

# KORAB HOUSE

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**Issued Capital** 

Shares: 297 Mln Last Price: 2.8 cents Capital: \$8.32 Mln

**Listing Codes** 

ASX: KOR BERLIN: C6S.BE

**Directors** 

Andrej K. Karpinski Executive Chairman Director

> Rodney H. Skeet Non-executive Director

Daniel A. Smetana Non-executive Director

Anthony G. Wills Non-executive Director

Projects

Winchester (Rum Jungle, NT) Magnesium carbonate (MgCO3)

Geolsec (Rum Jungle, NT) Phosphate rock (P2O5)

Rum Jungle, NT)
Au, Ag, Zn, Pb, Ni, Cu, Co,
Sc, Mn

Mt. Elephant (Ashburton, WA) Au, Cu

> Karratha (Pilbara, WA) Au, Co, Cu

Marble Bar/Nullagine (Pilbara, WA) Au. Co. Cu. Li 7 March 2018

# WINCHESTER MAGNESITE DIRECT SHIPPING ORE FEASIBILITY STUDY RESULTS (CAPEX AND OPEX)

Korab Resources Ltd ("Korab", or "Company") (ASX: KOR) is pleased to provide the results of the update of the pre-feasibility study to develop Winchester magnesite deposit as a direct shipping ore (DSO) operation. This study was completed by the Company using information collated and prepared by Golder Associates Pty Ltd, the Company, URS, Bateman Tenova, and Devmin Consultants. Following the current update, this is now a feasibility level study; however, for risk management reasons the Company believed it would be prudent to continue using the original accuracy of the cost estimates of +/-30% and consequently a 30% contingency has been added to all capital and operating costs.

Assumptions and inputs (mining work rates, excavation and earthmoving costs, labour costs, maintenance costs, equipment and consumables costs, as well as other input variables) underpinning this study which generated the capital and operating costs estimates were sourced from appropriate consultants and contractors. Whilst the aggregate estimates of all components of capital and operating costs are provided further in this report (see Table 1 and Table 2), the specific detailed work rates and prices which were quoted by third parties are commercially sensitive and are not disclosed in this report.

This study assessed capital (CAPEX) and operating costs (OPEX) of Winchester project supplying a direct shipping ore crushed on site to average 25mm and screened to separate fines (minus 6mm).

As part of this update, the Company evaluated the benefits of utilising automatic mineral ore sorter to sort crushed rock into multiple streams which would reduce the volume of waste and increase the proportion of saleable product.

The output from the quarry would consist of crushed magnesite rock with a waste stream consisting of magnesite fines, dolomite, talc, and waste rock (including polymetallic ores), which would be stored on site. The estimated ratio of coarse saleable magnesite rock to fines used in this study was 80%. The study revealed that there may be a market for magnesite fines, dolomite, talc, and other waste rock; however any potential revenue from sale of these has not been included in this study.

This is an update of the study results initially released to the market on 13 January 2015. The Company confirms that all the material assumptions underpinning the production target, or the forecast financial information derived from a production target, in the initial public report continue to apply and have not materially changed. Additional information (covering NPV, gross earnings, EBITDA, and cashflow) was released to the market on 10 March 2015.

Korab is currently finalising the estimates of revenues and various additional material factors such as costs of haulage, port charges, interest, debt repayment, royalties, overheads, etc. Inclusion of this additional information will allow estimation of updated approximate NPV, gross earnings, EBITDA, and cashflow). This estimation is expected to be completed shortly and will be released to the market when available.

This study is based solely on indicated mineral resource. Inferred mineral resource shown in Table 7 was not used in the estimation of the production target, or the forecast financial information derived







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> Mt. Elephant (Ashburton, WA) Au, Cu

> > Karratha (Pilbara, WA) Au, Co, Cu

Marble Bar/Nullagine (Pilbara, WA) Au, Co, Cu, Li from the production target. The estimated mineral resources underpinning this study have been prepared by a competent person or persons in accordance with the requirements in the JORC Code.

