loss associated with counterparty's inability to fulfill its payment obligations. The Company's credit risk is primarily attributable to cash and cash equivalents, receivables and the receipt of the second

tranche of financing from Talaxis under the Agreement and the receipt of the remainder of the grant funding from the University of Exeter.

#### Concentration risk

The majority of the Company's cash and cash equivalents are held by one major international bank. Deposits held with this bank may exceed the amount of insurance provided on such deposits. Generally these deposits may be redeemed upon demand and bear minimal risk.

#### Foreign currency rate risk

The functional and reporting currency of the Company is the United States dollar. The Company enters into transactions denominated in Canadian dollars, British sterling, United States dollars, South African rand and Malawian kwacha. The Company raises its equity in British sterling and Canadian dollars and then purchases Canadian dollars, Euros, British sterling, United States dollars, South African Rand and Malawi Kwacha funds to settle liabilities, as required.

As at March 31, 2018 and 2017, the following cash balances were held by the Company. The value of cash held by the Company has been adjusted for the valuations of derivative financial instruments and amounts due to related parties:

	2018		2017
Cash and cash equivalents:			
Canadian dollars	\$ 41,073	\$	155
United States dollars	5,866		2,162
Euro and UK Sterling	8,506,349		661,501
Malawi Kwacha	2,785		7,271
Warrants – derivative financial instruments	(1,371,341)	(	1,182,566)
Due to related parties	(303,564)		(287,976)
	\$ 6,881,168	\$	(799,453)

A 5% reduction in the value of the Canadian dollar, Euro and British pound in comparison to the United States dollar would cause a net loss of approximately \$428,000. A 5% change in the value of the Malawian Kwacha in relationship to the United States dollar would not cause a material change in net loss.

#### Liquidity Risk

Liquidity risk includes the risk that, as a result of the Company's operational liquidity requirements:

- The Company will not have sufficient funds to settle a transaction on the due date;
- The Company will be forced to sell financial assets at a value which is less than what they are worth; or
- The Company may be unable to settle or recover a financial asset at all.

The Company's operating cash requirements, including amounts projected to complete the Company's existing capital expenditure program and the Feasibility Study are continuously monitored and adjusted as input variables change. As these variables change, liquidity risks may necessitate the Company to conduct equity issues or obtain project debt financing.

The Company has in the past relied on equity financings to fund its activities. However, given the Definitive Agreements, the Company does not anticipate the need to raise additional equity capital in the short term. Should it, however, need to raise additional funds and while it has been successful in raising funds in the past, there is no guarantee that adequate funds will be available in the future.

The following table outlines the maturities of the Company's liabilities as at March 31, 2018:

					Greater	than 1
	Contractual (	Cash Flows	Less than 1 Year			Year
Accounts payable and accrued liabilities	\$	133,108	\$	133,108	\$	-
Due to related parties	\$	303,564	\$	303,564	\$	-

## Capital Risk

The Company's objective when managing capital is to maintain a flexible capital structure which will allow it to execute its capital expenditure program, which includes expenditures in mining activities which may or may not be successful. The Company has no externally imposed capital requirements. Prior to the Talaxis transaction, the Company depended on equity placements to remain solvent. Should it need to do so again in the future, cash from these placements may or may not be available depending on market or other conditions.

# LIQUIDITY AND CAPITAL RESOURCES

As of March 31, 2018, the Company had a working capital surplus of \$8,221,989 (March 31, 2017 – \$564,532) and an accumulated deficit of \$4,696,779 (December 31, 2017 - \$14,322,462).

The operations of the Company are currently being funded by the £6 million of investment proceeds received from Talaxis by two subsidiaries, Lancaster BVI and Maginito, in January 2018, and from the proceeds received upon the exercise of warrants on January 12, 2018, January 25, 2018, January 26, 2018 and March 1, 2018. Since December 31, 2017, 5,770,831 warrants have been exercised for aggregate cash consideration of \$529,971.

The Company has outstanding warrants (other than those held by brokers, agents and Talaxis) as set out in this table:

	Weighted	Weighted		
	Average	Average	Weighted	
	Exercise	Exercise	Average	
	Price (CAD)	Price (GBP)	Years Remaining	Number of Warrants
Balance at December 31, 2016	\$ 0.39	£ 0.066	1.46	45,372,314
Warrants exercised	-	-	-	(3,596,515)
Balance at December 31, 2017	\$ 0.39	£ 0.066	1.27	41,775,799
Warrants exercised	-	_	_	(5,620,831)
Balance at March 31, 2018	\$ 0.39	£ 0.066	1.02	36,154,968

In addition to the 36,154,968 outstanding warrants held by common shareholders above, there are an additional 14,249,112 broker, agent and Talaxis warrants outstanding which were issued to agents in fundraisings and to Talaxis for ongoing advice, for a total of 50,404,080 warrants outstanding.

In addition, the Company has received  $\notin$ 49,589 (%60,334) from the University of Exeter to advance the HiTech AlkCarb project. In combination with the previously received funds, the Company has received  $\notin$ 92,200 (\$108,326), as of the date of this report. The Company expects to receive up to a total of  $\notin$ 150,000 (\$202,725). Expenses associated with building exploration expertise in hi-tech raw materials, improving and developing interpretation of geophysical and down-hole data will qualify for use of the grant funding.

While investments by Talaxis are in subsidiaries of Mkango, the Company has agreed with Talaxis that certain expenses of Mkango will be reimbursed by funds held by Lancaster and Maginito in return for Mkango's management of the subsidiaries. Therefore, the Company expects that funding received from Talaxis, as well as funds received from the exercise of warrants and grant funding by the University of Exeter, will be sufficient to fund Mkango's operations in the near term.

The Company's consolidated cash balance at March 31, 2018 was \$8,556,074 (December 31, 2017 - \$691,276).

Other than as disclosed herein, the Company is not aware of any trends, uncertainties, demands, commitments or events, which are reasonably likely to have a material effect on the Company's business, financial condition or results of operations.

# **DIRECTORS AND OFFICERS AS AT MARCH 31, 2018**

William Dawes, Director and Chief Executive Officer Alexander Lemon, Director and President Derek Linfield, Chairman of the Board of Directors David Berg, Audit Committee Chairman, Director and Corporate Secretary Adrian Reynolds, Director (Audit Committee) Eugene Chen, Director (Audit Committee) Sandra Evans, Chief Financial Officer