Deposit is located south of Darwin in the Northern Territory, approximately 85km by road, less than a hundred meters from sealed road, and less than 5km from railway line. For location of the project please see Figure 1, and Figure 4. The deposit is a shallow, flat laying body covered by up to 5 meters of unconsolidated soil and gravel overburden. Figure 3 shows the test mining of magnesium carbonate rock at Winchester. Surface (top of the overburden) and the top of the magnesium carbonate rock are clearly marked in the photo. Personnel are visible in the open pit setting the explosive charges. Blasted rock was then excavated using hydraulic excavators and moved to the pad using trucks.

### CAPITAL COST ESTIMATES

Capital costs of the Winchester project have been estimated at approximately \$2.4 million to \$2.5 million (including 30% contingency). Components of the capital costs of the project are shown in Table 1.

Results of the study show that main components of capital expenditure are not sensitive to output capacity and that the capacity is primarily the function of demand for the DSO magnesite rock. The capacity of the project would therefore ultimately depend on any off-take and/or long term sale agreements. The study assumed that contractors would be used for majority of project operating tasks thus reducing capital costs by limiting the need for owner operated equipment. Capital cost has been estimated for the development of open pit operations with required access roads, bunding, pads, and other site infrastructure, waste and water management etc.

Several development variants were evaluated initially. In the end, a two-stage, bench-by-bench development was selected as the optimum variant for this feasibility study update. Under this variant, estimated capital costs were significantly reduced due to (among others) smaller volume of overburden to be removed prior to commencement of mining, no requirement for construction and maintenance of a diversion channel, and a reduced waste and water management requirements.

The study was based on a conceptual mine that could operate at various capacity levels: 375,000T/y ROM capacity, 750,000T/y ROM capacity and 1,000,000T/y ROM capacity. These levels were selected on the basis of Korab's discussions with potential buyers of the magnesite rock. Korab is the sole marketing agent for all rock produced by Korab's wholly owned subsidiary AusMag Pty Ltd. AusMag Pty Ltd is the owner and operator of the Winchester Project.

The layout of the project under two-stage, bench-by-bench operating scenario with stage-1 open pit quarry and quarry infrastructure is shown in Figure 2.

The estimated capital costs are rounded to the nearest significant digit and are provided as ranges.

Table 1 Project estimated capital costs

SUMMARY	FROM	TO
WATER MANAGEMENT	390,000	400,000
SITE INFRASTRUCTURE	580,000	590,000
WASTE PRODUCTS DUMPS	100,000	110,000
QUARRY	810,000	820,000
SUBTOTAL	1,880,000	1,920,000
CONTINGENCY (30%)	564,000	576,000
TOTAL ESTIMATE	2,444,000	2,496,000







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Marble Bar/Nullagine (Pilbara, WA) Au, Co, Cu, Li

#### OPERATING COST ESTIMATES

Estimated approximate project operating costs at various output capacities are shown in **Table 2**, **Table 3**, and **Table 4**. The estimated operating costs are rounded to the nearest significant digit and are provided as ranges.

Table 2 Project estimated operating costs (shovel and truck, drill and blast) at 375KT/Y capacity

<u>Description</u>	From	<u>To</u>
WATER MANAGEMENT (\$/YR.)	180,000	190,000
WASTE DUMPS (\$/YR.)	190,000	200,000
MINE AND CRUSHING (\$/YR.)	6,053,000	6,054,000
SUBTOTAL (\$/YR.)	6,423,000	6,444,000
CONTINGENCY (30%)	1,926,900	1,933,200
TOTAL ESTIMATE	8,349,900	8,377,200
CAPACITY OUTPUT ROM MAGNESITE (T/YR.)	375,000	375,000
SALEABLE COARSE MAGNESITE COST (\$/T)	27	28
COARSE MAGNESITE/FINES	80%	80%
CAPACITY OUTPUT COARSE SALEABLE MAGNESITE		
(T/YR.)	300,000	300,000
CAPACITY OUTPUT FINES (T/YR.)	75,000	75,000

Table 3 Project estimated operating costs (shovel and truck, drill and blast) at 750KT/Y capacity

<u>Description</u>	<u>From</u>	<u>To</u>
WATER MANAGEMENT (\$/YR.)	180,000	190,000
WASTE DUMPS (\$/YR.)	190,000	200,000
MINE AND CRUSHING (\$/YR.)	10,078,000	10,079,000
SUBTOTAL (\$/YR.)	10,448,000	10,469,000
CONTINGENCY (30%)	3,134,400	3,140,700
TOTAL ESTIMATE	13,582,400	13,609,700
CAPACITY OUTPUT ROM MAGNESITE (T/YR.)	750,000	750,000
SALEABLE COARSE MAGNESITE COST (\$/T)	22	23
COARSE MAGNESITE/FINES	80%	80%
CAPACITY OUTPUT COARSE SALEABLE MAGNESITE		
(T/YR.)	600,000	600,000
CAPACITY OUTPUT FINES (T/YR.)	150,000	150,000

Table 4 Project estimated operating costs (shovel and truck, drill and blast) at 1,000KT/Y capacity

<u>Description</u>	<u>From</u>	<u>To</u>
WATER MANAGEMENT (\$/YR.)	180,000	190,000
WASTE DUMPS (\$/YR.)	190,000	200,000
MINE AND CRUSHING (\$/YR.)	12,997,000	12,998,000
SUBTOTAL (\$/YR.)	13,367,000	13,388,000
CONTINGENCY (30%)	4,010,100	4,016,400
TOTAL ESTIMATE	17,377,100	17,404,400
CAPACITY OUTPUT ROM MAGNESITE (T/YR.)	1,000,000	1,000,000
SALEABLE COARSE MAGNESITE COST (\$/T)	21	22
COARSE MAGNESITE/FINES	80%	80%
CAPACITY OUTPUT COARSE SALEABLE MAGNESITE		
(T/YR.)	800,000	800,000
CAPACITY OUTPUT FINES (T/YR.)	200,000	200,000

All variants shown above assumed standard shovel and truck mining method with limited drill and blasting.







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> Karratha (Pilbara, WA) Au, Co, Cu

Marble Bar/Nullagine (Pilbara, WA) Au, Co, Cu, Li

#### **CAUTIONARY STATEMENT**

The feasibility study referred to in this announcement has been undertaken for the purpose of estimating approximate capital and operating costs of the Winchester Magnesium Carbonate Project. It is a preliminary technical and economic study of the potential viability of this Project. It is based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves. Further evaluation work and appropriate studies are required before the Company will be in a position to estimate any ore reserves or to provide any assurance of an economic development case.

This feasibility study is based on the material assumptions outlined elsewhere in this report, and in prior reports released on 13 January 2015 and 10 March 2015. The Company confirms that, all the material assumptions underpinning the production target, or the forecast financial information derived from a production target, in the initial public reports continue to apply and have not materially changed. These include assumptions about the availability of funding. While the Company considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the feasibility study will be achieved.

To achieve the range of outcomes indicated in the feasibility study, funding in the order of \$3.5 million to \$4 million will likely be required. Investors should note that there is no certainty that the Company will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Korab's existing shares.

It is also possible that the Company could pursue other 'value realisation' strategies such as a joint venture, a partial sale, or a sale of the project. If it does, this could materially reduce Korab's proportionate ownership of the project.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the feasibility study.

### AVAILABILITY OF FUNDING

On 23 March 2016 the Company reported that it has entered into an agreement with Mr. Hong Wang (who represents interests associated with Chinese steel industry, banking and finance, construction and building materials) for a \$6 million development funding for the Winchester magnesium carbonate project. Under this agreement, the \$6 million development funding would be provided by way of funders and/or their nominees acquiring a direct 25%-30% equity interest in AusMag Pty Ltd (wholly owned subsidiary of Korab developing the Winchester project) and would be conditional on Korab (or AusMag) securing additional offtakes for magnesium carbonate rock. The parties are yet to finalise the funding documentation for this transaction including the subscription agreement and the management agreement. The parties have agreed to wait with finalising the funding documentation until Korab finalises and publishes updated estimates of gross earnings, cashflow, NPV, and the projected aggregate earnings before interest tax and amortisation (EBITDA) for Winchester Project. This estimation is expected to be completed shortly and will be released to the market when available.

The Company assumed for the purpose of this study that the funding may be sourced either under the above agreement, or in the alternative, as a combination of debt (by way of a forward sale) and equity (by way of an institutional placement, and/or a pro-rata share issue). In light of the information received from relevant counterparties, and given the relatively low CAPEX of the project, both avenues appear feasible.

#### MINING PLAN

Results of the study show that average waste rock to ore ratio for the entire mining operation is approximately 0.45 to 1 T/T, though the actual ratio will fluctuate over the life of the project. Initially,







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Marble Bar/Nullagine (Pilbara, WA) Au, Co, Cu, Li the waste rock to ore ratio would be about 0.85 to 1, while towards the end of mine-life the ratio would be less than 0.2. The average ratio of all waste (overburden plus waste rock) to ore for the entire mining operation was approximately 0.55 to 1 T/T.

The design criteria for the open pit used in this study are summarised in the following table.

#### Table 5 Open pit design criteria

Bench Height (m)	5
Distance between berms (m)	20
Berm Width (m)	5
Road Width (m)	20
Maximum Road Gradient (%)	12.5

The slope design parameters used in this study are summarised in the following table.

### Table 6 Open pit slope design parameters

Unit	Face Angle	Face Height
Overburden	40°	Irregular
Undisturbed rock	70°	20 m

A thin layer (up to 5m) of unconsolidated soil and unconsolidated alluvium overlies the massive magnesite at the Winchester deposit. This overburden would require progressive removal to expose the hard, consolidated magnesite. It is expected that the unconsolidated, overburden could be removed by tractor scraper.

Under shovel and drill/blast option, conventional open pit mining methods using rubber-tyred trucks and either a hydraulic excavator or rubber-tyred, front end loader were proposed for excavation of the open pit materials. Please refer to the Figure 3 for a photo of the personnel setting the explosive charges in the Winchester open pit during the prior test mining operations.

Under the shovel and drill/blast option, magnesite would require blasting prior to excavation and mine benches are expected to be suitable for running rubber tyred mining equipment with minimal preparation.

Study indicates that optimum variant is for the mining operations to be initially carried out on a yearly campaign basis by employing a specialist mining contractor. Study shows that campaign mining can be utilised as the preferred mode of operation up to approximately 1,000,000 ROM output. If the volumes increase beyond this level, it is expected that the project could move to year round operation.

MINERAL RESOURCES ESTIMATES FOR WINCHESTER MAGNESITE DEPOSIT

Current estimated mineral resources at Winchester underpinning this pre-feasibility study are shown in the following table:

Table 7 Mineral resources estimates

At 40% MgO Cut-Off	MgCO Mass	MgO grade
	'000 Tonnes	%
Indicated Resources	12,200	43.1
Inferred Resources	4,400	43.6
Total	16,600	43.2

There has been no change to the Winchester mineral resource estimate since it was last reported in the Annual Report 2017.







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Mt. Elephant (Ashburton, WA) Au, Cu

> Karratha (Pilbara, WA) Au, Co, Cu

Marble Bar/Nullagine (Pilbara, WA) Au, Co, Cu, Li This information was prepared and first disclosed under the JORC Code 2004 on 17 July 2007. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

The author of this Report is not aware of any new information or data that materially affects the information included in the report released on 17 July 2007 and, in the case of mineral resources that all the material assumptions and technical parameters underpinning the estimates in the report released on 17 July 2007 continue to apply and have not materially changed. The form and context in which the findings of the report released on 17 July 2007 are presented have not been materially modified.

#### TIMEFRAME FOR DEVELOPMENT AND PRODUCTION

The Company is aiming to commence the development of the project and the production of magnesium carbonate rock as soon as practicable. The Company intends to lodge a "Notice of intent to mine" with the Northern Territory Department of Primary Industry and Resources very shortly.

For the purpose of this study the Company assumed that the funding for the project, completion of sales and/or offtakes of magnesium carbonate rock, and securing required governmental and regulatory project approvals will take approximately 12-14 months. This assumption is based on information obtained from our discussions with the relevant counterparties.

However; investors should note that the actual timeframe of the development and production will depend on the actual availability of funding for the project, completion of sales and/or offtakes of magnesium carbonate rock, securing required governmental and regulatory project approvals, access to transport, and market factors such as magnesium carbonate rock prices, energy prices, foreign exchange rates, etc. which are outside the control of the Company.

Should there be a delay with securing the funding, sales, or regulatory permits, or should there be an adverse change in any of the remaining aforementioned factors, it may impact on the development and production timeframe.

#### ACCESS TO TRANSPORT

Sea transport is available from Darwin Port's East Arm which is located 93km to the north of the project. Bulk materials handling facility at East Arm includes an 850m rail spur, 1,500T/H rail bottom dump station, stockpiles, haul roads and a 2,000T/H travelling gantry shiploader. The shiploader is designed for Panamax class ships. Road transport by haulage trucks is available to the Darwin port and to South Australia, Victoria, New South Wales and Queensland via Batchelor road and then via Stuart Highway. Darwin to Adelaide railway line runs along Stuart Highway and is transected by Batchelor road approximately 5km from the deposit. Currently there are no rail loading facilities either at Batchelor or near the point where Batchelor road transects the railway line. On 8 November 2017, Korab reported that it has signed Heads of Agreement with the operator of Darwin port. HoA envisages exporting of 500,000tpa of magnesite rock through Darwin Port East Arm Wharf and includes sub-leasing of the land, access to various port facilities, and use of loaders, and other equipment. HoA provides the basis for the final port agreement which will allow for exporting the magnesium carbonate rock through Darwin.

### PROJECT APPROVALS

Winchester deposit is located on a granted mineral lease ML 30587 held by Korab's wholly owned subsidiary AusMag Pty Ltd. Before the quarry can be established, an appropriate Mine Management Plan (MMP) will need to be submitted to the Northern Territory Department of Primary Industry and Resources and AusMag will need to receive the authorisation to implement this MMP. Prior to lodging the MMP, AusMag will lodge a "Notice of intent to mine" to allow the Department to complete the preliminary assessment of the planned development.







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Marble Bar/Nullagine (Pilbara, WA) Au, Co, Cu, Li Winchester quarry layout, pit design, site infrastructure design, and choice of equipment ensure that development and operation of the Winchester quarry will have very small footprint and low environmental impact.

Winchester deposit and the mineral lease are located wholly on freehold land and no native title approvals would be required to establish a quarry. However, any sacred sites and sites of anthropological or historical significance that are located within the project area would need to be protected. The Company will liaise and consult with all affected parties and various stakeholders to ensure that the project is well supported.

PRODUCTION SCHEDULE

The Company used the following production schedule in this feasibility study.

Year	Saleable Tonnage ('000 tonnes)	ROM Tonnage ('000 tonnes)	Cumulative ROM Production ('000 tonnes)	Resource Classification
1	600	750	750	indicated
2	600	750	1,500	indicated
3	600	750	2,250	indicated
4	800	1,000	3,250	indicated
5	800	1,000	4,250	indicated
6	800	1,000	5,250	indicated
7	800	1,000	6,250	indicated
8	800	1,000	7,250	indicated
9	1,000	1,250	8,500	indicated
10	1,000	1,250	9,750	indicated
11	1,000	1,250	11,000	indicated
12	960	1,200	12,200	indicated

This production schedule is based solely on indicated mineral resources. For mineral resources estimate which includes both indicated and inferred mineral resources please refer to **Table 7**.

The production schedule was developed after consultation with potential and prospective buyers of magnesium carbonate rock.

Similarly to the Timeframe for Production and Development section; investors should note that the actual production schedule will depend on the availability of funding for the Project, finalised magnesium carbonate rock sales and/or offtakes, governmental and regulatory project approvals, access to transport, and other factors such as magnesium carbonate rock prices, energy prices, foreign exchange rates, etc. which are outside the control of the Company.

On 4 November 2015, the Company reported that it has signed Heads of Agreement for the supply of 300,000 tonnes of magnesium carbonate rock per year for 5 years (HoA). On 6 March 2018, Korab has terminated this HoA without penalties by giving notice in writing to the counterparty as envisaged by the terms of HoA. This termination will allow Korab greater flexibility in setting volumes and prices during the ongoing discussions with potential and prospective buyers of magnesium carbonate rock.

MODIFYING FACTORS

For material modifying factors and assumptions used in this study which are not disclosed elsewhere in this report please refer to **Table 8**.

BACKGROUND INFORMATION

Winchester Magnesium Carbonate Project consists of a Mineral Lease ML30587, 100% held by AusMag Pty Ltd, a wholly owned subsidiary of Korab Resources Ltd. Korab is the sole marketing agent for the output from the Winchester quarry. The project is located 2km east from the town of







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Marble Bar/Nullagine (Pilbara, WA) Au, Co, Cu, Li Batchelor, some 70 km south of Darwin in the Northern Territory. Mineral Lease ML30587 covers an area of 352 ha.

The main use for magnesium carbonate rock is in production of various types of magnesium oxides. China and North Korea control majority of the economically viable magnesium carbonate resources in the world. Global magnesium oxide market is worth approximately US\$60 billion. The main sectors where magnesium oxide is used include: refractory bricks which are used to line the inside of steel and glass furnaces and cement kilns; production of flame retardants; production of fire resistant and moisture resistant building materials like mag wall, MgO board and mag cement; production of magnesium alloys used extensively in cars, airplanes, tanks, APC-s and other defence uses; hydrometallurgy of cobalt and nickel production; water purification and soil treatment and feedstock.

The potential game changer is the recent development of magnesium-ion batteries which have 8 to 12 times greater capacity than lithium-ion batteries and can be charged in as little as 36 minutes. Magnesium-ion battery's charge/discharge efficiency is 5 times higher than a lithium-ion battery. Another advantage of magnesium-ion battery is its ability to perform at temperatures as low as -30°C and as high as +55°C whereas lithium-ion batteries cease to function at around -15°C. Additional benefit of magnesium-ion batteries is that they do not use graphite and consequently are not dependant on supply of this relatively expensive material.

The variety of uses and the relative size of the magnesium oxide, and magnesium alloys markets are of obvious benefit to magnesium carbonate rock producers. By tonnage comparison, the magnesium oxide market is approximately 40 times bigger than the lithium carbonate market and approximately 22 times bigger than the graphite market.

#### COMPETENT PERSON STATEMENT

The information in this report that relates to Mineral Resources underpinning the feasibility study reported in this report is based on information compiled by the Company and reviewed by Malcolm Castle, a competent person who is a Member of the Australasian Institute of Mining and Metallurgy ("AusIMM"). It fairly represents, information and supporting documentation prepared by Malcolm Castle who is a consultant geologist employed by Agricola Mining Consultants Pty Ltd. Mr Castle has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2004 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" ("JORC Code"). Malcolm Castle consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

CONTACT:

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#### ABOUT KORAB RESOURCES

Korab Resources Ltd is an international mining and exploration company with operations in Australia and Europe. Korab's projects include Winchester magnesium carbonate deposit at Batchelor in the Northern Territory of Australia, Geolsec phosphate rock deposit also at Batchelor, and other gold, silver, copper, cobalt, nickel, and polymetallic projects in Australia and overseas. More information about Korab's projects can be sourced from Korab's website at <a href="https://www.korab.com.au">www.korab.com.au</a>. Korab's shares are traded on Australian Securities Exchange (ASX) and on the Berlin Stock Exchange (Berliner Börse) through Equiduct electronic trading platform.







# KORAB HOUSE

www.korab.com.au

# Issued Capital

Shares: 297 Mln Last Price: 2.8 cents Capital: \$8.32 Mln

### **Listing Codes**

ASX: KOR BERLIN: C6S.BE

#### **Directors**

Andrej K. Karpinski Executive Chairman Director

> Rodney H. Skeet Non-executive Director

Daniel A. Smetana Non-executive Director

Anthony G. Wills Non-executive Director

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Winchester (Rum Jungle, NT) Magnesium carbonate (MgCO3)

Geolsec (Rum Jungle, NT) Phosphate rock (P2O5)

Batchelor (Rum Jungle, NT) Au, Ag, Zn, Pb, Ni, Cu, Co, Sc, Mn

> Mt. Elephant (Ashburton, WA) Au, Cu

> > Karratha (Pilbara, WA) Au, Co, Cu

Marble Bar/Nullagine (Pilbara, WA) Au. Co. Cu. Li

### DISCLAIMER AND CAUTIONARY STATEMENT

Forward-looking statements are statements that are not historical facts. Words such as "expect(s)", "expected", "feel(s)", "believe(s)", "will", "may", "anticipate(s)", "should", "envisage(s)" and similar expressions are intended to identify such forward-looking information. This information includes, but is not limited to statements regarding future exploration results, resources, or reserves, and production. Anyone reading this report is cautioned not to place undue reliance on these forwardlooking statements. All of such statements are subject to risks and uncertainties (many of which are difficult to predict and which generally are beyond the control of the Company) that could cause actual results to differ materially from those expressed in, or implied or projected by, the forwardlooking information and statements. These risks and uncertainties include, but are not limited to: those relating to the interpretation of exploration results (including drill results), the geology, grade and continuity of mineral deposits and conclusions of economic evaluations; risks relating to possible variations in reserves, grade, mining dilution, ore loss, and recovery rates; risks relating to changes in project financial and technical parameters; risks relating to the potential for delays in exploration programs, project evaluation/review, completion of feasibility studies and project development; risks related to commodity prices and foreign exchange rate fluctuations; risks related to failure to secure adequate financing on a timely basis and on acceptable terms; risks related to delays in obtaining governmental, or other permits and approvals; risks related to security of tenure; and other risks and uncertainties related to the Company's prospects, properties and business strategy. Any forwardlooking information contained in this report is provided as of the date of this report. Except as required under applicable listing rules and securities laws, the Company does not intend, and does not assume any obligation, to update this forward-looking information. Pillbara East and Pilbara West projects are considered to be of early stage, grass roots exploration status.

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Table 8 Material modifying factor MODIFYING FACTOR	COMMENTS
Legal	Winchester deposit is located within the granted Mineral Lease (mining licence) ML30587. ML30587 has an area of 352 ha and was granted up to 20 October 2040 prior to which date it can be renewed. The lease can be renewed multiple times. East Africa Resources Limited (ASX: EAF) is entitled to a royalty of 5% of net profits achieved after deduction of all operating costs, transportation and sales costs and all taxes, government charges and royalties, as well as marketing costs and fees on sales of magnesite rock mined from Winchester deposit.
Infrastructure	The deposit is located 2km east from the town of Batchelor along Batchelor road and 75km from Darwin port along Stuart Highway. Darwin to Adelaide rail line runs approximately 5km from the deposit. High voltage power runs along the Batchelor road next to the deposit. Additional high voltage power lines run across the project 2 km to the east of the deposit. Gas pipeline runs approximately 3 km east of the deposit. Potable water is available on site. Accommodation is available at Batchelor town, and the alternative accommodation is available in Darwin.
Transportation	Sea transport is available from Darwin Port's East Arm which is located 93km to the north of the project. Bulk materials handling facility at East Arm includes 850m rail spur, 1,500T/H rail bottom dump station, stockpiles, haul roads and a 2,000T/H travelling gantry shiploader. The shiploader is designed for Panamax class ships. Road transport by haulage trucks is available to the Darwin port and to South Australia, Victoria, New South Wales and Queensland via Batchelor road and then via Stuart Highway. Darwin to Adelaide railway line runs along Stuart Highway and is transected by Batchelor road approximately 5km from the deposit. Currently there are no rail loading facilities either at Batchelor or near the point where Batchelor road transects the railway line. On 8 November 2017, Korab reported that it has signed Heads of Agreement with the operator of Darwin port. HoA envisages exporting of 500,000tpa of magnesite rock through Darwin Port East Arm Wharf and includes subleasing of the land, access to various port facilities, and use of loaders, and other equipment. HoA provides the basis for the final port agreement which will allow for exporting the magnesium carbonate rock through Darwin.
Mineral Resources Classification	The mineral resources estimates that were used to underpin this report are classified as indicated mineral resources.
Marketing (Off-take or Sale Agreements)	Development of Winchester depends on one or more long-term sale, or off-take agreements being completed successfully. Korab is in discussions with number of parties regarding potential joint ventures, equity partnerships, off-take and long-term sales agreements.
Mine Permitting	Winchester deposit is located on granted mineral lease ML 30587 held by Korab's wholly owned subsidiary AusMag Pty Ltd. Before the quarry can be established, an appropriate Mine Management Plan (MMP) will need to be submitted to the Northern Territory Department of Mines and Energy and AusMag will need to receive the authorisation to implement this MMP.
Environmental studies	Environmental impact studies have been undertaken for the Winchester





magnesite project and the assessment shows that the magnesite quarry will have a minimal impact. This is primarily because the project would be developed as a magnesite rock quarry with no processing of the rock other



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	than crushing and screening. The quarry and associated infrastructure will have a very small footprint. Mobile equipment, including crushers and sorters will be utilised were possible. There are several rock quarries in the vicinity of the town of Batchelor, some abandoned, and some in operation.
Native Title	Winchester deposit and the mineral lease are located wholly on freehold land and no native title approvals would be required to establish a quarry. However, any sacred sites and sites of anthropological or historical significance that are located within the project area would need to be protected.
Social	Winchester mine would utilise contractors operating on campaign basis. Other than contractor's staff, there would be relatively small number of personnel directly employed by AusMag Pty Ltd involved in establishing and operating the mine (fewer than 10). In addition, Winchester magnesite quarry has a potential to generate significant royalties income for the Northern Territory government over the life of the project. In addition to providing revenue stream for the government, the quarry would also directly benefit Territorians by supporting local businesses and providing jobs. Whilst there is no legal requirement to utilise local contractors and labour, local businesses and labour would be given preference as long as this would not have negative impact on the viability of the project. The project will aim to utilise local contractors operating on a campaign basis. Other than contractor's staff, there would be a number of local staff involved in establishing and operating the quarry.







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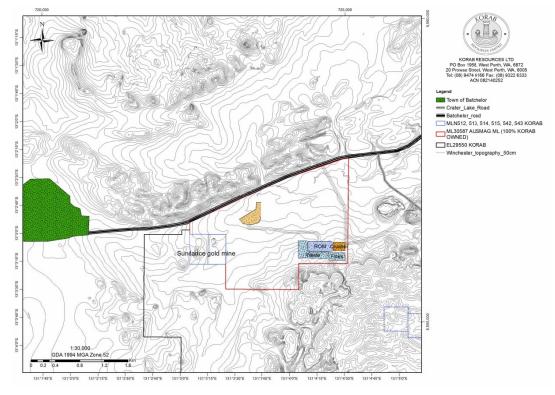


Figure 1 Site locality plan

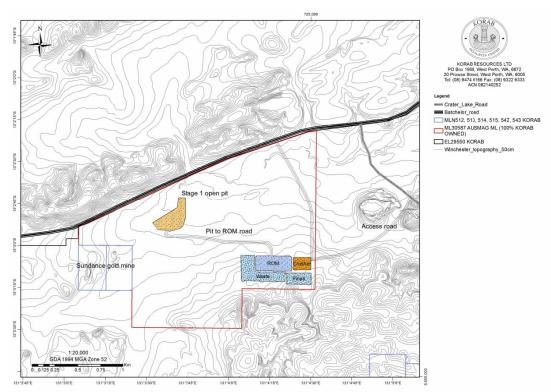


Figure 2 Conceptual layout at end of year 3 - two-stage, bench-by-bench development variant







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Figure 3 Test mining of magnesium carbonate rock using drill-blasting.



Figure 4 Winchester Magnesite deposit relative to basic infrastructure and topography



